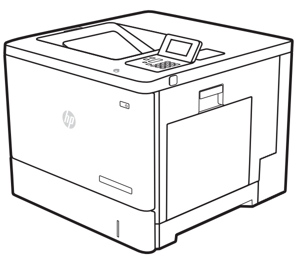
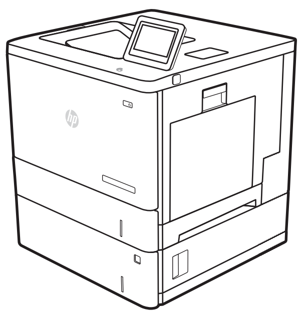
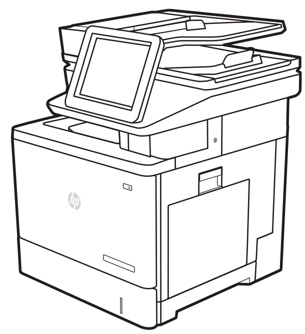
HP Color LaserJet Enterprise M552, M553, M554, M555
HP Color LaserJet Managed E55040
HP Color LaserJet Enterprise MFP M577, MFP M578
HP Color LaserJet Managed MFP E57540

Service Manual







www.hp.com/videos/LaserJet
www.hp.com/support/colorlj552
www.hp.com/support/colorlj553
www.hp.com/support/colorlj554

www.hp.com/colorljM577mfp
www.hp.com/colorljM578mfp
www.hp.com/colorljE55040
www.hp.com/colorljE57540mfp

HP Color LaserJet Enterprise M552, M553, M544, M555, MFP M577, MFP M578, Managed E55040, and Managed MFP E57540 - Service Manual

SUMMARY

Learn about printer theory of operation, how to diagnose and solve printer problems, and how to remove and replace supported printer service parts.

Edition 8, 9/2020

Revision history

View a list of document revisions.

Table -1 Revision history

Revision number	Revision date	Revision notes
8	9/2020	Migration into SDL Tridion Docs. RRP/TTS structure changed to combined service manual (CSRM) format. Updated content to include the M554, M555, and MFP M578 printers. Added M554 control panel removal. See Removal and replacement: Control panel (M552dn/M553n/dn/M554) on page 832. Added M555 control panel removal. See Removal and replacement: Control panel (M553x/M555/E55040) on page 511. Added M554/M555/M578 toner cartridges part numbers. See Removal and replacement: Toner cartridges on page 431. Minor edits and inclusions per HP Tech Marketing Engineer comments.
6	6/2020	Updated the error codes and control panel message troubleshooting topic. See Control panel messages document (CPMD) on page 327. Updated the firmware upgrades topic. See Firmware upgrades on page 169. Changes in part numbers/descriptions in the following list are reflected globally throughout the service manual. • Hard-disk drive (HDD) kit part, see Removal and replacement: Hard-disk

Table -1 Revision history (continued)

Revision number	Revision date	Revision notes
		drive (HDD) (M552/M553/M554/M555/E55040) on page 451. • Dual in-line memory module part, see Removal and replacement: Dual in-line memory module (DIMM) (M522/M553/M554/M555/E55040) on page 469. • ADF kit (Workflow/Enterprise), see Removal and replacement: Document feeder (M577/M578/E57540) on page 598. • Document feeder rollers, seeRemoval and replacement: Document feeder rollers (M577/M578/E57540) on page 555. • Tray 2-X paper pickup roller and separation rollers, see Removal and replacement: Tray 2-X paper pickup roller and separation roller assemblies on page 571. • ITB, see Removal and replacement: Intermediate transfer belt (ITB) on page 586. • Scanner control board, see Removal and replacement: Scanner control board (SCB) (M577/M578/E57540) on page 608. Accessories tables updated. See Supplies and accessories on page 2015.

Table -1 Revision history (continued)

Revision number	Revision date	Revision notes
5	1/2020	Updated Document feeder rollers firmware reset instructions. See Removal and replacement: Document feeder (M577/M578/E57540) on page 598 Updated the ITB (part number) removal topic, see Removal and replacement: Intermediate transfer belt (ITB) on page 586
4	7/2019	Updated content to include the managed E55040 and E57540 printers. Updated additional service and support pages, see HP service and support on page ix. Updated the upper cover (part numbers) removal topic. See Removal and replacement: Upper cover (M553/M555/E55040) on page 759. Updated the formatter (M552/M553/E55040) (part numbers) removal topic. See Removal and replacement: Formatter (M552/M553/M554/M555/E55040) on page 996. Updated the fuser power supply (part numbers) removal topic. See Removal and replacement: Fuser power supply (FPS) on page 1030. Updated the low-voltage power supply (part numbers) removal topic. See Removal and replacement: Low-voltage power supply (LVPS) on page 1041. Added the fixed tray guide install topic. See Removal and replacement: Fixed tray guide kit on page 564. Updated the document feeder and scanner whole units part numbers topic. See Document feeder and image scanner (M577/M578/E57540) on page 2022.

Conventions used in this guide

Learn about the conventions used in this publication.

TIP: Tips provide helpful hints or shortcuts.

NOTE: Notes provide important information to explain a concept or to complete a task.

CAUTION: Cautions indicate procedures that you should follow to avoid losing data or damaging the product.

WARNING! Warnings alert you to specific procedures that you should follow to avoid personal injury, catastrophic loss of data, or extensive damage to the product.

HP service and support

Learn about HP access to additional service and support information.

Additional service and support for channel partners

Channel partners go to partner.hp.com, and then use the steps below to access the HP Web-based Interactive Search Engine (WISE).

Access WISE for Channel partners

1. Select Services & Support (near the top of the screen).
2. Under Services Delivery, select Technical Support.
3. Select Technical Documentation.

Find information about the following topics

- Service manuals
- Service advisories
- Up-to-date control panel message (CPMD) troubleshooting
- Solutions for printer issues and emerging issues
- Remove and replace part instructions and videos
- Install and configure
- Printer specifications
- Warranty and regulatory information

Additional service and support for HP internal personnel

HP internal personnel, go to one of the following Web-based Interactive Search Engine (WISE) sites:

Americas (AMS)

- WISE - English
- WISE - Spanish
- WISE - Portuguese
- WISE - French

Asia Pacific / Japan (APJ)

- WISE - English
- WISE - Japanese
- WISE - Korean
- WISE - Chinese (simplified)

- WISE - Chinese (traditional)
- WISE - Thai

Europe / Middle East / Africa (EMEA)

- WISE - English

Additional technical support WISE videos

The videos below provide additional ways to access printer information using WISE.

Table of contents

1 Printer information, configurations, and specifications

Learn about printer configuration and specifications.

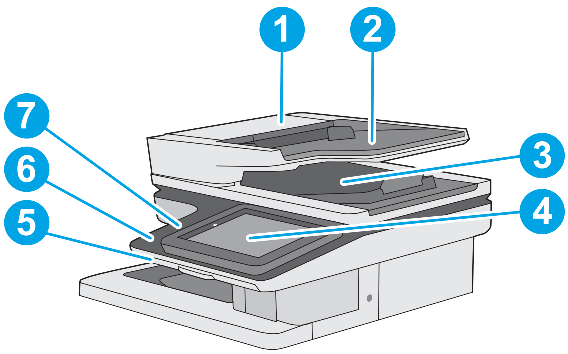
Information (document feeder and scanner)

Learn about the document feeder and scanner.

Document feeder and scanner front view

Learn about the document feeder and scanner components.

Figure 1-1 Document feeder and scanner front view



Item	Description
1	Document-feeder cover (access for clearing jams)
2	Document-feeder input tray
3	Document-feeder output bin
4	Control panel with color touchscreen display
5	Physical keyboard (flow models only)
6	Easy-access USB port (on the side of the control panel)
7	Hardware integration pocket (for connecting accessory and third-party devices)

Specifications (document feeder and scanner)

Learn about the document feeder and scanner specifications.

Technical specifications

Learn about the document feeder and scanner specifications.

Review the technical specifications for the document feeder and scanner.

See www.hp.com/support/colorljM577MFP or http://www.hp.com/support/colorljM578mfp or http://www.hp.com/support/colorljE57540mfp for current information.

Table 1-1 Copy and scan specifications (M577)

Copy and scan features	M577dn B5L46A	M577f B5L47A	M577c (flow) B5L54A	M577z (flow) B5L48A
Copies 38 pages per minute (ppm) on A4 and 40 ppm on letter-size paper	Yes	Yes	Yes	Yes
100-page document feeder with dual-head scanning for single-pass duplex copying and scanning	Yes	Yes	Yes	Yes
HP EveryPage Technologies including ultrasonic multi-feed detection	No	No	Yes	Yes
Embedded optical character recognition (OCR) provides the ability to convert printed pages into text that can be edited or searched using a computer	No	No	Yes	Yes
SMART Label feature provides paper-edge detection for automatic page cropping	No	No	Yes	Yes
Automatic page orientation for pages that have at least 100 characters of text	No	No	Yes	Yes
Automatic tone adjustment sets contrast, brightness, and background removal for each page	No	No	Yes	Yes

Table 1-1 Copy and scan specifications (M577) (continued)

Copy and scan features	M577dn B5L46A	M577f B5L47A	M577c (flow) B5L54A	M577z (flow) B5L48A
Send documents to E-mail, USB, and shared folders on a network	Yes	Yes	Yes	Yes
Send documents to SharePoint®	No	No	Yes	Yes

Table 1-2 Copy and scan specifications (M578)

Copy and scan features	M578dn 7ZU85A	M578f 7ZU86A	M578c (flow) 7ZU87A	M578z (flow) 7ZU88A
Copies 38 pages per minute (ppm) on A4 and 40 ppm on letter-size paper	Yes	Yes	Yes	Yes
100-page document feeder with dual-head scanning for single-pass duplex copying and scanning	Yes	Yes	Yes	Yes
HP EveryPage Technologies including ultrasonic multi-feed detection	Yes	Yes	Yes	Yes
Embedded optical character recognition (OCR) provides the ability to convert printed pages into text that can be edited or searched using a computer	Yes	Yes	Yes	Yes
SMART Label feature provides paper-edge detection for automatic page cropping	Yes	Yes	Yes	Yes
Automatic page orientation for pages that have at least 100 characters of text	Yes	Yes	Yes	Yes
Automatic tone adjustment sets contrast, brightness, and background removal for each page	Yes	Yes	Yes	Yes
Send documents to E-mail, USB, and shared folders on a network	Yes	Yes	Yes	Yes
Send documents to SharePoint®	Yes	Yes	Yes	Yes

Table 1-3 Copy and scan specifications (E57540)

Copy and scan features	E57540dn 3GY25A	E57540c (flow) 3GY26A
Copies 38 pages per minute (ppm) on A4 and 40 ppm on letter-size paper	Yes	Yes
100-page document feeder with dual-head scanning for single-pass duplex copying and scanning	Yes	Yes
HP EveryPage Technologies including ultrasonic multi-feed detection	No	Yes
Embedded optical character recognition (OCR) provides the ability to convert printed pages into text that can be edited or searched using a computer	No	Yes
SMART Label feature provides paper-edge detection for automatic page cropping	No	Yes
Automatic page orientation for pages that have at least 100 characters of text	No	Yes
Automatic tone adjustment sets contrast, brightness, and background removal for each page	No	Yes
Send documents to E-mail, USB, and shared folders on a network	Yes	Yes
Send documents to SharePoint®	No	Yes

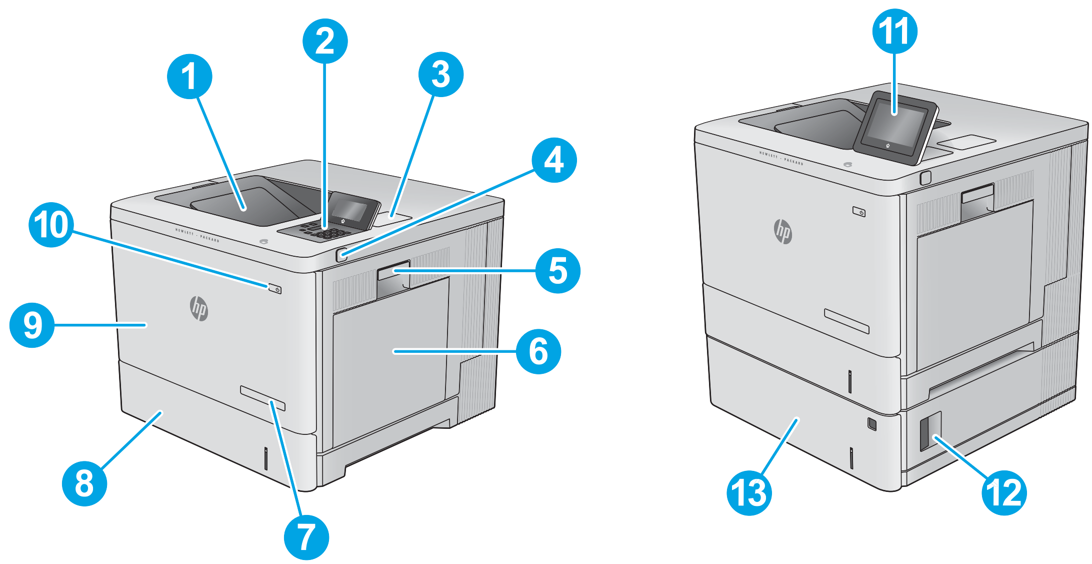
Information (base printer)

Learn about the base printer.

Printer front view (M552, M553, M554, M555, and E55040 models)

Identify the parts on the front of the printer (SFP).

Figure 1-2 Printer front view (SFP)

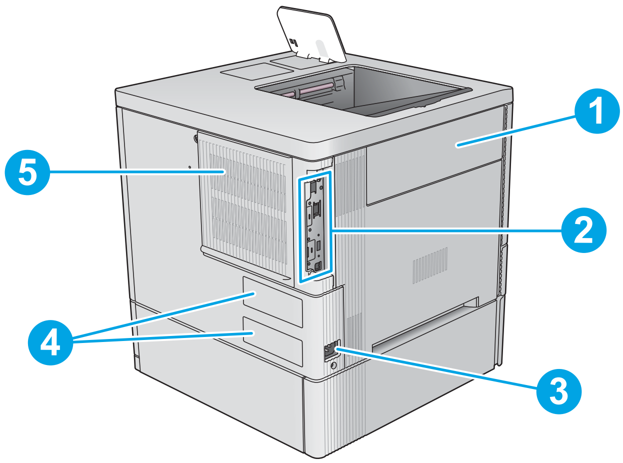


Number	Description
1	Standard output bin
2	4-line LCD control panel with keypad (n and dn models only)
3	Hardware integration pocket for connecting accessory and third-party devices (dn and x models only)
4	Easy-access USB port
5	Right door (access to the fuser and for clearing jams)
6	Tray 1
7	Model name
8	Tray 2
9	Front door (access to the toner cartridges)
10	On/off button
11	Control panel with color touchscreen display (M553x/M555/E55040)
12	Lower-right door for the 550-sheet paper feeder (access for clearing jams)
13	550-sheet paper feeder, Tray 3 (included with the x model, optional for the other models) NOTE: The M552 model accepts one 550-sheet paper feeder. All other models accept up to three 550-sheet paper feeders.

Printer back view (M552, M553, M554, M555, and E55040 models)

Identify the parts on the back of the printer (SFP).

Figure 1-3 Printer rear view (SFP)

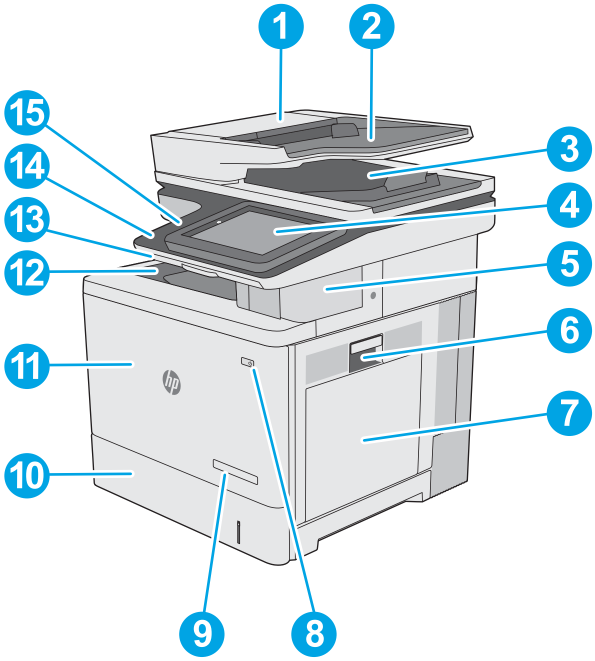


Number	Description
1	Toner-collection-unit door
2	Formatter (contains the interface ports)
3	Power connection
4	Serial number and product number label
5	Formatter cover

Printer front view (M577, M578, and E57540 models)

Identify the parts on the front of the printer (MFP).

Figure 1-4 Printer front view (MFP)

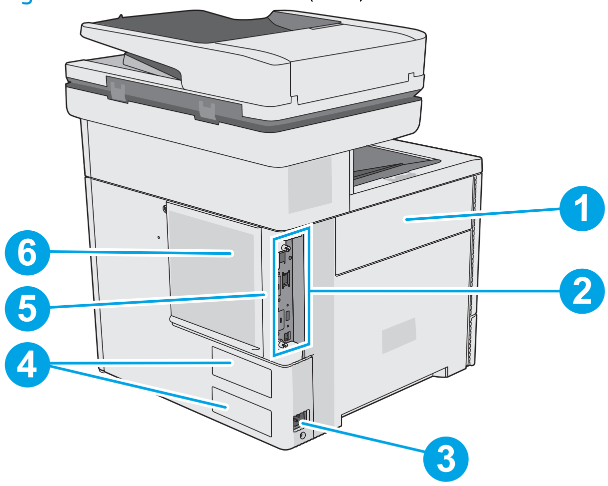


Number	Description
1	Document-feeder cover (access for clearing jams)
2	Document-feeder input tray
3	Document-feeder output bin
4	Control panel with color touchscreen display
5	Convenience stapler (c/f/z models only)
6	Right door (access to the fuser and for clearing jams)
7	Tray 1
8	On/off button
9	Model name
10	Tray 2
11	Front door (access to the toner cartridges)
12	Standard output bin
13	Physical keyboard (c/z models only)
14	Easy-access USB port (on the side of the control panel)
15	Hardware integration pocket (for connecting accessory and third-party devices)

Printer back view (M577, M578, and E57540 models)

Identify the parts on the back of the printer (MFP).

Figure 1-5 Printer rear view (MFP)



Number	Description
1	Toner-collection-unit door
2	Formatter (contains the interface ports)
3	Power connection
4	Serial number and product number label
5	Slot for a cable-type security lock (on the rear cover of the printer)
6	Formatter cover

Configuration (base printer)

Learn about the base printer configurations.

Configuration (base printer M552, M553, M554, M555, and E55040)

Learn about the base printer SFP configurations.

Figure 1-6 HP Color LaserJet Enterprise M552, M553, M554, M555, and E55040 printer (touchscreen model shown)

HP Color LaserJet Enterprise M552, M553, M554, M555, and E55040

- 33/35 pages per minute (A4/letter) (M552)

  37/40 pages per minute (A4/letter) (M553/E55040)

  56/35 pages per minute (A4/letter) (M554)

  56/40 pages per minute (A4/letter) (M555)

- FutureSmart 3 firmware (M552/M553)

  FutureSmart 4 firmware or FutureSmart 5 firmware (M554/M555/E55040)

- Trusted platform module 2.0 (security)

  NOTE: Standard for the M554/M555 printers. Optional for all other printers.

- Automatic duplex printing

  NOTE: Not available for the M553n. Standard for all other printers.

- Tray 1 (100-sheet capacity)
- Tray 2 (550-sheet capacity)
- 4-line graphical display with 10-key keypad (M552/M553n/dn)
- 68.58 mm (2.7 in) color graphical display with 10-key keypad (M554)

- 109.22 mm (4.3 in) color touchscreen display (M553x/M555/E55040)
- 1.0 GB base memory

NOTE: Expandable to 2 GB (M553/M554/M555/E55040). The M552 printer does not support memory expansion.

- HP Secure High-Performance Hard Disk

NOTE: Not available for the M552. Optional for all other printers.

- 4GB eMMC mass storage (M554/M555/E55040)
- 550-sheet paper feeder

NOTE: Standard for the M553x/M555x. Optional for all other printers.

HP Color LaserJet Managed E55040 only

- Managed contractual toner cartridges with lowest possible cost per page

Configuration (base printer M577, M578, and E57540)

Learn about the base printer MFP configurations.

Figure 1-7 HP Color LaserJet Enterprise M577, M578, and E57540 printer

HP Color LaserJet Enterprise M577, M578, and E57540

- 38/40 pages per minute (A4/letter) (M577/E57540)

  56/40 pages per minute (A4/letter) (M578)
- FutureSmart 4 firmware or FutureSmart 5 firmware
- Trusted platform module 2.0 (security)

NOTE: Standard for the M578 printer. Optional for all other printers.

- Automatic duplex printing
- Tray 1 (100-sheet capacity)

- Tray 2 (550-sheet capacity)
- Color touchscreen control panel
- 1.75 GB base memory

NOTE: Expandable to 2.5 GB (M577/E57540). The M578 printer supports a 3.8 GB memory expansion.

- 320 GB Hard Disk Drive (M577/E57540)

  500 GB Hard Disk Drive (M578)
- 550-sheet paper feeder (optional accessory)

NOTE: Up to three 550-sheet paper feeders are supported.

HP Color LaserJet Managed E57540 only

- Managed contractual toner cartridges with lowest possible cost per page

Specifications (base printer)

Learn about the base printer specifications.

Technical specifications (M552/M553)

Review the technical specifications for the M552/M553 printers.

See www.hp.com/support/colorljM552 or www.hp.com/support/colorljM553 or http://www.hp.com/support/colorljM554 or http://www.hp/support/colorljE55040 for current information.

Product numbers for each model

- M552dn - B5L23A
- M553n - B5L24A
- M553dn - B5L25A
- M553x - B5L26A

Table 1-4 Paper handling specifications (M552/M553)

Paper handling features	M552dn	M553n	M553dn	M553x
Tray 1 (100-sheet capacity)	✓	✓	✓	✓
Tray 2 (550-sheet capacity)	✓	✓	✓	✓
Tray 3 (1 x 550-sheet paper feeder) NOTE: The M552 model accepts one optional feeder. All other models support up to three optional feeders.	Optional	Optional	Optional	✓
Printer stand	Optional	Optional	Optional	Optional
Automatic duplex printing	✓	Not supported	✓	✓

Table 1-5 Connectivity specifications (M552/M553)

Connectivity features	M552dn	M553n	M553dn	M553x
10/100/1000 Ethernet LAN connection with IPv4 and IPv6	✓	✓	✓	✓
Hi-speed USB 2.0	✓	✓	✓	✓
Walk-up USB port	✓	✓	✓	✓
Hardware Integration Pocket (HIP) for connecting accessory and third-party devices	✓	Not supported	✓	✓
HP Internal USB Ports	Optional	Optional	Optional	Optional
HP Jetdirect 3000w NFC/wireless accessory for printing from mobile devices	Optional	Optional	Optional	Not supported

Table 1-5 Connectivity specifications (M552/M553) (continued)

Connectivity features	M552dn	M553n	M553dn	M553x
Integrated HP near-field communication (NFC) and Wi-Fi Direct functionality for printing from mobile devices	Not supported	Not supported	Not supported	✓
HP Jetdirect 2900nw Print Server accessory for wireless connectivity	Optional	Optional	Optional	Optional

Table 1-6 Print specifications (M552/M553)

Print features	M552dn	M553n	M553dn	M553x
Prints 33 pages per minute (ppm) on A4 and 36 ppm on letter-size paper	✓	Not supported	Not supported	Not supported
Prints 37 pages per minute (ppm) on A4 and 40 ppm on letter-size paper	Not supported	✓	✓	✓
Easy-access USB printing (no computer required)	Not supported	✓	✓	✓

Table 1-7 Other specifications (M552/M553)

Other features	M552dn	M553n	M553dn	M553x
1.0 GB base memory NOTE: Expandable to 2 GB (M553). The M552 printer does not support memory expansion.	✓	✓	✓	✓
HP Secure High-performance Hard Disk	Not supported	Optional	Optional	Optional
109.22 mm (4.3 in) color touchscreen control panel	Not supported	Not supported	Not supported	✓
4-line graphical display with 10-key keypad	✓	✓	✓	Not supported
HP Trusted Platform Module for encrypting all data that passes through the printer	Optional	Optional	Optional	Optional

Technical specifications (M554/M555)

Review the technical specifications for the M554/M555 printers.

See www.hp.com/support/colorljM552 or www.hp.com/support/colorljM553 or http://www.hp.com/support/colorljM554 or http://www.hp/support/colorljE55040 for current information.

Product numbers for each model

- M554dn - 7ZU81A
- M555dn - 7ZU78A
- M555x - 7ZU79A

Table 1-8 Paper handling specifications (M554/M555)

Paper handling features	M554dn	M555dn	M555x
Tray 1 (100-sheet capacity)	✓	✓	✓
Tray 2 (550-sheet capacity)	✓	✓	✓
Tray 3 (1 x 550-sheet paper feeder) NOTE: Up to three optional feeders are supported.	Optional	Optional	✓
Printer stand	Optional	Optional	Optional
Automatic duplex printing	✓	✓	✓

Table 1-9 Connectivity specifications (M554/M555)

Connectivity features	M554dn	M555dn	M555x
10/100/1000 Ethernet LAN connection with IPv4 and IPv6	✓	✓	✓
Hi-speed USB 2.0	✓	✓	✓
Walk-up USB port	✓	✓	✓
Hardware Integration Pocket (HIP) for connecting accessory and third-party devices	✓	✓	✓
HP Internal USB Ports	Optional	Optional	Optional
HP Jetdirect LAN Accessory	Optional	Optional	Optional
HP Jetdirect 3100w BLE/NFC/Wireless Accessory for printing from mobile devices NOTE: For use in the Hardware Integration Pocket (HIP) or the rear host USB port. The HP Jetdirect 3100w BLE/NFC/Wireless Accessory requires the HP Internal USB ports accessory.	Optional	Optional	Optional

Table 1-10 Print specifications (M554/M555)

Print features	M554dn	M555dn	M555x
Prints 56 pages per minute (ppm) on A4 and 35 ppm on letter-size paper	✓	Not supported	Not supported
Prints 56 pages per minute (ppm) on A4 and 40 ppm on letter-size paper	Not supported	✓	✓
Easy-access USB printing (no computer required)	✓	✓	✓
Store jobs in the printer memory to print later or print privately	✓	✓	✓

Table 1-11 Other specifications (M552/M553)

Other features	M554dn	M555dn	M555x
1.0 GB base memory NOTE: Expandable to 2 GB.	✓	✓	✓
HP Secure High Performance Hard Disk Drive FIPS Drive	Optional	Optional	Optional
4 GB embedded Multi-Media Controller (eMMC)	✓	✓	✓
109.22 mm (4.3 in) color touchscreen control panel	Not supported	Not supported	✓
68.58 mm (2.7 in) color graphics display with 10-key	✓	✓	Not supported
HP Trusted Platform Module for encrypting all data that passes through the printer	✓	✓	✓

Technical specifications (E55040)

Review the technical specifications for the E55040 printer.

See www.hp.com/support/colorljM552 or www.hp.com/support/colorljM553 or http://www.hp.com/support/colorljM554 or http://www.hp/support/colorljE55040 for current information.

Product numbers for each model

- E55040 - 3GX98A

Table 1-12 Paper handling specifications (E55040)

Paper handling features	E55040dw
Tray 1 (100-sheet capacity)	✓
Tray 2 (550-sheet capacity)	✓
Tray 3 (1 x 550-sheet paper feeder) NOTE: Up to three optional feeders are supported.	✓
Printer stand	Optional
Automatic duplex printing	✓

Table 1-13 Connectivity specifications (E55040)

Connectivity features	E55040dw
10/100/1000 Ethernet LAN connection with IPv4 and IPv6	✓
Hi-speed USB 2.0	✓
Walk-up USB port	✓
Hardware Integration Pocket (HIP) for connecting accessory and third-party devices	✓
HP Internal USB Ports	Optional

Table 1-13 Connectivity specifications (E55040) (continued)

Connectivity features	E55040dw
HP Jetdirect 3000w NFC/Wireless Accessory for printing from mobile devices NOTE: For use in the Hardware Integration Pocket (HIP) or the rear host USB port. The HP Jetdirect 3000w NFC/Wireless Accessory requires the HP Internal USB ports accessory. If the J8030A is connected using the rear host USB, the HIP is not used.	Optional
Integrated HP near-field communication (NFC) and Wi-Fi Direct functionality for printing from mobile devices	✓
HP Jetdirect 2900nw Print Server accessory for wireless connectivity	Optional

Table 1-14 Print specifications (E55040)

Print features	E55040dw
Prints 37 pages per minute (ppm) on A4 and 40 ppm on letter-size paper	✓
Easy-access USB printing (no computer required)	✓
Store jobs in the printer memory to print later or print privately	✓

Table 1-15 Other specifications (E55040)

Other features	E55040dw
1.0 GB base memory NOTE: Expandable to 2 GB.	✓
109.22 mm (4.3 in) color touchscreen control panel	✓
HP Trusted Platform Module for encrypting all data that passes through the printer	Optional

Technical specifications (M577)

Review the technical specifications for the M577 printer.

See www.hp.com/support/colorljM577MFP or http://www.hp.com/support/colorljM578mfp or http://www.hp.com/support/colorljE57540mfp for current information.

Product numbers for each model

- M577dn - B5L46A
- M577f - B5L47A
- M577c flow - B5L54A
- M577z flow - B5L48A

Table 1-16 Paper handling specifications (M577)

Paper handling features	M577dn	M577f	M577c flow	M577z flow
Tray 1 (100-sheet capacity)	✓	✓	✓	✓

Table 1-16 Paper handling specifications (M577) (continued)

Paper handling features	M577dn	M577f	M577c flow	M577z flow
Tray 2 (550-sheet capacity)	✓	✓	✓	✓
Tray 3 (1 x 550-sheet paper feeder) NOTE: Up to three optional feeders are supported.	Optional	Optional	Optional	Optional
Printer stand	Optional	Optional	Optional	Optional
Automatic duplex printing	✓	✓	✓	✓
Convenience stapler	Not supported	✓	✓	✓

Table 1-17 Connectivity specifications (M577)

Connectivity features	M577dn	M577f	M577c flow	M577z flow
10/100/1000 Ethernet LAN connection with IPv4 and IPv6	✓	✓	✓	✓
Hi-speed USB 2.0	✓	✓	✓	✓
Walk-up USB port	✓	✓	✓	✓
Hardware Integration Pocket (HIP) for connecting accessory and third-party devices	✓	✓	✓	✓
HP Internal USB Ports	Optional	Optional	Optional	Optional
HP Jetdirect 3000w NFC/wireless accessory for printing from mobile devices	Optional	Optional	Optional	Not supported
Integrated HP near-field communication (NFC) and Wi-Fi Direct functionality for printing from mobile devices	Not supported	Not supported	Not supported	✓
HP Jetdirect 2900nw Print Server accessory for wireless connectivity	Optional	Optional	Optional	Optional

Table 1-18 Print specifications (M577)

Print features	M577dn	M577f	M577c flow	M577z flow
Prints 38 pages per minute (ppm) on A4 and 40 ppm on letter-size paper	✓	✓	✓	✓
Easy-access USB printing (no computer required)	✓	✓	✓	✓
Store jobs in the printer memory to print later or print privately	✓	✓	✓	✓

Table 1-19 Copy and scan specifications (M577)

Print features	M577dn	M577f	M577c flow	M577z flow
Copies 38 pages per minute (ppm) on A4 and 40 ppm on letter-size paper	✓	✓	✓	✓
100-page document feeder with dual-head scanning for single-pass duplex copying and scanning	✓	✓	✓	✓
HP EveryPage Technologies including ultrasonic multi-feed detection	Not supported	Not supported	✓	✓
Embedded optical character recognition (OCR) provides the ability to convert printed pages into text that can be edited or searched using a computer	Not supported	Not supported	✓	✓
SMART Label feature provides paper-edge detection for automatic page cropping	Not supported	Not supported	✓	✓
Automatic page orientation for pages that have at least 100 characters of text	Not supported	Not supported	✓	✓
Automatic tone adjustment sets contrast, brightness, and background removal for each page	Not supported	Not supported	✓	✓

Table 1-20 Digital Send specifications (M577)

Print features	M577dn	M577f	M577c flow	M577z flow
Send documents to E-mail, USB, and shared folders on a network	✓	✓	✓	✓
Send documents to SharePoint®	Not supported	Not supported	✓	✓

Table 1-21 Other specifications (M577)

Other features	M577dn	M577f	M577c flow	M577z flow
1.75 GB base memory NOTE: Expandable to 2.5 GB.	✓	✓	✓	✓
320 GB Hard Disk Drive	✓	✓	✓	✓
Color touchscreen control panel	✓	✓	✓	✓
Physical keyboard	Not supported	Not supported	✓	✓
HP Trusted Platform Module for encrypting all data that passes through the printer	Optional	Optional	Optional	Optional
Fax	Optional	✓	✓	✓

Technical specifications (M578)

Review the technical specifications for the M578 printer.

See www.hp.com/support/colorljM577MFP or http://www.hp.com/support/colorljM578mfp or http://www.hp.com/support/colorljE57540mfp for current information.

Product numbers for each model

- M578dn - 7ZU85A
- M578f - 7ZU86A
- M578c - 7ZU87A
- M578z - 7ZU88A

Table 1-22 Paper handling specifications (M578)

Paper handling features	M578dn	M578f	M578c	M578z
Tray 1 (100-sheet capacity)	✓	✓	✓	✓
Tray 2 (550-sheet capacity)	✓	✓	✓	✓
Tray 3 (1 x 550-sheet paper feeder) NOTE: Up to three optional feeders are supported.	Optional	Optional	Optional	Optional
Printer stand	Optional	Optional	Optional	Optional
Automatic duplex printing	✓	✓	✓	✓
Convenience stapler	Not supported	✓	✓	✓

Table 1-23 Connectivity specifications (M578)

Connectivity features	M578dn	M578f	M578c	M578z
10/100/1000 Ethernet LAN connection with IPv4 and IPv6	✓	✓	✓	✓
Hi-speed USB 2.0	✓	✓	✓	✓
Walk-up USB port	✓	✓	✓	✓
Hardware Integration Pocket (HIP) for connecting accessory and third-party devices	✓	✓	✓	✓
HP Internal USB Ports	Optional	Optional	Optional	Optional
HP Jetdirect LAN Accessory	Optional	Optional	Optional	Optional
HP Jetdirect 3100w BLE/NFC/Wireless Accessory for printing from mobile devices NOTE: For use in the Hardware Integration Pocket (HIP) or the rear host USB port. The HP Jetdirect 3100w NFC/Wireless Accessory requires the HP Internal USB ports accessory. If the J8030A is connected using the rear host USB, the HIP is not used.	Optional	Optional	Optional	Optional

Table 1-24 Print specifications (M578)

Print features	M578dn	M578f	M578c	M578z
Prints 56 pages per minute (ppm) on A4 and 40 ppm on letter-size paper	✓	✓	✓	✓
Easy-access USB printing (no computer required)	✓	✓	✓	✓
Store jobs in the printer memory to print later or print privately	✓	✓	✓	✓

Table 1-25 Copy and scan specifications (M578)

Print features	M578dn	M578f	M578c	M578z
Copies 38 pages per minute (ppm) on A4 and 40 ppm on letter-size paper	✓	✓	✓	✓
100-page document feeder with dual-head scanning for single-pass duplex copying and scanning	✓	✓	✓	✓
HP EveryPage Technologies including ultrasonic multi-feed detection	✓	✓	✓	✓
Embedded optical character recognition (OCR) provides the ability to convert printed pages into text that can be edited or searched using a computer	✓	✓	✓	✓
SMART Label feature provides paper-edge detection for automatic page cropping	✓	✓	✓	✓
Automatic page orientation for pages that have at least 100 characters of text	✓	✓	✓	✓
Automatic tone adjustment sets contrast, brightness, and background removal for each page	✓	✓	✓	✓

Table 1-26 Digital Send specifications (M578)

Print features	M578dn	M578f	M578c	M578z
Send documents to E-mail, USB, and shared folders on a network	✓	✓	✓	✓
Send documents to SharePoint®	Not supported	Not supported	✓	✓

Table 1-27 Other specifications (M578)

Other features	M578dn	M578f	M578c	M578z
1.75 GB base memory NOTE: Expandable to 3.8 GB.	✓	✓	✓	✓
500 GB Hard Disk Drive	✓	✓	✓	✓

Table 1-27 Other specifications (M578) (continued)

Other features	M578dn	M578f	M578c	M578z
Color touchscreen control panel	✓	✓	✓	✓
Physical keyboard	Not supported	Not supported	✓	✓
HP Trusted Platform Module for encrypting all data that passes through the printer	Optional	Optional	Optional	Optional
Fax	Optional	✓	✓	✓

Technical specifications (E57540)

Review the technical specifications for the E57540 printer.

See www.hp.com/support/colorljM577MFP or http://www.hp.com/support/colorljM578mfp or http://www.hp.com/support/colorljE57540mfp for current information.

Product numbers for each model

- E57540dn - 3GY25A
- E57540c - 3GY26A

Table 1-28 Paper handling specifications (E57540)

Paper handling features	E57540dn	E57540c
Tray 1 (100-sheet capacity)	✓	✓
Tray 2 (550-sheet capacity)	✓	✓
Tray 3 (1 x 550-sheet paper feeder)	Optional	Optional
NOTE: Up to three optional feeders are supported.		
Printer stand	Optional	Optional
Automatic duplex printing	✓	✓
Convenience stapler	Not supported	✓

Table 1-29 Connectivity specifications (E57540)

Connectivity features	E57540dn	E57540c
10/100/1000 Ethernet LAN connection with IPv4 and IPv6	✓	✓
Hi-speed USB 2.0	✓	✓
Walk-up USB port	✓	✓
Hardware Integration Pocket (HIP) for connecting accessory and third-party devices	✓	✓
HP Internal USB Ports	Optional	Optional

Table 1-29 Connectivity specifications (E57540) (continued)

Connectivity features	E57540dn	E57540c
HP Jetdirect 3000w NFC/Wireless Accessory for printing from mobile devices	Optional	Optional
HP Jetdirect 2900nw Print Server accessory for wireless connectivity	Optional	Optional

Table 1-30 Print specifications (E57540)

Print features	E57540dn	E57540c
Prints 38 pages per minute (ppm) on A4 and 40 ppm on letter-size paper	✓	✓
Easy-access USB printing (no computer required)	✓	✓
Store jobs in the printer memory to print later or print privately	✓	✓

Table 1-31 Copy and scan specifications (E57540)

Print features	E57540dn	E57540c
Copies 38 pages per minute (ppm) on A4 and 40 ppm on letter-size paper	✓	✓
100-page document feeder with dual-head scanning for single-pass duplex copying and scanning	✓	✓
HP EveryPage Technologies including ultrasonic multi-feed detection	Not supported	✓
Embedded optical character recognition (OCR) provides the ability to convert printed pages into text that can be edited or searched using a computer	Not supported	✓
SMART Label feature provides paper-edge detection for automatic page cropping	Not supported	✓
Automatic page orientation for pages that have at least 100 characters of text	Not supported	✓
Automatic tone adjustment sets contrast, brightness, and background removal for each page	Not supported	✓

Table 1-32 Digital Send specifications (E57540)

Print features	E57540dn	E57540c
Send documents to E-mail, USB, and shared folders on a network	✓	✓
Send documents to SharePoint®	Not supported	✓

Table 1-33 Other specifications (E57540)

Other features	E57540dn	E57540c
1.75 GB base memory NOTE: Expandable to 2.5 GB.	✓	✓
320 GB Hard Disk Drive	✓	✓
Color touchscreen control panel	✓	✓
Physical keyboard	Not supported	✓
HP Trusted Platform Module for encrypting all data that passes through the printer	Optional	Optional
Fax	Optional	✓

Printer dimensions (SFP)

Make sure your printer environment is large enough to accommodate the printer.

NOTE: Values subject to change. For the most current information, go to www.hp.com/support/colorljM552 or www.hp.com/support/colorljM553 or http://www.hp.com/support/colorljM554 or http://www.hp/support/colorljE55040 or www.hp.com/support/colorljM577MFP or http://www.hp.com/support/colorljM578mfp or http://www.hp.com/support/colorljE57540mfp

Figure 1-8 Dimensions for the M552/M553n/dn/M554/M555dn printers

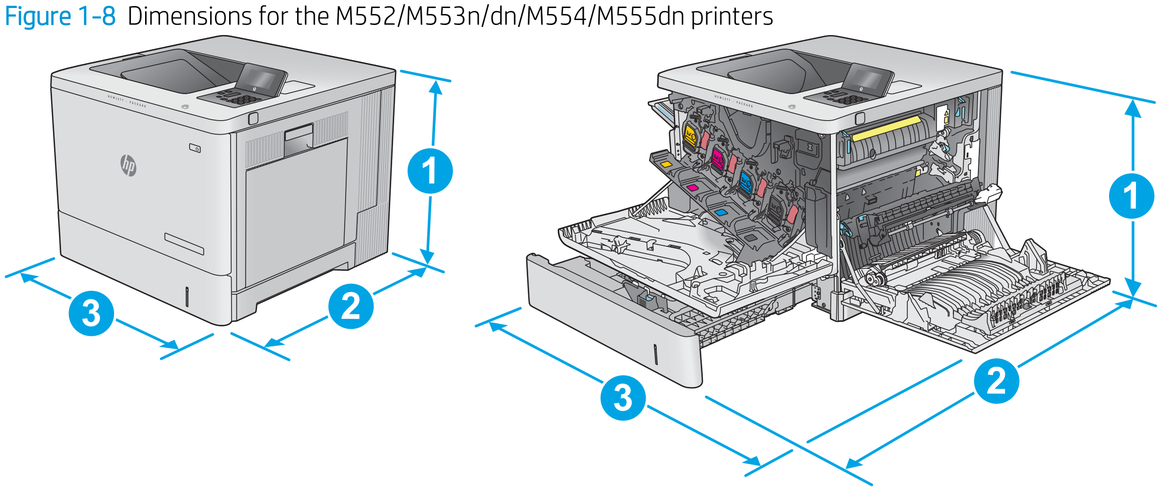
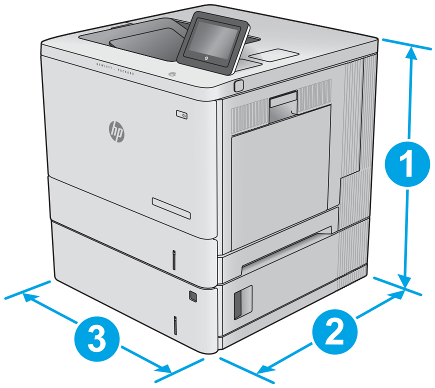


Table 1-34 Dimensions for the M552/M553n/dn/M554/M555dn printers

Measurement	Printer fully closed	Printer fully opened
1. Height	399 mm (15.7 in)	399 mm (15.7 in)
2. Depth	479 mm (18.9 in)	771 mm (30.4 in)
3.Width	458 mm (18.0 in)	826 mm (32.5 in)
Weight	27 kg (59.5 lb) (n models) 27.5 kg (60.6 lb) (dn models)	18.9 kg (41.67 lb)

Figure 1-9 Dimensions for the M553x/M555x/E55040 printers



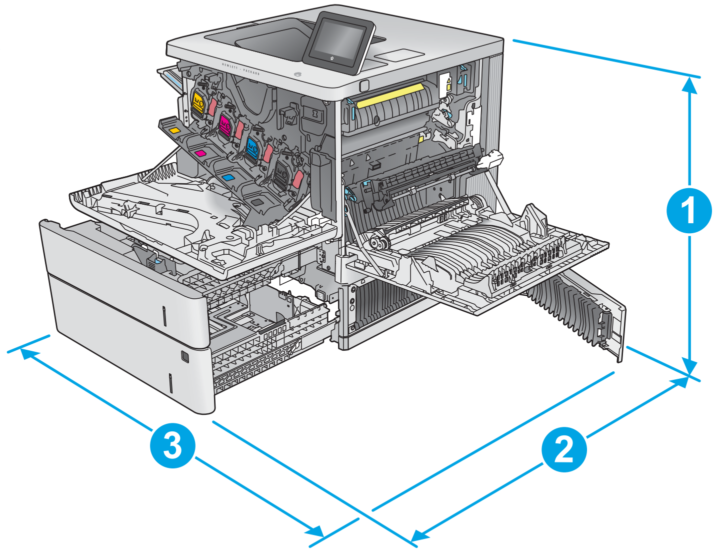
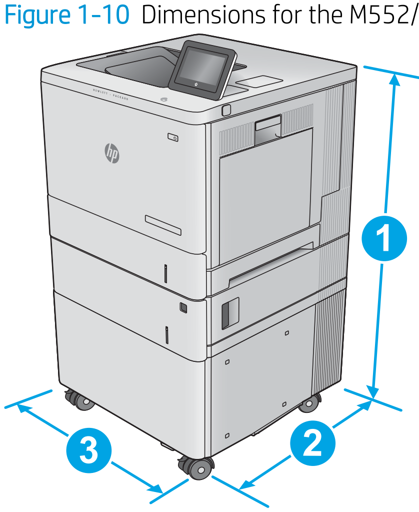


Table 1-35 Dimensions for the M553x/M555x/E55040 printers

Measurement	Printer fully closed	Printer fully opened
1. Height	581 mm (22.9 in)	581 mm (22.9 in)
2. Depth	479 mm (18.9 in)	771 mm (30.4 in)
3.Width	458 mm (18.0 in)	853 mm (33.6 in)
Weight	33.4 kg (73.6 lb)	33.4 kg (73.6 lb)

Figure 1-10 Dimensions for the M552/M553/M554/M555/E55040 printers with one 550-sheet tray and stand



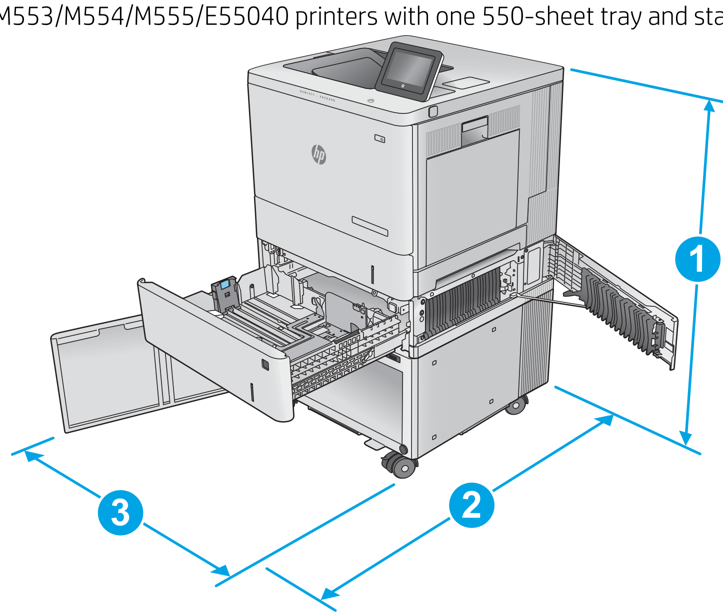


Table 1-36 Dimensions for the M552/M553/M554/M555/E55040 printers with one 550-sheet tray and stand

Measurement	Printer fully closed	Printer fully opened
1. Height	876 mm (34.5 in)	876 mm (34.5 in)

Table 1-36 Dimensions for the M552/M553/M554/M555/E55040 printers with one 550-sheet tray and stand (continued)

Measurement	Printer fully closed	Printer fully opened
2. Depth	479 mm (18.9 in)	900 mm (35.4 in)
3.Width	458 mm (18.0 in)	853 mm (33.6 in)
Weight	51.1 kg (112.7 lb)	51.1 kg (112.7 lb)

Figure 1-11 Dimensions for the 550-sheet tray

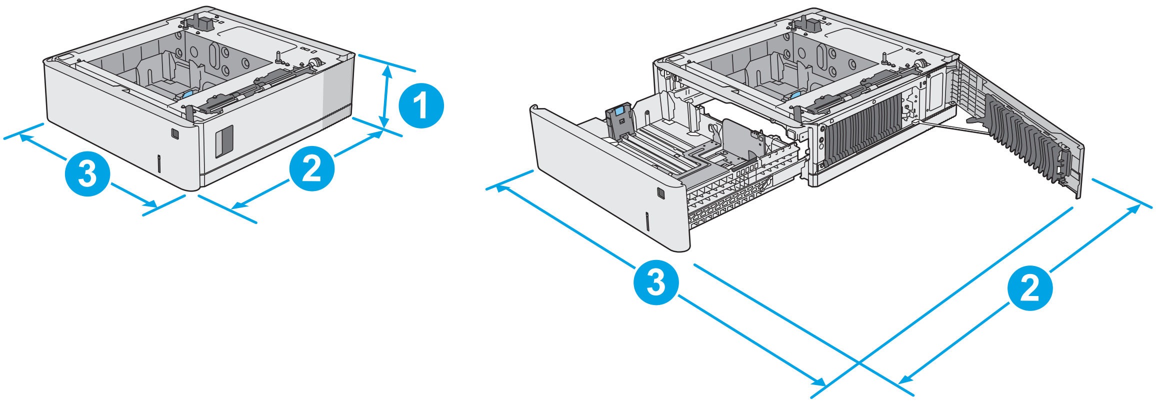


Table 1-37 Dimensions for the 550-sheet tray

Measurement	Tray fully closed	Tray fully opened
1. Height	130 mm (5.1 in)	130 mm (5.1 in)
2. Depth	465 mm (18.3 in)	768 mm (30.2 in)
3. Width	458 mm (18.0 in) (lower-right door open)	853 mm (33.6 in) (lower-right door closed)
Weight	5.8 kg (12.8 lb)	5.8 kg (12.8 lb)

Figure 1-12 Dimensions for the printer stand

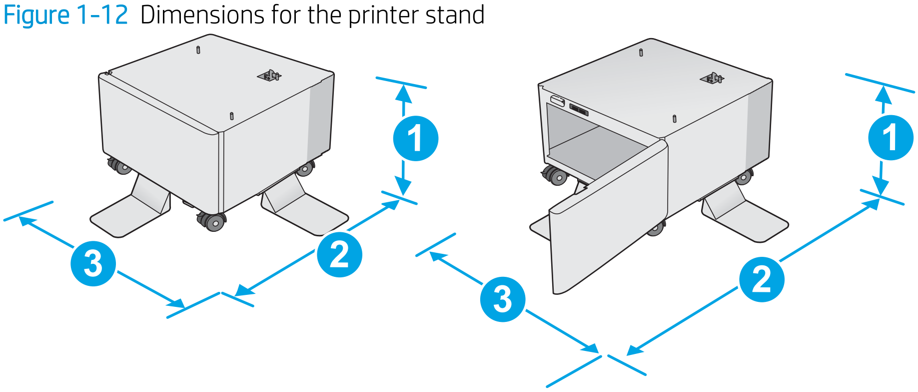


Table 1-38 Dimensions for the printer stand

Measurement	Stand fully closed	Stand fully opened
1. Height	295 mm (11.6 in)	295 mm (11.6 in)
2. Depth	869 mm (34.2 in)	1113 mm (43.8 in)

Table 1-38 Dimensions for the printer stand (continued)

Measurement	Stand fully closed	Stand fully opened
3. Width	884 mm (34.8 in)	884 mm (34.8 in)
Weight	17.7 kg (39 lb)	17.7 kg (39 lb)

Printer dimensions (MFP)

Make sure your printer environment is large enough to accommodate the printer.

NOTE: Values subject to change. For the most current information, go to www.hp.com/support/colorljM552 or www.hp.com/support/colorljM553 or http://www.hp.com/support/colorljM554 or http://www.hp/support/colorljE55040 or www.hp.com/support/colorljM577MFP or http://www.hp.com/support/colorljM578mfp or http://www.hp.com/support/colorljE57540mfp

Figure 1-13 Dimensions for the M577/M578/E57540 printers

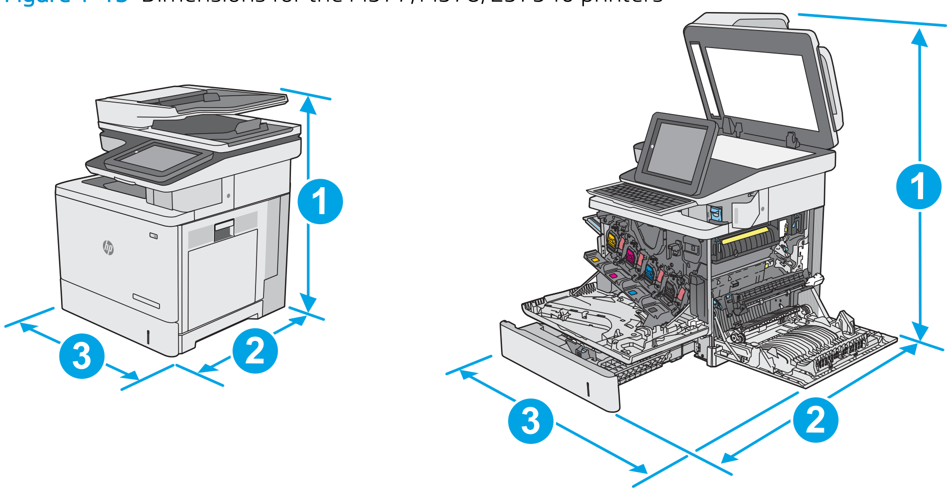


Table 1-39 Dimensions for the M577/M578/E57540 printers

Measurement	Printer fully closed	Printer fully opened
1. Height	583 mm (23.0 in)	837 mm (33.0 in)
2. Depth	504 mm (19.8 in)	853 mm (33.6 in)
3.Width	482 mm (19.0 in)	803 mm (31.6 in)
Weight	38.1 kg (84.0 lb) (dn models)	38.1 kg (84.0 lb) (dn models)
	38.3 kg (84.5 lb) (f models)	38.3 kg (84.5 lb) (f models)
	38.6 kg (85.0 lb) (c/z models)	38.6 kg (85.0 lb) (c/z models)

Figure 1-14 Dimensions for the M577/M578/E57540 printers with one 550-sheet tray and stand

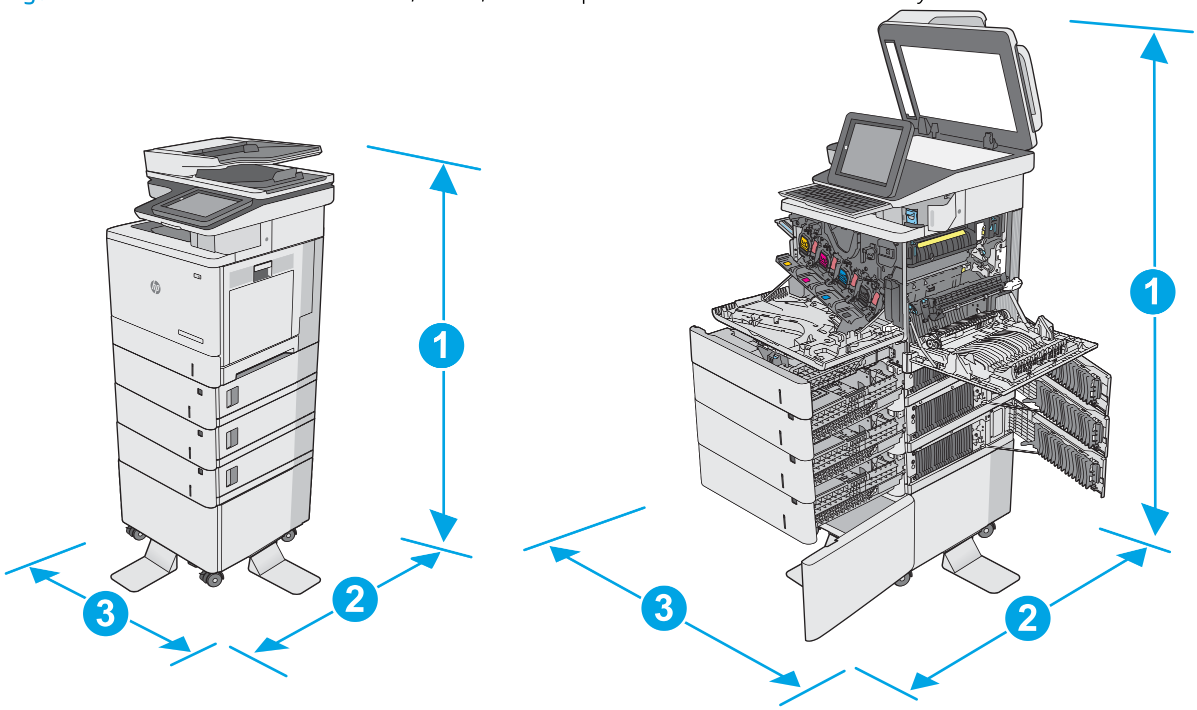


Table 1-40 **Dimensions for the M577/M578/E57540 printers with one 550-sheet tray and stand**

Measurement	Printer fully closed	Printer fully opened
1. Height	1268 mm (49.9 in)	1522 mm (59.9 in)
2. Depth	869 mm (34.2 in)	1113 mm (43.8 in)
3.Width	884 mm (34.8 in)	853 mm (33.6 in)
Weight	73.2 kg (161.4 lb) (dn models)	73.2 kg (161.4 lb) (dn models)
	73.4 kg (161.8 lb) (f models)	73.4 kg (161.8 lb) (f models)
	73.7 kg (162.5 lb) (c/z models)	73.7 kg (162.5 lb) (c/z models)

Figure 1-15 Dimensions for the 550-sheet tray

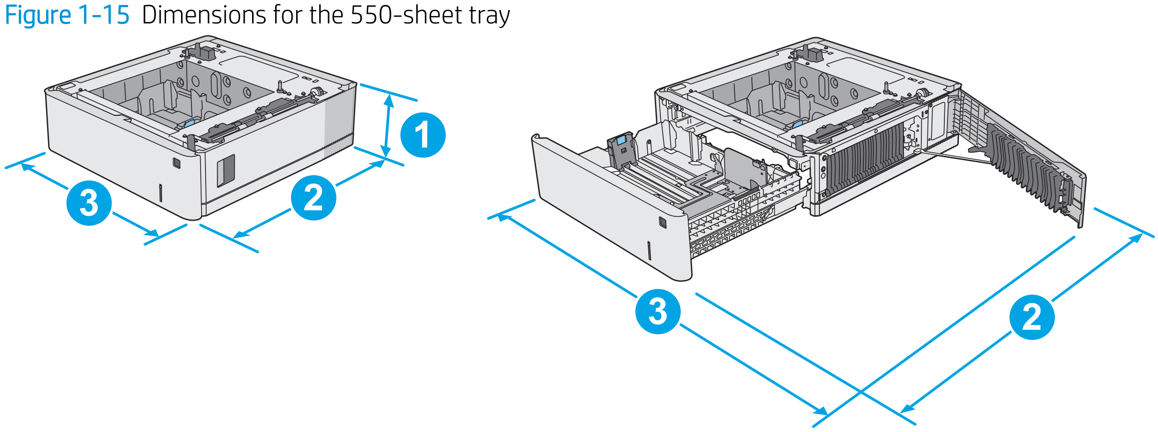


Table 1-41 Dimensions for the 550-sheet tray

Measurement	Tray fully closed	Tray fully opened
1. Height	130 mm (5.1 in)	130 mm (5.1 in)
2. Depth	465 mm (18.3 in)	768 mm (30.2 in)
3. Width	458 mm (18.0 in) (lower-right door open)	853 mm (33.6 in) (lower-right door closed)
Weight	5.8 kg (12.8 lb)	5.8 kg (12.8 lb)

Figure 1-16 Dimensions for the printer stand

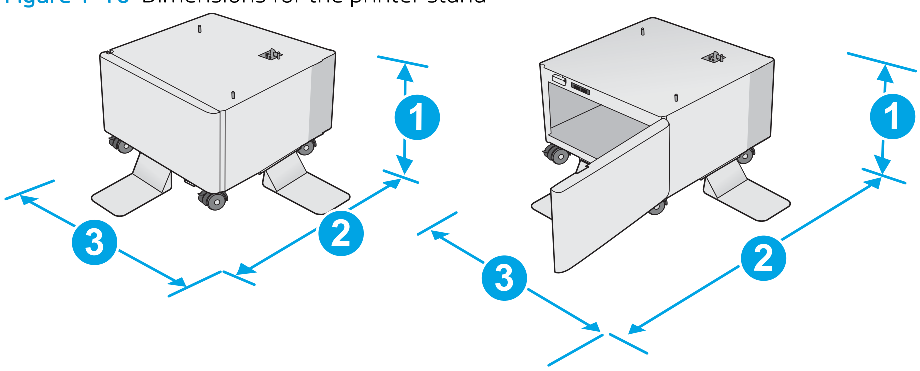


Table 1-42 Dimensions for the printer stand

Measurement	Stand fully closed	Stand fully opened
1. Height	295 mm (11.6 in)	295 mm (11.6 in)
2. Depth	869 mm (34.2 in)	1113 mm (43.8 in)
3. Width	884 mm (34.8 in)	884 mm (34.8 in)
Weight	17.7 kg (39 lb)	17.7 kg (39 lb)

Printer space requirements

Learn about the printer space requirements

HP recommends that 30 mm (1.81 in) be added to the printer dimensions to make sure there is sufficient space to open doors and covers, and to provide proper ventilation. See Printer dimensions (SFP) on page 24 and/or Printer dimensions (MFP) on page 27.

Power consumption, electrical specifications, and acoustic emissions

In order to operate properly, the printer must be in an environment that meets certain power specifications.

See www.hp.com/support/colorljM552 or www.hp.com/support/colorljM553 or http://www.hp.com/support/colorljM554 or http://www.hp/support/colorljE55040 or www.hp.com/support/colorljM577MFP or http://www.hp.com/support/colorljM578mfp or http://www.hp.com/support/colorljE57540mfp for current information.

⚠ CAUTION: Power requirements are based on the country/region where the printer is sold. Do not convert operating voltages. This will damage the printer and void the printer warranty.

Operating-environment range

In order to operate properly, the printer must be in an environment that meets certain specifications.

Table 1-43 Operating-environment specifications

Environment	Recommended	Allowed
Temperature	17° to 25°C (62.6° to 77°F)	15° to 30°C (59° to 86°F)
Relative humidity	30% to 70% relative humidity (RH)	10% to 80% RH

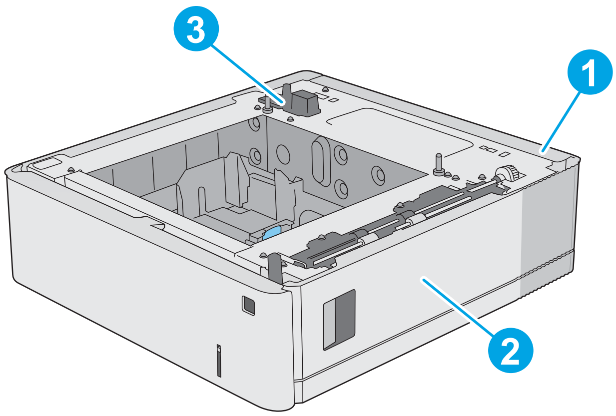
Information (input devices)

Learn about the printer input devices.

550-sheet paper feeder front view

Identify the pars on the 550-sheet paper feeder.

Figure 1-17 550-sheet paper feeder front view



Number	Description
1	550-sheet paper feeder (whole unit)
2	Tray 3/4/5 (cassette)
3	Drawer connector

2 Printer installation and maintenance

Learn about printer installation and maintenance.

Document feeder / scanner

Learn about the printer document feeder and scanner installation and maintenance.

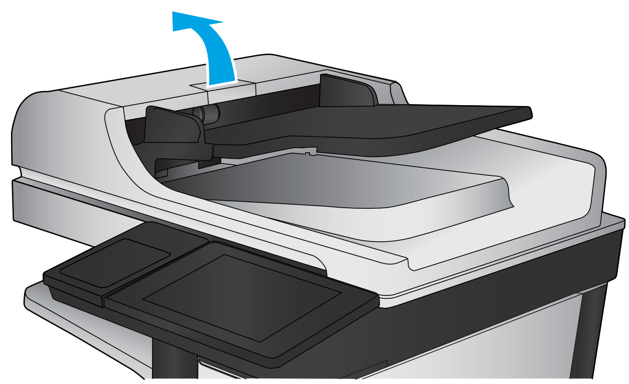
Clean the pickup rollers and separation pad in the document feeder (MFP)

Learn about cleaning the document feeder rollers and pads.

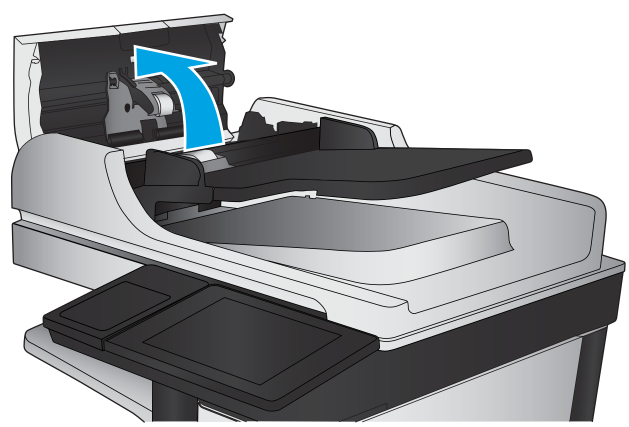
Over time, specks of debris might collect on the document feeder rollers and pads which can affect performance.

> NOTE: The figures in this topic show a typical MFP printer. However, the procedure is correct for all MFP printers.

1. Lift the document-feeder latch.

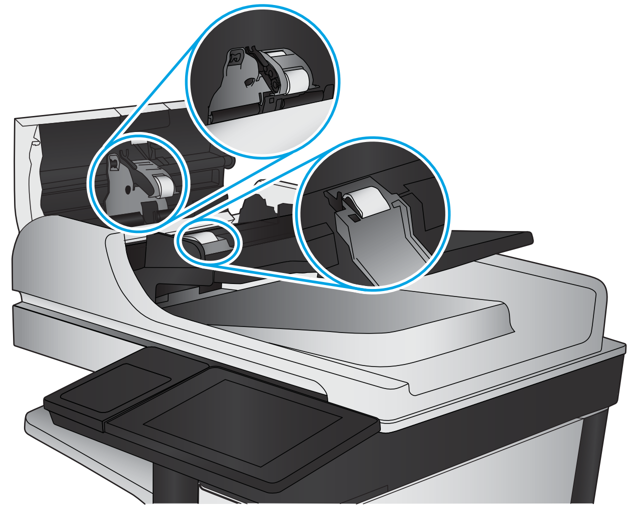


2. Open the document-feeder cover.



3. Remove any visible lint or dust from each of the feed rollers and the separation pad using compressed air or a clean lint-free cloth moistened with warm water.

   NOTE: Lift up the roller assembly to access and clean the second roller.



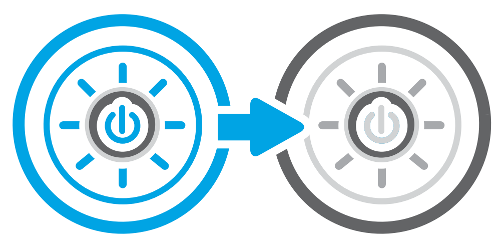
4. Close the document-feeder cover.

Check the scanner glass for dirt and smudges

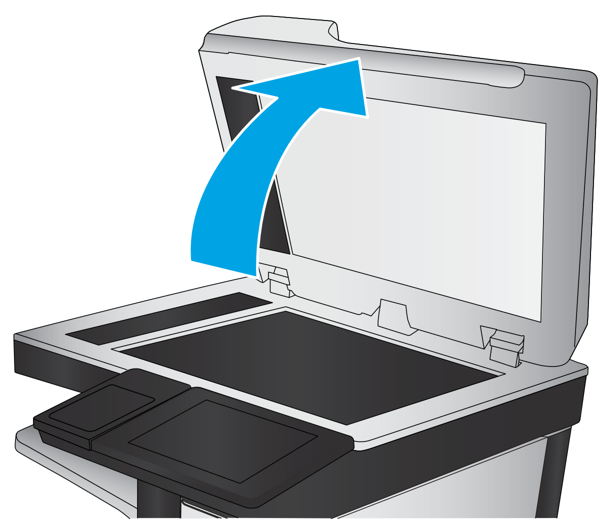
Learn about solving copy-quality debris problems.

Over time, specks of debris might collect on the scanner glass and document feeder white plastic backing, which might cause print defects. Use the following procedure to clean the scanner if the printed pages have streaks, unwanted lines, black dots, poor print quality, or unclear text.

1. Press the power button to turn the printer off, and then disconnect the power cable from the electrical outlet.



2. Open the scanner lid.

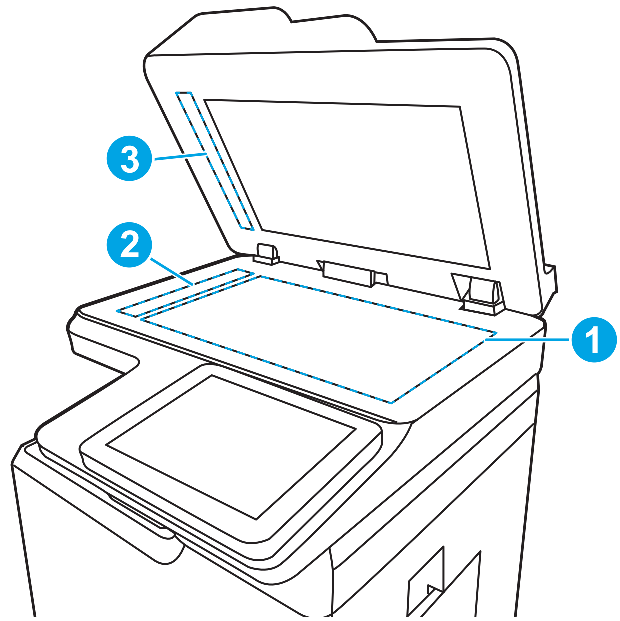


3. Clean the scanner glass (callout 1) and the document feeder strips (callout 2, callout 3) with a soft cloth or sponge that has been moistened with nonabrasive glass cleaner.

   CAUTION: Do not use abrasives, acetone, benzene, ammonia, ethyl alcohol, or carbon tetrachloride on any part of the printer; these can damage the printer. Do not place liquids directly on the glass or platen. They might seep and damage the printer.

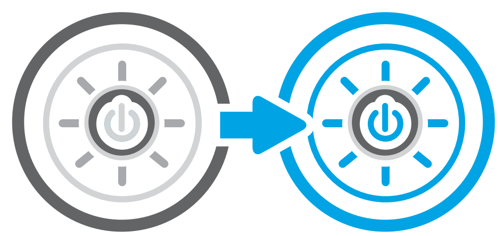
   NOTE: If you are having trouble with streaks on copies when you are using the document feeder, be sure to clean the small strips of glass on the left side of the scanner (callout 2, callout 3).

   [View a video of cleaning the document feeder glass and flatbed glass.]



4. Dry the glass and white plastic parts with a chamois or a cellulose sponge to prevent spotting.

5. Connect the power cable to an outlet, and then press the power button to turn the printer on.



3 Base printer

Learn about the base printer installation and maintenance.

Formatter accessories

Learn about the printer formatter accessories.

Table 3-1 Formatter accessories

Item	Description	Part number
1GB DDR3 Slim DIMM (SFP) NOTE: M553/M554/M555/E55040 only.	Memory	G6W84A (new) 5851-6422 (service)
1GB DDR3 x32 144-Pin 800MHz SODIMM (MFP)	Memory	E5K48A (new) E5K48-67902 (service)
HP Foreign Interface Harness	Optional port for connecting third-party devices	B5L31A (new) B5L31-67902 (service)
HP internal USB ports	Two optional USB ports for connecting third-party devices	B5L28A (new) B5L28-67902 (service)
HP Jetdirect 2900nw Print Server	USB wireless print server accessory	J8031A
HP Jetdirect 3000w NFC/Wireless Accessory	Wi-Fi direct accessory for “touch” printing from mobile devices	J8030A
HP Jetdirect 3100w BLE/NFC/Wireless Accessory NOTE: M578 only.	Wi-Fi direct accessory for “touch” printing from mobile devices	3JN69A
HP LaserJet MFP Analog Fax Accessory 600	Optional fax accessory for the MFP dn models	B5L53A (new) B5L53-67901 (service)
HP secure 500 GB high-performance hard disk drive NOTE: Not supported for the M552dn.	Hard-disk drive (HDD)	B5L29A (new) B5L29-67903 (service)
HP Trusted Platform Module (TPM)	Automatically encrypts all data that passes through the product	F5S62A (new) F5S62-61001 (service)

Supplies

Learn about the printer supplies.

Table 3-2 Supplies

Item	Description	Part number
HP 508A Black Original LaserJet Toner Cartridge (M552/M553/M557)	Standard-capacity replacement black toner cartridge	CF360A (new) CF360-67901 (service)
HP 508X High Yield Black Original LaserJet Toner Cartridge (M552/M553/M557)	High-capacity replacement black toner cartridge	CF360X (new) CF360-67902 (service)
HP 508A Cyan Original LaserJet Toner Cartridge (M552/M553/M557)	Standard-capacity replacement cyan cartridge	CF361A (new) CF361-67901 (service)
HP 508X High Yield Cyan Original LaserJet Toner Cartridge (M552/M553/M557)	High-capacity replacement cyan toner cartridge	CF361X (new) CF361-67902 (service)
HP 508A Yellow Original LaserJet Toner Cartridge (M552/M553/M557)	Standard-capacity replacement yellow toner cartridge	CF362A (new) CF362-67901 (service)
HP 508X High Yield Yellow Original LaserJet Toner Cartridge (M552/M553/M557)	High-capacity replacement yellow toner cartridge	CF362X (new) CF362-67902 (service)
HP 508A Magenta Original LaserJet Toner Cartridge (M552/M553/M557)	Standard-capacity replacement magenta toner cartridge	CF363A (new) CF363-67901 (service)
HP 508X High Yield Magenta Original LaserJet Toner Cartridge (M552/M553/M557)	High-capacity replacement magenta toner cartridge	CF363X (new) CF363-67902 (service)
SVC Cartridge LJ Black Managed Toner (E55040/E57540)	Managed black toner cartridge	W9060–67901
SVC Cartridge LJ Cyan Managed Toner (E55040/E57540)	Managed cyan toner cartridge	W9061–67901
SVC Cartridge LJ Yellow Managed Toner (E55040/E57540)	Managed yellow toner cartridge	W9062–67901
SVC Cartridge LJ Magenta Managed Toner (E55040/E57540)	Managed magenta toner cartridge	W9063–67901
SVC Cartridge-212A Black LaserJet Toner (M554/M555/M578)	Standard-capacity replacement black toner cartridge	7ZU81-67905
SVC Cartridge-212X Black LaserJet Toner (M554/M555/M578)	High-capacity replacement black toner cartridge	7ZU81-67909
SVC Cartridge-212A Cyan LaserJet Toner (M554/M555/M578)	Standard-capacity replacement cyan toner cartridge	7ZU81-67906
SVC Cartridge-212X Cyan LaserJet Toner (M554/M555/M578)	High-capacity replacement cyan toner cartridge	7ZU81-67910
SVC Cartridge-212A Yellow LaserJet Toner (M554/M555/M578)	Standard-capacity replacement yellow toner cartridge	7ZU81-67907

Table 3-2 Supplies (continued)

Item	Description	Part number
SVC Cartridge-212X Yellow LaserJet Toner (M554/M555/M578)	High-capacity replacement yellow toner cartridge	7ZU81-67911
SVC Cartridge-212A Magenta LaserJet Toner (M554/M555/M578)	Standard-capacity replacement magenta toner cartridge	7ZU81-67908
SVC Cartridge-212X Magenta LaserJet Toner (M554/M555/M578)	High-capacity replacement magenta toner cartridge	7ZU81-67912
HP toner-collection unit	Replacement toner-collection unit with attached door	B5L37A (new) B5L37-67901 (service)
HP LaserJet 200 ADF Roller Replacement Kit (M577/M578/E57540)	Replacement feed rollers for the document feeder	B5L52A (new) W5U23–67901 (service)
Fuser kit (110V)	Replacement fuser	B5L35A (new) B5L35-67902 (service)
Fuser kit (220V)	Replacement fuser	B5L36A (new) B5L36-67902 (service)
HP Staple Cartridge Pack (stapler models only)	Replacement staple cartridges (two staple cartridges - 1500 staples each)	Q7432A

Security setup

Learn about the base printer security.

Security settings on the information pages

Print and find printer security information on the configuration and HP embedded Jetdirect information pages.

NOTE: Depending on the model, up to three pages print when printing a configuration page. In addition to the main configuration page, the HP embedded Jetdirect configuration and the wireless pages print.

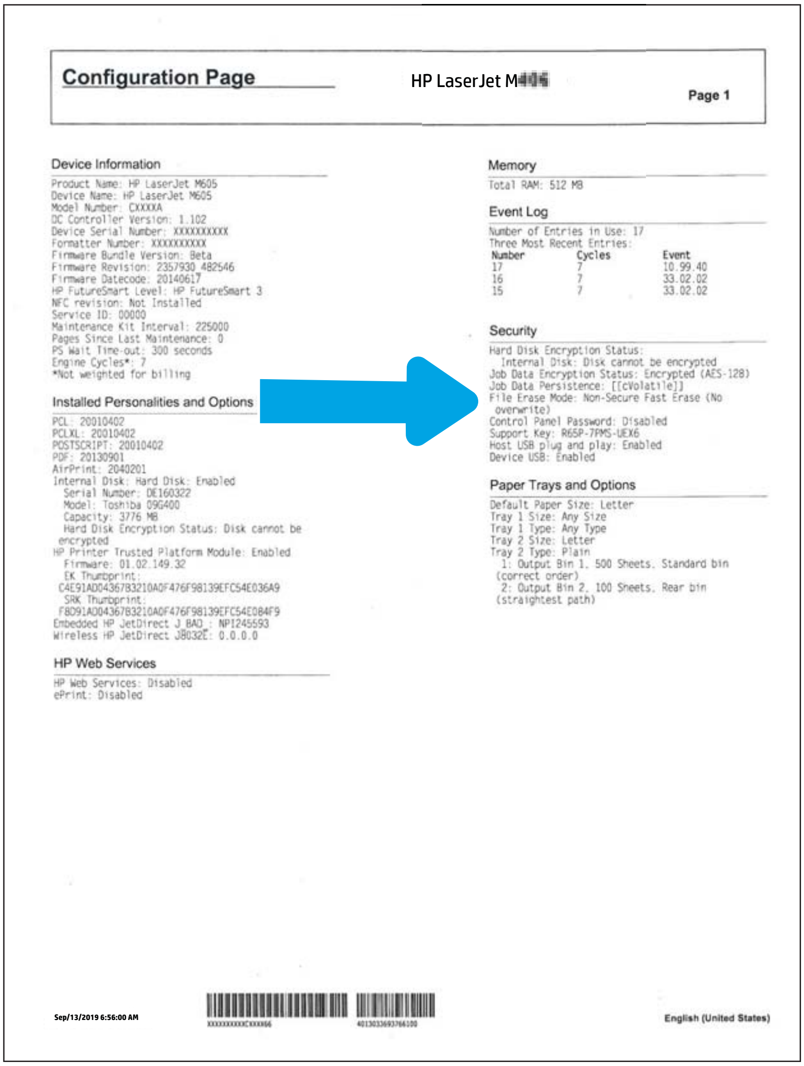
Print a configuration page from a SFP control panel

1. From the Home screen on the printer control panel, use the arrow buttons to navigate to Reports, and then press the OK button.
2. Use the arrow buttons to scroll to Configuration/Status Pages, and then press the OK button.
3. Use the arrow buttons to scroll to Configuration Page, and then press the OK button.
4. Use the arrow buttons to scroll to the print icon . Press the OK button to print the pages.

Print a configuration page from an MFP control panel

1. From the Home screen on the printer control panel, scroll to and touch the Reports button.
2. Open the following menus:
   – Configuration/Status pages
3. Touch Configuration Page to select it.
4. Touch the print icon to print the pages.

Figure 3-1 Configuration page printer security information



Configuration Page HP LaserJet M[redacted] **Page 1**

Device Information

Product Name: HP LaserJet M605
Device Name: HP LaserJet M605
Model Number: CXXXXA
DC Controller Version: 1.102
Device Serial Number: XXXXXXXXXX
Formatter Number: XXXXXXXXXX
Firmware Bundle Version: Beta
Firmware Revision: 2357930_482546
Firmware Datecode: 20140617
HP FutureSmart Level: HP FutureSmart 3
NFC revision: Not Installed
Service ID: 00000
Maintenance Kit Interval: 225000
Pages Since Last Maintenance: 0
PS Wait Time-out: 300 seconds
Engine Cycles*: 7
*Not weighted for billing

Installed Personalities and Options

PCL: 20010402
PCLXL: 20010402
POSTSCRIPT: 20010402
PDF: 20130901
AirPrint: 2040201
Internal Disk: Hard Disk: Enabled
  Serial Number: DE160322
  Model: Toshiba 09G400
  Capacity: 3776 MB
  Hard Disk Encryption Status: Disk cannot be encrypted
HP Printer Trusted Platform Module: Enabled
  Firmware: 01.02.149.32
  EK Thumbprint:
 C4E91AD04367B3210A0F476F98139EFC54E036A9
  SRK Thumbprint:
 F8D91AD04367B3210A0F476F98139EFC54E084F9
Embedded HP JetDirect J_BAD_: NPI245593
Wireless HP JetDirect J8032E: 0.0.0.0

HP Web Services

HP Web Services: Disabled
ePrint: Disabled

Memory

Total RAM: 512 MB

Event Log

Number of Entries in Use: 17
Three Most Recent Entries:

Number	Cycles	Event
17	7	10.99.40
16	7	33.02.02
15	7	33.02.02

Security

Hard Disk Encryption Status:
  Internal Disk: Disk cannot be encrypted
Job Data Encryption Status: Encrypted (AES-128)
Job Data Persistence: [[cVolatile]]
File Erase Mode: Non-Secure Fast Erase (No overwrite)
Control Panel Password: Disabled
Support Key: R65P-7PMS-UEX6
Host USB plug and play: Enabled
Device USB: Enabled

Paper Trays and Options

Default Paper Size: Letter
Tray 1 Size: Any Size
Tray 1 Type: Any Type
Tray 2 Size: Letter
Tray 2 Type: Plain
  1: Output Bin 1, 500 Sheets, Standard bin (correct order)
  2: Output Bin 2, 100 Sheets, Rear bin (straightest path)

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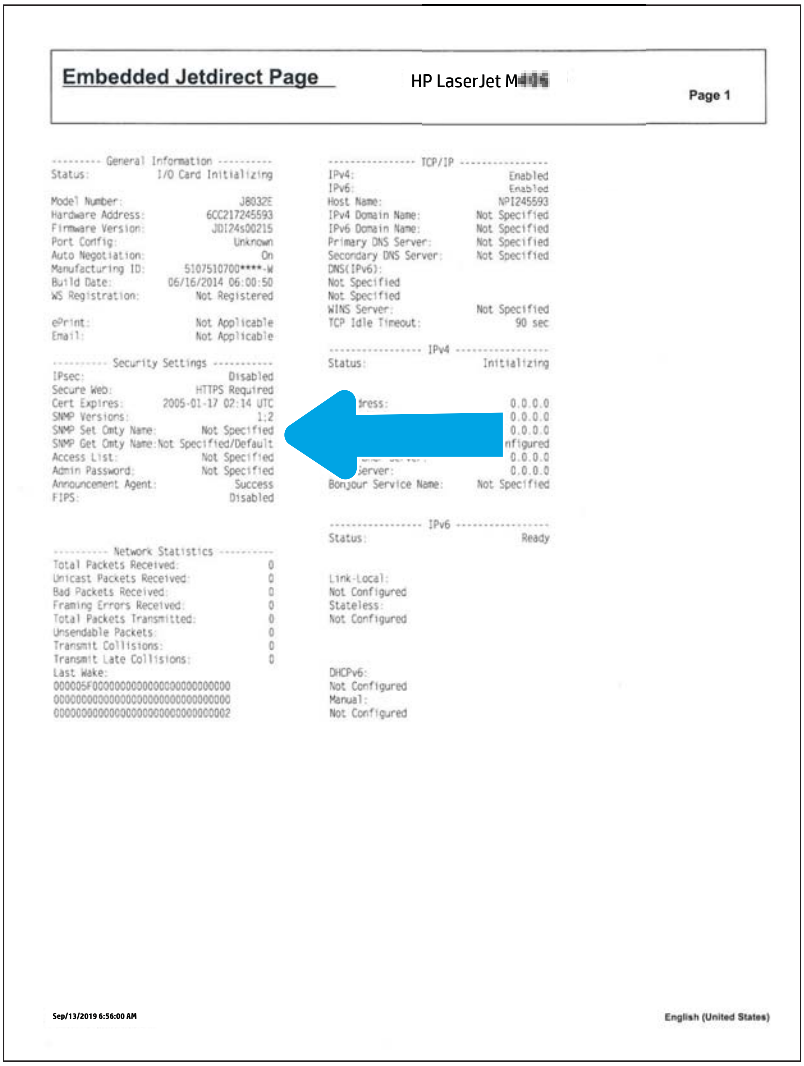
English (United States)

Figure 3-2 HP embedded Jetdirect page printer security information



Embedded Jetdirect Page HP LaserJet M[redacted] **Page 1**

---------- General Information ----------

Status:	I/O Card Initializing
Model Number:	J8032E
Hardware Address:	6CC217245593
Firmware Version:	JDI24s00215
Port Config:	Unknown
Auto Negotiation:	On
Manufacturing ID:	5107510700****-W
Build Date:	06/16/2014 06:00:50
WS Registration:	Not Registered
ePrint:	Not Applicable
Email:	Not Applicable

---------- Security Settings ----------

IPsec:	Disabled
Secure Web:	HTTPS Required
Cert Expires:	2005-01-17 02:14 UTC
SNMP Versions:	1;2
SNMP Set Cmty Name:	Not Specified
SNMP Get Cmty Name:	Not Specified/Default
Access List:	Not Specified
Admin Password:	Not Specified
Announcement Agent:	Success
FIPS:	Disabled

---------- Network Statistics ----------

Total Packets Received:	0
Unicast Packets Received:	0
Bad Packets Received:	0
Framing Errors Received:	0
Total Packets Transmitted:	0
Unsendable Packets:	0
Transmit Collisions:	0
Transmit Late Collisions:	0

Last Wake:
000005F000000000000000000000000
000000000000000000000000000000000
000000000000000000000000000000002

---------- TCP/IP ----------

IPv4:	Enabled
IPv6:	Enabled
Host Name:	NPI245593
IPv4 Domain Name:	Not Specified
IPv6 Domain Name:	Not Specified
Primary DNS Server:	Not Specified
Secondary DNS Server:	Not Specified
DNS(IPv6):	
Not Specified	
Not Specified	
WINS Server:	Not Specified
TCP Idle Timeout:	90 sec

---------- IPv4 ----------

Status:	Initializing
dress:	0.0.0.0
	0.0.0.0
	0.0.0.0
	nfigured
	0.0.0.0
erver:	0.0.0.0
Bonjour Service Name:	Not Specified

---------- IPv6 ----------

Status:	Ready

Link-Local:
Not Configured
Stateless:
Not Configured

DHCPv6:
Not Configured
Manual:
Not Configured

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Advanced security configuration with the HP Embedded Web Server (EWS)

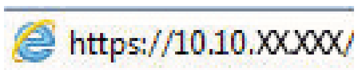
Use the HP Embedded Web Server to manage printer security.

How to access the HP Embedded Web Server (EWS)

Use the following steps to open the EWS.

1. From the Home screen on the printer control panel, touch the Information icon, and then touch the Ethernet icon to display the IP address or host name.

2. Open a web browser, and in the address line, type the IP address or host name exactly as it displays on the printer control panel. Press the `Enter` key on the computer keyboard. The EWS opens.



NOTE: If the web browser displays a message indicating that accessing the website might not be safe, select the option to continue to the website. Accessing this website will not harm the computer.

To use the HP Embedded Web Server, the browser must meet the following requirements:

Windows® 7

- Internet Explorer (version 8.x or greater)
- Google Chrome (version 34.x or greater)
- Firefox (version 20.x or greater)

Windows® 8 or greater

- Internet Explorer (version 9.x or greater)
- Google Chrome (version 34.x or greater)
- Firefox (version 20.x or greater)

macOS

- Safari (version 5.x or greater)
- Google Chrome (version 34.x or greater)

Linux

- Google Chrome (version 34.x or greater)
- Firefox (version 20.x or greater)

Security tab

Refer to the table for settings in the **Security** tab.

Table 3-3 HP Embedded Web Server Security tab

Menu	Description
General Security	Settings for general security, including the following: • Configure an administrator password to restrict access to certain features on the printer. • Set a custom device Service Access Code. • Set PJL password for processing PJL commands. • Set file system access and firmware upgrade security. • Enable or disable the Host USB port on the control panel or the USB connectivity port on the formatter for printing directly from a computer. • View the status of all security settings.
Account Policy	Enable administrator account settings.
Access Control	Configure access to printer functions for specific individuals or groups, and select the method individuals use to sign in to the printer.
Protect Stored Data	Configure and manage the internal storage for the printer. Configure settings for jobs that are stored on the printer internal storage.
Manage Remote Apps	Manage or whitelist remote apps by importing or deleting certificates that allow devices to use this product.
Certificate Management	Install and manage security certificates for access to the printer and the network.
Email Domain Restriction	If email functionality is enabled, administrators can limit the email addresses to which the printer can send messages.
Web Service Security	Allow resources on this printer to be accessed by web pages from different domains. If no sites are added to the list, then all sites are trusted.
Self Test	Verify that the security functions are running according to expected system parameters.

HP Cartridges with JetIntelligence

Learn about toner cartridge JetIntelligence.

HP Cartridges with JetIntelligence support two features for managing toner cartridges.

- The HP Cartridge Policy feature allows customers to specify the use of only genuine HP toner cartridges in the printer.
- The anti-theft feature enables locking a cartridge to a specific printer or fleet of printers.

HP Cartridge Policy

The genuine HP Cartridge Policy feature allows a customer to specify that only genuine HP supplies can be used in a printer. If anything but a genuine HP supply is installed, the printer will not print. This feature is disabled by default, and can be enabled or disabled from the control panel, the HP Embedded Web Server (EWS), or HP Web Jetadmin.

If a genuine HP cartridge has passed the low state and is installed in a printer that has this feature enabled, the printer will display an **Unauthorized Cartridge** message on the control panel and will not print.

If a non-HP toner cartridge is used in a printer with this feature enabled, the message **Unauthorized Cartridge** appears on the control-panel display and the printer will not print.

NOTE: If a customer suspects they have a counterfeit cartridge, they should report it by going to www.hp.com/go/anticounterfeit and selecting **Report now**.

Anti-theft or cartridge protection

The toner cartridge anti-theft feature allows a customer to configure the printer to automatically lock toner cartridges to a specific printer or fleet of printers when they are installed. A locked toner cartridge will work only in the specified printer or fleet of printers. This feature prevents toner cartridges from being stolen and used in another printer, or from being moved from an authorized printer to an unauthorized printer. This feature is disabled by default. Cartridge protection to a single printer can be enabled or disabled from the control panel or the HP Embedded Web Server (EWS). Cartridge protection for a printer fleet can be enabled only by using HP Web Jetadmin.

When the anti-theft feature is enabled, the toner cartridge in a printer will only work in the specified printer or fleet of printers. If a locked toner cartridge is moved to another printer, the cartridge will not print and the message **Protected Cartridge** appears on the control-panel display.

NOTE: When a toner cartridge is locked to a specific printer or fleet of printers, it cannot be unlocked. This is a permanent operation.

Dynamic security

Learn about dynamic-security-enabled printers.

NOTE: All printer models might not support the Dynamic security feature.

Certain HP printers use cartridges that have security chips or electronic circuitry. Cartridges using a non-HP chip or modified or non-HP circuitry* might not work. And, those that work today might not work in the future.

As is standard in the printing business, HP has a process for authenticating cartridges. HP continues to use security measures to protect the quality of our customer experiences, maintain the integrity of our printing systems, and protect our intellectual property. These measures include authentication methods that change periodically and might prevent some third-party supplies from working now or in the future. HP printers and original HP cartridges deliver the best quality, security and reliability. When cartridges are cloned or counterfeited, the customer is exposed to quality and potential security risks, compromising the printing experience.

***Non-HP Chips and modified or non-HP electronic circuitry** are not produced or validated by HP. HP cannot guarantee that these chips or circuitry will work in your printer now or in the future. If you are using non-original HP cartridges, please check with your supplier to ensure your cartridge has an original HP security chip or unmodified HP electronic circuitry.

Printer security features

Restrict who has access to configuration settings, secure data, and prevent access to valuable hardware components.

Introduction

The printer includes several security features to restrict who has access to configuration settings, to secure data, and to prevent access to valuable hardware components.

Security statements

Review this important security statement.

The printer supports security standards and recommended protocols that help you keep the printer secure, protect critical information on your network, and simplify the way you monitor and maintain the printer.

Assign an administrator password

Assign an administrator password for access to the printer and the HP Embedded Web Server so that unauthorized users cannot change the printer settings.

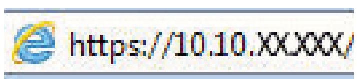
Use the HP Embedded Web Server (EWS) to set the password

Use the following steps to set a password for the printer.

1. Open the HP Embedded Web Server (EWS):

   a. From the Home screen on the printer control panel, touch the Information icon, and then touch the Ethernet icon to display the IP address or host name.

   b. Open a web browser, and in the address line, type the IP address or host name exactly as it displays on the printer control panel. Press the `Enter` key on the computer keyboard. The EWS opens.

   NOTE: If the web browser displays a message indicating that accessing the website might not be safe, select the option to continue to the website. Accessing this website will not harm the computer.

2. Click the **Security** tab.

3. Open the **General Security** menu.

4. In the area labeled **Set the Local Administrator Password**, enter the name to associate with the password in the **Username** field.

5. Enter the password in the **New Password** field, and then enter it again in the **Verify Password** field.

   NOTE: To change an existing password, first enter the existing password in the **Old Password** field.

6. Click the **Apply** button.

   IMPORTANT: Make note of the password and store it in a safe place. The administrator password cannot be recovered. If the administrator password is lost or forgotten, contact HP Support for the assistance required to completely reset the printer.

   [Click here to contact HP Support about resetting the printer password](#).

Provide user access credentials at the printer control panel

Use the following steps to sign into the control panel.

Some features on the printer control panel can be secured so that unauthorized people cannot use them. When a feature is secured, the printer prompts you to sign in before you can use it. You can also sign in without waiting for a prompt by selecting Sign In from the printer control panel.

Typically, the credentials for signing in to the printer are the same as for signing in to the network. Consult the network administrator for this printer if you have questions about which credentials to use.

1. From the Home screen on the printer control panel, select Sign In.

2. Follow the prompts to enter the credentials.

NOTE: To maintain security for the printer, select Sign Out when you have finished using the printer.

IP Security

IP Security (IPsec) is a set of protocols that control IP-based network traffic to and from the printer. IPsec provides host-to-host authentication, data integrity, and encryption of network communications.

For printers that are connected to the network and have an HP Jetdirect print server, you can configure IPsec by using the **Networking** tab in the HP Embedded Web Server.

Encryption support: HP High Performance Secure Hard Disks

The hard disk provides hardware-based encryption so you can securely store sensitive data without impacting printer performance. This hard disk uses the latest Advanced Encryption Standard (AES) and has versatile time-saving features and robust functionality.

Use the **Security** menu in the HP Embedded Web Server to configure the disk.

Lock the formatter

The formatter has a slot that you can use to attach a security cable.

Locking the formatter prevents someone from removing valuable components from it.

Cleaning

Learn about the base printer cleaning functions and procedures.

Over time, particles of toner and paper accumulate inside the printer. This can cause print-quality problems during printing. Cleaning the paper path eliminates or reduces these problems.

Clean the paper path and toner-cartridge areas every time that the toner cartridge is changed or whenever print-quality problems occur. As much as possible, keep the printer free from dust and debris. To clean the printer paper path at regularly scheduled intervals, go to Automatic cleaning page on page 50.

Printer rollers might require cleaning if the printer is experiencing pickup and feed problems or frequent paper jams that involve the rollers.

Print a cleaning page

Learn how to print a cleaning page.

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

Print a cleaning page from a SFP control panel

1. From the Home screen on the printer control panel, use the arrow keys to navigate to Support Tools, and then press the OK button.
2. Use the arrow buttons to scroll to Maintenance, and then press the OK button.
3. Use the arrow buttons to scroll to Calibration/Cleaning, and then press the OK button.
4. Use the arrow buttons to scroll to Cleaning page, and then press the OK button.

   TIP: Use this screen to set up automatic cleaning page intervals if desired.

5. Use the arrow buttons to scroll to Print (at the bottom of the control-panel display), and then press the OK button to print the cleaning page.

   NOTE: A **Cleaning...** message displays on the control-panel display. Do not turn the printer off until the cleaning process has finished. When it is finished, discard the printed page.

Print a cleaning page from an MFP control panel

1. From the Home screen on the printer control panel, scroll to and touch the Support Tools button.
2. Open the following menus:
   - Maintenance
   - Calibration/Cleaning
3. Touch Cleaning Page, and then touch the Print button to print the cleaning page.

   NOTE: A **Cleaning...** message displays on the control-panel display. Do not turn the printer off until the cleaning process has finished. When it is finished, discard the printed page.

TIP: Use this screen to set up automatic cleaning page intervals if desired.

Automatic cleaning page

Learn how to set up automatic cleaning page intervals.

Enable and configure auto cleaning from a SFP control panel

1. From the Home screen on the printer control panel, use the arrow keys to navigate to Support Tools, and then press the OK button.
2. Use the arrow buttons to scroll to Maintenance, and then press the OK button.
3. Use the arrow buttons to scroll to Calibration/Cleaning, and then press the OK button.
4. Use the arrow buttons to scroll to Cleaning page, and then press the OK button.
5. Use the arrow buttons to scroll to the desired automatic cleaning page interval, and then press the OK button to print the cleaning page.
6. Use the arrow buttons to scroll to Done (at the bottom of the control-panel display), and then press the OK button.

Enable and configure auto cleaning from an MFP control panel

1. From the Home screen on the printer control panel, scroll to and touch the Support Tools button.
2. Open the following menus:
   - Maintenance
   - Calibration/Cleaning
   - Cleaning Page
3. Touch the desired automatic cleaning page interval, and then touch the Done button.

Clean the Tray 1 rollers

Learn about cleaning the Tray 1 rollers.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 3-4 Part information

Part number	Part description
B5L24-67905	Multipurpose/tray 1 pick-up roller and separation assembly

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the Tray 1 pickup roller

Follow these steps to remove and replace the Tray 1 pickup roller.

▲ Remove the Tray 1 pickup roller.

a. Open Tray 1.

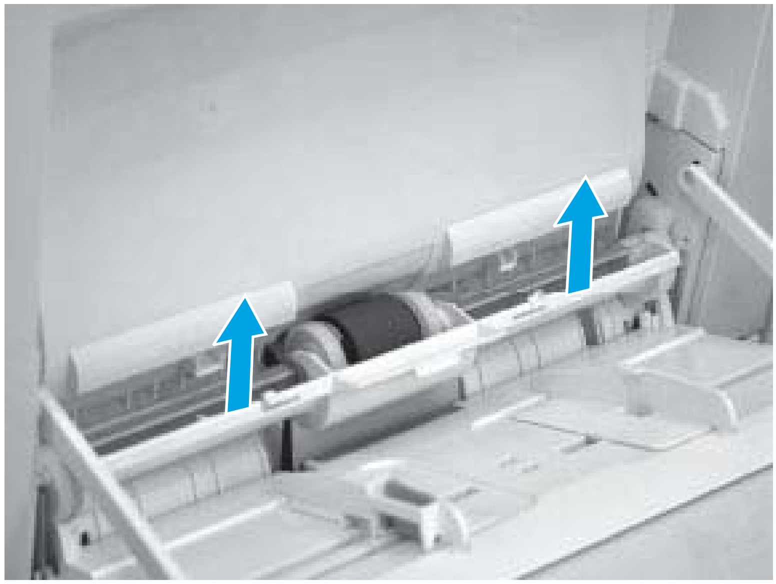
Figure 3-3 Open Tray 1

b. Pull on the center of the cover to open it.

Figure 3-4 Open the roller cover

c. Pull the cover straight off of the printer to remove it.

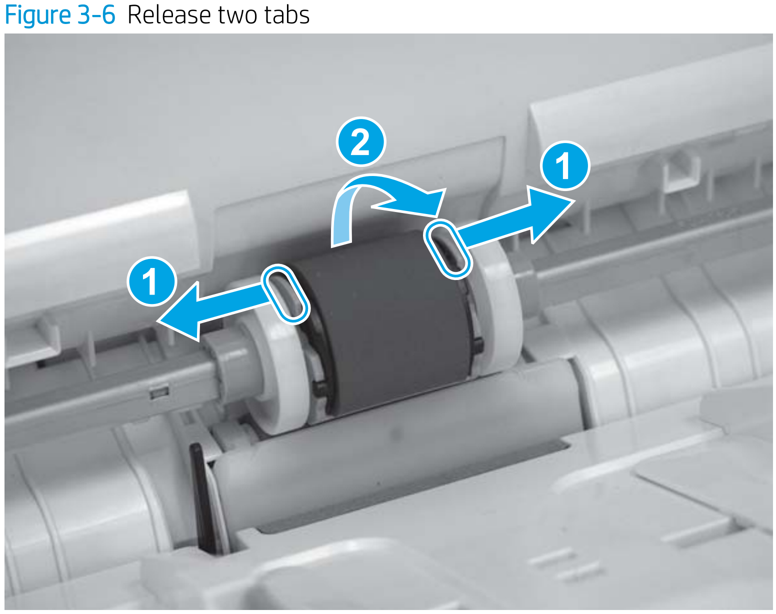
Figure 3-5 Remove the cover



d. Release two tabs (callout 1) between the roller collar and roller, and then rotate the top of the roller (callout 2) out and away from the printer.

TIP: Pushing down on the top of the roller might make it easier to release the tabs.

Figure 3-6 Release two tabs



e. Remove the roller.

Figure 3-7 Remove the roller

Remove the Tray 1 separation roller

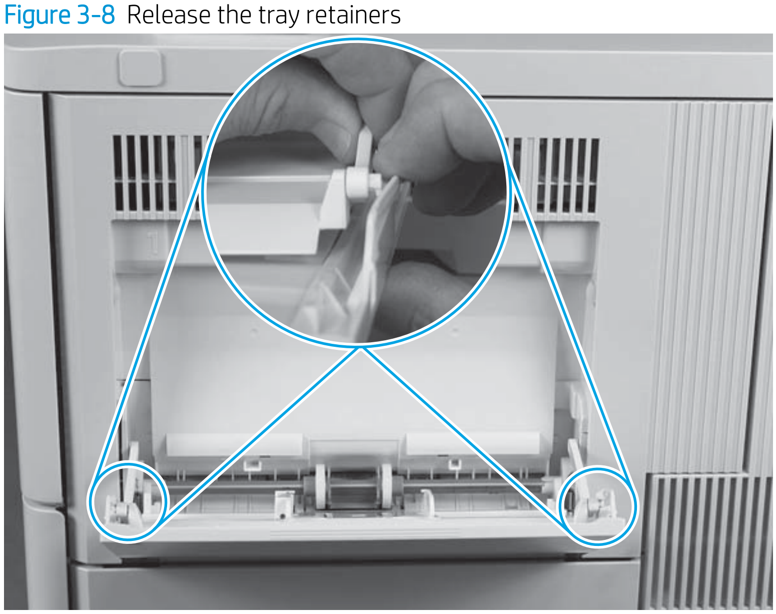
Follow these steps to remove and replace the Tray 1 separation roller.

▲ Remove the Tray 1 separation roller.

a. Carefully flex the right- and left-side tray retainers to release them.

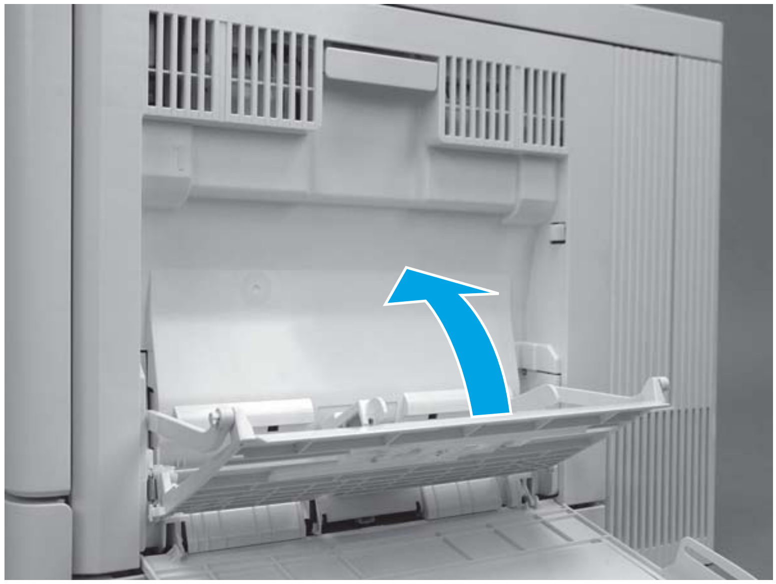
TIP: Raise the tray to the halfway closed position to make it is easier to release the retainers.

Figure 3-8 Release the tray retainers



b. Carefully raise Tray 1 up into the printer.

Figure 3-9 Raise Tray 1 up



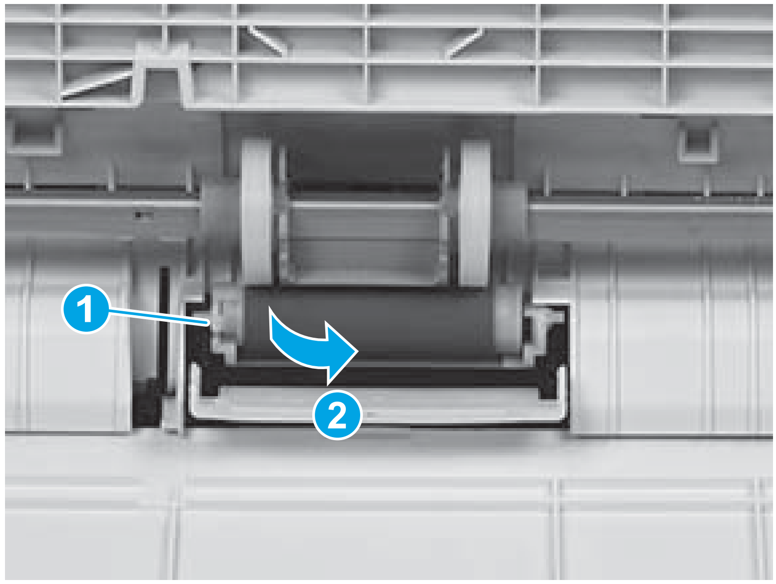
c. Firmly grasp the corners of the separation roller cover, and then rotate it down and away from the printer to remove it.

Figure 3-10 Open the roller cover

d. Release one tab (callout 1), and then rotate the end of the roller out and away from the holder (callout 2).

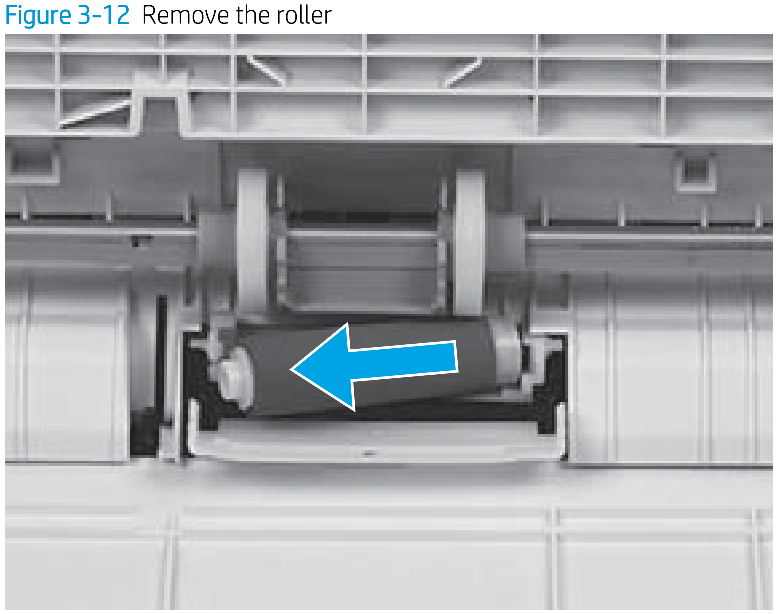
TIP: It might be necessary to use a small flat-blade screwdriver to complete this step.

Figure 3-11 Release one tab



e. Slide the roller out of the holder to remove it.

Figure 3-12 Remove the roller



Clean the Tray 1 rollers

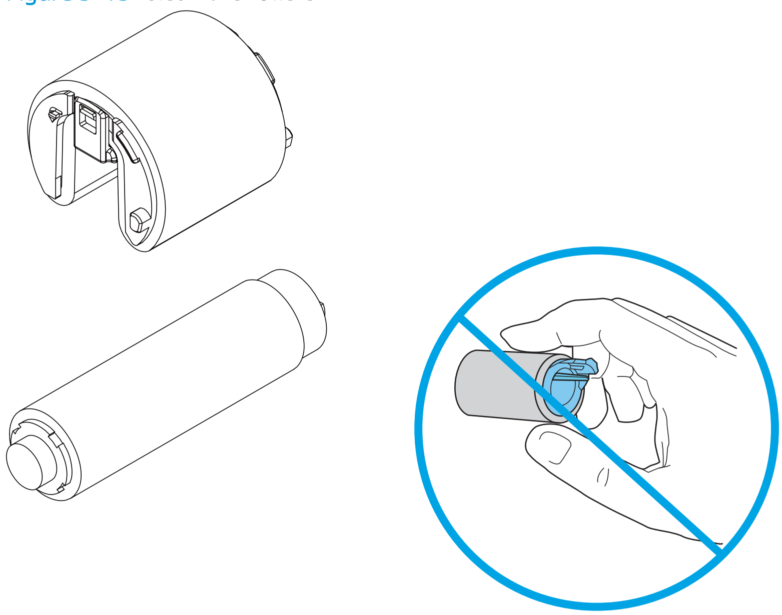
Learn about cleaning the Tray 1 rollers.

▲ Clean the Tray 1 rollers, and then reverse the removal steps to reinstall them.

▲ Use a damp, lint-free cloth to gently clean the roller and pad.

⚠ CAUTION:

Figure 3-13 Clean the rollers



Clean the Tray 2-X rollers

Learn about cleaning the Tray 2-X rollers.

NOTE: The procedure in this section shows Tray 2 in the figures. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5.

Before performing service

Turn the printer power off

- Disconnect the power cable.

  WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 3-5 Part information

Part number	Part description
RM2-6577-000CN	Kit-Tray 2-X roller

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the Tray 2-X paper pickup roller assembly

Learn about removing the Tray 2-X rollers.

NOTE: A SFP printer is shown in this section. However, the procedure is correct for all printer models.

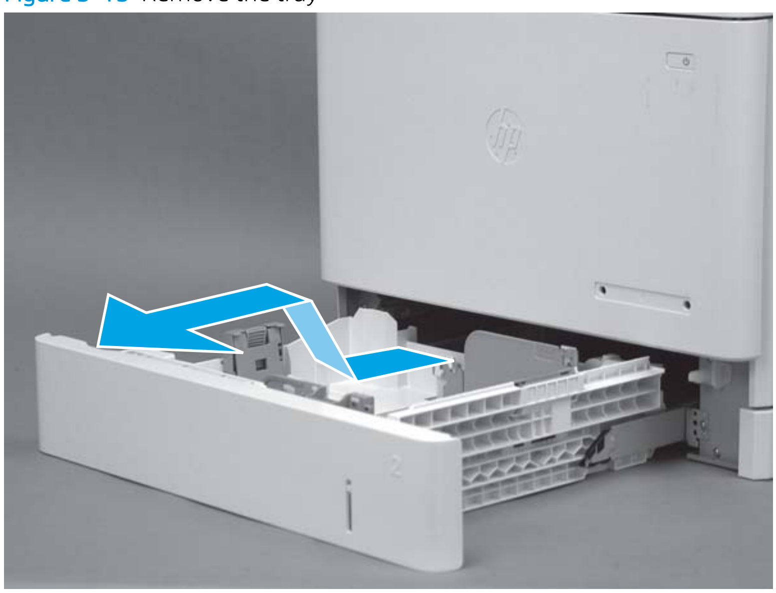
The figures in this section show Tray 2. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5. Always carefully read the instructions that accompany the figures.

1. Pull the tray out until it stops.

Figure 3-14 Pull the tray out

2. Lift the front of the tray, and then pull it out of the printer to remove it.

Figure 3-15 Remove the tray

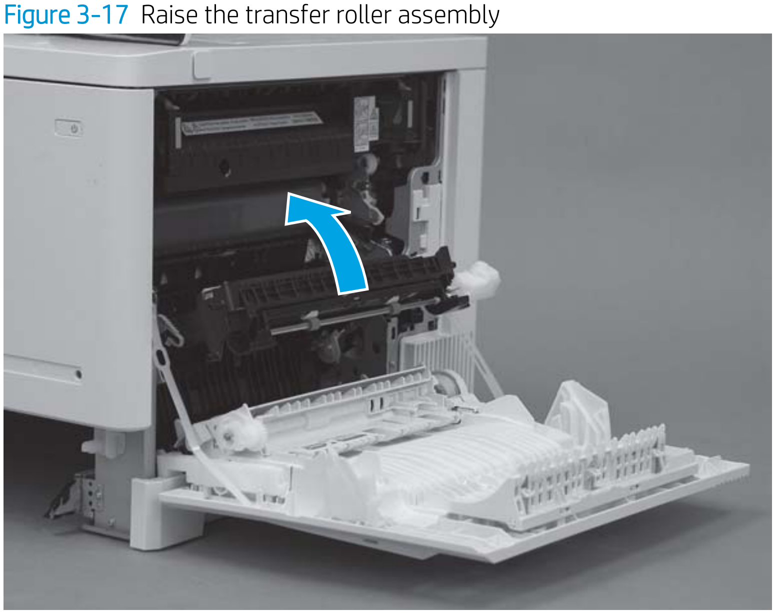


3. Open the right door.

Figure 3-16 Open the right door

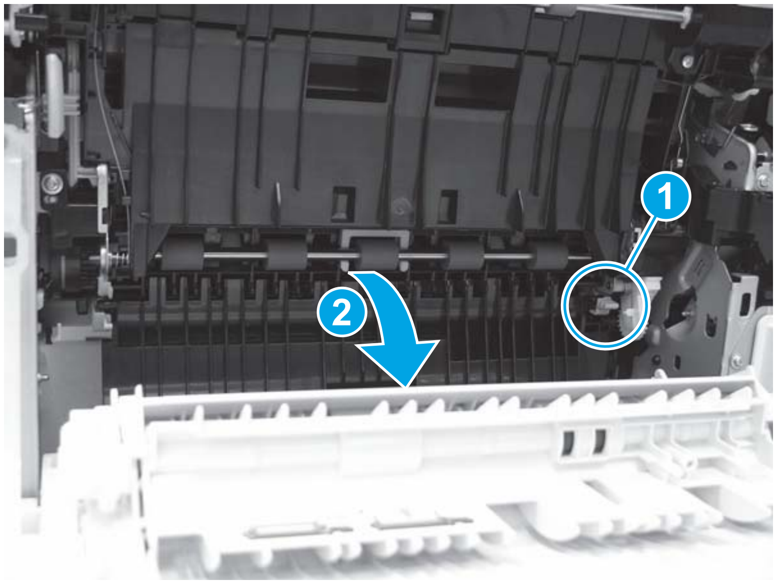
4. Carefully raise the transfer roller assembly up and into the printer.

Figure 3-17 Raise the transfer roller assembly



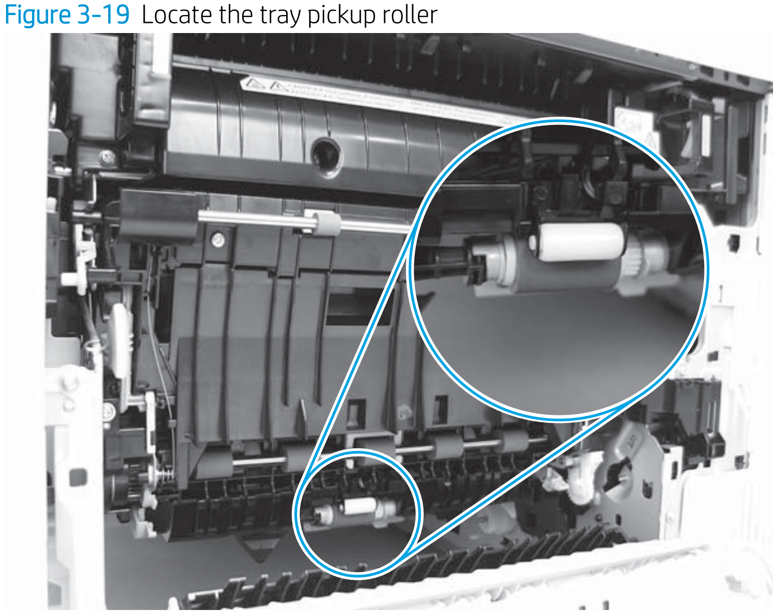
5. Release the green handle (callout 1), and then lower the paper guide (callout 2).

Figure 3-18 Lower the paper guide



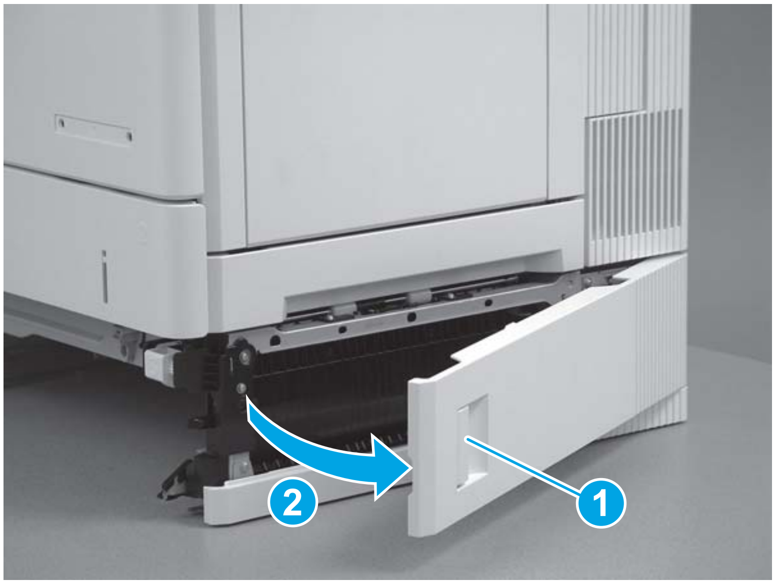
6. Locate the tray pickup roller assembly.

Figure 3-19 Locate the tray pickup roller



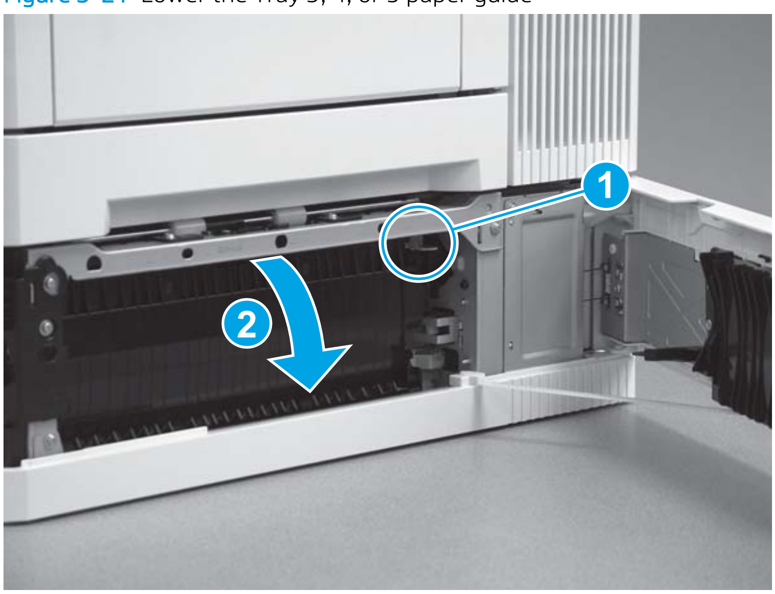
7. **Trays 3, 4, or 5 only**: Release the latch (callout 1), and then open the right door (callout 2).

Figure 3-20 Open the Tray 3, 4, or 5 right door



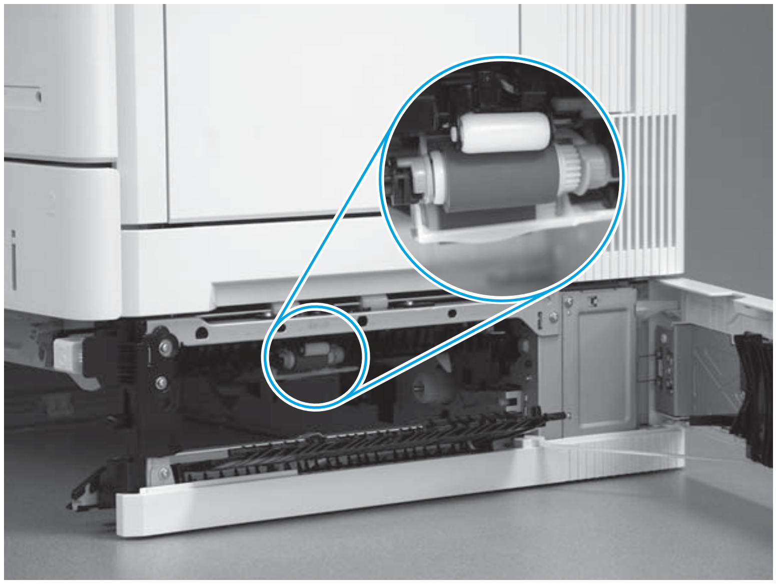
8. **Trays 3, 4, or 5 only**: Release the green handle (callout 1), and then lower the paper guide (callout 2).

Figure 3-21 Lower the Tray 3, 4, or 5 paper guide



9. **Trays 3, 4, or 5 only**: Locate the tray pickup roller assembly.

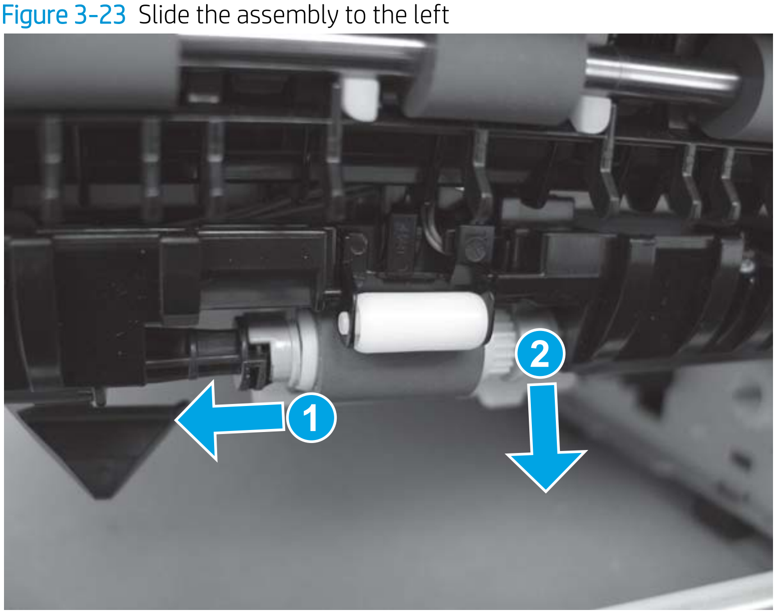
Figure 3-22 Locate the Tray 3, 4, or 5 pickup roller assembly



10. Slide the assembly to the left to compress the spring loaded shaft (callout 1), and then rotate the right end of the assembly down and away from the printer (callout 2).

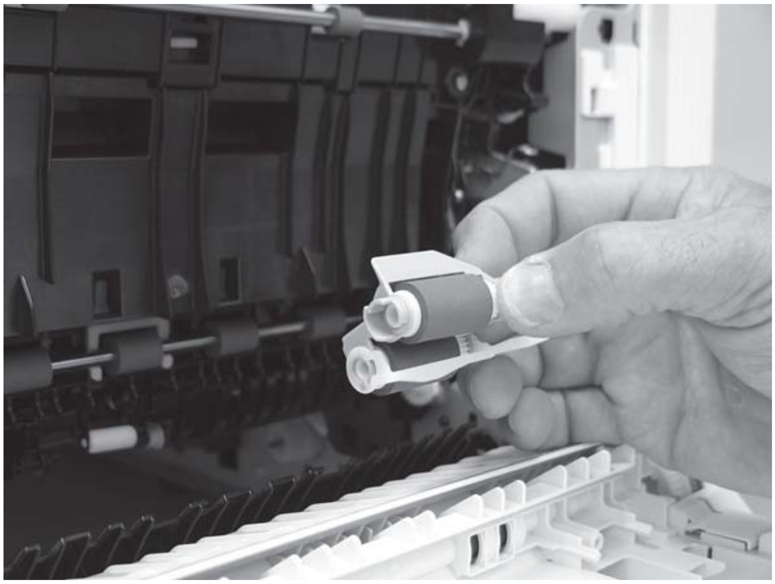
TIP: It might be easier to access the roller through the tray cavity, while viewing it through the right door opening.

Figure 3-23 Slide the assembly to the left



11. Remove the roller assembly.

Figure 3-24 Remove the roller assembly

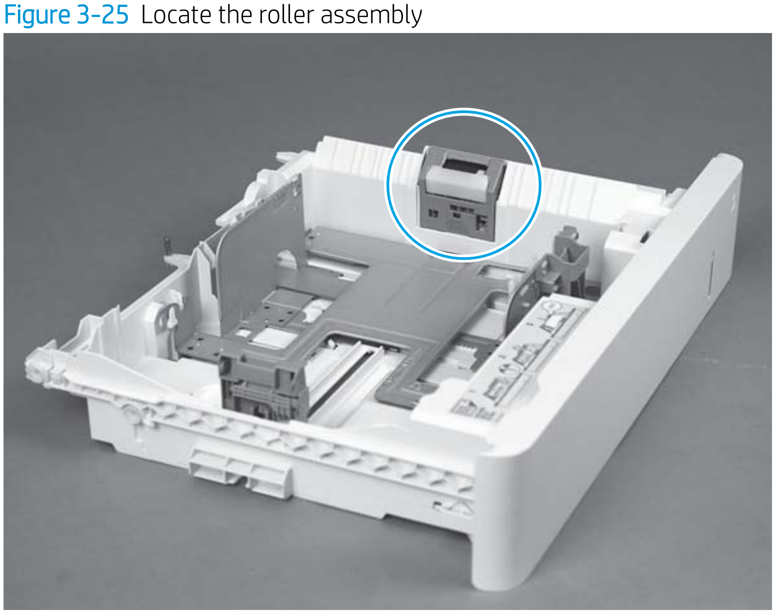


Remove the Tray 2-X separation roller

Learn about removing the Tray 2-X separation roller.

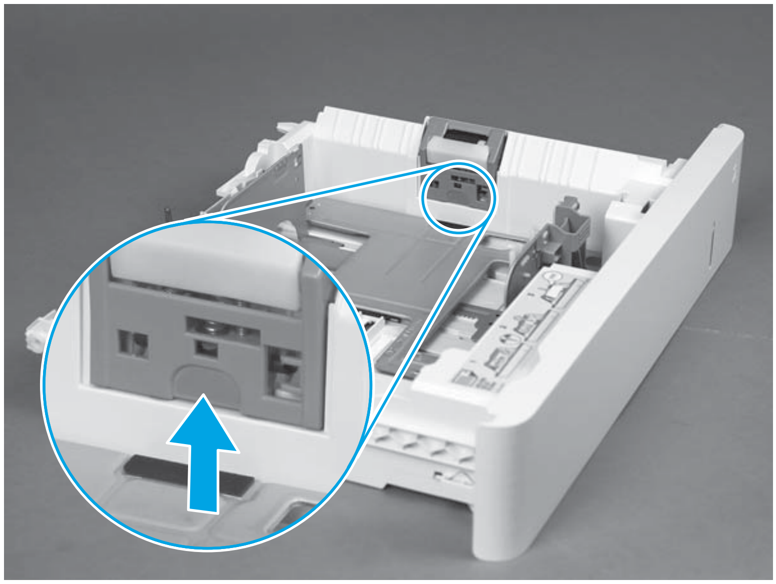
1. Locate the tray separation roller.

Figure 3-25 Locate the roller assembly



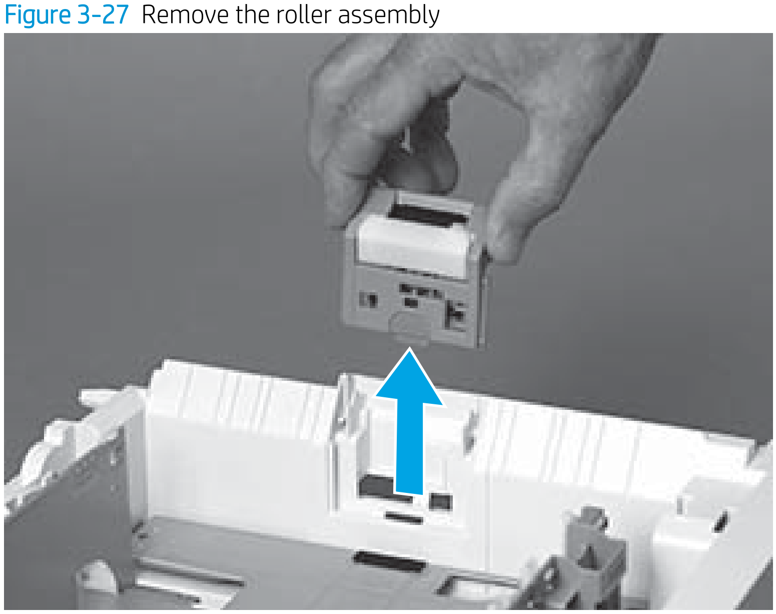
2. Push up on the blue label to release the roller assembly.

Figure 3-26 Push up on the blue label



3. Slide the roller assembly straight up to remove it.

Figure 3-27 Remove the roller assembly



Clean the Tray 2 rollers

Learn about cleaning the Tray 2 rollers.

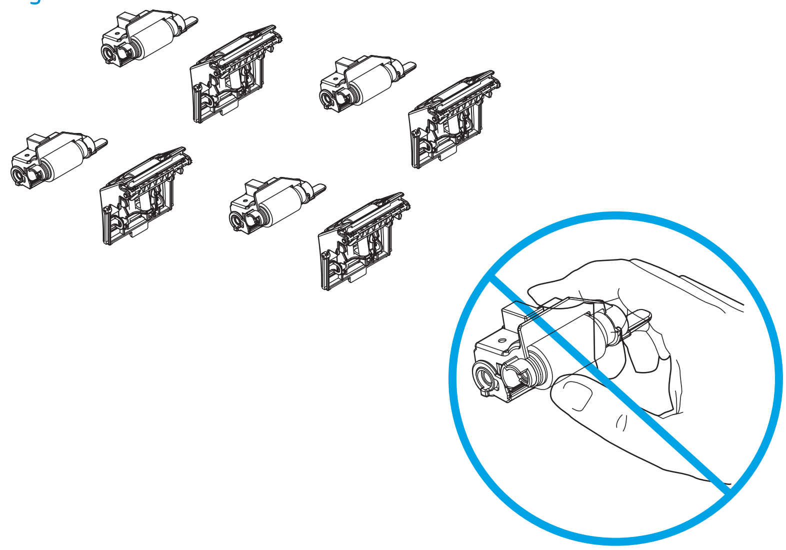
▲ Clean the Tray 2 rollers.

▲ Use a damp, lint-free cloth to gently clean the rollers.

CAUTION:

NOTE: The number of rollers depends on the number input accessories installed.

Figure 3-28 Clean the rollers



4 Input devices

Learn about input device installation and maintenance.

Clean the Tray 2-X rollers

Learn about cleaning the Tray 2-X rollers.

NOTE: The procedure in this section shows Tray 2 in the figures. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5.

Before performing service

Turn the printer power off

- Disconnect the power cable.

WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 4-1 Part information

Part number	Part description
RM2-6577-000CN	Kit-Tray 2-X roller

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the Tray 2-X paper pickup roller assembly

Learn about removing the Tray 2-X rollers.

NOTE: A SFP printer is shown in this section. However, the procedure is correct for all printer models.

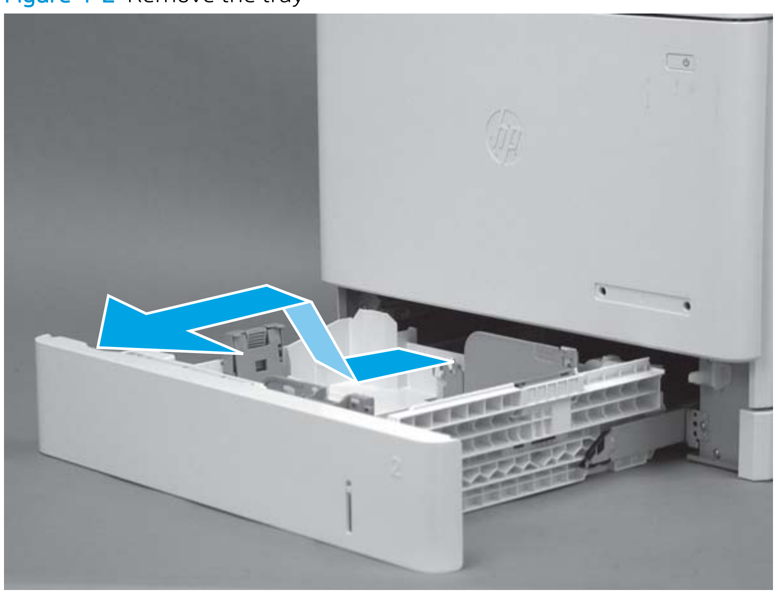
The figures in this section show Tray 2. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5. Always carefully read the instructions that accompany the figures.

1. Pull the tray out until it stops.

Figure 4-1 Pull the tray out

2. Lift the front of the tray, and then pull it out of the printer to remove it.

Figure 4-2 Remove the tray

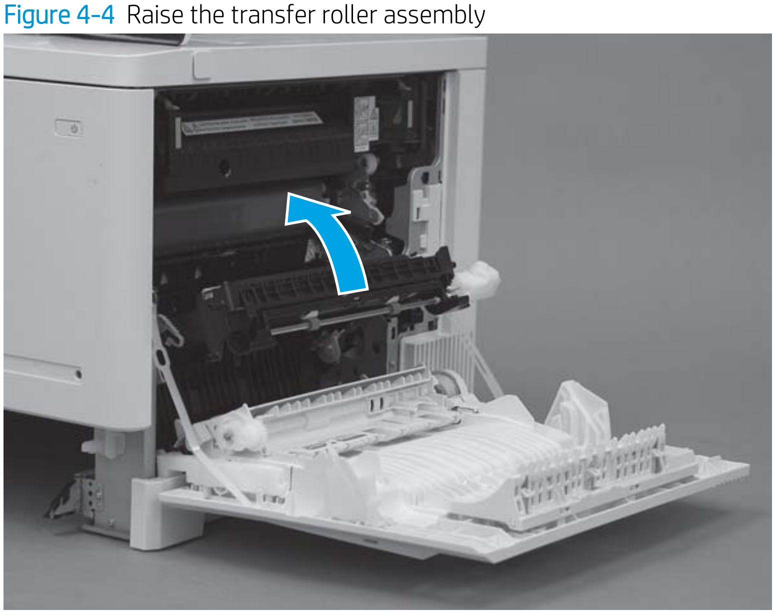


3. Open the right door.

Figure 4-3 Open the right door

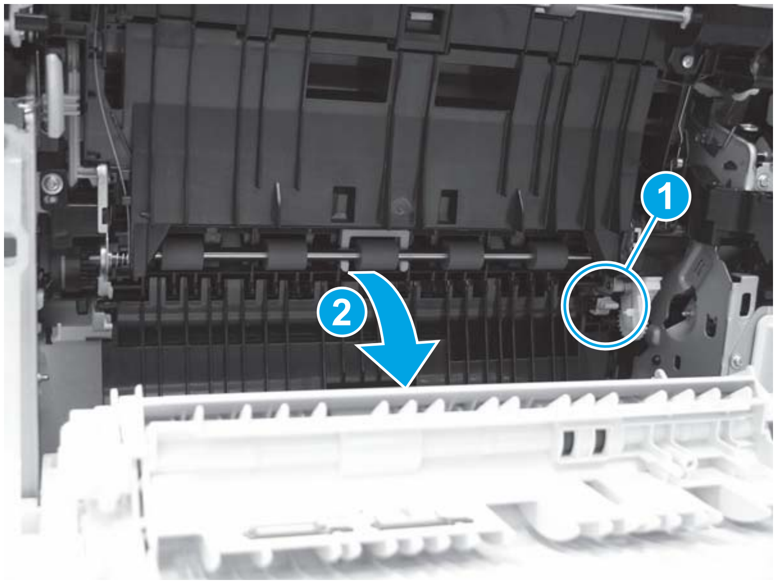
4. Carefully raise the transfer roller assembly up and into the printer.

Figure 4-4 Raise the transfer roller assembly



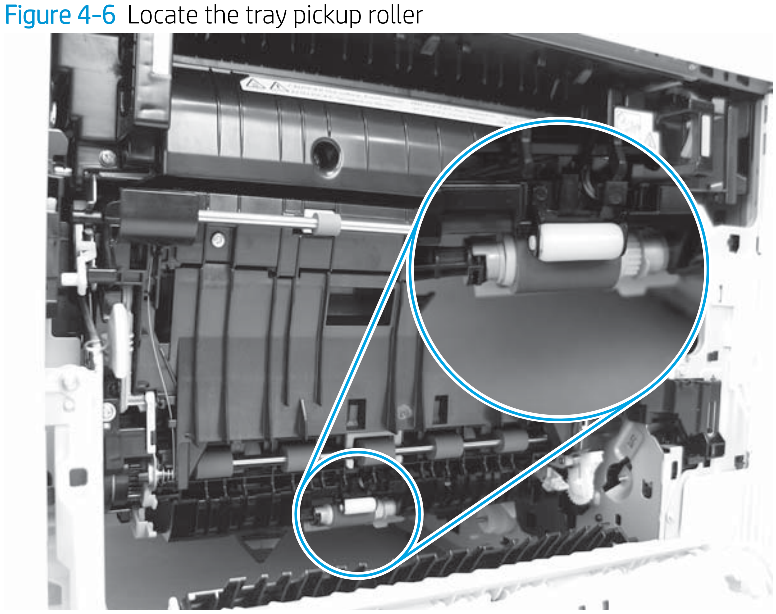
5. Release the green handle (callout 1), and then lower the paper guide (callout 2).

Figure 4-5 Lower the paper guide



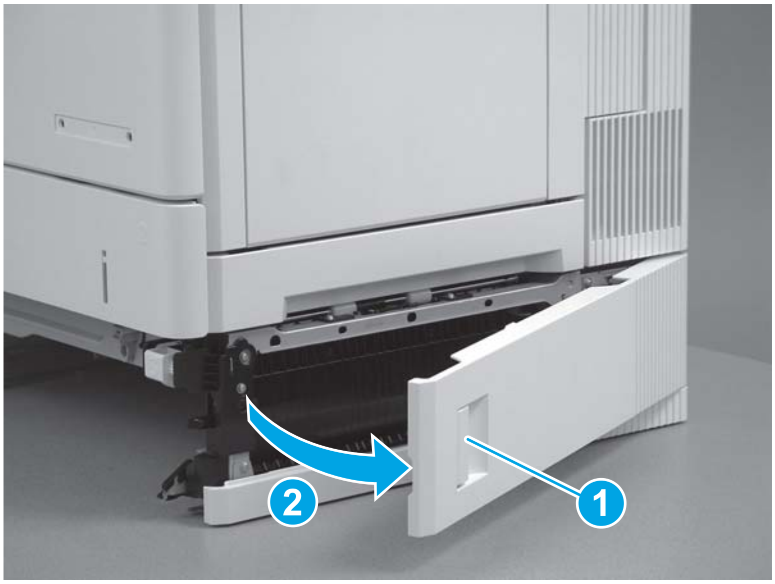
6. Locate the tray pickup roller assembly.

Figure 4-6 Locate the tray pickup roller



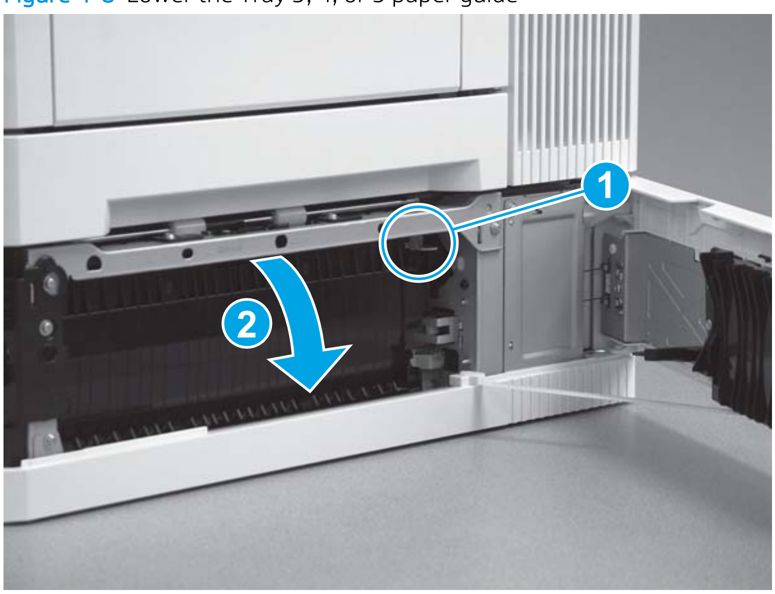
7. **Trays 3, 4, or 5 only**: Release the latch (callout 1), and then open the right door (callout 2).

Figure 4-7 Open the Tray 3, 4, or 5 right door



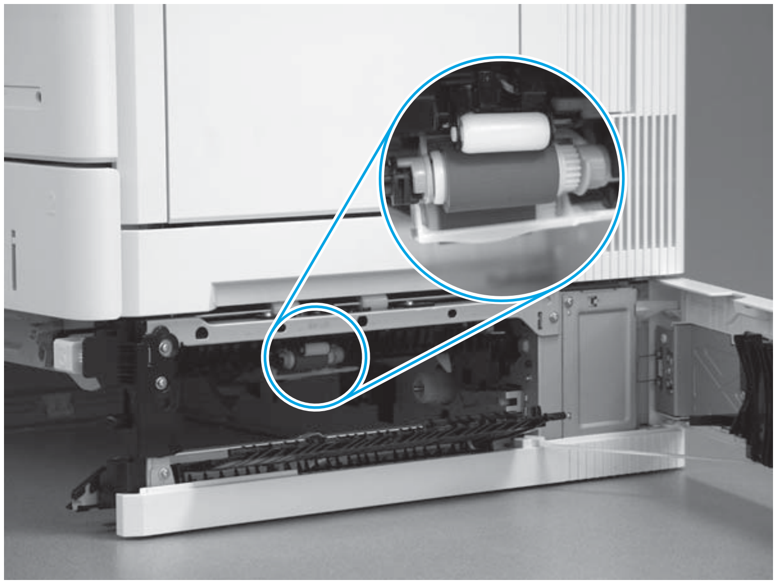
8. **Trays 3, 4, or 5 only**: Release the green handle (callout 1), and then lower the paper guide (callout 2).

Figure 4-8 Lower the Tray 3, 4, or 5 paper guide



9. **Trays 3, 4, or 5 only**: Locate the tray pickup roller assembly.

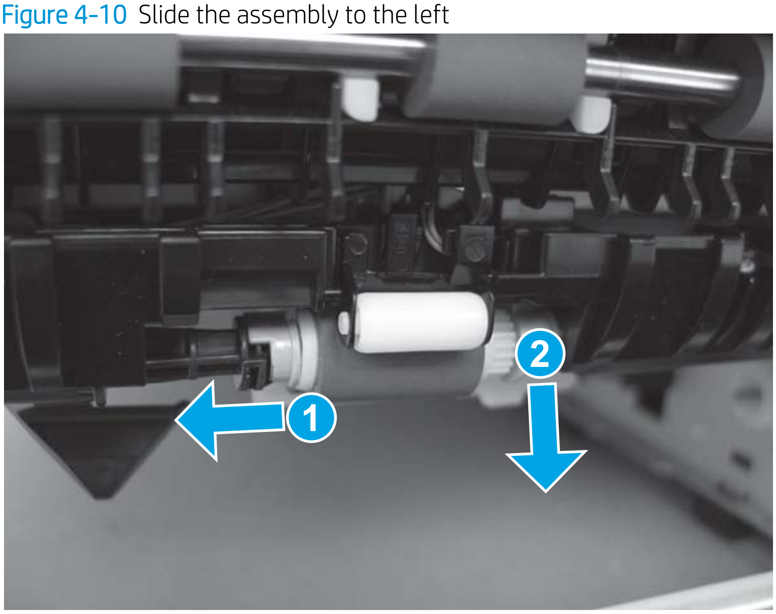
Figure 4-9 Locate the Tray 3, 4, or 5 pickup roller assembly



10. Slide the assembly to the left to compress the spring loaded shaft (callout 1), and then rotate the right end of the assembly down and away from the printer (callout 2).

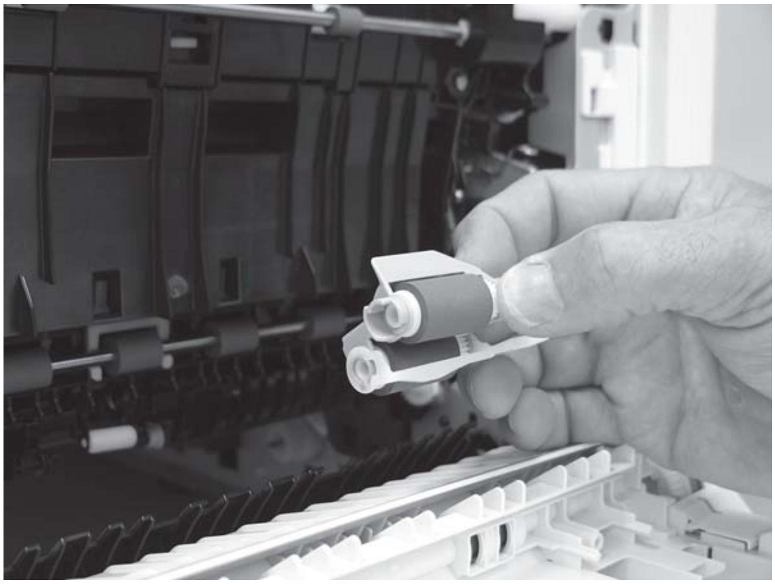
TIP: It might be easier to access the roller through the tray cavity, while viewing it through the right door opening.

Figure 4-10 Slide the assembly to the left



11. Remove the roller assembly.

Figure 4-11 Remove the roller assembly

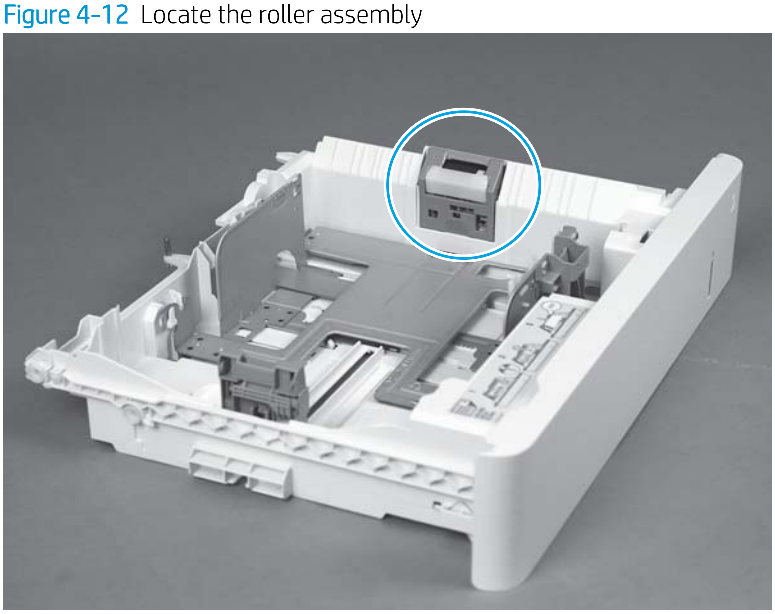


Remove the Tray 2-X separation roller

Learn about removing the Tray 2-X separation roller.

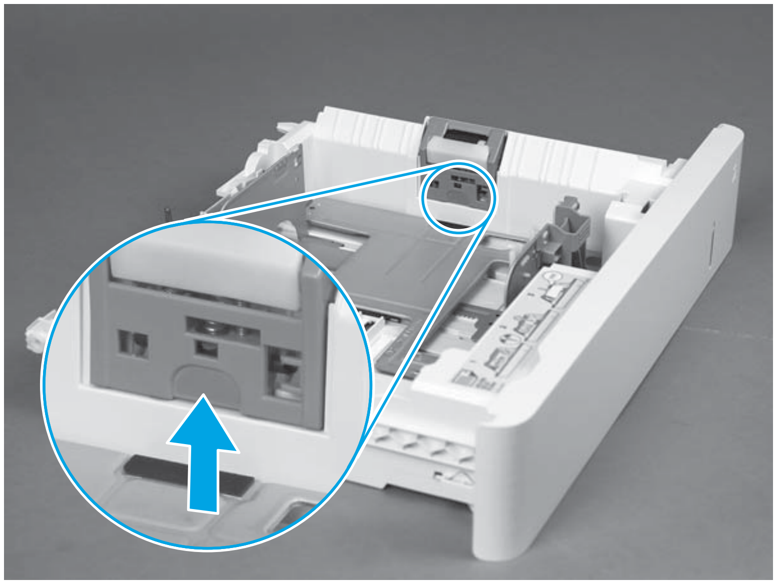
1. Locate the tray separation roller.

Figure 4-12 Locate the roller assembly



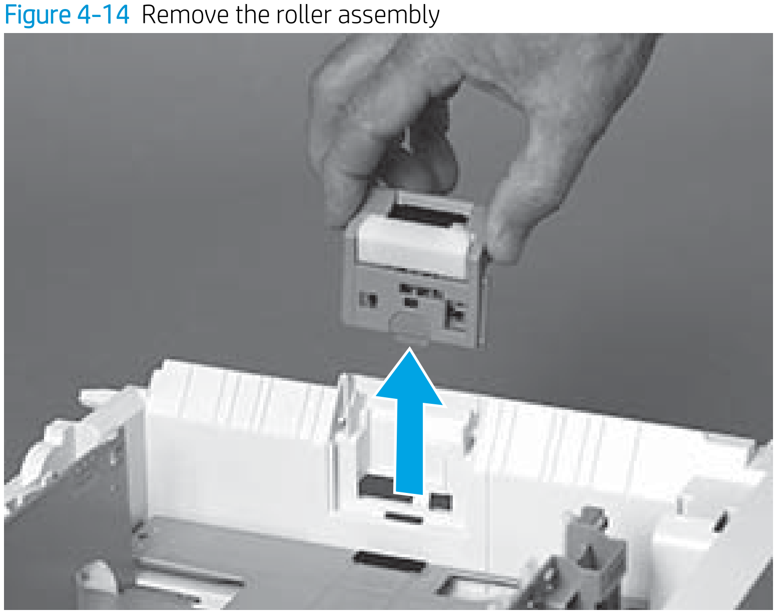
2. Push up on the blue label to release the roller assembly.

Figure 4-13 Push up on the blue label



3. Slide the roller assembly straight up to remove it.

Figure 4-14 Remove the roller assembly



Clean the Tray 2 rollers

Learn about cleaning the Tray 2 rollers.

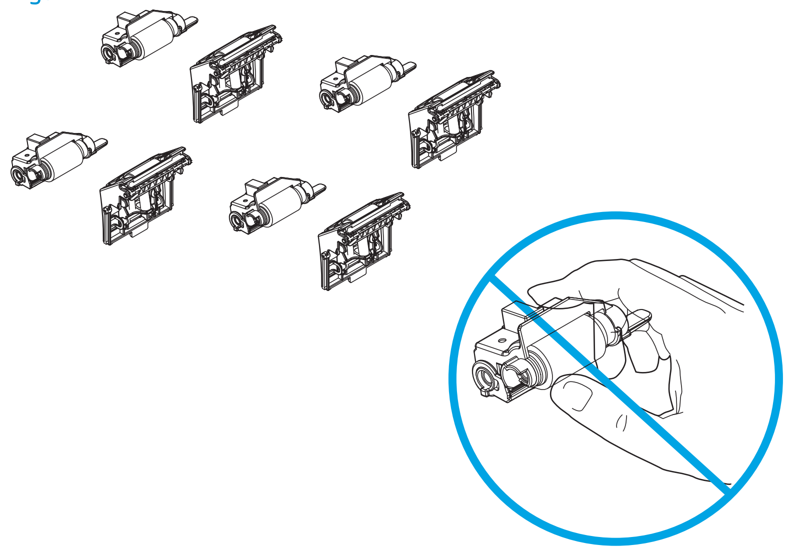
▲ Clean the Tray 2 rollers.

▲ Use a damp, lint-free cloth to gently clean the rollers.

CAUTION:

NOTE: The number of rollers depends on the number input accessories installed.

Figure 4-15 Clean the rollers



5 Theory of operation

Learn about the printer theory of operation.

Document feeder / scanner

Learn about the printer document feeder and scanner components.

NOTE: This section is for MFP printers only.

Document feed system

Learn about the various components of the document feed system.

This section describes the following:

- Sensors in the document feeder
- Document feeder paper path
- Simplex single-pass scanning
- Electronic duplexing (e-duplex) single-pass scanning
- Deskew operation
- Document feeder hinges

The printer supports single-pass electronic duplexing (e-duplex) copy jobs. Two separate scan modules scan the front-side and back-side of an e-duplex copy job page in a single pass through the document feeder.

For some printer bundles, this ADF supports a smart background feature which auto-crops and adjusts the image extents (see printer specifications for more information).

Sensors in the document feeder

Learn about the document feeder sensor locations and functions.

The document feeder contains the following sensors:

- **ADF paper present sensor**: Detects whether a document is present in the document feeder. If paper is present in the document feeder when copies are made, the printer scans the document using the document feeder. If no paper is present when copies are made, the printer scans the document using the scanner glass.
- **ADF Y (length) sensor**: Detects whether a legal-size original is present in the document feeder.
- **ADF jam cover sensor**: Detects whether the document feeder cover is open or closed.
- **ADF paper path deskew sensor**: Detects the top of the page as it enters the deskew rollers.
- **ADF paper path pick success sensor**: Detects a successful one page feed from the document feeder tray.

> NOTE: This sensor uses ultrasonic sound to detect a multi-page paper feed.

- **Paper path sensor 1**: Detects the top of the page as it approaches the front-side scan module (document feeder glass).

Figure 5-1 Document feeder sensors

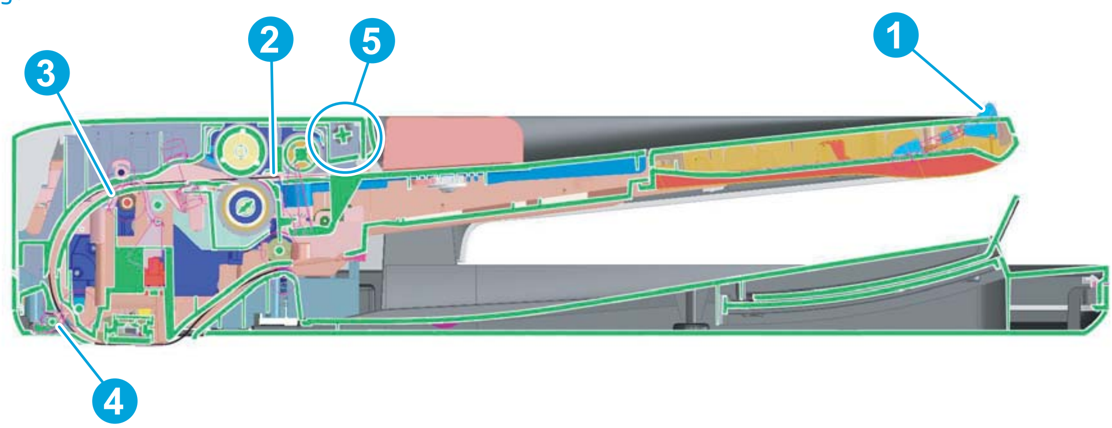


Table 5-1 Document feeder sensors

Item	Description
1	ADF Y (length) sensor
2	ADF paper present sensor
3	ADF deskew sensor
4	Paper path sensor 1 NOTE: For an e-duplex copy job, this sensor is used to activate the front-side scan module (in the scanner base) and the front-side background selector (in the document feeder), if needed.
5	ADF jam cover sensor (open the jam access cover and insert a folded piece of paper to activate the flag)

Document feeder paper path

Review the following information about the document feeder paper path.

Figure 5-2 Document feeder paper path

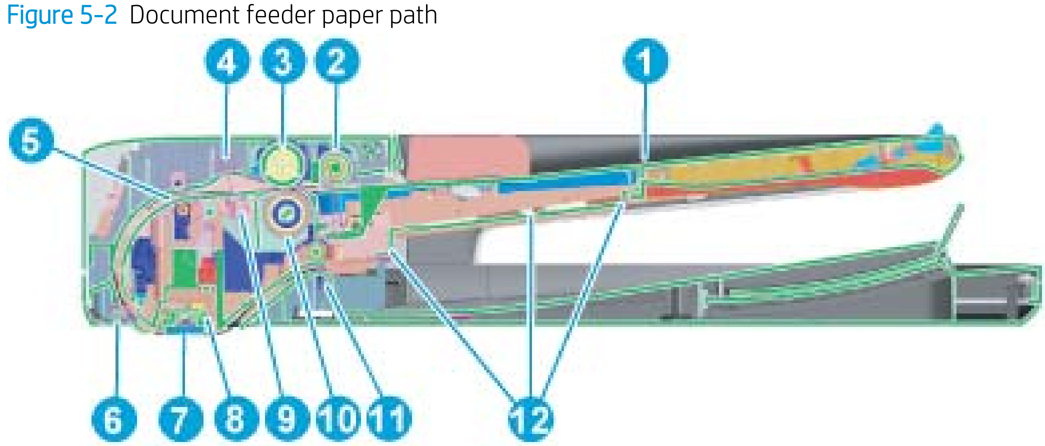


Table 5-2 Document feeder paper path

Item	Description	Item	Description
1	Input tray	7	Front-side scan module location NOTE: This scan module (document feeder glass) is located in the scanner base and is not pictured.
2	Pre-pick roller	8	Back-side scan module
3	Pick roller	9	ADF pick success transmitter
4	ADF pick success receiver	10	Separator roller
5	Deskew drive roller	11	Exit drive roller
6	Prescan drive roller	12	Lift plate

Document feeder simplex operation

Following is the basic sequence of operation for a document feeder simplex job.

1. The ADF jam cover sensor detects when the cover door is in the closed position.
2. The ADF paper present sensor activates when paper is loaded onto the input tray.
3. The feed motor rotates to raise the lift plate and starts to pick the loaded paper.
4. The ADF multi-pick (ultrasonic) sensor activates when the leading edge of the media is driven past the sensor. The printer firmware registers a successful pick operation.
5. The ADF paper path deskew activates when the leading edge of the paper passes it. The printer firmware registers the leading edge of the paper position.
6. The leading edge of the paper drives into the nip point of the deskew drive roller and the deskew pinch rollers. This creates a buckle of paper by the nip point for pick-skew correction.
7. The deskew motor rotates the deskew drive roller to pull the paper into the prescan drive roller.
8. The pick motor stops turning and allows both the pick and feed roller to turn freely while the paper is pulled in by the deskew drive roller.
9. The feed motor rotates to drive the paper into the prescan front-side sensor. The firmware registers the leading edge position of the paper as the multi-pick sensor activates.
10. The feed motor continues to rotate and drive the leading edge of the paper through the preset distance from the multi-pick sensor to the front-side scan zone. The scanner begins the scanning and data retrieval process.
11. The ADF multi-pick (ultrasonic) sensor deactivates when the trailing edge of the paper passes the sensor. The firmware registers the trailing edge of the paper position.
12. The feed motor continues to rotate and drive the trailing edge of the paper through the preset distance from the ADF multi-pick (ultrasonic) sensor to the front-side scan zone. The scanner ends the scanning and data retrieval process.
13. The feed motor continues to rotate and ejects the trailing edge of the paper into the output bin.
14. One of the following occurs:

- If the copy job is complete, the ADF paper present sensor deactivates. The feed motor reverses rotation to raise the pick roller.
- If the copy job is not complete, the ADF paper present sensor is active. The printer firmware detects additional pages in the input tray and the process repeats.

Document feeder e-duplex operation

Following is the basic sequence of operation for a document feeder simplex job.

NOTE: For an e-duplex copy job, the background scan operation begins immediately after the simplex sequence of operation ends.

1. The feed motor continues to drive the paper until the leading edge activates the prescan back-side sensor. The printer firmware registers the position of the leading edge of the paper.
2. The feed motor continues to rotate to drive the leading edge of the paper through the preset distance from prescan back-side sensor to the back-side background selector scan zone. The back-side background scan module begins scanning and retrieval of the data.
3. The prescan back-side sensor deactivates when the trailing edge of the paper passes it. The printer firmware registers the trailing edge of the paper position.
4. The feed motor continues to rotate to drive the trailing edge of the paper edge past the back-side background selector scan zone.
5. The feed motor continues to rotate and ejects the trailing edge of the paper into the output bin.
6. One of the following occurs:
   - If the copy job is complete, the ADF paper present sensor deactivates. The feed motor reverses rotation to raise the pick roller.
   - If the copy job is not complete, the ADF paper present sensor is active. The printer firmware detects additional pages in the input tray and the process repeats.

Deskew operation

Learn about the document feeder deskew features.

NOTE: For printer deskew specifications, go the HP Web-based interactive Search Engine (WISE) and search for HP LaserJet Enterprise, Managed, HP PageWide Pro, Enterprise, Managed - Skew Guide (C06363769).

Sliding side guides on the input tray make sure that the paper stack is correctly aligned at the center of the input tray when paper is loaded in the tray. The correct position of the loaded paper is parallel with the direction of travel into the document feeder paper path.

The document feeder further reduces paper skew due to improper loading of paper in the input tray by buckling the paper to create a paper buffer.

The document feeder aligns the leading edge of the paper parallel with the deskew drive rollers before the paper is driven further into the document feeder paper path.

NOTE: If the page to be copied is smaller than the minimal sliding guide setting, do not use the document feeder for the copy job. Attempting to copy too small of a page using the document feeder might result in document feeder jams and/or damage to the original page. Instead, use the flatbed glass to copy the page.

Figure 5-3 Document feeder side guides

Document feeder hinges

Review the following information about the document feeder hinges.

The document feeder hinges allow positioning the assembly vertically above the scanner glass to accommodate the placement of books and other objects up to 25 mm (1.0 in) in height on the scanner glass. The document feeder still closes (the bottom of the ADF is kept parallel to the scanner glass) and allows the printer to operate.

The document feeder will withstand a downward force of about 4.5 kg (10 lb) applied at the front edge center of the assembly—when the fulcrum (such as the spine of a book) is located anywhere on the scanner glass and parallel to its long axis—without breaking, deforming, detaching or experiencing performance degradation.

The document feeder hinges support the assembly in the open position and prevent the document feeder from suddenly closing and causing damage or a loud noise.

The hinges can hold the document feeder static in all positions higher than 100 mm (3.93 in); measured at the front of the assembly. Less than 2.3 kg (5 lb) of force is required to open or close the document feeder.

The hinges allow the document feeder to open to an angle of between 60º and 80º from the horizontal position (this angle will not allow the printer to tip over).

Figure 5-4 Document feeder open (book mode)

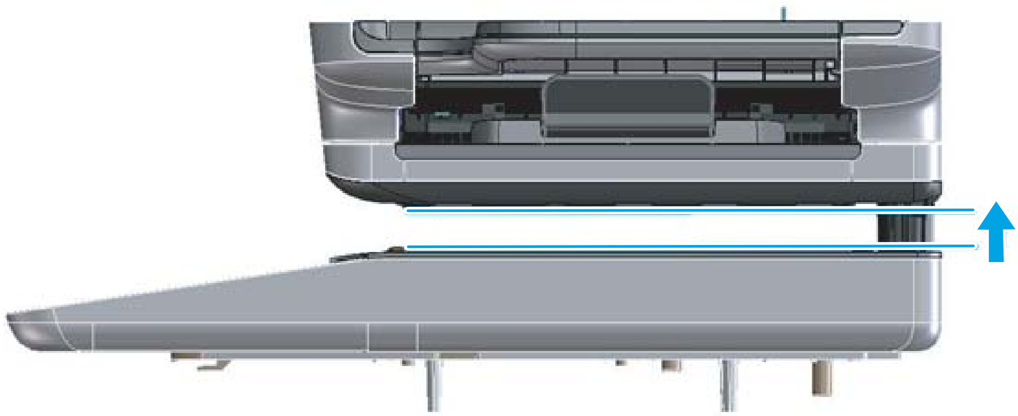


Figure 5-5 Document feeder open (60º to 80º)

Scanning and image capture system

Learn about the scanning and image capture system.

The scanner is a carriage-type platen scanner which includes the frame, glass, scan module, and a scan control board (SCB). The scanner has a sensor to detect legal-sized media and a switch to indicate when the document feeder is opened.

The document feeder and control panel are attached to the scanner. If the scanner fails, it can be replaced as a whole unit. The scanner replacement part does not include the document feeder, control panel, or SCB.

Base printer

Learn about the base printer components.

Basic operation

Learn about the basic operation of the printer.

The printer routes all high-level processes through the formatter, which stores font information, processes the print image, and communicates with the host computer.

The basic printer operation comprises the following systems:

- The engine-control system, which includes the power supply and the DC controller printed circuit assembly (PCA)
- The laser scanner system, which forms the latent image on the photosensitive drum
- The image-formation system, which transfers a toner image onto the paper
- The pickup, feed, and delivery system, which uses a system of rollers and belts to transport the paper through the printer
- Accessory (optional paper feeder)
- Integrated scanner assembly (document feeder and sub-scanner assembly)

Figure 5-6 Relationship between the main printer systems

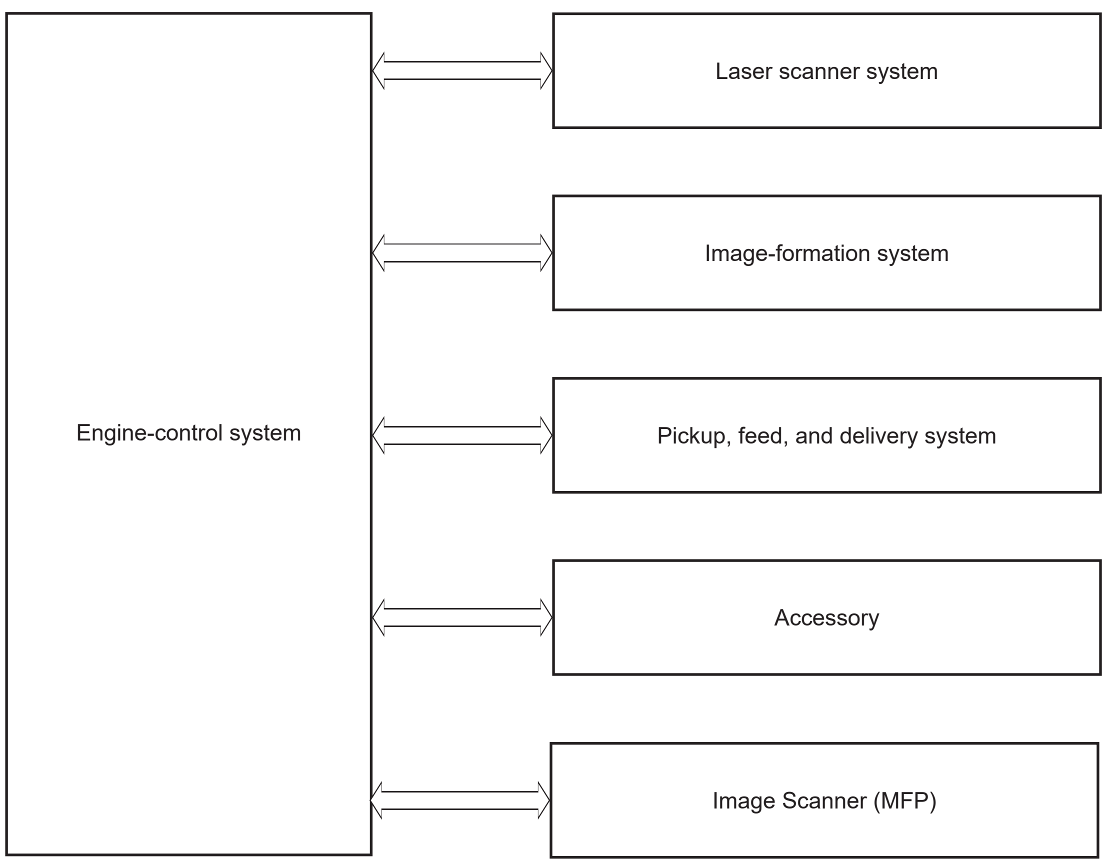
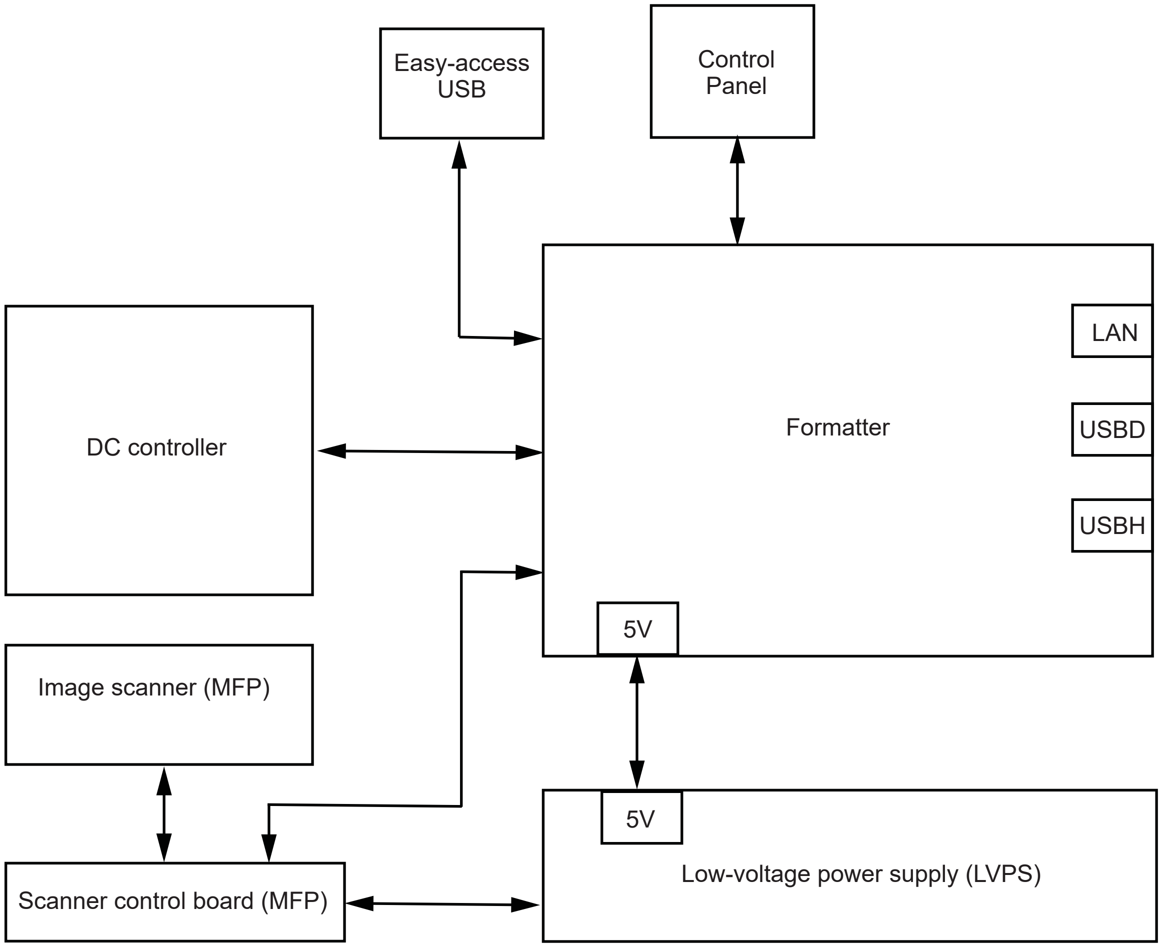


Figure 5-7 System block diagram



Sequence of operation

Learn how the DC controller PCA controls the printer operating sequence.

The DC controller PCA controls the operating sequence, as described in the following table.

Table 5-3 Sequence of operation

Period	Duration	Description
Waiting	From the time the power is turned on, the door is closed, or when the printer exits Sleep mode until the printer is ready for printing.	• Detects the fuser • Heats the fuser sleeve in the fuser • Pressurizes the pressure roller in the fuser • Detects the toner cartridges • Separates all of the developer rollers from the photosensitive drums • Separates all of the transfer rollers from the photosensitive drums • Rotates and stops each motor • Rotates and stops each fan • Detects the ITB • Cleans the ITB • Cleans the ITB secondary transfer roller
Standby	From the end of the waiting sequence or the last rotation, until the formatter receives a print command, or until the printer is turned off.	• Is in the Ready state • Enters Sleep mode if the formatter sends the sleep command • Rotates and stops each fan • Calibrates the printer if the calibration command is sent
Initial rotation	From the time the formatter receives a print command until the paper enters the paper path.	• Rotates each motor • Rotates each fan • Activates the high-voltage power supply (high-voltage bias) • Prepares the laser/scanner unit • Warms the fuser to the correct temperature

Table 5-3 Sequence of operation (continued)

Period	Duration	Description
Printing	From the time the first sheet of paper enters the paper path until the last sheet has passed through the fuser.	• Forms the image on the photosensitive drums • Picks paper from the tray. • Transfers the toner to the paper • Fuses the toner image onto the paper
Last rotation	From the time the last sheet of paper exits the fuser until the motors stop rotating.	• Moves the last printed sheet into the output bin • Stops each motor • Stops each fan • Stops the high-voltage power supply (high-voltage bias) • Stops the laser/scanner unit • Turns the fuser heater off • If another print command is received, the printer enters the initial rotation period when the last rotation is complete.

Formatter-control system

Learn about how the formatter operates.

⚠ CAUTION: Under **NO** circumstances should a formatter from a different printer be installed during the repair or troubleshooting processes. The formatter stores important data specific to the model of printer it is installed in and is not deigned to be swapped or repurposed in any way. Return a used formatter to HP.

Issues that can occur from swapping a formatter include:

- Serial number, product number, product name, page count, and supported cartridges information change and might make a product unusable
- 33.02.01 Used board/Disk installed errors

If a used formatter is installed and causes this issue, the **partner** must cover the costs of the repair in the form of a product replacement. **There is no method in the field to recover a printer where a used formatter is installed.**

The formatter performs the following functions:

- Controls the sleep delay function
- Receives and processes print data from the various printer inputs
- Monitors control panel functions and relaying printer status information through the control panel and the network or bi-directional interface
- Develops and coordinates data placement and timing with the DC controller PCA
- Stores customer configuration settings and paper types.
- Stores font information
- Communicates with the host computer through the network or the bidirectional interface

Power management

Learn about printer power management.

IMPORTANT:

Power management conserves power after the printer has been idle for an adjustable length of time. When the printer is in sleep mode, the control-panel back-light is turned off, but the printer retains all printer settings, downloaded fonts, and macros. The setting can be modified or turned off from the control-panel menus.

The printer exits sleep mode and enters the warm-up cycle when any of the following occurs.

- A print job, valid data, or a PML or PJL command is received at the serial port.
- A print job or fax (fax models) is received.
- The control panel is touched (button press or touchscreen touch depending on model).
- A document is loaded in the document feeder (MFP only).
- Opening the scanner lid (model dependent).
- The power button is pressed for 3 seconds or less.
- Connecting an operational live network Ethernet cable or fax line (fax models).
- Inserting a USB drive in either the front USB port or the USB port on the back of the device.
- Connecting a USB cable to an operating computer.
- Opening the cartridge, front, or rear door (model dependent).

NOTE: Opening a paper tray does not wake up the printer.

TIP: Error messages override the sleep delay message. The printer enters sleep mode at the selected time, but the error message continues to appear.

Power management M552/M553/M554/M555/M577/M578/E55040/E57540

Learn about printer power management (all models).

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

This topic includes power management features shared by the M552/M553/M554/M555/M577/M578/E55040/E57540 printers.

Set the sleep timer and configure the printer to use 1 watt or less of power

The sleep settings affect how much power the printer uses, the wake/sleep time, how quickly the printer enters sleep mode, and how quickly the printer wakes up from sleep mode.

To configure the printer to use 1 watt or less of power while in sleep mode, enter times for both the Sleep after Inactivity and Auto Off after sleep settings.

NOTE: HP does not recommend using deep sleep settings if you have Security Solutions installed. In some situations, the printer does not wake from deep sleep. For additional information, contact your HP representative.

1. From the Home screen on the printer control panel, navigate to the Settings application, and then select the Settings icon.
2. Open the following menus:
   a. General
   b. Energy Settings
   c. Sleep Settings
3. Select Sleep after Inactivity to specify the number of minutes the printer is inactive before it enters sleep mode. Enter the appropriate time period.
4. Select Auto Off after sleep to put the printer into a deeper power save mode after a period of sleep. Enter the appropriate time period.

   NOTE: By default, the printer will wake from Auto Off in response to any activity other than USB or Wi-Fi. For greater energy settings, you can set it to wake only to the power button by selecting Shut down (wake on power button only).
5. Select Done to save the settings.

Power management M577/M578/E55040/E57540

Learn about printer power management (M577/M578/E55040/E57540).

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

This topic includes power management features shared by the M577/M578/E55040/E57540 printers.

Set the sleep schedule

Use the Sleep Schedule feature to configure the printer to automatically wake or go into Sleep mode at specific times on specific days of the week.

1. From the Home screen on the printer control panel, navigate to the Settings application, and then select the Settings icon.
2. Open the following menus:
   a. General
   b. Energy Settings
   c. Sleep Schedule
3. Select the New Event button, and then select the type of event to schedule: Wake Event or Sleep Event.
4. For a wake or sleep event, configure the time and the days of the week for the event. Select Save to save the setting.

Power management E55040/E57540

Learn about printer power management (E55040/E57540).

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

This topic includes power management features shared by the E55040/E57540 printers.

Set the Sleep/Auto Off After Inactivity setting

Use the control panel menus to set the amount of idle time before the printer enters sleep mode.

Complete the following procedure to change the Sleep/Auto Off After setting:

1. On the printer control panel, open the Setup menu.
2. Open the following menus:
   a. System Setup
   b. Energy Settings
   c. Sleep/Auto Off After
3. Use the arrow keys to select the time for the Sleep/Auto Off After delay, and then press the OK button.

Set the Delay Shut Down setting

Use the control panel menus to select whether or not the printer delays shutting down after the power button is pressed.

Complete the following procedure to change the Delay Shut Down setting:

1. On the printer control panel, open the Setup menu.
2. Open the following menus:
   a. System Setup
   b. Energy Settings
   c. Delay Shut Down
3. Select one of the delay options:
   - No Delay: The printer shuts down after a period of inactivity determined by the Delay Shut Down setting.
   - When Ports Are Active: When this option is selected the printer will not shut down unless all ports are inactive. An active network link or fax connection will prevent the printer from shutting down.

Power management M552/M553/M554/M555/M577

Learn about printer power management (M552/M553/M554/M555/M577).

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

This topic includes power management features shared by the M552/M553/M554/M555/M577 printers.

TIP: For firmware versions prior to FustureSmart 4, the Idle Settings feature described in this section is termed Optimum Speed/Energy Usage (**Administration ▶ General Settings ▶ Energy Settings ▶ Optimum Speed/Energy Usage**)

Set the idle settings

This setting affects energy use while the product is idle, not while in Sleep Mode. Start faster results in a quicker first-page-out time, but uses more power. Save energy conserves power, but could result in a slower first-page-out time.

1. From the Home screen on the printer control panel, open the Settings menu.
2. Open the following menus:
   a. General
   b. Energy Settings
   c. Idle Settings
3. Adjust the slider, and then select Done to save the setting.

Printer job language (PJL)

Learn about printer job language (PJL).

PJL is an integral part of printer configuration, in addition to the standard PCL and PostScript (PS). With standard cabling, the printer can use PJL to perform a variety of functions.

- **Dynamic I/O switching:** The printer can be configured with a host on each I/O by using dynamic I/O switching. Even when the printer is offline, it can receive data from more than one I/O simultaneously, until the I/O buffer is full.
- **Context-sensitive switching:** The printer can automatically recognize the personality (PS or PCL) of each job and configure itself to serve that personality.
- **Isolation of print environment settings from one print job to the next:** For example, if a print job is sent to the printer in landscape mode, the subsequent print jobs print in landscape only if they are formatted for landscape printing.

Printer management language (PML)

Learn about printer management language (PML)

PML allows remote configuration of the printer and status read-back from the printer through the I/O ports.

Control panel

Learn about the control panel.

The formatter sends and receives printer status and command data to and from the control panel.

NOTE: The 10.9 cm (4.37 in) and 20.3 cm (8.0 in) control panels have a diagnostic mode to allow testing of the touchscreen, Home button, and speaker. The control panels do not require calibration.

SFP printers

- M552/M553

  6.85 cm (2.7 in) four-line color display with numeric keypad and additional buttons for navigating control-panel menus.

- M554

  6.9 cm (2.7 in) QVGA LCD color control panel with numeric keypad.

- M553X/M555/E55040

  10.9 cm (4.37 in) full-color SVGA with infrared touchscreen and adjustable viewing angle.

MFP printers

- M577/M578/E57540

  20.3 cm (8.0 in) full-color SVGA with infrared touchscreen and adjustable viewing angle.

Walk-up USB

Learn about the walk-up USB function.

NOTE: Touchscreen models only.

This printer features printing from a USB flash drive. This printer supports printing the following types of files from the USB flash drive.

- .pdf
- .jpg
- .prn and .PRN
- .pcl and .PCL
- ps and .PS
- doc and .docx
- .ppt and .pptx

When a USB flash drive is inserted into the front of the printer, the control panel will display the USB Flash Drive menu. The files present on the USB flash drive can be accessed from the control panel.

NOTE: The USB flash drive must be formatted using the FAT32 format. Drives formatted with NTFS will not work.

Any files in a supported format on the USB flash drive can be printed directly from the printer control panel. Pages also can be scanned and saved to the USB flash drive from the control panel.

Wireless

Learn about the wireless feature.

The M553x, M555x, M577z, M578z, and E55040 models contain a wireless card to enable wireless direct printing over a 802.11b/g/n wireless connection.

Near field communication (NFC)

Learn about the NFC feature.

The M553x, M577z, and E55040dw models support NFC capabilities. NFC enables a connection between the printer and a mobile device, such as a smart phone or tablet, by touching the device to the NFC icon on the bottom of the control panel. Documents and images from the mobile device can then be printed through the wireless card on the printer.

Low end data model (LEDM) overview

Learn about the low-end data model (LEDM).

The low-end data model (LEDM) provides one consistent data representation method and defines the dynamic and capabilities tickets shared between clients and devices, as well as the access protocol, event, security, and discovery methods.

CPU

Learn about the printer microprocessor.

The formatter incorporates a 1.2 GHz processor.

Input/output (I/O)

Learn about printer I/O functionality.

NOTE: Some of the following printer I/O functions are model specific. For example, not all printer models have a fax function.

Universal serial bus (USB)

The printer includes a USB 2.0 connection.

Universal serial bus (USB) hosts

The printer includes USB hosts for USB flash drive and job storage.

10/100/1000 networking

The printer includes a 10/100/1000 network (Ethernet) connection.

Fax

The printer includes a fax phone line connection.

NOTE: For some fax model printers, the telephone extension port is plugged and not operational.

Walk-up USB

The port is located on or near the control panel.

Memory

Learn about printer memory functionality.

> NOTE: Some of the following printer memory functions are model specific. For example, not all printer models have Flash memory.

Firmware

The formatter stores the printer firmware. The firmware can be stored on a hard disk drive, a solid-state drive, or an embedded multimedia card (eMMC). A remote firmware upgrade process is used to overwrite and upgrade the firmware.

> NOTE: For more information about a specific printer model, see the *Printer information, configurations, and specifications* section in the service manual.

Nonvolatile random access memory (NVRAM)

The printer uses nonvolatile memory (NVRAM) to store I/O and information about the print environment configuration. The contents of NVRAM are retained when the printer is turned off or disconnected.

Flash memory

NAND: Stores fax memory.

Random access memory

The printer uses the following RAM:

- SFP: 1.0 GB
- MFP: 1.75 GB

HP Memory Enhancement technology (MEt)

The HP Memory Enhancement technology (MEt) effectively doubles the standard memory through a variety of font- and data-compression methods.

> NOTE: MEt is available only in PCL mode; it is not functional when printing in PS mode.

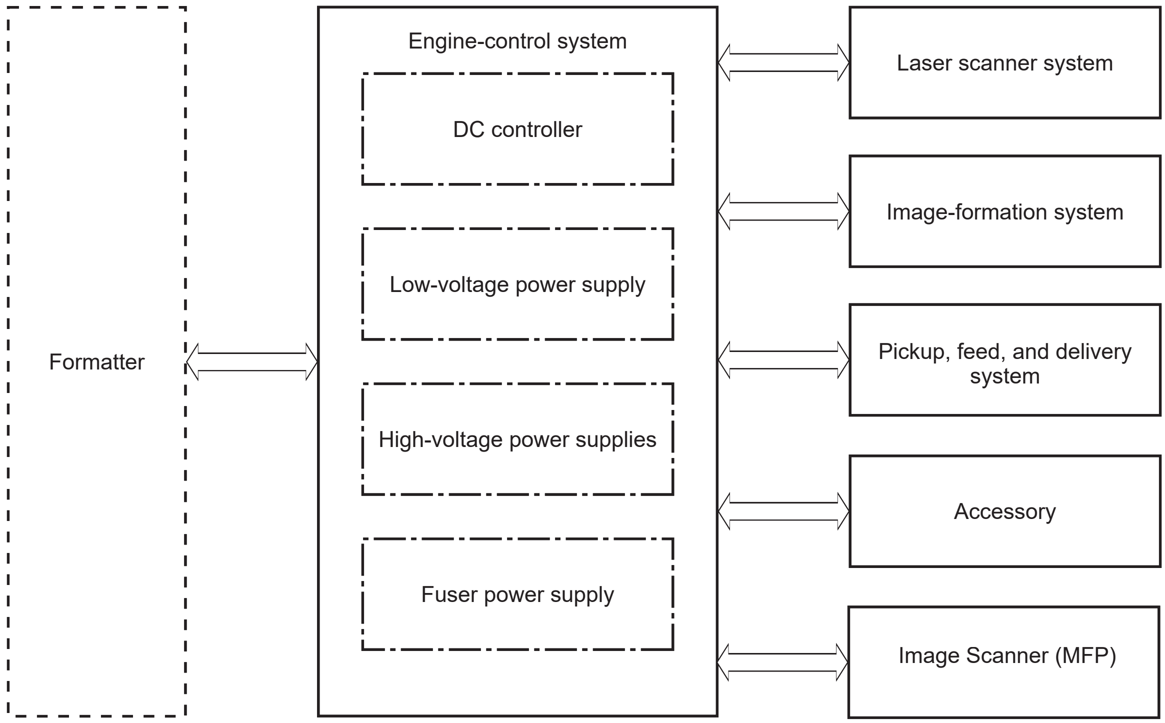
Engine-control system

Learn about the engine control system.

The engine-control system receives commands from the formatter and interacts with the other main systems to coordinate all printer functions. The engine-control system consists of the following components:

- DC controller
- Low-voltage power supply (LVPS; one unit)
- High-voltage power supplies (HVPS; two units)
- Fuser power supply (FPS; one unit)

Figure 5-8 Engine-control system

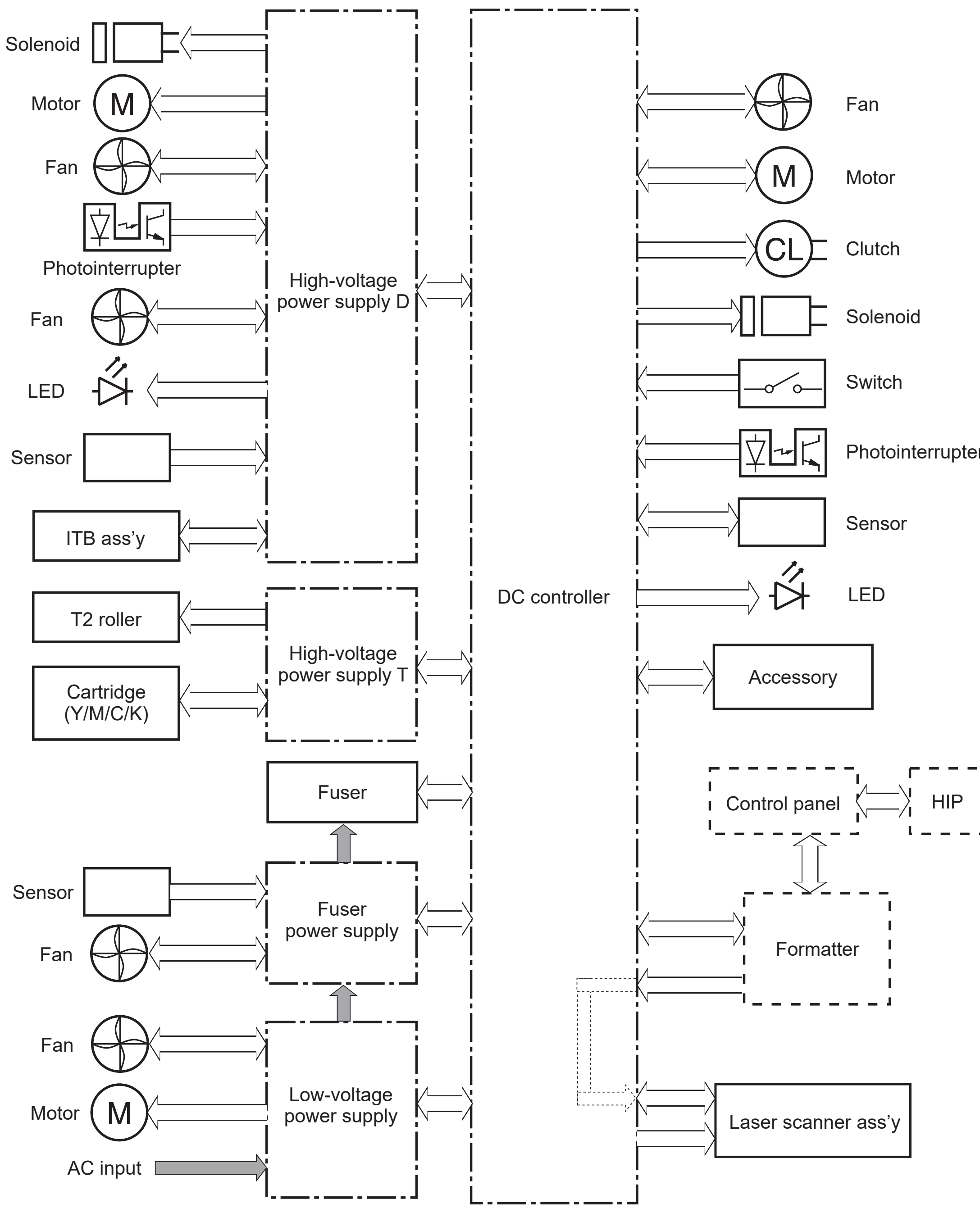


DC controller

Learn about the DC controller.

The DC controller controls the operation of the printer and its components. The DC controller starts the printer operation when the printer power is turned on and the power supply sends DC voltage to the DC controller. After the printer enters the standby period, the DC controller sends out various signals to operate motors, solenoids, and other printer components based on the print command and image data that the host computer sends.

Figure 5-9 DC controller block diagram



Motors

Learn about the printer motors.

The printer has eight motors. The motors drive the components in the paper-feed and image-formation systems.

The DC controller monitors the fuser motor; the scanner motor, and drum motors 1, 2, and 3 to determine if a motor has failed. It notifies the formatter when it encounters the following conditions:

- Start-up failure: the motor does not reach a specified speed within a specified time from when the motor starts.
- Rotational failure: the rotational speed of the motor is not in the specified range for a specified time after the motor reaches a specified speed.

Table 5-4 Motors

Abbreviation	Name	Purpose	Failure detection	Part number
M1	Drum motor 1	Drives the yellow photosensitive drum, yellow developing roller, and magenta developing roller	Yes	Drum motor (RM2-0078-000CN)
M2	Drum motor 2	Drives the magenta photosensitive drum, cyan photosensitive drum, and cyan developing roller	Yes	Drum motor (RM2-0078-000CN)
M3	Drum motor 3	Drives the black photosensitive drum, black developing roller, and ITB	Yes	Drum motor (RM2-0078-000CN)
M4	Fuser motor	Drives the pressure roller and delivery roller; the pressurization and release of the pressure roller; and the engagement and disengagement of the primary and secondary transfer rollers	Yes	Fuser drive assembly (RM2-0009-010CN; M552dn, M553dn, M553x, E55040, M577, E57540) (RM2-0091-010CN; M553n)
M5	Pickup motor	Drives the registration roller, Tray 1 pickup roller, Tray 2 pickup roller, and Tray 2 feed roller	No	Paper pickup drive assembly (RM2-0008-000CN)
M6	Developer disengagement motor	Drives the engagement and disengagement of the developing rollers	No	Stepping motor (RK2-6027-000CN)
M7	Scanner motor	Drives the scanner mirror	Yes	Laser scanner assembly (RM2-6545-010CN)
M8	Duplex reverse motor (duplex models only)	Drives the duplex reverse roller	No	Duplex drive assembly (RM2-0006-000CN)

Fans

Learn about the printer fans.

The printer has four fans for preventing the temperature from rising in the printer and for cooling the printed pages.

The DC controller determines if there is a fan failure and notifies the formatter if the fan locks for a specified time from when the fan starts.

Table 5-5 Fans

Abbreviation	Name	Cooling area	Type	Speed	Part number
FM1	Power supply fan	LVPS	Intake	Full/half	Fan (RK2-2416-010CN)
FM2	Cartridge fan	Toner cartridges	Intake	Full	Fan (RK2-6124-000CN)
FM3	Delivery fan	Output tray and fuser area	Exhaust	Full/half	Fan (RK2-2728-000CN)
FM4	Fuser fan	Fuser	Exhaust	Full/half	Fan (RK2-2418-000CN)

Solenoids

Learn about the printer solenoids.

Table 5-6 Solenoids

Abbreviation	Name
SL1	Primary transfer roller disengagement solenoid
SL2	Tray 1 pickup solenoid
SL3	Duplex reverse solenoid (duplex models only)

Clutches

Learn about the printer clutches.

Table 5-7 Clutches

Abbreviation	Name
CL1	Tray 2 pickup clutch
CL2	Duplex re-pickup clutch (duplex models only)

Switches

Learn about the printer switches.

Table 5-8 Switches

Abbreviation	Name	Part number
SW1	24V interlock switch	Interlock switch cable assembly (RM2-7206-000CN; not available)
SW3	Right door switch	Switch button (WC2-5806-000CN)
SW4	Power supply switch	Lever, switch (RC4-0131-000CN; not available)
SW5	Tray 2 detection switch	Switch button (WC2-5806-000CN)
SW1001	Test print switch	Not available

Sensors

Learn about the printer sensors.

Table 5-9 Sensors

Abbreviation	Name	Part number
PS1	Loop sensor	Not available
SE1	Media sensor	Registration assembly • RM2-0093-000CN (M553n) • RM2-0018-000CN (M552, M553dn, M553x, M554, M555, M557, M558, E55040, E57540)
SR1	Drum home position sensor 1	Not available
SR2	Drum home position sensor 2	Not available
SR3	Drum home position sensor 3	Not available
SR4	Developing home position sensor	Not available
SR5	Primary transfer roller disengagement sensor	Estrangement detect PCA assembly (RM2-7157-000CN)
SR6	Top-of-page (TOP) sensor (M552, M553dn, M553x, M554, M555, M557, M558, E55040, E57540)	Not available
SR6N	Top-of-page (TOP) sensor (M553n)	Not available
SR8	Tray 1 media-out sensor	Not available
SR9	Fuser delivery sensor	Not available
SR10	Output bin media-full sensor	Not available
SR11	Fuser pressure release sensor	Photointerrupter (WG8-5953-000CN; not available)
SR12	Tray 2 media-out sensor	Not available
SR13	Media width sensor, front (M552, M553dn, M553x, M554, M555, M557, M558, E55040, E57540)	Not available

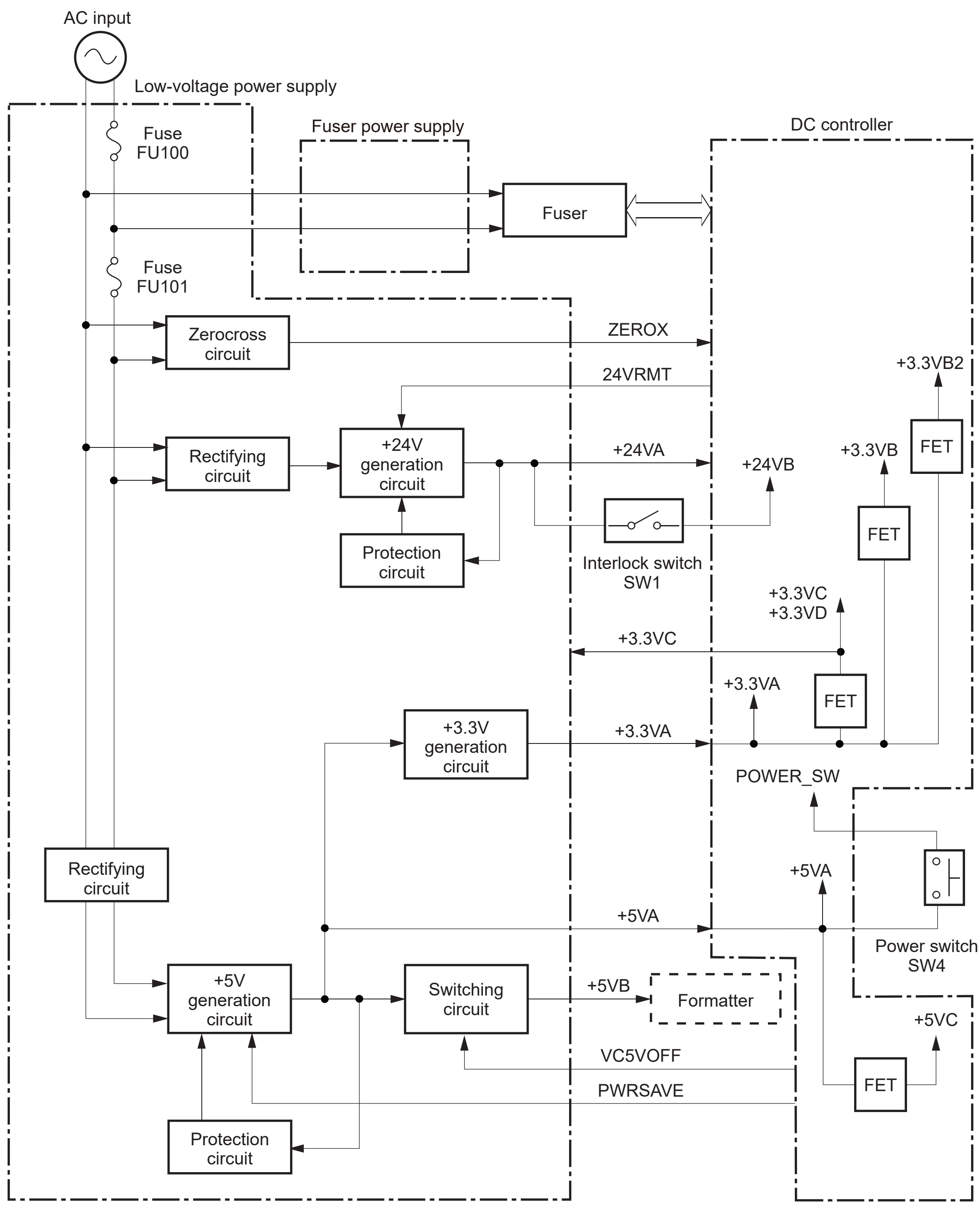
Table 5-9 Sensors (continued)

Abbreviation	Name	Part number
SR13N	Media width sensor, front (M553n)	Not available
SR14	Media width sensor, rear (M552, M553dn, M553x, M554, M555, M557, M558, E55040, E57540)	Not available
SR14N	Media width sensor, rear (M553n)	Not available
	Registration density sensor	Density detect assembly (RM2-7160-000CN)
	Environment sensor (temperature and humidity)	Environment sensor PCA (RM2-7154-000CN)
	Yellow toner-level sensor	Cartridge lift-up rail assembly (RM2-0025-000CN; not available)
	Magenta toner-level sensor	Cartridge lift-up rail assembly (RM2-0025-000CN; not available)
	Cyan toner-level sensor	Cartridge lift-up rail assembly (RM2-0025-000CN; not available)
	Black toner-level sensor	Cartridge lift-up rail assembly (RM2-0025-000CN; not available)
	Residual toner collection unit full sensor	Waste toner detect PCA (RM2-7130-000CN)
	Pre-exposure LED 1-3	Pre-exposure PCA (RM2-7168-000CN)
	Pre-exposure LED 4	Pre-exposure PCA (RM2-7169-000CN)

Low-voltage power supply

Learn about the low-voltage power supply (LVPS).

The low-voltage power-supply (LVPS) circuit converts the AC power from the wall receptacle into the DC voltages used by the printer components.



Low-voltage power supply voltages description

Learn about LVPS voltages.

The low-voltage power supply converts the AC power into three DC voltages, which it then subdivides, as described in the following table.

Table 5-10 Converted DC voltages

Main DC voltage	Sub-voltage	Behavior
+24 V	+24 VA	Constantly supplied Stopped during active OFF or inactive OFF
+24 V	+24 VB	Interrupted when the right door is open (SW1)
+24 V	+24 VC	Interrupted when the right door is open (SW1)
+5 V	+5 VA	Constantly supplied
+5 V	+5 VB	Constantly supplied
+5 V	+5 VC	Constantly supplied Stopped during active OFF or inactive OFF
+3.3 V	+3.3 VA	Constantly supplied
+3.3 V	+3.3 VB	Constantly supplied Stopped during inactive OFF
+3.3 V	+3.3 VC	Constantly supplied Stopped during active OFF or inactive OFF
+3.3 V	+3.3 VD	Constantly supplied Stopped during active OFF or inactive OFF

Over-current/over-voltage protection

Learn about LVPS protections.

The low-voltage power supply automatically stops supplying the DC voltage to the printer components whenever it detects excessive current or abnormal voltage. The low-voltage power supply has a protective circuit against over-current and over-voltage to prevent failures in the power supply circuit.

⚠ CAUTION: If DC voltage is not being supplied from the low-voltage power supply, the protective function might be running. In this case, turn the power switch off and unplug the power cord.

Do not turn the power switch on until the root cause is found and corrected.

If the protective function is active, the DC controller notifies the formatter of a low-voltage power supply failure. In addition, the low-voltage power supply has two fuses to protect against over-current. If over-current flows into the AC line, the fuse stops the AC power.

Low-voltage power supply failure detection

Learn about LVPS failure detection.

The DC controller determines a low-voltage power supply failure and notifies the formatter when the low-voltage power supply does not supply +24 V.

Low-voltage power supply functions

Learn about LVPS functions.

The printer has the following low-voltage power supply functions.

Table 5-11 Low-voltage power supply functions

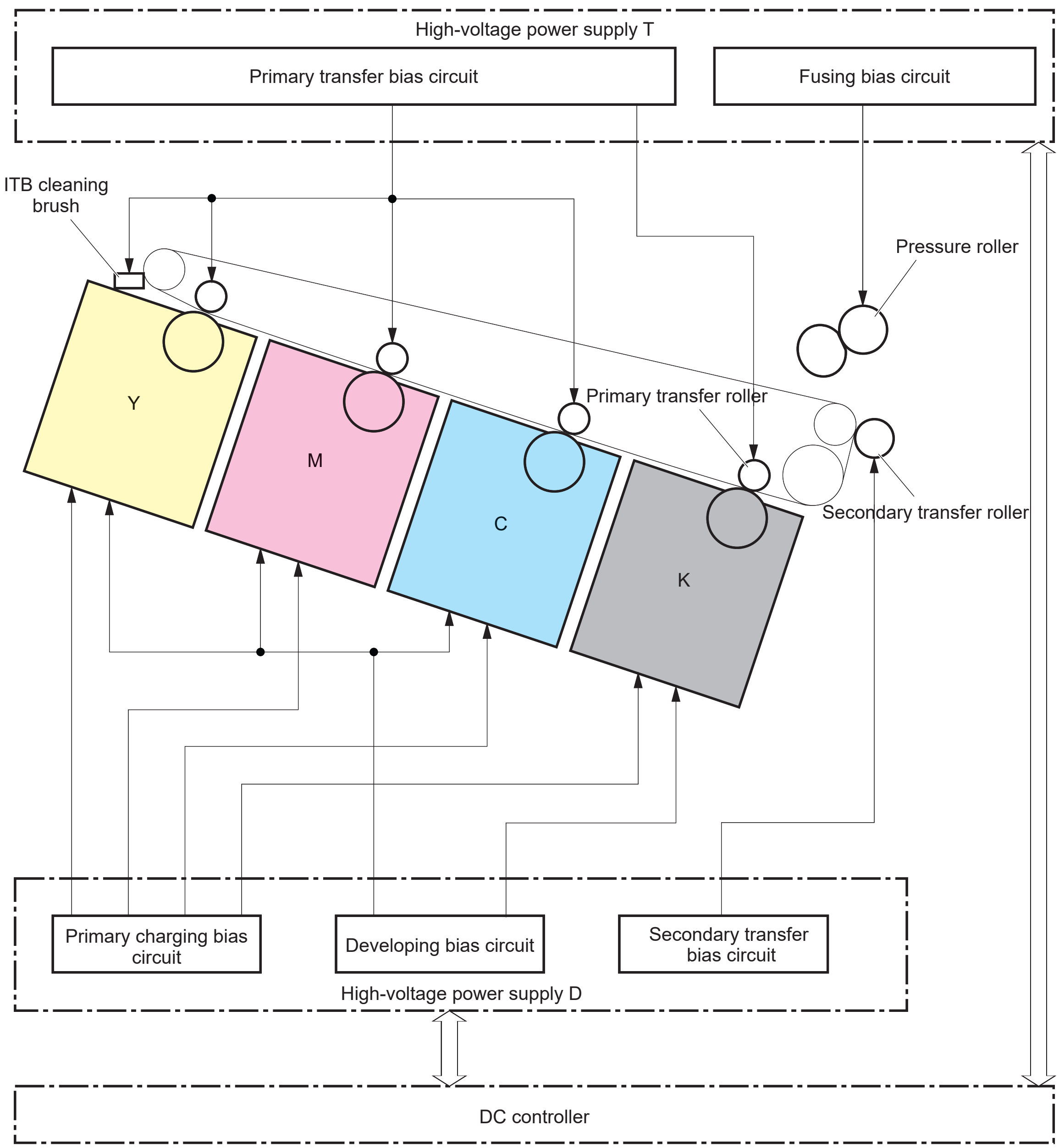
Function	Supported feature
Sleep mode	Yes
Power supply voltage detection	Yes
Automatic power OFF	Yes
Automatic power ON/OFF	Yes
Active OFF	Yes
Inactive OFF	Yes
Network mode	No
Power switch illumination	Yes
Low-voltage power supply failure detection	Yes
Power save mode	No

High-voltage power supply

Learn about the high-voltage power supply (HVPS).

The DC controller controls the high-voltage power supply (HVPS) to generate biases. The high-voltage power supply delivers the high-voltage biases to the following components used to transfer toner during the image-formation process:

- Primary charging roller (in the toner cartridges)
- Developing roller (in the toner cartridges)
- Primary transfer roller
- Secondary transfer roller
- Pressure roller
- ITB cleaning brush



High-voltage power supply circuits

Learn about HVPS circuits.

The high-voltage power supply contains the following separate circuits.

- **Primary-charging-bias generation**

The primary charging bias negatively charges the surface of the photosensitive drum to prepare for image formation.

- Developing-bias generation

  The developing bias adheres toner to an electrostatic latent image formed on the photosensitive drums.

- Primary-transfer-bias generation

  The primary transfer bias transfers the toner from each photosensitive drum onto the ITB.

- Secondary-transfer-bias generation

  The positive secondary transfer bias transfers the toner image from the ITB onto the paper. The negative bias transfers residual toner on the secondary transfer roller back to the ITB. The residual toner on the ITB is deposited in the toner collection unit.

Fuser bias

Learn about HVPS fuser bias.

The printer uses instant-on fusing. The fuser bias is DC positive for improved print quality. The fuser bias circuit is located in the high-voltage power supply, HVPS (T).

Fuser control

Learn about fuser control operation.

The DC controller and components in the fuser perform the following functions related to fuser operation:

- Control fuser temperature
- Detect fuser failures
- Prevent excessive temperature rise
- Detect remaining life in the fuser
- Determine if the correct fuser is installed

Fuser circuits

Learn about fuser circuits.

The fuser heater control circuit and the fuser heater safety circuit control the fuser temperature according to commands from the DC controller. The fuser consists of the following major components:

Figure 5-10 Fuser components

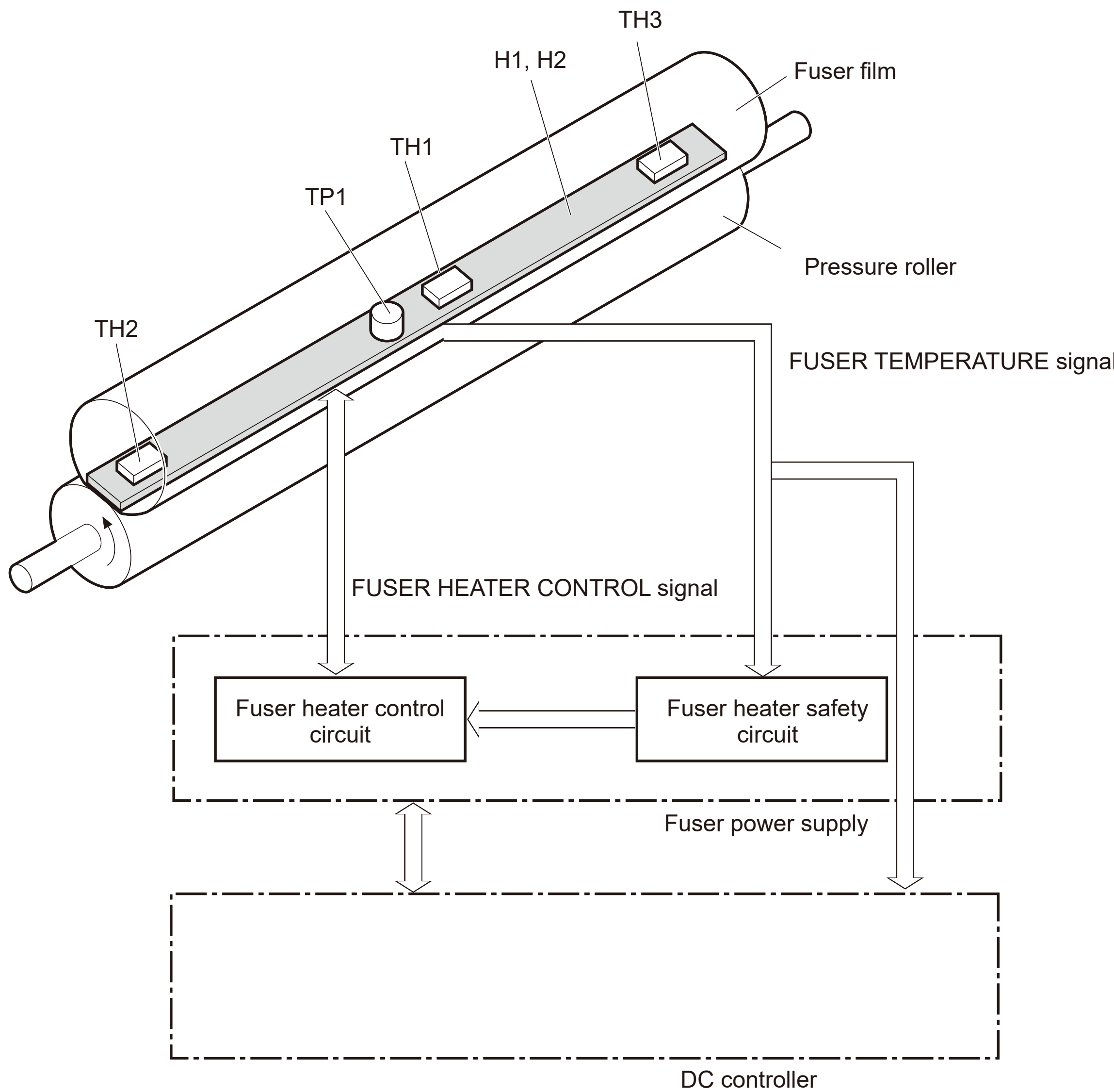


Table 5-12 Fuser components

Component	Abbreviation	Name	Function
Heater	H1	Fuser main heater	Heats the center of the fuser sleeve
Heater	H2	Fuser sub-heater	Heats the edge of the fuser sleeve
Thermistor (captive type)	TH1	Main thermistor	Detects the center temperature of the fuser heater
Thermistor (captive type)	TH2	Sub-thermistor 1	Detects the temperature at one end of the fuser heater

Table 5-12 Fuser components (continued)

Component	Abbreviation	Name	Function
Thermistor (captive type)	TH3	Sub-thermistor 2	Detects the temperature at one end of the fuser heater
Thermoswitch (non-captive type)	TP1	Thermoswitch	Prevents an abnormal temperature rise in the fuser heater

Fuser control functions

Learn about fuser control functions.

The printer has the following fuser control functions.

Table 5-13 Fuser control functions

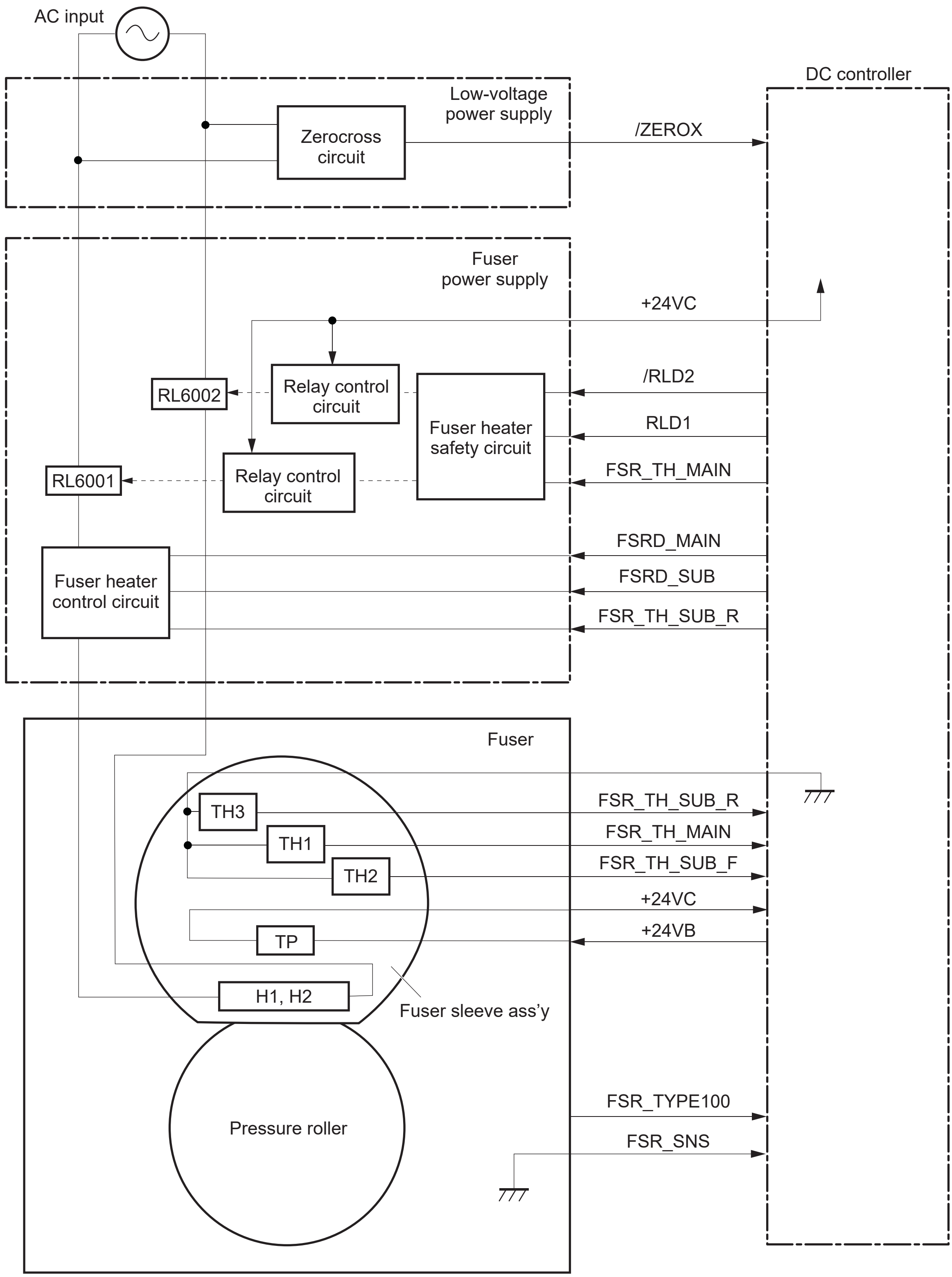
Function	Supported feature
Fuser temperature control	Yes
Fuser failure detection	Yes
Frequency detection circuit failure detection	Yes
Fuser pressure release mechanism failure detection	Yes
Fuser type discrepancy detection	Yes
Fuser type identification detection	Yes
Fuser presence detection	Yes
Fuser life detection	Yes
Relay failure detection	No
Pressure roller cleaning	Yes

Fuser temperature control

Learn about fuser temperature control.

The temperatures of the two rollers in the fuser fluctuate according to the stage of the printing process. The DC controller sends commands to the fuser-control circuit to adjust temperatures.

Figure 5-11 Fuser temperature-control circuit



Fuser heater protection

Learn about fuser heater protection.

Fuser heater protection is a feature that detects excessive temperatures in the fuser and interrupts the power supply to the fuser heater.

The following three protective components prevent the fuser heater from excessive rising temperature:

- DC controller

  When a thermistor or sub-thermistor detects a temperature above a certain threshold, the DC controller interrupts power to the specific heater.

- Fuser-heater safety circuit

  The fuser heater safety circuit monitors the detected temperature of the sub-thermistors.

- Thermoswitch

  If the temperature in the heaters is abnormally high, and the temperature in the thermoswitch exceeds a specified value, the contact to the thermoswitch breaks.

Fuser unit life detection

Learn about fuser unit life detection.

Fuser life is tracked by fuser rotations, and not by the number of pages printed. This is the most accurate tracking method since the fuser rotates for every print job.

Variations in fuser life depend on customer usage. Customers who are running one- and two-page intermittent jobs with long pauses between each job might reach the fuser low message sooner due to the fuser rotating more times per page than it would for larger print jobs.

NOTE: For more information, see HP LaserJet Enterprise - How to obtain the status of the maintenance kit.

Fuser identification

Learn about fuser unit life detection.

The printer detects the type and presence of the fuser. The DC controller notifies the formatter when it fails to detect the type or presence of the fuser.

NOTE: This printer detects if a fuser of the correct voltage for the printer is installed. If a fuser of the incorrect voltage is installed, the DC controller notifies the formatter and an error message is displayed on the control panel.

Engine laser/scanner system

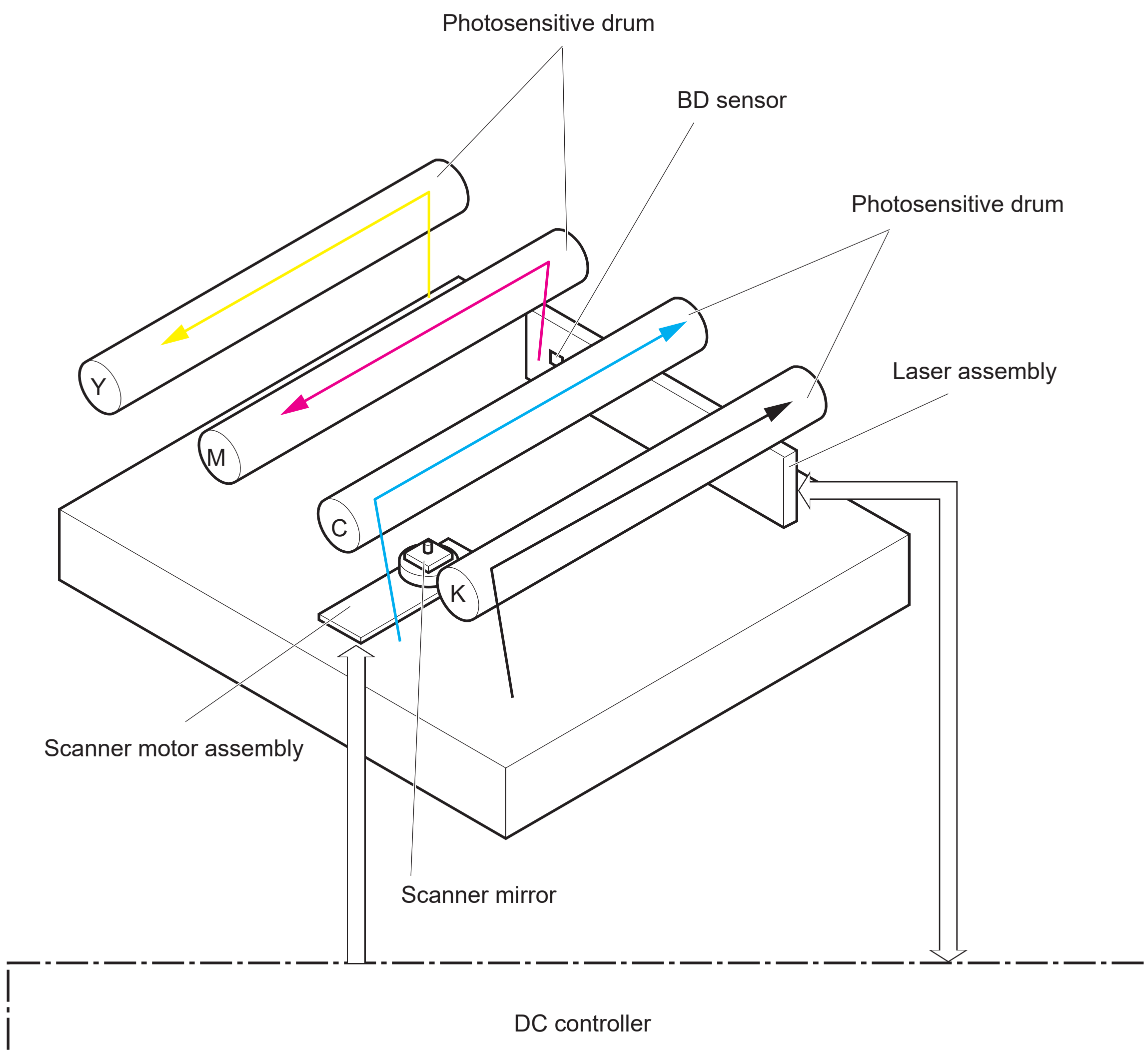
Learn about the engine laser/scanner system.

The laser/scanner system forms the latent electrostatic image on the photosensitive drums inside the toner cartridges.

The DC controller receives instructions from the formatter regarding the image of the page to be printed. The DC controller signals the lasers to emit light, and the laser beams pass through lenses and onto the scanner mirror, which rotates at a constant speed. The mirror reflects the beam onto the photosensitive drum in the pattern required for the image, exposing the surface of the drum so it can receive toner.

NOTE: The printer has one laser/scanner assembly for yellow, magenta, cyan and black which are controlled by signals sent from the DC controller.

Figure 5-12 Laser/scanner system



Laser/scanner failure detection

Learn about laser/scanner failure detection.

The DC controller determines an optical unit failure and notifies the formatter of the error status when any of the following occurs:

- **Laser/scanner motor startup failure**

  The scanner motor does not reach a specified rotation frequency within a specified period of time from when the laser/scanner starts up.

- **Laser/scanner motor abnormal rotation**

  The laser/scanner motor does not reach a specified rotational frequency within a specified period of time during a print operation.

Safety

Learn about laser/scanner safety.

The laser/scanner assembly has a mechanical laser shutter. For the safety of users and service technicians, the laser shutter interrupts the optical path of the laser/scanner assembly when the top door is opened (SW101).

Image-formation process

Learn about the image-formation process.

The image-formation system creates the printed image on the paper. The system consists of the following components:

- Toner cartridges
- Intermediate Transfer Belt (ITB)
- Primary transfer roller
- Secondary transfer (T2) roller
- Fuser
- Laser/scanner assembly
- High-voltage power supply D
- High-voltage power supply T

The DC Controller controls the internal components of the image formation system (according to commands received from the formatter) to form the toner images on the photosensitive drum surfaces. The toner images are then transferred to the print media and fused.

Figure 5-13 Image-formation system

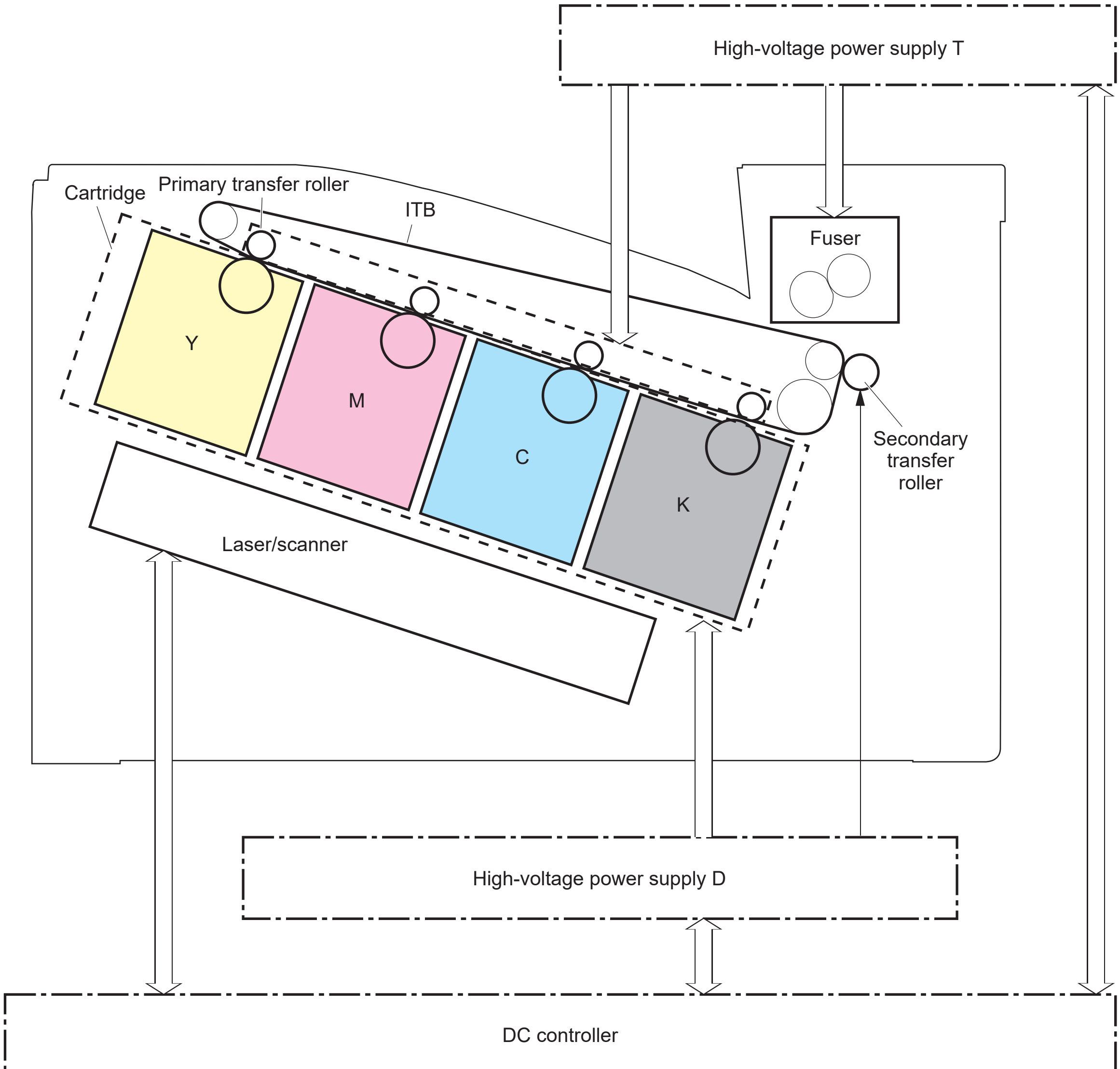


Image-formation system motors

The following figure shows the motors for the image-formation system.

Figure 5-14 Image-formation system motors

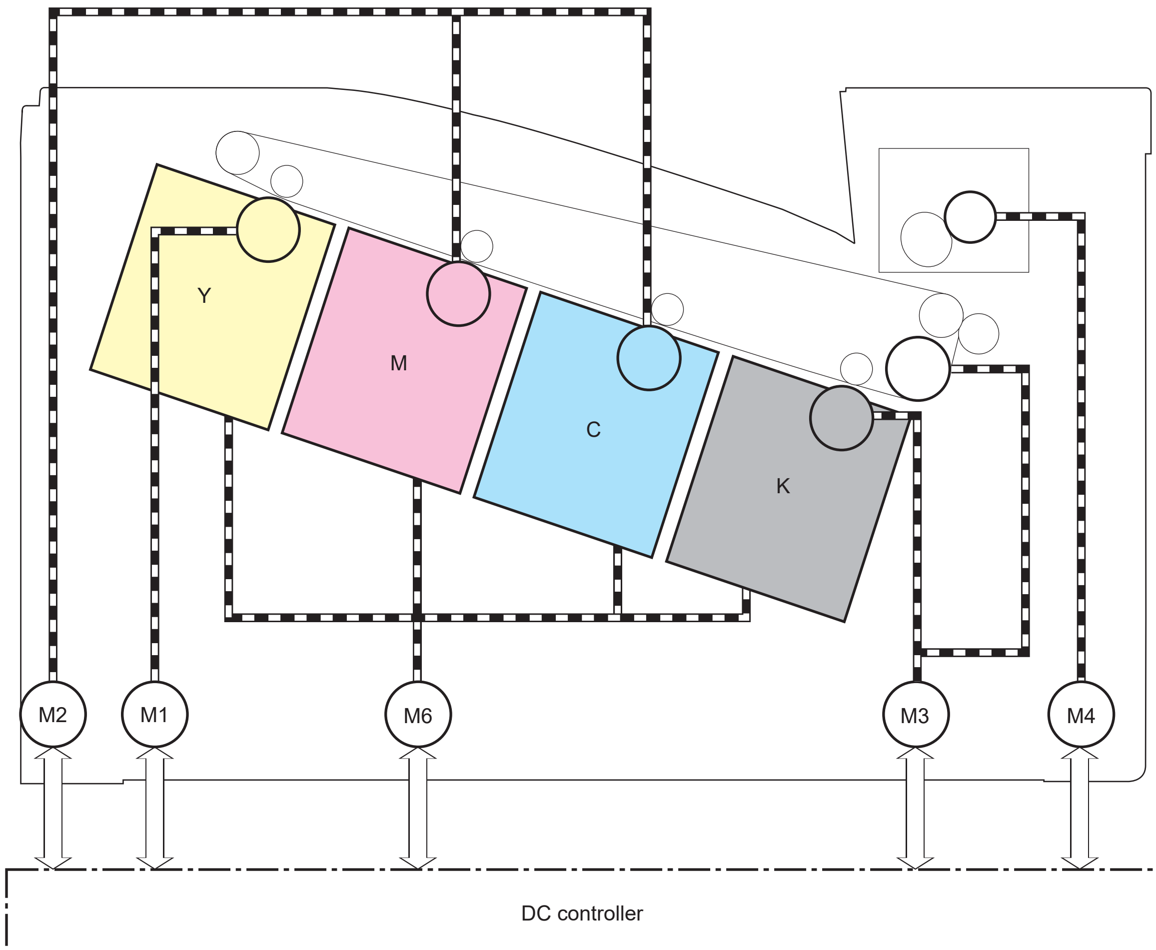


Table 5-14 Image-formation system motors

Abbreviation	Component	Par number
M1	Drum motor 1	Drum motor assembly (RM2-0078-000CN)
M2	Drum motor 2	Drum motor assembly (RM2-0078-000CN)
M3	Drum motor 3	Drum motor assembly (RM2-0078-000CN)
M4	Fuser motor	Fuser motor assembly (RM2-0077-000CN)
M6	Developer disengagement motor	Stepping motor (RK2-6027-000CN)

Image-formation system sensors

The following figure shows the sensors for the image-formation system.

Figure 5-15 Image-formation system sensors

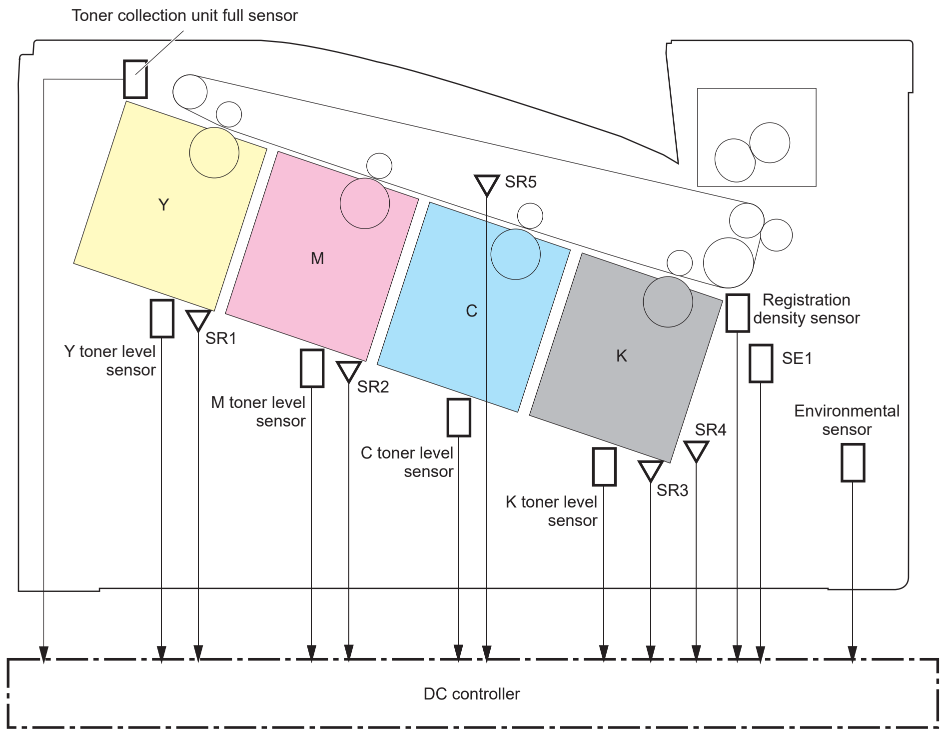


Table 5-15 Image-formation system sensors

Abbreviation	Name	Part number
SR1	Drum home position sensor 1	Not available
SR2	Drum home position sensor 2	Not available
SR3	Drum home position sensor 3	Not available
SR4	Developing home position sensor	Not available
SR5	Primary transfer roller disengagement sensor	Estrangement detect PCA assembly (RM2-7157-000CN)
SE1	Media sensor	Registration assembly • RM2-0093-000CN (M553n) • RM2-0018-000CN (M552, M553dn, M553x, M554, M555, M557, M558, E55040, E57540)
	Yellow toner-level sensor	Cartridge lift-up rail assembly (RM2-0025-000CN; not available)
	Magenta toner-level sensor	Cartridge lift-up rail assembly (RM2-0025-000CN; not available)
	Cyan toner-level sensor	Cartridge lift-up rail assembly (RM2-0025-000CN; not available)
	Black toner-level sensor	Cartridge lift-up rail assembly (RM2-0025-000CN; not available)

Table 5-15 Image-formation system sensors (continued)

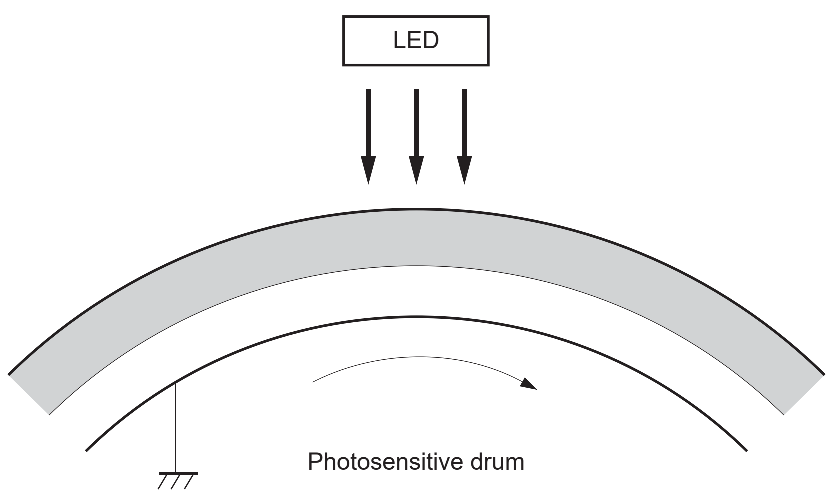
Abbreviation	Name	Part number
	Registration density sensor	Density detect assembly (RM2-7160-000CN)
	Environment sensor (temperature and humidity)	Environment sensor PCA (RM2-7154-000CN)
	Residual toner collection unit full sensor	Waste toner detect PCA (RM2-7130-000CN)
	Pre-exposure LED 1-3	Pre-exposure PCA (RM2-7168-000CN)
	Pre-exposure LED 4	Pre-exposure PCA (RM2-7169-000CN)

Step 1: Pre-exposure

Learn about the image formation pre-exposure step.

Light from the pre-exposure LED strikes the surface of the photosensitive drum to remove any residual electrical charges from the drum surface.

Figure 5-16 Pre-exposure

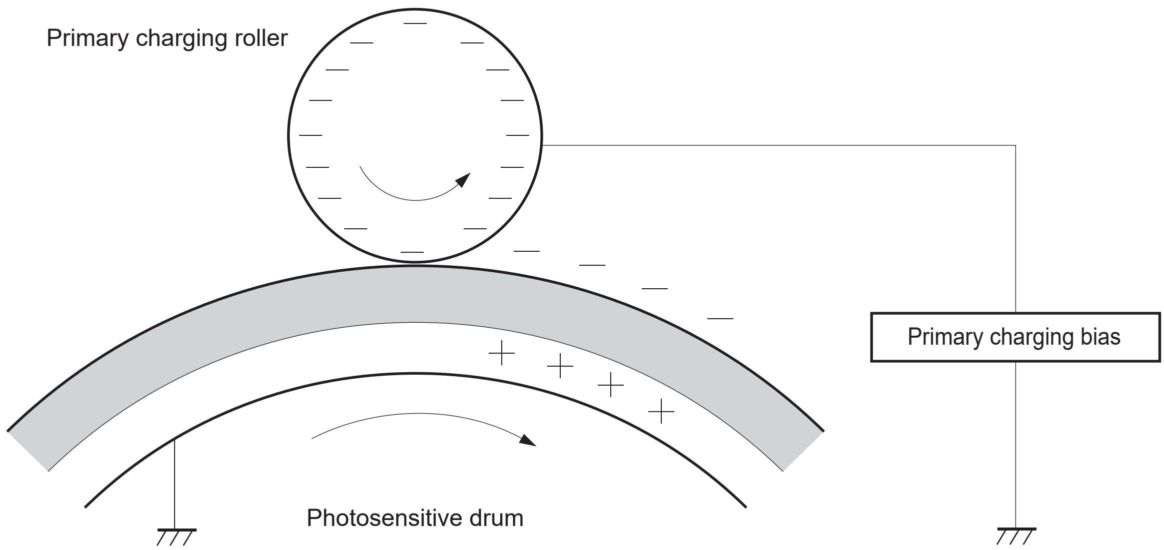


Step 2: Primary charging

Learn about the image formation primary charging step.

To prepare for latent image formation, the surface of the photosensitive drum is charged with a uniform negative charge. The primary charging roller receives the primary charging bias, and then the roller charges the drum by direct contact.

Figure 5-17 Primary charging

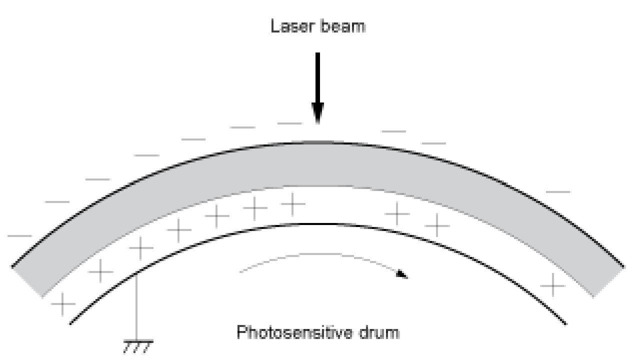


Step 3: Laser-beam exposure

Learn about the image formation laser-beam exposure step.

The laser beam strikes the photosensitive drum to neutralize the negative charge on the portions of the drum surface where the image will form. An electrostatic latent image forms where the negative charge was neutralized. The neutralized areas on the drum are ready to accept toner.

Figure 5-18 Laser-beam exposure

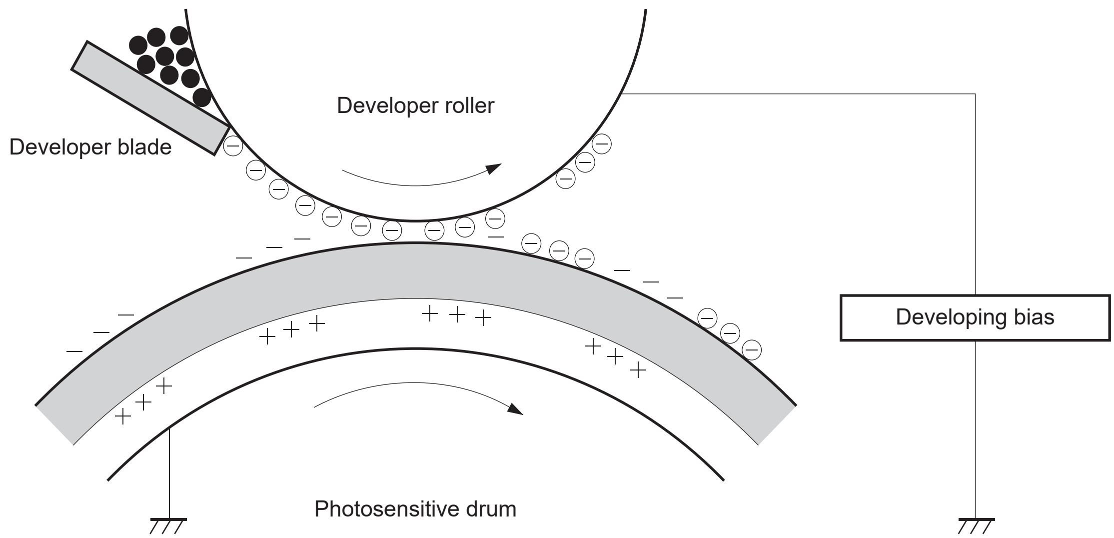


Step 4: Development

Learn about the image formation development step.

A developing bias is applied to the developing roller. The toner acquires a negative charge as a result of the friction from the developing roller rotating against the developing blade. Because the negatively charged surface of the photosensitive drums were neutralized where they have been struck by the laser beam, the toner adheres to those areas on the drums. The latent image becomes visible on the surface of the drum.

Figure 5-19 Development

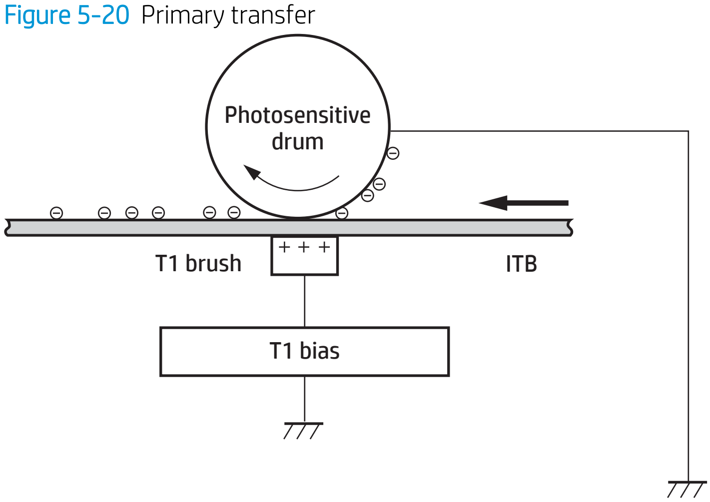


Step 5: Primary transfer

Learn about the image formation primary transfer step.

The positively charged primary-transfer brushes contact the ITB, giving the ITB a positive charge. The ITB attracts the negatively charged toner from the surface of each photosensitive drum, and the complete toner image transfers onto the ITB.

Figure 5-20 Primary transfer

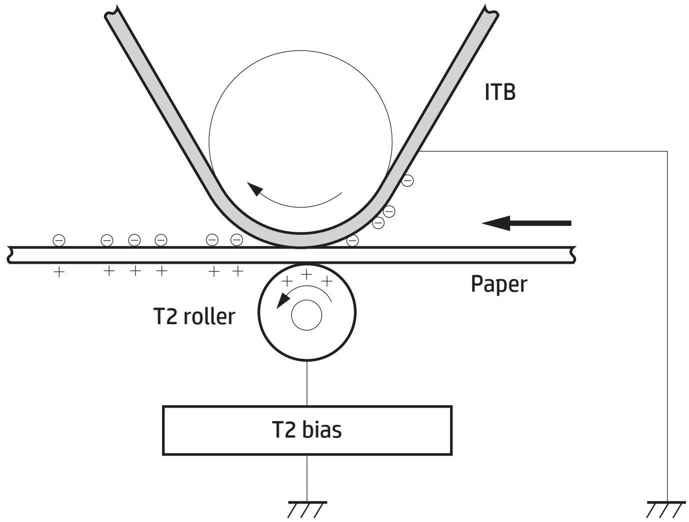


Step 6: Secondary transfer

Learn about the image formation secondary transfer step.

The paper acquires a positive charge from the secondary-transfer roller, and attracts the negatively charged toner from the surface of the ITB. The complete toner image transfers onto the paper.

Figure 5-21 Secondary transfer

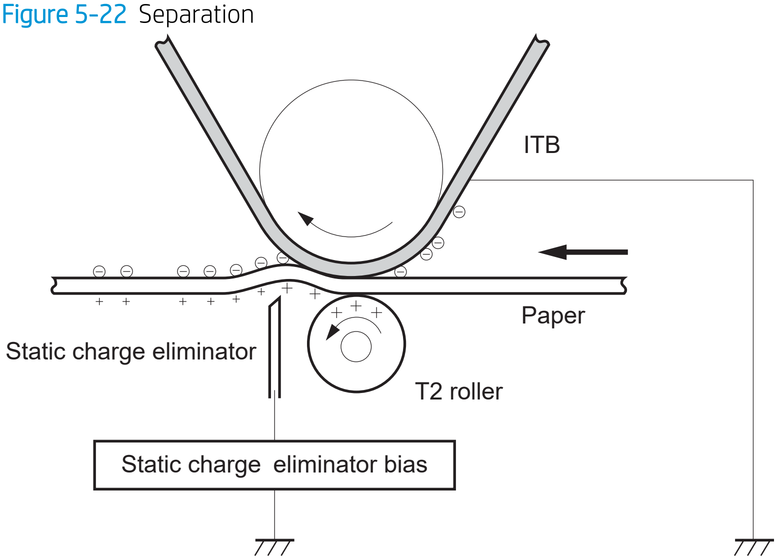


Step 7: Separation

Learn about the image formation separation step.

The stiffness of the paper causes it to separate from the ITB as the ITB bends. The static-charge eliminator removes excess charge from the paper for stable paper feeding and print quality.

Figure 5-22 Separation

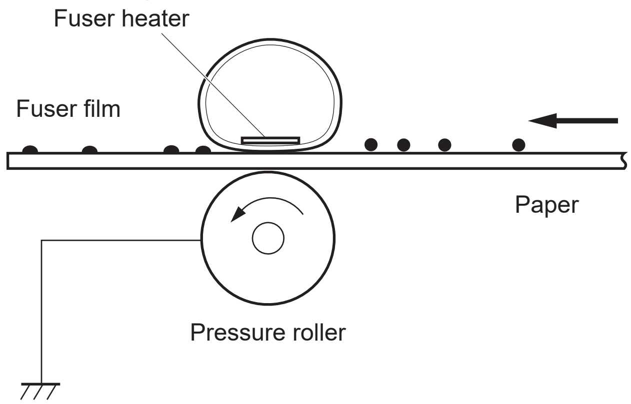


Step 8: Fusing

Learn about the image formation fusing step.

The printer uses an on-demand fusing method to adhere the toner image onto the page. As the page passes through the heated and pressurized rollers in the fuser the toner melts onto the page. The toner image is now permanently fused to the page. A fusing bias applied to the pressure roller improves image quality.

Figure 5-23 Fusing

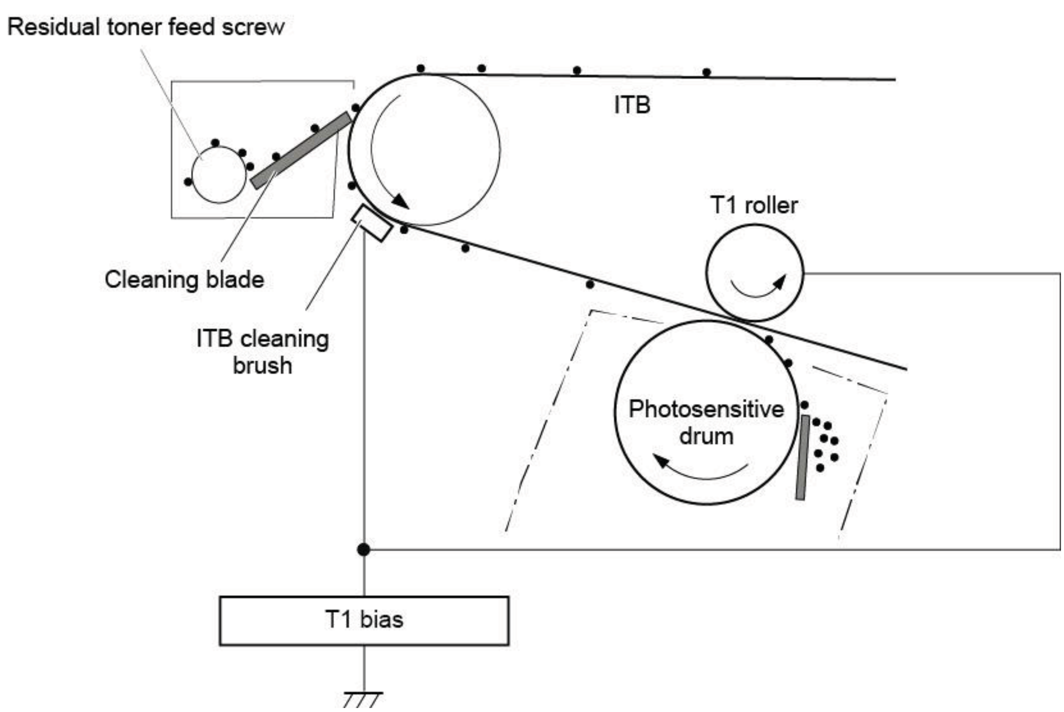


Step 9: ITB cleaning

Learn about the image formation ITB cleaning step.

The cleaning blade scrapes the residual toner off the surface of the ITB. The residual toner feed screw deposits residual toner in the toner collection unit. The residual toner which cannot be removed by the cleaning blade is charged by the ITB cleaning brush, and then transferred from the ITB surface to the photosensitive drum by the primary transfer (T1) roller.

Figure 5-24 ITB cleaning

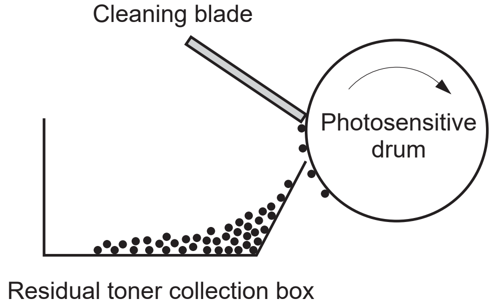


Step 10: Drum cleaning

Learn about the image formation drum cleaning step.

The cleaning blade scrapes the residual toner off the surface of the photosensitive drum and deposits it in the toner collection portion of the cartridge or in an external toner collection unit (TCU). The drum is now clear and ready for the next image-formation process.

Figure 5-25 Drum cleaning



Toner cartridges

Learn about the toner cartridges.

The following sections discuss the printer toner cartridges. The printer has four toner cartridges, one for each color: cyan, magenta, yellow, and black.

Design

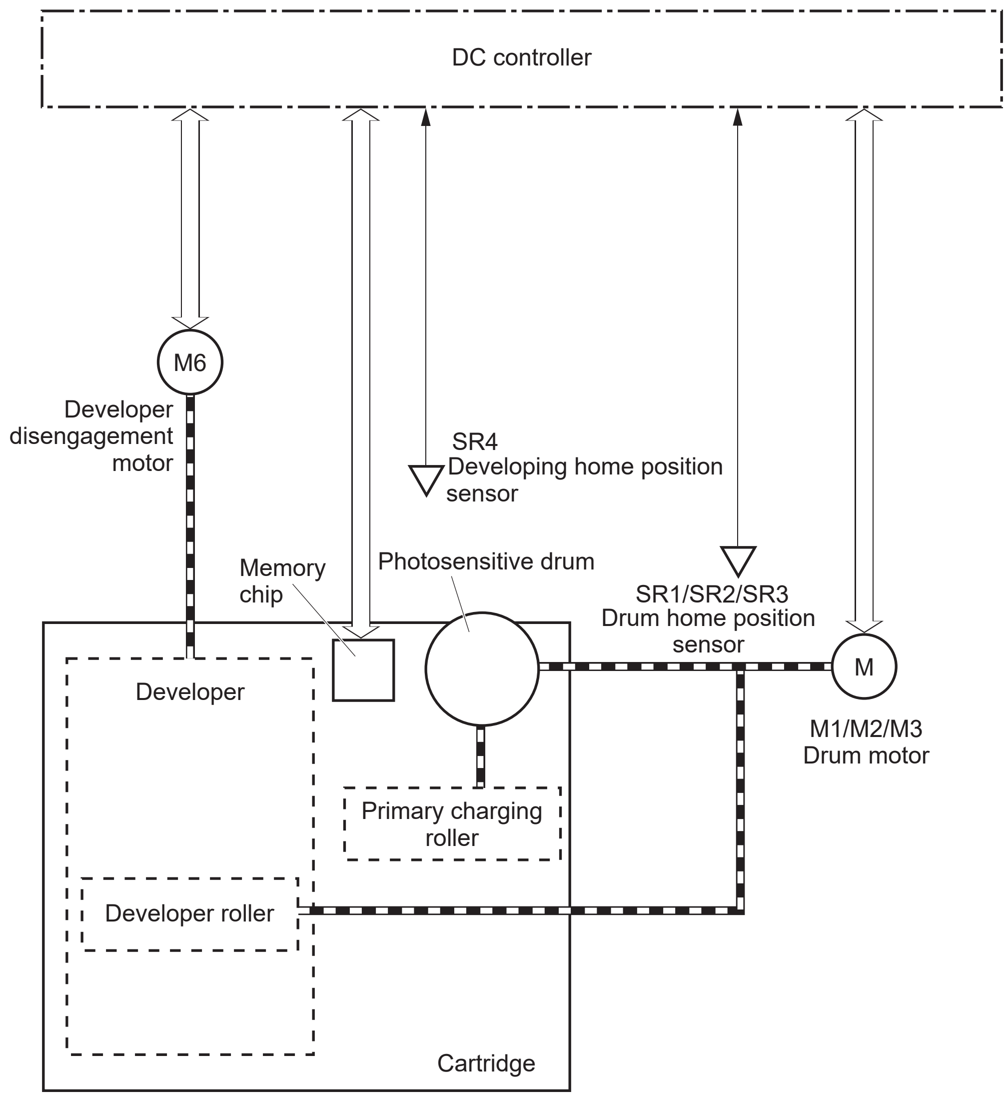
Learn about toner cartridge design.

Each toner cartridge is filled with toner and consists of the following components:

- Photosensitive drum
- Developer
- Primary-charging roller
- Memory chip

The DC controller rotates the drum motor to drive the photosensitive drum, developer roller, and the primary-charging roller.

Figure 5-26 Toner cartridge block diagram



Toner cartridge seal

Learn about the toner cartridge seal.

The toner cartridge seal is opened automatically when the toner cartridge is installed into the printer.

Memory chip

Learn about the toner cartridge memory chip.

The memory chip is non-volatile memory that stores information about the usage of the toner cartridge and helps protect the customer from counterfeit cartridges. This chip is also used to detect the presence of a cartridge within the printer or when a cartridge is installed in the wrong slot. The printer reads and writes the data in the memory chip.

Toner level and cartridge life detection

Learn about the toner level and cartridge life detection.

Toner level detection: The DC controller detects the remaining toner in the cartridge by the optical detection method and then notifies the formatter of the remaining toner level.

Cartridge life detection: Cartridge life detection is measured in two ways.

- Toner level

  For the first 75% of cartridge life, toner level is measure through pixel counting by the DC controller. Once the level reaches 25%, the toner level sensor utilizes electrical properties to determine the amount of toner remaining.

- Rotations of internal components (OPC and developer roller)

  The DC controller monitors these two life parameters and reports them to the formatter as percent life remaining. End of cartridge life is determined by the lower value of the two.

HP Cartridges with JetIntelligence

Learn about toner cartridge JetIntelligence.

HP Cartridges with JetIntelligence support two features for managing toner cartridges.

- The HP Cartridge Policy feature allows customers to specify the use of only genuine HP toner cartridges in the printer.
- The anti-theft feature enables locking a cartridge to a specific printer or fleet of printers.

HP Cartridge Policy

The genuine HP Cartridge Policy feature allows a customer to specify that only genuine HP supplies can be used in a printer. If anything but a genuine HP supply is installed, the printer will not print. This feature is disabled by default, and can be enabled or disabled from the control panel, the HP Embedded Web Server (EWS), or HP Web Jetadmin.

If a genuine HP cartridge has passed the low state and is installed in a printer that has this feature enabled, the printer will display an **Unauthorized Cartridge** message on the control panel and will not print.

If a non-HP toner cartridge is used in a printer with this feature enabled, the message **Unauthorized Cartridge** appears on the control-panel display and the printer will not print.

> NOTE: If a customer suspects they have a counterfeit cartridge, they should report it by going to www.hp.com/go/anticounterfeit and selecting **Report now**.

Anti-theft or cartridge protection

The toner cartridge anti-theft feature allows a customer to configure the printer to automatically lock toner cartridges to a specific printer or fleet of printers when they are installed. A locked toner cartridge will work only in the specified printer or fleet of printers. This feature prevents toner cartridges from being stolen and used in another printer, or from being moved from an authorized printer to an unauthorized printer. This feature is disabled by default. Cartridge protection to a single printer can be enabled or disabled from the control panel or the HP Embedded Web Server (EWS). Cartridge protection for a printer fleet can be enabled only by using HP Web Jetadmin.

When the anti-theft feature is enabled, the toner cartridge in a printer will only work in the specified printer or fleet of printers. If a locked toner cartridge is moved to another printer, the cartridge will not print and the message **Protected Cartridge** appears on the control-panel display.

NOTE: When a toner cartridge is locked to a specific printer or fleet of printers, it cannot be unlocked. This is a permanent operation.

Dynamic security

Learn about dynamic-security-enabled printers.

NOTE: All printer models might not support the Dynamic security feature.

Certain HP printers use cartridges that have security chips or electronic circuitry. Cartridges using a non-HP chip or modified or non-HP circuitry* might not work. And, those that work today might not work in the future.

As is standard in the printing business, HP has a process for authenticating cartridges. HP continues to use security measures to protect the quality of our customer experiences, maintain the integrity of our printing systems, and protect our intellectual property. These measures include authentication methods that change periodically and might prevent some third-party supplies from working now or in the future. HP printers and original HP cartridges deliver the best quality, security and reliability. When cartridges are cloned or counterfeited, the customer is exposed to quality and potential security risks, compromising the printing experience.

***Non-HP Chips and modified or non-HP electronic circuitry** are not produced or validated by HP. HP cannot guarantee that these chips or circuitry will work in your printer now or in the future. If you are using non-original HP cartridges, please check with your supplier to ensure your cartridge has an original HP security chip or unmodified HP electronic circuitry.

Developing unit engagement and disengagement control

Learn about developer unit operation.

The printer can print in full-color mode or in black-only mode. To print in black-only mode, the printer disengages the developing rollers in the cyan, magenta, and yellow toner cartridges, which maximizes the life of the cartridges.

When the printer is turned on and when each print job is completed, all four of the developing units are disengaged from the photosensitive drums. When development is not needed, a special cam mechanism on the developer roller stops the rotation separate from the developer disengagement cam, providing even more life for the cartridge.

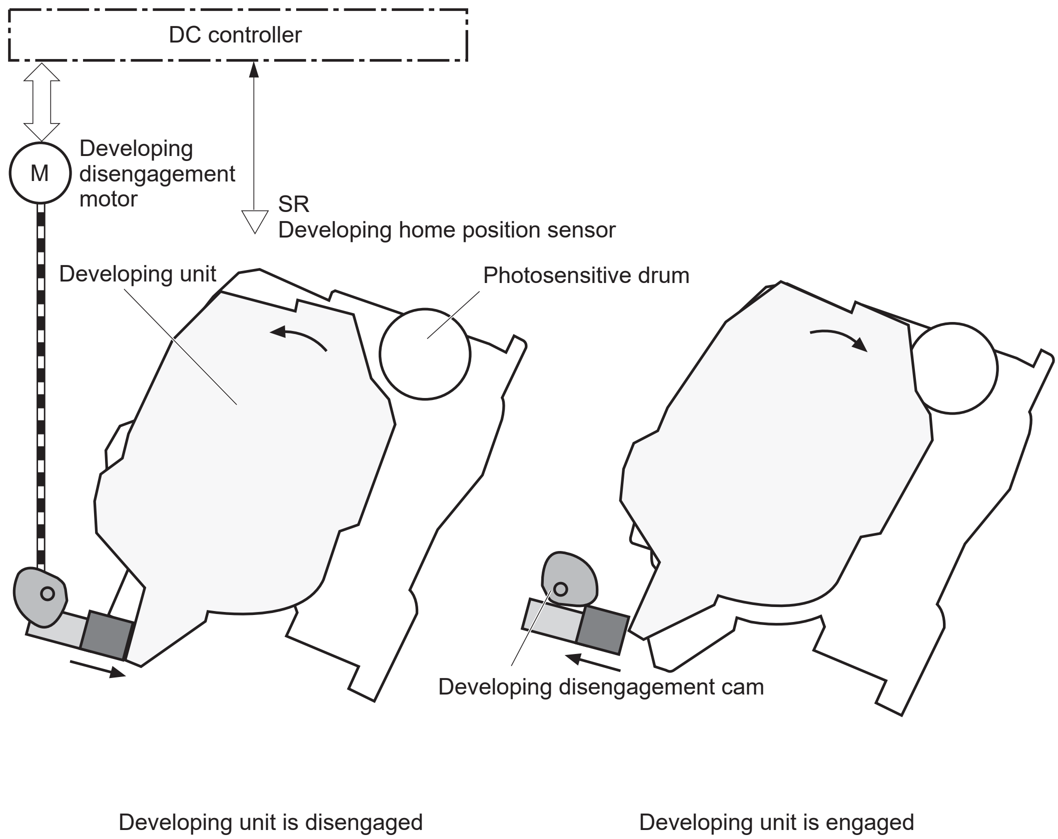
- The drive of the developer disengagement motor rotates the developer disengagement cam.
- As the cam rotates, the developing unit engages with or separates from the photosensitive drum.

When the print mode is full color, the developing units engage with the drums. When the print mode is black-only, only the black developing unit engages with the drum.

The DC controller determines a developer disengagement motor failure and notifies the formatter when it does not detect a specified signal from the developer disengagement sensor during the developing unit engagement and disengagement operation.

NOTE: The figure below is representational only. The toner cartridge configuration varies by printer design.

Figure 5-27 Toner cartridge block diagram



Intermediate transfer belt assembly

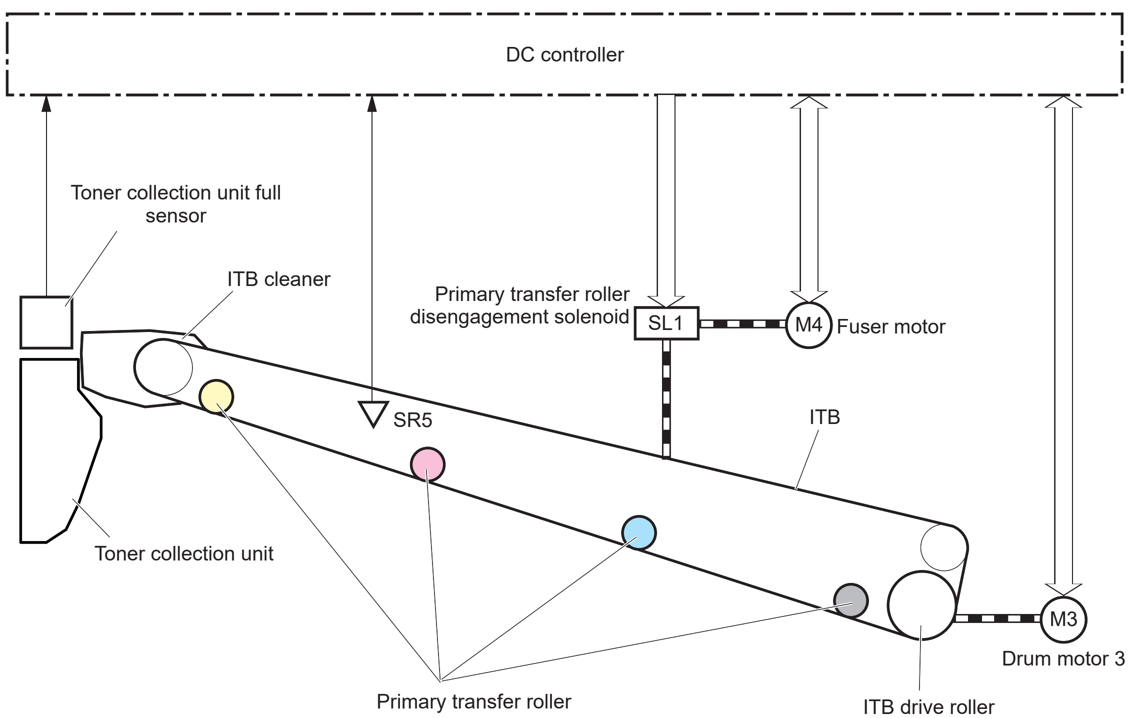
Learn about the Intermediate transfer belt (ITB) assembly.

The ITB unit accepts the toner images from the photosensitive drums and transfers the completed image to the paper. The ITB unit has the following main components:

- Intermediate transfer belt (ITB)
- ITB-drive roller
- Primary-transfer roller
- ITB cleaner

Drum motor 3 drives the ITB drive roller, which rotates the ITB. The motion of the ITB causes the primary transfer rollers to rotate. The ITB cleaner cleans the ITB surface.

Figure 5-28 ITB unit



Primary-transfer roller engagement and disengagement control

Learn about ITB primary-transfer roller engagement and disengagement control.

Depending on the requirements of the print job, the primary-transfer rollers engage with the ITB so it can receive toner from the photosensitive drums. The primary-transfer rollers have three engagement states.

Primary-transfer roller engagement states

- **All rollers disengaged**

  The ITB is disengaged from all the four photosensitive drums. This state is the home position for the ITB unit.

- **All rollers engaged**

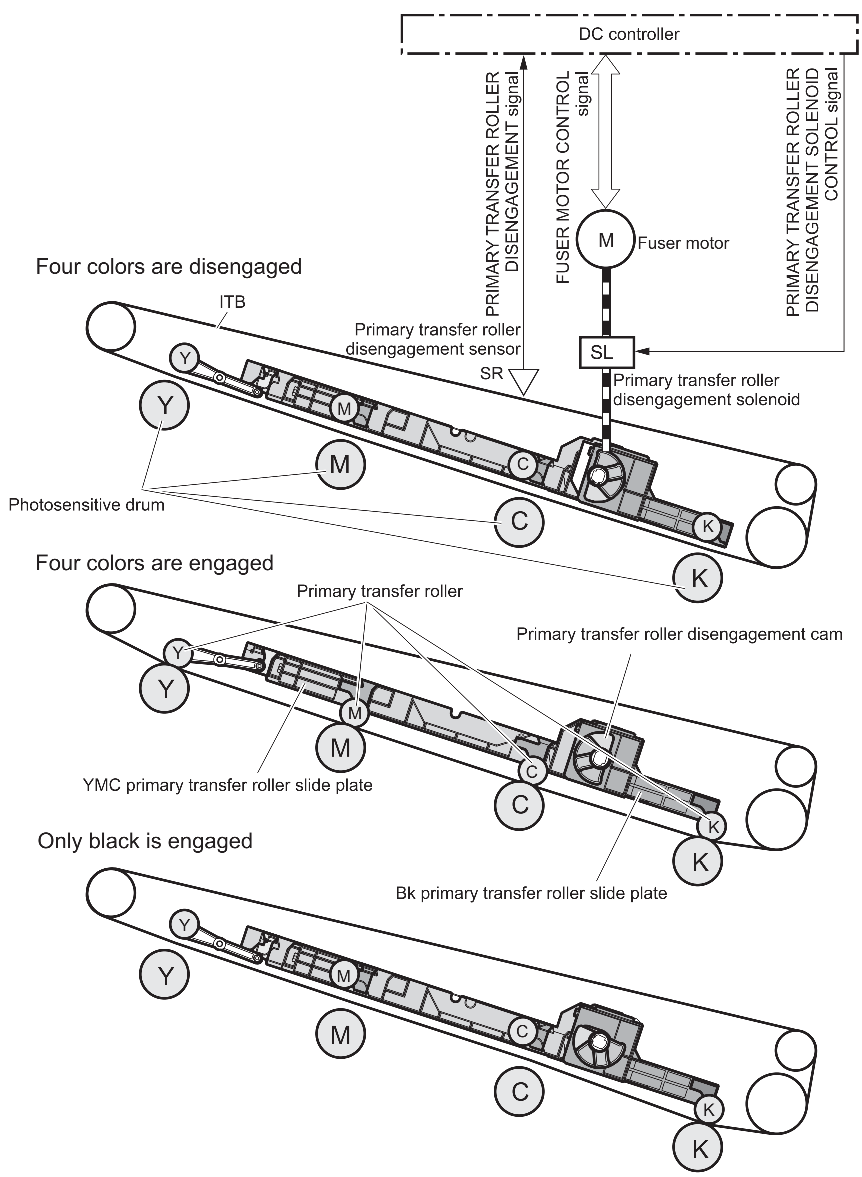
  The ITB is engaged with all four photosensitive drums. This is the state for full-color printing.

- **Black roller engaged**

  The ITB is engaged with only the black photosensitive drum. This is the state for black-only printing.

NOTE: The figure below is representational only. The ITB configuration varies by printer design.

Figure 5-29 Three states of primary-transfer roller engagement and disengagement



The primary-transfer-roller disengagement motor rotates or reverses to place the primary-transfer-roller disengagement cam into one of three positions. The cam causes the transfer-roller slide plate to move to the right or left. This movement causes the primary-transfer rollers to move up to engage the ITB with the photosensitive drum or down to disengage it.

The DC controller expects to receive a signal from the ITB home-position sensor when the primary-transfer roller engages or disengages. If the DC controller does not receive this signal, but detects that the primary-transfer-roller disengagement motor is rotating, the DC controller determines that the primary-transfer-disengagement mechanism has failed, and notifies the formatter.

ITB unit detection

Learn about ITB unit detection.

The DC controller monitors several signals from the ITB unit to detect status.

Table 5-16 **ITB unit detection**

Item	Description
ITB unit life detection	The DC controller detects whether the ITB unit is new by monitoring the new ITB unit sensor. The DC controller determines the ITB unit is at end of life and notifies the formatter when a specified number of pages are printed after the ITB unit is If swapping ITB units between two printers for troubleshooting purposes, be sure to return the ITB units to their original printers to maintain the correct life count. NOTE: When installing a new ITB, follow the prompts on the control panel to set the **Maintenance Kit** status to **Reset**. If a supplies low message did not appear on the control-panel display, the **Maintenance Kit** status cannot be reset.
ITB unit presence detection	The DC controller detects the presence of an ITB unit by monitoring the primary-transfer roller disengagement sensor. The DC controller turns on the primary-transfer disengagement solenoid for specified times during an initial rotation period when the following events occur: ● The printer is turned on ● The printer exits sleep mode ● The door is closed The DC controller determines the absences of an ITB unit and notifies the formatter when it does not detect a specified signal from the new primary-transfer roller disengagement sensor.

ITB cleaning mechanism

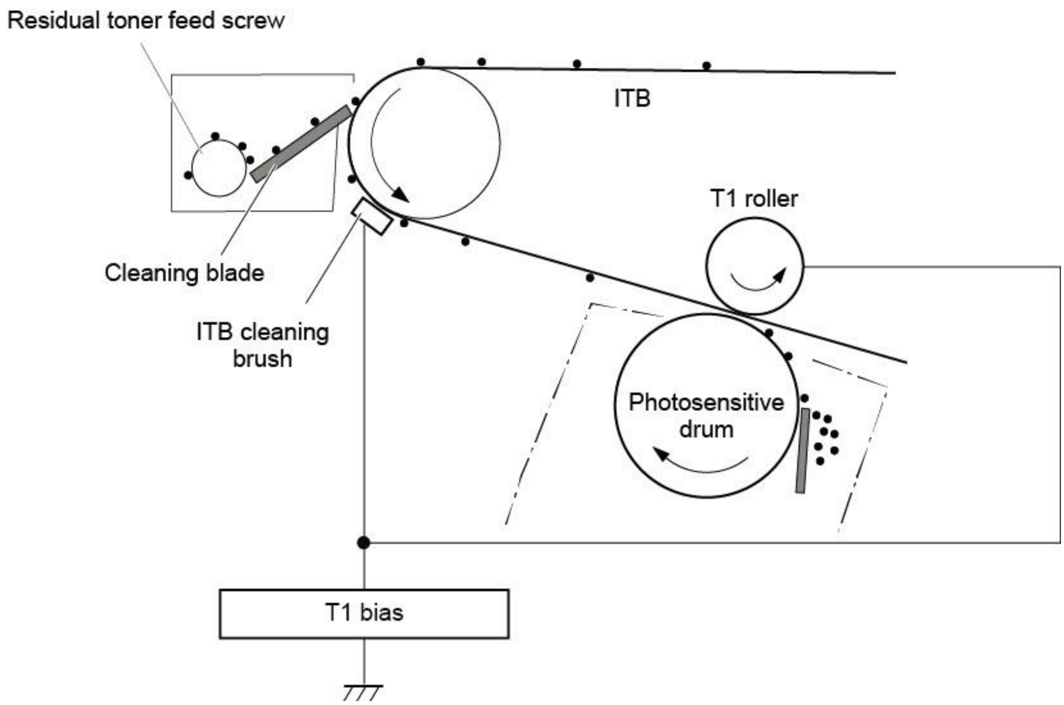
Learn about ITB cleaning.

The cleaning blade in the ITB cleaner scrapes the residual toner off the ITB surface and deposits the residual toner into the toner collection unit. The residual toner feed screw deposits the residual toner to the residual toner feed unit. The ITB motor and the residual toner feed motor drive the screw.

The residual toner that cannot be removed by the cleaning blade is charged by the ITB cleaning brush, and then transferred from the ITB surface to the photosensitive drum by the primary transfer (T1) roller. The DC controller detects whether the toner collection unit is full by using the toner collection unit full sensor, and then notifies the formatter.

NOTE: The figure below is representational only. The ITB configuration varies by printer design.

Figure 5-30 ITB cleaning process



Secondary transfer roller functions

Learn about secondary transfer roller functions.

The secondary transfer roller transfers the image from the ITB onto the paper.

The printer has the following secondary transfer roller functions.

Table 5-17 Secondary transfer roller functions

Function	Supported feature
Secondary transfer roller cleaning mechanism	Yes
Secondary transfer roller presence detection	No
Secondary transfer roller life detection	No
Secondary transfer roller alienation control	Yes

Color self calibration

Learn about printer color self calibration.

The printer calibrates itself to maintain proper print-quality. The calibration corrects color-misregistration and color-density variation due to environmental changes or internal variation in the printer.

The printer has the following calibration functions.

Table 5-18 Calibration functions

Function	Supported feature
Color-plane registration correction control	Yes
Environment correction control	Yes
Image density control (DMAX)	Yes
Image halftone control (DHALF)	Yes
Registration density sensor failure detection	Yes
Color sensor control	No
Gray axis control (GAS)	No
Environment sensor failure detection	Yes

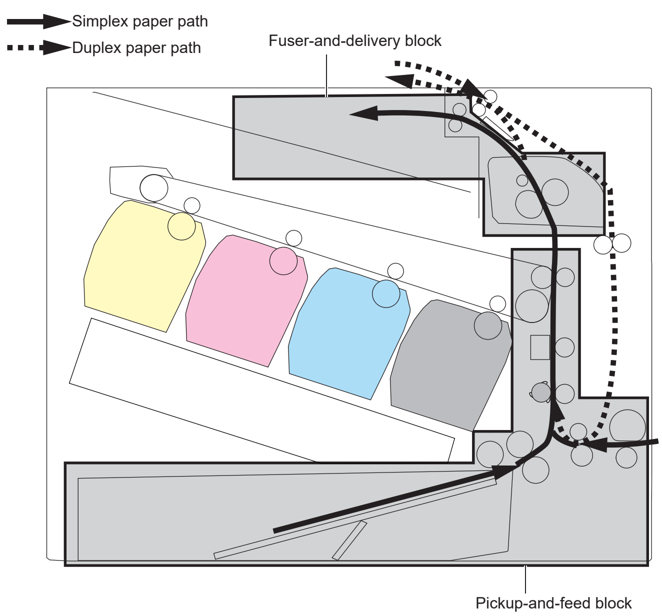
Engine pickup, feed, and delivery system

Learn about the printer pickup, feed and delivery system.

The DC controller controls the pickup, feed, and delivery system according to commands from the formatter. The pickup, feed, and delivery system uses a series of rollers to move the paper through the printer.

The pickup, feed, and delivery system consists of the following three functional blocks.

- **Pickup-and-feed-block**: Controls the movement of the paper from each pickup source to the fuser inlet
- **Fuser-and-delivery-block**: Controls the movement of the paper from the fuser to the delivery destination
- **Duplex block**: Controls the movement of the paper from the duplex switchback unit to the duplex re-pickup unit (duplex models only)



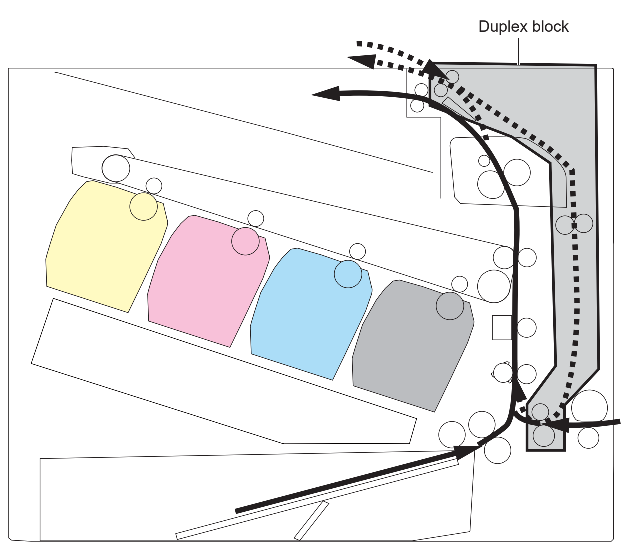


Photo sensors and switches

Learn about the engine pickup, feed, and delivery sensors and switches.

The following figure shows the sensors and switches for the engine pickup, feed, and delivery system.

Figure 5-31 Photo sensors and switches (engine pickup, feed, and delivery system)

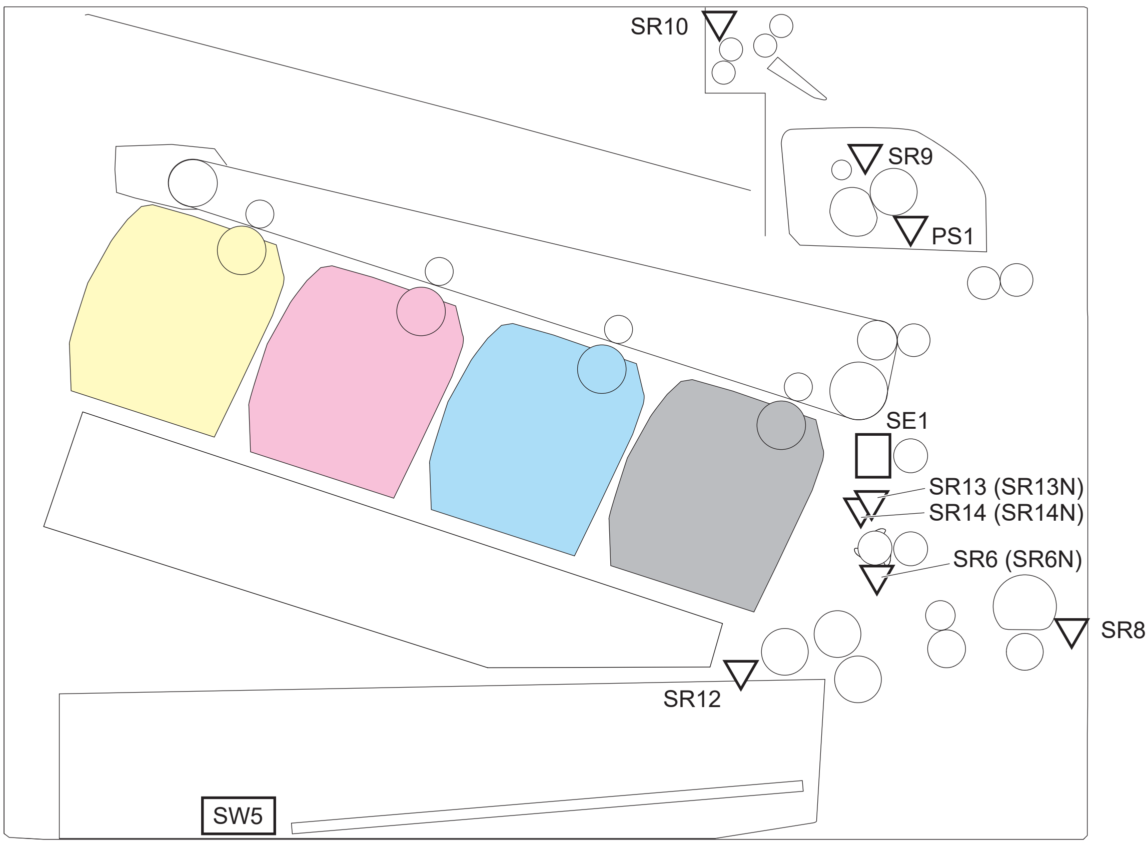


Table 5-19 Photo sensors and switches (engine pickup, feed, and delivery system)

Abbreviation	Component	Part number
PS1	Loop sensor	Fuser • B5L35-67902 (110V) • B5L36-67902 (220V)
SE1	Media sensor	Registration assembly • RM2-0093-000CN (M553n) • RM2-0018-000CN (M552, M553dn, M553x, M554, M555, M577. M578, E55040, E57540)
SR6	Top-of-page (TOP) sensor (M552, M553dn, M553x, M554, M555, M577. M578, E55040, E57540)	Registration assembly (RM2-0018-000CN)
SR6N	Top-of-page (TOP) sensor (M553n)	Registration assembly (RM2-0093-000CN)
SR8	Tray 1 media-out sensor	Right door assembly (RM2-0019-000CN)

Table 5-19 Photo sensors and switches (engine pickup, feed, and delivery system) (continued)

Abbreviation	Component	Part number
SR9	Fuser delivery sensor	Fuser • B5L35-67902 (110V) • B5L36-67902 (220V)
SR10	Output bin media-full sensor	Paper delivery assembly • RM2-0092-000CN (M553n) • RM2-0016-000CN (M552, M553dn, M553x, M554, M555, M577. M578, E55040, E57540)
SR11	Fuser pressure release sensor	Not available
SR12	Tray 2 media-out sensor	Paper pickup assembly (RM2-6556-000CN)
SR13	Media width sensor, front (M552, M553dn, M553x, M554, M555, M577. M578, E55040, E57540)	Registration assembly (RM2-0018-000CN)
SR13N	Media width sensor, front (M553n)	Registration assembly (RM2-0093-000CN)
SR14	Media width sensor, rear (M552, M553dn, M553x, M554, M555, M577. M578, E55040, E57540)	Registration assembly (RM2-0018-000CN)
SR14N	Media width sensor, rear (M553n)	Registration assembly (RM2-0093-000CN)
SW5	Tray 2 detection switch	Not available

Motors, clutches, and solenoids

Learn about the engine pickup, feed, and delivery motors, clutches, and solenoids.

The following figure shows the motors, clutches, and solenoids for the engine pickup, feed, and delivery system.

Figure 5-32 Motors, clutches, and solenoids (engine pickup, feed, and delivery system)

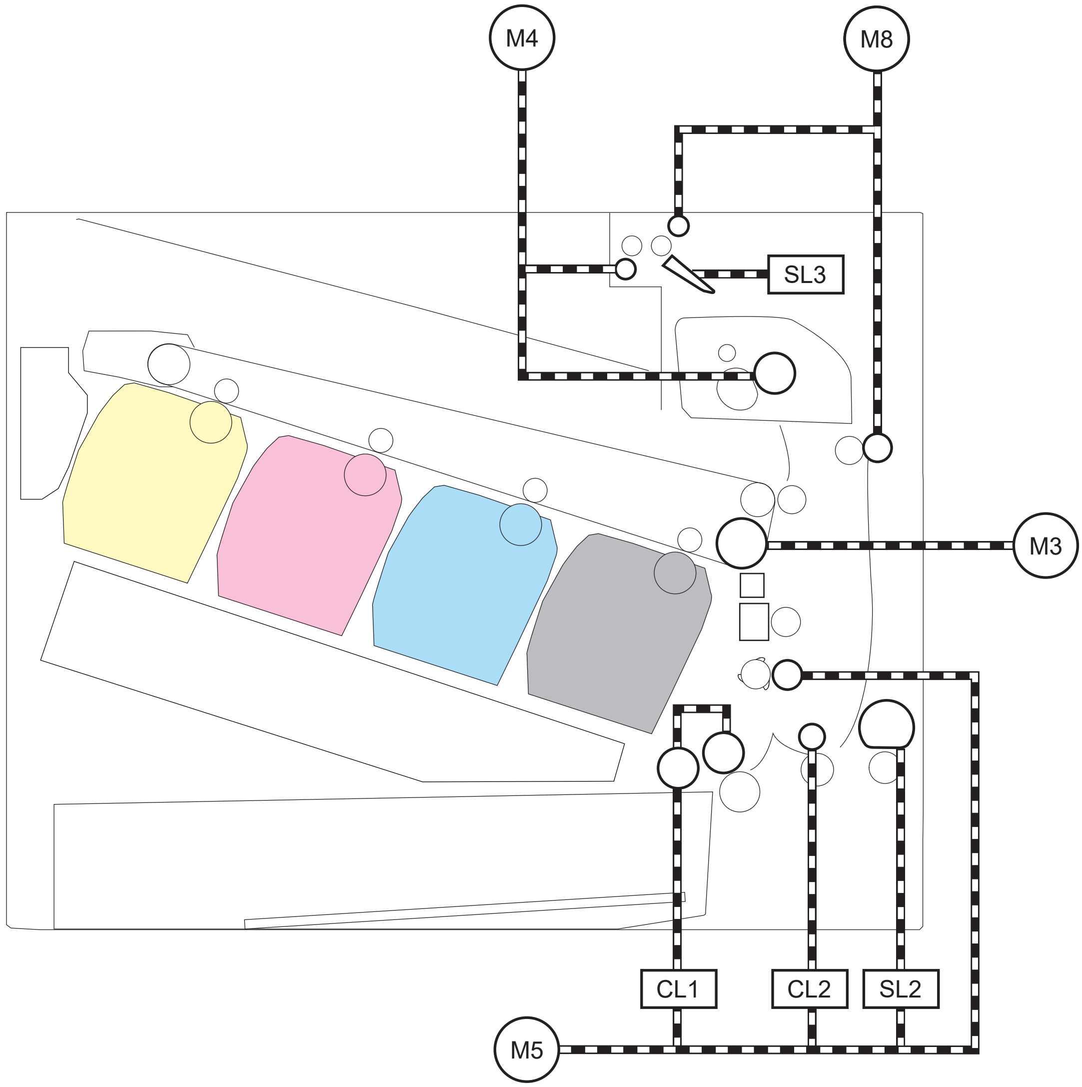


Table 5-20 Motors, clutches, and solenoids (engine pickup, feed, and delivery system)

Abbreviation	Component	Part number
M3	Drum motor 3	Drum motor assembly (RM2-0078-000CN)
M4	Fuser motor	Fuser motor assembly (RM2-0077-000CN)
M5	Pickup motor	Paper pickup drive assembly (RM2-0008-000CN)
M6	Developer disengagement motor	Stepping motor (RK2-6027-000CN)
M7	Scanner motor	Laser scanner assembly (RM2-0100-000CN; not orderable)
M8	Duplex reverse motor (duplex models)	Duplex drive assembly (RM2-0006-000CN)
CL1	Tray 2 pickup clutch	Lifter drive assembly (RM2-0010-000CN)
CL2	Duplex re-pickup clutch (duplex models)	Duplex drive assembly (RM2-0006-000CN)

Table 5-20 Motors, clutches, and solenoids (engine pickup, feed, and delivery system) (continued)

Abbreviation	Component	Part number
SL1	Primary transfer roller alienation solenoid	Fuser drive assembly • RM2-0091-010CN (M553n) • RM2-0009-010CN (M552, M553dn, M553x, M554, M555, M577, M578, E55040, E57540)
SL2	Tray 1 pickup solenoid	Right door assembly (RM2-0019-000CN)
SL3	Duplex reverse solenoid (duplex models)	Duplex drive assembly (RM2-0006-000CN)

Tray 1 (multipurpose)/Tray 2 (base printer)

Learn about the engine pickup, feed, and delivery for Tray 1 (multipurpose) and Tray 2 (base printer).

Moving paper from Tray 1 and Tray 2 involves the interaction of multiple components within the printer. The following sections describe these processes.

Tray 1 paper pickup and feed

The printer picks up one sheet of paper from Tray 1. The Tray 1 media-out sensor (SR8) detects whether paper is present in Tray 1.

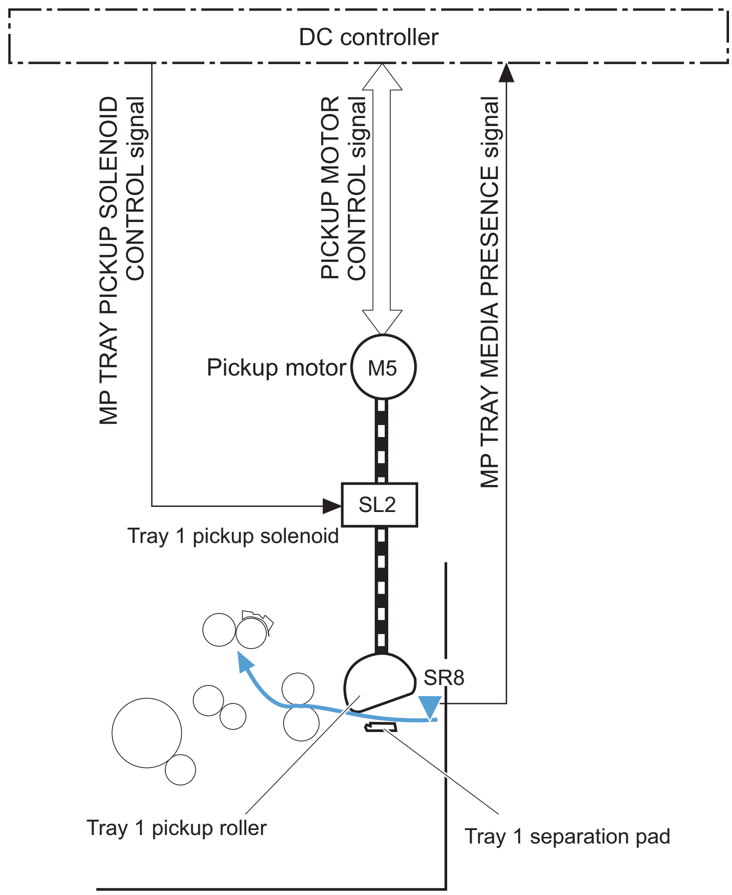
NOTE: Tray 1 and Tray 2 are optimal for paper pickup when using special paper or media other than 20 lb plain paper. For Tray 1, the printer increases the number of attempts to pick up a page, which increases the reliability of successfully picking the page from the tray and decreases the possibility of a mis-pick jam.

HP recommends using Tray 1 or Tray 2 if the printer is experiencing excessive or reoccurring jams from trays other than Tray 1 and Tray 2, or for print jobs that require media other than 20 lb plain paper.

Following are the sequence of steps for the Tray 1 pickup operation.

1. The pickup motor reverses when a print command is received from the formatter.
2. When the DC controller turns on the Tray 1 pickup solenoid, the Tray 1 pickup roller rotates and the lifting plate lifts.
3. As the lifting plate rises, the paper is picked up.
4. The Tray 1 separation pad removes any multiply-fed sheets, and one sheet is fed into the printer.

Figure 5-33 Tray 1 pickup mechanism



Tray 2 paper presence detection

The Tray 2 media-out sensor (SR12) detects the presence of paper in Tray 2.

The DC controller notifies the formatter when the Tray 2 media-out sensor detects that paper is absent.

Tray 2 lift operation

The printer keeps the paper stack surface at the correct pickup position. The Tray 2 lift-up operation is performed under the following conditions.

- The printer is turned on
- Tray 2 is installed
- The paper stack surface in Tray 2 lowers

The operational sequence of the Tray 2 lift operation is as follows.

1. The pickup motor (M5) rotates and the lifter moves up. Note that this printer uses the pickup motor rather than a dedicated lifter motor.
2. When the Tray 2 media stack surface sensor 2 detects the stack surface of media, the lifter motor stops.
3. The lifter motor rotates again to lift the lifter when the Tray 2 media stack surface sensor 1 detects the stack surface and then lowers during printing.

When a Tray 2 media stack surface sensors does not detect the stack surface within a specified time period after the lifter motor starts rotating, the DC controller determines a lifter motor failure and notifies the formatter.

Tray 2 paper pickup

NOTE: Tray 1 and Tray 2 are optimal for paper pickup when using special paper or media other than 20 lb plain paper. For Tray 1, the printer increases the number of attempts to pick up a page, which increases the reliability of successfully picking the page from the tray and decreases the possibility of a mis-pick jam.

HP recommends using Tray 1 or Tray 2 if the printer is experiencing excessive or reoccurring jams from trays other than Tray 1 and Tray 2, or for print jobs that require media other than 20 lb plain paper.

Following are the sequence of steps for the Tray 2 pickup operation.

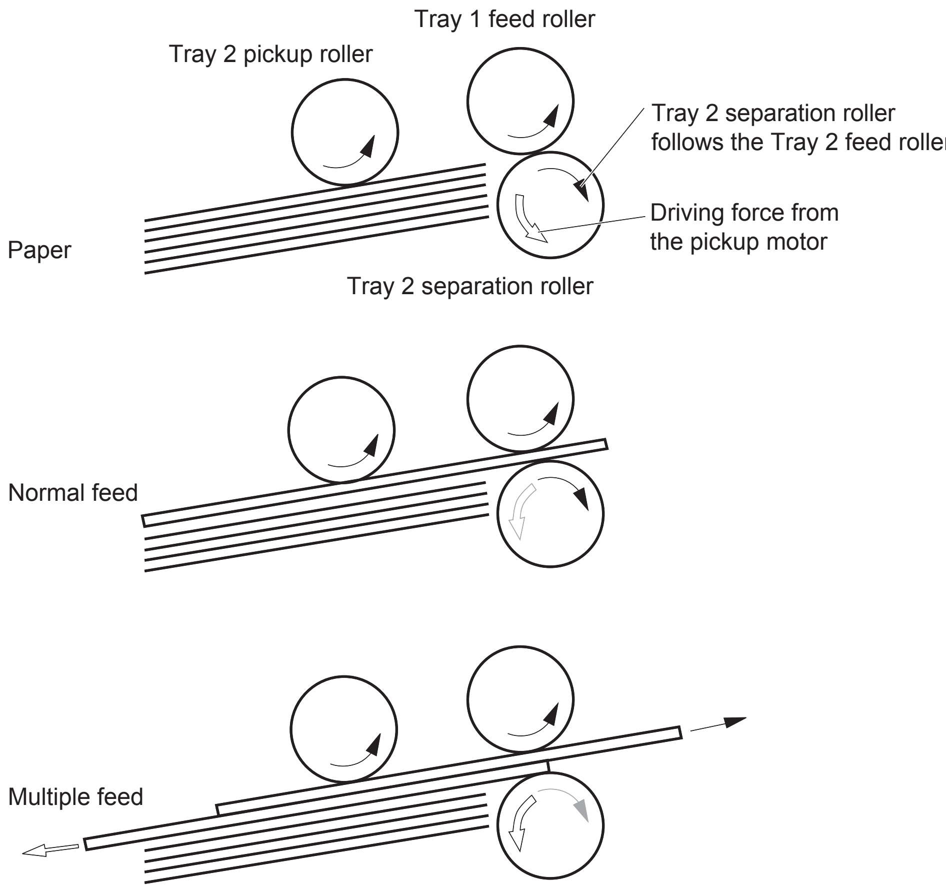
1. The printer is turned on or Tray 2 is inserted.
2. The tray lift-up operation raises the lifting plate so paper can be picked up.
3. The pickup motor rotates when a print command is received from the formatter.
4. The Tray 2 pickup roller and Tray 2 feed roller rotate.
5. The Tray 2 pickup solenoid turns on at a specified time.
6. The Tray 2 pickup cam rotates.
7. As the pickup arm lowers, the Tray 2 pickup roller touches the surface of the paper stack.
8. One sheet of paper feeds into the printer.

Tray 2 multiple-feed prevention

The printer uses a separation roller method to prevent multiple sheets of print media from entering the paper path.

The separation roller overruns if just one sheet of paper is picked. If two or more sheets are picked, only the top sheet will be fed to registration and the multiply-fed sheets will be held at the pickup location by the separation roller. This printer does not have an actively-driven separation roller.

Figure 5-34 Tray 2 multiple-feed prevention



Tray 2 presence detection

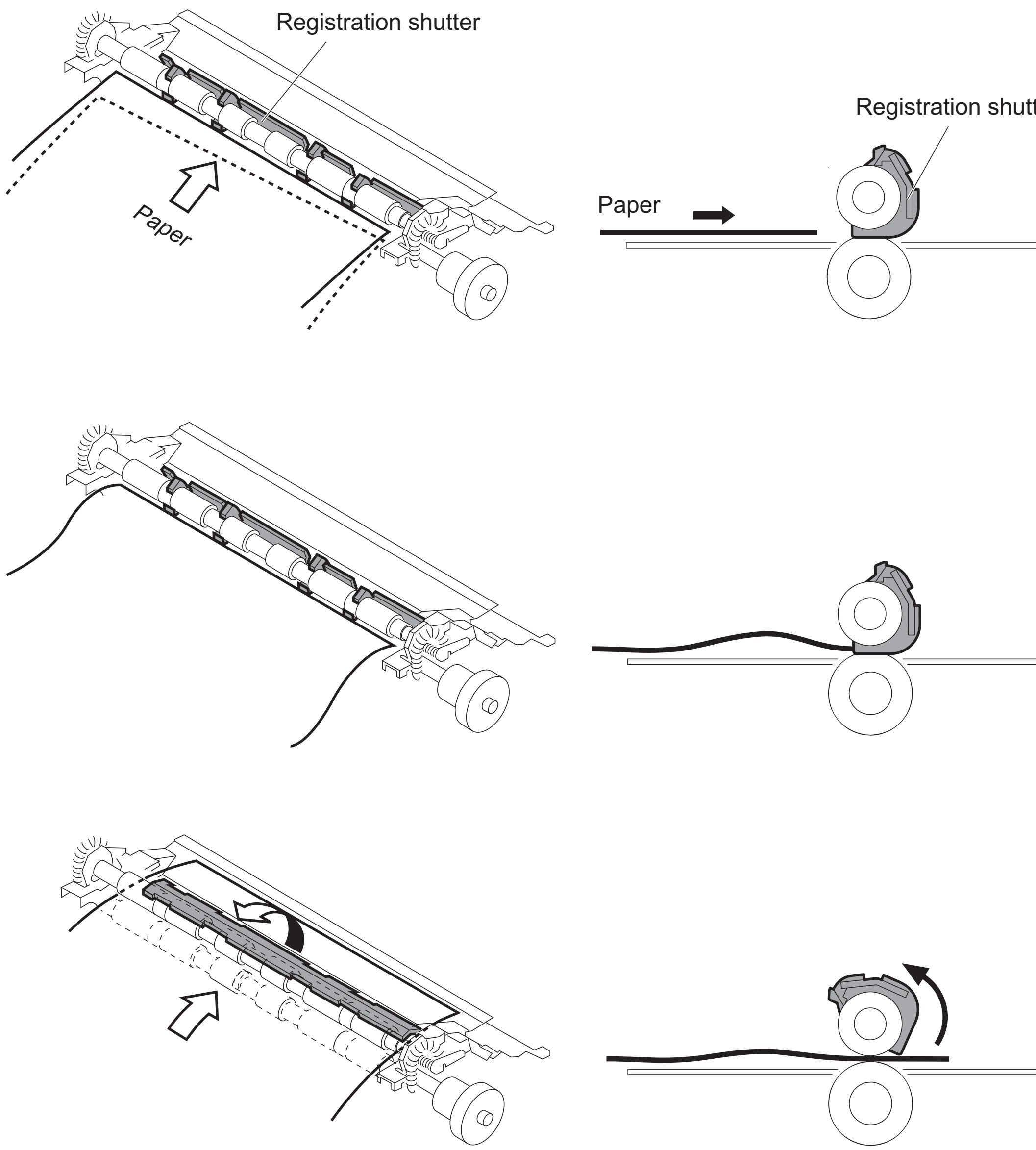
The Tray 2 presence sensor is in the lifter drive unit. The sensor detects the tray-presence sensor flag and determines whether the cassette is installed correctly.

Tray 2 skew feed prevention

The printer can straighten the paper without slowing the feed operation.

1. The leading edge of paper strikes the registration shutter, and the leading edge is aligned with the shutter.
2. As the feed rollers keep pushing the paper, the paper warps.
3. When the force is great enough, the registration shutter rotates, and the paper passes through straightened.

Figure 5-35 Skew-feed prevention



Tray 2 media type detection

The printer selects the optimal print mode based upon the media type detected by the media sensor. The media sensor consists of an optical sensor, which detects the surface texture of the paper, and an ultrasonic sensor, which measures the thickness of the paper.

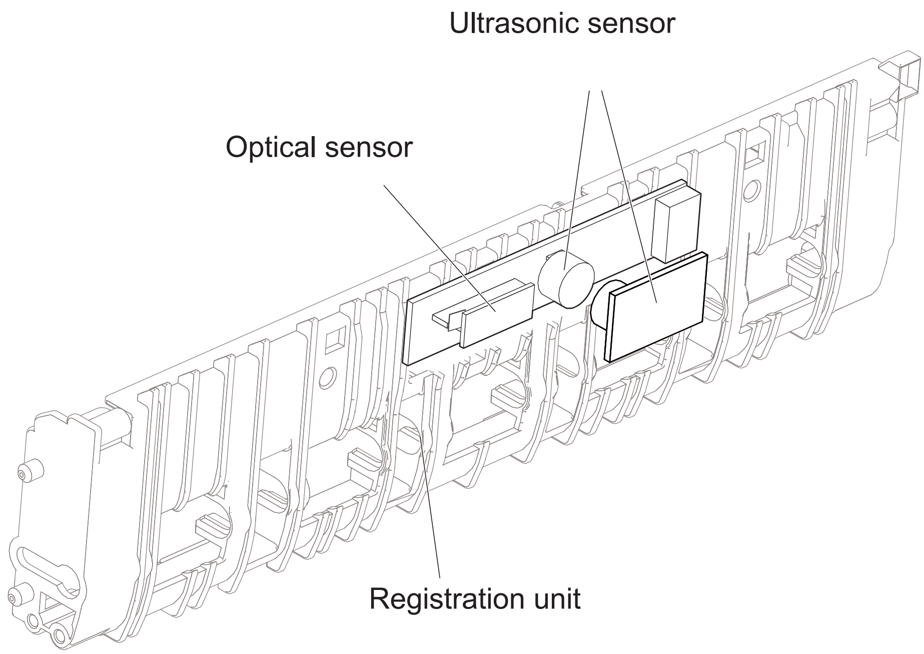
Following are the print modes detected by the printer.

- Normal
- Heavy media 1
- Heavy media 2
- Heavy media 3

- Light media
- Glossy media 1
- Glossy media 2
- Glossy media 3
- LBP_OHT

The DC controller determines a media sensor error and reports it to the formatter when the value detected by the media sensor is out of a specified range of values.

Figure 5-36 Media sensors



Feed speed control

The DC controller adjusts the feed speed to improve the print quality depending on the paper type. The paper is fed at a specified speed according to the print mode designated by the formatter.

Speed for both full color and black and white pages

- 1/1 speed = 210 mm/s
- Pro speed = 174 mm/s
- 1/2 speed = 105 mm/s
- 1/3 speed = 70 mm/s

Table 5-21 Print mode and fan speed

Print mode	Fan speed	Media sensor detection
Normal	1/1 speed = 210 mm/s	Yes

Table 5-21 Print mode and fan speed (continued)

Print mode	Fan speed	Media sensor detection
Heavy media 1	Pro speed = 174 mm/s	No
Heavy media 2	1/2 speed = 105 mm/s	Yes
Heavy media 3	1/3 speed = 70 mm/s	Yes
Light media 1	1/1 speed = 210 mm/s	Yes
Light media 2	1/1 speed = 210 mm/s	Yes
Light media 3	1/3 speed = 70 mm/s	Yes
Glossy media 1	1/3 speed = 70 mm/s	Yes
Glossy media 2	1/3 speed = 70 mm/s	Yes
Glossy media 3	1/3 speed = 70 mm/s	Yes
Glossy film	1/3 speed = 70 mm/s	Yes
Envelope 1	1/2 speed = 105 mm/s	No
OHT	1/3 speed = 70 mm/s	Yes
Label	1/2 speed = 105 mm/s	No
Designated media 1	1/2 speed = 105 mm/s	No
Designated media 2	1/3 speed = 70 mm/s	No
Designated media 3	Pro speed = 174 mm/s	No

Duplexing unit (duplex models)

Learn about the duplexing unit.

NOTE: To identify duplex printer models, see the *Printer information, configurations, and specifications* section of the service manual.

The duplexing unit reverses the paper and feeds it through the paper path to print the second side.

Duplexing reverse and duplex feed control

Learn about the engine pickup, feed, and delivery duplexing reverse and duplex feed control.

The duplex reverse control reverses the paper after the first side is printed and feeds it to the duplex re-pickup position to print the second side of the page.

1. At a specified time after the first side of a page is printed, the duplex reverse motor rotates, and the duplex reverse solenoid is turned on.
2. The duplex flapper moves, and the paper feeds to the duplex reverse unit.
3. After a specified period of time, the duplex reverse motor reverses, and the paper feeds to the duplex feed unit.
4. The duplex reverse motor and the pickup motor move the paper to the duplex re-pickup position.
5. The duplex reverse motor and the duplex feed clutch stop, and the paper feed operation pauses.
6. After a specified period of time, the duplex reverse motor rotates, and the duplex feed clutch is turned on. The paper is then picked up again.

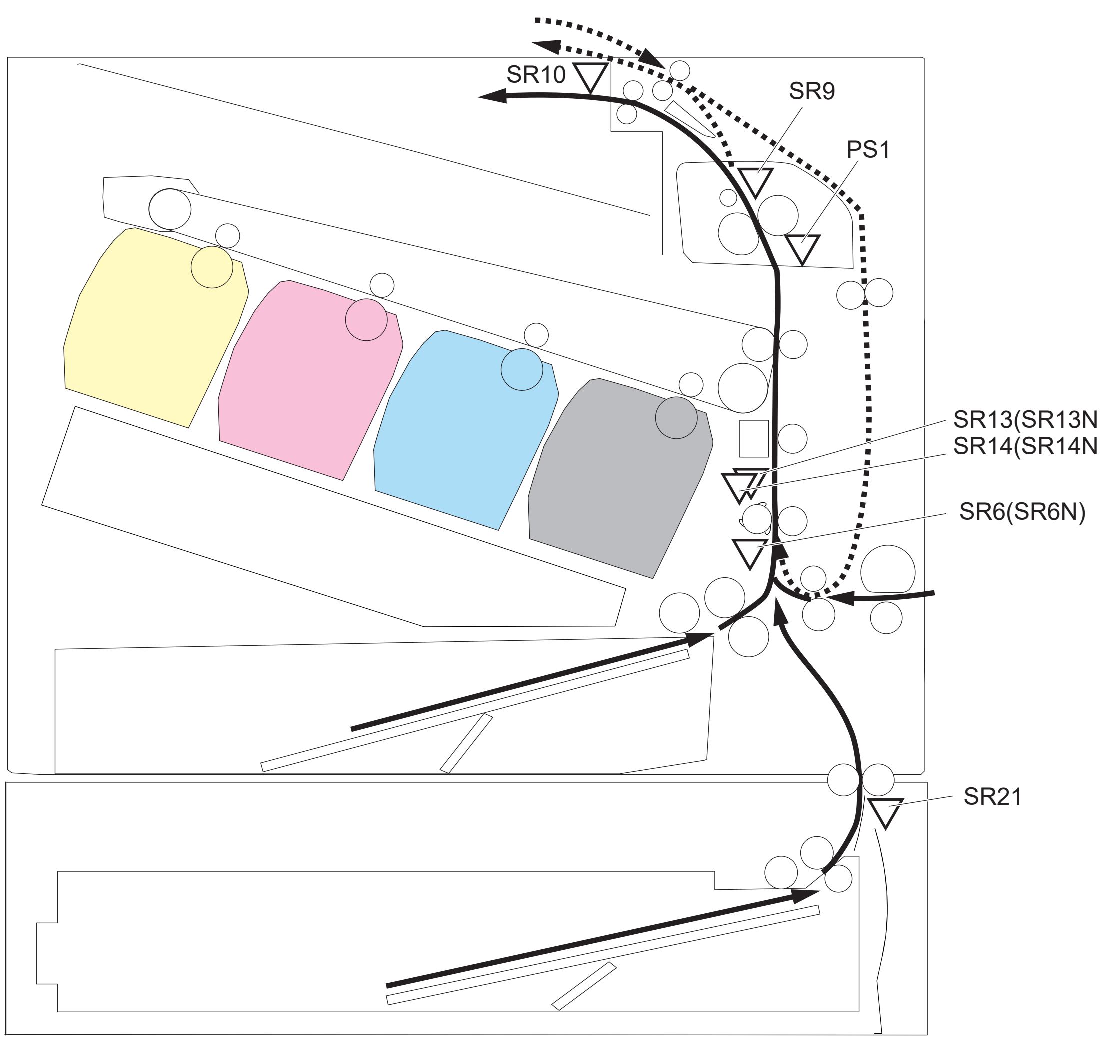
Jam detection/prevention

Learn about the engine pickup, feed, and delivery jam detection/prevention.

The printer uses the following sensors to detect the paper as it moves through the paper path and to report to the DC controller if the paper has jammed.

- Top of page (TOP) sensor (SR6/SR6N)
- Media width sensor (front, SR13/SR13N)
- Media width sensor (rear, SR14/SR14N)
- Loop sensor (PS1)
- Fuser delivery sensor (SR9)
- Output bin media-full sensor (SR10)
- 1x550 sheet paper feeder media feed sensor (SR21)

Figure 5-37 Jam detection sensors



The printer determines that a jam has occurred if one of these sensors detects paper at an inappropriate time. The DC controller stops the print operation and notifies the formatter

Table 5-22 Detected jam types

Jam	Description
Media input delay jam 1	Media did not reach the registration sensor in time.
Media input delay jam 2	Media did not reach the source tray feed sensor in time.
Media input delay jam 3	Media did not reach the tray 3 feed sensor in time.
Duplex re-feed jam 1	Media did not reach the registration sensor in time.
Media input stay jam 1	Media remained at the registration sensor longer than legal-sized media should remain.
Fuser delivery delay jam 1	Media did not reach the fuser output sensor in time.
Fuser delivery stay jam 1	Media stayed at fuser output sensor longer than it should stay. Media is in **duplex** path.
Fuser delivery stay jam 2	Media stayed at fuser output sensor longer than it should stay. Media is in **simplex** path.
Wrap jam 1	Media is first detected at fuser output sensor and then disappeared from the sensor before it should have disappeared.
Door open jam	A door is open while paper is moving through the printer.
Residual Media in paper path jam 1	Media detected in the paper path.

Fuser wrapping jam detection

Learn about the engine pickup, feed, and delivery fuser wrapping jam detection.

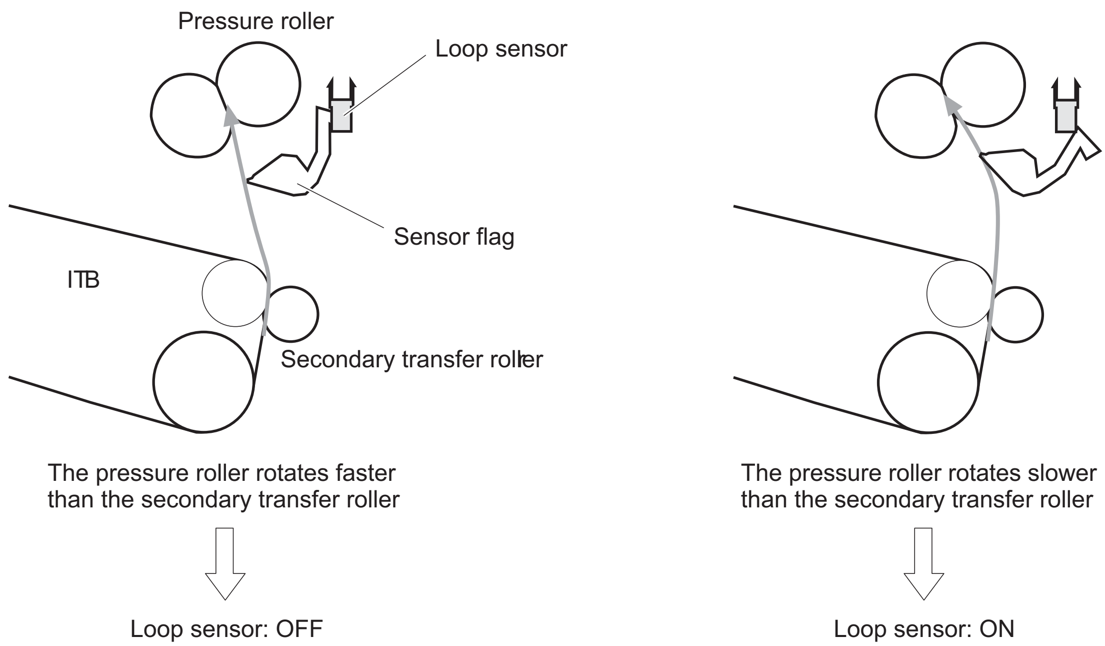
Loop control

The loop control stabilizes the paper feed operation before the paper enters the fuser.

- If the pressure roller rotates slower than the secondary transfer roller, the paper loop increases and an image defect or paper crease occurs.
- If the pressure roller rotates faster than the secondary transfer roller, the paper loop decreases and a vertical scanning magnification failure occurs because the pressure roller pulls the paper.

To prevent these problems, the loop sensor detects the paper loop before the paper enters the fuser. The DC controller adjusts the rotational speed of the fuser motor according to the output signals from the loop sensor and maintains the paper loop. The DC controller slows the fuser motor when the sensor is off and speeds up the motor when the sensor is on.

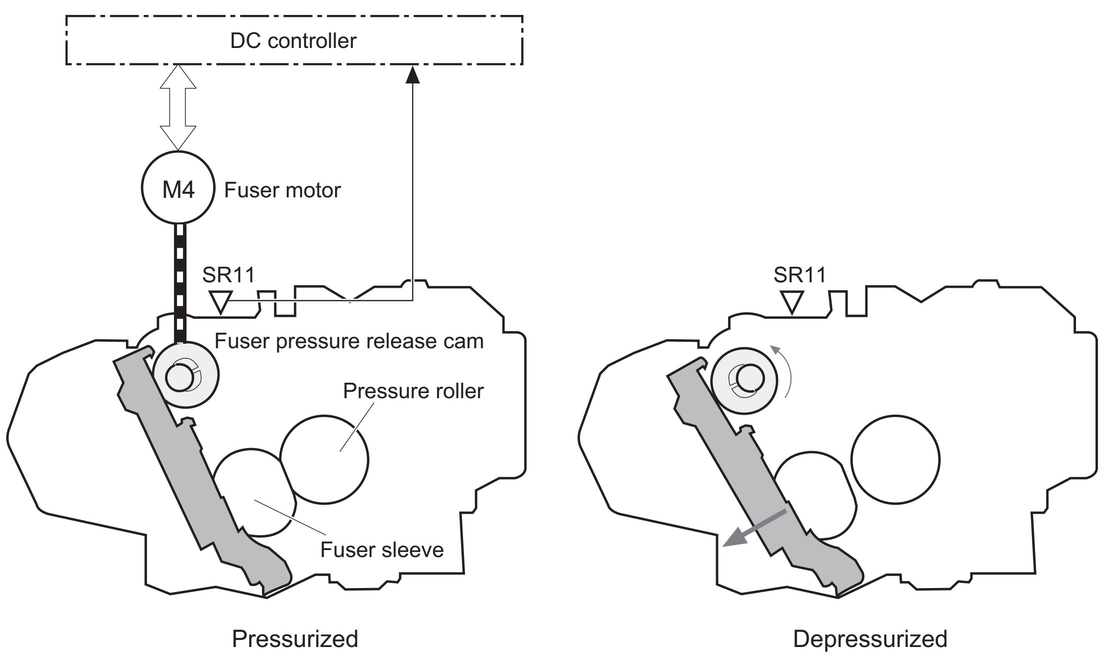
Figure 5-38 Fuser loop control mechanism



Pressure roller pressurization and depressurization control

To prevent excessive wear on the pressure roller and help with jam-clearing procedures, the pressure roller pressurizes only during printing and standby. The DC controller reverses the fuser motor. The fuser motor rotates the fuser pressure-release cam.

Figure 5-39 Pressure roller pressurization control



The pressure roller depressurizes under the following conditions.

- The printer is turned off
- Any failure occurs
- During power-save mode
- A paper jam is detected

If the DC controller does not sense the fuser pressure-release sensor for a specified period after it reverses the fuser motor, it notifies the formatter that a fuser pressure-release mechanism failure has occurred.

Input devices

Learn about the input devices.

Tray 3-5

Learn about the optional 550-sheet paper feeder (optional Tray 3-5).

The 550-sheet paper feeder is optionally installed at bottom of the printer. It picks up the print media and feeds it to the printer. The paper DC controller controls the operational sequence of the paper feeder. The printer supports up to three of these paper feeders at a time.

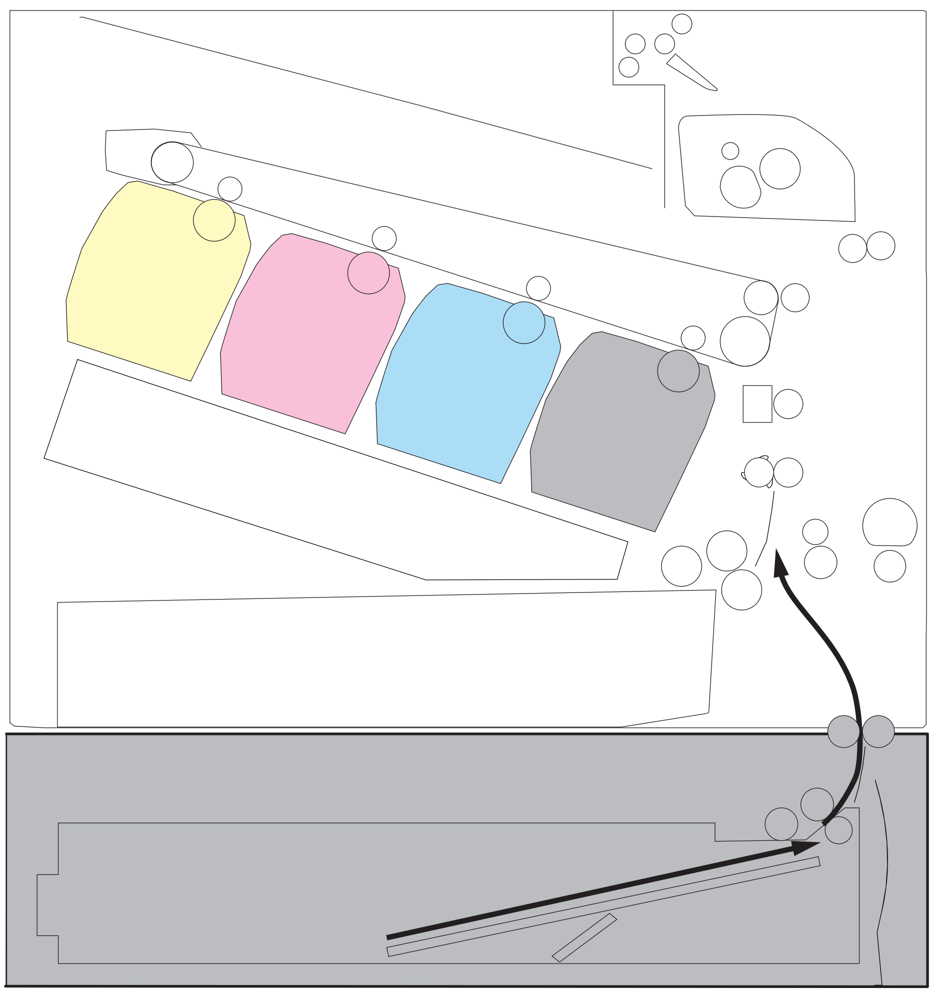
Paper path

Learn about the Tray 3-5 paper path.

The 550-sheet paper feeder is installed under the printer. It picks up paper and feeds it into the printer. The figure below shows the optional Tray 3-5 paper path.

NOTE: If more than one paper feeder is installed (Trays 4/5), the paper feeds up through each paper feeders to the print engine.

Figure 5-40 550-sheet paper feeder

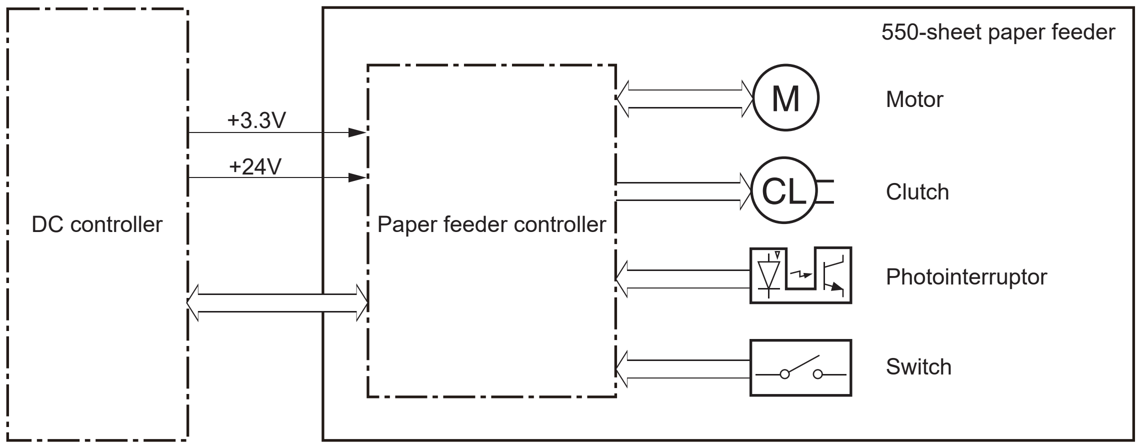


Tray 3-5 paper feeder controller

Learn about the paper feeder controller.

The figure below shows the paper feeder controller block diagram. The table in this topic describes the paper feeder electrical components. The paper feeder controller controls the operational sequence of the paper feeder.

Figure 5-41 Paper feeder controller



Tray 3-5 motor control

The 550-sheet paper feeder has one motor for lifting the tray and feeding paper.

The 550-sheet paper feeder has one motor for lifting the tray and feeding paper.

Table 5-23 Tray 3-5 motor control

Abbreviation	Component	Drives	Failure detection
M20	Feed motor (550-sheet paper feeder)	Tray pickup roller (B5L24-67904)	No
		Tray feed roller (B5L24-67904)	
		Paper feed assembly (RM2-5145-000CN)	
		Lifter drive assembly (RM2-5149-000CN)	

Electrical components, pickup and feed

Learn about the Tray 3-5 electrical components.

The paper feeder contains several motors, solenoids, sensors, and switches, as described in the following table.

Figure 5-42 Electrical components (Tray 3-5)

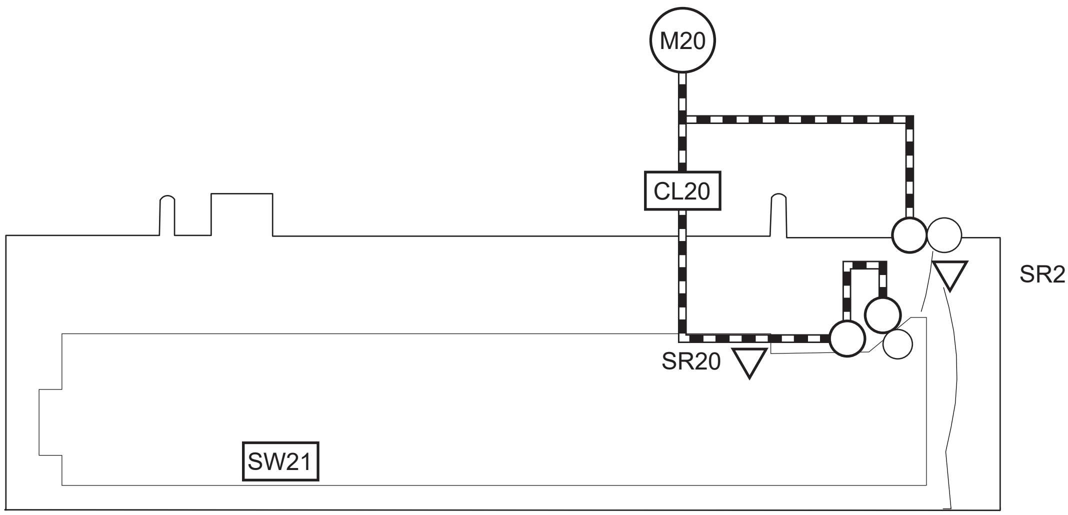


Table 5-24 Electrical components (Tray 3-5)

Component type	Abbreviation	Component name	Part number
Motor	M20	Feed motor	Paper feed assembly (RM2-5145-000CN)
Clutch	CL20	Tray pick up clutch	Lifter drive assembly (RM2-5149-000CN)
Switch	SW20	Right door switch	Right door (RM2-5146-000CN)
Switch	SW21	Tray detection switch	Switch button (WC2-5806-000CN)
Sensor	SR20	Tray media-out sensor	Paper pickup assembly (RM2-5154-000CN)
Sensor	SR21	Feed sensor	Paper feed assembly (RM2-5145-000CN)

Tray 3-5 multiple feed prevention

Learn about the Tray 3-5 multiple feed prevention.

The multiple-feed prevention for the 550-sheet paper feeder is operated in the same way as that of the printer base.

Tray 3-5 tray presence detection

Learn about the Tray 3-5 tray presence detection.

The presence detection for the 550-sheet paper feeder is the same way as that of the printer base.

Tray 3-5 tray lift operation

Learn about the Tray 3-5 tray lift operation.

The 550-sheet paper feeder keeps the paper stack surface at the correct pickup position. The tray lift operation occurs under the following conditions.

- The printer is turned on
- The tray is inserted
- The paper stack surface of the tray lowers

Tray lift sequence

1. The feeder tray-lifting motor rotates and the lifter moves up.
2. When the paper-feeder media-stack-surface sensor detects the stack surface of the paper, the lifting motor stops.
3. The lifting motor rotates again to lift the lifter when the paper-feeder media-stack-surface sensor detects the stack surface, and then lowers during printing.

If a tray media-stack-surface sensor does not detect a stack surface within a specified period after the lifting motor starts rotating, the paper feeder driver determines that the lifting motor has failed and notifies the formatter through the DC controller.

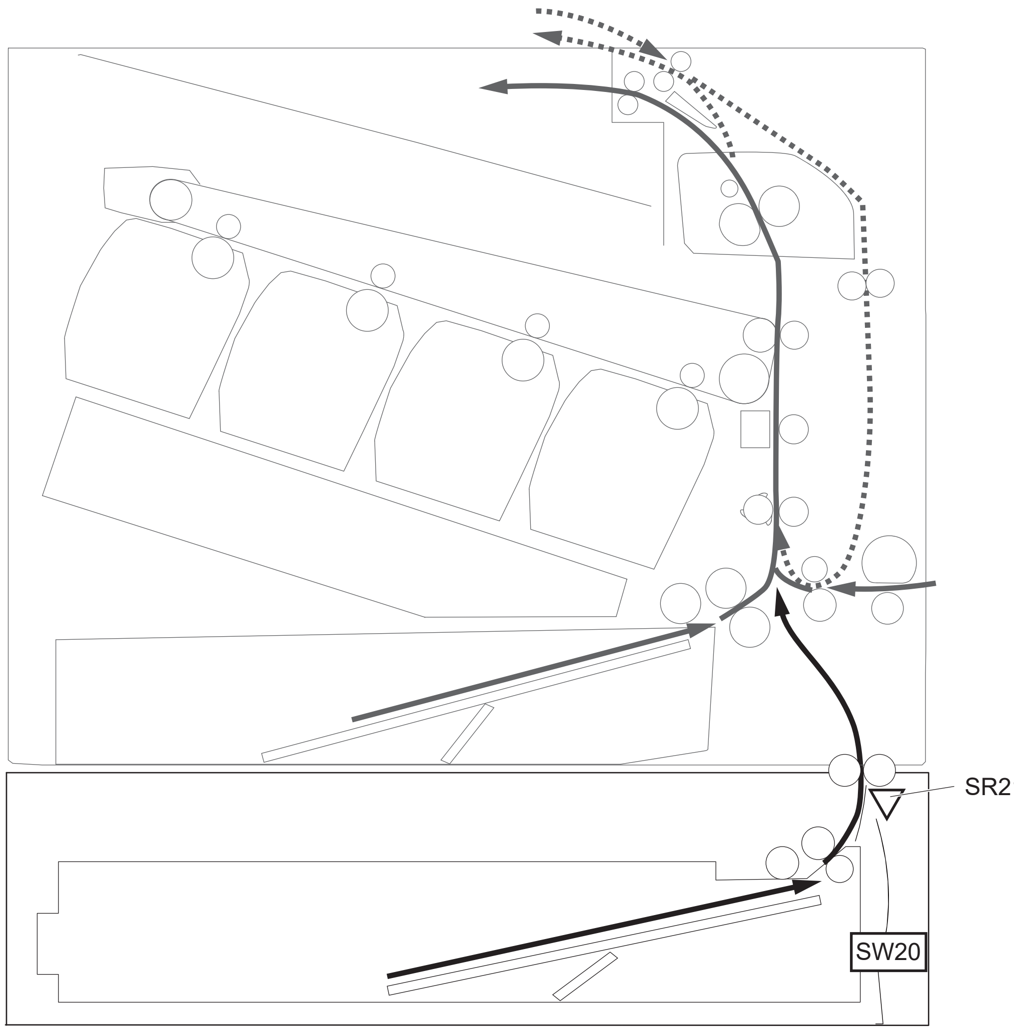
The paper-feeder driver notifies the formatter if either of the paper-feeder media-stack-surface sensors fails to detect the stack surface within a specified period from when a lift-up operation starts.

Tray 3-5 jam detection

Learn about Tray 3-5 jam detection.

The 550-sheet paper feeder uses the feed sensor (SR21) and right door switch (SW20) to detect the presence of paper and to check whether paper has jammed

Figure 5-43 Jam detection (Tray 3-5)



The 550-sheet paper feeder detects the following jams.

- **Media input delay jam 1**

  Paper did not reach the registration sensor in time.

- **Media input delay jam 2**

  Paper did not reach the source tray feed sensor in time.

- **Media input delay jam 3**

  Paper did not reach the tray 3 feed sensor in time.

- **Pickup stationary jam**

  The feed sensor does not detect the trailing edge of paper within a specified time after the sensor detects the leading edge.

- **Residual paper jam**

The feed sensor detects the presence of paper for a specified time during an automatic delivery operation.

- Right door open jam

  The right door open is detected during a paper feed operation.

6 Solve problems

Learn about solving printer problems.

HP service and support

Learn about HP access to additional service and support information.

Additional service and support for channel partners

Channel partners go to partner.hp.com, and then use the steps below to access the HP Web-based Interactive Search Engine (WISE).

Access WISE for Channel partners

1. Select Services & Support (near the top of the screen).
2. Under Services Delivery, select Technical Support.
3. Select Technical Documentation.

Find information about the following topics

- Service manuals
- Service advisories
- Up-to-date control panel message (CPMD) troubleshooting
- Solutions for printer issues and emerging issues
- Remove and replace part instructions and videos
- Install and configure
- Printer specifications
- Warranty and regulatory information

Additional service and support for HP internal personnel

HP internal personnel, go to one of the following Web-based Interactive Search Engine (WISE) sites:

Americas (AMS)

- WISE - English
- WISE - Spanish
- WISE - Portuguese
- WISE - French

Asia Pacific / Japan (APJ)

- WISE - English
- WISE - Japanese
- WISE - Korean
- WISE - Chinese (simplified)
- WISE - Chinese (traditional)
- WISE - Thai

Europe / Middle East / Africa (EMEA)

- WISE - English

Additional technical support WISE videos

The videos below provide additional ways to access printer information using WISE.

Determine the problem source

When the printer malfunctions or encounters an unexpected situation, the printer control panel alerts the user to the situation.

This section contains a pre-troubleshooting checklist and a troubleshooting flow chart to filter out many possible causes of the problem.

- Use the pre-troubleshooting check list to gather information about the problem from the customer.
- Use the troubleshooting flowchart to pinpoint the root cause of hardware malfunctions. The flowchart guides you to the section of this chapter that contains steps for correcting the malfunction.

Before beginning any troubleshooting procedure, check the following issues:

- Are supply items within their rated life?
- Does the configuration page reveal any configuration errors?

NOTE: The customer is responsible for checking supplies and for using supplies that are in good condition.

Pre-troubleshooting checklist

The following table includes basic questions to ask the customer to quickly help define the problem(s).

Table 6-1 Pre-troubleshooting checklist

General topic	Questions
Environment	• Is the printer installed on a solid, level surface (+/- 1°)? • Is the power-supply voltage within ± 10 volts of the specified power source? • Is the power-supply plug inserted in the printer and the wall outlet (not a surge protector)? • Is the operating environment within the specified parameters? • Is the printer exposed to ammonia gas, such as that produced by diazo copiers or office cleaning materials? NOTE: Diazo copiers produce ammonia gas as part of the copying processes. Ammonia gas (from cleaning supplies or a diazo copier) can have an adverse effect on some printer components (for example, the toner cartridge or cartridges OPC). • Is the printer exposed to direct sunlight? • Is the printer exposed to an air conditioning or heating vent that can cause temperature fluctuations?
Media	• Does the customer use only supported media? • Is the media in good condition (no curls, folds, or distortion)? • Is the media stored correctly and within environmental limits?

Table 6-1 Pre-troubleshooting checklist (continued)

General topic	Questions
Input trays	• Is the amount of media in the tray within specifications? • Is the media correctly placed in the tray? • Are the paper guides aligned with the stack (no gaps in the stack or excessive pressure causing the stack to bow)? • Is the tray (or trays) correctly installed in the printer?
Toner cartridge	• Is the toner cartridge (or cartridges) installed correctly? NOTE: If country/region specific toner cartridges are available for the printer, make sure the correct cartridge is installed.
Transfer unit and fuser	• Are the transfer unit and fuser installed correctly? NOTE: For printers with an intermediate transfer belt (ITB), is the ITB installed correctly and fully seated. If a replacement ITB was installed, was all of the packing materials removed?
Covers	• Is the toner cartridge door closed?
Condensation	• Does condensation occur following a temperature change (particularly in winter following cold storage)? If so, wipe affected parts dry or leave the printer on for 10 to 20 minutes. • Was a toner cartridge (or cartridges) opened soon after being moved from a cold to a warm room? If so, allow the toner cartridge (or cartridges) to sit at room temperature for 1 to 2 hours.
Miscellaneous	• Check for and remove any non-HP components (toner cartridges, memory modules, and EIO cards) from the printer. • Remove the printer from the network and ensure that the failure is associated with the printer before beginning troubleshooting. • For any color print-quality issues (color printers only), calibrate the printer, and then print a diagnostics page to verify print quality.

Troubleshooting flowchart

This flowchart highlights the general processes to follow to quickly isolate and solve printer hardware problems.

Each row depicts a major troubleshooting step. Follow a “yes” answer to a question to proceed to the next major step. A “no” answer indicates that more testing is needed. Go to the appropriate section in this chapter, and follow the instructions there. After completing the instructions, go to the next major step in this troubleshooting flowchart.

Table 6-2 Troubleshooting flowchart

Step	Question	Action
1 Power on	Is the printer on and does a readable message display?	

Table 6-2 Troubleshooting flowchart (continued)

Step	Question		Action
	Yes ↓	No →	Basic printer functions should start up when the printer is connected into an electrical outlet and the power switch is pushed to the on position. During normal operation cooling fans and/or motors should be operating. Place a hand over fan intake or exhaust vents to determine if the fan or fans are spinning. Lean close to the printer to hear motors rotating. If fans and/or motors are operating, the dc side of the power supply is functioning. Always make sure that the printer is plugged into a known-functioning wall receptacle. Remove power strips and plug the printer directly into a wall receptacle. For more information, see Troubleshooting power-on or blank control panel problems on page 296 After the control panel display is functional, see step 2.
2 Control panel messages	Does the message **Ready** display on the control panel?		
	Yes ↓	No →	After the errors have been corrected, go to step 3. Use the control panel message document (CPMD) section in this manual to correct any displayed error messages.
3 Event log	Open the Troubleshooting menu and print an event log to see the history of errors with this printer. Does the event log print?		
	Yes ↓	No →	If the event log does not print, check for error messages. If paper jams inside the printer, see the jams section of the printer service manual. If error messages display on the control panel when trying to print an event log, see the control panel message document (CPMD) section of this manual. After successfully printing and evaluating the event log, see step 4.
4 Information pages	Open the Reports menu and print the configuration pages to verify that all the accessories are installed. Are all the accessories installed?		

Table 6-2 Troubleshooting flowchart (continued)

Step	Question		Action
	Yes ↓	No →	If accessories that are installed are not listed on the configuration page, remove the accessory and reinstall it. Make sure that the most recent firmware is installed. See the firmware upgrade section of this manual for more information. After evaluating the configuration pages, see step 5.
5 Print quality	Does the print quality meet the customer's requirements?		
	Yes ↓	No →	Compare the images with the sample defects in the Image-quality troubleshooting section of this manual. Solve print-quality and copy-quality issues as needed. After the print quality is acceptable, see step 6.
6 Interface	Can the customer print successfully from the host computer?		
	Yes. This is the end of the troubleshooting process.	No →	Verify that all I/O cables are connected correctly and that a valid IP address is listed on the HP Jetdirect configuration page. If error messages display on the control panel or appear in the event log, see the control-panel message document (CPMD) section of this manual. For more information on troubleshooting these issues, see Performance and connectivity troubleshooting on page 410. When the customer can print from the host computer, this is the end of the troubleshooting process.

Firmware upgrades

Learn about printer firmware upgrades.

To download the most recent firmware upgrade for the printer, go to:

- In the US, go to www.hp.com/support/colorljM552 or www.hp.com/support/colorljM553 or http://www.hp.com/support/colorljM554 or http://www.hp/support/colorljE55040 or www.hp.com/support/colorljM577MFP or http://www.hp.com/support/colorljM578mfp or http://www.hp.com/support/colorljE57540mfp.

  a. Select **Get drivers, Software, and Firmware**, and then select the appropriate product by name.

  NOTE: More than one printer model might be listed. Make sure to select the correct model so that the upgraded firmware supports all of the printer functions.

  b. Select the driver language and operating system.

  c. Locate the firmware download, and then select **Download**.

- Outside the U.S., go to www.hp.com/support.

  a. Select your country/region.

  b. Select **Drivers & Downloads**.

  c. Enter the product name in the **Find my product** dialogue box, and then select **Go**.

  TIP: Click on the **How do I find my product name/number?** link to see a short video on identifying the printer name and number.

  d. Select the appropriate product by name.

  NOTE: More than one printer model might be listed. Make sure to select the correct model so that the upgraded firmware supports all of the printer functions.

  e. Select the driver language and operating system.

  f. Locate the firmware download, and then select **Download**.

Determine the installed revision of firmware

Learn about how to determine the version of installed printer firmware.

Print a configuration page to determine the installed revision of firmware.

IMPORTANT:

Print the configuration page from an MFP control panel

1. From the Home screen on the printer control panel, scroll to and touch the Reports button.
2. Open the following menus:
   – Configuration/Status pages

3. Touch Configuration Page to select it.

4. Touch the print icon to print the pages.

Print the configuration page from a SFP control panel

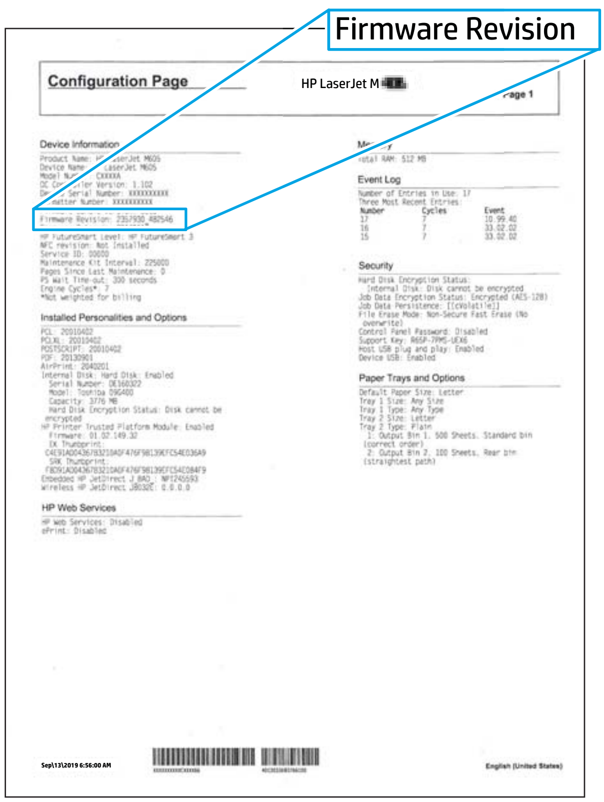
1. From the Home screen on the printer control panel, use the arrow keys to navigate to Reports, and then press the OK button.

2. Use the arrow buttons to scroll to Configuration/Status Pages, and then press the OK button.

3. Use the arrow buttons to scroll to Configuration Page, and then press the OK button.

4. Use the arrow buttons to scroll to the print icon . Press the OK button to print the pages.

Figure 6-1 Configuration page firmware version



HP Embedded Web Server

Learn how to perform a firmware upgrade using the HP Embedded Web Server.

NOTE: The printer should be at the **Ready** state.

The firmware update might take 10 minutes or longer based on the input/output (I/O) transfer rates and the time it takes for the printer to reinitialize.

1. Open an Internet browser window.

2. Enter the printer IP address in the URL line.

3. Select the **Firmware Upgrade** link from the **General** tab or from the **Troubleshooting** tab.
4. Browse to the location that the firmware upgrade file was downloaded to, and then select the firmware file. The file has a .bdl file extension. Select the Install button to perform the upgrade.

> NOTE: Do not close the browser window OR interrupt communication until the HP Embedded Web Server (EWS) displays the confirmation page.

5. After the printer reinitializes, print a configuration page and verify that the latest firmware version has been installed.

USB flash drive firmware (Pre-boot menu) (SFP)

Learn how to perform a USB flash drive firmware (Pre-boot menu) update using a SFP control panel.

1. Press the Cancel button when you see the 1/8 under the logo.
2. Use the arrow buttons to highlight +3 Administrator, and then press the OK button.
3. Use the arrow buttons to highlight +1 Download, and then press the OK button.
4. Insert the USB flash drive with the .bdl file on it into the USB port on the printer.

> NOTE: If the error message No USB Thumbdrive Files Found displays on the control panel display, try using a different portable storage device.

5. Use the arrow buttons to highlight USB Thumbdrive, and then press the OK button.
6. Use the arrow buttons to highlight the .bdl file, and then press the OK button.

> NOTE: The upgrade process can take 10 minutes or longer to complete.
>
> TIP: If there is more than one .bdl file on the storage device, make sure to select the correct file for this printer.

7. When the message Complete displays on the control panel display, turn the printer power off, and then on again.
8. When the upgrade process is complete, print a configuration page and verify that the upgrade firmware version was installed.

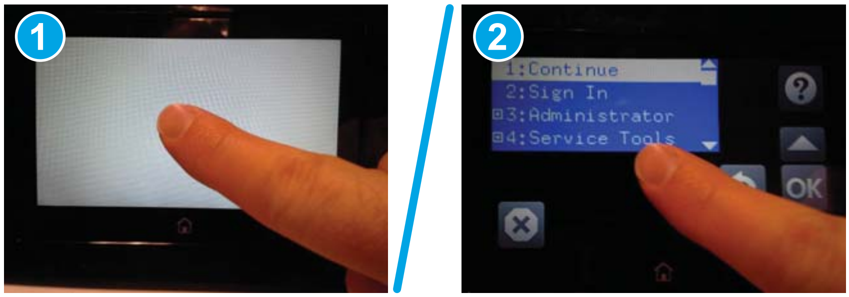
USB flash drive firmware (Pre-boot menu) (MFP)

Learn how to perform a USB flash drive firmware (Pre-boot menu) update from an MFP control panel.

1. Copy the .bdl file to a portable USB flash drive.

2. Touch the middle of the control panel display when you see the 1/8 under the logo.

Figure 6-2 Open the Pre-boot menu



3. Use the arrow buttons to highlight +3 Administrator, and then touch the OK button.

4. Use the arrow buttons to highlight +1 Download, and then touch the OK button.

5. Insert the USB flash drive with the .bdl file on it into the USB port on the printer.

NOTE: If the error message No USB Thumbdrive Files Found displays on the control panel display, try using a different portable storage device.

6. Use the arrow buttons to highlight USB Thumbdrive, and then touch the OK button.

7. Use the arrow buttons to highlight the .bdl file, and then touch the OK button.

NOTE: The upgrade process can take 10 minutes or longer to complete.

TIP: If there is more than one .bdl file on the storage device, make sure to select the correct file for this printer.

8. When the message Complete displays on the control panel display, touch the down arrow ▼ button several times until the message Continue displays.

9. Touch the OK button to begin the upgrade. When the upgrade is complete, the printer will initialize to the **Ready** state.

10. When the upgrade process is complete, print a configuration page and verify that the upgrade firmware version was installed.

USB flash drive firmware (control panel menu) (SFP)

Learn how to perform a USB flash drive firmware (control panel menu) update from a SFP control panel (FutureSmart 4 firmware or later).

1. From the Home screen on the printer control panel, use the arrow buttons to scroll to Support Tools, and then press the OK button.

2. Open the following menus:

   - Maintenance
   - USB Firmware Upgrade

3. Insert the USB flash drive with the .bdl file on it into the USB port on the printer.

4. Use the arrow buttons to scroll to the appropriate .bdl file, and then press the OK button.

5. When the upgrade process is complete, print a configuration page and verify that the upgrade firmware version was installed.

USB flash drive firmware (control panel menu) (MFP)

Learn how to perform a USB flash drive firmware (control panel menu) update from a n MFP control panel.

1. Copy the .bdl file to a portable USB flash drive.

2. Turn the printer on, and then wait until it reaches the **Ready** state.

3. From the Home screen on the printer control panel, scroll to and touch the Support Tools button.

4. Open the Maintenance menu.

5. Touch the USB Firmware Upgrade button.

6. Insert the USB flash drive with the .bdl file on it into the USB port on the printer.

7. Touch the .bdl file, and then touch the Upgrade button.

   TIP: If there is more than one .bdl file on the storage device, make sure to select the correct file for this printer.

8. Select one of the following options:

   - Upgrade

     NOTE: The upgrade process can take 10 minutes or longer to complete.

   - Re-install

   - Downgrade

9. When the upgrade is complete, the printer will initialize to the **Ready** state.

10. When the upgrade process is complete, print a configuration page and verify that the upgrade firmware version was installed.

Comprehensive list of troubleshooting tools

Learn about the printer troubleshooting tools.

Engine test

Learn about troubleshooting the printer using the engine test diagnostic.

When the engine test is performed, a test page with lines prints if the engine is functioning correctly.

NOTE: Depending on printer models, either a simplex engine test page, a duplex engine test page, or both simplex and duplex engine test pages might be available.

Use a small pointed object to depress and hold the engine test button (location varies depending on the printer model). An engine test page prints. The test page can use only Tray 2 as the paper source, so make sure that paper is loaded in Tray 2.

Possible engine test pages (printer dependent)

- A series of lines parallel to the **short** end of the page.
- A series of lines parallel to the **long** end of the page.

Pre-boot menu options

The Pre-boot menus are available prior to the printer initializing.

⚠ CAUTION: The Format Disk option performs a disk initialization for the entire disk. The operating system, firmware files, and third party files (among other files) will be completely lost. HP does not recommend this action unless it is specified as a solution in the CPMD.

TIP: The Pre-boot menu is also remotely accessible by using a telnet network protocol (Remote Admin) to establish an administration connection to the printer.

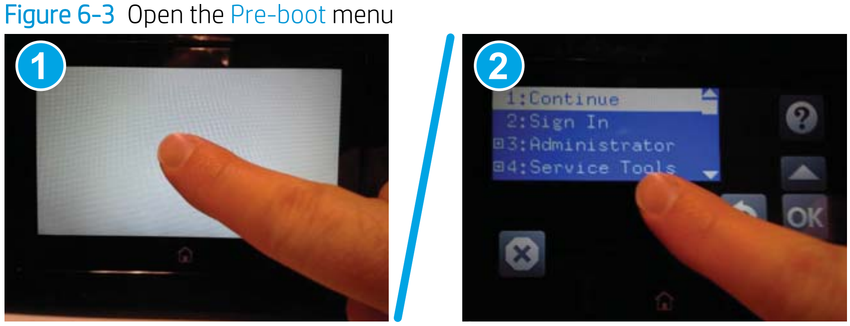
Open the Pre-boot menu from a touchscreen control panel

Use the following procedure to open the Pre-boot menu from a touchscreen control panel.

1. Turn the printer on.

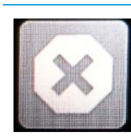
2. Touch the middle of the control-panel display when you see the 1/8 under the logo.

Figure 6-3 Open the Pre-boot menu



3. On the Pre-boot menu screen, use the following buttons to navigate the tests.

Figure 6-4 Pre-boot menu

Button	Description
	Use this button to see more information about a selected item.
	Use this button to scroll up through menu items.
	Use this button to select a highlighted menu item.
	Use this button to scroll down through menu items.
	Use this button to go back to the previous menu.
	Not used.
	Use this button to exit a diagnostic test.

4. Use the arrow buttons on the touchscreen to navigate the Pre-boot menu.

5. Touch the OK button to select a menu item.

Open the Pre-Boot menu from a LCD control panel

Use the following procedure to open the Pre-Boot menu from a LCD control panel.

1. Turn the printer on.

2. Press the Cancel button when you see the 1/8 under the logo.

3. Use the arrow buttons on the control panel to navigate the Pre-Boot menu.

4. Press the OK button to select a menu item.

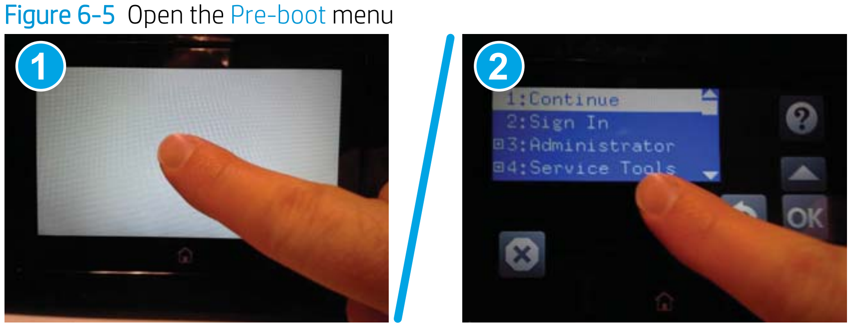
Cold reset using the Pre-boot menu from a touchscreen control panel

Use the following procedure to perform a cold reset using the Pre-boot menu from a touchscreen control panel.

⚠ CAUTION: This procedure resets all printer configurations and settings to factory defaults (customer configurations and settings are lost).

1. Touch the middle of the control-panel display when you see the 1/8 under the logo.

Figure 6-5 Open the Pre-boot menu



2. Use the down arrow ▼ button to highlight the +3:Administrator item, and then touch the OK button.

3. Use the down arrow ▼ button to highlight the +8:Startup Options item, and then touch the OK button.

4. Use the down arrow ▼ button to highlight the 2 Cold Reset item, and then touch the OK button to select it.

5. Touch the Home button to return to the main Pre-boot menu and highlight the 1:Continue item, and then touch the OK button.

   NOTE: The printer will initialize.

Cold reset using the Pre-boot menu from a LCD control panel

Use the following procedure to perform a cold reset using the Pre-boot menu from a LCD control panel.

⚠ CAUTION: This procedure resets all printer configurations and settings to factory defaults (customer configurations and settings are lost).

1. Press the Cancel ⊗ button when you see the 1/8 under the logo.

2. Use the down arrow ▼ button to highlight the +3:Administrator item, and then press the OK button.

3. Use the down arrow ▼ button to highlight the +8:Startup Options item, and then press the OK button.

4. Use the down arrow ▼ button to highlight the 2 Cold Reset item, and then press the OK button to select it.

5. Touch the Home button to return to the main Pre-boot menu and highlight the 1:Continue item, and then touch the OK button.

   NOTE: The printer will initialize.

NOTE: Some of the pre-boot options in the following tables are not supported by the current version of the printer firmware and are included for information only. Future versions of firmware will support these options.

Table 6-3 Pre-boot menu options (1 of 7)

Menu option	First level	Second level	Third level	Description
Continue				Selecting the Continue item exits the Pre-boot menu and continues the normal boot process. If a selection is not made in the initial menu within 30 seconds, the printer returns to a normal boot (the same as selecting Continue). If the user navigates to another menu, the timeout does not apply.
Sign In				Enter the administrator PIN or service PIN if one is required to open the Pre-boot menu.
Administrator				This item navigates to the Administrator submenus. If authentication is required (and the user is not already signed in) the Sign In prompt displays. The user is required to sign in.
Administrator	Download	Network USB USB Thumbdrive		This item initiates a Pre-boot firmware download process. A USB Thumbdrive option will work on all FutureSmart printers. USB or Network connections are not currently supported.
Administrator	Format Disk			This item reinitializes the disk and cleans all disk partitions. CAUTION: Selecting the Format Disk item removes **all** data. A delete confirmation prompt is **not** provided. The system is **not** bootable after this action and a **99.09.67** error displays on the control panel. A firmware download must be performed to return the system to a bootable state.

Table 6-3 Pre-boot menu options (1 of 7) (continued)

Menu option	First level	Second level	Third level	Description
Administrator	Partial Clean			This item reinitializes the disk (removing all data except the firmware repository where the master firmware bundle is downloaded and saved). CAUTION: Selecting the Partial Clean item removes **all** data except the firmware repository. A delete confirmation prompt is **not** provided. CAUTION: This procedure resets all printer configurations and settings to factory defaults (customer configurations and settings are lost). This allows a user to reformat the disk by removing the firmware image from the active directory without having to download new firmware code (printer remains bootable).
Administrator	Change Password			Select this item to set or change the administrator password.
Administrator	Clear Password			Select the Clear Password item to remove a password from the Administrator menu. Before the password is actually cleared, a message will be shown asking to confirm that the password should be cleared. Press the OK button to confirm the action. When the confirmation prompt displays, press the OK button to clear the password.

Table 6-4 Pre-boot menu options (2 of 7)

Menu option	First level	Second level	Third level	Description
Administrator (continued)	Manage Disk	Clear disk		Select the Clear disk item to enable using an external device for job storage. Job storage is normally enabled only for the Boot device. This will be grayed out unless the **99.09.68** error is displayed.
Administrator	Manage Disk	Lock Disk		Select the Lock Disk item to lock (mate) a new secure disk to this printer. The secure disk already locked to this printer will remain accessible to this printer. Use this function to have more than one encrypted disk accessible by the printer when using them interchangeably. The data stored on the secure disk locked to this printer always remains accessible to this printer.
Administrator	Manage Disk	Leave Unlocked		Select the Leave Unlocked item to use a new secure disk in an unlocked mode for a single service event. The secure disk that is already locked to this printer will remain accessible to this printer and uses the old disk's encryption password with the new disk. The secure disk that is already locked to this printer remains accessible to this printer.

Table 6-4 Pre-boot menu options (2 of 7) (continued)

Menu option	First level	Second level	Third level	Description
Administrator	Manage Disk	Clear Disk Pwd		Select the Clear Disk Pwd item to continue using the non-secure disk and clear the password associated with the yet-to-be installed secure disk. CAUTION: Data on the missing secure disk will be permanently inaccessible.
Administrator	Manage Disk	Retain Password		Select the Retain Password item to use the non-secure disk for this session only, and then search for the missing secure disk in future sessions.
Administrator	Manage Disk	Boot Device	Secure Erase	Select the Secure Erase item to erase all of the data on the disk and unlock it if required. This might take a long time. NOTE: The system will be unusable until the system files are reinstalled. The ATA secure-erase command is a one-pass overwrite, which erases the entire disk including firmware. The disk remains an encrypted disk.
Administrator	Manage Disk	Boot Device	Erase/Unlock	Select the Erase/Unlock item to cryptographically erase all data on the disk and unlock the disk to allow a user to gain access to it from any printer. NOTE: The system will be unusable until the system files are reinstalled. It erases the encryption key. The encryption key is erased, so the disk becomes a non-encrypted disk.
Administrator	Manage Disk	Boot Device	Get Status	This item provides disk status information if any is available.

Table 6-5 Pre-boot menu options (3 of 7)

Menu option	First level	Second level	Third level	Description
Administrator (continued)	Manage Disk (continued)	Internal Device		Select the Internal Device item to erase the internal device or get a status about the internal device.
Administrator	Manage Disk	Internal Device	Secure Erase	Select the Secure Erase item to erase all of the data on the disk and unlock it if required. This might take a long time. NOTE: The system will be unusable until the system files are reinstalled. The ATA secure-erase command erases the entire disk, including firmware. The disk remains an encrypted disk.
Administrator	Manage Disk	Internal Device	Erase/Unlock	Select the Erase/Unlock item to cryptographically erase all of the data on disk and unlock the disk to allow the user to gain access to it from any printer. NOTE: The system will be unusable until the system files are reinstalled. The HP High Performance Secure Hard Disk is erased.
Administrator	Manage Disk	Internal Device	Get Status	This item provides disk status information if any is available.
Administrator	Manage Disk	External Device		Select the External Device item to erase the external device or get status about the external device.

Table 6-5 Pre-boot menu options (3 of 7) (continued)

Menu option	First level	Second level	Third level	Description
Administrator	Manage Disk	External Device	Secure Erase	Select the Secure Erase item to erase all of the data on the disk and unlock it if required. This might take a long time. NOTE: The system will be unusable until the system files are reinstalled. The ATA secure-erase command erases the entire disk, including firmware. The disk remains an encrypted disk.
Administrator	Manage Disk	External Device	Erase/Unlock	Select the Erase/Unlock item to cryptographically erase all of the data on disk and unlock the disk to allow a user to gain access to it from any printer. NOTE: The system will be unusable until the system files are reinstalled. The encryption key is erased, so the disk becomes a non-encrypted disk.
Administrator	Manage Disk	External Device	Get Status	This item provides disk status information if any is available.

Table 6-6 Pre-boot menu options (4 of 7)

Menu option	First level	Second level	Third level	Description
Administrator (continued)	Configure LAN NOTE: This configuration is only active when the Pre-boot menu is open.	IP Mode [DHCP]		The network can be configured to obtain the network settings from a DHCP server or as static. Use this item for automatic IP address acquisition from the DHCP server.
Administrator	Configure LAN NOTE: This configuration is only active when the Pre-boot menu is open.	IP Mode [STATIC]		Use this item to manually assign the network addresses.
Administrator	Configure LAN NOTE: This configuration is only active when the Pre-boot menu is open.	IP Mode [STATIC]	IP Address	Use this item to manually enter the IP addresses.
Administrator	Configure LAN NOTE: This configuration is only active when the Pre-boot menu is open.	IP Mode [STATIC]	Subnet Mask	Use this item to manually enter the subnet mask.

Table 6-6 Pre-boot menu options (4 of 7) (continued)

Menu option	First level	Second level	Third level	Description
Administrator	Configure LAN NOTE: This configuration is only active when the Pre-boot menu is open.	IP Mode [STATIC]	Default Gateway	Use this item to manually enter the default gateway.
Administrator	Configure LAN NOTE: This configuration is only active when the Pre-boot menu is open.	IP Mode [STATIC]	Save	Select the Save item to save the manual settings.

Table 6-7 Pre-boot menu options (5 of 7)

Menu option	First level	Second level	Third level	Description
Administrator (continued)	Startup Options			Select the Startup Options item to specify options that can be set for the next time the printer is turned on and initializes to the **Ready** state.
Administrator	Startup Options	Show Revision		**Not currently functional**: Select the Show Revision item to allow the printer to initialize and show the firmware version when the printer reaches the **Ready** state. Once the printer power is turned on the next time, the Show Revision item is unchecked so that the firmware revision is not shown.
Administrator	Startup Options	Cold Reset		Select the Cold Reset item to clear the IP address and all customer settings. (This item also returns all settings to factory defaults.) NOTE: Items in the Service menu are not reset.
Administrator	Startup Options	Skip Disk Load		Select the Skip Disk Load item to disable installed third-party applications.
Administrator	Startup Options	Skip Cal		Select the Skip Cal item to skip the printer calibration for the very next power-initialization cycle only.
Administrator	Startup Options	Lock Service		CAUTION: Select the Lock Service item to lock the Service menu access (both in the Pre-boot menu and the Device Maintenance menu). Service personnel must have the administrator remove the Lock Service setting before they can open the Service menu.
Administrator	Startup Options	Skip FSCK		Select the Skip FSCK item to disable Chkdisk/ScanVolume during startup.

Table 6-7 Pre-boot menu options (5 of 7) (continued)

Menu option	First level	Second level	Third level	Description
Administrator	Startup Options	First Power		**Not currently functional**: This item allows the printer to initialize as if it is the first time it has been turned on. For example, the user is prompted to configure first-time settings like date/time, language, and other settings. Select this item so that it is enabled for the next time the printer power is turned on. When the printer power is turned on the next time, this item is unchecked so that the pre-configured settings are used during configuration, and the first-time setting prompt is not used.
Administrator	Startup Options	Embedded Jetdirect Off		Select the Embedded Jetdirect Off item to disable the embedded HP Jetdirect. By default this item is unchecked so that HP Jetdirect is always enabled.
Administrator	Startup Options	WiFi Accessory		Select the WiFi Accessory item to enable the wireless accessory.

Table 6-8 Pre-boot menu options (6 of 7)

Menu option	First level	Second level	Third level	Description
Administrator (continued)	Diagnostics			Diagnostic items are useful to diagnose hardware components and their interface connections. Use these items to troubleshoot specific hardware components, and the interface between them and other components.
Administrator	Diagnostics	Memory	Do Not Run	Use the Do Not Run item to exclude the Memory diagnostic when executing multiple diagnostics.
Administrator	Diagnostics		Short	Use the Short item to select a brief memory test. NOTE: This test requires about four minutes to execute.
Administrator	Diagnostics		Long	Use the Long item to select an extended memory test. NOTE: This test requires about twenty minutes to execute.
Administrator	Diagnostics	Disk	Do Not Run	Use the Do Not Run item to exclude the Disk diagnostic when executing multiple diagnostics.
Administrator	Diagnostics		Short	Use the Short item to select a brief firmware self-test. NOTE: This test requires about two or three minutes to execute.
Administrator	Diagnostics		Long	Use the Long item to select an extended firmware self-test. NOTE: This test requires about sixty minutes to execute.
Administrator	Diagnostics		Optimized	Use the Optimized item to select a test that checks the active sectors on the disk. NOTE: This test requires about thirty minutes to execute.

Table 6-8 Pre-boot menu options (6 of 7) (continued)

Menu option	First level	Second level	Third level	Description
Administrator	Diagnostics		Raw	Use the Raw item to select a test that checks every sector on the disk. NOTE: This test requires about fifty minutes to execute.
Administrator	Diagnostics		Smart	Use the Smart item to select a very brief test that checks the drive self-monitoring analysis and reporting technology (SMART) status—the drive detects and reports reliability indicators to help anticipate disk failures (SMART status).
Administrator	Diagnostics	CPB		Use the CPB item to verify the integrity of the copy processor board (CPB) and the formatter PCA connections.
Administrator	Diagnostics	Interconnect		Use the Interconnect item to verify the integrity of the interconnect PCA (ICB) and its connections.
Administrator	Diagnostics	Run Selected		Select the Run Selected item to execute a selected test. NOTE: If more than one test is selected, they are executed in sequence.

Table 6-9 Pre-boot menu options (7 of 7)

Menu option	First level	Second level	Third level	Description
Administrator (continued)	Remote Admin	Start Telnet		The Remote Admin item allows a service technician to access to the printer Pre-boot menu remotely, and to navigate the menu selections from a remote location. IMPORTANT: A Remote Admin connection must be initiated by a person that is physically present at the printer. This person will also need to provide a randomly generated PIN to the remote service technician. NOTE: For more information about using the Remote Admin function, see "Remote Admin (M506/M507/E50145, M527/M528/E52645)" in the Troubleshooting Manual.
Administrator	Remote Admin	Stop Telnet		
Administrator	Remote Admin	Refresh IP		
Administrator	System Triage	Copy Logs		If the device will not boot to the **Ready** state, or the diagnostic log feature found in the Troubleshooting menu is not accessible, then use the System Triage item to copy the diagnostic logs to a USB flash drive at the next printer start up. The files can then be sent to HP to help diagnose the problem.
Administrator	Change Svc PWD			Use this item to change the Service menu personal identification number (PIN).
Administrator	Reset Svc PWD			If the Service menu personal identification number (PIN) has been changed. Use this item to reset it to the original PIN.
Service Tools	Reset Password			Use this item to reset the Pre-boot administrator password.
Service Tools	Subsystems			For manufacturing use only. Do not change these values.
Developer Tools	Netexec			

Remote Admin

Learn about the printer Remote Admin function.

The Remote Admin feature allows remote access the printer Pre-boot menu (BIOS environment). The printer functions as a telnet server which uses the telnet networking protocol to transmit text data. Any computer (with telnet installed and enabled) can function as the telnet client to remotely display and interact with the Pre-boot menu.

IMPORTANT: While the Remote Admin function allows remote access the Pre-boot menu, for security reasons the Remote Admin connection must be initiated by a person that is physically present at the printer.

Required software and network connection

Before using the Remote Admin feature, make sure that the telnet network protocol is installed and enabled on the remote telnet client computer.

NOTE: This section describes enabling and configuring the telnet feature for computers using a Windows® operating system.

HP recommends that the telnet client computer be a Windows-based system; however, there are other operating systems that support the telnet network protocol. For information about enabling and configuring the telnet network protocol for other operating systems, see the owner's manual for that operating system.

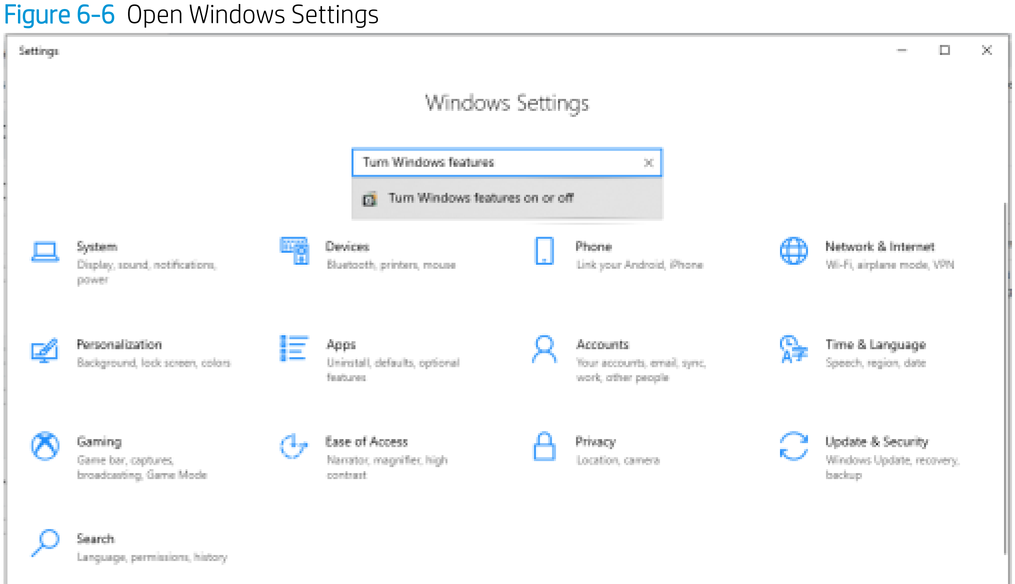
Enable the Windows telnet client

All computers using the Windows operating system have the telnet client installed, however, the telnet client function might not be enabled by default.

NOTE: The figures and menus in this section are for the Windows 10® operating system. Screens and menu selections might vary slightly for other operating systems.

1. Use the **Start** menu to open the **Windows Settings** dialog box, and then search for **Turn Windows features on or off**. Click the **Turn Windows features on or off** item.

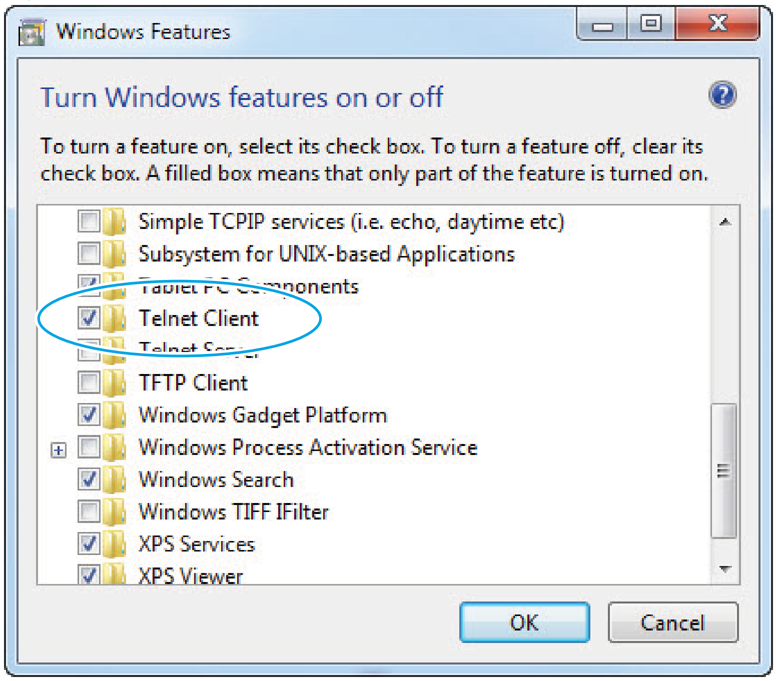
   Figure 6-6 Open Windows Settings

2. In the **Windows Features** box, scroll down to **Telnet Client**. If the check box is not checked, click the box to select it, and then click the **OK** button.

TIP: If the check box is already checked then the telnet client function is already enabled. Click the **Cancel** button.

Figure 6-7 Enable the telnet client feature



Network connection

The remote telnet client computer must have direct network access to the printer for the Remote Admin function to operate. This means that the telnet client computer must be on the same network as the printer.

The Remote Admin function cannot be accessed through a network firewall or other remote access network security programs.

If a private network is not accessible, ask the network administrator to set up a virtual private network (VPN) connection to the network.

Connect a remote connection

Use the following procedures to connect a remote connection.

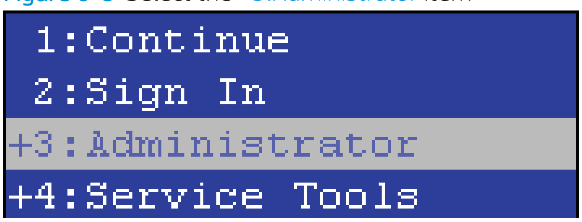
Start the telnet server function at the printer

For security reasons the Remote Admin feature must be initiated by a person that is physically present at the printer. The following steps must be performed by a person that is physically present at the printer.

NOTE: This person might need to sign in with an administrator or service password depending on how the printer is configured.

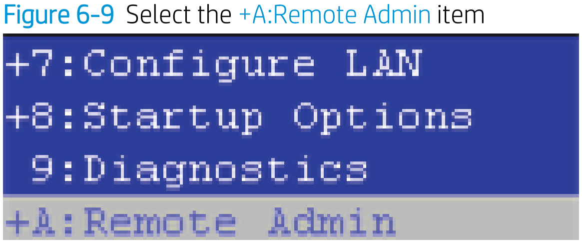
1. Turn the printer on.
2. The HP logo displays on the printer control panel. When a 1/8 with an underscore displays, touch the middle of the screen to open the Pre-boot menu.
3. Use the arrow buttons on the touchscreen to scroll down and highlight the +3:Administrator item, and then touch the OK button to select it.

   Figure 6-8 Select the +3:Administrator item

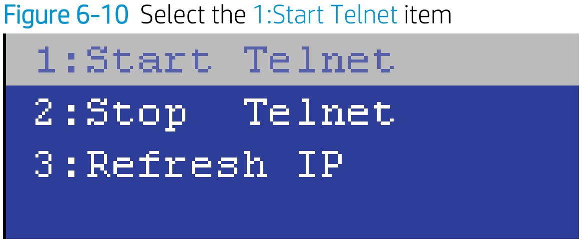
4. Use the arrow buttons on the touchscreen to scroll down and highlight the +A:Remote Admin item, and then touch the OK button to select it.

   Figure 6-9 Select the +A:Remote Admin item

5. Use the arrow buttons on the touchscreen to scroll down and highlight the 1:Start Telnet item, and then touch the OK button to select it.

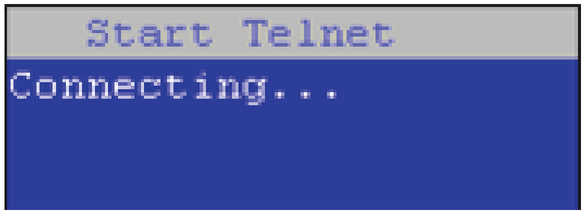
   Figure 6-10 Select the 1:Start Telnet item

6. Do one of the following

   - If a connecting message displays briefly, go to 7.

Figure 6-11 Telnet connecting message



- If an error message displays, use the steps below to identify the problem.

  Figure 6-12 Telnet error message

  1. The printer network cable is not correctly connected.

  2. The BIOS LAN settings are incorrect.

     - The printer should be configured to use a static IP address, but is configured to use DHCP instead.

     - The printer is configured to use a static IP address, but the IP address is incorrect.

  3. The printer is correctly configured to use DHCP, but the DHCP server is not turned on or is malfunctioning.

7. When the printer telnet server function is initialized, the following screen appears. Use the information on this screen to connect the remote telnet client computer to the printer.

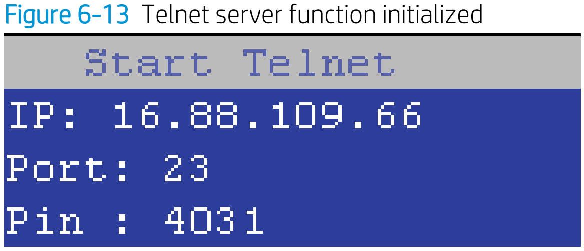
   NOTE: The printer is now ready to receive remote telnet client commands.

   - **IP**: The static or dynamically allocated IP address for the printer.

   - **Port**: The standard telnet port (23).

   - **Pin**: A randomly generated 4-digit personal identification number (PIN).

   Figure 6-13 Telnet server function initialized

Start the telnet client function at the remote computer

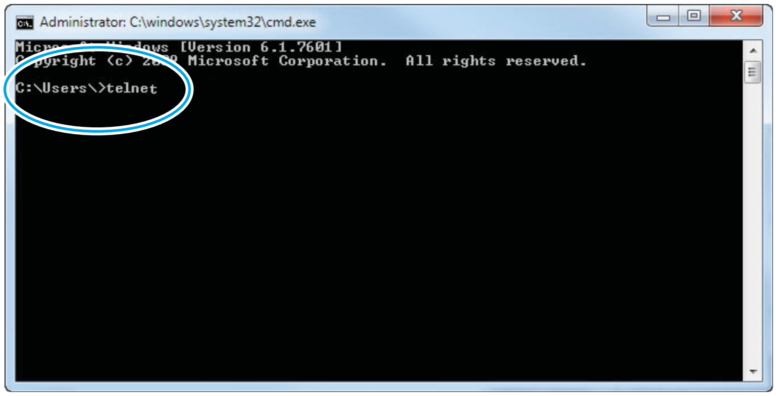
The following steps establish a Remote Admin connection from a remote computer to the printer.

1. From the **Start** menu open the **Command Prompt** desktop application.

   TIP: Type `cmd` in the application search dialogue box to find the application.

2. From any displayed directory, type `telnet` at the prompt, and then press the **Enter** key.

Figure 6-14 Start a telnet session

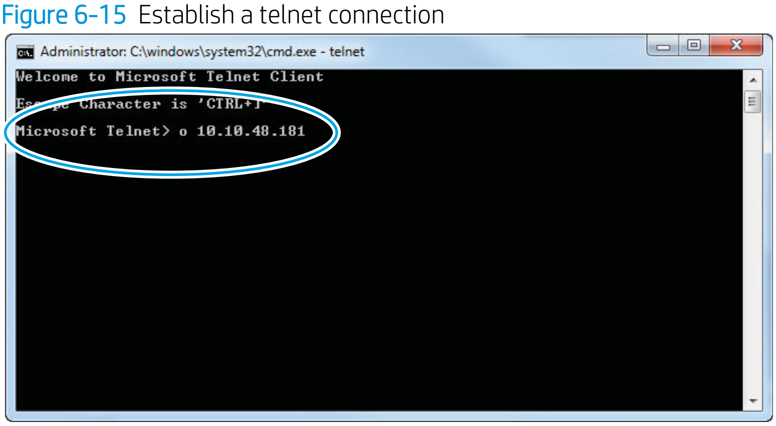


3. Type `o <IP ADDRESS>` at the telnet prompt, and then press the **Enter** key.

NOTE: For `<IP ADDRESS>`, substitute the IP address that was displayed in step 7 of the "Start the telnet server function at the printer" topic.

TIP: If the telnet connection fails to establish a connection, the printer is probably behind a firewall or on a different network that the remote telnet client computer.

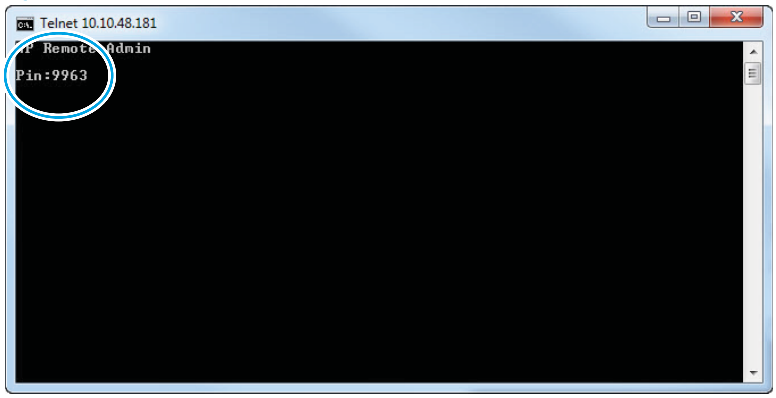
Figure 6-15 Establish a telnet connection



4. Type the PIN that was displayed in step 7 of then "Start the telnet server function at the printer" topic at the prompt, and then press the **Enter** key.

IMPORTANT: Make sure to type the PIN correctly. After five incorrect PIN entries, the printer terminates the Remote Admin connection. The Remote Admin feature must be re-initiated at the printer. See the "Start the telnet server function at the printer" topic.

Figure 6-16 Enter the PIN

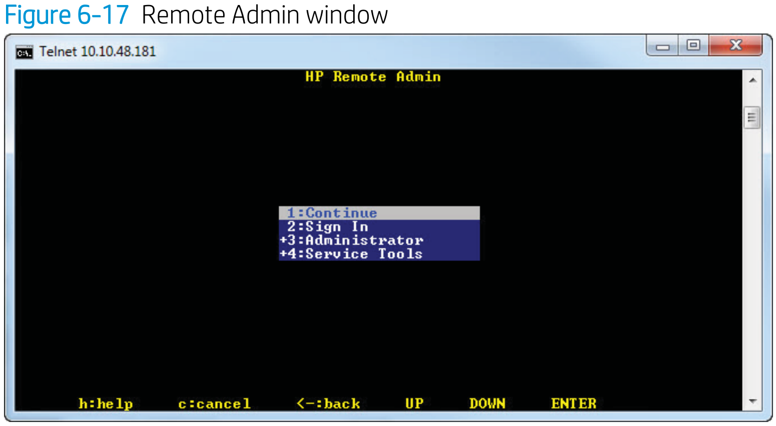


5. The following screen displays when the correct PIN is entered and the Remote Admin connection is successful. For information about the Pre-boot menu and options, see "Pre-boot menu options" in the printer *Service Manual*.

NOTE: Because a Remote Admin connection is an unsecured telnet network protocol connection, the following Pre-boot menu items are disabled for the remote telnet client computer.

- The **+3:Administrator** menu **4:Change Password** item.
- The **+3:Administrator** menu **5:Clear Password** item.
- The **+3:Administrator** menu **6:Disk Manage** item.

Figure 6-17 Remote Admin window



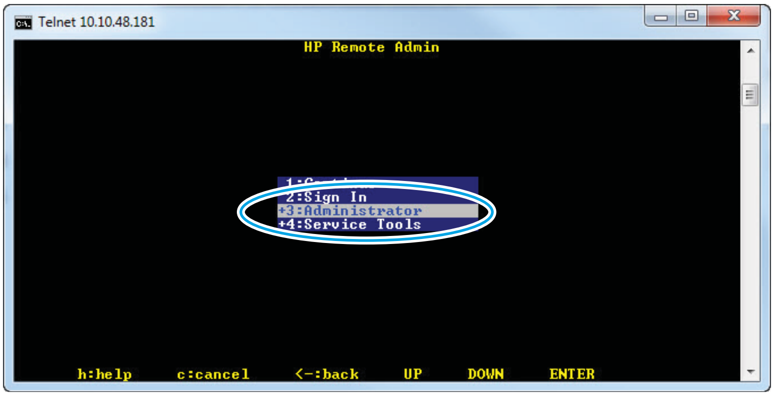
Disconnect a remote connection

The Remote Admin connection can be terminated from the printer control panel or the remote telnet client computer.

NOTE: The following procedure describes terminating a Remote Admin connection from the remote telnet client computer.

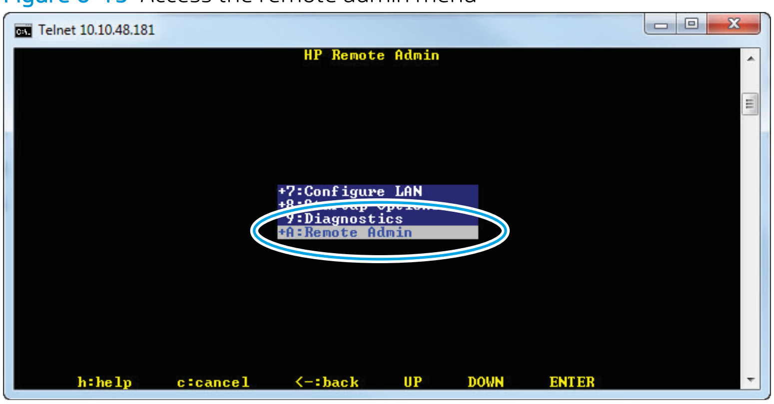
1. From the Pre-boot main menu, use the arrow buttons on the keyboard to scroll down to the **+3:Administrator** item, and then press the **Enter** key.

   Figure 6-18 Access the administrator menu

2. Use the arrow buttons on the keyboard to scroll down to the **+A:Remote Admin** item, and then press the **Enter** key.

   Figure 6-19 Access the remote admin menu

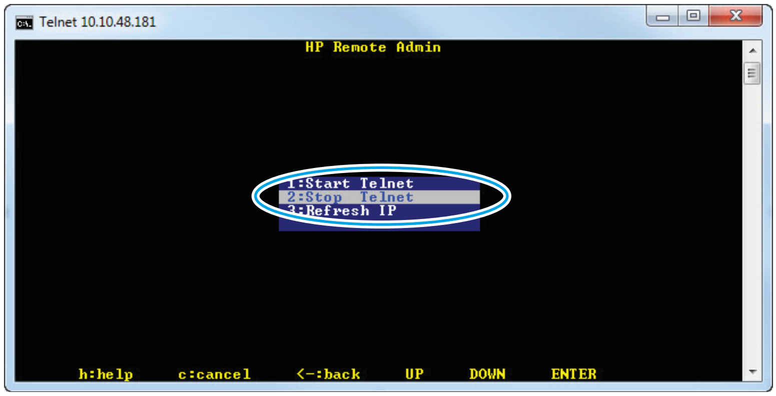
   

3. Use the arrow buttons on the keyboard to scroll down to the **2:Stop Telnet** item, and then press the **Enter** key. The Remote Admin connection between the printer and the remote telnet client computer terminates.

IMPORTANT: The printer remains in the Pre-boot menu. Have the person that is physically present at the printer do the following:

- Touch the Home button to return to the main Pre-boot menu and highlight the **1:Continue** item, and then touch the OK button. The printer will continue to initialize.

Figure 6-20 Terminate the telnet connection



Advanced configuration with the HP Embedded Web Server (EWS)

Use the HP Embedded Web Server to manage advanced printing functions.

Introduction

Use the HP Embedded Web Server to manage printing functions from a computer instead of the printer control panel.

- View printer status information
- Determine the remaining life for all supplies and order new ones
- View and change tray configurations
- View and change the printer control-panel menu configuration
- View and print internal pages
- Receive notification of printer and supplies events
- View and change network configuration

The HP Embedded Web Server works when the printer is connected to an IP-based network. The HP Embedded Web Server does not support IPX-based printer connections. Internet access is not needed to open and use the HP Embedded Web Server.

When the printer is connected to the network, the HP Embedded Web Server is automatically available.

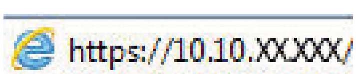
NOTE: The HP Embedded Web Server is not accessible beyond the network firewall.

How to access the HP Embedded Web Server (EWS)

Use the following steps to open the EWS.

1. From the Home screen on the printer control panel, touch the Information icon, and then touch the Ethernet icon to display the IP address or host name.

2. Open a web browser, and in the address line, type the IP address or host name exactly as it displays on the printer control panel. Press the `Enter` key on the computer keyboard. The EWS opens.



NOTE: If the web browser displays a message indicating that accessing the website might not be safe, select the option to continue to the website. Accessing this website will not harm the computer.

To use the HP Embedded Web Server, the browser must meet the following requirements:

Windows® 7

- Internet Explorer (version 8.x or greater)
- Google Chrome (version 34.x or greater)
- Firefox (version 20.x or greater)

Windows® 8 or greater

- Internet Explorer (version 9.x or greater)
- Google Chrome (version 34.x or greater)
- Firefox (version 20.x or greater)

macOS

- Safari (version 5.x or greater)
- Google Chrome (version 34.x or greater)

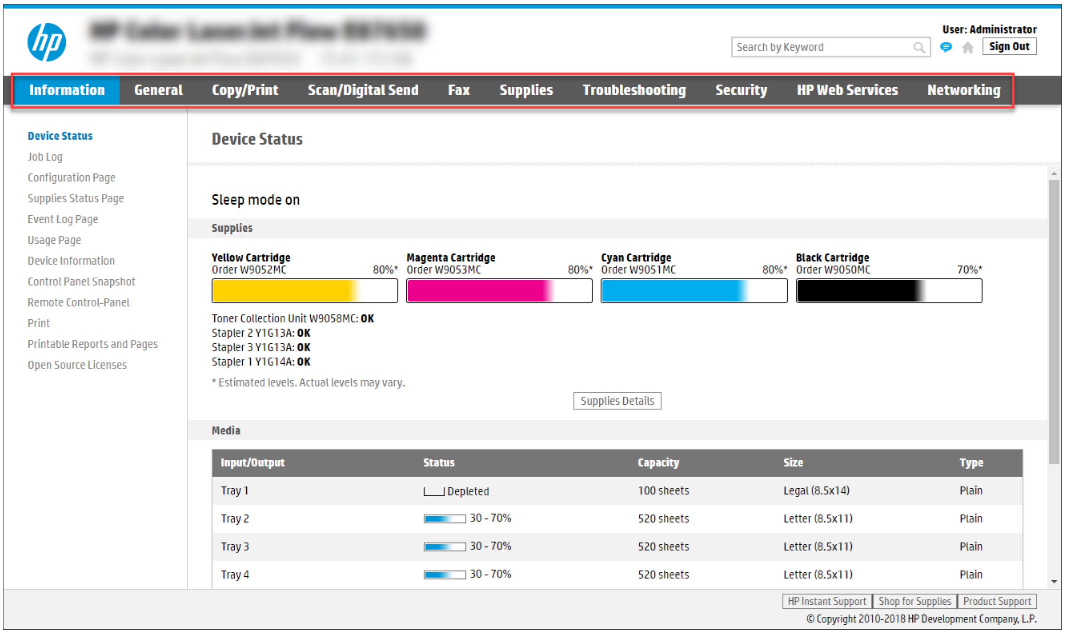
Linux

- Google Chrome (version 34.x or greater)
- Firefox (version 20.x or greater)

HP Embedded Web Server features

Learn about the HP Embedded Web Server (EWS) features available on each tab.

Figure 6-21 EWS Tabs



NOTE: **Copy/Print**, **Scan/Digital Send**, and **Fax** tabs only appear for multi-function printers (MFPs). A **Print** tab appears for single-function printers (SFPs).

Information tab

Refer to the table for settings in the **Information** tab.

Table 6-10 HP Embedded Web Server Information tab

Menu	Description
Device Status	Shows the printer status and shows the estimated life remaining of HP supplies. The page also shows the type and size of paper set for each tray. To change the default settings, click the **Change Settings** link.
Job Log	Provides a list of the jobs that have been processed.
Configuration Page	Shows the information found on the configuration page.
Supplies Status Page	Shows the status of the supplies for the printer.
Event Log Page	Shows a list of all printer events and errors. Use the **HP Instant Support** link (in the **Other Links** area on all HP Embedded Web Server pages) to connect to a set of dynamic web pages that help solve problems. These pages also show additional services available for the printer.
Usage Page	Shows a summary of the number of pages the printer has printed, grouped by size, type, and paper print path.
Device Information	Shows the printer network name, address, and model information. To customize these entries, click the **Device Information** menu on the **General** tab.
Control Panel Snapshot	Shows an image of the current screen on the control panel display.
Remote Control-Panel	Provides a way to troubleshoot or manage the printer from a browser window on a desktop or laptop.

Table 6-10 HP Embedded Web Server Information tab (continued)

Menu	Description
Print	Allows the user to send a print-ready file to the printer to be printed.
Printable Reports and Pages	Lists the internal reports and pages for the printer. Select one or more items to print.
Open Source Licenses	Shows a summary of the licenses for open source software programs that can be used with the printer.

General tab

Refer to the table for settings in the **General** tab.

Table 6-11 HP Embedded Web Server General tab

Menu	Description
Control Panel Customization	Reorder, show, or hide features on the control-panel display. Change the default display language and keyboard layouts.
Quick Sets	Configure jobs that are available in the **Quick Sets** area of the Home screen on the printer control panel.
Alerts	Set up email alerts for various printer and supplies events.
Control Panel Settings App	Shows the Settings app options that are available on the printer control panel.
General Settings	Configure how the printer recovers from jams and other general printer settings.
AutoSend	Configure the printer to send automated emails regarding printer configuration and supplies to specific email addresses.
Edit Other Links	Add or customize a link to another website. This link displays in the footer area on all HP Embedded Web Server pages.
Ordering Information	Enter information about ordering replacement toner cartridges. This information displays on the supplies status page.
Device Information	Name the printer and assign an asset number to it. Enter the name of the primary contact who will receive information about the printer.
Language	Set the language in which to display the HP Embedded Web Server information.
Firmware Upgrade	Download and install printer firmware upgrade files.
Date/Time Settings	Set the date and time or synchronize with a network time server.
Energy Settings	Set or edit a wake time, sleep time, and sleep delay for the printer. Set a different schedule for each day of the week and for holidays. Set which interactions with the printer cause it to wake from sleep mode.
Back up and Restore	Create a backup file that contains printer and user data. If necessary, use this file to restore data to the printer.
Reset Factory Settings	Restore printer settings to the factory defaults.
Solution Installer	Install or remove third-party software packages that extend or modify the functionality of the printer.

Table 6-11 HP Embedded Web Server General tab (continued)

Menu	Description
Job Statistics Settings	Provides connection information about third-party job-statistics services, or enables local serverless device job accounting.
Quota Settings	Provides connection information about third-party job-quota services, or enables local device quota service.

Other Links list

Configure which links display in the footer of the HP Embedded Web Server by using the **Edit Other Links** menu on the **General** tab.

NOTE: The following are the default links.

Table 6-12 HP Embedded Web Server Other Links list

Menu	Description
HP Instant Support	Connect to the HP website to find solutions to printer problems.
Shop for Supplies	Connect to the HP website for information on purchasing original HP supplies, such as cartridges and paper.
Product Support	Connect to the support site for the printer to search for help on various topics.

Copy/Print tab

Refer to the table for settings in the **Copy/Print** tab.

Table 6-13 HP Embedded Web Server Copy/Print tab

Menu	Description
Print from USB Drive Settings	Enable or disable the Print from USB Drive menu on the control panel.
Manage Stored Jobs	Enable or disable the ability to store jobs in the printer memory. Configure job-storage options.
Default Print Options	Configure the default options for print jobs.
Restrict Color (Color printers only)	Permit or restrict color printing and copying. Specify permissions for individual users or for jobs that are sent from specific software programs.
PCL and PostScript Settings	Adjust the PCL and PostScript settings for all print jobs, including copy jobs and received faxes.
Print Quality	Configure the print quality settings, including color adjustment, image registration, and allowed paper types.
Copy Settings	Configure the default options and Quick Sets for copy jobs. NOTE: If job-specific copy setting options are not set from the control panel at the start of a job, the default settings will be used for the job.

Table 6-13 HP Embedded Web Server Copy/Print tab (continued)

Menu	Description
Expert Copy	Enable or disable Expert Copy and set the initial copy view. The Expert Copy feature is available only on some HP MFPs with larger control panels, and is available in FutureSmart 4 firmware 24.7.3 release or later.
Manage Trays	Configure settings for paper trays.
Manage Stapler/Stacker	Configure settings for the stapler/stacker for printers that have this feature.

Scan/Digital Send tab

Refer to the table for settings in the **Scan/Digital Send** tab.

Table 6-14 HP Embedded Web Server Scan/Digital Send tab

Menu	Description
Email Setup	Configure the default email settings for digital sending, including the following: • Settings for the outgoing mail (SMTP) server • Settings for Email Quick Sets jobs • Default message settings, such as the "From" address and the subject line • Settings for digital signatures and encryption • Settings for email notifications • Default scan settings for email jobs • Default file settings for email jobs
Scan to Network Folder	Configure the network folder settings for digital sending, including the following: • Settings for Quick Sets jobs saved in a network folder • Settings for notifications • Default scan settings for jobs saved in a network folder • Default file settings for jobs saved in a network folder
Scan to SharePoint®	Configure the SharePoint settings for digital sending, including the following: • Settings for Quick Sets jobs saved in a document library on the SharePoint site • Default settings for jobs saved in a document library on the SharePoint site
Scan to USB Drive	Configure the USB settings for digital sending, including the following: • Settings for Quick Sets jobs saved on a USB flash drive • Settings for notifications • Default scan settings for jobs saved on a USB flash drive • Default file settings for jobs saved on a USB flash drive

Table 6-14 HP Embedded Web Server Scan/Digital Send tab (continued)

Menu	Description
Contacts	Manage contacts, including the following: • Add email addresses into the printer one at a time. • Import a large list of frequently-used email addresses on to the printer all at once, rather than adding them one at a time. • Export contacts from the printer into a .CSV file on the computer to use as a data backup, or import the records onto another HP printer. • Edit email addresses that have already been saved in the printer.
Preferences	Manage general scanning settings.
Email and Scan to Network Folder Quick Setup Wizards	Configure the printer to send scanned images as email attachments. Configure the printer to save scanned images to network-folder Quick Sets. Quick Sets provide easy access to files saved on the network.
Digital Sending Software Setup	Configure settings related to using optional Digital Sending software.

Fax tab

Refer to the table for settings in the **Fax** tab.

Table 6-15 HP Embedded Web Server Fax tab

Menu	Description
Fax Send Setup	Configure settings for sending faxes, including the following: • Default settings for outgoing faxes • Settings for fax Quick Sets jobs • Settings for notifications • Default setting for sending faxes using the internal fax modem • Settings for using a LAN fax service • Settings for using an Internet fax service
Fax Speed Dials	Manage speed dials, including the following: • Import .CSV files containing email addresses, fax numbers, or user records, so that they can be accessed on this printer. • Export email, fax, or user records from the printer into a file on the computer to use as a data backup, or import the records onto another HP printer.
Fax Receive Setup	Configure default print options for incoming faxes, and set up a fax printing schedule.
Fax Archive and Forwarding	Enable or disable fax archiving and fax forwarding, and configure basic settings for each: • Fax archiving is a method to send a copy of all incoming and outgoing faxes to an email address, a network folder, or an FTP server. • Fax forwarding is a method to forward incoming faxes to a different fax device.
Fax Activity Log	Contains a list of the faxes that have been sent from or received by this printer.

Supplies tab

Refer to the table for settings in the **Supplies** tab.

Table 6-16 HP Embedded Web Server Supplies tab

Menu	Description
Manage Supplies	Configure how the printer reacts when supplies reach a Very Low state.

Troubleshooting tab

Refer to the table for settings in the **Troubleshooting** tab.

Table 6-17 HP Embedded Web Server Troubleshooting tab

Menu	Description
General Troubleshooting	Use the following options as appropriate: • **Reports and Tests** area: Select and print several types of reports and tests. Some reports can be viewed in the EWS by clicking the **View** button. • **Fax Tools** area: Configure settings for fax troubleshooting. (MFP and Digital Sender products with HP analog fax accessory only) • **OXPd Troubleshooting** area: Enable or disable the **Allow a Non-Secure Connection for Web Services** option • **Auto Recovery** area: Enable or disable the **Enable Auto Recovery** option, which allows the printer to auto recover from errors that might require the power to be turned off and on (for example, a 49 error).
Online Help	Link to HP cloud-based online help to assist in troubleshooting printing issues.
Diagnostic Data NOTE: This item is available only if an administrator password is set from the **Security** tab.	Export printer information to a file that can be useful for HP technical support to use for detailed problem analysis.
Calibration/Cleaning (Color LaserJet printers only)	Enable the automatic cleaning feature, create and print the cleaning page, and select an option to calibrate the printer immediately.
Reset Factory Settings	Restore printer settings to factory defaults.
Firmware Upgrade	Download and install printer firmware upgrade files.

Security tab

Refer to the table for settings in the **Security** tab.

Table 6-18 HP Embedded Web Server Security tab

Menu	Description
General Security	Settings for general security, including the following: ● Configure an administrator password to restrict access to certain features on the printer. ● Set a custom device Service Access Code. ● Set PJL password for processing PJL commands. ● Set file system access and firmware upgrade security. ● Enable or disable the Host USB port on the control panel or the USB connectivity port on the formatter for printing directly from a computer. ● View the status of all security settings.
Account Policy	Enable administrator account settings.
Access Control	Configure access to printer functions for specific individuals or groups, and select the method individuals use to sign in to the printer.
Protect Stored Data	Configure and manage the internal storage for the printer. Configure settings for jobs that are stored on the printer internal storage.
Manage Remote Apps	Manage or whitelist remote apps by importing or deleting certificates that allow devices to use this product.
Certificate Management	Install and manage security certificates for access to the printer and the network.
Email Domain Restriction	If email functionality is enabled, administrators can limit the email addresses to which the printer can send messages.
Web Service Security	Allow resources on this printer to be accessed by web pages from different domains. If no sites are added to the list, then all sites are trusted.
Self Test	Verify that the security functions are running according to expected system parameters.

HP Web Services tab

Use the **HP Web Services** tab to configure and enable HP Web Services for this printer. It is necessary to Enable HP Web Services to use the HP ePrint feature.

Table 6-19 HP Embedded Web Server HP Web Services tab

Menu	Description
Web Services Setup	Connect this printer to HP Connected on the web by enabling HP Web Services.
Web Proxy	Configure a proxy server if there are issues enabling HP Web Services or connecting the printer to the Internet.
HP JetAdvantage	Access solutions that extend the capabilities of the printer
Smart Cloud Print	Enable Smart Cloud Print, which allows access to web-based apps that extend the capabilities of the printer.

Networking tab

Use the **Networking** tab to configure and secure network settings for the printer when it is connected to an IP-based network. This tab does not display if the printer is connected to other types of networks.

Table 6-20 HP Embedded Web Server Networking tab > Configuration settings

Menu	Description
Wireless Station	Configure the initial wireless settings. NOTE: The configuration options available depend on the print server model.
Wi-Fi Direct	Configure Wi-Fi Direct settings for printers that include embedded Wi-Fi Direct Print and NFC printing or that have a wireless accessory installed. NOTE: The configuration options available depend on the print server model.
TCP/IP Settings	Configure TCP/IP settings for IPv4 and IPv6 networks. NOTE: The configuration options available depend on the print server model.
Network Settings	Configure IPX/SPX, AppleTalk, DLC/LLC, and SNMP settings, depending on the print server model.
Other Settings	Configure general printing protocols and services supported by the print server. The available options depend on the print server model, but can include firmware update, LPD queues, USB settings, support information, and refresh rate.
AirPrint	Enable, set up, or disable network printing from Apple-supported printers.
Select Language	Change the language displayed by the HP Embedded Web Server. This page displays if the web pages support multiple languages. Optionally, select supported languages through language-preference settings in the browser.
Select Location	Select a country/region for the printer.

Table 6-21 HP Embedded Web Server Networking tab > Google Cloud Print settings

Menu	Description
Setup	Set up Google Cloud Print options.
Web Proxy	Configure proxy settings.

Table 6-22 HP Embedded Web Server Networking tab > Security settings

Menu	Description
Settings	View and restore current security settings to factory-default values. Configure security settings using the Security Configuration Wizard. NOTE: Do not use the Security Configuration Wizard to configure security settings if using network-management applications, such as HP Web Jetadmin.
Authorization	Control configuration management and use of this printer, including limiting host access to this printer through an Access Control List (ACL) (for selected print servers on IPv4 networks only).
Secure Communication	Configure Transport Layer Security (TLS) protocol and encryption options.

Table 6-22 HP Embedded Web Server Networking tab > Security settings (continued)

Menu	Description
Mgmt. Protocols	Configure and manage security protocols for this printer, including the following: • Set the security management level for the HP Embedded Web Server, and control traffic over HTTP and HTTPS. • Configure the SNMP (Simple Network Management Protocol) operation. Enable or disable the SNMP v1/v2c or SNMP v3 agents on the print server. • Control access through protocols that may not be secure, such as printing protocols, print services, discovery protocols, name resolution services, and configuration-management protocols.
802.1X Authentication	Configure 802.1X authentication settings on the Jetdirect print server as required for client authentication on the network, and reset the 802.1X authentication settings to factory-default values. CAUTION: When changing the 802.1X authentication settings; the printer might lose its connection. To reconnect, it might be necessary to reset the print server to a factory-default state and reinstall the printer.
IPsec/Firewall	View or configure a Firewall policy or an IPsec/Firewall policy.
Announcement Agent	Enable or disable the HP Device Announcement Agent, set the configuration server, and configure mutual authentication using certificates.

Table 6-23 HP Embedded Web Server Networking tab > Diagnostics settings

Menu	Description
Network Statistics	Display network statistics that are collected and stored on the HP Jetdirect print server.
Protocol Info	View a list of network-configuration settings on the HP Jetdirect print server for each protocol.
Configuration Page	View the HP Jetdirect configuration page, which contains status and configuration information.

Print menu

Review the following information about the Print menu in the Settings menu.

To display: From the Home screen on the printer control panel, use the arrow keys to navigate to Settings, and then select OK. Use the down arrow ▼ button to scroll to Print, and then press the OK button.

Table 6-24 Print menu

First level	Second level	Third level	Fourth Level	Values	Description
Enable Print from USB Drive				Enabled Disabled*	Enables the printer to open a file from a USB drive.
Managed Stored Jobs	Job Sort Order			Job Name* Date*	This option allows you list the jobs either alphabetically or chronologically.

Table 6-24 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
Managed Stored Jobs	Retain Temporary Jobs			Do not retain Personal jobs only All temporary jobs	Sets which temporary jobs will be retained in the event of a printer reboot.
Managed Stored Jobs	Temporary Job Storage Limit			1-300 Default = 32	Configure global settings for jobs that are stored in the printer memory. The Temporary Job Storage Limit feature specifies the number of temporary jobs that can be stored on the printer. The maximum allowed value is 300.
Managed Stored Jobs	Standard Stored Job Retention			Off 30 minutes 1 hour 4 hours 1 day 1 week 4 weeks	Configure global settings for jobs that are stored in the printer memory. The Standard Stored Job Retention feature specifies the amount of time jobs can be stored on the printer.
Default Print Options	Number of Copies			Range: 1-32000 Default = 1	Sets the default number of copies for a copy job. This default applies when the Copy function or the Quick Copy function is initiated from the printer Home screen.
Default Print Options	Paper Selection			Select from a list of sizes that the printer supports.	Configures the default paper size used for print jobs.
Default Print Options	Default Custom Paper Size	X Dimension		Range: 2.52-12.60 inches Default = 12.60 inches	Configures the default paper size that is used when the user selects **Custom** as the paper size for a print job.
Default Print Options	Default Custom Paper Size	Y Dimension		Range: 5-18 inches Default = 18 inches	
Default Print Options	Default Custom Paper Size	Use Inches		Enabled* Disabled	
Default Print Options	Output Sides			1-sided* 2-sided	Use to indicate whether the original document is printed on one or both sides.

Table 6-24 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
Default Print Options	Quality Level			Normal* Enhanced Fine Lines	Use to select the level of desired print quality.
Default Print Options	Edge-to-Edge			Normal (recommended)* Edge-to-Edge output	Use to avoid shadows that can appear along the edges of copies when the original document is printed close to the edges.
PCL and Postscript Settings	Suppress Blank Pages			Off* On	This option is for users who are generating their own PCL, which could include extra form feeds that would cause blank pages to be printed. When the On option is selected, form feeds are ignored if the page is blank.
PCL and Postscript Settings	Courier Font			Regular Dark	Select which version of the Courier font you want to use. The factory default setting is Regular, which uses an average stroke width. The Dark setting can be used if a heavier Courier font is needed.
PCL and Postscript Settings	Wide A4			Enabled Disabled*	Changes the printable area of A4-size paper. If you enable this option, eighty 10-pitch characters can be printed on a single line of A4 paper.
PCL and Postscript Settings	Print PS Errors			Enabled Disabled*	Use this feature to select whether a PostScript (PS) error page is printed when the printer encounters a PS error.
PCL and Postscript Settings	Print PDF Errors			Enabled Disabled*	Selects whether a PDF error page is printed when the printer encounters a PDF error.

Table 6-24 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
PCL and Postscript Settings	Personality			Auto* PCL PS PDF	Configures the default print language or personality for the printer. Normally you should not change the printer language. If you change the setting to a specific printer language, the printer does not automatically switch from one language to another unless specific software commands are sent to it.
PCL and Postscript Settings	PCL	Font Settings	Font Source	Internal Disk resident*	Selects the font source for the user-soft default font. The list of available options varies depending on the installed printer options.
PCL and Postscript Settings	PCL		Font Number	Range: 0-110 Default = 0	Specifies the font number for the user-soft default font using the source that is specified in the Font Source menu. The printer assigns a number to each font and lists it on the PCL font list. The font number displays in the Font # column of the printout.
PCL and Postscript Settings	PCL		Font Pitch	Range: 0.44-99.99 Default = 10	If the Font Source option and the Font Number setting indicate a contour font, then use this feature to select a default pitch (for a fixed-spaced font).
PCL and Postscript Settings	PCL	PCL Settings	Form Length	Range: 5-128 Default = 60	Controls the PCL print-command options. PCL is a set of printer commands that HP developed to provide access to printer features. Use the Form Length feature to select the user soft -default vertical form length.

Table 6-24 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
PCL and Postscript Settings	PCL	PCL Settings	Orientation	Portrait Landscape	Select the orientation that is most often used for copy or scan originals. Select the Portrait option if the short edge is at the top or select the Landscape option if the long edge is at the top.
PCL and Postscript Settings	PCL	PCL Settings	Symbol Set	Select from a list of symbol sets.	Select any one of several available symbol sets from the control panel. A symbol set is a unique grouping of all the characters in a font. The factory default value for this option is PC-8. Either PC-8 or PC-850 are recommended for line-draw characters.
PCL and Postscript Settings	PCL	PCL Settings	Media Source Mapping	Standard* Classic	Use to select and maintain input trays by number when you are not using the printer driver, or when the software program has no option for tray selection. The following options are available: Standard: Tray numbering is based on newer HP LaserJet models. Classic: Tray numbering is based on HP LaserJet 4 and older models.
Print Quality	Adjust Color	Tonal Range		Highlights Midtones Shadows	Select the tonal range to adjust.
Print Quality	Adjust Color	Cyan Magenta Yellow Black		Use the arrow keys to adjust the sliding bar for each color.	

Table 6-24 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
Print Quality	Image Registration	Tray	Tray 1 Tray 2 Tray 3 Tray 4 Tray 5 Depends upon the number of trays installed		Specify tray to be adjusted

Table 6-24 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
Print Quality	Image Registration	Front-side Horizontal Shift Front-side Vertical Shift Back-side Horizontal Shift Back-side Vertical Shift		-5.00 mm to 5.00 mm	Shift the margin alignment to center the image on the page from top to bottom and from left to right. You can also align the image on the front with the image printed on the back. The direction that is perpendicular to the way the paper passes through the printer is referred to as X. This is also known as the scan direction. X1 is the scan direction for a single-sided page or for the second side of a two-sided page. X2 is the scan direction for the first side of a two-sided page. The direction that the paper feeds through the printer is referred to as Y. Y1 is the feed direction for a single-sided page or for the second side of a two-sided page. Y2 is the feed direction for the first side of a two-sided page. Use the Adjust Tray <X> menu to adjust the registration settings for each tray. Before adjusting these values, print a registration test page. It provides alignment guides in the X and Y directions so you can determine which adjustments are necessary. You can adjust values for X1 Shift, X2 Shift, Y1 Shift, and Y2 Shift.
Print Quality	Image Registration	Print Test Page			Use the Print Test Page option to print a page to test the image registration. It provides alignment guides in the X and Y directions so you can determine which adjustments are necessary.

Table 6-24 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
Print Quality	Auto Sense Behavior	Tray 1		Sense every page Sense first page Sense transparency only	
Print Quality	Auto Sense Behavior	All Other Trays		Sense first page Sense transparency only	
Print Quality	Adjust Paper types			Select from a list of paper types Reset Paper Types	
Print Quality	Optimize	Normal Paper		Standard Smooth	Set to Smooth when printing on smooth paper of normal weight.
Print Quality	Optimize	Heavy paper		Standard Smooth	Set to Smooth when printing on smooth, heavy media types.
Print Quality	Optimize	Envelope control		Normal Reduced Temp	Set to Reduced Temp if envelopes are sticking due to moisture in the envelop adhesive.
Print Quality	Optimize	Tray 1		Normal Alternate	Set the mode to Alternate if marks appear on the back side of the paper when printing from Tray 1. This sets the printer to initiate a clean sequence every time a job finishes when the printer is set for Any Size and Any Type for Tray 1.
Print Quality	Optimize	Background		Normal Alternate	Set to Alternate when a background occurs all over the page.
Print Quality	Optimize	Uniformity Control		Normal Alternate 1 Alternate 2 Alternate 3	Set to Alternate 1 to improve uniformity on any paper type.
Print Quality	Optimize	Cac03		Off On	Set to On if printing with media that contains a high calcium carbonate content. Engine print speed is slowed so that less paper dust is produced.

Table 6-24 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
Print Quality	Optimize	Best Normal		Off On	Set to On to try and improve print quality.
Print Quality	Optimize	Tracking Control		Off On	Improves color stability by adjusting the bias voltage. Make sure this mode is set to On.
Print Quality	Optimize	Registration		Normal Alternate	Set to Alternate when color misregistration occurs.
Print Quality	Optimize	Transfer Control		Normal Alternate 1	Set to Alternate to reduce primary transfer bias and to resolve low density or blotchy images.
Print Quality	Optimize	Moisture Control		Normal Alternate	Set to Alternate if the printer is installed in a high-humidity environment.
Print Quality	Optimize	Reset Optimize		Reset	Use Reset to reset the menu defaults.
Print Quality	Edge Control			Off Light Normal* Maximum	
Manage Trays	Use Requested Tray			Exclusively* When available	Controls how the printer handles jobs that have specified a specific input tray. Two options are available: Exclusively: The printer never selects a different tray when the user has indicated that a specific tray should be used, even if that tray is empty. When available: The printer pulls from another tray if the specified tray is empty, even though the specific tray was indicated for the job.

Table 6-24 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
Manage Trays	Manually Feed Prompt			Always* Prompt on mismatch	Indicate whether a prompt should appear when the type or size for a job does not match the specified tray and the printer pulls from the multipurpose tray instead. Two options are available: Always: A prompt always displays before using the multipurpose tray. Prompt on mismatch: A prompt displays only if the size or type do not match or the tray is empty.
Manage Trays	Size/Type Prompt			Display* Do not display	Controls whether the tray configuration message displays whenever a tray is closed. Two options are available: Display: Shows the tray configuration message when a tray is closed. The user is able to configure the tray settings directly from this message. Do not display: Prevents the tray configuration message from automatically appearing.

Table 6-24 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
Manage Trays	Use Another Tray			Allow* Do not allow	Use to turn on or off the control panel prompt to select another tray when the specified tray is empty. Two options are available: Allow: When this option is selected the user is prompted to either add paper to the selected tray or to choose a different tray. This is the factory default. Do not allow: When this option is selected, the user is not given the option of selecting a different tray. The printer prompts the user to add paper to the tray that was initially selected.
Manage Trays	Alternative Letterhead Mode			Disabled* Enabled	Use to load letterhead or preprinted paper into the tray the same way for all print jobs, whether you are printing to one side of the sheet or to both sides of the sheet. When this option is selected, load the paper as you would for printing on both sides. See the user documentation that came with the printer for instructions about loading letterhead for printing on both sides. When this option is selected, the printer speed slows to the speed required for printing on both sides.

Table 6-24 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
Manage Trays	Duplex Blank Pages			Automatic* Always	Controls how the printer handles two-sided jobs (duplexing). Two options are available: Automatic: Choose this option to skip printing blank sides during a two-sided print job. The printer can print jobs faster when blank sides are skipped. Always: Choose this option to print all sides of a two-sided job, even if one side is blank. This might be preferable for certain jobs that use paper types such as letterhead or prepunched paper.
Manage Trays	Override A4/Letter			Yes* No	Prints on letter-size paper when an A4 job is sent but no A4-size paper is loaded in the printer (or to print on A4 paper when a letter-size job is sent but no letter-size paper is loaded). This option will also override A3 with ledger-size paper and ledger with A3-size paper.

Table 6-24 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
Manage Trays	Unsupported Size Behavior			Use default size automatically* Prompt for user response	Use this feature to identify the desired behavior when printing a document on a paper size that the printer does not support.
Manage Trays	Rotate Offset			Automatic* Off	Allows printing of multiple copies of a print job in alternate orientations. For example, the first copy outputs in landscape orientation, the second outputs in portrait orientation, the third in landscape, and so on. This feature works only with Letter or A4-sized paper and requires the use of at least two paper trays. One tray is loaded to feed paper in the long-edge orientation and the other is loaded to feed paper in the short-edge orientation.

Defeating interlocks

Learn about defeating printer interlocks.

Different tests can be used to isolate different types of issues. For assembly or noise isolation, run the diagnostic test when the toner cartridge door or rear door is open.

To operate the printer with the doors open, the interlock switch levers must be depressed to simulate a closed-cover position.

⚠ WARNING! Be careful when performing printer diagnostics to avoid risk of injury. Only trained service personnel should open and run the diagnostics with the covers removed. Never touch any of the power supplies when the printer is turned on.

TIP: Fold a stiff piece of paper, for example a business card or index card, into a 10 mm (.375 in) strip, and insert the strip into the slots for the front door and right door logic switches.

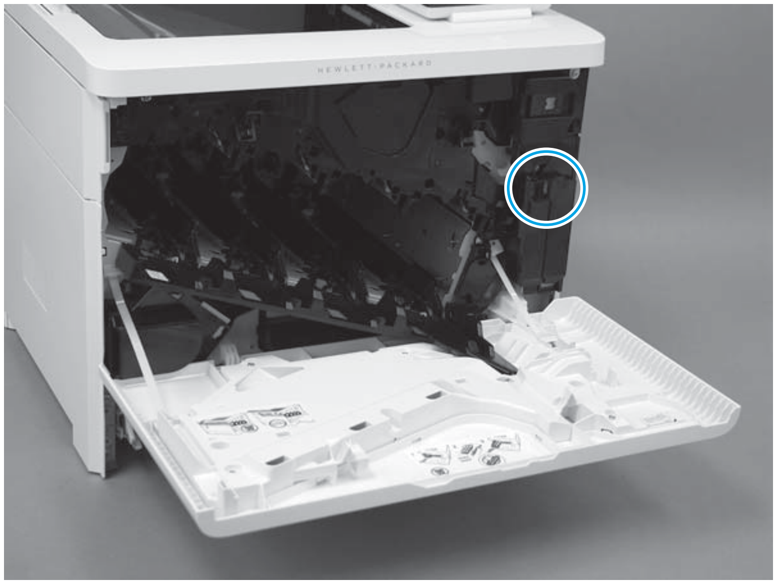
Defeat the front (cartridge) door interlock

1. Open the front door.

2. Insert a folded piece of paper into the slot.

> TIP: Fold a stiff piece of paper, for example a business card or index card, into a 10 mm (.375 in) strip, and insert the strip into the slots for the front door and right door logic switches.

Figure 6-22 Defeat the front door interlock



Defeat the right door interlock

1. Open the right door.

2. Insert a folded piece of paper into the slot.

TIP: Fold a stiff piece of paper, for example a business card or index card, into a 10 mm (.375 in) strip, and insert the strip into the slots for the front door and right door logic switches.

Figure 6-23 Defeat the right door interlock (right side)

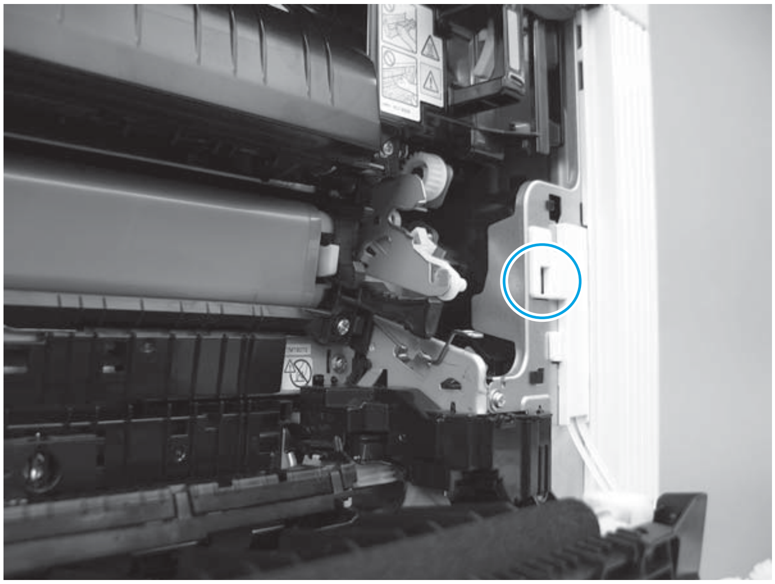
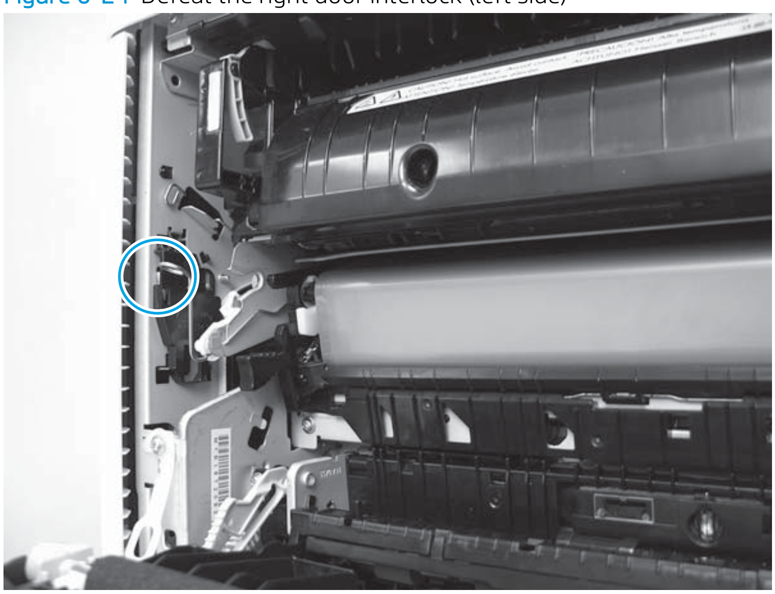


Figure 6-24 Defeat the right door interlock (left side)



LED Diagnostics (formatter)

Learn about troubleshooting the printer using formatter LEDs.

Understand lights on the formatter

Two LEDs on the formatter indicate that the printer is functioning correctly.

Figure 6-25 LEDs (formatter)

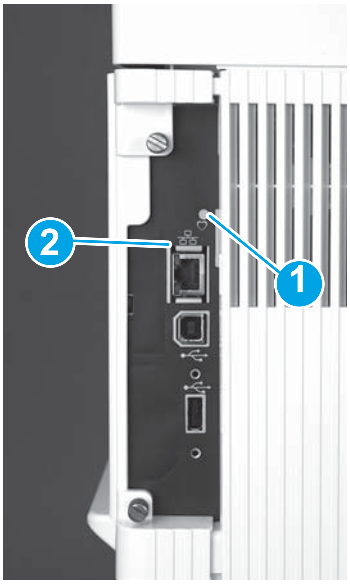


Table 6-25 LEDs (formatter)

Item	Description
Heartbeat LED	Indicates that the formatter is functioning.
HP Jetdirect LEDs	Indicates network activity and link status.

CAUTION: Under **NO** circumstances should a formatter from a different printer be installed during the repair or troubleshooting processes. The formatter stores important data specific to the model of printer it is installed in and is not deigned to be swapped or repurposed in any way. Return a used formatter to HP.

Issues that can occur from swapping a formatter include:

- Serial number, product number, product name, page count, and supported cartridges information change and might make a product unusable
- 33.02.01 Used board/Disk installed errors

If a used formatter is installed and causes this issue, the **partner** must cover the costs of the repair in the form of a product replacement. **There is no method in the field to recover a printer where a used formatter is installed.**

For more information, see HP LaserJet Enterprise, HP LaserJet Managed, HP PageWide Enterprise, HP PageWide Managed - 33.02.01 error or printer name and/or product number changes after replacing the formatter.

This part contains components that are electrostatic discharge (ESD) sensitive. To reduce the possibility of ESD damage, always touch the sheet-metal chassis to ground yourself before touching an ESD sensitive part.

Heartbeat LED

The heartbeat LED indicates that the formatter is functioning correctly. While the product is initializing after it is turned on, the LED blinks rapidly, and then turns off. When the product has finished the initialization sequence, the heartbeat LED pulses on and off.

The following table describes the heartbeat LED operation while the product is executing the firmware boot process.

NOTE: If after initialization, the heartbeat LED is not solid green, see Table 6-27 Heartbeat LED, product operational on page 221.

Table 6-26 Heartbeat LED, product initialization

Initializing state	Heartbeat LED, normal state	Heartbeat LED, error state
No power (power cable disconnected or power switch off)	Off	Not applicable
Power on (immediately after the power switch pressed)	Red, solid • Duration should be 1 second or less	Red, solid • Firmware error; problem finding hardware and booting the serial peripheral interface flash memory (boot process halted) Replace the formatter.
Serial peripheral interface (SPI) flash memory boot	Green, solid	Red, solid • Firmware error; problem finding hardware and booting the serial peripheral interface flash memory (boot process halted) Replace the formatter.
HW checks on board DRAM	Green, solid	Red, solid • Firmware error; problem finding hardware and booting the serial peripheral interface flash memory (boot process halted) Replace the formatter.
Control panel connection initializes	Green, solid NOTE: Control panel communication successful. If an error occurs, a message should appear on the control-panel display.	Yellow, fast flash • Formatter to control panel connection failed (boot process halted) Check the cables between the formatter and control panel for damage. Make sure that the cables are fully seated.
Pre-boot menu available (including diagnostics)	Green, solid	Red, solid • Diagnostic failure (Follow diagnostic instructions) Turn the power off, and then on again to restart the initialization process.
Accessing disk for firmware image	Green, solid NOTE: If applicable, disk error messages appear on the control-panel display.	Yellow, fast flash • Control panel not connected
Firmware boot	Green, solid NOTE: If applicable, disk error messages appear on the control-panel display.	Yellow, fast flash • Control panel not connected

Table 6-26 Heartbeat LED, product initialization (continued)

Initializing state	Heartbeat LED, normal state	Heartbeat LED, error state
Product operational	Green, heartbeat blink NOTE: If applicable, disk error messages appear on the control-panel display.	Yellow, fast flash • Control panel not connected
49.XX.YY error or initialization freezes	Not applicable	LED off NOTE: An error message (for example, **49.XX.YY**) might appear on the control-panel display. Eventually a formatter connection missing message appears. Turn the power off, and then on again to restart the initialization process. If the error persists, perform a firmware upgrade.
Control panel connection interrupted after the product is operational	Not applicable	Yellow, fast flash • Control panel not connected
Flat flexible cable (FFC) between the formatter and DC controller is not connected or damaged	Not applicable	Yellow, solid • Formatter to DC controller connection failed Check the cable between the formatter and DC controller for damage. Make sure that the cable is fully seated.
Sleep Mode	Green, slow blink	Not applicable
Approaching Sleep Mode	Green, slow blink	Not applicable
Wake up from Sleep Mode	Follows initialization progression	Follows initialization progression
Approaching wake up from Sleep Mode	Follows initialization progression	Follows initialization progression

The following table describes the heartbeat LED operation when the product completes the firmware boot process and is in the **Ready** state.

Table 6-27 Heartbeat LED, product operational

Green	• Normal operation – Formatter is operating normally – Firmware is operating normally – Control panel is connected
Yellow	• Formatter cannot connect to the control panel – Check control panel connections – Verify control panel functionality

Table 6-27 Heartbeat LED, product operational (continued)

Red	• Formatter error or failure – Serial peripheral interface (SPI) flash memory boot error – Power on self test (formatter) failed – Diagnostic (formatter) failed
Off	TIP: The heartbeat LED is off if the power cable is disconnected, the product power switch is in the off position, or the product is in Sleep Mode. • Firmware or system freeze – Check control panel for an error message – Control panel failure NOTE: This condition is not usually caused by a formatter failure. Turn the power off, and then on again. If the error persists, perform a firmware upgrade.

HP Jetdirect LEDs

The embedded HP Jetdirect print server has two LEDs. The yellow LED indicates network activity, and the green LED indicates the link status. A blinking yellow LED indicates network traffic. If the green LED is off, a link has failed.

For link failures, check all the network cable connections. In addition, try to manually configure the link settings on the embedded print server by using the printer control-panel menus.

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

1. From the Home screen on the printer control panel, scroll to and touch the Administration button.
2. Open the following menus:
   - Network Settings
   - Embedded Jetdirect Menu
   - Link Speed
3. Select the appropriate link speed, and then touch the OK button.

Scanner tests (MFP)

Learn about troubleshooting the MFP scanner tests.

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

Document feeder and image scanner replacement parts

If a document feeder or image scanner sensor fails, replace the following assemblies:

- Document feeder sensors

  NOTE: All include a replacement white backing kit.

  – Kit - ADF whole unit Enterprise; B5L47-67906

  – Kit - ADF whole unit Workflow; B5L47-67907

  – Image scanner whole unit; B5L46-67904

Scanner tests

Use these diagnostic tests to manually test the document feeder and scanner sensors.

Scanner test sensors

- ADF paper present
- ADF Y (length)
- ADF jam cover
- ADF paper path deskew
- ADF paper path pick success
- Paper path sensor 1 (unreachable)
- Paper path sensor 2 (unreachable)
- Flatbed Y (length)
- Flatbed cover

Scanner test sensors

1. From the Home screen on the product control panel, scroll to and select the Support Tools item.
2. Open the following menus:
   – Troubleshooting
   – Diagnostic Tests
   – Manual scanner sensor test
3. Select the sensor name on the screen to display a sensor location graphic on the control-panel display.
4. Activate the desired sensor, and then check the control-panel display to verify the sensor state (active or inactive).

- The State virtual LED next to the sensor number and sensor name illuminates green when the sensor is active.
- The Toggle virtual LED next to the sensor number and sensor name illuminates green after the sensor is activated and increments by one each time the sensor is interrupted (activated or deactivated).

  For example, opening the flatbed cover increments the Flatbed cover Toggle item count two times—once when the door is opened, and once when the door is closed.

5. Select the Reset sensors item to reset the Toggle count item.

   -or-

   Touch the Cancel button to exit the Scanner Tests screen, and then touch the Cancel button again to return the Diagnostic Tests menu.

Disable cartridge check

Learn about the disable cartridge check troubleshooting diagnostic.

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

Use this diagnostic test to print internal pages or send an external job to the printer when the toner cartridge is removed or exchanged. Supply errors are ignored while the printer is in this mode.

When the printer is in this mode, access the troubleshooting menus and print internal pages (the print quality pages will be the most useful). This test can be used to isolate problems, such as noise, and to isolate print-quality problems that are related to the toner cartridge.

NOTE: Do not remove or exchange the toner cartridge until after beginning the disable cartridge check diagnostic.

Disable cartridge check from a SFP control panel

1. From the Home screen on the printer control panel, use the arrow keys to navigate to Support Tools, and then press the OK button.
2. Use the arrow buttons to scroll to Troubleshooting, and then press the OK button.
3. Use the arrow buttons to scroll to Diagnostic Tests, and then press the OK button.
4. Select Continue to enter *Maintenance Mode*.
5. Use the arrow buttons to scroll to Disable Cartridge Check, and then press the OK button.

Disable cartridge check from an MFP control panel

1. From the Home screen on the printer control panel, scroll to and touch the Support Tools button.
2. Open the following menus:

– Troubleshooting

– Diagnostic Tests

– Disable Cartridge Check

Print/stop test

Learn about the print/stop test troubleshooting diagnostic.

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

Use this diagnostic test to isolate the cause of problems such as image-formation defects and jams within the engine.

During this test, stop the paper anywhere along the printer paper path. The test can be programmed to stop printing internal pages or an external print job when the paper reaches a certain position. The test can also be programmed to stop from 0 to 60,000 ms. If the timer is set to a value that is greater than the job-print time, the printer can recover in one of two ways.

Printer recovery (print/stop test)

- After the print job is completed press the OK button to return to the Troubleshooting menu before the timer times out.
- After the timer times out, touch the Stop button. Activate the door switch to restart the engine and return it to a normal state.

Common print/stop test timing millisecond (ms) stops

- **600 ms**: The page has passed the registration area and the leading edge is just short of entering the fuser. The image can be seen on the paper but has not fused. If the defect is visible then the cause might be the drum, transfer roller, or a roller prior to, or in, the registration area.
- **1200 ms**: The leading edge is about 18mm (0.71 in) into the top output bin. The image has gone through the fuser. If the defect was not visible prior to the fuser, and is visible after the fuser, then the fuser it is the likely cause of the print quality defect. Inspect the fuser for damage, debris, or labels stuck to the fuser. Replace the fuser. Discuss media specifications and proper care of the fuser with the customer.

Print/stop test from a SFP control panel

1. From the Home screen on the printer control panel, use the arrow buttons to navigate to Support Tools, and then press the OK button.
2. Use the arrow buttons to scroll to Troubleshooting, and then press the OK button.
3. Use the arrow buttons to scroll to Diagnostic Tests, and then press the OK button.
4. Select Continue to enter **Maintenance mode**.
5. Use the arrow buttons to scroll to Print/Stop Test, and then press the OK button.

Print/stop test from an MFP control panel

1. From the Home screen on the printer control panel, scroll to and touch the Support Tools button.
2. Open the following menus:
   – Troubleshooting
   – Diagnostic Tests
   – Print/Stop Test
3. Enter a range, and then touch the OK button.

Individual component diagnostics

Learn about printer individual component diagnostics.

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

Paper path test

Learn about the paper path test troubleshooting diagnostic.

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

This diagnostic test generates one or more test pages. Use these pages to isolate the cause of jams.

To isolate a problem, specify which input tray to use, and specify the number of copies to print. Print multiple copies to help isolate intermittent problems. The following options become available after beginning the diagnostic feature:

- Print Test Page: Run the paper-path test from the default settings: Tray 2, no duplex, and one copy. To specify other settings, scroll down the menu, and select the setting, and then scroll back up and select Print Test Page to start the test.
- Source Tray: Select Tray 1, Tray 2, or the optional tray.
- Number of Copies: Set the numbers of copies to be printed; the choices are 1, 10, 50, 100, or 500.

Paper path test from a SFP control panel

1. From the Home screen on the printer control panel, use the arrow buttons to navigate to Support Tools, and then press the OK button.
2. Use the arrow buttons to scroll to Troubleshooting, and then press the OK button.
3. Use the arrow buttons to scroll to Diagnostic Tests, and then press the OK button.
4. Select Continue to enter **Maintenance mode**.
5. Use the arrow buttons to scroll to Paper Path Test, and then press the OK button.

Paper path test from an MFP control panel

1. From the Home screen on the printer control panel, scroll to and touch the Support Tools button.
2. Open the following menus:
   - Troubleshooting
   - Diagnostic Tests
   - Paper Path Test
3. Select the paper path test options for the test.

Print/stop test

Learn about the print/stop test troubleshooting diagnostic.

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

Use this diagnostic test to isolate the cause of problems such as image-formation defects and jams within the engine.

During this test, stop the paper anywhere along the printer paper path. The test can be programmed to stop printing internal pages or an external print job when the paper reaches a certain position. The test can also be programmed to stop from 0 to 60,000 ms. If the timer is set to a value that is greater than the job-print time, the printer can recover in one of two ways.

Printer recovery (print/stop test)

- After the print job is completed press the OK button to return to the Troubleshooting menu before the timer times out.
- After the timer times out, touch the Stop button. Activate the door switch to restart the engine and return it to a normal state.

Common print/stop test timing millisecond (ms) stops

- **600 ms**: The page has passed the registration area and the leading edge is just short of entering the fuser. The image can be seen on the paper but has not fused. If the defect is visible then the cause might be the drum, transfer roller, or a roller prior to, or in, the registration area.
- **1200 ms**: The leading edge is about 18mm (0.71 in) into the top output bin. The image has gone through the fuser. If the defect was not visible prior to the fuser, and is visible after the fuser, then the fuser it is the likely cause of the print quality defect. Inspect the fuser for damage, debris, or labels stuck to the fuser. Replace the fuser. Discuss media specifications and proper care of the fuser with the customer.

Print/stop test from a SFP control panel

1. From the Home screen on the printer control panel, use the arrow buttons to navigate to Support Tools, and then press the OK button.
2. Use the arrow buttons to scroll to Troubleshooting, and then press the OK button.
3. Use the arrow buttons to scroll to Diagnostic Tests, and then press the OK button.
4. Select Continue to enter **Maintenance mode**.
5. Use the arrow buttons to scroll to Print/Stop Test, and then press the OK button.

Print/stop test from an MFP control panel

1. From the Home screen on the printer control panel, scroll to and touch the Support Tools button.
2. Open the following menus:

- Troubleshooting
- Diagnostic Tests
- Print/Stop Test

3. Enter a range, and then touch the OK button.

Paper path sensors test

Learn about the paper path sensor test troubleshooting diagnostic.

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

Paper path sensor test from a SFP control panel

1. From the Home screen on the printer control panel, use the arrow buttons to navigate to Support Tools, and then press the OK button.
2. Use the arrow buttons to scroll to Troubleshooting, and then press the OK button.
3. Use the arrow buttons to scroll to Diagnostic Tests, and then press the OK button.
4. Select Continue to enter **Maintenance mode**.
5. Use the arrow buttons to scroll to Paper Path Sensors, and then press the OK button.

NOTE: Exiting the Paper Path Sensors menu and then reentering the test will clear the test values from the previous test.

The menu list of sensors and switches for the Paper Path Sensors test varies depending on which optional accessories are installed.

For trays other than Tray 1 or Tray 2, the tray number associated with a sensor or switch depends on the number of accessories installed.

Paper path sensor test from an MFP control panel

1. From the Home screen on the printer control panel, scroll to and touch the Support Tools button.
2. Open the following menus:
   - Troubleshooting
   - Diagnostic Tests
   - Paper Path Sensors
3. Touch Start to run the test.

NOTE: Exiting the Paper Path Sensors menu and then reentering the test will clear the test values from the previous test.

The menu list of sensors and switches for the Paper Path Sensors test varies depending on which optional accessories are installed.

For trays other than Tray 1 or Tray 2, the tray number associated with a sensor or switch depends on the number of accessories installed.

Table 6-28 Paper-path sensors diagnostic tests

Sensor	Abbreviation	Description	Part number
Tray 3 feed sensor (optional accessory)	SR21	Paper feed assembly	RM2-5145-000CN
Registration sensor	SR6	Registration assembly	RM2-0093-000CN (M553n) RM2-0018-000CN (M522, M553dn, M553x, M577, M578, E55040. E57540)
Fuser loop 1 sensor	PS1	Fuser	B5L35-67902 (110 V) B5L36-67902 (220 V)
Front media width sensor	SR13	Registration assembly	RM2-0093-000CN (M553n) RM2-0018-000CN (M522, M553dn, M553x, M577, M578, E55040. E57540)
Rear media width sensor	SR14	Registration assembly	RM2-0093-000CN (M553n) RM2-0018-000CN (M522, M553dn, M553x, M577, M578, E55040. E57540)
Fuser pressure release sensor	SR11	Fuser	B5L35-67902 (110 V) B5L36-67902 (220 V)
Fuser output sensor	SR9	Fuser	B5L35-67902 (110 V) B5L36-67902 (220 V)
Developer alienation sensor	SR4	Main drive assembly	B5L25-67902
Output bin full sensor	SR10	Paper delivery assembly	RM2-0092-000CN (M553n) RM2-0016-000CN (M522, M553dn, M553x, M577, M578, E55040. E57540)

Manual sensors test

Learn about the manual sensor test troubleshooting diagnostic.

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

Manual sensor test from a SFP control panel

1. From the Home screen on the printer control panel, use the arrow buttons to navigate to Support Tools, and then press the OK button.
2. Use the arrow buttons to scroll to Troubleshooting, and then press the OK button.
3. Use the arrow buttons to scroll to Diagnostic Tests, and then press the OK button.
4. Select Continue to enter **Maintenance mode**.
5. Use the arrow buttons to scroll to Manual Sensor Test, and then press the OK button.
6. Activate the desired sensor, and then check the control-panel display to verify the sensor state (active or inactive).
   - The State virtual LED next to the sensor number and sensor name illuminates green when the sensor is active.
   - The Toggle virtual LED next to the sensor number and sensor name illuminates green after the sensor is activated and increments by one each time the sensor is interrupted (activated or deactivated).

Manual test from an MFP control panel

1. From the Home screen on the printer control panel, scroll to and touch the Support Tools button.
2. Open the following menus:
   - Troubleshooting
   - Diagnostic Tests
   - Manual Sensor Test
3. Activate the desired sensor, and then check the control-panel display to verify the sensor state (active or inactive).
   - The State virtual LED next to the sensor number and sensor name illuminates green when the sensor is active.
   - The Toggle virtual LED next to the sensor number and sensor name illuminates green after the sensor is activated and increments by one each time the sensor is interrupted (activated or deactivated).

NOTE: The following table describes the sensor tests available with an optional 1x550-sheet paper feeder installed.

For trays other than Tray 1 or Tray 2, the tray number associated with a sensor or switch depends on the number of accessories installed.

Table 6-29 Manual sensor diagnostic tests

Sensor	Abbreviation	Description	Part number
Front door opening/closing sensor	SW4	Switch PCA assembly	RM2-7133-000CN
Right door opening/closing sensor	SW3	Switch button assembly	WC2-5806-000CN

Table 6-29 Manual sensor diagnostic tests (continued)

Sensor	Abbreviation	Description	Part number
Tray 3 feed sensor (optional accessory)	SR21	Paper feed assembly	RM2-5145-000CN
Registration sensor	SR6	Registration assembly	RM2-0093-000CN (M553n) RM2-0018-000CN (M522, M553dn, M553x, M577, M578, E55040. E57540)
Fuser loop 1 sensor	PS1	Fuser	B5L35-67902 (110 V) B5L36-67902 (220 V)
Front media width sensor	SR13 SR13N (M553n)	Paper pickup assembly	RM2-6556-000CN
Rear media width sensor	SR14 SR14N (M553n)	Paper pickup assembly	RM2-6556-000CN
Fuser pressure release sensor	SR11	Fuser	B5L35-67902 (110 V) B5L36-67902 (220 V)
Fuser output sensor	SR9	Fuser	B5L35-67902 (110 V) B5L36-67902 (220 V)
Output bin full sensor	SR10	Paper delivery assembly	RM2-0092-000CN (M553n) RM2-0016-000CN (M522, M553dn, M553x, M577, M578, E55040. E57540)

Tray/bin manual sensors test

Learn about the tray/bin manual sensor test troubleshooting diagnostic.

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

Tray/bin manual sensor test from a SFP control panel

1. From the Home screen on the printer control panel, use the arrow buttons to navigate to Support Tools, and then press the OK button.
2. Use the arrow buttons to scroll to Troubleshooting, and then press the OK button.
3. Use the arrow buttons to scroll to Diagnostic Tests, and then press the OK button.
4. Select Continue to enter **Maintenance mode**.
5. Use the arrow buttons to scroll to Tray/bin Manual Sensor Test, and then press the OK button.
6. Activate the desired sensor, and then check the control-panel display to verify the sensor state (active or inactive).

– The State virtual LED next to the sensor number and sensor name illuminates green when the sensor is active.

– The Toggle virtual LED next to the sensor number and sensor name illuminates green after the sensor is activated and increments by one each time the sensor is interrupted (activated or deactivated).

Tray/bin manual test from an MFP control panel

1. From the Home screen on the printer control panel, scroll to and touch the Support Tools button.
2. Open the following menus:
   - Troubleshooting
   - Diagnostic Tests
   - Tray/bin Manual Sensor Test
3. Activate the desired sensor, and then check the control-panel display to verify the sensor state (active or inactive).
   - The State virtual LED next to the sensor number and sensor name illuminates green when the sensor is active.
   - The Toggle virtual LED next to the sensor number and sensor name illuminates green after the sensor is activated and increments by one each time the sensor is interrupted (activated or deactivated).

NOTE: The following table describes the sensor tests available with an optional 1x550-sheet paper feeder installed.

For trays other than Tray 1 or Tray 2, the tray number associated with a sensor or switch depends on the number of accessories installed.

Table 6-30 Tray/bin manual sensor diagnostic tests

Sensor	Abbreviation	Description	Part number
Tray 2 paper sensor	SR5	Switch button assembly	WC2-5806-000CN
Tray 1 paper sensor	SR8	Right door assembly	RM2-0019-000CN
Cassette media out sensor	SR12	Paper pickup assembly	RM2-6556-000CN
Tray 3-X media out sensor (optional accessories)	SR20	Paper pickup assembly	RM2-5154-000CN
Tray 3-X cassette sensor (optional accessories)	SW21	Switch button assembly	WC2-5806-000CN
Tray 3-X feed sensor (optional accessories)	SR21	Paper feeder assembly	RM2-5145-000CN
Right door sensor (optional accessories)	SW20	Right door assembly	RM2-5146-000CN
Output bin full sensor	SR10	Paper delivery assembly	RM2-0092-000CN (M553n) RM2-0016-000CN (M522, M553dn, M553x, M577, M578, E55040. E57540)

Component test

Learn about the component test troubleshooting diagnostic.

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

NOTE: The front door or right side door interlocks must be defeated to run the component tests. Some tests might require that the ITB and toner cartridges be removed. A control-panel display prompt appears indicate removing some, or all of the cartridges, during certain tests.

Component test from a SFP control panel

1. From the Home screen on the printer control panel, use the arrow buttons to navigate to Support Tools, and then press the OK button.
2. Use the arrow buttons to scroll to Troubleshooting, and then press the OK button.
3. Use the arrow buttons to scroll to Diagnostic Tests, and then press the OK button.
4. Select Continue to enter **Maintenance mode**.
5. Use the arrow buttons to scroll to Component Test, and then press the OK button.
6. Select a component, and then select Start to begin the test.
7. Select Stop to end the test

Component test from an MFP control panel

1. From the Home screen on the printer control panel, scroll to and touch the Support Tools button.
2. Open the following menus:
   - Troubleshooting
   - Diagnostic Tests
   - Component Test
3. Select the component test options for the test.

NOTE: The menu list of components for the Component Test varies depending on which optional accessories are installed.

The table in this section describes the components available with an optional 1x550-sheet paper feeder installed.

For trays other than Tray 1 or Tray 2, the tray number associated with a sensor or switch depends on the number of accessories installed.

Table 6-31 Component test details

Component test	Item tested	Part number	Comments
Drum motors	M1/M2/M3	RM2-0078-000CN	Activates the specified motor.

Table 6-31 Component test details (continued)

Component test	Item tested	Part number	Comments
Fuser drive assembly	M4	RM2-0091-010CN (M553n) RM2-0009-010CN (M522, M553dn, M553x, M577, M578, E55040. E57540)	Activates the specified motor.
Fuser pressure release motor	M6	RK2-6027-000CN	Activates the specified motor.
Tray 2 pickup motor	M5	RM2-0008-000CN Pickup drive assembly	Activates the specified motor.
Tray 3 pickup motor (optional accessory)	M20	RM2-5145-000CN Paper feed assembly	Activates the specified motor.
Duplexer pickup motor (duplex models)	M8	RM2-0006-000CN Duplex drive assembly	Activates the specified motor.
Tray 1 pickup solenoid	SL2	RM2-6556-000CN Paper pickup assembly	Activates the specified solenoid.
Tray 2 pickup solenoid	SL1	RM2-0090-000CN (M553n) RM2-0022-000CN (M522, M553dn, M553x, M577, M578, E55040. E57540) Tray 1 roller alienation (part of secondary transfer assembly)	Activates the specified solenoid.
Tray 3-X pickup solenoid (optional accessories)	Not applicable	RM2-5154-000CN Paper pickup assembly	Activates the specified solenoid.
Duplex switchback solenoid (duplex models)	SL3	RM2-0006-000CN Duplex drive assembly	Activates the specified solenoid.
Feed roller clutch	CL1	RM2-0010-000CN Lifter drive assembly	Activates the specified clutch.
Laser Scanner motor	M7	RM2-6545-010CN Laser/scanner assembly	Activates the specified motor.

Diagrams: Block diagrams

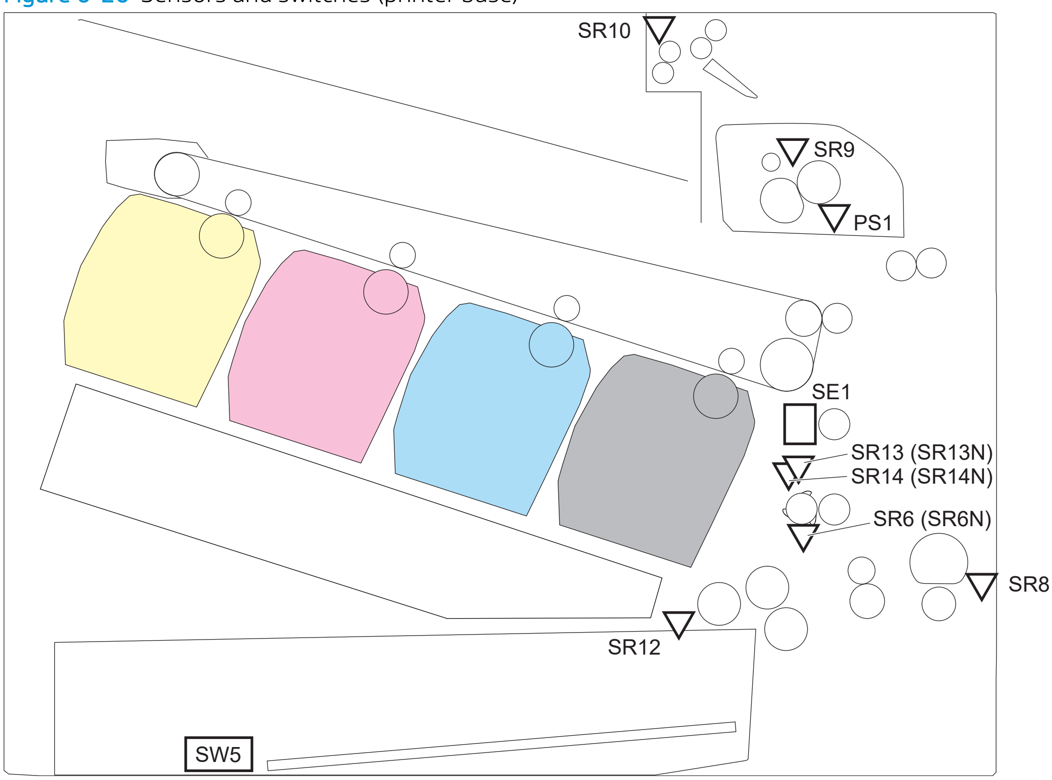
View block diagrams for the printer.

Sensors and switches

View document feeder, printer, and paper feeder sensor and switch diagrams.

Sensors and switches (printer base)

Figure 6-26 Sensors and switches (printer base)



Item	Description	Item	Description
SR6	Top-of-Page (TOP) sensor (duplex models)	SR13N	Media width (front, simplex models)
SR6N	Top-of-Page (TOP) sensor (simplex models)	SR14	Media width (rear, duplex models)
SR8	Tray 1 (multipurpose tray) media-out sensor	SR14N	Media width (rear, simplex models)
SR9	Fuser delivery sensor	PS1	Loop sensor
SR10	Output bin media-full sensor	SE1	Media sensor
SR12	Tray 2 (cassette) media-out sensor	SW5	Tray 2 (cassette) detection switch
SR13	Media width (front, duplex models)		

Sensors and switches (550-sheet paper feeder)

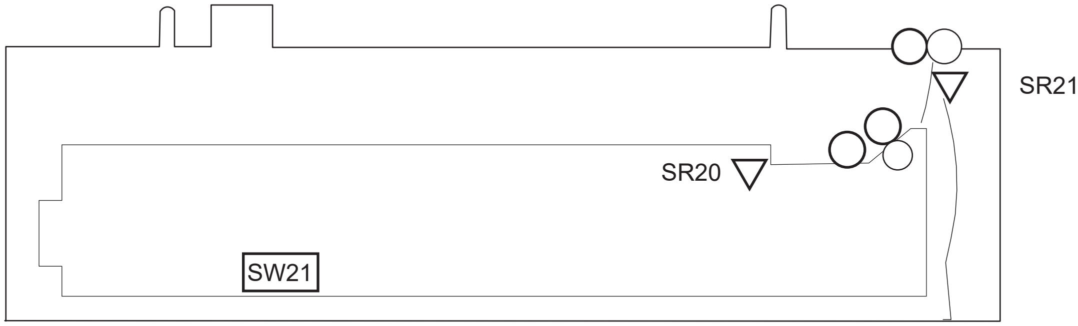
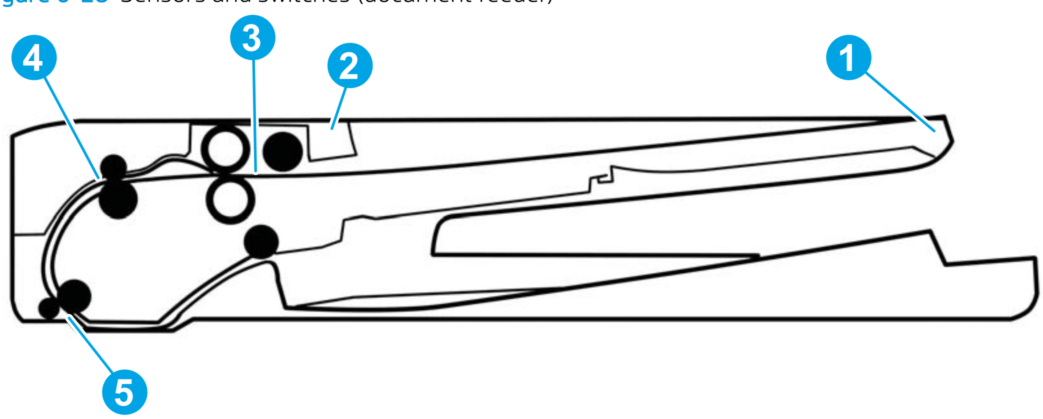


Figure 6-27 Sensors and switches (550-sheet paper feeder)

Item	Description
SR20	Tray 3/4/5(cassette) media-out sensor
SR21	Paper feeder media feed sensor
SW21	Tray 3/4/5(cassette) detection switch

Sensors and switches (document feeder)

Figure 6-28 Sensors and switches (document feeder)



Item	Description
1	Length sensor
2	Jam cover sensor
3	Paper present sensor
4	Deskew sensor
5	Paper path sensor

Cross section diagrams

View printer and paper feeder cross section diagrams.

Cross-sectional view of the printer

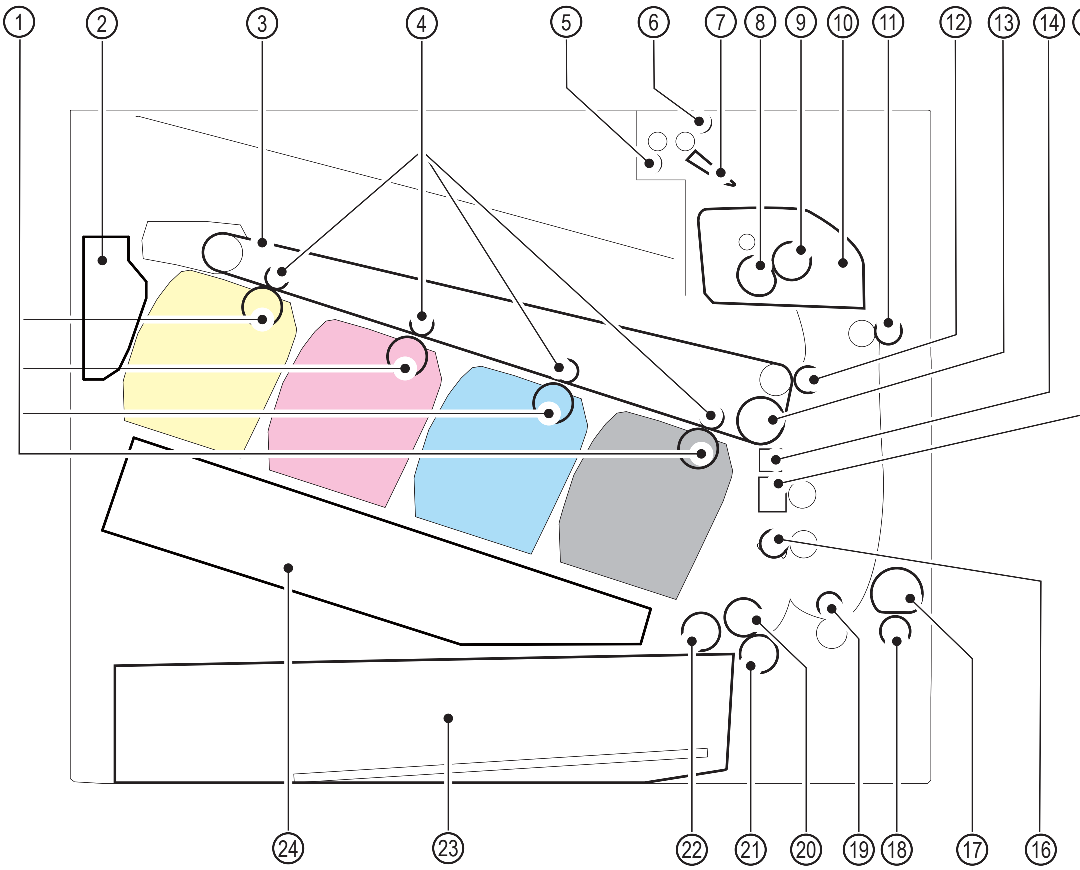
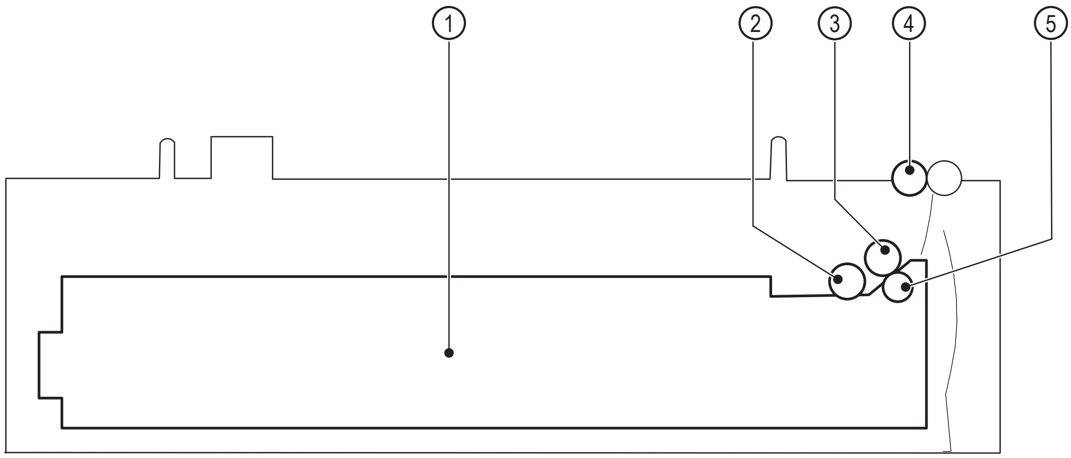


Figure 6-29 Cross-sectional view of the printer

Item	Description	Item	Description
1	Photosensitive drum	13	ITB drive roller
2	Toner collection unit (TCU)	14	Registration density sensor
3	Intermediate transfer belt (ITB)	14	Media sensor
4	Primary transfer (T1) roller	16	Registration roller
5	Output roller	17	Tray 1 (multipurpose tray) pickup roller
6	Duplex switchback roller (duplex models)	18	Tray 1 (multipurpose tray) separation roller
7	Duplex flapper (duplex models)	19	Duplex re-pickup roller (duplex models)
8	Fuser film	20	Tray 2 feed roller
9	Pressure roller	21	Tray 2 separation roller
10	Fuser	22	Tray 2 pickup roller
11	Duplex feed roller (duplex models)	23	Tray 2
12	Secondary transfer (T2) roller	24	Laser/scanner assembly

Cross-sectional view of the 550-sheet paper feeder

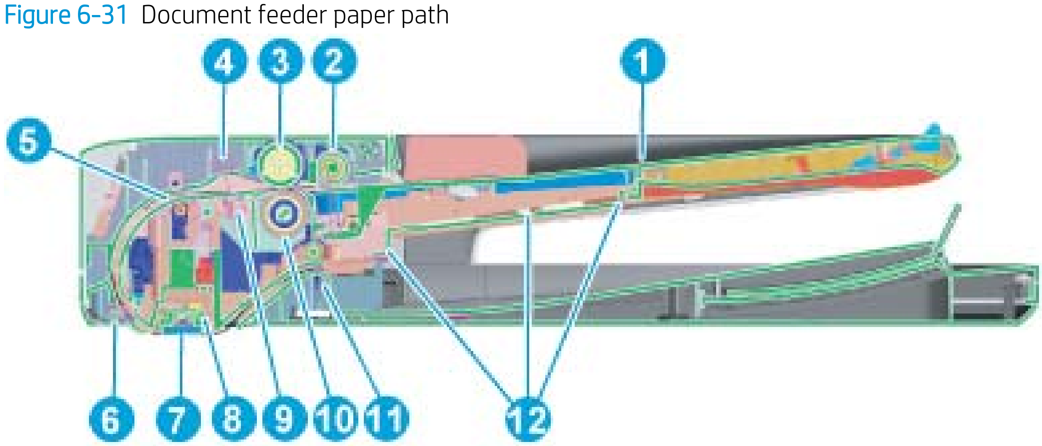
Figure 6-30 Cross-sectional view of the 550-sheet paper feeder



Item	Description
1	Tray 3/4/5
2	Tray 3/4/5 pickup roller
3	Tray 3/4/5 feed roller
4	Tray 3/4/5 feed roller
5	Tray 3/4/5 separation roller

Cross-sectional view of the document feeder

Figure 6-31 Document feeder paper path



Item	Description	Item	Description
1	Input tray	7	Front-side scan module location NOTE: This scan module (document feeder glass) is located in the scanner base and is not pictured.
2	Pre-pick roller	8	Back-side scan module
3	Pick roller	9	ADF pick success transmitter

Item	Description	Item	Description
4	ADF pick success receiver	10	Separator roller
5	Deskew drive roller	11	Exit drive roller
6	Prescan drive roller	12	Lift plate

Printed circuit assembly (PCA) connector locations

View printed circuit assembly (PCA) diagrams.

DC controller PCA connections

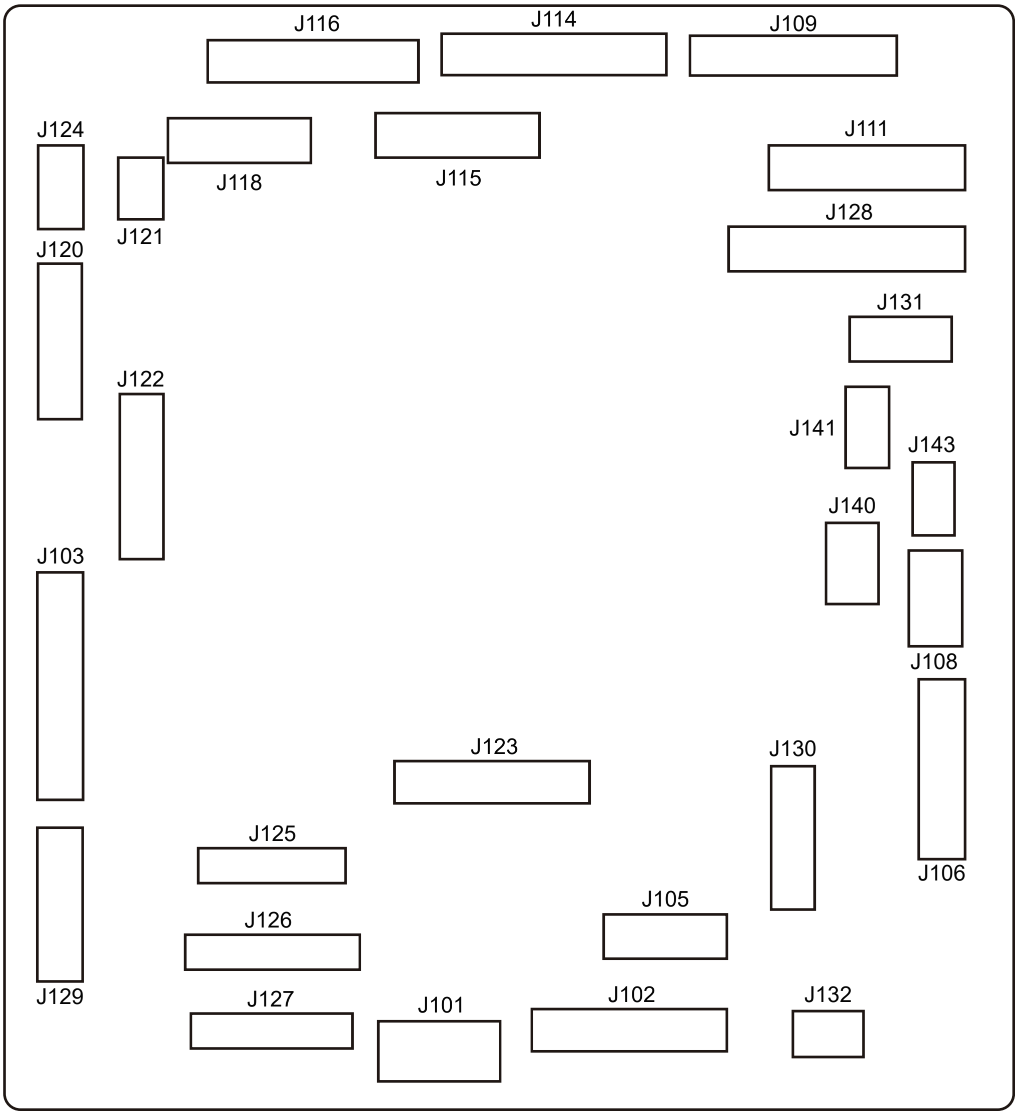


Figure 6-32 DC controller PCA connections

Item	Description	Item	Description
J101	Low-voltage power supply assembly (LVPS) 24V interlock switch	J122	Tray 2 (cassette) pickup clutch (CL1) Tray 1 (multipurpose tray pickup solenoid (SL2) Tray 2 (cassette) detection switch (SW5) Environmental sensor Tray 1 (multipurpose tray) media-out sensor (SR8)
J102	LVPS	J123	Upper cartridge guide switch

Item	Description	Item	Description
J103	Scanner motor (M7) Memory chip, toner cartridges Paper feeder	J124	Media sensor (SE1)
J105	LVPS	J125	High-voltage power supply D (HVPSD)
J106	Formatter	J126	Y/M laser assembly
J108	Empty	J127	C/K laser assembly
J109	High-voltage power supply T (HVPST)	J128	Fuser power supply (FPS)
J111	Drum motor 1 (M1) Drum motor 2 (M2)	J129	Y/M/C/K toner level sensor
J114	Fuser motor (M4) Primary transfer (T1) roller alienation solenoid Drum home position sensor 1 Drum home position sensor 2 Drum home position sensor 3	J130	Drum motor 3 (M3) Developer home position sensor
J115	Right door switch Power supply switch Fuser pressure release sensor Pre-exposure LED 3 - 4	J131	Output bin media-full sensor (SR10) High-voltage power supply T (HVPST)
J116	Fuser	J132	Developer alienation (disengagement) motor (M6)
J118	Duplex re-pickup clutch (CL2; duplex models only) Top-of-Page (TOP) sensor (SR6, duplex; SR6N, simplex) Media width sensor, front (SR13, duplex; SR13N simplex) Media width sensor, rear (SR14, duplex; SR14N simplex)	J140	Empty
J120	Registration density sensor, front Registration density sensor, rear	J141	Empty
J121	Tray 2 (cassette) media-out sensor	J143	Empty

Formatter PCA connections

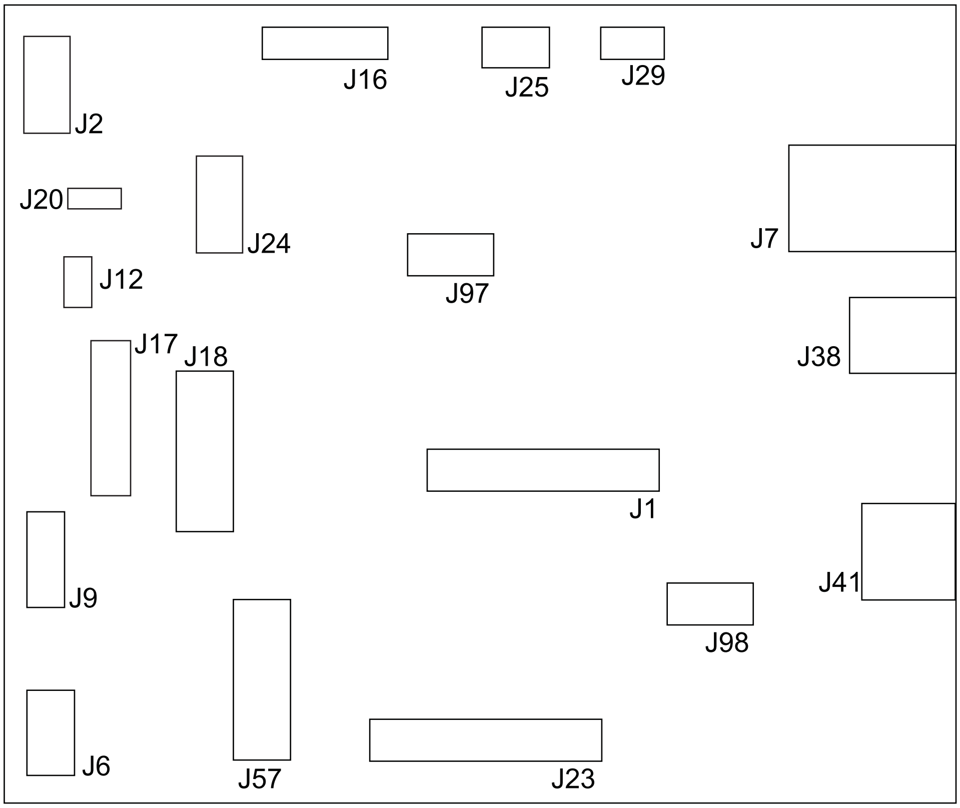
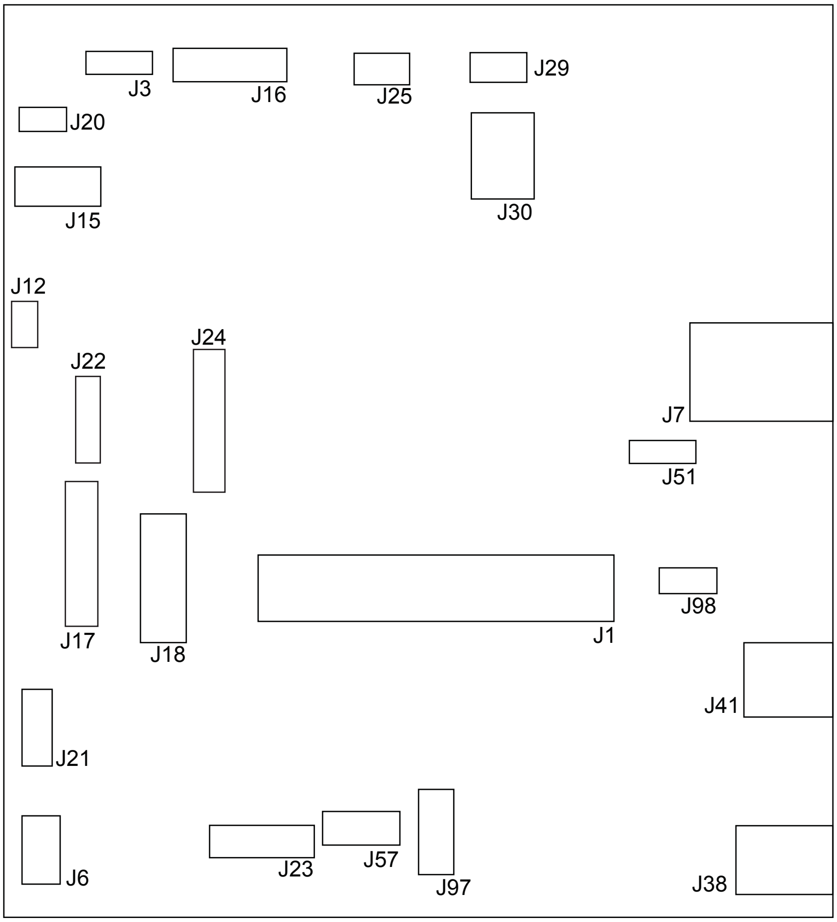


Figure 6-33 Formatter PCA connections (M552/M553/M554/M555/E55040)

Item	Description	Item	Description
J1	Slim DIMM	J23	Not used
J2	Control panel (touchscreen models)	J24	Not used
J6	Formatter Power Cable	J25	Wireless cable
J7	Network LAN	J29	IOD
J9	AA module power cable	J38	USB-device
J12	HIP/AA USB	J42	USB-host
J16	Control panel power cable	J57	BASH
J17	DC controller (flat cable)	J97	Embedded MultiMedia Card (eMMC)
J18	Hard-disk drive (optional HDD)	J98	Trusted Platform Module NOTE: The TPM is factory installed for the M554, M555, and M578 printers and is not field replaceable. It is optional for all other models.
J20	Walkup USB		

Figure 6-34 Formatter PCA connections (M577/M578/E57540)

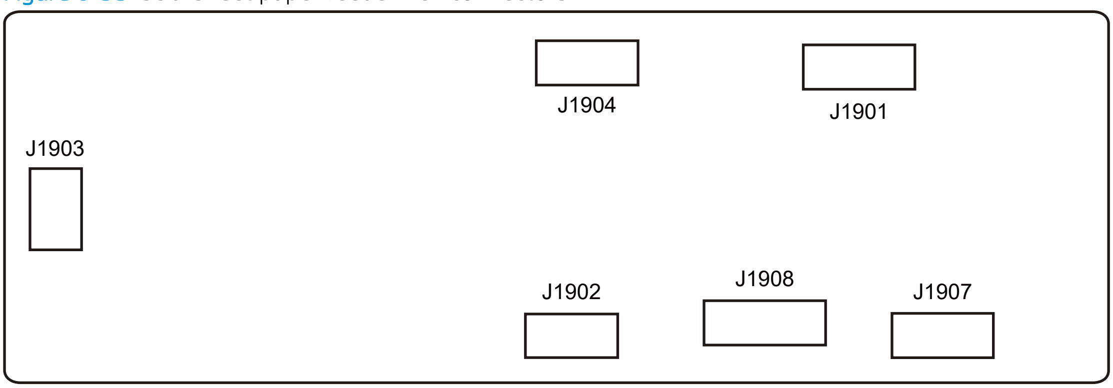


Item	Description	Item	Description
J1	DIMM	J23	Not used
J3	Dedicated NFC (not used)	J24	Not used
J6	Formatter power cable	J25	Wireless cable
J7	Network LAN	J29	Island of Data (IOD)
J12	HIP	J30	Control panel HDMI
J15	Fax	J38	USB-device
J16	Control panel sideband cable	J41	USB-host
J17	DC controller (flat cable)	J51	BASH
J18	Hard-disk drive	J57	Debug
J20	Walkup USB	J97	Embedded MultiMedia Card (eMMC)

Item	Description	Item	Description
J21	Accessible Architecture (AA)	J98	Trusted Platform Module NOTE: The TPM is factory installed for the M554, M555, and M578 printers and is not field replaceable. It is optional for all other models.
J22	Scanner HDMI		

550-sheet paper feeder PCA connectors

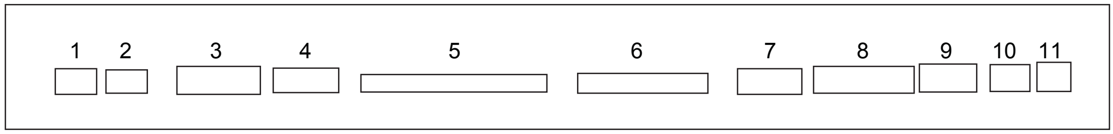
Figure 6-35 550-sheet paper feeder PCA connectors



Item	Description	Item	Description
J1901	DC controller PCA for paper feeder	J1904	Tray 3/4/5 (cassette) media-out sensor (SR20) Feed senor (SR21)
J1902	Tray 3/4/5 (cassette) pickup clutch (CL20) Right door switch Tray 3/4/5 (cassette) detection switch (SW21)	J1907	Paper feeder
J1903	Feed motor (M20)	J1908	Empty

Scanner control board PCA connectors

Figure 6-36 Scanner control board PCA connectors



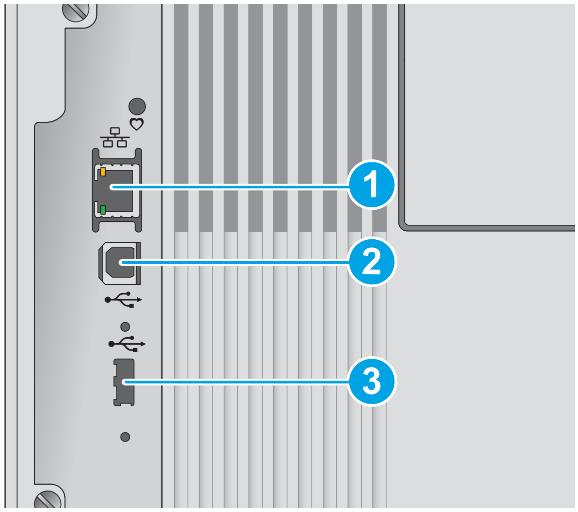
Item	Description	Item	Description
1	Stapler power	7	Document feeder motors (feed and deskew)
2	Scan control board power (24V)	8	Document feeder sensors (prescan, media present, and top hatch)
3	PAM to SCAM communication (HDMI)	9	Document feeder ultrasonic sensor receiver and deskew sensor
4	Image scanner sensors (paper feeder open and image scanner media length) and cave LED	10	Document feeder letter/legal input tray sensor
5	Image scanner (S1) FFC (scanner data and image scanner motor)	11	Document feeder ultrasonic sensor transmitter
6	Document feeder (S2) FFC (scanner data)		

Diagrams: External plug and port locations

View printer external plugs and ports diagrams.

External plug and port locations

Figure 6-37 External plug and port locations



Item	Description
1	Local area network (LAN) Ethernet (RJ-45) network port
2	Hi-Speed USB 2.0 printing port
3	USB port for connecting external USB devices (this port might be covered) NOTE: For Walkup USB printing, use the USB port near the control panel.

Diagrams: Major component locations

View printer major component locations diagrams.

Major components (printer base)

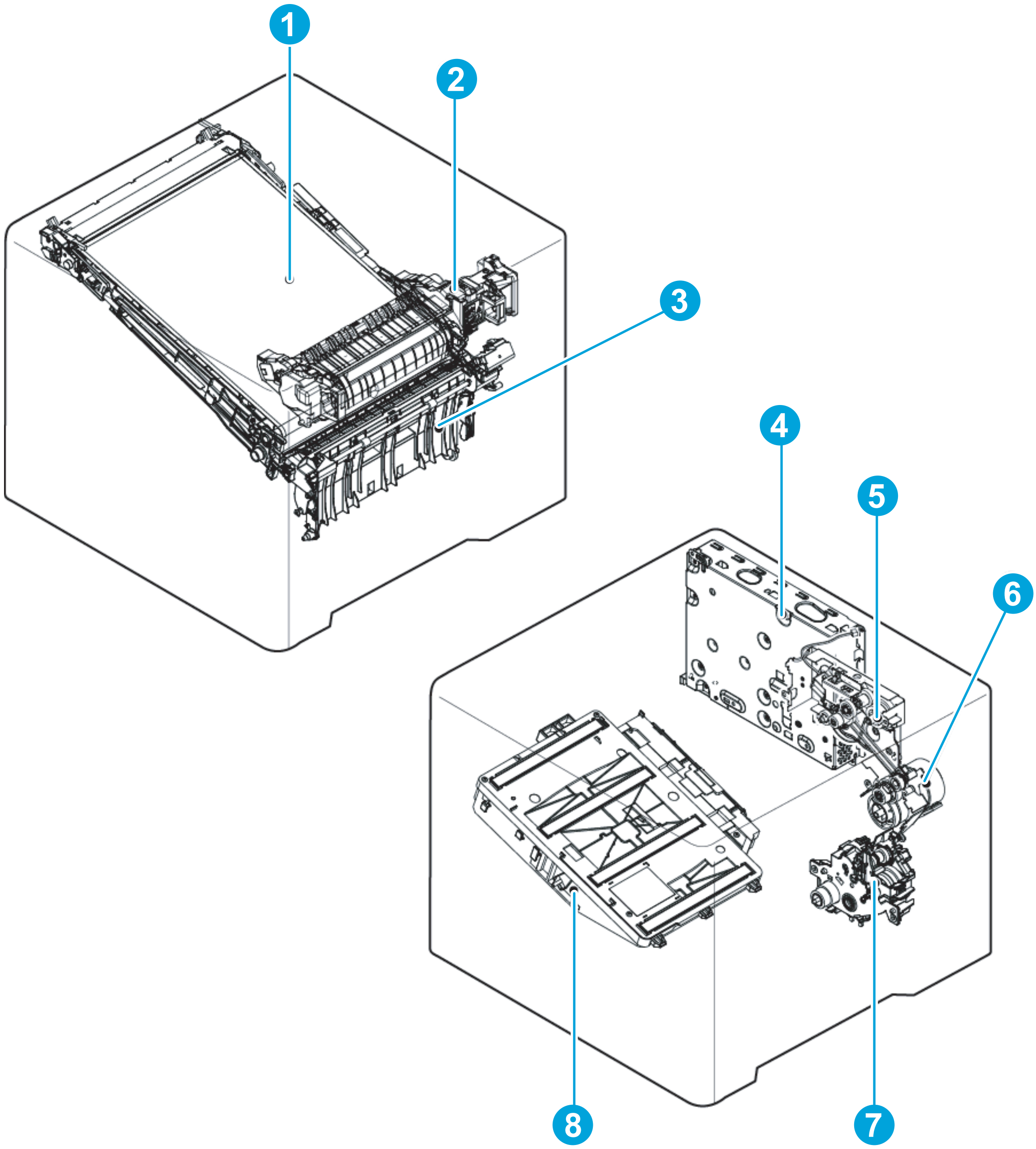
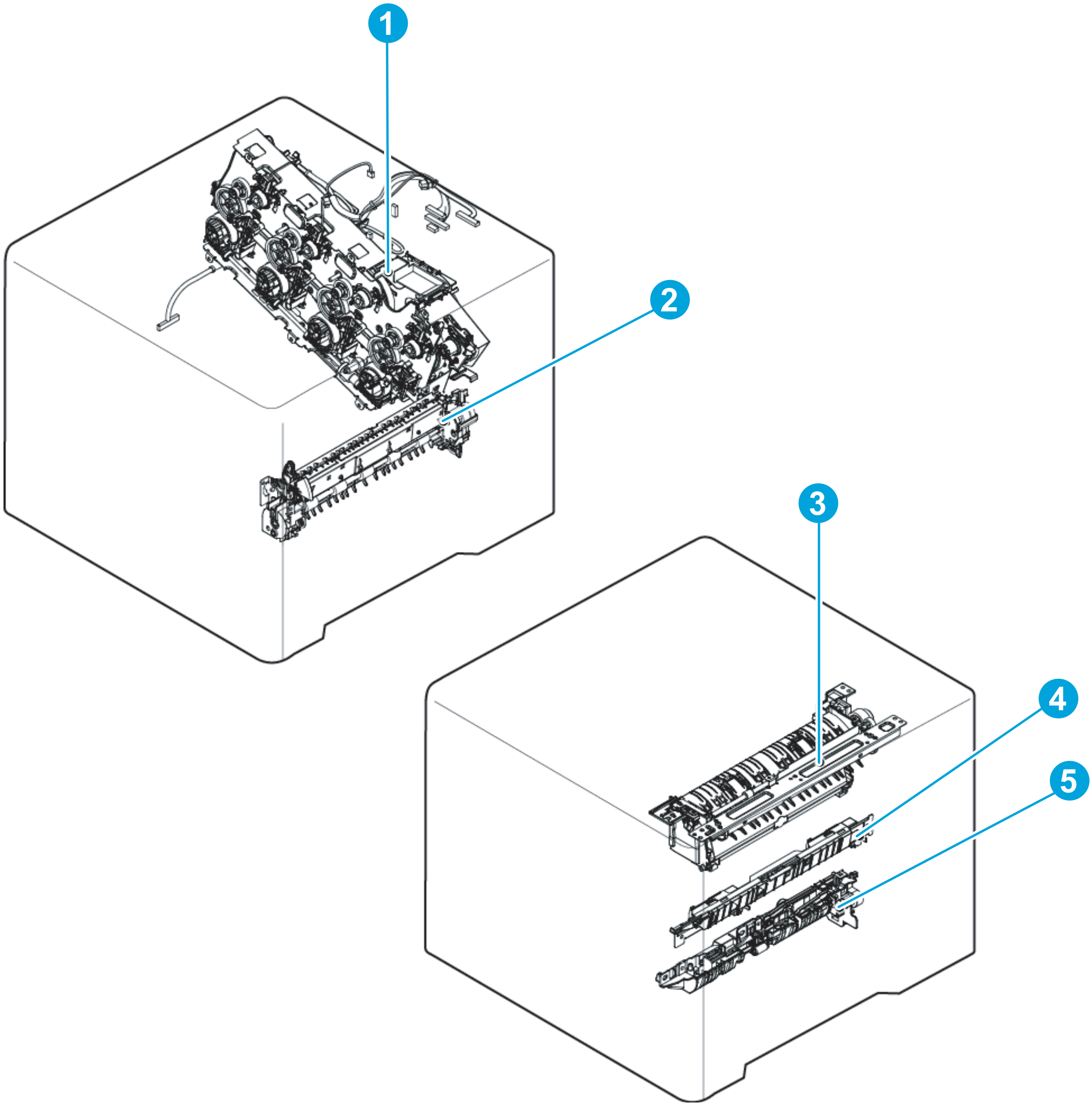


Figure 6-38 Major components (printer base 1 of 2)

Item	Description	Item	Description
1	Intermediate transfer belt (ITB)	5	Fuser drive assembly
2	Fuser	6	Pickup drive assembly
3	Secondary transfer (T2) roller assembly	7	Lifter drive assembly
4	Formatter case assembly	8	Laser/scanner assembly

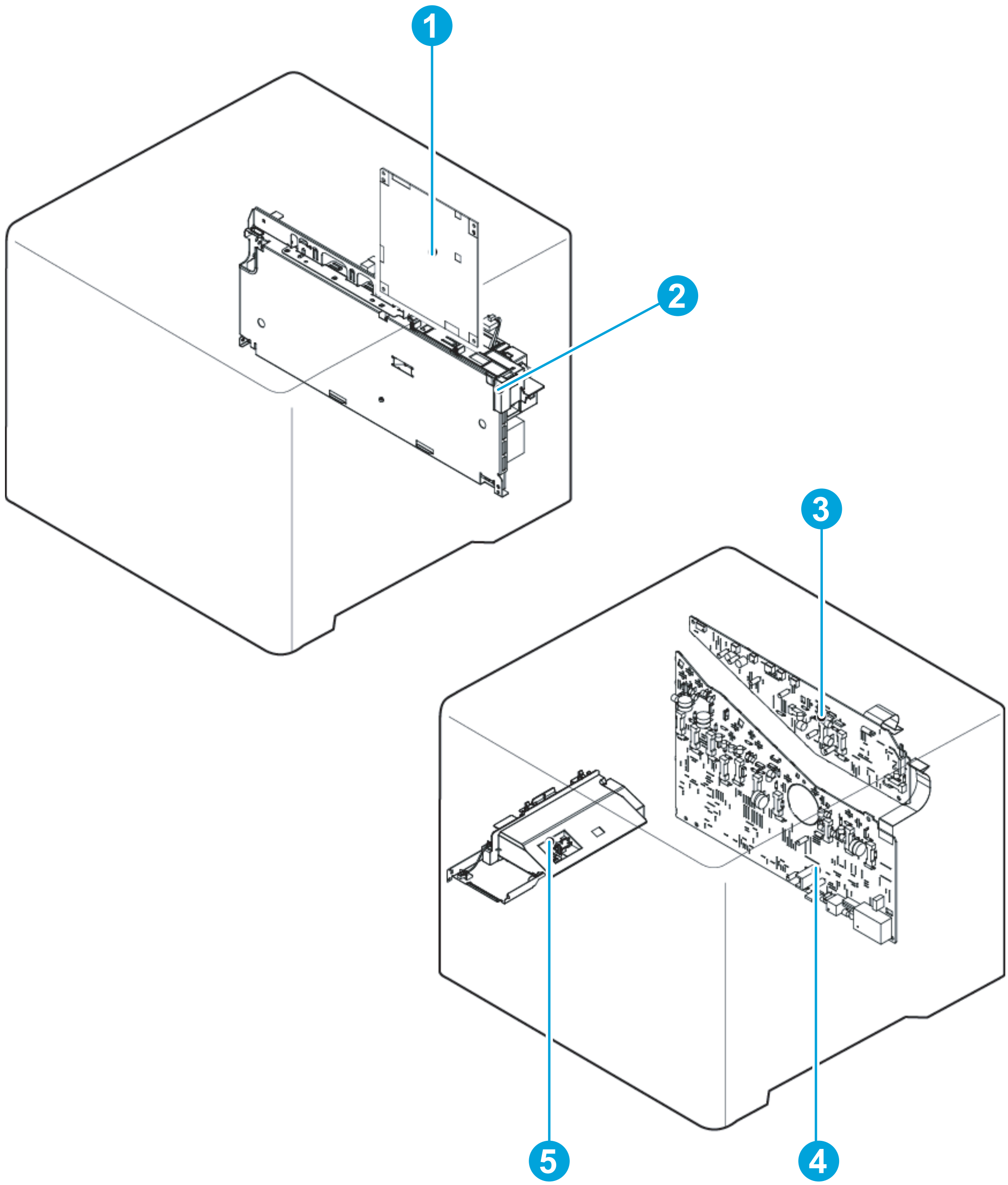
Figure 6-39 Major components (printer base 2 of 2)



Item	Description	Item	Description
1	Main drive assembly	4	Registration density sensor assembly
2	Registration assembly	5	Cassette pickup assembly
3	Delivery assembly		

Printed circuit assemblies (printer base)

Figure 6-40 Printed circuit assemblies (printer base)

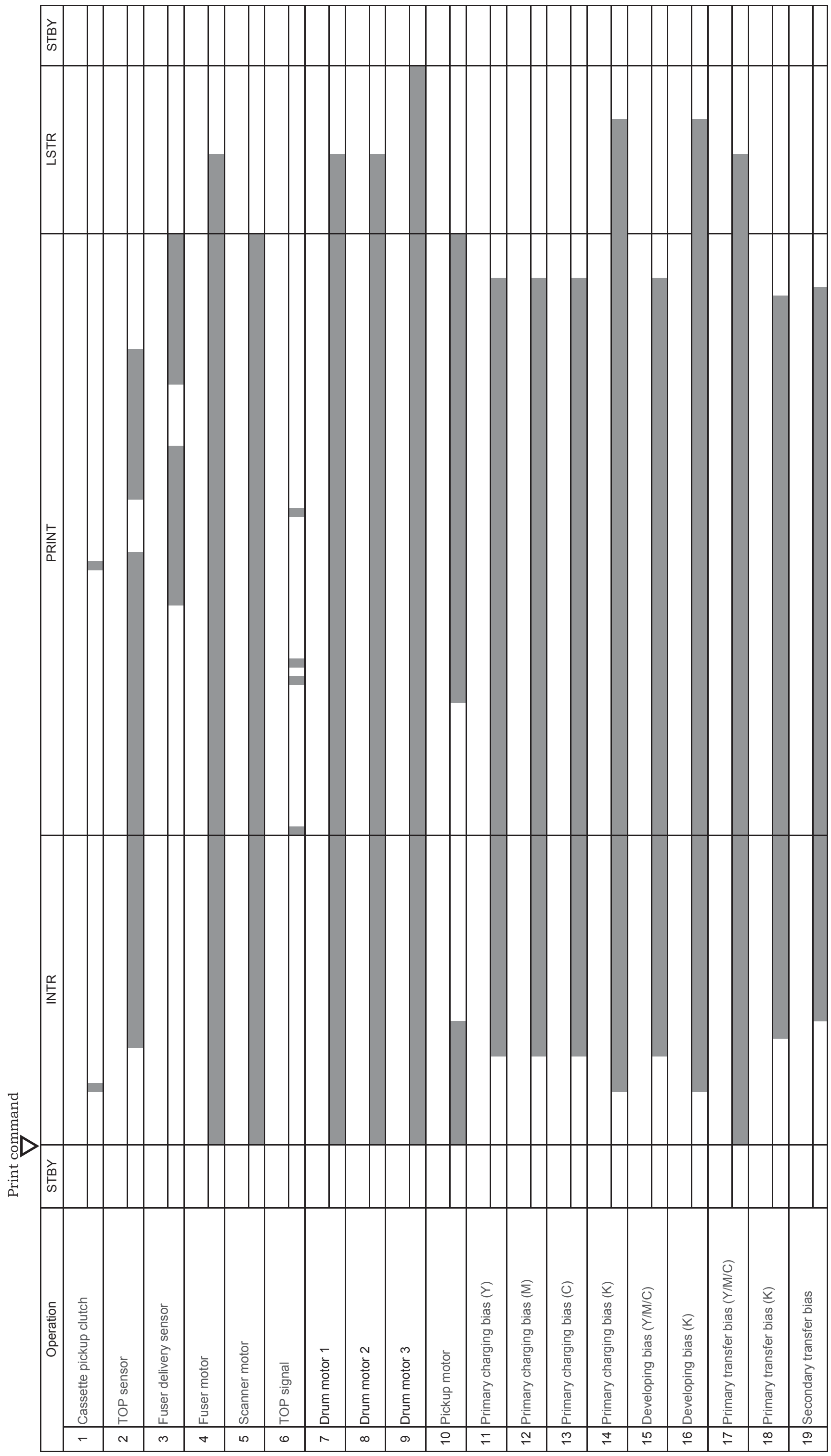


Item	Description	Item	Description
1	DC controller	4	High-voltage power supply D (HVPSD)
2	Low-voltage power supply	5	Fuser power supply (FPS)
3	High-voltage power supply T (HVPST)	Not shown	Formatter NOTE: Located to the right of the DC controller.

Diagrams: General timing chart

View the printer timing chart diagram.

Figure 6-41 Timing chart



Diagrams: General circuit diagrams

View the printer circuit diagram.

Figure 6-42 General circuit diagram (base printer 1 of 2)

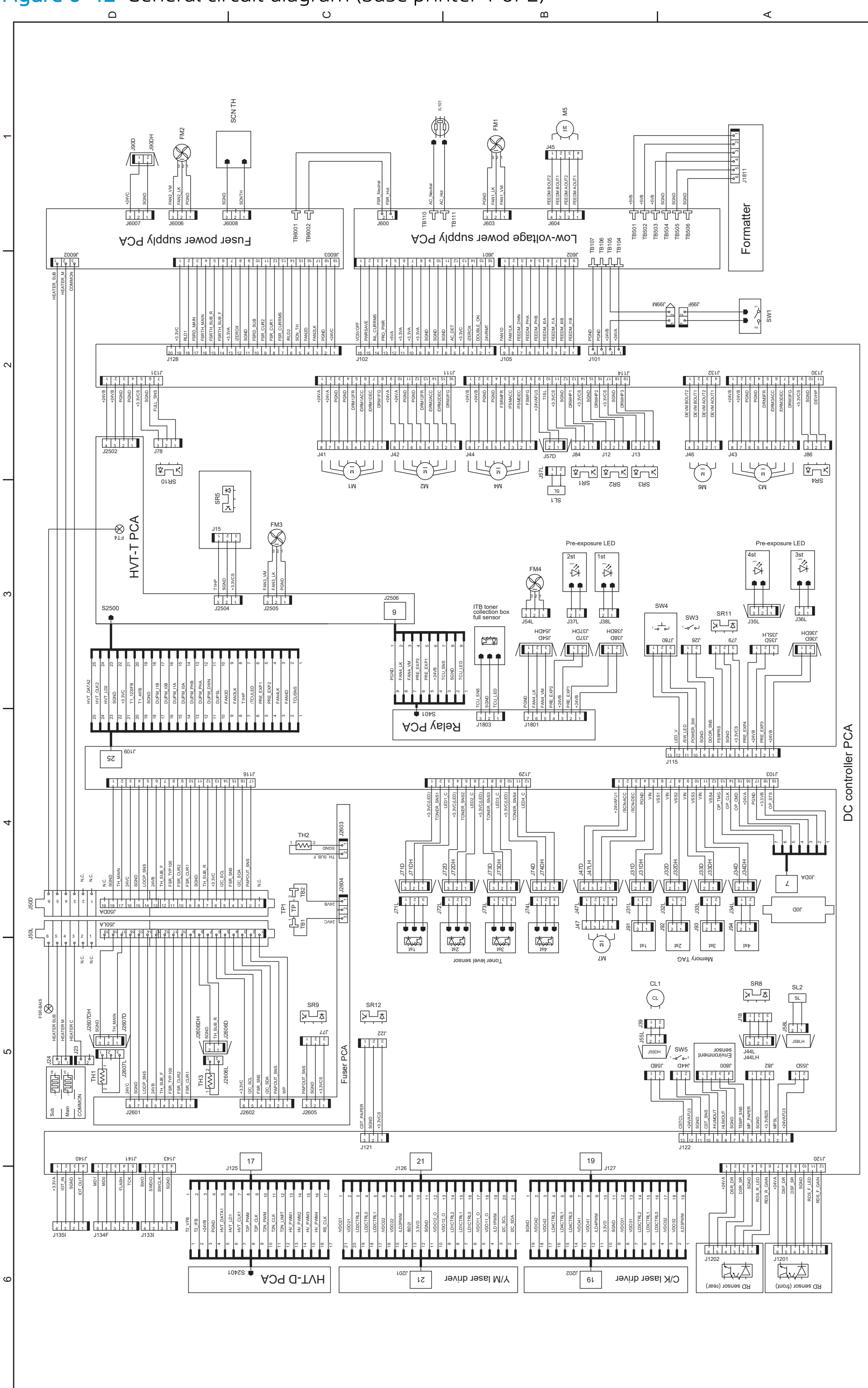


Figure 6-43 General circuit diagram (base printer 2 of 2)

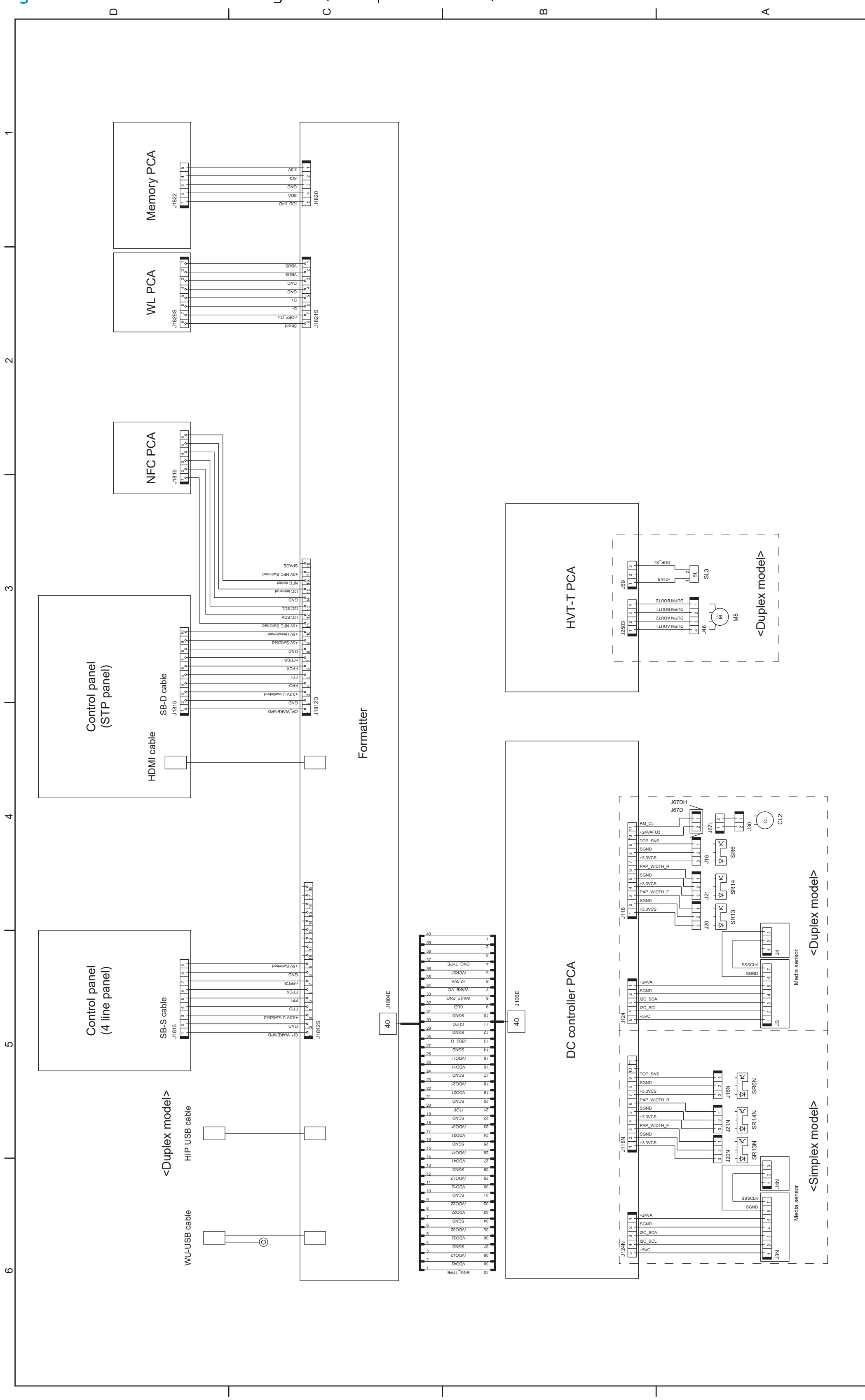
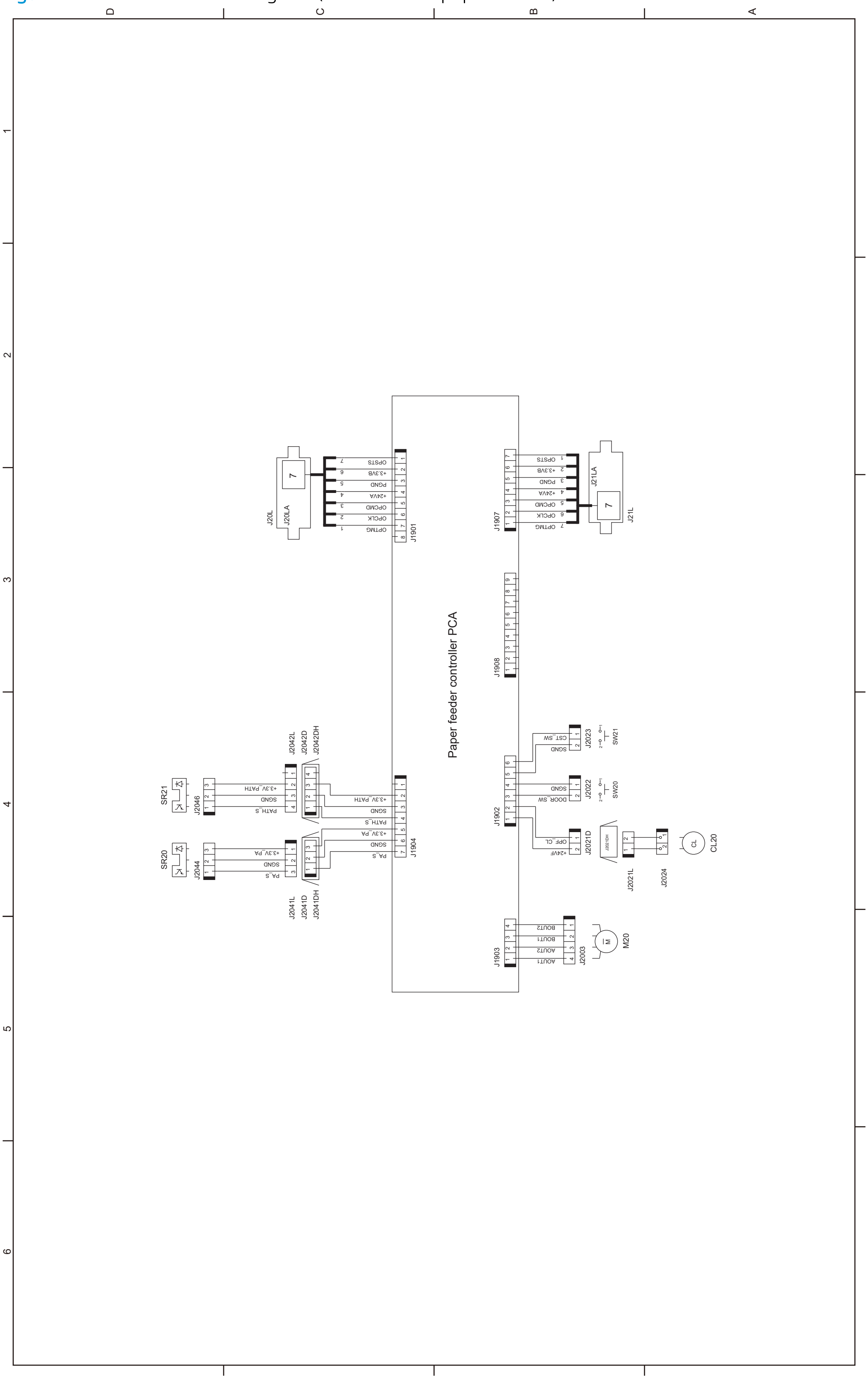


Figure 6-44 General circuit diagram (1x550-sheet paper feeder)



Internal test and information pages

Learn about printer test and information pages.

NOTE: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

Configuration and Jetdirect page

Print and find printer information on configuration and HP embedded Jetdirect information pages.

NOTE: Depending on the model, up to three pages print when printing a configuration page. In addition to the main configuration page, the HP embedded Jetdirect configuration and the wireless pages print.

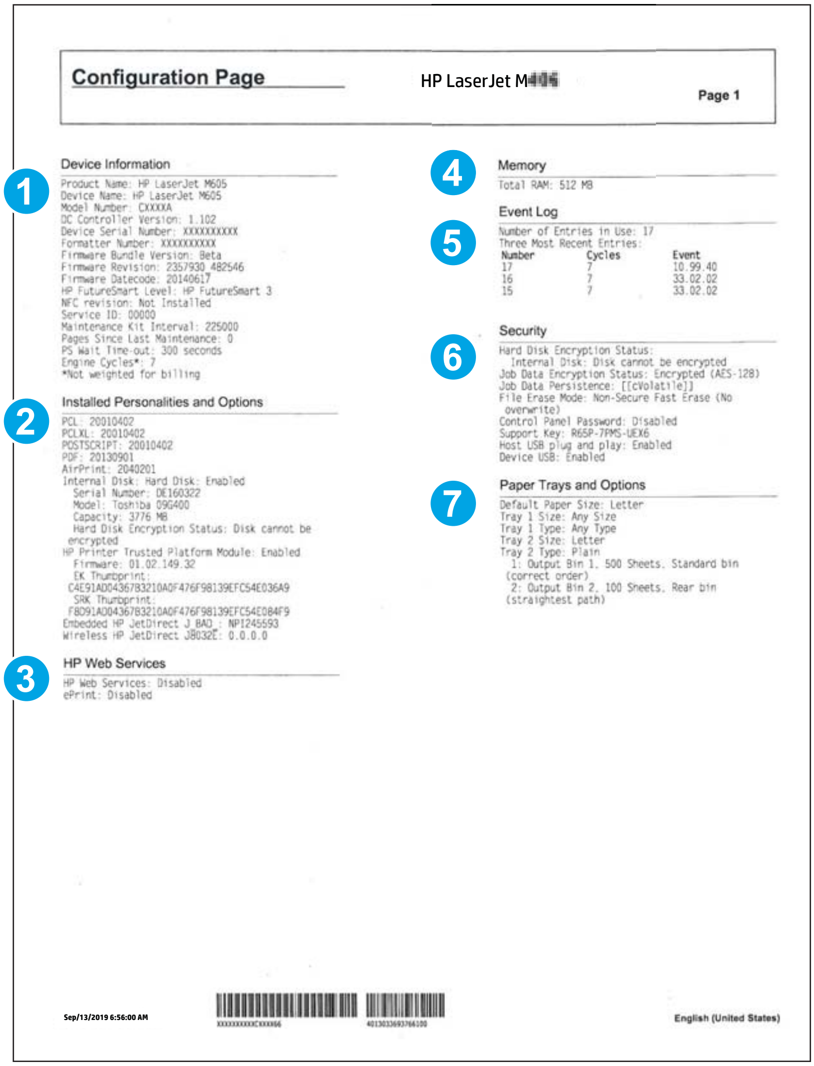
Print the configuration page from a SFP control panel

1. From the Home screen on the printer control panel, use the arrow buttons to navigate to Reports, and then press the OK button.
2. Use the arrow buttons to scroll to Configuration/Status Pages, and then press the OK button.
3. Use the arrow buttons to scroll to Configuration Page, and then press the OK button.
4. Use the arrow buttons to scroll to the print icon . Press the OK button to print the pages.

Print the configuration page from an MFP control panel

1. From the Home screen on the printer control panel, scroll to and touch the Reports button.
2. Open the following menus:
   – Configuration/Status pages
3. Touch Configuration Page to select it.
4. Touch the print icon to print the pages.

Figure 6-45 Configuration page



Configuration Page HP LaserJet M[illegible] **Page 1**

1 Device Information

Product Name: HP LaserJet M605
Device Name: HP LaserJet M605
Model Number: CXXXXA
DC Controller Version: 1.102
Device Serial Number: XXXXXXXXXX
Formatter Number: XXXXXXXXXX
Firmware Bundle Version: Beta
Firmware Revision: 2357930_482546
Firmware Datecode: 20140617
HP FutureSmart Level: HP FutureSmart 3
NFC revision: Not Installed
Service ID: 00000
Maintenance Kit Interval: 225000
Pages Since Last Maintenance: 0
PS Wait Time-out: 300 seconds
Engine Cycles*: 7
*Not weighted for billing

2 Installed Personalities and Options

PCL: 20010402
PCLXL: 20010402
POSTSCRIPT: 20010402
PDF: 20130901
AirPrint: 2040201
Internal Disk: Hard Disk: Enabled
Serial Number: DE160322
Model: Toshiba 09G400
Capacity: 3776 MB
Hard Disk Encryption Status: Disk cannot be encrypted
HP Printer Trusted Platform Module: Enabled
Firmware: 01.02.149.32
EK Thumbprint:
C4E91AD04367B3210A0F476F98139EFC54E036A9
SRK Thumbprint:
F8D91AD04367B3210A0F476F98139EFC54E084F9
Embedded HP JetDirect J_BAD_: NPI245593
Wireless HP JetDirect J8032E: 0.0.0.0

3 HP Web Services

HP Web Services: Disabled
ePrint: Disabled

4 Memory

Total RAM: 512 MB

5 Event Log

Number of Entries in Use: 17
Three Most Recent Entries:

Number	Cycles	Event
17	7	10.99.40
16	7	33.02.02
15	7	33.02.02

6 Security

Hard Disk Encryption Status:
Internal Disk: Disk cannot be encrypted
Job Data Encryption Status: Encrypted (AES-128)
Job Data Persistence: [[cVolatile]]
File Erase Mode: Non-Secure Fast Erase (No overwrite)
Control Panel Password: Disabled
Support Key: R65P-7PMS-UEX6
Host USB plug and play: Enabled
Device USB: Enabled

7 Paper Trays and Options

Default Paper Size: Letter
Tray 1 Size: Any Size
Tray 1 Type: Any Type
Tray 2 Size: Letter
Tray 2 Type: Plain
1: Output Bin 1, 500 Sheets, Standard bin (correct order)
2: Output Bin 2, 100 Sheets, Rear bin (straightest path)

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Item	Description	Item	Description
1	Device information	5	Event log
2	Installed personalities and options	6	Security
3	HP Web services	7	Paper trays and options
4	Memory		

Certain information, such as the firmware date codes, the IP address, and the email gateways, is especially helpful while servicing the printer. This information is on the various configuration pages.

Table 6-32 Important information on the configuration pages

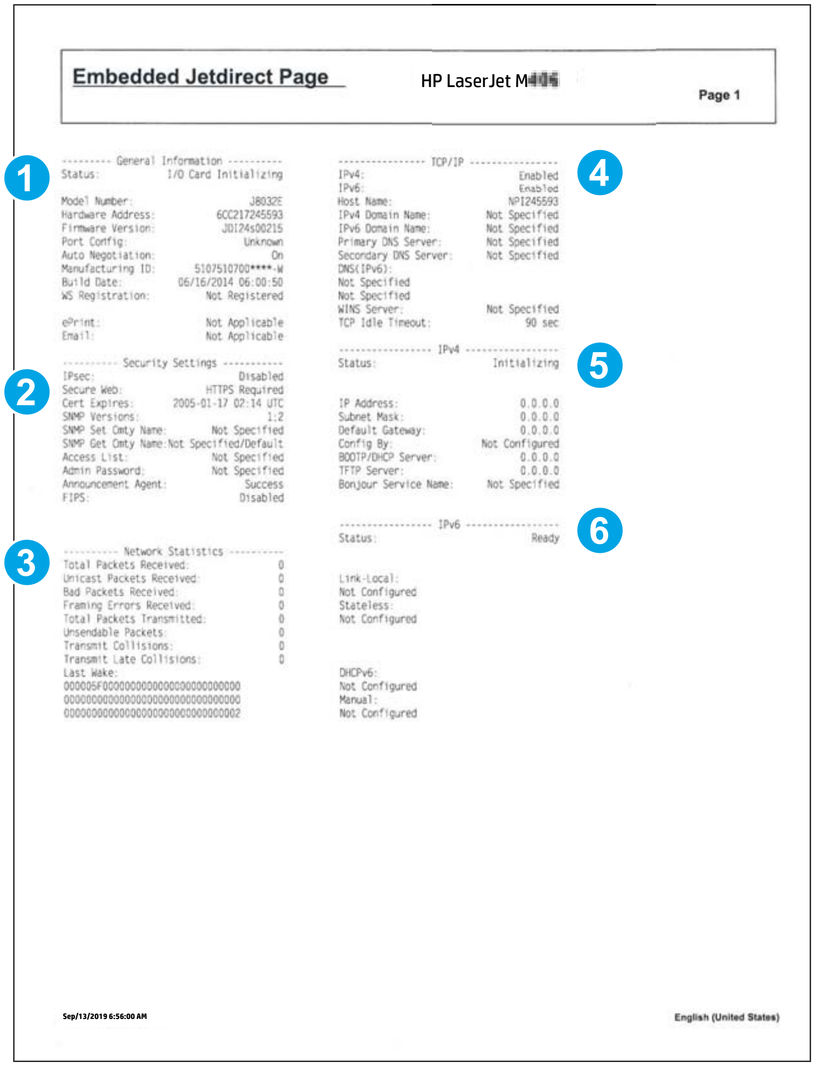
Type of information	Specific information	Configuration page
Firmware Bundle Version	Firmware information	Main configuration page (Device information)

Table 6-32 Important information on the configuration pages (continued)

Type of information	Specific information	Configuration page
Firmware Revision	Firmware information	Main configuration page (Device information)
Firmware Datecode	Firmware information	Main configuration page (Device information)
Accessories and internal storage All optional devices that are installed on the printer should be listed on the main configuration page. Separate pages print for the optional paper handling devices and the fax accessory. These pages list more-detailed information for those devices.	Optional installed formatter devices and accessories information	Main configuration page (Installed Personalities and Options)
Memory	Total RAM information	Main configuration page (Memory)
Tray and bin information	Size and type by tray (including installed optional paper feeders) information	Main configuration page (Paper Trays and Options)
Engine cycles, service ID, and cartridge information	Engine information	Main configuration page (Device Information)
Event-log information	Error information	Main configuration page (Event Log)

The second configuration page is the HP embedded Jetdirect page, which contains the following information:

Figure 6-46 HP embedded Jetdirect page



Embedded Jetdirect Page HP LaserJet M[redacted] **Page 1**

```
--------- General Information ----------
Status:               I/O Card Initializing

Model Number:                        J8032E
Hardware Address:              6CC217245593
Firmware Version:               JDI24s00215
Port Config:                        Unknown
Auto Negotiation:                        On
Manufacturing ID:          5107510700****-W
Build Date:             06/16/2014 06:00:50
WS Registration:             Not Registered

ePrint:                      Not Applicable
Email:                       Not Applicable

----------- Security Settings -----------
IPsec:                             Disabled
Secure Web:                  HTTPS Required
Cert Expires:       2005-01-17 02:14 UTC
SNMP Versions:                          1;2
SNMP Set Cmty Name:           Not Specified
SNMP Get Cmty Name:Not Specified/Default
Access List:                  Not Specified
Admin Password:               Not Specified
Announcement Agent:                 Success
FIPS:                              Disabled

----------- Network Statistics ----------
Total Packets Received:                   0
Unicast Packets Received:                 0
Bad Packets Received:                     0
Framing Errors Received:                  0
Total Packets Transmitted:                0
Unsendable Packets:                       0
Transmit Collisions:                      0
Transmit Late Collisions:                 0
Last Wake:
000005F00000000000000000000000000
00000000000000000000000000000000
00000000000000000000000000000002

---------------- TCP/IP ----------------
IPv4:                               Enabled
IPv6:                               Enabled
Host Name:                        NPI245593
IPv4 Domain Name:             Not Specified
IPv6 Domain Name:             Not Specified
Primary DNS Server:           Not Specified
Secondary DNS Server:         Not Specified
DNS(IPv6):
Not Specified
Not Specified
WINS Server:                  Not Specified
TCP Idle Timeout:                    90 sec

----------------- IPv4 -----------------
Status:                        Initializing

IP Address:                         0.0.0.0
Subnet Mask:                        0.0.0.0
Default Gateway:                    0.0.0.0
Config By:                   Not Configured
BOOTP/DHCP Server:                  0.0.0.0
TFTP Server:                        0.0.0.0
Bonjour Service Name:         Not Specified

----------------- IPv6 -----------------
Status:                               Ready

Link-Local:
Not Configured
Stateless:
Not Configured

DHCPv6:
Not Configured
Manual:
Not Configured
```

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Item	Description
1	General Information indicates the printer status, model number, hardware firmware version, port select, port configuration, auto negotiation, manufacturing identification, and manufactured date.
2	Security Settings information
3	Network Statistics indicates the total packets received, unicast packets received, bad packets received, framing errors received, total packets transmitted, unsendable packets, transmit collisions, and transmit late collisions.
4	TCP/IP information, including the IP address
5	IPv4 information
6	IPv6 information

Reports menu

Learn about the control-panel Reports menu.

To display: At the printer control panel, select the Reports menu.

To print: At the printer control panel, touch (MFP) or use the arrow buttons (SFP) to select the printer icon . For the SFP, press the OK button to print the pages.

In the following table, asterisks (*) indicate the factory default setting.

NOTE: The View option is control-panel type dependent (might not be available).

Table 6-33 Reports menu

First level	Second level	Values	Description
Configuration/Status Pages	Settings Menu Map	Cancel View Print	Shows a map of the entire control panel system and the selected values for each setting.
Configuration/Status Pages	Current Settings Page	Cancel View Print	Shows a summary of the current settings for the printer. This might be helpful if you plan to make changes and need a record of the present configuration.
Configuration/Status Pages	Configuration Page	Cancel View Print	Shows the printer settings and installed accessories.
Configuration/Status Pages	How to Connect Page	Cancel View Print	Shows the network information typically needed to connect the printer to a network.
Configuration/Status Pages	Supplies Status Page	Cancel View Print	Shows the approximate remaining life for the supplies; reports statistics on total number of pages and jobs processed, serial number, page counts, and maintenance information. HP provides approximations of the remaining life for the supplies as a customer convenience. The actual remaining supply levels might be different than the approximations provided.
Configuration/Status Pages	Usage Page	Cancel View Print	Shows a count of all paper sizes that have passed through the printer; lists whether they were simplex or duplex, and reports the page count.

Table 6-33 Reports menu (continued)

First level	Second level	Values	Description
Configuration/Status Pages	File Directory Page	Cancel View Print	Shows the file name and folder name for files that are stored in the printer memory.
Configuration/Status Pages	Web Services Status Page	Cancel View Print	Shows the detected Web Services for the printer.
Fax Reports Fax models only	Fax Activity Log	Cancel View Print	Contains a list of the faxes that have been sent from or received by this printer.
Fax Reports Fax models only	Billing Codes Report	Cancel View Print	Provides a list of billing codes that have been used for outgoing faxes. This report shows how many sent faxes were billed to each code.
Fax Reports Fax models only	Blocked Fax List	Cancel View Print	A list of phone numbers that are blocked from sending faxes to this printer.
Fax Reports Fax models only	Speed Dial List	Cancel View Print	Shows the speed dials that have been set up for this printer.
Fax Reports Fax models only	Fax Call Report	Cancel View Print	A detailed report of the last fax operation, either sent or received.
Other Pages	PCL Font List	Cancel Print	Prints the available PCL fonts.
Other Pages	PS Font List	Cancel Print	Prints the available PS fonts.

Settings menu

Learn about the control-panel Settings menu.

NOTE: You can perform basic printer setup by using the Settings menu. Use the HP Embedded Web Server for more advanced printer setup. To open the HP Embedded Web Server, enter the printer IP address or host name in the address bar of a Web browser.

General menu

Review the following information about the General menu in the Settings menu.

To display: From the Home screen on the printer control panel, use the arrow keys to navigate to Settings, and then select OK. Use the down arrow ▼ button to scroll to General, and then press the OK button.

Table 6-34 General menu

First level	Second level	Third level	Fourth level	Values	Description
Date/Time Settings	Date/Time Format	Date Format		DD/MMM/YYYY MMM/DD/YYYY YYYY/MMM/DD	Use the Date/Time Settings menu to specify the date and time and to configure date/time settings.
Date/Time Settings	Date/Time Format	Time Format		12 hour (AM/PM) 24 hours	Select the format that the printer uses to show the date and time, for example 12-hour format or 24-hour format.
Date/Time Settings	Date/Time	Date		Select the date from a pop-up calendar.	
Date/Time Settings	Date/Time	Time		Select the time from a pop-up keypad.	
Date/Time Settings	Date/Time	Time Zone		Select the time zone.	
Energy Settings	Sleep Schedule	A list of scheduled events displays.	Select an event from the list to edit it	For the selected event, change the time and days settings as desired. Done Select the trash can icon to delete the event	Use to configure the printer to automatically wake up or go to sleep at specific times on specific days. Using this feature saves energy. NOTE: You must configure the date and time settings before you can use this feature.
Energy Settings	Sleep Schedule	New event	Event Type	Wake Sleep	Select whether to add or edit a Wake event or a Sleep event, and then select the time and the days for the wake or sleep event.
Energy Settings	Sleep Schedule	New event	Time		Set the wake or sleep event time parameters.

Table 6-34 General menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Energy Settings	Sleep Schedule	New event	Event Days	Select days of the week from a list.	Set the wake or sleep event day parameters.
Energy Settings	Sleep Settings	Sleep After Inactivity Auto Off After Sleep Select one of these items: ● HP Auto Off/Auto On (Wake on most events) ● Shut down (Wake on power button only)		Range: 1 to 110 minutes Default = 0 minutes	Set the number of minutes after which the printer enters Sleep or Auto Off mode. Use the arrow buttons on the control panel to increase or decrease the number of minutes.
Display Settings	Display Brightness	A sliding bar displays with the indicator set in the middle. Use the arrow keys to select the desired brightness and then select Done.			Use to specify the intensity of the LCD control panel display.
Display Settings	Language Settings	Language		Select from a list of languages that the printer supports.	Use to select a different language for control panel messages and specify the default keyboard layout. When you select a new language, the keyboard layout automatically changes to match the factory default for the selected language.
Display Settings	Language Settings	Keyboard Layout		Each language has a default keyboard layout. To change it, select from a list of layouts.	Select the default keyboard layout that matches the language you want to use.
Display Settings	Information Screen			Show connection information* Hide connection information	Use this menu item to display or hide connection information on the Home screen.
Display Settings	Inactivity Timeout			Range: 10-300 seconds Default = 60 seconds	Specifies the amount of time that elapses between any activity on the control panel and when the printer resets to the default settings. When the timeout expires, the control panel display returns to the Home menu, and any user signed in to the printer is signed out.

Table 6-34 General menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Display Settings	Clearable Warnings			Display during job* Display until cleared	Use this feature to set the period that a clearable warning displays on the control panel. If the On setting is selected, clearable warnings appear until the Clearable Warnings button is pressed. If the Job setting is selected, clearable warnings stay on the display during the job that generated the warning and disappear from the display when the next job starts.
Display Settings	Continuable Events			Auto-continue (10 seconds)* Touch OK to continue	Use this option to configure the printer behavior when the printer encounters certain errors. If the Auto-continue (10 seconds) option is selected, the job will continue after 10 seconds. If the Touch OK to continue option is selected, the job will stop and require the user to touch the OK button before continuing.
Enable Device USB				Enabled Disabled*	Enables the printer to open a file from a USB drive

Table 6-34 General menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Jam Recovery				Auto* Off On	This printer provides a jam recovery feature that reprints jammed pages. Select one of the following options: Auto: The printer attempts to reprint jammed pages when sufficient memory is available. This is the default setting. Off: The printer does not attempt to reprint jammed pages. Because no memory is used to store the most recent pages, performance is optimal. NOTE: When using this option, if the printer runs out of paper and the job is being printed on both sides, some pages can be lost. On: The printer always reprints jammed pages. Additional memory is allocated to store the last few pages printed. This might cause overall performance to suffer.
Auto Recovery				Enabled Disabled*	The printer attempts to reprint jammed pages when sufficient memory is available.

Table 6-34 General menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Enable AutoSend				Disable* Enable	Browse to the HP Embedded Web Server AutoSend configuration page for advanced set up and the HP online Privacy Statement Information. Use the Enable AutoSend menu to enable or disable the AutoSend feature. The AutoSend feature enables your product to periodically send product configuration information including serial number, event logs, page usage counts and supplies status information to HP web addresses (URLs), or email addresses. Information sent to HP is used to improve products and services, and to monitor the product if you have a relationship with HP that provides you services such as proactive cartridge replacement, pay-per-page contracts, support agreements, or usage tracking.
Hold Off Print Job				On* Off	Enable this feature if you want to prevent print jobs from starting while a user is initiating a copy job from the control panel. Held print jobs start printing after the copy job is finished, provided that no other copy job is in the print queue.
Reset Factory Settings				Cancel Reset	Touch Reset to reset current user-specified default settings to the factory default settings.

Print menu

Review the following information about the Print menu in the Settings menu.

To display: From the Home screen on the printer control panel, use the arrow keys to navigate to Settings, and then select OK. Use the down arrow ▼ button to scroll to Print, and then press the OK button.

Table 6-35 Print menu

First level	Second level	Third level	Fourth Level	Values	Description
Enable Print from USB Drive				Enabled Disabled*	Enables the printer to open a file from a USB drive.
Managed Stored Jobs	Job Sort Order			Job Name* Date*	This option allows you list the jobs either alphabetically or chronologically.
Managed Stored Jobs	Retain Temporary Jobs			Do not retain Personal jobs only All temporary jobs	Sets which temporary jobs will be retained in the event of a printer reboot.
Managed Stored Jobs	Temporary Job Storage Limit			1-300 Default = 32	Configure global settings for jobs that are stored in the printer memory. The Temporary Job Storage Limit feature specifies the number of temporary jobs that can be stored on the printer. The maximum allowed value is 300.
Managed Stored Jobs	Standard Stored Job Retention			Off 30 minutes 1 hour 4 hours 1 day 1 week 4 weeks	Configure global settings for jobs that are stored in the printer memory. The Standard Stored Job Retention feature specifies the amount of time jobs can be stored on the printer.
Default Print Options	Number of Copies			Range: 1-32000 Default = 1	Sets the default number of copies for a copy job. This default applies when the Copy function or the Quick Copy function is initiated from the printer Home screen.
Default Print Options	Paper Selection			Select from a list of sizes that the printer supports.	Configures the default paper size used for print jobs.
Default Print Options	Default Custom Paper Size	X Dimension		Range: 2.52-12.60 inches Default = 12.60 inches	Configures the default paper size that is used when the user selects **Custom** as the paper size for a print job.

Table 6-35 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
Default Print Options	Default Custom Paper Size	Y Dimension		Range: 5-18 inches Default = 18 inches	
Default Print Options	Default Custom Paper Size	Use Inches		Enabled* Disabled	
Default Print Options	Output Sides			1-sided* 2-sided	Use to indicate whether the original document is printed on one or both sides.
Default Print Options	Quality Level			Normal* Enhanced Fine Lines	Use to select the level of desired print quality.
Default Print Options	Edge-to-Edge			Normal (recommended)* Edge-to-Edge output	Use to avoid shadows that can appear along the edges of copies when the original document is printed close to the edges.
PCL and Postscript Settings	Suppress Blank Pages			Off* On	This option is for users who are generating their own PCL, which could include extra form feeds that would cause blank pages to be printed. When the On option is selected, form feeds are ignored if the page is blank.
PCL and Postscript Settings	Courier Font			Regular Dark	Select which version of the Courier font you want to use. The factory default setting is Regular, which uses an average stroke width. The Dark setting can be used if a heavier Courier font is needed.
PCL and Postscript Settings	Wide A4			Enabled Disabled*	Changes the printable area of A4-size paper. If you enable this option, eighty 10-pitch characters can be printed on a single line of A4 paper.
PCL and Postscript Settings	Print PS Errors			Enabled Disabled*	Use this feature to select whether a PostScript (PS) error page is printed when the printer encounters a PS error.

Table 6-35 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
PCL and Postscript Settings	Print PDF Errors			Enabled Disabled*	Selects whether a PDF error page is printed when the printer encounters a PDF error.
PCL and Postscript Settings	Personality			Auto* PCL PS PDF	Configures the default print language or personality for the printer. Normally you should not change the printer language. If you change the setting to a specific printer language, the printer does not automatically switch from one language to another unless specific software commands are sent to it.
PCL and Postscript Settings	PCL	Font Settings	Font Source	Internal Disk resident*	Selects the font source for the user-soft default font. The list of available options varies depending on the installed printer options.
PCL and Postscript Settings	PCL		Font Number	Range: 0-110 Default = 0	Specifies the font number for the user-soft default font using the source that is specified in the Font Source menu. The printer assigns a number to each font and lists it on the PCL font list. The font number displays in the Font # column of the printout.
PCL and Postscript Settings	PCL		Font Pitch	Range: 0.44-99.99 Default = 10	If the Font Source option and the Font Number setting indicate a contour font, then use this feature to select a default pitch (for a fixed-spaced font).

Table 6-35 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
PCL and Postscript Settings	PCL	PCL Settings	Form Length	Range: 5-128 Default = 60	Controls the PCL print-command options. PCL is a set of printer commands that HP developed to provide access to printer features. Use the Form Length feature to select the user soft -default vertical form length.
PCL and Postscript Settings	PCL	PCL Settings	Orientation	Portrait Landscape	Select the orientation that is most often used for copy or scan originals. Select the Portrait option if the short edge is at the top or select the Landscape option if the long edge is at the top.
PCL and Postscript Settings	PCL	PCL Settings	Symbol Set	Select from a list of symbol sets.	Select any one of several available symbol sets from the control panel. A symbol set is a unique grouping of all the characters in a font. The factory default value for this option is PC-8. Either PC-8 or PC-850 are recommended for line-draw characters.
PCL and Postscript Settings	PCL	PCL Settings	Media Source Mapping	Standard* Classic	Use to select and maintain input trays by number when you are not using the printer driver, or when the software program has no option for tray selection. The following options are available: Standard: Tray numbering is based on newer HP LaserJet models. Classic: Tray numbering is based on HP LaserJet 4 and older models.

Table 6-35 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
Print Quality	Adjust Color	Tonal Range		Highlights Midtones Shadows	Select the tonal range to adjust.
Print Quality	Adjust Color	Cyan Magenta Yellow Black		Use the arrow keys to adjust the sliding bar for each color.	
Print Quality	Image Registration	Tray	Tray 1 Tray 2 Tray 3 Tray 4 Tray 5 Depends upon the number of trays installed		Specify tray to be adjusted

Table 6-35 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
Print Quality	Image Registration	Front-side Horizontal Shift Front-side Vertical Shift Back-side Horizontal Shift Back-side Vertical Shift		-5.00 mm to 5.00 mm	Shift the margin alignment to center the image on the page from top to bottom and from left to right. You can also align the image on the front with the image printed on the back. The direction that is perpendicular to the way the paper passes through the printer is referred to as X. This is also known as the scan direction. X1 is the scan direction for a single-sided page or for the second side of a two-sided page. X2 is the scan direction for the first side of a two-sided page. The direction that the paper feeds through the printer is referred to as Y. Y1 is the feed direction for a single-sided page or for the second side of a two-sided page. Y2 is the feed direction for the first side of a two-sided page. Use the Adjust Tray <X> menu to adjust the registration settings for each tray. Before adjusting these values, print a registration test page. It provides alignment guides in the X and Y directions so you can determine which adjustments are necessary. You can adjust values for X1 Shift, X2 Shift, Y1 Shift, and Y2 Shift.
Print Quality	Image Registration	Print Test Page			Use the Print Test Page option to print a page to test the image registration. It provides alignment guides in the X and Y directions so you can determine which adjustments are necessary.

Table 6-35 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
Print Quality	Auto Sense Behavior	Tray 1		Sense every page Sense first page Sense transparency only	
Print Quality	Auto Sense Behavior	All Other Trays		Sense first page Sense transparency only	
Print Quality	Adjust Paper types			Select from a list of paper types Reset Paper Types	
Print Quality	Optimize	Normal Paper		Standard Smooth	Set to Smooth when printing on smooth paper of normal weight.
Print Quality	Optimize	Heavy paper		Standard Smooth	Set to Smooth when printing on smooth, heavy media types.
Print Quality	Optimize	Envelope control		Normal Reduced Temp	Set to Reduced Temp if envelopes are sticking due to moisture in the envelop adhesive.
Print Quality	Optimize	Tray 1		Normal Alternate	Set the mode to Alternate if marks appear on the back side of the paper when printing from Tray 1. This sets the printer to initiate a clean sequence every time a job finishes when the printer is set for Any Size and Any Type for Tray 1.
Print Quality	Optimize	Background		Normal Alternate	Set to Alternate when a background occurs all over the page.
Print Quality	Optimize	Uniformity Control		Normal Alternate 1 Alternate 2 Alternate 3	Set to Alternate 1 to improve uniformity on any paper type.
Print Quality	Optimize	Cac03		Off On	Set to On if printing with media that contains a high calcium carbonate content. Engine print speed is slowed so that less paper dust is produced.

Table 6-35 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
Print Quality	Optimize	Best Normal		Off On	Set to On to try and improve print quality.
Print Quality	Optimize	Tracking Control		Off On	Improves color stability by adjusting the bias voltage. Make sure this mode is set to On.
Print Quality	Optimize	Registration		Normal Alternate	Set to Alternate when color misregistration occurs.
Print Quality	Optimize	Transfer Control		Normal Alternate 1	Set to Alternate to reduce primary transfer bias and to resolve low density or blotchy images.
Print Quality	Optimize	Moisture Control		Normal Alternate	Set to Alternate if the printer is installed in a high-humidity environment.
Print Quality	Optimize	Reset Optimize		Reset	Use Reset to reset the menu defaults.
Print Quality	Edge Control			Off Light Normal* Maximum	
Manage Trays	Use Requested Tray			Exclusively* When available	Controls how the printer handles jobs that have specified a specific input tray. Two options are available: Exclusively: The printer never selects a different tray when the user has indicated that a specific tray should be used, even if that tray is empty. When available: The printer pulls from another tray if the specified tray is empty, even though the specific tray was indicated for the job.

Table 6-35 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
Manage Trays	Manually Feed Prompt			Always* Prompt on mismatch	Indicate whether a prompt should appear when the type or size for a job does not match the specified tray and the printer pulls from the multipurpose tray instead. Two options are available: Always: A prompt always displays before using the multipurpose tray. Prompt on mismatch: A prompt displays only if the size or type do not match or the tray is empty.
Manage Trays	Size/Type Prompt			Display* Do not display	Controls whether the tray configuration message displays whenever a tray is closed. Two options are available: Display: Shows the tray configuration message when a tray is closed. The user is able to configure the tray settings directly from this message. Do not display: Prevents the tray configuration message from automatically appearing.

Table 6-35 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
Manage Trays	Use Another Tray			Allow* Do not allow	Use to turn on or off the control panel prompt to select another tray when the specified tray is empty. Two options are available: Allow: When this option is selected the user is prompted to either add paper to the selected tray or to choose a different tray. This is the factory default. Do not allow: When this option is selected, the user is not given the option of selecting a different tray. The printer prompts the user to add paper to the tray that was initially selected.
Manage Trays	Alternative Letterhead Mode			Disabled* Enabled	Use to load letterhead or preprinted paper into the tray the same way for all print jobs, whether you are printing to one side of the sheet or to both sides of the sheet. When this option is selected, load the paper as you would for printing on both sides. See the user documentation that came with the printer for instructions about loading letterhead for printing on both sides. When this option is selected, the printer speed slows to the speed required for printing on both sides.

Table 6-35 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
Manage Trays	Duplex Blank Pages			Automatic* Always	Controls how the printer handles two-sided jobs (duplexing). Two options are available: Automatic: Choose this option to skip printing blank sides during a two-sided print job. The printer can print jobs faster when blank sides are skipped. Always: Choose this option to print all sides of a two-sided job, even if one side is blank. This might be preferable for certain jobs that use paper types such as letterhead or prepunched paper.
Manage Trays	Override A4/Letter			Yes* No	Prints on letter-size paper when an A4 job is sent but no A4-size paper is loaded in the printer (or to print on A4 paper when a letter-size job is sent but no letter-size paper is loaded). This option will also override A3 with ledger-size paper and ledger with A3-size paper.

Table 6-35 Print menu (continued)

First level	Second level	Third level	Fourth Level	Values	Description
Manage Trays	Unsupported Size Behavior			Use default size automatically* Prompt for user response	Use this feature to identify the desired behavior when printing a document on a paper size that the printer does not support.
Manage Trays	Rotate Offset			Automatic* Off	Allows printing of multiple copies of a print job in alternate orientations. For example, the first copy outputs in landscape orientation, the second outputs in portrait orientation, the third in landscape, and so on. This feature works only with Letter or A4-sized paper and requires the use of at least two paper trays. One tray is loaded to feed paper in the long-edge orientation and the other is loaded to feed paper in the short-edge orientation.

Manage Supplies menu

Review the following information about the Manage Supplies menu in the Settings menu.

To display: From the Home screen on the printer control panel, use the arrow keys to navigate to Settings, and then select OK. Use the down arrow ▼ button to scroll to Manage Supplies, and then press the OK button.

Table 6-36 Manage Supplies menu

First level	Second level	Values	Description
Low Warning Thresholds	Yellow Cartridge Magenta Cartridge Cyan Cartridge Black Cartridge	1-100% Default = 5%	Set the estimated percentage at which the printer notifies you when a toner cartridge is very low.
Low Warning Threshold Message		On Off	Displays a message on the control panel when a cartridge is very low.

Table 6-36 Manage Supplies menu (continued)

First level	Second level	Values	Description
Very Low Behavior	Color Cartridges Black Cartridge Drums 1-3 Drum 4 Transfer Kit Fuser Kit	Stop Continue Prompt to continue	
Restrict Color Use		Enable color Color if allowed* Disable color	Use this feature to enable, restrict, or disable color printing.
Color/Black Mix		Auto Mostly color pages Mostly black pages	Instructs the printer when to switch between color and monochrome printing modes for the best overall performance. Auto: Uses the mode that is appropriate for the first page of the job. If necessary, the printer switches modes during the middle of a job and then stays in that mode until the job is finished. Mostly color pages: The printer uses color mode for all jobs, even if the job contains no color pages. Mostly black pages: The printer uses monochrome mode until it detects a color page. The printer switches back to monochrome mode when it detects a sequence of several monochrome pages.
Store Usage Data		On supplies Not on supplies	Store Usage Data provides a way to suppress the toner cartridges from storing most of the information gathered exclusively for the purpose of understanding the usage of the printer. Select the On supplies setting to store the data on the toner cartridge memory chip. Select the Not on supplies setting to suppress the information from being stored on the memory chip.
Cartridge Protection		Off* Protect Cartridges	Select to permanently protect cartridges so that they can be used only in this product or fleet of products.
Cartridge Policy		Off* Authorized HP	Set Authorized HP to allow only genuine HP cartridges to be used in this printer.

Networking menu

Review the following information about the Networking menu in the Settings menu.

To display: From the Home screen on the printer control panel, use the arrow keys to navigate to Settings, and then select OK. Use the down arrow ▼ button to scroll to Networking, and then press the OK button.

Table 6-37 Networking menu

First level	Second level	Third level	Fourth level	Values	Description
Ethernet	Information	Print Security Report		Yes No*	Yes: Prints a page that contains the current security settings on the HP Jetdirect print server. No: A security settings page is not printed.
Ethernet	TCP/IP	Host Name		Use the arrow buttons to edit the host name. NPIXXXXXX*	An alphanumeric string, up to 32 characters, used to identify the printer. This name is listed on the HP Jetdirect configuration page. The default host name is NPIxxxxxx, where xxxxxx is the last six digits of the LAN hardware (MAC) address.

Table 6-37 Networking menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Ethernet	TCP/IP	IPV4 Settings	Config Method	Bootp DHCP* Auto IP Manual	Specifies the method that TCP/IPv4 parameters will be configured on the HP Jetdirect print server. Bootp (Bootstrap Protocol): Use for automatic configuration from a BootP server. DHCP (Dynamic Host Configuration Protocol): Use for automatic configuration from a DHCPv4 server. If selected and a DHCP lease exists, the DHCP Release menu and the DHCP Renew menu are available to set DHCP lease options. Auto IP: Use for automatic link-local IPv4 addressing. An address in the form 169.254.x.x is assigned automatically. If you set this option to the Manual setting, use the Manual Settings menu to configure TCP/IPv4 parameters.

Table 6-37 Networking menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Ethernet	TCP/IP	IPV4 Settings	Default IP	Auto IP* Legacy	Specify the IP address to default to when the print server is unable to obtain an IP address from the network during a forced TCP/IP reconfiguration (for example, when manually configured to use BootP or DHCP). NOTE: This feature assigns a static IP address that might interfere with a managed network. Auto IP: A link-local IP address 169.254.x.x is set. Legacy: The address 192.0.0.192 is set, consistent with older HP Jetdirect printers.
Ethernet	TCP/IP	IPV4 Settings	DHCP Release	Yes No*	
Ethernet	TCP/IP	IPV4 Settings	DHCP Renew	Yes No*	
Ethernet	TCP/IP	IPV4 Settings	Primary DNS	Range: 0-255 Default = xxx.xxx.xx.xx	Specify the IP address (n.n.n.n) of a Primary Domain Name System (DNS) Server.
Ethernet		IPV4 Settings	Secondary DNS	Range: 0-255 Default = 0.0.0.0	Specify the IP address (n.n.n.n) of a Secondary DNS Server.
Ethernet	TCP/IP	IPV6 Settings	Enable	Off On*	Use this item to enable or disable IPv6 operation on the print server. Off: IPv6 is disabled. On: IPv6 is enabled.
Ethernet	TCP/IP	IPV6 Settings	Address	Manual Settings Enable Address	Use this item to enable and manually configure a TCP/IPv6 address.

Table 6-37 Networking menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Ethernet	TCP/IP	IPV6 Settings	DHCPV6 Policy	Router Specified Router Unavailable* Always	Router Specified: The stateful auto-configuration method to be used by the print server is determined by a router. The router specifies whether the print server obtains its address, its configuration information, or both from a DHCPv6 server. Router Unavailable: If a router is not available, the print server should attempt to obtain its stateful configuration from a DHCPv6 server. Always: Whether a router is available, the print server always attempts to obtain its stateful configuration from a DHCPv6 server.
Ethernet	TCP/IP	IPV6 Settings	Primary DNS	Range: 0-255 Default = xxx.xxx.xx.xx	Specify the IP address (n.n.n.n) of a Primary Domain Name System (DNS) Server.
Ethernet	TCP/IP	IPV6 Settings	Secondary DNS	Range: 0-255 Default = 0.0.0.0	Specify the IP address (n.n.n.n) of a Secondary DNS Server.
Ethernet	TCP/IP	Proxy Server		Select from a provided list.	Specifies the proxy server to be used by embedded applications in the printer. A proxy server is typically used by network clients for Internet access. It caches Web pages, and provides a degree of Internet security for those clients. To specify a proxy server, enter its IPv4 address or fully-qualified domain name. The name can be up to 255 octets. For some networks, you might need to contact your Internet Service Provider (ISP) for the proxy server address.

Table 6-37 Networking menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Ethernet	TCP/IP	Proxy Port		Range: 1-65535 Default = 00080	Enter the port number used by the proxy server for client support. The port number identifies the port reserved for proxy activity on your network, and can be a value from 0 to 65535.
Ethernet	TCP/IP	Idle Timeout		Range: 1-3600 Default = 0270	The time period, in seconds, after which an idle TCP print data connection is closed (default is 270 seconds, 0 disables the timeout).

Supplies menu

Review the following information about the Supplies menu.

To display: From the Home screen on the printer control panel, use the arrow keys to navigate to Supplies, and then select OK.

Table 6-38 Supplies menu

First level	Values	Description
Supplies Summary		View a summary of the status of all printer supplies.
Yellow Cartridge Magenta Cartridge Cyan Cartridge Drum 1 Drum 2 Drum 3 Drum 4 Black Cartridge	Status Order HP Part Pages Printed Approximate Pages Remaining	Select a supply from the list to see the current status of the supply, the part number used to order a replacement, the number of pages printed, and the approximate number of pages remaining.
Toner Collection Unit Transfer Kit Fuser Kit	Status Order HP Part	Select a part from the list to see the current status of the part and the part number used to order a replacement.

Trays menu

Review the following information about the Trays menu.

To display: From the Home screen on the printer control panel, use the arrow keys to navigate to Trays, and then select OK.

Table 6-39 Trays menu

First level	Second level	Values	Description
Tray 1 Tray 2-x	Size	Select paper size from a list of supported sizes.	Choose the paper size for the tray
Tray 1 Tray 2-x	Type	Select paper type from a list of supported types.	Choose the paper type for the tray.

Support Tools menu

Learn about the control-panel Support Tools menu.

NOTE: The Support Tools sub-menu contains the options for maintaining the printer and troubleshooting printer problems.

Maintenance menu

Learn about the control-panel Maintenance menu.

Backup/Restore menu

Learn about the control-panel Backup/Restore menu.

To display: At the printer control panel, select the Support Tools menu, select the Maintenance menu, and then select the Backup/Restore menu.

To print: At the printer control panel, touch (MFP) or use the arrow buttons (SFP) to select the printer icon . For the SFP, press the OK button to print the pages.

In the following table, asterisks (*) indicate the factory default setting.

Table 6-40 Backup/Restore menu

First level	Second level	Third level	Values
Back up Data	Enable Scheduled Backups	Backup Time	Enter a time
Back up Data	Enable Scheduled Backups	Days Between Backups	Enter the number of days
Back up Data	Back up Now		
Back up Data	Export Last Backup		
Restore Data			Insert a USB drive that contains the backup file.

Calibration/Cleaning menu

Learn about the control-panel Calibration/Cleaning menu .

To display: At the printer control panel, select the Support Tools menu, select the Maintenance menu, and then select the Calibration/Cleaning menu.

To print: At the printer control panel, touch (MFP) or use the arrow buttons (SFP) to select the printer icon . For the SFP, press the OK button to print the pages.

In the following table, asterisks (*) indicate the factory default setting.

Table 6-41 Calibration/Cleaning menu

First level	Values	Description
Cleaning Page	Automatic Cleaning Interval Off* 1000 pages 2000 pages 5000 pages 10000 pages 20000 pages	Use this menu to configure the settings for the product to automatically print a cleaning page. Select Off to disable automatic cleaning. Select a cleaning interval to set the number of pages to be printed before an automatic cleaning page is printed. Touch Print to manually print a cleaning page. NOTE: Cleaning pages print on the default paper size configured for the printer.
Quick Calibration	Start	The printer automatically calibrates itself at various times. However, the user can calibrate the printer immediately if the printer experiences problems with print quality. Use this feature to perform a partial calibration. Use this calibration if color density or tone seem incorrect. Before calibrating, make sure that the Ready indicator displays on the control panel display. If a job is in progress, the calibration occurs when that job is complete.
Full Calibration	Start	The printer automatically calibrates itself at various times. However, the user can calibrate the printer immediately if the printer experiences problems with print quality. Use this feature to perform a full calibration, which can take up to three minutes. Use this calibration if the color layers seem to be shifted on the page. Before calibrating, make sure that the Ready indicator displays on the control panel display. If a job is in progress, the calibration occurs when that job is complete.
Power on Calibration	No delay Delay 15 minutes	This feature controls the timing of calibration when the printer wakes up or is turned on.

Table 6-41 Calibration/Cleaning menu (continued)

First level	Values	Description
Calibrate Scanner MFP	Done Start	Touch Start to calibrate the device scanner. Messages on the control panel display will lead you through the calibration process.
Reset Calibration	Reset Cancel	Use this feature to return the product to the factory-set default values for color calibration. Select Reset to reset the color calibration. The printer will restart with the factory-set defaults. Select Cancel to close the menu without resetting the color calibration.

USB Firmware Upgrade menu

Learn about the control-panel USB Firmware Upgrade menu.

To display: At the printer control panel, select the Support Tools menu, select the Maintenance menu, and then select the USB Firmware Upgrade menu.

Insert a USB storage device with a firmware upgrade bundle into the USB port, and follow the on-screen instructions.

Service menu

Learn about the control-panel Service menu.

To display: At the printer control panel, select the Support Tools menu, and then select the Service menu.

The Service menu is locked and requires a personal identification number (PIN) for access. This menu is intended for use by authorized service personnel. See the Service menu section of this manual.

Troubleshooting menu

Review the following information about the Troubleshooting menu.

To display: From the Home screen on the printer control panel, use the arrow keys to navigate to Support Tools, and then select OK. Navigate to Maintenance, and then select OK. Navigate to Troubleshooting, and then select OK.

Table 6-42 Troubleshooting menu

First level	Second level	Third level	Values	Description
Reports	Configuration/Status Pages		Settings Menu Map Current Settings Page Configuration Page How to Connect Page Supplies Status Page Usage Page File Directory Page Web Services Status Page Color Usage Job Log	Select the desired report and then select the print icon  to print the page.
Reports	Configuration/Status Pages	Other Pages	Demonstration Page RBG Samples CMYK Samples PCL Font List PS Font List	Select the desired report and then select the print icon  to print the page.
Print Quality Pages	PQ Troubleshooting Pages		Print	Use to print pages that can help you resolve problems with print quality.
Print Quality Pages	Diagnostics Page		Print	Use to print a diagnostics page. The page includes color swatches, diagnostic information, and calibration information.
Print Quality Pages	Color Band Test		Print	Use to print a page that helps you resolve problems with print quality.
Event Log			Print Cancel	Use to print a list of the 50 most recent events in the event log. For each event, the printed log shows the error number, page count, error code, and description or personality.
Paper Path Page			Print	Shows how many pages were printed from each tray.
Diagnostic Tests	Disable Cartridge Check		Continue	Use this diagnostic test to print internal pages or send an external job to the printer when the toner cartridge is removed or exchanged. Supply errors are ignored while the printer is in this mode.

Table 6-42 Troubleshooting menu (continued)

First level	Second level	Third level	Values	Description
Diagnostic Tests	Paper Path Test	Number of Copies	Range: 1-500 Default = 1	Sets the default number of copies for a copy job. This default applies when the Copy or Quick Copy function is initiated from the printer Home screen. The factory default setting is 1.
Diagnostic Tests	Paper Path Test	Paper Tray	Select from a list of the available trays.	Generates a test page for testing paper handling features. You can define the path that is used for the test in order to test specific paper paths.
Diagnostic Tests	Paper Path Test	Output Sides	1-sided* 2-sided	
Diagnostic Tests	Print/Stop Test		Stop Next Print Job* Delay	
Diagnostic Tests	Paper Path Sensor Test		Select from a list of the printer sensors.	Initiates a test of the paper path sensors.
Diagnostic Tests	Manual Sensor Test		Select from a list of available components. Reset Sensors	Test the printer sensors and switches for correct operation. Each sensor is displayed on the control panel screen, along with its status. Manually trip each sensor and watch for it to change on the screen. Select the Stop button to abort the test.
Diagnostic Tests	Component Test		Select from a list of available components. Repeat	Use this item to exercise individual parts independently to isolate noise, leaking, or other issues. To start the test, select one of the components. The test will run the number of times specified by the Repeat option. The user might be prompted to remove parts from the printer during the test. Select the Stop button to abort the test.
Generate Debug Data			Start	
Retrieve Diagnostics Data			Send to email	Create files that contain information about the printer that can help identify the cause of problems.

Printer resets

Learn about the printer resets.

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

Restore factory-set defaults from a SFP control panel

1. From the Home screen on the printer control panel, use the arrow buttons to navigate to Settings, and then press the OK button.
2. Use the arrow buttons to scroll to General, and then press the OK button.
3. Use the arrow buttons to scroll to Restore Factory Settings, and then press the OK button.
4. A verification message advises that completing the reset function might result in loss of data. Select the Reset button to complete the process.

Restore factory-set defaults from an MFP control panel

1. From the Home screen on the printer control panel, scroll to and touch the Settings button.
2. Open the following menus:
   - General Settings
   - Reset Factory Settings
3. A verification message advises that completing the reset function might result in loss of data. Touch the Reset button to complete the process.

Restore the Service ID

When replacing the formatter, the Service ID date is lost. Use this menu item to reset the date to the original date that the printer was first used. The date format is YYDDD. Use the following formula to calculate the Service ID.

Calculate the service ID

For the calculation below, the placed-in-service date is 17OCT2002.

1. To calculate YY, subtract 1990 from the calendar year. If the printer was first used in 2002, calculate YY as follows: 2002 - 1990 = 19. YY = 12.
2. Subtract 1 from 10 (October is the tenth month of the year): 10 - 1 = 9.
   - Multiply 9 by 30: 9 x 30 = 270 and add 17 to 270: 270 + 17 = 287. Thus, DDD = 287.
3. In this example the Service ID is 12287.

Convert the Service ID to an actual date

Use the printer Service ID number to determine whether the printer is still under warranty. Use the following formula to convert the Service ID into the actual date the printer was placed-in-service. For the example below, use the Service ID previously calculated (12287).

1. Add 1990 to YY to get the actual year that the printer was installed.
2. Divide DDD by 30. If there is a remainder, add 1 to the result. This is the month.
3. The remainder from the calculation in step 2 is the date.
    1. 12 + 1990 = 2002, so the year is 2002.
    2. 287 divided by 30 = 9 with a remainder of 17. Because there is a remainder, add 1 to 9 to get 10, which represents October.
    3. The remainder in step 2 is 17, so that is the date. The complete date is 17-October-2002.

    NOTE: A six-day grace period is built into the date system.

Cold reset using the Pre-boot menu from a SFP control panel

CAUTION: This procedure resets all printer configurations and settings to factory defaults (customer configurations and settings are lost).

1. Press the Cancel button when you see the 1/8 under the logo
2. Use the arrow buttons to highlight +3:Administrator item, and then press the OK button.
3. Use the arrow buttons to highlight +8:Startup Options item, and then press the OK button.
4. Use the arrow buttons to highlight 2 Cold Reset item, and then press the OK button.
5. Press the Home button to return to the main Pre-boot menu and highlight the 1:Continue item, and then press the OK button.

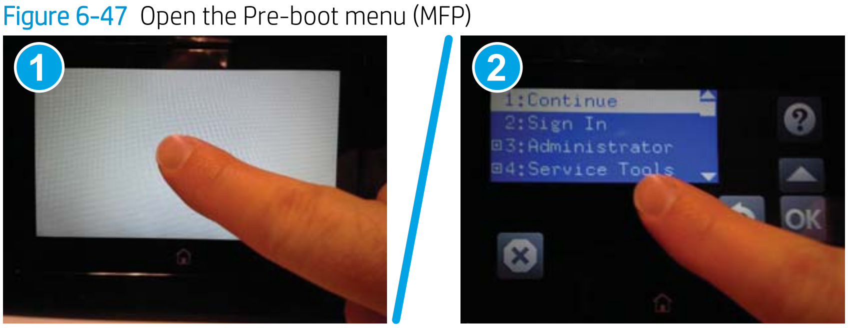
    NOTE: The printer initializes.

Cold reset using the Pre-boot menu from an MFP control panel

CAUTION: This procedure resets all printer configurations and settings to factory defaults (customer configurations and settings are lost).

1. Touch the middle of the control-panel display when you see the 1/8 under the logo

    Figure 6-47 Open the Pre-boot menu (MFP)

2. Use the arrow buttons to highlight +3:Administrator item, and then press the OK button.

3. Use the arrow buttons to highlight +8:Startup Options item, and then press the OK button.

4. Use the arrow buttons to highlight 2 Cold Reset item, and then press the OK button.

5. Touch the Home button to return to the main Pre-boot menu and highlight the 1:Continue item, and then press the OK button.

   NOTE: The printer initializes.

Format Disk and Partial Clean functions

Learn about the printer Format Disk and Partial Clean functions.

Active and repository firmware locations

The firmware bundle consists of multiple parts. The main components are the Windows CE Operating System and the printer/peripheral firmware files.

There are two locations/partitions on the hard drive where the firmware components are stored:

- The Active, where the operating system and firmware currently are executing.
- The Repository, the recovery location.

If the Active location is damaged, or a Partial Clean was performed, the printer automatically copies over the OS and firmware files from the Repository location and the printer recovers.

If both the Active and Repository locations are damaged, or a Format Disk was performed, then both locations are gone and the error message **99.09.67** displays on the control-panel display. The user must upload the firmware to the printer in order for it to function again.

CAUTION: The Format Disk option performs a disk initialization for the entire disk. The operating system, firmware files, and third party files (among other files) are completely lost. HP does not recommend this action.

Partial Clean

The Partial Clean option erases all partitions and data on the disk drive, except for the firmware repository where a backup copy of the firmware file is stored. This allows the disk drive to be reformatted without having to download a firmware upgrade file to return the printer to a bootable state.

Characteristics of a Partial Clean

- Customer-defined settings, third-party solutions, firmware files, and the operating system are deleted.
- Rebooting the printer restores the firmware files from the Repository location, but does not restore any customer-defined settings.
- For previous HP printers, a Hard Disk Initialization is similar to executing the Partial Clean function for this printer.

CAUTION: HP recommends backing-up printer configuration data before executing a Partial Clean to retain customer-defined settings (if needed). See the Backup/Restore item in the Device Maintenance menu.

Reasons for performing Partial Clean

- The printer continually boots up in an error state.

> **NOTE:** Try clearing the error prior to executing a Partial Clean.

- The printer will not respond to commands from the control panel.
- Executing the Partial Clean function is helpful for troubleshooting hard disk problems.
- To reset the printer by deleting all solutions and customer-defined settings.
- The printer default settings are not properly working.

Execute a Partial Clean from a SFP control panel

This procedure resets all printer configurations and settings to factory defaults (customer configurations and settings are lost).

1. Press the Cancel button when you see the 1/8 under the logo
2. Use the arrow buttons to highlight +3:Administrator item, and then press the OK button.
3. Use the arrow buttons to highlight Partial Clean item, and then press the OK button.
4. Press the OK button again.
5. Press the Home button to return to the main Pre-boot menu and highlight the Continue item, and then press the OK button.

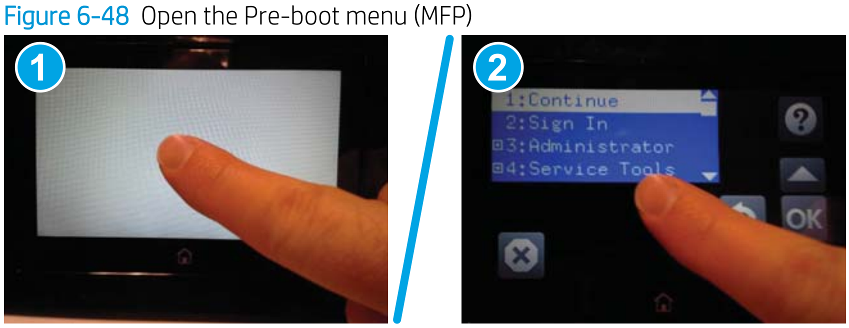
> **NOTE:** The printer initializes.

Execute a Partial Clean from an MFP control panel

This procedure resets all printer configurations and settings to factory defaults (customer configurations and settings are lost).

1. Touch the middle of the control-panel display when you see the 1/8 under the logo

Figure 6-48 Open the Pre-boot menu (MFP)



2. Use the arrow buttons to highlight +3:Administrator item, and then press the OK button.
3. Use the arrow buttons to highlight Partial Clean item, and then press the OK button.
4. Press the OK button again.
5. Touch the Home button to return to the main Pre-boot menu and highlight the Continue item, and then press the OK button.

NOTE: The printer initializes.

Format Disk

The Format Disk option erases the entire disk drive.

CAUTION: After executing a Format Disk option, the printer is not bootable.

Characteristics of a Format Disk

- Customer-defined settings, third-party solutions, firmware files, and the operating system are deleted.

  NOTE: Rebooting the printer *does not* restore the firmware files

- Rebooting the printer restores the firmware files from the Repository location, but does not restore any customer-defined settings.
- After executing the Format Disk function, the message **99.09.67** displays on the control panel.
- After executing the Format Disk function, the printer firmware must be reloaded.

CAUTION: HP recommends not using the Format Disk option unless an error occurs and the solution in the printer service manual recommends this solution. After executing the Format Disk function, the printer is unusable.

HP recommends backing-up printer configuration data before executing a Format Disk to retain customer-defined settings (if needed). See the Backup/Restore item in the Device Maintenance menu.

Reasons for performing Format Disk

- The printer continually boots up in an error state.

  NOTE: Try clearing the error prior to executing a Format Disk.

- The printer will not respond to commands from the control panel.
- Executing the Format Disk function is helpful for troubleshooting hard disk problems.
- To reset the printer by deleting all solutions and customer-defined settings.

Execute a Format Disk from a SFP control panel

This procedure resets all printer configurations and settings to factory defaults (customer configurations and settings are lost).

1. Press the Cancel button when you see the 1/8 under the logo
2. Use the arrow buttons to highlight +3:Administrator item, and then press the OK button.
3. Use the arrow buttons to highlight Format Disk item, and then press the OK button.
4. Press the OK button again.

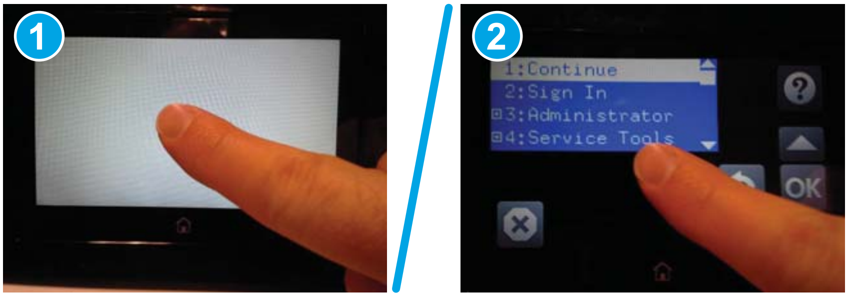
NOTE: When the Format Disk operation is complete, reload the printer firmware.

Execute a Format Disk from an MFP control panel

This procedure resets all printer configurations and settings to factory defaults (customer configurations and settings are lost).

1. Touch the middle of the control-panel display when you see the 1/8 under the logo

Figure 6-49 Open the Pre-boot menu (MFP)



2. Use the arrow buttons to highlight +3:Administrator item, and then press the OK button.
3. Use the arrow buttons to highlight Format Disk item, and then press the OK button.
4. Press the OK button again.

NOTE: When the Format Disk operation is complete, reload the printer firmware.

Troubleshooting power-on or blank control panel problems

If the printer is not powering on correctly, use the following steps to begin troubleshooting the problem.

1. Verify that power is available to the printer. If the printer is plugged into a surge protector or uninterruptible power supply (UPS), remove it. Plug the printer directly into a known operating wall receptacle (make sure that the wall receptacle provides the correct voltage and current for the printer).

   NOTE: Unplug any other devices on the same circuit that the printer is using.

2. Try another known operating wall receptacle and a different power cord.
3. To eliminate a thermal switch issue, unplug the power cord and leave it unplugged for over 20 minutes. Re-attach the power cord, and then turn the power on again.
4. During normal operation, a cooling fan or fans begin to spin briefly after the printer power is turned on. Place a hand over the cover vent or vents to feel air passing out of the printer. Lean close to the printer to hear the fan or fans operating. Look for illuminated lights on the control panel and formatter LEDs.

   NOTE: Operational fans, motors, and control-panel lights indicate the following:

   - AC power is present at the printer.
   - The power supply is providing either or both 24 Vdc and 5 Vdc voltages.
   - The DC controller microprocessor is functioning.

5. If the printer powers on, but the control panel is blank, make sure that the control-panel display wire harness or harnesses and flat flexible cable or cables (FFCs) are connected.

NOTE: The following conditions indicate that the printer has frozen while in Sleep mode or Sleep delay. Opening a door or pressing a control-panel button should cause the printer to wake up from Sleep mode or Sleep delay.

- The control panel home button LED is illuminated
- The power-switch LED flashes once every three to five seconds

If the control panel is not responding, or if it appears black or blank, try the following:

a. Turn the printer power off, and then on again.

b. Verify that the system is correctly functioning by printing a test page. Does the test page print correctly?

   Is the printer HP Embedded Web Server (EWS) accessible?

c. Verify that the control panel is correctly functioning. If it is not, turn the printer off and reseat the control-panel assembly cable connections at the control-panel assembly and the formatter.

d. Try upgrading the firmware. If the firmware upgrade fails to resolve the problem, and the printer still freezes while in Sleep mode or Sleep delay, elevate the case.

e. If the error persists and the EWS functions correctly, replace the control-panel assembly.

6. If normal start-up noises are not heard, turn the printer off, and then remove any installed accessories (for example, envelope feeders, paper feeders, or output accessories).
7. Turn the printer on, and then listen for start-up noises. If normal start-up noises are heard, the problem might be with an accessory.
8. Perform an engine test. The engine test procedure varies by printer, so refer to the printer Service Manual to get instructions.
9. If the engine test page prints, the print engine is operating normally. Replace the formatter.

CAUTION: Under **NO** circumstances should a formatter from a different printer be installed during the repair or troubleshooting processes. The formatter stores important data specific to the model of printer it is installed in and is not designed to be swapped or repurposed in any way. Return a used formatter to HP.

Issues that can occur from swapping a formatter include:

- Serial number, product number, product name, page count, and supported cartridges information change and might make a product unusable
- 33.02.01 Used board/Disk installed errors

If a used formatter is installed and causes this issue, the **partner** must cover the costs of the repair in the form of a product replacement. **There is no method in the field to recover a printer where a used formatter is installed.**

For more information, see the following topic (c06360930):

- HP internal link: 33.02.01 error or printer name and/or product number changes after replacing the formatter
- HP external partner link: 33.02.01 error or printer name and/or product number changes after replacing the formatter

To access the HP partner link, you must first log in to the HP Partner First Portal and then connect to WISE.

NOTE: If the engine test page does not print, turn the printer off, reconnect the formatter power connector, remove the embedded MultiMedia Card (eMMC), and then try the engine test again. If the page prints, the problem might be the eMMC.

10. If after replacing the formatter or eMMC normal start-up noises are still not heard, replace the DC controller.
11. If the print engine appears to be correctly operating (the engine test page successfully printed) and the control panel is still blank, replace the power supply.

Troubleshooting an unresponsive printer

If the printer powers up normally and the control panel displays correctly, but the printer appears unresponsive to print jobs, use the following steps to troubleshoot the issue.

1. The control panel should indicate a Ready, Paused, Sleep mode on or Sleep delay on status. If an error message displays, resolve the error. Resolve any supply issues.
2. For network connection errors, verify that the network port is active and that the cables are securely seated.
   a. Check the network cable connections between the printer and the computer or network port. Make sure that the connections are secure.
   b. Make sure that the cables are not faulty by trying different cables, if possible.
3. Check the network LEDs (callout 1) to see if they indicate any issues.

NOTE: The figure below is representational only. Network LED location varies by printer.

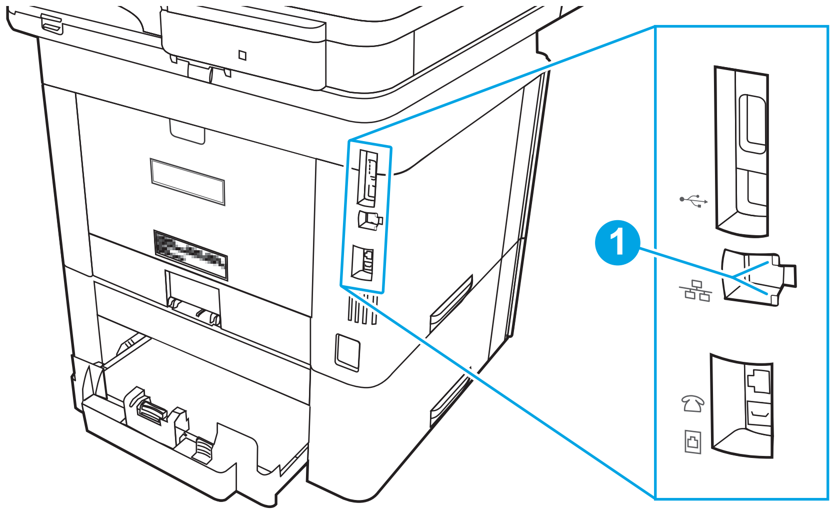
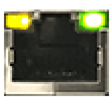


Table 6-43 Network LEDs

LED light pattern	Description
	Solid green light and flashing yellow light indicates a successful network connection.
	No lights on indicates a faulty network connection. Disconnect and reconnect the cable to the port. In the Network Settings Menu, verify the link settings and make sure that the port is enabled.

4. Use one of the following options to print a configuration page. If the printer is connected to a network, an HP Jetdirect page also prints.

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

Print the configuration page from a SFP control panel

1. From the Home screen on the printer control panel, use the arrow buttons to navigate to Reports, and then press the OK button.
2. Use the arrow buttons to scroll to Configuration/Status Pages, and then press the OK button.
3. Use the arrow buttons to scroll to Configuration Page, and then press the OK button.
4. Use the arrow buttons to scroll to the print icon . Press the OK button to print the pages.

Print the configuration page from an MFP control panel

1. From the Home screen on the printer control panel, scroll to and touch the Reports button.
2. Open the following menus:
   - Configuration/Status pages

   3. Touch Configuration Page to select it.

   4. Touch the print icon to print the pages.

5. Check to see if there is a newer version of the firmware available. If there is, update the firmware.

6. Verify that the correct print driver for this printer is installed. Check the program to make sure that the print driver for this printer is used. The print driver can be downloaded from support.hp.com.

7. Print a short document from a different program that has worked in the past. If this solution works, the problem is with the program. If this solution does not work (the document does not print), complete these steps:

   a. Try printing the job from another computer that has the printer software installed.

   b. If the printer is connected to the network, connect the printer directly to a host computer with a USB cable. Redirect the printer to the correct port, or reinstall the software (make sure to select the new connection type).

   NOTE: The host USB port may disabled from the factory. If so, this port needs to be activated first before connecting the printer to the USB port.

For more information about troubleshooting an unresponsive printer and about troubleshooting connectivity issues, see the "Performance and connectivity troubleshooting" section of the Service manual.

Engine diagnostics

Learn about internal engine diagnostics that help in troubleshooting print quality, paper path, noise, assembly, and timing issues.

Engine test

Learn about troubleshooting the printer using the engine test diagnostic.

When the engine test is performed, a test page with lines prints if the engine is functioning correctly.

NOTE: Depending on printer models, either a simplex engine test page, a duplex engine test page, or both simplex and duplex engine test pages might be available.

Use a small pointed object to depress and hold the engine test button (location varies depending on the printer model). An engine test page prints. The test page can use only Tray 2 as the paper source, so make sure that paper is loaded in Tray 2.

Possible engine test pages (printer dependent)

- A series of lines parallel to the **short** end of the page.
- A series of lines parallel to the **long** end of the page.

Defeating interlocks

Learn about defeating printer interlocks.

Different tests can be used to isolate different types of issues. For assembly or noise isolation, run the diagnostic test when the toner cartridge door or rear door is open.

To operate the printer with the doors open, the interlock switch levers must be depressed to simulate a closed-cover position.

WARNING! Be careful when performing printer diagnostics to avoid risk of injury. Only trained service personnel should open and run the diagnostics with the covers removed. Never touch any of the power supplies when the printer is turned on.

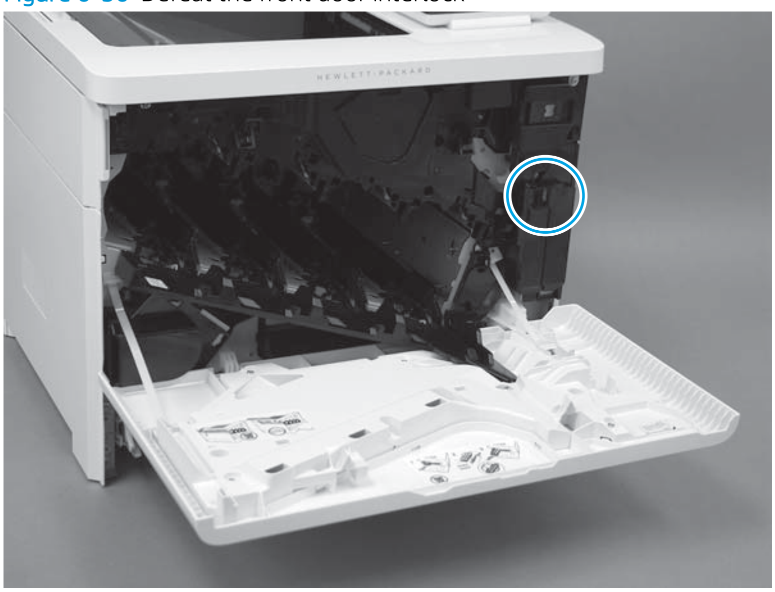
TIP: Fold a stiff piece of paper, for example a business card or index card, into a 10 mm (.375 in) strip, and insert the strip into the slots for the front door and right door logic switches.

Defeat the front (cartridge) door interlock

1. Open the front door.
2. Insert a folded piece of paper into the slot.

   TIP: Fold a stiff piece of paper, for example a business card or index card, into a 10 mm (.375 in) strip, and insert the strip into the slots for the front door and right door logic switches.

   Figure 6-50 Defeat the front door interlock

Defeat the right door interlock

1. Open the right door.

2. Insert a folded piece of paper into the slot.

TIP: Fold a stiff piece of paper, for example a business card or index card, into a 10 mm (.375 in) strip, and insert the strip into the slots for the front door and right door logic switches.

Figure 6-51 Defeat the right door interlock (right side)

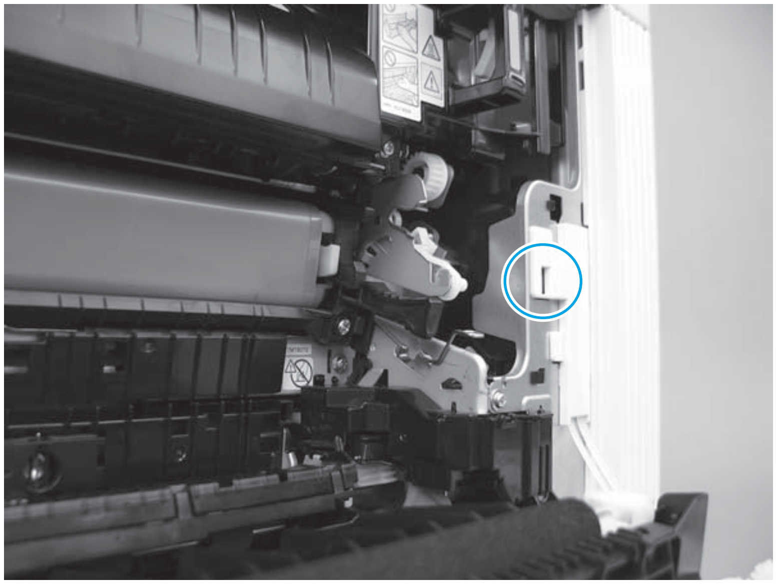
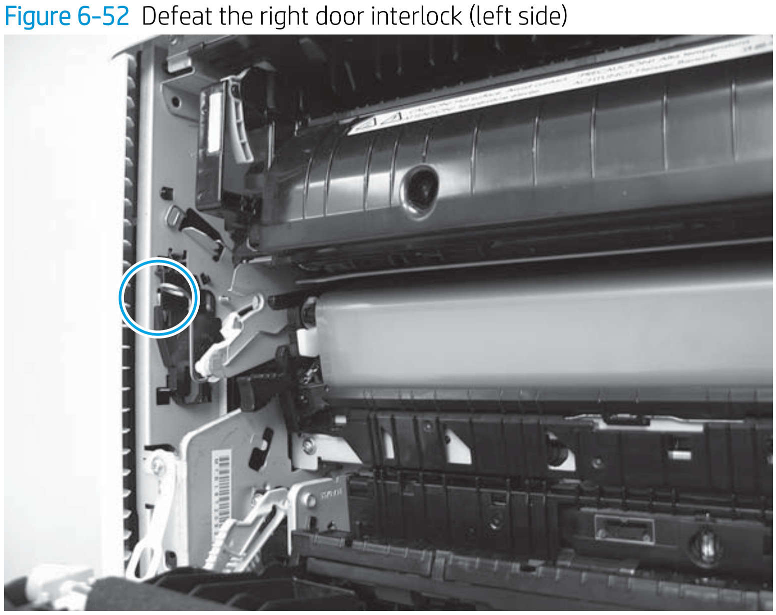


Figure 6-52 Defeat the right door interlock (left side)



Control panel troubleshooting

If the control panel is not responding normally or has display issues, use the following procedures to troubleshoot the issues.

Control panel system diagnostics (MFP)

Learn about MFP printer firmware control panel troubleshooting.

Use the diagnostics in this section to test the control panel hardware and display using the printer firmware system diagnostics.

Touchscreen diagnostic mode (M553x, M555, M577, M578, and E57540)

Learn about touchscreen diagnostic mode.

Use the diagnostics in this section to test the control-panel hardware and embedded firmware. These tests are useful for checking control-panel functionality independent of the printer control-panel system diagnostics. To test the control panel using the system diagnostics, see Open the control panel system diagnostic tests on page 313.

1. **M553x, M555, E55040**: Locate the diagnostic-tests access button on the back of the control panel.

   Figure 6-53 Diagnostic-tests access button

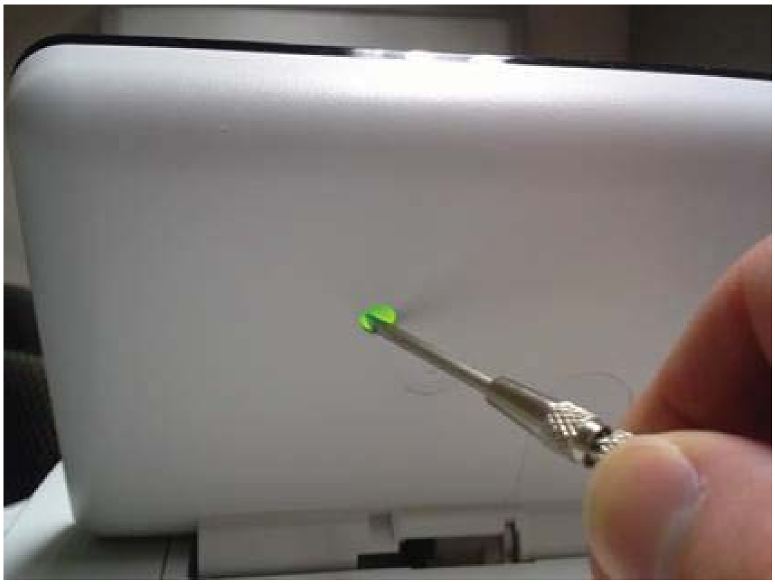
   

2. **M553x, M555, E55040**: Press the diagnostics-access button. Repeatedly pressing the button cycles through the available diagnostics.

NOTE: A pen, pencil, or other small blunt object is needed to press the button.

TIP: When pressed, the button illuminates green.

Figure 6-54 Press the diagnostics-access button



3. **M577, M578, and E57540**: Locate the diagnostic-tests access button on the back of the control panel.

Figure 6-55 Diagnostic-tests access button

4. **M577, M578, and E57540**: Press the diagnostics-access button. Repeatedly pressing the button cycles through the available diagnostics.

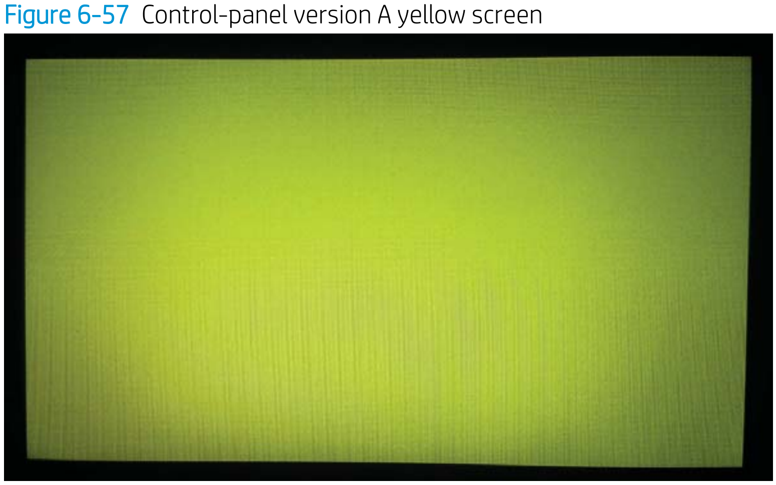
Figure 6-56 Press the diagnostics-access button

5. A yellow screen appears (after the first press of the button) indicating that the control-panel firmware is version A (a magenta screen indicates version B firmware).

NOTE: If a different color appears on the screen, escalate the problem using the HP support process.

TIP: After 4 seconds of inactivity, the diagnostic mode times out and is exited.

Figure 6-57 Control-panel version A yellow screen



6. Touch the screen to cycle the screen through the following:

NOTE: Depending on where the control panel was manufactured, a magenta, a green, and a blue screen might appear before the white screen. Touch the screen to cycle past these screens.

- Five brightness levels of a white screen.
- A final black screen.

TIP: When the final black screen displays, press the Home button to cycle through the diagnostic screens again.

7. Pressing the diagnostic-tests button with the black screen displayed, exits the diagnostic mode.

Control panel diagnostic flowcharts (M553x, M555, M577, M578, and E57540)

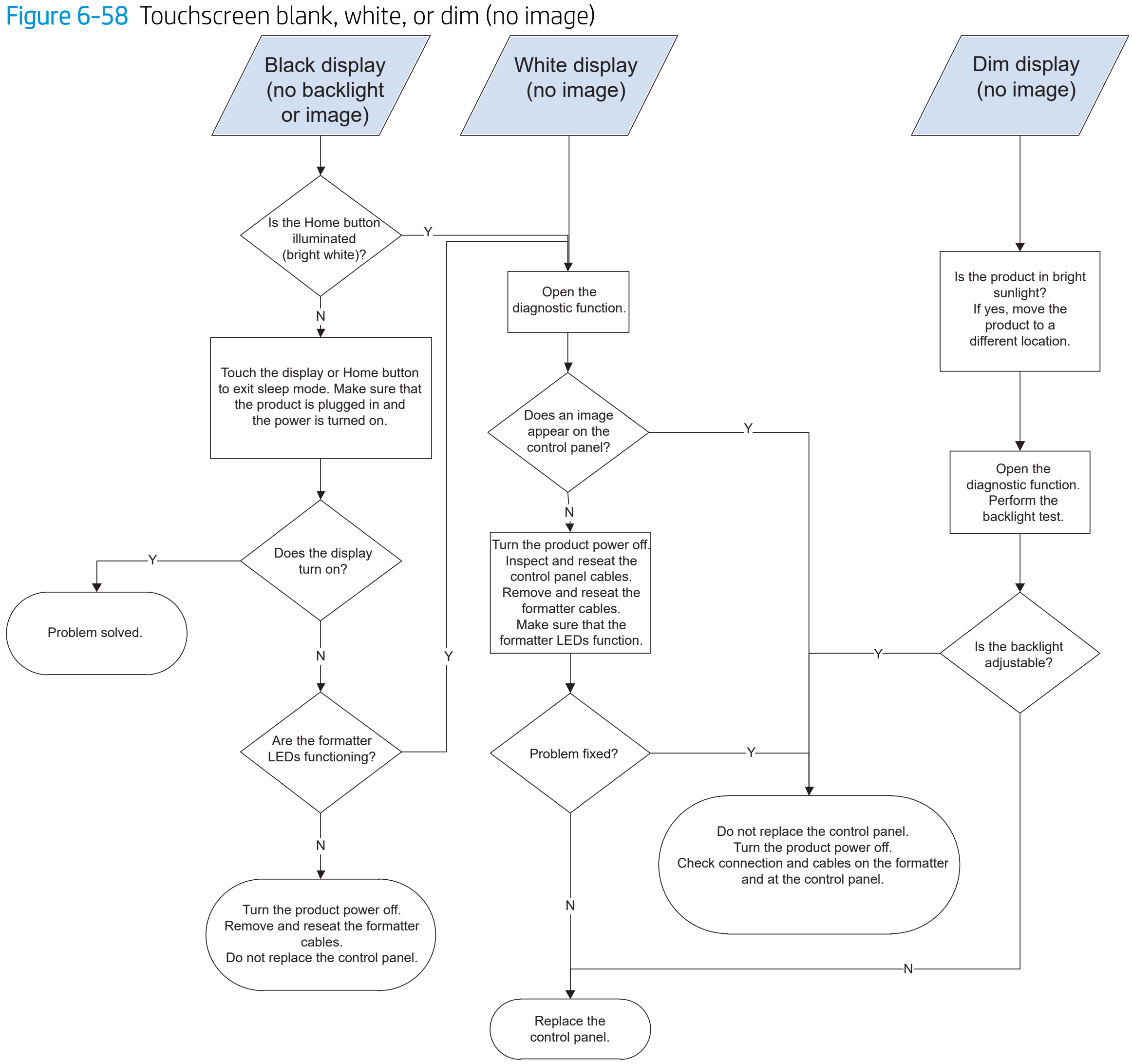
Use the flowcharts in this section to troubleshoot the following control panel problems.

- Touchscreen is blank, white, or dim (no image).
- Touchscreen is slow to respond or requires multiple presses to respond.
- Touchscreen has an unresponsive zone.
- No control panel sound.
- Home button is unresponsive.
- Hardware integration pocket (HIP) is not functioning (control panel functional).

Touchscreen black, white, or dim (no image)

To open the diagnostic function, press the button on the back of the control panel.

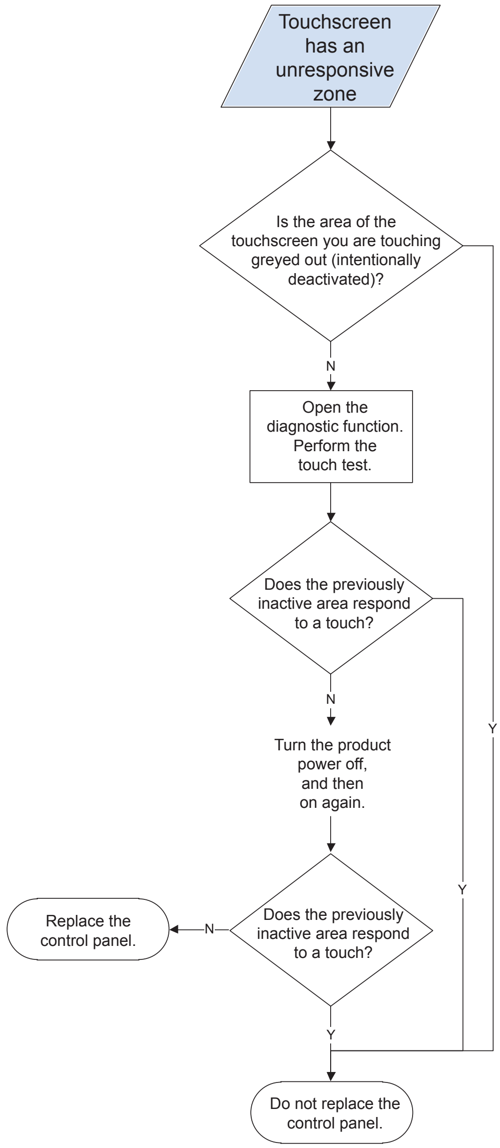
Figure 6-58 Touchscreen blank, white, or dim (no image)



Touchscreen has an unresponsive zone

To open the diagnostic function, press the button on the back of the control panel.

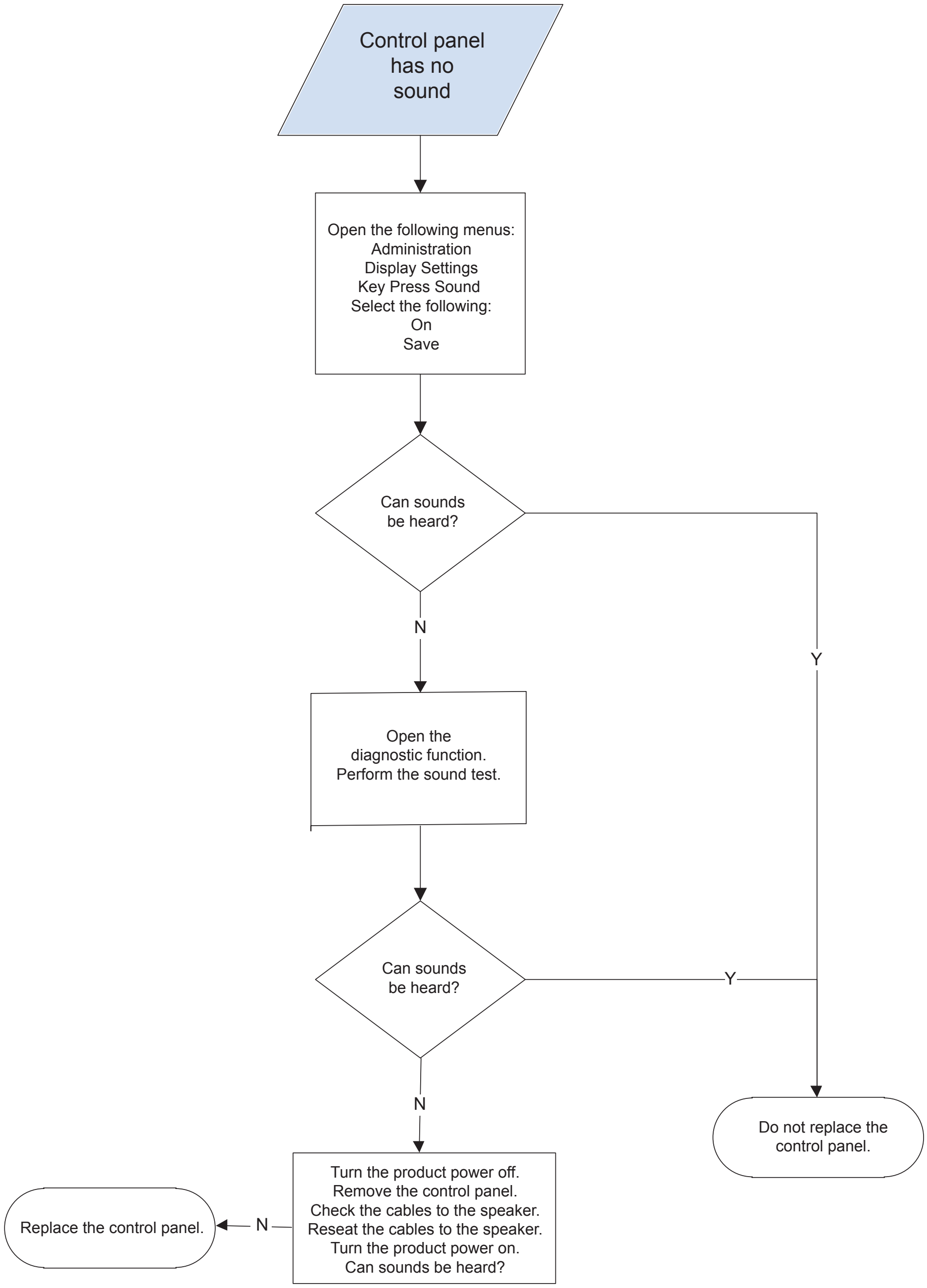
Figure 6-59 Touchscreen has an unresponsive zone



No control panel sound

To open the diagnostic function, press the button on the back of the control panel.

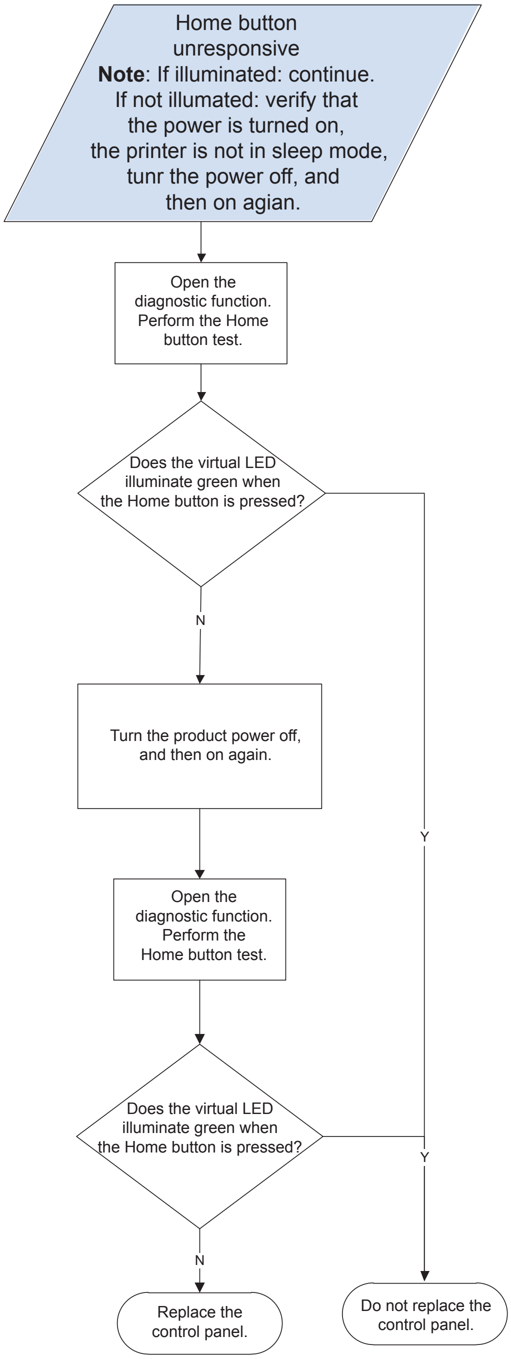
Figure 6-60 No control panel sound



Home button is unresponsive

To open the diagnostic function, press the button on the back of the control panel.

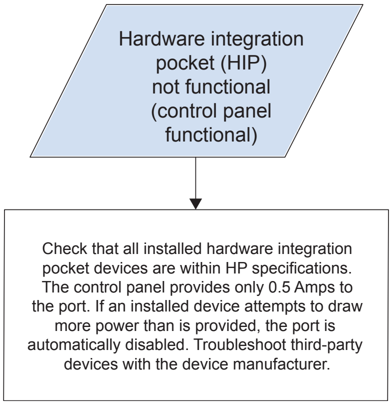
Figure 6-61 Home button is unresponsive



Hardware integration pocket (HIP) is not functioning (control panel functional)

Review the following information when the HIP is not functioning, but the control panel is functional.

Figure 6-62 Hardware integration pocket (HIP) is not functioning (control panel functional)



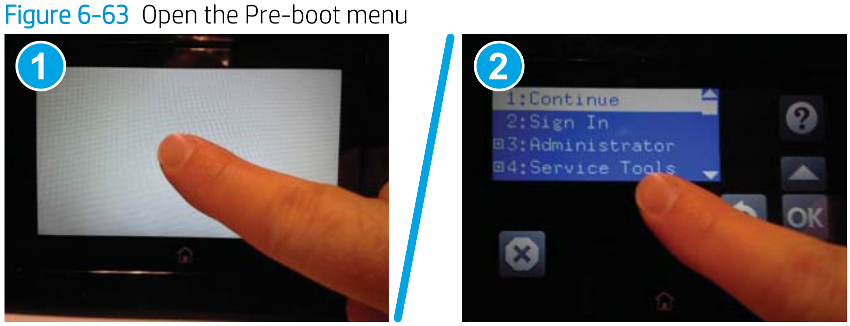
Open the control panel system diagnostic tests

Learn about accessing the control panel system diagnostics tests from a touchscreen control panel.

Use the following procedure to open the control panel system diagnostics tests (MFP).

1. Turn the printer power off, and then on again.
2. Touch the middle of the control panel display when you see the 1/8 under the logo.

   Figure 6-63 Open the Pre-boot menu

3. On the Pre-boot menu screen, use the following buttons to navigate the tests.

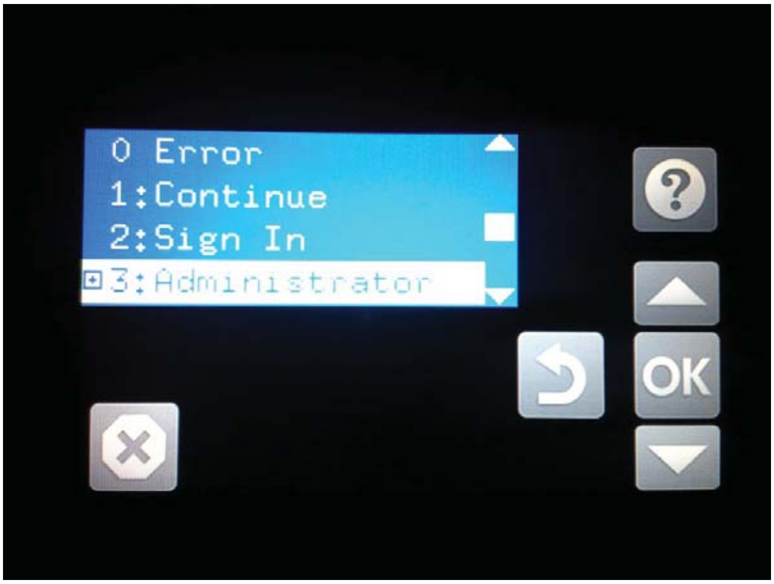
Figure 6-64 Pre-boot menu

Table 6-44 Pre-boot menu button descriptions

Button	Description
	Use this button to see more information about a selected item.
	Use this button to scroll up through menu items.
	Use this button to select a highlighted menu item.
	Use this button to scroll down through menu items.
	Use this button to go back to the previous menu.
	Not used.
	Use this button to exit a diagnostic test.

4. Use the down arrow ▼ button to scroll to +3 Administration, and then press the OK button to select it.

Figure 6-65 Access the administration menu



5. Use the down arrow ▼ button to scroll to +E CP Diagnostics, and then press the OK button to select it.

> NOTE: An administrator password might be required to continue.

Figure 6-66 Access the diagnostics menu

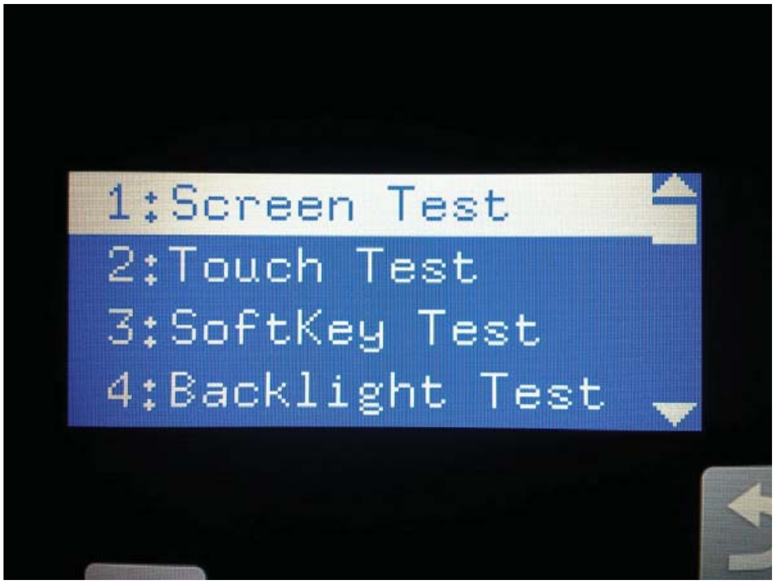
Screen test

Learn about the control panel system diagnostic screen test.

1. Open the control panel system diagnostic tests. See Open the control panel system diagnostic tests on page 313.

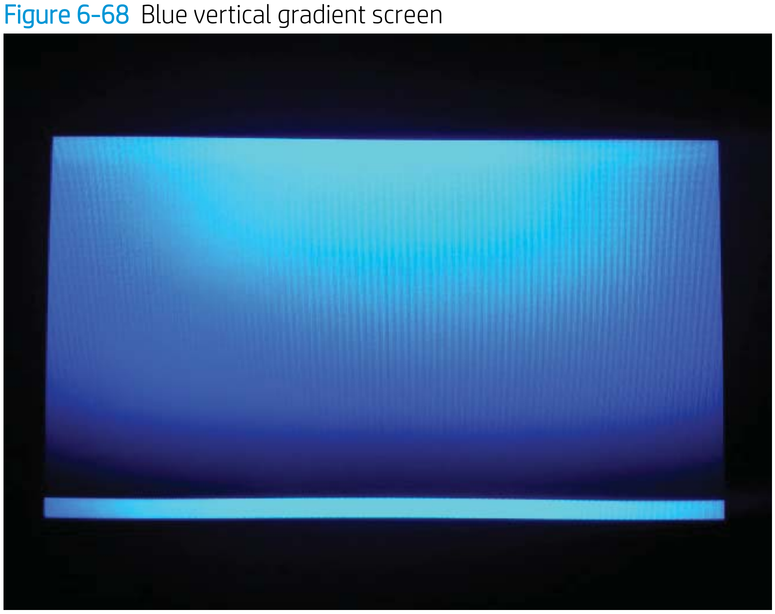
2. With 1 Screen Test highlighted, press the OK button to select it.

Figure 6-67 Open the screen test



The blue vertical gradient screen appears.

Figure 6-68 Blue vertical gradient screen



3. Touch the touchscreen to scroll though the remaining touchscreen test screens.

NOTE: Touch the Home button to exit the test.

Table 6-45 Touchscreen test screens

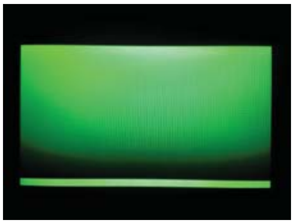
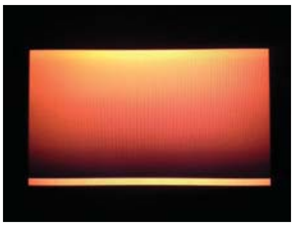
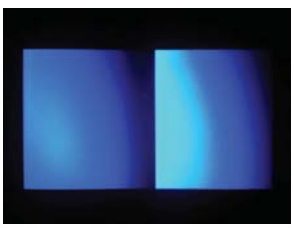
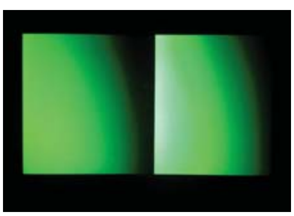
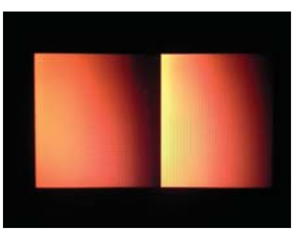
Screen	Description
	Green vertical gradient
	Red vertical gradient
	Blue horizontal gradient
	Green horizontal gradient
	Red horizontal gradient
	Blue with black horizontal interlaced

Table 6-45 Touchscreen test screens (continued)

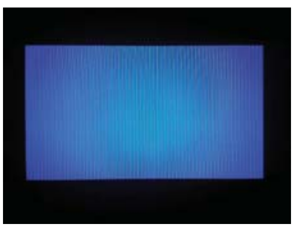
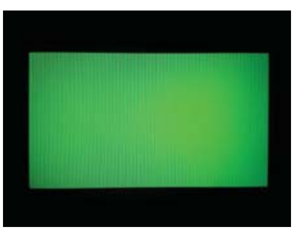
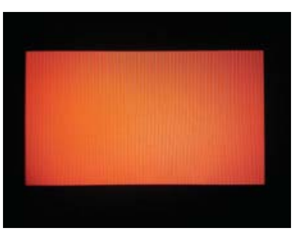
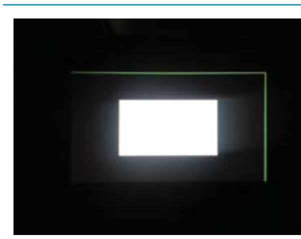
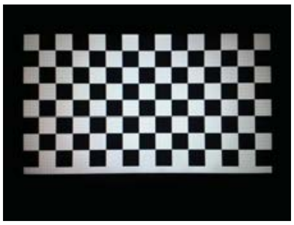
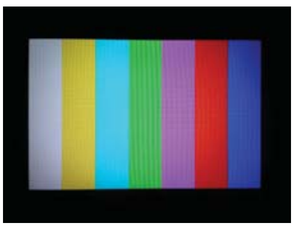
Screen	Description
	Green with black horizontal interlaced
	Red with black horizontal interlaced
	Blue with black vertical interlaced
	Green with black vertical interlaced
	Red with black vertical interlaced
	Black with white center

Table 6-45 Touchscreen test screens (continued)

Screen	Description
	White with black center
	Checkerboard
	Multicolor stripes
	Blue green grid meshing

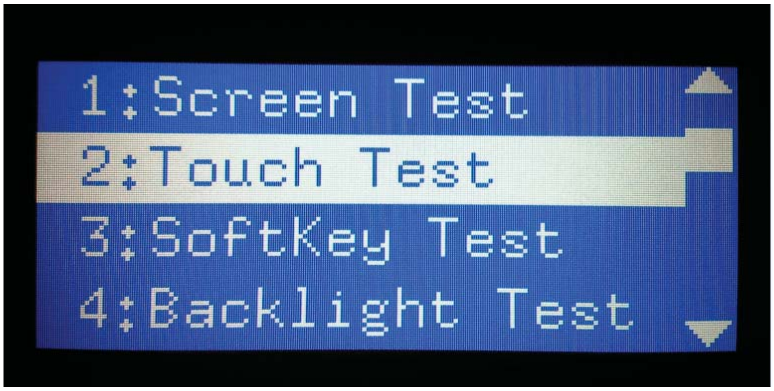
Touch test

Learn about the control panel system diagnostic touch test.

1. Open the control panel system diagnostic tests. See Open the control panel system diagnostic tests on page 313.

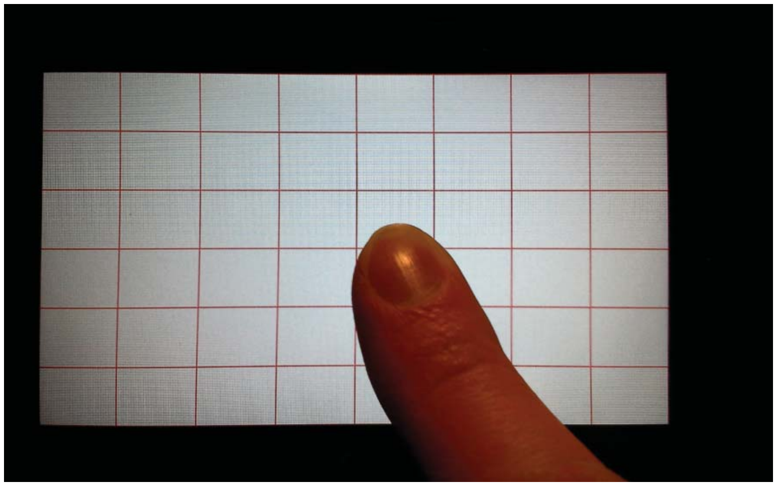
2. Use the down arrow ▼ button to scroll to 2 Touch Test, and then press the OK button to select it.

Figure 6-69 Open the touch test



3. Use your finger to touch the white grid on the display.

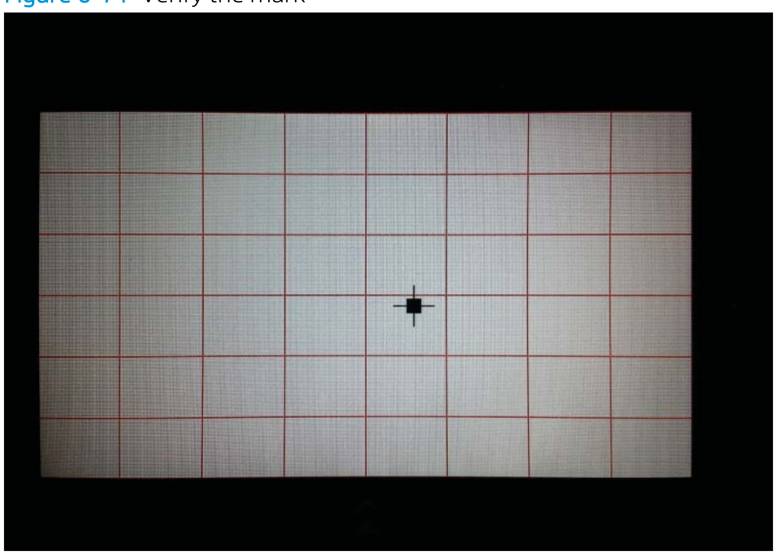
Figure 6-70 Touch the white grid



A mark appears on the grid where it was touched.

> NOTE: Touch the Home button to exit the test.

Figure 6-71 Verify the mark



SoftKey test

Learn about the control panel system diagnostic SoftKey test.

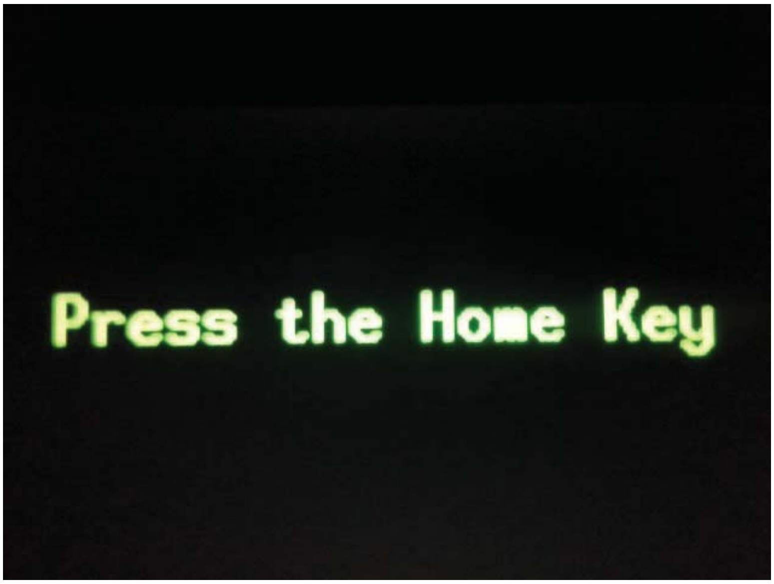
1. Open the control panel system diagnostic tests. See Open the control panel system diagnostic tests on page 313.

2. Use the down arrow ▼ button to scroll to 3 SoftKey Test, and then press the OK button to select it.

Figure 6-72 Open the softkey test

3. When prompted, touch the Home button.

Figure 6-73 Touch the Home button



If the test is successful, the following screen appears on the display.

NOTE: Touch the screen to exit the test.

Figure 6-74 Successful test

Backlight test

Learn about the control panel system diagnostic backlight test.

1. Open the control panel system diagnostic tests. See Open the control panel system diagnostic tests on page 313.

2. Use the down arrow ▼ button to scroll to 4 Backlight Test, and then press the OK button to select it.

   After selecting the 4 Backlight Test, the screen automatically dims, and then returns to full brightness.

   NOTE: Touch any key to exit the test.

   Figure 6-75 Open the backlight test

Sound test

Learn about the control panel system diagnostic sound test.

1. Open the control panel system diagnostic tests. See Open the control panel system diagnostic tests on page 313.

2. Use the down arrow ▼ button to scroll to 5 Sound Test, and then press the OK button to select it.

   After selecting the 5 Sound Test, the printer emits a series of audible tones.

> **NOTE:** Touch any key to exit the test.

Figure 6-76 Open the sound test

Version

Learn about the control panel system diagnostic version information.

1. Open the control panel system diagnostic tests. See Open the control panel system diagnostic tests on page 313.

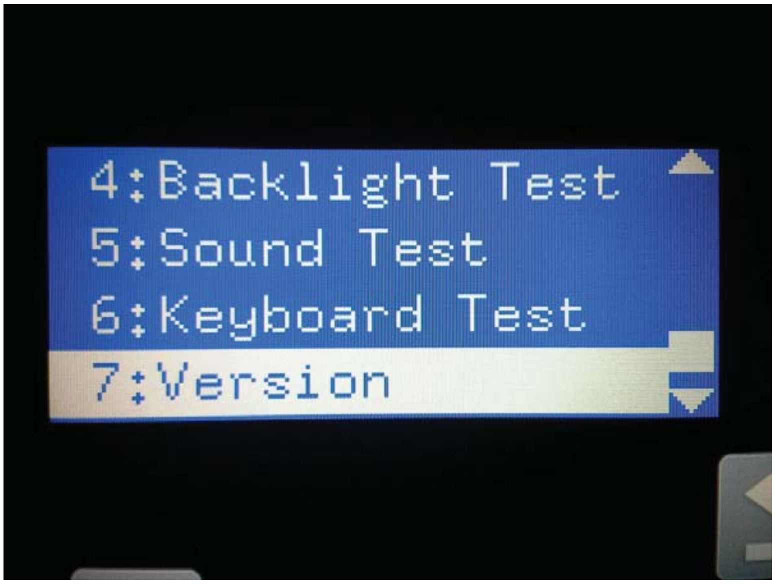
2. Use the down arrow ▼ button to scroll to 7 Version, and then press the OK button to select it.

> **NOTE:** Touch any key to exit the test.

> **NOTE:** The following types of information are for the control panel only, not the printer.

- Panel ID
- Hardware (version)
- Firmware (version)
- KB Hw (version)
- KB Firm (version)
- LCD Vendor
- Touch Controller Version

Figure 6-77 Open the version information



Control panel messages document (CPMD)

Learn about the printer control panel messages document (CPMD).

NOTE: A complete CPMD is not included in this service manual.

Click here to access the current CPMD for this printer.

How to search for printer documentation

The CPMD, error codes, and other support documentation for each printer is found on the internal HP portals.

These are Wise for Channel and WISE (formerly SAW). Wise for channel is available to HP channel partners and WISE is available to call agents, service technicians, and other HP internal users. The level of detail available will depend on your access credentials . To learn how to find support content in WISE, watch the video here.

To view a list of control panel message documents per printer in **WISE**, go to the following topic (c05048451):

- HP internal link: Control panel message document (CPMD) list
- HP external partner link: Control panel message document (CPMD) list

NOTE: To access the HP partner link, you must first log in to the HP Partner First Portal and then connect to WISE.

How to search WISE for printer documentation

These instructions are for HP internal use by call agents, service technicians, and other internal users.

To learn how to find support content in WISE, watch the video here: Finding Error Code and Control Panel Message Document in WISE.

To view a list of control panel message documents per printer in **WISE**, go to HP LaserJet, OfficeJet, PageWide, ScanJet Enterprise - Control panel message document (CPMD) list (HP internal only).

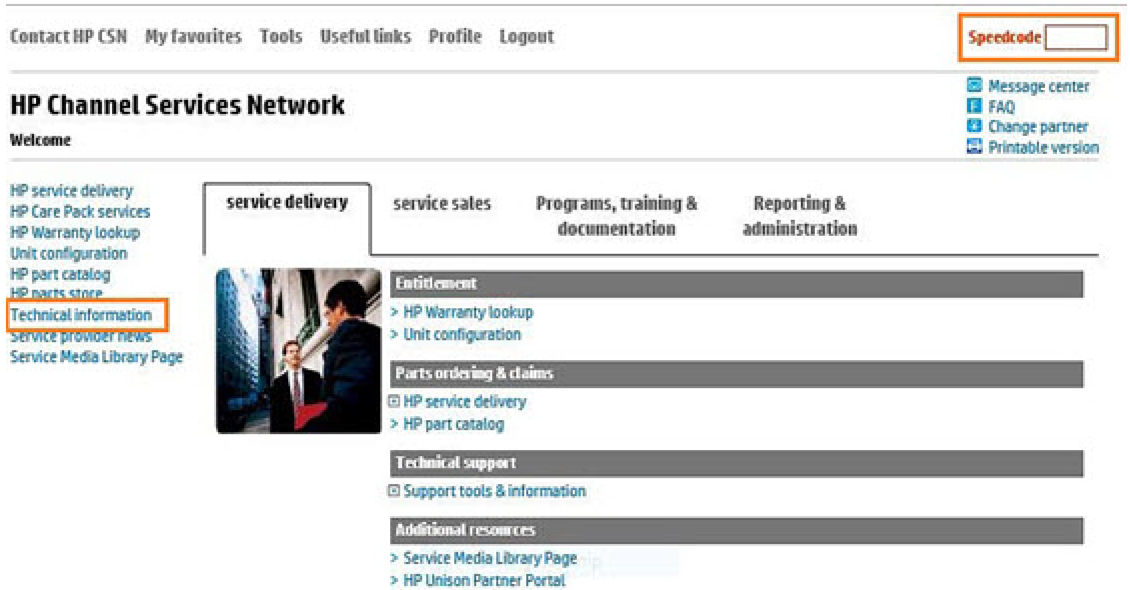
How to search GCSN for printer documentation

These instructions are for internal use by HP Channel Partners.

To learn how to find support content in GCSN, watch the video here: Finding Error Code and Control Panel Message Documents in GCSN or follow these steps:

1. On the Home screen in GCSN, open **Technical information** using one of the following two methods:
   - Type `TINF` in the **Speedcode** field found in the upper right corner and press Enter.

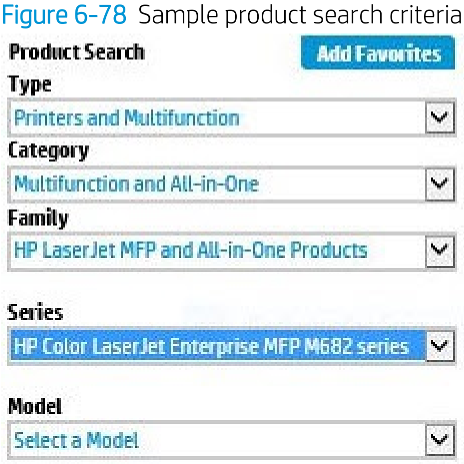
- On the Home page, click **Technical information** in the left pane.



2. Under **Product Search**, select the **Type**, **Category**, **Family**, and **Series** that match your product model (leave the **Model** field as blank or the default).

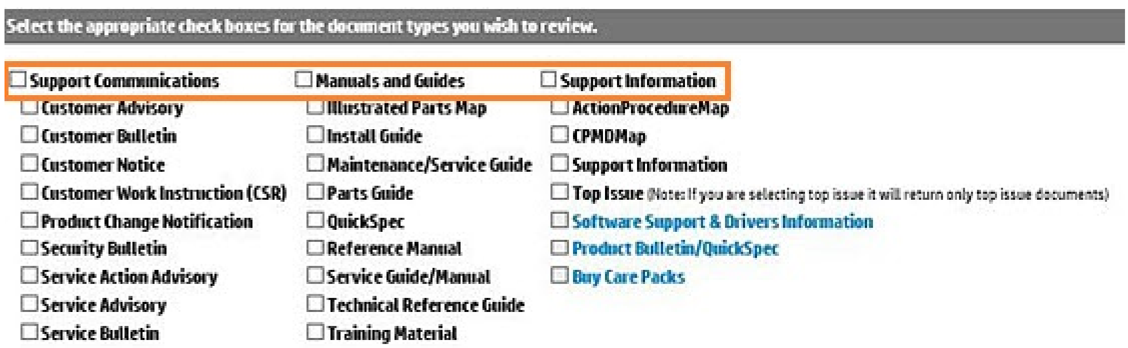
NOTE: Make sure to log in to GCSN using your service-qualified credentials to access the most comprehensive content list available. To find out how to become service-qualified, contact your HP representative.

Figure 6-78 Sample product search criteria



3. Click **Add Favorites** and then click **Add** to add the printer to your Favorites list and allow you to bypass the **Product Search** fields next time for that particular model (optional).

4. Clear all of the high-level check boxes.



5. Select the check boxes for the document types for which you want to search.

NOTE: Select only the high-level **Manuals and Guides** search option if you are not sure in which type of manual or guide the content might be listed.

6. Select **Submit**.

7. If needed, click **Back To selection Criteria** and narrow your search (the maximum allowed search result is 100 documents).

NOTE: Do not select the **Top Issue** option unless you only want to view top issues for that model. All other available content will be filtered out.

Technical information type	Select this checkbox
CPMD	**CPMD-Map**
List of all CPMDs per product	**Support Information**
Installation Guide or Hardware Install Guide	**Maintenance/Service Guide** or **Install Guide**
Service cost document	**Install Guide** or **Service Guide/Manual**
Service guide or Service manual	**Service Guide/Manual**
Self-solve or troubleshooting document	**Support Information**
User manual or User guide	**User Guide**
Warranty and Legal Guide	**Warranty Statement**

Error-code and control-panel-message troubleshooting overview

This section provides information on error codes and searching for information.

Error codes

Error codes and control-panel messages display on the printer control panel to indicate the current printer status or situations that might require action. Error codes are numerical, or alphanumerical, and have a set structure with six characters (example: 13.WX.YZ).

- The first two characters are numeric and represent the system component that is causing the error. For example, in error code `10.22.15`, **10** = **Supplies** for HP LaserJets.
- The remaining four characters (W, X, Y, and Z values) further define the error.

HP LaserJet and HP PageWide Enterprise error codes are documented in the control panel message document (CPMD) for each printer.

The CPMD is a comprehensive list of error codes, diagnostic and troubleshooting steps to clear or resolve the error, and other helpful information such as service mode pins and part numbers.

The CPMD is continually updated and republished with the latest information for the following error codes.

Table 6-46 ERROR CODES: The first two characters

Error code	System Component	System Error Description
10.WX.YZ	Supplies (LaserJet)	Supply error or supply memory error.
11.WX.YZ	Real-time clock	Internal error with the clock on the formatter.
13.WX.YZ	Jam (LaserJet)	Paper jam or open door jam error.
15.WX.YZ	Jam (PageWide)	Paper jam or open door jam error.
17.WX.YZ	Supplies (PageWide)	Supply error or supply memory error.
20.WX.YZ	Printer memory	Insufficient memory or buffering error.
21.WX.YZ	Page	Page complexity causing a decompression error when trying to process job.
30.WX.YZ	Scanner	Flatbed scanner error occurring inside the unit.
31.WX.YZ	Document feeder	Document feeder, scanner, or jam error.
32.WX.YZ	Backup, restore, or reset	Backup, restore, or reset notification or error.
33.WX.YZ	Security	Backup, Disk, EFI BIOS, Firmware integrity (SureStart), or Trusted Platform Module (TPM) notification or error.
40.WX.YZ	Input/Output (I/O)	Partition manager, secure erase, or USB accessory error.
41.WX.YZ	Fuser, Laser scanner, or Paper path	Miscellaneous error including general and misprint or mismatch errors typically involving (but not limited to) the fuser, the laser scanner, or the paper path.

Table 6-46 ERROR CODES: The first two characters (continued)

Error code	System Component	System Error Description
42.WX.YZ	Firmware	Firmware failure involving the Event Log, Shell, System Manager, or other component.
44.WX.YZ	Firmware	Firmware failure involving a digital sending component.
45.WX.YZ	OXPd/Web Kit (PageWide)	Informational notifications involving the OXPd Web Kit (communications log).
46.WX.YZ	Engine (LaserJet)	Engine communication error.
47.WX.YZ	Firmware	Job parser or printer calibration error.
48.WX.YZ	Firmware	PJA job accounting, job management, or job pipeline error.
49.WX.YZ	Firmware	Firmware communication error.
50.WX.YZ	Fuser (LaserJet)	Fuser error.
51.WX.YZ	Laser scanner (LaserJet)	Laser scanner beam error.
52.WX.YZ	Laser scanner (LaserJet)	Laser scanner startup error.
54.WX.YZ	Sensor	Sensor error (not jam related).
55.WX.YZ	DC controller (LaserJet)	DC controller communication error.
56.WX.YZ	Paper handling (LaserJet)	Paper input/output or accessory error.
57.WX.YZ	Fan	Fan error.
58.WX.YZ	Sensor	Engine sensor failure.
59.WX.YZ	Motor (LaserJet)	Motor error.
60.WX.YZ	Tray motor error (LaserJet)	Tray lifting or pick up error.
61.WX.YZ	Engine (PageWide)	Print engine error with the 8–bit data package.
62.WX.YZ	System (LaserJet)	LaserJet internal system error.
	Print bar (PageWide)	PageWide print system error.
63.WX.YZ	Engine (LaserJet)	General engine error (electrical, communication, etc.).
65.WX.YZ	Connector	Output accessory connection error.
66.WX.YZ	Output accessory	Output accessory error.
67.WX.YZ	Input accessory	Input accessory connection error
69.WX.YZ	Duplexer	Duplexer error.
70.WX.YZ	DC controller (LaserJet)	DC controller firmware error.
80.WX.YZ	Managed device	Embedded Jetdirect error.
81.WX.YZ	Near Field Communication (NFC)	Wireless, Bluetooth or internal EIO error.
82.WX.YZ	Memory (hard disk, EMMC, etc.)	Disk hardware error.

Table 6-46 ERROR CODES: The first two characters (continued)

Error code	System Component	System Error Description
90.WX.YZ	Internal diagnostics	Internal test of systems (i.e. disk, CPB, display) or interconnection error.
98.WX.YZ	Hard disk	Hard disk partition error.
99.WX.YZ	Firmware installer	Remote Firmware Upgrade (RFU), firmware install (engine or accessory), or disk error.

Solve paper handling problems

Review the following information to solve paper handling problems.

Clear paper jams (SFP)

Use the procedures in this section to clear jammed paper from the printer paper path.

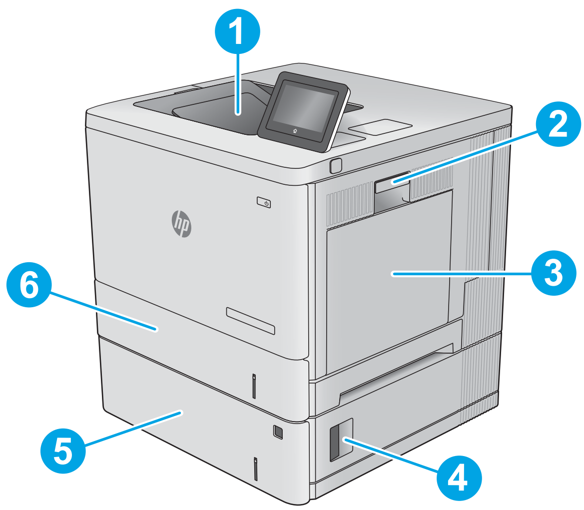
NOTE: To avoid tearing the paper, pull the jammed paper out slowly and gently.

Figures in this section are representational only. The actual printer being serviced might look slightly different depending on the model and installed accessories.

Jam locations

Jams can occur in these locations (SFP).

Figure 6-79 Paper jam locations (SFP)



Item	Location
1	Output bin
2	Right door and fuser area
3	Tray 1
4	Lower-right door
5	Optional 550-sheet trays
6	Tray 2

Auto-navigation for clearing paper jams

Learn about printer jam clearing auto-navigation.

The auto-navigation feature assists in clearing jams by providing step-by-step instructions on the control panel.

When you complete a step, the printer displays instructions for the next step until you have completed all steps in the procedure.

Experiencing frequent or recurring paper jams?

To reduce the number of paper jams, try these solutions.

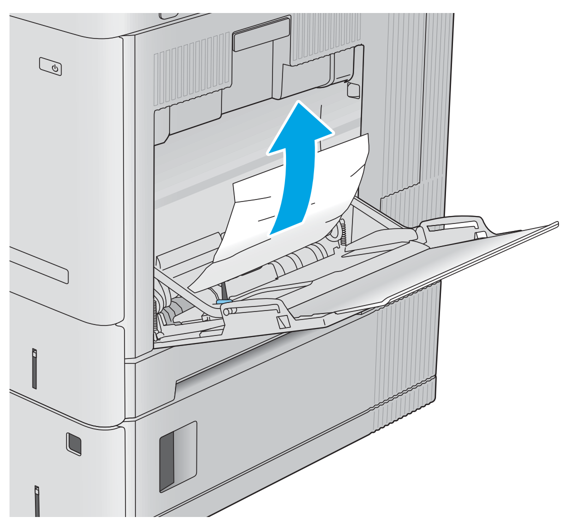
NOTE: View a video that demonstrates how to load paper in a way that reduces the number of paper jams.

1. Use only paper that meets HP specifications for this printer.
2. Use paper that is not wrinkled, folded, or damaged. If necessary, use paper from a different package.
3. Use paper that has not previously been printed or copied on.
4. Make sure the tray is not overfilled. If it is, remove the entire stack of paper from the tray, straighten the stack, and then return some of the paper to the tray.
5. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides so they are touching the paper stack without bending it.
6. Make sure that the tray is fully inserted in the printer.
7. If you are printing on heavy, embossed, or perforated paper, use the manual feed feature and feed sheets one at a time.
8. Open the Trays menu on the printer control panel. Verify that the tray is configured correctly for the paper type and size.
9. Make sure the printing environment is within recommended specifications.

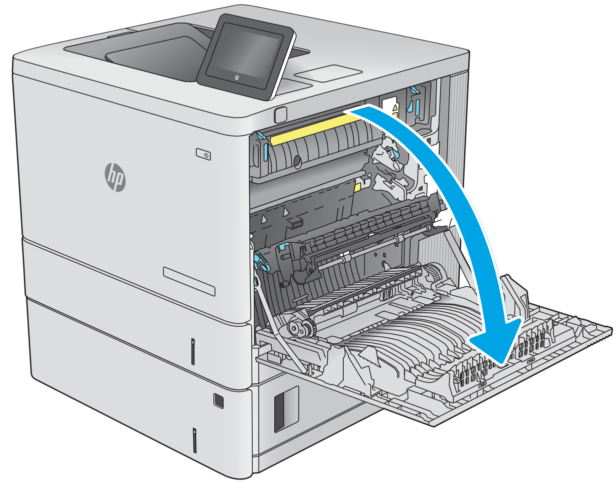
Clear paper jams in Tray 1 (13.A1)

Use the following procedure to check for paper in all possible jam locations related to Tray 1. When a jam occurs, the control panel displays an animation that assists in clearing the jam.

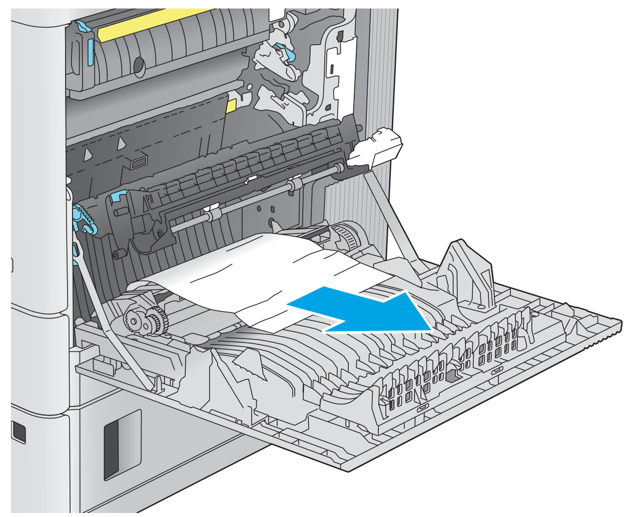
1. If jammed paper is visible in Tray 1, clear the jam by gently pulling the paper straight out. Touch the OK button to clear the message.



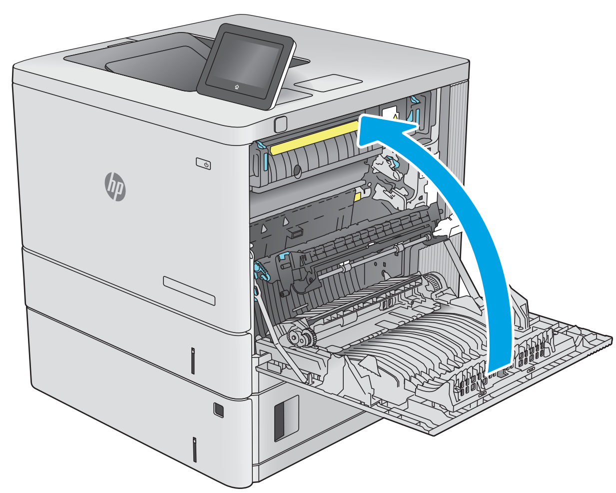
2. If the paper remains stuck, or if no jammed paper is visible in Tray 1, remove any remaining paper in the tray, and then close Tray 1 and open the right door.



3. If jammed paper is present, gently pull it out.



4. Close the right door.

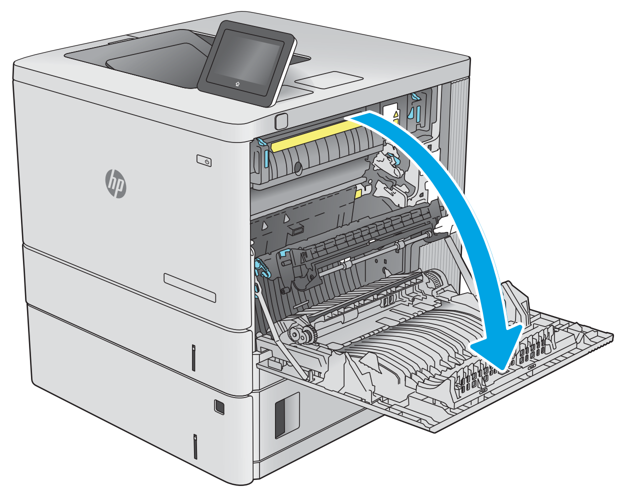


Clear paper jams in Tray 2 (13.A2)

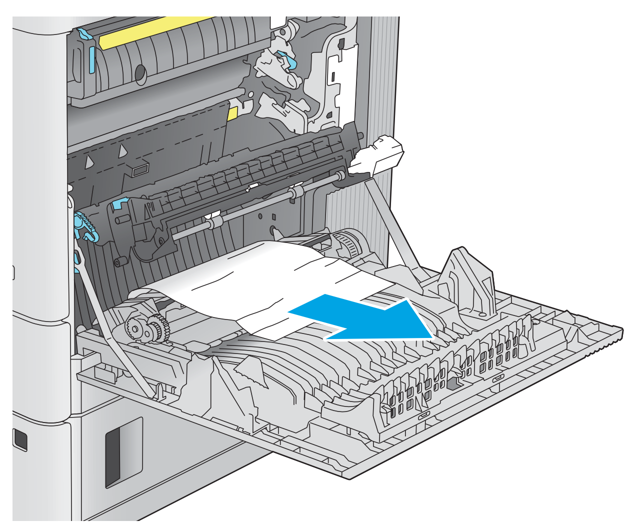
Use the following procedure to check for paper in all possible jam locations related to Tray 2. When a jam occurs, the control panel displays an animation that assists in clearing the jam.

1. Lift the latch on the right door to release it.

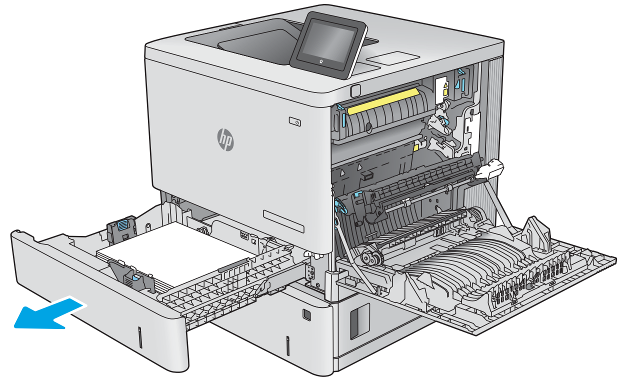
2. Open the right door.



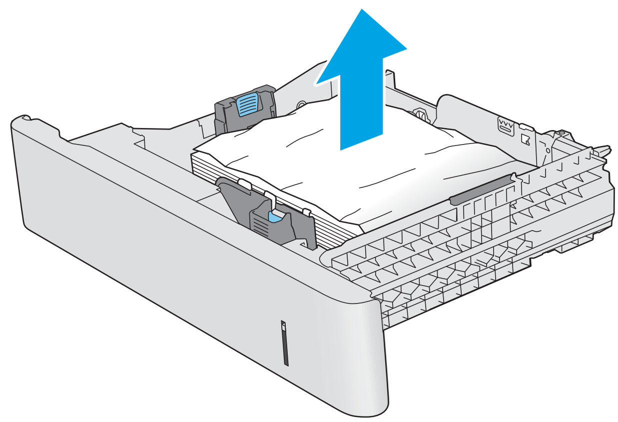
3. Gently pull out any jammed paper from the pick up area.



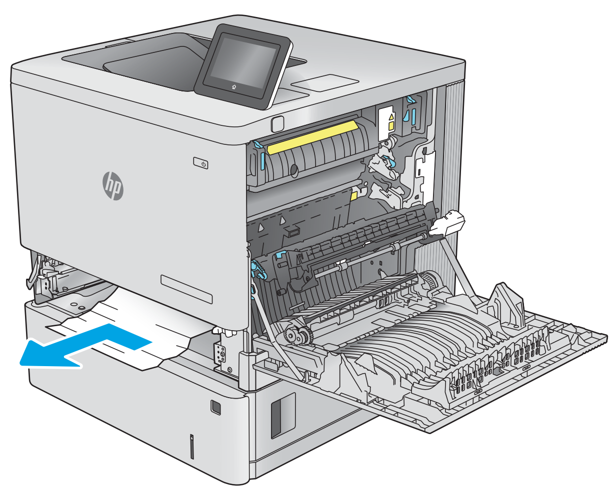
4. Pull the tray completely out of the printer by pulling and lifting it up slightly.



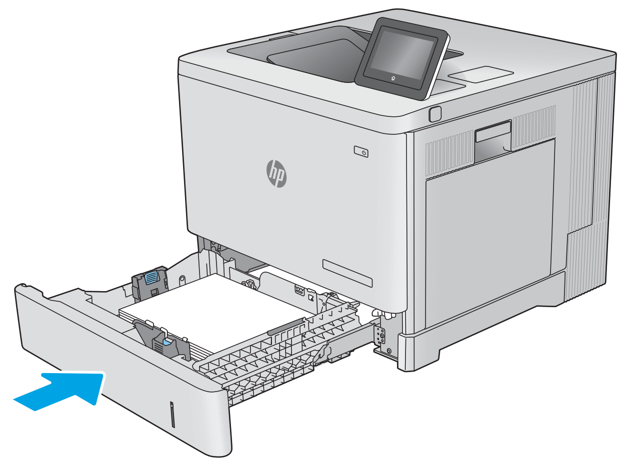
5. Remove any jammed or damaged sheets of paper. Verify that the tray is not overfilled and that the paper guides are adjusted correctly.



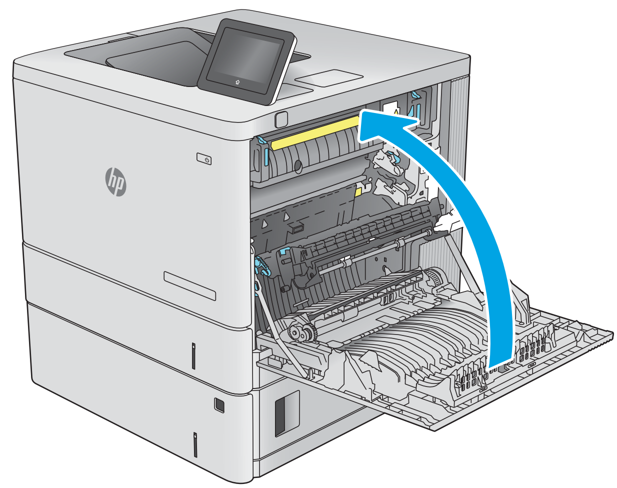
6. Remove any paper from the feed rollers inside the printer. First pull the paper to the left to release it, and then pull it forward to remove it.



7. Reinsert and close the tray.



8. Close the right door.

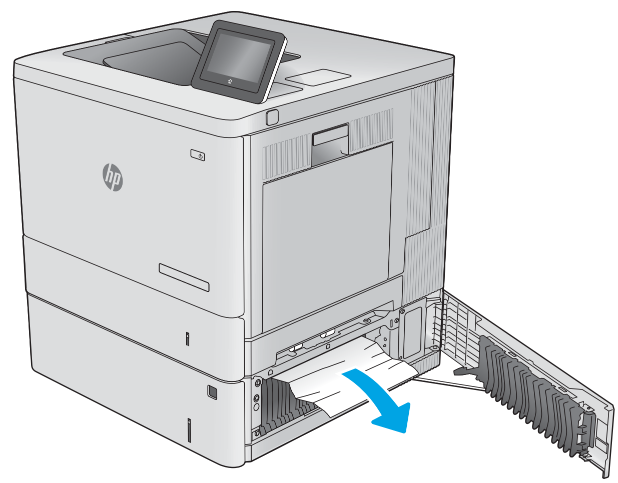


Clear paper jams in Tray 3, Tray 4, or Tray 5 (13.A3, 13.A4, 13.A5)

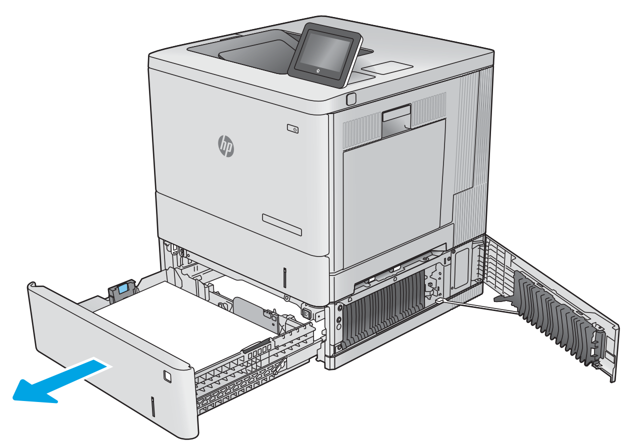
Use the following procedure to check for paper in all possible jam locations related to the optional 550-sheet paper feeders. When a jam occurs, the control panel displays an animation that assists in clearing the jam.

1. Open the lower-right door.

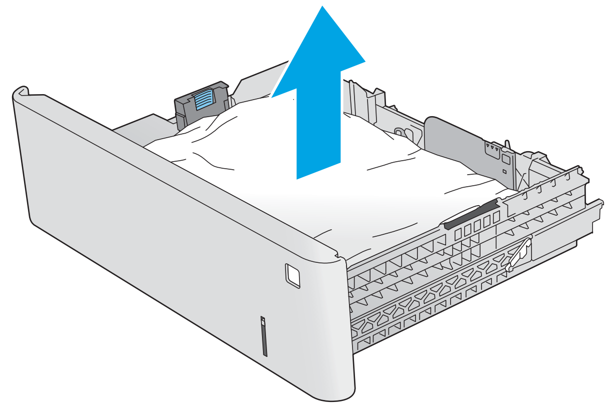
2. Gently pull out any jammed paper.



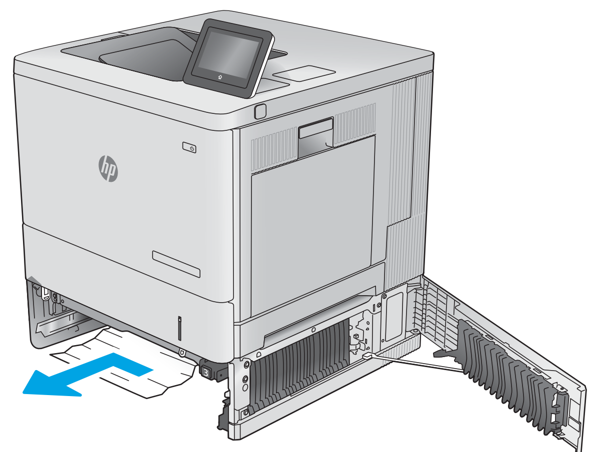
3. Pull the tray completely out of the printer by pulling and lifting it up slightly.



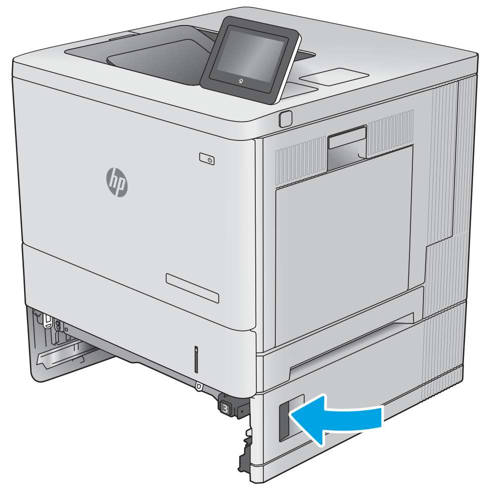
4. Remove any jammed or damaged sheets of paper. Verify that the tray is not overfilled and that the paper guides are adjusted correctly.



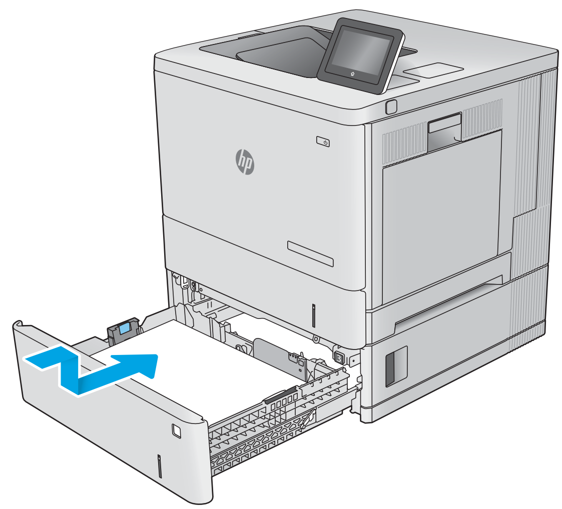
5. Remove any paper from the feed rollers inside the printer. First pull the paper to the left to release it, and then pull it forward to remove it.



6. Close the lower-right door.



7. Reinsert and close the tray.

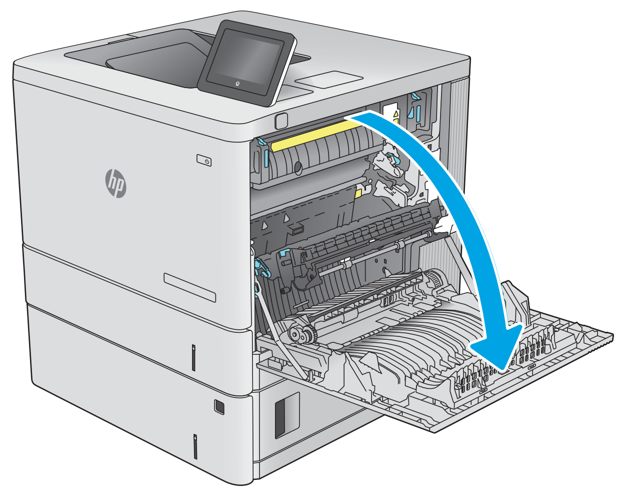


Clear paper jams in the right door and fuser area (13.B)

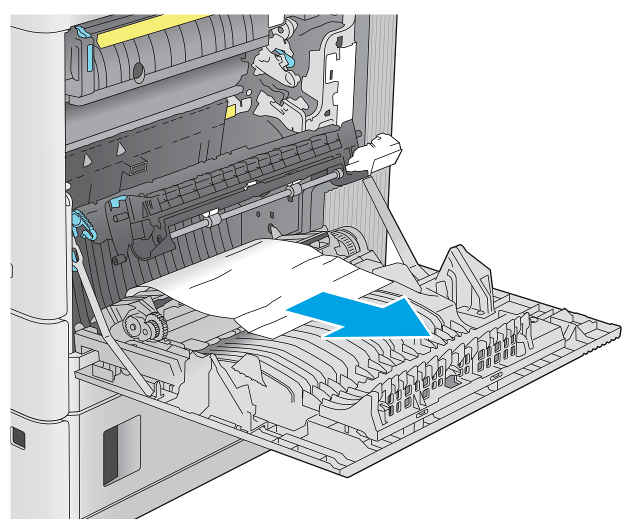
Use the following procedure to check for paper in all possible jam locations inside the right door. When a jam occurs, the control panel displays an animation that assists in clearing the jam.

1. Lift the latch on the right door to release it.

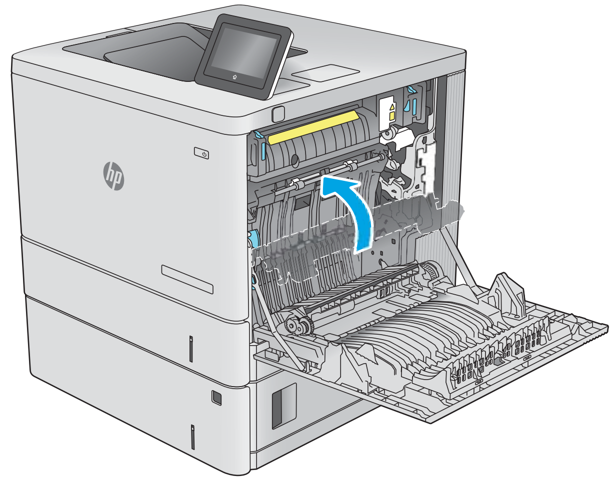
2. Open the right door.



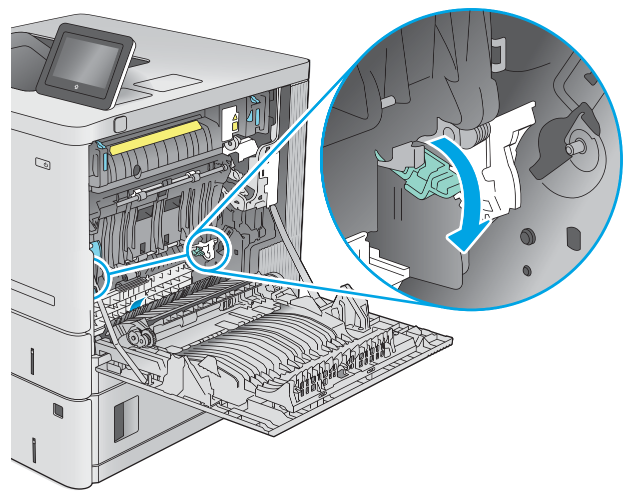
3. Gently pull out any jammed paper from the pick up area.



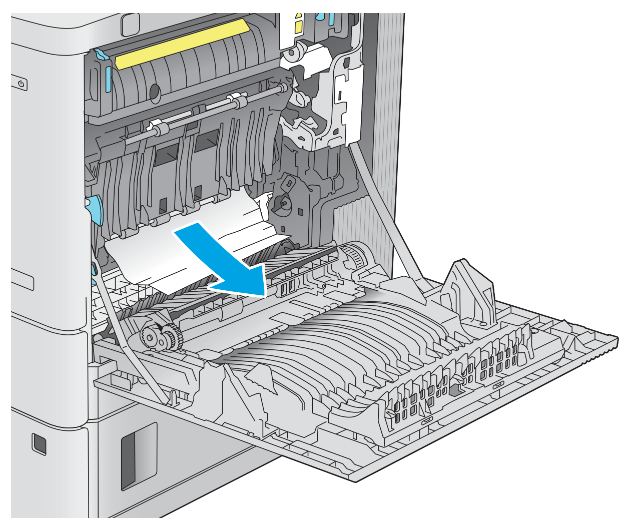
4. Close the transfer assembly.



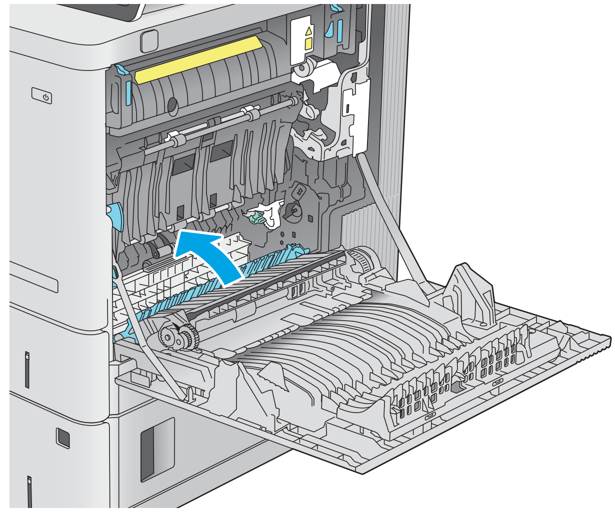
5. Push down on the green levers to release the jam-access cover.



6. Gently pull out any jammed paper. If the paper tears, make sure to remove all remnants.

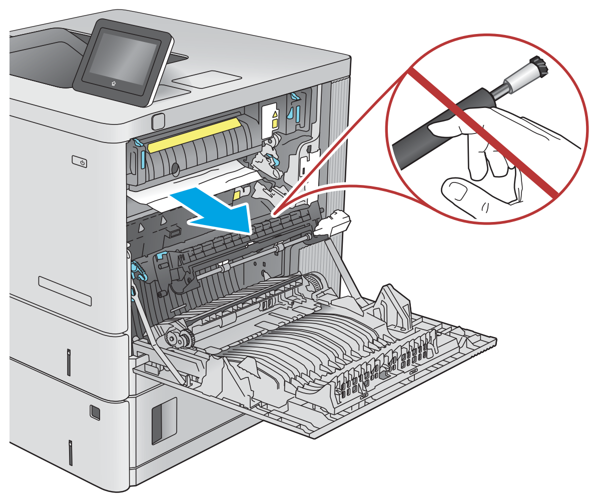


7. Close the jam-access cover, and then lower the transfer assembly.

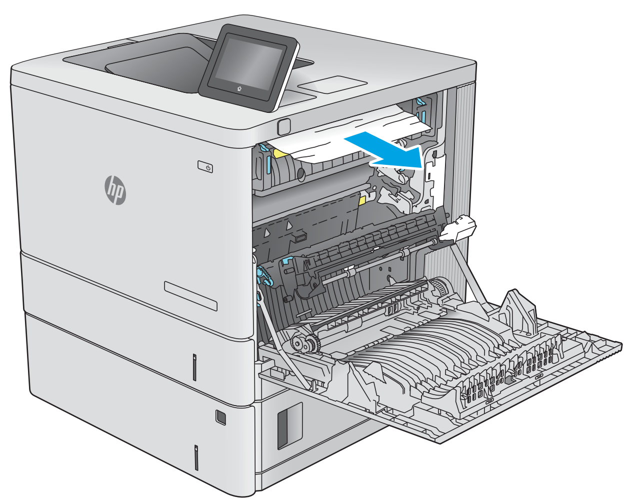


8. If paper is visible entering the bottom of the fuser, gently pull downward to remove it.

   CAUTION: Do not touch the foam on the transfer roller. Contaminants can affect print quality.

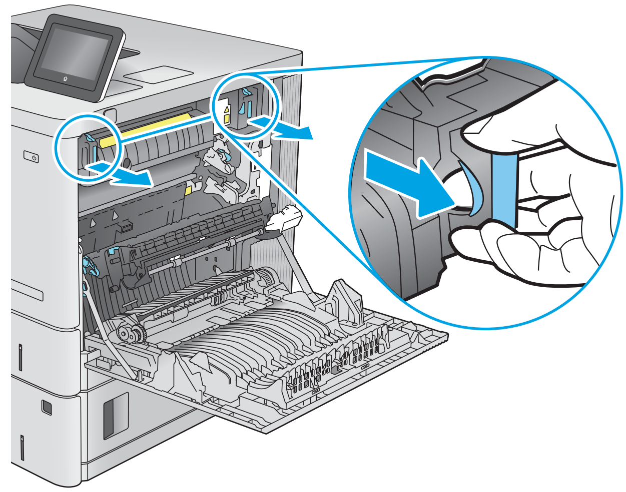


9. If paper is jammed as it enters the output bin, gently pull the paper out to remove it.



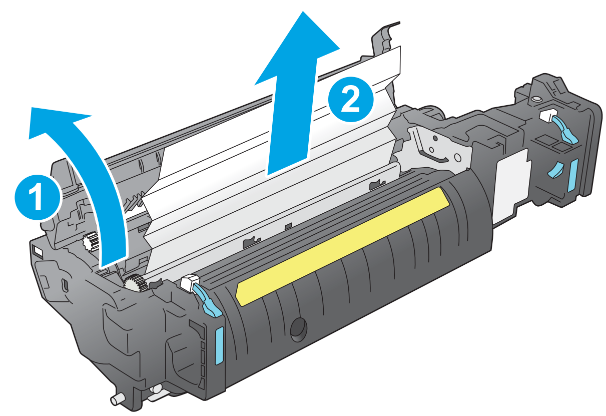
10. Paper could be jammed inside the fuser where it would not be visible. Grasp the fuser handles, lift up slightly, and then pull straight out to remove the fuser.

    CAUTION: The fuser can be hot while the printer is in use. Wait for the fuser to cool before handling it.

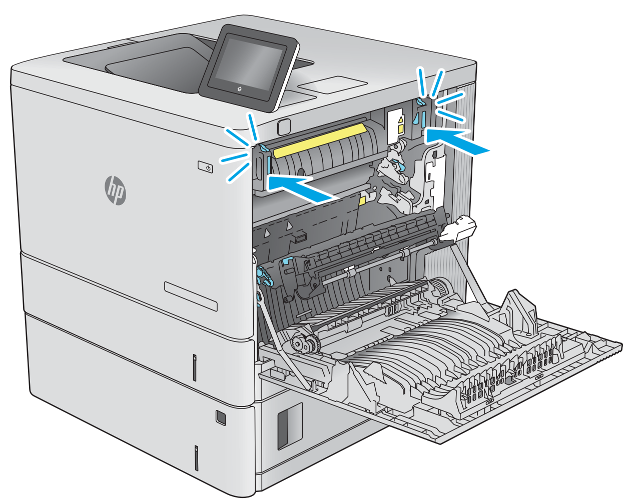


11. Open the jam-access door. If paper is jammed inside the fuser, gently pull it straight up to remove it. If the paper tears, remove all paper fragments.

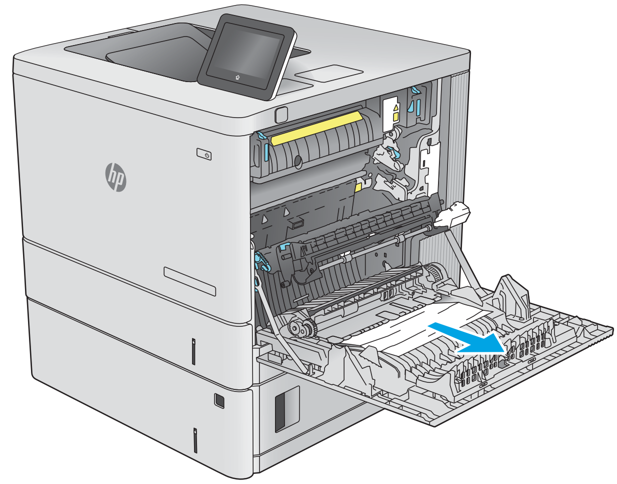
    CAUTION: Even if the body of the fuser has cooled, the rollers that are inside could still be hot. Do not touch the fuser rollers until they have cooled.



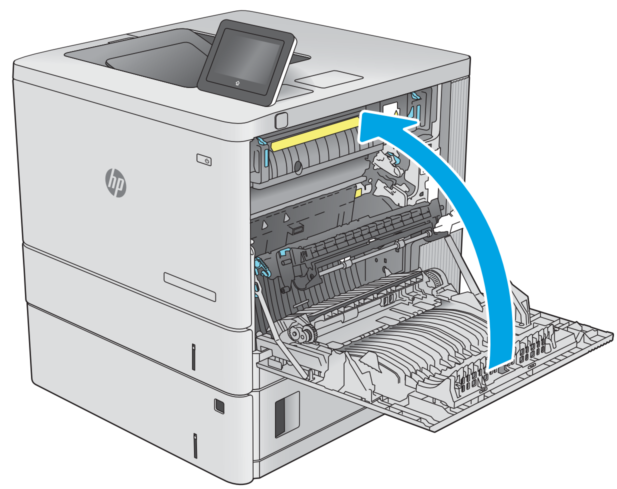
12. Close the jam-access door, and push the fuser completely into the printer until it clicks into place.



13. Check for jammed paper in the duplex path inside the right door, and remove any jammed paper.



14. Close the right door.



Clear paper jams in the output bin (13.E1)

Use the following procedure to clear jams in the output bin. When a jam occurs, the control panel displays an animation that assists in clearing the jam.

1. If paper is visible in the output bin, grasp the leading edge and remove it.

Change jam recovery (SFP)

Use the following procedure to change jam recovery from a SFP control panel (FutureSmart 4 firmware or later).

1. From the Home screen on the printer control panel, use the arrow buttons to navigate to Settings, and then press the OK button.
2. Use the buttons to scroll to General, and then press the OK button.
3. Use the arrow buttons to scroll to Jam Recovery, and then press the OK button.
4. Use the arrow buttons to scroll to an option, and then press the OK button to select it.
   - Auto — The printer attempts to reprint jammed pages when sufficient memory is available. This is the default setting.
   - Off — The printer does not attempt to reprint jammed pages. Because no memory is used to store the most recent pages, performance is optimal.

     NOTE: Some pages can be lost if the printer runs out of paper while printing a duplex job with Jam Recovery set to Off.
   - On — The printer always reprints jammed pages. Additional memory is allocated to store the last few pages printed.

Clear paper jams (MFP)

Use the procedures in this section to clear jammed paper from the printer paper path.

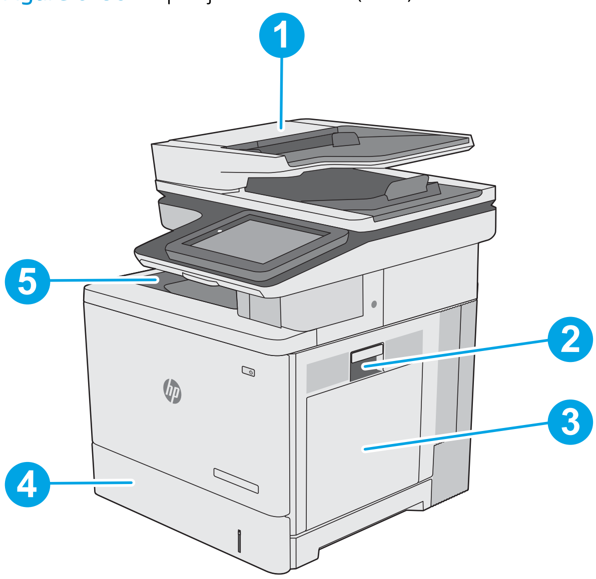
NOTE: To avoid tearing the paper, pull the jammed paper out slowly and gently.

Figures in this section are representational only. The actual printer being serviced might look slightly different depending on the model and installed accessories.

Jam locations

Jams can occur in these locations (MFP).

Figure 6-80 Paper jam locations (MFP)



Item	Location
1	Document feeder
2	Right door and fuser area
3	Tray 1
4	Tray 2
5	Output bin

Auto-navigation for clearing paper jams

Learn about printer jam clearing auto-navigation.

The auto-navigation feature assists in clearing jams by providing step-by-step instructions on the control panel.

When you complete a step, the printer displays instructions for the next step until you have completed all steps in the procedure.

Experiencing frequent or recurring paper jams?

To reduce the number of paper jams, try these solutions.

NOTE: View a video that demonstrates how to load paper in a way that reduces the number of paper jams.

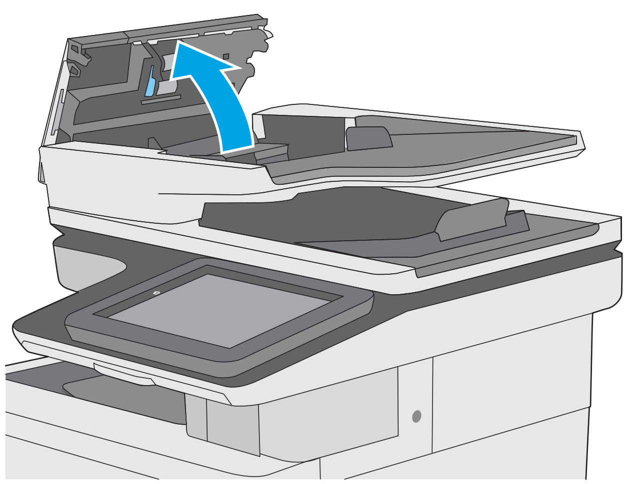
1. Use only paper that meets HP specifications for this printer.
2. Use paper that is not wrinkled, folded, or damaged. If necessary, use paper from a different package.
3. Use paper that has not previously been printed or copied on.
4. Make sure the tray is not overfilled. If it is, remove the entire stack of paper from the tray, straighten the stack, and then return some of the paper to the tray.
5. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides so they are touching the paper stack without bending it.
6. Make sure that the tray is fully inserted in the printer.
7. If you are printing on heavy, embossed, or perforated paper, use the manual feed feature and feed sheets one at a time.
8. Open the Trays menu on the printer control panel. Verify that the tray is configured correctly for the paper type and size.
9. Make sure the printing environment is within recommended specifications.

Clear paper jams in the document feeder (31.13.yz)

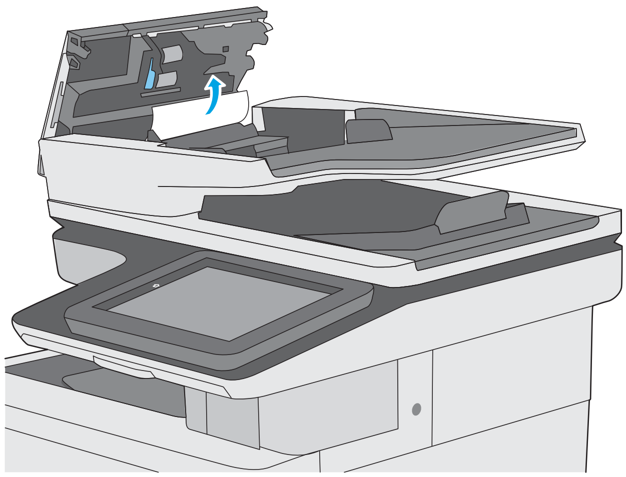
Use the following procedure to check for paper in all possible jam locations related to the document feeder.

When a jam occurs, the control panel might display a message and an animation that assists in clearing the jam.

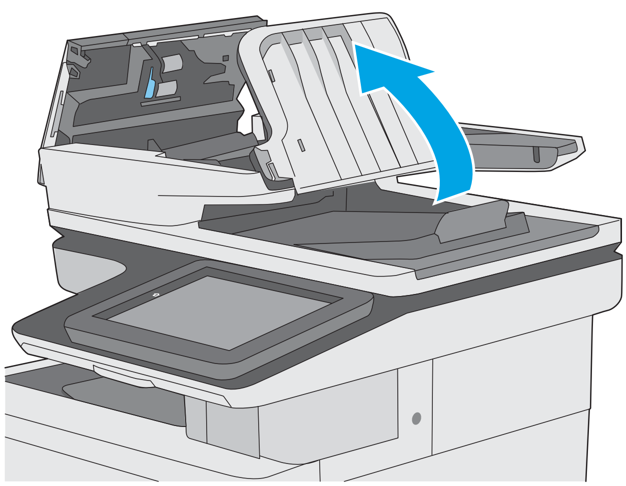
1. Open the document feeder cover.



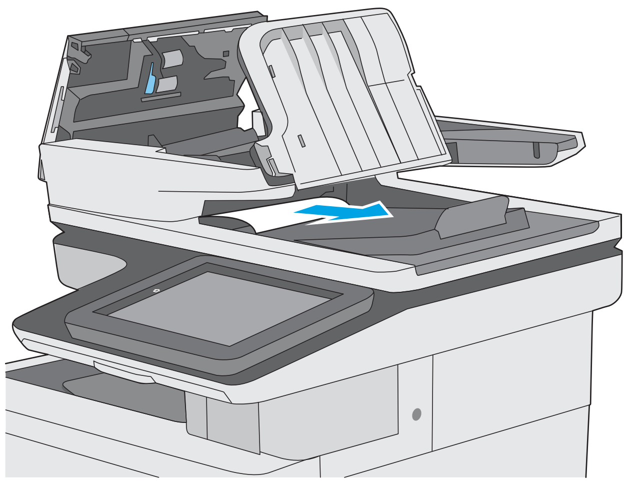
2. Remove any jammed paper.



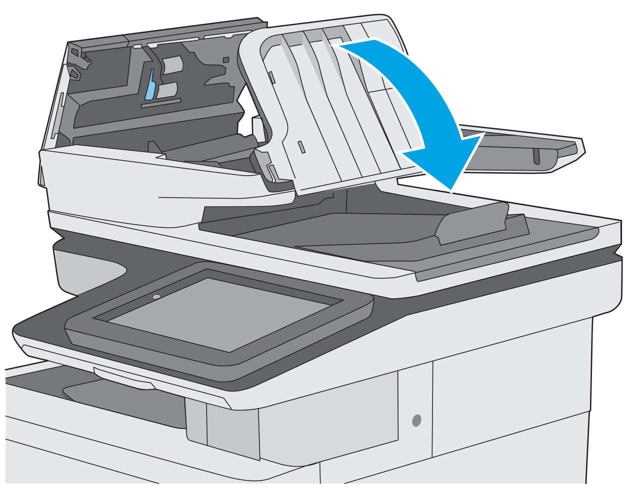
3. Lift the document-feeder input tray.



4. Remove any jammed paper.

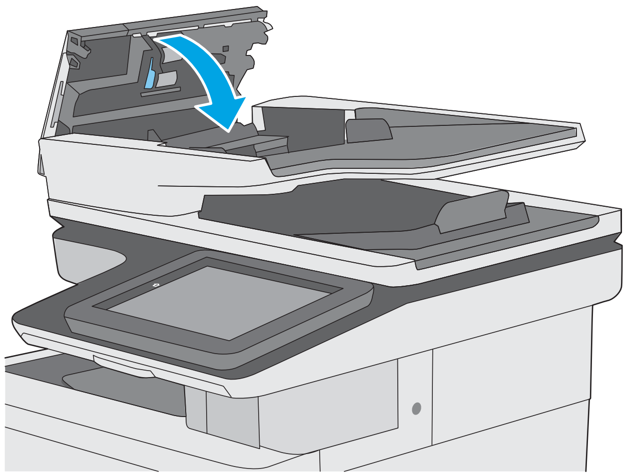


5. Lower the document-feeder input tray.



6. Close the document feeder cover.

NOTE: Verify that the latch on the top of the document-feeder cover is completely closed. Misfeed or no-pick errors might occur if the document-feeder cover is not completely closed.



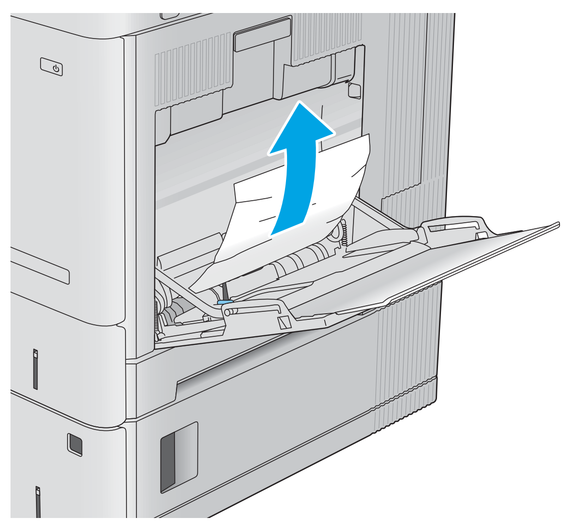
NOTE: To avoid jams, make sure the guides in the document feeder input tray are adjusted tightly against the document. Remove all staples and paper clips from original documents.

NOTE: Original documents that are printed on heavy, glossy paper can jam more frequently than originals that are printed on plain paper.

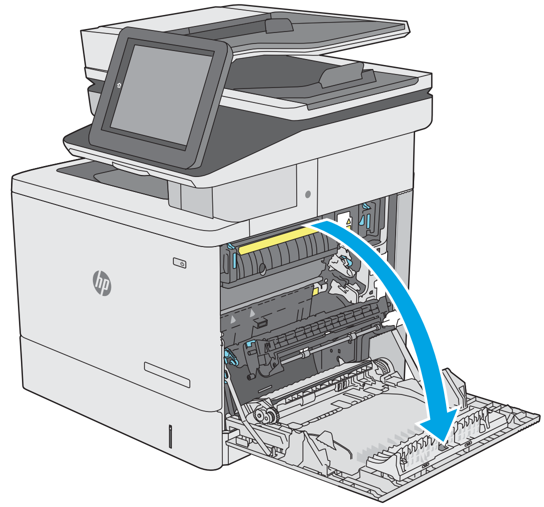
Clear paper jams in Tray 1 (13.A1)

Use the following procedure to check for paper in all possible jam locations related to Tray 1. When a jam occurs, the control panel displays an animation that assists in clearing the jam.

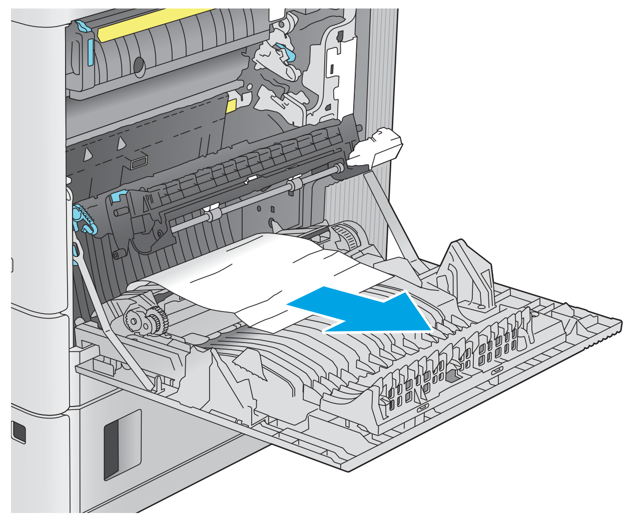
1. If jammed paper is visible in Tray 1, clear the jam by gently pulling the paper straight out. Touch the OK button to clear the message.



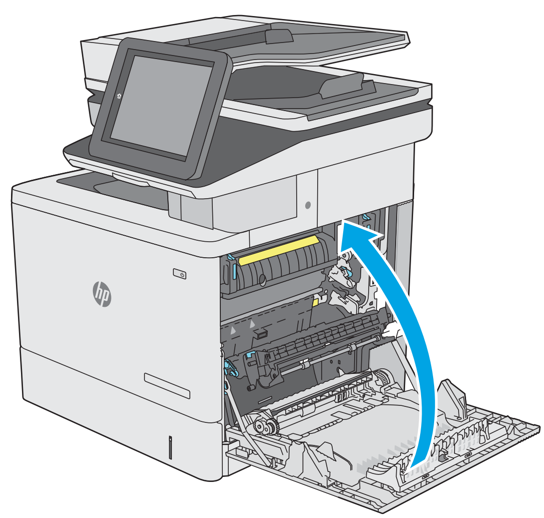
2. If the paper remains stuck, or if no jammed paper is visible in Tray 1, remove any remaining paper in the tray, and then close Tray 1 and open the right door.



3. If jammed paper is present, gently pull it out.



4. Close the right door.

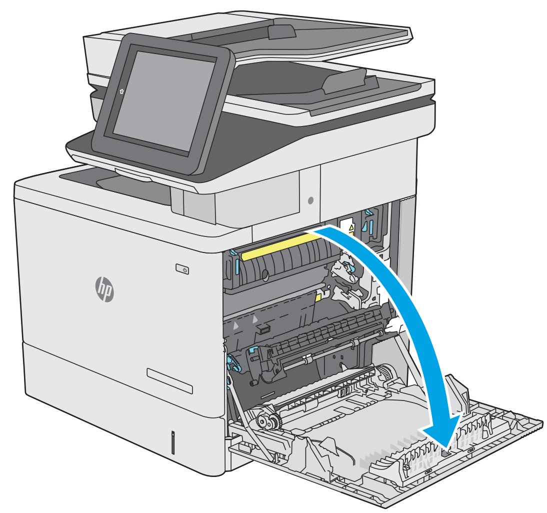


Clear paper jams in Tray 2 (13.A2)

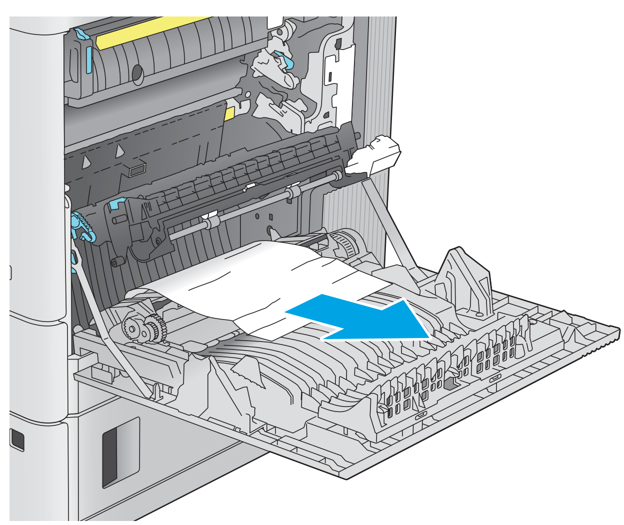
Use the following procedure to check for paper in all possible jam locations related to Tray 2. When a jam occurs, the control panel displays an animation that assists in clearing the jam.

1. Lift the latch on the right door to release it.

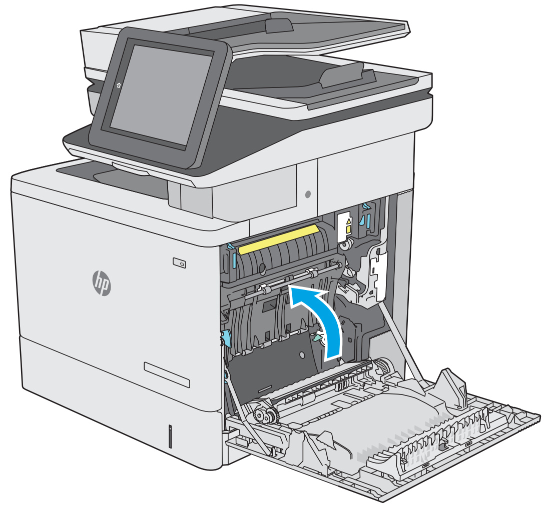
2. Open the right door.



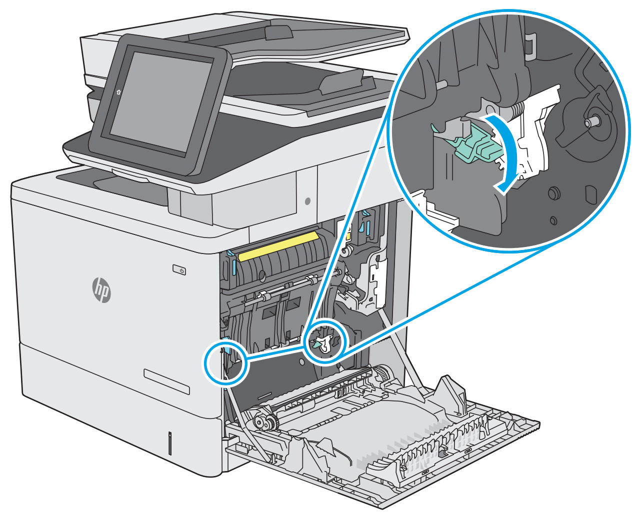
3. Gently pull out any jammed paper from the pick up area.



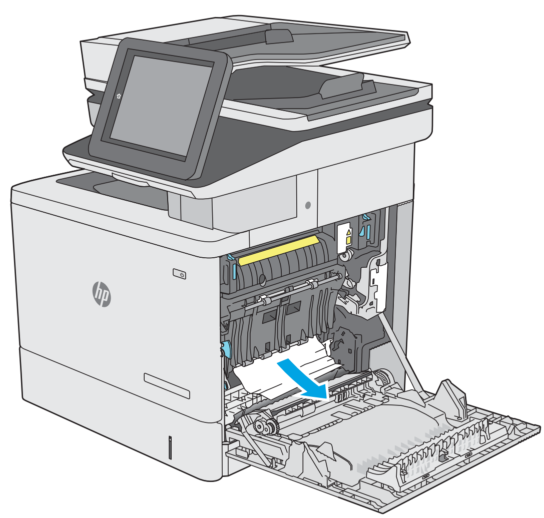
4. Close the transfer assembly.



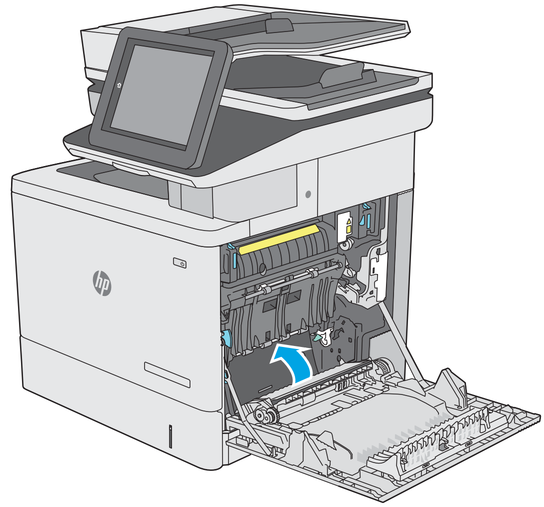
5. Push down on the green levers to release the jam-access cover.



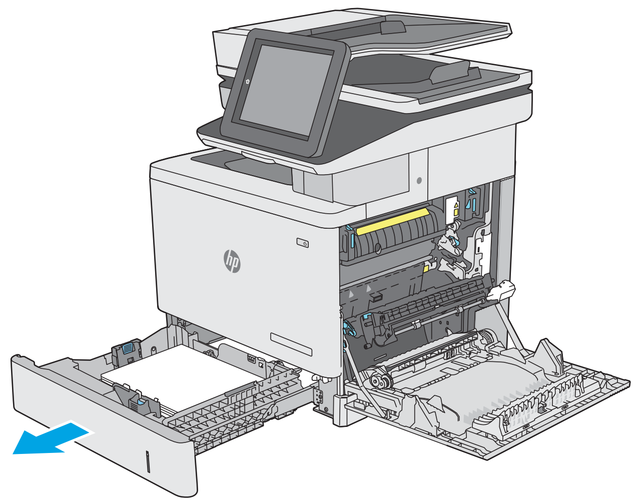
6. Gently pull out any jammed paper. If the paper tears, make sure to remove all remnants.



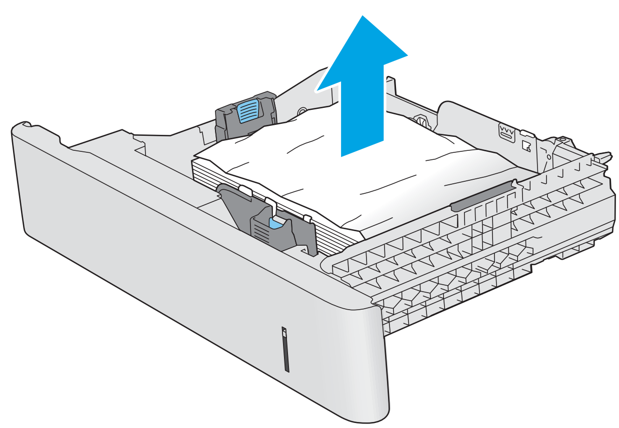
7. Close the jam-access cover, and then lower the transfer assembly.



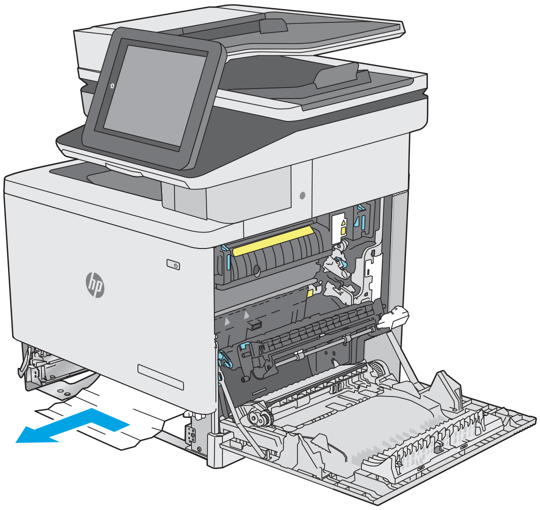
8. Pull the tray completely out of the printer by pulling and lifting it up slightly.



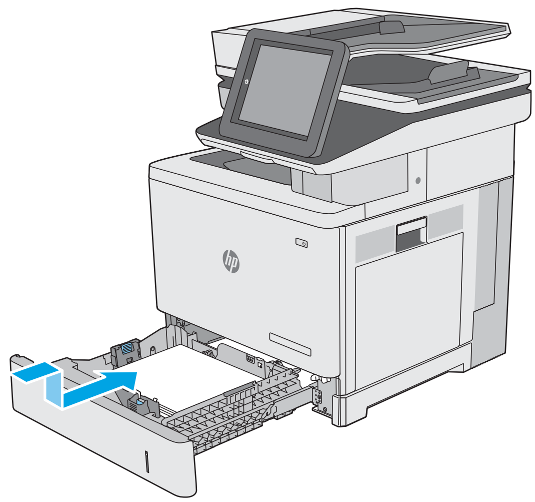
9. Remove any jammed or damaged sheets of paper. Verify that the tray is not overfilled and that the paper guides are adjusted correctly.



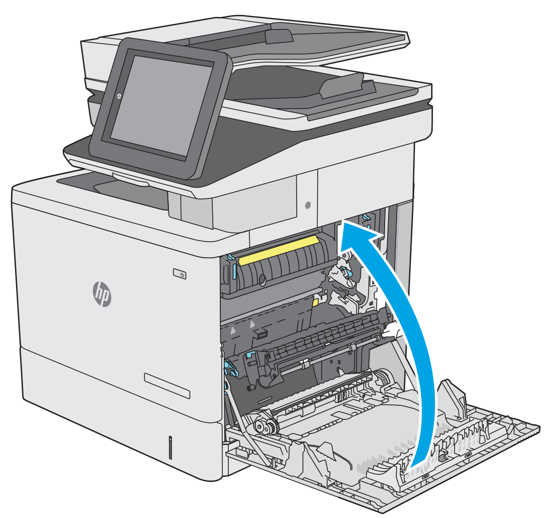
10. Remove any paper from the feed rollers inside the printer. First pull the paper to the left to release it, and then pull it forward to remove it.



11. Reinsert and close the tray.



12. Close the right door.

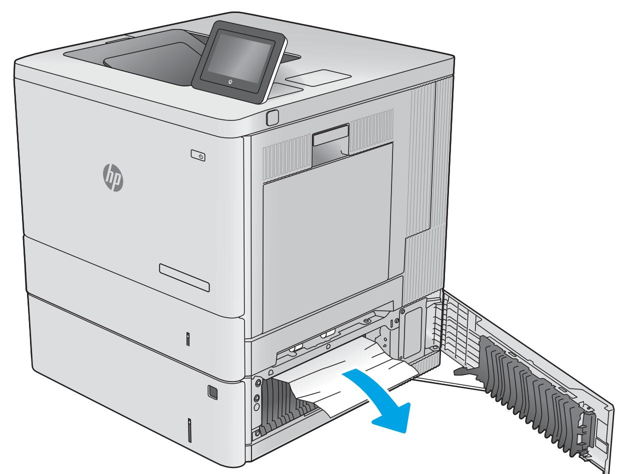


Clear paper jams in Tray 3, Tray 4, or Tray 5 (13.A3, 13.A4, 13.A5)

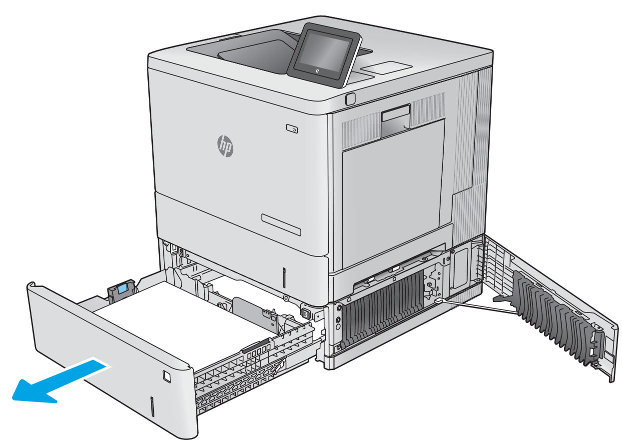
Use the following procedure to check for paper in all possible jam locations related to the optional 550-sheet paper feeders. When a jam occurs, the control panel displays an animation that assists in clearing the jam.

1. Open the lower-right door.

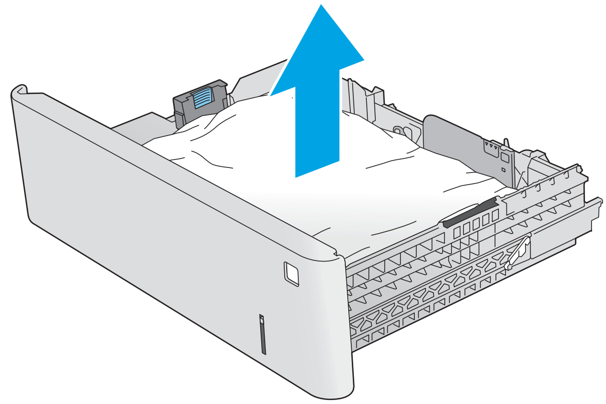
2. Gently pull out any jammed paper.



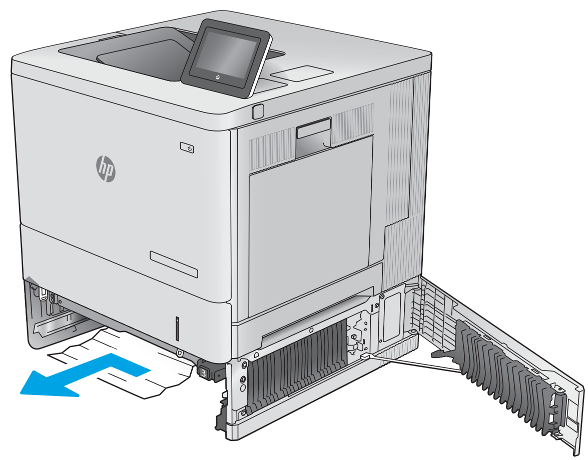
3. Pull the tray completely out of the printer by pulling and lifting it up slightly.



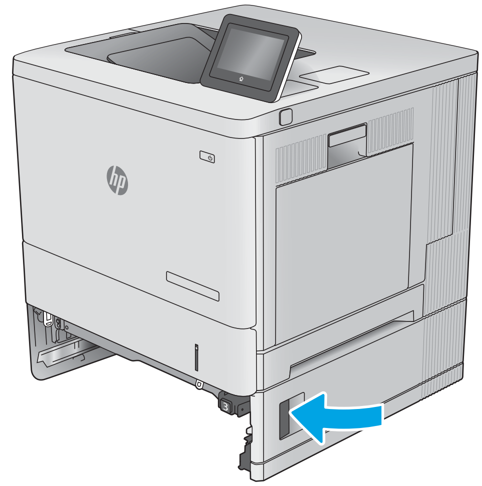
4. Remove any jammed or damaged sheets of paper. Verify that the tray is not overfilled and that the paper guides are adjusted correctly.



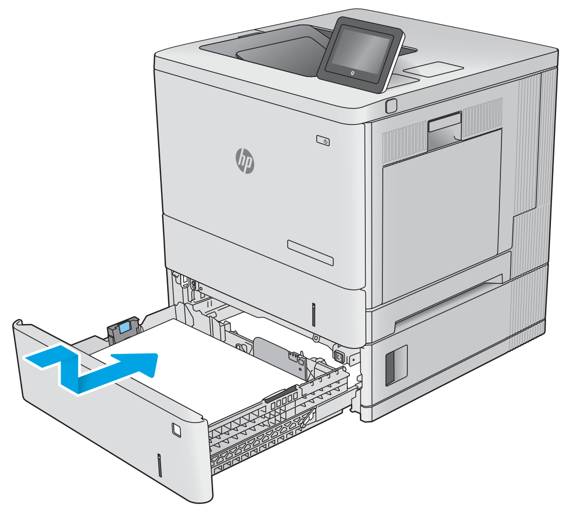
5. Remove any paper from the feed rollers inside the printer. First pull the paper to the left to release it, and then pull it forward to remove it.



6. Close the lower-right door.



7. Reinsert and close the tray.

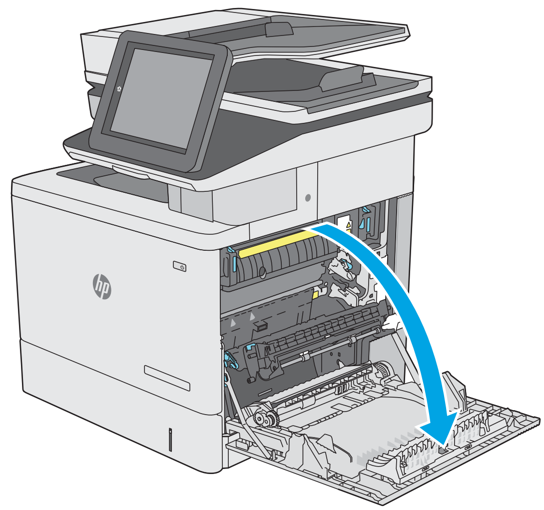


Clear paper jams in the right door and fuser area (13.B)

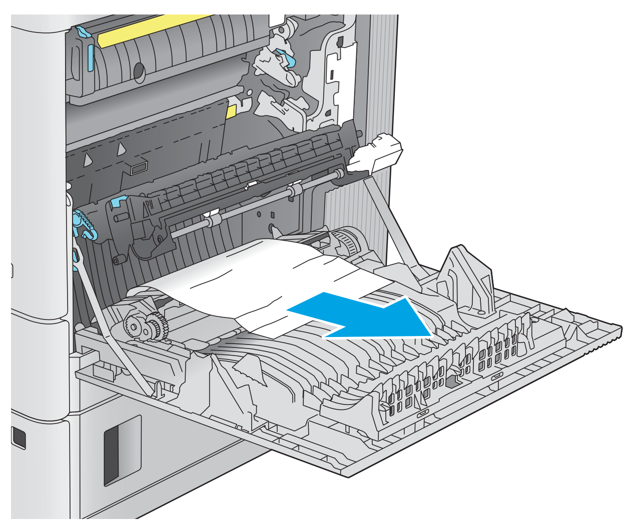
Use the following procedure to check for paper in all possible jam locations inside the right door. When a jam occurs, the control panel displays an animation that assists in clearing the jam.

1. Lift the latch on the right door to release it.

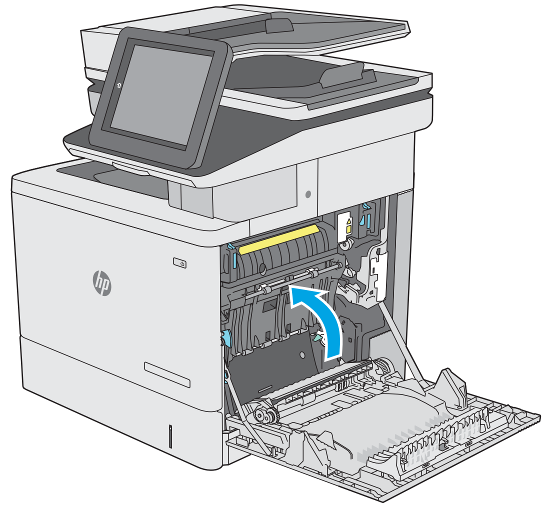
2. Open the right door.



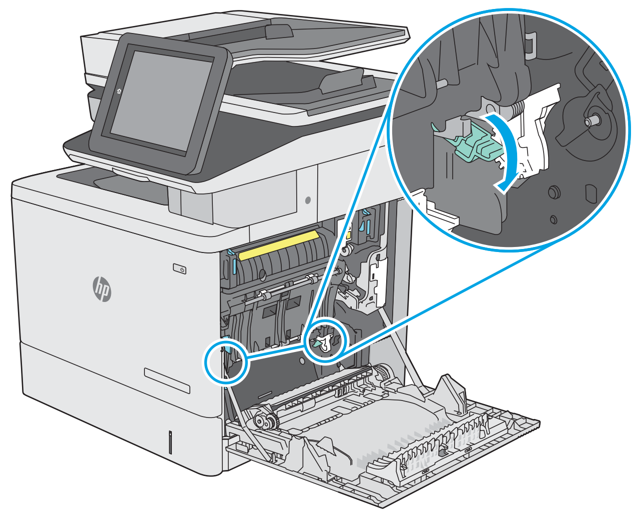
3. Gently pull out any jammed paper from the pick up area.



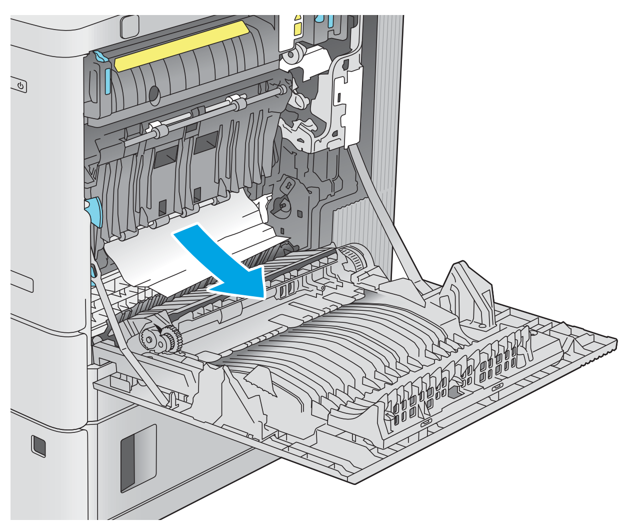
4. Close the transfer assembly.



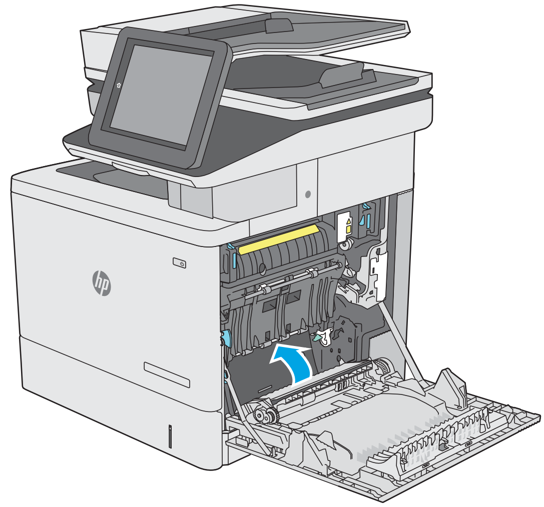
5. Push down on the green levers to release the jam-access cover.



6. Gently pull out any jammed paper. If the paper tears, make sure to remove all remnants.

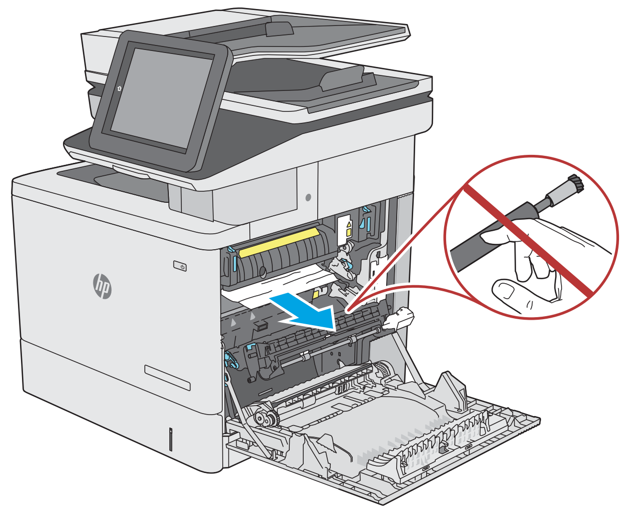


7. Close the jam-access cover, and then lower the transfer assembly.

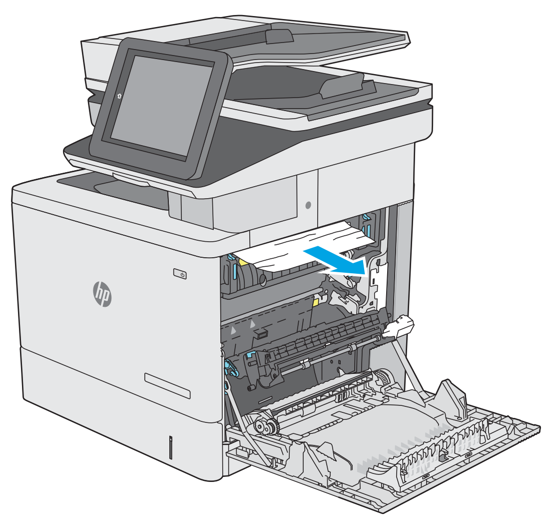


8. If paper is visible entering the bottom of the fuser, gently pull downward to remove it.

   CAUTION: Do not touch the foam on the transfer roller. Contaminants can affect print quality.

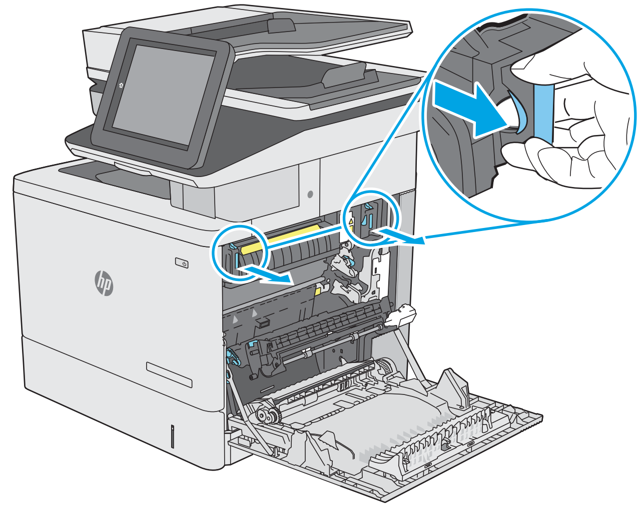


9. If paper is jammed as it enters the output bin, gently pull the paper out to remove it.



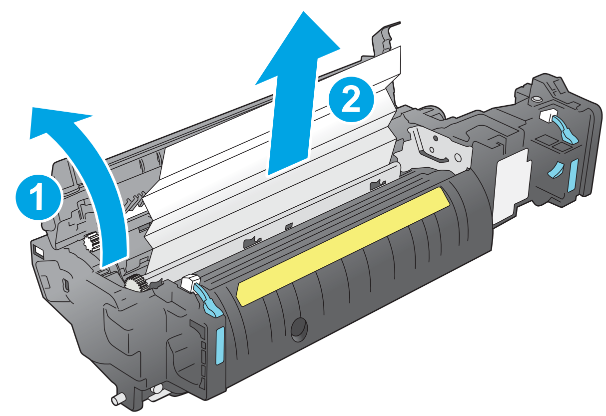
10. Paper could be jammed inside the fuser where it would not be visible. Grasp the fuser handles, lift up slightly, and then pull straight out to remove the fuser.

    CAUTION: The fuser can be hot while the printer is in use. Wait for the fuser to cool before handling it.

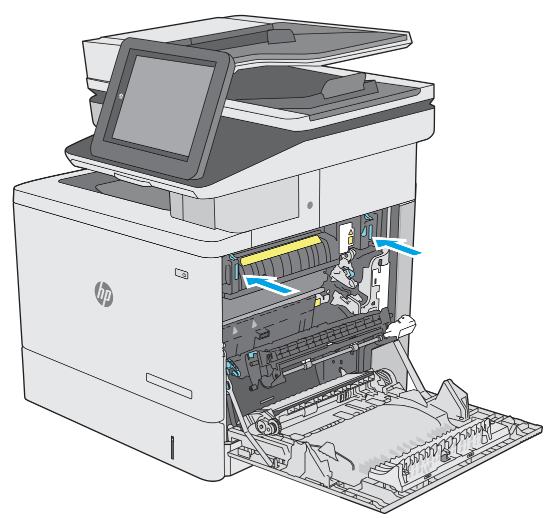


11. Open the jam-access door. If paper is jammed inside the fuser, gently pull it straight up to remove it. If the paper tears, remove all paper fragments.

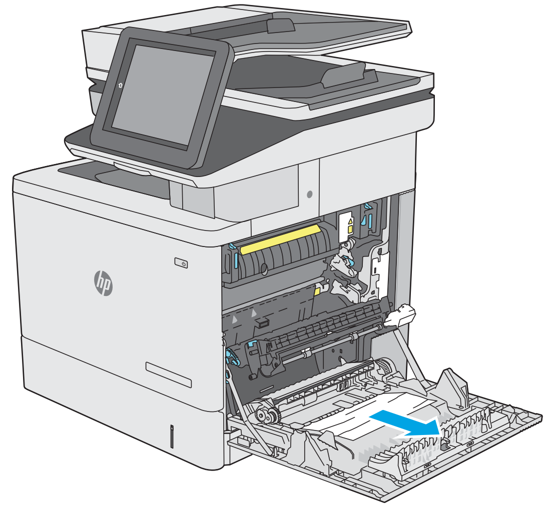
    CAUTION: Even if the body of the fuser has cooled, the rollers that are inside could still be hot. Do not touch the fuser rollers until they have cooled.



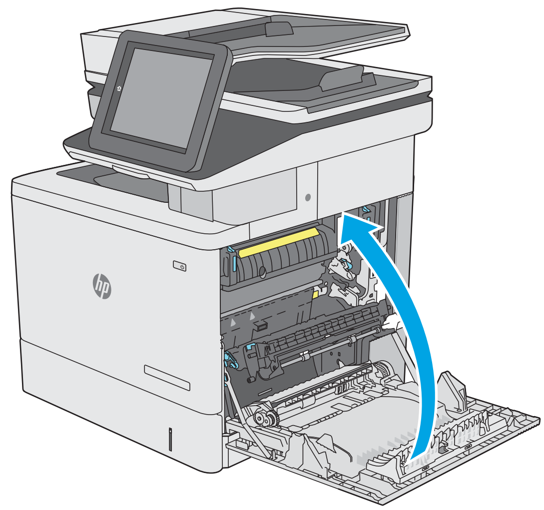
12. Close the jam-access door, and push the fuser completely into the printer until it clicks into place.



13. Check for jammed paper in the duplex path inside the right door, and remove any jammed paper.



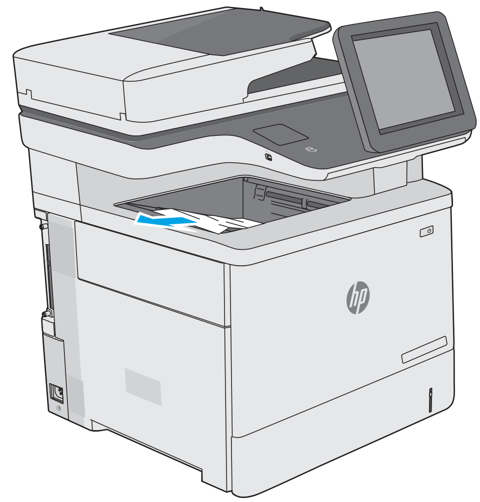
14. Close the right door.



Clear paper jams in the output bin (13.E1)

Use the following procedure to clear jams in the output bin. When a jam occurs, the control panel displays an animation that assists in clearing the jam.

1. If paper is visible in the output bin, grasp the leading edge and remove it.



Change jam recovery (MFP)

Use the following procedure to change jam recovery from an MFP control panel.

1. From the Home screen on the printer control panel, scroll to and touch the Settings button.
2. Open the General menu, and then open the Jam recovery menu.
3. Select one of the following options:
   - Auto — The printer attempts to reprint jammed pages when sufficient memory is available. This is the default setting.
   - Off — The printer does not attempt to reprint jammed pages. Because no memory is used to store the most recent pages, performance is optimal.

     NOTE: Some pages can be lost if the printer runs out of paper while printing a duplex job with Jam Recovery set to Off.

   - On — The printer always reprints jammed pages. Additional memory is allocated to store the last few pages printed.

Printer feeds incorrect page size

Review the following information when the printer feeds an incorrect page size.

Table 6-47 Printer feeds incorrect page size

Cause	Solution
The correct size paper is not loaded in the tray.	Load the correct size paper in the tray.
The correct size paper is not selected in the software program or printer driver.	Confirm that the settings in the software program and printer driver are correct, because the software program settings override the printer driver and control panel settings, and the printer driver settings override the control panel settings.
The correct size paper for the tray is not selected in the printer control panel.	From the control panel, select the correct size paper for the tray.

Table 6-47 Printer feeds incorrect page size (continued)

Cause	Solution
The paper size is not configured correctly for the tray.	Print a configuration page to determine the paper size for which the tray is configured.
The guides in the tray are not against the paper.	Verify that the paper guides are touching the paper.

Printer pulls from incorrect tray

Review the following information when the printer pulls from an incorrect tray.

Table 6-48 Printer pulls from incorrect tray

Cause	Solution
A driver for a different printer is in use.	Use a driver for this printer.
The specified tray is empty.	Load paper in the specified tray.
The paper size is not configured correctly for the input tray.	Print a configuration page or use the control panel to determine the paper size for which the tray is configured.
The guides in the tray are not against the paper.	Verify that the guides are touching the paper.

Printer will not duplex or duplexes incorrectly (duplex models)

Review the following information when the printer will not duplex or duplexes incorrectly.

Table 6-49 Printer will not duplex (print 2-sided jobs) or duplexes incorrectly

Cause	Solution
The duplex job is trying to use unsupported paper.	Verify that the paper is supported for duplex printing.
The printer driver is not set up for duplex printing.	Set up the printer driver to enable duplex printing.
The first page is printing on the back of preprinted forms or letterhead.	Load preprinted forms and letterhead in Tray 1 with the letterhead or printed side down, with the top of the page leading into the printer. For Tray 2-X, load the paper printed side up with the top of the page toward the right of the printer.
The printer model does not support automatic 2-sided printing.	The printer model does not support automatic 2-sided printing.

Paper does not feed from Tray 2-X

Review the following information when the paper does not feed from Tray 2-X.

Table 6-50 Paper does not feed from Tray 2-X

Cause	Solution
The correct size paper is not loaded.	Load the correct size paper.
The input tray is empty.	Load paper in the input tray.

Table 6-50 Paper does not feed from Tray 2-X (continued)

Cause	Solution
The correct paper type for the input tray is not selected in the printer control panel.	From the printer control panel, select the correct paper type for the input tray. Trays configured for a paper type with a specific weight range will not match a print job that specifies an exact weight, even if the specified weight is within the weight range.
Paper from a previous jam has not been completely removed.	Open the printer and remove any paper in the paper path. Closely inspect the fuser area for jams.
None of the optional trays appear as input tray options.	The optional trays only display as available if they are installed. Verify that any optional trays are correctly installed. Verify that the printer driver has been configured to recognize the optional trays.
An optional tray is incorrectly installed.	Print a configuration page to confirm that the optional tray is installed. If not, verify that the tray is correctly attached to the printer.
The paper size is not configured correctly for the input tray.	Print a configuration page or use the control panel to determine the paper size for which the tray is configured.
The guides in the tray are not against the paper.	Verify that the guides are touching the paper.

Output is curled or wrinkled

Review the following information when the output is curled or wrinkled.

Table 6-51 Output is curled or wrinkled

Cause	Solution
Paper does not meet the specifications for this printer.	Use only paper that meets the HP paper specifications for this printer. Non-recycled, 75 g/m2 (20 lb) paper is optimal for office use.
The correct paper type for the input tray is not selected in the printer control panel.	From the printer control panel, select the correct paper type for the input tray. Trays configured for a paper type with a specific weight range will not match a print job that specifies an exact weight, even if the specified weight is within the weight range.
Paper is damaged or in poor condition.	Remove paper from the input tray and load paper that is in good condition.
The printer is operating in an excessively humid environment.	Verify that the printing environment is within humidity specifications.
The print job consist of large, solid-filled areas.	Large, solid-filled areas can cause excessive curl. Try using a different pattern.
Paper used was not stored correctly and might have absorbed moisture.	Remove paper and replace it with paper from a fresh, unopened package. Store paper in a plastic bag to protect it from humidity.
Paper has poorly cut edges.	Remove paper, flex it, rotate it 180 degrees or turn it over, and then reload it into the input tray. Do not fan paper. If the problem persists, replace the paper.
The specific paper type was not configured for the tray or selected in the software.	Configure the software for the paper (see the software documentation). Configure the tray for the paper.
The paper has previously been used for a print job.	Do not re-use paper.

The printer does not pick up paper

If the printer does not pick up paper from the tray, try these solutions.

NOTE: Tray 1 and Tray 2 are optimal for paper pickup when using special paper or media other than 20lb plain paper. For Tray 1 and Tray 2 the printer increases the number of attempts to pick up a page, which increases the reliability of successfully picking the page from the tray and decreases the possibility of a mispick jam.

HP recommends using Tray 1 or Tray 2 if the printer is experiencing excessive or reoccurring jams from trays other than Tray 1 and Tray 2, or for print jobs that require media other than 20lb plain paper.

1. Open the printer and remove any jammed sheets of paper.
2. Load the tray with the correct size of paper for the job.
3. Make sure the paper size and type are set correctly on the printer control panel.
4. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides to the appropriate indentation in the tray.
5. Check the printer control panel to see if the printer is waiting for an acknowledgment to the feed the paper manually prompt. Load paper, and continue.
6. The rollers above the tray might be contaminated. Clean the rollers with a lint-free cloth dampened with warm water.

The printer picks up multiple sheets of paper

If the printer picks up multiple sheets of paper from the tray, try these solutions.

1. Remove the stack of paper from the tray and flex it, rotate it 180 degrees, and flip it over. *Do not fan the paper*. Return the stack of paper to the tray.
2. Use only paper that meets HP specifications for this printer.
3. Use paper that is not wrinkled, folded, or damaged. If necessary, use paper from a different package.
4. Make sure the tray is not overfilled. If it is, remove the entire stack of paper from the tray, straighten the stack, and then return some of the paper to the tray.
5. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides to the appropriate indentation in the tray.
6. Make sure the printing environment is within recommended specifications.

The document feeder jams, skews, or picks up multiple sheets of paper (MFP)

Learn about MFP document feeder paper handling problems.

Review the following information when the document feeder jams, skews, or picks up multiple sheets of paper.

- Check to see if there are areas on the page that might have had staples removed. This can cause jams and/or mispicks.
- The original might have something on it, such as staples or self-adhesive notes that must be removed.
- Check that all rollers are in place and correctly installed.

- Make sure that the top document-feeder cover is closed.
- The pages might not be placed correctly. Straighten the pages and adjust the paper guides to center the stack.
- The paper guides must be touching the sides of the paper stack to work correctly. Make sure that the paper stack is straight and the guides are against the paper stack.
- The document feeder input tray or output bin might contain more than the maximum number of pages. Make sure the paper stack fits below the guides in the input tray, and remove pages from the output bin.
- Verify that there are no pieces of paper, staples, paper clips, or other debris in the paper path.
- Clean the document-feeder rollers and the separation pad. Use compressed air or a clean, lint-free cloth moistened with warm water. If misfeeds still occur, replace the rollers.

Paper does not feed automatically

Review the following information when the paper does not feed automatically.

Table 6-52 Paper does not feed automatically

Cause	Solution
Manual feed is selected in the software program.	Load Tray 1 with paper, or, if the paper is loaded, press the OK button.
The correct size paper is not loaded.	Load the correct size paper.
The input tray is empty.	Load paper into the input tray.
Paper from a previous jam has not been completely removed.	Open the printer and remove any paper in the paper path.
The paper size is not configured correctly for the input tray.	Print a configuration page or use the control panel to determine the paper size for which the tray is configured.
The guides in the tray are not against the paper.	Verify that the rear and width paper guides are touching the paper.

Image-quality troubleshooting

Learn about image-quality troubleshooting.

Use the information in this topic to troubleshoot and resolve image-quality (what you see on the final printed page) problems including copy-quality, print-quality, and color problems (color printers only).

Various printer hardware problems can cause image-quality defects. This topic is a guide to the steps used to isolate the specific areas of the printer that are causing image-quality defects on the printed page, and to provide solutions to resolve those image-quality defects.

Image-quality problems are defined as:

- **Print-quality (PQ) problems**: PQ problems are associated with the print engine (printer base) of an MFP printer (single function non MFP image-quality problems are always PQ defects). PQ defects appear on pages that are **printed** by the print engine and not fed through an integrated scanner assembly (ISA).
- **Copy-quality (CQ) problems**: CQ problems are associated with the integrated-scanner assembly (ISA) portion of an MFP printer. CQ defects appear on pages that are **copied** using the document feeder or flatbed glass.

If the print defect is already known to be a PQ or CQ problem, skip to the appropriate troubleshooting topic listed below. Otherwise, follow the steps in the next section below to get started troubleshooting image-quality problems.

- **Print-quality (PQ) problems**: See Print-quality troubleshooting on page 375.
- **Copy-quality (CQ) problems**: See Copy-quality troubleshooting on page 400.

Get started troubleshooting image-quality problems

Print a demonstration page to identify the defect as a PQ (print engine) or CQ (ISA) problem.

NOTE: If the image defect appears on the printed demonstration page, the issue is a print-quality (PQ) problem (associated with the print engine and not the document feeder or flatbed glass) and not a CQ problem.

Make sure that the demonstration page is printed on **plain paper**.

Enterprise printers

1. Select **Reports** > **Other pages**.
2. Select Demonstration Page.

Pro printers

1. At the printer, scroll to or select Setup.
2. Go to Reports, and then select Demonstration Page.

Does the demonstration page show any image-quality defects?

- **Yes**: If defects appear on the printed demonstration page the issue is PQ related. See Print-quality troubleshooting on page 375.
- **No**: If defects does not appear on the printed demonstration page the issue is CQ related. See Copy-quality troubleshooting on page 400.

Print-quality troubleshooting

Learn about the print-quality troubleshooting.

NOTE: Print-quality (PQ) problems are associated with the print engine (printer base) of an MFP printer (single function non MFP image-quality problems are always PQ defects). PQ defects appear on pages that are **printed** by the print engine and not feed through an integrated scanner assembly (ISA).

Repetitive image defect ruler

Review the following information about a repetitive image defect ruler.

When troubleshooting the source of some print image defects, one solution is to identify if it is a repetitive defect (does the print quality defect appear multiple times on the printed page?). If this is the case, use a ruler to measure occurrences of repetitive image defects to help solve image-quality problems. For more information, see Using a ruler to measure between repetitive defects.

Use a ruler to measure occurrences of repetitive image defects to help solve image-quality problems. Place the ruler next to the first occurrence of the defect on the page. Find the distance between identical defects and use the table below to identify the component that is causing the defect.

CAUTION: Do not use solvents or oils to clean rollers. Instead, rub the roller with a lint-free cloth. If dirt is difficult to remove, rub the roller with a lint-free cloth that has been dampened with water.

NOTE: The primary charging roller, photosensitive drum, and developer roller cannot be cleaned because they are internal assemblies in the toner cartridge or imaging drum. If one of these assemblies is causing the defect, replace the toner cartridge.

The primary fuser sleeve unit or pressure roller cannot be cleaned because they are internal assemblies in the fuser. If one of these assemblies is causing the defect, replace the fuse

TIP: To make a printer specific repetitive defect ruler, use a metric ruler to transfer the measurements in the table below to a transparency or the edge of a piece of paper—clearly label each ruler mark with the associated defective assembly.

Table 6-53 Repetitive defects

Assembly	Distance between defects
Primary charging roller	27 mm (1.06 in)
Developer roller	32 mm (1.26 in)
Registration roller	42 mm (1.65 in)
Secondary transfer roller	50.0 mm (1.97 in)
Fuser film	58 mm (2.28 in)
Pressure roller	69 mm (2.83 in)
Photosensitive drum	75 mm (2.95 in)

Print-quality troubleshooting pages

Learn about the available print-quality troubleshooting pages.

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

NOTE: To get further assistance in print quality troubleshooting, go to www.hp.com/support/colorljM552 or www.hp.com/support/colorljM553 or http://www.hp.com/support/colorljM554 or http://www.hp/support/colorljE55040 or www.hp.com/support/colorljM577MFP or http://www.hp.com/support/colorljM578mfp or http://www.hp.com/support/colorljE57540mfp and select **PQ Troubleshooting Tools**.

TIP: Form more information about print-quality troubleshooting, go to HP LaserJet, HP OfficeJet, HP PageWide - Image Quality Troubleshooting Guide (IQTG) on the HP WISE service portal.

Print the print-quality troubleshooting pages

Learn how to print the print-quality troubleshooting pages.

Print the print-quality troubleshooting pages from a SFP control panel

1. From the Home screen on the printer control panel, use the arrow keys to navigate to Support Tools, and then press the OK button.
2. Use the arrow buttons to scroll to Troubleshooting, and then press the OK button.
3. Use the arrow buttons to scroll to Print Quality Pages, and then press the OK button.
4. Use the arrow buttons to scroll to Print PQ Troubleshooting Page, and then press the OK button.
5. Use the arrow buttons to scroll to the Print icon (at the bottom of the control-panel display), and then press the OK button to print the pages.

Print the print-quality troubleshooting pages from an MFP control panel

1. From the Home screen on the printer control panel, scroll to and touch the Support Tools button.
2. Open the following menus:
   - Troubleshooting
   - Print Quality Pages
   - Print PQ Troubleshooting Page
3. Touch the Print, button to print the pages.

Figure 6-81 Print-quality troubleshooting procedure page

Figure 6-82 Yellow print-quality troubleshooting page

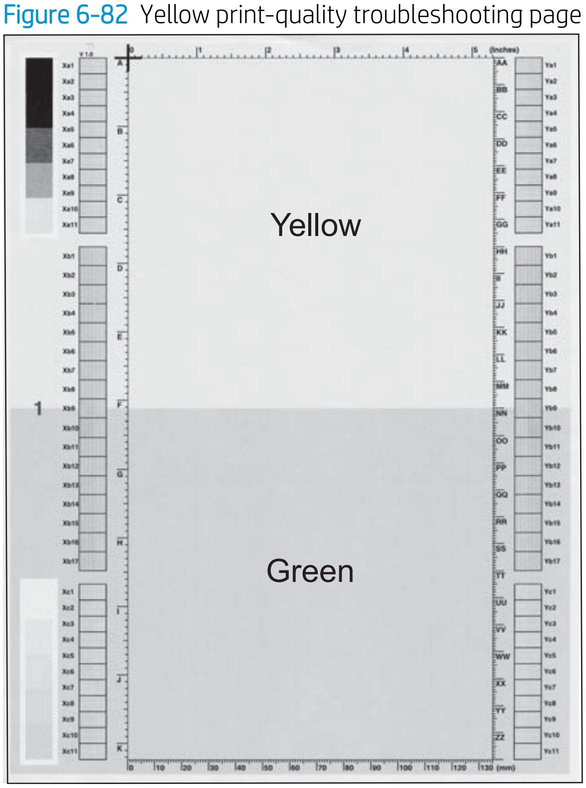
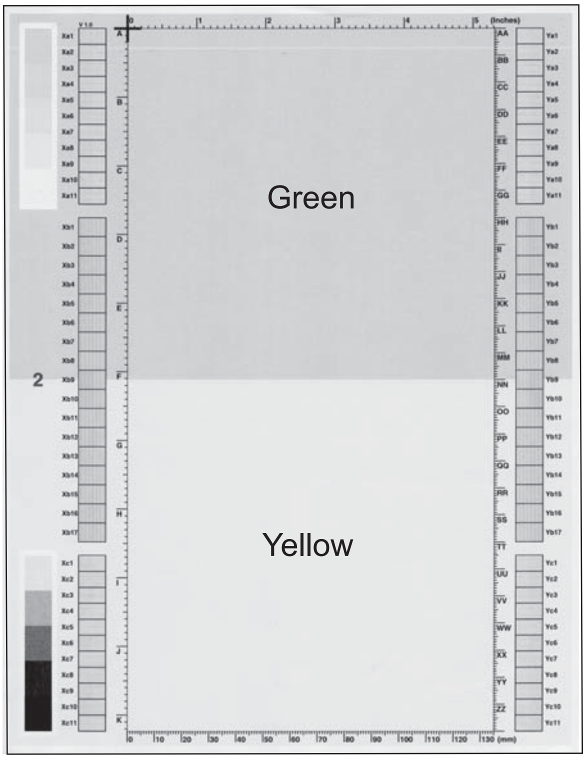
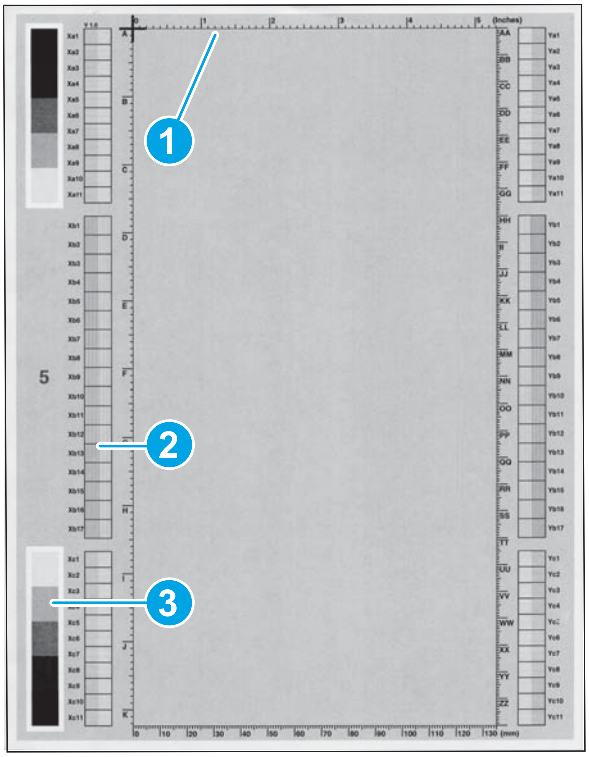


Figure 6-83 Yellow comparison page



Yellow cannot be easily seen unless combined with cyan, so half of each page is yellow and the other half is an amplified version of yellow print problems (green half). Compare the yellow on page one with the corresponding green on page two for defects. Also check the cyan page for defects.

Figure 6-84 Black print-quality troubleshooting page



Item	Description
1. Grids	The grids are in inches and millimeters. They are labeled with letters and numbers so that defects can be described by position and by distance between repeats.
2. Color plane registration (CPR) bars	After printing, the box with no extra color in each area on each page shows how far off the CPR of that color is. Each page has two process direction areas and three scan direction areas that are labeled x and y and 1–11. The page should be fed by the long edge. Each square from the center equals 42 microns.
3. Color ramp patches	Used to detect offset for the OPC or developer in the image drum or offset in the fuser.

NOTE: To get further assistance in print quality troubleshooting, go to www.hp.com/support/colorljM552 or www.hp.com/support/colorljM553 or http://www.hp.com/support/colorljM554 or http://www.hp/support/colorljE55040 or www.hp.com/support/colorljM577MFP or http://www.hp.com/support/colorljM578mfp or http://www.hp.com/support/colorljE57540mfp and select **PQ Troubleshooting Tools**.

Print the print-quality assessment page

Learn how to print the print-quality assessment page.

Print the print-quality assessment page from a SFP control panel

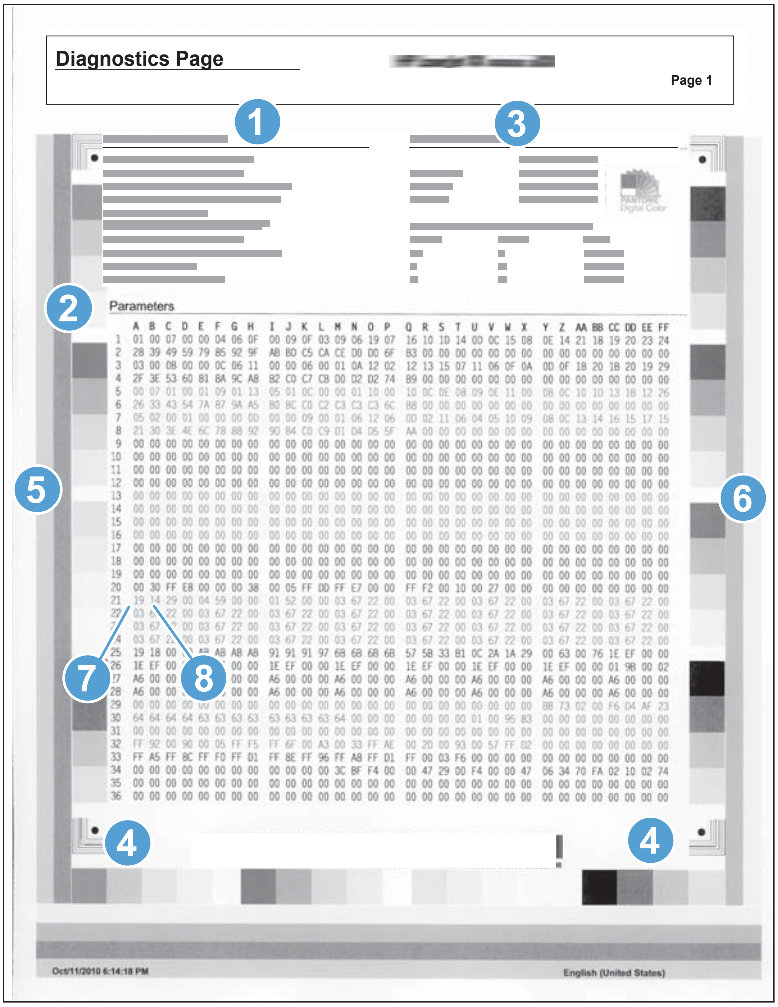
1. From the Home screen on the printer control panel, use the arrow keys to navigate to Support Tools, and then press the OK button.
2. Use the arrow buttons to scroll to Troubleshooting, and then press the OK button.

3. Use the arrow buttons to scroll to Print Quality Pages, and then press the OK button.
4. Use the arrow buttons to scroll to Diagnostics page, and then press the OK button.
5. Use the arrow buttons to scroll to the Print icon (at the bottom of the control-panel display), and then press the OK button to print the pages.

Print the print-quality assessment page from an MFP control panel

1. From the Home screen on the printer control panel, scroll to and touch the Support Tools button.
2. Open the following menus:
   – Troubleshooting
   – Print Quality Pages
   – Diagnostics Page
3. Touch the Print, button to print the pages.

Figure 6-85 Print-quality assessment page



Item	Description
1	Calibration information
2	Parameters
3	Color density
4	Color plane registration
5	Primary colors
6	Secondary colors
7	Temperature values (21A)
8	Humidity values (21B)

Calibrate the printer

Learn how to calibrate the printer.

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

Calibration is a printer function that optimizes print quality. Follow these steps to resolve print-quality problems such as misaligned color, colored shadows, blurry graphics, or other print-quality issues.

Calibrate the printer from a SFP control panel

1. From the Home screen on the printer control panel, use the arrow keys to navigate to Support Tools, and then press the OK button.
2. Use the arrow buttons to scroll to Maintenance, and then press the OK button.
3. Use the arrow buttons to scroll to Calibration/Cleaning, and then press the OK button.
4. Use the arrow buttons to scroll to Full Calibration, and then press the OK button.

   A **Calibrating** message displays on the printer control panel. The calibration process takes a few minutes to complete. Do not turn the printer off until the calibration process has finished.
5. Wait while the printer calibrates, and then try printing again.

Calibrate the printer from an MFP control panel

1. From the Home screen on the printer control panel, scroll to and touch the Support Tools button.
2. Open the following menus:
   - Maintenance
   - Calibration/Cleaning
   - Full Calibration
3. Touch the Start, button.

   A **Calibrating** message displays on the printer control panel. The calibration process takes a few minutes to complete. Do not turn the printer off until the calibration process has finished.
4. Wait while the printer calibrates, and then try printing again.

Use manual print modes

Learn about manual print modes..

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

Try using manual print modes to see if they solve the image-quality problems.

NOTE: Tray 1 and Tray 2 are optimal for paper pickup when using special paper or media other than 20lb plain paper. For Tray 1 and Tray 2 the printer increases the number of attempts to pick up a page, which increases the reliability of successfully picking the page from the tray and decreases the possibility of a mis-pick jam.

HP recommends using Tray 1 or Tray 2 if the printer is experiencing excessive or reoccurring jams from trays other than Tray 1 and Tray 2, or for print jobs that require media other than 20lb plain paper.

Select a manual print mode from a SFP control panel

1. From the Home screen on the printer control panel, use the arrow keys to navigate to Settings, and then press the OK button.
2. Use the arrow buttons to scroll to Print, and then press the OK button.
3. Use the arrow buttons to scroll to Print Quality, and then press the OK button.
4. Use the arrow buttons to scroll to Adjust Paper Types or Optimize, and then press the OK button.

   NOTE: The Adjust Paper Types and Optimize submenus vary by printer model.

Select a manual print mode from an MFP control panel

1. From the Home screen on the printer control panel, scroll to and touch the Settings button.
2. Open the following menus:
   - Print
   - Print Quality
   - Adjust Paper Types or Optimize

   NOTE: The Adjust Paper Types and Optimize submenus vary by printer model.

Table 6-54 Optimize submenu

Optimize item	Values	Comments
Normal Paper	Standard Smooth	Set to Smooth when printing on smooth paper of normal weight.
Heavy paper	Standard Smooth	Set to Smooth when printing on smooth, heavy media types.
Envelope control	Normal Reduced Temp	Set to Reduced Temp if envelopes are sticking due to moisture in the envelop adhesive.
Tray 1	Normal Alternate	Set the mode to Alternate if marks appear on the back side of the paper when printing from Tray 1. This sets the printer to initiate a clean sequence every time a job finishes when the printer is set for Any Size and Any Type for Tray 1.
Background	Normal Alternate	Set to Alternate when a background occurs all over the page.

Table 6-54 Optimize submenu (continued)

Optimize item	Values	Comments
Uniformity Control	Normal Alternate 1 Alternate 2 Alternate 3	Set to Alternate 1 to improve uniformity on any paper type.
Cac03	Off On	Set to On if printing with media that contains a high calcium carbonate content. Engine print speed is slowed so that less paper dust is produced.
Best Normal	Off On	Set to On to try and improve print quality.
Tracking Control	Off On	Improves color stability by adjusting the bias voltage. Make sure this mode is set to On.
Registration	Normal Alternate	Set to Alternate when color misregistration occurs.
Transfer Control	Normal Alternate	Set to Alternate to reduce primary transfer bias and to resolve low density or blotchy images.
Moisture Control	Normal Alternate	Set to Alternate if the printer is installed in a high-humidity environment.
Reset Optimize	Reset	Use Reset to reset the menu defaults.

Print from a different software program

Try printing from a different software program.

If the page prints correctly, the problem is with the software program from which you were printing.

Check the paper-type setting for the print job

Check the paper type setting when printing from a software program and the printed pages have smears, fuzzy or dark print, curled paper, scattered dots of toner, loose toner, or small areas of missing toner.

Check the paper type setting on the control panel

Check the paper type setting on the printer control panel, and change the setting as needed.

1. Open and close the paper tray.
2. Follow the control panel prompts to confirm or modify the paper type and size settings for the tray.
3. Make sure the paper loaded meets specifications.
4. Adjust the humidity and resistance setting on the control panel to match the environment.
   a. Open the following menus:
      1. Settings
      2. Copy/Print
      3. Print quality
      4. Adjust paper type
   b. Select the paper type that matches the type loaded in the tray.
   c. Use the arrows to increase or decrease the humidity and resistance setting.
5. Make sure the driver settings match the control panel settings.

NOTE: The print driver settings will override any control panel settings.

Check the paper type setting (Windows)

Check the paper type setting for Windows, and change the setting as needed.

NOTE: The print driver settings will override any control panel settings.

1. From the software program, select the **Print** option.
2. Select the printer, and then click the **Properties** or **Preferences** button.
3. Click the **Paper/Quality** tab.
4. From the **Paper Type** drop-down list, click the **More...** option.
5. Expand the list of **Type is:** options.
6. Expand the category of paper types that best describes your paper.
7. Select the option for the type of paper you are using, and click the **OK** button.
8. Click the **OK** button to close the **Document Properties** dialog box. In the **Print** dialog box, click the **OK** button to print the job.

Check the paper type setting (macOS)

Check the paper type setting for macOS, and change the setting as needed.

1. Click the **File** menu, and then click the **Print** option.
2. In the **Printer** menu, select the printer.
3. Click **Show Details** or **Copies & Pages**.
4. Open the menus drop-down list, and then click the **Paper/Quality** menu.
5. Select a type from the **Media Type** drop-down list.
6. Click the **Print** button.

Check toner-cartridge status

Follow these steps to check the estimated life remaining in the toner cartridges and if applicable, the status of other replaceable maintenance parts.

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

Step one: Print the Supplies Status Page

The supplies status page indicates the cartridge status.

1. From the Home screen on the printer control panel, select the Reports menu.
2. Select the Configuration/Status Pages menu.
3. Select Supplies Status Page, and then select Print to print the page.

Step two: Check supplies status

Check the supplies status report as follows.

1. Look at the supplies status report to check the percent of life remaining for the toner cartridges and, if applicable, the status of other replaceable maintenance parts.

   Print quality problems can occur when using a toner cartridge that is at its estimated end of life. The supplies status page indicates when a supply level is very low. After an HP supply has reached the very low threshold, HP's premium protection warranty on that supply has ended.

   The toner cartridge does not need to be replaced now unless the print quality is no longer acceptable. Consider having a replacement available to install when print quality is no longer acceptable.

   If you determine that you need to replace a toner cartridge or other replaceable maintenance parts, the supplies status page lists the genuine HP part numbers.

2. Check to see if you are using a genuine HP cartridge.

   A genuine HP toner cartridge has the word "HP" on it, or has the HP logo on it. For more information on identifying HP cartridges go to www.hp.com/go/learnaboutsupplies.

Print a cleaning page

Learn how to print a cleaning page.

IMPORTANT: The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

Print a cleaning page from a SFP control panel

1. From the Home screen on the printer control panel, use the arrow keys to navigate to Support Tools, and then press the OK button.
2. Use the arrow buttons to scroll to Maintenance, and then press the OK button.

3. Use the arrow buttons to scroll to Calibration/Cleaning, and then press the OK button.

4. Use the arrow buttons to scroll to Cleaning page, and then press the OK button.

   TIP: Use this screen to set up automatic cleaning page intervals if desired.

5. Use the arrow buttons to scroll to Print (at the bottom of the control-panel display), and then press the OK button to print the cleaning page.

   NOTE: A **Cleaning...** message displays on the control-panel display. Do not turn the printer off until the cleaning process has finished. When it is finished, discard the printed page.

Print a cleaning page from an MFP control panel

1. From the Home screen on the printer control panel, scroll to and touch the Support Tools button.

2. Open the following menus:

   – Maintenance

   – Calibration/Cleaning

3. Touch Cleaning Page, and then touch the Print button to print the cleaning page.

   NOTE: A **Cleaning...** message displays on the control-panel display. Do not turn the printer off until the cleaning process has finished. When it is finished, discard the printed page.

   TIP: Use this screen to set up automatic cleaning page intervals if desired.

Check paper and the printing environment

Use the following information to check the paper selection and the printing environment.

Step one: Use paper that meets HP specifications

Some print-quality problems arise from using paper that does not meet HP specifications.

- Always use a paper type and weight that this printer supports.
- Use paper that is of good quality and free of cuts, nicks, tears, spots, loose particles, dust, wrinkles, voids, staples, and curled or bent edges.
- Use paper that has not been previously printed on.
- Use paper that does not contain metallic material, such as glitter.
- Use paper that is designed for use in laser printers. Do not use paper that is designed only for use in Inkjet printers.
- Use paper that is not too rough. Using smoother paper generally results in better print quality.

Step two: Check the environment

The environment can directly affect print quality and is a common cause of print-quality or paper-feeding issues. Try the following solutions:

- Move the printer away from drafty locations, such as open windows or doors, or air-conditioning vents.
- Make sure the printer is not exposed to temperatures or humidity outside of printer specifications.
- Do not place the printer in a confined space, such as a cabinet.
- Place the printer on a sturdy, level surface.
- Remove anything that is blocking the vents on the printer. The printer requires good air flow on all sides, including the top.
- Protect the printer from airborne debris, dust, steam, grease, or other elements that can leave residue inside the printer.

Step three: Set the individual tray alignment

Follow these steps when text or images are not centered or aligned correctly on the printed page when printing from specific trays.

1. From the Home screen on the printer control panel, select the Settings menu.
2. Select the following menus:
   a. Copy/Print or Print
   b. Print Quality
   c. Image Registration
3. Select Tray, and then select the tray to adjust.
4. Select Print Test Page, and then follow the instructions on the printed pages.

5. Select Print Test Page again to verify the results, and then make further adjustments if necessary.

6. Select Done to save the new settings.

Try a different print driver

Try a different print driver when printing from a software program and the printed pages have unexpected lines in graphics, missing text, missing graphics, incorrect formatting, or substituted fonts.

Download any of the following drivers from the HP Web site: www.hp.com/support/colorljM552 or www.hp.com/support/colorljM553 or http://www.hp.com/support/colorljM554 or http://www.hp/support/colorljE55040 or www.hp.com/support/colorljM577MFP or http://www.hp.com/support/colorljM578mfp or http://www.hp.com/support/colorljE57540mfp.

Table 6-55 Print drivers

Driver	Description
HP PCL.6 driver	If available, this printer-specific print driver supports older operating systems like Windows XP and Windows Vista. For a list of supported operating systems, go to www.hp.com/go/support.
HP PCL 6 driver	This printer-specific print driver supports Windows 7 and newer operating systems that support version 3 drivers. For a list of supported operating systems, go to www.hp.com/go/support.
HP PCL-6 driver	This product-specific print driver supports Windows 8 and newer operating systems that support version 4 drivers. For a list of supported operating systems, go to www.hp.com/go/support.
HP UPD PS driver	• Recommended for printing with Adobe software programs or with other highly graphics-intensive software programs • Provides support for printing from Postscript emulation needs, or for Postscript flash font support
HP UPD PCL 6	• Recommended for printing in all Windows environments • Provides the overall best speed, print quality, and printer feature support for most users • Developed to align with Windows Graphic Device Interface (GDI) for best speed in Windows environments • Might not be fully compatible with third-party and custom software programs that are based on PCL 5

Troubleshoot image defects

Review examples of image defects and steps to resolve these defects.

Table 6-56 Image defects table quick reference

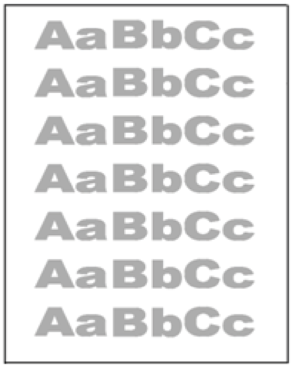
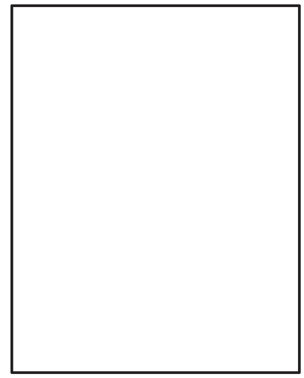
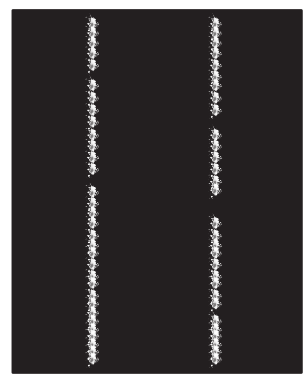
Defect	Defect	Defect
Table 6-64 Light print on page 397 	Table 6-62 Gray background or dark print on page 396 	Table 6-59 Blank page — No print on page 394 
Table 6-58 Black page on page 393 	Table 6-57 Banding defects on page 393 	Table 6-66 Streak defects on page 399 

Table 6-56 Image defects table quick reference (continued)

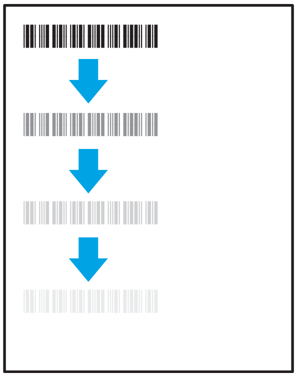
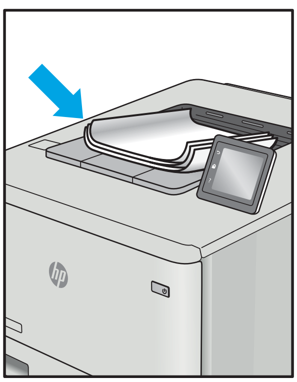
Defect	Defect	Defect
Table 6-61 Fixing/fuser defects on page 395 	Table 6-63 Image placement defects on page 396 	Table 6-60 Color plane registrations defects (color models only) on page 394 
Table 6-65 Output defects on page 398 		

Image defects, no matter the cause, can often be resolved using the same steps. Use the following steps as a starting point for solving image defect issues.

1. Reprint the document. Print quality defects can be intermittent in nature or can go away completely with continued printing.
2. Check the condition of the cartridge or cartridges. If a cartridge is in a **Very Low** state (it has passed the rated life), replace the cartridge.
3. Make sure that the driver and tray print mode settings match the media that is loaded in the tray. Try using a different ream of media or a different tray. Try using a different print mode.
4. Make sure the printer is within the supported operating temperature/humidity range.
5. Make sure that the paper type, size, and weight are supported by the printer. See the printer support page at support.hp.com for a list of the supported paper sizes and types for the printer.

NOTE: The term "fusing" refers to the part of the printing process where toner is affixed to paper.

The following examples depict letter-size paper that has passed through the printer with the short edge first.

Table 6-57 Banding defects

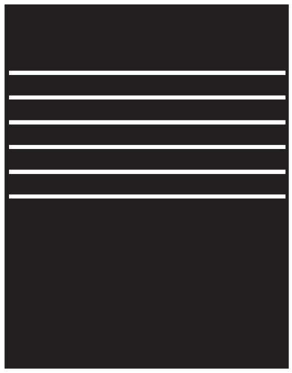
Sample	Description	Possible solutions
	Dark or light lines which repeat down the length of the page, and are wide-pitch and/or impulse bands. They might be sharp or soft in nature. The defect displays only in areas of fill, not in text or sections with no printed content.	1. Reprint the document. 2. Try printing from another tray. 3. Replace the cartridge. 4. Use a different paper type. 5. **Enterprise models only:** From the Home screen on the printer control panel, go to the Adjust Paper Types menu, and then choose a print mode that is designed for a slightly heavier media than what you are using. This slows the print speed and might improve the print quality. 6. If the issue persists, go to support.hp.com.

Table 6-58 Black page

Sample	Description	Possible solutions
	The entire printed page is black.	1. Visually inspect the cartridge to check for damage. 2. Make sure that the cartridge is installed correctly. 3. Replace the cartridge. 4. If the issue persists, go to support.hp.com.

Table 6-59 Blank page — No print

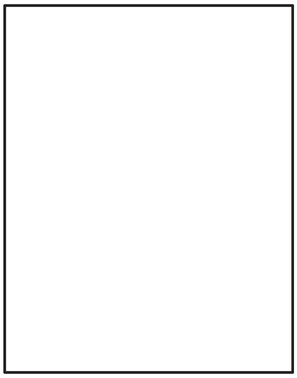
Sample	Description	Possible solutions
	The page is completely blank and contains no printed content.	1. Make sure that the cartridges are genuine HP cartridges. 2. Make sure that the cartridge is installed correctly. 3. Print with a different cartridge. 4. Check the paper type in the paper tray and adjust the printer settings to match. If necessary, select a lighter paper type. 5. If the issue persists, go to support.hp.com.

Table 6-60 Color plane registrations defects (color models only)

Sample	Description	Possible solutions
	One or more color plane(s) is not aligned with the other color planes. This registration error will typically occur with yellow.	1. Reprint the document. 2. From the printer control panel, calibrate the printer. 3. If a cartridge has reached a **Very Low** state, or the printed output is severely faded, replace the cartridge. 4. From the printer control panel use the Restore Calibration feature to reset the printer's calibration settings to the factory defaults. 5. If the issue persists, go to support.hp.com.

Table 6-61 Fixing/fuser defects

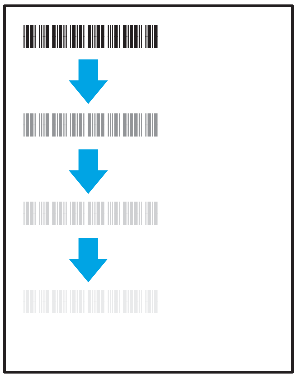
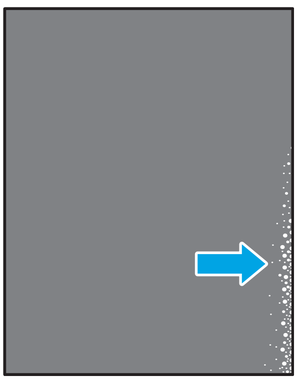
Sample	Description	Possible solutions
	Slight shadows or offsets of the image are repeated down the page. The repeated image might fade with each recurrence.	1. Reprint the document. 2. Check the paper type in the paper tray and adjust the printer settings to match. If necessary, select a lighter paper type. 3. If the issue persists, go to support.hp.com.
	Toner rubs off along either edge of the page. This defect is more common at the edges of high-coverage jobs, and on light media types, but can occur anywhere on the page.	1. Reprint the document. 2. Check the paper type in the paper tray and adjust the printer settings to match. If necessary, select a heavier paper type. 3. **Enterprise models only:** From the printer control panel, go to the Edge-to-Edge menu and then select Normal. Reprint the document. 4. **Enterprise models only:** From the printer control panel, select Auto Include Margins and then reprint the document. 5. If the issue persists, go to support.hp.com.

Table 6-62 Gray background or dark print

Sample	Description	Possible solutions
	The image or text is darker than expected and/or the background is gray.	1. Make sure that the paper in the trays has not already been run through the printer. 2. Use a different paper type. 3. Reprint the document. 4. **Mono models only:** From the Home screen on the printer control panel, go to the Adjust Toner Density menu, and then adjust the toner density to a lower level. 5. Make sure that the printer is within the supported operating temperature and humidity range. 6. Replace the cartridge. 7. If the issue persists, go to support.hp.com.

Table 6-63 Image placement defects

Sample	Description	Possible solutions
	The image is not centered, or is skewed on the page. The defect occurs when the paper is not positioned properly as it is pulled from the tray and moves through the paper path.	1. Reprint the document. 2. Remove the paper and then reload the tray. Make sure that all the paper edges are even on all sides. 3. Make sure that the top of the paper stack is below the tray-full indicator. Do not overfill the tray. 4. Make sure that the paper guides are adjusted to the correct size for the paper. Do not adjust the paper guides tightly against the paper stack. Adjust them to the indentations or markings in the tray. 5. If the issue persists, go to support.hp.com.

Table 6-64 Light print

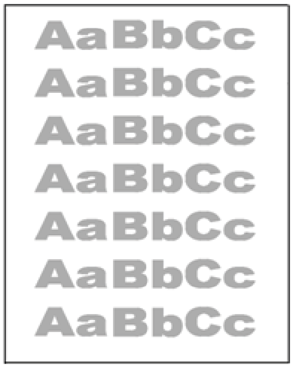
Sample	Description	Possible solutions
	The printed content is light or faded on the entire page.	1. Reprint the document. 2. Remove the cartridge, and then shake it to redistribute the toner. Reinsert the toner cartridges into the printer and close the cover. For a graphical representation of this procedure, see *Replace the toner cartridges*. 3. **Mono models only:** Make sure that the EconoMode setting is disabled, both at the printer control panel and in the print driver. 4. Make sure that the cartridge is installed correctly. 5. Print a Supplies Status Page and check the life and usage of the cartridge. 6. Replace the cartridge. 7. If the issue persists, go to support.hp.com.

Table 6-65 Output defects

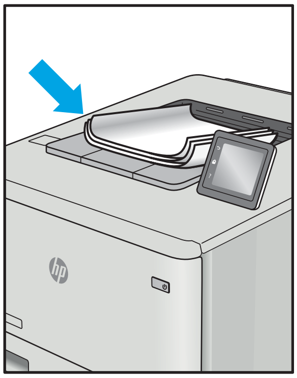
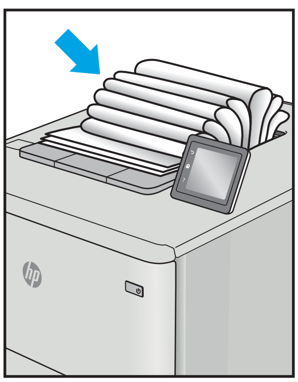
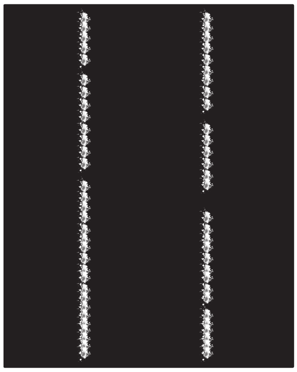
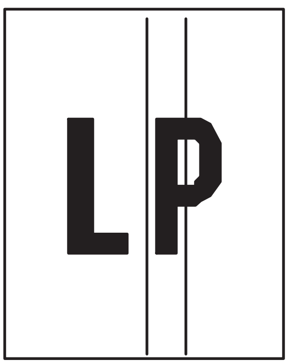
Sample	Description	Possible solutions
	Printed pages have curled edges. The curled edge can be along the short or long side of the paper. Two types of curl are possible: ● **Positive curl:** The paper curls toward the printed side. The defect occurs in dry environments or when printing high-coverage pages. ● **Negative curl:** The paper curls away from the printed side. The defect occurs in high-humidity environments or when printing low-coverage pages.	1. Reprint the document. 2. **Positive curl:** From the printer control panel, select a heavier paper type. The heavier paper type creates a higher temperature for printing. **Negative curl:** From the printer control panel, select a lighter paper type. The lighter paper type creates a lower temperature for printing. Try storing the paper in a dry environment prior to use, or use freshly opened paper. 3. Print in duplex mode. 4. If the issue persists, go to support.hp.com.
	The paper does not stack well in the output tray. The stack might be uneven, skewed, or the pages might be pushed out of the tray and onto the floor. Any of the following conditions can cause this defect: ● Extreme paper curl ● The paper in the tray is wrinkled or deformed ● The paper is a non-standard paper type, such as envelopes ● The output tray is too full	1. Reprint the document. 2. Extend the output bin extension. 3. If the defect is caused by extreme paper curl, refer to the troubleshooting steps for "Output curl." 4. Use a different paper type. 5. Use freshly opened paper. 6. Remove the paper from the output tray before the tray gets too full. 7. If the issue persists, go to support.hp.com.

Table 6-66 Streak defects

Sample	Description	Possible solutions
	Light vertical streaks that usually span the length of the page. The defect displays only in areas of fill, not in text or sections with no printed content.	1. Reprint the document. 2. Remove the cartridge, and then shake it to redistribute the toner. Reinsert the toner cartridges into the printer and close the cover. For a graphical representation of this procedure, see *Replace the toner cartridges*. 3. If the issue persists, go to support.hp.com. NOTE: Both light and dark vertical streaks can occur when the printing environment is outside the specified range for temperature or humidity. Refer to your printer's environmental specifications for allowable temperature and humidity levels.
	Dark vertical lines which occur down the length of the page. The defect might occur anywhere on the page, in areas of fill or in sections with no printed content. On color models, these lines or streaks will also be visible on the ITB cleaning page.	1. Reprint the document. 2. Remove the cartridge, and then shake it to redistribute the toner. Reinsert the toner cartridges into the printer and close the cover. For a graphical representation of this procedure, see *Replace the toner cartridges*. 3. Print a cleaning page. 4. Check the toner level in the cartridge. 5. If the issue persists, go to support.hp.com.

Copy-quality troubleshooting

Learn about copy-quality troubleshooting.

NOTE: Copy-quality (CQ) problems are associated with the integrated-scanner assembly (ISA) portion of an MFP printer. CQ defects appear on pages that are **copied** using the document feeder or flatbed glass.

Identify the location and type of the CQ problem

Resolving CQ problems involves isolating the defect to the document feeder or flatbed glass. Comparing printed output between the document feeder and the flatbed glass might determine the ISA location that is causing the CQ defect.

NOTE: If a CQ defect appears on printed output from both the document feeder **and** the flatbed glass, carefully inspect the original source for a print-quality (PQ) problem.

Document feeder isolation test

1. Mark a printed page in a way that clearly identifies it as the source document used in this isolation procedure.
2. Place the source page in the document feeder, and then make a copy.
3. Mark the copied output page to clearly identify it as output from the document feeder.
4. Compare the original and copied pages. Defects appearing on the copied page are caused by a problem in the document feeder.

Flatbed isolation test

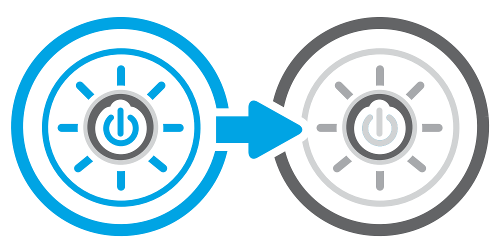
1. Mark a printed page in a way that clearly identifies it as the source document used in this isolation procedure.
2. Place the source page on the flatbed glass, and then make a copy.
3. Mark the copied output page to clearly identify it as output from the flatbed.
4. Compare the original and copied pages. Defects appearing on the copied page are caused by a problem in the flatbed.

Check the scanner glass for dirt and smudges

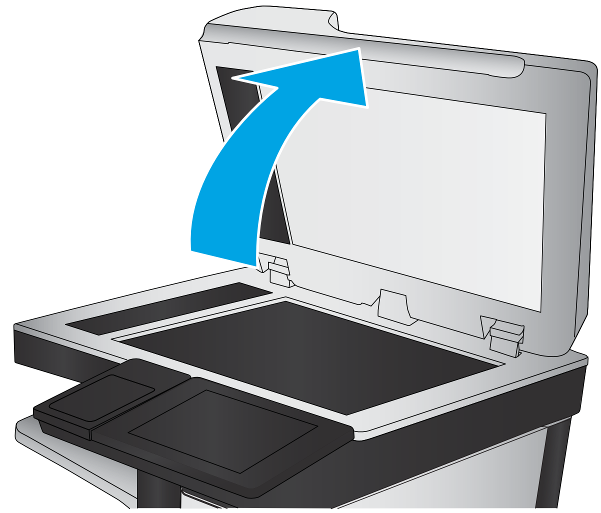
Learn about solving copy-quality debris problems.

Over time, specks of debris might collect on the scanner glass and document feeder white plastic backing, which might cause print defects. Use the following procedure to clean the scanner if the printed pages have streaks, unwanted lines, black dots, poor print quality, or unclear text.

1. Press the power button to turn the printer off, and then disconnect the power cable from the electrical outlet.



2. Open the scanner lid.

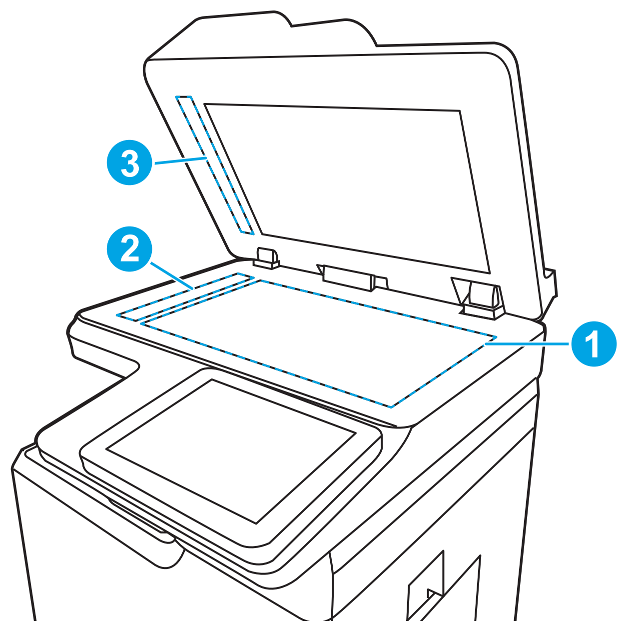


3. Clean the scanner glass (callout 1) and the document feeder strips (callout 2, callout 3) with a soft cloth or sponge that has been moistened with nonabrasive glass cleaner.

   CAUTION: Do not use abrasives, acetone, benzene, ammonia, ethyl alcohol, or carbon tetrachloride on any part of the printer; these can damage the printer. Do not place liquids directly on the glass or platen. They might seep and damage the printer.

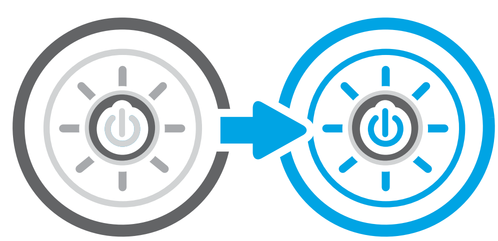
   NOTE: If you are having trouble with streaks on copies when you are using the document feeder, be sure to clean the small strips of glass on the left side of the scanner (callout 2, callout 3).

   View a video of cleaning the document feeder glass and flatbed glass.



4. Dry the glass and white plastic parts with a chamois or a cellulose sponge to prevent spotting.

5. Connect the power cable to an outlet, and then press the power button to turn the printer on.



Vertical lines, bands, or streaks

Learn about vertical lines, bands, or streaks copy-quality problems.

Vertical lines or streaks appear on copies and/or scans in the same direction that the paper feeds when copying and/or scanning from the document feeder. Lines or streaks might be visible on the front and/or the back side of the page. Copies and/or scans from the flatbed glass look normal. Printouts also look normal.

The line or streak might be black or in color, and can also be present on fax or digital send output (for example, when using Scan to folder or Scan to email features.

NOTE: HP has determined that **99%** of all lines and streaks on copies made by feeding the original documents through the document feeder are caused by **debris on the document feeder glass strip**. Even small specks can cause the light reflected off the original to be distorted, resulting in a line, streak, or smudge on copies or scans made from the document feeder.

Even if the document feeder glass strip and/or flatbed glass has been wiped clean, the defect might persist. Persistent vertical lines, bands, or streaks when copying from the document feeder might mean that the debris causing the print quality are not readily visible and cannot be removed with a quick cleaning.

Use the procedures below to resolve persistent lines, bands, or streak copy-quality (CQ) problems.

Locate debris and thoroughly clean the document feeder glass

1. Place a blank sheet of paper in the document feeder and mark an **X** in the lower right corner as shown.

   Figure 6-86 Load the document feeder

2. Press the Start button to make a copy of the blank page.

3. Place the copied paper face-up on the flatbed glass with the **X** located as shown.

NOTE: Make sure the upper left corner of the copy is aligned with the upper left corner of the flatbed glass.

Figure 6-87 Place the copy on the flatbed

4. Follow the line or streak on the paper to the area on the document feeder glass that is causing the CQ problem.

Figure 6-88 Identify the CQ defect location

5. Use a fingernail to loosen any stubborn debris.

> ⚠ **WARNING!** Use only a fingernail. Other objects can scratch the document feeder glass.

Clean this specific area again (with a lint-free cloth dampened with water), and then dry the glass with a soft, lint-free cloth.

Figure 6-89 Clean the glass

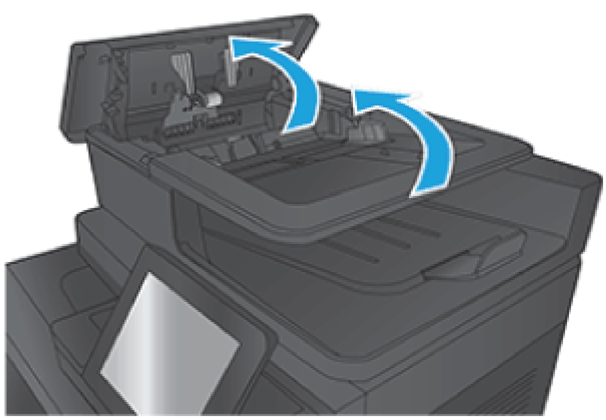
6. Make another copy or scan to determine if the defect is gone.

Clean the duplexer scanner glass (model specific)

> **NOTE:** Not all MFP printers use a background selector for duplex printing.
>
> If a *Side 2 Background Selector* cannot be located for the printer (it might not include one) skip this procedure.

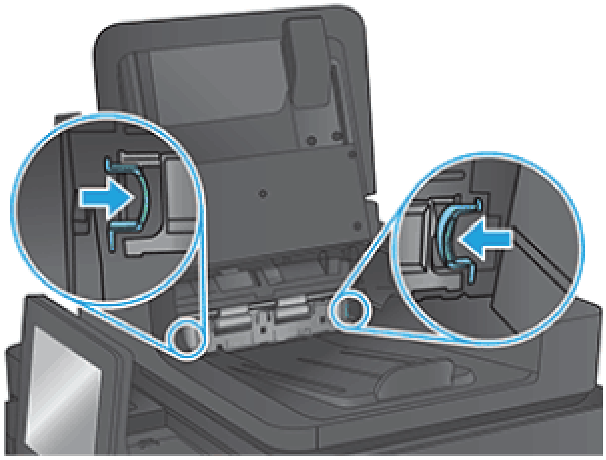
1. Release the latch and open the document feeder jam-access door.

Figure 6-90 Open the jam-access door



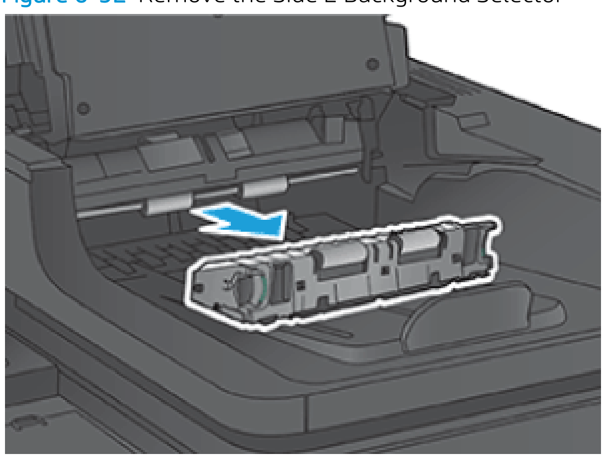
2. Unlock the Side 2 Background Selector by pressing and holding both green tabs inward towards each other.

Figure 6-91 Release the Side 2 Background Selector



3. While holding the green tabs, pull out and remove the Side 2 Background Selector.

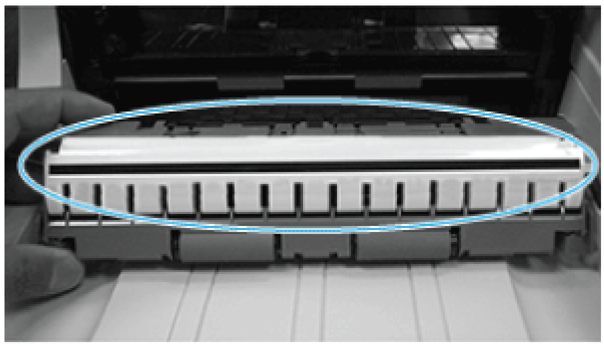
Figure 6-92 Remove the Side 2 Background Selector



4. Rotate the top to reveal the white and black backside reflector (circled in blue).

> **NOTE:** If the white and black areas do not come clean, try again using isopropyl alcohol, and then wipe the surface thoroughly with a damp cloth to remove any residual alcohol. Dry the area with a soft, dry cloth to prevent spotting.

Figure 6-93 Locate the backside reflector



5. With the background selector removed from the document feeder, clean the inside of the scan module.

6. In the back area from where the background selector was removed, locate the Side 2 Scan Module glass found under the top area.

> **NOTE:** The glass surface of the Side 2 Scan module sits horizontally flat and might not be easily viewable.

7. Use a soft, lint-free cloth moistened with water and apply pressure upwards behind the rollers to clean the Side 2 Scan Module Glass, making sure to that the entire width of the glass is cleaned from left to right.

> **NOTE:** If needed, lens cleaner or non-abrasive glass cleaner can be applied to the cloth before cleaning the glass. Spray only onto the cloth and not directly onto the glass or device. Do not spray water or glass cleaner on the glass as it can seep under it and possibly damage the printer. Do not use abrasives, acetone, benzene, ethyl alcohol, or carbon tetrachloride on the glass; these can damage it and/or leave residue on the glass resulting in degraded copy/scan quality.

8. Reverse the removal steps to reinstall the Side 2 Background Selector.

9. Make another copy or scan to determine if the defect is gone.

Modify printer settings to improve scan or copy quality

Learn about printer settings to improve scan or copy quality.

Optimize printer settings to potentially improve scan or copy quality.

> **IMPORTANT:** The printer settings described in this section are firmware dependent and might not be available for a specific printer (for example, color adjustment settings do not apply to mono printers).

Image Adjustment settings

> **NOTE:** Settings > Print (SFP) or Copy/Print (MFP) > Image Adjustment > Background Cleanup.

Use the sliders to perform a Background Cleanup, adjust the image Darkness as well as changing the Sharpness and Contrast.

Use this feature to improve the overall quality of the copy (for example, adjusting the Darkness and Sharpness. Use the Background Cleanup setting to remove faint images from the background or to remove a light background color.

- Darkness: Adjust this setting to increase or decrease the amount of white and black in the colors.
- Contrast: Adjust this setting to increase or decrease the difference between the lightest and darkest color on the page.
- Background Cleanup: Adjust this setting if copying a faint image is a problem.
- Sharpness: Adjust this setting to clarify or soften the image. Increasing the sharpness might make text appear crisper, but decreasing it would make photographs appear smoother.

Optimize Text/Picture settings

NOTE: Settings > Scan/Digital Send Settings > Optimize Text/Picture.

Use to optimize the output for a particular type of content. You can optimize the output for text, printed pictures, or a mixture.

Use this setting to optimize the output for a particular type of content.

- Mixed: Use to optimize the setting for text and for pictures.
- Text: Use to optimize the text portion of the copy when text and/or pictures are on the original.
- Printed picture: Use to optimize line drawing and preprinted images such as magazine clippings or pages from a book. If you see bands of irregular intensity on copies, try selecting Printed picture to improve quality.
- Photographs: Use to optimize photographic prints.

Color/Black settings

NOTE: Settings > Scan/Digital Send Settings > Color/Black.

Use to enable or disable color scanning.(some highlighters will not auto detect as color).

- Automatically detect color or black: When pages without color are detected, the printer creates an image of the page in 1-bit black if other settings allow. If the other settings don't allow (File Type, for example), the image is in grayscale.
- Automatically detect color or gray: When pages without color are detected, the printer creates an image of the page in grayscale. Select this option for the best image quality for non-color pages.
- Color: Scans the documents in color.
- Black: Scans documents in black and white with a compressed file size.
- Black/Gray: Scans or prints documents in grayscale.

Light or faint copies (color models)

Learn how to resolve light or faint copy-quality problems.

Are you attempting to copy or scan highlighted text?

NOTE: When digitally sending or copying highlighted images or text objects, the image might appear lighter than expected or does not show up at all with certain brands/types of highlighter pens.

Highlighters come in bright, often fluorescent colors. Fluorescent highlighter inks tend to reflect more light than that which is absorbed by the paper source. This reflection might cause the image to not show up as well as non-fluorescent colors depending upon the scanner/MFP being used.

The most common color for highlighters is yellow, but many other colors are also found such as pink, blue, green, orange, and purples. Yellow is often the preferred color to use when making a photocopy as it tends to not produce as much of a shadow on copies or scans.

There are different color and ink properties depending upon the brand of highlighters used. Due to these differences, scanning of the images might vary greatly from not being seen at all to changing colors (for example, orange highlighter might appear brown in the copy or scan or yellow highlighter might appear green).

Automatic color detect

HP has a feature in all FutureSmart (LaserJet Enterprise Series only) printers which automatically detects color on each page. Depending upon the amount of color information on a page, the scanner might determine the page to be black and white due to a very, very small amount of color which might be considered background artifacts. This helps to reduce the file size of sent files as well as toner usage on a copied page. You might see small highlighted marks on pages print out in black and white or even disappear.

The black and white effect is due to the printer not seeing enough color on the page, in which case the whole image is rendered as a black and white page. The highlighted mark disappearing might be due to the marker characteristics not being detected by the scanner.

Does the printer have the latest firmware version installed?

A Firmware enhancement has been introduced for certain LaserJets to help with the reproduction of highlighted images.

NOTE: Some Multifunction Printers (MFPs) using FutureSmart firmware v3.5.3 or later have improved color reproduction of fluorescent highlighters when scanning or copying.

No or I don't know

Use the following steps to identify the installed firmware version, and then upgrade the firmware if needed.

1. Print a configuration page (from the printer control panel).
2. On the printed configuration page look in the section marked **Device Information**, and then identify the **Firmware Datecode** and **Firmware Revision**.

   This is the current version of firmware installed on this printer.
3. In the US, go to www.hp.com/support/colorljM552 or www.hp.com/support/colorljM553 or http://www.hp.com/support/colorljM554 or http://www.hp/support/colorljE55040 or www.hp.com/support/colorljM577MFP or http://www.hp.com/support/colorljM578mfp or http://www.hp.com/support/colorljE57540mfp.
   1. Select **Get drivers, Software, and Firmware**, and then select the appropriate product by name.

NOTE: More than one printer model might be listed. Make sure to select the correct model so that the upgraded firmware supports all of the printer functions.

b. Select the driver language and operating system.

c. Locate the firmware download. If the firmware version is more recent than the one shown on the printed configuration page, select **Download**.

4. Outside the U.S., go to www.hp.com/support.

a. Select your country/region.

b. Select **Drivers & Downloads**.

c. Enter the product name in the **Find my product** dialogue box, and then select **Go**.

TIP: Click on the **How do I find my product name/number?** link to see a short video on identifying the printer name and number.

d. Select the appropriate product by name.

NOTE: More than one printer model might be listed. Make sure to select the correct model so that the upgraded firmware supports all of the printer functions.

e. Select the driver language and operating system.

f. Locate the firmware download. If the firmware version is more recent than the one shown on the printed configuration page, select **Download**.

5. Perform a firmware upgrade. See Firmware upgrades on page 169 for more information.

6. When the upgrade process is complete, print a configuration page and verify that the upgrade firmware version was installed.

Yes

These procedures help provide settings which affect the way highlighters are scanned or copied. A firmware enhancement is available for certain printers that helps with the reproduction of highlighted images.

- Enable Firmware Enhancement

  1. From the Home screen, select the desired scanning application (for example, Copy, E-Mail, Save to Network Folder).

  2. Select More Options > Optimize Text/Picture > Text button (not slider). This enables the improved color reproduction of fluorescent highlighters.

  TIP: Administrators can set Text as the default setting on the device.

- Alternative Settings

  See Modify printer settings to improve scan or copy quality on page 406 in the printer service manual for more information.

Performance and connectivity troubleshooting

Learn about performance and connectivity troubleshooting.

Solve fax or email problems

Learn about solving fax and email problems.

Fax or email troubleshooting information is not provided in this service manual. The most current information is available in WISE or HP Channel Services Network (CSN). Search using model number then use "fax troubleshooting" as the search term.

Channel partners, go to HP Channel Services Network (CSN) at http://www.hp.com/partners/csn.

HP service personnel, go to one of the following Web-based Interactive Search Engines (WISE) sites:

Americas (AMS)

- WISE - English
- WISE - Spanish
- WISE - Portuguese
- WISE - French

Asia Pacific / Japan (APJ)

- WISE - English
- WISE - Japanese
- WISE - Korean
- WISE - Chinese (simplified)
- WISE - Chinese (traditional)
- WISE - Thai

Europe / Middle East / Africa (EMEA)

- WISE - English

Solve performance problems

Review the following information and procedures to solve performance problems.

NOTE: Tray 1 and Tray 2 are optimal for paper pickup when using special paper or media other than 75-80gsm (20lb) plain paper. For Tray 1 and Tray 2 the printer increases the number of attempts to pick up a page, which increases the reliability of successfully picking the page from the tray and decreases the possibility of a mis-pick jam.

HP recommends using Tray 1 or Tray 2 if the printer is experiencing excessive or reoccurring jams from trays other than Tray 1 and Tray 2, or for print jobs that require media other than 75-80gsm (20lb) plain paper.

Factors affecting print performance

Review the following information about factors affecting print performance.

Table 6-67 Solve performance problems

Problem	Cause	Solution
Pages print but are totally blank.	The document might contain blank pages.	Check the original document to see if content is present on all of the pages.
Pages print but are totally blank.	The printer might be malfunctioning.	To check the printer, print a Configuration page.
Pages print but are totally blank.	Make sure that the printer is not feeding multiple pages (especially if very thin paper is used).	Make sure that the paper meets HP specifications for this printer. For a complete list of specific HP-brand paper that this printer supports, go to www.hp.com/support/colorljM552 or www.hp.com/support/colorljM553 or http://www.hp.com/support/colorljM554 or http://www.hp/support/colorljE55040 or www.hp.com/support/colorljM577MFP or http://www.hp.com/support/colorljM578mfp or http://www.hp.com/support/colorljE57540mfp.
Pages print very slowly. NOTE: Some software programs process print jobs slowly.	Heavier paper types can slow the print job.	Print on a different type of paper.
Pages print very slowly. NOTE: Some software programs process print jobs slowly.	Complex pages can print slowly.	Proper fusing might require a slower print speed to ensure the best print quality.
Pages print very slowly. NOTE: Some software programs process print jobs slowly.	Large batches, narrow paper, and special paper such as gloss, transparency, cardstock, and HP Tough Paper can slow the print job.	Print in smaller batches, on a different type of paper, or on a different size of paper.
Pages did not print.	The printer might not be pulling paper correctly.	Make sure paper is loaded in the tray correctly.
Pages did not print.	The paper is jamming in the printer.	Clear the jam.

Table 6-67 Solve performance problems (continued)

Problem	Cause	Solution
Pages did not print.	The USB cable might be defective or incorrectly connected.	● Disconnect the USB cable at both ends and reconnect it. ● Try printing a job that has printed in the past. ● Try using a different USB cable.
Pages did not print.	Other devices are running on the host computer.	The printer might not share a USB port. If an external hard drive or network switchbox is connected to the same port as the printer, the other device might be interfering with the printer. To connect and use the printer, disconnect the other device or use two USB ports on the host computer.
Pages did not print.	The print job might not have arrived at the printer.	Check the printer status queue. Also, the Printing message should appear on the control panel display.

Print speeds

Print speed is the number of pages that print in one minute. Print speed depends on different engine-process speeds or operational pauses between printed pages during normal printer operation. Factors that determine the print speed of the printer include the following:

- Page formatting time

  The printer must pause for each page to be formatted before it prints. Complex pages take more time to format, resulting in reduced print speed. However, most jobs print at full engine speed.

- Media size

  Legal-size media reduces print speed because it is longer than the standard Letter- or A4–size media. A reduce print speed is used when printing on narrow media to prevent the edges of the fuser from overheating.

- Media mode

  Some media types require a reduced print speed to achieve maximum print quality on that media. For example, glossy, heavy, and specialty media (for example, envelopes or photos) require a reduced print speed. To maximize the print speed for special media types, make sure that the correct media type in the print driver is selected.

- Printer temperature

  To prevent printer damage, print speed is reduced if the printer reaches a specific internal temperature (thermal slow down). The starting temperature of the printer, ambient environment temperature, and the print job size effect the number of pages that can be printed before the printer reduces the print speed. Thermal slow down reduces print speed by printing four pages and then pausing for an amount of time before printing continues.

- Other print speed reduction factors

  Other factors (especially during large print jobs) that can cause reduced print speeds include:

– Density control sequence; occurs every 150 pages and takes about 120 seconds

The printer does not print

If the printer does not print at all, try the following solutions.

1. Make sure the printer is turned on and that the control panel indicates it is ready.
   - If the control panel does not indicate the printer is ready, turn the printer off and then on again.
   - If the control panel indicates the printer is ready, try sending the job again.
2. If the control panel indicates the printer has an error, resolve the error and then try sending the job again.
3. Make sure the cables are all connected correctly. If the printer is connected to a network, check the following items:
   - Check the bottom LED next to the network connection on the printer. If the network is active, the light is green.
   - Make sure that a network cable and not a phone cord is used to connect to the network.
   - Make sure the network router, hub, or switch is turned on and that it is working correctly.
4. Install the HP software for the printer. Using generic printer drivers can cause delays clearing jobs from the print queue.
5. From the list of printers on your computer, right-click the name of this product, click **Properties**, and open the **Ports** tab.
   - If a network cable is used to connect to the network, make sure the printer name listed on the **Ports** tab matches the one on the printer configuration page.
   - If a USB cable is used, and the printer is connected to a wireless network, make sure the box is checked next to **Virtual printer port for USB**.
6. If a personal firewall system on the computer is used, it might be blocking communication with the printer. Try temporarily disabling the firewall to see if it is the source of the problem.
7. If the host computer or the printer is connected to a wireless network, low signal quality or interference might be delaying print jobs.

The printer prints slowly

If the printer prints, but it seems slow, try the following solutions.

1. Make sure the computer meets the minimum specifications for this printer. For a list of specifications, go to this Web site: www.hp.com/support/colorljM552 or www.hp.com/support/colorljM553 or http://www.hp.com/support/colorljM554 or http://www.hp/support/colorljE55040 or www.hp.com/support/colorljM577MFP or http://www.hp.com/support/colorljM578mfp or http://www.hp.com/support/colorljE57540mfp.
2. When the printer is configured to print on some paper types, such as heavy paper, the printer prints more slowly so it can correctly fuse the toner to the paper. If the paper type setting is not correct for the type of paper you are using, change the setting to the correct paper type.
3. If the host computer or the printer is connected to a wireless network, low signal quality or interference might be delaying print jobs.

Solve connectivity problems

Review the following information and procedures to solve connectivity problems.

Solve USB connection problems

If you have connected the product directly to a computer, check the cable.

- Verify that the cable is connected to the computer and to the product.
- Verify that the cable is not longer than 2 m (6.65 ft). Try using a shorter cable.
- Verify that the cable is working correctly by connecting it to another product. Replace the cable if necessary.

Solve wired network problems

Review the following information and procedures to solve wired network problems.

Introduction

Check the following items to verify that the printer is communicating with the network. Before beginning, print a configuration page from the printer control panel and locate the printer IP address that is listed on this page.

Poor physical connection

Use the following procedure when the printer has a poor physical connection.

1. Verify that the printer is attached to the correct network port using a cable of the correct length.
2. Verify that cable connections are secure.
3. Look at the network port connection on the back of the printer, and verify that the amber activity light and the green link-status light are lit.
4. If the problem continues, try a different cable or port on the hub.

The computer is using the incorrect IP address for the printer

Use the following procedure when the computer is using the incorrect IP address for the printer.

1. Open the printer properties and click the **Ports** tab. Verify that the current IP address for the printer is selected. The printer IP address is listed on the printer configuration page.
2. If you installed the printer using the HP standard TCP/IP port, select the box labeled **Always print to this printer, even if its IP address changes**.
3. If you installed the printer using a Microsoft standard TCP/IP port, use the hostname instead of the IP address.
4. If the IP address is correct, delete the printer and then add it again.

The computer is unable to communicate with the printer

Use the following procedure when the computer is unable to communicate with the printer.

1. Test network communication by pinging the network.
   a. Open a command-line prompt on your computer.
      - For Windows, click **Start**, click **Run**, type `cmd`, and then press Enter.
      - For macOS, go to **Applications**, then **Utilities**, and open **Terminal**.

   b. Type `ping` followed by the IP address for your printer.

   c. If the window displays round-trip times, the network is working.
2. If the ping command failed, verify that the network hubs are on, and then verify that the network settings, the printer, and the computer are all configured for the same network.

The printer is using incorrect link and duplex settings for the network

HP recommends leaving these settings in automatic mode (the default setting). If you change these settings, you must also change them for your network.

New software programs might be causing compatibility problems

Verify that any new software programs are correctly installed and that they use the correct print driver.

The computer or workstation might be set up incorrectly

Use the following procedure when the computer or workstation might be set up incorrectly.

1. Check the network drivers, print drivers, and the network redirection settings.
2. Verify that the operating system is configured correctly.

The printer is disabled, or other network settings are incorrect

Use the following procedure when the printer is disabled, or other network settings are incorrect.

1. Review the configuration page to check the status of the network protocol. Enable it if necessary.
2. Reconfigure the network settings if necessary.

Solve fax or email problems

Fax or email troubleshooting information is not provided in this service manual. The most current information is available in WISE or HP Channel Services Network (CSN). Search using model number then use "fax troubleshooting" as the search term.

Additional service and support for HP internal personnel

HP internal personnel, go to one of the following Web-based Interactive Search Engine (WISE) sites:

Americas (AMS)

- WISE - English
- WISE - Spanish
- WISE - Portuguese
- WISE - French

Asia Pacific / Japan (APJ)

- WISE - English
- WISE - Japanese
- WISE - Korean
- WISE - Chinese (simplified)
- WISE - Chinese (traditional)
- WISE - Thai

Europe / Middle East / Africa (EMEA)

- WISE - English

7 Removal and replacement

When servicing the printer, several items must be taken into account to ensure a successful repair and to avoid damage to the printer or injury. Learn about these considerations and find detailed instructions for removing and replacing printer parts.

HP service and support

Learn about HP access to additional service and support information.

Additional service and support for channel partners

Channel partners go to partner.hp.com, and then use the steps below to access the HP Web-based Interactive Search Engine (WISE).

Access WISE for Channel partners

1. Select Services & Support (near the top of the screen).
2. Under Services Delivery, select Technical Support.
3. Select Technical Documentation.

Find information about the following topics

- Service manuals
- Service advisories
- Up-to-date control panel message (CPMD) troubleshooting
- Solutions for printer issues and emerging issues
- Remove and replace part instructions and videos
- Install and configure
- Printer specifications
- Warranty and regulatory information

Additional service and support for HP internal personnel

HP internal personnel, go to one of the following Web-based Interactive Search Engine (WISE) sites:

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- WISE - English
- WISE - Spanish
- WISE - Portuguese
- WISE - French

Asia Pacific / Japan (APJ)

- WISE - English
- WISE - Japanese
- WISE - Korean
- WISE - Chinese (simplified)
- WISE - Chinese (traditional)
- WISE - Thai

Europe / Middle East / Africa (EMEA)

- WISE - English

Additional technical support WISE videos

The videos below provide additional ways to access printer information using WISE.

Order parts, accessories, and supplies

Find information about ordering parts and supplies for the printer.

Ordering

Order parts by authorized service providers.

Table 7-1 Ordering

Item or provider	Description
Order supplies and paper	www.hp.com/go/suresupply
Order parts from authorized service providers	www.hp.com/buy/parts or partsurfer.hp.com
Order through service or support providers	Contact an HP-authorized service or support provider.
Order using the HP Embedded Web Server (EWS)	To access, in a supported web browser on your computer, enter the printer IP address or host name in the address/URL field. The EWS contains a link to the HP SureSupply web site, which provides options for purchasing Original HP supplies.

Orderable parts

Not all of the parts shown in the exploded assembly diagrams are orderable parts.

Refer to the tables following the diagrams or the alphabetical/numerical parts lists to determine if a part is orderable.

Supplies and accessories

Learn about the supplies and accessories that are available for the printer.

To order cartridges, visit http://www.hp.com (some portions of the HP Web site are available in English only). Ordering cartridges online is not supported in all countries/regions. However, many countries/regions have information about ordering by telephone, locating a local store, and printing a shopping list. In addition, go to hp.com/supplies to obtain information about purchasing HP products in your country/region.

Use only the replacement cartridges that have the same cartridge number as the cartridge that is being replaced. Find the cartridge number in the following places:

- On the label of the cartridge that is being replaced.
- On a sticker inside the printer. Open the cartridge door to locate the sticker.
- Open the printer software (**HP Printer Assistant**), and then click **Shop** ▶ **Shop For Supplies Online**.
- Open the HP Embedded Web Server (EWS), and then click **Tools** ▶ **Supply Status** (under the **Product Information** item).

Table 7-2 Supplies part numbers

Item	Description	Part number (service)	Product number (new)
Toner cartridge (M552/M553/M557/E55040/E57540)	HP 508A Black Original LaserJet Toner Cartridge	CF360-67901	CF360A

Table 7-2 Supplies part numbers (continued)

Item	Description	Part number (service)	Product number (new)
Toner cartridge	HP 508X High Yield Black Original LaserJet Toner cartridge	CF360-67902	CF360X
Toner cartridge (M552/M553/M557/ E55040/E57540)	HP 508A Cyan Original LaserJet Toner Cartridge	CF361-67901	CF361A
Toner cartridge (M552/M553/M557/ E55040/E57540)	HP 508X High Yield Cyan Original LaserJet Toner cartridge	CF361-67902	CF361X
Toner cartridge (M552/M553/M557/ E55040/E57540)	HP 508A Yellow Original LaserJet Toner Cartridge	CF362-67901	CF362A
Toner cartridge (M552/M553/M557/ E55040/E57540)	HP 508X High Yield Yellow Original LaserJet Toner cartridge	CF362-67902	CF362X
Toner cartridge (M552/M553/M557/ E55040/E57540)	HP 508A Magenta Original LaserJet Toner Cartridge	CF363-67901	CF363A
Toner cartridge (M552/M553/M557/ E55040/E57540)	HP 508X High Yield Magenta Original LaserJet Toner cartridge	CF363-67902	CF363X
Toner cartridge (E55040/E57540)	SVC Cartridge LJ Black Managed Toner	W9060–67901	
Toner cartridge (E55040/E57540)	SVC Cartridge LJ Cyan Managed Toner	W9061–67901	
Toner cartridge (E55040/E57540)	SVC Cartridge LJ Yellow Managed Toner	W9062–67901	
Toner cartridge (E55040/E57540)	SVC Cartridge LJ Magenta Managed Toner	W9063–67901	
Toner cartridge (M554/M555/M578)	SVC Cartridge-212A Black LaserJet Toner	7ZU81-67905	
Toner cartridge (M554/M555/M578)	SVC Cartridge-212X Black LaserJet Toner (High Yield)	7ZU81-67909	
Toner cartridge (M554/M555/M578)	SVC Cartridge-212A Cyan LaserJet Toner	7ZU81-67906	
Toner cartridge (M554/M555/M578)	SVC Cartridge-212X Cyan LaserJet Toner (High Yield)	7ZU81-67910	
Toner cartridge (M554/M555/M578)	SVC Cartridge-212A Yellow LaserJet Toner	7ZU81-67907	
Toner cartridge (M554/M555/M578)	SVC Cartridge-212X Yellow LaserJet Toner (High Yield)	7ZU81-67911	
Toner cartridge (M554/M555/M578)	SVC Cartridge-212A Magenta LaserJet Toner	7ZU81-67908	
Toner cartridge (M554/M555/M578)	SVC Cartridge-212X Magenta LaserJet Toner (High Yield)	7ZU81-67912	
HP toner-collection unit		B5L37-67901	B5L37A
HP Staple Cartridge Pack (stapler models)			Q7432A
HP LaserJet 200 ADF Roller Replacement Kit (MFP)		W5U23–67901	B5L52A
Fuser kit (110V)		B5L35-67902	B5L35A
Fuser kit (220V)		B5L36-67902	B5L36A

Table 7-3 Accessories (M552, M553, M554, M555, and E55040)

Description	Description	Part number (service)	Product number
550-sheet paper feeder NOTE: The M552 model accepts one 550-sheet paper feeder. The M553 and E55040 models accept up to three 550-sheet paper feeders.	Optional 550-sheet paper feeder (included with the x model)	B5L34-67901	B5L34A
Fixed tray guide kit	Fixed tray guide kit for cassette trays.	5851-7708	
HP secure 500 GB high-performance hard disk drive NOTE: Not supported for the M552dn.	Optional hard drive	B5L29-67903	B5L29A
Printer stand and storage	Optional stand with storage to support the printer Recommended when using multiple optional paper feeders.	B5L51-67901	B5L51A
1GB DDR3 Slim DIMM (SFP) NOTE: M553/M554/M555/E55040 only.	Optional DIMM for expanding the memory	5851-6422	G6W84A
HP internal USB ports	Two optional USB ports for connecting third-party devices	B5L28-67902	B5L28A
HP Trusted Platform Module (TPM)	Automatically encrypts all data that passes through the printer	F5S62-61001	F5S62A

Table 7-4 Accessories (M577, M578, and E57540)

Description	Description	Part number (service)	Product number
550-sheet paper feeder NOTE: The printer accepts up to three 550-sheet paper feeders.	Optional 550-sheet paper feeder (included with the x model)	B5L34-67901	B5L34A
Fixed tray guide kit	Fixed tray guide kit for cassette trays.	5851-7708	
HP secure 500 GB high-performance hard disk drive NOTE: Not supported for the M552dn.	Optional hard drive	B5L29-67903	B5L29A
Printer stand and storage	Optional stand with storage to support the printer Recommended when using multiple optional paper feeders.	B5L51-67901	B5L51A
1GB DDR3 x32 144-Pin 800MHz SODIMM (MFP)	Optional DIMM for expanding the memory	E5K48-67902	E5K48A
HP internal USB ports	Two optional USB ports for connecting third-party devices	B5L28-67902	B5L28A

Table 7-4 Accessories (M577, M578, and E57540) (continued)

Description	Description	Part number (service)	Product number
HP Trusted Platform Module (TPM)	Automatically encrypts all data that passes through the printer	F5S62-61001	F5S62A
HP LaserJet Keyboard Overlay Kit for Simplified Chinese & Traditional Chinese	Language-specific, adhesive overlay for the physical keyboard		A7W12A
HP LaserJet Keyboard Overlay Kit for Swedish	Language-specific, adhesive overlay for the physical keyboard		A7W14A
HP Smartcard NIPRNet Solution for US Government NOTE: Requires installing the HP Internal USB ports accessory (B5L28A).	Nonsecure Internet Protocol (IP) Router Network for transmitting non-classified information		CC543B
HP Smartcard NIPRNet Solution for US Government NOTE: Requires installing the HP Internal USB ports accessory (B5L28A).	Secret Internet Protocol (IP) Router Network for transmitting classified information		F8B30A
HP Foreign Interface Harness	Optional port for connecting third-party devices	B5L31-67902	B5L31A
HP LaserJet MFP Analog Fax Accessory 600	Optional fax accessory for the dn model	B5L53-67901	B5L53A
HP Jetdirect 2900nw Print Server	USB wireless print server accessory		J8031A
HP Jetdirect 3000w NFC/Wireless Accessory	Wi-Fi direct accessory for “touch” printing from mobile devices		J8030A

Customer self-repair parts

Learn about printer customer self-repair parts.

Customer self-repair (CSR) parts are available for many HP LaserJet printers to reduce repair time.

NOTE: More information about the CSR program and benefits can be found at www.hp.com/go/csr-support and www.hp.com/go/csr-faq.

Genuine HP replacement parts can be ordered at www.hp.com/buy/parts or by contacting an HP-authorized service or support provider. When ordering, one of the following will be needed: part number, serial number (found on back of printer), product number, or printer name.

- Parts listed as **A**: Easy
- Parts listed as **B**: Difficult and/or require tools

- Parts listed as **Mandatory**: Customer installed self-replacement parts (unless the customer is willing to pay for HP service personnel to perform the repair). For these parts, on-site or return-to-depot support is not provided under the HP printer warranty.
- Parts listed as **Optional**: HP service personnel installed self-replacement parts by customer request for no additional charge during the printer warranty period.

Table 7-5 **Customer self-repair (CSR) parts**

Kit name	Description	CSR level	Part number
Control panel kit (M553x/M555/E55040	Control panel	A	B5L24-67903
Control panel kit (MFP)	Control panel	A	B5L47-67018
Secondary transfer roller kit	Secondary transfer roller	A	RM2-6575-000CN
Intermediate transfer belt (ITB)	ITB	B	RM2-6576-000CN
Tray 2-5 roller kit	Rollers for Tray 2 and the optional 550-sheet paper feeders	A	RM2-6577-000CN
ADF roller replacement Kit	Replacement feed rollers for the document feeder	A	W5U23-67901
Fuser kit (110V)	Fuser (110V)	A	B5L35-67902
Fuser kit (220V)	Fuser (220V)	A	B5L36-67902
embedded MultiMedia Card (eMMC) kit (SFP)	eMMC module	A	5851-6436
320GB encrypted hard disk drive kit (MFP)	Replacement hard disk drive	A	5851-6712
White backing kit (MFP)	White backing for the document feeder Retention clips for the document feeder white backing	A	5851-7740
Retention clip kit (MFP)	Retention clips for the document feeder white backing	A	5851-6573
Keyboard kit (flow models)	Keyboard	A	B5L47-67019 (US) B5L47-67020 (UK)
Keyboard overlay kit (FR, IT, RU, DE, ES: UK Kybd) (flow models)	Keyboard overlay	A	5851-6019
Keyboard overlay kit (FR-CN, ES-LA, ES: US Kybd) (flow models)	Keyboard overlay	A	5851-6020
Keyboard overlay kit (FR-SW, DE-SW, DA: UK Kybd) (flow models)	Keyboard overlay	A	5851-6021
Keyboard overlay kit (ZHTW, ZHCN) (flow models)	Keyboard overlay	A	5851-6022
Keyboard overlay kit (ES, PT) (flow models)	Keyboard overlay	A	5851-6023
Keyboard overlay kit (JA-KG, JA-KT) (flow models)	Keyboard overlay	A	5851-6024

HP service and support

Learn about HP access to additional service and support information.

Additional service and support for channel partners

Channel partners go to partner.hp.com, and then use the steps below to access the HP Web-based Interactive Search Engine (WISE).

Access WISE for Channel partners

1. Select Services & Support (near the top of the screen).
2. Under Services Delivery, select Technical Support.
3. Select Technical Documentation.

Find information about the following topics

- Service manuals
- Service advisories
- Up-to-date control panel message (CPMD) troubleshooting
- Solutions for printer issues and emerging issues
- Remove and replace part instructions and videos
- Install and configure
- Printer specifications
- Warranty and regulatory information

Additional service and support for HP internal personnel

HP internal personnel, go to one of the following Web-based Interactive Search Engine (WISE) sites:

Americas (AMS)

- WISE - English
- WISE - Spanish
- WISE - Portuguese
- WISE - French

Asia Pacific / Japan (APJ)

- WISE - English
- WISE - Japanese
- WISE - Korean
- WISE - Chinese (simplified)
- WISE - Chinese (traditional)
- WISE - Thai

Europe / Middle East / Africa (EMEA)

- WISE - English

Additional technical support WISE videos

The videos below provide additional ways to access printer information using WISE.

Assembly locations

Learn about major printer assembly locations.

Printer front view (M552, M553, M554, M555, and E55040 models)

Identify the parts on the front of the printer (SFP).

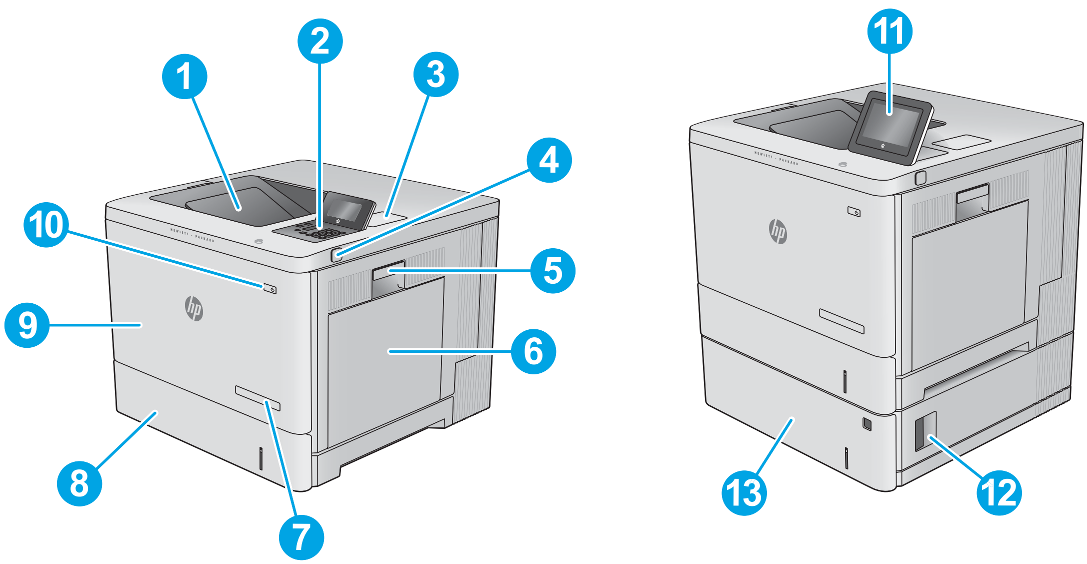


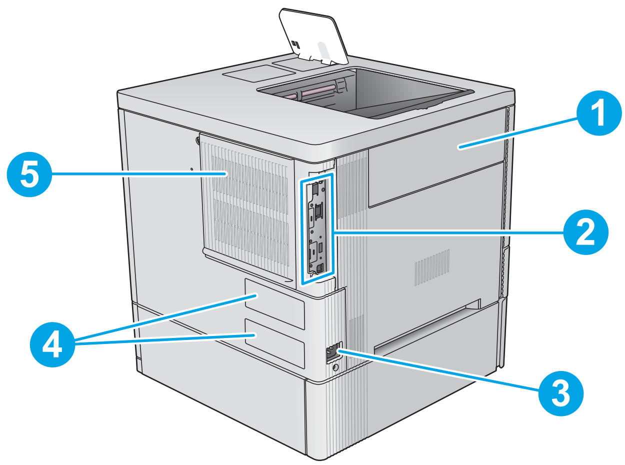
Figure 7-1 Printer front view (SFP)

Number	Description
1	Standard output bin
2	4-line LCD control panel with keypad (n and dn models only)
3	Hardware integration pocket for connecting accessory and third-party devices (dn and x models only)
4	Easy-access USB port
5	Right door (access to the fuser and for clearing jams)
6	Tray 1
7	Model name
8	Tray 2
9	Front door (access to the toner cartridges)
10	On/off button
11	Control panel with color touchscreen display (M553x/M555/E55040)
12	Lower-right door for the 550-sheet paper feeder (access for clearing jams)
13	550-sheet paper feeder, Tray 3 (included with the x model, optional for the other models) NOTE: The M552 model accepts one 550-sheet paper feeder. All other models accept up to three 550-sheet paper feeders.

Printer back view (M552, M553, M554, M555, and E55040 models)

Identify the parts on the back of the printer (SFP).

Figure 7-2 Printer rear view (SFP)

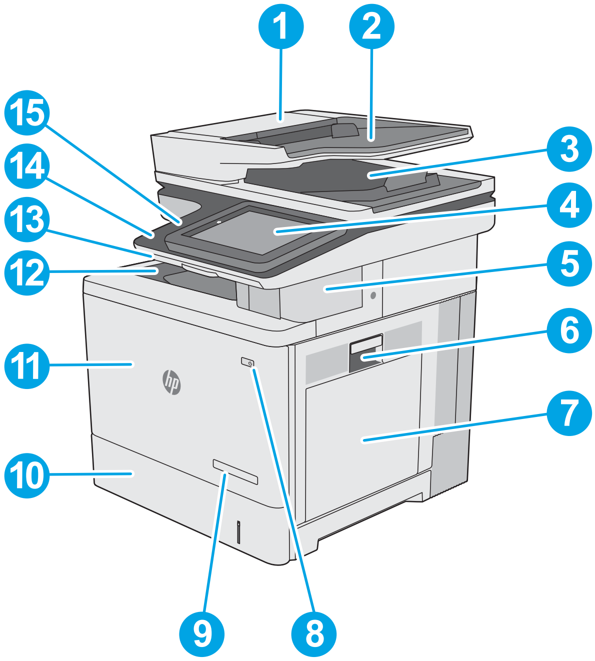


Number	Description
1	Toner-collection-unit door
2	Formatter (contains the interface ports)
3	Power connection
4	Serial number and product number label
5	Formatter cover

Printer front view (M577, M578, and E57540 models)

Identify the parts on the front of the printer (MFP).

Figure 7-3 Printer front view (MFP)

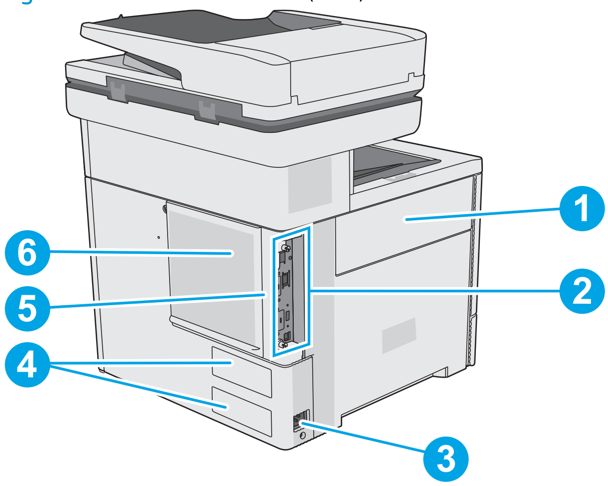


Number	Description
1	Document-feeder cover (access for clearing jams)
2	Document-feeder input tray
3	Document-feeder output bin
4	Control panel with color touchscreen display
5	Convenience stapler (c/f/z models only)
6	Right door (access to the fuser and for clearing jams)
7	Tray 1
8	On/off button
9	Model name
10	Tray 2
11	Front door (access to the toner cartridges)
12	Standard output bin
13	Physical keyboard (c/z models only)
14	Easy-access USB port (on the side of the control panel)
15	Hardware integration pocket (for connecting accessory and third-party devices)

Printer back view (M577, M578, and E57540 models)

Identify the parts on the back of the printer (MFP).

Figure 7-4 Printer rear view (MFP)



Number	Description
1	Toner-collection-unit door
2	Formatter (contains the interface ports)
3	Power connection
4	Serial number and product number label
5	Slot for a cable-type security lock (on the rear cover of the printer)
6	Formatter cover

Customer self-repair (CSR) A parts and accessories

Customer self-repair (CSR) A parts are parts that a customer replaces without assistance from a field technician. These parts can be replaced without the use of any tools.

Removal and replacement: Toner cartridges

This document provides the procedures to remove and replace the toner cartridges.

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-6 Part information

Part number	Part description
CF360-67901	Standard-capacity replacement black toner cartridge with instruction guide
CF360-67902	High-capacity replacement black toner cartridge with instruction guide
	NOTE: M552/M553/M577 Enterprise and managed only.
CF361-67901	Standard-capacity replacement cyan cartridge with instruction guide
CF361-67902	High-capacity replacement cyan toner cartridge with instruction guide
	NOTE: M552/M553/M577 Enterprise and managed only.
CF362-67901	Standard-capacity replacement yellow toner cartridge with instruction guide
CF362-67902	High-capacity replacement yellow toner cartridge with instruction guide
	NOTE: M552/M553/M577 Enterprise and managed only.
CF363-67901	
CF363-67902	NOTE: M552/M553/M577 Enterprise and managed only.
W9060–67901	SVC Cartridge LJ Black Managed Toner
	NOTE: E55040 and E57540 only.
W9061–67901	SVC Cartridge LJ Cyan Managed Toner
	NOTE: E55040 and E57540 only.
W9062–67901	SVC Cartridge LJ Yellow Managed Toner
	NOTE: E55040 and E57540 only.
W9063–67901	SVC Cartridge LJ Magenta Managed Toner
	NOTE: E55040 and E57540 only.

Table 7-6 Part information (continued)

Part number	Part description
7ZU81-67905 7ZU81-67909	SVC Cartridge-212A Black LaserJet Toner SVC Cartridge-212X Black LaserJet Toner NOTE: M554/M555/M578 only.
7ZU81-67906 7ZU81-67910	SVC Cartridge-212A Cyan LaserJet Toner SVC Cartridge-212X Cyan LaserJet Toner NOTE: M554/M555/M578 only.
7ZU81-67907 7ZU81-67911	SVC Cartridge-212A Yellow LaserJet Toner SVC Cartridge-212X Yellow LaserJet Toner NOTE: M554/M555/M578 only.
7ZU81-67908 7ZU81-67912	SVC Cartridge-212A Magenta LaserJet Toner SVC Cartridge-212X Magenta LaserJet Toner NOTE: M554/M555/M578 only.

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

No special tools are required to remove or install this assembly.

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

The procedures in this section are for printers with FutureSmart 4 (FS4) or later firmware installed. For printers with FS3 firmware installed, go to the HP WISE web site and search for *HP Color LaserJet Enterprise M552, M553 - Control-panel menus* (c04574398) or *HP Color LaserJet Enterprise MFP M577 - Control-panel menus* (c04796059) for more information.

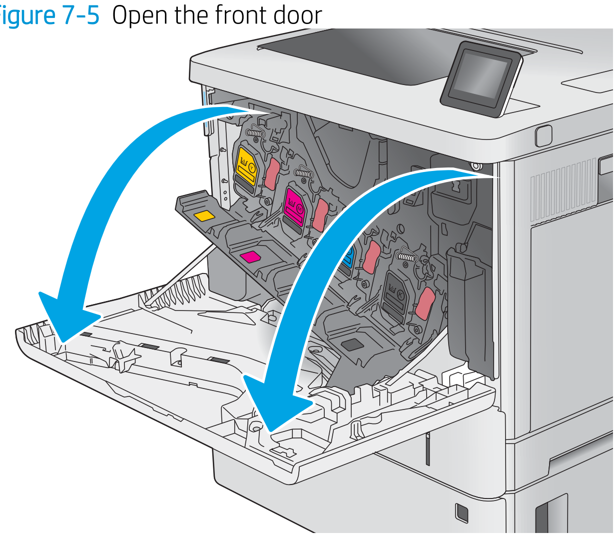
1. From the Home screen on the printer control panel, open the Support Tools menu.
2. Open the following menus:
   - Troubleshooting
   - Print Quality Pages
   - Color Band Test
3. Select the Print or OK button to print the pages.

Remove the toner cartridges

Follow these steps to replace a toner cartridge.

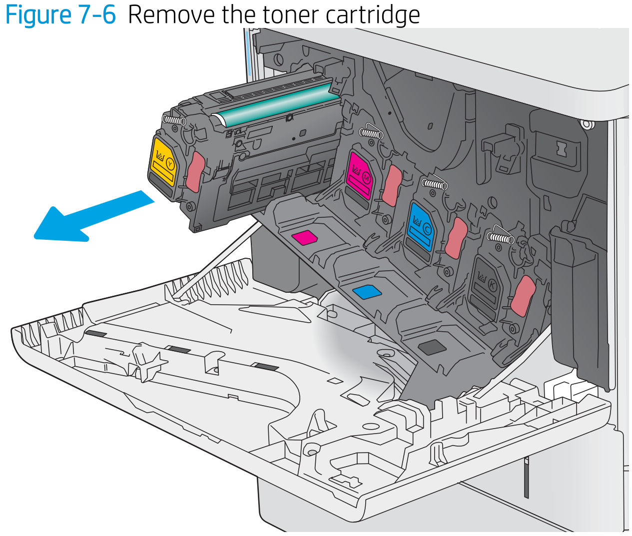
1. Open the front door.

Figure 7-5 Open the front door



2. Grasp the handle of the used toner cartridge and pull out to remove it.

Figure 7-6 Remove the toner cartridge



Unpack the replacement assembly

Follow these steps to unpack a toner cartridge.

1. Remove the new toner cartridge from its protective shell by tearing off the plastic strip and opening the package. Save all packaging for recycling the used toner cartridge.

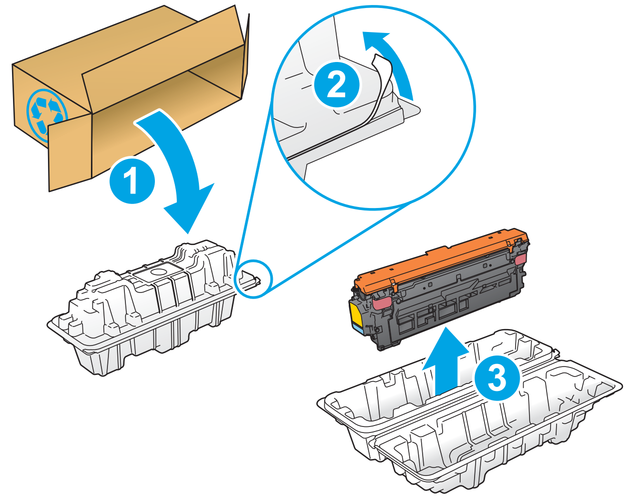


Figure 7-7 Unpack the toner cartridge

2. Pack the used toner cartridge into the box that the new cartridge came in, or use a large cardboard box and fill it with several cartridges that you need to recycle. See the enclosed recycling guide for information about recycling.

   In the U.S., a pre-paid shipping label is included in the box. In other countries/regions, go to www.hp.com/recycle to print a pre-paid shipping label.

   Adhere the pre-paid shipping label to the box, and return the used cartridge to HP for recycling.

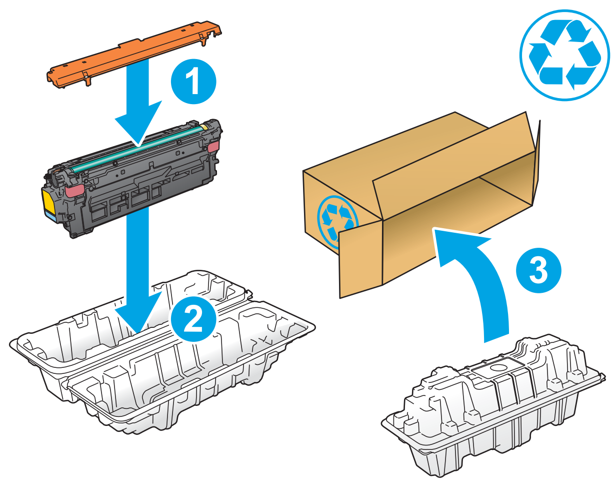


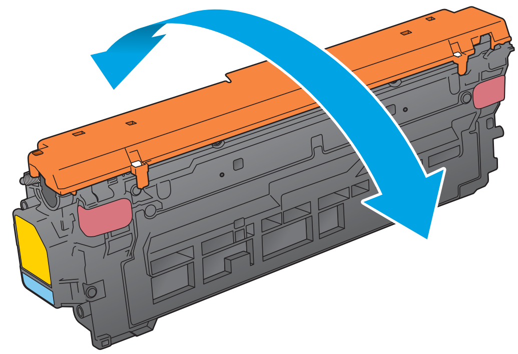
Figure 7-8 Recycle the used cartridge

Install the toner cartridges

Follow these steps to replace a toner cartridge.

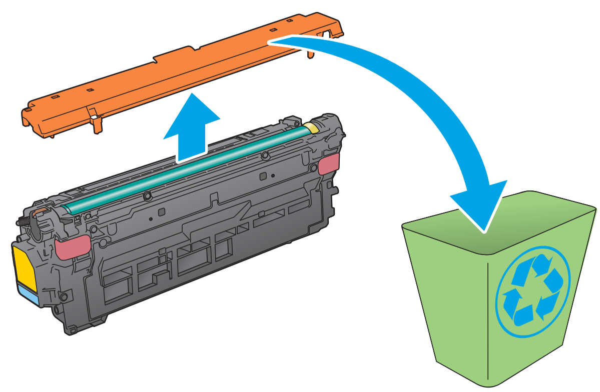
1. Hold both ends of the toner cartridge and rock it 5-6 times.

Figure 7-9 Rock the toner cartridge



2. Remove the protective shield from the toner cartridge.

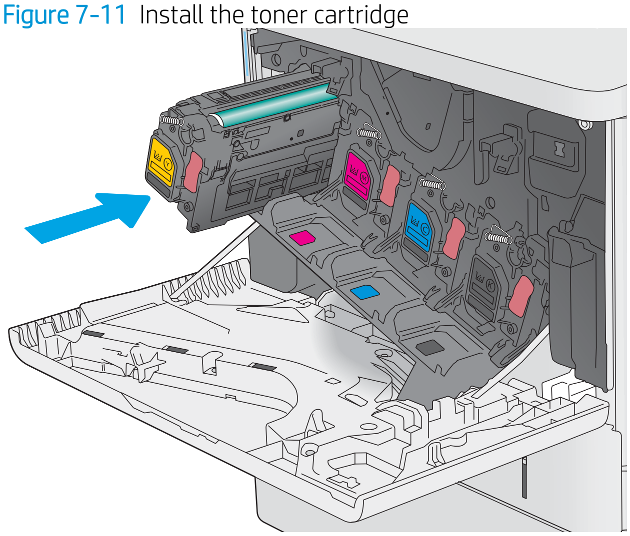
Figure 7-10 Remove the protective shield



3. Support the toner cartridge underneath with one hand while holding the cartridge handle with the other. Align the toner cartridge with its slot on the shelf, and then insert the toner cartridge into the product.

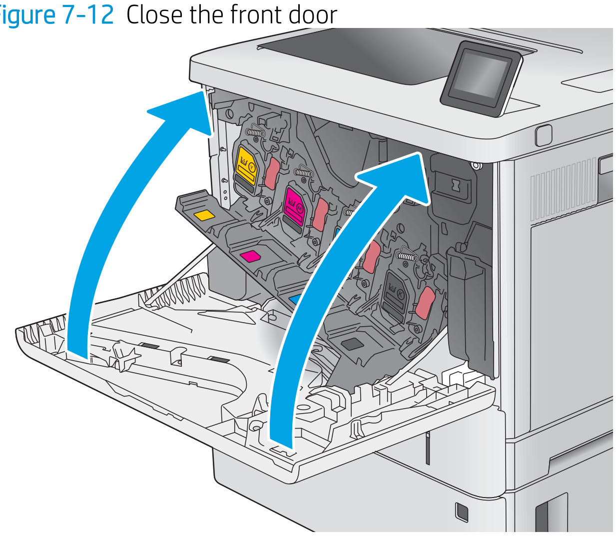
   CAUTION: Avoid touching the green imaging drum. Fingerprints on the imaging drum can cause print defects.

Figure 7-11 Install the toner cartridge



4. Close the front door.

Figure 7-12 Close the front door



Removal and replacement: Toner collection unit (TCU)

Learn about removing and replacing the toner collection unit (TCU).

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-7 Part information

Part number	Part description
B5L37-67901	Toner collection unit (TCU) with instruction guide

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-13 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-14 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

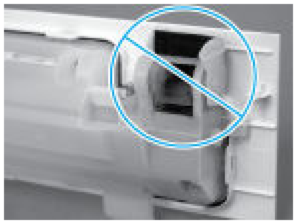
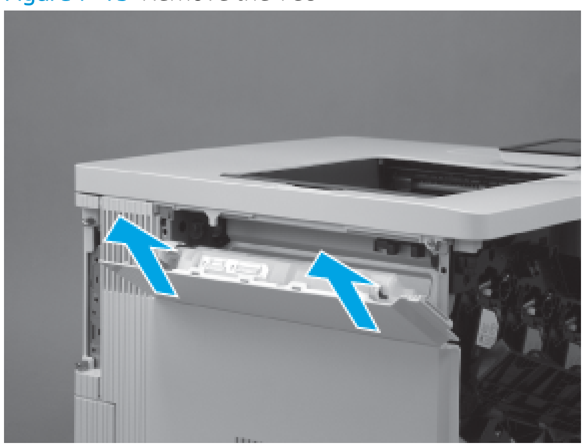


Figure 7-15 Remove the TCU



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

⚠ CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

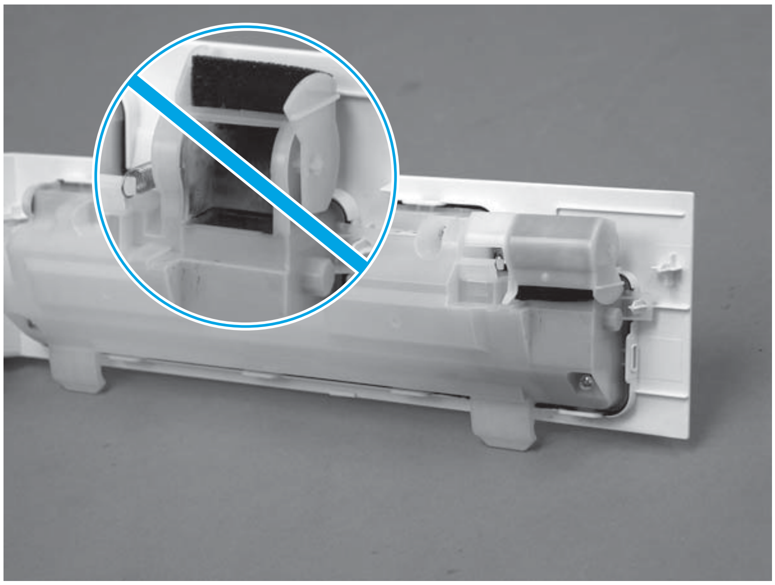
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Install the TCU

Follow these steps to install the toner collection unit (TCU).

1. Open the TCU.

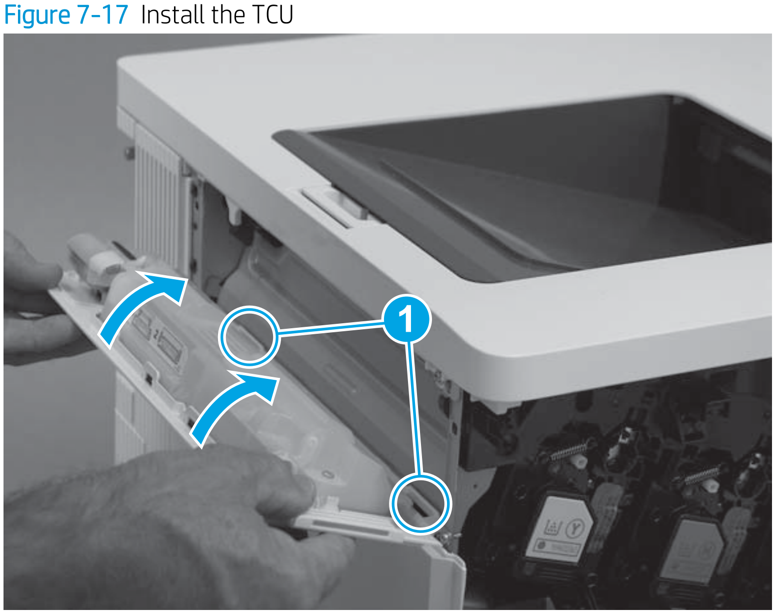
   Figure 7-16 Verify that the toner collection hatch cover is closed

2. Position the TCU with the hinges in the slots provided in the printer (callout 1), and then rotate the TCU up and into the closed position.

NOTE: The toner collection hatch cover automatically opens when the TCU is closed.

Figure 7-17 Install the TCU



3. Close the front door.

Figure 7-18 Close the front door

Removal and replacement: Staple cartridge (M577/M578/E57540 stapler models)

Learn about removing and replacing the staple cartridge.

Before performing service

Turn the printer power off

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-8 Part information

Part number	Part description
Q7432A	HP staple cartridge pack

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Use the stapler to staple two pages together.

Remove the staple cartridge

Follow these steps to remove the staple cartridge.

1. Open the stapler door.

Figure 7-19 Open the stapler door

2. Pull the staple cartridge straight out of the printer to remove it.

Figure 7-20 Remove the staple cartridge

Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

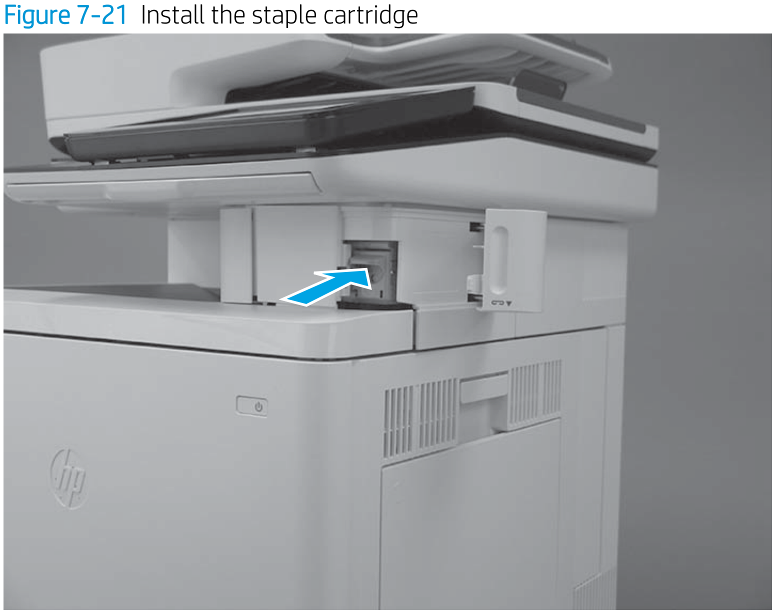
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Install the staple cartridge

Follow these steps to install the staple cartridge.

1. Push the staple cartridge straight out of the printer to install it.

Figure 7-21 Install the staple cartridge



2. Close the stapler door.

Figure 7-22 Close the stapler door

Removal and replacement: Fuser

This document provides the procedures to remove and replace the fuser.

Mean time to repair: 5 minutes

Service level: Basic

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-9 Part information

Part number	Part description
B5L35-67902	Fuser (110V) with instruction guide
B5L36-67902	Fuser (220V) with instruction guide

Required tools

No special tools are required to install this part.

After performing service

Make sure that the right door is fully closed after replacing the fuser.

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print a configuration page to make sure that the printer is functioning correctly.

Remove the fuser

Follow these steps to remove the fuser.

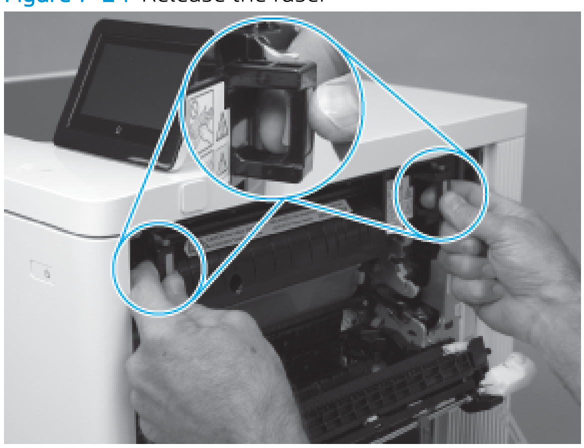
1. Open the right door.

   ⚠ CAUTION: The fuser is very hot. After turning the printer power off, allow the fuser to cool for at least 30 minutes before removing it.

Figure 7-23 Open the right door

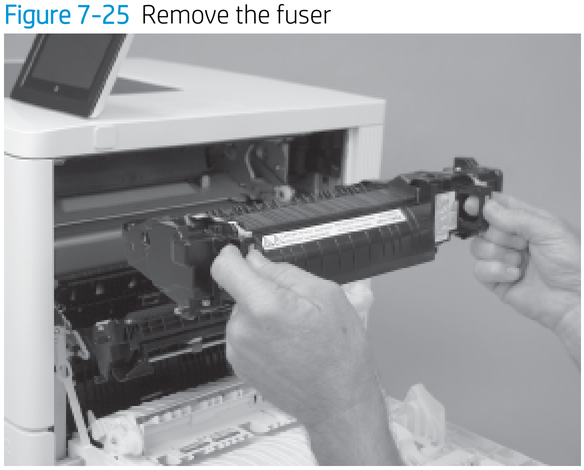
2. Grasp the two fuser handles, and then squeeze the two blue triggers on the handles to release the fuser.

Figure 7-24 Release the fuser



3. Slide the fuser straight out of the printer to remove it.

Figure 7-25 Remove the fuser



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

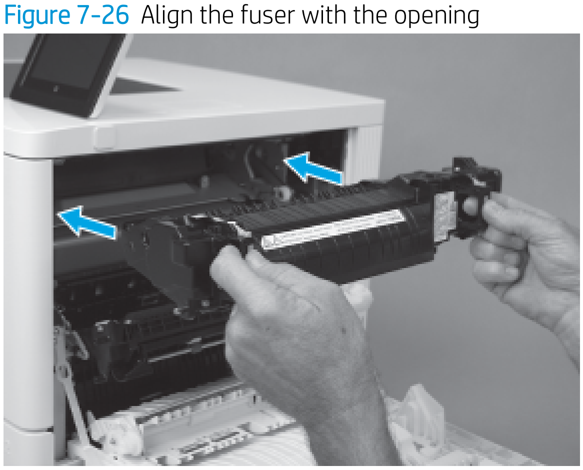
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Install the fuser

Follow these steps to install the fuser.

1. Align the fuser with the opening in the printer.

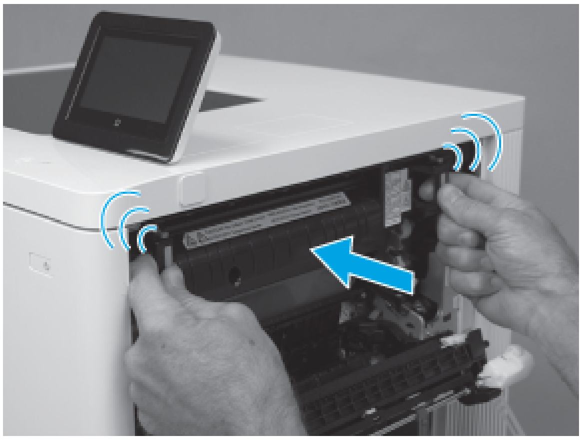
Figure 7-26 Align the fuser with the opening



2. Slide the fuser into the printer, push in to install it, and then make sure that it is fully seated.

TIP: When the fuser is fully seated, the two blue triggers on the handles make an audible click.

Figure 7-27 Install the fuser



3. Close the right door.

Figure 7-28 Close the right door

Reset the supplies counter

Follow these steps to reset the supplies counter.

The procedures in this section are for printers with FutureSmart 3 (FS3) firmware installed only)

▲ Turn the printer power on, and then do one of the following:

Reset the fuser counter from a touchscreen control panel

1. From the Home screen on the control panel, scroll to and touch the Administration button.
2. Open the following menus:

–

–

–

3. Select the Yes item to reset the fuser counter.

Reset the fuser counter from an SFP control panel

1. From the Home screen on the control panel, use the down arrow button to scroll to Administration, and then press the OK button.
2. Use the down arrow button to scroll to Manage Supplies, and then press the OK button.
3. Use the down arrow button to scroll to Reset Supplies, and then press the OK button.
4. Use the down arrow button to scroll to New Fuser Kit, and then press the OK button.
5. Use the down arrow button to scroll to Yes, and then press the OK button to reset the fuser counter.

Removal and replacement: Hard-disk drive (HDD) (M552/M553/M554/M555/E55040)

This document provides the procedures to remove and replace the SFP hard-disk drive (HDD).

View a video demonstration of removing and replacing the hard-disk drive.

Mean time to repair: 10 minutes

Service level: Basic

Before performing service

Turn the printer power off

- Disconnect the power cable.

WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

IMPORTANT: Do not replace the formatter, DC controller, and eMMC PCA or hard-disk drive simultaneously during a single printer servicing. Doing so might cause the printer to become unstable or inoperable.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-10 Part information

Part number	Part description
B5L29-67903	HP secure 500 GB high-performance hard disk drive (HDD)

Required tools

- No special tools are required to remove this part.

After performing service

Make sure that the formatter cover is fully seated, and that the thumbscrews are finger tight after replacing it.

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

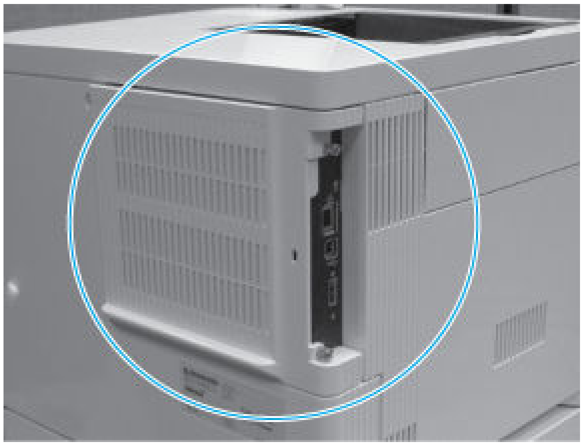
Print a configuration page to make sure that the printer is functioning correctly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

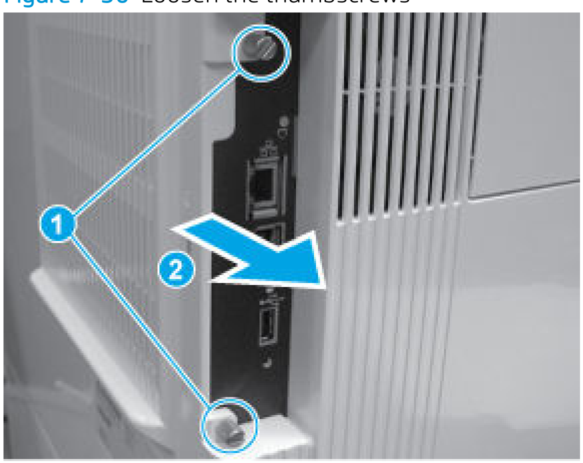
Figure 7-29 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-30 Loosen the thumbscrews

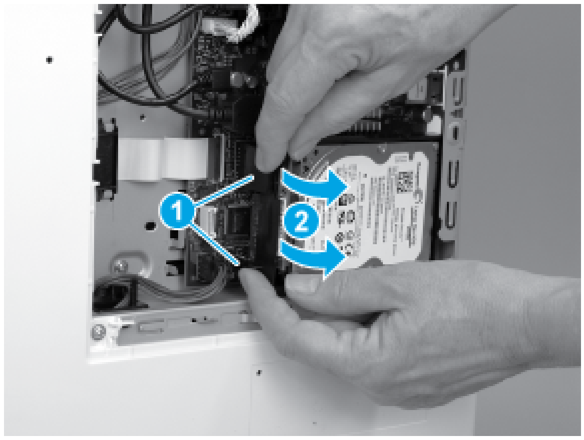


Remove the hard-disk drive (HDD)

Follow these steps to remove the hard-disk drive (HDD).

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter.

Figure 7-31 Release the HDD



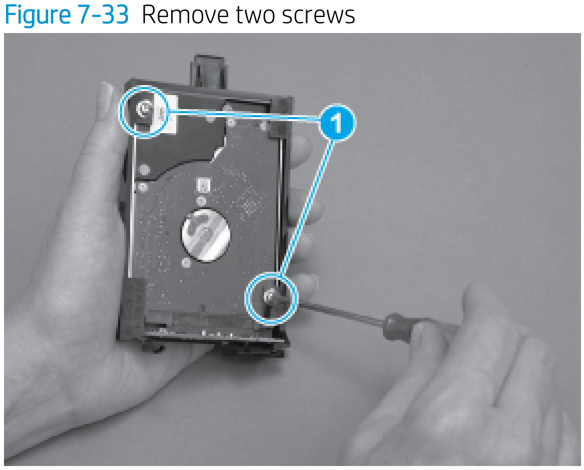
2. Slide the HDD away from the printer to remove it.

Figure 7-32 Remove the HDD

3. Using the screwdriver provided with the replacement HDD, remove two screws (callout 1). Save these screws. They will be installed on the replacement HDD.

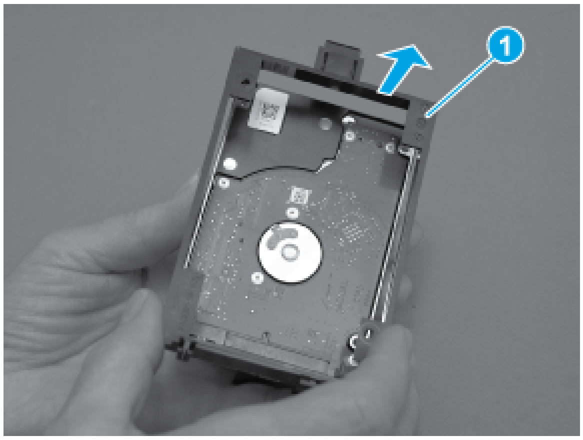
TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-33 Remove two screws



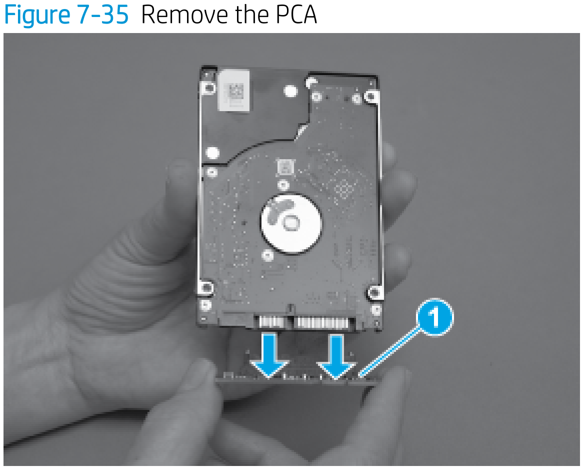
4. Lift the bracket (callout 1) up and off of the HDD. Save this bracket. It will be installed on the replacement HDD.

Figure 7-34 Remove the bracket



5. Grasp the PCA card (callout 1) attached to the end of the HDD and pull it away from the HDD to remove it. Save this PCA. It will be installed on the replacement HDD.

Figure 7-35 Remove the PCA



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

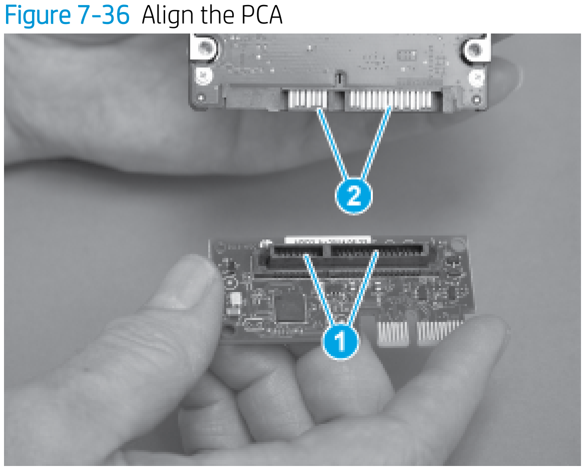
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Install the hard-disk drive (HDD)

Follow these steps to install the hard-disk drive (HDD).

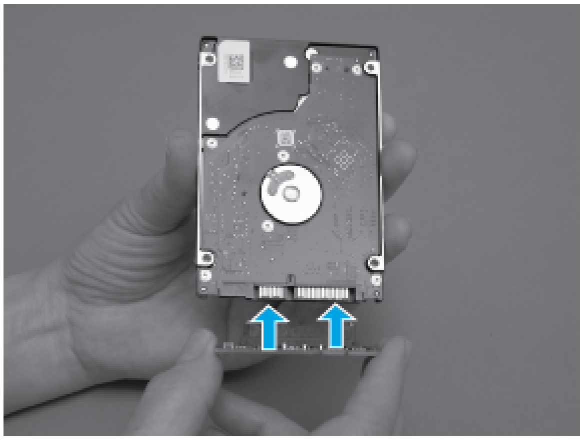
1. Align the slots (callout 1) on the PCA with the connectors (callout 2) on the replacement HDD.

Figure 7-36 Align the PCA



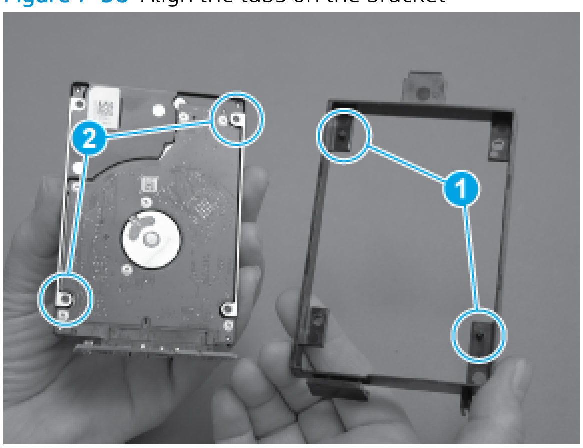
2. Press the PCA onto the HDD connectors. Make sure that the PCA is fully seated on the connectors.

Figure 7-37 Install the PCA



3. Align the tabs (callout 1) on the bracket with the holes (callout 2) in the back side of the HDD.

Figure 7-38 Align the tabs on the bracket



4. Install the bracket on the HDD.

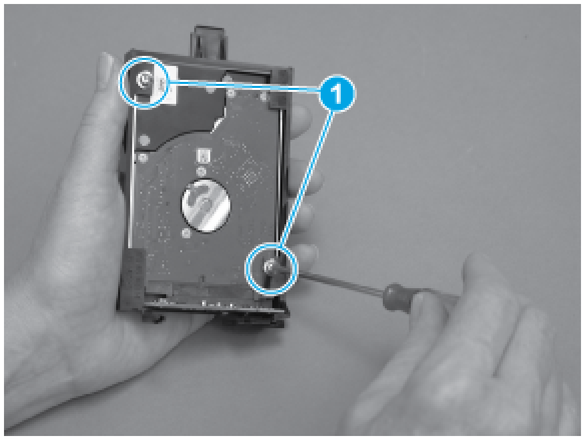
NOTE: If the bracket is difficult to install, make sure that the holes in the HDD are correctly aligned with the tabs on the bracket.

Figure 7-39 Install the bracket

5. Install two screws (callout 1).

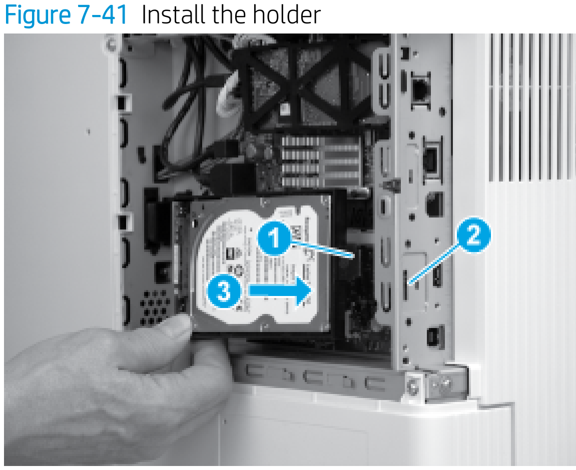
> ⚠ CAUTION: Tighten the screws just enough to secure the HDD to the bracket. Do not over-tighten.

Figure 7-40 Install two screws



6. Align the end of the bracket (callout 1) with the slot in the chassis (callout 2), and then slide the HDD into the printer (callout 3) to engage the bracket with the chassis.

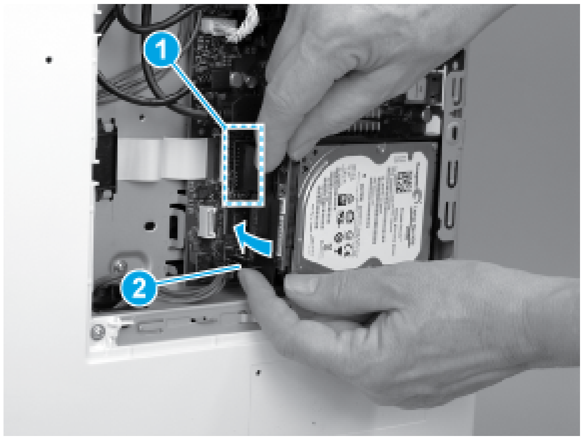
Figure 7-41 Install the holder



7. Hold the HDD connector latch (callout 1) in the released position, and then rotate the HDD down and into the connector on the formatter to install it.

NOTE: Make sure that the tab (callout 2) snaps into place, and that the HDD is securely installed.

Figure 7-42 Release the HDD



Install the formatter cover

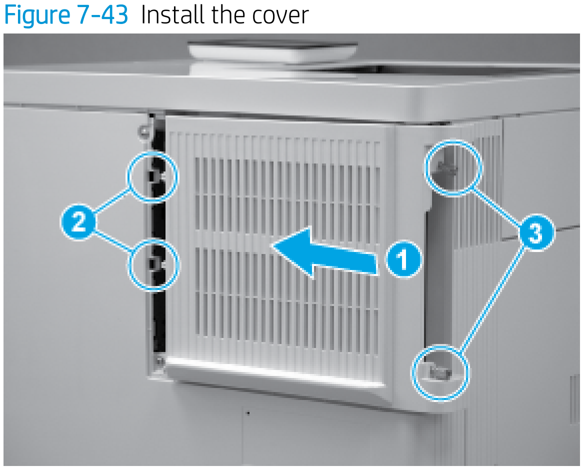
Follow these steps to install the formatter cover.

▲ Slide the cover onto the printer (callout 1) to install it.

NOTE: Make sure that the tabs on the formatter cover align with the slots provided in the printer (callout 2). Tighten the two thumbscrews (callout 3).

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-43 Install the cover



Reinstall the product firmware

Follow these steps to reinstall the product firmware.

1. Go to www.hp.com/go/futuresmart.

2. Select the **Upgrade now** button.

3. Use the drop-down lists to find the HP Enterprise or HP Managed printer model.

4. Select the **Link to Firmware download page**.

5. Select **Firmware** from the list of software and drivers.

   CAUTION: Downgrading from FutureSmart 4 to FutureSmart 3 will result in a loss of custom settings. Before upgrading to FutureSmart 4, go to the FutureSmart Navigation Compass to review the display differences and any feature modifications.

6. Select **Download** next to the desired firmware version.

7. For installation instructions, go to one of the following support sites:

   - One HP printer: Updated firmware using a USB flash drive or the Embedded Web Server (EWS)
   - Multiple HP printers at one time: Updated firmware using Web Jetadmin

   NOTE: To view installation instructions, go to http://www.hp.com/go/futuresmart. Select **Upgrade now**, and then select **How to perform a firmware update**.

Removal and replacement: Hard-disk drive (HDD) (M577/M578/E57540)

This document provides the procedures to remove and replace the MFP hard-disk drive (HDD).

View a video demonstration of removing and replacing the hard-disk drive.

Mean time to repair: 10 minutes

Service level: Basic

Before performing service

Turn the printer power off

- Disconnect the power cable.

> WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

> IMPORTANT: Do not replace the formatter, DC controller, and eMMC PCA or hard-disk drive simultaneously during a single printer servicing. Doing so might cause the printer to become unstable or inoperable.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-11 Part information

Part number	
5851-6712	500GB secure hard disk drive (HDD) assembly

Required tools

- No special tools are required to remove this part.

After performing service

Make sure that the formatter cover is fully seated, and that the thumbscrews are finger tight after replacing it.

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

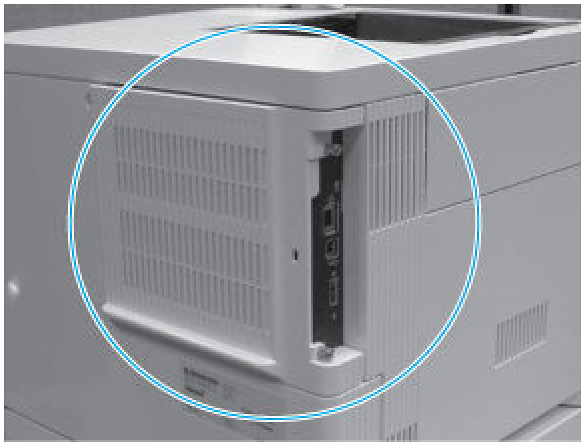
Print a configuration page to make sure that the printer is functioning correctly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

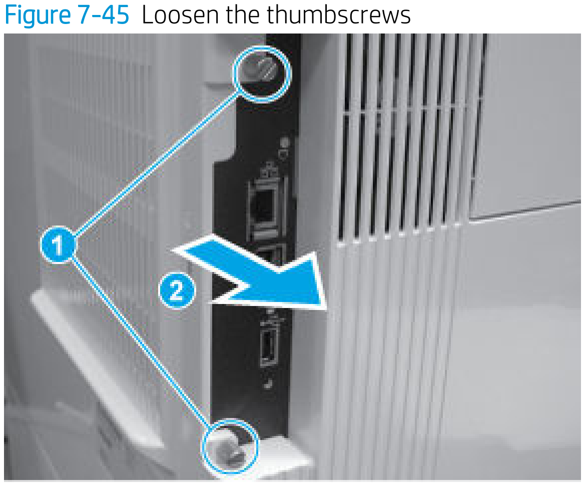
Figure 7-44 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-45 Loosen the thumbscrews

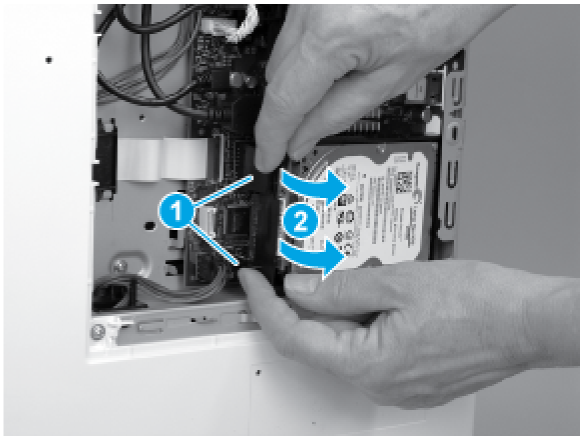


Remove the hard-disk drive (HDD)

Follow these steps to remove the hard-disk drive (HDD).

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter.

Figure 7-46 Release the HDD



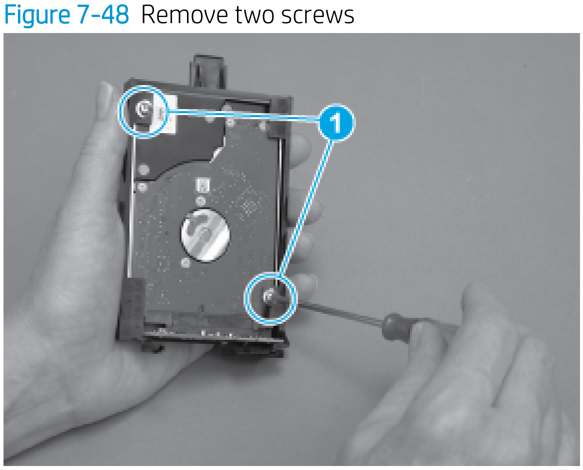
2. Slide the HDD away from the printer to remove it.

Figure 7-47 Remove the HDD

3. Using the screwdriver provided with the replacement HDD, remove two screws (callout 1). Save these screws. They will be installed on the replacement HDD.

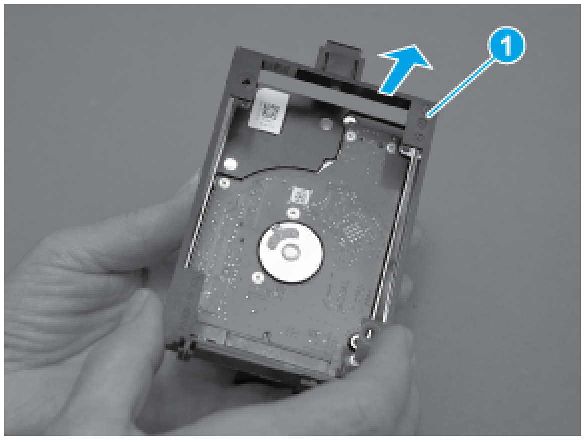
TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-48 Remove two screws



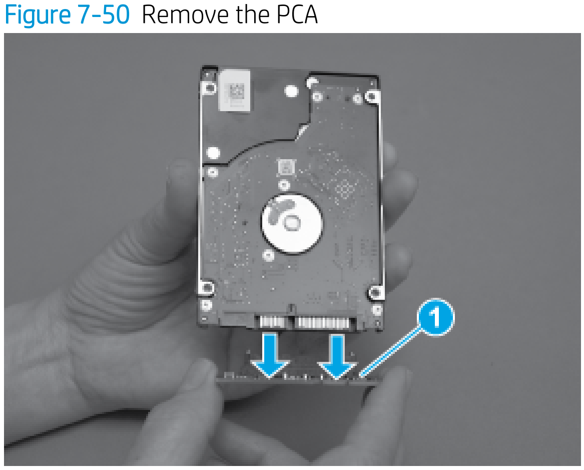
4. Lift the bracket (callout 1) up and off of the HDD. Save this bracket. It will be installed on the replacement HDD.

Figure 7-49 Remove the bracket



5. Grasp the PCA card (callout 1) attached to the end of the HDD and pull it away from the HDD to remove it. Save this PCA. It will be installed on the replacement HDD.

Figure 7-50 Remove the PCA



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

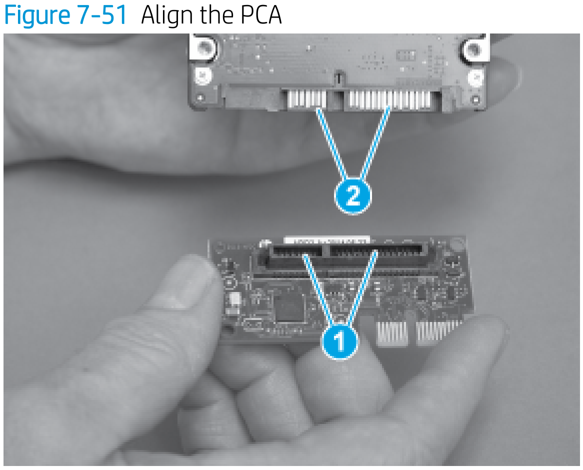
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Install the hard-disk drive (HDD)

Follow these steps to install the hard-disk drive (HDD).

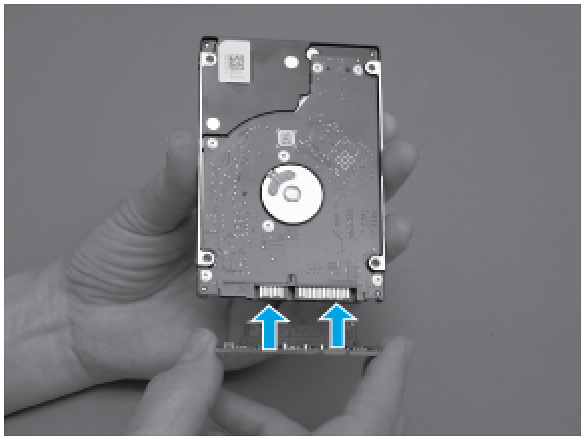
1. Align the slots (callout 1) on the PCA with the connectors (callout 2) on the replacement HDD.

Figure 7-51 Align the PCA



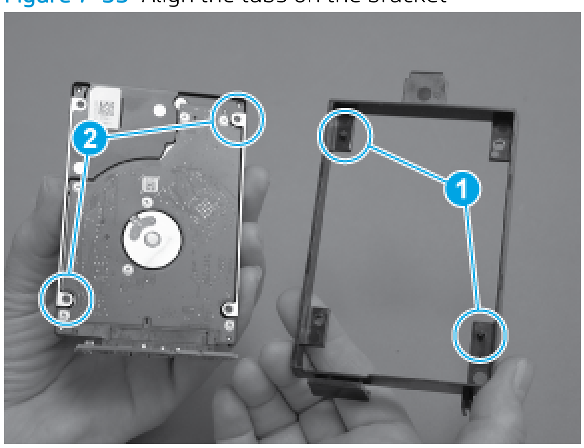
2. Press the PCA onto the HDD connectors. Make sure that the PCA is fully seated on the connectors.

Figure 7-52 Install the PCA



3. Align the tabs (callout 1) on the bracket with the holes (callout 2) in the back side of the HDD.

Figure 7-53 Align the tabs on the bracket



4. Install the bracket on the HDD.

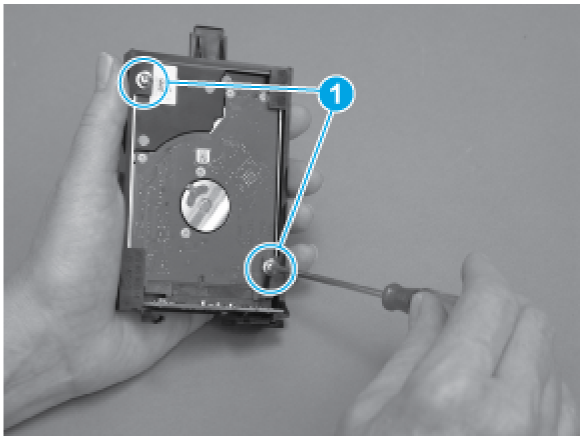
NOTE: If the bracket is difficult to install, make sure that the holes in the HDD are correctly aligned with the tabs on the bracket.

Figure 7-54 Install the bracket

5. Install two screws (callout 1).

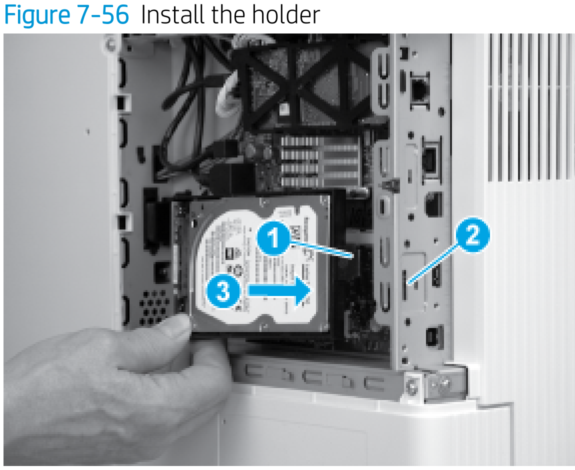
⚠ CAUTION: Tighten the screws just enough to secure the HDD to the bracket. Do not over-tighten.

Figure 7-55 Install two screws



6. Align the end of the bracket (callout 1) with the slot in the chassis (callout 2), and then slide the HDD into the printer (callout 3) to engage the bracket with the chassis.

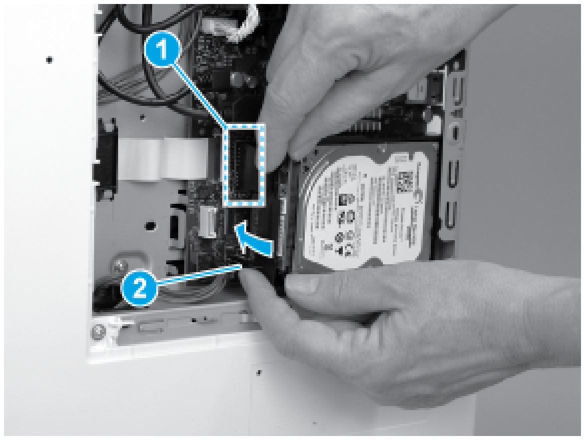
Figure 7-56 Install the holder



7. Hold the HDD connector latch (callout 1) in the released position, and then rotate the HDD down and into the connector on the formatter to install it.

NOTE: Make sure that the tab (callout 2) snaps into place, and that the HDD is securely installed.

Figure 7-57 Release the HDD



Install the formatter cover

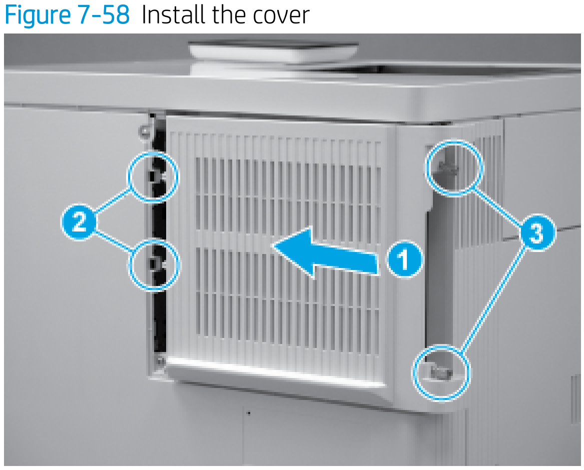
Follow these steps to install the formatter cover.

▲ Slide the cover onto the printer (callout 1) to install it.

NOTE: Make sure that the tabs on the formatter cover align with the slots provided in the printer (callout 2). Tighten the two thumbscrews (callout 3).

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-58 Install the cover



Reinstall the product firmware

Follow these steps to reinstall the product firmware.

1. Go to www.hp.com/go/futuresmart.

2. Select the **Upgrade now** button.

3. Use the drop-down lists to find the HP Enterprise or HP Managed printer model.

4. Select the **Link to Firmware download page**.

5. Select **Firmware** from the list of software and drivers.

> ⚠ CAUTION: Downgrading from FutureSmart 4 to FutureSmart 3 will result in a loss of custom settings. Before upgrading to FutureSmart 4, go to the FutureSmart Navigation Compass to review the display differences and any feature modifications.

6. Select **Download** next to the desired firmware version.

7. For installation instructions, go to one of the following support sites:

   - One HP printer: Updated firmware using a USB flash drive or the Embedded Web Server (EWS)
   - Multiple HP printers at one time: Updated firmware using Web Jetadmin

> NOTE: To view installation instructions, go to http://www.hp.com/go/futuresmart. Select **Upgrade now**, and then select **How to perform a firmware update**.

Removal and replacement: Dual in-line memory module (DIMM) (M522/M553/M554/M555/E55040)

Learn about removing and replacing the dual in-line memory module (DIMM).

Before performing service

Turn the printer power off

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-12 Part information

Part number	Part description
5851-6422	1GB DDR3 Slim DIMM

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

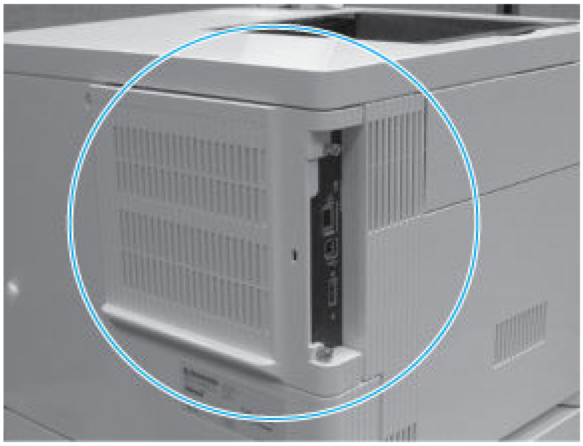
No post service test is available for this assembly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

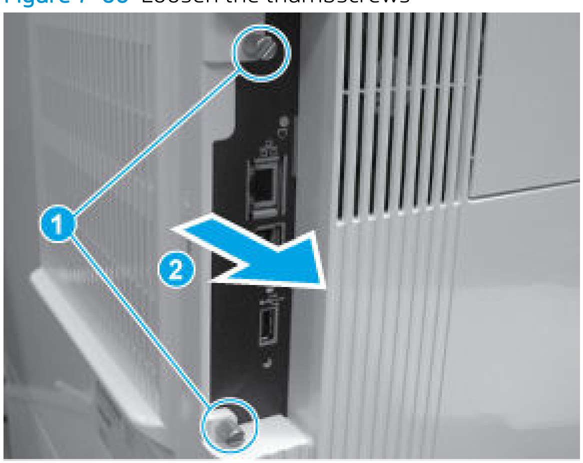
Figure 7-59 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-60 Loosen the thumbscrews



Remove the hard-disk drive (HDD)

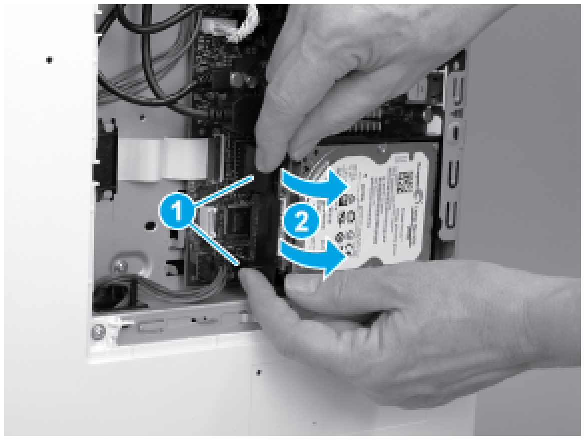
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-61 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-62 Remove the HDD

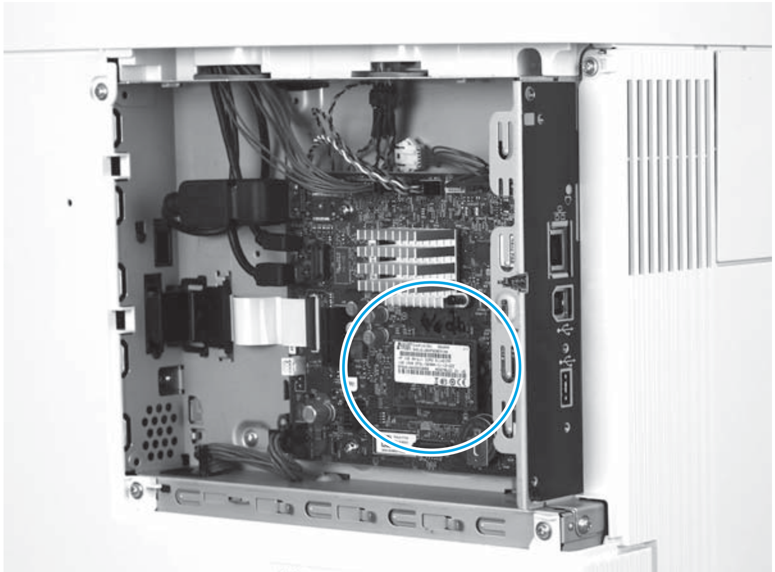
Remove the dual in-line memory module (DIMM)

Follow these steps to remove the DIMM.

⚠ CAUTION: ESD sensitive part.

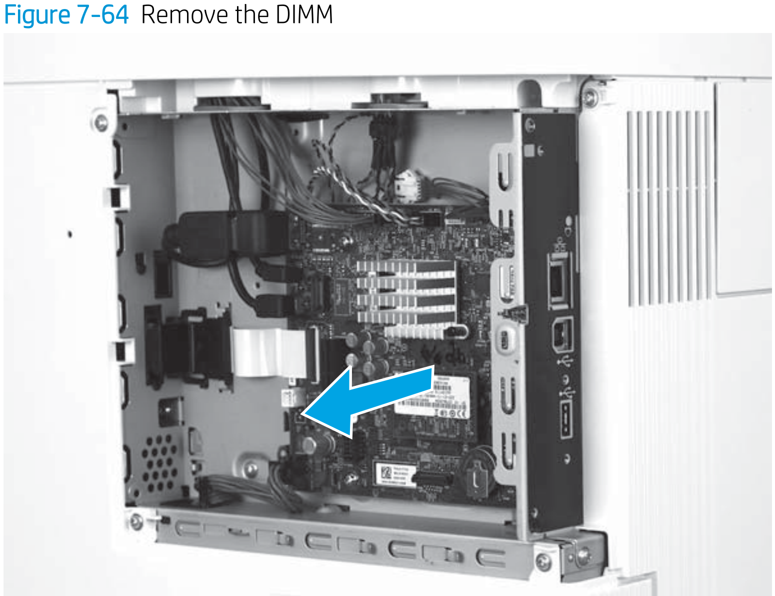
1. Locate the DIMM component on the formatter.

Figure 7-63 Locate the DIMM



2. Pull the DIMM straight off of the formatter to remove it.

Figure 7-64 Remove the DIMM



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

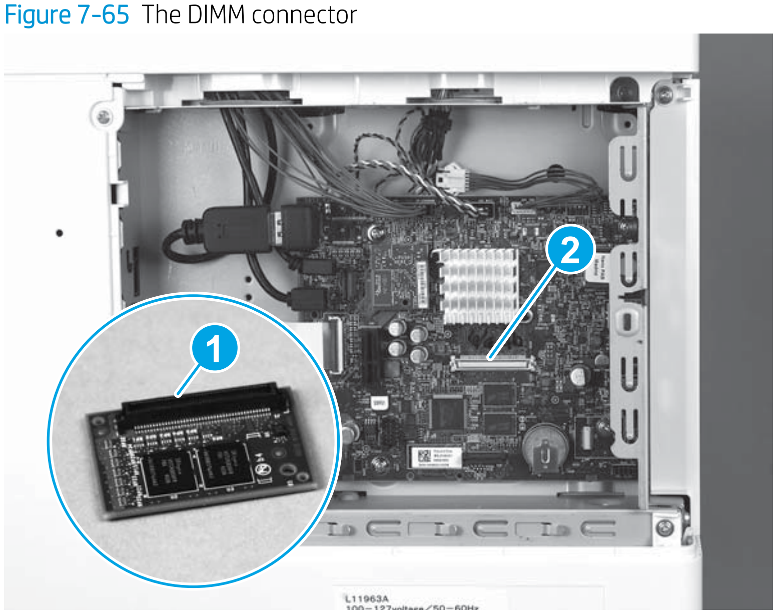
Install the DIMM

Follow these steps to install the DIMM.

CAUTION: ESD ESD sensitive part.

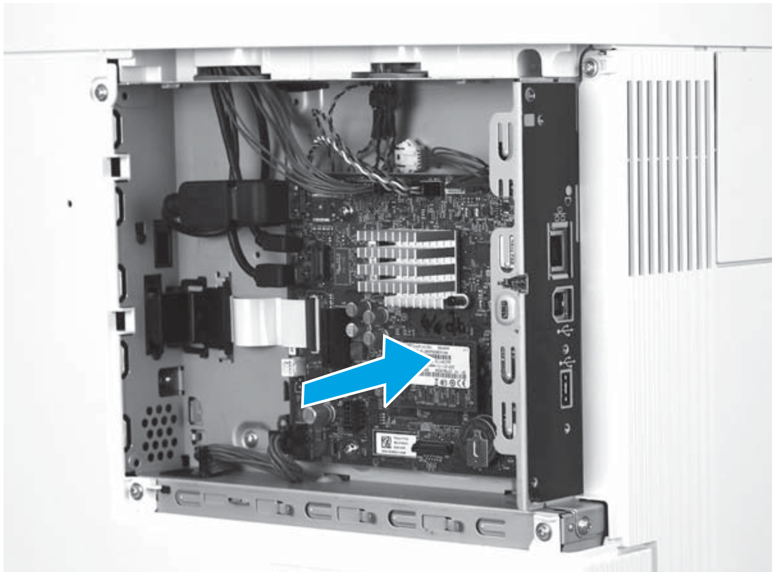
1. The DIMM connector (callout 1) is keyed, and can only be installed in one direction in the formatter connector (callout 2).

Figure 7-65 The DIMM connector



2. Align the connector on the DIMM with the connector on the formatter, and then push the DIMM onto the formatter to install it.

Figure 7-66 Install the DIMM



3. Verify that the DIMM is fully seated in the connector.

Figure 7-67 Verify the installation

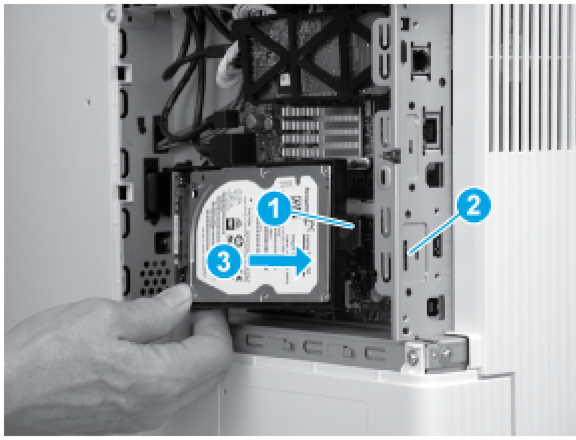
Install the HDD

Follow these steps to install the HD).

An MFP printer is shown in this section. However, the procedure is correct for all printer models.

1. Align the end of the bracket (callout 1) with the slot in the chassis (callout 2), and then slide the HDD into the printer (callout 3) to engage the bracket with the chassis.

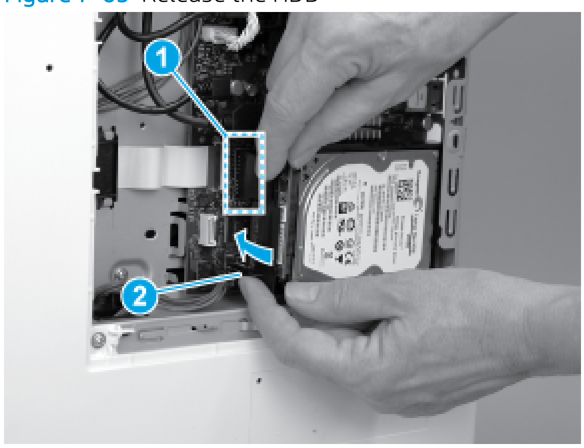
Figure 7-68 Install the holder



2. Hold the HDD connector latch (callout 1) in the released position, and then rotate the HDD down and into the connector on the formatter to install it.

NOTE: Make sure that the tab (callout 2) snaps into place, and that the HDD is securely installed.

Figure 7-69 Release the HDD



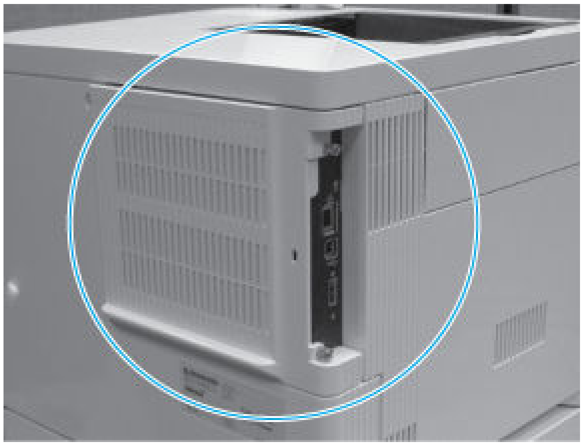
Install the formatter cover

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

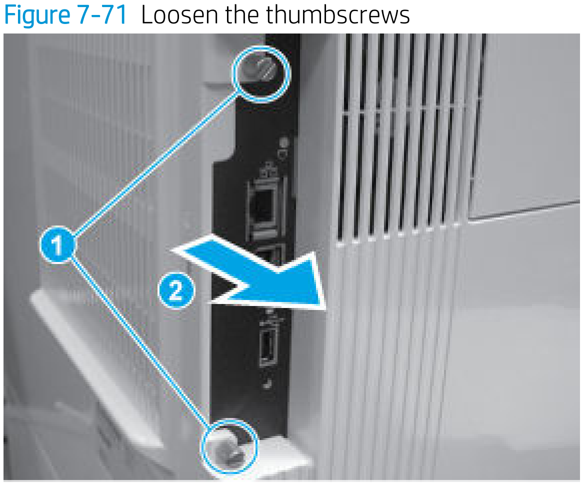
Figure 7-70 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-71 Loosen the thumbscrews



Removal and replacement: Dual in-line memory module (DIMM) (M577/M578/E57540)

Learn about removing and replacing the dual in-line memory module (DIMM).

Before performing service

Turn the printer power off

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-13 Part information

Part number	Part description
E5K48-67902	1 GB Dual in-line memory module (DIMM) with instruction guide (MFP)
5851-6581	2 GB Dual in-line memory module (DIMM) with instruction guide (MFP)

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

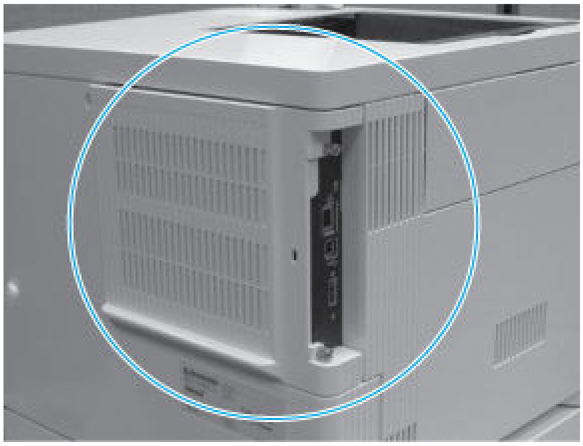
No post service test is available for this assembly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

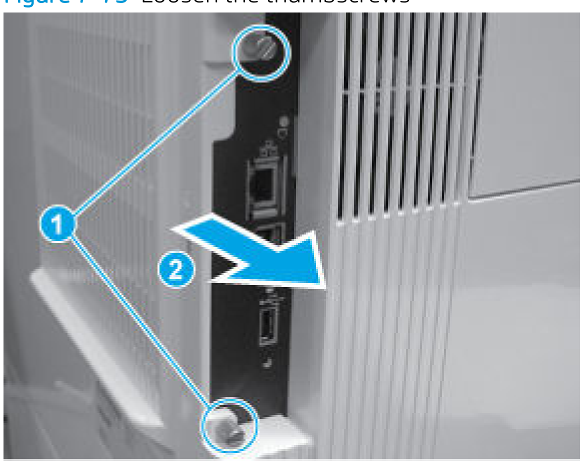
Figure 7-72 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-73 Loosen the thumbscrews



Remove the hard-disk drive (HDD)

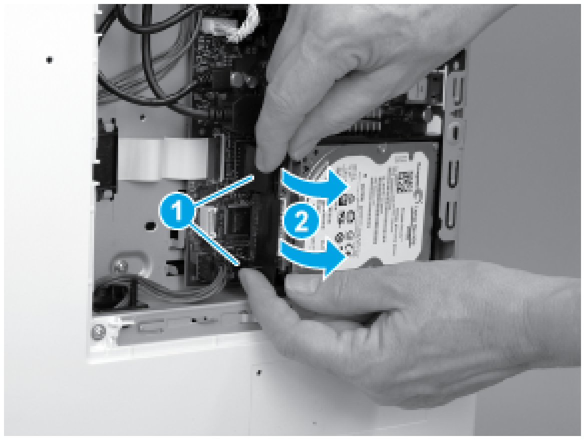
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-74 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-75 Remove the HDD

Remove the dual in-line memory module (DIMM)

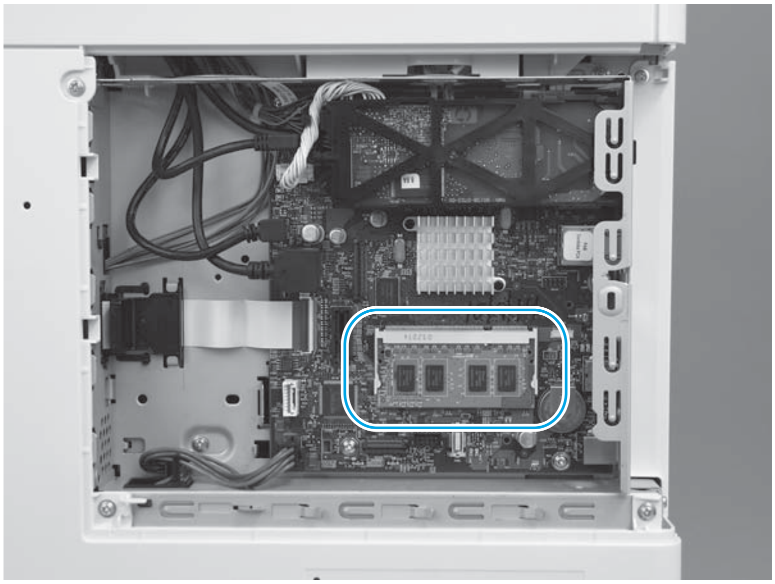
Follow these steps to remove the DIMM.

⚠ CAUTION: ESD sensitive part.

---

1. Locate the DIMM component on the formatter.

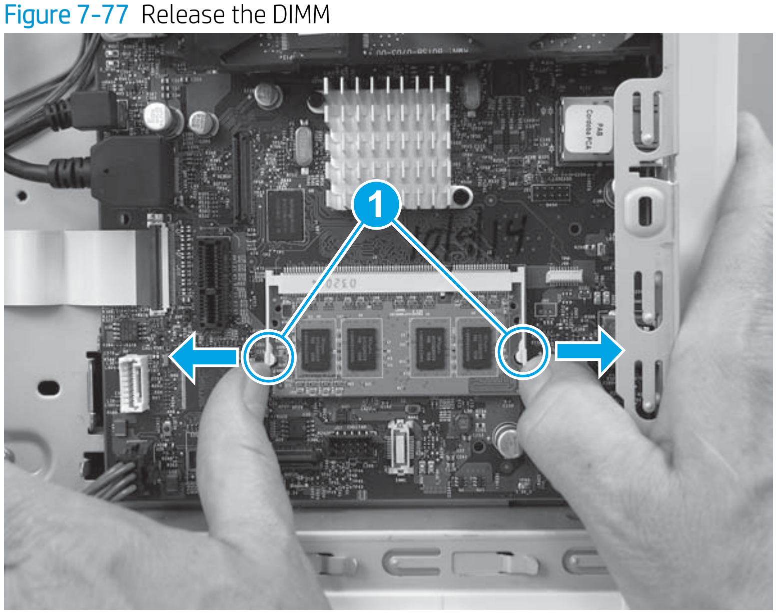
Figure 7-76 Locate the DIMM



2. Do the following:

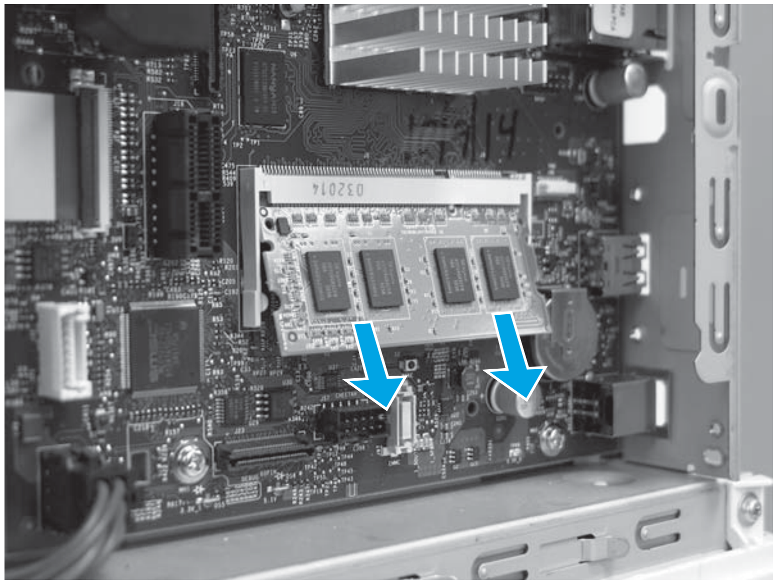
   1. Release two locking arms (callout 1).

Figure 7-77 Release the DIMM



2. Pull the DIMM down and away from the holder to remove it.

Figure 7-78 Remove the DIMM



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Install the DIMM

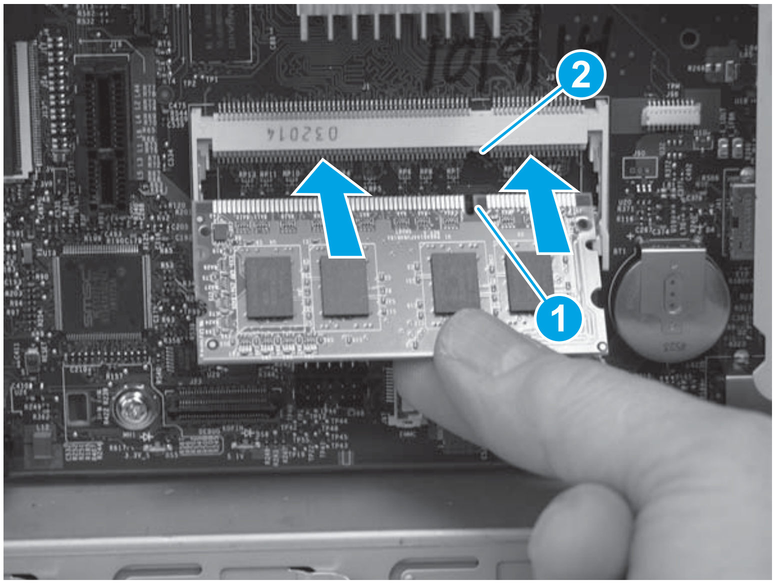
Follow these steps to install the DIMM.

CAUTION: ESD sensitive part.

1. Insert the top edge of the DIMM (callout 1) in the holder (callout 2).

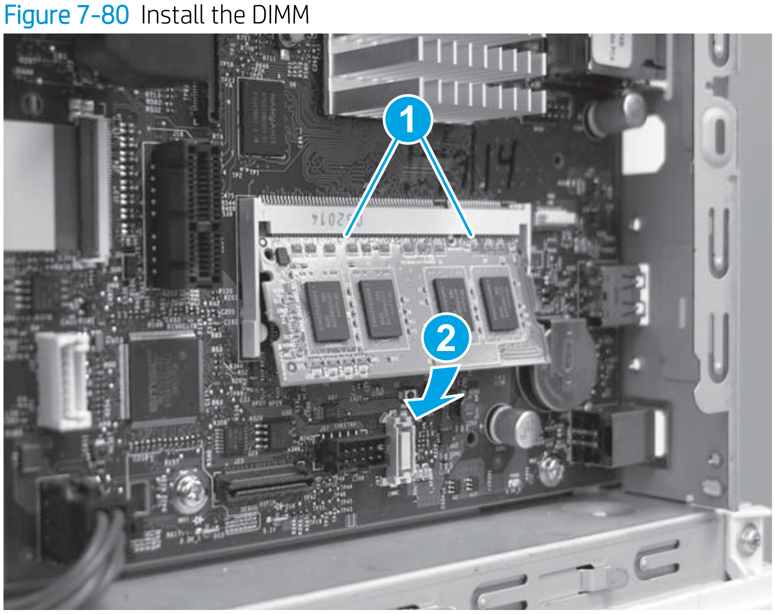
NOTE: The DIMM is keyed and can only be inserted in the holder one way.

Figure 7-79 Insert the DIMM



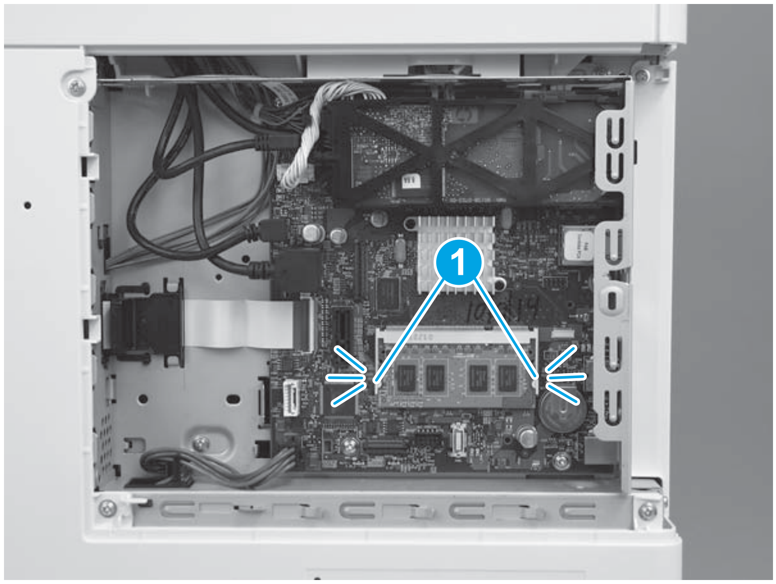
2. Make sure that the DIMM is fully installed in the holder (callout 1), and then rotate the bottom edge of the DIMM toward the holder (callout 2).

Figure 7-80 Install the DIMM



3. Make sure that the DIMM snaps into the locking arms (callout 1).

Figure 7-81 Snap the DIMM into place



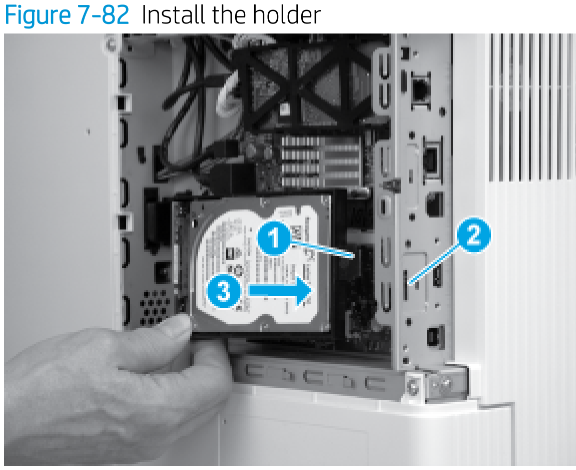
Install the HDD

Follow these steps to install the HD).

An MFP printer is shown in this section. However, the procedure is correct for all printer models.

1. Align the end of the bracket (callout 1) with the slot in the chassis (callout 2), and then slide the HDD into the printer (callout 3) to engage the bracket with the chassis.

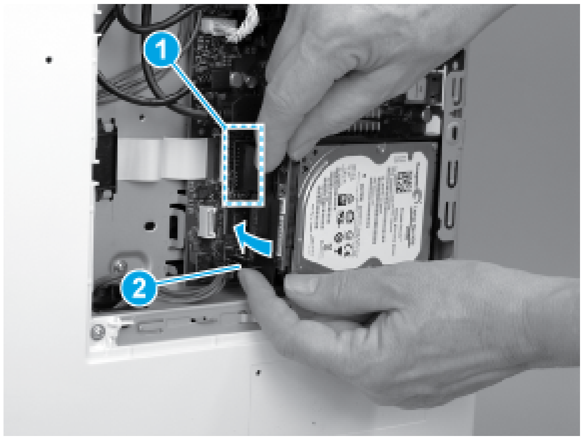
Figure 7-82 Install the holder



2. Hold the HDD connector latch (callout 1) in the released position, and then rotate the HDD down and into the connector on the formatter to install it.

NOTE: Make sure that the tab (callout 2) snaps into place, and that the HDD is securely installed.

Figure 7-83 Release the HDD



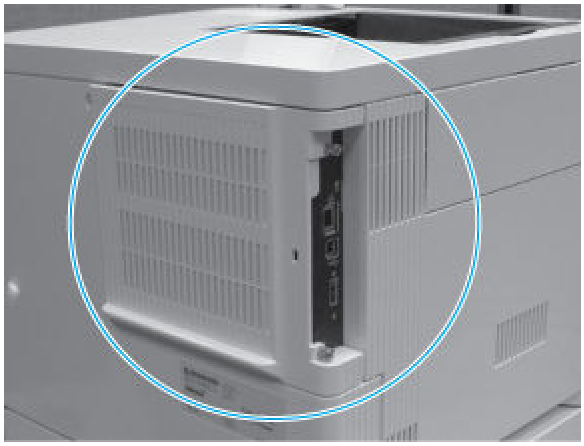
Install the formatter cover

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

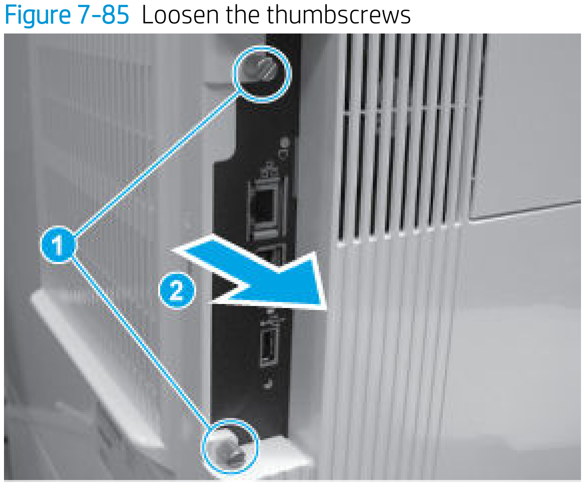
Figure 7-84 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-85 Loosen the thumbscrews



Removal and replacement: embedded MultiMedia Card (eMMC) (M522/M553/M554/M555/E55040)

Learn about removing and replacing the embedded MultiMedia Card (eMMC).

Before performing service

Turn the printer power off

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-14 Part information

Part number	Part description
5851-6436	4 GB embedded MultiMedia Card (eMMC) with instruction guide

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

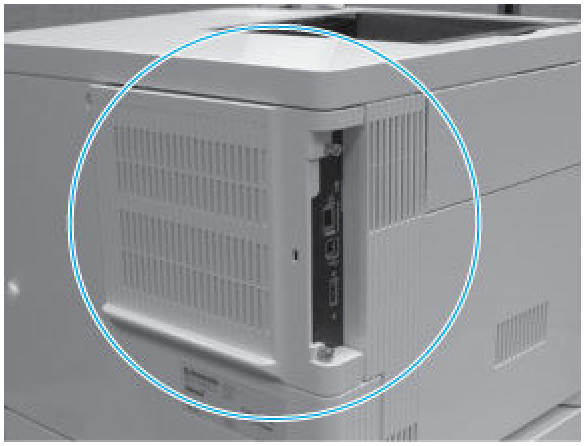
Print any pages necessary to make sure the printer is functioning correctly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

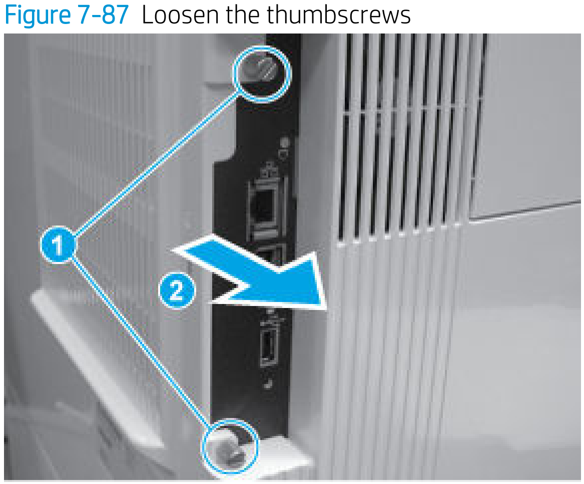
Figure 7-86 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-87 Loosen the thumbscrews



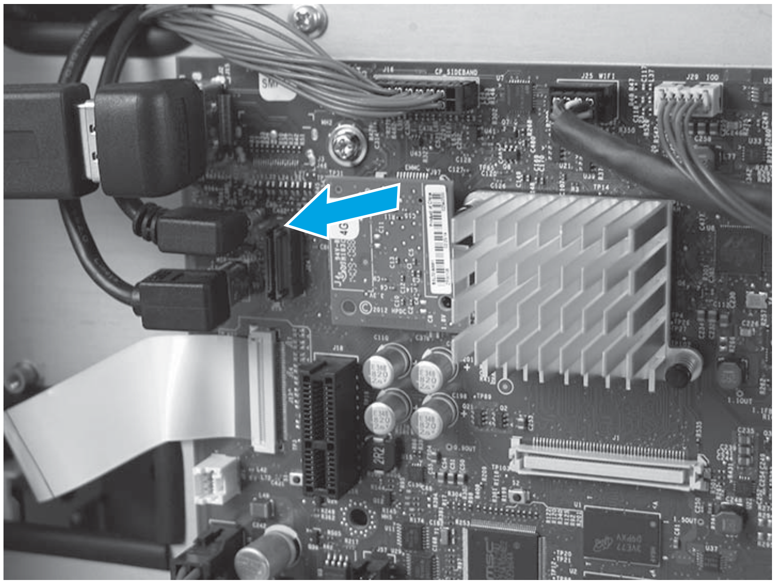
Remove the embedded MultiMedia Card (eMMC)

Follow these steps to remove the eMMC.

CAUTION: ESD sensitive part.

▲ Locate the eMMC component on the formatter, and then pull it straight off of the formatter to remove it.

Figure 7-88 Remove the eMMC



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Install the eMMC

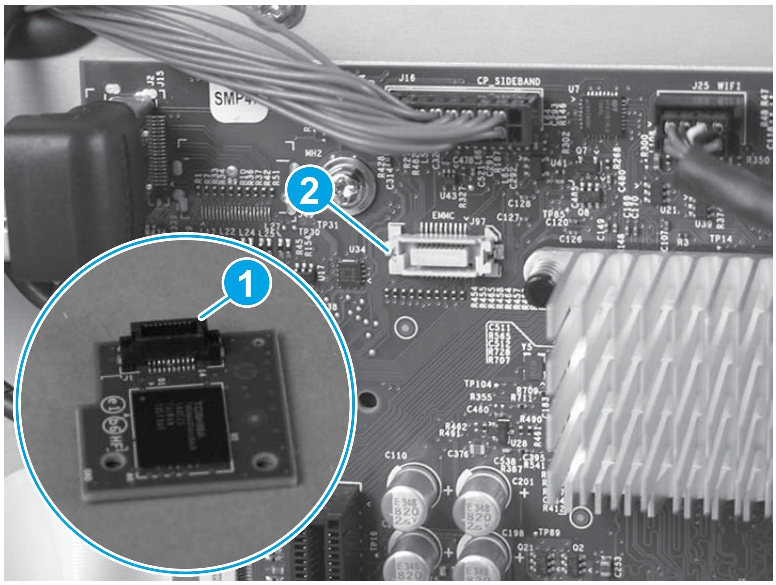
Follow these steps to install the eMMC.

CAUTION: ESD sensitive part.

1. Align the connector on the replacement eMMC (callout 1) with the connector on the formatter (callout 2), and then push the eMMC onto the formatter to install it.

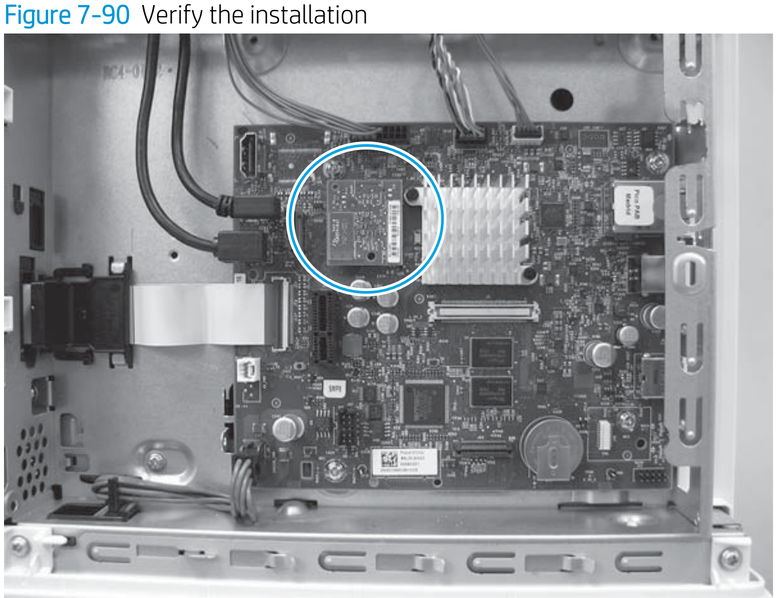
NOTE: The eMMC can only be installed in one direction on the formatter

Figure 7-89 Install the eMMC



2. Push down on the eMMC to make sure that it is fully seated in the connector.

Figure 7-90 Verify the installation



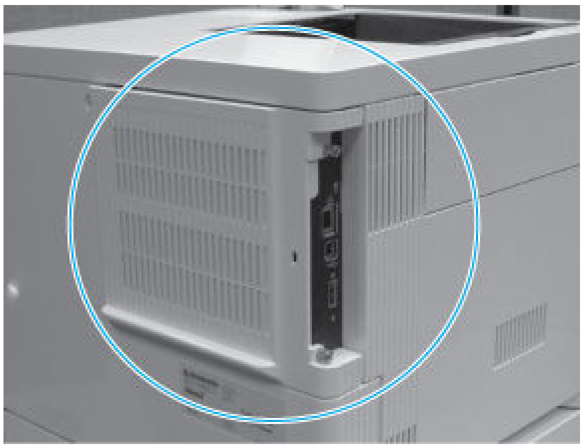
Install the formatter cover

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

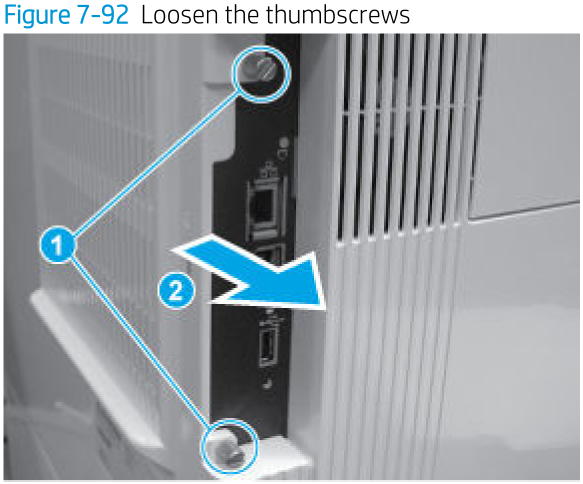
Figure 7-91 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-92 Loosen the thumbscrews



Reinstall the product firmware

Follow these steps to reinstall the product firmware.

1. Go to www.hp.com/go/futuresmart.
2. Select the **Upgrade now** button.
3. Use the drop-down lists to find the HP Enterprise or HP Managed printer model.
4. Select the **Link to Firmware download page**.

5. Select **Firmware** from the list of software and drivers.

> ⚠ CAUTION: Downgrading from FutureSmart 4 to FutureSmart 3 will result in a loss of custom settings. Before upgrading to FutureSmart 4, go to the FutureSmart Navigation Compass to review the display differences and any feature modifications.

6. Select **Download** next to the desired firmware version.

7. For installation instructions, go to one of the following support sites:

   - One HP printer: Updated firmware using a USB flash drive or the Embedded Web Server (EWS)
   - Multiple HP printers at one time: Updated firmware using Web Jetadmin

> NOTE: To view installation instructions, go to http://www.hp.com/go/futuresmart. Select **Upgrade now**, and then select **How to perform a firmware update**.

Removal and replacement: Secondary transfer roller

Learn about removing and replacing the secondary transfer roller.

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-15 Part information

Part number	Part description
RM2-6575-000CN	Secondary transfer roller with instruction guide

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the secondary transfer roller

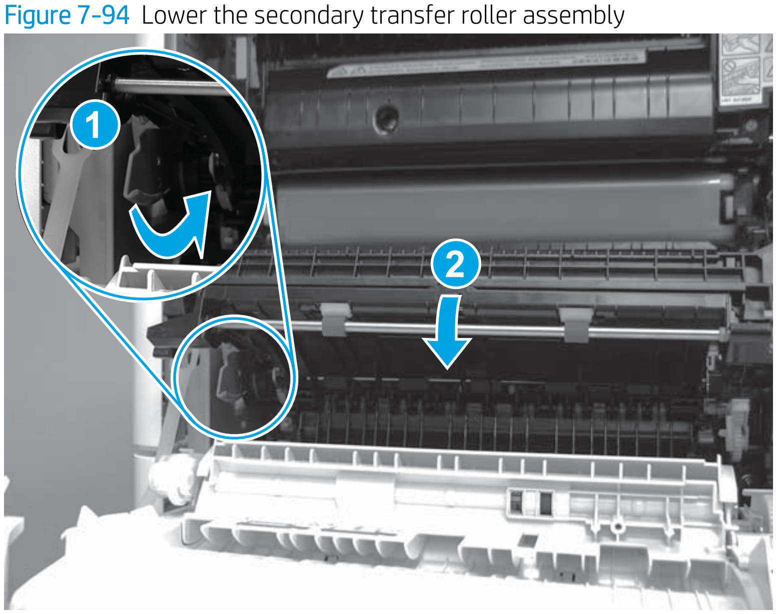
Follow these steps to remove the secondary transfer roller.

1. Open the right door.

Figure 7-93 Open the right door

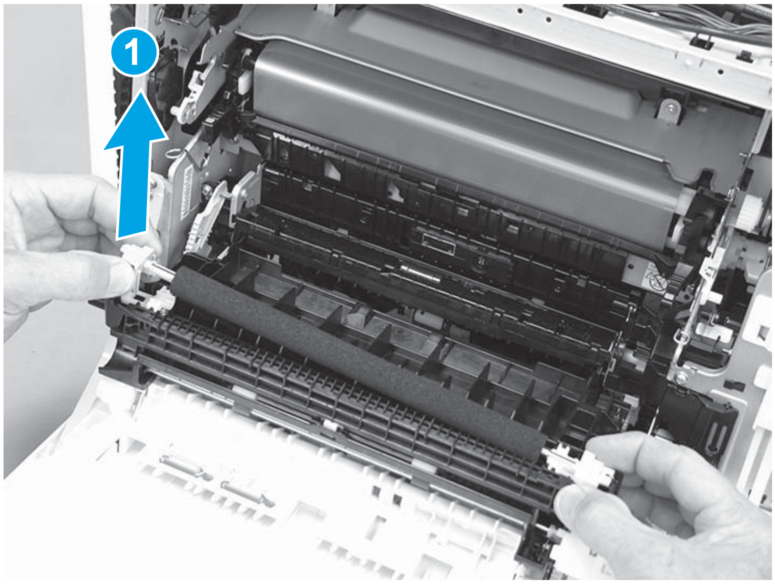
2. Push in on the blue lever (callout 1) to release the secondary transfer roller assembly, and then lower the assembly (callout 2) to the service position.

Figure 7-94 Lower the secondary transfer roller assembly



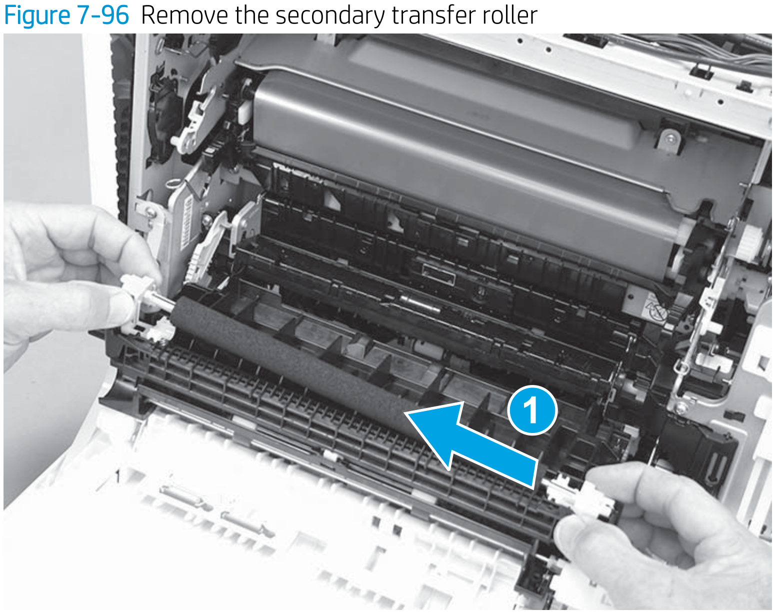
3. Slightly lift the left end of the roller shaft (callout 1; near the gear) to release the transfer roller clip.

Figure 7-95 Release the secondary transfer roller clip



4. Slide the right end roller collar (callout 1) to the left to remove the transfer roller.

Figure 7-96 Remove the secondary transfer roller



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

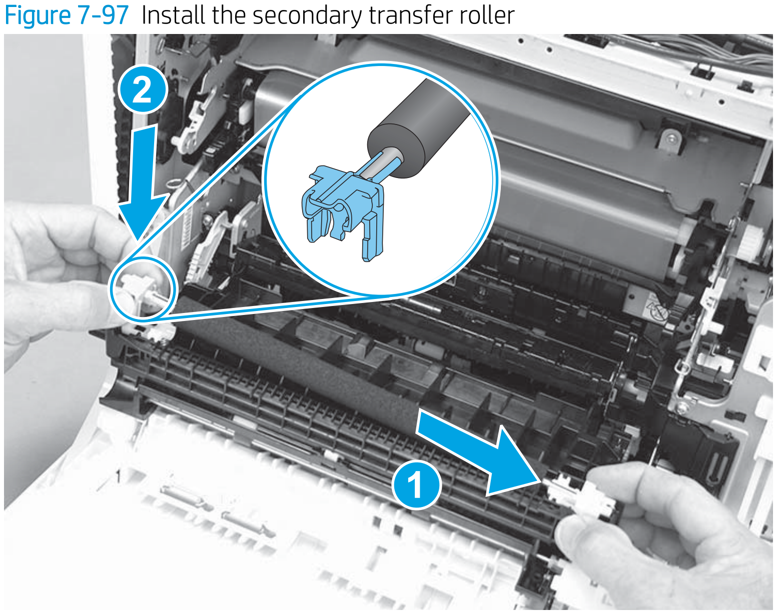
Install the secondary transfer roller

Follow these steps to install the secondary transfer roller.

1. Insert the right end (white plastic) of the replacement roller into the holder (callout 1), and then push down on the left end (blue plastic clip; callout 2) until the roller snaps into place.

IMPORTANT: Make sure that both ends of the roller assembly are fully seated in the holders.

Figure 7-97 Install the secondary transfer roller



2. Close the right door.

Figure 7-98 Close the right door

Removal and replacement: Universal Serial Bus (USB) cover (M522/M553/M554/M555/E55040)

Learn about removing and replacing the USB port cover.

Before performing service

Turn the printer power off

- ○ Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-16 Part information

Part number	Part description
RC4-0214-000CN	USB cover

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- ○ Connect the power cable.
- ○ Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

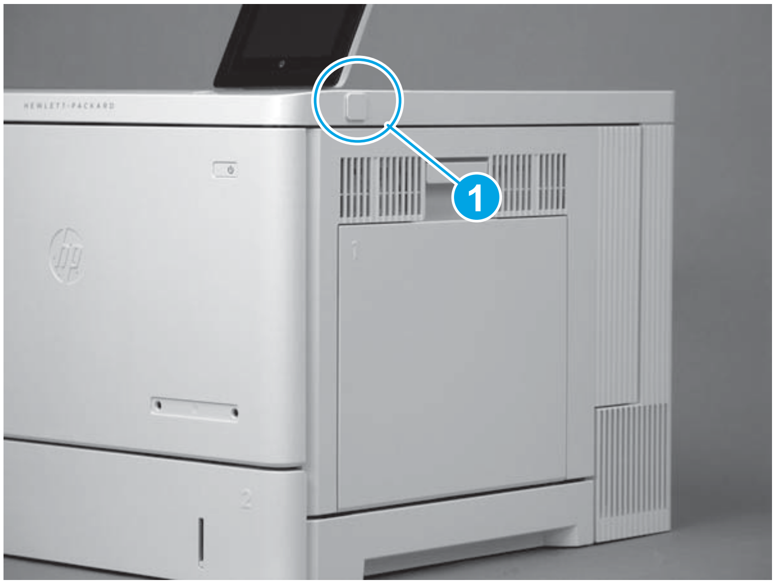
Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

NOTE: This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-99 Locate the USB cover



2. Pull the cover off of the printer to remove it.

Figure 7-100 Remove the cover

Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Remove the USB cover

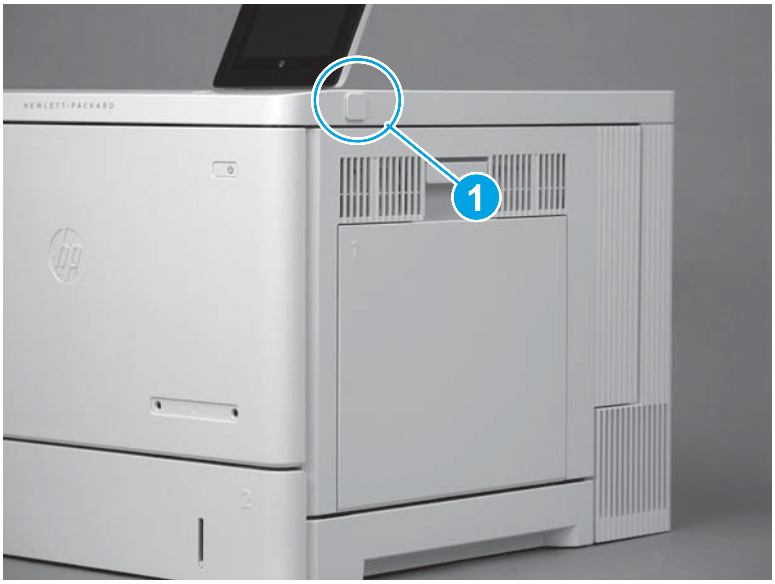
Follow these steps to remove the USB cover.

1. Push the cover into the USB port to install it.

Figure 7-101 Install the cover

2. Make sure that the USB cover (callout 1) is fully seated after installing it.

Figure 7-102 Check the installation



Removal and replacement: Hardware Integration Pocket (HIP) cover (M522/M553/M554/M555/E55040)

Learn about removing and replacing the hardware Integration Pocket (HIP) cover.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

> CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.
>
> If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-17 Part information

Part number	Part description
RC5-1812-000CN	HIP cover

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

Remove the HIP cover

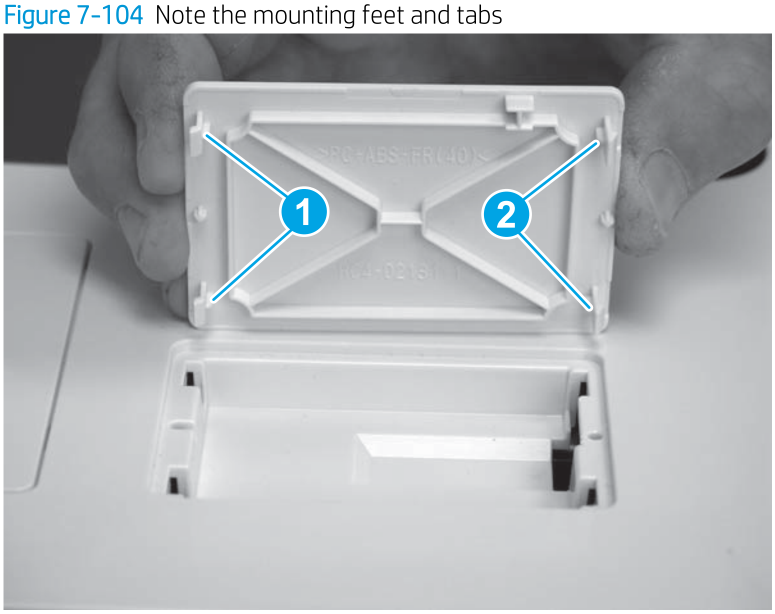
Follow these steps to remove the HIP cover.

1. Locate the HIP cover.

Figure 7-103 Locate the HIP cover

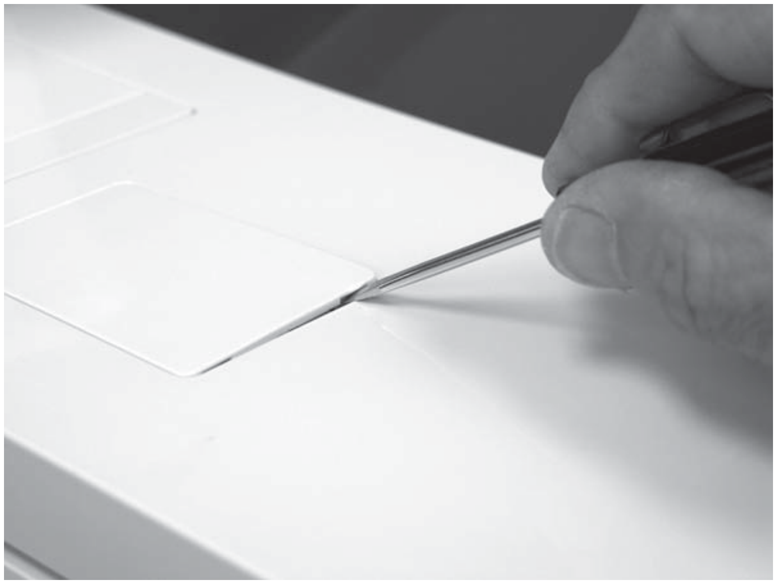
2. Before proceeding, take note of the mounting feet (callout 1) and tabs (callout 2) on the HIP cover.

Figure 7-104 Note the mounting feet and tabs



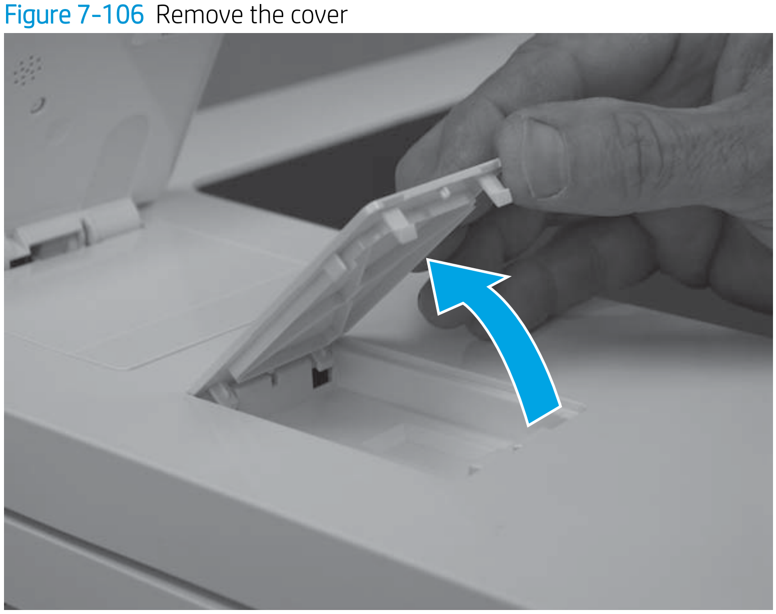
3. Use a small flat-blade screwdriver to release the tabs on the HIP cover.

Figure 7-105 Release the cover



4. Rotate the cover up and off of the printer to remove it.

Figure 7-106 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

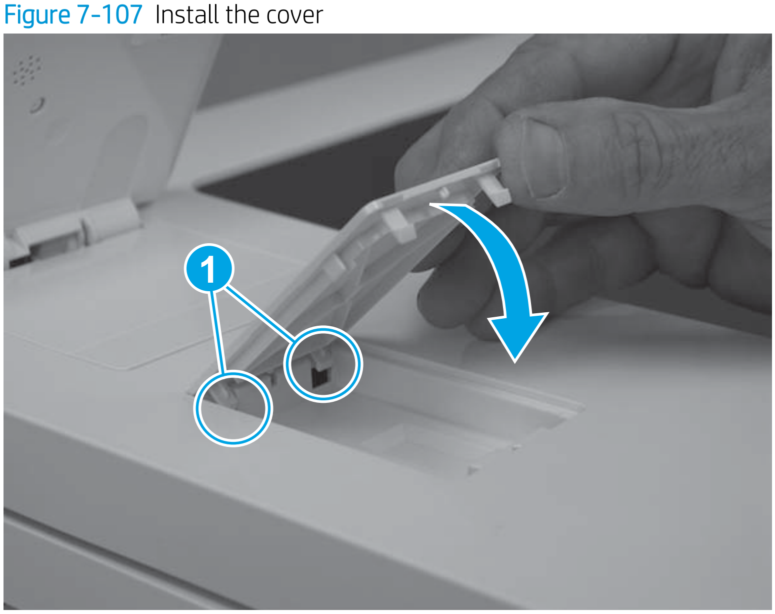
Install the HIP cover

Follow these steps to remove the HIP cover.

1. Position the HIP cover mounting feed in the slots (callout 1) provided in the top cover, and then rotate it down to install it.

NOTE: Make sure that the tabs on the cover snap into place.

Figure 7-107 Install the cover



2. Make sure that the HIP cover is fully seated after installing it.

Figure 7-108 Check the installation

Removal and replacement: Hardware Integration Pocket (HIP) cover (M577/M578/ E57540)

Learn about removing and replacing the hardware Integration Pocket (HIP) cover.

Before performing service

Turn the printer power off

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-18 Part information

Part number	Part description
B5L46-40021	HIP cover

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

Remove the HIP cover

Follow these steps to remove the HIP cover.

1. Locate the HIP cover.

Figure 7-109 Locate the HIP cover

2. Use a small flat-blade screwdriver to release the tabs on the HIP cover.

Figure 7-110 Release the cover

3. Rotate the cover up and off of the printer to remove it.

Figure 7-111 Remove the cover

Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

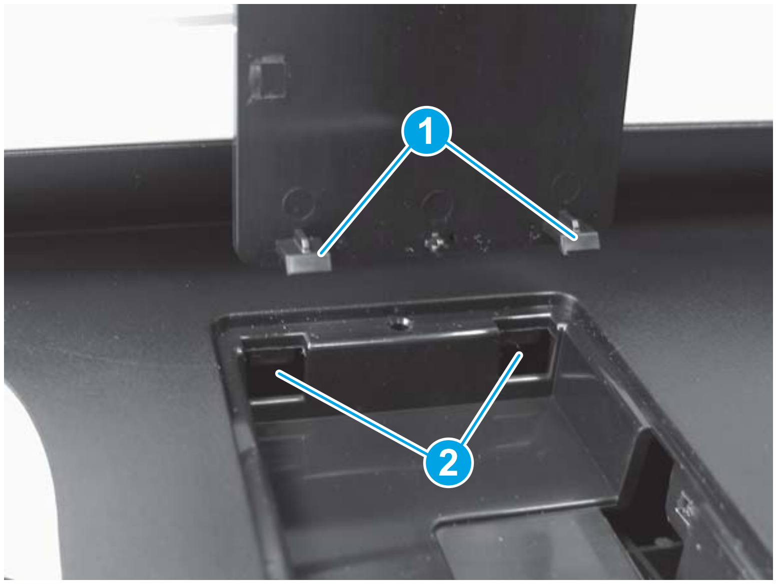
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Install the HIP cover

Follow these steps to remove the HIP cover.

1. Position the tabs (callout 1) on the HIP cover in the slots (callout 2) in the printer.

Figure 7-112 Position the cover



2. Rotate the cover down.

NOTE: Make sure that the tabs on the cover snap into place.

Figure 7-113 Install the cover

3. Make sure that the HIP cover is fully seated after installing it.

Figure 7-114 Check the installation

Removal and replacement: Control panel (M553x/M555/E55040)

This document provides the procedures to remove and replace the control panel.

Mean time to repair: 10 minutes

Service level: Basic

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-19 Part information

Part number	Part description
B5L24-67903	Control panel (M553x/E55040dw/E55040dn)
K0Q15-67904	Kit - control panel 4.3 inch CLJ M555

Required tools

- Reversible small, flat-blade screwdriver and #2 Phillips screwdriver (included with the control panel)

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

The printer includes a diagnostic test mode for the control panel. For more information, see the control panel checks section of the printer troubleshooting manual.

Remove the control panel (M553x/M555/E55040)

Follow these steps to remove the control panel.

> NOTE: This procedure is for the M553x/M555/E55040 printers only.
>
> **M555 models**: Removing the control panel is similar to the procedure below. For the M555, a flat cable connects the control panel to the formatter.

1. Tilt the control panel up.

Figure 7-115 Tilt the control panel up

2. Use the small flat-blade screwdriver supplied in this kit to release the control-panel screws cover tabs.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-116 Release the control-panel screws cover tabs

3. Rotate the cover up to remove it.

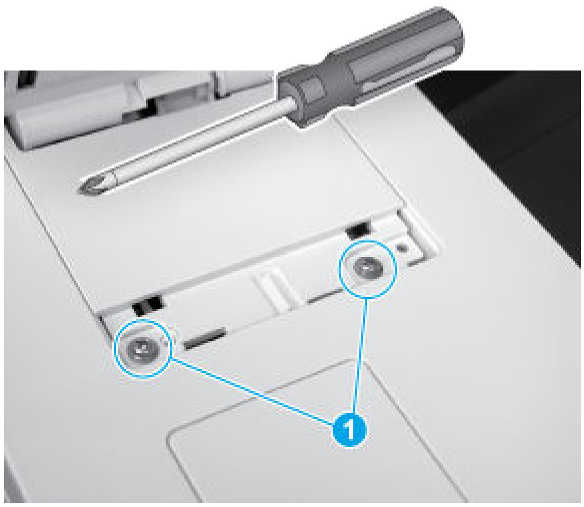
Figure 7-117 Remove the cover

4. Use the small Phillips screwdriver supplied in this kit to remove two screws (callout 1).

IMPORTANT: Store the screws in a secure place where they cannot fall down into the printer.

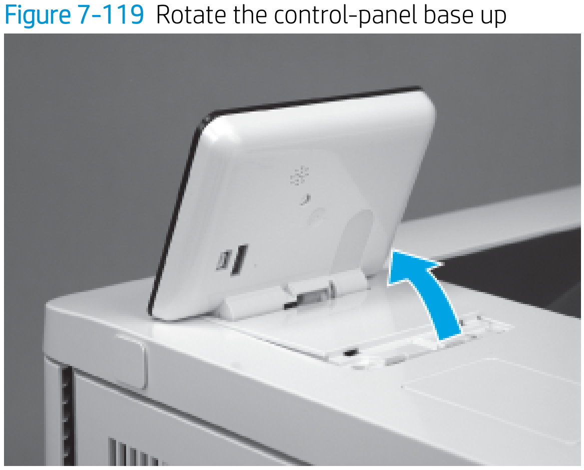
TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-118 Remove two screws



5. Rotate the control-panel base toward the front of the printer.

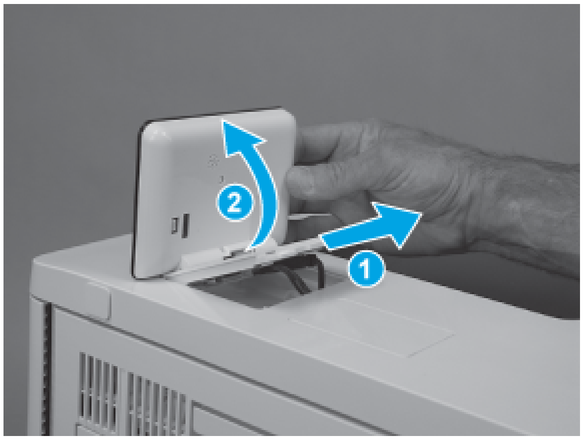
Figure 7-119 Rotate the control-panel base up



6. Slightly slide the control-panel base toward the rear of the printer (callout 1) to release it, and then turn the control panel over (callout 2) to access the bottom side.

⚠ CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

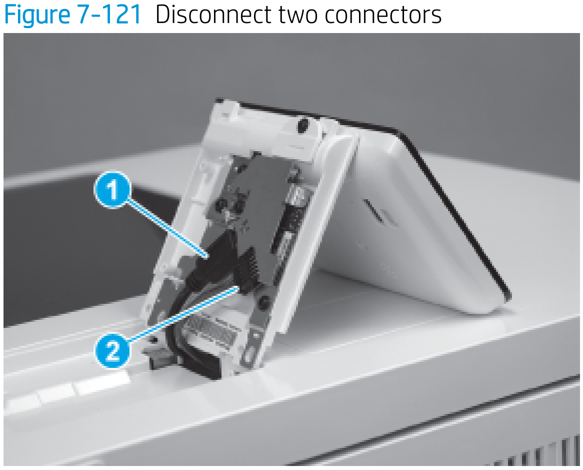
Figure 7-120 Turn the control panel over



7. Disconnect one USB cable (callout 1), one connector (callout 2), and then remove the control panel.

NOTE: **M555 only**: Disconnect one flat cable (not shown), and then remove the control panel.

Figure 7-121 Disconnect two connectors



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

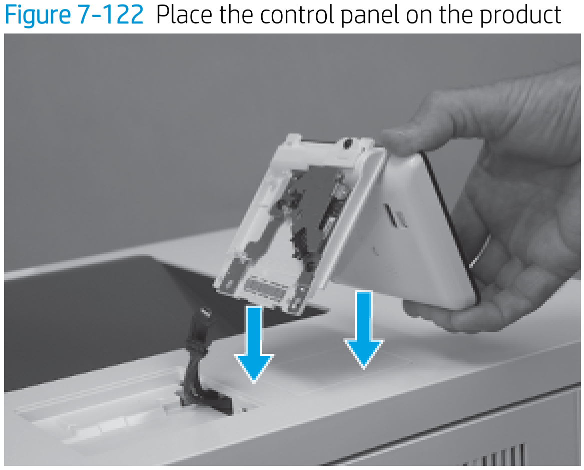
Install the control-panel assembly

Follow these steps to install the control-panel assembly.

NOTE: The figures in this procedure show the M553x printer. The M555 control panel uses a flat cable to connect to the formatter. However, installing the control panel is similar to the following procedure.

1. Place the control panel on the printer as shown.

Figure 7-122 Place the control panel on the product

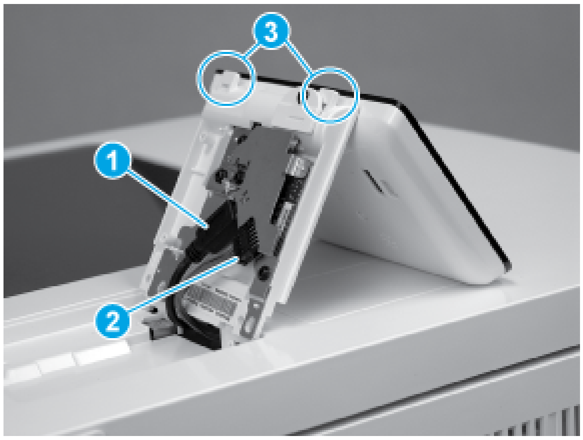


2. Connect one USB cable (callout 1), and one connector (callout 2).

NOTE: **M555 only**: Connect one flat cable (not shown).

TIP: Take note of the location of the two mounting tabs (callout 3) on the control-panel assembly.

Figure 7-123 Connect two connectors



3. Turn the control panel over, and then position the front edge tabs (callout 1) in the slots in the top cover.

Figure 7-124 Turn the control panel over

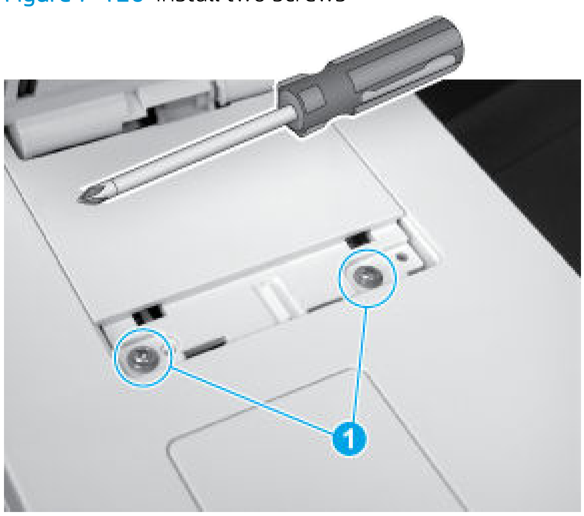
4. Rotate the control-panel base down onto the printer.

Figure 7-125 Rotate the control-panel base down

5. Use the small Phillips screwdriver supplied in this kit to install two screws (callout 1).

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

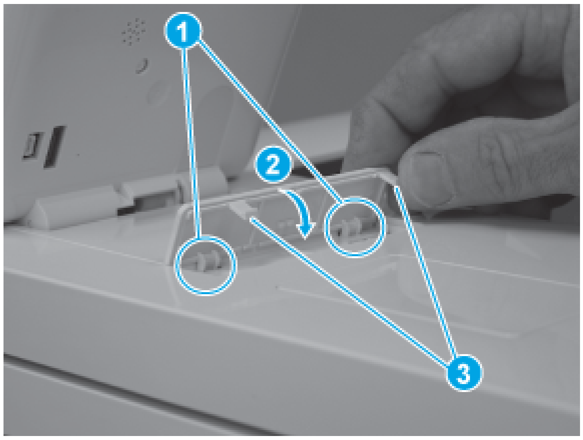
Figure 7-126 Install two screws



6. Position the screw cover mounting feet into the slots in the top cover (callout 1), and then rotate the cover down (callout 2) to install it.

NOTE: Press down on the cover firmly to make sure that the tabs on the cover (callout 3) snap into place.

Figure 7-127 Install the cover



Removal and replacement: Control panel (M577/M578/E57540)

This document provides the procedures to remove and replace the control panel (MFP).

Mean time to repair: 5 minutes

Service level: Basic

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-20 Part information

Part number	Part description
B5L47-67018	Control panel and reversible screwdriver with instruction guide

Required tools

- #2 Phillips screwdriver with a magnetic tip.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

The printer includes a diagnostic test mode for the control panel. For more information, see the control panel checks section of the printer troubleshooting manual.

Remove the control-panel cover (MFP)

Follow these steps to remove the control-panel cover (MFP).

1. Open the document feeder (callout 1).

> NOTE: If the control panel is not fully tilted forward, tilt it forward now until it stops (callout 2).

Figure 7-128 Open the document feeder

2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

NOTE: The thin, black plastic cover will separate from the white plastic control-panel base.

Figure 7-129 Release five tabs

3. Continue to lift the top edge of the cover away from the printer, and then remove the cover.

Figure 7-130 Remove the cover

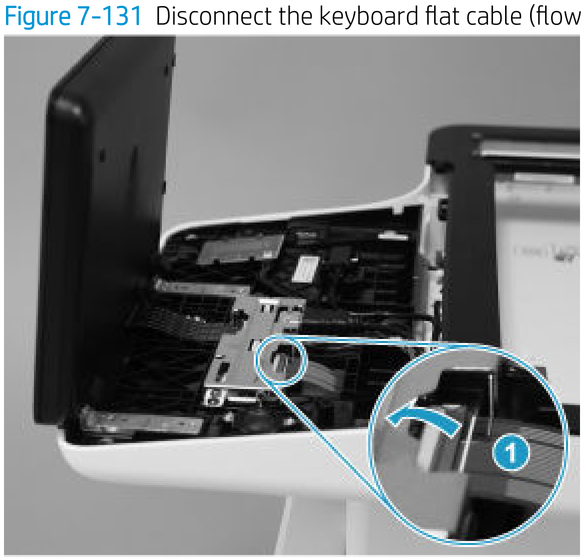
Remove the control panel (MFP)

Follow these steps to remove the control panel (MFP).

1. **Flow models**: Open the latch (callout 1) to release the keyboard flat cable.

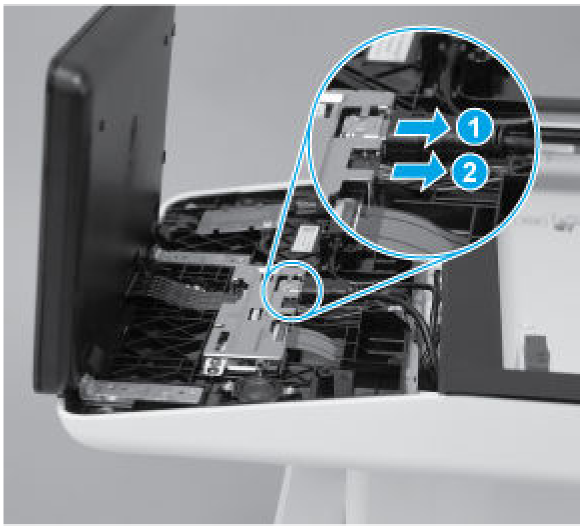
⚠ CAUTION: The latch must be opened to release the cable.

Figure 7-131 Disconnect the keyboard flat cable (flow models)



2. Disconnect one HDMI cable (callout 1) and one connector (callout 2).

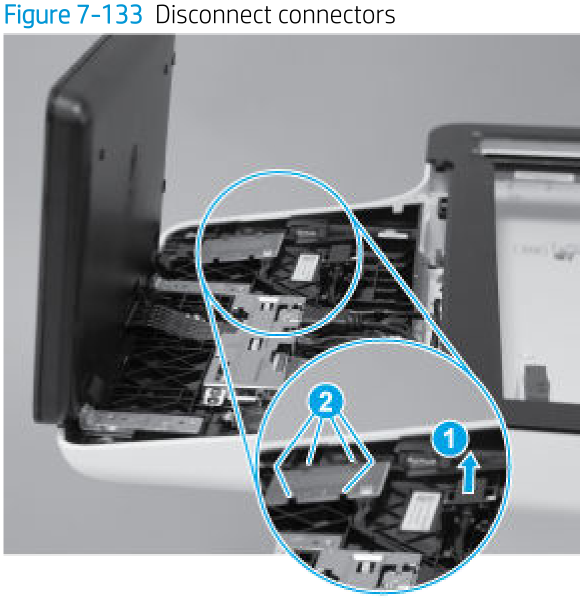
Figure 7-132 Disconnect connectors



3. Remove the USB cable (callout 1) from the holder.

Flow models: Release four tabs (callout 2), and then remove the near-field communication (NFC) printed circuit board.

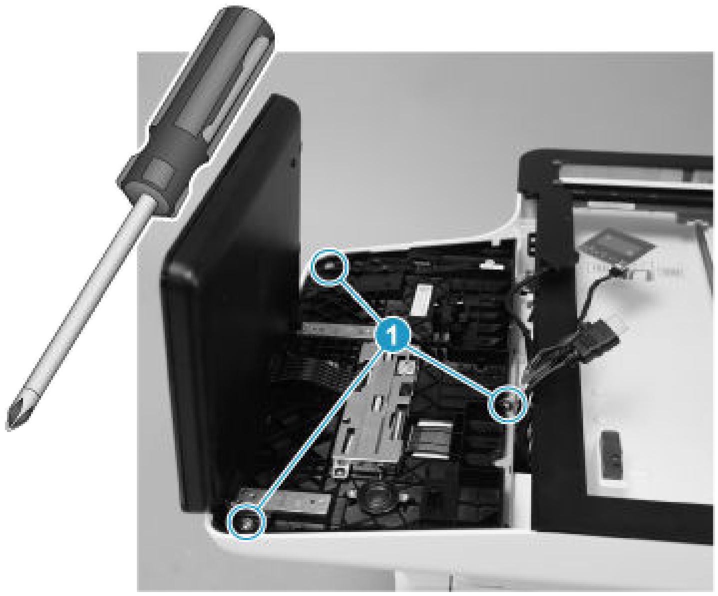
Figure 7-133 Disconnect connectors



4. Remove three screws (callout 1).

TIP: The screwdriver (supplied with the kit) has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-134 Remove three screws



5. Lift the front of the control panel off of the printer (callout 1), and then slide it towards the front of the printer (callout 2) to remove it.

Figure 7-135 Remove the control panel

Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Install the control panel (MFP)

Follow these steps to install the control panel (MFP).

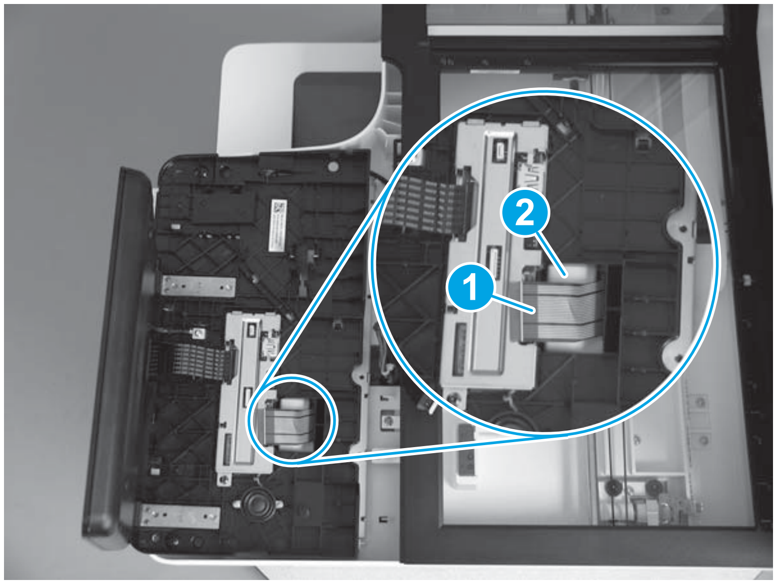
1. **Flow models**: Open the latch (callout 1) to release the keyboard flat cable.

CAUTION: The latch must be opened to release the cable.

Figure 7-136 Disconnect the keyboard flat cable (flow models)

2. **Flow models**: Make sure to feed the keyboard flat cable (callout 1) through the opening (callout 2) in the control-panel base when installing the control panel.

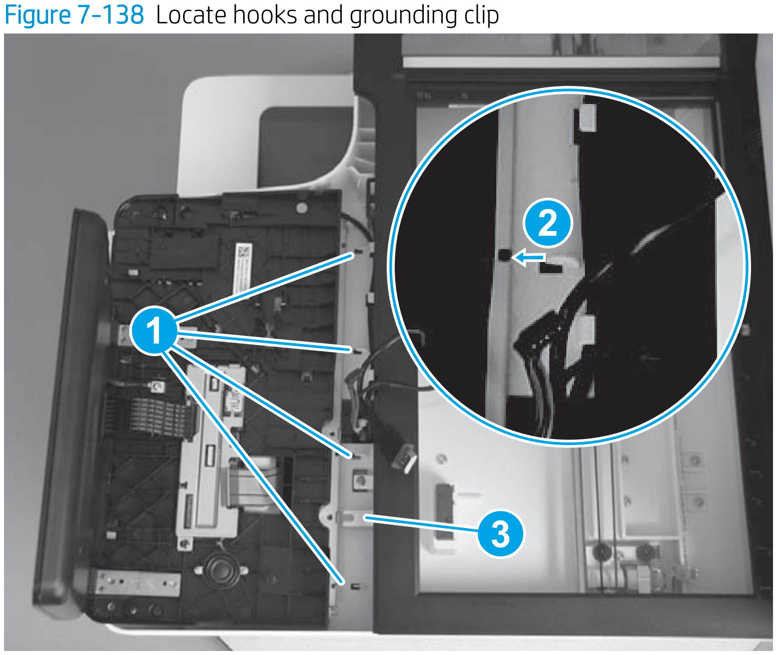
Figure 7-137 Feed the keyboard flat cable through opening



3. Locate the four hooks on the printer and matching slots in the control-panel base (callout 1). The hooks fit into the slots (callout 2) when the assembly is installed.

NOTE: Make sure that the grounding clip (callout 3) is on top of the assembly base when it is installed.

Figure 7-138 Locate hooks and grounding clip



4. Position the rear edge of the control panel in the printer (callout 1), and then lower the front edge down (callout 2) to install it.

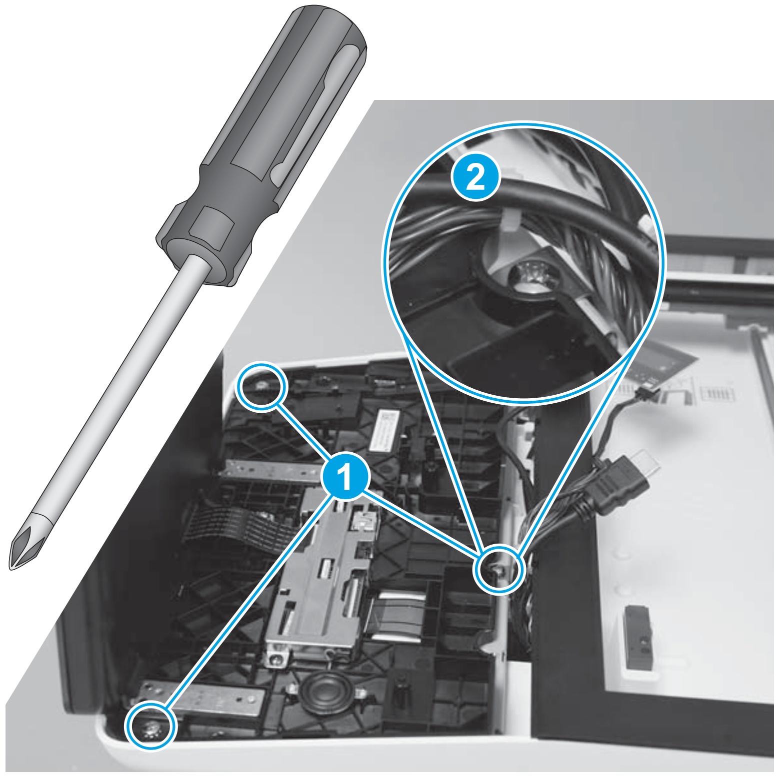
NOTE: If the control panel is difficult to install, make sure that the hooks, slots, and grounding clip are correctly engaged. See the previous step.

Figure 7-139 Install the control panel

5. Install three screws (callout 1), making sure that the grounding clip is correctly installed (callout 2).

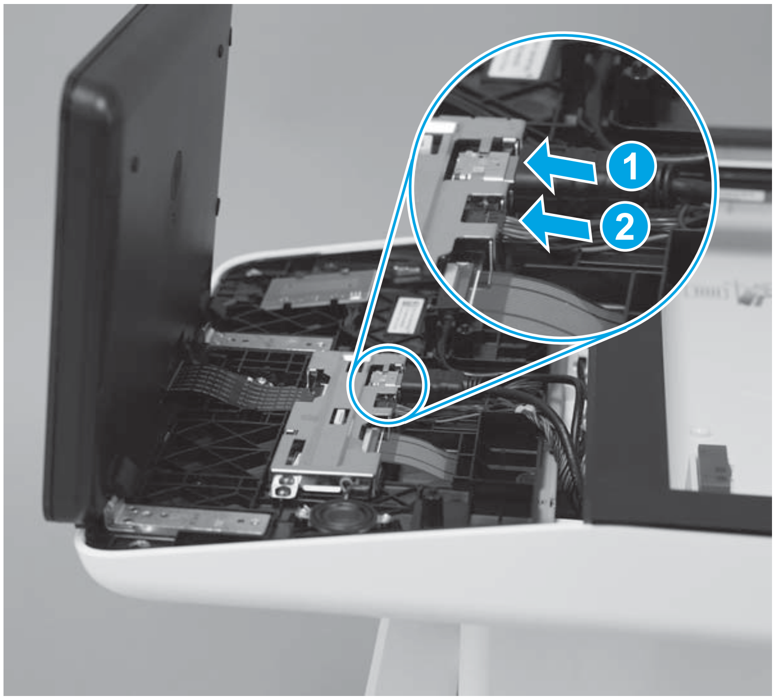
NOTE: The screwdriver (supplied with the kit) has a reversible shaft. Simply pull the shaft out of the handle and then reinstall it with the desired end facing out.

Figure 7-140 Install three screws



6. Connect one HDMI cable (callout 1), and one connector (callout 2).

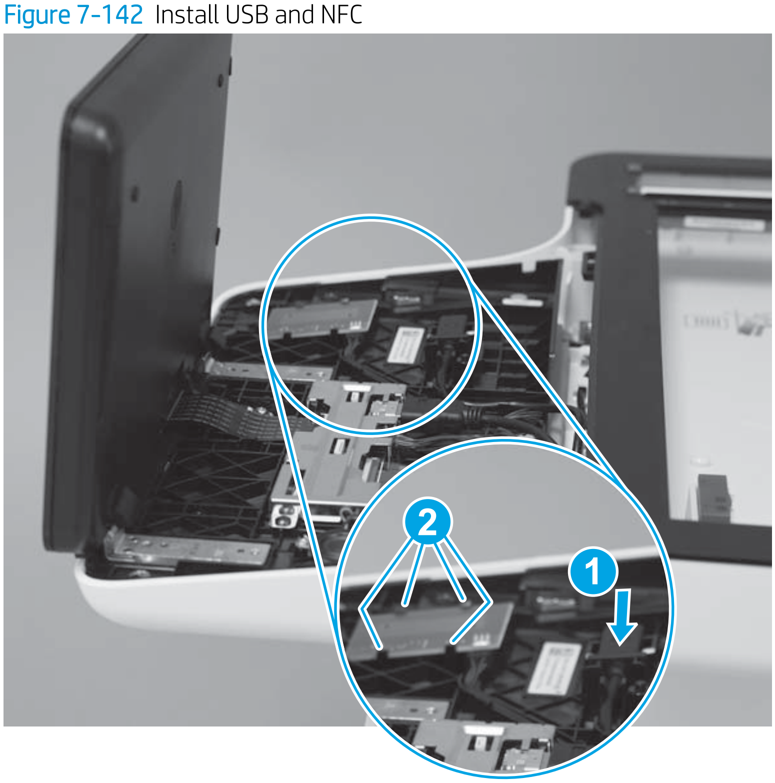
Figure 7-141 Connect connectors



7. Install the USB cable (callout 1) in the holder.

NOTE: **NFC models only**: Install the near-field communication (NFC) printed circuit board under the four tabs (callout 2).

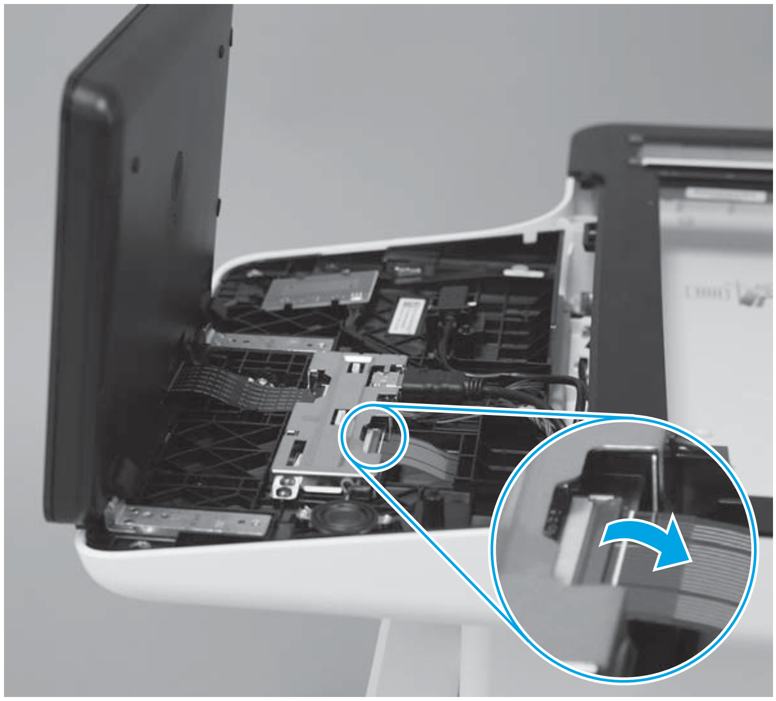
Figure 7-142 Install USB and NFC



8. **Flow models**: Position the keyboard flat cable in the connector, and then close the latch (callout 1).

NOTE: Slightly tug on the cable to make sure that it is fully captured in the connector.

Figure 7-143 Connect the keyboard flat cable



Install the control-panel cover (MFP)

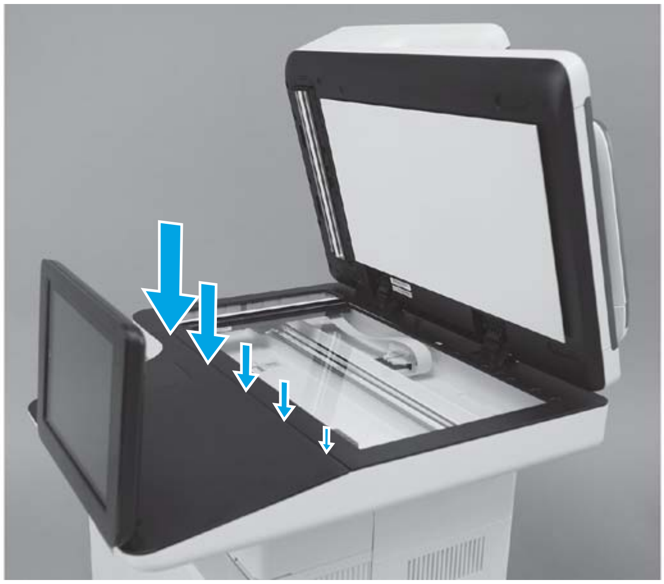
Follow these steps to install the control-panel cover (MFP).

1. Position the control-panel cover on the printer.

Figure 7-144 Install the cover

2. Beginning at the left side of the control-panel cover, carefully push down along the top edge of the cover to engage five tabs.

Figure 7-145 Engage five tabs



3. Close the document feeder.

NOTE: Adjust the control panel to the desired angle.

Figure 7-146 Close the document feeder

Removal and replacement: Keyboard (M577/M578/E57540 flow models)

Learn about removing and replacing the keyboard.

Before performing service

Turn the printer power off

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-21 Part information

Part number	Part description
B5L47-67019	US English Keyboard Kit
B5L47-67020	UK English Keyboard Kit

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the control-panel cover (MFP)

Follow these steps to remove the control-panel cover (MFP).

1. Open the document feeder (callout 1).

NOTE: If the control panel is not fully tilted forward, tilt it forward now until it stops (callout 2).

Figure 7-147 Open the document feeder

2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

NOTE: The thin, black plastic cover will separate from the white plastic control-panel base.

Figure 7-148 Release five tabs

3. Continue to lift the top edge of the cover away from the printer, and then remove the cover.

Figure 7-149 Remove the cover

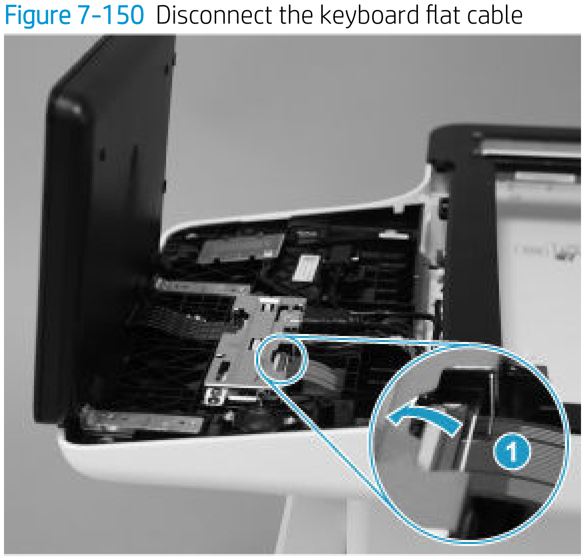
Remove the keyboard (MFP)

Follow these steps to remove the keyboard.

1. Open the latch (callout 1) to release the keyboard flat cable.

> ⚠ CAUTION: The latch must be opened to release the cable.

Figure 7-150 Disconnect the keyboard flat cable

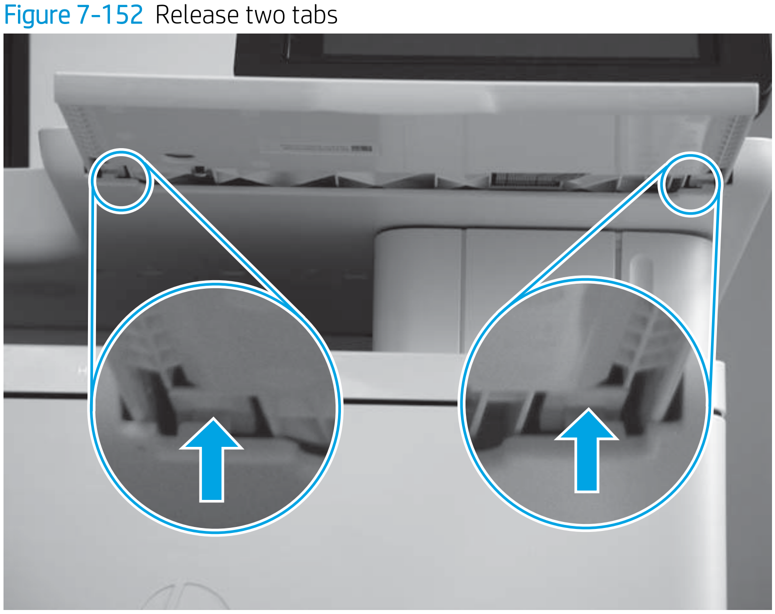


2. Slide the keyboard tray out until it stops.

Figure 7-151 Slide the keyboard out

3. Push up on the keyboard tray to release two tabs on the bottom of the tray, and then slide the tray toward the front of the printer to disengage the tabs.

Figure 7-152 Release two tabs



4. Slide the keyboard (callout 1) all of the way out of the printer to remove it.

Figure 7-153 Remove the keyboard

Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Install the control panel (MFP)

Follow these steps to install the keyboard.

1. Position the flat cable (callout 1) on the keyboard into the keyboard slot (callout 2).

Figure 7-154 Install the flat cable through the slot

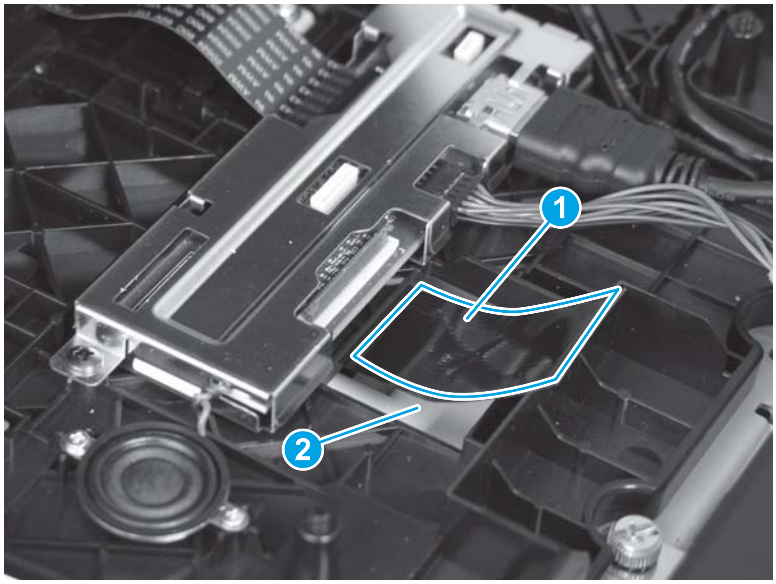
2. Slide the keyboard tray into the slot.

NOTE: Only slide the tray halfway into the opening. This makes connecting the cable in the next step easier.

Figure 7-155 Slide the keyboard into the slot

3. If the flat cable (callout 1) is not in the opening (callout 2) in the control panel base, carefully reach in and thread the flat cable through the opening.

Figure 7-156 Check the flat cable

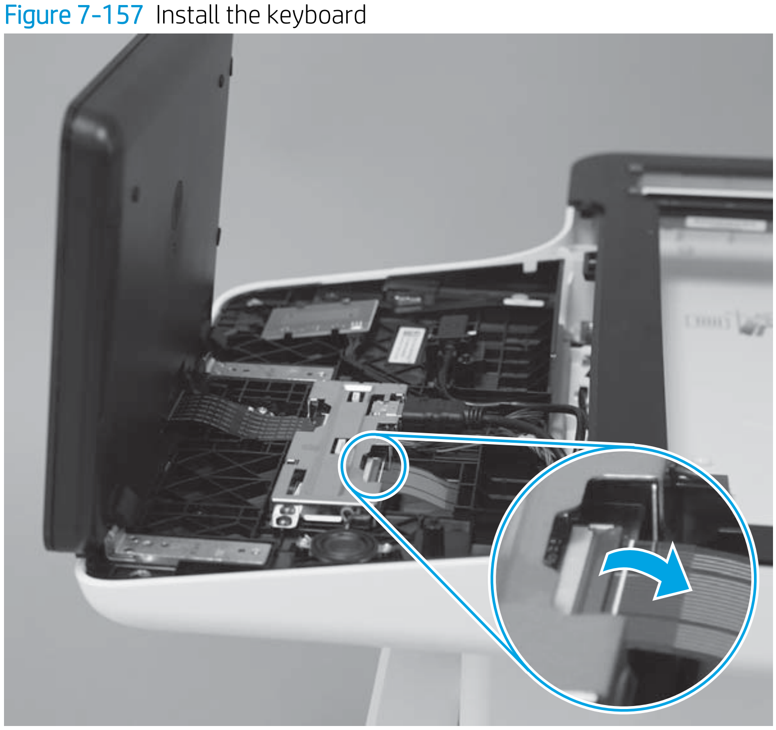


4. Position the keyboard flat cable in the connector, and then close the connector latch.

IMPORTANT: Slightly tug on the cable to make sure that it is fully captured in the connector.

NOTE: When the connector latch is closed and the cable is correctly installed, the white line on the cable is parallel to the connector latch.

Figure 7-157 Install the keyboard



Install the control-panel cover (MFP)

Follow these steps to install the control-panel cover (MFP).

1. Position the control-panel cover on the printer.

   Figure 7-158 Install the cover

2. Beginning at the left side of the control-panel cover, carefully push down along the top edge of the cover to engage five tabs.

   Figure 7-159 Engage five tabs

3. Close the document feeder.

NOTE: Adjust the control panel to the desired angle.

Figure 7-160 Close the document feeder

Removal and replacement: White backing (M577/M578/E57540)

Learn about removing and replacing the document feeder white backing.

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-22 Part information

Part number	Part description
5851-7740	White backing kit with instruction guide

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the white backing (MFP)

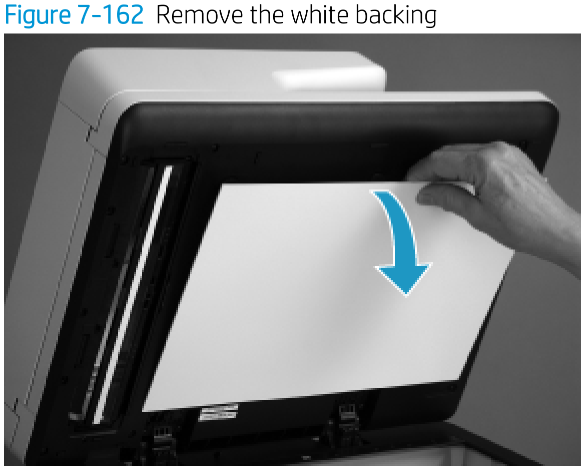
Follow these steps to remove the white backing.

1. Open the document feeder.

Figure 7-161 Open the document feeder

2. Remove the white backing.

Figure 7-162 Remove the white backing



3. One or more of the retention clips (callout 1) that fit in the openings (callout 2) in the document feeder might remain attached to the white backing when it is removed. If this happens, remove the clip from the white backing.

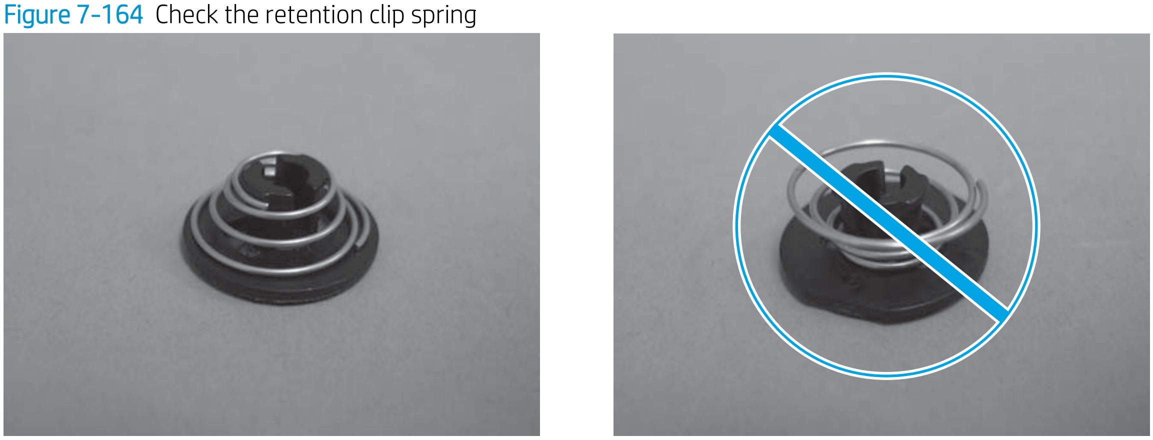
NOTE: If none of the retention clips remain attached to the white backing, skip the remaining sub-steps in this removal procedure.

Figure 7-163 Check the retention clips

4. If a spring comes off of a retention clip, make sure that it is correctly repositioned on the clip.

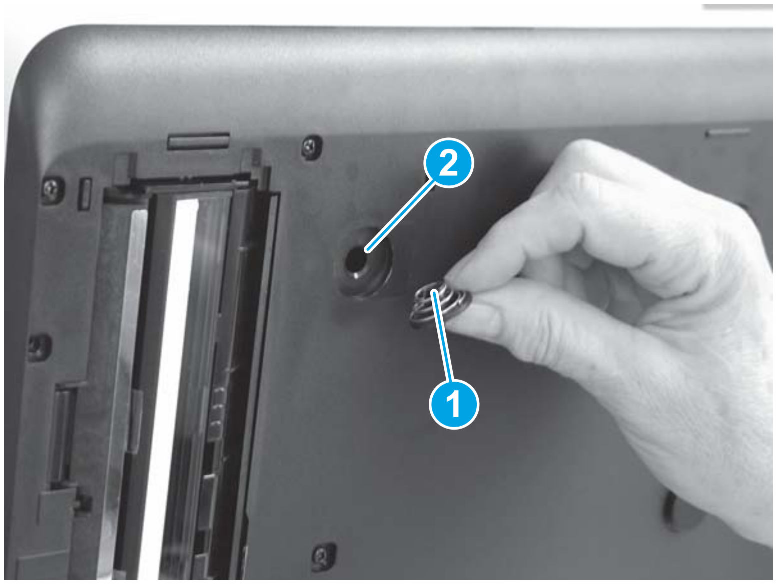
NOTE: If any of the retention clips or springs are damaged, replace them with the clips supplied in the kit.

Figure 7-164 Check the retention clip spring



5. Install the clip (callout 1) in the opening (callout 2) in the document feeder.

Figure 7-165 Install the retention clip



6. Press the clip to make sure it is securely installed.

Figure 7-166 Press the retention clip

Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Install the white backing (MFP)

Follow these steps to install the white backing.

1. Open the document feeder, and then place the replacement white backing on the flatbed scanner glass, as shown.

NOTE: Place the corner of the backing that does not have a hook-and-loop fastener in the upper-left corner of the scanner glass.

Figure 7-167 Install the white backing

2. Close the document feeder.

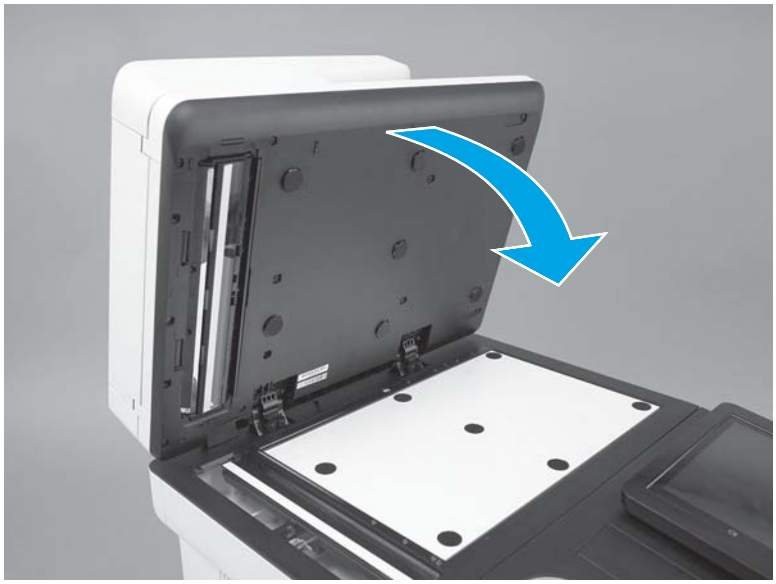


Figure 7-168 Close the document feeder

3. Open the document feeder and make sure that the white backing is securely attached.

Figure 7-169 Check the white backing

4. Close the document feeder.

Figure 7-170 Close the document feeder

Removal and replacement: Retention clips (M577/M578/E57540)

Learn about removing and replacing the document feeder white backing retention clips.

Before performing service

Turn the printer power off

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-23 Part information

Part number	Part description
5851-6573	Retention clips kit with instruction guide

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the retention clips (MFP)

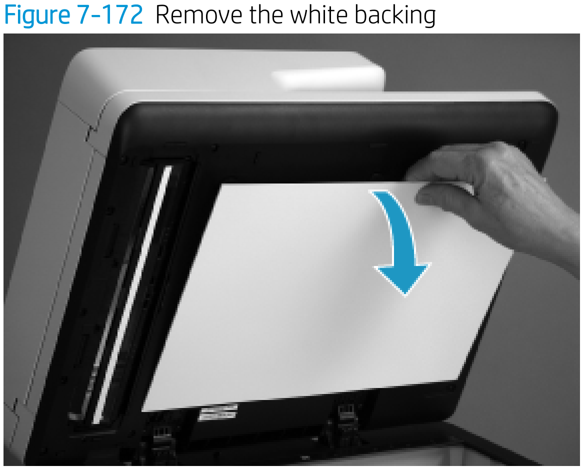
Follow these steps to remove the white backing retention clips.

1. Open the document feeder.

Figure 7-171 Open the document feeder

2. Remove the white backing.

Figure 7-172 Remove the white backing



3. If any of the retention clips (callout 1) remain attached to the white backing remove them. Check to see if any clips remain attached to the document feeder (callout 2).

NOTE: If none of the retention clips remain attached to the white backing, proceed to the next step.

Figure 7-173 Check the retention clips

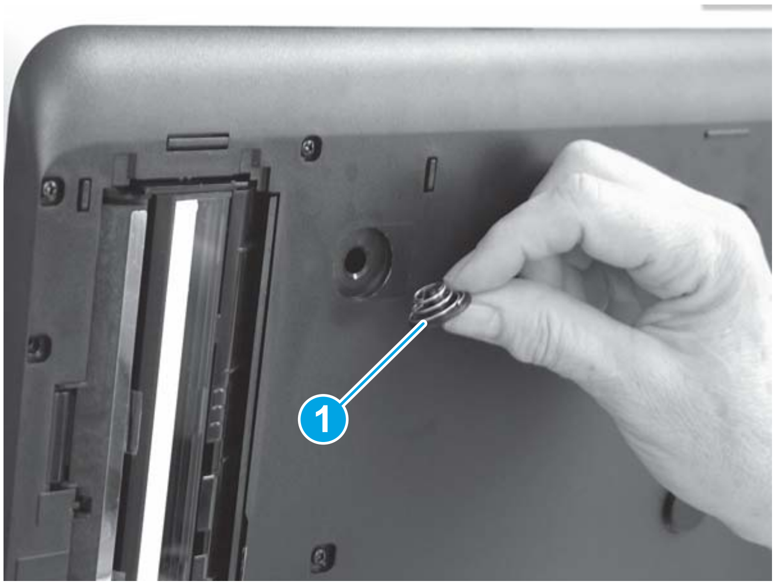
4. Remove any damaged retention clips from the document feeder.

TIP: Use the edge of a coin to loosen the clip.

Figure 7-174 Loosen damaged clips

5. Remove the retention clip (callout 1).

Figure 7-175 Remove the retention clip



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

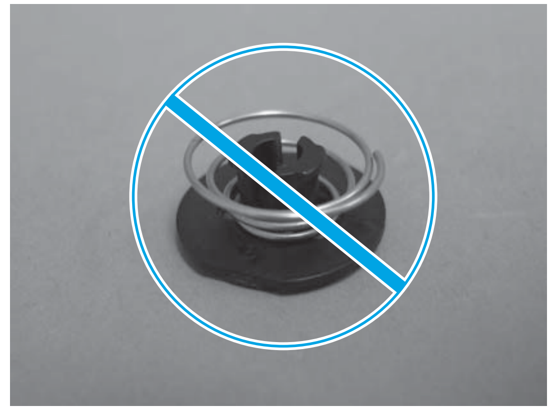
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Install the retention clips (MFP)

Follow these steps to install the white backing retention clips.

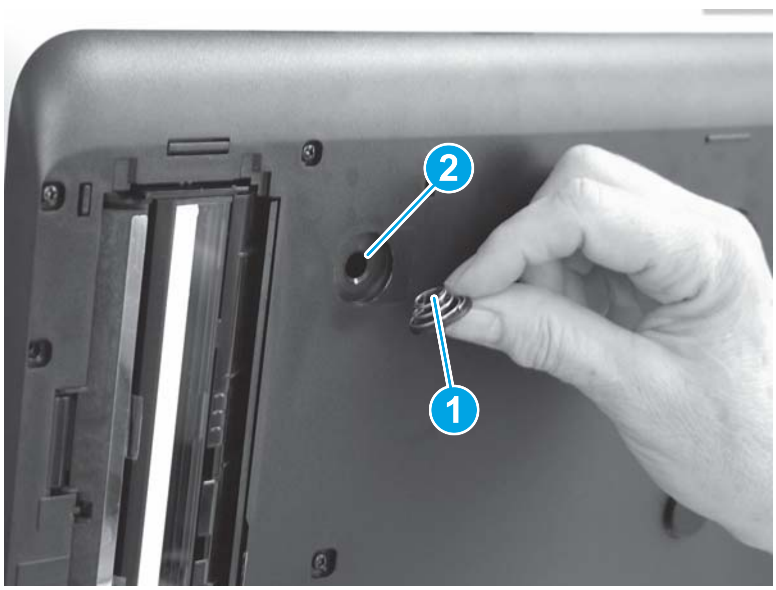
1. If a spring comes off of a retention clip, make sure that it is correctly repositioned on the clip.

Figure 7-176 Check the retention clip spring



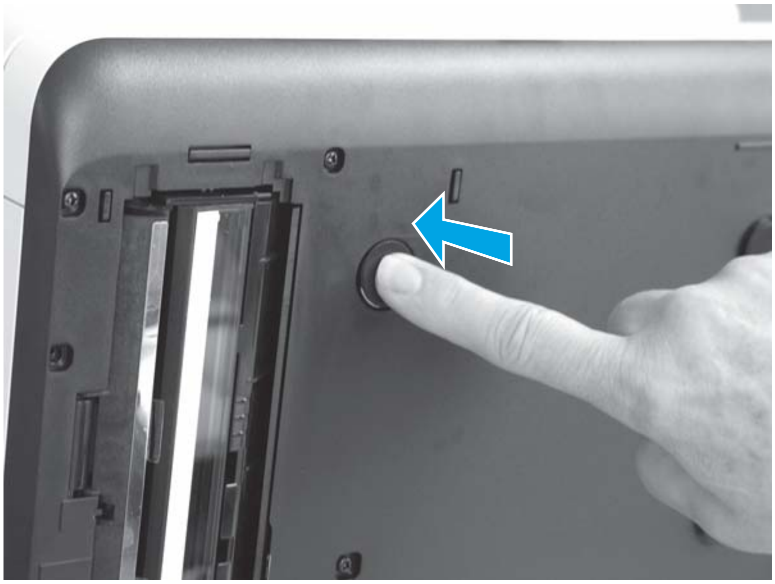
2. Install the clip (callout 1) in the opening (callout 2) in the document feeder. Repeat this step until all of the retention clips are installed.

Figure 7-177 Install the retention clip



3. Press the clip to make sure it is securely installed. Repeat this step until all of the retention clips are secure.

Figure 7-178 Press the retention clip



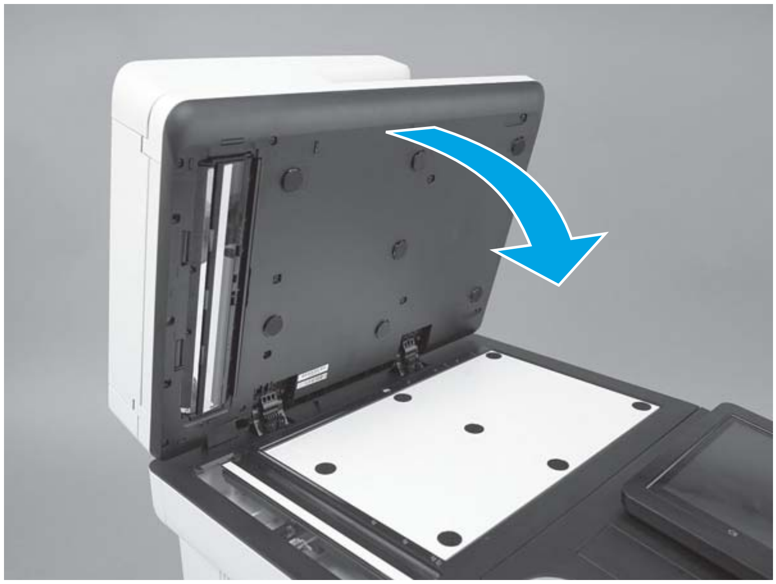
4. Place the white backing, on the flatbed scanner glass as shown.

NOTE: Place the corner of the backing that does not have a hook-and-loop fastener in the upper-left corner of the scanner glass.

Figure 7-179 Install the white backing

5. Close the document feeder.

Figure 7-180 Close the document feeder



6. Open the document feeder and make sure that the white backing is securely attached.

Figure 7-181 Check the white backing

7. Close the document feeder.

Figure 7-182 Close the document feeder

Removal and replacement: Document feeder rollers (M577/M578/E57540)

Learn about removing and replacing the document feeder rollers.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

> ⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.
>
> If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-24 Part information

Part number	Part description
W5U23-67901	ADF maintenance kit with instruction guide

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the pickup and feed roller assembly

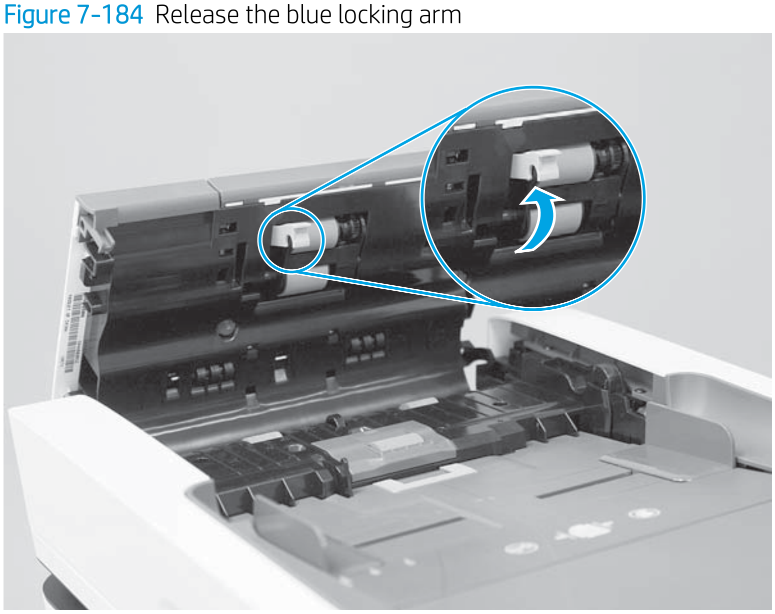
Follow these steps to remove the pickup and feed roller assembly.

1. Open the document-feeder jam access door.

Figure 7-183 Open the document-feeder jam access door

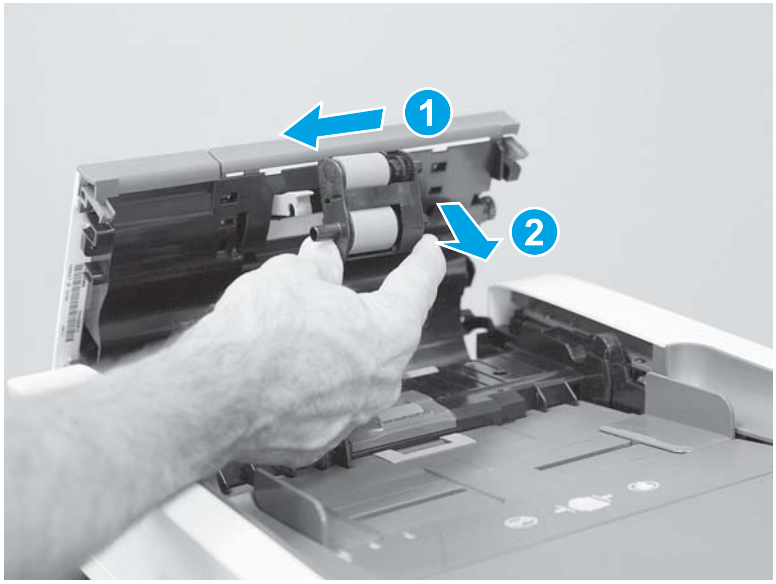
2. Release the blue locking arm.

Figure 7-184 Release the blue locking arm



3. Slide the pickup and feed roller assembly to the left (callout 1), and then pull it away from the document feeder (callout 2) to remove it.

Figure 7-185 Remove the roller assembly



Remove the separation roller

Follow these steps to remove the separation roller.

1. Rotate the top edge of the separation roller cover away from the printer to release it.

Figure 7-186 Release the separation roller cover

2. Remove the cover.

Figure 7-187 Remove the cover

3. Slide the separation roller to the left, and then lift it up and away from the document feeder to remove it.

Figure 7-188 Remove the roller

Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Install the separation roller

Follow these steps to install the separation roller.

1. Lower the separation roller into the document feeder, and then slide it to the right to install it.

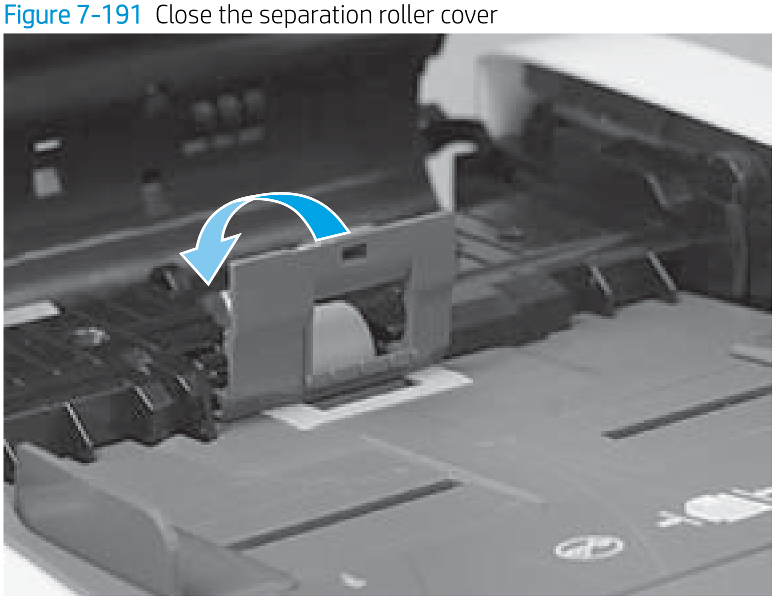
Figure 7-189 Install the roller

2. Position the bottom edge of the separation roller cover on the printer.

Figure 7-190 Position the separation roller cover

3. Rotate the cover down to close it.

Figure 7-191 Close the separation roller cover



4. The roller might seem loose until the cover is snapped closed. The cover helps hold the roller in place.

Figure 7-192 Snap the cover closed

Install the pickup and feed roller assembly

Follow these steps to install the pickup and feed roller assembly.

1. Position the pickup and feed roller assembly in the document feeder (callout 1), and then slide the assembly to the right (callout 2) to install it.

Figure 7-193 Install the roller assembly

2. Close the blue locking arm.

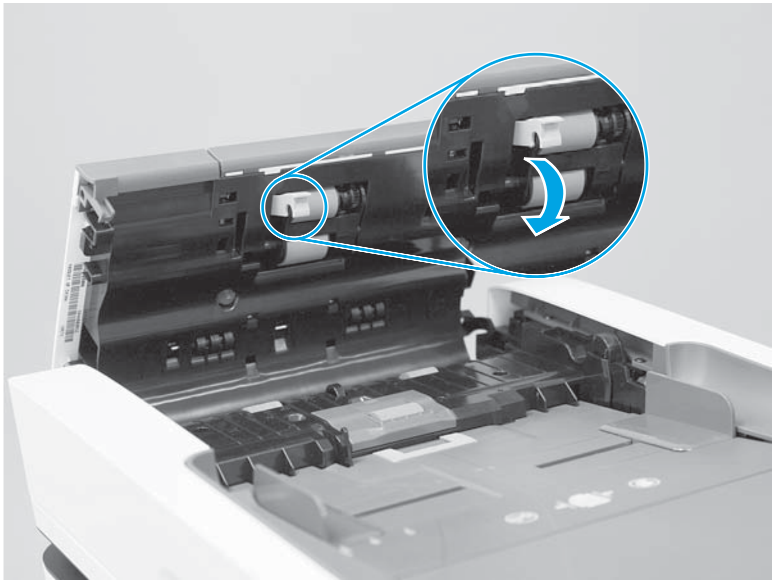


Figure 7-194 close the blue locking arm

3. Close the document-feeder jam access door.

Figure 7-195 Close the document-feeder jam access door

Customer self-repair (CSR) B parts and accessories

Customer self-repair (CSR) B parts are parts that a customer replaces without assistance from a field technician. These parts might require the use of tools.

Removal and replacement: Fixed tray guide kit

Learn about removing and replacing the fixed tray guide kit.

NOTE: The procedure in this section shows Tray 2 in the figures. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5.

Before performing service

Turn the printer power off

- Disconnect the power cable.

WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-25 Part information

Part number	Part description
5851-7708	Fixed tray guide kit with instruction guide NOTE: The kit includes four length guide locks, four width guide locks, and eight screws. Only one kit is required per printer.

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove Tray 2

Learn about removing Tray 2.

NOTE: A SFP printer is shown in this section. However, the procedure is correct for all printer models.

The figures in this section show Tray 2. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5. Always carefully read the instructions that accompany the figures.

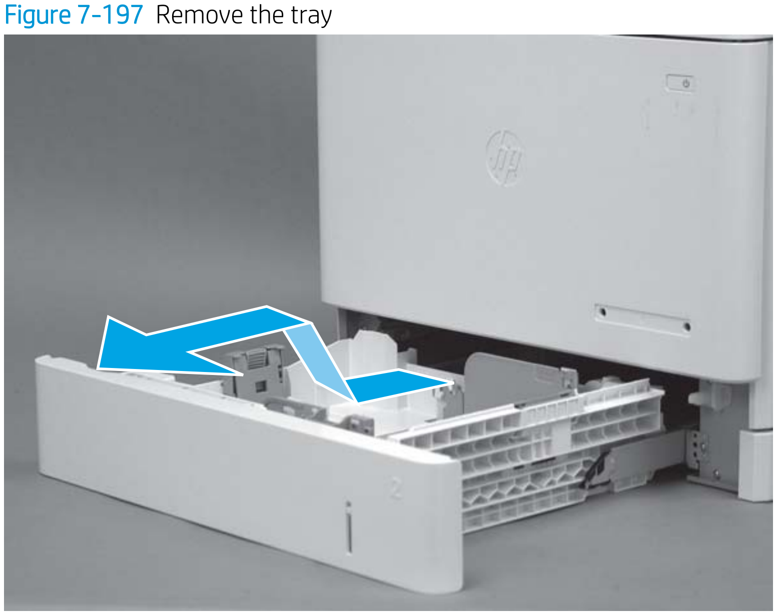
1. Pull the tray out until it stops.

Figure 7-196 Pull the tray out

2. Lift the front of the tray, and then pull it out of the printer to remove it.

NOTE: **For a replacement tray:** If the tray has Fixed Tray Guides installed and are still required, move hardware to new tray. If necessary, order new kit: 3GY25–67901 Kit - Fixed Tray Guide. Only one kit required per engine.

Figure 7-197 Remove the tray



Install the fixed tray guide

Learn about installing the fixed tray guide.

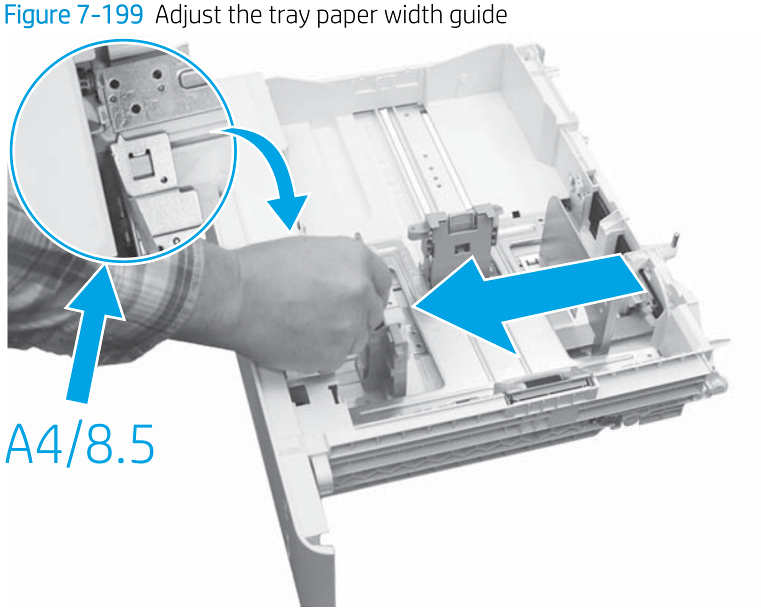
1. Identify the kit components.

- **Callout 1**: Width guide lock
- **Callout 2**: Length guide lock
- **Callout 3**: Screws (self tapping)

Figure 7-198 Identify kit components

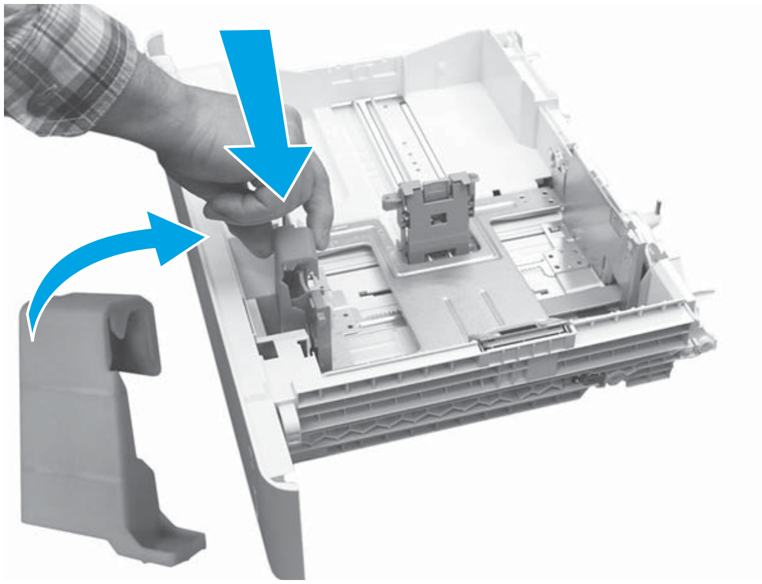
2. Adjust the sliding tray paper width guide to the **A4/8.5** setting.

Figure 7-199 Adjust the tray paper width guide



3. Install the width guide lock over the width guide in the tray.

Figure 7-200 Install the width guide lock

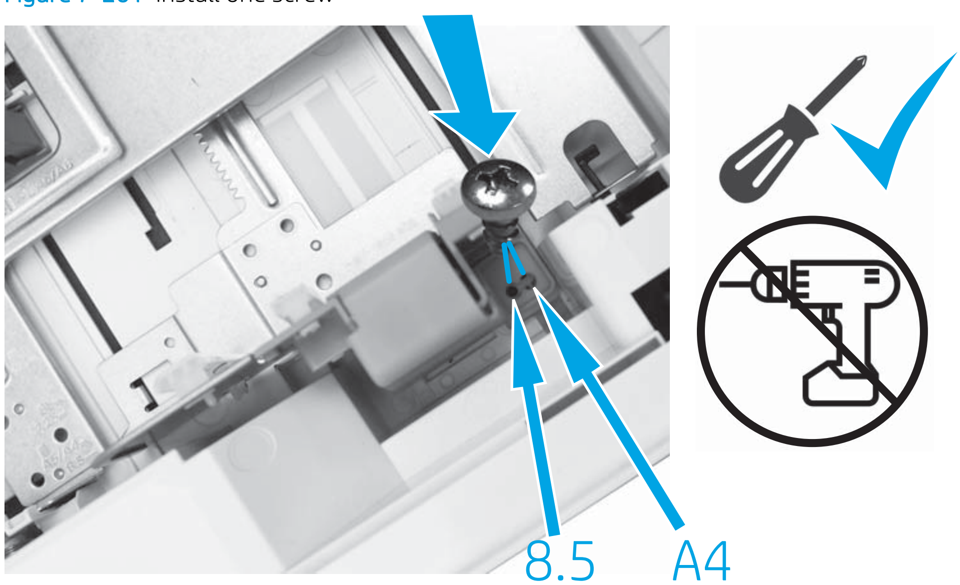


4. Install one screw to secure the lock in place.

⚠ CAUTION: Do not use a power screwdriver to install the screw.

NOTE: Verify that the tray paper width guide is set to the **A4/8.5** setting.

Figure 7-201 Install one screw



5. Adjust the sliding tray paper length guide to the **A4/11** setting.

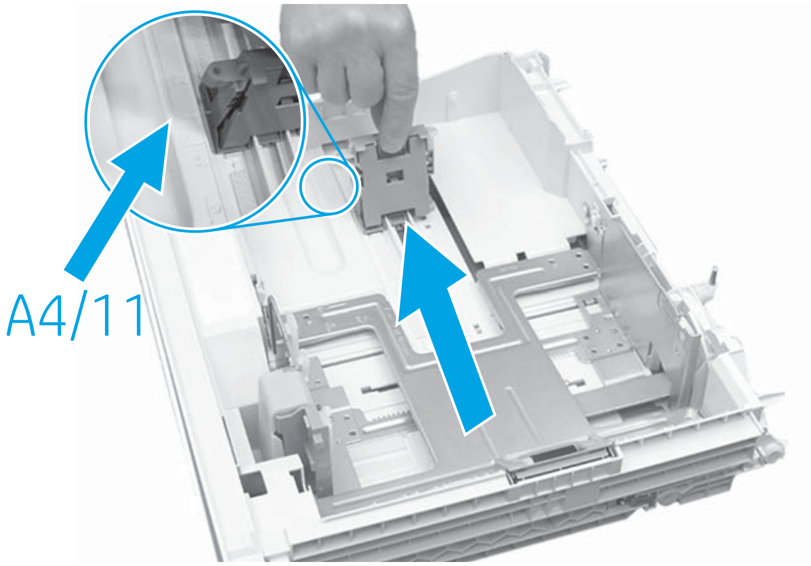


Figure 7-202 Adjust the tray paper length guide

6. To install the length guide lock on the length guide in the tray, do the following:

   1. Position the hooked end of the lock under the rear edge of the length guide (as shown).

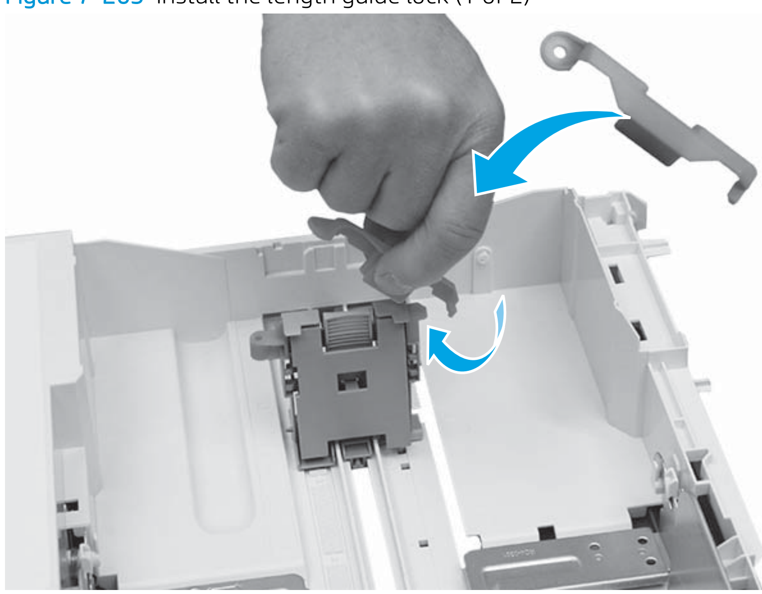


Figure 7-203 Install the length guide lock (1 of 2)

2. Rotate the lock down and onto the length guide.

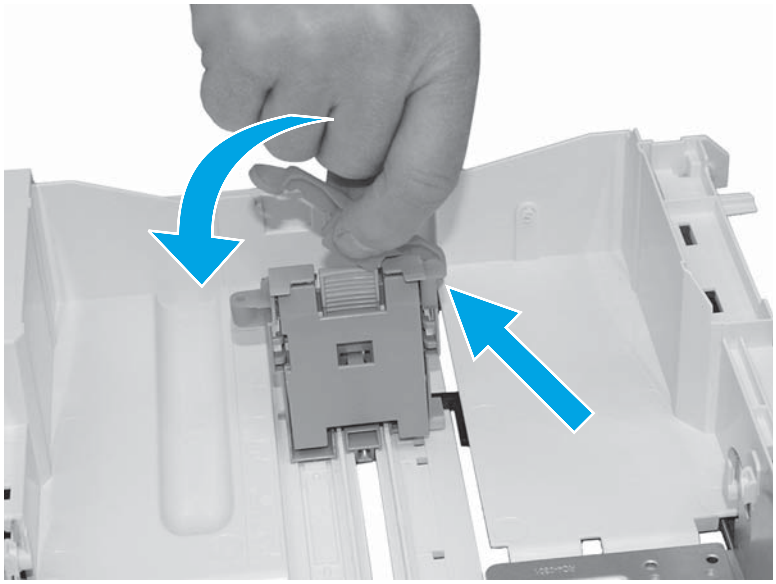
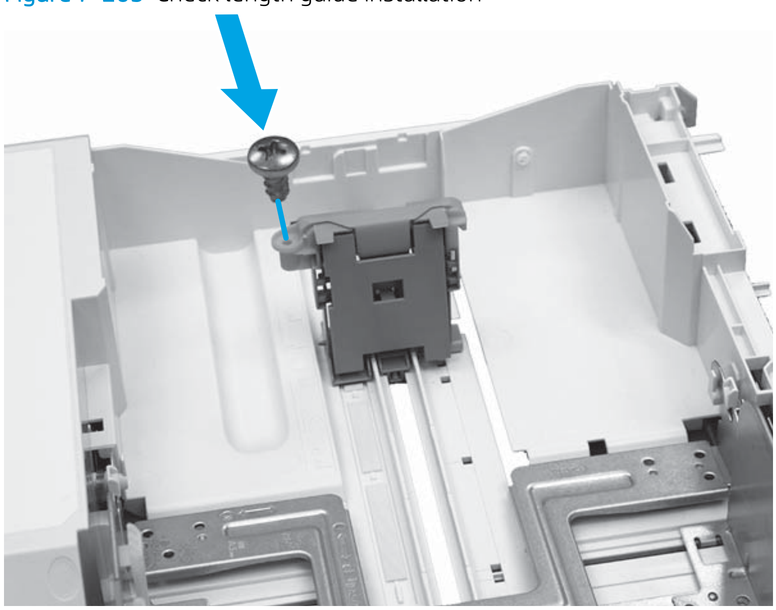


Figure 7-204 Install the length guide lock (2 of 2)

7. Verify that the lock is correctly installed on the length guide. The lock mounting screw hole must align with the hole in the guide.

IMPORTANT: If the hole in the lock and the guide are not aligned, remove the lock and reinstall it.

Figure 7-205 Check length guide installation

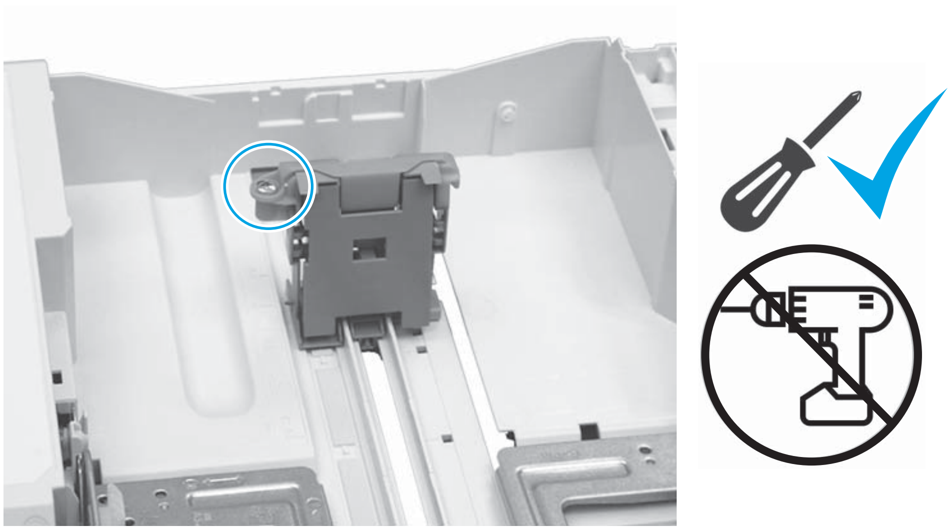


8. Install one screw to secure the lock in place.

> ⚠ **CAUTION:** Do not use a power screwdriver to install the screw.

> **NOTE:** Reinstall the tray.

Figure 7-206 Install one screw



Removal and replacement: Tray 2-X paper pickup roller and separation roller assemblies

Learn about removing and replacing the Tray 2-X rollers.

NOTE: The procedure in this section shows Tray 2 in the figures. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5.

Before performing service

Turn the printer power off

- Disconnect the power cable.

WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-26 Part information

Part number	Part description
RM2-6577-000CN	Kit-Tray 2-X roller

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the Tray 2-X paper pickup roller assembly

Learn about removing the Tray 2-X rollers.

NOTE: A SFP printer is shown in this section. However, the procedure is correct for all printer models.

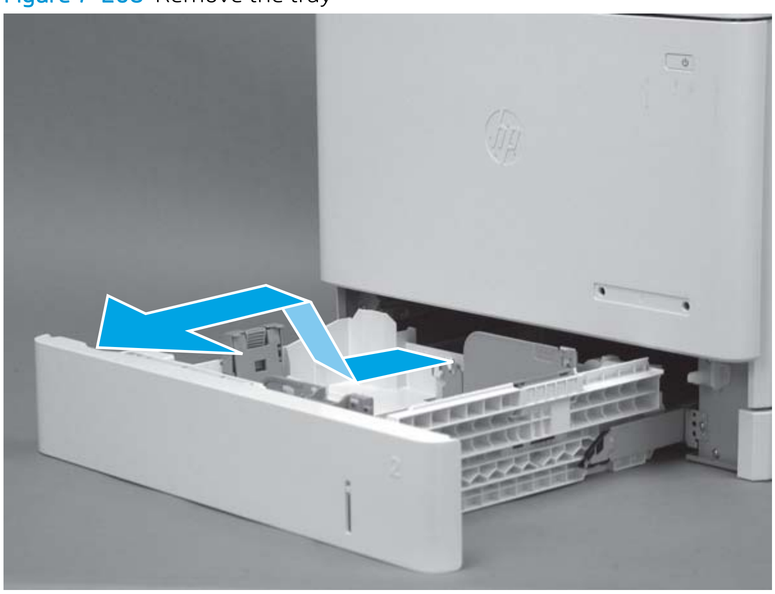
The figures in this section show Tray 2. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5. Always carefully read the instructions that accompany the figures.

1. Pull the tray out until it stops.

Figure 7-207 Pull the tray out

2. Lift the front of the tray, and then pull it out of the printer to remove it.

Figure 7-208 Remove the tray

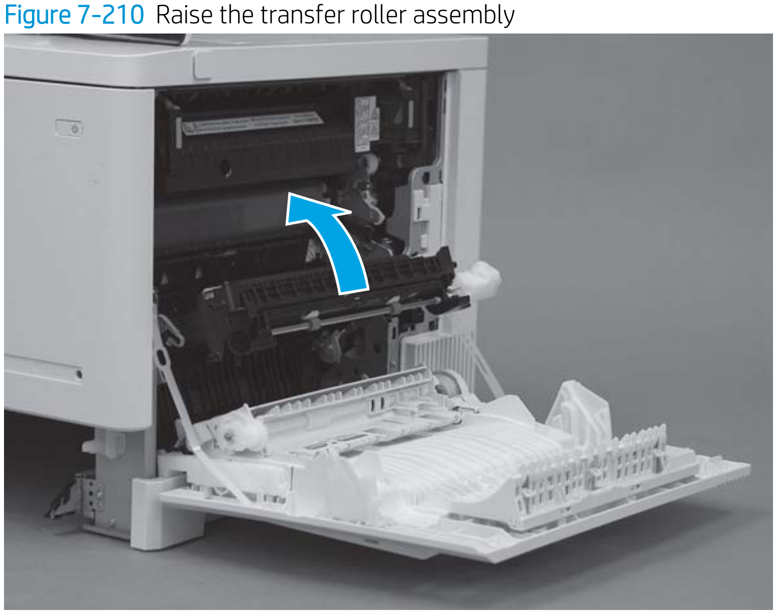


3. Open the right door.

Figure 7-209 Open the right door

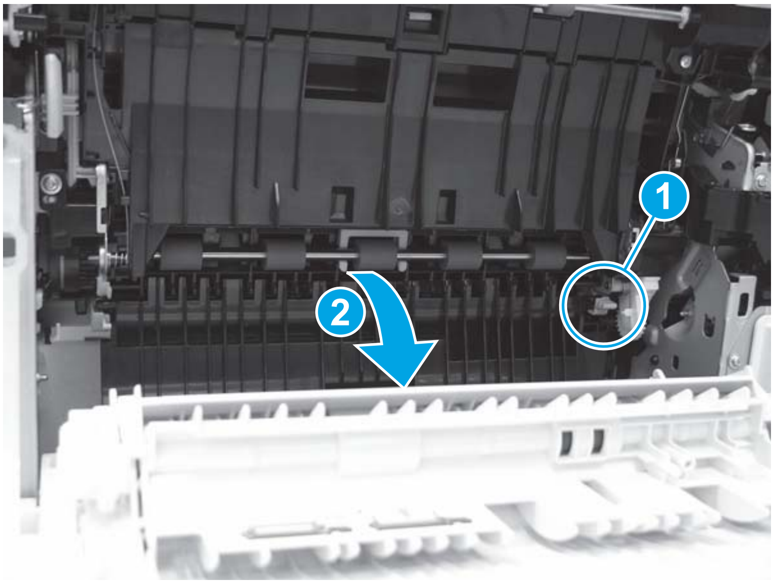
4. Carefully raise the transfer roller assembly up and into the printer.

Figure 7-210 Raise the transfer roller assembly



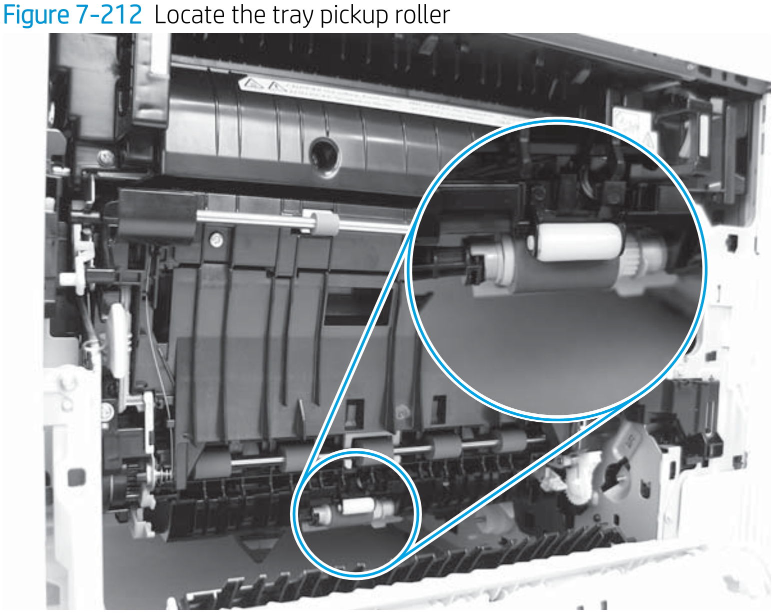
5. Release the green handle (callout 1), and then lower the paper guide (callout 2).

Figure 7-211 Lower the paper guide



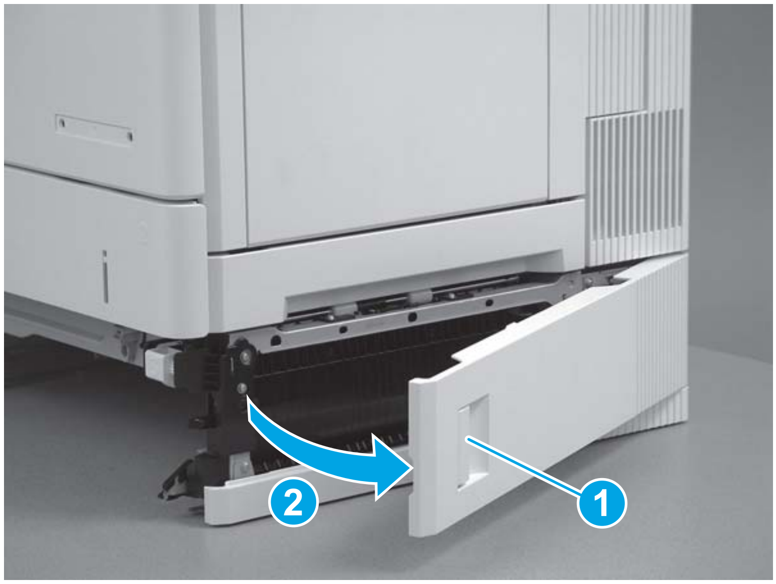
6. Locate the tray pickup roller assembly.

Figure 7-212 Locate the tray pickup roller



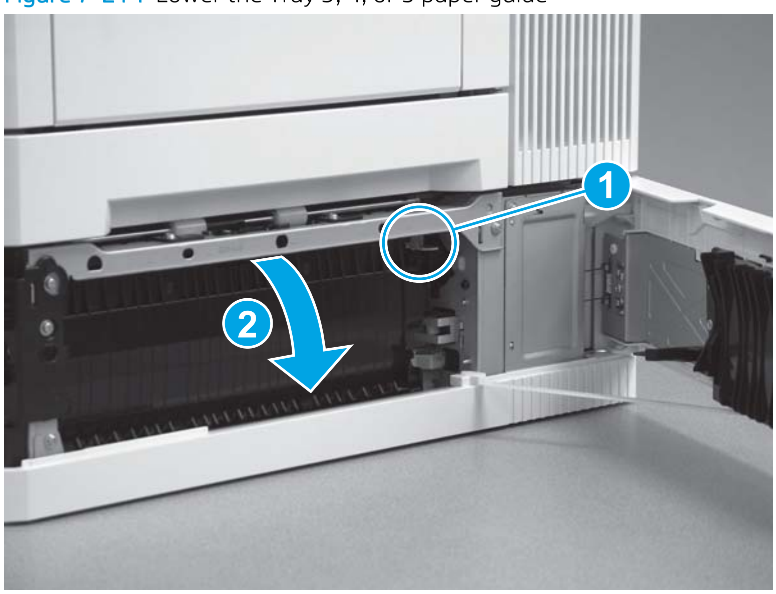
7. **Trays 3, 4, or 5 only**: Release the latch (callout 1), and then open the right door (callout 2).

Figure 7-213 Open the Tray 3, 4, or 5 right door



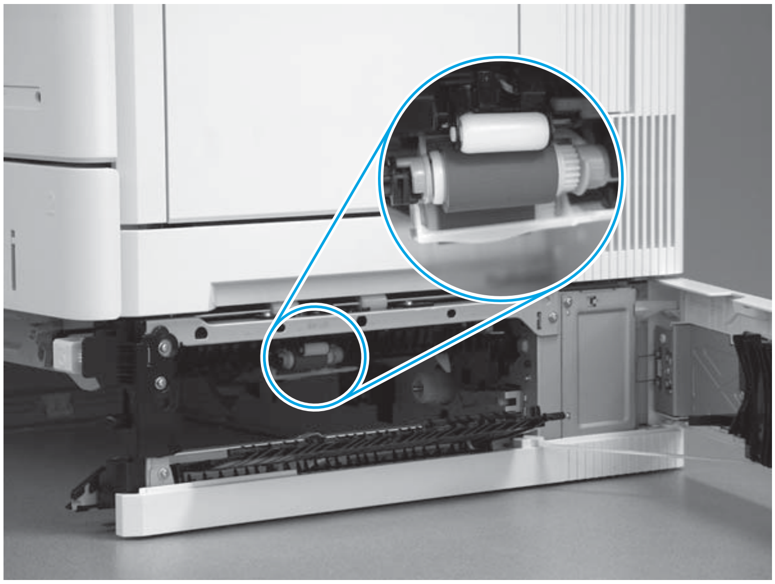
8. **Trays 3, 4, or 5 only**: Release the green handle (callout 1), and then lower the paper guide (callout 2).

Figure 7-214 Lower the Tray 3, 4, or 5 paper guide



9. **Trays 3, 4, or 5 only**: Locate the tray pickup roller assembly.

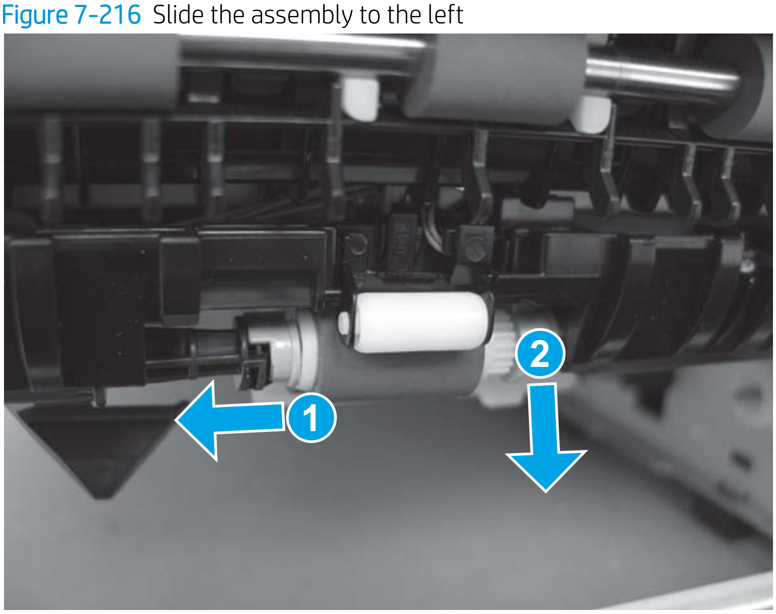
Figure 7-215 Locate the Tray 3, 4, or 5 pickup roller assembly



10. Slide the assembly to the left to compress the spring loaded shaft (callout 1), and then rotate the right end of the assembly down and away from the printer (callout 2).

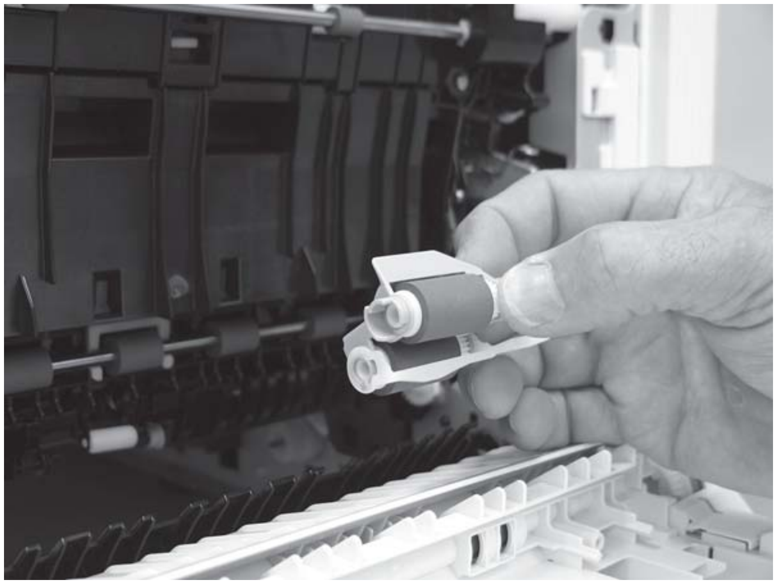
TIP: It might be easier to access the roller through the tray cavity, while viewing it through the right door opening.

Figure 7-216 Slide the assembly to the left



11. Remove the roller assembly.

Figure 7-217 Remove the roller assembly

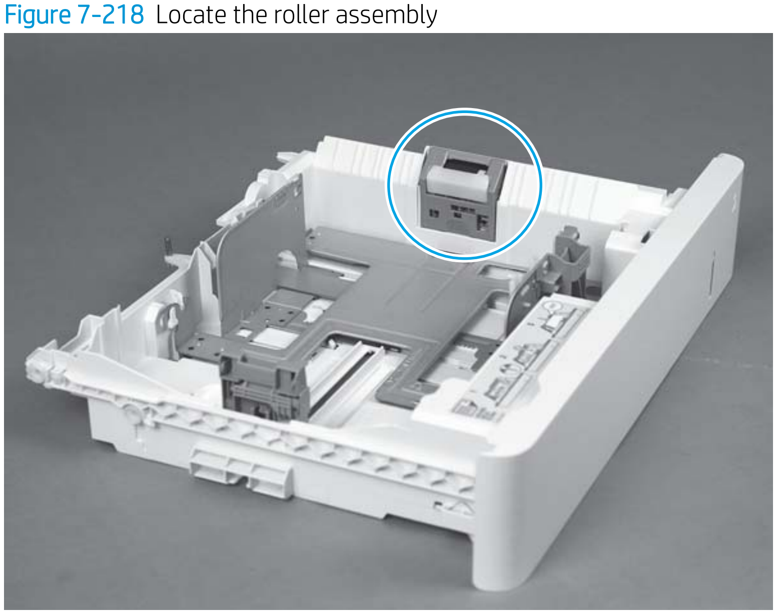


Remove the Tray 2-X separation roller

Learn about removing the Tray 2-X separation roller.

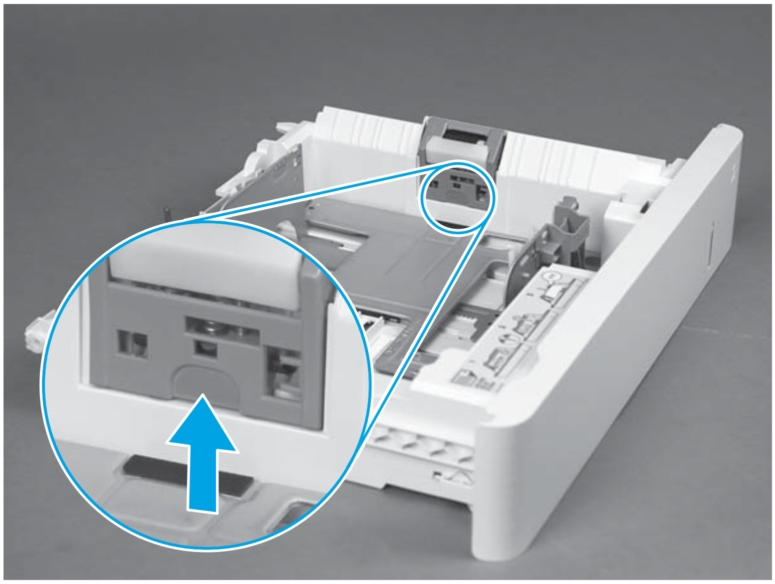
1. Locate the tray separation roller.

Figure 7-218 Locate the roller assembly



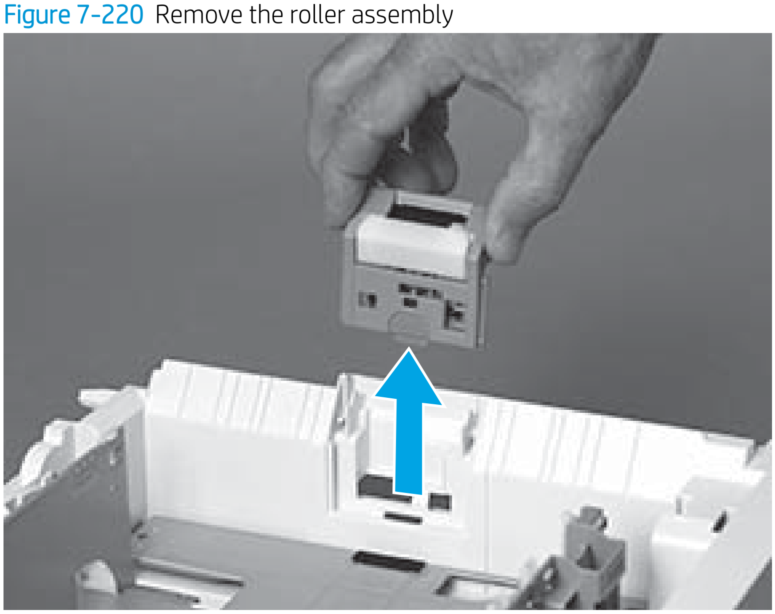
2. Push up on the blue label to release the roller assembly.

Figure 7-219 Push up on the blue label



3. Slide the roller assembly straight up to remove it.

Figure 7-220 Remove the roller assembly



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

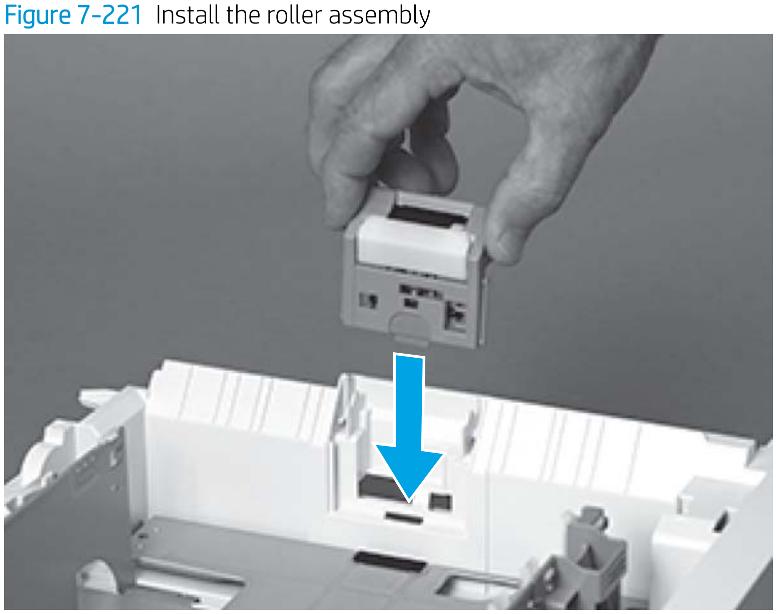
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Install the Tray 2-X separation roller

Learn about installing the Tray 2-X separation roller.

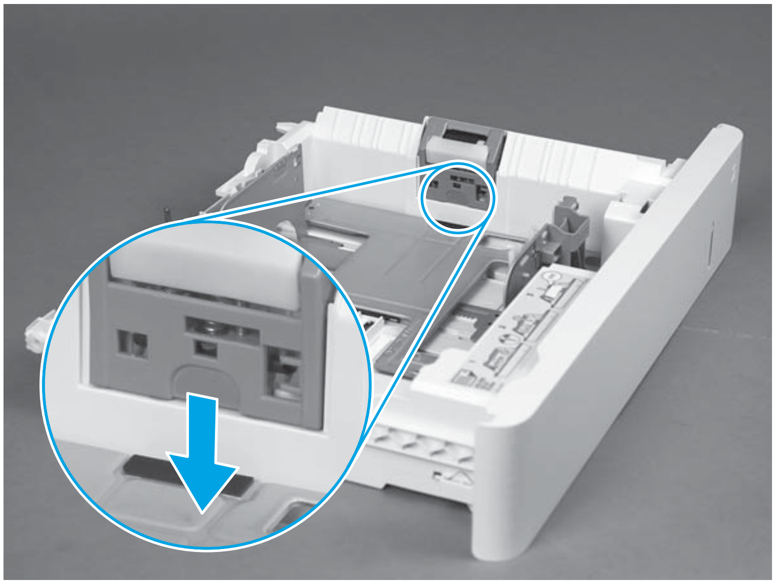
1. Slide the roller assembly straight into the tray to install it.

Figure 7-221 Install the roller assembly



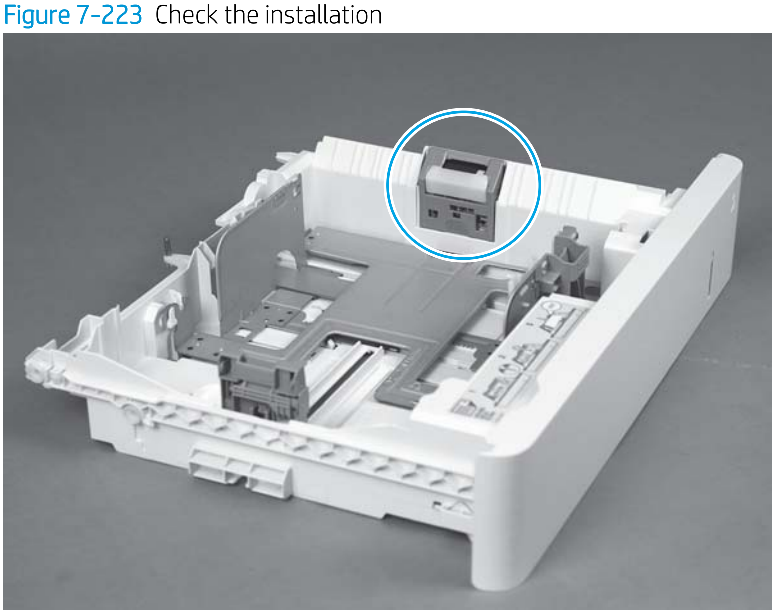
2. Make sure that the roller assembly is fully seated.

Figure 7-222 Fully seat the roller assembly



3. Verify that the roller assembly is correctly installed—it should be firmly attached to the tray.

Figure 7-223 Check the installation



Install the Tray 2-X paper pickup roller assembly

Learn about installing the Tray 2-X rollers.

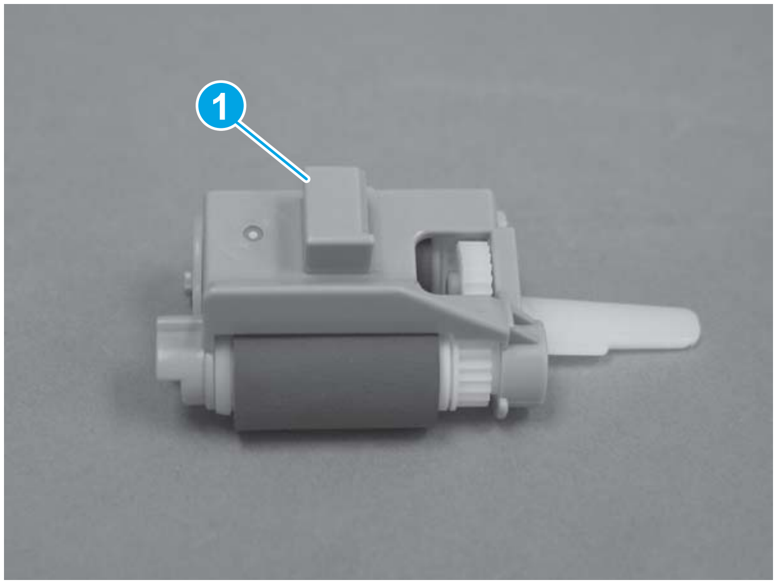
NOTE: A SFP printer is shown in this section. However, the procedure is correct for all printer models.

The figures in this section show Tray 2. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5. Always carefully read the instructions that accompany the figures.

1. Before proceeding, take note of the mounting tab (callout 1) on the replacement roller assembly.

IMPORTANT: When correctly installed, a black-plastic protrusion in the printer fits into this tab to hold the roller in the upright position.

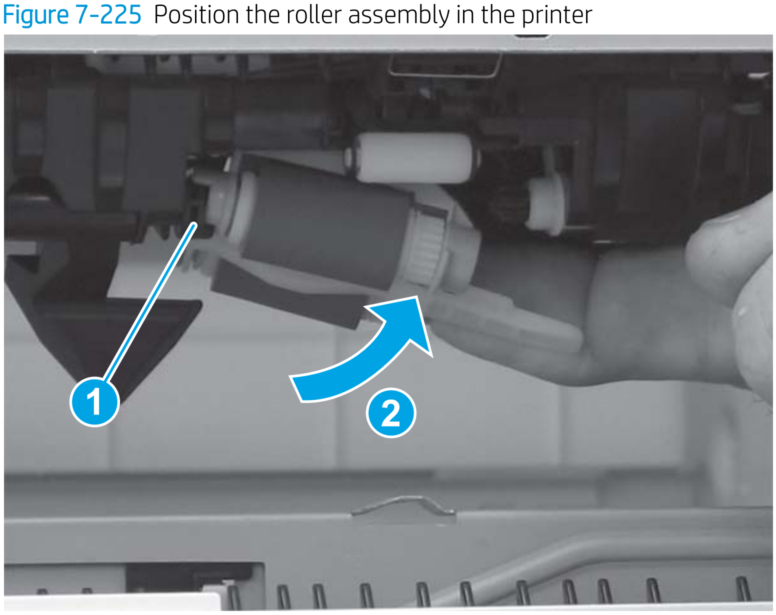
Figure 7-224 Note the mounting tab



2. Position the roller assembly in the printer with the spring loaded shaft compressed (callout 1), and then rotate the right end of the assembly up and into the printer (callout 2).

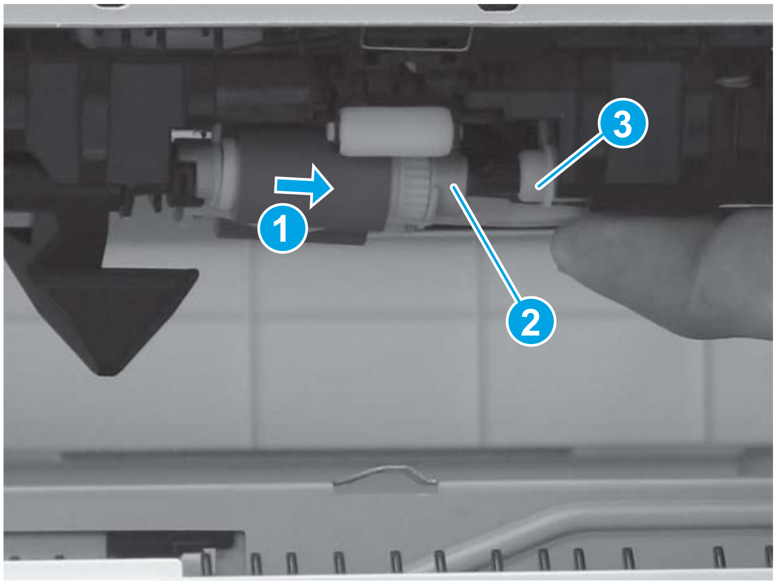
TIP: It might be easier to access the roller through the tray cavity, while viewing it through the right door opening.

Figure 7-225 Position the roller assembly in the printer



3. Carefully release the spring loaded shaft (callout 1) with the roller in place. The collar (callout 2) on the assembly fits over the bushing (callout 3) in the printer.

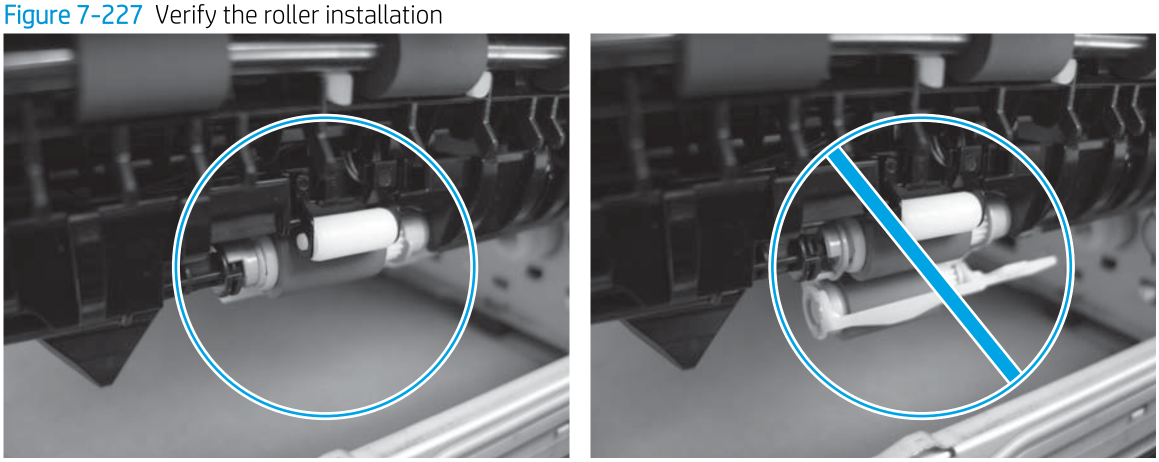
Figure 7-226 Release the spring loaded shaft



4. Make sure that the roller assembly is correctly installed. It must not hang down into the tray cavity. If the roller hangs down into the tray cavity, remove it, and then reinstall it.

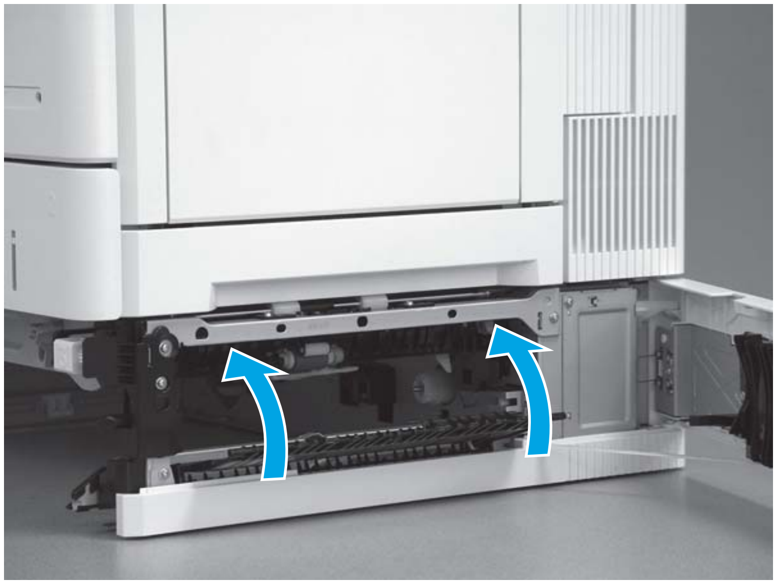
⚠ CAUTION: If the roller assembly is not correctly installed, it will be damaged when the tray is installed

Figure 7-227 Verify the roller installation



5. **Trays 3, 4, or 5 only**: Raise the paper guide.

Figure 7-228 Raise the Tray 3, 4, or 5 paper guide



6. **Trays 3, 4, or 5 only**: Close the right door.

Figure 7-229 Close the Tray 3, 4, or 5 right door

7. Close the right door.

Figure 7-230 Close the right door

8. With the front of the tray slightly lifted, align the sides of the tray with the rails in the printer, and then carefully slide the tray into the printer.

TIP: As the tray slides into the printer, lower the front of it.

Figure 7-231 Install the tray

9. Close the tray.

Figure 7-232 Close the tray

Removal and replacement: Intermediate transfer belt (ITB)

This document provides instructions about removing and replacing the intermediate transfer belt (ITB) assembly.

View a video demonstration of removing and replacing the Intermediate transfer belt.

Mean time to repair: 5 minutes

Service level: Basic

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

To order a replacement assembly, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts

Table 7-27 Part information

Part number	Part description
RM2-6576-000CN	Intermediate transfer belt assembly
B5L24-69001	Intermediate transfer belt assembly (refurbished)

Required tools

No special tools are required to install this assembly.

After performing service

Make sure that the right door is fully closed after replacing the ITB.

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print a configuration page to make sure that the printer is functioning correctly.

Remove the ITB

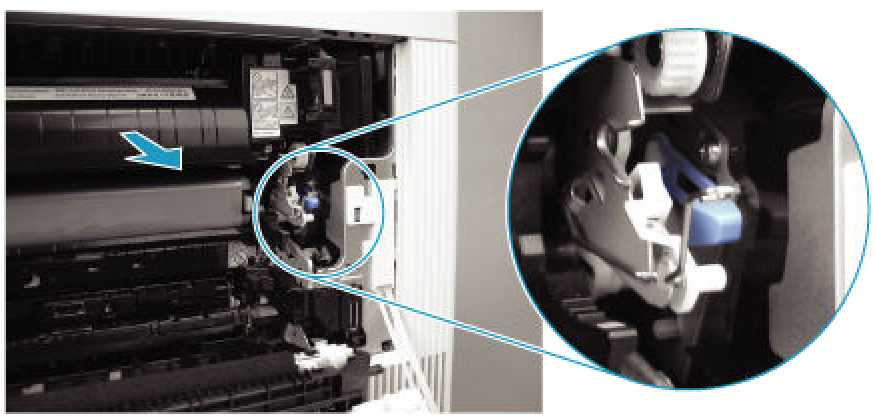
Follow these steps to remove the ITB.

1. Open the right door.

Figure 7-233 Open the right door

2. Pull the blue lever to release the ITB drive coupling.

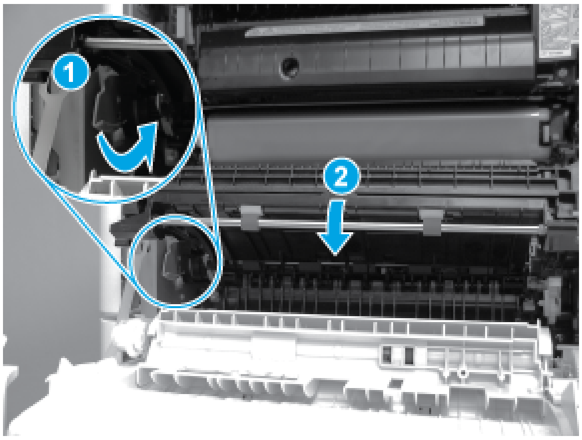
Figure 7-234 Release the ITB drive coupling



3. Push in on the blue arm to release the secondary transfer roller assembly, and then completely lower the assembly.

NOTE: Press the blue arm on the secondary transfer roller assembly a second time to release the roller assembly when it stops at the halfway open position.

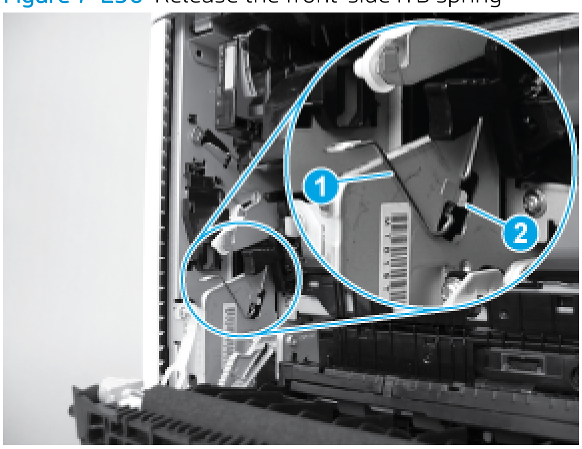
Figure 7-235 Lower the secondary transfer roller assembly



4. Release the left-side ITB spring (callout 1) from the tab (callout 2).

NOTE: For late production M552/M553 printers and all M554/m555 printers, this ITB spring is not installed.

Figure 7-236 Release the front-side ITB spring

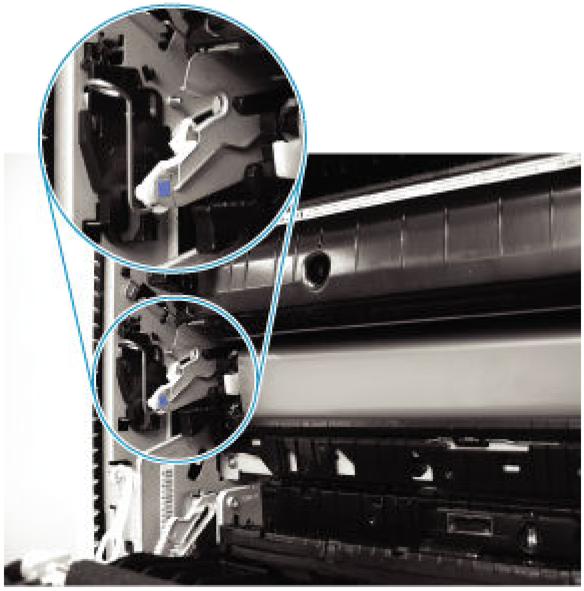


5. Place the left-side ITB spring on the holder to keep it out of the way.

NOTE: For late production M552/M553 printers and all M554/m555 printers, this ITB spring is not installed.

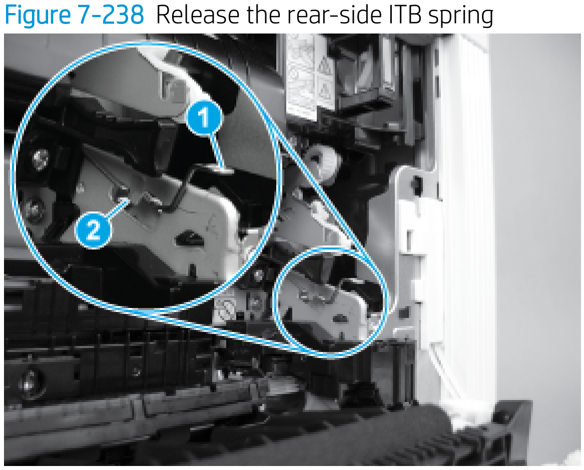
TIP: The holder is colored blue to help locate it.

Figure 7-237 Place the spring on the holder



6. Release the right-side ITB spring (callout 1) from the tab (callout 2).

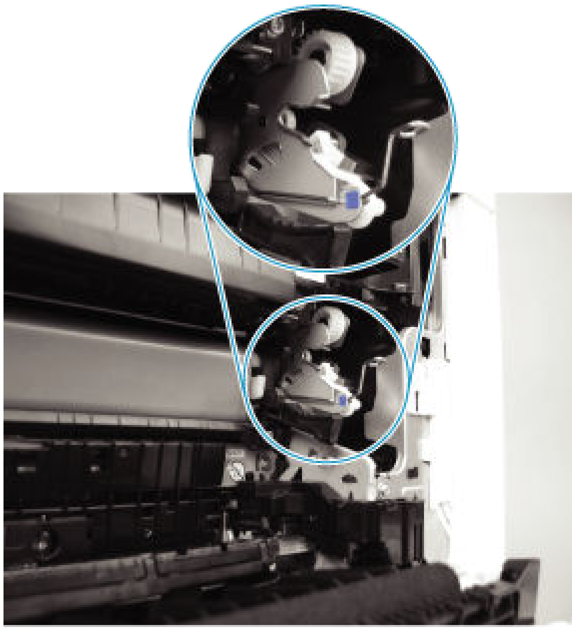
Figure 7-238 Release the rear-side ITB spring



7. Place the right-side ITB spring on the holder to keep it out of the way.

TIP: The holder is colored blue to help locate it.

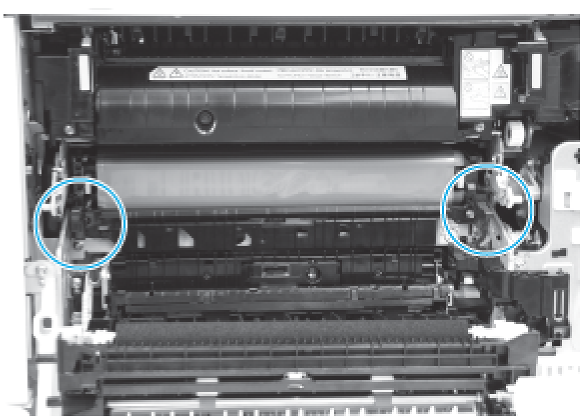
Figure 7-239 Place the spring on the holder



8. Grasp the two blue handles on the ITB.

CAUTION: If the ITB is removed to access other assemblies in the printer, use care. The ITB is a sensitive assembly. Be careful when handling the ITB so that it is not damaged. Always place the ITB in a safe and protected location.

Figure 7-240 Grasp the ITB handles



9. Pull the ITB out of the printer to remove it.

⚠ CAUTION: Do not touch the grey-plastic belt. Skin oils and fingerprints on the belt can cause print-quality problems.

Figure 7-241 Remove the ITB

Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

⚠ CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

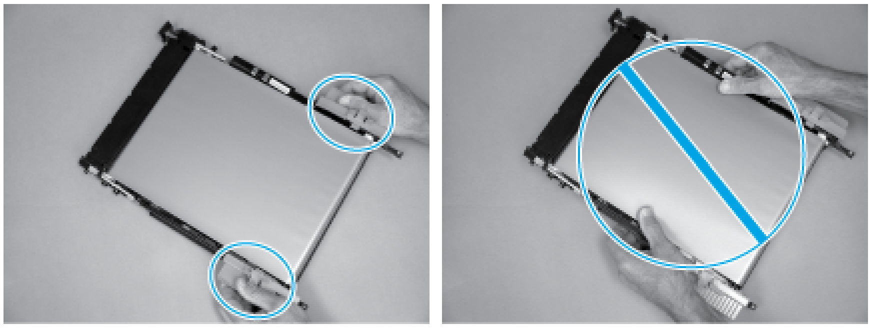
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Install the ITB

Follow these steps to install the ITB.

1. Hold the ITB by the orange handles.

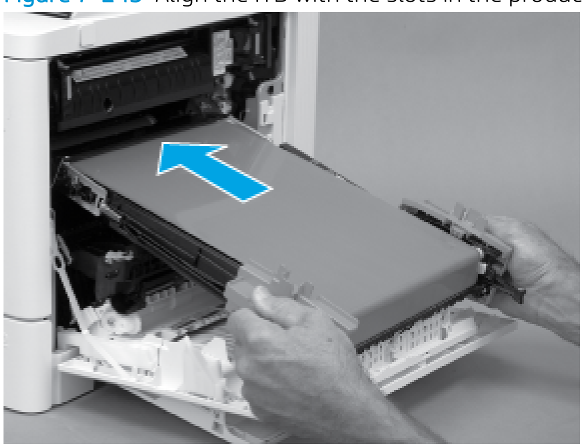
Figure 7-242 Handle the ITB by the edges



2. Align the ITB with the slots in the printer, and then carefully push it into the printer.

NOTE: Be careful. Do not dislodge the ITB retainer springs from the holders on the chassis. The springs can interfere with installing the ITB.

Figure 7-243 Align the ITB with the slots in the product

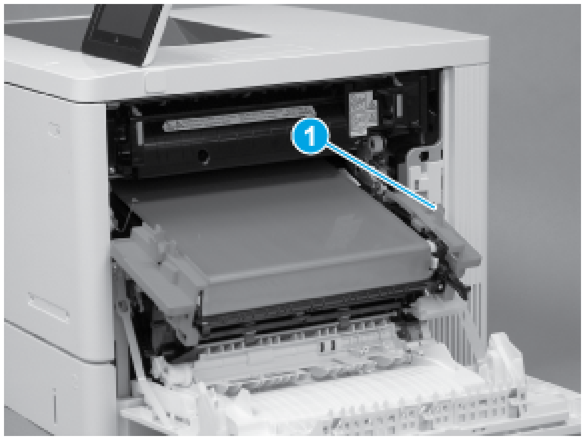


3. Continue to carefully push the ITB into the printer until it the orange handles stop it.

Figure 7-244 Orange handles stop

4. Release one tab (callout 1).

Figure 7-245 Release one tab



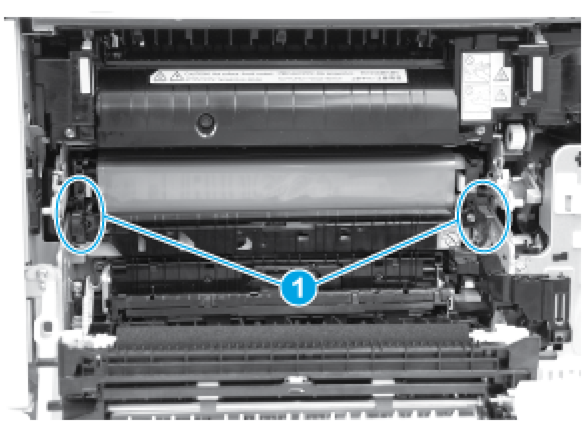
5. Remove the orange handle. Repeat this step for the remaining orange handle.

TIP: HP recommends recycling the plastic handles.

Figure 7-246 Remove the orange handle

6. Continue to carefully push the ITB into the printer until it is fully installed.

Figure 7-247 Install the ITB

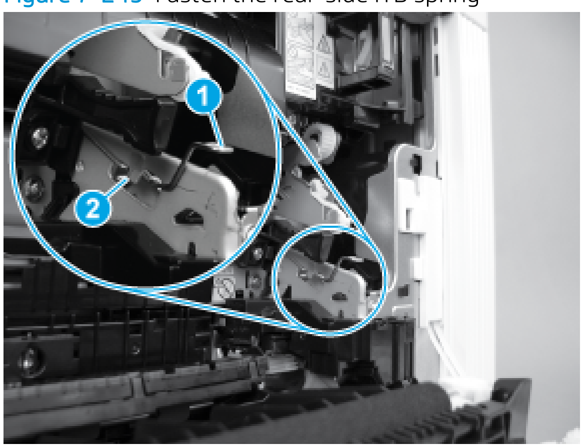


7. Remove the right-side ITB spring from the holder.

Figure 7-248 Remove the spring from the holder

8. Fasten the right-side ITB spring (callout 1) under the tab (callout 2).

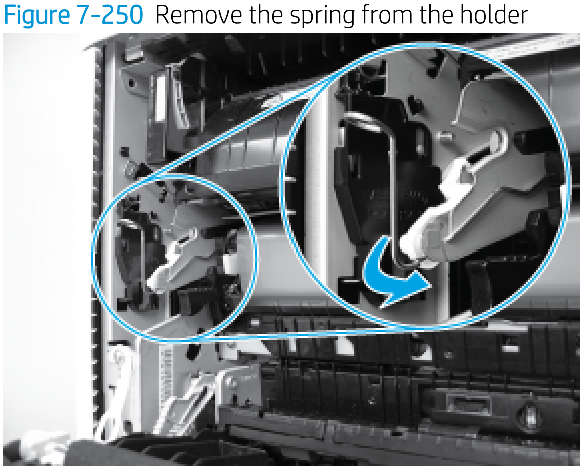
Figure 7-249 Fasten the rear-side ITB spring



9. Remove the left-side ITB spring from the holder.

NOTE: For late production M552/M553 printers and all M554/m555 printers, this ITB spring is not installed.

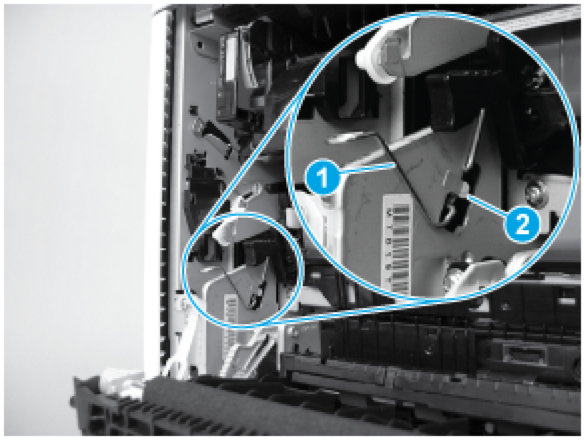
Figure 7-250 Remove the spring from the holder



10. Fasten the left-side ITB spring (callout 1) under the tab (callout 2).

NOTE: For late production M552/M553 printers and all M554/m555 printers, this ITB spring is not installed.

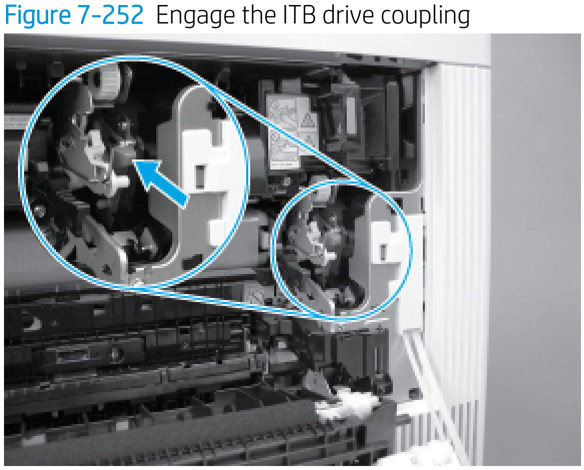
Figure 7-251 Fasten the front-side ITB spring



11. Push in the blue lever to engage the ITB drive coupling.

IMPORTANT: If the ITB drive coupling is not fully engaged, the right door will not properly close.

Figure 7-252 Engage the ITB drive coupling



12. Close the right door.

TIP: The right door should close easily if the ITB assembly is correctly installed.

Figure 7-253 Close the right door

Removal and replacement: Document feeder / scanner

Learn about document feeder and scanner parts removal and replacement.

Removal and replacement: Document feeder (M577/M578/E57540)

This document provides the procedures to remove and replace the document feeder (MFP).

View a video demonstration of removing and replacing the document feeder.

Mean time to repair: 20 minutes

Service level: Intermediate

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-28 Part information

Part number	Part description
B5L47-67906	Kit - ADF whole unit Enterprise
B5L47-67907	Kit - ADF whole unit Workflow

Required tools

- #2 Phillips screwdriver with a magnetic tip.
- Small flat-blade screwdriver.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

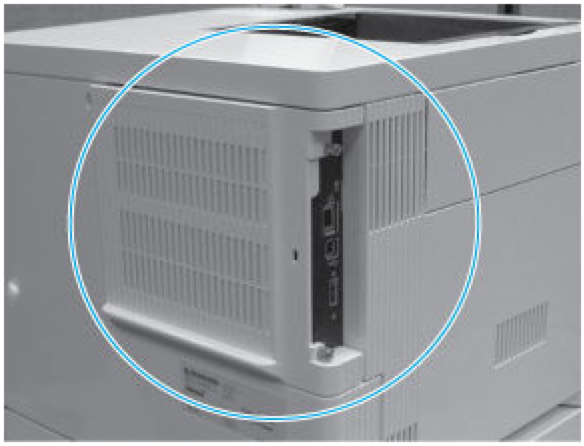
Use the document feeder to make a copy to make sure that it is properly functioning.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

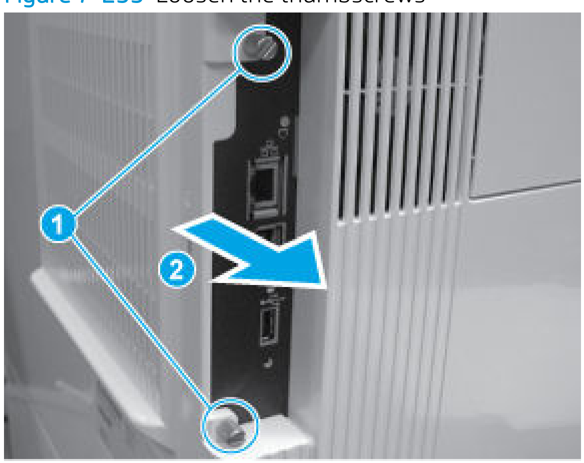
Figure 7-254 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-255 Loosen the thumbscrews



Remove the rear upper cover (MFP)

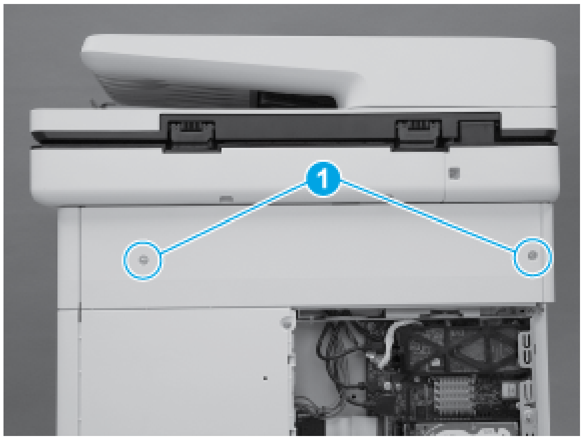
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

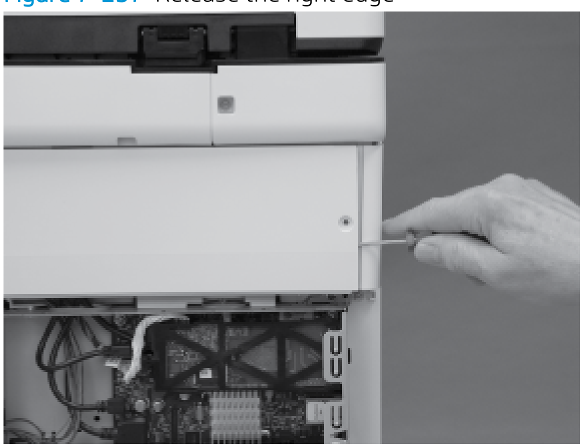
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-256 Remove two screws



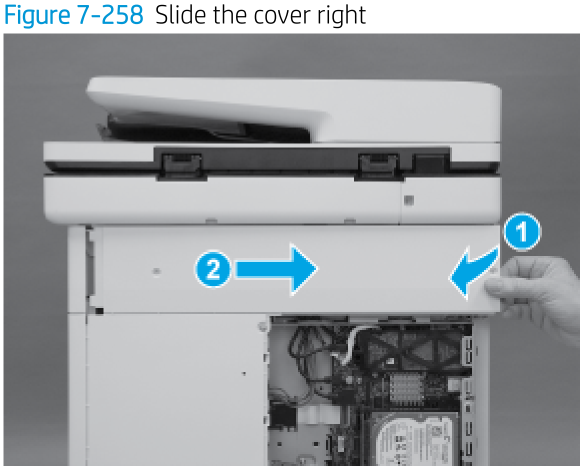
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-257 Release the right edge



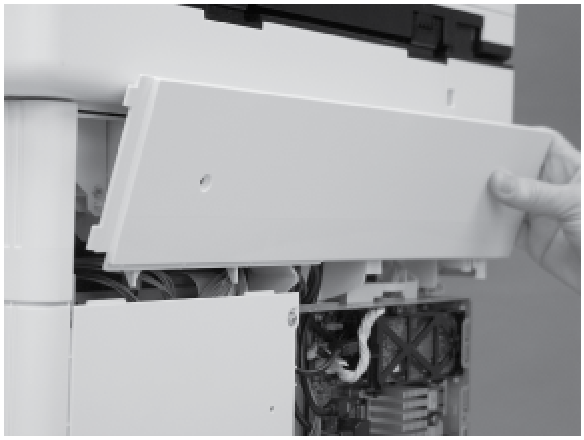
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-258 Slide the cover right



4. Remove the cover.

Figure 7-259 Remove the cover



Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

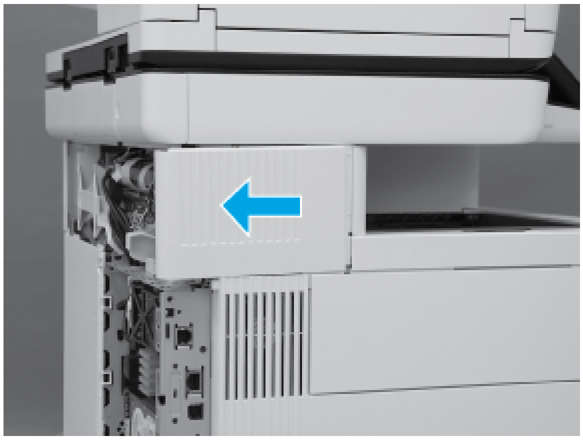
NOTE: This procedure is for MFP models only.

1. At the left side of the printer, release one tab (callout 1).

Figure 7-260 Release one tab

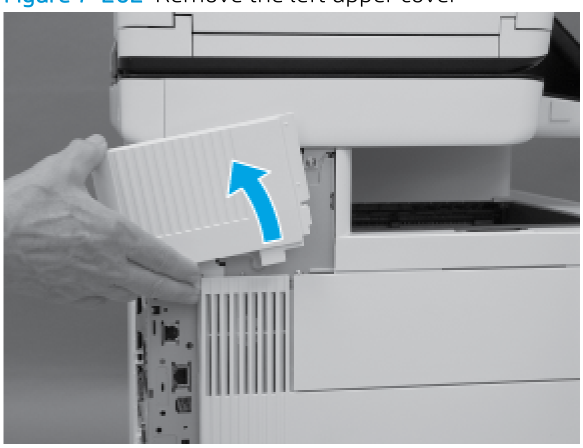
2. Slide the left upper cover toward the back of the printer.

Figure 7-261 Slide the cover back



3. Rotate the cover up to remove it.

Figure 7-262 Remove the left upper cover



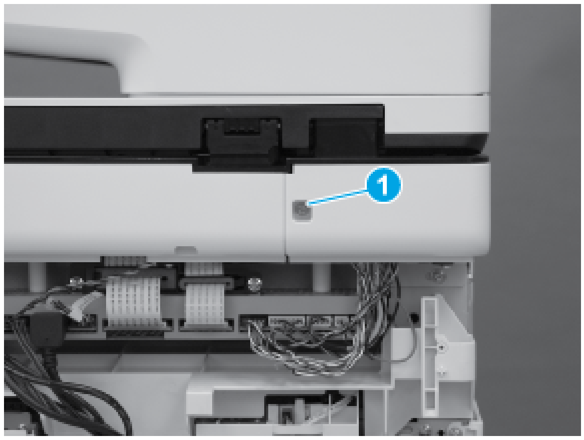
Remove the document feeder (MFP)

Follow these steps to remove the document feeder (MFP).

1. Remove one screw (callout 1).

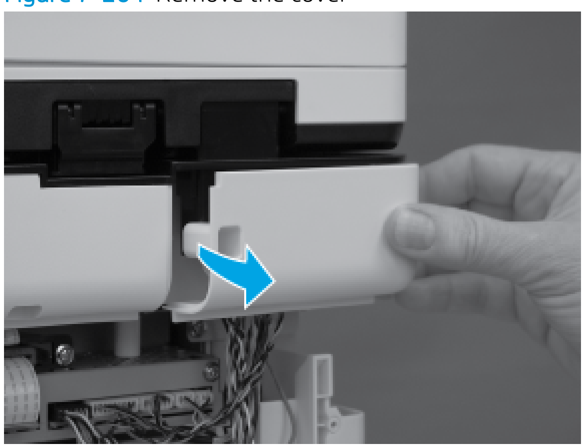
TIP: This is a self-tapping screw for plastic. When reinstalling, rotate the screw counterclockwise to align it with the existing thread pattern, and then carefully turn it clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw hole.

Figure 7-263 Remove one screw



2. Rotate the cover away from the printer to remove it.

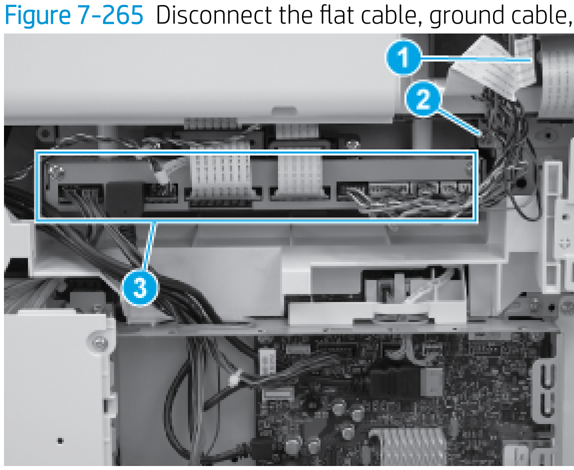
Figure 7-264 Remove the cover



3. Disconnect one flat cable (callout 1), remove one ground screw (callout 2) to release the grounding cable, and then disconnect all of the connectors (callout 3) on the scanner control board.

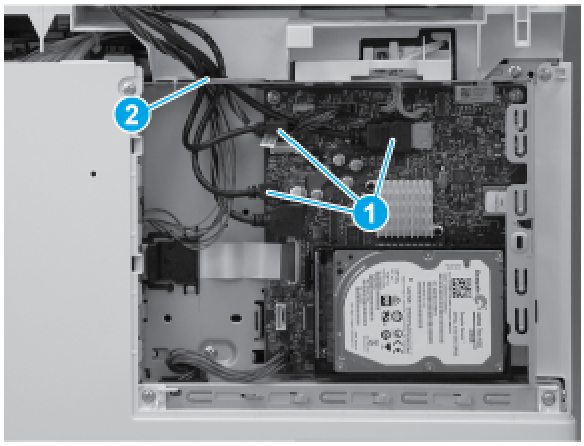
TIP: There are eight wire-harness connectors, two flat cables, and one high-definition multimedia interface (HDMI) cable connector.

Figure 7-265 Disconnect the flat cable, ground cable, and connectors



4. Disconnect three connectors (callout 1) from the formatter, and then release three black cables through the opening (callout 2) in the formatter case.

Figure 7-266 Disconnect three connectors

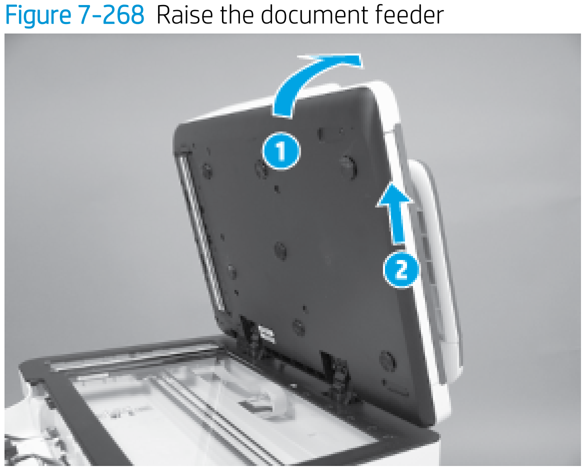


5. Open the document feeder.

Figure 7-267 Open the document feeder

6. Tilt the document feeder back until it stops (callout 1), and then lift it off of the scanner until it stops (callout 2).

Figure 7-268 Raise the document feeder



7. Support the document feeder, and then use a small flat-blade screwdriver to release two tabs on the document feeder hinges.

Figure 7-269 Release two tabs

8. Lift the document feeder up to remove it.

NOTE: While removing the document feeder, carefully pass the wire harnesses and the flat cable through the opening in the scanner.

Figure 7-270 Remove the document feeder

Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Install the white backing (MFP)

Follow these steps to install the white backing (MFP).

IMPORTANT: When a replacement image scanner or document feeder is installed, make sure to install a replacement white backing (supplied with the image scanner or document feeder).

1. Open the document feeder, and then place the replacement white backing on the flatbed scanner glass, as shown.

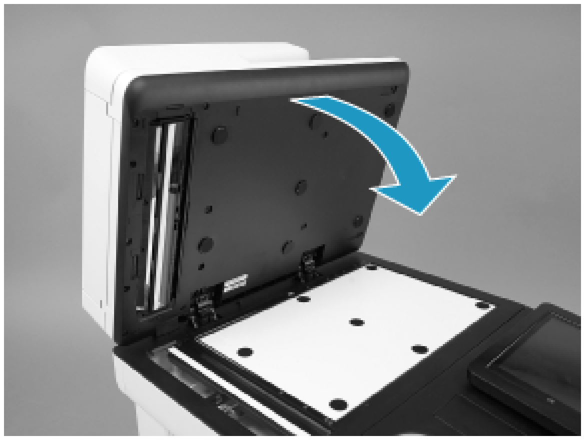
NOTE: Place the corner of the backing that does not have a hook-and-loop fastener in the upper-left corner of the scanner glass.

If any of the retention clips or springs on the document feeder are damaged, replace them with the clips supplied in white backing kit (part number 5851-7740).

Figure 7-271 Install the white backing

2. Close the document feeder.

Figure 7-272 Close the document feeder



3. Open the document feeder and make sure that the white backing is securely attached.

Figure 7-273 Check the white backing

Reset the firmware counter

Follow these steps to reset the firmware counter.

1. From the Home screen on the control panel, scroll to and touch the Device Maintenance button.
2. Scroll to and touch the Service button.
3. On the sign-in screen, select the Service Access Code option from the drop-down list.
4. Enter the following service access code for this printer: 11057715.
5. Scroll to and touch the Cycle Counts Item.
6. Reset the following items:
   - Document Feeder Kit Interval; set to zero
   - ADF Count; set to zero

Removal and replacement: Scanner control board (SCB) (M577/M578/E57540)

This document provides the procedures to remove and replace the scanner control board (SCB).

View a video demonstration of removing and replacing the scanner control board.

Mean time to repair: 10 minutes

Service level: Intermediate

Before performing service

Turn the printer power off

- Disconnect the power cable.

WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-29 Part information

Part number	Part description
B5L47-67903	Scanner control board kit with instruction guide

Required tools

- No special tools are required for this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

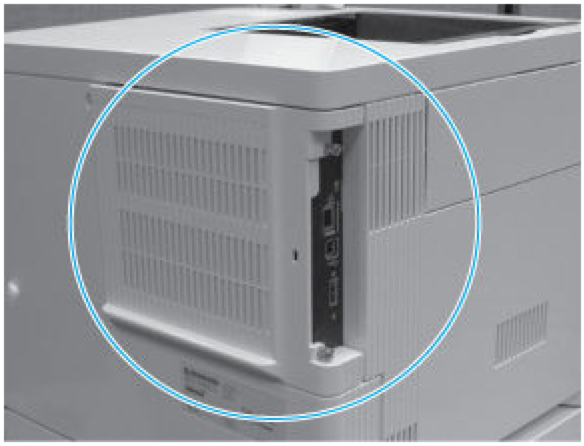
Print a configuration page to make sure that the printer is functioning correctly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

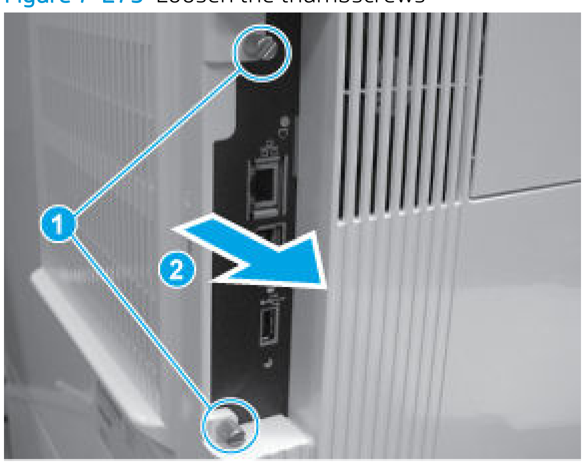
Figure 7-274 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-275 Loosen the thumbscrews



Remove the rear upper cover (MFP)

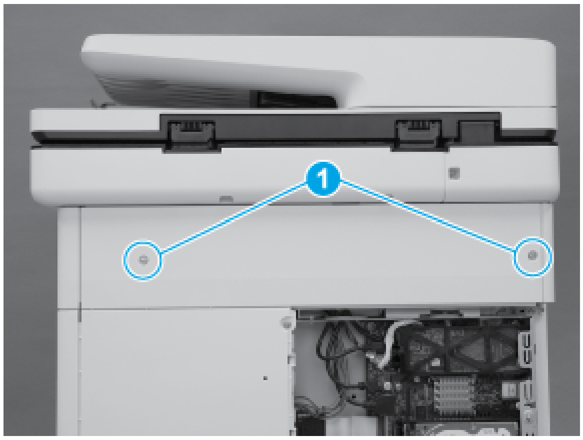
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

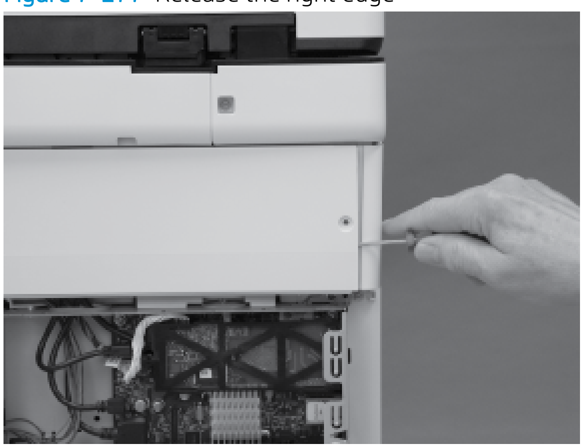
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-276 Remove two screws



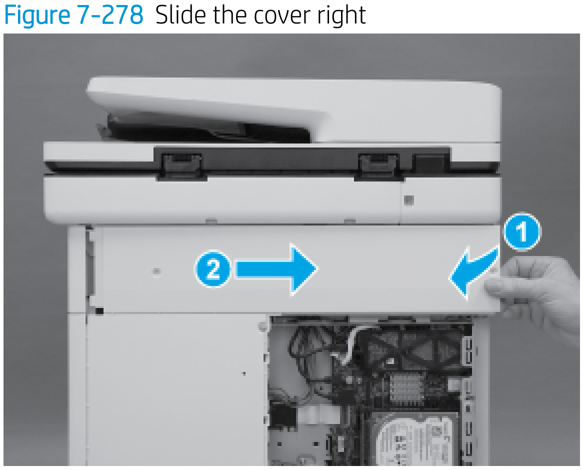
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-277 Release the right edge



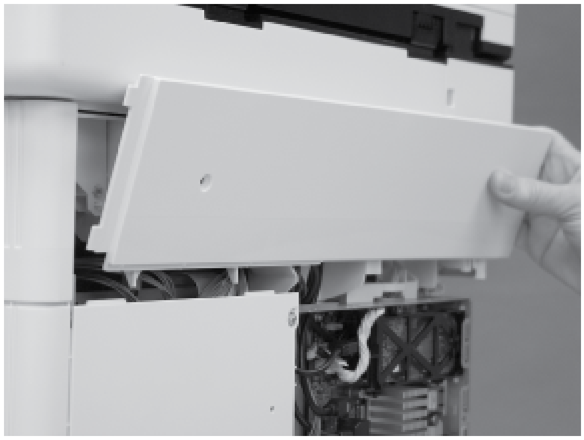
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-278 Slide the cover right



4. Remove the cover.

Figure 7-279 Remove the cover



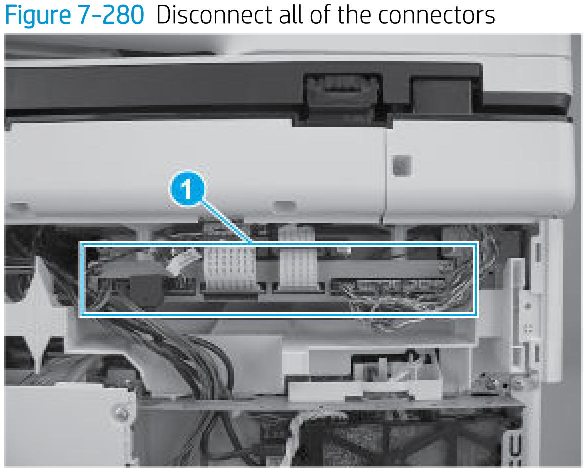
Remove the scanner control board (SCB)

Follow these steps to Remove the scanner control board (SCB).

1. Disconnect all of the connectors (callout 1) from the SCB.

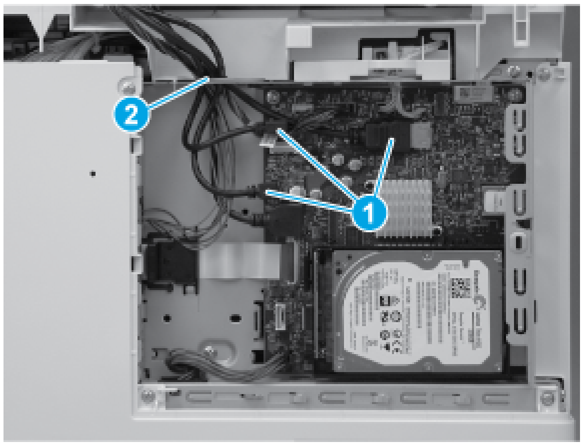
TIP: There are eight wire-harness connectors, two flat cables, and one high-definition multimedia interface (HDMI) cable connector.

Figure 7-280 Disconnect all of the connectors



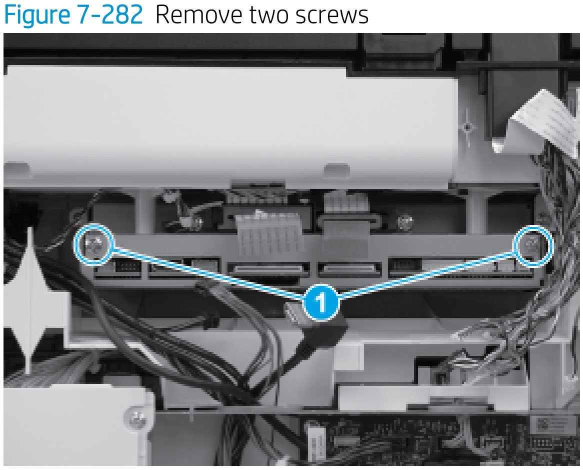
2. Disconnect three connectors (callout 1) from the formatter, and then release three black cables through the opening (callout 2) in the formatter case.

Figure 7-281 Disconnect three connectors



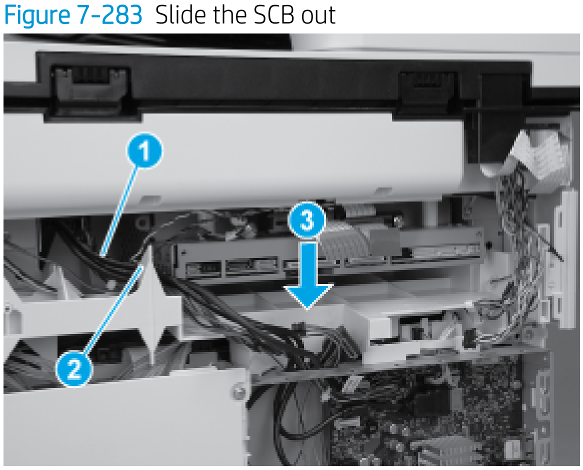
3. Remove two screws (callout 1).

Figure 7-282 Remove two screws



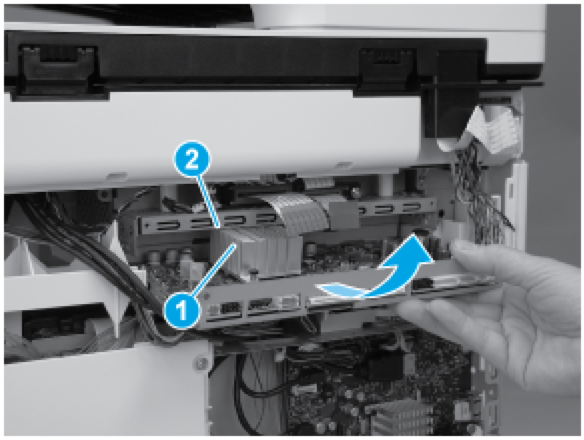
4. Remove the cables (callout 1) from the guide (callout 2) , and then lower the SCB (callout 3) .

Figure 7-283 Slide the SCB out



5. Rotate the SCB up and out of the printer. Make sure that the heat sink (callout 1) on the SCB does not get caught on the edge of the sheet metal (callout 2).

Figure 7-284 Remove the SCB



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Image scanner (M577/M578/E57540)

This document provides the procedures to remove and replace the image scanner.

[View a video demonstration of removing and replacing the image scanner.]

Mean time to repair: 35 minutes

Service level: Intermediate

Before performing service

Turn the printer power off

- Disconnect the power cable.

WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-30 Part information

Part number	Part description
B5L46-67904	Image scanner whole unit kit with instruction guide

Required tools

- Small flat-blade screwdriver.
- #2 Phillips screwdriver with a magnetic tip.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print a configuration page, and then make a copy using the flatbed glass to make sure that it is properly functioning.

Print a configuration page, and then make a copy using the document feeder to make sure that it is properly functioning.

Remove the control-panel cover (MFP)

Follow these steps to remove the control-panel cover (MFP).

1. Open the document feeder (callout 1).

NOTE: If the control panel is not fully tilted forward, tilt it forward now until it stops (callout 2).

Figure 7-285 Open the document feeder

2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

NOTE: The thin, black plastic cover will separate from the white plastic control-panel base.

Figure 7-286 Release five tabs

3. Continue to lift the top edge of the cover away from the printer, and then remove the cover.

Figure 7-287 Remove the cover

Remove the white backing (MFP)

Follow these steps to remove the white backing (MFP).

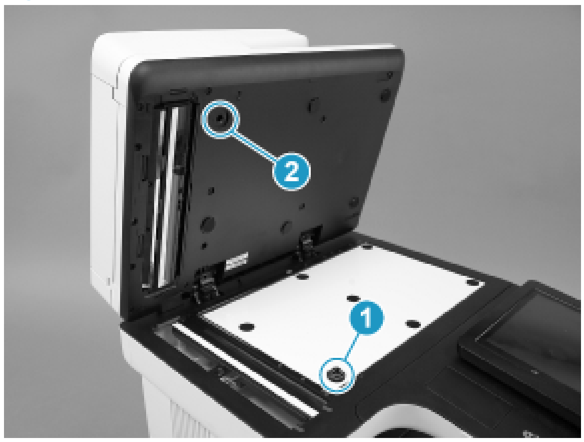
1. Remove the white backing.

Figure 7-288 Remove the white backing

2. One or more of the retention clips (callout 1) that fit in the openings (callout 2) in the document feeder might remain attached to the white backing when it is removed. If this happens, remove the clip from the white backing.

NOTE: If none of the retention clips remain attached to the white backing, skip the remaining sub-steps in this removal procedure.

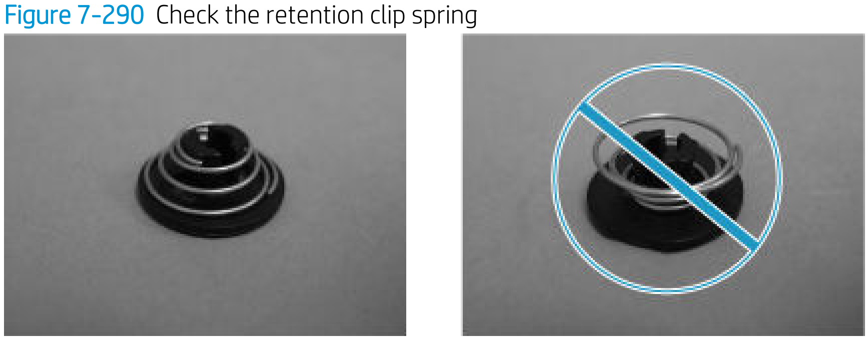
Figure 7-289 Check the retention clips



3. If a spring comes off of a retention clip, make sure that it is correctly repositioned on the clip.

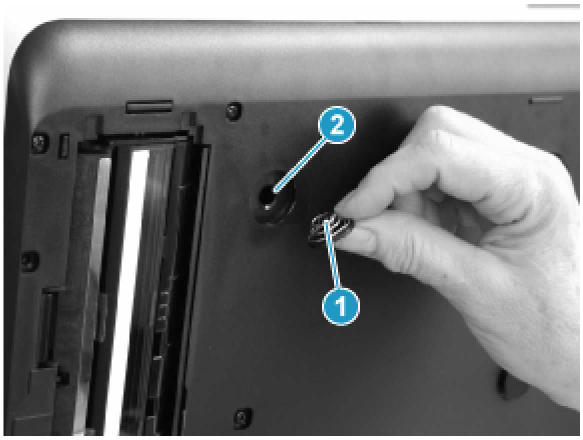
NOTE: If any of the retention clips or springs are damaged, replace them with the clips supplied in this white backing kit (part number 5851-7740).

Figure 7-290 Check the retention clip spring



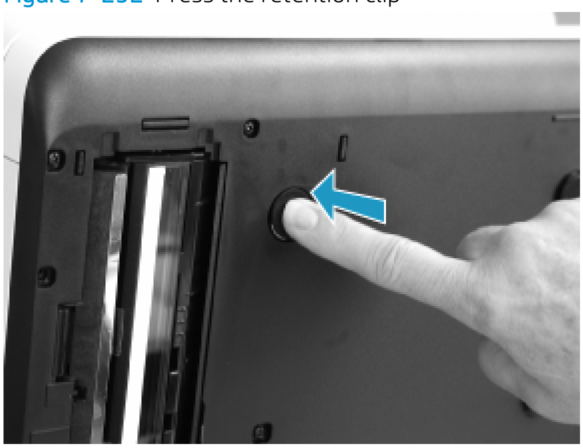
4. Install the clip (callout 1) in the opening (callout 2) in the document feeder.

Figure 7-291 Install the retention clip



5. Press the clip to make sure it is securely installed.

Figure 7-292 Press the retention clip



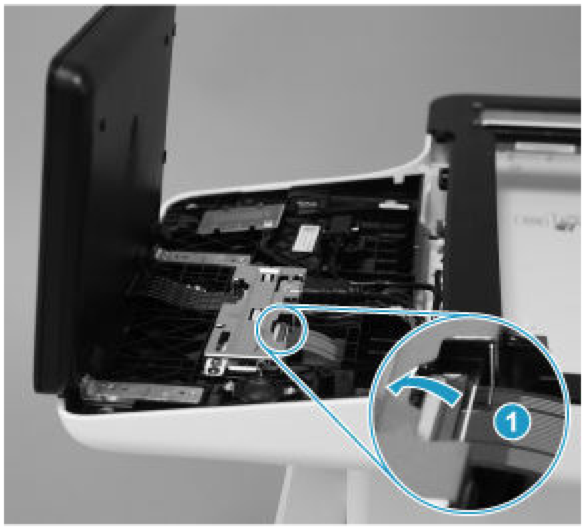
Remove the keyboard (flow models)

Follow these steps to remove the keyboard (flow models).

1. Open the latch (callout 1) to release the keyboard flat cable.

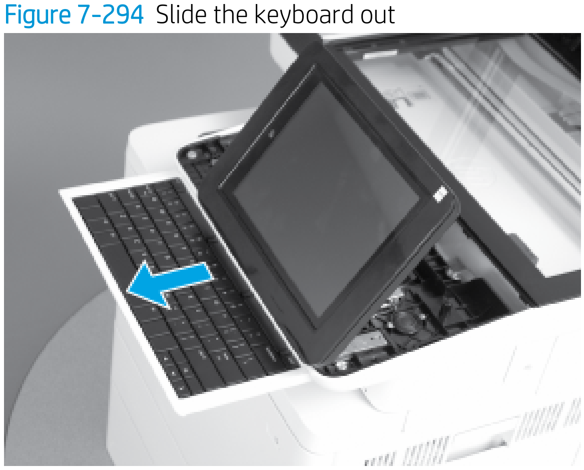
⚠ CAUTION: The latch must be opened to release the cable.

Figure 7-293 Disconnect the keyboard flat cable



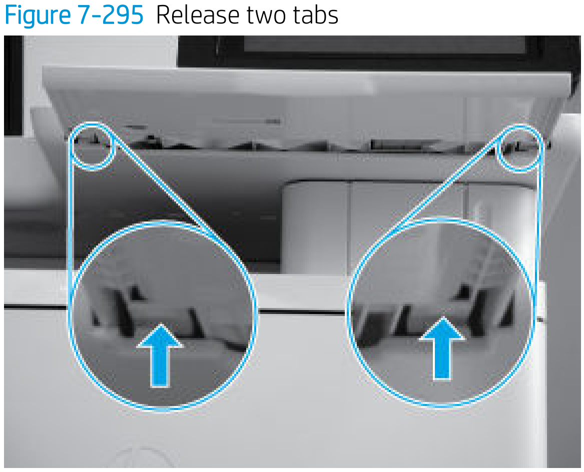
2. Slide the keyboard tray out until it stops.

Figure 7-294 Slide the keyboard out



3. Push up on the keyboard tray to release two tabs on the bottom of the tray, and then slide the tray toward the front of the printer to disengage the tabs.

Figure 7-295 Release two tabs



4. Slide the keyboard (callout 1) all of the way out of the printer to remove it.

Figure 7-296 Remove the keyboard

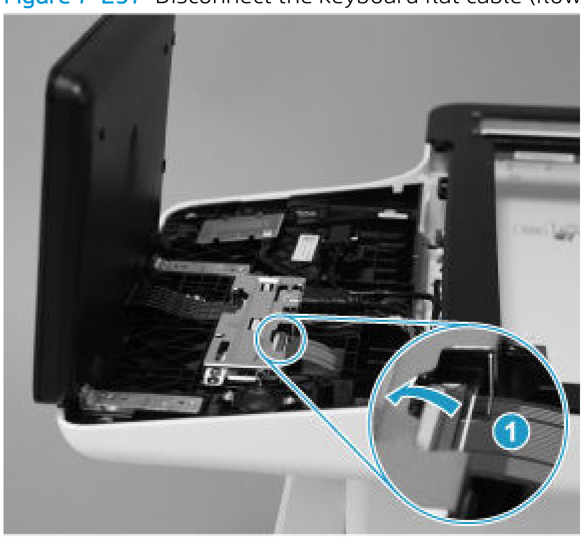
Remove the control panel (MFP)

Follow these steps to remove the control panel (MFP).

1. **Flow models**: Open the latch (callout 1) to release the keyboard flat cable.

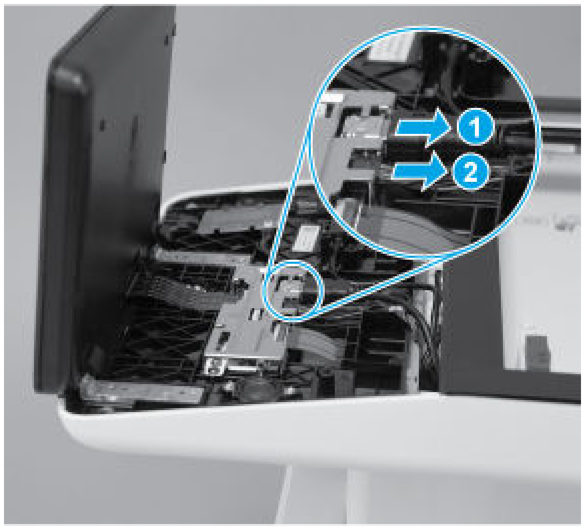
> ⚠ CAUTION: The latch must be opened to release the cable.

Figure 7-297 Disconnect the keyboard flat cable (flow models)



2. Disconnect one HDMI cable (callout 1) and one connector (callout 2).

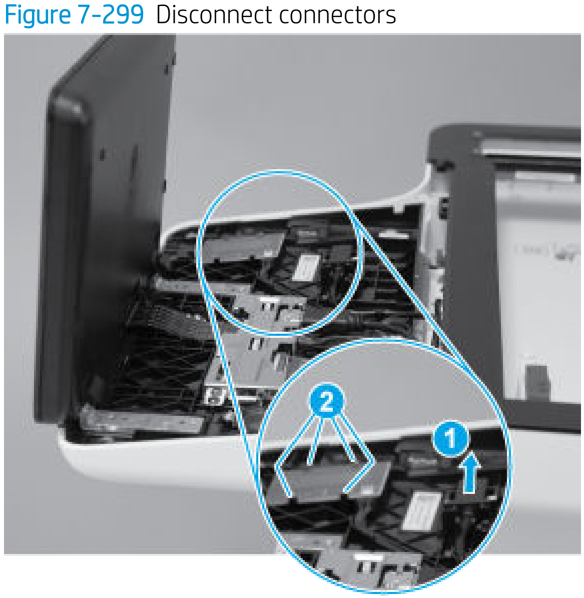
Figure 7-298 Disconnect connectors



3. Remove the USB cable (callout 1) from the holder.

   Flow models: Release four tabs (callout 2), and then remove the near-field communication (NFC) printed circuit board.

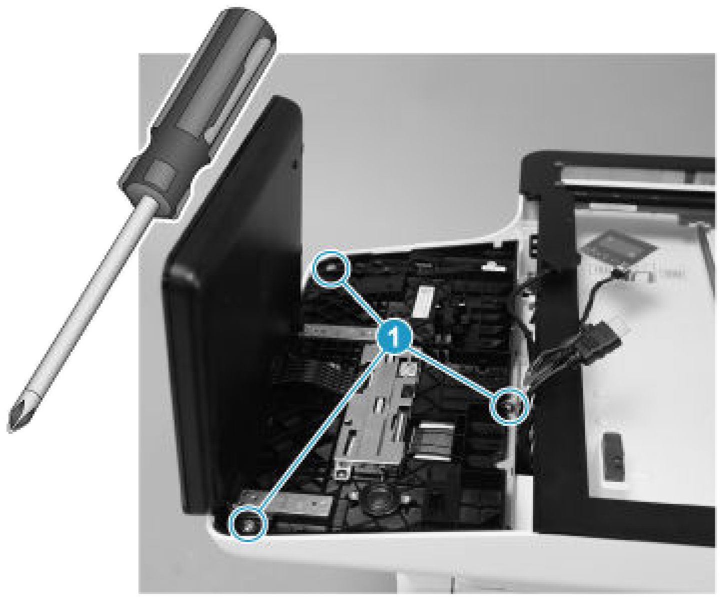
Figure 7-299 Disconnect connectors



4. Remove three screws (callout 1).

TIP: The screwdriver (supplied with the kit) has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-300 Remove three screws



5. Lift the front of the control panel off of the printer (callout 1), and then slide it towards the front of the printer (callout 2) to remove it.

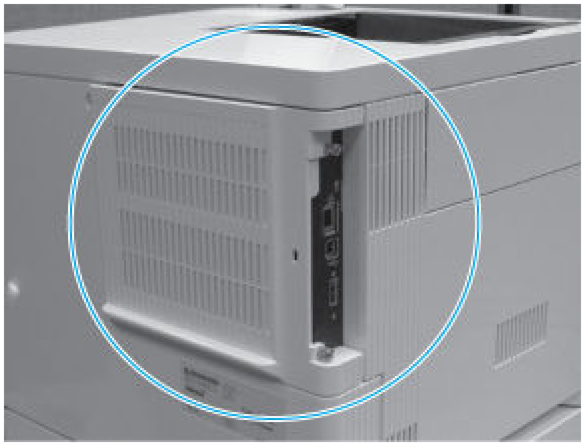
Figure 7-301 Remove the control panel

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

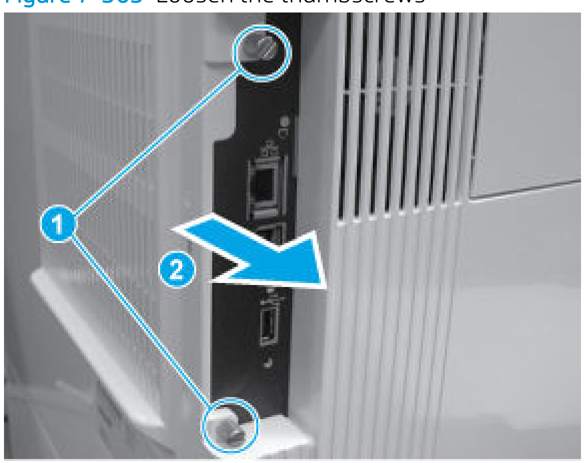
Figure 7-302 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-303 Loosen the thumbscrews



Remove the fax PCA (fax models)

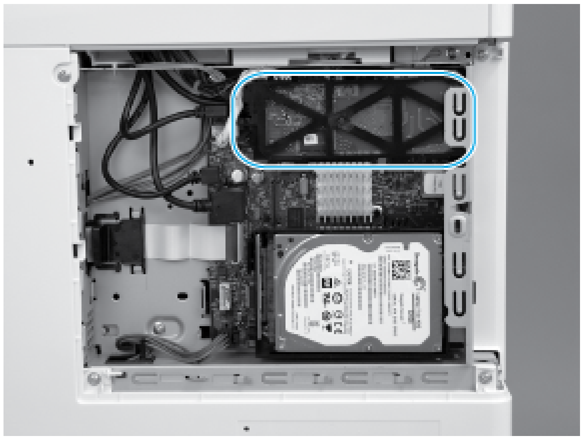
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

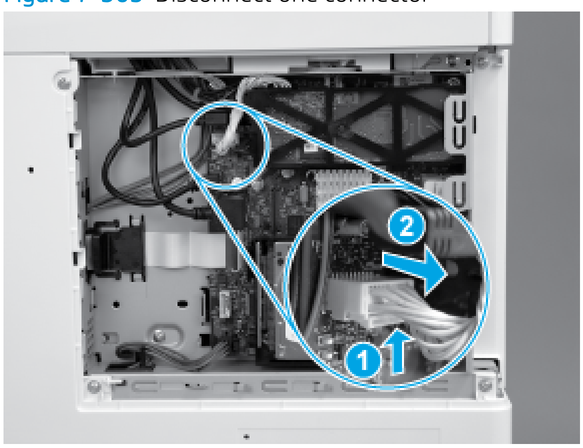
1. Locate the fax PCA component on the formatter.

Figure 7-304 Locate the fax PCA



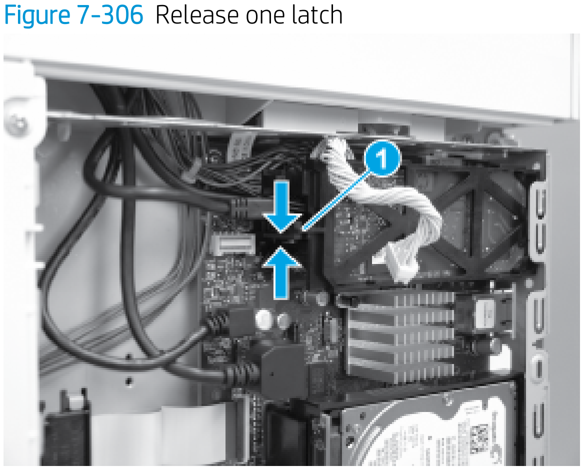
2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-305 Disconnect one connector



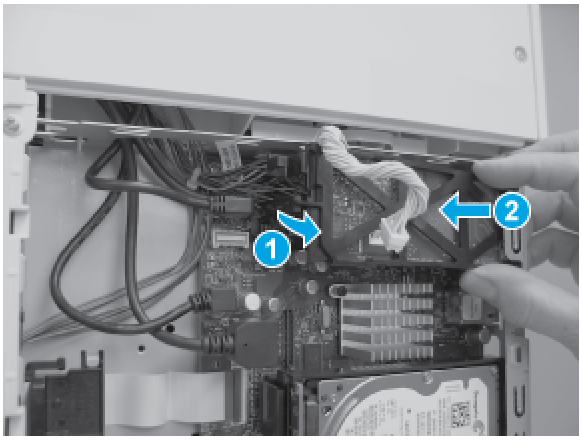
3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-306 Release one latch



4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-307 Remove the fax PCA



Remove the rear upper cover (MFP)

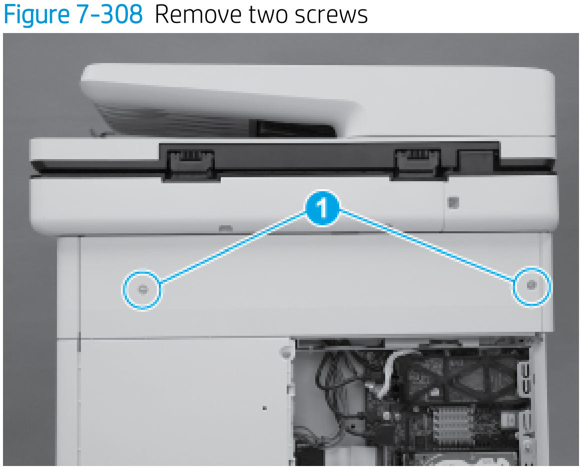
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

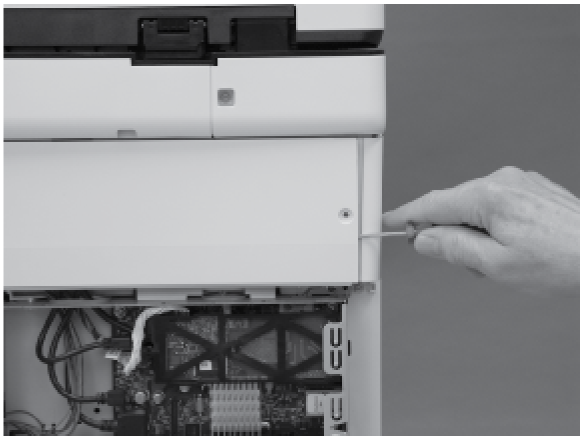
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-308 Remove two screws



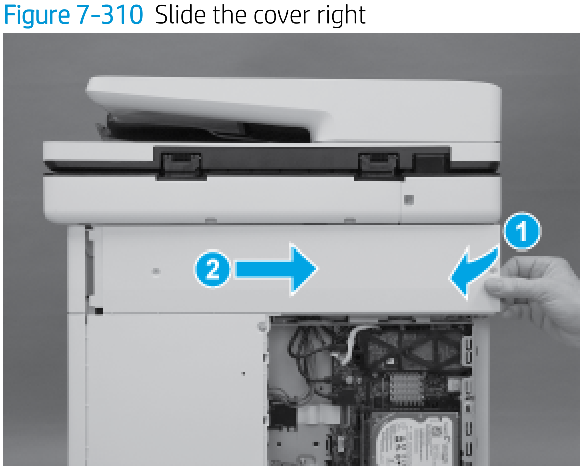
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-309 Release the right edge



3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-310 Slide the cover right



4. Remove the cover.

Figure 7-311 Remove the cover

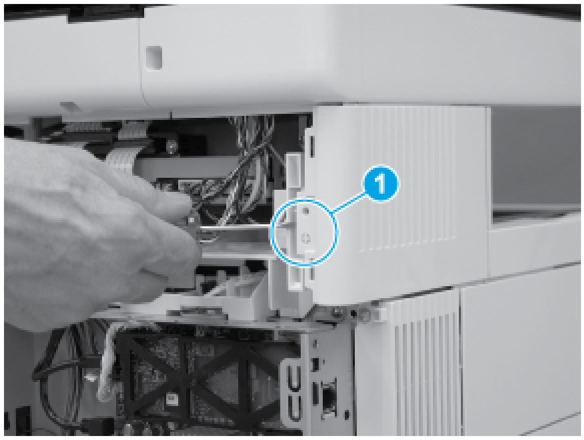
Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

NOTE: This procedure is for MFP models only.

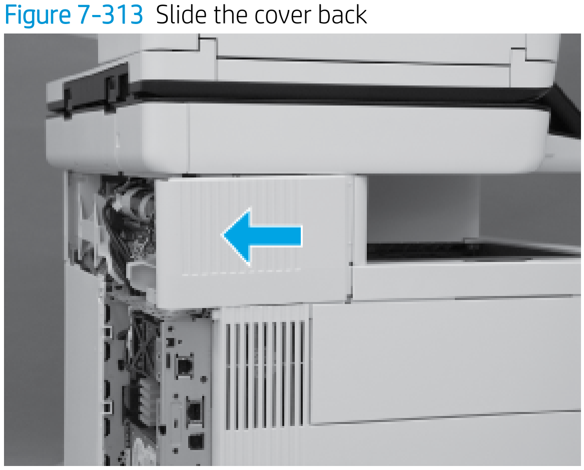
1. At the left side of the printer, release one tab (callout 1).

   Figure 7-312 Release one tab

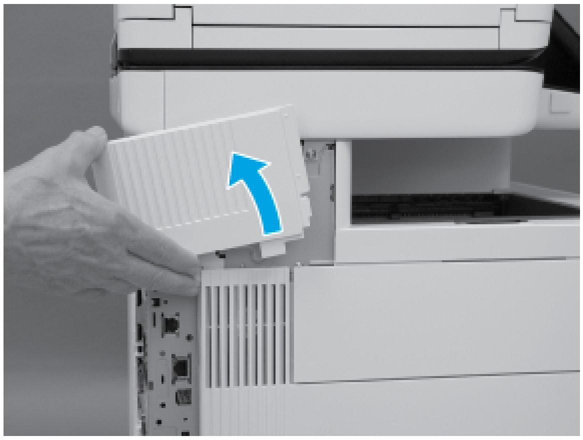
2. Slide the left upper cover toward the back of the printer.

   Figure 7-313 Slide the cover back

3. Rotate the cover up to remove it.

Figure 7-314 Remove the left upper cover



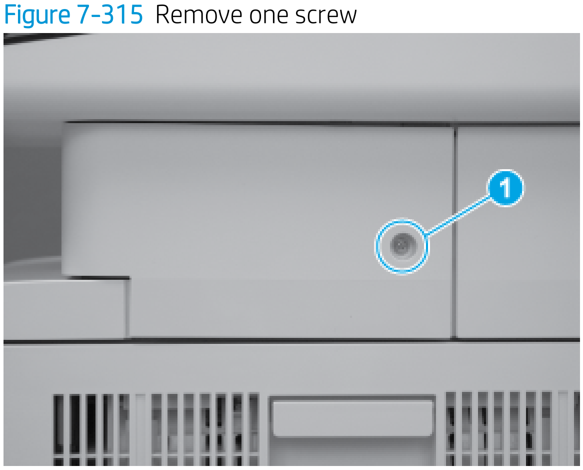
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-315 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-316 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-317 Rotate the cover

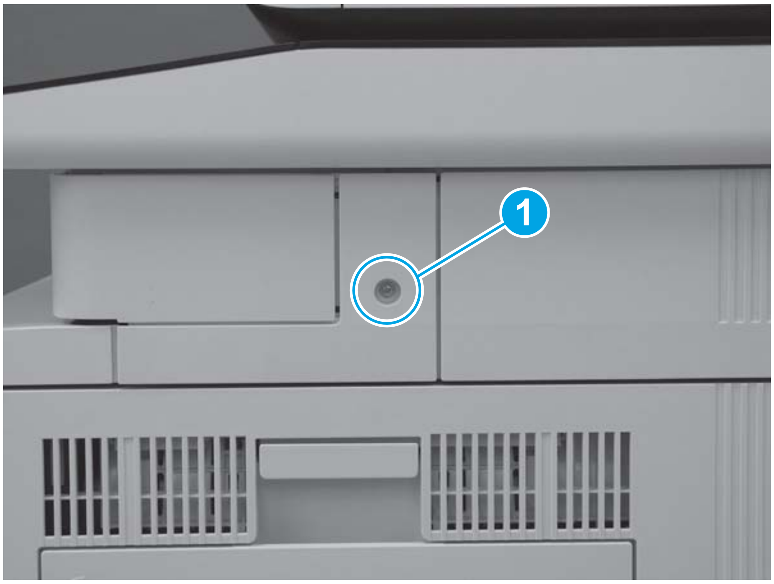
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

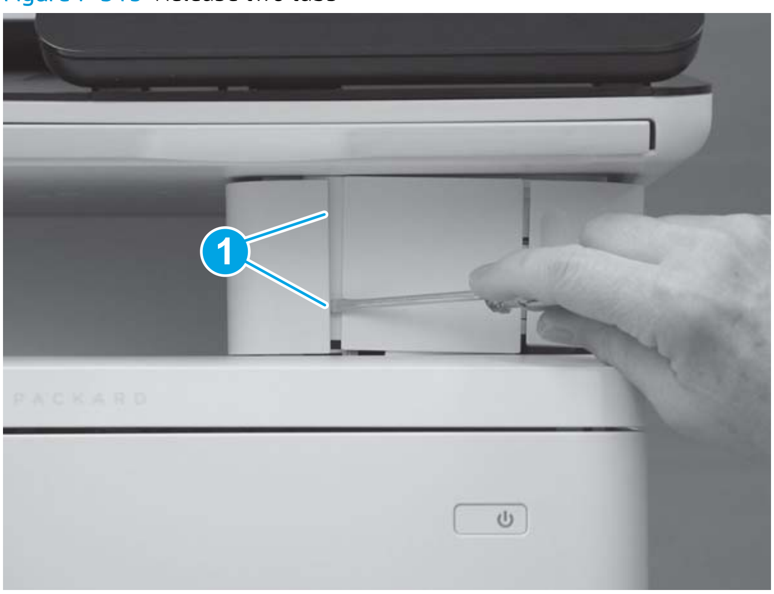
1. Remove one screw (callout 1).

Figure 7-318 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-319 Release two tabs



3. Release the back edge of the cover.

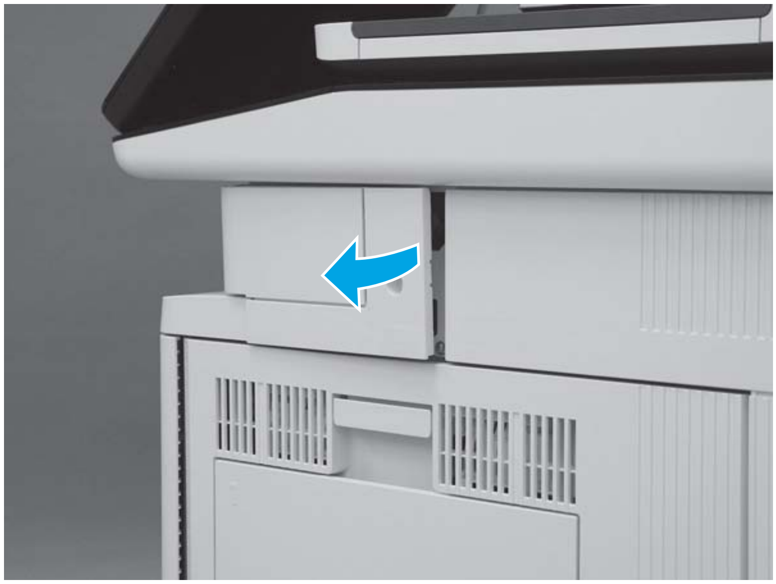


Figure 7-320 Release the back edge of the cover

4. Rotate the cover away from the printer to remove it.

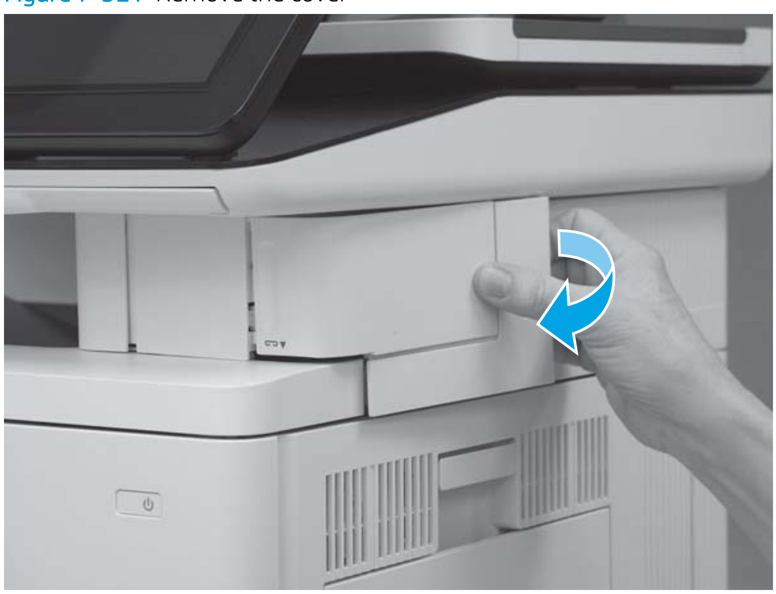


Figure 7-321 Remove the cover

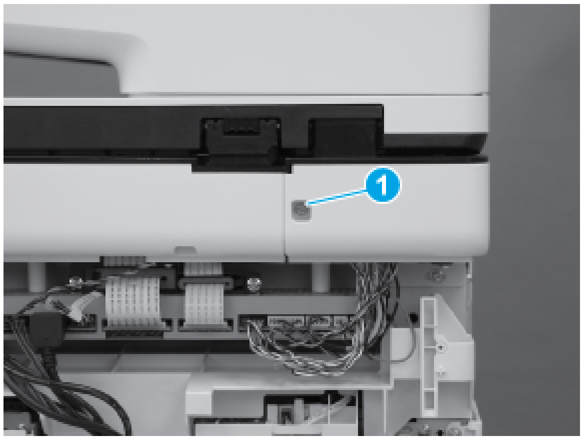
Remove the document feeder (MFP)

Follow these steps to remove the document feeder (MFP).

1. Remove one screw (callout 1).

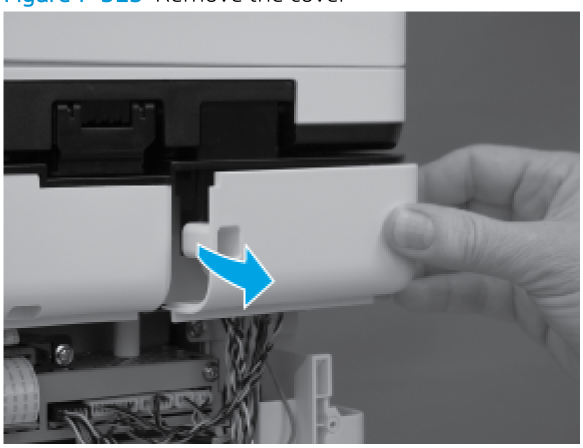
> TIP: This is a self-tapping screw for plastic. When reinstalling, rotate the screw counterclockwise to align it with the existing thread pattern, and then carefully turn it clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw hole.

Figure 7-322 Remove one screw



2. Rotate the cover away from the printer to remove it.

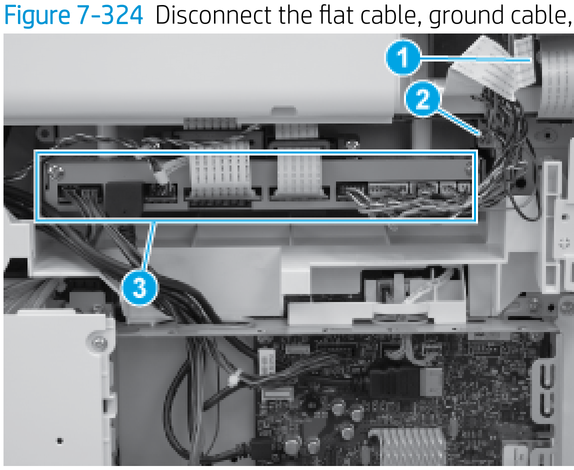
Figure 7-323 Remove the cover



3. Disconnect one flat cable (callout 1), remove one ground screw (callout 2) to release the grounding cable, and then disconnect all of the connectors (callout 3) on the scanner control board.

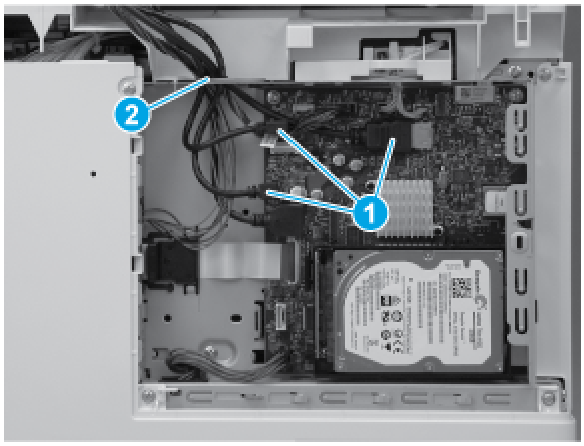
TIP: There are eight wire-harness connectors, two flat cables, and one high-definition multimedia interface (HDMI) cable connector.

Figure 7-324 Disconnect the flat cable, ground cable, and connectors



4. Disconnect three connectors (callout 1) from the formatter, and then release three black cables through the opening (callout 2) in the formatter case.

Figure 7-325 Disconnect three connectors

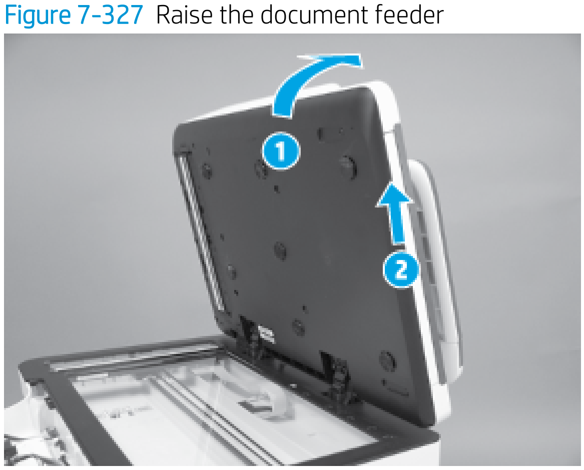


5. Open the document feeder.

Figure 7-326 Open the document feeder

6. Tilt the document feeder back until it stops (callout 1), and then lift it off of the scanner until it stops (callout 2).

Figure 7-327 Raise the document feeder



7. Support the document feeder, and then use a small flat-blade screwdriver to release two tabs on the document feeder hinges.

Figure 7-328 Release two tabs

8. Lift the document feeder up to remove it.

NOTE: While removing the document feeder, carefully pass the wire harnesses and the flat cable through the opening in the scanner.

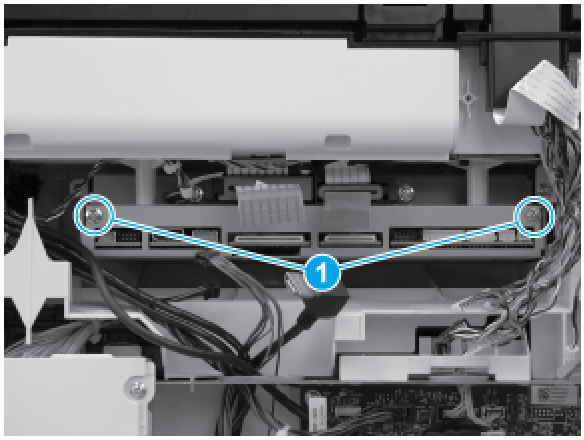
Figure 7-329 Remove the document feeder

Remove the scanner control board (SCB) (MFP)

Follow these steps to remove the scanner control board (SCB) (MFP).

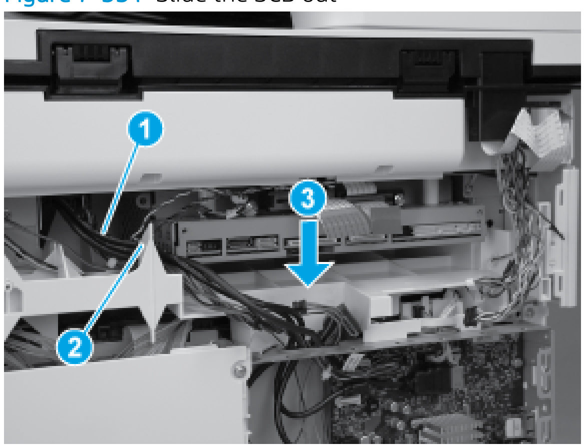
1. Remove two screws (callout 1).

Figure 7-330 Remove two screws



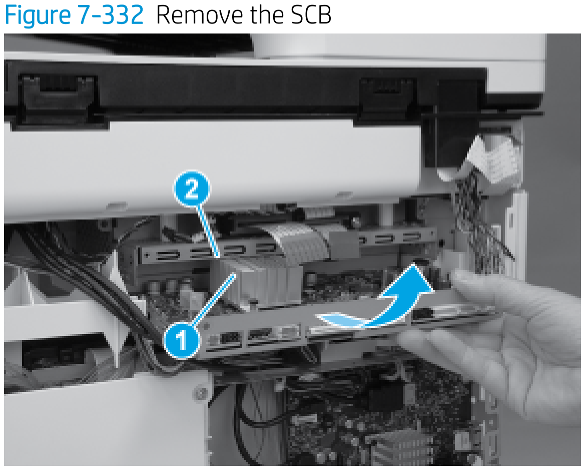
2. Remove the cables (callout 1) from the guide (callout 2) , and then lower the SCB (callout 3) .

Figure 7-331 Slide the SCB out



3. Rotate the SCB up and out of the printer. Make sure that the heat sink (callout 1) on the SCB does not get caught on the edge of the sheet metal (callout 2).

Figure 7-332 Remove the SCB

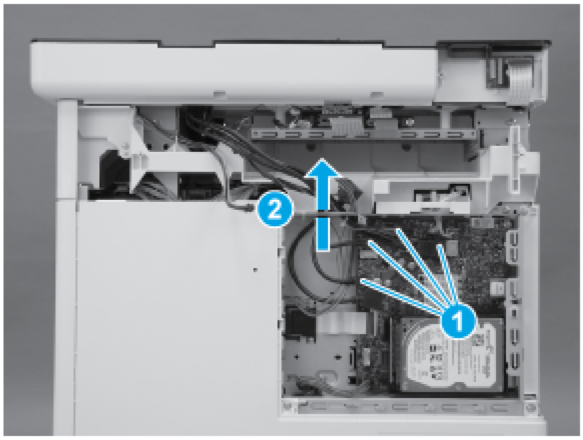


Remove the image scanner assembly (MFP)

Follow these steps to remove the image scanner assembly (MFP).

1. Disconnect four connectors (callout 1) on the formatter, and then pass the wire harnesses and cables through the top opening in the formatter case (callout 2).

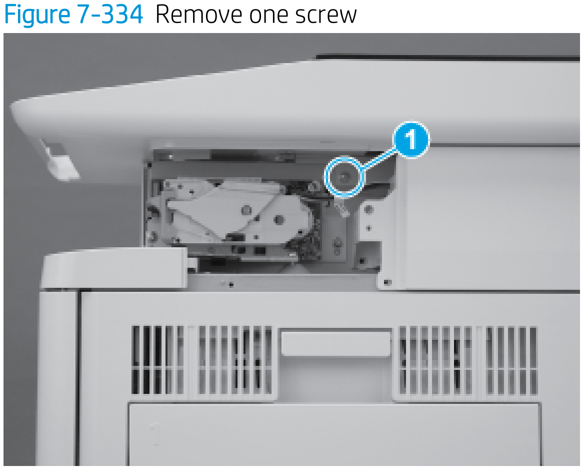
Figure 7-333 Disconnect cables and connectors



2. At the right side of the printer, remove one screw (callout 1).

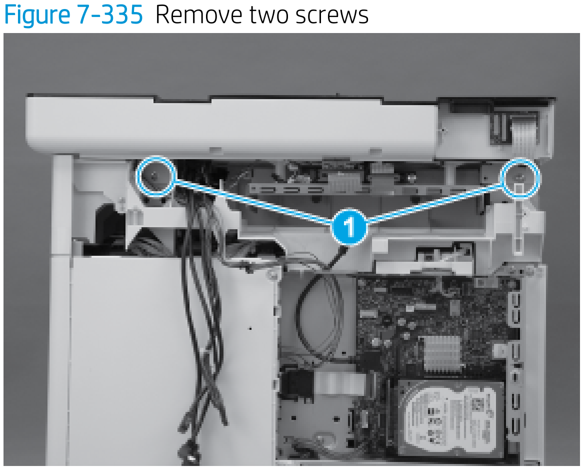
NOTE: The M577z is shown in the figure below. The procedure is correct for all MFP models.

Figure 7-334 Remove one screw



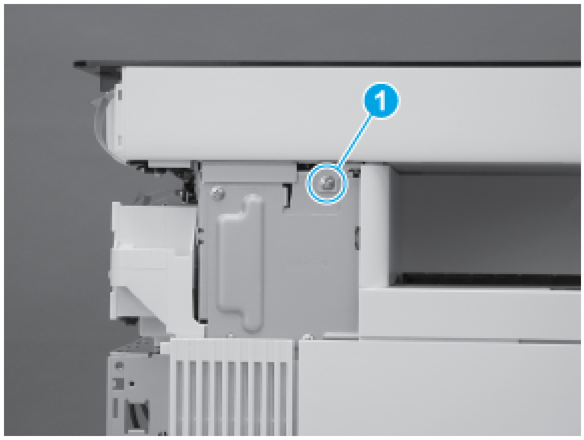
3. At the back of the printer, remove two screws (callout 1).

Figure 7-335 Remove two screws



4. At the left side of the printer, remove one screw (callout 1).

Figure 7-336 Remove one screw



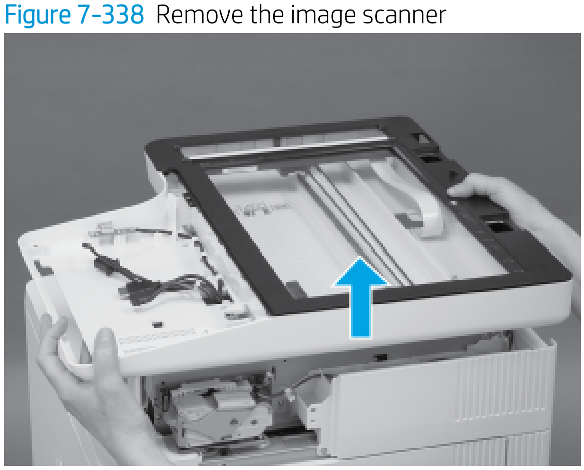
5. Slide the image scanner toward the back of the printer to release it.

Figure 7-337 Release the image scanner

6. Lift the image scanner straight up to remove it.

Reinstallation tip: **Replacement image scanner kit**: Make sure to install the keyboard cover (non-flow models) supplied with the image scanner.

Figure 7-338 Remove the image scanner



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

   NOTE: HP recommends responsible disposal of the defective part.

   http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

   CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

   IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

   NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

   NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Install the white backing (MFP)

Follow these steps to install the white backing (MFP).

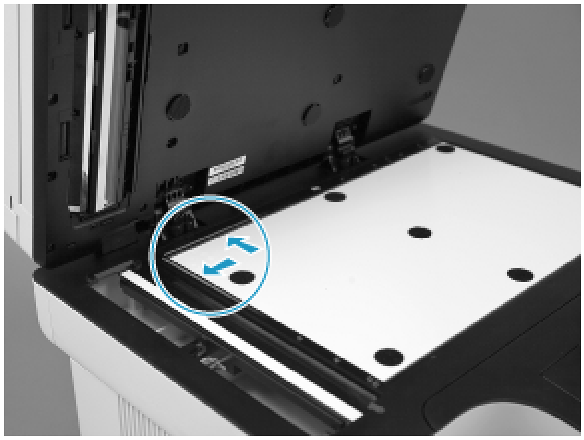
IMPORTANT: When a replacement image scanner or document feeder is installed, make sure to install a replacement white backing (supplied with the image scanner or document feeder).

1. Open the document feeder, and then place the replacement white backing on the flatbed scanner glass, as shown.

   NOTE: Place the corner of the backing that does not have a hook-and-loop fastener in the upper-left corner of the scanner glass.

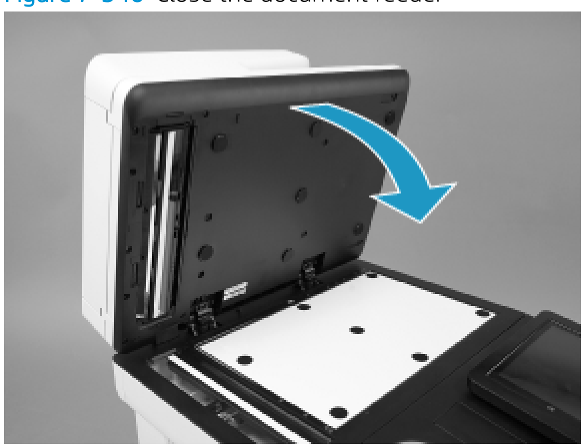
   If any of the retention clips or springs on the document feeder are damaged, replace them with the clips supplied in white backing kit (part number 5851-7740).

Figure 7-339 Install the white backing



2. Close the document feeder.

Figure 7-340 Close the document feeder



3. Open the document feeder and make sure that the white backing is securely attached.

Figure 7-341 Check the white backing

Removal and replacement: External panels, covers, and doors (base printer)

Learn how to remove and replace the printer external panels, covers, and doors.

Removal and replacement: Tray 2

Learn about removing and replacing Tray 2.

Before performing service

Turn the printer power off

- Disconnect the power cable.

  > ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

> ⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.
>
> If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-31 Part information

Part number	Part description
RM2-0007-020CN	Tray 2

Required tools

- Small flat-blade screwdriver
- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

Remove Tray 2

Learn about removing Tray 2.

> NOTE: A SFP printer is shown in this section. However, the procedure is correct for all printer models.
>
> The figures in this section show Tray 2. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5. Always carefully read the instructions that accompany the figures.

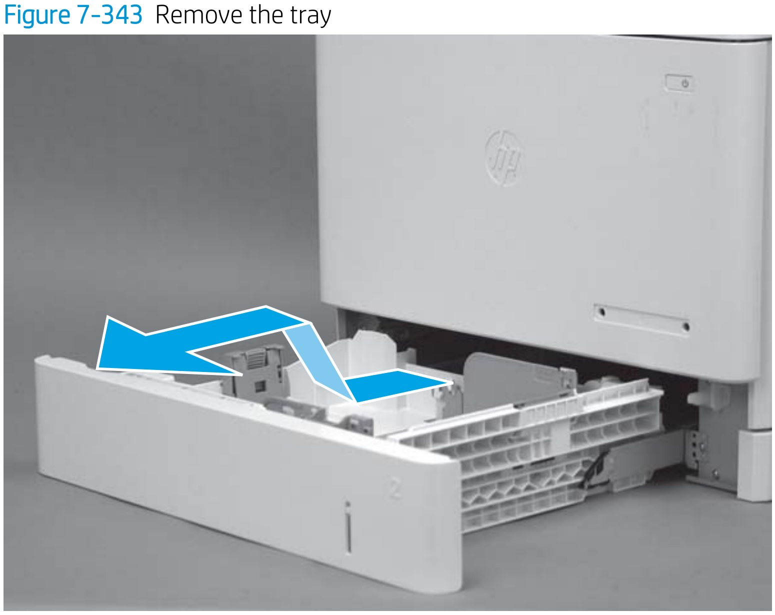
1. Pull the tray out until it stops.

Figure 7-342 Pull the tray out

2. Lift the front of the tray, and then pull it out of the printer to remove it.

NOTE: **For a replacement tray:** If the tray has Fixed Tray Guides installed and are still required, move hardware to new tray. If necessary, order new kit: 3GY25–67901 Kit - Fixed Tray Guide. Only one kit required per engine.

Figure 7-343 Remove the tray



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Stapler cover assembly (M577/M578/E57540 stapler models)

Learn about removing and replacing the stapler cover.

Before performing service

Turn the printer power off

- Disconnect the power cable.

WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-32 Part information

Part number	Part description
B5L46-60121	Stapler cover assembly

Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

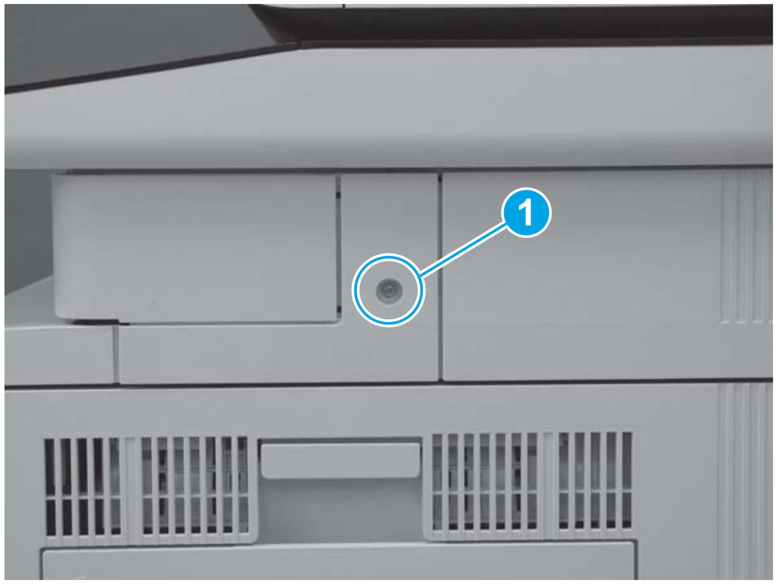
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

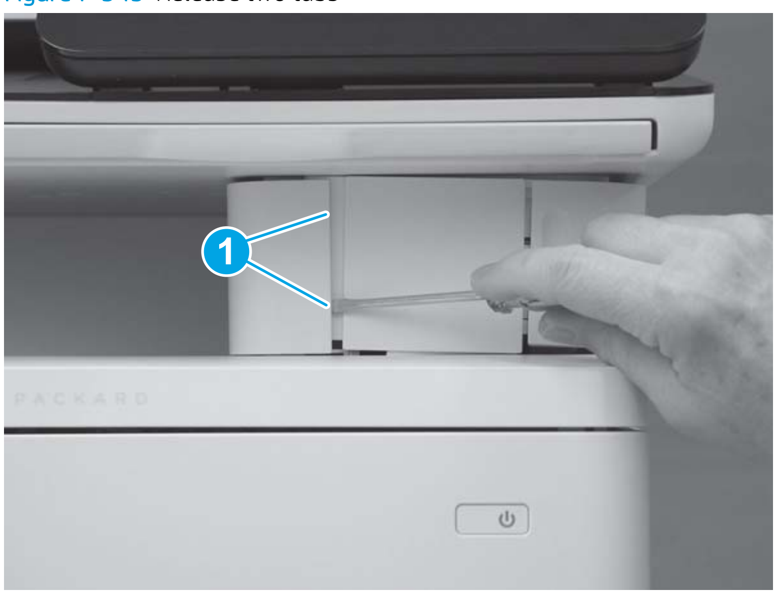
1. Remove one screw (callout 1).

Figure 7-344 Remove one screw



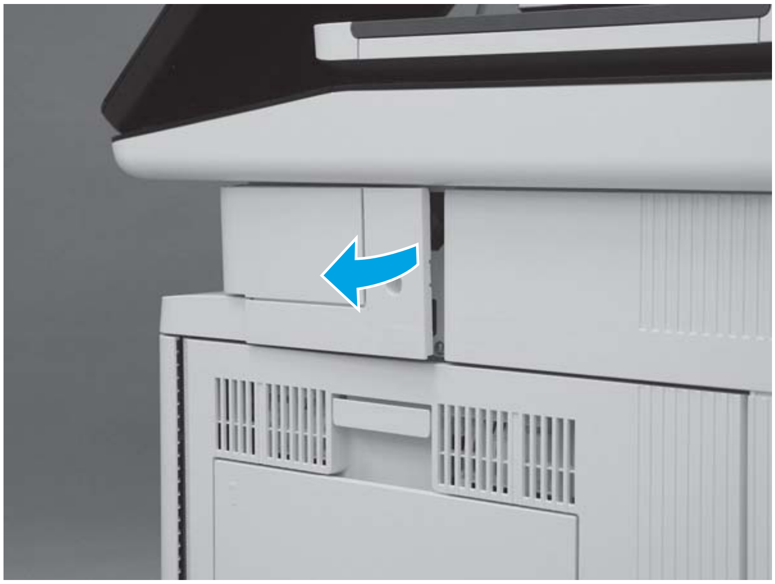
2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-345 Release two tabs



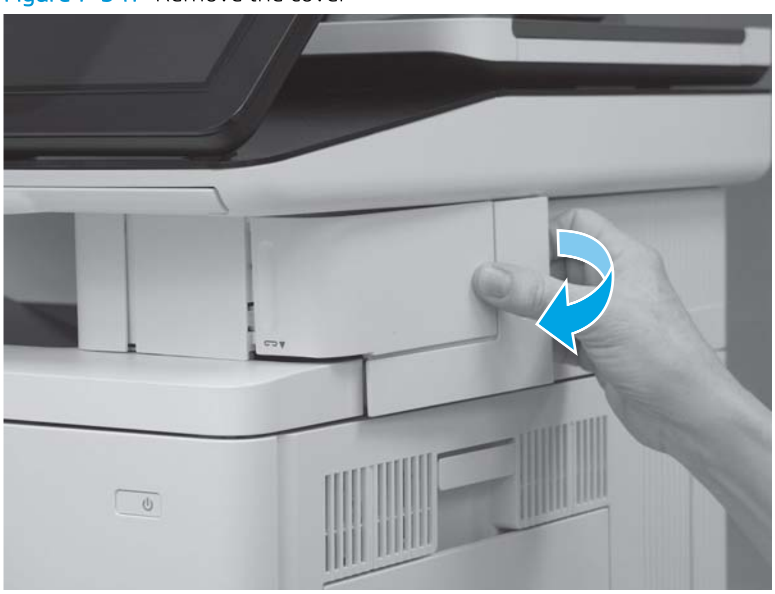
3. Release the back edge of the cover.

Figure 7-346 Release the back edge of the cover



4. Rotate the cover away from the printer to remove it.

Figure 7-347 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right front upper cover (M577/M578/E57540 non-stapler models)

Learn about removing and replacing the right front upper cover.

Before performing service

Turn the printer power off

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-33 Part information

Part number	Part description
B5L46-40024	Right front upper cover

Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

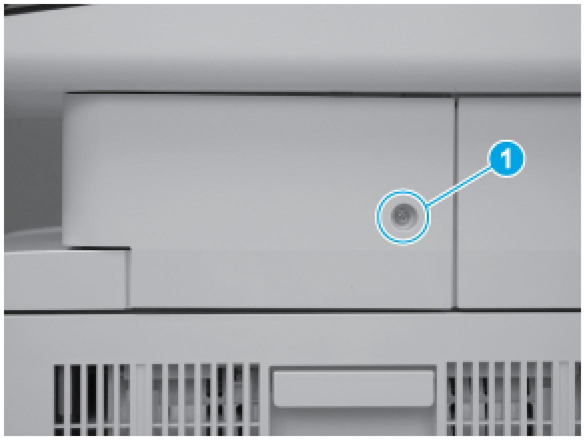
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-348 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-349 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-350 Rotate the cover

Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Rear upper cover (M577/M578/E57540)

Learn about removing and replacing the rear upper cover.

Before performing service

Turn the printer power off

- Disconnect the power cable.

  > ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

> ⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.
>
> If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-34 Part information

Part number	Part description
RC4-3385-000CN	Rear upper cover

Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

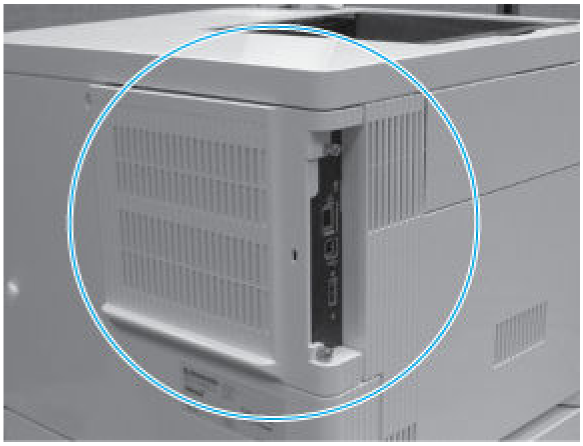
No post service test is available for this assembly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

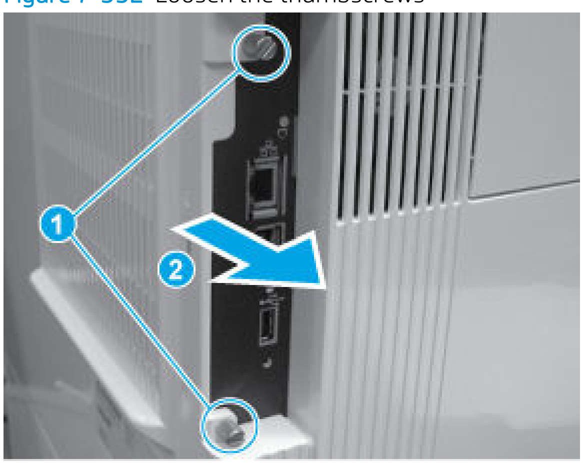
Figure 7-351 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-352 Loosen the thumbscrews



Remove the rear upper cover (MFP)

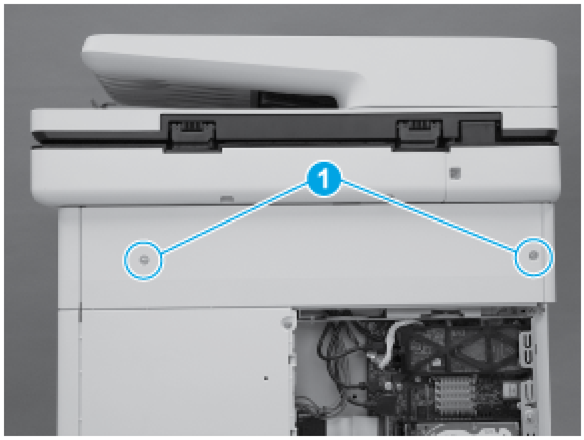
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

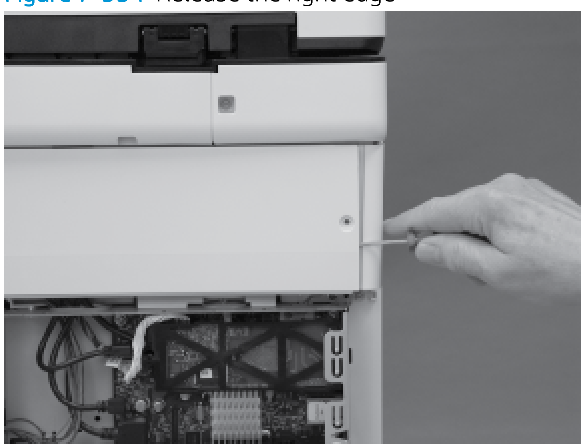
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-353 Remove two screws



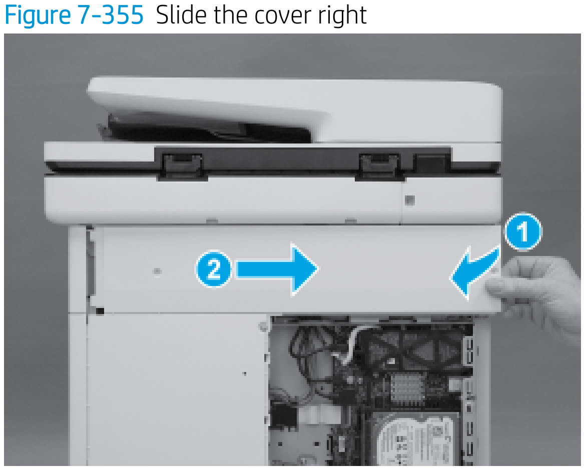
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-354 Release the right edge



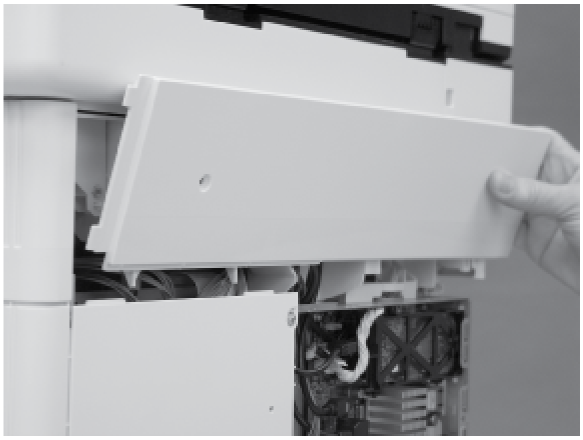
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-355 Slide the cover right



4. Remove the cover.

Figure 7-356 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Left upper cover (M577/M578/E57540)

Learn about removing and replacing the left upper cover.

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-35 Part information

Part number	Part description
RC4-3384-000CN	Left upper cover

Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

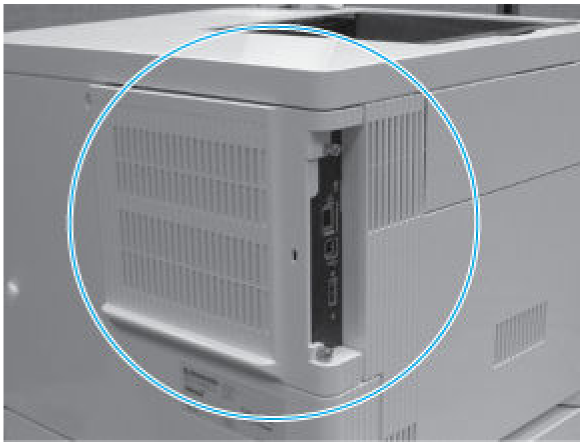
No post service test is available for this assembly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

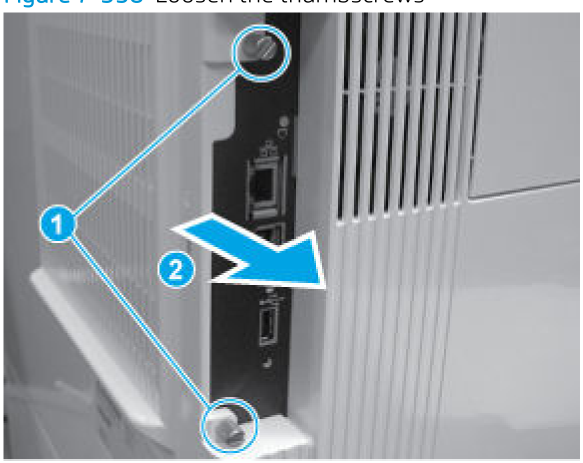
Figure 7-357 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-358 Loosen the thumbscrews



Remove the rear upper cover (MFP)

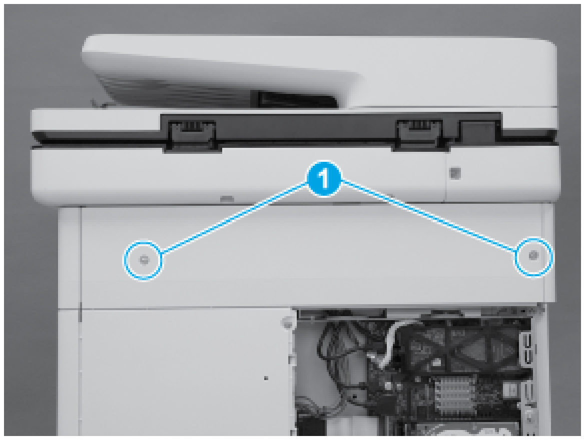
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

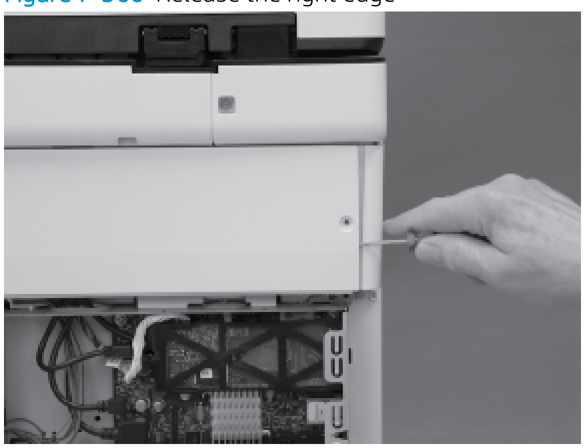
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-359 Remove two screws



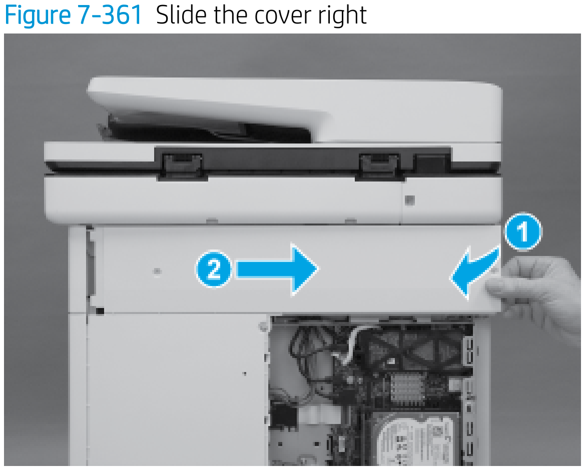
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-360 Release the right edge



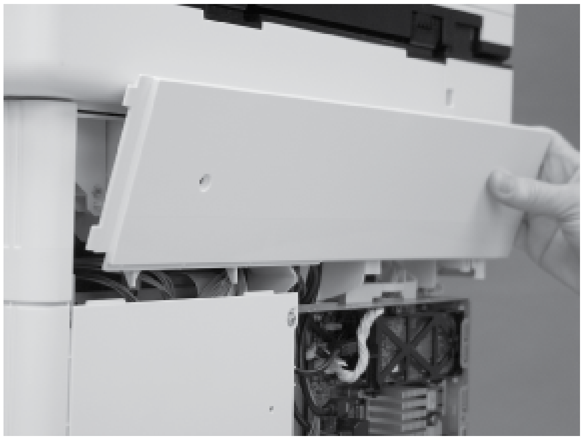
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-361 Slide the cover right



4. Remove the cover.

Figure 7-362 Remove the cover



Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

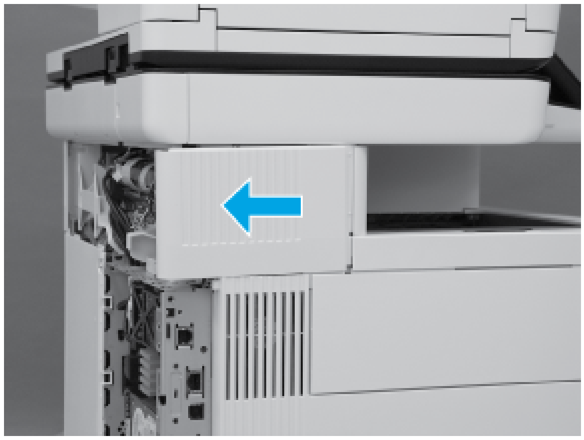
NOTE: This procedure is for MFP models only.

1. At the left side of the printer, release one tab (callout 1).

Figure 7-363 Release one tab

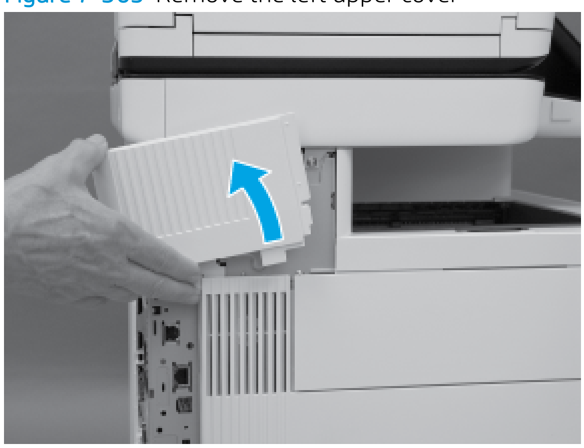
2. Slide the left upper cover toward the back of the printer.

Figure 7-364 Slide the cover back



3. Rotate the cover up to remove it.

Figure 7-365 Remove the left upper cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right upper cover (M577/M578/E57540)

Learn about removing and replacing the right upper cover.

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-36 Part information

Part number	Part description
RC4-3386-000CN	Right upper cover

Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

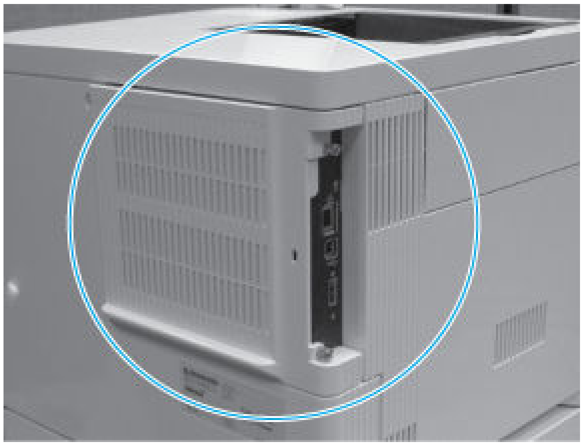
No post service test is available for this assembly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

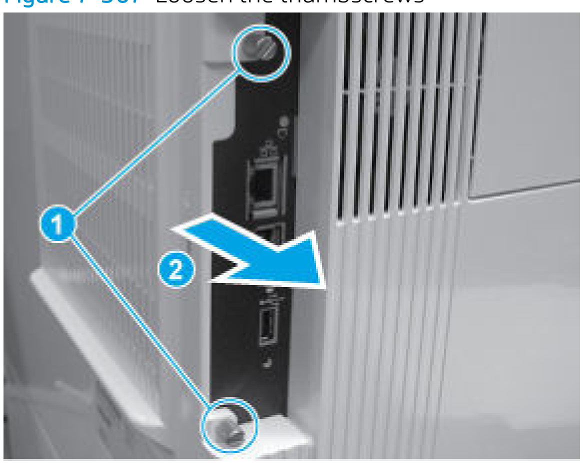
Figure 7-366 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-367 Loosen the thumbscrews



Remove the rear upper cover (MFP)

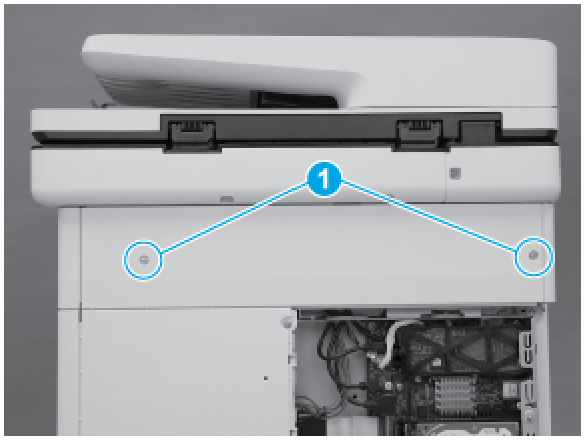
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

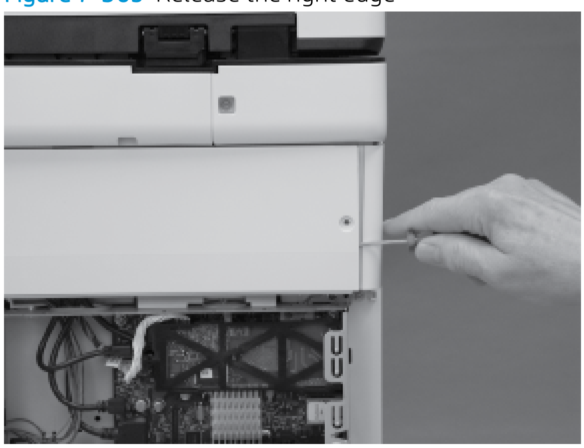
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-368 Remove two screws



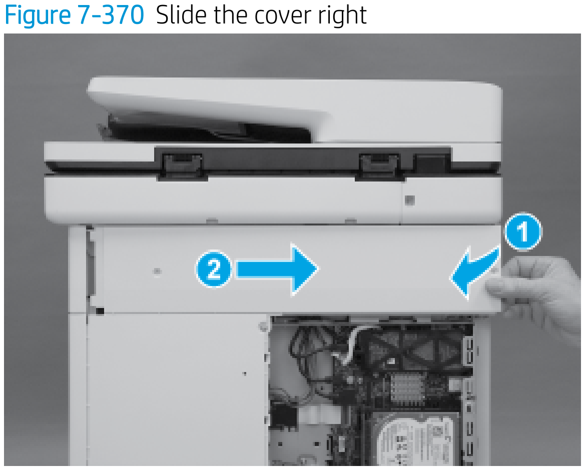
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-369 Release the right edge



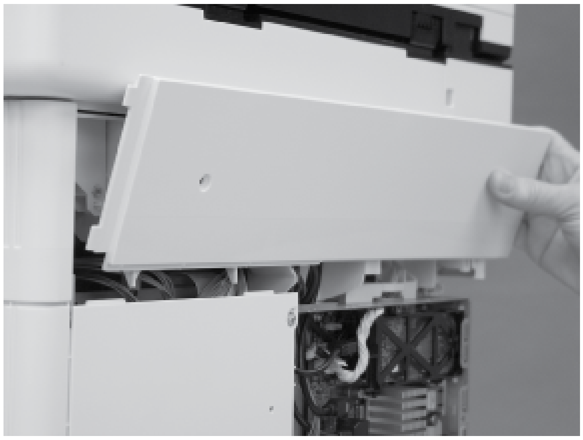
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-370 Slide the cover right



4. Remove the cover.

Figure 7-371 Remove the cover



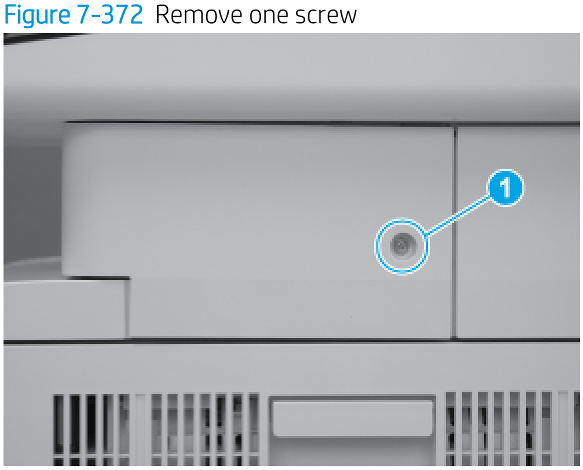
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-372 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-373 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-374 Rotate the cover

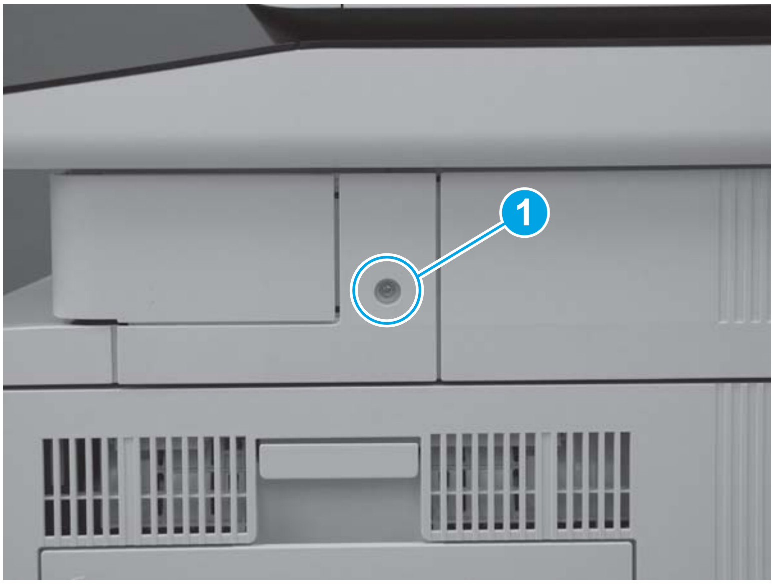
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

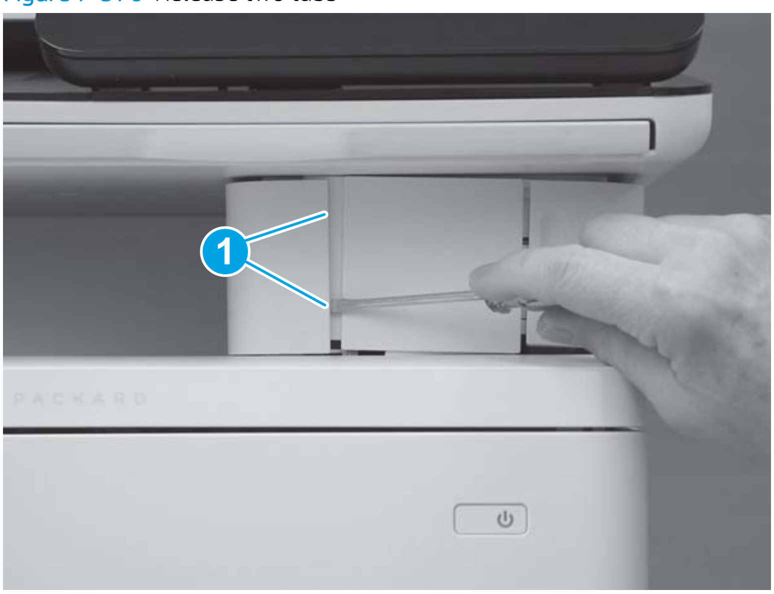
1. Remove one screw (callout 1).

Figure 7-375 Remove one screw



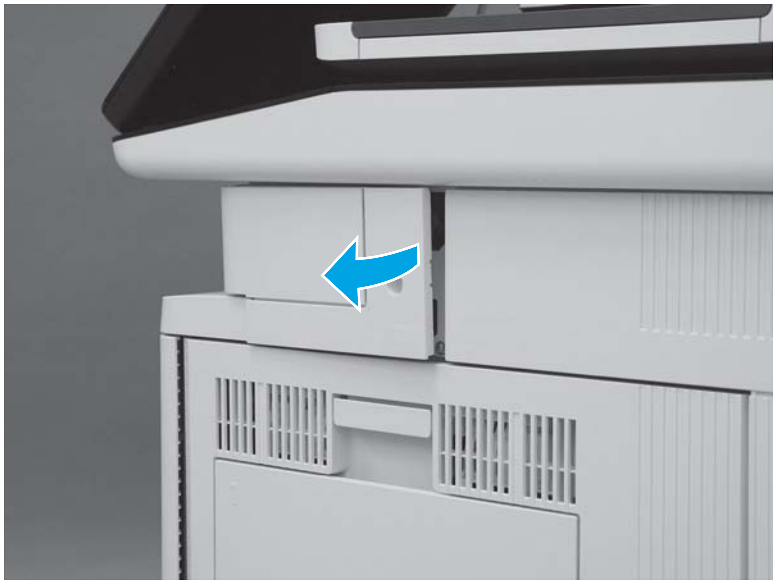
2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-376 Release two tabs



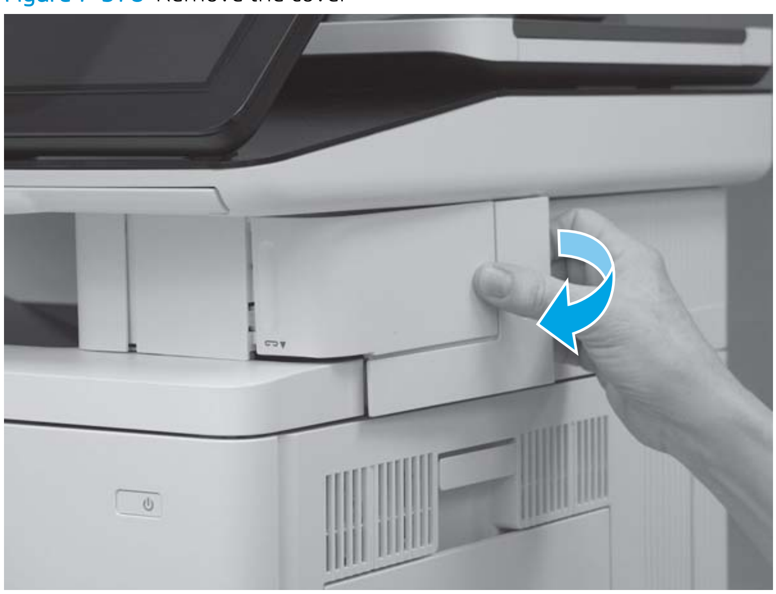
3. Release the back edge of the cover.

Figure 7-377 Release the back edge of the cover



4. Rotate the cover away from the printer to remove it.

Figure 7-378 Remove the cover



Remove the right upper cover (MFP)

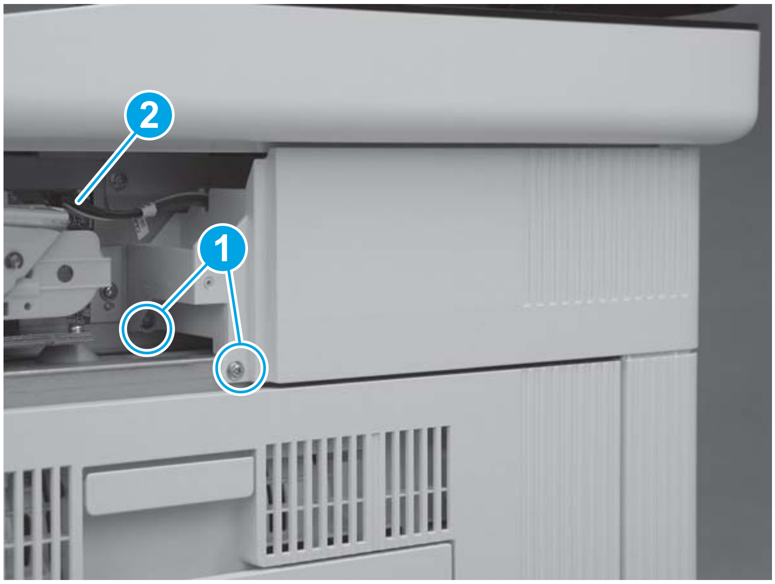
Follow these steps to remove the right upper cover.

NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

Figure 7-379 Remove two screws and one connector

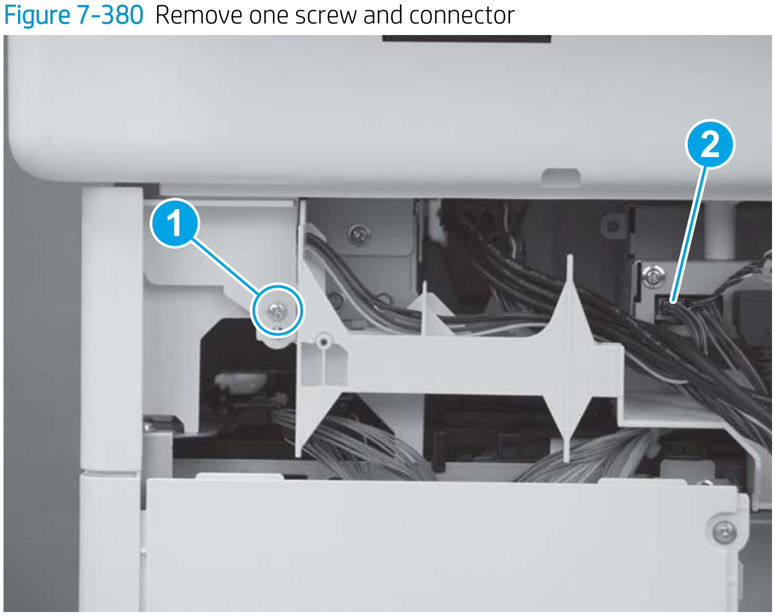


2. At the back of the printer, remove one screw (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

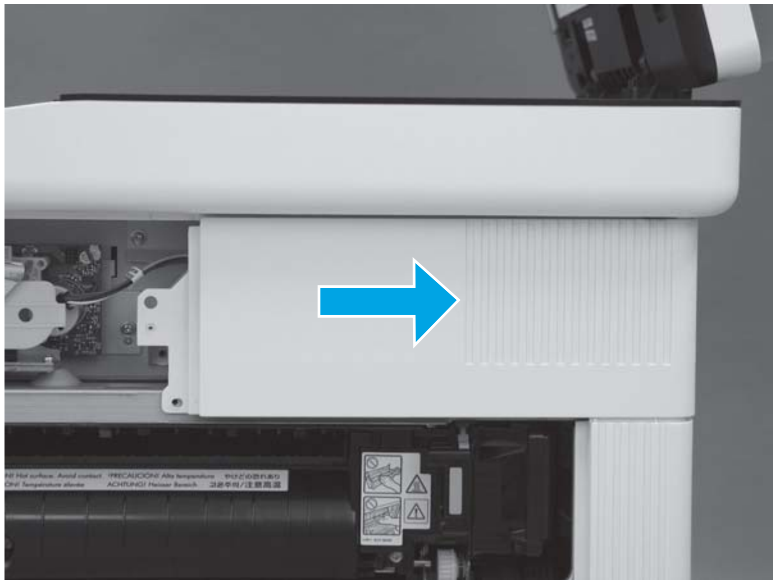
> **Reinstallation tip:** This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

Figure 7-380 Remove one screw and connector



3. Slide the cover toward the back of the printer.

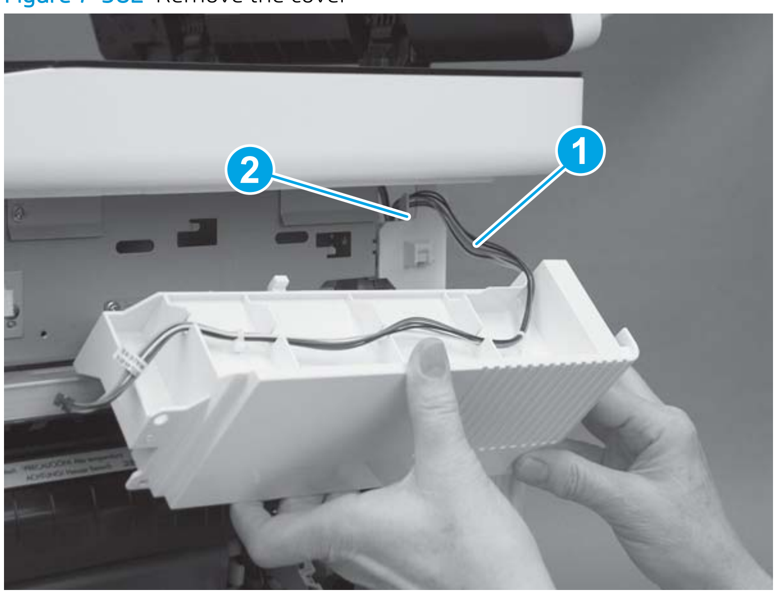
Figure 7-381 Slide the cover



4. Lift the cover away from the printer to remove it.

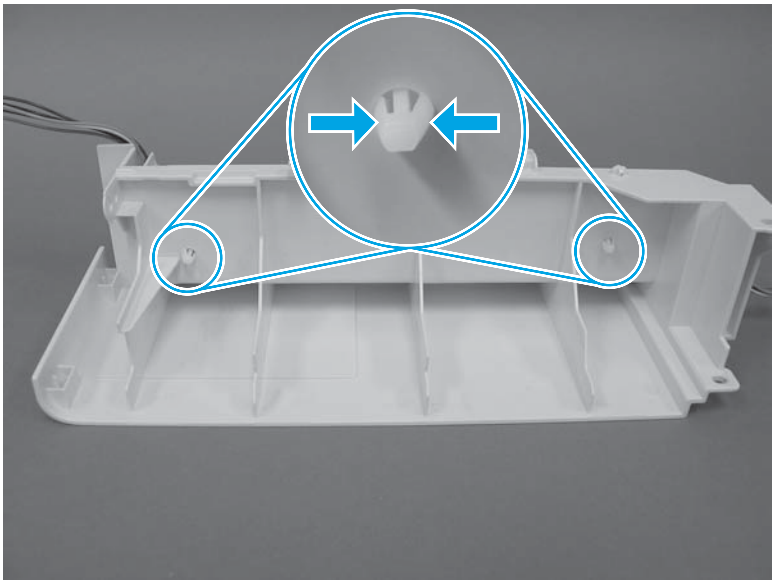
M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

Figure 7-382 Remove the cover



5. **M577/M578z**: Release two retainers on the bottom side of the cover.

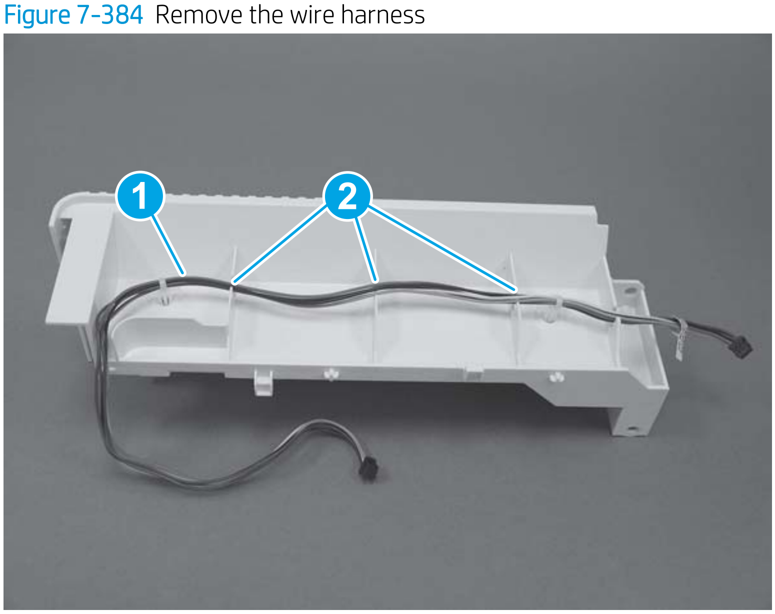
Figure 7-383 Release two retainers



6. **M577/M578z**: On the top of the cover, release the wires (callout 1) from the guides (callout 2) in the right upper cover.

NOTE: Set the wire harness aside for installation on the replacement right upper cover.

Figure 7-384 Remove the wire harness



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Top rear cover (M577/M578/E57540)

Learn about removing and replacing the top rear cover.

Before performing service

Turn the printer power off

- Disconnect the power cable.

  WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-37 Part information

Part number	Part description
RC4-3383-000CN	Top rear cover

Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

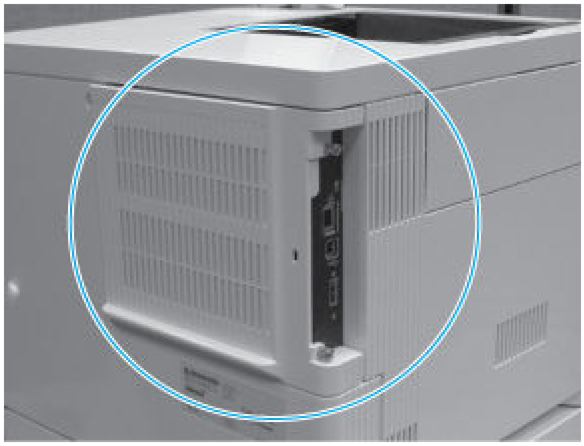
No post service test is available for this assembly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

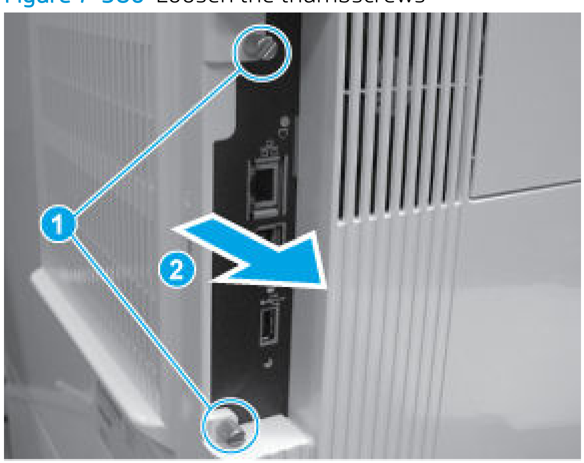
Figure 7-385 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-386 Loosen the thumbscrews



Remove the rear upper cover (MFP)

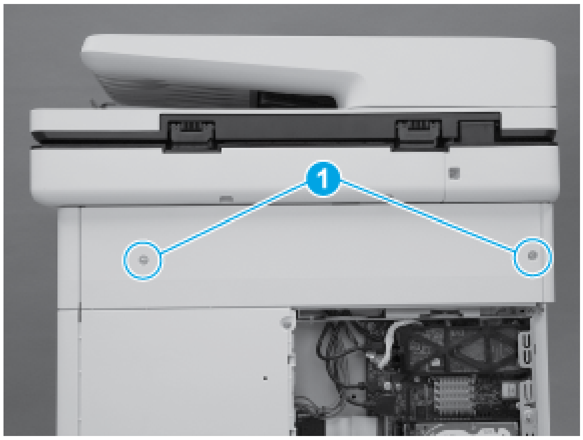
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

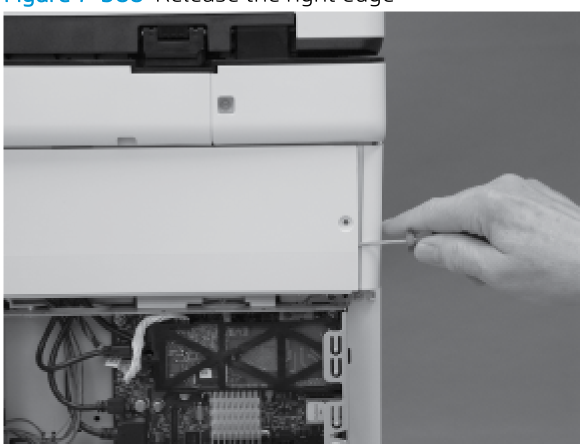
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-387 Remove two screws



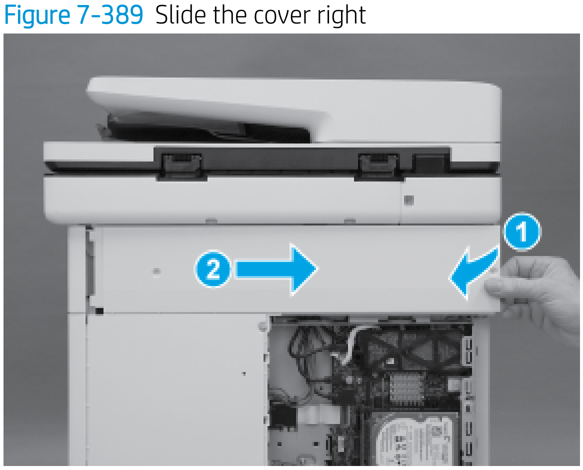
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-388 Release the right edge



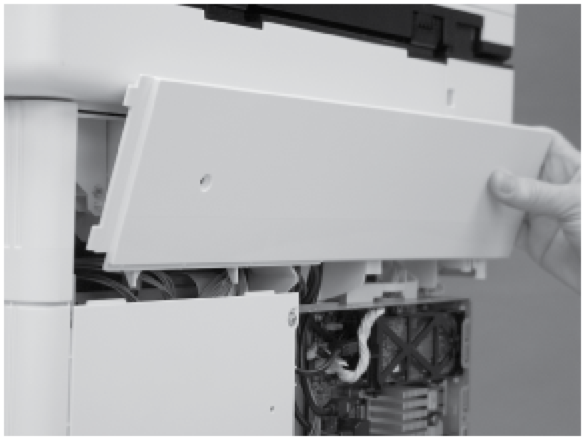
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-389 Slide the cover right



4. Remove the cover.

Figure 7-390 Remove the cover



Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

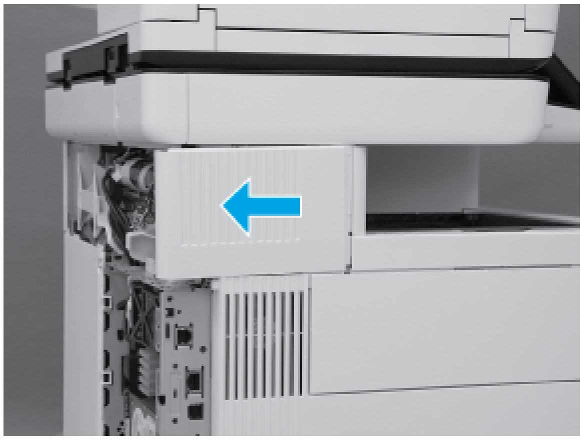
NOTE: This procedure is for MFP models only.

1. At the left side of the printer, release one tab (callout 1).

Figure 7-391 Release one tab

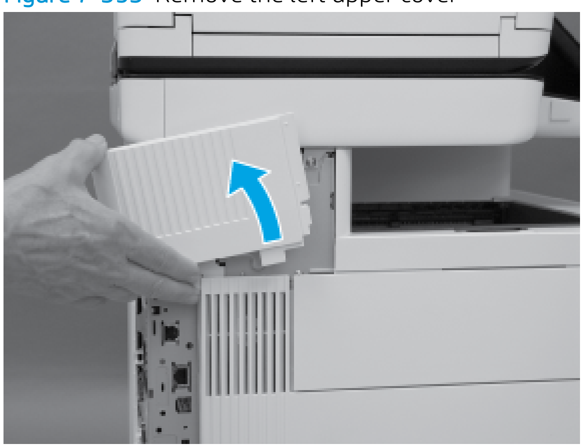
2. Slide the left upper cover toward the back of the printer.

Figure 7-392 Slide the cover back



3. Rotate the cover up to remove it.

Figure 7-393 Remove the left upper cover



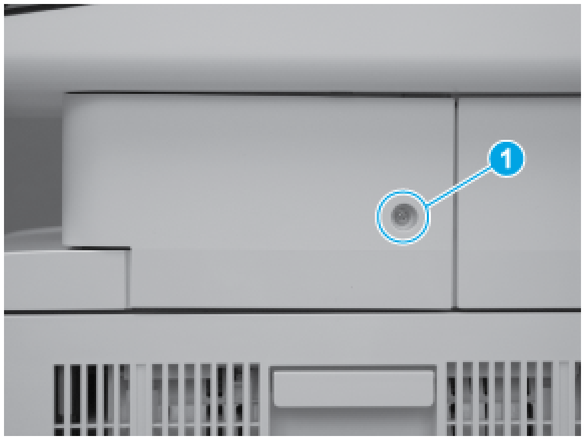
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-394 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-395 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-396 Rotate the cover

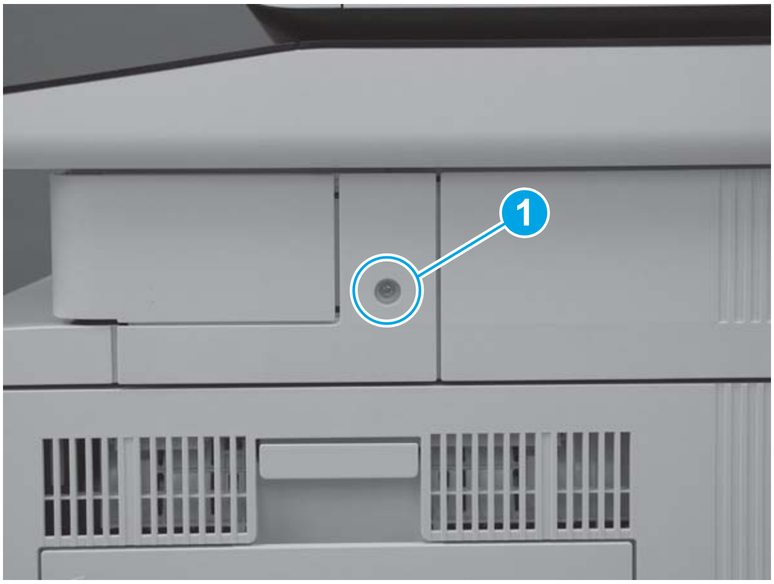
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

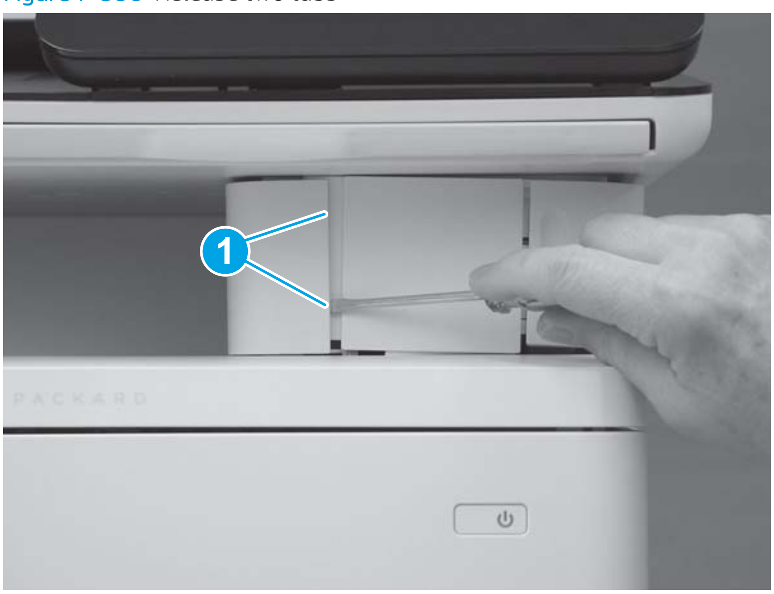
1. Remove one screw (callout 1).

Figure 7-397 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-398 Release two tabs



3. Release the back edge of the cover.

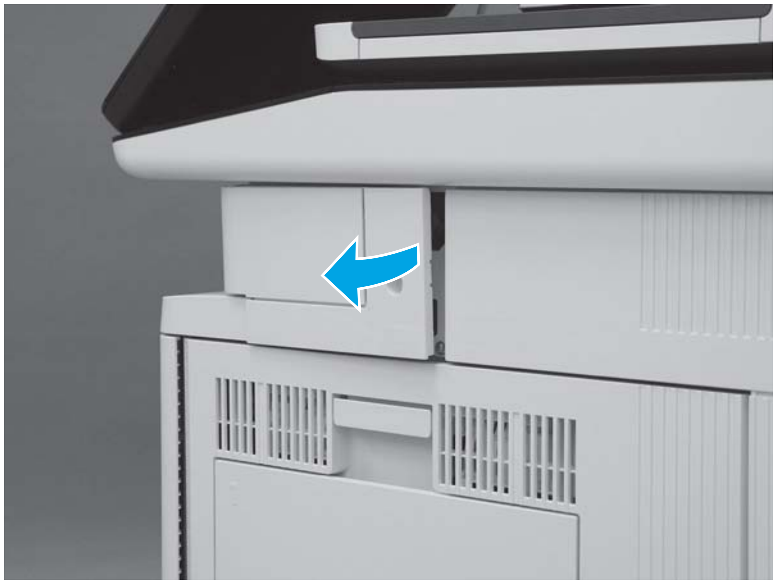


Figure 7-399 Release the back edge of the cover

4. Rotate the cover away from the printer to remove it.

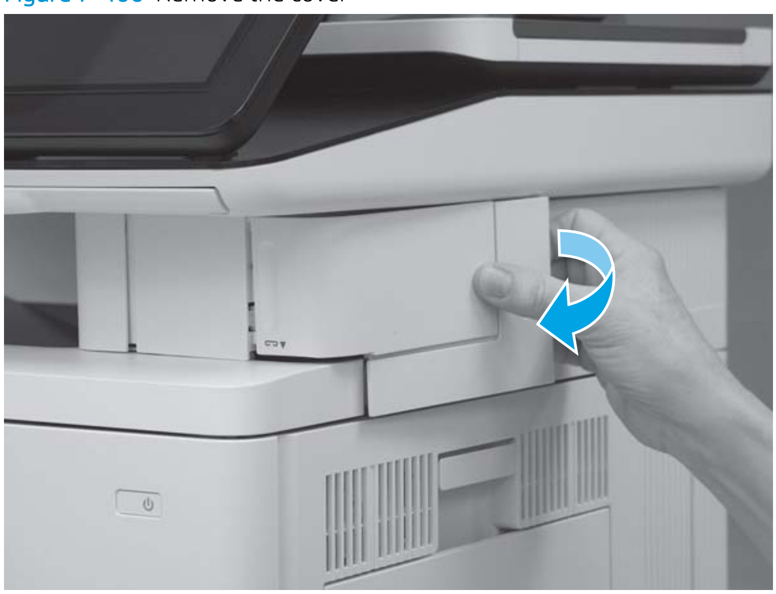


Figure 7-400 Remove the cover

Remove the integrated scanner assembly (ISA) (MFP)

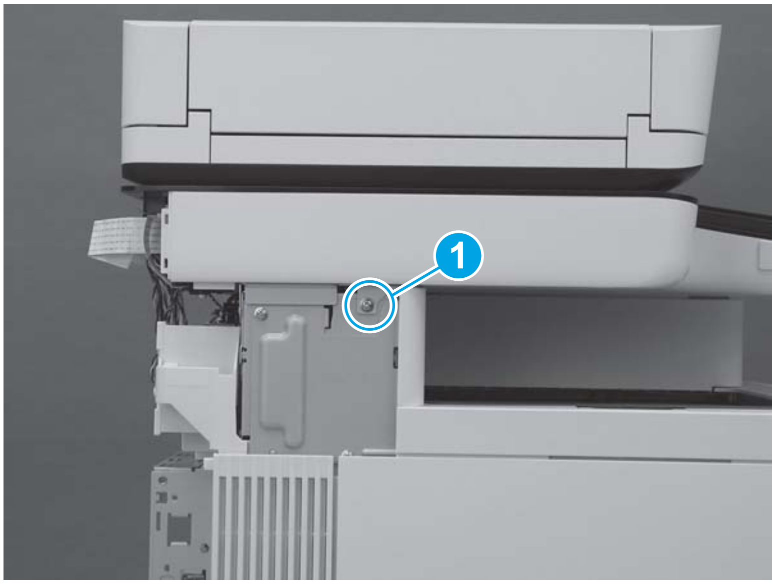
Follow these steps to remove the integrated scanner assembly (ISA).

NOTE: This procedure is for MFP models only.

NOTE: The ISA includes the document feeder, image scanner, scanner control board (SCB), control panel, keyboard (flow models) and NFC PCA (not all models).

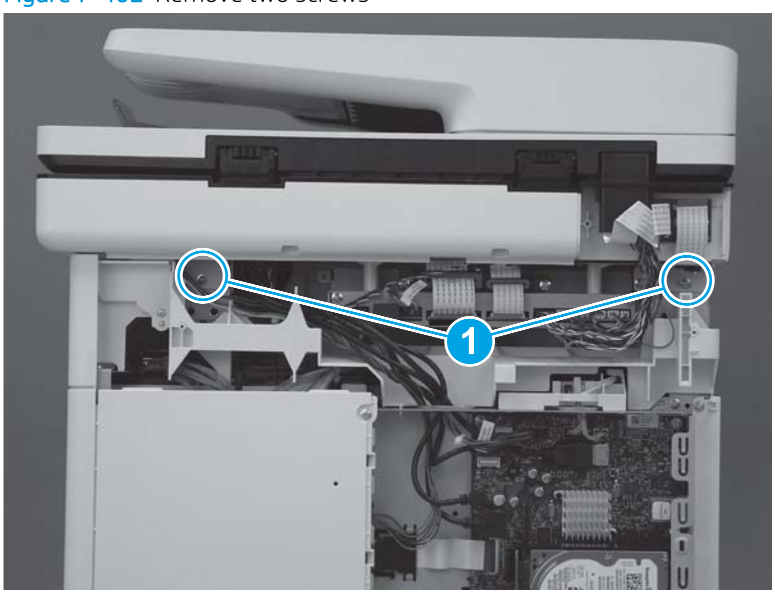
1. At the left side of the printer, remove one screw (callout 1).

Figure 7-401 Remove one screw



2. At the back of the printer, remove two screws (callout 1).

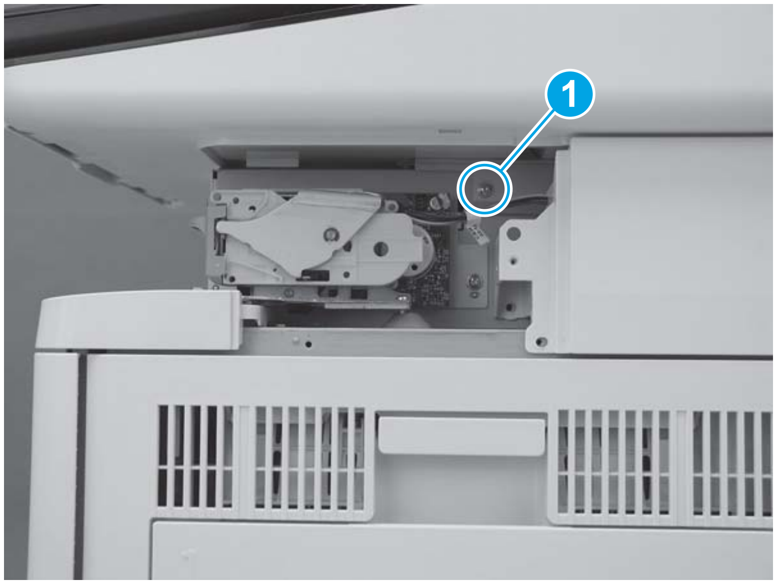
Figure 7-402 Remove two screws



3. At the right side of the printer, remove one screw (callout 1).

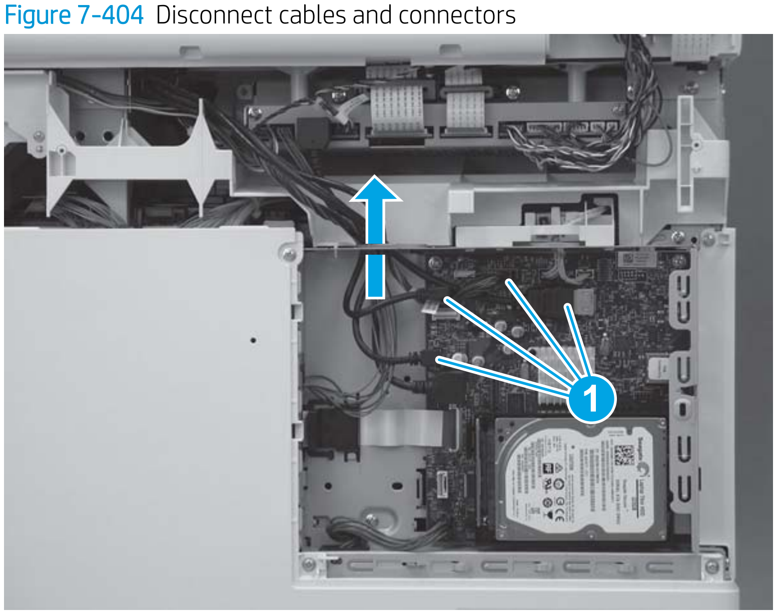
NOTE: The M577z is shown in the figure below. The procedure is correct for all MFP models.

Figure 7-403 Remove one screw



4. Disconnect four connectors (callout 1) on the formatter, and then pass the wire harnesses and cables through the top opening in the formatter case (callout 2).

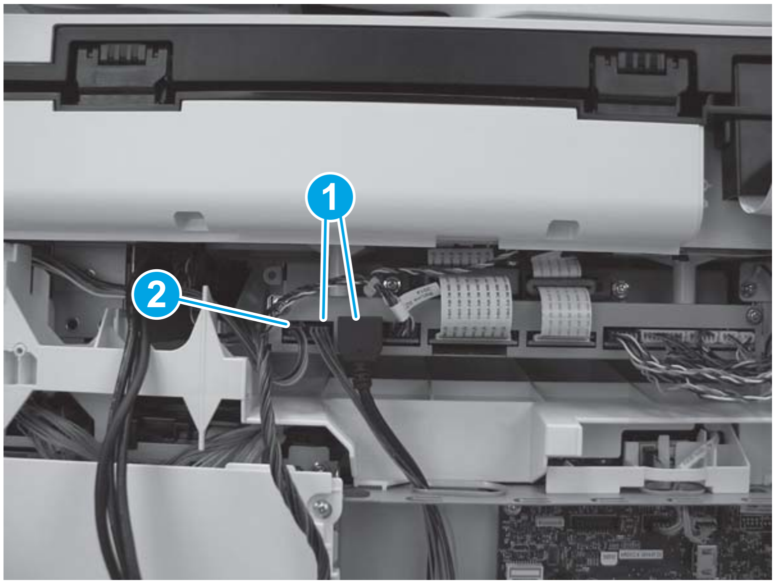
Figure 7-404 Disconnect cables and connectors



5. Disconnect two connectors on the scanner control board (callout 1).

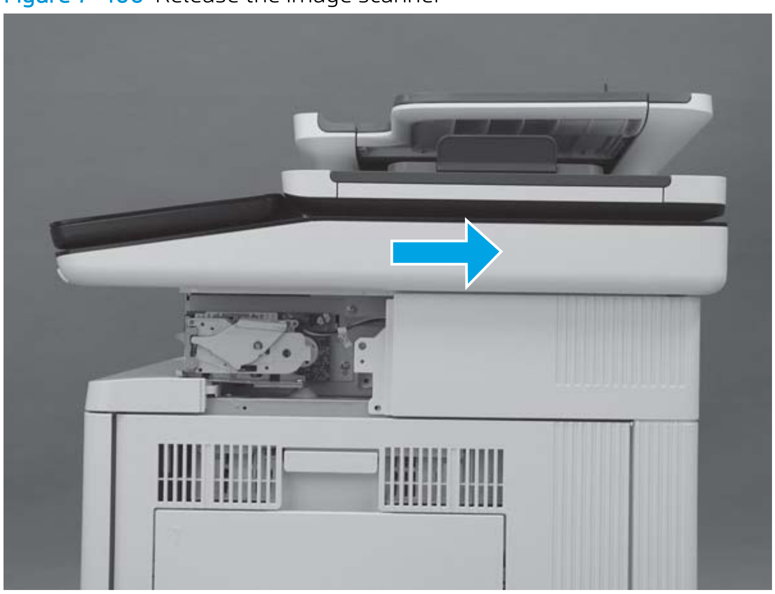
MFP stapler models: Disconnect one connector for the stapler on the scanner control board (callout 2).

Figure 7-405 Disconnect connectors



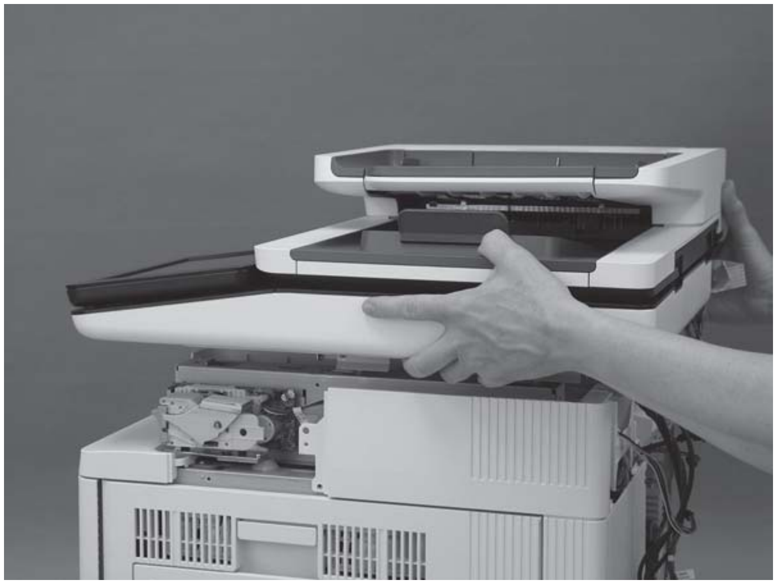
6. Slide the image scanner toward the back of the printer to release it.

Figure 7-406 Release the image scanner



7. Lift the ISA straight up to remove it.

Figure 7-407 Remove the ISA



Remove the right upper cover (MFP)

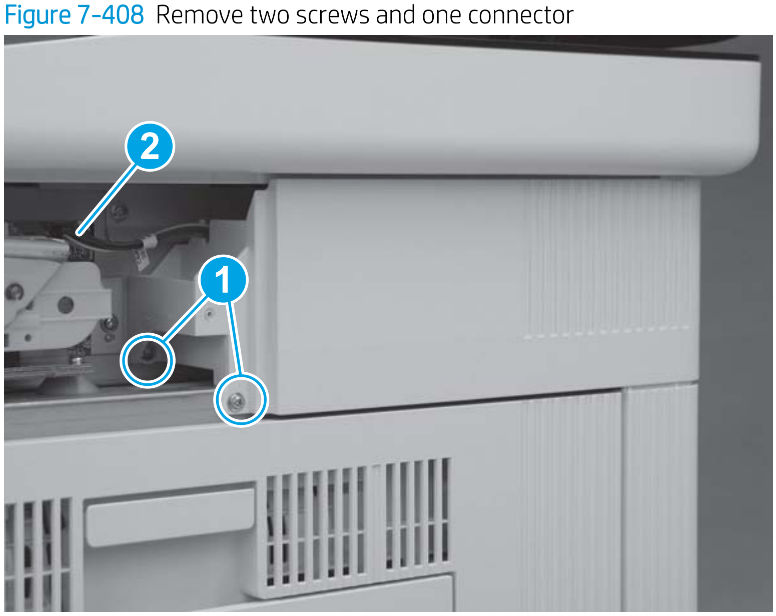
Follow these steps to remove the right upper cover.

NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Figure 7-408 Remove two screws and one connector

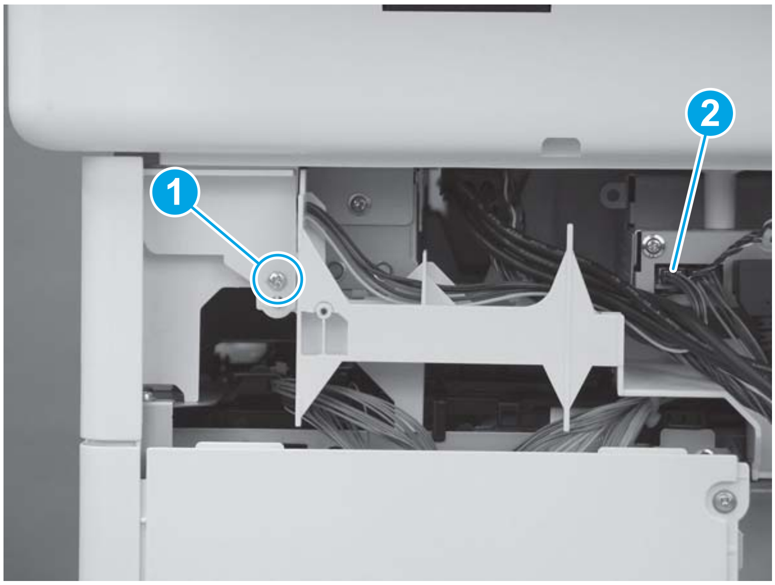


2. At the back of the printer, remove one screw (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Reinstallation tip: This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

   Figure 7-409 Remove one screw and connector

3. Slide the cover toward the back of the printer.

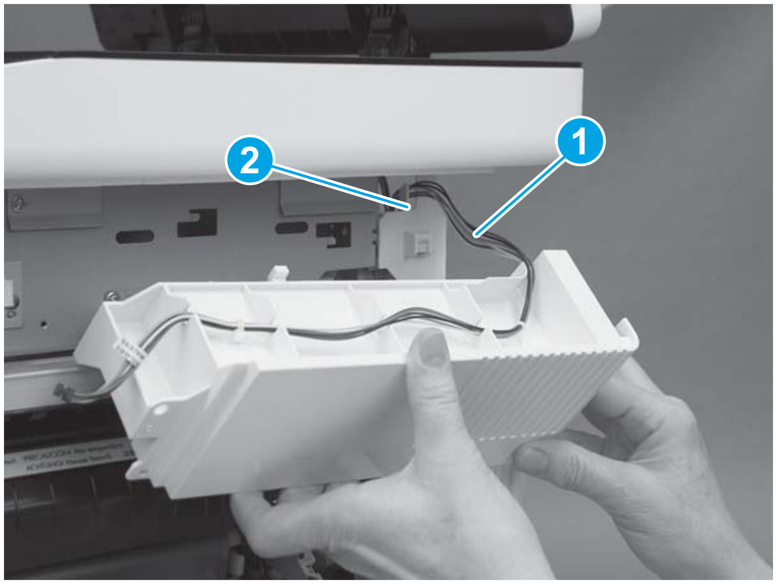
   Figure 7-410 Slide the cover

4. Lift the cover away from the printer to remove it.

M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

Figure 7-411 Remove the cover



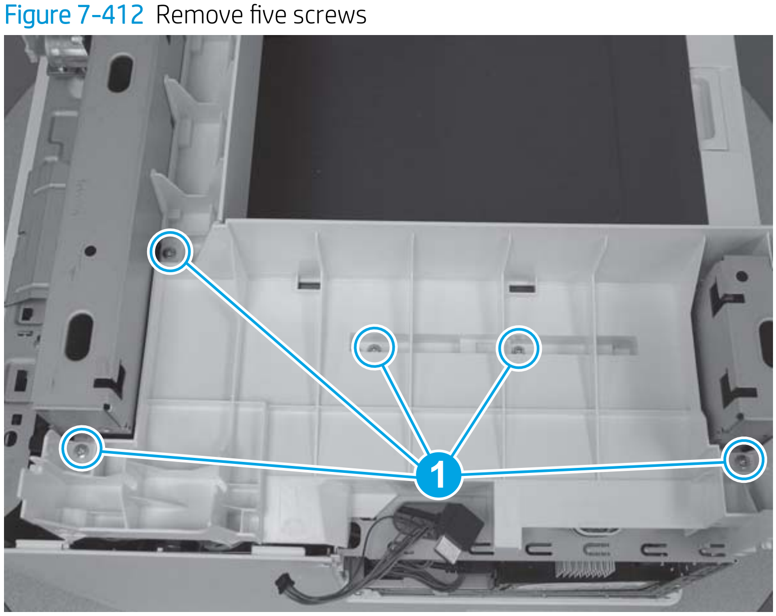
Remove the top rear cover (MFP)

Follow these steps to remove the top rear cover.

NOTE: This procedure is for MFP models only.

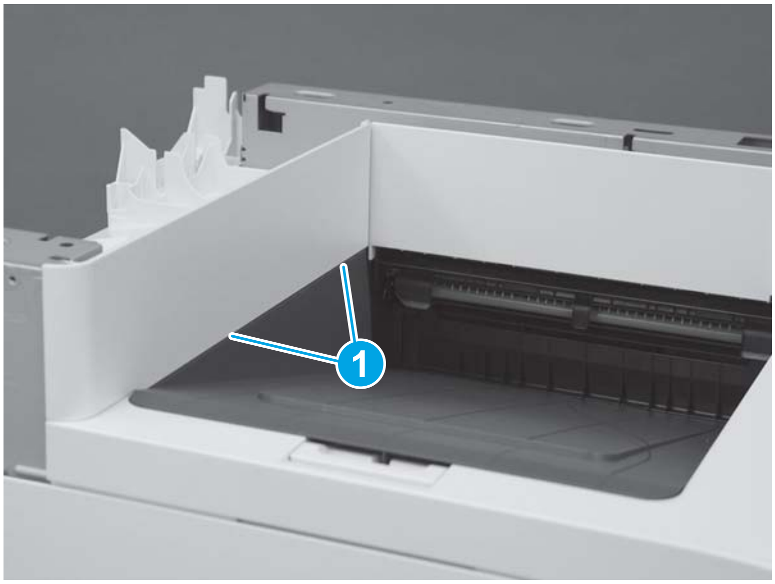
1. At the top of the printer, remove five screws (callout 1).

Figure 7-412 Remove five screws



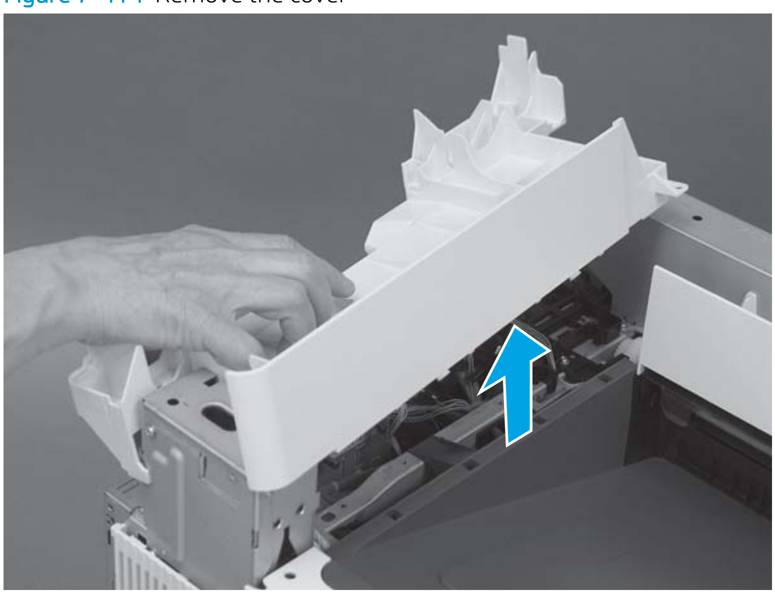
2. Release two tabs (callout 1) on the front edge of the cover.

Figure 7-413 Release two tabs



3. Remove the top rear cover.

Figure 7-414 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Paper feed cover (M577/M578/E57540)

Learn about removing and replacing the paper feed cover.

Before performing service

Turn the printer power off

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-38 Part information

Part number	Part description
RC4-3382-000CN	Paper feed cover

Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

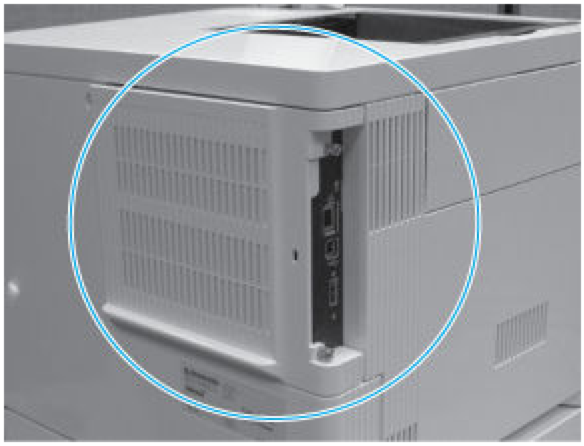
No post service test is available for this assembly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

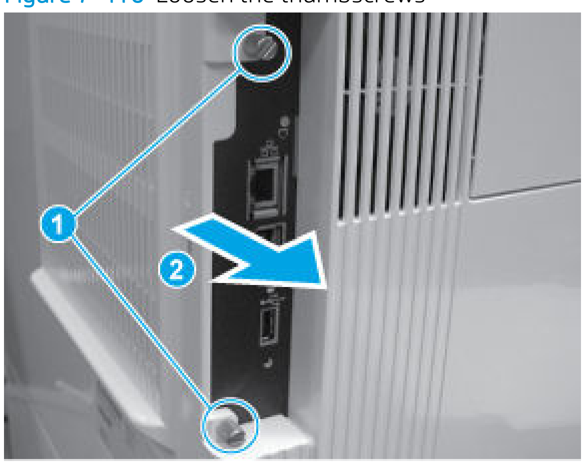
Figure 7-415 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-416 Loosen the thumbscrews



Remove the rear upper cover (MFP)

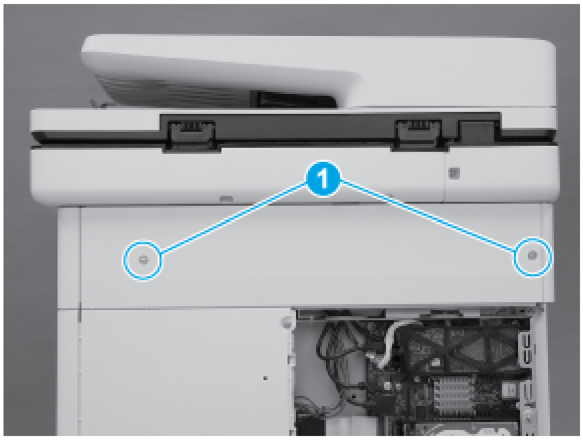
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

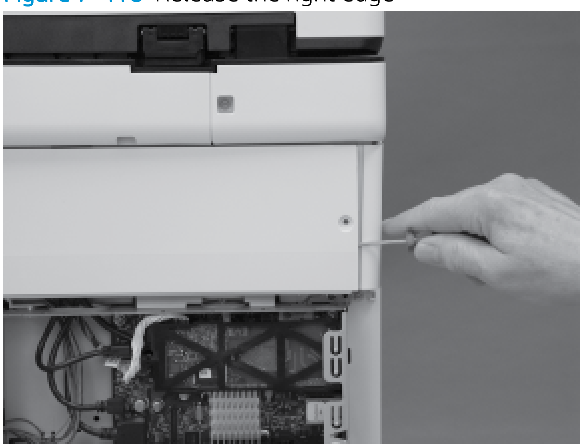
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-417 Remove two screws



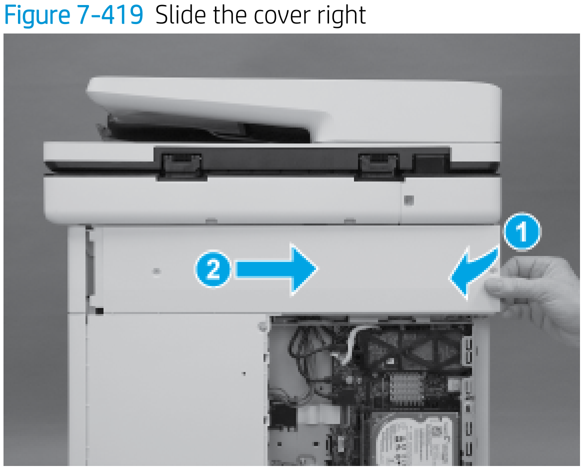
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-418 Release the right edge



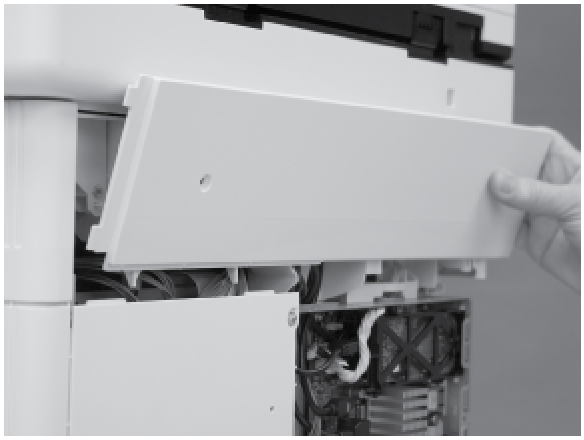
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-419 Slide the cover right



4. Remove the cover.

Figure 7-420 Remove the cover



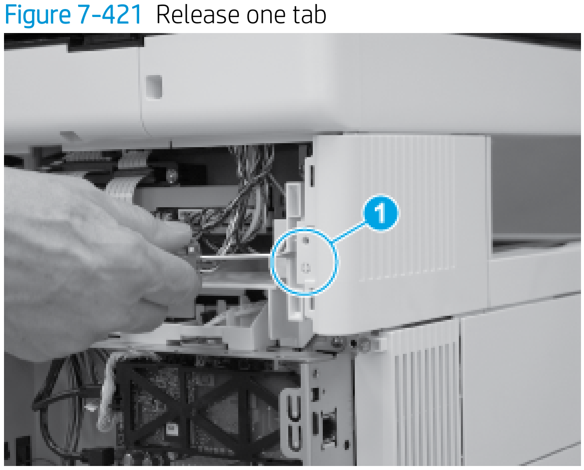
Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

NOTE: This procedure is for MFP models only.

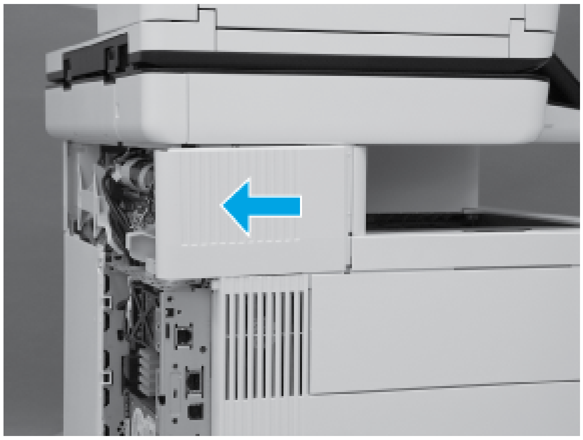
1. At the left side of the printer, release one tab (callout 1).

Figure 7-421 Release one tab



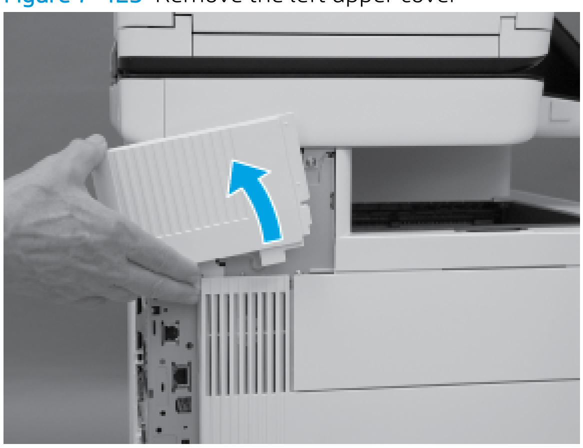
2. Slide the left upper cover toward the back of the printer.

Figure 7-422 Slide the cover back



3. Rotate the cover up to remove it.

Figure 7-423 Remove the left upper cover



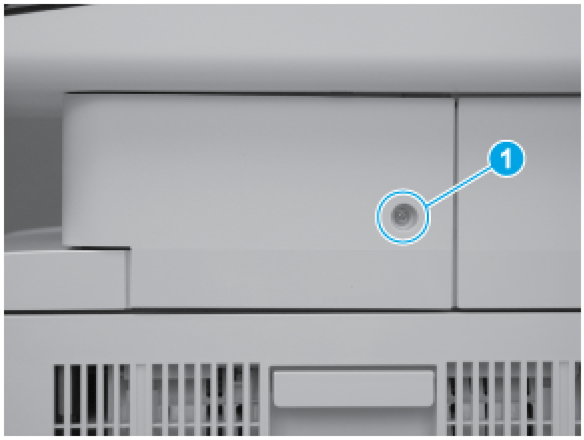
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-424 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-425 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-426 Rotate the cover

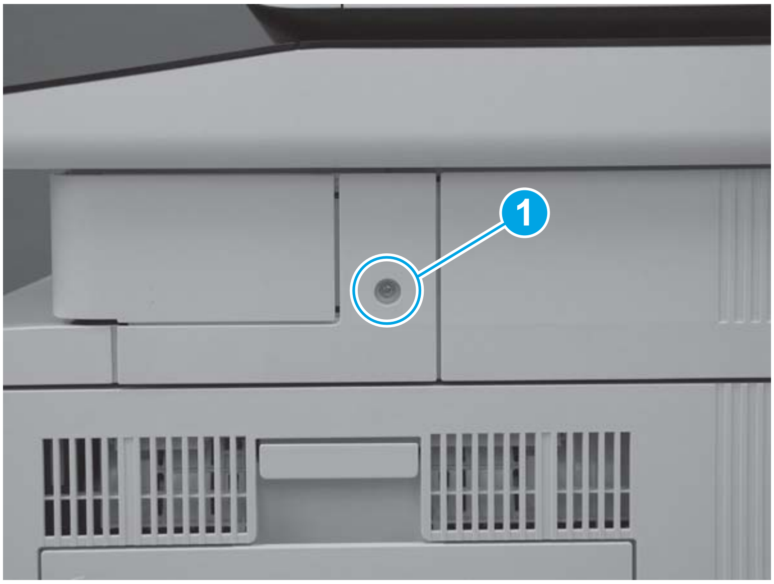
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

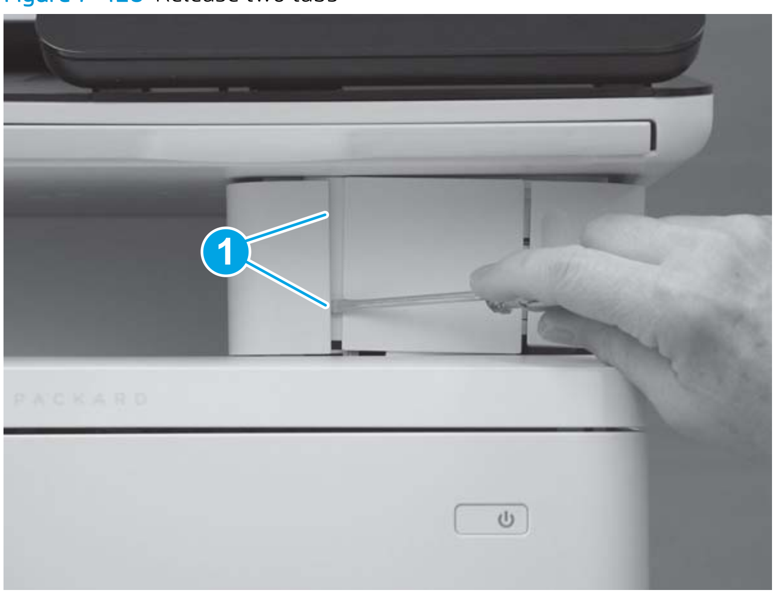
1. Remove one screw (callout 1).

Figure 7-427 Remove one screw



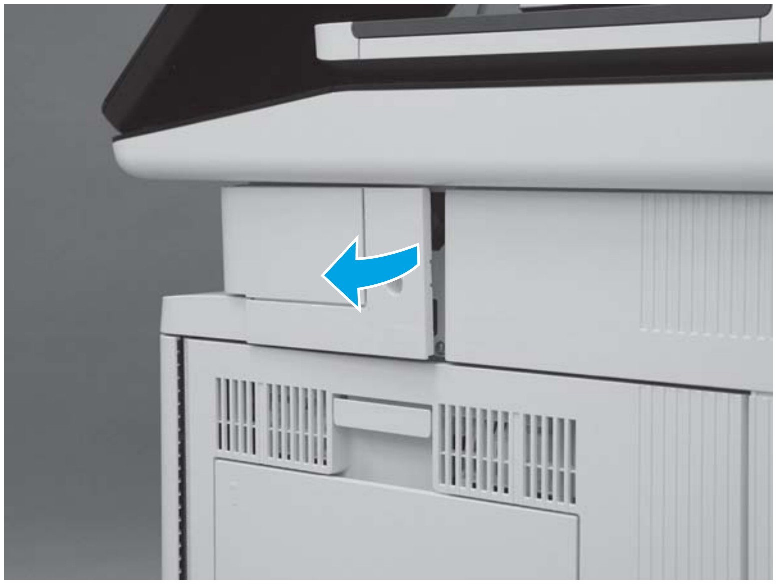
2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-428 Release two tabs



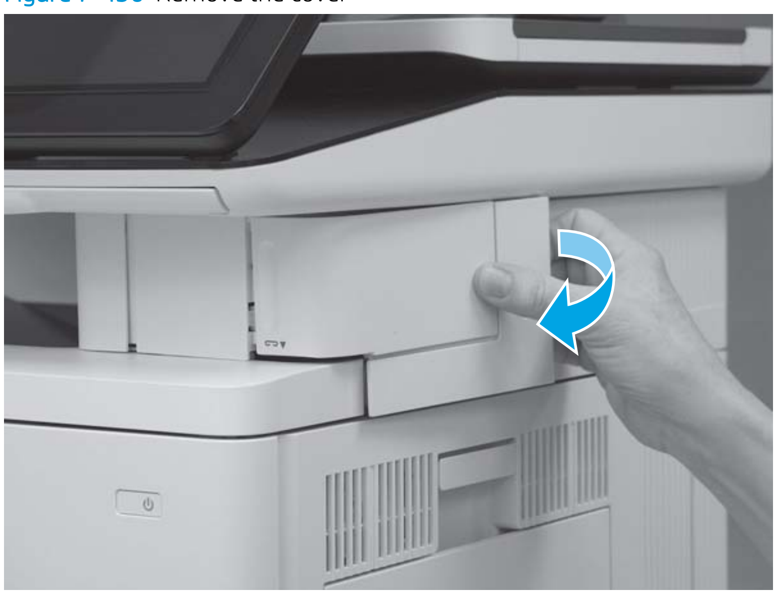
3. Release the back edge of the cover.

Figure 7-429 Release the back edge of the cover



4. Rotate the cover away from the printer to remove it.

Figure 7-430 Remove the cover



Remove the integrated scanner assembly (ISA) (MFP)

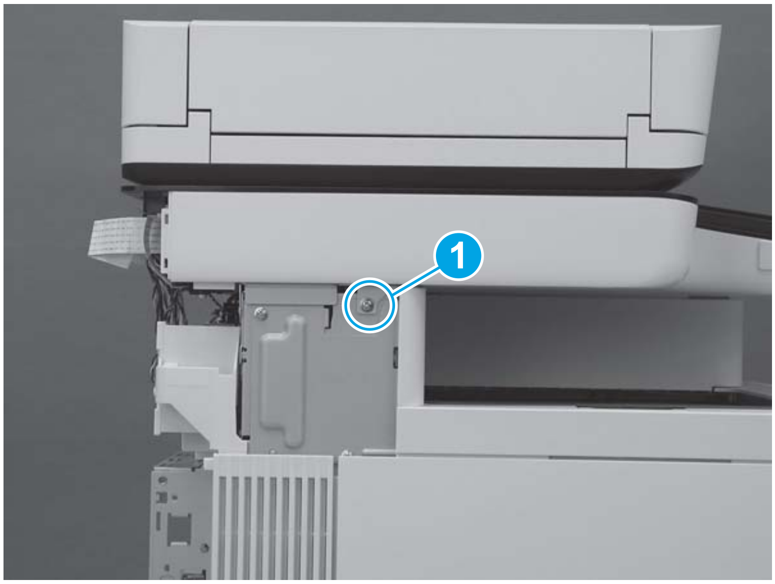
Follow these steps to remove the integrated scanner assembly (ISA).

NOTE: This procedure is for MFP models only.

NOTE: The ISA includes the document feeder, image scanner, scanner control board (SCB), control panel, keyboard (flow models) and NFC PCA (not all models).

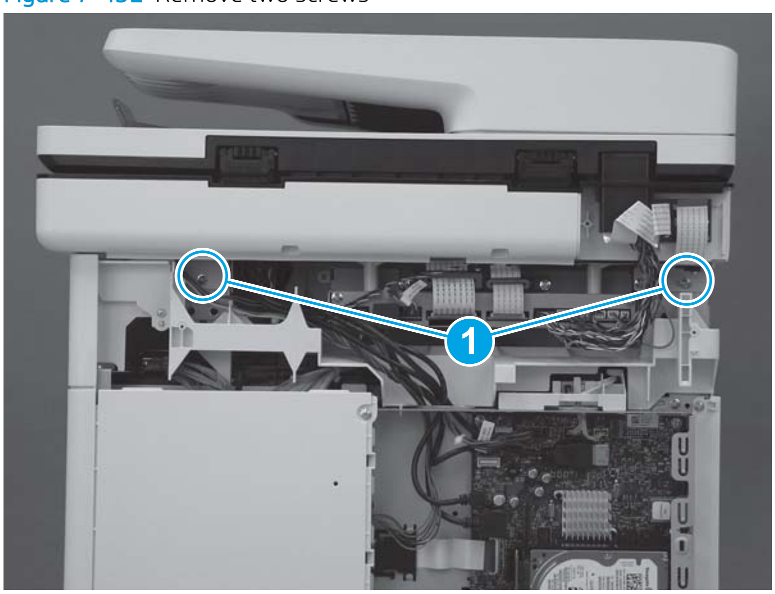
1. At the left side of the printer, remove one screw (callout 1).

Figure 7-431 Remove one screw



2. At the back of the printer, remove two screws (callout 1).

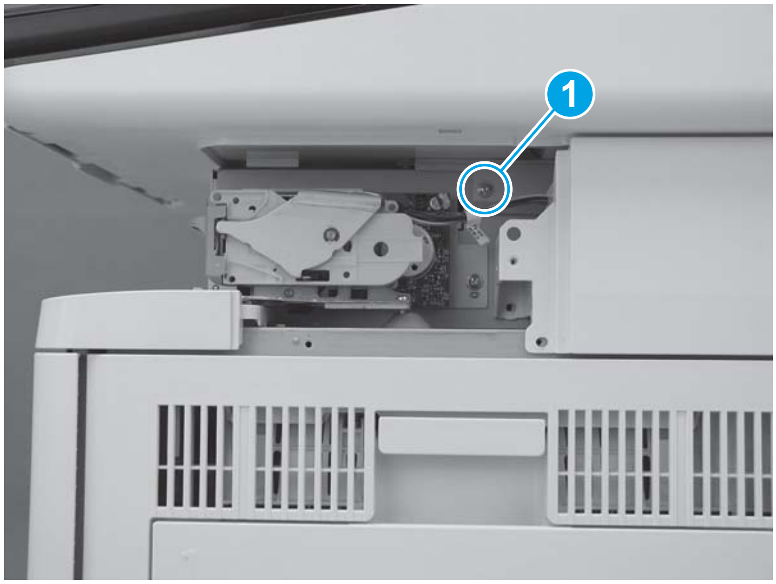
Figure 7-432 Remove two screws



3. At the right side of the printer, remove one screw (callout 1).

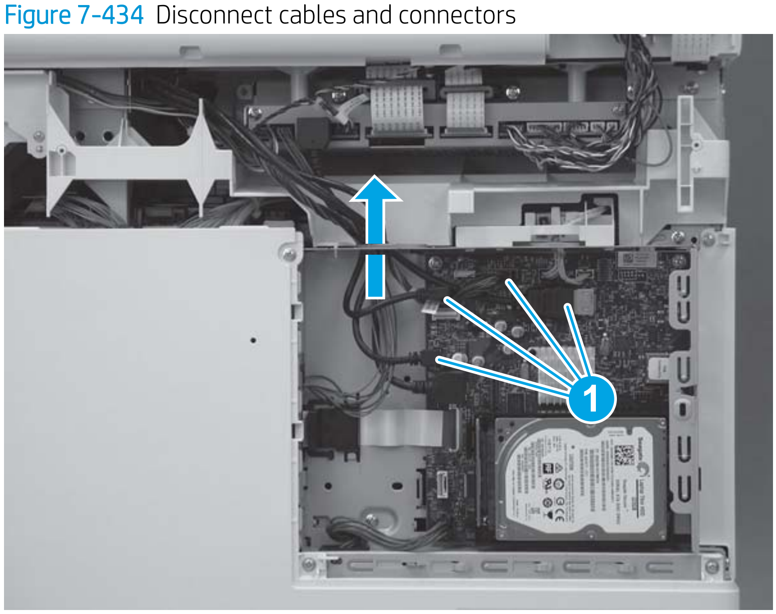
NOTE: The M577z is shown in the figure below. The procedure is correct for all MFP models.

Figure 7-433 Remove one screw



4. Disconnect four connectors (callout 1) on the formatter, and then pass the wire harnesses and cables through the top opening in the formatter case (callout 2).

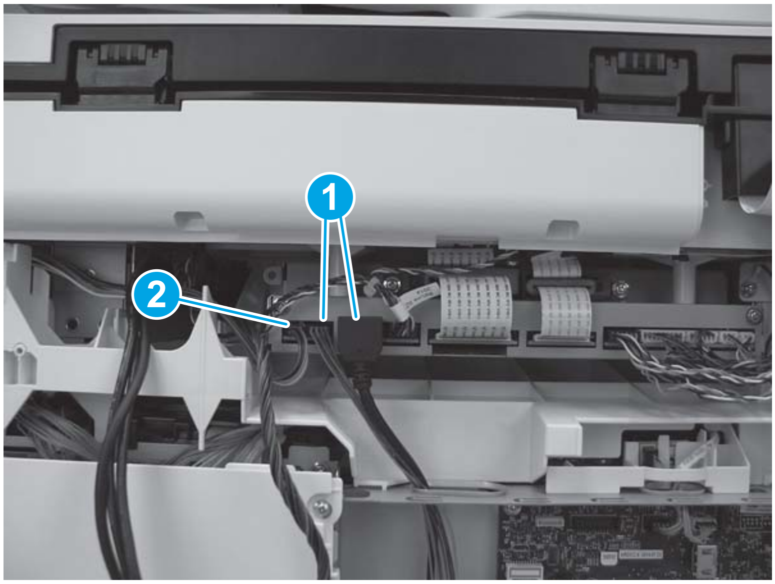
Figure 7-434 Disconnect cables and connectors



5. Disconnect two connectors on the scanner control board (callout 1).

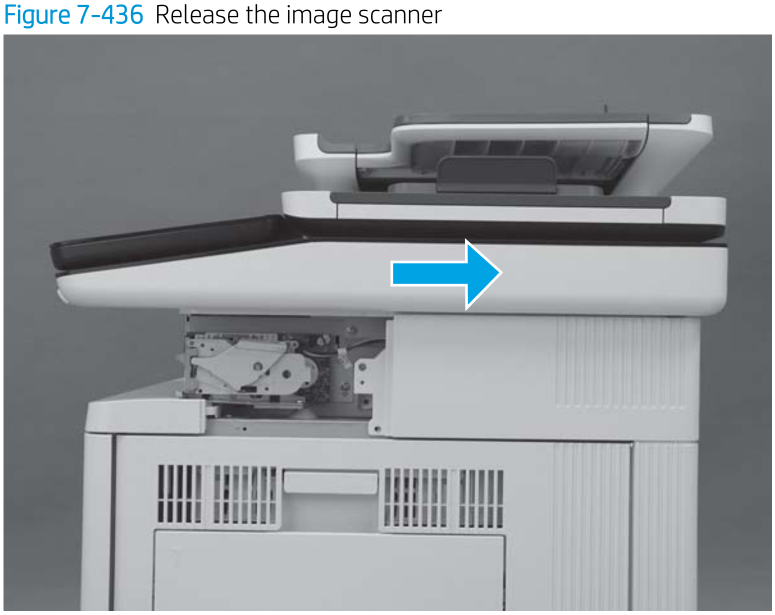
   MFP stapler models: Disconnect one connector for the stapler on the scanner control board (callout 2).

   Figure 7-435 Disconnect connectors

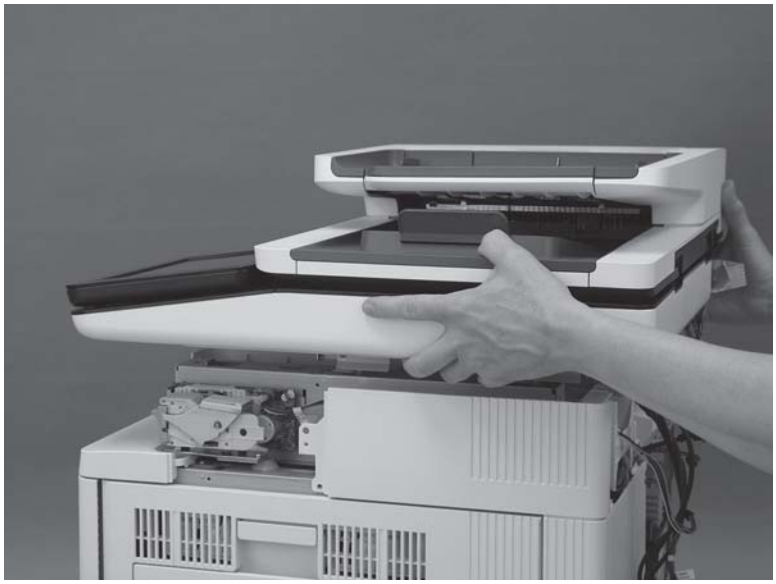
6. Slide the image scanner toward the back of the printer to release it.

   Figure 7-436 Release the image scanner

7. Lift the ISA straight up to remove it.

Figure 7-437 Remove the ISA



Remove the right upper cover (MFP)

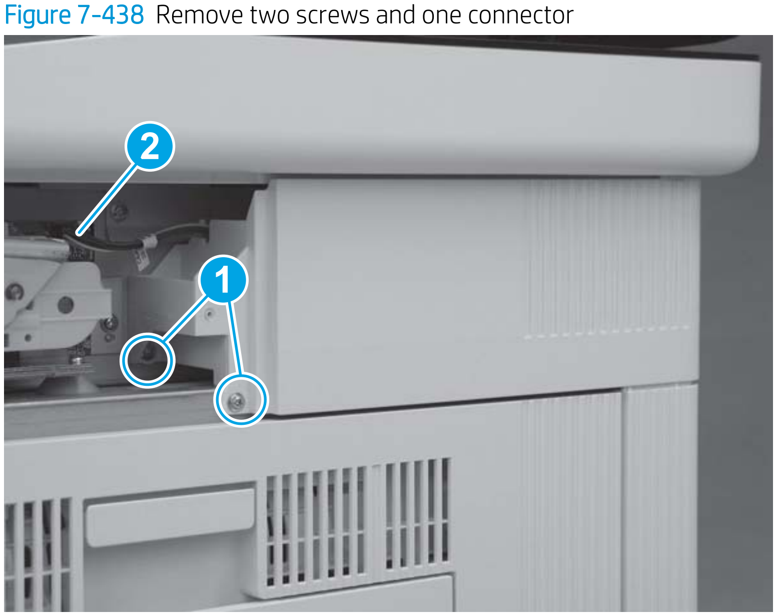
Follow these steps to remove the right upper cover.

> NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Figure 7-438 Remove two screws and one connector

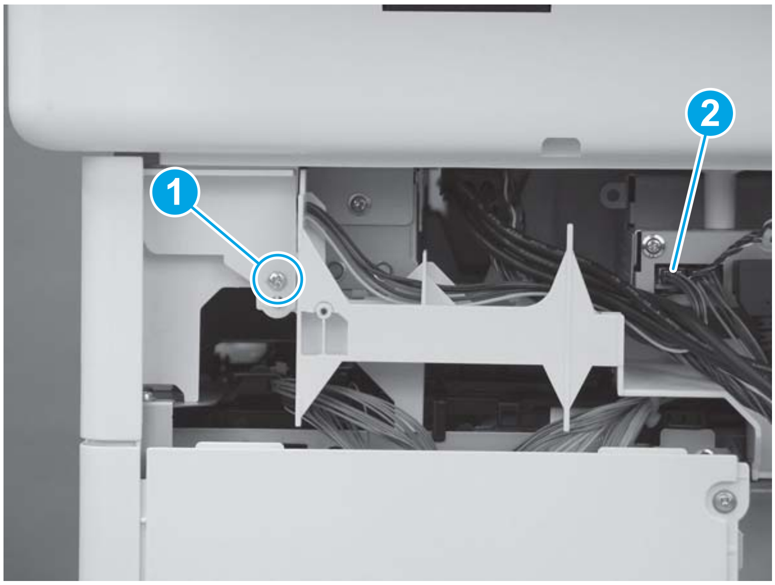


2. At the back of the printer, remove one screw (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Reinstallation tip: This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

   Figure 7-439 Remove one screw and connector



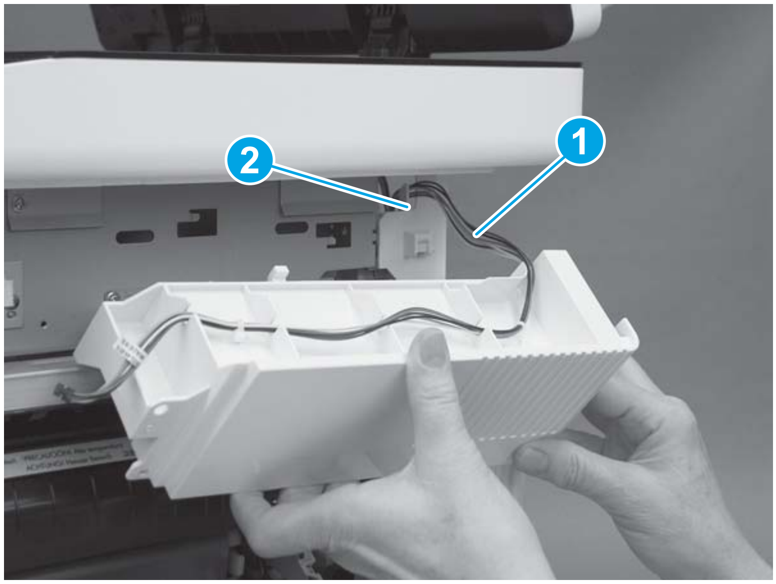
3. Slide the cover toward the back of the printer.

   Figure 7-440 Slide the cover

4. Lift the cover away from the printer to remove it.

   M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

   Figure 7-441 Remove the cover



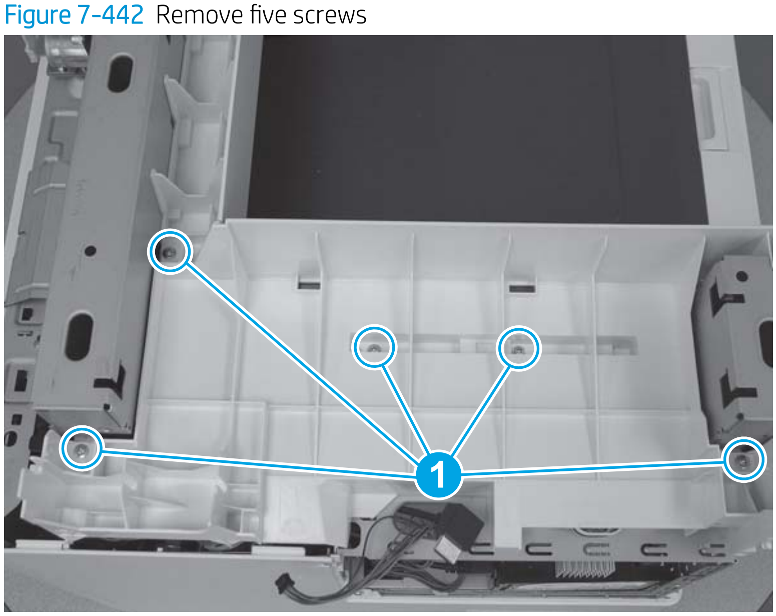
Remove the top rear cover (MFP)

Follow these steps to remove the top rear cover.

NOTE: This procedure is for MFP models only.

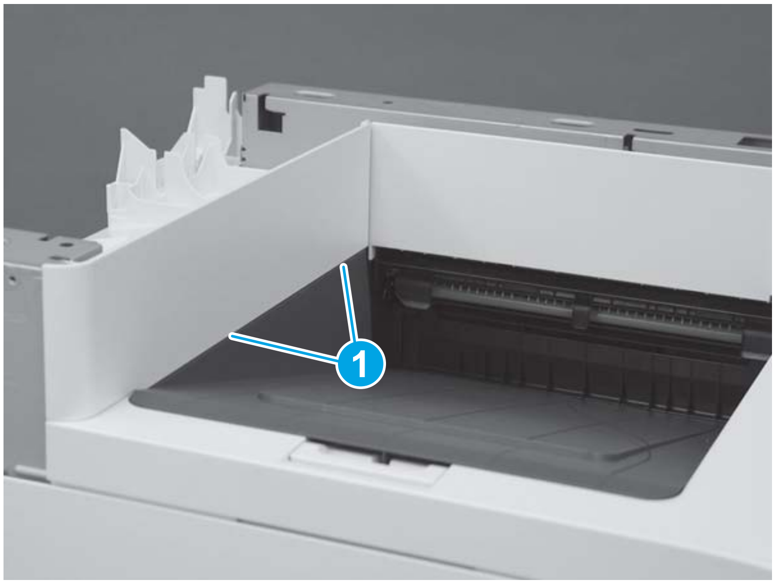
1. At the top of the printer, remove five screws (callout 1).

   Figure 7-442 Remove five screws



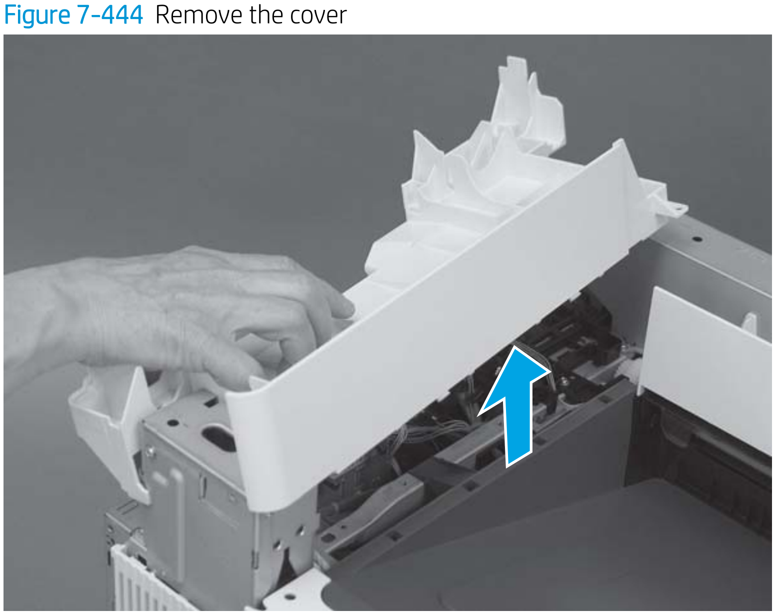
2. Release two tabs (callout 1) on the front edge of the cover.

Figure 7-443 Release two tabs



3. Remove the top rear cover.

Figure 7-444 Remove the cover



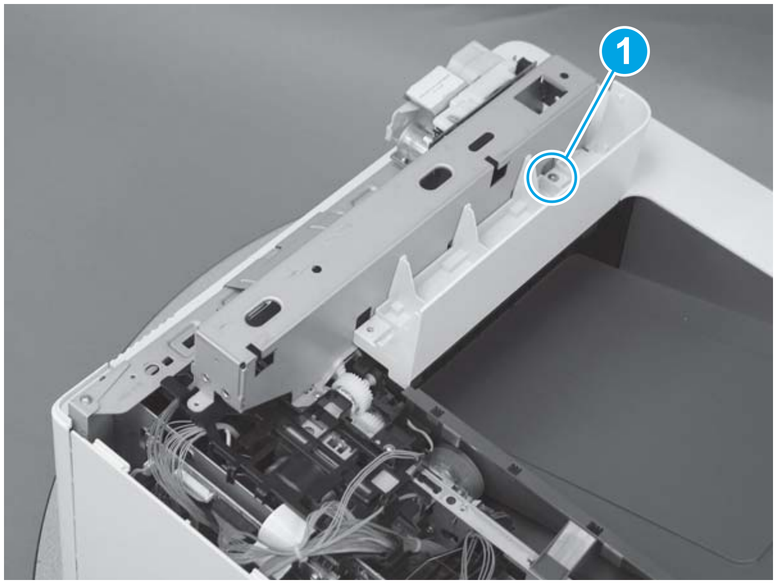
Remove the paper feed cover (MFP)

Follow these steps to remove the paper feed cover.

NOTE: This procedure is for MFP models only.

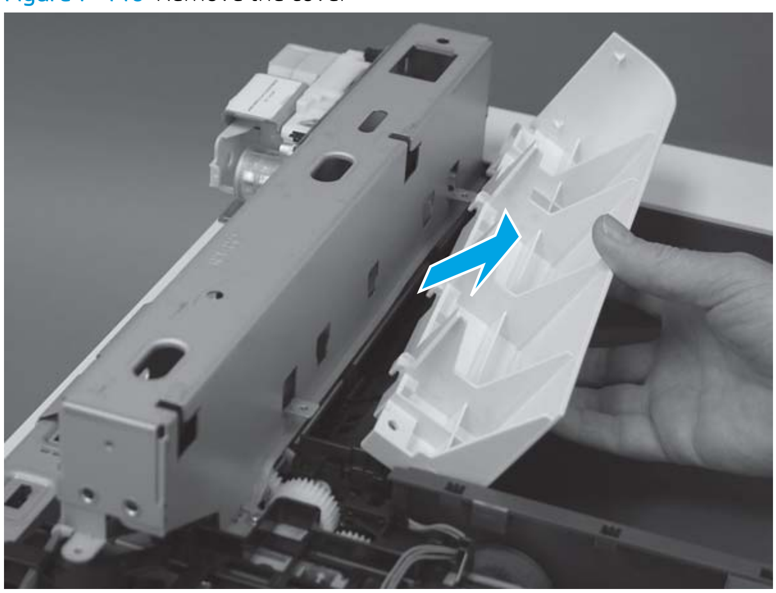
1. Remove one screw (callout 1).

Figure 7-445 Remove one screw



2. Lift the cover up to remove it.

Figure 7-446 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Top cover (M577/M578/E57540)

Learn about removing and replacing the top cover.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

> ⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.
>
> If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-39 Part information

Part number	Part description
RC4-3381-000CN	Top cover

Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

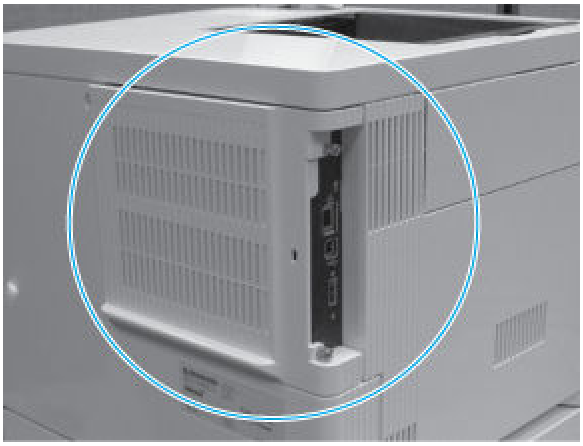
No post service test is available for this assembly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

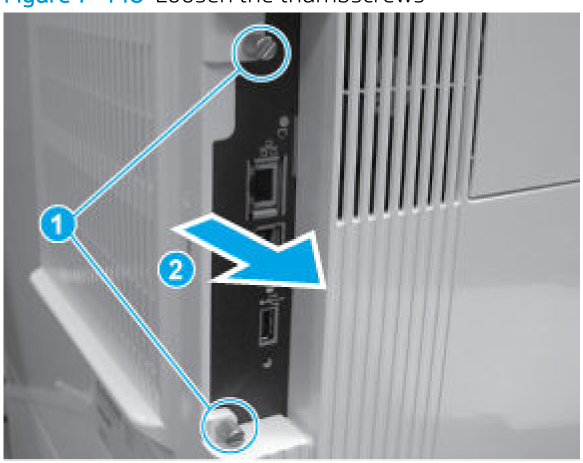
Figure 7-447 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-448 Loosen the thumbscrews



Remove the rear upper cover (MFP)

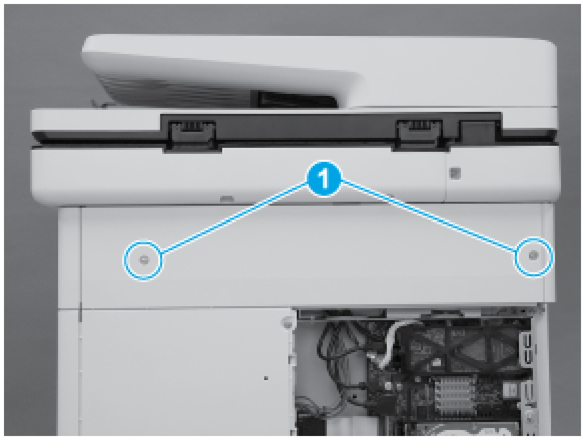
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

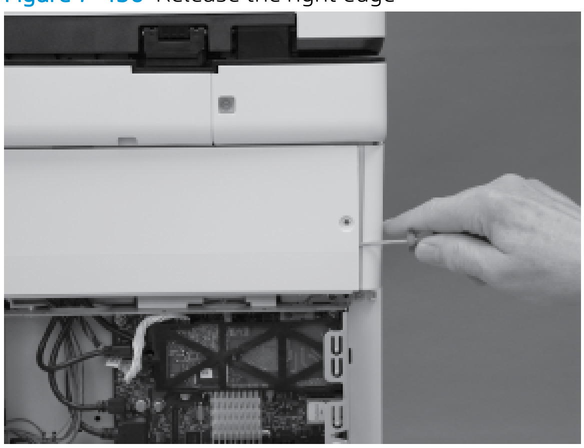
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-449 Remove two screws



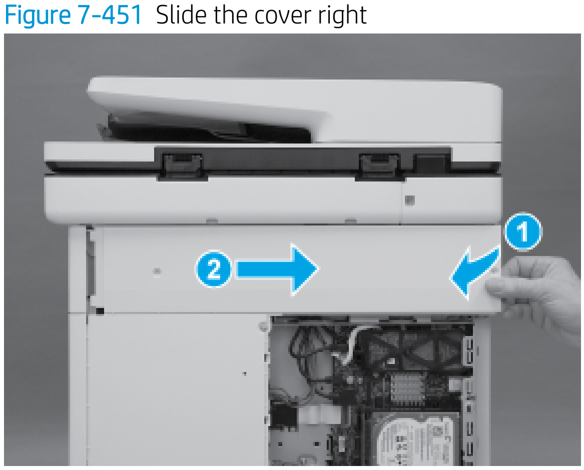
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-450 Release the right edge



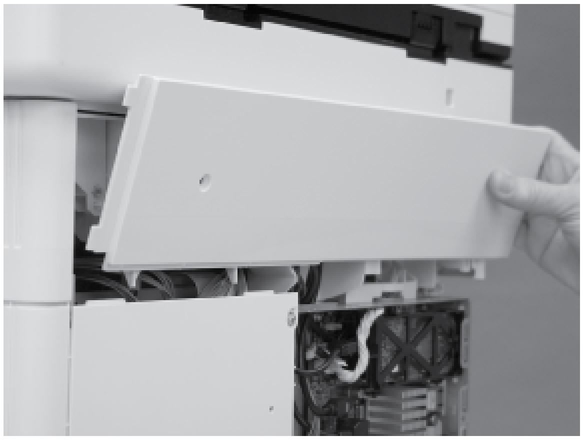
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-451 Slide the cover right



4. Remove the cover.

Figure 7-452 Remove the cover



Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

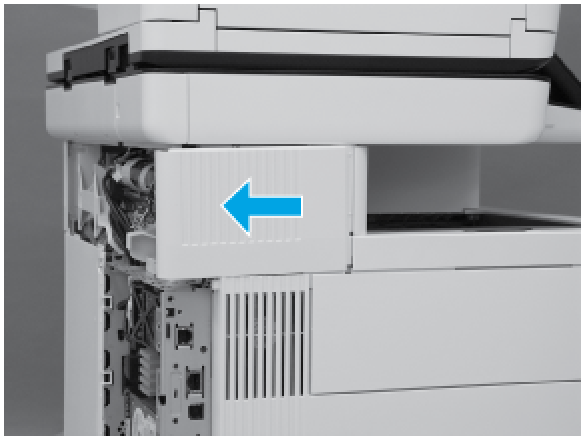
NOTE: This procedure is for MFP models only.

1. At the left side of the printer, release one tab (callout 1).

Figure 7-453 Release one tab

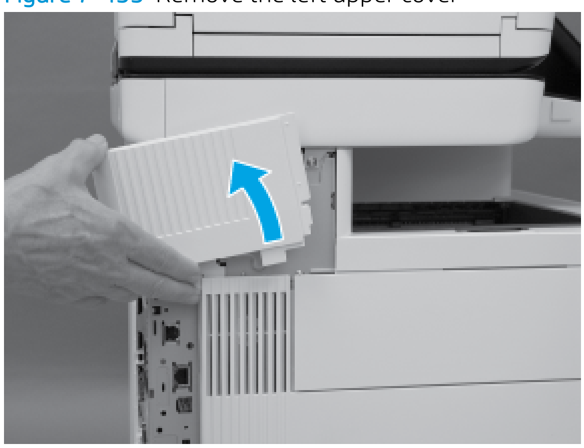
2. Slide the left upper cover toward the back of the printer.

Figure 7-454 Slide the cover back



3. Rotate the cover up to remove it.

Figure 7-455 Remove the left upper cover



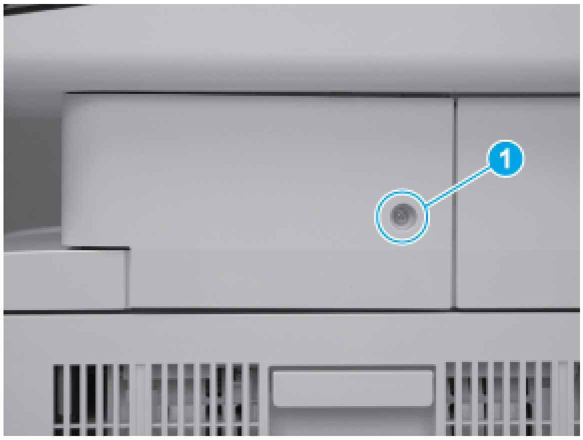
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-456 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-457 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-458 Rotate the cover

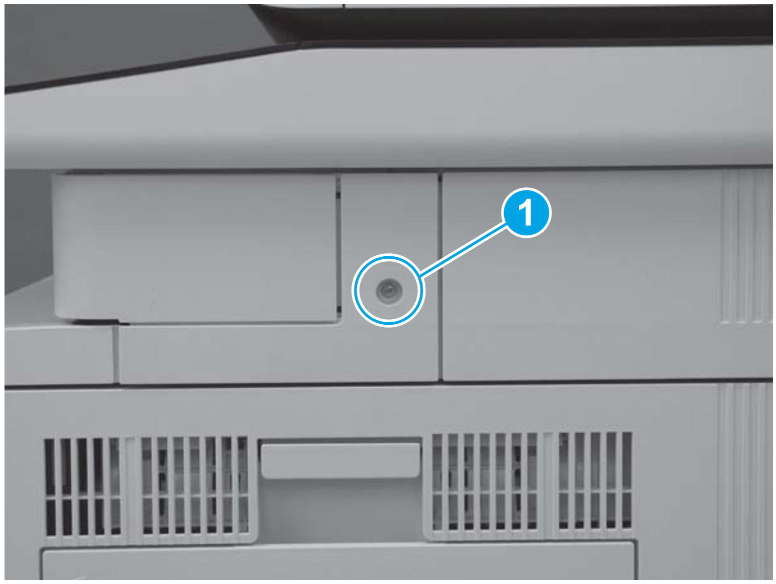
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

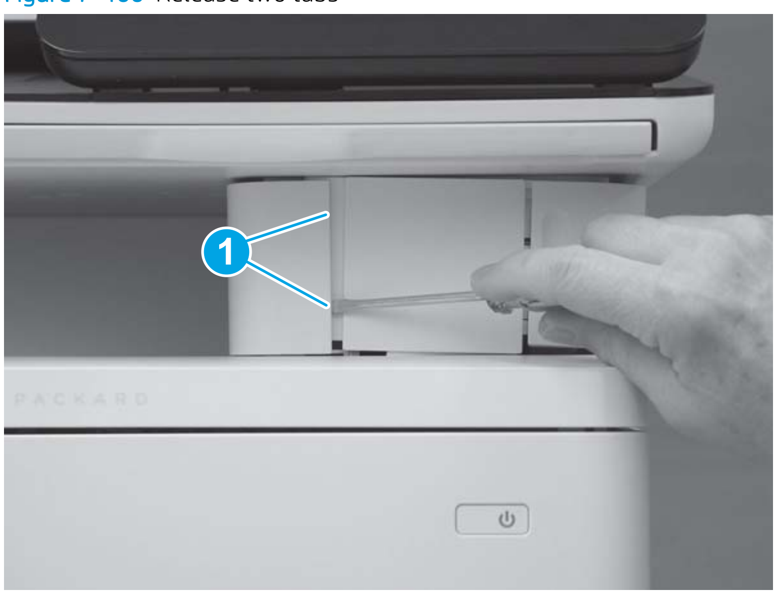
1. Remove one screw (callout 1).

Figure 7-459 Remove one screw



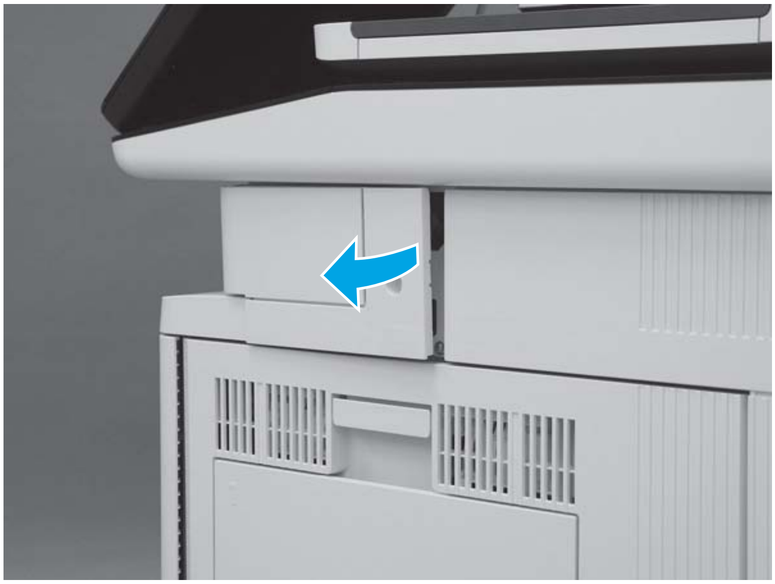
2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-460 Release two tabs



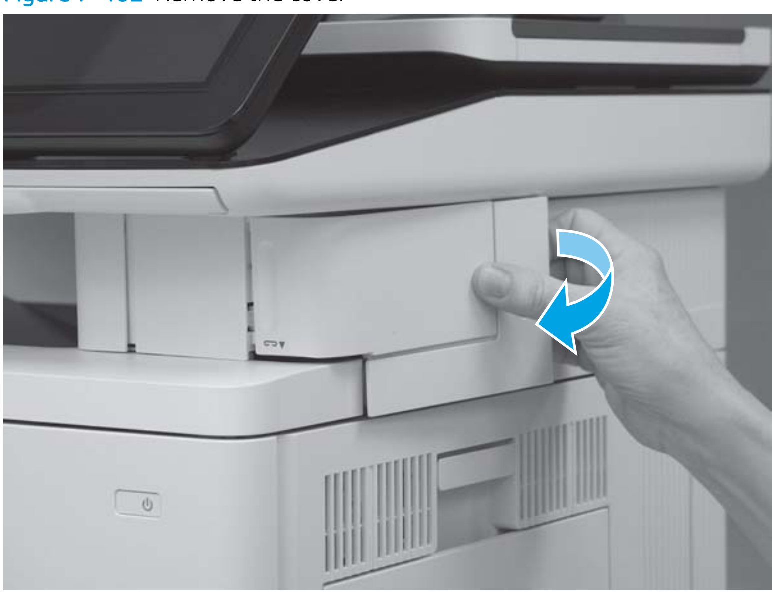
3. Release the back edge of the cover.

Figure 7-461 Release the back edge of the cover



4. Rotate the cover away from the printer to remove it.

Figure 7-462 Remove the cover



Remove the integrated scanner assembly (ISA) (MFP)

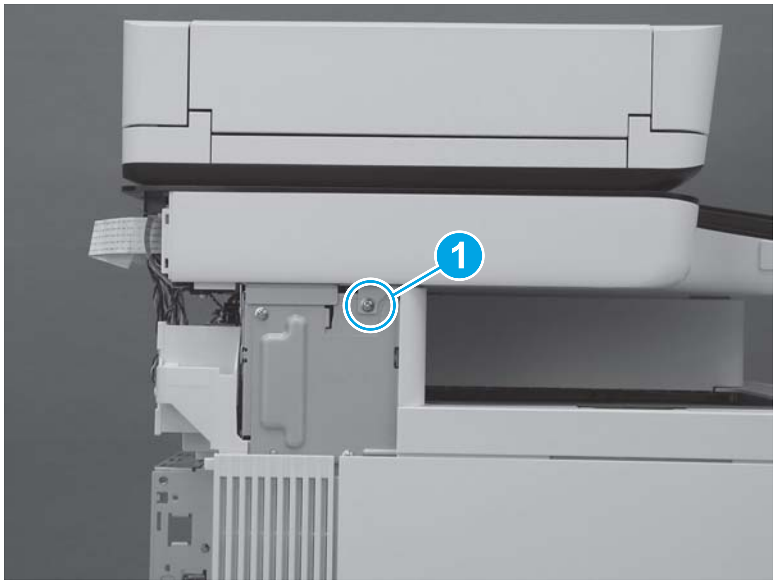
Follow these steps to remove the integrated scanner assembly (ISA).

NOTE: This procedure is for MFP models only.

NOTE: The ISA includes the document feeder, image scanner, scanner control board (SCB), control panel, keyboard (flow models) and NFC PCA (not all models).

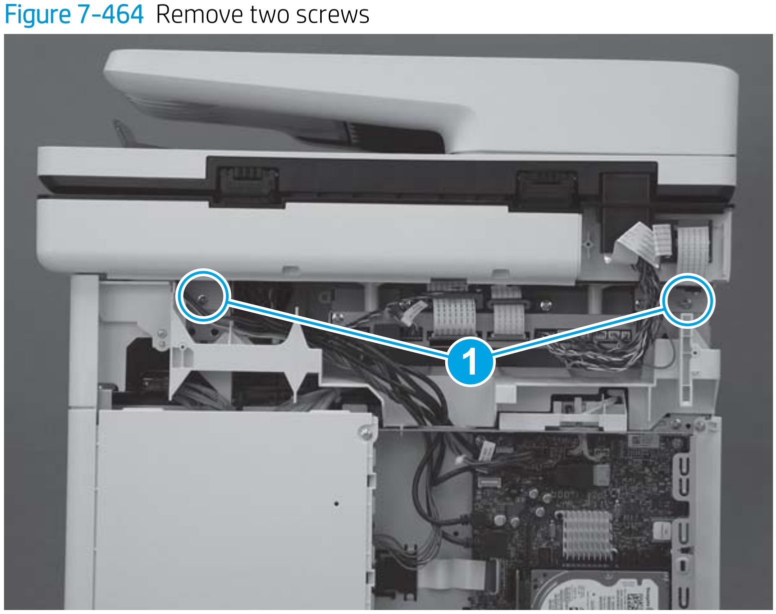
1. At the left side of the printer, remove one screw (callout 1).

Figure 7-463 Remove one screw



2. At the back of the printer, remove two screws (callout 1).

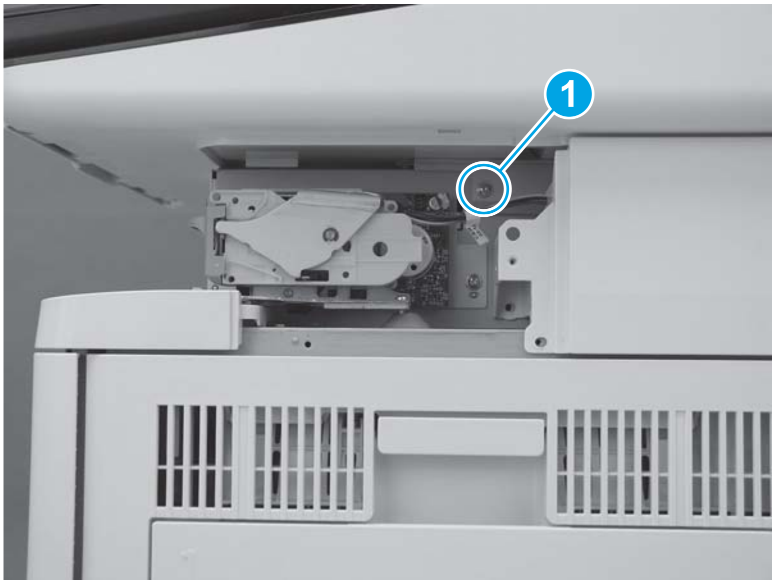
Figure 7-464 Remove two screws



3. At the right side of the printer, remove one screw (callout 1).

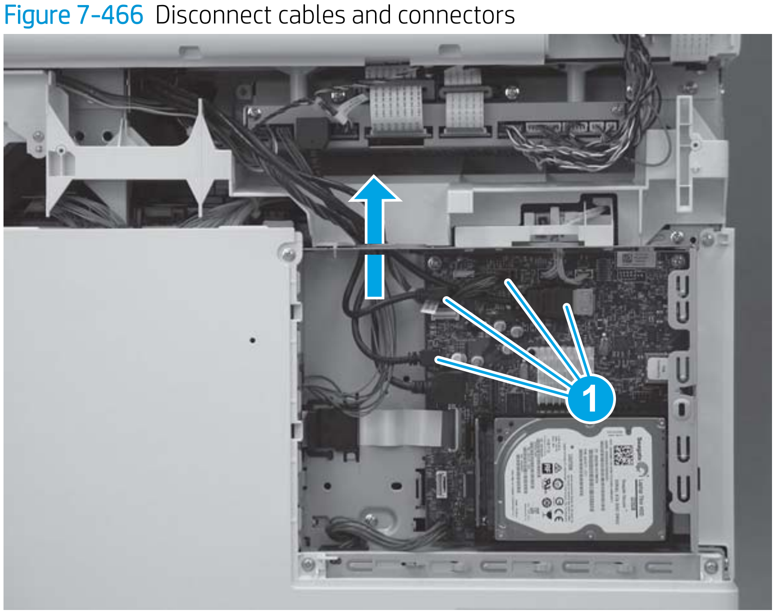
NOTE: The M577z is shown in the figure below. The procedure is correct for all MFP models.

Figure 7-465 Remove one screw



4. Disconnect four connectors (callout 1) on the formatter, and then pass the wire harnesses and cables through the top opening in the formatter case (callout 2).

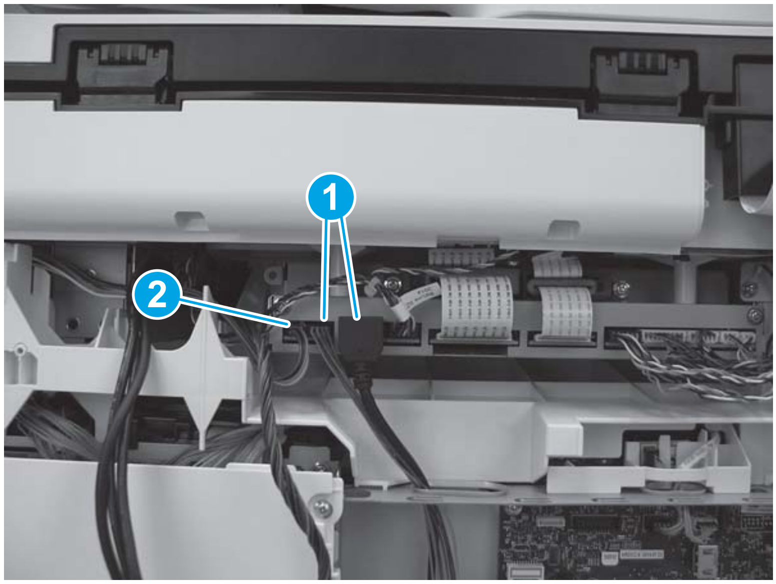
Figure 7-466 Disconnect cables and connectors



5. Disconnect two connectors on the scanner control board (callout 1).

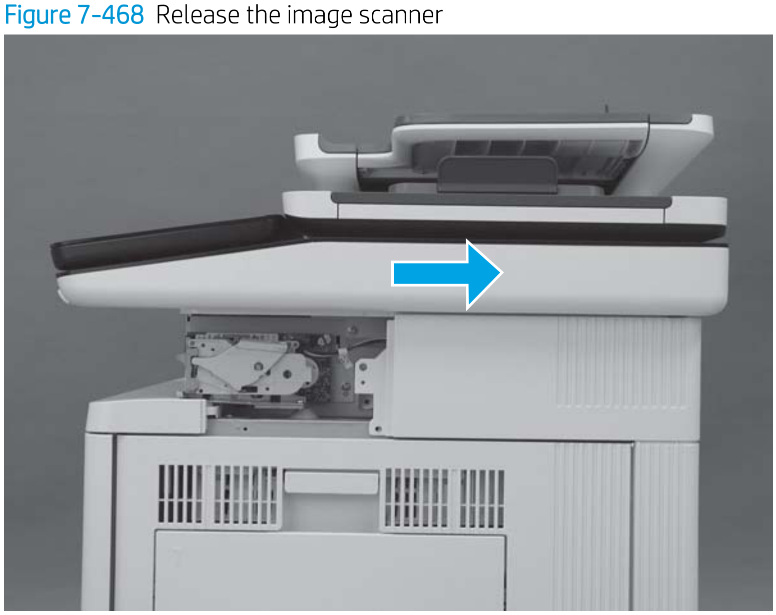
   MFP stapler models: Disconnect one connector for the stapler on the scanner control board (callout 2).

   Figure 7-467 Disconnect connectors



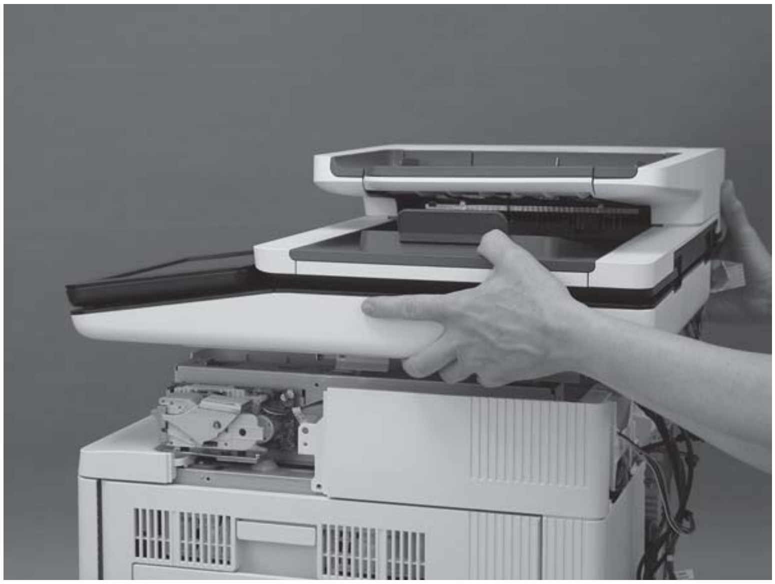
6. Slide the image scanner toward the back of the printer to release it.

   Figure 7-468 Release the image scanner



7. Lift the ISA straight up to remove it.

Figure 7-469 Remove the ISA



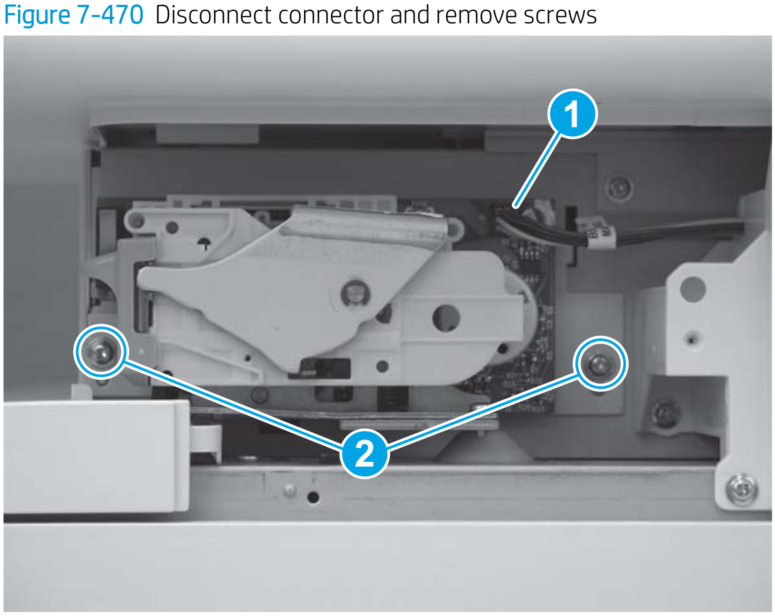
Remove the stapler unit (MFP stapler models)

Follow these steps to remove the stapler unit.

> NOTE: This step is for stapler models only.

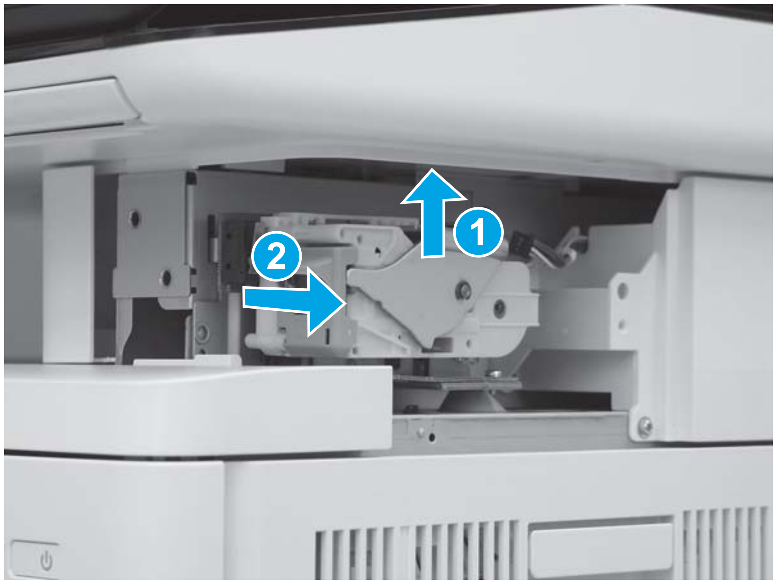
1. Disconnect one connector (callout 1), and then remove two screws (callout 2).

Figure 7-470 Disconnect connector and remove screws



2. Slide the stapler unit up (callout 1), and then pull it away from the printer (callout 2) to remove it.

Figure 7-471 Remove the stapler unit



Remove the right upper cover (MFP)

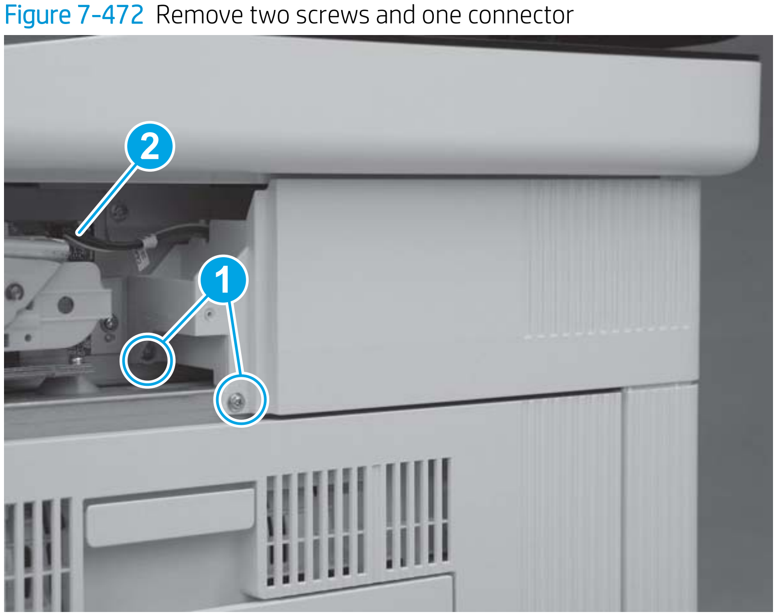
Follow these steps to remove the right upper cover.

NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Figure 7-472 Remove two screws and one connector

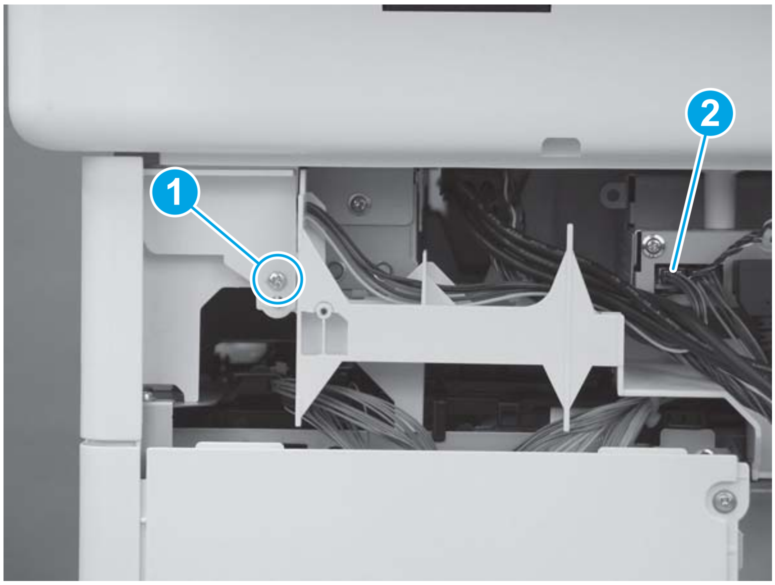


2. At the back of the printer, remove one screw (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Reinstallation tip: This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

   Figure 7-473 Remove one screw and connector

3. Slide the cover toward the back of the printer.

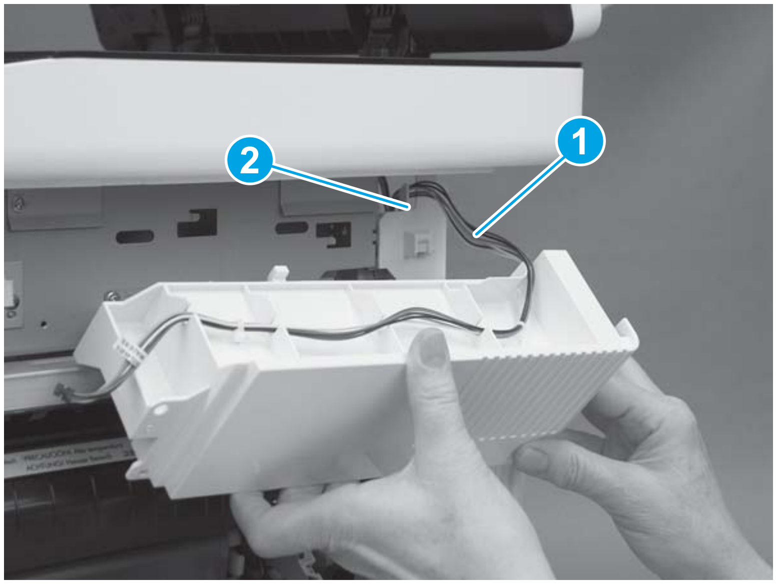
   Figure 7-474 Slide the cover

4. Lift the cover away from the printer to remove it.

   M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

   Figure 7-475 Remove the cover



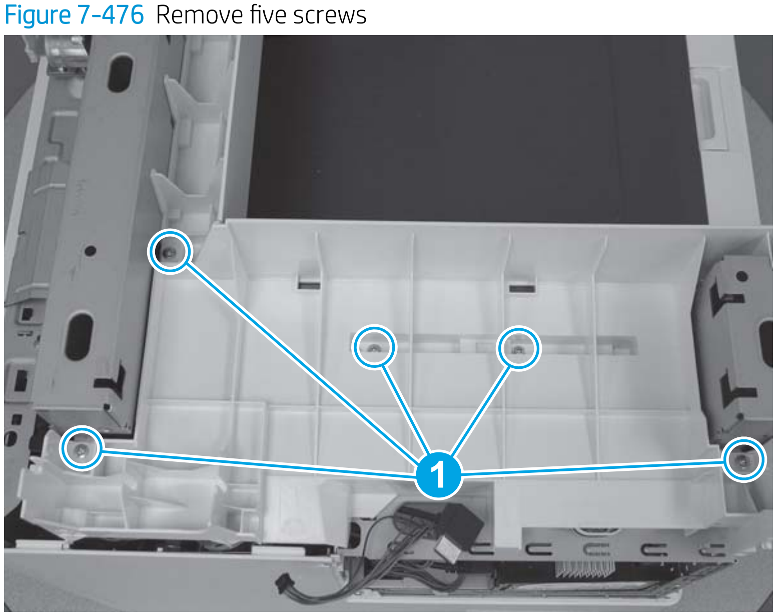
Remove the top rear cover (MFP)

Follow these steps to remove the top rear cover.

NOTE: This procedure is for MFP models only.

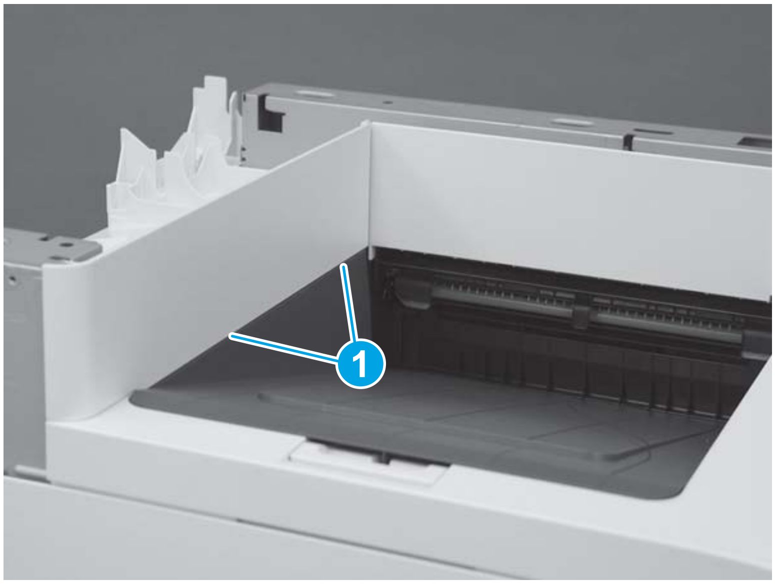
1. At the top of the printer, remove five screws (callout 1).

   Figure 7-476 Remove five screws



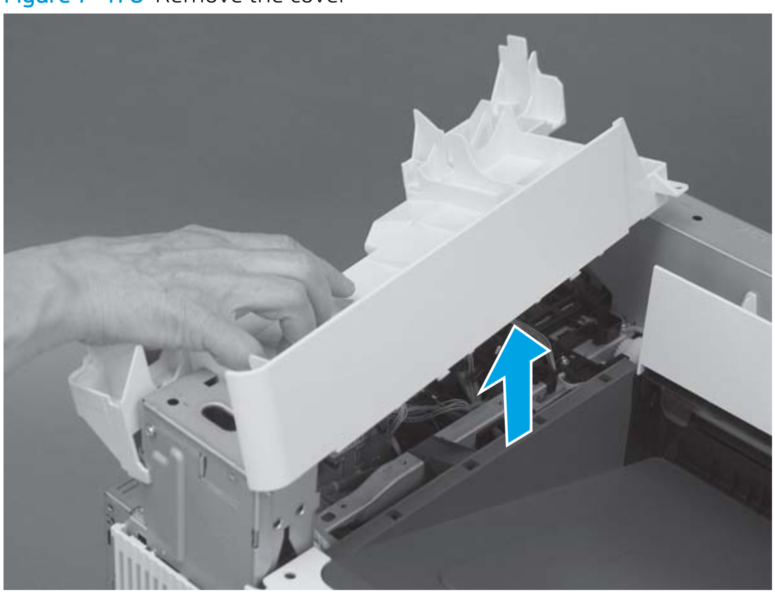
2. Release two tabs (callout 1) on the front edge of the cover.

Figure 7-477 Release two tabs



3. Remove the top rear cover.

Figure 7-478 Remove the cover



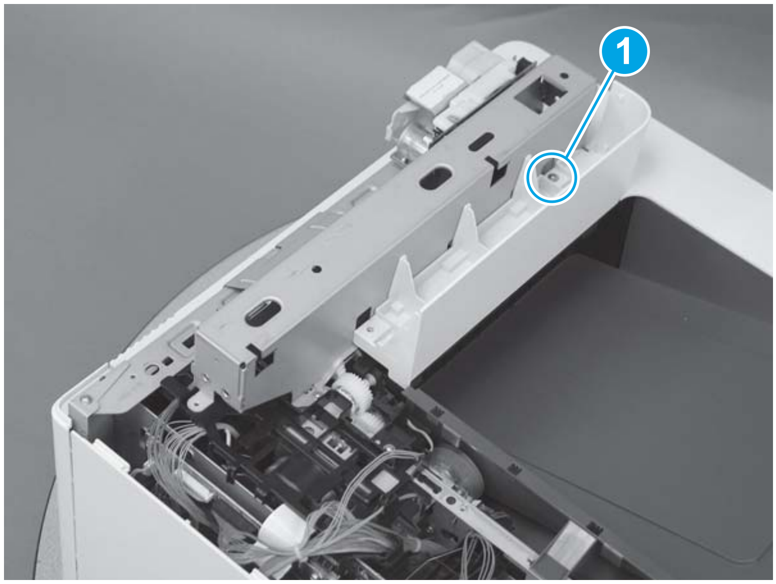
Remove the paper feed cover (MFP)

Follow these steps to remove the paper feed cover.

NOTE: This procedure is for MFP models only.

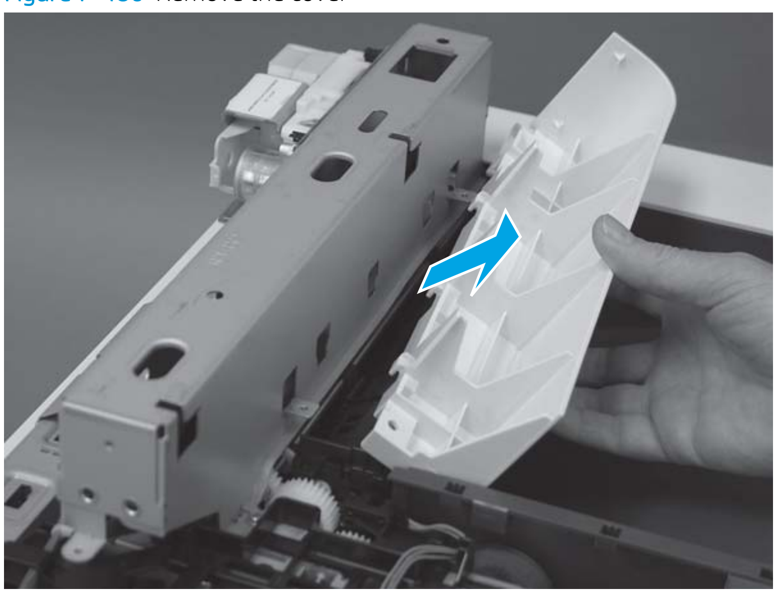
1. Remove one screw (callout 1).

Figure 7-479 Remove one screw



2. Lift the cover up to remove it.

Figure 7-480 Remove the cover



Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-481 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-482 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

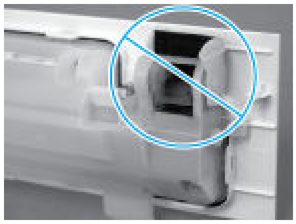
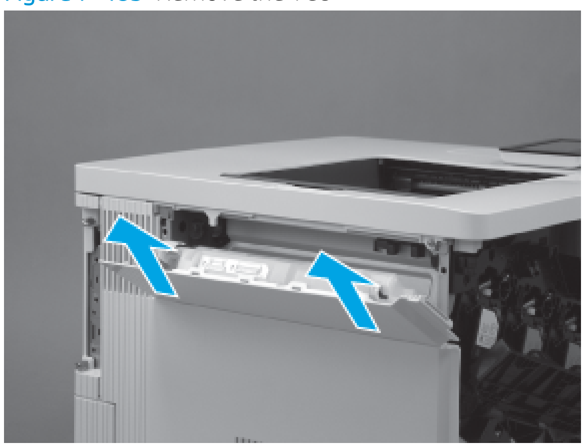
> ⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.
>
> 

Figure 7-483 Remove the TCU



Remove the top cover (MFP)

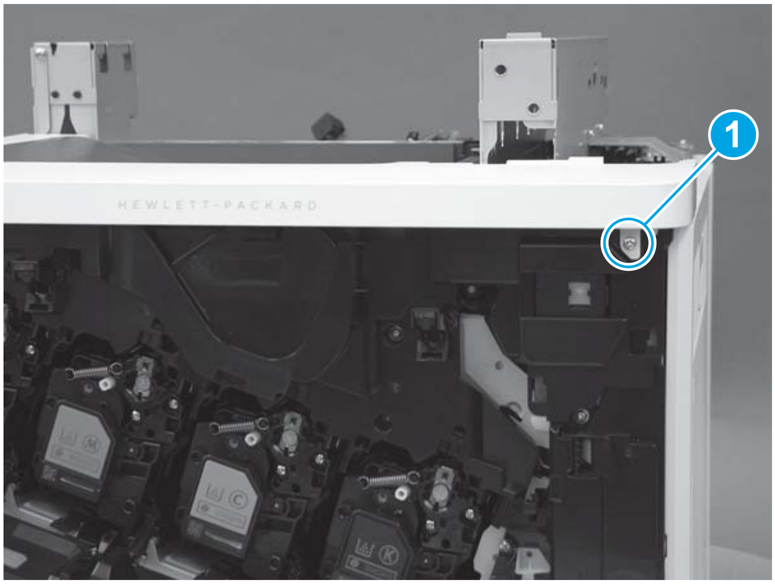
Follow these steps to remove the top cover.

> NOTE: This procedure is for MFP models only.

1. At the front of the printer, remove one screw (callout 1).

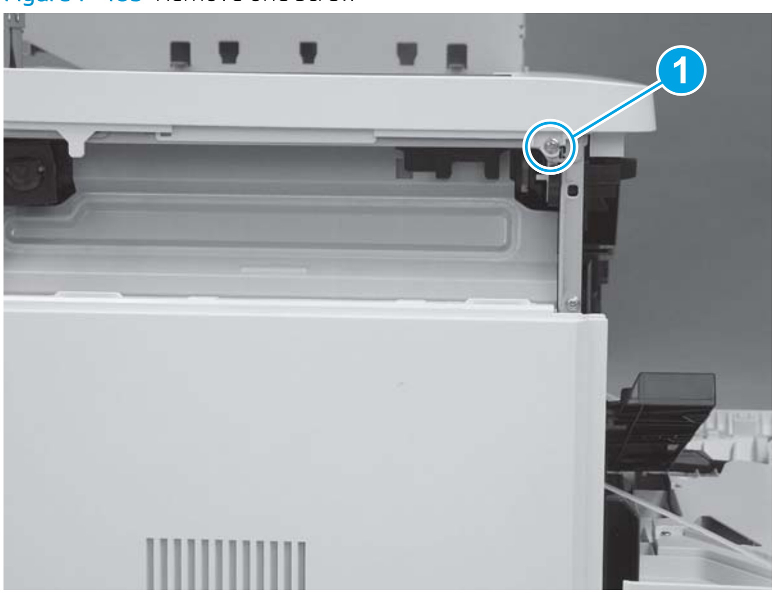
> Reinstallation tip: This screw is longer and a different type of screw than the screw removed in the next step. When reinstalling the top cover, make sure that this screw is installed in the correct position.

Figure 7-484 Remove one screw



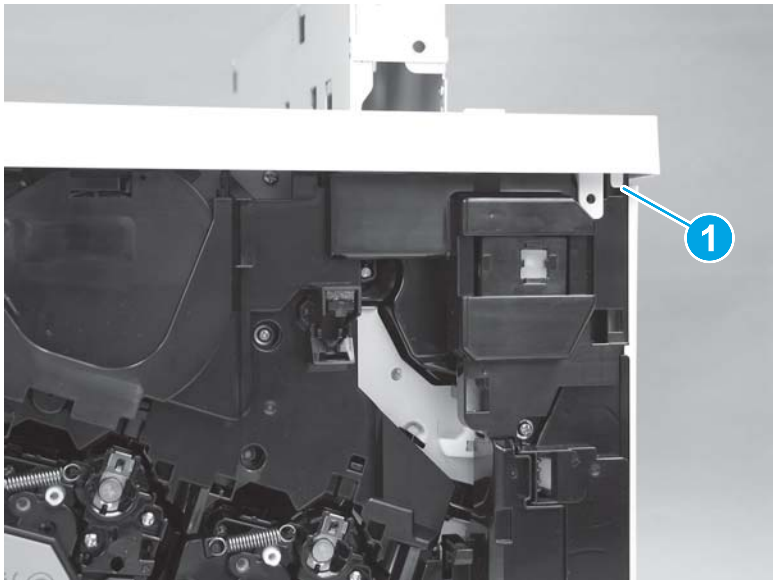
2. At the left side of the printer, remove one screw (callout 1).

Figure 7-485 Remove one screw



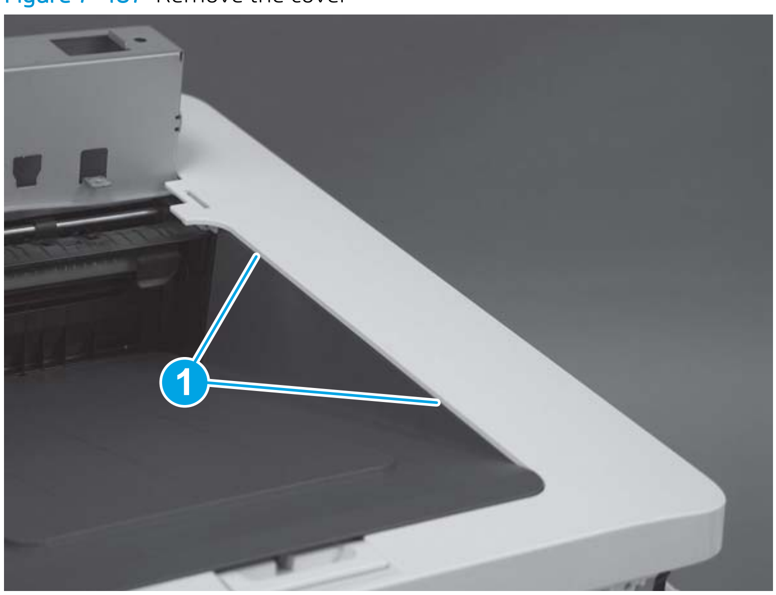
3. At the front of the printer, release one tab (callout 1).

Figure 7-486 Release one tab



4. At the top of the printer, release two tabs (callout 1) next to the output bin, and then remove the top cover.

Figure 7-487 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right door

Learn about removing and replacing the right door.

Before performing service

Turn the printer power off

- Disconnect the power cable.

WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-40 Part information

Part number	Part description
RM2-0019-010CN	Right door

Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

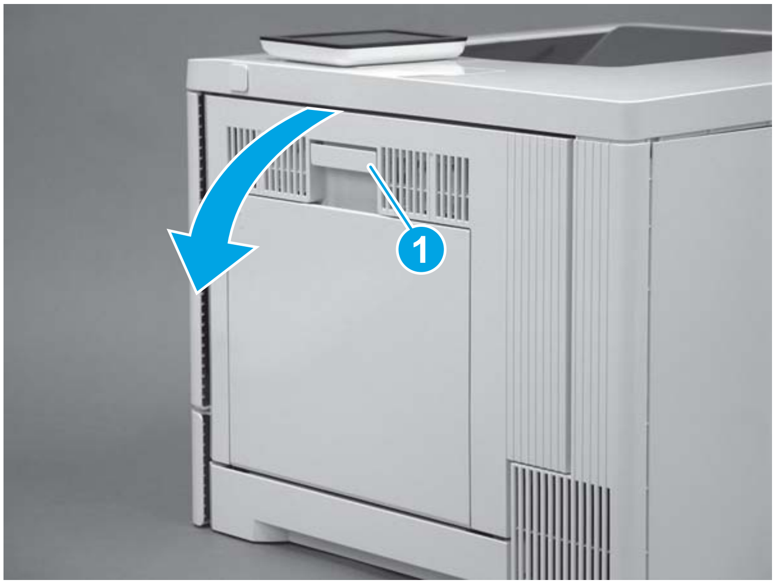
No post service test is available for this assembly.

Remove the Right Door

Follow these steps to remove the right door.

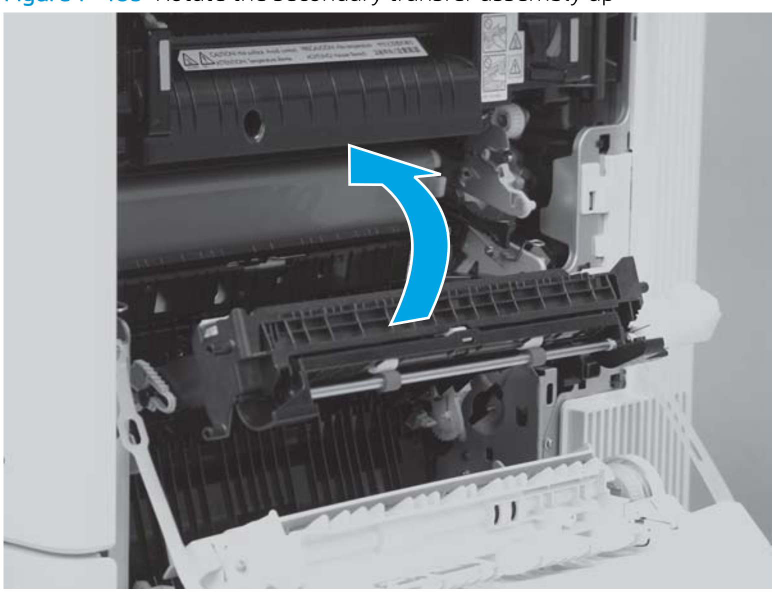
1. Use the handle (callout 1) to open the right door.

Figure 7-488 Open the right door



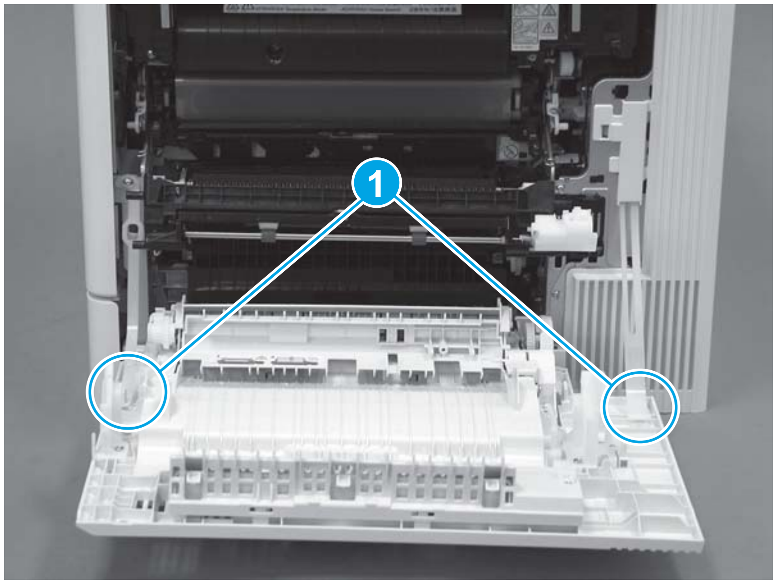
2. Rotate the secondary transfer assembly up and into the printer to move it out of the way.

Figure 7-489 Rotate the secondary transfer assembly up



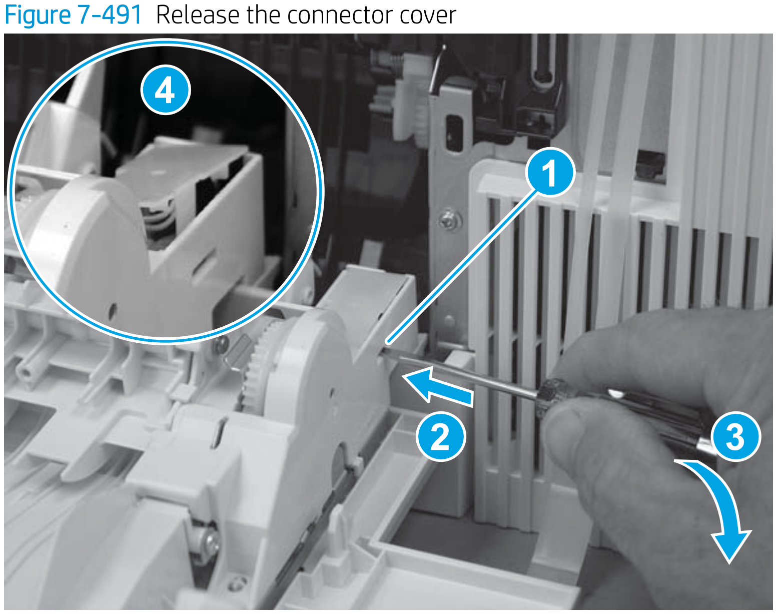
3. At the right- and left-side of the door, use a small flat blade screwdriver to release the door retainer straps (callout 1), and then pull them through the slot in the door.

Figure 7-490 Release the door retainer straps



4. Locate a slot (callout 1) near the gear side of the door, push the blade of a small screwdriver into the slot (callout 2) to release one tab, and then rotate the end of the screwdriver down (callout 3) release the connector cover (callout 4).

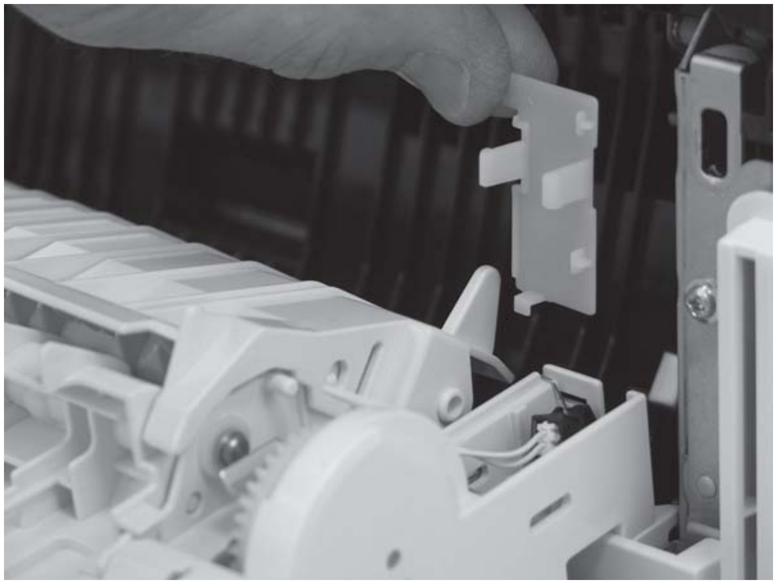
Figure 7-491 Release the connector cover



5. Remove the connector cover.

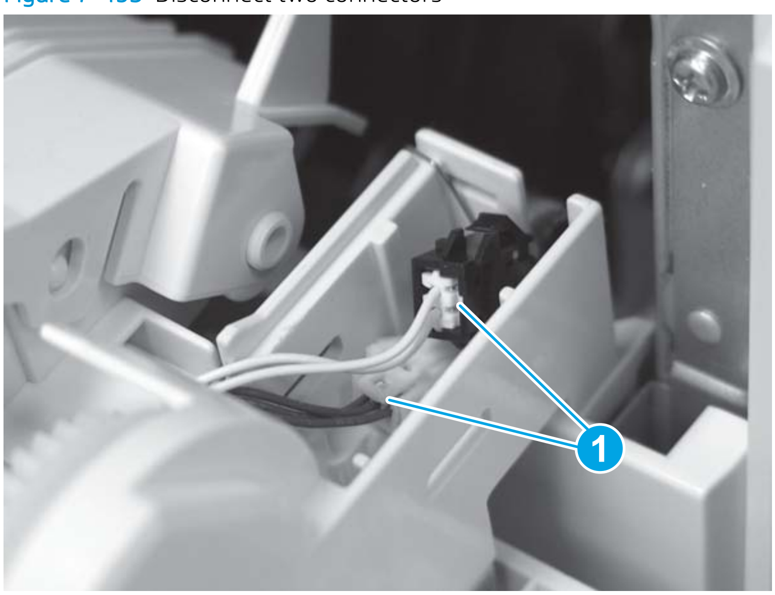
Reinstallation tip: When the cover is correctly installed it is flat against the door. If the cover is incorrectly installed the right door might not properly close.

Figure 7-492 Remove the cover



6. Disconnect two connectors (callout 1).

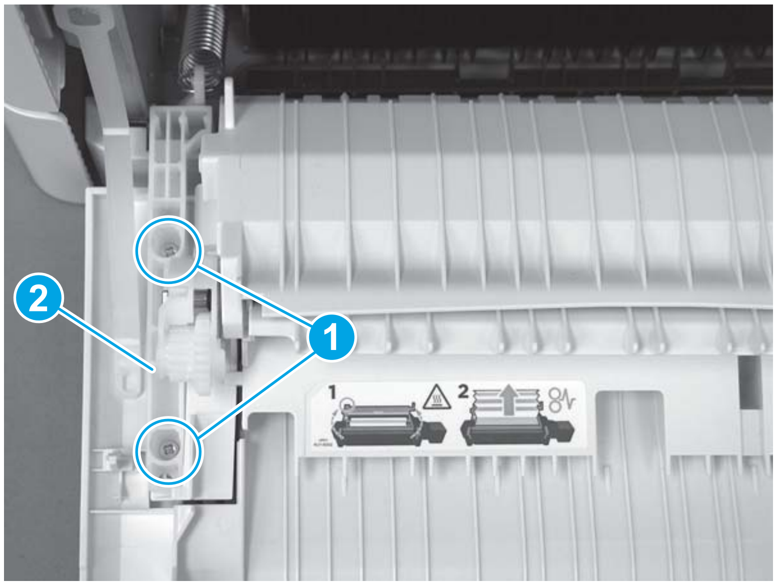
Figure 7-493 Disconnect two connectors



7. Remove two screws (callout 1) to release the door arm (callout 2).

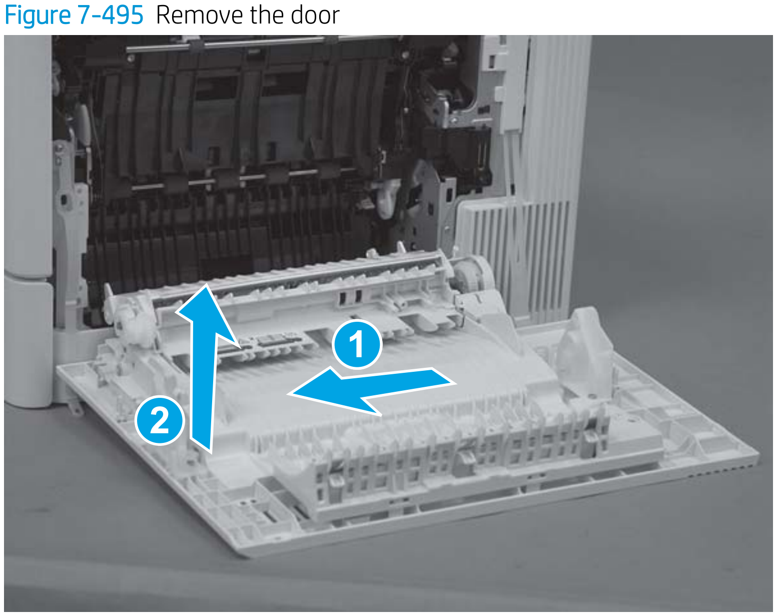
⚠ CAUTION: The door arm is spring loaded. Keep a firm grip on it while removing the screws, and then carefully move it up and into the printer.

Figure 7-494 Remove two screws



8. Slide the door toward the front of the printer (callout 1) to release it, and then lift it up (callout 2) to remove it.

Figure 7-495 Remove the door



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Front door

Learn about removing and replacing the front door.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

> ⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.
>
> If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-41 Part information

Part number	Part description
B5L25-67901	Front door

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

Remove Tray 2

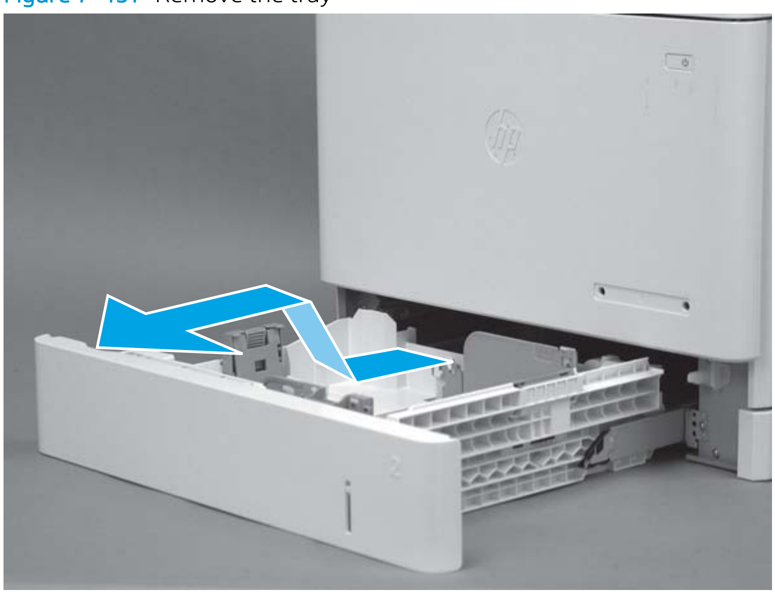
Follow these steps to remove Tray 2.

1. Pull the tray out until it stops.

Figure 7-496 Pull the tray out

2. Lift the front of the tray, and then pull it out of the printer to remove it.

Figure 7-497 Remove the tray



Remove the front door

Follow these steps to remove the front door.

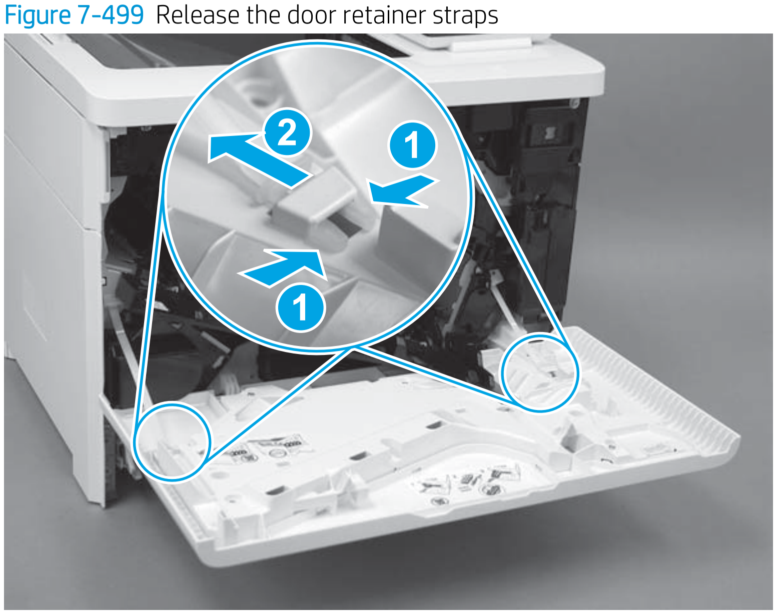
1. Open the front door.

Figure 7-498 Open the front door

2. At the right- and left-side of the door, release two tabs (callout 1), and then release the door retainer straps (callout 2).

TIP: Use a pair of needle nose pliers to easily release the tabs.

Figure 7-499 Release the door retainer straps

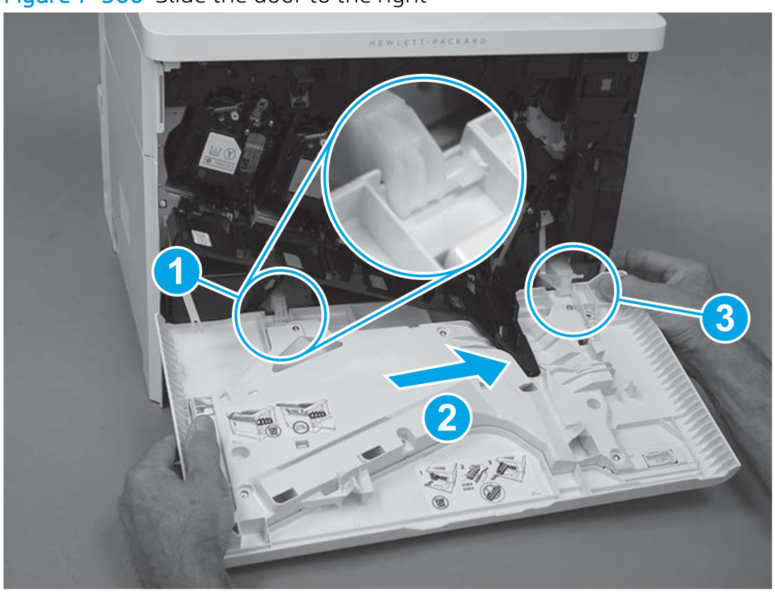


3. Carefully push down on the door to lower it until the keyed hinge pin (callout 1) is aligned with the slot in the flange, and then slide the door to the right (callout 2) to release the left and right hinge pins (callout 1 and callout 3).

CAUTION: The keyed hinge pin (callout 1) is fragile, and can easily be broken off.

Make sure that it is correctly aligned with the slot in the flange before attempting to remove the front door from the printer.

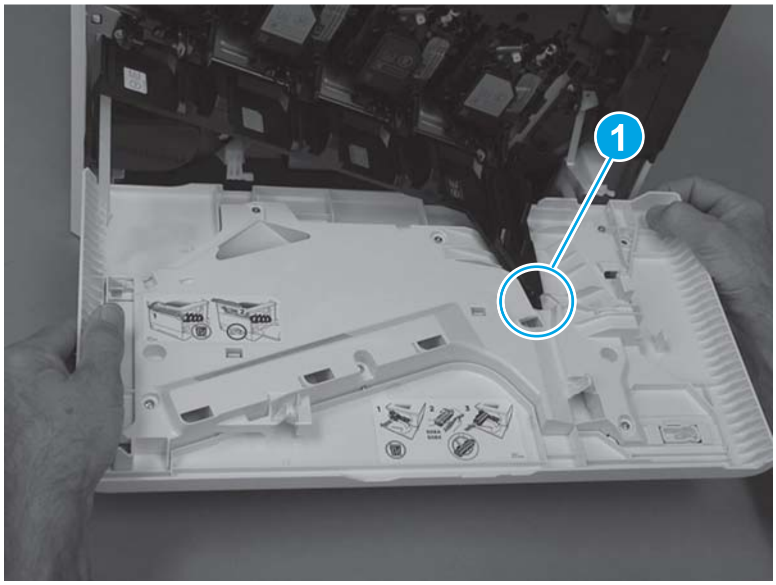
Figure 7-500 Slide the door to the right



4. Pull the door toward you to release the inner door (callout 1), and then remove the front door.

> ⚠ CAUTION: Hold the inner door (callout 1) in place before releasing it. The inner door is spring loaded will abruptly close and be damaged if it is not held down.

Figure 7-501 Remove the door



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

> NOTE: HP recommends responsible disposal of the defective part.
>
> http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

> ⚠ CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

> IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

> NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

> NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Formatter cover

Learn about removing and replacing the formatter cover.

Before performing service

Turn the printer power off

- Disconnect the power cable.

  WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-42 Part information

Part number	Part description
RM2-0084-000CN	Formatter cover

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

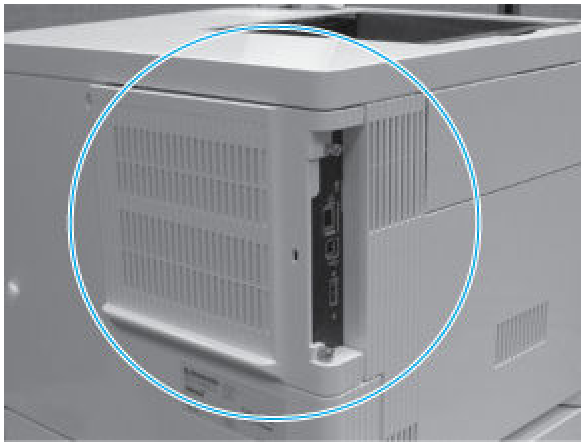
No post service test is available for this assembly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

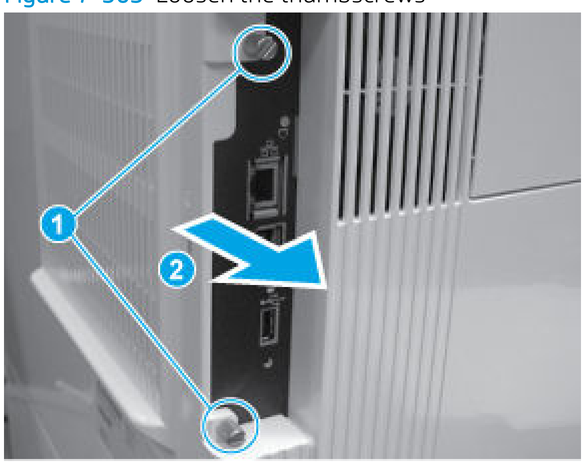
Figure 7-502 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-503 Loosen the thumbscrews



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Rear cover (M522/M553/M554/M555/E55040)

Learn about removing and replacing the rear cover.

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-43 Part information

Part number	Part description
RM2-0085-000CN	Rear cover

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

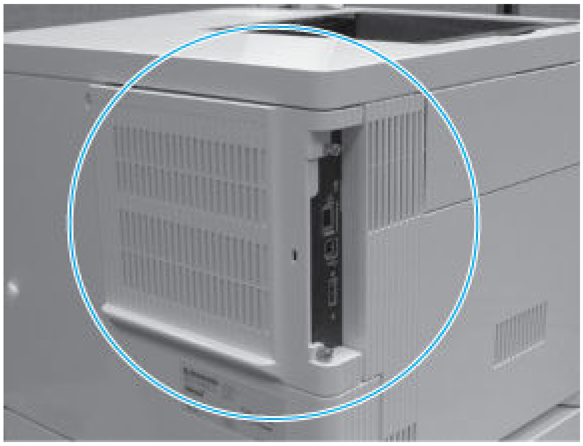
No post service test is available for this assembly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

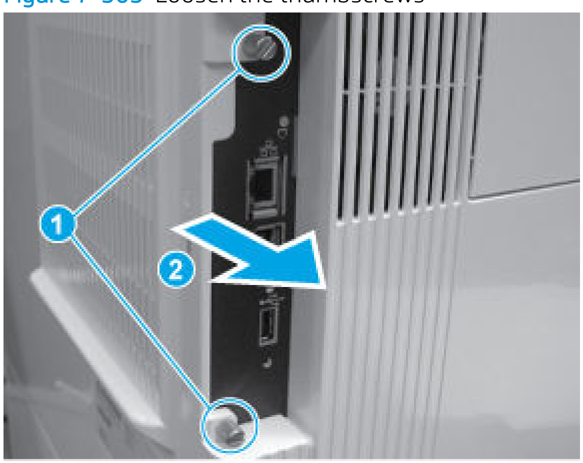
Figure 7-504 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-505 Loosen the thumbscrews



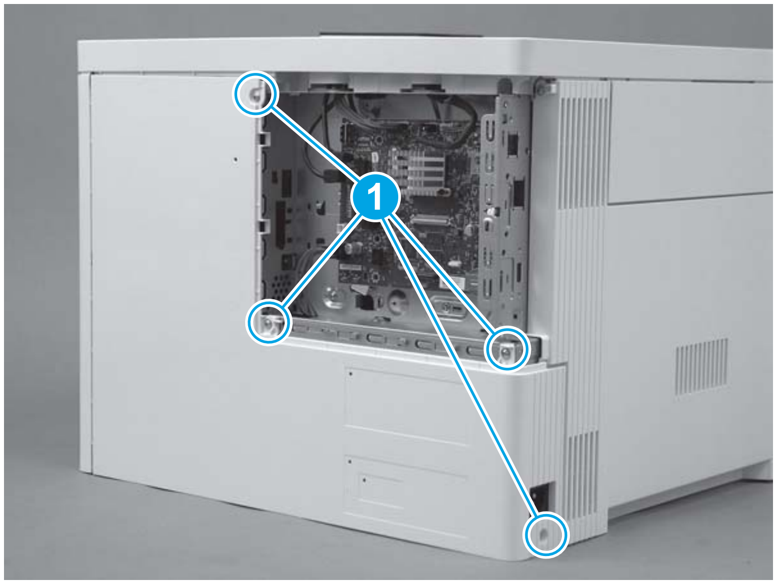
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

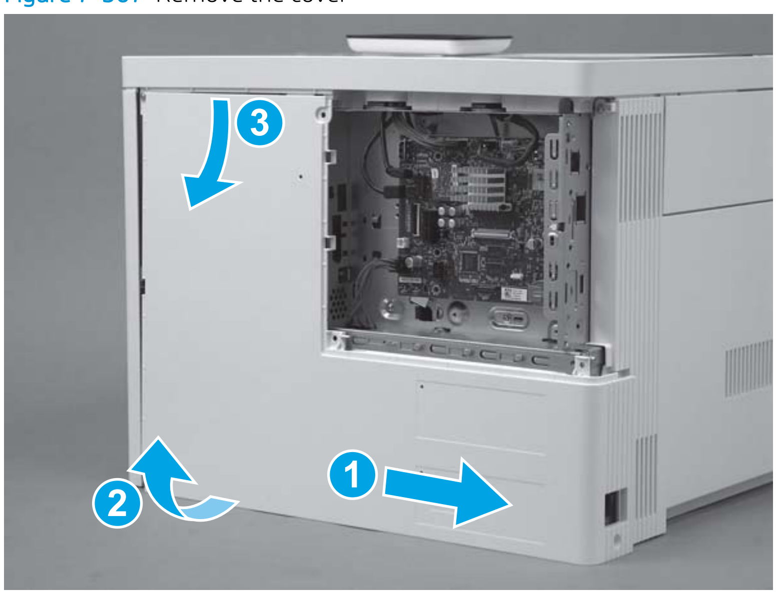
1. Remove four screws (callout 1).

Figure 7-506 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-507 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Rear cover (M577/M578/E57540)

Learn about removing and replacing the rear cover.

Before performing service

Turn the printer power off

- Disconnect the power cable.

  WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-44 Part information

Part number	Part description
RM2-0085-000CN	Rear cover

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

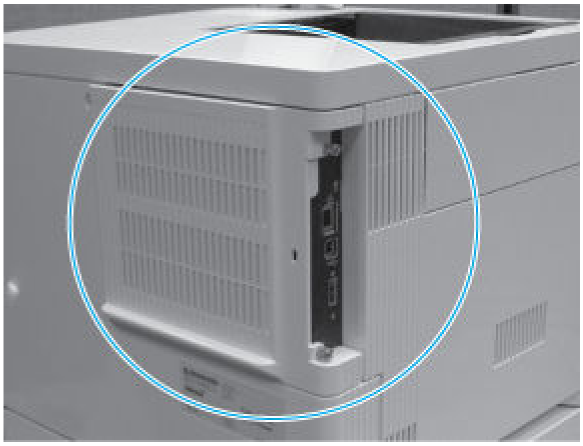
No post service test is available for this assembly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

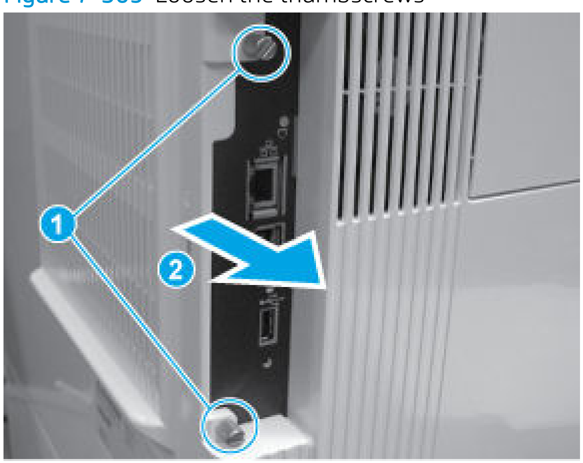
Figure 7-508 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-509 Loosen the thumbscrews



Remove the rear upper cover (MFP)

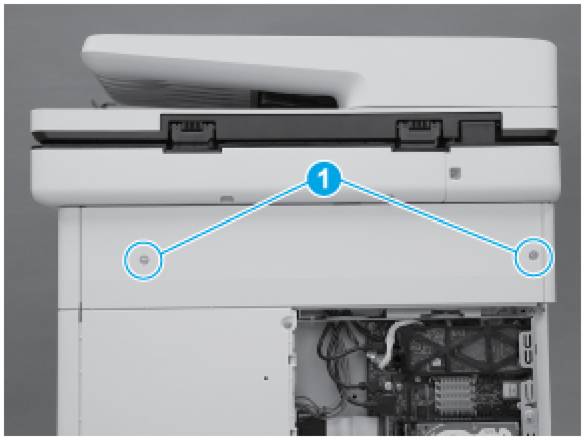
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

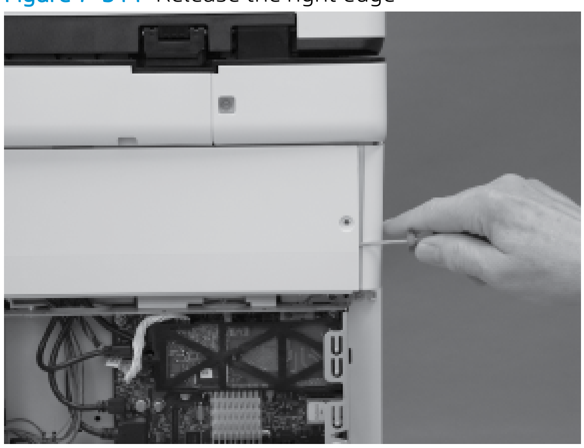
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-510 Remove two screws



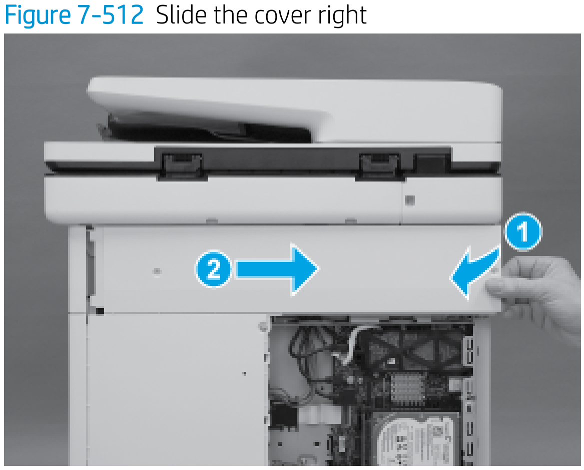
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-511 Release the right edge



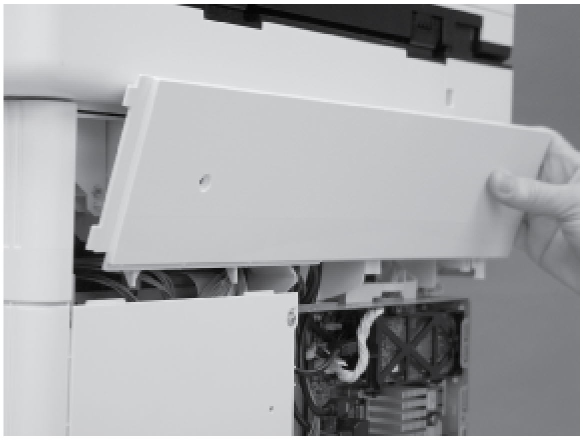
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-512 Slide the cover right



4. Remove the cover.

Figure 7-513 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-514 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-515 Remove the cover

Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Left cover

Learn about removing and replacing the left cover.

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-45 Part information

Part number	Part description
RC4-0179-000CN	Left cover

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-516 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-517 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

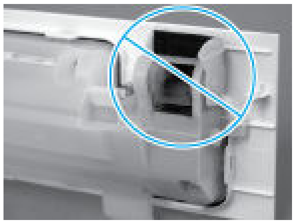
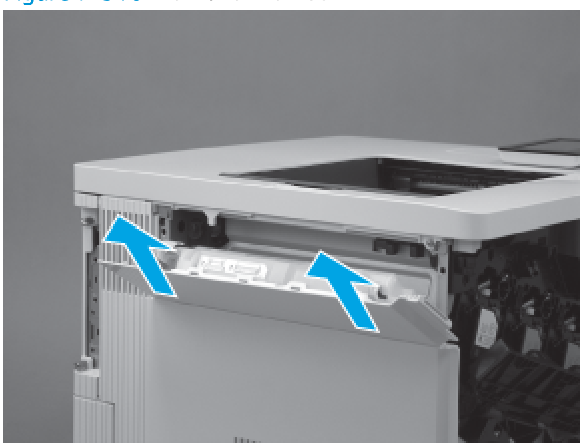


Figure 7-518 Remove the TCU



Remove the formatter cover

Follow these steps to remove the formatter cover.

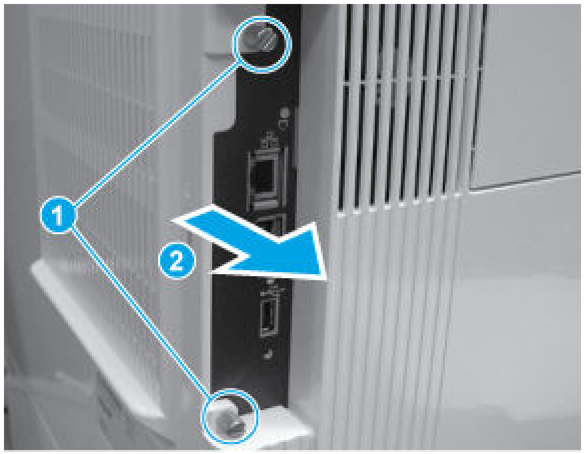
1. Locate the formatter cover.

Figure 7-519 Locate the formatter cover

2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-520 Loosen the thumbscrews



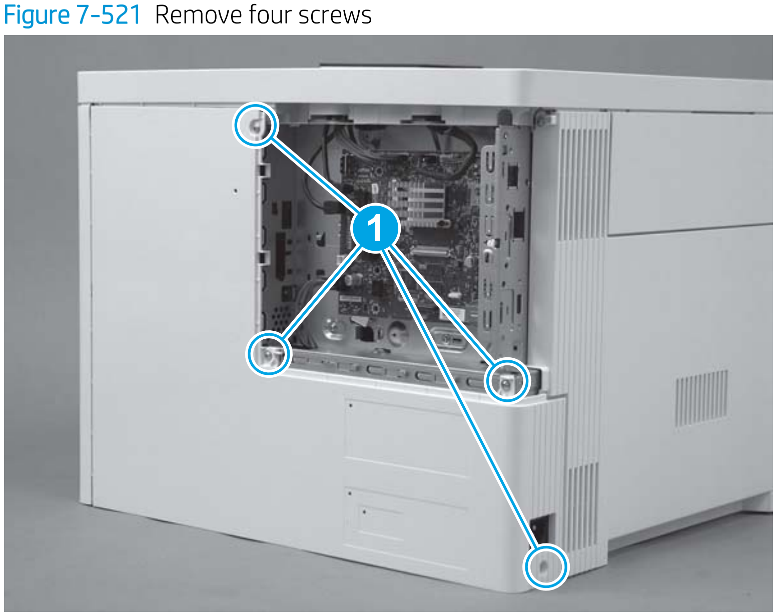
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

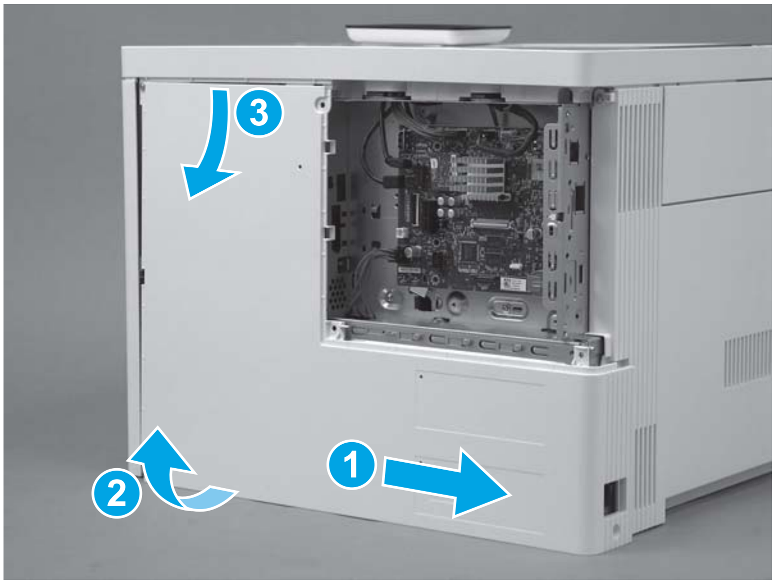
1. Remove four screws (callout 1).

Figure 7-521 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-522 Remove the cover



Remove the rear upper cover (MFP)

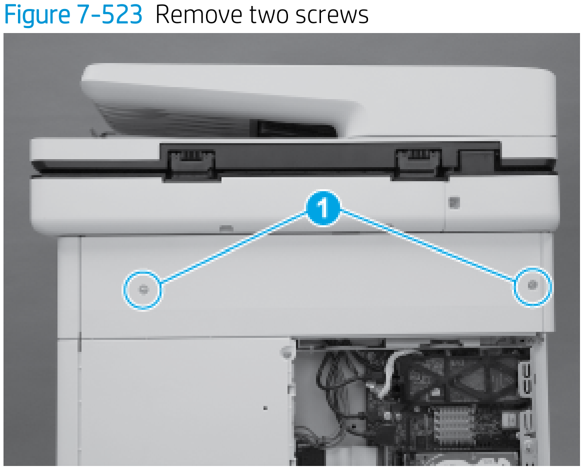
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

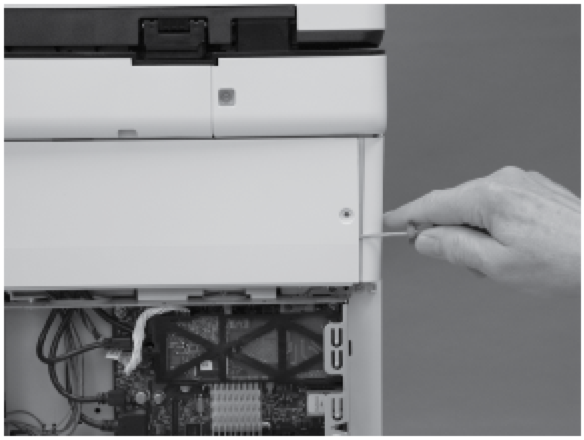
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-523 Remove two screws



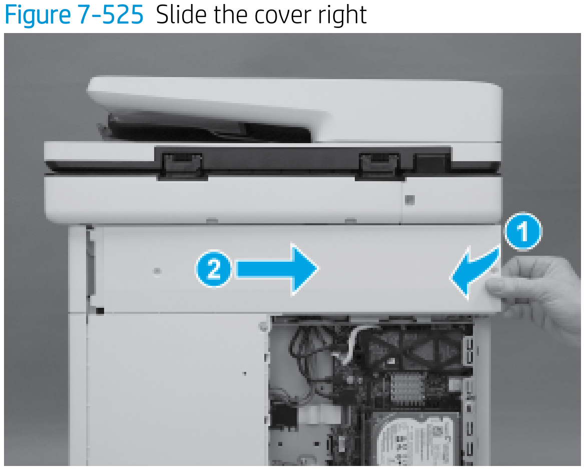
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-524 Release the right edge



3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-525 Slide the cover right



4. Remove the cover.

Figure 7-526 Remove the cover

Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-527 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-528 Remove the cover

Remove the left cover

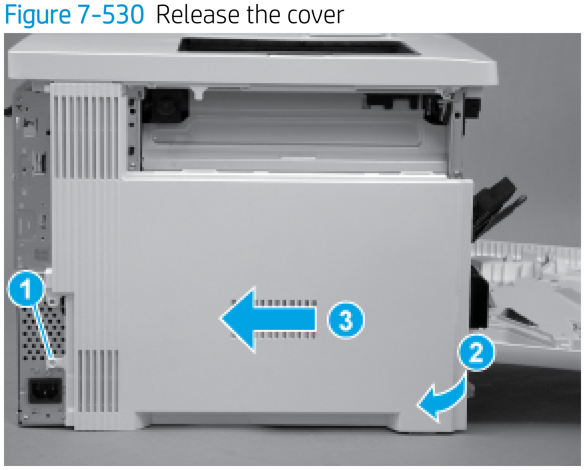
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-529 Remove one screw

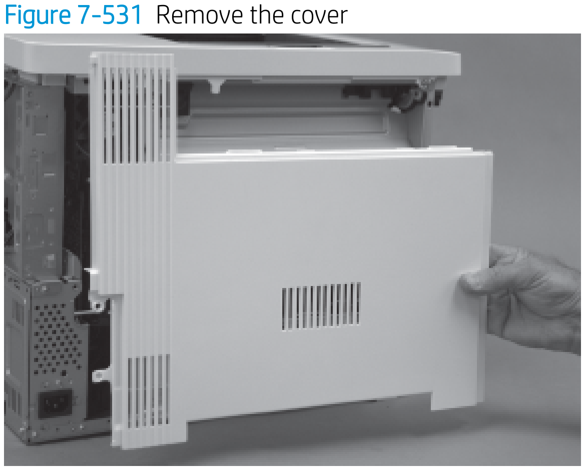
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-530 Release the cover



3. Remove the cover.

Figure 7-531 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Upper cover (M553/M555/E55040)

Learn about removing and replacing the upper cover.

Before performing service

Turn the printer power off

- Disconnect the power cable.

  WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-46 Part information

Part number	Part description
RL2-0097-000CN	Upper cover (M533x)
RL2-0098-000CN	Upper cover (M533x and E55040dw)
RL2-0120-000CN	Upper cover (M555 and E55040dn)

Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

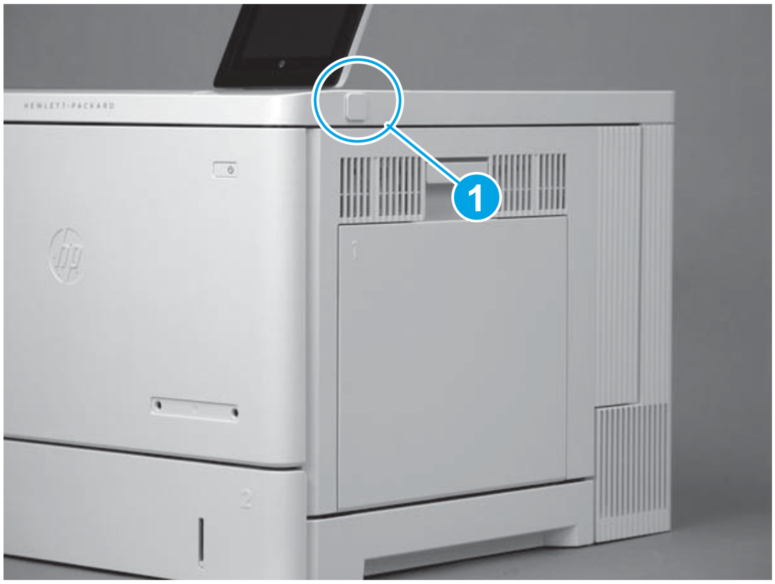
Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

NOTE: This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-532 Locate the USB cover



2. Pull the cover off of the printer to remove it.

Figure 7-533 Remove the cover

Remove the HIP cover

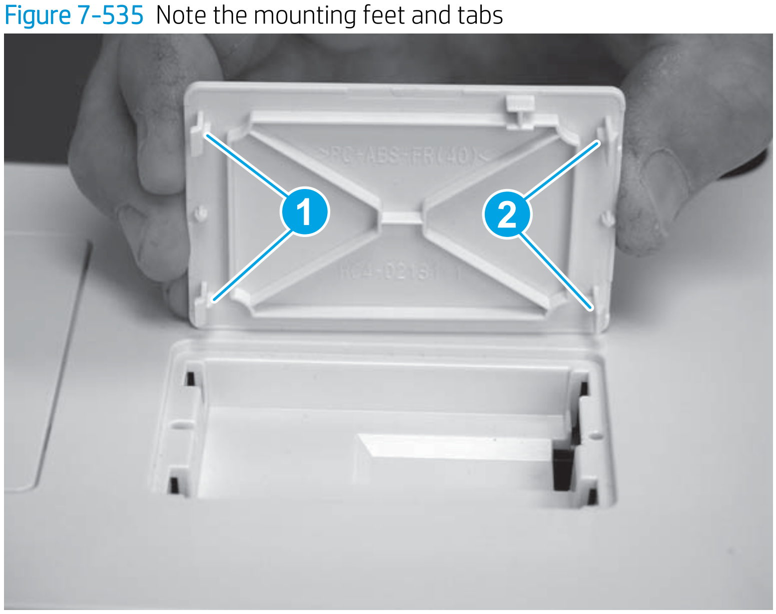
Follow these steps to remove the HIP cover.

1. Locate the HIP cover.

Figure 7-534 Locate the HIP cover

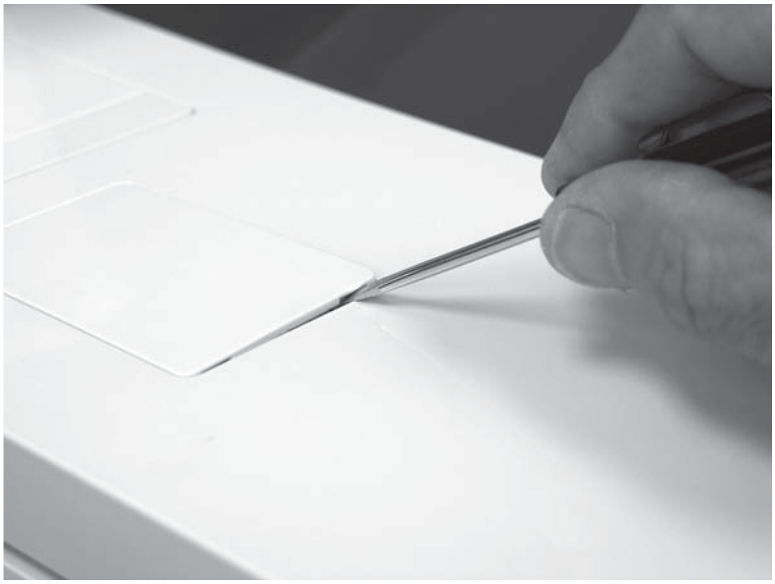
2. Before proceeding, take note of the mounting feet (callout 1) and tabs (callout 2) on the HIP cover.

Figure 7-535 Note the mounting feet and tabs



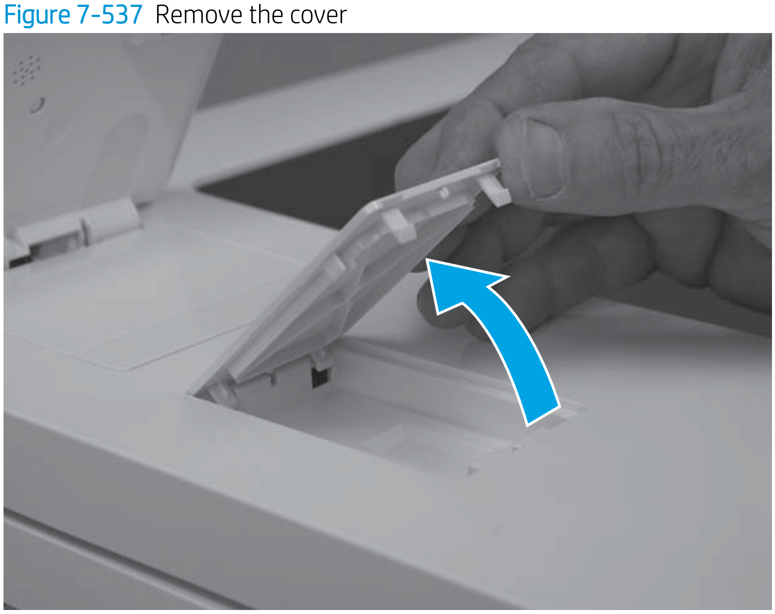
3. Use a small flat-blade screwdriver to release the tabs on the HIP cover.

Figure 7-536 Release the cover



4. Rotate the cover up and off of the printer to remove it.

Figure 7-537 Remove the cover



Remove the control panel (M553x/M555/E55040)

Follow these steps to remove the control panel.

NOTE: This procedure is for the M553x/M555/E55040 printers only.

M555 models: Removing the control panel is similar to the procedure below. For the M555, a flat cable connects the control panel to the formatter.

1. Tilt the control panel up.

Figure 7-538 Tilt the control panel up

2. Use the small flat-blade screwdriver supplied in this kit to release the control-panel screws cover tabs.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-539 Release the control-panel screws cover tabs

3. Rotate the cover up to remove it.

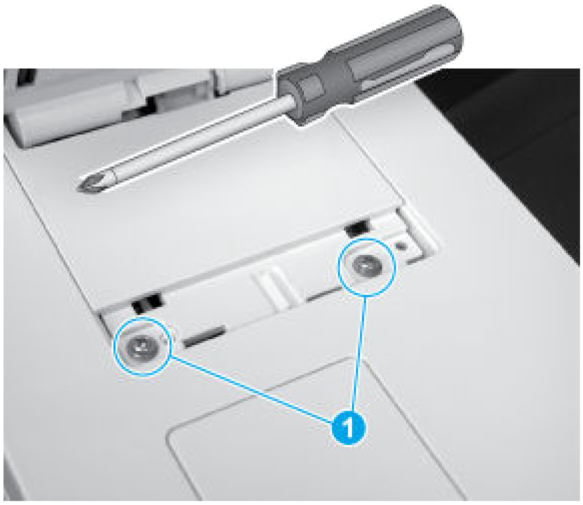
Figure 7-540 Remove the cover

4. Use the small Phillips screwdriver supplied in this kit to remove two screws (callout 1).

IMPORTANT: Store the screws in a secure place where they cannot fall down into the printer.

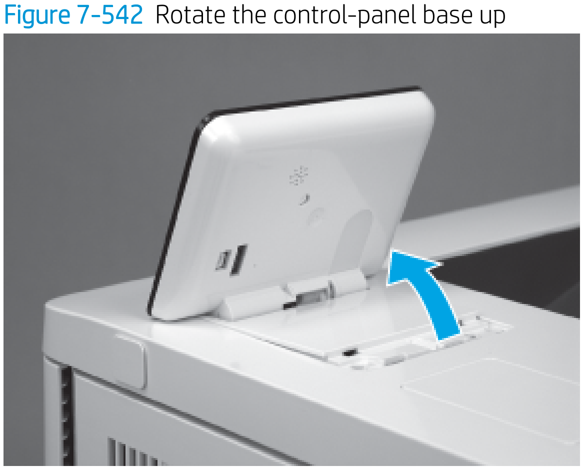
TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-541 Remove two screws



5. Rotate the control-panel base toward the front of the printer.

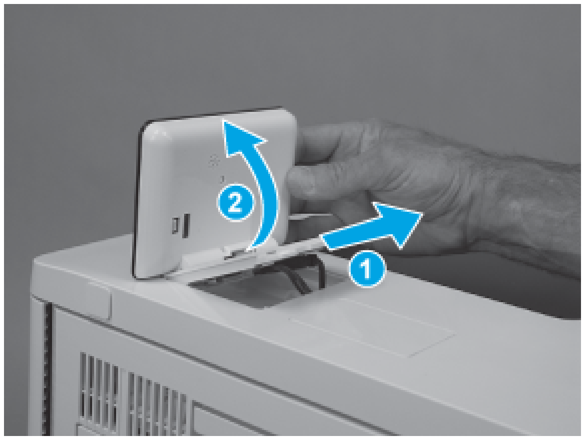
Figure 7-542 Rotate the control-panel base up



6. Slightly slide the control-panel base toward the rear of the printer (callout 1) to release it, and then turn the control panel over (callout 2) to access the bottom side.

⚠ CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

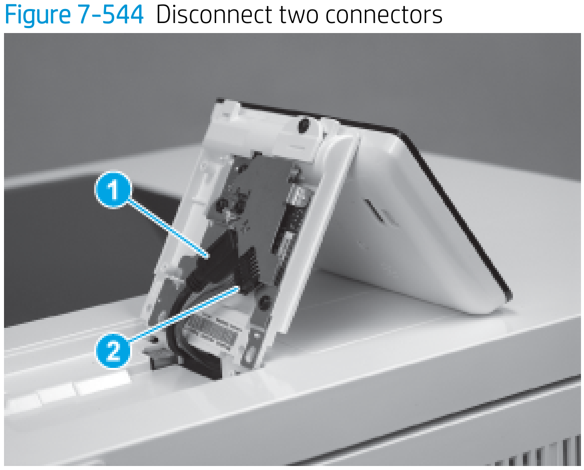
Figure 7-543 Turn the control panel over



7. Disconnect one USB cable (callout 1), one connector (callout 2), and then remove the control panel.

NOTE: **M555 only**: Disconnect one flat cable (not shown), and then remove the control panel.

Figure 7-544 Disconnect two connectors



Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-545 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-546 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

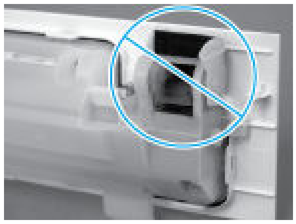
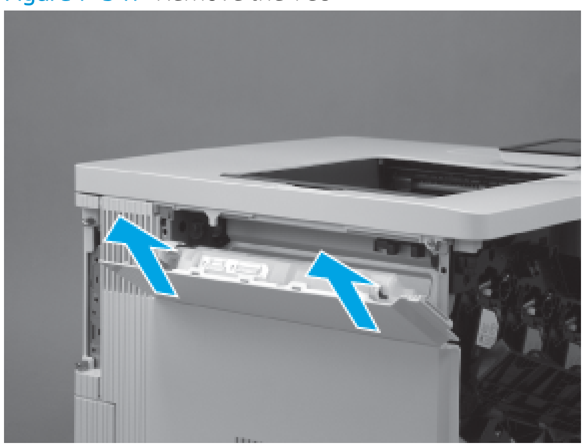


Figure 7-547 Remove the TCU



Remove the formatter cover

Follow these steps to remove the formatter cover.

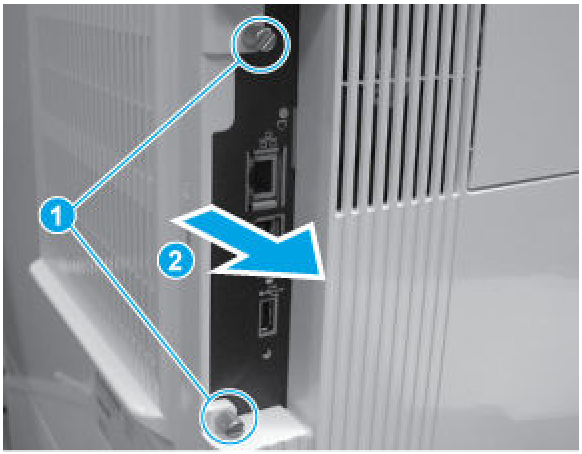
1. Locate the formatter cover.

Figure 7-548 Locate the formatter cover

2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-549 Loosen the thumbscrews



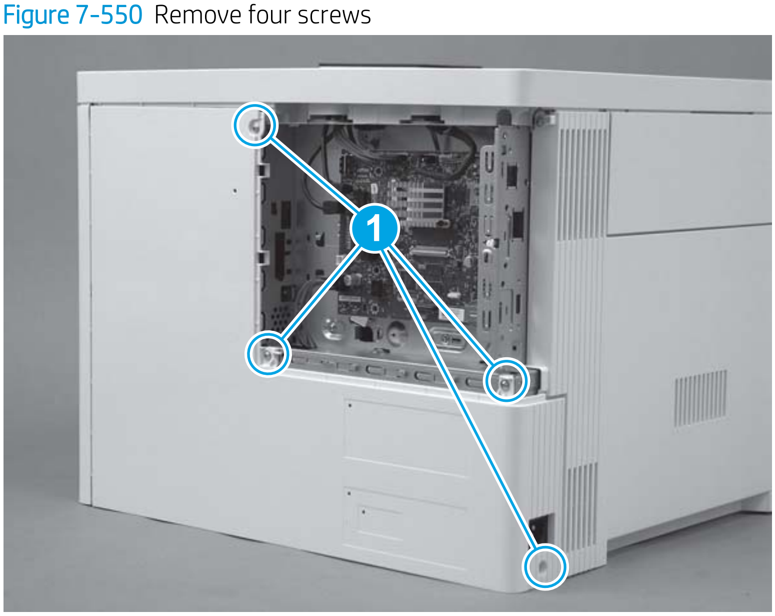
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

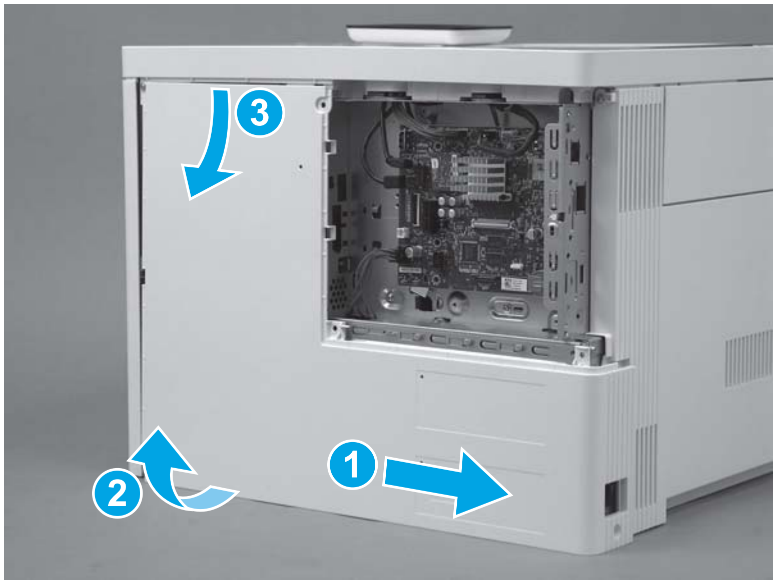
1. Remove four screws (callout 1).

Figure 7-550 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-551 Remove the cover



Remove the left cover

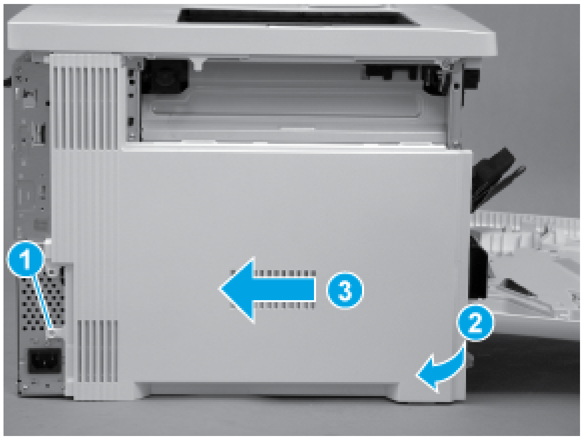
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-552 Remove one screw

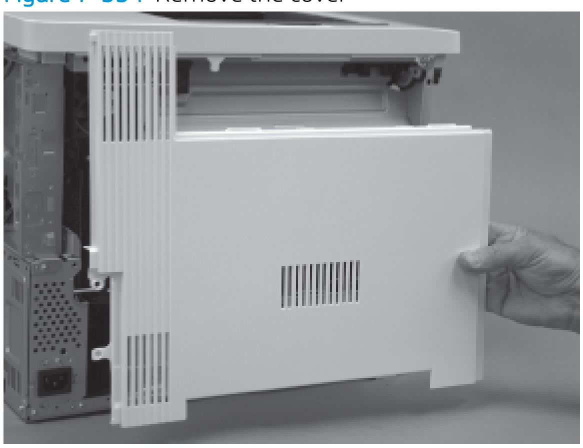
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-553 Release the cover



3. Remove the cover.

Figure 7-554 Remove the cover



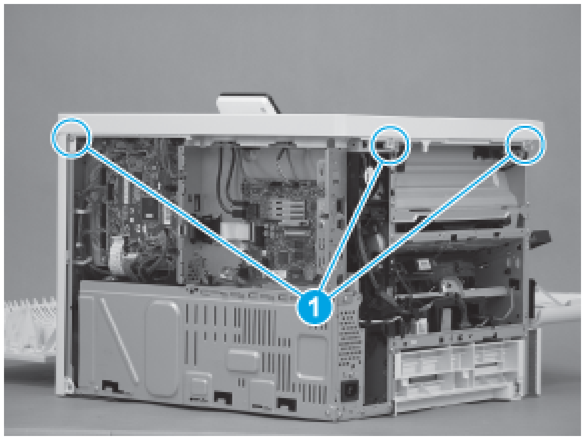
Remove the upper cover (SFP)

Follow these steps to remove the upper cover.

NOTE: This procedure is for SFP models only.

1. Remove three screws (callout 1).

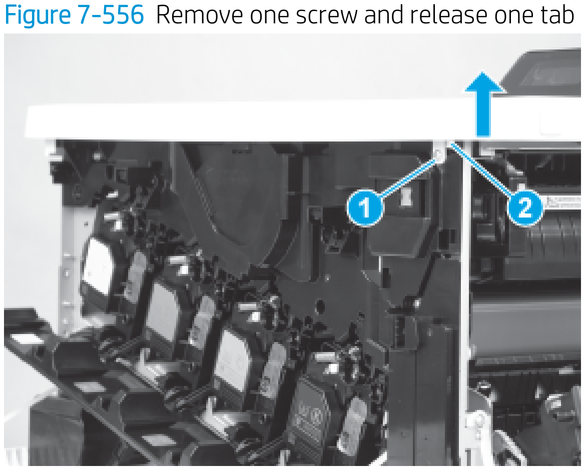
Figure 7-555 Remove three screws



2. Remove one screw (callout 1), release one tab (callout 2), and then slightly separate the corner of the cover from the chassis.

NOTE: This is a self-tapping plastic-thread screw. Make sure that this screw is used in this location when it is reinstalled.

Figure 7-556 Remove one screw and release one tab

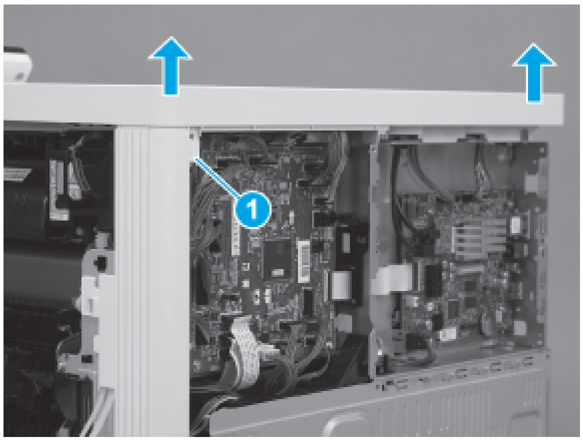


3. Release one tab (callout 1), and then lift up on the cover to release it.

IMPORTANT: **M554 models**: Disconnect the control-panel flat cable at the formatter.

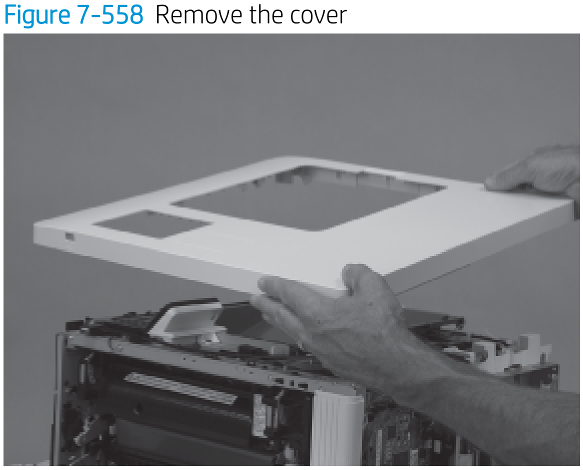
NOTE: If the cover does not release, check for addition tabs by locating the triangles embossed in the cover at tab locations.

Figure 7-557 Release the cover



4. Remove the cover.

Figure 7-558 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Output bin

Learn about removing and replacing the output bin.

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-47 Part information

Part number	Part description
RM2-0044-000CN	Output bin

Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

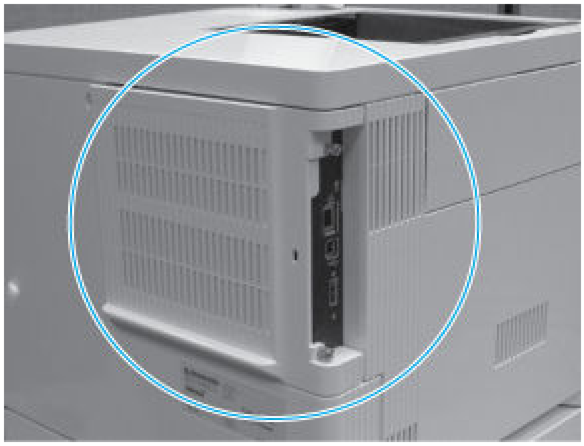
No post service test is available for this assembly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

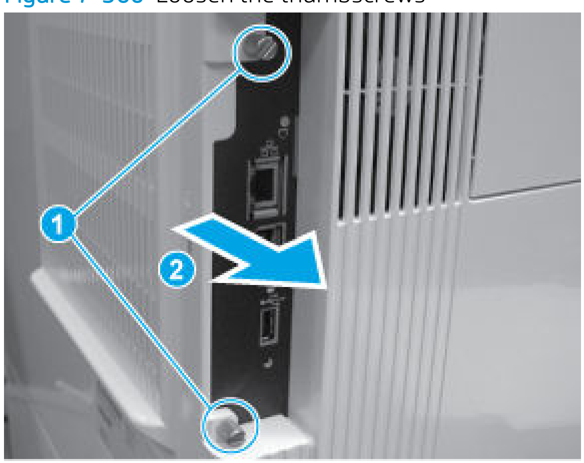
Figure 7-559 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-560 Loosen the thumbscrews

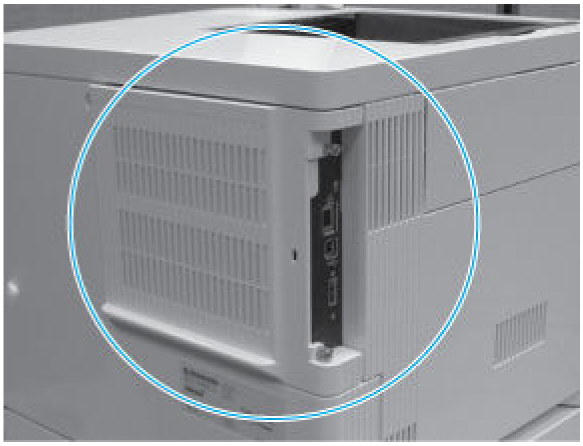


Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

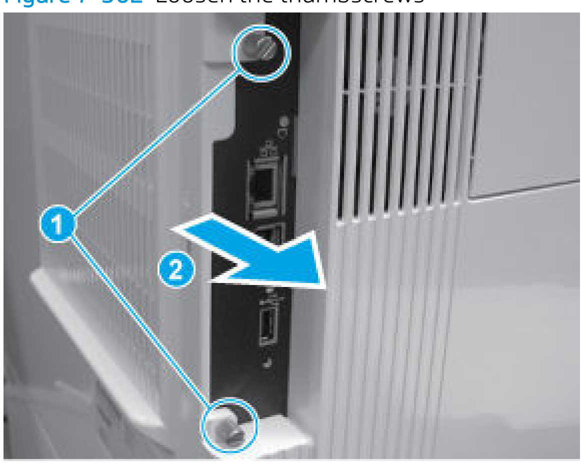
Figure 7-561 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-562 Loosen the thumbscrews



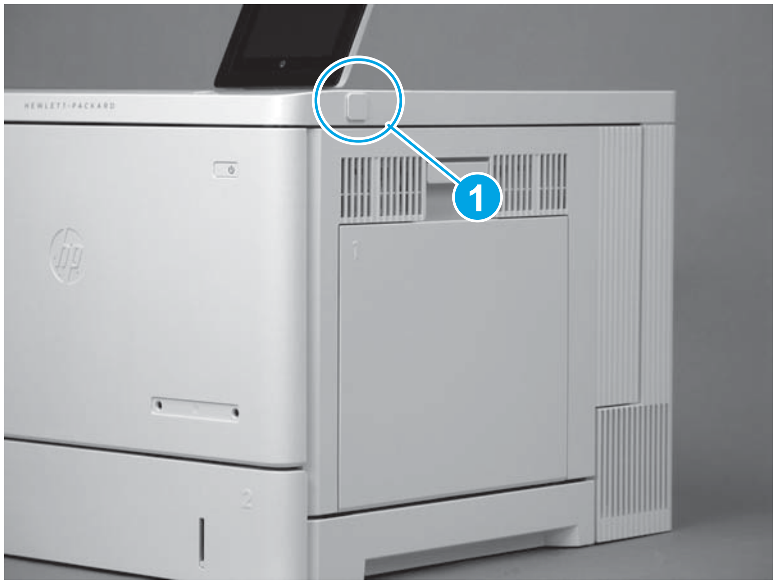
Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

NOTE: This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-563 Locate the USB cover



2. Pull the cover off of the printer to remove it.

Figure 7-564 Remove the cover

Remove the control panel (M553x/M555/E55040)

Follow these steps to remove the control panel.

NOTE: This procedure is for the M553x/M555/E55040 printers only.

M555 models: Removing the control panel is similar to the procedure below. For the M555, a flat cable connects the control panel to the formatter.

1. Tilt the control panel up.

Figure 7-565 Tilt the control panel up

2. Use the small flat-blade screwdriver supplied in this kit to release the control-panel screws cover tabs.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-566 Release the control-panel screws cover tabs

3. Rotate the cover up to remove it.

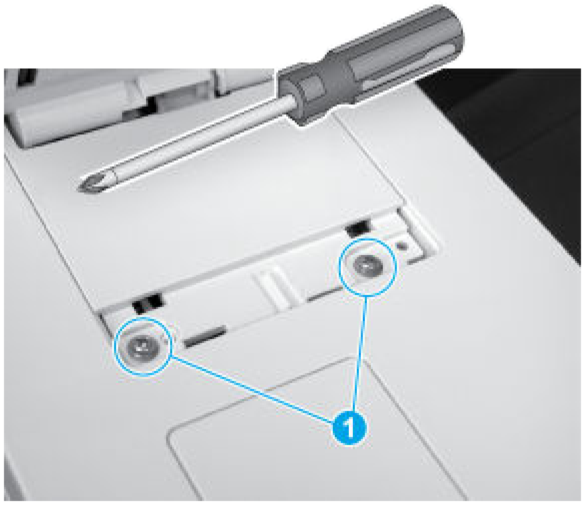
Figure 7-567 Remove the cover

4. Use the small Phillips screwdriver supplied in this kit to remove two screws (callout 1).

IMPORTANT: Store the screws in a secure place where they cannot fall down into the printer.

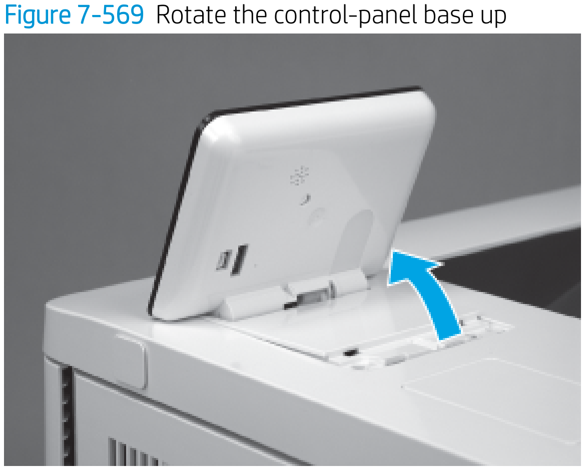
TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-568 Remove two screws



5. Rotate the control-panel base toward the front of the printer.

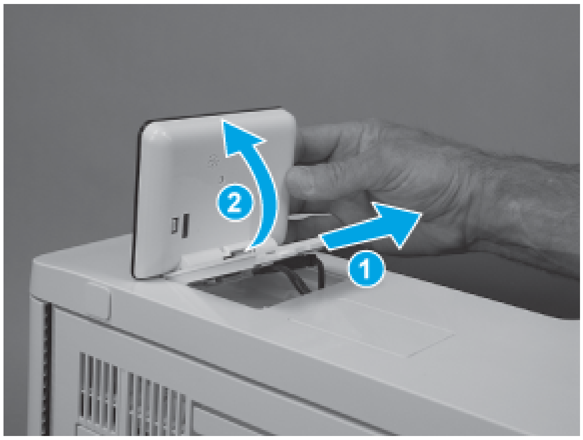
Figure 7-569 Rotate the control-panel base up



6. Slightly slide the control-panel base toward the rear of the printer (callout 1) to release it, and then turn the control panel over (callout 2) to access the bottom side.

⚠ CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

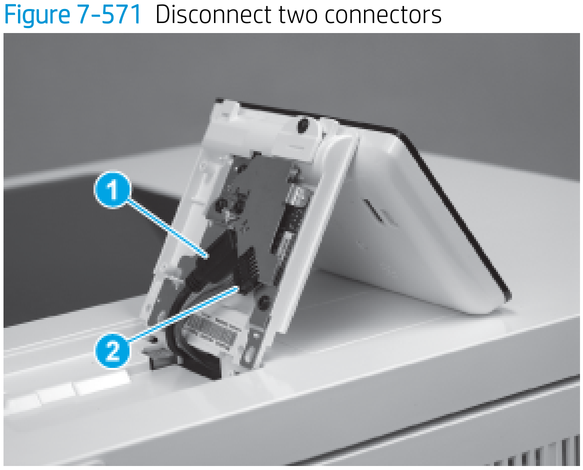
Figure 7-570 Turn the control panel over



7. Disconnect one USB cable (callout 1), one connector (callout 2), and then remove the control panel.

NOTE: **M555 only**: Disconnect one flat cable (not shown), and then remove the control panel.

Figure 7-571 Disconnect two connectors



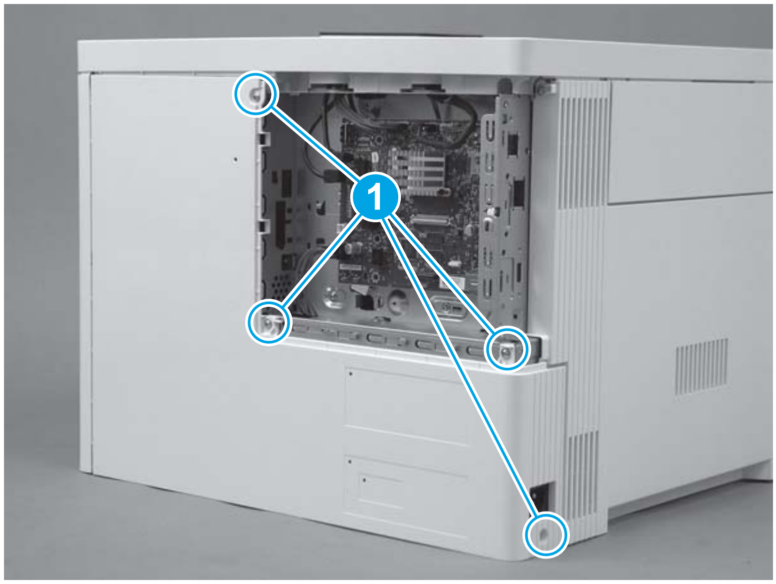
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

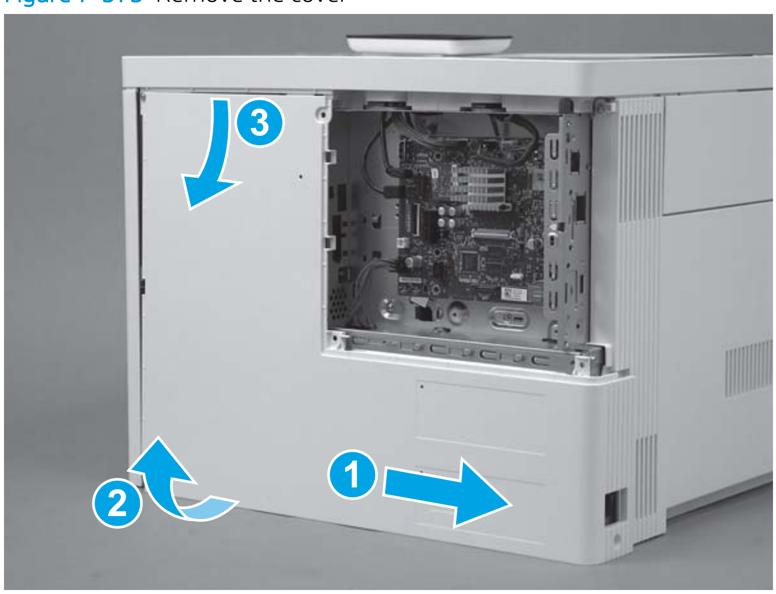
1. Remove four screws (callout 1).

Figure 7-572 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-573 Remove the cover



Remove the rear upper cover (MFP)

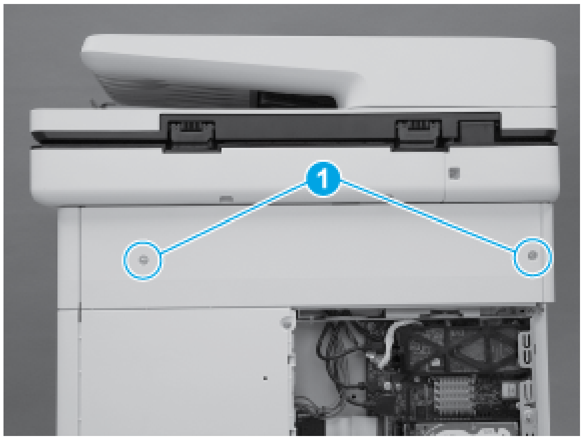
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

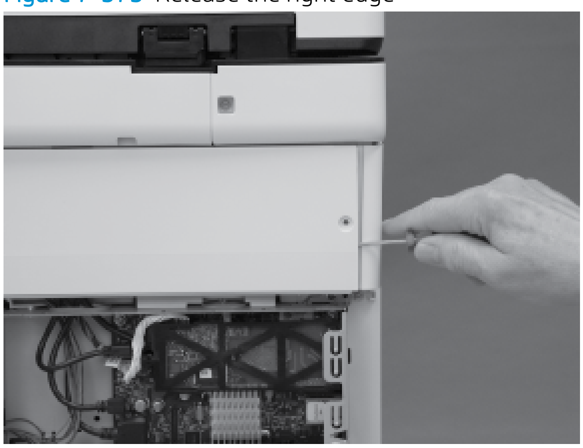
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-574 Remove two screws



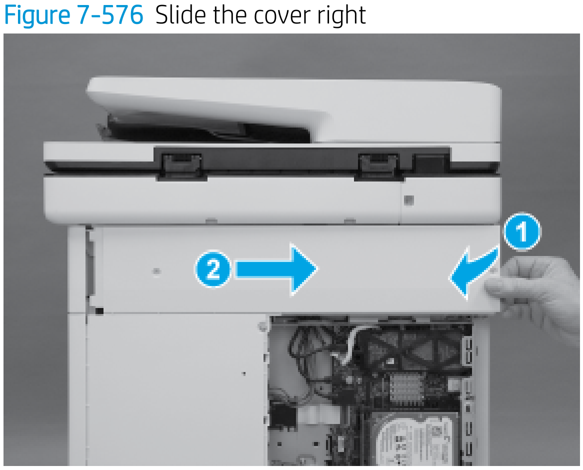
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-575 Release the right edge



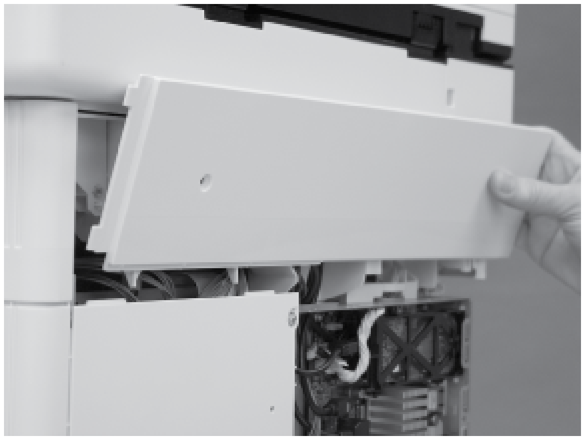
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-576 Slide the cover right



4. Remove the cover.

Figure 7-577 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-578 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-579 Remove the cover

Remove the left cover

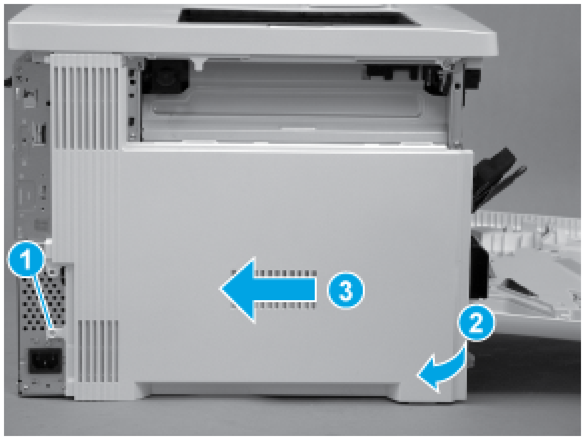
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-580 Remove one screw

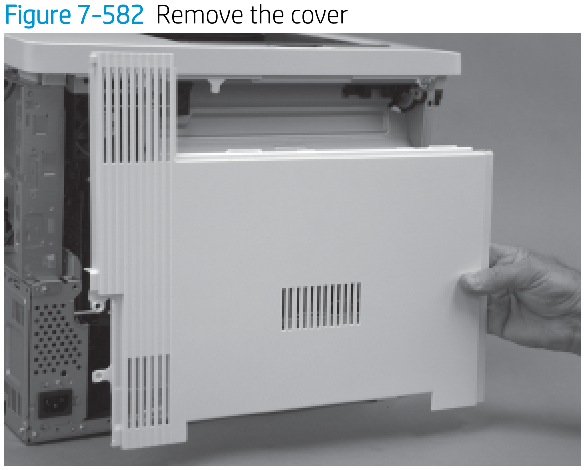
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-581 Release the cover



3. Remove the cover.

Figure 7-582 Remove the cover



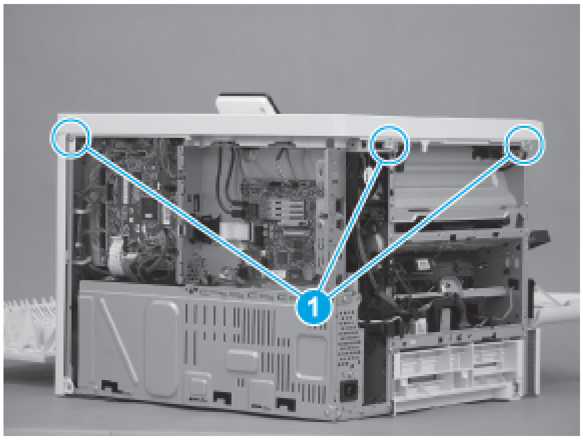
Remove the upper cover (SFP)

Follow these steps to remove the upper cover.

NOTE: This procedure is for SFP models only.

1. Remove three screws (callout 1).

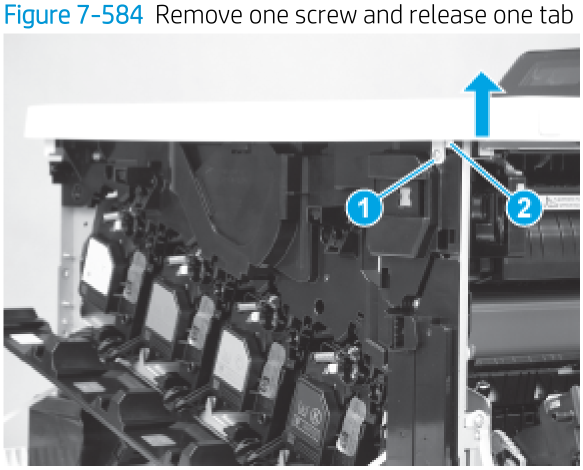
Figure 7-583 Remove three screws



2. Remove one screw (callout 1), release one tab (callout 2), and then slightly separate the corner of the cover from the chassis.

NOTE: This is a self-tapping plastic-thread screw. Make sure that this screw is used in this location when it is reinstalled.

Figure 7-584 Remove one screw and release one tab

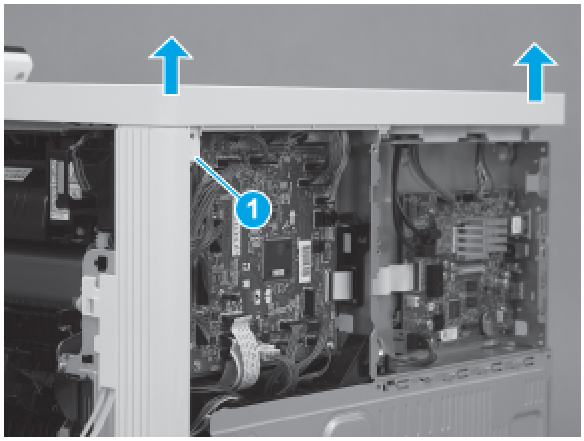


3. Release one tab (callout 1), and then lift up on the cover to release it.

IMPORTANT: **M554 models**: Disconnect the control-panel flat cable at the formatter.

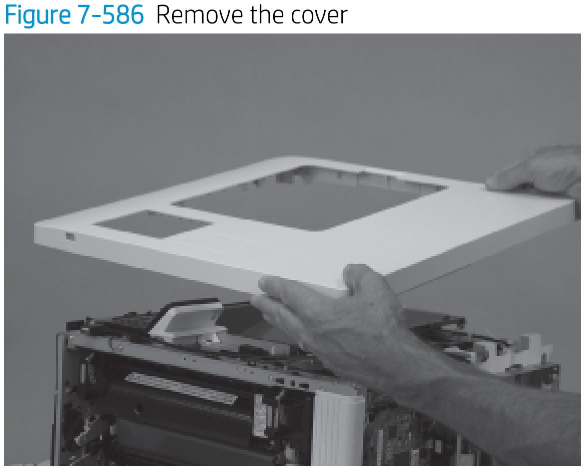
NOTE: If the cover does not release, check for addition tabs by locating the triangles embossed in the cover at tab locations.

Figure 7-585 Release the cover



4. Remove the cover.

Figure 7-586 Remove the cover



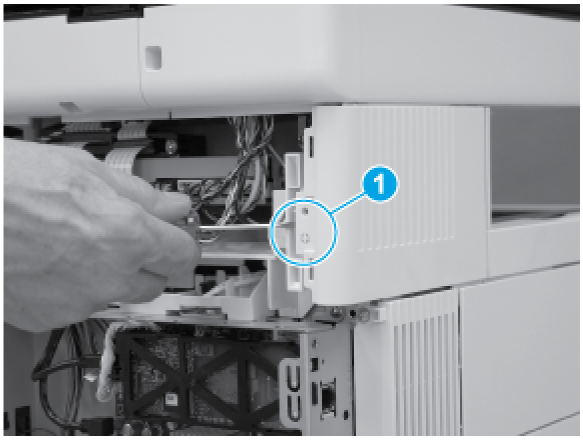
Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

NOTE: This procedure is for MFP models only.

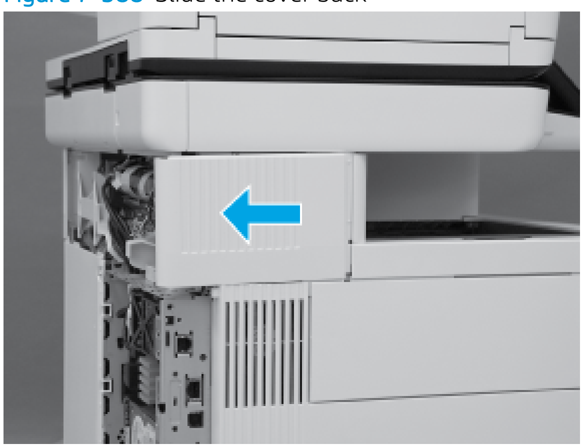
1. At the left side of the printer, release one tab (callout 1).

Figure 7-587 Release one tab



2. Slide the left upper cover toward the back of the printer.

Figure 7-588 Slide the cover back



3. Rotate the cover up to remove it.

Figure 7-589 Remove the left upper cover

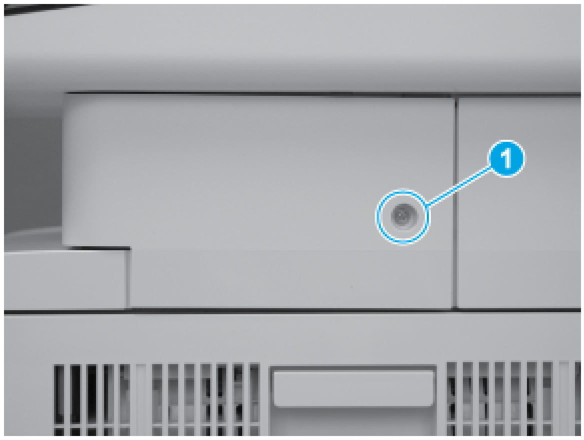
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-590 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-591 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-592 Rotate the cover

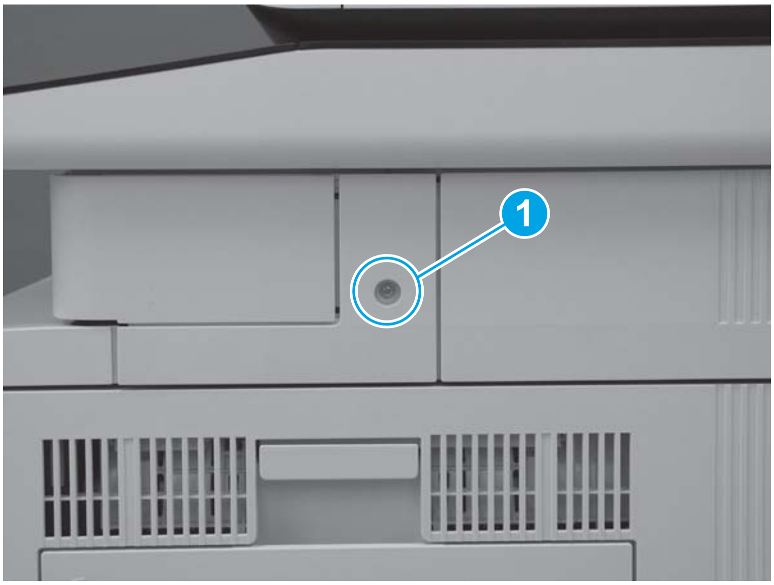
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

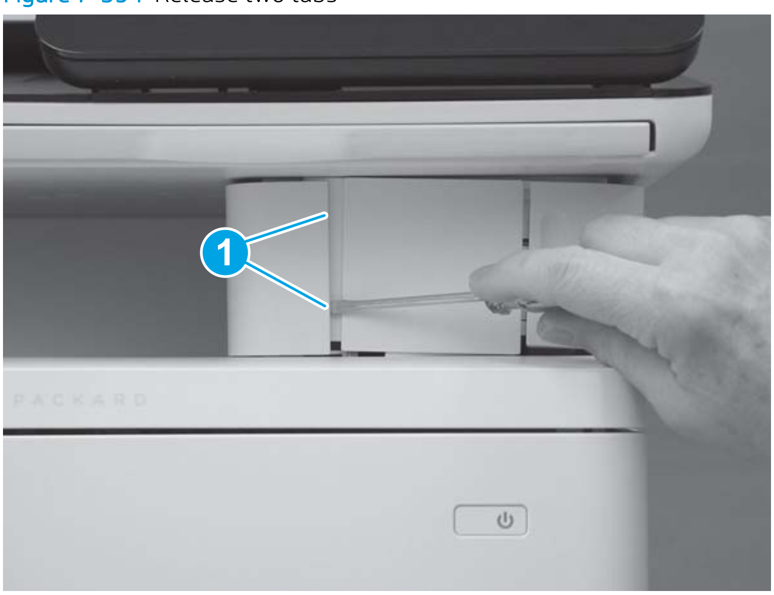
1. Remove one screw (callout 1).

Figure 7-593 Remove one screw



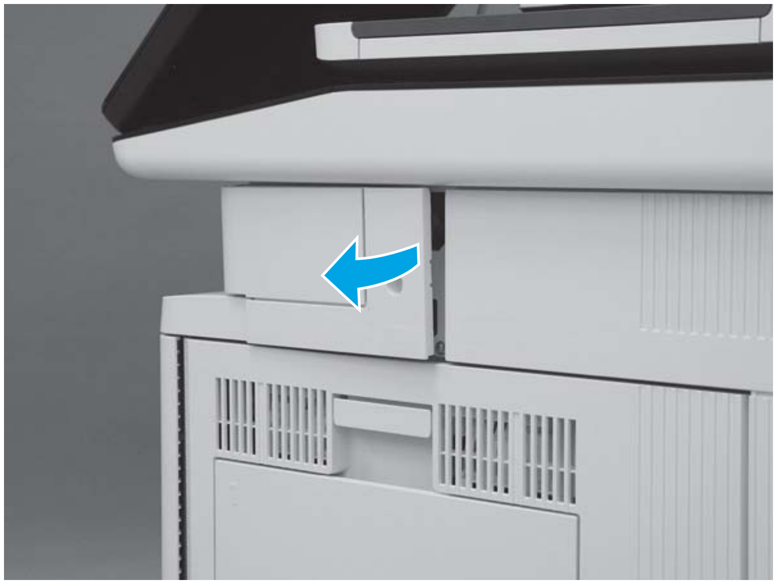
2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-594 Release two tabs



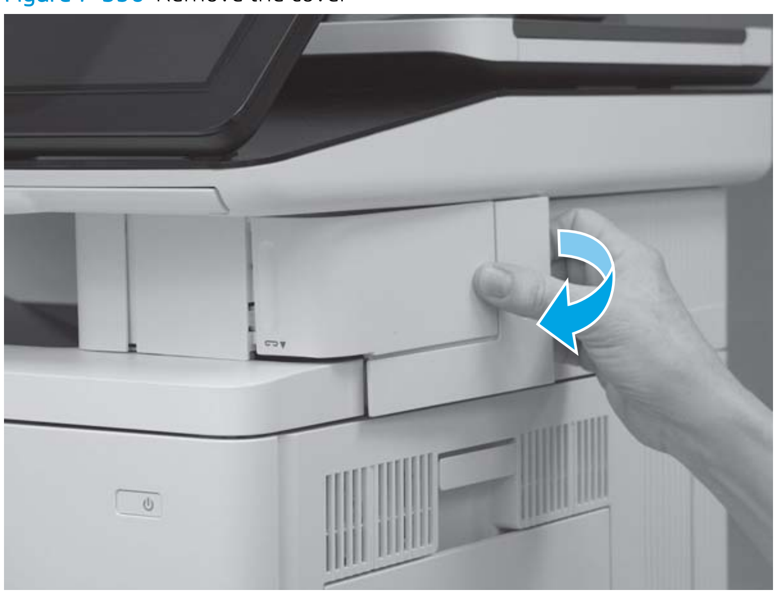
3. Release the back edge of the cover.

Figure 7-595 Release the back edge of the cover



4. Rotate the cover away from the printer to remove it.

Figure 7-596 Remove the cover



Remove the integrated scanner assembly (ISA) (MFP)

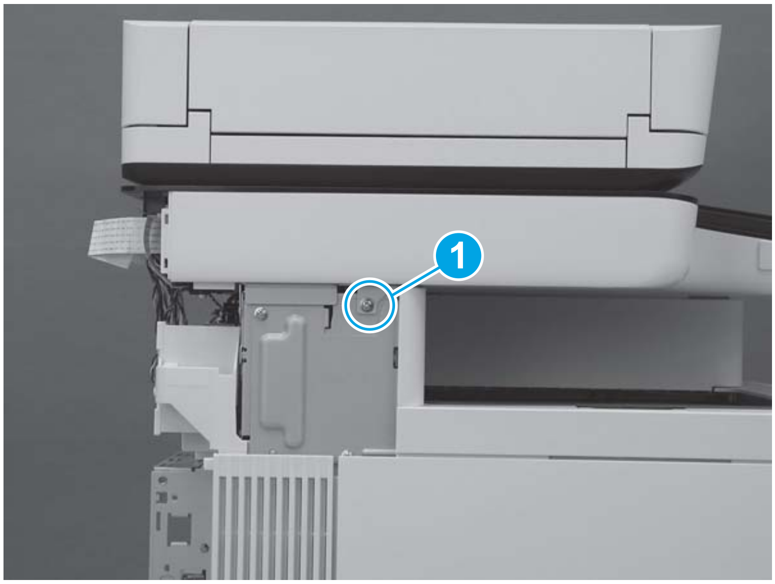
Follow these steps to remove the integrated scanner assembly (ISA).

NOTE: This procedure is for MFP models only.

NOTE: The ISA includes the document feeder, image scanner, scanner control board (SCB), control panel, keyboard (flow models) and NFC PCA (not all models).

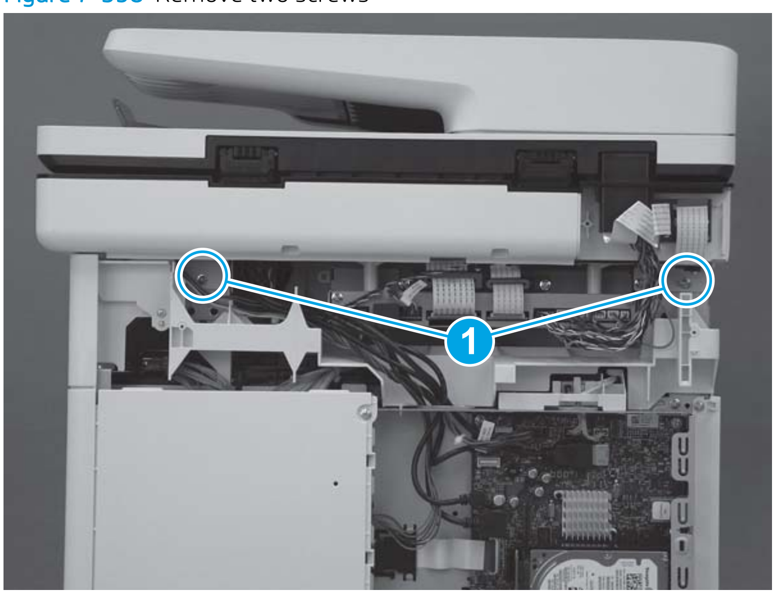
1. At the left side of the printer, remove one screw (callout 1).

Figure 7-597 Remove one screw



2. At the back of the printer, remove two screws (callout 1).

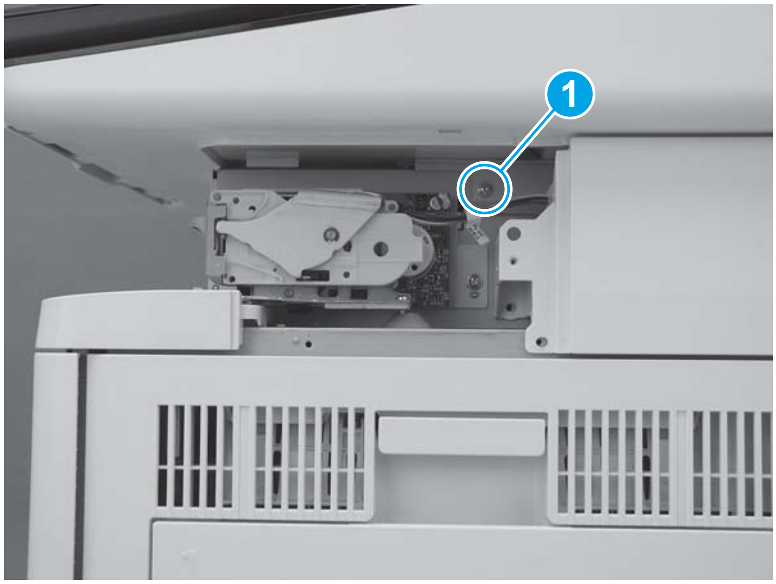
Figure 7-598 Remove two screws



3. At the right side of the printer, remove one screw (callout 1).

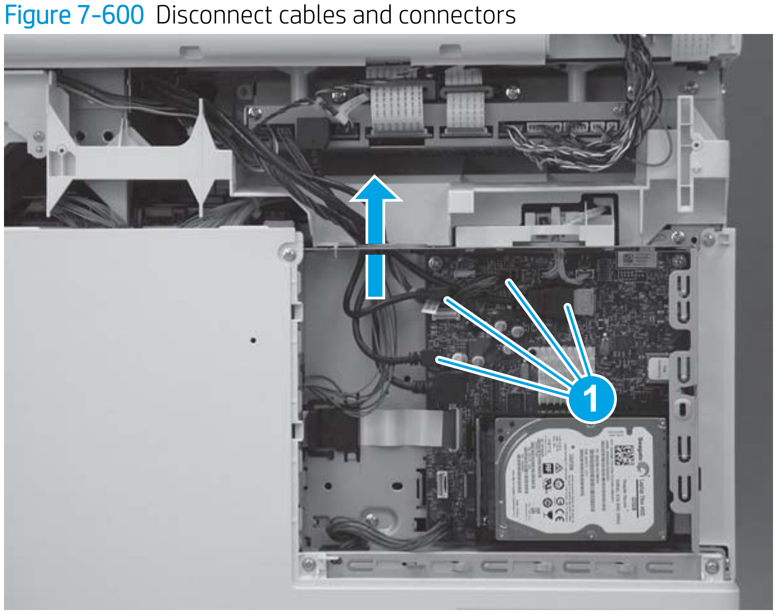
NOTE: The M577z is shown in the figure below. The procedure is correct for all MFP models.

Figure 7-599 Remove one screw



4. Disconnect four connectors (callout 1) on the formatter, and then pass the wire harnesses and cables through the top opening in the formatter case (callout 2).

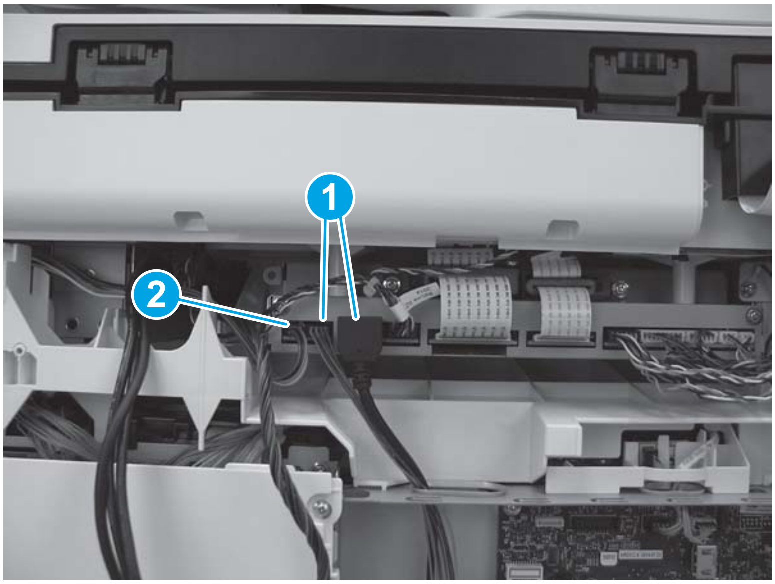
Figure 7-600 Disconnect cables and connectors



5. Disconnect two connectors on the scanner control board (callout 1).

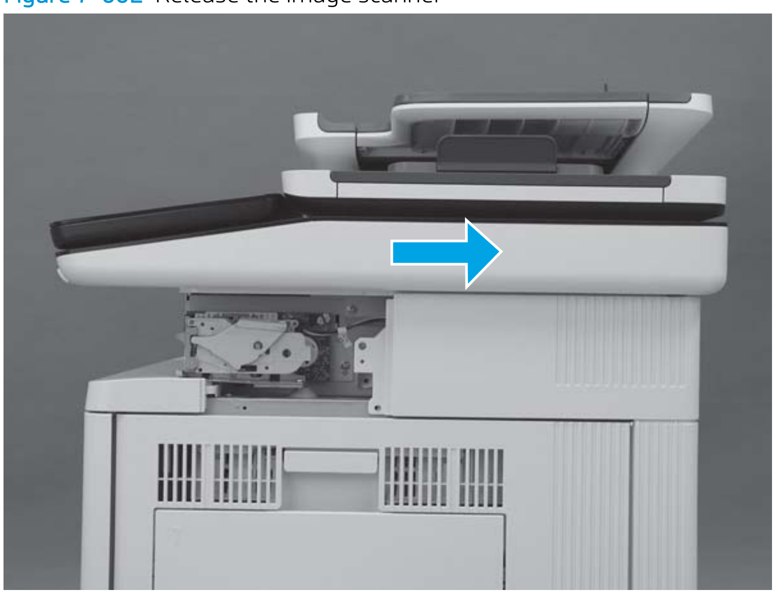
   MFP stapler models: Disconnect one connector for the stapler on the scanner control board (callout 2).

   Figure 7-601 Disconnect connectors

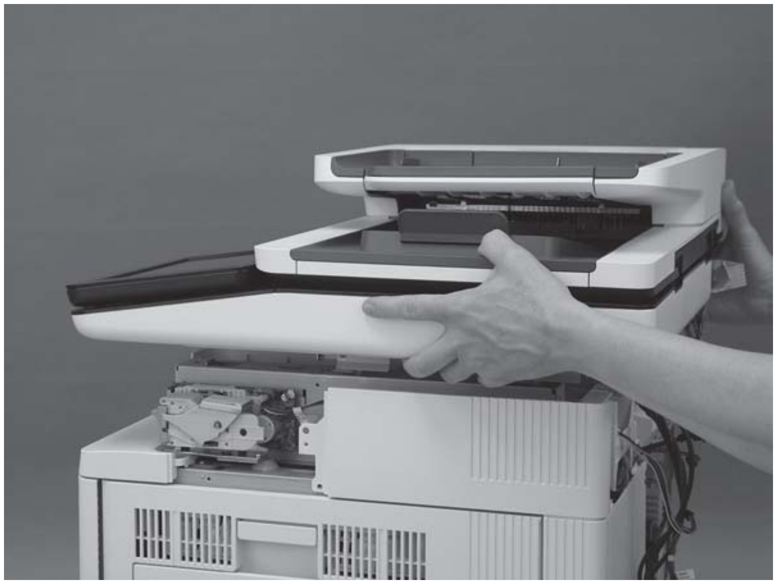
6. Slide the image scanner toward the back of the printer to release it.

   Figure 7-602 Release the image scanner

7. Lift the ISA straight up to remove it.

Figure 7-603 Remove the ISA



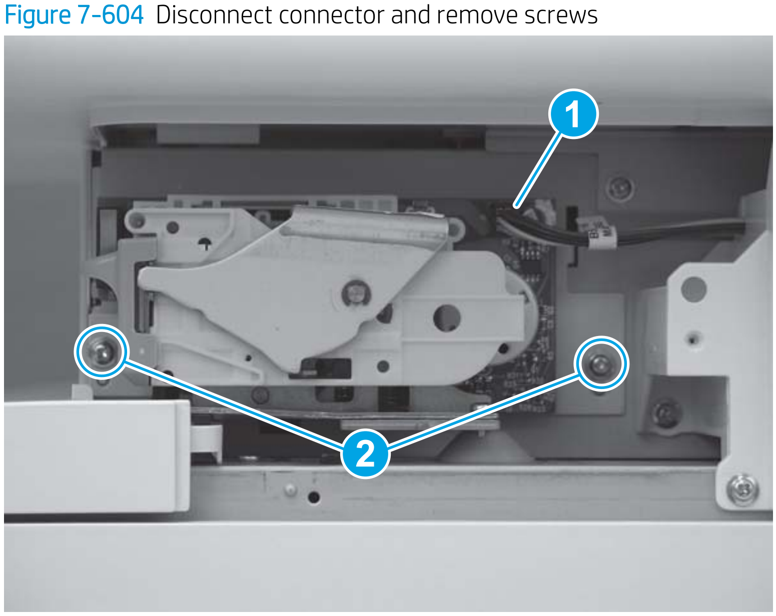
Remove the stapler unit (MFP stapler models)

Follow these steps to remove the stapler unit.

NOTE: This step is for stapler models only.

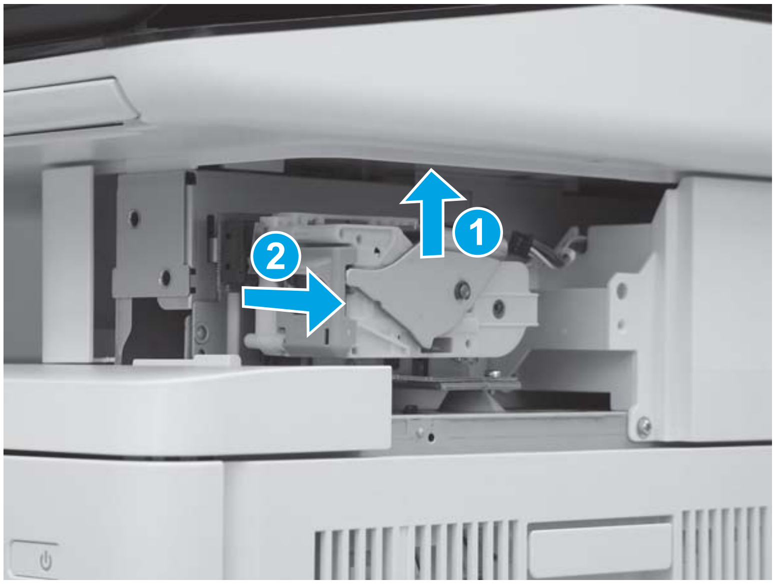
1. Disconnect one connector (callout 1), and then remove two screws (callout 2).

Figure 7-604 Disconnect connector and remove screws



2. Slide the stapler unit up (callout 1), and then pull it away from the printer (callout 2) to remove it.

Figure 7-605 Remove the stapler unit



Remove the right upper cover (MFP)

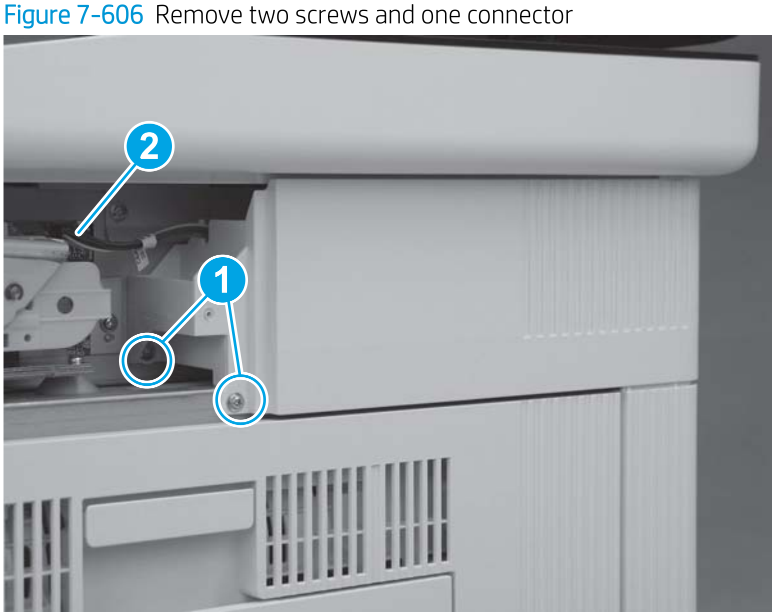
Follow these steps to remove the right upper cover.

NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Figure 7-606 Remove two screws and one connector

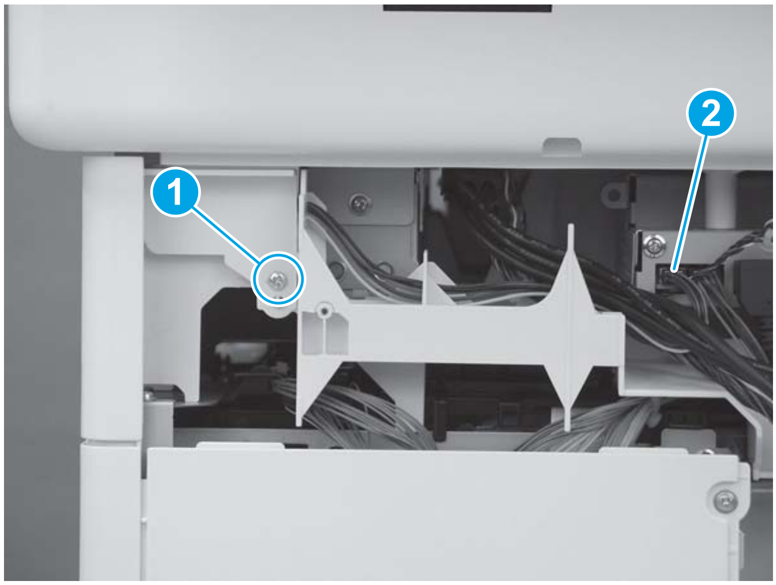


2. At the back of the printer, remove one screw (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

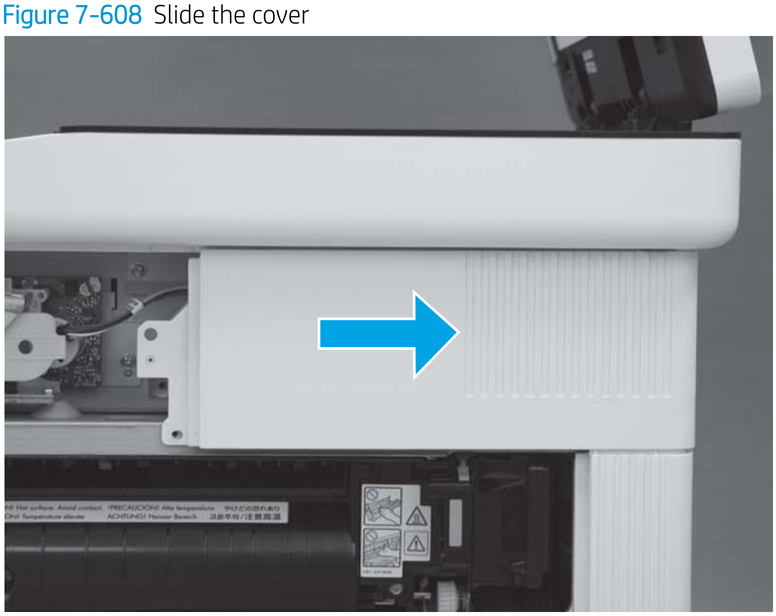
   Reinstallation tip: This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

   Figure 7-607 Remove one screw and connector



3. Slide the cover toward the back of the printer.

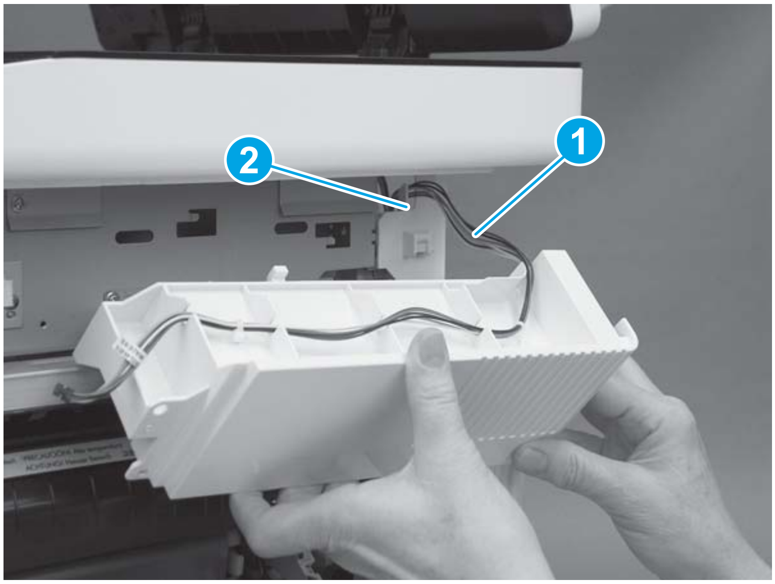
   Figure 7-608 Slide the cover



4. Lift the cover away from the printer to remove it.

   M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

   Figure 7-609 Remove the cover

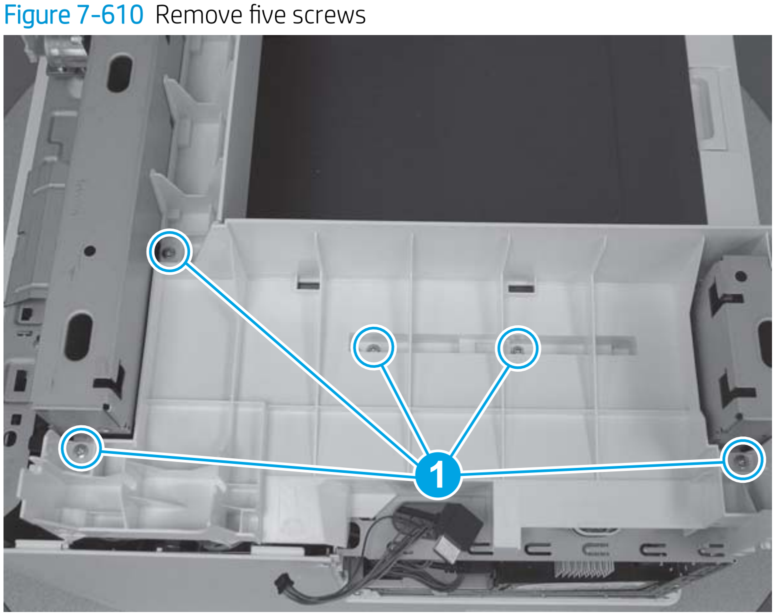
Remove the top rear cover (MFP)

Follow these steps to remove the top rear cover.

> NOTE: This procedure is for MFP models only.

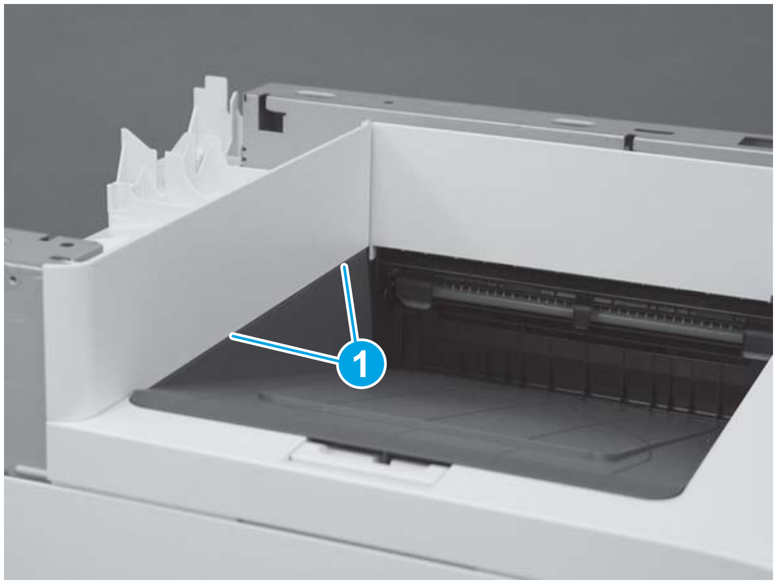
1. At the top of the printer, remove five screws (callout 1).

   Figure 7-610 Remove five screws

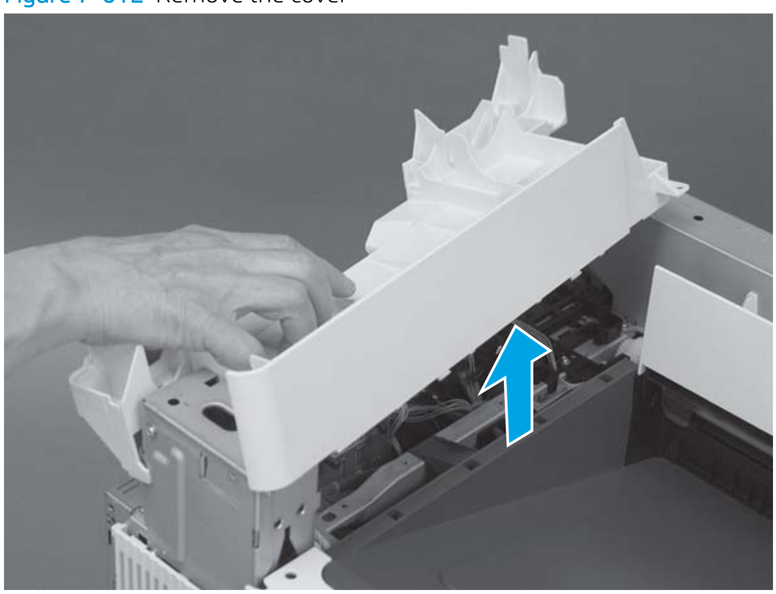
2. Release two tabs (callout 1) on the front edge of the cover.

Figure 7-611 Release two tabs



3. Remove the top rear cover.

Figure 7-612 Remove the cover



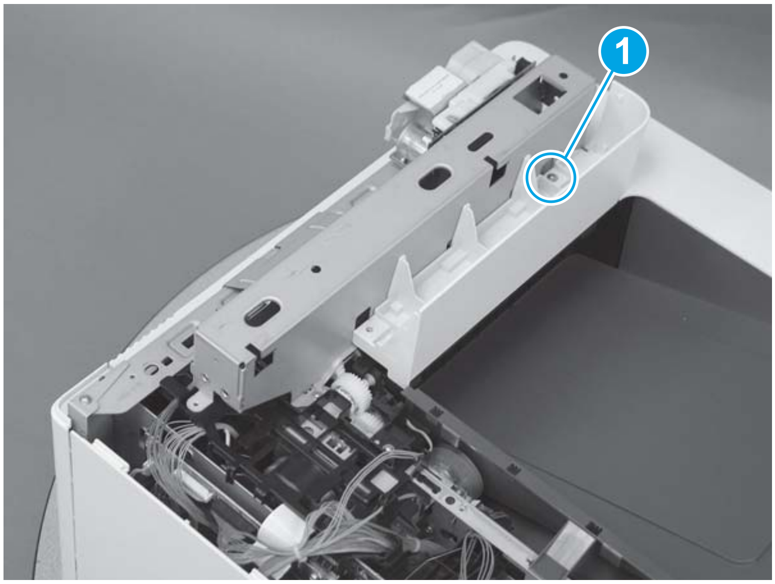
Remove the paper feed cover (MFP)

Follow these steps to remove the paper feed cover.

NOTE: This procedure is for MFP models only.

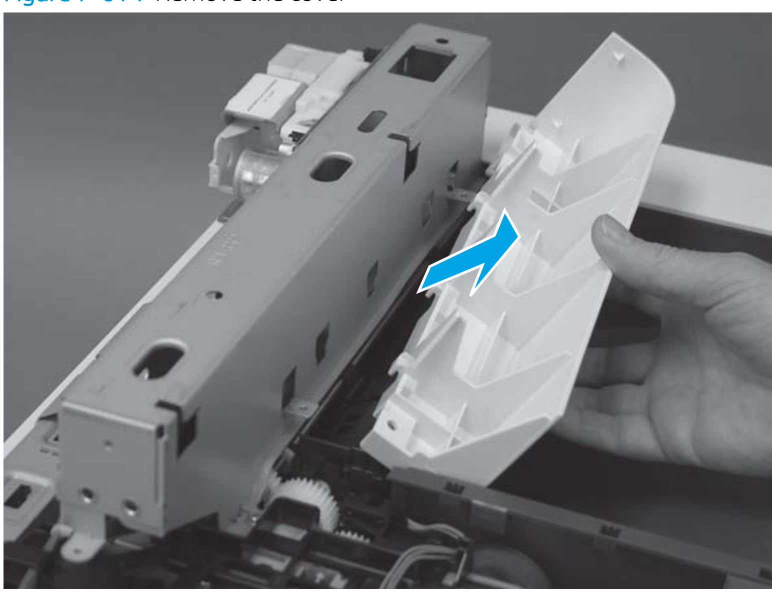
1. Remove one screw (callout 1).

Figure 7-613 Remove one screw



2. Lift the cover up to remove it.

Figure 7-614 Remove the cover



Remove the top cover (MFP)

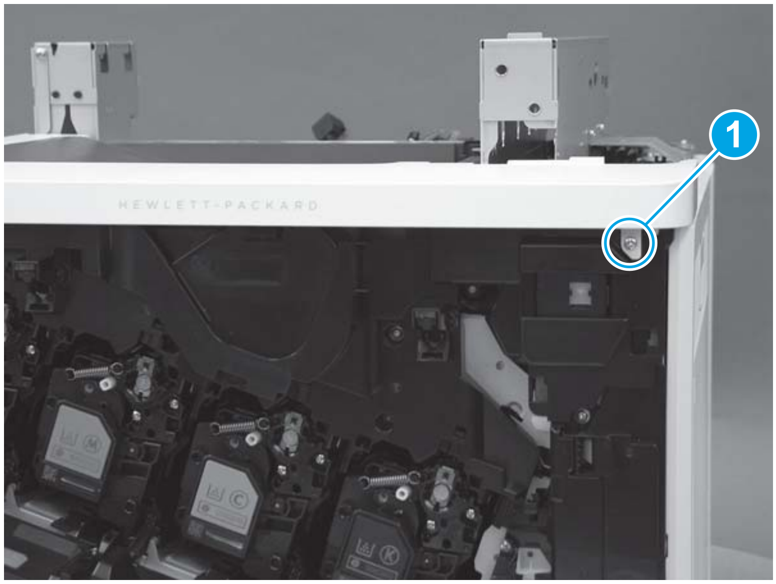
Follow these steps to remove the top cover.

NOTE: This procedure is for MFP models only.

1. At the front of the printer, remove one screw (callout 1).

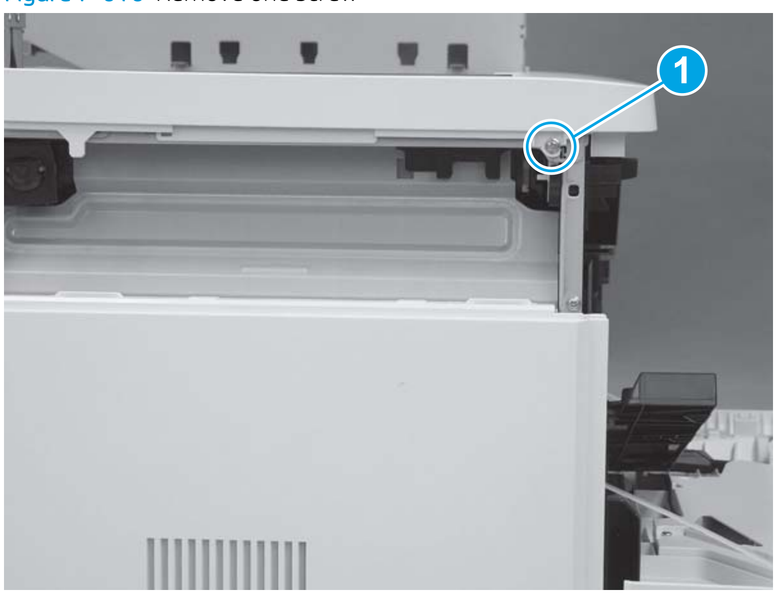
Reinstallation tip: This screw is longer and a different type of screw than the screw removed in the next step. When reinstalling the top cover, make sure that this screw is installed in the correct position.

Figure 7-615 Remove one screw



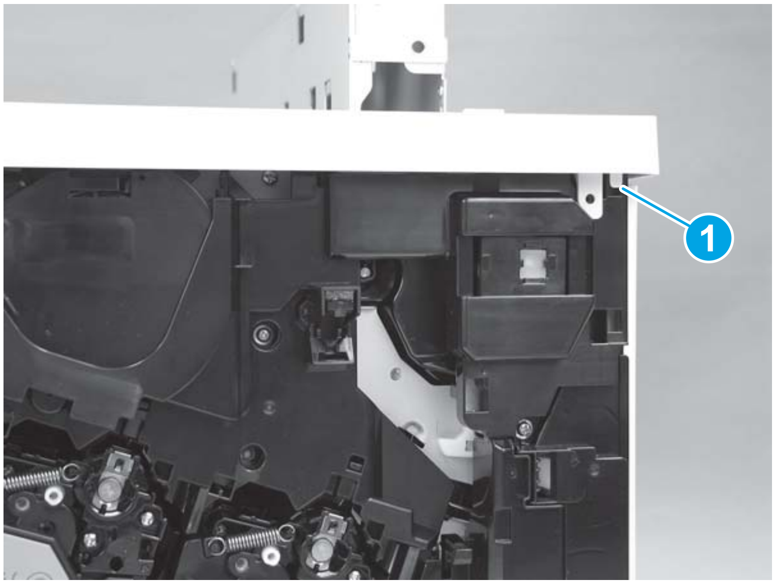
2. At the left side of the printer, remove one screw (callout 1).

Figure 7-616 Remove one screw



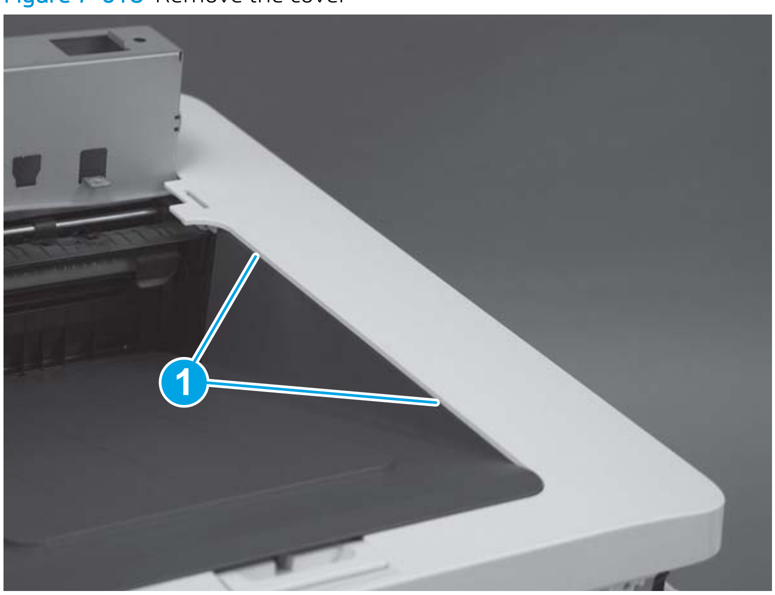
3. At the front of the printer, release one tab (callout 1).

Figure 7-617 Release one tab



4. At the top of the printer, release two tabs (callout 1) next to the output bin, and then remove the top cover.

Figure 7-618 Remove the cover

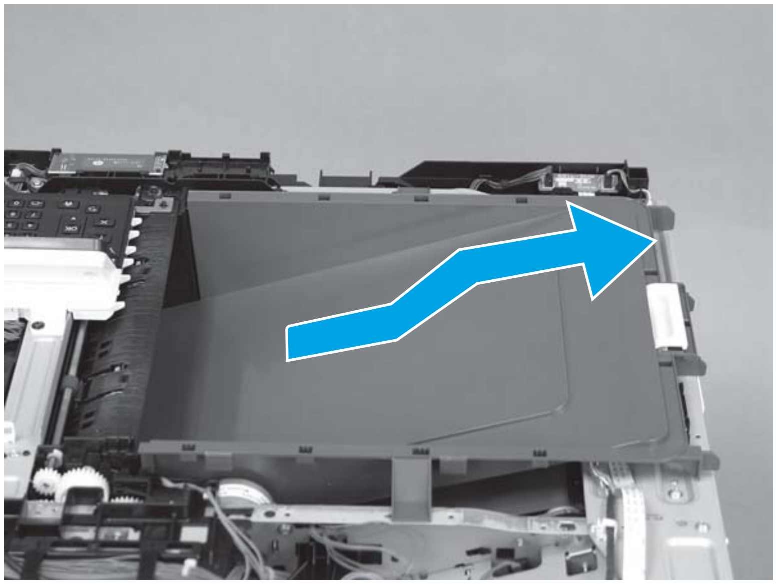


Remove the output bin

Follow these steps to remove the output bin.

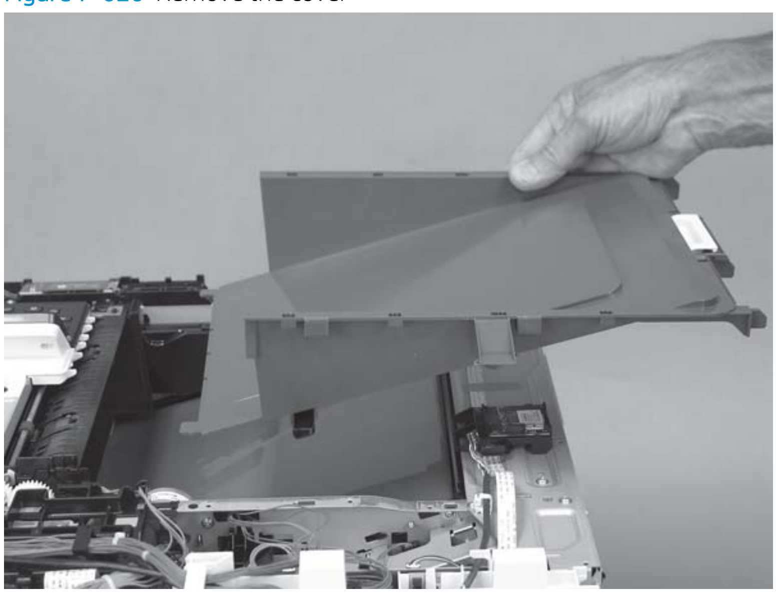
1. Slightly slide and lift the cover to release it.

Figure 7-619 Release the cover



2. Remove the cover.

Figure 7-620 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right rear cover (M522/M553/M554/M555/E55040)

Learn about removing and replacing the right rear cover.

Before performing service

Turn the printer power off

- Disconnect the power cable.

WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-48 Part information

Part number	Part description
RC4-0178-000CN	Right rear cover

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

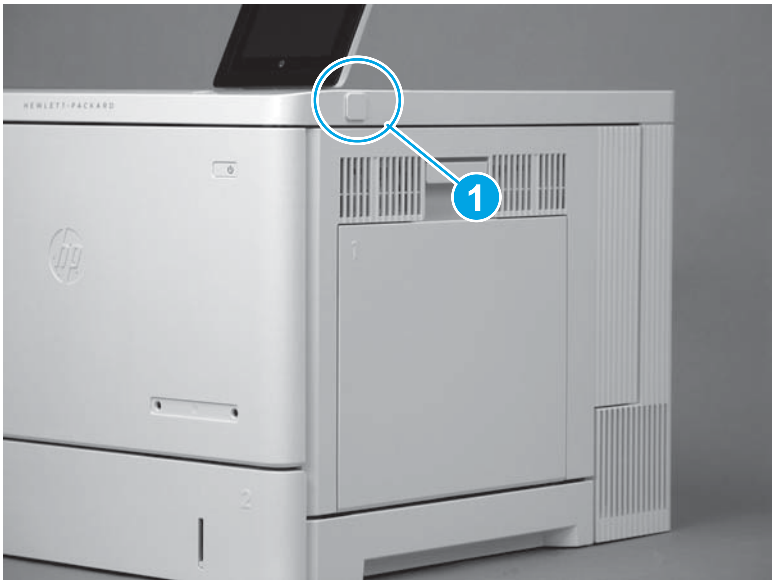
Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

NOTE: This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-621 Locate the USB cover



2. Pull the cover off of the printer to remove it.

Figure 7-622 Remove the cover

Remove the control panel (M553x/M555/E55040)

Follow these steps to remove the control panel.

NOTE: This procedure is for the M553x/M555/E55040 printers only.

M555 models: Removing the control panel is similar to the procedure below. For the M555, a flat cable connects the control panel to the formatter.

1. Tilt the control panel up.

Figure 7-623 Tilt the control panel up

2. Use the small flat-blade screwdriver supplied in this kit to release the control-panel screws cover tabs.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-624 Release the control-panel screws cover tabs

3. Rotate the cover up to remove it.

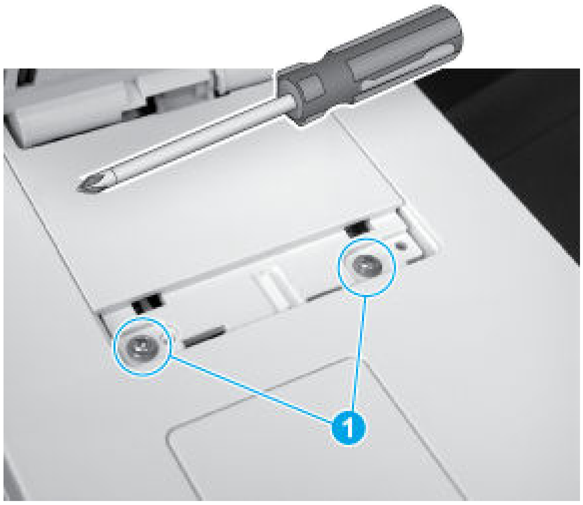
Figure 7-625 Remove the cover

4. Use the small Phillips screwdriver supplied in this kit to remove two screws (callout 1).

IMPORTANT: Store the screws in a secure place where they cannot fall down into the printer.

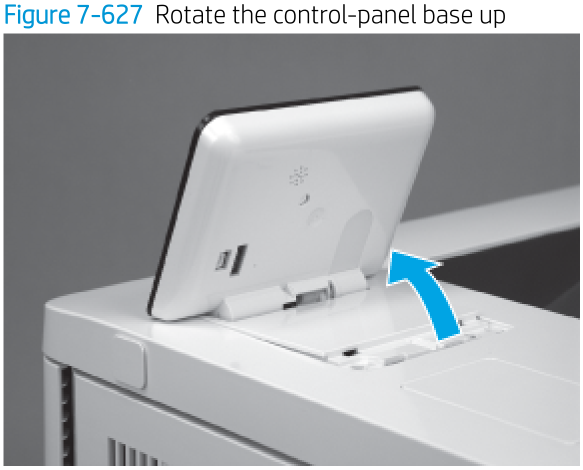
TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-626 Remove two screws



5. Rotate the control-panel base toward the front of the printer.

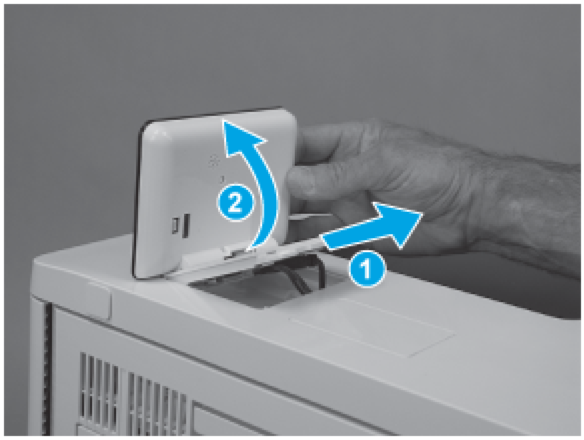
Figure 7-627 Rotate the control-panel base up



6. Slightly slide the control-panel base toward the rear of the printer (callout 1) to release it, and then turn the control panel over (callout 2) to access the bottom side.

CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

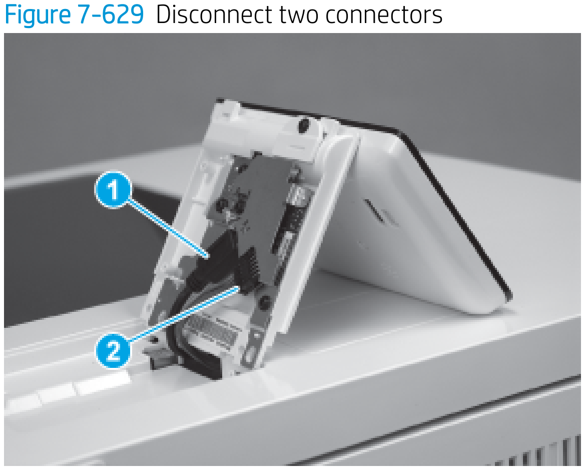
Figure 7-628 Turn the control panel over



7. Disconnect one USB cable (callout 1), one connector (callout 2), and then remove the control panel.

NOTE: **M555 only**: Disconnect one flat cable (not shown), and then remove the control panel.

Figure 7-629 Disconnect two connectors



Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-630 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-631 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

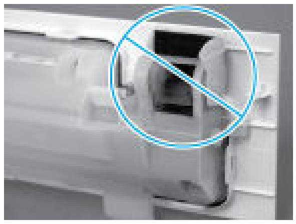
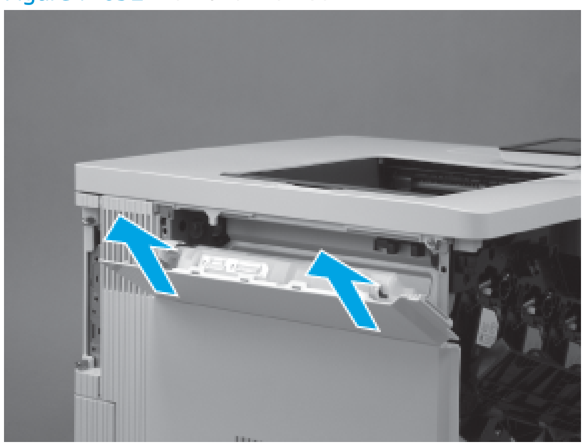


Figure 7-632 Remove the TCU



Remove the formatter cover

Follow these steps to remove the formatter cover.

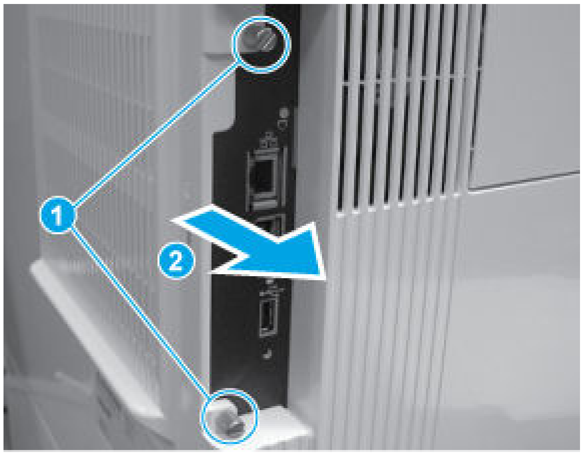
1. Locate the formatter cover.

Figure 7-633 Locate the formatter cover

2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-634 Loosen the thumbscrews



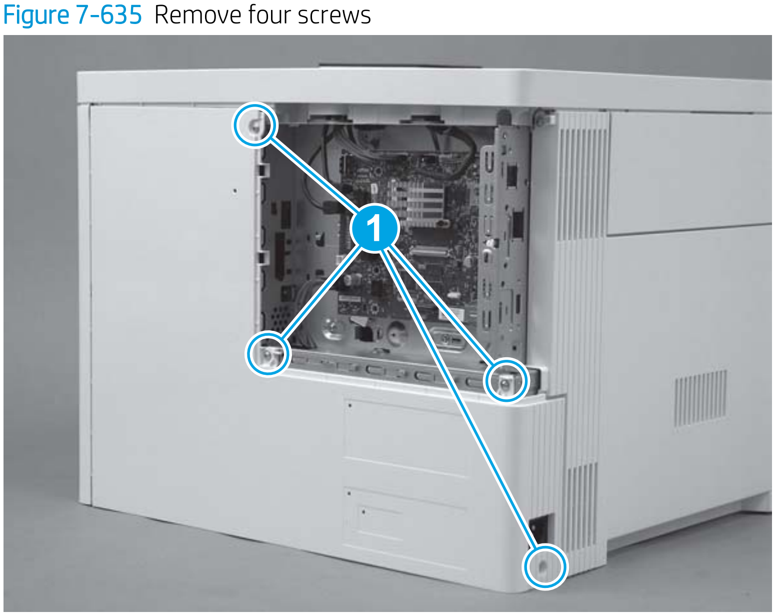
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

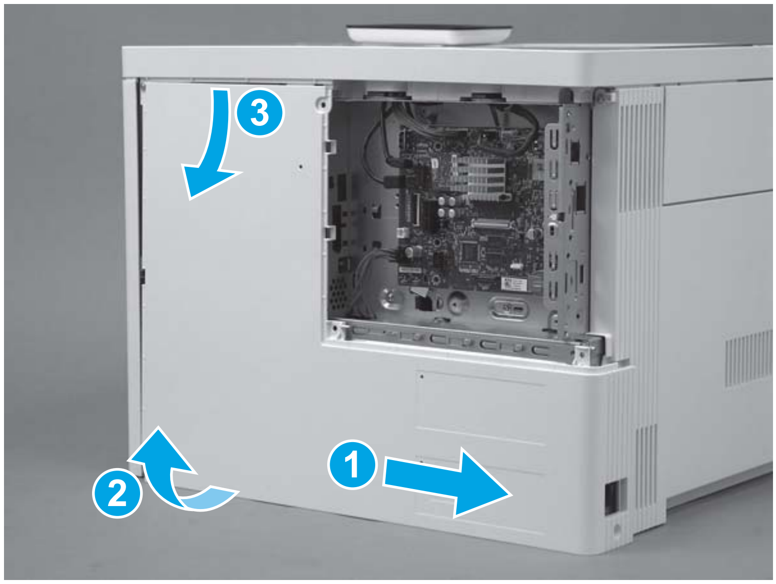
1. Remove four screws (callout 1).

Figure 7-635 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-636 Remove the cover



Remove the left cover

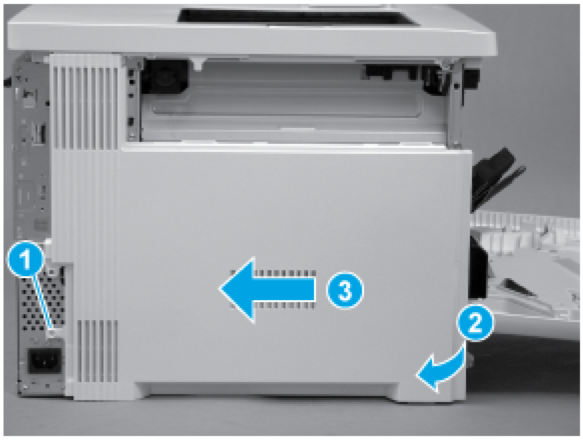
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-637 Remove one screw

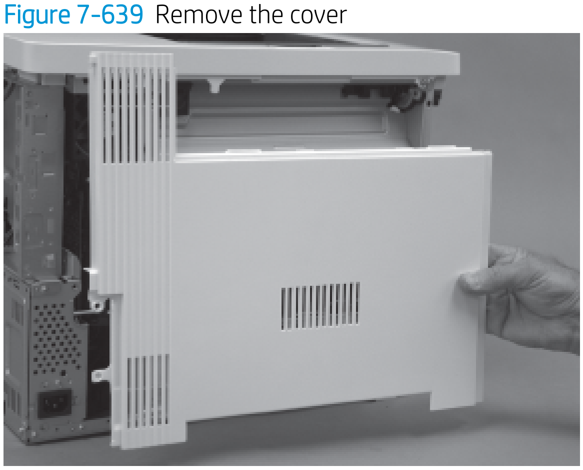
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-638 Release the cover



3. Remove the cover.

Figure 7-639 Remove the cover



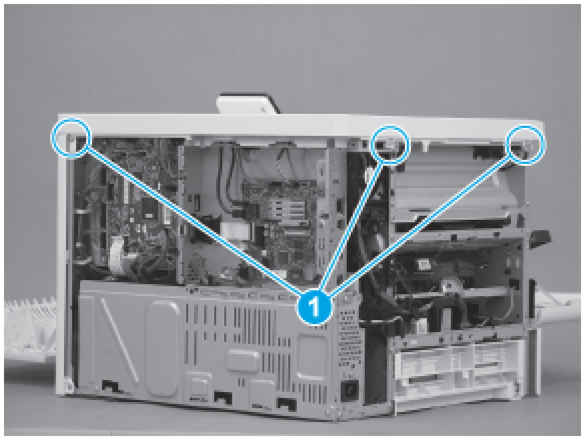
Remove the upper cover (SFP)

Follow these steps to remove the upper cover.

NOTE: This procedure is for SFP models only.

1. Remove three screws (callout 1).

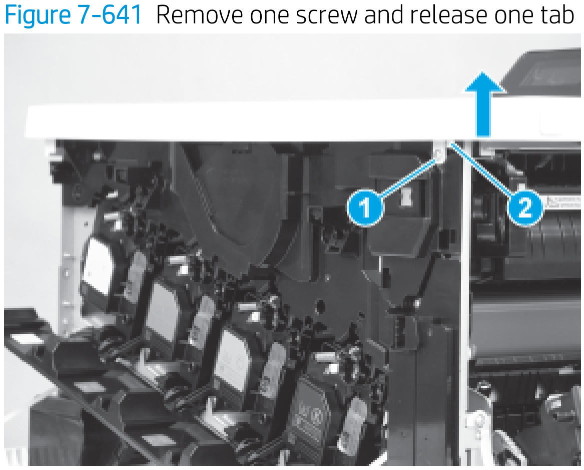
Figure 7-640 Remove three screws



2. Remove one screw (callout 1), release one tab (callout 2), and then slightly separate the corner of the cover from the chassis.

NOTE: This is a self-tapping plastic-thread screw. Make sure that this screw is used in this location when it is reinstalled.

Figure 7-641 Remove one screw and release one tab

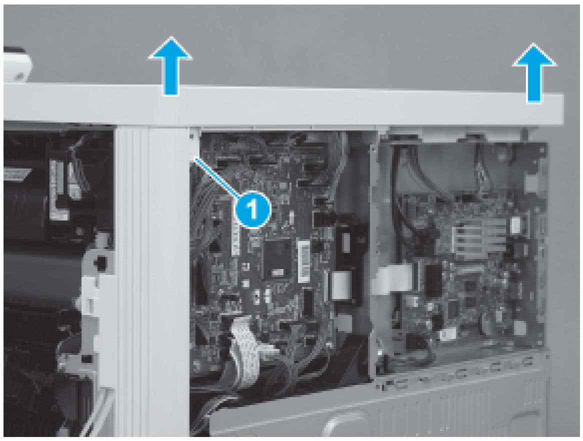


3. Release one tab (callout 1), and then lift up on the cover to release it.

IMPORTANT: **M554 models**: Disconnect the control-panel flat cable at the formatter.

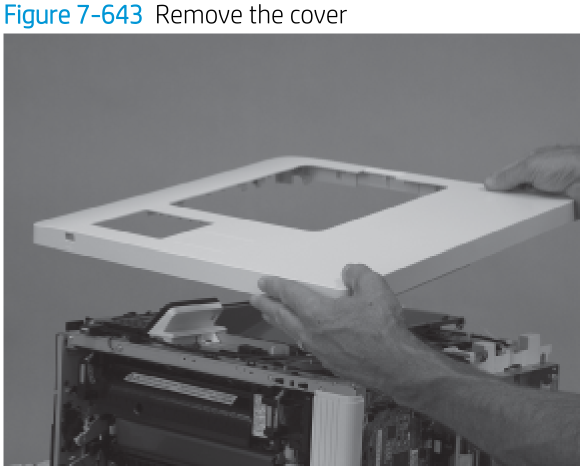
NOTE: If the cover does not release, check for addition tabs by locating the triangles embossed in the cover at tab locations.

Figure 7-642 Release the cover



4. Remove the cover.

Figure 7-643 Remove the cover



Remove the right rear cover

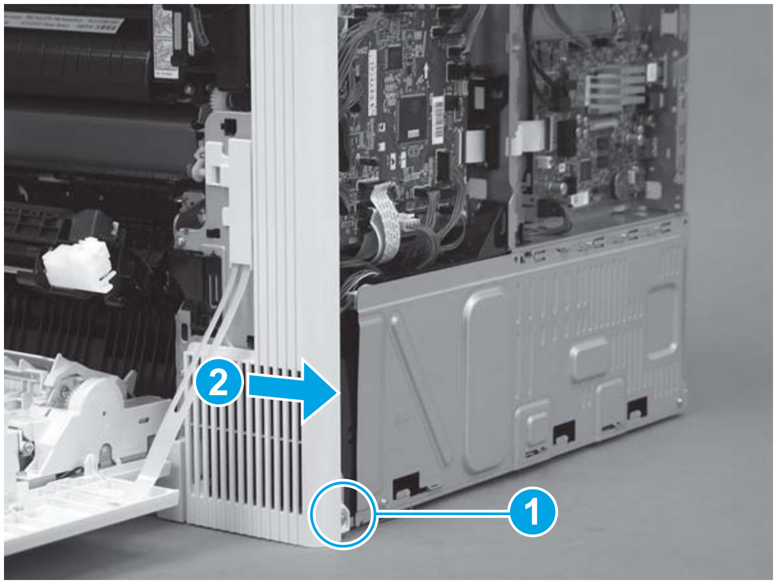
Follow these steps to remove the right rear cover.

NOTE: The figures in this topic show a SFP model. However, the procedure is correct for an MFP.

1. Remove one screw (callout 1), and then slide the cover toward the rear of the printer (callout 2) to release it.

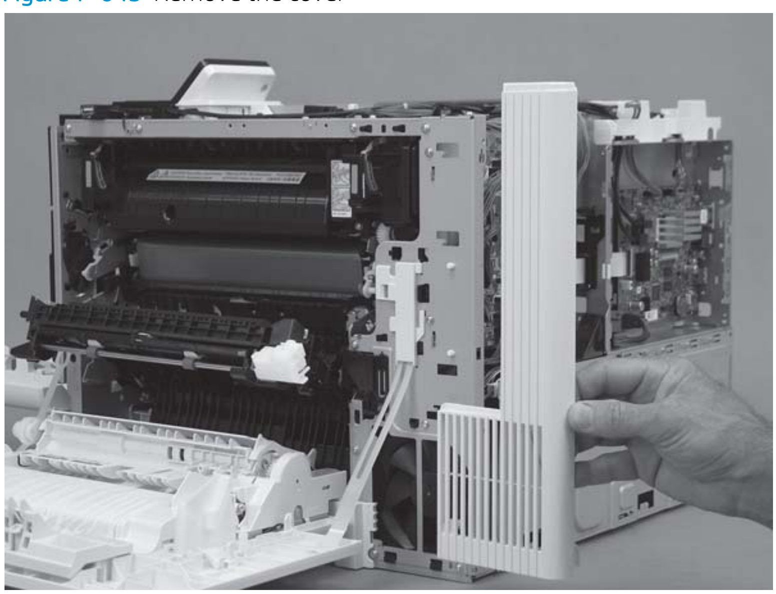
TIP: If the right door is closed, open it now.

Figure 7-644 Release the cover



2. Remove the cover.

Figure 7-645 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right rear cover (M577/M578/E57540)

Learn about removing and replacing the right rear cover.

Before performing service

Turn the printer power off

- Disconnect the power cable.

  WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-49 Part information

Part number	Part description
RC4-0178-000CN	Right rear cover

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

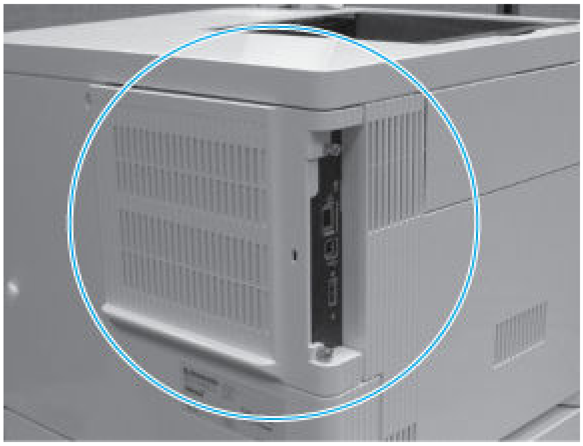
No post service test is available for this assembly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

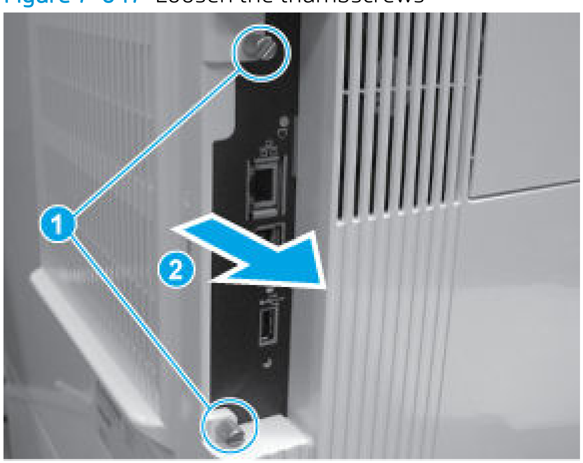
Figure 7-646 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-647 Loosen the thumbscrews



Remove the rear upper cover (MFP)

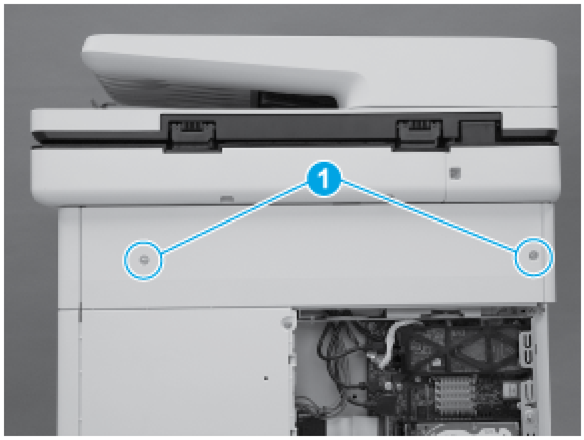
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

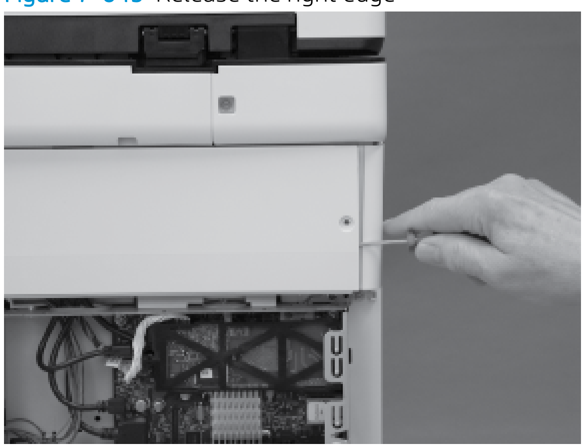
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-648 Remove two screws



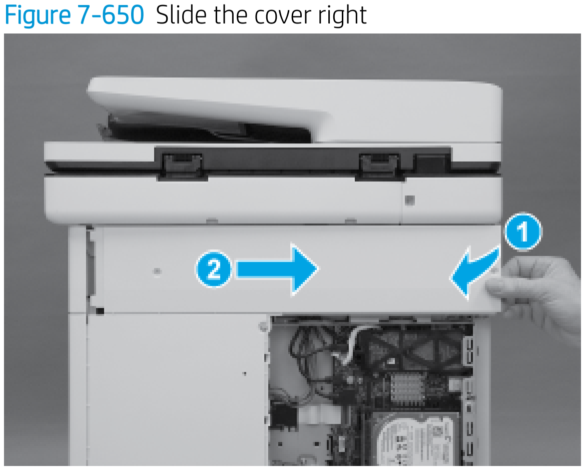
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-649 Release the right edge



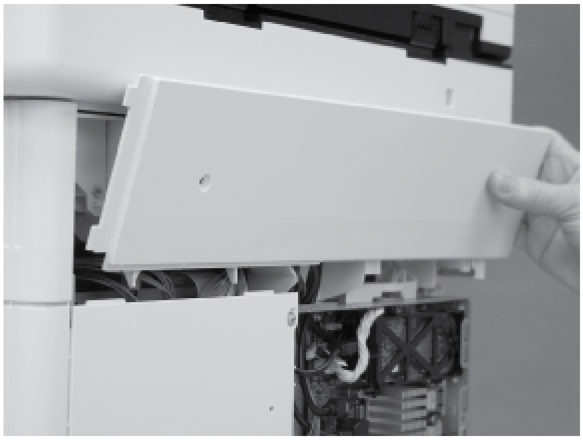
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-650 Slide the cover right



4. Remove the cover.

Figure 7-651 Remove the cover



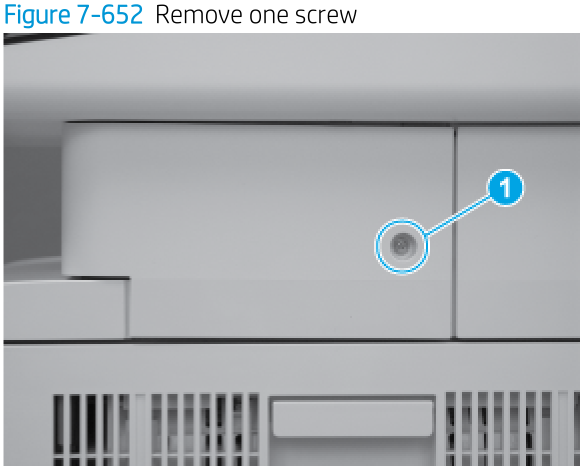
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-652 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-653 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-654 Rotate the cover

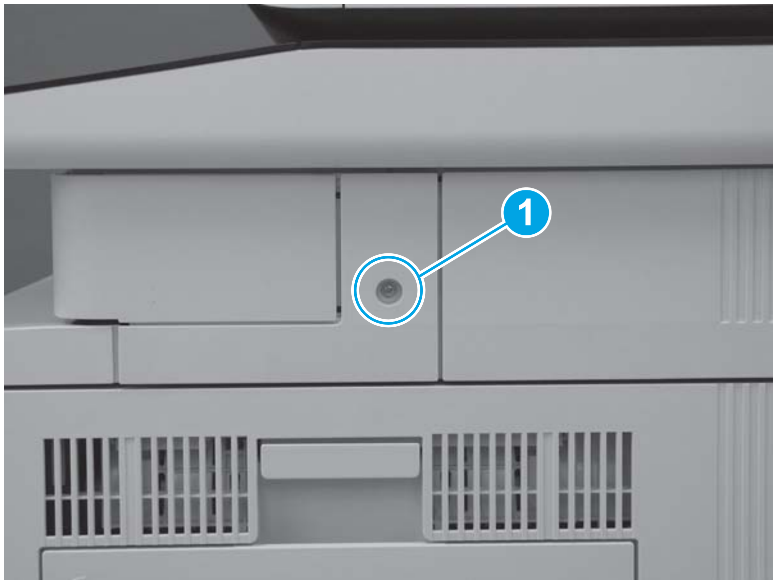
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

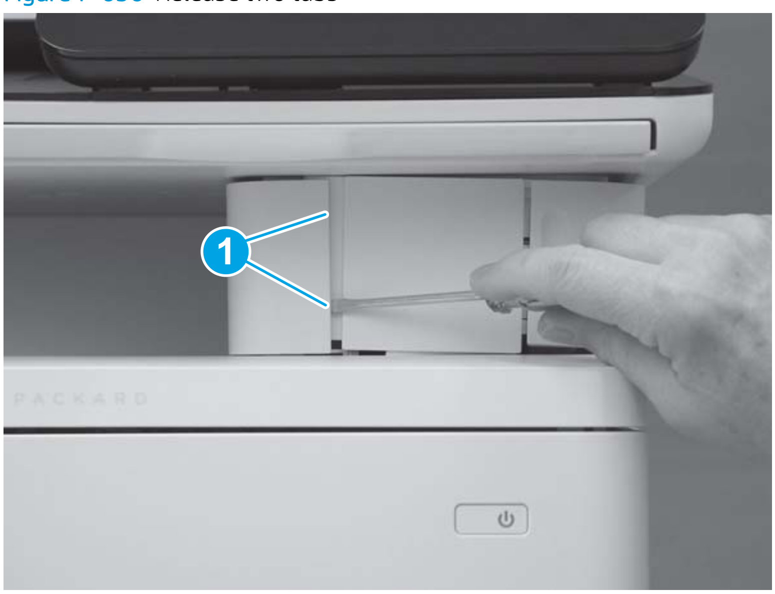
1. Remove one screw (callout 1).

Figure 7-655 Remove one screw



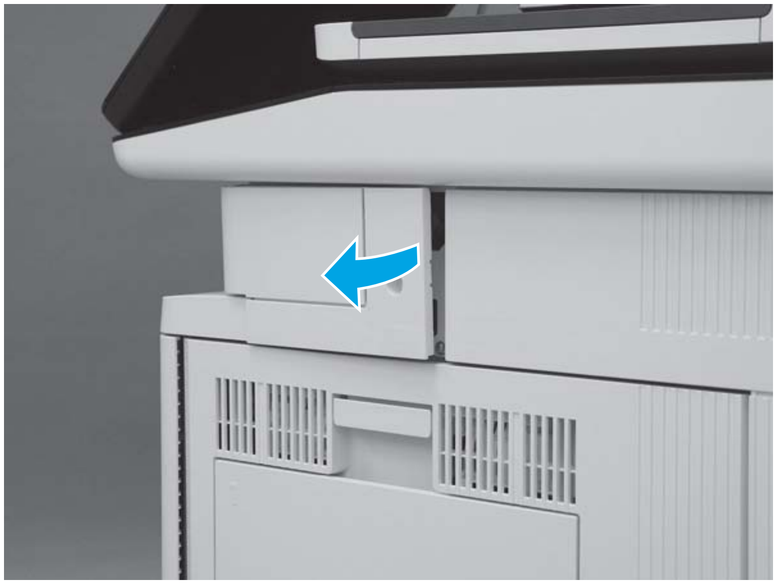
2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-656 Release two tabs



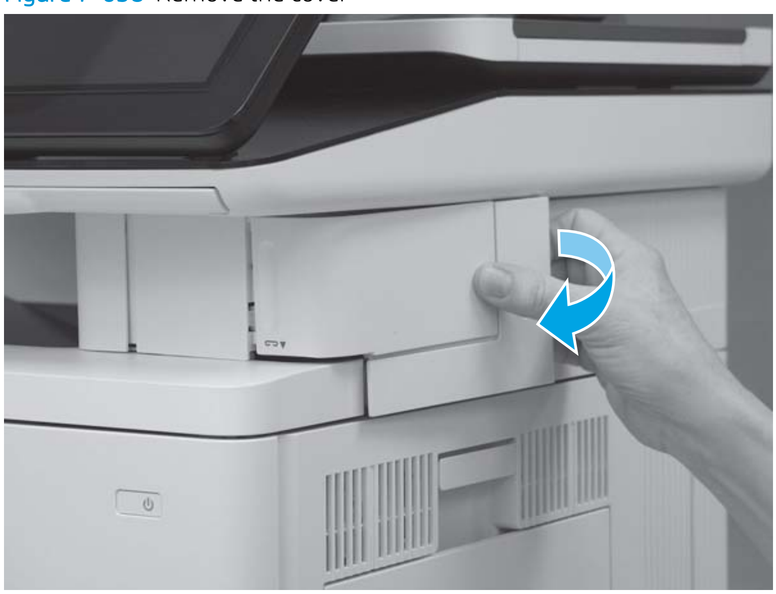
3. Release the back edge of the cover.

Figure 7-657 Release the back edge of the cover



4. Rotate the cover away from the printer to remove it.

Figure 7-658 Remove the cover



Remove the right upper cover (MFP)

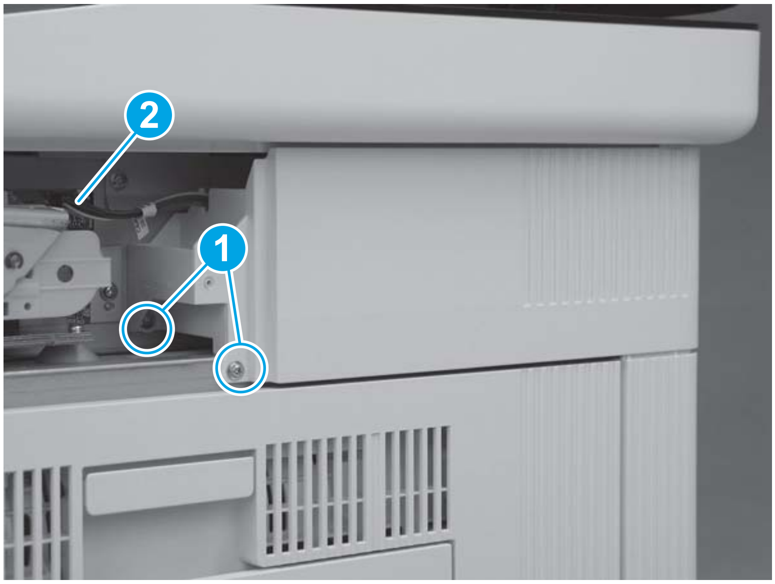
Follow these steps to remove the right upper cover.

NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

Figure 7-659 Remove two screws and one connector

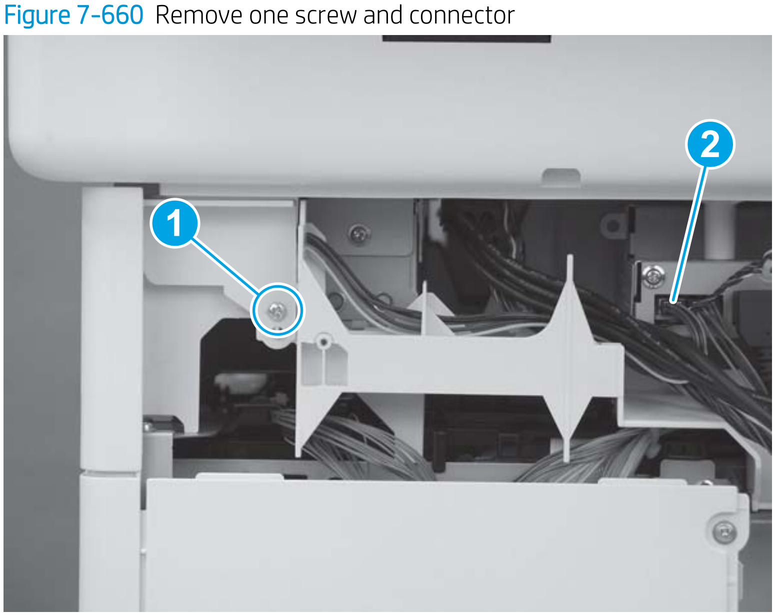


2. At the back of the printer, remove one screw (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

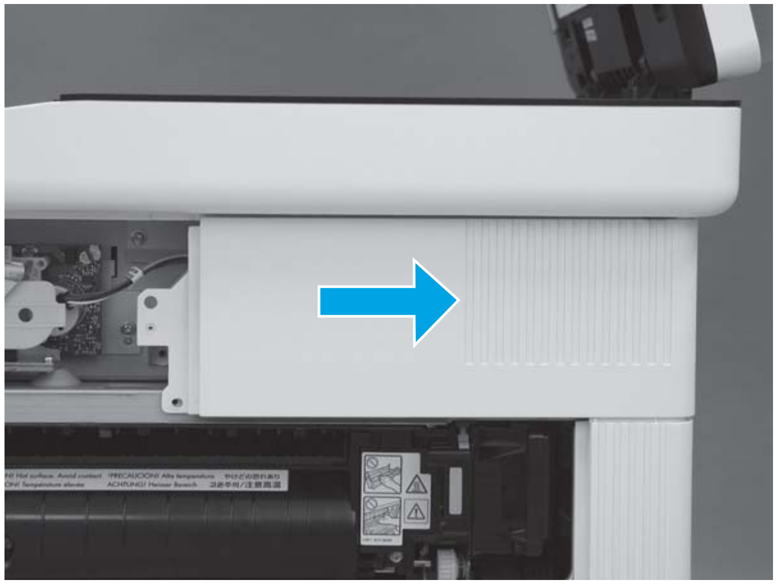
Reinstallation tip: This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

Figure 7-660 Remove one screw and connector



3. Slide the cover toward the back of the printer.

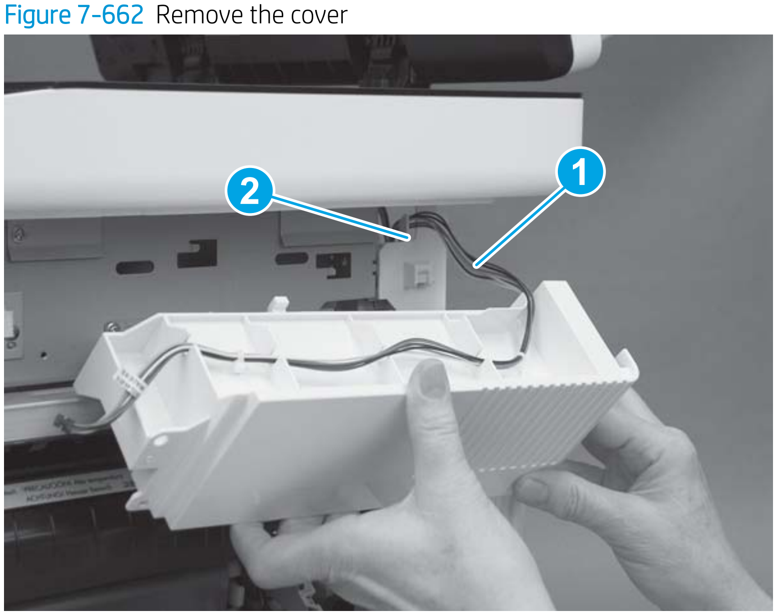
Figure 7-661 Slide the cover



4. Lift the cover away from the printer to remove it.

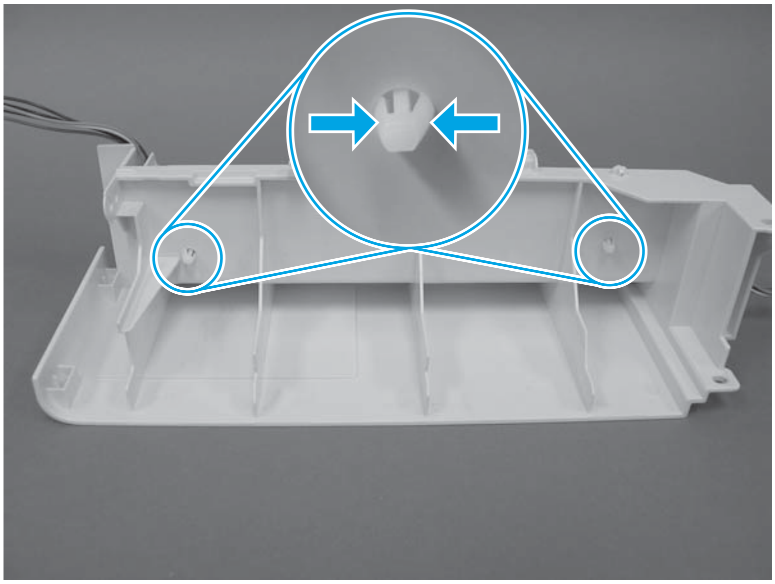
M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

Figure 7-662 Remove the cover



5. **M577/M578z**: Release two retainers on the bottom side of the cover.

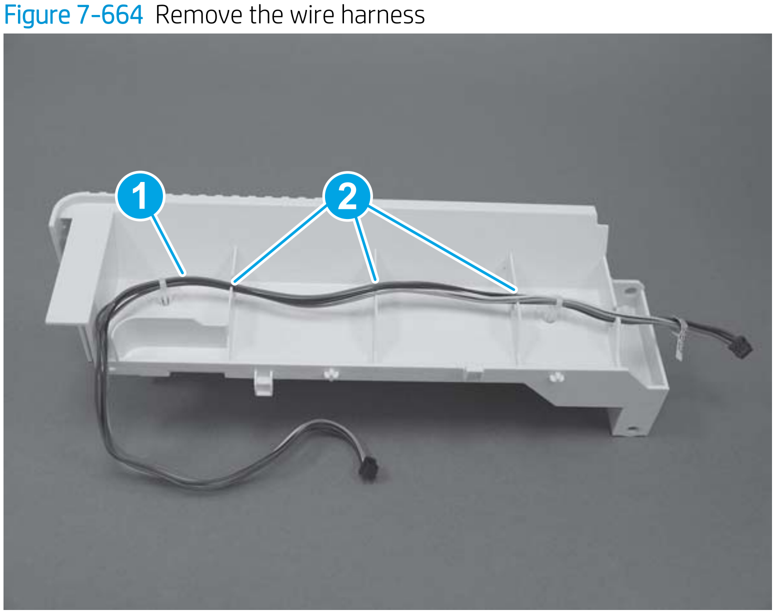
Figure 7-663 Release two retainers



6. **M577/M578z**: On the top of the cover, release the wires (callout 1) from the guides (callout 2) in the right upper cover.

NOTE: Set the wire harness aside for installation on the replacement right upper cover.

Figure 7-664 Remove the wire harness



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-665 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-666 Remove the cover

Remove the right rear cover

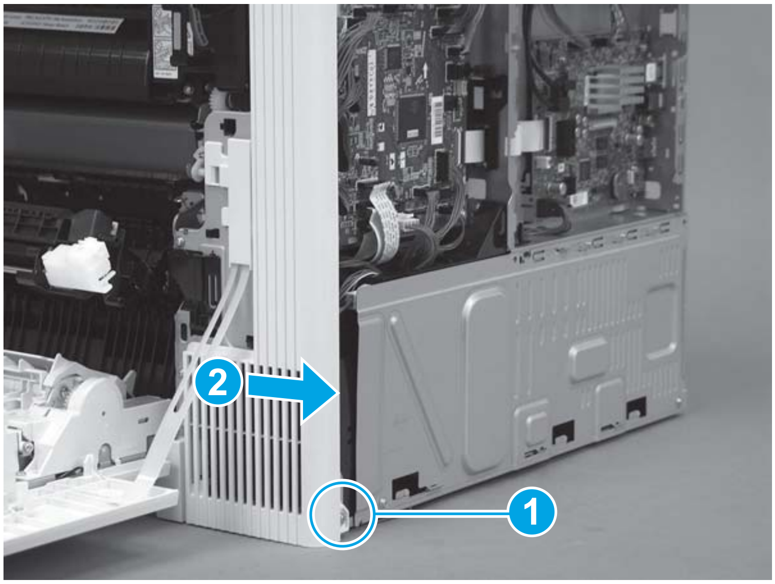
Follow these steps to remove the right rear cover.

NOTE: The figures in this topic show a SFP model. However, the procedure is correct for an MFP.

1. Remove one screw (callout 1), and then slide the cover toward the rear of the printer (callout 2) to release it.

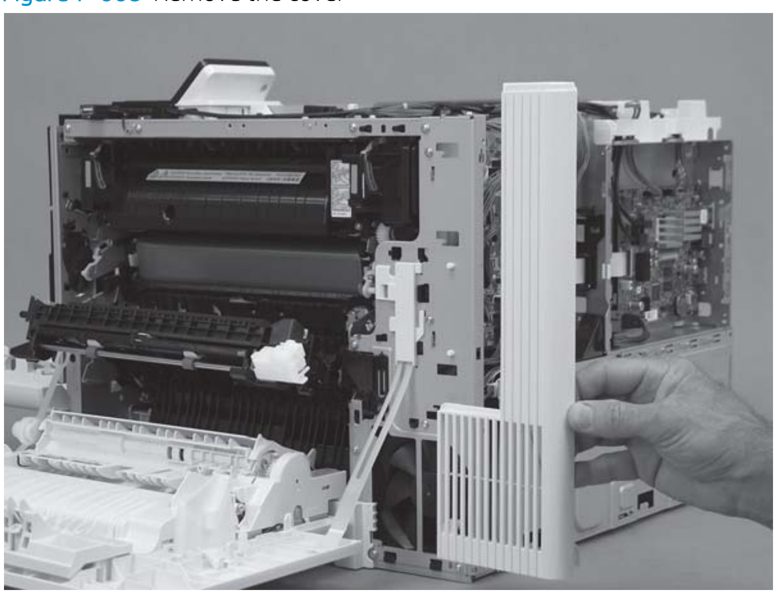
   TIP: If the right door is closed, open it now.

Figure 7-667 Release the cover



2. Remove the cover.

Figure 7-668 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Control panel (M552dn/M553n/dn/M554)

Learn about removing and replacing the control panel.

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-50 Part information

Part number	Part description
RM2-7180-000CN	Control panel (M552dn and M553n/dn)
RM2-6582-000CN	Control panel (M554)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

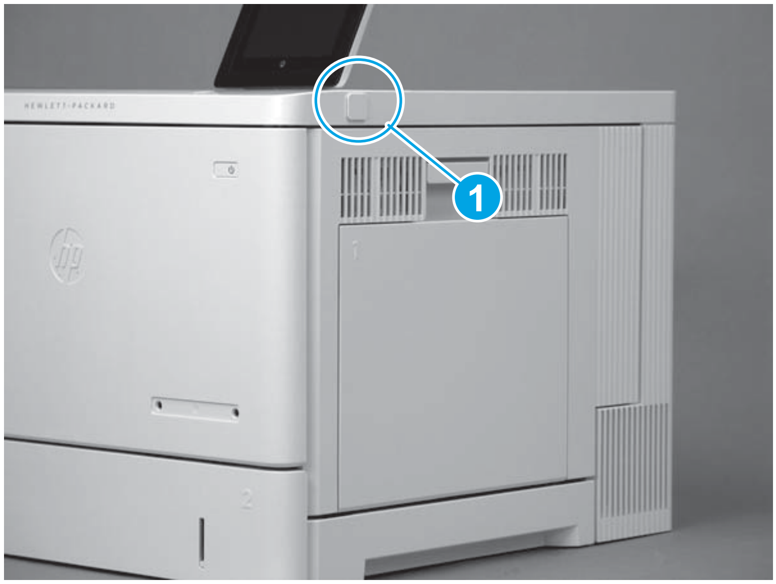
Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

NOTE: This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-669 Locate the USB cover



2. Pull the cover off of the printer to remove it.

Figure 7-670 Remove the cover

Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-671 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-672 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

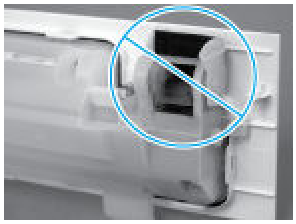
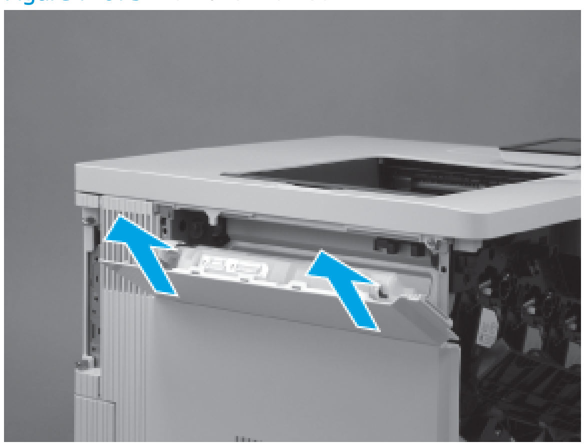


Figure 7-673 Remove the TCU

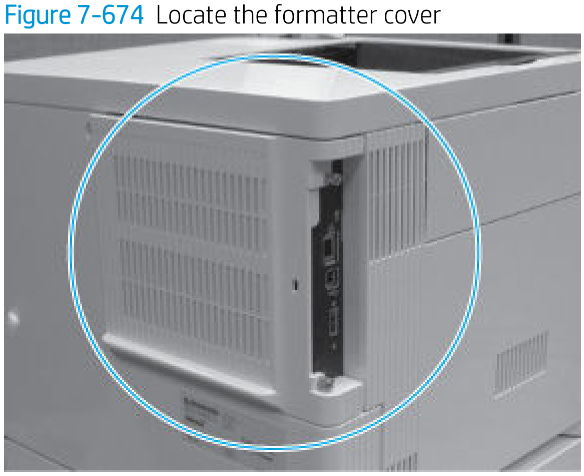


Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

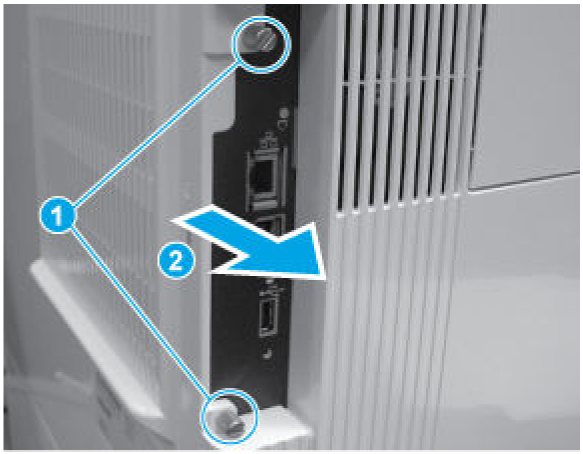
Figure 7-674 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-675 Loosen the thumbscrews



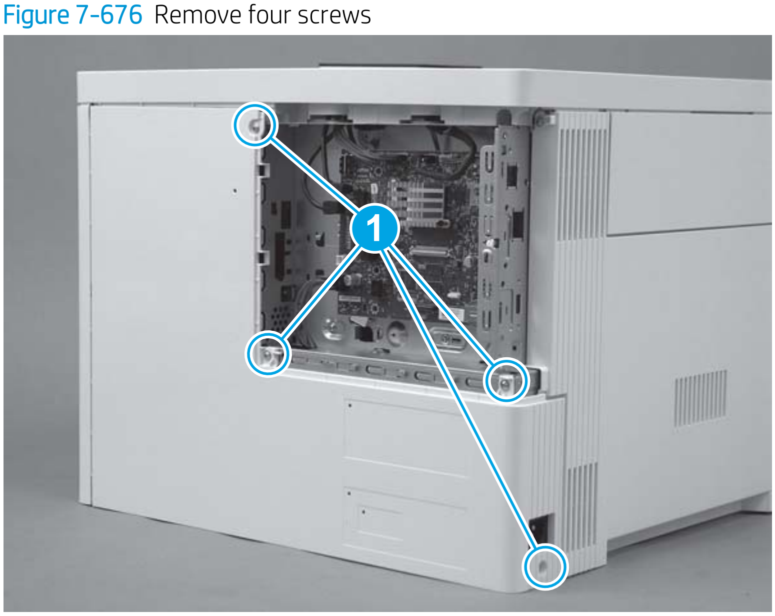
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

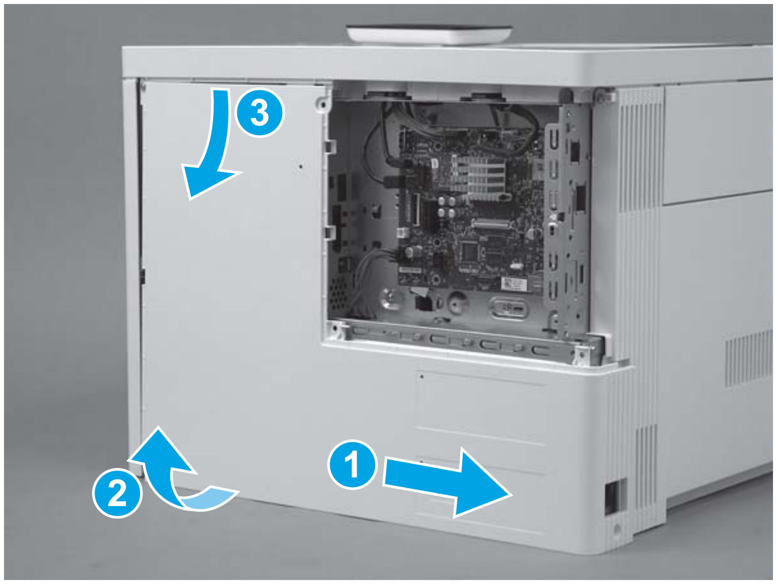
1. Remove four screws (callout 1).

Figure 7-676 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-677 Remove the cover



Remove the left cover

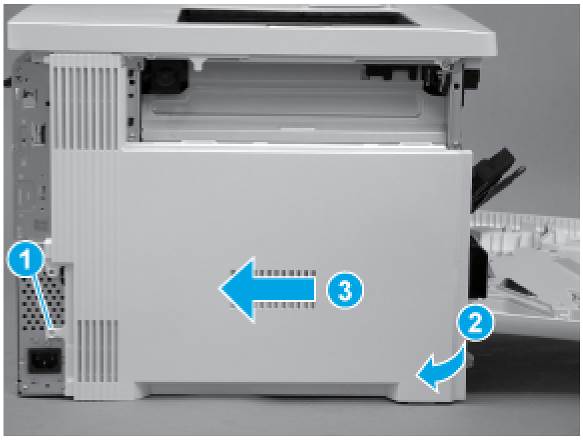
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-678 Remove one screw

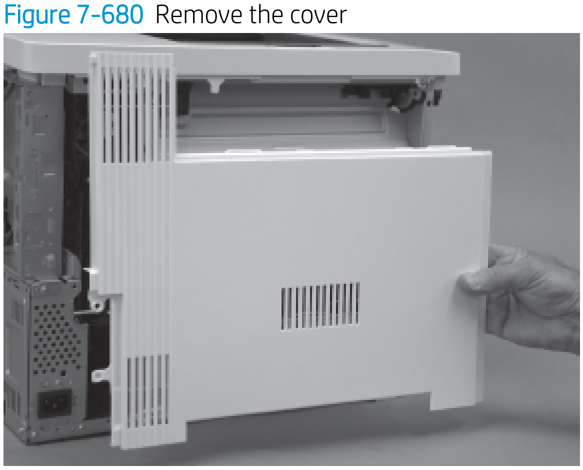
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-679 Release the cover



3. Remove the cover.

Figure 7-680 Remove the cover



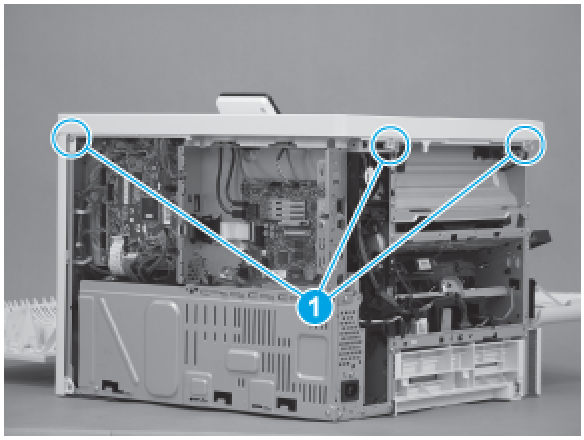
Remove the upper cover (SFP)

Follow these steps to remove the upper cover.

NOTE: This procedure is for SFP models only.

1. Remove three screws (callout 1).

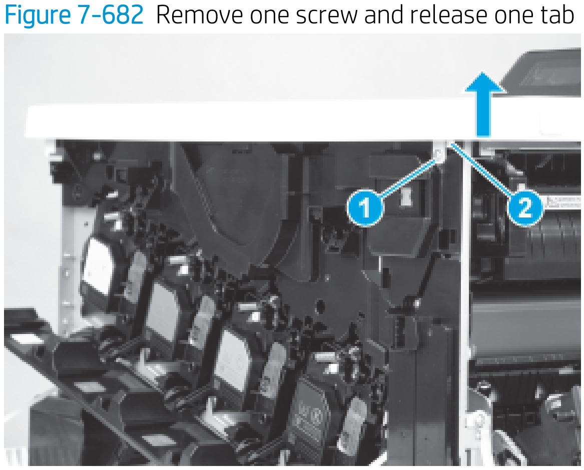
Figure 7-681 Remove three screws



2. Remove one screw (callout 1), release one tab (callout 2), and then slightly separate the corner of the cover from the chassis.

NOTE: This is a self-tapping plastic-thread screw. Make sure that this screw is used in this location when it is reinstalled.

Figure 7-682 Remove one screw and release one tab

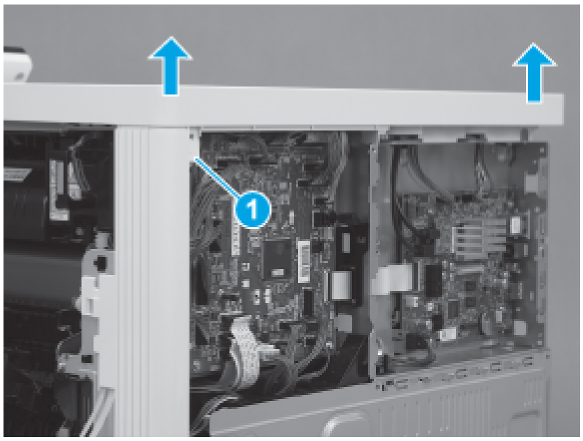


3. Release one tab (callout 1), and then lift up on the cover to release it.

IMPORTANT: **M554 models**: Disconnect the control-panel flat cable at the formatter.

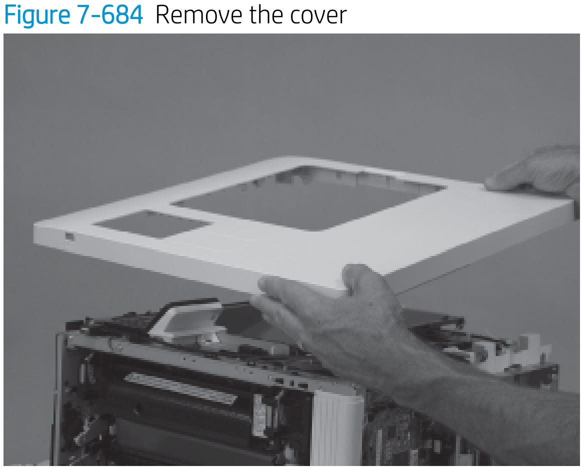
NOTE: If the cover does not release, check for addition tabs by locating the triangles embossed in the cover at tab locations.

Figure 7-683 Release the cover



4. Remove the cover.

Figure 7-684 Remove the cover



Remove the control panel

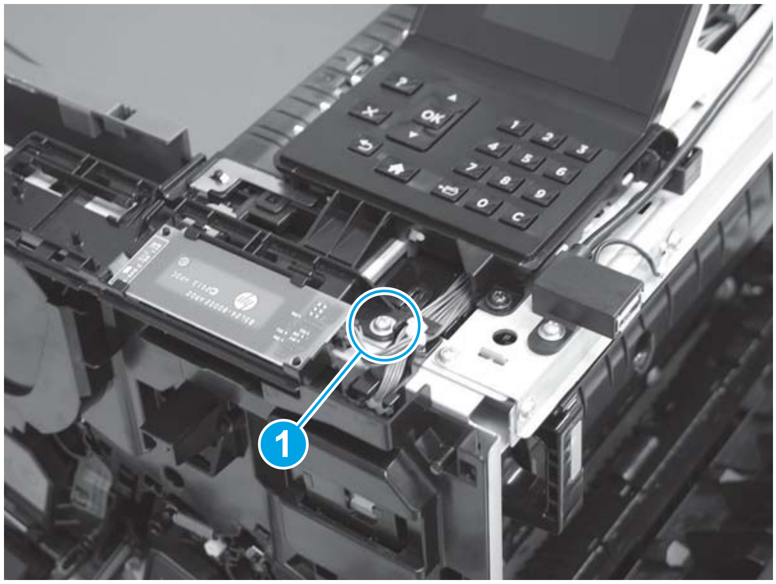
Follow these steps to remove the control panel.

NOTE: This procedure is for the M552dn/M553n/dn/M554 printers only.

The figures in this procedure show the M552/M553 printer. The M554 control panel looks slightly different than shown below. However, removing the control panel is similar to the following procedure.

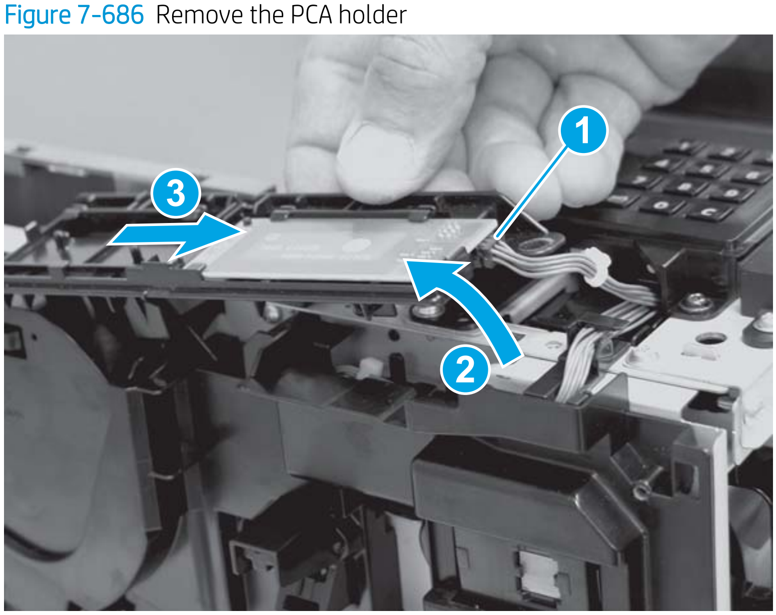
1. Remove one screw (callout 1).

Figure 7-685 Remove one screw



2. **M552/M553**: Disconnect one connector (callout 1). Rotate the near field communication (NFC) PCA holder up (callout 2), and then slide it to the right (callout 3) to remove it.

Figure 7-686 Remove the PCA holder



3. **M552/M553**: Remove one cable from the guide.

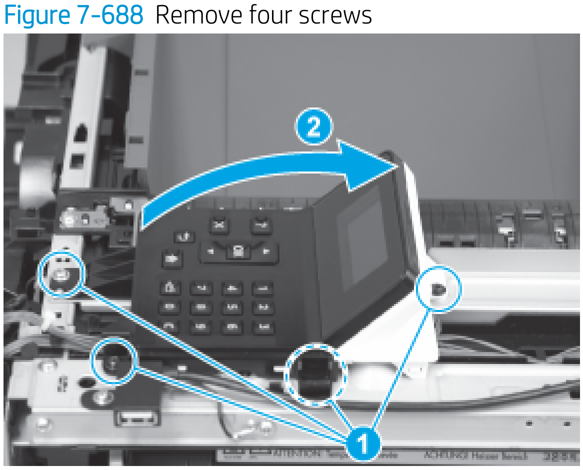
Figure 7-687 Remove one cable

4. **M552/M553**: Remove four screws (callout 1), and then turn the control panel over (callout 2).

NOTE: **M554**: Remove any screws fastening the assembly to the printer chassis, and then turn the control panel over (callout 2) to access the bottom side.

CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

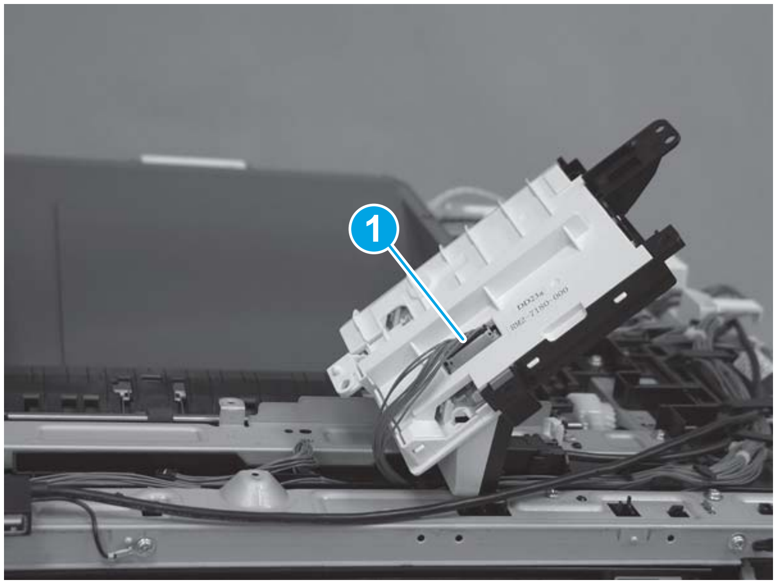
Figure 7-688 Remove four screws



5. **M552/M553**: Disconnect one connector (callout 1), and then remove the control panel.

NOTE: **M554**: Disconnect one flat cable, and then remove the control panel.

Figure 7-689 Remove the control panel



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Internal parts and assemblies (base printer)

Learn how to remove and replace the base printer internal parts and assemblies.

Removal and replacement: Tray 1 pickup and separation rollers

Learn about removing and replacing the Tray 1 rollers.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-51 Part information

Part number	Part description
B5L24-67905	Multipurpose/tray 1 pick-up roller and separation assembly

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the Tray 1 pickup roller

Follow these steps to remove and replace the Tray 1 pickup roller.

▲ Remove the Tray 1 pickup roller.

a. Open Tray 1.

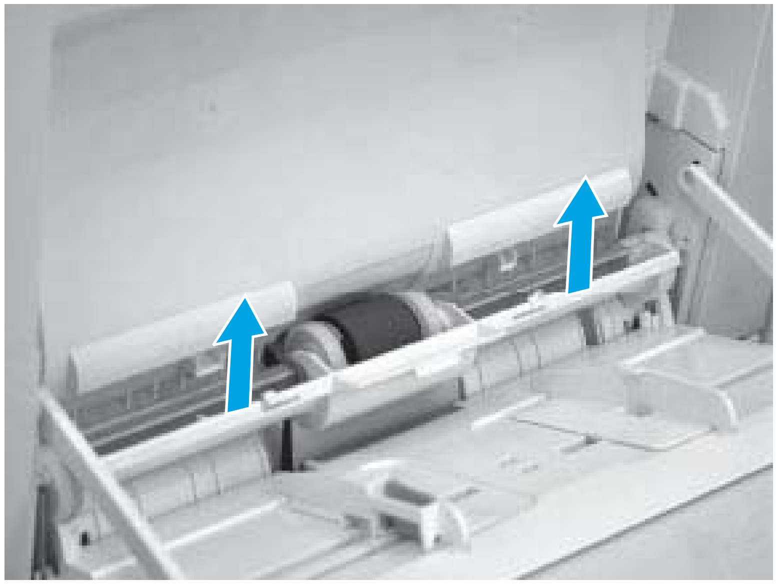
Figure 7-690 Open Tray 1

b. Pull on the center of the cover to open it.

Figure 7-691 Open the roller cover

c. Pull the cover straight off of the printer to remove it.

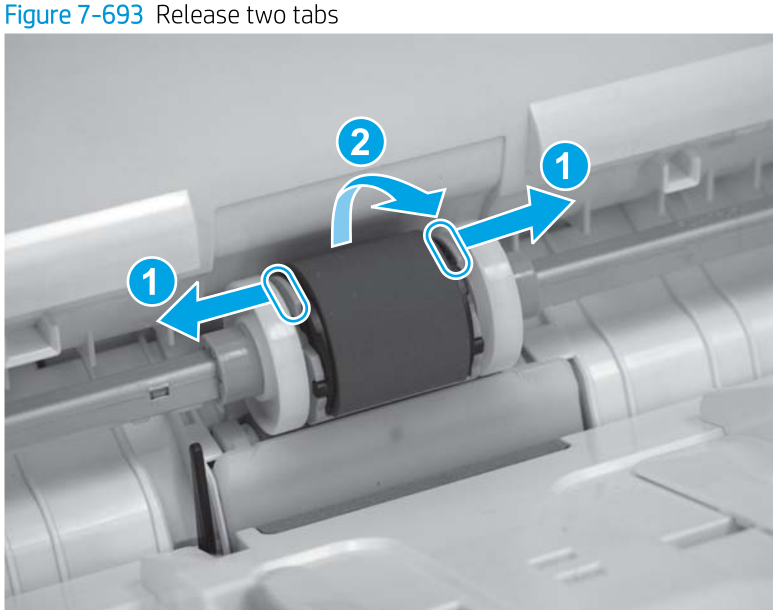
Figure 7-692 Remove the cover



d. Release two tabs (callout 1) between the roller collar and roller, and then rotate the top of the roller (callout 2) out and away from the printer.

TIP: Pushing down on the top of the roller might make it easier to release the tabs.

Figure 7-693 Release two tabs



e. Remove the roller.

Figure 7-694 Remove the roller

Remove the Tray 1 separation roller

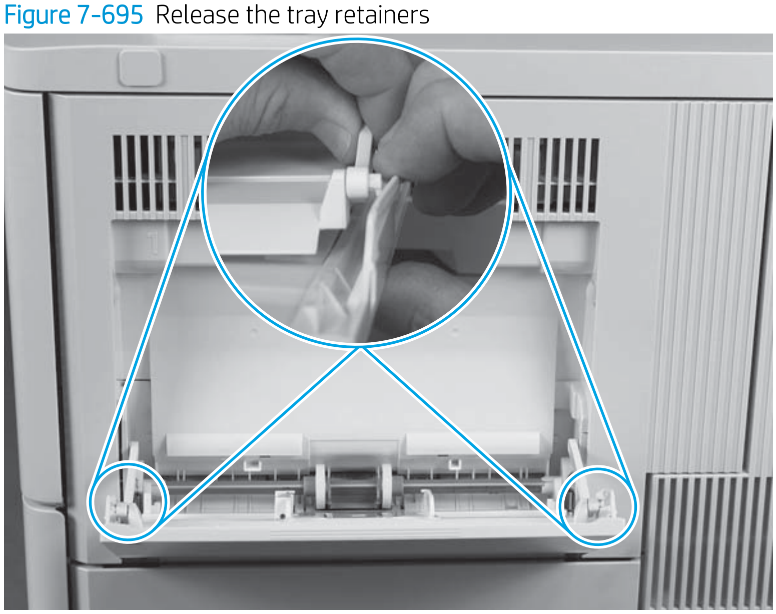
Follow these steps to remove and replace the Tray 1 separation roller.

▲ Remove the Tray 1 separation roller.

a. Carefully flex the right- and left-side tray retainers to release them.

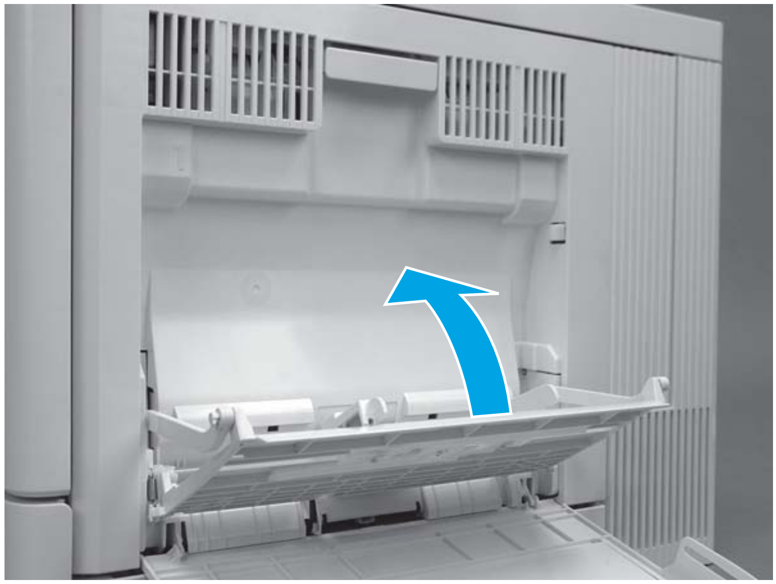
TIP: Raise the tray to the halfway closed position to make it is easier to release the retainers.

Figure 7-695 Release the tray retainers



b. Carefully raise Tray 1 up into the printer.

Figure 7-696 Raise Tray 1 up



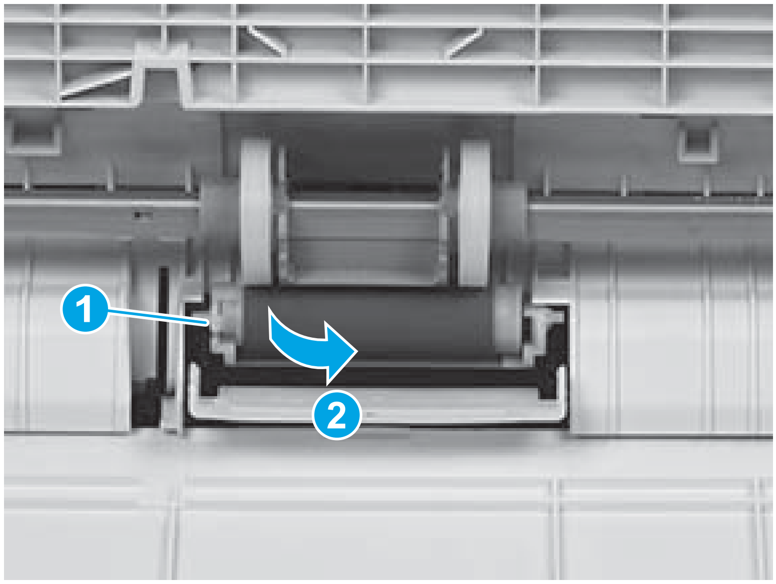
c. Firmly grasp the corners of the separation roller cover, and then rotate it down and away from the printer to remove it.

Figure 7-697 Open the roller cover

d. Release one tab (callout 1), and then rotate the end of the roller out and away from the holder (callout 2).

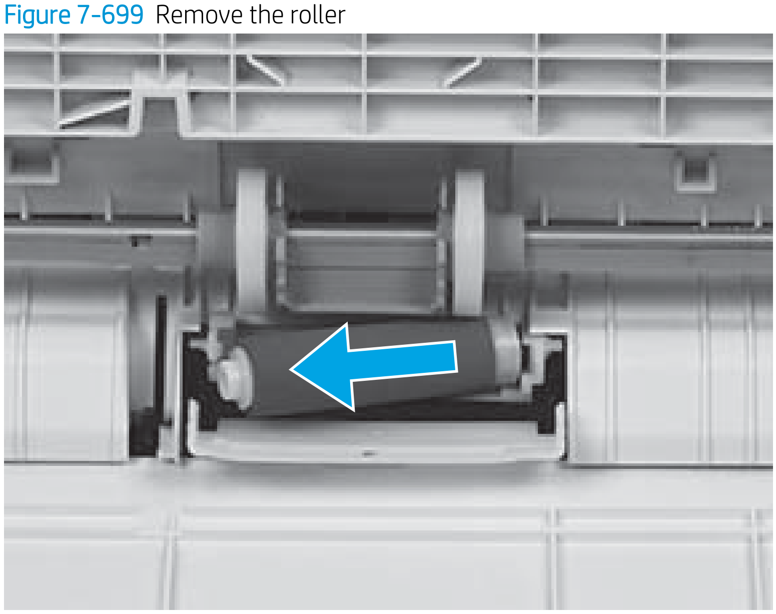
TIP: It might be necessary to use a small flat-blade screwdriver to complete this step.

Figure 7-698 Release one tab



e. Slide the roller out of the holder to remove it.

Figure 7-699 Remove the roller



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Secondary transfer assembly

Learn about removing and replacing the secondary transfer roller.

Before performing service

Turn the printer power off

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-52 Part information

Part number	Part description
RM2-0090-000CN	Secondary transfer assembly (M553n)
RM2-0022-000CN	Secondary transfer assembly (M552/M553dn/x/M554/M555?M577/M578/E55040/E57540)

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the secondary transfer assembly

Follow these steps to remove the secondary transfer assembly.

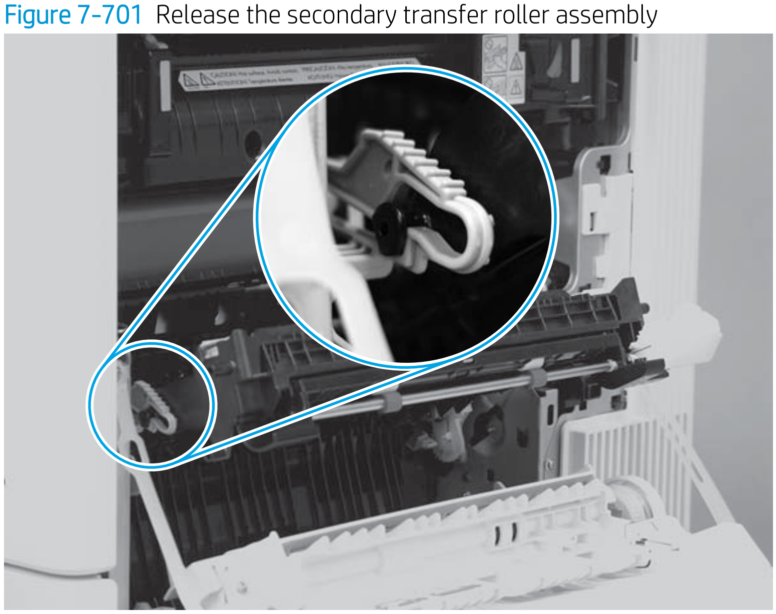
1. Open the right door.

Figure 7-700 Open the right door

2. Release the blue arm, and then let the secondary transfer assembly rotate down to the half-way open position.

NOTE: The assembly should stop at the halfway down point—the pin will stop at the notch in the slot in the blue arm.

Figure 7-701 Release the secondary transfer roller assembly



3. Carefully flex the top portion of the blue arm—as shown in the figure—to start to disengage it from the pin.

Figure 7-702 Carefully flex the top portion of the blue arm

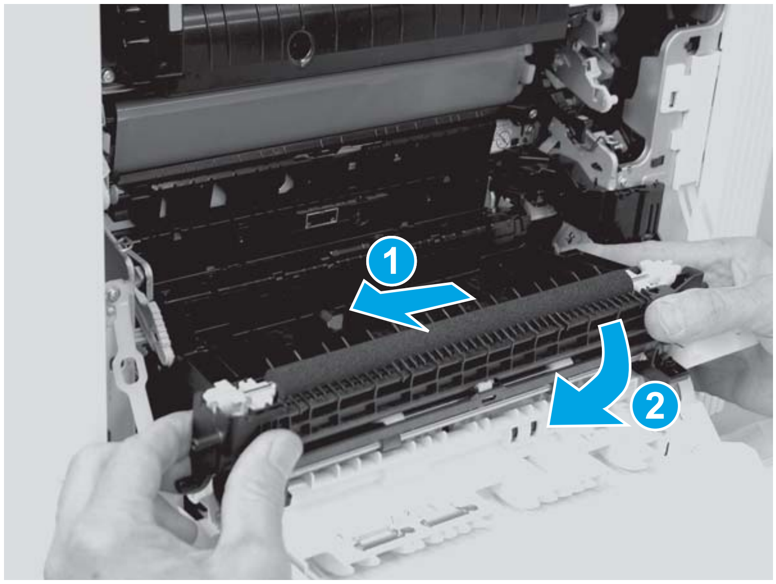
4. Continue to flex the blue arm until it disengages from the pin.

Figure 7-703 Disengage the blue arm and pin

5. Slide the assembly toward the front of the printer to release it (callout 1), and then rotate it down and away from the printer to remove it (callout 2).

Reinstallation tip: Before removing the assembly, take note of where the assembly hinge pins fit into the holes provided in the printer.

Figure 7-704 Remove the secondary transfer roller assembly



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Near field communication (NFC) PCA (M553x/E55040)

Learn about removing and replacing the secondary near field communication (NFC) PCA.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-53 Part information

Part number	Part description
B5L24-60002	NFC PCA

Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

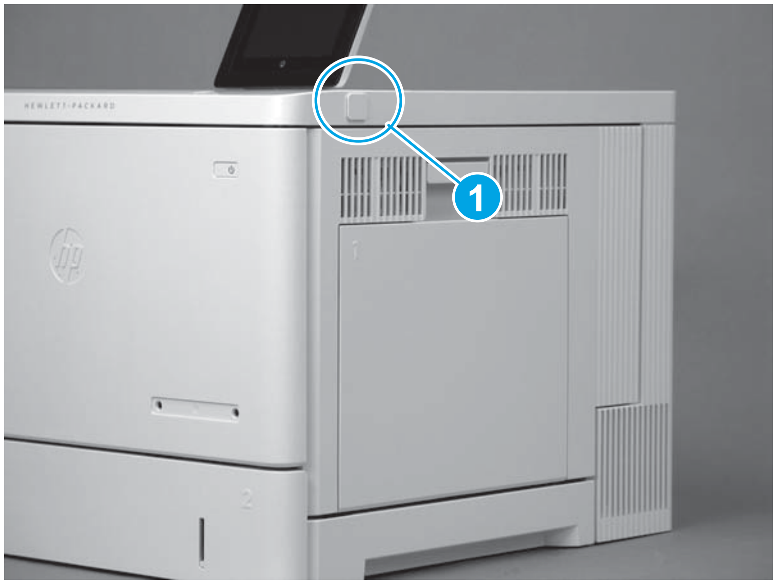
Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

> NOTE: This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-705 Locate the USB cover



2. Pull the cover off of the printer to remove it.

Figure 7-706 Remove the cover

Remove the control panel (M553x/E55040)

Follow these steps to remove the control panel.

NOTE: This procedure is for the M553x/E55040 printers only.

1. Tilt the control panel up.

Figure 7-707 Tilt the control panel up

2. Use the small flat-blade screwdriver supplied in this kit to release the control-panel screws cover tabs.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-708 Release the control-panel screws cover tabs

3. Rotate the cover up to remove it.

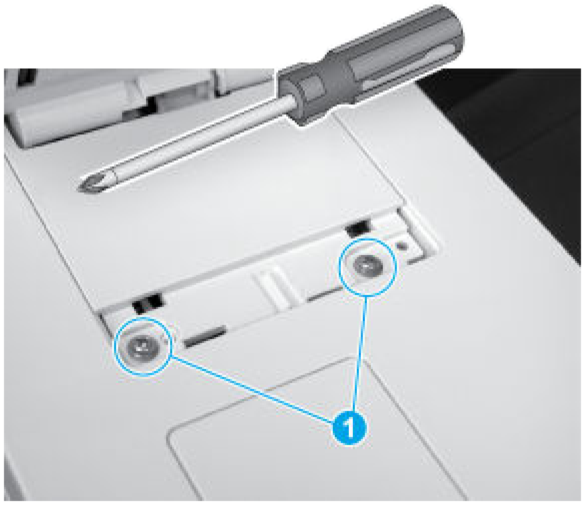
Figure 7-709 Remove the cover

4. Use the small Phillips screwdriver supplied in this kit to remove two screws (callout 1).

IMPORTANT: Store the screws in a secure place where they cannot fall down into the printer.

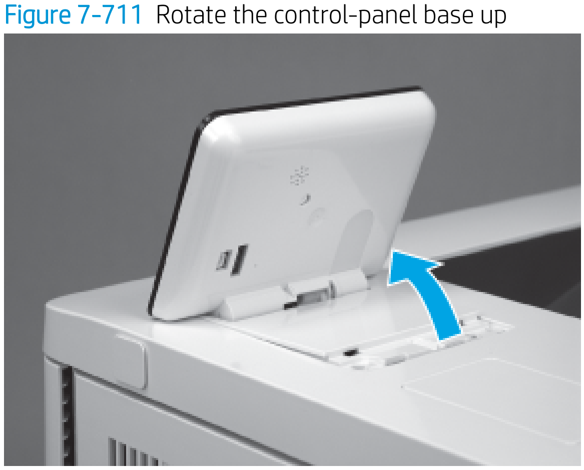
TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-710 Remove two screws



5. Rotate the control-panel base toward the front of the printer.

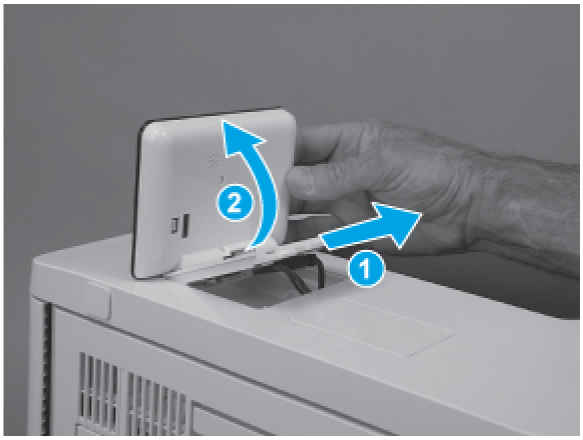
Figure 7-711 Rotate the control-panel base up



6. Slightly slide the control-panel base toward the rear of the printer (callout 1) to release it, and then turn the control panel over (callout 2) to access the bottom side.

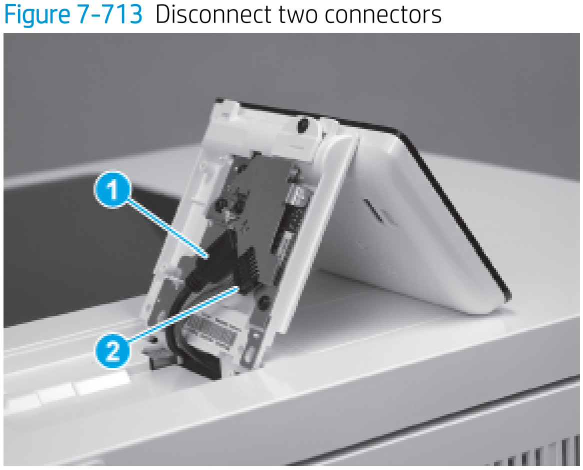
⚠ CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

Figure 7-712 Turn the control panel over



7. Disconnect one USB cable (callout 1), one connector (callout 2), and then remove the control panel.

Figure 7-713 Disconnect two connectors



Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-714 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-715 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

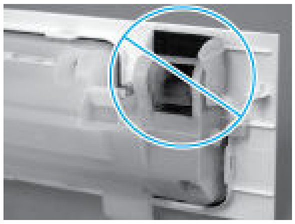
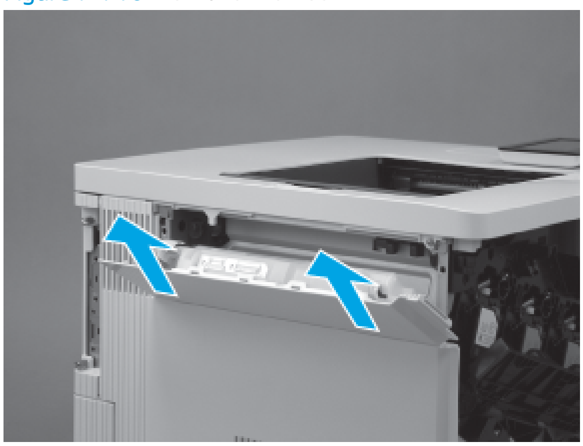


Figure 7-716 Remove the TCU



Remove the formatter cover

Follow these steps to remove the formatter cover.

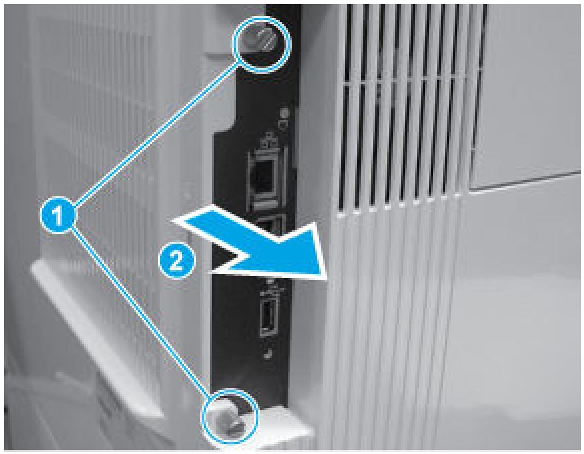
1. Locate the formatter cover.

Figure 7-717 Locate the formatter cover

2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-718 Loosen the thumbscrews



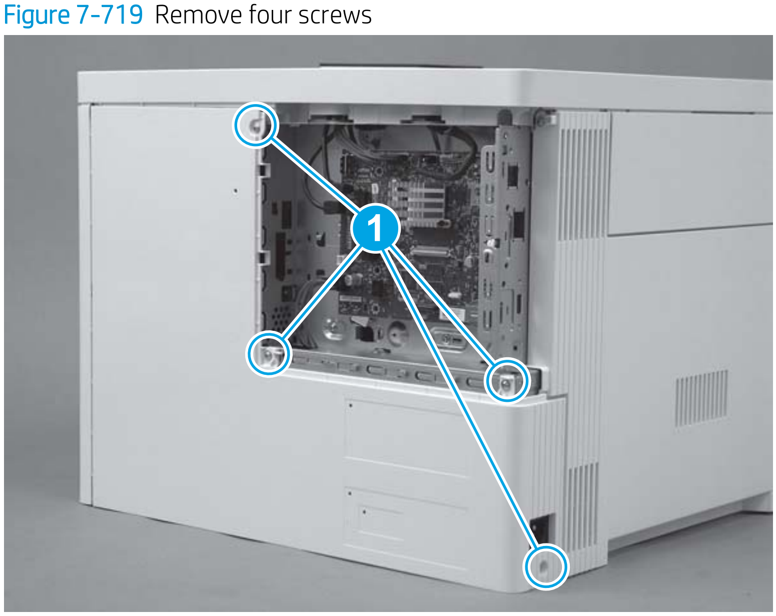
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

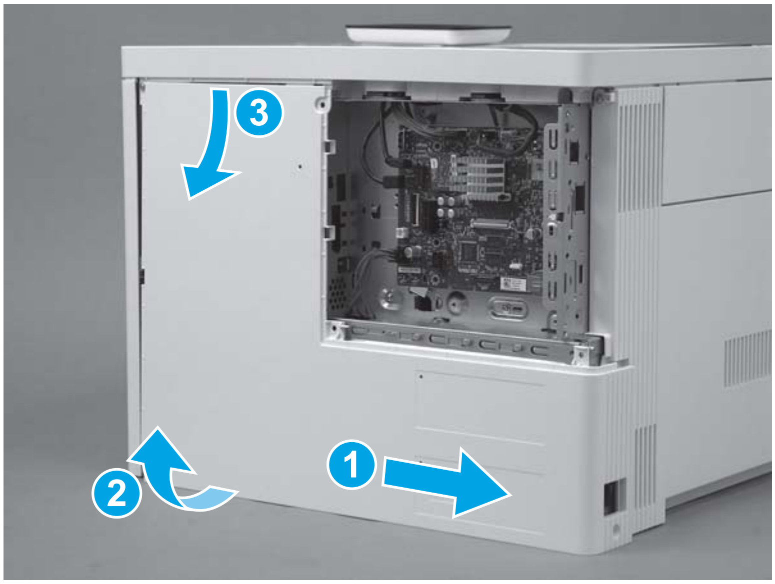
1. Remove four screws (callout 1).

Figure 7-719 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-720 Remove the cover



Remove the left cover

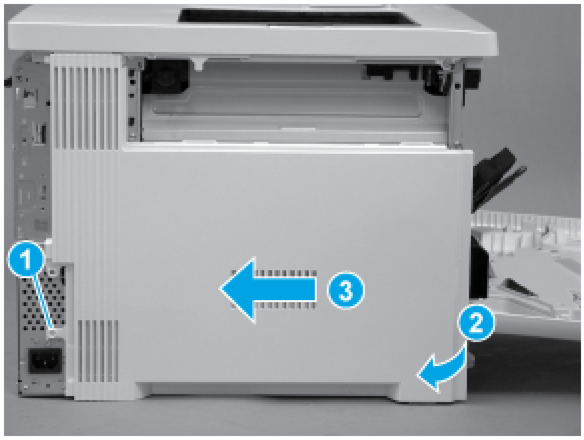
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-721 Remove one screw

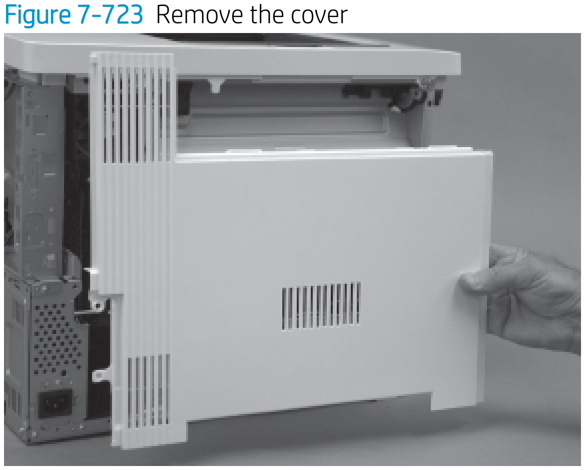
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-722 Release the cover



3. Remove the cover.

Figure 7-723 Remove the cover



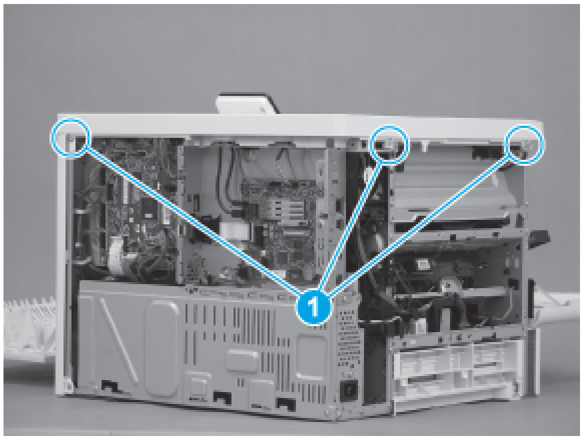
Remove the upper cover (SFP)

Follow these steps to remove the upper cover.

NOTE: This procedure is for SFP models only.

1. Remove three screws (callout 1).

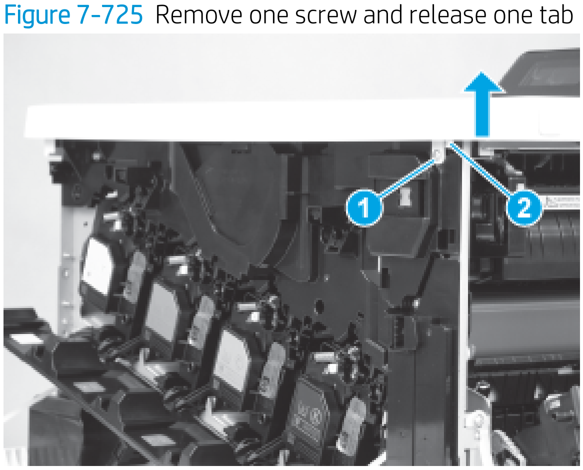
Figure 7-724 Remove three screws



2. Remove one screw (callout 1), release one tab (callout 2), and then slightly separate the corner of the cover from the chassis.

NOTE: This is a self-tapping plastic-thread screw. Make sure that this screw is used in this location when it is reinstalled.

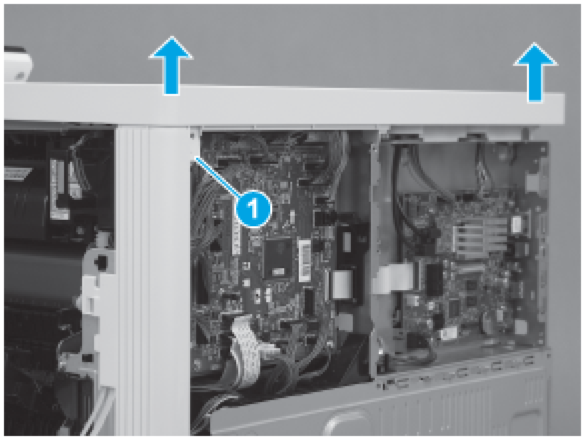
Figure 7-725 Remove one screw and release one tab



3. Release one tab (callout 1), and then lift up on the cover to release it.

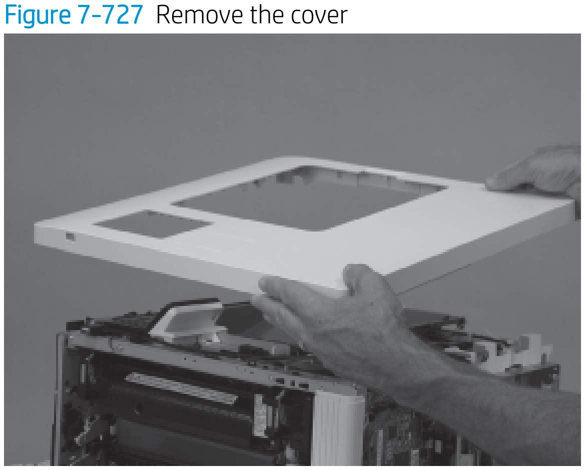
NOTE: If the cover does not release, check for addition tabs by locating the triangles embossed in the cover at tab locations.

Figure 7-726 Release the cover



4. Remove the cover.

Figure 7-727 Remove the cover

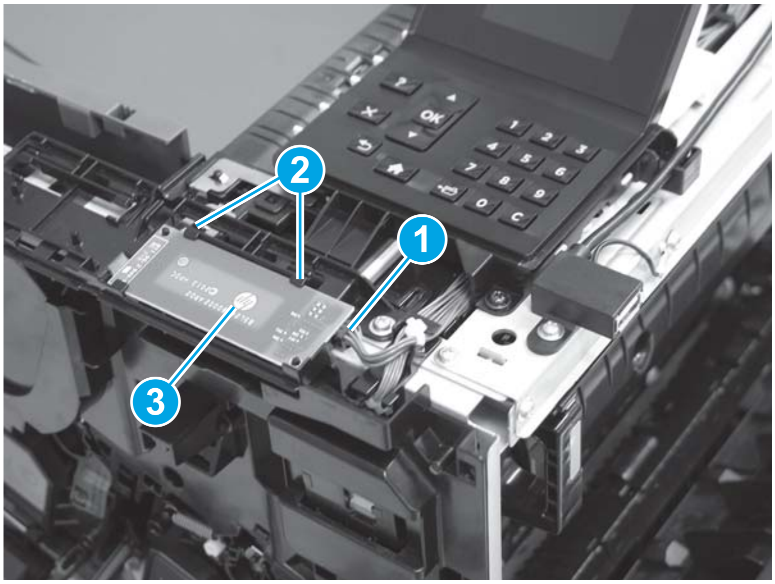


Remove the NFC PCA

Follow these steps to remove the NFC PCA.

▲ Disconnect one connector (callout 1), release two tabs (callout 2), and then remove the NFC PCA (callout 3).

Figure 7-728 Remove the NFC PCA



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Near field communication (NFC) PCA (M577z)

Learn about removing and replacing the secondary near field communication (NFC) PCA.

Before performing service

Turn the printer power off

- Disconnect the power cable.

WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-54 Part information

Part number	Part description
B5L24-60001	NFC PCA

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the NFC

Follow these steps to remove the NFC.

1. Open the document feeder (callout 1).

NOTE: If the control panel is not fully tilted forward, tilt it forward now until it stops (callout 2).

Figure 7-729 Open the document feeder

2. Beginning at the right side of the control-panel cover, carefully release five tabs along the top edge of the cover.

NOTE: The thin, black plastic cover will separate from the white plastic control-panel base.

Figure 7-730 Release five tabs

3. Continue to lift the top edge of the cover away from the printer, and then remove the cover.

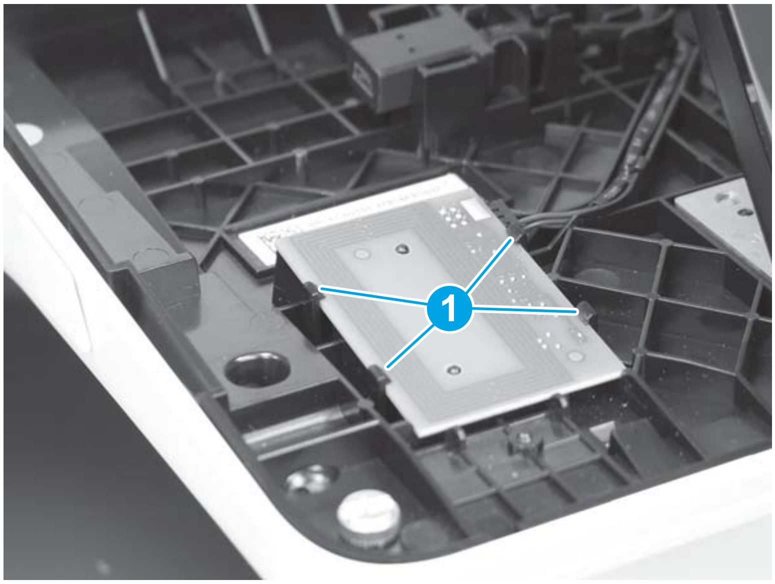
Figure 7-731 Remove the cover

4. Locate the NFC.

Figure 7-732 Locate the NFC

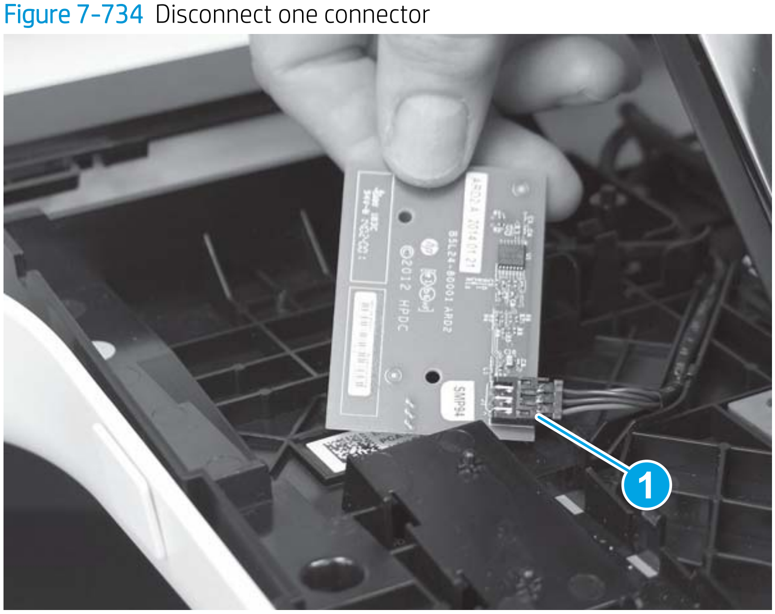
5. Release four tabs (callout 1).

Figure 7-733 Release four tabs



6. Lift the NFC PCA up, and then disconnect one connector (callout 1).

Figure 7-734 Disconnect one connector



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Wireless PCA (M553x/M555/M577z/M578/E55040dw)

Learn about removing and replacing the wireless PCA.

Before performing service

Turn the printer power off

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-55 Part information

Part number	Part description
1150-7968	Wireless PCA (M553/M577
0960-3659	Wireless PCA/BLE (M555/M578)

Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

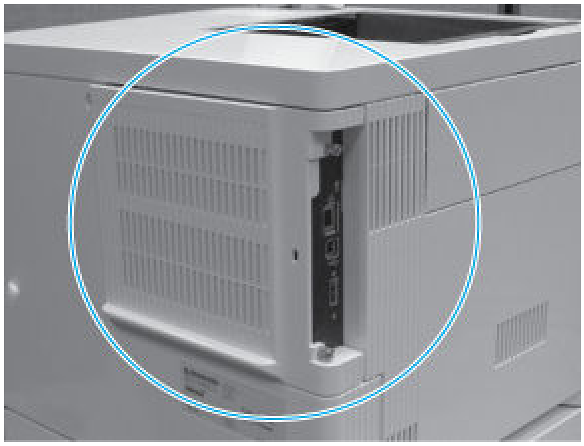
Print any pages necessary to make sure the printer is functioning correctly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

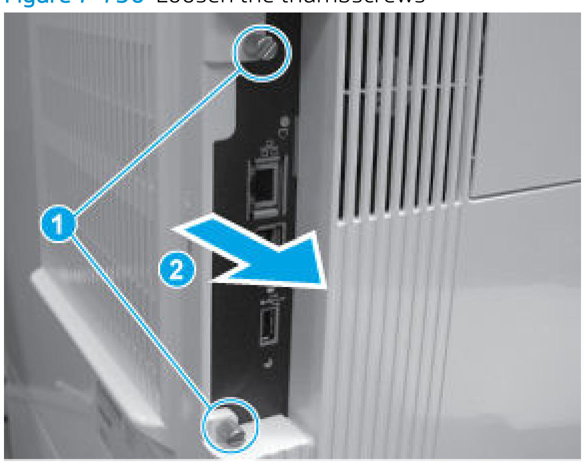
Figure 7-735 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-736 Loosen the thumbscrews



Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-737 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-738 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

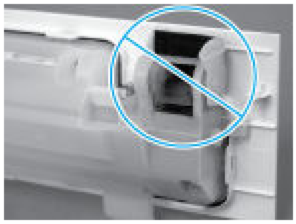
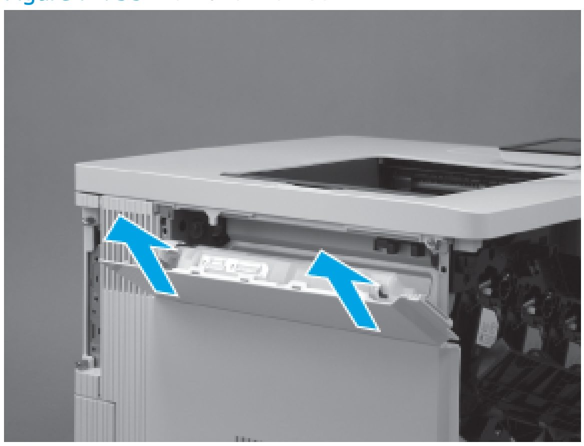


Figure 7-739 Remove the TCU



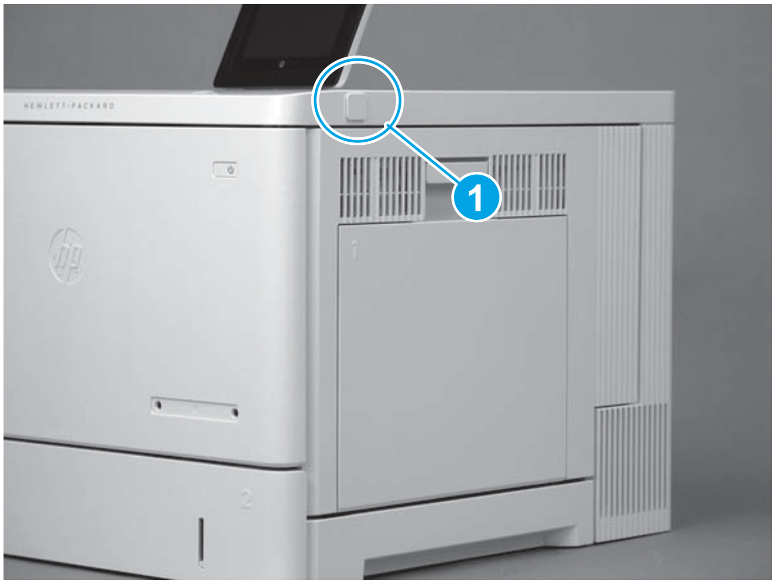
Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

NOTE: This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-740 Locate the USB cover



2. Pull the cover off of the printer to remove it.

Figure 7-741 Remove the cover

Remove the control panel (M553x/M555/E55040)

Follow these steps to remove the control panel.

NOTE: This procedure is for the M553x/M555/E55040 printers only.

M555 models: Removing the control panel is similar to the procedure below. For the M555, a flat cable connects the control panel to the formatter.

1. Tilt the control panel up.

Figure 7-742 Tilt the control panel up

2. Use the small flat-blade screwdriver supplied in this kit to release the control-panel screws cover tabs.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-743 Release the control-panel screws cover tabs

3. Rotate the cover up to remove it.

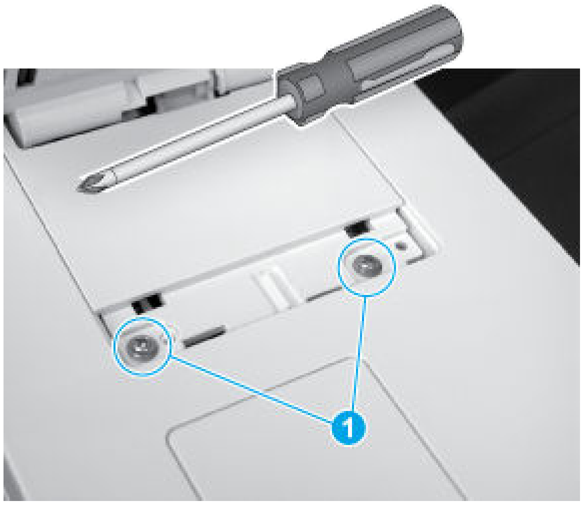
Figure 7-744 Remove the cover

4. Use the small Phillips screwdriver supplied in this kit to remove two screws (callout 1).

IMPORTANT: Store the screws in a secure place where they cannot fall down into the printer.

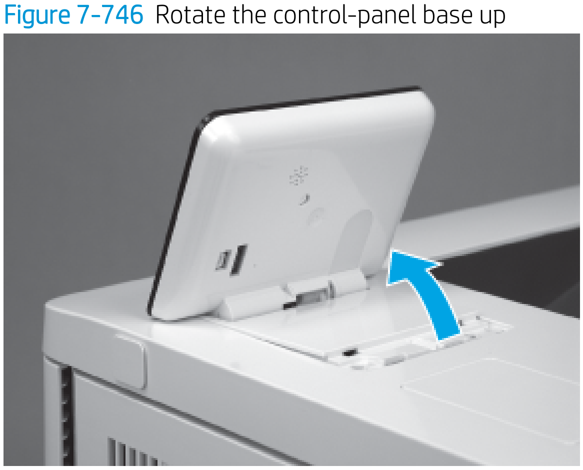
TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-745 Remove two screws



5. Rotate the control-panel base toward the front of the printer.

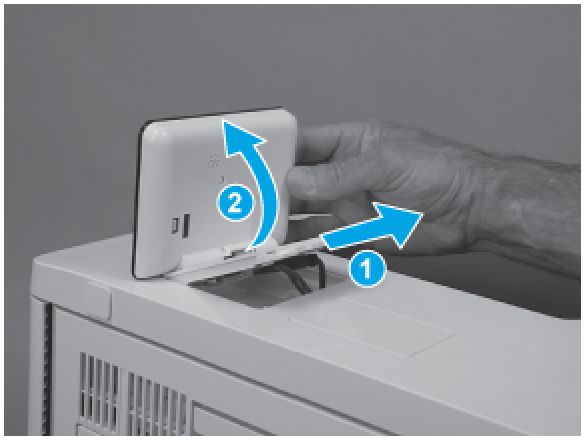
Figure 7-746 Rotate the control-panel base up



6. Slightly slide the control-panel base toward the rear of the printer (callout 1) to release it, and then turn the control panel over (callout 2) to access the bottom side.

⚠ CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

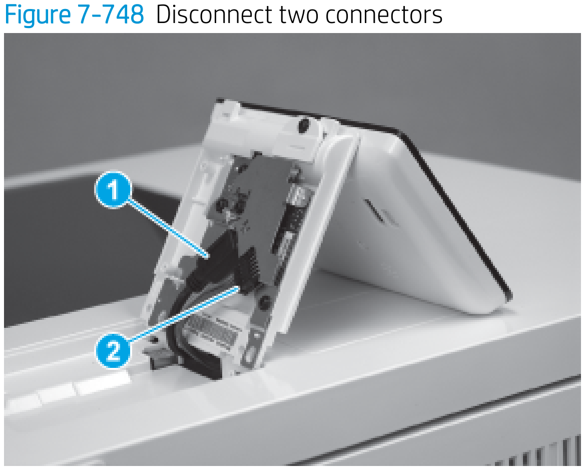
Figure 7-747 Turn the control panel over



7. Disconnect one USB cable (callout 1), one connector (callout 2), and then remove the control panel.

NOTE: **M555 only**: Disconnect one flat cable (not shown), and then remove the control panel.

Figure 7-748 Disconnect two connectors



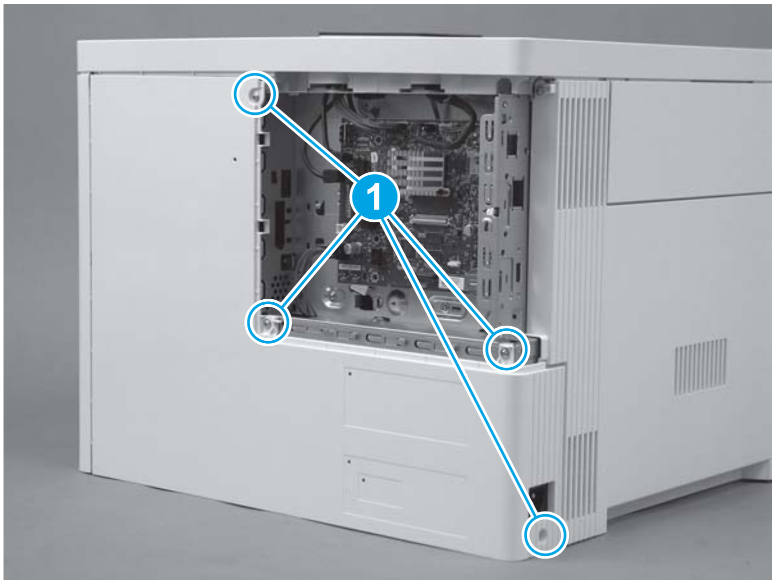
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

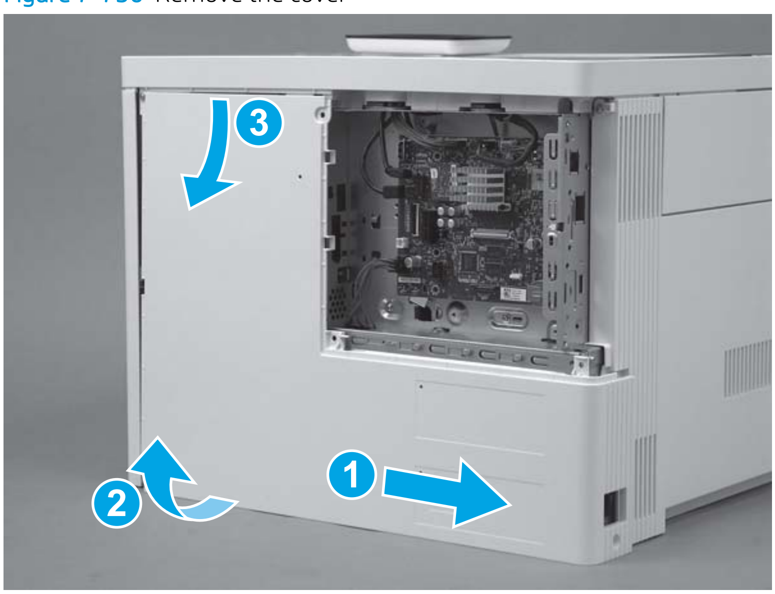
1. Remove four screws (callout 1).

Figure 7-749 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-750 Remove the cover



Remove the left cover

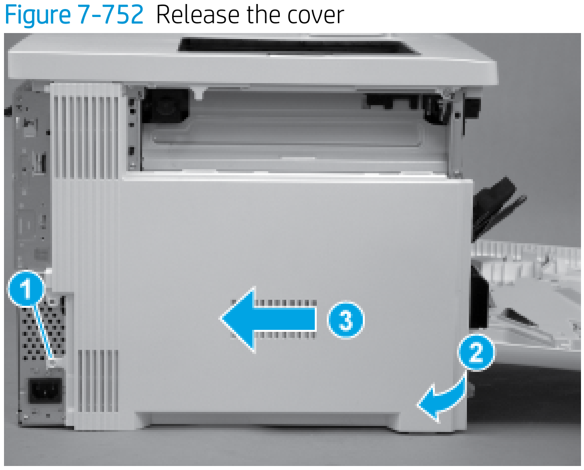
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-751 Remove one screw

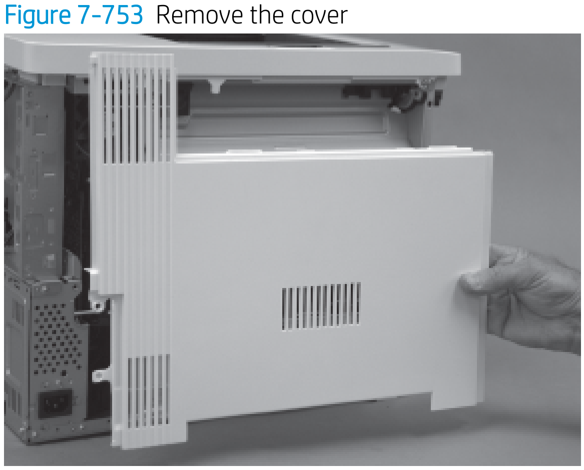
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-752 Release the cover



3. Remove the cover.

Figure 7-753 Remove the cover



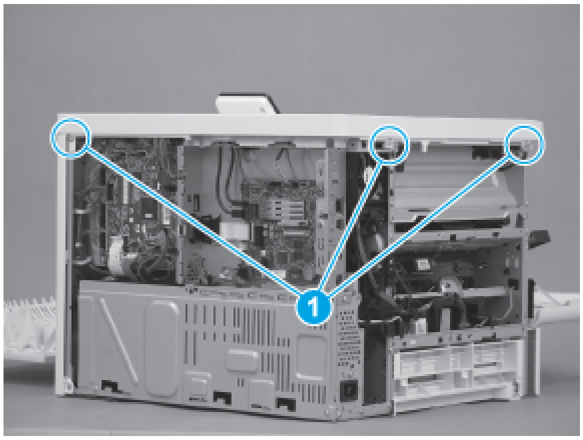
Remove the upper cover (SFP)

Follow these steps to remove the upper cover.

NOTE: This procedure is for SFP models only.

1. Remove three screws (callout 1).

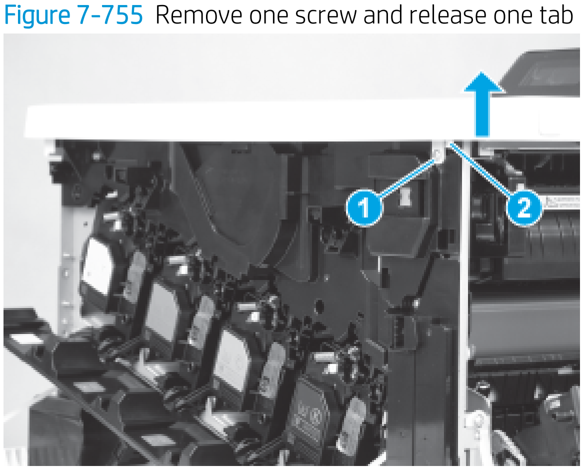
Figure 7-754 Remove three screws



2. Remove one screw (callout 1), release one tab (callout 2), and then slightly separate the corner of the cover from the chassis.

NOTE: This is a self-tapping plastic-thread screw. Make sure that this screw is used in this location when it is reinstalled.

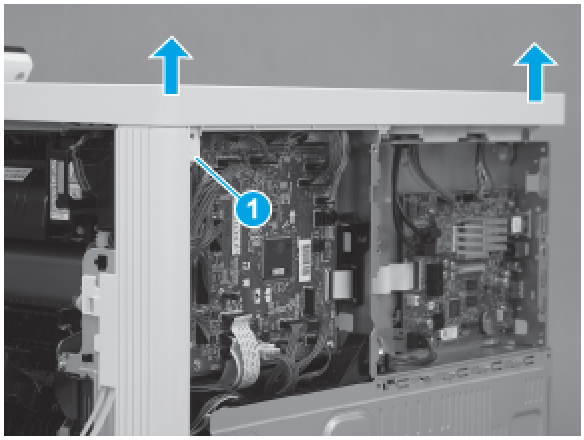
Figure 7-755 Remove one screw and release one tab



3. Release one tab (callout 1), and then lift up on the cover to release it.

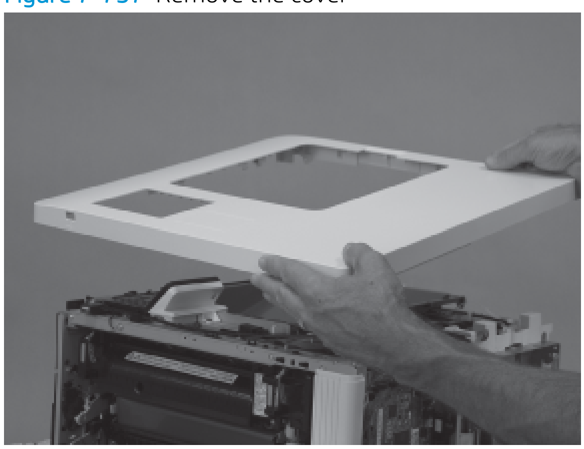
NOTE: If the cover does not release, check for addition tabs by locating the triangles embossed in the cover at tab locations.

Figure 7-756 Release the cover



4. Remove the cover.

Figure 7-757 Remove the cover



Remove the rear upper cover (MFP)

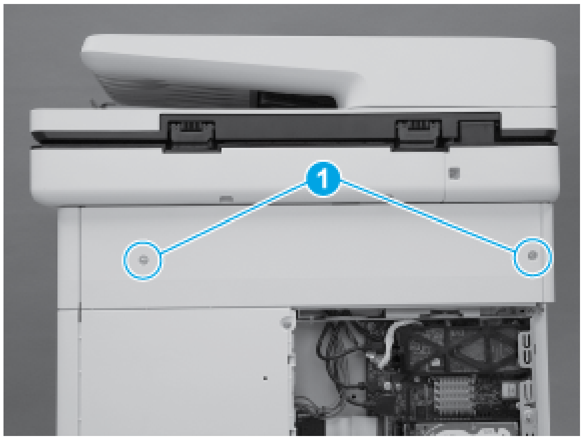
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

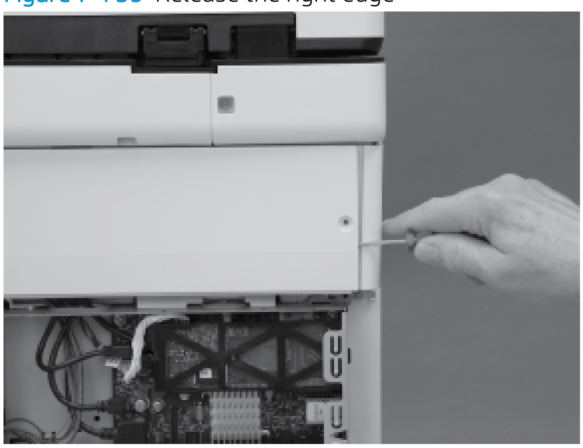
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-758 Remove two screws



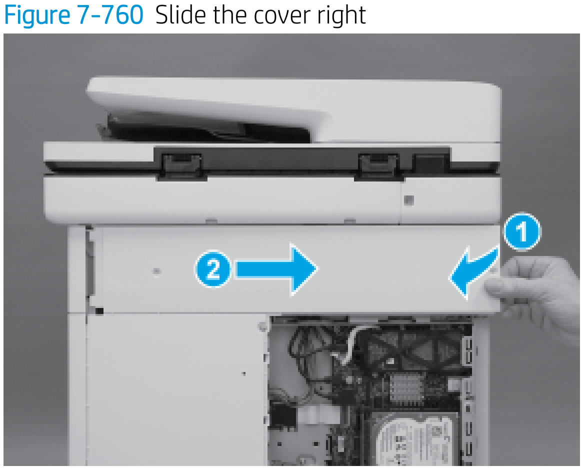
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-759 Release the right edge



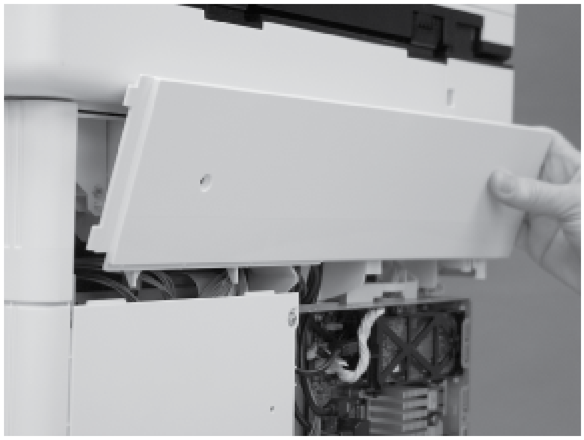
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-760 Slide the cover right



4. Remove the cover.

Figure 7-761 Remove the cover



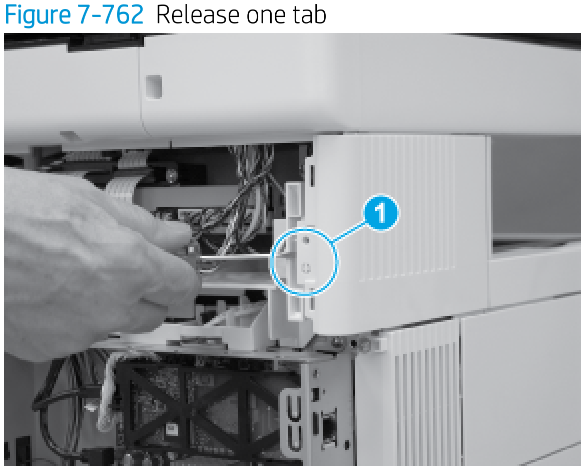
Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

NOTE: This procedure is for MFP models only.

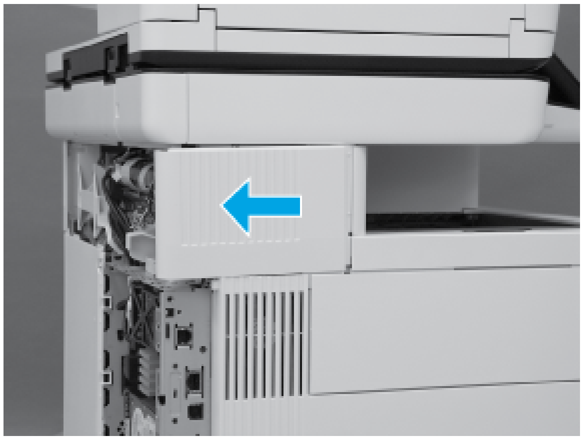
1. At the left side of the printer, release one tab (callout 1).

Figure 7-762 Release one tab



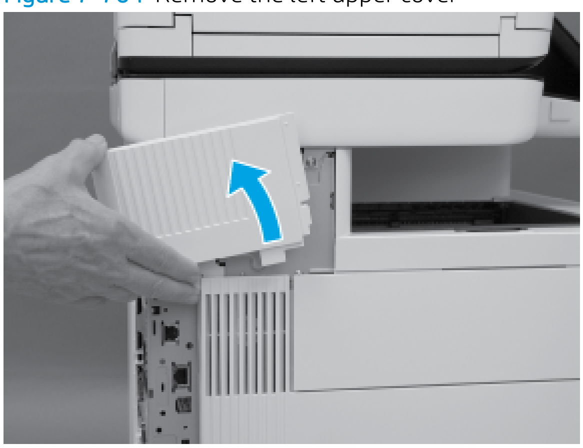
2. Slide the left upper cover toward the back of the printer.

Figure 7-763 Slide the cover back



3. Rotate the cover up to remove it.

Figure 7-764 Remove the left upper cover



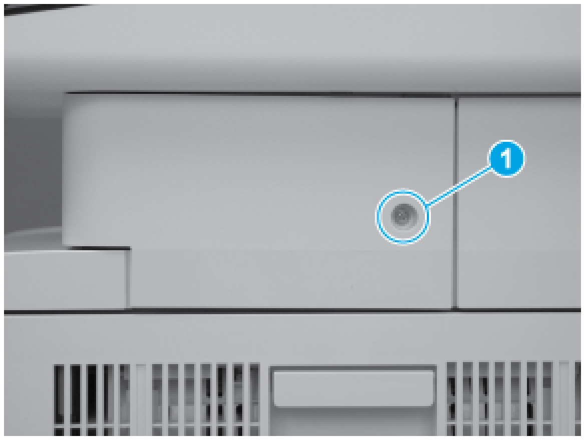
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-765 Remove one screw

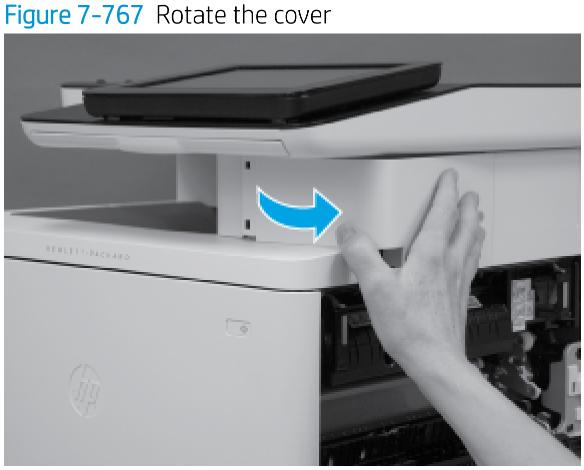


2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-766 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-767 Rotate the cover



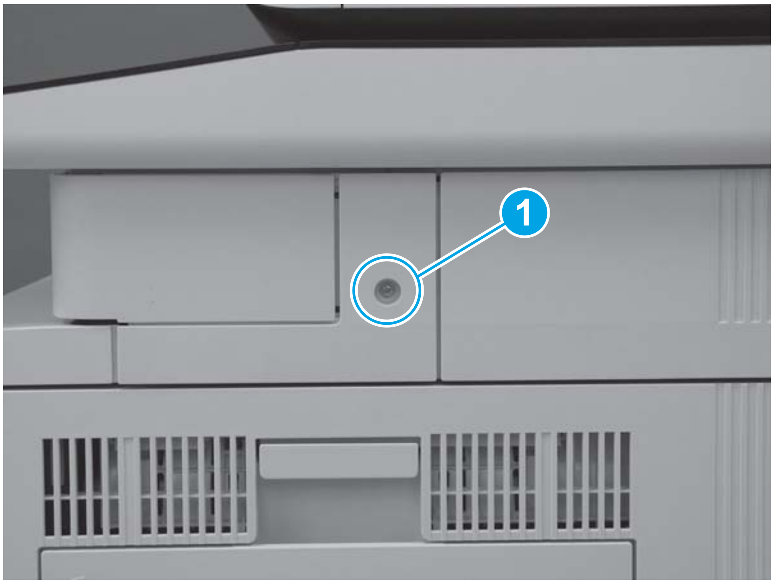
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

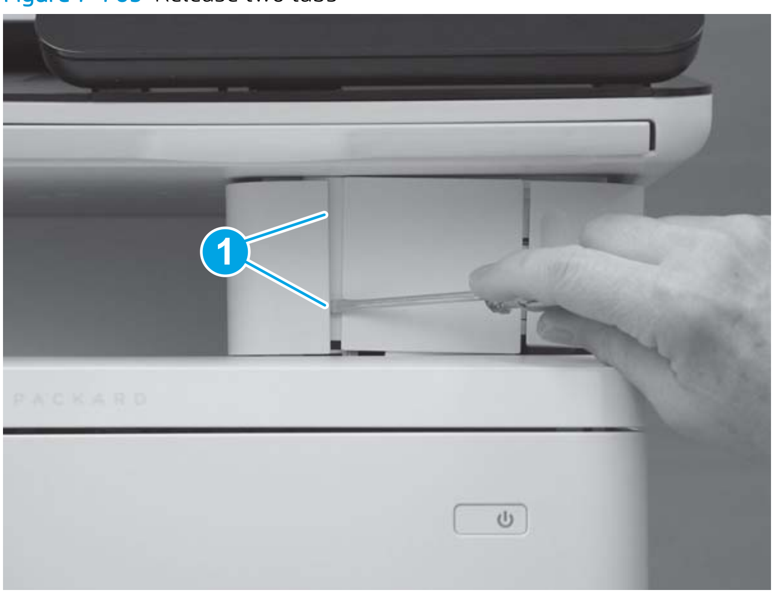
1. Remove one screw (callout 1).

Figure 7-768 Remove one screw



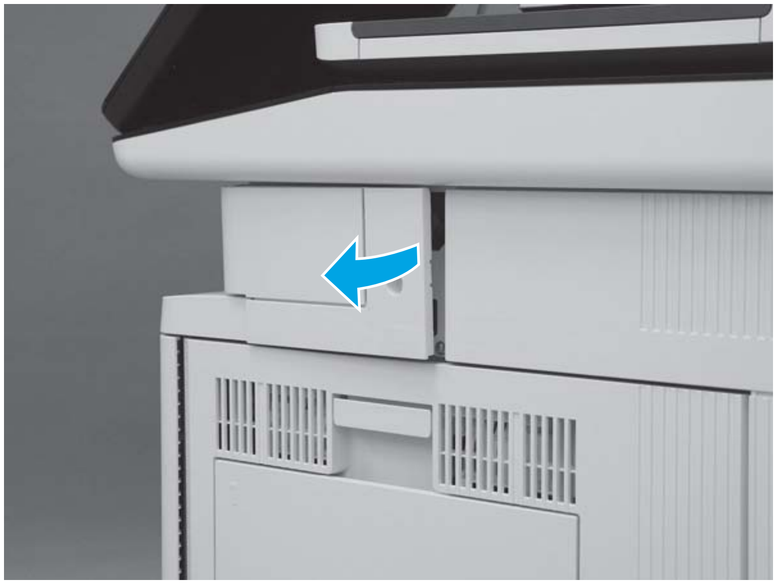
2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-769 Release two tabs



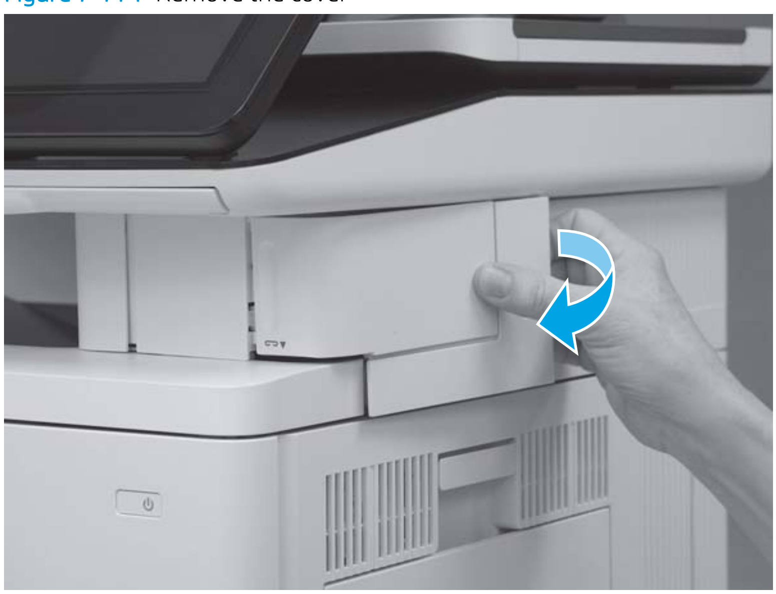
3. Release the back edge of the cover.

Figure 7-770 Release the back edge of the cover



4. Rotate the cover away from the printer to remove it.

Figure 7-771 Remove the cover



Remove the integrated scanner assembly (ISA) (MFP)

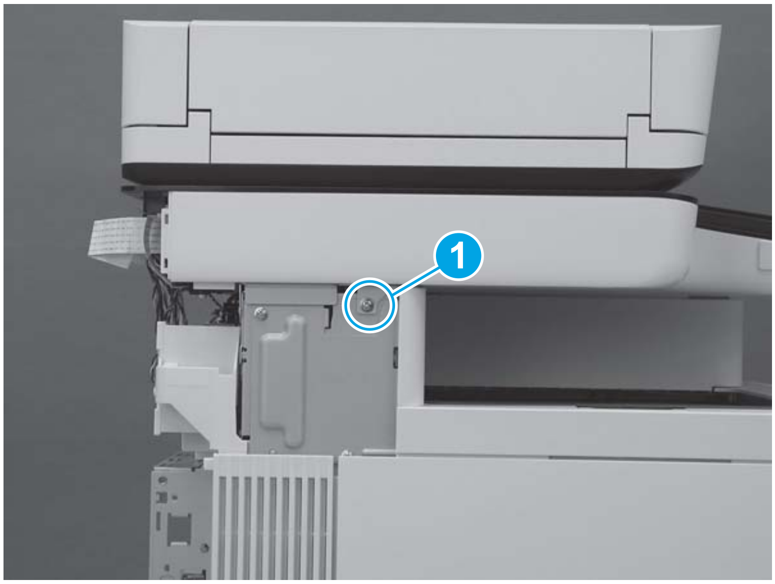
Follow these steps to remove the integrated scanner assembly (ISA).

NOTE: This procedure is for MFP models only.

NOTE: The ISA includes the document feeder, image scanner, scanner control board (SCB), control panel, keyboard (flow models) and NFC PCA (not all models).

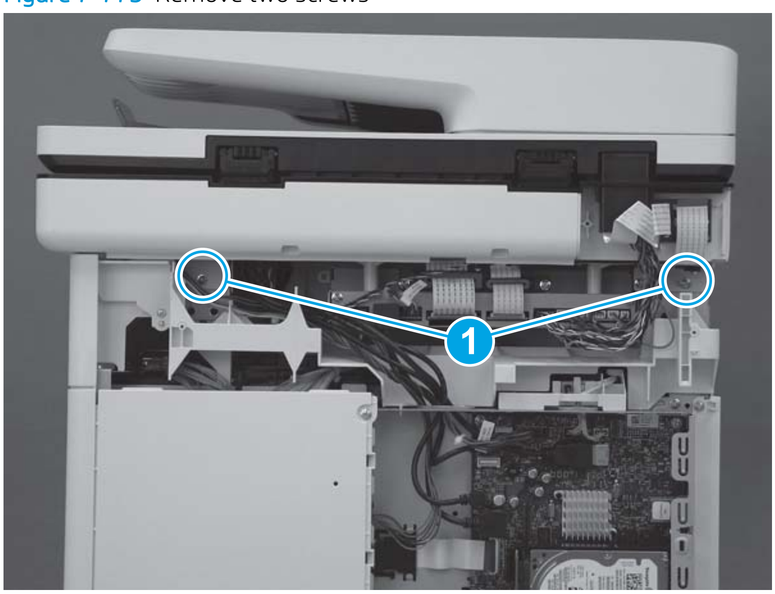
1. At the left side of the printer, remove one screw (callout 1).

Figure 7-772 Remove one screw



2. At the back of the printer, remove two screws (callout 1).

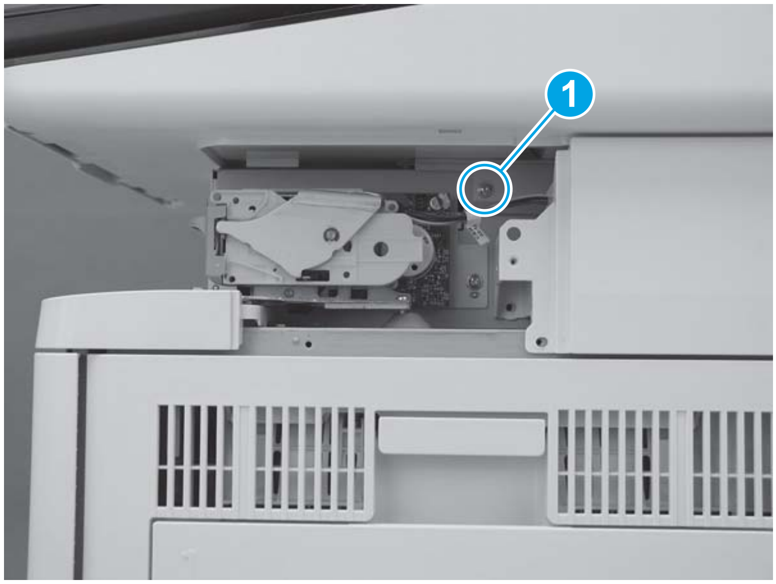
Figure 7-773 Remove two screws



3. At the right side of the printer, remove one screw (callout 1).

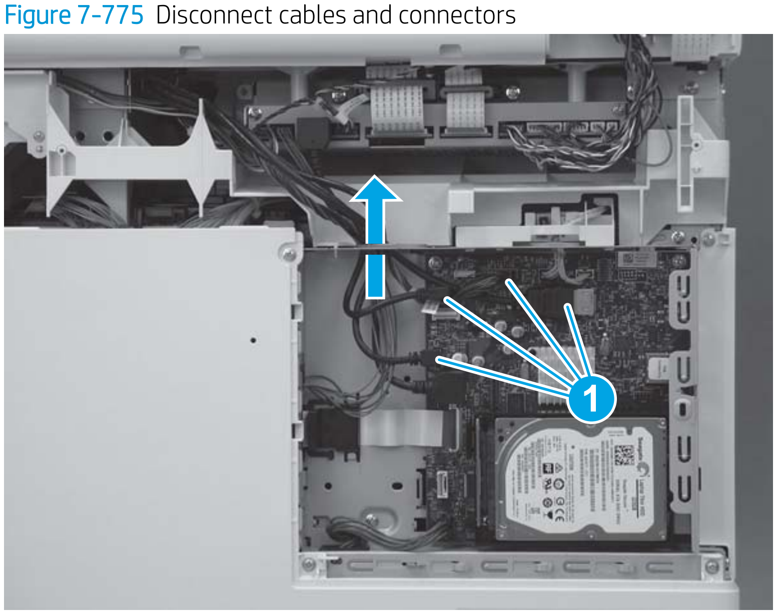
NOTE: The M577z is shown in the figure below. The procedure is correct for all MFP models.

Figure 7-774 Remove one screw



4. Disconnect four connectors (callout 1) on the formatter, and then pass the wire harnesses and cables through the top opening in the formatter case (callout 2).

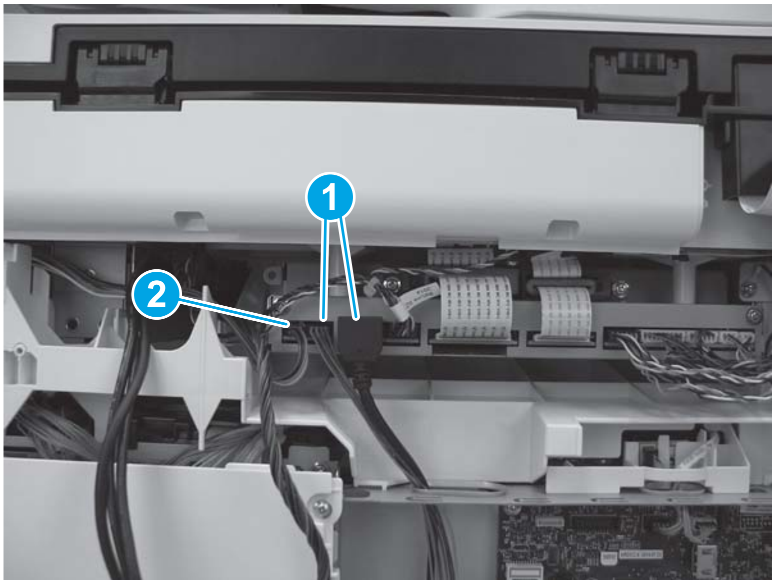
Figure 7-775 Disconnect cables and connectors



5. Disconnect two connectors on the scanner control board (callout 1).

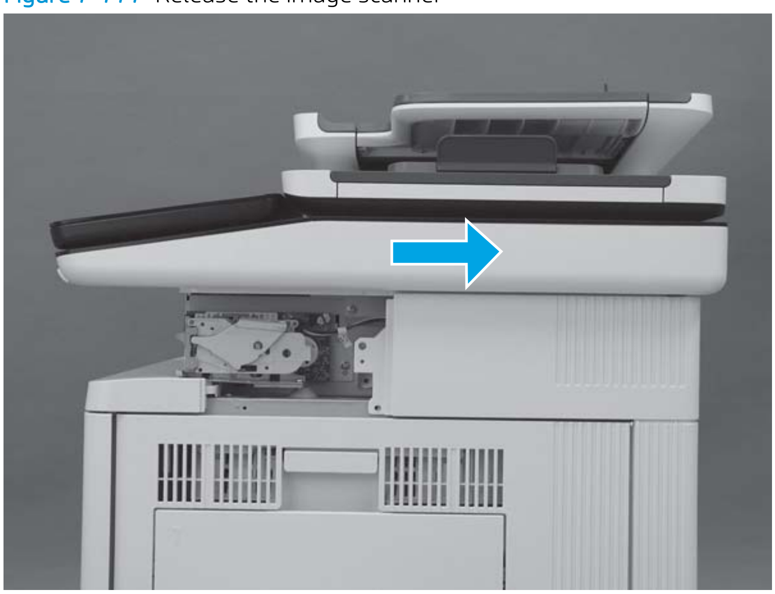
MFP stapler models: Disconnect one connector for the stapler on the scanner control board (callout 2).

Figure 7-776 Disconnect connectors



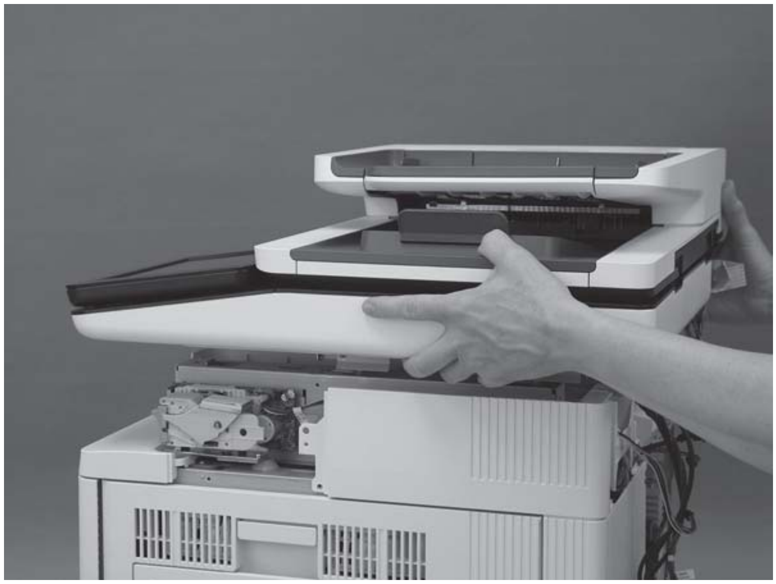
6. Slide the image scanner toward the back of the printer to release it.

Figure 7-777 Release the image scanner



7. Lift the ISA straight up to remove it.

Figure 7-778 Remove the ISA



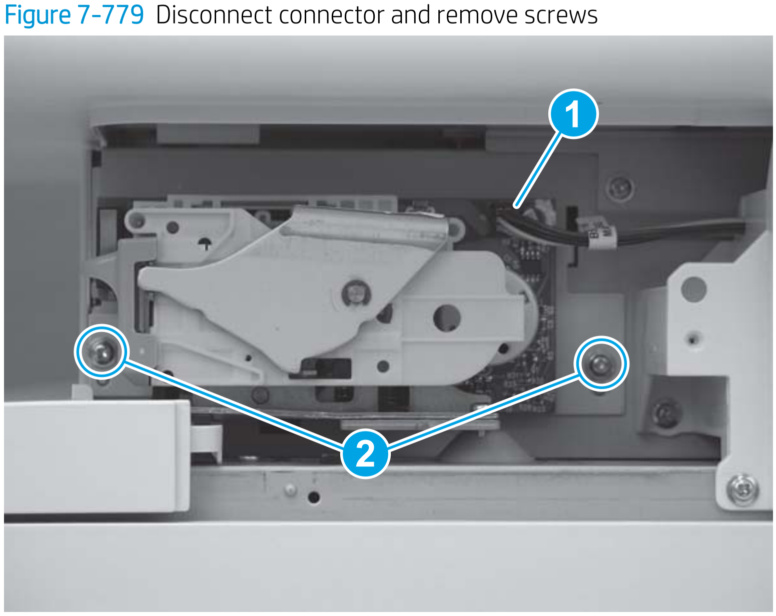
Remove the stapler unit (MFP stapler models)

Follow these steps to remove the stapler unit.

NOTE: This step is for stapler models only.

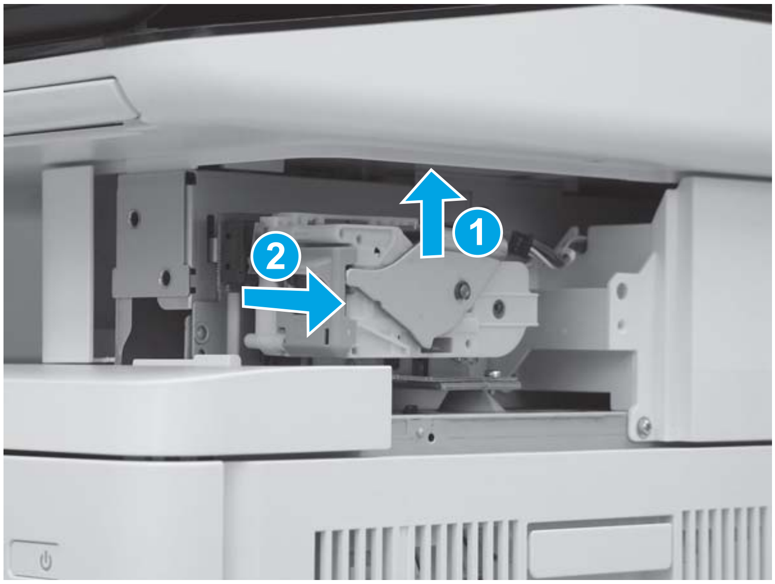
1. Disconnect one connector (callout 1), and then remove two screws (callout 2).

Figure 7-779 Disconnect connector and remove screws



2. Slide the stapler unit up (callout 1), and then pull it away from the printer (callout 2) to remove it.

Figure 7-780 Remove the stapler unit



Remove the right upper cover (MFP)

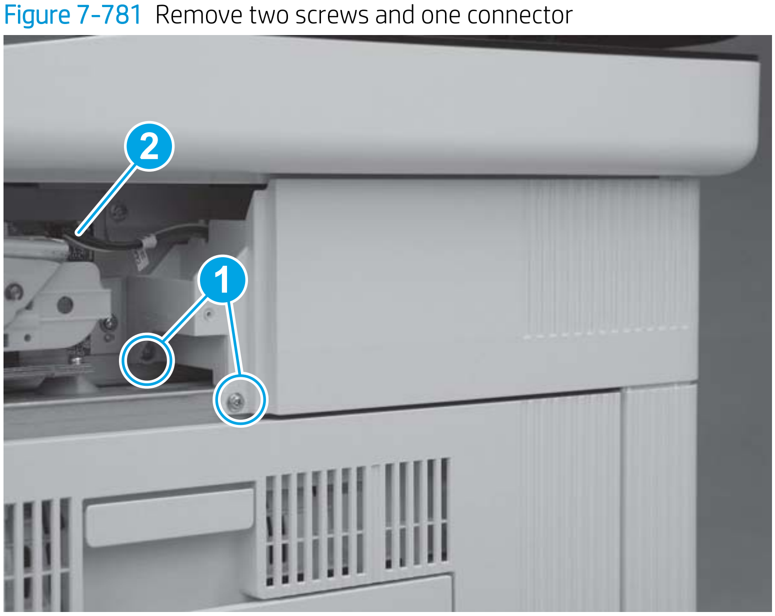
Follow these steps to remove the right upper cover.

NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Figure 7-781 Remove two screws and one connector

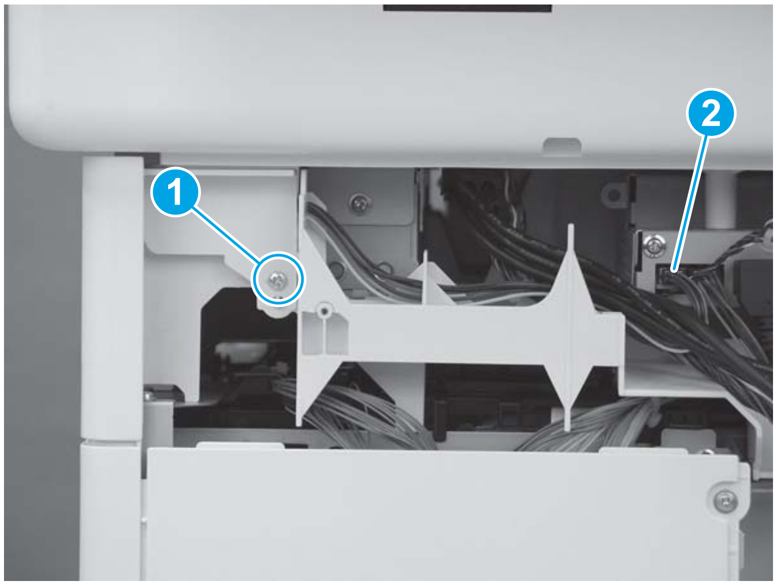


2. At the back of the printer, remove one screw (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

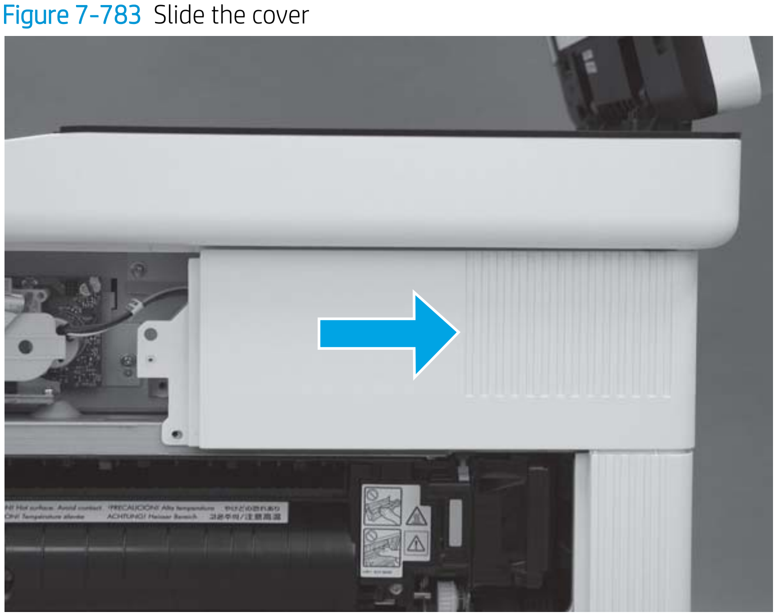
> **Reinstallation tip:** This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

Figure 7-782 Remove one screw and connector



3. Slide the cover toward the back of the printer.

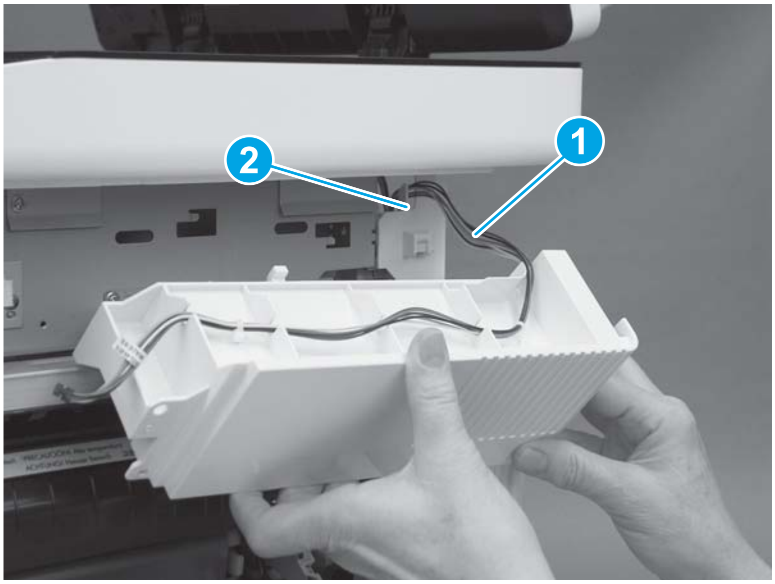
Figure 7-783 Slide the cover



4. Lift the cover away from the printer to remove it.

   M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

   Figure 7-784 Remove the cover

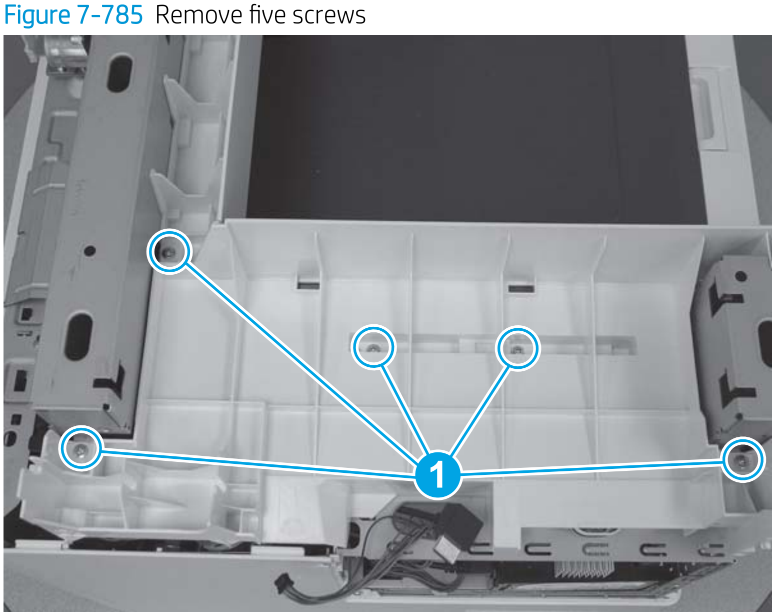
Remove the top rear cover (MFP)

Follow these steps to remove the top rear cover.

NOTE: This procedure is for MFP models only.

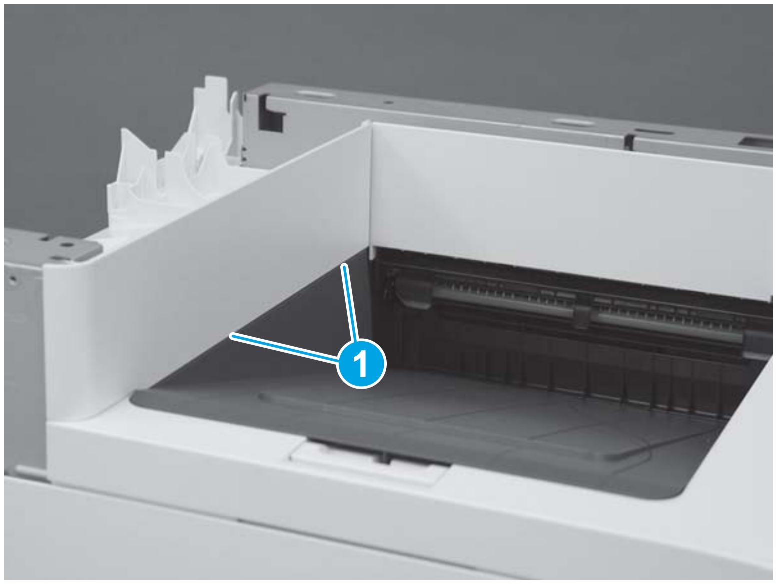
1. At the top of the printer, remove five screws (callout 1).

   Figure 7-785 Remove five screws

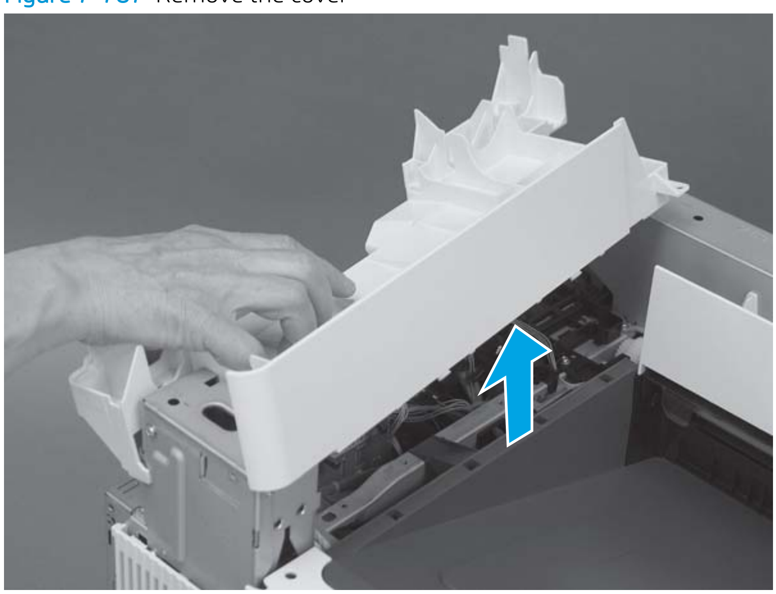
2. Release two tabs (callout 1) on the front edge of the cover.

Figure 7-786 Release two tabs



3. Remove the top rear cover.

Figure 7-787 Remove the cover



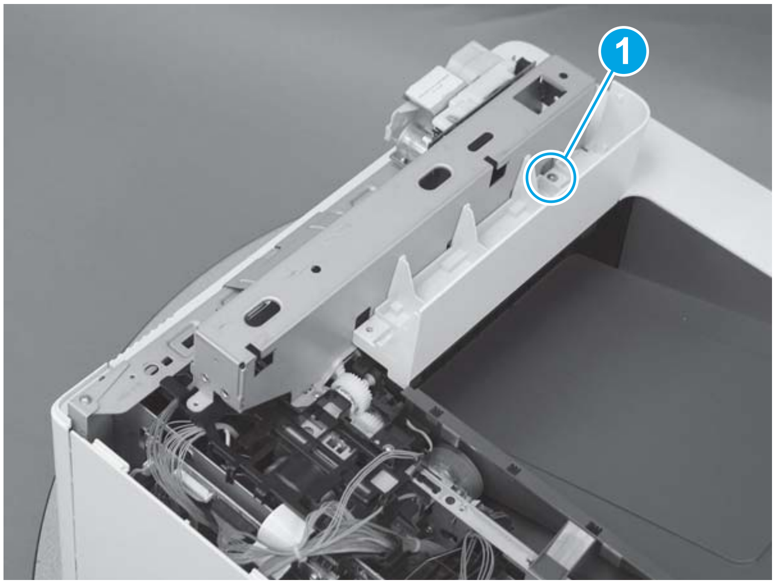
Remove the paper feed cover (MFP)

Follow these steps to remove the paper feed cover.

NOTE: This procedure is for MFP models only.

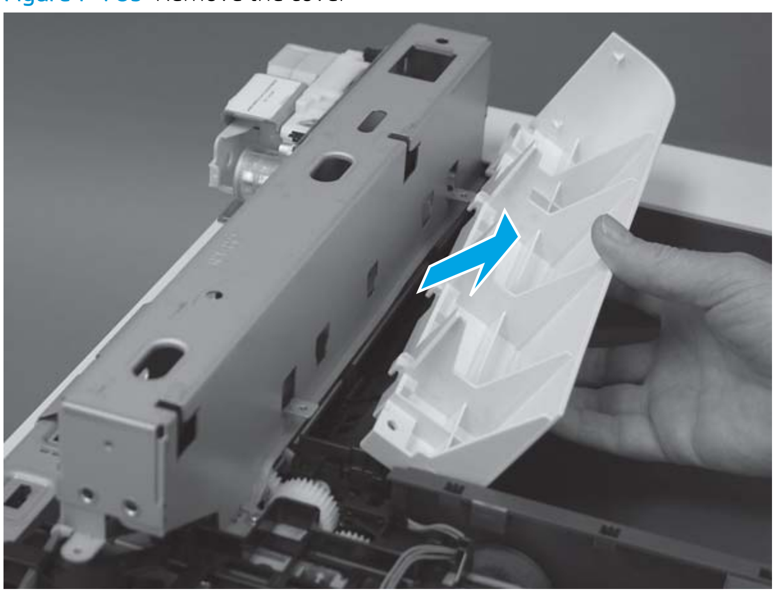
1. Remove one screw (callout 1).

Figure 7-788 Remove one screw



2. Lift the cover up to remove it.

Figure 7-789 Remove the cover



Remove the top cover (MFP)

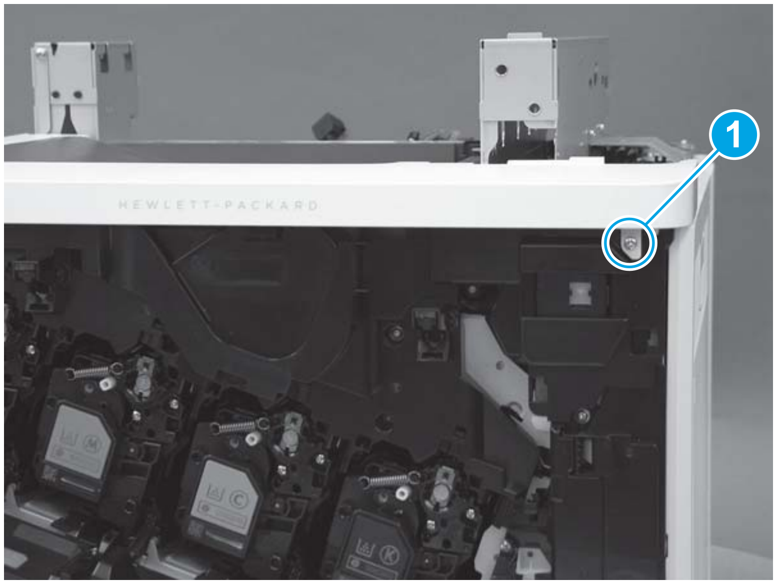
Follow these steps to remove the top cover.

NOTE: This procedure is for MFP models only.

1. At the front of the printer, remove one screw (callout 1).

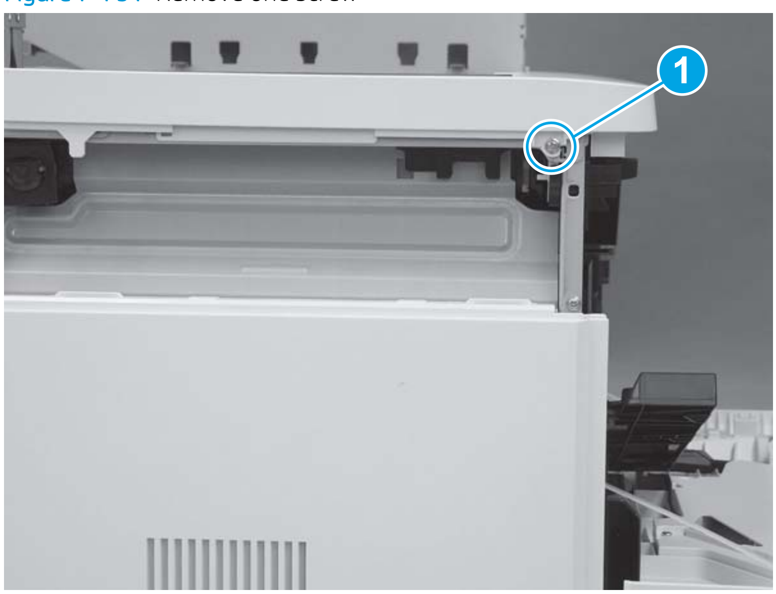
Reinstallation tip: This screw is longer and a different type of screw than the screw removed in the next step. When reinstalling the top cover, make sure that this screw is installed in the correct position.

Figure 7-790 Remove one screw



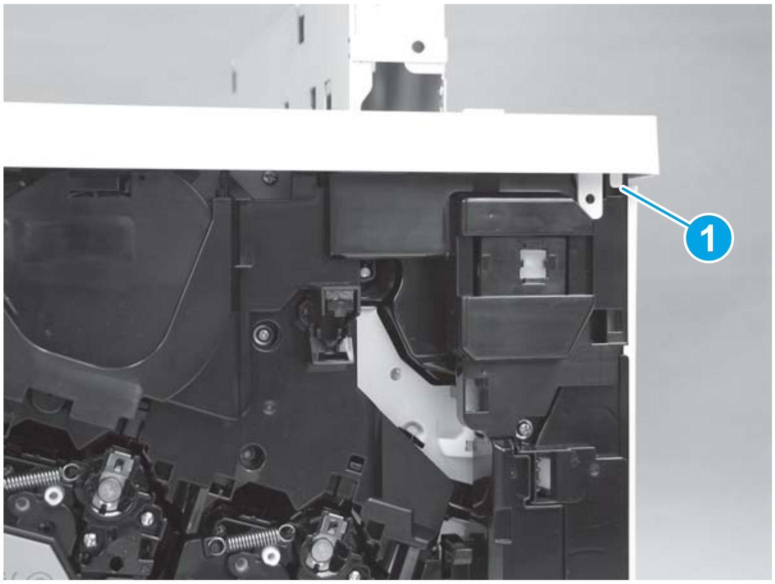
2. At the left side of the printer, remove one screw (callout 1).

Figure 7-791 Remove one screw



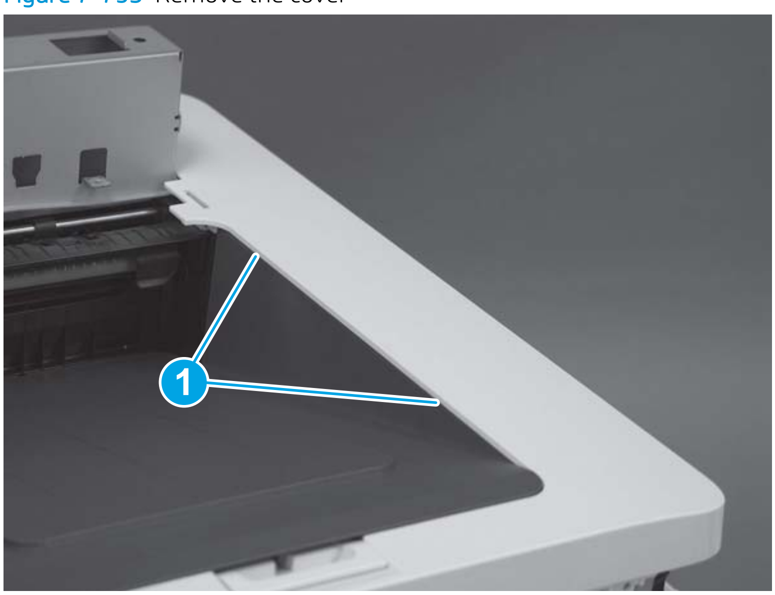
3. At the front of the printer, release one tab (callout 1).

Figure 7-792 Release one tab



4. At the top of the printer, release two tabs (callout 1) next to the output bin, and then remove the top cover.

Figure 7-793 Remove the cover

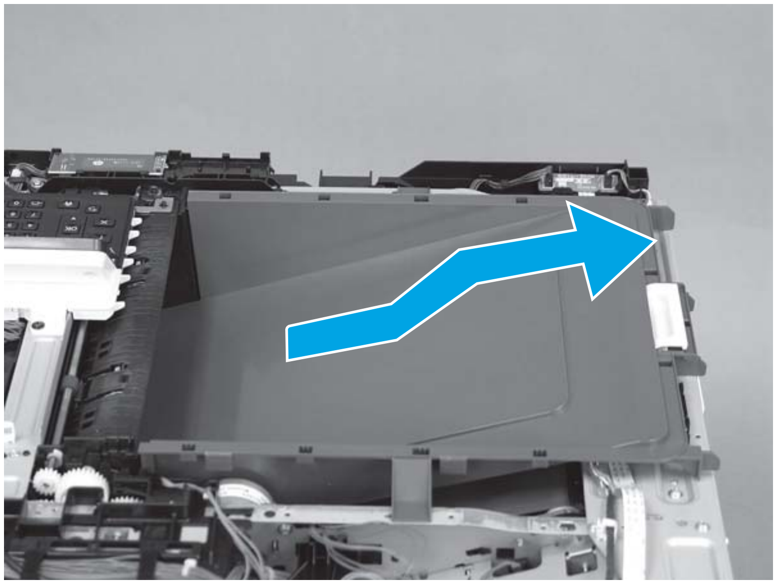


Remove the output bin

Follow these steps to remove the output bin.

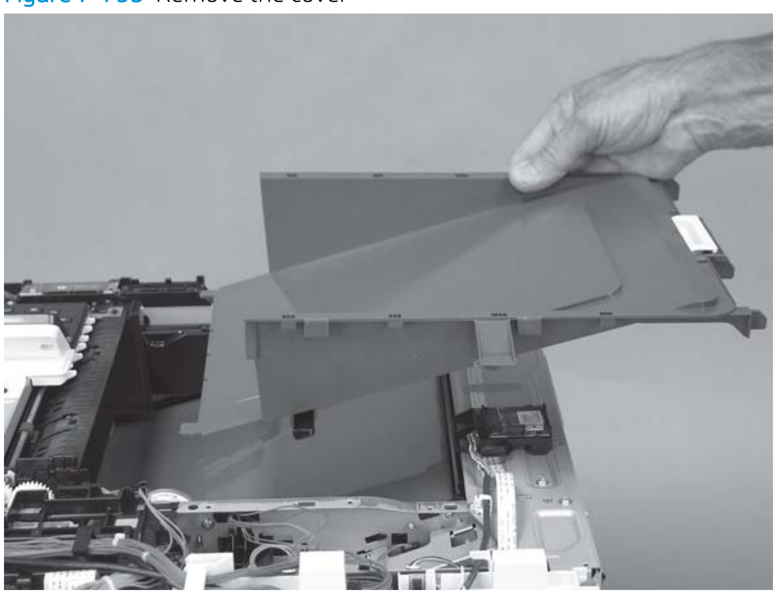
1. Slightly slide and lift the cover to release it.

Figure 7-794 Release the cover



2. Remove the cover.

Figure 7-795 Remove the cover

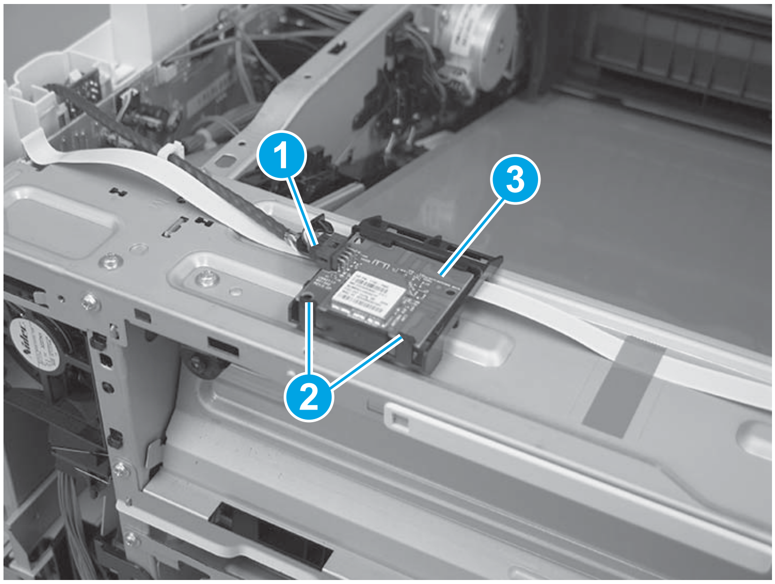


Remove the wireless PCA

Follow these steps to remove the wireless PCA.

▲ Disconnect one connector (callout 1), release two tabs (callout 2), and then remove the wireless PCA (callout 3).

Figure 7-796 Remove the wireless PCA



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

   NOTE: HP recommends responsible disposal of the defective part.

   http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

   CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

   IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

   NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

   NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Switch (SW4) PCA

Learn about removing and replacing the switch (SW4) PCA.

Before performing service

Turn the printer power off

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-56 Part information

Part number	Part description
RM2-7133-000CN	Switch (SW4) PCASwitch (SW4) PCA

Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

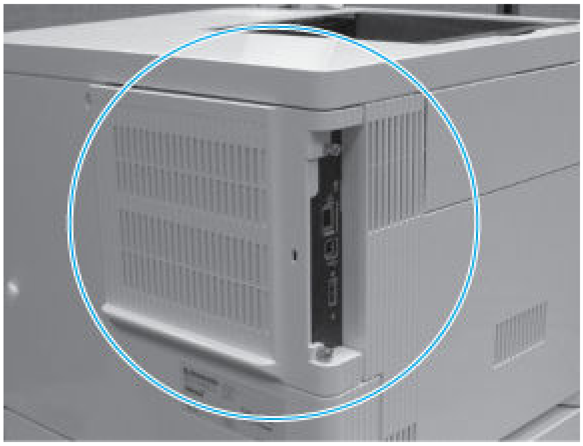
No post service test is available for this assembly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

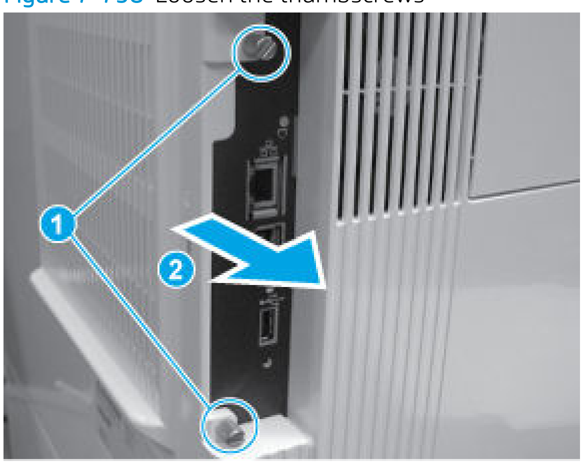
Figure 7-797 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-798 Loosen the thumbscrews



Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-799 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-800 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

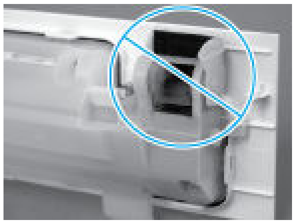
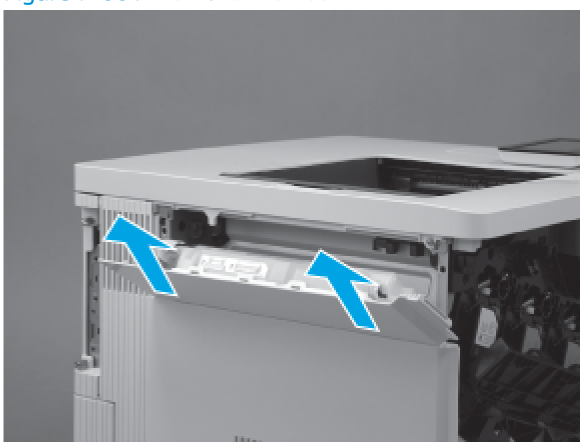


Figure 7-801 Remove the TCU



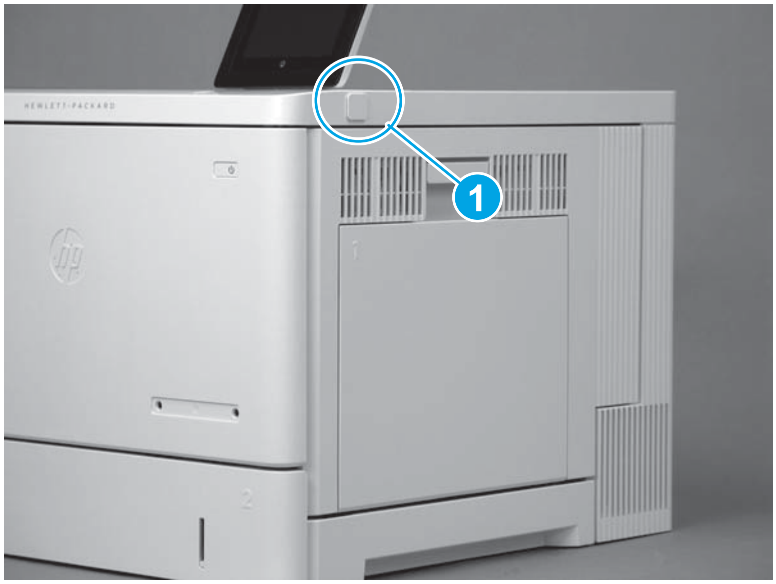
Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

NOTE: This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-802 Locate the USB cover



2. Pull the cover off of the printer to remove it.

Figure 7-803 Remove the cover

Remove the control panel (M553x/M555/E55040)

Follow these steps to remove the control panel.

NOTE: This procedure is for the M553x/M555/E55040 printers only.

M555 models: Removing the control panel is similar to the procedure below. For the M555, a flat cable connects the control panel to the formatter.

1. Tilt the control panel up.

Figure 7-804 Tilt the control panel up

2. Use the small flat-blade screwdriver supplied in this kit to release the control-panel screws cover tabs.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-805 Release the control-panel screws cover tabs

3. Rotate the cover up to remove it.

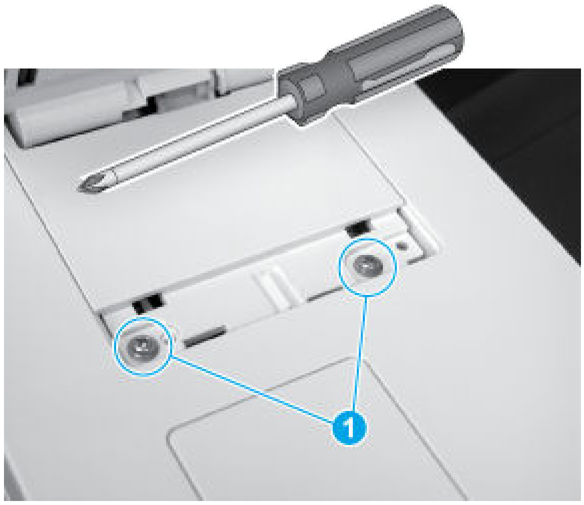
Figure 7-806 Remove the cover

4. Use the small Phillips screwdriver supplied in this kit to remove two screws (callout 1).

IMPORTANT: Store the screws in a secure place where they cannot fall down into the printer.

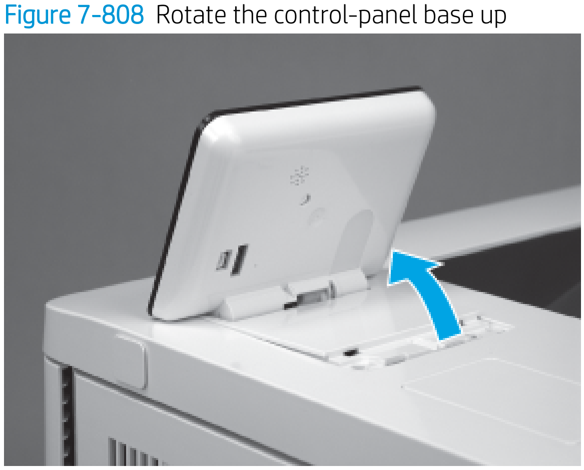
TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-807 Remove two screws



5. Rotate the control-panel base toward the front of the printer.

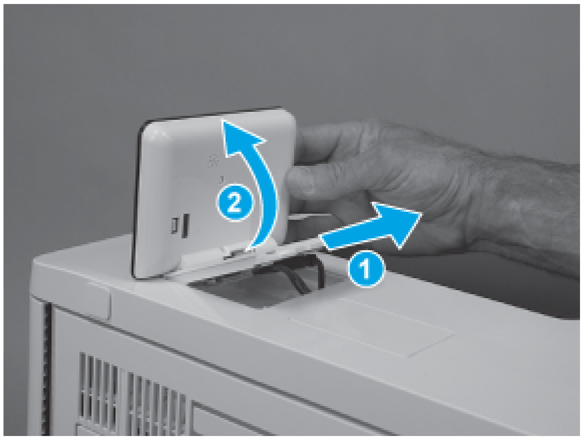
Figure 7-808 Rotate the control-panel base up



6. Slightly slide the control-panel base toward the rear of the printer (callout 1) to release it, and then turn the control panel over (callout 2) to access the bottom side.

⚠ CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

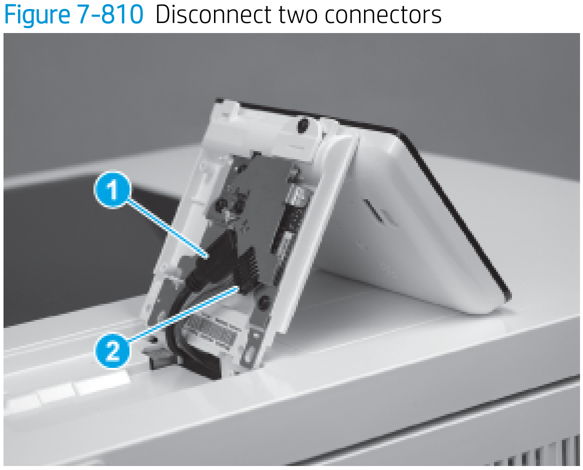
Figure 7-809 Turn the control panel over



7. Disconnect one USB cable (callout 1), one connector (callout 2), and then remove the control panel.

NOTE: **M555 only**: Disconnect one flat cable (not shown), and then remove the control panel.

Figure 7-810 Disconnect two connectors



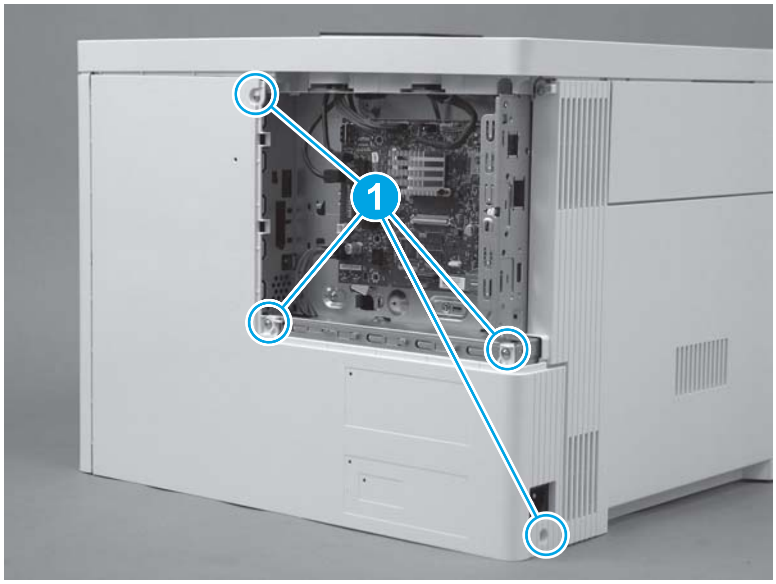
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

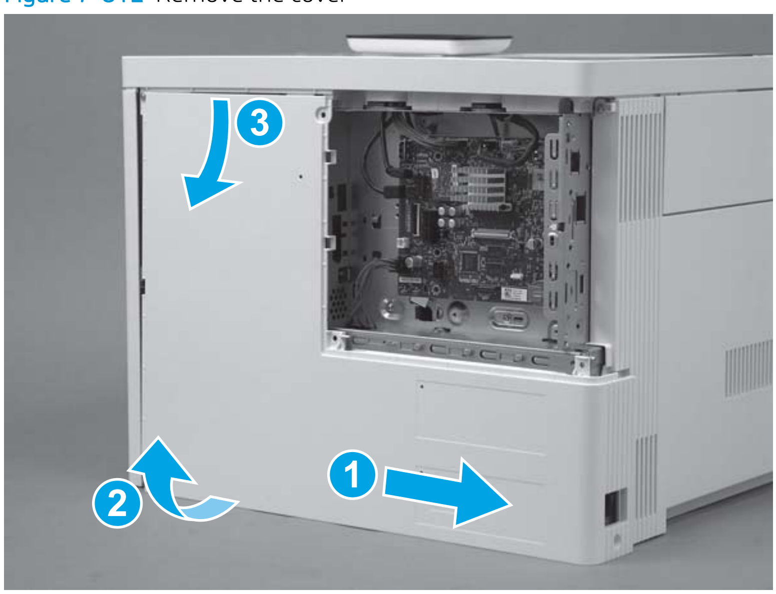
1. Remove four screws (callout 1).

Figure 7-811 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-812 Remove the cover



Remove the left cover

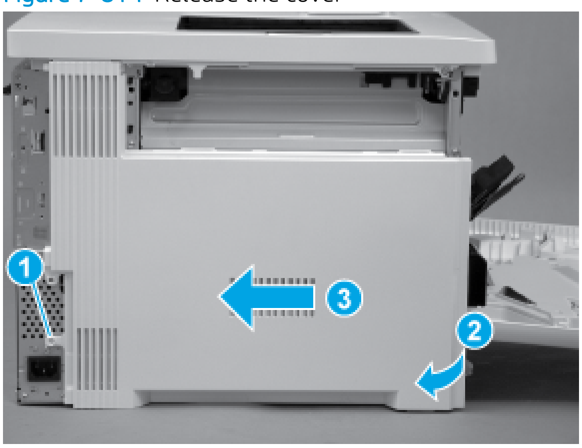
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-813 Remove one screw

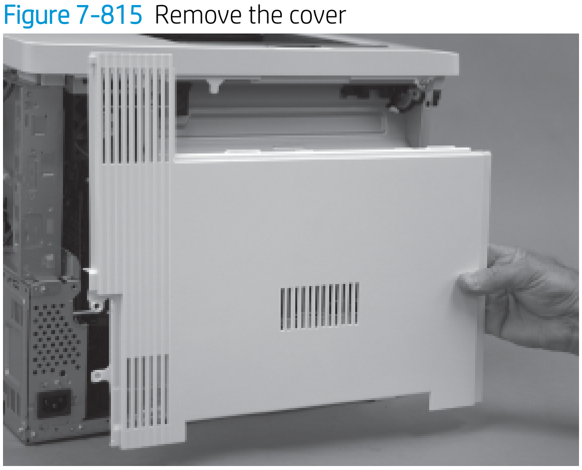
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-814 Release the cover



3. Remove the cover.

Figure 7-815 Remove the cover



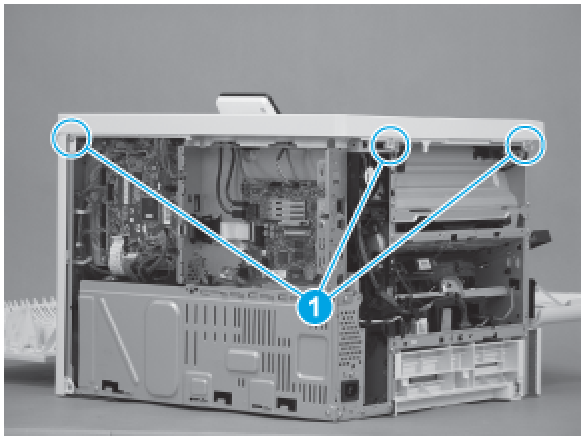
Remove the upper cover (SFP)

Follow these steps to remove the upper cover.

NOTE: This procedure is for SFP models only.

1. Remove three screws (callout 1).

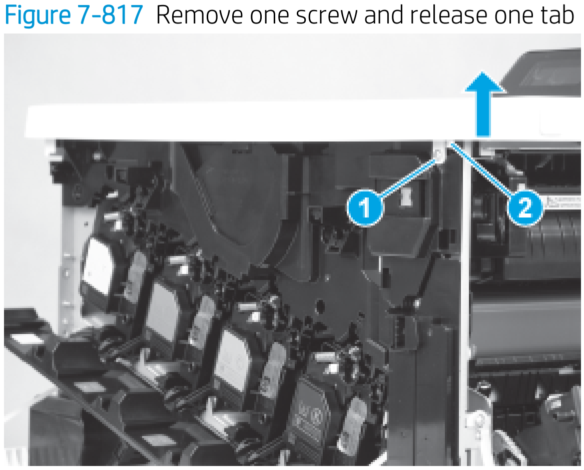
Figure 7-816 Remove three screws



2. Remove one screw (callout 1), release one tab (callout 2), and then slightly separate the corner of the cover from the chassis.

NOTE: This is a self-tapping plastic-thread screw. Make sure that this screw is used in this location when it is reinstalled.

Figure 7-817 Remove one screw and release one tab

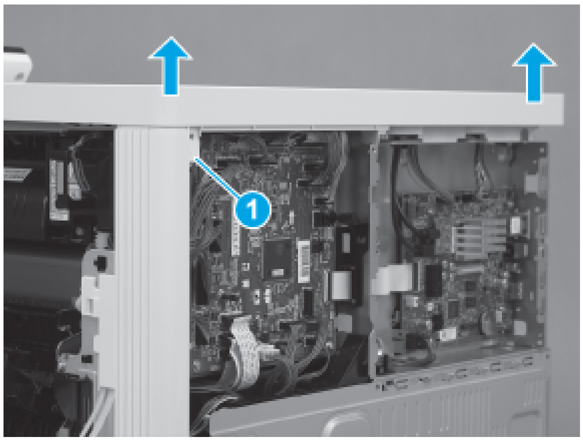


3. Release one tab (callout 1), and then lift up on the cover to release it.

IMPORTANT: **M554 models**: Disconnect the control-panel flat cable at the formatter.

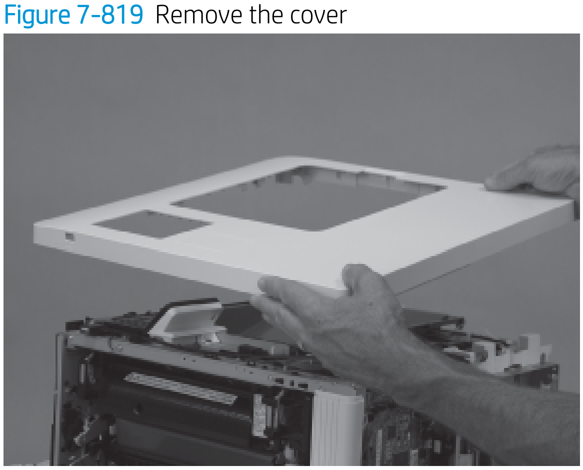
NOTE: If the cover does not release, check for addition tabs by locating the triangles embossed in the cover at tab locations.

Figure 7-818 Release the cover



4. Remove the cover.

Figure 7-819 Remove the cover



Remove the rear upper cover (MFP)

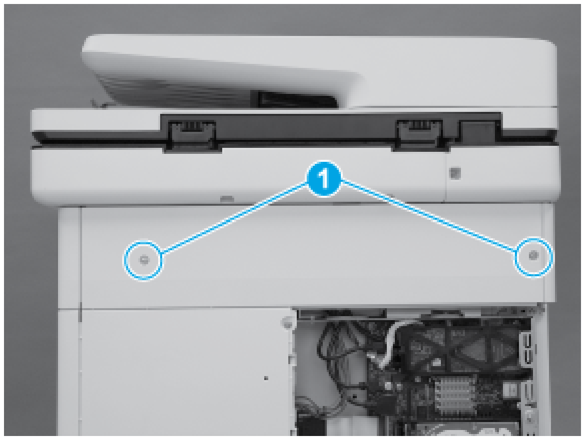
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

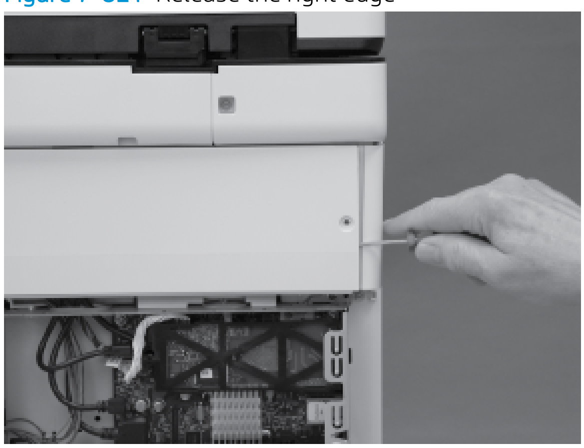
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-820 Remove two screws



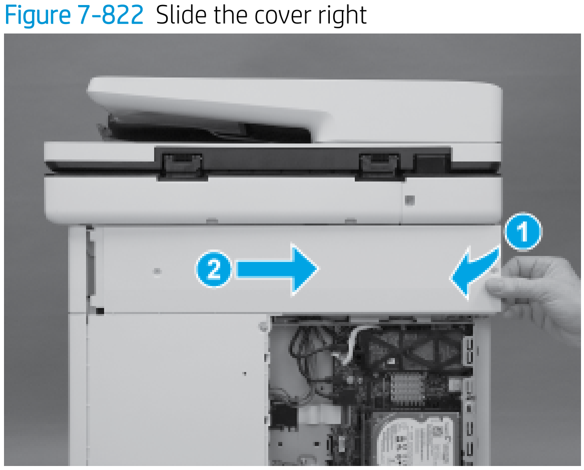
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-821 Release the right edge



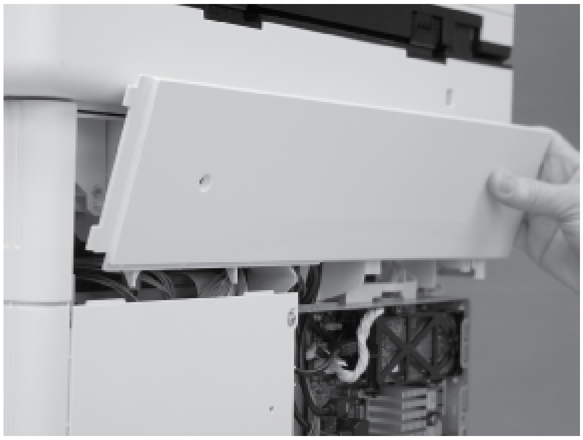
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-822 Slide the cover right



4. Remove the cover.

Figure 7-823 Remove the cover



Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

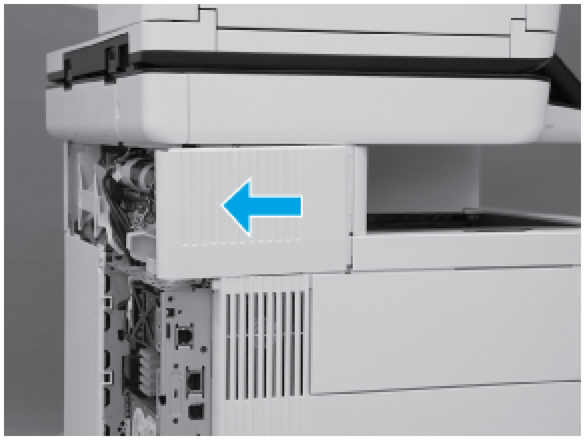
NOTE: This procedure is for MFP models only.

1. At the left side of the printer, release one tab (callout 1).

Figure 7-824 Release one tab

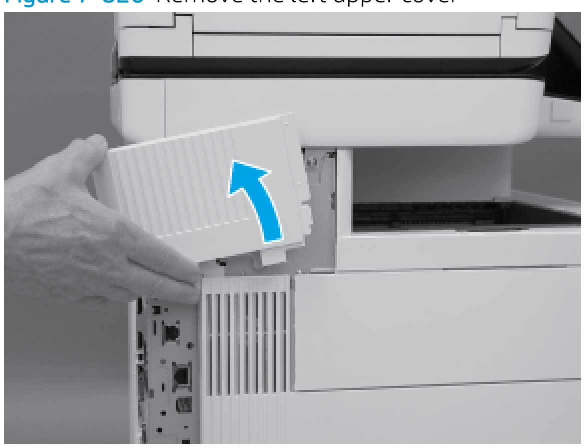
2. Slide the left upper cover toward the back of the printer.

Figure 7-825 Slide the cover back



3. Rotate the cover up to remove it.

Figure 7-826 Remove the left upper cover



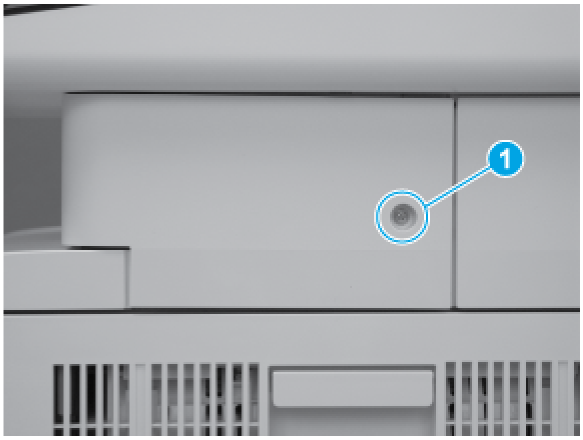
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-827 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-828 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-829 Rotate the cover

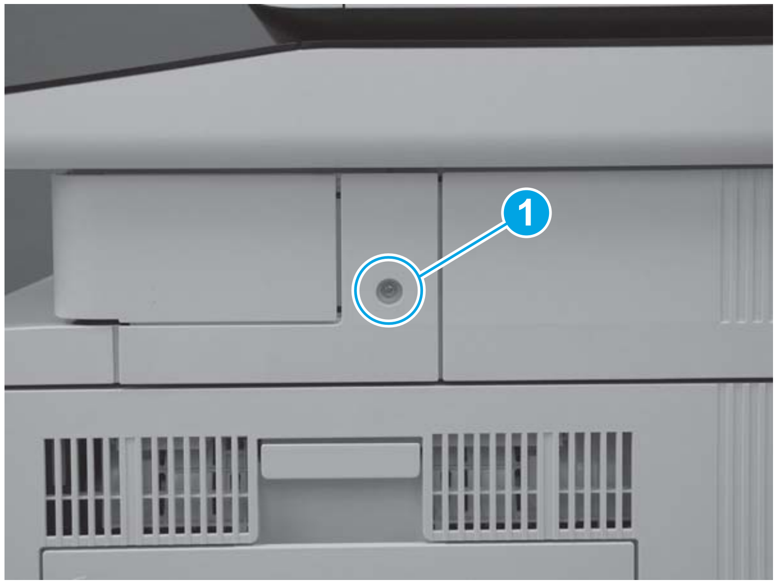
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

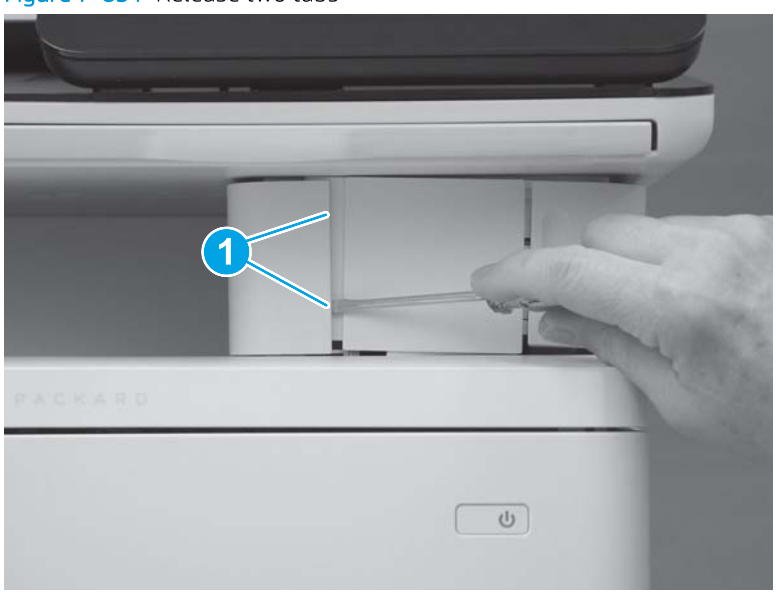
1. Remove one screw (callout 1).

Figure 7-830 Remove one screw



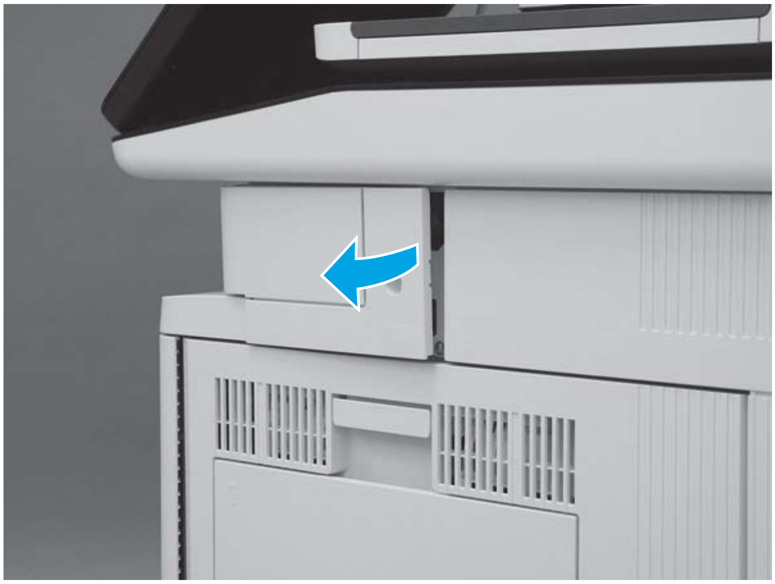
2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-831 Release two tabs



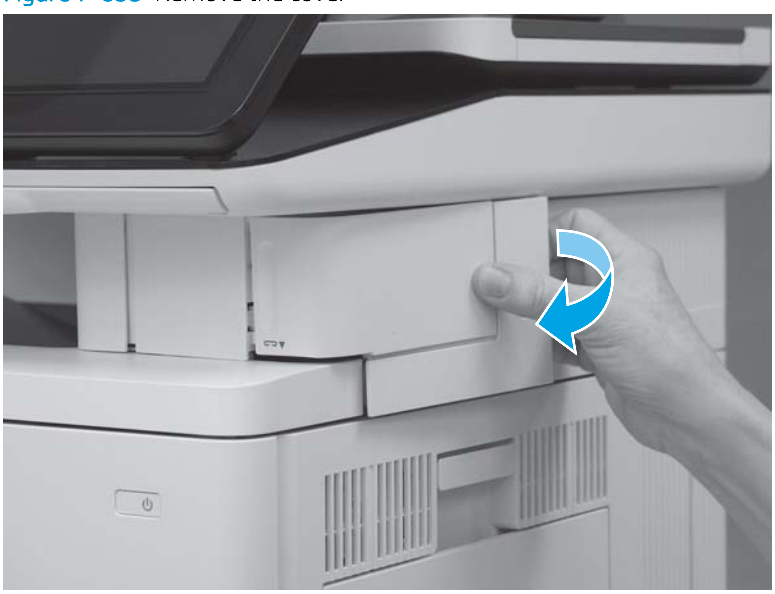
3. Release the back edge of the cover.

Figure 7-832 Release the back edge of the cover



4. Rotate the cover away from the printer to remove it.

Figure 7-833 Remove the cover



Remove the integrated scanner assembly (ISA) (MFP)

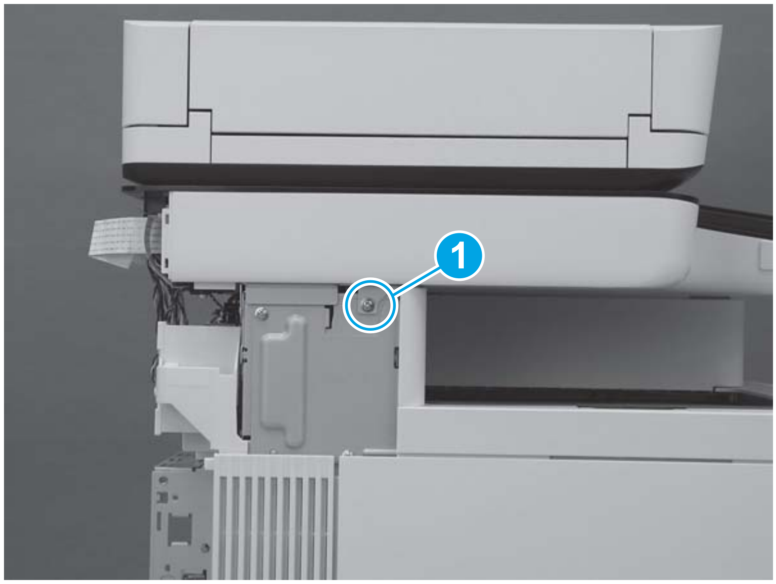
Follow these steps to remove the integrated scanner assembly (ISA).

NOTE: This procedure is for MFP models only.

NOTE: The ISA includes the document feeder, image scanner, scanner control board (SCB), control panel, keyboard (flow models) and NFC PCA (not all models).

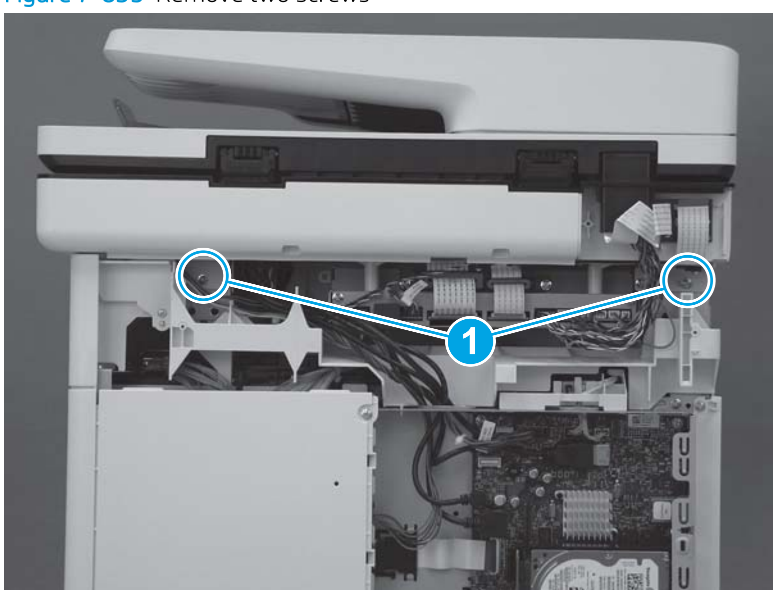
1. At the left side of the printer, remove one screw (callout 1).

Figure 7-834 Remove one screw



2. At the back of the printer, remove two screws (callout 1).

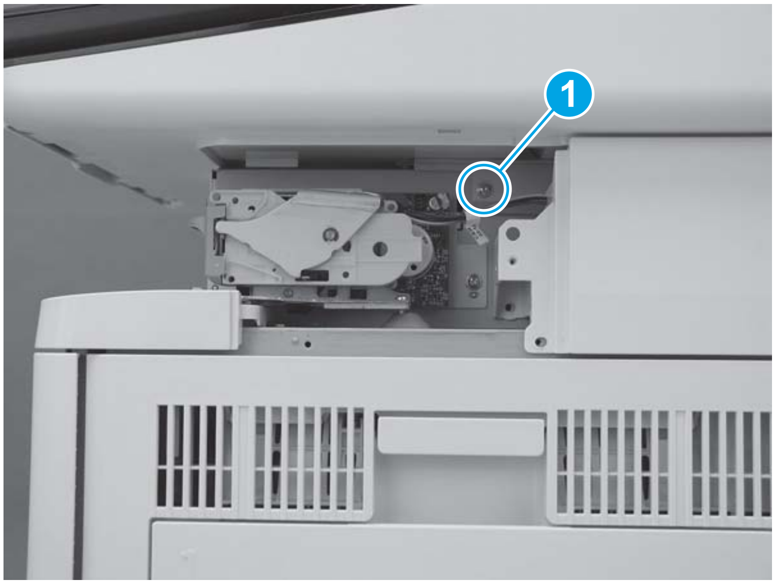
Figure 7-835 Remove two screws



3. At the right side of the printer, remove one screw (callout 1).

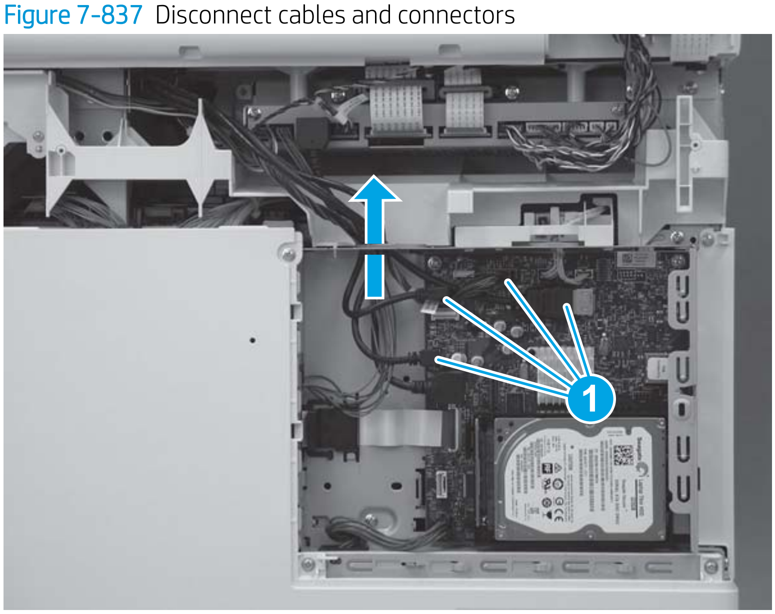
NOTE: The M577z is shown in the figure below. The procedure is correct for all MFP models.

Figure 7-836 Remove one screw



4. Disconnect four connectors (callout 1) on the formatter, and then pass the wire harnesses and cables through the top opening in the formatter case (callout 2).

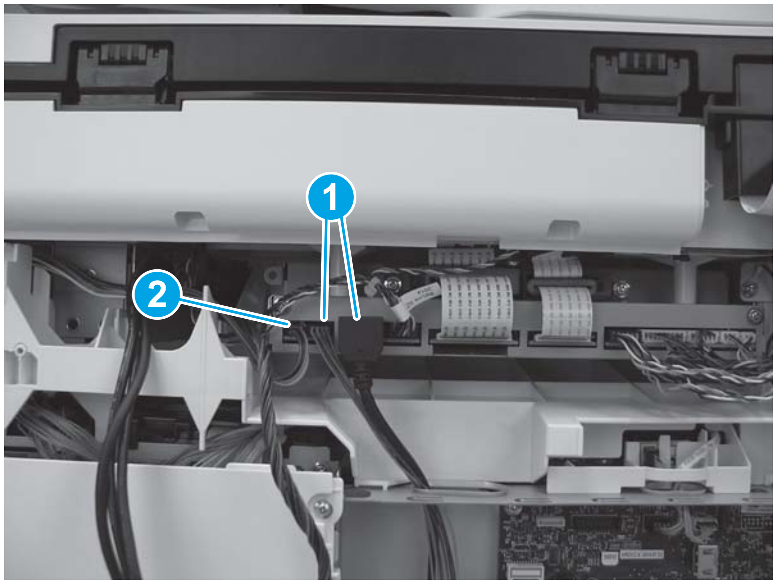
Figure 7-837 Disconnect cables and connectors



5. Disconnect two connectors on the scanner control board (callout 1).

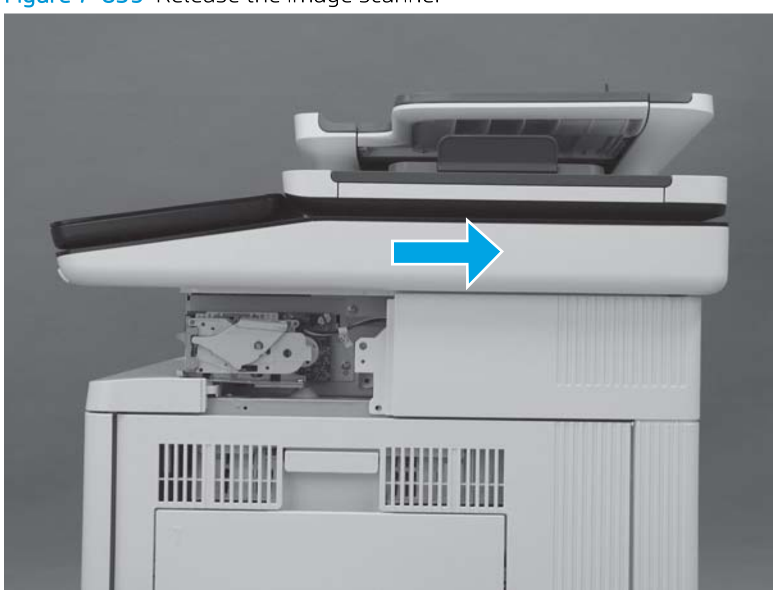
   MFP stapler models: Disconnect one connector for the stapler on the scanner control board (callout 2).

   Figure 7-838 Disconnect connectors

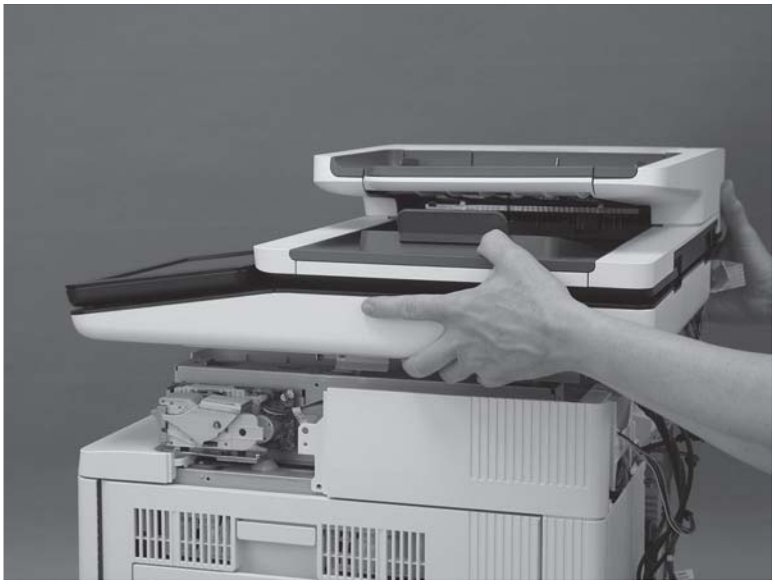
6. Slide the image scanner toward the back of the printer to release it.

   Figure 7-839 Release the image scanner

7. Lift the ISA straight up to remove it.

Figure 7-840 Remove the ISA



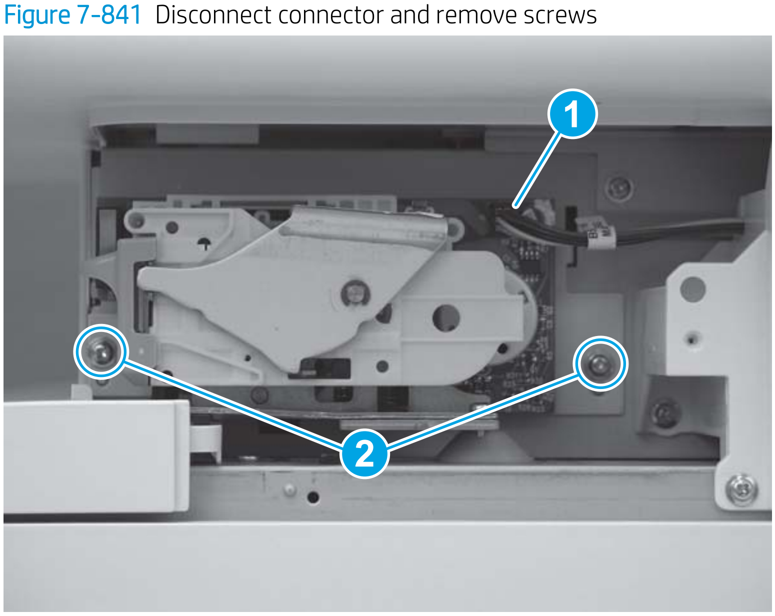
Remove the stapler unit (MFP stapler models)

Follow these steps to remove the stapler unit.

NOTE: This step is for stapler models only.

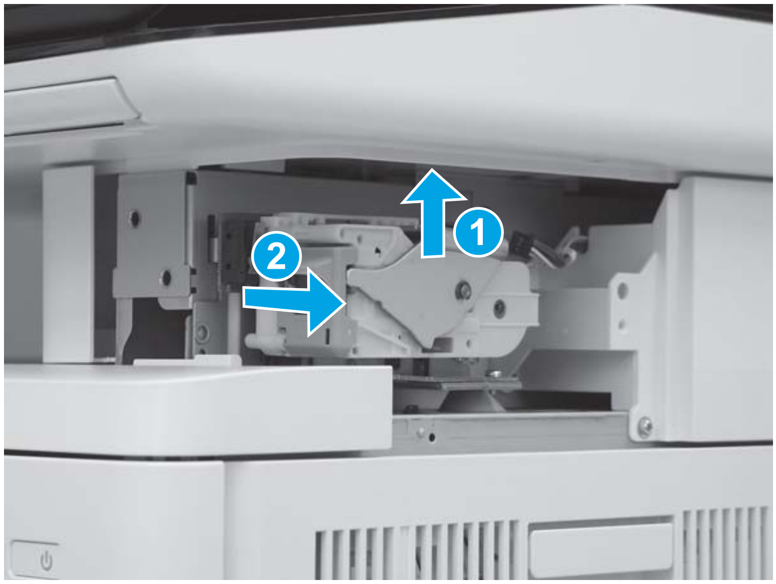
1. Disconnect one connector (callout 1), and then remove two screws (callout 2).

Figure 7-841 Disconnect connector and remove screws



2. Slide the stapler unit up (callout 1), and then pull it away from the printer (callout 2) to remove it.

Figure 7-842 Remove the stapler unit



Remove the right upper cover (MFP)

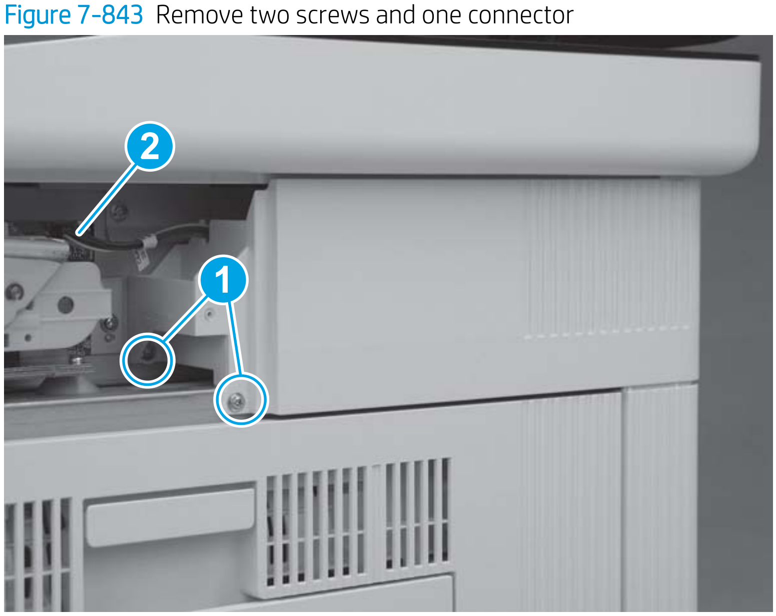
Follow these steps to remove the right upper cover.

NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Figure 7-843 Remove two screws and one connector

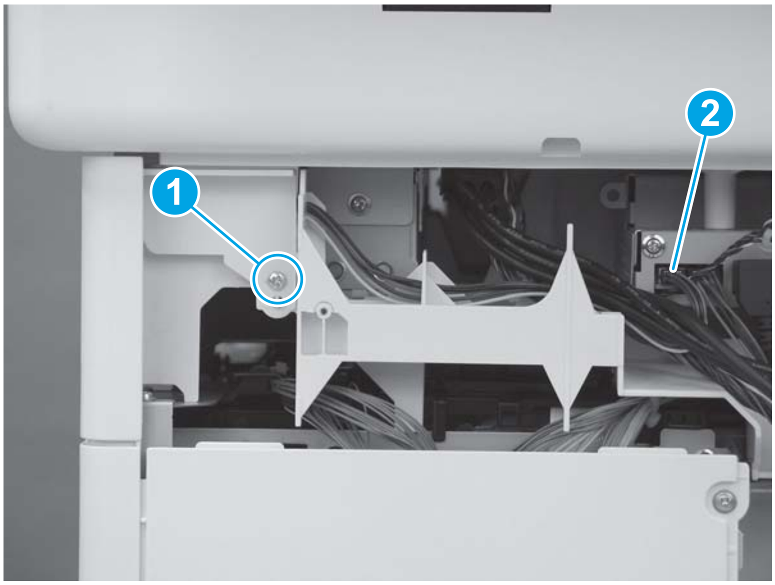


2. At the back of the printer, remove one screw (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

> Reinstallation tip: This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

Figure 7-844 Remove one screw and connector



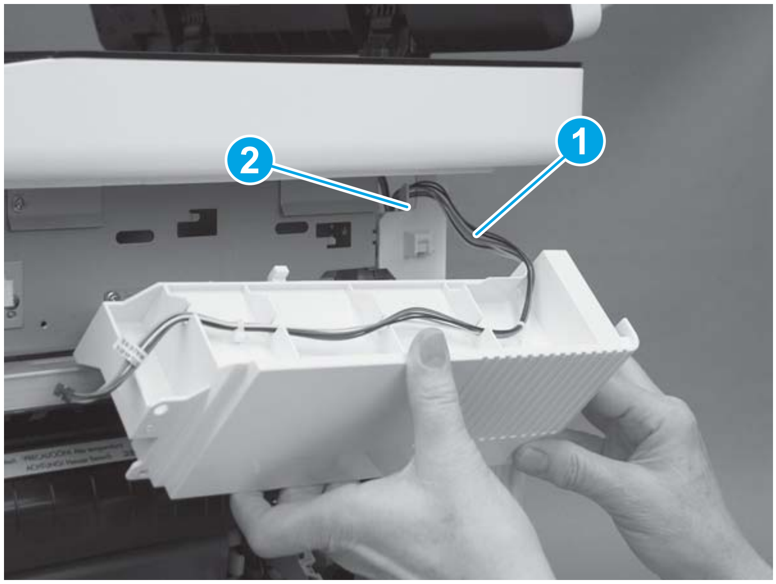
3. Slide the cover toward the back of the printer.

Figure 7-845 Slide the cover

4. Lift the cover away from the printer to remove it.

   M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

   Figure 7-846 Remove the cover

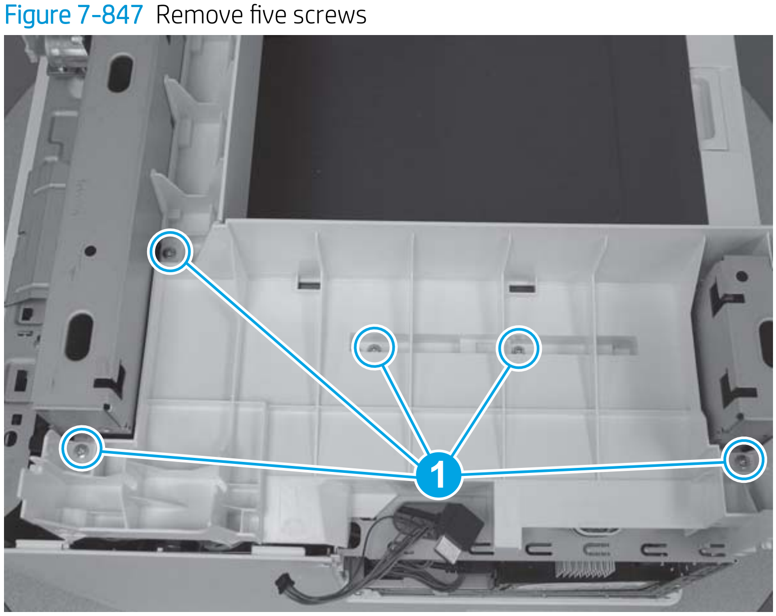
Remove the top rear cover (MFP)

Follow these steps to remove the top rear cover.

> **NOTE:** This procedure is for MFP models only.

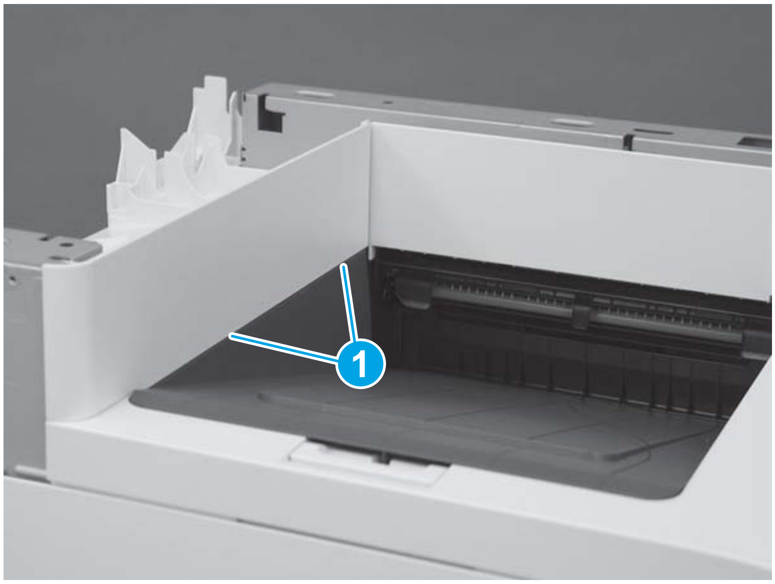
1. At the top of the printer, remove five screws (callout 1).

   Figure 7-847 Remove five screws

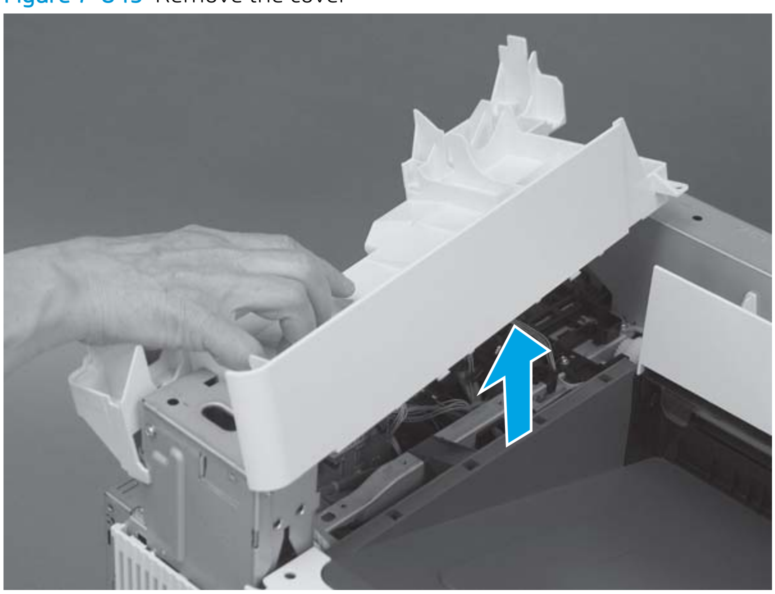
2. Release two tabs (callout 1) on the front edge of the cover.

Figure 7-848 Release two tabs



3. Remove the top rear cover.

Figure 7-849 Remove the cover



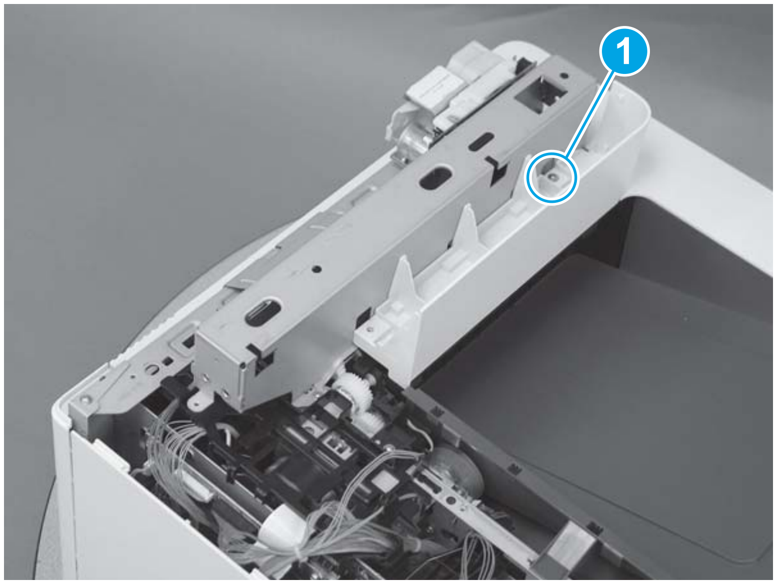
Remove the paper feed cover (MFP)

Follow these steps to remove the paper feed cover.

NOTE: This procedure is for MFP models only.

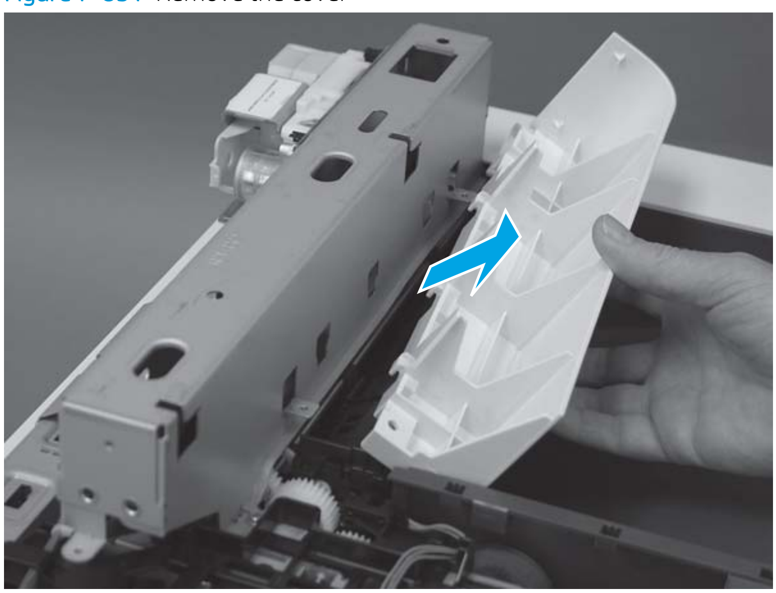
1. Remove one screw (callout 1).

Figure 7-850 Remove one screw



2. Lift the cover up to remove it.

Figure 7-851 Remove the cover



Remove the top cover (MFP)

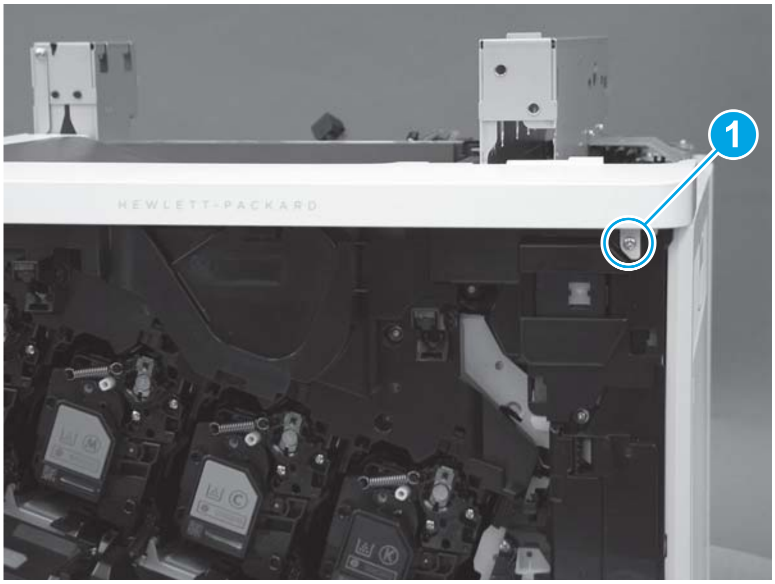
Follow these steps to remove the top cover.

NOTE: This procedure is for MFP models only.

1. At the front of the printer, remove one screw (callout 1).

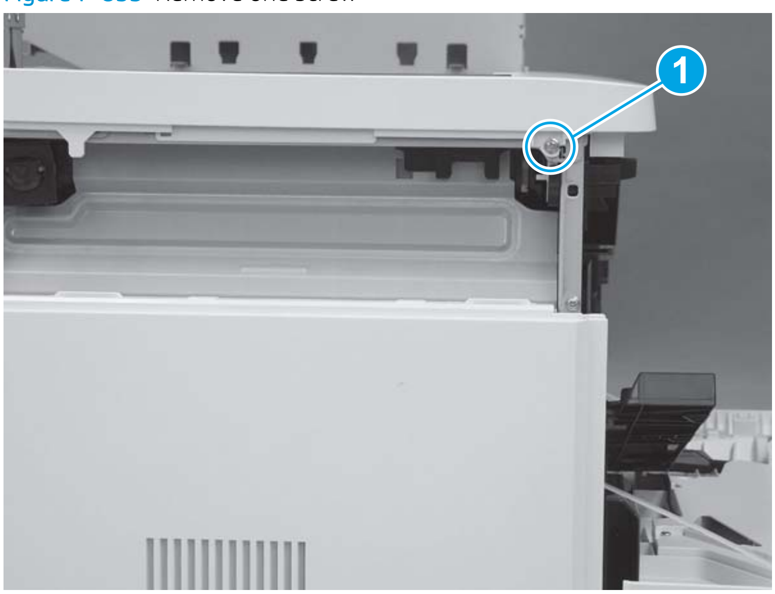
Reinstallation tip: This screw is longer and a different type of screw than the screw removed in the next step. When reinstalling the top cover, make sure that this screw is installed in the correct position.

Figure 7-852 Remove one screw



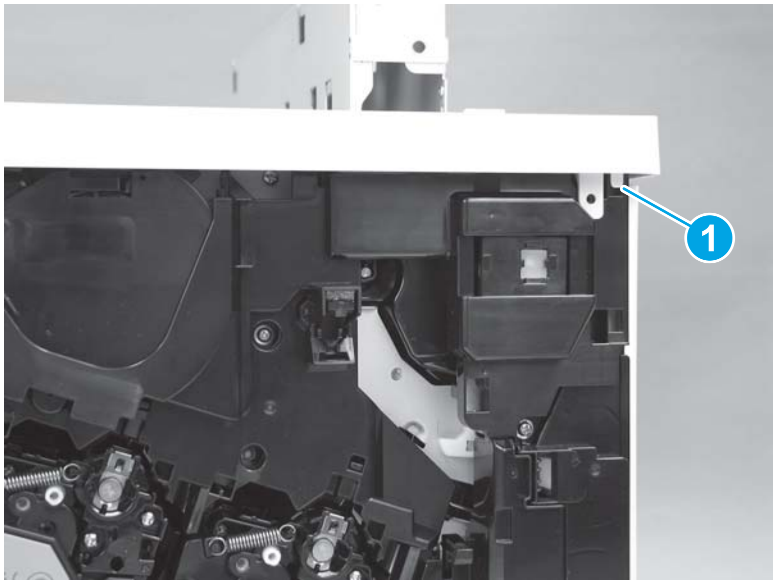
2. At the left side of the printer, remove one screw (callout 1).

Figure 7-853 Remove one screw



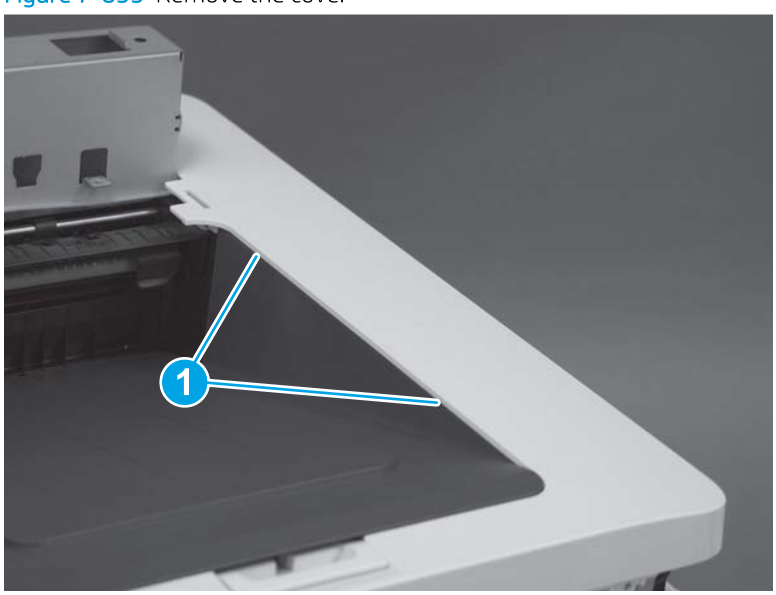
3. At the front of the printer, release one tab (callout 1).

Figure 7-854 Release one tab



4. At the top of the printer, release two tabs (callout 1) next to the output bin, and then remove the top cover.

Figure 7-855 Remove the cover



Remove the switch (SW4) PCA

Follow these steps to remove the switch (SW4) PCA.

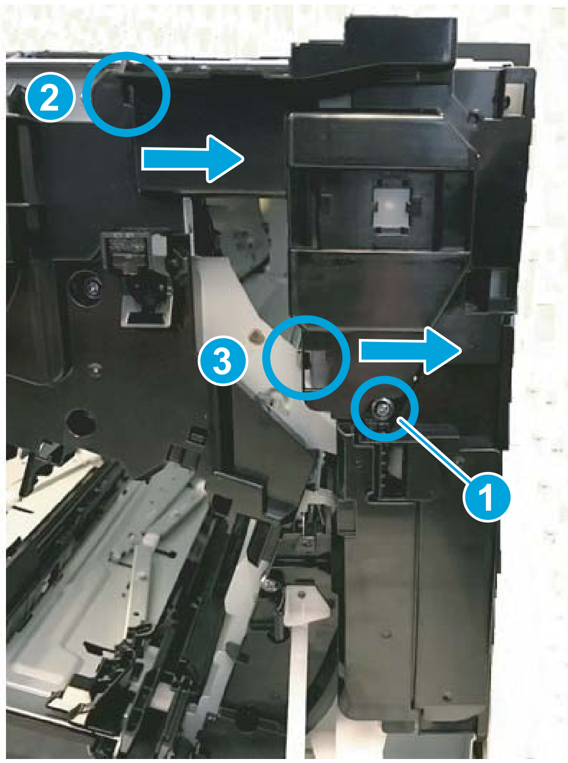
1. Do the following:
   1. If the front and right doors are not already open, open them now.
   2. Remove one screw (callout 1).

3. At the upper left corner (callout 2) of the upper cover, carefully pry the cover to the right to release it.

4. At the lower left edge (callout 3) of the upper cover, carefully pry the cover to the right to remove it

NOTE: Use a small flat blade screwdriver to release and remove the cover.

Figure 7-856 Remove the upper cover



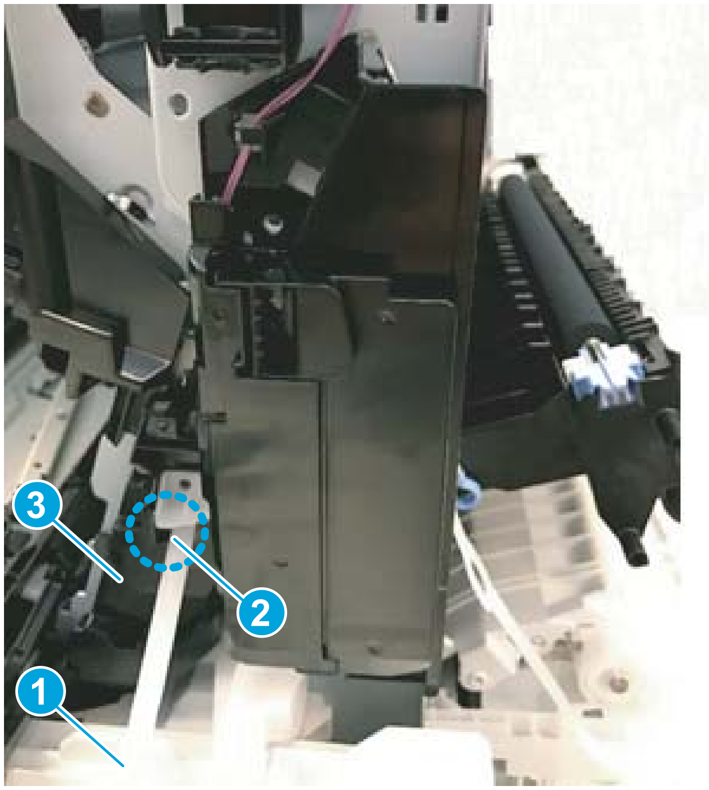
2. Do the following:

NOTE: The switch (SW4) PCA cover consists of a left and right cover.

1. Release the right-side door strap (callout 1; squeeze two tabs to release the strap from the holder on the door).

2. Remove one screw (callout 2), and then remove the left side of the cover (callout 3).

Figure 7-857 Remove the switch left-side cover



3. Do the following:

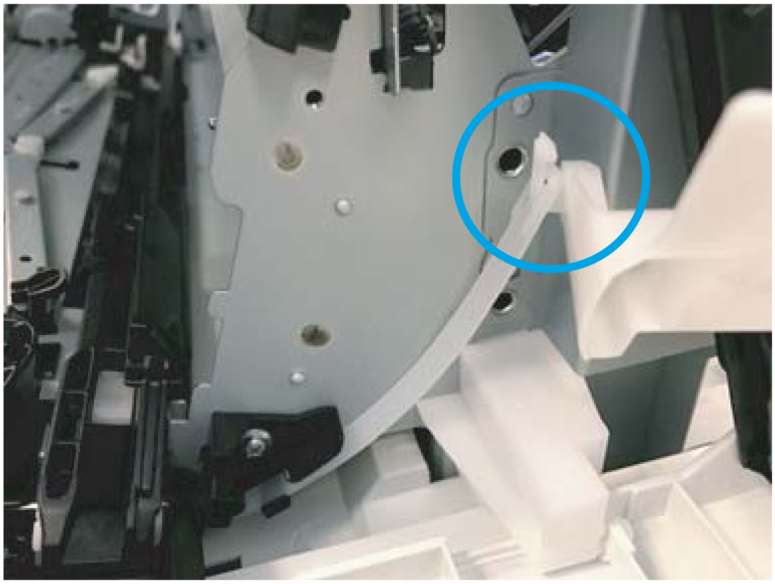
⚠ CAUTION: The door interlocks behind the switch right-side cover are not captive and can be easily dislodged when handling the cover.

1. Carefully separate the switch right-side cover from the printer chassis.

   NOTE: The cover is still attached to the chassis by a strap. Do not attempt to completely remove the cover.

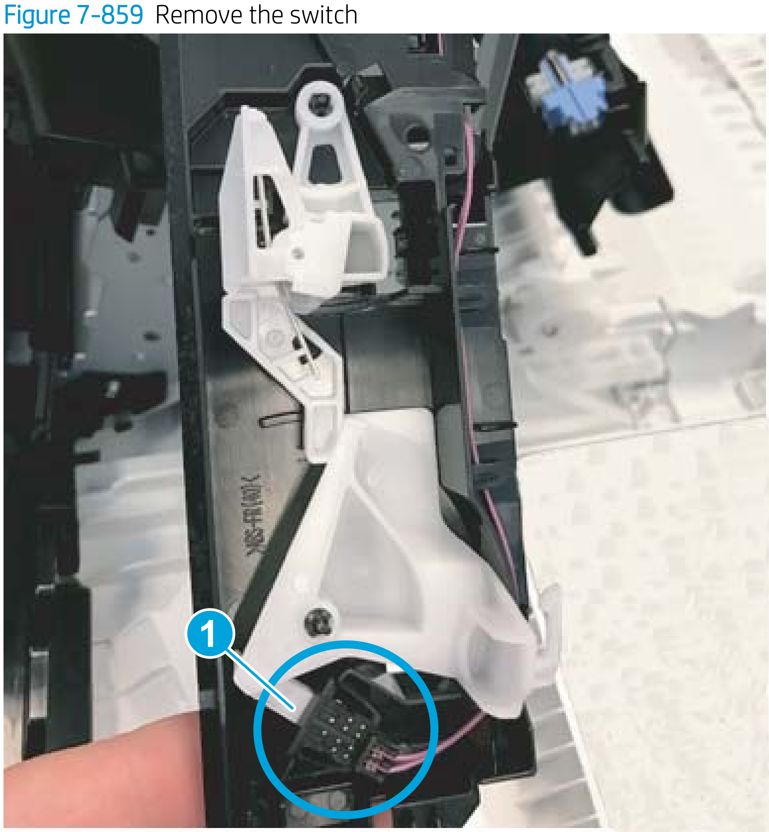
2. Release the white strap (callout 1) from the lower door interlock (behind the switch right-side cover).

Figure 7-858 Release the white strap



4. Disconnect one connector, and then remove the switch (SW4) PC board assembly switch (callout 1).

Figure 7-859 Remove the switch



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Stapler unit (M577/M578/E57540 stapler models)

Learn about removing and replacing the stapler unit.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-57 Part information

Part number	Part description
B5L46-60102	Stapler unit

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Use the convenience stapler to staple two pages together.

Remove the staple cartridge

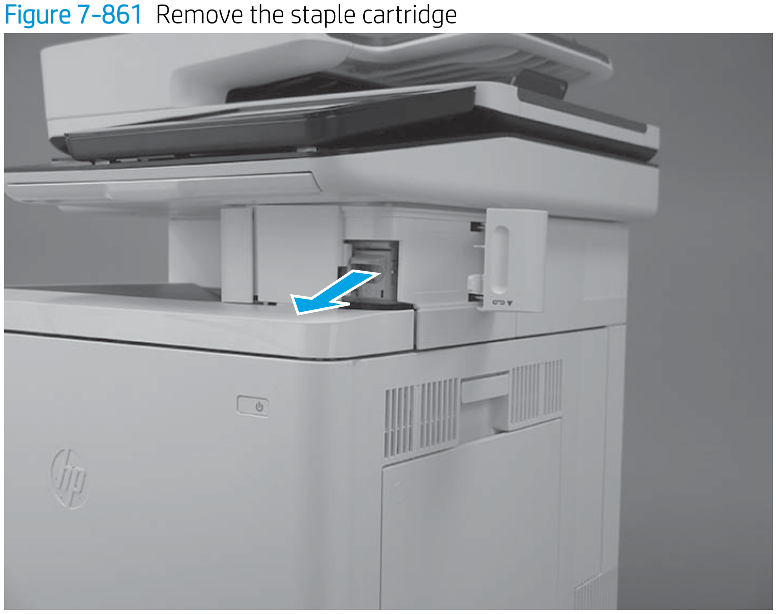
Follow these steps to remove the staple cartridge.

1. Open the stapler door.

Figure 7-860 Open the stapler door

2. Pull the staple cartridge straight out of the printer to remove it.

Figure 7-861 Remove the staple cartridge



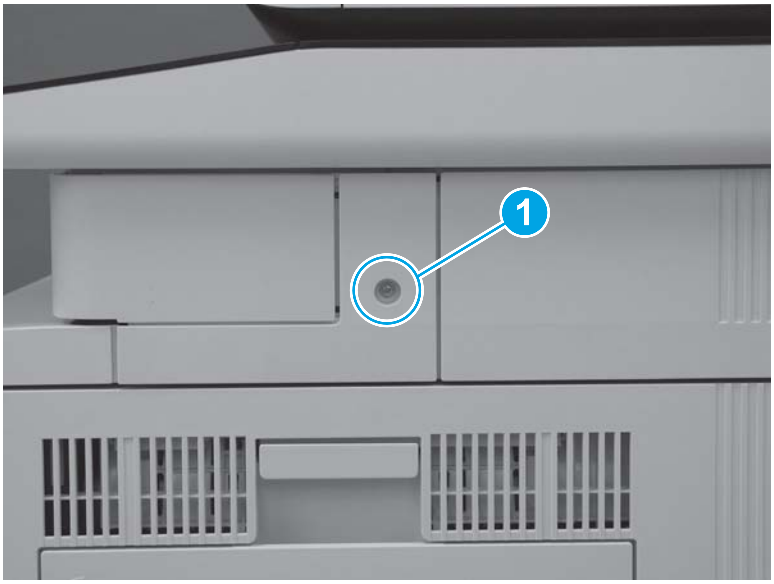
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

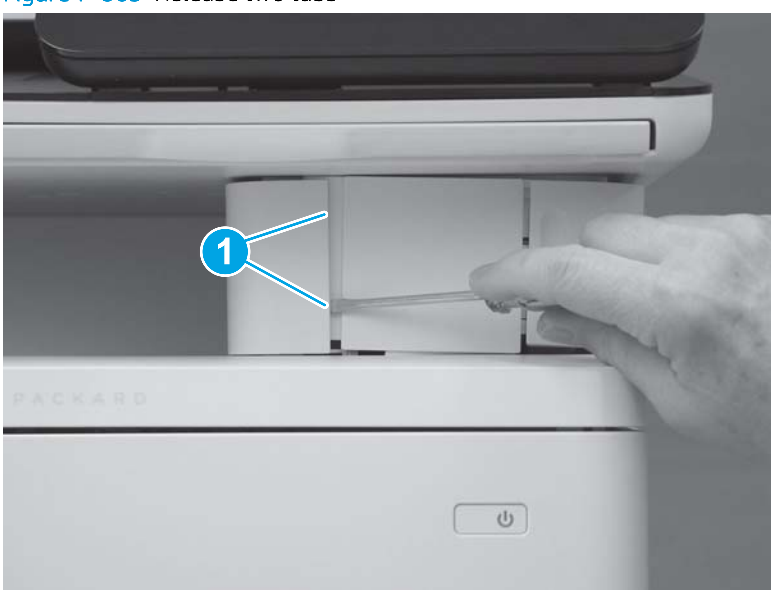
1. Remove one screw (callout 1).

Figure 7-862 Remove one screw



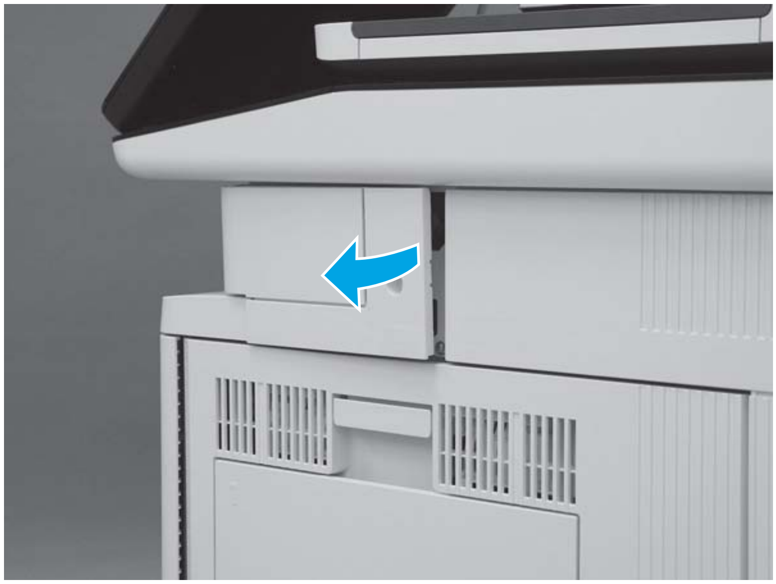
2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-863 Release two tabs



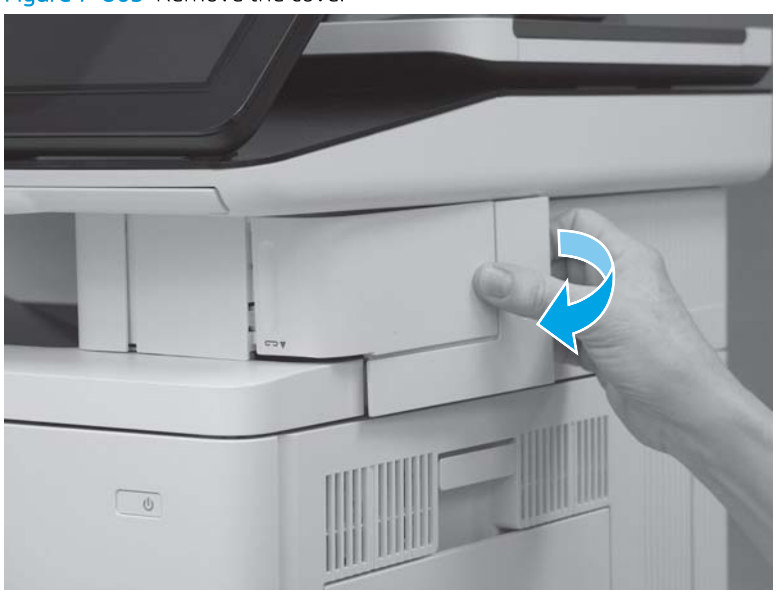
3. Release the back edge of the cover.

Figure 7-864 Release the back edge of the cover



4. Rotate the cover away from the printer to remove it.

Figure 7-865 Remove the cover



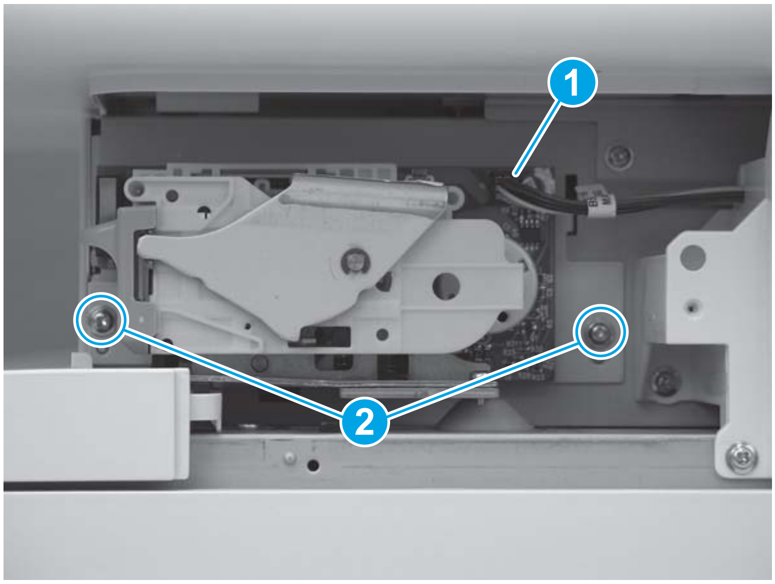
Remove the stapler unit (MFP stapler models)

Follow these steps to remove the stapler unit.

NOTE: This step is for stapler models only.

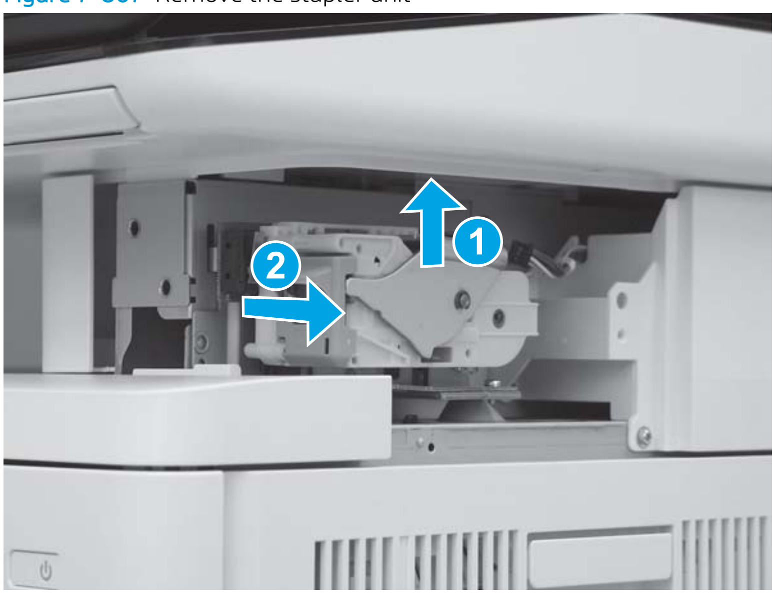
1. Disconnect one connector (callout 1), and then remove two screws (callout 2).

Figure 7-866 Disconnect connector and remove screws



2. Slide the stapler unit up (callout 1), and then pull it away from the printer (callout 2) to remove it.

Figure 7-867 Remove the stapler unit



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: DC controller (DCC)

This document provides the procedures to remove and replace the DC controller (DCC).

[View a video demonstration of removing and replacing the DC controller.](#)

Mean time to repair: 30 minutes

Service level: Intermediate

Before performing service

Turn the printer power off

- Disconnect the power cable.

  WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

IMPORTANT: Do not replace the formatter, DC controller, and eMMC PCA or hard-disk drive simultaneously during a single printer servicing. Doing so might cause the printer to become unstable or inoperable.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-58 Part information

Part number	Part description
RM3-7458-000CN	DC controller (M552, M553, E55040)
RM3-7459-000CN	DC controller (M577, E57540)
RM3-8465-000CN	DC controller (M554, M555)
RM3-8468-000CN	DC controller (M578)

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Make sure that all of the connectors on the DC controller are fully seated.

Make sure that the formatter cover is fully seated, and that the thumbscrews are finger tight after replacing it.

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

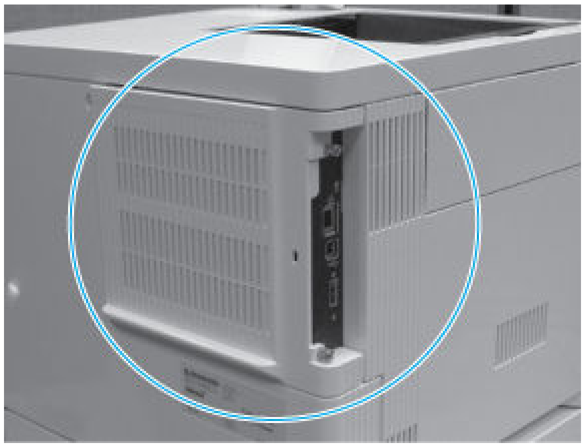
Print a configuration page to make sure that the printer is functioning correctly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

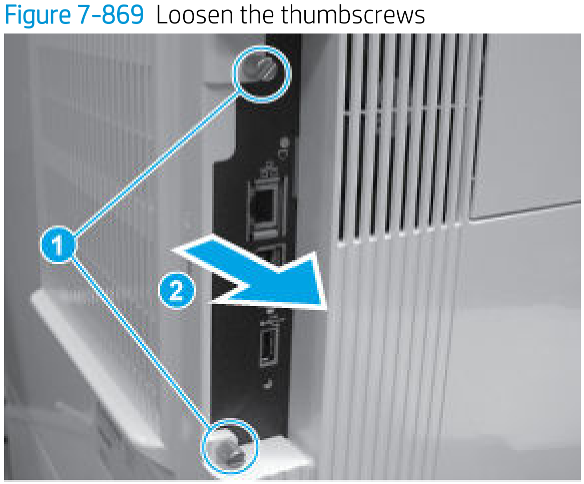
Figure 7-868 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-869 Loosen the thumbscrews



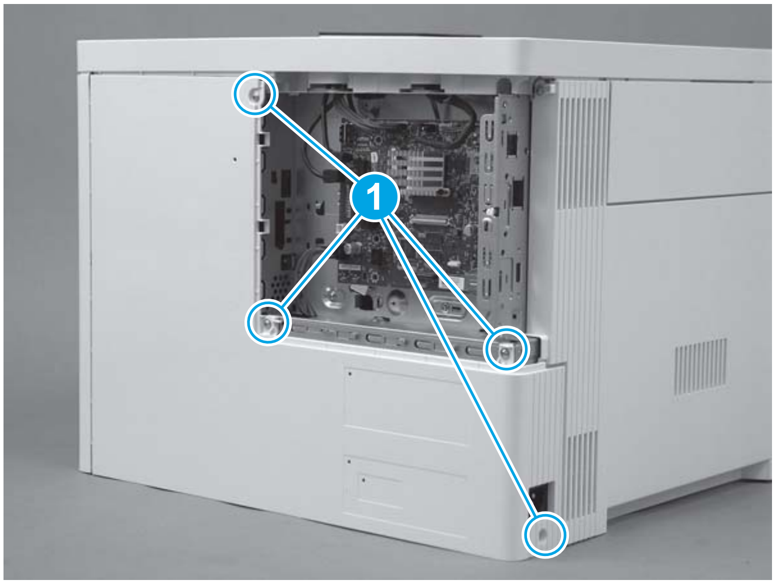
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

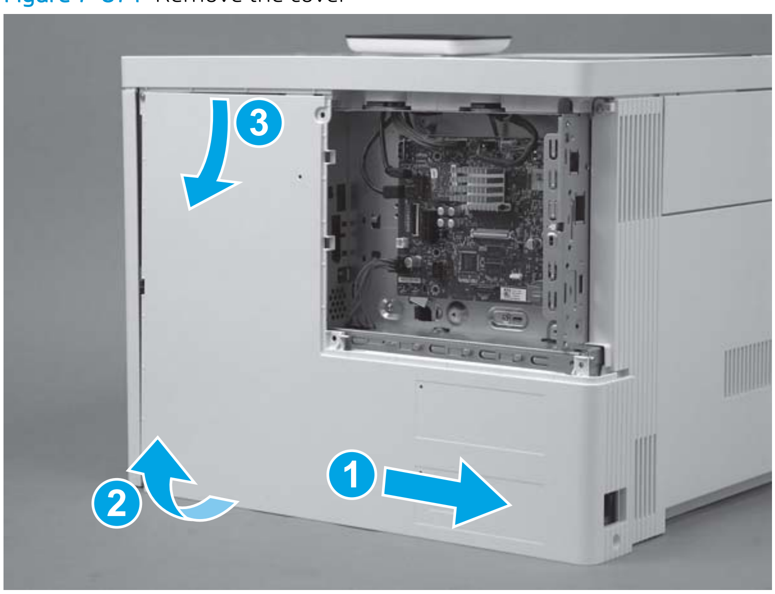
1. Remove four screws (callout 1).

Figure 7-870 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-871 Remove the cover



Remove the rear upper cover (MFP)

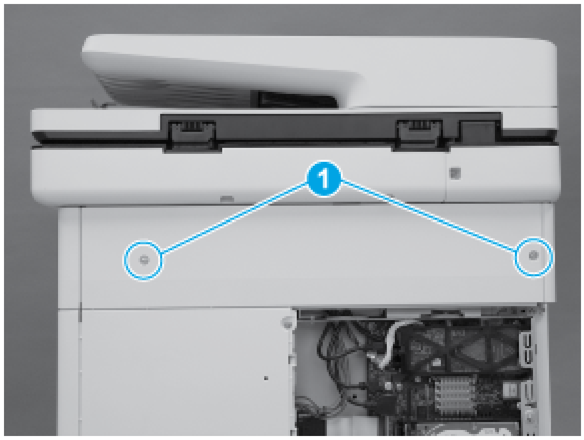
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

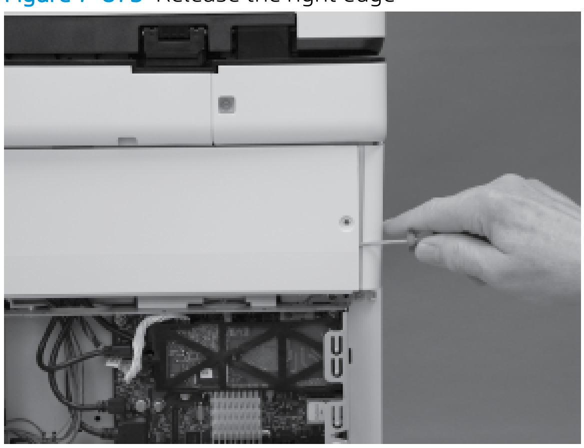
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-872 Remove two screws



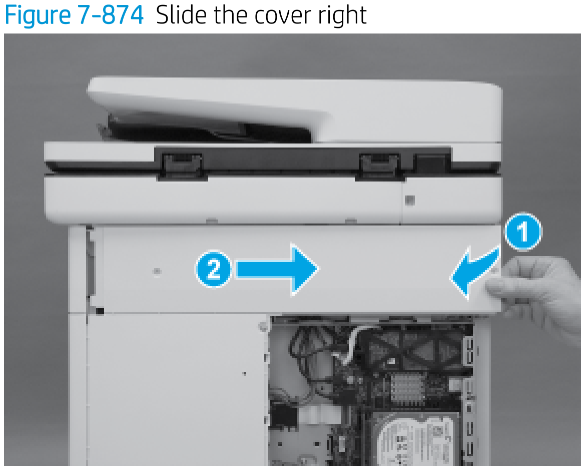
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-873 Release the right edge



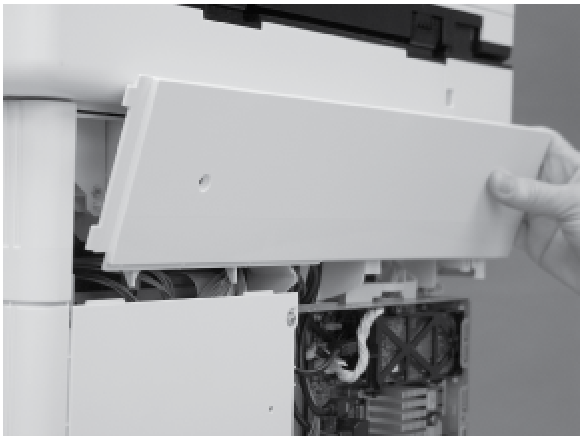
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-874 Slide the cover right



4. Remove the cover.

Figure 7-875 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-876 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-877 Remove the cover

Remove the DC controller

Follow these steps to remove the DC controller.

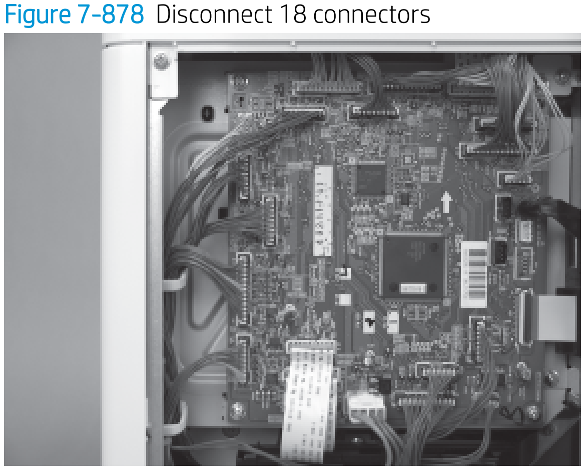
1. Disconnect 18 connectors on the DC controller. The flat cables will be disconnected in the next step.

   The following connectors are empty:

   - J140, J141, and J143

> Reinstallation tip: **For DCC replacement installation**: Refer to the installation guide included in the box with a replacement DC controller. Because of manufacturing changes, there is an additional connector that must be connected or terminated depending on printer model.

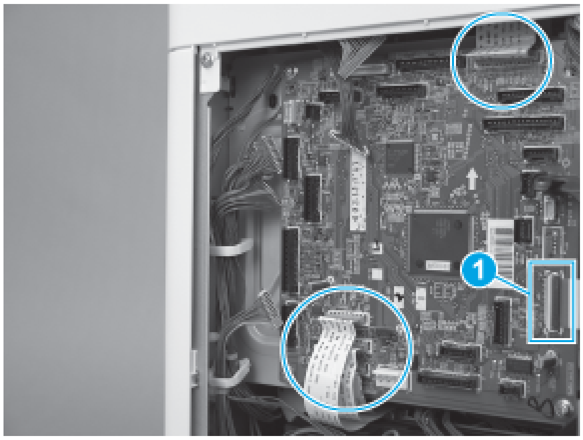
Figure 7-878 Disconnect 18 connectors



2. Disconnect five flat cables.

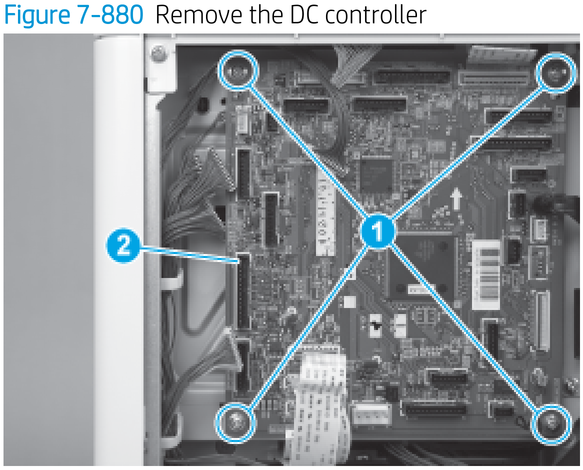
IMPORTANT: One of the flat-cable connectors (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-879 Disconnect the flat cables



3. Remove four screws (callout 1), and then remove the DC controller (callout 2).

Figure 7-880 Remove the DC controller



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Delivery assembly

Learn about removing and replacing the delivery assembly.

Before performing service

Turn the printer power off

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-59 Part information

Part number	Part description
RM2-0092-000CN	Paper delivery assembly (M553n)
RM2-0016-000CN	Paper delivery assembly (M552dn, M553dn, M553x, M554, M555, E55040dw, E55040dn, M577, M578, E57540)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

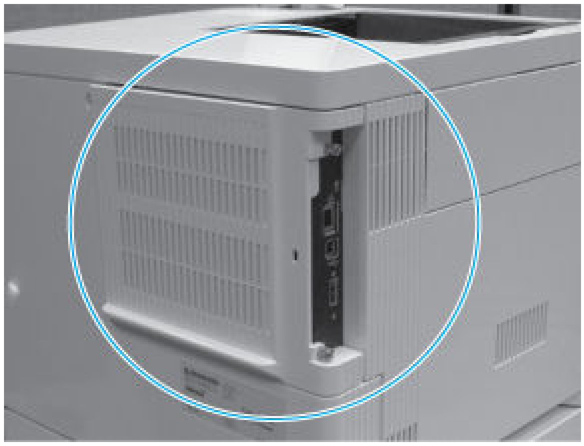
Print any pages necessary to make sure the printer is functioning correctly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

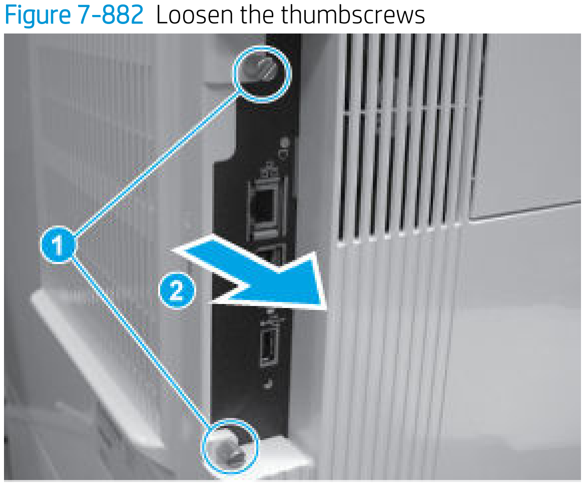
Figure 7-881 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-882 Loosen the thumbscrews



Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-883 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-884 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

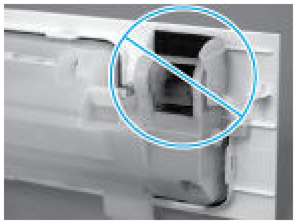
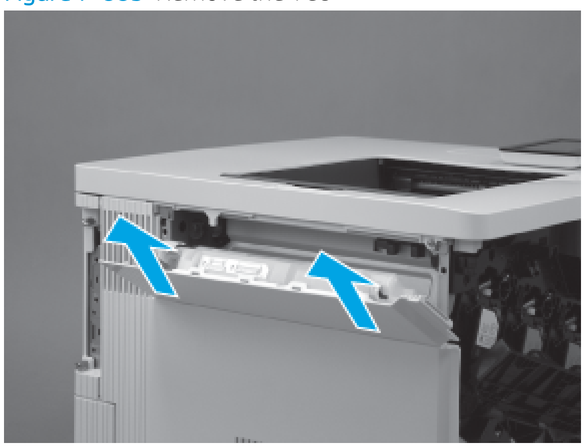
> ⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.
>
> 

Figure 7-885 Remove the TCU



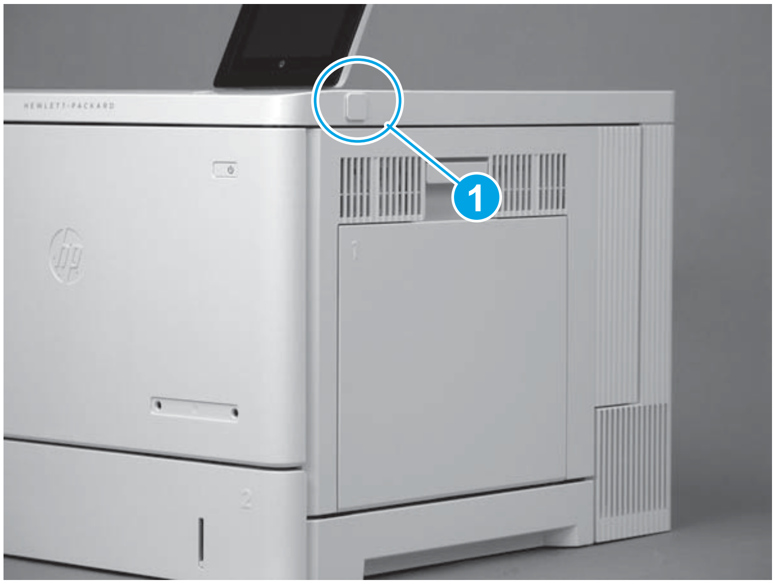
Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

> NOTE: This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-886 Locate the USB cover



2. Pull the cover off of the printer to remove it.

Figure 7-887 Remove the cover

Remove the fuser

Follow these steps to remove the fuser.

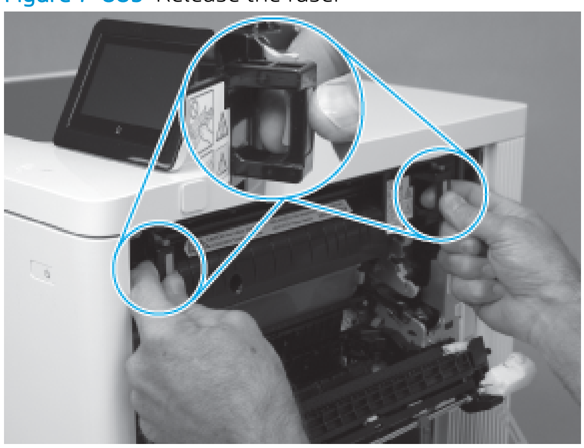
1. Open the right door.

> ⚠ CAUTION: The fuser is very hot. After turning the printer power off, allow the fuser to cool for at least 30 minutes before removing it.

Figure 7-888 Open the right door

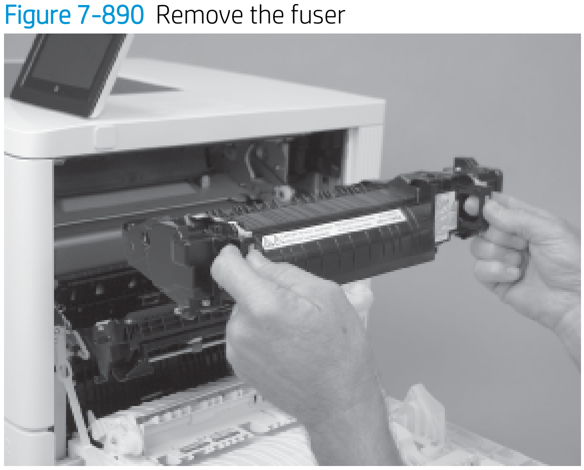
2. Grasp the two fuser handles, and then squeeze the two blue triggers on the handles to release the fuser.

Figure 7-889 Release the fuser



3. Slide the fuser straight out of the printer to remove it.

Figure 7-890 Remove the fuser

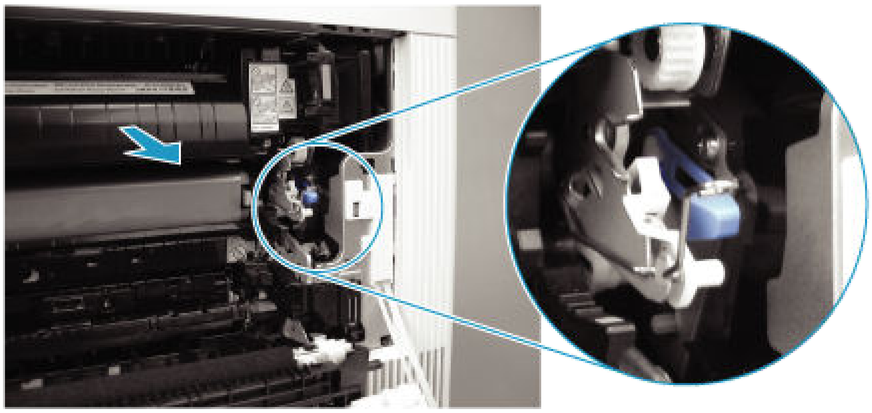


Remove the ITB

Follow these steps to remove the ITB.

1. Pull the blue lever to release the ITB drive coupling.

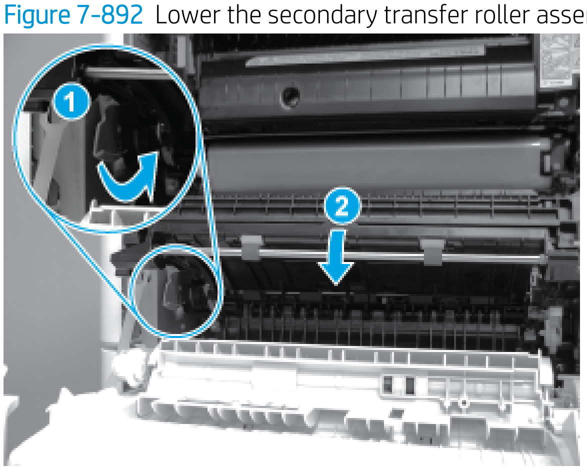
Figure 7-891 Release the ITB drive coupling



2. Push in on the blue arm to release the secondary transfer roller assembly, and then completely lower the assembly.

NOTE: Press the blue arm on the secondary transfer roller assembly a second time to release the roller assembly when it stops at the halfway open position.

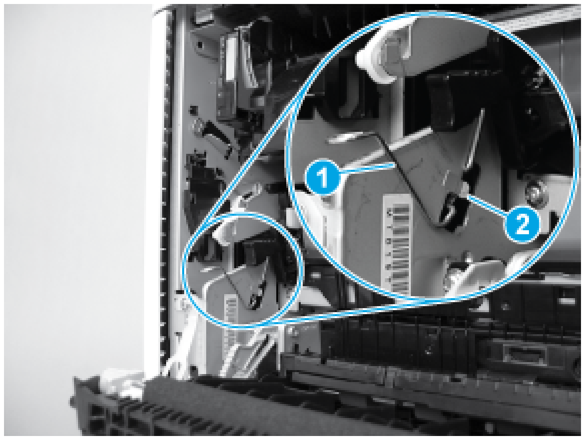
Figure 7-892 Lower the secondary transfer roller assembly



3. Release the left-side ITB spring (callout 1) from the tab (callout 2).

NOTE: For late production M552/M553 printers and all M554/m555 printers, this ITB spring is not installed.

Figure 7-893 Release the front-side ITB spring

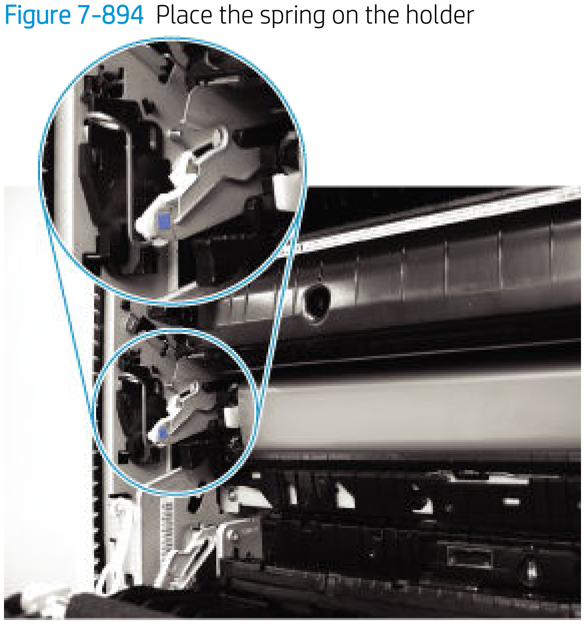


4. Place the left-side ITB spring on the holder to keep it out of the way.

NOTE: For late production M552/M553 printers and all M554/m555 printers, this ITB spring is not installed.

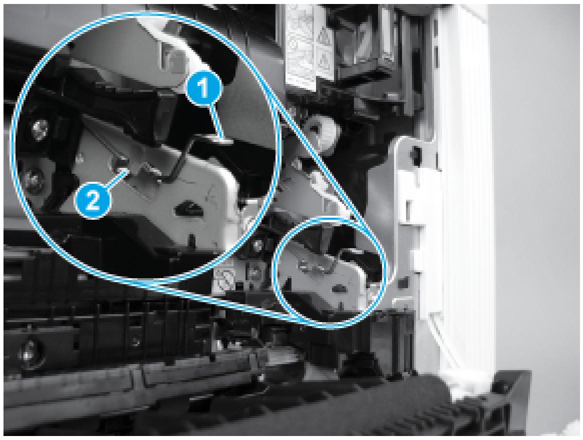
TIP: The holder is colored blue to help locate it.

Figure 7-894 Place the spring on the holder



5. Release the right-side ITB spring (callout 1) from the tab (callout 2).

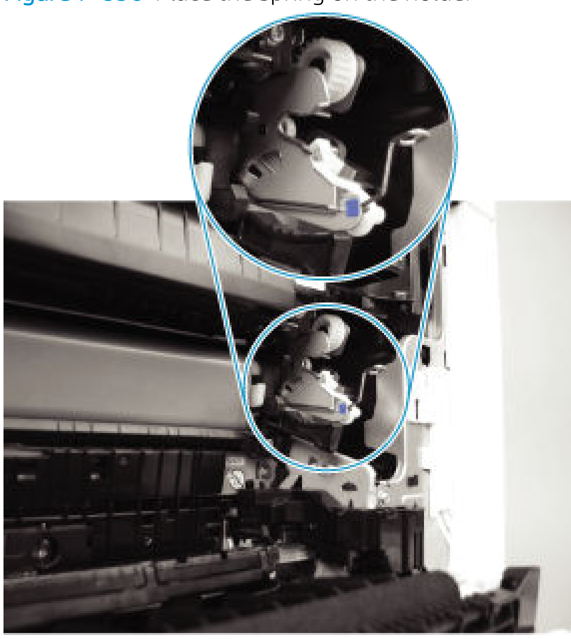
Figure 7-895 Release the rear-side ITB spring



6. Place the right-side ITB spring on the holder to keep it out of the way.

TIP: The holder is colored blue to help locate it.

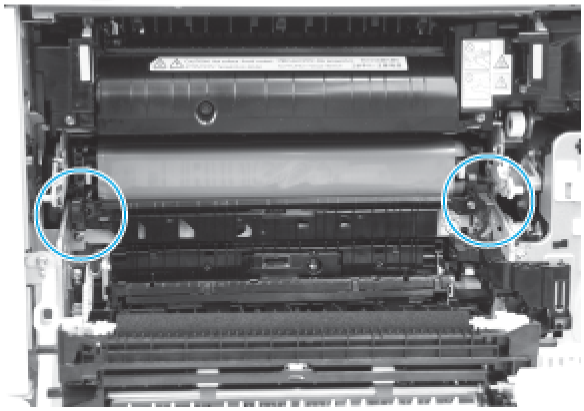
Figure 7-896 Place the spring on the holder



7. Grasp the two blue handles on the ITB.

⚠ CAUTION: If the ITB is removed to access other assemblies in the printer, use care. The ITB is a sensitive assembly. Be careful when handling the ITB so that it is not damaged. Always place the ITB in a safe and protected location.

Figure 7-897 Grasp the ITB handles



8. Pull the ITB out of the printer to remove it.

⚠ CAUTION: Do not touch the grey-plastic belt. Skin oils and fingerprints on the belt can cause print-quality problems.

Figure 7-898 Remove the ITB

Remove the control panel (M553x/M555/E55040)

Follow these steps to remove the control panel.

NOTE: This procedure is for the M553x/M555/E55040 printers only.

M555 models: Removing the control panel is similar to the procedure below. For the M555, a flat cable connects the control panel to the formatter.

1. Tilt the control panel up.

Figure 7-899 Tilt the control panel up

2. Use the small flat-blade screwdriver supplied in this kit to release the control-panel screws cover tabs.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-900 Release the control-panel screws cover tabs

3. Rotate the cover up to remove it.

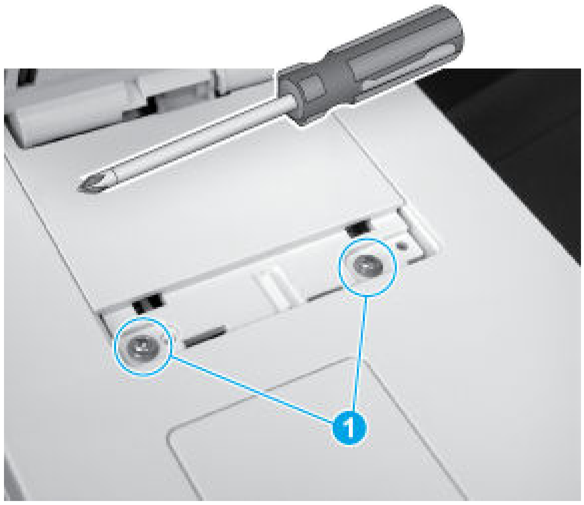
Figure 7-901 Remove the cover

4. Use the small Phillips screwdriver supplied in this kit to remove two screws (callout 1).

IMPORTANT: Store the screws in a secure place where they cannot fall down into the printer.

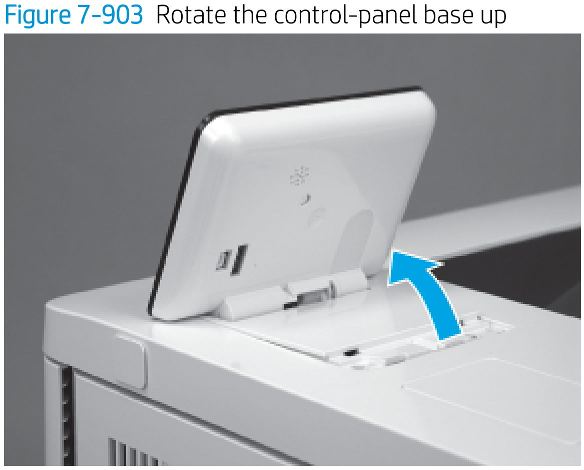
TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-902 Remove two screws



5. Rotate the control-panel base toward the front of the printer.

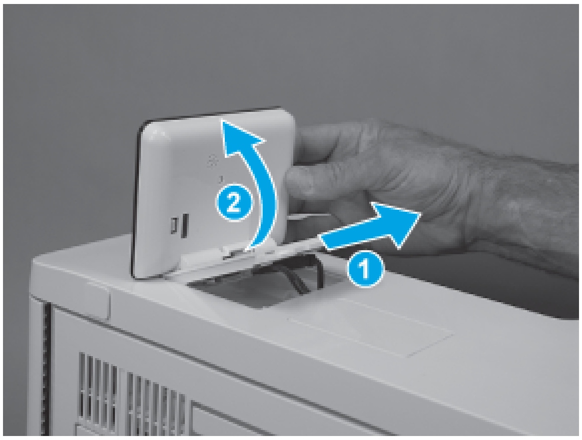
Figure 7-903 Rotate the control-panel base up



6. Slightly slide the control-panel base toward the rear of the printer (callout 1) to release it, and then turn the control panel over (callout 2) to access the bottom side.

CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

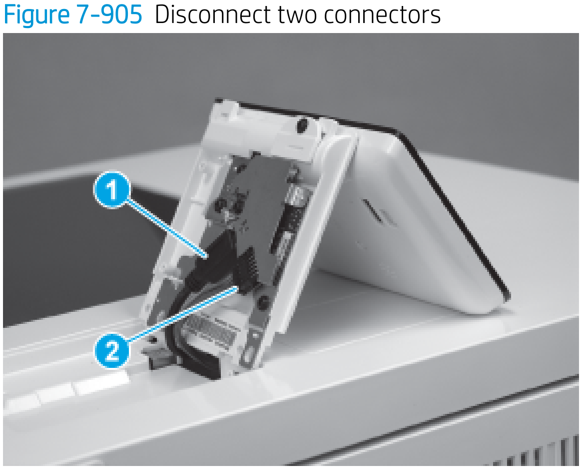
Figure 7-904 Turn the control panel over



7. Disconnect one USB cable (callout 1), one connector (callout 2), and then remove the control panel.

NOTE: **M555 only**: Disconnect one flat cable (not shown), and then remove the control panel.

Figure 7-905 Disconnect two connectors



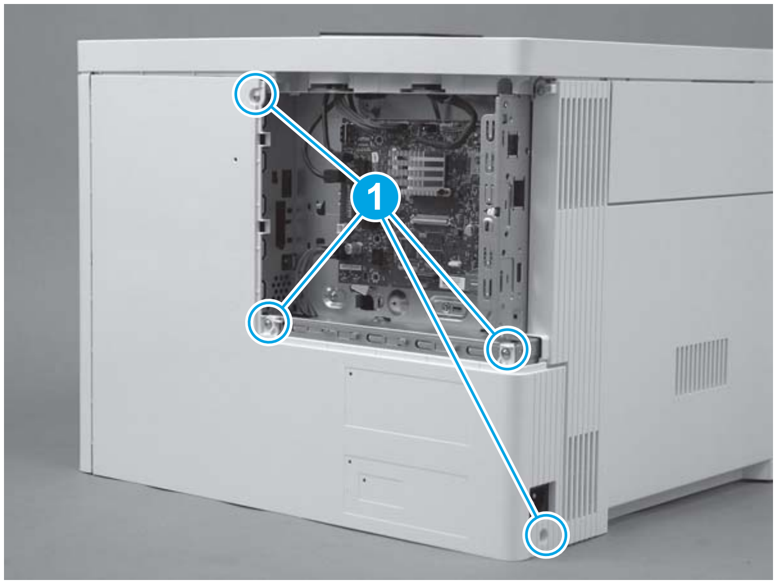
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

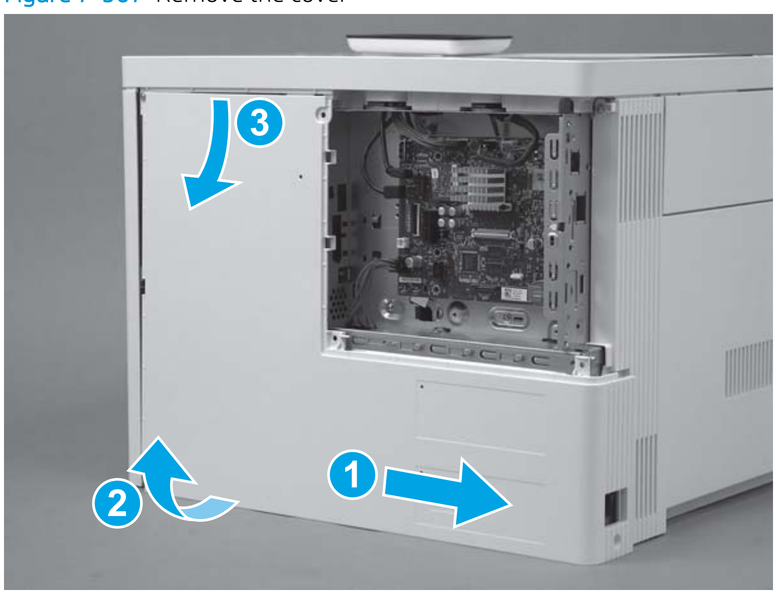
1. Remove four screws (callout 1).

Figure 7-906 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-907 Remove the cover



Remove the left cover

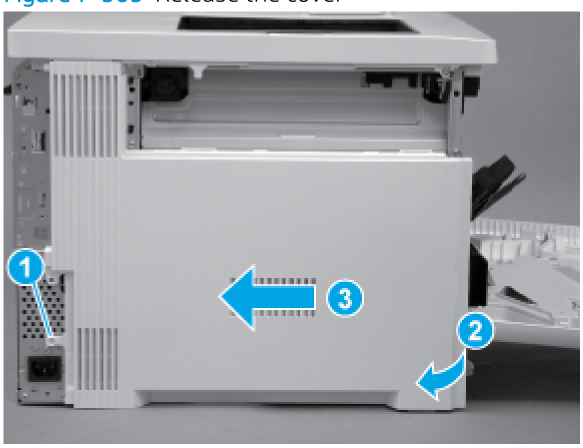
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-908 Remove one screw

2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-909 Release the cover



3. Remove the cover.

Figure 7-910 Remove the cover

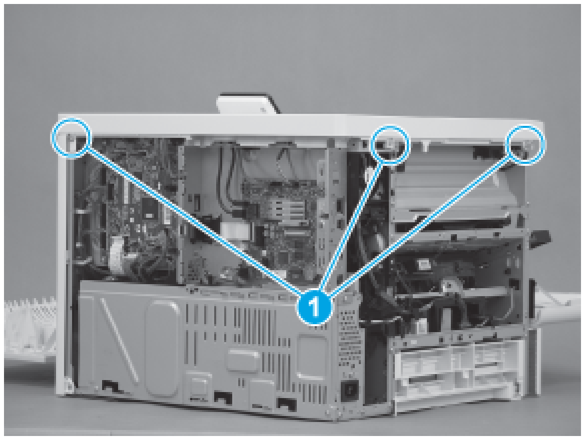
Remove the upper cover (SFP)

Follow these steps to remove the upper cover.

NOTE: This procedure is for SFP models only.

1. Remove three screws (callout 1).

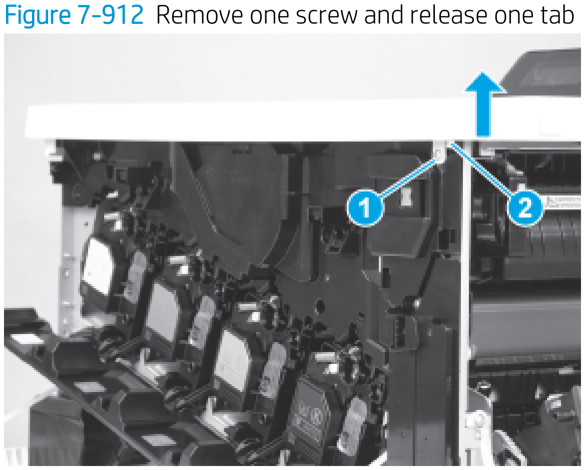
Figure 7-911 Remove three screws



2. Remove one screw (callout 1), release one tab (callout 2), and then slightly separate the corner of the cover from the chassis.

NOTE: This is a self-tapping plastic-thread screw. Make sure that this screw is used in this location when it is reinstalled.

Figure 7-912 Remove one screw and release one tab

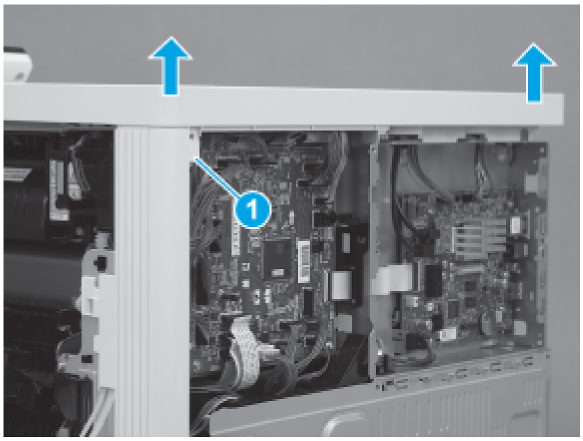


3. Release one tab (callout 1), and then lift up on the cover to release it.

IMPORTANT: **M554 models**: Disconnect the control-panel flat cable at the formatter.

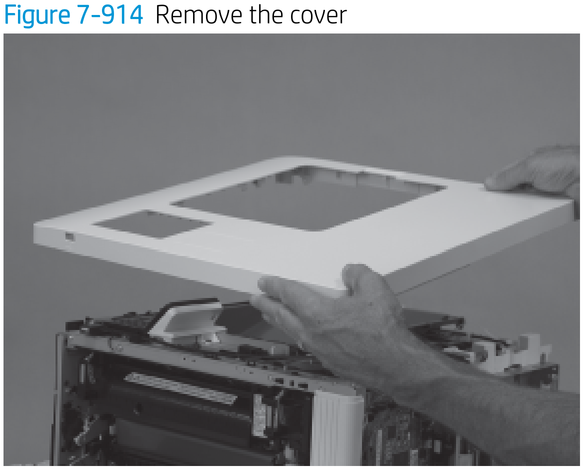
NOTE: If the cover does not release, check for addition tabs by locating the triangles embossed in the cover at tab locations.

Figure 7-913 Release the cover



4. Remove the cover.

Figure 7-914 Remove the cover



Remove the control panel

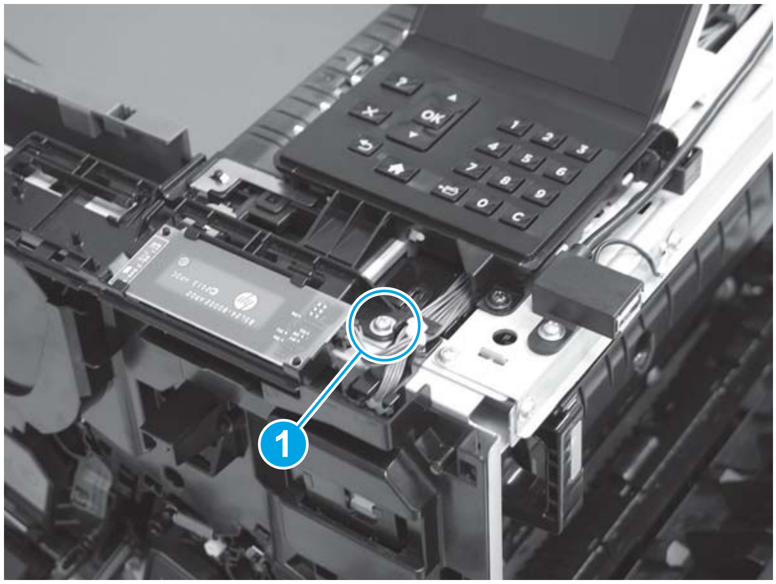
Follow these steps to remove the control panel.

NOTE: This procedure is for the M552dn/M553n/dn/M554 printers only.

The figures in this procedure show the M552/M553 printer. The M554 control panel looks slightly different than shown below. However, removing the control panel is similar to the following procedure.

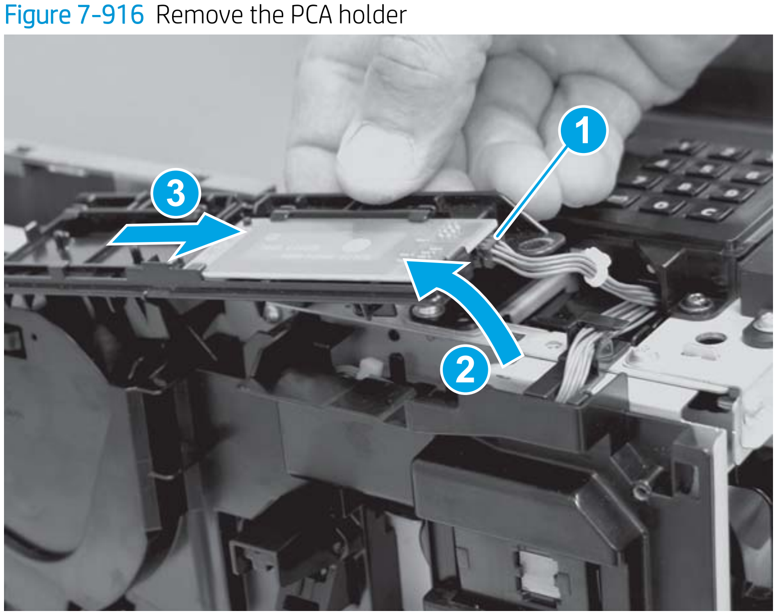
1. Remove one screw (callout 1).

Figure 7-915 Remove one screw



2. **M552/M553**: Disconnect one connector (callout 1). Rotate the near field communication (NFC) PCA holder up (callout 2), and then slide it to the right (callout 3) to remove it.

Figure 7-916 Remove the PCA holder



3. M552/M553: Remove one cable from the guide.

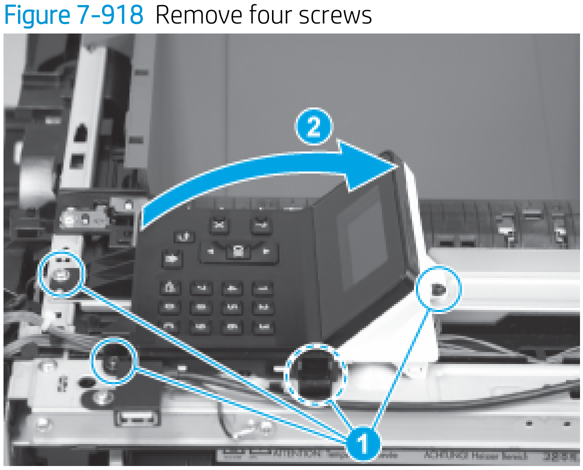
Figure 7-917 Remove one cable

4. M552/M553: Remove four screws (callout 1), and then turn the control panel over (callout 2).

NOTE: M554: Remove any screws fastening the assembly to the printer chassis, and then turn the control panel over (callout 2) to access the bottom side.

CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

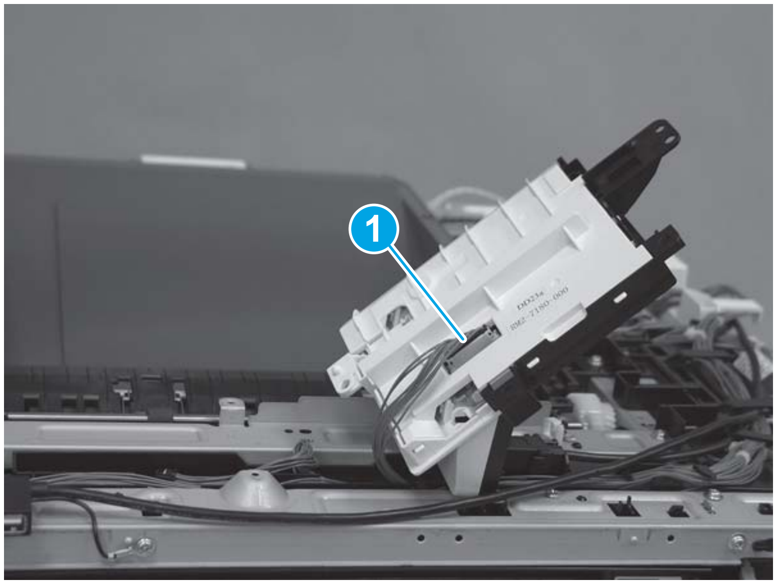
Figure 7-918 Remove four screws



5. **M552/M553**: Disconnect one connector (callout 1), and then remove the control panel.

NOTE: **M554**: Disconnect one flat cable, and then remove the control panel.

Figure 7-919 Remove the control panel



Remove the rear upper cover (MFP)

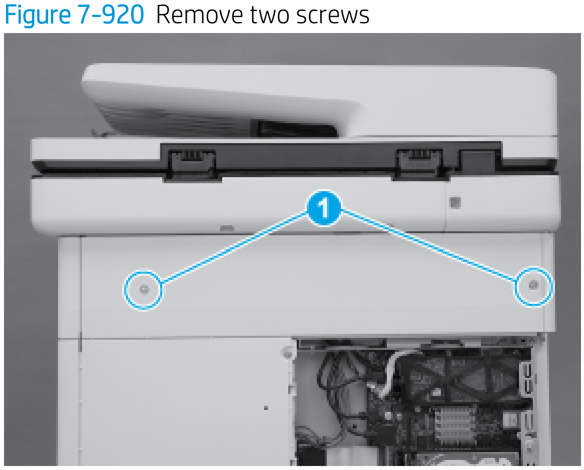
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

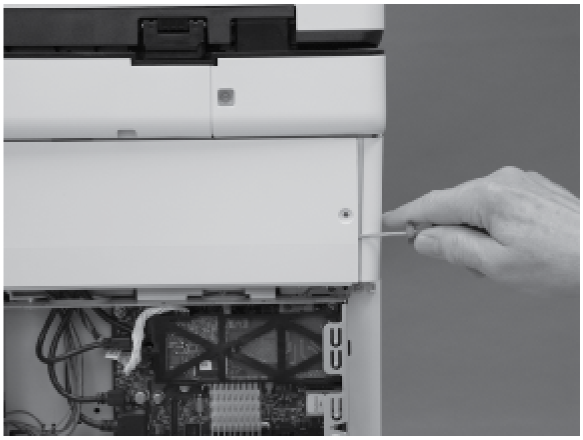
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-920 Remove two screws



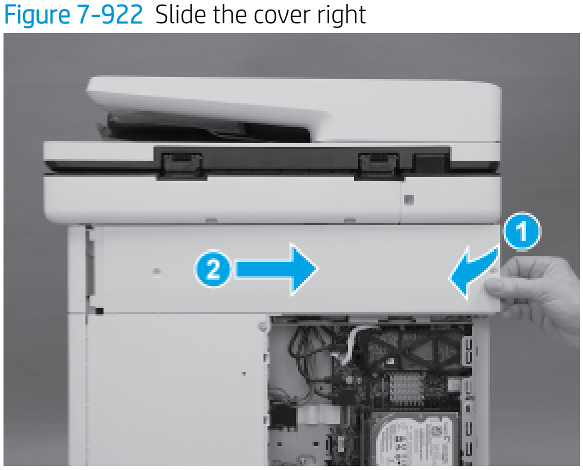
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-921 Release the right edge



3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-922 Slide the cover right



4. Remove the cover.

Figure 7-923 Remove the cover

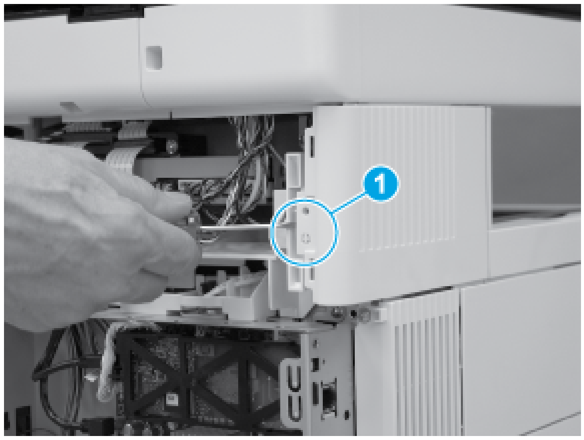
Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

NOTE: This procedure is for MFP models only.

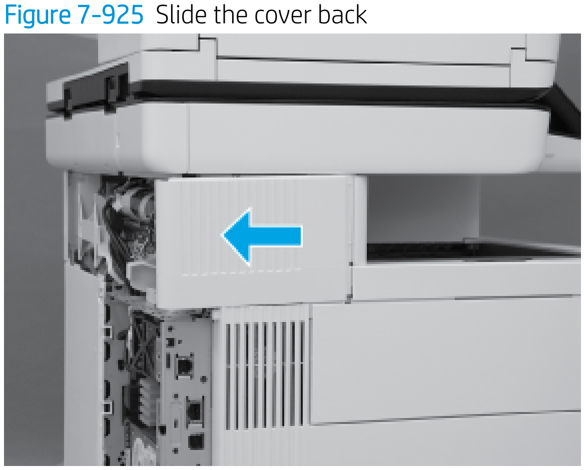
1. At the left side of the printer, release one tab (callout 1).

Figure 7-924 Release one tab



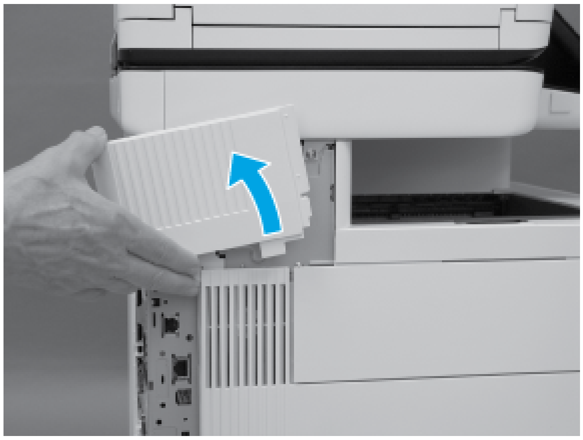
2. Slide the left upper cover toward the back of the printer.

Figure 7-925 Slide the cover back



3. Rotate the cover up to remove it.

Figure 7-926 Remove the left upper cover



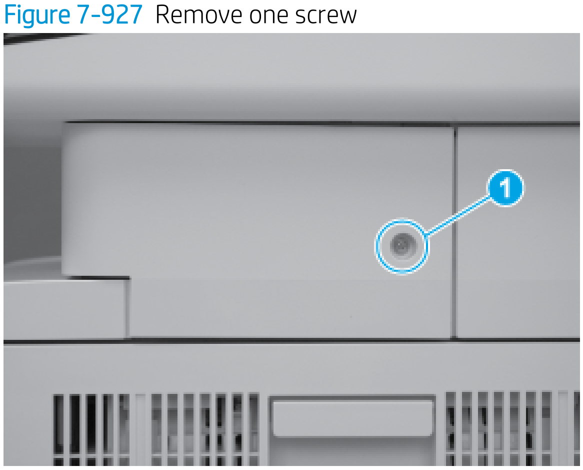
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-927 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-928 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-929 Rotate the cover

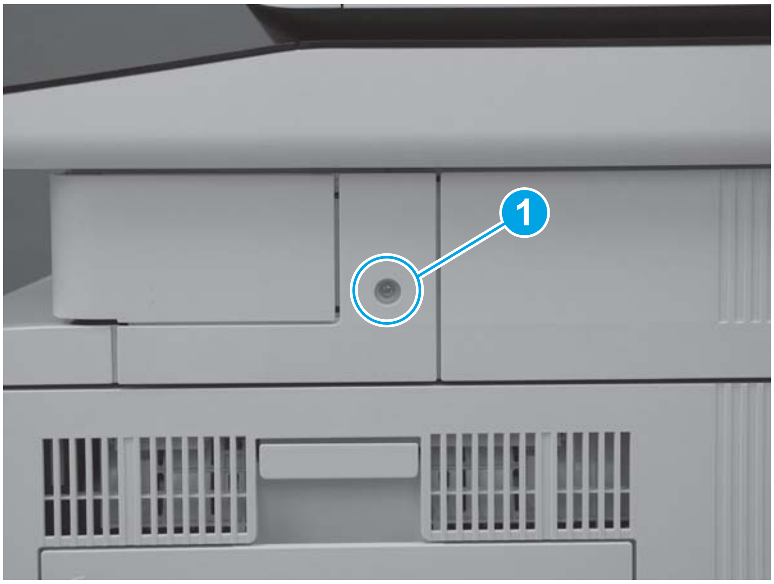
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

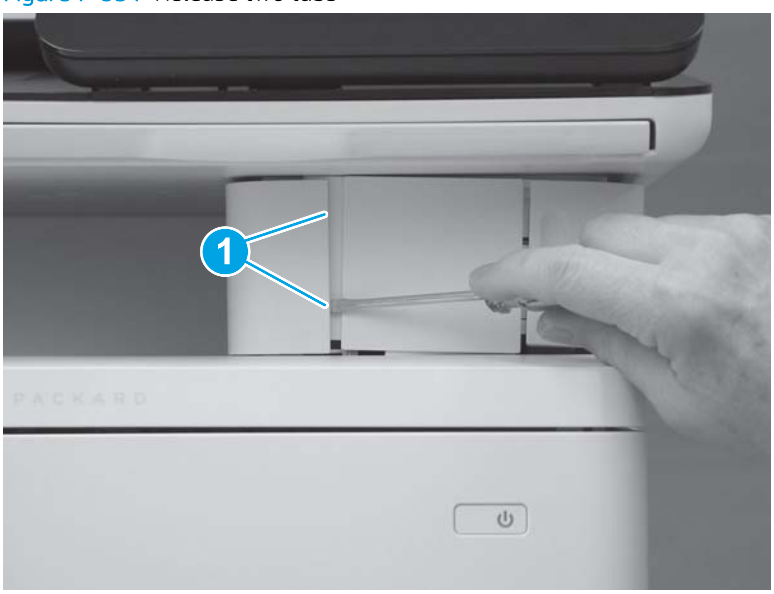
1. Remove one screw (callout 1).

Figure 7-930 Remove one screw



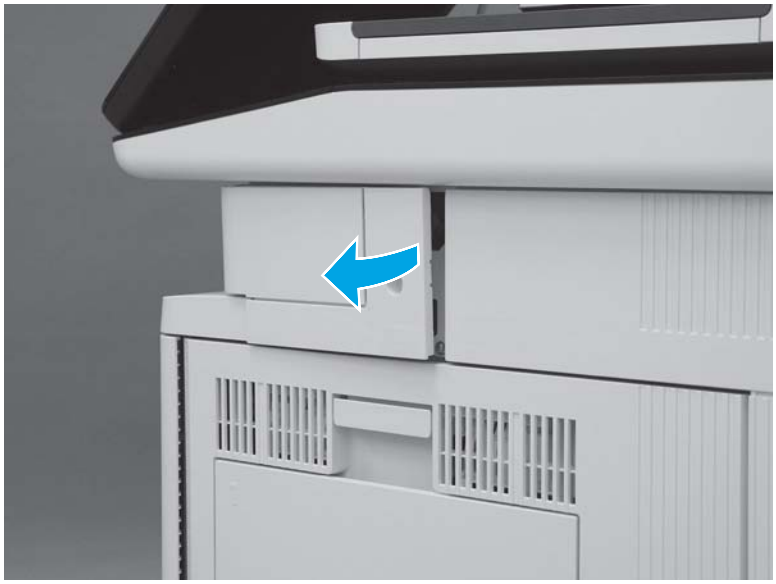
2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-931 Release two tabs



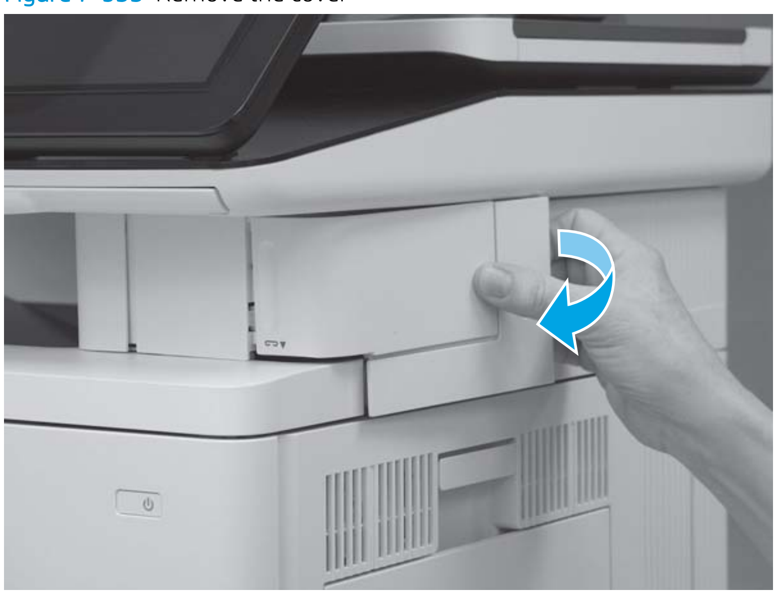
3. Release the back edge of the cover.

Figure 7-932 Release the back edge of the cover



4. Rotate the cover away from the printer to remove it.

Figure 7-933 Remove the cover



Remove the integrated scanner assembly (ISA) (MFP)

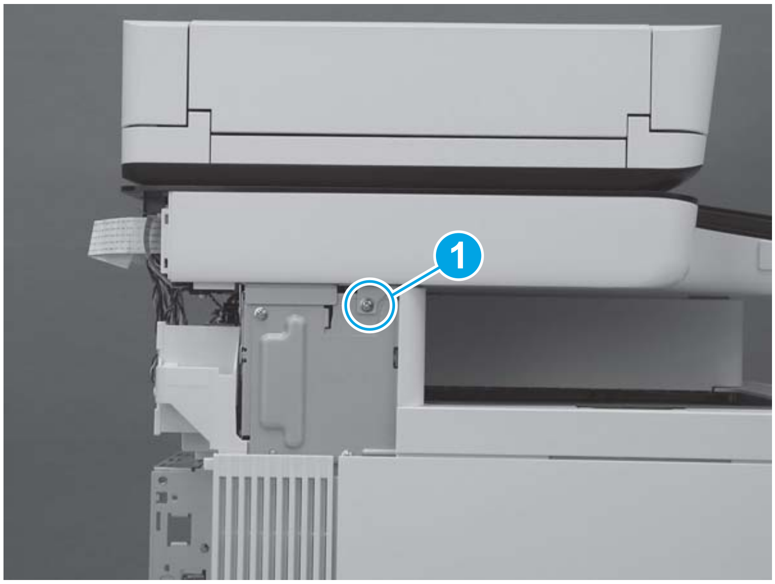
Follow these steps to remove the integrated scanner assembly (ISA).

NOTE: This procedure is for MFP models only.

NOTE: The ISA includes the document feeder, image scanner, scanner control board (SCB), control panel, keyboard (flow models) and NFC PCA (not all models).

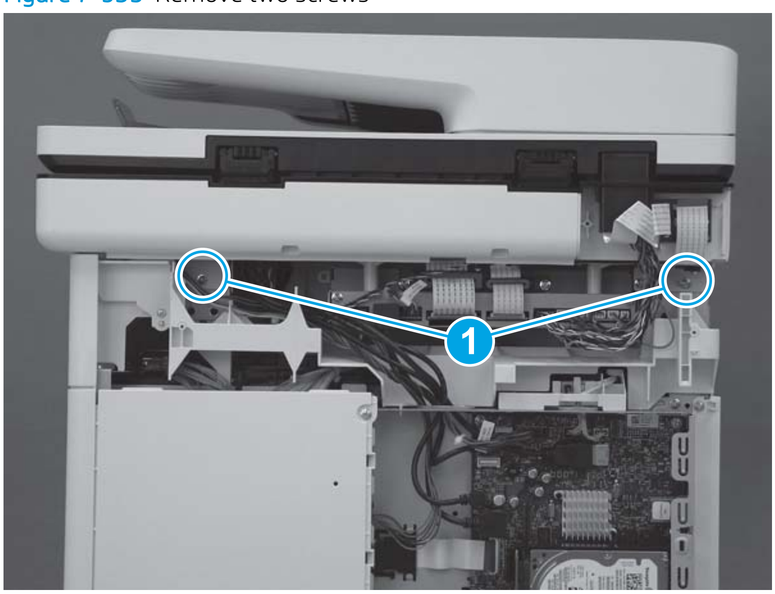
1. At the left side of the printer, remove one screw (callout 1).

Figure 7-934 Remove one screw



2. At the back of the printer, remove two screws (callout 1).

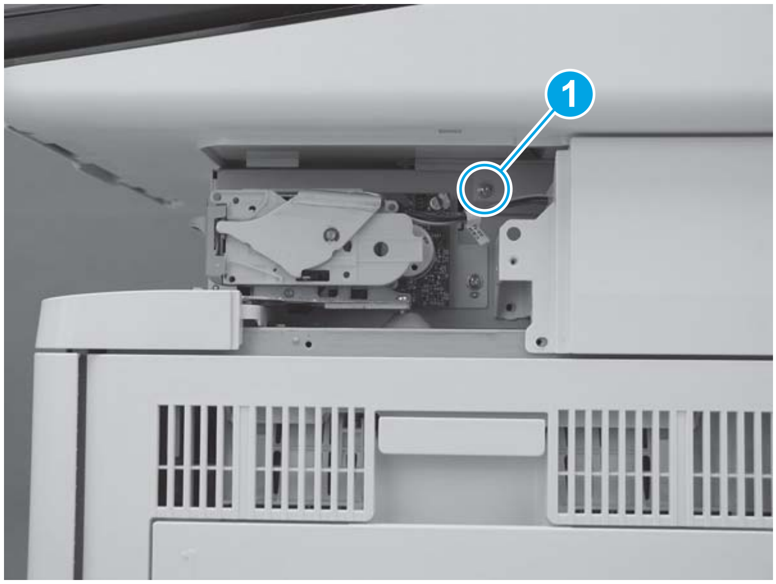
Figure 7-935 Remove two screws



3. At the right side of the printer, remove one screw (callout 1).

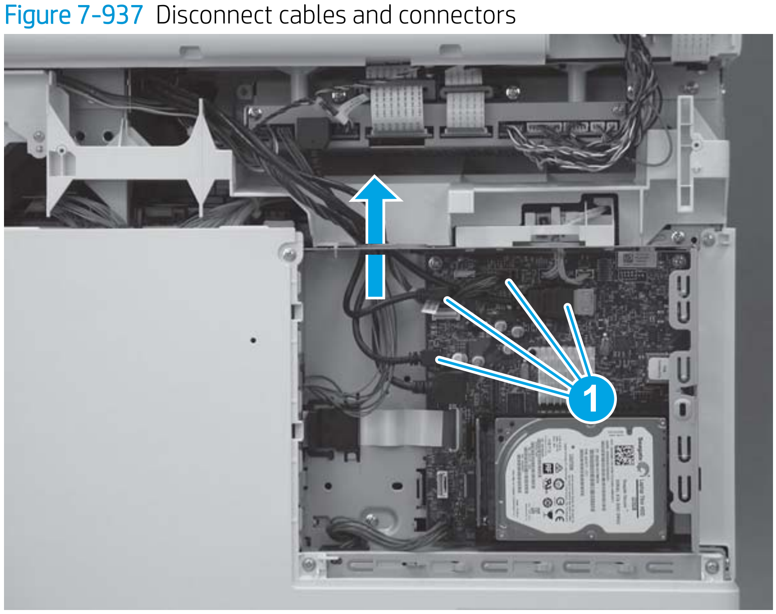
NOTE: The M577z is shown in the figure below. The procedure is correct for all MFP models.

Figure 7-936 Remove one screw



4. Disconnect four connectors (callout 1) on the formatter, and then pass the wire harnesses and cables through the top opening in the formatter case (callout 2).

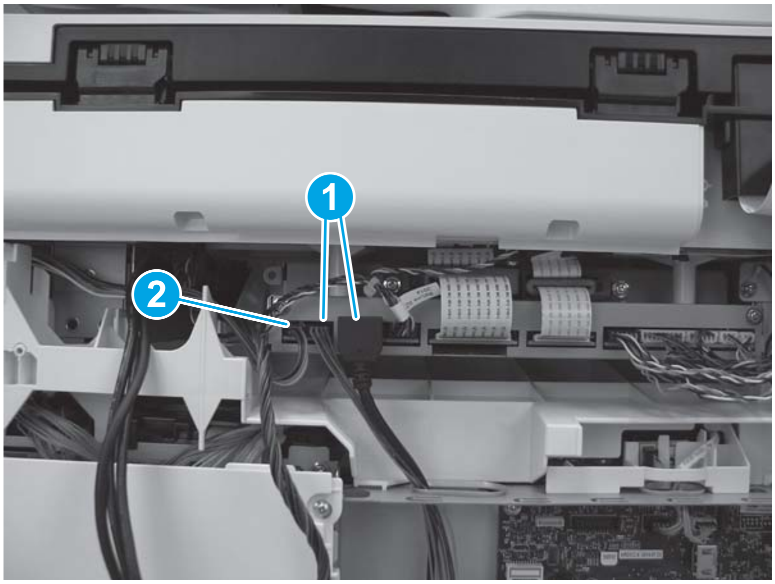
Figure 7-937 Disconnect cables and connectors



5. Disconnect two connectors on the scanner control board (callout 1).

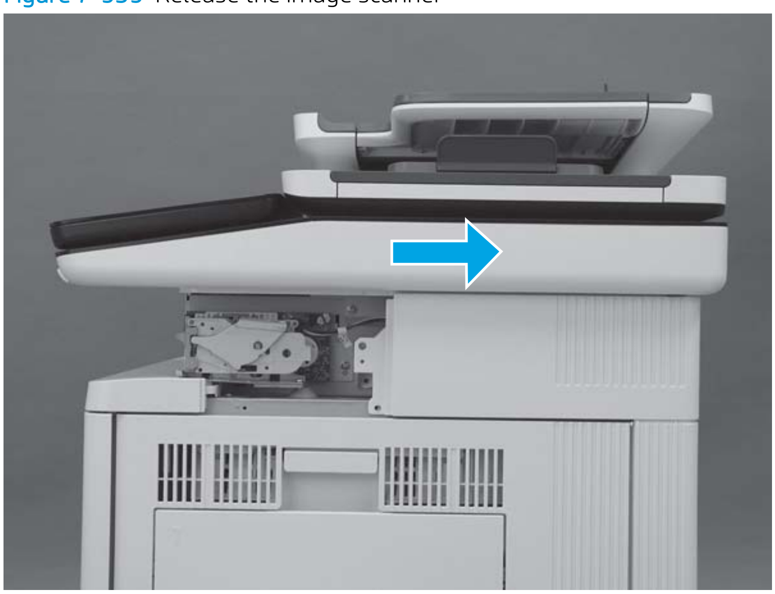
MFP stapler models: Disconnect one connector for the stapler on the scanner control board (callout 2).

Figure 7-938 Disconnect connectors



6. Slide the image scanner toward the back of the printer to release it.

Figure 7-939 Release the image scanner



7. Lift the ISA straight up to remove it.

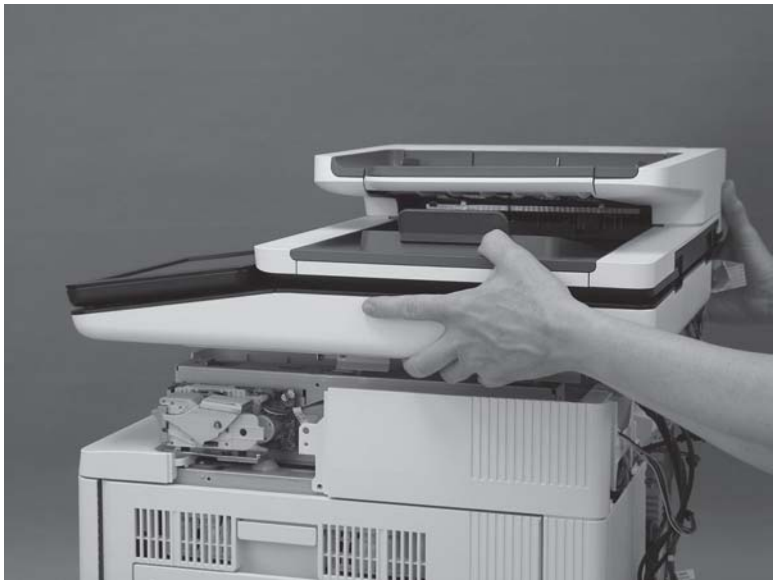


Figure 7-940 Remove the ISA

Remove the stapler unit (MFP stapler models)

Follow these steps to remove the stapler unit.

NOTE: This step is for stapler models only.

1. Disconnect one connector (callout 1), and then remove two screws (callout 2).

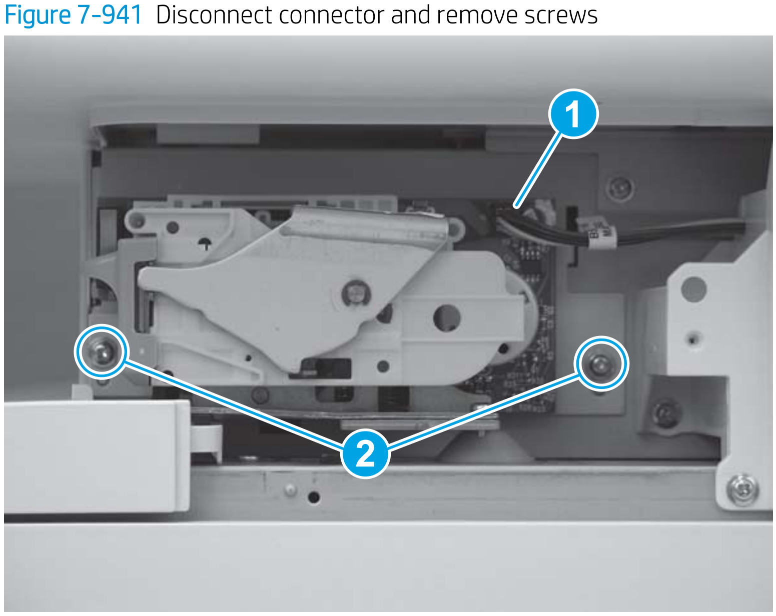
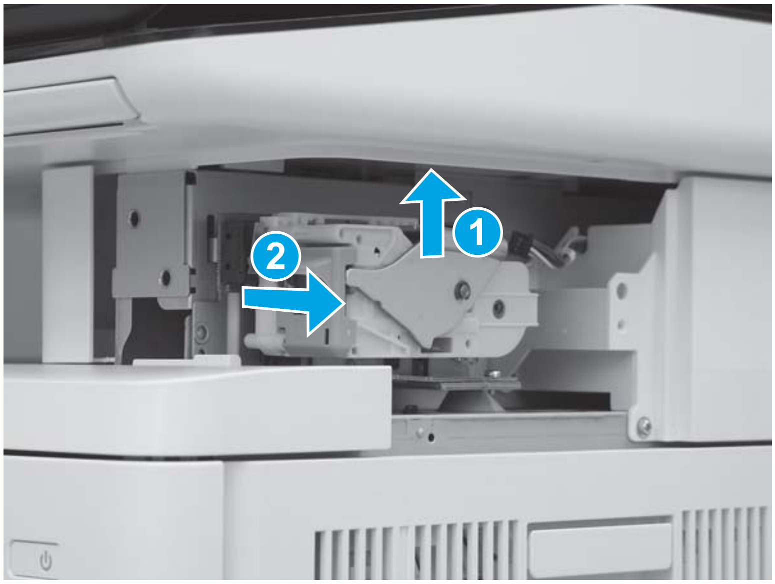


Figure 7-941 Disconnect connector and remove screws

2. Slide the stapler unit up (callout 1), and then pull it away from the printer (callout 2) to remove it.

Figure 7-942 Remove the stapler unit



Remove the right upper cover (MFP)

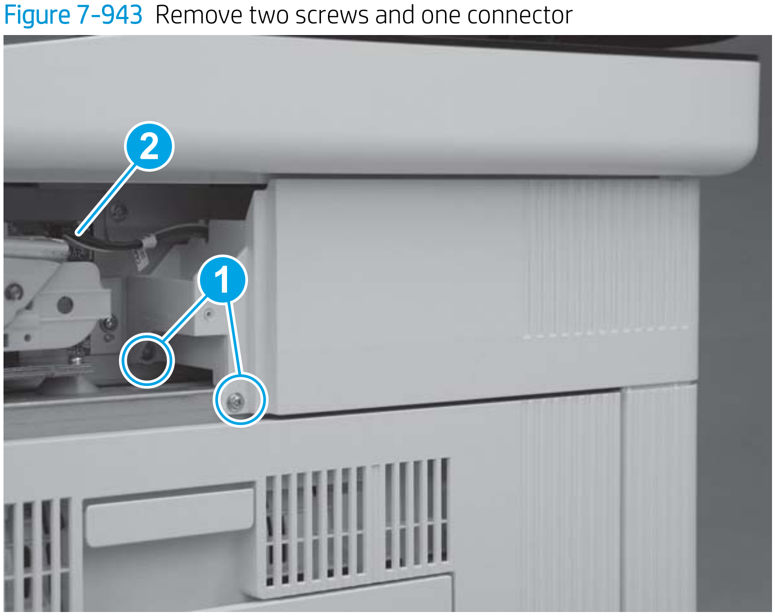
Follow these steps to remove the right upper cover.

NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Figure 7-943 Remove two screws and one connector

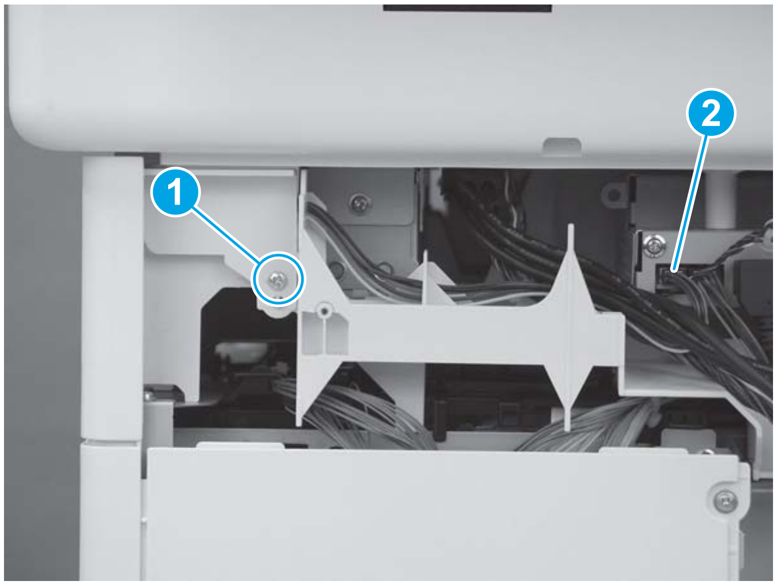


2. At the back of the printer, remove one screw (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Reinstallation tip: This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

   Figure 7-944 Remove one screw and connector



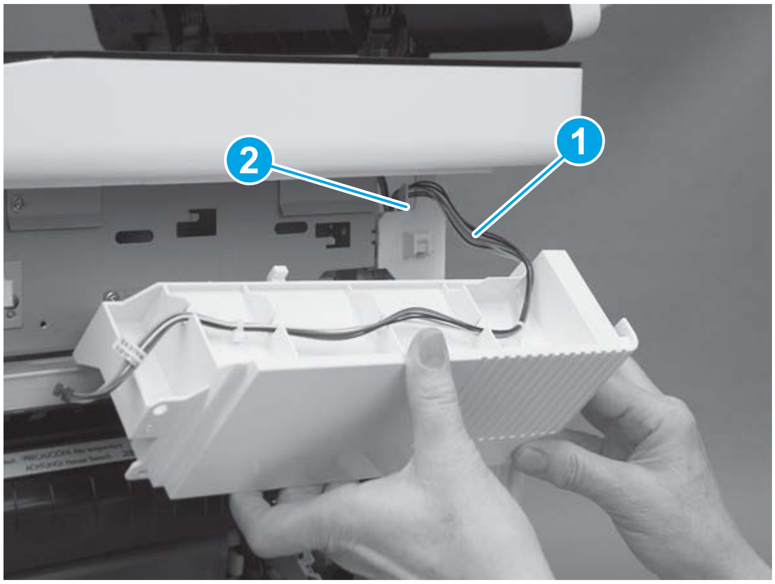
3. Slide the cover toward the back of the printer.

   Figure 7-945 Slide the cover

4. Lift the cover away from the printer to remove it.

   M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

   Figure 7-946 Remove the cover

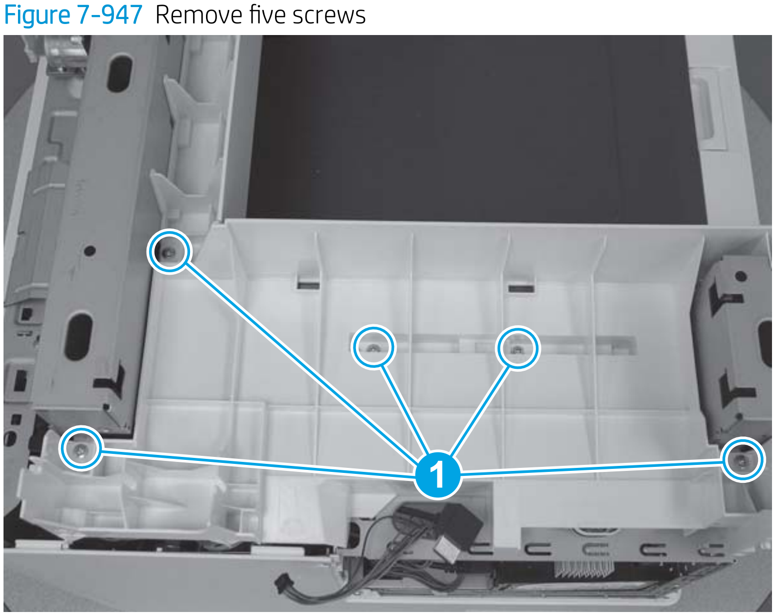
Remove the top rear cover (MFP)

Follow these steps to remove the top rear cover.

NOTE: This procedure is for MFP models only.

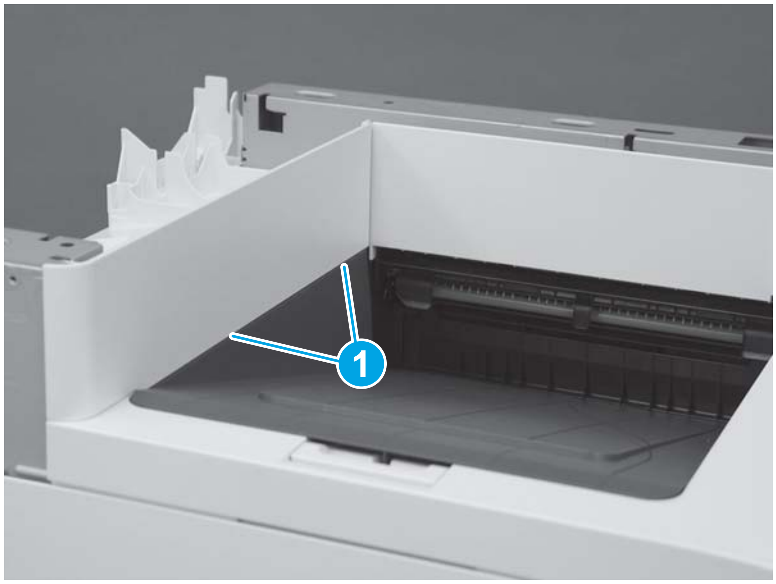
1. At the top of the printer, remove five screws (callout 1).

   Figure 7-947 Remove five screws

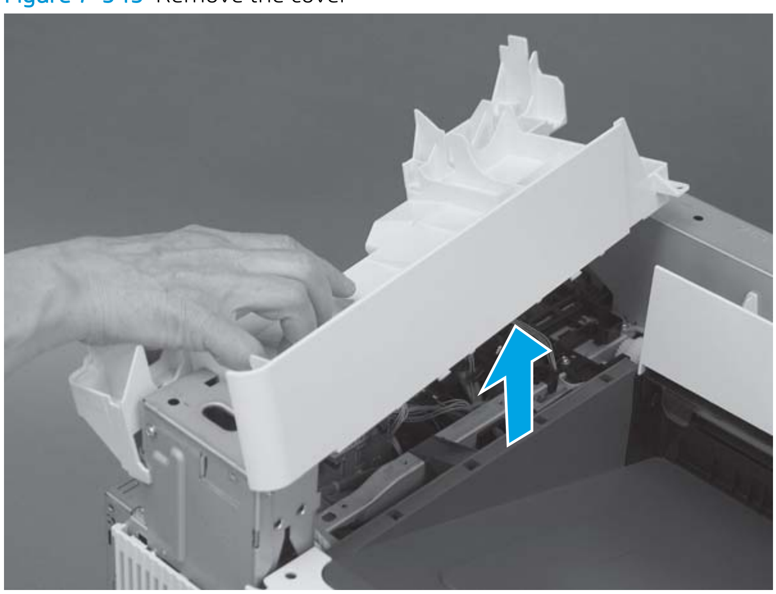
2. Release two tabs (callout 1) on the front edge of the cover.

Figure 7-948 Release two tabs



3. Remove the top rear cover.

Figure 7-949 Remove the cover



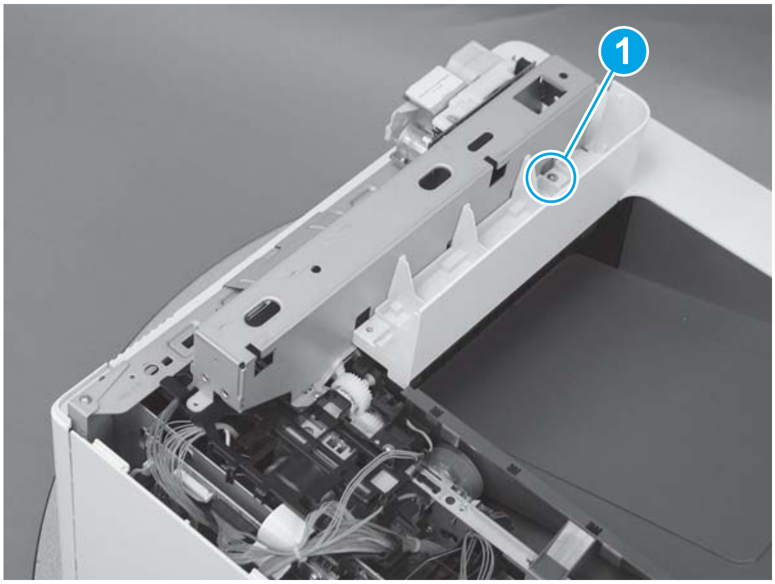
Remove the paper feed cover (MFP)

Follow these steps to remove the paper feed cover.

NOTE: This procedure is for MFP models only.

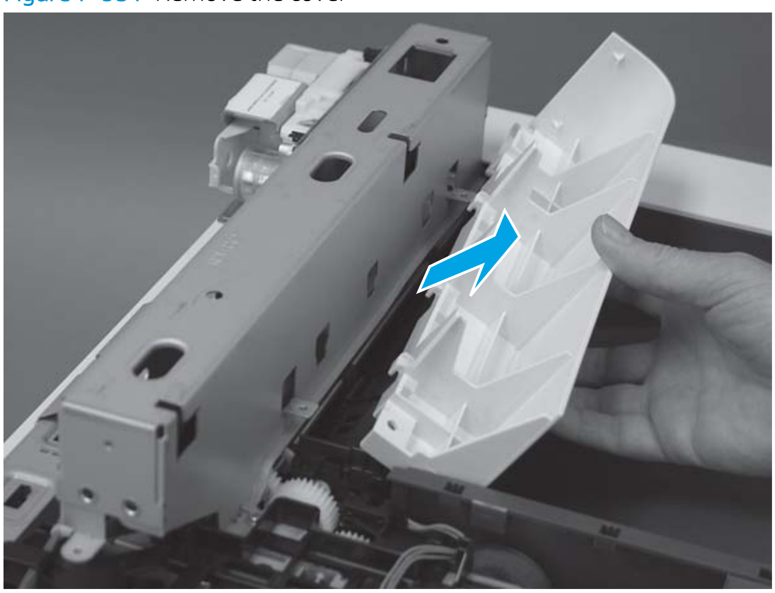
1. Remove one screw (callout 1).

Figure 7-950 Remove one screw



2. Lift the cover up to remove it.

Figure 7-951 Remove the cover



Remove the top cover (MFP)

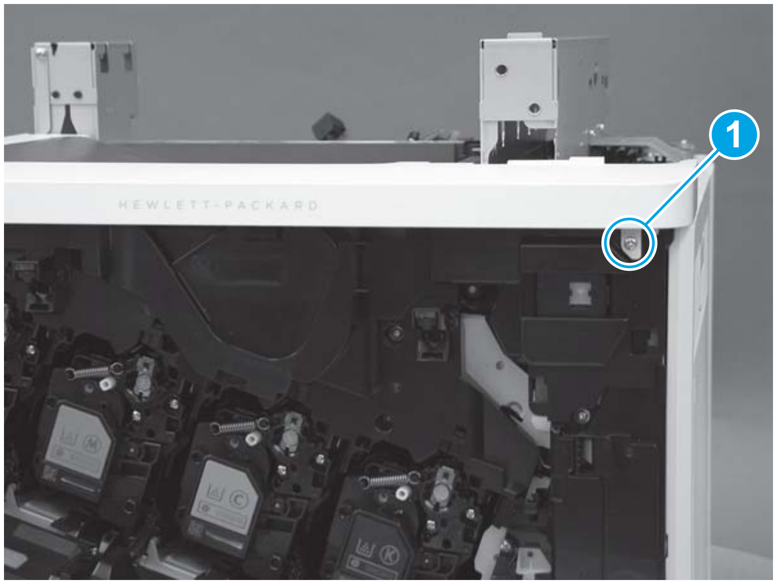
Follow these steps to remove the top cover.

NOTE: This procedure is for MFP models only.

1. At the front of the printer, remove one screw (callout 1).

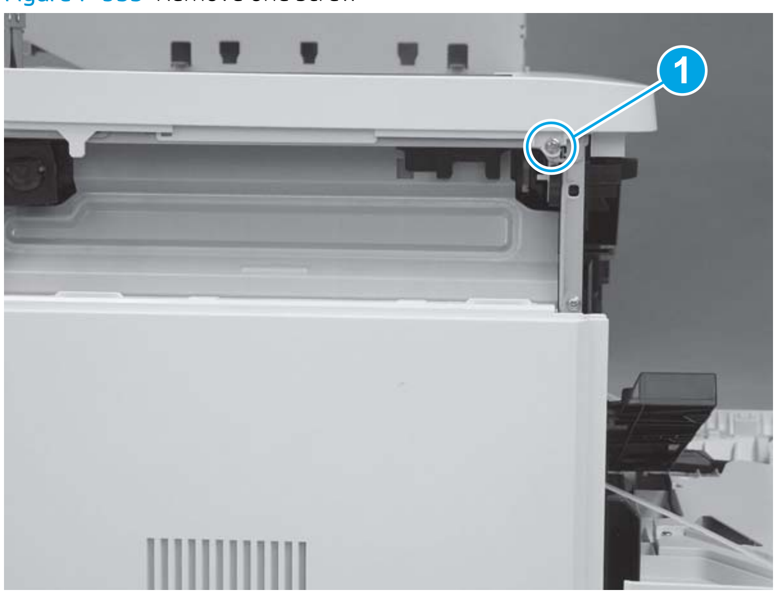
Reinstallation tip: This screw is longer and a different type of screw than the screw removed in the next step. When reinstalling the top cover, make sure that this screw is installed in the correct position.

Figure 7-952 Remove one screw



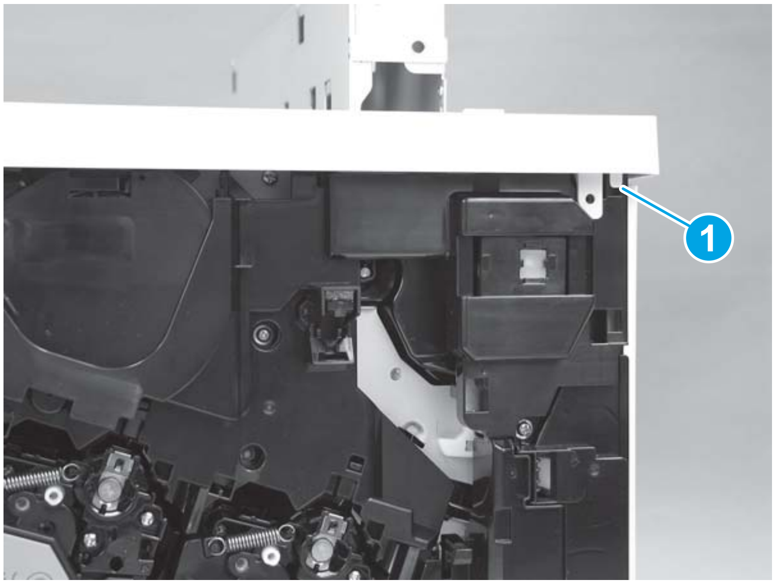
2. At the left side of the printer, remove one screw (callout 1).

Figure 7-953 Remove one screw



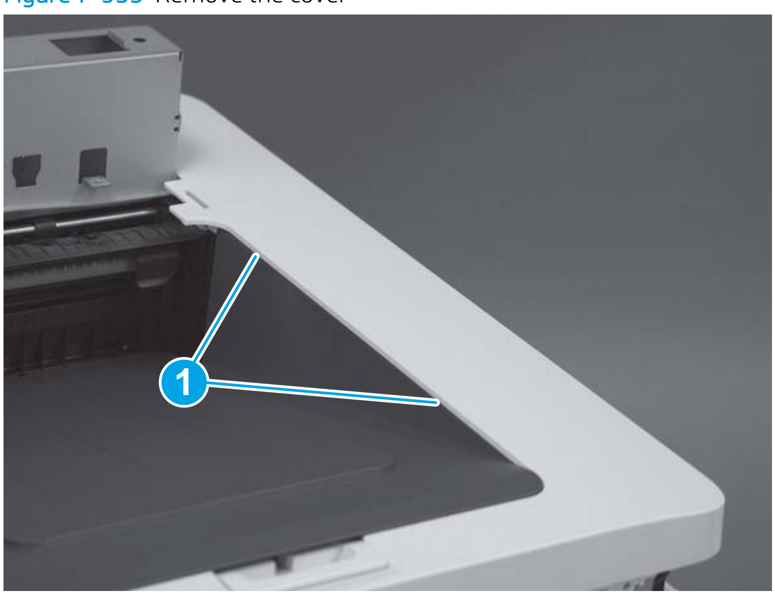
3. At the front of the printer, release one tab (callout 1).

Figure 7-954 Release one tab



4. At the top of the printer, release two tabs (callout 1) next to the output bin, and then remove the top cover.

Figure 7-955 Remove the cover



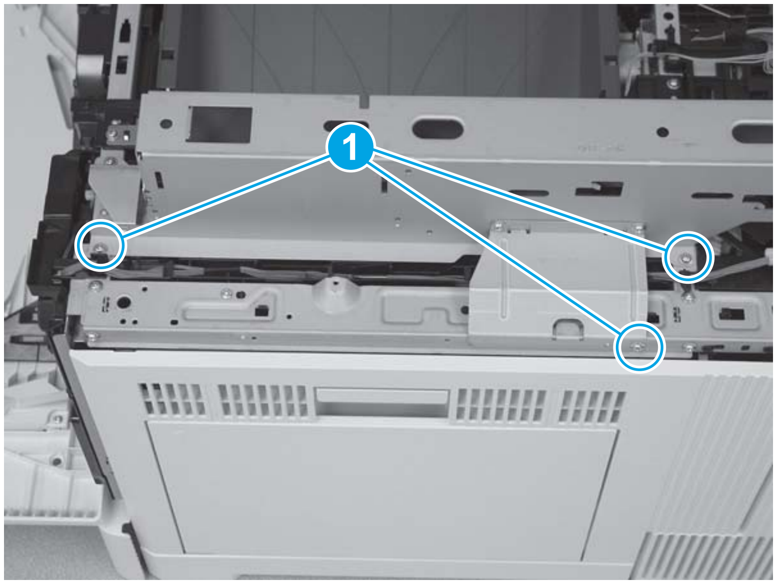
Remove the top bracket (MFP)

Follow these steps to remove the top bracket.

NOTE: This procedure is for MFP models only.

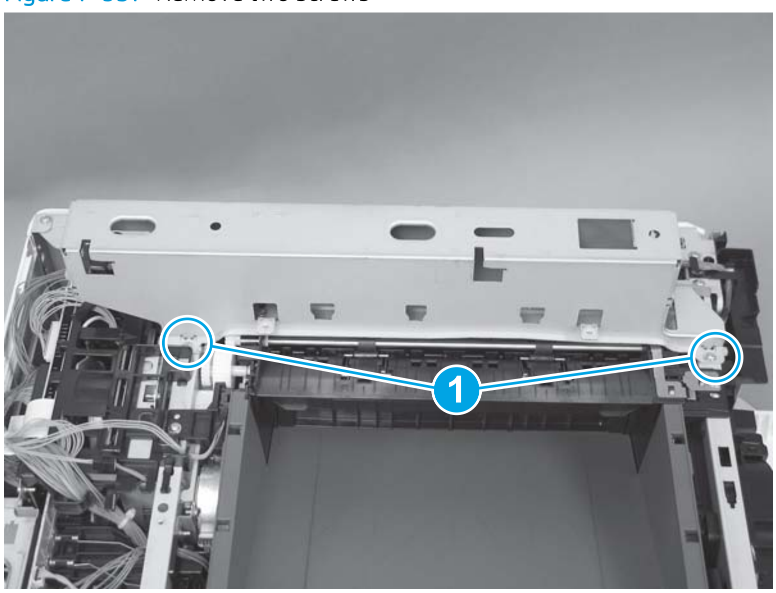
1. At the top of the printer, remove three screws (callout 1).

Figure 7-956 Remove three screws



2. At the top of the printer, remove two screws (callout 1).

Figure 7-957 Remove two screws



3. Lift the top bracket up to remove it.

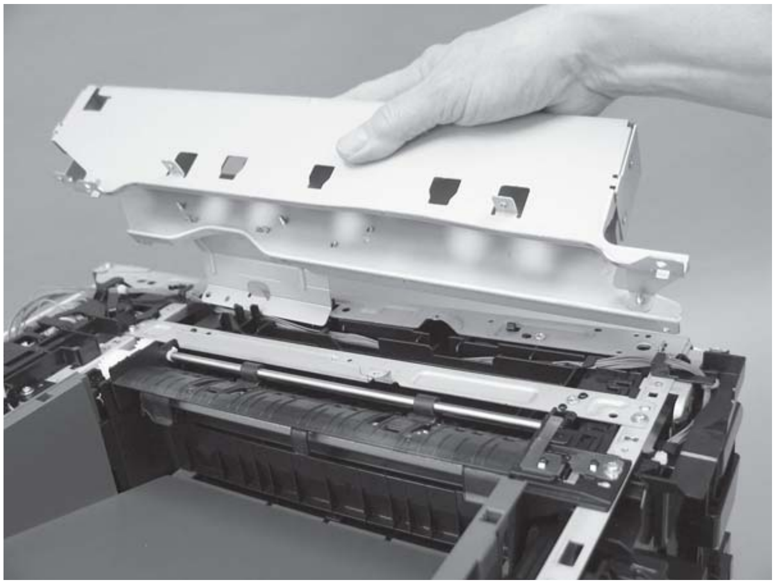


Figure 7-958 Remove the bracket

Remove the output bin

Follow these steps to remove the output bin.

1. Slightly slide and lift the cover to release it.

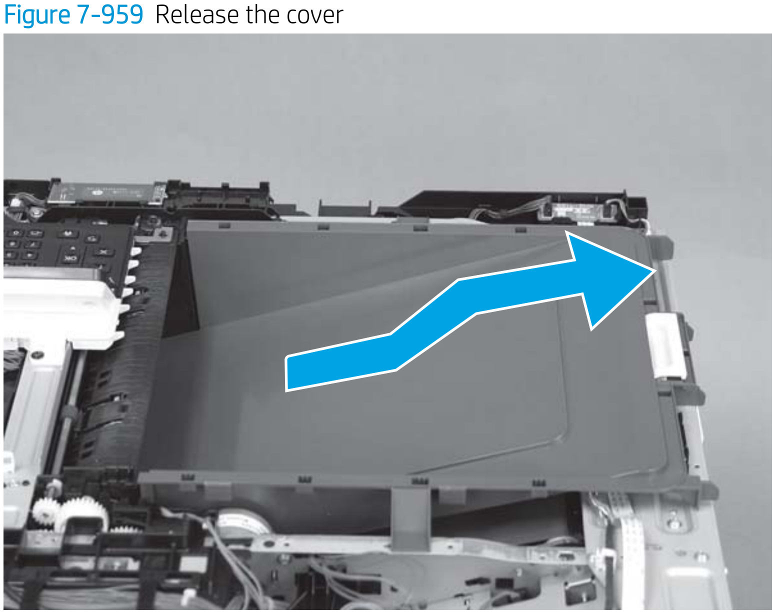


Figure 7-959 Release the cover

2. Remove the cover.

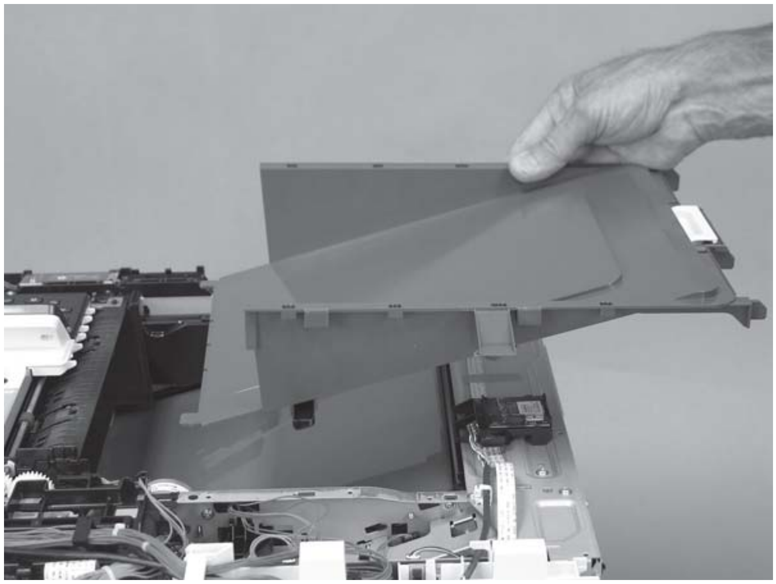


Figure 7-960 Remove the cover

Remove the delivery assembly

Follow these steps to remove the delivery assembly.

1. At the right side of the printer, remove two screws (callout 1).

NOTE: These two screws are the self-tapping type.

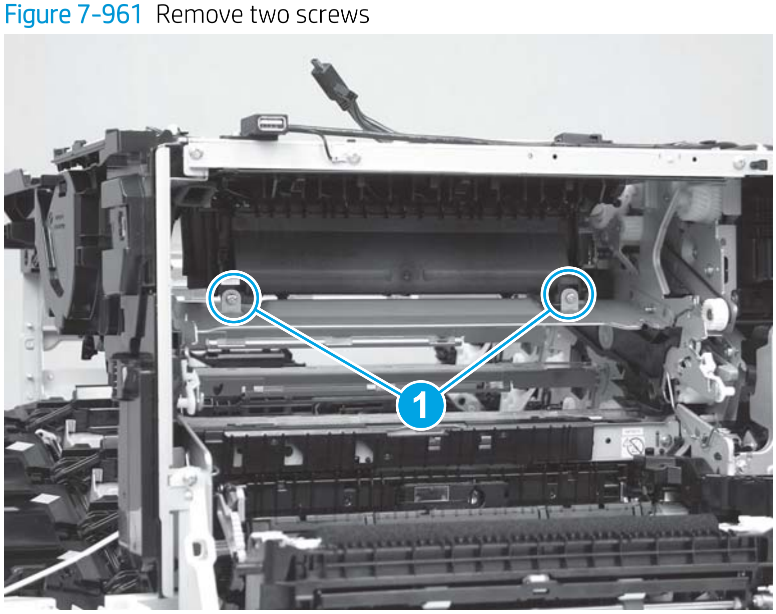
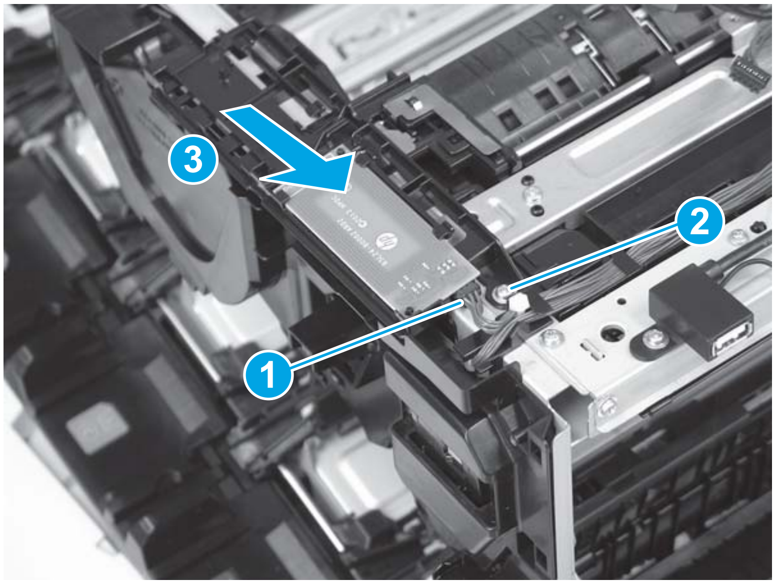


Figure 7-961 Remove two screws

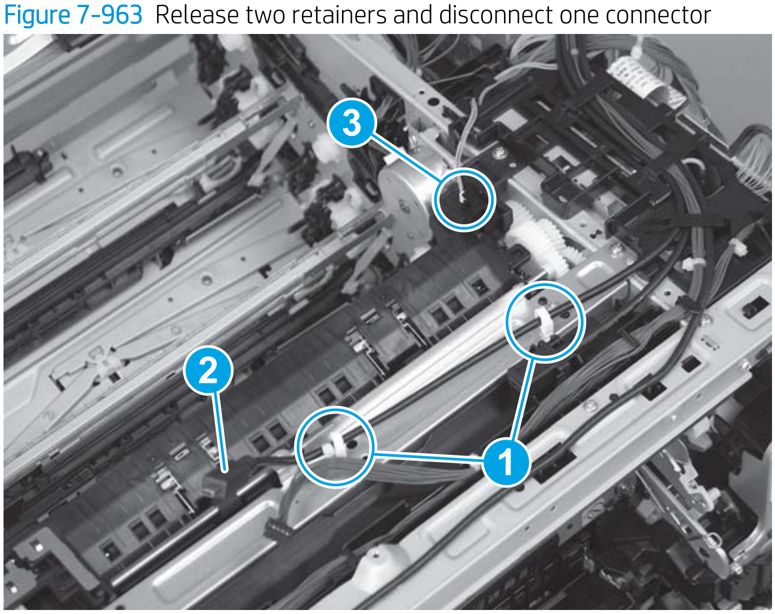
2. **(M553x/M555/E55040)**: At the top-front-right corner of the printer, disconnect one connector (callout 1), remove one screw (callout 2), and then remove the near field communication (NFC) PCA and holder by sliding them to the right (callout 3).

Figure 7-962 Remove the NFC



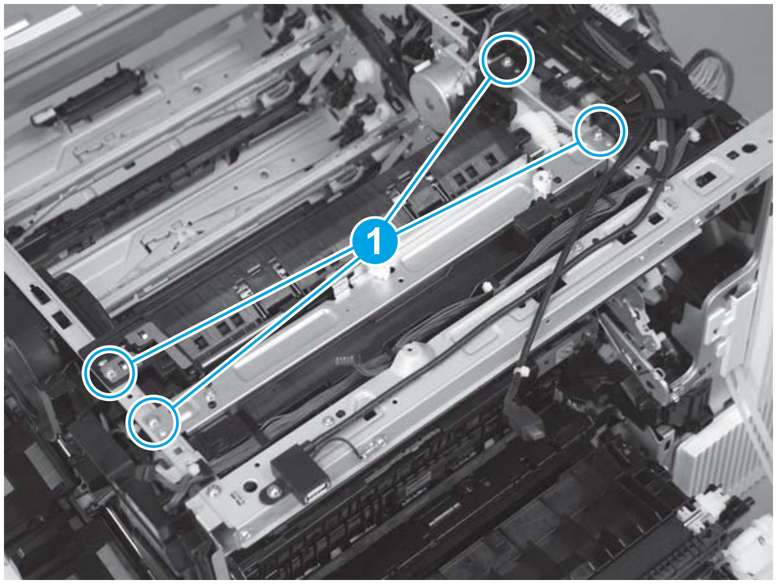
3. Release two retainers (callout 1), remove the USB cable (callout 2) from the retainers, and then disconnect one connector (callout 3).

Figure 7-963 Release two retainers and disconnect one connector



4. Remove four screws (callout 1).

Figure 7-964 Remove four screws



5. Remove the delivery assembly.

⚠ CAUTION: The solenoid plunger and arm (callout 1) located on the right side of the assembly are not captive.

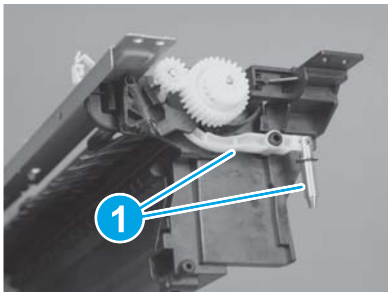
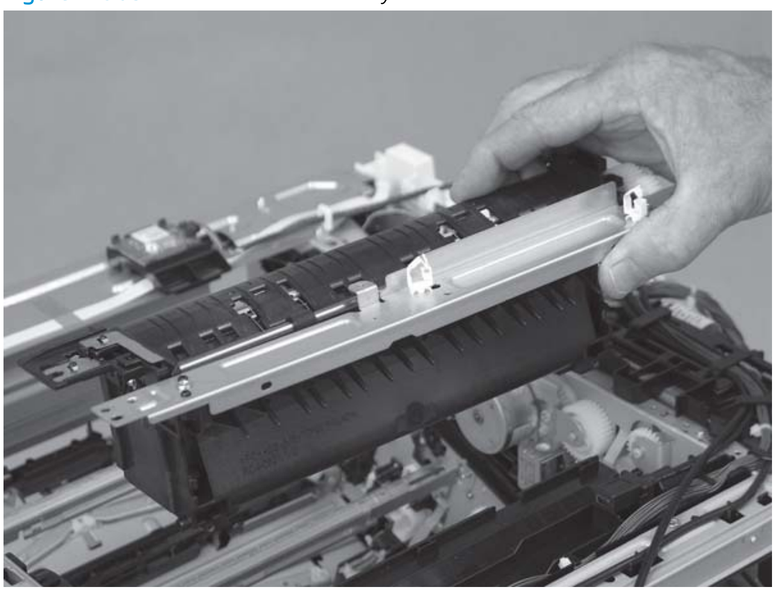


Figure 7-965 Remove the assembly



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Formatter (M552/M553/M554/M555/E55040)

This document provides the procedures to remove and replace the SFP formatter.

Watch a video about formatter installation

Mean time to repair: 15 minutes

Service level: Intermediate

Before performing service

Turn the printer power off

- Disconnect the power cable.

WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

CAUTION: Under **NO** circumstances should a formatter from a different printer be installed during the repair or troubleshooting processes. The formatter stores important data specific to the model of printer it is installed in and is not deigned to be swapped or re-purposed in any way. Return a used formatter to HP.

Issues that can occur from swapping a formatter include:

- Serial number, product number, product name, page count, and supported cartridges information change and might make a product unusable.
- 33.02.01 Used board/Disk installed errors.

If a used formatter is installed and causes this issue, the partner must cover the costs of the repair in the form of a product replacement. **There is no method in the field to recover a printer where a used formatter is installed.**

For more information, see HP LaserJet Enterprise, HP LaserJet Managed, HP PageWide Enterprise, HP PageWide Managed - 33.02.01 error or printer name and/or product number changes after replacing the formatter.

IMPORTANT: Do not replace the formatter, DC controller, and eMMC PCA or hard-disk drive simultaneously during a single printer servicing. Doing so might cause the printer to become unstable or inoperable.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-60 Part information

Part number	Part description
B5L23-67903	Formatter assembly M552dn
B5L23-67904	Formatter assembly M552dn China/India
B5L24-67909	Formatter assembly M553n, M553dn, M553dh
B5L24-67908	Formatter assembly M553n, M553dn, M553dh China/India
B5L26-67901	Formatter assembly M553x/E55040
B5L26-67902	Formatter assembly M553x/E55040 China/India
7ZU81-67903	Formatter assembly M554dn
7ZU81-67904	Formatter assembly M554dn China/India

Table 7-60 Part information (continued)

Part number	Part description
7ZU78-67903	Formatter assembly M555dn
7ZU78-67904	Formatter assembly M555dn China/India
7ZU79-67903	Formatter assembly M555x
7ZU79-67904	Formatter assembly M555x China/India

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Make sure that all of the connectors on the formatter are fully seated.

Make sure that the formatter cover is fully seated, and that the thumbscrews are finger tight after replacing it.

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print a configuration page to make sure that the printer is functioning correctly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

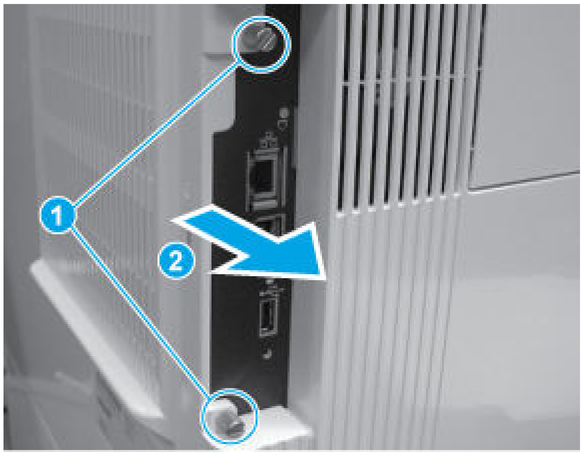
1. Locate the formatter cover.

Figure 7-966 Locate the formatter cover

2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-967 Loosen the thumbscrews



Remove the hard-disk drive (HDD)

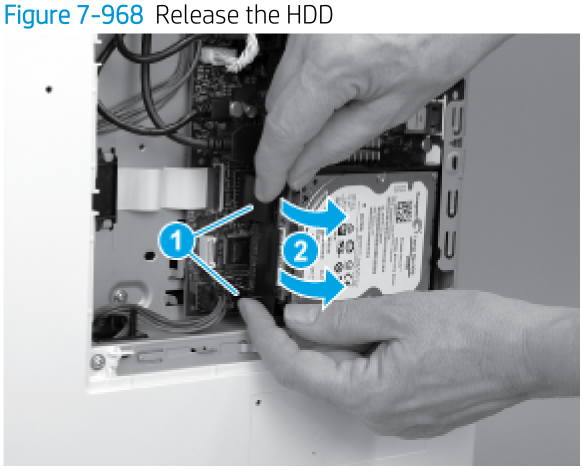
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-968 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-969 Remove the HDD

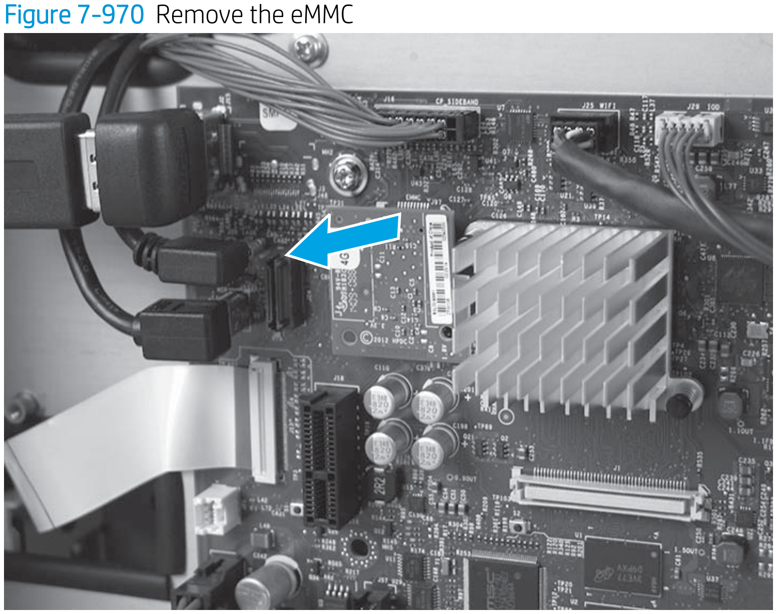
Remove the embedded MultiMedia Card (eMMC)

Follow these steps to remove the eMMC.

CAUTION: ESD sensitive part.

▲ Locate the eMMC component on the formatter, and then pull it straight off of the formatter to remove it.

Figure 7-970 Remove the eMMC



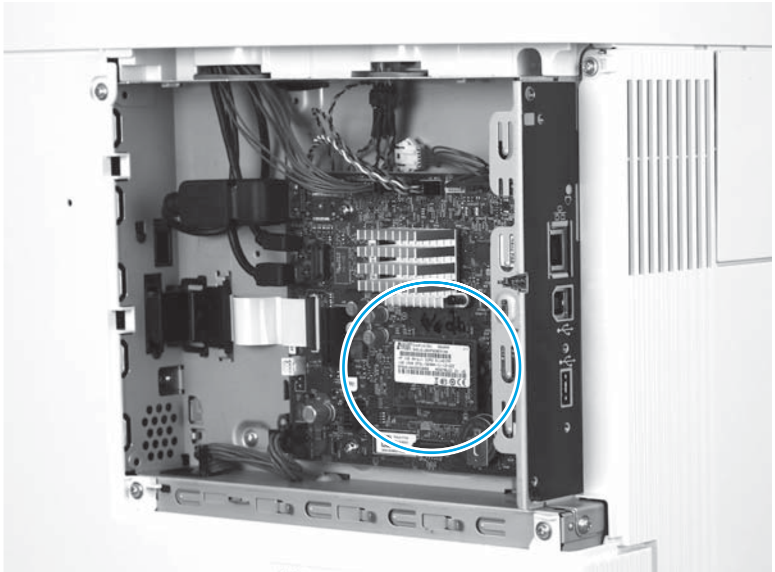
Remove the dual in-line memory module (DIMM)

Follow these steps to remove the DIMM.

CAUTION: ESD sensitive part.

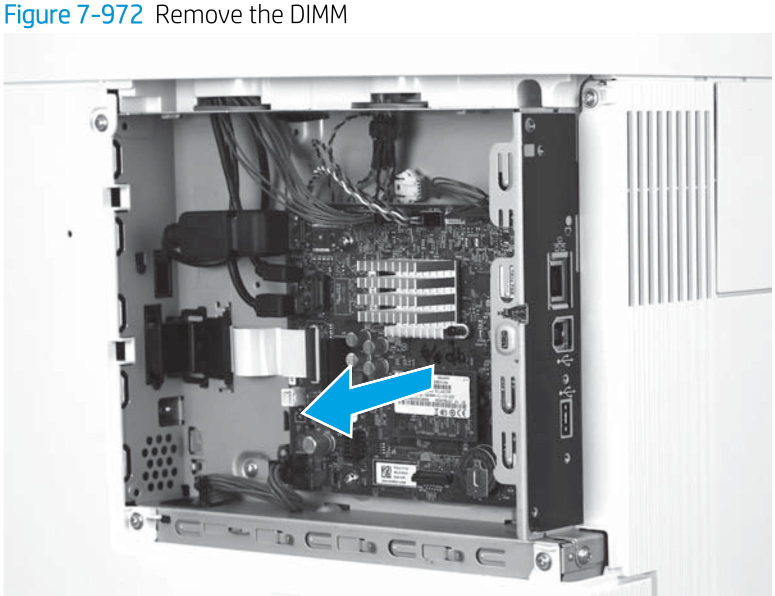
1. Locate the DIMM component on the formatter.

Figure 7-971 Locate the DIMM



2. Pull the DIMM straight off of the formatter to remove it.

Figure 7-972 Remove the DIMM



Remove the trusted platform module (TPM)

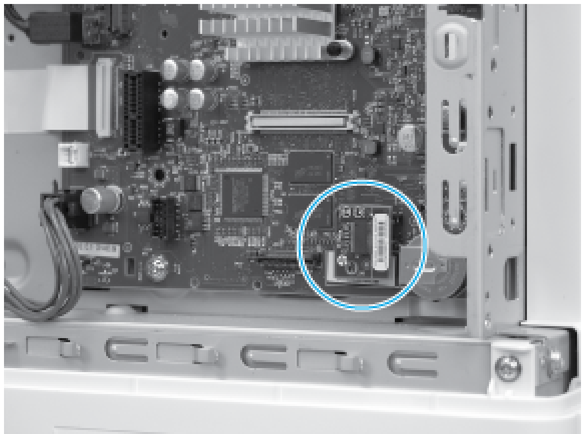
Follow these steps to remove the trusted platform module (TPM).

CAUTION: ESD sensitive part.

NOTE: Removing the TPM is only necessary for formatter or TPM accessory replacement.

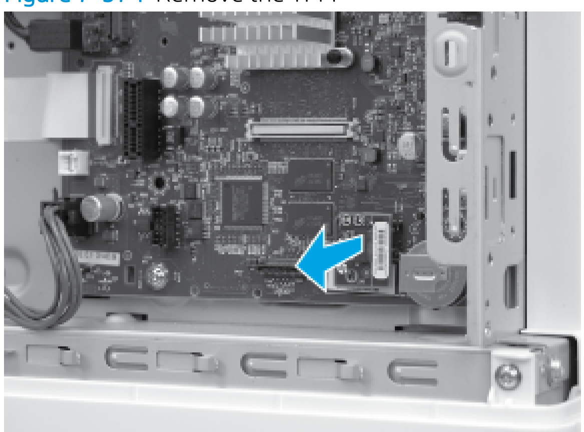
1. Locate the TPM component on the formatter.

Figure 7-973 Locate the TPM



2. Pull the TPM straight off of the formatter to remove it.

Figure 7-974 Remove the TPM



Remove the formatter (SFP)

Follow these steps to remove the formatter.

NOTE: This procedure is for SFP models only.

1. Disconnect all of the connectors on the formatter.

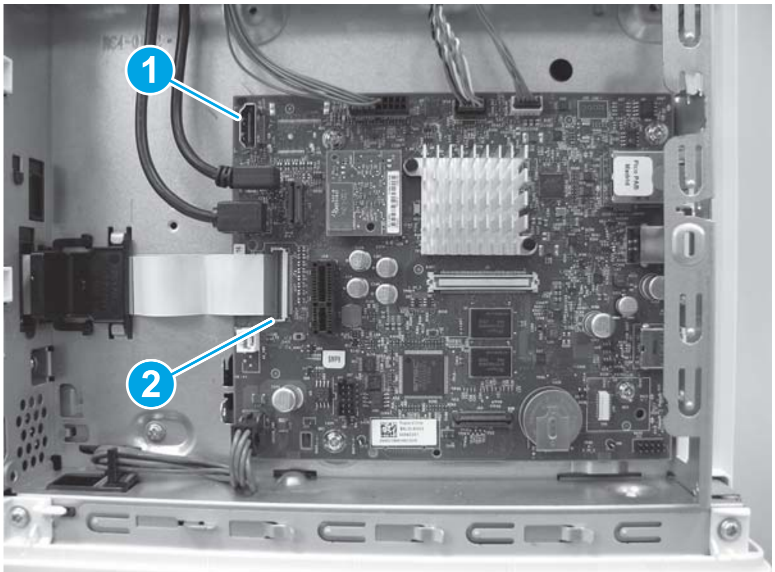
   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)
   - All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
   - M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)

- All models: J57
- All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

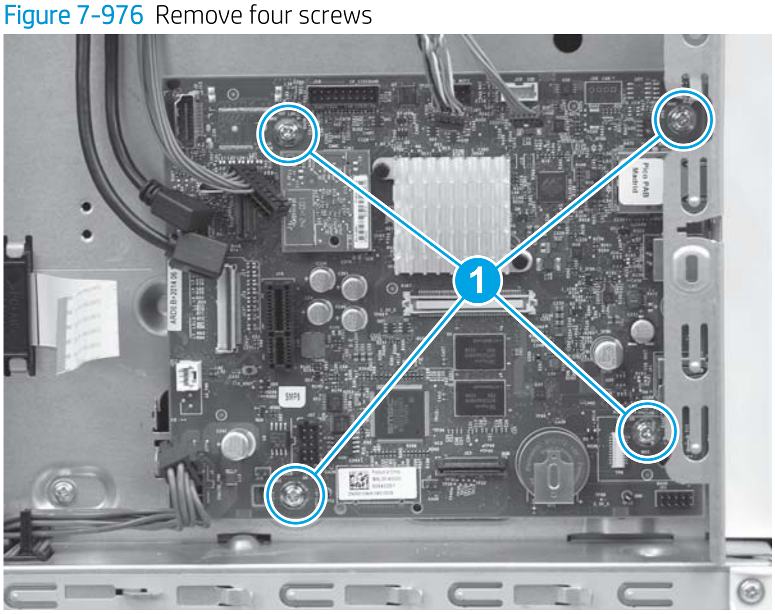
IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-975 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-976 Remove four screws



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Formatter (M577/M578/E57540)

This document provides the procedures to remove and replace the MFP formatter.

View a video demonstration of removing and replacing the formatter.

Mean time to repair: 10 minutes

Service level: Intermediate

Before performing service

Turn the printer power off

- Disconnect the power cable.

WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

CAUTION: Under **NO** circumstances should a formatter from a different printer be installed during the repair or troubleshooting processes. The formatter stores important data specific to the model of printer it is installed in and is not deigned to be swapped or re-purposed in any way. Return a used formatter to HP.

Issues that can occur from swapping a formatter include:

- Serial number, product number, product name, page count, and supported cartridges information change and might make a product unusable.
- 33.02.01 Used board/Disk installed errors.

If a used formatter is installed and causes this issue, the partner must cover the costs of the repair in the form of a product replacement. **There is no method in the field to recover a printer where a used formatter is installed.**

For more information, see HP LaserJet Enterprise, HP LaserJet Managed, HP PageWide Enterprise, HP PageWide Managed - 33.02.01 error or printer name and/or product number changes after replacing the formatter.

IMPORTANT: Do not replace the formatter, DC controller, and hard-disk drive simultaneously during a single printer servicing. Doing so might cause the printer to become unstable or inoperable.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-61 Part information

Part number	Part description
B5L46-67909	Formatter assembly M577, E57540
B5L46-67911	Formatter assembly M577, E57540 China/India
7ZU85-67903	Formatter assembly M578
7ZU85-67904	Formatter assembly M578 China/India

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Make sure that all of the connectors on the formatter are fully seated.

Make sure that the formatter cover is fully seated, and that the thumbscrews are finger tight after replacing it.

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print a configuration page to make sure that the printer is functioning correctly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

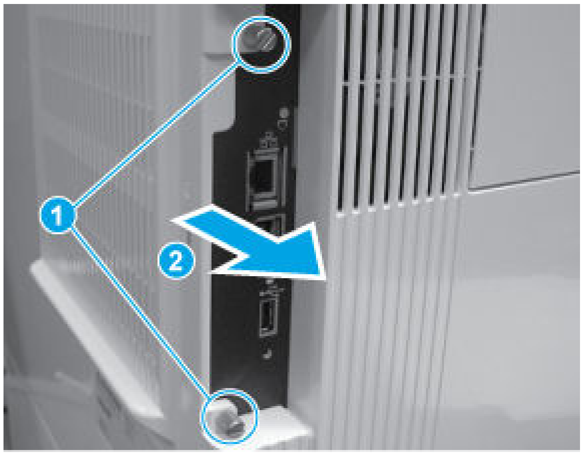
1. Locate the formatter cover.

Figure 7-977 Locate the formatter cover

2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-978 Loosen the thumbscrews



Remove the hard-disk drive (HDD)

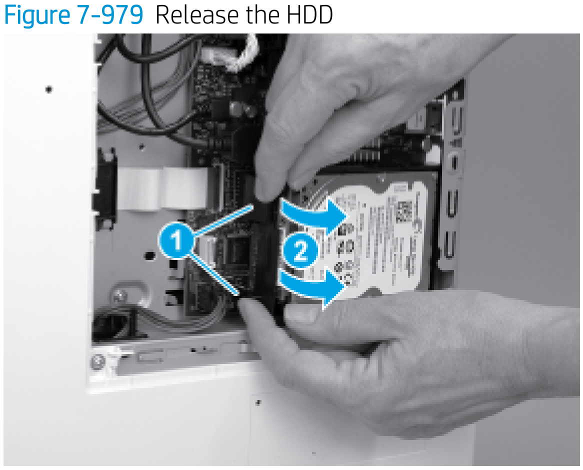
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-979 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-980 Remove the HDD

Remove the fax PCA (fax models)

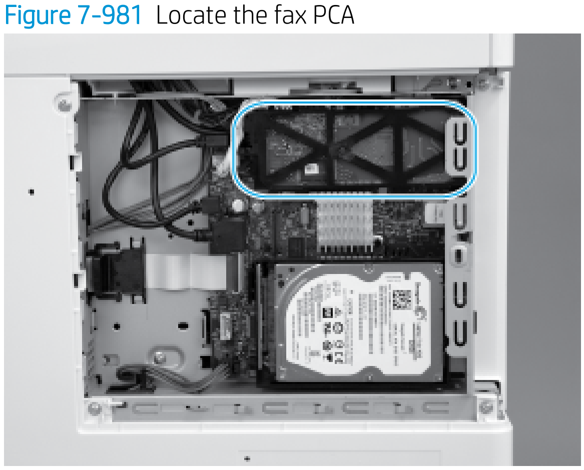
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

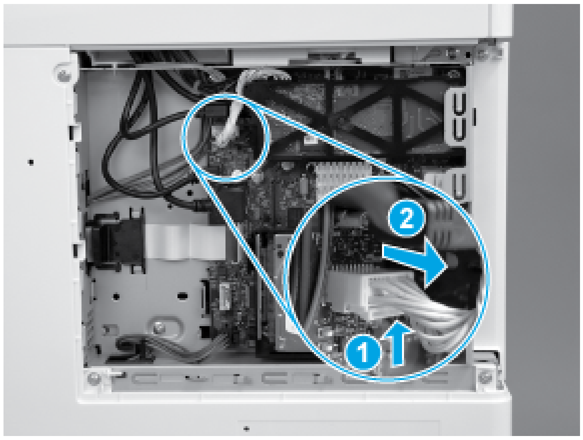
1. Locate the fax PCA component on the formatter.

Figure 7-981 Locate the fax PCA



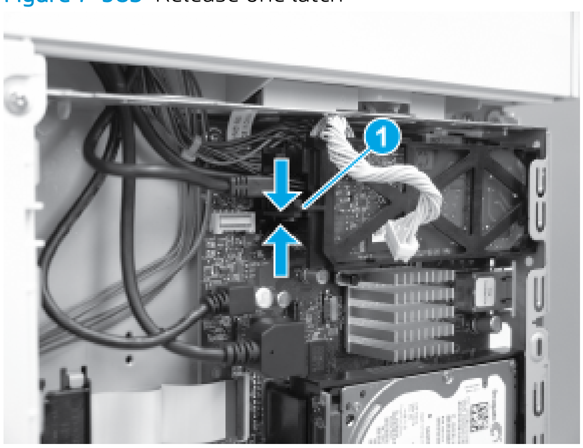
2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-982 Disconnect one connector



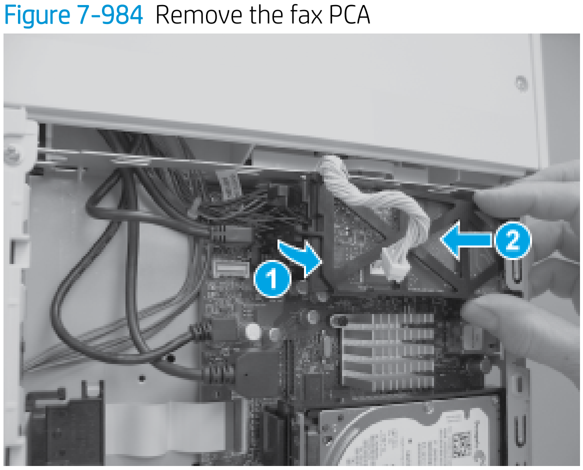
3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-983 Release one latch



4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-984 Remove the fax PCA



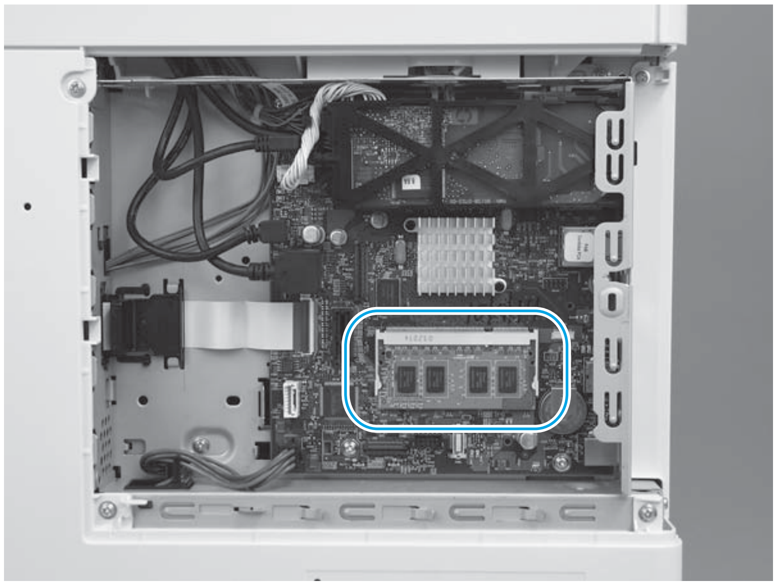
Remove the dual in-line memory module (DIMM)

Follow these steps to remove the DIMM.

CAUTION: ESD sensitive part.

1. Locate the DIMM component on the formatter.

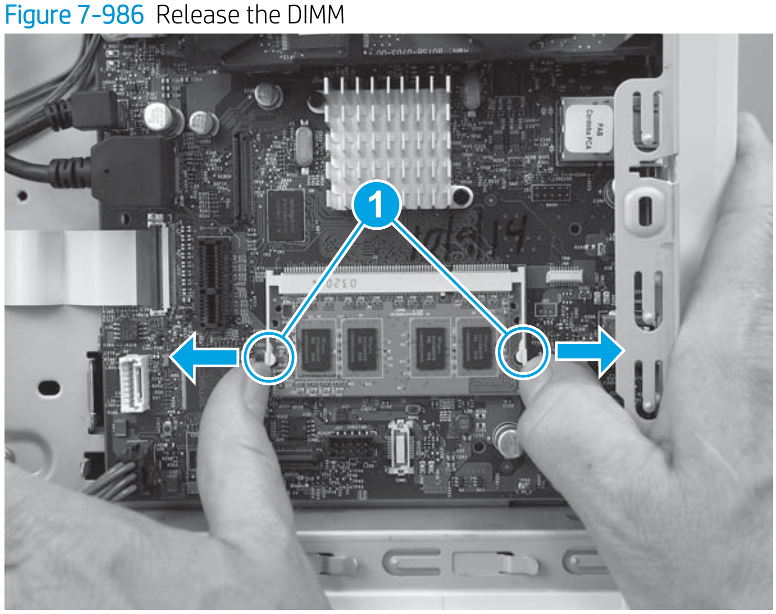
Figure 7-985 Locate the DIMM



2. Do the following:

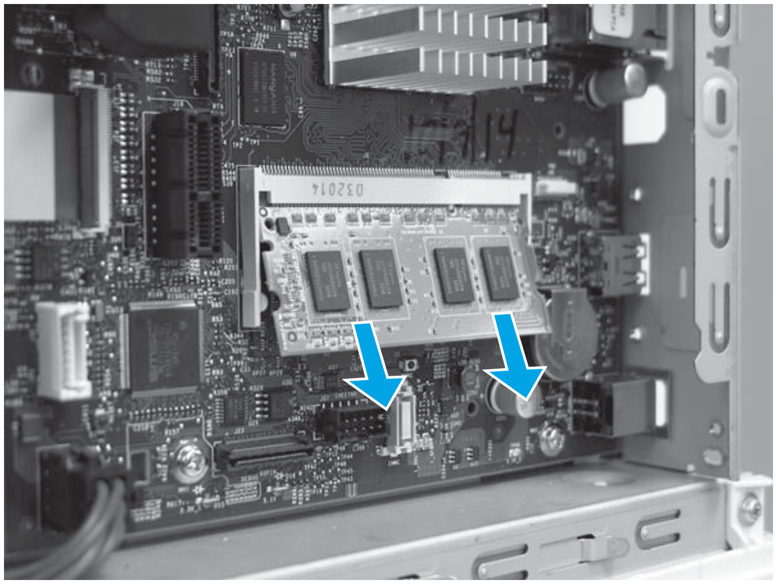
    1. Release two locking arms (callout 1).

Figure 7-986 Release the DIMM



2. Pull the DIMM down and away from the holder to remove it.

Figure 7-987 Remove the DIMM



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

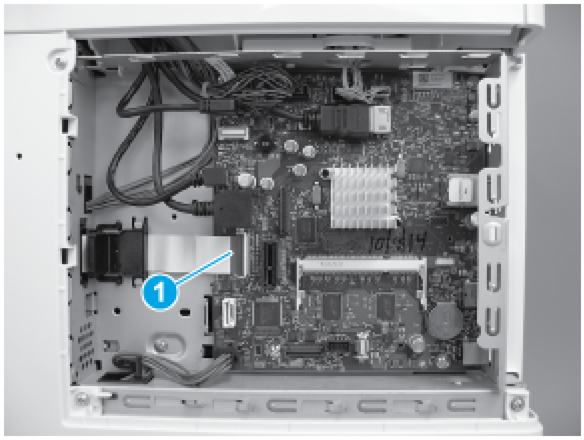
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

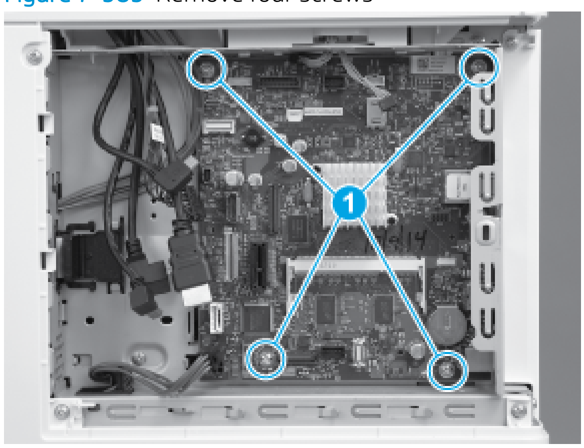
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-988 Disconnect all connectors



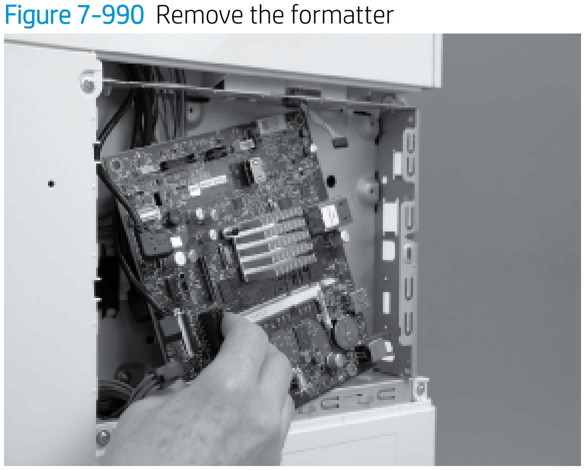
2. Remove four screws (callout 1).

Figure 7-989 Remove four screws



3. Remove the formatter.

Figure 7-990 Remove the formatter



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Formatter case assembly

Learn about removing and replacing the formatter case assembly.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-62 Part information

Part number	Part description
Not orderable	Formatter case assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

> NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-991 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-992 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

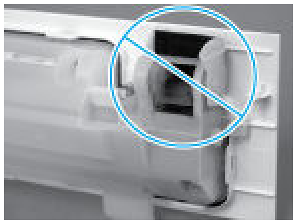
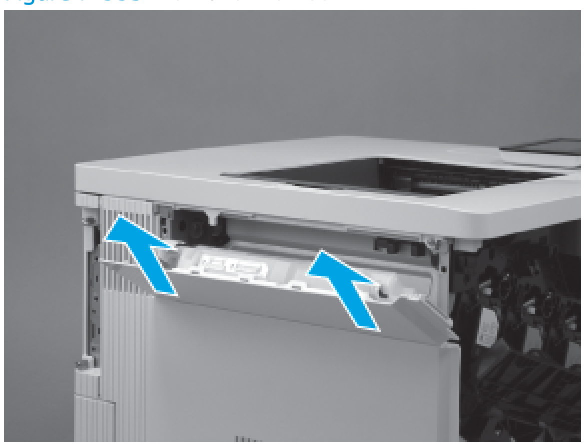


Figure 7-993 Remove the TCU



Remove the formatter cover

Follow these steps to remove the formatter cover.

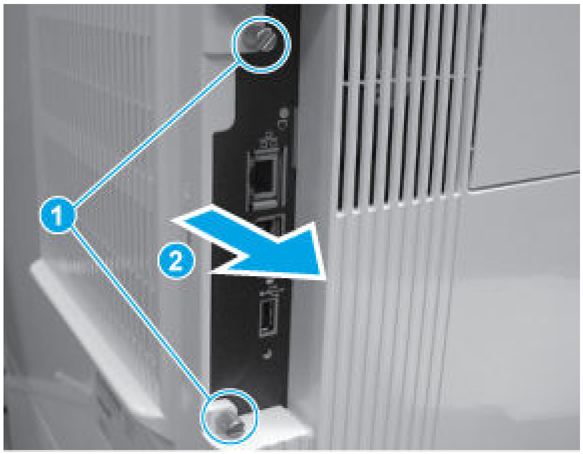
1. Locate the formatter cover.

Figure 7-994 Locate the formatter cover

2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-995 Loosen the thumbscrews



Remove the formatter (SFP)

Follow these steps to remove the formatter.

NOTE: This procedure is for SFP models only.

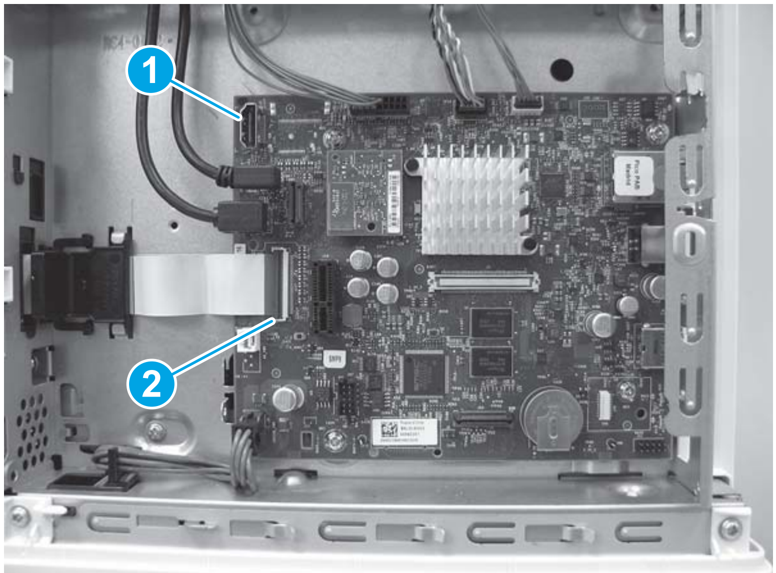
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)
   - All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
   - M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)
   - All models: J57
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

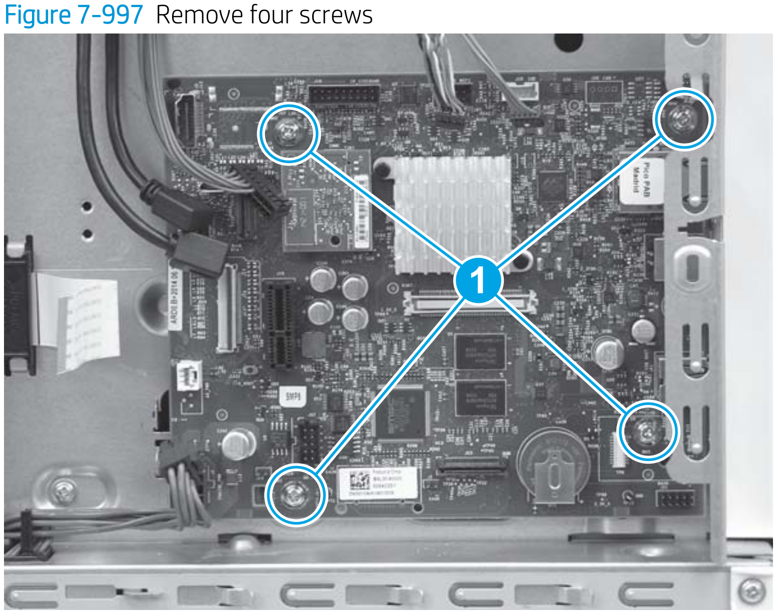
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-996 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-997 Remove four screws



Remove the hard-disk drive (HDD)

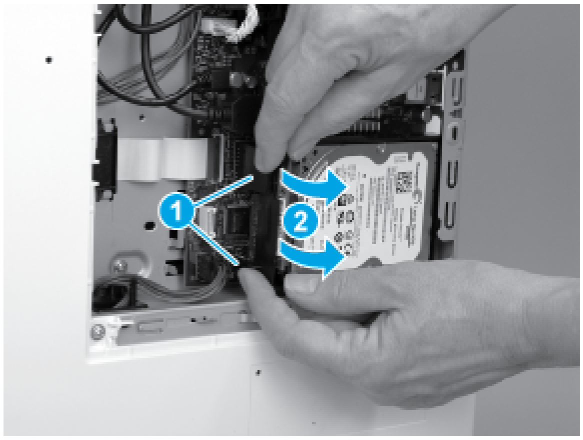
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-998 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-999 Remove the HDD

Remove the fax PCA (fax models)

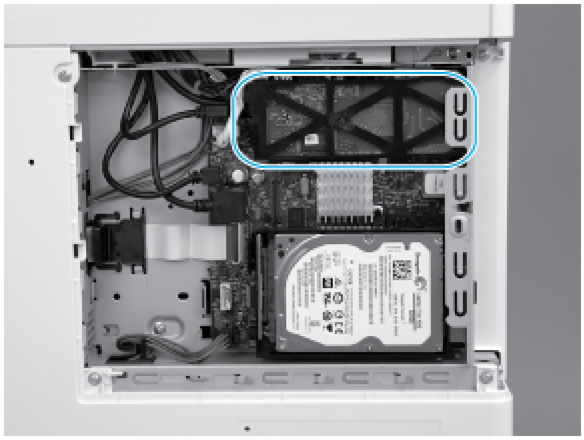
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

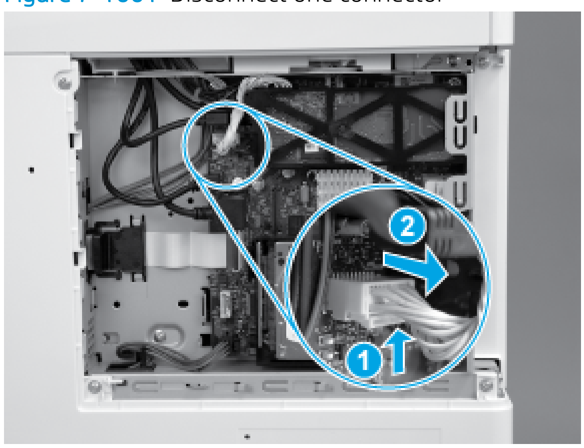
1. Locate the fax PCA component on the formatter.

Figure 7-1000 Locate the fax PCA



2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-1001 Disconnect one connector

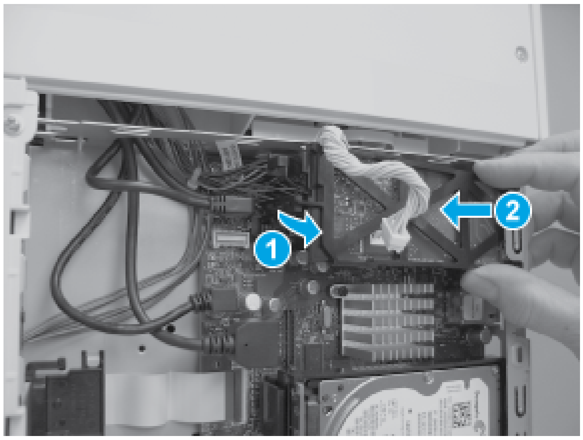


3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-1002 Release one latch

4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-1003 Remove the fax PCA



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

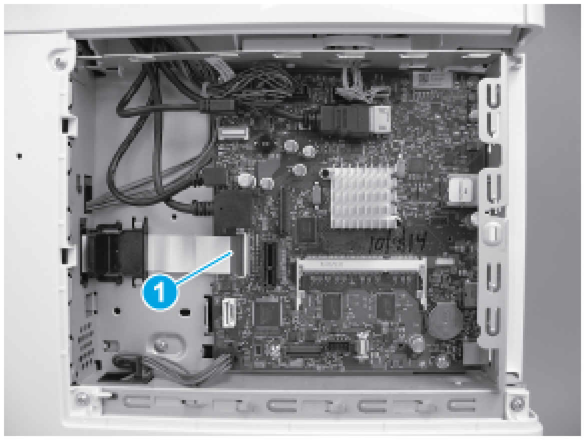
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

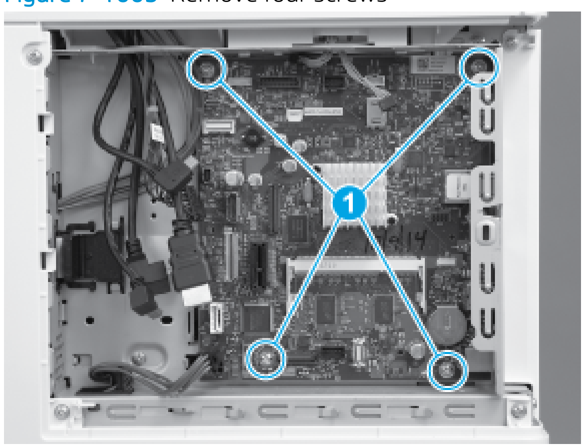
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1004 Disconnect all connectors



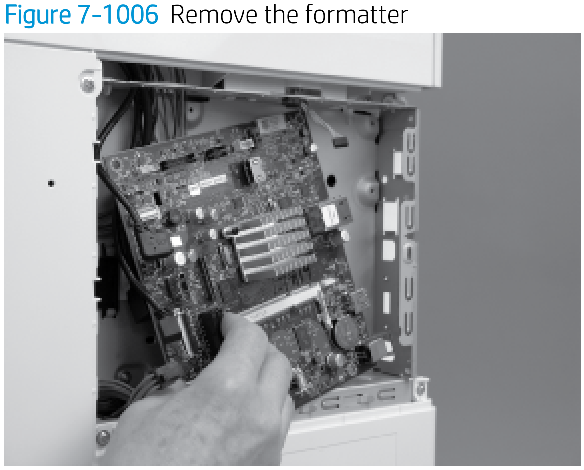
2. Remove four screws (callout 1).

Figure 7-1005 Remove four screws



3. Remove the formatter.

Figure 7-1006 Remove the formatter



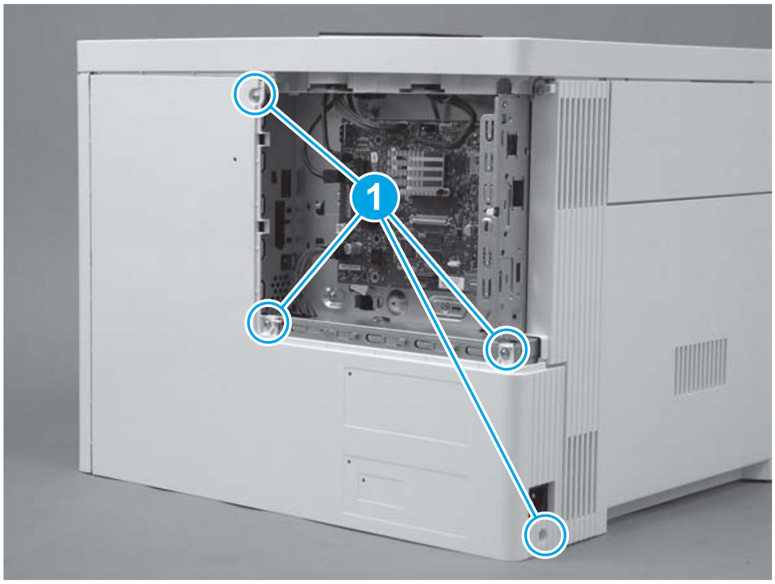
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

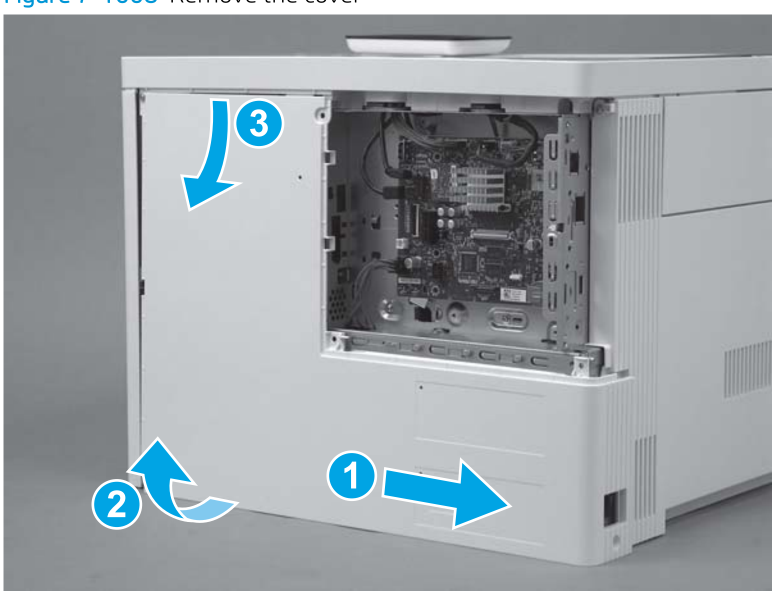
1. Remove four screws (callout 1).

Figure 7-1007 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-1008 Remove the cover



Remove the rear upper cover (MFP)

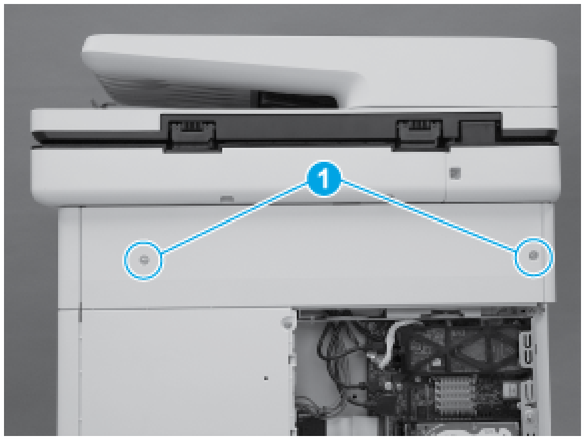
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

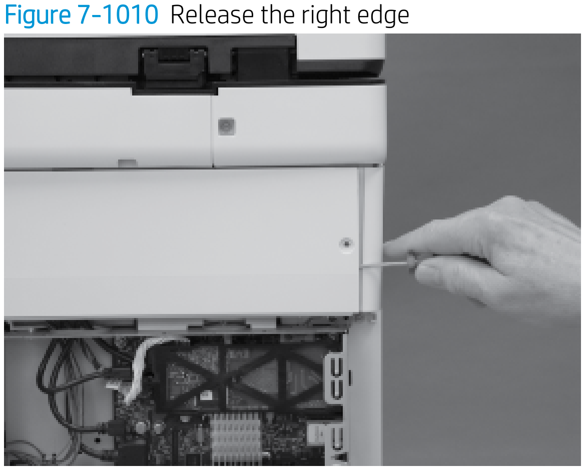
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-1009 Remove two screws



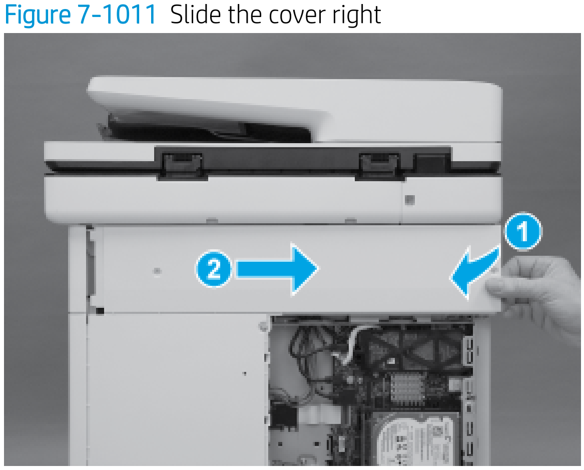
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-1010 Release the right edge



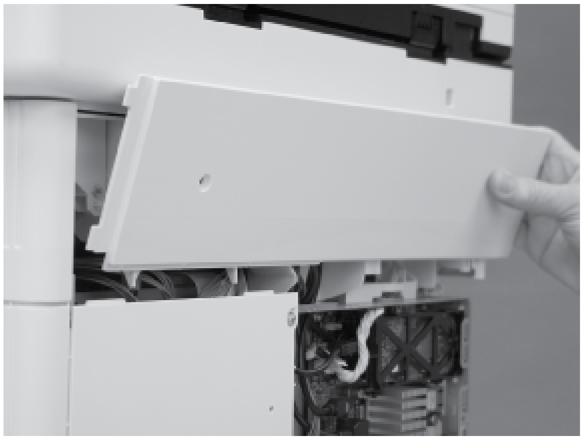
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-1011 Slide the cover right



4. Remove the cover.

Figure 7-1012 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-1013 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-1014 Remove the cover

Remove the left cover

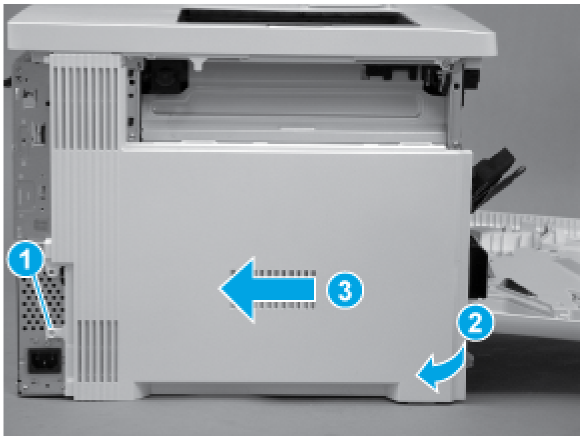
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1015 Remove one screw

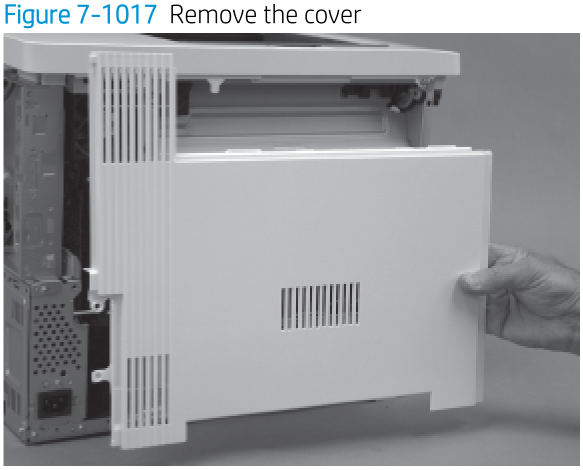
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-1016 Release the cover



3. Remove the cover.

Figure 7-1017 Remove the cover

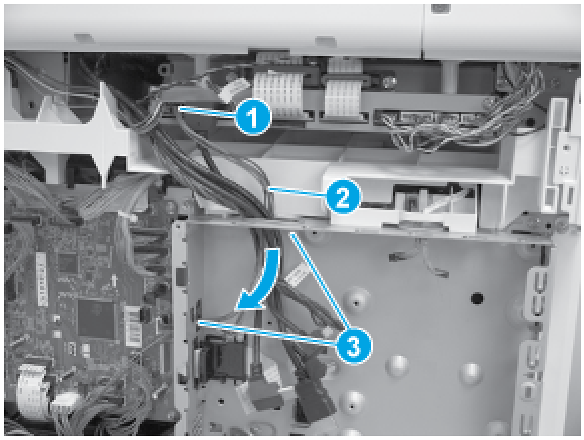


Remove the formatter case

Follow these steps to remove the formatter case.

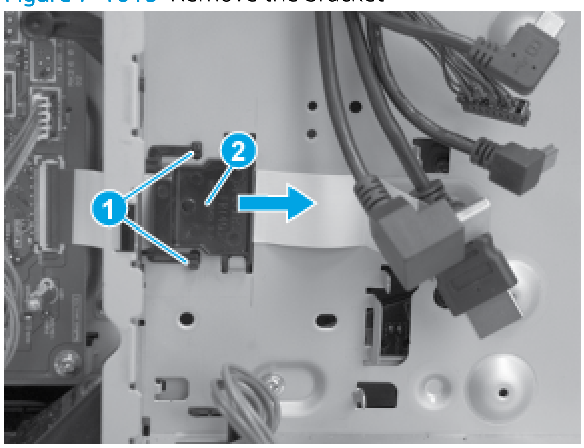
1. **MFP only**: Disconnect one connector (callout 1), and then pass the wire harness (callout 2) through two openings in the formatter case (callout 3).

Figure 7-1018 Disconnect one connector



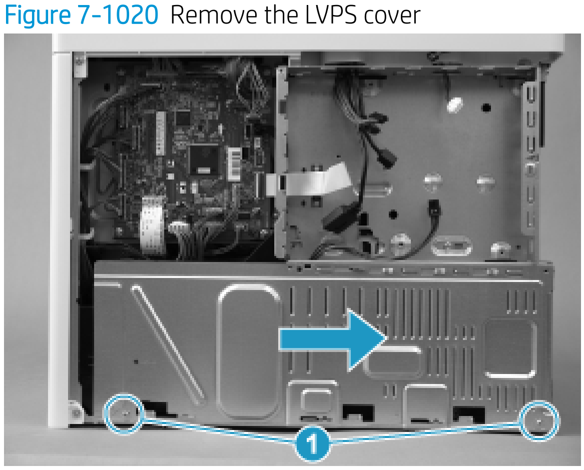
2. Release two tabs (callout 1) on the black plastic bracket. Hold the tabs in the released position, and then slide the bracket (callout 2) to the right to remove it from the formatter case.

Figure 7-1019 Remove the bracket



3. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

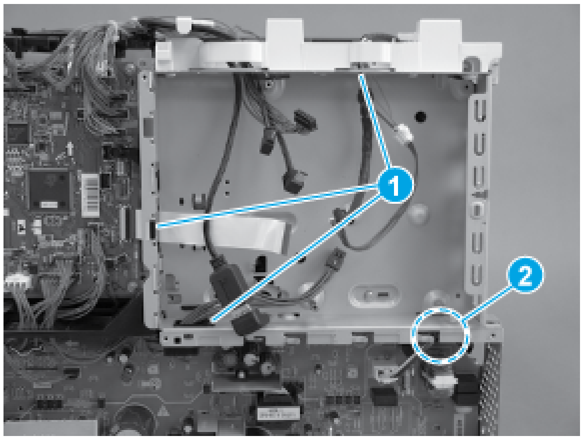
Figure 7-1020 Remove the LVPS cover



4. Pass two wire harnesses and one flat cable (callout 1) through the opening in the formatter case, and then release one wire harness from the retainer (callout 2).

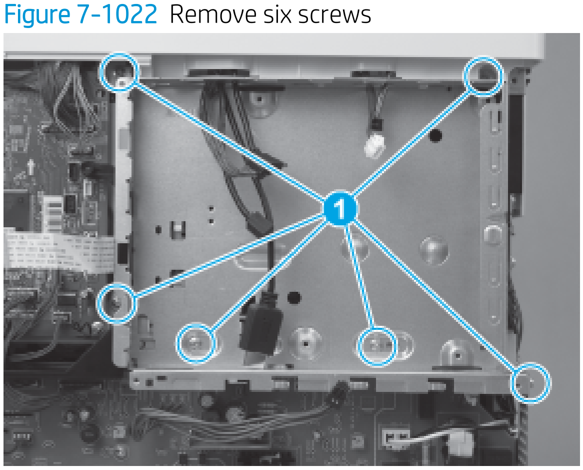
⚠ CAUTION: The flat cable might be attached to the formatter case with double-sided tape. Make sure that this tape is released, so that the flat cable is not damaged when the formatter case is removed.

Figure 7-1021 Release wire harnesses and flat cable



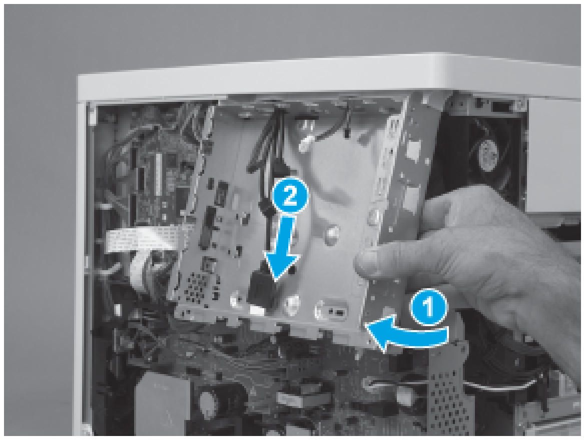
5. Remove six screws (callout 1).

Figure 7-1022 Remove six screws



6. Rotate the bottom of the formatter case away from the printer (callout 1), and then pull it down (callout 2) to release it.

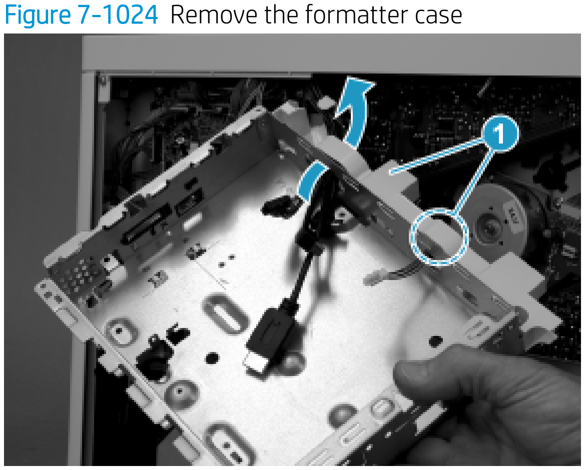
   Figure 7-1023 Release the formatter case

7. Pass the wire harnesses through the opening in the formatter case to remove it.

   IMPORTANT: If the formatter case is removed so that it can be replaced, make sure to transfer the memory PCA (island of data) and plastic bracket (callout 1) to the replacement case.

   Figure 7-1024 Remove the formatter case

Removal and replacement: Fuser power supply (FPS)

Learn about removing and replacing the fuser power supply.

Before performing service

Turn the printer power off

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-63 Part information

Part number	Part description
RM3-7159-000CN	Fuser power supply (110V)
RM3-7160-000CN	Fuser power supply (220V)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-1025 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-1026 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

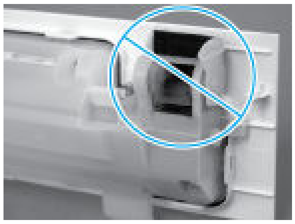
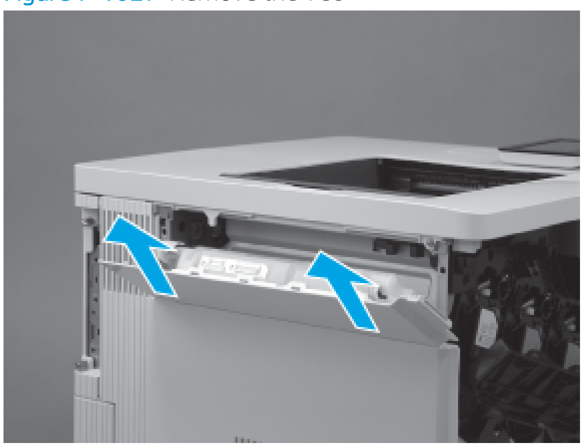
> ⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.
>
> 

Figure 7-1027 Remove the TCU

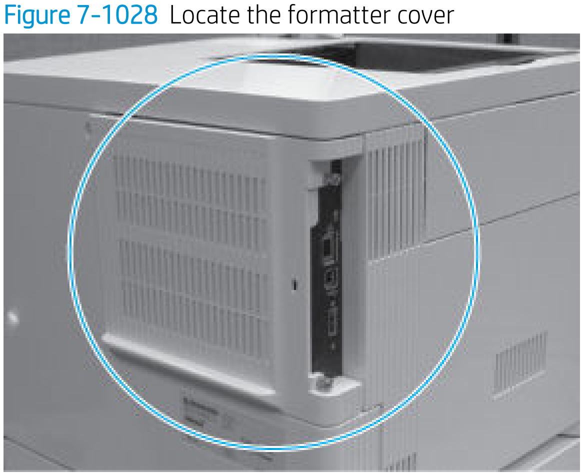


Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

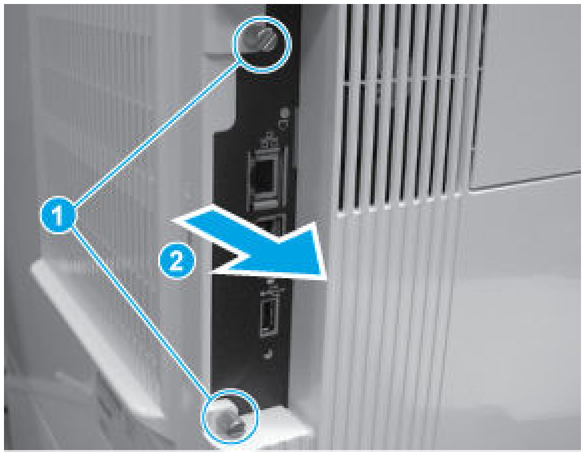
Figure 7-1028 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-1029 Loosen the thumbscrews



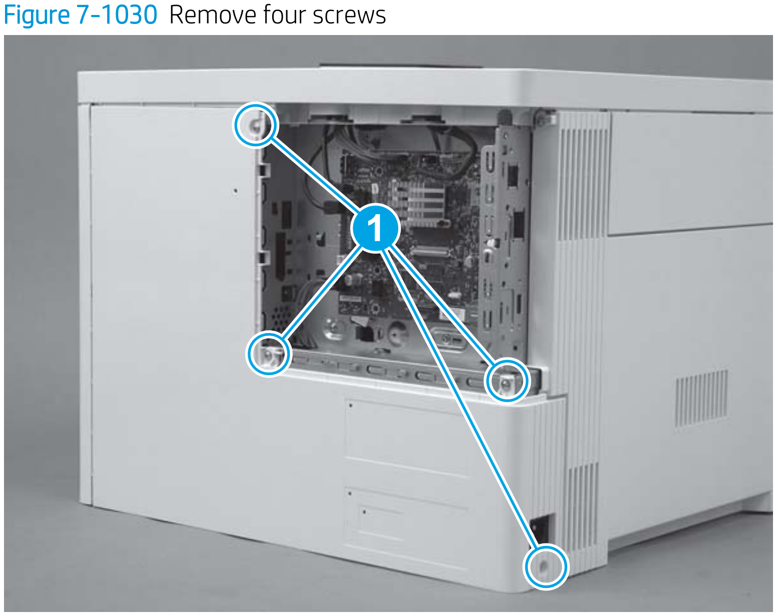
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

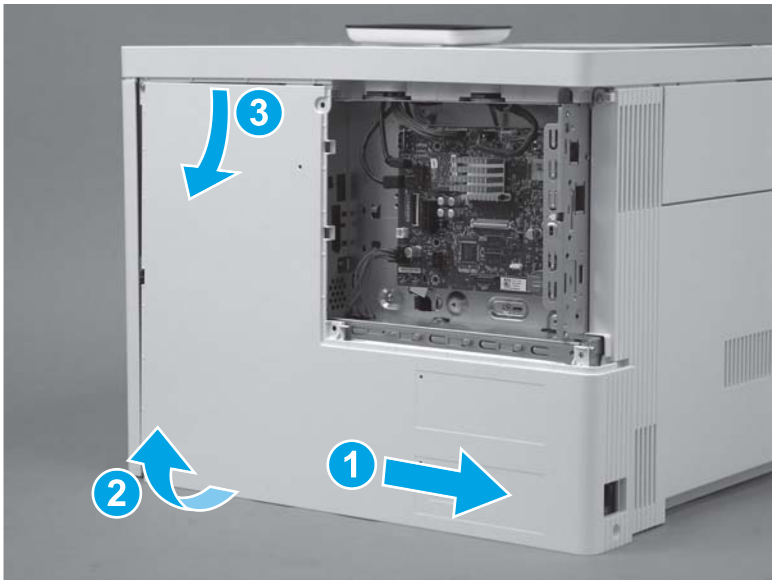
1. Remove four screws (callout 1).

Figure 7-1030 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-1031 Remove the cover



Remove the rear upper cover (MFP)

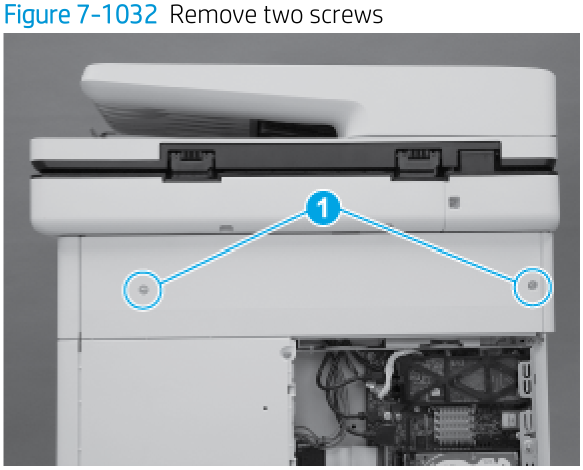
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

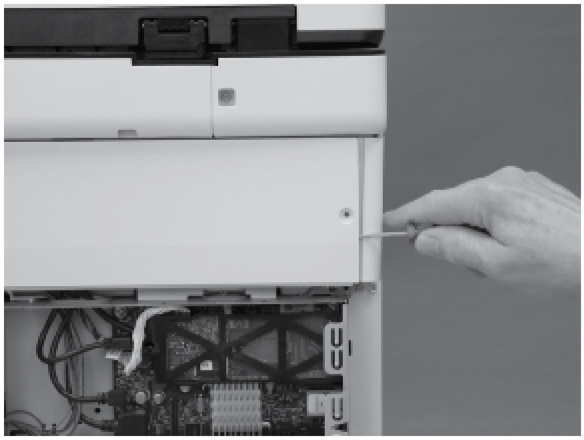
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-1032 Remove two screws



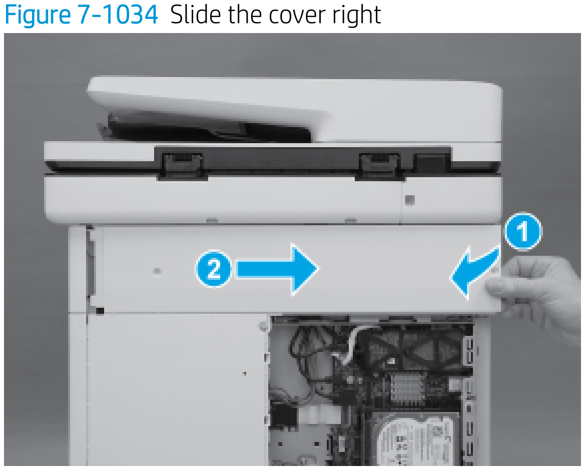
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-1033 Release the right edge



3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-1034 Slide the cover right



4. Remove the cover.

Figure 7-1035 Remove the cover

Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

> NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-1036 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-1037 Remove the cover

Remove the left cover

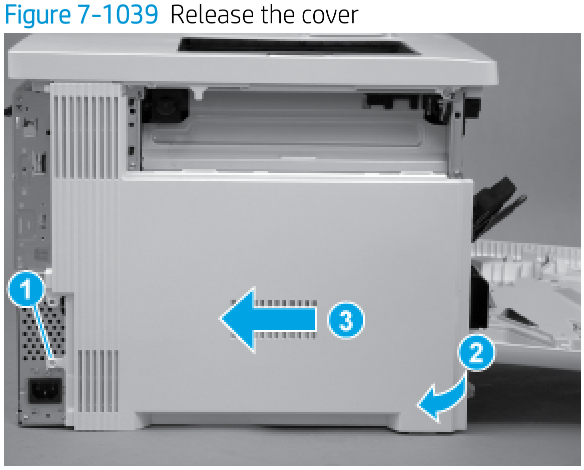
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1038 Remove one screw

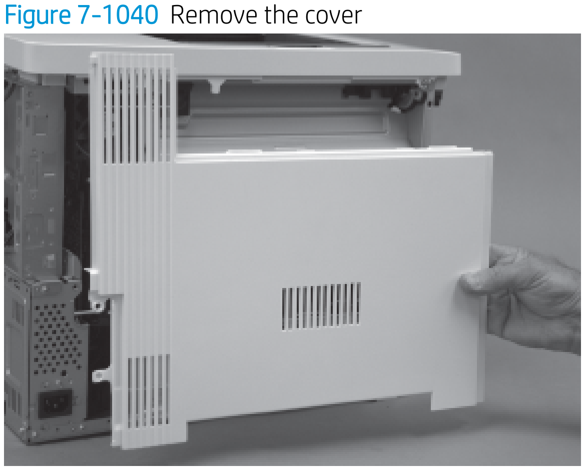
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-1039 Release the cover



3. Remove the cover.

Figure 7-1040 Remove the cover

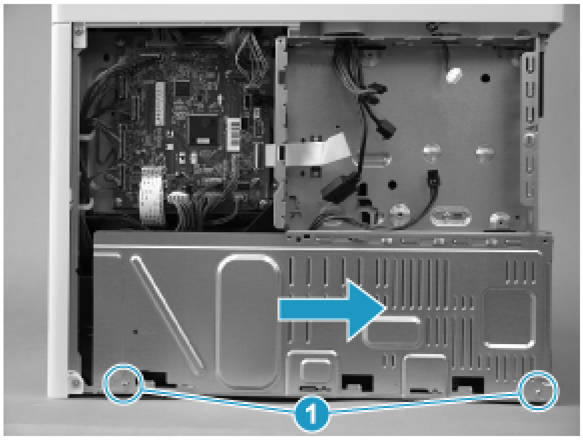


Remove the fuser power supply

Follow these steps to remove the fuser power supply.

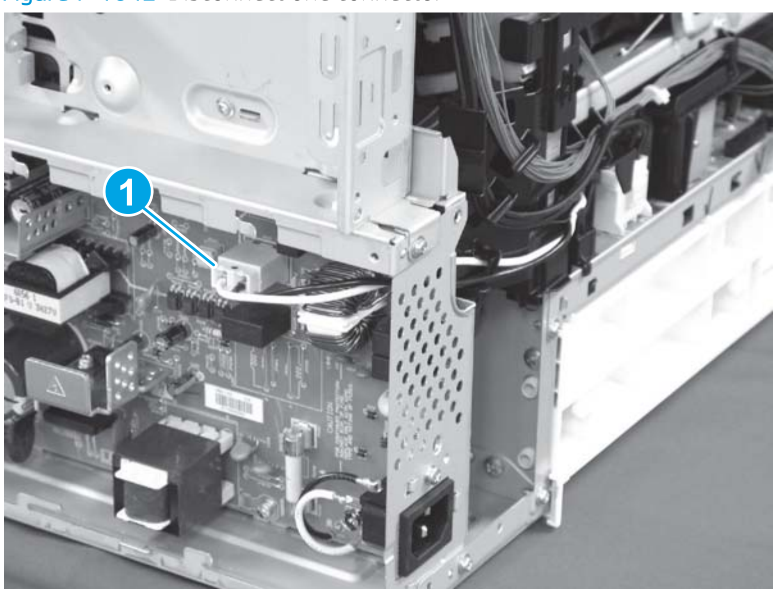
1. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

Figure 7-1041 Remove the LVPS cover



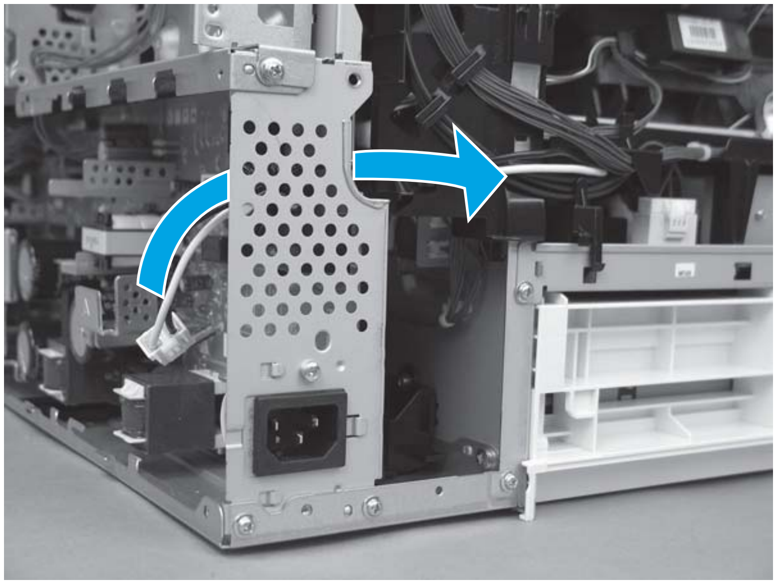
2. Disconnect one connector (callout 1).

Figure 7-1042 Disconnect one connector



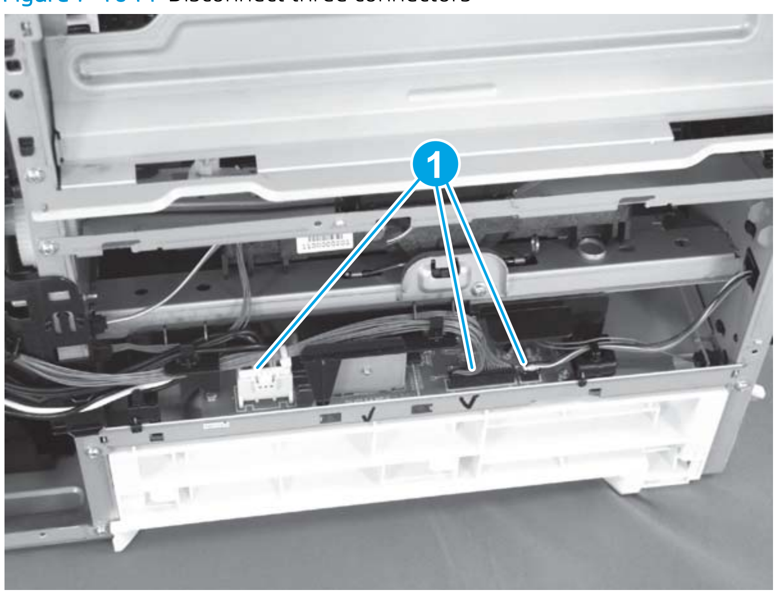
3. Pass the wire harness through the opening in the chassis.

Figure 7-1043 Pass the wire harness through the opening



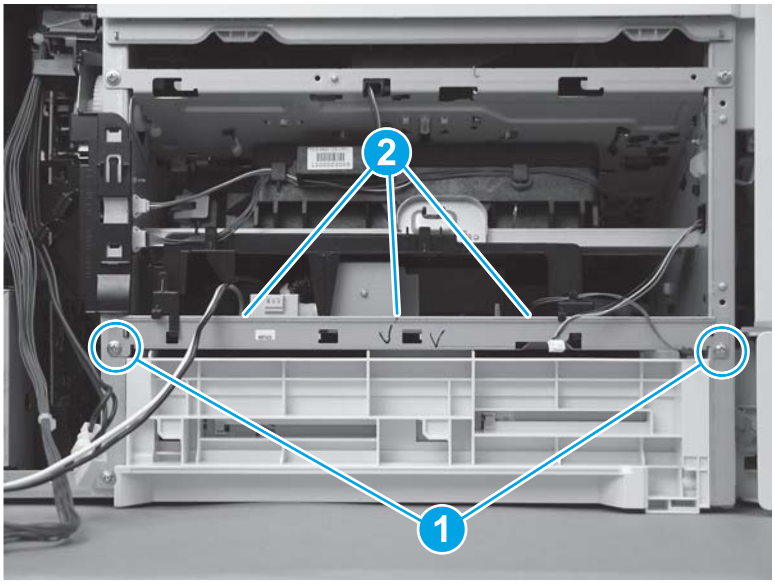
4. Disconnect three connectors (callout 1).

Figure 7-1044 Disconnect three connectors



5. Remove two screws (callout 1), and then remove the fuser power supply (callout 2).

Figure 7-1045 Remove the fuser power supply



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Low-voltage power supply (LVPS)

This document provides the procedures to remove and replace the low-voltage power supply (LVPS).

[View a video demonstration of removing and replacing the Low-voltage power supply.]

Mean time to repair: 25 minutes

Service level: Intermediate

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-64 LVPS part numbers

Part number	Part description
RM3-7157-000CN	Low-voltage power supply (LVPS) (110V)
RM3-7158-000CN	Low-voltage power supply (LVPS) (220V)

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Make sure that all of the connectors on the LVPS are fully seated.

Make sure that all of the connectors on the formatter are fully seated.

Make sure that the formatter cover is fully seated, and that the thumbscrews are finger tight after replacing it.

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print a configuration page to make sure that the printer is functioning correctly.

Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

> NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-1046 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-1047 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

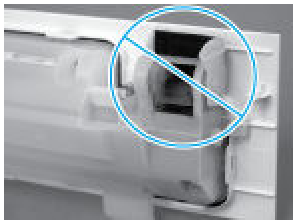
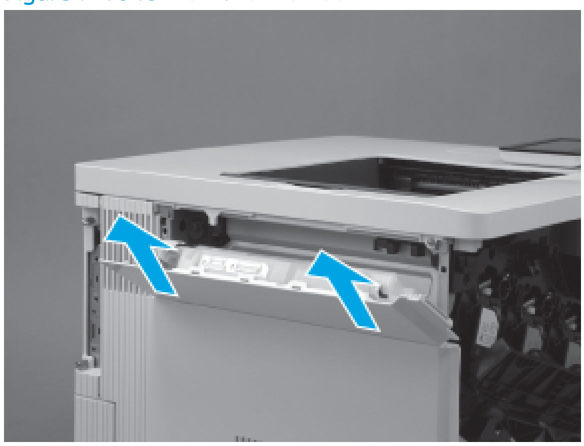


Figure 7-1048 Remove the TCU

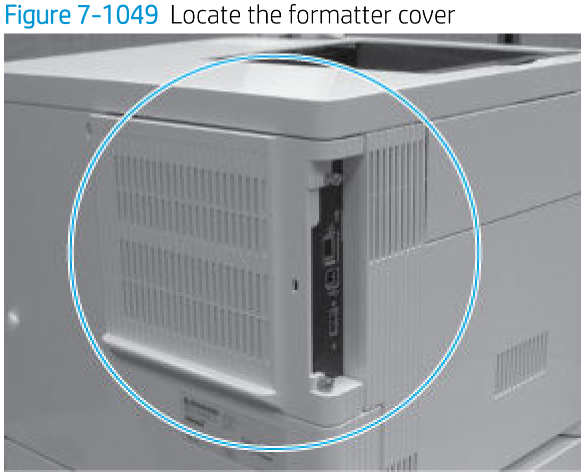


Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

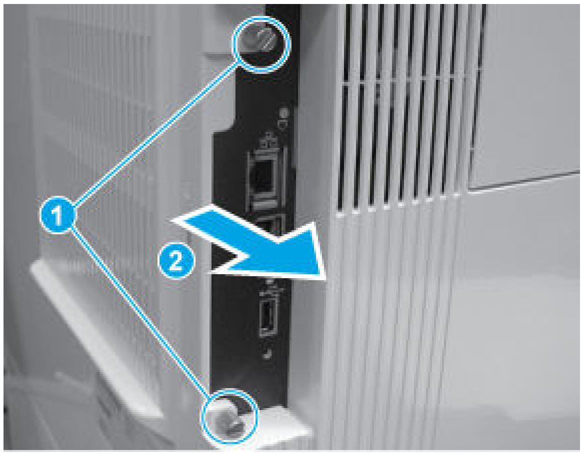
Figure 7-1049 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-1050 Loosen the thumbscrews



Remove the formatter (SFP)

Follow these steps to remove the formatter.

NOTE: This procedure is for SFP models only.

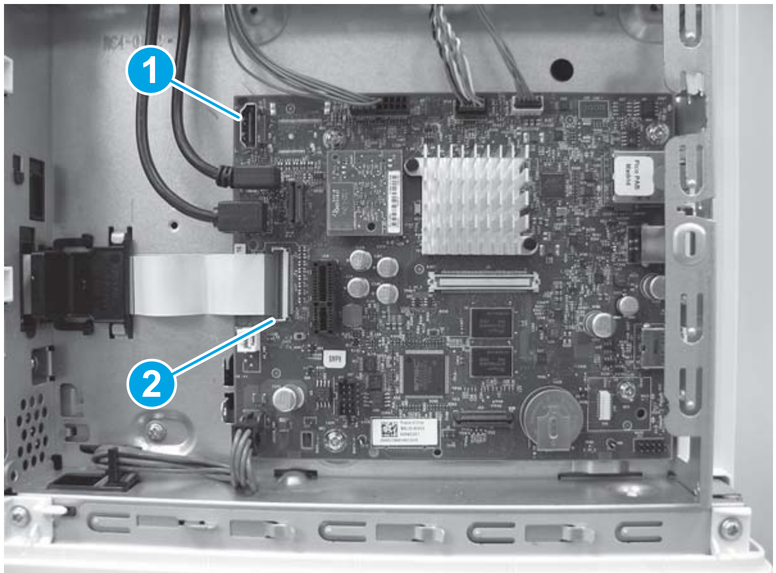
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)
   - All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
   - M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)
   - All models: J57
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

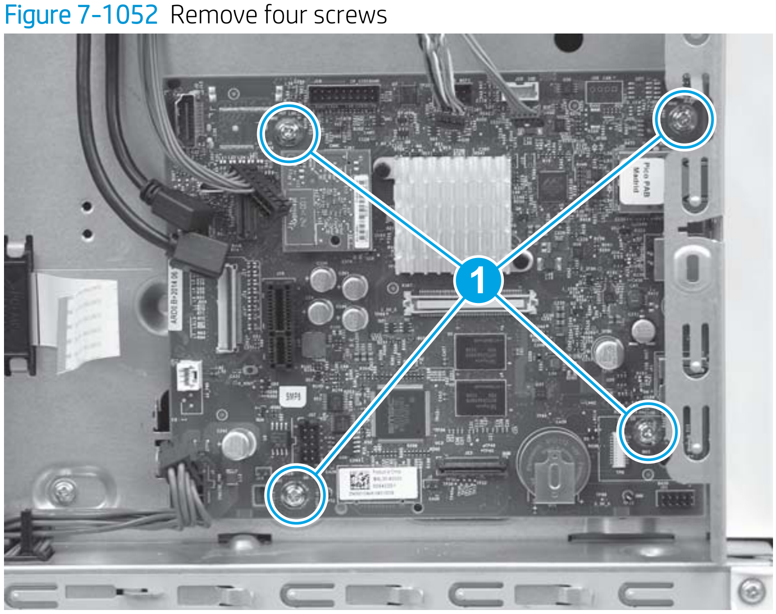
IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1051 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-1052 Remove four screws

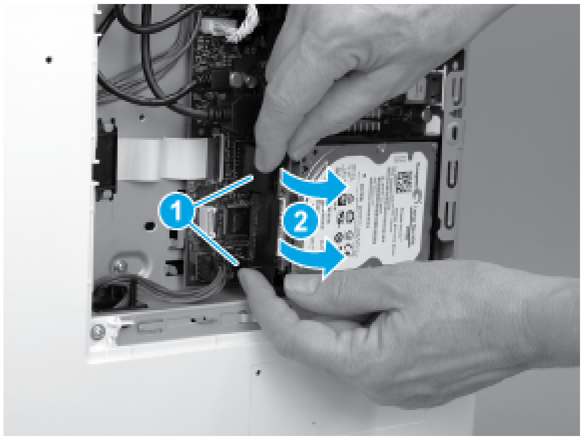


Remove the hard-disk drive (HDD) (MFP)

Follow these steps to remove the hard-disk drive (HDD).

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter.

Figure 7-1053 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-1054 Remove the HDD

Remove the fax PCA (fax models)

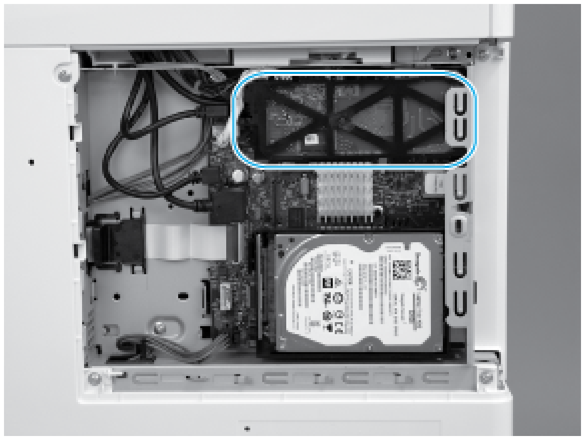
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

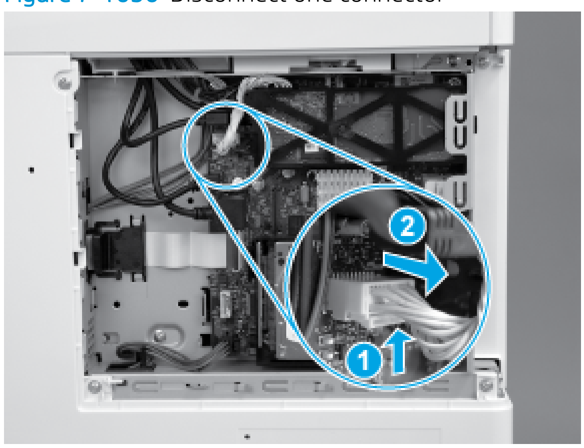
1. Locate the fax PCA component on the formatter.

Figure 7-1055 Locate the fax PCA



2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-1056 Disconnect one connector

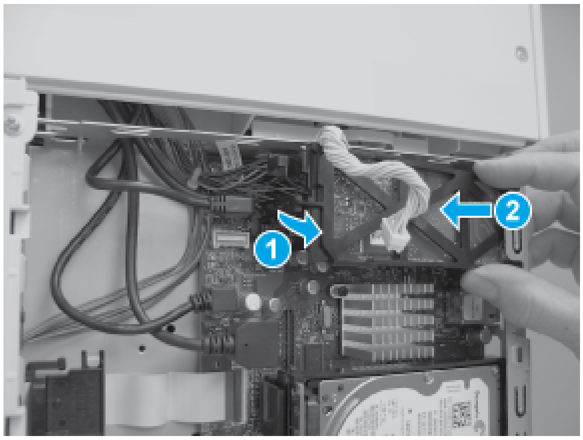


3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-1057 Release one latch

4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-1058 Remove the fax PCA



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

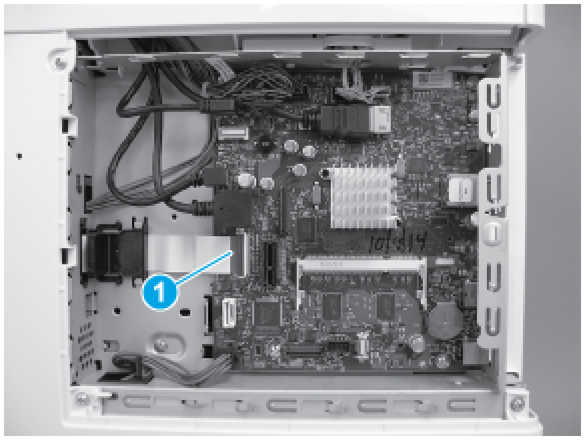
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

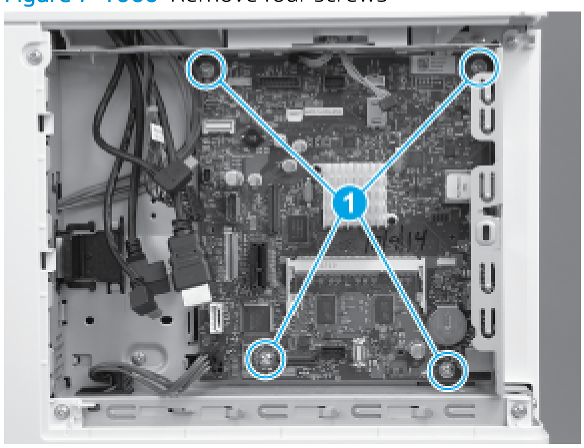
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1059 Disconnect all connectors



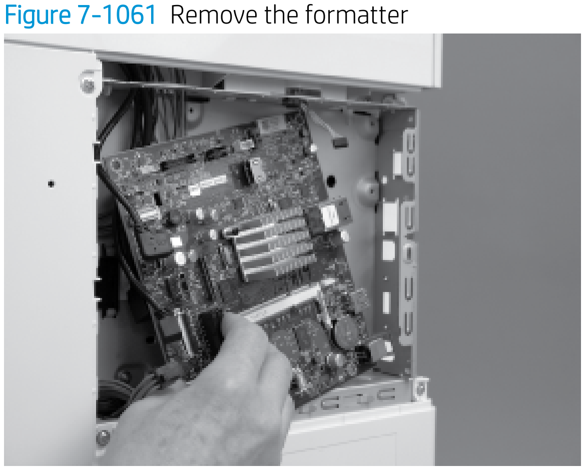
2. Remove four screws (callout 1).

Figure 7-1060 Remove four screws



3. Remove the formatter.

Figure 7-1061 Remove the formatter



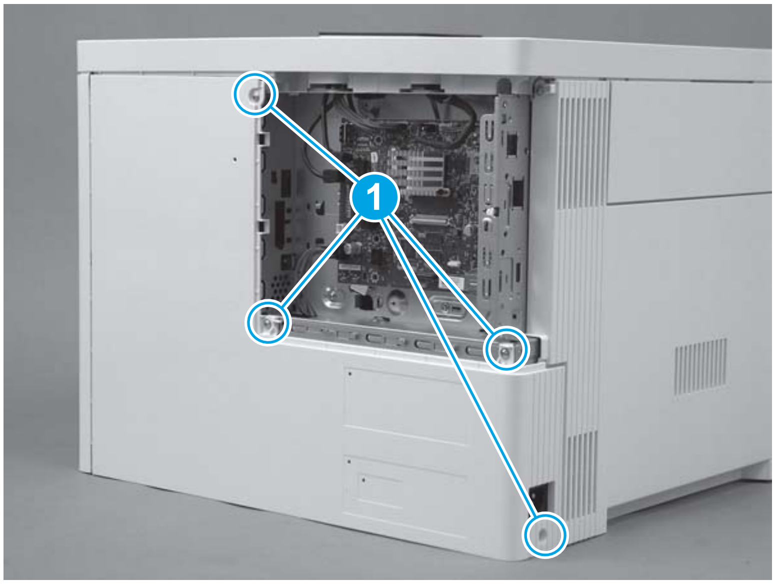
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

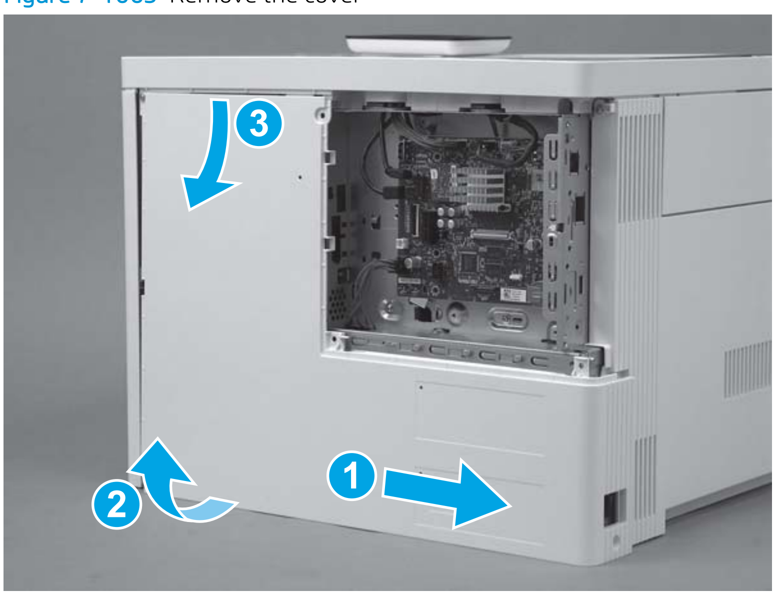
1. Remove four screws (callout 1).

Figure 7-1062 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-1063 Remove the cover



Remove the rear upper cover (MFP)

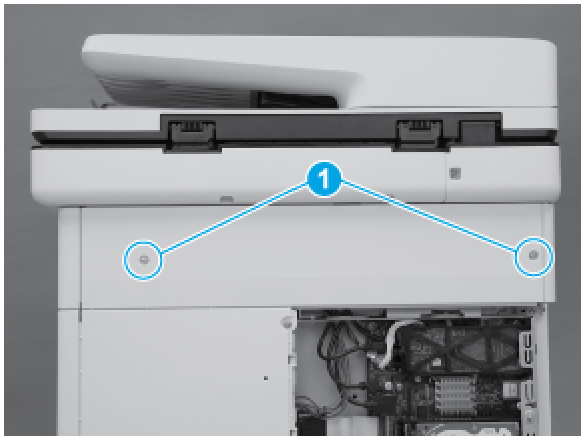
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

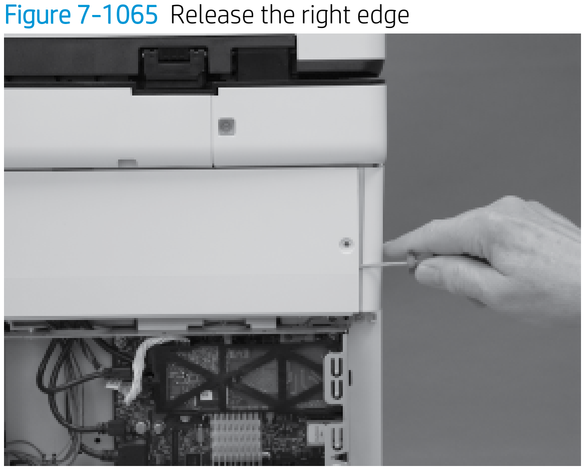
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-1064 Remove two screws



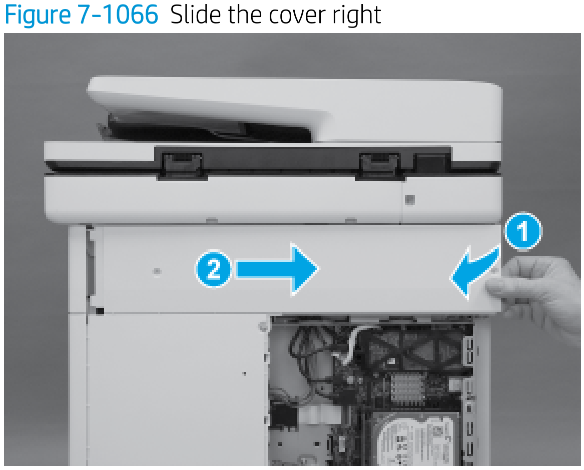
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-1065 Release the right edge



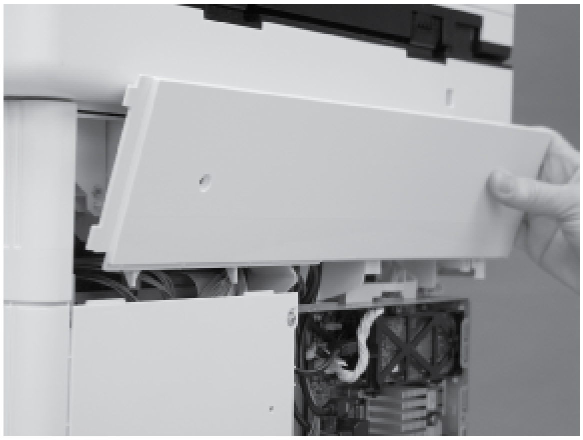
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-1066 Slide the cover right



4. Remove the cover.

Figure 7-1067 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-1068 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-1069 Remove the cover

Remove the left cover

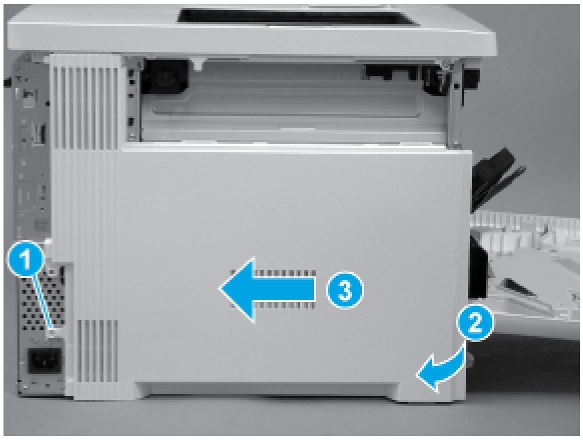
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1070 Remove one screw

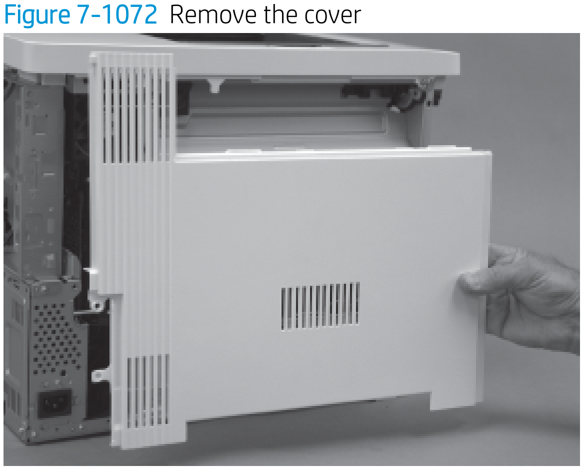
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-1071 Release the cover



3. Remove the cover.

Figure 7-1072 Remove the cover

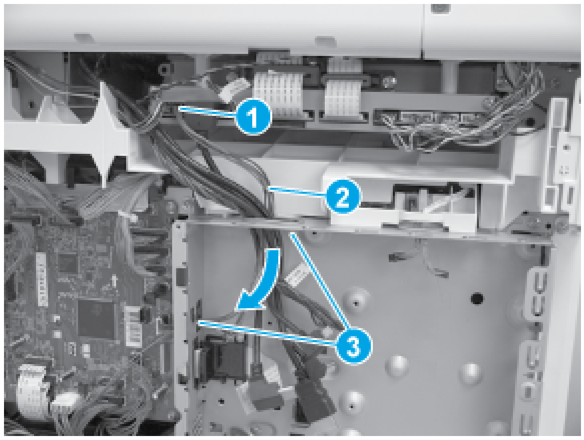


Remove the formatter case

Follow these steps to remove the formatter case.

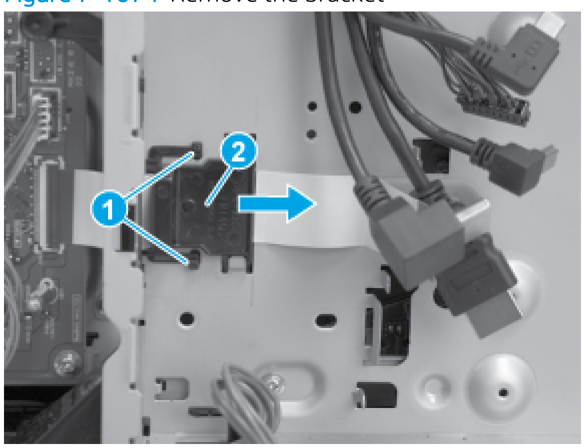
1. **MFP only**: Disconnect one connector (callout 1), and then pass the wire harness (callout 2) through two openings in the formatter case (callout 3).

Figure 7-1073 Disconnect one connector



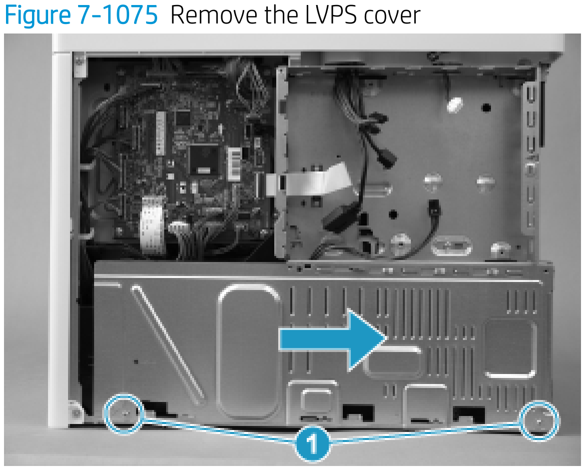
2. Release two tabs (callout 1) on the black plastic bracket. Hold the tabs in the released position, and then slide the bracket (callout 2) to the right to remove it from the formatter case.

Figure 7-1074 Remove the bracket



3. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

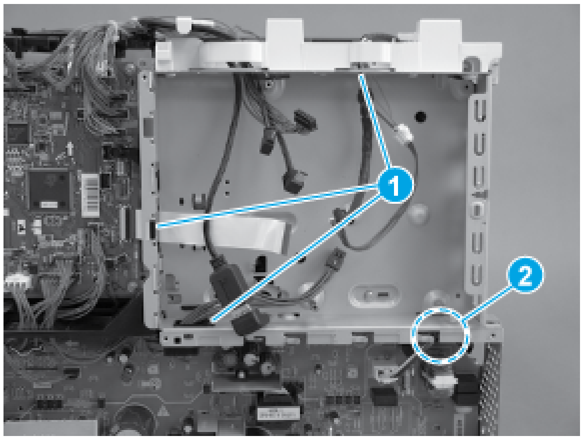
Figure 7-1075 Remove the LVPS cover



4. Pass two wire harnesses and one flat cable (callout 1) through the opening in the formatter case, and then release one wire harness from the retainer (callout 2).

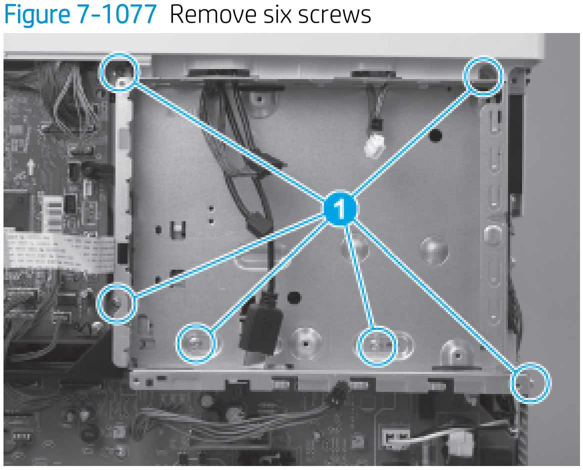
⚠ CAUTION: The flat cable might be attached to the formatter case with double-sided tape. Make sure that this tape is released, so that the flat cable is not damaged when the formatter case is removed.

Figure 7-1076 Release wire harnesses and flat cable



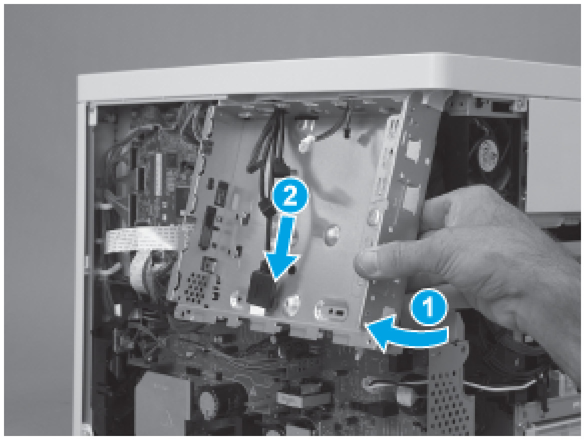
5. Remove six screws (callout 1).

Figure 7-1077 Remove six screws



6. Rotate the bottom of the formatter case away from the printer (callout 1), and then pull it down (callout 2) to release it.

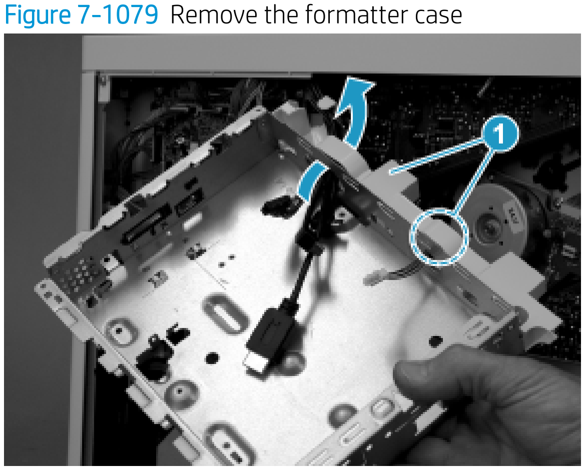
Figure 7-1078 Release the formatter case



7. Pass the wire harnesses through the opening in the formatter case to remove it.

IMPORTANT: If the formatter case is removed so that it can be replaced, make sure to transfer the memory PCA (island of data) and plastic bracket (callout 1) to the replacement case.

Figure 7-1079 Remove the formatter case



Remove the low-voltage power supply (LVPS)

Follow these steps to remove the low-voltage power supply (LVPS).

1. Disconnect one wire harness (callout 1), and then pass the wire harness through the opening (callout 2) in the chassis.

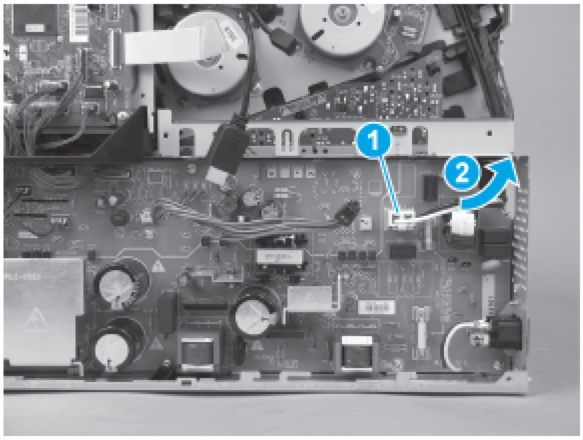


Figure 7-1080 Disconnect one wire harness

2. Disconnect three connectors on the DC controller (callout 1), and then disconnect four connectors (callout 2) on the LVPS.

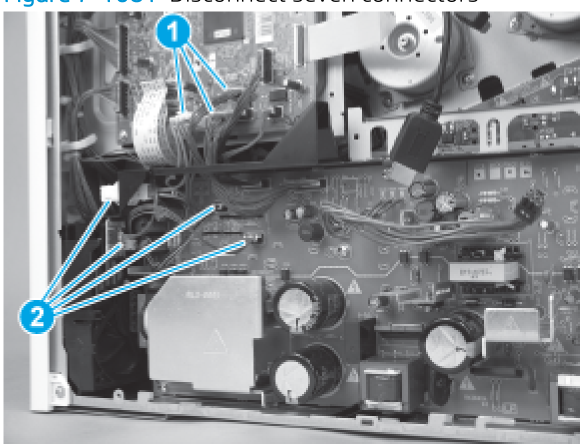


Figure 7-1081 Disconnect seven connectors

3. Pass the wire harnesses from the DC controller to the LVPS through the opening in the chassis (callout 1), and then release the wire harnesses from the retainer (callout 2).

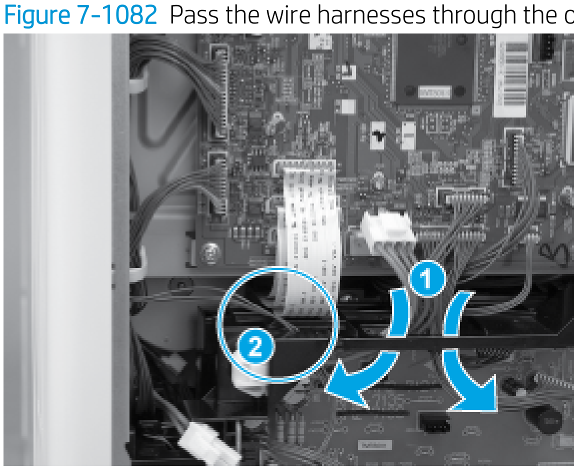
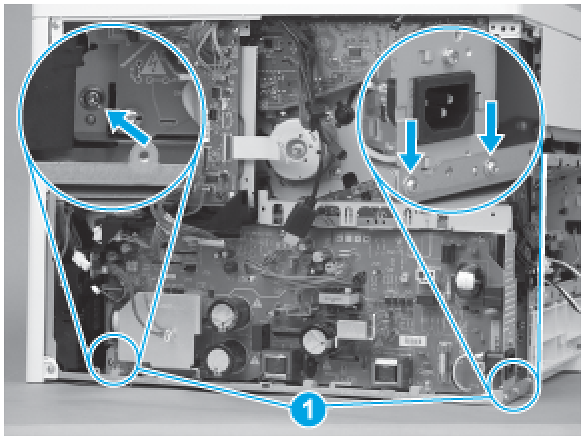


Figure 7-1082 Pass the wire harnesses through the opening

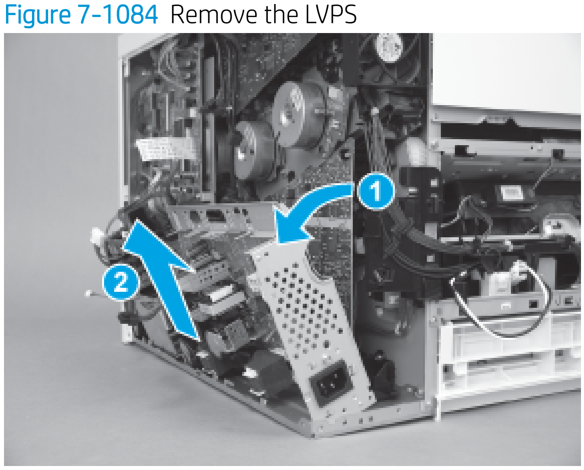
4. Remove three screws (callout 1).

Figure 7-1083 Remove three screws



5. Rotate the top of the LVPS away from the printer (callout 1), and then slide it up and out (callout 2) of the printer to remove it.

Figure 7-1084 Remove the LVPS



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: High-voltage power supply D (HVPSD)

Learn about removing and replacing the high-voltage power supply D.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-65 Part information

Part number	Part description
RM2-7122-000CN	High-voltage power supply D (HVPSD)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

> NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-1085 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-1086 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

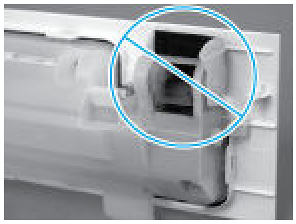
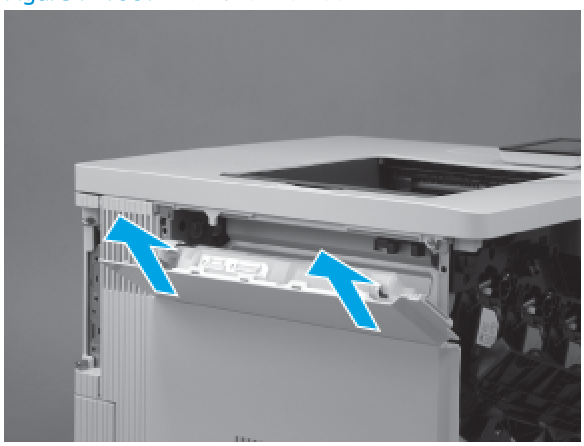


Figure 7-1087 Remove the TCU

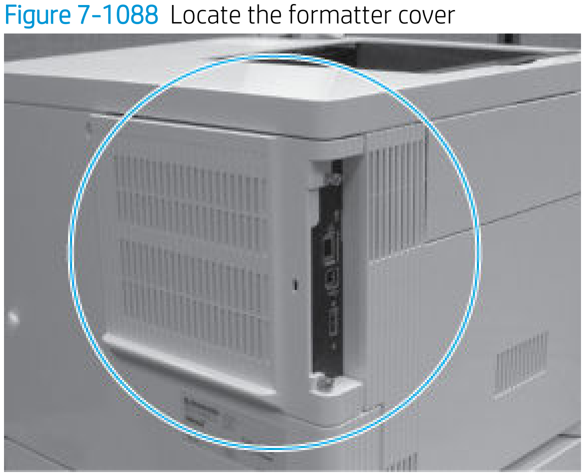


Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

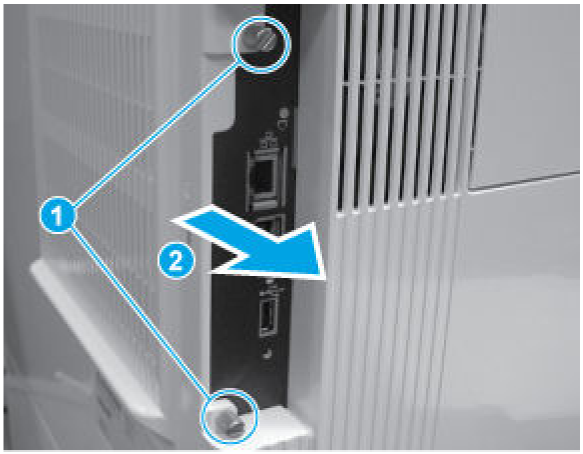
Figure 7-1088 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-1089 Loosen the thumbscrews



Remove the formatter (SFP)

Follow these steps to remove the formatter.

NOTE: This procedure is for SFP models only.

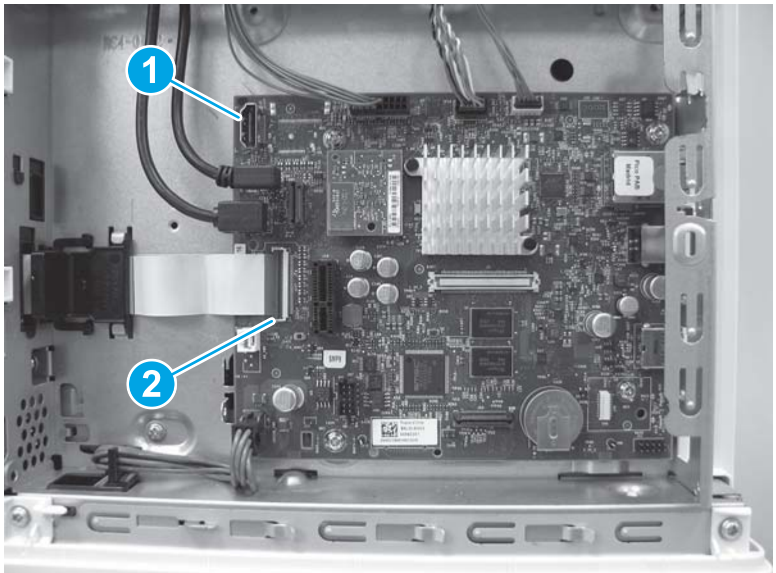
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)
   - All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
   - M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)
   - All models: J57
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

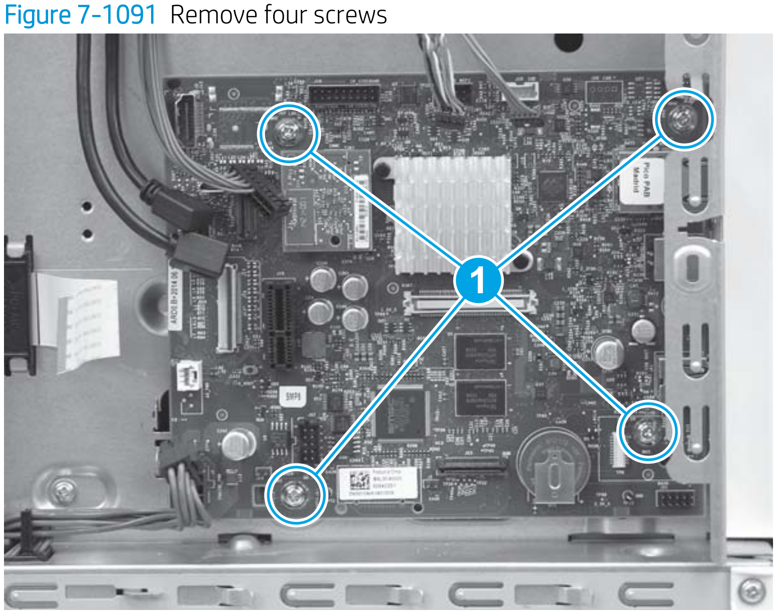
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1090 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-1091 Remove four screws



Remove the hard-disk drive (HDD)

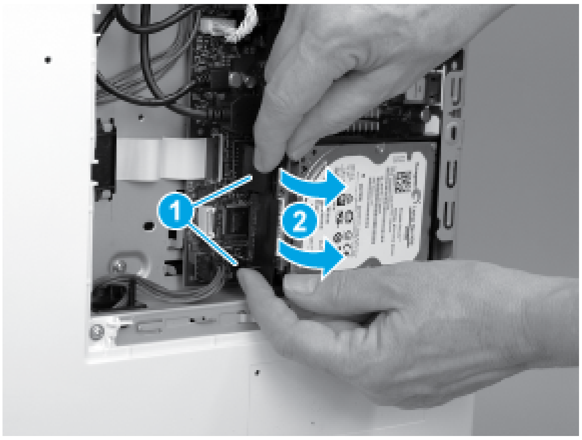
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-1092 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-1093 Remove the HDD

Remove the fax PCA (fax models)

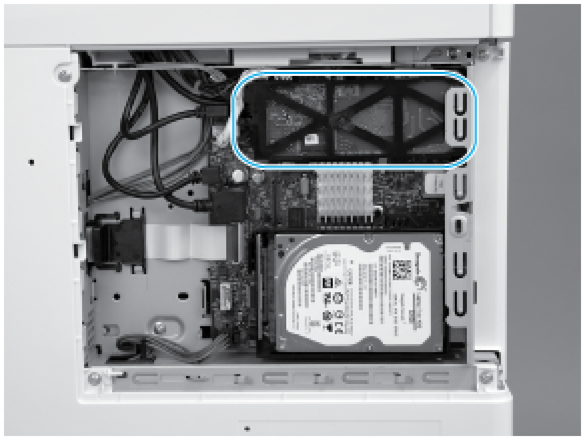
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

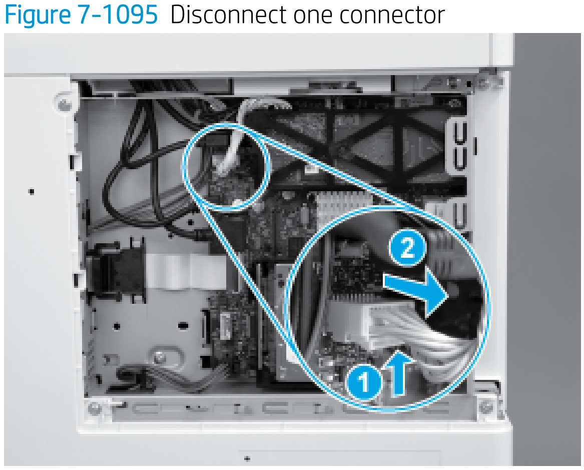
1. Locate the fax PCA component on the formatter.

Figure 7-1094 Locate the fax PCA



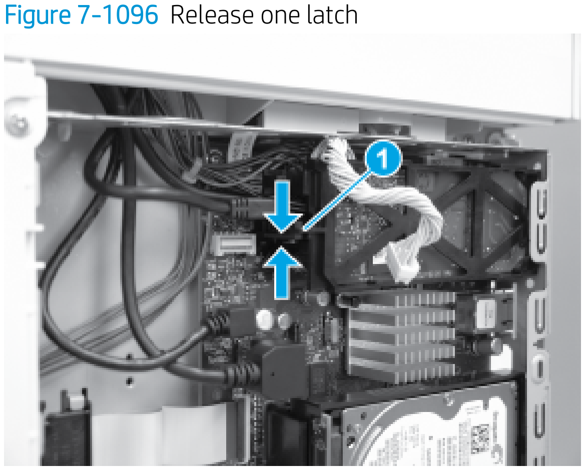
2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-1095 Disconnect one connector



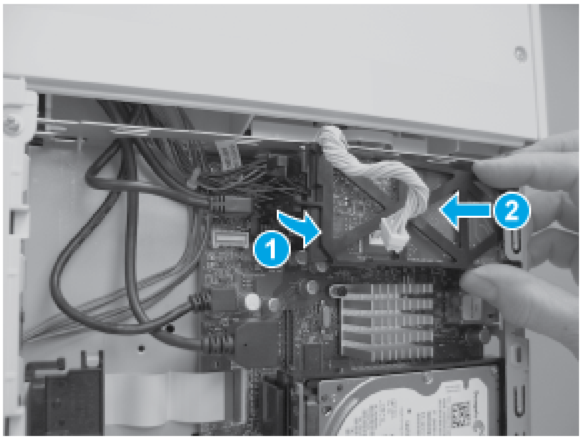
3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-1096 Release one latch



4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-1097 Remove the fax PCA



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

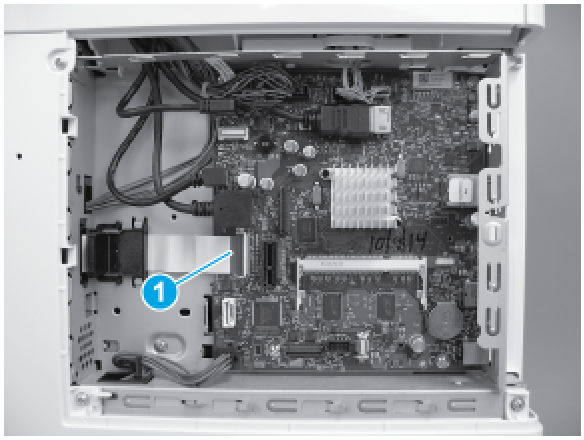
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

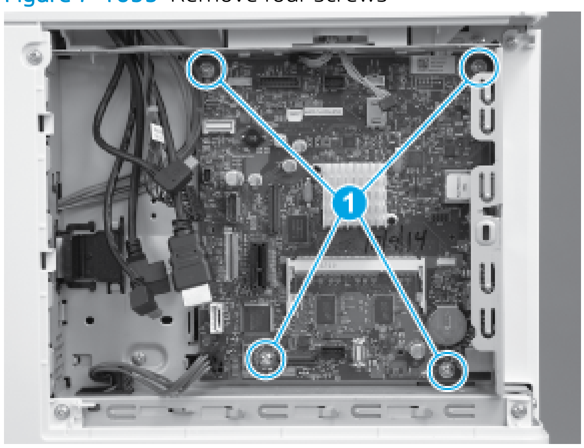
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1098 Disconnect all connectors



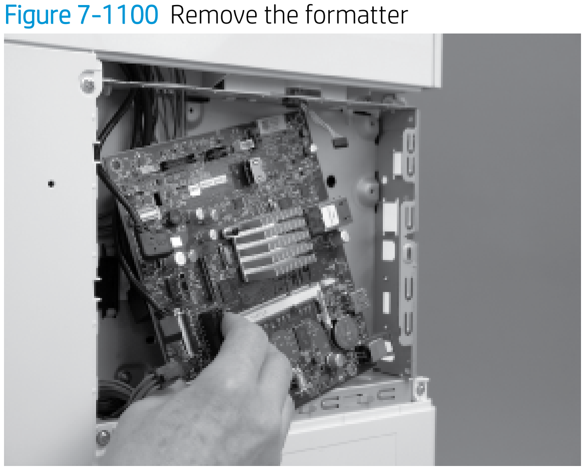
2. Remove four screws (callout 1).

Figure 7-1099 Remove four screws



3. Remove the formatter.

Figure 7-1100 Remove the formatter



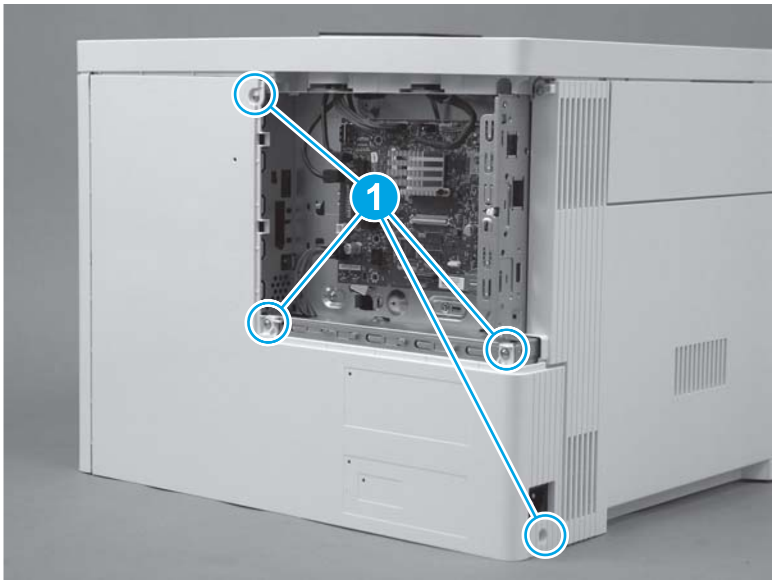
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

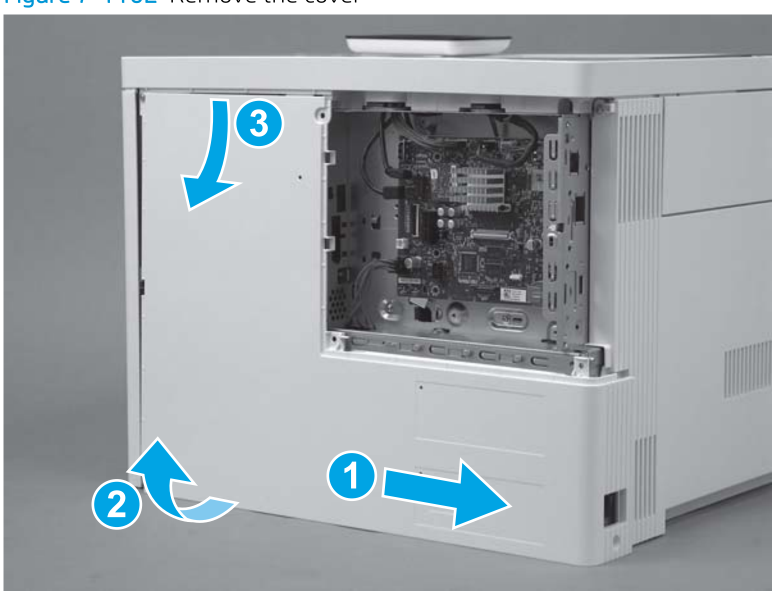
1. Remove four screws (callout 1).

Figure 7-1101 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-1102 Remove the cover



Remove the rear upper cover (MFP)

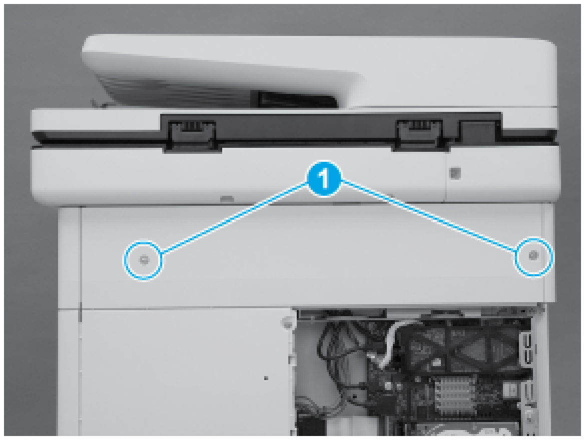
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

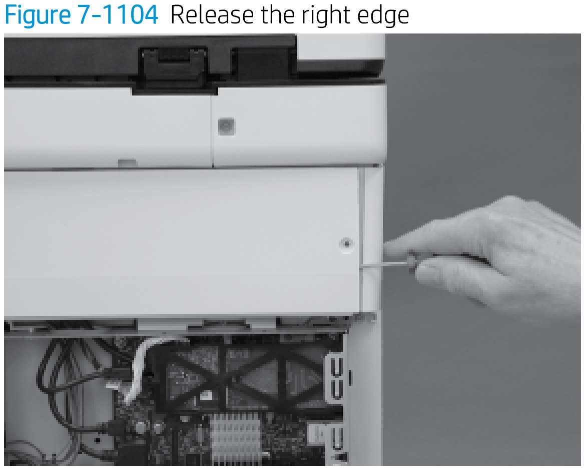
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-1103 Remove two screws



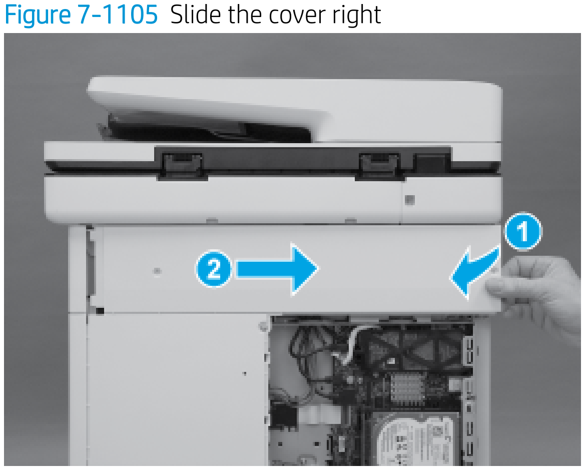
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-1104 Release the right edge



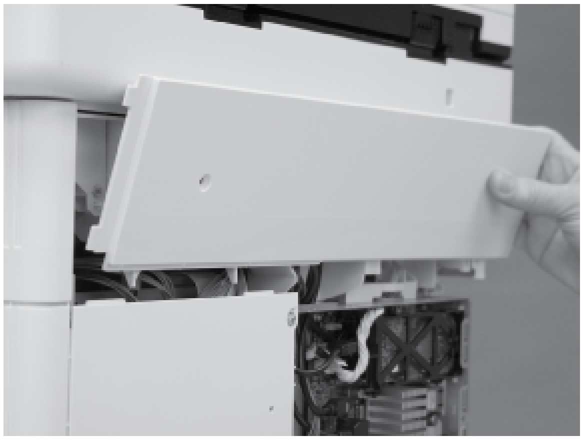
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-1105 Slide the cover right



4. Remove the cover.

Figure 7-1106 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-1107 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-1108 Remove the cover

Remove the left cover

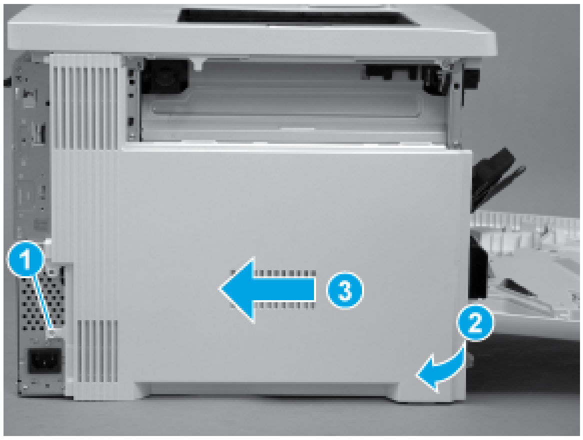
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1109 Remove one screw

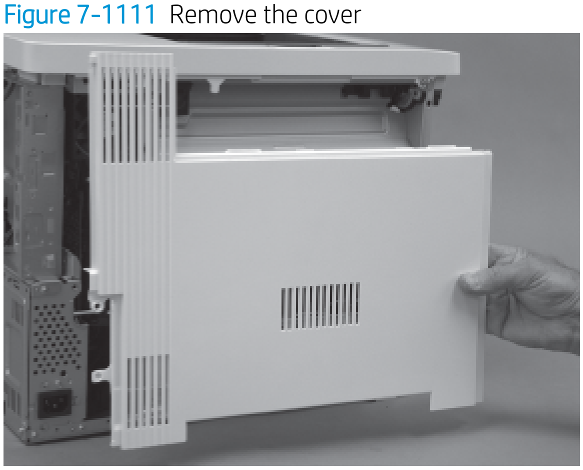
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-1110 Release the cover



3. Remove the cover.

Figure 7-1111 Remove the cover

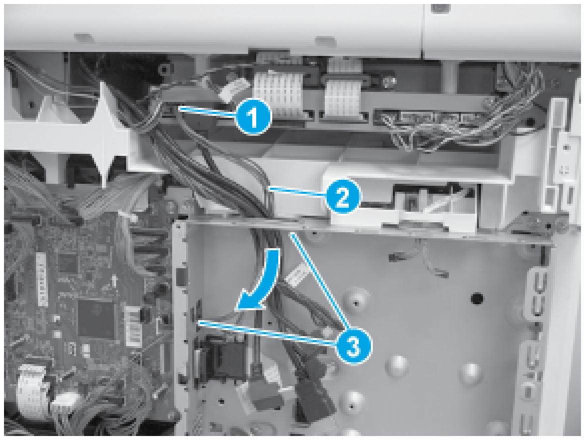


Remove the formatter case

Follow these steps to remove the formatter case.

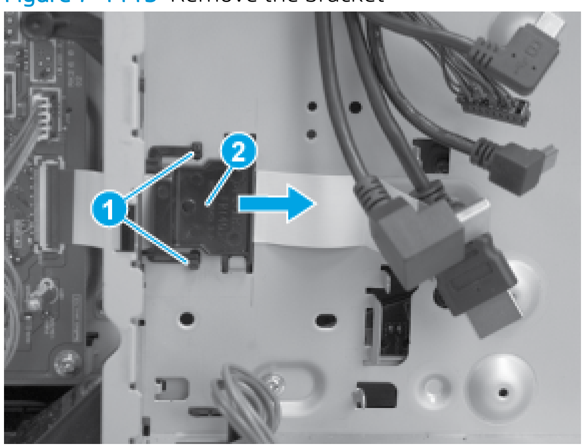
1. **MFP only**: Disconnect one connector (callout 1), and then pass the wire harness (callout 2) through two openings in the formatter case (callout 3).

Figure 7-1112 Disconnect one connector



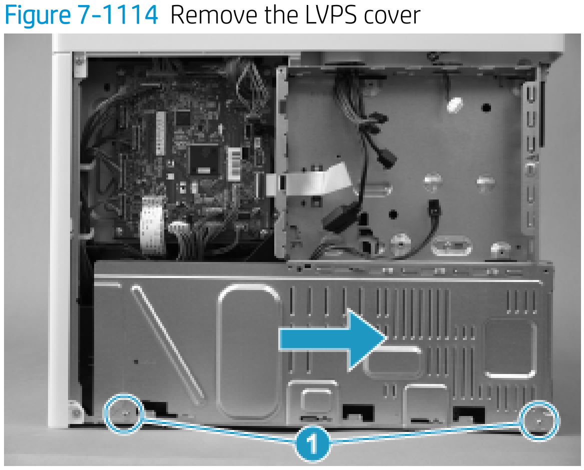
2. Release two tabs (callout 1) on the black plastic bracket. Hold the tabs in the released position, and then slide the bracket (callout 2) to the right to remove it from the formatter case.

Figure 7-1113 Remove the bracket



3. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

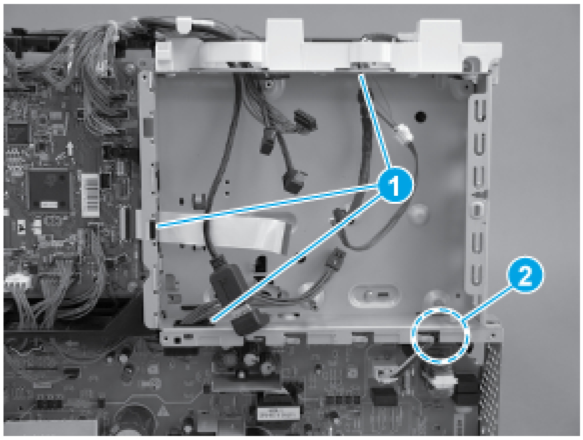
Figure 7-1114 Remove the LVPS cover



4. Pass two wire harnesses and one flat cable (callout 1) through the opening in the formatter case, and then release one wire harness from the retainer (callout 2).

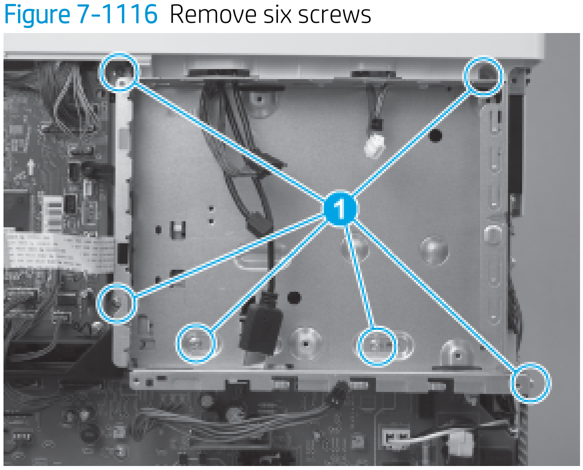
⚠ CAUTION: The flat cable might be attached to the formatter case with double-sided tape. Make sure that this tape is released, so that the flat cable is not damaged when the formatter case is removed.

Figure 7-1115 Release wire harnesses and flat cable



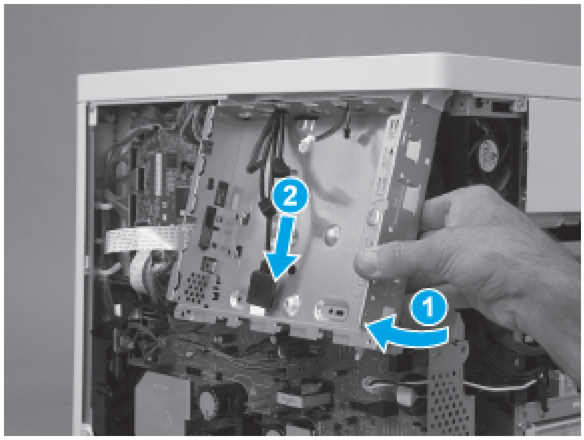
5. Remove six screws (callout 1).

Figure 7-1116 Remove six screws



6. Rotate the bottom of the formatter case away from the printer (callout 1), and then pull it down (callout 2) to release it.

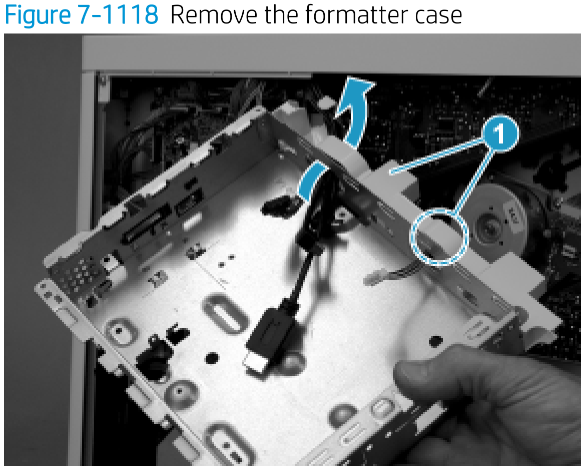
Figure 7-1117 Release the formatter case



7. Pass the wire harnesses through the opening in the formatter case to remove it.

IMPORTANT: If the formatter case is removed so that it can be replaced, make sure to transfer the memory PCA (island of data) and plastic bracket (callout 1) to the replacement case.

Figure 7-1118 Remove the formatter case

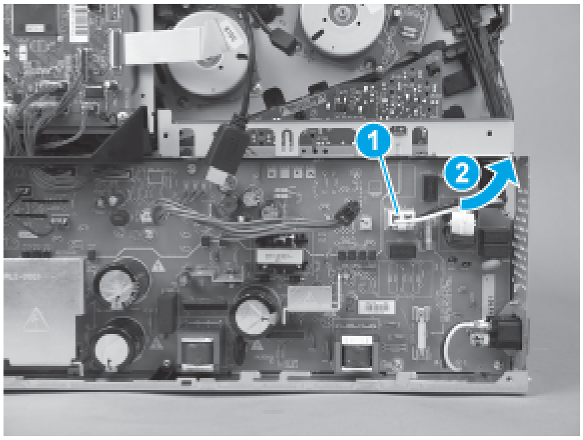


Remove the low-voltage power supply (LVPS)

Follow these steps to remove the low-voltage power supply (LVPS).

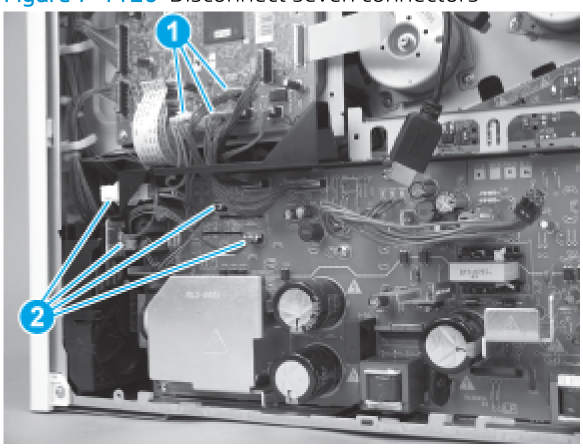
1. Disconnect one wire harness (callout 1), and then pass the wire harness through the opening (callout 2) in the chassis.

Figure 7-1119 Disconnect one wire harness



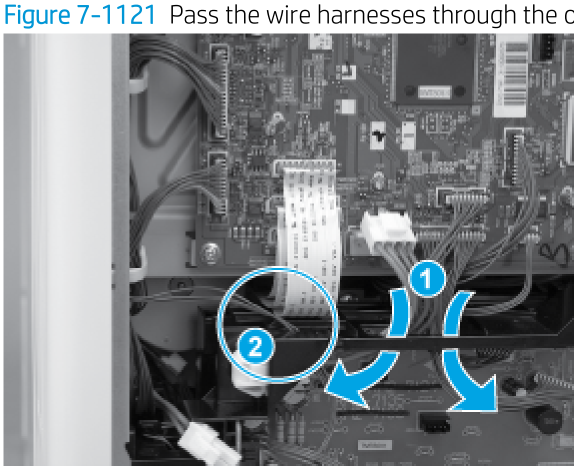
2. Disconnect three connectors on the DC controller (callout 1), and then disconnect four connectors (callout 2) on the LVPS.

Figure 7-1120 Disconnect seven connectors



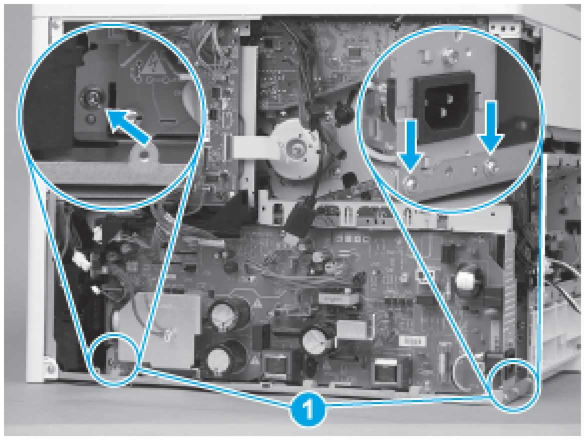
3. Pass the wire harnesses from the DC controller to the LVPS through the opening in the chassis (callout 1), and then release the wire harnesses from the retainer (callout 2).

Figure 7-1121 Pass the wire harnesses through the opening



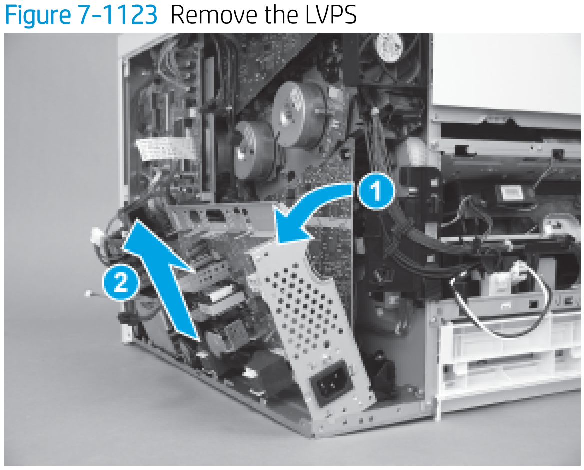
4. Remove three screws (callout 1).

Figure 7-1122 Remove three screws



5. Rotate the top of the LVPS away from the printer (callout 1), and then slide it up and out (callout 2) of the printer to remove it.

Figure 7-1123 Remove the LVPS

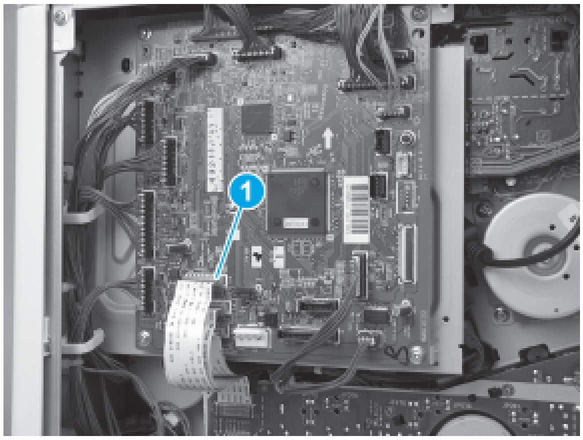


Remove the high-voltage power supply D (HVPSD)

Follow these steps to remove the high-voltage power supply D (HVPSD).

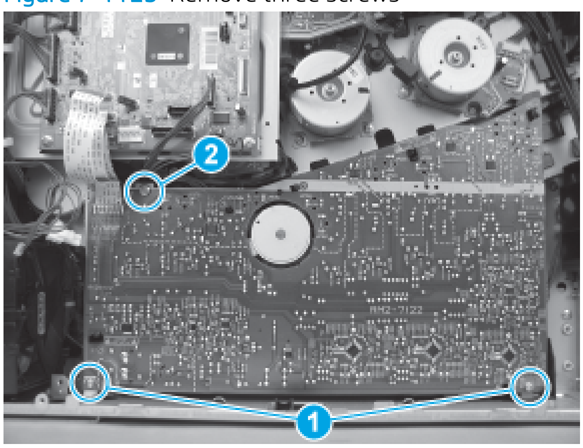
1. Disconnect one flat cable (callout 1) on the DC controller.

Figure 7-1124 Disconnect one flat cable



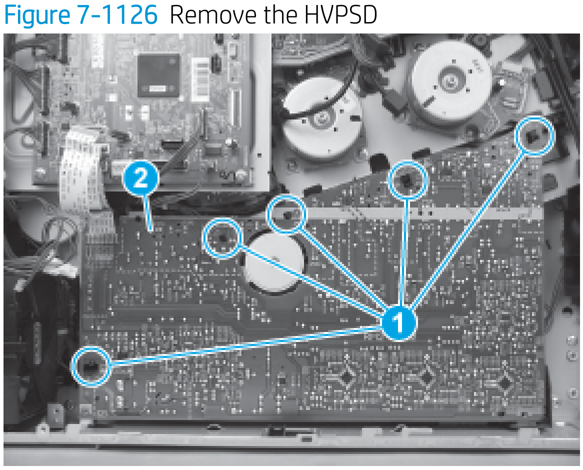
2. Remove two screws (callout 1), and then remove one self tapping screw (callout 2) on the HVPSD.

Figure 7-1125 Remove three screws



3. Release five tabs (callout 1), and then remove the HVPSD (callout 2).

Figure 7-1126 Remove the HVPSD



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Drum motor 1 (M1)

Learn about removing and replacing drum motor 1.

Before performing service

Turn the printer power off

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-66 Part information

Part number	Part description
RM2-0078-000CN	Drum motor 1 (M1)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-1127 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-1128 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

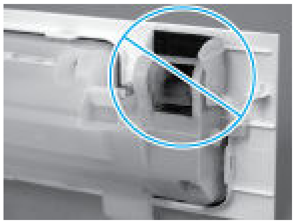
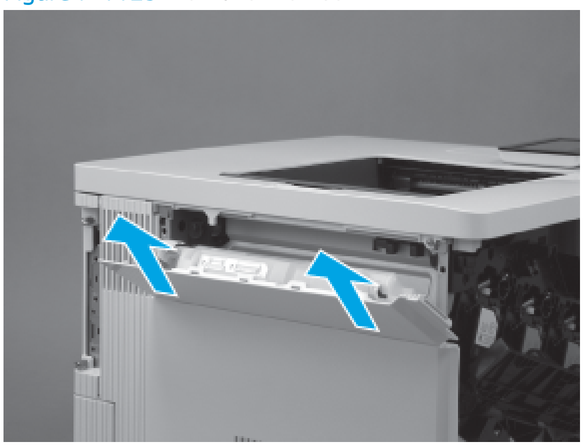


Figure 7-1129 Remove the TCU

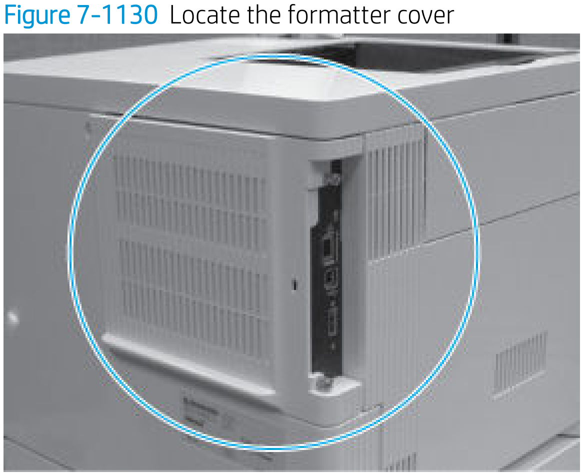


Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

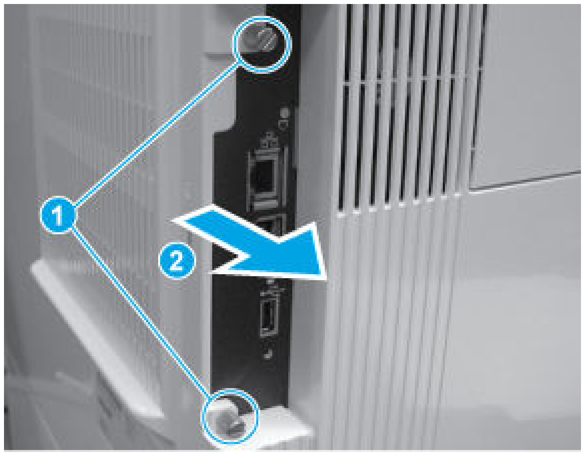
Figure 7-1130 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-1131 Loosen the thumbscrews



Remove the formatter (SFP)

Follow these steps to remove the formatter.

NOTE: This procedure is for SFP models only.

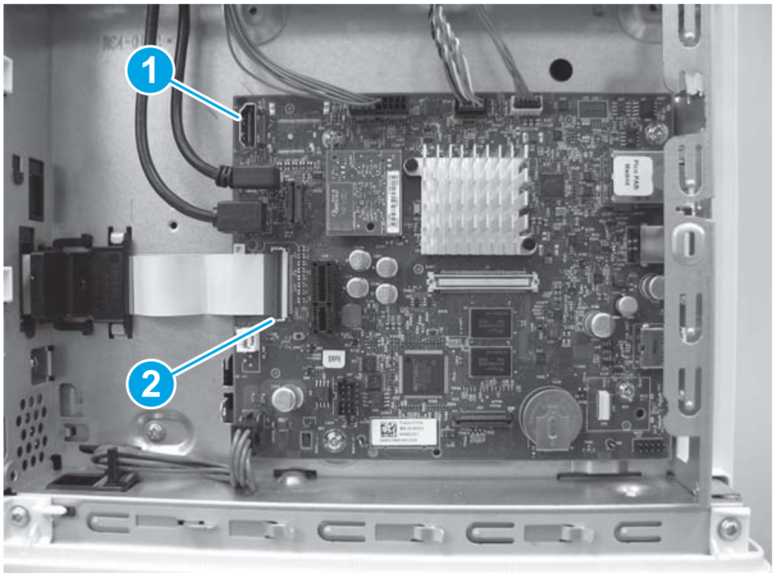
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)
   - All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
   - M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)
   - All models: J57
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

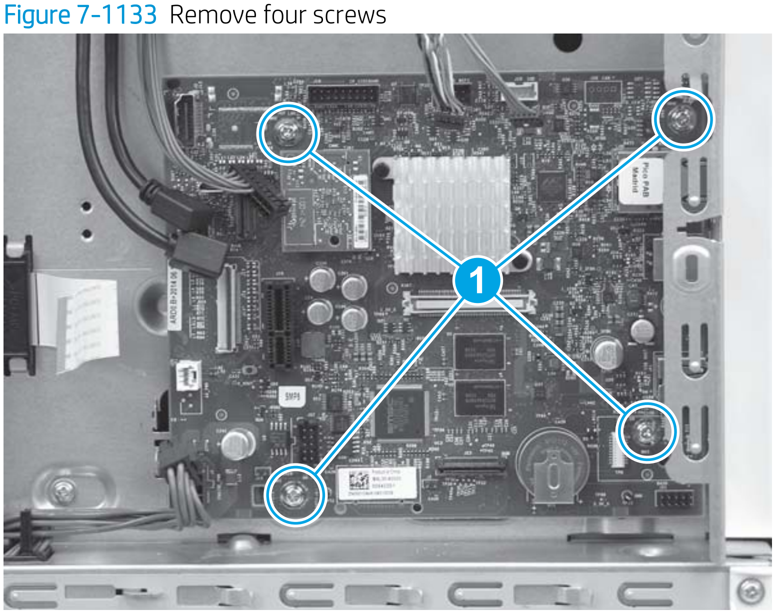
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1132 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-1133 Remove four screws



Remove the hard-disk drive (HDD)

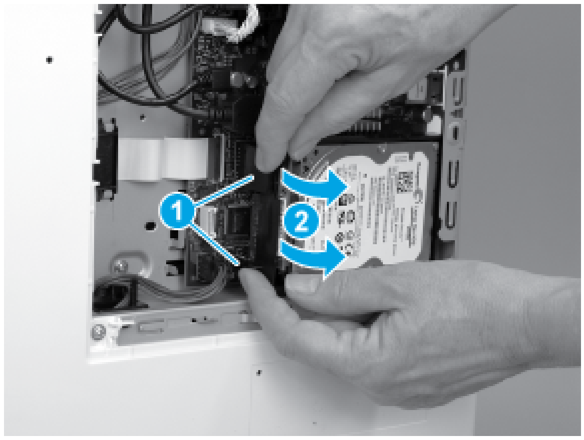
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-1134 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-1135 Remove the HDD

Remove the fax PCA (fax models)

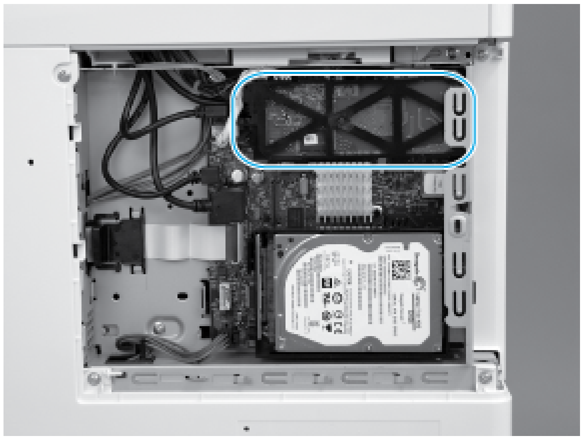
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

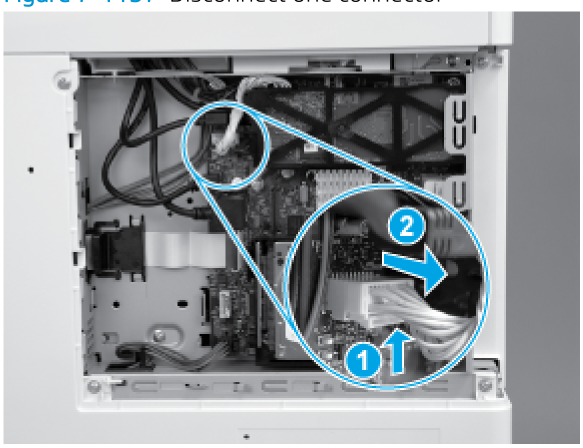
1. Locate the fax PCA component on the formatter.

Figure 7-1136 Locate the fax PCA



2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-1137 Disconnect one connector

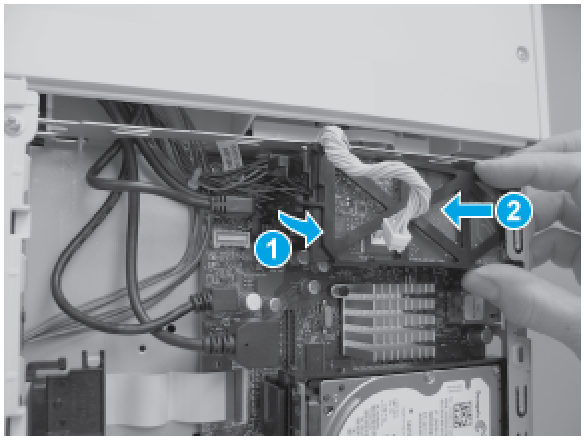


3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-1138 Release one latch

4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-1139 Remove the fax PCA



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

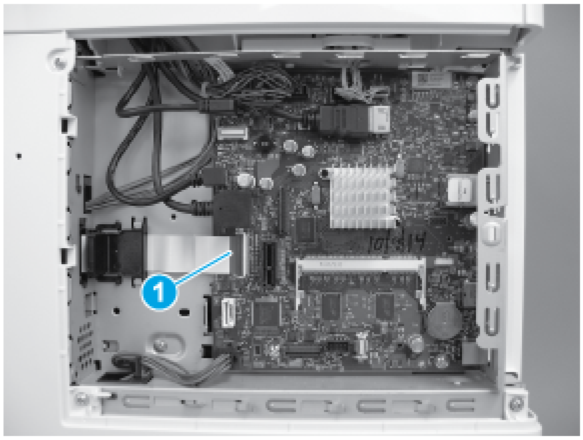
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

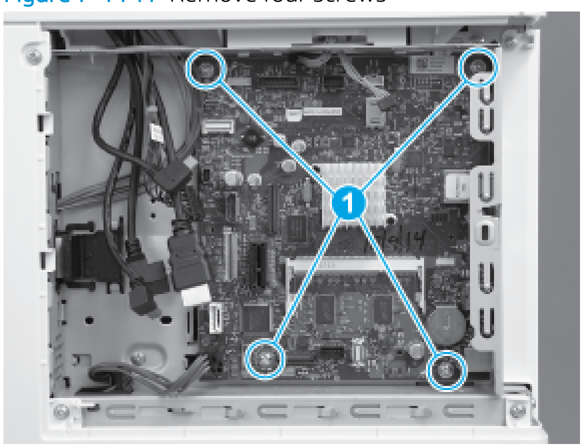
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1140 Disconnect all connectors



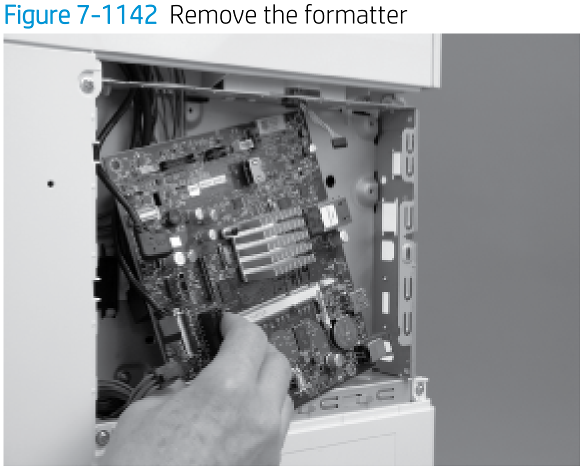
2. Remove four screws (callout 1).

Figure 7-1141 Remove four screws



3. Remove the formatter.

Figure 7-1142 Remove the formatter



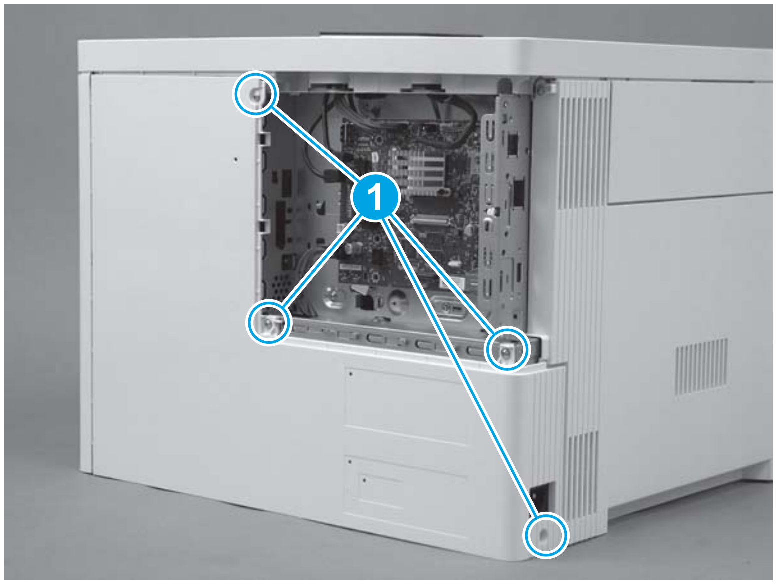
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

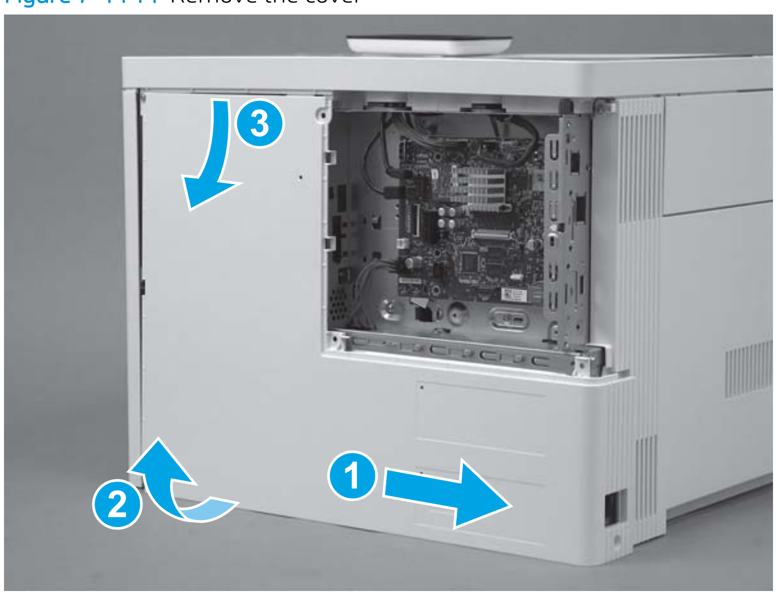
1. Remove four screws (callout 1).

Figure 7-1143 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-1144 Remove the cover



Remove the rear upper cover (MFP)

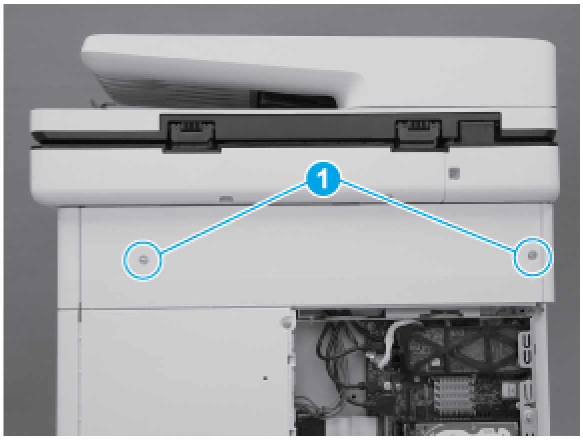
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

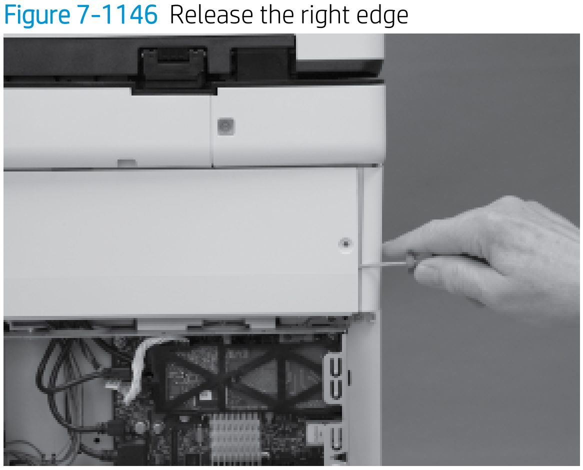
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-1145 Remove two screws



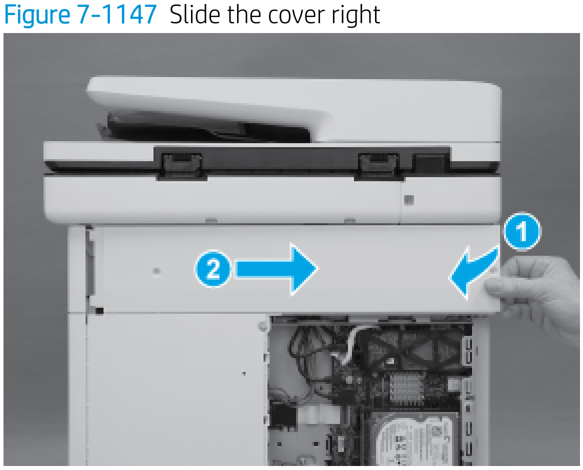
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-1146 Release the right edge



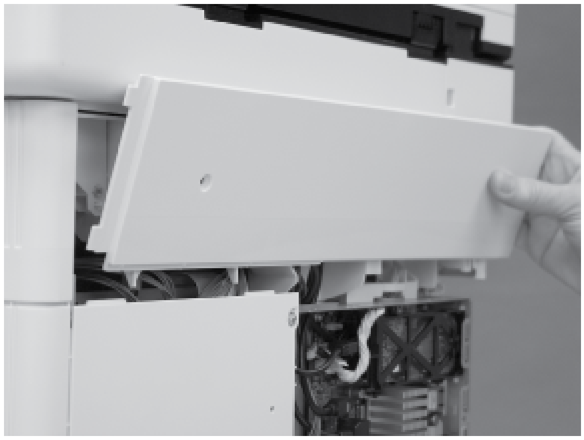
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-1147 Slide the cover right



4. Remove the cover.

Figure 7-1148 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-1149 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-1150 Remove the cover

Remove the left cover

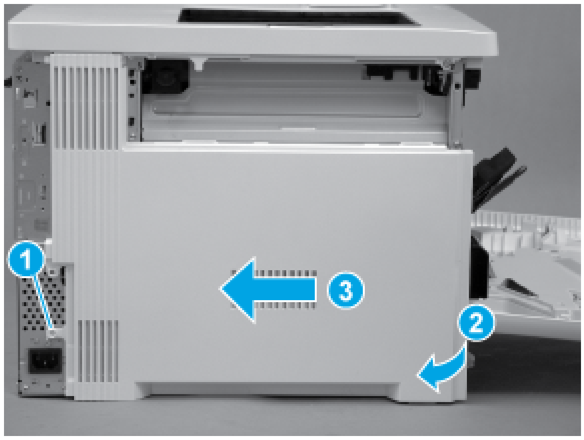
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1151 Remove one screw

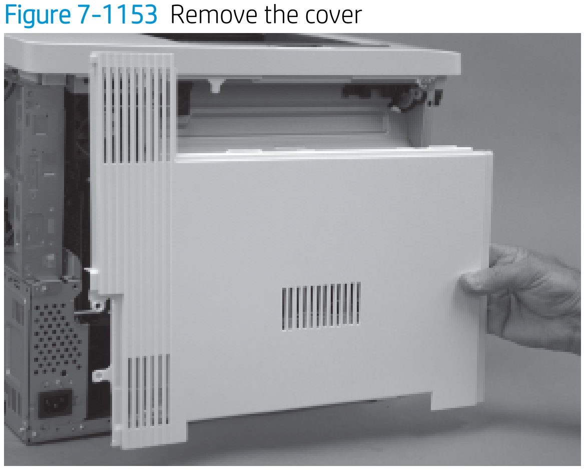
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-1152 Release the cover



3. Remove the cover.

Figure 7-1153 Remove the cover

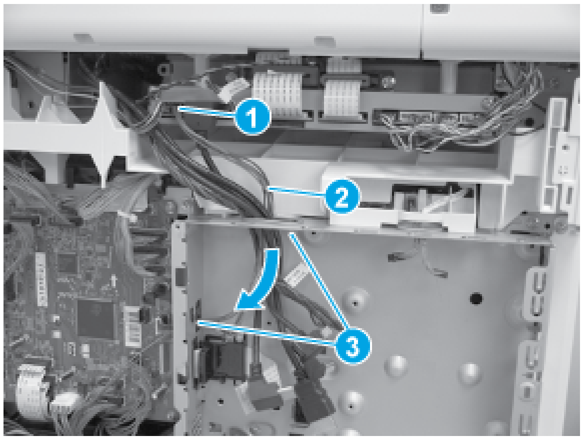


Remove the formatter case

Follow these steps to remove the formatter case.

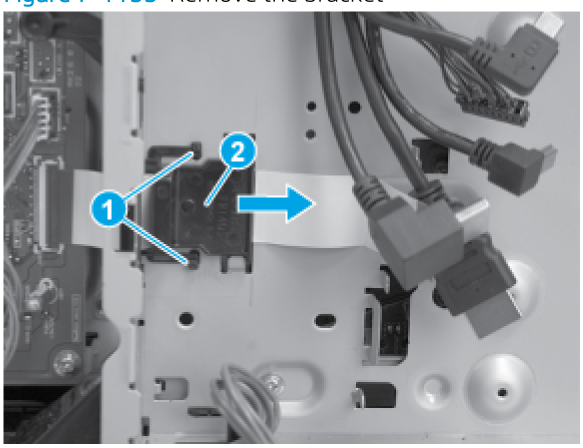
1. **MFP only**: Disconnect one connector (callout 1), and then pass the wire harness (callout 2) through two openings in the formatter case (callout 3).

Figure 7-1154 Disconnect one connector



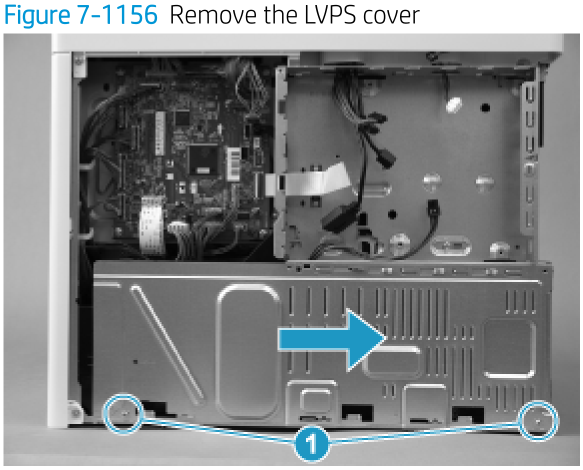
2. Release two tabs (callout 1) on the black plastic bracket. Hold the tabs in the released position, and then slide the bracket (callout 2) to the right to remove it from the formatter case.

Figure 7-1155 Remove the bracket



3. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

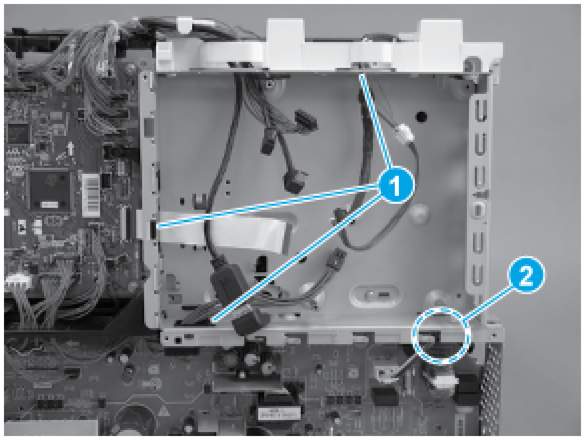
Figure 7-1156 Remove the LVPS cover



4. Pass two wire harnesses and one flat cable (callout 1) through the opening in the formatter case, and then release one wire harness from the retainer (callout 2).

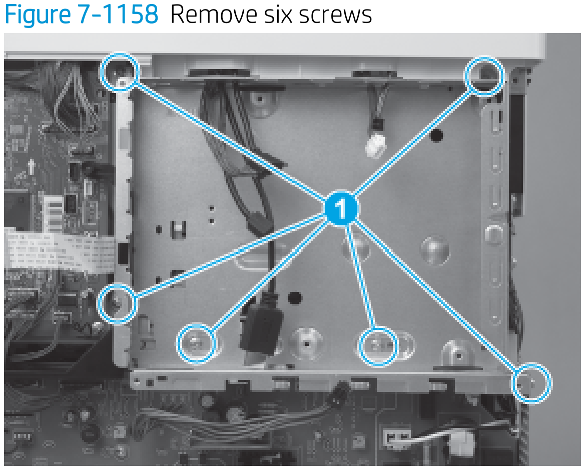
⚠ CAUTION: The flat cable might be attached to the formatter case with double-sided tape. Make sure that this tape is released, so that the flat cable is not damaged when the formatter case is removed.

Figure 7-1157 Release wire harnesses and flat cable



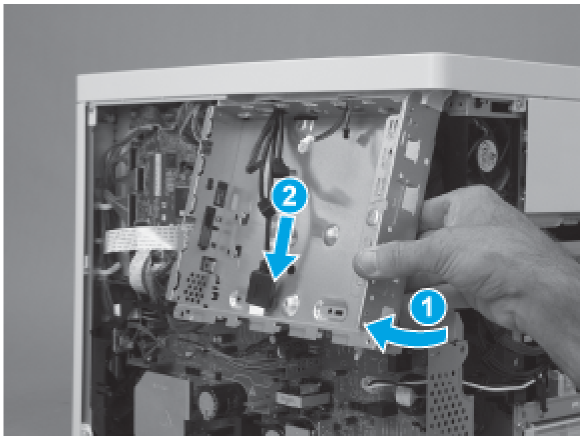
5. Remove six screws (callout 1).

Figure 7-1158 Remove six screws



6. Rotate the bottom of the formatter case away from the printer (callout 1), and then pull it down (callout 2) to release it.

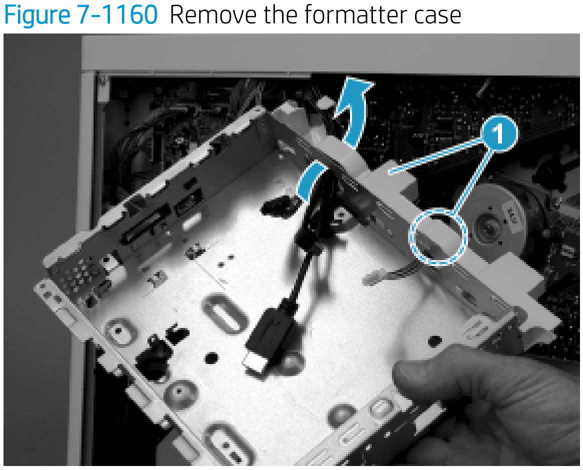
Figure 7-1159 Release the formatter case



7. Pass the wire harnesses through the opening in the formatter case to remove it.

IMPORTANT: If the formatter case is removed so that it can be replaced, make sure to transfer the memory PCA (island of data) and plastic bracket (callout 1) to the replacement case.

Figure 7-1160 Remove the formatter case

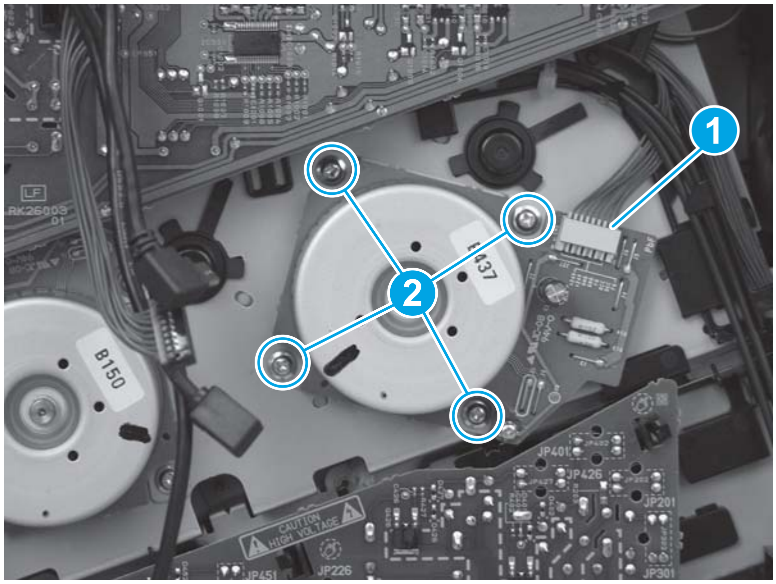


Remove drum motor 1 (M1)

Follow these steps to remove drum motor 1.

▲ Disconnect one connector (callout 1), remove four screws (callout 2), and then remove the motor.

Figure 7-1161 Remove the motor



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Power-supply fan (FM1)

Learn about removing and replacing power supply fan.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-67 Part information

Part number	Part description
RK2-2416-000CN	Power supply fan (FM1)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

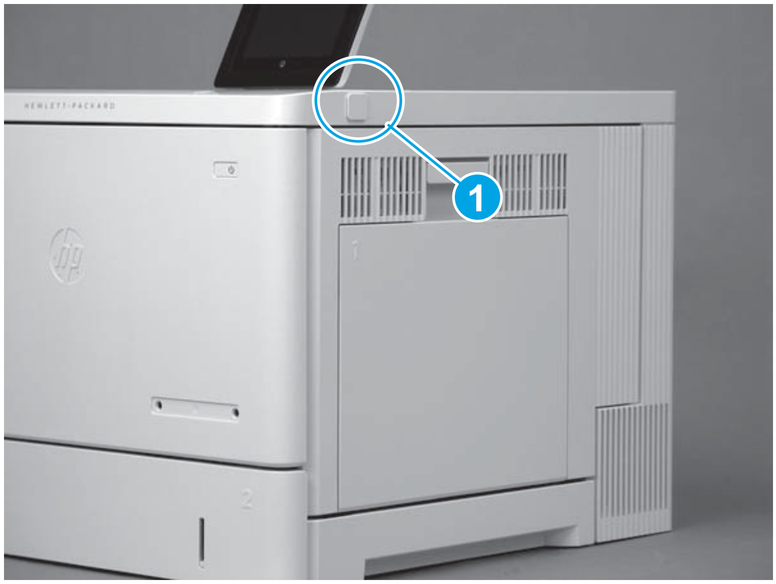
Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

> NOTE: This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-1162 Locate the USB cover



2. Pull the cover off of the printer to remove it.

Figure 7-1163 Remove the cover

Remove the control panel (M553x/M555/E55040)

Follow these steps to remove the control panel.

NOTE: This procedure is for the M553x/M555/E55040 printers only.

M555 models: Removing the control panel is similar to the procedure below. For the M555, a flat cable connects the control panel to the formatter.

1. Tilt the control panel up.

Figure 7-1164 Tilt the control panel up

2. Use the small flat-blade screwdriver supplied in this kit to release the control-panel screws cover tabs.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-1165 Release the control-panel screws cover tabs

3. Rotate the cover up to remove it.

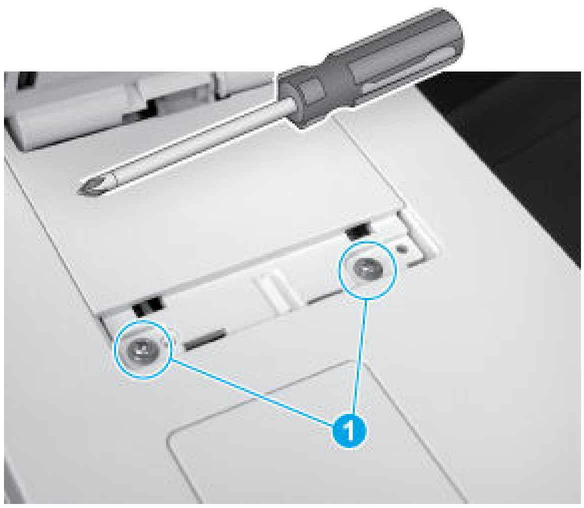
Figure 7-1166 Remove the cover

4. Use the small Phillips screwdriver supplied in this kit to remove two screws (callout 1).

IMPORTANT: Store the screws in a secure place where they cannot fall down into the printer.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-1167 Remove two screws



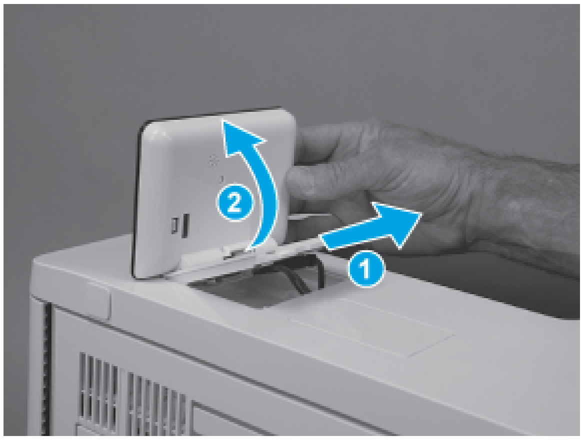
5. Rotate the control-panel base toward the front of the printer.

Figure 7-1168 Rotate the control-panel base up

6. Slightly slide the control-panel base toward the rear of the printer (callout 1) to release it, and then turn the control panel over (callout 2) to access the bottom side.

⚠ CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

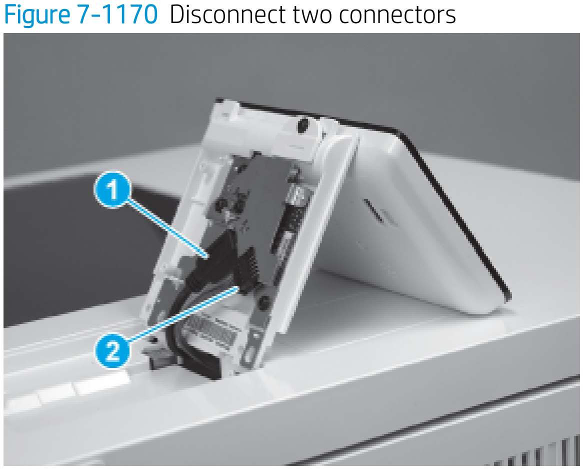
Figure 7-1169 Turn the control panel over



7. Disconnect one USB cable (callout 1), one connector (callout 2), and then remove the control panel.

NOTE: **M555 only**: Disconnect one flat cable (not shown), and then remove the control panel.

Figure 7-1170 Disconnect two connectors



Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-1171 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-1172 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

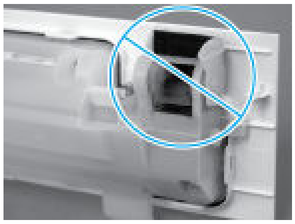
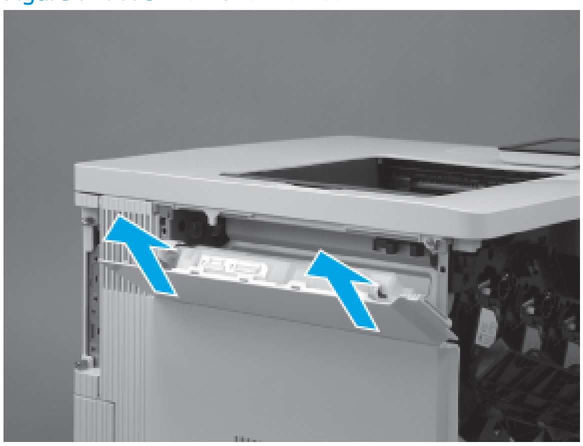


Figure 7-1173 Remove the TCU



Remove the formatter cover

Follow these steps to remove the formatter cover.

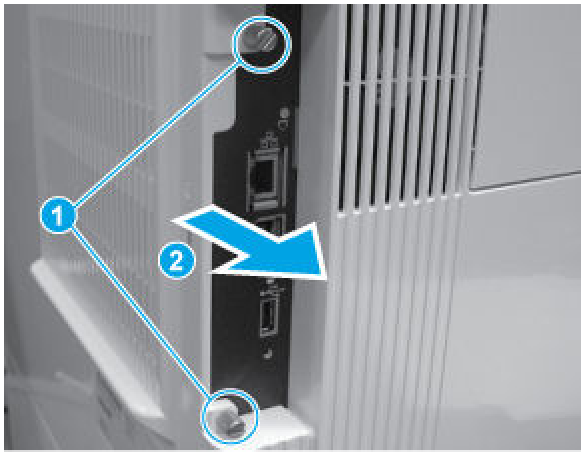
1. Locate the formatter cover.

Figure 7-1174 Locate the formatter cover

2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-1175 Loosen the thumbscrews



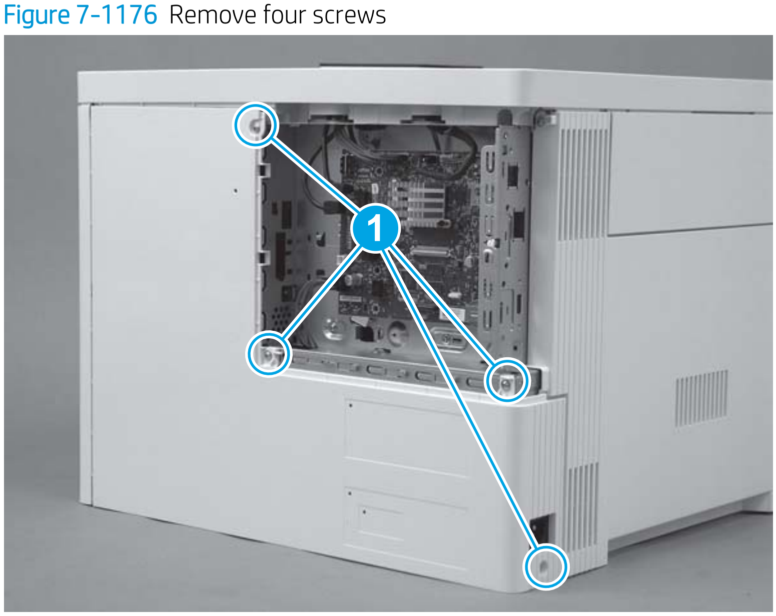
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

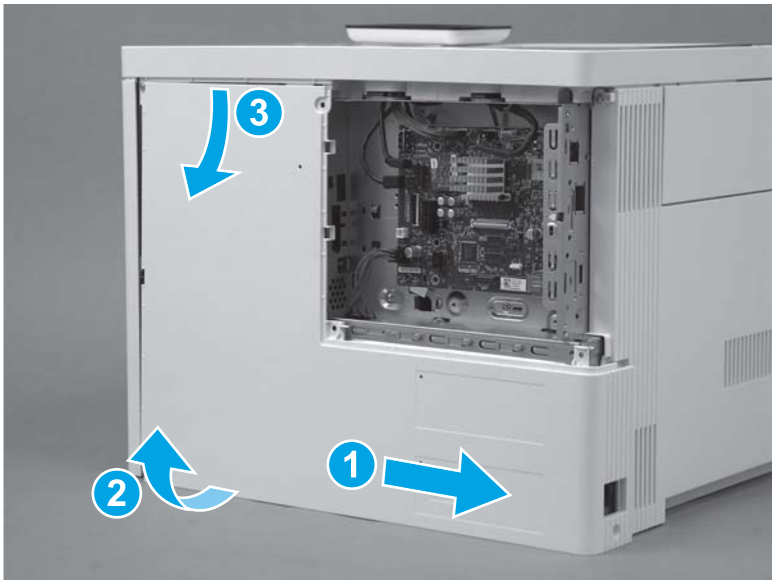
1. Remove four screws (callout 1).

Figure 7-1176 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-1177 Remove the cover



Remove the rear upper cover (MFP)

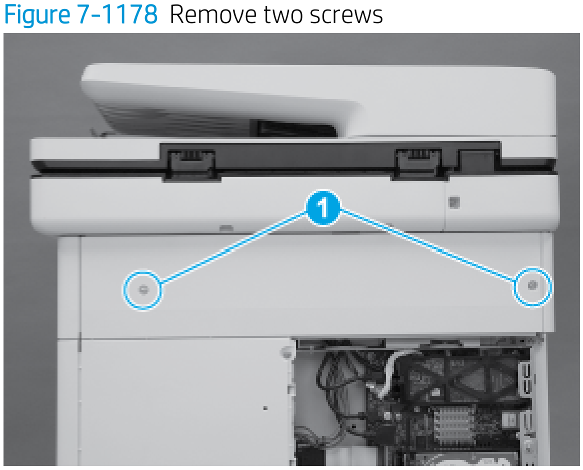
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

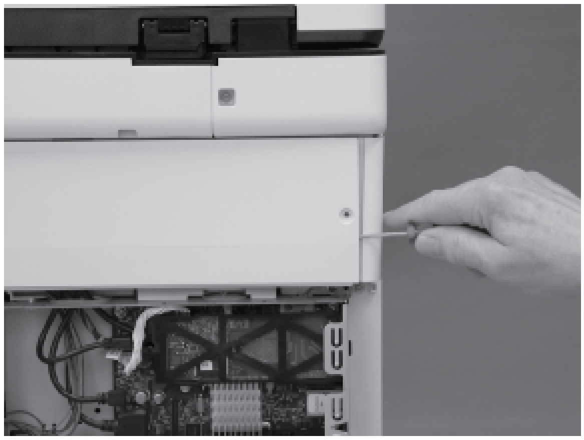
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-1178 Remove two screws



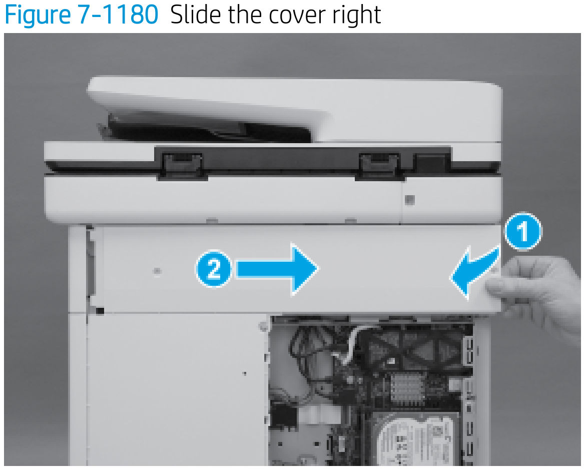
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-1179 Release the right edge



3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-1180 Slide the cover right



4. Remove the cover.

Figure 7-1181 Remove the cover

Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-1182 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-1183 Remove the cover

Remove the left cover

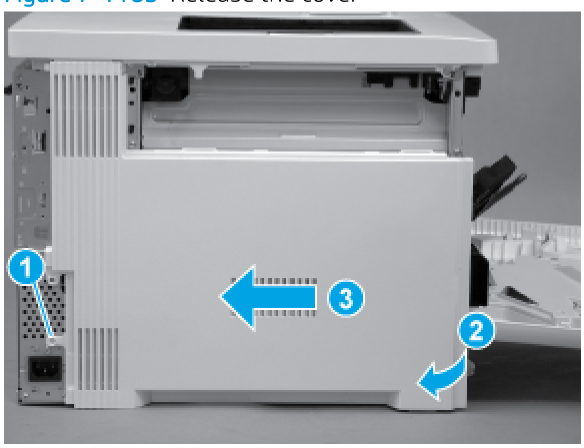
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1184 Remove one screw

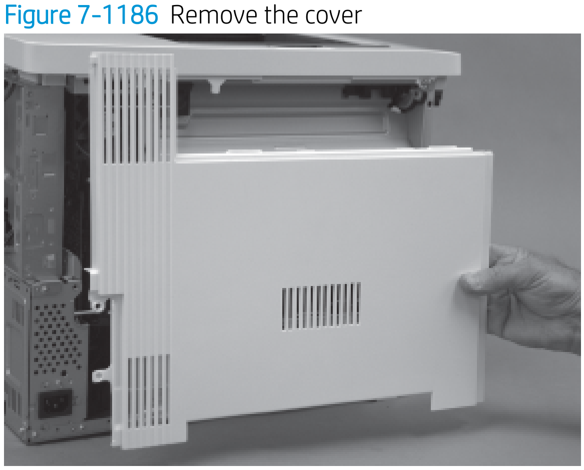
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-1185 Release the cover



3. Remove the cover.

Figure 7-1186 Remove the cover



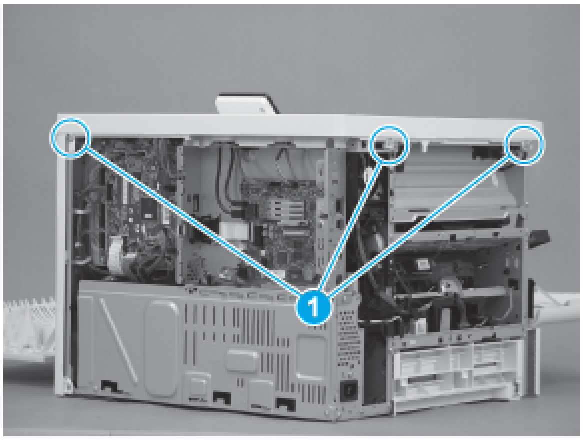
Remove the upper cover (SFP)

Follow these steps to remove the upper cover.

NOTE: This procedure is for SFP models only.

1. Remove three screws (callout 1).

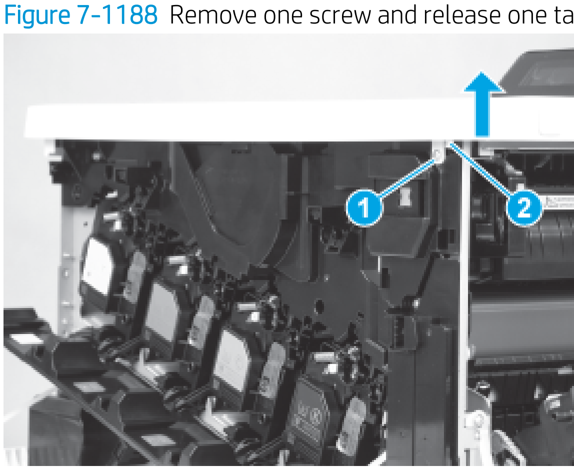
Figure 7-1187 Remove three screws



2. Remove one screw (callout 1), release one tab (callout 2), and then slightly separate the corner of the cover from the chassis.

NOTE: This is a self-tapping plastic-thread screw. Make sure that this screw is used in this location when it is reinstalled.

Figure 7-1188 Remove one screw and release one tab

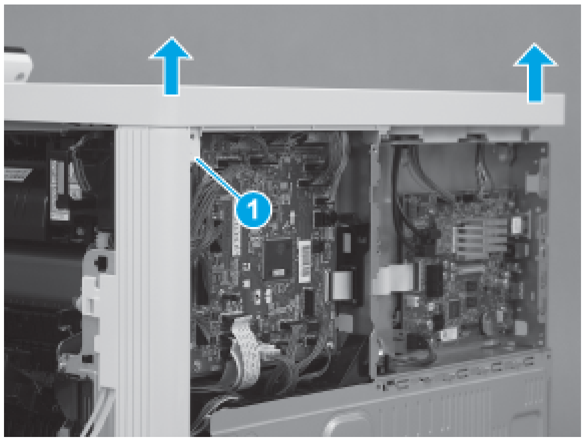


3. Release one tab (callout 1), and then lift up on the cover to release it.

IMPORTANT: **M554 models**: Disconnect the control-panel flat cable at the formatter.

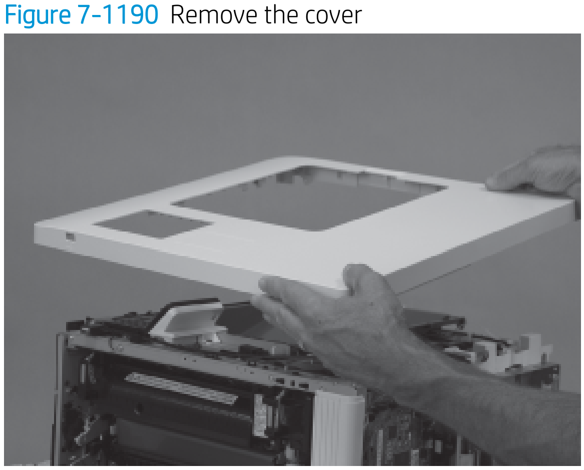
NOTE: If the cover does not release, check for addition tabs by locating the triangles embossed in the cover at tab locations.

Figure 7-1189 Release the cover



4. Remove the cover.

Figure 7-1190 Remove the cover



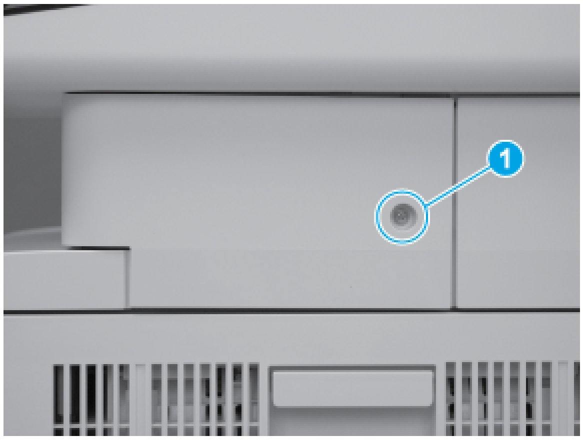
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-1191 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-1192 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-1193 Rotate the cover

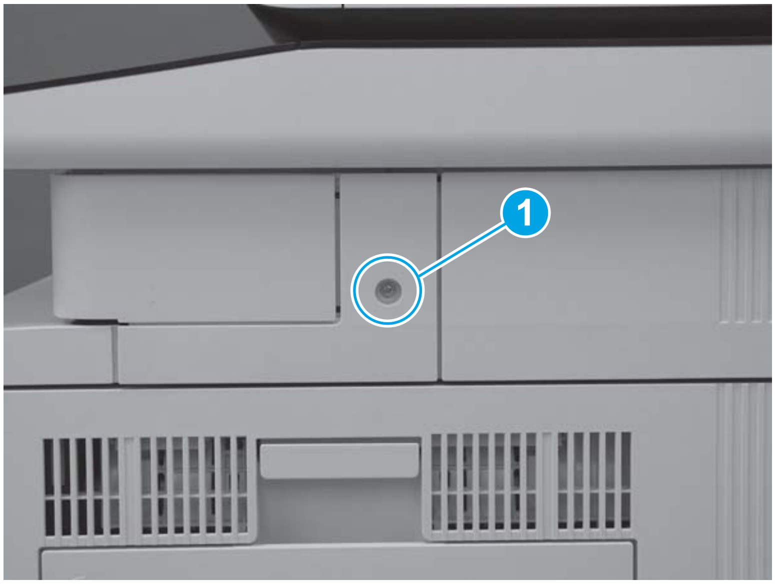
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

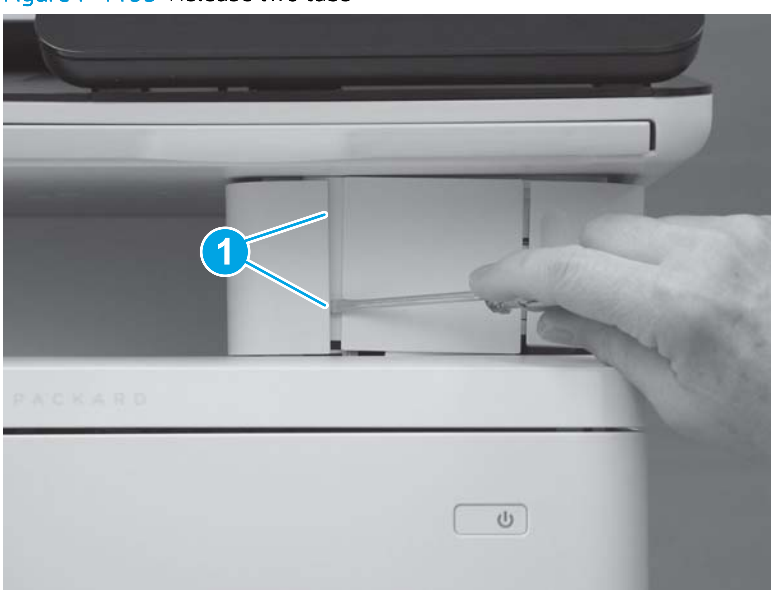
1. Remove one screw (callout 1).

Figure 7-1194 Remove one screw



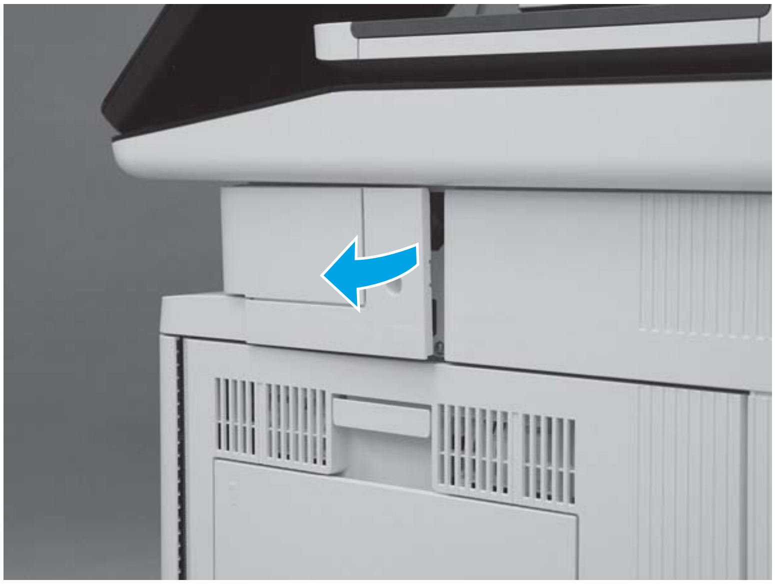
2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-1195 Release two tabs



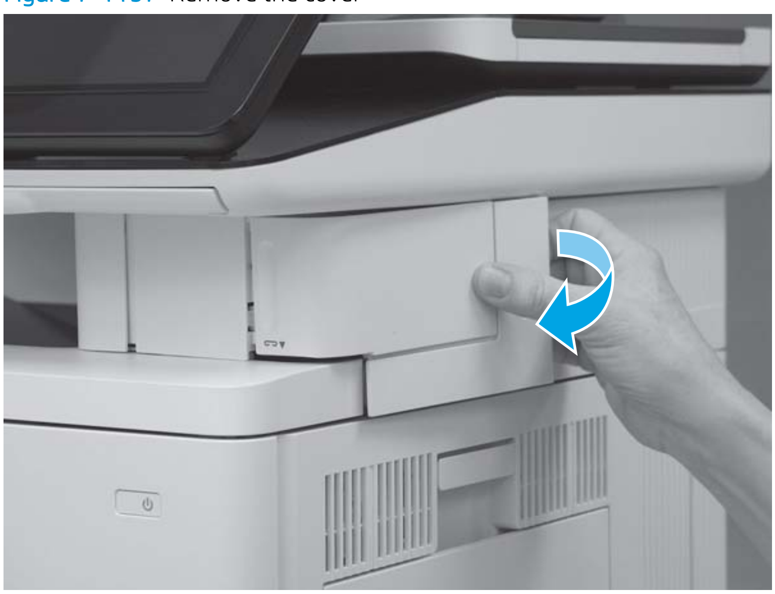
3. Release the back edge of the cover.

Figure 7-1196 Release the back edge of the cover



4. Rotate the cover away from the printer to remove it.

Figure 7-1197 Remove the cover



Remove the right upper cover (MFP)

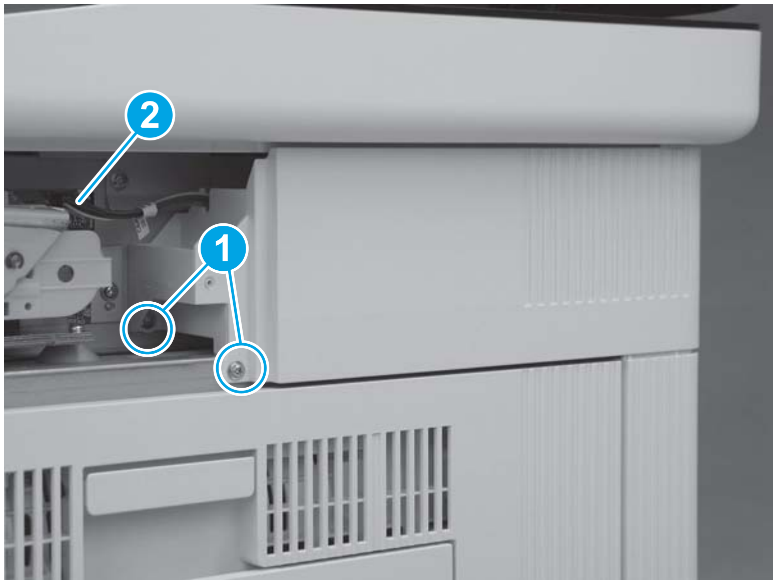
Follow these steps to remove the right upper cover.

NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

Figure 7-1198 Remove two screws and one connector

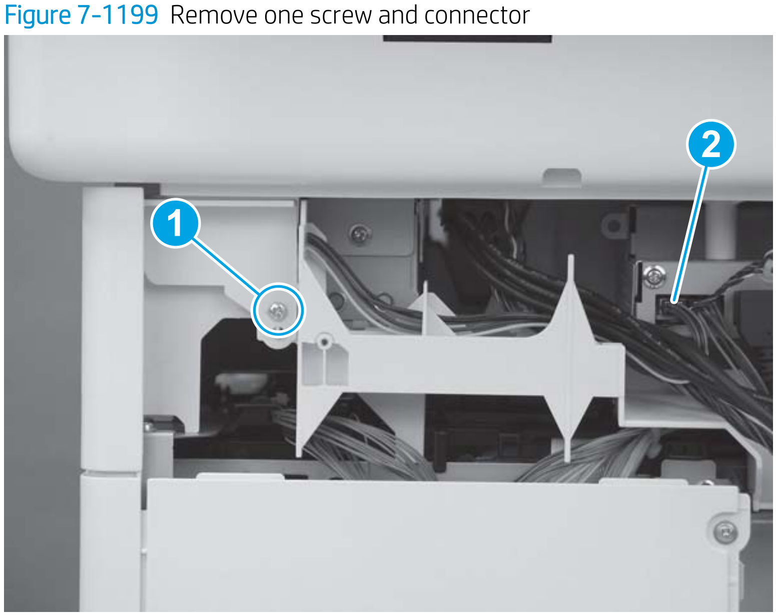


2. At the back of the printer, remove one screw (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

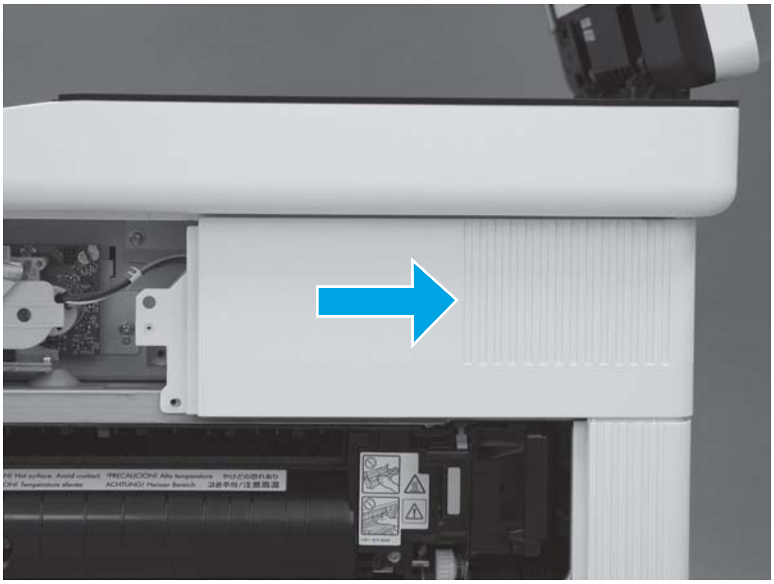
> **Reinstallation tip:** This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

Figure 7-1199 Remove one screw and connector



3. Slide the cover toward the back of the printer.

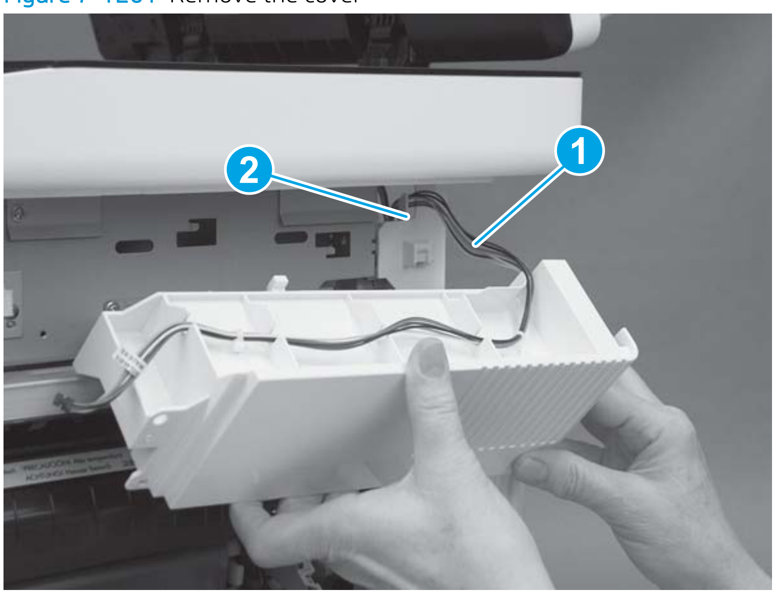
Figure 7-1200 Slide the cover



4. Lift the cover away from the printer to remove it.

M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

Figure 7-1201 Remove the cover



Remove the right rear cover

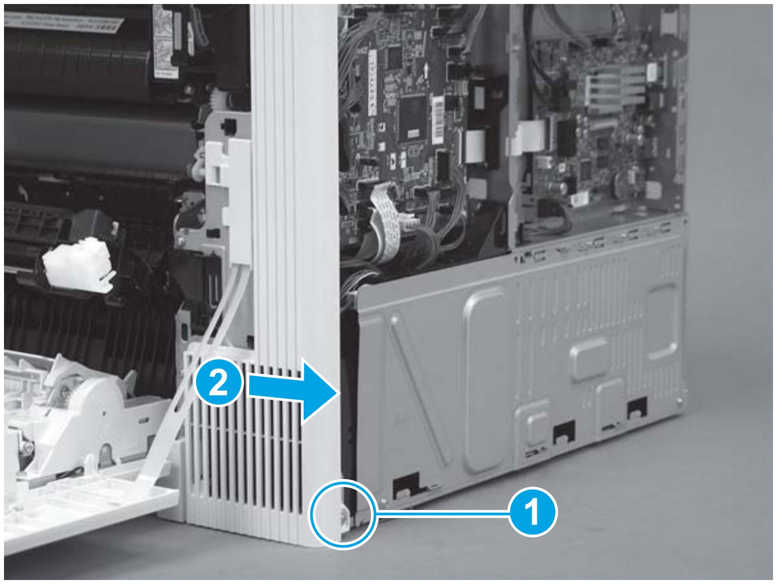
Follow these steps to remove the right rear cover.

NOTE: The figures in this topic show a SFP model. However, the procedure is correct for an MFP.

1. Remove one screw (callout 1), and then slide the cover toward the rear of the printer (callout 2) to release it.

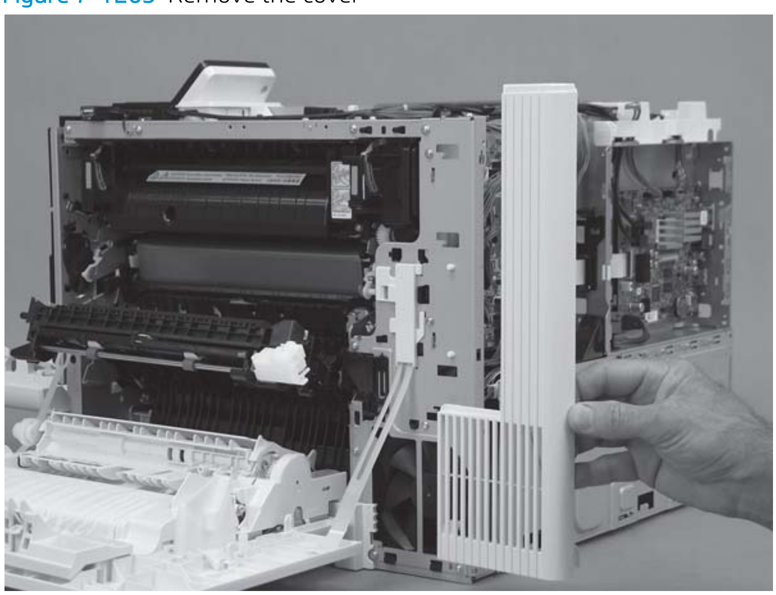
TIP: If the right door is closed, open it now.

Figure 7-1202 Release the cover



2. Remove the cover.

Figure 7-1203 Remove the cover



Remove the formatter (SFP)

Follow these steps to remove the formatter.

NOTE: This procedure is for SFP models only.

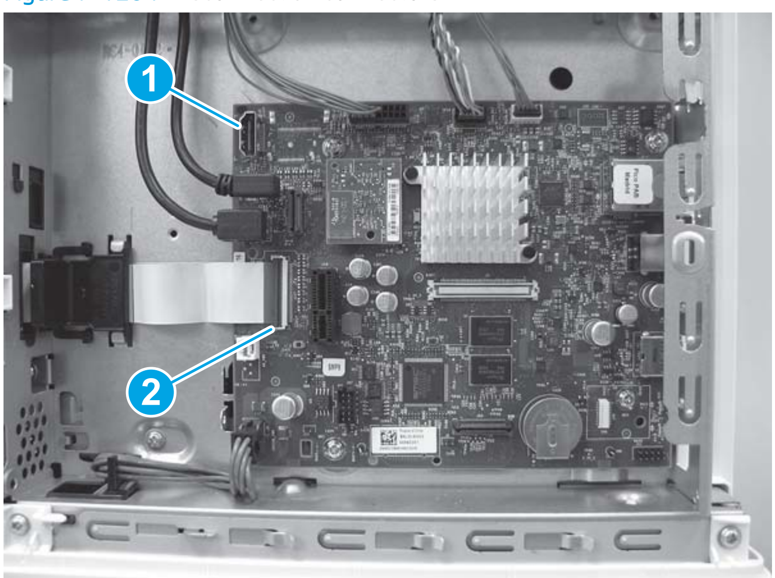
1. Disconnect all of the connectors on the formatter.

The following connectors are empty:

- All models: J1 (this connector is empty unless the optional DIMM is installed)
- M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)
- All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
- All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
- M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)
- All models: J57
- All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

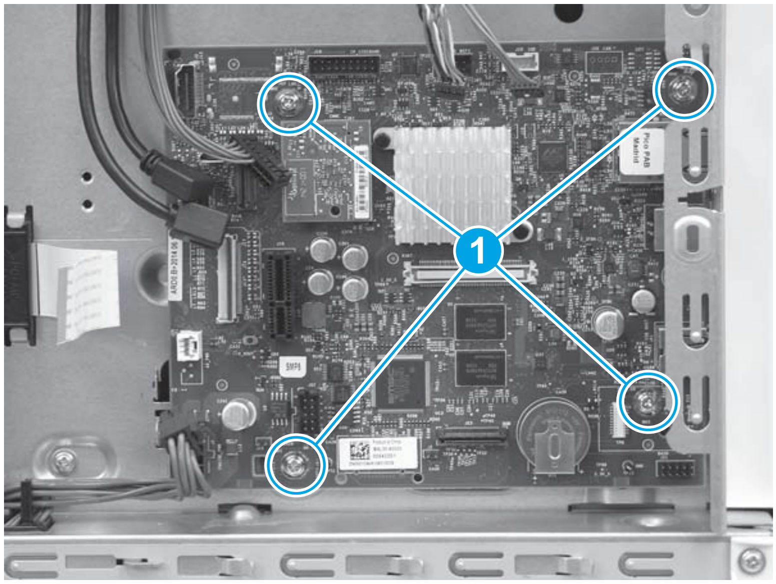
IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1204 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-1205 Remove four screws



Remove the hard-disk drive (HDD)

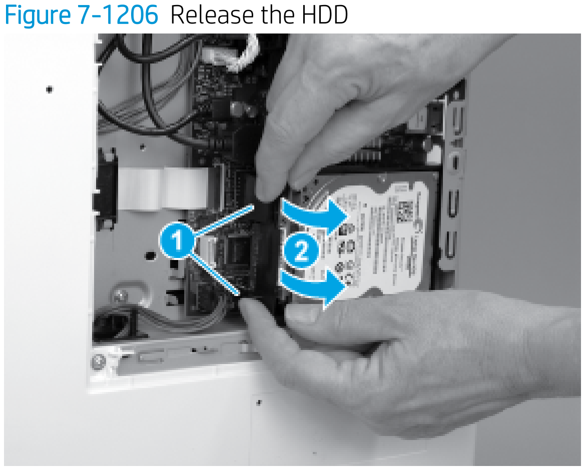
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-1206 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-1207 Remove the HDD

Remove the fax PCA (fax models)

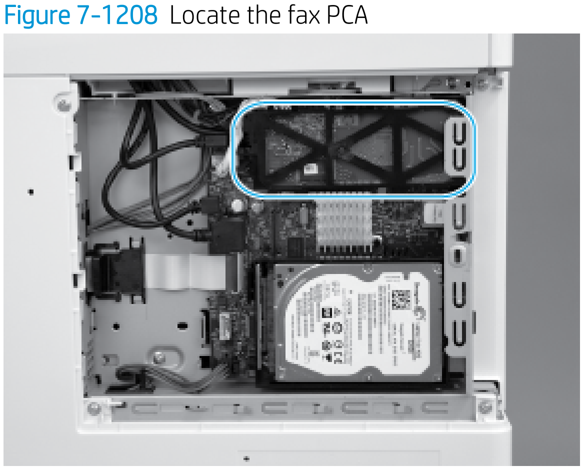
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

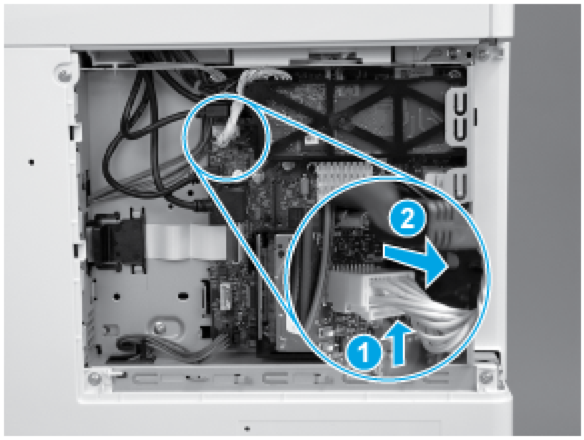
1. Locate the fax PCA component on the formatter.

Figure 7-1208 Locate the fax PCA



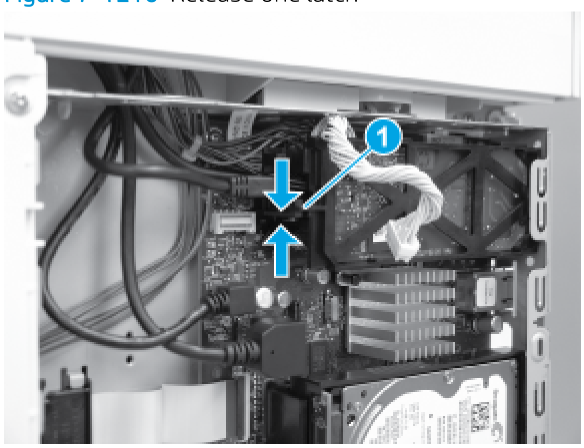
2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-1209 Disconnect one connector



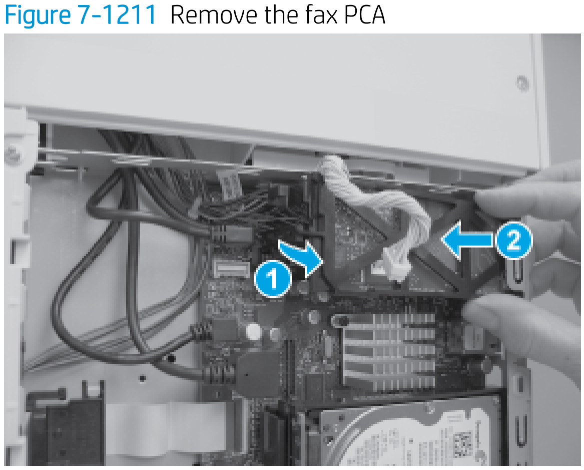
3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-1210 Release one latch



4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-1211 Remove the fax PCA



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

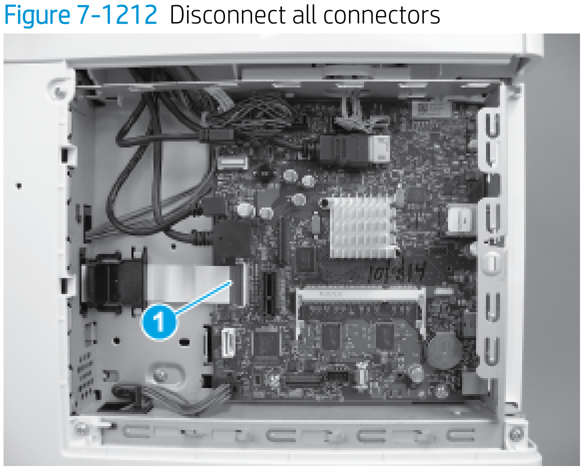
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

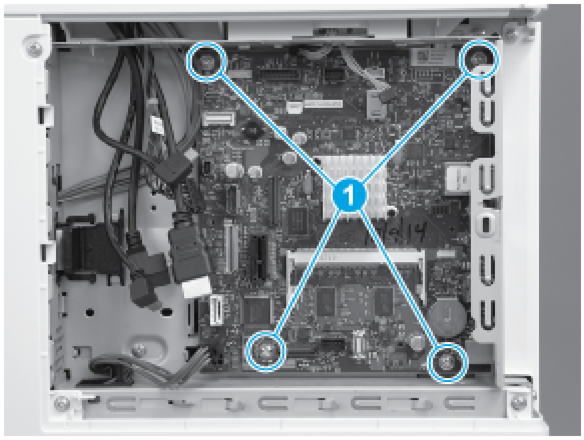
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

   Figure 7-1212 Disconnect all connectors

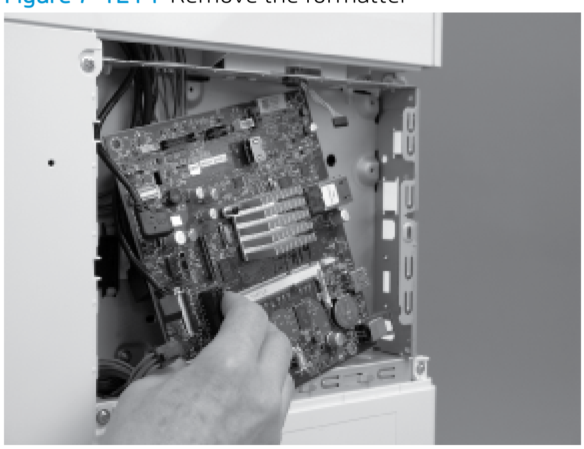
2. Remove four screws (callout 1).

Figure 7-1213 Remove four screws



3. Remove the formatter.

Figure 7-1214 Remove the formatter

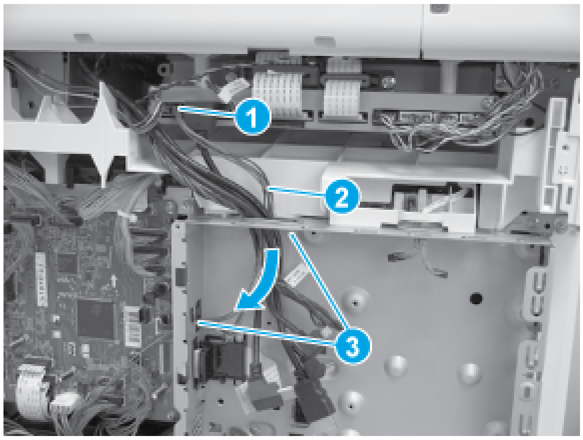


Remove the formatter case

Follow these steps to remove the formatter case.

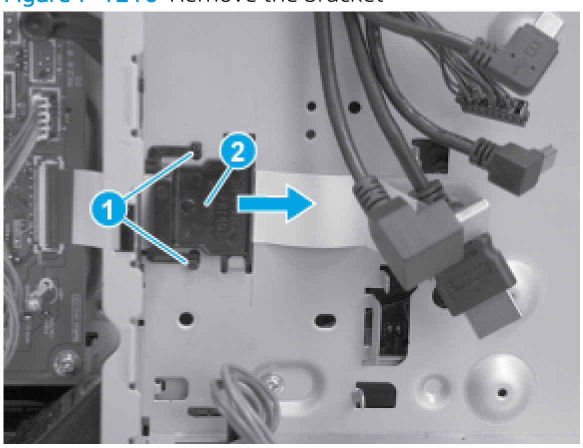
1. **MFP only**: Disconnect one connector (callout 1), and then pass the wire harness (callout 2) through two openings in the formatter case (callout 3).

Figure 7-1215 Disconnect one connector



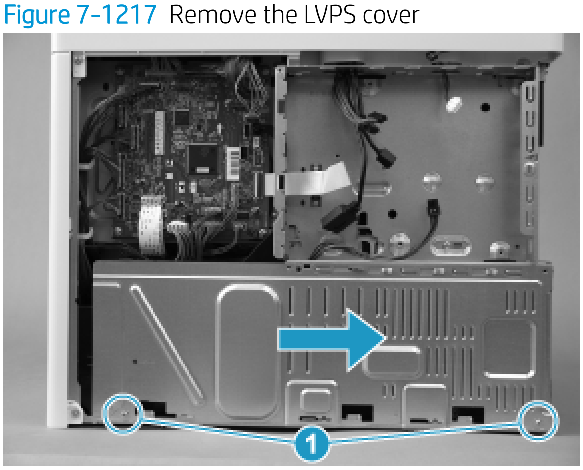
2. Release two tabs (callout 1) on the black plastic bracket. Hold the tabs in the released position, and then slide the bracket (callout 2) to the right to remove it from the formatter case.

Figure 7-1216 Remove the bracket



3. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

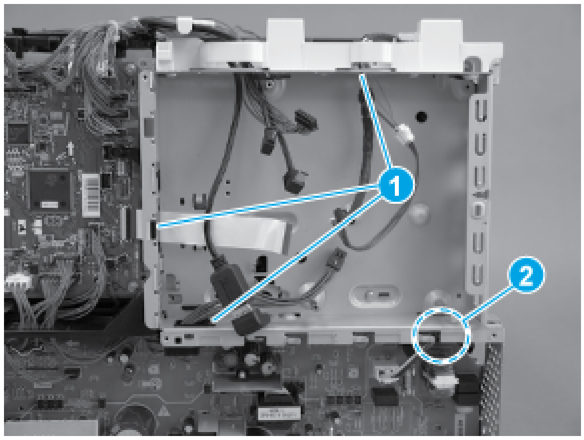
Figure 7-1217 Remove the LVPS cover



4. Pass two wire harnesses and one flat cable (callout 1) through the opening in the formatter case, and then release one wire harness from the retainer (callout 2).

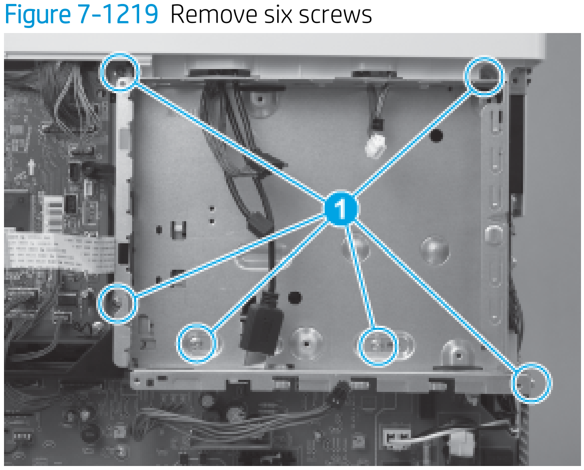
⚠ CAUTION: The flat cable might be attached to the formatter case with double-sided tape. Make sure that this tape is released, so that the flat cable is not damaged when the formatter case is removed.

Figure 7-1218 Release wire harnesses and flat cable



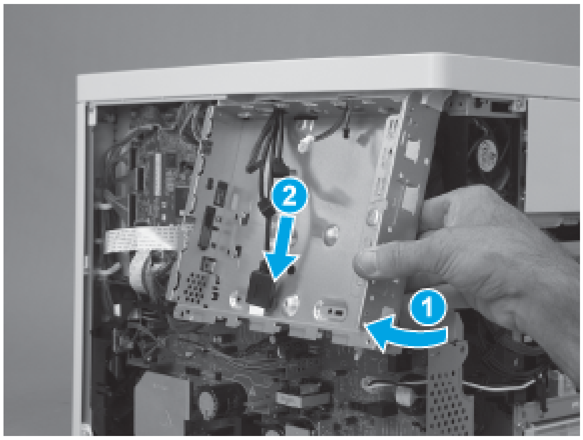
5. Remove six screws (callout 1).

Figure 7-1219 Remove six screws



6. Rotate the bottom of the formatter case away from the printer (callout 1), and then pull it down (callout 2) to release it.

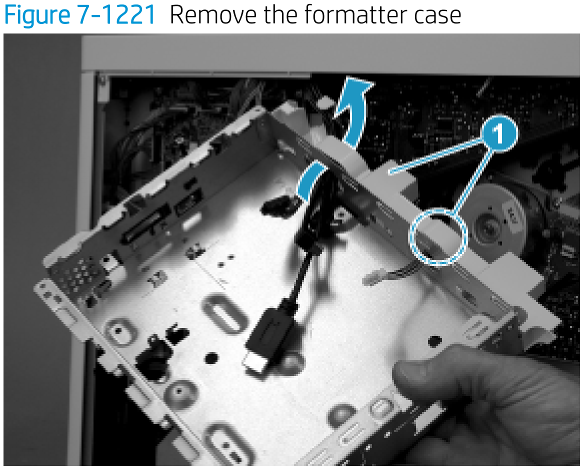
Figure 7-1220 Release the formatter case



7. Pass the wire harnesses through the opening in the formatter case to remove it.

> **IMPORTANT:** If the formatter case is removed so that it can be replaced, make sure to transfer the memory PCA (island of data) and plastic bracket (callout 1) to the replacement case.

Figure 7-1221 Remove the formatter case

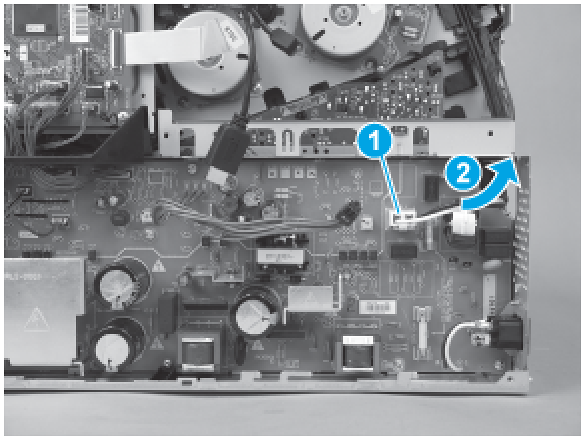


Remove the low-voltage power supply (LVPS)

Follow these steps to remove the low-voltage power supply (LVPS).

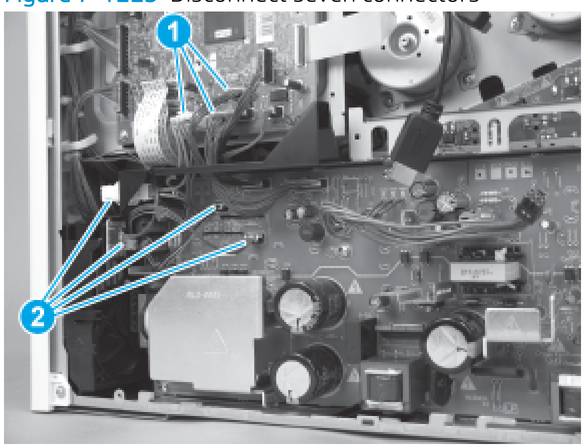
1. Disconnect one wire harness (callout 1), and then pass the wire harness through the opening (callout 2) in the chassis.

Figure 7-1222 Disconnect one wire harness



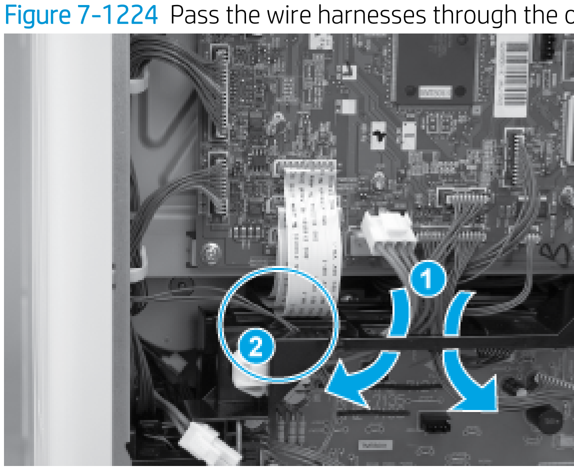
2. Disconnect three connectors on the DC controller (callout 1), and then disconnect four connectors (callout 2) on the LVPS.

Figure 7-1223 Disconnect seven connectors



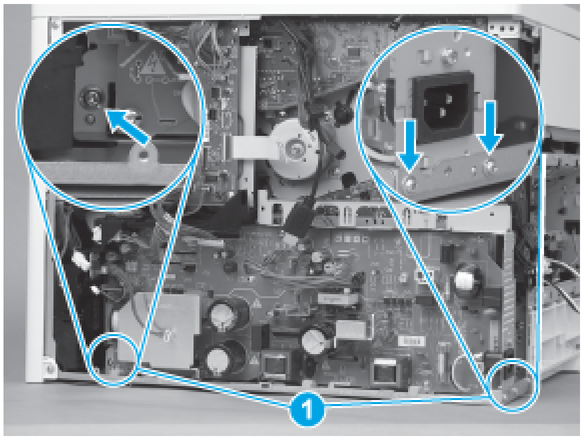
3. Pass the wire harnesses from the DC controller to the LVPS through the opening in the chassis (callout 1), and then release the wire harnesses from the retainer (callout 2).

Figure 7-1224 Pass the wire harnesses through the opening



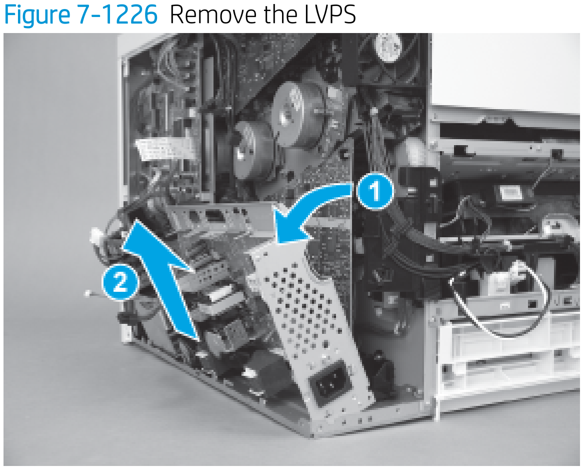
4. Remove three screws (callout 1).

Figure 7-1225 Remove three screws



5. Rotate the top of the LVPS away from the printer (callout 1), and then slide it up and out (callout 2) of the printer to remove it.

Figure 7-1226 Remove the LVPS

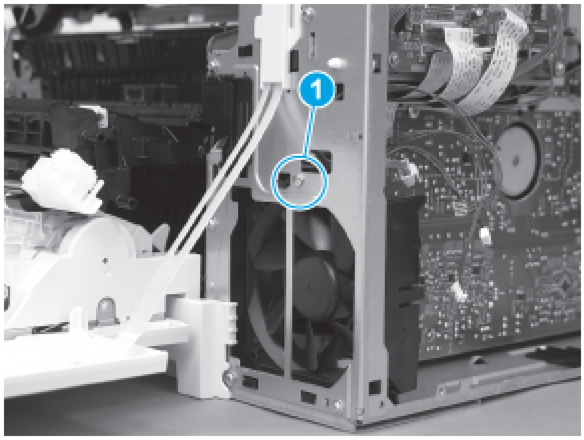


Remove the power supply fan (FM1)

Follow these steps to remove the power supply fan.

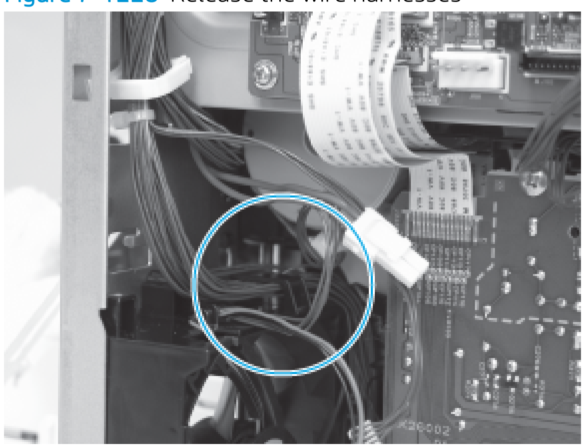
1. Remove one screw (callout 1).

Figure 7-1227 Remove one screw



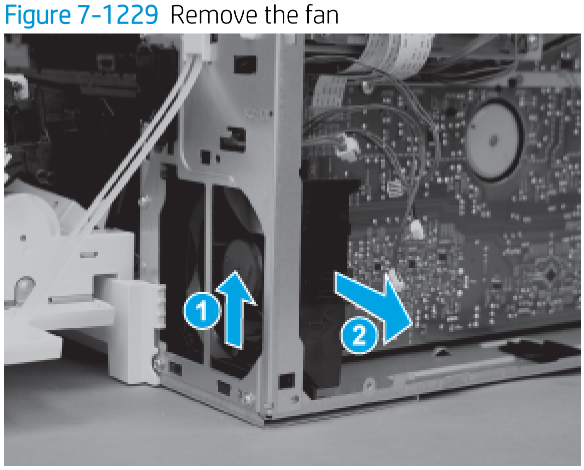
2. Release the wire harnesses from the retainer on the top of the fan bracket.

Figure 7-1228 Release the wire harnesses



3. Lift the fan up (callout 1), and then slide it out of the printer (callout 2) to remove it.

Figure 7-1229 Remove the fan



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Developing disengagement motor (M6)

Learn about removing and replacing developing disengagement motor.

Before performing service

Turn the printer power off

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-68 Part information

Part number	Part description
RK2-6027-000CN	Developing disengagement motor (M6)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-1230 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-1231 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

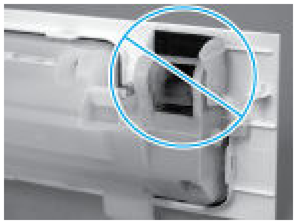
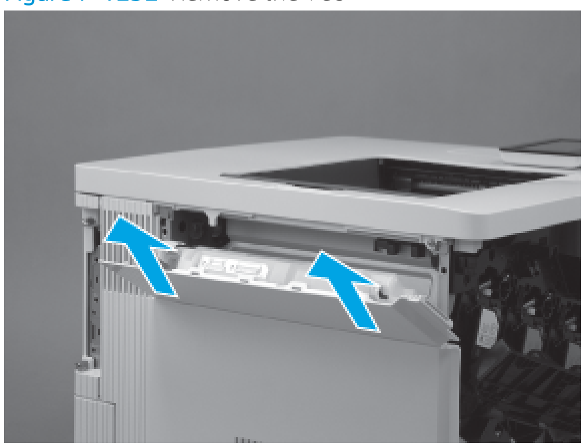


Figure 7-1232 Remove the TCU



Remove the formatter cover

Follow these steps to remove the formatter cover.

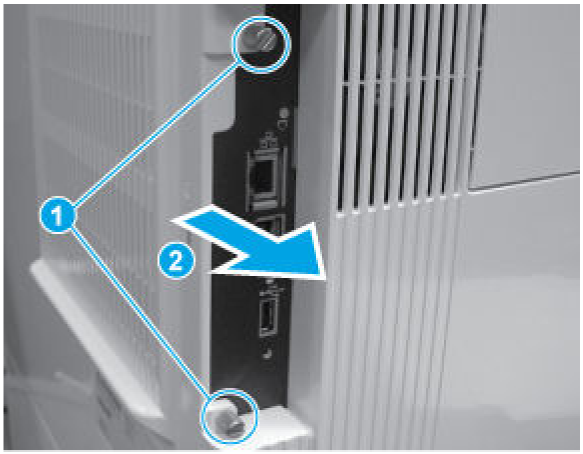
1. Locate the formatter cover.

Figure 7-1233 Locate the formatter cover

2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

> TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-1234 Loosen the thumbscrews



Remove the formatter (SFP)

Follow these steps to remove the formatter.

> NOTE: This procedure is for SFP models only.

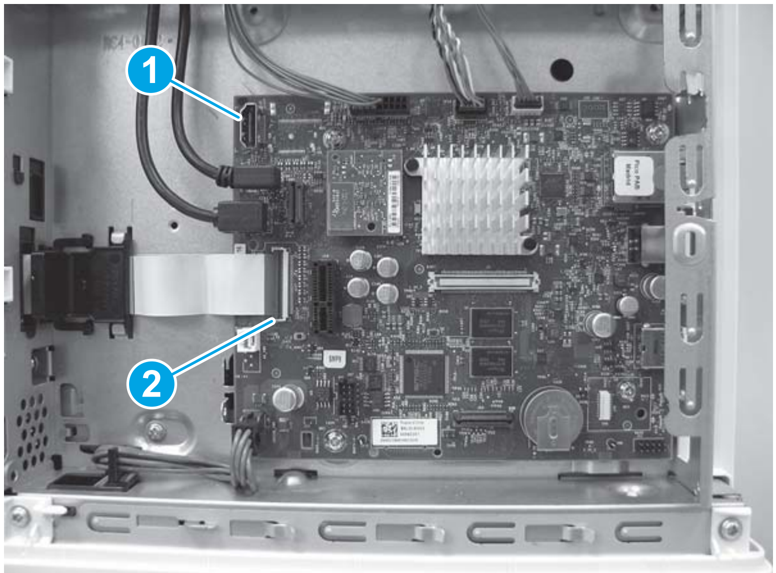
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)
   - All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
   - M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)
   - All models: J57
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

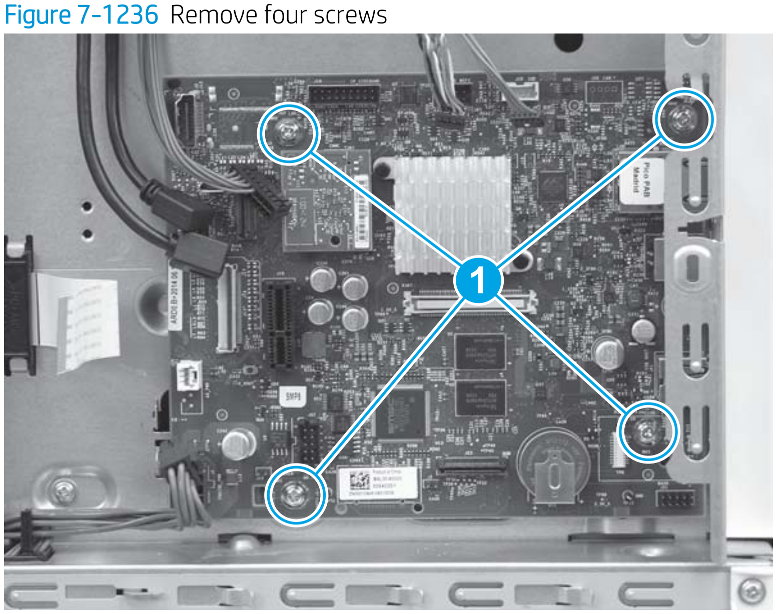
> IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1235 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-1236 Remove four screws



Remove the hard-disk drive (HDD)

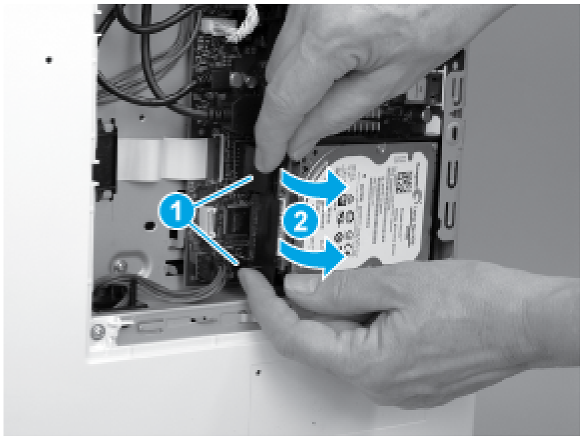
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-1237 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-1238 Remove the HDD

Remove the fax PCA (fax models)

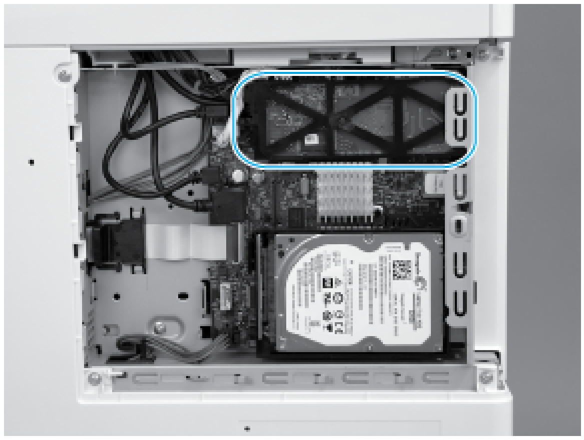
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

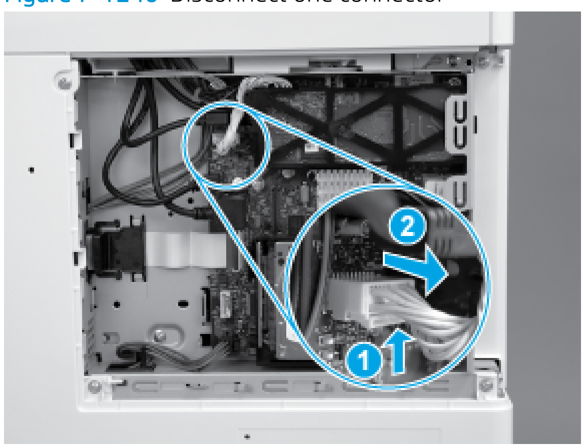
1. Locate the fax PCA component on the formatter.

Figure 7-1239 Locate the fax PCA



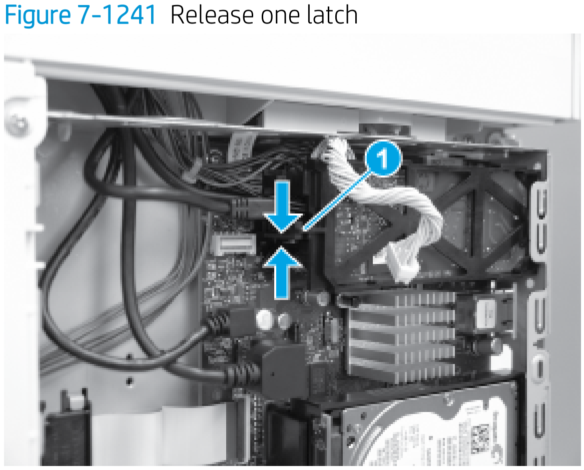
2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-1240 Disconnect one connector



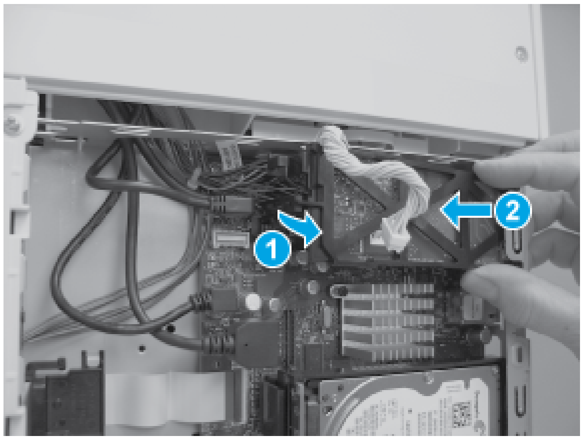
3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-1241 Release one latch



4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-1242 Remove the fax PCA



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

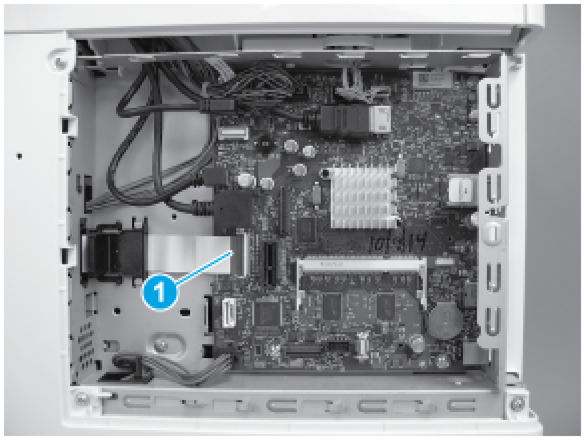
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

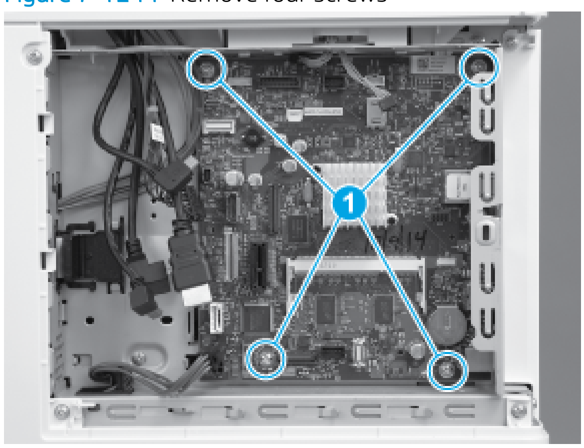
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1243 Disconnect all connectors



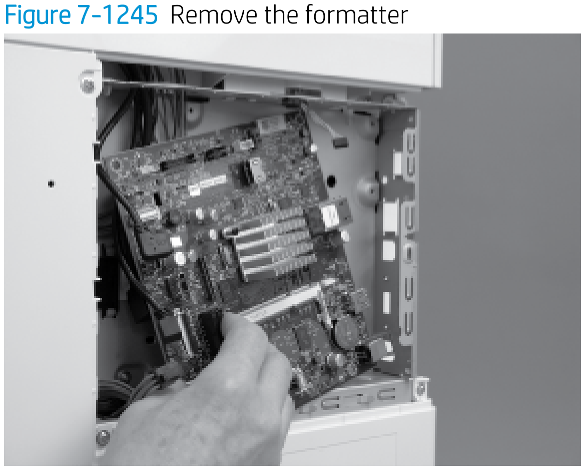
2. Remove four screws (callout 1).

Figure 7-1244 Remove four screws



3. Remove the formatter.

Figure 7-1245 Remove the formatter



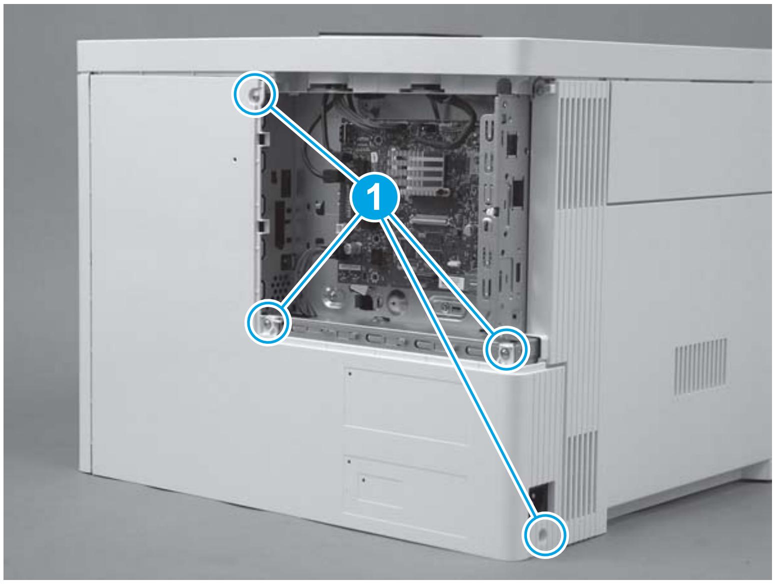
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

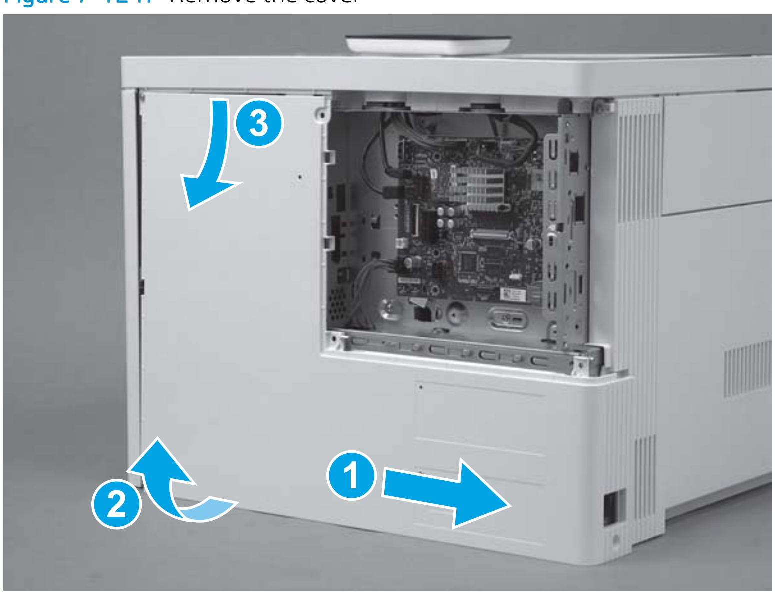
1. Remove four screws (callout 1).

Figure 7-1246 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-1247 Remove the cover



Remove the rear upper cover (MFP)

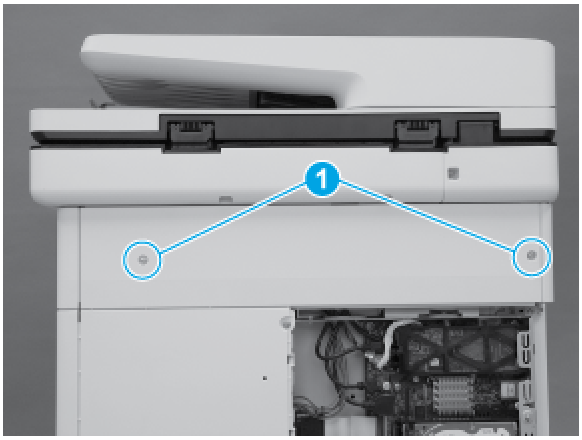
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

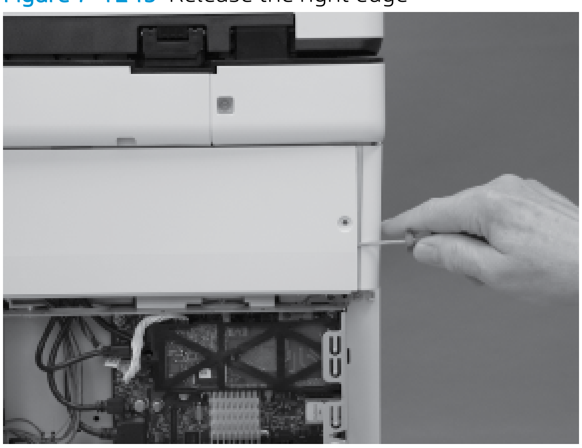
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-1248 Remove two screws



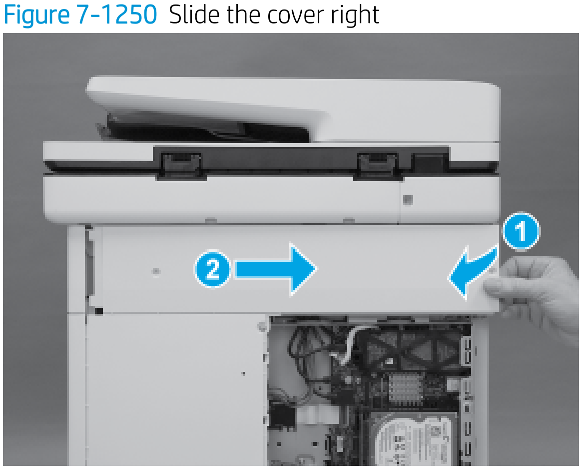
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-1249 Release the right edge



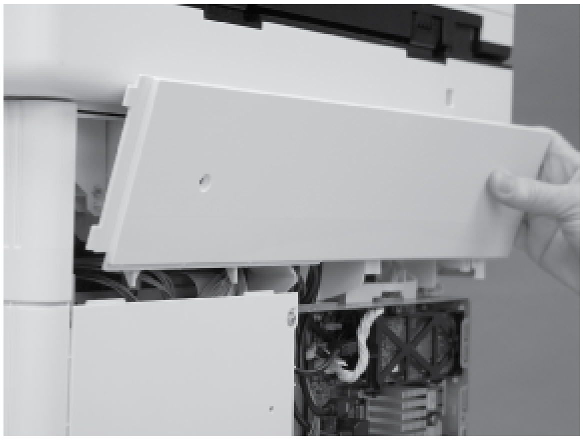
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-1250 Slide the cover right



4. Remove the cover.

Figure 7-1251 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-1252 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-1253 Remove the cover

Remove the left cover

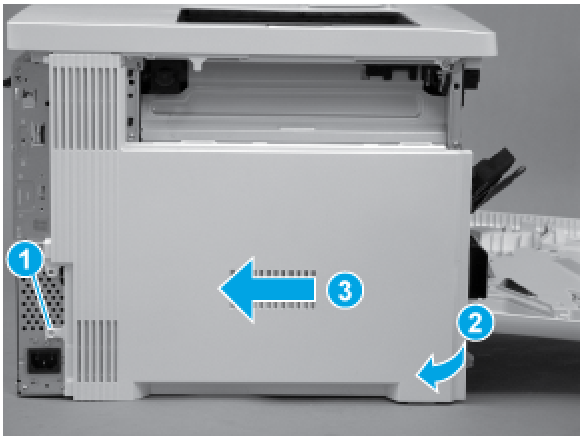
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1254 Remove one screw

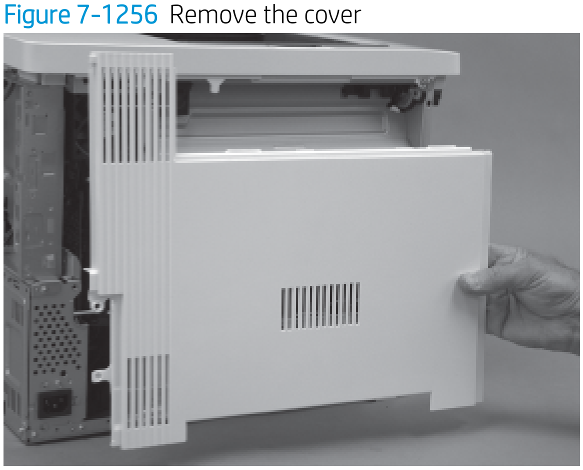
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-1255 Release the cover



3. Remove the cover.

Figure 7-1256 Remove the cover

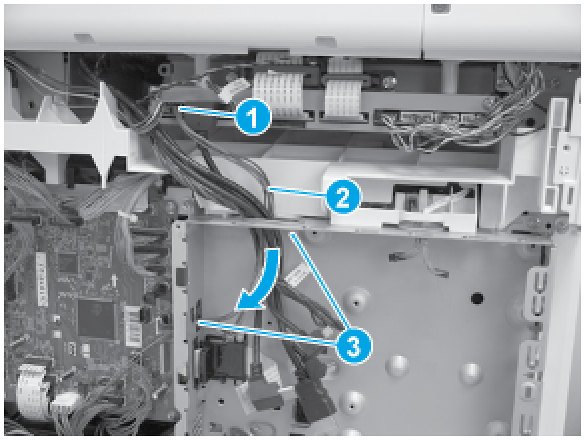


Remove the formatter case

Follow these steps to remove the formatter case.

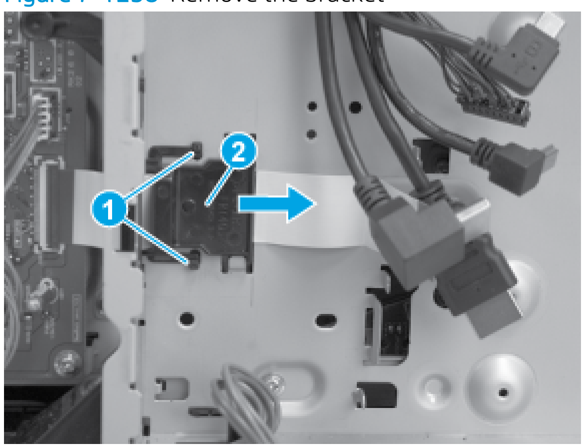
1. **MFP only**: Disconnect one connector (callout 1), and then pass the wire harness (callout 2) through two openings in the formatter case (callout 3).

Figure 7-1257 Disconnect one connector



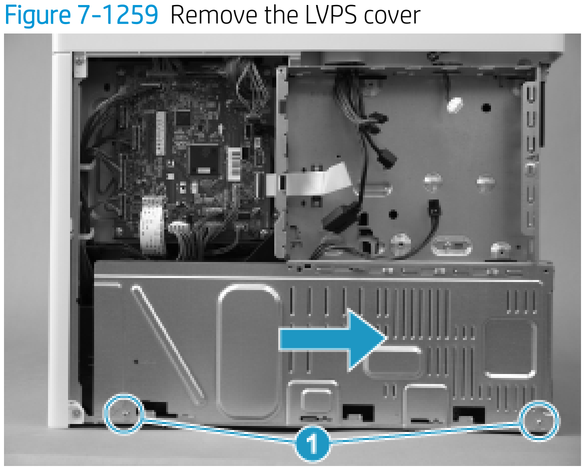
2. Release two tabs (callout 1) on the black plastic bracket. Hold the tabs in the released position, and then slide the bracket (callout 2) to the right to remove it from the formatter case.

Figure 7-1258 Remove the bracket



3. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

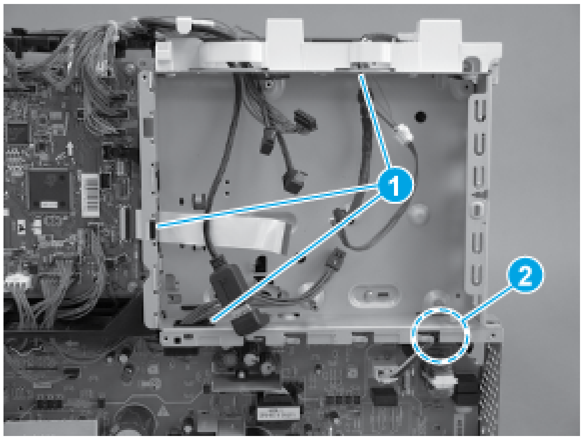
Figure 7-1259 Remove the LVPS cover



4. Pass two wire harnesses and one flat cable (callout 1) through the opening in the formatter case, and then release one wire harness from the retainer (callout 2).

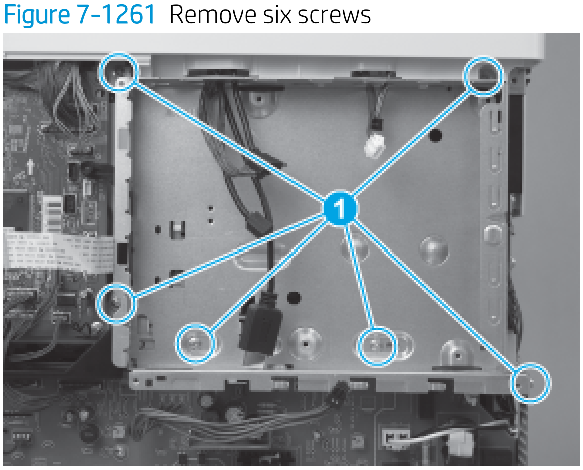
⚠ CAUTION: The flat cable might be attached to the formatter case with double-sided tape. Make sure that this tape is released, so that the flat cable is not damaged when the formatter case is removed.

Figure 7-1260 Release wire harnesses and flat cable



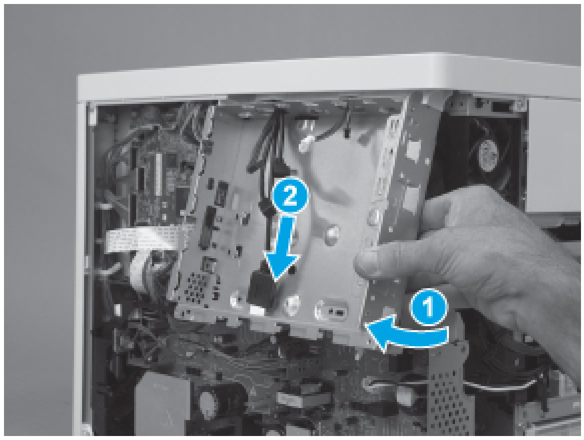
5. Remove six screws (callout 1).

Figure 7-1261 Remove six screws



6. Rotate the bottom of the formatter case away from the printer (callout 1), and then pull it down (callout 2) to release it.

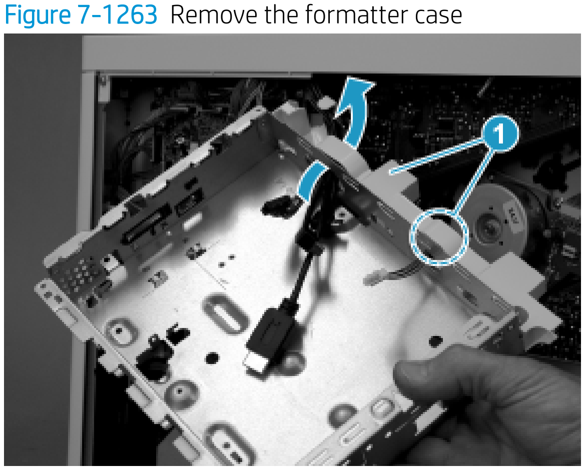
Figure 7-1262 Release the formatter case



7. Pass the wire harnesses through the opening in the formatter case to remove it.

IMPORTANT: If the formatter case is removed so that it can be replaced, make sure to transfer the memory PCA (island of data) and plastic bracket (callout 1) to the replacement case.

Figure 7-1263 Remove the formatter case

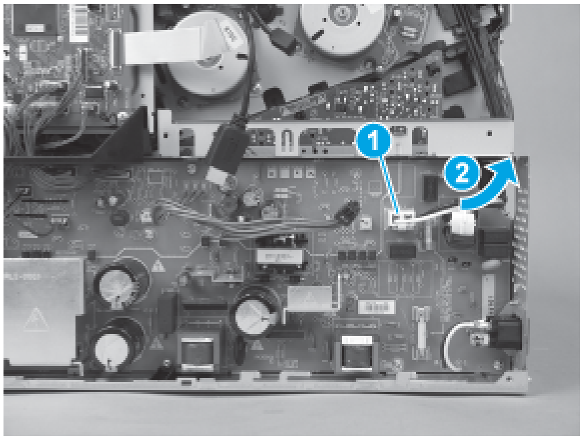


Remove the low-voltage power supply (LVPS)

Follow these steps to remove the low-voltage power supply (LVPS).

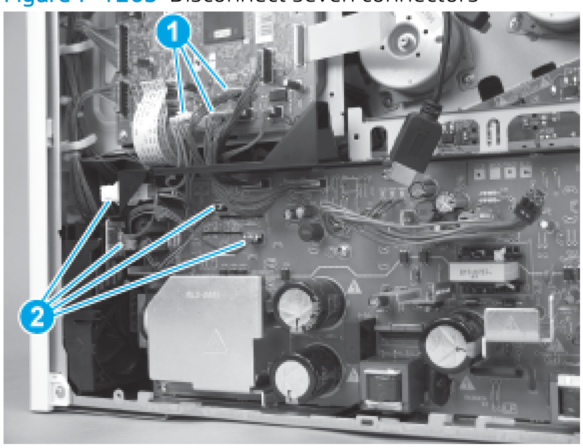
1. Disconnect one wire harness (callout 1), and then pass the wire harness through the opening (callout 2) in the chassis.

Figure 7-1264 Disconnect one wire harness



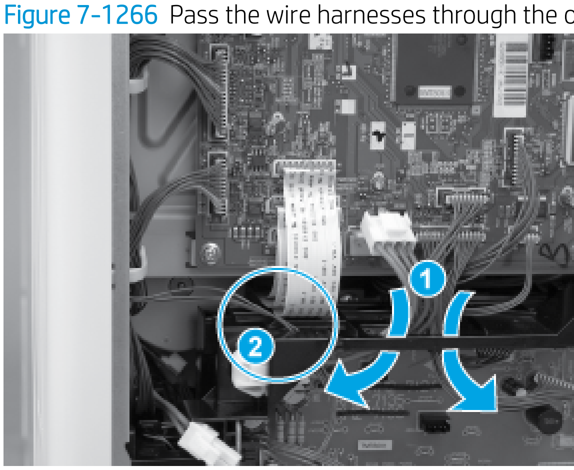
2. Disconnect three connectors on the DC controller (callout 1), and then disconnect four connectors (callout 2) on the LVPS.

Figure 7-1265 Disconnect seven connectors



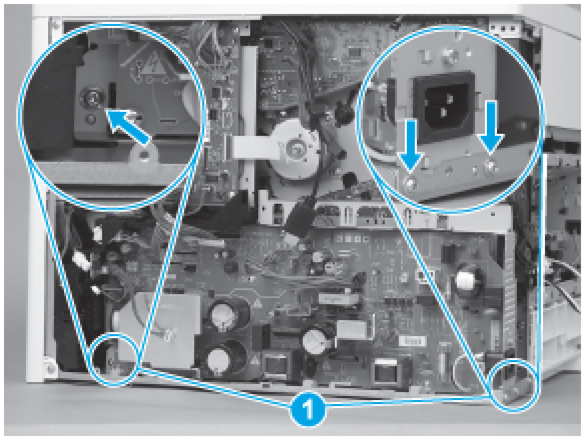
3. Pass the wire harnesses from the DC controller to the LVPS through the opening in the chassis (callout 1), and then release the wire harnesses from the retainer (callout 2).

Figure 7-1266 Pass the wire harnesses through the opening



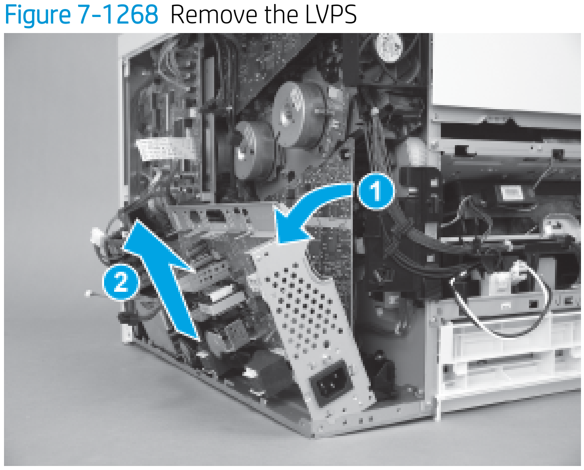
4. Remove three screws (callout 1).

Figure 7-1267 Remove three screws



5. Rotate the top of the LVPS away from the printer (callout 1), and then slide it up and out (callout 2) of the printer to remove it.

Figure 7-1268 Remove the LVPS

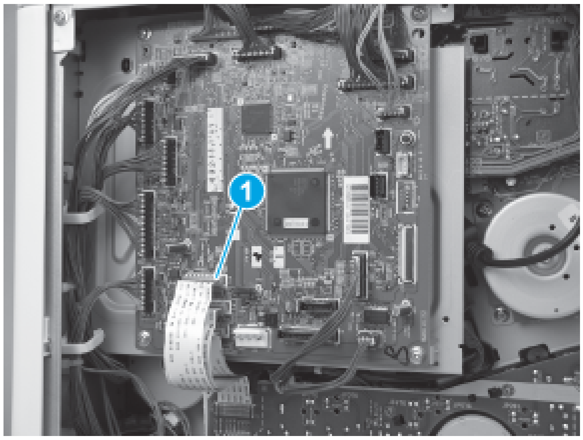


Remove the high-voltage power supply D (HVPSD)

Follow these steps to remove the high-voltage power supply D (HVPSD).

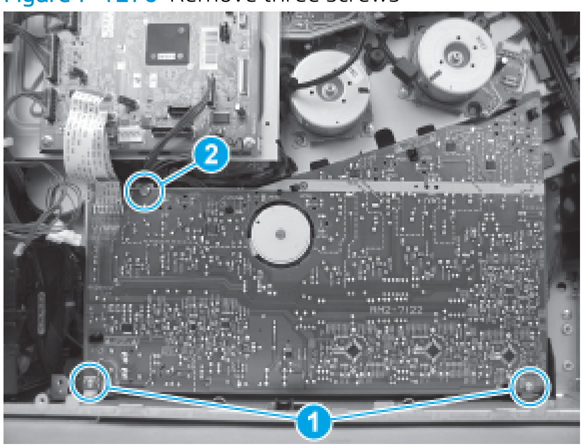
1. Disconnect one flat cable (callout 1) on the DC controller.

Figure 7-1269 Disconnect one flat cable



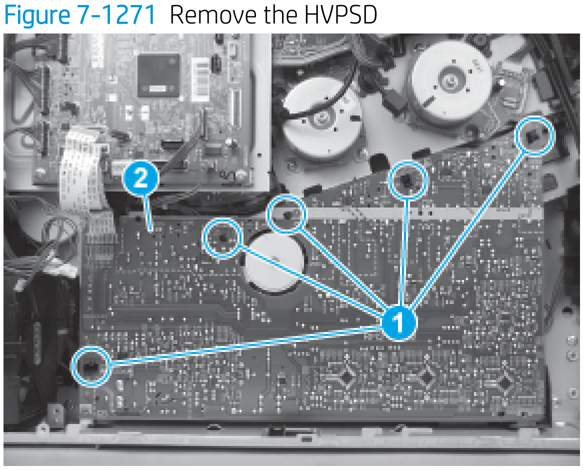
2. Remove two screws (callout 1), and then remove one self tapping screw (callout 2) on the HVPSD.

Figure 7-1270 Remove three screws



3. Release five tabs (callout 1), and then remove the HVPSD (callout 2).

Figure 7-1271 Remove the HVPSD

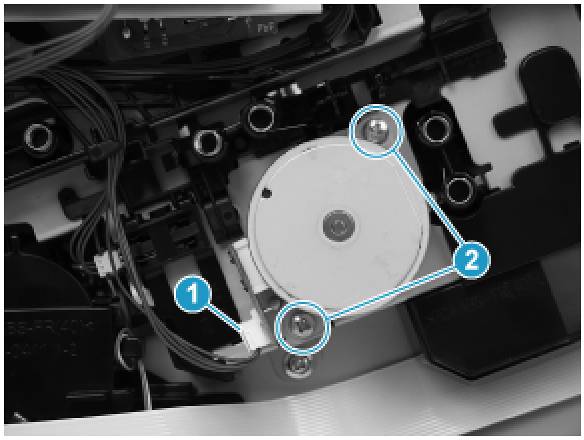


Remove the developing disengagement motor (M6)

Follow these steps to remove the developing disengagement motor.

▲ Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the motor.

Figure 7-1272 Remove the motor



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Auto close assembly

Learn about removing and replacing the auto close assembly.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-69 Part information

Part number	Part description
RM2-5147-000CN	Auto close assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

> NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-1273 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-1274 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

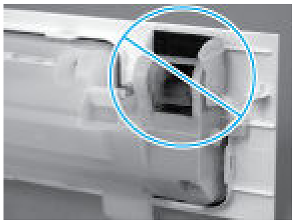
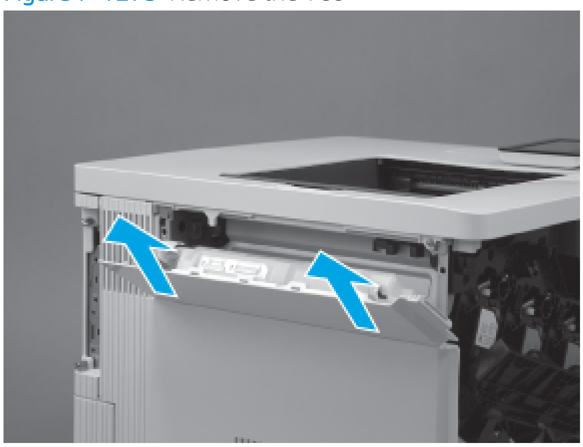


Figure 7-1275 Remove the TCU

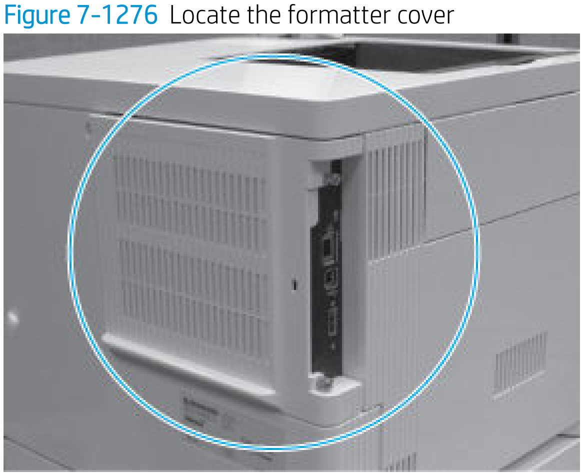


Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

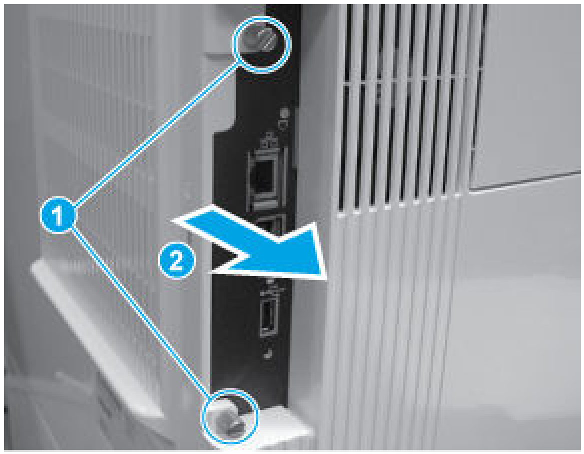
Figure 7-1276 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-1277 Loosen the thumbscrews



Remove the formatter (SFP)

Follow these steps to remove the formatter.

NOTE: This procedure is for SFP models only.

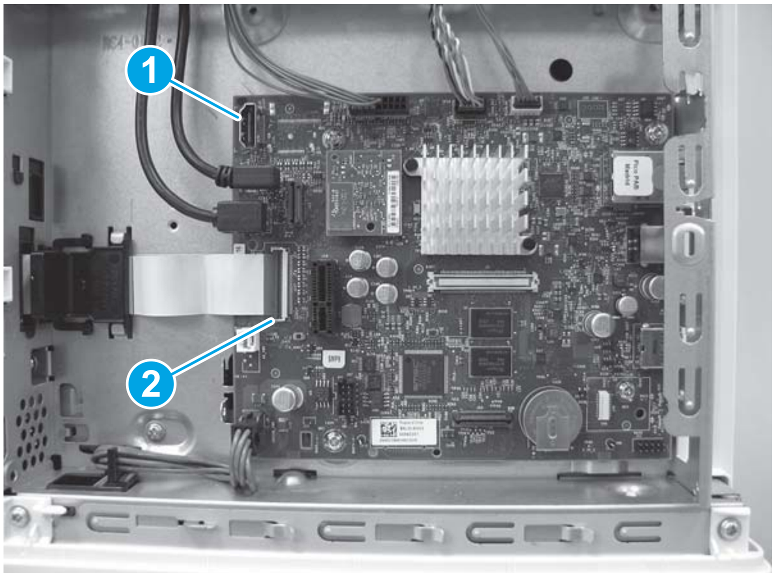
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)
   - All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
   - M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)
   - All models: J57
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

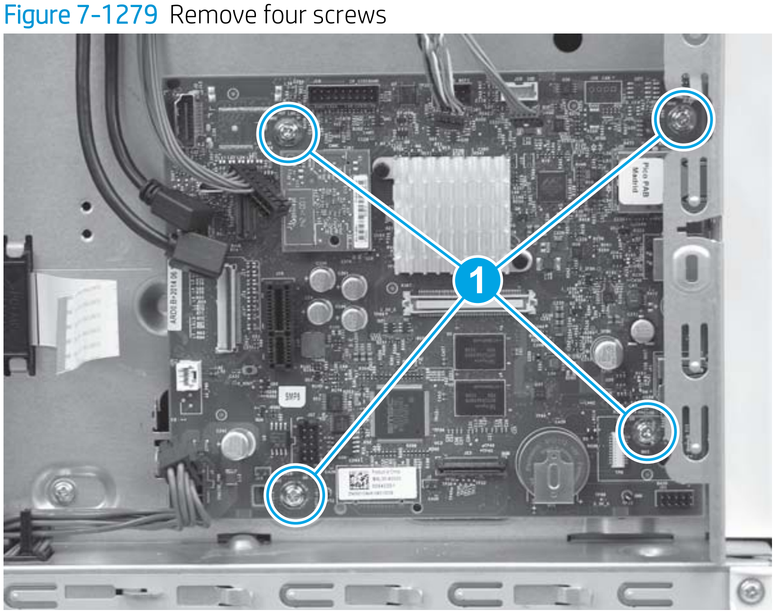
IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1278 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-1279 Remove four screws



Remove the hard-disk drive (HDD)

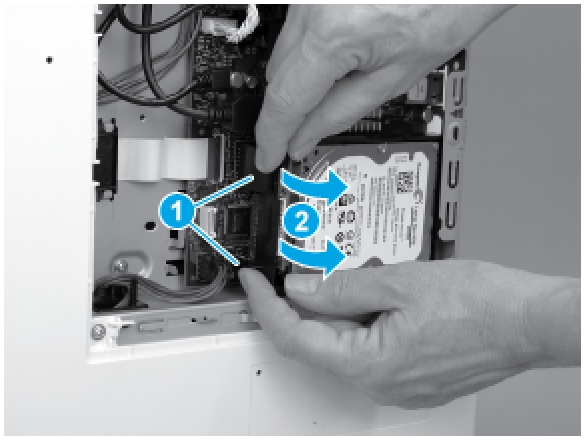
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-1280 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-1281 Remove the HDD

Remove the fax PCA (fax models)

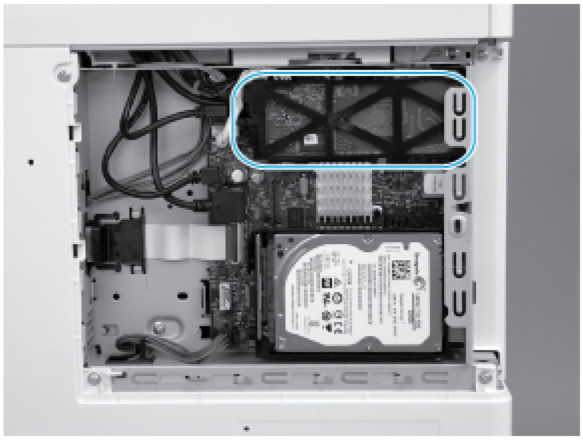
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

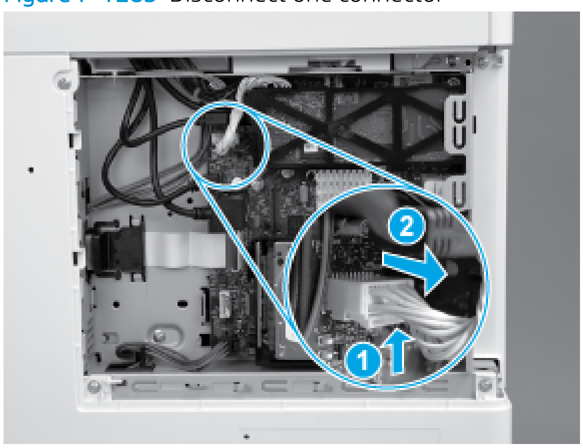
1. Locate the fax PCA component on the formatter.

Figure 7-1282 Locate the fax PCA



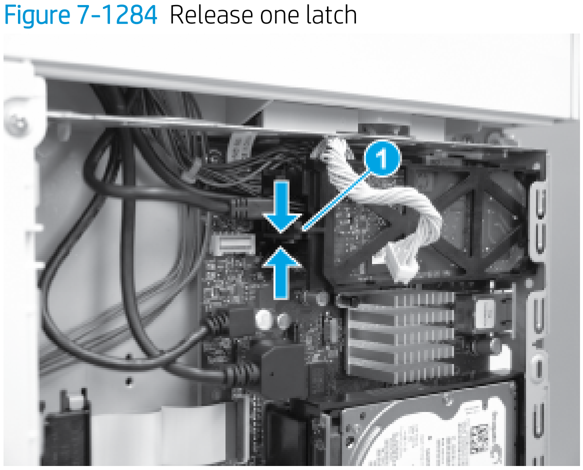
2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-1283 Disconnect one connector



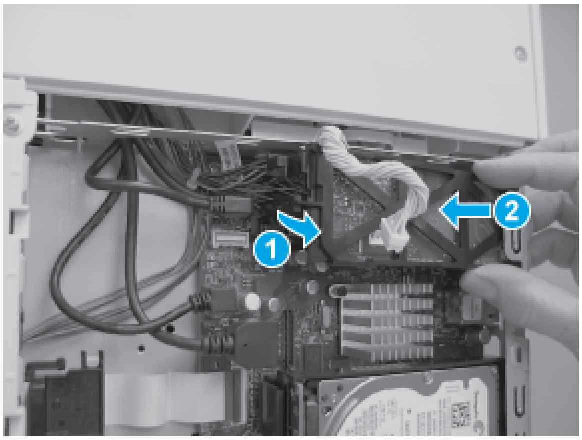
3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-1284 Release one latch



4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-1285 Remove the fax PCA



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

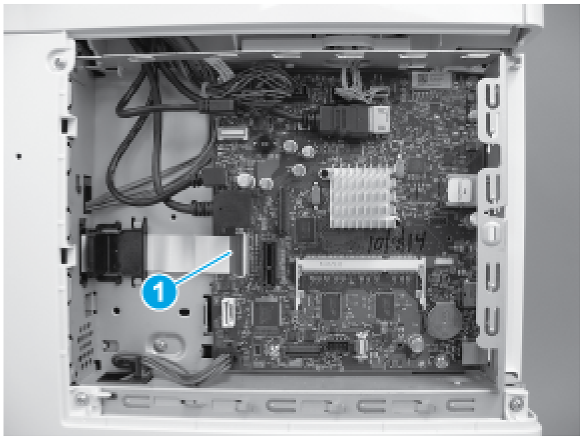
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

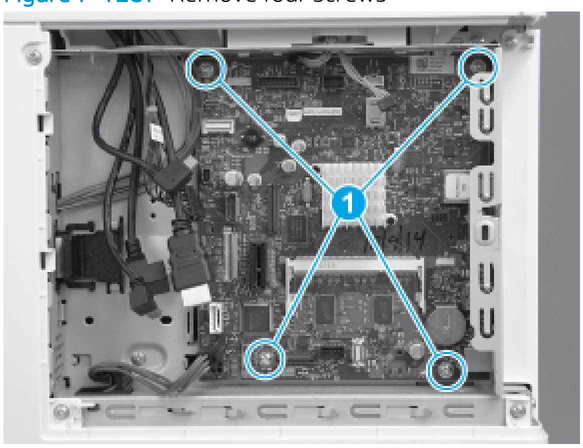
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1286 Disconnect all connectors



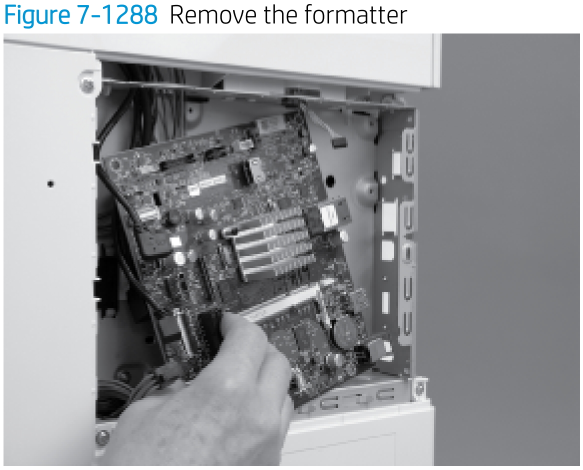
2. Remove four screws (callout 1).

Figure 7-1287 Remove four screws



3. Remove the formatter.

Figure 7-1288 Remove the formatter



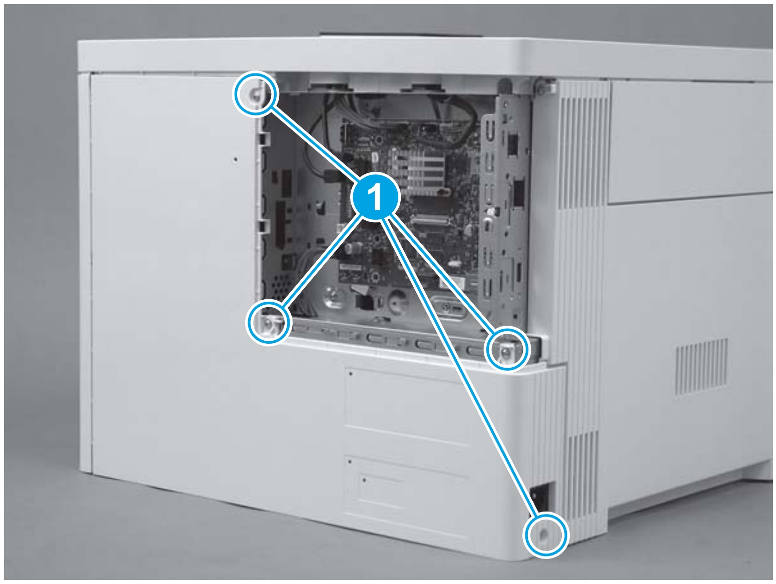
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

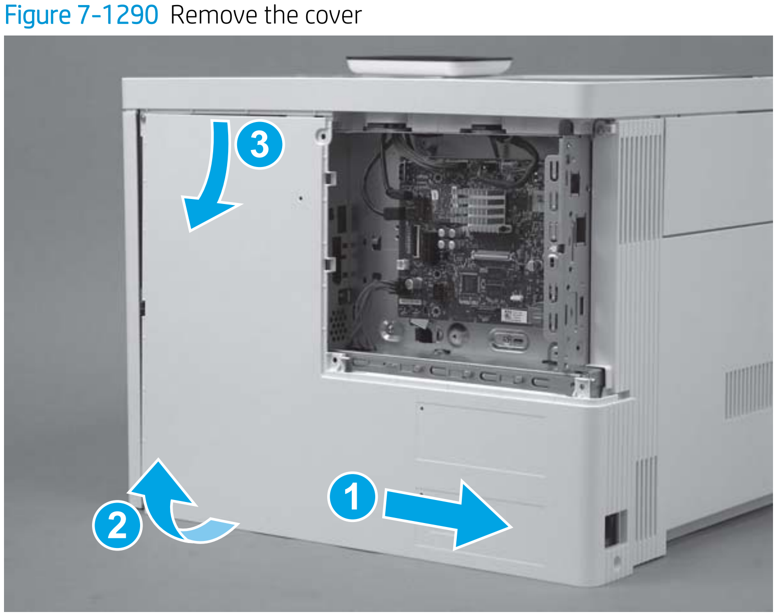
1. Remove four screws (callout 1).

Figure 7-1289 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-1290 Remove the cover



Remove the rear upper cover (MFP)

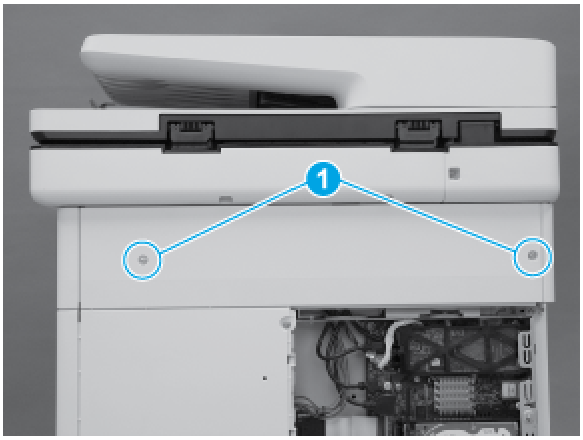
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

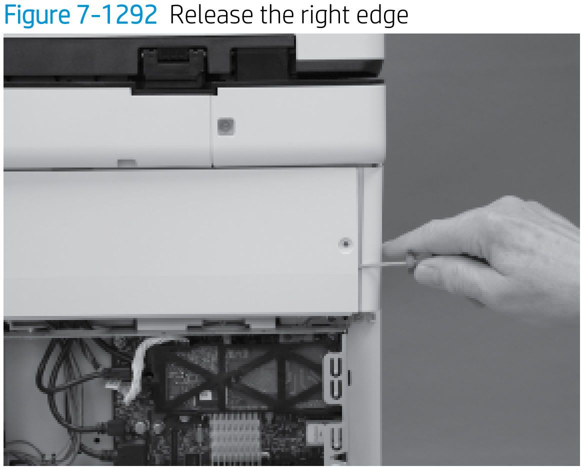
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-1291 Remove two screws



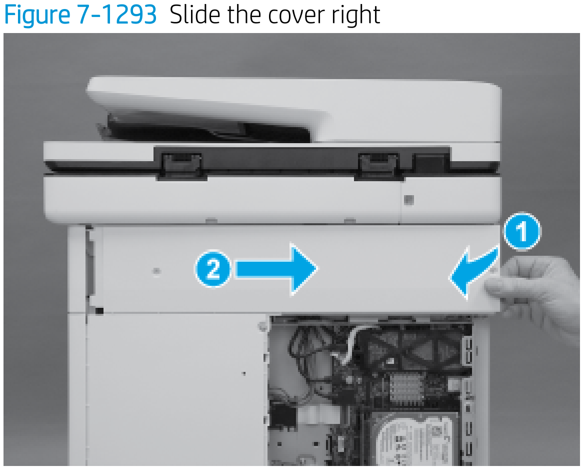
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-1292 Release the right edge



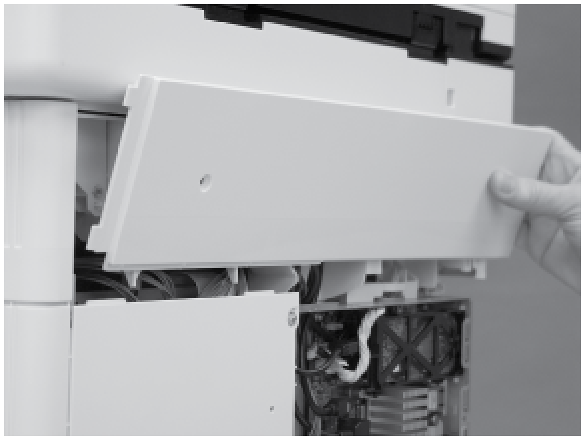
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-1293 Slide the cover right



4. Remove the cover.

Figure 7-1294 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-1295 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-1296 Remove the cover

Remove the left cover

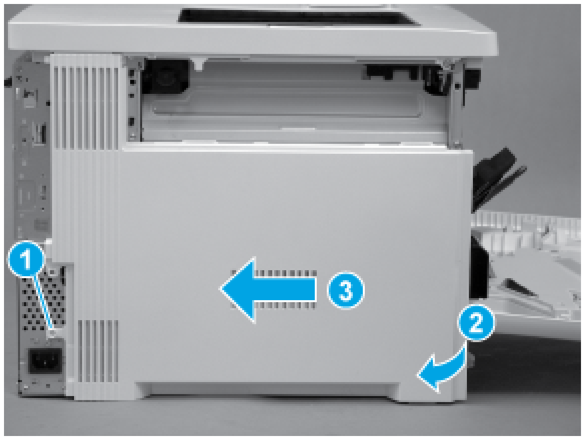
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1297 Remove one screw

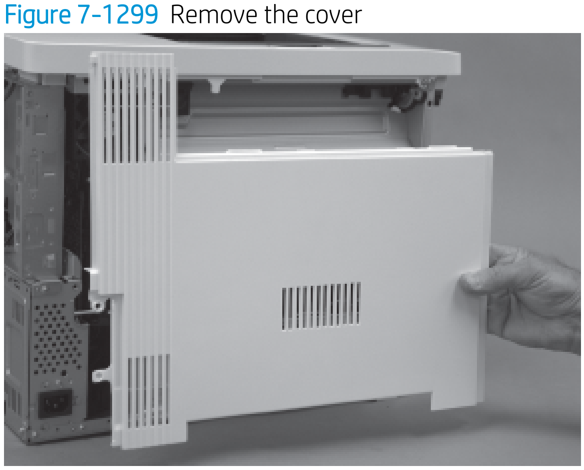
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-1298 Release the cover



3. Remove the cover.

Figure 7-1299 Remove the cover

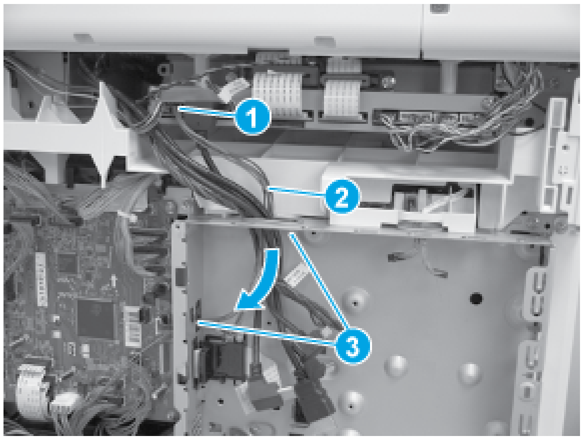


Remove the formatter case

Follow these steps to remove the formatter case.

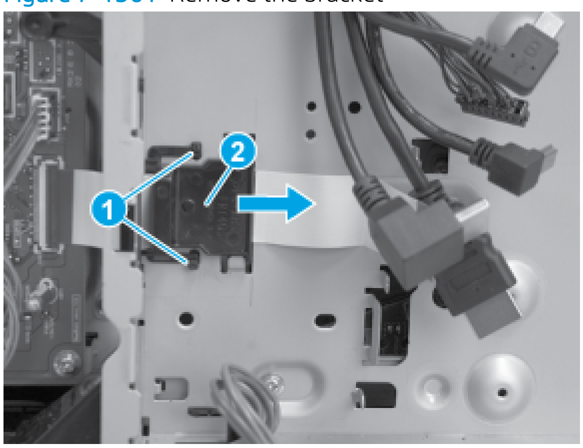
1. **MFP only**: Disconnect one connector (callout 1), and then pass the wire harness (callout 2) through two openings in the formatter case (callout 3).

Figure 7-1300 Disconnect one connector



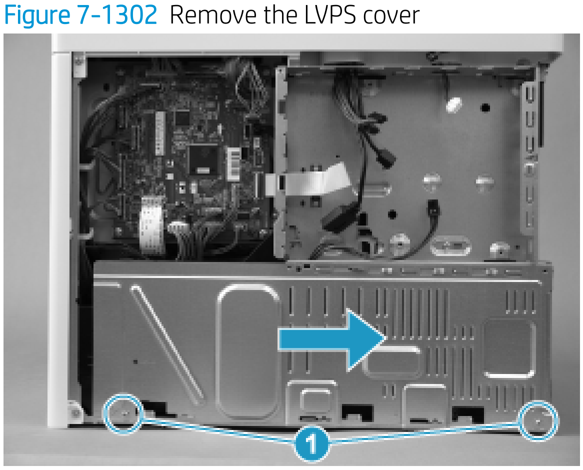
2. Release two tabs (callout 1) on the black plastic bracket. Hold the tabs in the released position, and then slide the bracket (callout 2) to the right to remove it from the formatter case.

Figure 7-1301 Remove the bracket



3. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

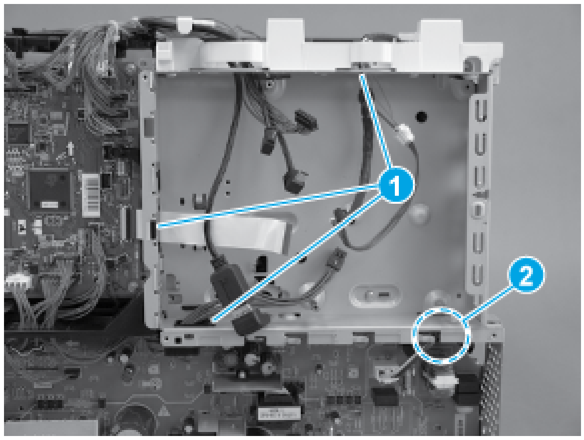
Figure 7-1302 Remove the LVPS cover



4. Pass two wire harnesses and one flat cable (callout 1) through the opening in the formatter case, and then release one wire harness from the retainer (callout 2).

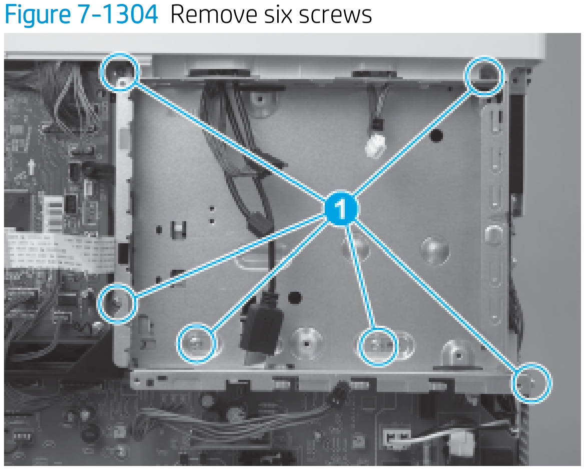
⚠ CAUTION: The flat cable might be attached to the formatter case with double-sided tape. Make sure that this tape is released, so that the flat cable is not damaged when the formatter case is removed.

Figure 7-1303 Release wire harnesses and flat cable



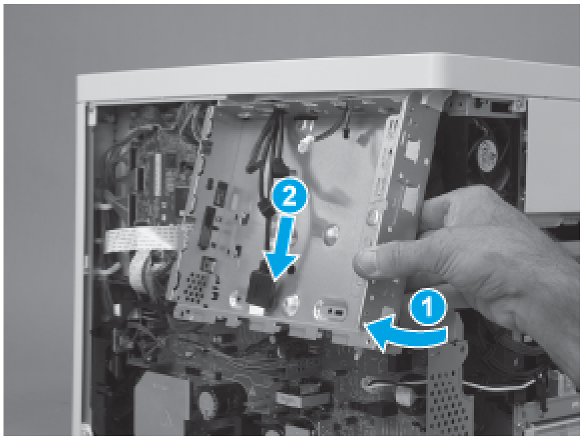
5. Remove six screws (callout 1).

Figure 7-1304 Remove six screws



6. Rotate the bottom of the formatter case away from the printer (callout 1), and then pull it down (callout 2) to release it.

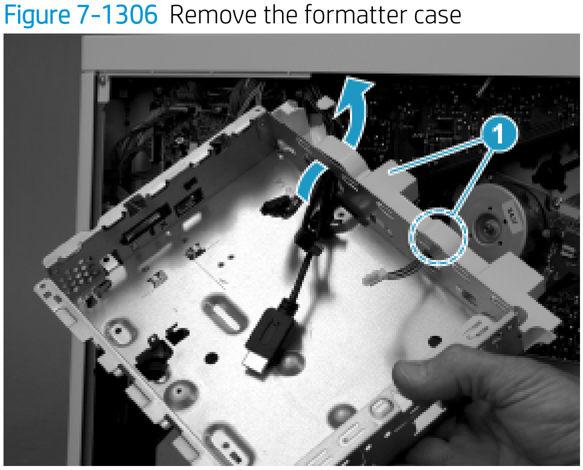
Figure 7-1305 Release the formatter case



7. Pass the wire harnesses through the opening in the formatter case to remove it.

IMPORTANT: If the formatter case is removed so that it can be replaced, make sure to transfer the memory PCA (island of data) and plastic bracket (callout 1) to the replacement case.

Figure 7-1306 Remove the formatter case

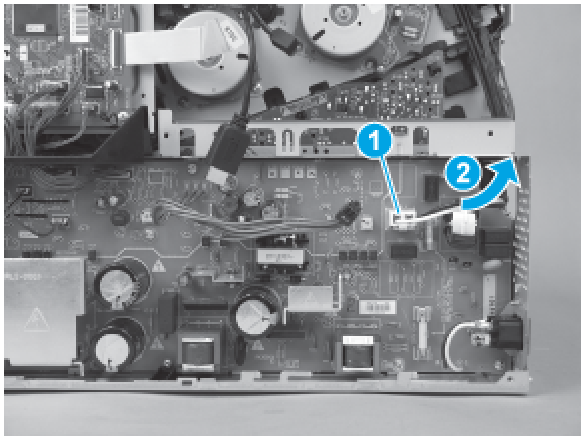


Remove the low-voltage power supply (LVPS)

Follow these steps to remove the low-voltage power supply (LVPS).

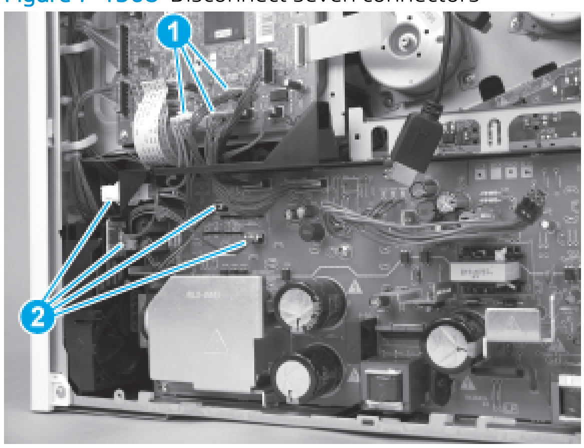
1. Disconnect one wire harness (callout 1), and then pass the wire harness through the opening (callout 2) in the chassis.

Figure 7-1307 Disconnect one wire harness



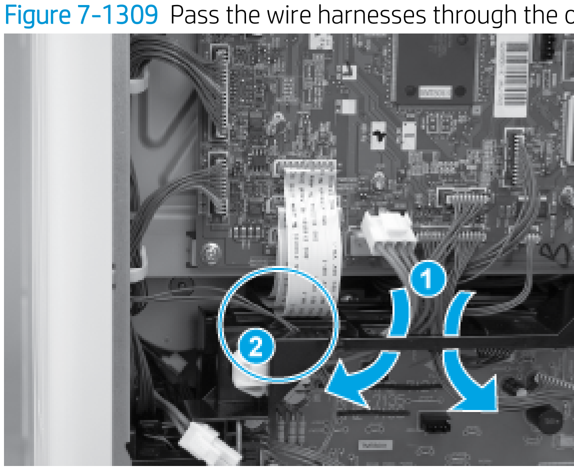
2. Disconnect three connectors on the DC controller (callout 1), and then disconnect four connectors (callout 2) on the LVPS.

Figure 7-1308 Disconnect seven connectors



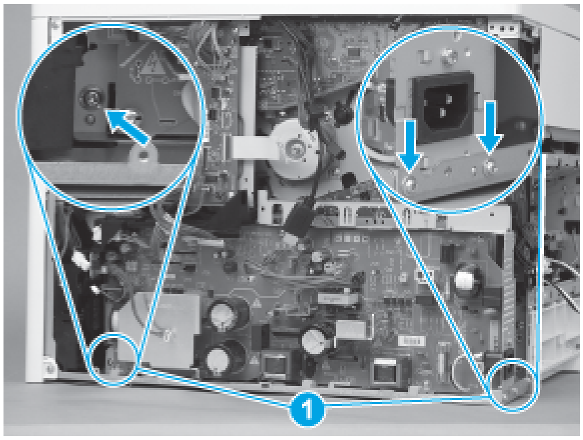
3. Pass the wire harnesses from the DC controller to the LVPS through the opening in the chassis (callout 1), and then release the wire harnesses from the retainer (callout 2).

Figure 7-1309 Pass the wire harnesses through the opening



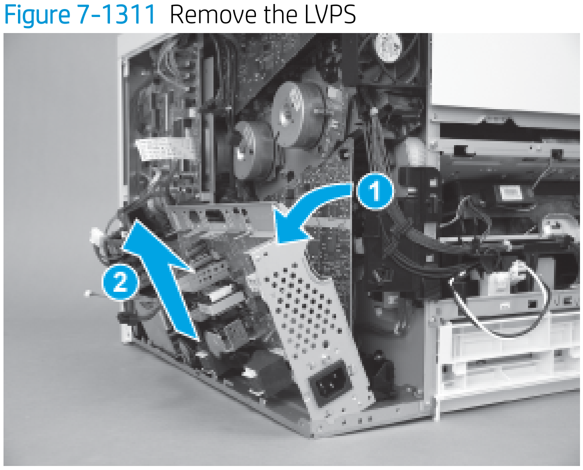
4. Remove three screws (callout 1).

Figure 7-1310 Remove three screws



5. Rotate the top of the LVPS away from the printer (callout 1), and then slide it up and out (callout 2) of the printer to remove it.

Figure 7-1311 Remove the LVPS

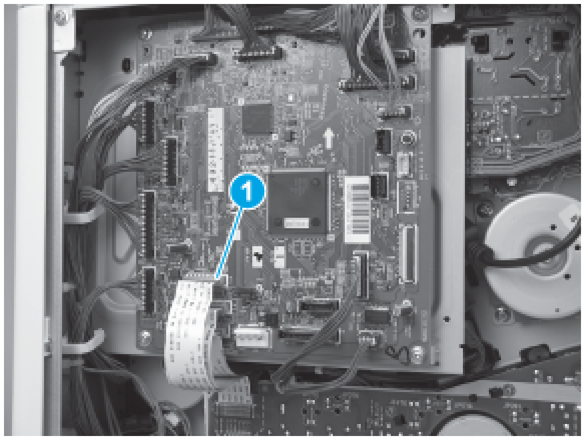


Remove the high-voltage power supply D (HVPSD)

Follow these steps to remove the high-voltage power supply D (HVPSD).

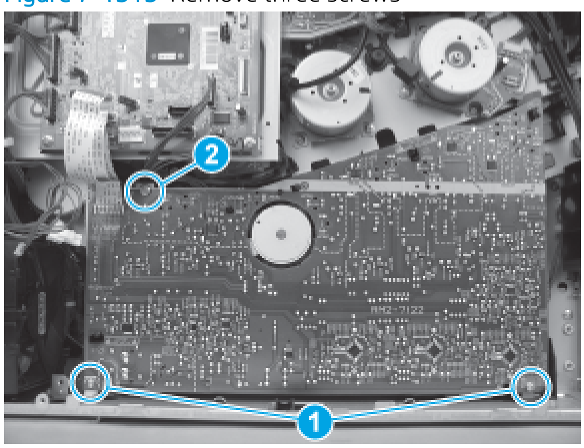
1. Disconnect one flat cable (callout 1) on the DC controller.

Figure 7-1312 Disconnect one flat cable



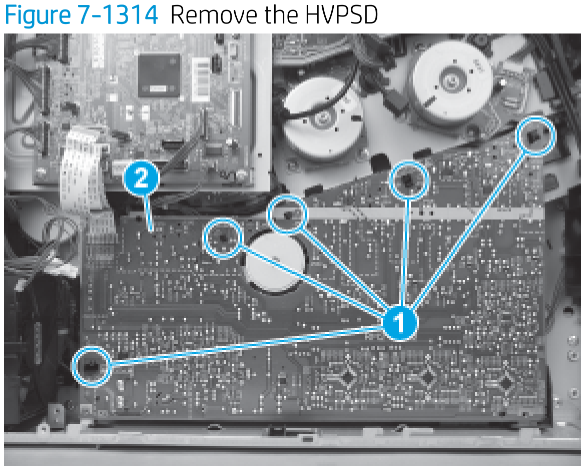
2. Remove two screws (callout 1), and then remove one self tapping screw (callout 2) on the HVPSD.

Figure 7-1313 Remove three screws



3. Release five tabs (callout 1), and then remove the HVPSD (callout 2).

Figure 7-1314 Remove the HVPSD

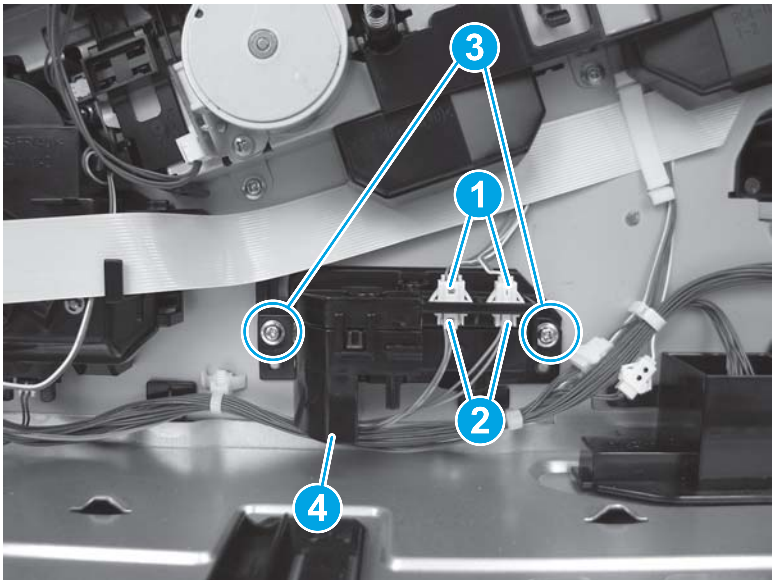


Remove the auto close assembly

Follow these steps to remove the auto close assembly.

▲ Disconnect four connectors (callout 1/2), remove two screws (callout 3), and then remove the auto close assembly (callout 4).

Figure 7-1315 Remove the auto close assembly



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Lifter drive assembly

Learn about removing and replacing the lifter drive assembly.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-70 Part information

Part number	Part description
RM2-0010-000CN	Lifter drive assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

> NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-1316 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-1317 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

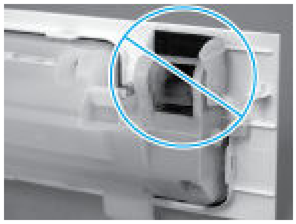
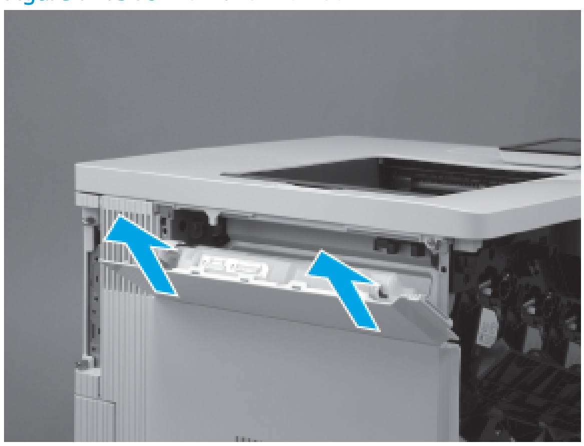


Figure 7-1318 Remove the TCU

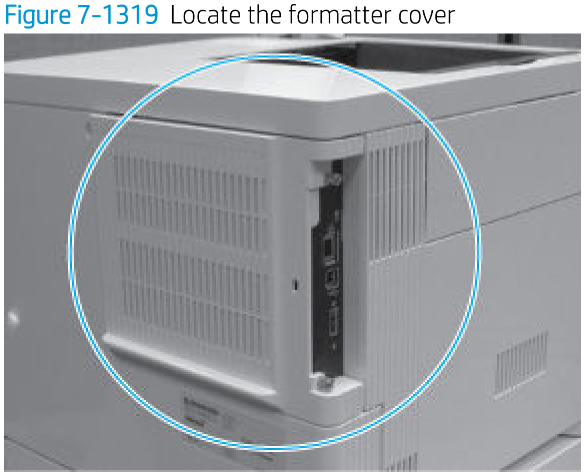


Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

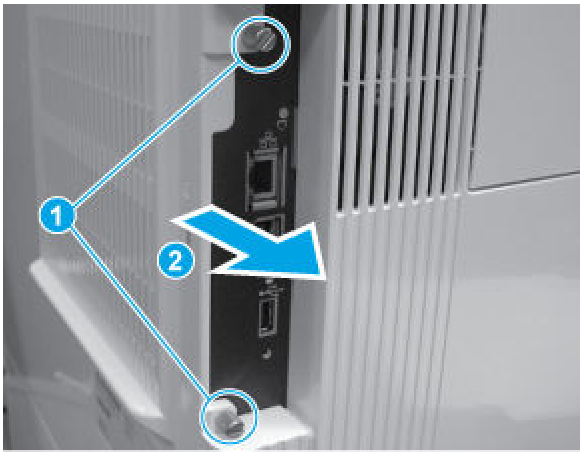
Figure 7-1319 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-1320 Loosen the thumbscrews



Remove the formatter (SFP)

Follow these steps to remove the formatter.

NOTE: This procedure is for SFP models only.

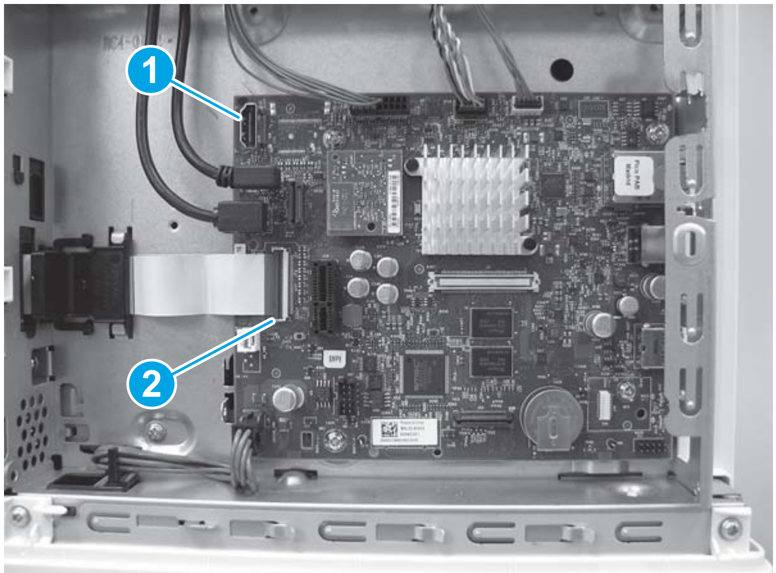
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)
   - All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
   - M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)
   - All models: J57
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

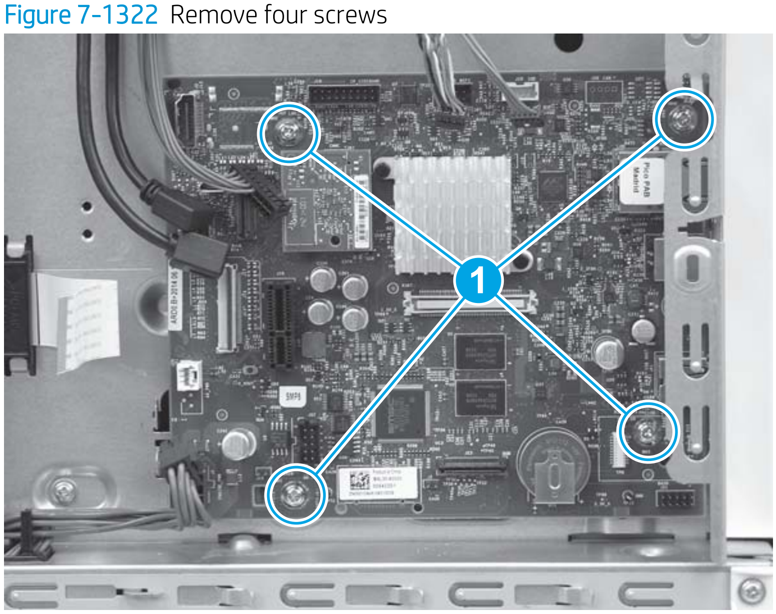
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1321 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-1322 Remove four screws



Remove the hard-disk drive (HDD)

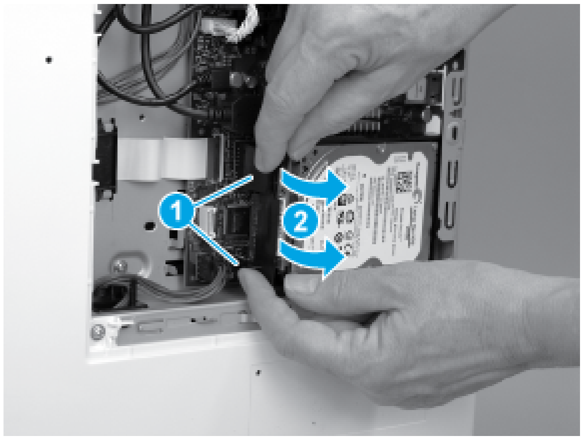
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-1323 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-1324 Remove the HDD

Remove the fax PCA (fax models)

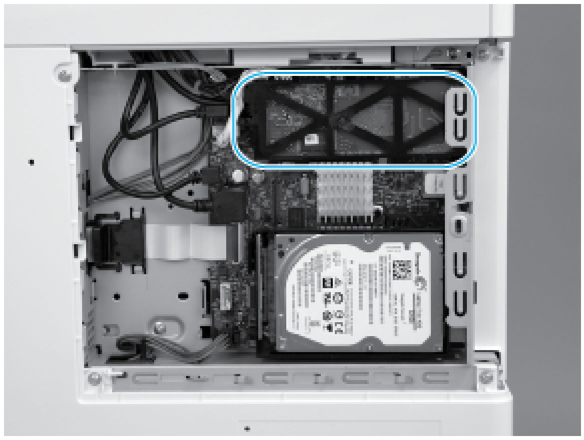
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

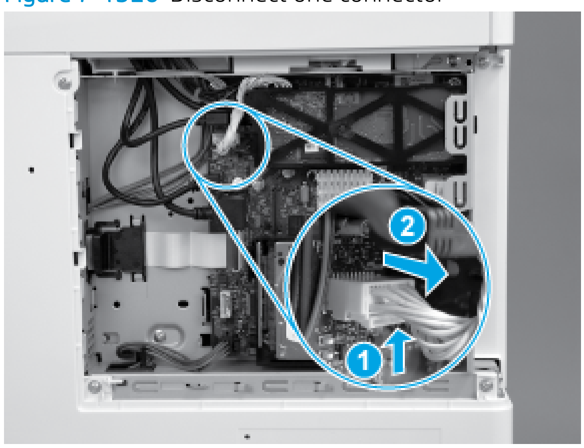
1. Locate the fax PCA component on the formatter.

Figure 7-1325 Locate the fax PCA



2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-1326 Disconnect one connector

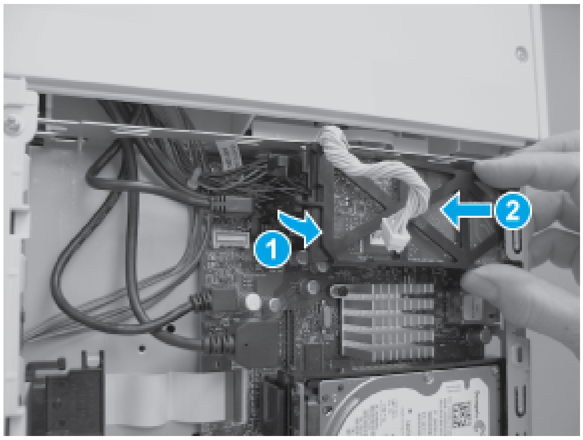


3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-1327 Release one latch

4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-1328 Remove the fax PCA



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

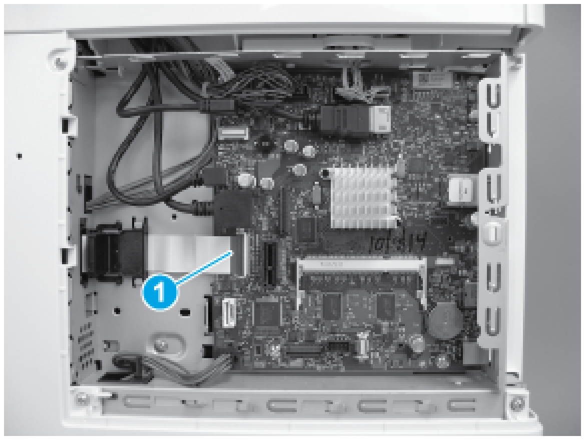
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

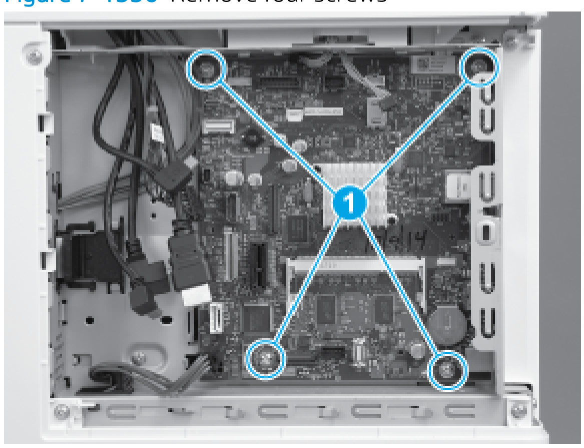
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1329 Disconnect all connectors



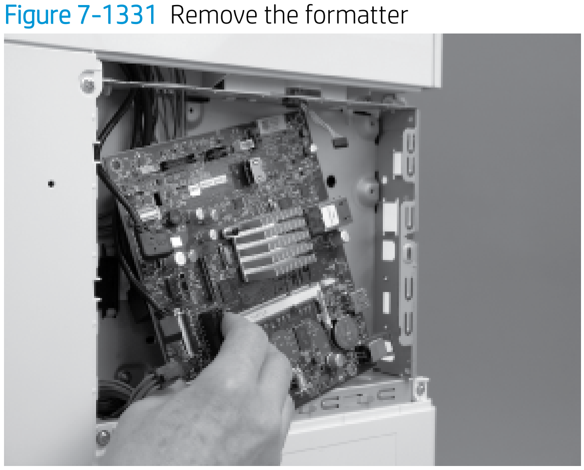
2. Remove four screws (callout 1).

Figure 7-1330 Remove four screws



3. Remove the formatter.

Figure 7-1331 Remove the formatter



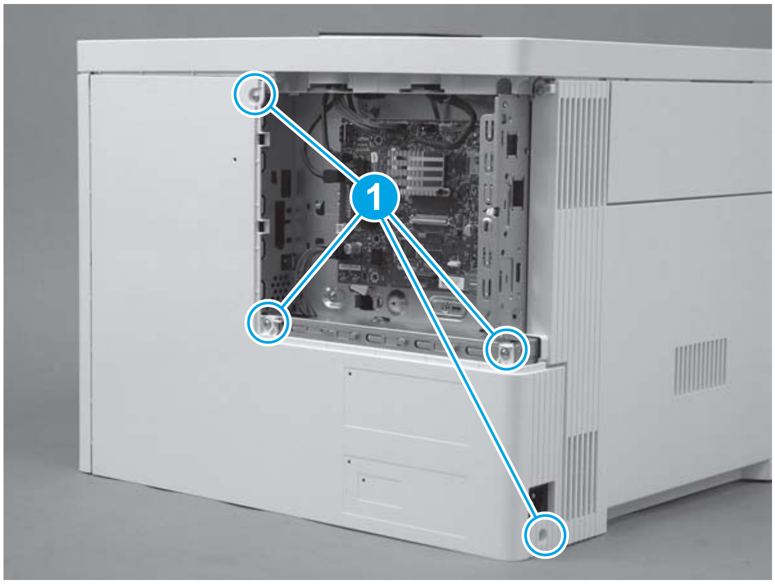
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

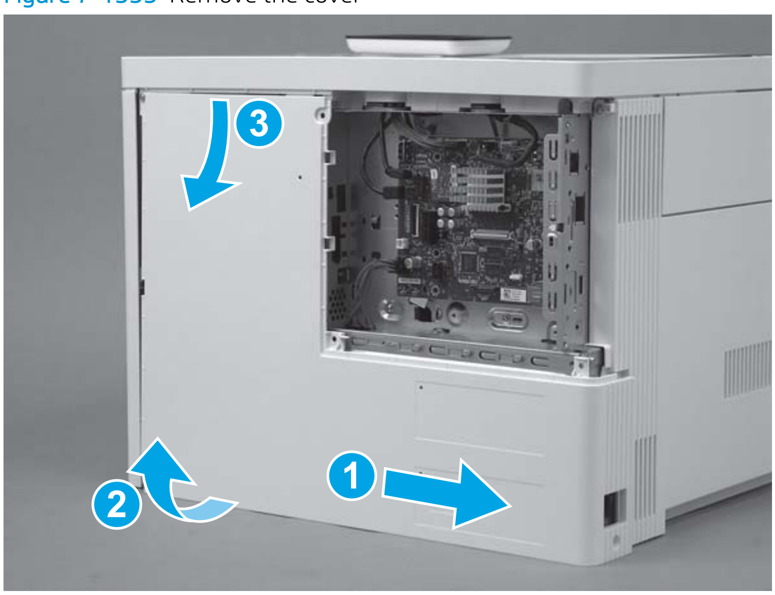
1. Remove four screws (callout 1).

Figure 7-1332 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-1333 Remove the cover



Remove the rear upper cover (MFP)

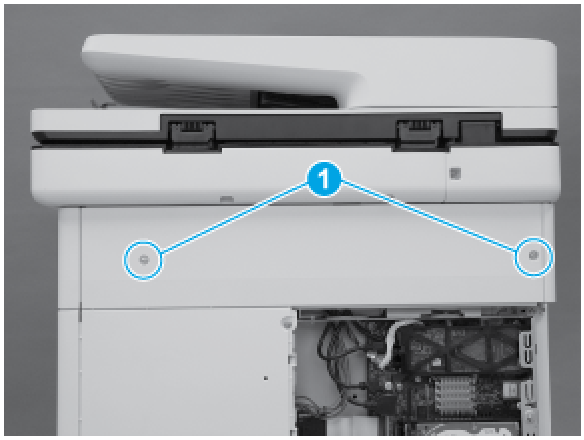
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

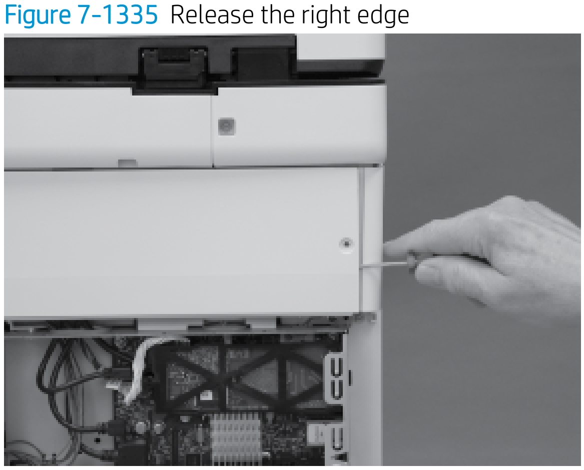
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-1334 Remove two screws



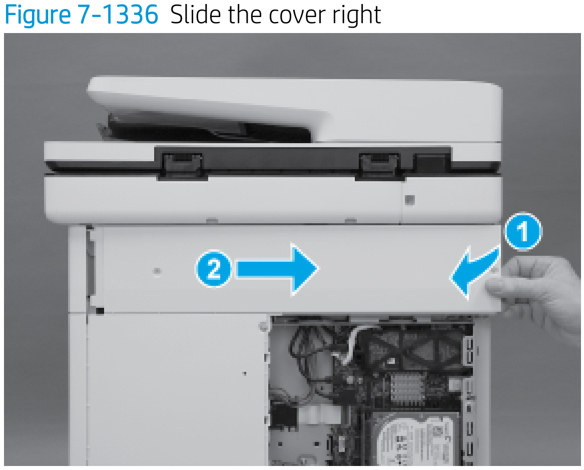
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-1335 Release the right edge



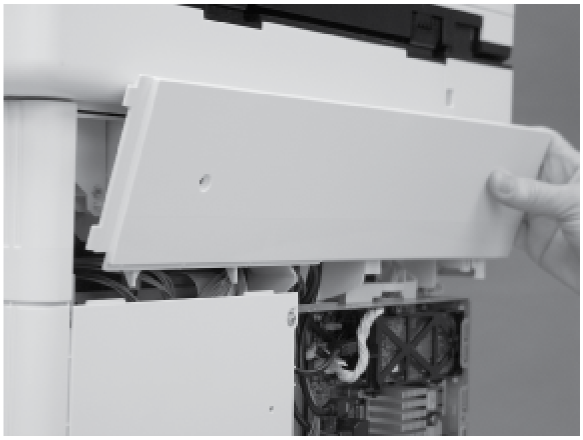
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-1336 Slide the cover right



4. Remove the cover.

Figure 7-1337 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-1338 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-1339 Remove the cover

Remove the left cover

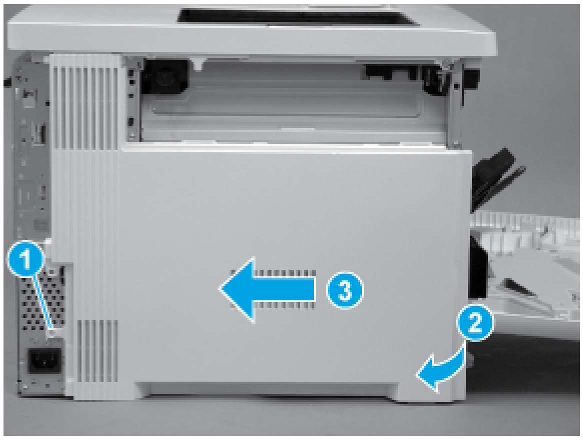
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1340 Remove one screw

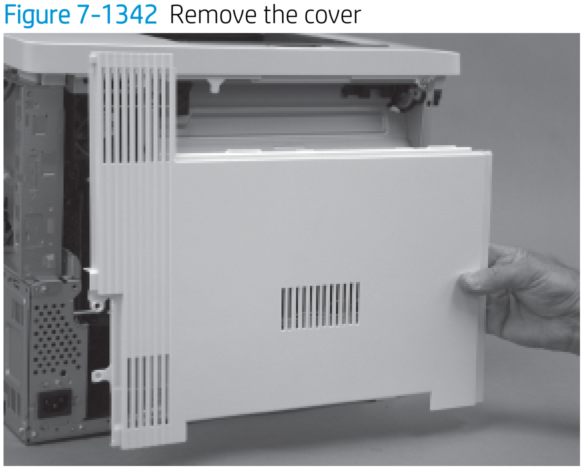
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-1341 Release the cover



3. Remove the cover.

Figure 7-1342 Remove the cover

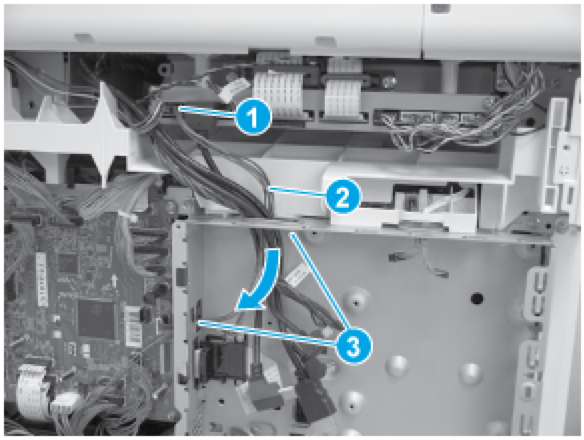


Remove the formatter case

Follow these steps to remove the formatter case.

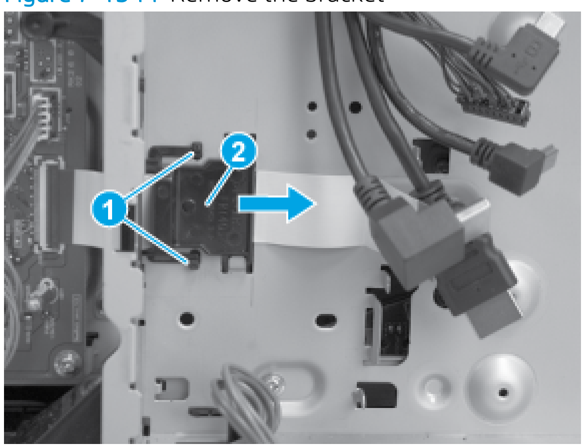
1. **MFP only**: Disconnect one connector (callout 1), and then pass the wire harness (callout 2) through two openings in the formatter case (callout 3).

Figure 7-1343 Disconnect one connector



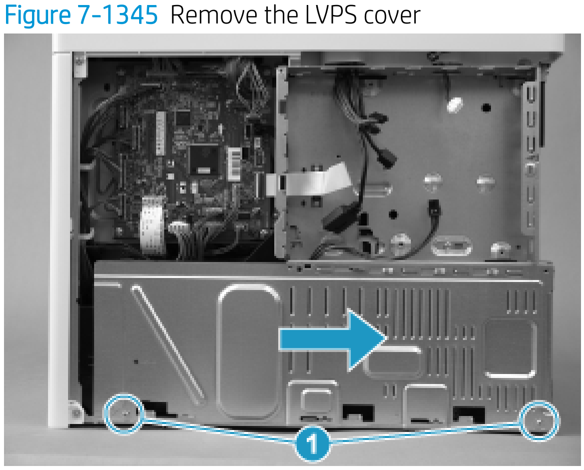
2. Release two tabs (callout 1) on the black plastic bracket. Hold the tabs in the released position, and then slide the bracket (callout 2) to the right to remove it from the formatter case.

Figure 7-1344 Remove the bracket



3. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

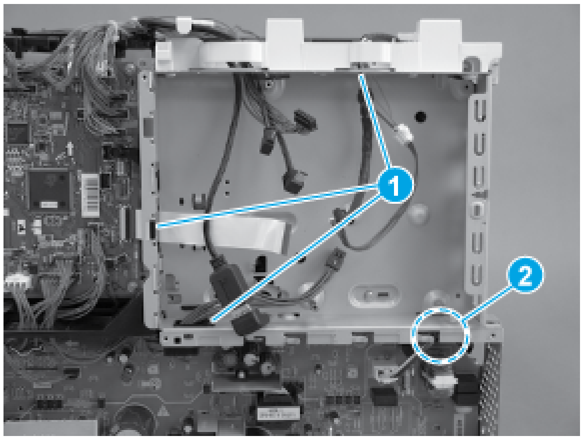
Figure 7-1345 Remove the LVPS cover



4. Pass two wire harnesses and one flat cable (callout 1) through the opening in the formatter case, and then release one wire harness from the retainer (callout 2).

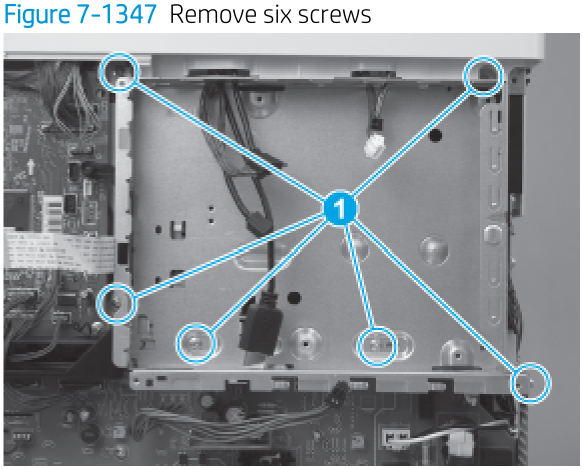
⚠ CAUTION: The flat cable might be attached to the formatter case with double-sided tape. Make sure that this tape is released, so that the flat cable is not damaged when the formatter case is removed.

Figure 7-1346 Release wire harnesses and flat cable



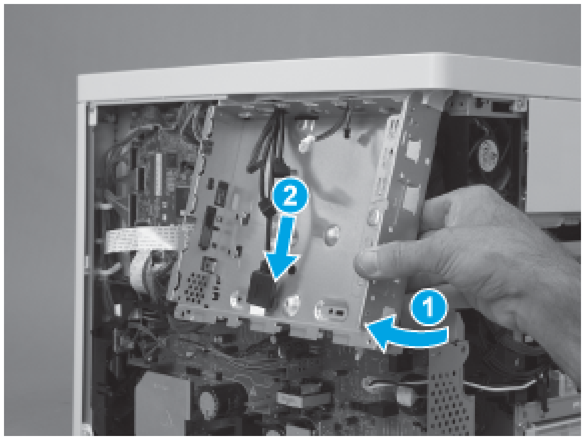
5. Remove six screws (callout 1).

Figure 7-1347 Remove six screws



6. Rotate the bottom of the formatter case away from the printer (callout 1), and then pull it down (callout 2) to release it.

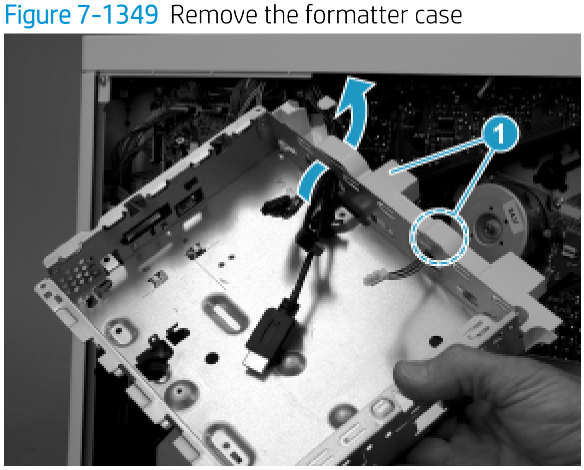
Figure 7-1348 Release the formatter case



7. Pass the wire harnesses through the opening in the formatter case to remove it.

IMPORTANT: If the formatter case is removed so that it can be replaced, make sure to transfer the memory PCA (island of data) and plastic bracket (callout 1) to the replacement case.

Figure 7-1349 Remove the formatter case

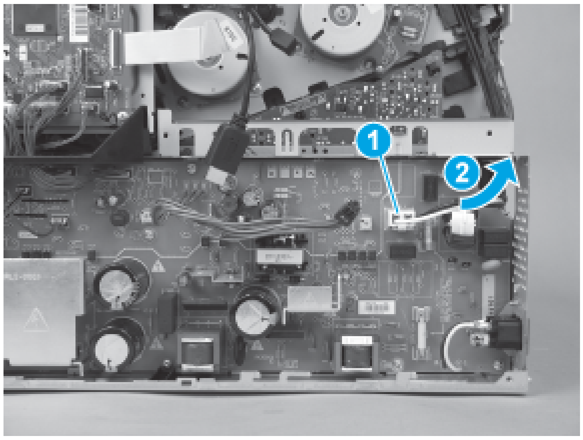


Remove the low-voltage power supply (LVPS)

Follow these steps to remove the low-voltage power supply (LVPS).

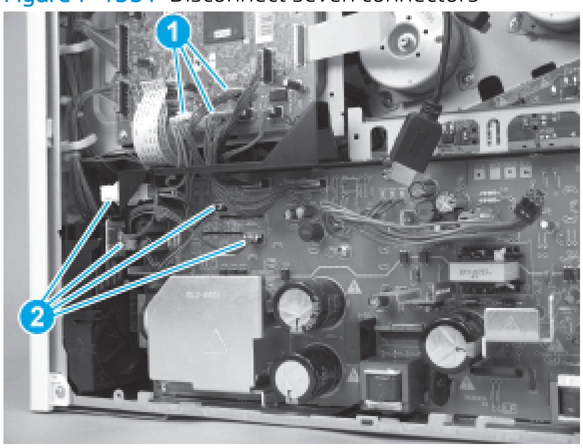
1. Disconnect one wire harness (callout 1), and then pass the wire harness through the opening (callout 2) in the chassis.

Figure 7-1350 Disconnect one wire harness



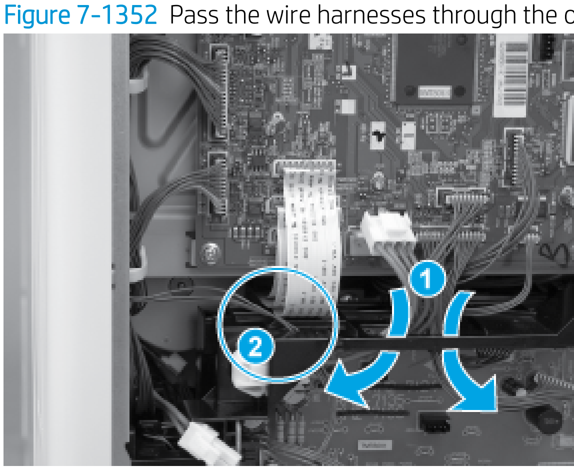
2. Disconnect three connectors on the DC controller (callout 1), and then disconnect four connectors (callout 2) on the LVPS.

Figure 7-1351 Disconnect seven connectors



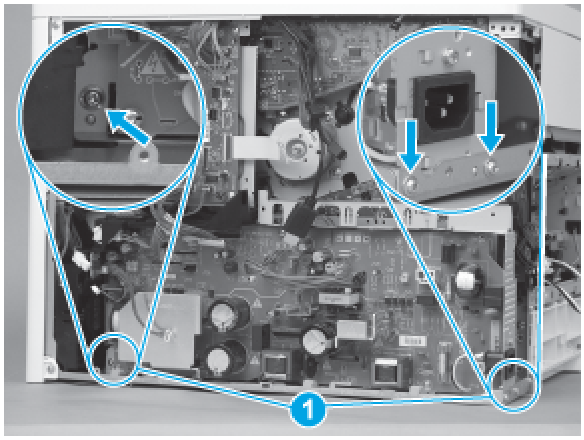
3. Pass the wire harnesses from the DC controller to the LVPS through the opening in the chassis (callout 1), and then release the wire harnesses from the retainer (callout 2).

Figure 7-1352 Pass the wire harnesses through the opening



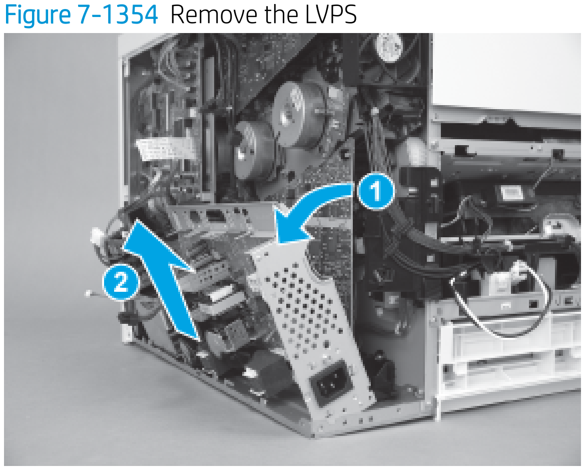
4. Remove three screws (callout 1).

Figure 7-1353 Remove three screws



5. Rotate the top of the LVPS away from the printer (callout 1), and then slide it up and out (callout 2) of the printer to remove it.

Figure 7-1354 Remove the LVPS

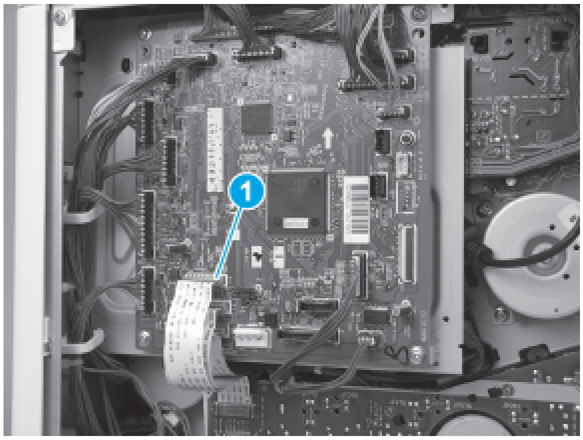


Remove the high-voltage power supply D (HVPSD)

Follow these steps to remove the high-voltage power supply D (HVPSD).

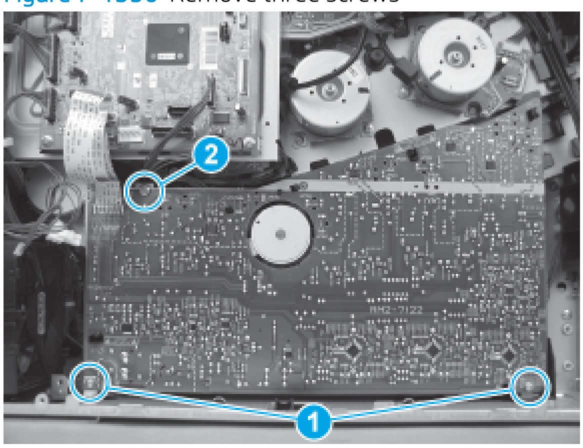
1. Disconnect one flat cable (callout 1) on the DC controller.

Figure 7-1355 Disconnect one flat cable



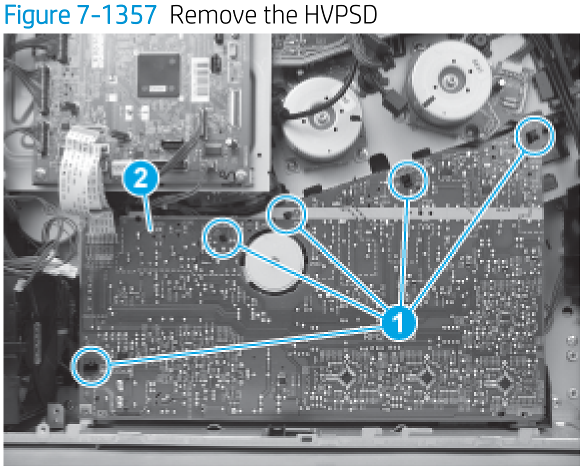
2. Remove two screws (callout 1), and then remove one self tapping screw (callout 2) on the HVPSD.

Figure 7-1356 Remove three screws



3. Release five tabs (callout 1), and then remove the HVPSD (callout 2).

Figure 7-1357 Remove the HVPSD

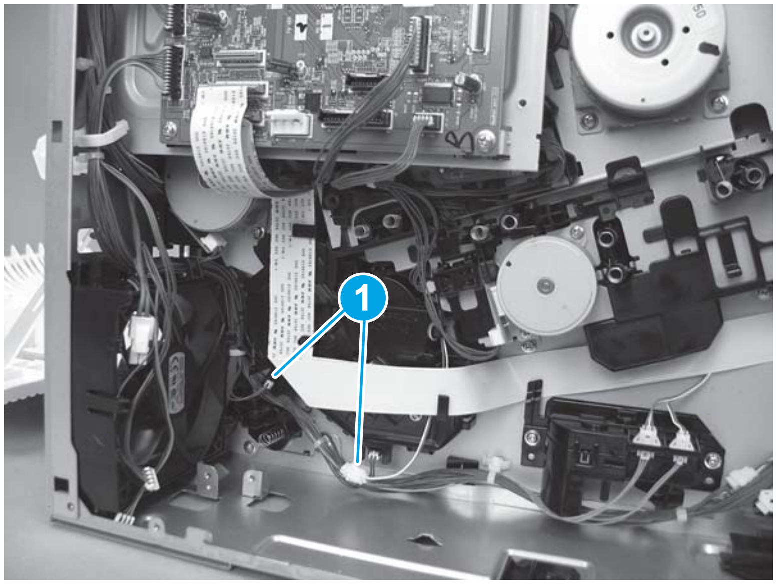


Remove the auto close assembly

Follow these steps to remove the auto close assembly.

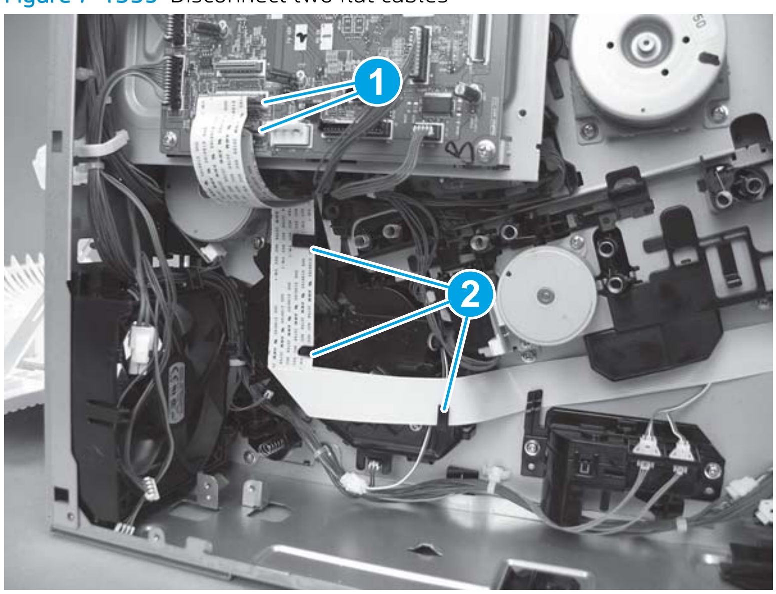
1. Disconnect two connectors (callout 1).

Figure 7-1358 Disconnect two connectors



2. Disconnect two flat cables (callout 1), and then release them from the retainers (callout 2).

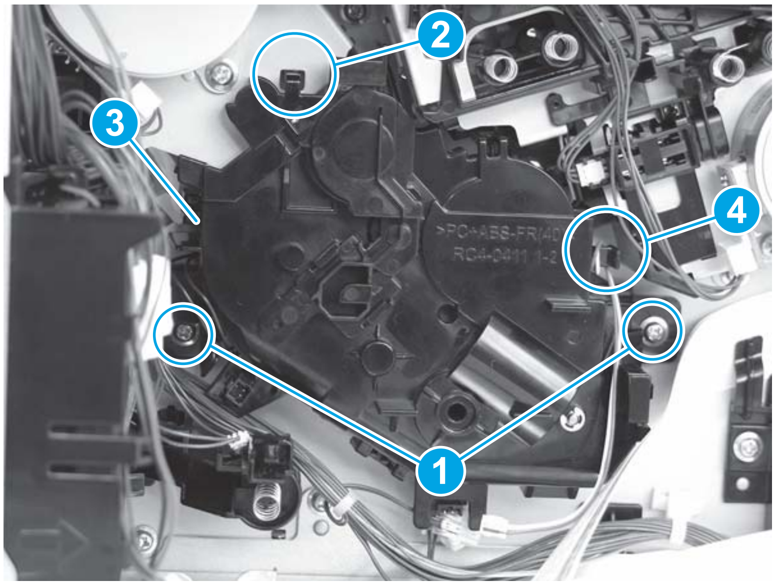
Figure 7-1359 Disconnect two flat cables



3. Remove two screws (callout 1), release one tab (callout 2), and then remove the lifter drive assembly (callout 3).

NOTE: Release one wire harness from the retainer (callout 4) as the assembly is removed.

Figure 7-1360 Remove the assembly



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Laser/scanner assembly

This document provides the procedures to remove and replace the laser/scanner assembly.

Mean time to repair: 25 minutes

Service level: Intermediate

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-71 Part information

Part number	Part description
RM2-6545-000CN	Laser/scanner assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip

After performing service

Make sure that all of the connectors on the HVPSD are fully seated.

Make sure that all of the connectors on the LVPS are fully seated.

Make sure that all of the connectors on the formatter are fully seated.

Make sure that the formatter cover is fully seated, and that the thumbscrews are finger tight after replacing it.

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print a configuration page to make sure that the printer is functioning correctly.

Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

> NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-1361 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-1362 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

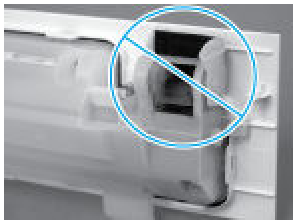
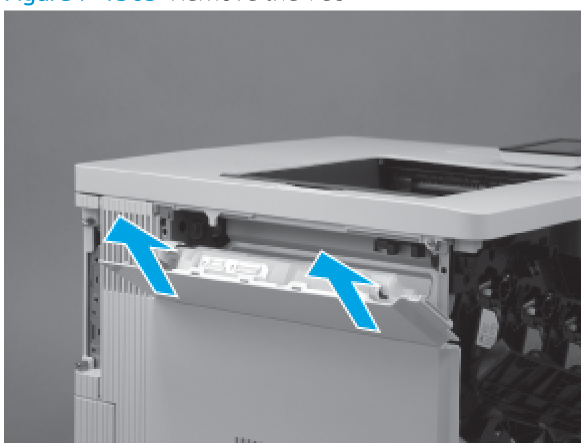


Figure 7-1363 Remove the TCU

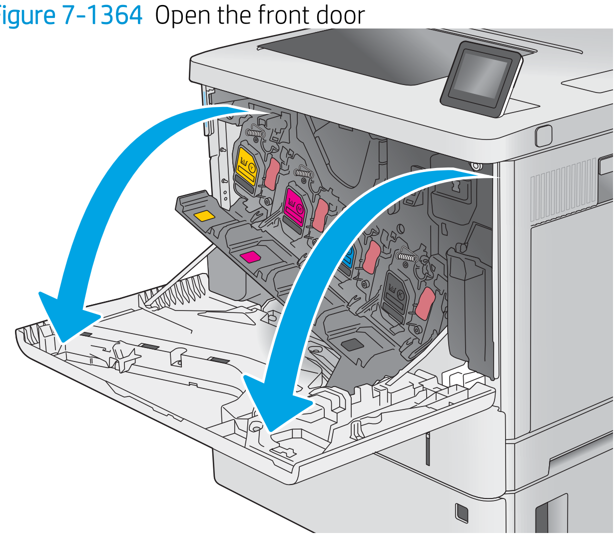


Remove the toner cartridges

Follow these steps to replace a toner cartridge.

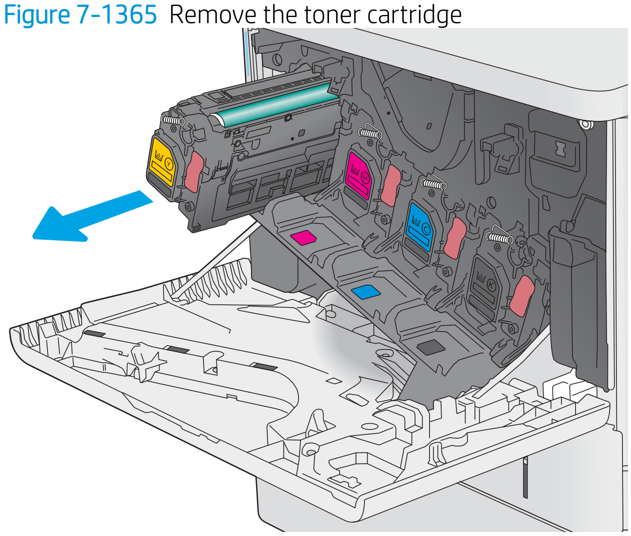
1. Open the front door.

Figure 7-1364 Open the front door



2. Grasp the handle of the used toner cartridge and pull out to remove it.

Figure 7-1365 Remove the toner cartridge

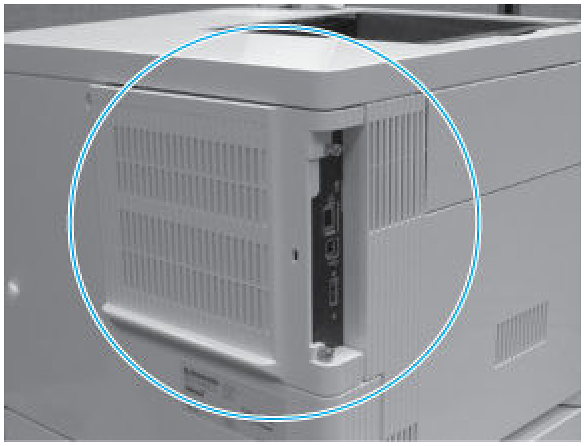


Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

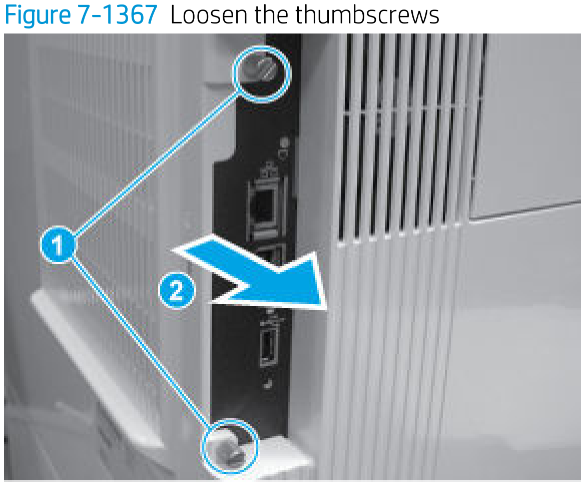
Figure 7-1366 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-1367 Loosen the thumbscrews



Remove the formatter (SFP)

Follow these steps to remove the formatter.

NOTE: This procedure is for SFP models only.

1. Disconnect all of the connectors on the formatter.

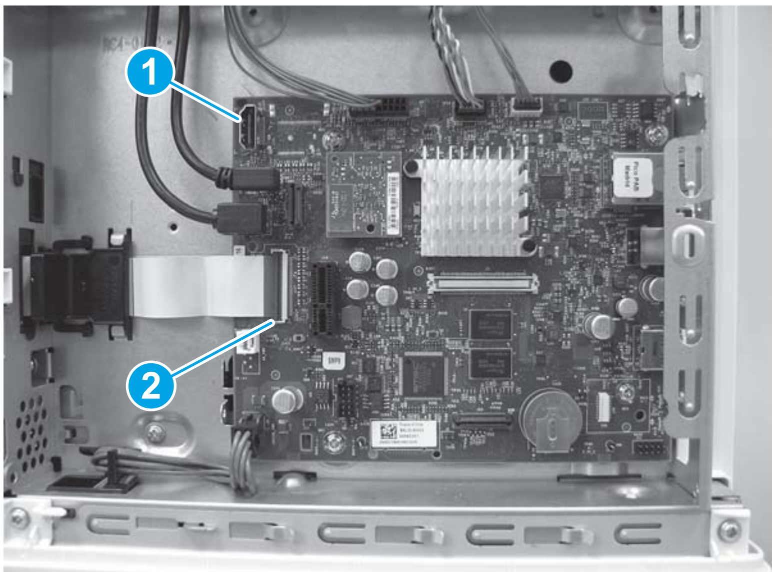
   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)
   - All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J18 (this connector is empty unless the optional hard-disk drive is installed)

- M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)
- All models: J57
- All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

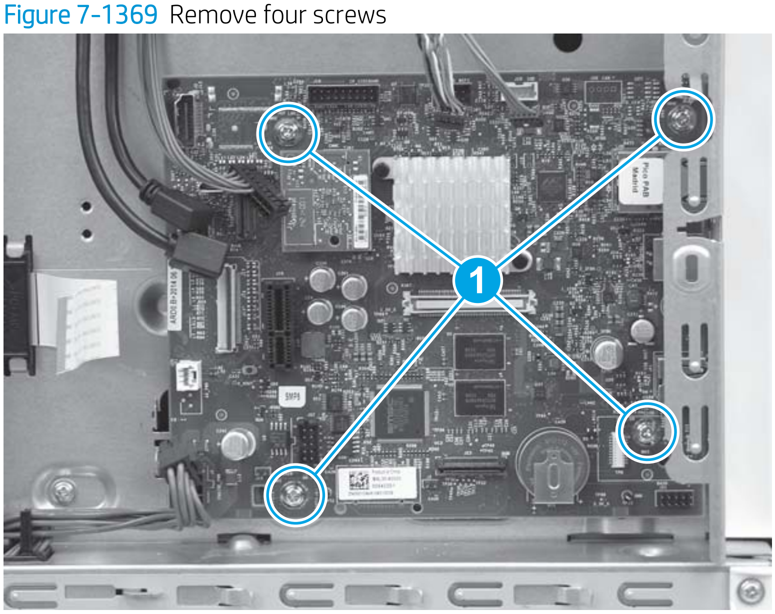
IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1368 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-1369 Remove four screws



Remove the hard-disk drive (HDD)

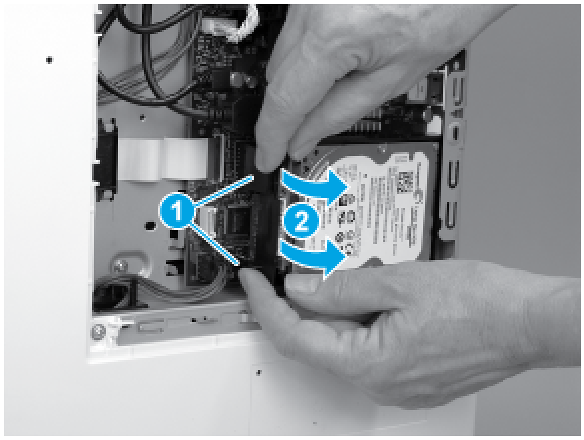
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

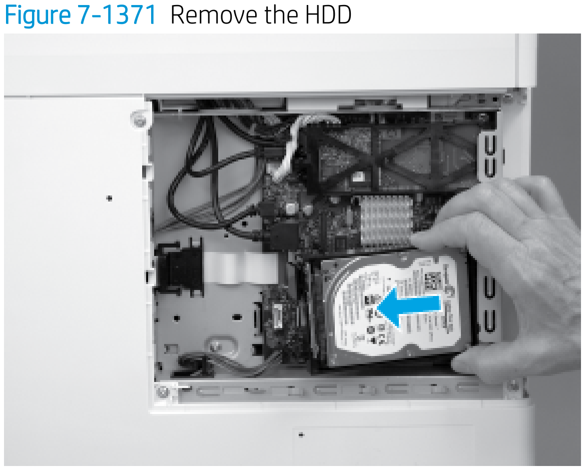
1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-1370 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-1371 Remove the HDD



Remove the fax PCA (fax models)

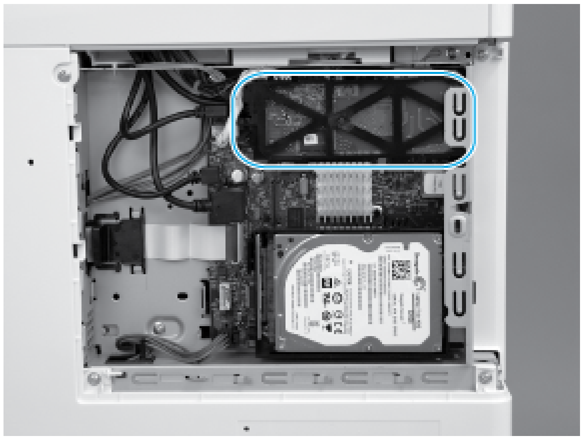
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

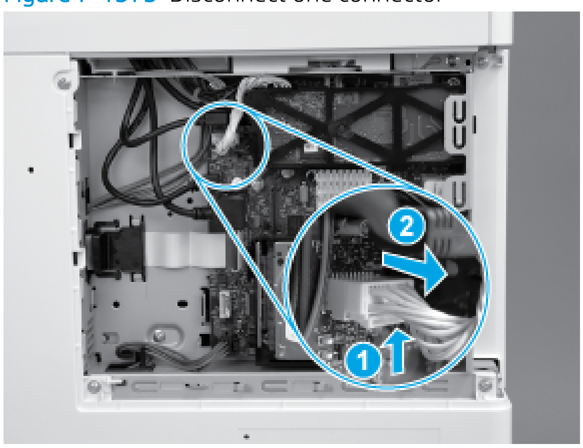
1. Locate the fax PCA component on the formatter.

Figure 7-1372 Locate the fax PCA



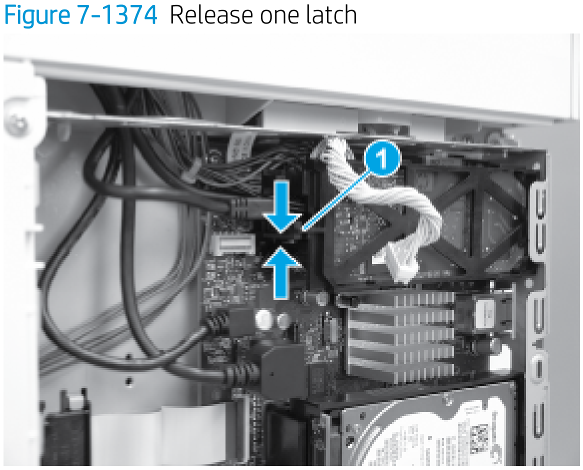
2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-1373 Disconnect one connector



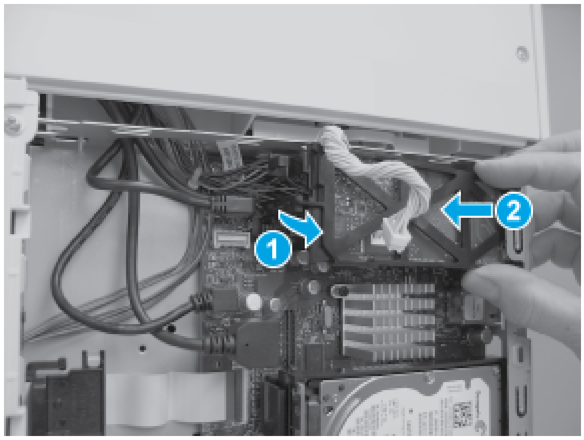
3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-1374 Release one latch



4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-1375 Remove the fax PCA



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

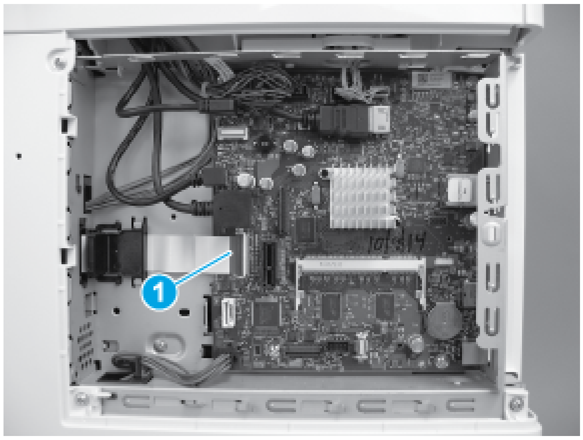
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

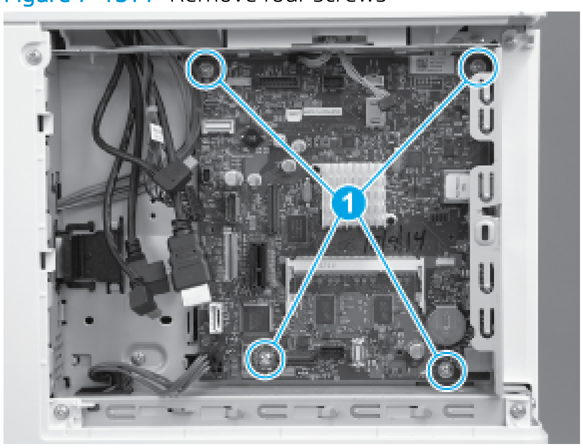
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1376 Disconnect all connectors



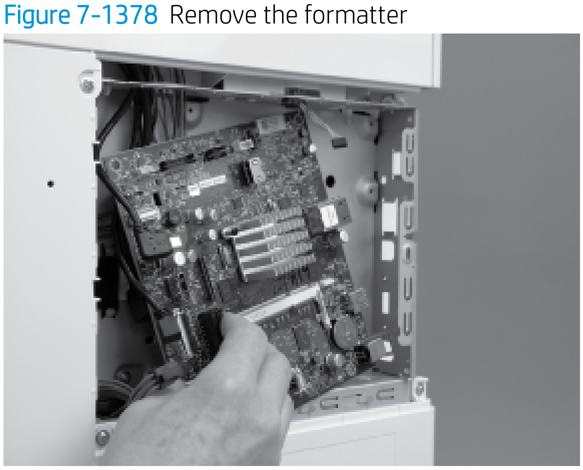
2. Remove four screws (callout 1).

Figure 7-1377 Remove four screws



3. Remove the formatter.

Figure 7-1378 Remove the formatter



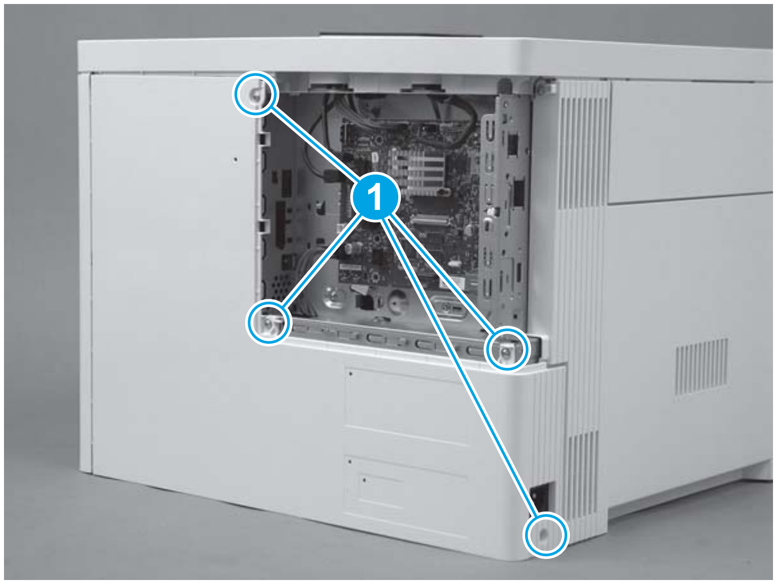
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

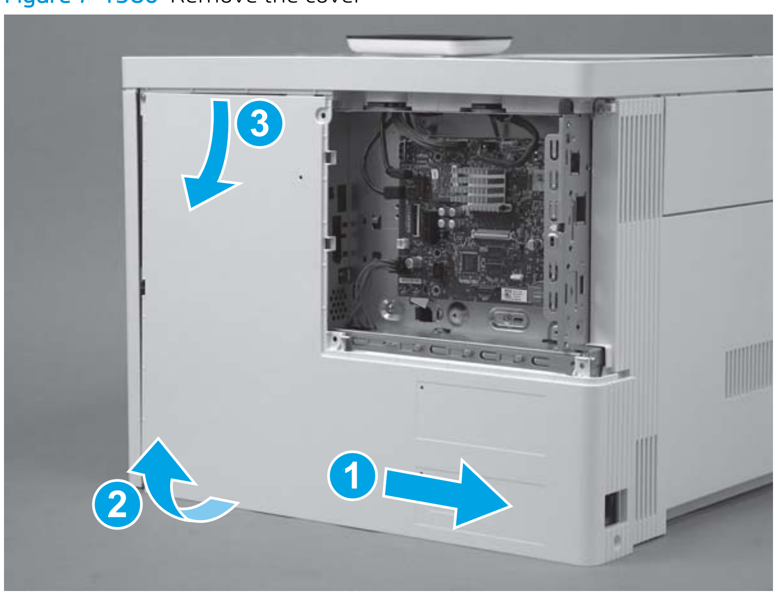
1. Remove four screws (callout 1).

Figure 7-1379 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-1380 Remove the cover



Remove the rear upper cover (MFP)

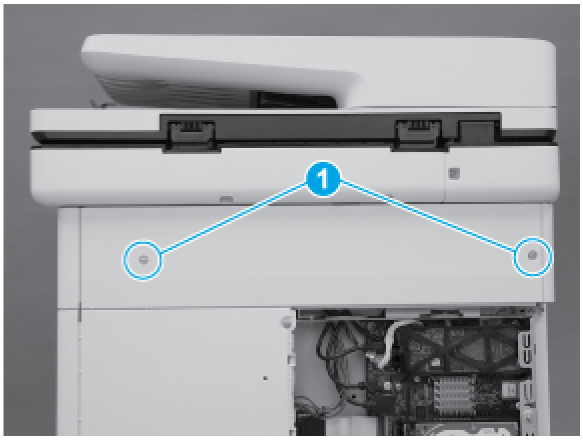
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

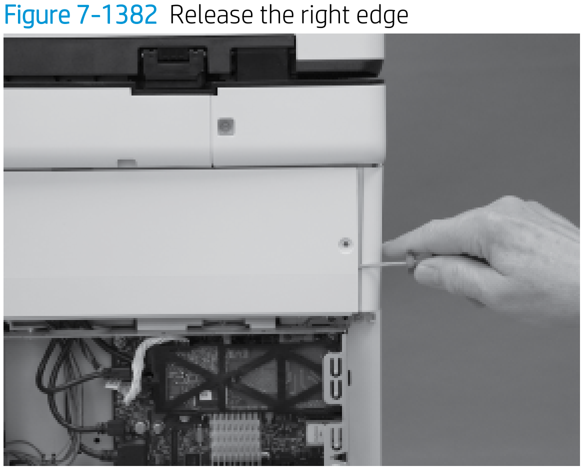
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-1381 Remove two screws



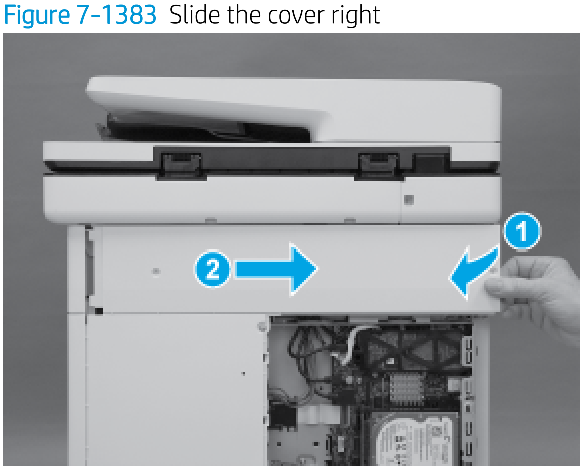
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-1382 Release the right edge



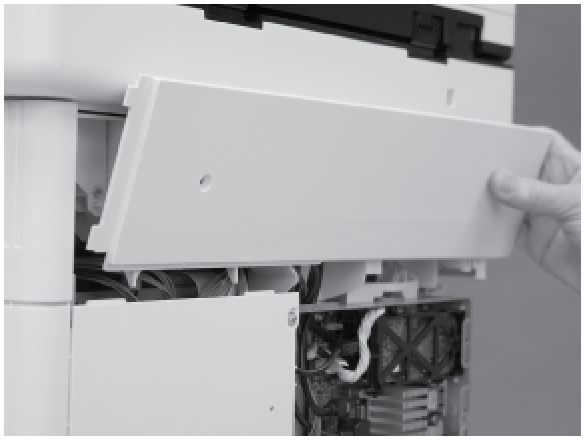
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-1383 Slide the cover right



4. Remove the cover.

Figure 7-1384 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-1385 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-1386 Remove the cover

Remove the left cover

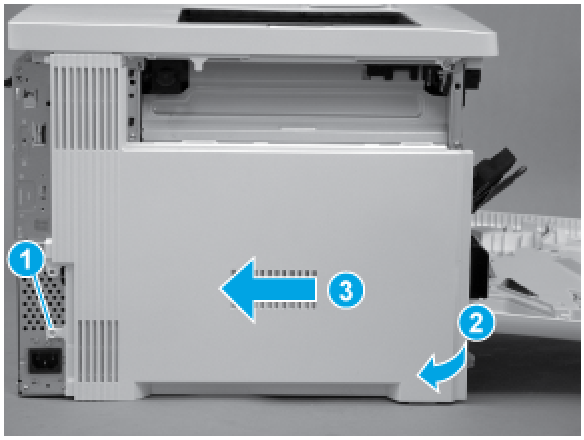
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1387 Remove one screw

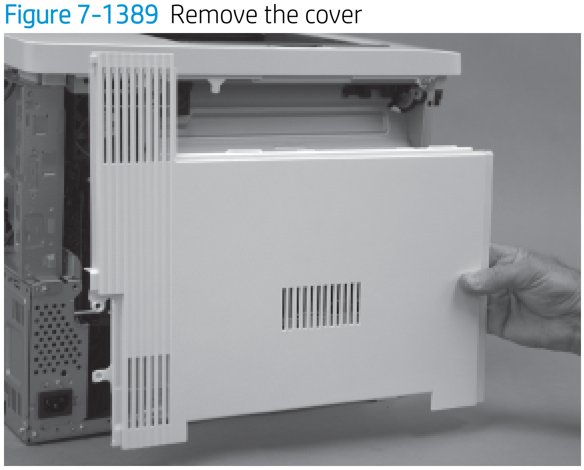
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-1388 Release the cover



3. Remove the cover.

Figure 7-1389 Remove the cover

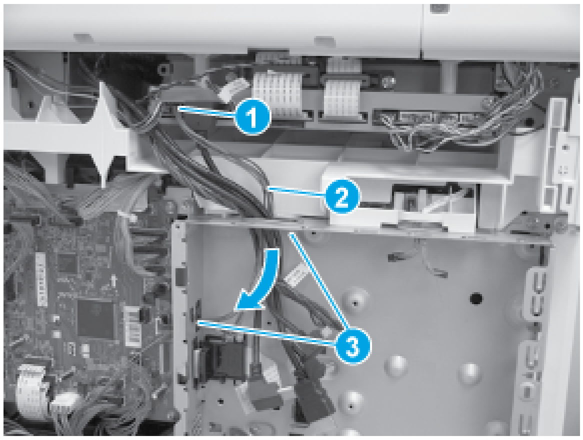


Remove the formatter case

Follow these steps to remove the formatter case.

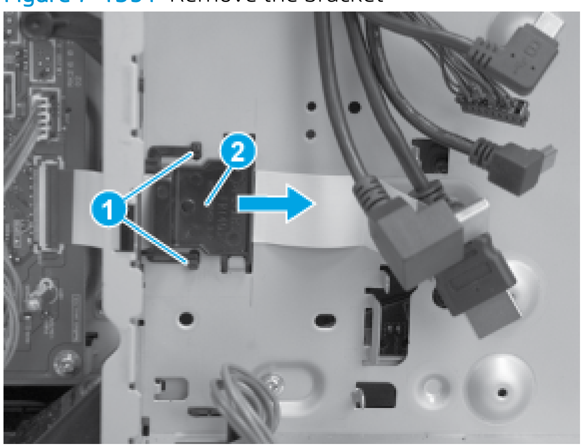
1. **MFP only**: Disconnect one connector (callout 1), and then pass the wire harness (callout 2) through two openings in the formatter case (callout 3).

Figure 7-1390 Disconnect one connector



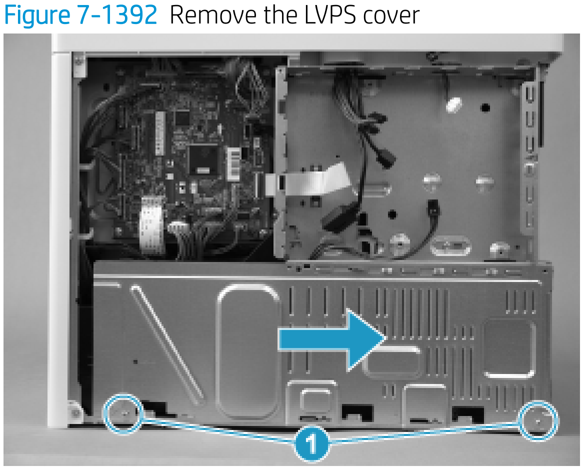
2. Release two tabs (callout 1) on the black plastic bracket. Hold the tabs in the released position, and then slide the bracket (callout 2) to the right to remove it from the formatter case.

Figure 7-1391 Remove the bracket



3. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

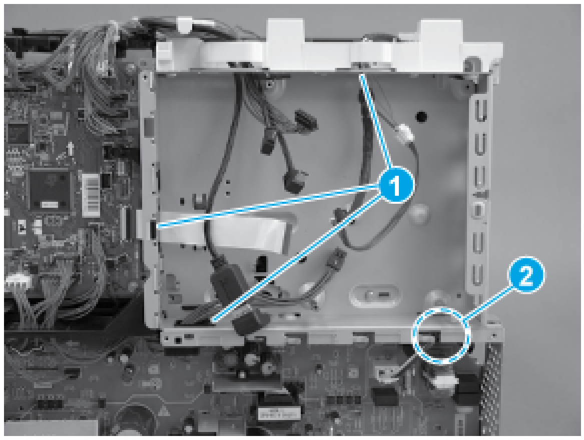
Figure 7-1392 Remove the LVPS cover



4. Pass two wire harnesses and one flat cable (callout 1) through the opening in the formatter case, and then release one wire harness from the retainer (callout 2).

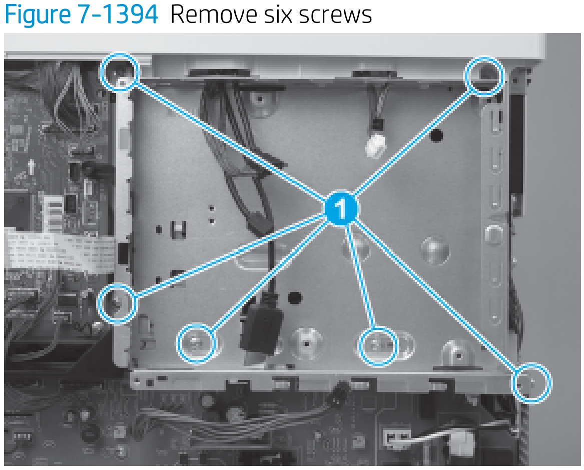
⚠ CAUTION: The flat cable might be attached to the formatter case with double-sided tape. Make sure that this tape is released, so that the flat cable is not damaged when the formatter case is removed.

Figure 7-1393 Release wire harnesses and flat cable



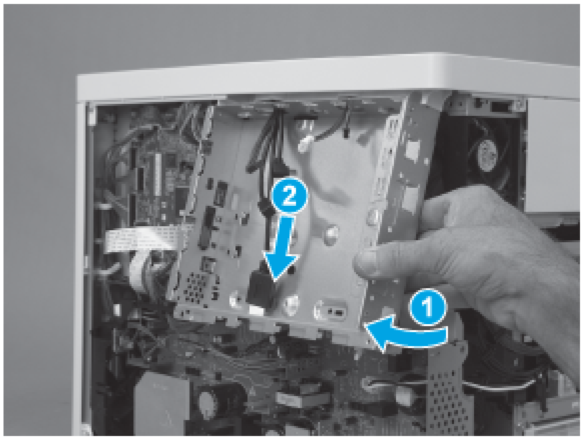
5. Remove six screws (callout 1).

Figure 7-1394 Remove six screws



6. Rotate the bottom of the formatter case away from the printer (callout 1), and then pull it down (callout 2) to release it.

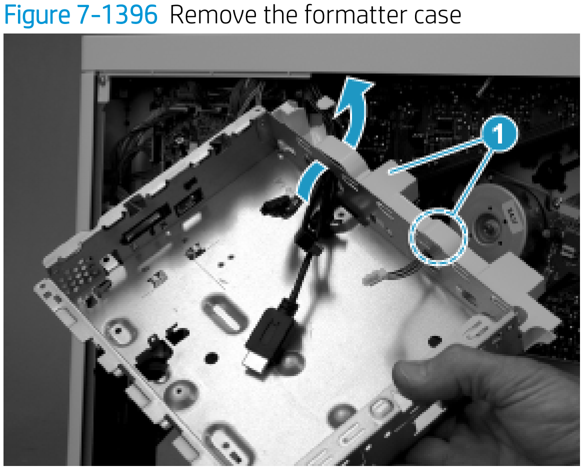
Figure 7-1395 Release the formatter case



7. Pass the wire harnesses through the opening in the formatter case to remove it.

IMPORTANT: If the formatter case is removed so that it can be replaced, make sure to transfer the memory PCA (island of data) and plastic bracket (callout 1) to the replacement case.

Figure 7-1396 Remove the formatter case

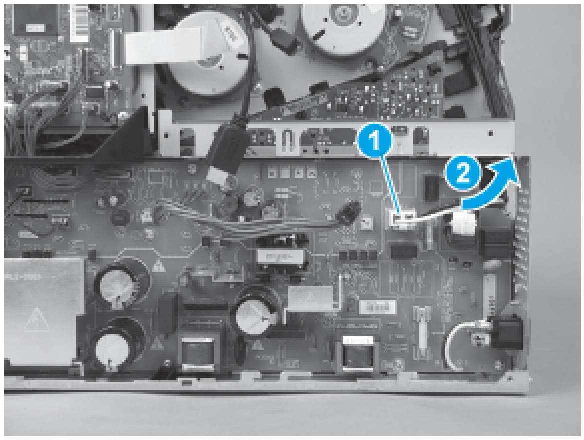


Remove the low-voltage power supply (LVPS)

Follow these steps to remove the low-voltage power supply (LVPS).

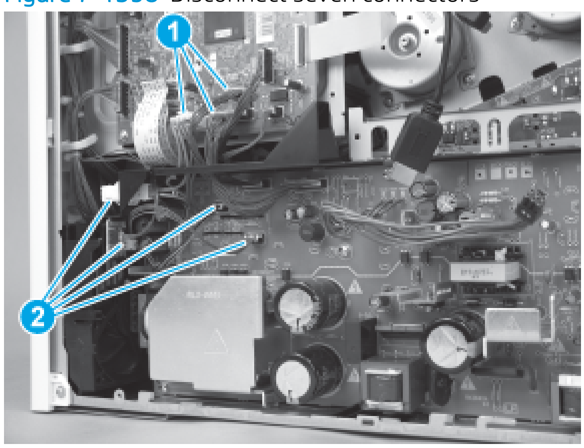
1. Disconnect one wire harness (callout 1), and then pass the wire harness through the opening (callout 2) in the chassis.

Figure 7-1397 Disconnect one wire harness



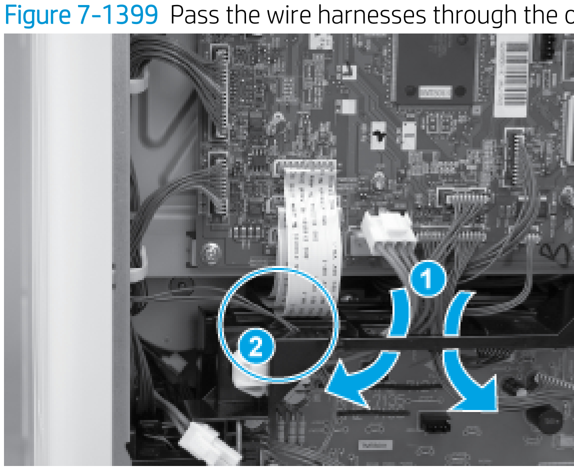
2. Disconnect three connectors on the DC controller (callout 1), and then disconnect four connectors (callout 2) on the LVPS.

Figure 7-1398 Disconnect seven connectors



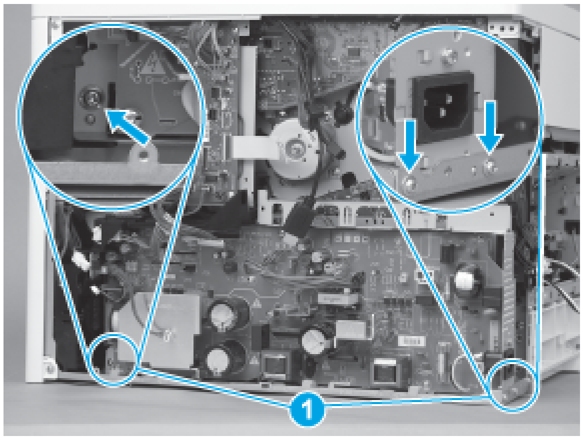
3. Pass the wire harnesses from the DC controller to the LVPS through the opening in the chassis (callout 1), and then release the wire harnesses from the retainer (callout 2).

Figure 7-1399 Pass the wire harnesses through the opening



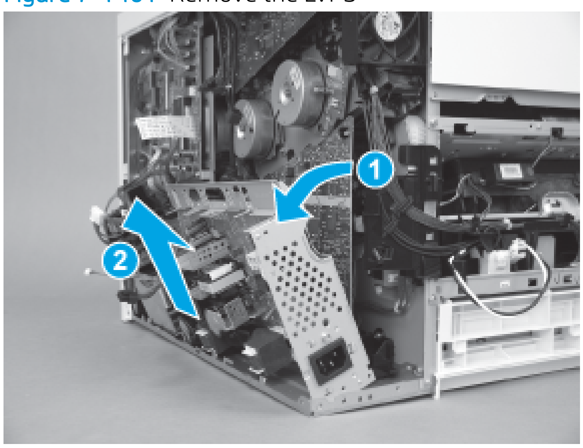
4. Remove three screws (callout 1).

Figure 7-1400 Remove three screws



5. Rotate the top of the LVPS away from the printer (callout 1), and then slide it up and out (callout 2) of the printer to remove it.

Figure 7-1401 Remove the LVPS

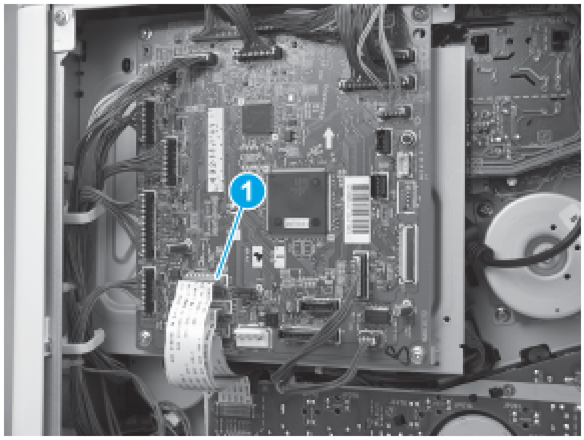


Remove the high-voltage power supply D (HVPSD)

Follow these steps to remove the high-voltage power supply D (HVPSD).

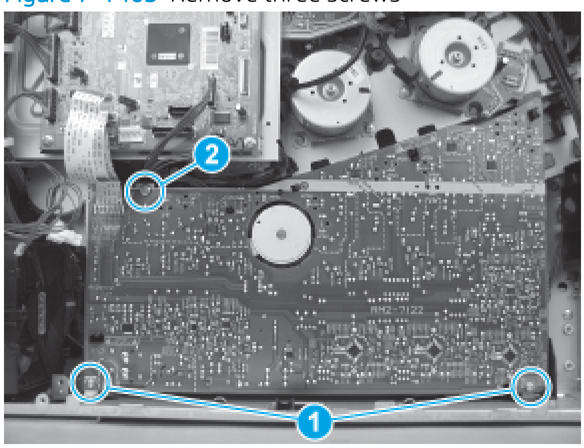
1. Disconnect one flat cable (callout 1) on the DC controller.

Figure 7-1402 Disconnect one flat cable



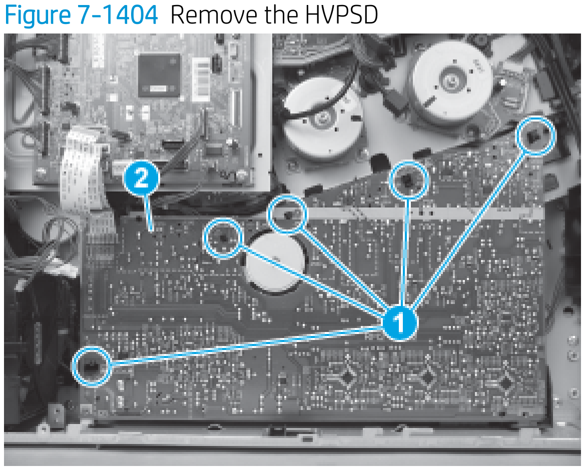
2. Remove two screws (callout 1), and then remove one self tapping screw (callout 2) on the HVPSD.

Figure 7-1403 Remove three screws



3. Release five tabs (callout 1), and then remove the HVPSD (callout 2).

Figure 7-1404 Remove the HVPSD

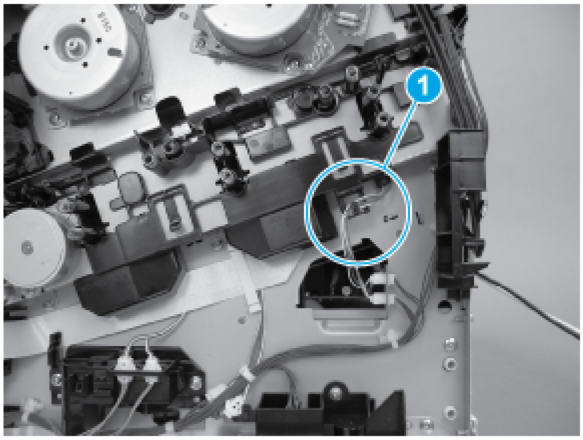


Remove the laser/scanner assembly

Follow these steps to remove the laser/scanner assembly.

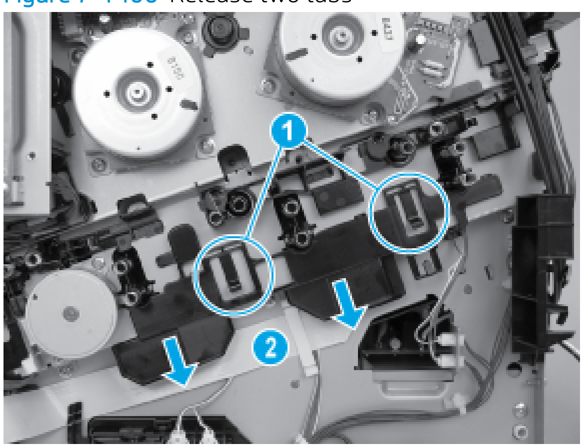
1. Release one wire harness from the retainer (callout 1).

Figure 7-1405 Release one wire harness



2. Release two tabs (callout 1), and then pull down on the guide (callout 2) to release it.

Figure 7-1406 Release two tabs

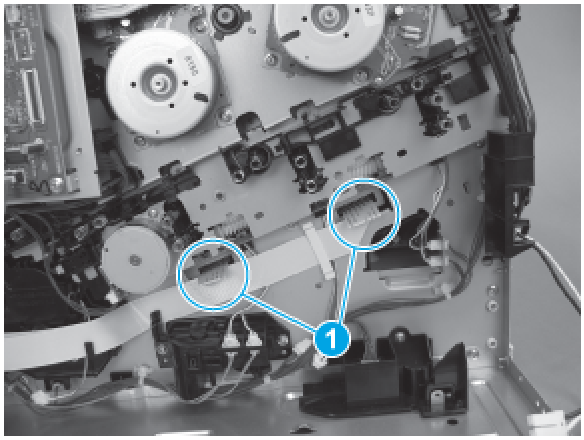


3. Remove the guide.

Figure 7-1407 Remove the guide

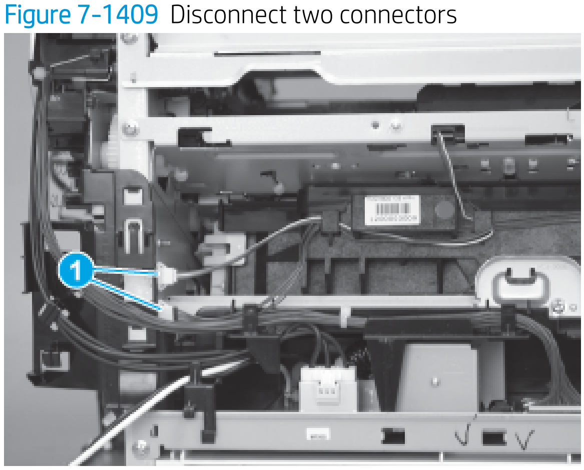
4. Disconnect two flat cables (callout 1).

Figure 7-1408 Disconnect two flat cables



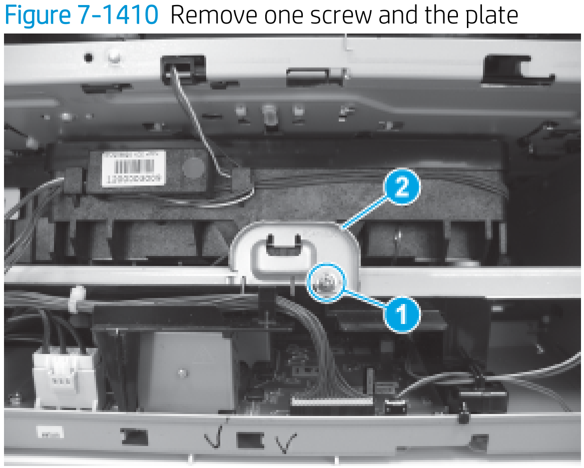
5. At the rear of the printer, disconnect two connectors (callout 1).

Figure 7-1409 Disconnect two connectors



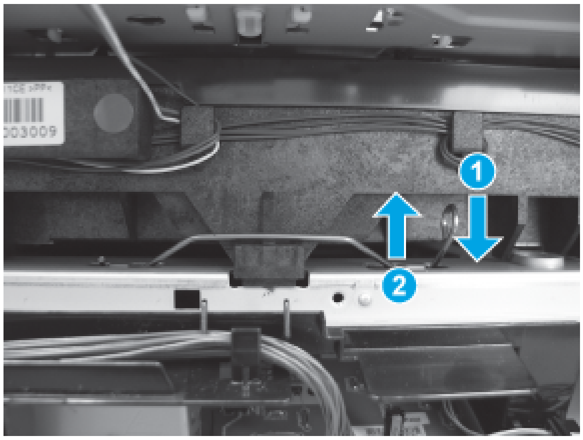
6. At the rear of the printer, remove one screw (callout 1), and then remove the sheet-metal plate (callout 2).

Figure 7-1410 Remove one screw and the plate



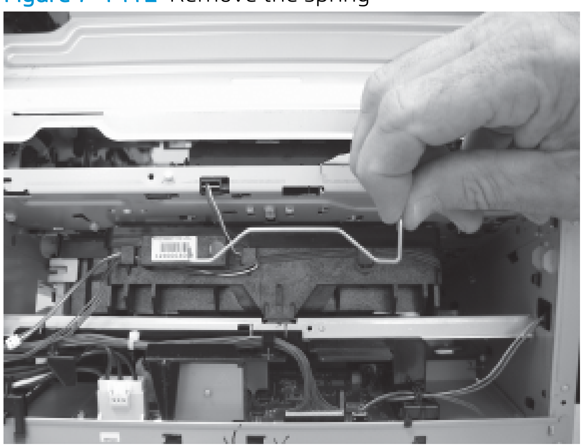
7. At the rear of the printer, push down on the spring (callout 1), and then lift it up (callout 2) to release it from the tab on the chassis.

Figure 7-1411 Release the spring



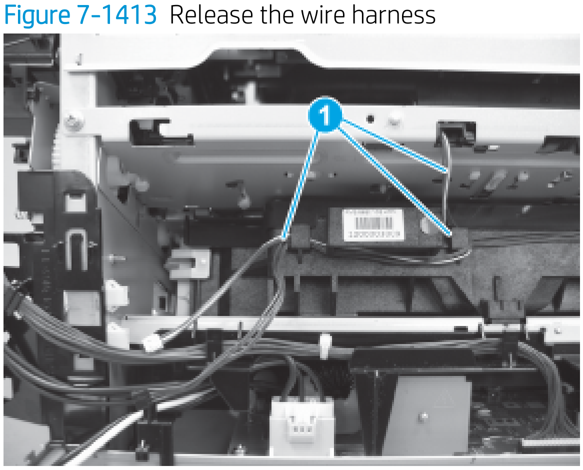
8. Remove the spring.

Figure 7-1412 Remove the spring



9. At the rear of the printer, release the wire harness from the retainers (callout 1).

Figure 7-1413 Release the wire harness

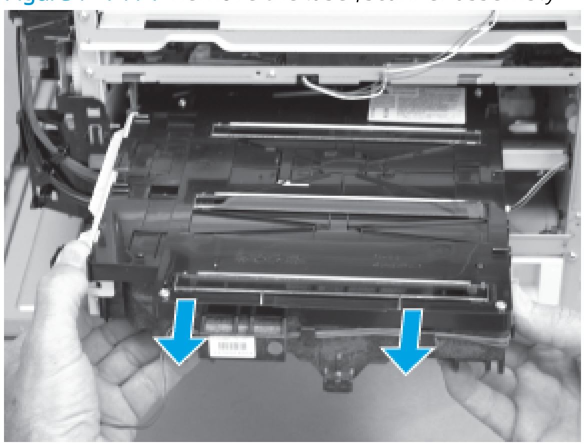


10. Grasp the assembly by the edges, and then pull the laser/scanner assembly straight out of the printer to remove it.

CAUTION: To avoid damaging the glass cleaners, make sure that the front door is open before removing the laser/scanner assembly.

Reinstallation tip: **Replacement LVPS installation**: Handle the replacement laser/scanner assembly by the edges. Do not touch the two glass windows. Skin oils on the windows can cause image quality problems.

Figure 7-1414 Remove the laser/scanner assembly



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Delivery fan (FM3)

Learn about removing and replacing the delivery fan.

Before performing service

Turn the printer power off

- Disconnect the power cable.

WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-72 Part information

Part number	Part description
RK2-2728-000CN	Delivery fan (FM3)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

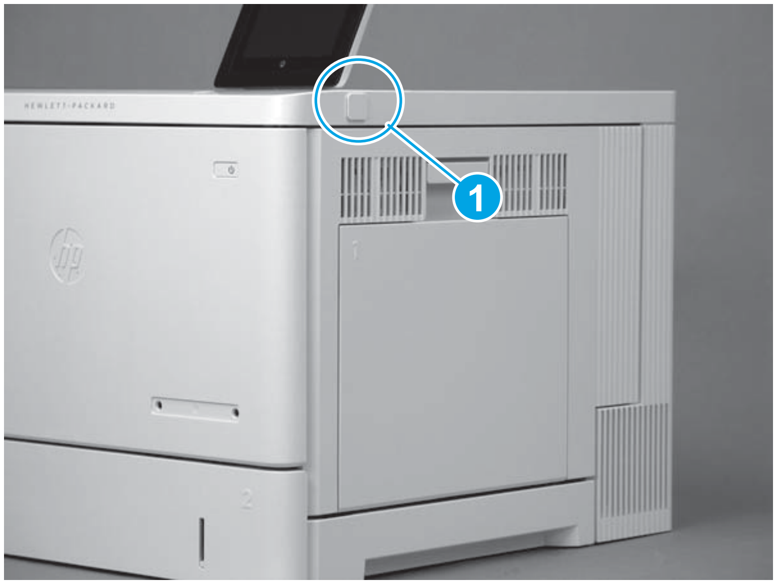
Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

NOTE: This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-1415 Locate the USB cover



2. Pull the cover off of the printer to remove it.

Figure 7-1416 Remove the cover

Remove the control panel (M553x/M555/E55040)

Follow these steps to remove the control panel.

NOTE: This procedure is for the M553x/M555/E55040 printers only.

M555 models: Removing the control panel is similar to the procedure below. For the M555, a flat cable connects the control panel to the formatter.

1. Tilt the control panel up.

Figure 7-1417 Tilt the control panel up

2. Use the small flat-blade screwdriver supplied in this kit to release the control-panel screws cover tabs.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-1418 Release the control-panel screws cover tabs

3. Rotate the cover up to remove it.

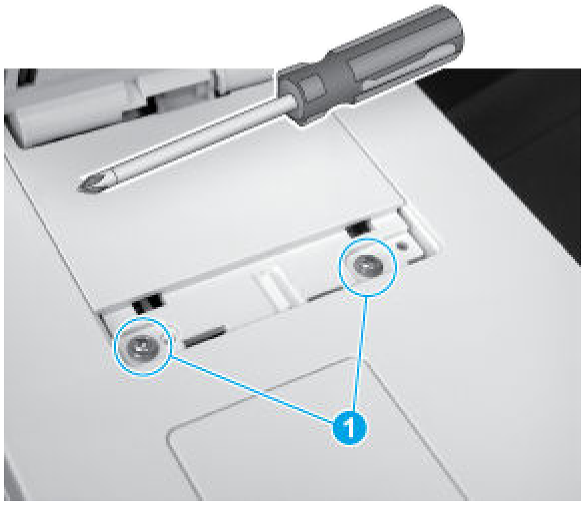
Figure 7-1419 Remove the cover

4. Use the small Phillips screwdriver supplied in this kit to remove two screws (callout 1).

IMPORTANT: Store the screws in a secure place where they cannot fall down into the printer.

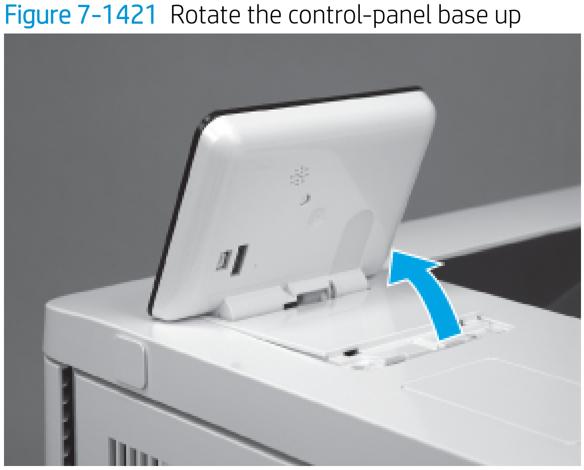
TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-1420 Remove two screws



5. Rotate the control-panel base toward the front of the printer.

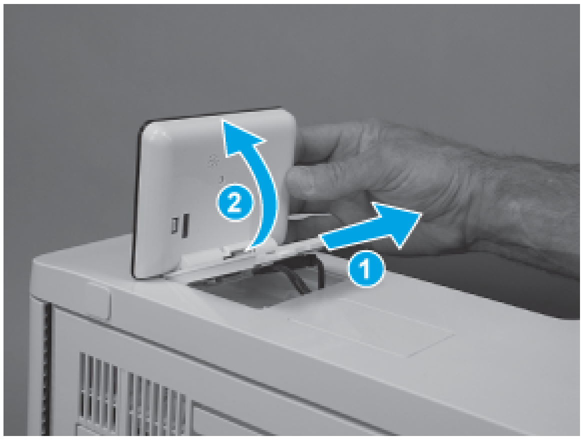
Figure 7-1421 Rotate the control-panel base up



6. Slightly slide the control-panel base toward the rear of the printer (callout 1) to release it, and then turn the control panel over (callout 2) to access the bottom side.

⚠ CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

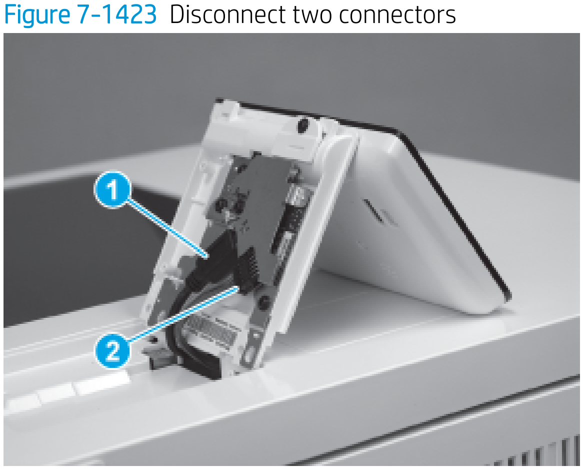
Figure 7-1422 Turn the control panel over



7. Disconnect one USB cable (callout 1), one connector (callout 2), and then remove the control panel.

NOTE: **M555 only**: Disconnect one flat cable (not shown), and then remove the control panel.

Figure 7-1423 Disconnect two connectors



Remove Tray 2

Learn about removing Tray 2.

NOTE: A SFP printer is shown in this section. However, the procedure is correct for all printer models.

The figures in this section show Tray 2. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5. Always carefully read the instructions that accompany the figures.

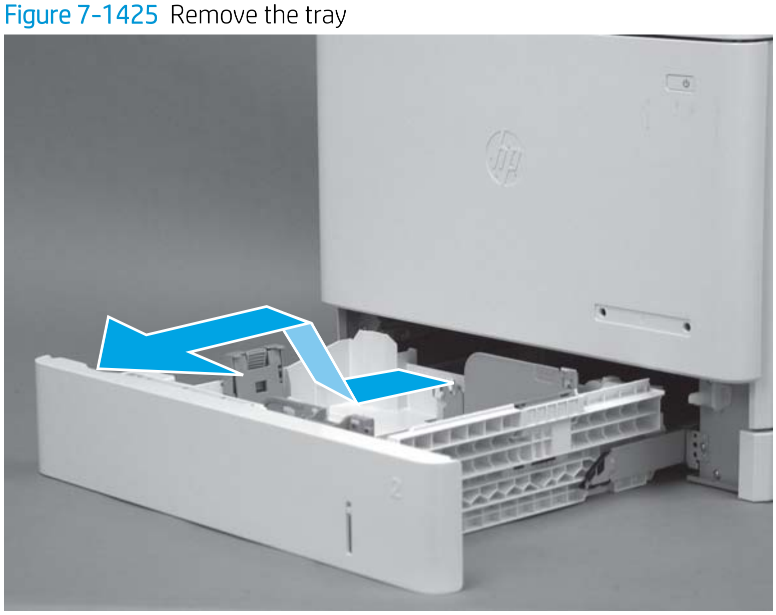
1. Pull the tray out until it stops.

Figure 7-1424 Pull the tray out

2. Lift the front of the tray, and then pull it out of the printer to remove it.

NOTE: **For a replacement tray:** If the tray has Fixed Tray Guides installed and are still required, move hardware to new tray. If necessary, order new kit: 3GY25–67901 Kit - Fixed Tray Guide. Only one kit required per engine.

Figure 7-1425 Remove the tray



Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-1426 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-1427 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

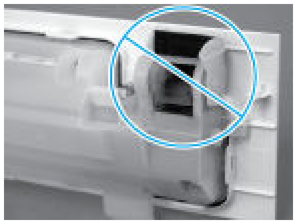
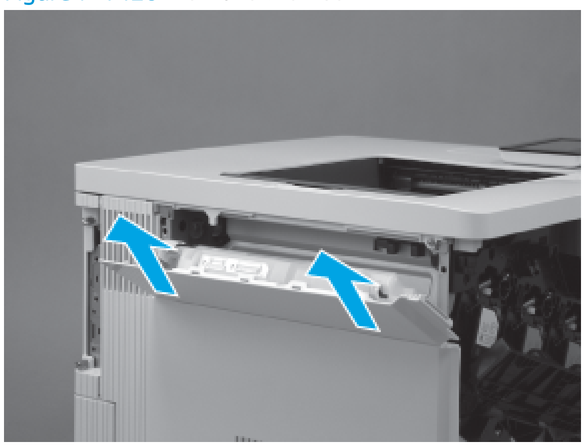


Figure 7-1428 Remove the TCU



Remove the formatter cover

Follow these steps to remove the formatter cover.

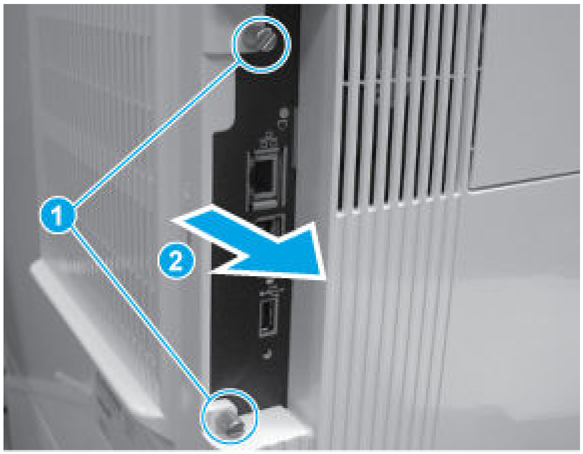
1. Locate the formatter cover.

Figure 7-1429 Locate the formatter cover

2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-1430 Loosen the thumbscrews



Remove the formatter (SFP)

Follow these steps to remove the formatter.

NOTE: This procedure is for SFP models only.

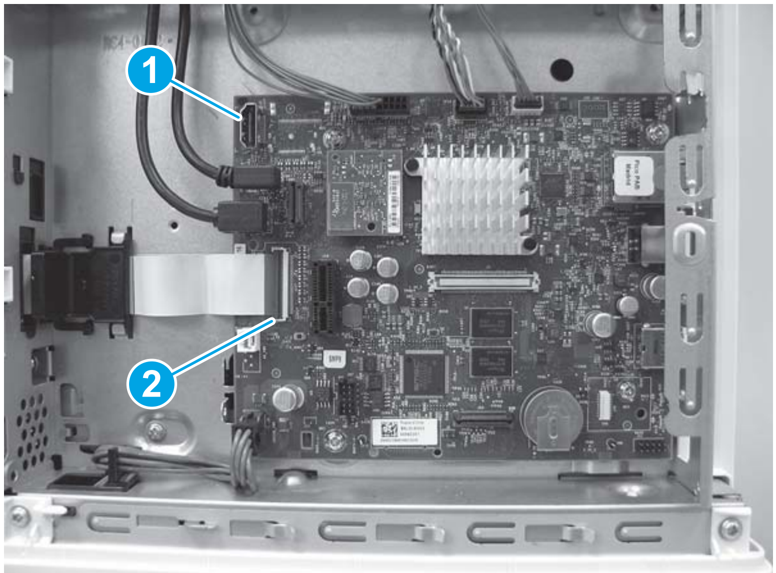
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)
   - All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
   - M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)
   - All models: J57
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

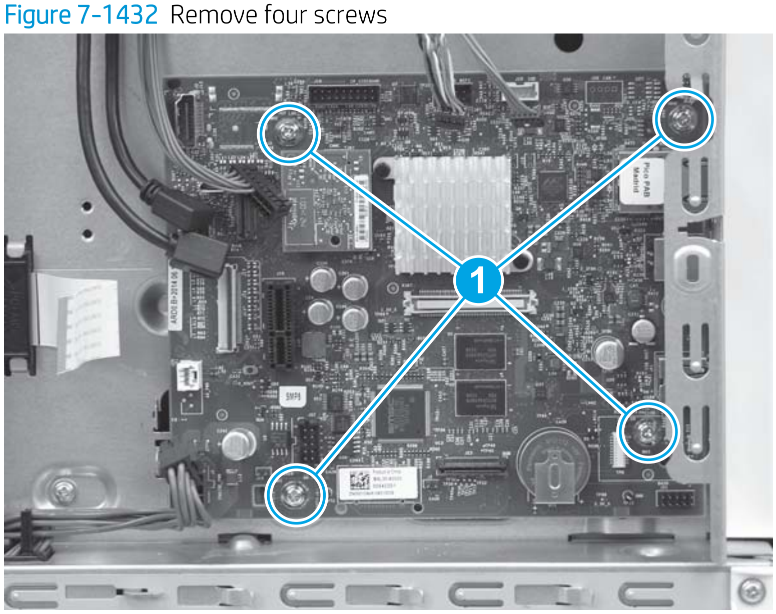
IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1431 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-1432 Remove four screws



Remove the hard-disk drive (HDD)

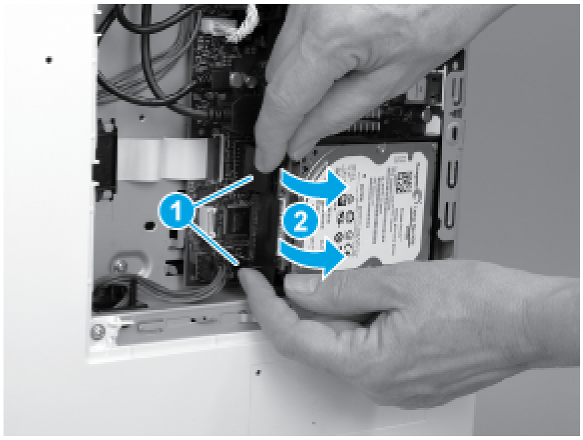
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-1433 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-1434 Remove the HDD

Remove the fax PCA (fax models)

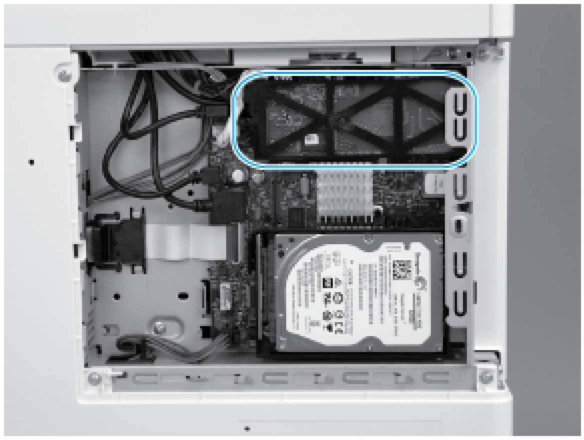
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

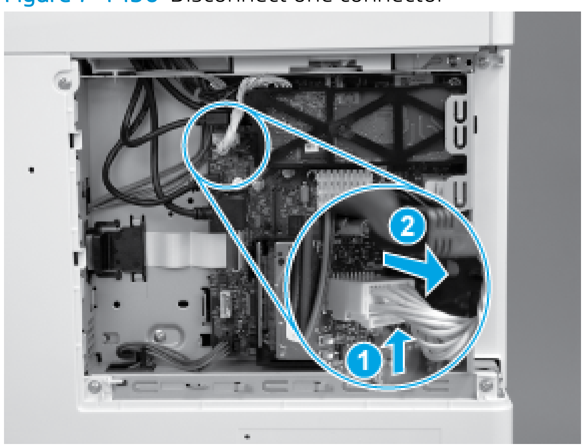
1. Locate the fax PCA component on the formatter.

Figure 7-1435 Locate the fax PCA



2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-1436 Disconnect one connector

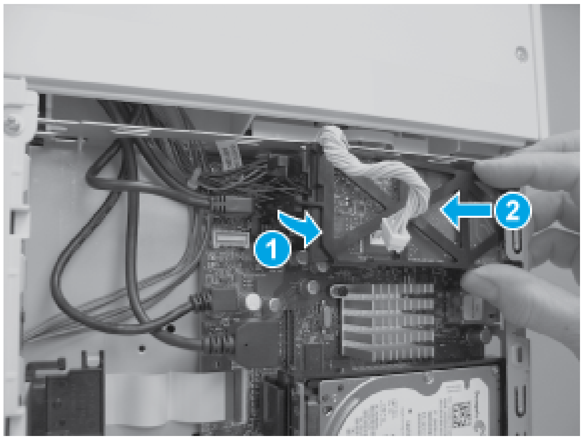


3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-1437 Release one latch

4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-1438 Remove the fax PCA



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

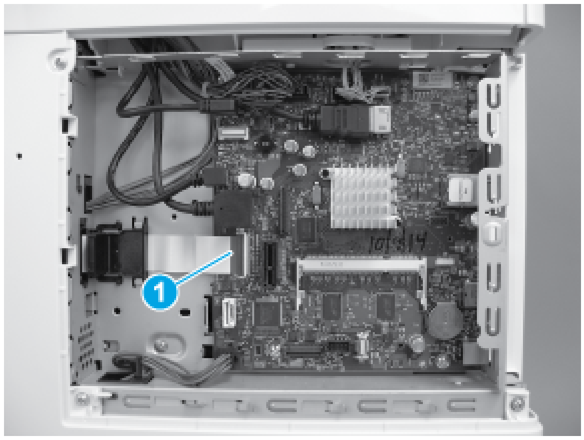
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

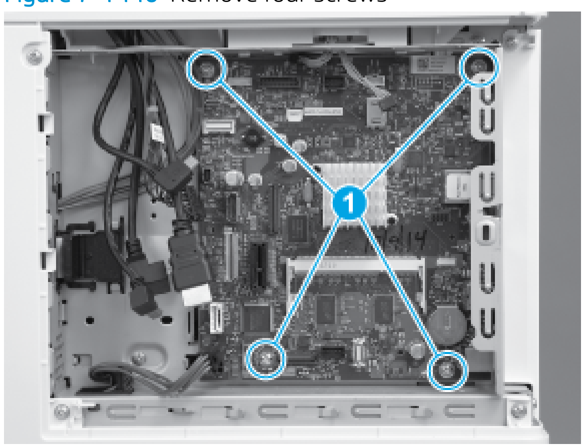
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1439 Disconnect all connectors



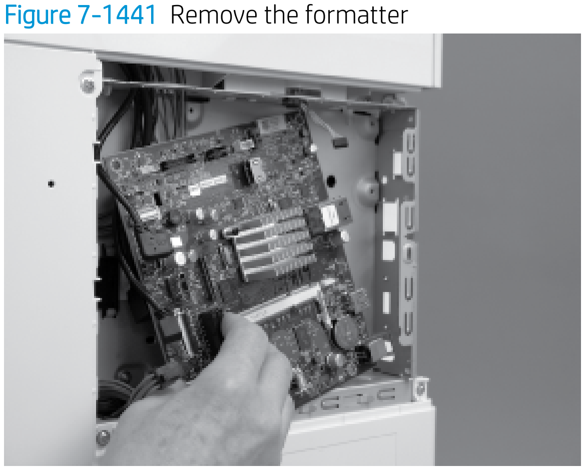
2. Remove four screws (callout 1).

Figure 7-1440 Remove four screws



3. Remove the formatter.

Figure 7-1441 Remove the formatter



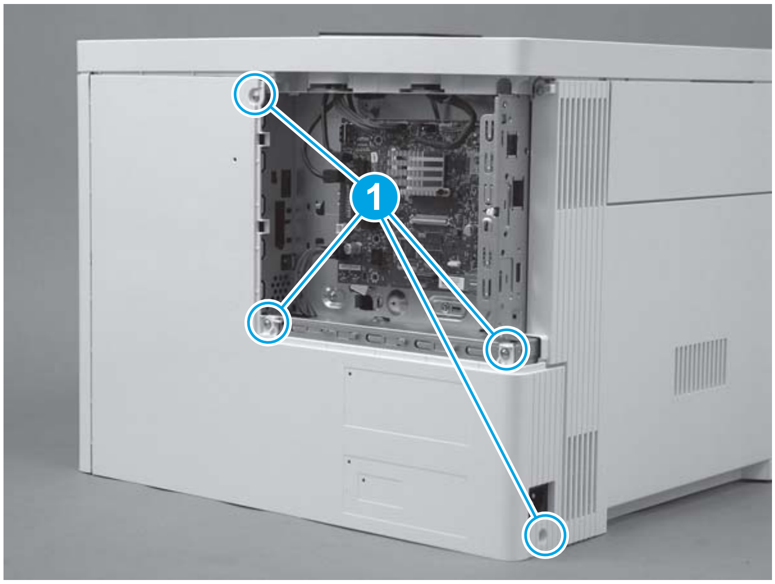
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

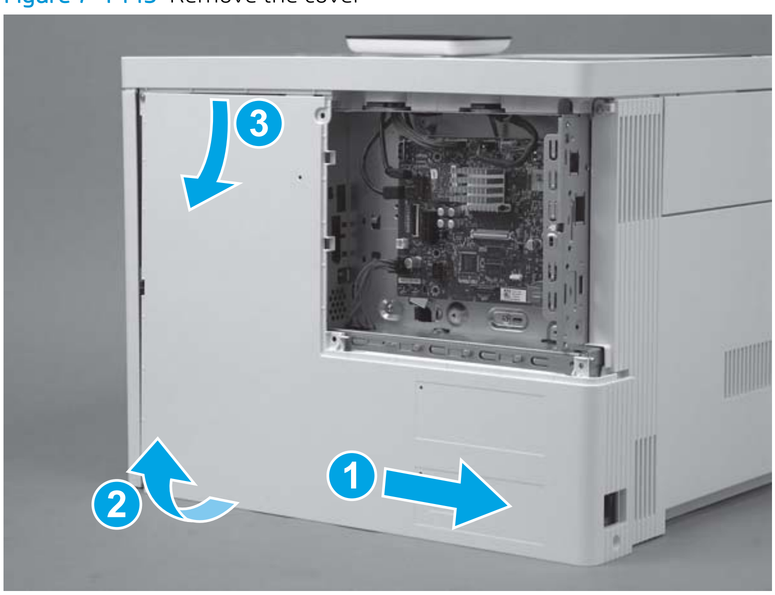
1. Remove four screws (callout 1).

Figure 7-1442 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-1443 Remove the cover



Remove the rear upper cover (MFP)

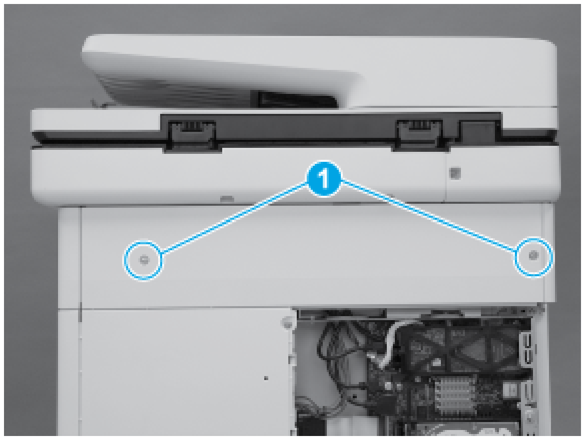
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

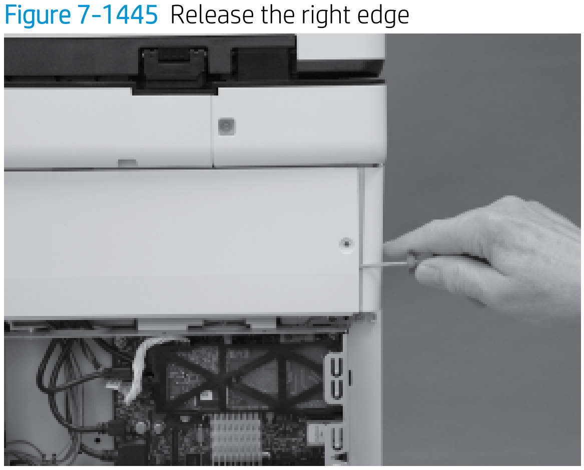
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-1444 Remove two screws



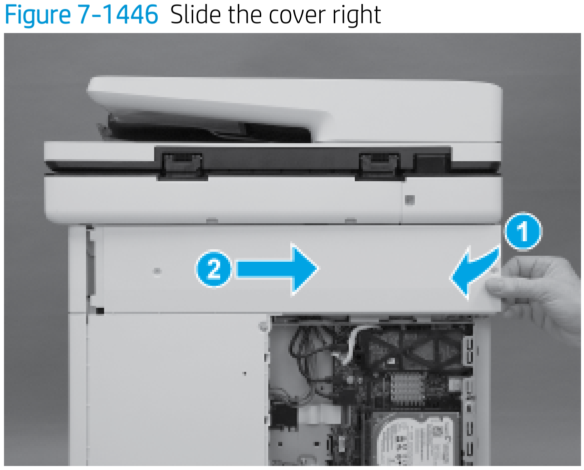
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-1445 Release the right edge



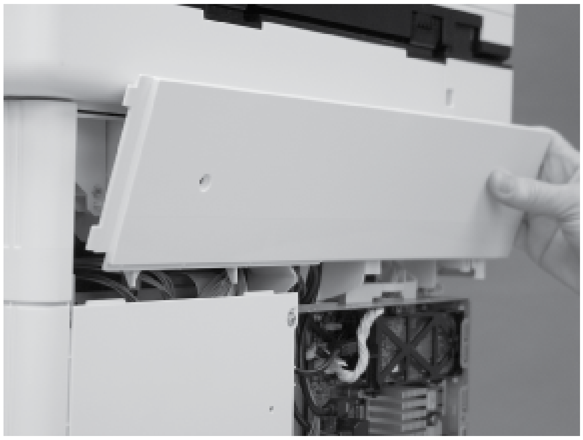
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-1446 Slide the cover right



4. Remove the cover.

Figure 7-1447 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-1448 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-1449 Remove the cover

Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

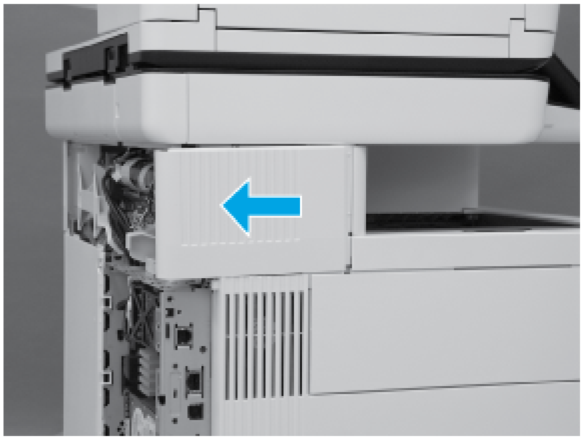
NOTE: This procedure is for MFP models only.

1. At the left side of the printer, release one tab (callout 1).

Figure 7-1450 Release one tab

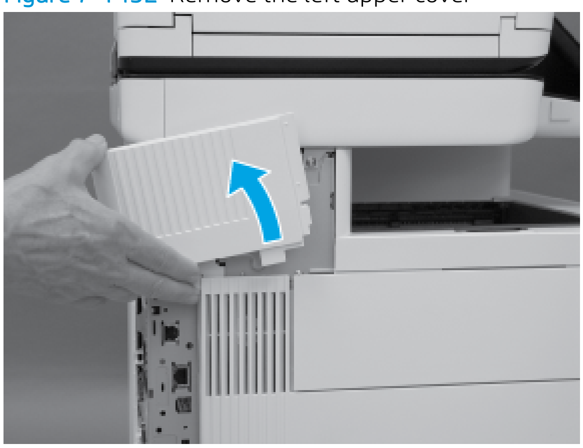
2. Slide the left upper cover toward the back of the printer.

Figure 7-1451 Slide the cover back



3. Rotate the cover up to remove it.

Figure 7-1452 Remove the left upper cover



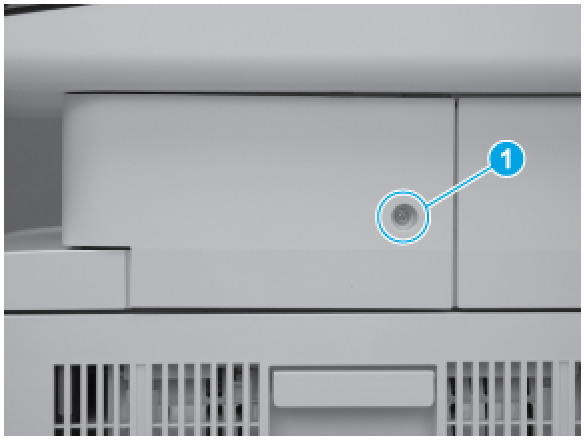
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-1453 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-1454 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-1455 Rotate the cover

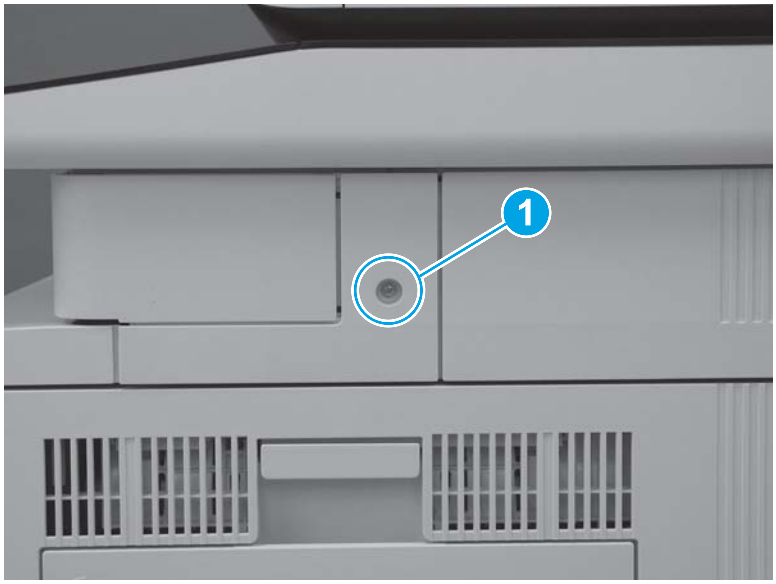
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

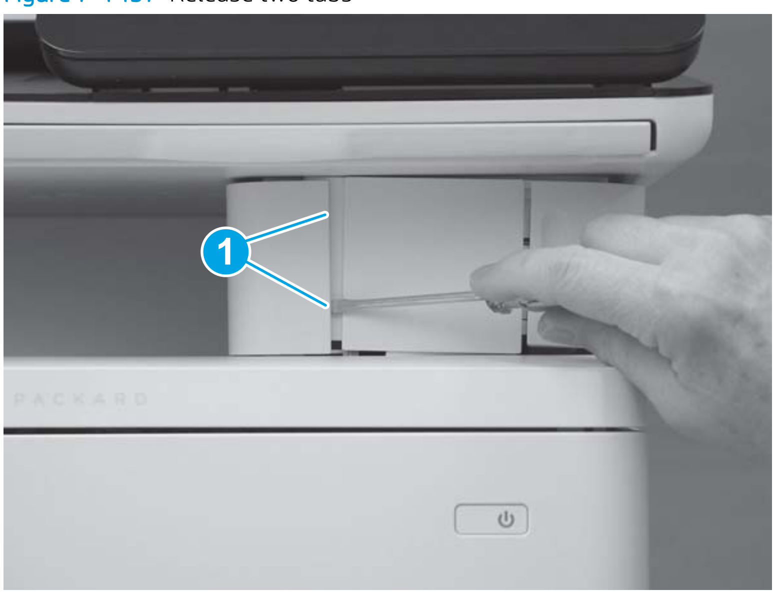
1. Remove one screw (callout 1).

Figure 7-1456 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-1457 Release two tabs



3. Release the back edge of the cover.

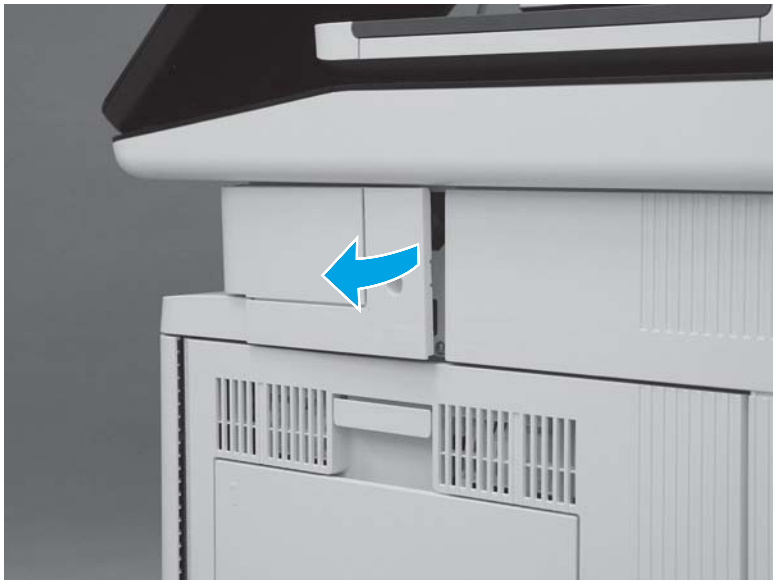


Figure 7-1458 Release the back edge of the cover

4. Rotate the cover away from the printer to remove it.

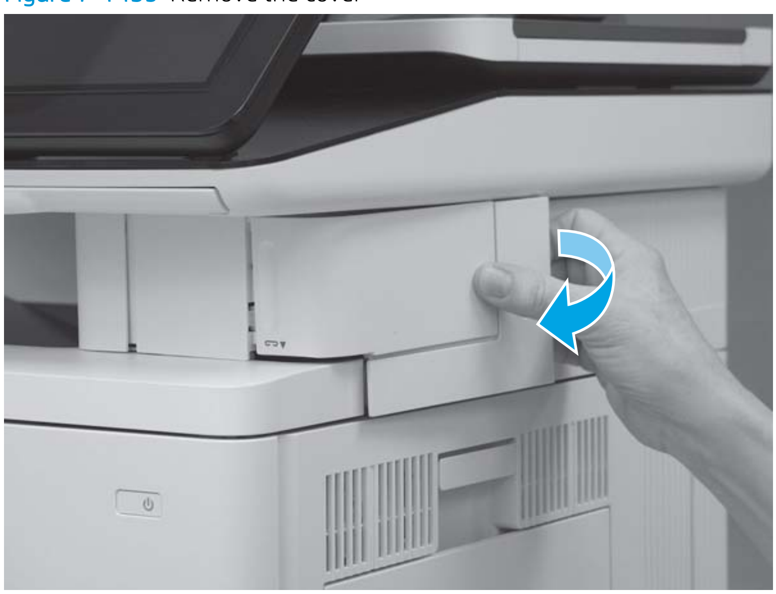


Figure 7-1459 Remove the cover

Remove the integrated scanner assembly (ISA) (MFP)

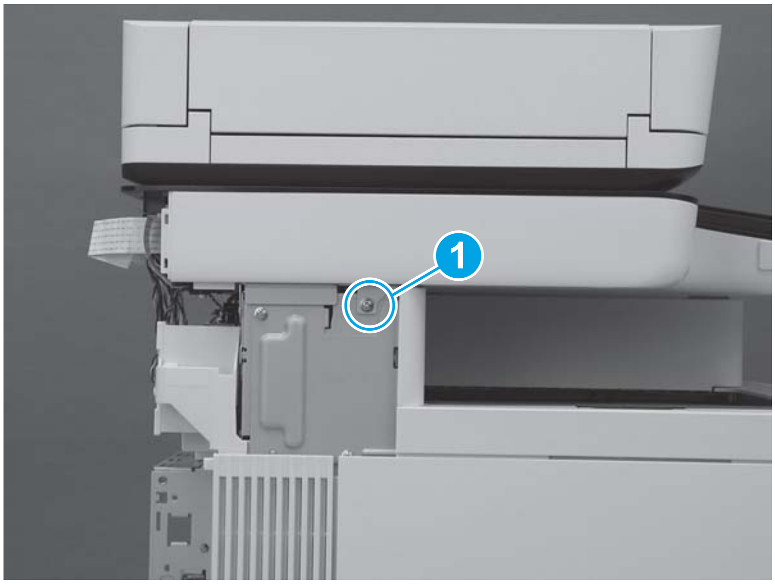
Follow these steps to remove the integrated scanner assembly (ISA).

NOTE: This procedure is for MFP models only.

NOTE: The ISA includes the document feeder, image scanner, scanner control board (SCB), control panel, keyboard (flow models) and NFC PCA (not all models).

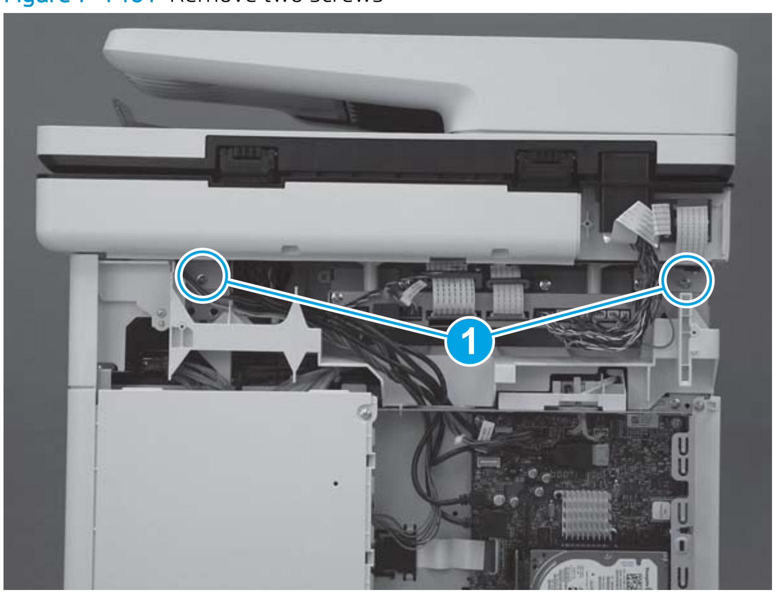
1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1460 Remove one screw



2. At the back of the printer, remove two screws (callout 1).

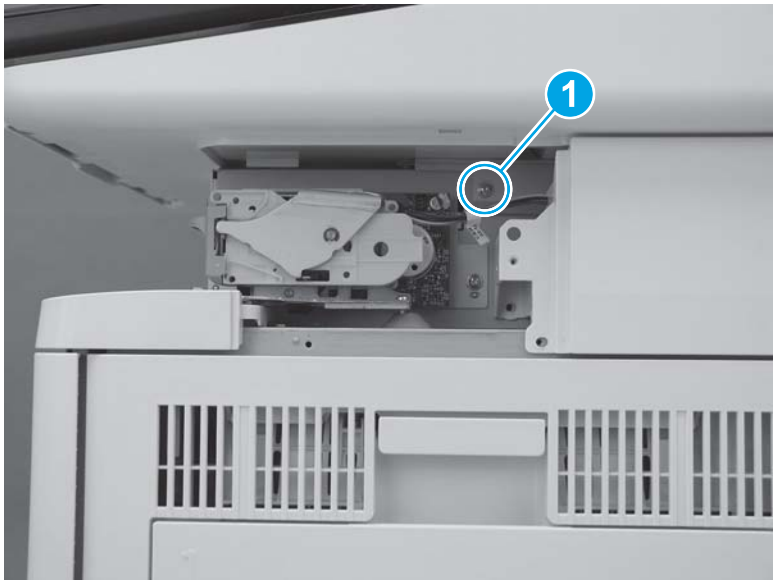
Figure 7-1461 Remove two screws



3. At the right side of the printer, remove one screw (callout 1).

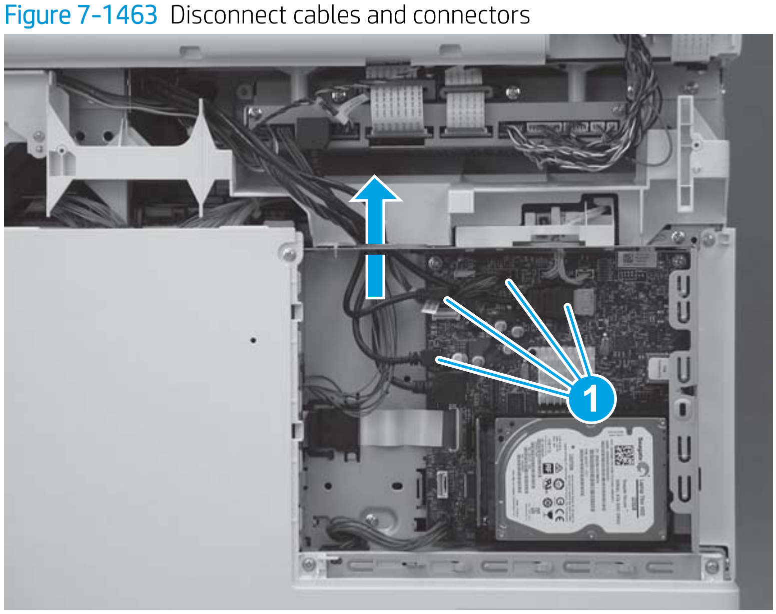
NOTE: The M577z is shown in the figure below. The procedure is correct for all MFP models.

Figure 7-1462 Remove one screw



4. Disconnect four connectors (callout 1) on the formatter, and then pass the wire harnesses and cables through the top opening in the formatter case (callout 2).

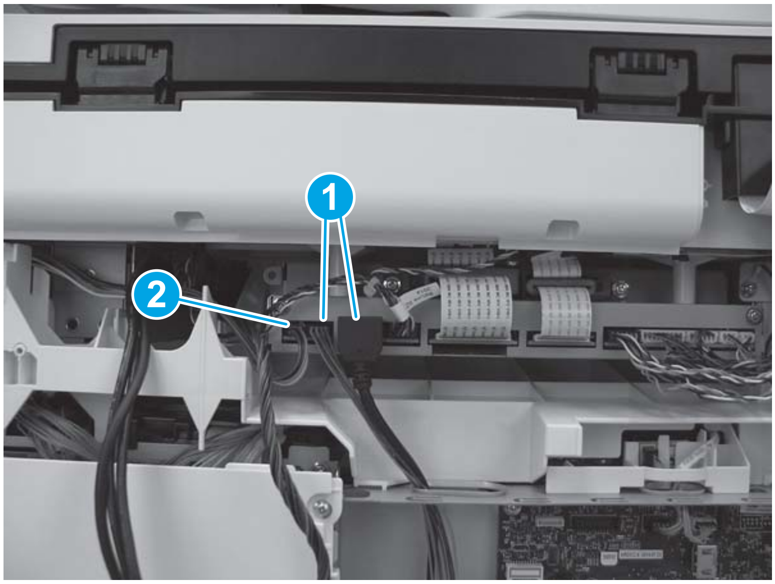
Figure 7-1463 Disconnect cables and connectors



5. Disconnect two connectors on the scanner control board (callout 1).

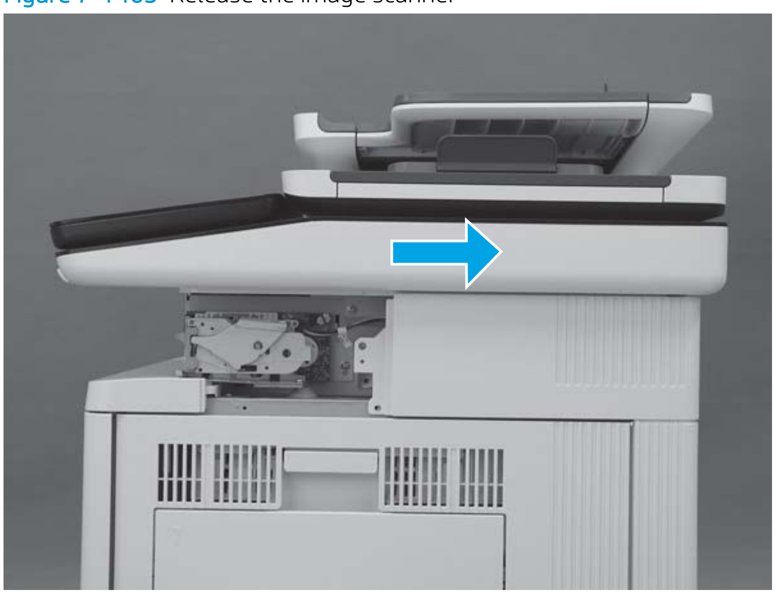
   MFP stapler models: Disconnect one connector for the stapler on the scanner control board (callout 2).

   Figure 7-1464 Disconnect connectors



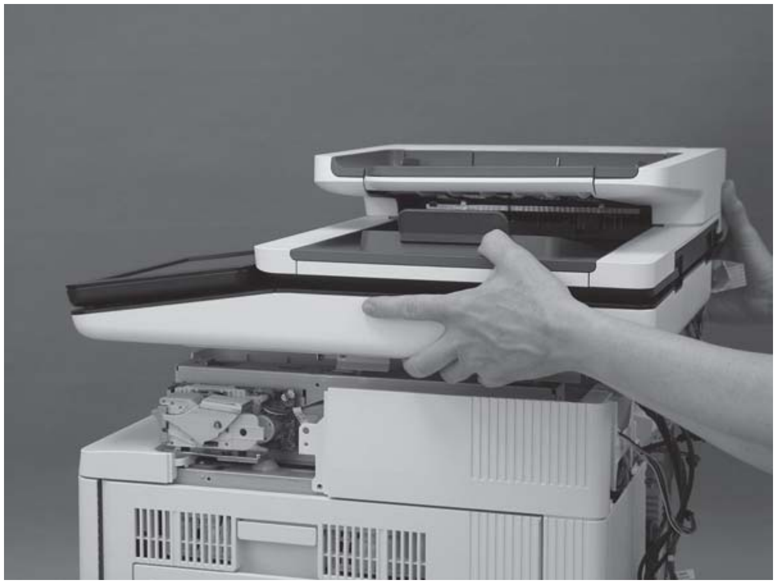
6. Slide the image scanner toward the back of the printer to release it.

   Figure 7-1465 Release the image scanner



7. Lift the ISA straight up to remove it.

Figure 7-1466 Remove the ISA



Remove the right upper cover (MFP)

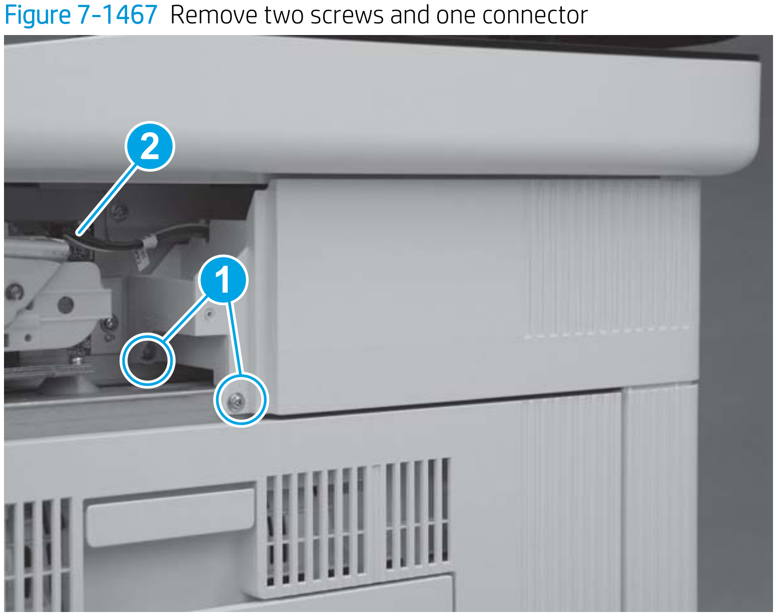
Follow these steps to remove the right upper cover.

NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Figure 7-1467 Remove two screws and one connector

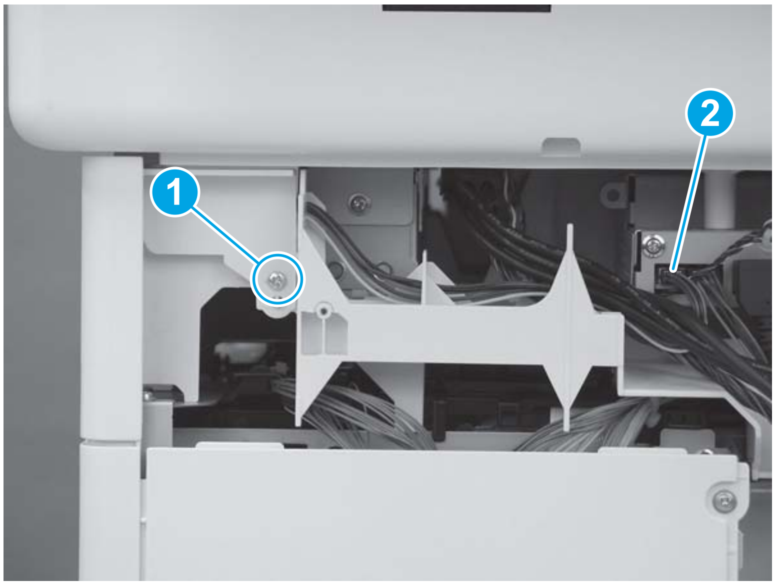
   

2. At the back of the printer, remove one screw (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

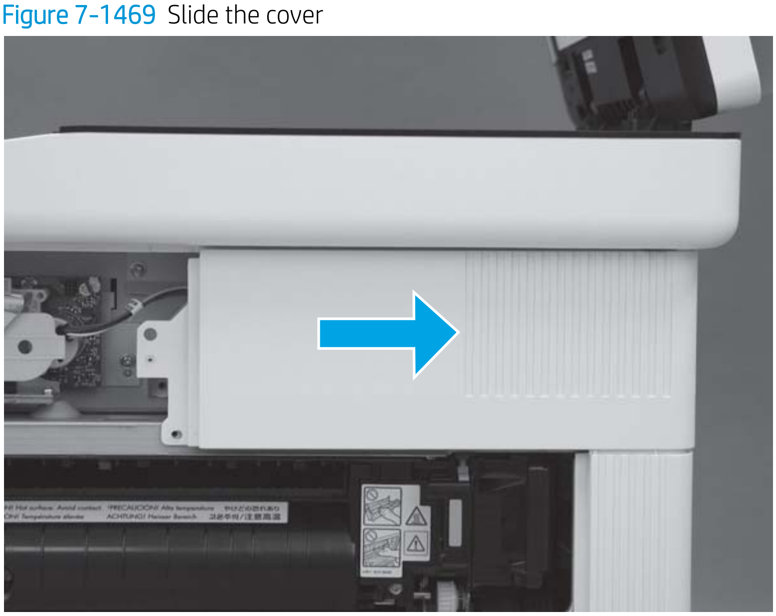
Reinstallation tip: This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

Figure 7-1468 Remove one screw and connector



3. Slide the cover toward the back of the printer.

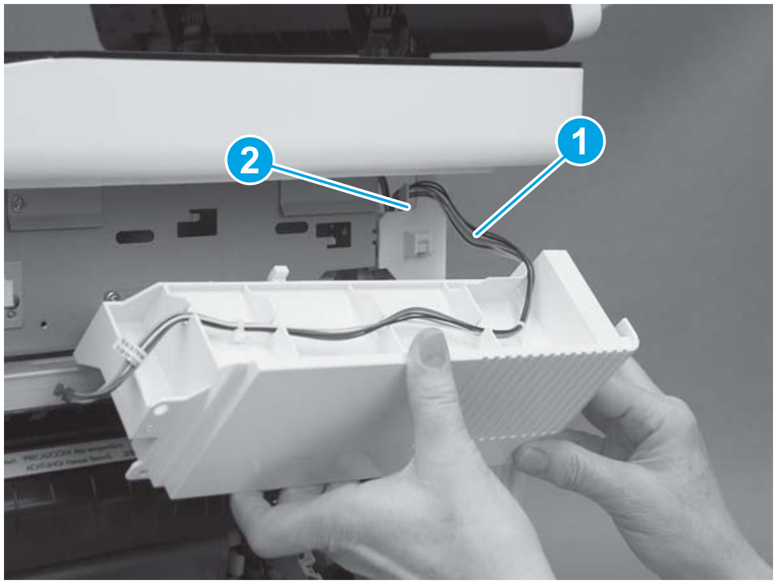
Figure 7-1469 Slide the cover



4. Lift the cover away from the printer to remove it.

   M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

   Figure 7-1470 Remove the cover

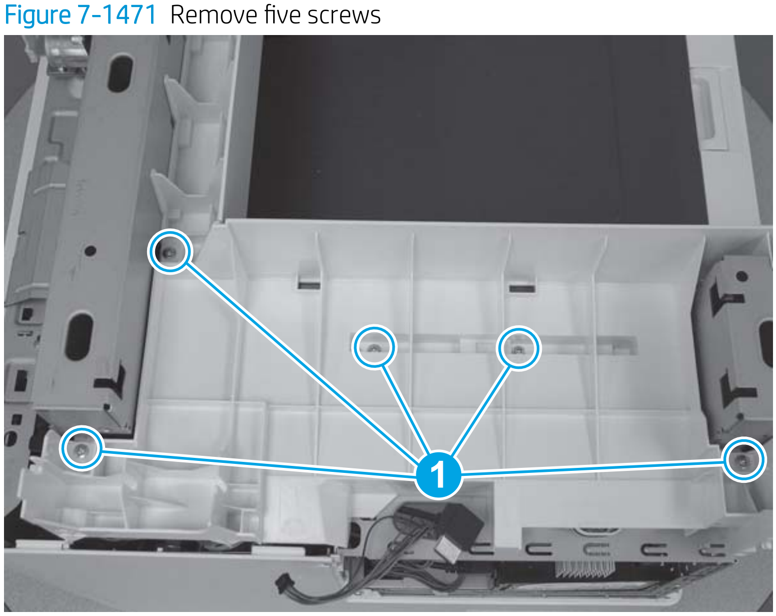
Remove the top rear cover (MFP)

Follow these steps to remove the top rear cover.

NOTE: This procedure is for MFP models only.

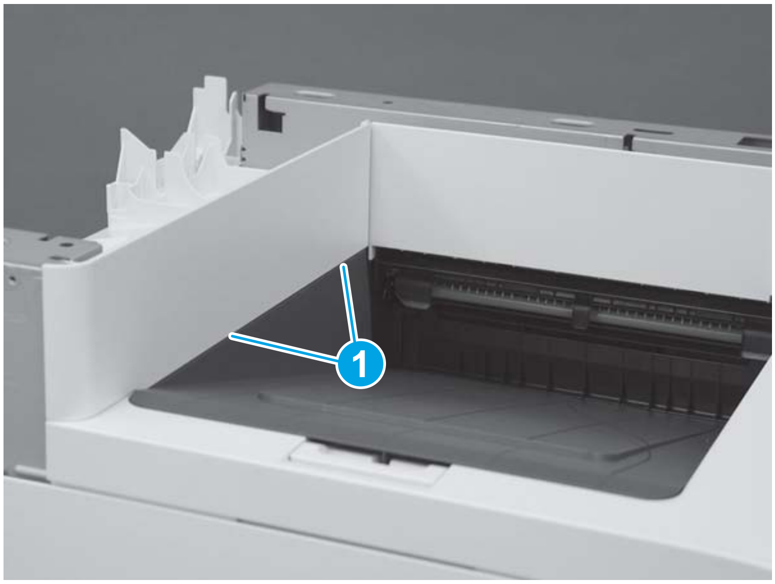
1. At the top of the printer, remove five screws (callout 1).

   Figure 7-1471 Remove five screws

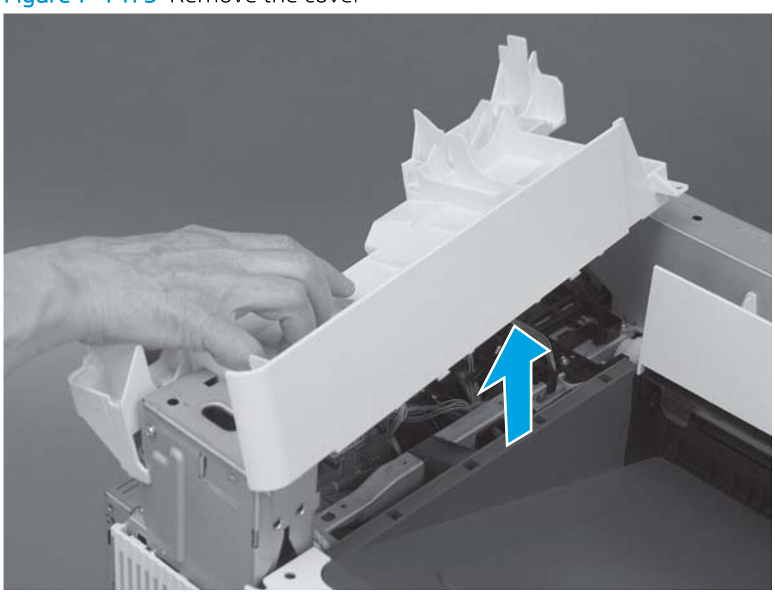
2. Release two tabs (callout 1) on the front edge of the cover.

Figure 7-1472 Release two tabs



3. Remove the top rear cover.

Figure 7-1473 Remove the cover



Remove the left cover

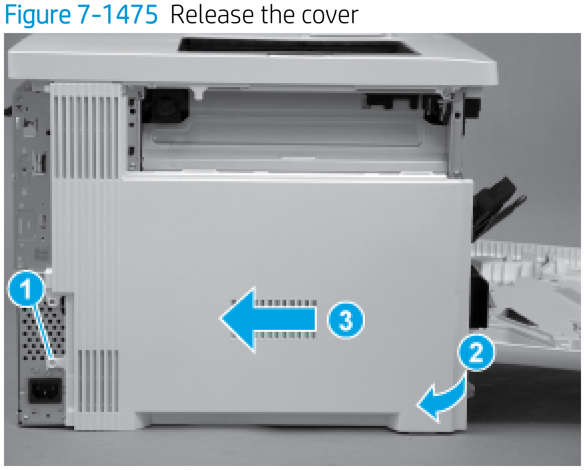
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1474 Remove one screw

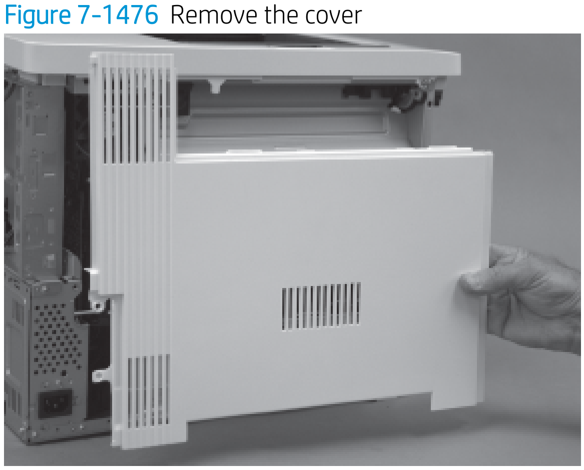
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-1475 Release the cover



3. Remove the cover.

Figure 7-1476 Remove the cover



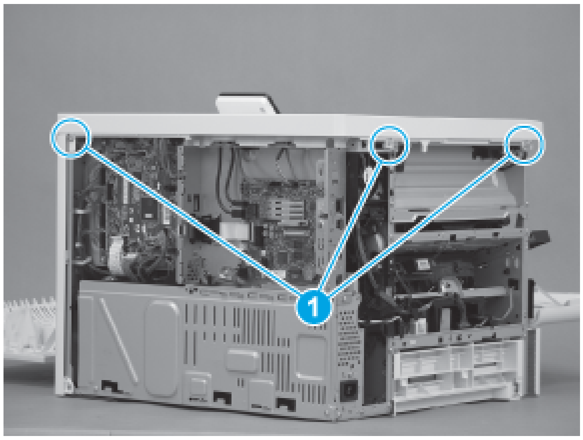
Remove the upper cover (SFP)

Follow these steps to remove the upper cover.

NOTE: This procedure is for SFP models only.

1. Remove three screws (callout 1).

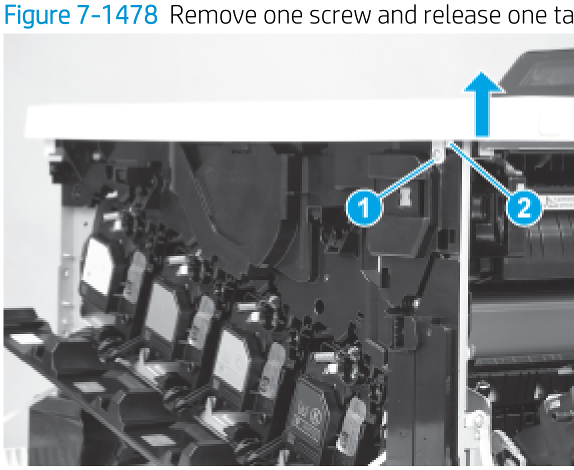
Figure 7-1477 Remove three screws



2. Remove one screw (callout 1), release one tab (callout 2), and then slightly separate the corner of the cover from the chassis.

NOTE: This is a self-tapping plastic-thread screw. Make sure that this screw is used in this location when it is reinstalled.

Figure 7-1478 Remove one screw and release one tab

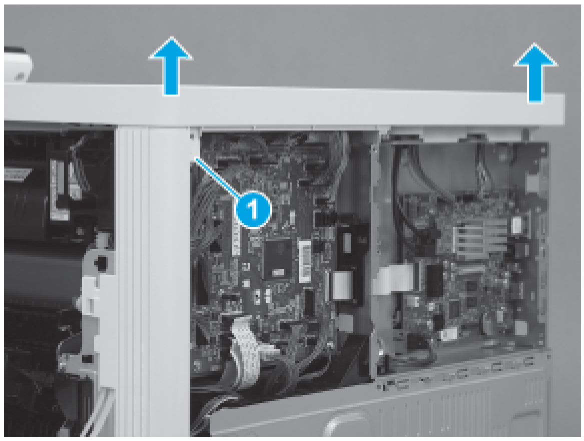


3. Release one tab (callout 1), and then lift up on the cover to release it.

IMPORTANT: **M554 models**: Disconnect the control-panel flat cable at the formatter.

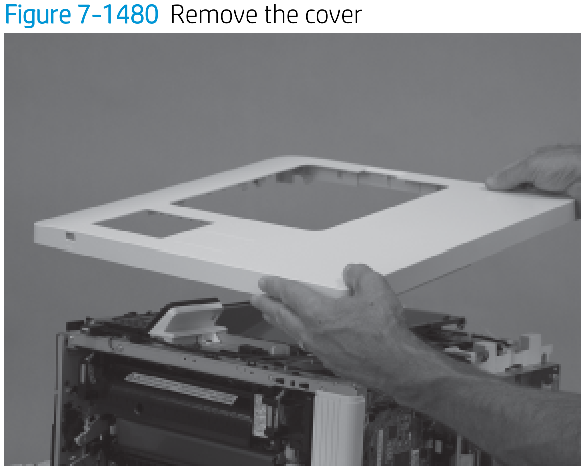
NOTE: If the cover does not release, check for addition tabs by locating the triangles embossed in the cover at tab locations.

Figure 7-1479 Release the cover



4. Remove the cover.

Figure 7-1480 Remove the cover

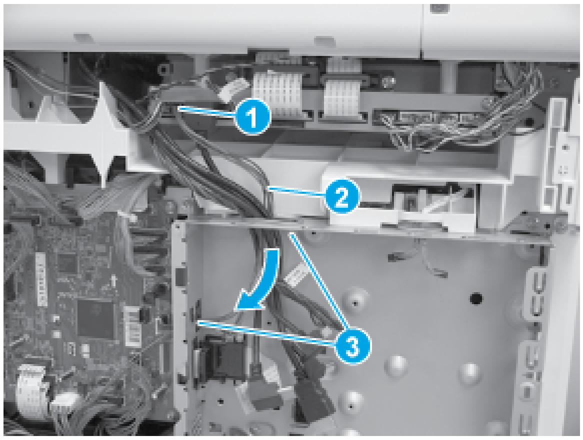


Remove the formatter case

Follow these steps to remove the formatter case.

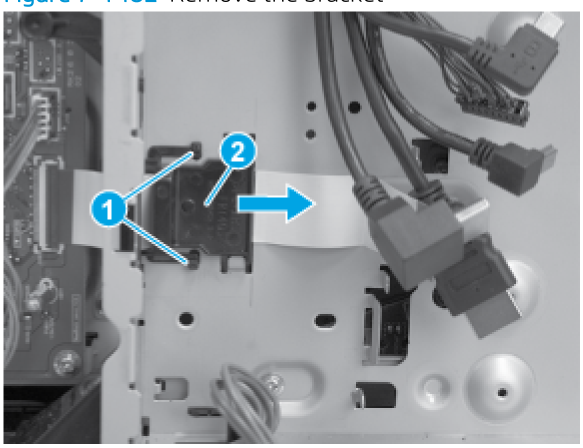
1. **MFP only**: Disconnect one connector (callout 1), and then pass the wire harness (callout 2) through two openings in the formatter case (callout 3).

Figure 7-1481 Disconnect one connector



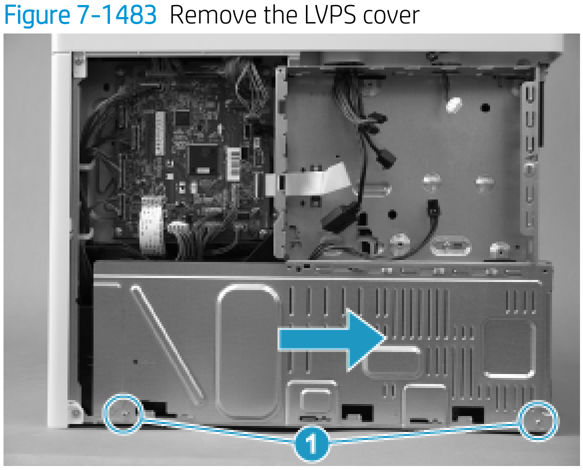
2. Release two tabs (callout 1) on the black plastic bracket. Hold the tabs in the released position, and then slide the bracket (callout 2) to the right to remove it from the formatter case.

Figure 7-1482 Remove the bracket



3. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

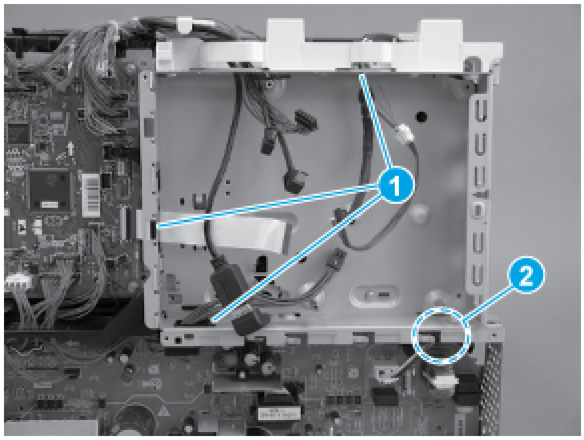
Figure 7-1483 Remove the LVPS cover



4. Pass two wire harnesses and one flat cable (callout 1) through the opening in the formatter case, and then release one wire harness from the retainer (callout 2).

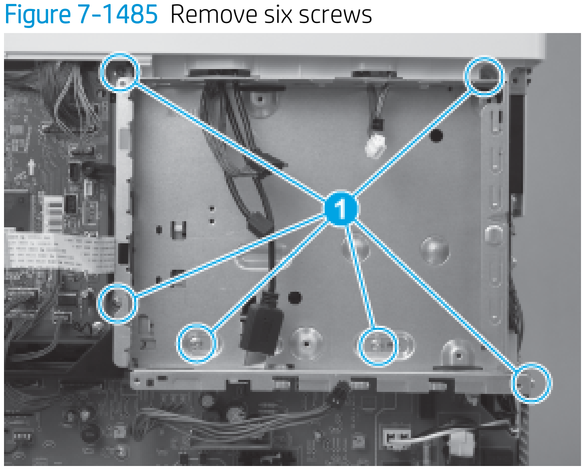
⚠ CAUTION: The flat cable might be attached to the formatter case with double-sided tape. Make sure that this tape is released, so that the flat cable is not damaged when the formatter case is removed.

Figure 7-1484 Release wire harnesses and flat cable



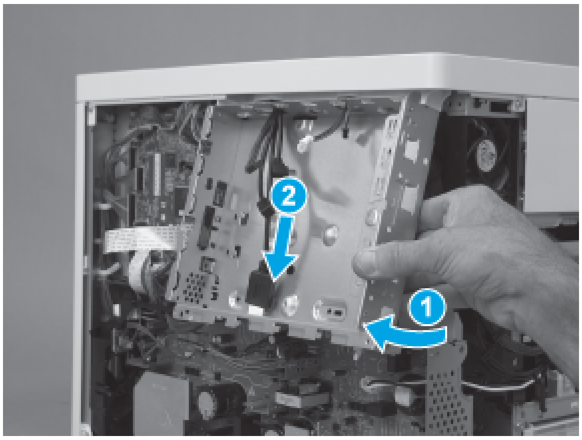
5. Remove six screws (callout 1).

Figure 7-1485 Remove six screws



6. Rotate the bottom of the formatter case away from the printer (callout 1), and then pull it down (callout 2) to release it.

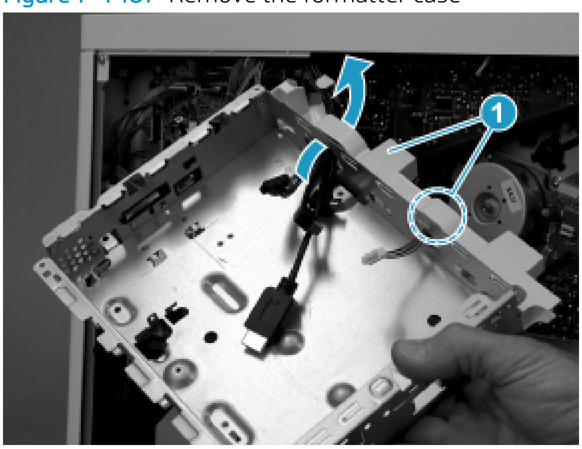
Figure 7-1486 Release the formatter case



7. Pass the wire harnesses through the opening in the formatter case to remove it.

IMPORTANT: If the formatter case is removed so that it can be replaced, make sure to transfer the memory PCA (island of data) and plastic bracket (callout 1) to the replacement case.

Figure 7-1487 Remove the formatter case

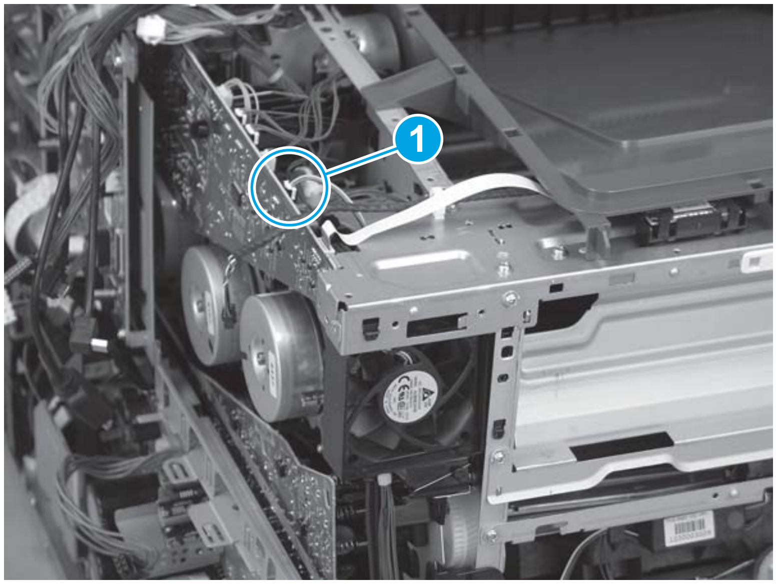


Remove the delivery fan (FM3)

Follow these steps to remove the delivery fan.

1. Disconnect one connector (callout 1).

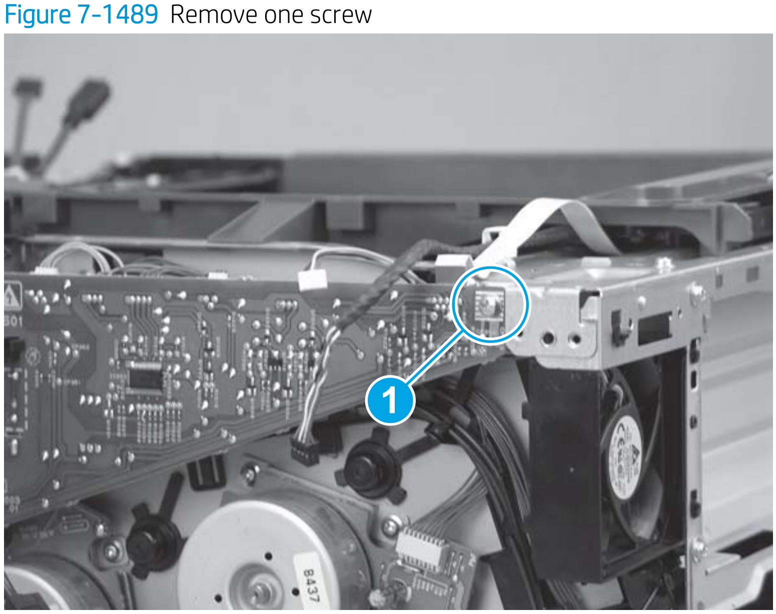
Figure 7-1488 Disconnect one connector



2. Remove one screw (callout 1).

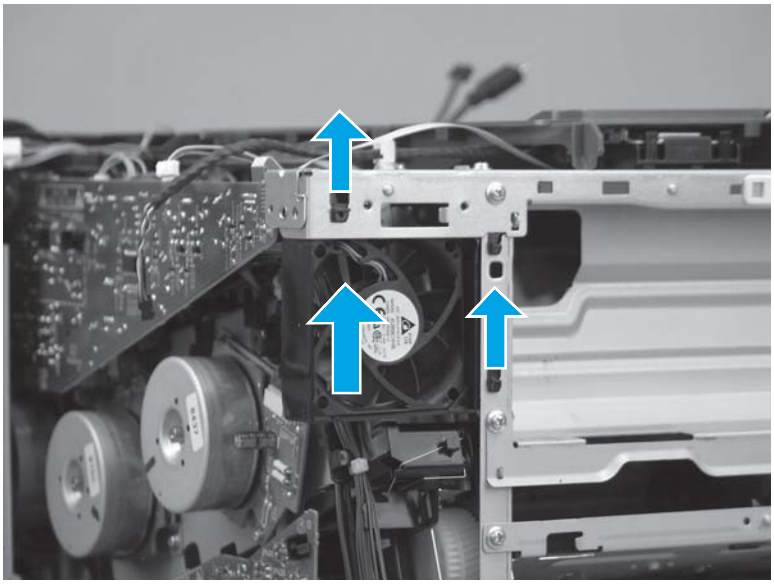
NOTE: This screw does not secure the fan to the chassis. However it is necessary to remove it so that the corner of the high-voltage power supply T (HVPST) can be moved out of the way to remove the fan.

Figure 7-1489 Remove one screw



3. Slide the fan up to release it.

Figure 7-1490 Release the fan

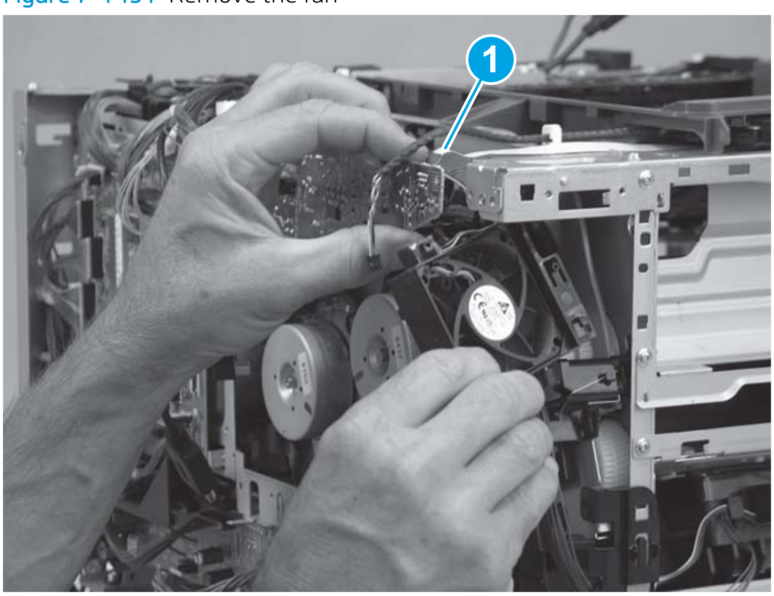


4. Slightly flex the corner of the HVPST out of the way (callout 1), and then remove the fan.

CAUTION: Do not over flex the HVPST and damage it.

Reinstallation tip: Look at the arrows embossed on the fan or the holder. When a replacement fan is installed, make sure that the embossed arrows face the correct direction.

Figure 7-1491 Remove the fan



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: High-voltage power supply T (HVPST)

Learn about removing and replacing the high-voltage power supply T.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ **WARNING!** To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-73 Part information

Part number	Part description
RM2-7123-000CN	High-voltage power supply T (HVPST) M552, M553dn/x, M554, M555, M577, M578, E55040, E57540)
RM2-7134-000CN	High-voltage power supply T (HVPST) (M553n)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

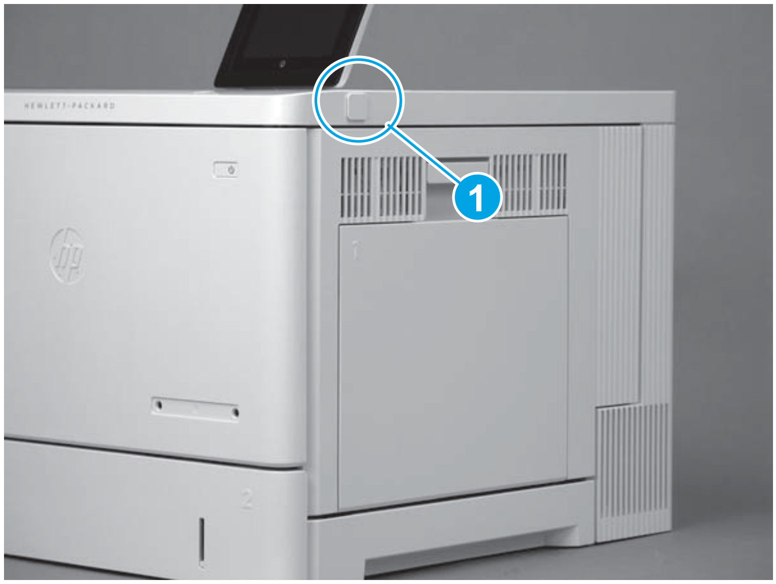
Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

> **NOTE:** This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-1492 Locate the USB cover



2. Pull the cover off of the printer to remove it.

Figure 7-1493 Remove the cover

Remove the control panel (M553x/M555/E55040)

Follow these steps to remove the control panel.

NOTE: This procedure is for the M553x/M555/E55040 printers only.

M555 models: Removing the control panel is similar to the procedure below. For the M555, a flat cable connects the control panel to the formatter.

1. Tilt the control panel up.

Figure 7-1494 Tilt the control panel up

2. Use the small flat-blade screwdriver supplied in this kit to release the control-panel screws cover tabs.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-1495 Release the control-panel screws cover tabs

3. Rotate the cover up to remove it.

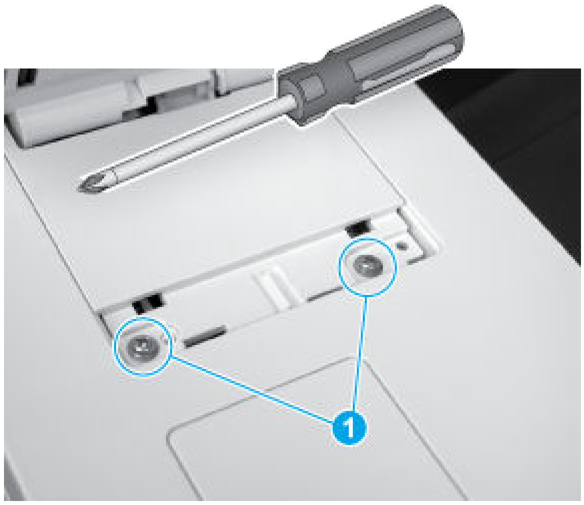
Figure 7-1496 Remove the cover

4. Use the small Phillips screwdriver supplied in this kit to remove two screws (callout 1).

IMPORTANT: Store the screws in a secure place where they cannot fall down into the printer.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-1497 Remove two screws



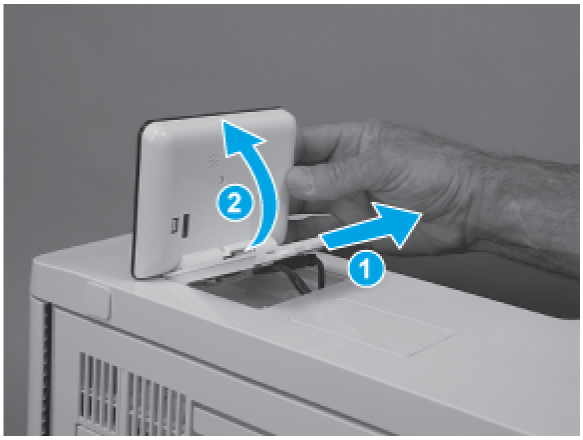
5. Rotate the control-panel base toward the front of the printer.

Figure 7-1498 Rotate the control-panel base up

6. Slightly slide the control-panel base toward the rear of the printer (callout 1) to release it, and then turn the control panel over (callout 2) to access the bottom side.

⚠ CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

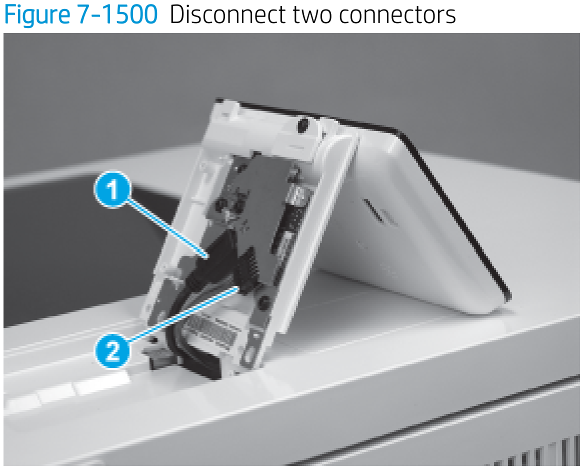
Figure 7-1499 Turn the control panel over



7. Disconnect one USB cable (callout 1), one connector (callout 2), and then remove the control panel.

NOTE: **M555 only**: Disconnect one flat cable (not shown), and then remove the control panel.

Figure 7-1500 Disconnect two connectors



Remove Tray 2

Learn about removing Tray 2.

NOTE: A SFP printer is shown in this section. However, the procedure is correct for all printer models.

The figures in this section show Tray 2. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5. Always carefully read the instructions that accompany the figures.

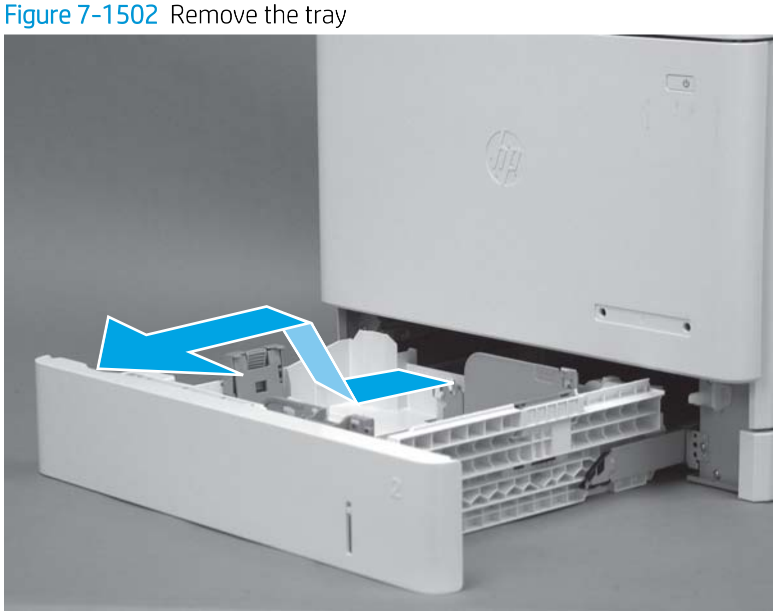
1. Pull the tray out until it stops.

Figure 7-1501 Pull the tray out

2. Lift the front of the tray, and then pull it out of the printer to remove it.

NOTE: **For a replacement tray:** If the tray has Fixed Tray Guides installed and are still required, move hardware to new tray. If necessary, order new kit: 3GY25–67901 Kit - Fixed Tray Guide. Only one kit required per engine.

Figure 7-1502 Remove the tray



Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-1503 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-1504 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

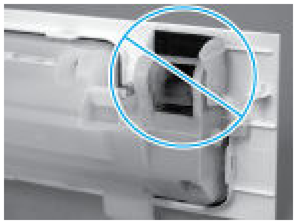
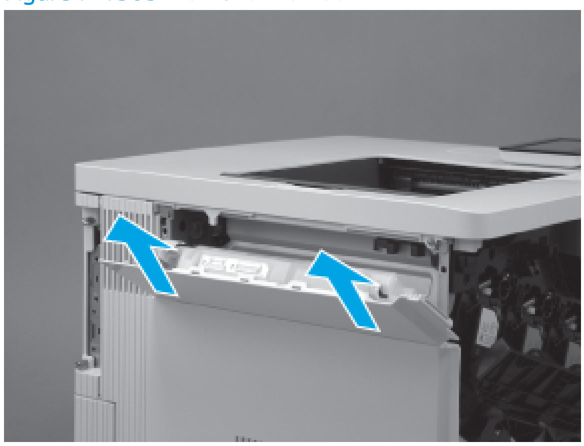


Figure 7-1505 Remove the TCU

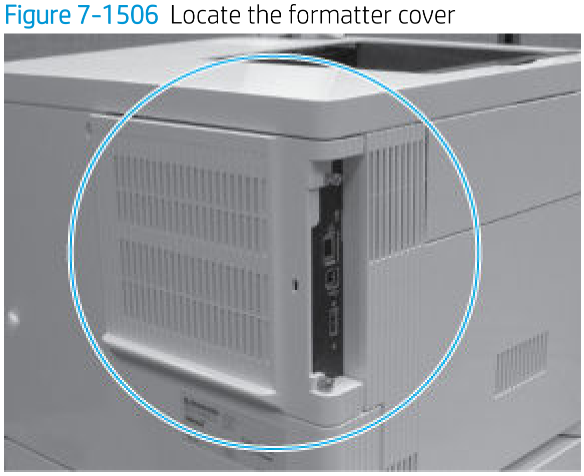


Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

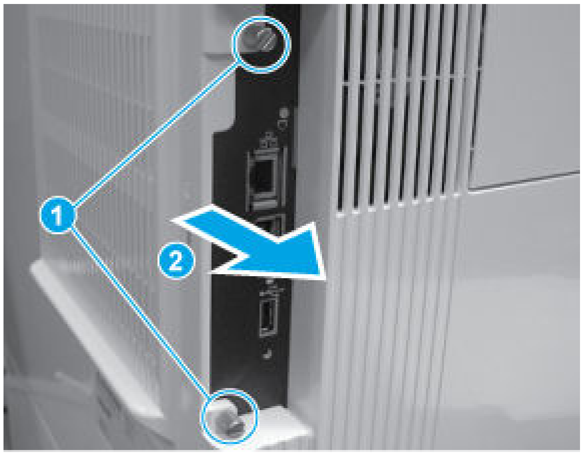
Figure 7-1506 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-1507 Loosen the thumbscrews



Remove the formatter (SFP)

Follow these steps to remove the formatter.

NOTE: This procedure is for SFP models only.

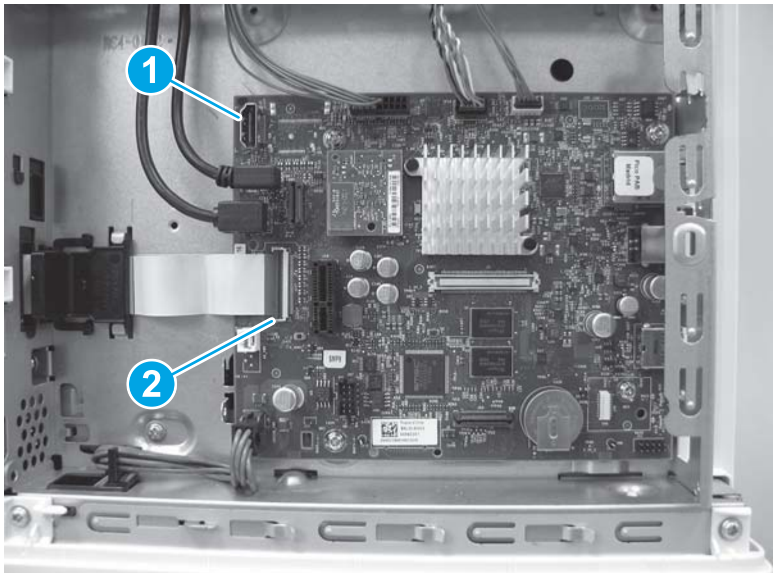
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)
   - All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
   - M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)
   - All models: J57
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

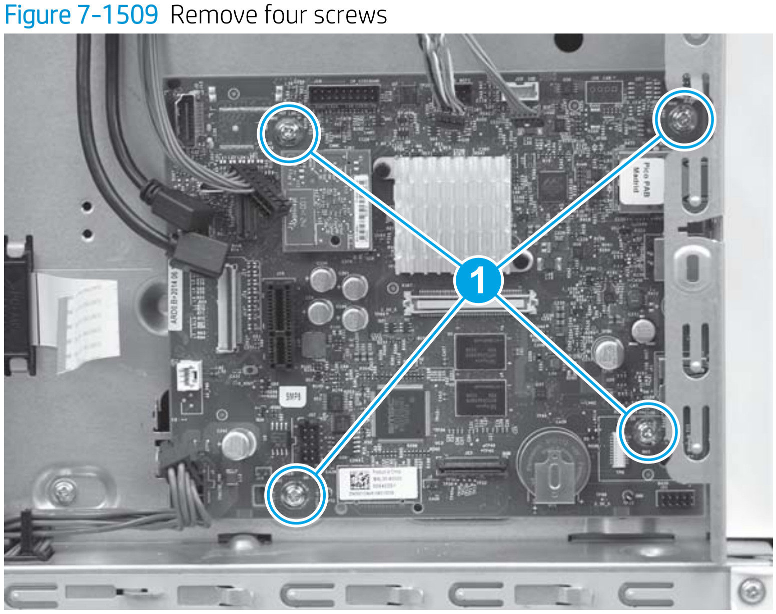
IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1508 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-1509 Remove four screws



Remove the hard-disk drive (HDD)

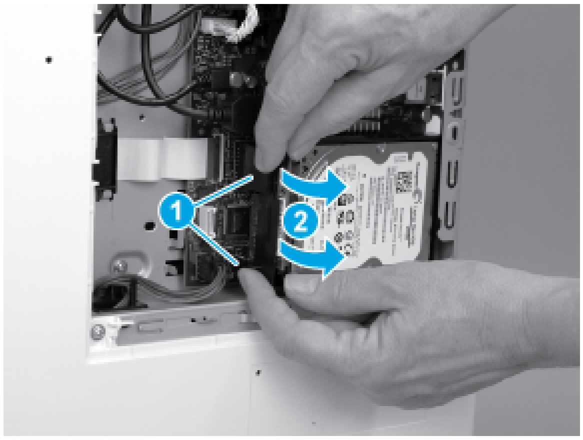
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-1510 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-1511 Remove the HDD

Remove the fax PCA (fax models)

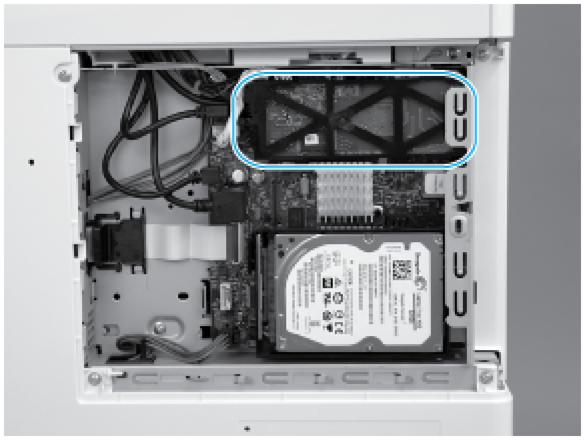
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

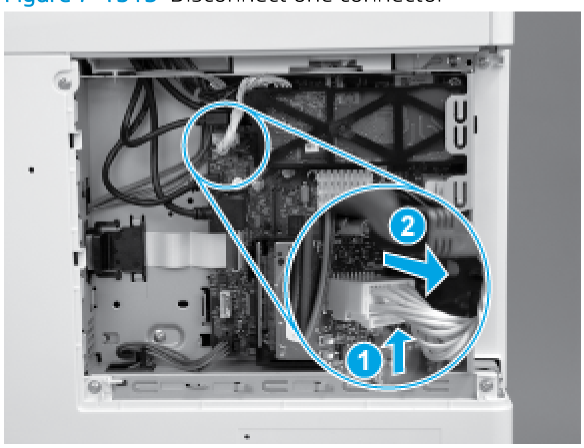
1. Locate the fax PCA component on the formatter.

Figure 7-1512 Locate the fax PCA



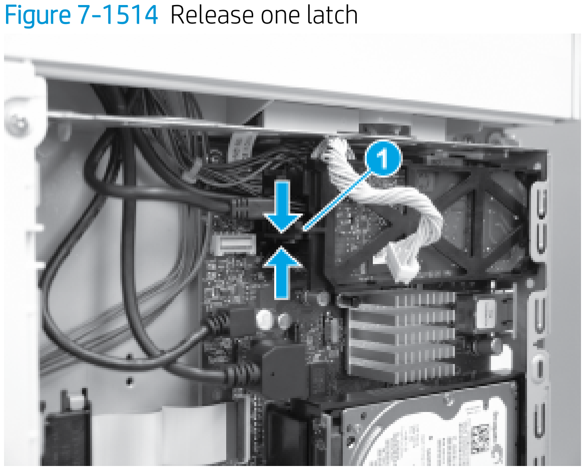
2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-1513 Disconnect one connector



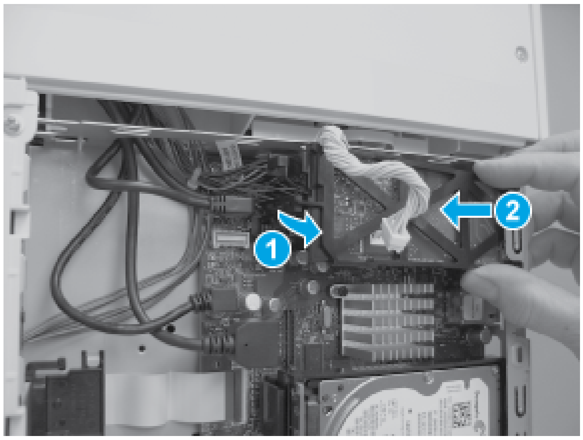
3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-1514 Release one latch



4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-1515 Remove the fax PCA



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

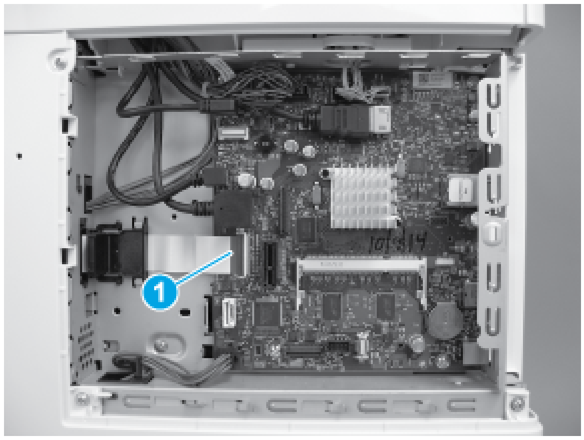
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

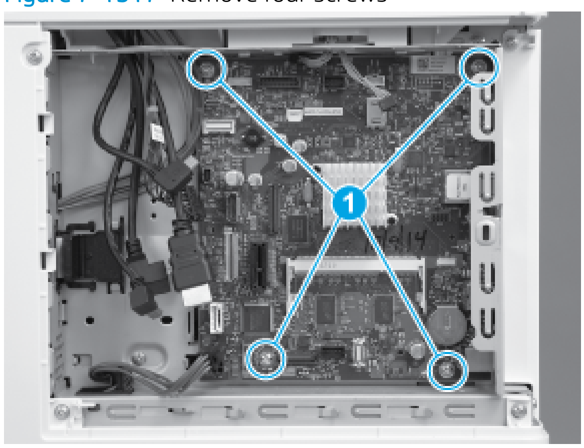
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1516 Disconnect all connectors



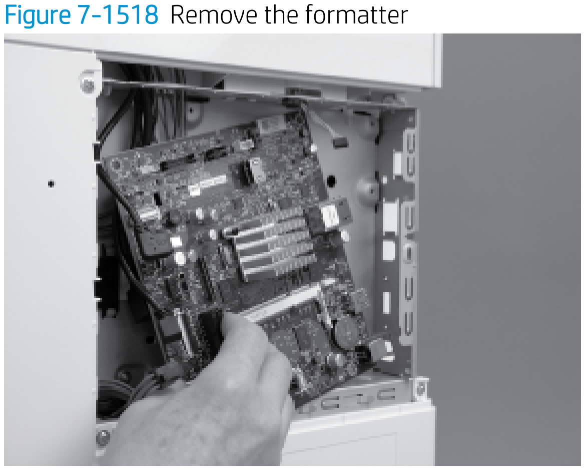
2. Remove four screws (callout 1).

Figure 7-1517 Remove four screws



3. Remove the formatter.

Figure 7-1518 Remove the formatter



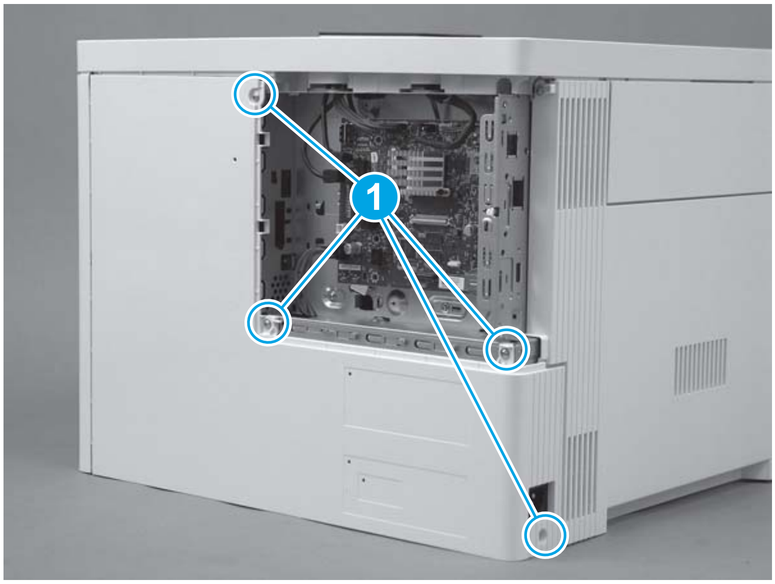
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

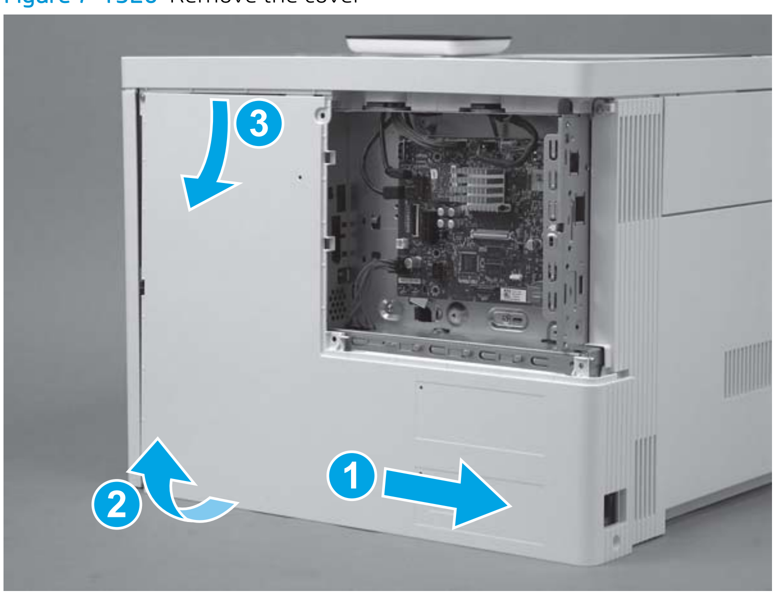
1. Remove four screws (callout 1).

Figure 7-1519 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-1520 Remove the cover



Remove the rear upper cover (MFP)

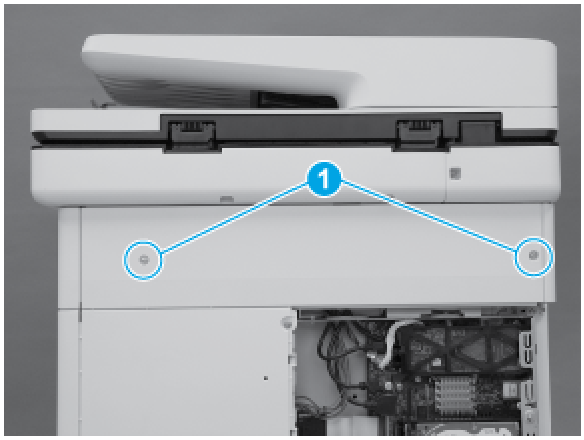
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

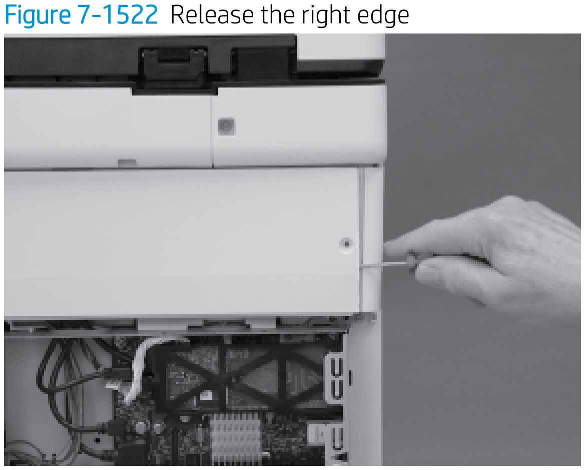
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-1521 Remove two screws



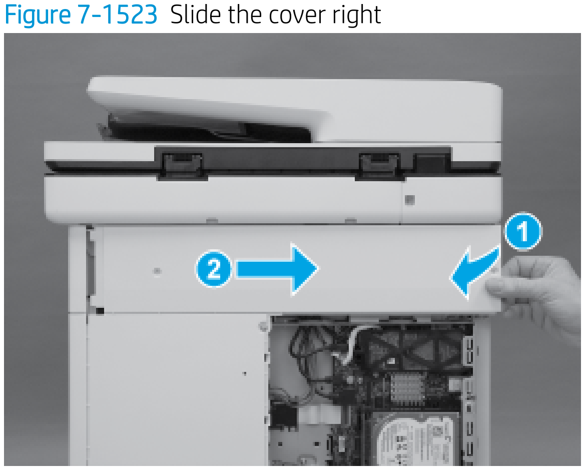
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-1522 Release the right edge



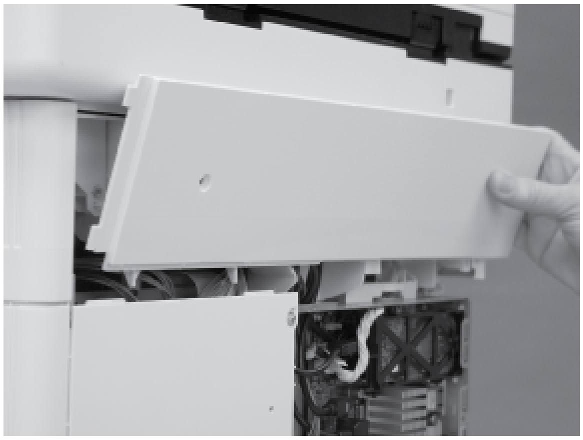
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-1523 Slide the cover right



4. Remove the cover.

Figure 7-1524 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-1525 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-1526 Remove the cover

Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

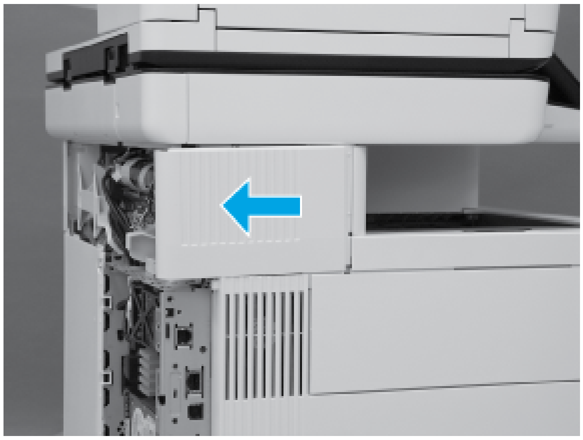
NOTE: This procedure is for MFP models only.

1. At the left side of the printer, release one tab (callout 1).

Figure 7-1527 Release one tab

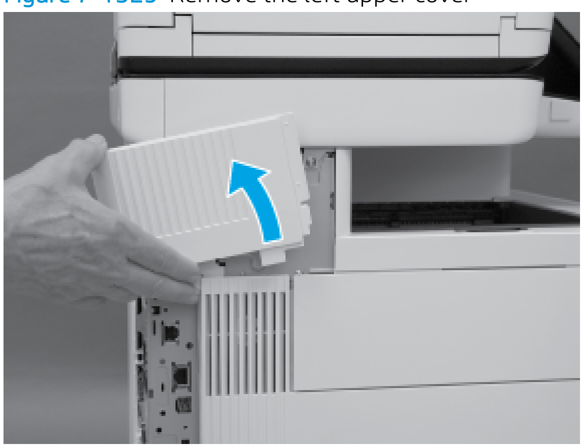
2. Slide the left upper cover toward the back of the printer.

Figure 7-1528 Slide the cover back



3. Rotate the cover up to remove it.

Figure 7-1529 Remove the left upper cover



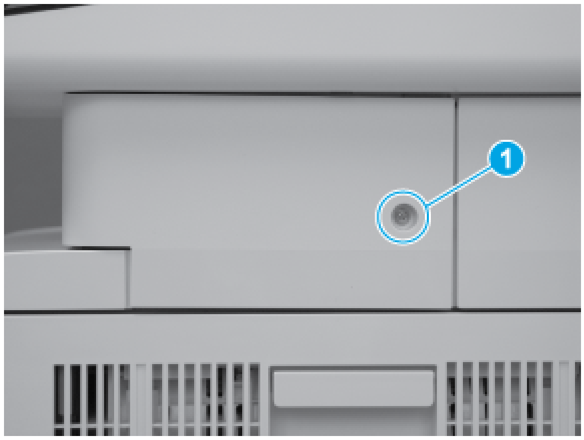
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-1530 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-1531 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-1532 Rotate the cover

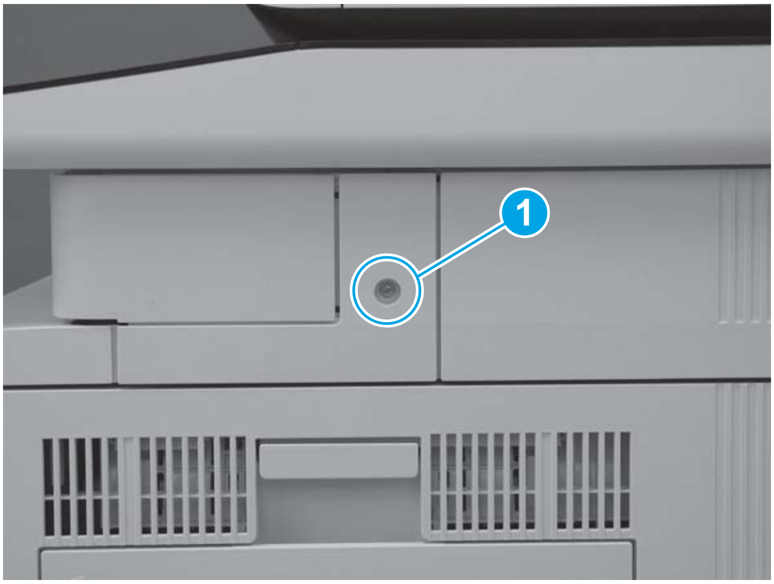
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

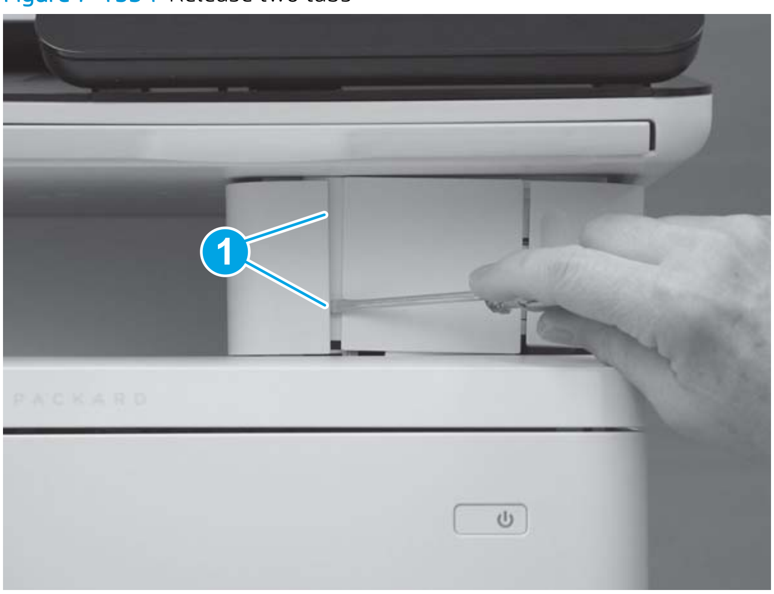
1. Remove one screw (callout 1).

Figure 7-1533 Remove one screw



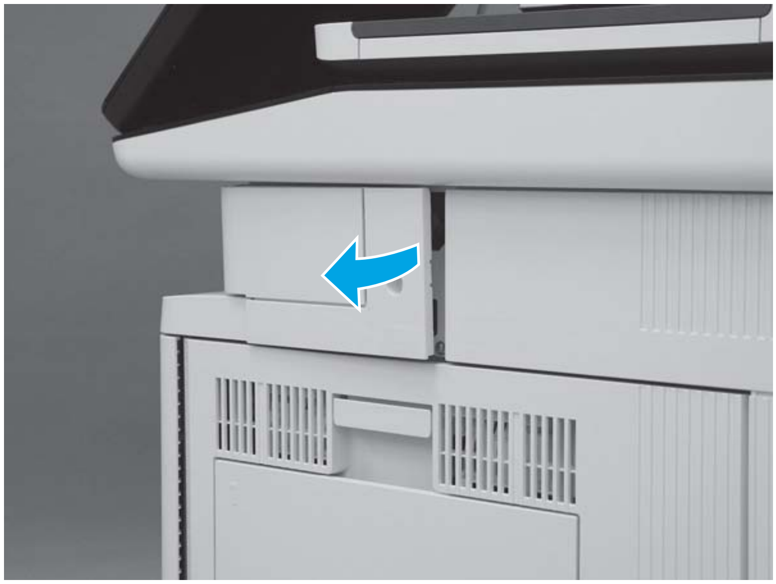
2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-1534 Release two tabs



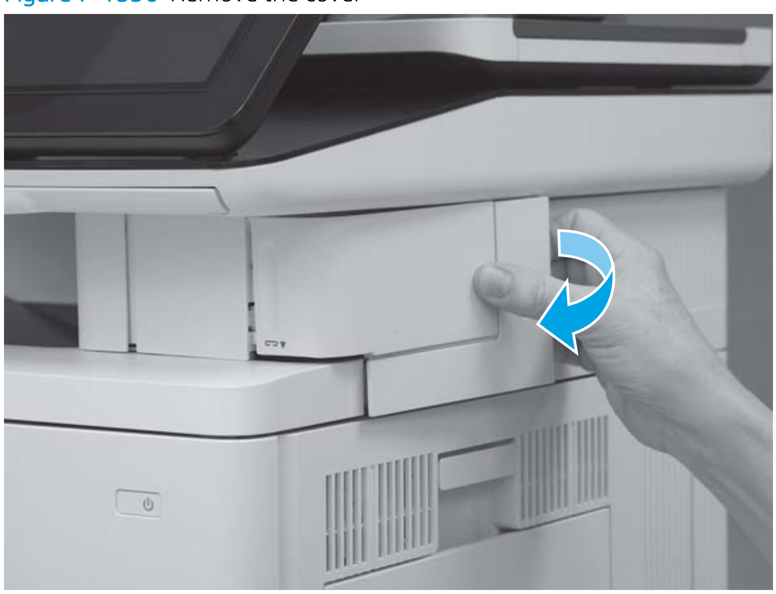
3. Release the back edge of the cover.

Figure 7-1535 Release the back edge of the cover



4. Rotate the cover away from the printer to remove it.

Figure 7-1536 Remove the cover



Remove the integrated scanner assembly (ISA) (MFP)

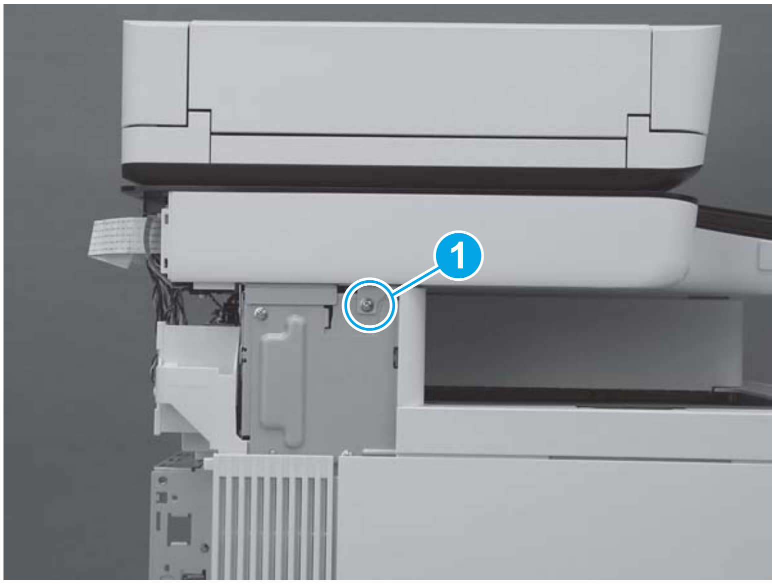
Follow these steps to remove the integrated scanner assembly (ISA).

NOTE: This procedure is for MFP models only.

NOTE: The ISA includes the document feeder, image scanner, scanner control board (SCB), control panel, keyboard (flow models) and NFC PCA (not all models).

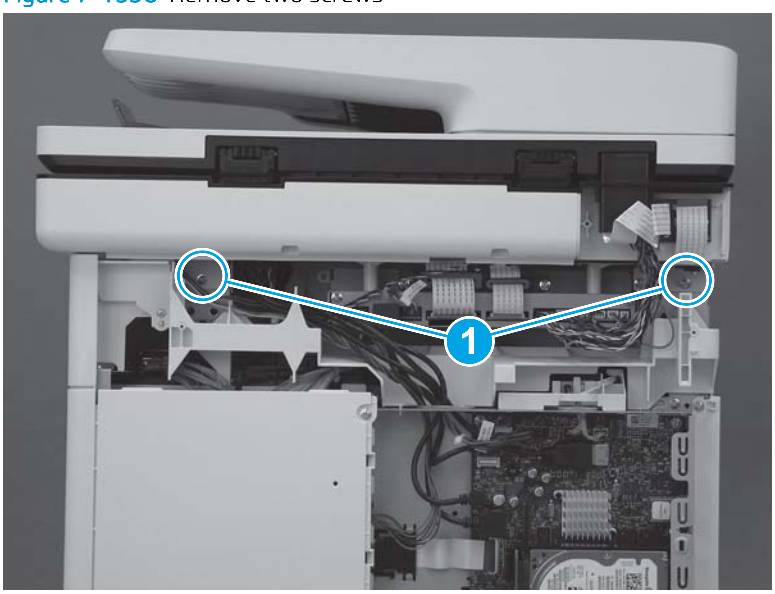
1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1537 Remove one screw



2. At the back of the printer, remove two screws (callout 1).

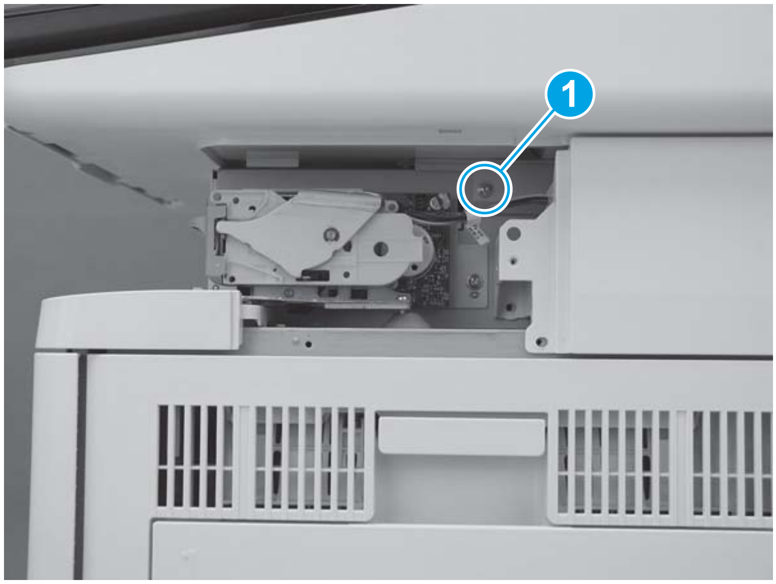
Figure 7-1538 Remove two screws



3. At the right side of the printer, remove one screw (callout 1).

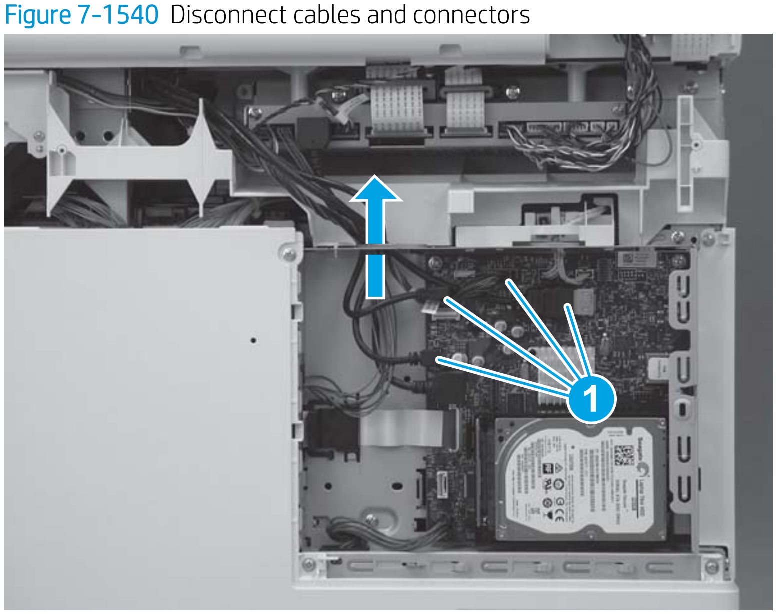
NOTE: The M577z is shown in the figure below. The procedure is correct for all MFP models.

Figure 7-1539 Remove one screw



4. Disconnect four connectors (callout 1) on the formatter, and then pass the wire harnesses and cables through the top opening in the formatter case (callout 2).

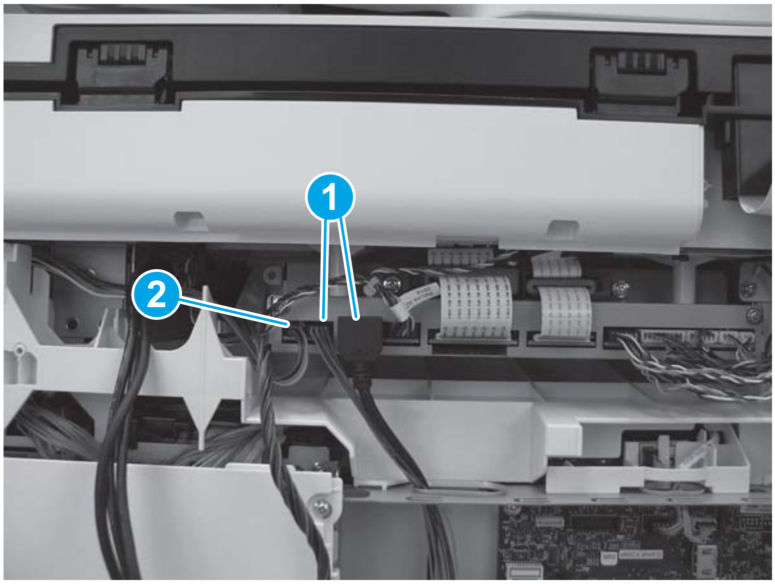
Figure 7-1540 Disconnect cables and connectors



5. Disconnect two connectors on the scanner control board (callout 1).

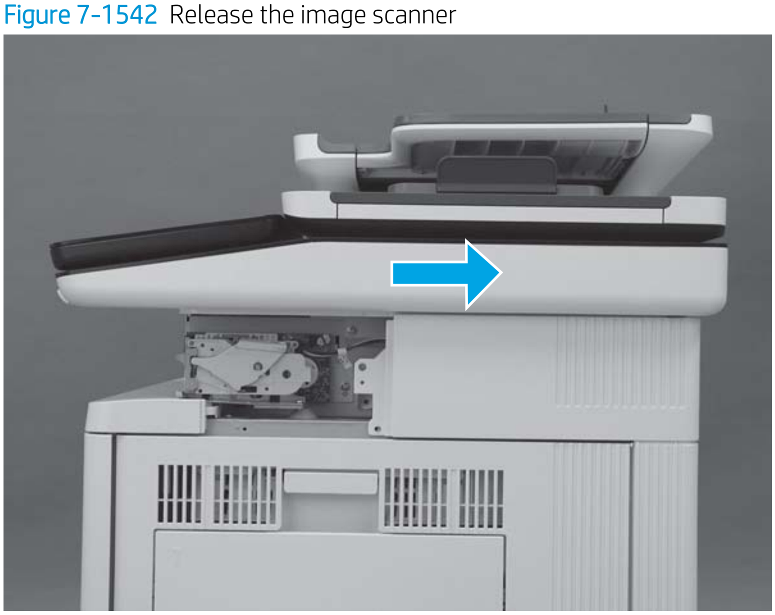
   MFP stapler models: Disconnect one connector for the stapler on the scanner control board (callout 2).

   Figure 7-1541 Disconnect connectors

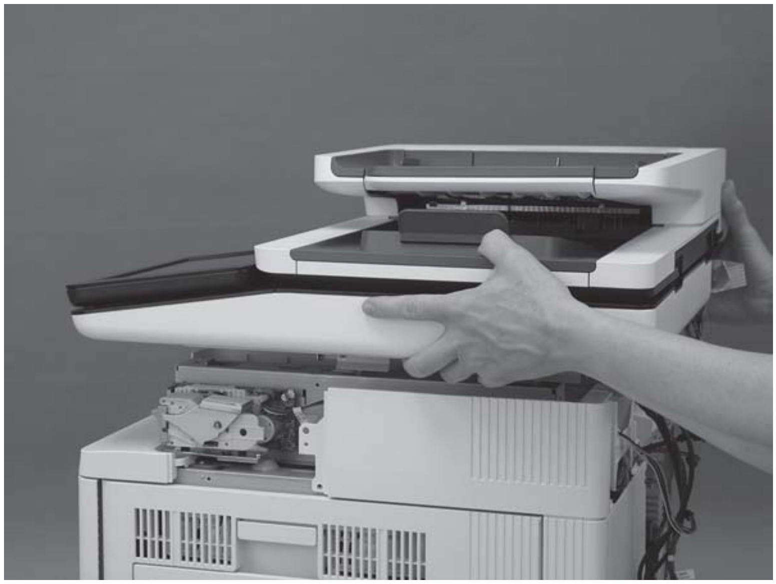
6. Slide the image scanner toward the back of the printer to release it.

   Figure 7-1542 Release the image scanner

7. Lift the ISA straight up to remove it.

Figure 7-1543 Remove the ISA



Remove the right upper cover (MFP)

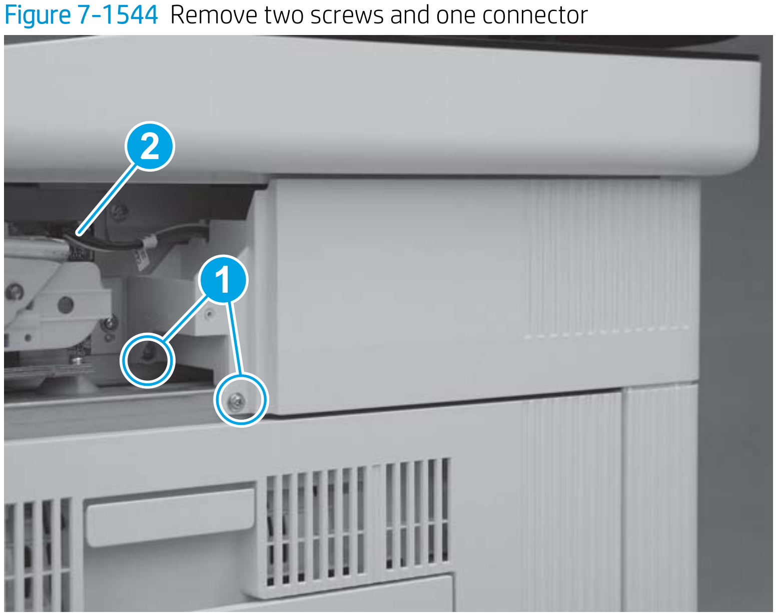
Follow these steps to remove the right upper cover.

NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Figure 7-1544 Remove two screws and one connector

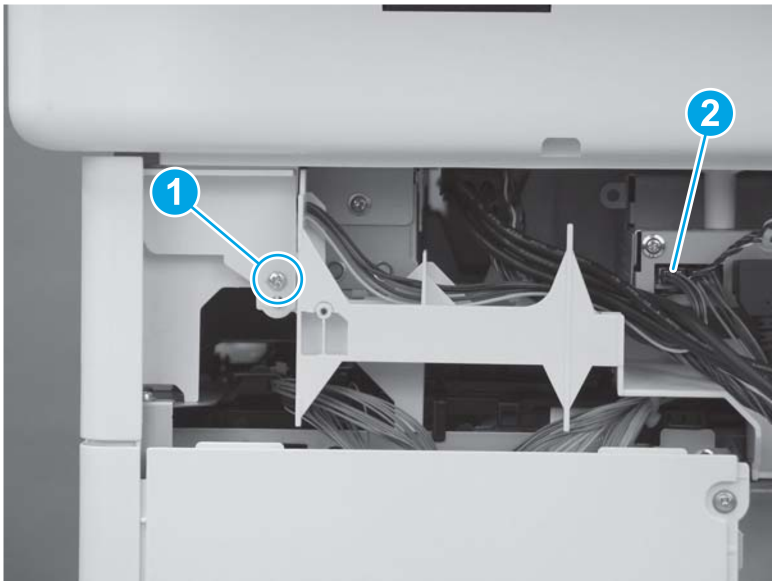
   

2. At the back of the printer, remove one screw (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

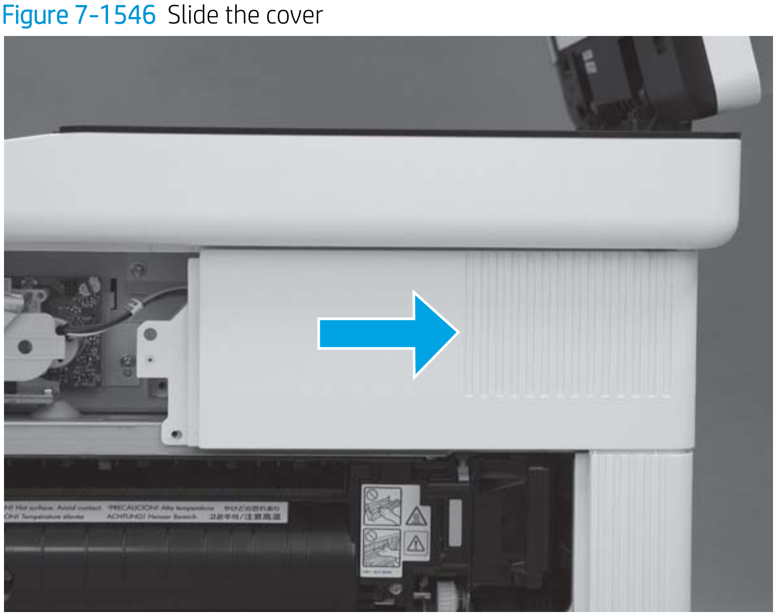
> Reinstallation tip: This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

Figure 7-1545 Remove one screw and connector



3. Slide the cover toward the back of the printer.

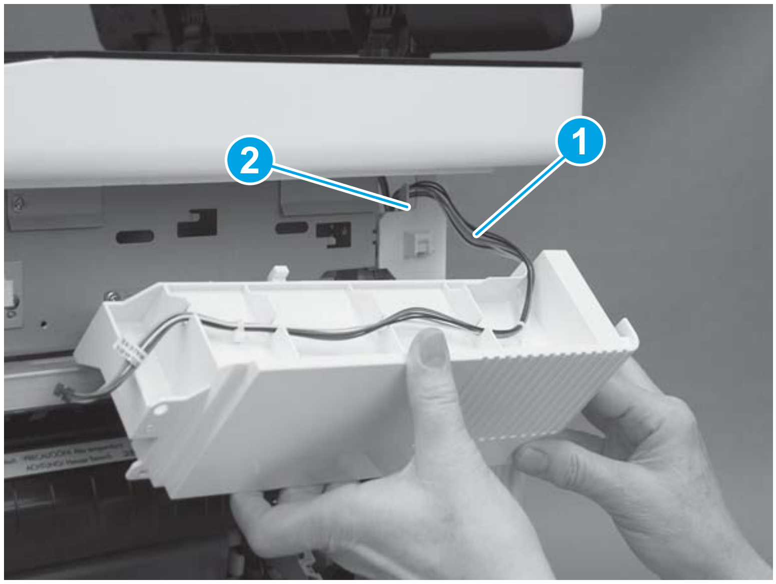
Figure 7-1546 Slide the cover



4. Lift the cover away from the printer to remove it.

   M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

   Figure 7-1547 Remove the cover



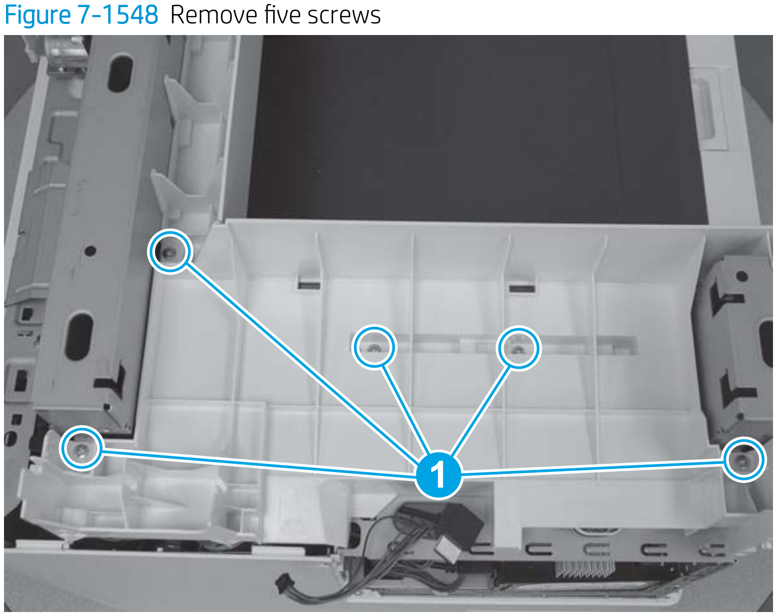
Remove the top rear cover (MFP)

Follow these steps to remove the top rear cover.

NOTE: This procedure is for MFP models only.

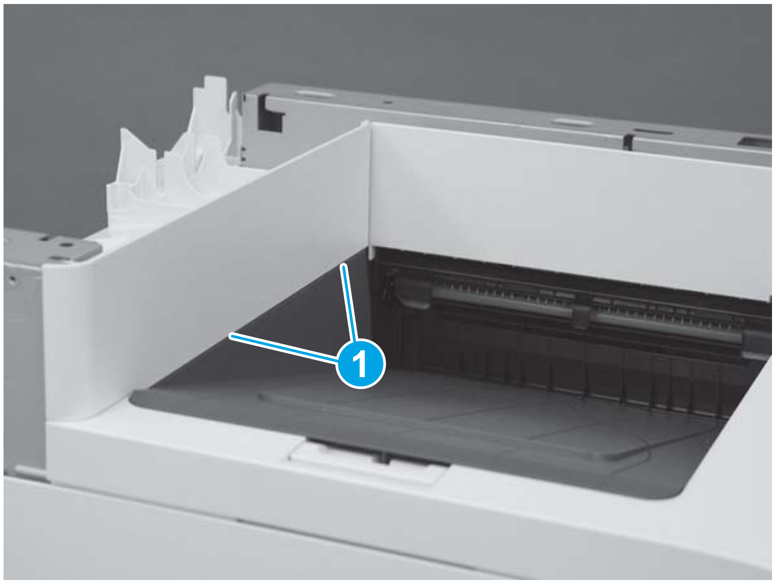
1. At the top of the printer, remove five screws (callout 1).

   Figure 7-1548 Remove five screws



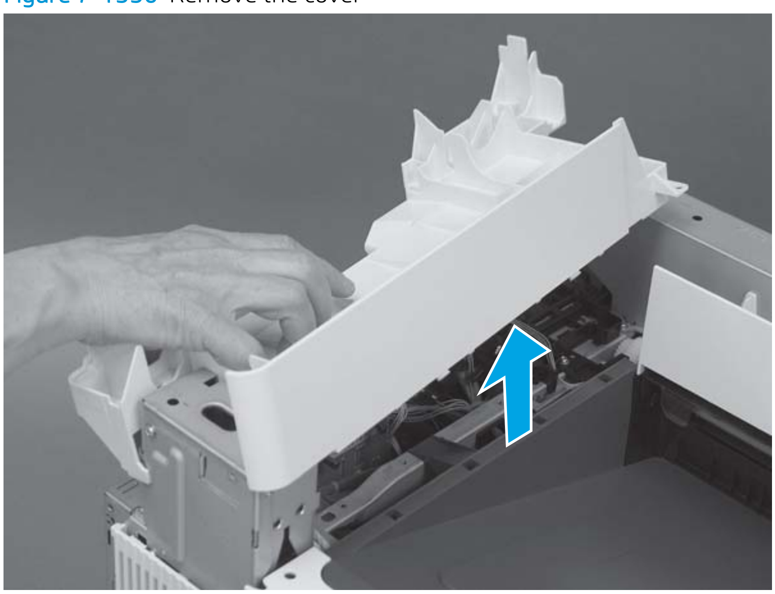
2. Release two tabs (callout 1) on the front edge of the cover.

Figure 7-1549 Release two tabs



3. Remove the top rear cover.

Figure 7-1550 Remove the cover



Remove the left cover

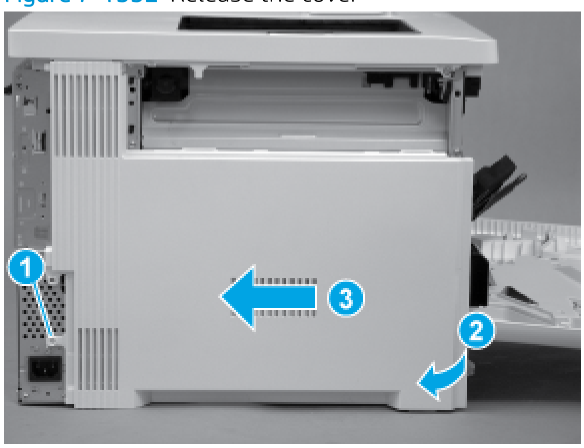
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1551 Remove one screw

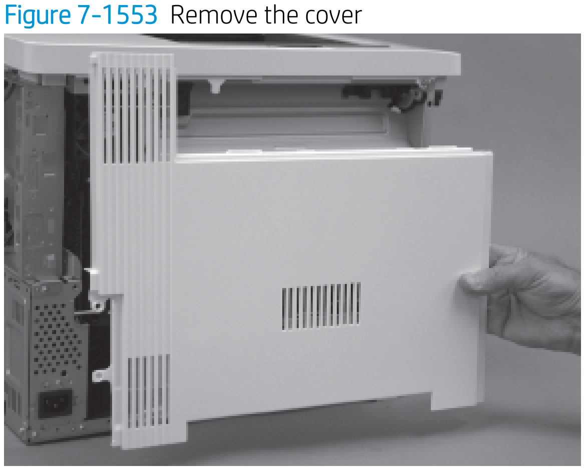
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-1552 Release the cover



3. Remove the cover.

Figure 7-1553 Remove the cover



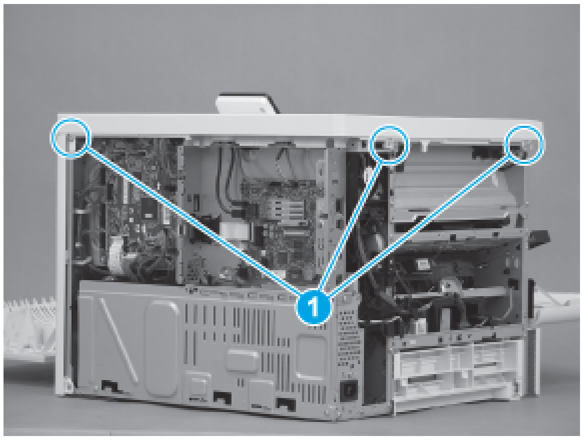
Remove the upper cover (SFP)

Follow these steps to remove the upper cover.

NOTE: This procedure is for SFP models only.

1. Remove three screws (callout 1).

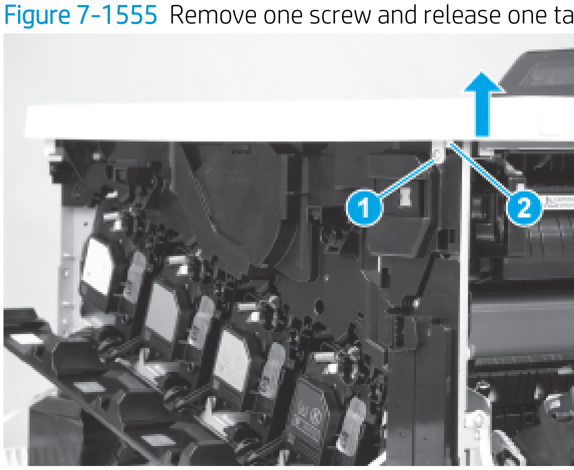
Figure 7-1554 Remove three screws



2. Remove one screw (callout 1), release one tab (callout 2), and then slightly separate the corner of the cover from the chassis.

NOTE: This is a self-tapping plastic-thread screw. Make sure that this screw is used in this location when it is reinstalled.

Figure 7-1555 Remove one screw and release one tab

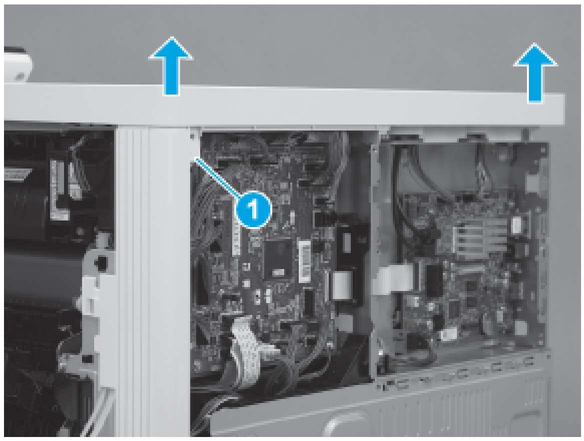


3. Release one tab (callout 1), and then lift up on the cover to release it.

IMPORTANT: **M554 models**: Disconnect the control-panel flat cable at the formatter.

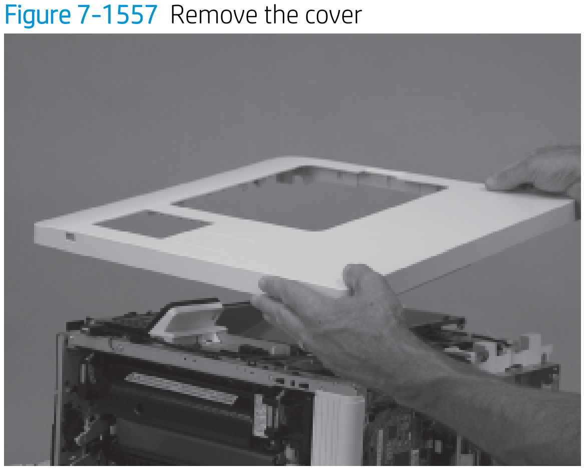
NOTE: If the cover does not release, check for addition tabs by locating the triangles embossed in the cover at tab locations.

Figure 7-1556 Release the cover



4. Remove the cover.

Figure 7-1557 Remove the cover

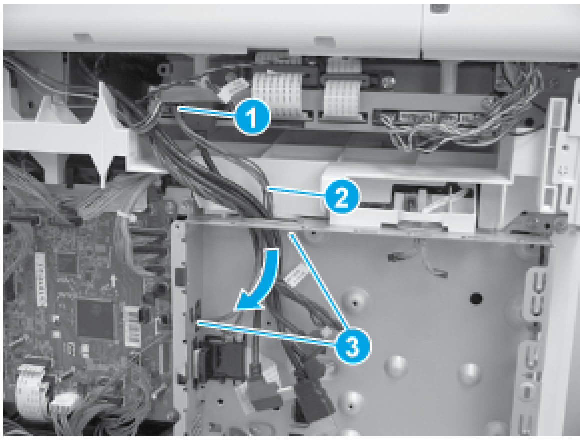


Remove the formatter case

Follow these steps to remove the formatter case.

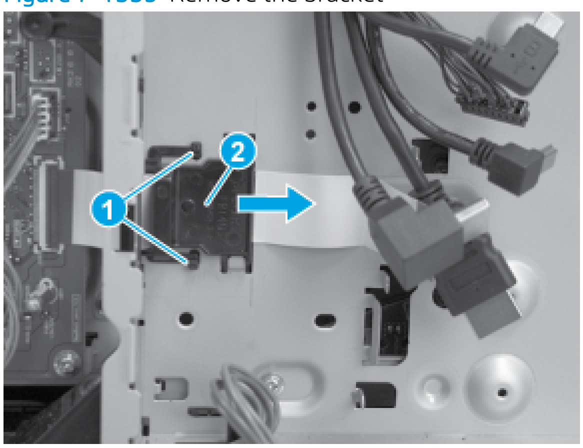
1. **MFP only**: Disconnect one connector (callout 1), and then pass the wire harness (callout 2) through two openings in the formatter case (callout 3).

Figure 7-1558 Disconnect one connector



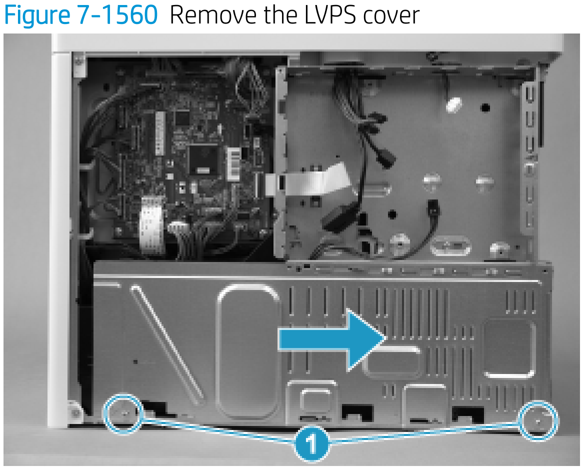
2. Release two tabs (callout 1) on the black plastic bracket. Hold the tabs in the released position, and then slide the bracket (callout 2) to the right to remove it from the formatter case.

Figure 7-1559 Remove the bracket



3. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

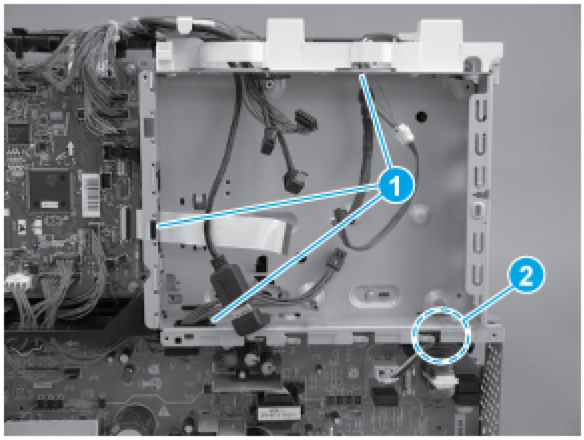
Figure 7-1560 Remove the LVPS cover



4. Pass two wire harnesses and one flat cable (callout 1) through the opening in the formatter case, and then release one wire harness from the retainer (callout 2).

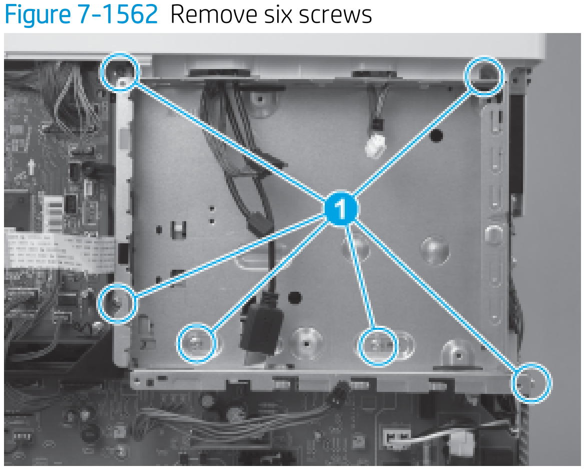
⚠ CAUTION: The flat cable might be attached to the formatter case with double-sided tape. Make sure that this tape is released, so that the flat cable is not damaged when the formatter case is removed.

Figure 7-1561 Release wire harnesses and flat cable



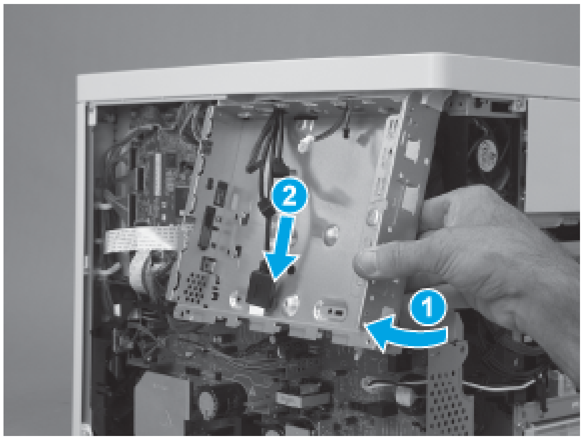
5. Remove six screws (callout 1).

Figure 7-1562 Remove six screws



6. Rotate the bottom of the formatter case away from the printer (callout 1), and then pull it down (callout 2) to release it.

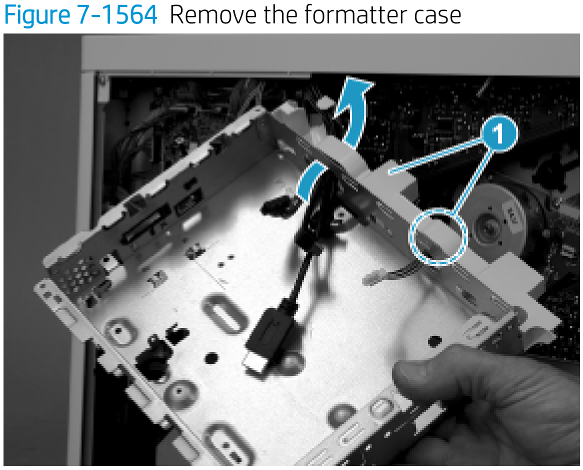
Figure 7-1563 Release the formatter case



7. Pass the wire harnesses through the opening in the formatter case to remove it.

IMPORTANT: If the formatter case is removed so that it can be replaced, make sure to transfer the memory PCA (island of data) and plastic bracket (callout 1) to the replacement case.

Figure 7-1564 Remove the formatter case



Remove the right rear cover

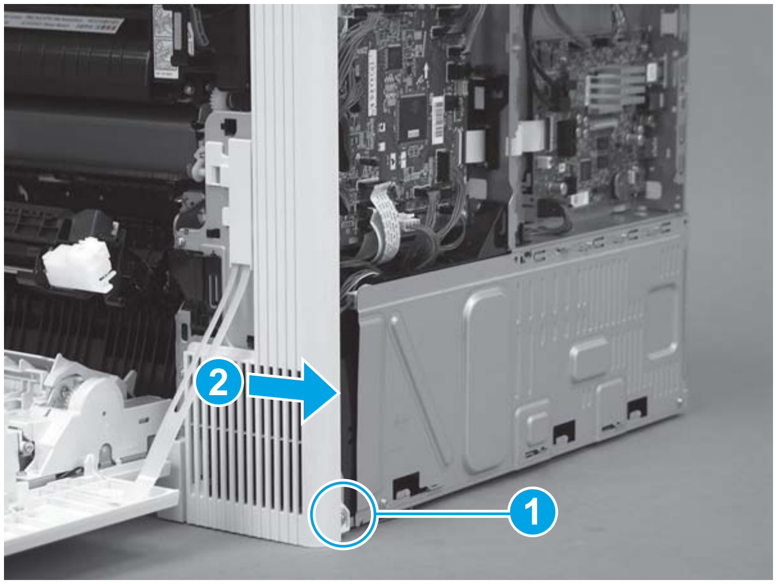
Follow these steps to remove the right rear cover.

NOTE: The figures in this topic show a SFP model. However, the procedure is correct for an MFP.

1. Remove one screw (callout 1), and then slide the cover toward the rear of the printer (callout 2) to release it.

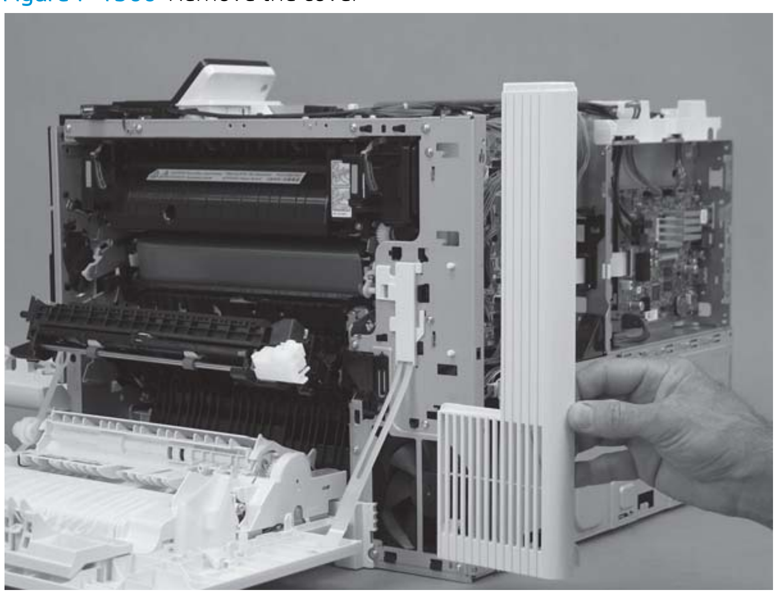
TIP: If the right door is closed, open it now.

Figure 7-1565 Release the cover



2. Remove the cover.

Figure 7-1566 Remove the cover



Remove the DC controller (DCC) and sheet-metal bracket

Follow these steps to remove the DC controller and sheet-metal bracket together.

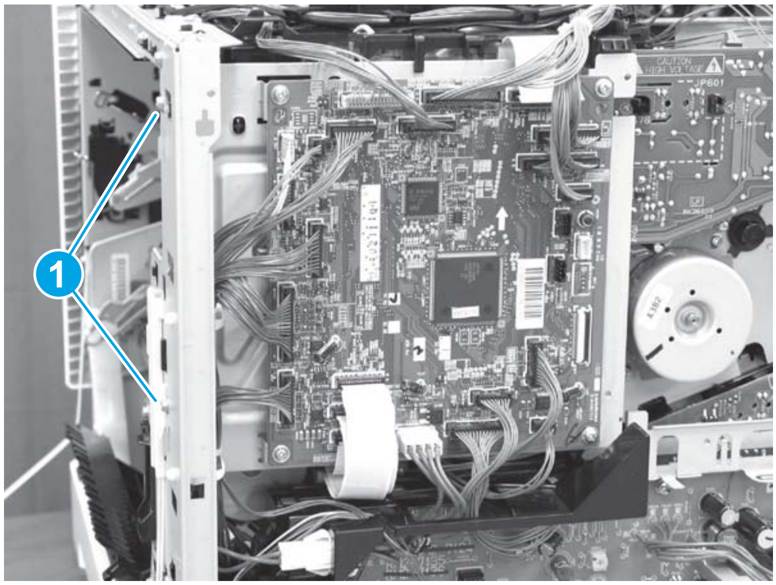
NOTE: ESD sensitive part.

1. Disconnect all of the connectors, and then remove two screws (callout 1).

Empty DCC connectors

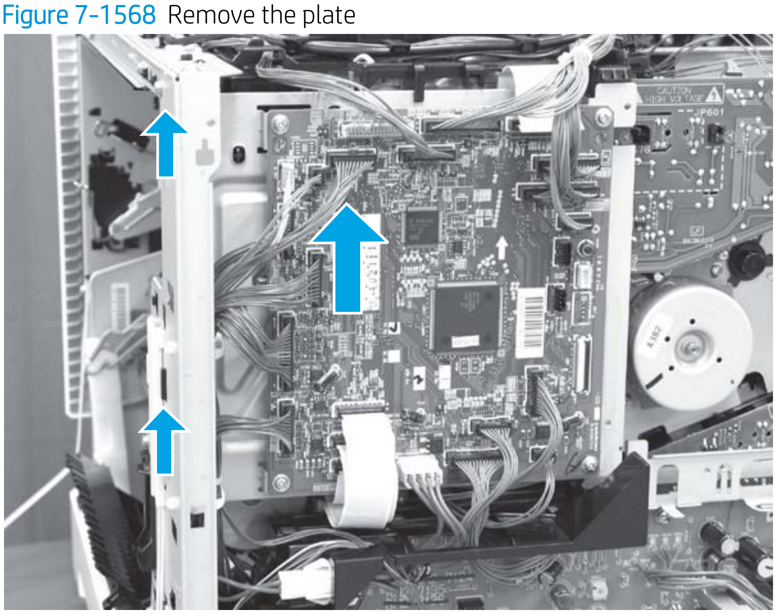
- J140
- J141
- J143

Figure 7-1567 Remove two screws



2. Lift up on the DC controller and sheet-metal plate to remove it.

Figure 7-1568 Remove the plate



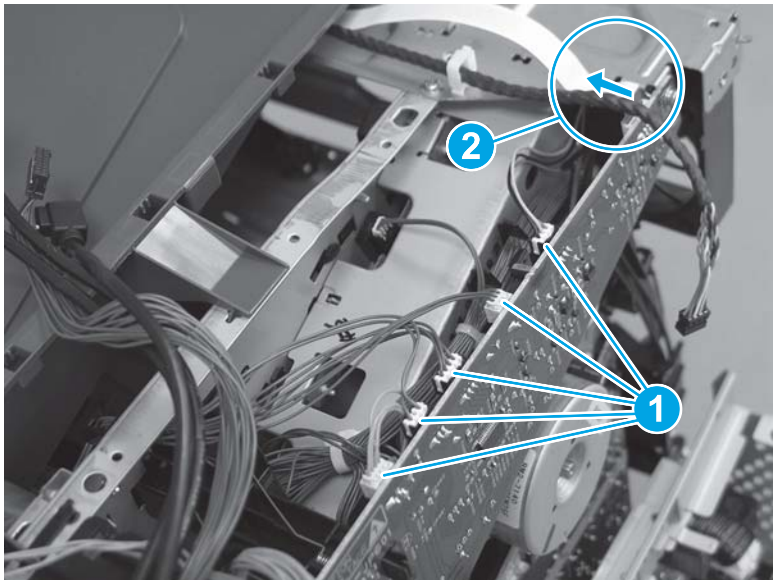
Remove the high-voltage power supply T (HVPST)

Follow these steps to remove the high-voltage power supply T.

NOTE: ESD sensitive part.

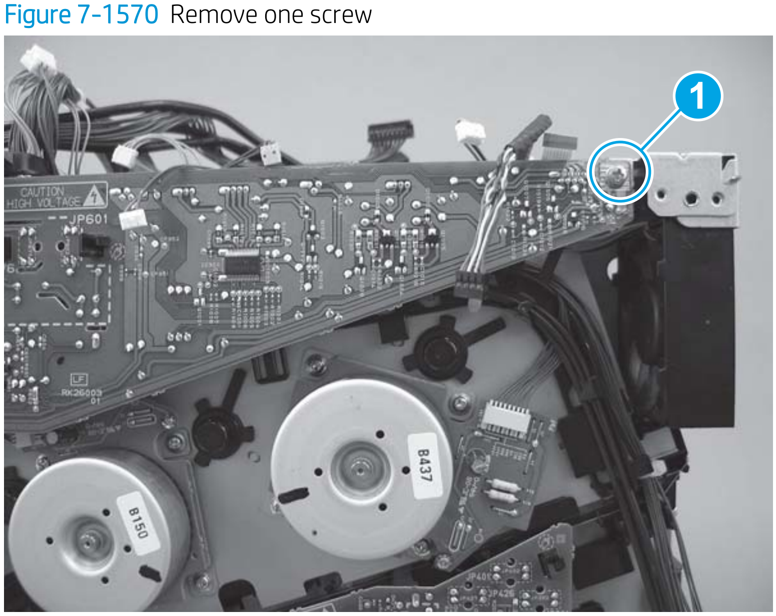
1. Disconnect five connectors (callout 1), and then disconnect one flat cable (callout 2).

Figure 7-1569 Disconnect five connectors and one flat cable



2. Remove one screw (callout 1).

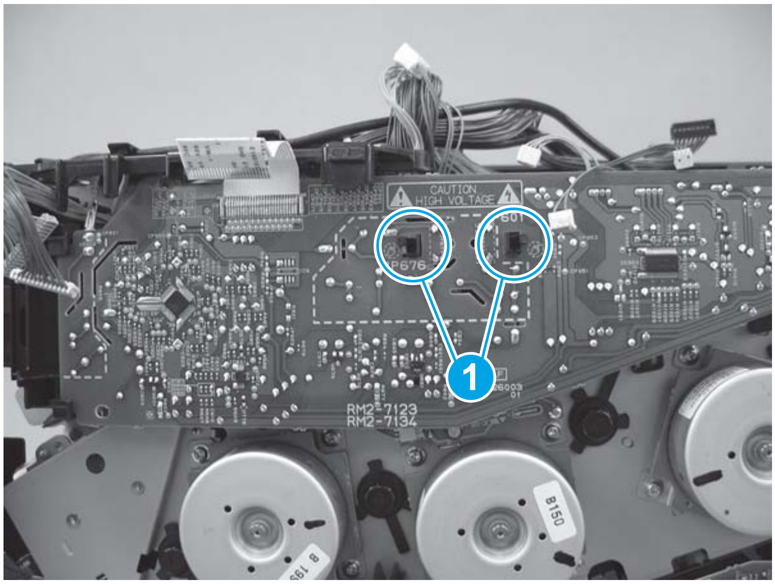
Figure 7-1570 Remove one screw



3. Release two tabs (callout 1), and then separate the HVPST from the printer.

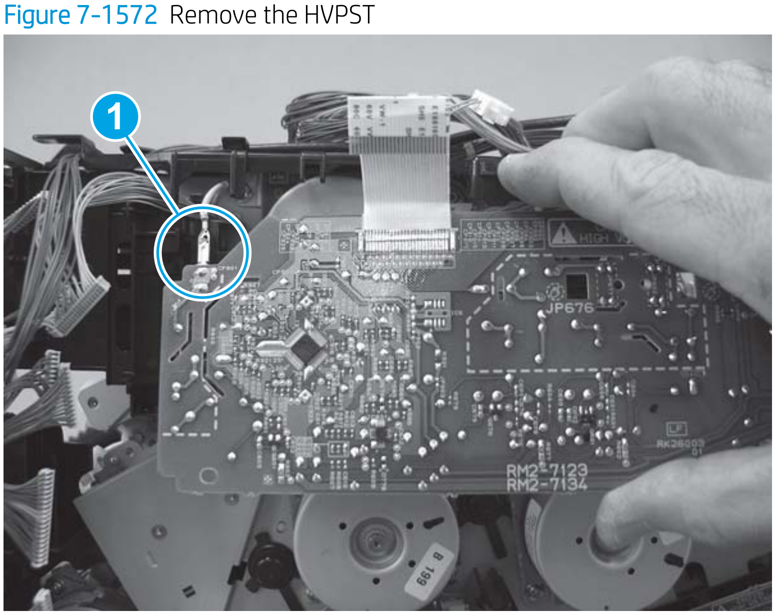
⚠ CAUTION: Do not attempt to completely remove the HVPST. It is still connected to the printer by ground wire harness.

Figure 7-1571 Release the HVPST



4. Release one ground wire connector (callout 1), and then remove the HVPST.

Figure 7-1572 Remove the HVPST



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Drum motor 2 (M2)

Learn about removing and replacing drum motor 2.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-74 Part information

Part number	Part description
RM2-0078-000CN	Drum motor 2 (M2)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

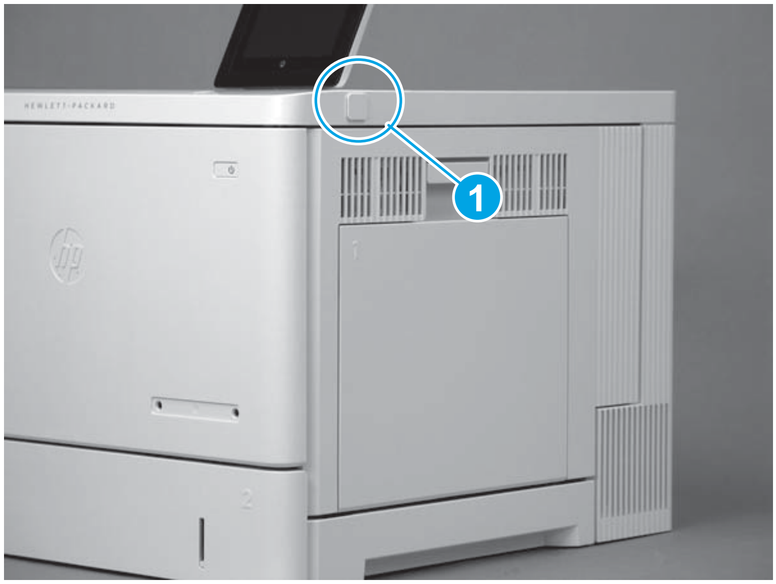
Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

> NOTE: This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-1573 Locate the USB cover



2. Pull the cover off of the printer to remove it.

Figure 7-1574 Remove the cover

Remove the control panel (M553x/M555/E55040)

Follow these steps to remove the control panel.

NOTE: This procedure is for the M553x/M555/E55040 printers only.

M555 models: Removing the control panel is similar to the procedure below. For the M555, a flat cable connects the control panel to the formatter.

1. Tilt the control panel up.

Figure 7-1575 Tilt the control panel up

2. Use the small flat-blade screwdriver supplied in this kit to release the control-panel screws cover tabs.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-1576 Release the control-panel screws cover tabs

3. Rotate the cover up to remove it.

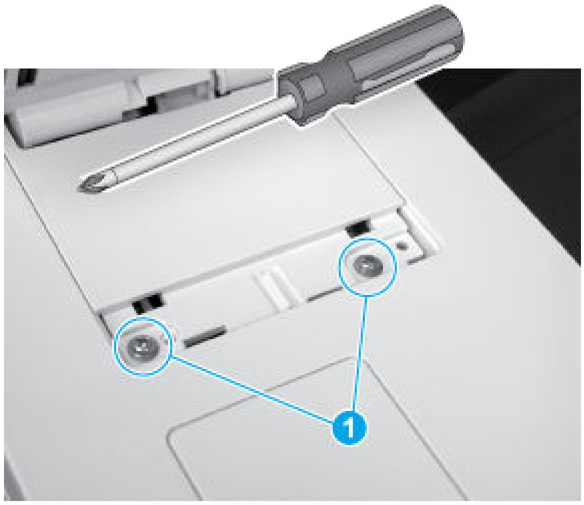
Figure 7-1577 Remove the cover

4. Use the small Phillips screwdriver supplied in this kit to remove two screws (callout 1).

IMPORTANT: Store the screws in a secure place where they cannot fall down into the printer.

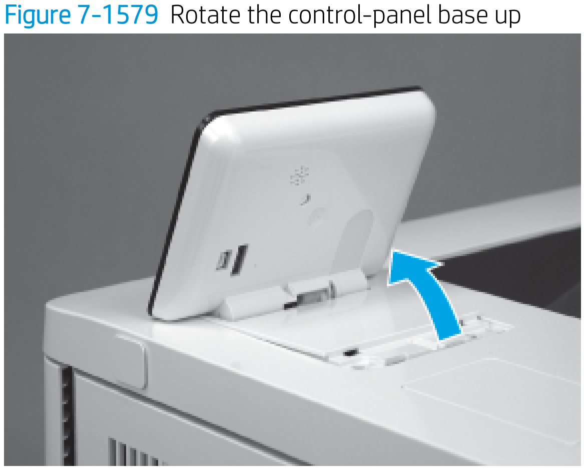
TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-1578 Remove two screws



5. Rotate the control-panel base toward the front of the printer.

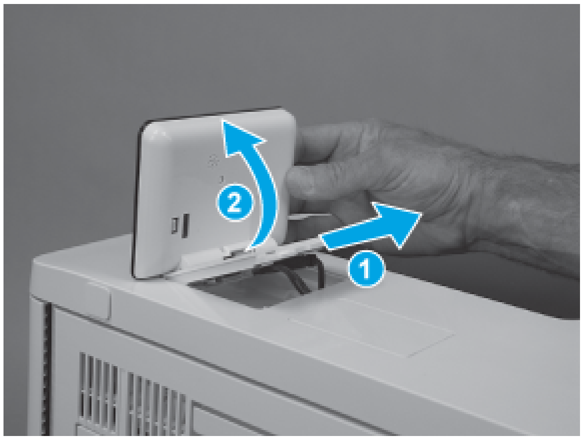
Figure 7-1579 Rotate the control-panel base up



6. Slightly slide the control-panel base toward the rear of the printer (callout 1) to release it, and then turn the control panel over (callout 2) to access the bottom side.

⚠ CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

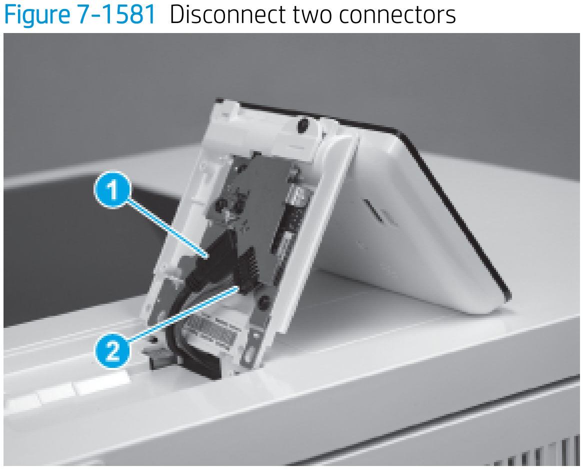
Figure 7-1580 Turn the control panel over



7. Disconnect one USB cable (callout 1), one connector (callout 2), and then remove the control panel.

NOTE: **M555 only**: Disconnect one flat cable (not shown), and then remove the control panel.

Figure 7-1581 Disconnect two connectors



Remove Tray 2

Learn about removing Tray 2.

NOTE: A SFP printer is shown in this section. However, the procedure is correct for all printer models.

The figures in this section show Tray 2. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5. Always carefully read the instructions that accompany the figures.

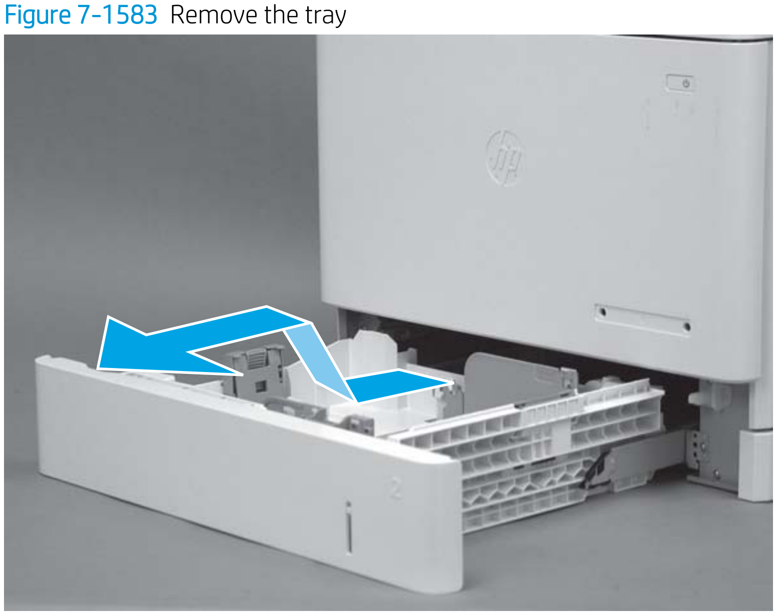
1. Pull the tray out until it stops.

Figure 7-1582 Pull the tray out

2. Lift the front of the tray, and then pull it out of the printer to remove it.

NOTE: **For a replacement tray:** If the tray has Fixed Tray Guides installed and are still required, move hardware to new tray. If necessary, order new kit: 3GY25–67901 Kit - Fixed Tray Guide. Only one kit required per engine.

Figure 7-1583 Remove the tray



Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-1584 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-1585 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

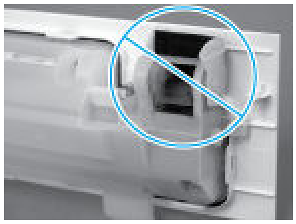
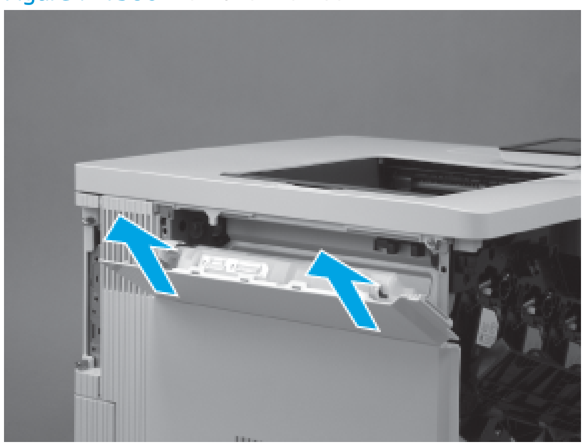


Figure 7-1586 Remove the TCU

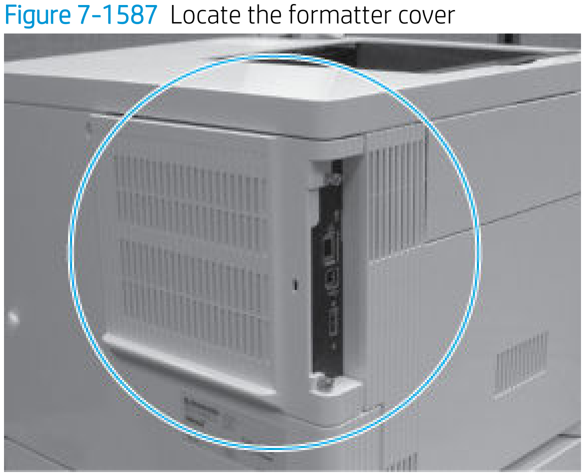


Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

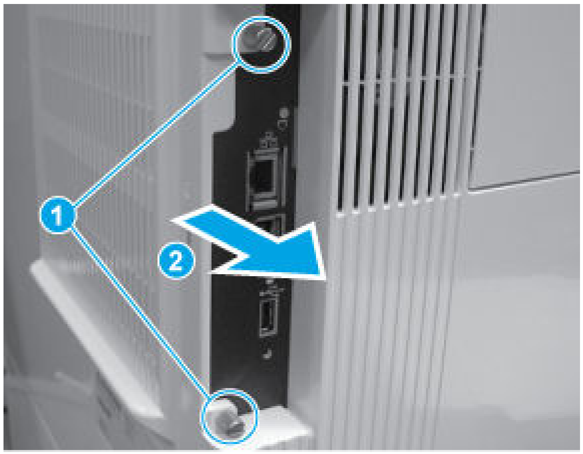
Figure 7-1587 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-1588 Loosen the thumbscrews



Remove the formatter (SFP)

Follow these steps to remove the formatter.

NOTE: This procedure is for SFP models only.

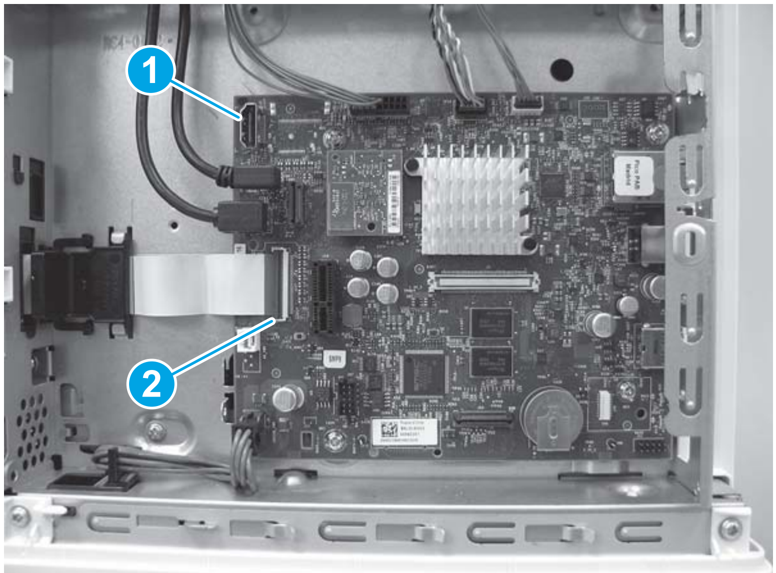
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)
   - All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
   - M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)
   - All models: J57
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

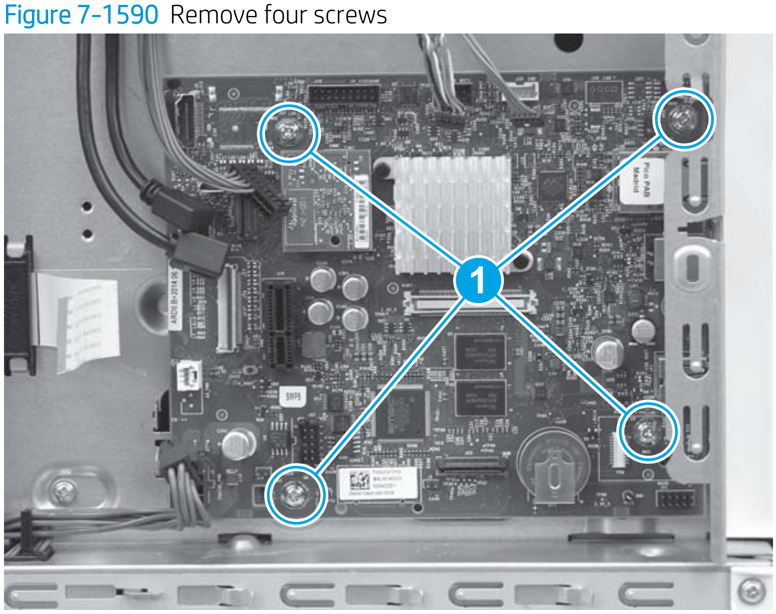
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1589 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-1590 Remove four screws



Remove the hard-disk drive (HDD)

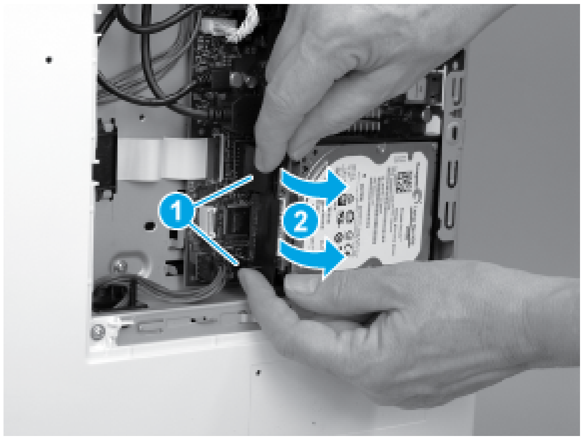
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-1591 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-1592 Remove the HDD

Remove the fax PCA (fax models)

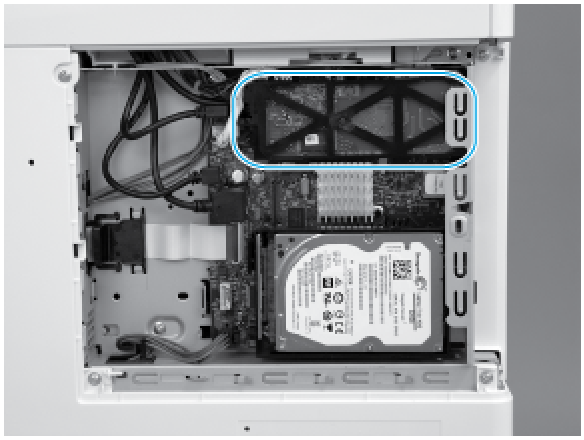
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

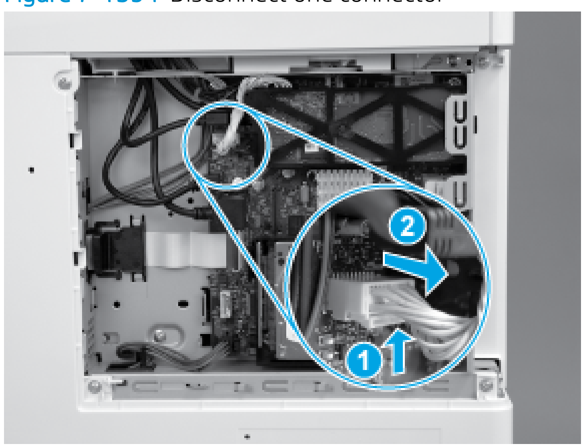
1. Locate the fax PCA component on the formatter.

Figure 7-1593 Locate the fax PCA



2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-1594 Disconnect one connector

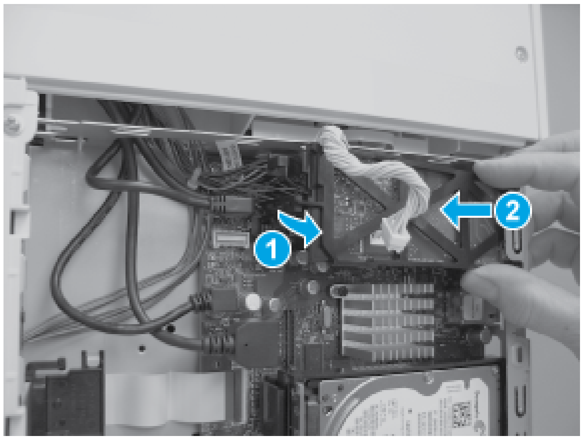


3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-1595 Release one latch

4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-1596 Remove the fax PCA



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

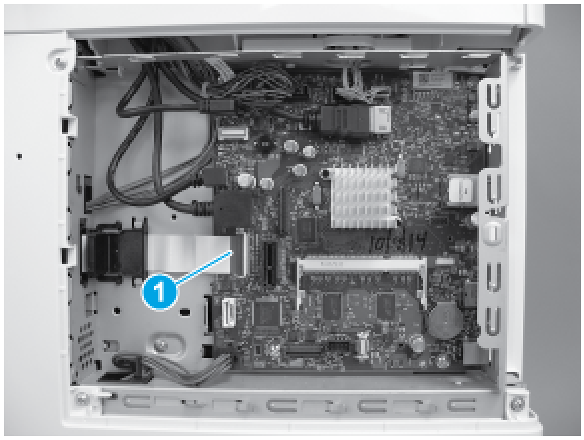
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

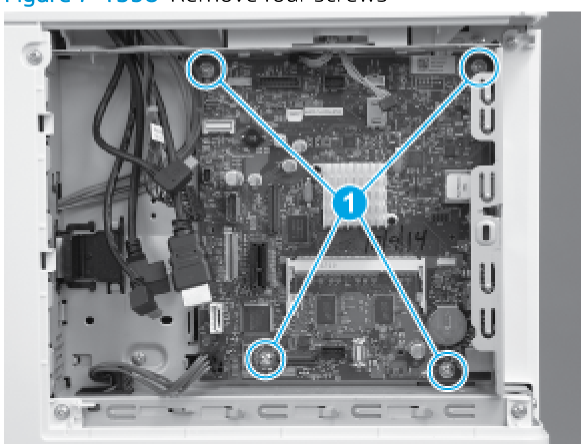
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1597 Disconnect all connectors



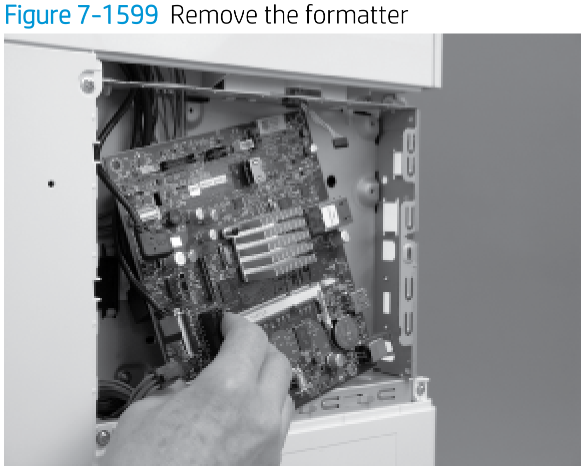
2. Remove four screws (callout 1).

Figure 7-1598 Remove four screws



3. Remove the formatter.

Figure 7-1599 Remove the formatter



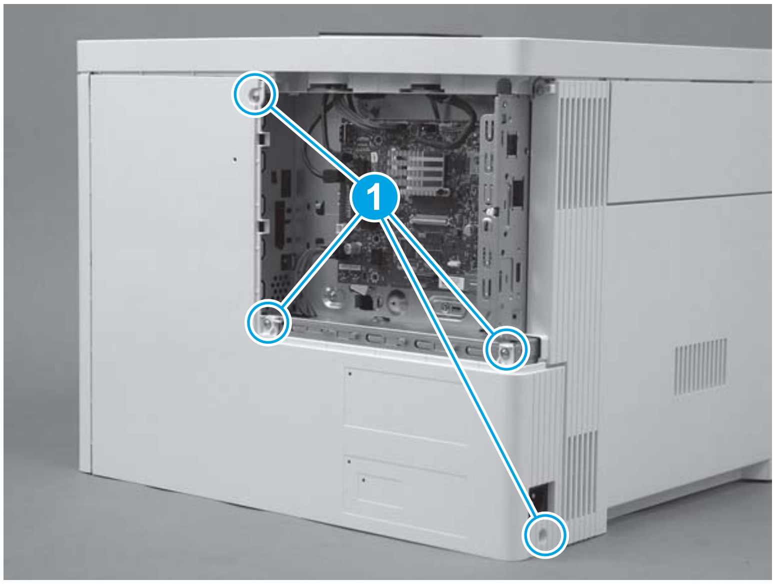
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

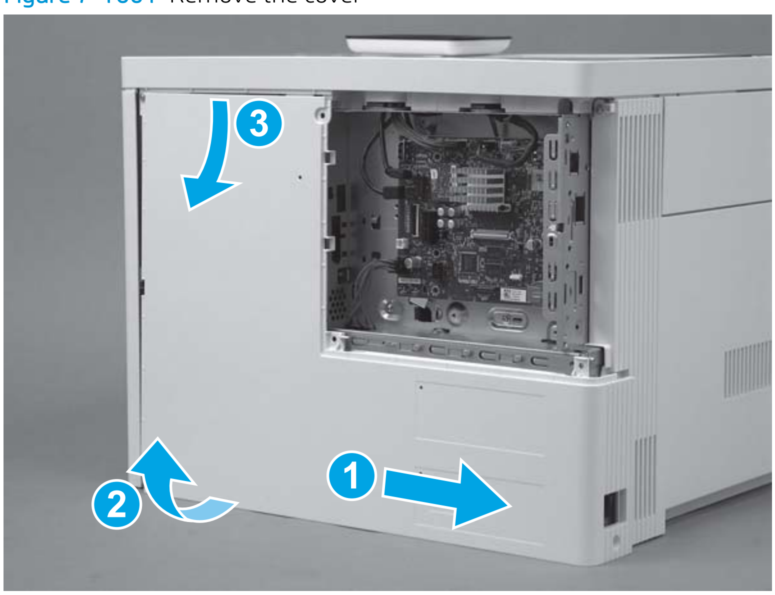
1. Remove four screws (callout 1).

Figure 7-1600 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-1601 Remove the cover



Remove the rear upper cover (MFP)

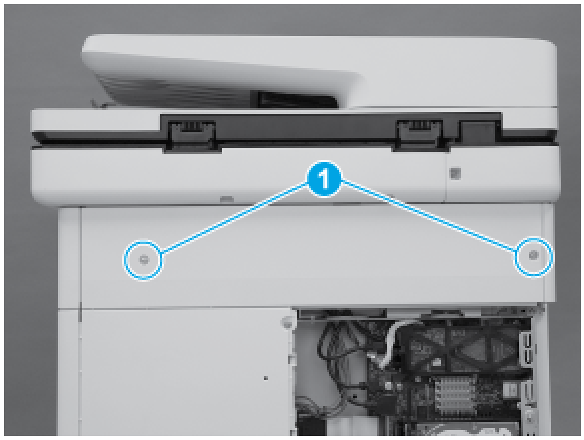
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

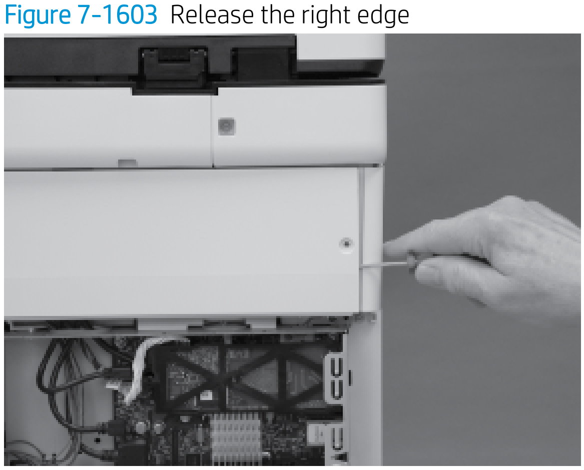
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-1602 Remove two screws



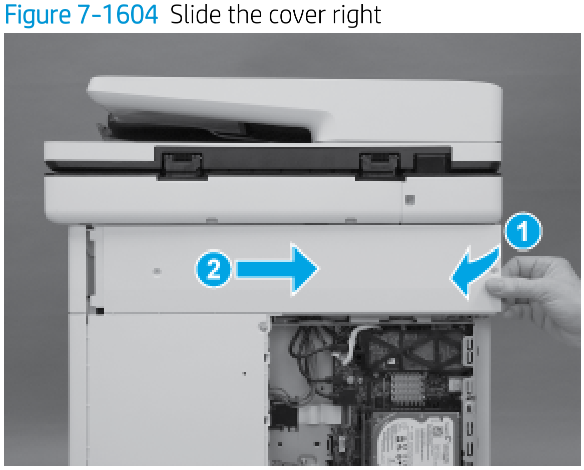
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-1603 Release the right edge



3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-1604 Slide the cover right



4. Remove the cover.

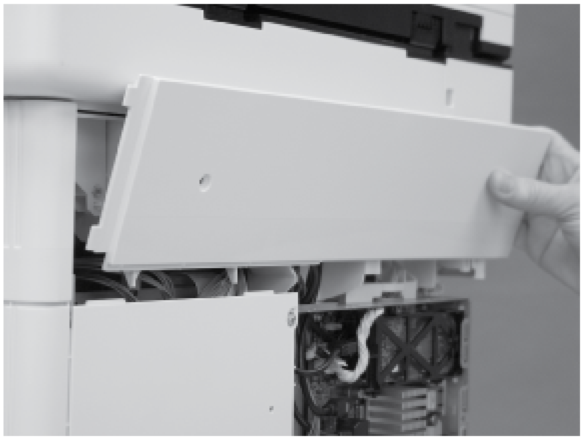


Figure 7-1605 Remove the cover

Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-1606 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-1607 Remove the cover

Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

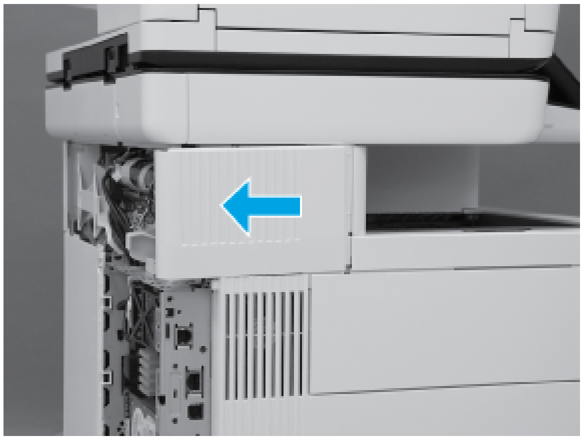
NOTE: This procedure is for MFP models only.

1. At the left side of the printer, release one tab (callout 1).

Figure 7-1608 Release one tab

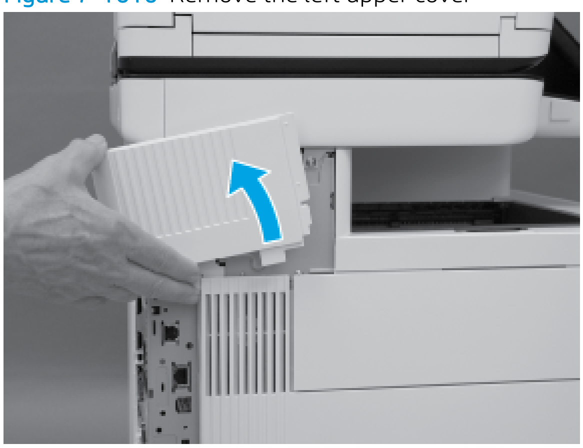
2. Slide the left upper cover toward the back of the printer.

Figure 7-1609 Slide the cover back



3. Rotate the cover up to remove it.

Figure 7-1610 Remove the left upper cover



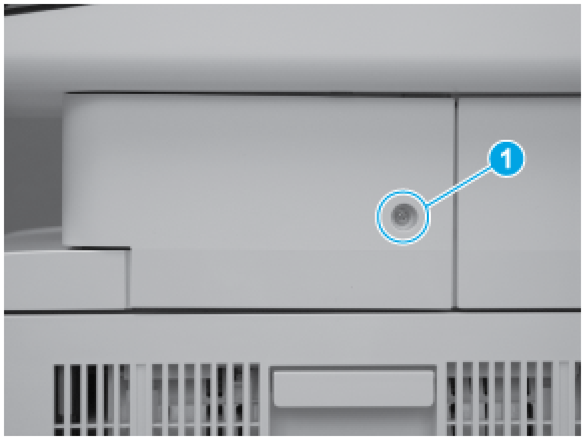
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-1611 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-1612 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-1613 Rotate the cover

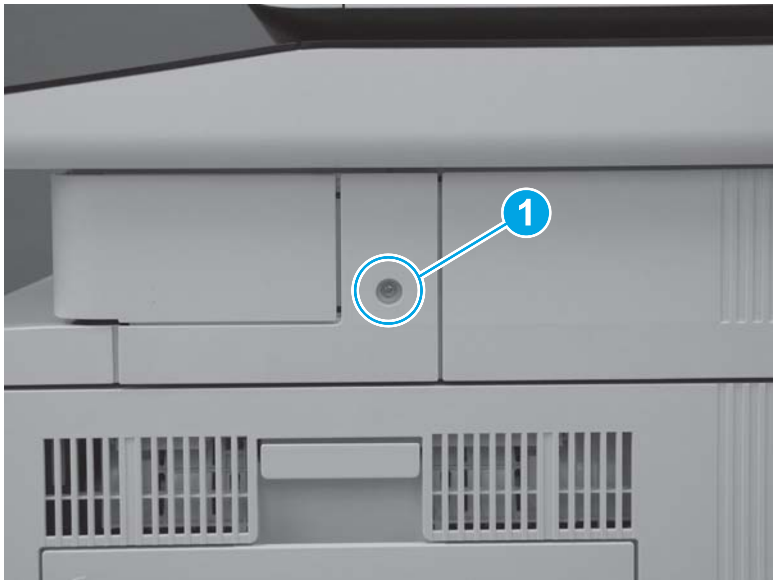
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

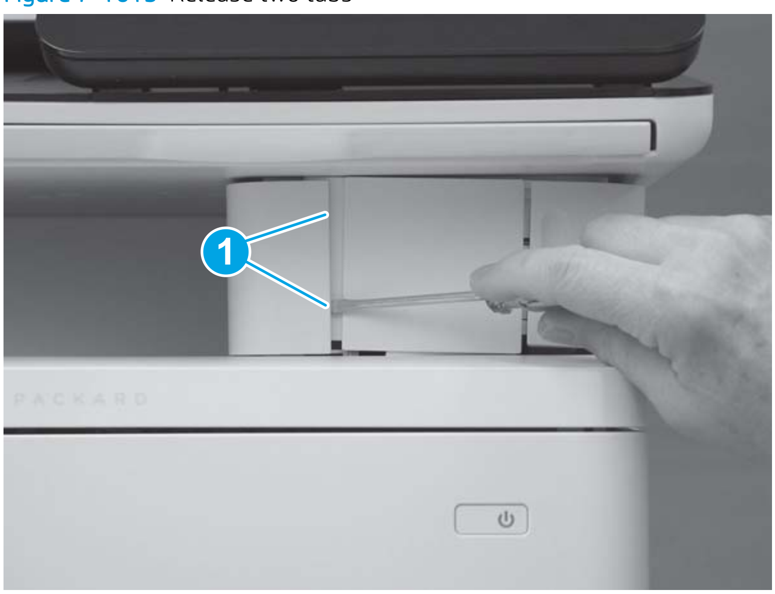
1. Remove one screw (callout 1).

Figure 7-1614 Remove one screw



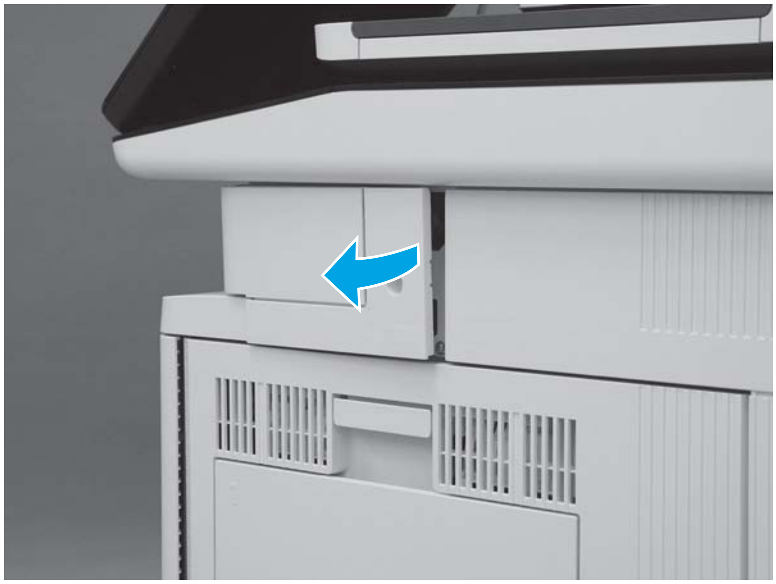
2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-1615 Release two tabs



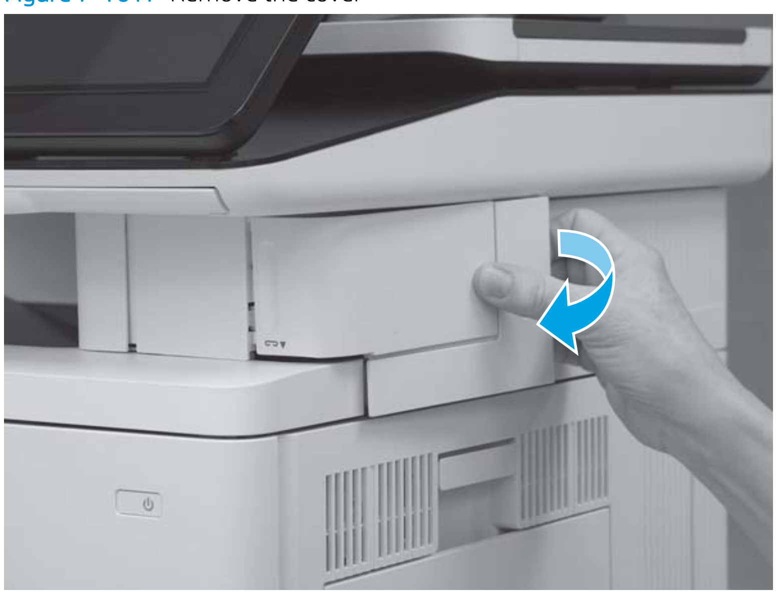
3. Release the back edge of the cover.

Figure 7-1616 Release the back edge of the cover



4. Rotate the cover away from the printer to remove it.

Figure 7-1617 Remove the cover



Remove the integrated scanner assembly (ISA) (MFP)

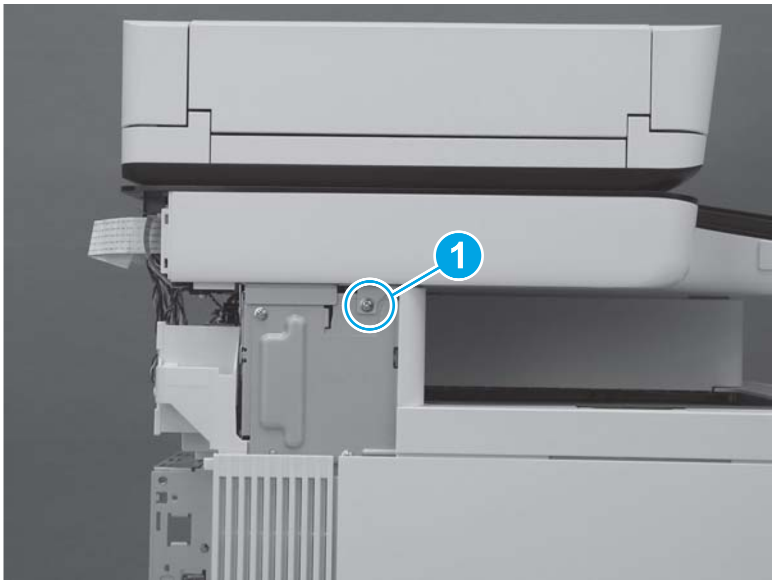
Follow these steps to remove the integrated scanner assembly (ISA).

NOTE: This procedure is for MFP models only.

NOTE: The ISA includes the document feeder, image scanner, scanner control board (SCB), control panel, keyboard (flow models) and NFC PCA (not all models).

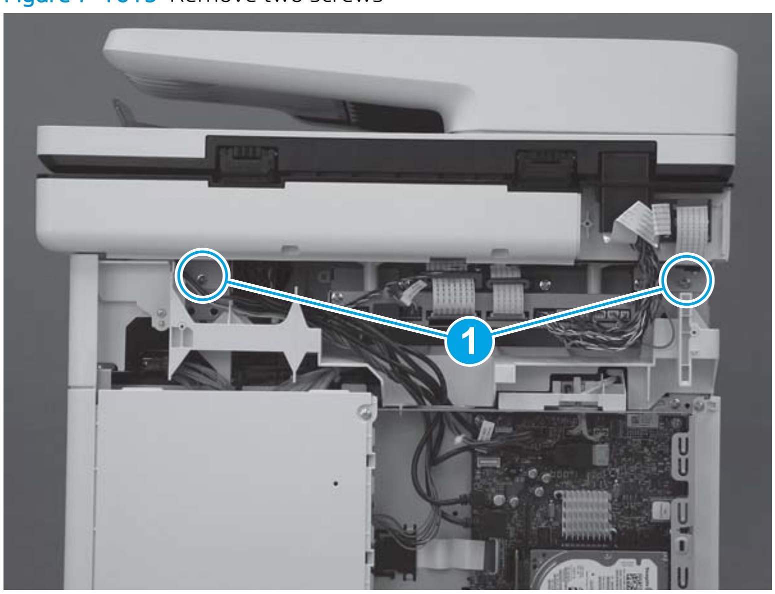
1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1618 Remove one screw



2. At the back of the printer, remove two screws (callout 1).

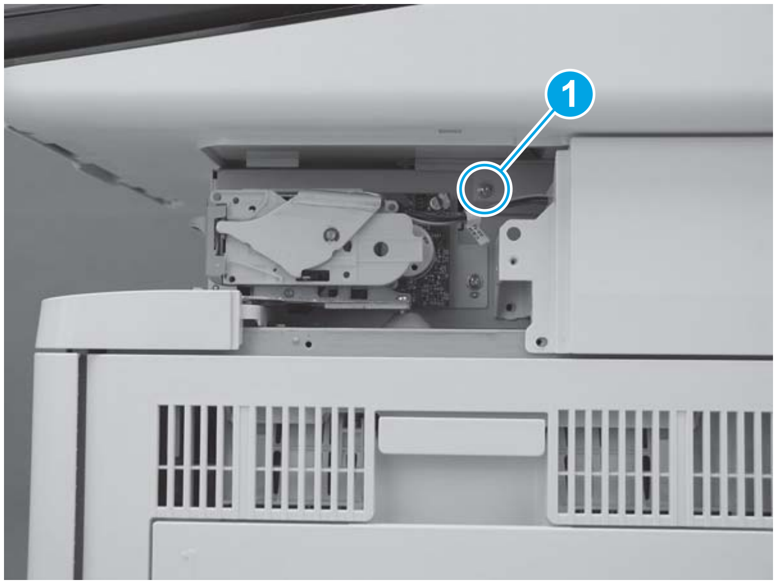
Figure 7-1619 Remove two screws



3. At the right side of the printer, remove one screw (callout 1).

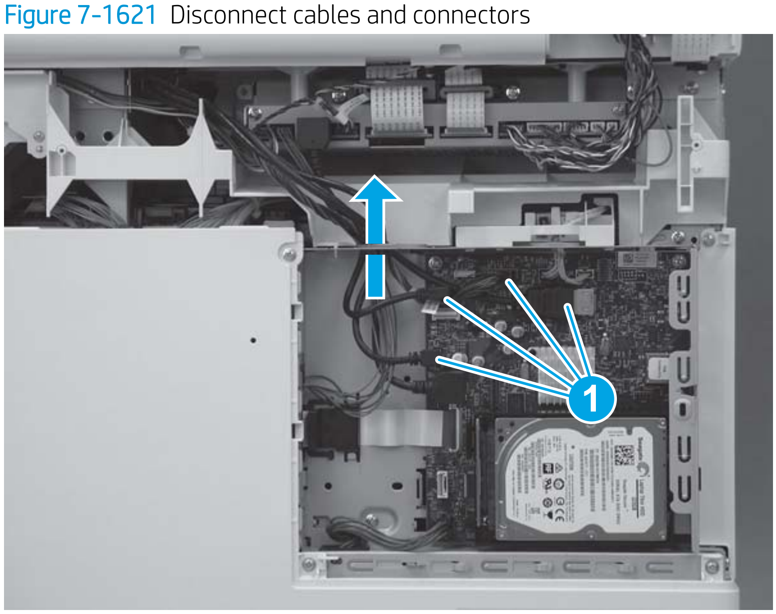
NOTE: The M577z is shown in the figure below. The procedure is correct for all MFP models.

Figure 7-1620 Remove one screw



4. Disconnect four connectors (callout 1) on the formatter, and then pass the wire harnesses and cables through the top opening in the formatter case (callout 2).

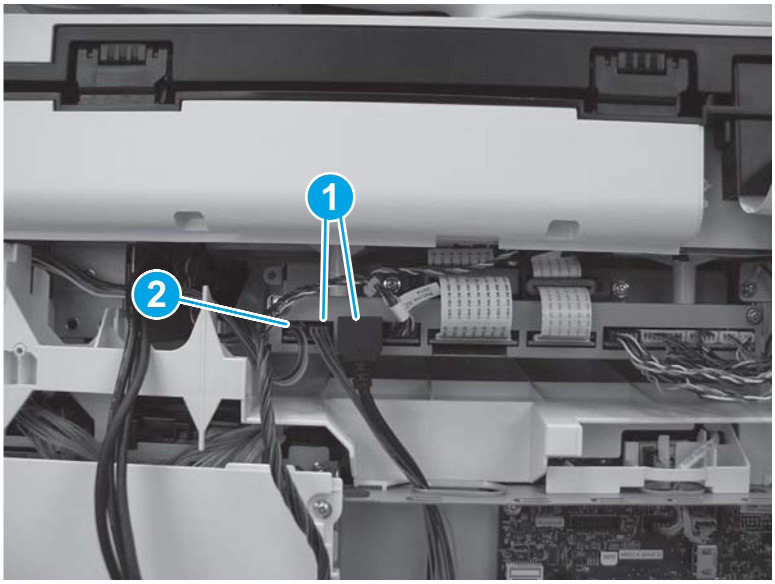
Figure 7-1621 Disconnect cables and connectors



5. Disconnect two connectors on the scanner control board (callout 1).

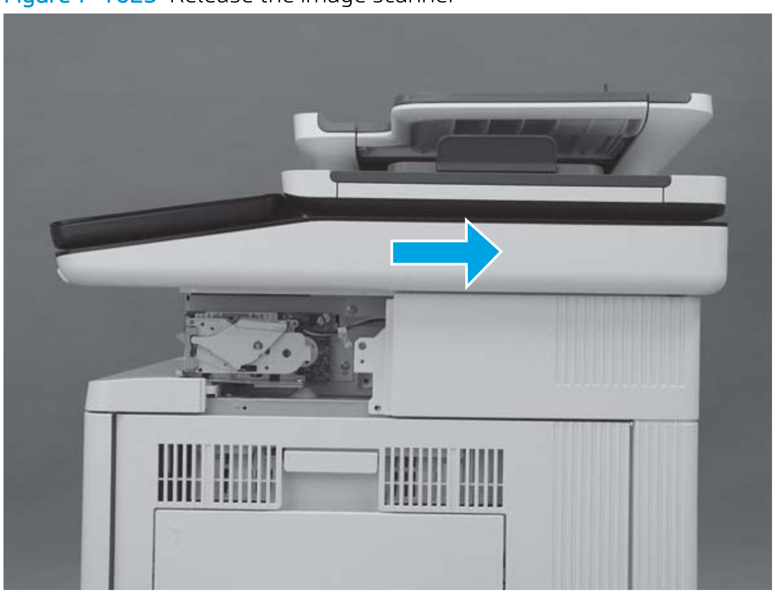
MFP stapler models: Disconnect one connector for the stapler on the scanner control board (callout 2).

Figure 7-1622 Disconnect connectors



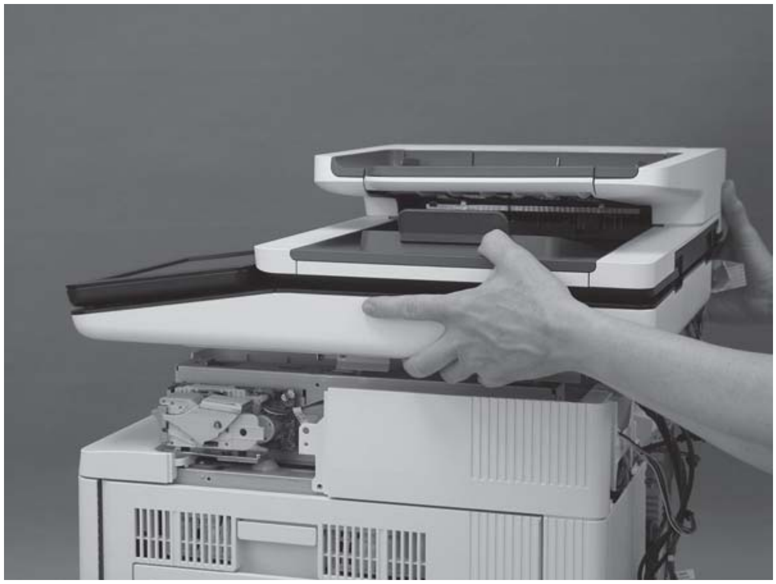
6. Slide the image scanner toward the back of the printer to release it.

Figure 7-1623 Release the image scanner



7. Lift the ISA straight up to remove it.

Figure 7-1624 Remove the ISA



Remove the right upper cover (MFP)

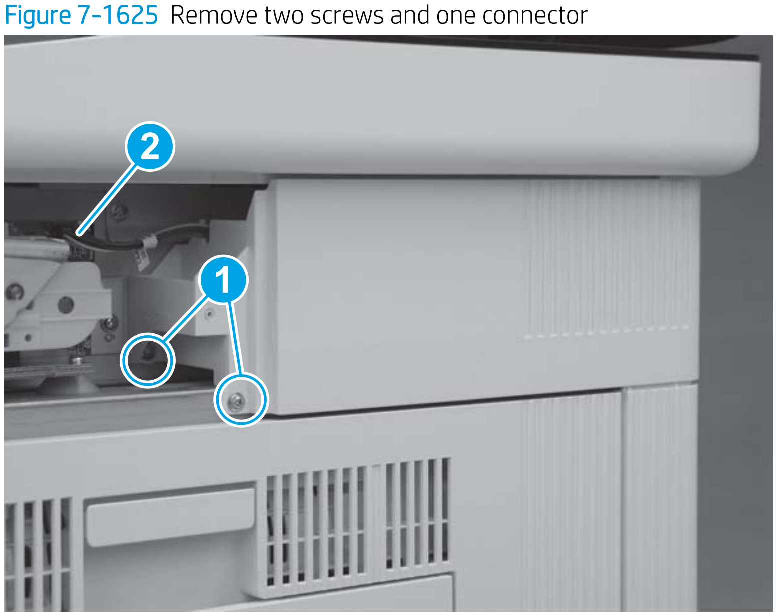
Follow these steps to remove the right upper cover.

NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Figure 7-1625 Remove two screws and one connector

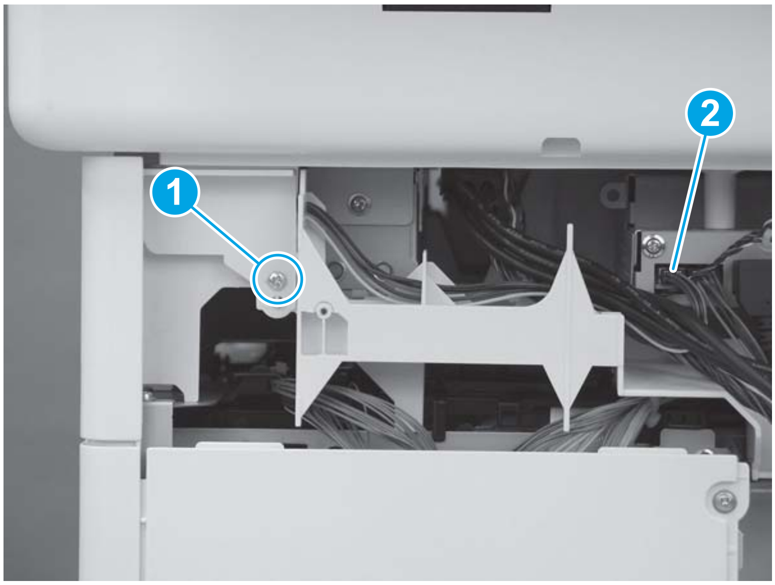


2. At the back of the printer, remove one screw (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Reinstallation tip: This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

   Figure 7-1626 Remove one screw and connector



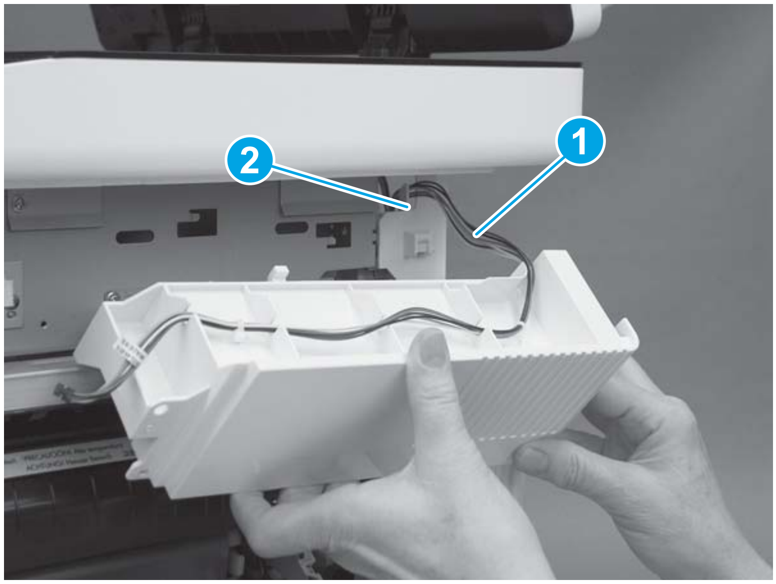
3. Slide the cover toward the back of the printer.

   Figure 7-1627 Slide the cover

4. Lift the cover away from the printer to remove it.

   M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

   Figure 7-1628 Remove the cover

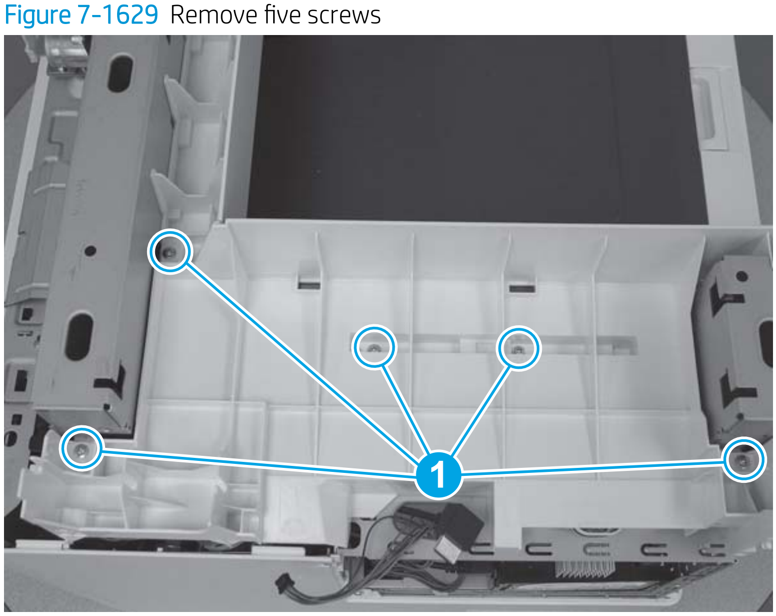
Remove the top rear cover (MFP)

Follow these steps to remove the top rear cover.

> NOTE: This procedure is for MFP models only.

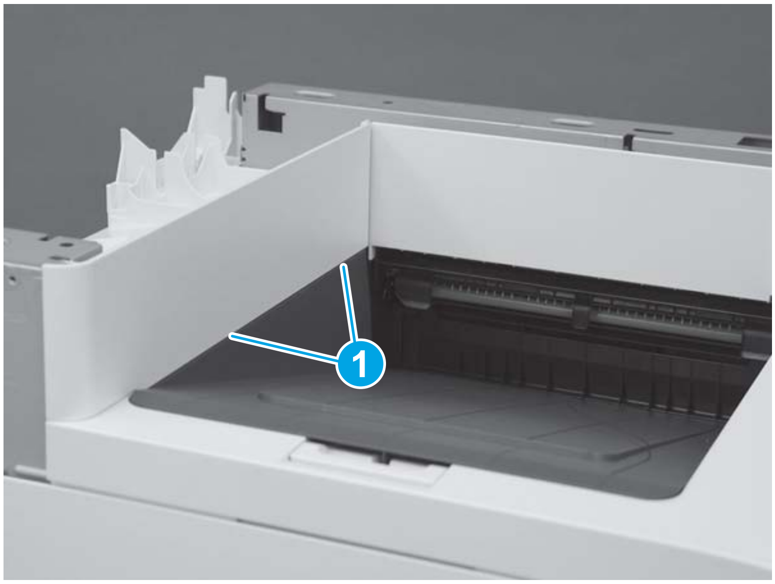
1. At the top of the printer, remove five screws (callout 1).

   Figure 7-1629 Remove five screws

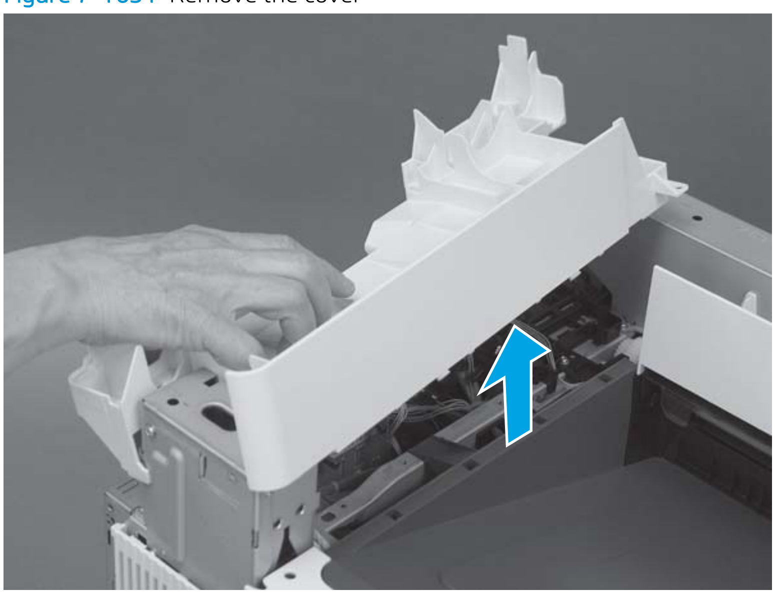
2. Release two tabs (callout 1) on the front edge of the cover.

Figure 7-1630 Release two tabs



3. Remove the top rear cover.

Figure 7-1631 Remove the cover



Remove the left cover

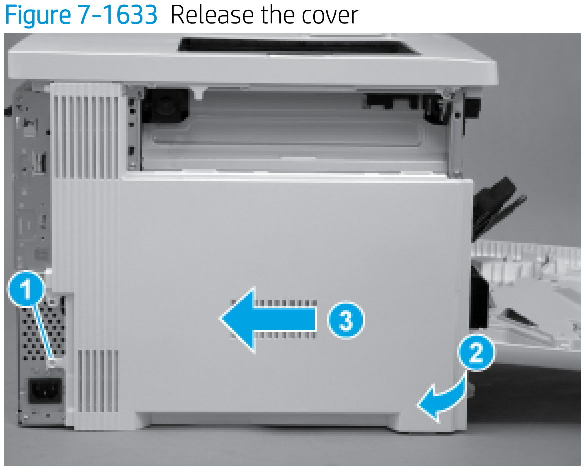
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1632 Remove one screw

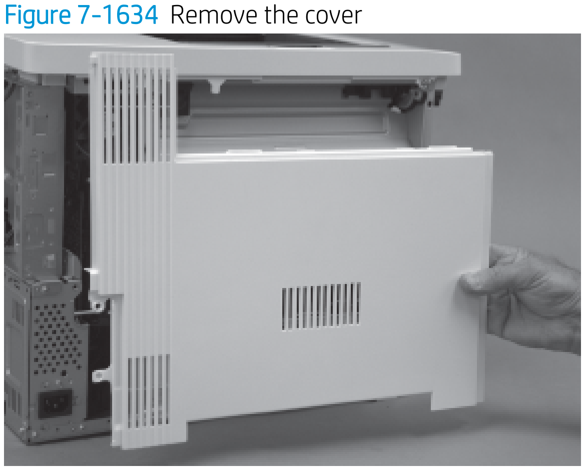
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-1633 Release the cover



3. Remove the cover.

Figure 7-1634 Remove the cover



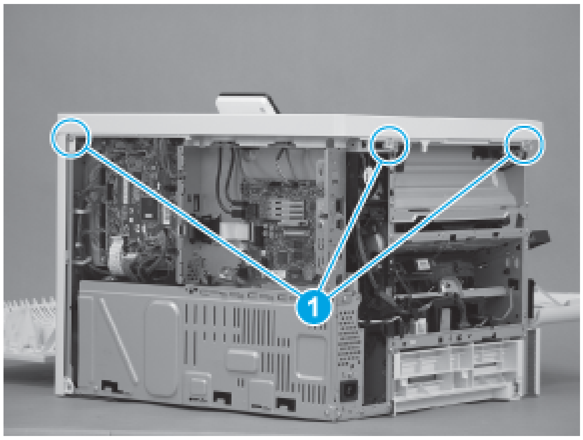
Remove the upper cover (SFP)

Follow these steps to remove the upper cover.

NOTE: This procedure is for SFP models only.

1. Remove three screws (callout 1).

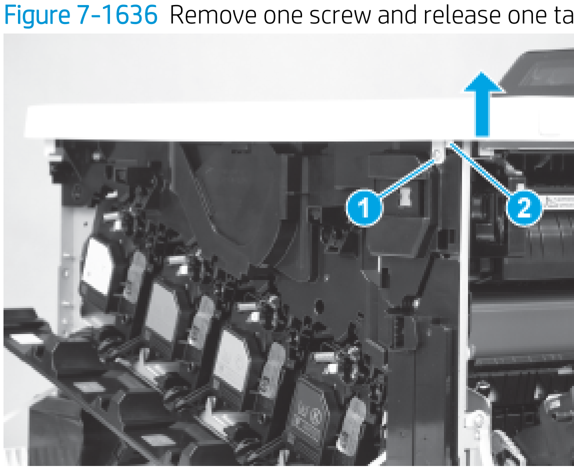
Figure 7-1635 Remove three screws



2. Remove one screw (callout 1), release one tab (callout 2), and then slightly separate the corner of the cover from the chassis.

NOTE: This is a self-tapping plastic-thread screw. Make sure that this screw is used in this location when it is reinstalled.

Figure 7-1636 Remove one screw and release one tab

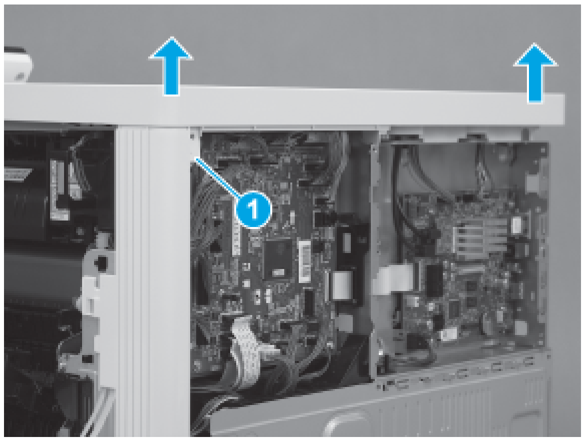


3. Release one tab (callout 1), and then lift up on the cover to release it.

IMPORTANT: **M554 models**: Disconnect the control-panel flat cable at the formatter.

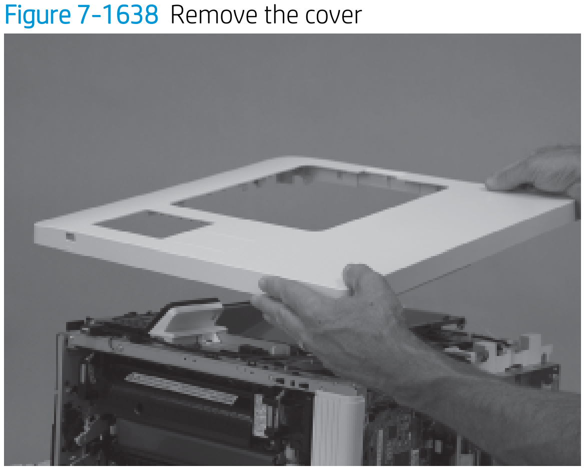
NOTE: If the cover does not release, check for addition tabs by locating the triangles embossed in the cover at tab locations.

Figure 7-1637 Release the cover



4. Remove the cover.

Figure 7-1638 Remove the cover

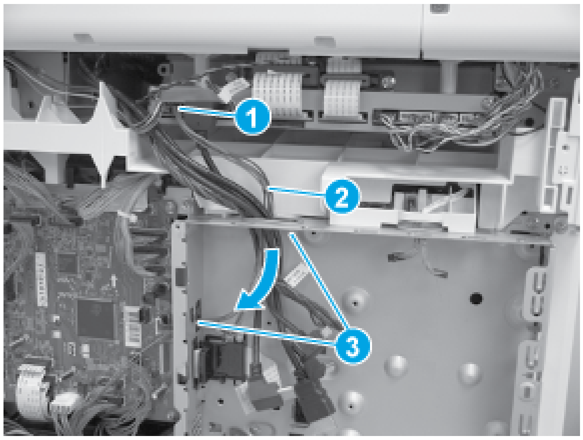


Remove the formatter case

Follow these steps to remove the formatter case.

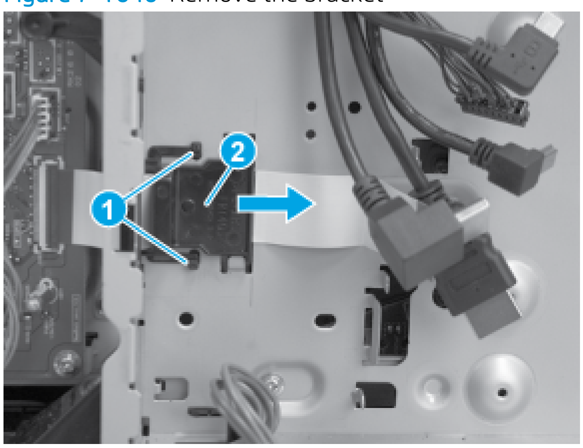
1. **MFP only**: Disconnect one connector (callout 1), and then pass the wire harness (callout 2) through two openings in the formatter case (callout 3).

Figure 7-1639 Disconnect one connector



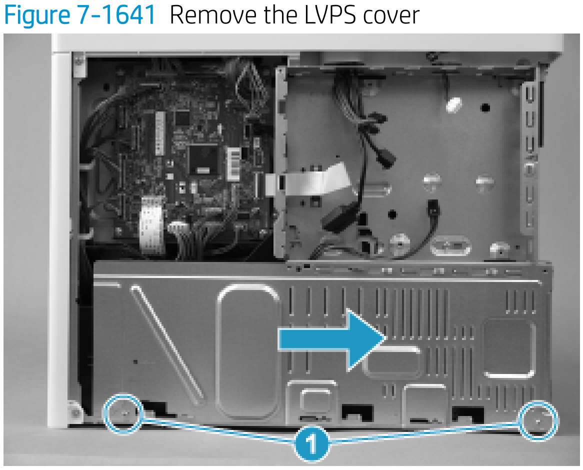
2. Release two tabs (callout 1) on the black plastic bracket. Hold the tabs in the released position, and then slide the bracket (callout 2) to the right to remove it from the formatter case.

Figure 7-1640 Remove the bracket



3. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

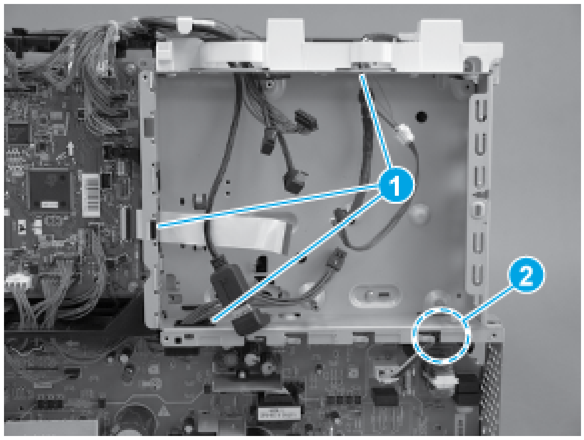
Figure 7-1641 Remove the LVPS cover



4. Pass two wire harnesses and one flat cable (callout 1) through the opening in the formatter case, and then release one wire harness from the retainer (callout 2).

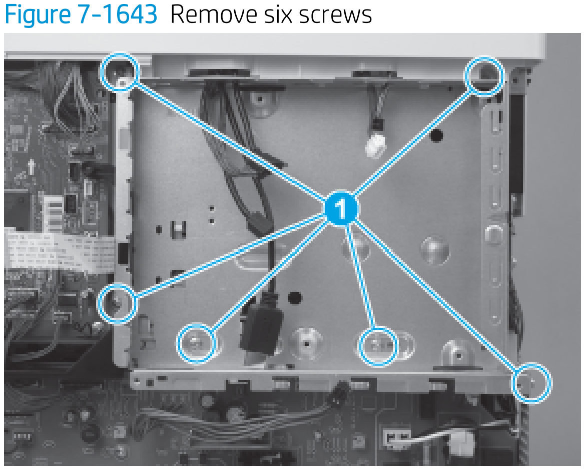
CAUTION: The flat cable might be attached to the formatter case with double-sided tape. Make sure that this tape is released, so that the flat cable is not damaged when the formatter case is removed.

Figure 7-1642 Release wire harnesses and flat cable



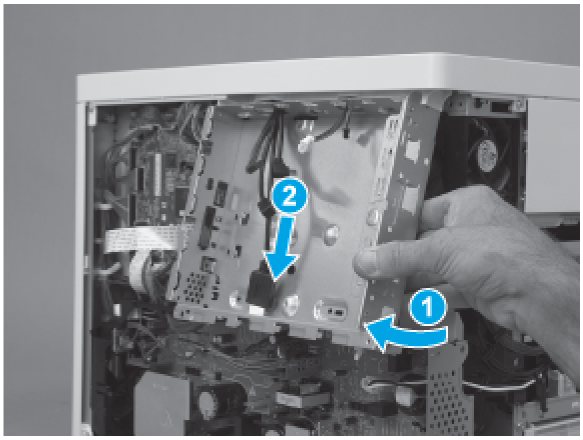
5. Remove six screws (callout 1).

Figure 7-1643 Remove six screws



6. Rotate the bottom of the formatter case away from the printer (callout 1), and then pull it down (callout 2) to release it.

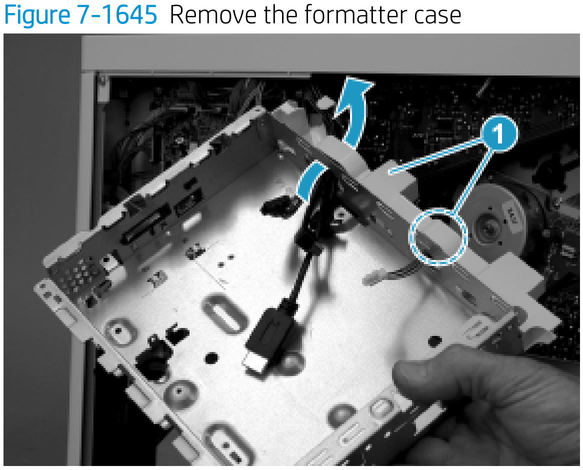
Figure 7-1644 Release the formatter case



7. Pass the wire harnesses through the opening in the formatter case to remove it.

IMPORTANT: If the formatter case is removed so that it can be replaced, make sure to transfer the memory PCA (island of data) and plastic bracket (callout 1) to the replacement case.

Figure 7-1645 Remove the formatter case



Remove the right rear cover

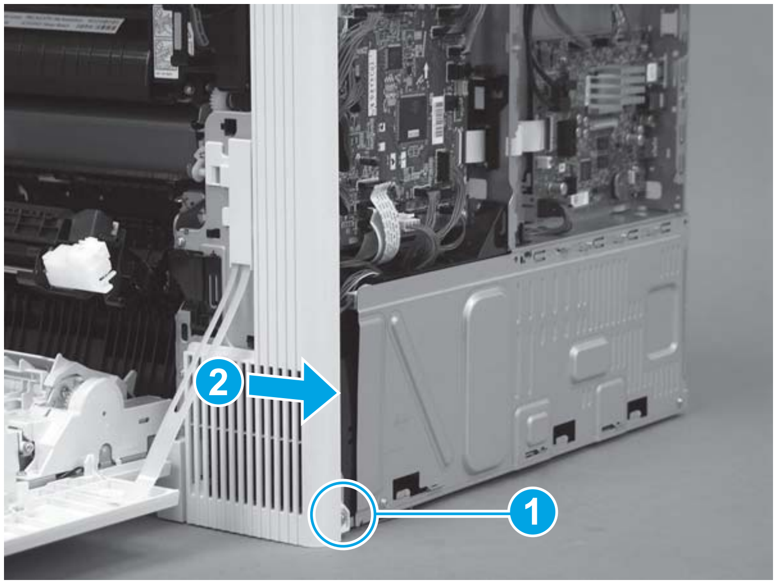
Follow these steps to remove the right rear cover.

NOTE: The figures in this topic show a SFP model. However, the procedure is correct for an MFP.

1. Remove one screw (callout 1), and then slide the cover toward the rear of the printer (callout 2) to release it.

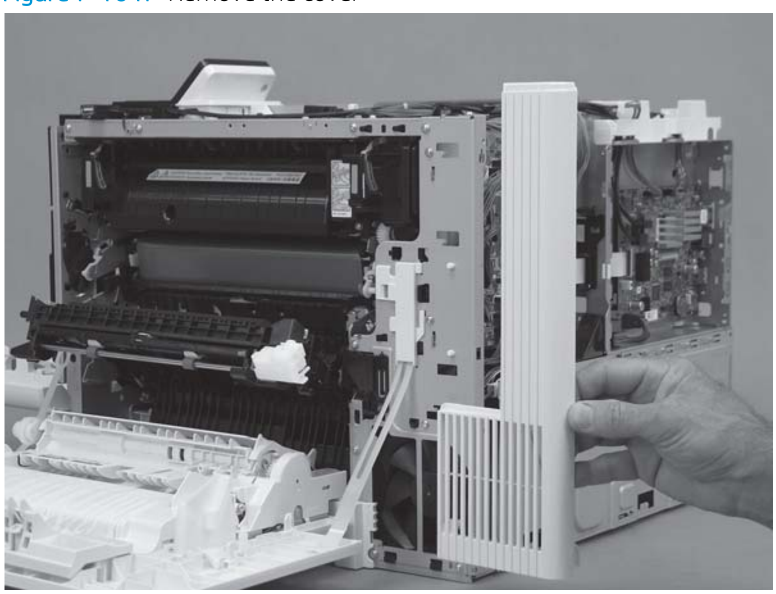
TIP: If the right door is closed, open it now.

Figure 7-1646 Release the cover



2. Remove the cover.

Figure 7-1647 Remove the cover



Remove the DC controller (DCC) and sheet-metal bracket

Follow these steps to remove the DC controller and sheet-metal bracket together.

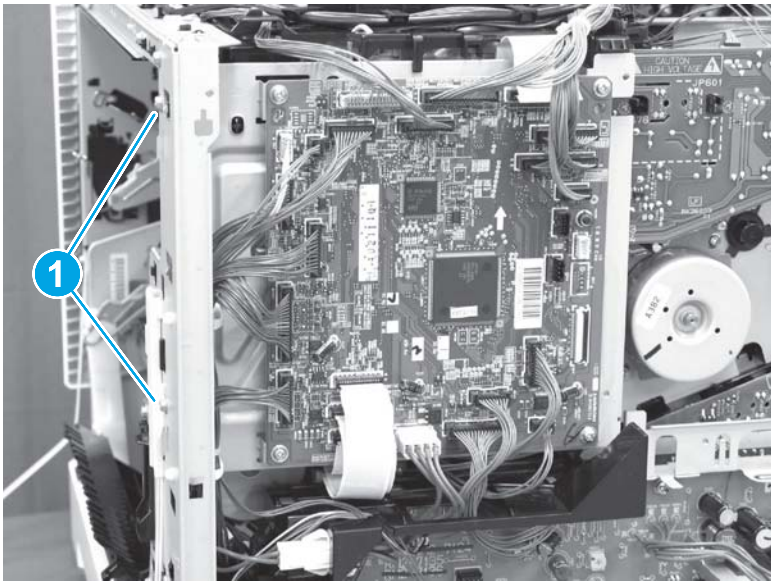
NOTE: ESD sensitive part.

1. Disconnect all of the connectors, and then remove two screws (callout 1).

Empty DCC connectors

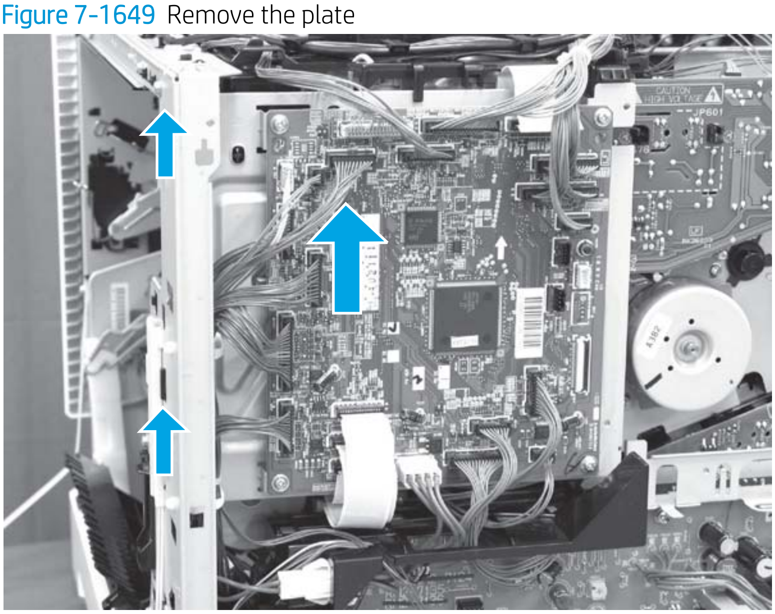
- J140
- J141
- J143

Figure 7-1648 Remove two screws



2. Lift up on the DC controller and sheet-metal plate to remove it.

Figure 7-1649 Remove the plate



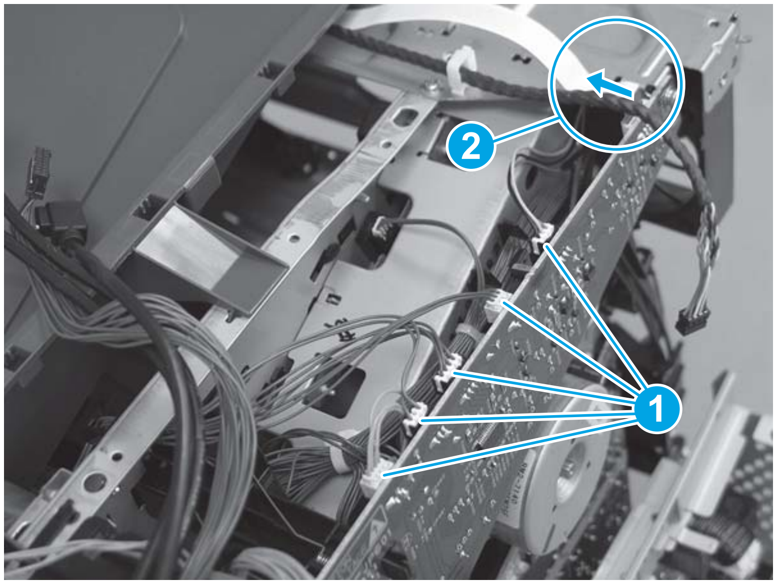
Remove the high-voltage power supply T (HVPST)

Follow these steps to remove the high-voltage power supply T.

NOTE: ESD sensitive part.

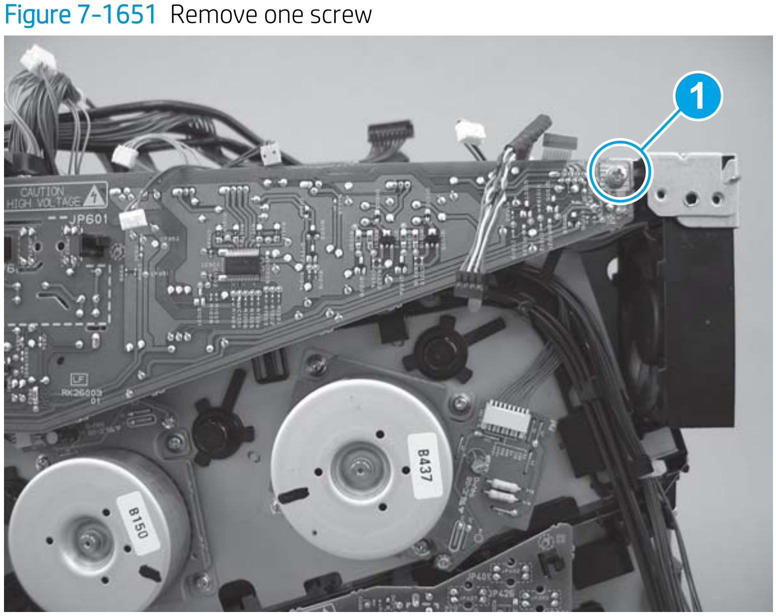
1. Disconnect five connectors (callout 1), and then disconnect one flat cable (callout 2).

Figure 7-1650 Disconnect five connectors and one flat cable



2. Remove one screw (callout 1).

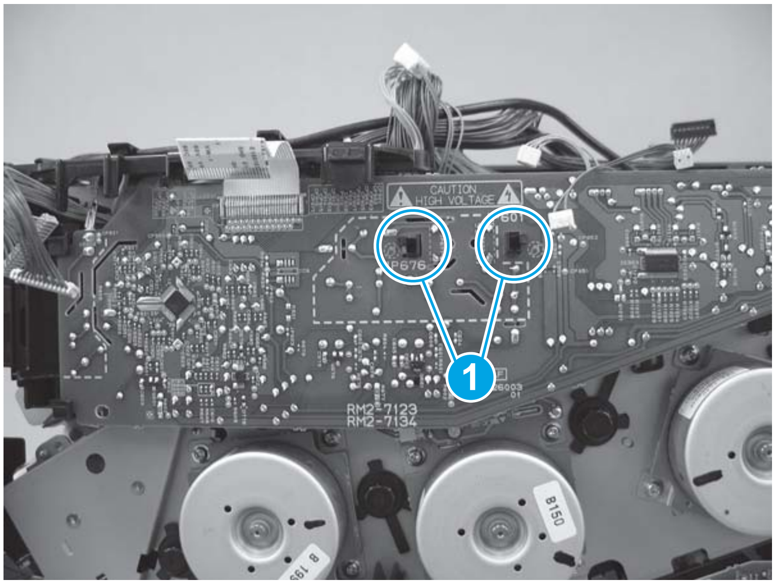
Figure 7-1651 Remove one screw



3. Release two tabs (callout 1), and then separate the HVPST from the printer.

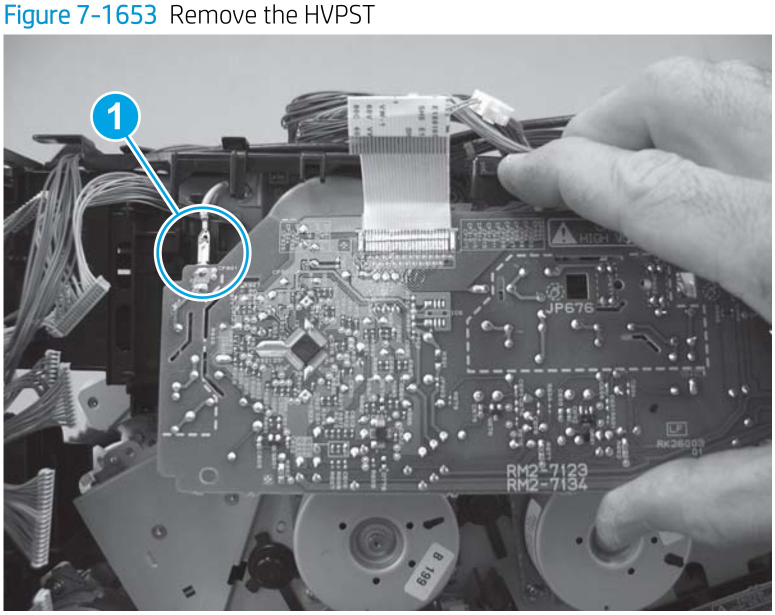
> ⚠ CAUTION: Do not attempt to completely remove the HVPST. It is still connected to the printer by ground wire harness.

Figure 7-1652 Release the HVPST



4. Release one ground wire connector (callout 1), and then remove the HVPST.

Figure 7-1653 Remove the HVPST

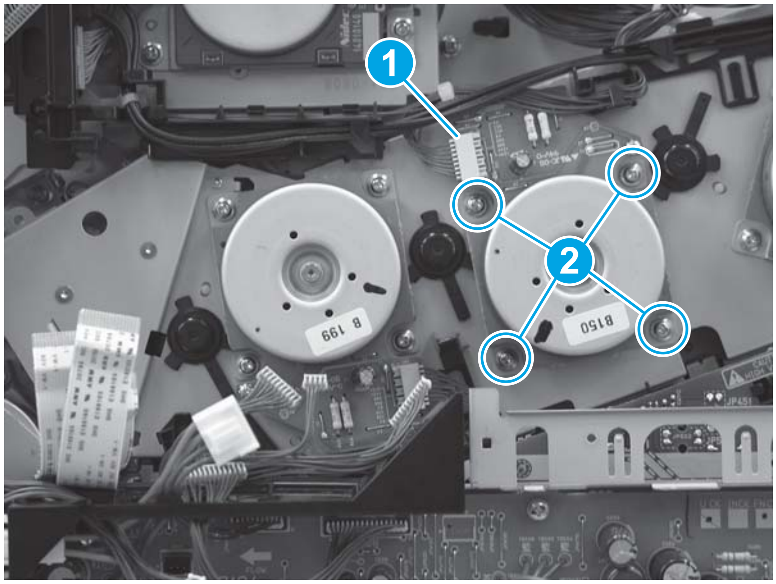


Remove drum motor 2 (M2)

Follow these steps to remove drum motor 2.

▲ Disconnect one connector (callout 1), remove four screws (callout 2), and then remove the motor.

Figure 7-1654 Remove the motor



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Drum motor 3 (M3)

Learn about removing and replacing drum motor 3.

Before performing service

Turn the printer power off

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-75 Part information

Part number	Part description
RM2-0078-000CN	Drum motor 3 (M3)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

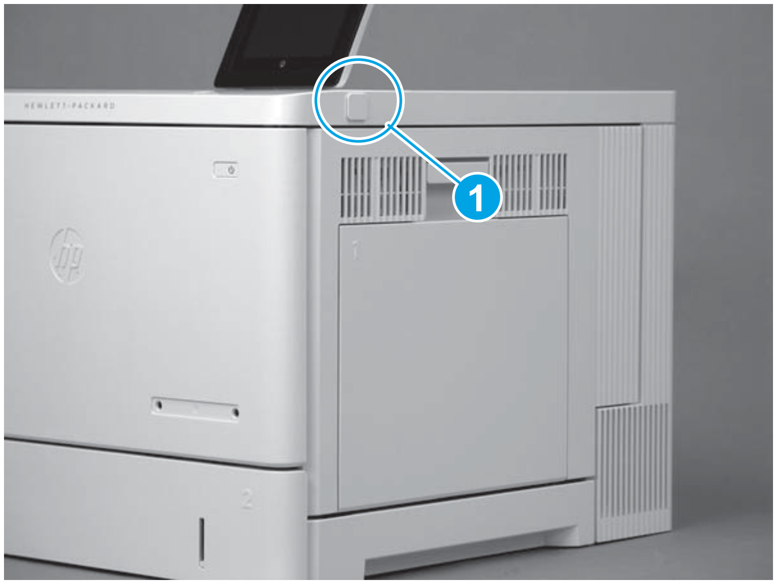
Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

NOTE: This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-1655 Locate the USB cover



2. Pull the cover off of the printer to remove it.

Figure 7-1656 Remove the cover

Remove the control panel (M553x/M555/E55040)

Follow these steps to remove the control panel.

NOTE: This procedure is for the M553x/M555/E55040 printers only.

M555 models: Removing the control panel is similar to the procedure below. For the M555, a flat cable connects the control panel to the formatter.

1. Tilt the control panel up.

Figure 7-1657 Tilt the control panel up

2. Use the small flat-blade screwdriver supplied in this kit to release the control-panel screws cover tabs.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-1658 Release the control-panel screws cover tabs

3. Rotate the cover up to remove it.

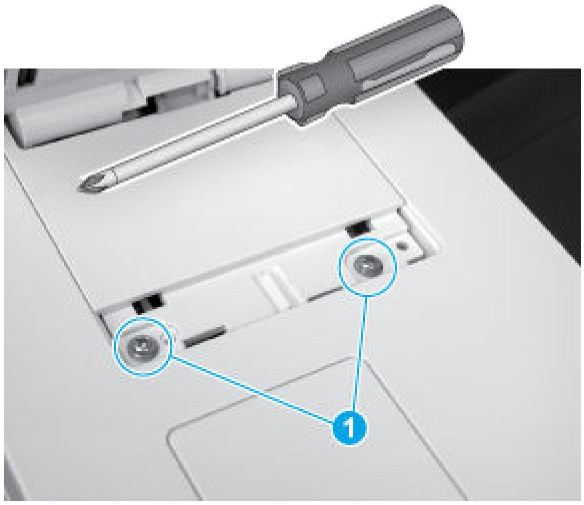
Figure 7-1659 Remove the cover

4. Use the small Phillips screwdriver supplied in this kit to remove two screws (callout 1).

IMPORTANT: Store the screws in a secure place where they cannot fall down into the printer.

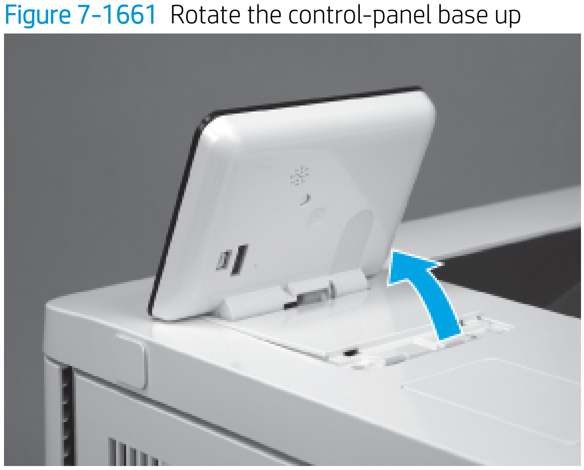
TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-1660 Remove two screws



5. Rotate the control-panel base toward the front of the printer.

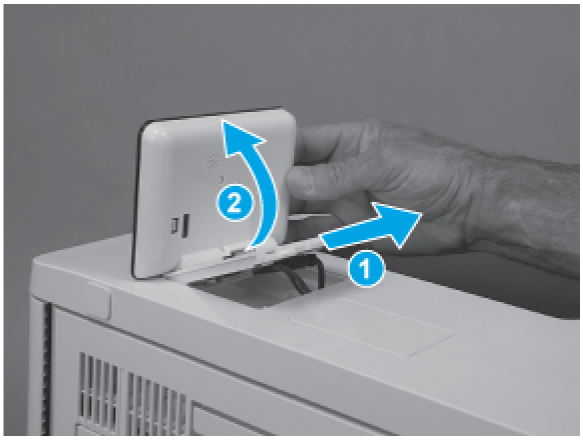
Figure 7-1661 Rotate the control-panel base up



6. Slightly slide the control-panel base toward the rear of the printer (callout 1) to release it, and then turn the control panel over (callout 2) to access the bottom side.

CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

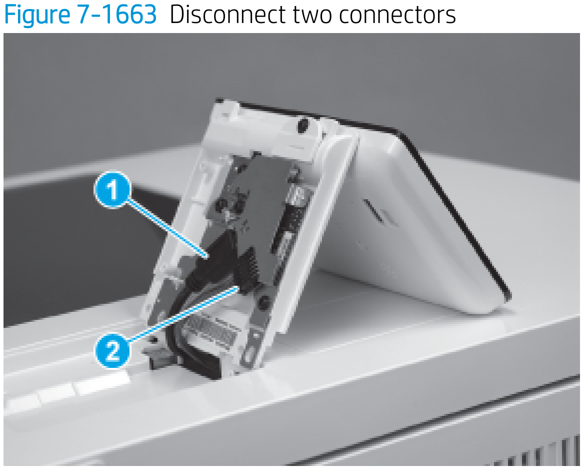
Figure 7-1662 Turn the control panel over



7. Disconnect one USB cable (callout 1), one connector (callout 2), and then remove the control panel.

NOTE: **M555 only**: Disconnect one flat cable (not shown), and then remove the control panel.

Figure 7-1663 Disconnect two connectors



Remove Tray 2

Learn about removing Tray 2.

NOTE: A SFP printer is shown in this section. However, the procedure is correct for all printer models.

The figures in this section show Tray 2. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5. Always carefully read the instructions that accompany the figures.

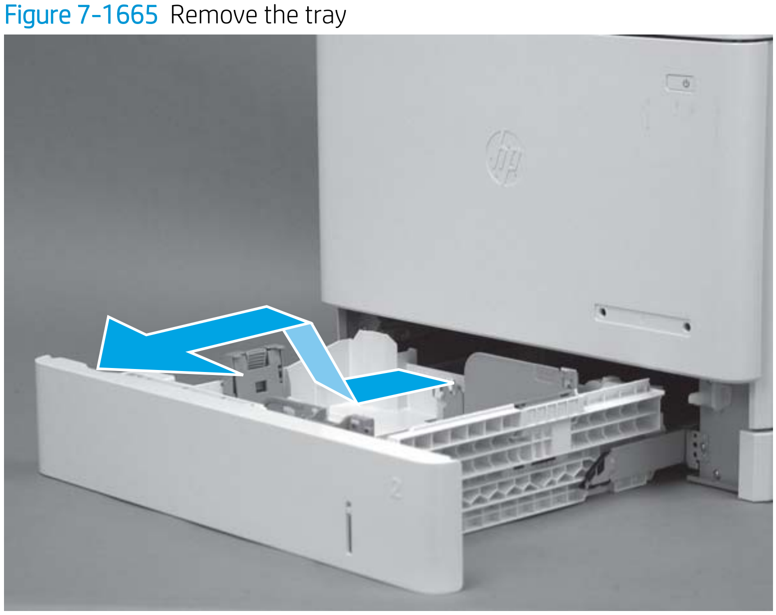
1. Pull the tray out until it stops.

Figure 7-1664 Pull the tray out

2. Lift the front of the tray, and then pull it out of the printer to remove it.

NOTE: **For a replacement tray:** If the tray has Fixed Tray Guides installed and are still required, move hardware to new tray. If necessary, order new kit: 3GY25–67901 Kit - Fixed Tray Guide. Only one kit required per engine.

Figure 7-1665 Remove the tray



Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-1666 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-1667 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

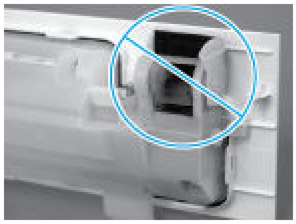
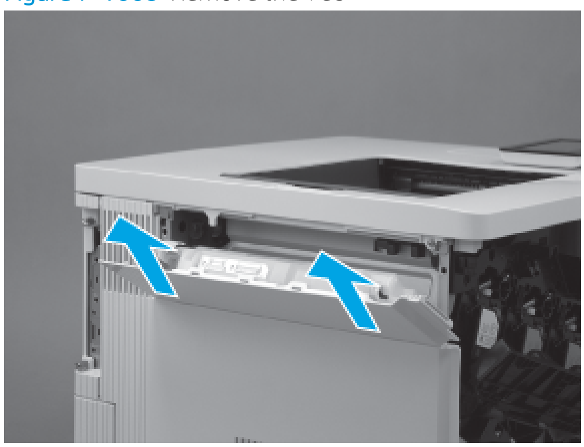


Figure 7-1668 Remove the TCU

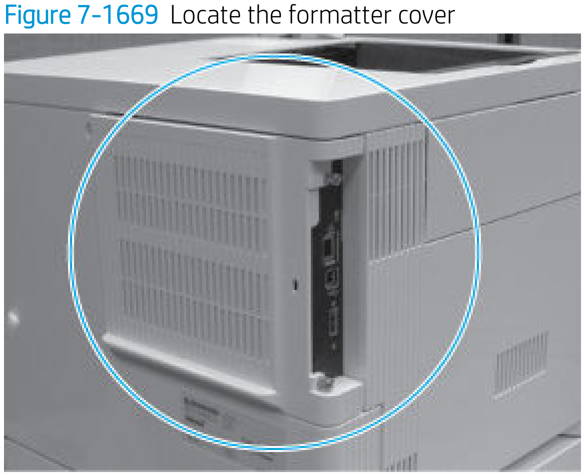


Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

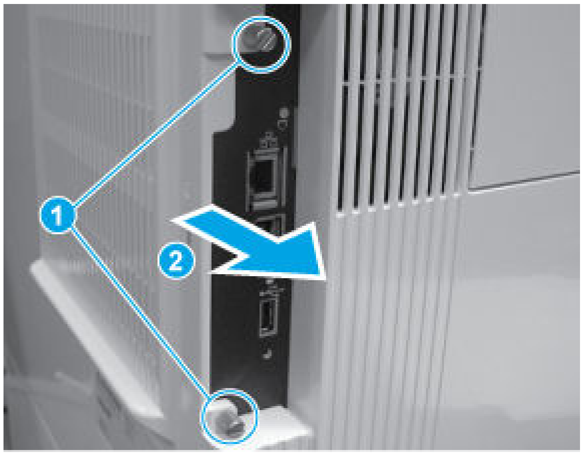
Figure 7-1669 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-1670 Loosen the thumbscrews



Remove the formatter (SFP)

Follow these steps to remove the formatter.

NOTE: This procedure is for SFP models only.

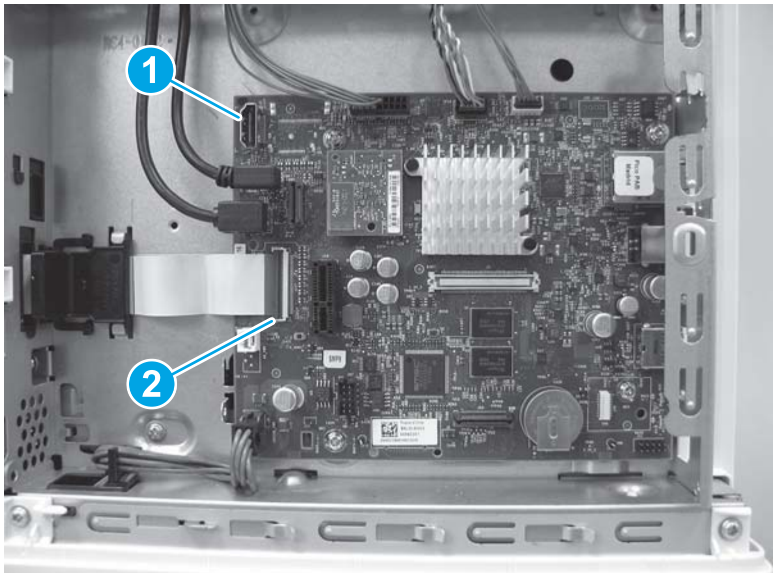
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)
   - All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
   - M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)
   - All models: J57
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

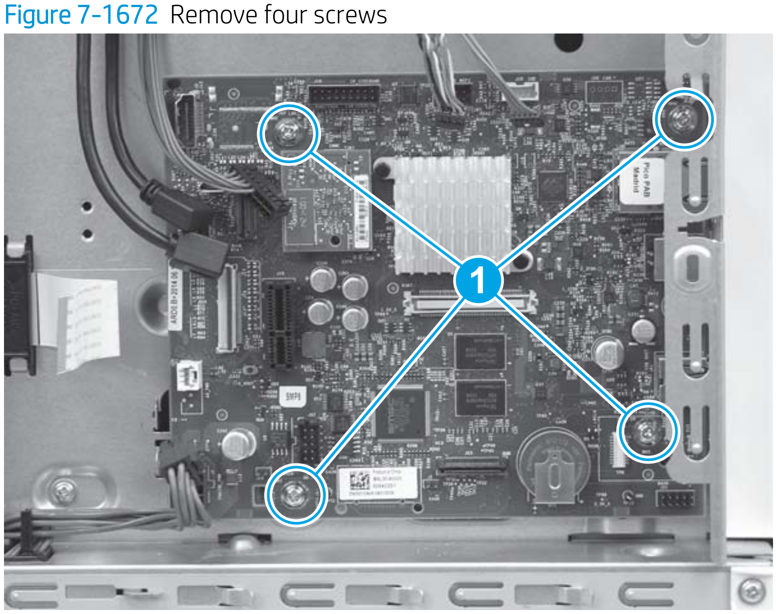
IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1671 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-1672 Remove four screws



Remove the hard-disk drive (HDD)

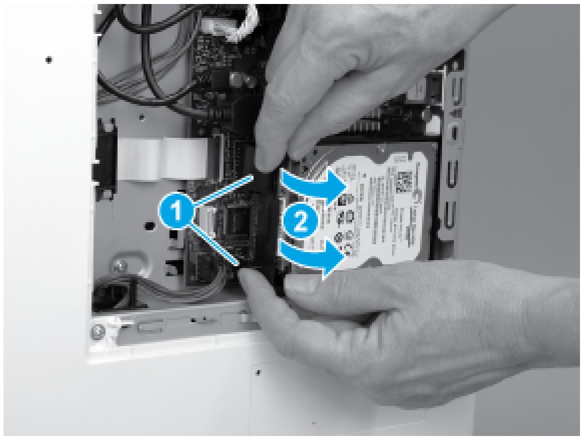
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-1673 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-1674 Remove the HDD

Remove the fax PCA (fax models)

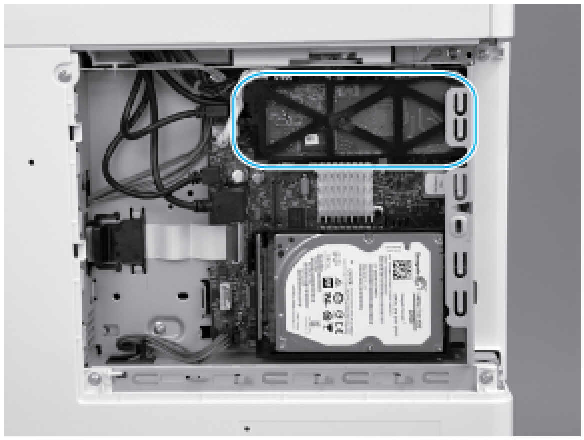
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

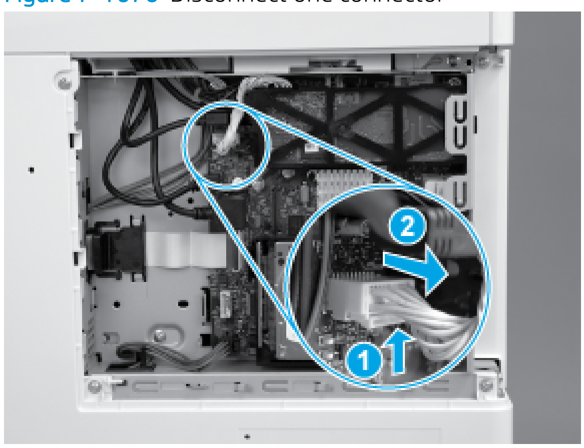
1. Locate the fax PCA component on the formatter.

Figure 7-1675 Locate the fax PCA



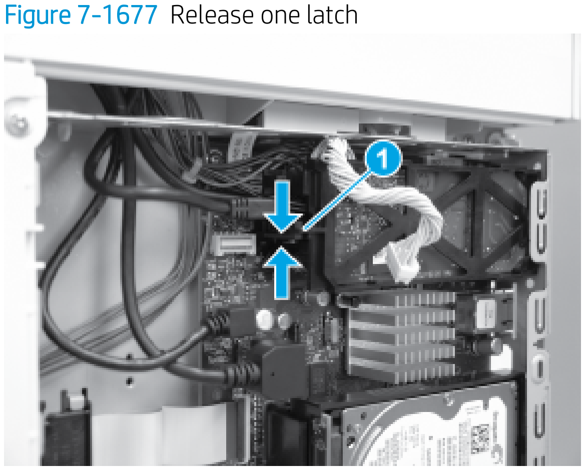
2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-1676 Disconnect one connector



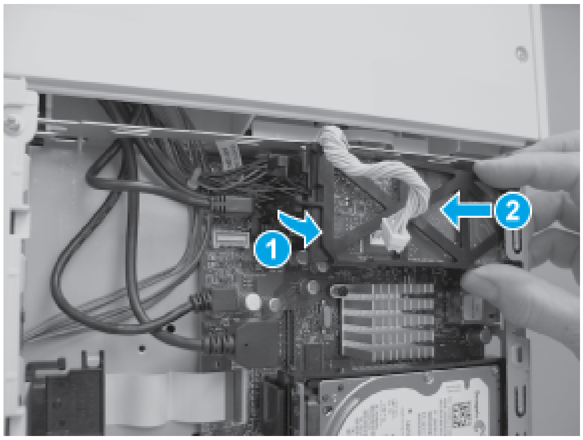
3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-1677 Release one latch



4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-1678 Remove the fax PCA



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

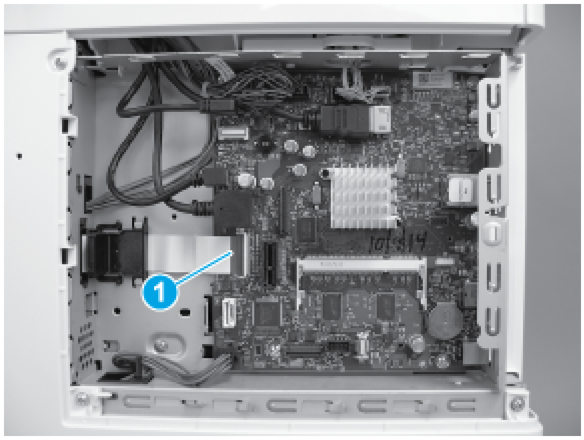
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

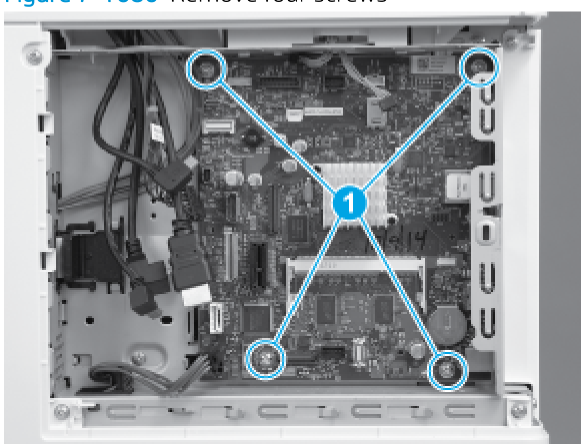
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1679 Disconnect all connectors



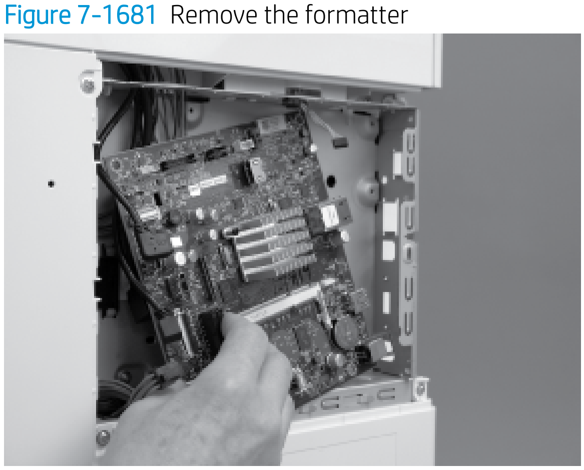
2. Remove four screws (callout 1).

Figure 7-1680 Remove four screws



3. Remove the formatter.

Figure 7-1681 Remove the formatter



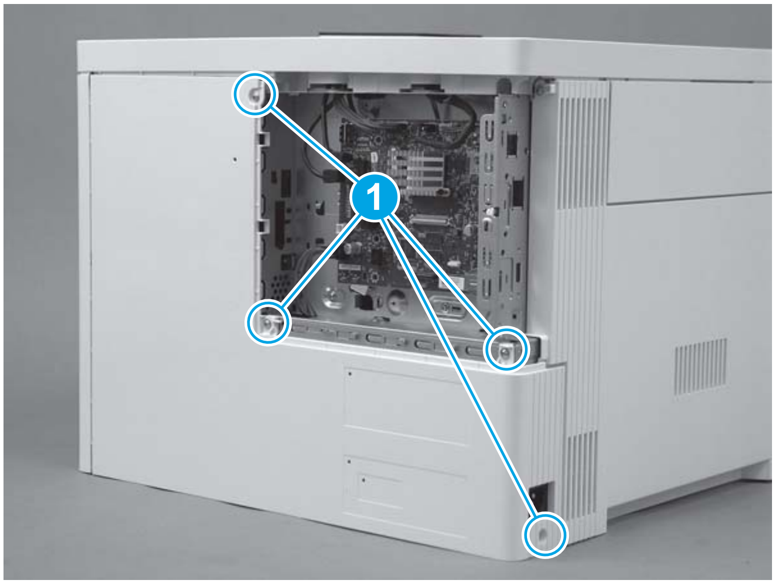
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

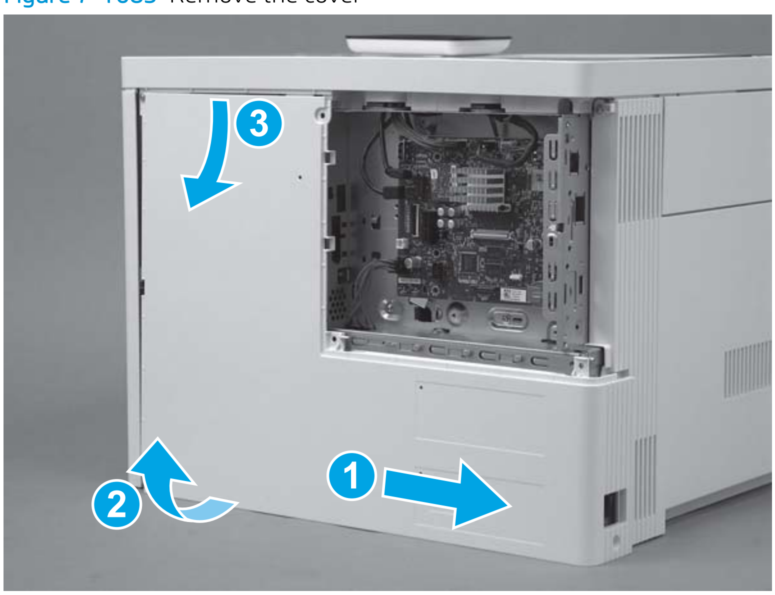
1. Remove four screws (callout 1).

Figure 7-1682 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-1683 Remove the cover



Remove the rear upper cover (MFP)

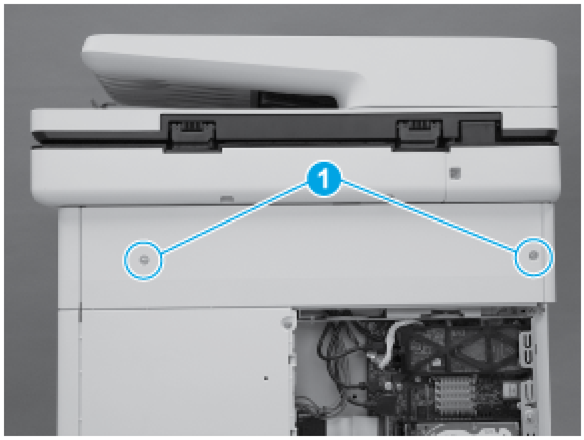
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

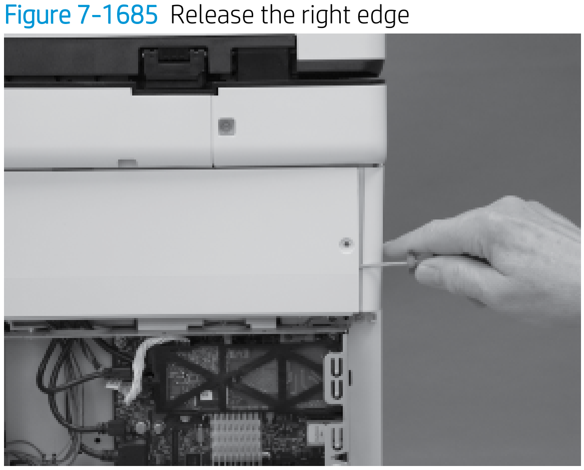
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-1684 Remove two screws



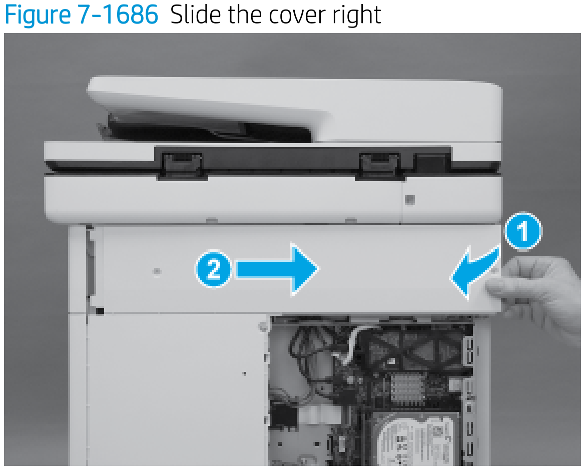
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-1685 Release the right edge



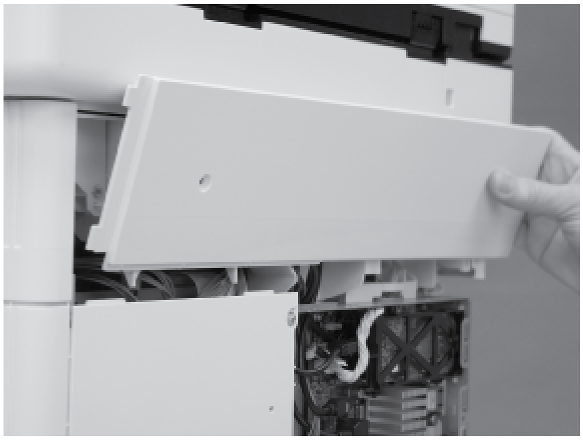
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-1686 Slide the cover right



4. Remove the cover.

Figure 7-1687 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-1688 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-1689 Remove the cover

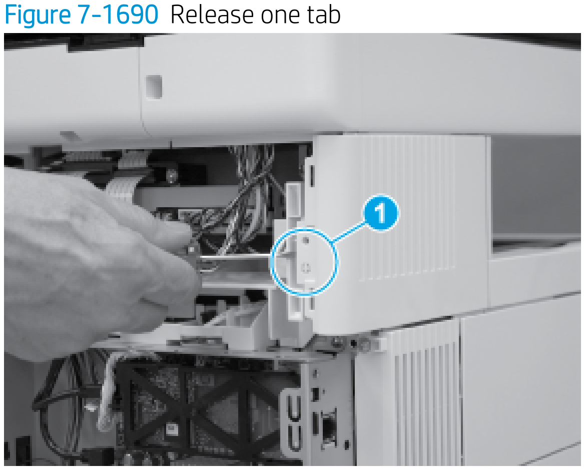
Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

NOTE: This procedure is for MFP models only.

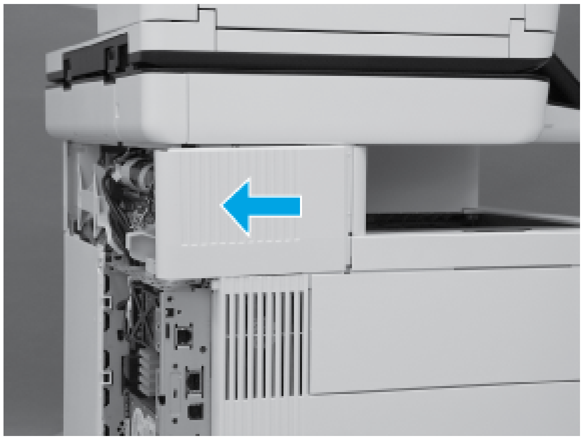
1. At the left side of the printer, release one tab (callout 1).

Figure 7-1690 Release one tab



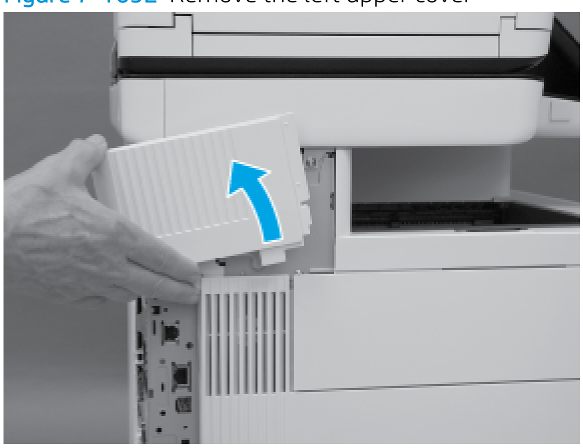
2. Slide the left upper cover toward the back of the printer.

Figure 7-1691 Slide the cover back



3. Rotate the cover up to remove it.

Figure 7-1692 Remove the left upper cover



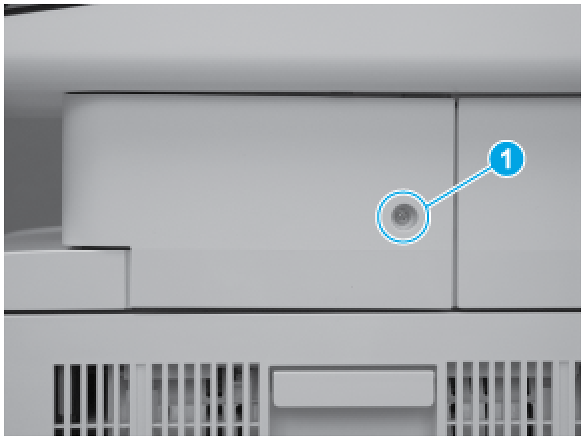
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-1693 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-1694 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-1695 Rotate the cover

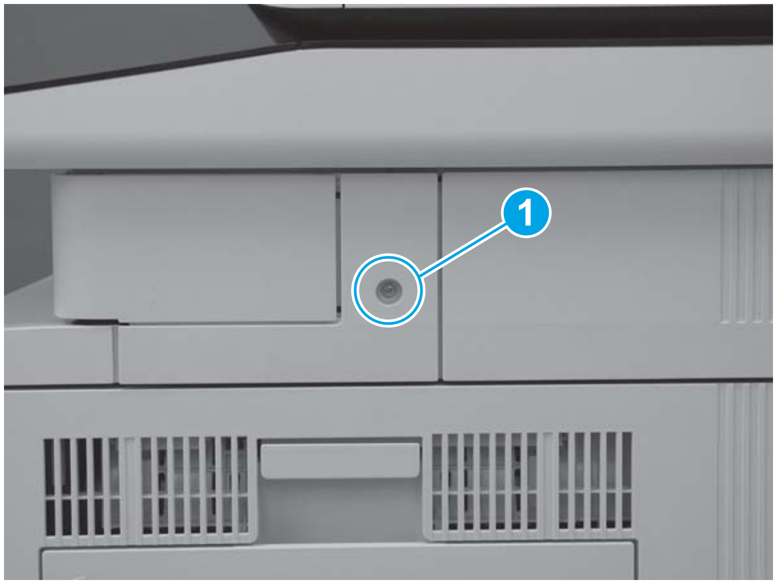
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

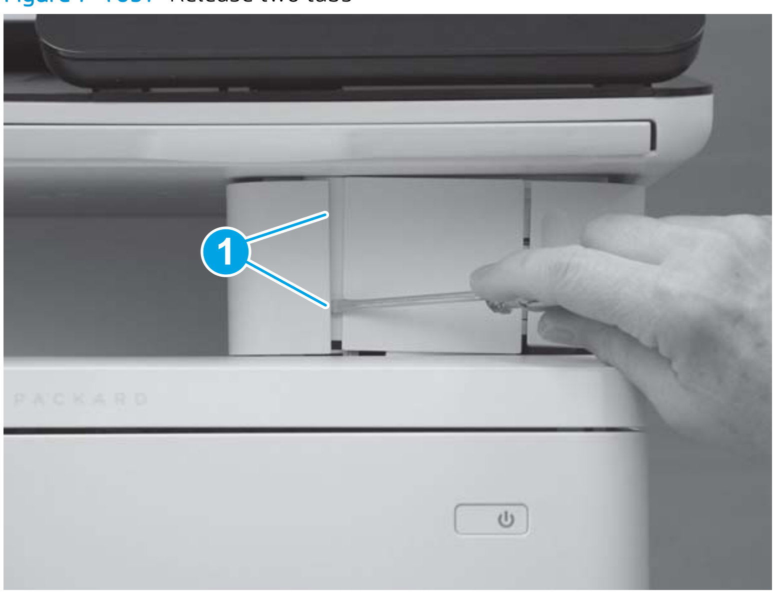
1. Remove one screw (callout 1).

Figure 7-1696 Remove one screw



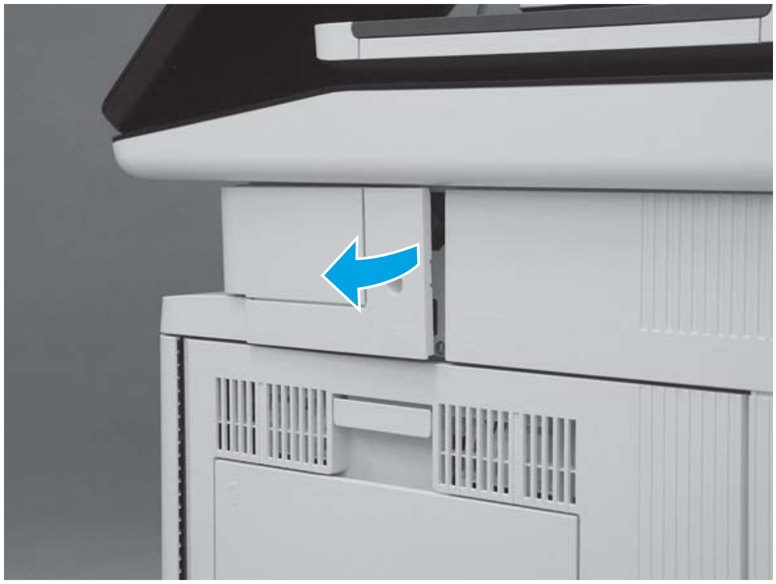
2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-1697 Release two tabs



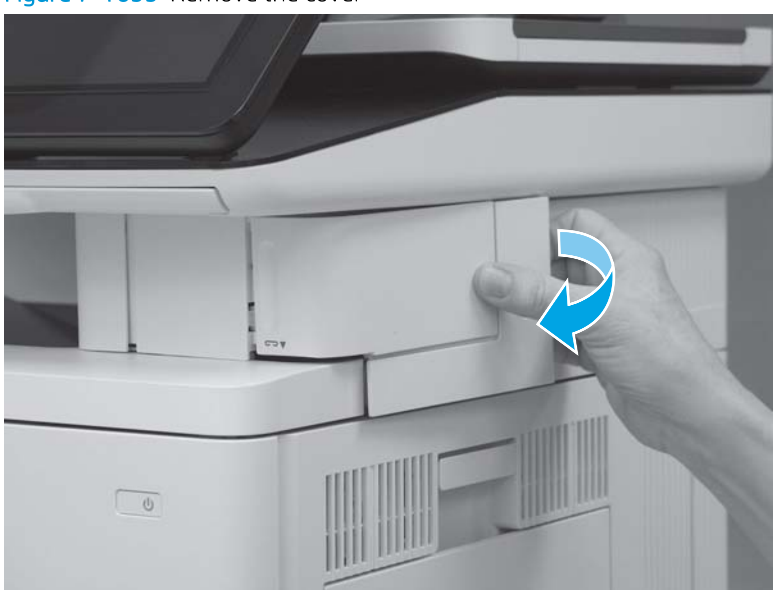
3. Release the back edge of the cover.

Figure 7-1698 Release the back edge of the cover



4. Rotate the cover away from the printer to remove it.

Figure 7-1699 Remove the cover



Remove the integrated scanner assembly (ISA) (MFP)

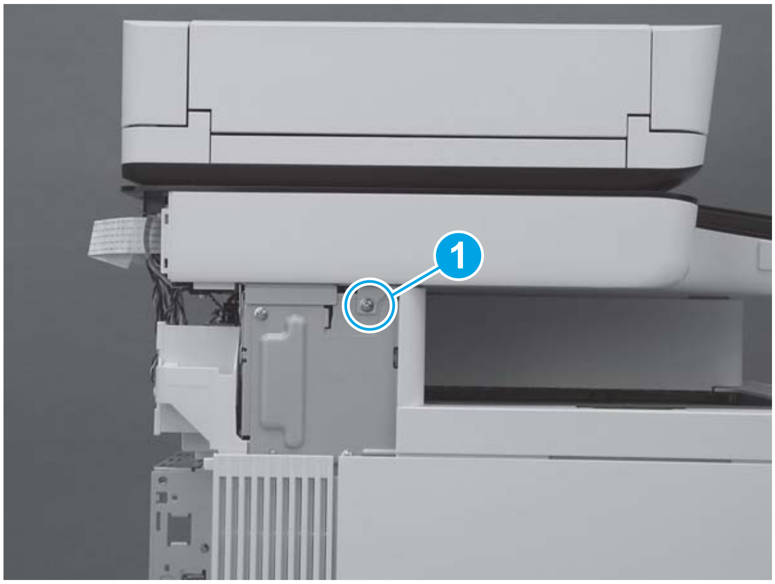
Follow these steps to remove the integrated scanner assembly (ISA).

NOTE: This procedure is for MFP models only.

NOTE: The ISA includes the document feeder, image scanner, scanner control board (SCB), control panel, keyboard (flow models) and NFC PCA (not all models).

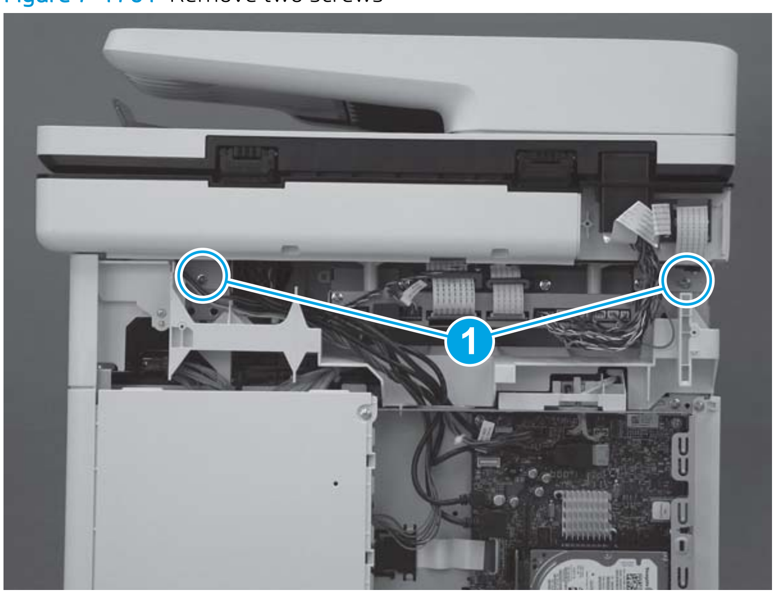
1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1700 Remove one screw



2. At the back of the printer, remove two screws (callout 1).

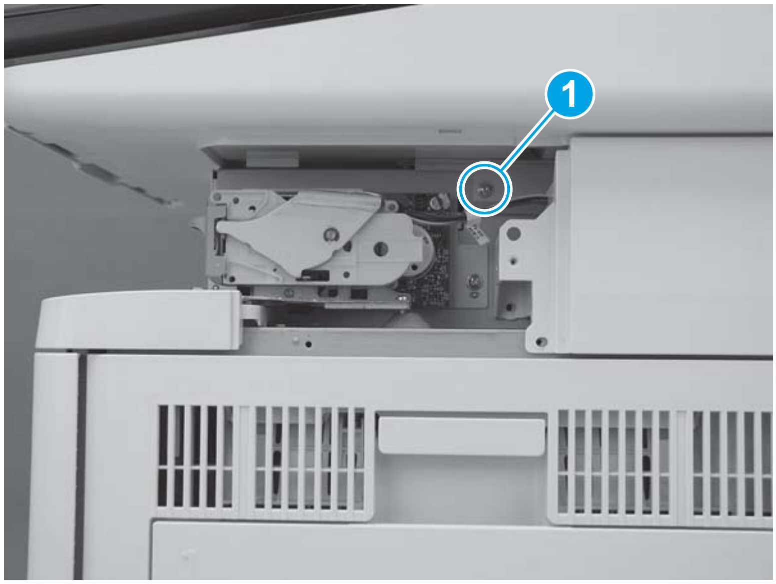
Figure 7-1701 Remove two screws



3. At the right side of the printer, remove one screw (callout 1).

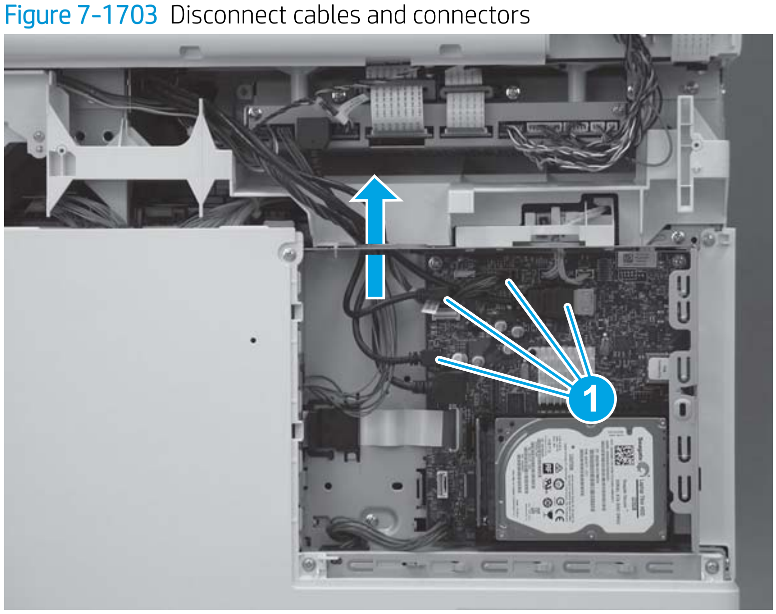
NOTE: The M577z is shown in the figure below. The procedure is correct for all MFP models.

Figure 7-1702 Remove one screw



4. Disconnect four connectors (callout 1) on the formatter, and then pass the wire harnesses and cables through the top opening in the formatter case (callout 2).

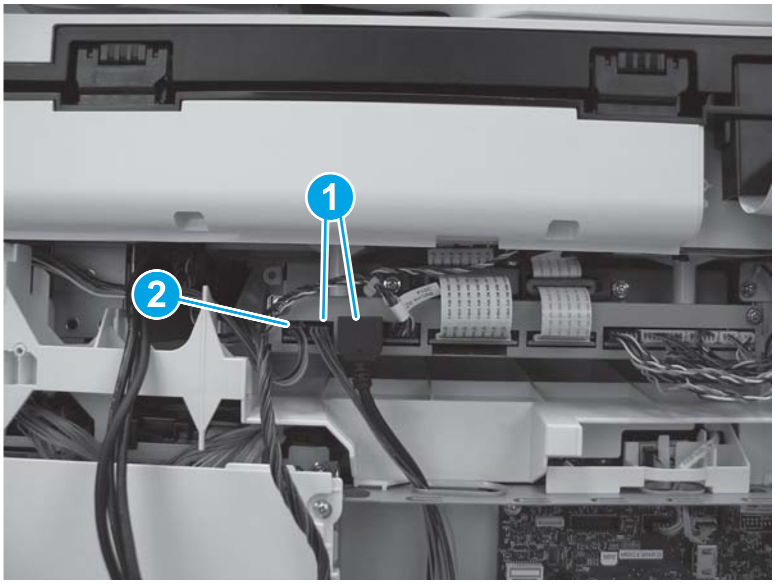
Figure 7-1703 Disconnect cables and connectors



5. Disconnect two connectors on the scanner control board (callout 1).

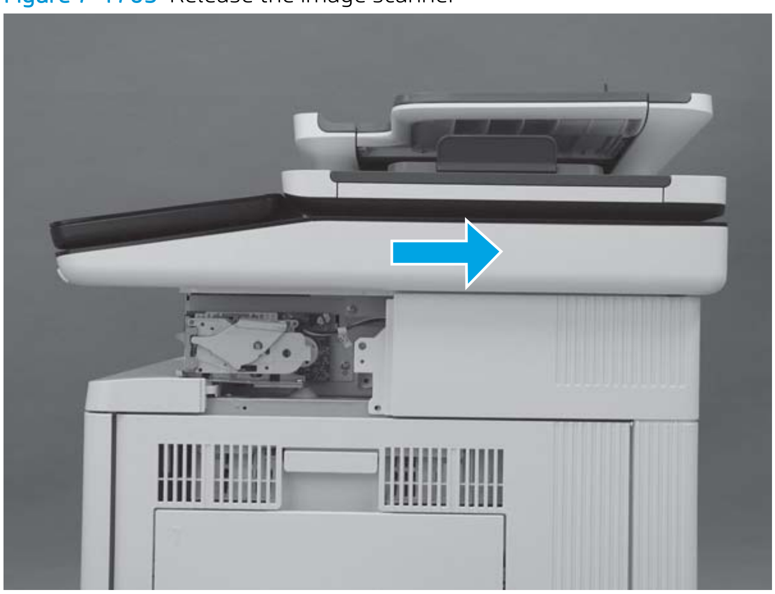
   MFP stapler models: Disconnect one connector for the stapler on the scanner control board (callout 2).

   Figure 7-1704 Disconnect connectors

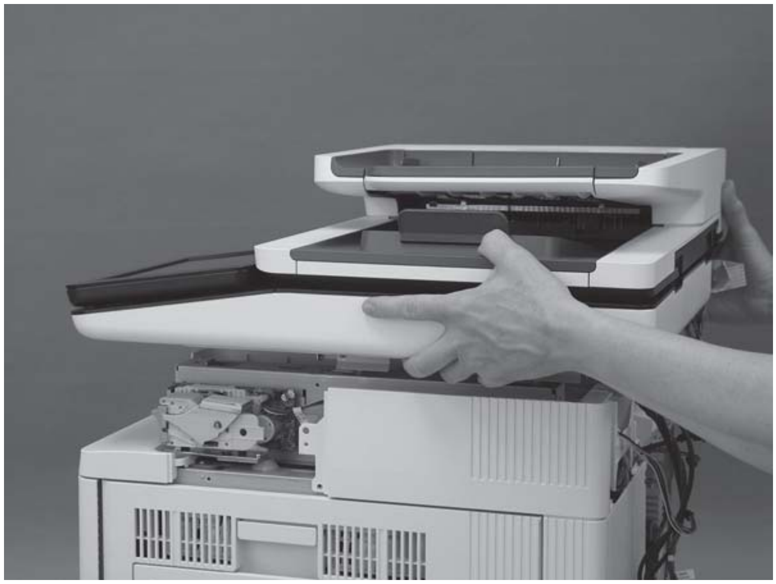
6. Slide the image scanner toward the back of the printer to release it.

   Figure 7-1705 Release the image scanner

7. Lift the ISA straight up to remove it.

Figure 7-1706 Remove the ISA



Remove the right upper cover (MFP)

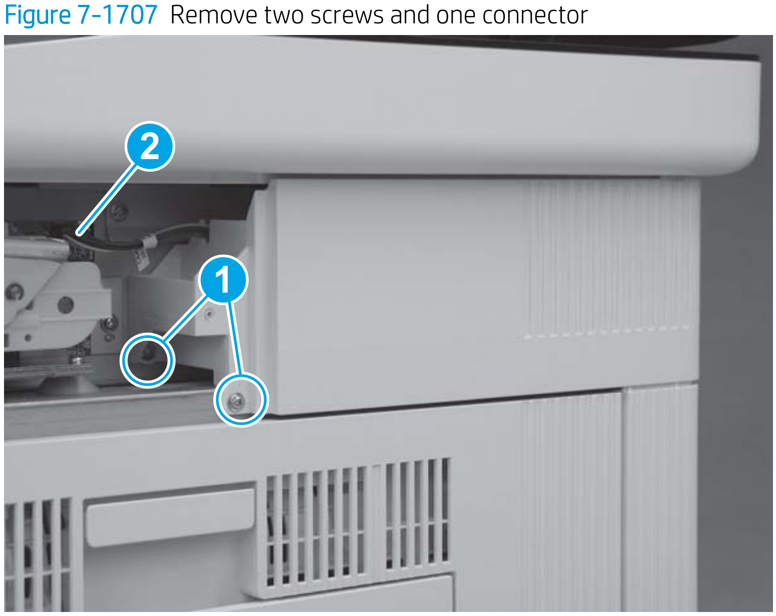
Follow these steps to remove the right upper cover.

NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Figure 7-1707 Remove two screws and one connector

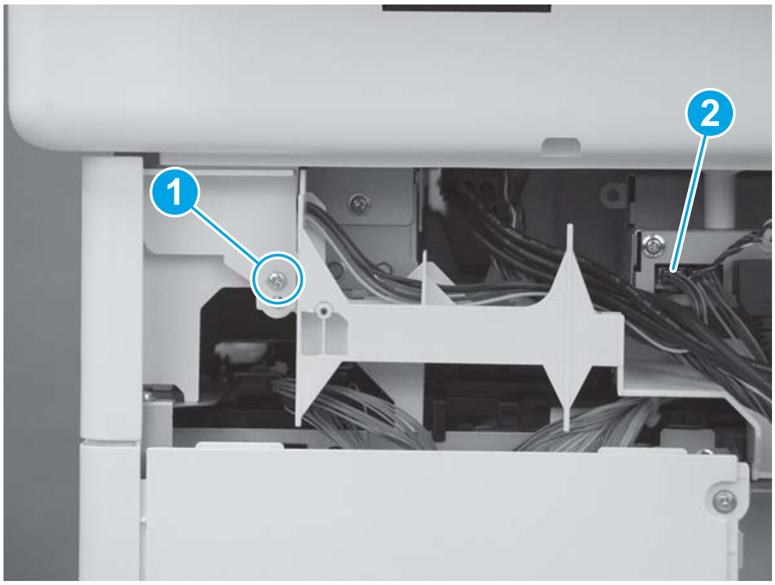


2. At the back of the printer, remove one screw (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Reinstallation tip: This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

   Figure 7-1708 Remove one screw and connector



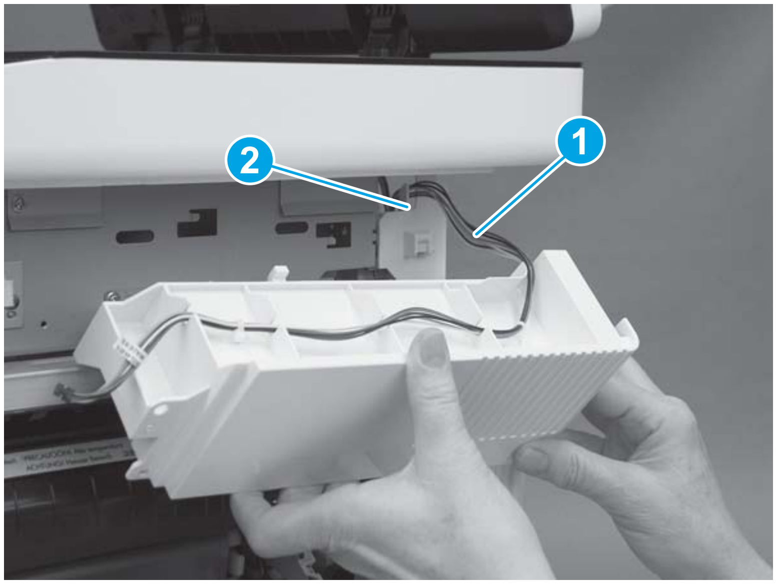
3. Slide the cover toward the back of the printer.

   Figure 7-1709 Slide the cover

4. Lift the cover away from the printer to remove it.

   M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

   Figure 7-1710 Remove the cover

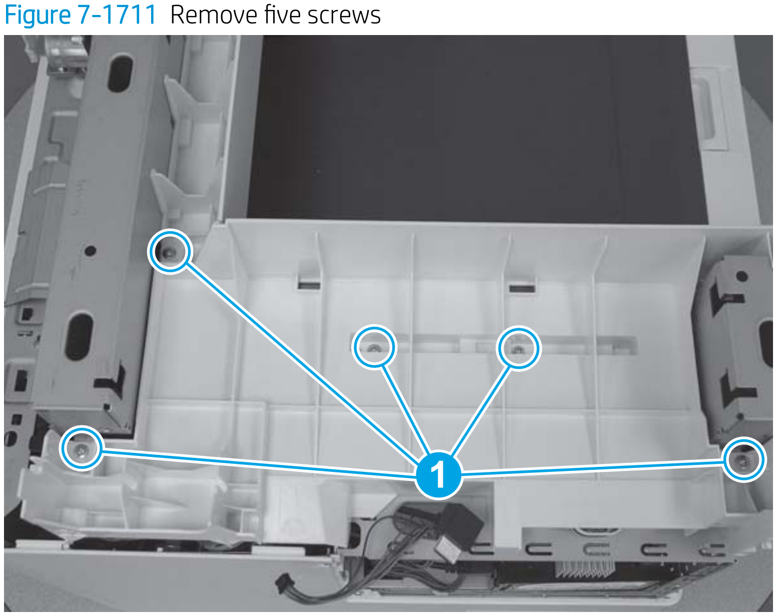
Remove the top rear cover (MFP)

Follow these steps to remove the top rear cover.

NOTE: This procedure is for MFP models only.

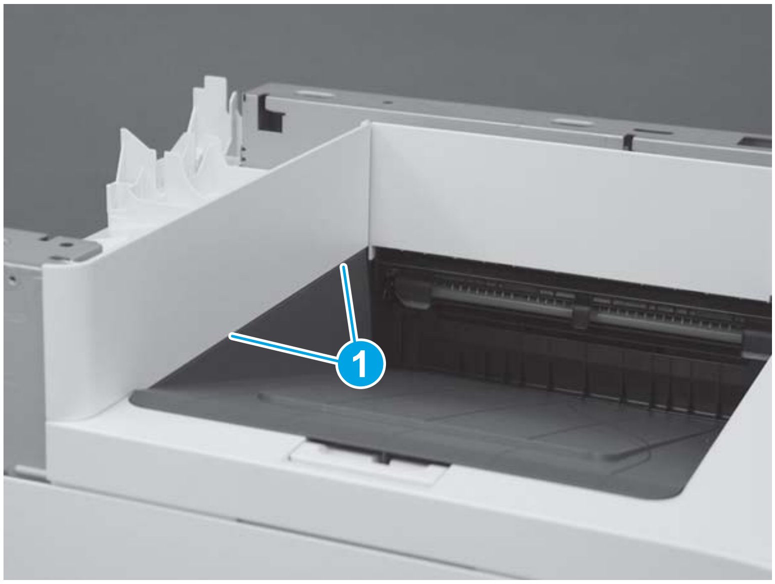
1. At the top of the printer, remove five screws (callout 1).

   Figure 7-1711 Remove five screws

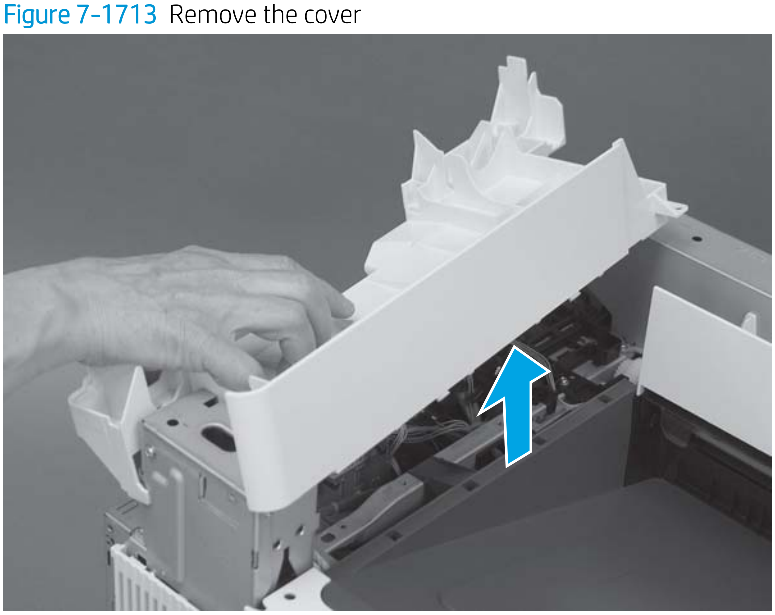
2. Release two tabs (callout 1) on the front edge of the cover.

Figure 7-1712 Release two tabs



3. Remove the top rear cover.

Figure 7-1713 Remove the cover



Remove the left cover

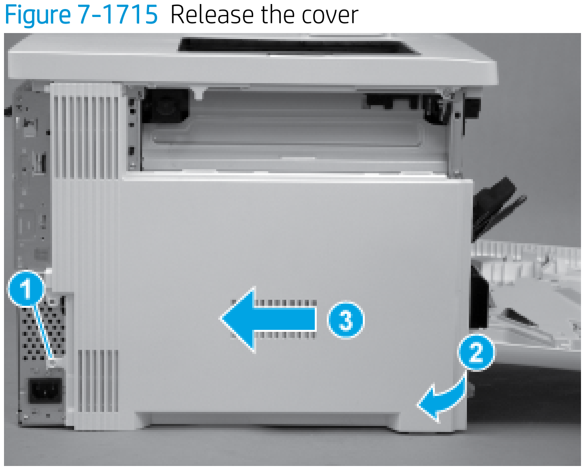
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1714 Remove one screw

2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-1715 Release the cover



3. Remove the cover.

Figure 7-1716 Remove the cover

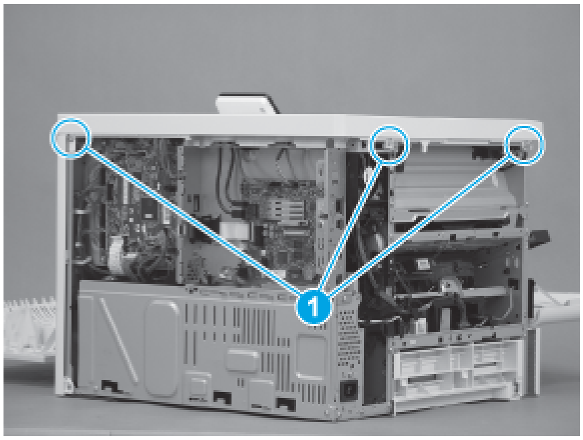
Remove the upper cover (SFP)

Follow these steps to remove the upper cover.

NOTE: This procedure is for SFP models only.

1. Remove three screws (callout 1).

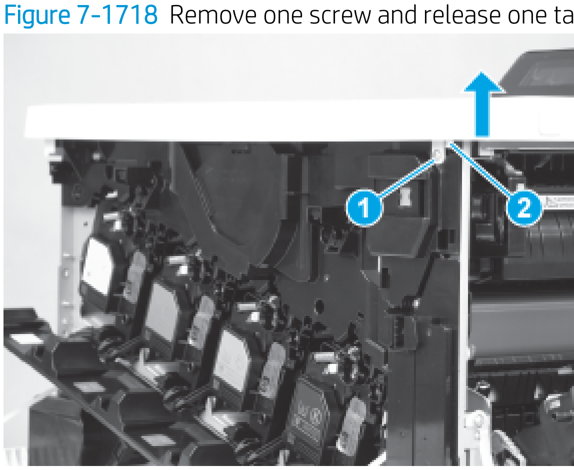
Figure 7-1717 Remove three screws



2. Remove one screw (callout 1), release one tab (callout 2), and then slightly separate the corner of the cover from the chassis.

NOTE: This is a self-tapping plastic-thread screw. Make sure that this screw is used in this location when it is reinstalled.

Figure 7-1718 Remove one screw and release one tab

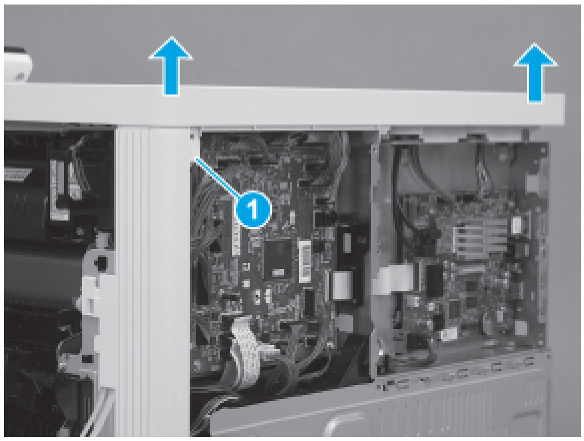


3. Release one tab (callout 1), and then lift up on the cover to release it.

IMPORTANT: **M554 models**: Disconnect the control-panel flat cable at the formatter.

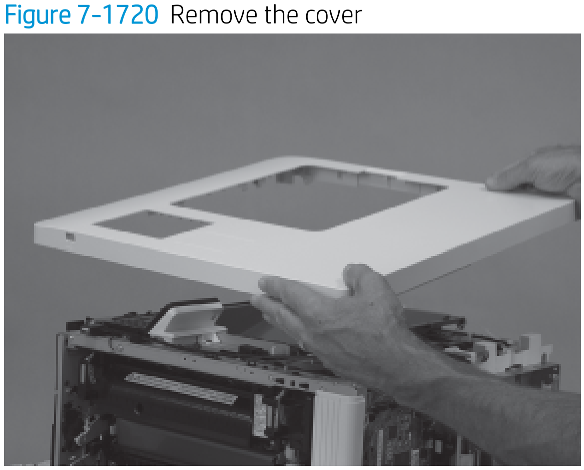
NOTE: If the cover does not release, check for addition tabs by locating the triangles embossed in the cover at tab locations.

Figure 7-1719 Release the cover



4. Remove the cover.

Figure 7-1720 Remove the cover

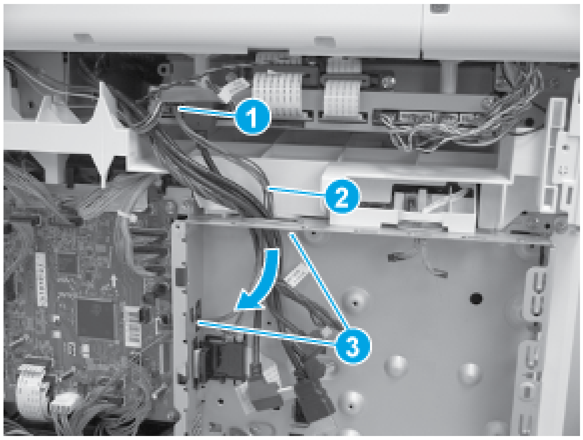


Remove the formatter case

Follow these steps to remove the formatter case.

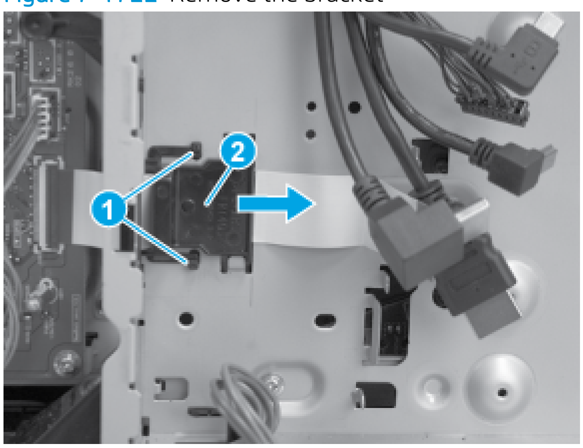
1. **MFP only**: Disconnect one connector (callout 1), and then pass the wire harness (callout 2) through two openings in the formatter case (callout 3).

Figure 7-1721 Disconnect one connector



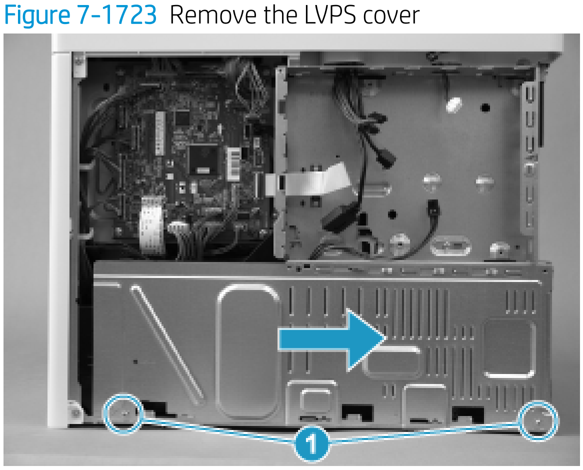
2. Release two tabs (callout 1) on the black plastic bracket. Hold the tabs in the released position, and then slide the bracket (callout 2) to the right to remove it from the formatter case.

Figure 7-1722 Remove the bracket



3. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

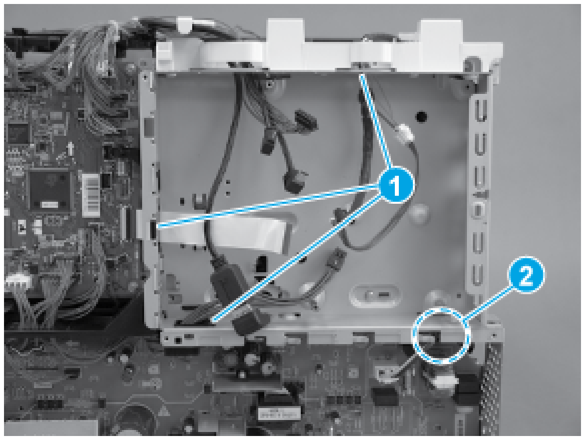
Figure 7-1723 Remove the LVPS cover



4. Pass two wire harnesses and one flat cable (callout 1) through the opening in the formatter case, and then release one wire harness from the retainer (callout 2).

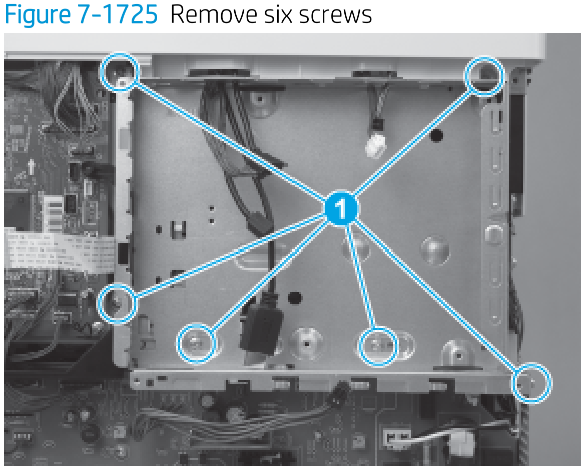
⚠ CAUTION: The flat cable might be attached to the formatter case with double-sided tape. Make sure that this tape is released, so that the flat cable is not damaged when the formatter case is removed.

Figure 7-1724 Release wire harnesses and flat cable



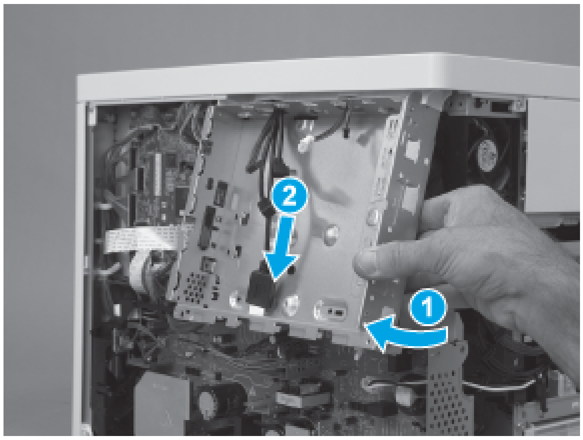
5. Remove six screws (callout 1).

Figure 7-1725 Remove six screws



6. Rotate the bottom of the formatter case away from the printer (callout 1), and then pull it down (callout 2) to release it.

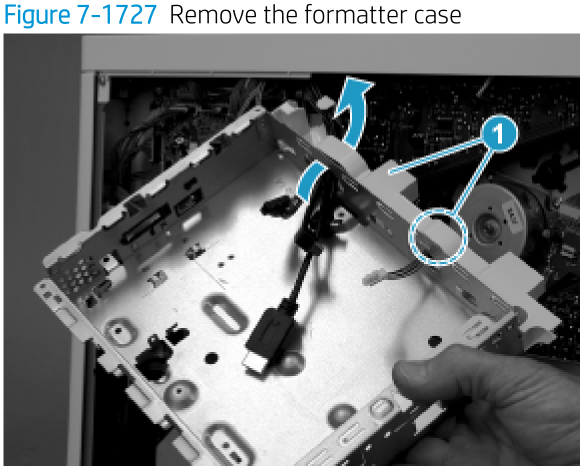
Figure 7-1726 Release the formatter case



7. Pass the wire harnesses through the opening in the formatter case to remove it.

IMPORTANT: If the formatter case is removed so that it can be replaced, make sure to transfer the memory PCA (island of data) and plastic bracket (callout 1) to the replacement case.

Figure 7-1727 Remove the formatter case



Remove the right rear cover

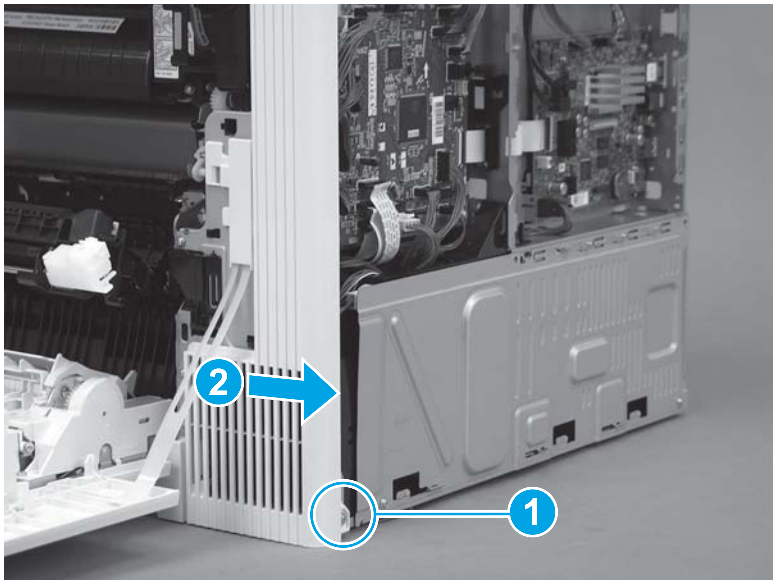
Follow these steps to remove the right rear cover.

NOTE: The figures in this topic show a SFP model. However, the procedure is correct for an MFP.

1. Remove one screw (callout 1), and then slide the cover toward the rear of the printer (callout 2) to release it.

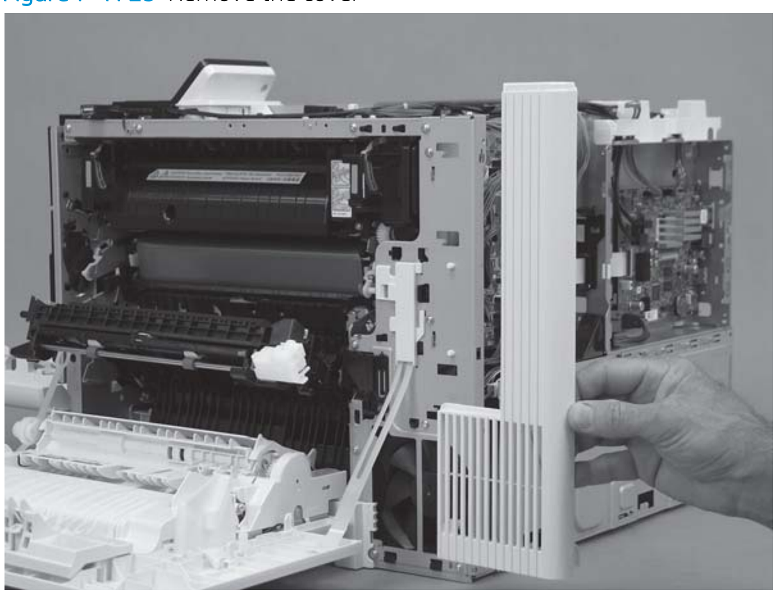
TIP: If the right door is closed, open it now.

Figure 7-1728 Release the cover



2. Remove the cover.

Figure 7-1729 Remove the cover



Remove the DC controller (DCC) and sheet-metal bracket

Follow these steps to remove the DC controller and sheet-metal bracket together.

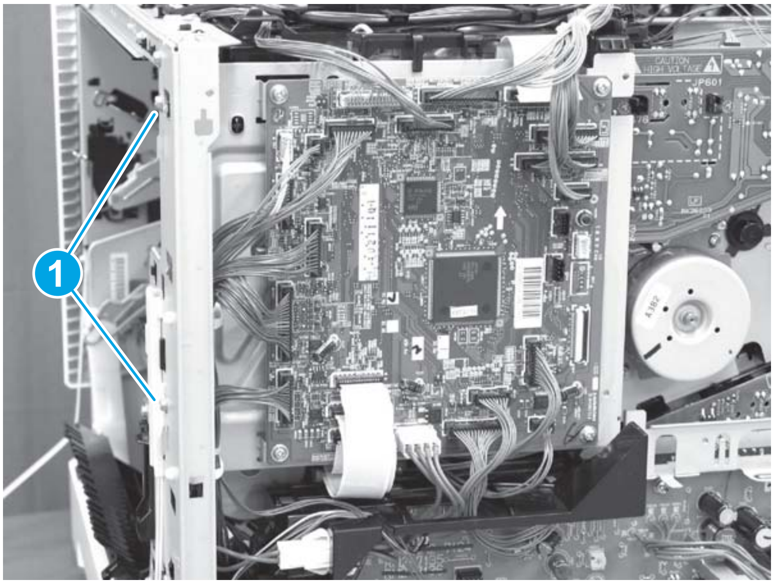
NOTE: ESD sensitive part.

1. Disconnect all of the connectors, and then remove two screws (callout 1).

Empty DCC connectors

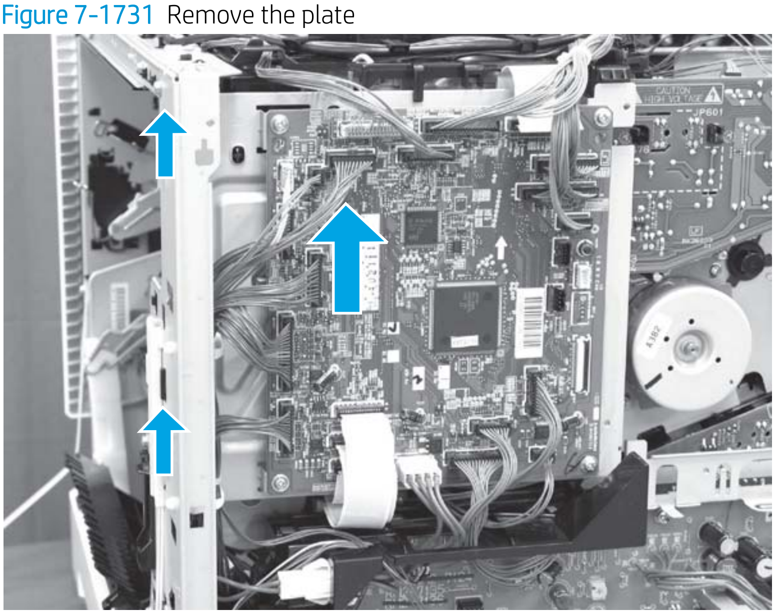
- J140
- J141
- J143

Figure 7-1730 Remove two screws



2. Lift up on the DC controller and sheet-metal plate to remove it.

Figure 7-1731 Remove the plate



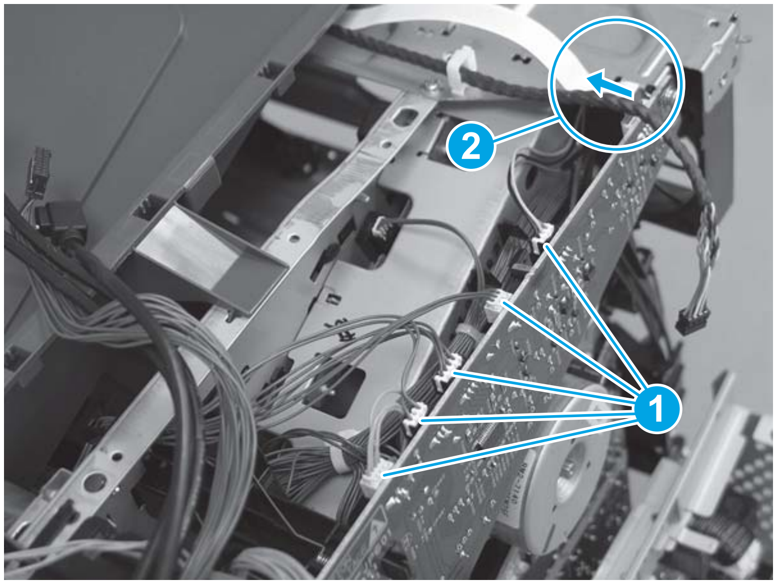
Remove the high-voltage power supply T (HVPST)

Follow these steps to remove the high-voltage power supply T.

NOTE: ESD sensitive part.

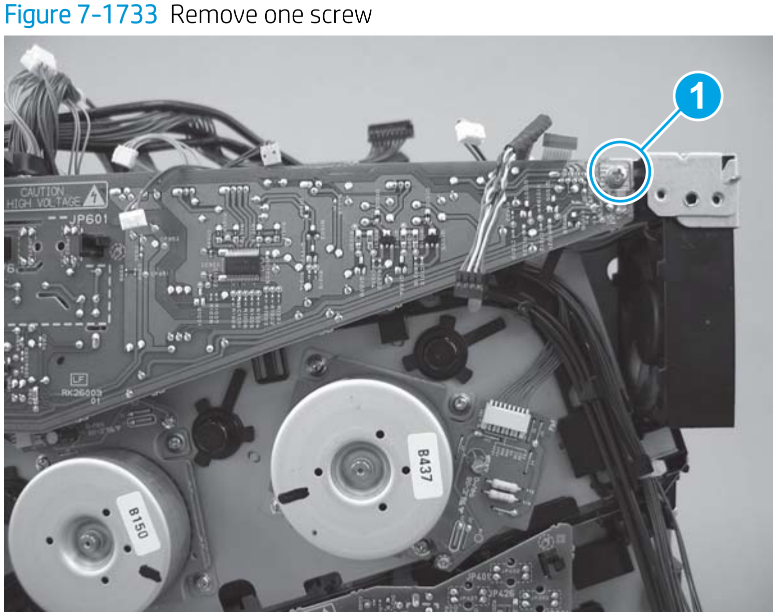
1. Disconnect five connectors (callout 1), and then disconnect one flat cable (callout 2).

Figure 7-1732 Disconnect five connectors and one flat cable



2. Remove one screw (callout 1).

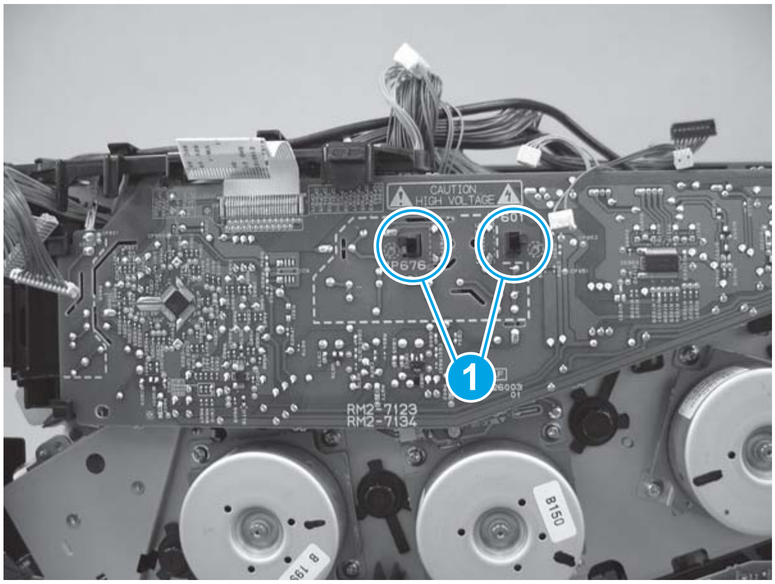
Figure 7-1733 Remove one screw



3. Release two tabs (callout 1), and then separate the HVPST from the printer.

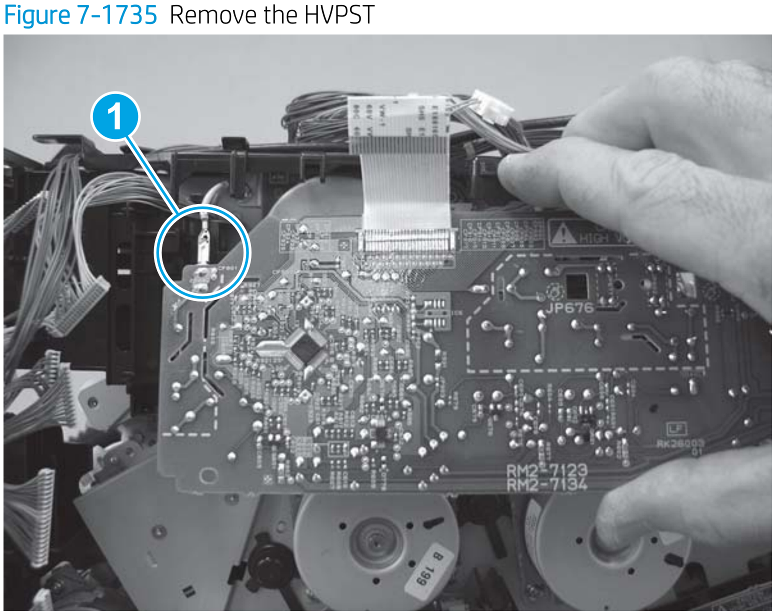
> ⚠ CAUTION: Do not attempt to completely remove the HVPST. It is still connected to the printer by ground wire harness.

Figure 7-1734 Release the HVPST



4. Release one ground wire connector (callout 1), and then remove the HVPST.

Figure 7-1735 Remove the HVPST

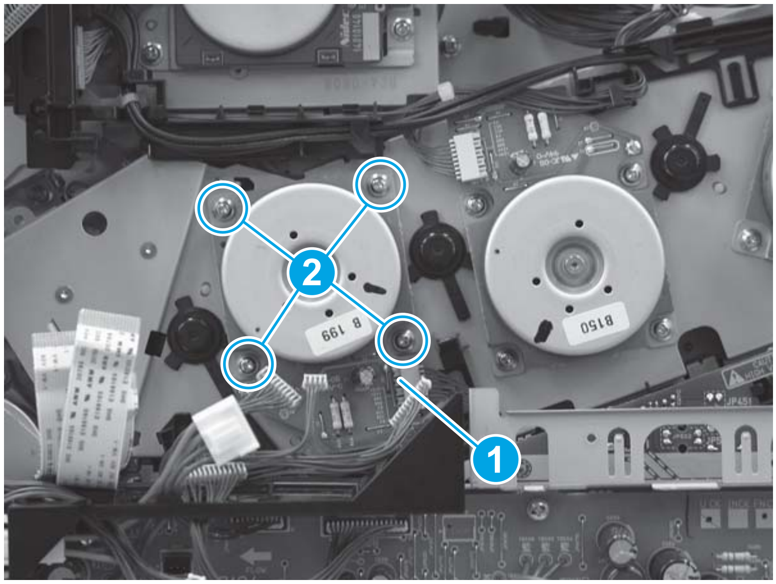


Remove drum motor 3 (M3)

Follow these steps to remove drum motor 3.

▲ Disconnect one connector (callout 1), remove four screws (callout 2), and then remove the motor.

Figure 7-1736 Remove the motor



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Fuser motor 3 (M4)

Learn about removing and replacing the fuser motor.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-76 Part information

Part number	Part description
RM2-0077-000CN	Fuser motor 3 (M4)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

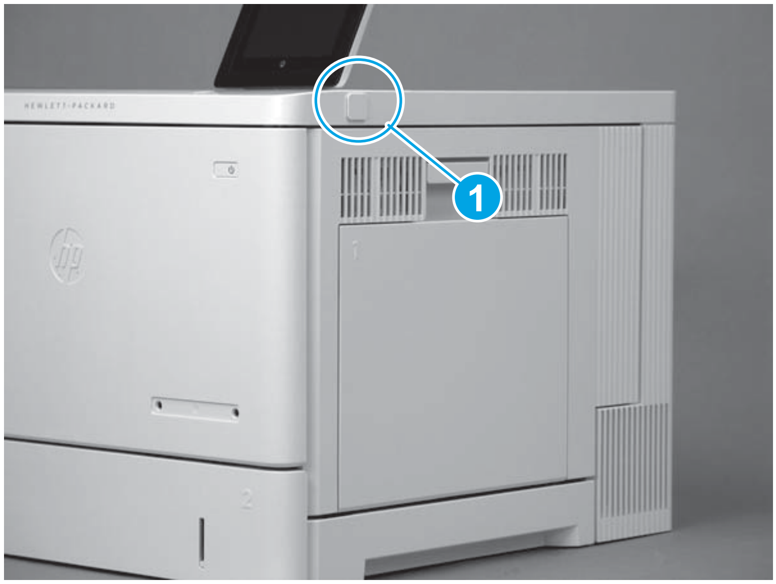
Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

> NOTE: This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-1737 Locate the USB cover



2. Pull the cover off of the printer to remove it.

Figure 7-1738 Remove the cover

Remove the control panel (M553x/M555/E55040)

Follow these steps to remove the control panel.

NOTE: This procedure is for the M553x/M555/E55040 printers only.

M555 models: Removing the control panel is similar to the procedure below. For the M555, a flat cable connects the control panel to the formatter.

1. Tilt the control panel up.

Figure 7-1739 Tilt the control panel up

2. Use the small flat-blade screwdriver supplied in this kit to release the control-panel screws cover tabs.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-1740 Release the control-panel screws cover tabs

3. Rotate the cover up to remove it.

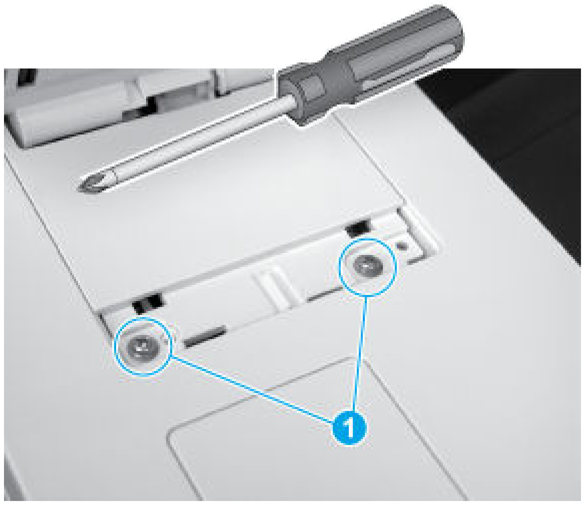
Figure 7-1741 Remove the cover

4. Use the small Phillips screwdriver supplied in this kit to remove two screws (callout 1).

IMPORTANT: Store the screws in a secure place where they cannot fall down into the printer.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-1742 Remove two screws



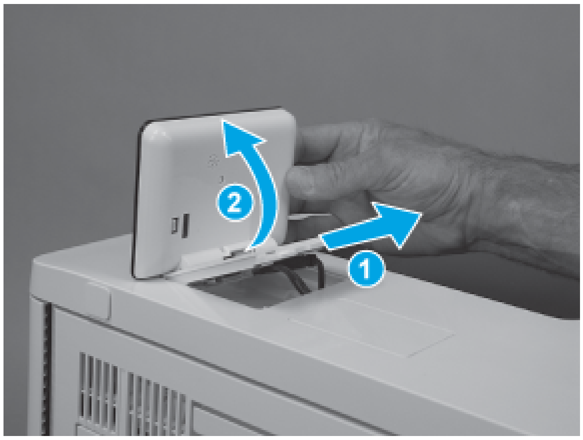
5. Rotate the control-panel base toward the front of the printer.

Figure 7-1743 Rotate the control-panel base up

6. Slightly slide the control-panel base toward the rear of the printer (callout 1) to release it, and then turn the control panel over (callout 2) to access the bottom side.

⚠ CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

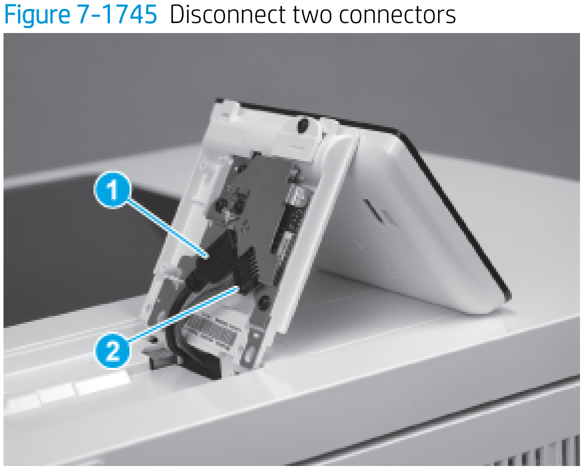
Figure 7-1744 Turn the control panel over



7. Disconnect one USB cable (callout 1), one connector (callout 2), and then remove the control panel.

NOTE: **M555 only**: Disconnect one flat cable (not shown), and then remove the control panel.

Figure 7-1745 Disconnect two connectors



Remove Tray 2

Learn about removing Tray 2.

NOTE: A SFP printer is shown in this section. However, the procedure is correct for all printer models.

The figures in this section show Tray 2. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5. Always carefully read the instructions that accompany the figures.

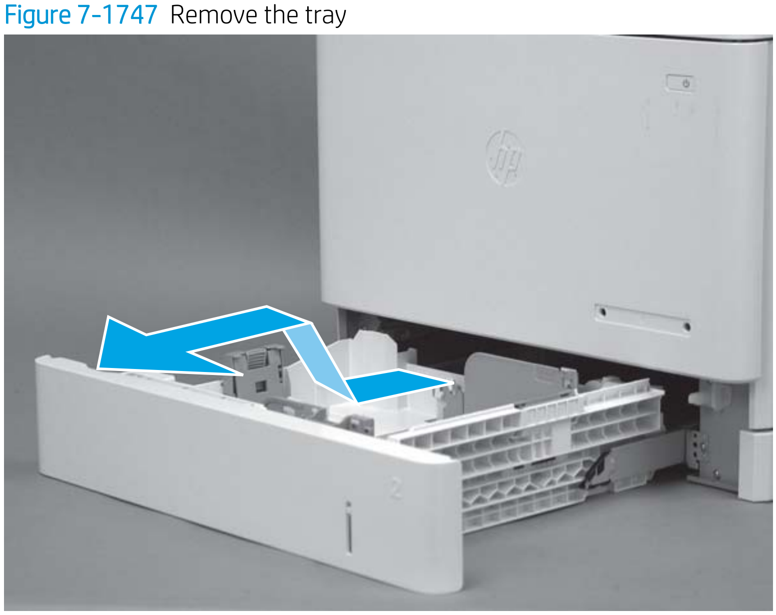
1. Pull the tray out until it stops.

Figure 7-1746 Pull the tray out

2. Lift the front of the tray, and then pull it out of the printer to remove it.

NOTE: **For a replacement tray:** If the tray has Fixed Tray Guides installed and are still required, move hardware to new tray. If necessary, order new kit: 3GY25–67901 Kit - Fixed Tray Guide. Only one kit required per engine.

Figure 7-1747 Remove the tray



Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-1748 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-1749 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

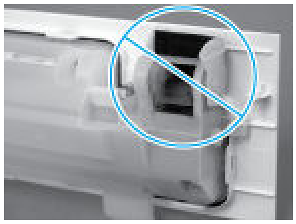
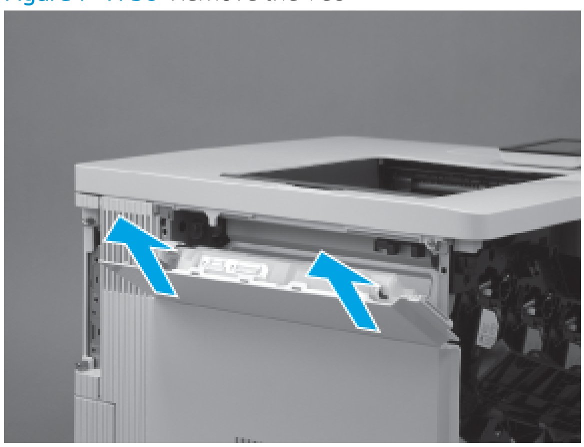


Figure 7-1750 Remove the TCU

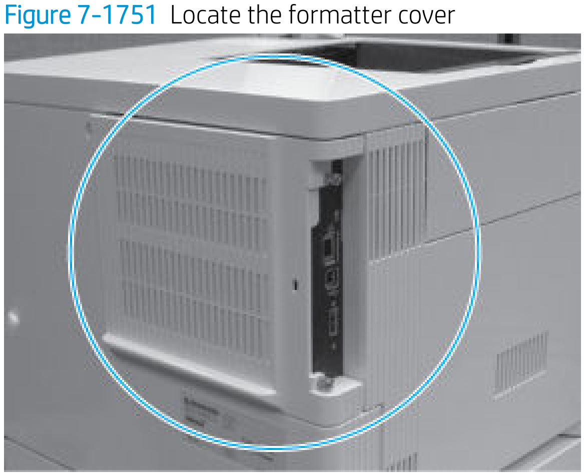


Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

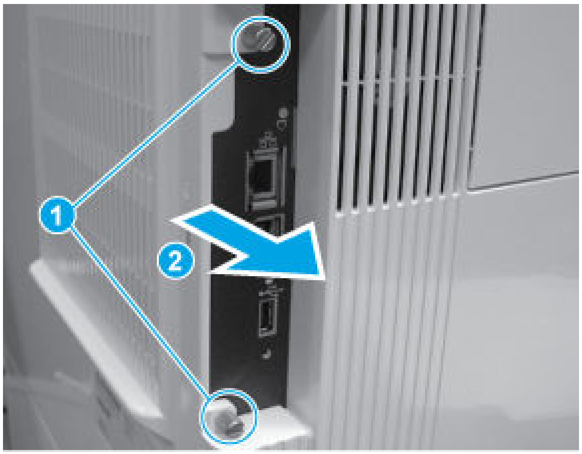
Figure 7-1751 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

> TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-1752 Loosen the thumbscrews



Remove the formatter (SFP)

Follow these steps to remove the formatter.

> NOTE: This procedure is for SFP models only.

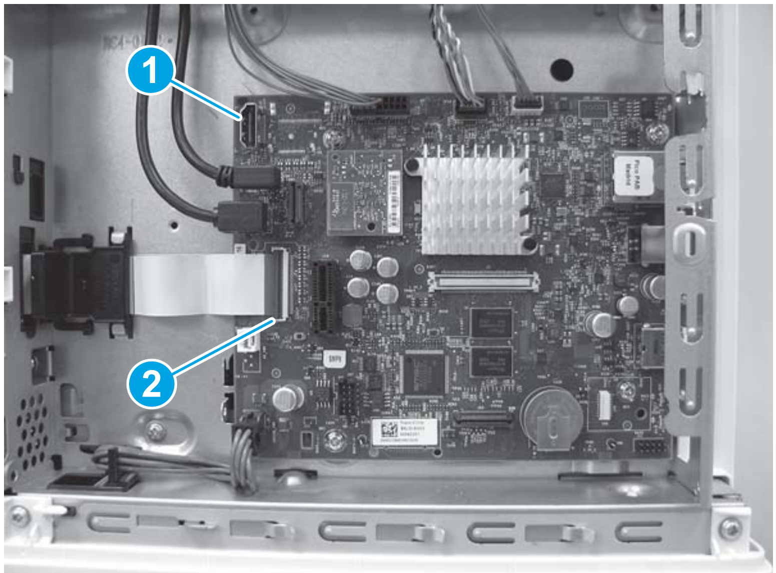
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)
   - All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
   - M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)
   - All models: J57
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

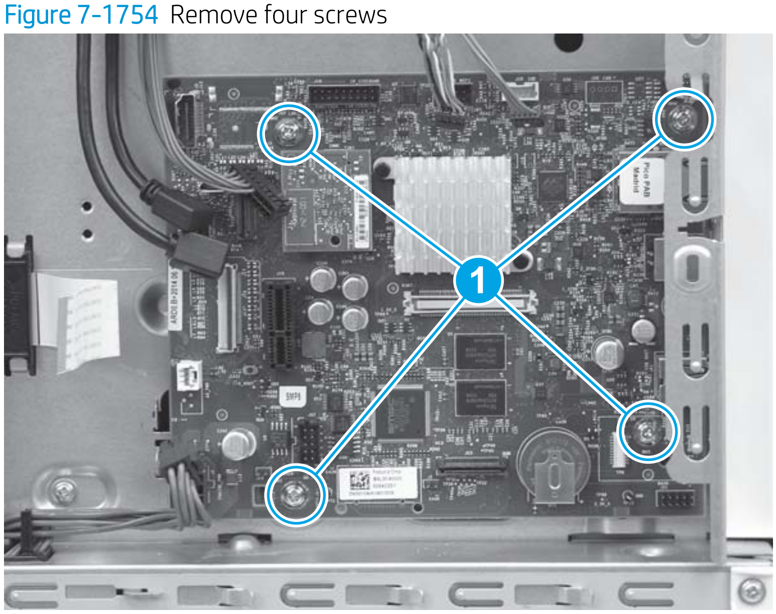
> IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1753 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-1754 Remove four screws



Remove the hard-disk drive (HDD)

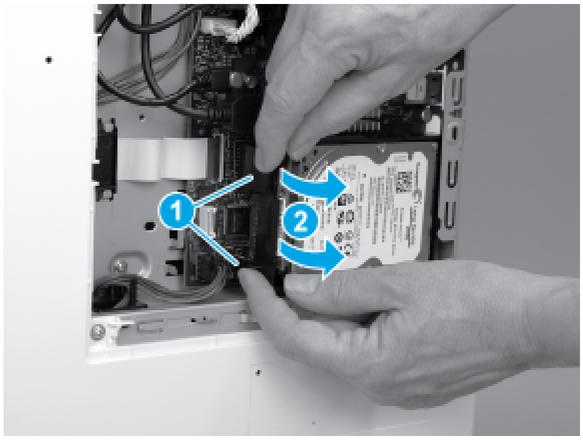
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-1755 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-1756 Remove the HDD

Remove the fax PCA (fax models)

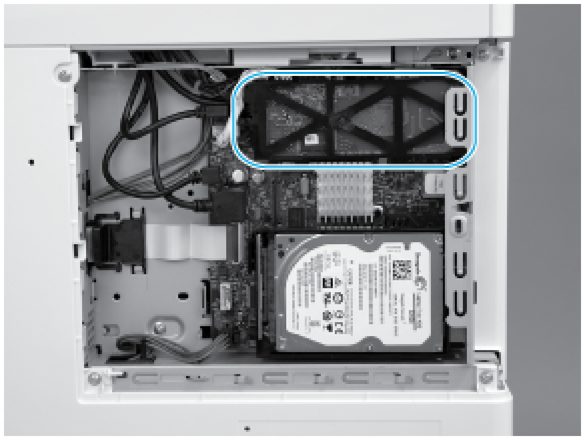
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

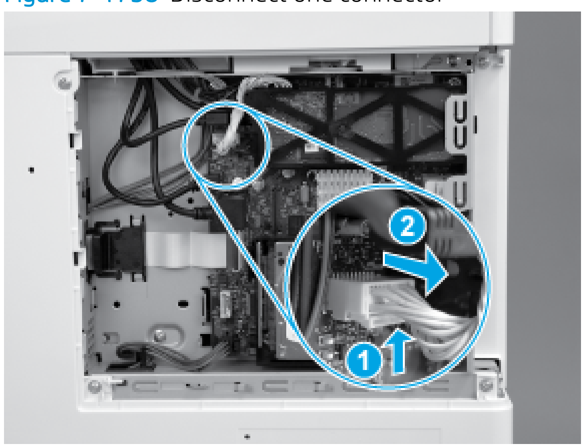
1. Locate the fax PCA component on the formatter.

Figure 7-1757 Locate the fax PCA



2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-1758 Disconnect one connector

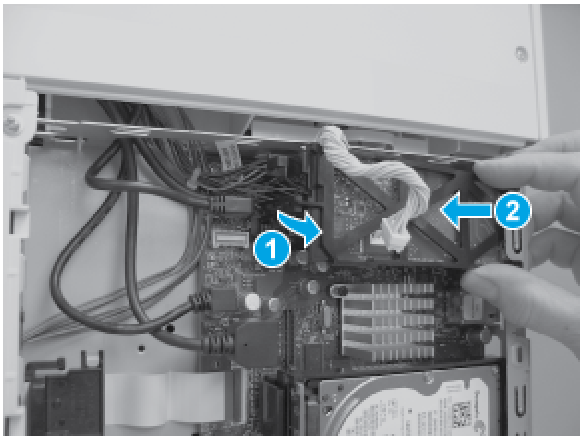


3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-1759 Release one latch

4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-1760 Remove the fax PCA



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

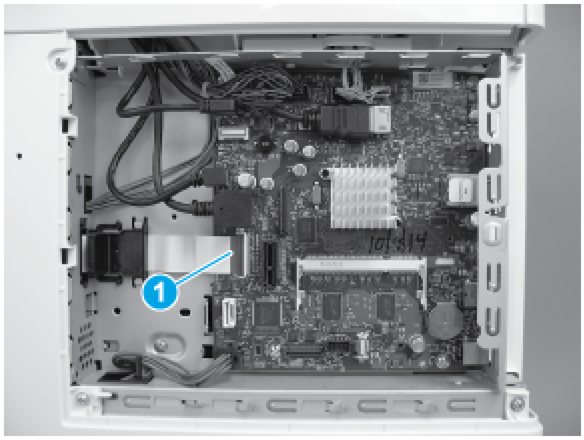
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

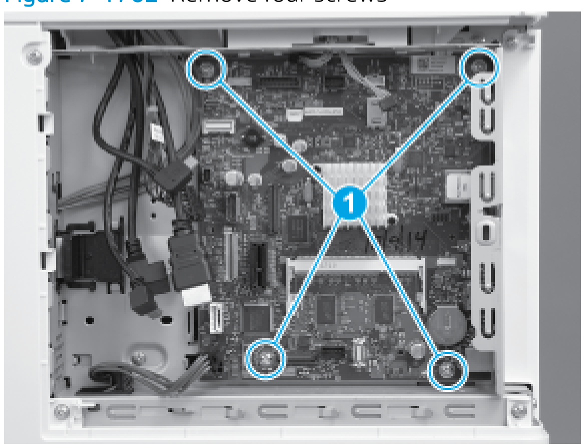
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1761 Disconnect all connectors



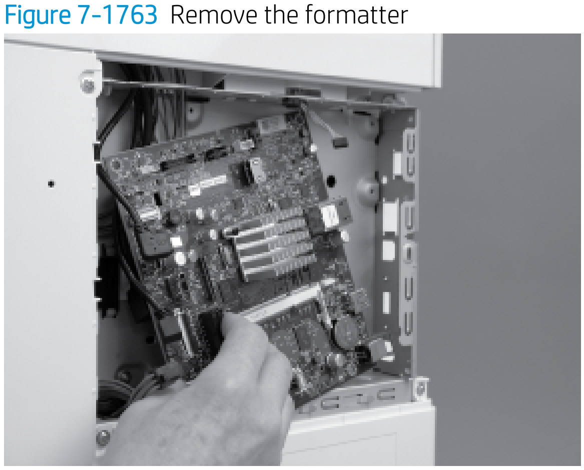
2. Remove four screws (callout 1).

Figure 7-1762 Remove four screws



3. Remove the formatter.

Figure 7-1763 Remove the formatter



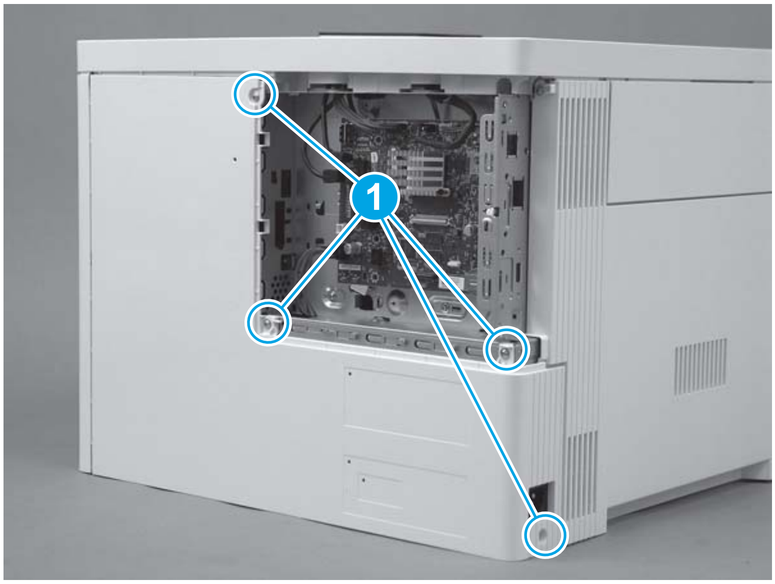
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

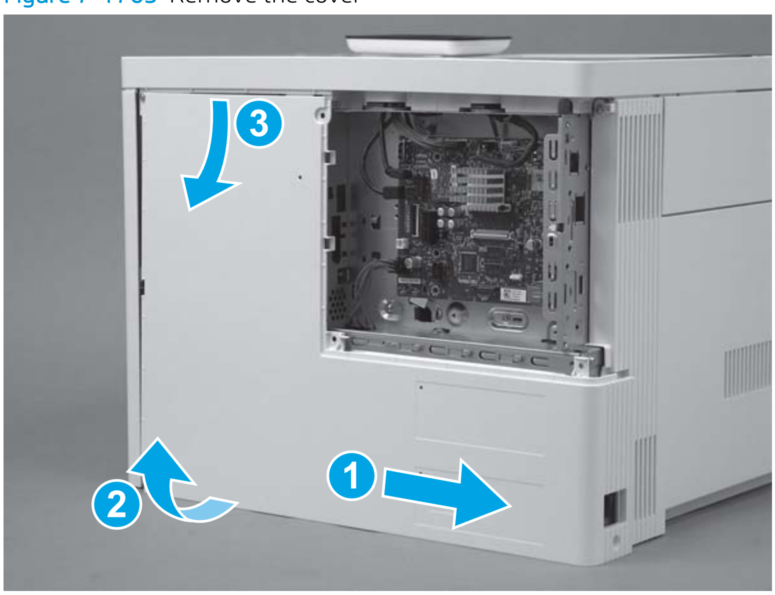
1. Remove four screws (callout 1).

Figure 7-1764 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-1765 Remove the cover



Remove the rear upper cover (MFP)

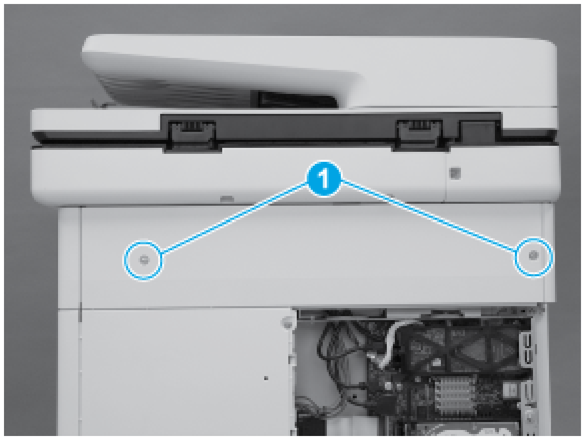
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

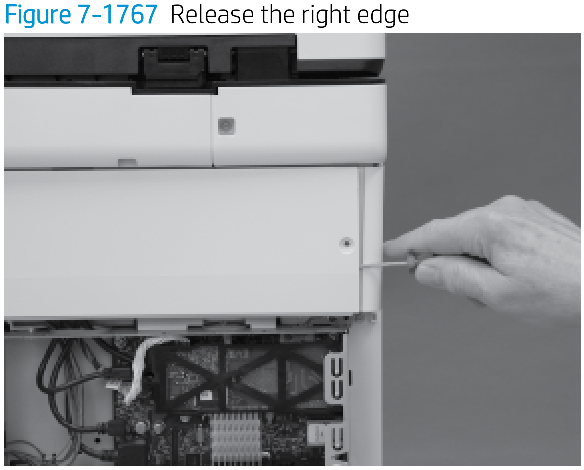
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-1766 Remove two screws



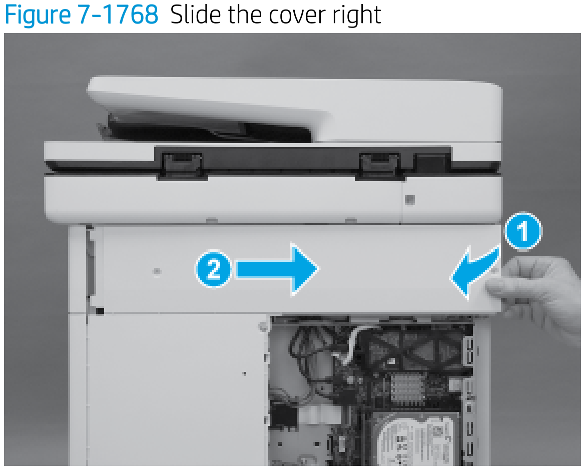
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-1767 Release the right edge



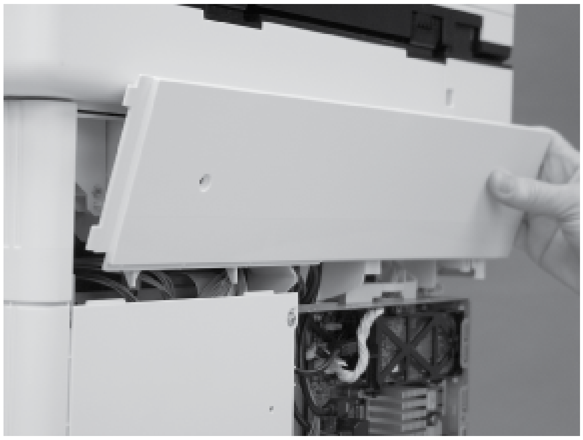
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-1768 Slide the cover right



4. Remove the cover.

Figure 7-1769 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-1770 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-1771 Remove the cover

Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

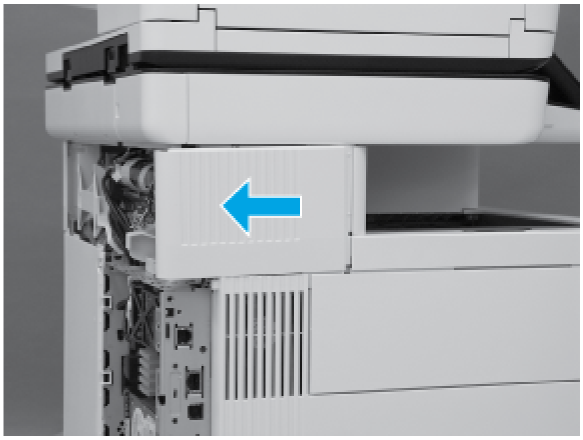
NOTE: This procedure is for MFP models only.

1. At the left side of the printer, release one tab (callout 1).

Figure 7-1772 Release one tab

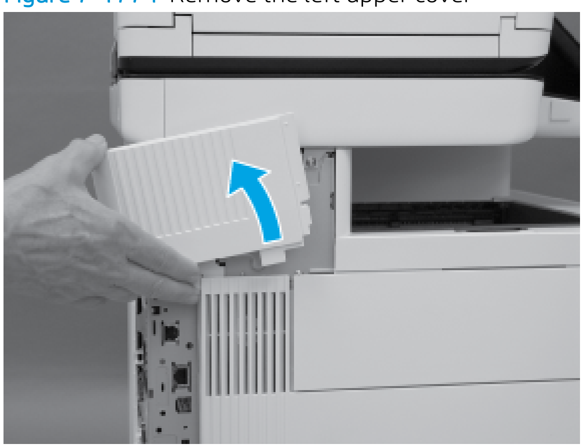
2. Slide the left upper cover toward the back of the printer.

Figure 7-1773 Slide the cover back



3. Rotate the cover up to remove it.

Figure 7-1774 Remove the left upper cover



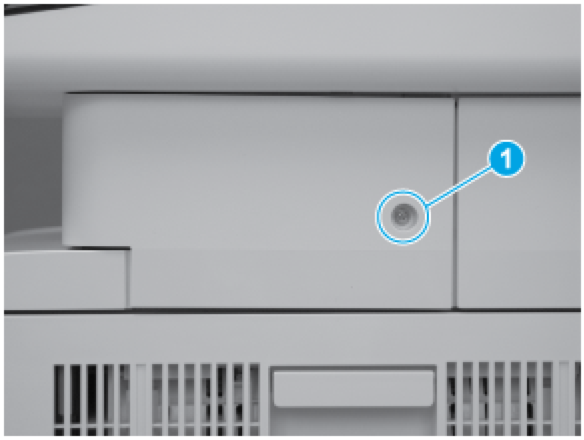
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-1775 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-1776 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-1777 Rotate the cover

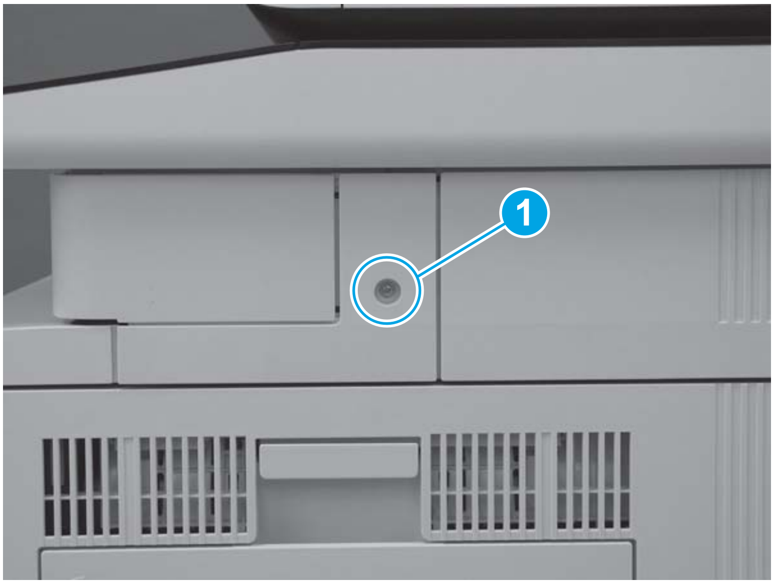
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

1. Remove one screw (callout 1).

Figure 7-1778 Remove one screw

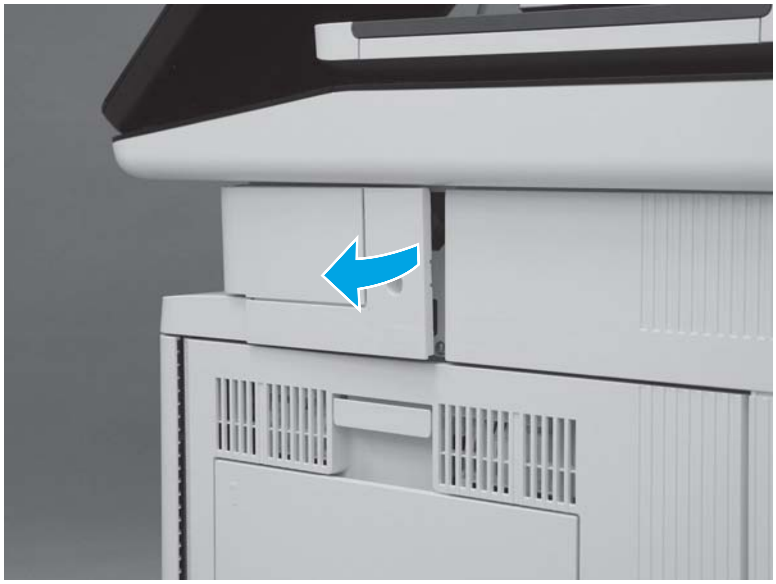


2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-1779 Release two tabs

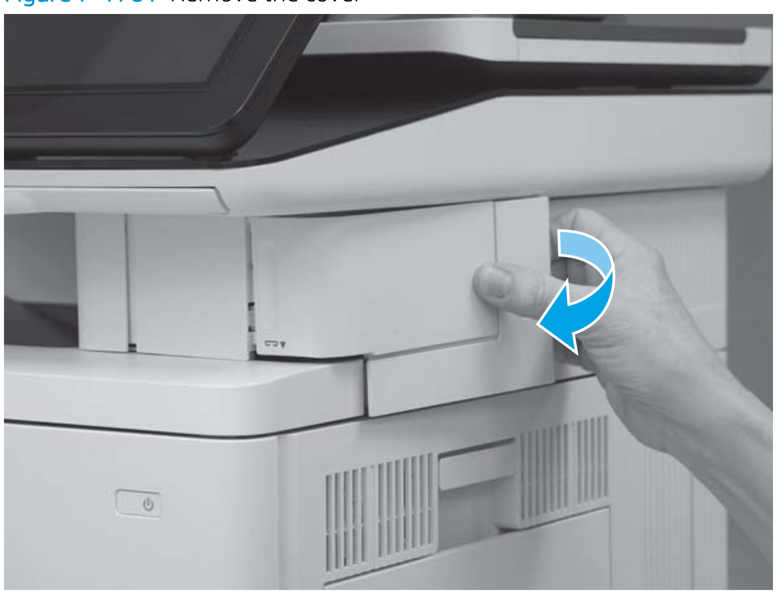
3. Release the back edge of the cover.

Figure 7-1780 Release the back edge of the cover



4. Rotate the cover away from the printer to remove it.

Figure 7-1781 Remove the cover



Remove the integrated scanner assembly (ISA) (MFP)

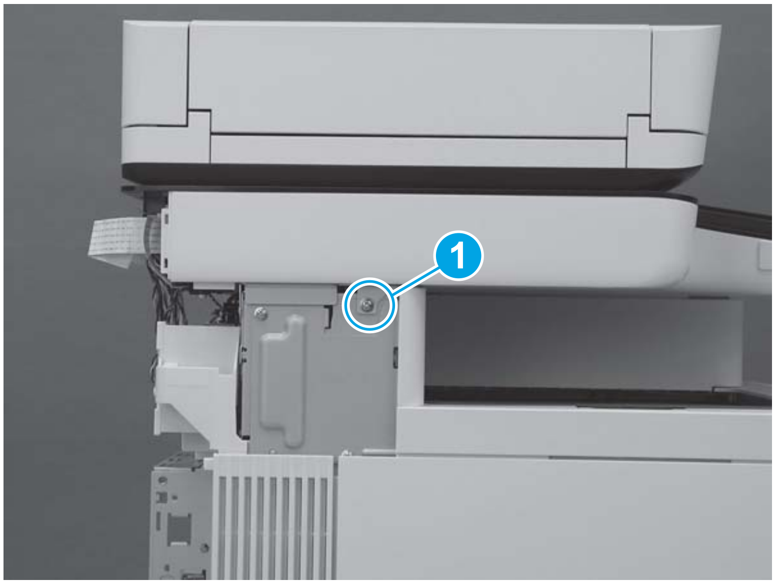
Follow these steps to remove the integrated scanner assembly (ISA).

NOTE: This procedure is for MFP models only.

NOTE: The ISA includes the document feeder, image scanner, scanner control board (SCB), control panel, keyboard (flow models) and NFC PCA (not all models).

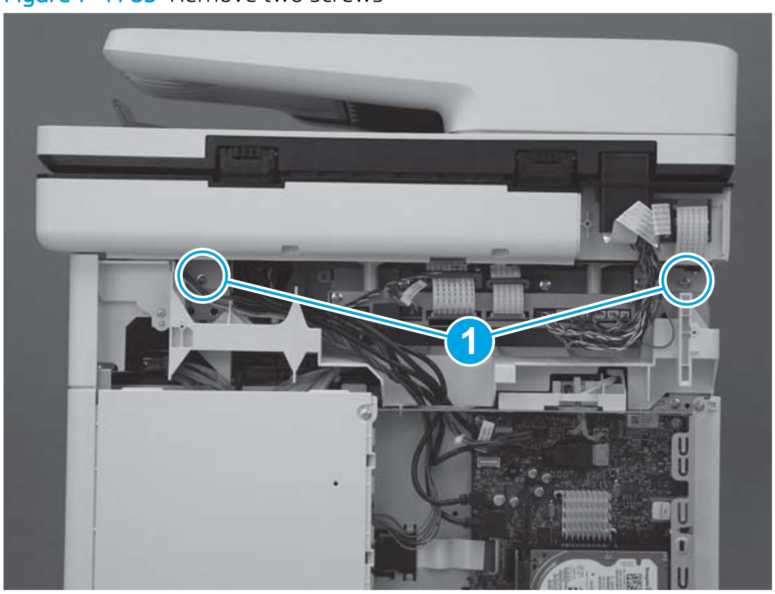
1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1782 Remove one screw



2. At the back of the printer, remove two screws (callout 1).

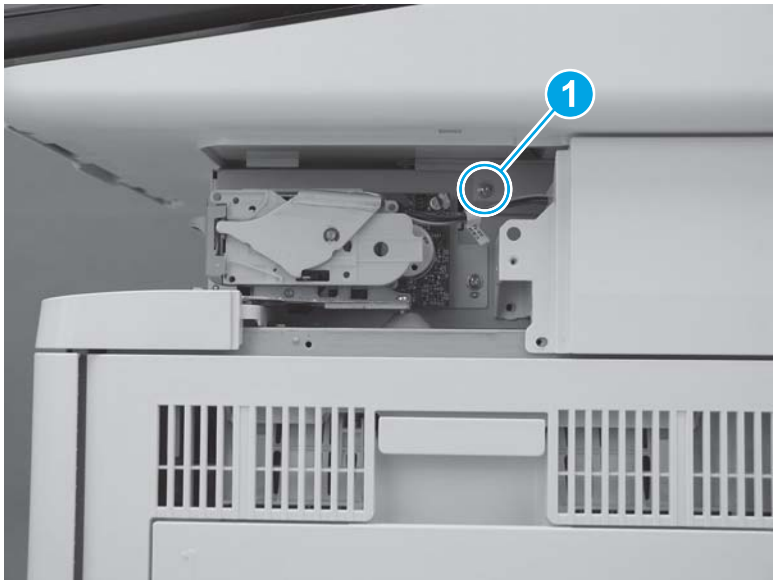
Figure 7-1783 Remove two screws



3. At the right side of the printer, remove one screw (callout 1).

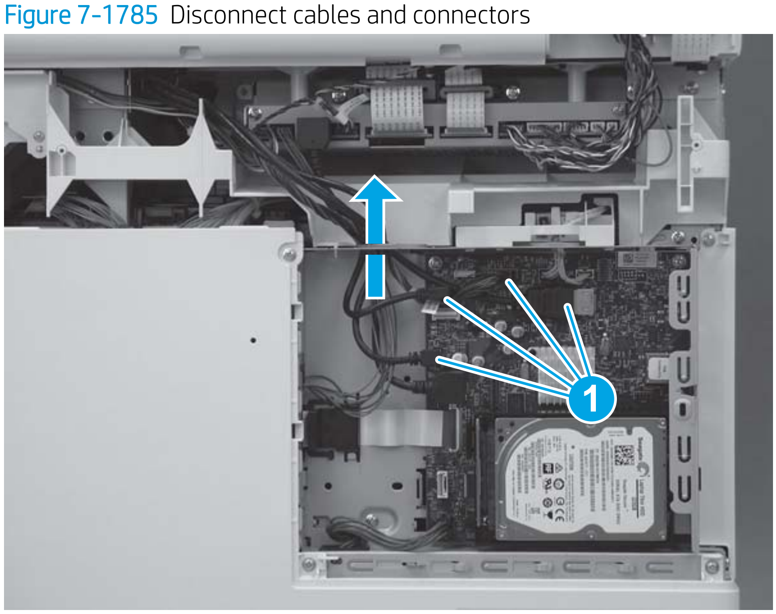
NOTE: The M577z is shown in the figure below. The procedure is correct for all MFP models.

Figure 7-1784 Remove one screw



4. Disconnect four connectors (callout 1) on the formatter, and then pass the wire harnesses and cables through the top opening in the formatter case (callout 2).

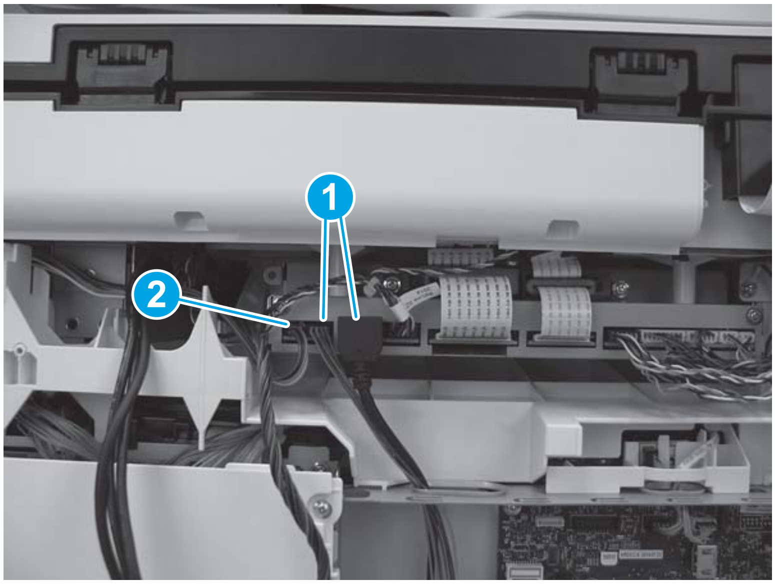
Figure 7-1785 Disconnect cables and connectors



5. Disconnect two connectors on the scanner control board (callout 1).

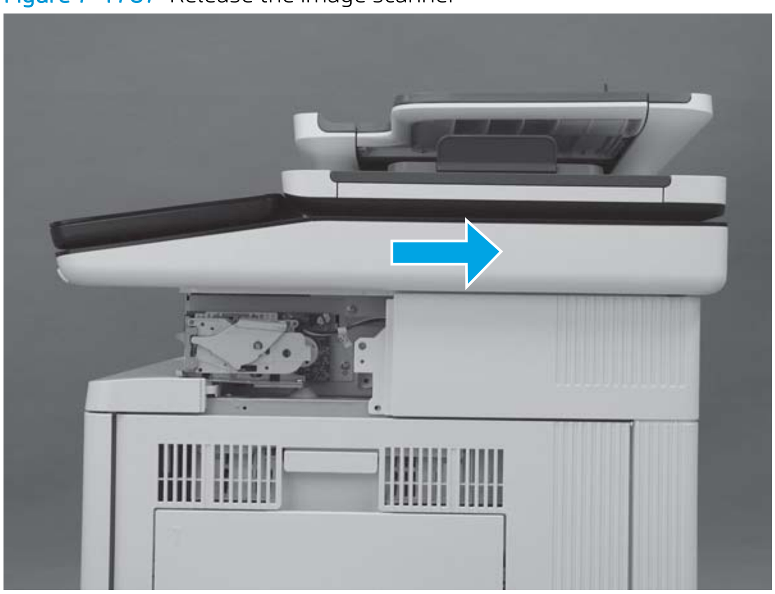
   MFP stapler models: Disconnect one connector for the stapler on the scanner control board (callout 2).

   Figure 7-1786 Disconnect connectors

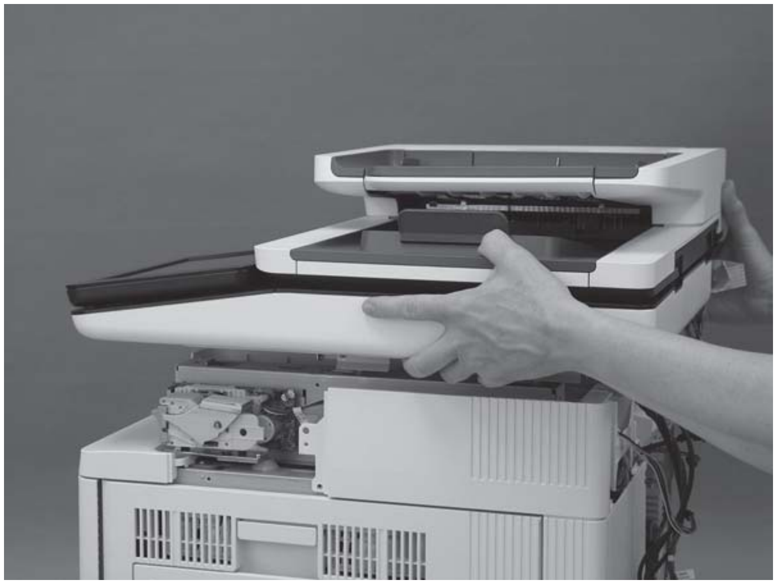
6. Slide the image scanner toward the back of the printer to release it.

   Figure 7-1787 Release the image scanner

7. Lift the ISA straight up to remove it.

Figure 7-1788 Remove the ISA



Remove the right upper cover (MFP)

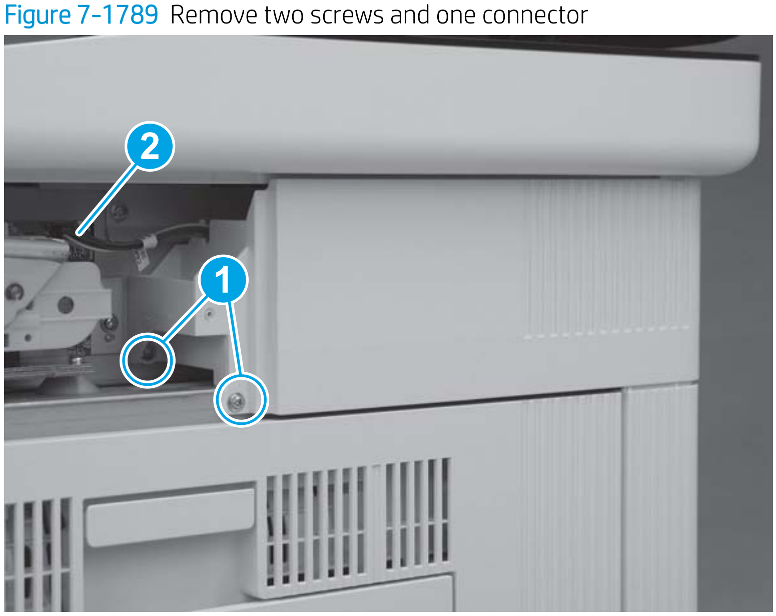
Follow these steps to remove the right upper cover.

NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Figure 7-1789 Remove two screws and one connector

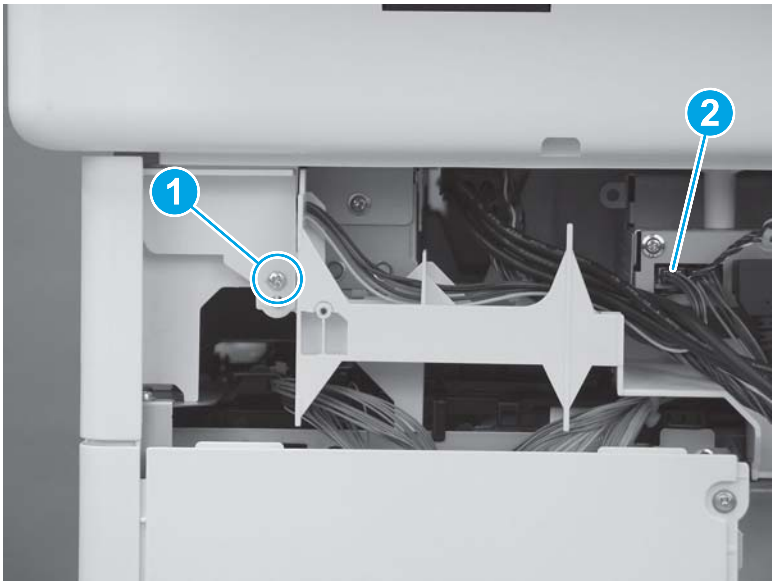


2. At the back of the printer, remove one screw (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Reinstallation tip: This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

   Figure 7-1790 Remove one screw and connector



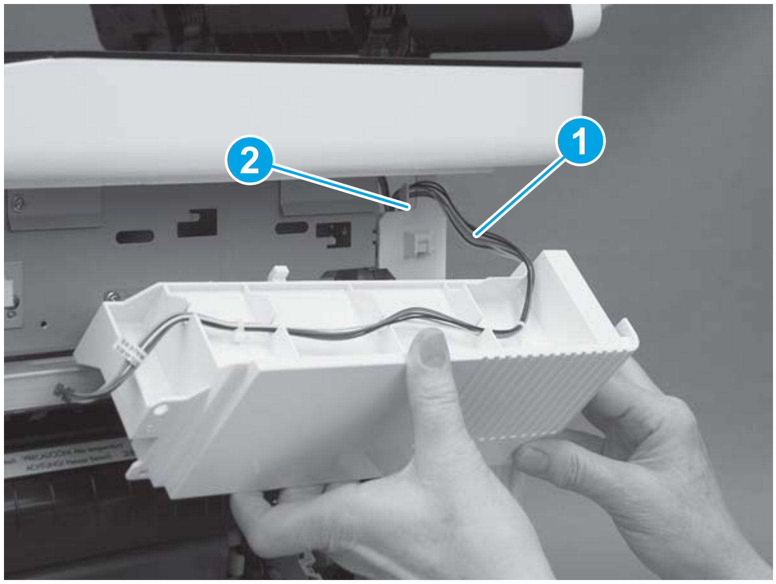
3. Slide the cover toward the back of the printer.

   Figure 7-1791 Slide the cover

4. Lift the cover away from the printer to remove it.

   M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

   Figure 7-1792 Remove the cover

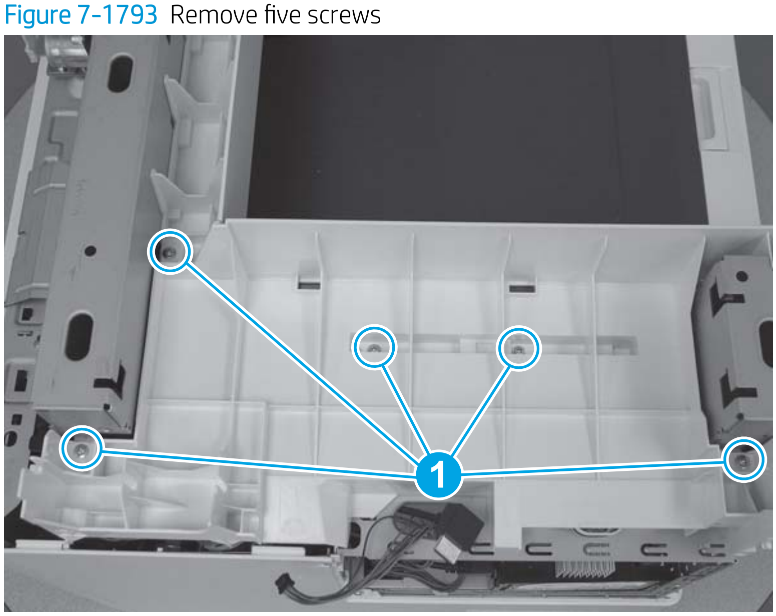
Remove the top rear cover (MFP)

Follow these steps to remove the top rear cover.

NOTE: This procedure is for MFP models only.

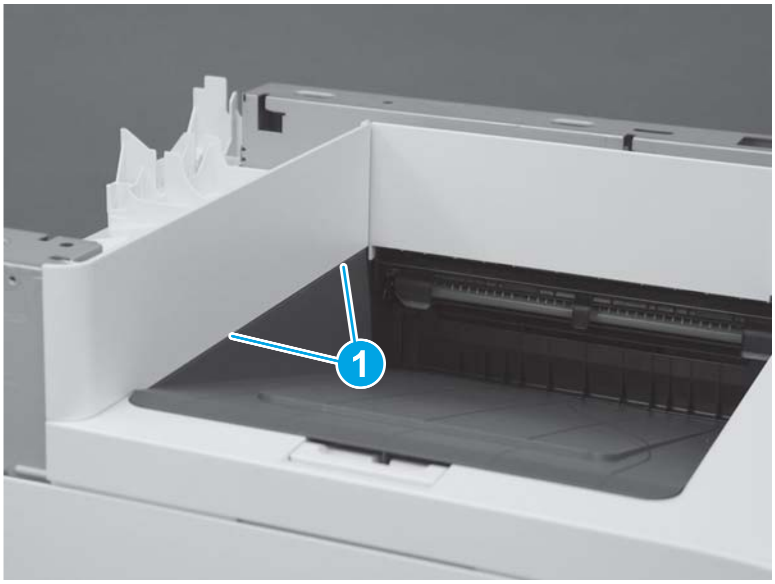
1. At the top of the printer, remove five screws (callout 1).

   Figure 7-1793 Remove five screws

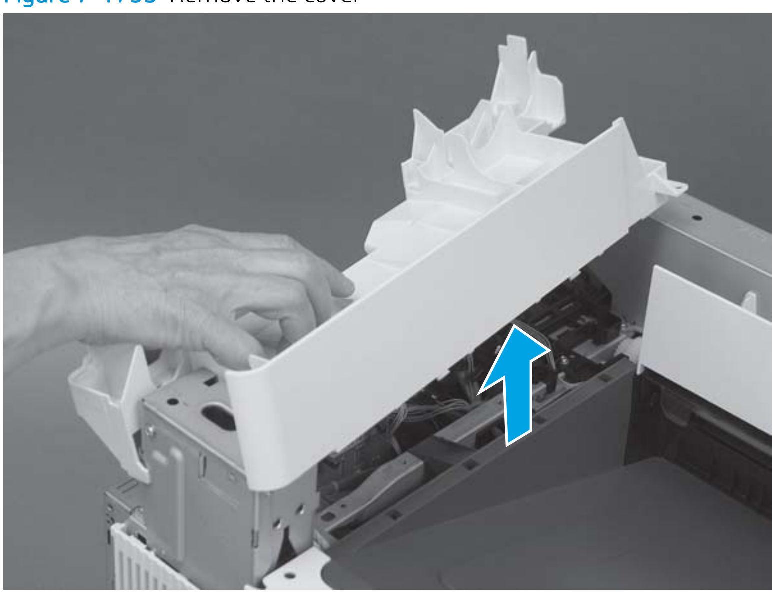
2. Release two tabs (callout 1) on the front edge of the cover.

Figure 7-1794 Release two tabs



3. Remove the top rear cover.

Figure 7-1795 Remove the cover



Remove the left cover

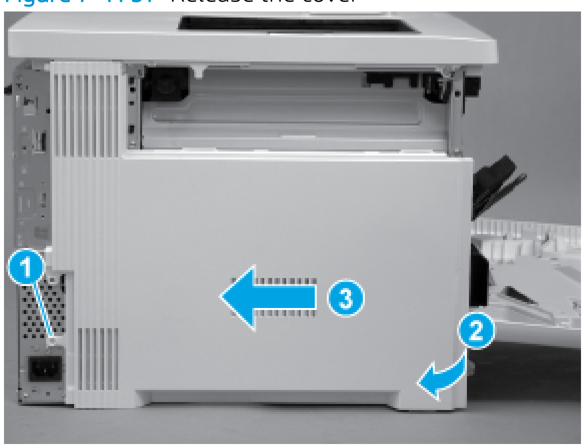
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1796 Remove one screw

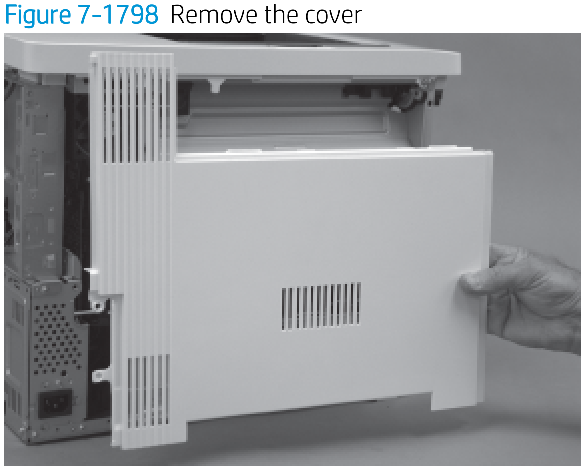
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-1797 Release the cover



3. Remove the cover.

Figure 7-1798 Remove the cover



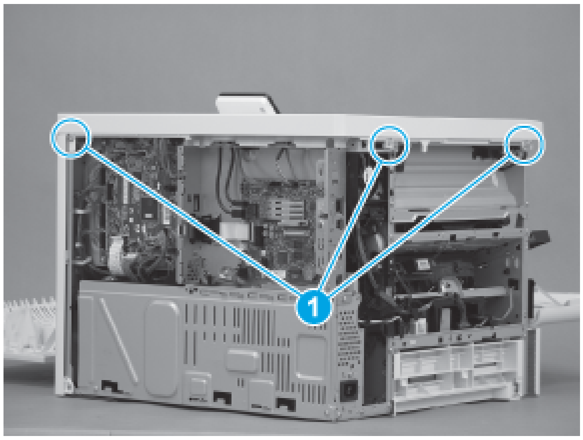
Remove the upper cover (SFP)

Follow these steps to remove the upper cover.

NOTE: This procedure is for SFP models only.

1. Remove three screws (callout 1).

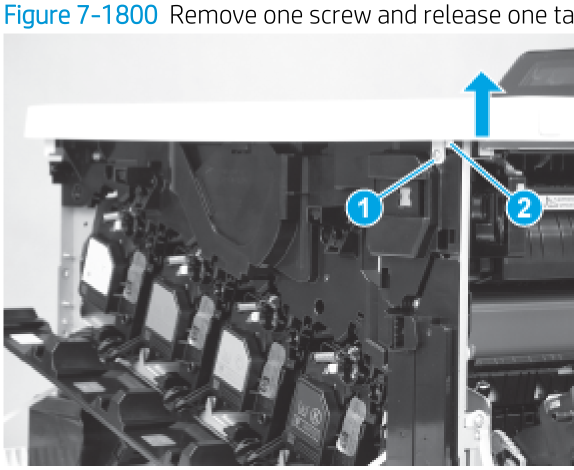
Figure 7-1799 Remove three screws



2. Remove one screw (callout 1), release one tab (callout 2), and then slightly separate the corner of the cover from the chassis.

NOTE: This is a self-tapping plastic-thread screw. Make sure that this screw is used in this location when it is reinstalled.

Figure 7-1800 Remove one screw and release one tab

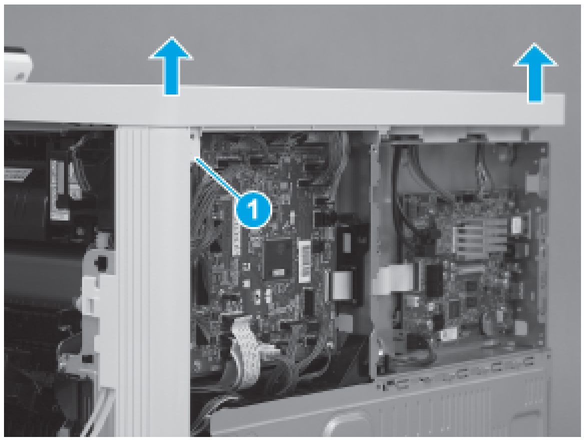


3. Release one tab (callout 1), and then lift up on the cover to release it.

IMPORTANT: **M554 models**: Disconnect the control-panel flat cable at the formatter.

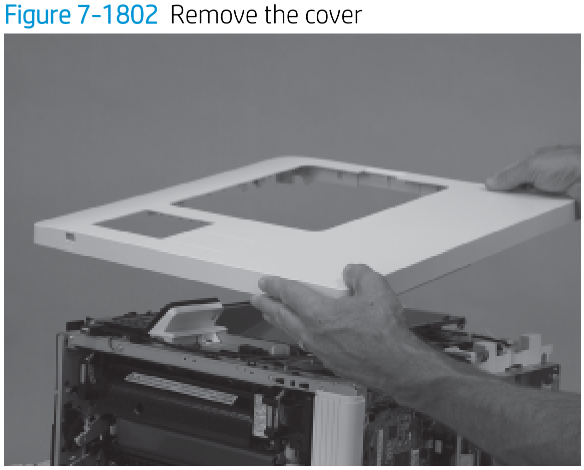
NOTE: If the cover does not release, check for addition tabs by locating the triangles embossed in the cover at tab locations.

Figure 7-1801 Release the cover



4. Remove the cover.

Figure 7-1802 Remove the cover

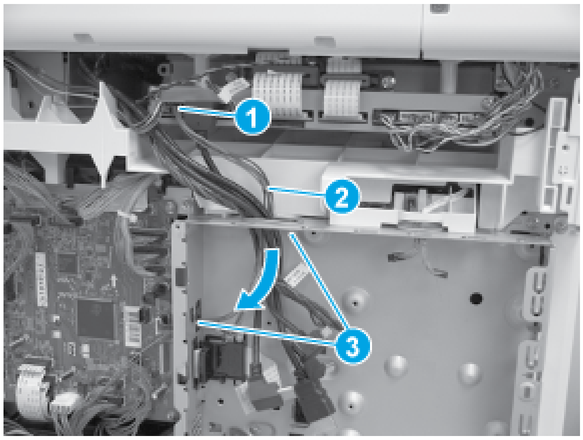


Remove the formatter case

Follow these steps to remove the formatter case.

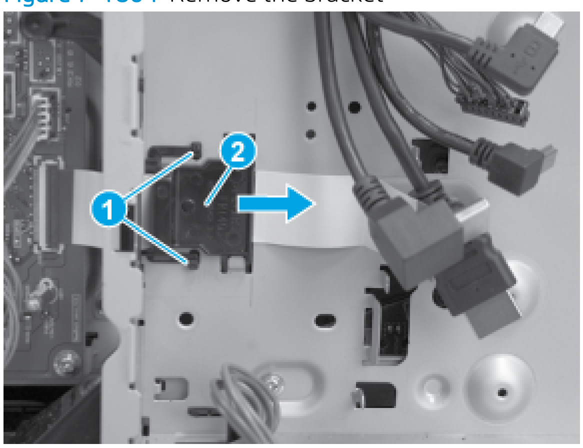
1. **MFP only**: Disconnect one connector (callout 1), and then pass the wire harness (callout 2) through two openings in the formatter case (callout 3).

Figure 7-1803 Disconnect one connector



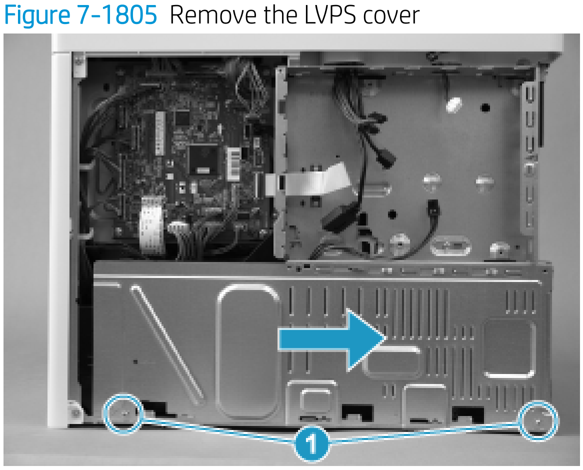
2. Release two tabs (callout 1) on the black plastic bracket. Hold the tabs in the released position, and then slide the bracket (callout 2) to the right to remove it from the formatter case.

Figure 7-1804 Remove the bracket



3. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

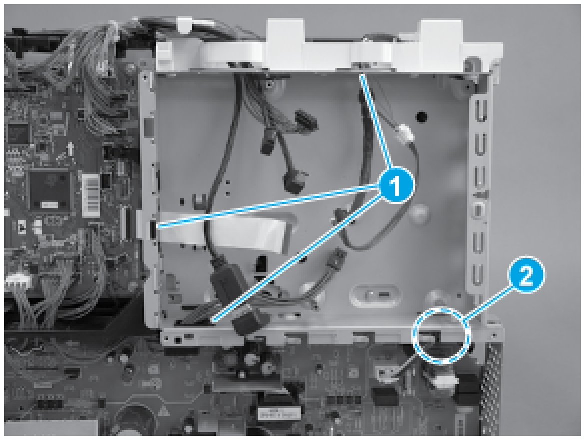
Figure 7-1805 Remove the LVPS cover



4. Pass two wire harnesses and one flat cable (callout 1) through the opening in the formatter case, and then release one wire harness from the retainer (callout 2).

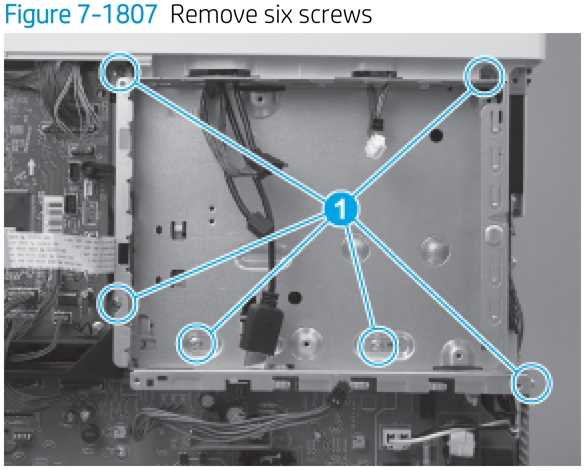
⚠ CAUTION: The flat cable might be attached to the formatter case with double-sided tape. Make sure that this tape is released, so that the flat cable is not damaged when the formatter case is removed.

Figure 7-1806 Release wire harnesses and flat cable



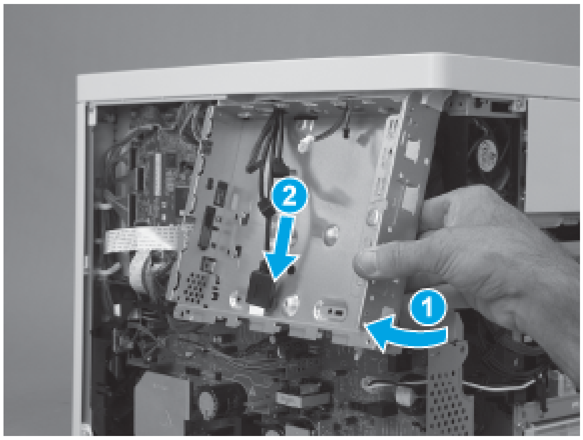
5. Remove six screws (callout 1).

Figure 7-1807 Remove six screws



6. Rotate the bottom of the formatter case away from the printer (callout 1), and then pull it down (callout 2) to release it.

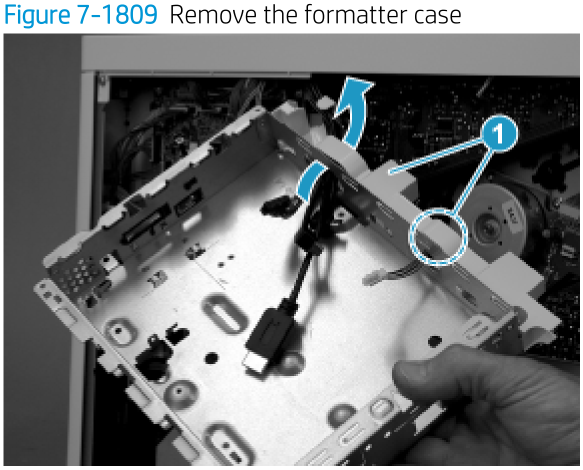
Figure 7-1808 Release the formatter case



7. Pass the wire harnesses through the opening in the formatter case to remove it.

IMPORTANT: If the formatter case is removed so that it can be replaced, make sure to transfer the memory PCA (island of data) and plastic bracket (callout 1) to the replacement case.

Figure 7-1809 Remove the formatter case



Remove the right rear cover

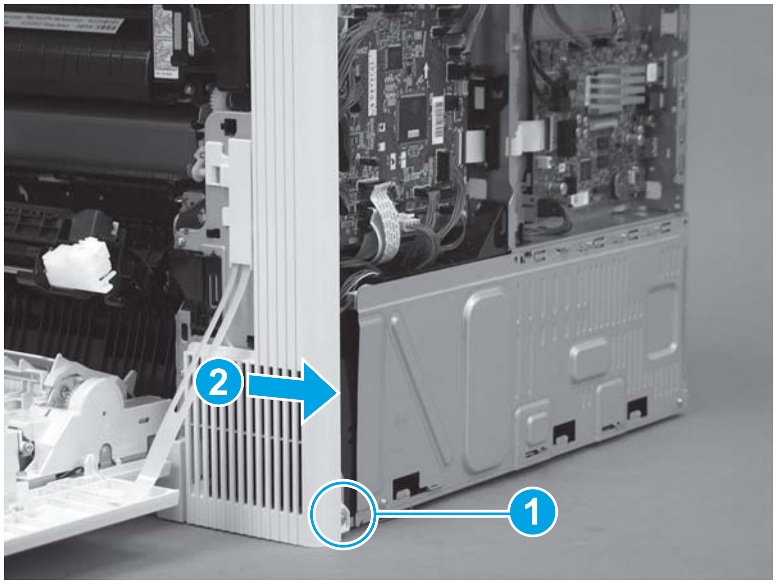
Follow these steps to remove the right rear cover.

NOTE: The figures in this topic show a SFP model. However, the procedure is correct for an MFP.

1. Remove one screw (callout 1), and then slide the cover toward the rear of the printer (callout 2) to release it.

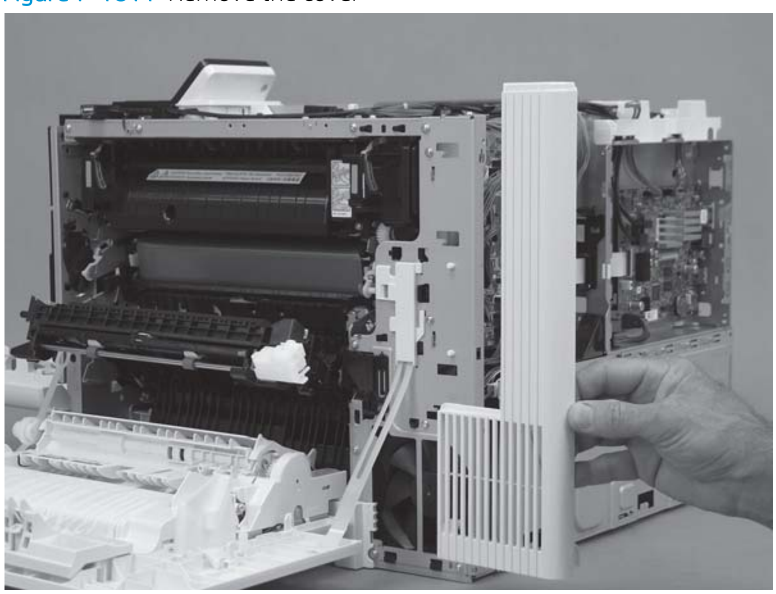
TIP: If the right door is closed, open it now.

Figure 7-1810 Release the cover



2. Remove the cover.

Figure 7-1811 Remove the cover



Remove the DC controller (DCC) and sheet-metal bracket

Follow these steps to remove the DC controller and sheet-metal bracket together.

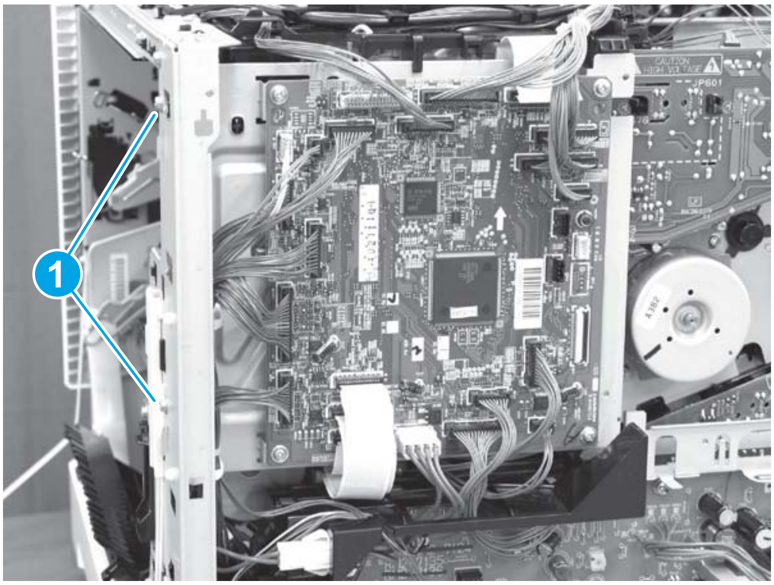
NOTE: ESD sensitive part.

1. Disconnect all of the connectors, and then remove two screws (callout 1).

Empty DCC connectors

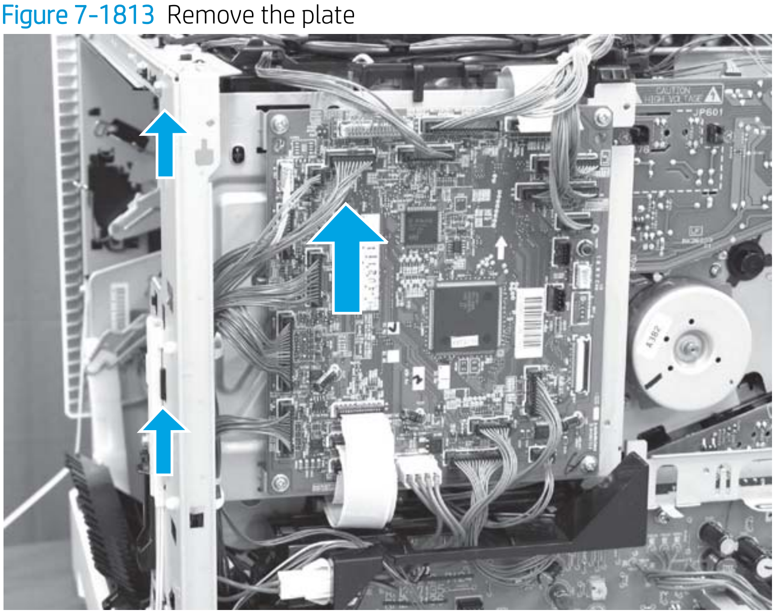
- J140
- J141
- J143

Figure 7-1812 Remove two screws



2. Lift up on the DC controller and sheet-metal plate to remove it.

Figure 7-1813 Remove the plate



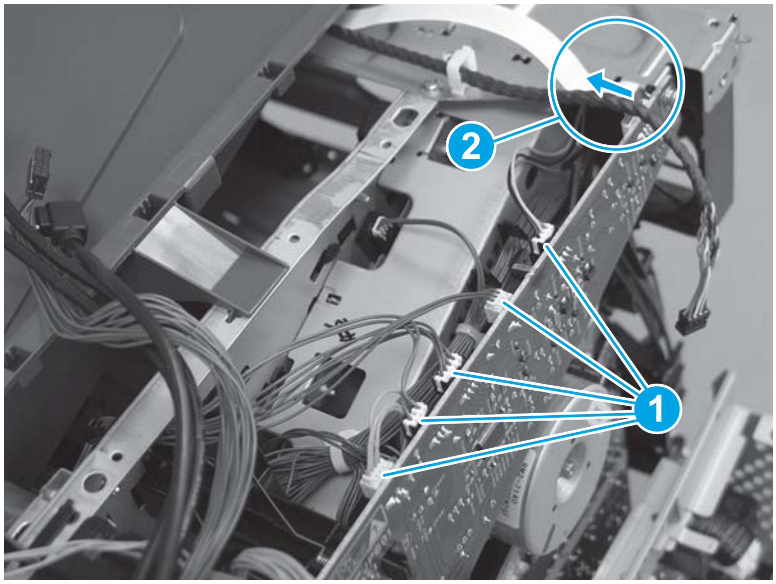
Remove the high-voltage power supply T (HVPST)

Follow these steps to remove the high-voltage power supply T.

NOTE: ESD sensitive part.

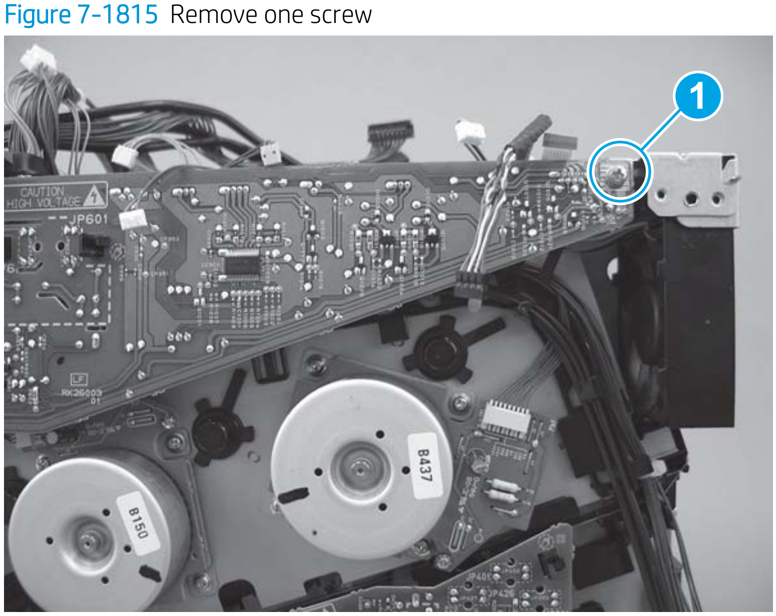
1. Disconnect five connectors (callout 1), and then disconnect one flat cable (callout 2).

Figure 7-1814 Disconnect five connectors and one flat cable



2. Remove one screw (callout 1).

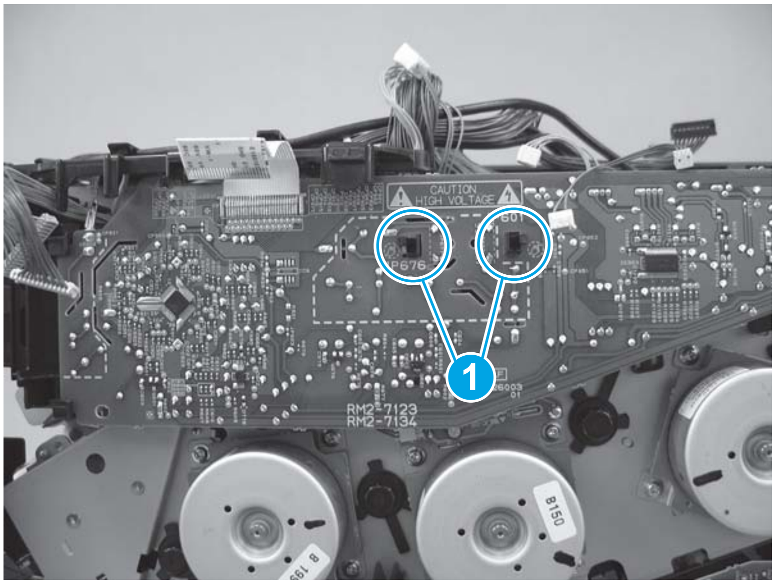
Figure 7-1815 Remove one screw



3. Release two tabs (callout 1), and then separate the HVPST from the printer.

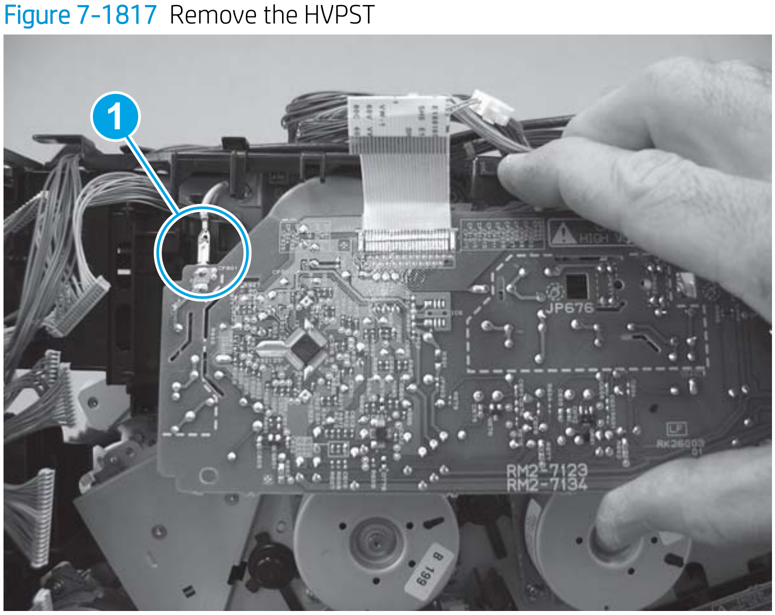
> ⚠ CAUTION: Do not attempt to completely remove the HVPST. It is still connected to the printer by ground wire harness.

Figure 7-1816 Release the HVPST



4. Release one ground wire connector (callout 1), and then remove the HVPST.

Figure 7-1817 Remove the HVPST

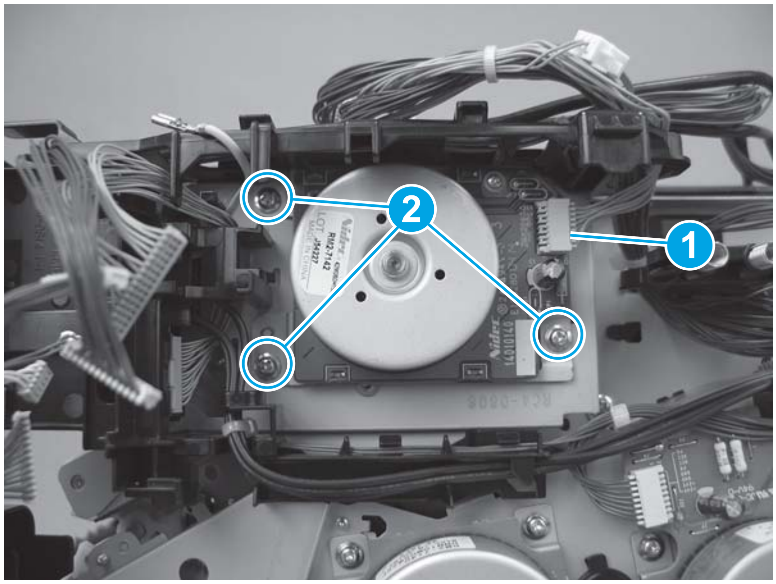


Remove fuser motor (M4)

Follow these steps to remove the fuser motor.

▲ Disconnect one connector (callout 1), remove three screws (callout 2), and then remove the motor.

Figure 7-1818 Remove the motor



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Environmental sensor printed circuit assembly (PCA)

Learn about removing and replacing the environmental sensor PCA.

Before performing service

Turn the printer power off

- Disconnect the power cable.

WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-77 Part information

Part number	Part description
RM2-7154-000CN	Environmental sensor PCA

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the formatter (SFP)

Follow these steps to remove the formatter.

NOTE: This procedure is for SFP models only.

1. Disconnect all of the connectors on the formatter.

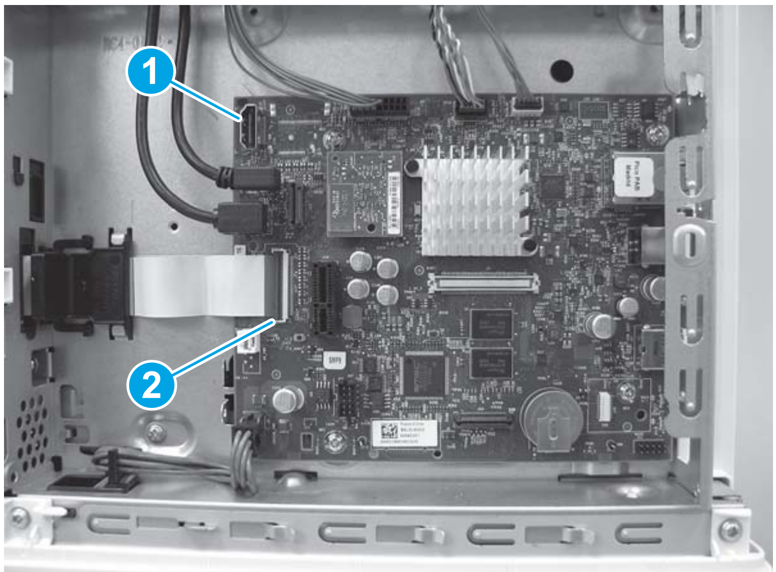
   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)
   - All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
   - M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)

- All models: J57
- All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

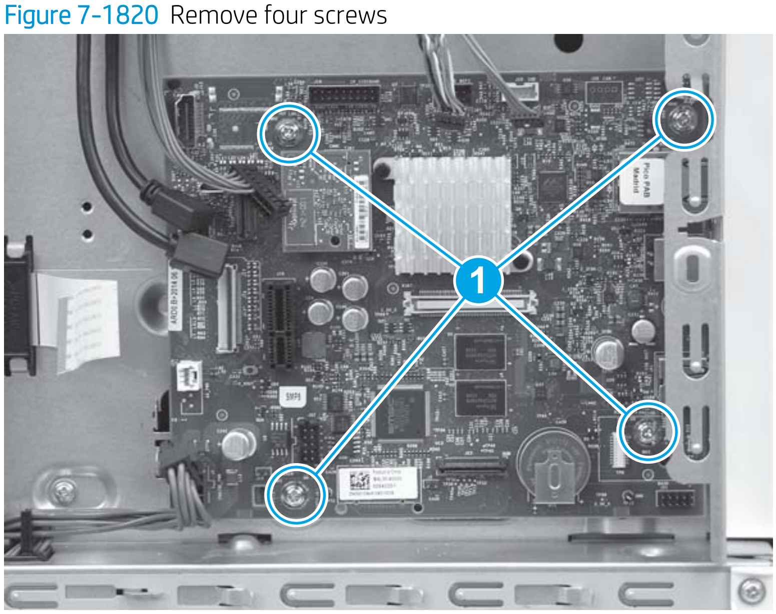
IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1819 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-1820 Remove four screws



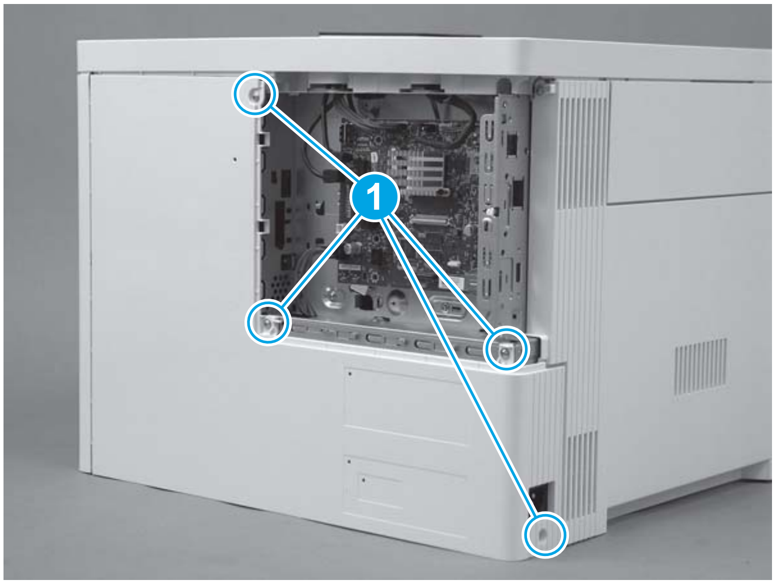
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

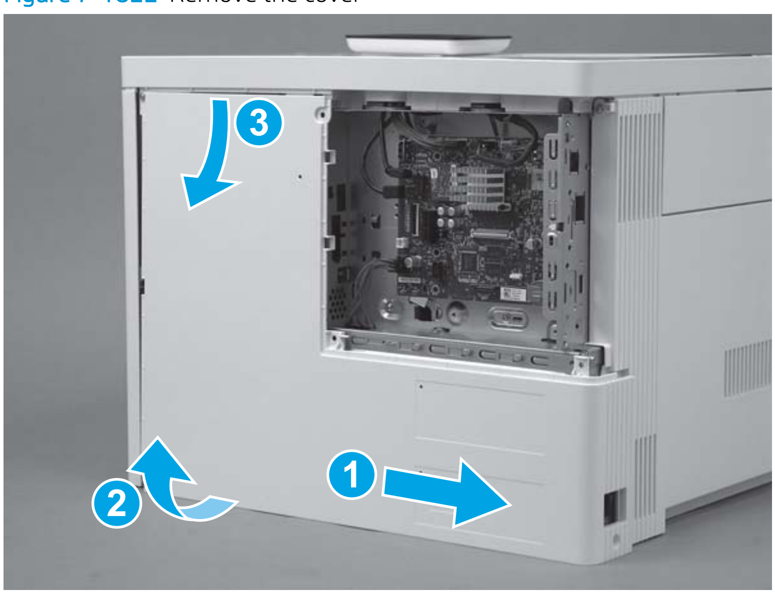
1. Remove four screws (callout 1).

Figure 7-1821 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-1822 Remove the cover



Remove the rear upper cover (MFP)

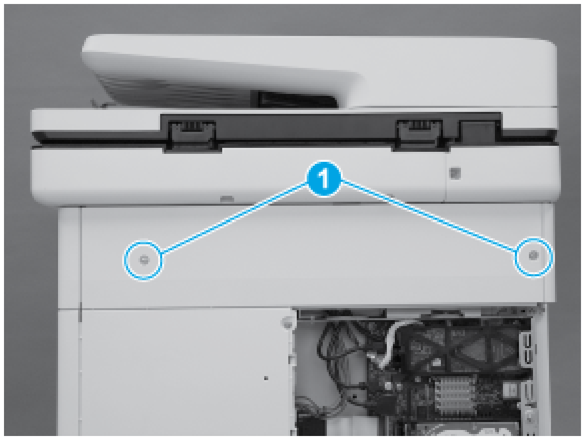
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

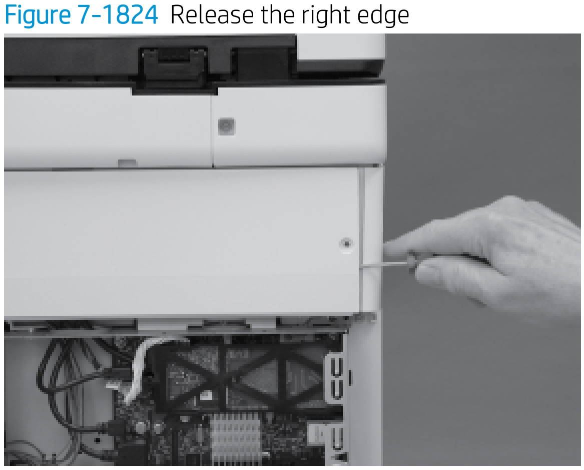
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-1823 Remove two screws



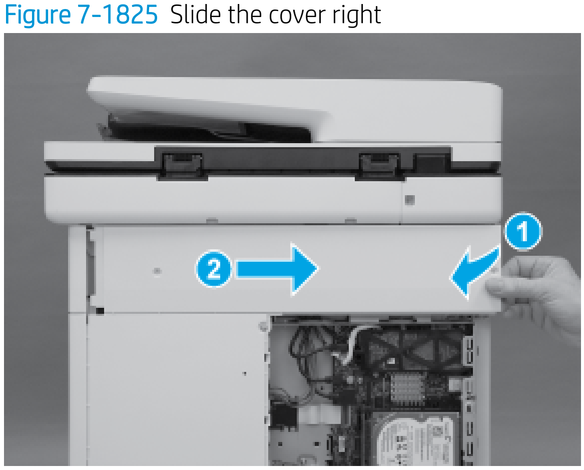
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-1824 Release the right edge



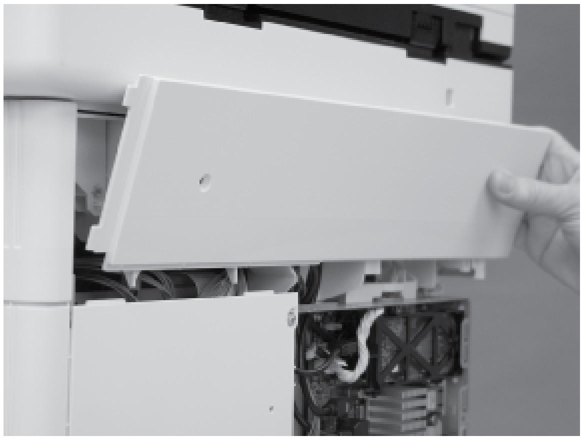
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-1825 Slide the cover right



4. Remove the cover.

Figure 7-1826 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-1827 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-1828 Remove the cover

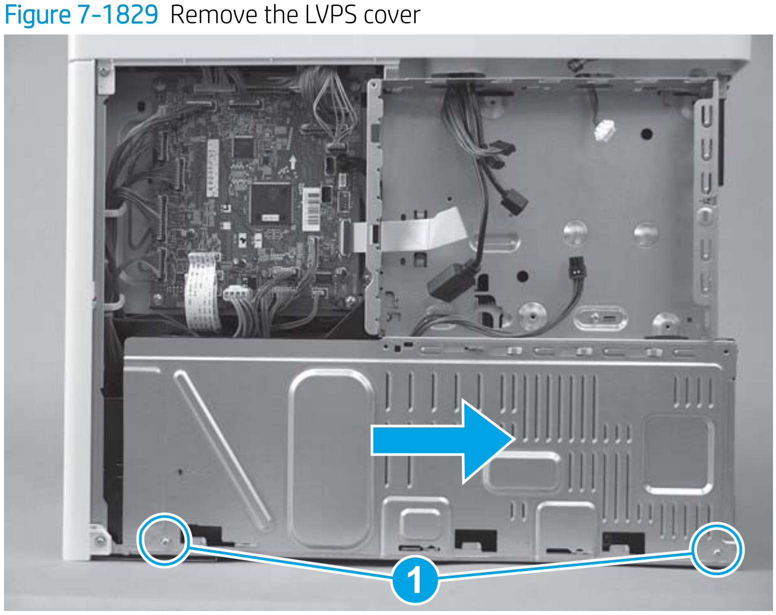
Remove the environmental sensor PCA

Follow these steps to remove the environmental sensor PCA.

NOTE: ESD sensitive part.

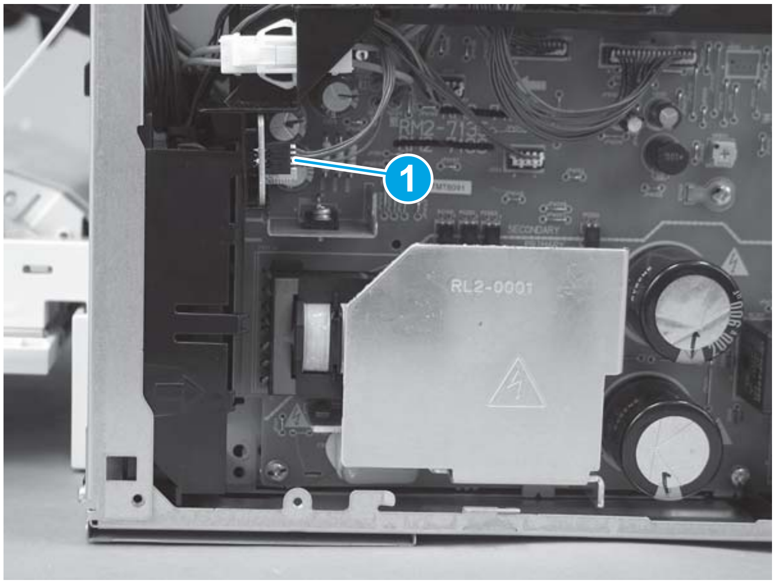
1. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

Figure 7-1829 Remove the LVPS cover



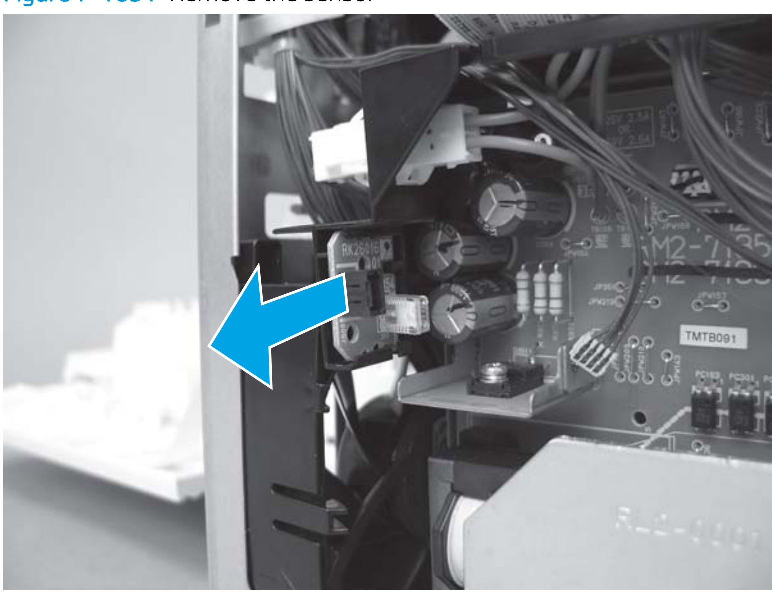
2. Disconnect one connector (callout 1).

Figure 7-1830 Disconnect one connector



3. Slide the environmental sensor PCA out of the holder to remove it.

Figure 7-1831 Remove the sensor



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Fuser drive assembly

Learn about removing and replacing the fuser drive assembly.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-78 Part information

Part number	Part description
RM2-0091-010CN	Fuser drive assembly (M553n)
RM2-0009-000CN	Fuser drive assembly (M552, M553dn/x, M554, M555, M577, M578, E 55040, E57540)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

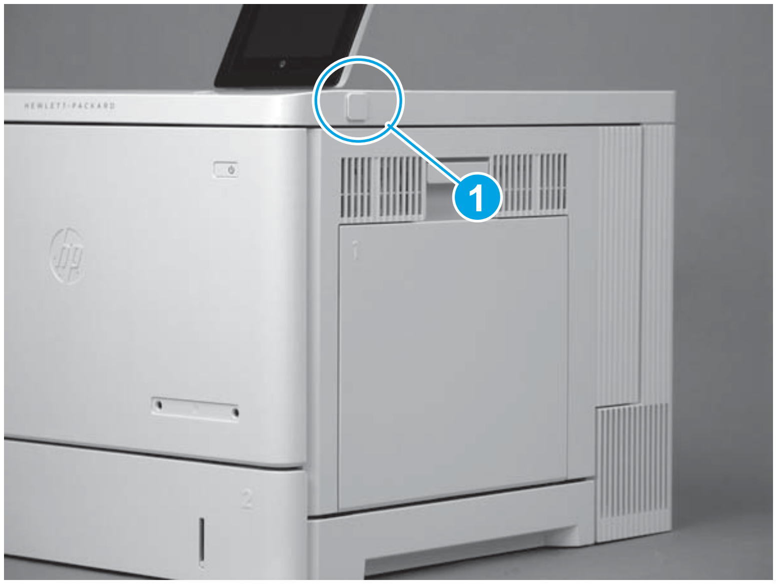
Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

> NOTE: This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-1832 Locate the USB cover



2. Pull the cover off of the printer to remove it.

Figure 7-1833 Remove the cover

Remove the fuser

Follow these steps to remove the fuser.

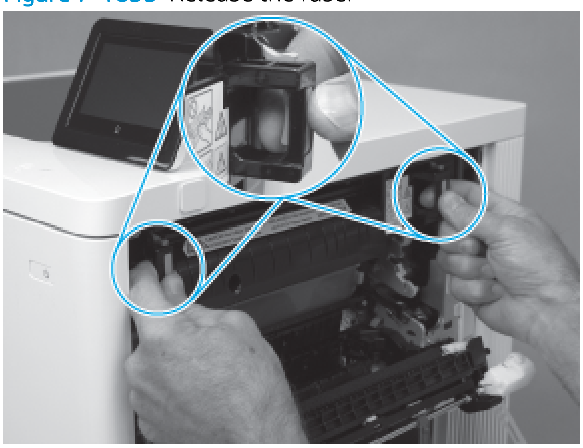
1. Open the right door.

> ⚠ CAUTION: The fuser is very hot. After turning the printer power off, allow the fuser to cool for at least 30 minutes before removing it.

Figure 7-1834 Open the right door

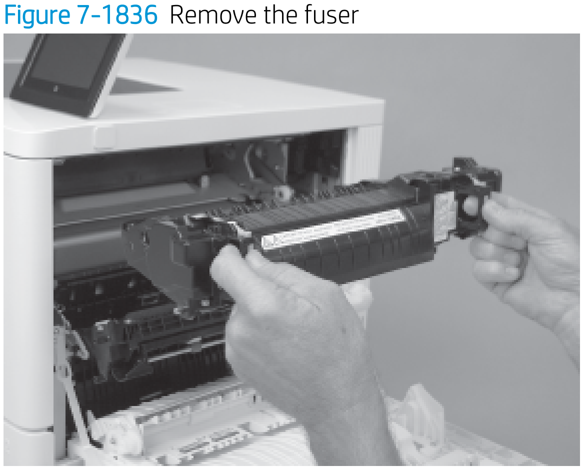
2. Grasp the two fuser handles, and then squeeze the two blue triggers on the handles to release the fuser.

Figure 7-1835 Release the fuser



3. Slide the fuser straight out of the printer to remove it.

Figure 7-1836 Remove the fuser



Remove the control panel (M553x/M555/E55040)

Follow these steps to remove the control panel.

NOTE: This procedure is for the M553x/M555/E55040 printers only.

M555 models: Removing the control panel is similar to the procedure below. For the M555, a flat cable connects the control panel to the formatter.

1. Tilt the control panel up.

Figure 7-1837 Tilt the control panel up

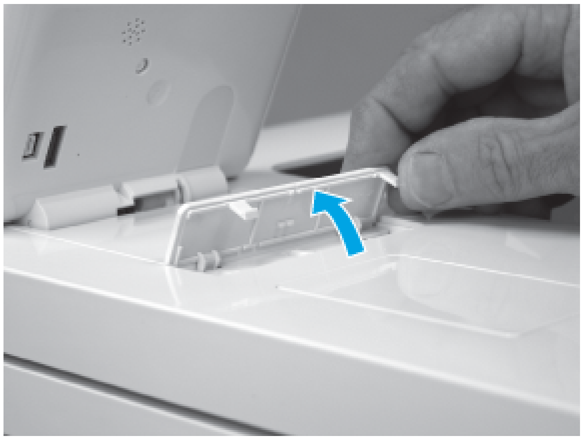
2. Use the small flat-blade screwdriver supplied in this kit to release the control-panel screws cover tabs.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-1838 Release the control-panel screws cover tabs

3. Rotate the cover up to remove it.

Figure 7-1839 Remove the cover

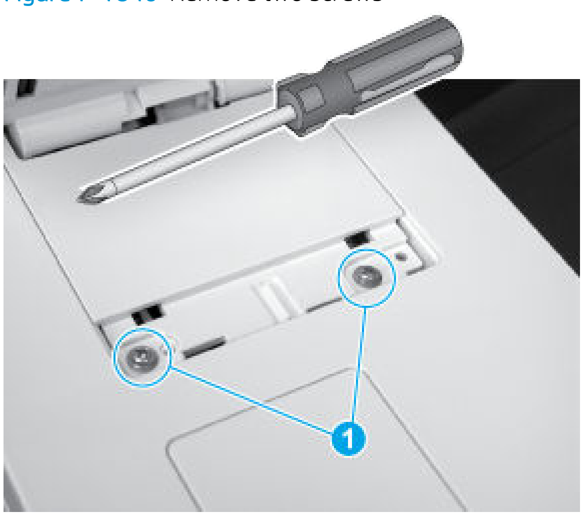


4. Use the small Phillips screwdriver supplied in this kit to remove two screws (callout 1).

IMPORTANT: Store the screws in a secure place where they cannot fall down into the printer.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-1840 Remove two screws



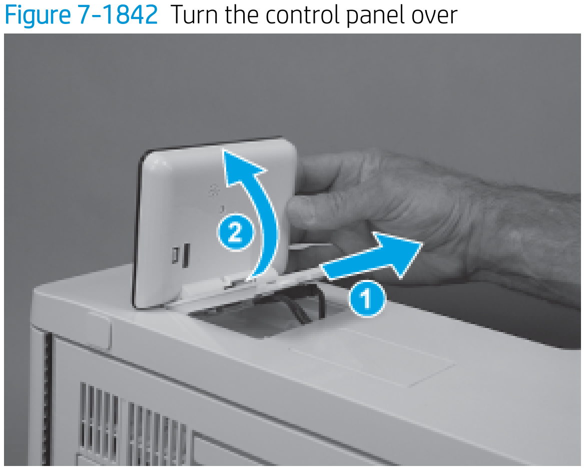
5. Rotate the control-panel base toward the front of the printer.

Figure 7-1841 Rotate the control-panel base up

6. Slightly slide the control-panel base toward the rear of the printer (callout 1) to release it, and then turn the control panel over (callout 2) to access the bottom side.

> ⚠ CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

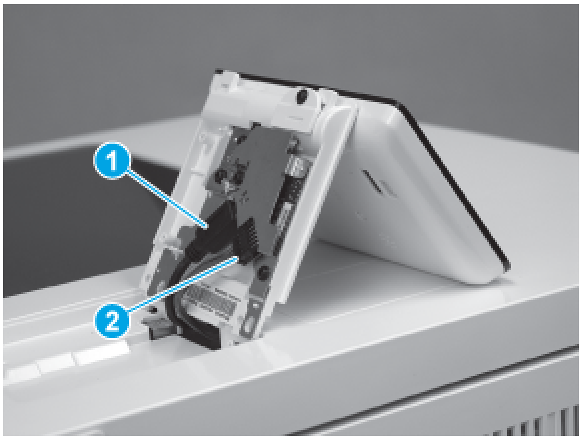
Figure 7-1842 Turn the control panel over



7. Disconnect one USB cable (callout 1), one connector (callout 2), and then remove the control panel.

NOTE: **M555 only**: Disconnect one flat cable (not shown), and then remove the control panel.

Figure 7-1843 Disconnect two connectors



Remove Tray 2

Learn about removing Tray 2.

NOTE: A SFP printer is shown in this section. However, the procedure is correct for all printer models.

The figures in this section show Tray 2. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5. Always carefully read the instructions that accompany the figures.

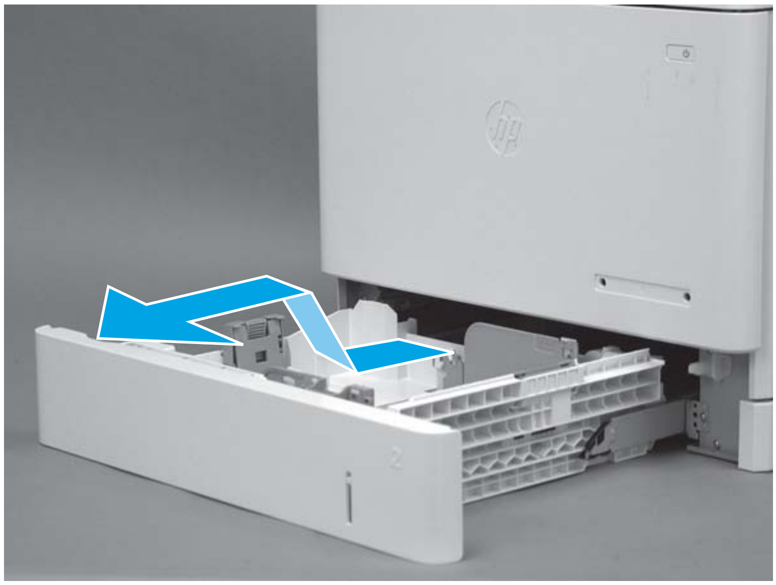
1. Pull the tray out until it stops.

Figure 7-1844 Pull the tray out

2. Lift the front of the tray, and then pull it out of the printer to remove it.

NOTE: **For a replacement tray:** If the tray has Fixed Tray Guides installed and are still required, move hardware to new tray. If necessary, order new kit: 3GY25–67901 Kit - Fixed Tray Guide. Only one kit required per engine.

Figure 7-1845 Remove the tray



Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

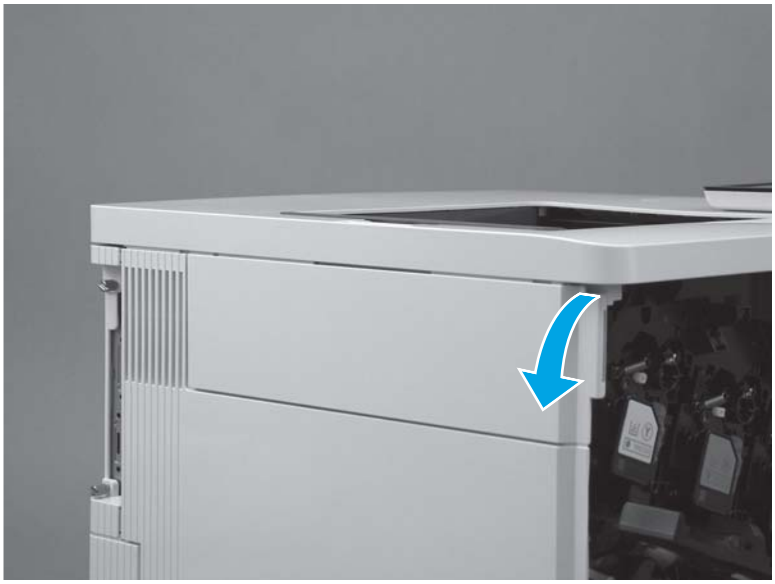
1. Open the front door.

Figure 7-1846 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

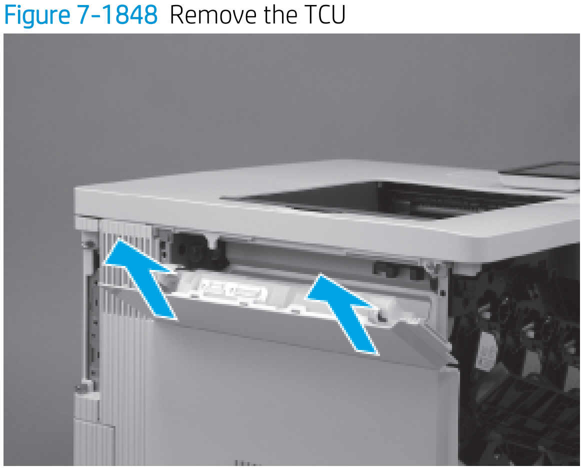
Figure 7-1847 Open the TCU



3. Pull the TCU away from the printer at an angle to remove it.

CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

Figure 7-1848 Remove the TCU

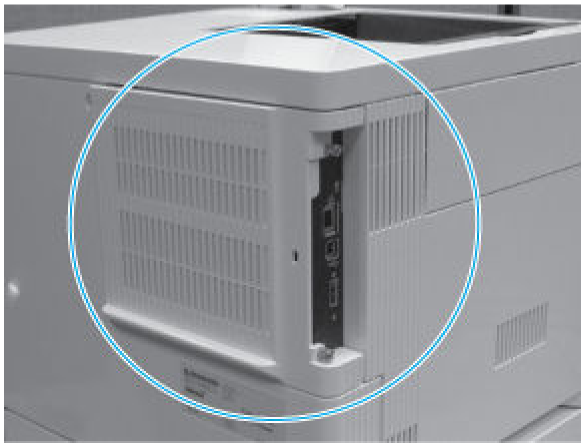


Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

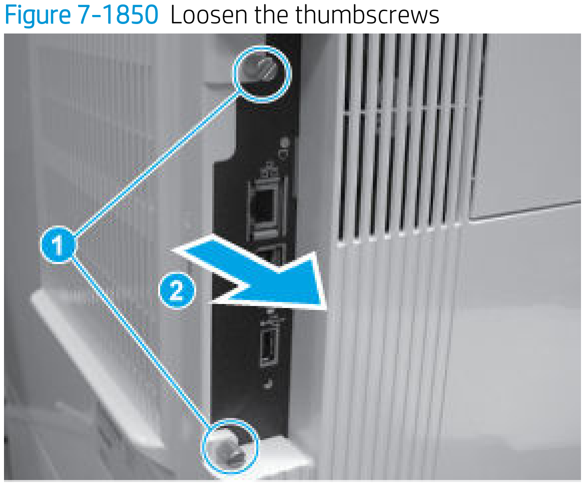
Figure 7-1849 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-1850 Loosen the thumbscrews



Remove the formatter (SFP)

Follow these steps to remove the formatter.

NOTE: This procedure is for SFP models only.

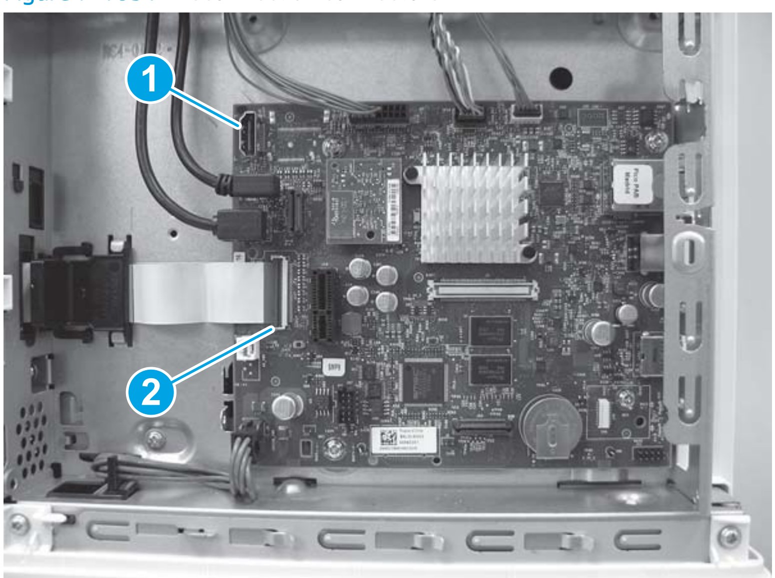
1. Disconnect all of the connectors on the formatter.

The following connectors are empty:

- All models: J1 (this connector is empty unless the optional DIMM is installed)
- M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)
- All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
- All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
- M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)
- All models: J57
- All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

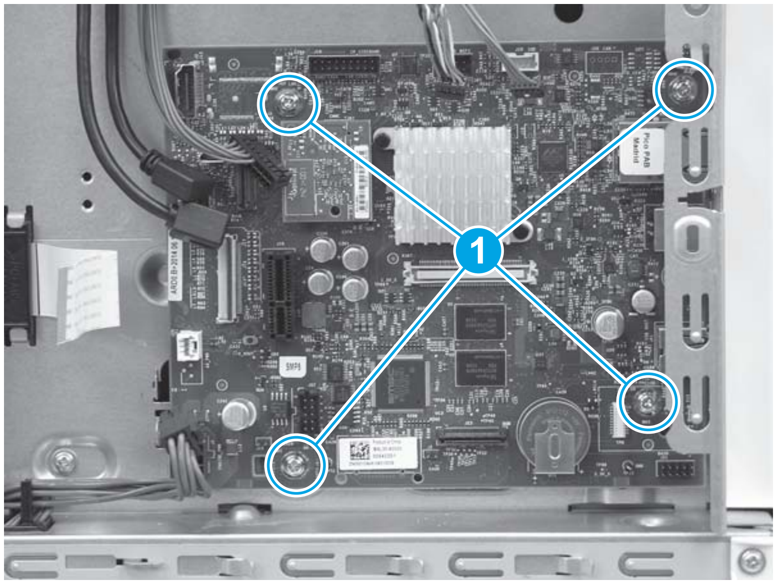
IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1851 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-1852 Remove four screws



Remove the hard-disk drive (HDD)

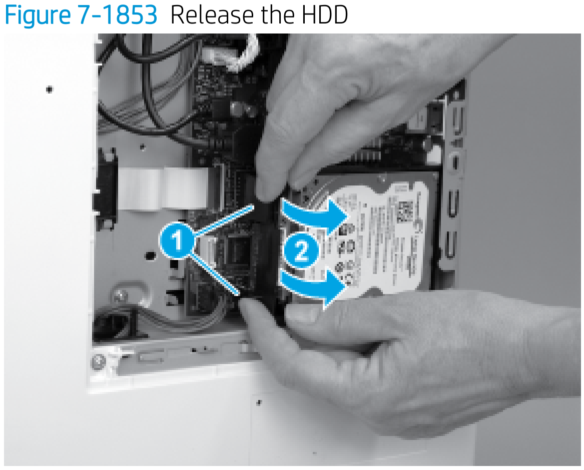
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-1853 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-1854 Remove the HDD

Remove the fax PCA (fax models)

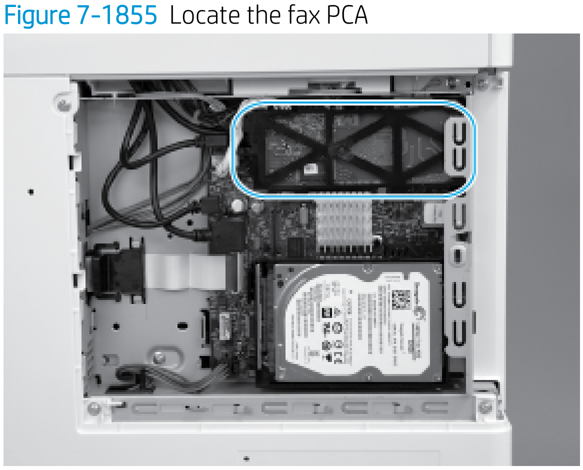
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

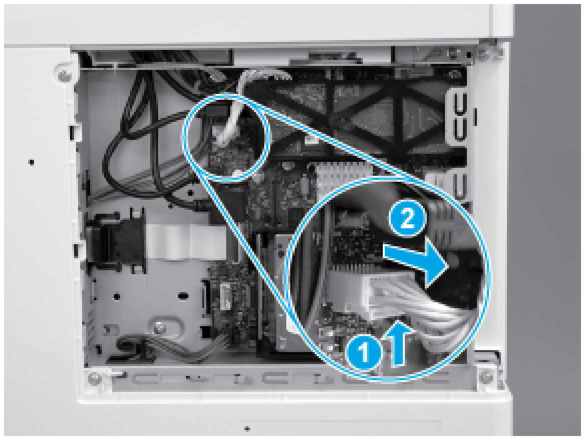
1. Locate the fax PCA component on the formatter.

Figure 7-1855 Locate the fax PCA



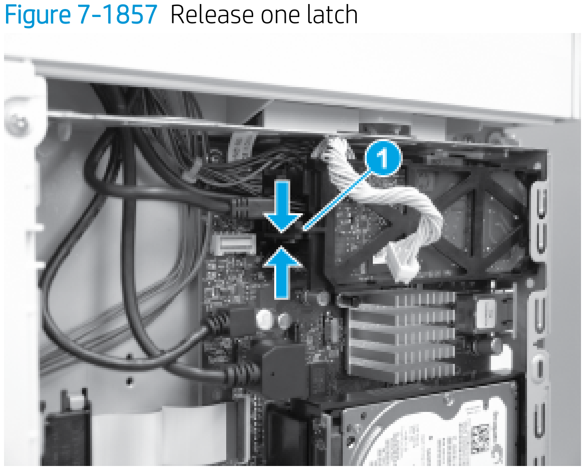
2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-1856 Disconnect one connector



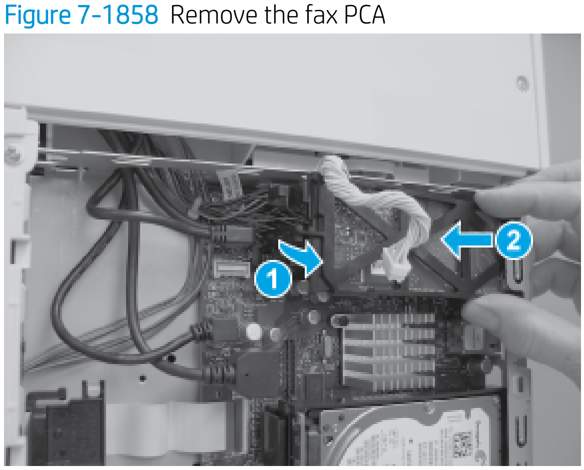
3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-1857 Release one latch



4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-1858 Remove the fax PCA



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

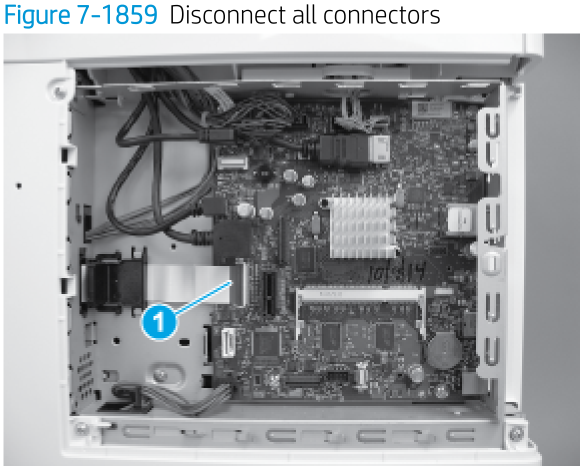
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

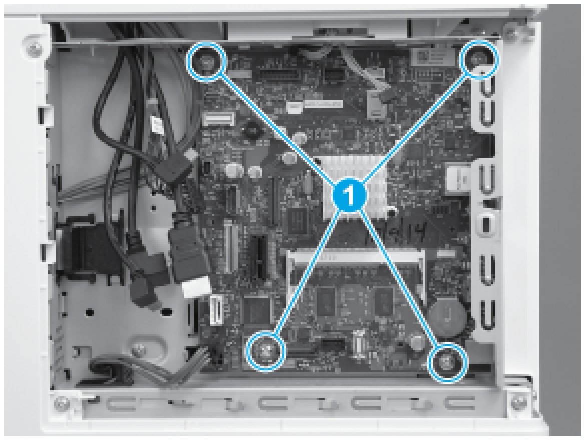
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

   Figure 7-1859 Disconnect all connectors

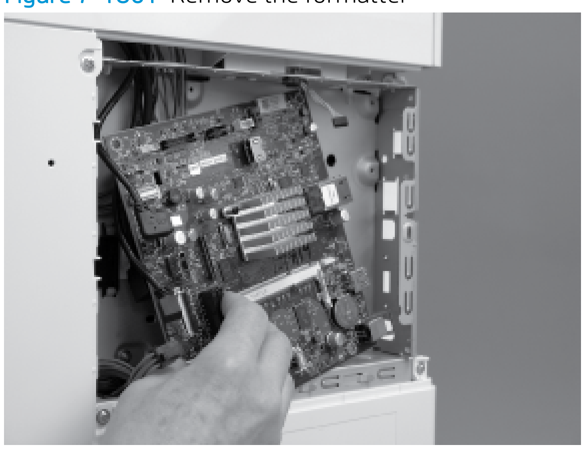
2. Remove four screws (callout 1).

Figure 7-1860 Remove four screws



3. Remove the formatter.

Figure 7-1861 Remove the formatter



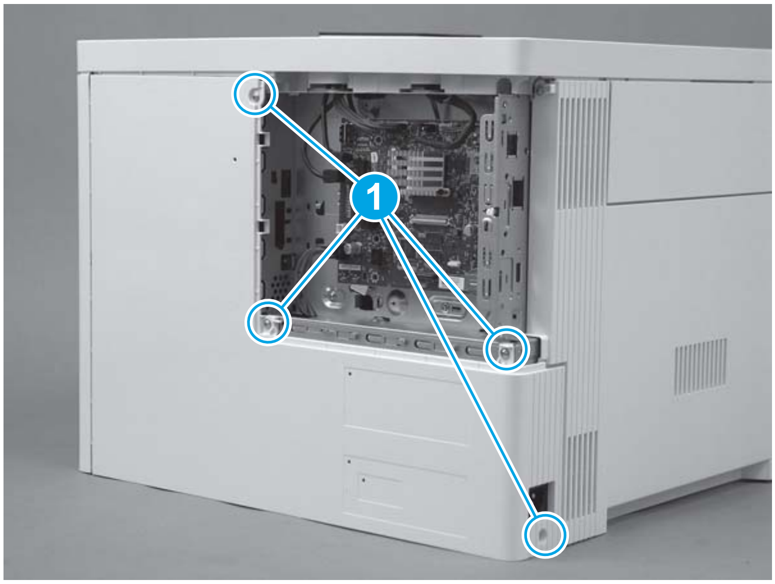
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

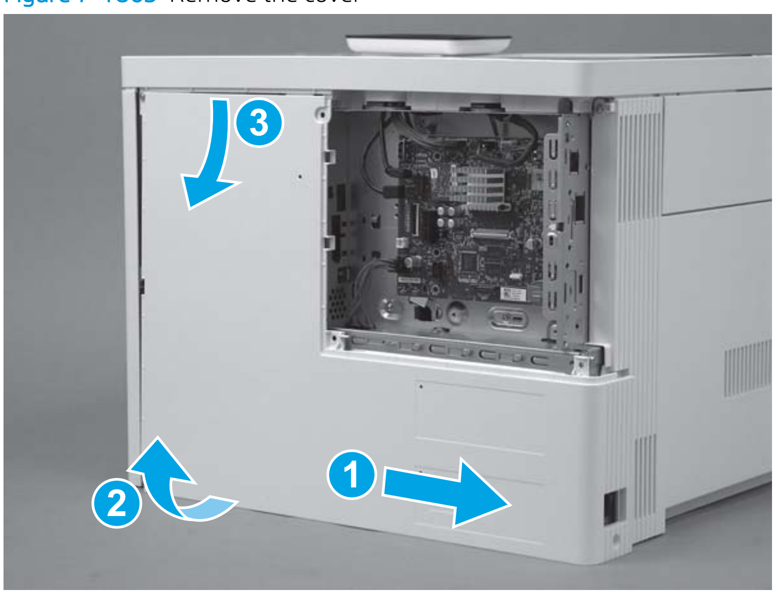
1. Remove four screws (callout 1).

Figure 7-1862 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-1863 Remove the cover



Remove the rear upper cover (MFP)

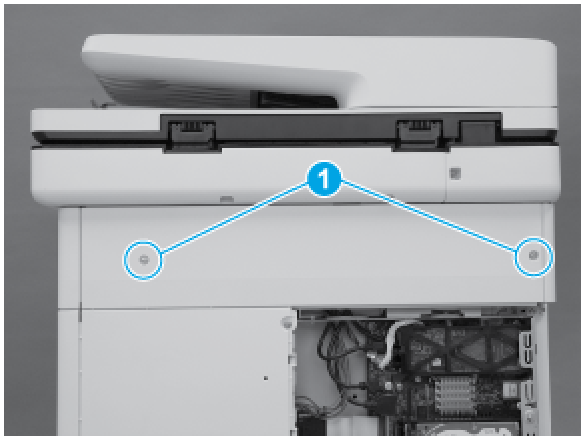
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

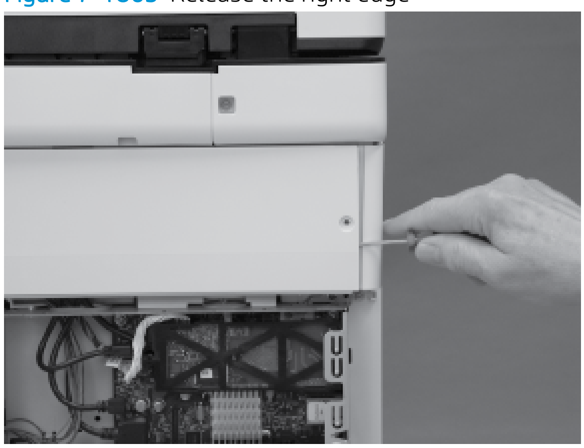
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-1864 Remove two screws



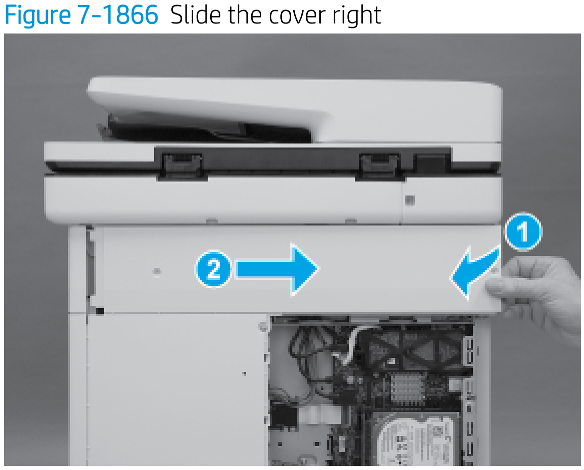
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-1865 Release the right edge



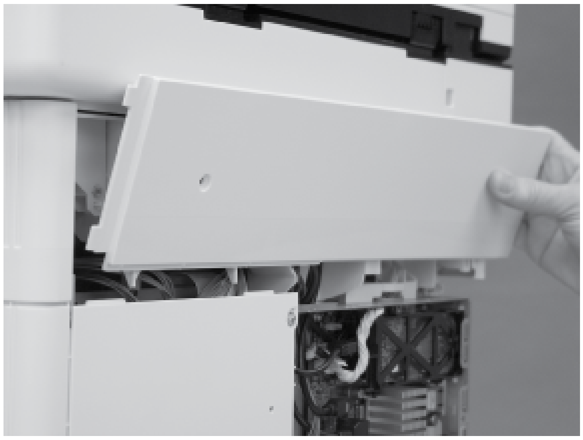
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-1866 Slide the cover right



4. Remove the cover.

Figure 7-1867 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-1868 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-1869 Remove the cover

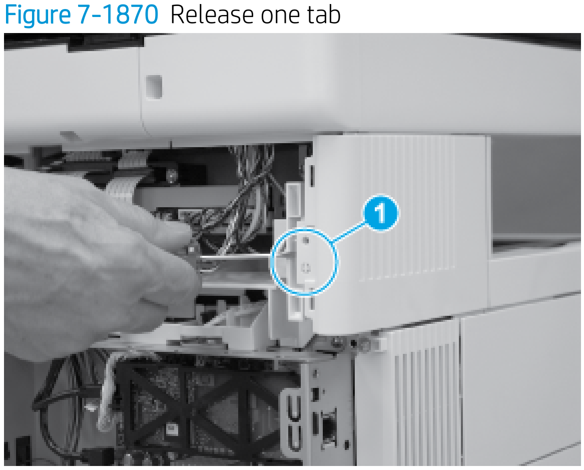
Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

NOTE: This procedure is for MFP models only.

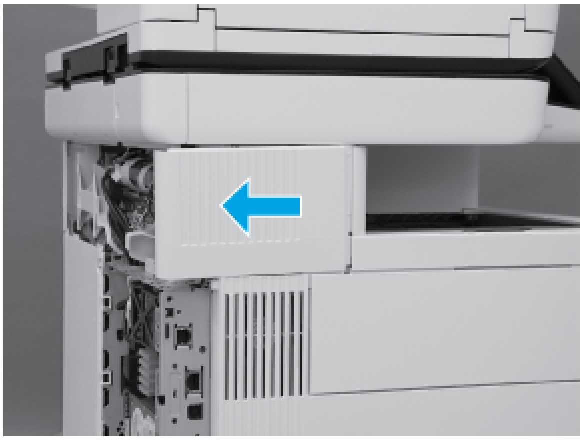
1. At the left side of the printer, release one tab (callout 1).

Figure 7-1870 Release one tab



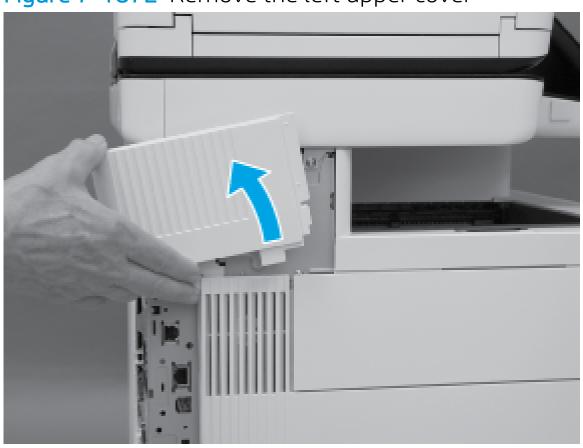
2. Slide the left upper cover toward the back of the printer.

Figure 7-1871 Slide the cover back



3. Rotate the cover up to remove it.

Figure 7-1872 Remove the left upper cover



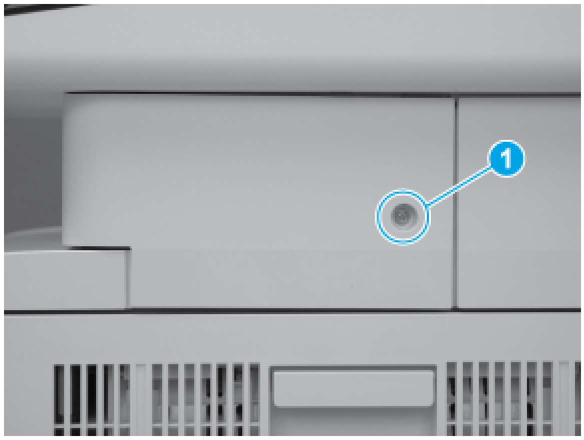
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-1873 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-1874 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-1875 Rotate the cover

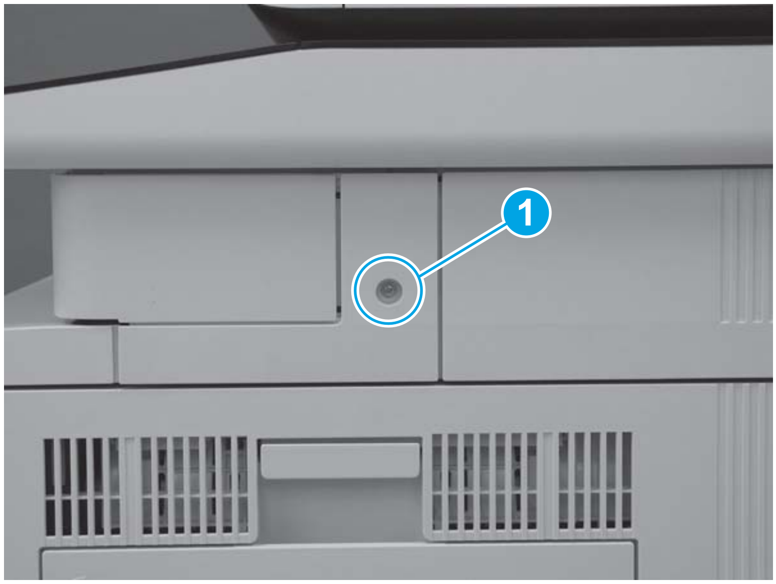
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

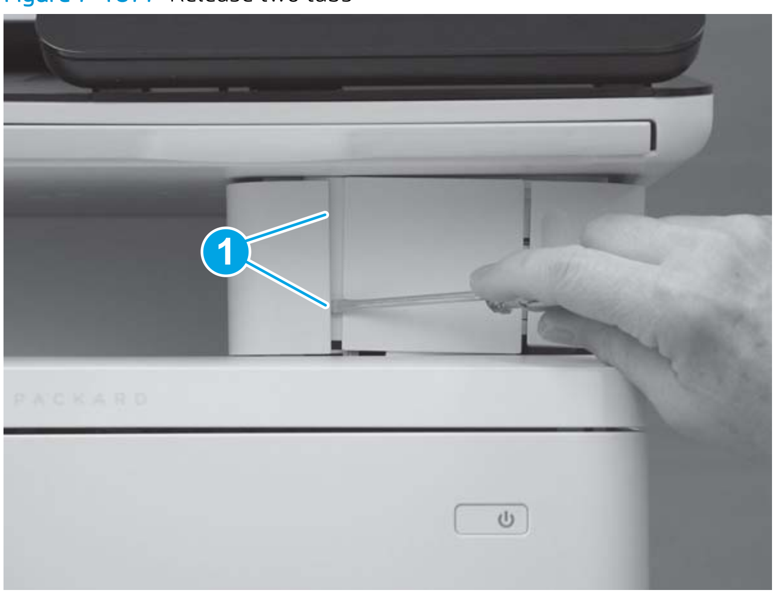
1. Remove one screw (callout 1).

Figure 7-1876 Remove one screw



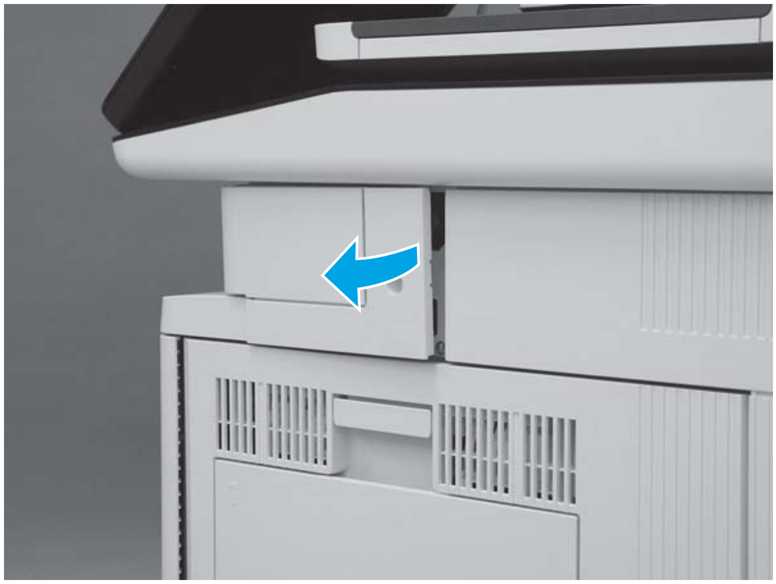
2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-1877 Release two tabs



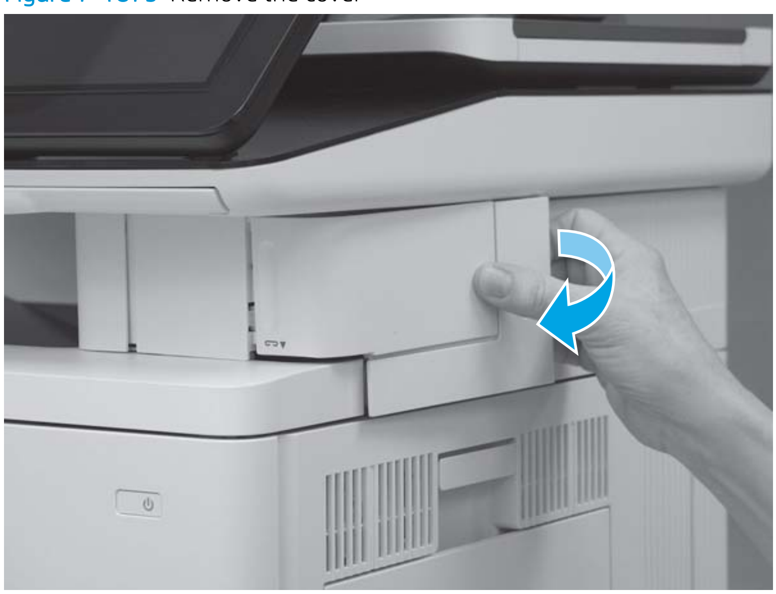
3. Release the back edge of the cover.

Figure 7-1878 Release the back edge of the cover



4. Rotate the cover away from the printer to remove it.

Figure 7-1879 Remove the cover



Remove the integrated scanner assembly (ISA) (MFP)

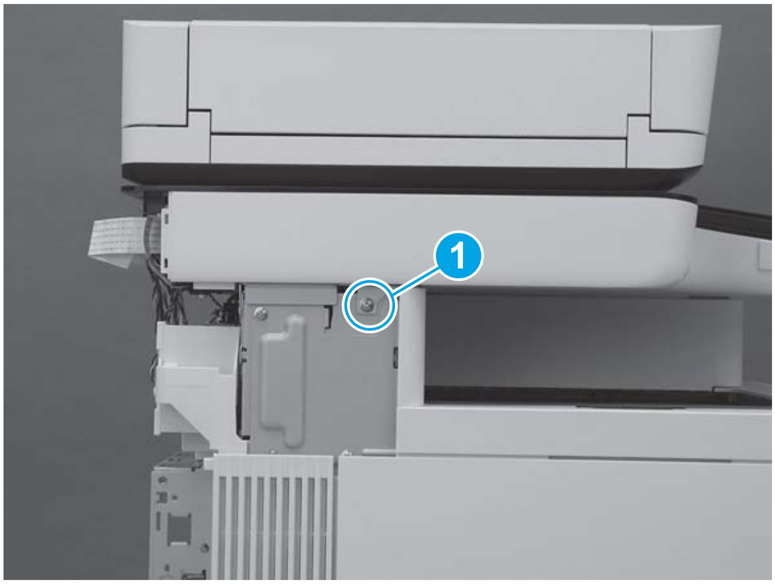
Follow these steps to remove the integrated scanner assembly (ISA).

NOTE: This procedure is for MFP models only.

NOTE: The ISA includes the document feeder, image scanner, scanner control board (SCB), control panel, keyboard (flow models) and NFC PCA (not all models).

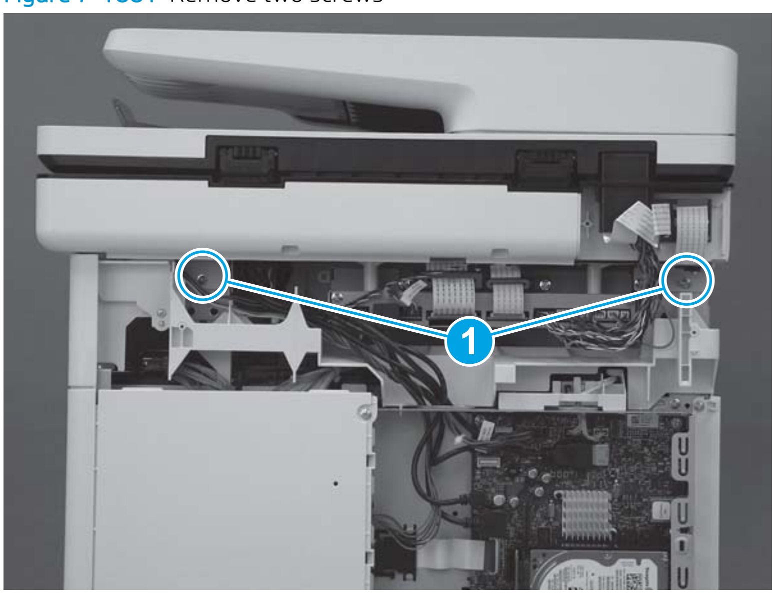
1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1880 Remove one screw



2. At the back of the printer, remove two screws (callout 1).

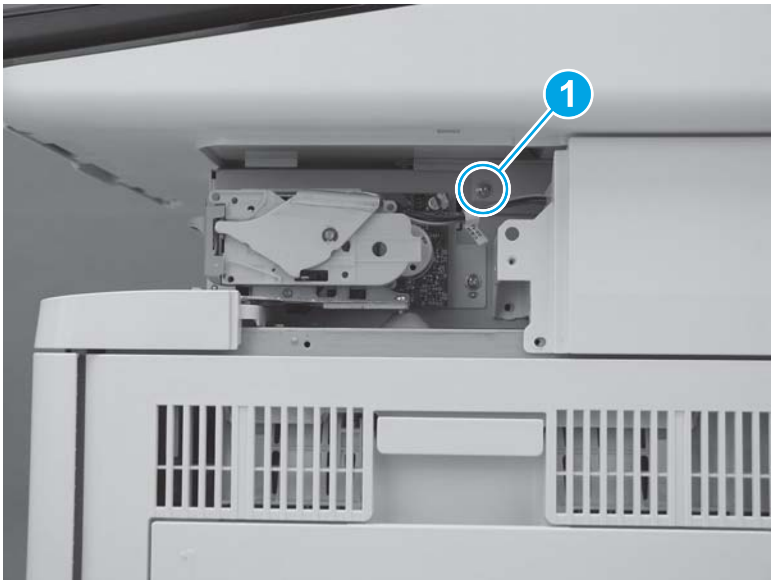
Figure 7-1881 Remove two screws



3. At the right side of the printer, remove one screw (callout 1).

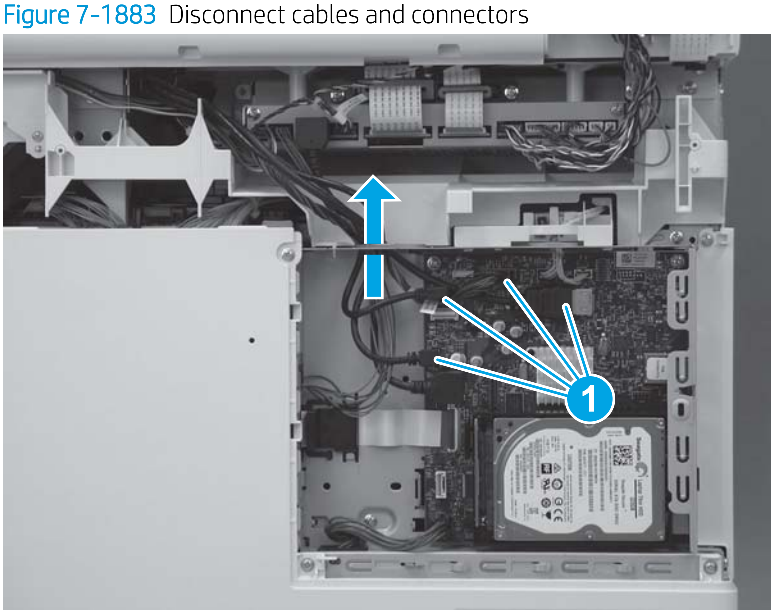
NOTE: The M577z is shown in the figure below. The procedure is correct for all MFP models.

Figure 7-1882 Remove one screw



4. Disconnect four connectors (callout 1) on the formatter, and then pass the wire harnesses and cables through the top opening in the formatter case (callout 2).

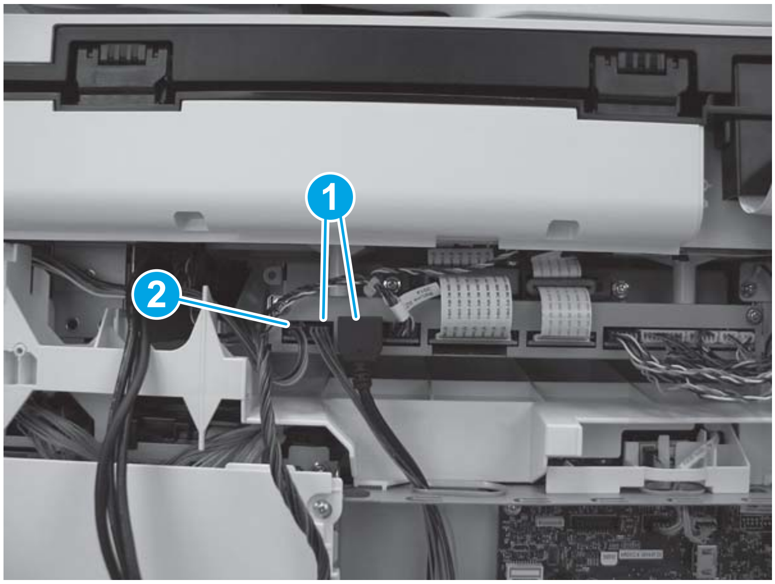
Figure 7-1883 Disconnect cables and connectors



5. Disconnect two connectors on the scanner control board (callout 1).

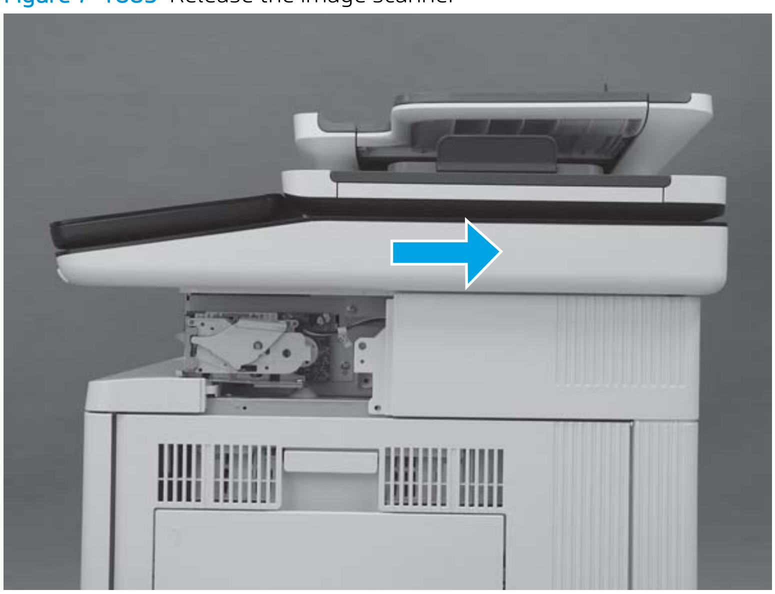
   MFP stapler models: Disconnect one connector for the stapler on the scanner control board (callout 2).

   Figure 7-1884 Disconnect connectors

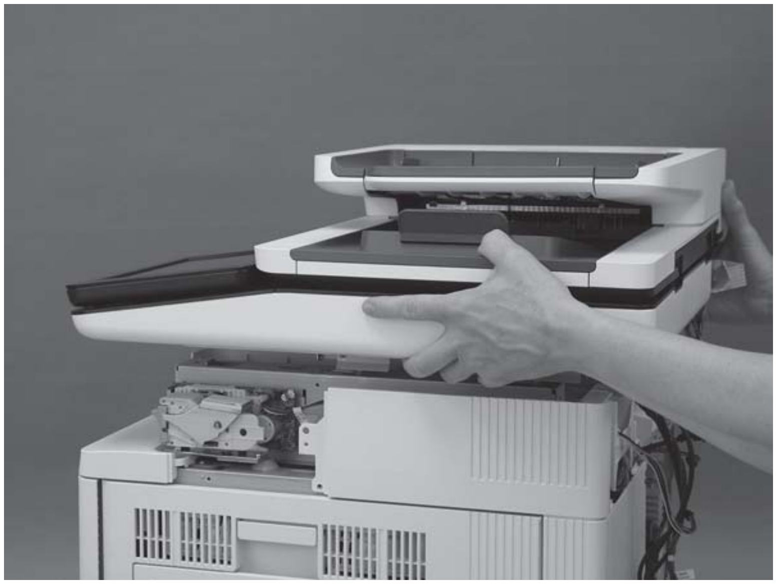
6. Slide the image scanner toward the back of the printer to release it.

   Figure 7-1885 Release the image scanner

7. Lift the ISA straight up to remove it.

Figure 7-1886 Remove the ISA



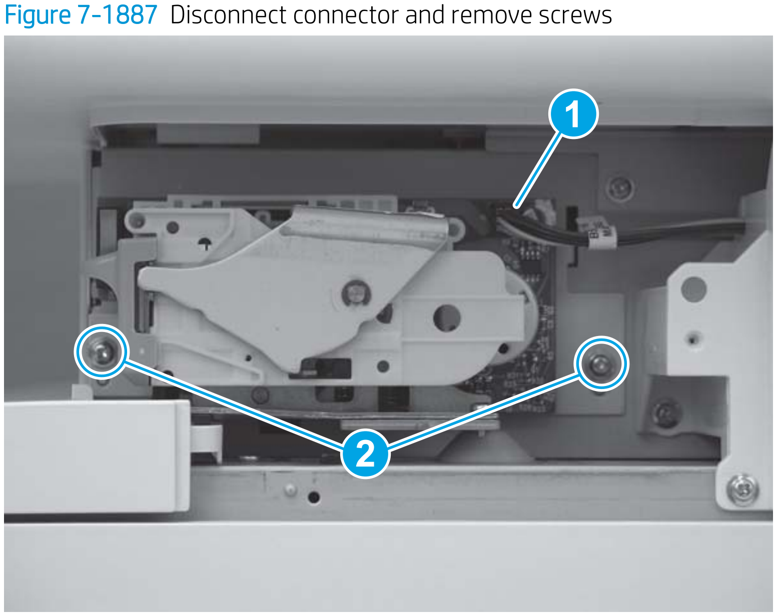
Remove the stapler unit (MFP stapler models)

Follow these steps to remove the stapler unit.

NOTE: This step is for stapler models only.

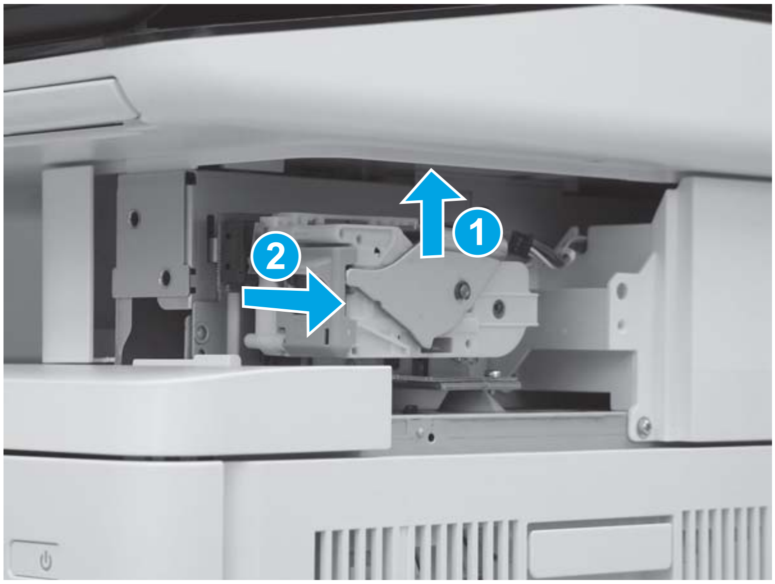
1. Disconnect one connector (callout 1), and then remove two screws (callout 2).

Figure 7-1887 Disconnect connector and remove screws



2. Slide the stapler unit up (callout 1), and then pull it away from the printer (callout 2) to remove it.

Figure 7-1888 Remove the stapler unit



Remove the right upper cover (MFP)

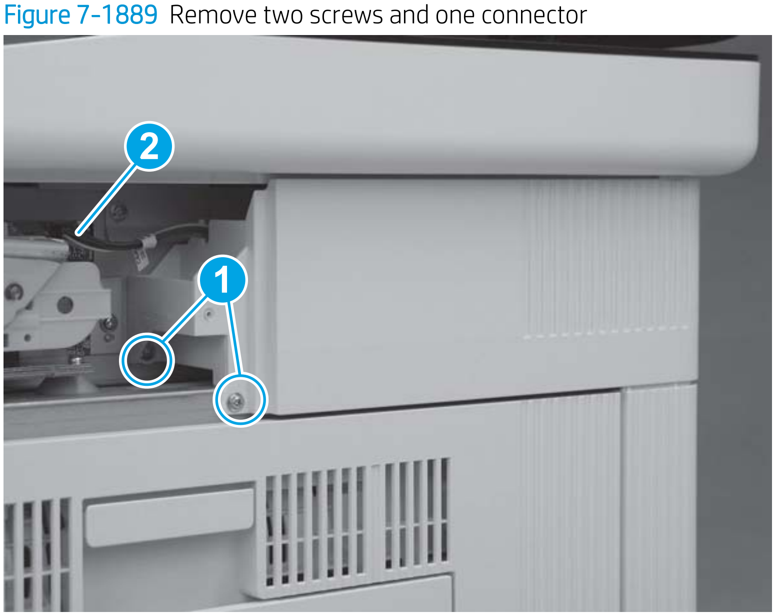
Follow these steps to remove the right upper cover.

NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Figure 7-1889 Remove two screws and one connector

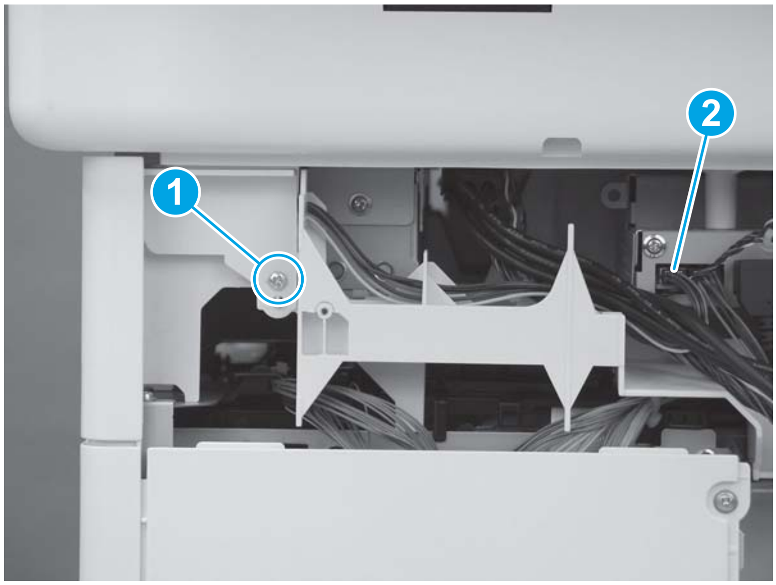


2. At the back of the printer, remove one screw (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

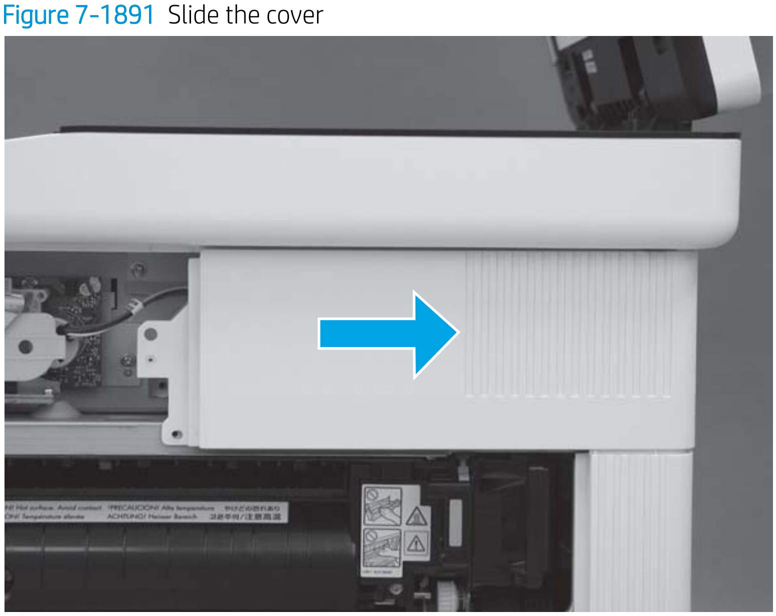
   Reinstallation tip: This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

   Figure 7-1890 Remove one screw and connector



3. Slide the cover toward the back of the printer.

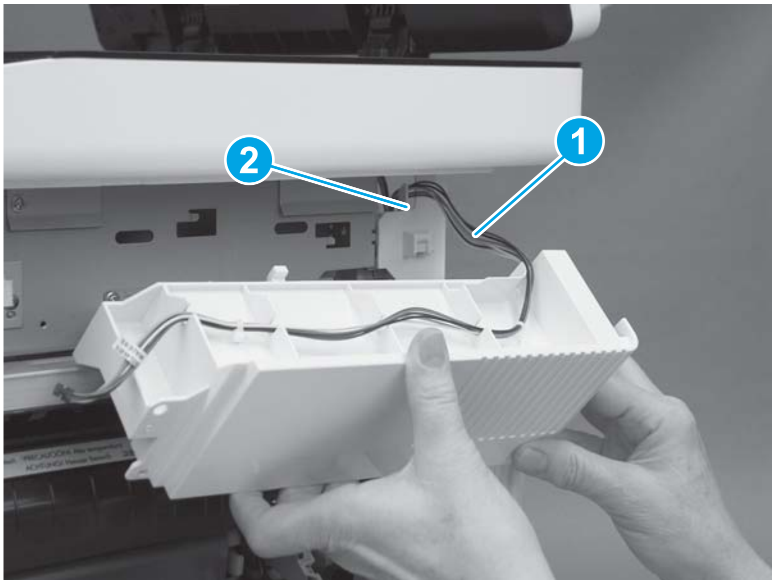
   Figure 7-1891 Slide the cover



4. Lift the cover away from the printer to remove it.

   M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

   Figure 7-1892 Remove the cover



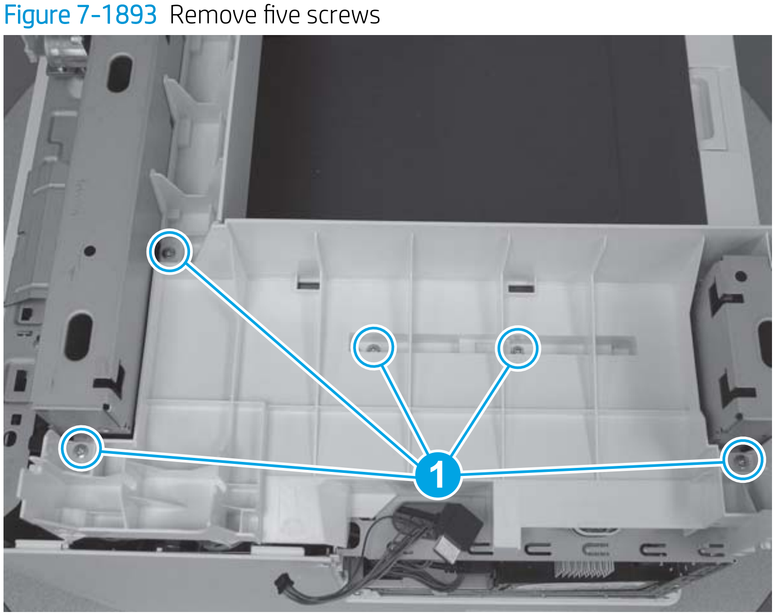
Remove the top rear cover (MFP)

Follow these steps to remove the top rear cover.

> **NOTE:** This procedure is for MFP models only.

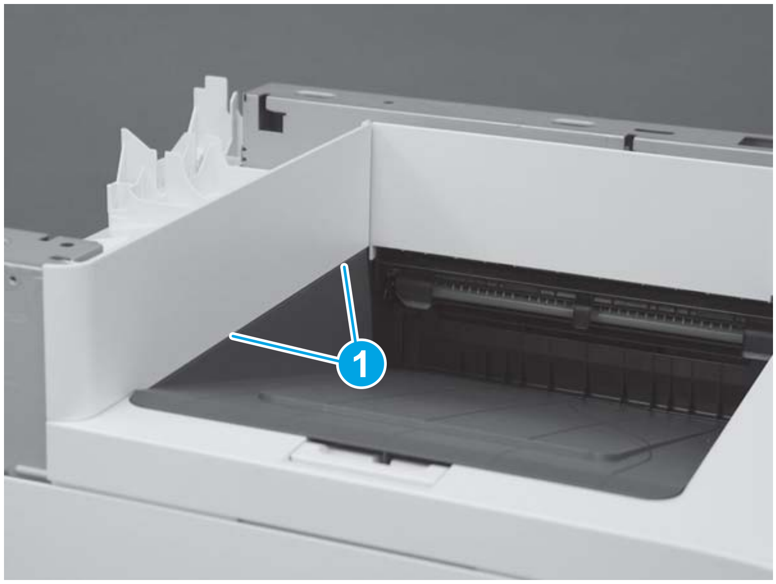
1. At the top of the printer, remove five screws (callout 1).

   Figure 7-1893 Remove five screws



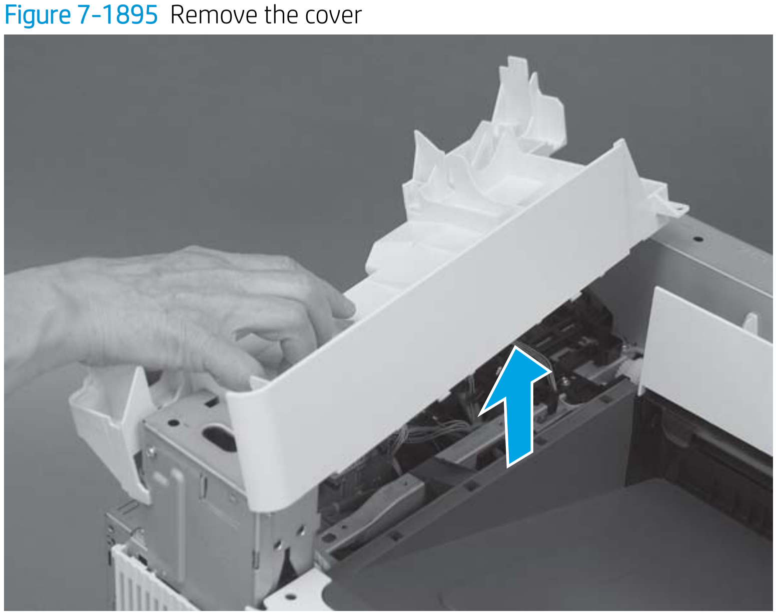
2. Release two tabs (callout 1) on the front edge of the cover.

Figure 7-1894 Release two tabs



3. Remove the top rear cover.

Figure 7-1895 Remove the cover



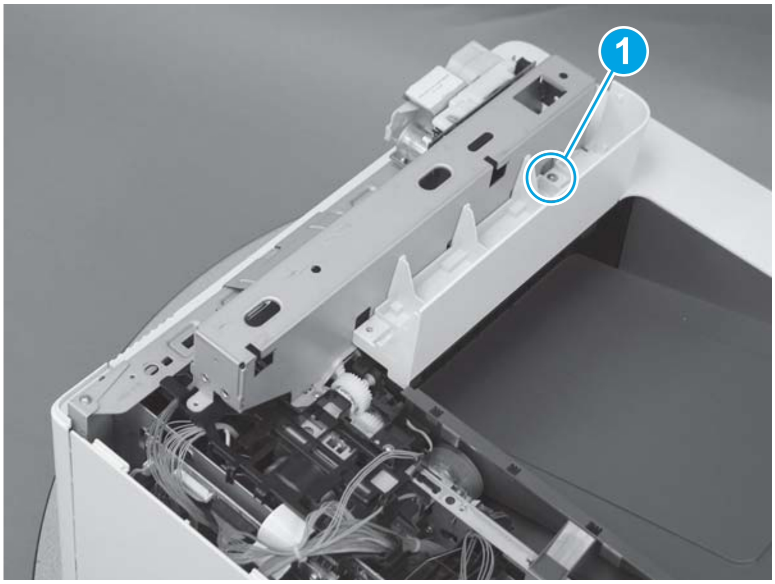
Remove the paper feed cover (MFP)

Follow these steps to remove the paper feed cover.

NOTE: This procedure is for MFP models only.

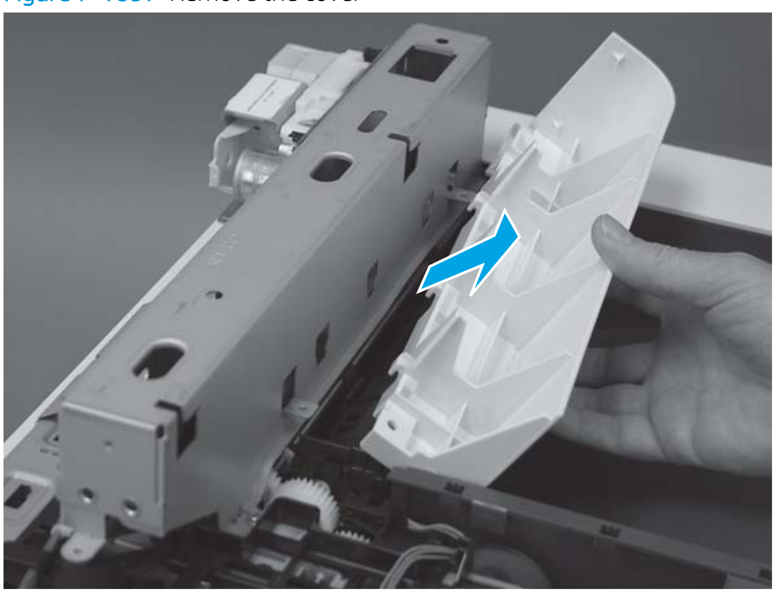
1. Remove one screw (callout 1).

Figure 7-1896 Remove one screw



2. Lift the cover up to remove it.

Figure 7-1897 Remove the cover



Remove the top cover (MFP)

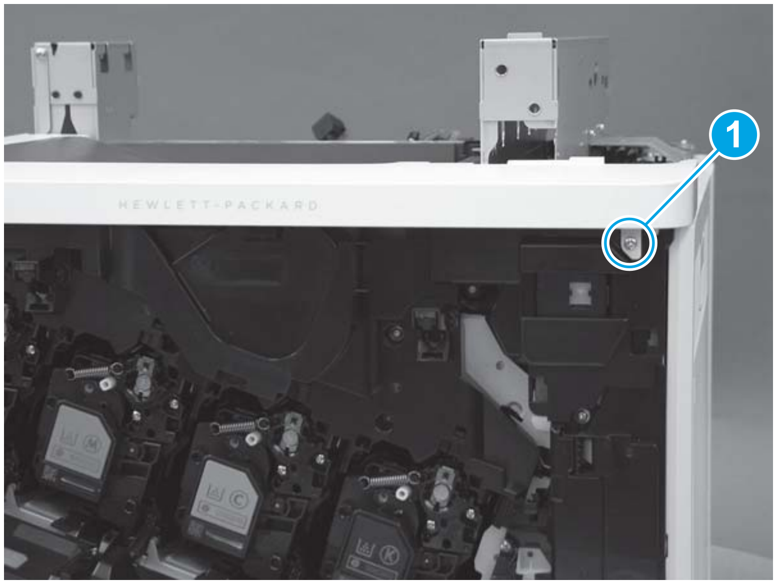
Follow these steps to remove the top cover.

NOTE: This procedure is for MFP models only.

1. At the front of the printer, remove one screw (callout 1).

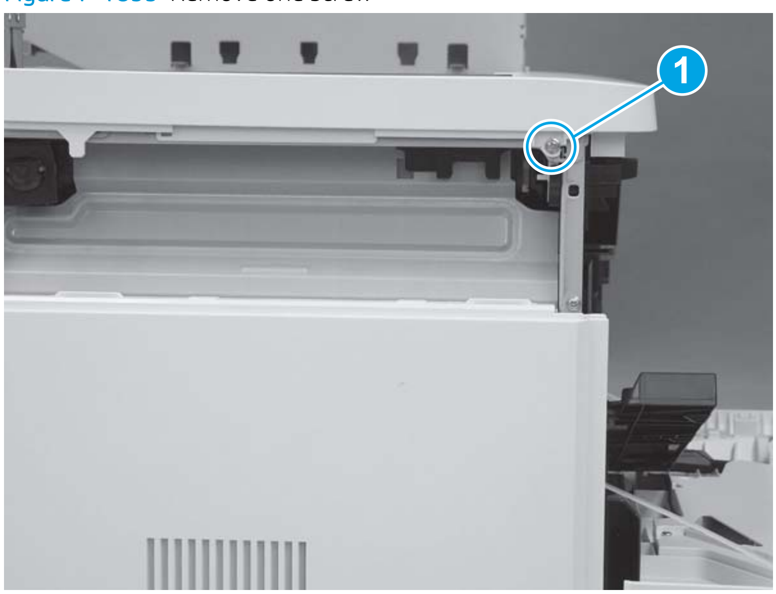
Reinstallation tip: This screw is longer and a different type of screw than the screw removed in the next step. When reinstalling the top cover, make sure that this screw is installed in the correct position.

Figure 7-1898 Remove one screw



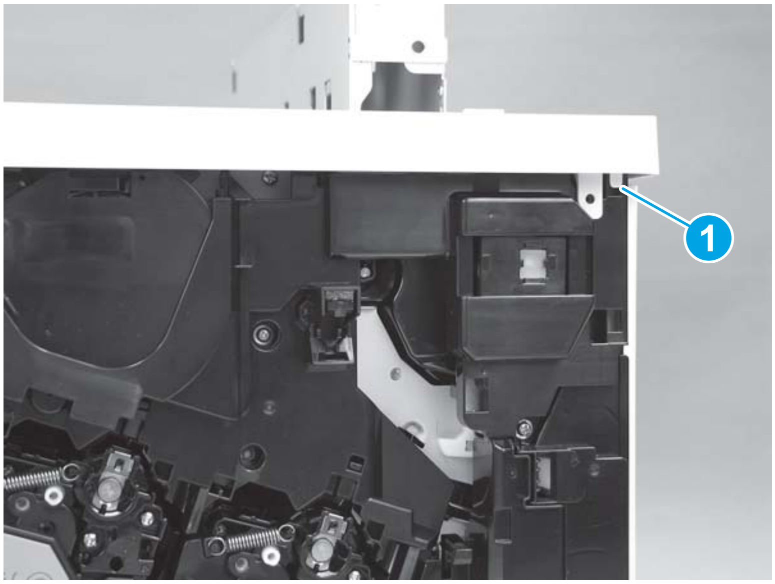
2. At the left side of the printer, remove one screw (callout 1).

Figure 7-1899 Remove one screw



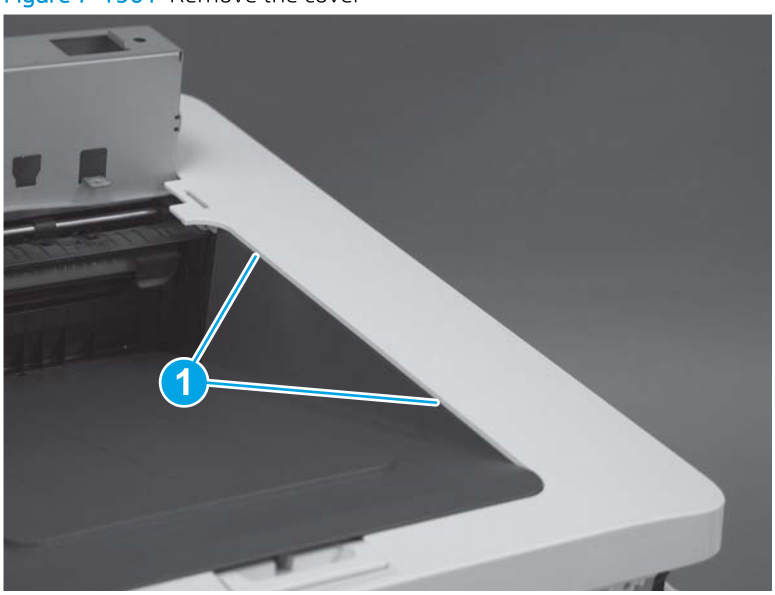
3. At the front of the printer, release one tab (callout 1).

Figure 7-1900 Release one tab



4. At the top of the printer, release two tabs (callout 1) next to the output bin, and then remove the top cover.

Figure 7-1901 Remove the cover



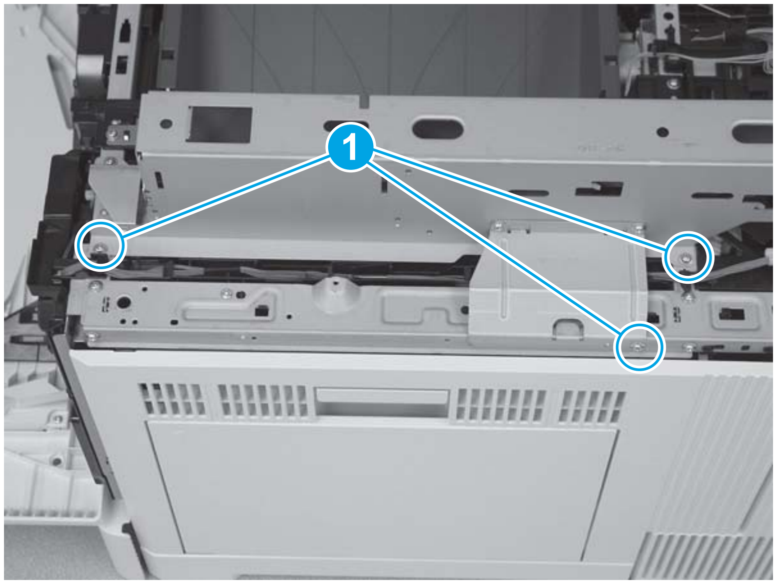
Remove the top bracket (MFP)

Follow these steps to remove the top bracket.

NOTE: This procedure is for MFP models only.

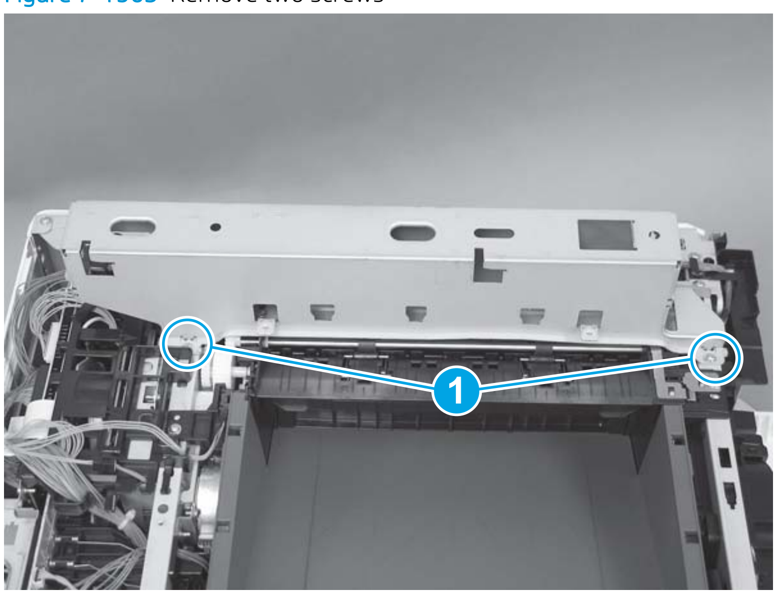
1. At the top of the printer, remove three screws (callout 1).

Figure 7-1902 Remove three screws



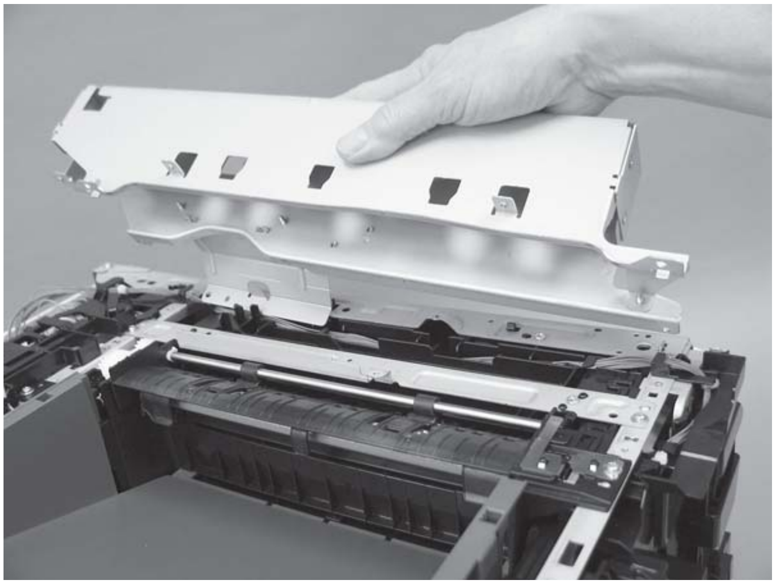
2. At the top of the printer, remove two screws (callout 1).

Figure 7-1903 Remove two screws



3. Lift the top bracket up to remove it.

Figure 7-1904 Remove the bracket



Remove the left cover

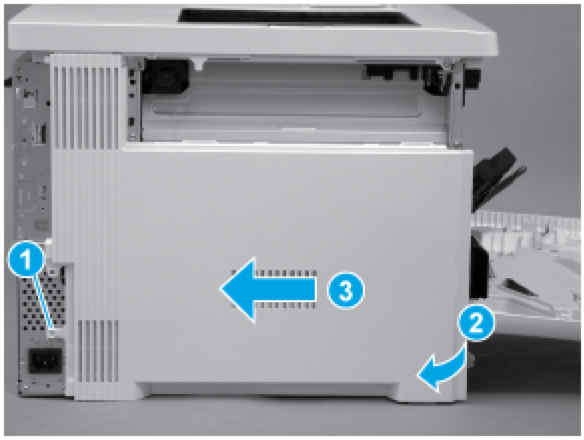
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1905 Remove one screw

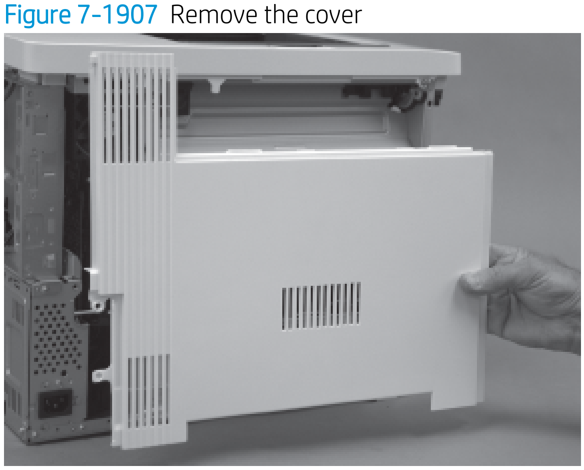
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-1906 Release the cover



3. Remove the cover.

Figure 7-1907 Remove the cover



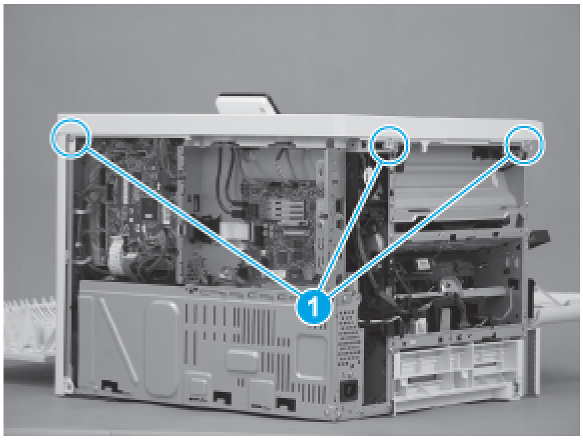
Remove the upper cover (SFP)

Follow these steps to remove the upper cover.

NOTE: This procedure is for SFP models only.

1. Remove three screws (callout 1).

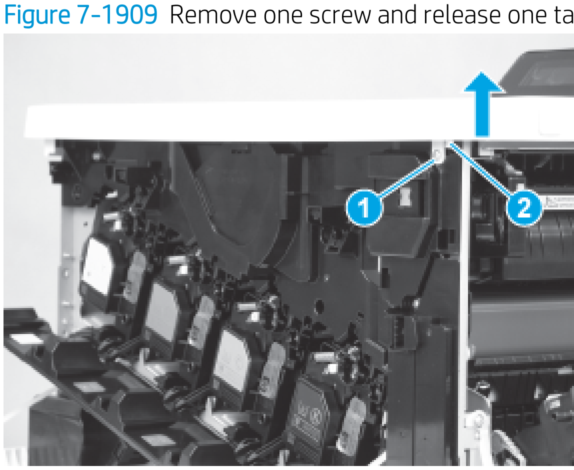
Figure 7-1908 Remove three screws



2. Remove one screw (callout 1), release one tab (callout 2), and then slightly separate the corner of the cover from the chassis.

NOTE: This is a self-tapping plastic-thread screw. Make sure that this screw is used in this location when it is reinstalled.

Figure 7-1909 Remove one screw and release one tab

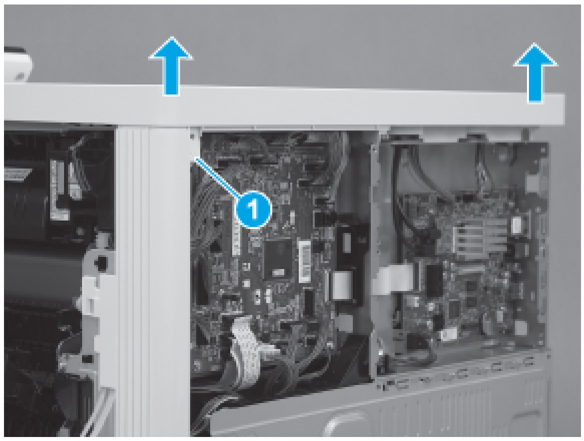


3. Release one tab (callout 1), and then lift up on the cover to release it.

IMPORTANT: **M554 models**: Disconnect the control-panel flat cable at the formatter.

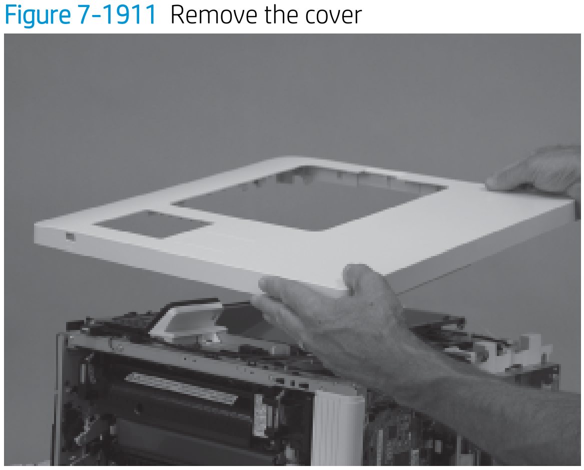
NOTE: If the cover does not release, check for addition tabs by locating the triangles embossed in the cover at tab locations.

Figure 7-1910 Release the cover



4. Remove the cover.

Figure 7-1911 Remove the cover

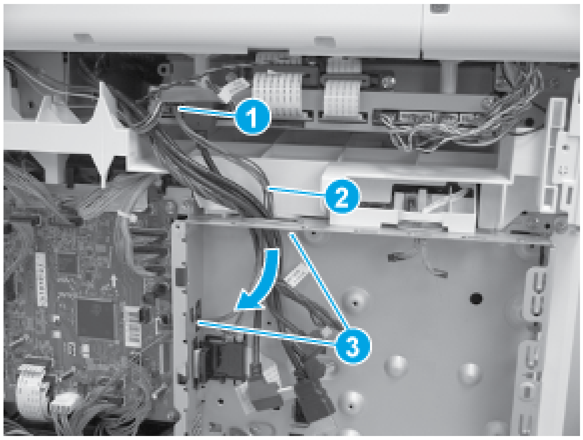


Remove the formatter case

Follow these steps to remove the formatter case.

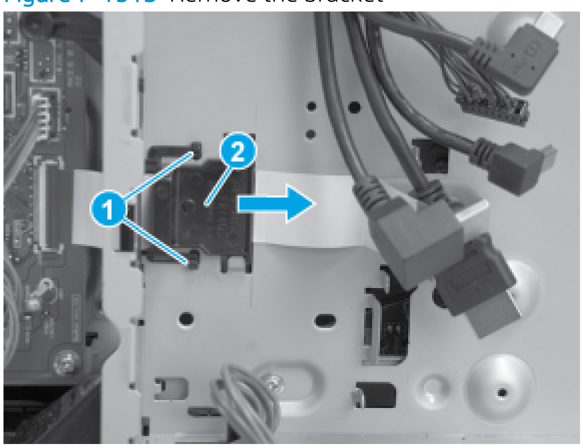
1. **MFP only**: Disconnect one connector (callout 1), and then pass the wire harness (callout 2) through two openings in the formatter case (callout 3).

Figure 7-1912 Disconnect one connector



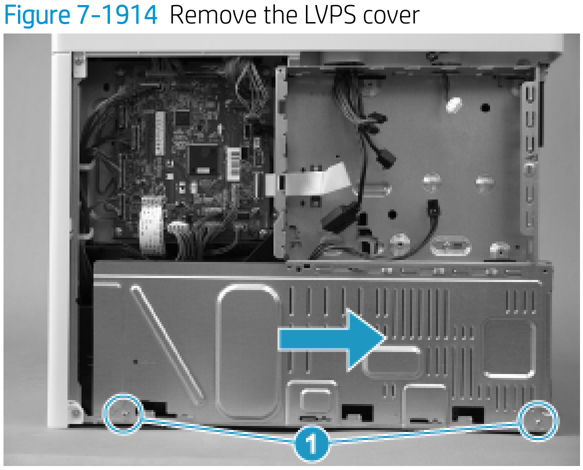
2. Release two tabs (callout 1) on the black plastic bracket. Hold the tabs in the released position, and then slide the bracket (callout 2) to the right to remove it from the formatter case.

Figure 7-1913 Remove the bracket



3. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

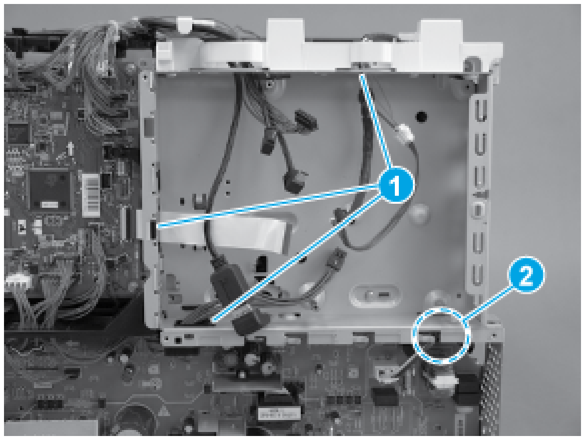
Figure 7-1914 Remove the LVPS cover



4. Pass two wire harnesses and one flat cable (callout 1) through the opening in the formatter case, and then release one wire harness from the retainer (callout 2).

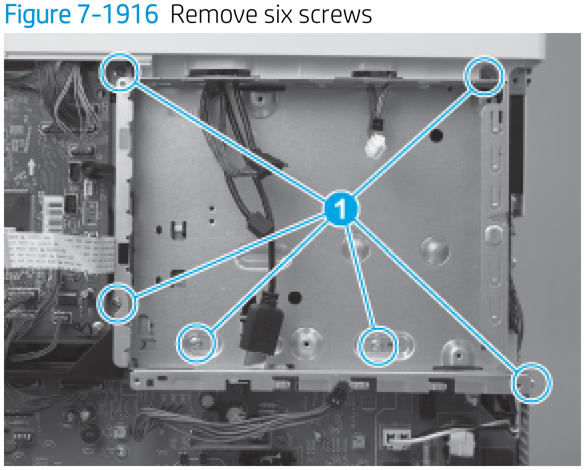
⚠ CAUTION: The flat cable might be attached to the formatter case with double-sided tape. Make sure that this tape is released, so that the flat cable is not damaged when the formatter case is removed.

Figure 7-1915 Release wire harnesses and flat cable



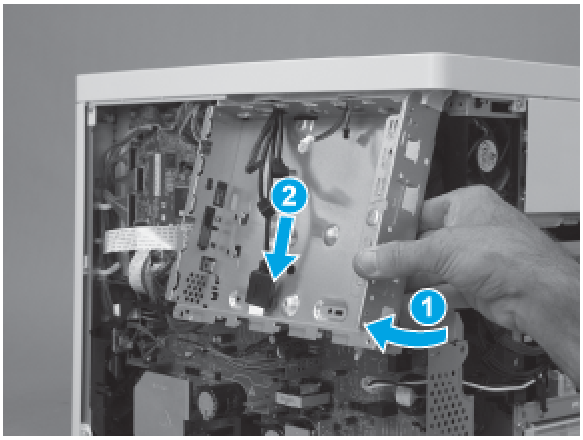
5. Remove six screws (callout 1).

Figure 7-1916 Remove six screws



6. Rotate the bottom of the formatter case away from the printer (callout 1), and then pull it down (callout 2) to release it.

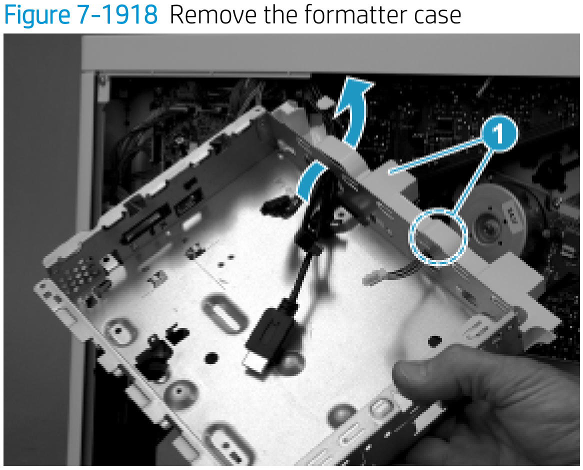
Figure 7-1917 Release the formatter case



7. Pass the wire harnesses through the opening in the formatter case to remove it.

IMPORTANT: If the formatter case is removed so that it can be replaced, make sure to transfer the memory PCA (island of data) and plastic bracket (callout 1) to the replacement case.

Figure 7-1918 Remove the formatter case



Remove the right rear cover

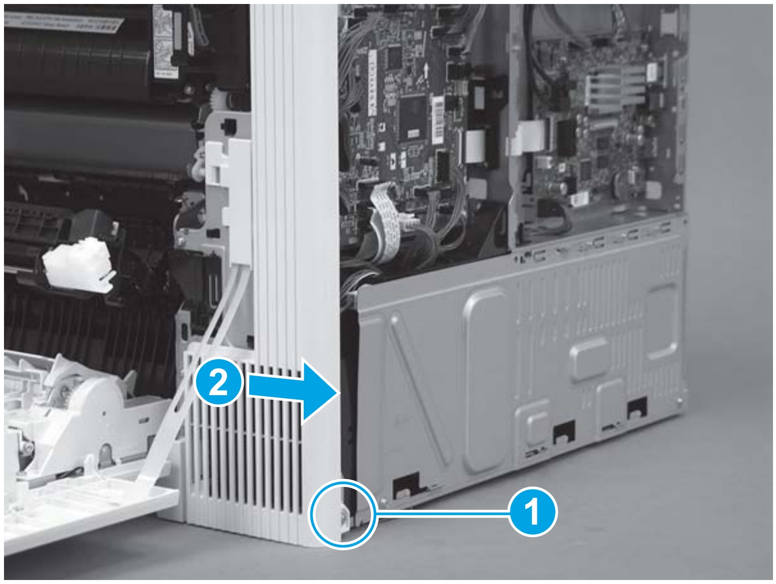
Follow these steps to remove the right rear cover.

NOTE: The figures in this topic show a SFP model. However, the procedure is correct for an MFP.

1. Remove one screw (callout 1), and then slide the cover toward the rear of the printer (callout 2) to release it.

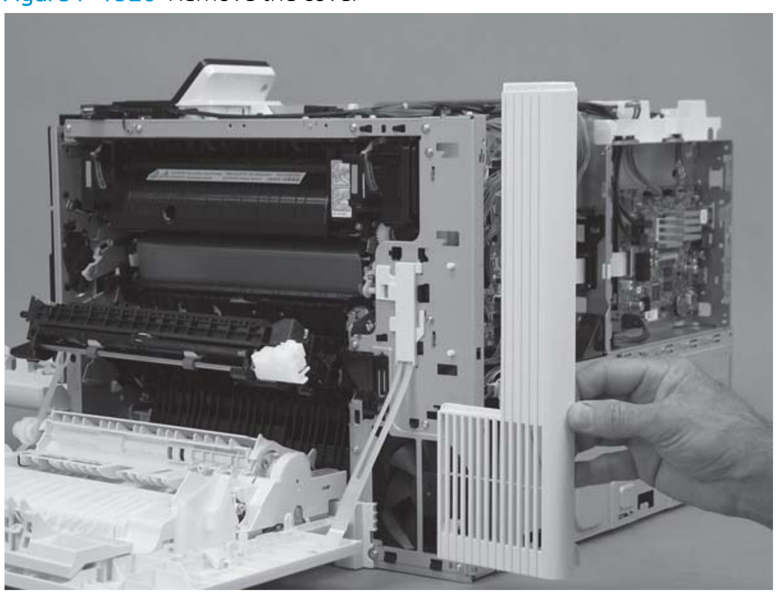
TIP: If the right door is closed, open it now.

Figure 7-1919 Release the cover



2. Remove the cover.

Figure 7-1920 Remove the cover



Remove the DC controller (DCC) and sheet-metal bracket

Follow these steps to remove the DC controller and sheet-metal bracket together.

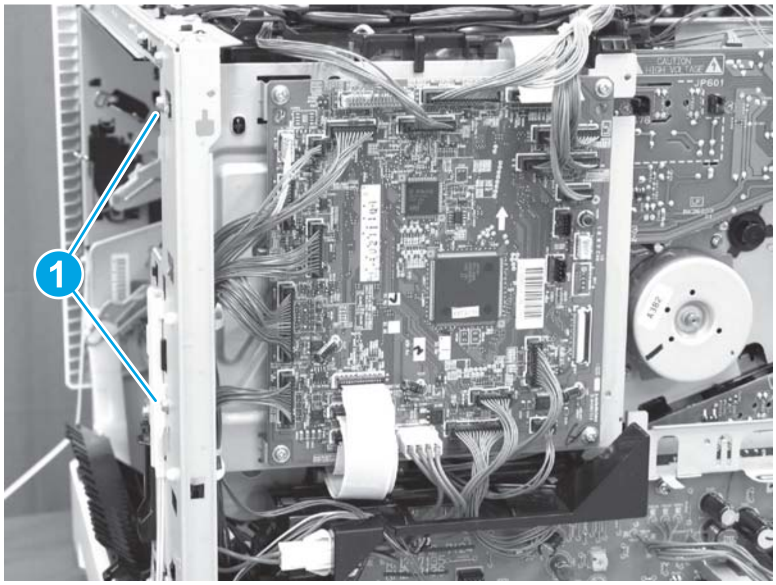
NOTE: ESD sensitive part.

1. Disconnect all of the connectors, and then remove two screws (callout 1).

Empty DCC connectors

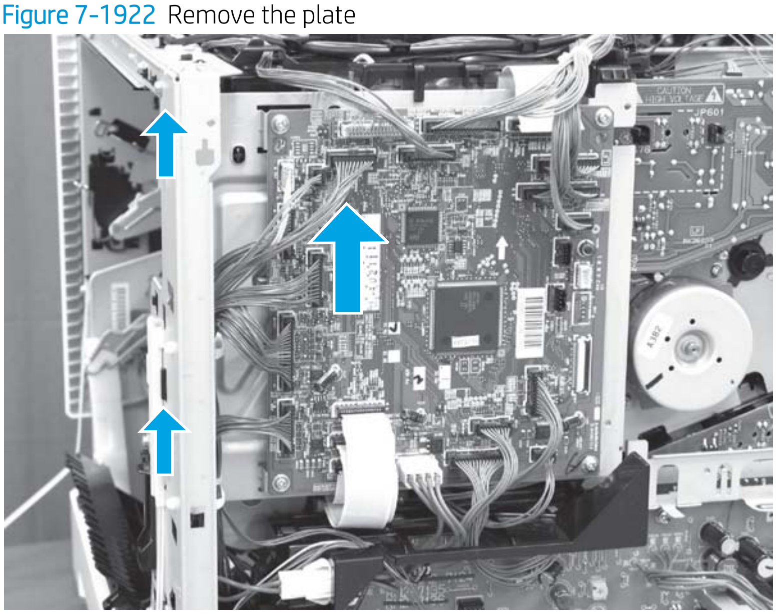
- J140
- J141
- J143

Figure 7-1921 Remove two screws



2. Lift up on the DC controller and sheet-metal plate to remove it.

Figure 7-1922 Remove the plate



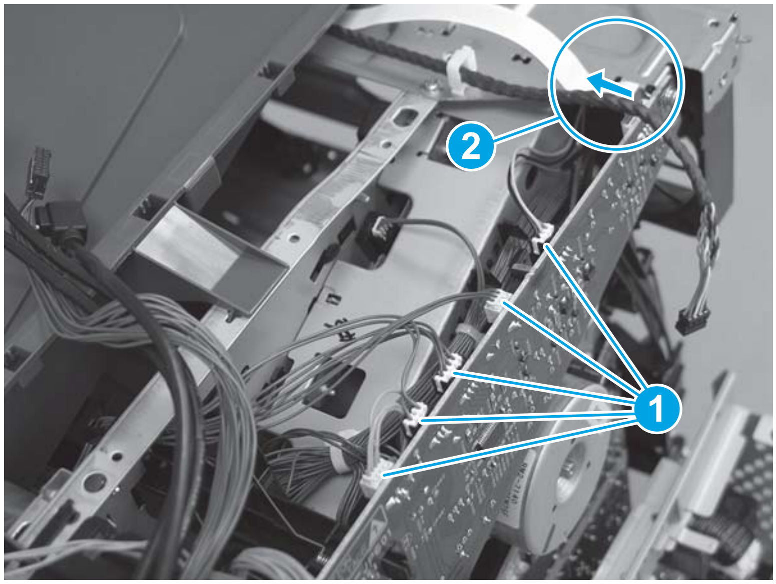
Remove the high-voltage power supply T (HVPST)

Follow these steps to remove the high-voltage power supply T.

NOTE: ESD sensitive part.

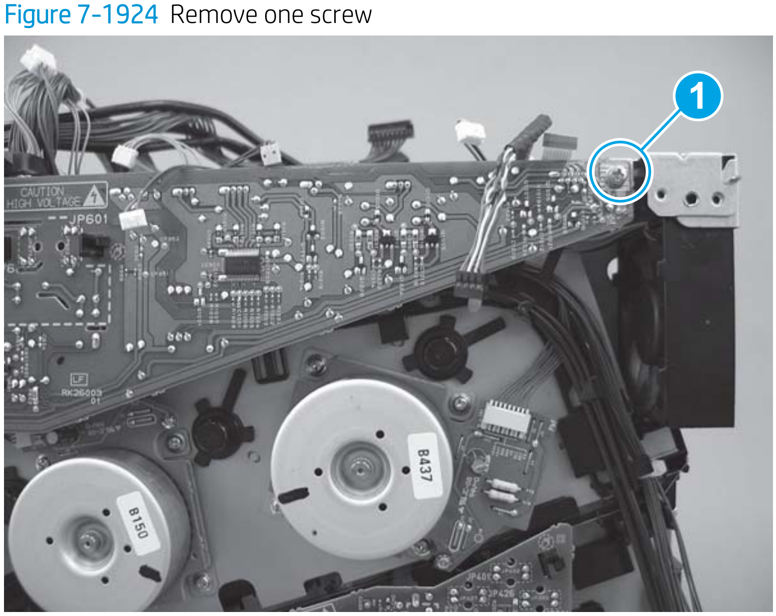
1. Disconnect five connectors (callout 1), and then disconnect one flat cable (callout 2).

Figure 7-1923 Disconnect five connectors and one flat cable



2. Remove one screw (callout 1).

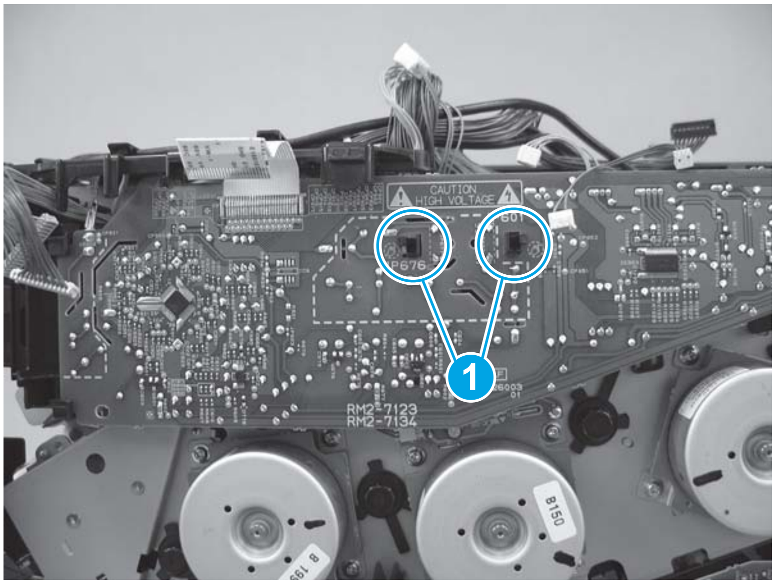
Figure 7-1924 Remove one screw



3. Release two tabs (callout 1), and then separate the HVPST from the printer.

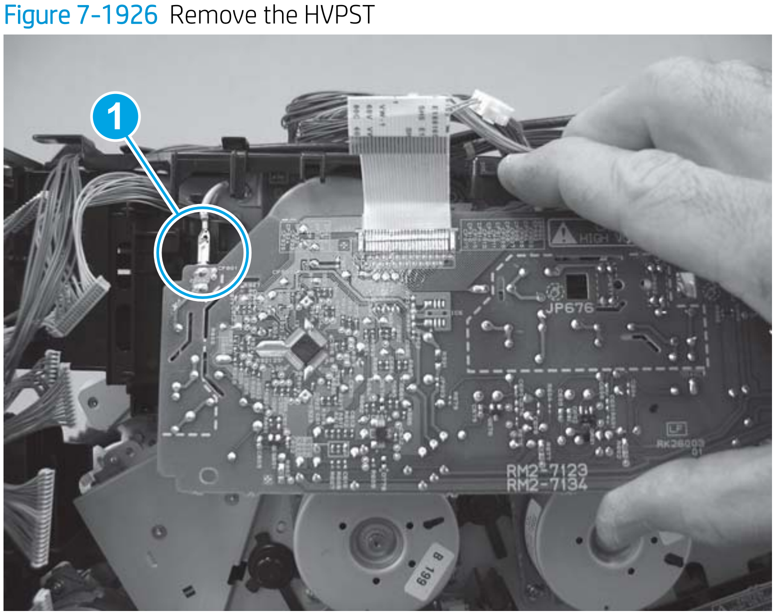
> ⚠ CAUTION: Do not attempt to completely remove the HVPST. It is still connected to the printer by ground wire harness.

Figure 7-1925 Release the HVPST



4. Release one ground wire connector (callout 1), and then remove the HVPST.

Figure 7-1926 Remove the HVPST



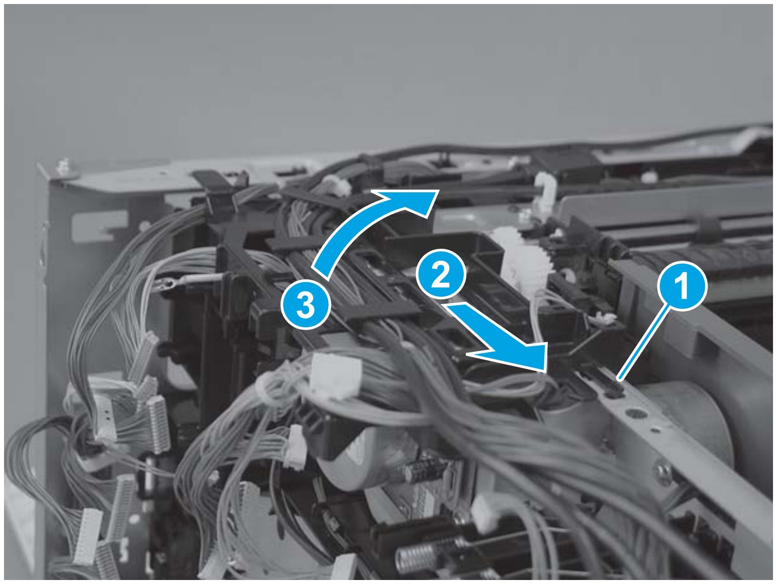
Remove the fuser drive assembly

Follow these steps to remove the fuser drive assembly.

1. Release one tab (callout 1), slide the guide to release it (callout 2), and then rotate the guide up and away from the chassis to move it out of the way (callout 3).

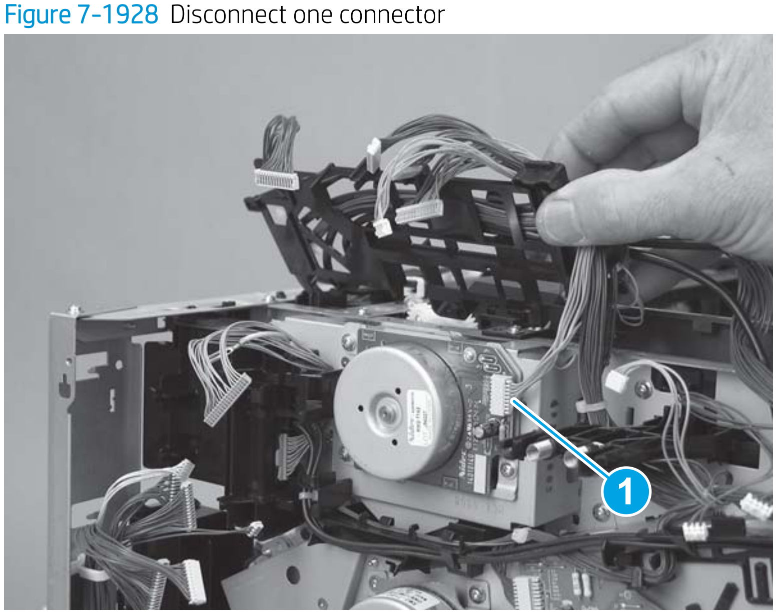
⚠ CAUTION: One wire harnesses in the guide is still attached to the fuser motor. Do not attempt to completely remove the guide.

Figure 7-1927 Move the guide out of the way



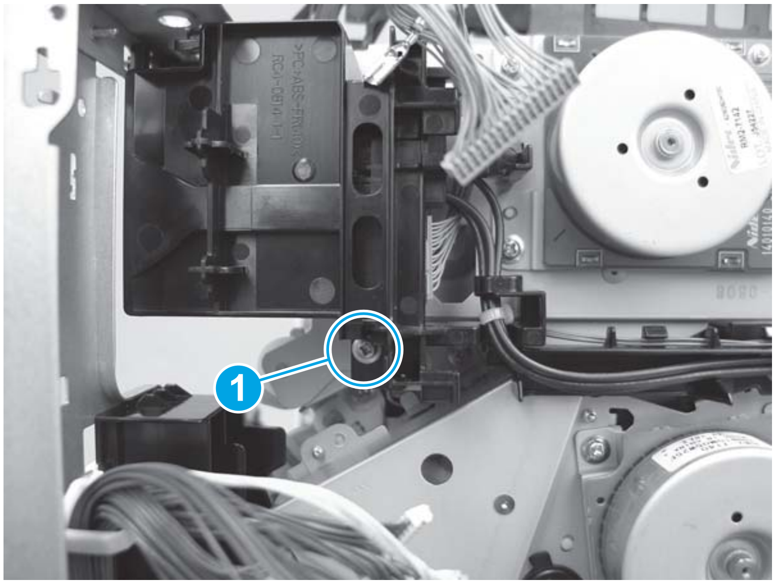
2. Disconnect one connector (callout 1).

Figure 7-1928 Disconnect one connector



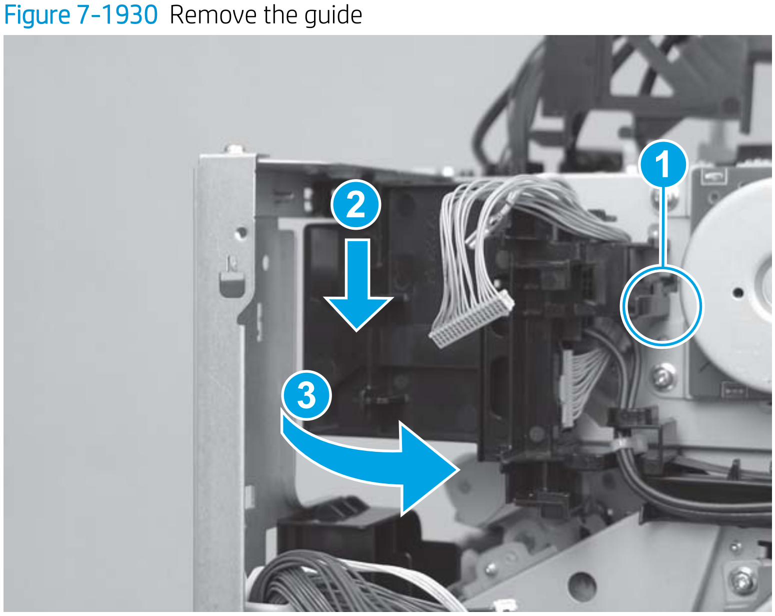
3. Remove one screw (callout 1).

Figure 7-1929 Remove one screw



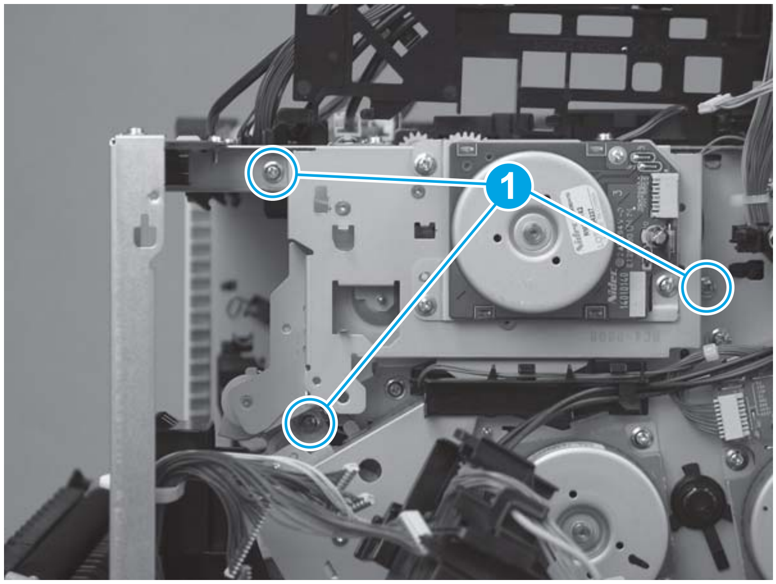
4. Release one tab (callout 1), slide the guide down to release it (callout 2), and then rotate the guide away from the chassis to remove it (callout 3).

Figure 7-1930 Remove the guide



5. Remove three screws (callout 1).

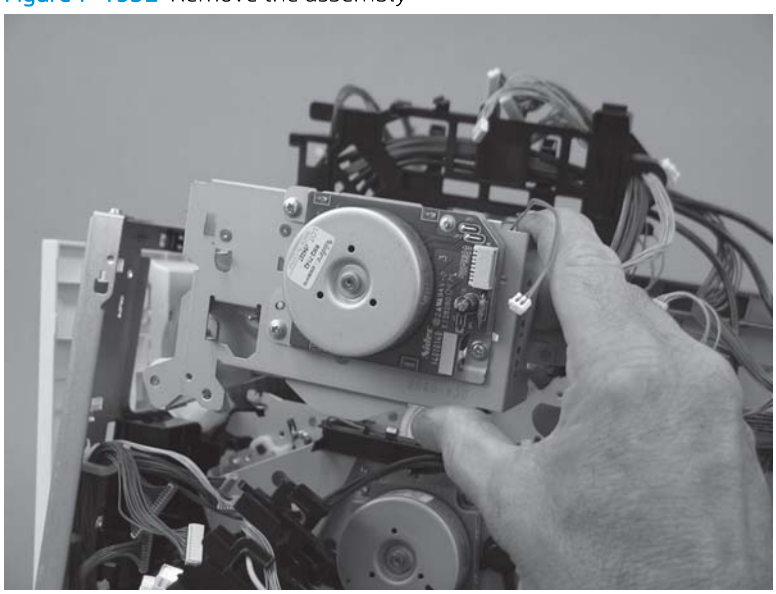
Figure 7-1931 Remove three screws



6. Remove the assembly.

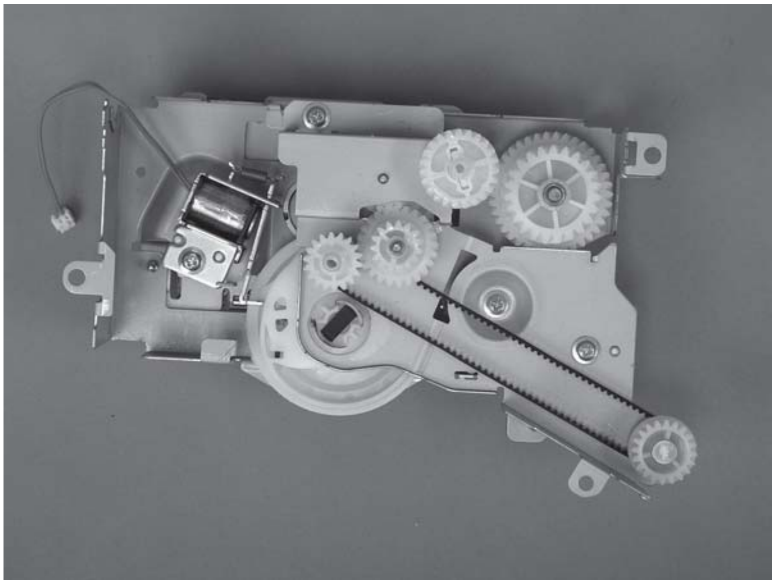
⚠ CAUTION: Two gears on the back side of the assembly are not captive. Handle the assembly carefully.

Figure 7-1932 Remove the assembly



7. **Optional step:** Two gears (callout 1) on the back side of the assembly are not captive. If the gears are dislodged, install them as shown.

Figure 7-1933 Remove the assembly



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Duplex drive assembly and motor

Learn about removing and replacing the duplex drive assembly.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-79 Part information

Part number	Part description
RM2-0006-000CN	Duplex drive assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the fuser

Follow these steps to remove the fuser.

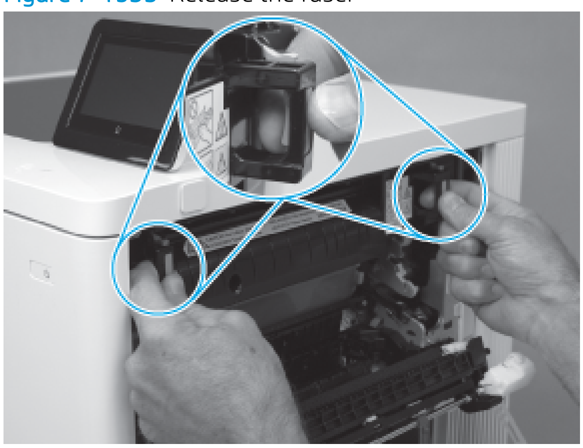
1. Open the right door.

> ⚠ CAUTION: The fuser is very hot. After turning the printer power off, allow the fuser to cool for at least 30 minutes before removing it.

Figure 7-1934 Open the right door

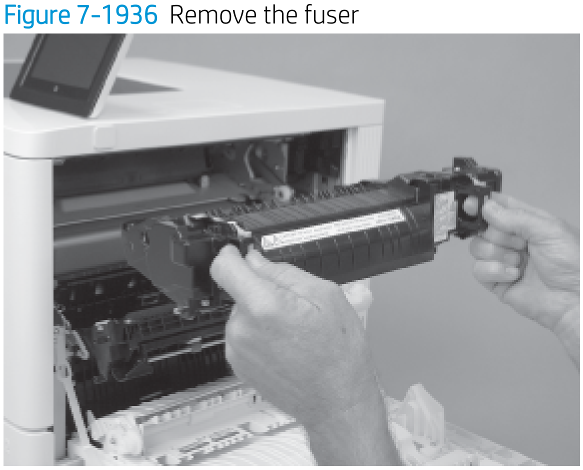
2. Grasp the two fuser handles, and then squeeze the two blue triggers on the handles to release the fuser.

Figure 7-1935 Release the fuser



3. Slide the fuser straight out of the printer to remove it.

Figure 7-1936 Remove the fuser



Remove the ITB

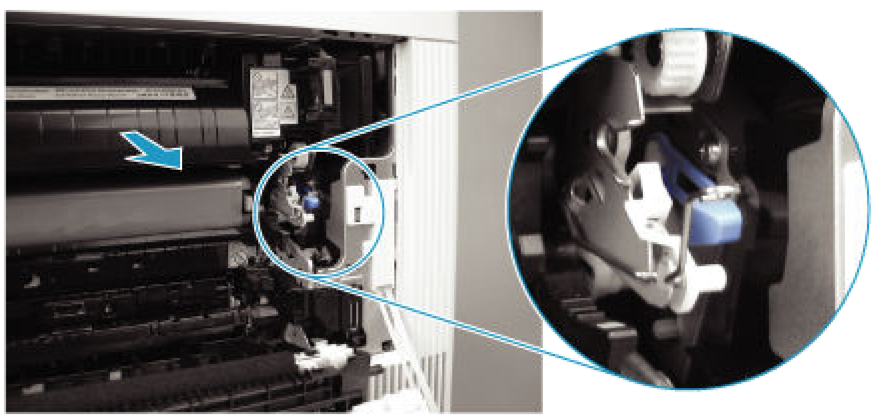
Follow these steps to remove the ITB.

1. Open the right door.

Figure 7-1937 Open the right door

2. Pull the blue lever to release the ITB drive coupling.

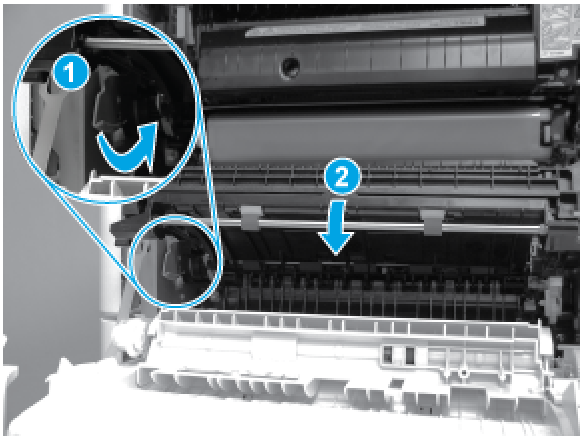
Figure 7-1938 Release the ITB drive coupling



3. Push in on the blue arm to release the secondary transfer roller assembly, and then completely lower the assembly.

NOTE: Press the blue arm on the secondary transfer roller assembly a second time to release the roller assembly when it stops at the halfway open position.

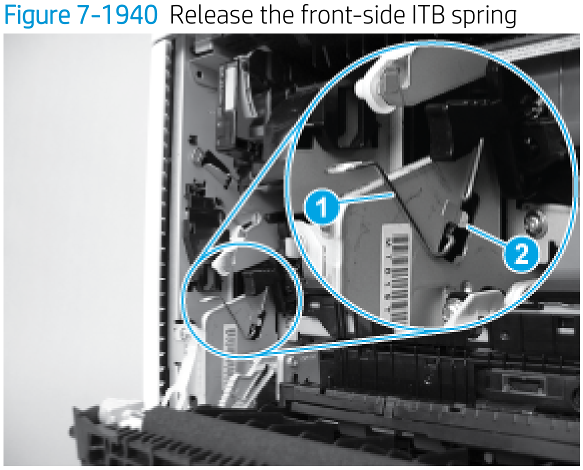
Figure 7-1939 Lower the secondary transfer roller assembly



4. Release the left-side ITB spring (callout 1) from the tab (callout 2).

NOTE: For late production M552/M553 printers and all M554/m555 printers, this ITB spring is not installed.

Figure 7-1940 Release the front-side ITB spring

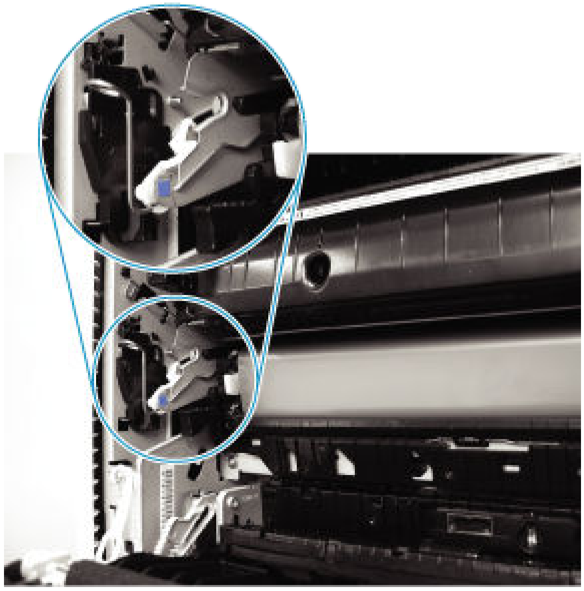


5. Place the left-side ITB spring on the holder to keep it out of the way.

NOTE: For late production M552/M553 printers and all M554/m555 printers, this ITB spring is not installed.

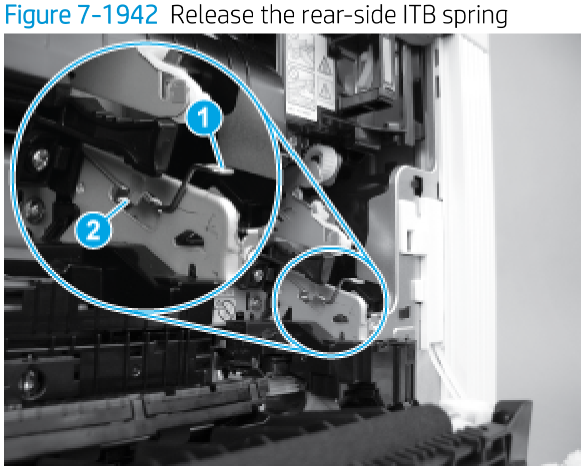
TIP: The holder is colored blue to help locate it.

Figure 7-1941 Place the spring on the holder



6. Release the right-side ITB spring (callout 1) from the tab (callout 2).

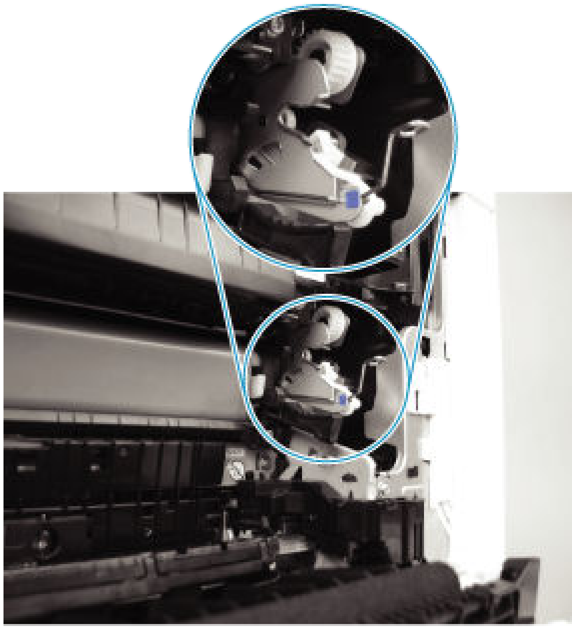
Figure 7-1942 Release the rear-side ITB spring



7. Place the right-side ITB spring on the holder to keep it out of the way.

TIP: The holder is colored blue to help locate it.

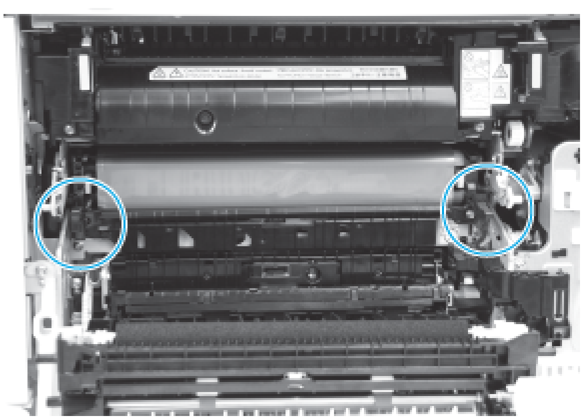
Figure 7-1943 Place the spring on the holder



8. Grasp the two blue handles on the ITB.

CAUTION: If the ITB is removed to access other assemblies in the printer, use care. The ITB is a sensitive assembly. Be careful when handling the ITB so that it is not damaged. Always place the ITB in a safe and protected location.

Figure 7-1944 Grasp the ITB handles



9. Pull the ITB out of the printer to remove it.

CAUTION: Do not touch the grey-plastic belt. Skin oils and fingerprints on the belt can cause print-quality problems.

Figure 7-1945 Remove the ITB

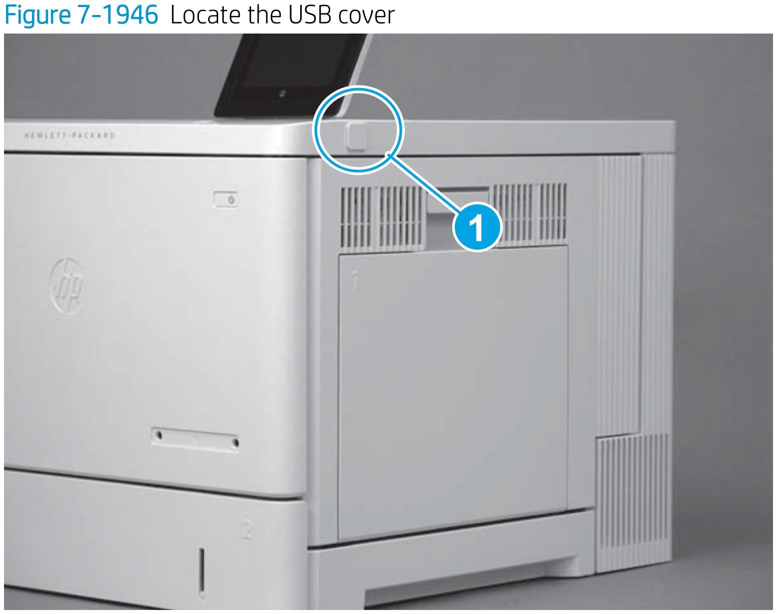
Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

NOTE: This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-1946 Locate the USB cover



2. Pull the cover off of the printer to remove it.

Figure 7-1947 Remove the cover

Remove the control panel (M553x/M555/E55040)

Follow these steps to remove the control panel.

NOTE: This procedure is for the M553x/M555/E55040 printers only.

M555 models: Removing the control panel is similar to the procedure below. For the M555, a flat cable connects the control panel to the formatter.

1. Tilt the control panel up.

Figure 7-1948 Tilt the control panel up

2. Use the small flat-blade screwdriver supplied in this kit to release the control-panel screws cover tabs.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-1949 Release the control-panel screws cover tabs

3. Rotate the cover up to remove it.

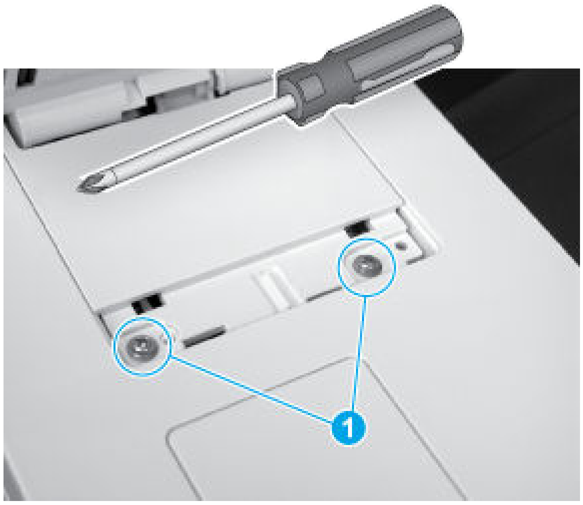
Figure 7-1950 Remove the cover

4. Use the small Phillips screwdriver supplied in this kit to remove two screws (callout 1).

IMPORTANT: Store the screws in a secure place where they cannot fall down into the printer.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-1951 Remove two screws



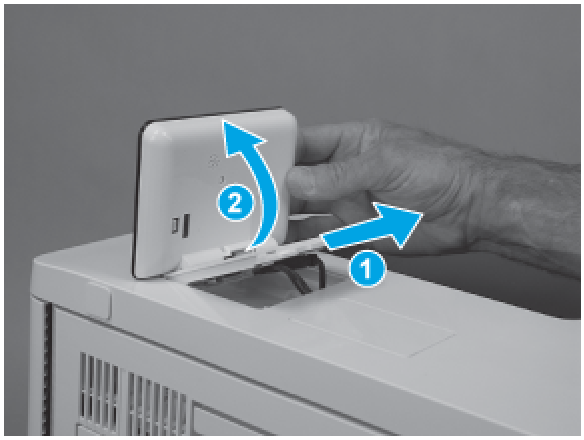
5. Rotate the control-panel base toward the front of the printer.

Figure 7-1952 Rotate the control-panel base up

6. Slightly slide the control-panel base toward the rear of the printer (callout 1) to release it, and then turn the control panel over (callout 2) to access the bottom side.

⚠ CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

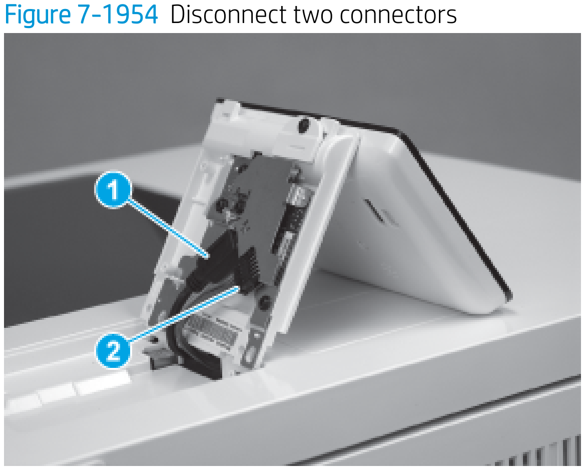
Figure 7-1953 Turn the control panel over



7. Disconnect one USB cable (callout 1), one connector (callout 2), and then remove the control panel.

NOTE: **M555 only**: Disconnect one flat cable (not shown), and then remove the control panel.

Figure 7-1954 Disconnect two connectors



Remove Tray 2

Learn about removing Tray 2.

NOTE: A SFP printer is shown in this section. However, the procedure is correct for all printer models.

The figures in this section show Tray 2. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5. Always carefully read the instructions that accompany the figures.

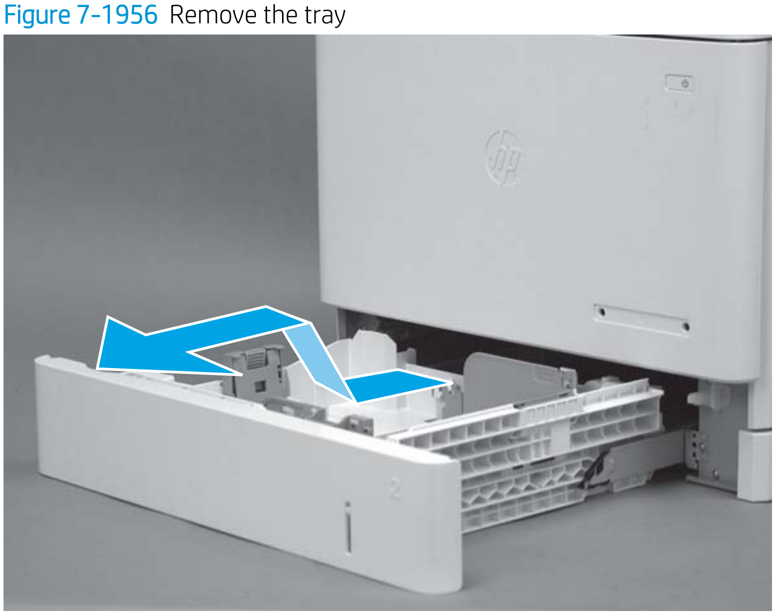
1. Pull the tray out until it stops.

Figure 7-1955 Pull the tray out

2. Lift the front of the tray, and then pull it out of the printer to remove it.

NOTE: **For a replacement tray:** If the tray has Fixed Tray Guides installed and are still required, move hardware to new tray. If necessary, order new kit: 3GY25–67901 Kit - Fixed Tray Guide. Only one kit required per engine.

Figure 7-1956 Remove the tray



Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-1957 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-1958 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

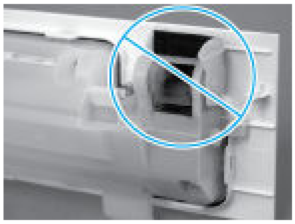
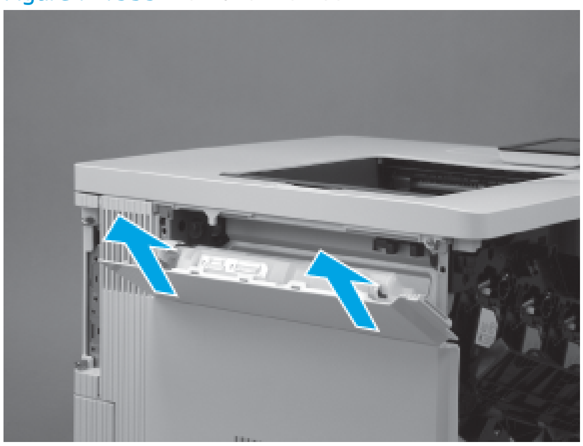


Figure 7-1959 Remove the TCU

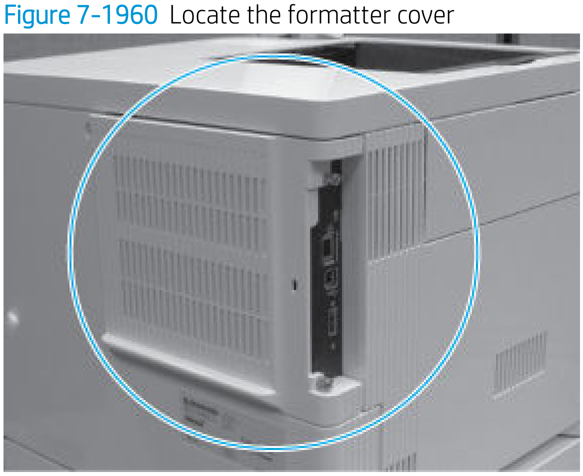


Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

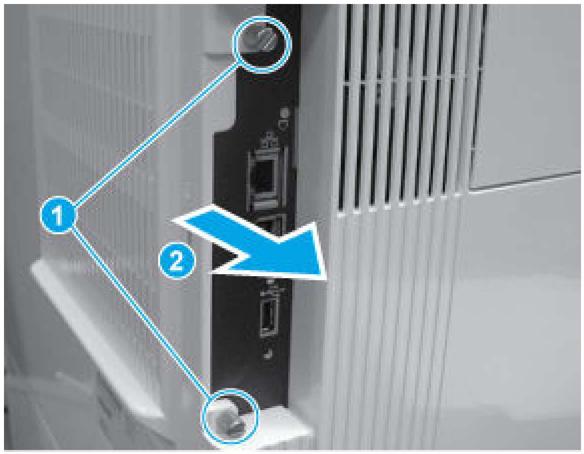
Figure 7-1960 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-1961 Loosen the thumbscrews



Remove the formatter (SFP)

Follow these steps to remove the formatter.

NOTE: This procedure is for SFP models only.

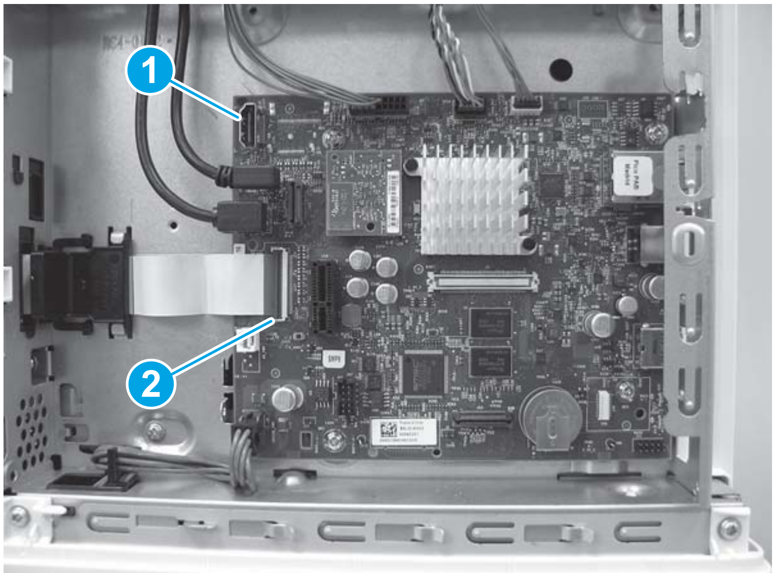
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)
   - All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
   - M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)
   - All models: J57
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

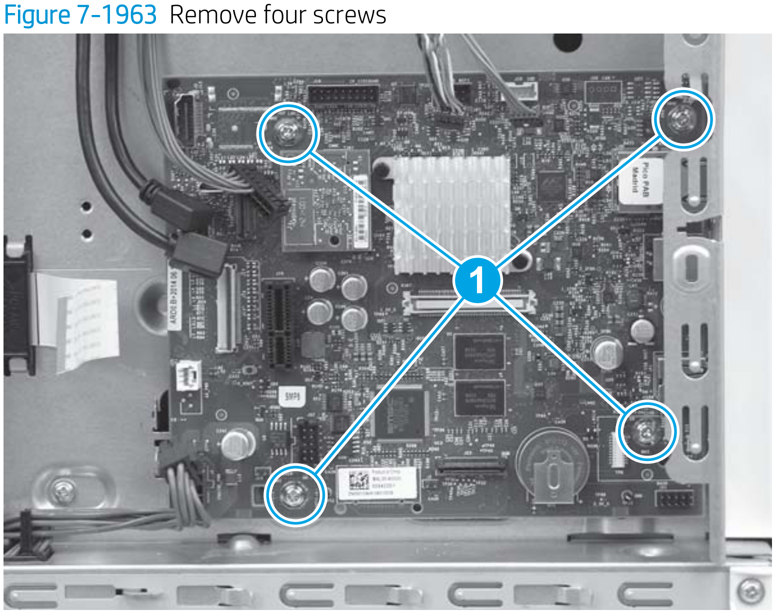
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1962 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-1963 Remove four screws



Remove the hard-disk drive (HDD)

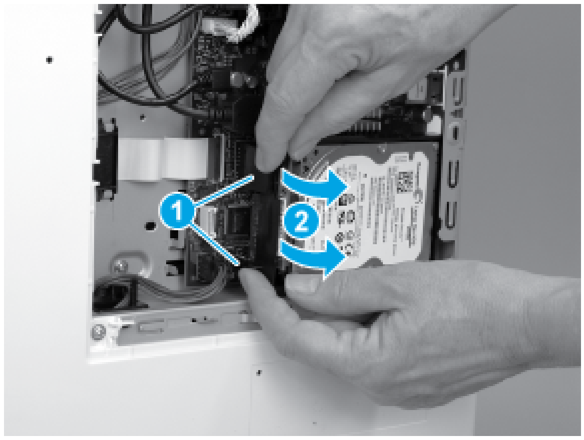
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-1964 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-1965 Remove the HDD

Remove the fax PCA (fax models)

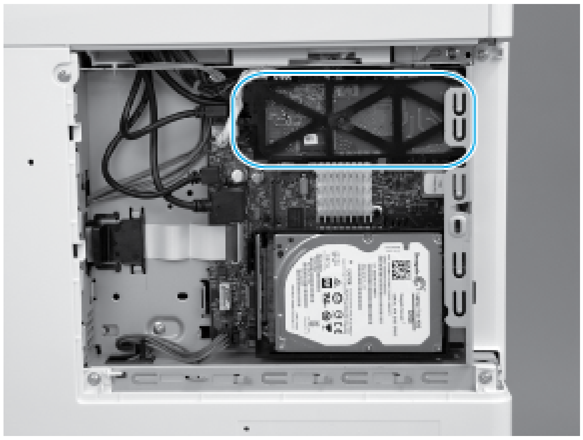
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

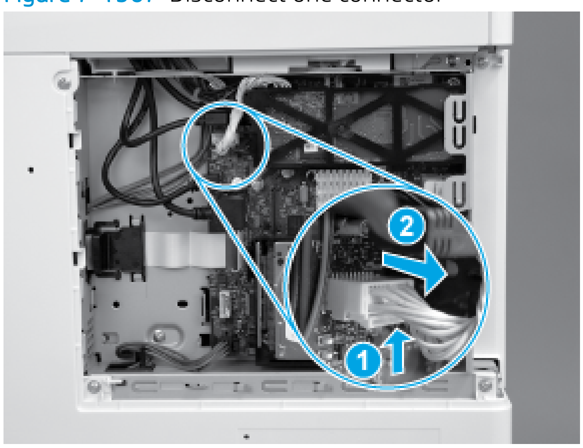
1. Locate the fax PCA component on the formatter.

Figure 7-1966 Locate the fax PCA



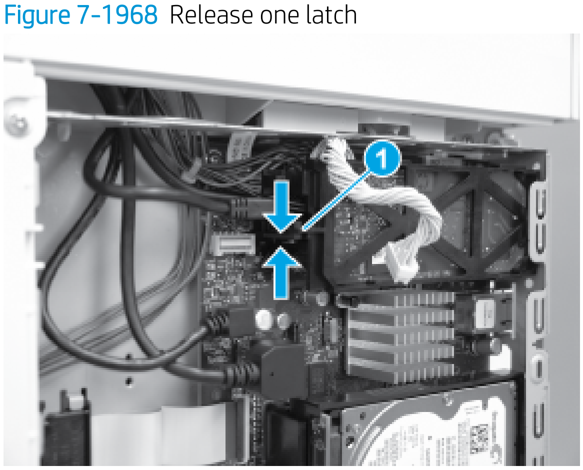
2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-1967 Disconnect one connector



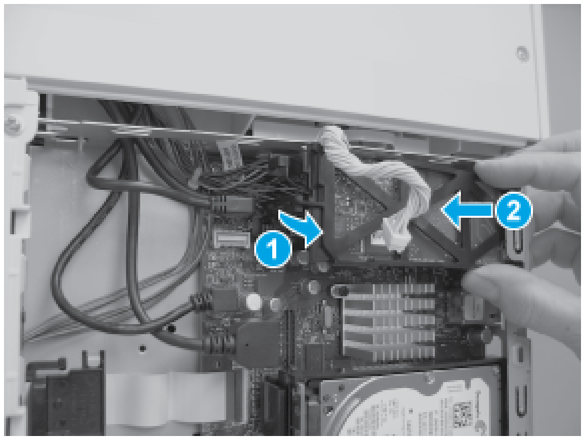
3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-1968 Release one latch



4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-1969 Remove the fax PCA



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

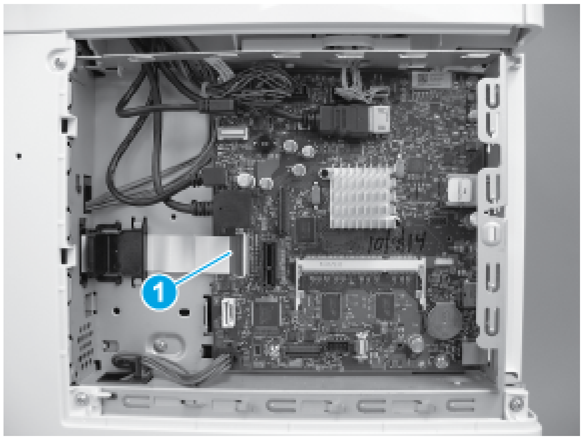
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

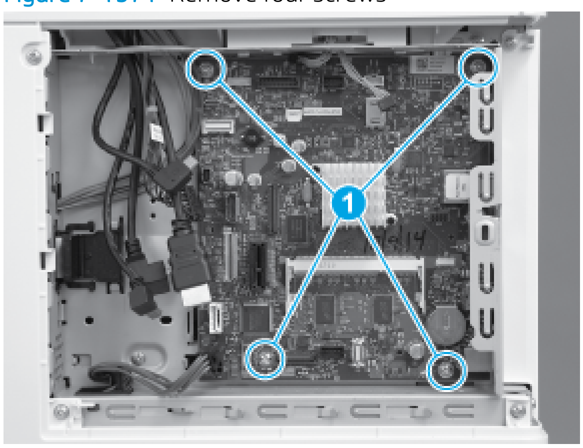
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-1970 Disconnect all connectors



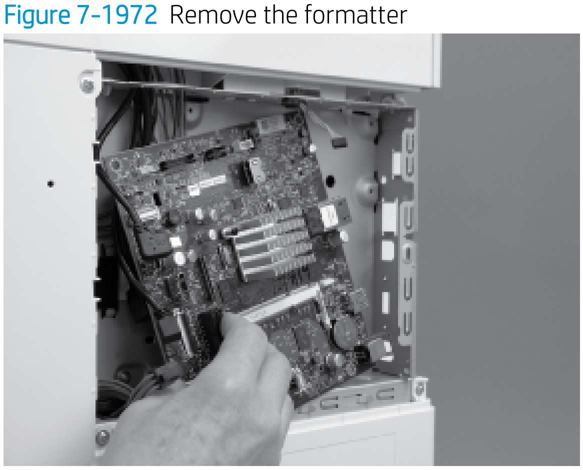
2. Remove four screws (callout 1).

Figure 7-1971 Remove four screws



3. Remove the formatter.

Figure 7-1972 Remove the formatter



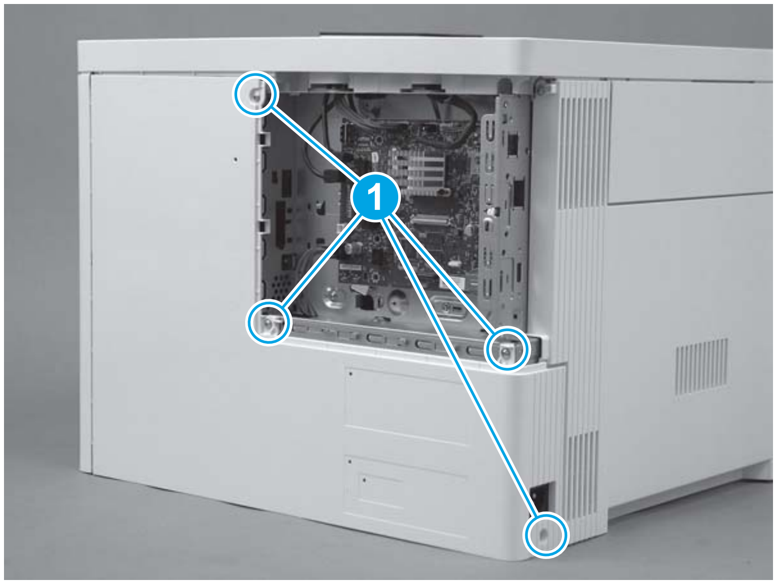
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

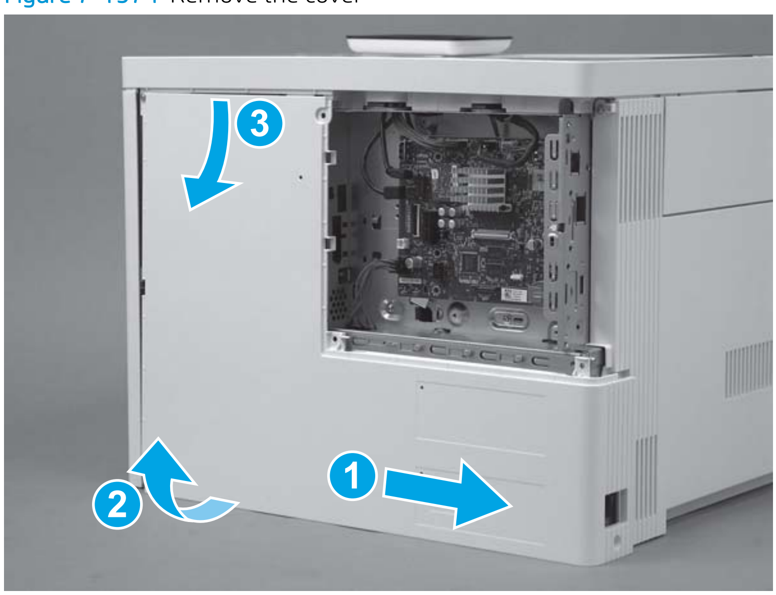
1. Remove four screws (callout 1).

Figure 7-1973 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-1974 Remove the cover



Remove the rear upper cover (MFP)

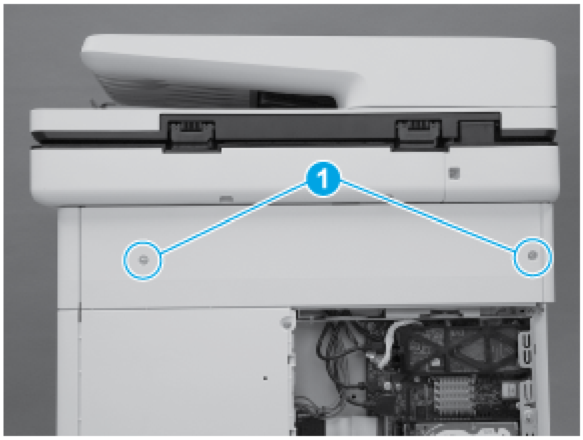
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

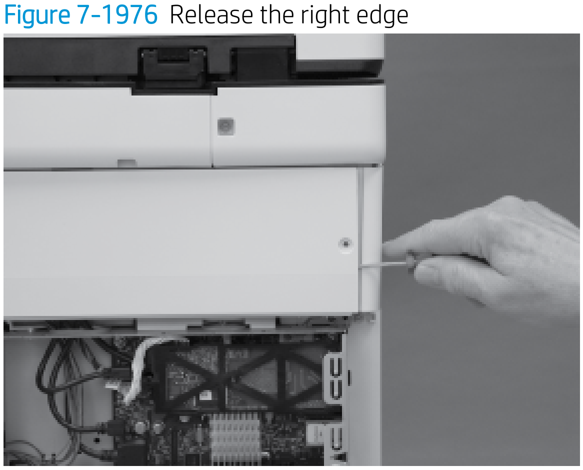
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-1975 Remove two screws



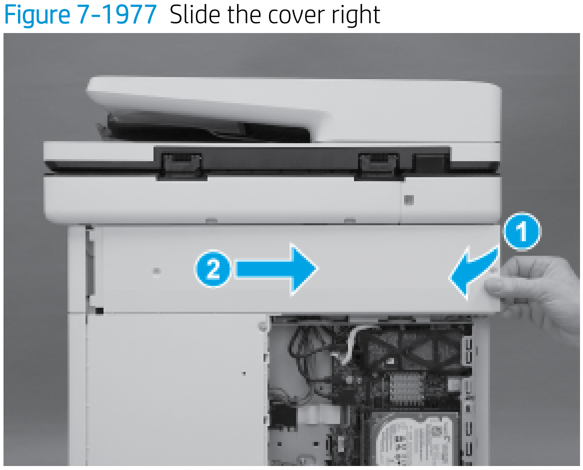
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-1976 Release the right edge



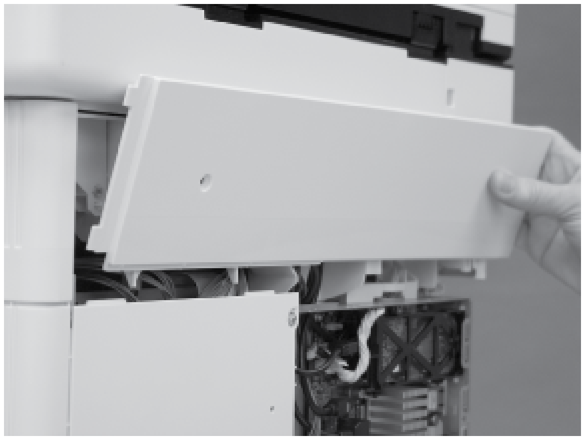
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-1977 Slide the cover right



4. Remove the cover.

Figure 7-1978 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-1979 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-1980 Remove the cover

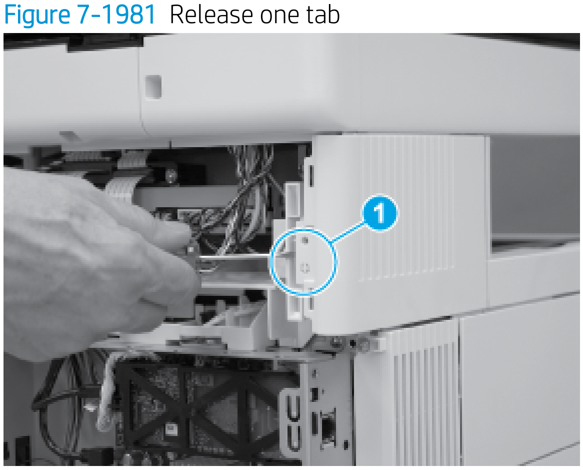
Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

NOTE: This procedure is for MFP models only.

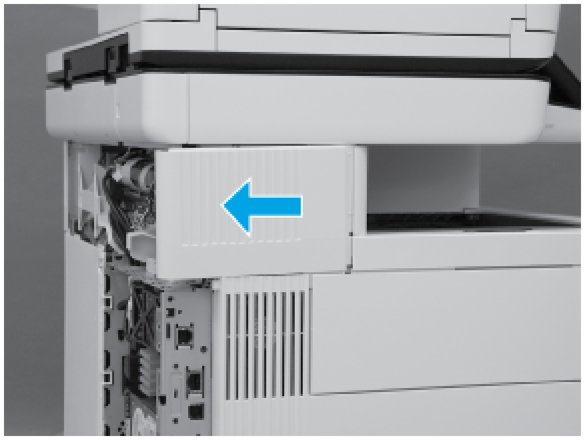
1. At the left side of the printer, release one tab (callout 1).

Figure 7-1981 Release one tab



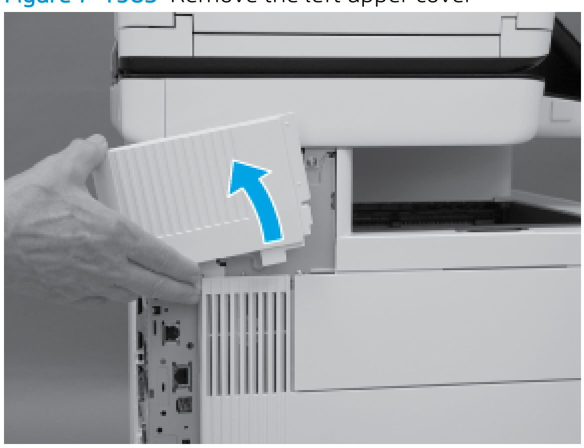
2. Slide the left upper cover toward the back of the printer.

Figure 7-1982 Slide the cover back



3. Rotate the cover up to remove it.

Figure 7-1983 Remove the left upper cover



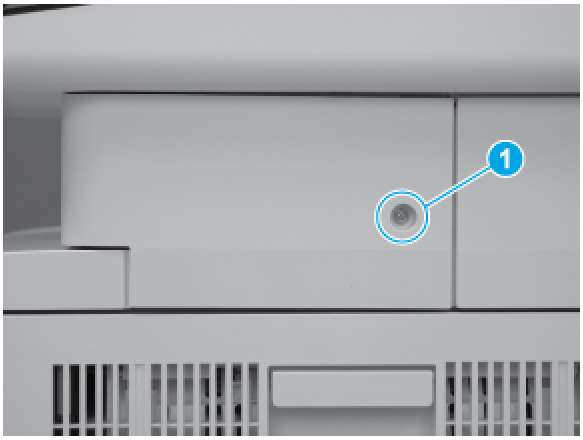
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-1984 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-1985 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-1986 Rotate the cover

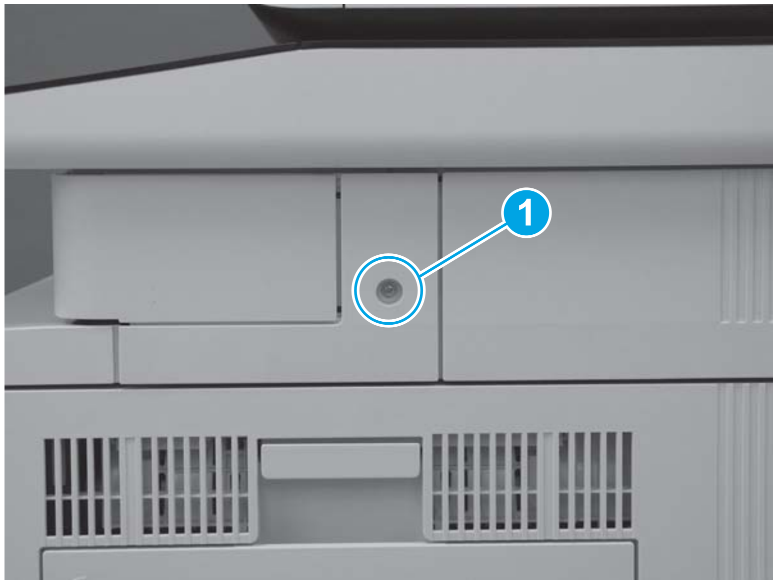
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

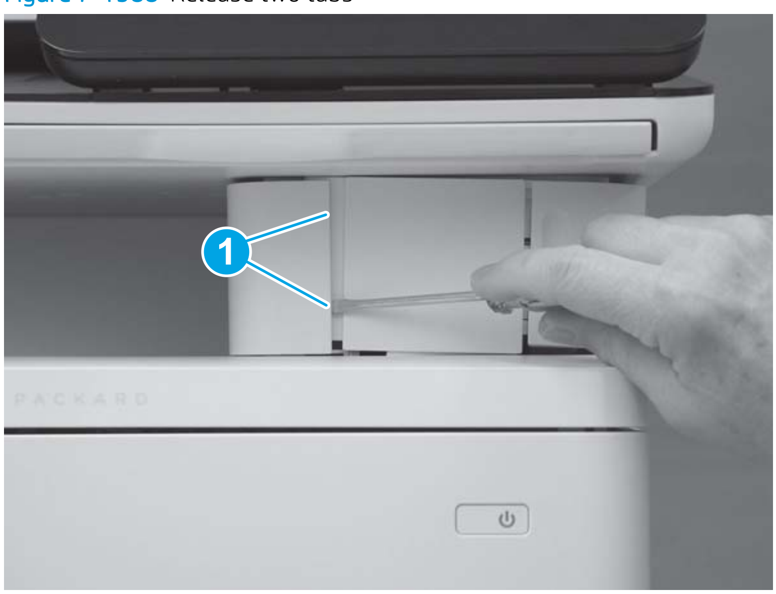
1. Remove one screw (callout 1).

Figure 7-1987 Remove one screw



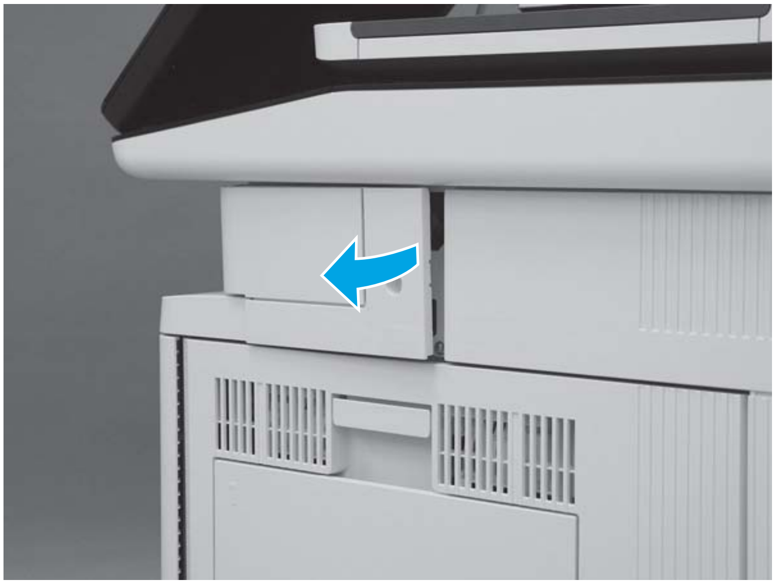
2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-1988 Release two tabs



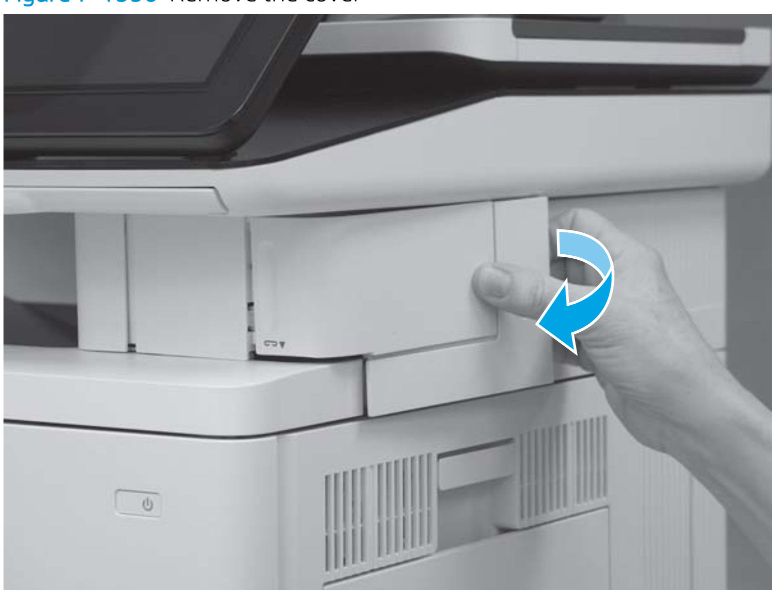
3. Release the back edge of the cover.

Figure 7-1989 Release the back edge of the cover



4. Rotate the cover away from the printer to remove it.

Figure 7-1990 Remove the cover



Remove the integrated scanner assembly (ISA) (MFP)

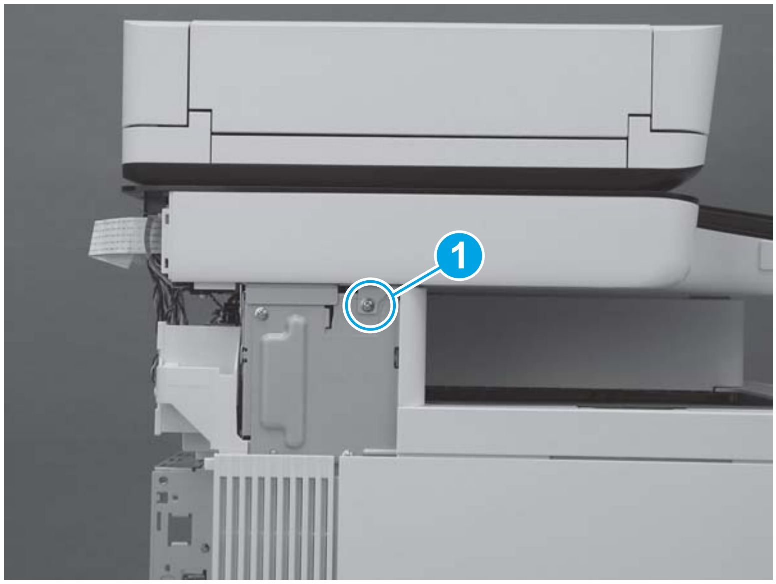
Follow these steps to remove the integrated scanner assembly (ISA).

NOTE: This procedure is for MFP models only.

NOTE: The ISA includes the document feeder, image scanner, scanner control board (SCB), control panel, keyboard (flow models) and NFC PCA (not all models).

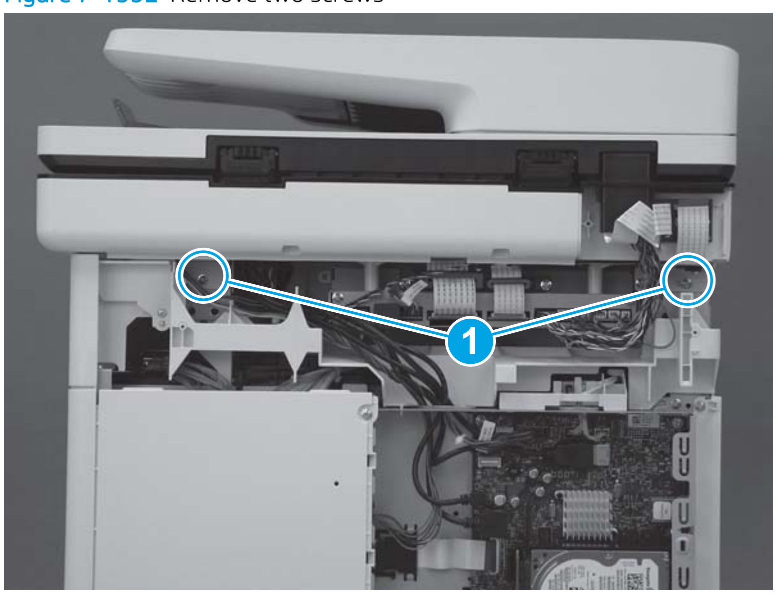
1. At the left side of the printer, remove one screw (callout 1).

Figure 7-1991 Remove one screw



2. At the back of the printer, remove two screws (callout 1).

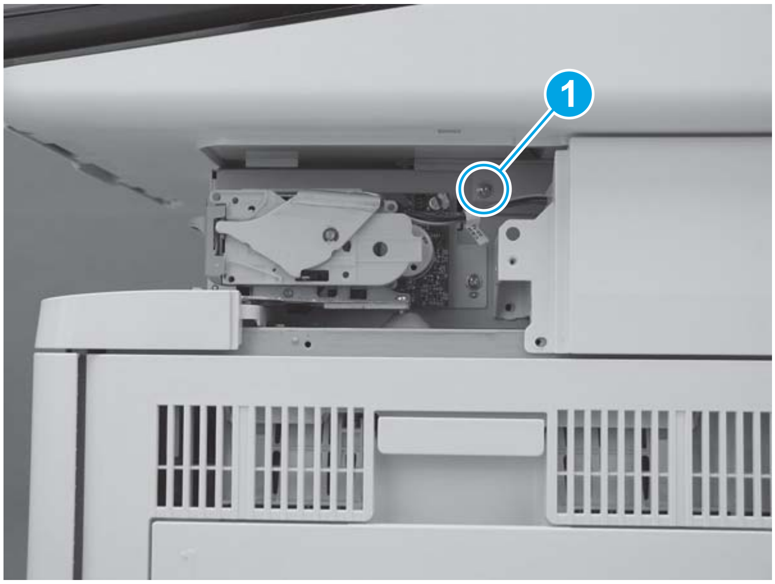
Figure 7-1992 Remove two screws



3. At the right side of the printer, remove one screw (callout 1).

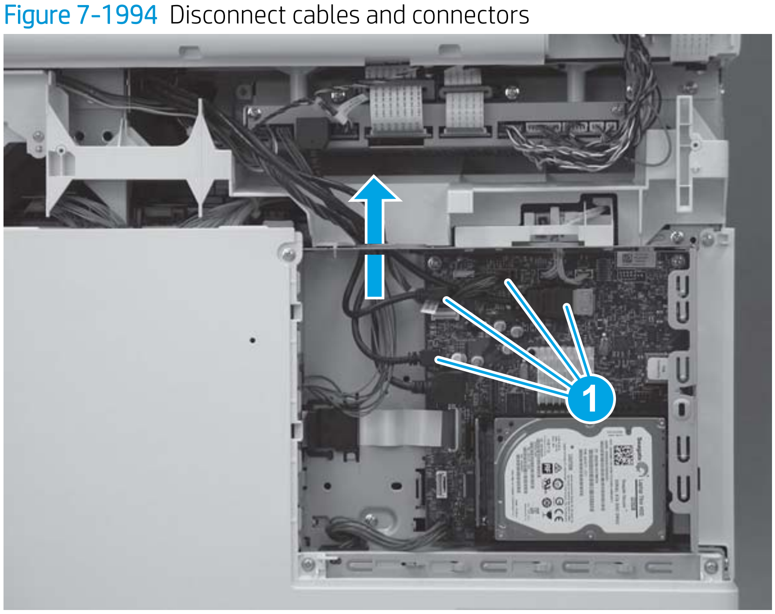
NOTE: The M577z is shown in the figure below. The procedure is correct for all MFP models.

Figure 7-1993 Remove one screw



4. Disconnect four connectors (callout 1) on the formatter, and then pass the wire harnesses and cables through the top opening in the formatter case (callout 2).

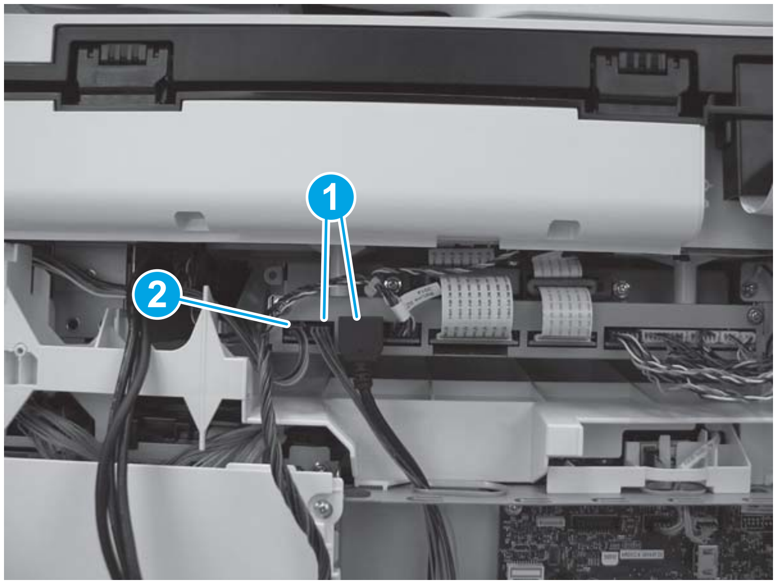
Figure 7-1994 Disconnect cables and connectors



5. Disconnect two connectors on the scanner control board (callout 1).

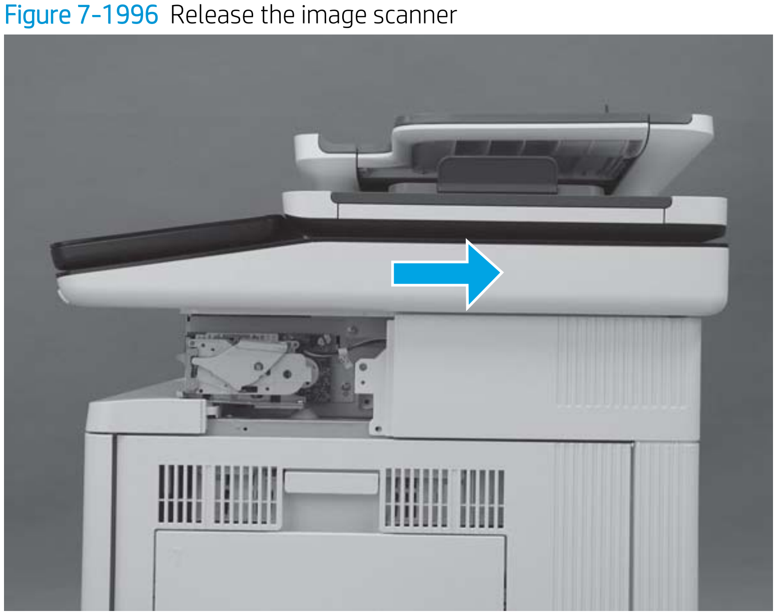
   MFP stapler models: Disconnect one connector for the stapler on the scanner control board (callout 2).

   Figure 7-1995 Disconnect connectors

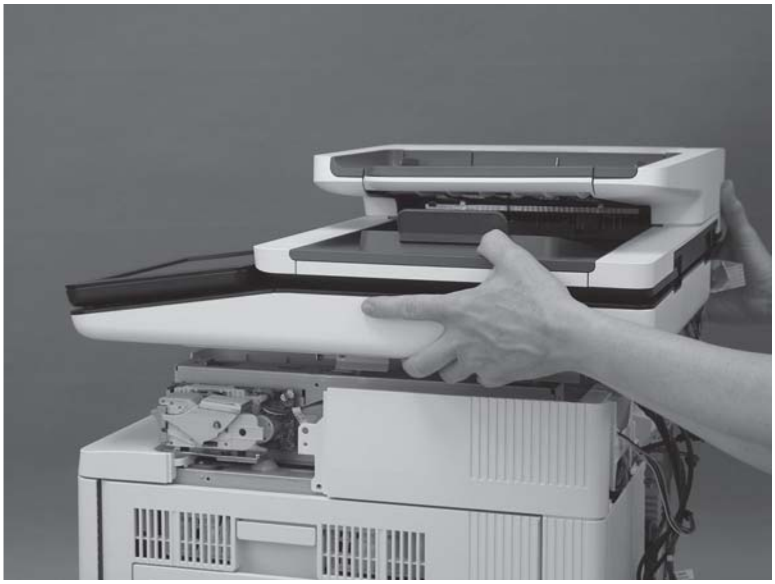
6. Slide the image scanner toward the back of the printer to release it.

   Figure 7-1996 Release the image scanner

7. Lift the ISA straight up to remove it.

Figure 7-1997 Remove the ISA



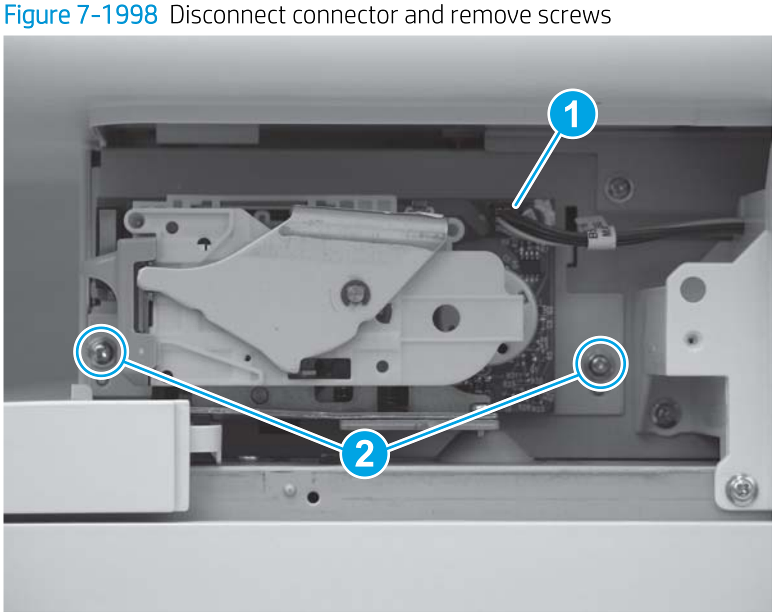
Remove the stapler unit (MFP stapler models)

Follow these steps to remove the stapler unit.

NOTE: This step is for stapler models only.

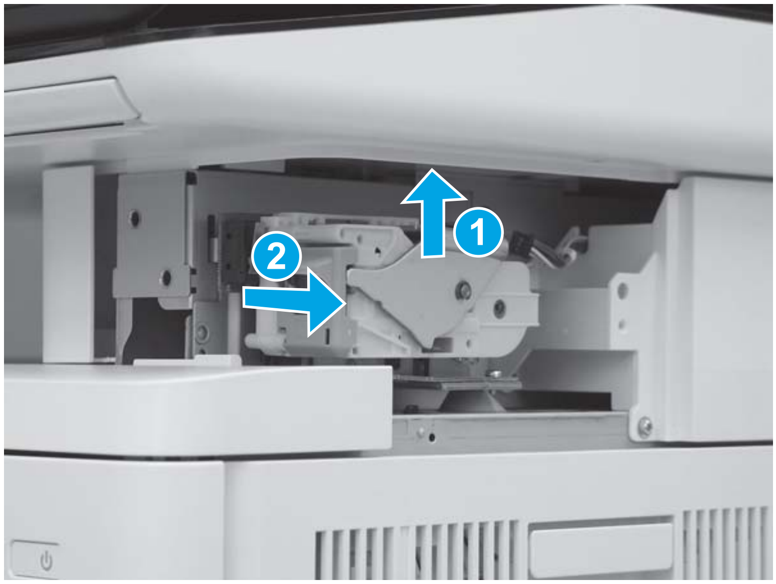
1. Disconnect one connector (callout 1), and then remove two screws (callout 2).

Figure 7-1998 Disconnect connector and remove screws



2. Slide the stapler unit up (callout 1), and then pull it away from the printer (callout 2) to remove it.

Figure 7-1999 Remove the stapler unit



Remove the right upper cover (MFP)

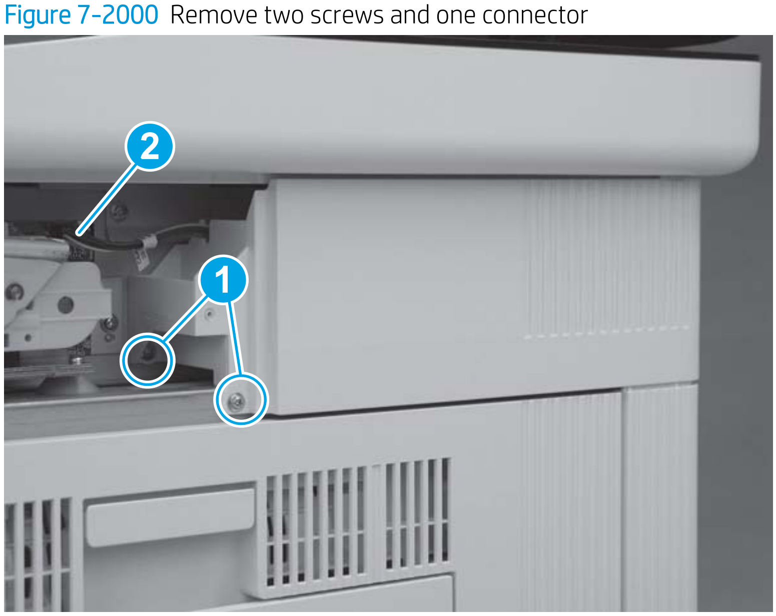
Follow these steps to remove the right upper cover.

NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Figure 7-2000 Remove two screws and one connector

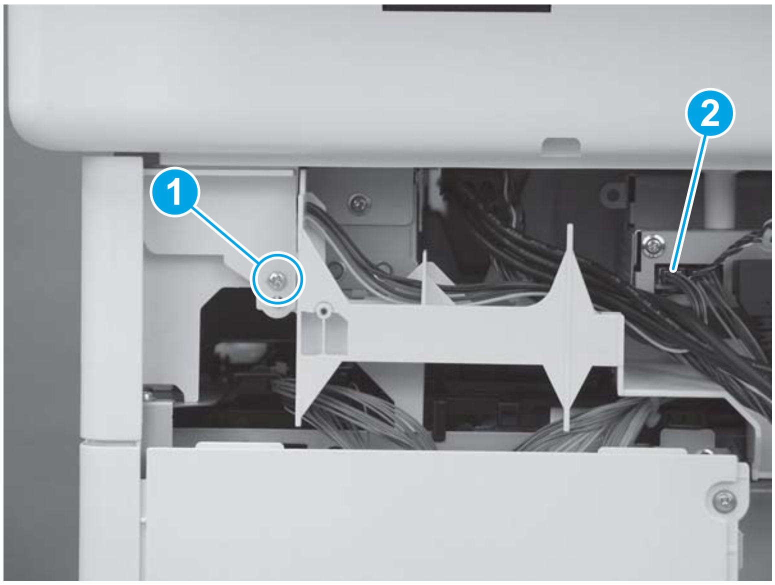


2. At the back of the printer, remove one screw (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

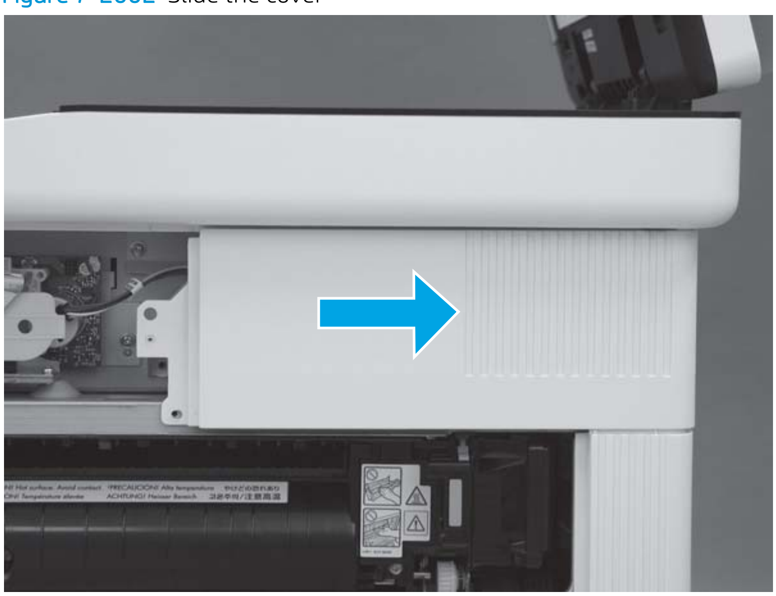
> Reinstallation tip: This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

Figure 7-2001 Remove one screw and connector



3. Slide the cover toward the back of the printer.

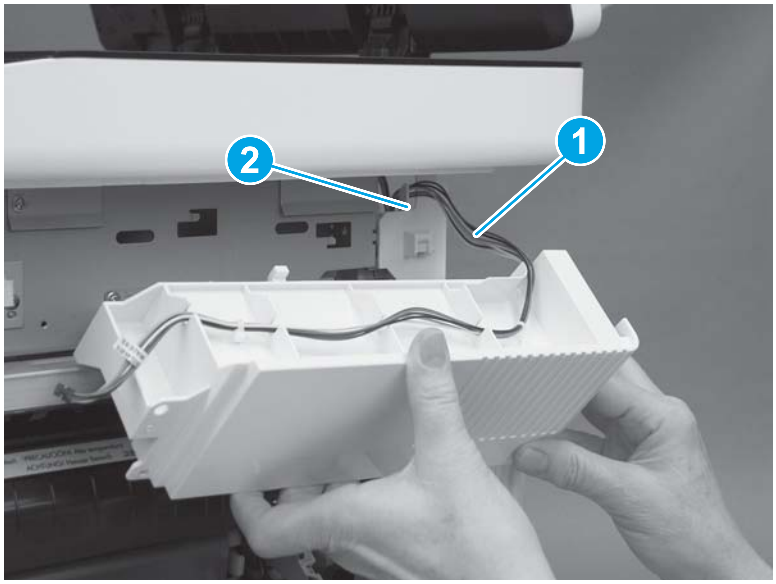
Figure 7-2002 Slide the cover



4. Lift the cover away from the printer to remove it.

 M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

 Figure 7-2003 Remove the cover



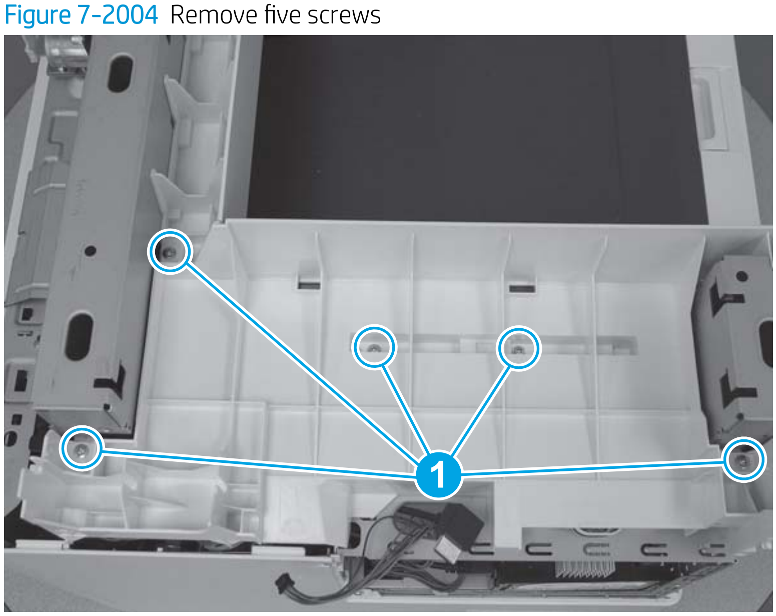
Remove the top rear cover (MFP)

Follow these steps to remove the top rear cover.

NOTE: This procedure is for MFP models only.

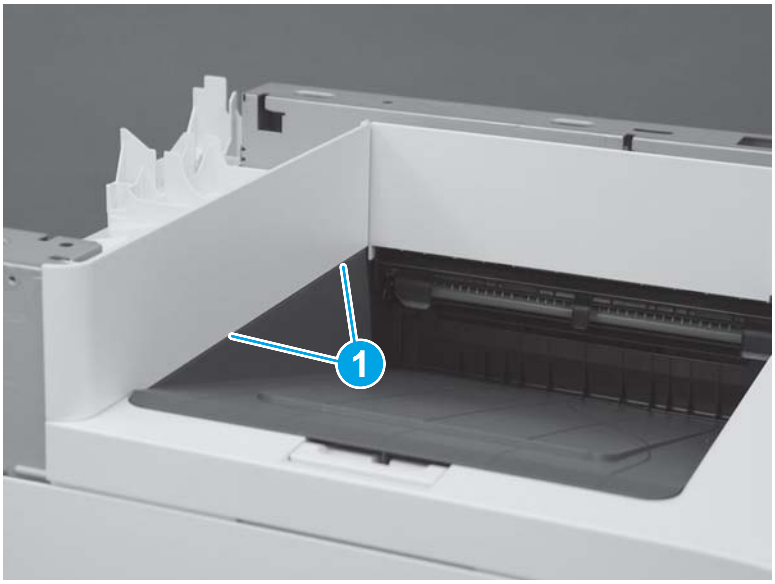
1. At the top of the printer, remove five screws (callout 1).

 Figure 7-2004 Remove five screws



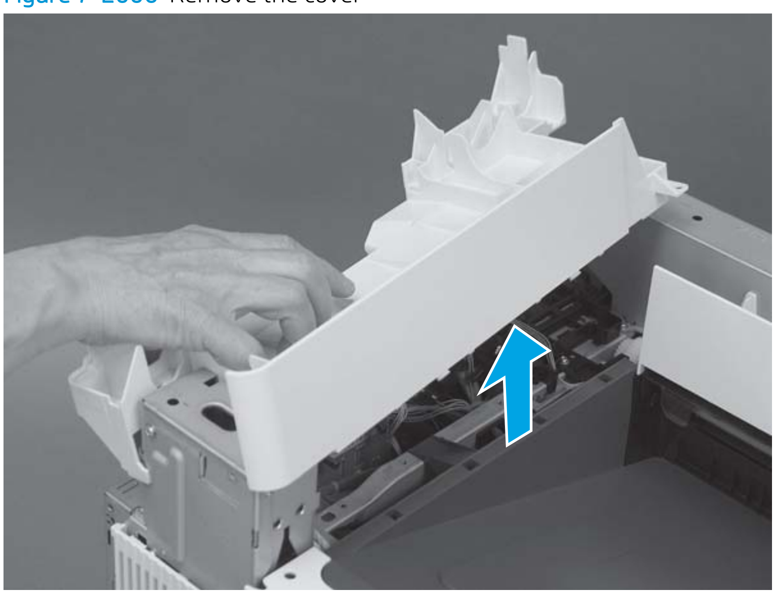
2. Release two tabs (callout 1) on the front edge of the cover.

Figure 7-2005 Release two tabs



3. Remove the top rear cover.

Figure 7-2006 Remove the cover



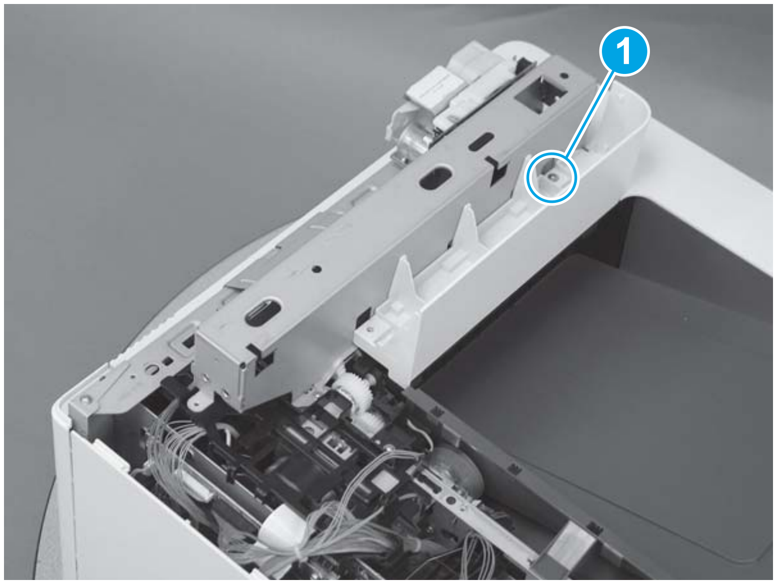
Remove the paper feed cover (MFP)

Follow these steps to remove the paper feed cover.

NOTE: This procedure is for MFP models only.

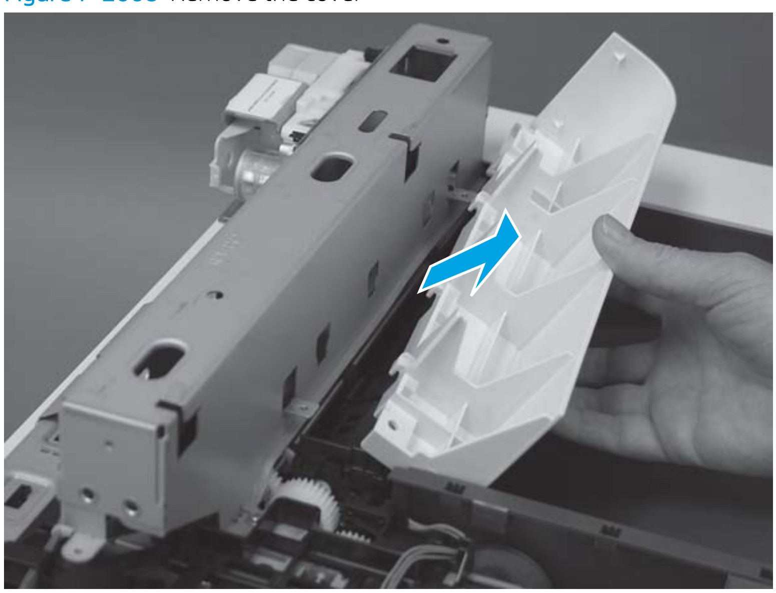
1. Remove one screw (callout 1).

Figure 7-2007 Remove one screw



2. Lift the cover up to remove it.

Figure 7-2008 Remove the cover



Remove the top cover (MFP)

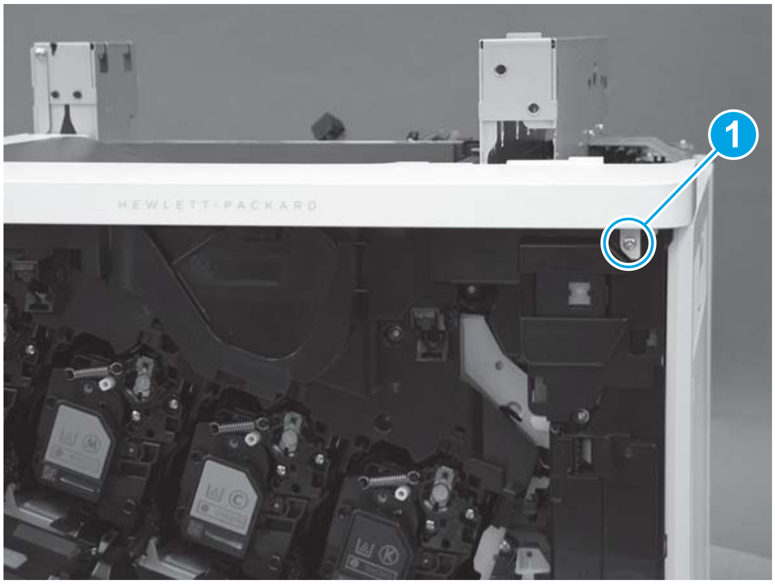
Follow these steps to remove the top cover.

NOTE: This procedure is for MFP models only.

1. At the front of the printer, remove one screw (callout 1).

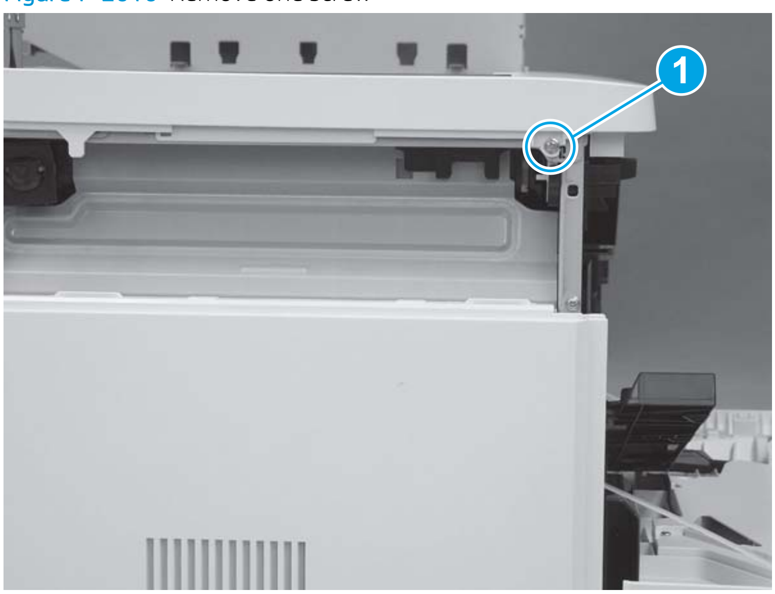
Reinstallation tip: This screw is longer and a different type of screw than the screw removed in the next step. When reinstalling the top cover, make sure that this screw is installed in the correct position.

Figure 7-2009 Remove one screw



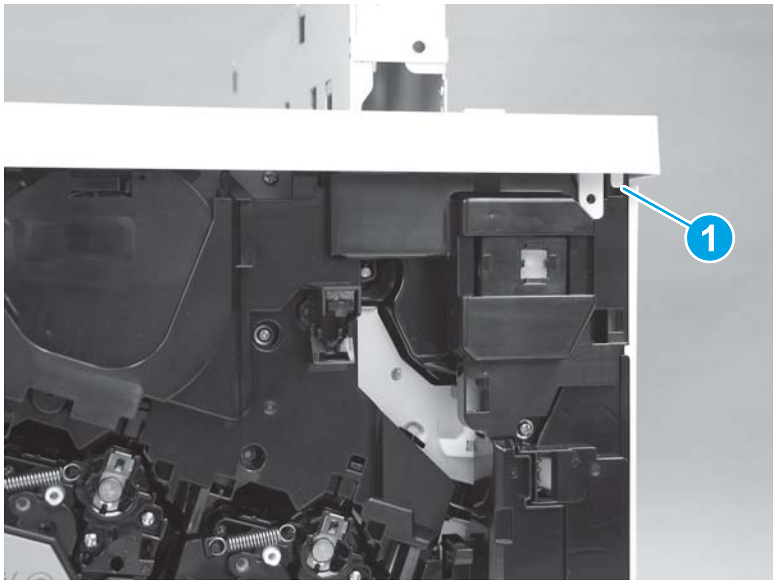
2. At the left side of the printer, remove one screw (callout 1).

Figure 7-2010 Remove one screw



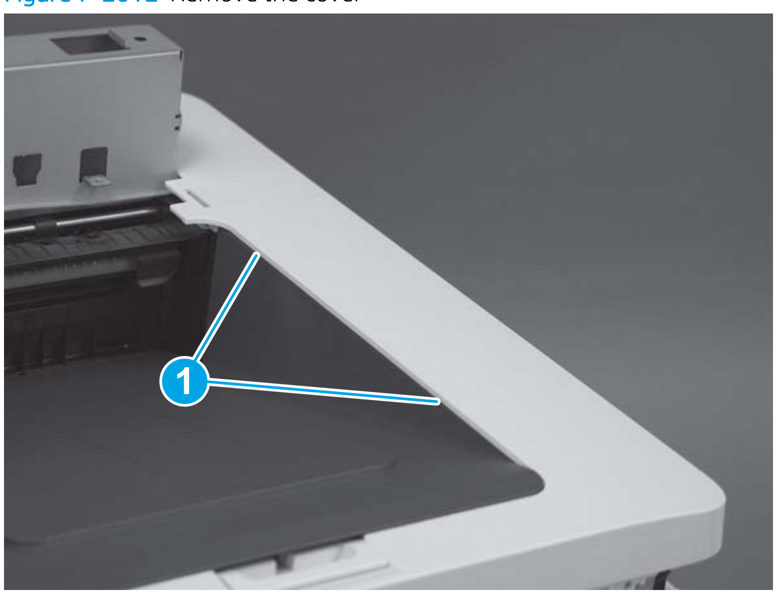
3. At the front of the printer, release one tab (callout 1).

Figure 7-2011 Release one tab



4. At the top of the printer, release two tabs (callout 1) next to the output bin, and then remove the top cover.

Figure 7-2012 Remove the cover



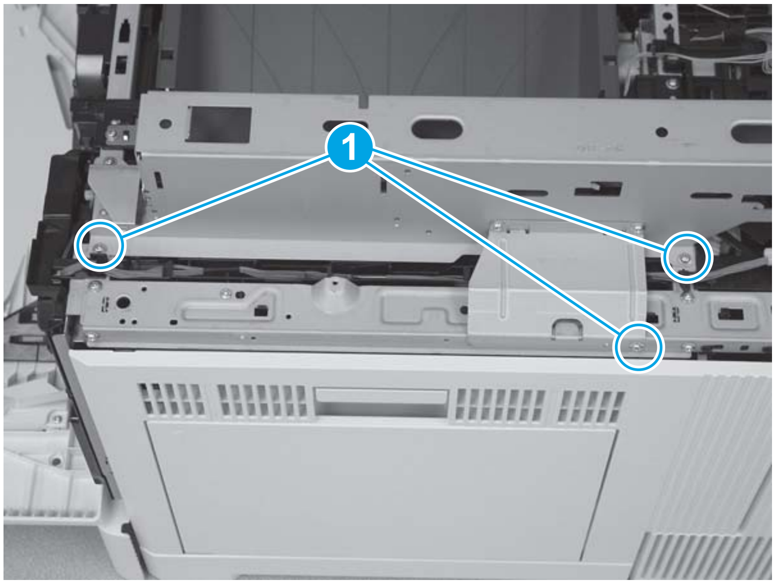
Remove the top bracket (MFP)

Follow these steps to remove the top bracket.

NOTE: This procedure is for MFP models only.

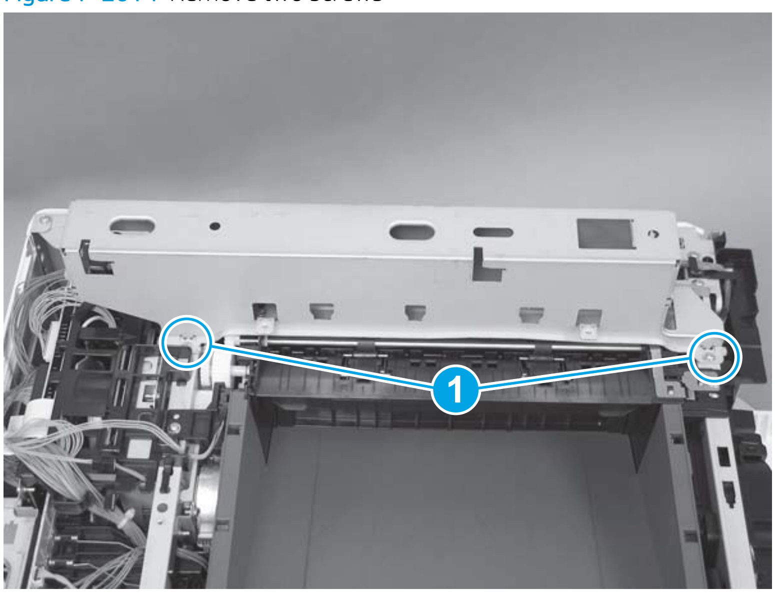
1. At the top of the printer, remove three screws (callout 1).

Figure 7-2013 Remove three screws



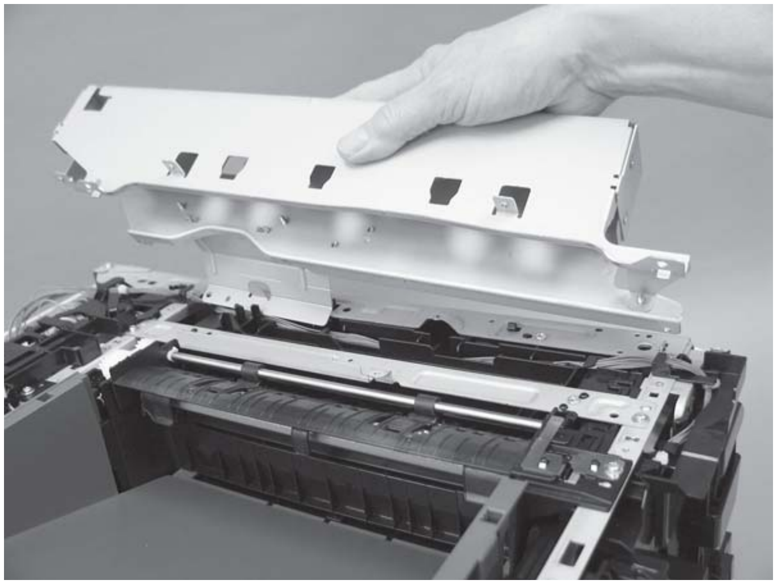
2. At the top of the printer, remove two screws (callout 1).

Figure 7-2014 Remove two screws



3. Lift the top bracket up to remove it.

Figure 7-2015 Remove the bracket



Remove the left cover

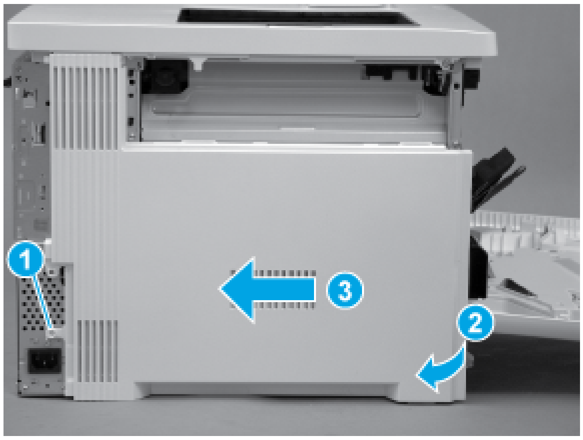
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-2016 Remove one screw

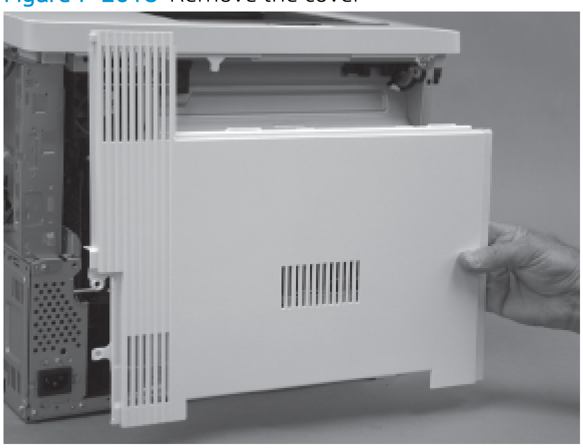
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-2017 Release the cover



3. Remove the cover.

Figure 7-2018 Remove the cover



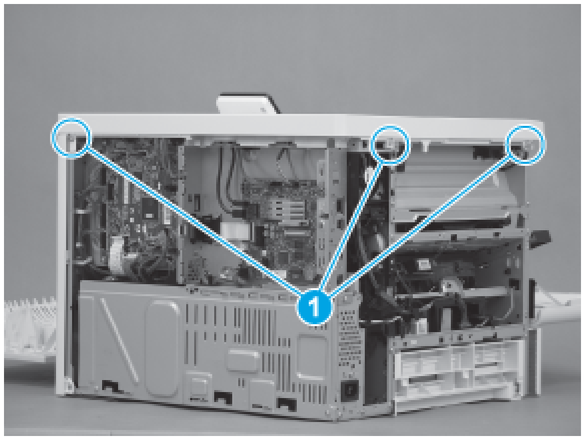
Remove the upper cover (SFP)

Follow these steps to remove the upper cover.

NOTE: This procedure is for SFP models only.

1. Remove three screws (callout 1).

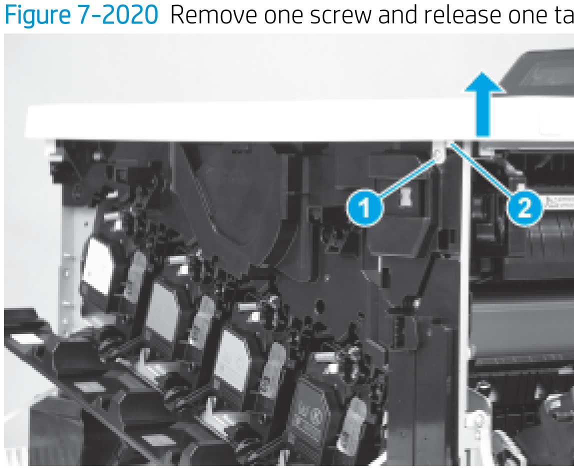
Figure 7-2019 Remove three screws



2. Remove one screw (callout 1), release one tab (callout 2), and then slightly separate the corner of the cover from the chassis.

NOTE: This is a self-tapping plastic-thread screw. Make sure that this screw is used in this location when it is reinstalled.

Figure 7-2020 Remove one screw and release one tab

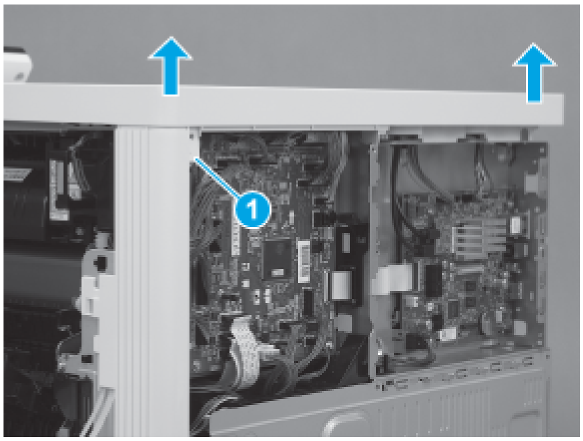


3. Release one tab (callout 1), and then lift up on the cover to release it.

IMPORTANT: **M554 models**: Disconnect the control-panel flat cable at the formatter.

NOTE: If the cover does not release, check for addition tabs by locating the triangles embossed in the cover at tab locations.

Figure 7-2021 Release the cover



4. Remove the cover.

Figure 7-2022 Remove the cover

Remove the control panel

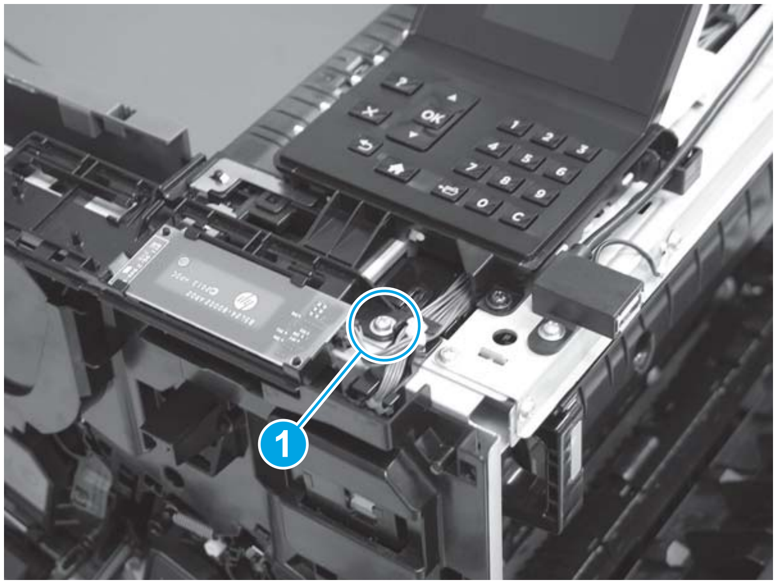
Follow these steps to remove the control panel.

NOTE: This procedure is for the M552dn/M553n/dn/M554 printers only.

The figures in this procedure show the M552/M553 printer. The M554 control panel looks slightly different than shown below. However, removing the control panel is similar to the following procedure.

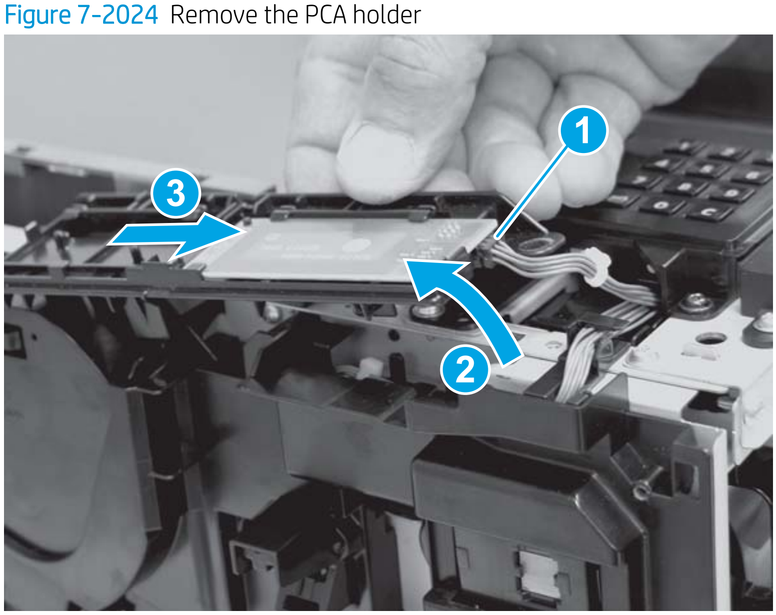
1. Remove one screw (callout 1).

Figure 7-2023 Remove one screw



2. **M552/M553**: Disconnect one connector (callout 1). Rotate the near field communication (NFC) PCA holder up (callout 2), and then slide it to the right (callout 3) to remove it.

Figure 7-2024 Remove the PCA holder



3. **M552/M553**: Remove one cable from the guide.

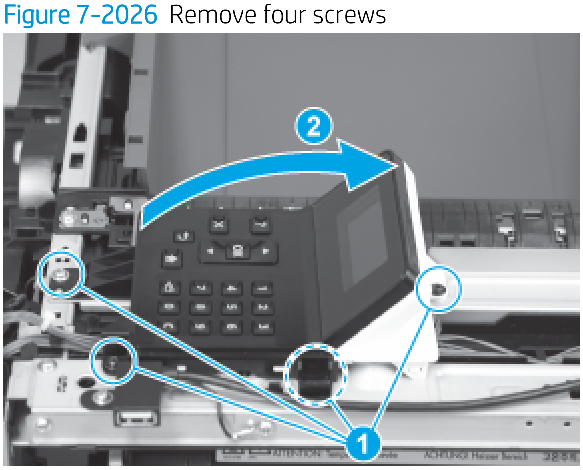
Figure 7-2025 Remove one cable

4. **M552/M553**: Remove four screws (callout 1), and then turn the control panel over (callout 2).

NOTE: **M554**: Remove any screws fastening the assembly to the printer chassis, and then turn the control panel over (callout 2) to access the bottom side.

CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

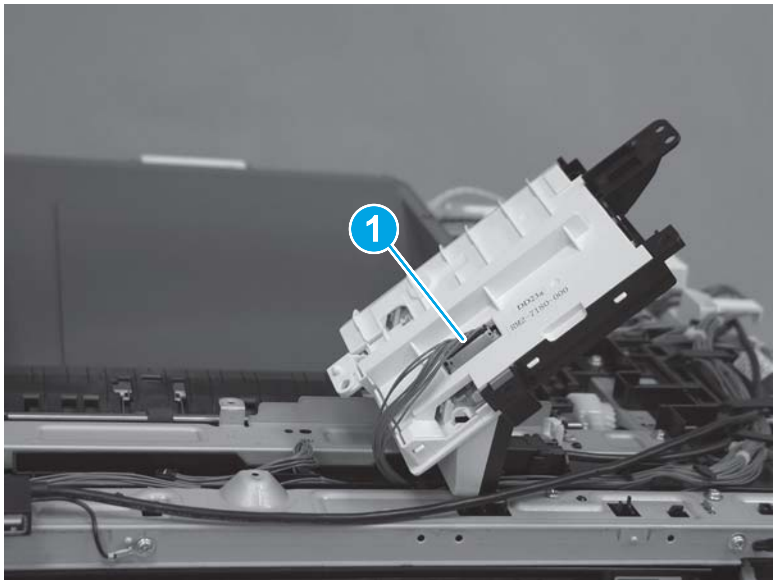
Figure 7-2026 Remove four screws



5. **M552/M553**: Disconnect one connector (callout 1), and then remove the control panel.

NOTE: **M554**: Disconnect one flat cable, and then remove the control panel.

Figure 7-2027 Remove the control panel

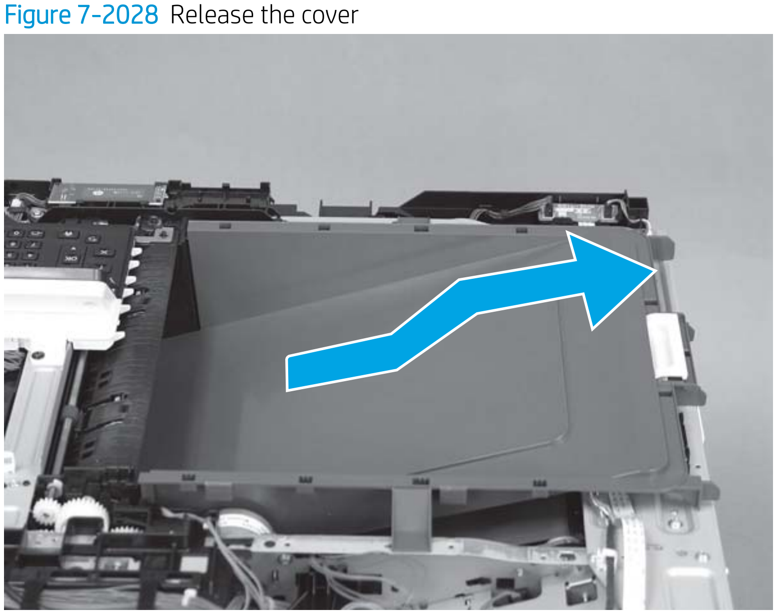


Remove the output bin

Follow these steps to remove the output bin.

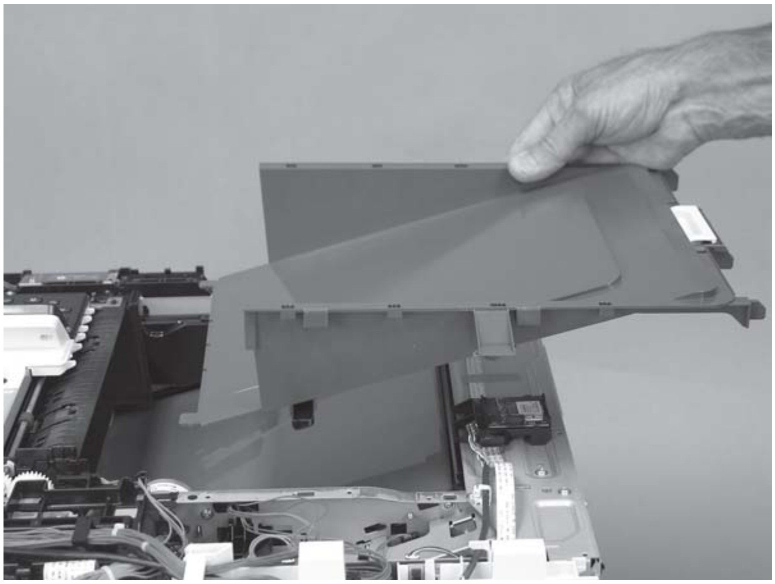
1. Slightly slide and lift the cover to release it.

Figure 7-2028 Release the cover



2. Remove the cover.

Figure 7-2029 Remove the cover

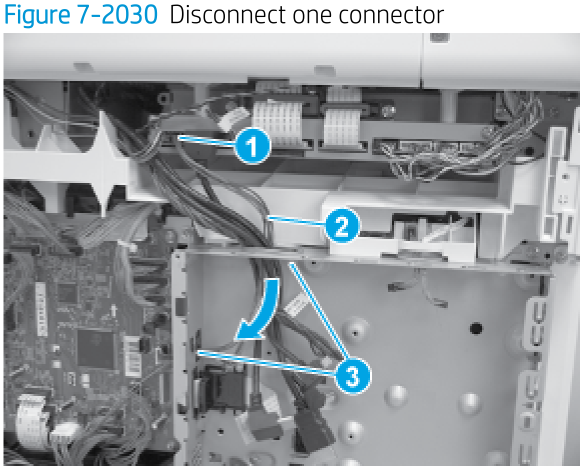


Remove the formatter case

Follow these steps to remove the formatter case.

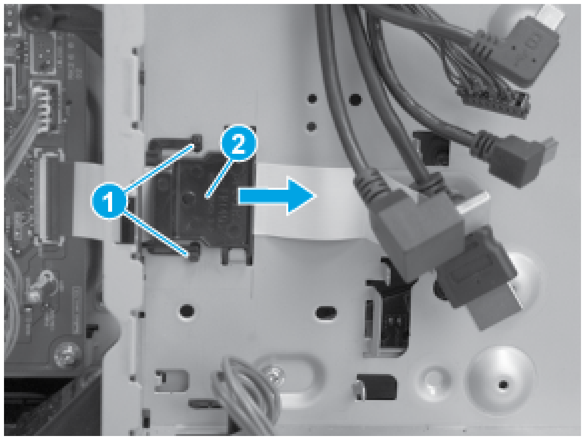
1. **MFP only**: Disconnect one connector (callout 1), and then pass the wire harness (callout 2) through two openings in the formatter case (callout 3).

Figure 7-2030 Disconnect one connector



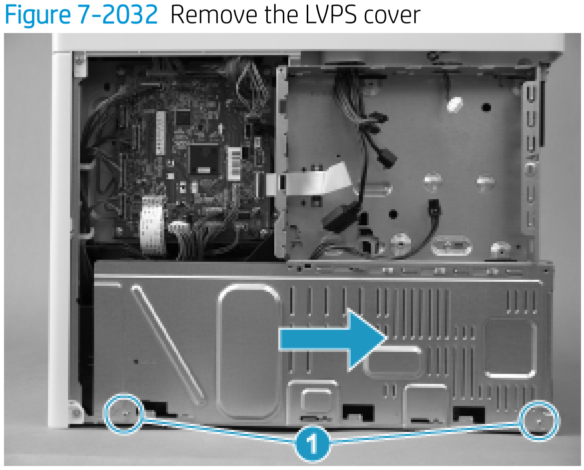
2. Release two tabs (callout 1) on the black plastic bracket. Hold the tabs in the released position, and then slide the bracket (callout 2) to the right to remove it from the formatter case.

Figure 7-2031 Remove the bracket



3. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

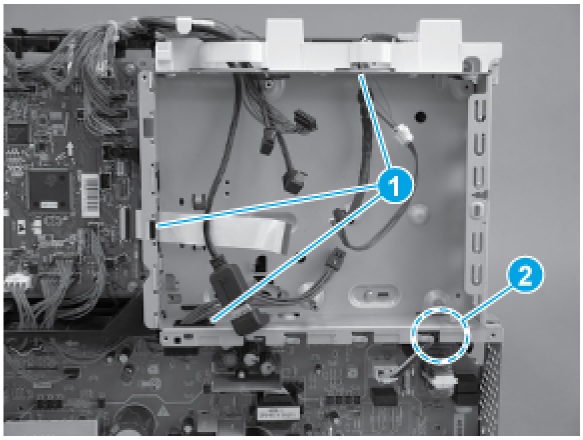
Figure 7-2032 Remove the LVPS cover



4. Pass two wire harnesses and one flat cable (callout 1) through the opening in the formatter case, and then release one wire harness from the retainer (callout 2).

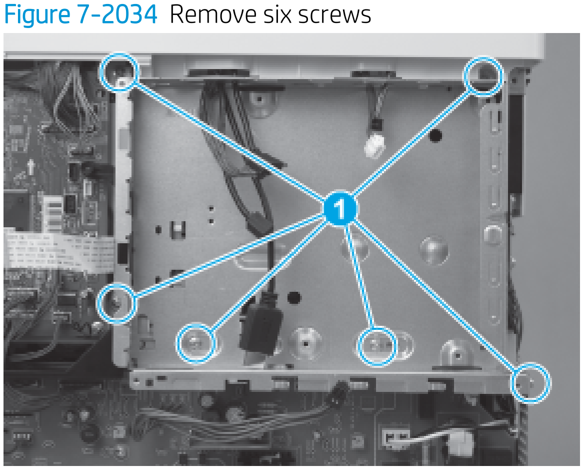
⚠ CAUTION: The flat cable might be attached to the formatter case with double-sided tape. Make sure that this tape is released, so that the flat cable is not damaged when the formatter case is removed.

Figure 7-2033 Release wire harnesses and flat cable



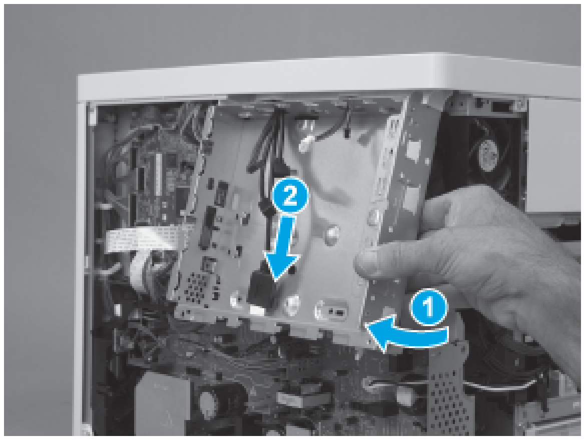
5. Remove six screws (callout 1).

Figure 7-2034 Remove six screws



6. Rotate the bottom of the formatter case away from the printer (callout 1), and then pull it down (callout 2) to release it.

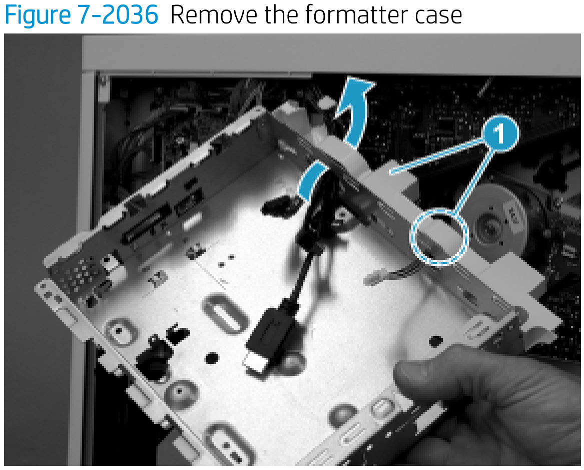
Figure 7-2035 Release the formatter case



7. Pass the wire harnesses through the opening in the formatter case to remove it.

IMPORTANT: If the formatter case is removed so that it can be replaced, make sure to transfer the memory PCA (island of data) and plastic bracket (callout 1) to the replacement case.

Figure 7-2036 Remove the formatter case



Remove the right rear cover

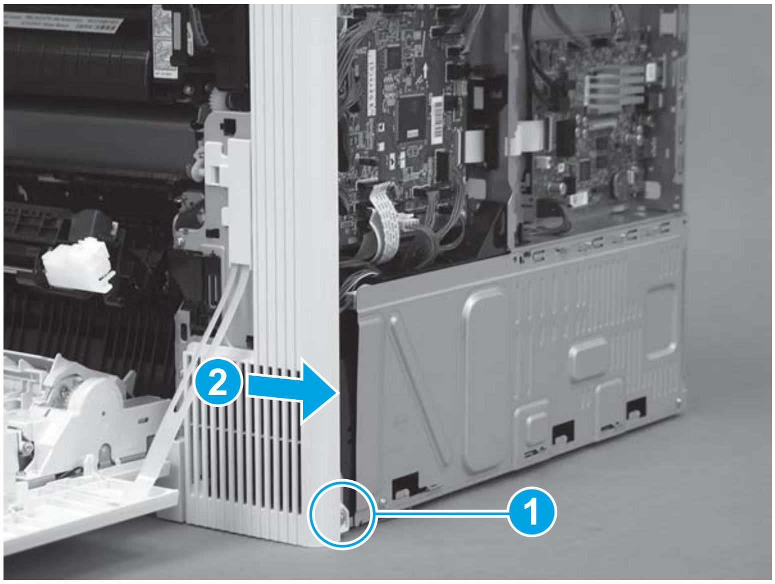
Follow these steps to remove the right rear cover.

NOTE: The figures in this topic show a SFP model. However, the procedure is correct for an MFP.

1. Remove one screw (callout 1), and then slide the cover toward the rear of the printer (callout 2) to release it.

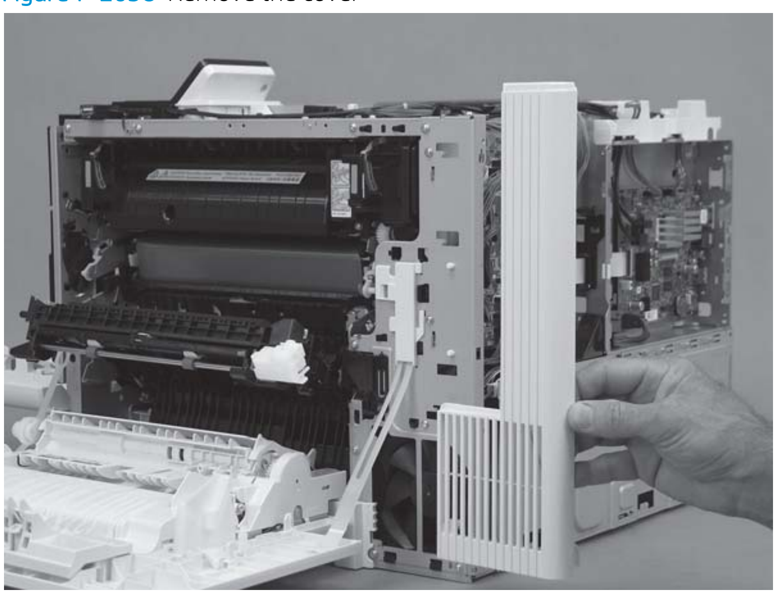
TIP: If the right door is closed, open it now.

Figure 7-2037 Release the cover



2. Remove the cover.

Figure 7-2038 Remove the cover



Remove the DC controller (DCC) and sheet-metal bracket

Follow these steps to remove the DC controller and sheet-metal bracket together.

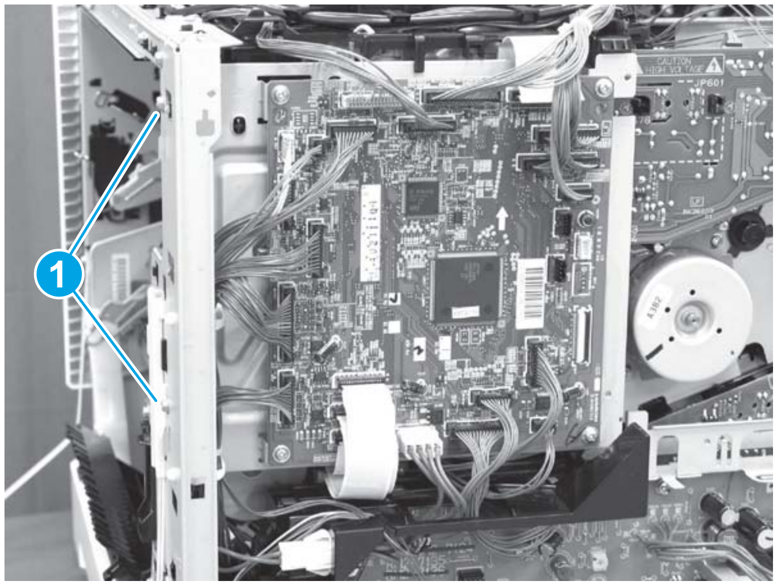
NOTE:  ESD sensitive part.

1. Disconnect all of the connectors, and then remove two screws (callout 1).

Empty DCC connectors

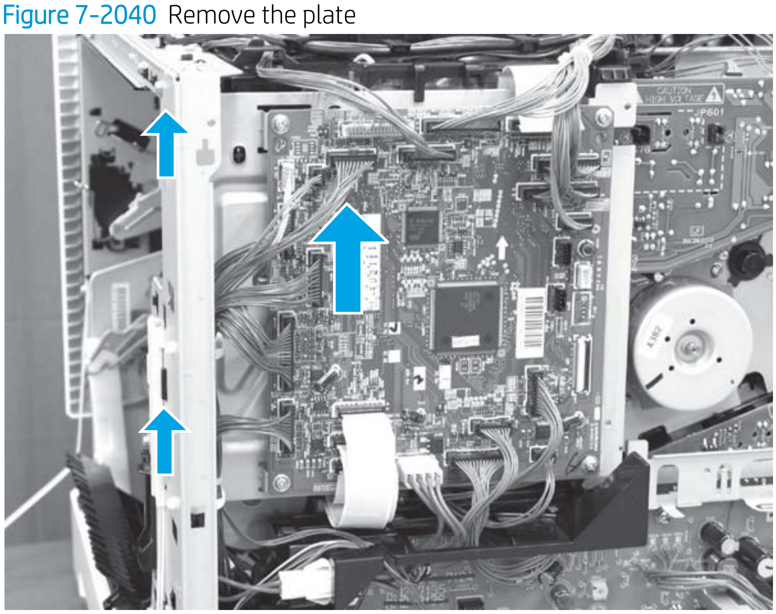
- J140
- J141
- J143

Figure 7-2039 Remove two screws



2. Lift up on the DC controller and sheet-metal plate to remove it.

Figure 7-2040 Remove the plate



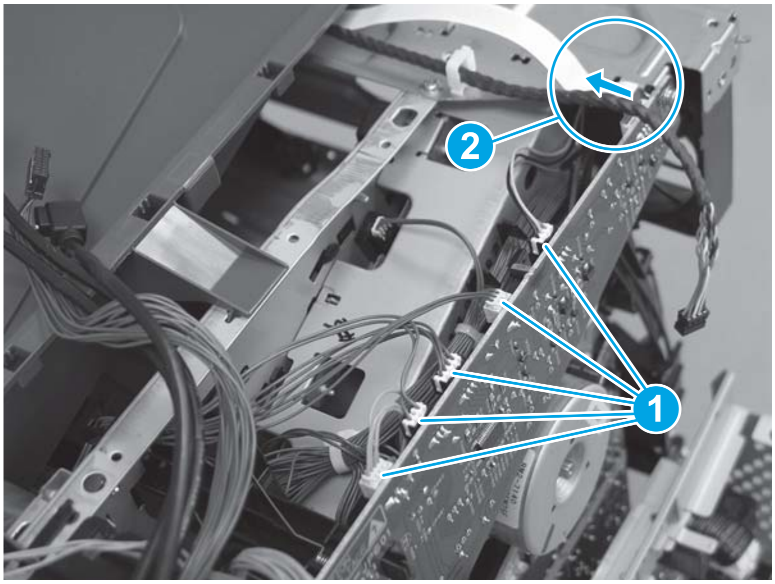
Remove the high-voltage power supply T (HVPST)

Follow these steps to remove the high-voltage power supply T.

NOTE: ESD sensitive part.

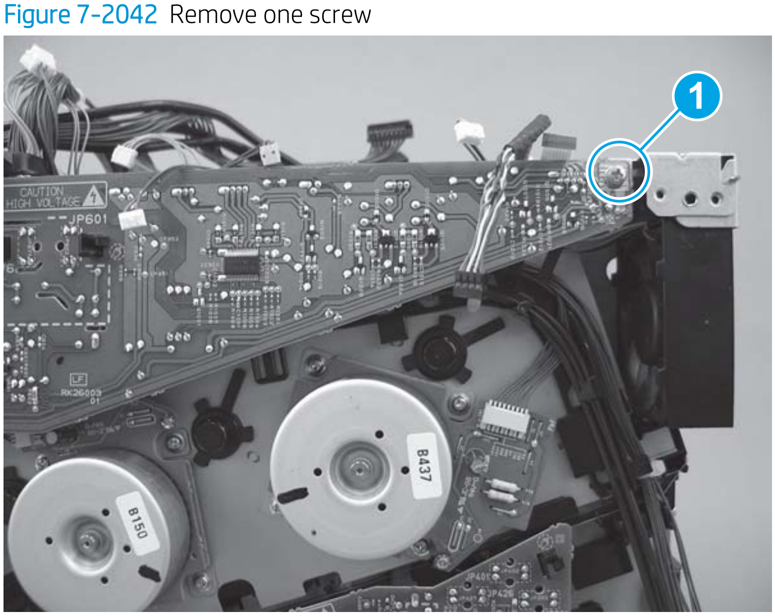
1. Disconnect five connectors (callout 1), and then disconnect one flat cable (callout 2).

Figure 7-2041 Disconnect five connectors and one flat cable



2. Remove one screw (callout 1).

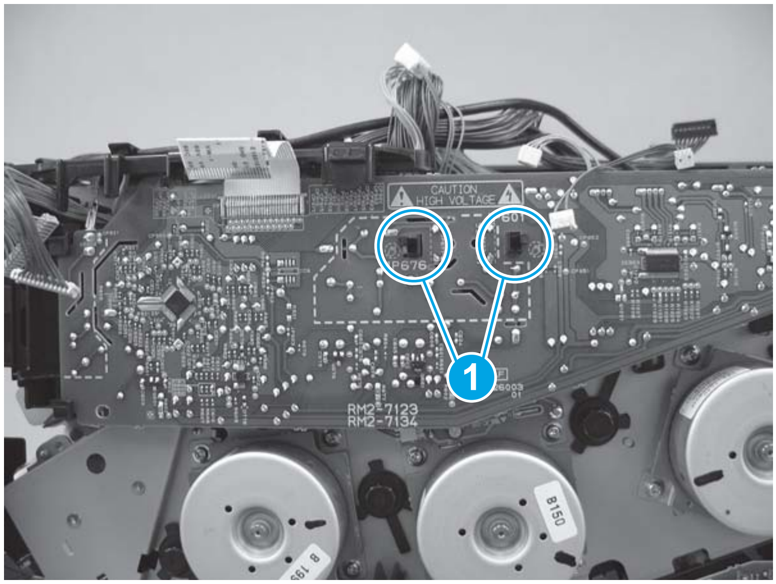
Figure 7-2042 Remove one screw



3. Release two tabs (callout 1), and then separate the HVPST from the printer.

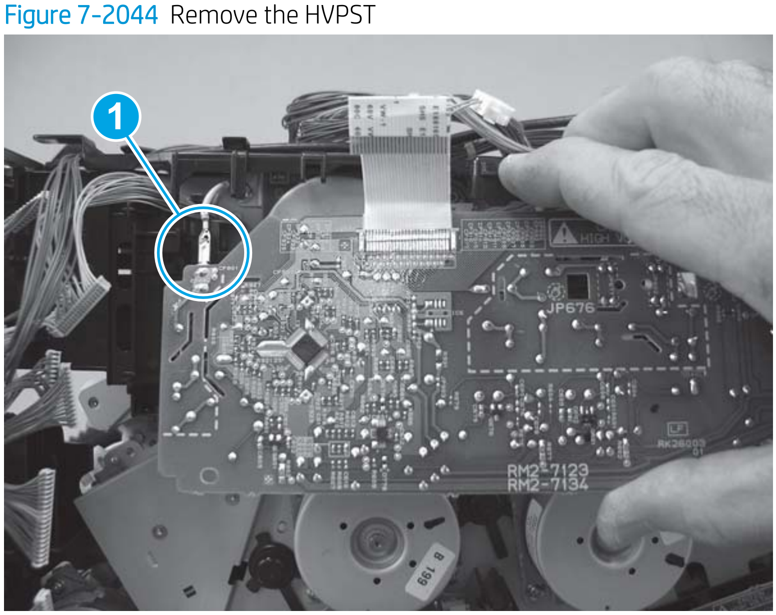
⚠ CAUTION: Do not attempt to completely remove the HVPST. It is still connected to the printer by ground wire harness.

Figure 7-2043 Release the HVPST



4. Release one ground wire connector (callout 1), and then remove the HVPST.

Figure 7-2044 Remove the HVPST



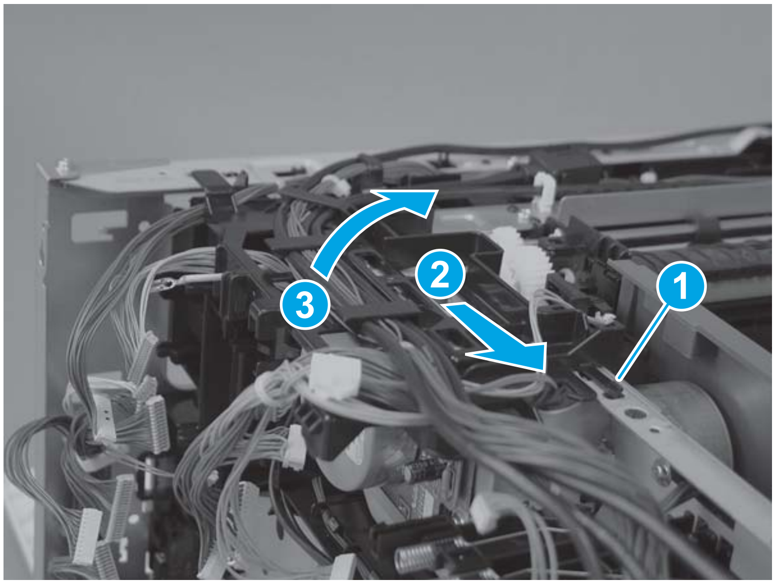
Remove the fuser drive assembly

Follow these steps to remove the fuser drive assembly.

1. Release one tab (callout 1), slide the guide to release it (callout 2), and then rotate the guide up and away from the chassis to move it out of the way (callout 3).

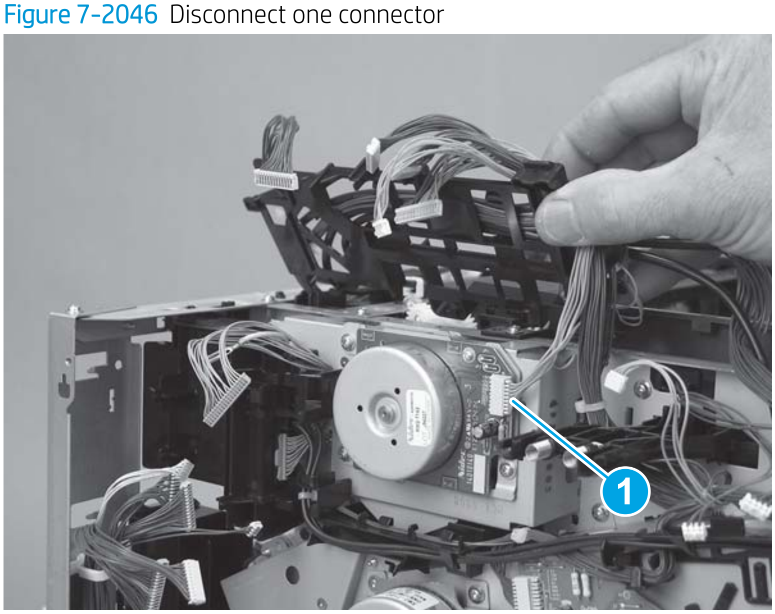
⚠ CAUTION: One wire harnesses in the guide is still attached to the fuser motor. Do not attempt to completely remove the guide.

Figure 7-2045 Move the guide out of the way



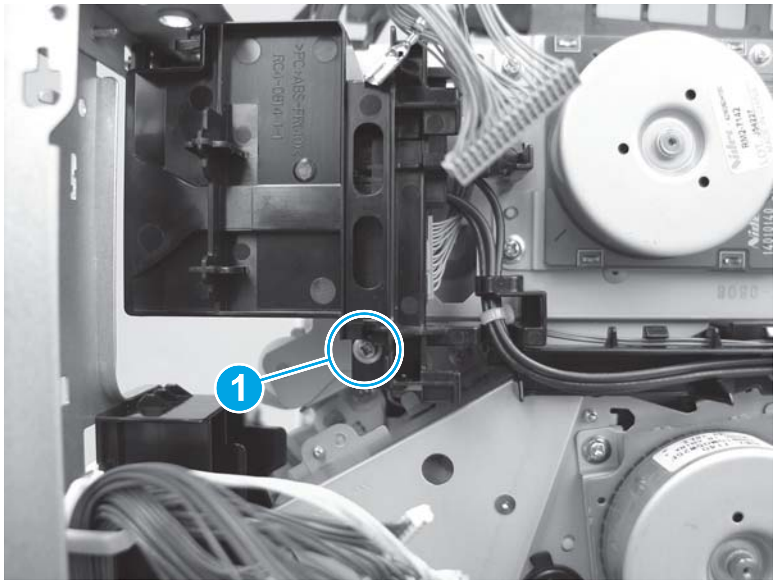
2. Disconnect one connector (callout 1).

Figure 7-2046 Disconnect one connector



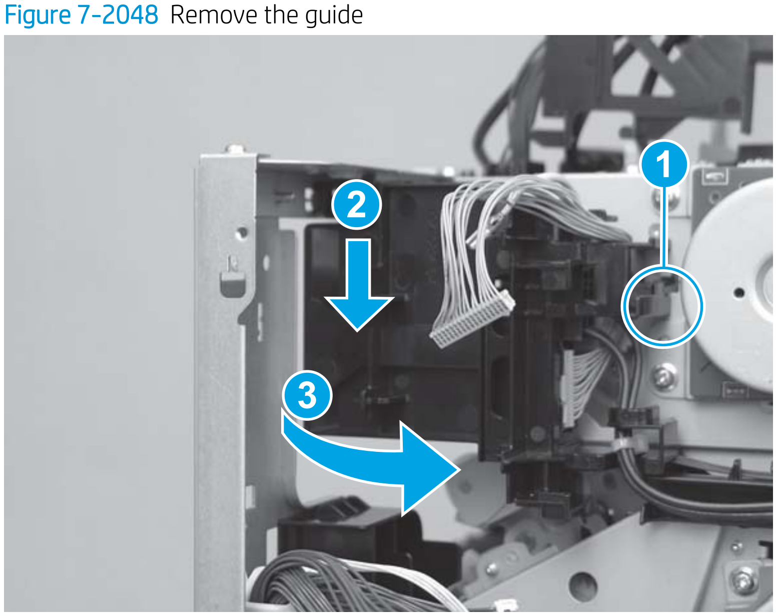
3. Remove one screw (callout 1).

Figure 7-2047 Remove one screw



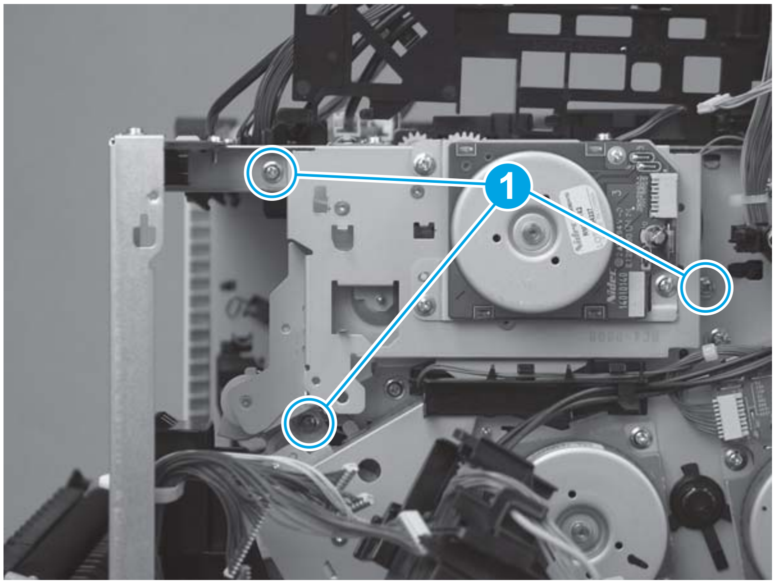
4. Release one tab (callout 1), slide the guide down to release it (callout 2), and then rotate the guide away from the chassis to remove it (callout 3).

Figure 7-2048 Remove the guide



5. Remove three screws (callout 1).

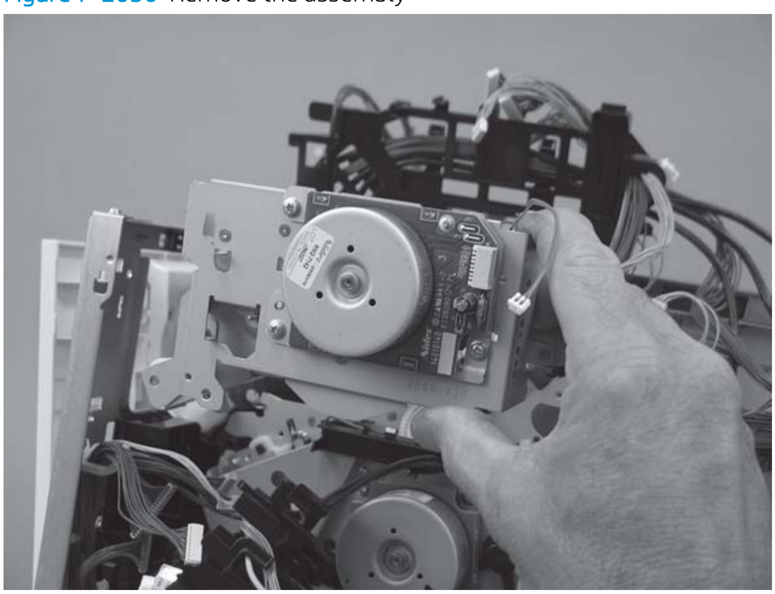
Figure 7-2049 Remove three screws



6. Remove the assembly.

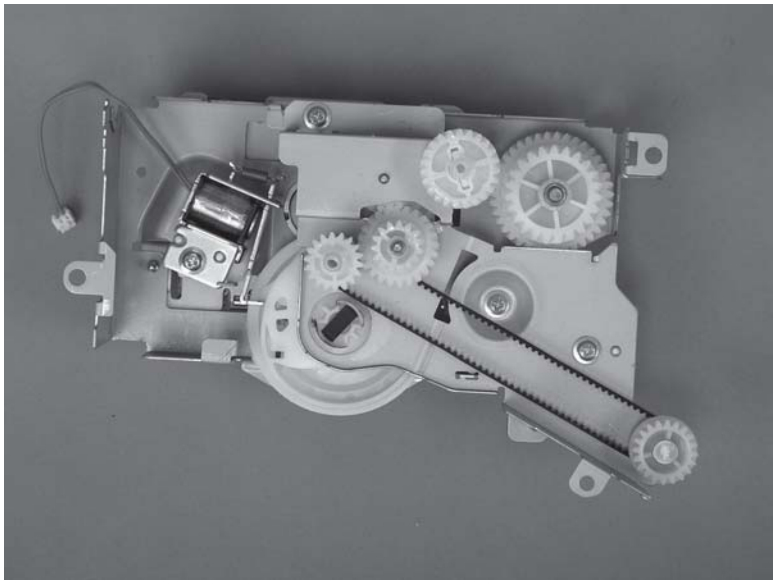
⚠ CAUTION: Two gears on the back side of the assembly are not captive. Handle the assembly carefully.

Figure 7-2050 Remove the assembly



7. **Optional step:** Two gears (callout 1) on the back side of the assembly are not captive. If the gears are dislodged, install them as shown.

Figure 7-2051 Remove the assembly



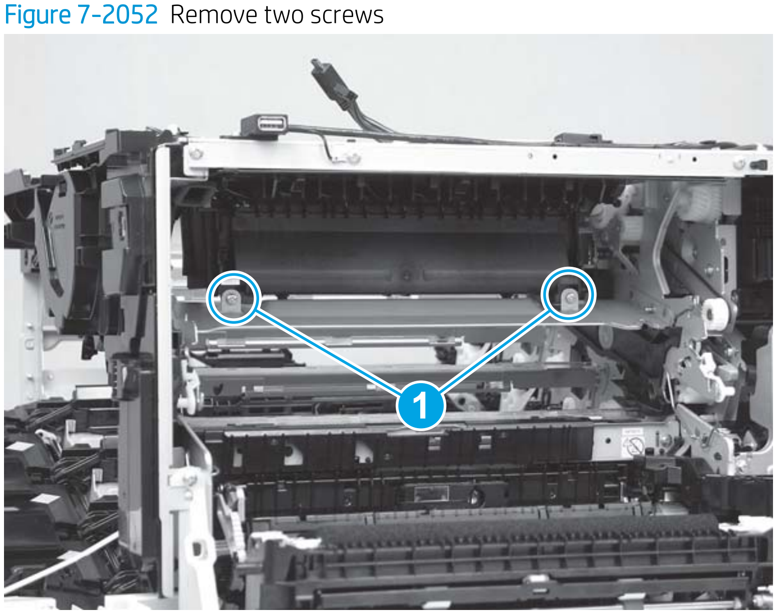
Remove the delivery assembly

Follow these steps to remove the delivery assembly.

1. At the right side of the printer, remove two screws (callout 1).

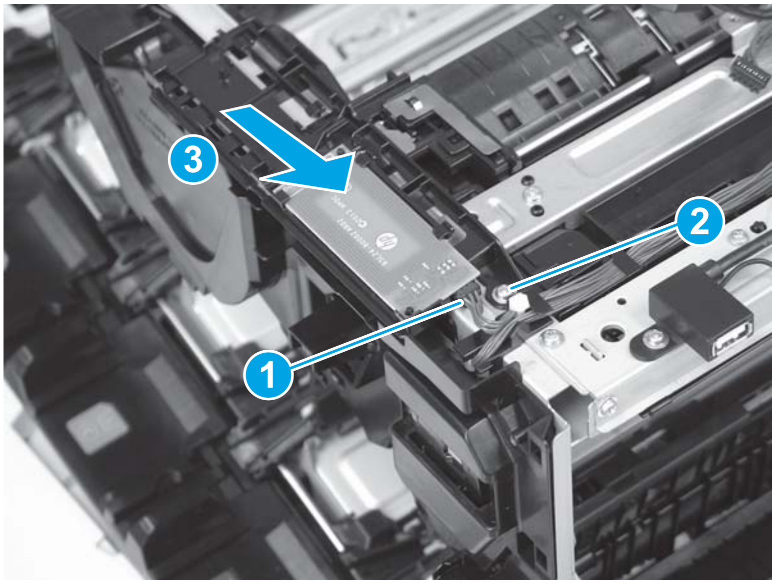
NOTE: These two screws are the self-tapping type.

Figure 7-2052 Remove two screws



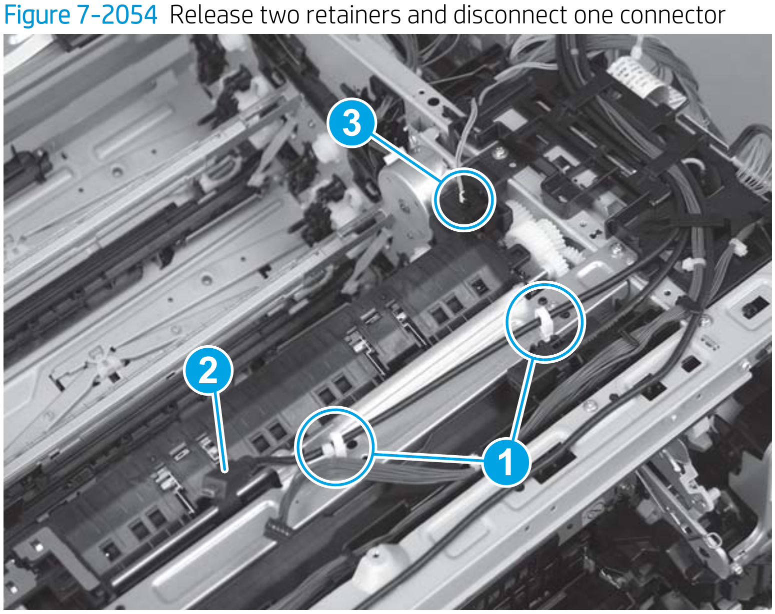
2. **(M553x/M555/E55040)**: At the top-front-right corner of the printer, disconnect one connector (callout 1), remove one screw (callout 2), and then remove the near field communication (NFC) PCA and holder by sliding them to the right (callout 3).

Figure 7-2053 Remove the NFC



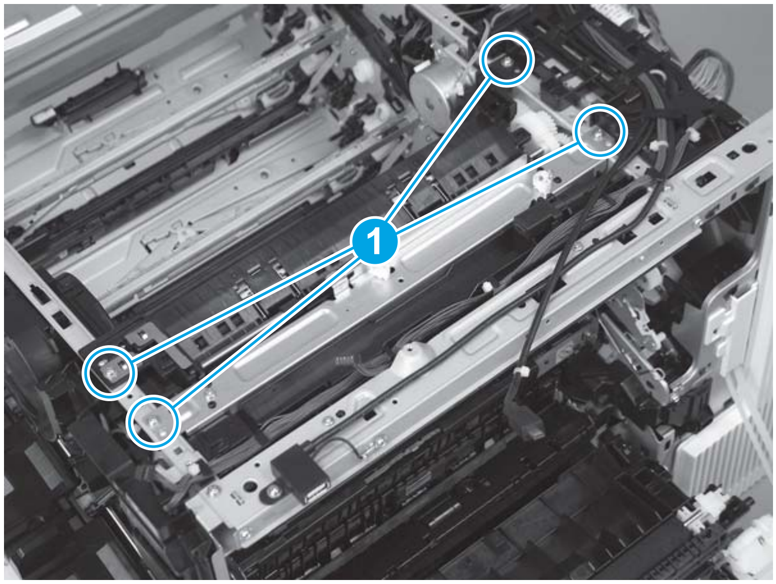
3. Release two retainers (callout 1), remove the USB cable (callout 2) from the retainers, and then disconnect one connector (callout 3).

Figure 7-2054 Release two retainers and disconnect one connector



4. Remove four screws (callout 1).

Figure 7-2055 Remove four screws



5. Remove the delivery assembly.

⚠ CAUTION: The solenoid plunger and arm (callout 1) located on the right side of the assembly are not captive.

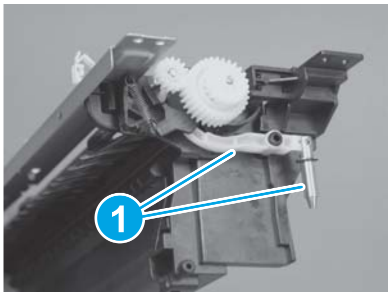
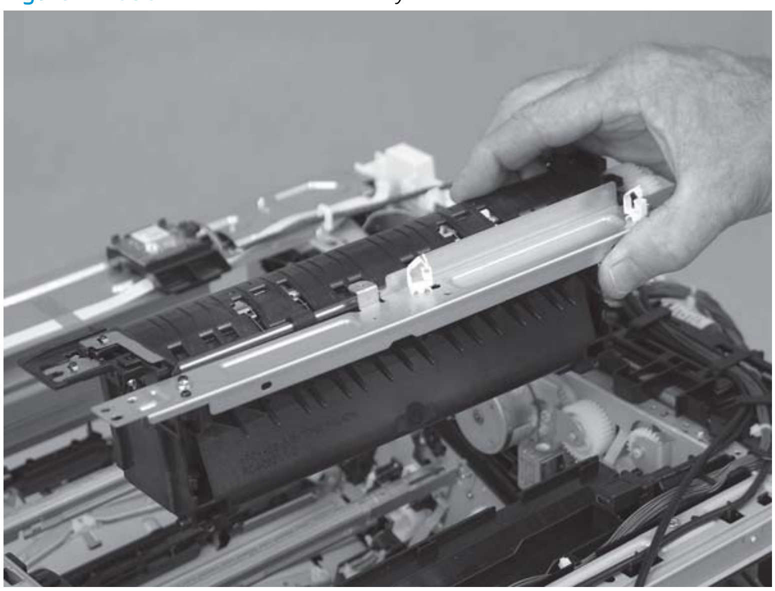


Figure 7-2056 Remove the assembly

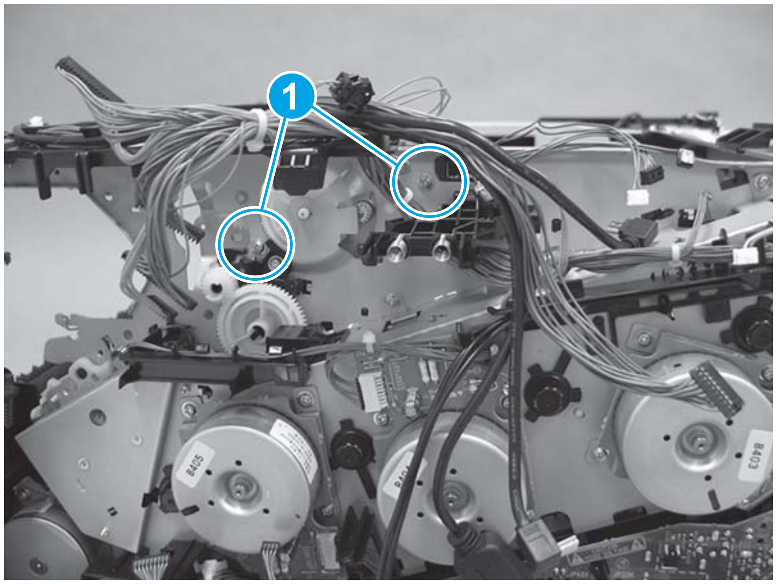


Remove duplex drive assembly and motor

Follow these steps to remove the duplex drive assembly and motor.

1. Remove two screws (callout 1).

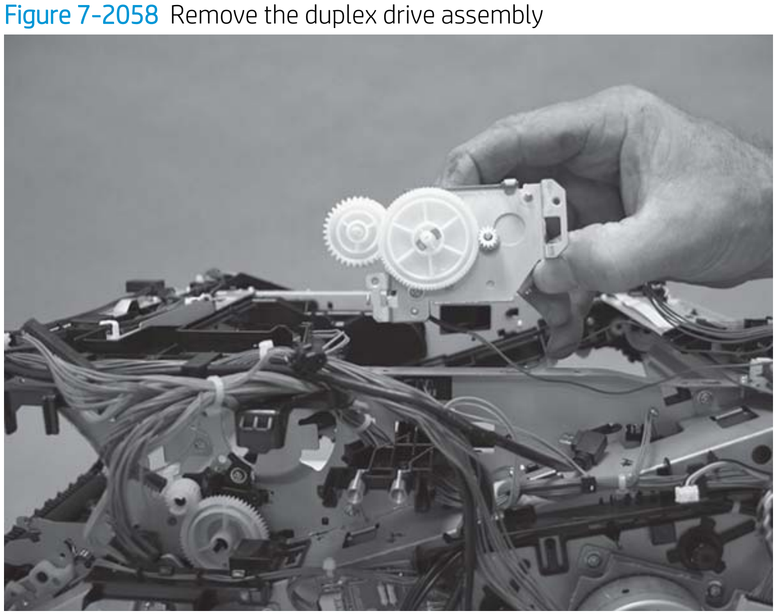
Figure 7-2057 Remove two screws



2. Remove the duplex drive assembly.

NOTE: Feed two wire harnesses through the opening in the chassis as the assembly is removed.

Figure 7-2058 Remove the duplex drive assembly



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Pickup drive assembly and motor (M5)

Learn about removing and replacing the pickup drive assembly.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-80 Part information

Part number	Part description
RM2-0008-000CN	Pickup drive assembly and motor (M5)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

> NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-2059 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-2060 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

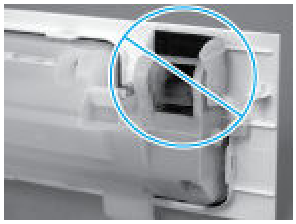
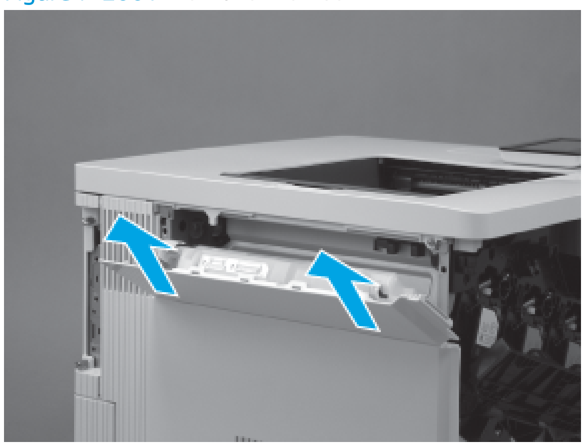


Figure 7-2061 Remove the TCU



Remove the formatter cover

Follow these steps to remove the formatter cover.

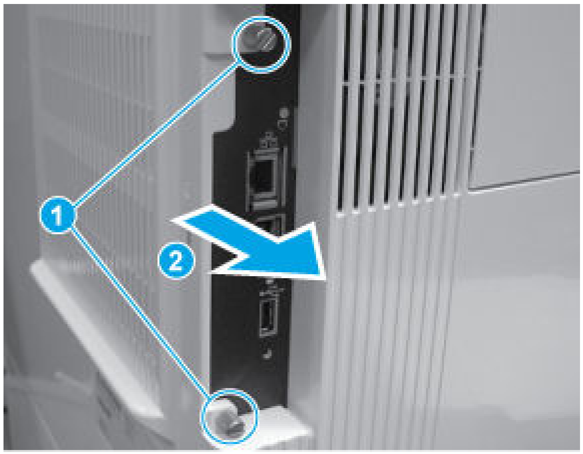
1. Locate the formatter cover.

Figure 7-2062 Locate the formatter cover

2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-2063 Loosen the thumbscrews



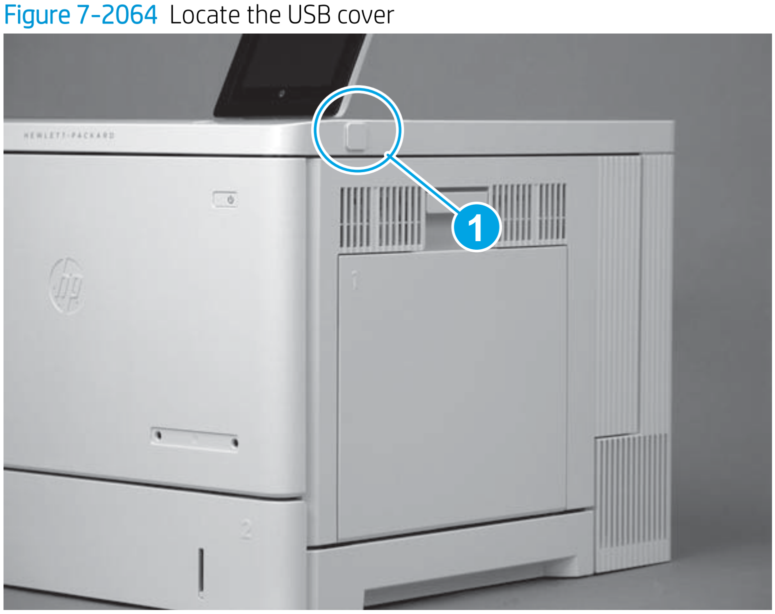
Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

NOTE: This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-2064 Locate the USB cover



2. Pull the cover off of the printer to remove it.

Figure 7-2065 Remove the cover

Remove the control panel (M553x/M555/E55040)

Follow these steps to remove the control panel.

NOTE: This procedure is for the M553x/M555/E55040 printers only.

M555 models: Removing the control panel is similar to the procedure below. For the M555, a flat cable connects the control panel to the formatter.

1. Tilt the control panel up.

Figure 7-2066 Tilt the control panel up

2. Use the small flat-blade screwdriver supplied in this kit to release the control-panel screws cover tabs.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-2067 Release the control-panel screws cover tabs

3. Rotate the cover up to remove it.

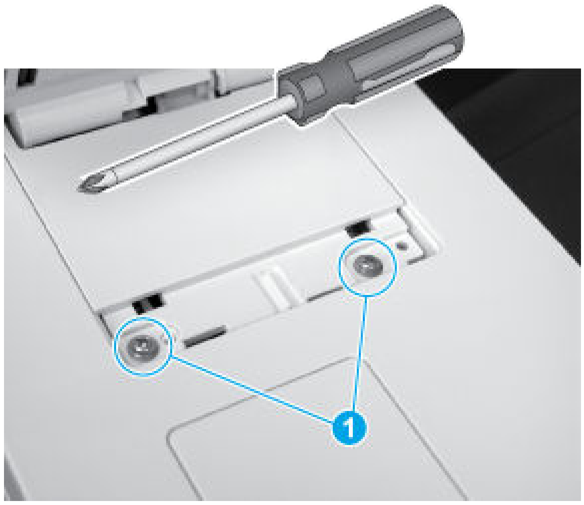
Figure 7-2068 Remove the cover

4. Use the small Phillips screwdriver supplied in this kit to remove two screws (callout 1).

IMPORTANT: Store the screws in a secure place where they cannot fall down into the printer.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-2069 Remove two screws



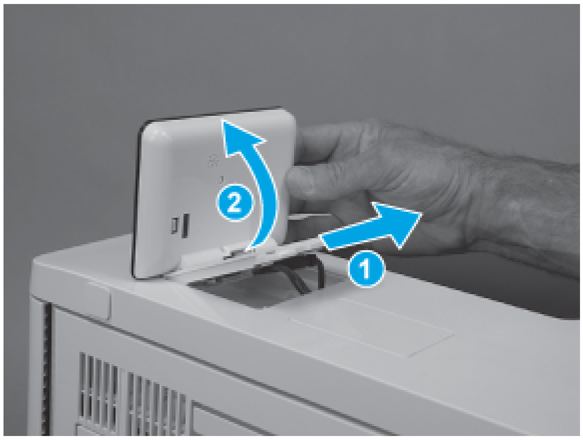
5. Rotate the control-panel base toward the front of the printer.

Figure 7-2070 Rotate the control-panel base up

6. Slightly slide the control-panel base toward the rear of the printer (callout 1) to release it, and then turn the control panel over (callout 2) to access the bottom side.

⚠ CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

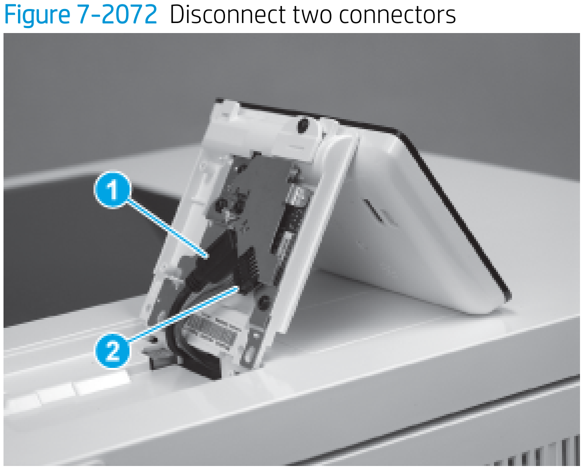
Figure 7-2071 Turn the control panel over



7. Disconnect one USB cable (callout 1), one connector (callout 2), and then remove the control panel.

NOTE: **M555 only**: Disconnect one flat cable (not shown), and then remove the control panel.

Figure 7-2072 Disconnect two connectors



Remove the formatter (SFP)

Follow these steps to remove the formatter.

NOTE: This procedure is for SFP models only.

1. Disconnect all of the connectors on the formatter.

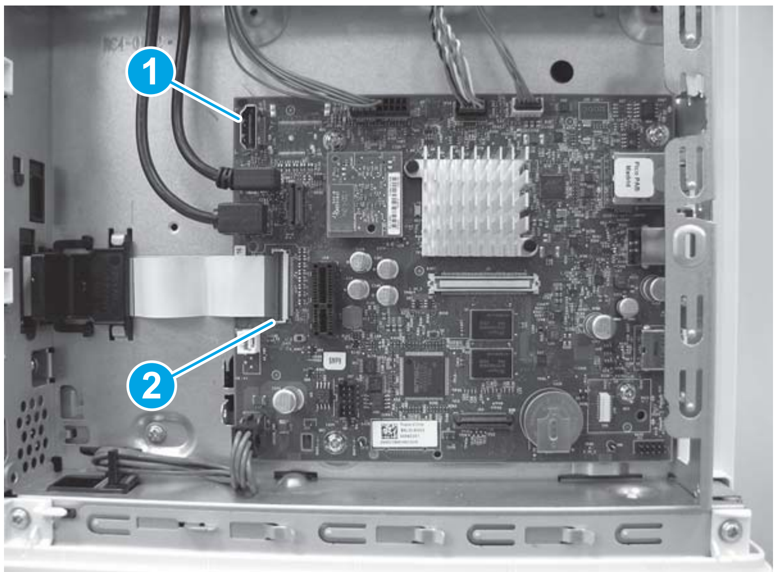
   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)

- All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
- All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
- M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)
- All models: J57
- All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

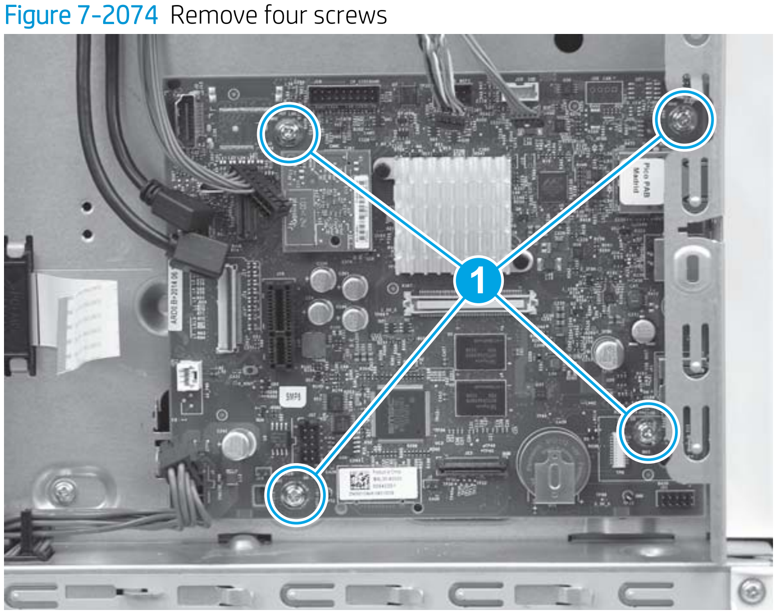
IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-2073 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-2074 Remove four screws



Remove the hard-disk drive (HDD)

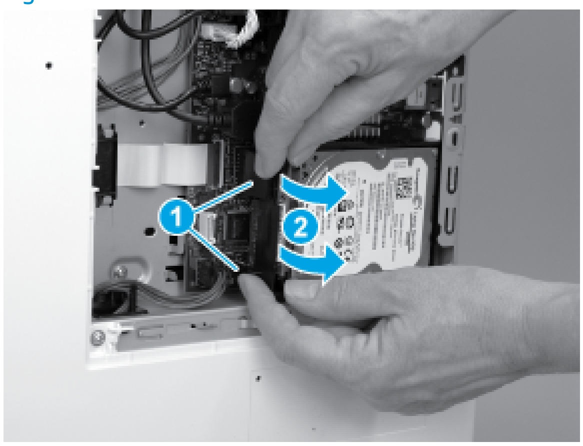
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

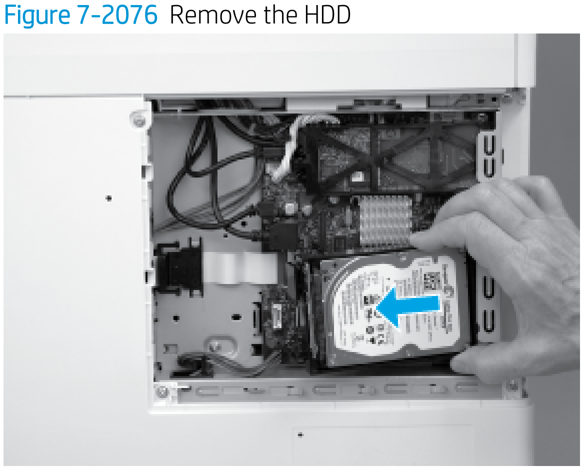
1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

   Figure 7-2075 Release the HDD

2. Slide the HDD away from the printer to remove it.

   Figure 7-2076 Remove the HDD

Remove the fax PCA (fax models)

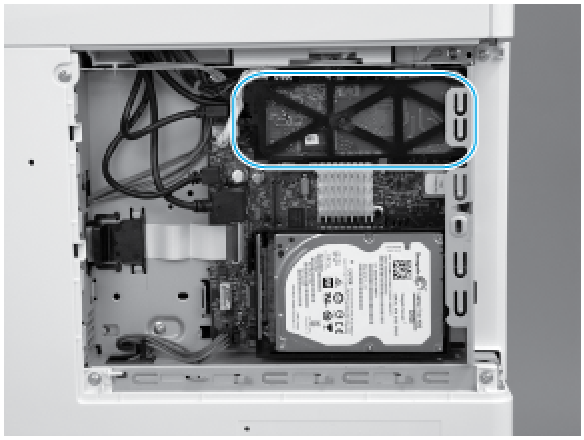
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

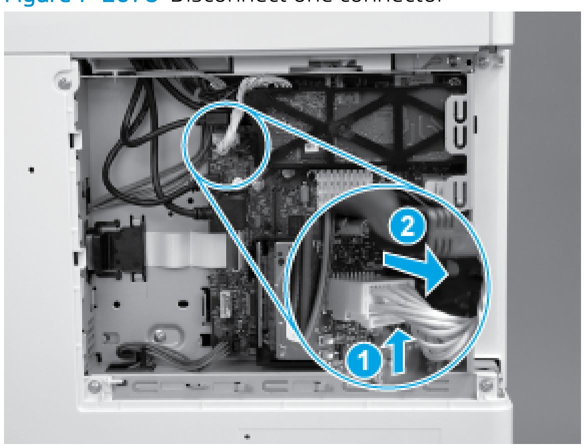
1. Locate the fax PCA component on the formatter.

Figure 7-2077 Locate the fax PCA



2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-2078 Disconnect one connector

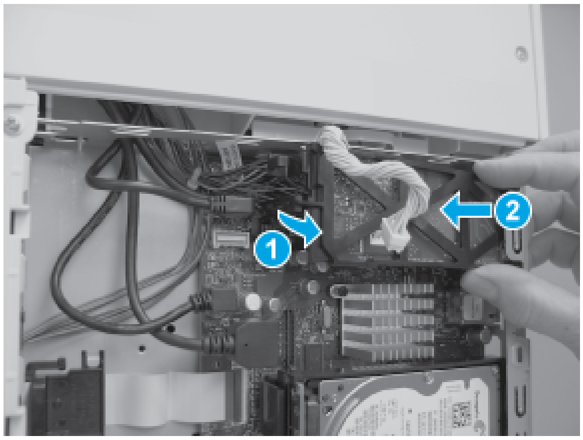


3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-2079 Release one latch

4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-2080 Remove the fax PCA



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

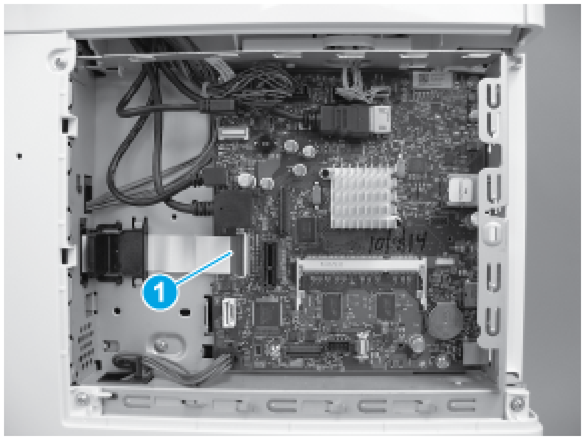
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

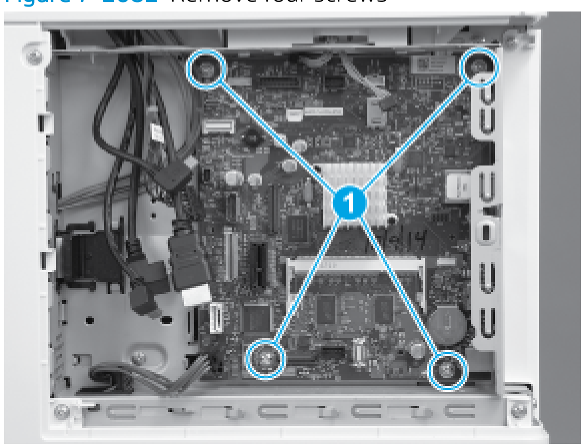
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-2081 Disconnect all connectors



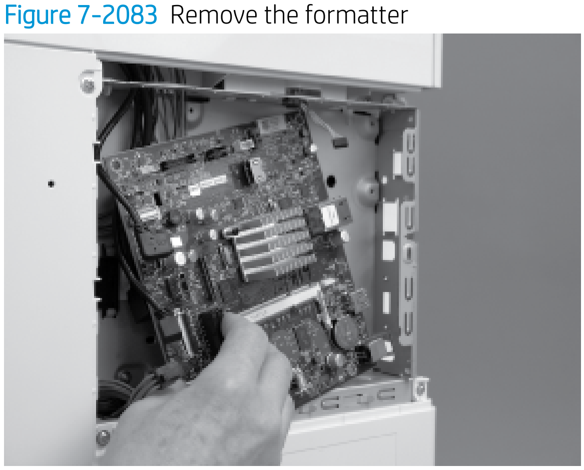
2. Remove four screws (callout 1).

Figure 7-2082 Remove four screws



3. Remove the formatter.

Figure 7-2083 Remove the formatter



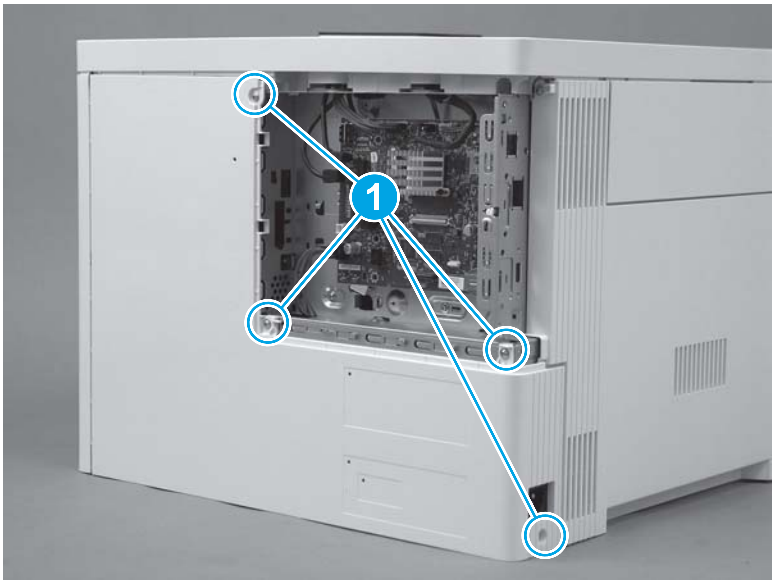
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

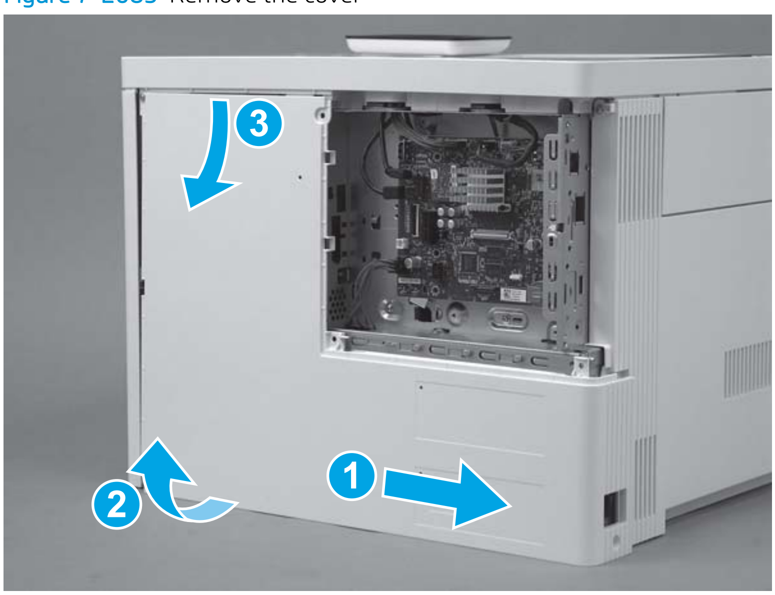
1. Remove four screws (callout 1).

Figure 7-2084 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-2085 Remove the cover



Remove the rear upper cover (MFP)

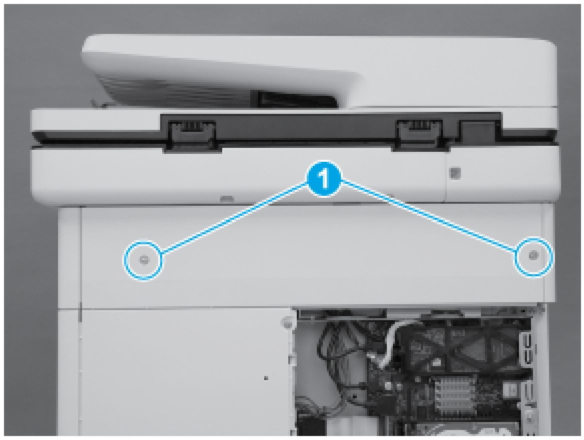
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

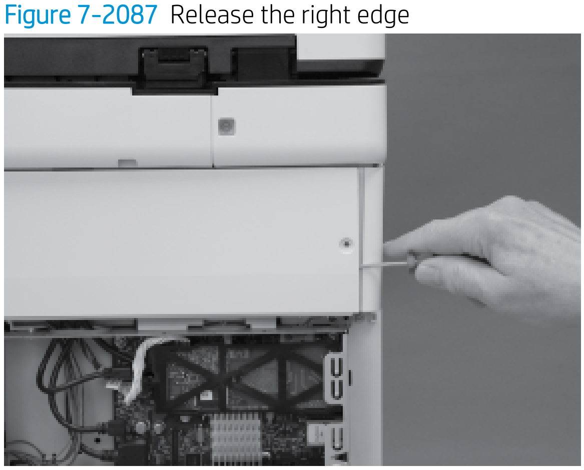
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-2086 Remove two screws



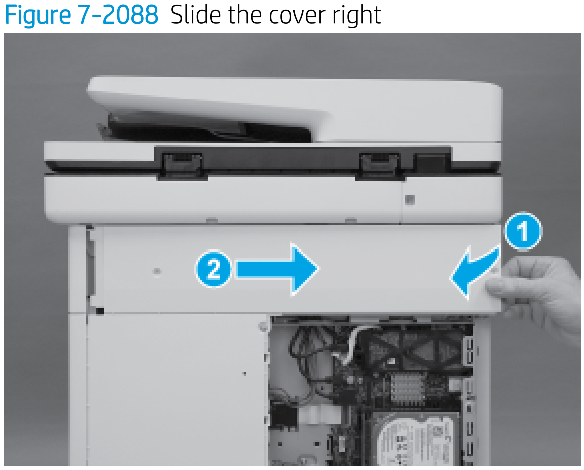
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-2087 Release the right edge



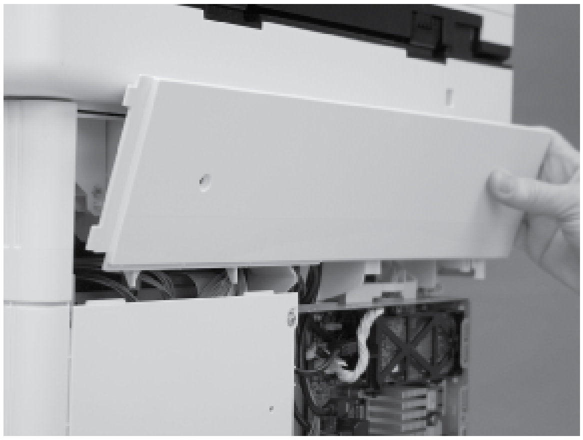
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-2088 Slide the cover right



4. Remove the cover.

Figure 7-2089 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-2090 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-2091 Remove the cover

Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

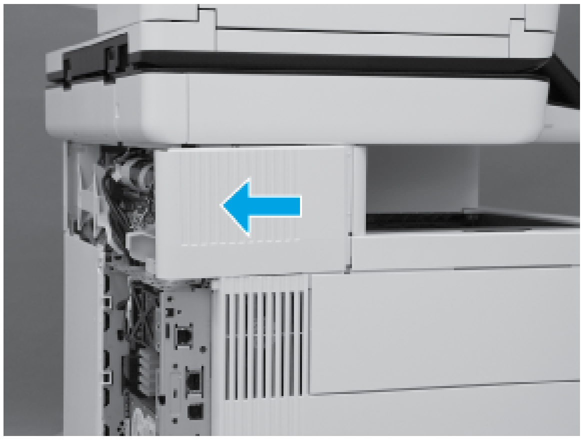
NOTE: This procedure is for MFP models only.

1. At the left side of the printer, release one tab (callout 1).

Figure 7-2092 Release one tab

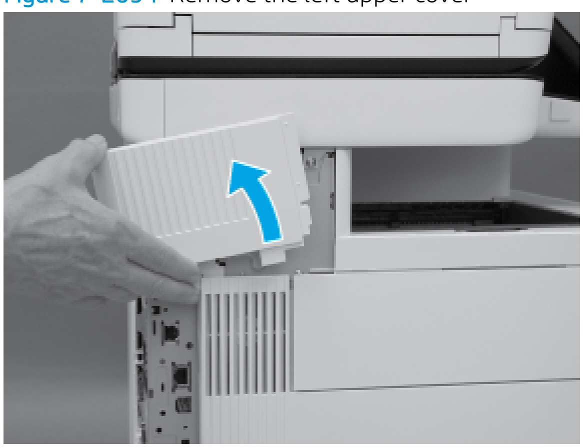
2. Slide the left upper cover toward the back of the printer.

Figure 7-2093 Slide the cover back



3. Rotate the cover up to remove it.

Figure 7-2094 Remove the left upper cover



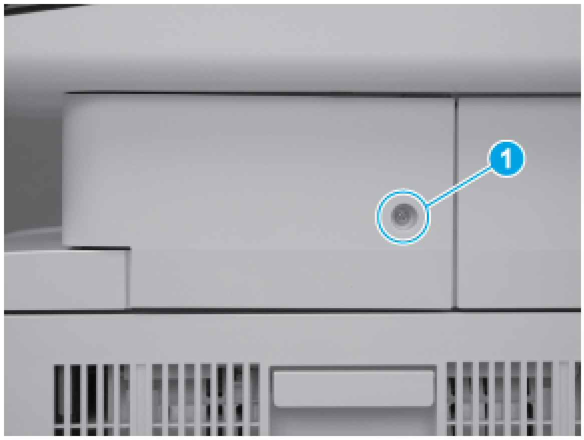
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-2095 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-2096 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-2097 Rotate the cover

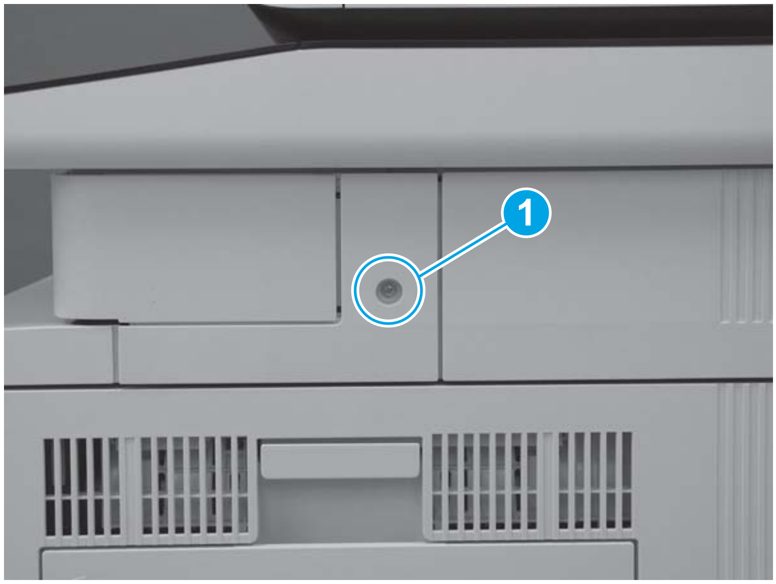
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

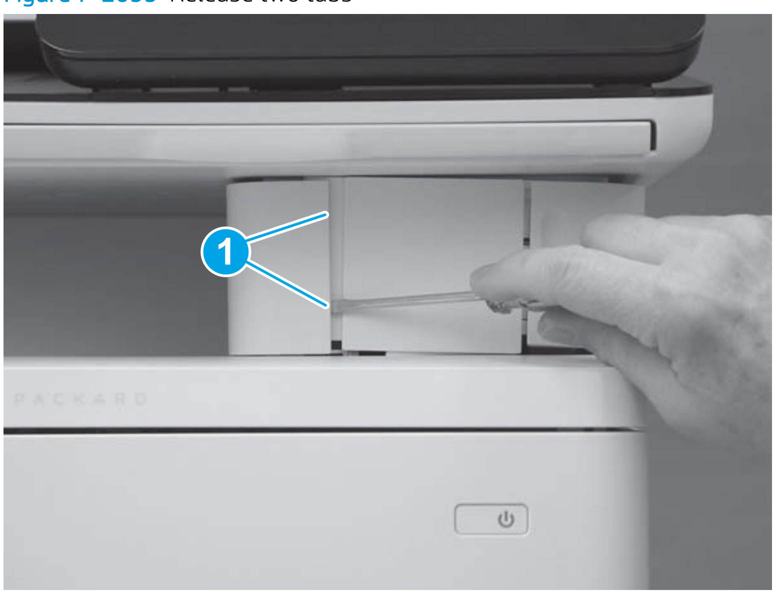
1. Remove one screw (callout 1).

Figure 7-2098 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-2099 Release two tabs



3. Release the back edge of the cover.

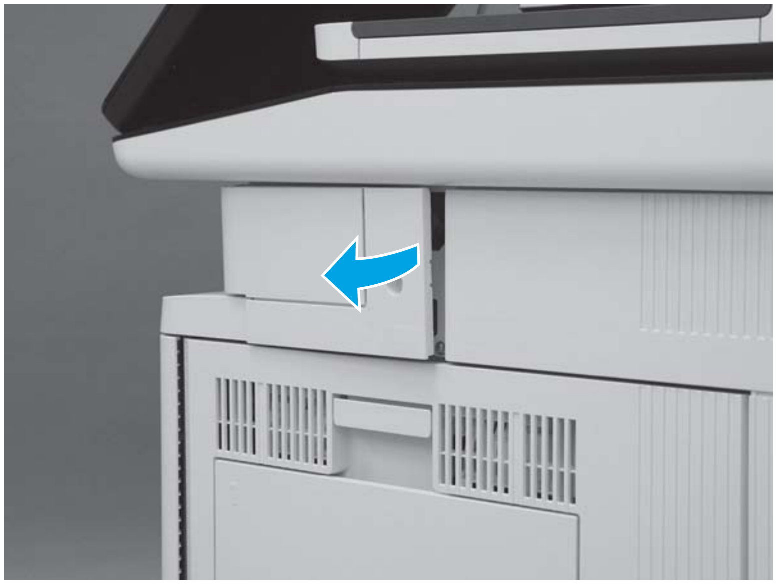


Figure 7-2100 Release the back edge of the cover

4. Rotate the cover away from the printer to remove it.

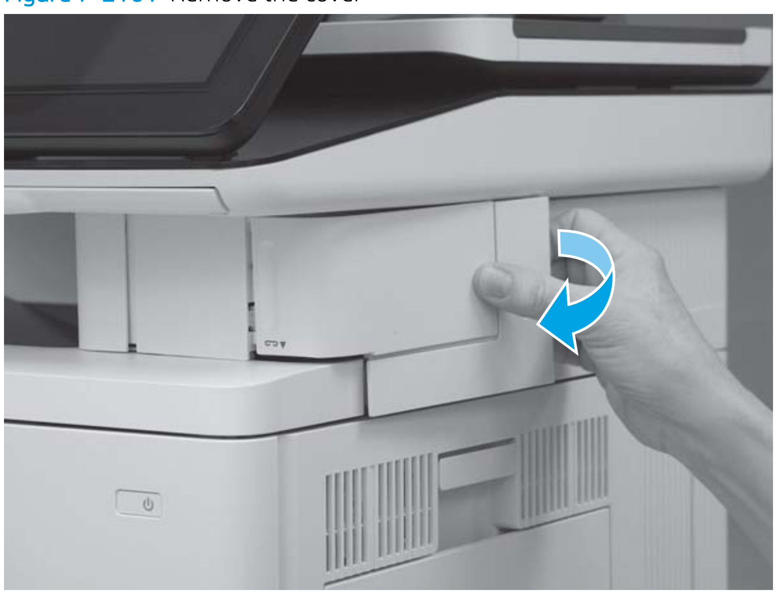


Figure 7-2101 Remove the cover

Remove the integrated scanner assembly (ISA) (MFP)

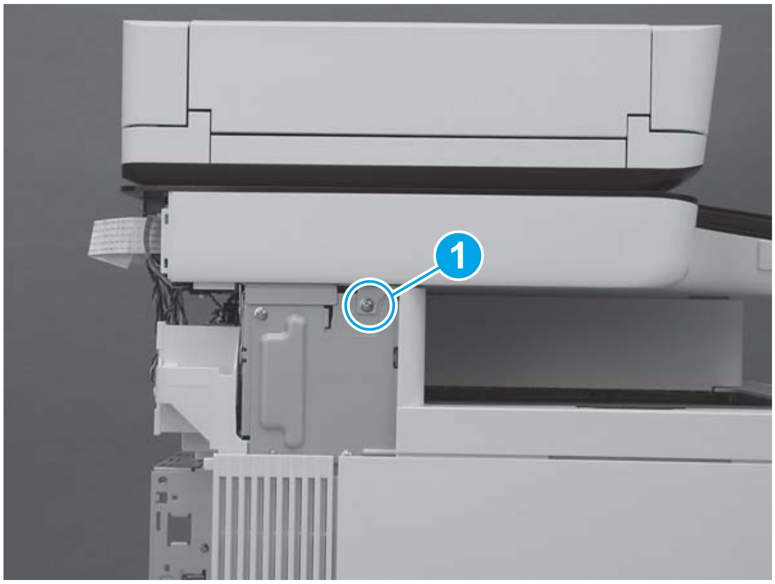
Follow these steps to remove the integrated scanner assembly (ISA).

NOTE: This procedure is for MFP models only.

NOTE: The ISA includes the document feeder, image scanner, scanner control board (SCB), control panel, keyboard (flow models) and NFC PCA (not all models).

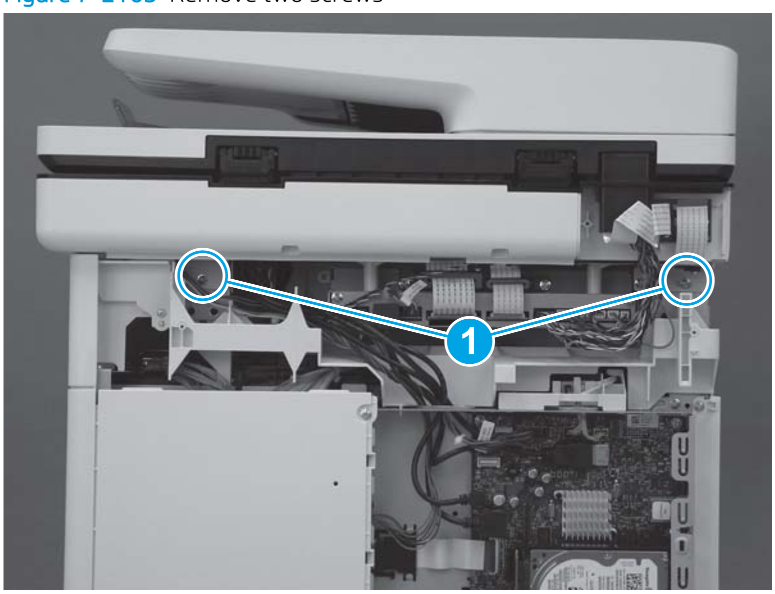
1. At the left side of the printer, remove one screw (callout 1).

Figure 7-2102 Remove one screw



2. At the back of the printer, remove two screws (callout 1).

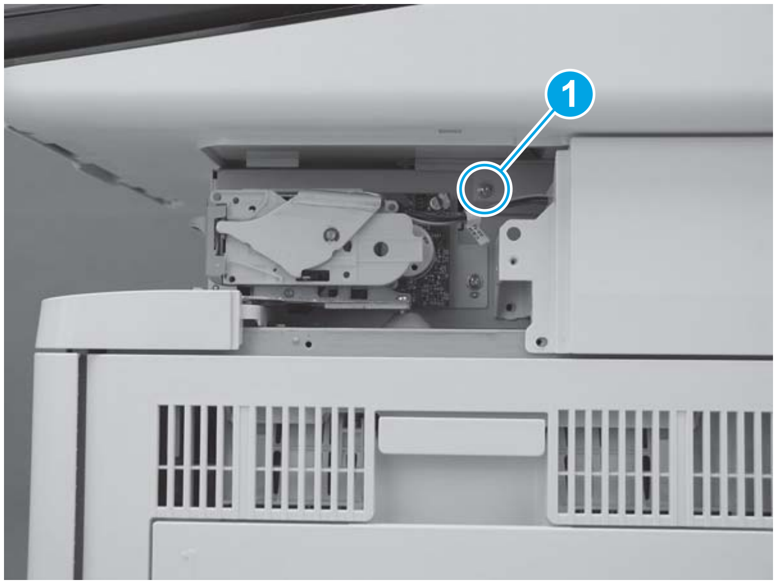
Figure 7-2103 Remove two screws



3. At the right side of the printer, remove one screw (callout 1).

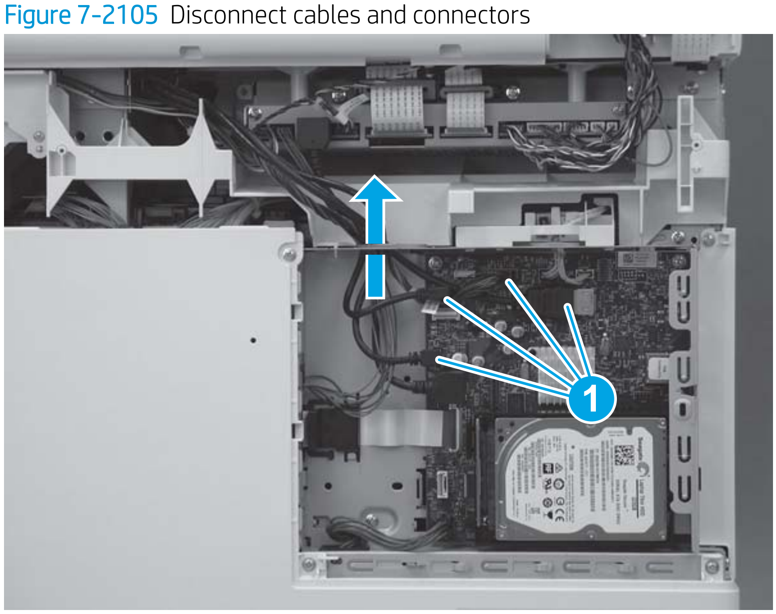
NOTE: The M577z is shown in the figure below. The procedure is correct for all MFP models.

Figure 7-2104 Remove one screw



4. Disconnect four connectors (callout 1) on the formatter, and then pass the wire harnesses and cables through the top opening in the formatter case (callout 2).

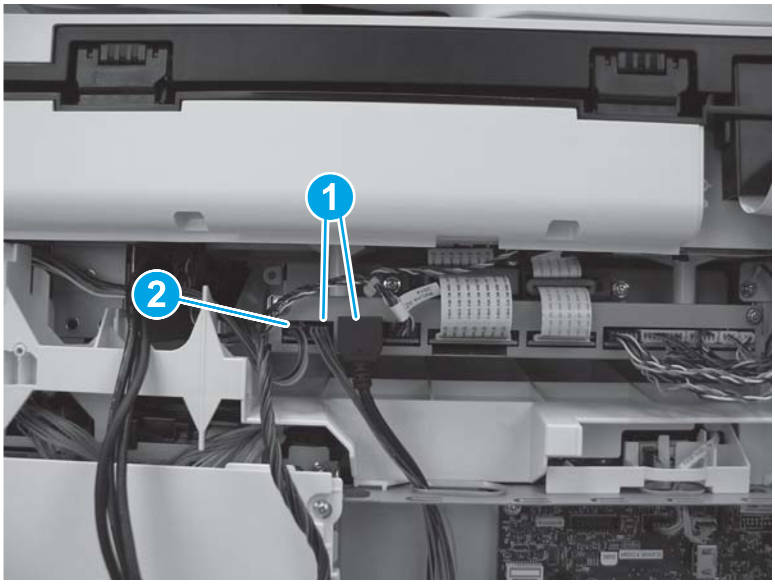
Figure 7-2105 Disconnect cables and connectors



5. Disconnect two connectors on the scanner control board (callout 1).

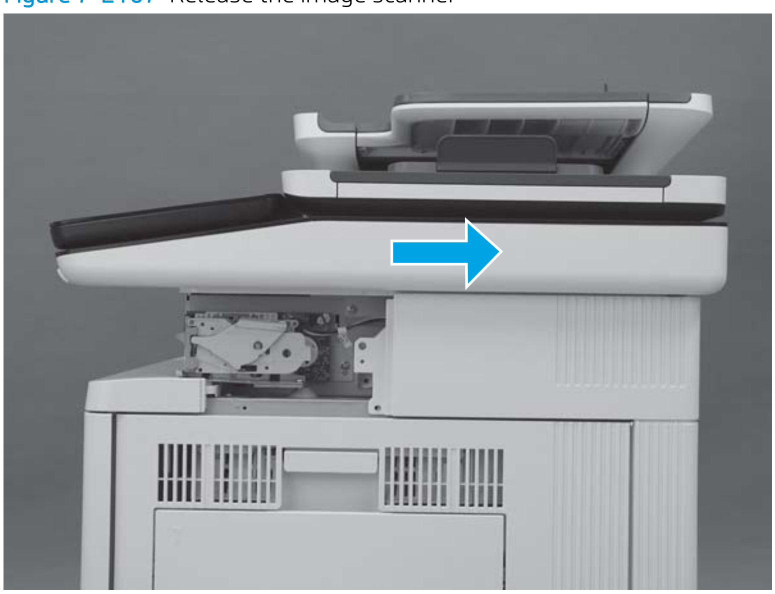
   MFP stapler models: Disconnect one connector for the stapler on the scanner control board (callout 2).

   Figure 7-2106 Disconnect connectors

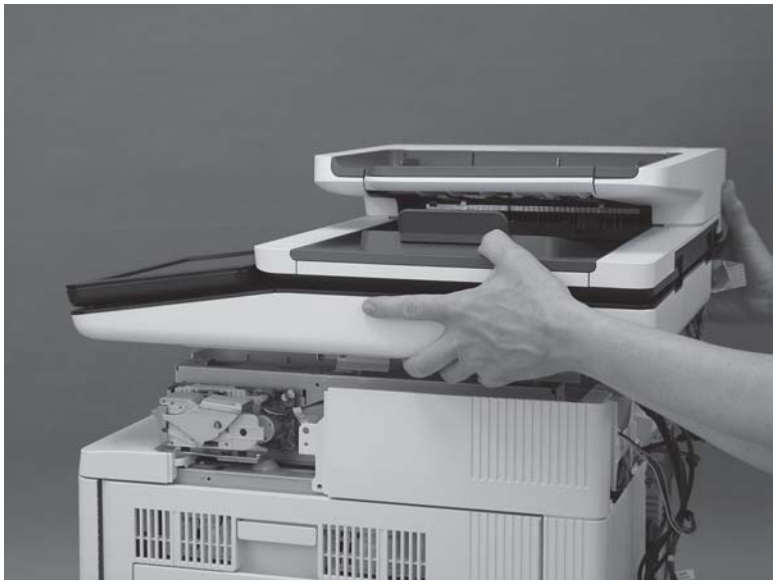
6. Slide the image scanner toward the back of the printer to release it.

   Figure 7-2107 Release the image scanner

7. Lift the ISA straight up to remove it.

Figure 7-2108 Remove the ISA



Remove the right upper cover (MFP)

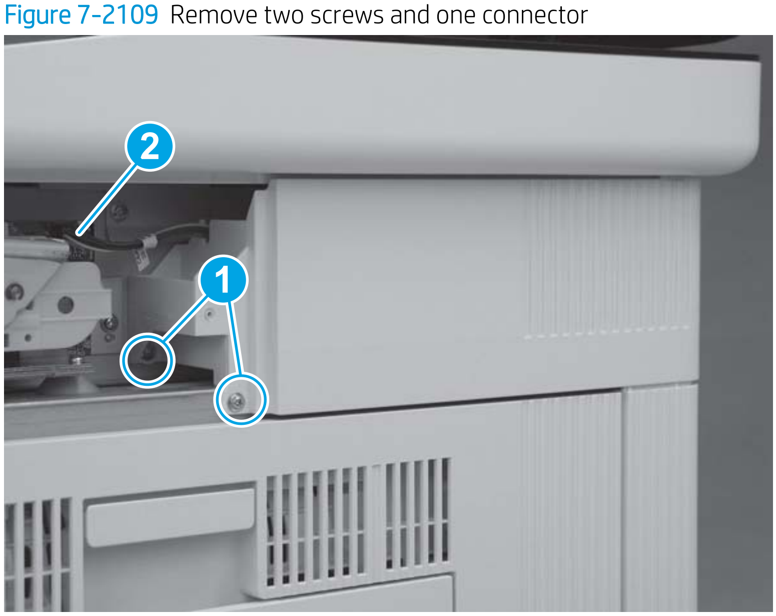
Follow these steps to remove the right upper cover.

NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Figure 7-2109 Remove two screws and one connector

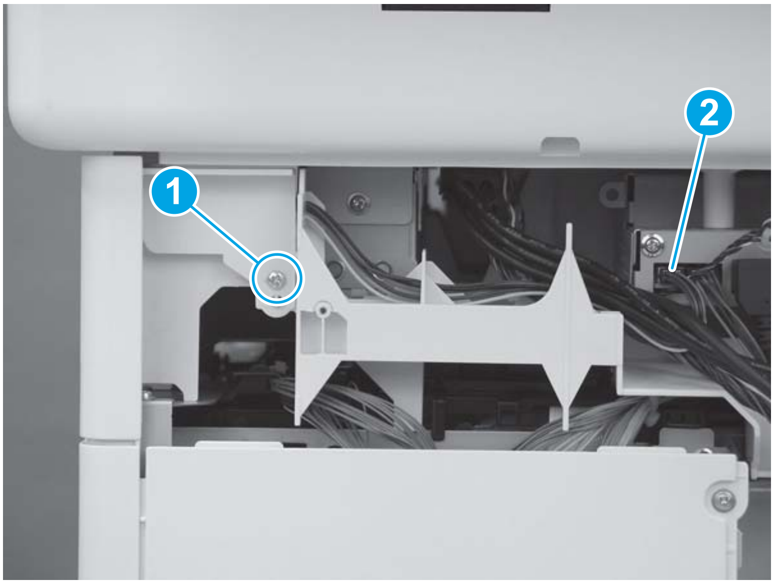


2. At the back of the printer, remove one screw (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

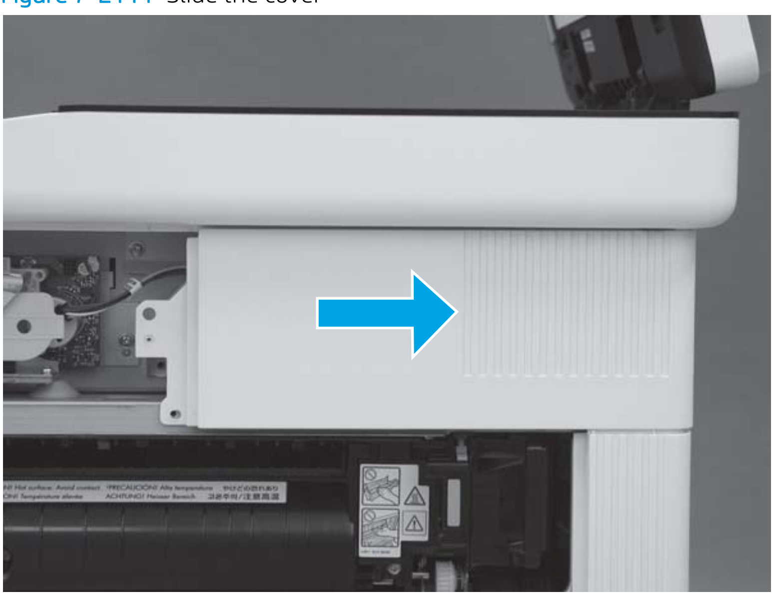
   Reinstallation tip: This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

   Figure 7-2110 Remove one screw and connector

3. Slide the cover toward the back of the printer.

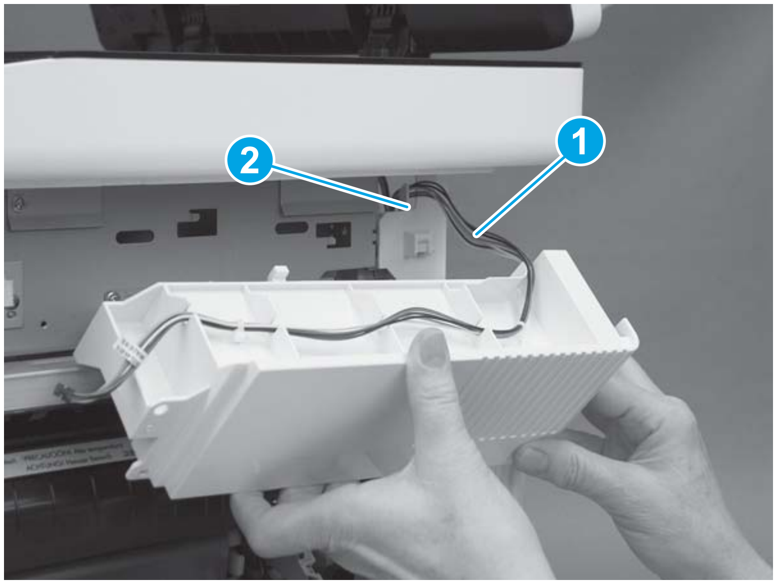
   Figure 7-2111 Slide the cover

4. Lift the cover away from the printer to remove it.

   M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

   Figure 7-2112 Remove the cover

Remove the left cover

Follow these steps to remove the left cover.

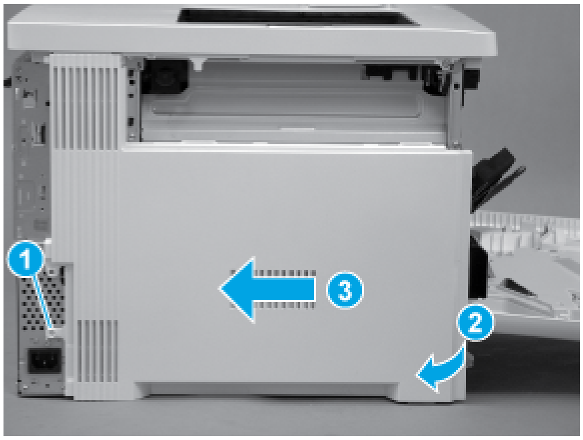
1. At the left side of the printer, remove one screw (callout 1).

   Figure 7-2113 Remove one screw

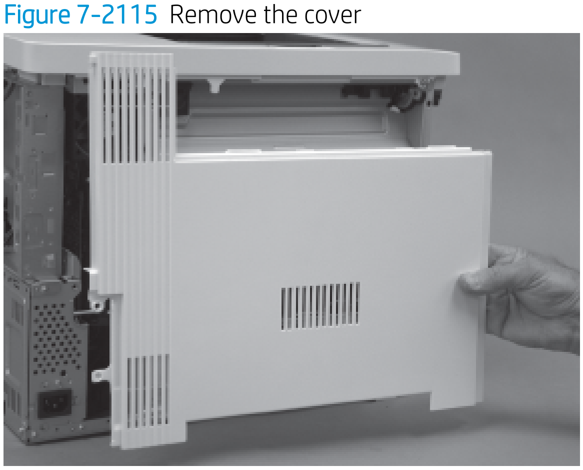
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-2114 Release the cover



3. Remove the cover.

Figure 7-2115 Remove the cover



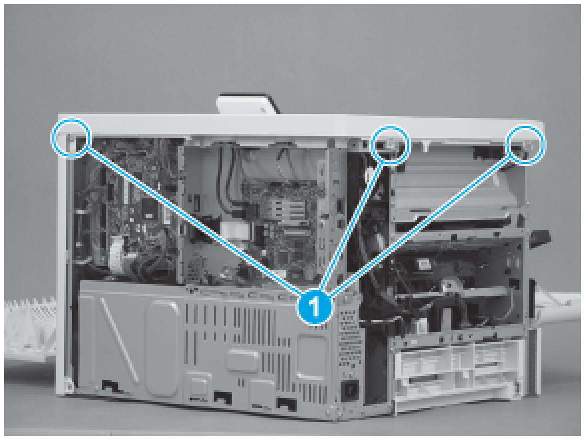
Remove the upper cover (SFP)

Follow these steps to remove the upper cover.

NOTE: This procedure is for SFP models only.

1. Remove three screws (callout 1).

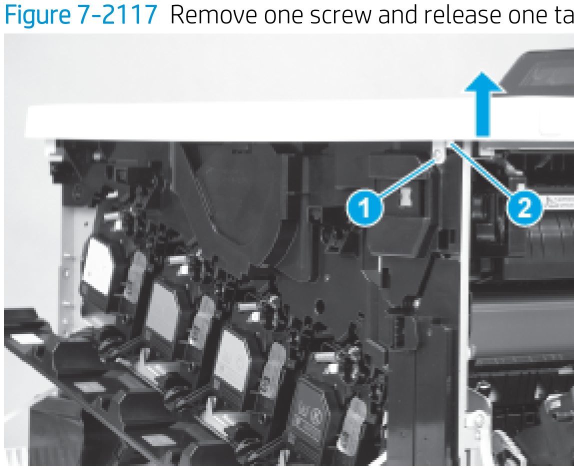
Figure 7-2116 Remove three screws



2. Remove one screw (callout 1), release one tab (callout 2), and then slightly separate the corner of the cover from the chassis.

NOTE: This is a self-tapping plastic-thread screw. Make sure that this screw is used in this location when it is reinstalled.

Figure 7-2117 Remove one screw and release one tab

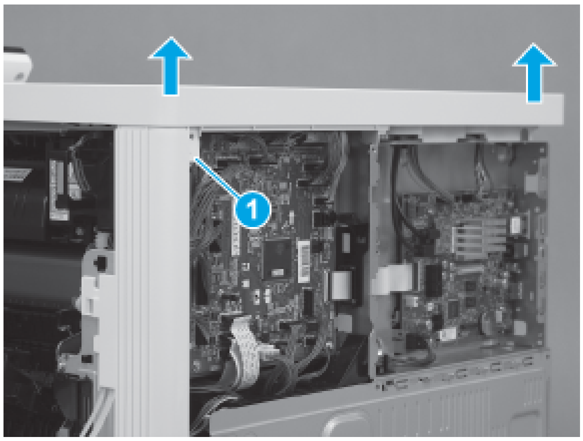


3. Release one tab (callout 1), and then lift up on the cover to release it.

IMPORTANT: **M554 models**: Disconnect the control-panel flat cable at the formatter.

NOTE: If the cover does not release, check for addition tabs by locating the triangles embossed in the cover at tab locations.

Figure 7-2118 Release the cover



4. Remove the cover.

Figure 7-2119 Remove the cover

Remove the right rear cover

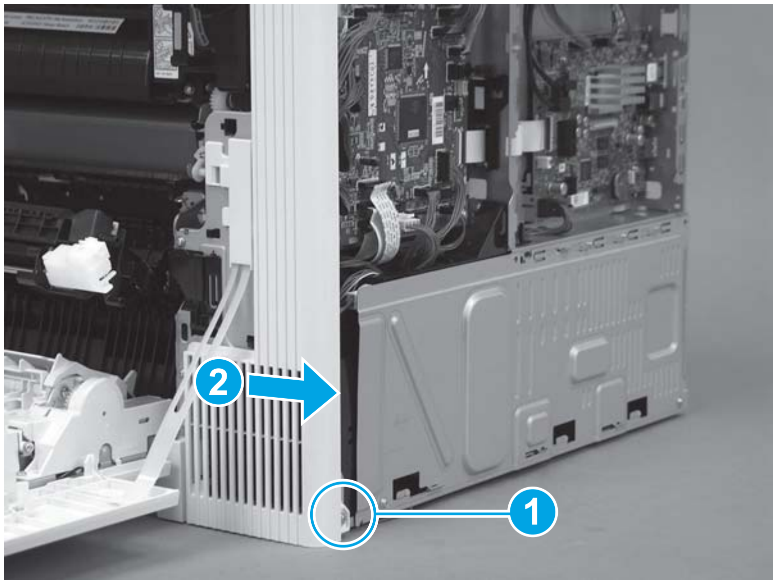
Follow these steps to remove the right rear cover.

NOTE: The figures in this topic show a SFP model. However, the procedure is correct for an MFP.

1. Remove one screw (callout 1), and then slide the cover toward the rear of the printer (callout 2) to release it.

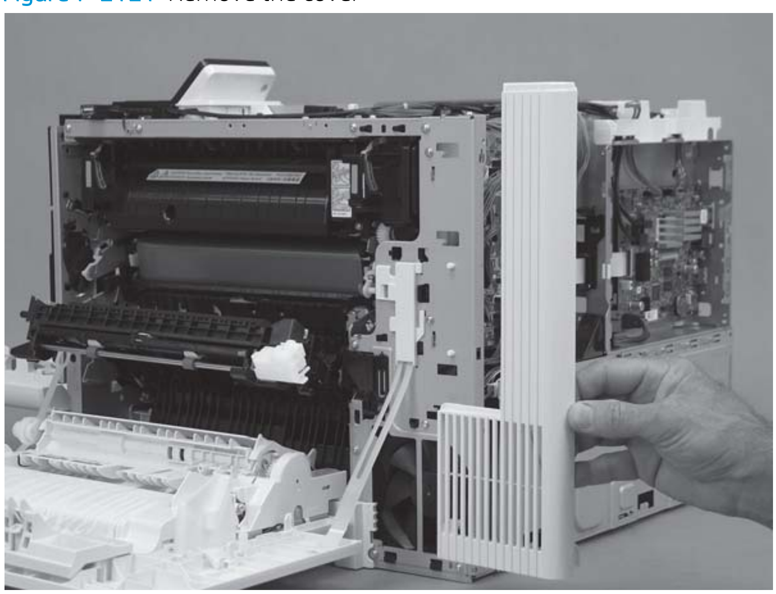
TIP: If the right door is closed, open it now.

Figure 7-2120 Release the cover



2. Remove the cover.

Figure 7-2121 Remove the cover

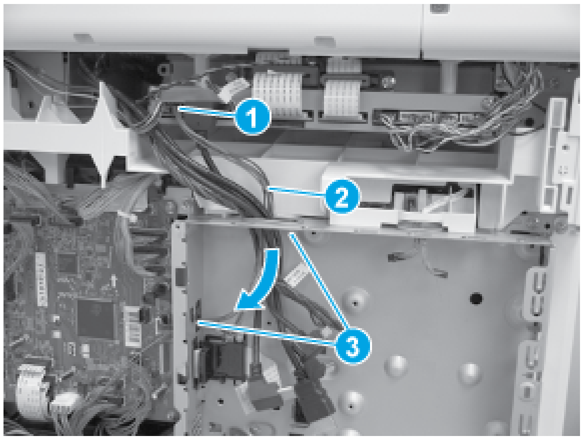


Remove the formatter case

Follow these steps to remove the formatter case.

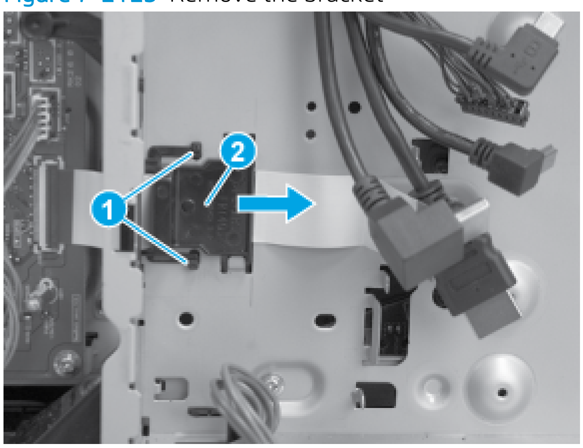
1. **MFP only**: Disconnect one connector (callout 1), and then pass the wire harness (callout 2) through two openings in the formatter case (callout 3).

Figure 7-2122 Disconnect one connector



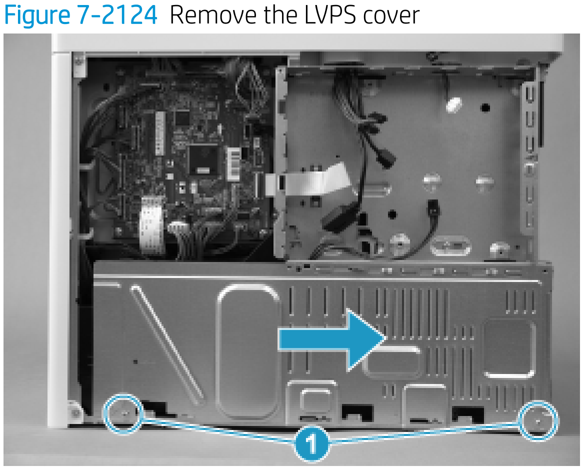
2. Release two tabs (callout 1) on the black plastic bracket. Hold the tabs in the released position, and then slide the bracket (callout 2) to the right to remove it from the formatter case.

Figure 7-2123 Remove the bracket



3. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

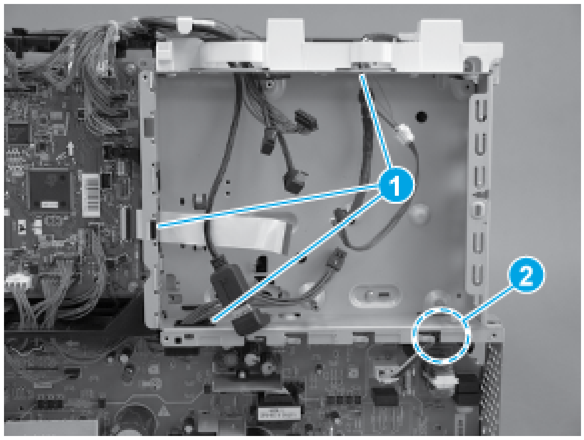
Figure 7-2124 Remove the LVPS cover



4. Pass two wire harnesses and one flat cable (callout 1) through the opening in the formatter case, and then release one wire harness from the retainer (callout 2).

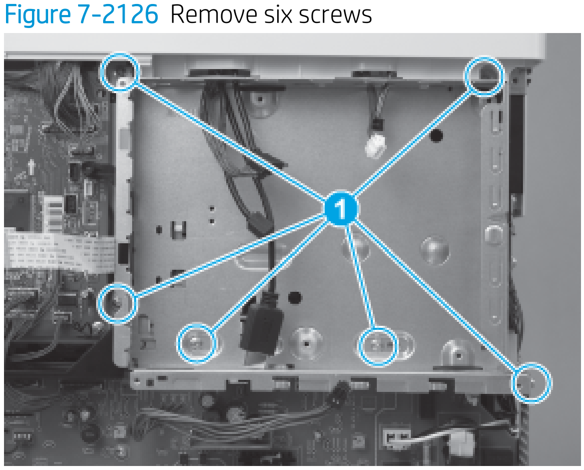
⚠ CAUTION: The flat cable might be attached to the formatter case with double-sided tape. Make sure that this tape is released, so that the flat cable is not damaged when the formatter case is removed.

Figure 7-2125 Release wire harnesses and flat cable



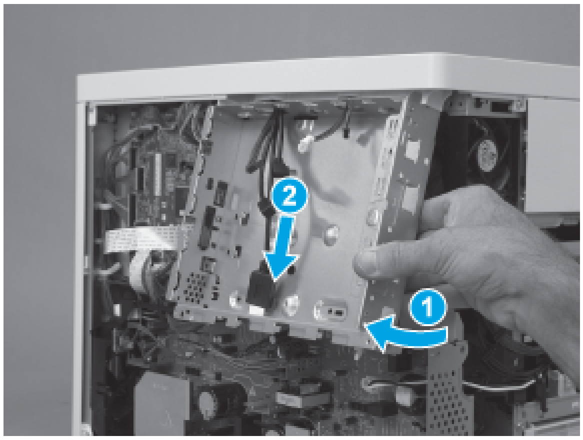
5. Remove six screws (callout 1).

Figure 7-2126 Remove six screws



6. Rotate the bottom of the formatter case away from the printer (callout 1), and then pull it down (callout 2) to release it.

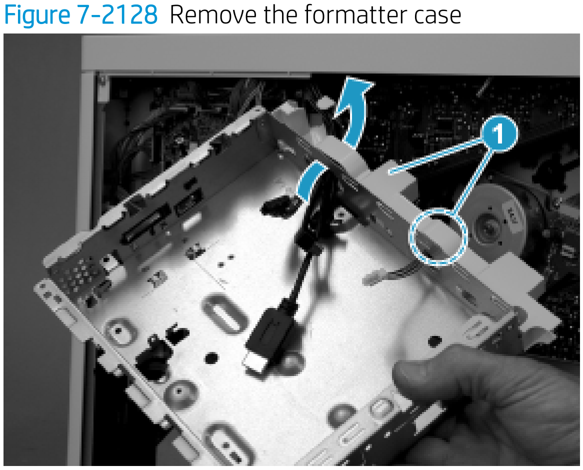
Figure 7-2127 Release the formatter case



7. Pass the wire harnesses through the opening in the formatter case to remove it.

IMPORTANT: If the formatter case is removed so that it can be replaced, make sure to transfer the memory PCA (island of data) and plastic bracket (callout 1) to the replacement case.

Figure 7-2128 Remove the formatter case

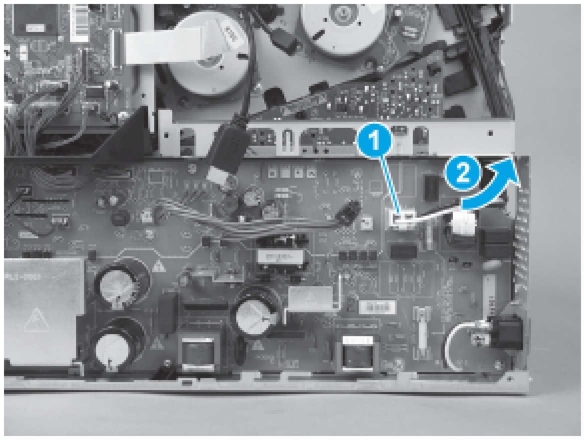


Remove the low-voltage power supply (LVPS)

Follow these steps to remove the low-voltage power supply (LVPS).

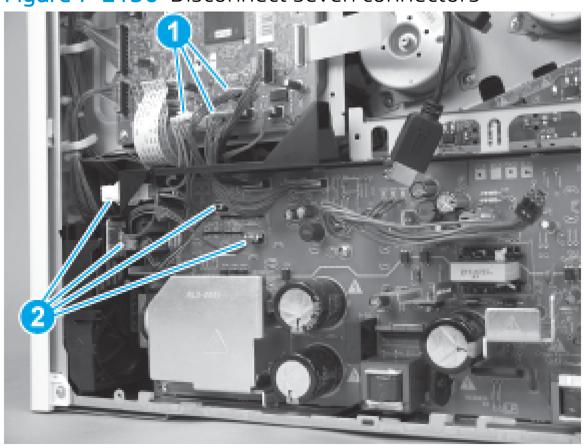
1. Disconnect one wire harness (callout 1), and then pass the wire harness through the opening (callout 2) in the chassis.

Figure 7-2129 Disconnect one wire harness



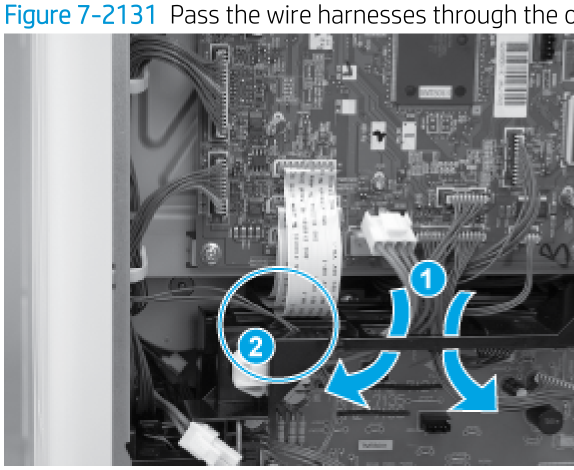
2. Disconnect three connectors on the DC controller (callout 1), and then disconnect four connectors (callout 2) on the LVPS.

Figure 7-2130 Disconnect seven connectors



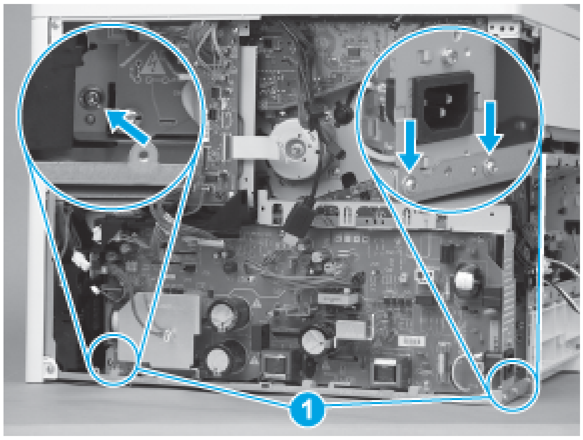
3. Pass the wire harnesses from the DC controller to the LVPS through the opening in the chassis (callout 1), and then release the wire harnesses from the retainer (callout 2).

Figure 7-2131 Pass the wire harnesses through the opening



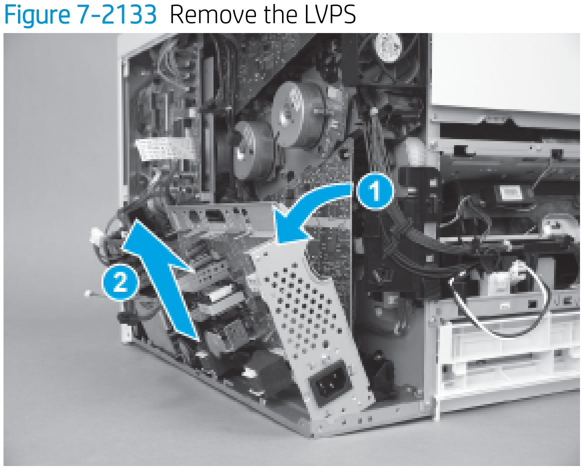
4. Remove three screws (callout 1).

Figure 7-2132 Remove three screws



5. Rotate the top of the LVPS away from the printer (callout 1), and then slide it up and out (callout 2) of the printer to remove it.

Figure 7-2133 Remove the LVPS

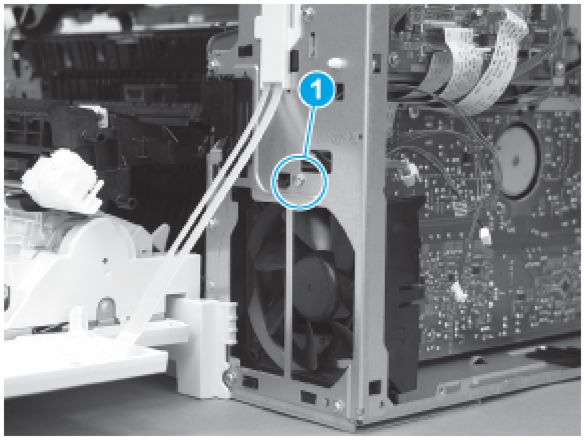


Remove the power supply fan (FM1)

Follow these steps to remove the power supply fan.

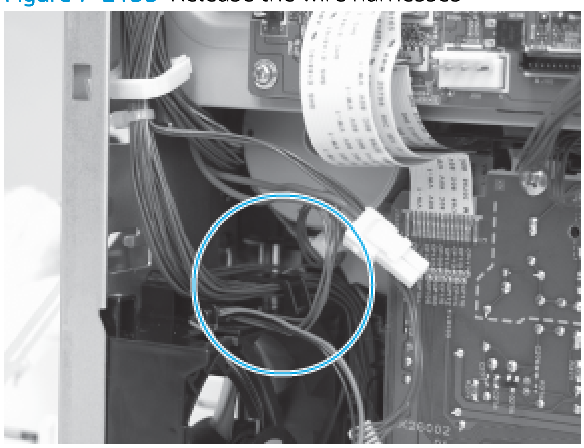
1. Remove one screw (callout 1).

Figure 7-2134 Remove one screw



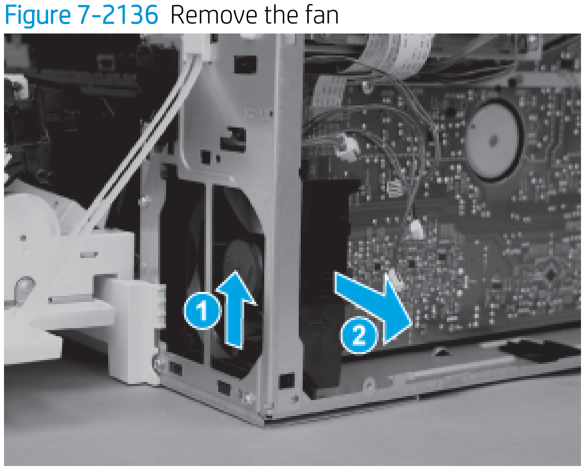
2. Release the wire harnesses from the retainer on the top of the fan bracket.

Figure 7-2135 Release the wire harnesses



3. Lift the fan up (callout 1), and then slide it out of the printer (callout 2) to remove it.

Figure 7-2136 Remove the fan

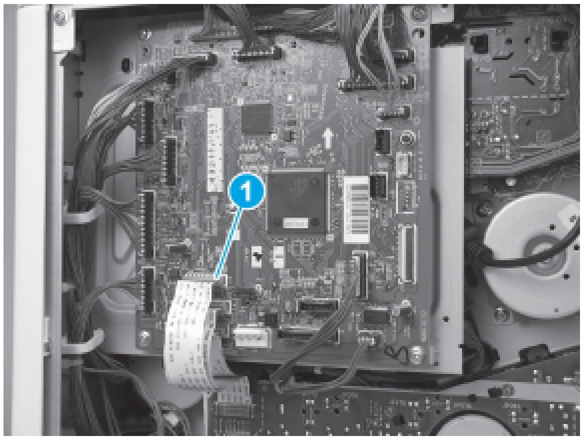


Remove the high-voltage power supply D (HVPSD)

Follow these steps to remove the high-voltage power supply D (HVPSD).

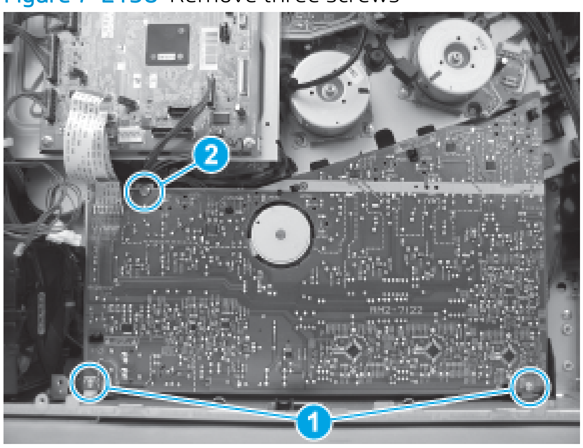
1. Disconnect one flat cable (callout 1) on the DC controller.

Figure 7-2137 Disconnect one flat cable



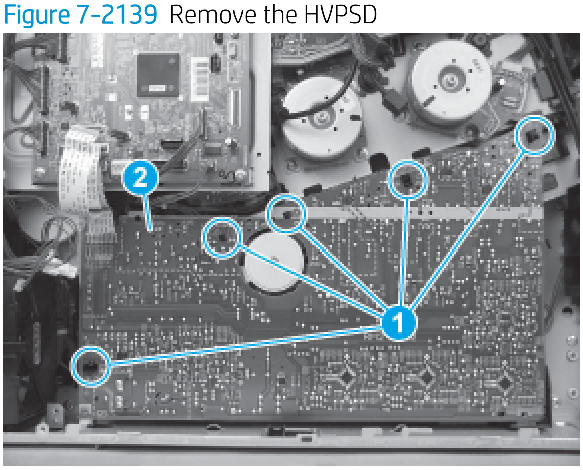
2. Remove two screws (callout 1), and then remove one self tapping screw (callout 2) on the HVPSD.

Figure 7-2138 Remove three screws



3. Release five tabs (callout 1), and then remove the HVPSD (callout 2).

Figure 7-2139 Remove the HVPSD

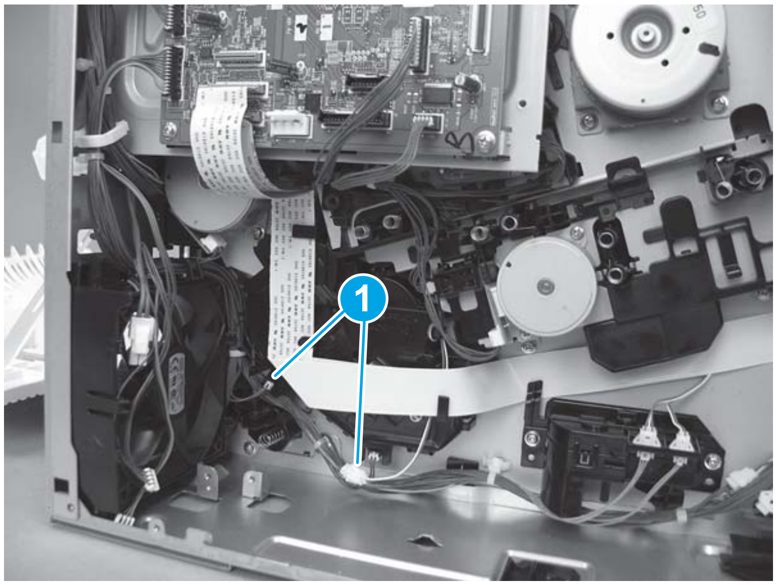


Remove the auto close assembly

Follow these steps to remove the auto close assembly.

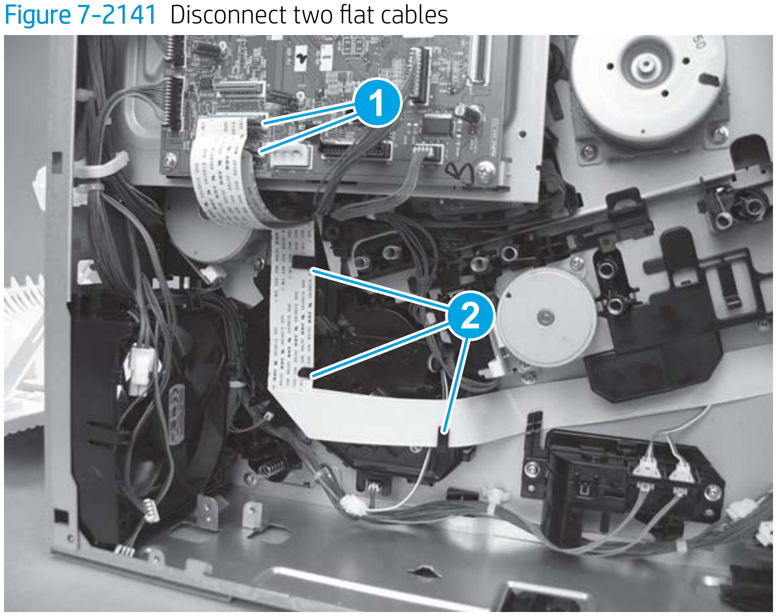
1. Disconnect two connectors (callout 1).

Figure 7-2140 Disconnect two connectors



2. Disconnect two flat cables (callout 1), and then release them from the retainers (callout 2).

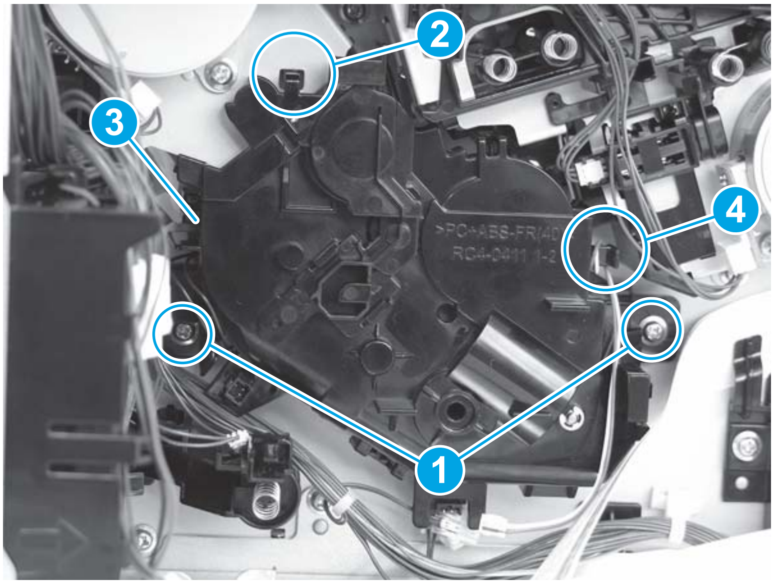
Figure 7-2141 Disconnect two flat cables



3. Remove two screws (callout 1), release one tab (callout 2), and then remove the lifter drive assembly (callout 3).

NOTE: Release one wire harness from the retainer (callout 4) as the assembly is removed.

Figure 7-2142 Remove the assembly



Remove the DC controller (DCC) and sheet-metal bracket

Follow these steps to remove the DC controller and sheet-metal bracket together.

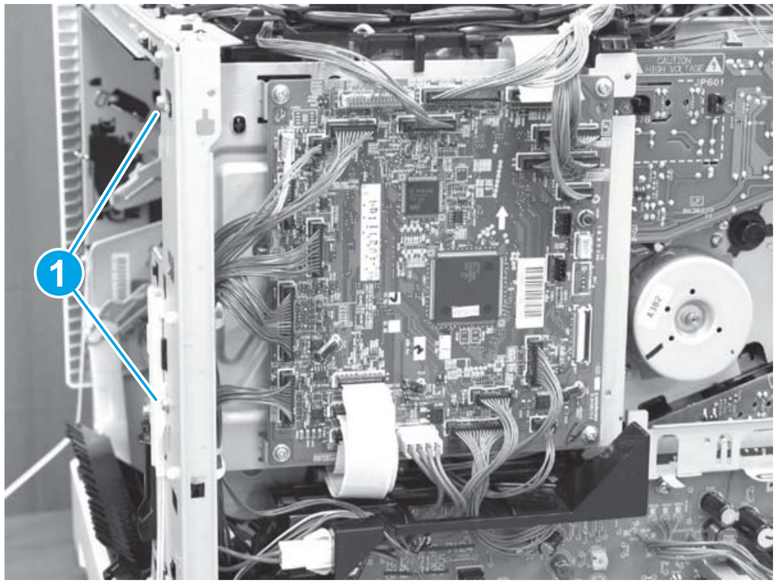
NOTE: ESD sensitive part.

1. Disconnect all of the connectors, and then remove two screws (callout 1).

Empty DCC connectors

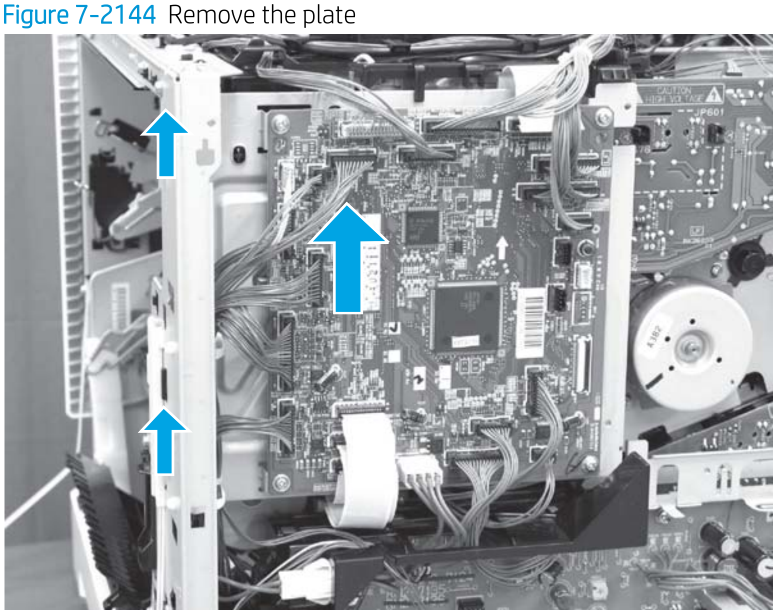
- J140
- J141
- J143

Figure 7-2143 Remove two screws



2. Lift up on the DC controller and sheet-metal plate to remove it.

Figure 7-2144 Remove the plate

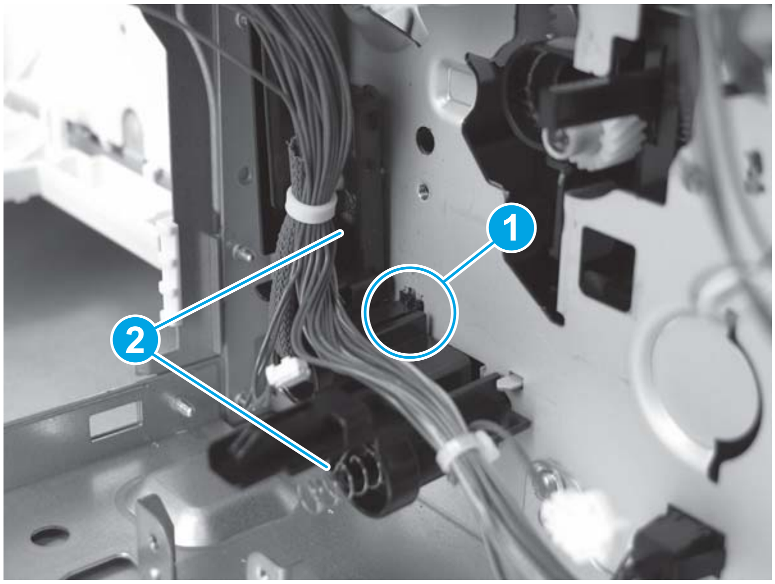


Remove the pickup drive assembly and motor (M5)

Follow these steps to remove the pickup drive assembly and motor.

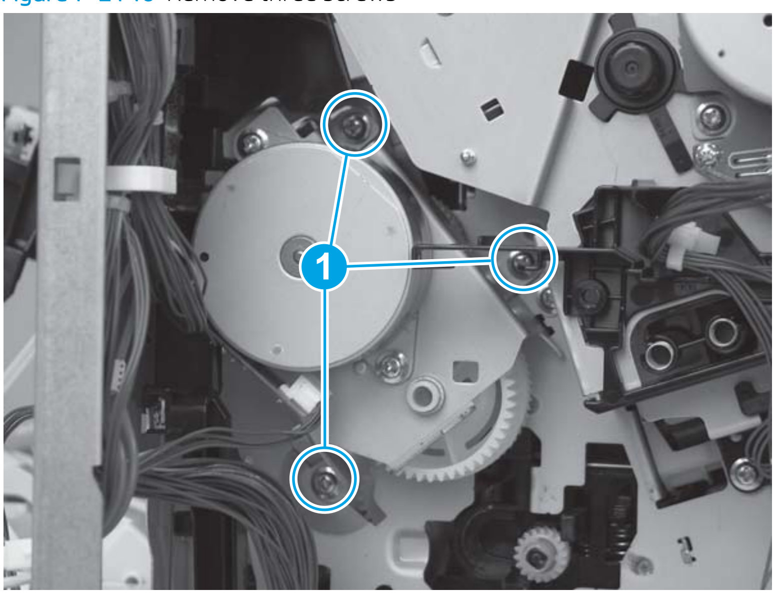
1. Release one tab (callout 1), and then move the guide (callout 2) out of the way.

Figure 7-2145 Move the guide out of the way



2. Remove three screws (callout 1).

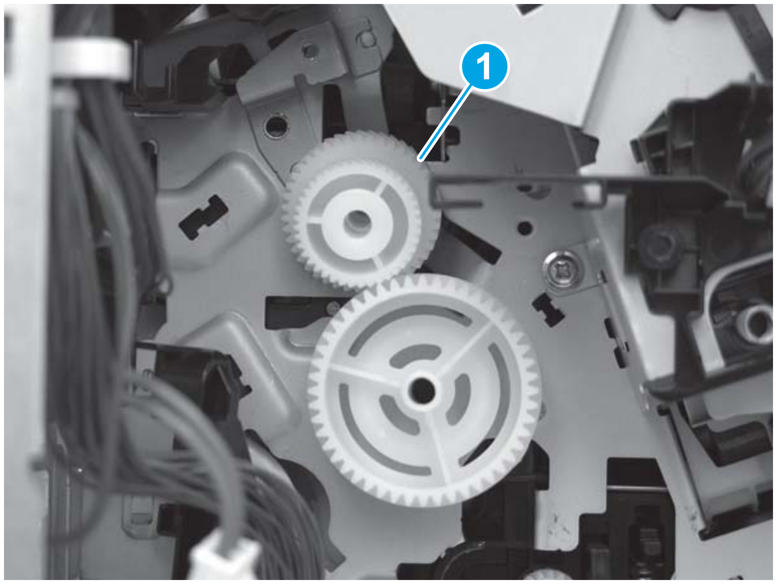
Figure 7-2146 Remove three screws



3. Remove the assembly.

⚠ CAUTION: One gear on the back side of the assembly is not captive. Handle the assembly carefully.

Figure 7-2147 Remove the assembly



4. If the gear (callout 1) was not removed with the assembly in the previous step, remove it now.

Figure 7-2148 Remove the gear if installed

Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Registration assembly

Learn about removing and replacing the registration assembly.

Before performing service

Turn the printer power off

- Disconnect the power cable.

WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-81 Part information

Part number	Part description
RM2-0093-000CN	Registration assembly (M553n)
RM2-0018-000CN	Registration assembly (M552, M553dn/x, M554, M555, M577, M578, E55040, E57540)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the secondary transfer assembly

Follow these steps to remove the secondary transfer assembly.

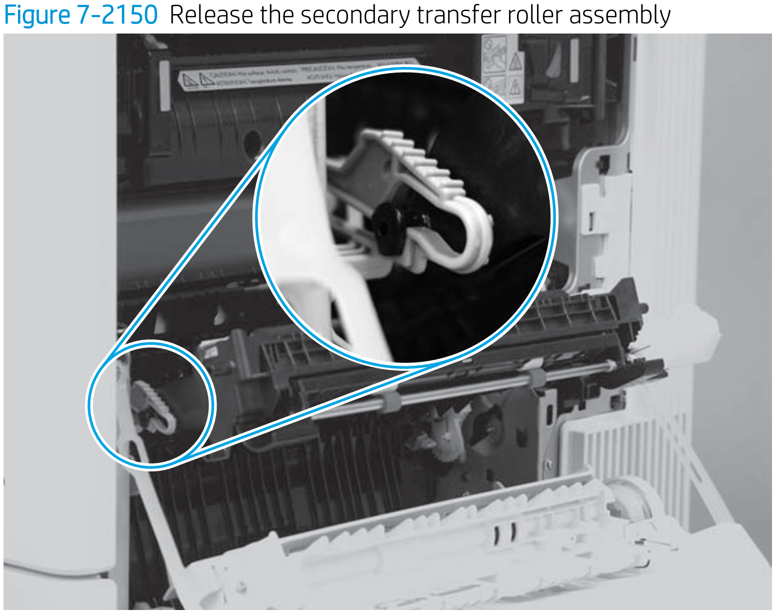
1. Open the right door.

Figure 7-2149 Open the right door

2. Release the blue arm, and then let the secondary transfer assembly rotate down to the half-way open position.

NOTE: The assembly should stop at the halfway down point—the pin will stop at the notch in the slot in the blue arm.

Figure 7-2150 Release the secondary transfer roller assembly



3. Carefully flex the top portion of the blue arm—as shown in the figure—to start to disengage it from the pin.

Figure 7-2151 Carefully flex the top portion of the blue arm

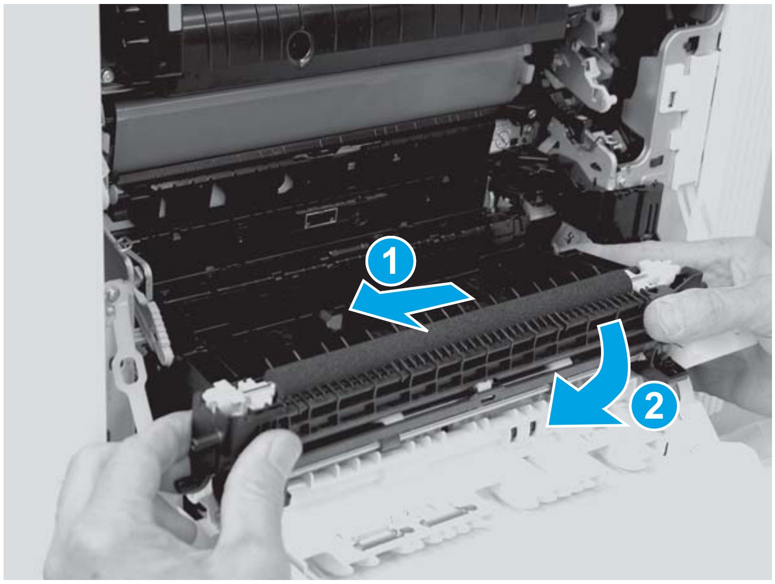
4. Continue to flex the blue arm until it disengages from the pin.

Figure 7-2152 Disengage the blue arm and pin

5. Slide the assembly toward the front of the printer to release it (callout 1), and then rotate it down and away from the printer to remove it (callout 2).

Reinstallation tip: Before removing the assembly, take note of where the assembly hinge pins fit into the holes provided in the printer.

Figure 7-2153 Remove the secondary transfer roller assembly



Remove the ITB

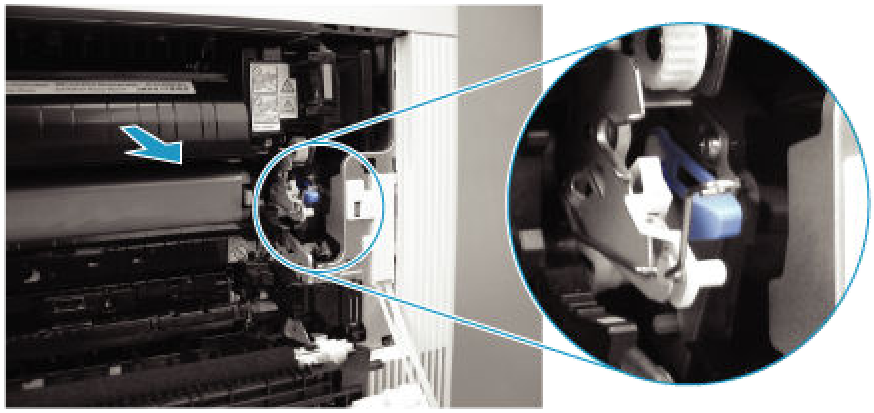
Follow these steps to remove the ITB.

1. Open the right door.

Figure 7-2154 Open the right door

2. Pull the blue lever to release the ITB drive coupling.

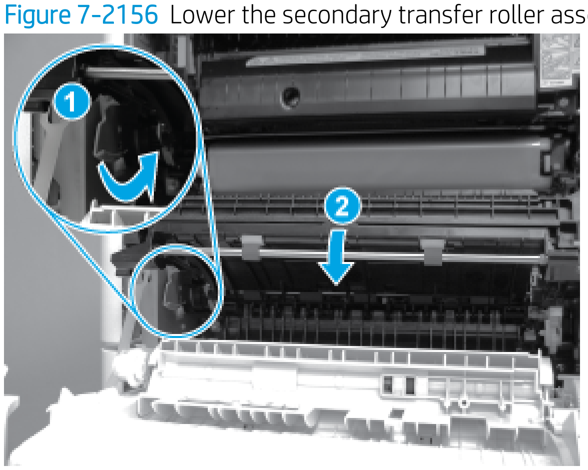
Figure 7-2155 Release the ITB drive coupling



3. Push in on the blue arm to release the secondary transfer roller assembly, and then completely lower the assembly.

NOTE: Press the blue arm on the secondary transfer roller assembly a second time to release the roller assembly when it stops at the halfway open position.

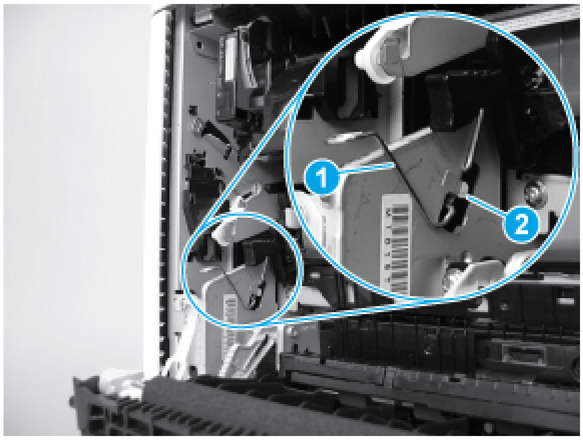
Figure 7-2156 Lower the secondary transfer roller assembly



4. Release the left-side ITB spring (callout 1) from the tab (callout 2).

NOTE: For late production M552/M553 printers and all M554/m555 printers, this ITB spring is not installed.

Figure 7-2157 Release the front-side ITB spring

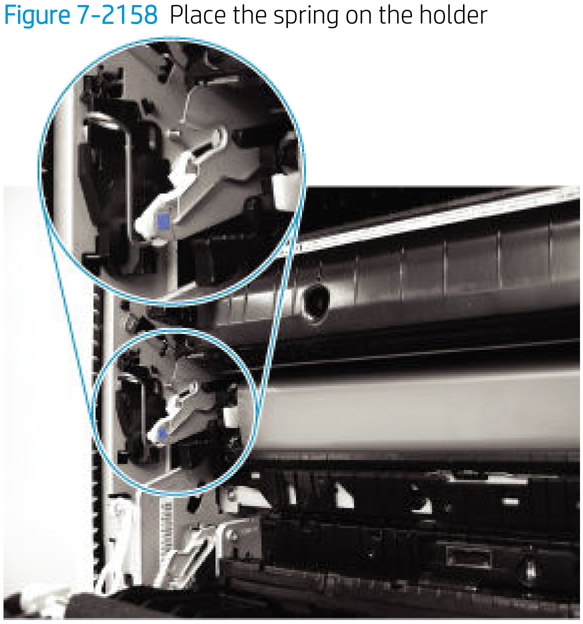


5. Place the left-side ITB spring on the holder to keep it out of the way.

NOTE: For late production M552/M553 printers and all M554/m555 printers, this ITB spring is not installed.

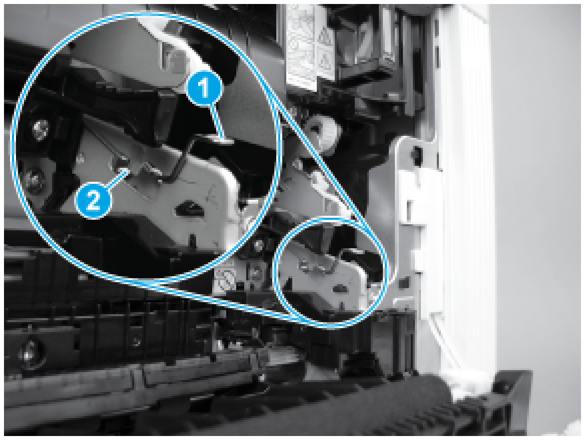
TIP: The holder is colored blue to help locate it.

Figure 7-2158 Place the spring on the holder



6. Release the right-side ITB spring (callout 1) from the tab (callout 2).

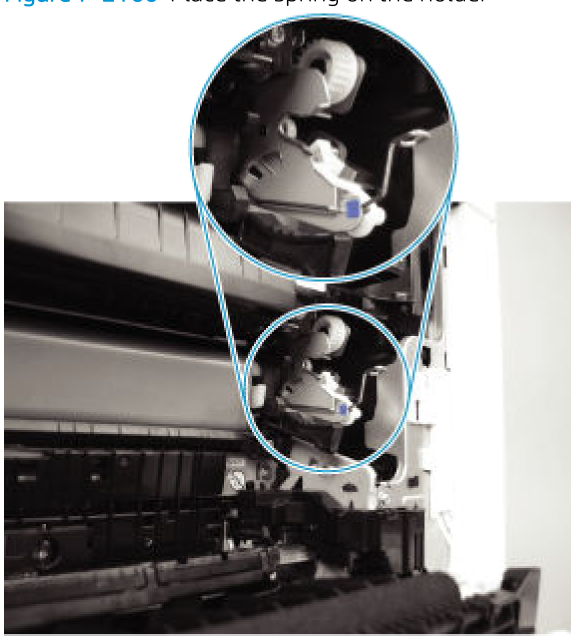
Figure 7-2159 Release the rear-side ITB spring



7. Place the right-side ITB spring on the holder to keep it out of the way.

TIP: The holder is colored blue to help locate it.

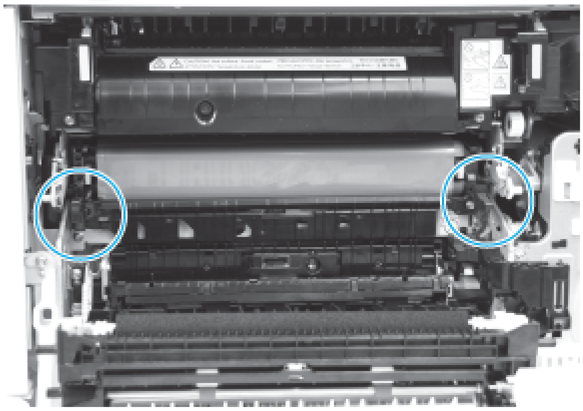
Figure 7-2160 Place the spring on the holder



8. Grasp the two blue handles on the ITB.

⚠ CAUTION: If the ITB is removed to access other assemblies in the printer, use care. The ITB is a sensitive assembly. Be careful when handling the ITB so that it is not damaged. Always place the ITB in a safe and protected location.

Figure 7-2161 Grasp the ITB handles



9. Pull the ITB out of the printer to remove it.

⚠ CAUTION: Do not touch the grey-plastic belt. Skin oils and fingerprints on the belt can cause print-quality problems.

Figure 7-2162 Remove the ITB

Remove Tray 2

Learn about removing Tray 2.

NOTE: A SFP printer is shown in this section. However, the procedure is correct for all printer models.

The figures in this section show Tray 2. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5. Always carefully read the instructions that accompany the figures.

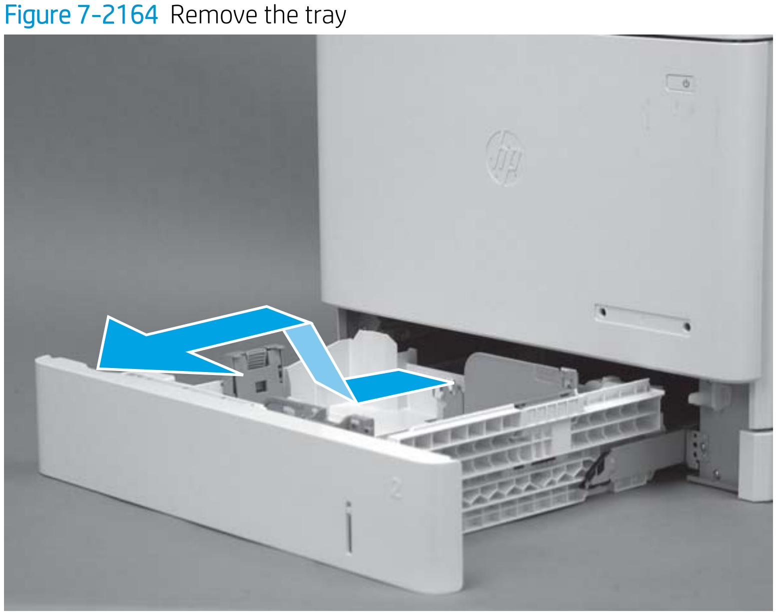
1. Pull the tray out until it stops.

Figure 7-2163 Pull the tray out

2. Lift the front of the tray, and then pull it out of the printer to remove it.

NOTE: **For a replacement tray:** If the tray has Fixed Tray Guides installed and are still required, move hardware to new tray. If necessary, order new kit: 3GY25–67901 Kit - Fixed Tray Guide. Only one kit required per engine.

Figure 7-2164 Remove the tray



Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-2165 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-2166 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

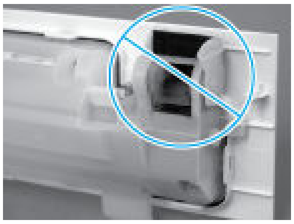
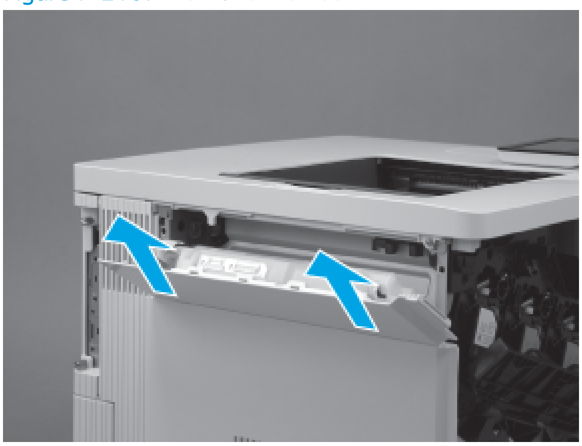


Figure 7-2167 Remove the TCU



Remove the formatter cover

Follow these steps to remove the formatter cover.

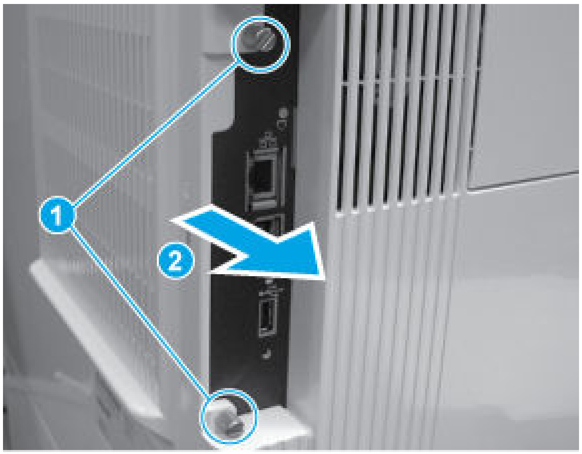
1. Locate the formatter cover.

Figure 7-2168 Locate the formatter cover

2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-2169 Loosen the thumbscrews



Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

NOTE: This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-2170 Locate the USB cover

2. Pull the cover off of the printer to remove it.

Figure 7-2171 Remove the cover

Remove the control panel (M553x/M555/E55040)

Follow these steps to remove the control panel.

NOTE: This procedure is for the M553x/M555/E55040 printers only.

M555 models: Removing the control panel is similar to the procedure below. For the M555, a flat cable connects the control panel to the formatter.

1. Tilt the control panel up.

Figure 7-2172 Tilt the control panel up

2. Use the small flat-blade screwdriver supplied in this kit to release the control-panel screws cover tabs.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-2173 Release the control-panel screws cover tabs

3. Rotate the cover up to remove it.

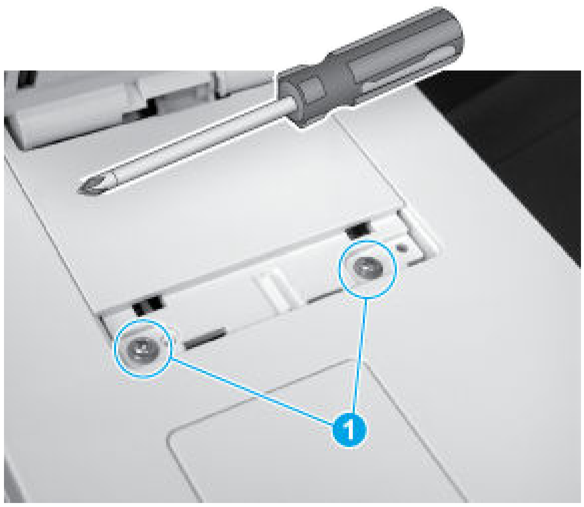
Figure 7-2174 Remove the cover

4. Use the small Phillips screwdriver supplied in this kit to remove two screws (callout 1).

IMPORTANT: Store the screws in a secure place where they cannot fall down into the printer.

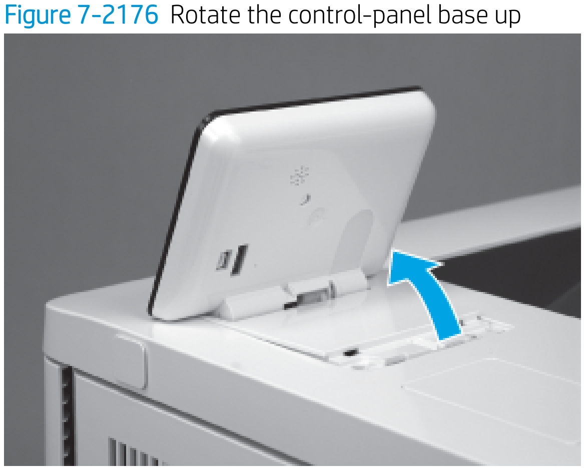
TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-2175 Remove two screws



5. Rotate the control-panel base toward the front of the printer.

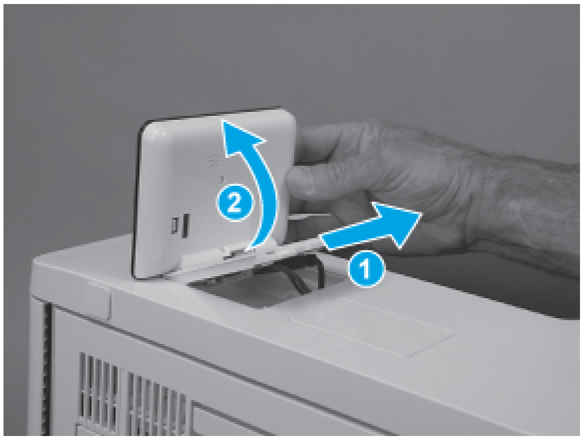
Figure 7-2176 Rotate the control-panel base up



6. Slightly slide the control-panel base toward the rear of the printer (callout 1) to release it, and then turn the control panel over (callout 2) to access the bottom side.

⚠ CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

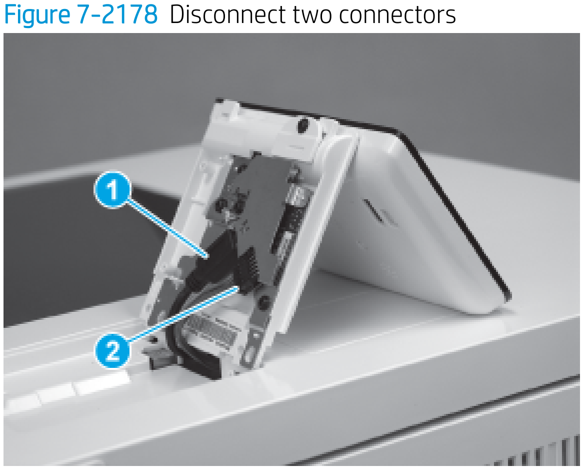
Figure 7-2177 Turn the control panel over



7. Disconnect one USB cable (callout 1), one connector (callout 2), and then remove the control panel.

NOTE: **M555 only**: Disconnect one flat cable (not shown), and then remove the control panel.

Figure 7-2178 Disconnect two connectors



Remove the formatter (SFP)

Follow these steps to remove the formatter.

NOTE: This procedure is for SFP models only.

1. Disconnect all of the connectors on the formatter.

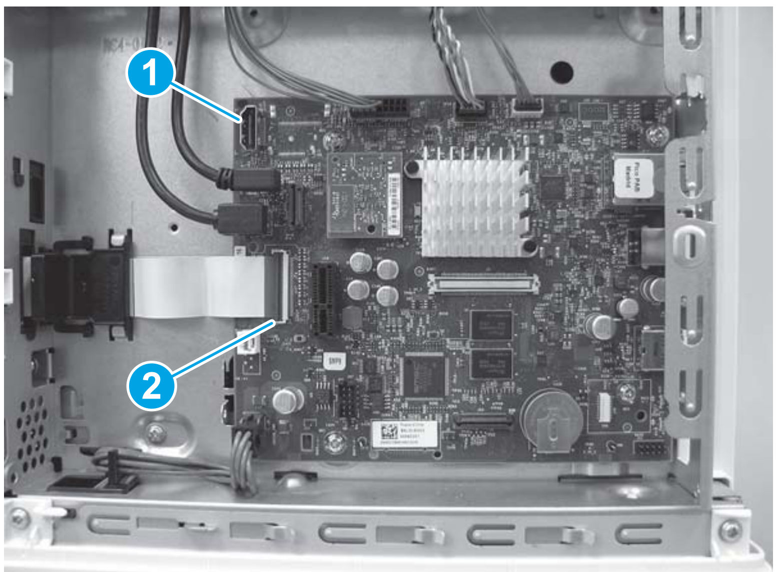
   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)

- All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
- All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
- M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)
- All models: J57
- All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

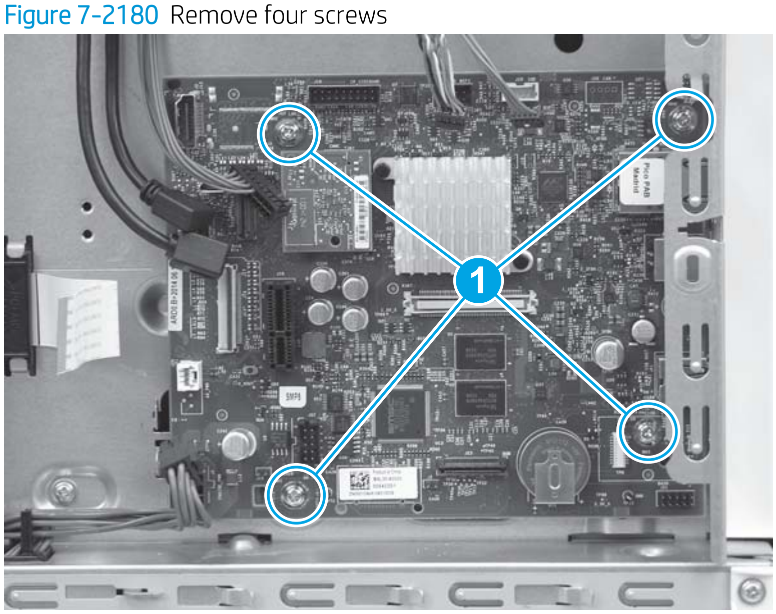
IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-2179 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-2180 Remove four screws



Remove the hard-disk drive (HDD)

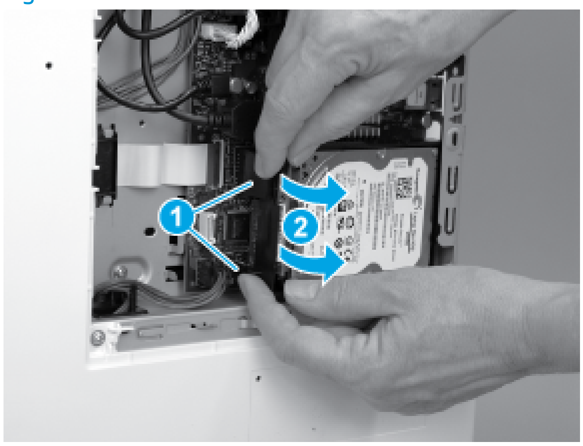
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

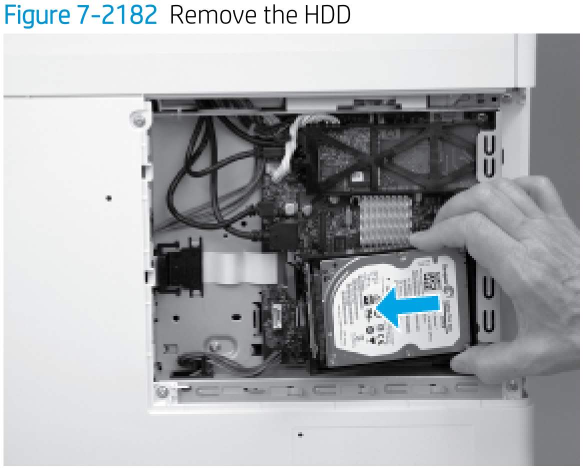
1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-2181 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-2182 Remove the HDD



Remove the fax PCA (fax models)

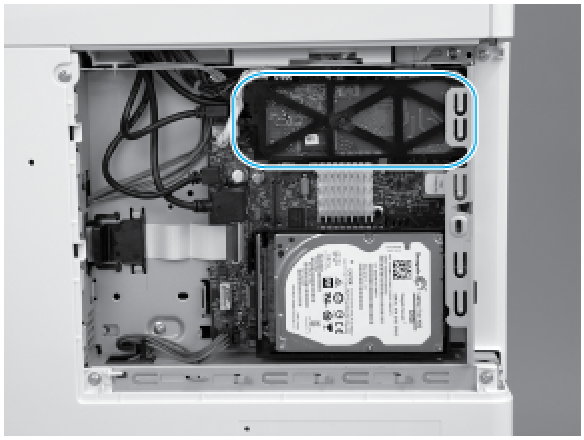
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

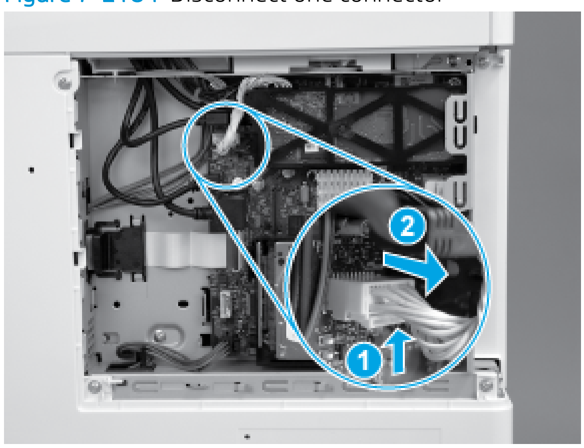
1. Locate the fax PCA component on the formatter.

Figure 7-2183 Locate the fax PCA



2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-2184 Disconnect one connector

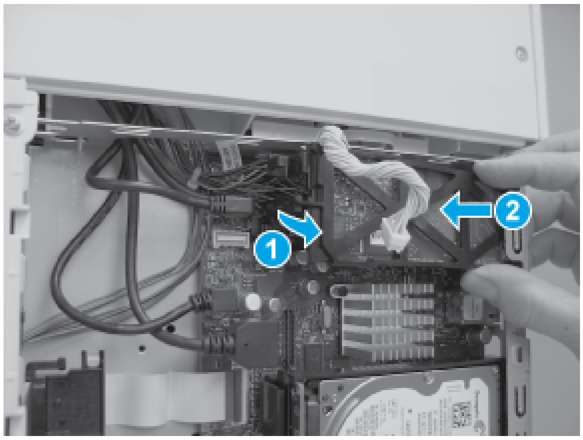


3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-2185 Release one latch

4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-2186 Remove the fax PCA



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

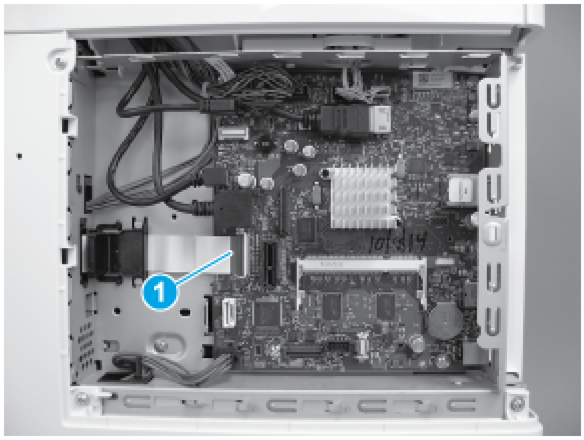
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

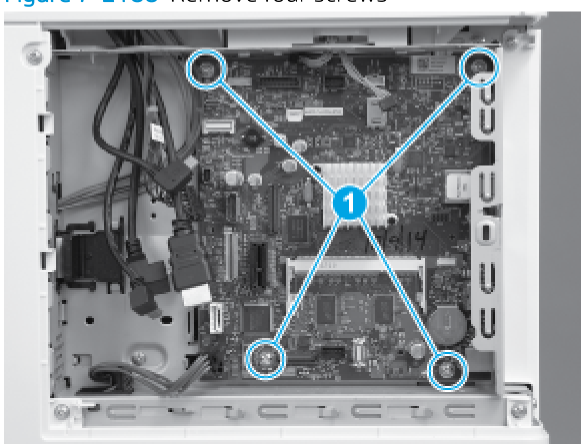
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-2187 Disconnect all connectors



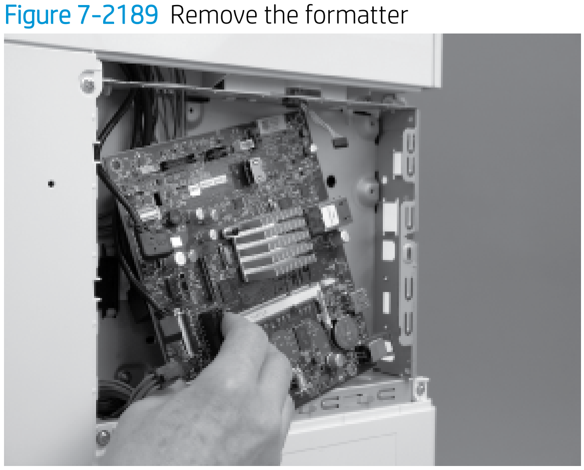
2. Remove four screws (callout 1).

Figure 7-2188 Remove four screws



3. Remove the formatter.

Figure 7-2189 Remove the formatter



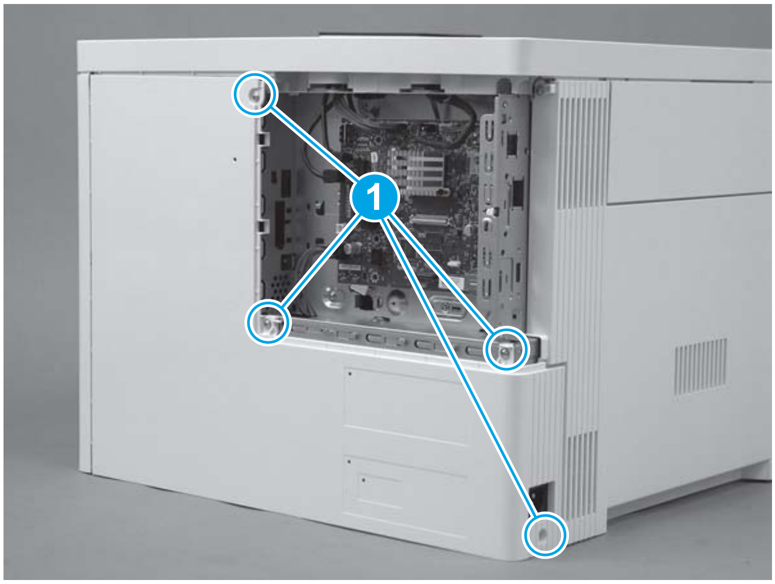
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

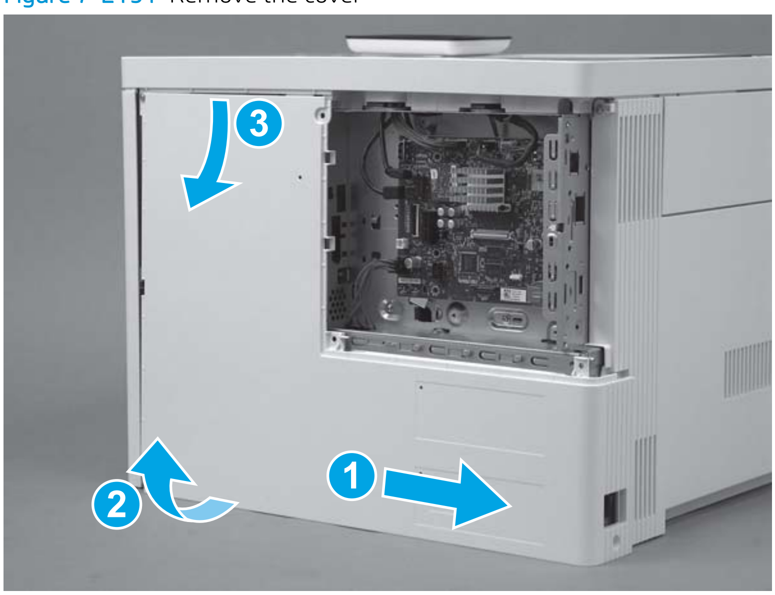
1. Remove four screws (callout 1).

Figure 7-2190 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-2191 Remove the cover



Remove the rear upper cover (MFP)

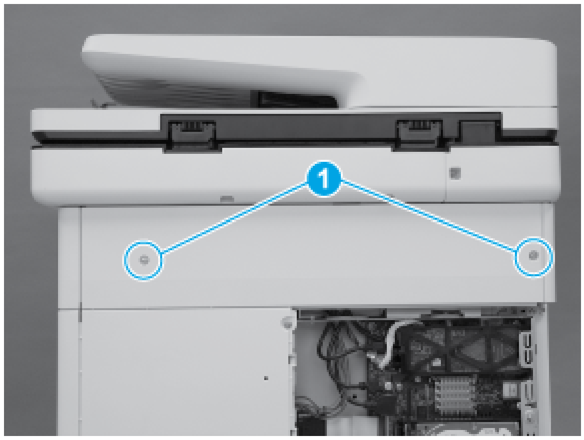
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

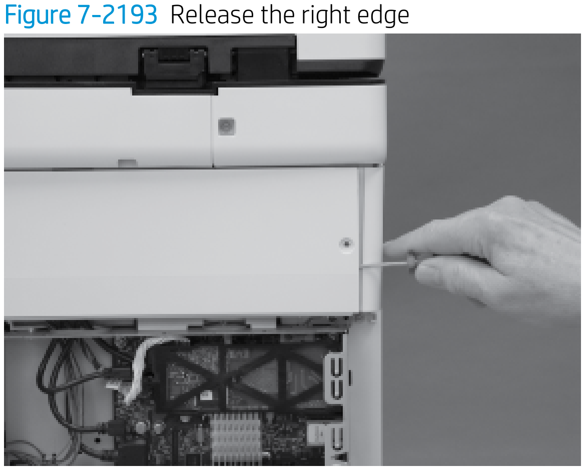
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-2192 Remove two screws



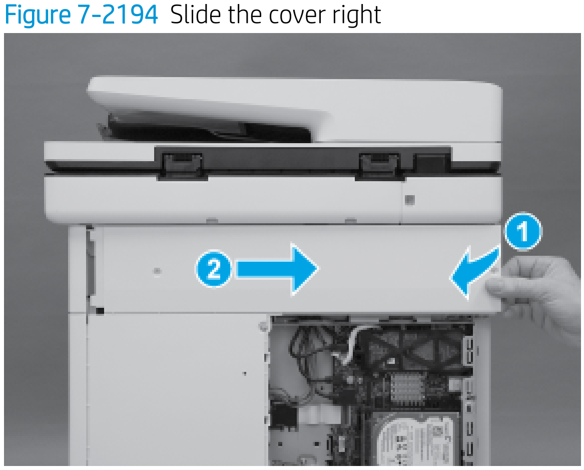
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-2193 Release the right edge



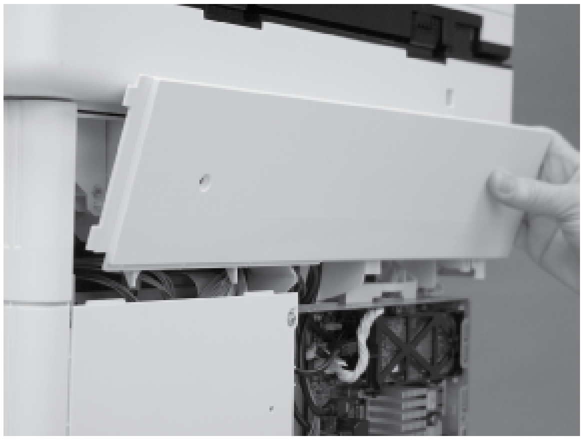
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-2194 Slide the cover right



4. Remove the cover.

Figure 7-2195 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-2196 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-2197 Remove the cover

Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

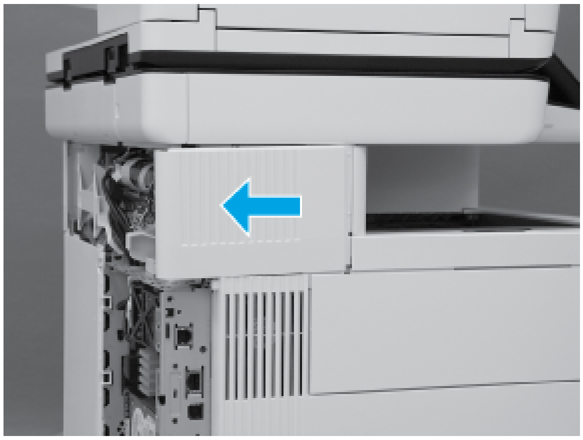
NOTE: This procedure is for MFP models only.

1. At the left side of the printer, release one tab (callout 1).

Figure 7-2198 Release one tab

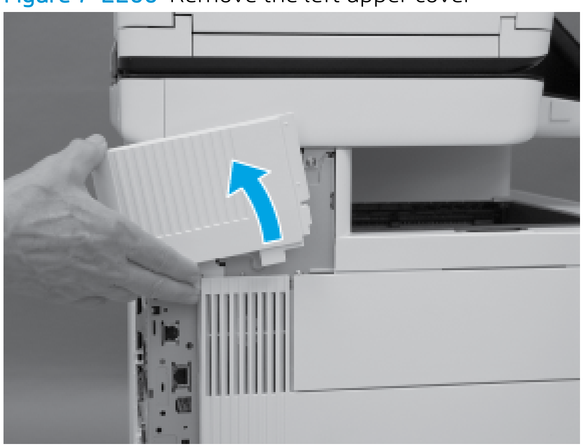
2. Slide the left upper cover toward the back of the printer.

Figure 7-2199 Slide the cover back



3. Rotate the cover up to remove it.

Figure 7-2200 Remove the left upper cover



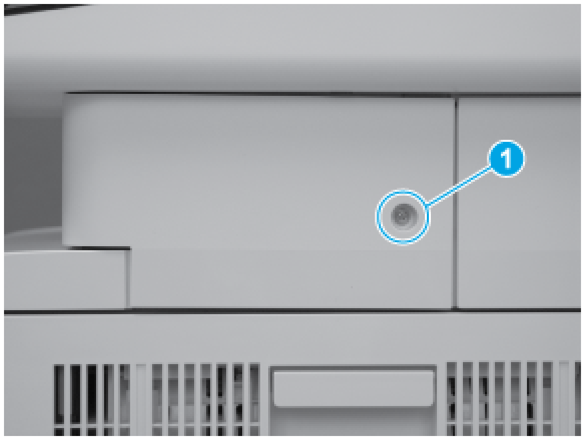
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-2201 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-2202 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-2203 Rotate the cover

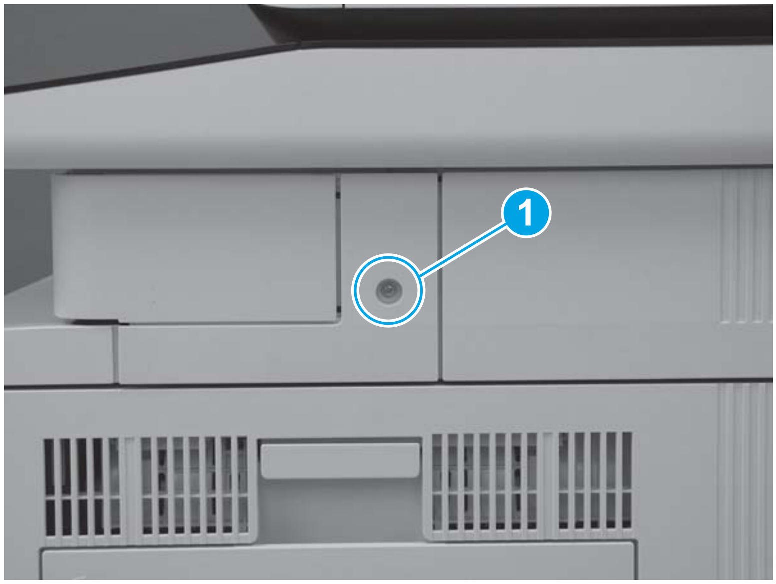
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

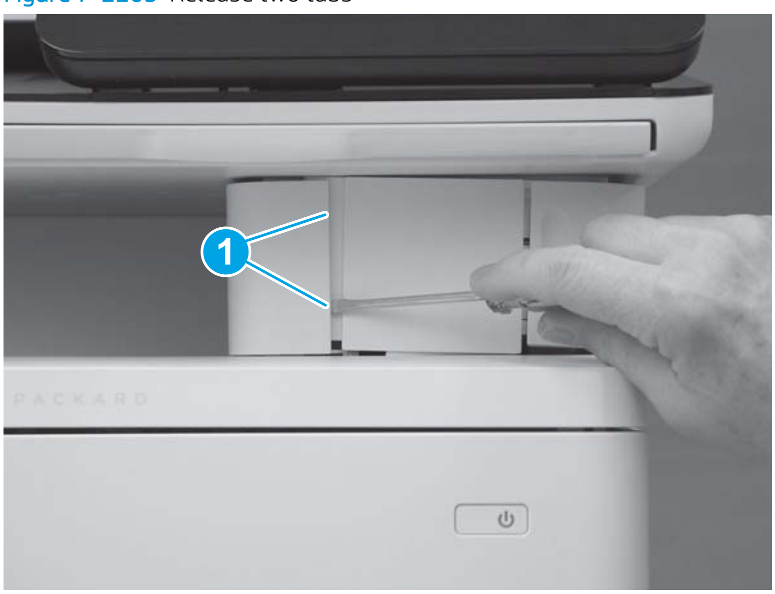
1. Remove one screw (callout 1).

Figure 7-2204 Remove one screw



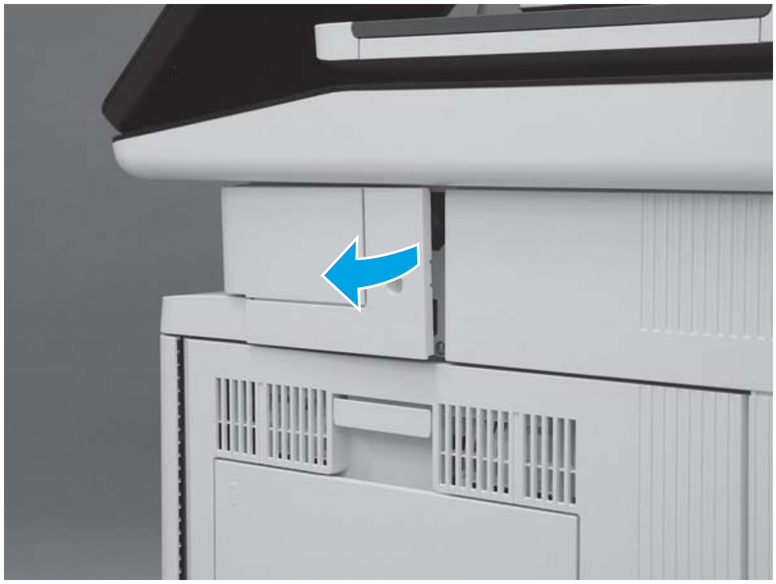
2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-2205 Release two tabs



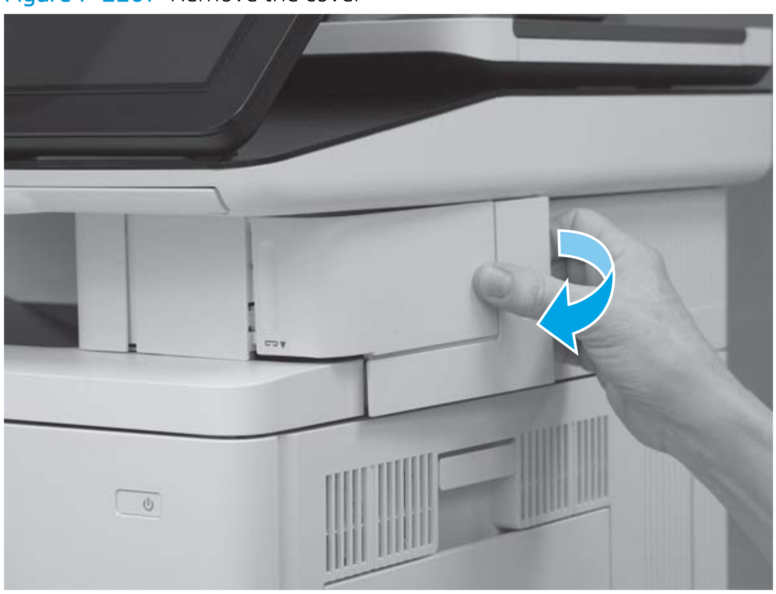
3. Release the back edge of the cover.

Figure 7-2206 Release the back edge of the cover



4. Rotate the cover away from the printer to remove it.

Figure 7-2207 Remove the cover



Remove the integrated scanner assembly (ISA) (MFP)

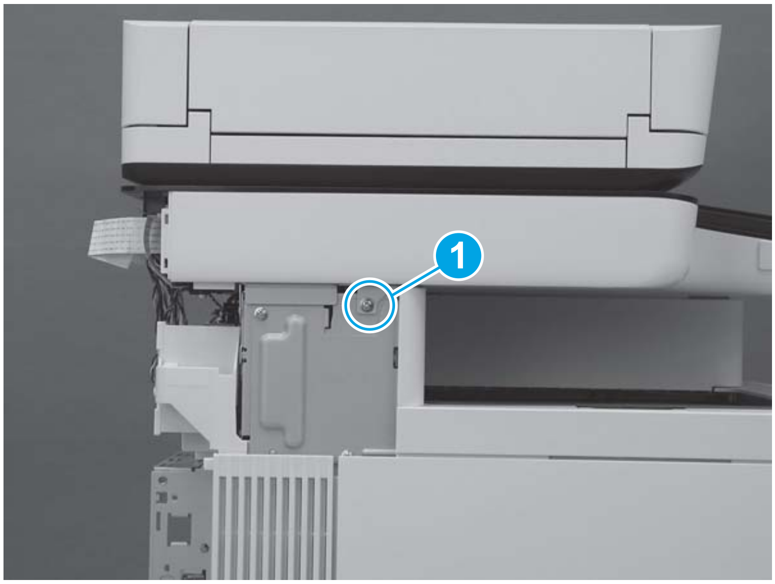
Follow these steps to remove the integrated scanner assembly (ISA).

NOTE: This procedure is for MFP models only.

NOTE: The ISA includes the document feeder, image scanner, scanner control board (SCB), control panel, keyboard (flow models) and NFC PCA (not all models).

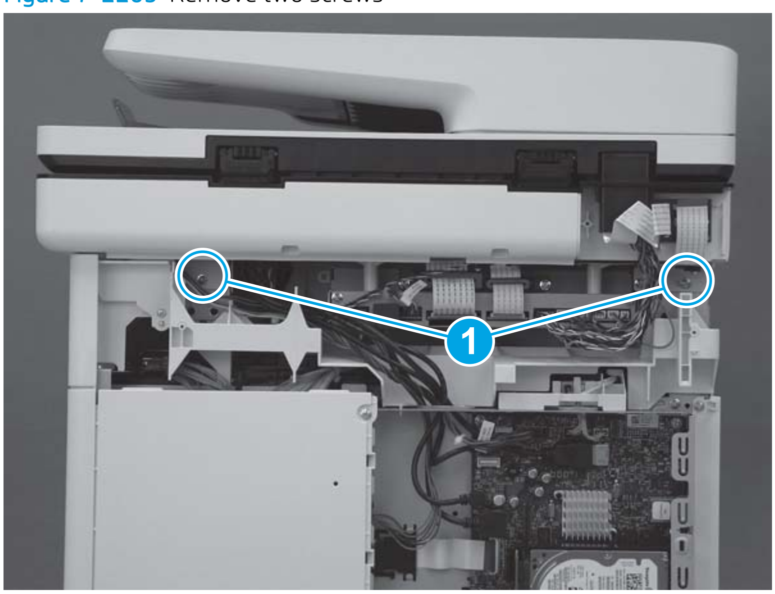
1. At the left side of the printer, remove one screw (callout 1).

Figure 7-2208 Remove one screw



2. At the back of the printer, remove two screws (callout 1).

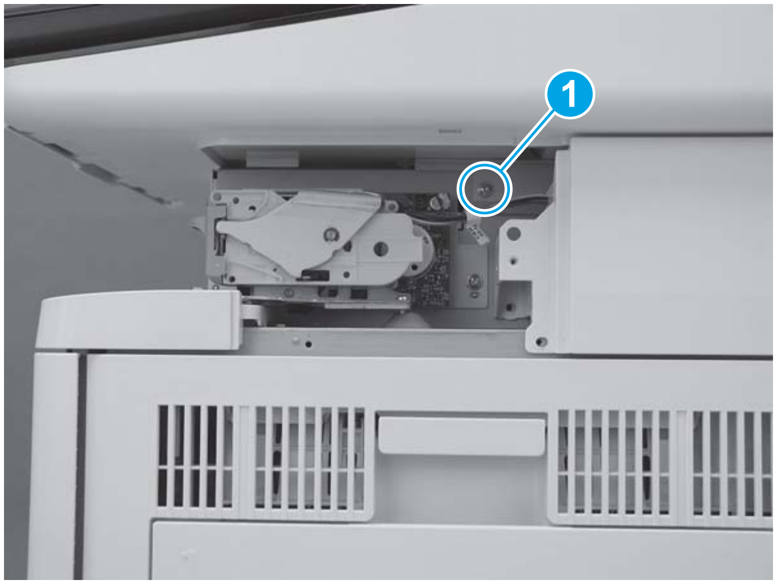
Figure 7-2209 Remove two screws



3. At the right side of the printer, remove one screw (callout 1).

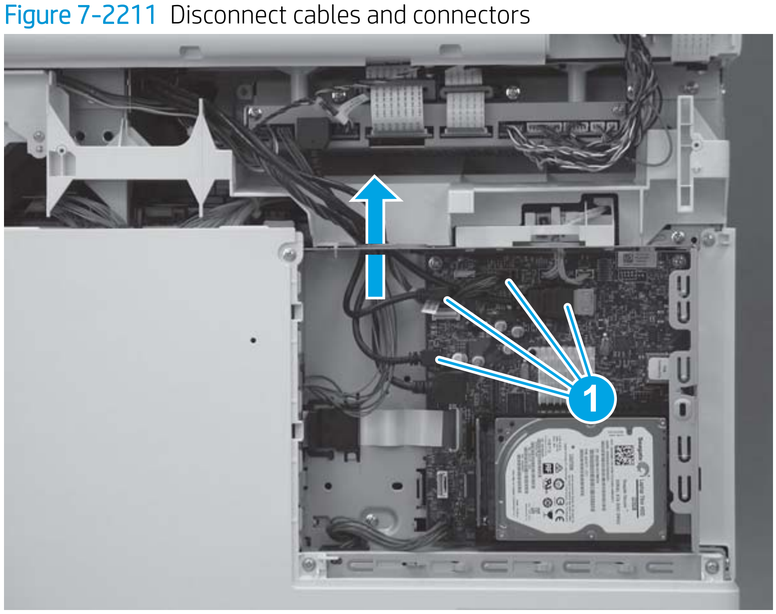
NOTE: The M577z is shown in the figure below. The procedure is correct for all MFP models.

Figure 7-2210 Remove one screw



4. Disconnect four connectors (callout 1) on the formatter, and then pass the wire harnesses and cables through the top opening in the formatter case (callout 2).

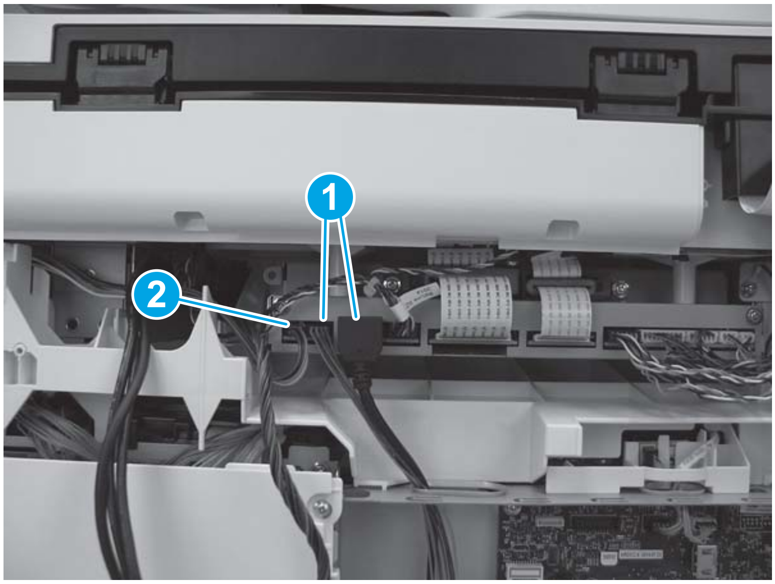
Figure 7-2211 Disconnect cables and connectors



5. Disconnect two connectors on the scanner control board (callout 1).

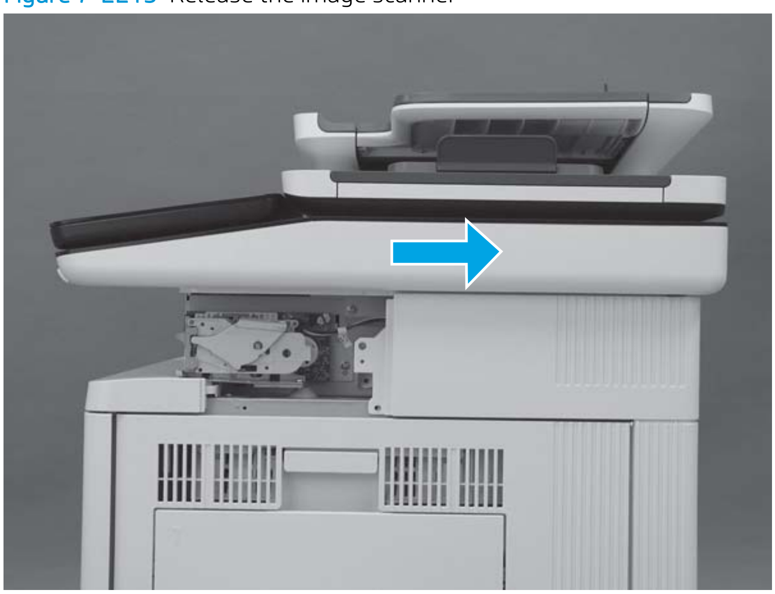
   MFP stapler models: Disconnect one connector for the stapler on the scanner control board (callout 2).

   Figure 7-2212 Disconnect connectors

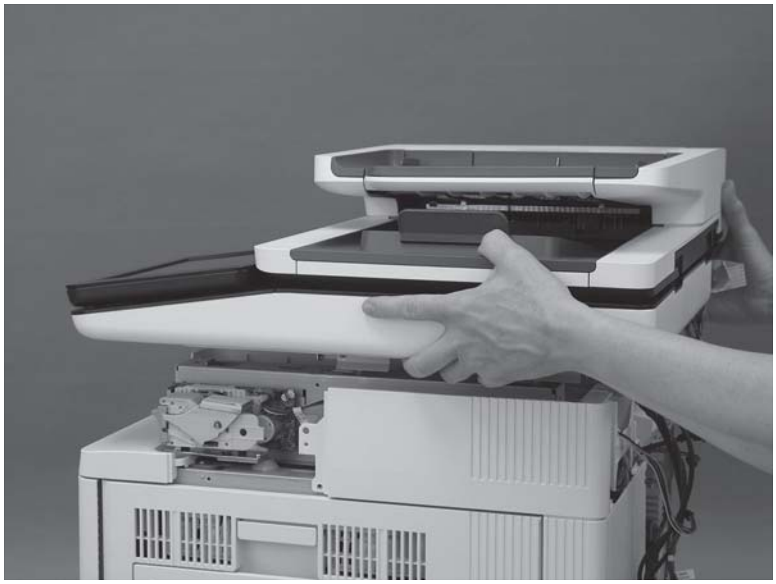
6. Slide the image scanner toward the back of the printer to release it.

   Figure 7-2213 Release the image scanner

7. Lift the ISA straight up to remove it.

Figure 7-2214 Remove the ISA



Remove the right upper cover (MFP)

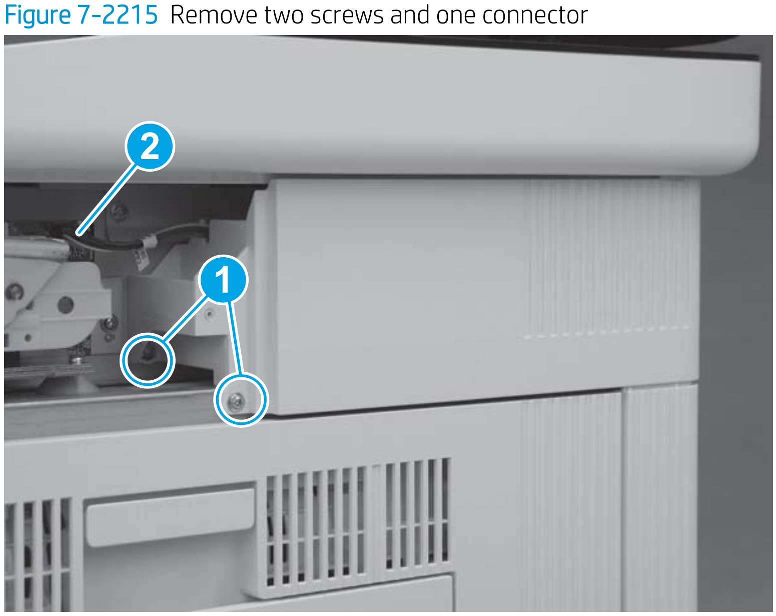
Follow these steps to remove the right upper cover.

NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Figure 7-2215 Remove two screws and one connector

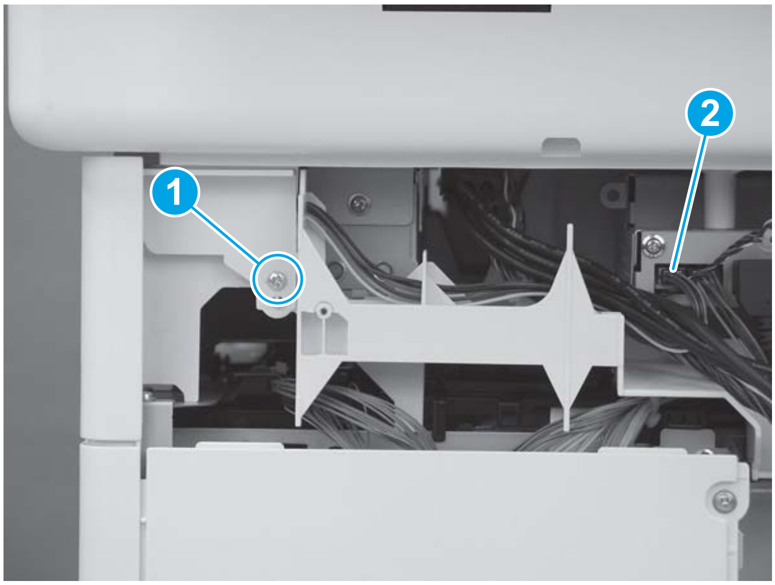


2. At the back of the printer, remove one screw (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

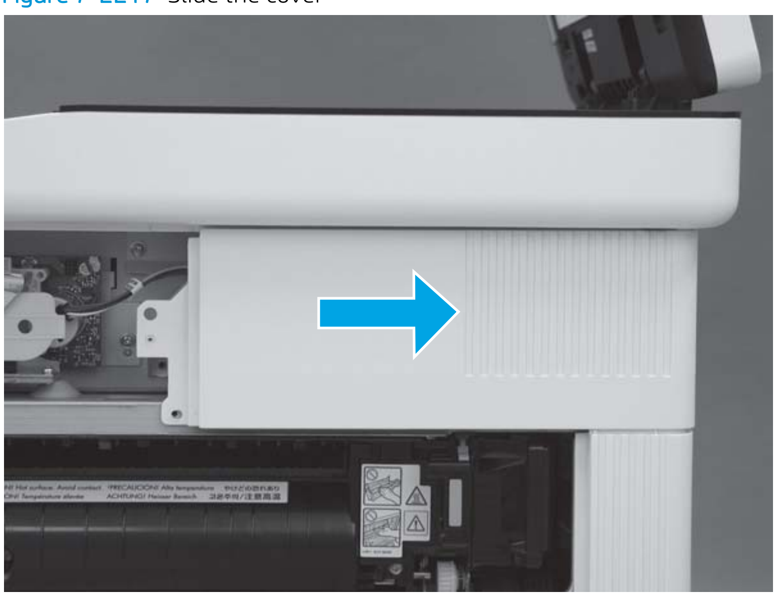
Reinstallation tip: This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

Figure 7-2216 Remove one screw and connector



3. Slide the cover toward the back of the printer.

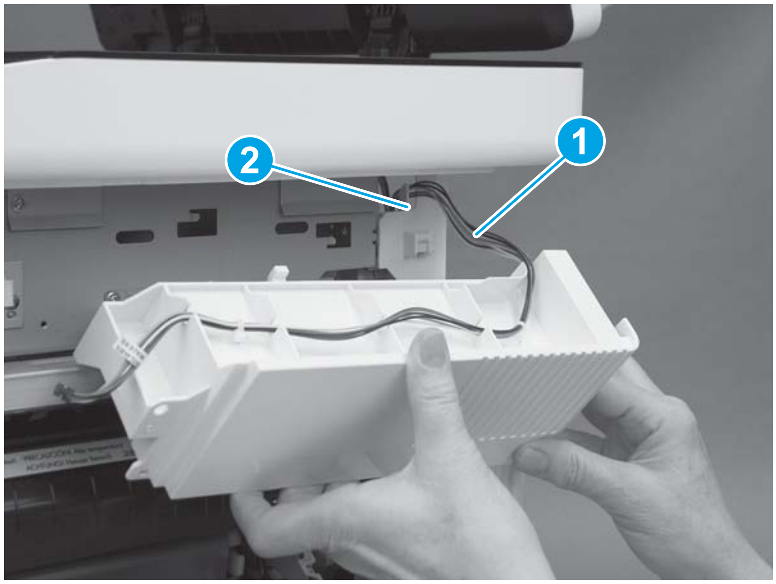
Figure 7-2217 Slide the cover



4. Lift the cover away from the printer to remove it.

   M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

   Figure 7-2218 Remove the cover

Remove the left cover

Follow these steps to remove the left cover.

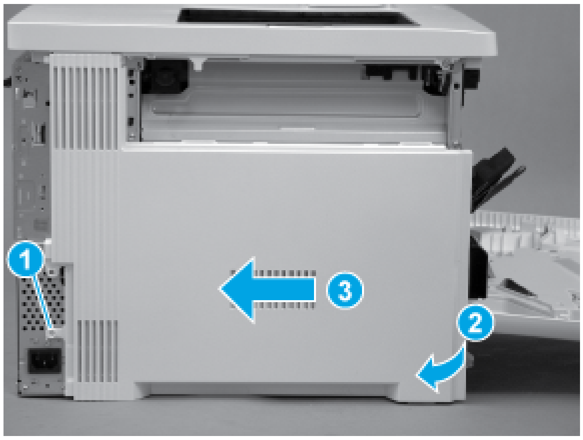
1. At the left side of the printer, remove one screw (callout 1).

   Figure 7-2219 Remove one screw

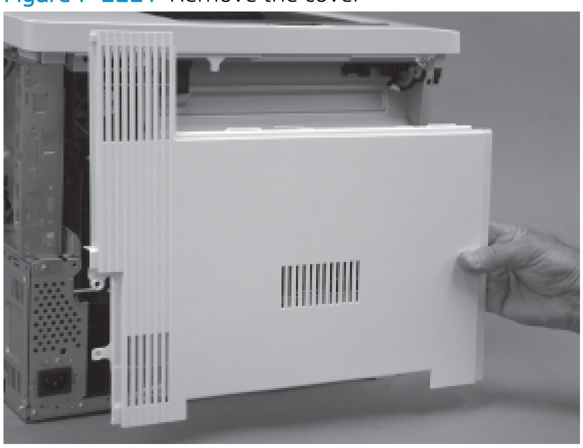
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-2220 Release the cover



3. Remove the cover.

Figure 7-2221 Remove the cover



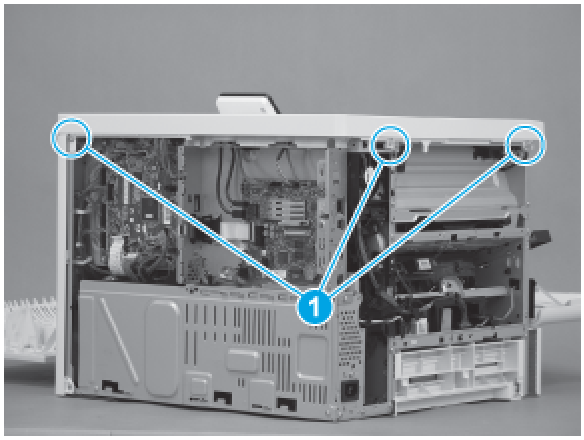
Remove the upper cover (SFP)

Follow these steps to remove the upper cover.

NOTE: This procedure is for SFP models only.

1. Remove three screws (callout 1).

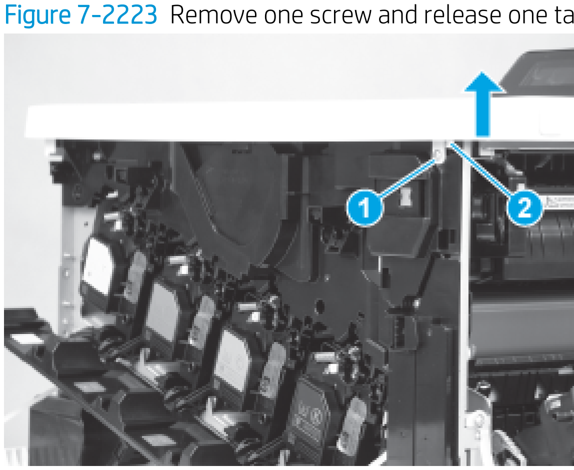
Figure 7-2222 Remove three screws



2. Remove one screw (callout 1), release one tab (callout 2), and then slightly separate the corner of the cover from the chassis.

NOTE: This is a self-tapping plastic-thread screw. Make sure that this screw is used in this location when it is reinstalled.

Figure 7-2223 Remove one screw and release one tab

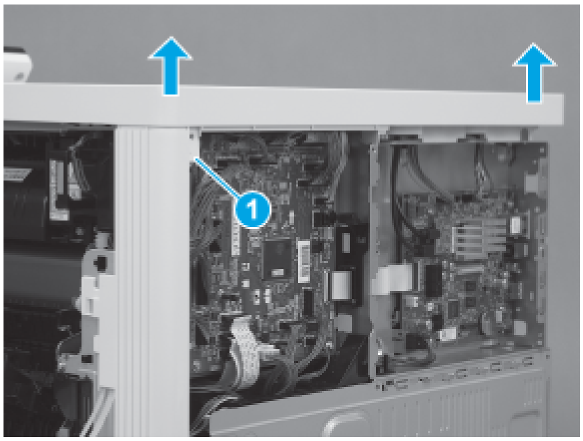


3. Release one tab (callout 1), and then lift up on the cover to release it.

IMPORTANT: **M554 models**: Disconnect the control-panel flat cable at the formatter.

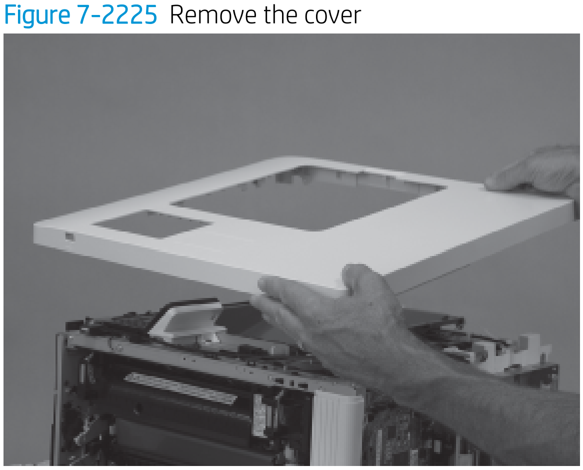
NOTE: If the cover does not release, check for addition tabs by locating the triangles embossed in the cover at tab locations.

Figure 7-2224 Release the cover



4. Remove the cover.

Figure 7-2225 Remove the cover



Remove the right rear cover

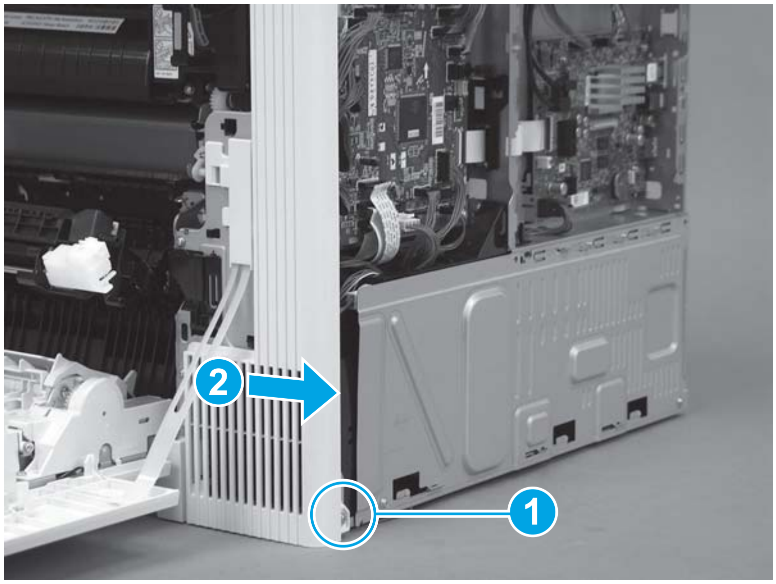
Follow these steps to remove the right rear cover.

NOTE: The figures in this topic show a SFP model. However, the procedure is correct for an MFP.

1. Remove one screw (callout 1), and then slide the cover toward the rear of the printer (callout 2) to release it.

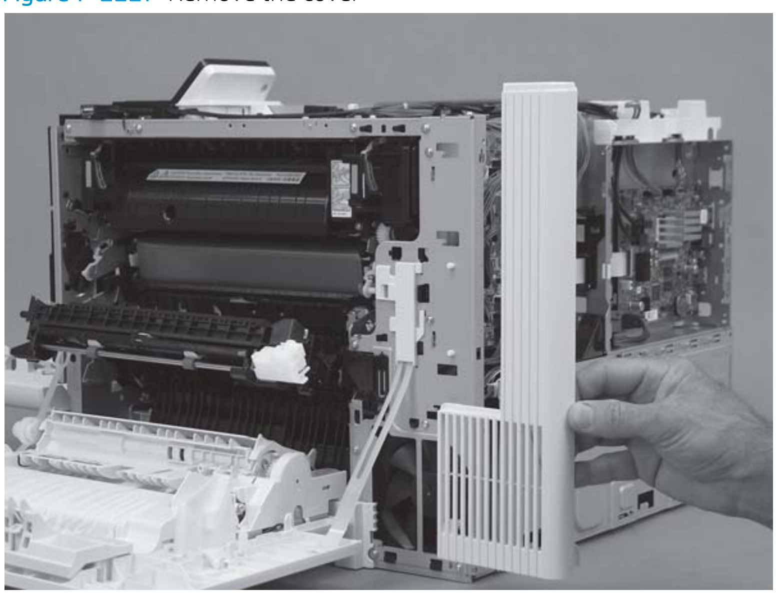
TIP: If the right door is closed, open it now.

Figure 7-2226 Release the cover



2. Remove the cover.

Figure 7-2227 Remove the cover

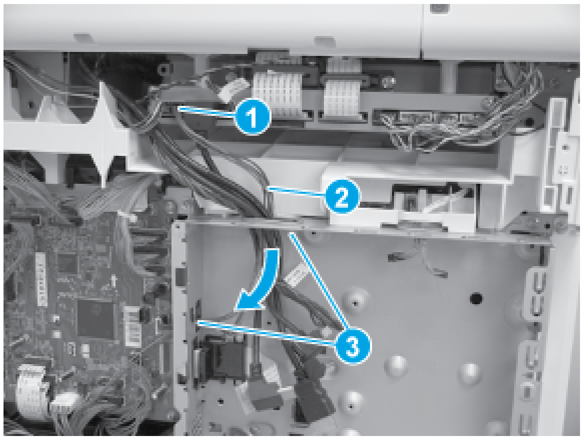


Remove the formatter case

Follow these steps to remove the formatter case.

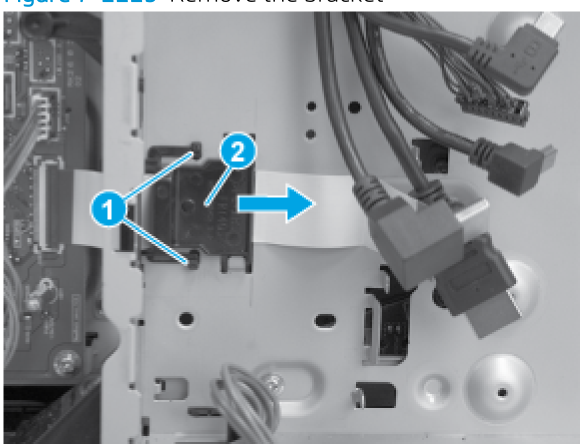
1. **MFP only**: Disconnect one connector (callout 1), and then pass the wire harness (callout 2) through two openings in the formatter case (callout 3).

Figure 7-2228 Disconnect one connector



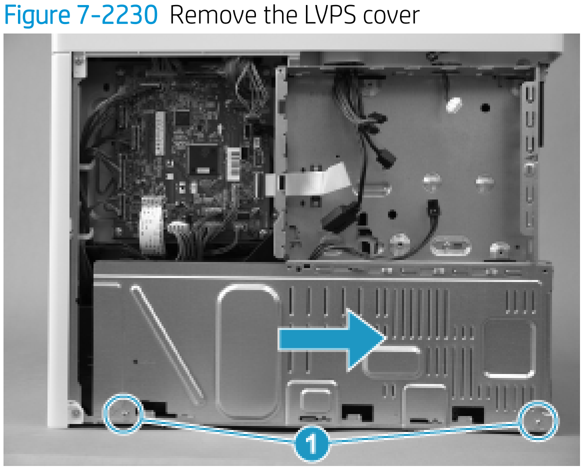
2. Release two tabs (callout 1) on the black plastic bracket. Hold the tabs in the released position, and then slide the bracket (callout 2) to the right to remove it from the formatter case.

Figure 7-2229 Remove the bracket



3. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

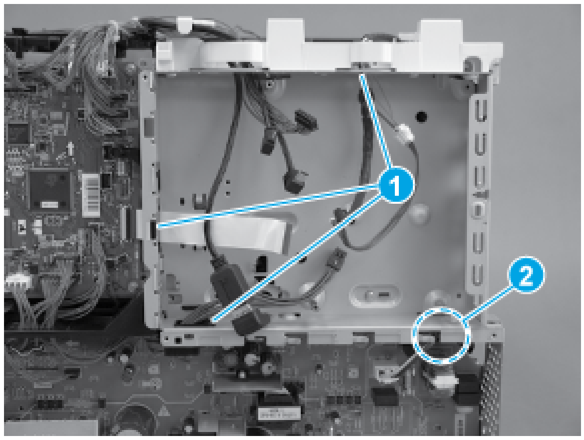
Figure 7-2230 Remove the LVPS cover



4. Pass two wire harnesses and one flat cable (callout 1) through the opening in the formatter case, and then release one wire harness from the retainer (callout 2).

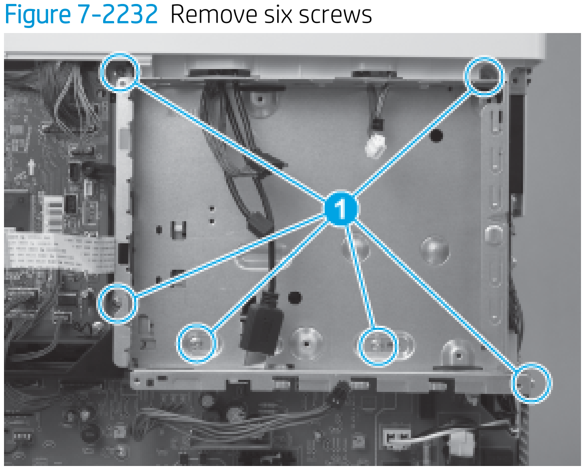
⚠ CAUTION: The flat cable might be attached to the formatter case with double-sided tape. Make sure that this tape is released, so that the flat cable is not damaged when the formatter case is removed.

Figure 7-2231 Release wire harnesses and flat cable



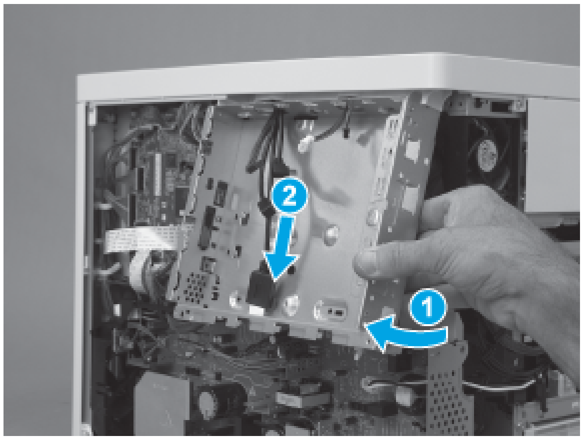
5. Remove six screws (callout 1).

Figure 7-2232 Remove six screws



6. Rotate the bottom of the formatter case away from the printer (callout 1), and then pull it down (callout 2) to release it.

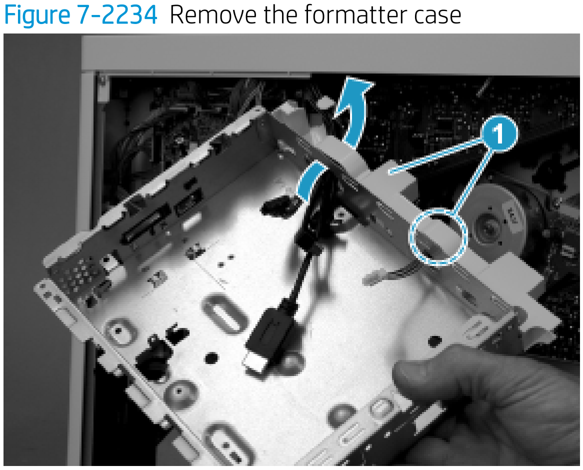
Figure 7-2233 Release the formatter case



7. Pass the wire harnesses through the opening in the formatter case to remove it.

IMPORTANT: If the formatter case is removed so that it can be replaced, make sure to transfer the memory PCA (island of data) and plastic bracket (callout 1) to the replacement case.

Figure 7-2234 Remove the formatter case

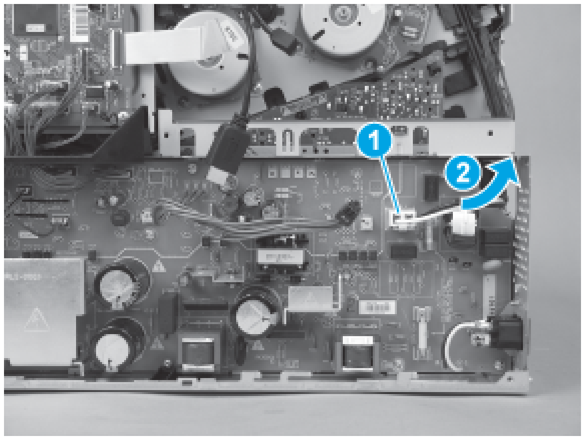


Remove the low-voltage power supply (LVPS)

Follow these steps to remove the low-voltage power supply (LVPS).

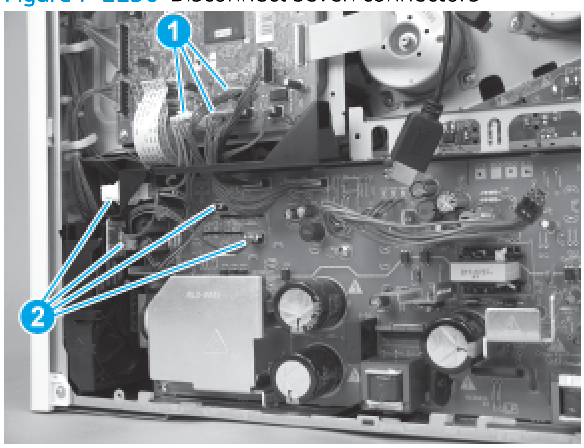
1. Disconnect one wire harness (callout 1), and then pass the wire harness through the opening (callout 2) in the chassis.

Figure 7-2235 Disconnect one wire harness



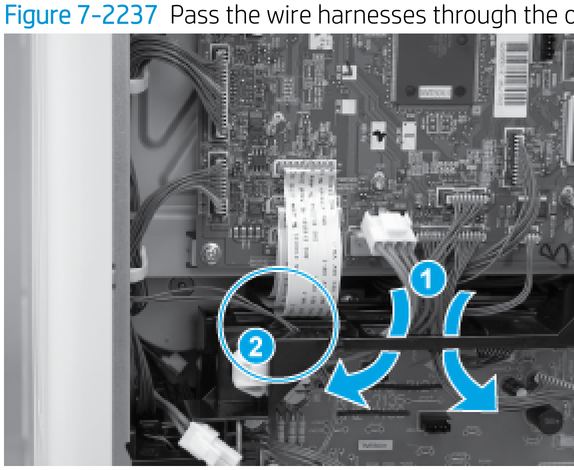
2. Disconnect three connectors on the DC controller (callout 1), and then disconnect four connectors (callout 2) on the LVPS.

Figure 7-2236 Disconnect seven connectors



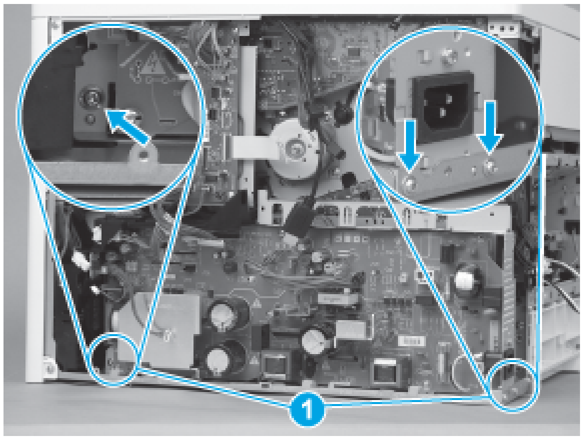
3. Pass the wire harnesses from the DC controller to the LVPS through the opening in the chassis (callout 1), and then release the wire harnesses from the retainer (callout 2).

Figure 7-2237 Pass the wire harnesses through the opening



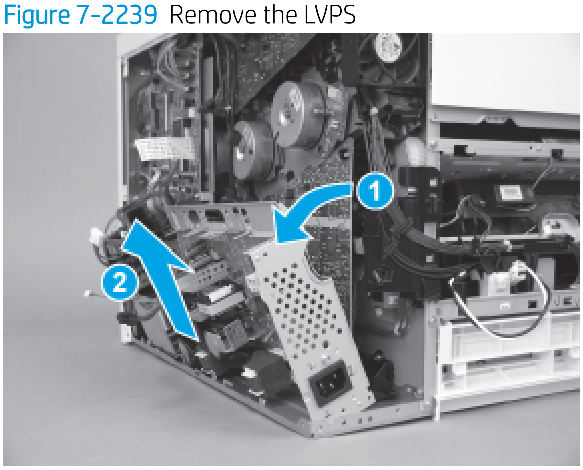
4. Remove three screws (callout 1).

Figure 7-2238 Remove three screws



5. Rotate the top of the LVPS away from the printer (callout 1), and then slide it up and out (callout 2) of the printer to remove it.

Figure 7-2239 Remove the LVPS

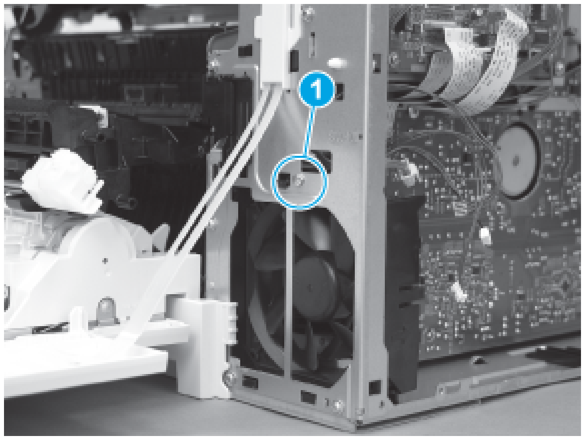


Remove the power supply fan (FM1)

Follow these steps to remove the power supply fan.

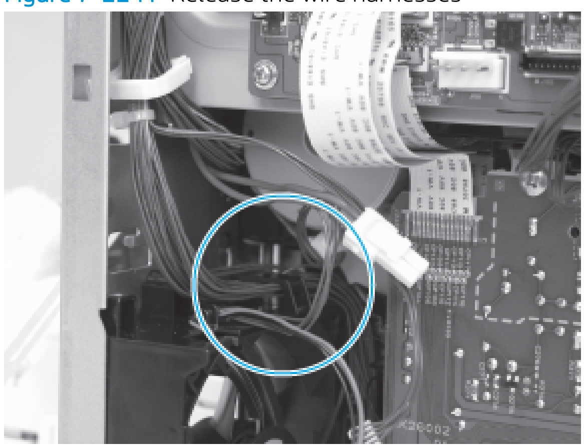
1. Remove one screw (callout 1).

Figure 7-2240 Remove one screw



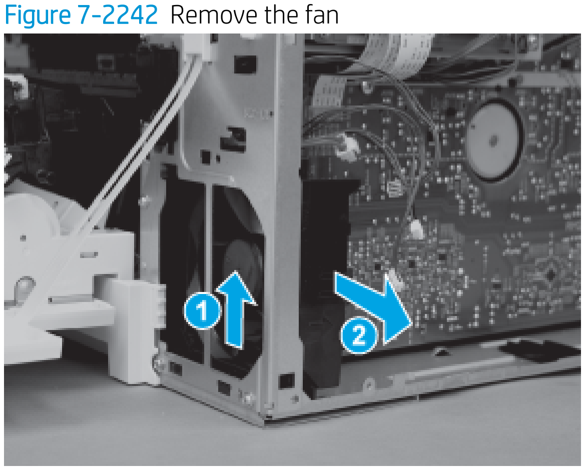
2. Release the wire harnesses from the retainer on the top of the fan bracket.

Figure 7-2241 Release the wire harnesses



3. Lift the fan up (callout 1), and then slide it out of the printer (callout 2) to remove it.

Figure 7-2242 Remove the fan

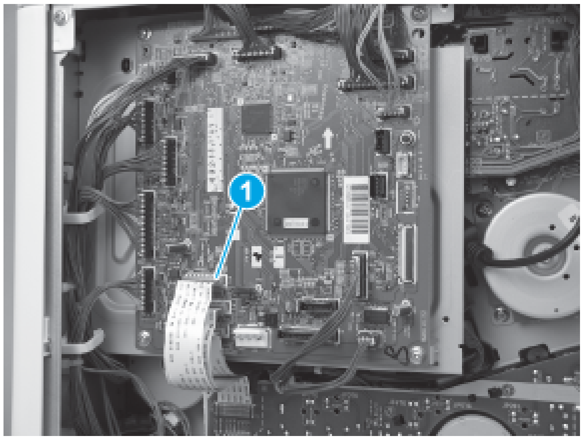


Remove the high-voltage power supply D (HVPSD)

Follow these steps to remove the high-voltage power supply D (HVPSD).

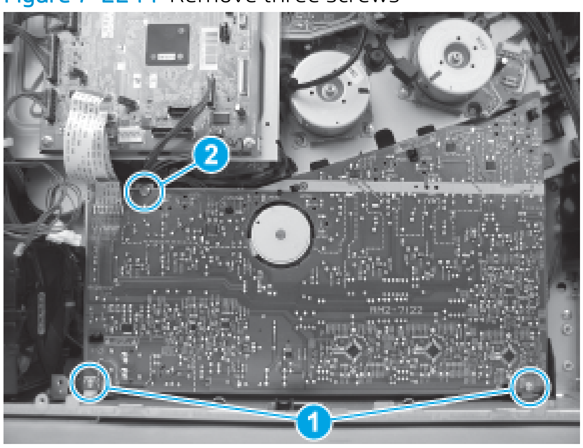
1. Disconnect one flat cable (callout 1) on the DC controller.

Figure 7-2243 Disconnect one flat cable



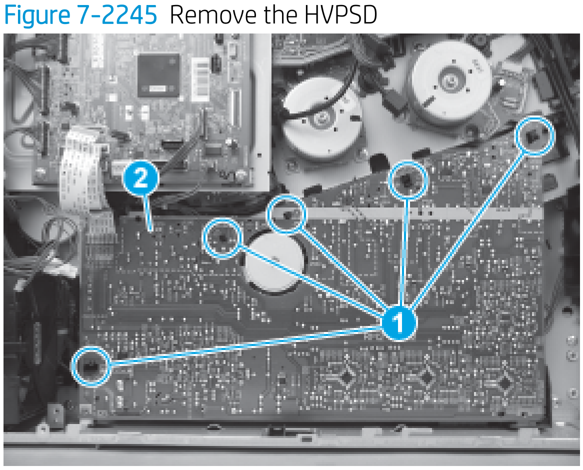
2. Remove two screws (callout 1), and then remove one self tapping screw (callout 2) on the HVPSD.

Figure 7-2244 Remove three screws



3. Release five tabs (callout 1), and then remove the HVPSD (callout 2).

Figure 7-2245 Remove the HVPSD

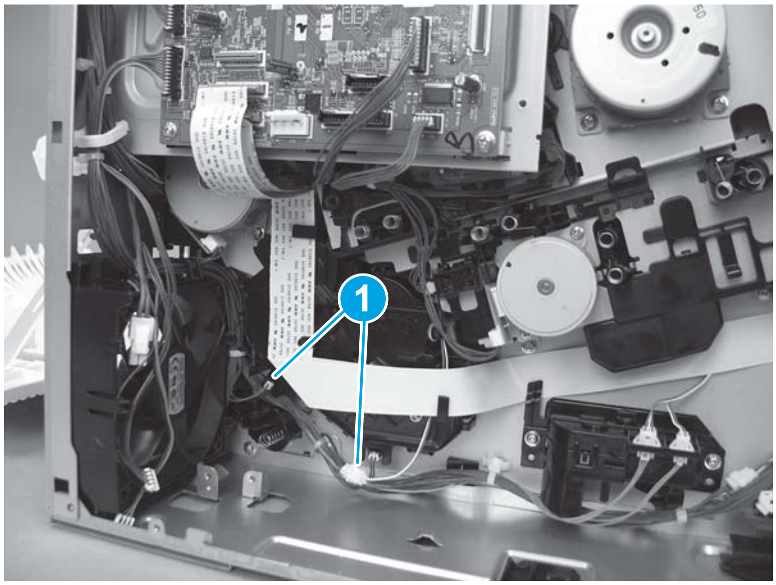


Remove the auto close assembly

Follow these steps to remove the auto close assembly.

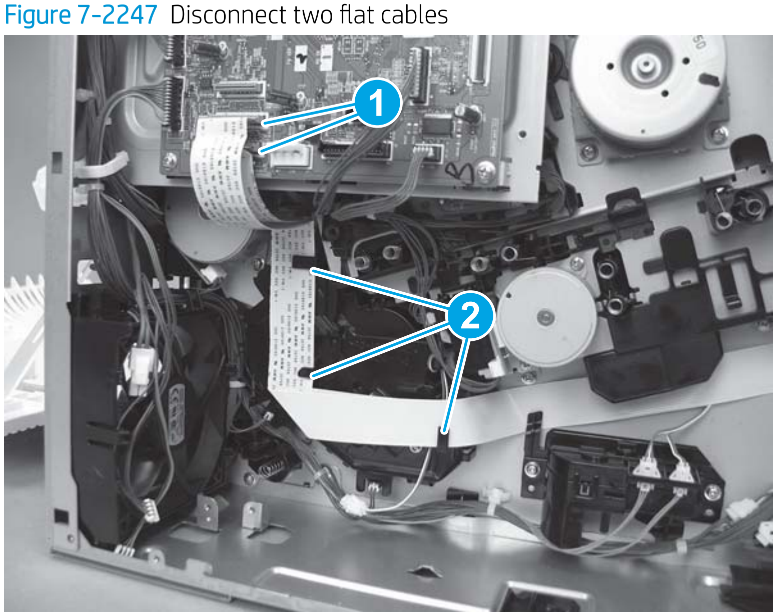
1. Disconnect two connectors (callout 1).

Figure 7-2246 Disconnect two connectors



2. Disconnect two flat cables (callout 1), and then release them from the retainers (callout 2).

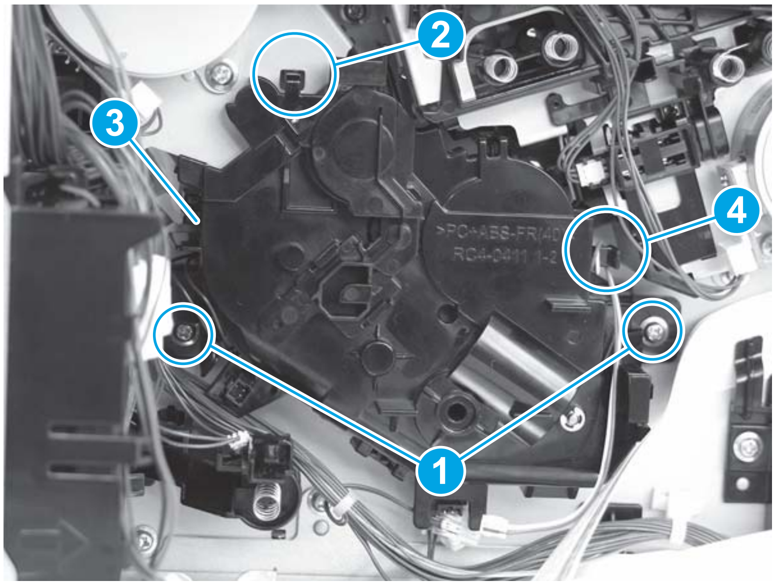
Figure 7-2247 Disconnect two flat cables



3. Remove two screws (callout 1), release one tab (callout 2), and then remove the lifter drive assembly (callout 3).

NOTE: Release one wire harness from the retainer (callout 4) as the assembly is removed.

Figure 7-2248 Remove the assembly



Remove the DC controller (DCC) and sheet-metal bracket

Follow these steps to remove the DC controller and sheet-metal bracket together.

NOTE: 

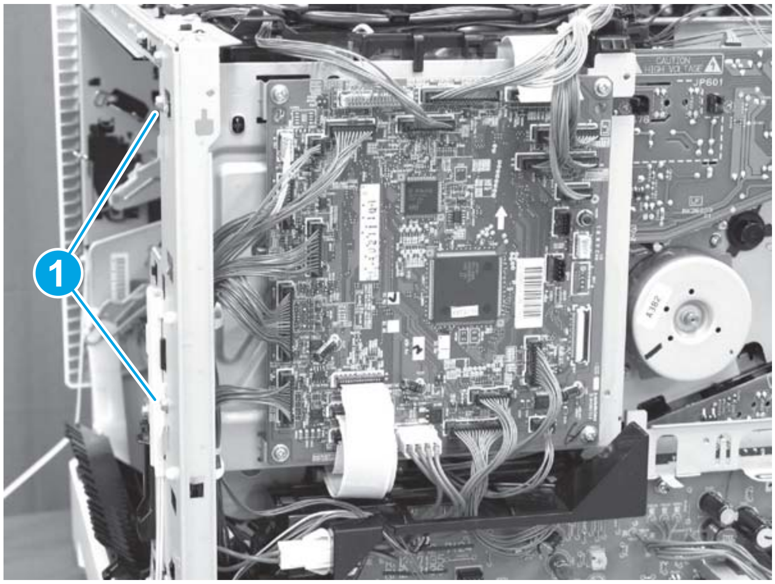
ESD sensitive part.

1. Disconnect all of the connectors, and then remove two screws (callout 1).

   Empty DCC connectors

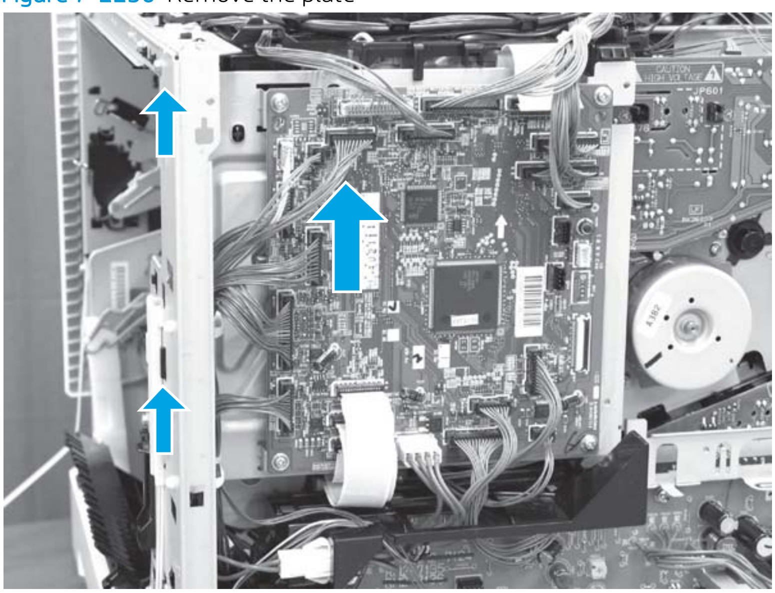
   - J140
   - J141
   - J143

Figure 7-2249 Remove two screws



2. Lift up on the DC controller and sheet-metal plate to remove it.

Figure 7-2250 Remove the plate

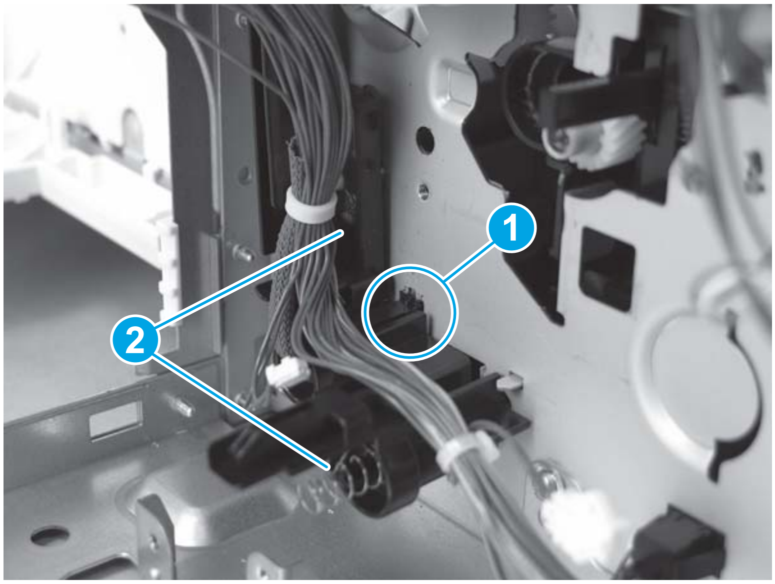


Remove the pickup drive assembly and motor (M5)

Follow these steps to remove the pickup drive assembly and motor.

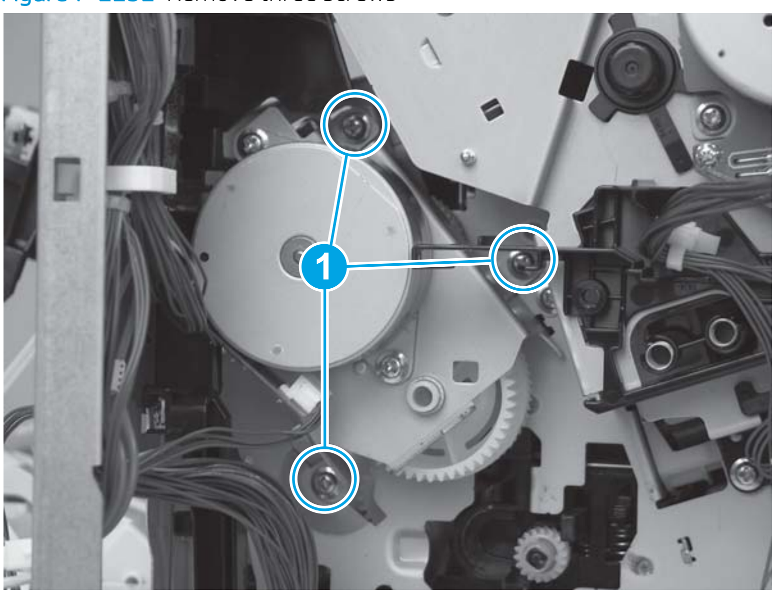
1. Release one tab (callout 1), and then move the guide (callout 2) out of the way.

Figure 7-2251 Move the guide out of the way



2. Remove three screws (callout 1).

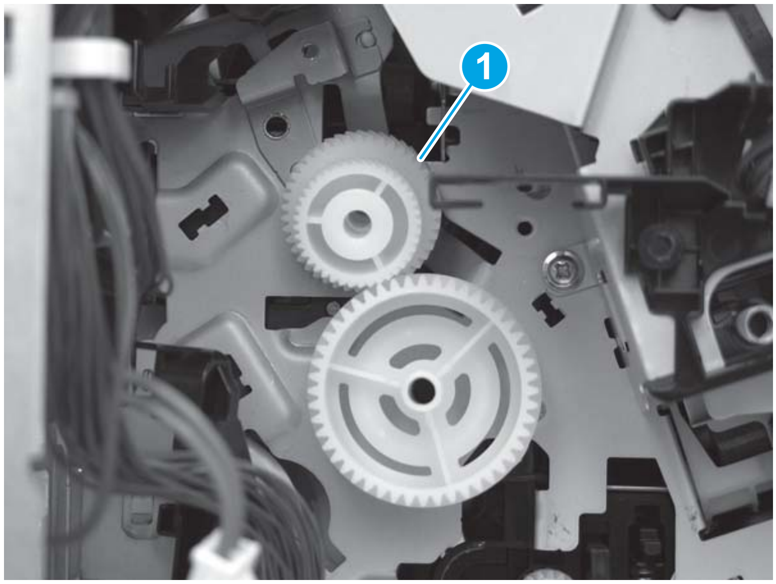
Figure 7-2252 Remove three screws



3. Remove the assembly.

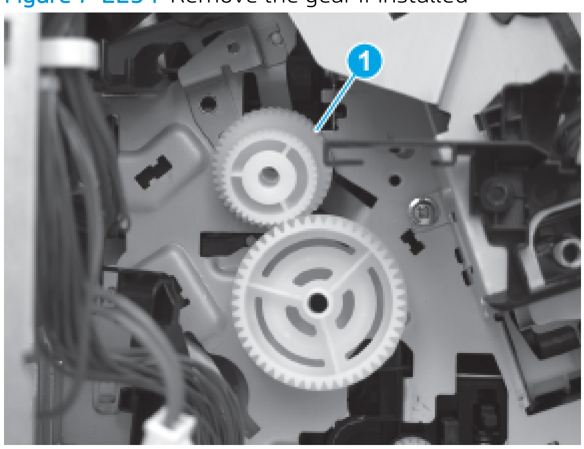
⚠ CAUTION: One gear on the back side of the assembly is not captive. Handle the assembly carefully.

Figure 7-2253 Remove the assembly



4. If the gear (callout 1) was not removed with the assembly in the previous step, remove it now.

Figure 7-2254 Remove the gear if installed

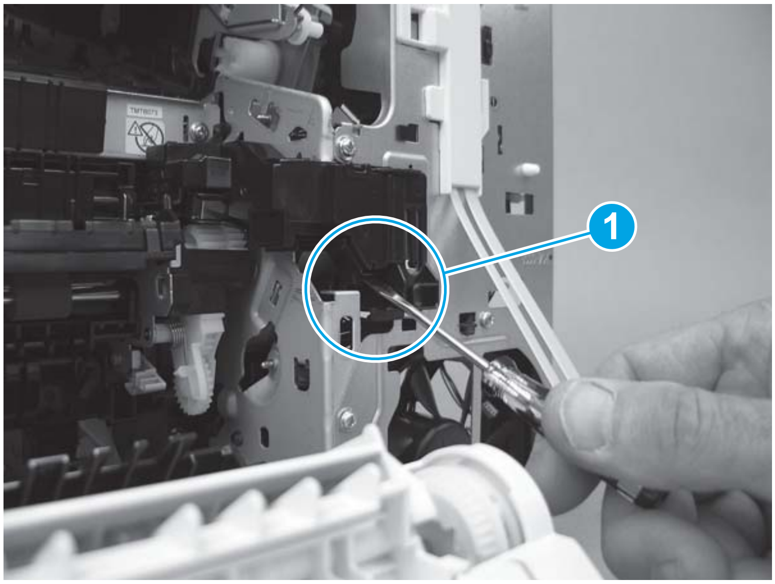


Remove the registration assembly

Follow these steps to remove the registration assembly.

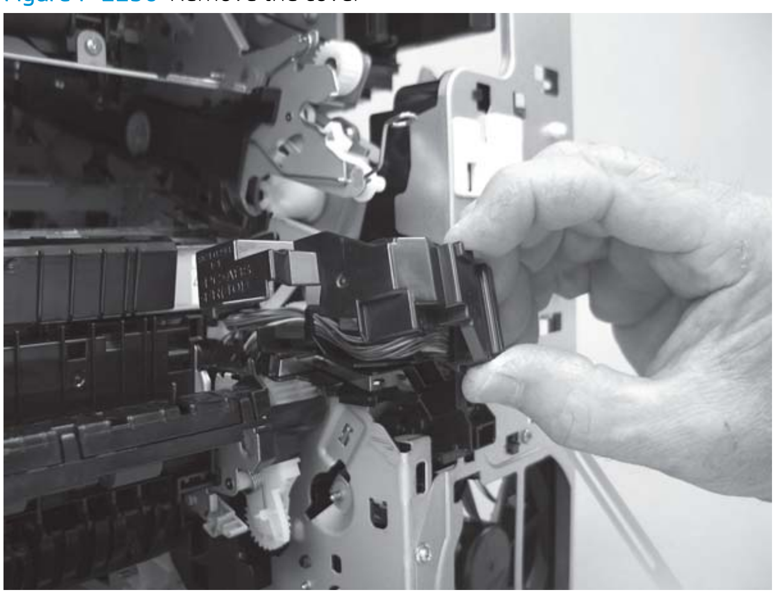
1. At the right side of the printer, release one tab (callout 1).

Figure 7-2255 Release one tab



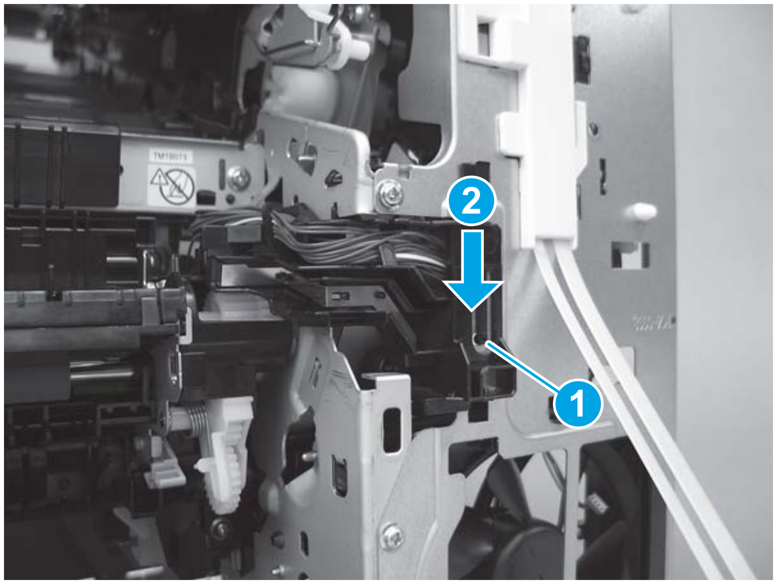
2. Remove the cover.

Figure 7-2256 Remove the cover



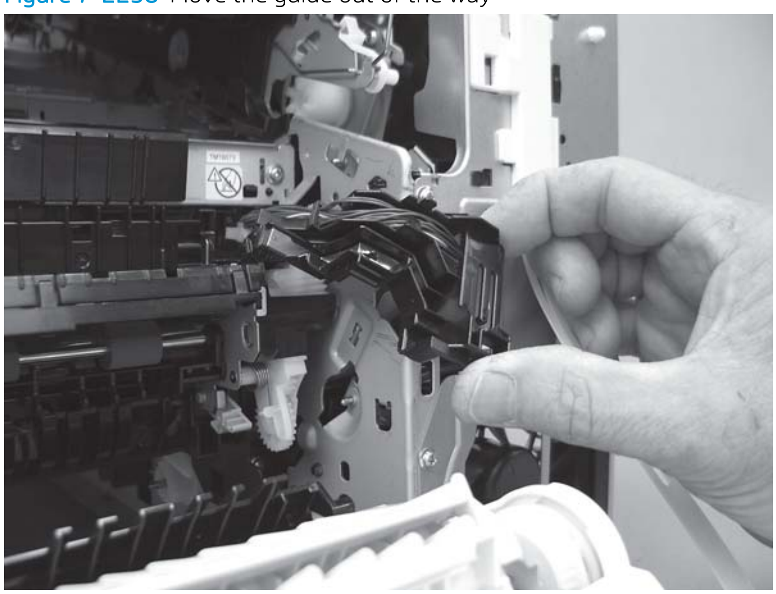
3. Release one tab (callout 1), and then push down on the guide (callout 2) to release it.

Figure 7-2257 Release the guide



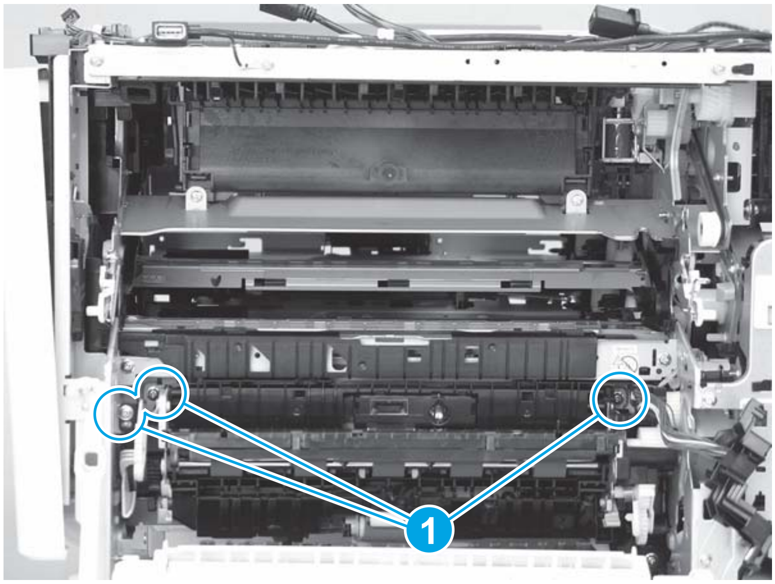
4. Move the guide out of the way.

Figure 7-2258 Move the guide out of the way



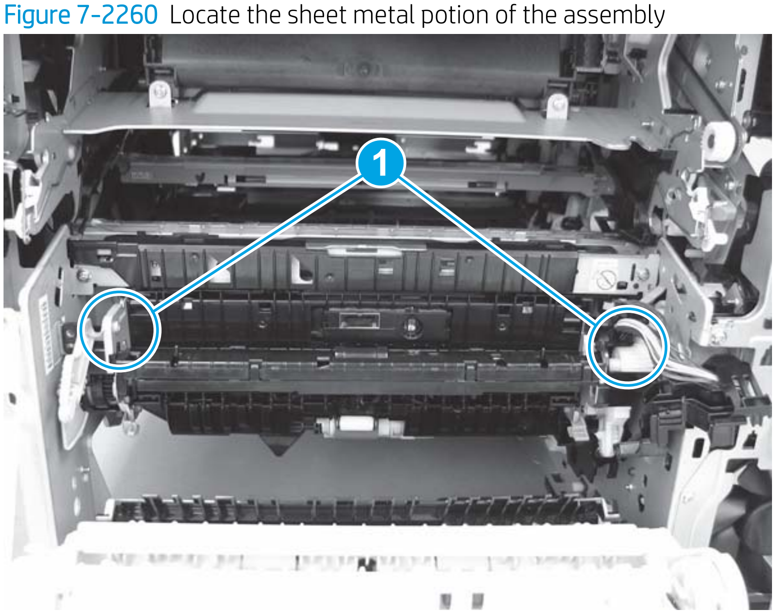
5. Remove three screws (callout 1).

Figure 7-2259 Remove three screws



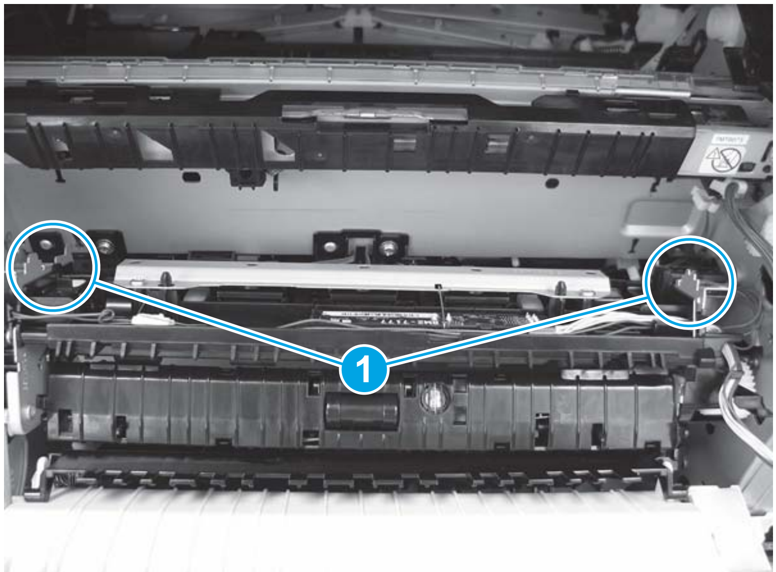
6. Before proceeding, locate the sheet metal portion (callout 1) of the assembly. When handling the assembly, use the sheet metal as handles.

Figure 7-2260 Locate the sheet metal potion of the assembly



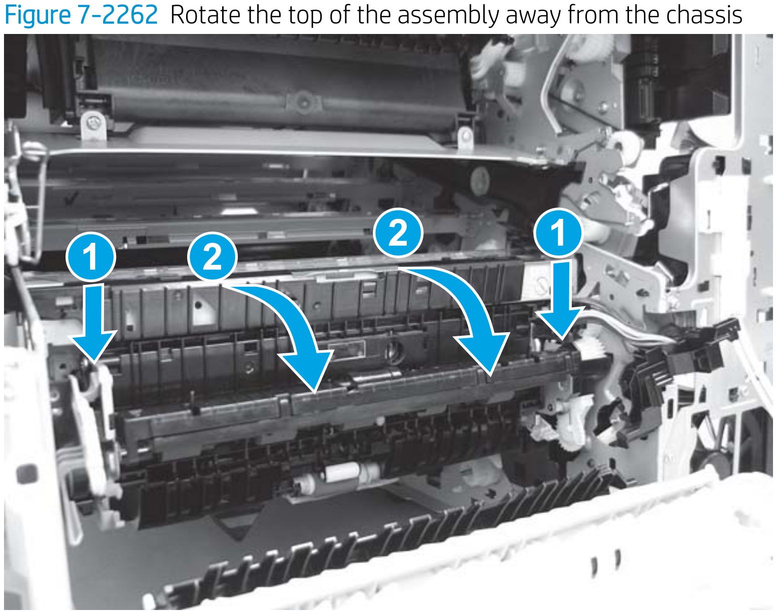
7. Before proceeding, take note of the sheet-metal tabs (callout 1) on the back of the assembly that fasten it to the chassis (the figure shows the assembly removed so the tabs can be viewed).

Figure 7-2261 Locate the sheet metal potion of the assembly



8. Grasp the sheet-metal handles (callout 1), and then rotate the top of the assembly away from the chassis (callout 2) to release the top tabs.

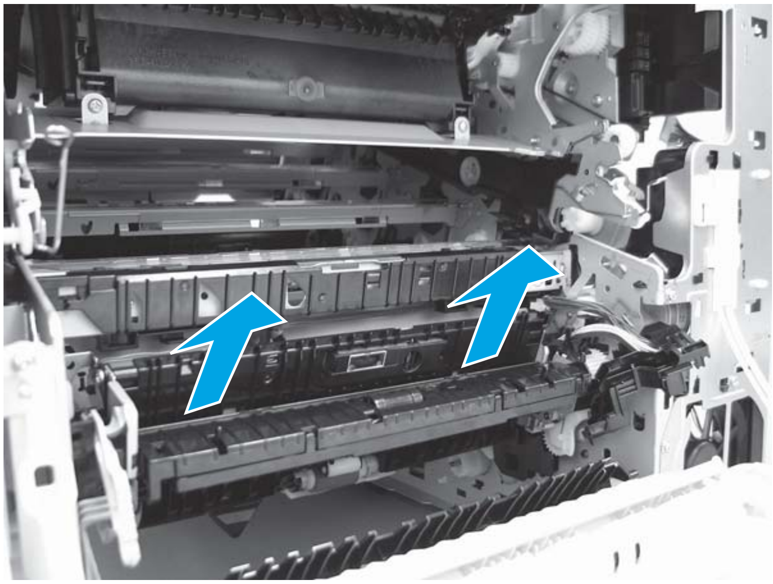
Figure 7-2262 Rotate the top of the assembly away from the chassis



9. Pull up on the assembly to release the bottom tabs.

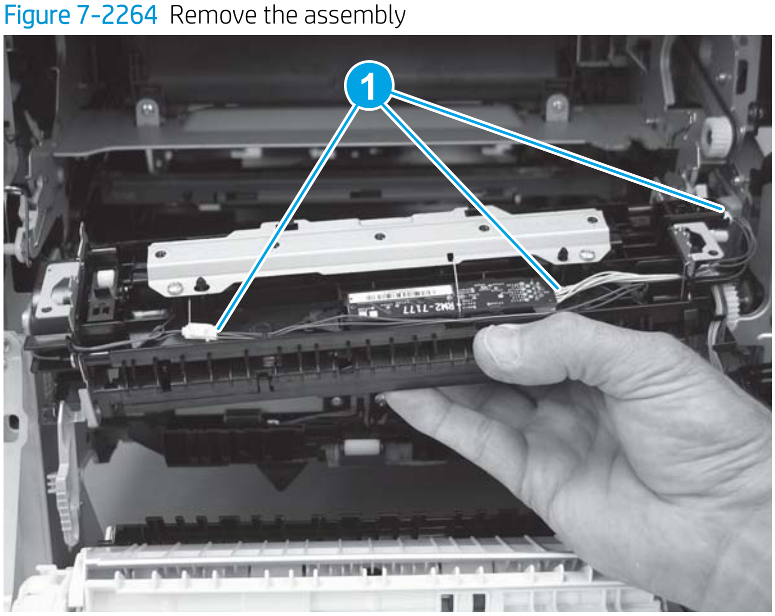
⚠ CAUTION: The assembly is still attached to the printer by a wire harness. Do not attempt to completely remove the assembly.

Figure 7-2263 Release the bottom tabs



10. Turn the registration assembly over to access the back side, disconnect three connectors (callout 1), and then remove the assembly.

Figure 7-2264 Remove the assembly



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Paper pickup assembly

Learn about removing and replacing the paper pickup assembly.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-82 Part information

Part number	Part description
RM2-6556-000CN	Paper pickup assembly (includes the Tray 2 paper pickup roller assembly)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the secondary transfer assembly

Follow these steps to remove the secondary transfer assembly.

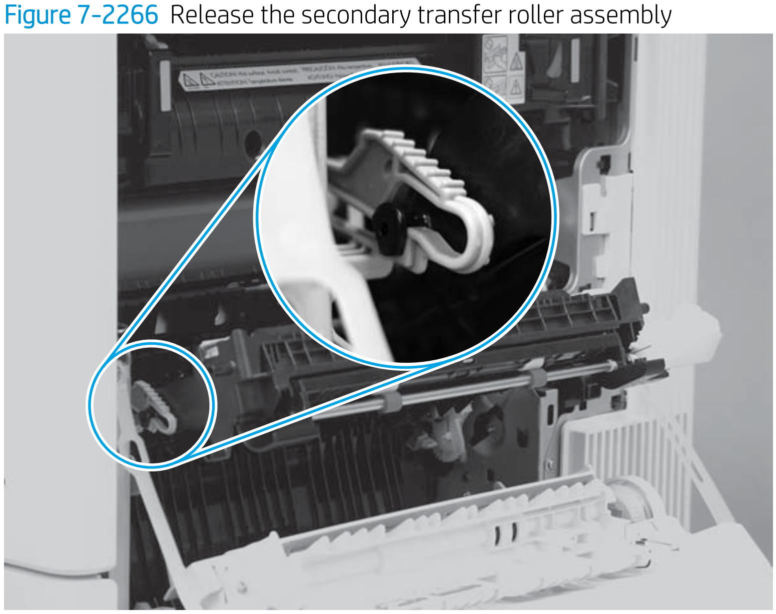
1. Open the right door.

Figure 7-2265 Open the right door

2. Release the blue arm, and then let the secondary transfer assembly rotate down to the half-way open position.

NOTE: The assembly should stop at the halfway down point—the pin will stop at the notch in the slot in the blue arm.

Figure 7-2266 Release the secondary transfer roller assembly



3. Carefully flex the top portion of the blue arm—as shown in the figure—to start to disengage it from the pin.

Figure 7-2267 Carefully flex the top portion of the blue arm

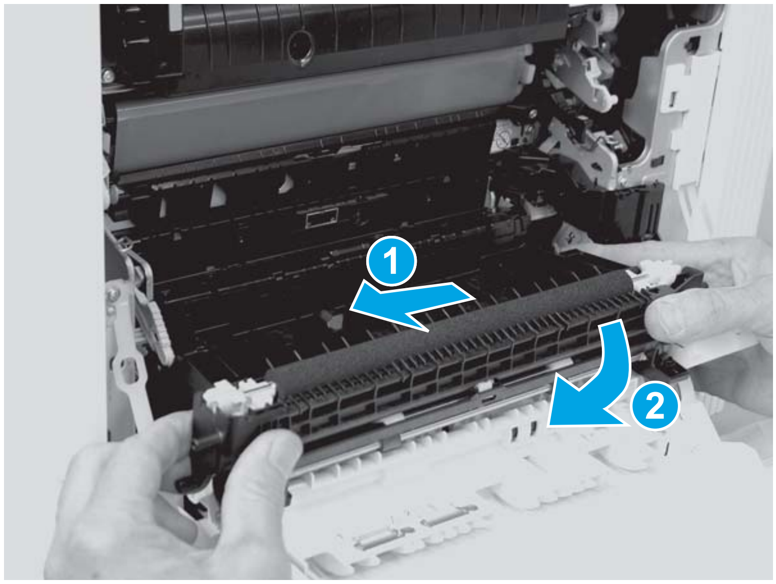
4. Continue to flex the blue arm until it disengages from the pin.

Figure 7-2268 Disengage the blue arm and pin

5. Slide the assembly toward the front of the printer to release it (callout 1), and then rotate it down and away from the printer to remove it (callout 2).

Reinstallation tip: Before removing the assembly, take note of where the assembly hinge pins fit into the holes provided in the printer.

Figure 7-2269 Remove the secondary transfer roller assembly



Remove the ITB

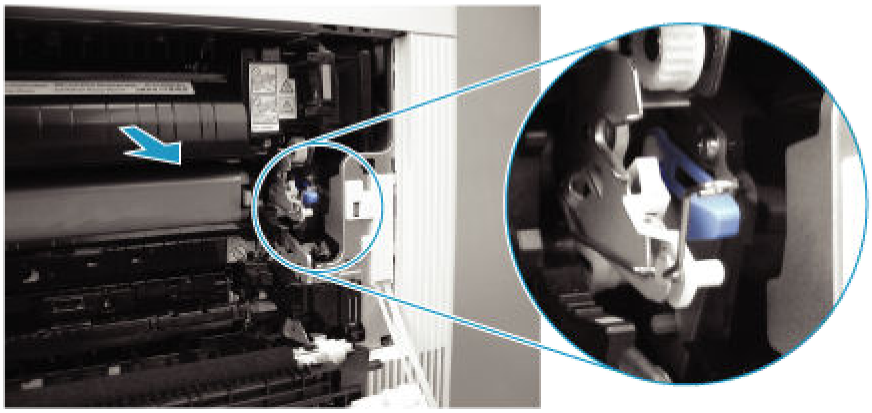
Follow these steps to remove the ITB.

1. Open the right door.

Figure 7-2270 Open the right door

2. Pull the blue lever to release the ITB drive coupling.

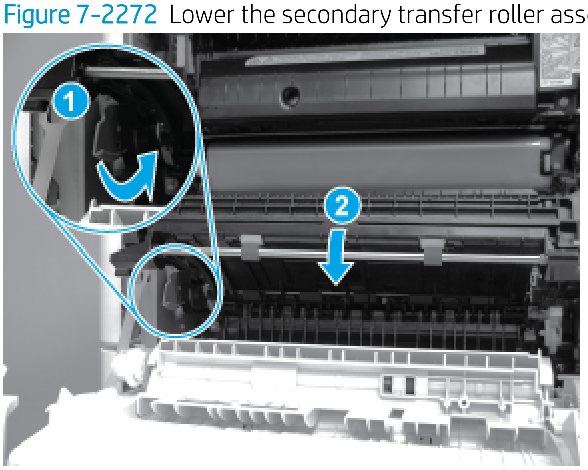
Figure 7-2271 Release the ITB drive coupling



3. Push in on the blue arm to release the secondary transfer roller assembly, and then completely lower the assembly.

NOTE: Press the blue arm on the secondary transfer roller assembly a second time to release the roller assembly when it stops at the halfway open position.

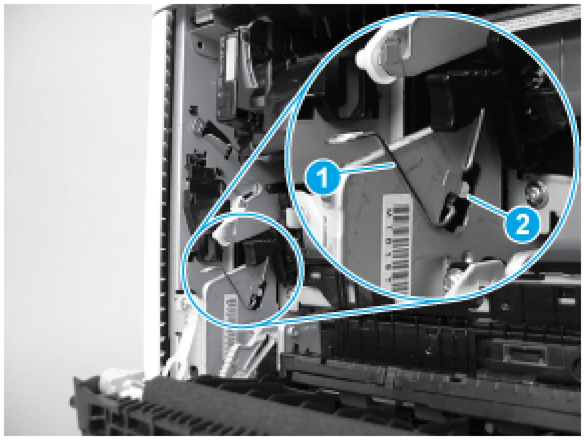
Figure 7-2272 Lower the secondary transfer roller assembly



4. Release the left-side ITB spring (callout 1) from the tab (callout 2).

NOTE: For late production M552/M553 printers and all M554/m555 printers, this ITB spring is not installed.

Figure 7-2273 Release the front-side ITB spring

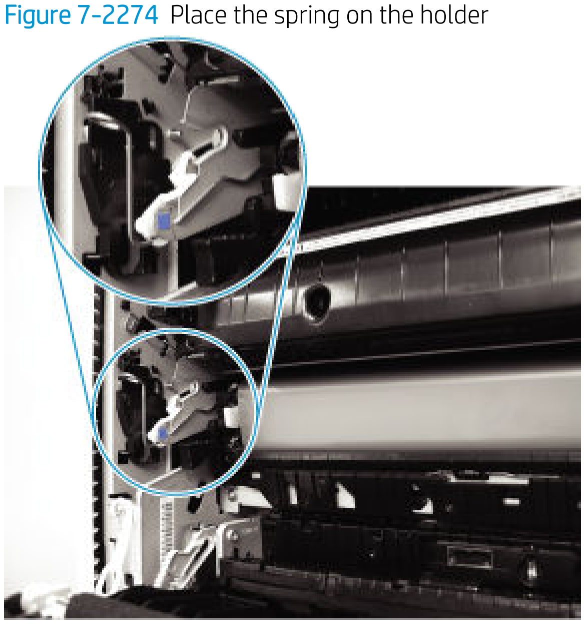


5. Place the left-side ITB spring on the holder to keep it out of the way.

NOTE: For late production M552/M553 printers and all M554/m555 printers, this ITB spring is not installed.

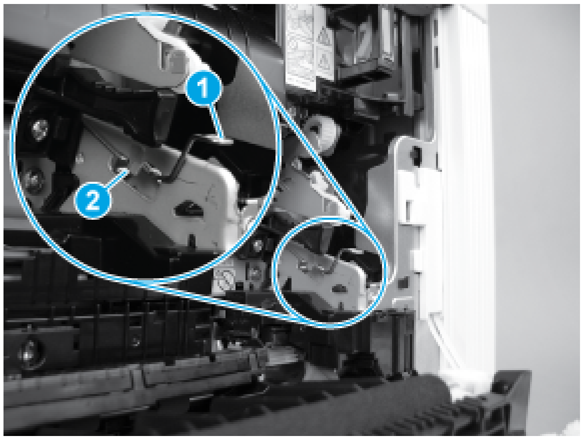
TIP: The holder is colored blue to help locate it.

Figure 7-2274 Place the spring on the holder



6. Release the right-side ITB spring (callout 1) from the tab (callout 2).

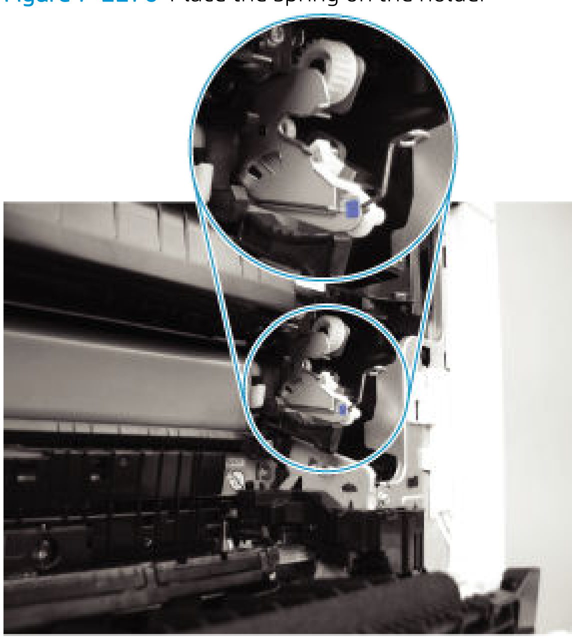
Figure 7-2275 Release the rear-side ITB spring



7. Place the right-side ITB spring on the holder to keep it out of the way.

TIP: The holder is colored blue to help locate it.

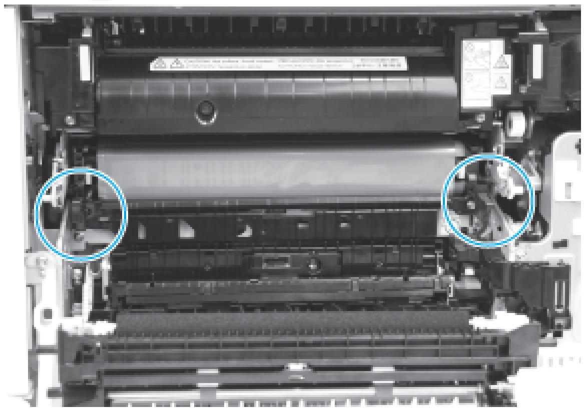
Figure 7-2276 Place the spring on the holder



8. Grasp the two blue handles on the ITB.

> ⚠ CAUTION: If the ITB is removed to access other assemblies in the printer, use care. The ITB is a sensitive assembly. Be careful when handling the ITB so that it is not damaged. Always place the ITB in a safe and protected location.

Figure 7-2277 Grasp the ITB handles



9. Pull the ITB out of the printer to remove it.

> ⚠ CAUTION: Do not touch the grey-plastic belt. Skin oils and fingerprints on the belt can cause print-quality problems.

Figure 7-2278 Remove the ITB

Remove Tray 2

Learn about removing Tray 2.

> NOTE: A SFP printer is shown in this section. However, the procedure is correct for all printer models.
>
> The figures in this section show Tray 2. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5. Always carefully read the instructions that accompany the figures.

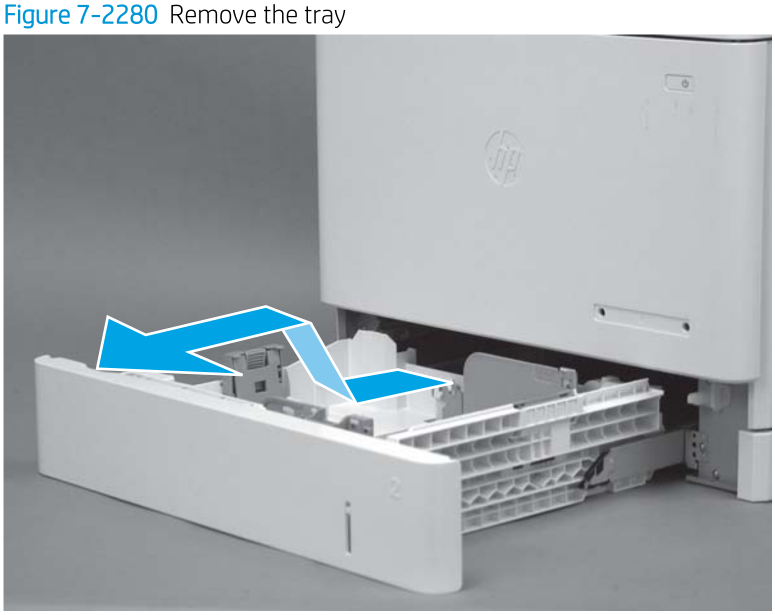
1. Pull the tray out until it stops.

Figure 7-2279 Pull the tray out

2. Lift the front of the tray, and then pull it out of the printer to remove it.

NOTE: **For a replacement tray:** If the tray has Fixed Tray Guides installed and are still required, move hardware to new tray. If necessary, order new kit: 3GY25–67901 Kit - Fixed Tray Guide. Only one kit required per engine.

Figure 7-2280 Remove the tray



Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-2281 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-2282 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

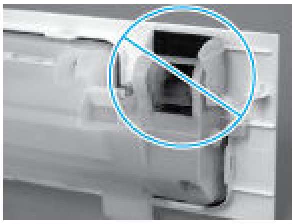
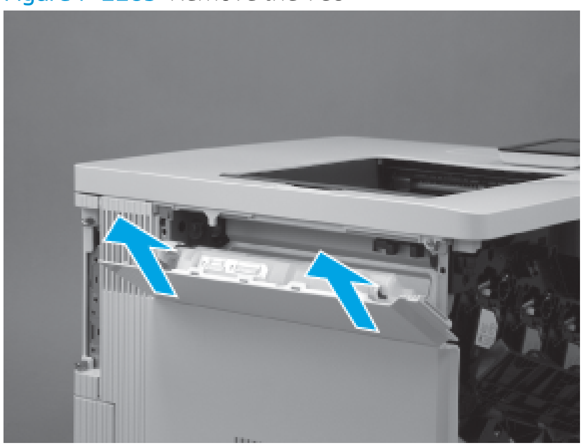


Figure 7-2283 Remove the TCU

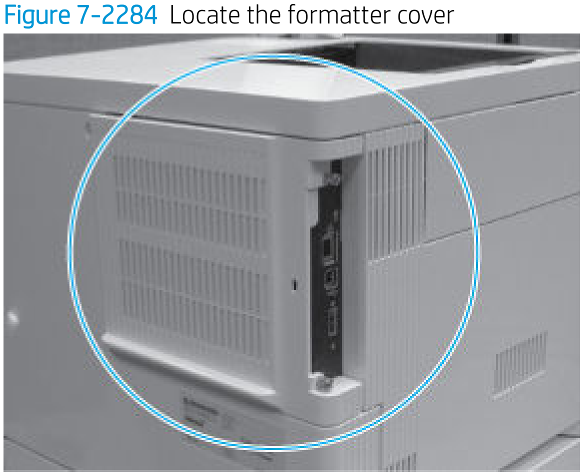


Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

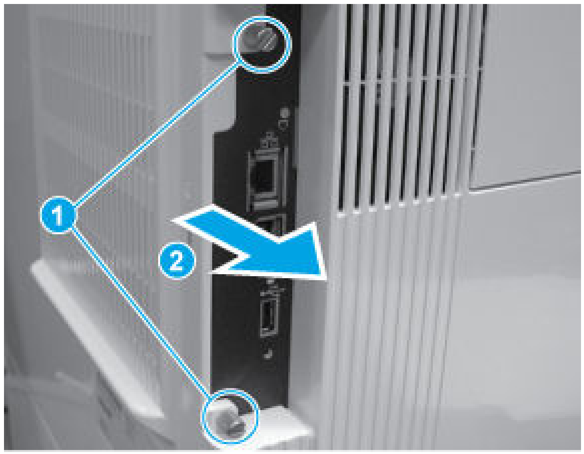
Figure 7-2284 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-2285 Loosen the thumbscrews



Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

NOTE: This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-2286 Locate the USB cover

2. Pull the cover off of the printer to remove it.

Figure 7-2287 Remove the cover

Remove the control panel (M553x/M555/E55040)

Follow these steps to remove the control panel.

NOTE: This procedure is for the M553x/M555/E55040 printers only.

M555 models: Removing the control panel is similar to the procedure below. For the M555, a flat cable connects the control panel to the formatter.

1. Tilt the control panel up.

Figure 7-2288 Tilt the control panel up

2. Use the small flat-blade screwdriver supplied in this kit to release the control-panel screws cover tabs.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-2289 Release the control-panel screws cover tabs

3. Rotate the cover up to remove it.

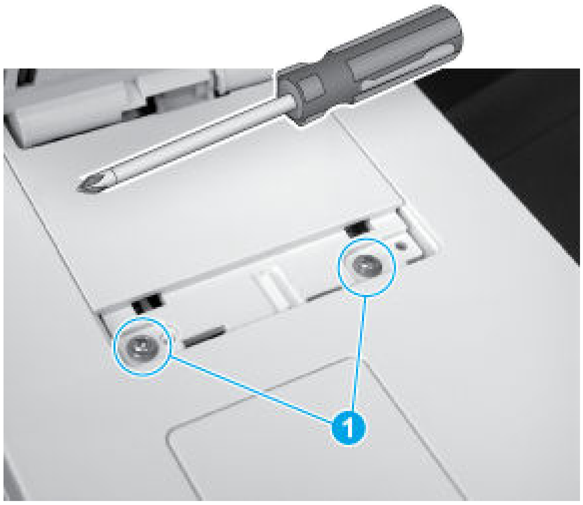
Figure 7-2290 Remove the cover

4. Use the small Phillips screwdriver supplied in this kit to remove two screws (callout 1).

IMPORTANT: Store the screws in a secure place where they cannot fall down into the printer.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-2291 Remove two screws



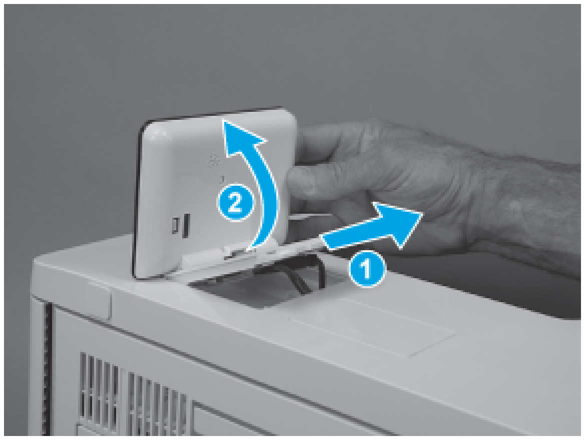
5. Rotate the control-panel base toward the front of the printer.

Figure 7-2292 Rotate the control-panel base up

6. Slightly slide the control-panel base toward the rear of the printer (callout 1) to release it, and then turn the control panel over (callout 2) to access the bottom side.

⚠ CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

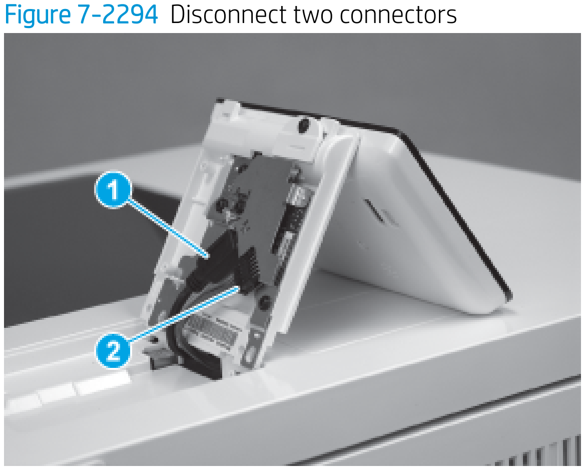
Figure 7-2293 Turn the control panel over



7. Disconnect one USB cable (callout 1), one connector (callout 2), and then remove the control panel.

NOTE: **M555 only**: Disconnect one flat cable (not shown), and then remove the control panel.

Figure 7-2294 Disconnect two connectors



Remove the formatter (SFP)

Follow these steps to remove the formatter.

NOTE: This procedure is for SFP models only.

1. Disconnect all of the connectors on the formatter.

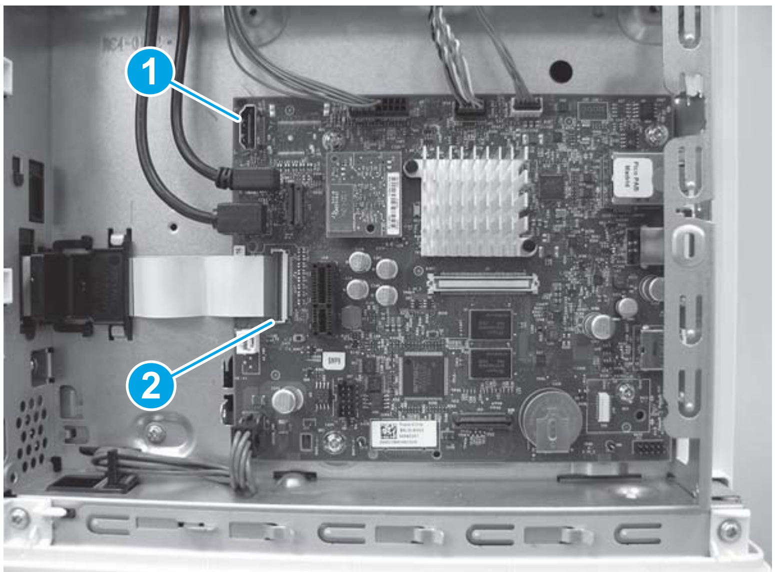
   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)

- All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
- All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
- M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)
- All models: J57
- All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

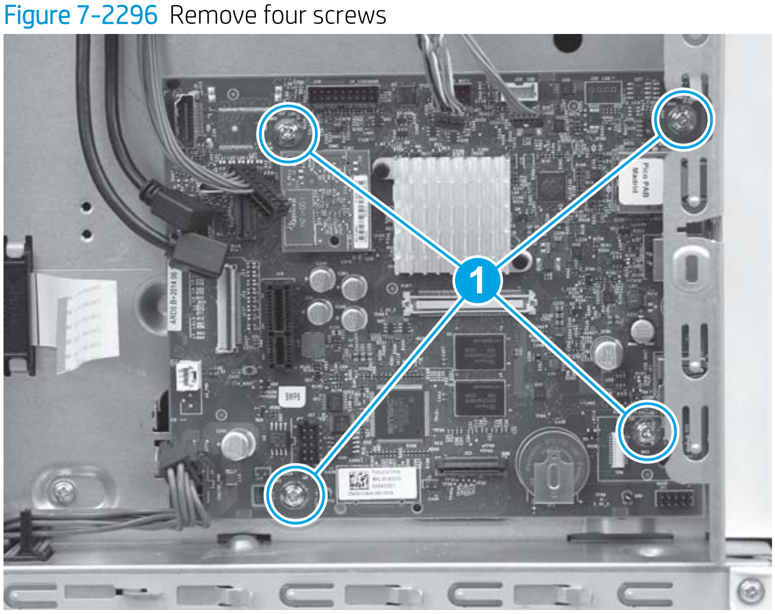
IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-2295 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-2296 Remove four screws



Remove the hard-disk drive (HDD)

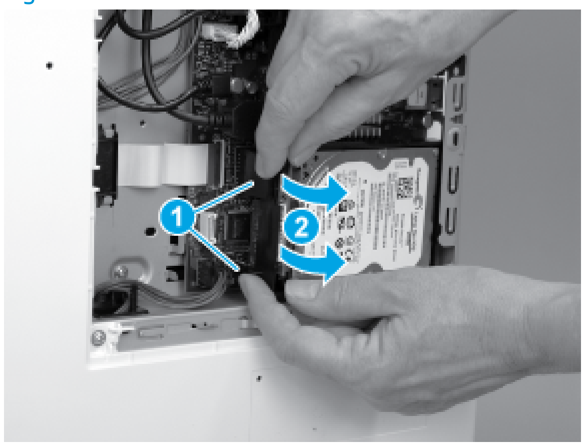
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

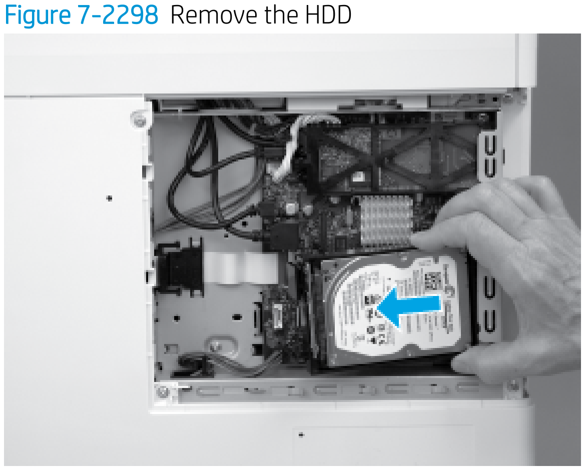
1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

   Figure 7-2297 Release the HDD

2. Slide the HDD away from the printer to remove it.

   Figure 7-2298 Remove the HDD

Remove the fax PCA (fax models)

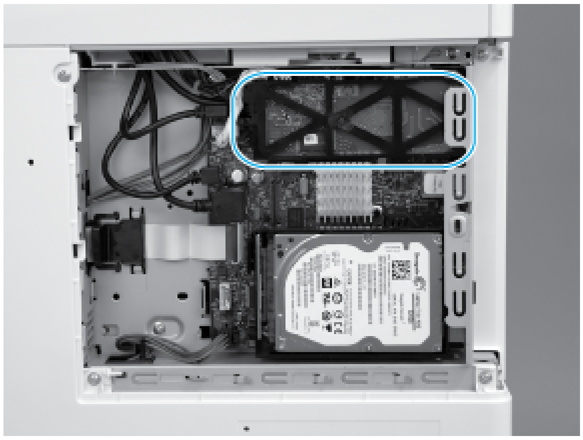
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

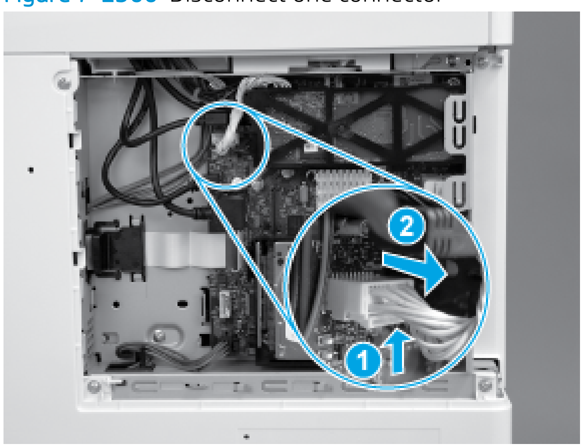
1. Locate the fax PCA component on the formatter.

Figure 7-2299 Locate the fax PCA



2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-2300 Disconnect one connector

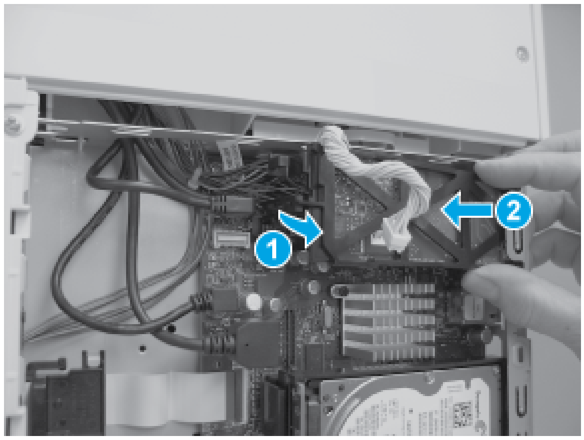


3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-2301 Release one latch

4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-2302 Remove the fax PCA



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

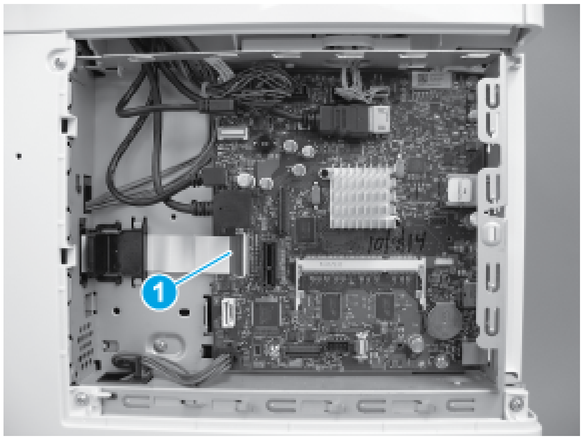
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

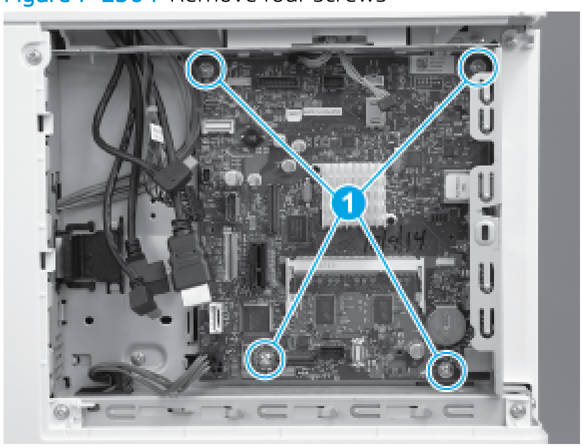
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-2303 Disconnect all connectors



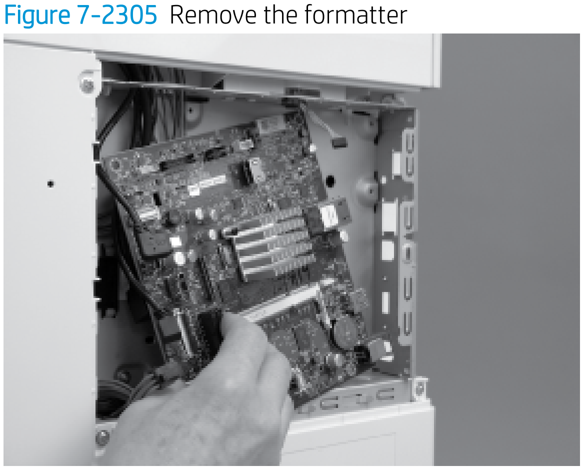
2. Remove four screws (callout 1).

Figure 7-2304 Remove four screws



3. Remove the formatter.

Figure 7-2305 Remove the formatter



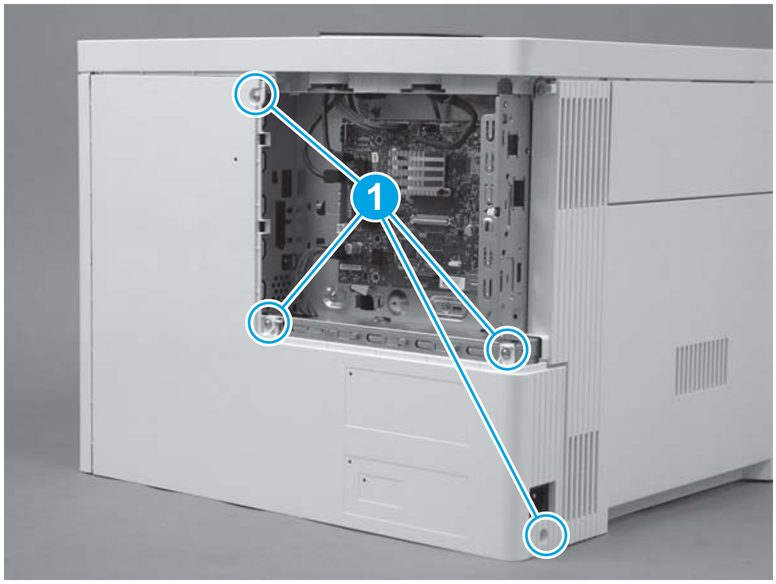
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

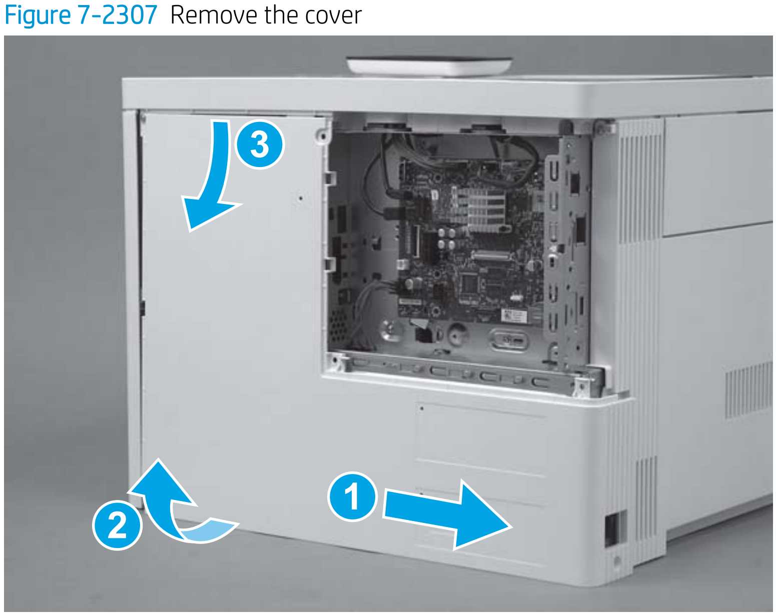
1. Remove four screws (callout 1).

Figure 7-2306 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-2307 Remove the cover



Remove the rear upper cover (MFP)

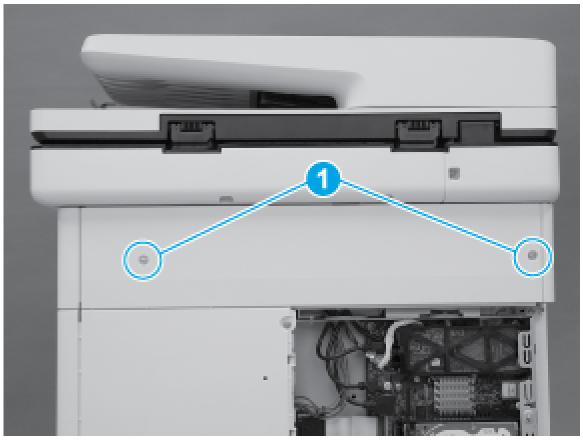
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

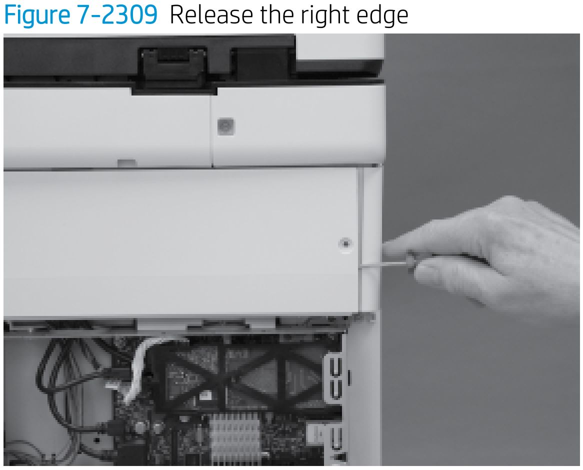
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-2308 Remove two screws



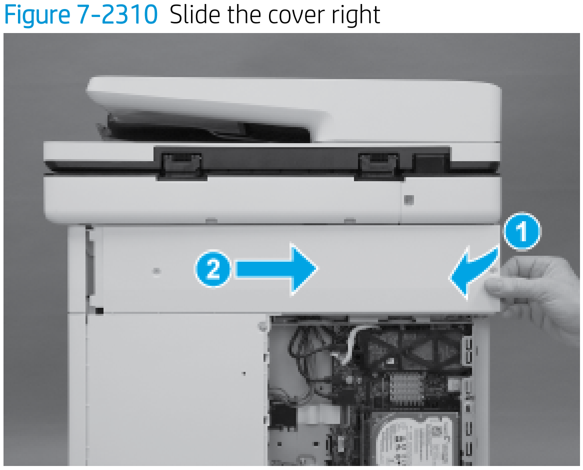
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-2309 Release the right edge



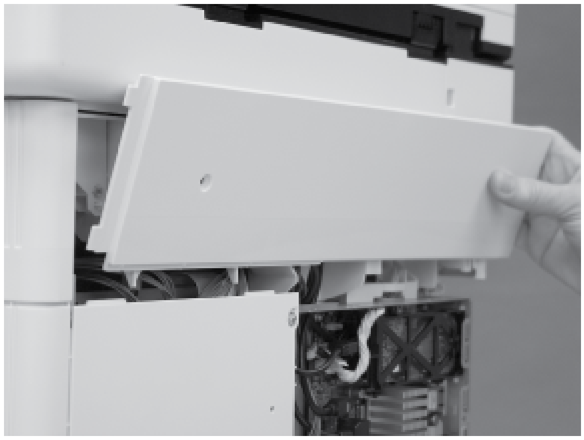
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-2310 Slide the cover right



4. Remove the cover.

Figure 7-2311 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-2312 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-2313 Remove the cover

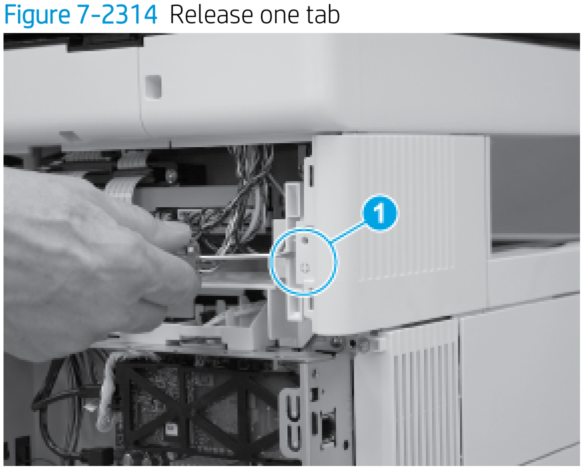
Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

NOTE: This procedure is for MFP models only.

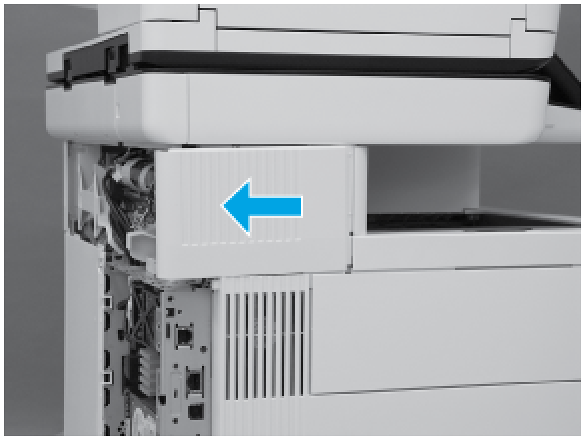
1. At the left side of the printer, release one tab (callout 1).

Figure 7-2314 Release one tab



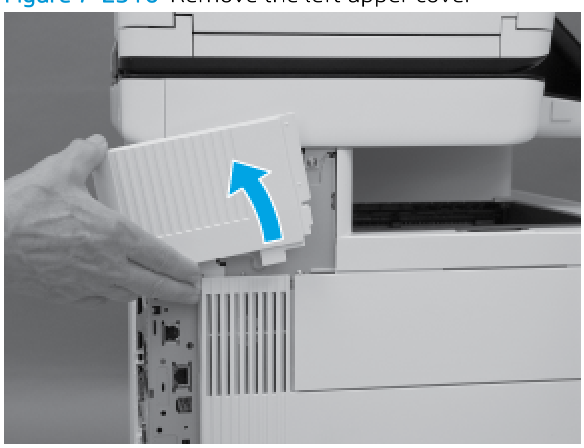
2. Slide the left upper cover toward the back of the printer.

Figure 7-2315 Slide the cover back



3. Rotate the cover up to remove it.

Figure 7-2316 Remove the left upper cover



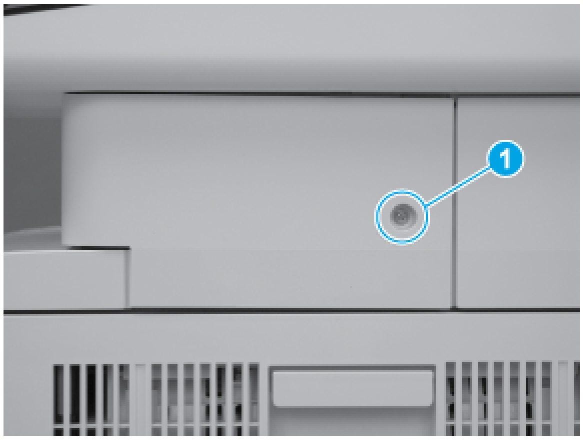
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-2317 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-2318 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-2319 Rotate the cover

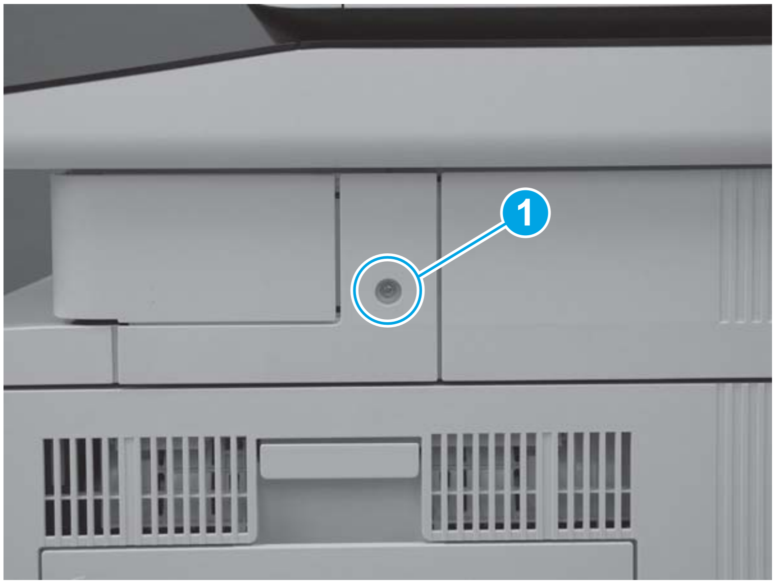
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

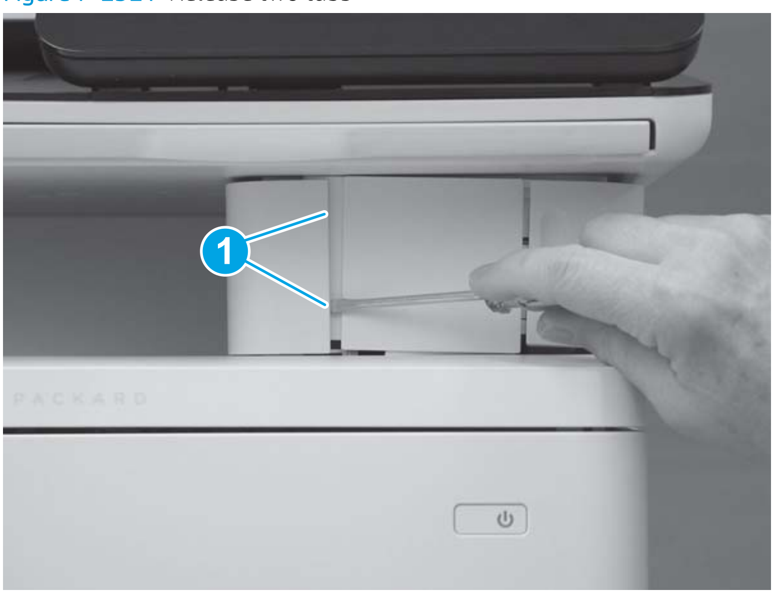
1. Remove one screw (callout 1).

Figure 7-2320 Remove one screw



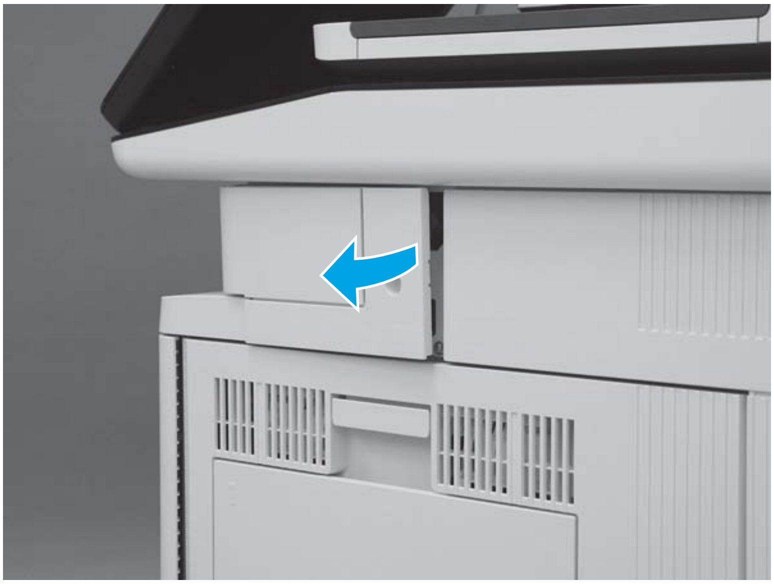
2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-2321 Release two tabs



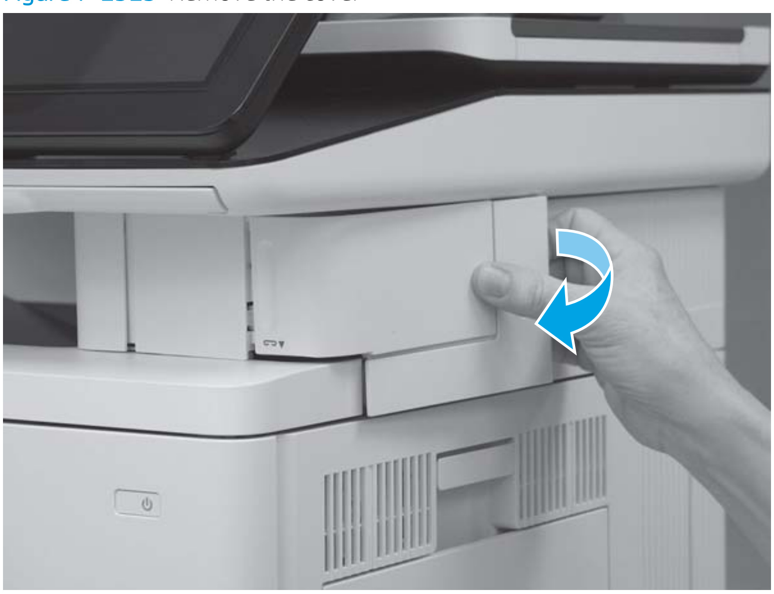
3. Release the back edge of the cover.

Figure 7-2322 Release the back edge of the cover



4. Rotate the cover away from the printer to remove it.

Figure 7-2323 Remove the cover



Remove the integrated scanner assembly (ISA) (MFP)

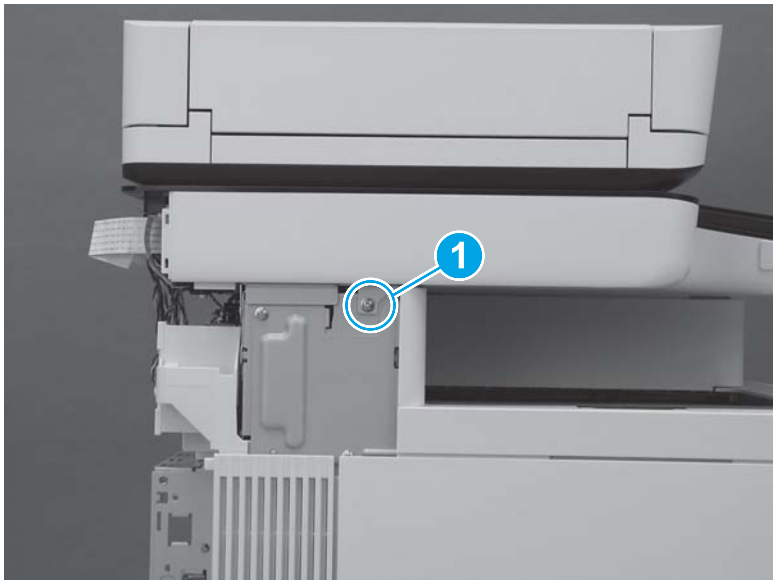
Follow these steps to remove the integrated scanner assembly (ISA).

NOTE: This procedure is for MFP models only.

NOTE: The ISA includes the document feeder, image scanner, scanner control board (SCB), control panel, keyboard (flow models) and NFC PCA (not all models).

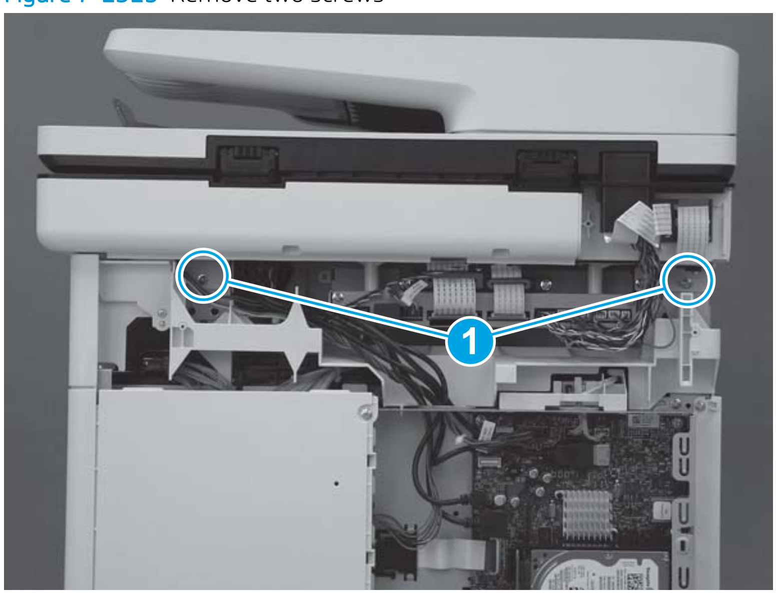
1. At the left side of the printer, remove one screw (callout 1).

Figure 7-2324 Remove one screw



2. At the back of the printer, remove two screws (callout 1).

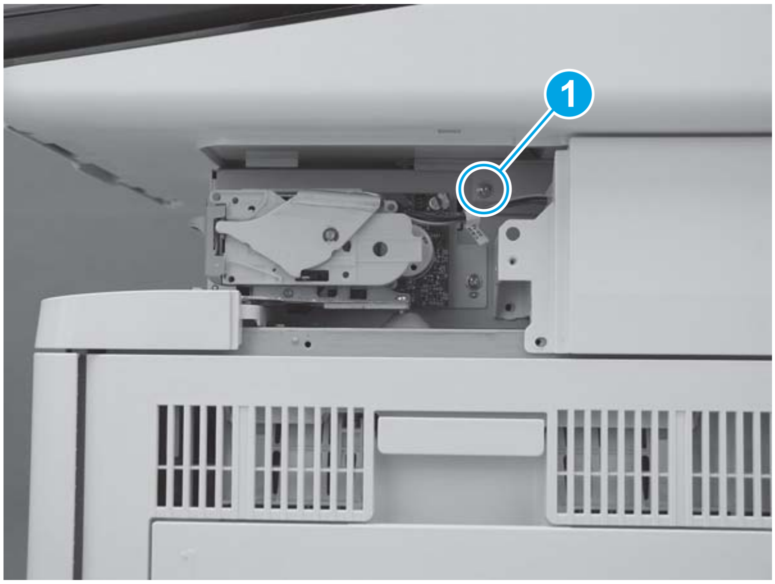
Figure 7-2325 Remove two screws



3. At the right side of the printer, remove one screw (callout 1).

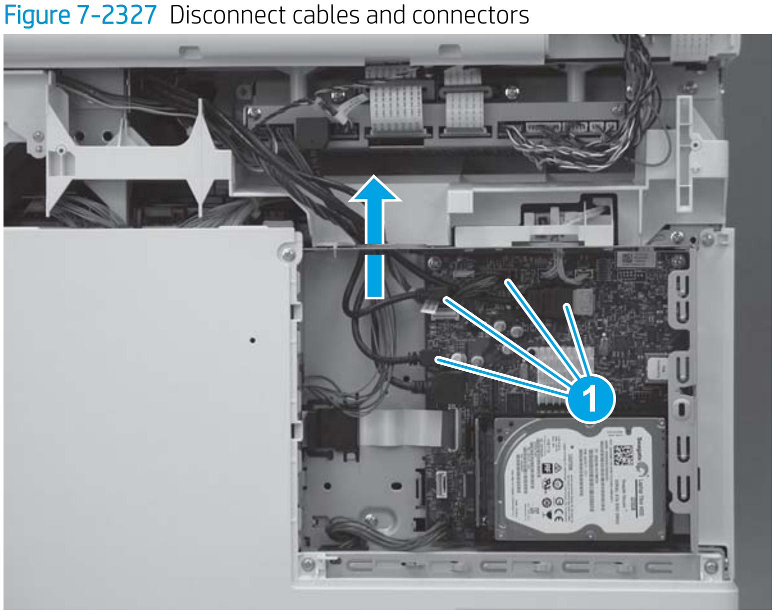
NOTE: The M577z is shown in the figure below. The procedure is correct for all MFP models.

Figure 7-2326 Remove one screw



4. Disconnect four connectors (callout 1) on the formatter, and then pass the wire harnesses and cables through the top opening in the formatter case (callout 2).

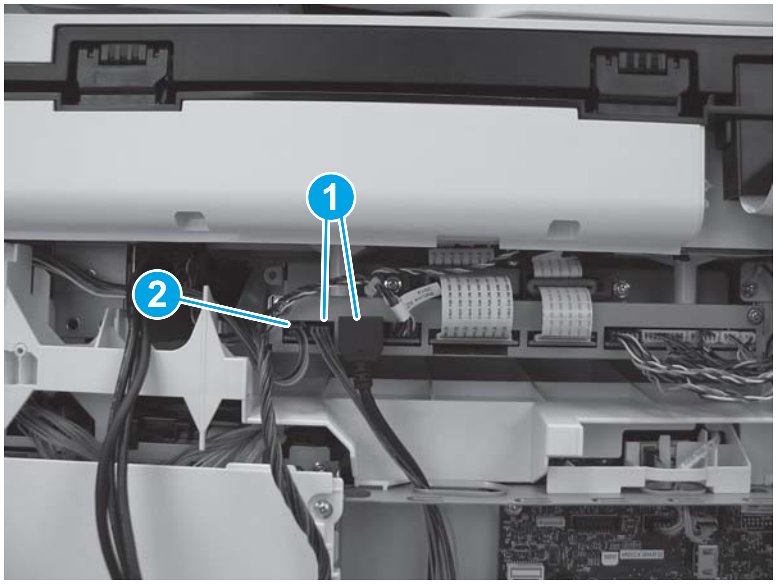
Figure 7-2327 Disconnect cables and connectors



5. Disconnect two connectors on the scanner control board (callout 1).

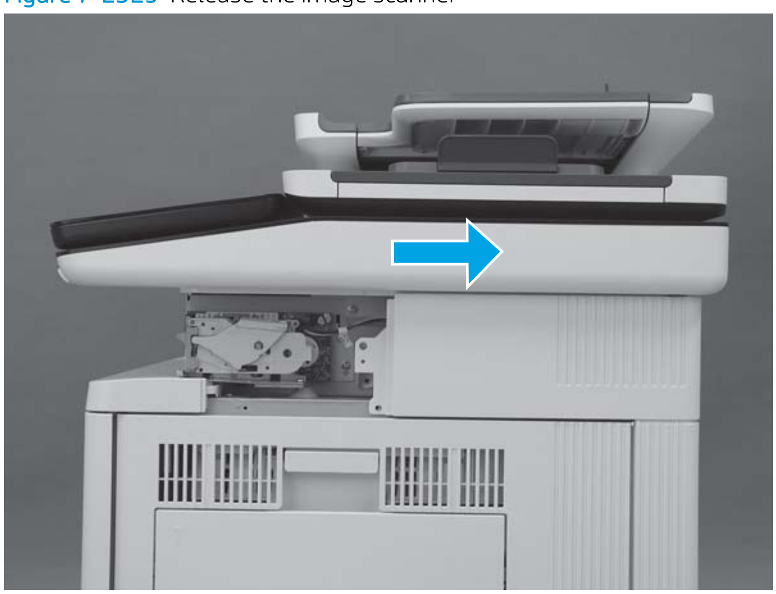
   MFP stapler models: Disconnect one connector for the stapler on the scanner control board (callout 2).

   Figure 7-2328 Disconnect connectors

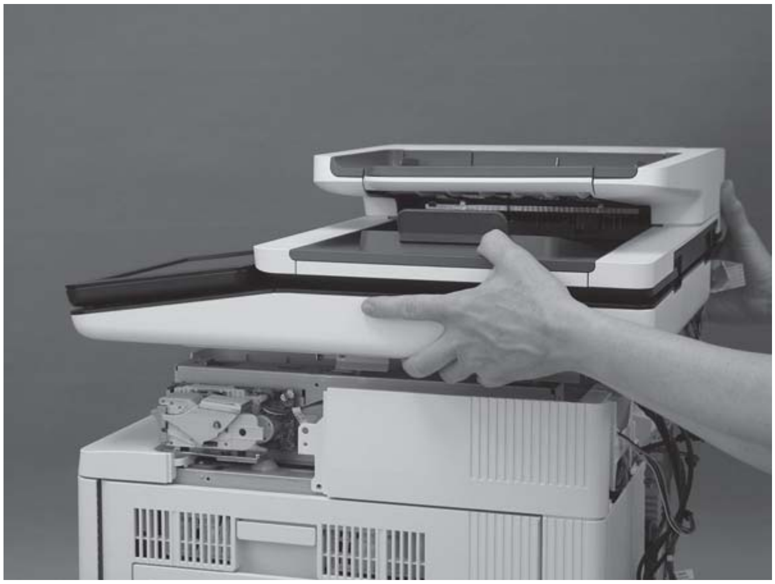
6. Slide the image scanner toward the back of the printer to release it.

   Figure 7-2329 Release the image scanner

7. Lift the ISA straight up to remove it.

Figure 7-2330 Remove the ISA



Remove the right upper cover (MFP)

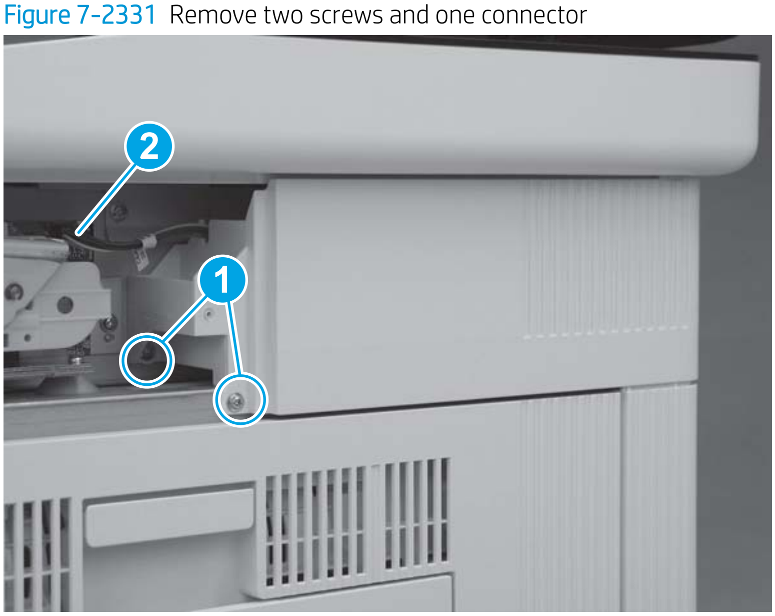
Follow these steps to remove the right upper cover.

NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Figure 7-2331 Remove two screws and one connector

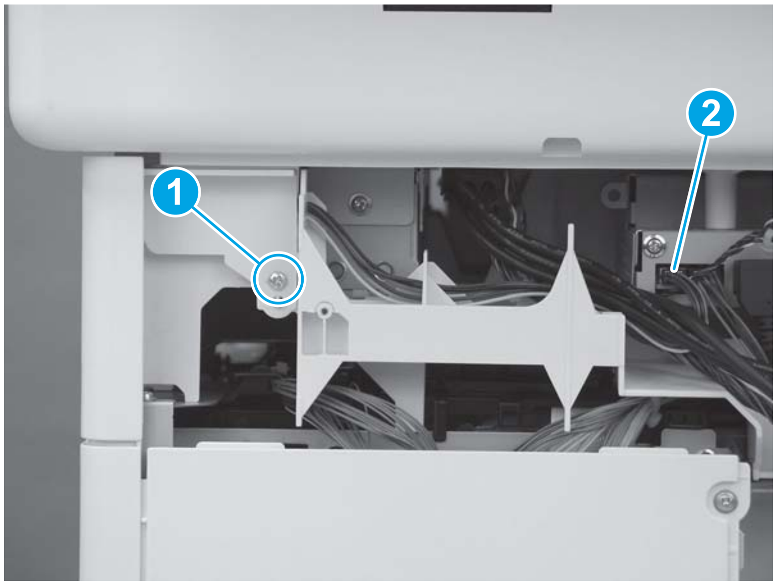


2. At the back of the printer, remove one screw (callout 1).

M577/M578z: Disconnect one connector (callout 2).

Reinstallation tip: This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

Figure 7-2332 Remove one screw and connector



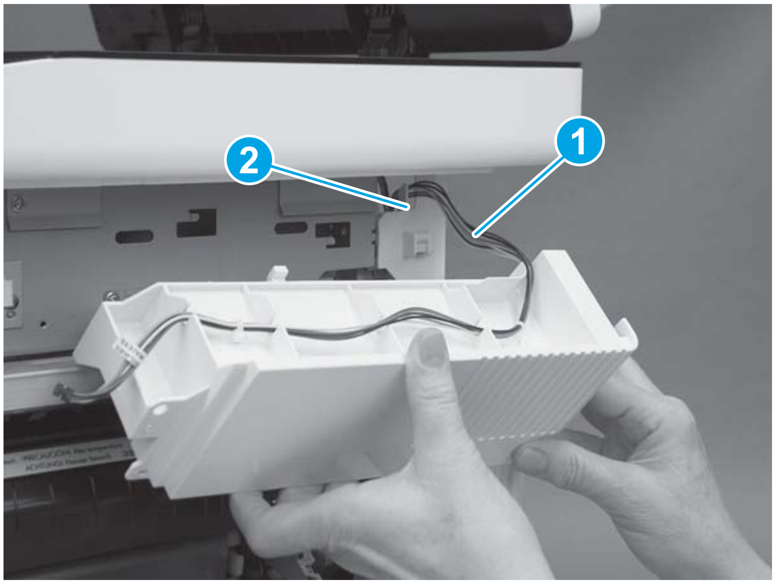
3. Slide the cover toward the back of the printer.

Figure 7-2333 Slide the cover

4. Lift the cover away from the printer to remove it.

   M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

   Figure 7-2334 Remove the cover

Remove the left cover

Follow these steps to remove the left cover.

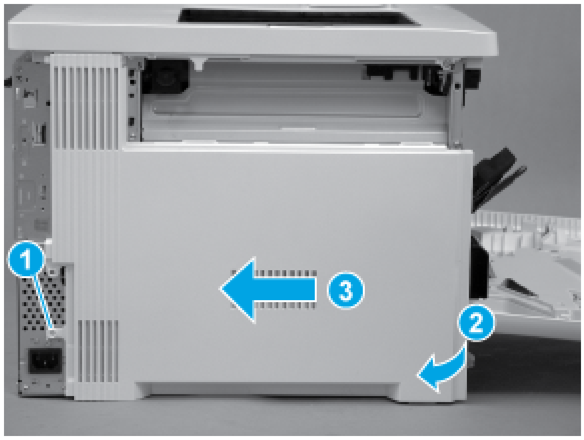
1. At the left side of the printer, remove one screw (callout 1).

   Figure 7-2335 Remove one screw

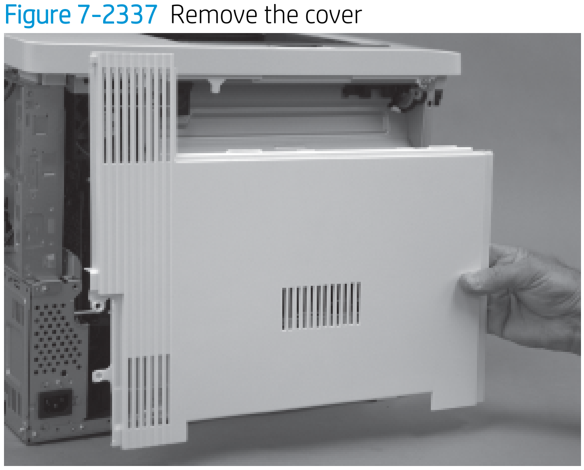
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-2336 Release the cover



3. Remove the cover.

Figure 7-2337 Remove the cover



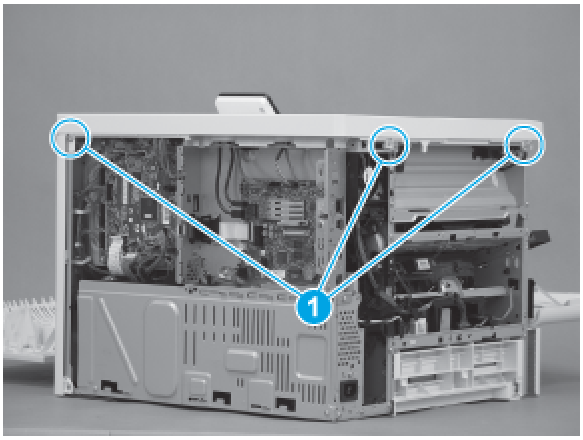
Remove the upper cover (SFP)

Follow these steps to remove the upper cover.

NOTE: This procedure is for SFP models only.

1. Remove three screws (callout 1).

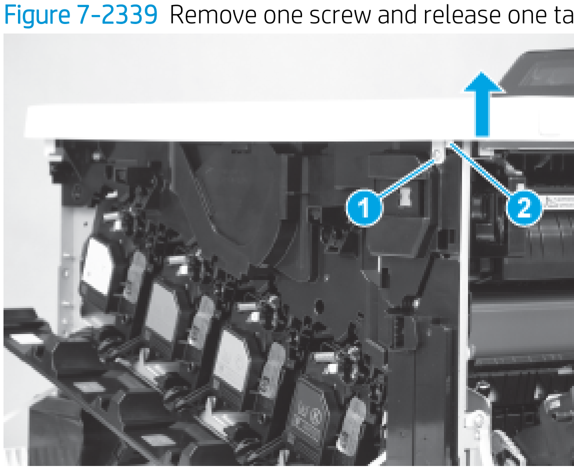
Figure 7-2338 Remove three screws



2. Remove one screw (callout 1), release one tab (callout 2), and then slightly separate the corner of the cover from the chassis.

NOTE: This is a self-tapping plastic-thread screw. Make sure that this screw is used in this location when it is reinstalled.

Figure 7-2339 Remove one screw and release one tab

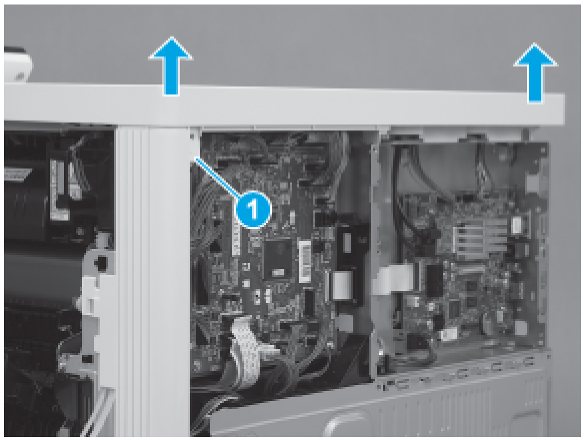


3. Release one tab (callout 1), and then lift up on the cover to release it.

IMPORTANT: **M554 models**: Disconnect the control-panel flat cable at the formatter.

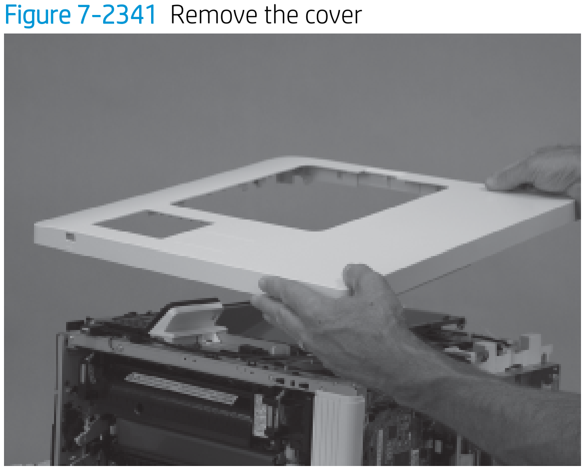
NOTE: If the cover does not release, check for addition tabs by locating the triangles embossed in the cover at tab locations.

Figure 7-2340 Release the cover



4. Remove the cover.

Figure 7-2341 Remove the cover



Remove the right rear cover

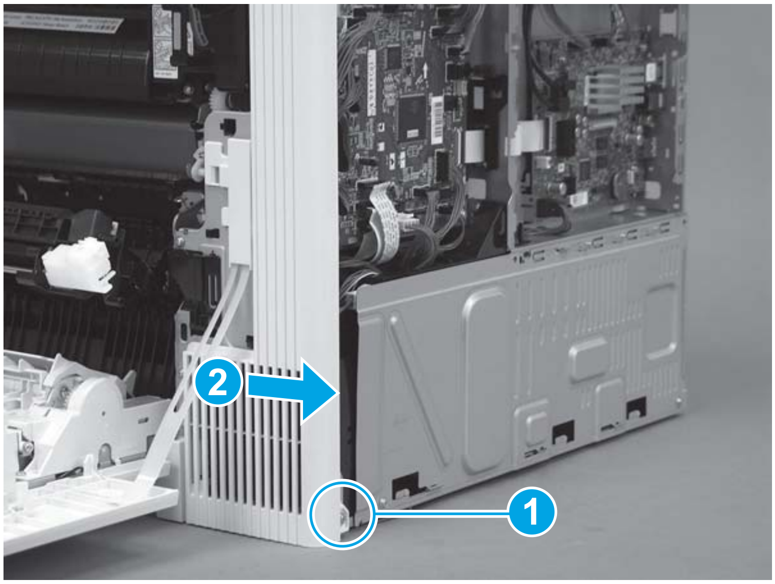
Follow these steps to remove the right rear cover.

NOTE: The figures in this topic show a SFP model. However, the procedure is correct for an MFP.

1. Remove one screw (callout 1), and then slide the cover toward the rear of the printer (callout 2) to release it.

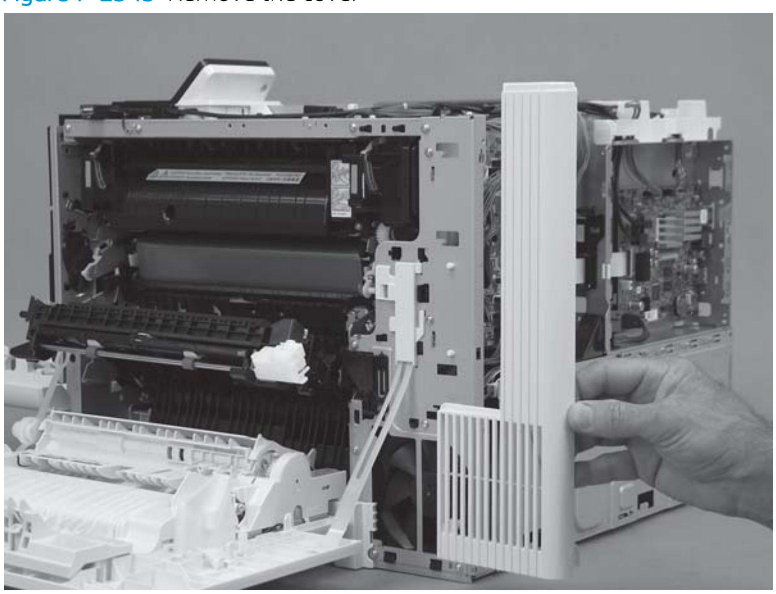
TIP: If the right door is closed, open it now.

Figure 7-2342 Release the cover



2. Remove the cover.

Figure 7-2343 Remove the cover

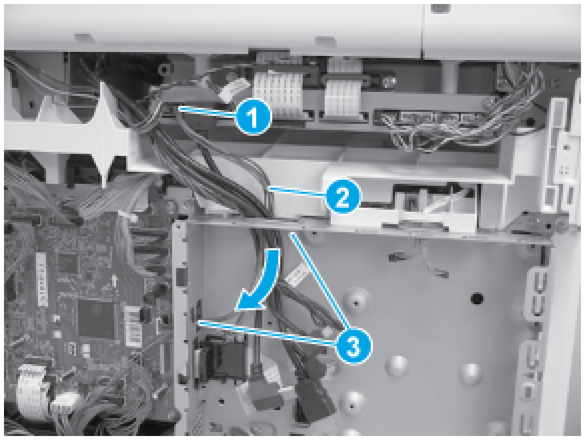


Remove the formatter case

Follow these steps to remove the formatter case.

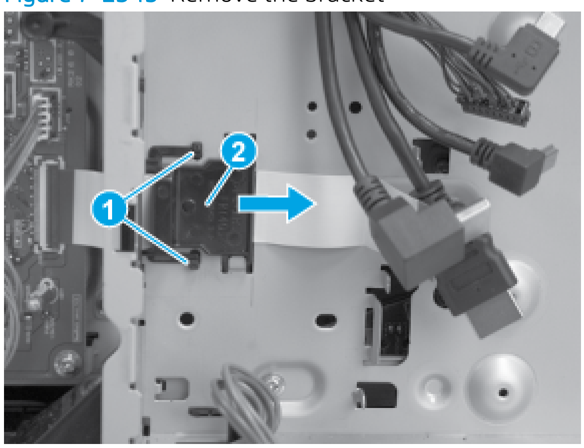
1. **MFP only**: Disconnect one connector (callout 1), and then pass the wire harness (callout 2) through two openings in the formatter case (callout 3).

Figure 7-2344 Disconnect one connector



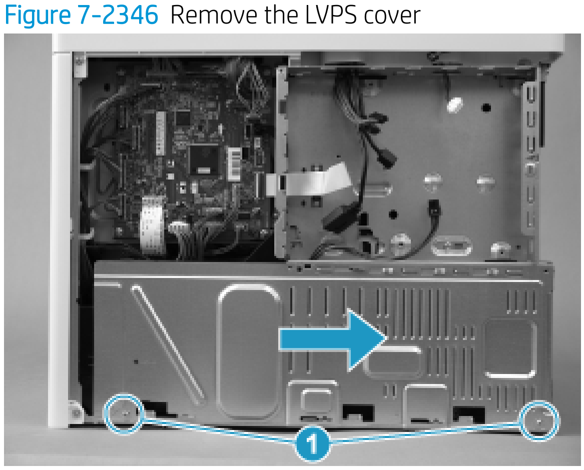
2. Release two tabs (callout 1) on the black plastic bracket. Hold the tabs in the released position, and then slide the bracket (callout 2) to the right to remove it from the formatter case.

Figure 7-2345 Remove the bracket



3. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

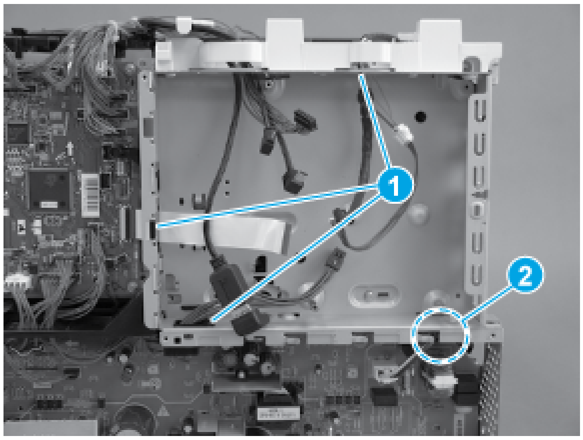
Figure 7-2346 Remove the LVPS cover



4. Pass two wire harnesses and one flat cable (callout 1) through the opening in the formatter case, and then release one wire harness from the retainer (callout 2).

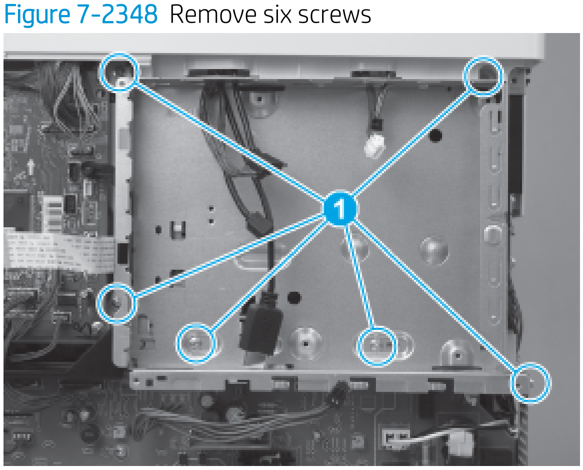
⚠ CAUTION: The flat cable might be attached to the formatter case with double-sided tape. Make sure that this tape is released, so that the flat cable is not damaged when the formatter case is removed.

Figure 7-2347 Release wire harnesses and flat cable



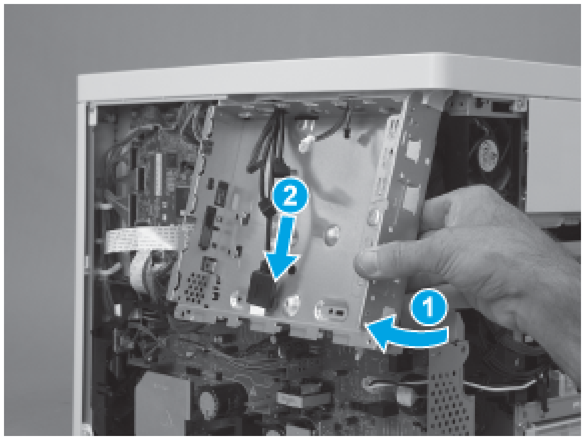
5. Remove six screws (callout 1).

Figure 7-2348 Remove six screws



6. Rotate the bottom of the formatter case away from the printer (callout 1), and then pull it down (callout 2) to release it.

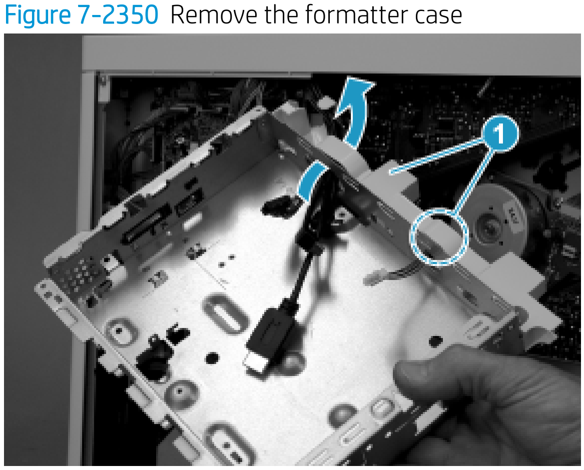
Figure 7-2349 Release the formatter case



7. Pass the wire harnesses through the opening in the formatter case to remove it.

IMPORTANT: If the formatter case is removed so that it can be replaced, make sure to transfer the memory PCA (island of data) and plastic bracket (callout 1) to the replacement case.

Figure 7-2350 Remove the formatter case

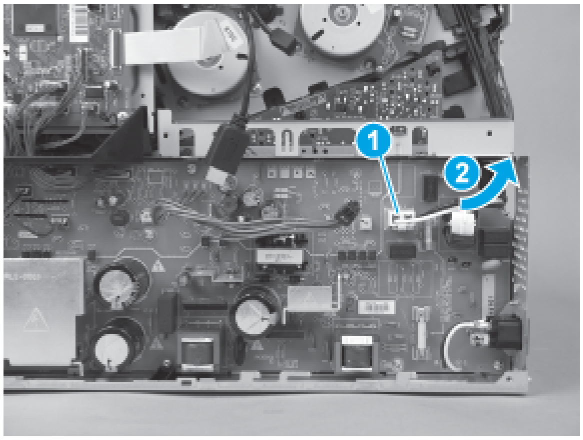


Remove the low-voltage power supply (LVPS)

Follow these steps to remove the low-voltage power supply (LVPS).

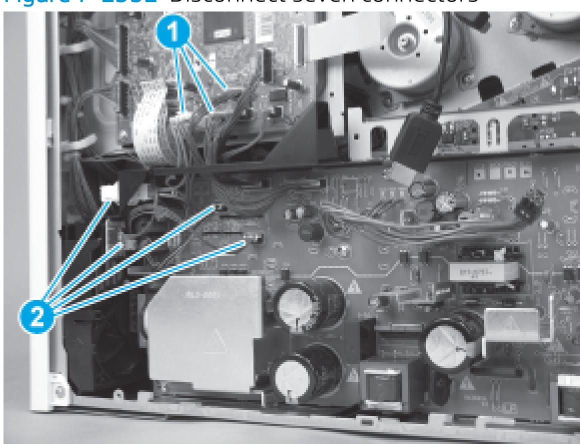
1. Disconnect one wire harness (callout 1), and then pass the wire harness through the opening (callout 2) in the chassis.

Figure 7-2351 Disconnect one wire harness



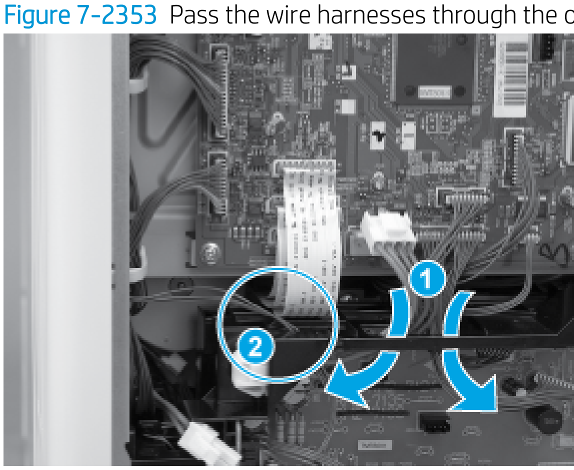
2. Disconnect three connectors on the DC controller (callout 1), and then disconnect four connectors (callout 2) on the LVPS.

Figure 7-2352 Disconnect seven connectors



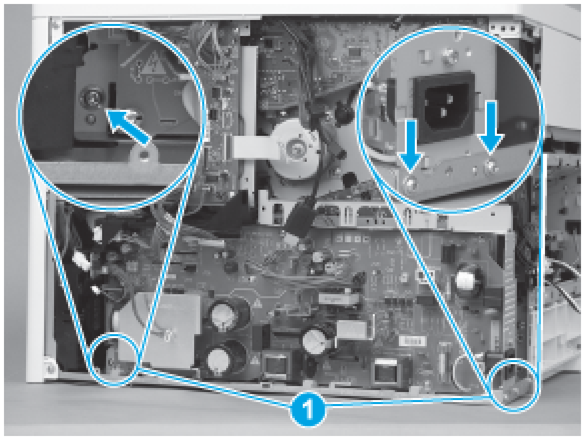
3. Pass the wire harnesses from the DC controller to the LVPS through the opening in the chassis (callout 1), and then release the wire harnesses from the retainer (callout 2).

Figure 7-2353 Pass the wire harnesses through the opening



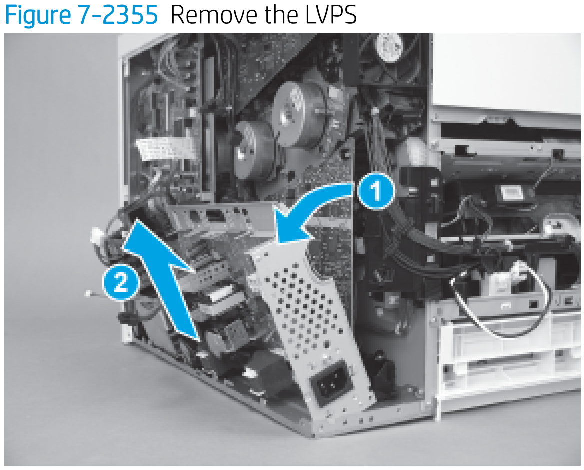
4. Remove three screws (callout 1).

Figure 7-2354 Remove three screws



5. Rotate the top of the LVPS away from the printer (callout 1), and then slide it up and out (callout 2) of the printer to remove it.

Figure 7-2355 Remove the LVPS

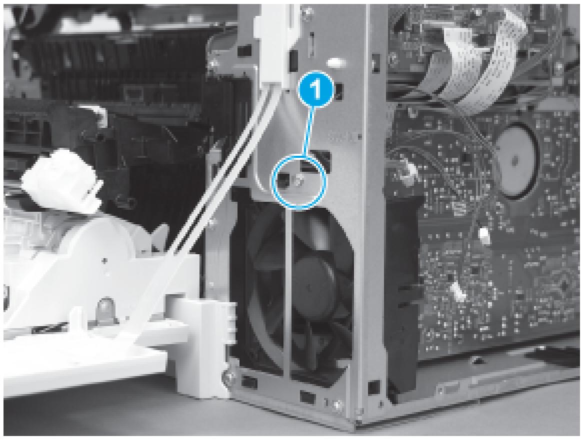


Remove the power supply fan (FM1)

Follow these steps to remove the power supply fan.

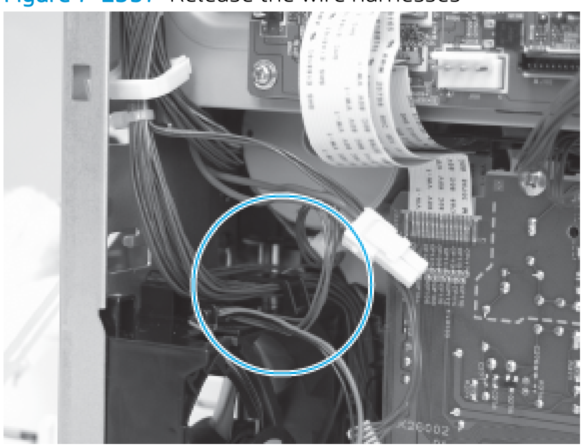
1. Remove one screw (callout 1).

Figure 7-2356 Remove one screw



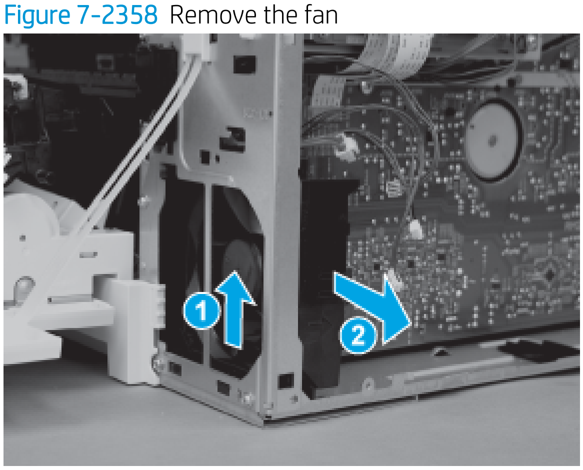
2. Release the wire harnesses from the retainer on the top of the fan bracket.

Figure 7-2357 Release the wire harnesses



3. Lift the fan up (callout 1), and then slide it out of the printer (callout 2) to remove it.

Figure 7-2358 Remove the fan

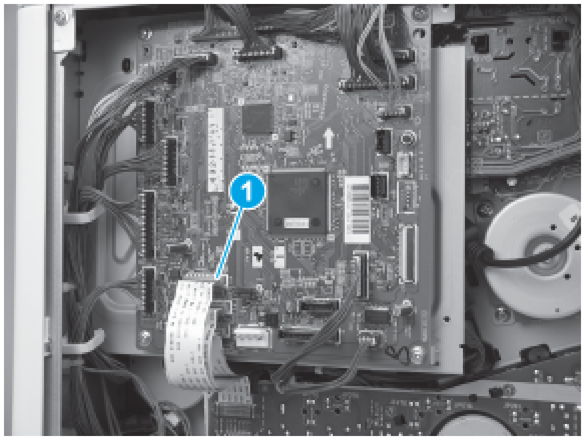


Remove the high-voltage power supply D (HVPSD)

Follow these steps to remove the high-voltage power supply D (HVPSD).

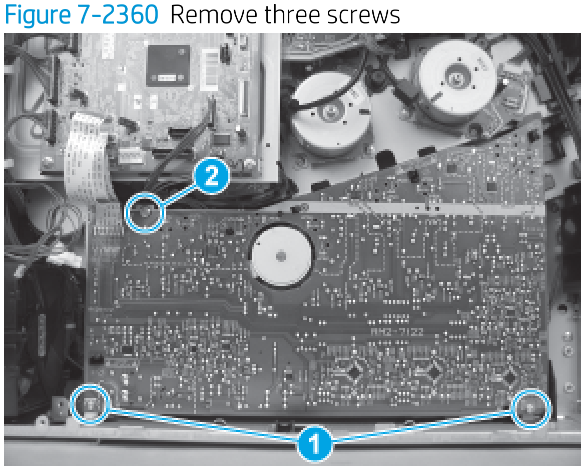
1. Disconnect one flat cable (callout 1) on the DC controller.

Figure 7-2359 Disconnect one flat cable



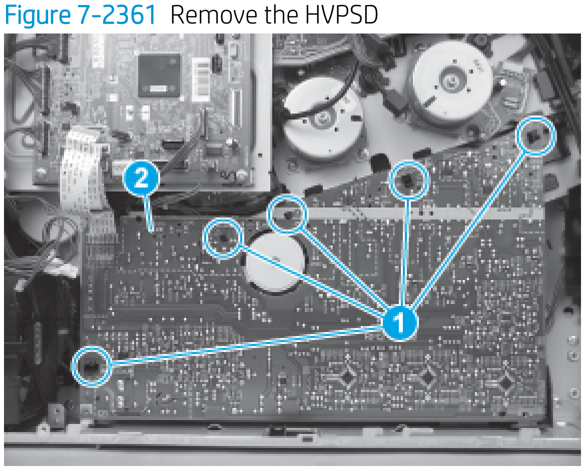
2. Remove two screws (callout 1), and then remove one self tapping screw (callout 2) on the HVPSD.

Figure 7-2360 Remove three screws



3. Release five tabs (callout 1), and then remove the HVPSD (callout 2).

Figure 7-2361 Remove the HVPSD

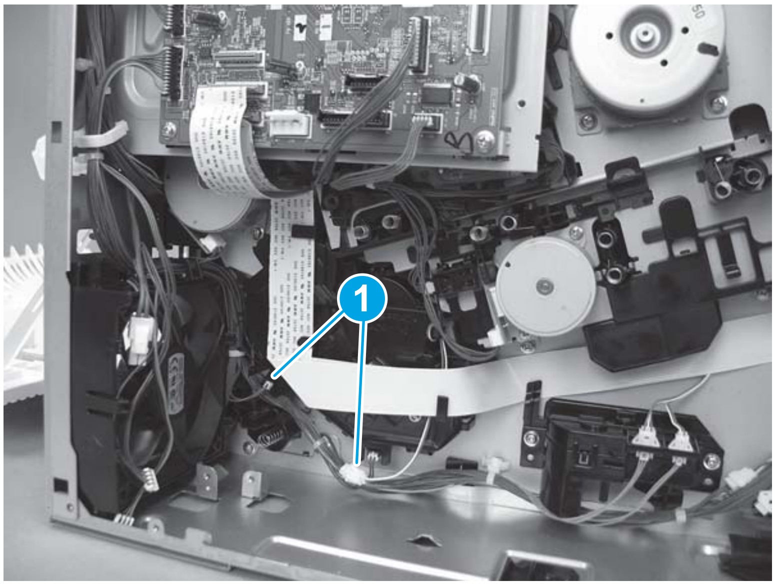


Remove the auto close assembly

Follow these steps to remove the auto close assembly.

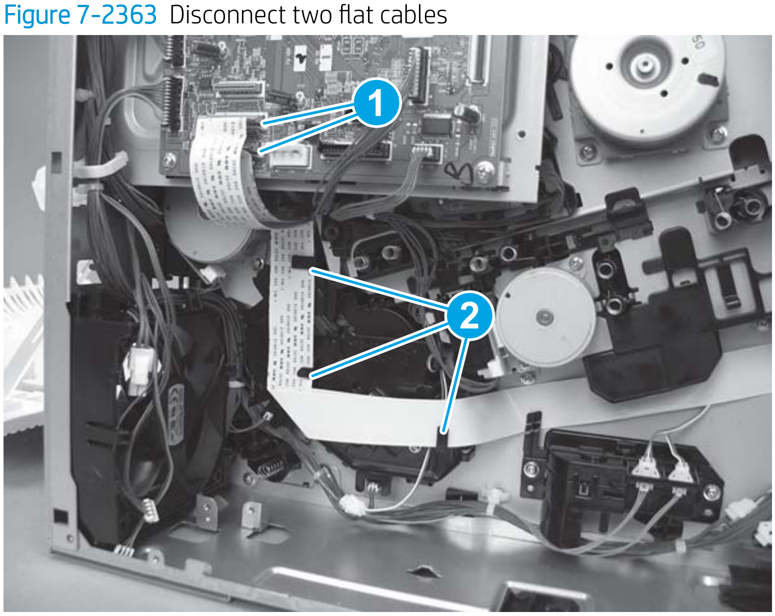
1. Disconnect two connectors (callout 1).

Figure 7-2362 Disconnect two connectors



2. Disconnect two flat cables (callout 1), and then release them from the retainers (callout 2).

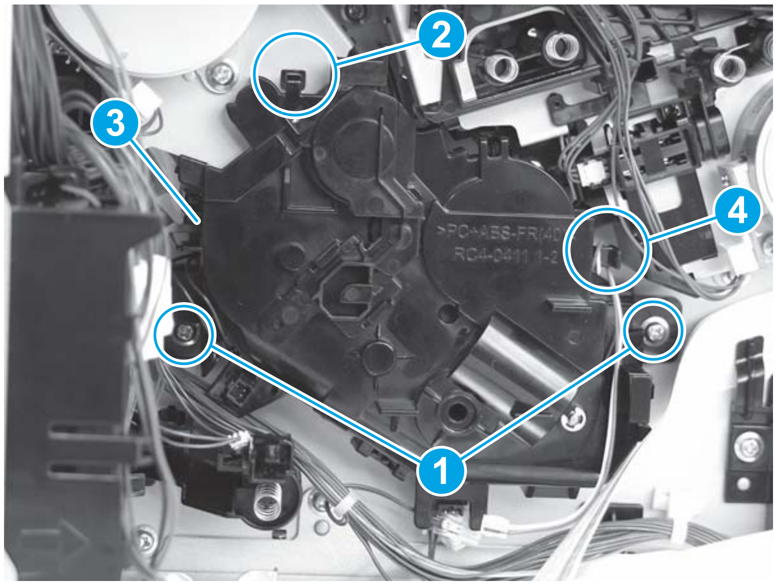
Figure 7-2363 Disconnect two flat cables



3. Remove two screws (callout 1), release one tab (callout 2), and then remove the lifter drive assembly (callout 3).

NOTE: Release one wire harness from the retainer (callout 4) as the assembly is removed.

Figure 7-2364 Remove the assembly



Remove the DC controller (DCC) and sheet-metal bracket

Follow these steps to remove the DC controller and sheet-metal bracket together.

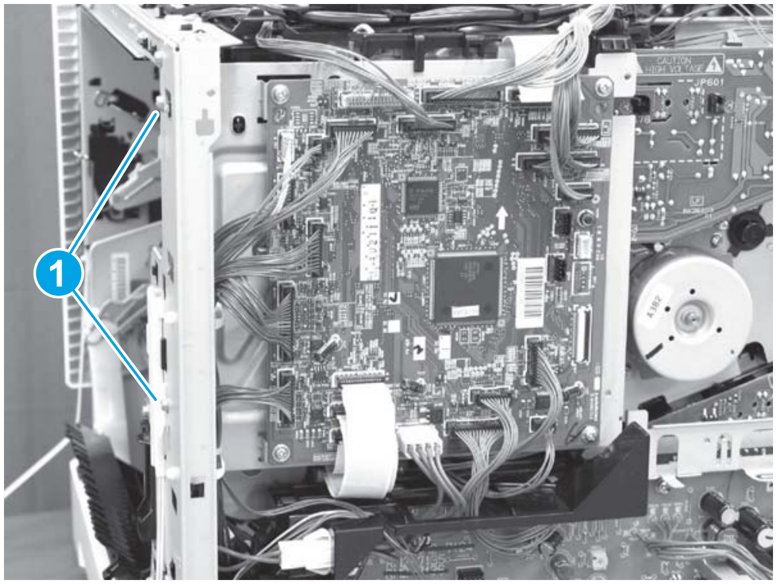
NOTE: ESD sensitive part.

1. Disconnect all of the connectors, and then remove two screws (callout 1).

   Empty DCC connectors

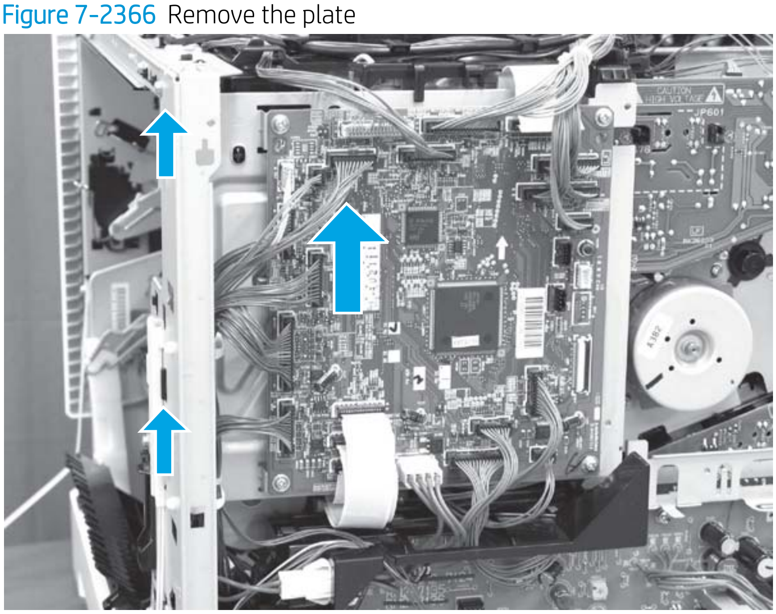
   - J140
   - J141
   - J143

Figure 7-2365 Remove two screws



2. Lift up on the DC controller and sheet-metal plate to remove it.

Figure 7-2366 Remove the plate

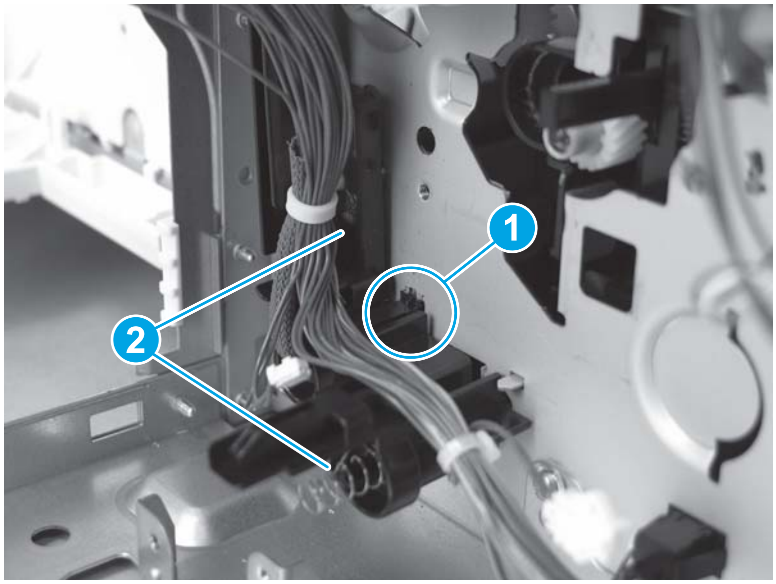


Remove the pickup drive assembly and motor (M5)

Follow these steps to remove the pickup drive assembly and motor.

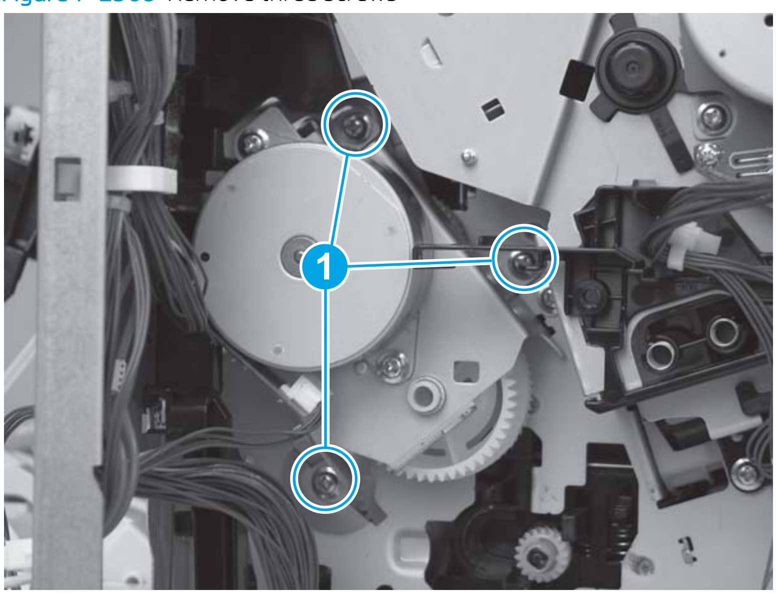
1. Release one tab (callout 1), and then move the guide (callout 2) out of the way.

Figure 7-2367 Move the guide out of the way



2. Remove three screws (callout 1).

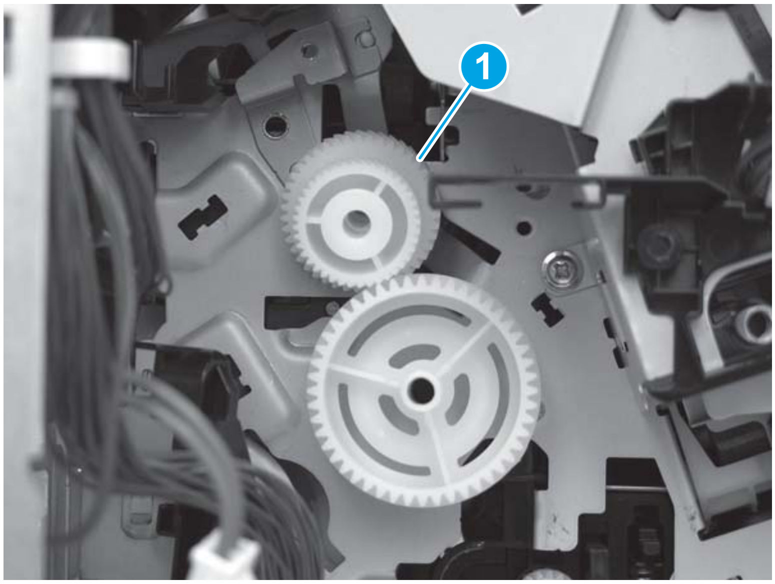
Figure 7-2368 Remove three screws



3. Remove the assembly.

⚠ CAUTION: One gear on the back side of the assembly is not captive. Handle the assembly carefully.

Figure 7-2369 Remove the assembly



4. If the gear (callout 1) was not removed with the assembly in the previous step, remove it now.

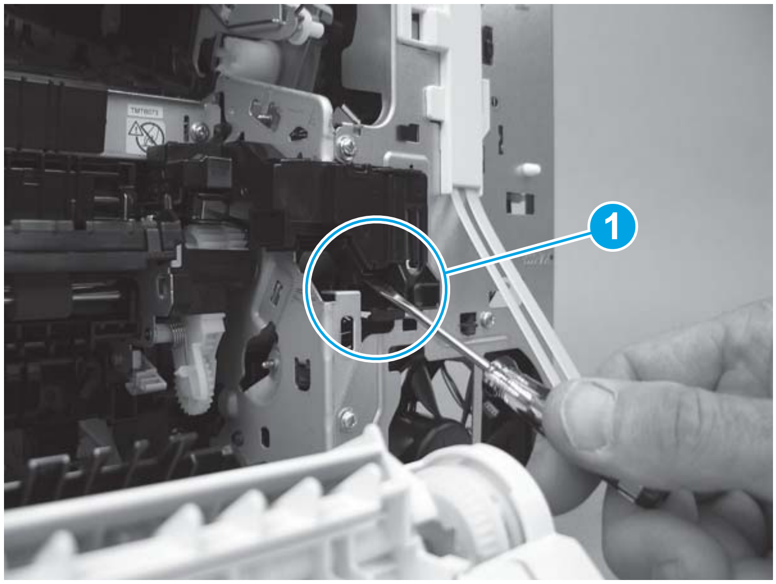
Figure 7-2370 Remove the gear if installed

Remove the registration assembly

Follow these steps to remove the registration assembly.

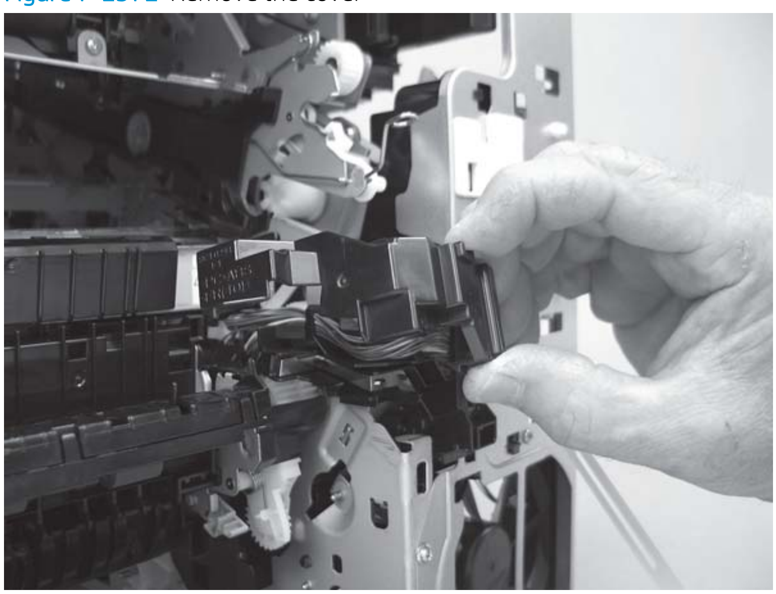
1. At the right side of the printer, release one tab (callout 1).

Figure 7-2371 Release one tab



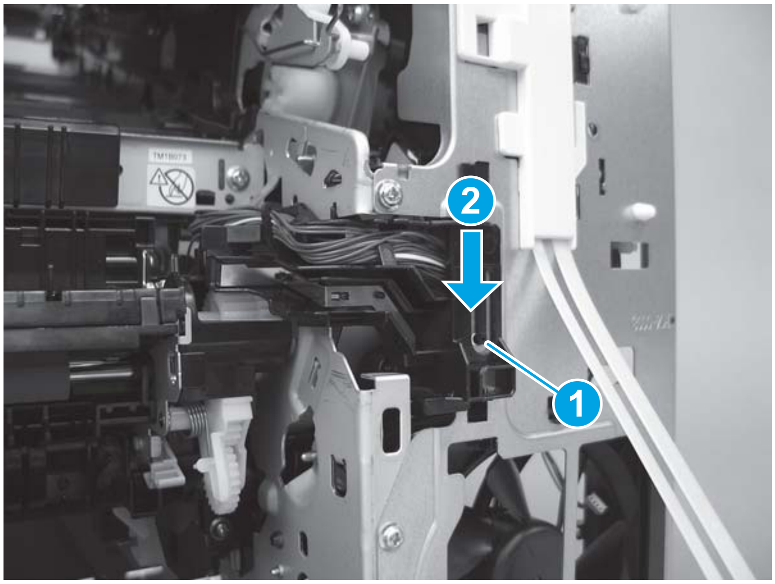
2. Remove the cover.

Figure 7-2372 Remove the cover



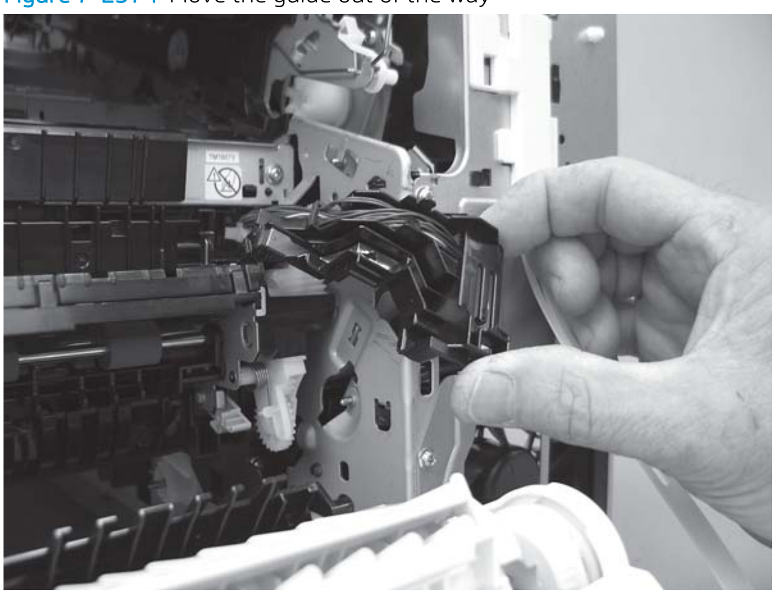
3. Release one tab (callout 1), and then push down on the guide (callout 2) to release it.

Figure 7-2373 Release the guide



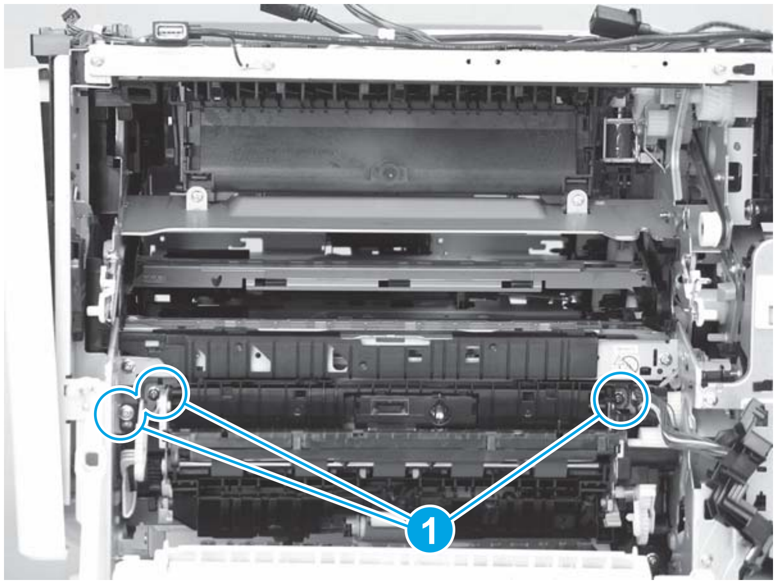
4. Move the guide out of the way.

Figure 7-2374 Move the guide out of the way



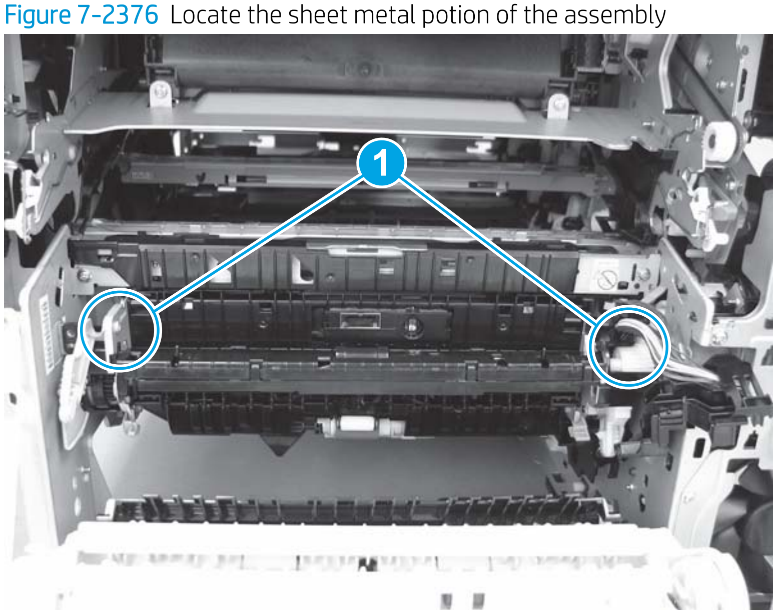
5. Remove three screws (callout 1).

Figure 7-2375 Remove three screws



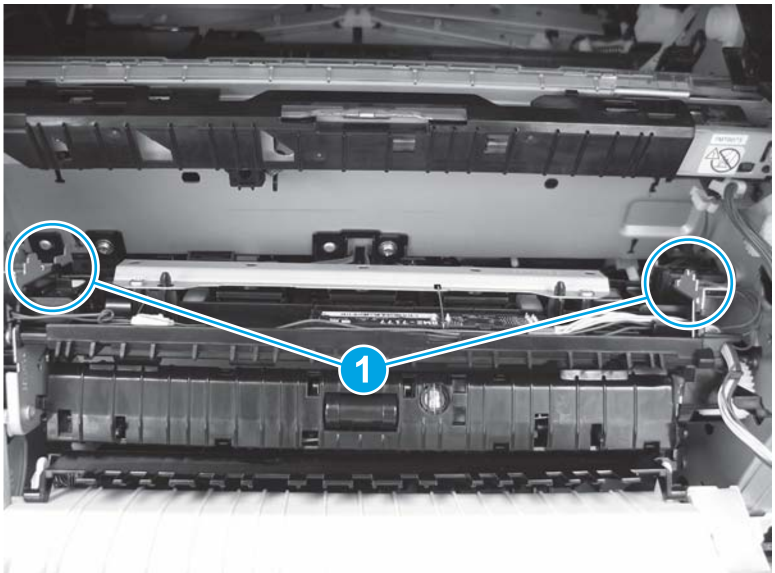
6. Before proceeding, locate the sheet metal portion (callout 1) of the assembly. When handling the assembly, use the sheet metal as handles.

Figure 7-2376 Locate the sheet metal potion of the assembly



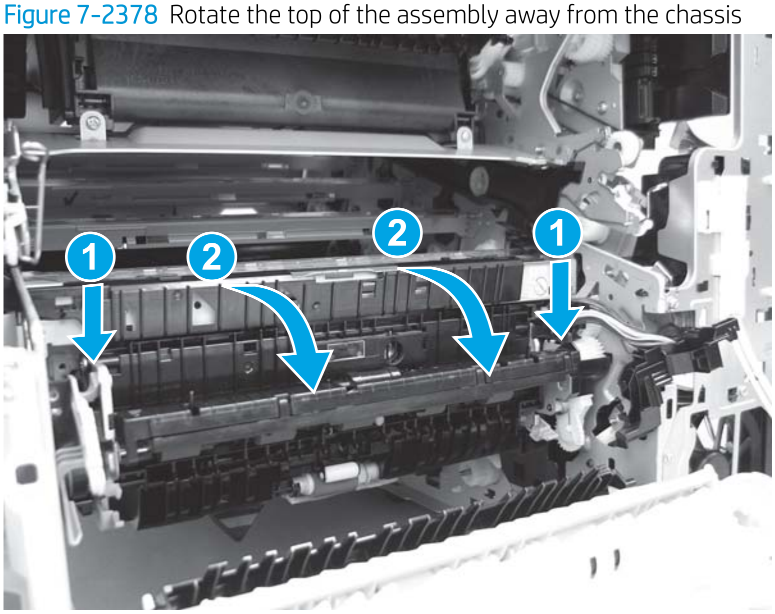
7. Before proceeding, take note of the sheet-metal tabs (callout 1) on the back of the assembly that fasten it to the chassis (the figure shows the assembly removed so the tabs can be viewed).

Figure 7-2377 Locate the sheet metal potion of the assembly



8. Grasp the sheet-metal handles (callout 1), and then rotate the top of the assembly away from the chassis (callout 2) to release the top tabs.

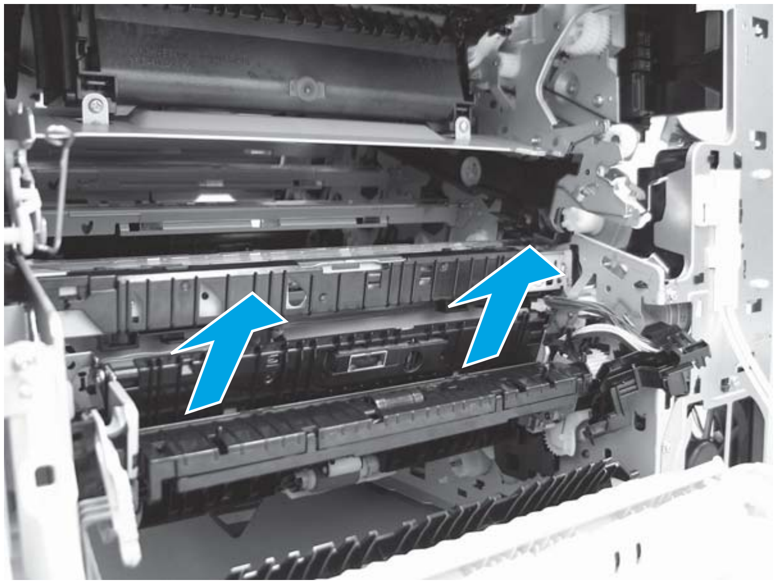
Figure 7-2378 Rotate the top of the assembly away from the chassis



9. Pull up on the assembly to release the bottom tabs.

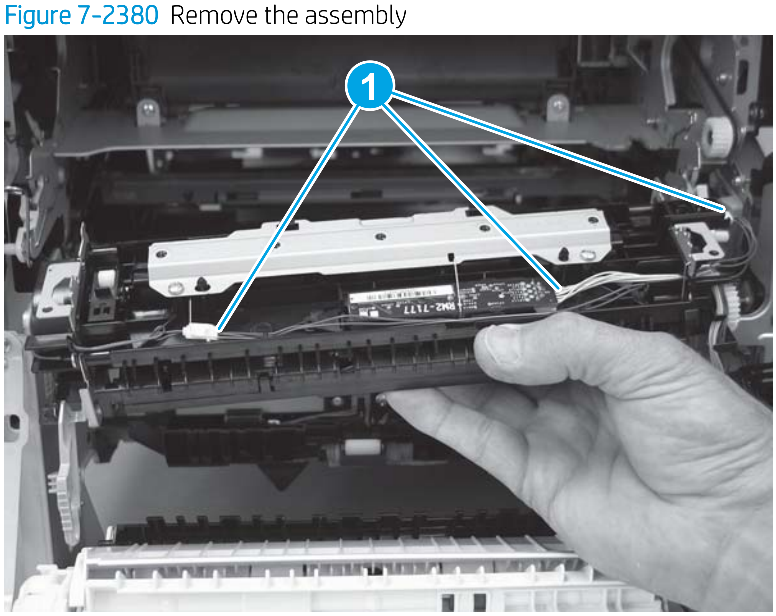
> ⚠ CAUTION: The assembly is still attached to the printer by a wire harness. Do not attempt to completely remove the assembly.

Figure 7-2379 Release the bottom tabs



10. Turn the registration assembly over to access the back side, disconnect three connectors (callout 1), and then remove the assembly.

Figure 7-2380 Remove the assembly

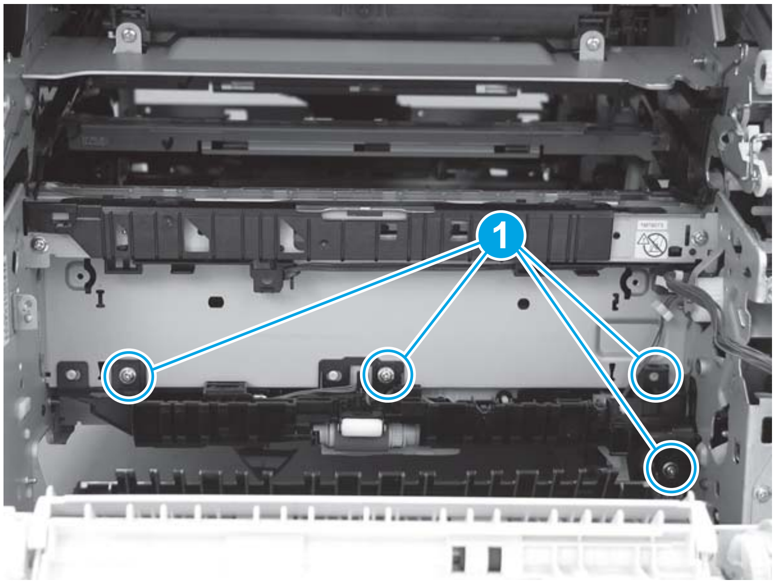


Remove the paper pickup assembly

Follow these steps to remove the paper pickup assembly.

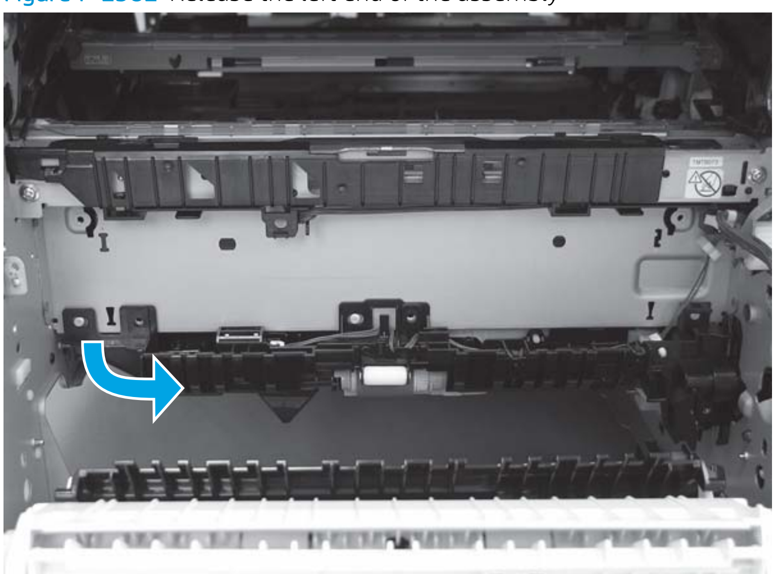
1. At the right side of the printer, remove four screws (callout 1).

Figure 7-2381 Remove four screws



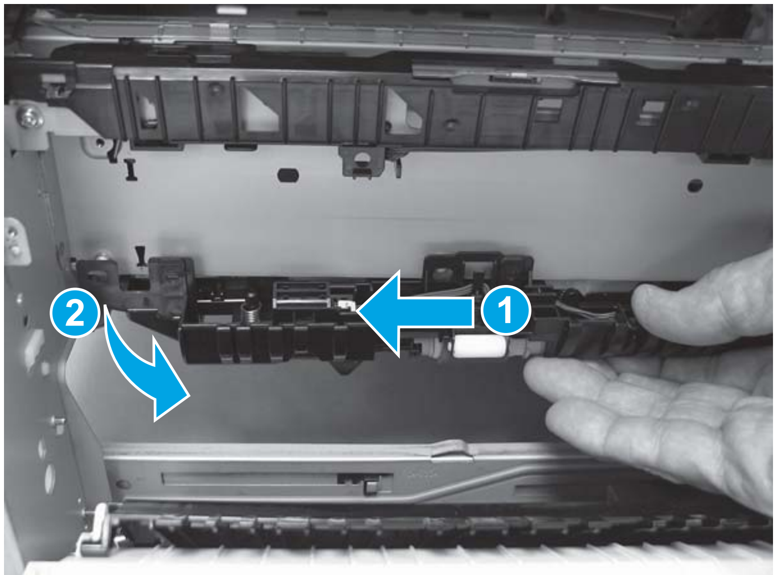
2. Slightly separate the left end of the assembly from the chassis to release it.

Figure 7-2382 Release the left end of the assembly



3. Slide the assembly to the left (callout 1), and then continue to rotate the left end of it out and away from the chassis (callout 2).

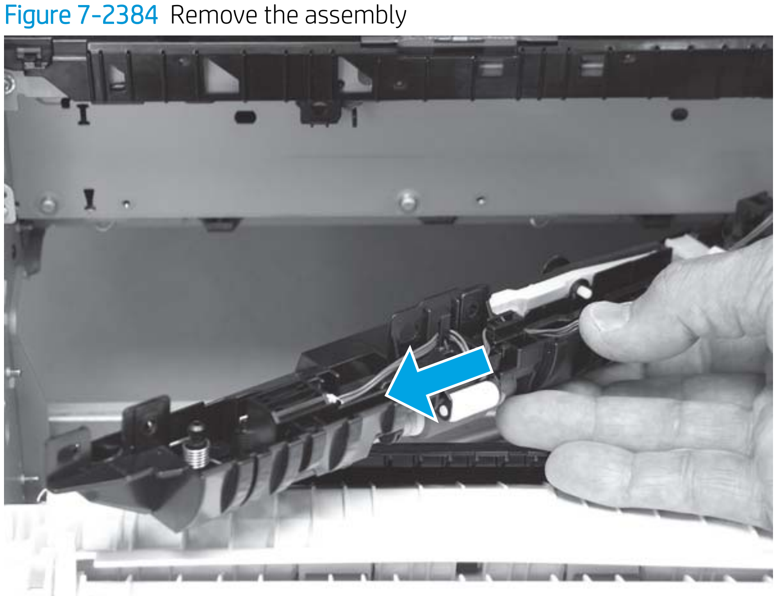
Figure 7-2383 Slide the assembly to the left



4. Remove the assembly.

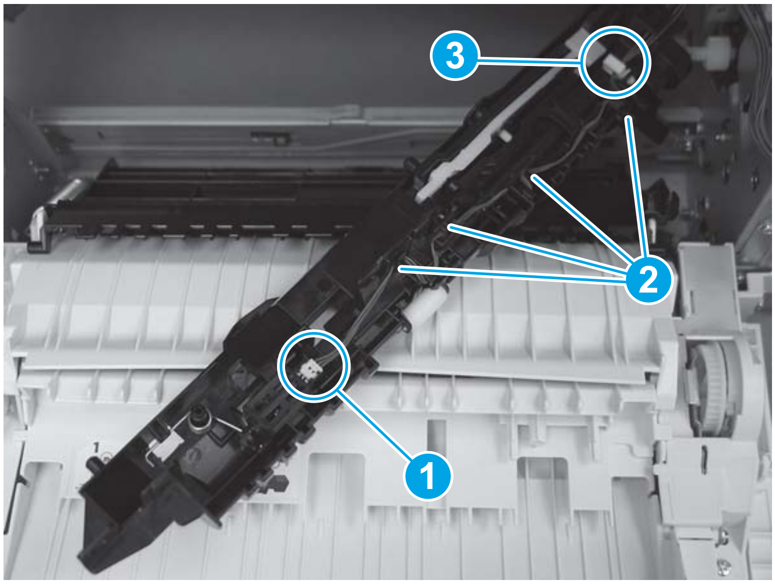
⚠ CAUTION: The assembly is still attached to the printer by a wire harness. Do not attempt to completely remove the assembly.

Figure 7-2384 Remove the assembly



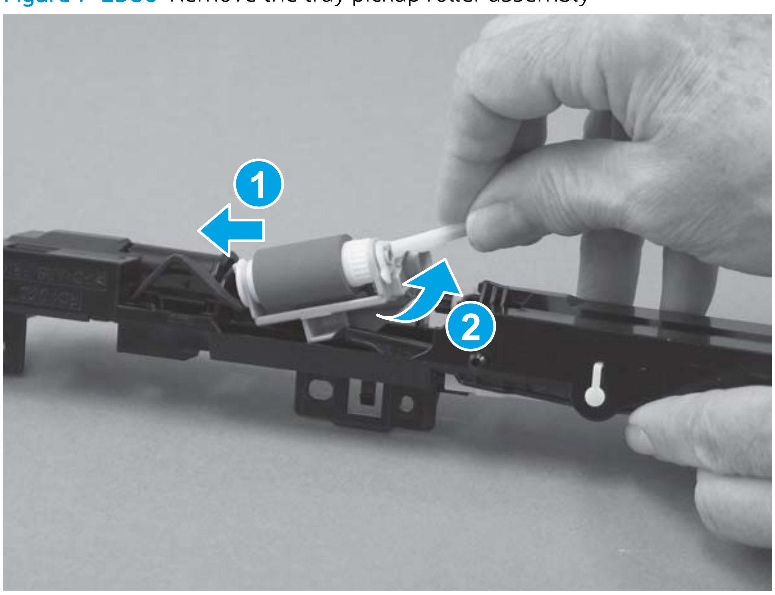
5. Turn the paper pickup assembly over to access the back side, release one connector (callout 1), release the wire harness from the guide (callout 2), and then release it from the retainer (callout 3).

Figure 7-2385 Disconnect one connector



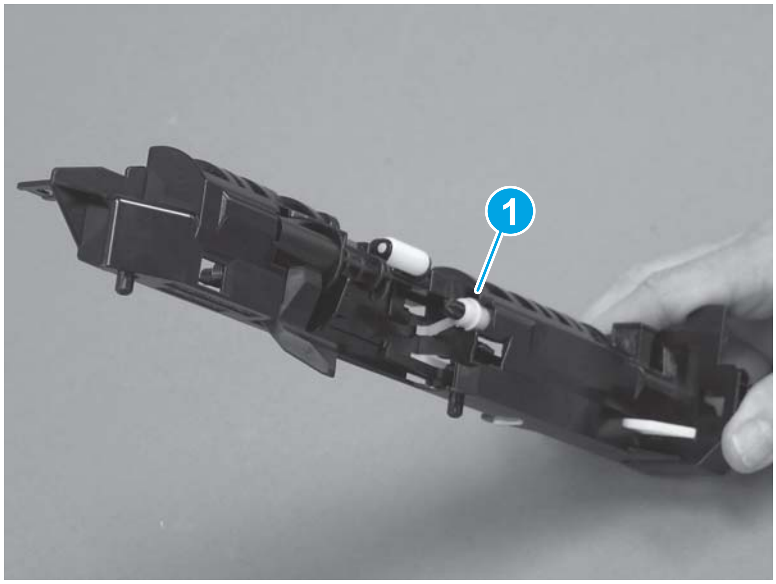
6. On the paper pickup assembly, slide the tray pickup roller assembly to the left to compress the spring loaded shaft (callout 1), and then rotate the right end of the roller assembly up and away from the pickup assembly (callout 2) to remove it.

Figure 7-2386 Remove the tray pickup roller assembly



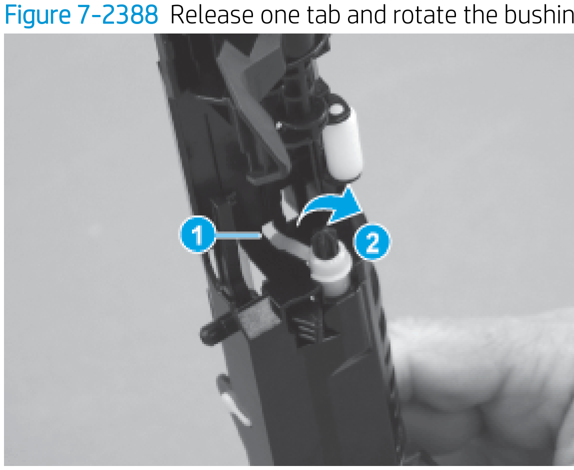
7. Locate the feed bushing (callout 1).

Figure 7-2387 Locate the feed bushing



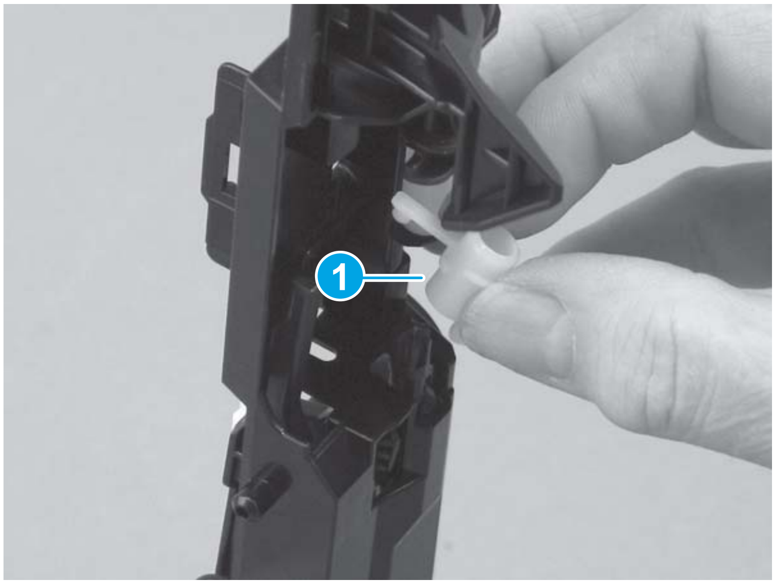
8. Use a small, flat-blade screwdriver to release one tab on the bushing (callout 1), and then rotate the bushing clockwise (callout 2).

Figure 7-2388 Release one tab and rotate the bushing



9. Lift the bushing (callout 1) off of the shaft.

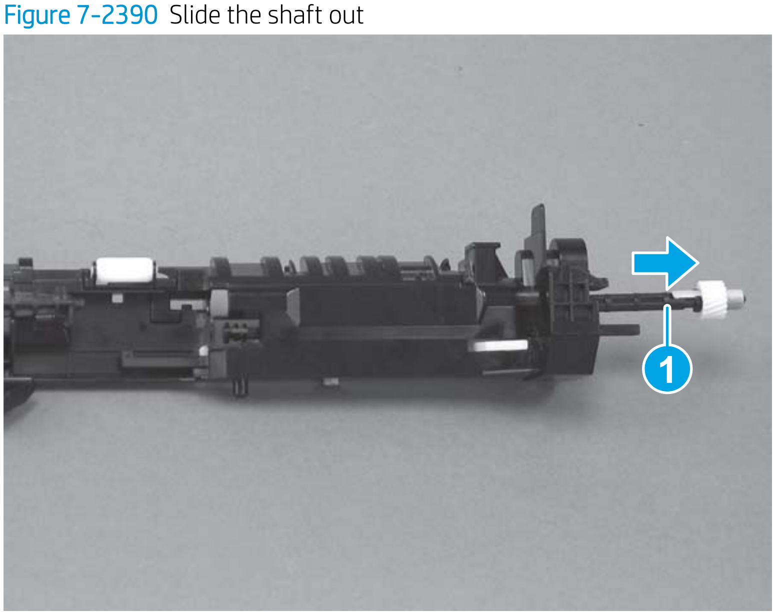
Figure 7-2389 Remove the bushing



10. At the end of the paper pickup assembly, slide the shaft with the gear on the end (callout 1) slightly out of the assembly.

NOTE: Try not to remove the grease from the gear when handling the shaft and gear.

Figure 7-2390 Slide the shaft out

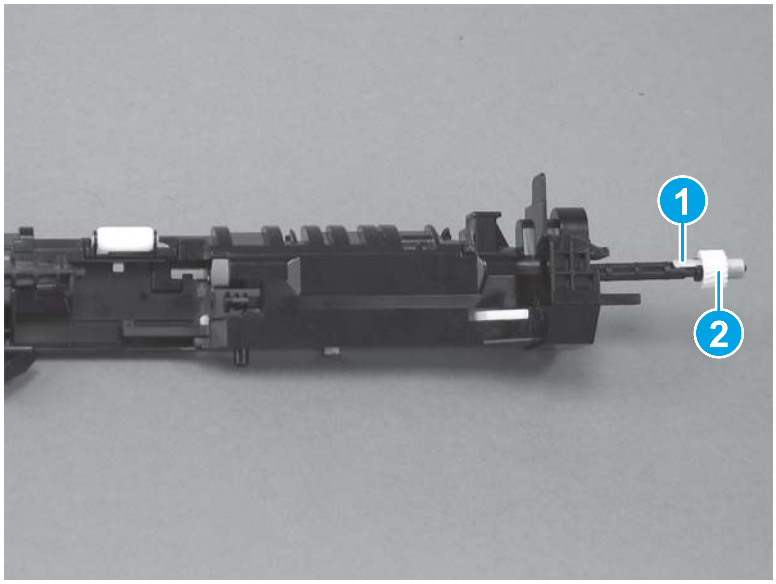


11. Release one tab (callout 1), and then slide the gear (callout 2) off of the shaft.

NOTE: Try not to remove the grease from the gear when handling the shaft and gear.

TIP: Set the gear aside for installation on the replacement paper pickup assembly.

Figure 7-2391 Remove the gear



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

   NOTE: HP recommends responsible disposal of the defective part.

   http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

   CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

   IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

   NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

   NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Density-detect assembly

Learn about removing and replacing the density-detect assembly.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-83 Part information

Part number	Part description
RM2-7160-000CN	Density-detect assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove the secondary transfer assembly

Follow these steps to remove the secondary transfer assembly.

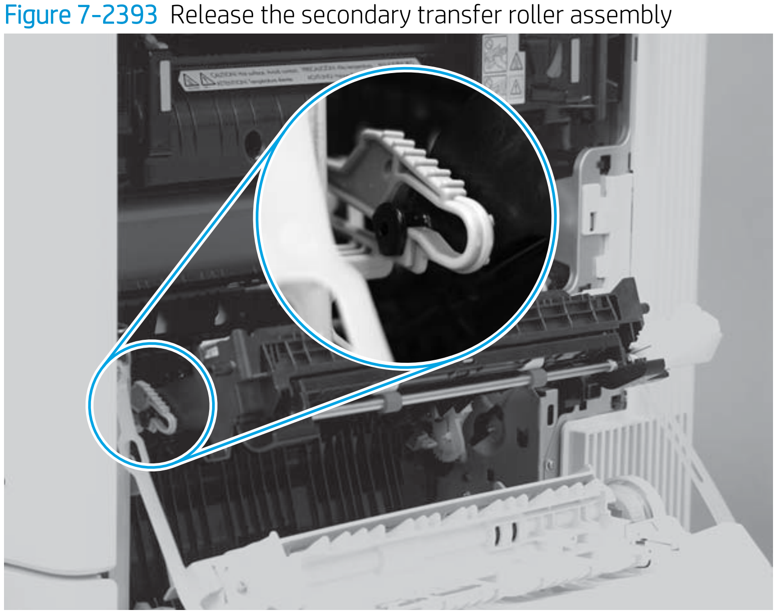
1. Open the right door.

Figure 7-2392 Open the right door

2. Release the blue arm, and then let the secondary transfer assembly rotate down to the half-way open position.

NOTE: The assembly should stop at the halfway down point—the pin will stop at the notch in the slot in the blue arm.

Figure 7-2393 Release the secondary transfer roller assembly



3. Carefully flex the top portion of the blue arm—as shown in the figure—to start to disengage it from the pin.

Figure 7-2394 Carefully flex the top portion of the blue arm

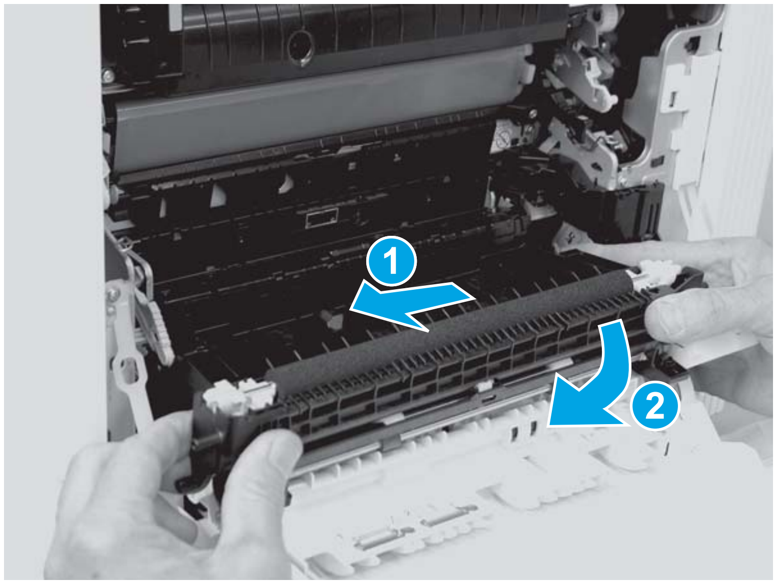
4. Continue to flex the blue arm until it disengages from the pin.

Figure 7-2395 Disengage the blue arm and pin

5. Slide the assembly toward the front of the printer to release it (callout 1), and then rotate it down and away from the printer to remove it (callout 2).

Reinstallation tip: Before removing the assembly, take note of where the assembly hinge pins fit into the holes provided in the printer.

Figure 7-2396 Remove the secondary transfer roller assembly



Remove the ITB

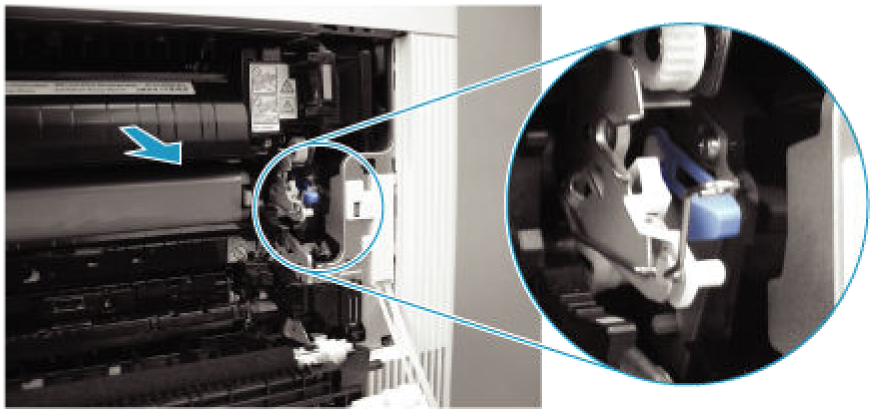
Follow these steps to remove the ITB.

1. Open the right door.

Figure 7-2397 Open the right door

2. Pull the blue lever to release the ITB drive coupling.

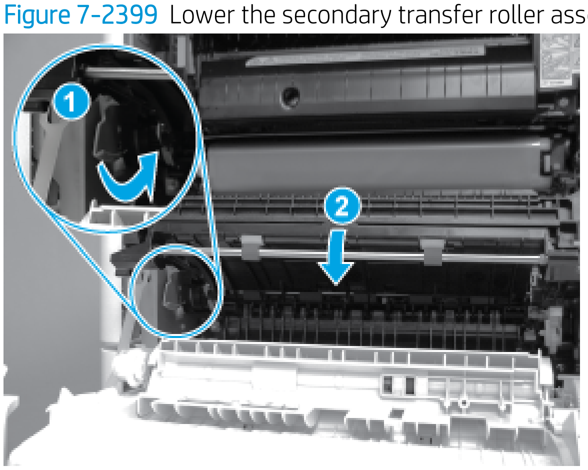
Figure 7-2398 Release the ITB drive coupling



3. Push in on the blue arm to release the secondary transfer roller assembly, and then completely lower the assembly.

NOTE: Press the blue arm on the secondary transfer roller assembly a second time to release the roller assembly when it stops at the halfway open position.

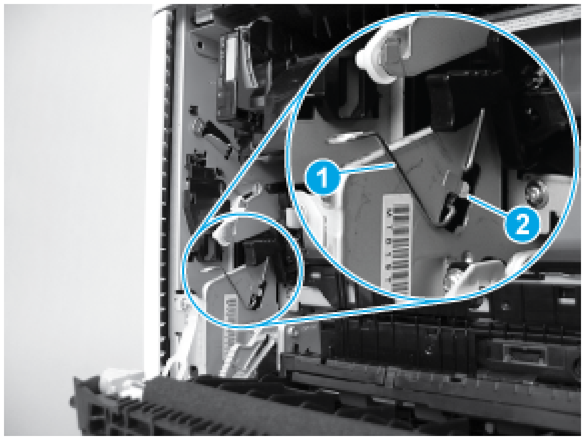
Figure 7-2399 Lower the secondary transfer roller assembly



4. Release the left-side ITB spring (callout 1) from the tab (callout 2).

NOTE: For late production M552/M553 printers and all M554/m555 printers, this ITB spring is not installed.

Figure 7-2400 Release the front-side ITB spring

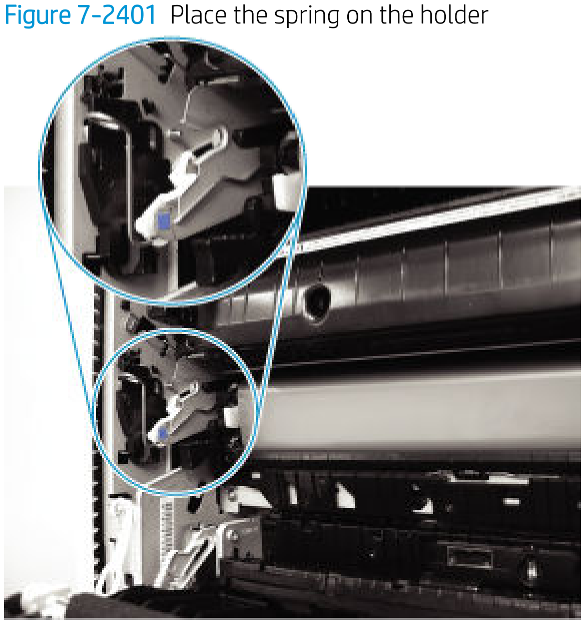


5. Place the left-side ITB spring on the holder to keep it out of the way.

NOTE: For late production M552/M553 printers and all M554/m555 printers, this ITB spring is not installed.

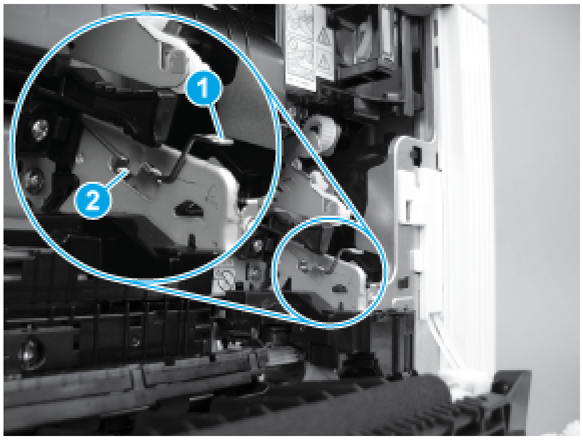
TIP: The holder is colored blue to help locate it.

Figure 7-2401 Place the spring on the holder



6. Release the right-side ITB spring (callout 1) from the tab (callout 2).

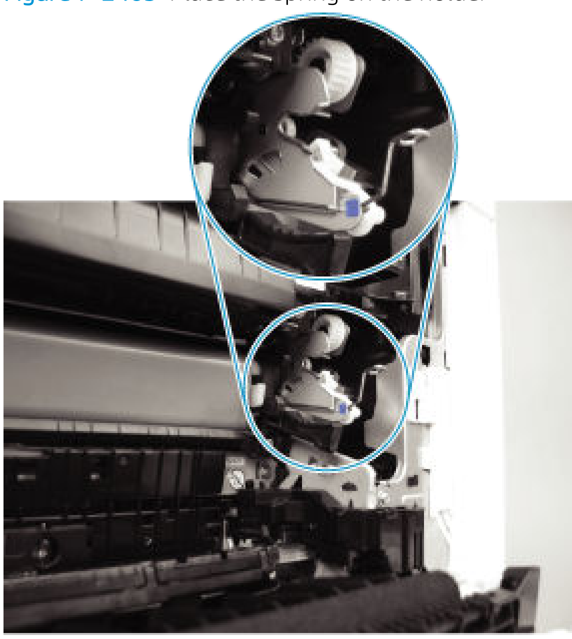
Figure 7-2402 Release the rear-side ITB spring



7. Place the right-side ITB spring on the holder to keep it out of the way.

TIP: The holder is colored blue to help locate it.

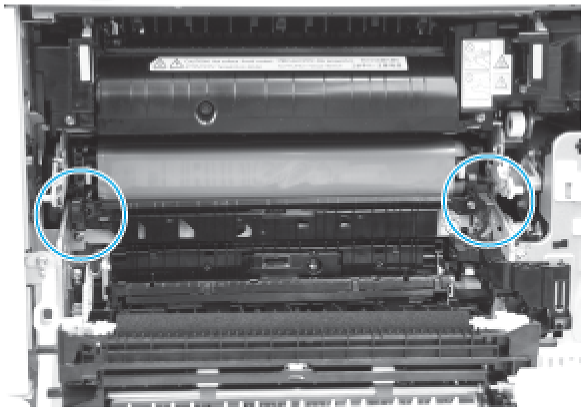
Figure 7-2403 Place the spring on the holder



8. Grasp the two blue handles on the ITB.

⚠ CAUTION: If the ITB is removed to access other assemblies in the printer, use care. The ITB is a sensitive assembly. Be careful when handling the ITB so that it is not damaged. Always place the ITB in a safe and protected location.

Figure 7-2404 Grasp the ITB handles



9. Pull the ITB out of the printer to remove it.

⚠ CAUTION: Do not touch the grey-plastic belt. Skin oils and fingerprints on the belt can cause print-quality problems.

Figure 7-2405 Remove the ITB

Remove Tray 2

Learn about removing Tray 2.

NOTE: A SFP printer is shown in this section. However, the procedure is correct for all printer models.

The figures in this section show Tray 2. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5. Always carefully read the instructions that accompany the figures.

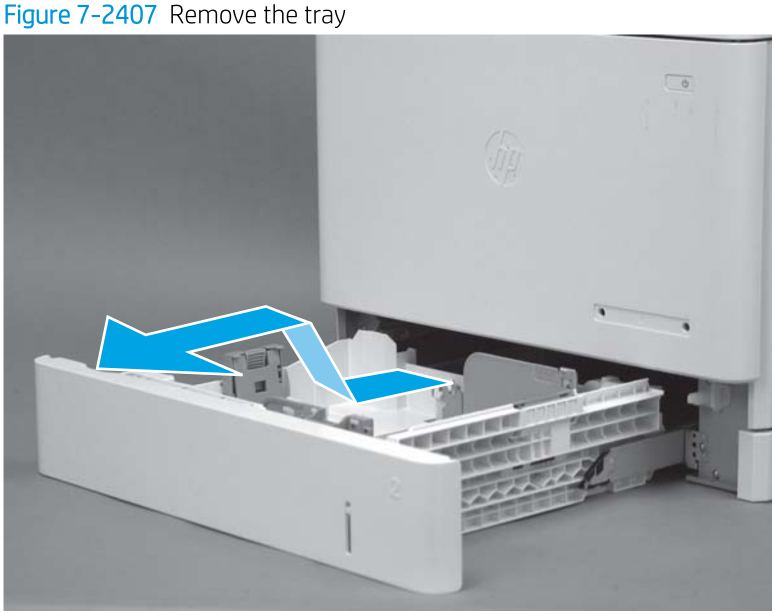
1. Pull the tray out until it stops.

Figure 7-2406 Pull the tray out

2. Lift the front of the tray, and then pull it out of the printer to remove it.

NOTE: **For a replacement tray:** If the tray has Fixed Tray Guides installed and are still required, move hardware to new tray. If necessary, order new kit: 3GY25–67901 Kit - Fixed Tray Guide. Only one kit required per engine.

Figure 7-2407 Remove the tray



Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-2408 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-2409 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

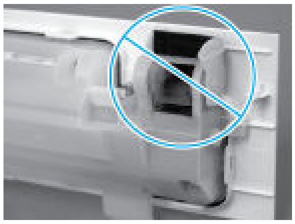
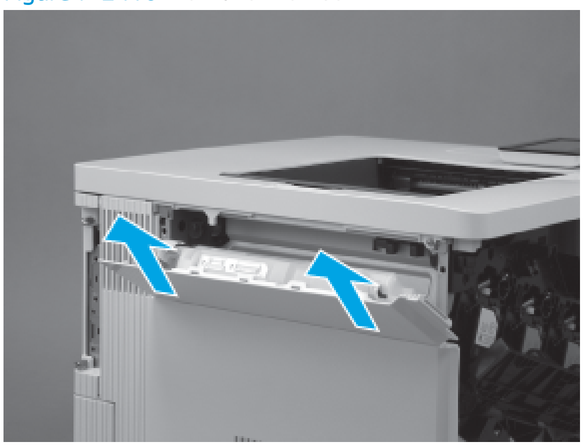


Figure 7-2410 Remove the TCU



Remove the formatter cover

Follow these steps to remove the formatter cover.

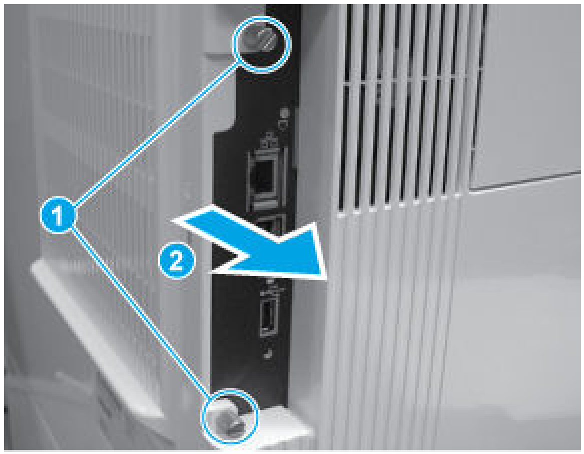
1. Locate the formatter cover.

Figure 7-2411 Locate the formatter cover

2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-2412 Loosen the thumbscrews



Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

NOTE: This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-2413 Locate the USB cover

2. Pull the cover off of the printer to remove it.

Figure 7-2414 Remove the cover

Remove the control panel (M553x/M555/E55040)

Follow these steps to remove the control panel.

NOTE: This procedure is for the M553x/M555/E55040 printers only.

M555 models: Removing the control panel is similar to the procedure below. For the M555, a flat cable connects the control panel to the formatter.

1. Tilt the control panel up.

Figure 7-2415 Tilt the control panel up

2. Use the small flat-blade screwdriver supplied in this kit to release the control-panel screws cover tabs.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-2416 Release the control-panel screws cover tabs

3. Rotate the cover up to remove it.

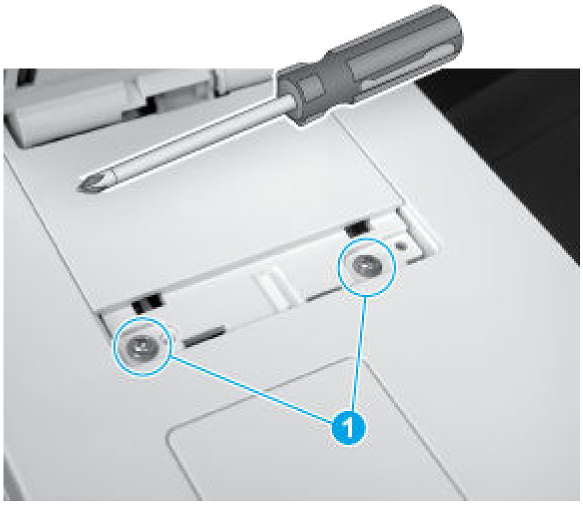
Figure 7-2417 Remove the cover

4. Use the small Phillips screwdriver supplied in this kit to remove two screws (callout 1).

IMPORTANT: Store the screws in a secure place where they cannot fall down into the printer.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-2418 Remove two screws



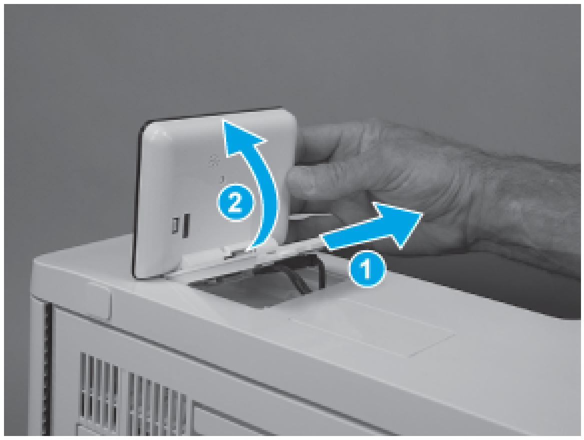
5. Rotate the control-panel base toward the front of the printer.

Figure 7-2419 Rotate the control-panel base up

6. Slightly slide the control-panel base toward the rear of the printer (callout 1) to release it, and then turn the control panel over (callout 2) to access the bottom side.

⚠ CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

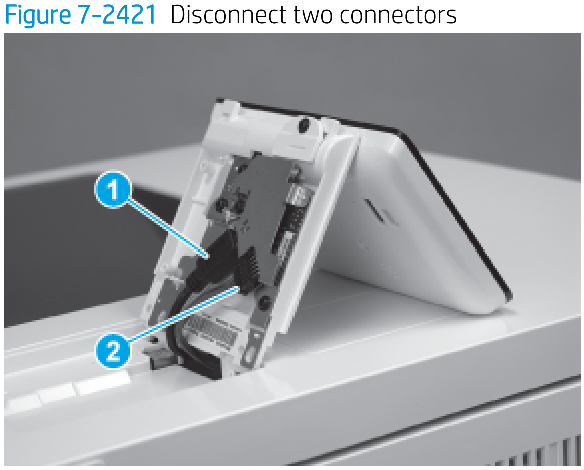
Figure 7-2420 Turn the control panel over



7. Disconnect one USB cable (callout 1), one connector (callout 2), and then remove the control panel.

NOTE: **M555 only**: Disconnect one flat cable (not shown), and then remove the control panel.

Figure 7-2421 Disconnect two connectors



Remove the formatter (SFP)

Follow these steps to remove the formatter.

NOTE: This procedure is for SFP models only.

1. Disconnect all of the connectors on the formatter.

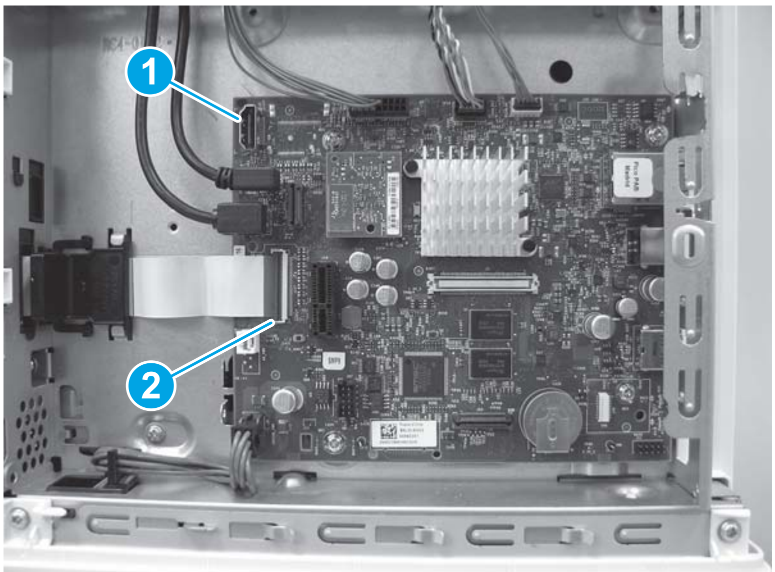
   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)

- All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
- All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
- M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)
- All models: J57
- All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

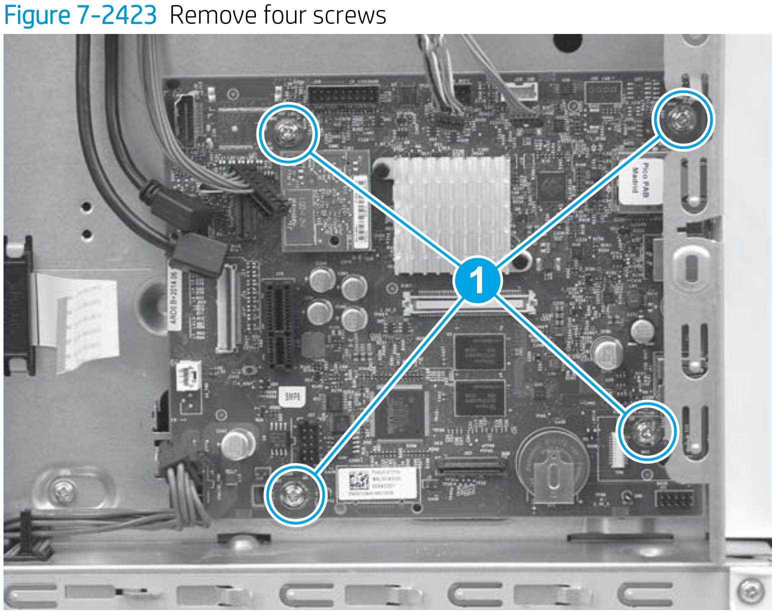
IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-2422 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-2423 Remove four screws



Remove the hard-disk drive (HDD)

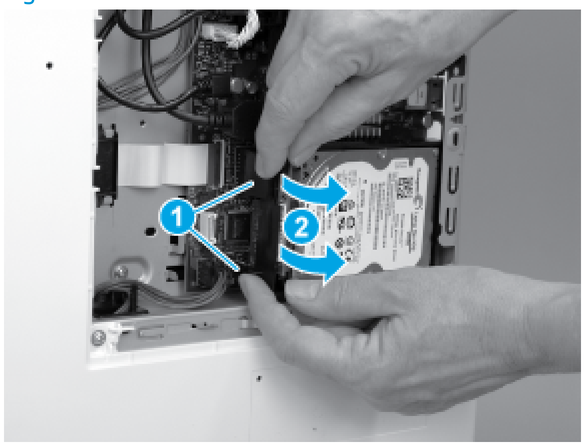
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

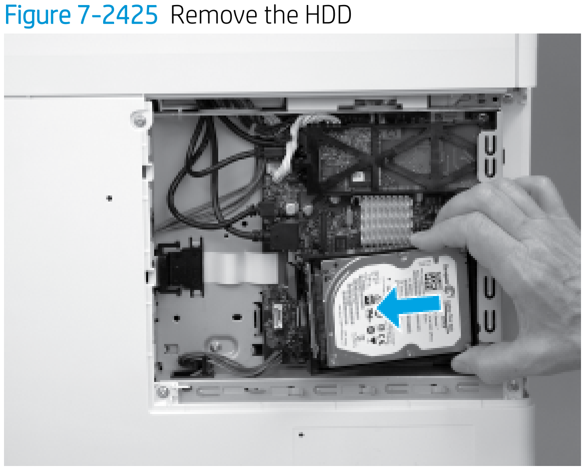
1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

   Figure 7-2424 Release the HDD

2. Slide the HDD away from the printer to remove it.

   Figure 7-2425 Remove the HDD

Remove the fax PCA (fax models)

Follow these steps to remove the fax PCA (fax models).

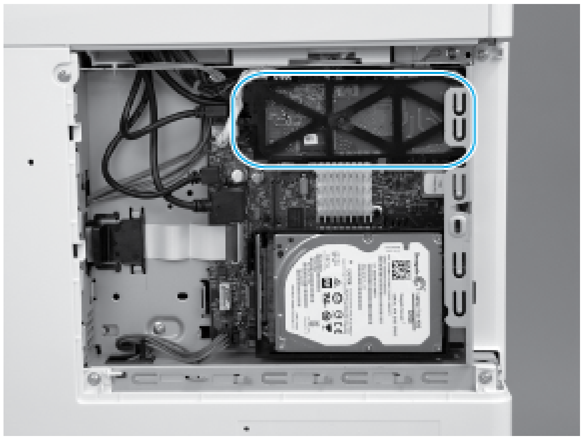
CAUTION: 

ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

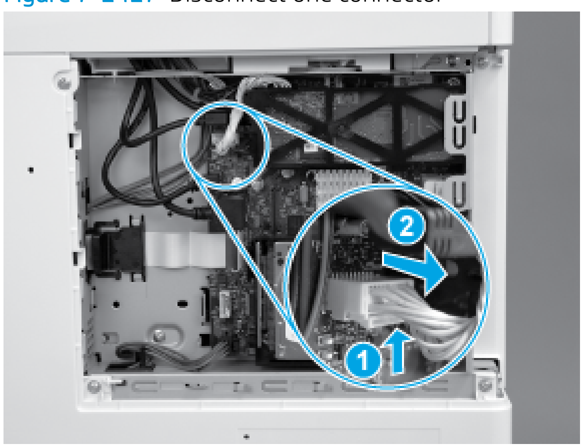
1. Locate the fax PCA component on the formatter.

Figure 7-2426 Locate the fax PCA



2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-2427 Disconnect one connector

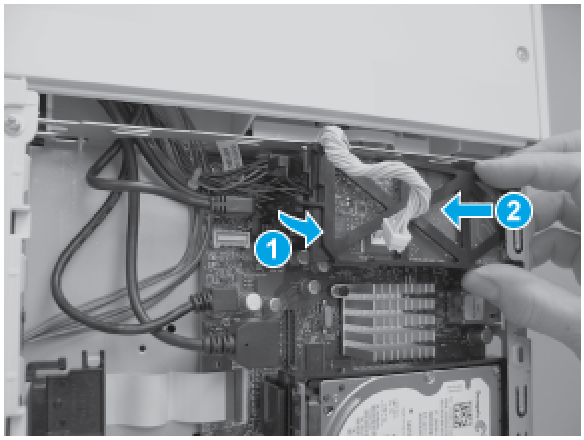


3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-2428 Release one latch

4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-2429 Remove the fax PCA



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

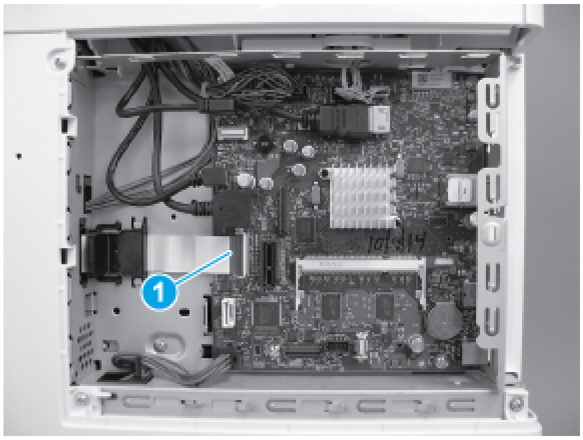
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

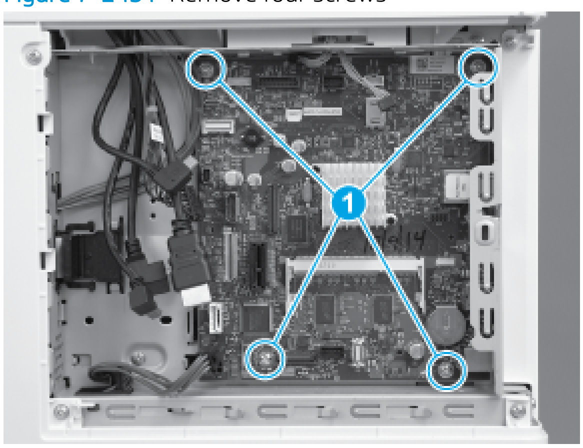
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-2430 Disconnect all connectors



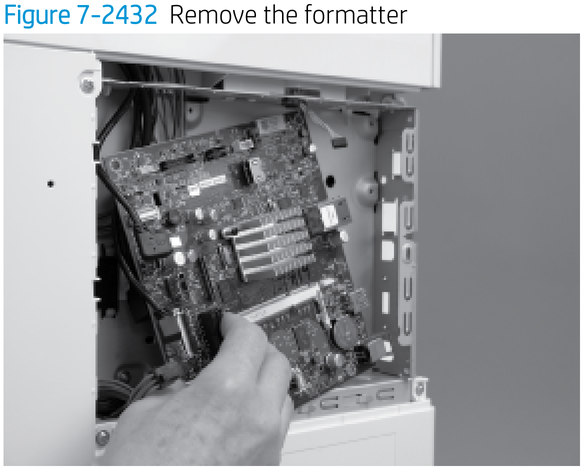
2. Remove four screws (callout 1).

Figure 7-2431 Remove four screws



3. Remove the formatter.

Figure 7-2432 Remove the formatter



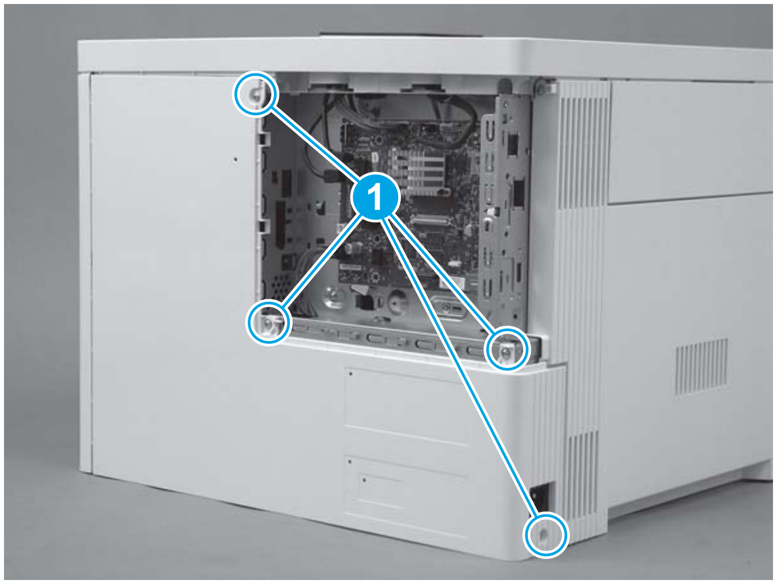
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

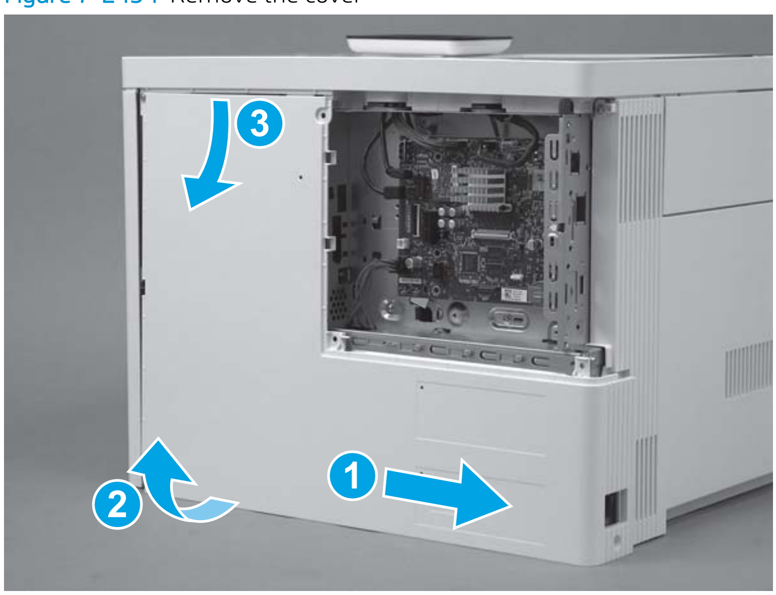
1. Remove four screws (callout 1).

Figure 7-2433 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-2434 Remove the cover



Remove the rear upper cover (MFP)

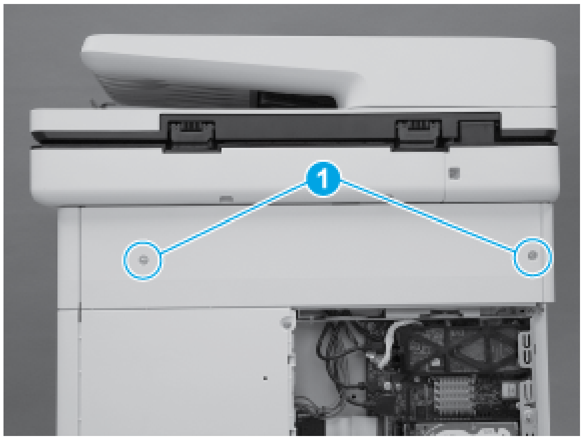
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

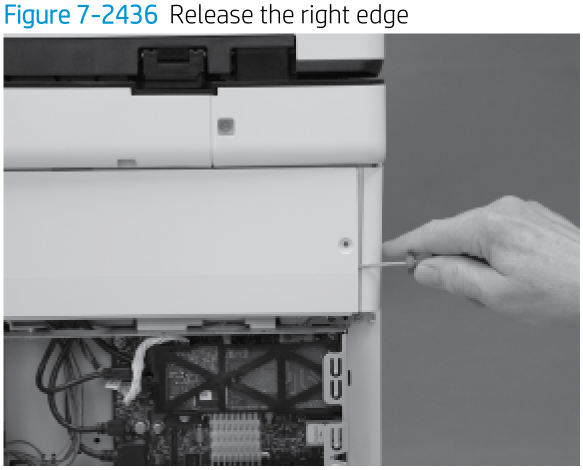
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-2435 Remove two screws



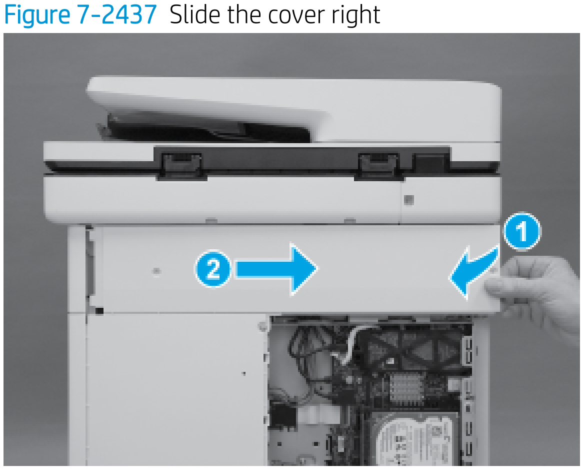
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-2436 Release the right edge



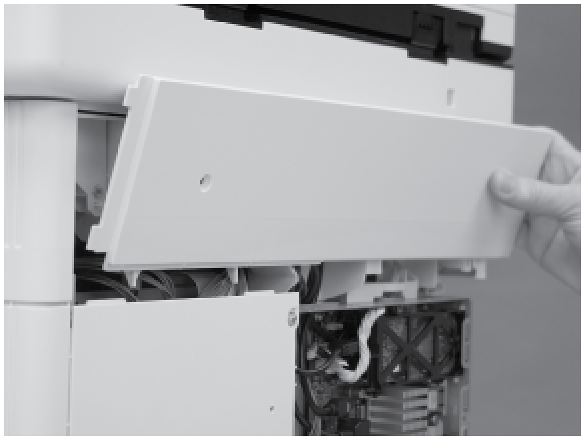
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-2437 Slide the cover right



4. Remove the cover.

Figure 7-2438 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-2439 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-2440 Remove the cover

Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

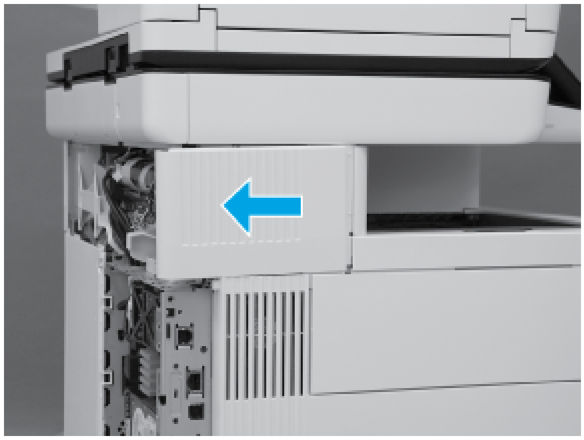
NOTE: This procedure is for MFP models only.

1. At the left side of the printer, release one tab (callout 1).

Figure 7-2441 Release one tab

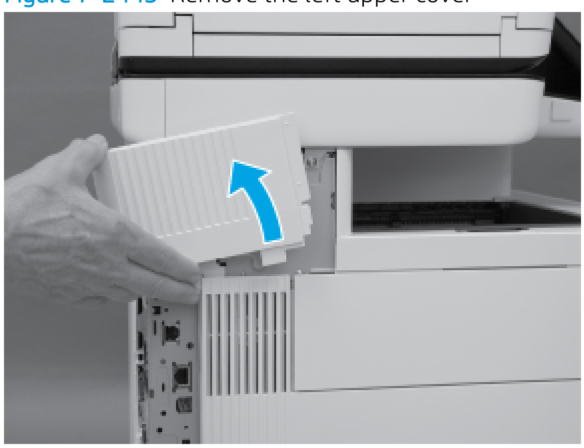
2. Slide the left upper cover toward the back of the printer.

Figure 7-2442 Slide the cover back



3. Rotate the cover up to remove it.

Figure 7-2443 Remove the left upper cover



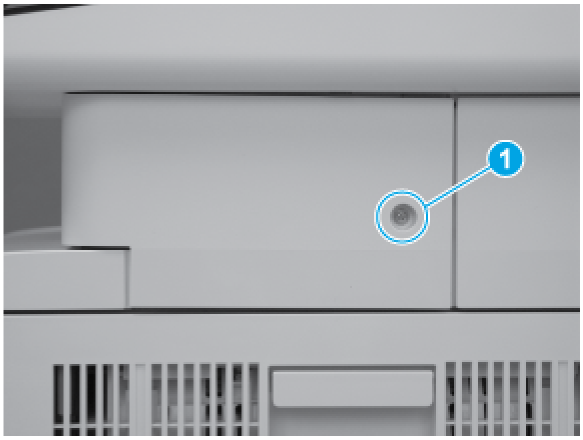
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-2444 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-2445 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-2446 Rotate the cover

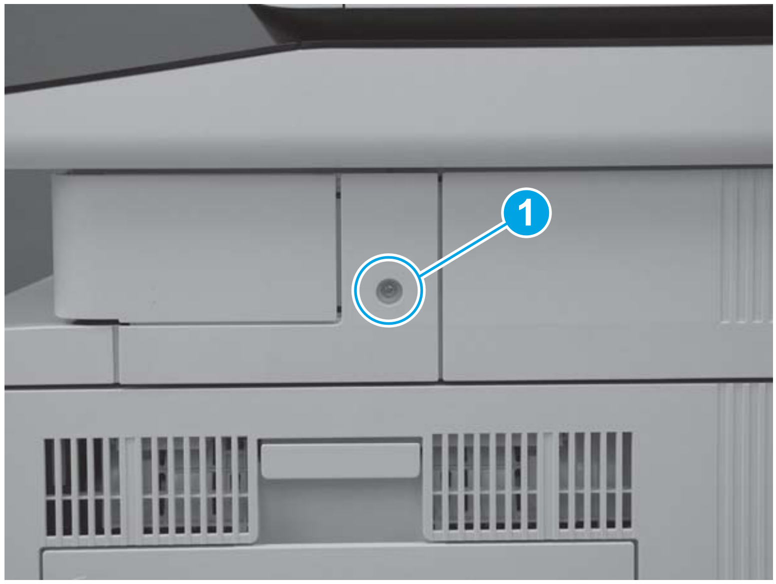
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

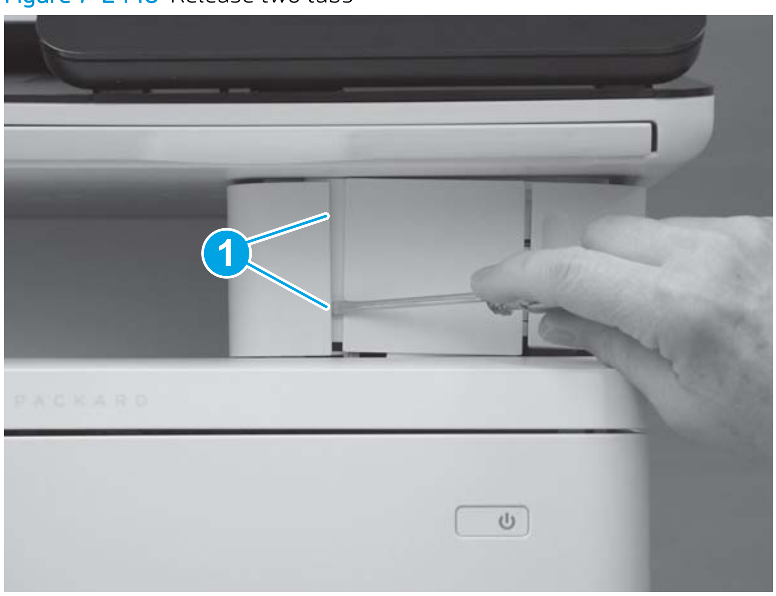
1. Remove one screw (callout 1).

Figure 7-2447 Remove one screw



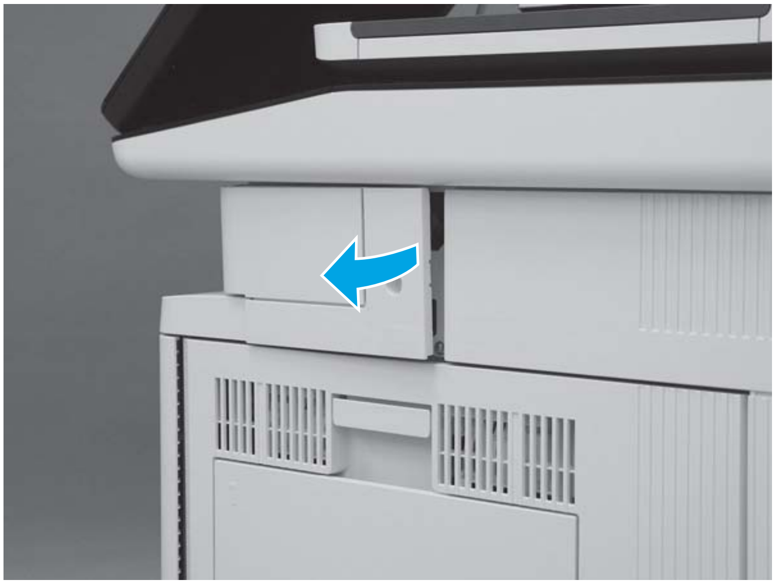
2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-2448 Release two tabs



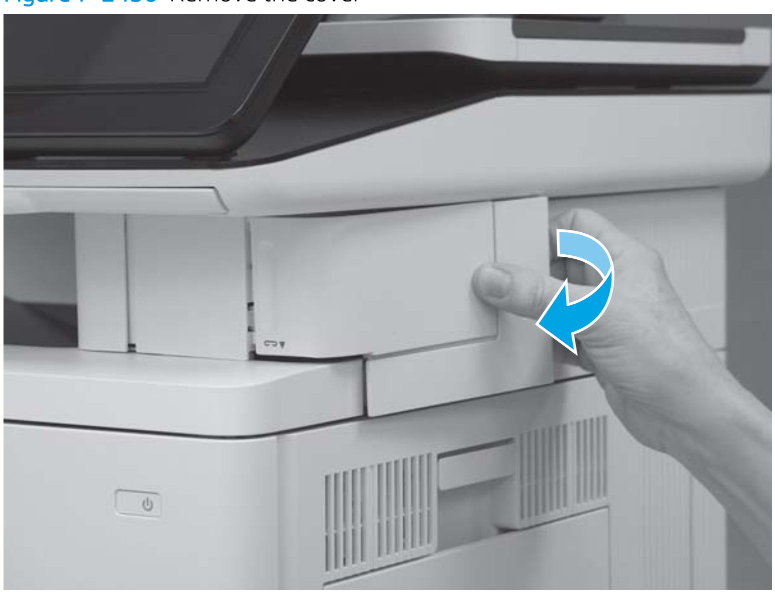
3. Release the back edge of the cover.

Figure 7-2449 Release the back edge of the cover



4. Rotate the cover away from the printer to remove it.

Figure 7-2450 Remove the cover



Remove the integrated scanner assembly (ISA) (MFP)

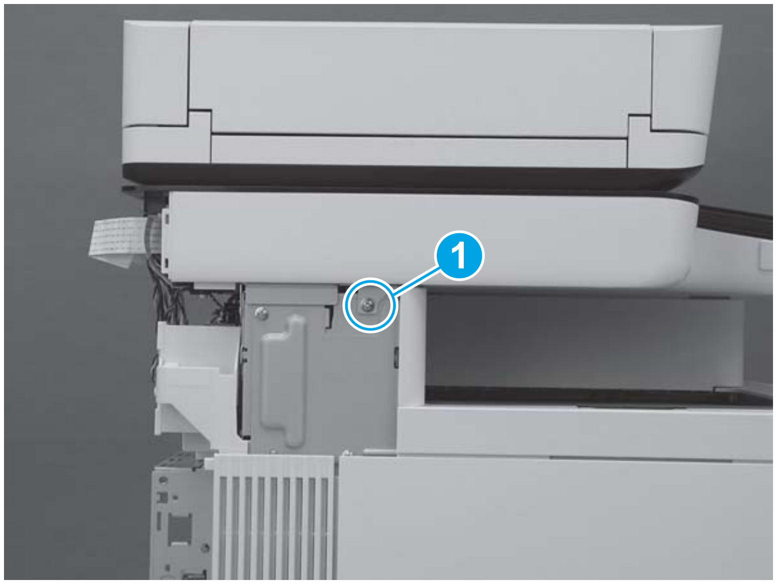
Follow these steps to remove the integrated scanner assembly (ISA).

NOTE: This procedure is for MFP models only.

NOTE: The ISA includes the document feeder, image scanner, scanner control board (SCB), control panel, keyboard (flow models) and NFC PCA (not all models).

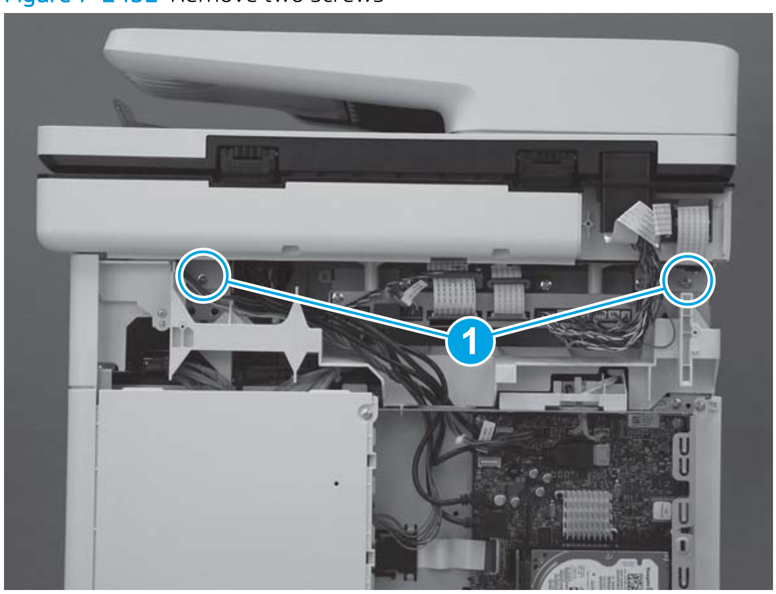
1. At the left side of the printer, remove one screw (callout 1).

Figure 7-2451 Remove one screw



2. At the back of the printer, remove two screws (callout 1).

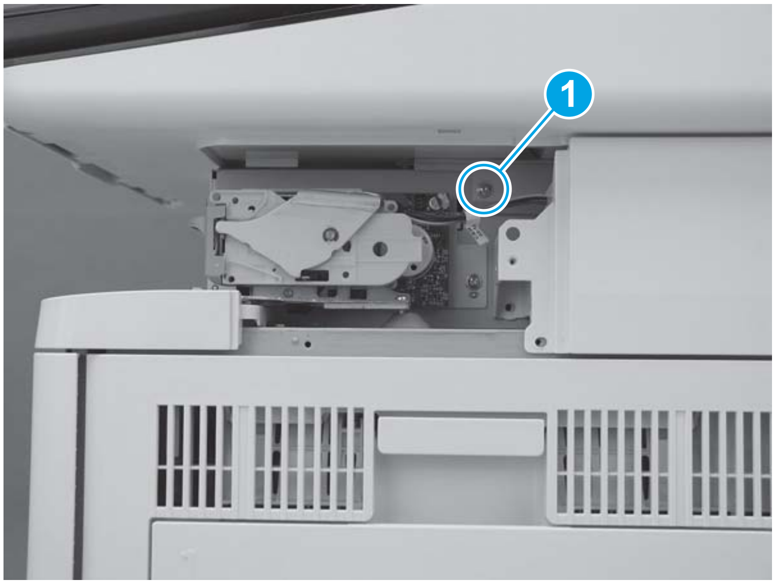
Figure 7-2452 Remove two screws



3. At the right side of the printer, remove one screw (callout 1).

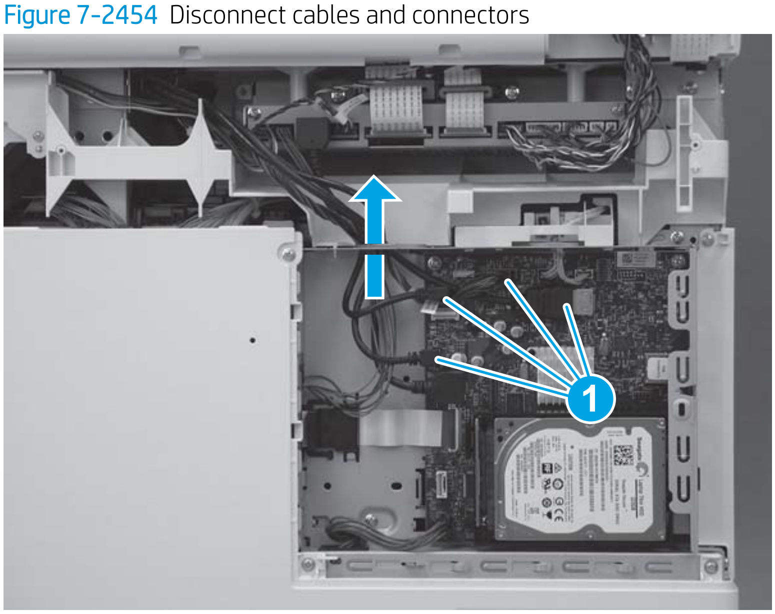
NOTE: The M577z is shown in the figure below. The procedure is correct for all MFP models.

Figure 7-2453 Remove one screw



4. Disconnect four connectors (callout 1) on the formatter, and then pass the wire harnesses and cables through the top opening in the formatter case (callout 2).

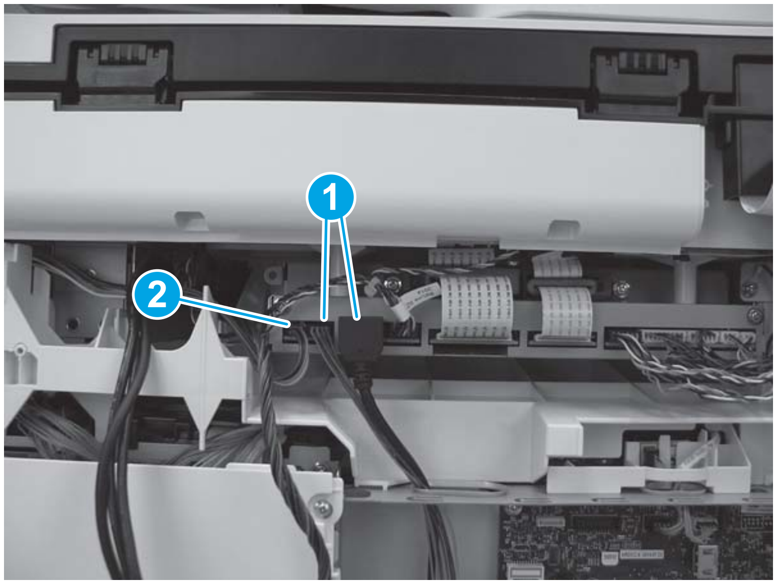
Figure 7-2454 Disconnect cables and connectors



5. Disconnect two connectors on the scanner control board (callout 1).

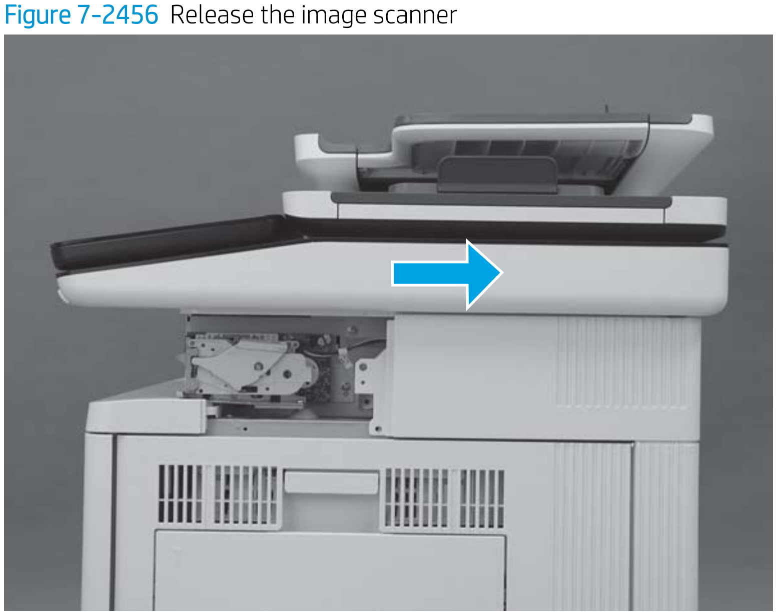
   MFP stapler models: Disconnect one connector for the stapler on the scanner control board (callout 2).

   Figure 7-2455 Disconnect connectors

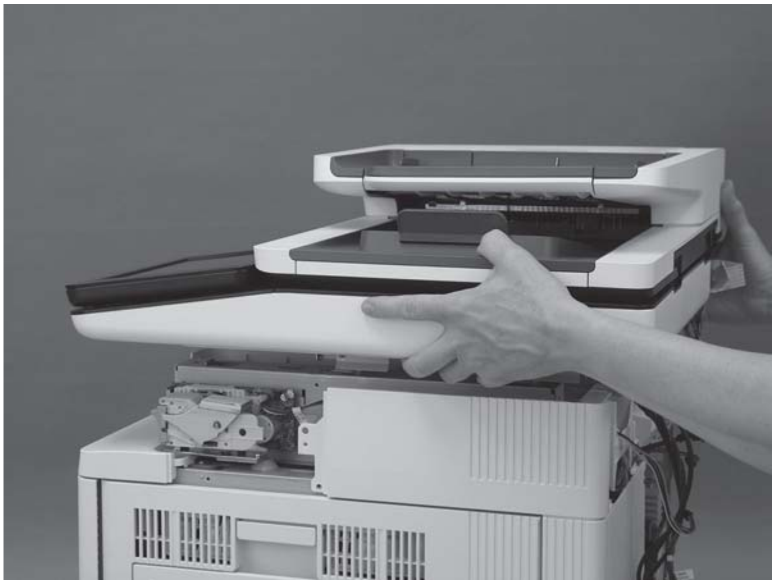
6. Slide the image scanner toward the back of the printer to release it.

   Figure 7-2456 Release the image scanner

7. Lift the ISA straight up to remove it.

Figure 7-2457 Remove the ISA



Remove the right upper cover (MFP)

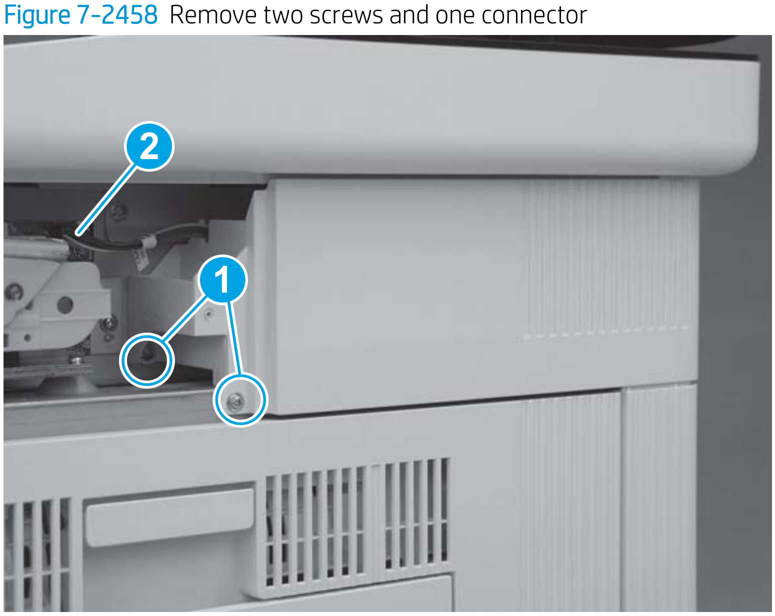
Follow these steps to remove the right upper cover.

NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Figure 7-2458 Remove two screws and one connector

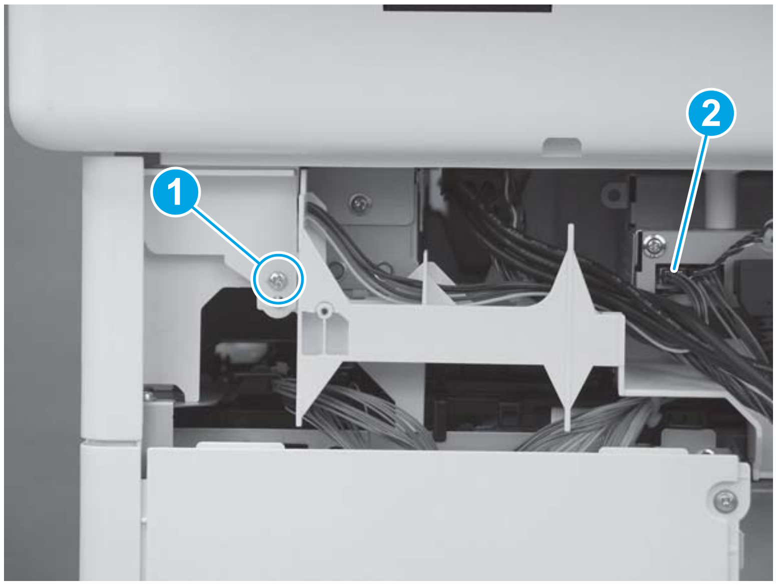


2. At the back of the printer, remove one screw (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

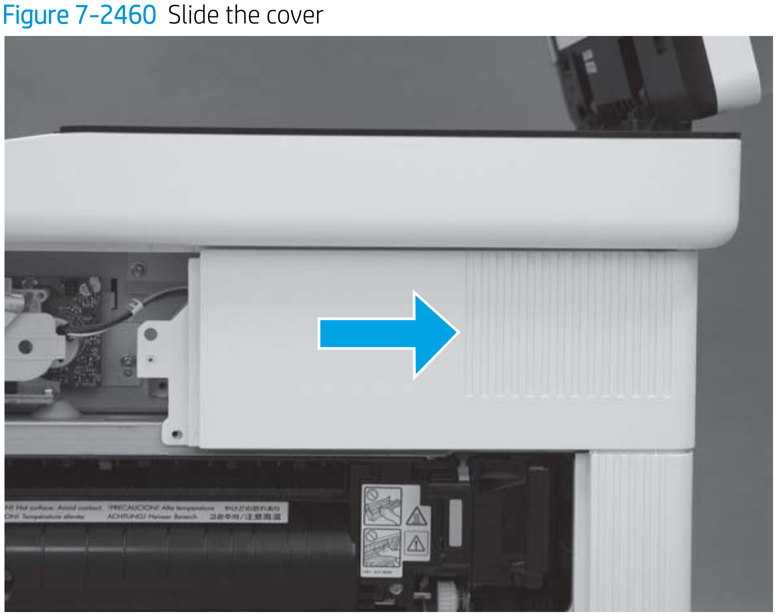
Reinstallation tip: This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

Figure 7-2459 Remove one screw and connector



3. Slide the cover toward the back of the printer.

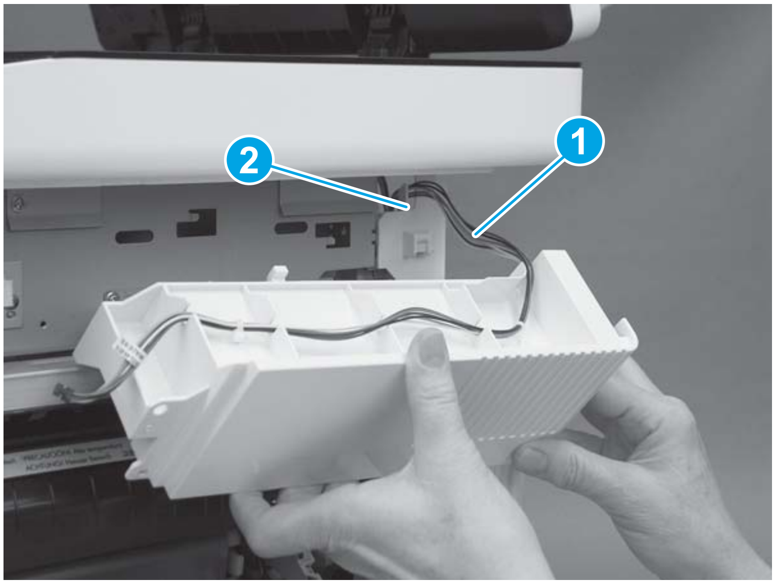
Figure 7-2460 Slide the cover



4. Lift the cover away from the printer to remove it.

   M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

   Figure 7-2461 Remove the cover



Remove the left cover

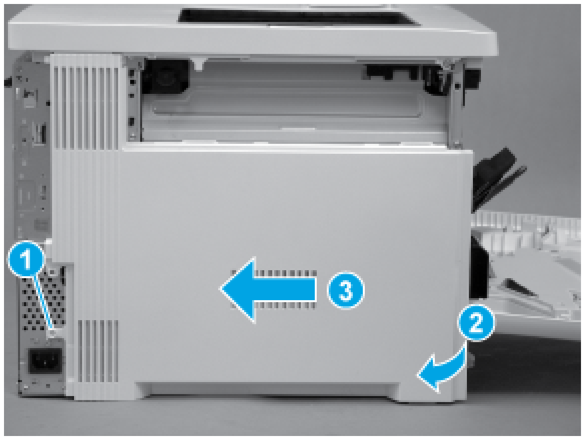
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

   Figure 7-2462 Remove one screw

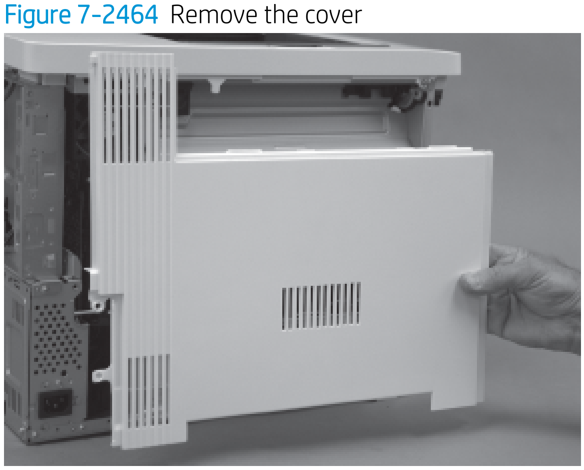
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-2463 Release the cover



3. Remove the cover.

Figure 7-2464 Remove the cover



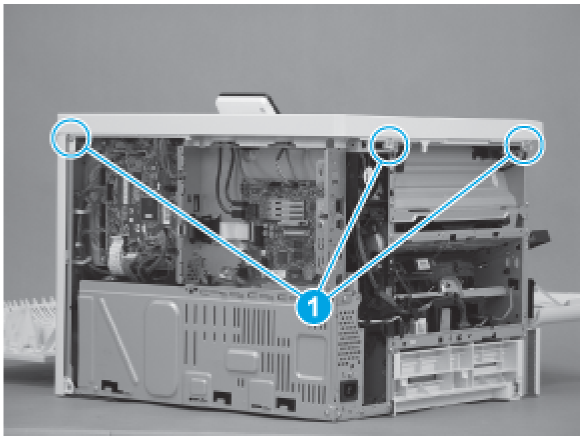
Remove the upper cover (SFP)

Follow these steps to remove the upper cover.

NOTE: This procedure is for SFP models only.

1. Remove three screws (callout 1).

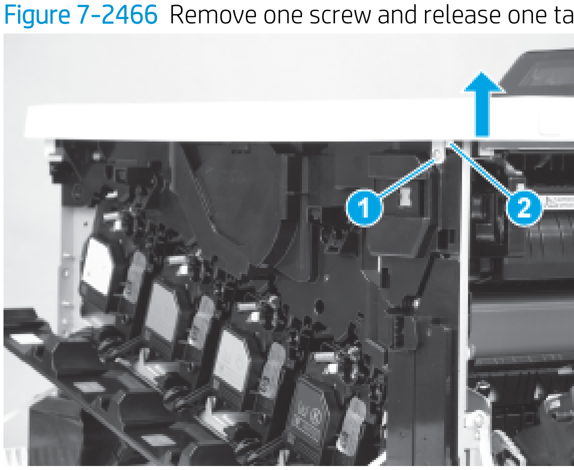
Figure 7-2465 Remove three screws



2. Remove one screw (callout 1), release one tab (callout 2), and then slightly separate the corner of the cover from the chassis.

NOTE: This is a self-tapping plastic-thread screw. Make sure that this screw is used in this location when it is reinstalled.

Figure 7-2466 Remove one screw and release one tab

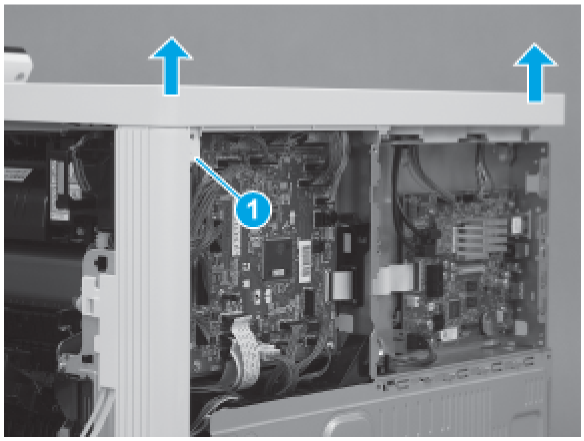


3. Release one tab (callout 1), and then lift up on the cover to release it.

IMPORTANT: **M554 models**: Disconnect the control-panel flat cable at the formatter.

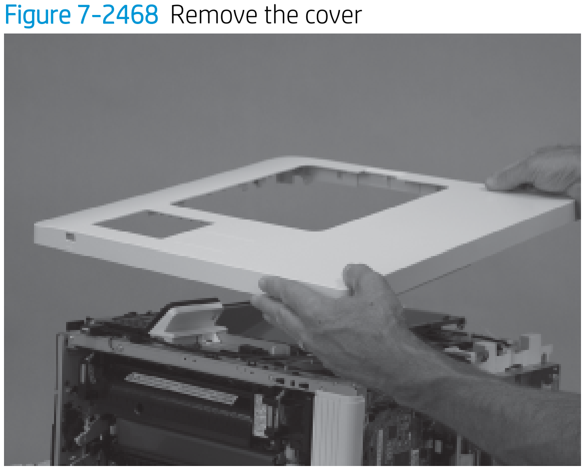
NOTE: If the cover does not release, check for addition tabs by locating the triangles embossed in the cover at tab locations.

Figure 7-2467 Release the cover



4. Remove the cover.

Figure 7-2468 Remove the cover



Remove the right rear cover

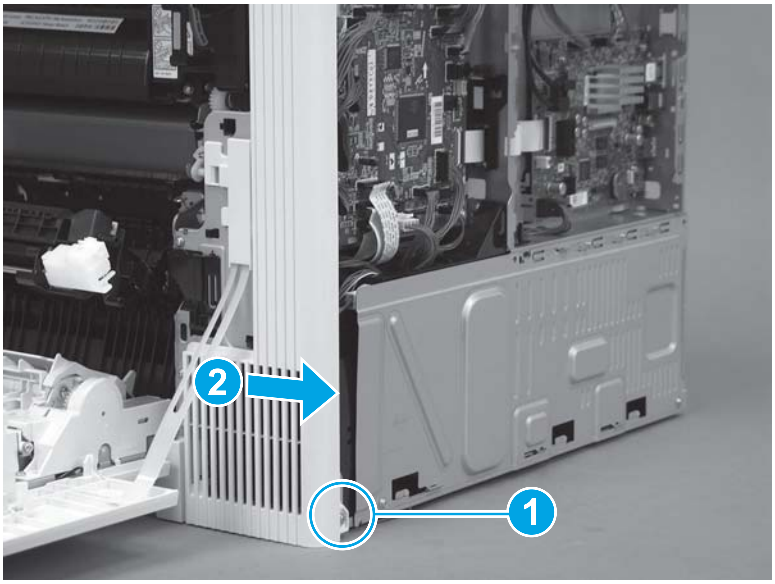
Follow these steps to remove the right rear cover.

NOTE: The figures in this topic show a SFP model. However, the procedure is correct for an MFP.

1. Remove one screw (callout 1), and then slide the cover toward the rear of the printer (callout 2) to release it.

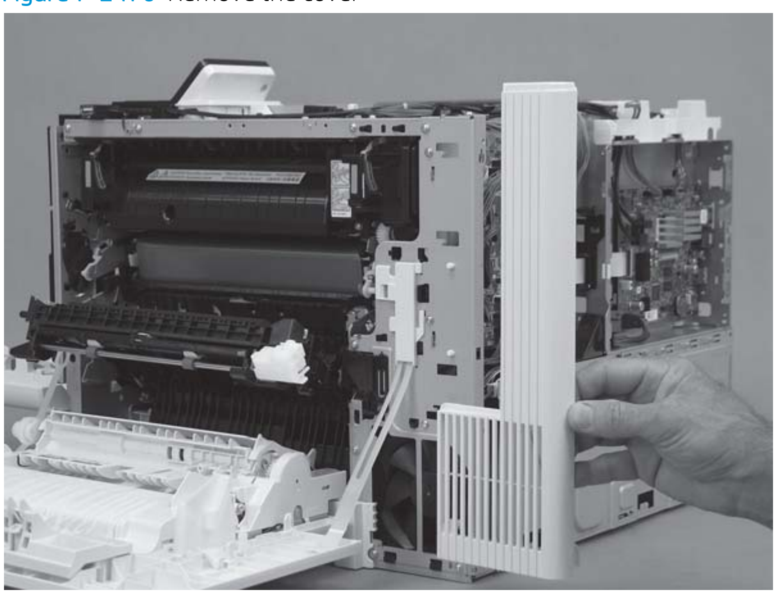
TIP: If the right door is closed, open it now.

Figure 7-2469 Release the cover



2. Remove the cover.

Figure 7-2470 Remove the cover

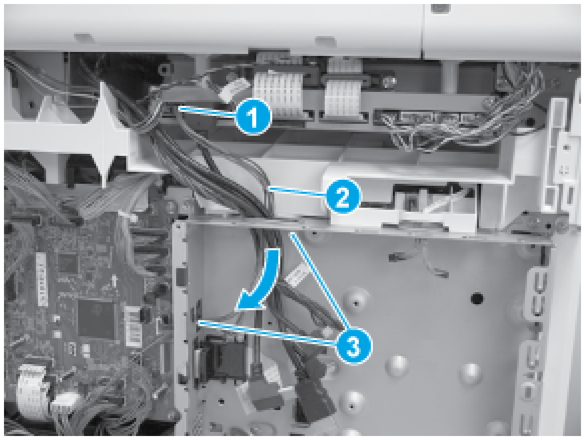


Remove the formatter case

Follow these steps to remove the formatter case.

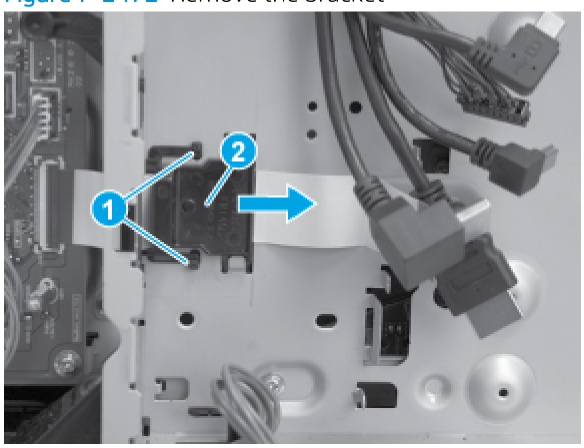
1. **MFP only**: Disconnect one connector (callout 1), and then pass the wire harness (callout 2) through two openings in the formatter case (callout 3).

Figure 7-2471 Disconnect one connector



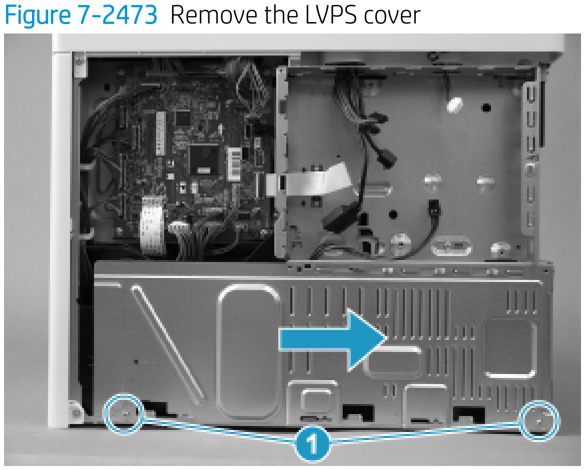
2. Release two tabs (callout 1) on the black plastic bracket. Hold the tabs in the released position, and then slide the bracket (callout 2) to the right to remove it from the formatter case.

Figure 7-2472 Remove the bracket



3. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

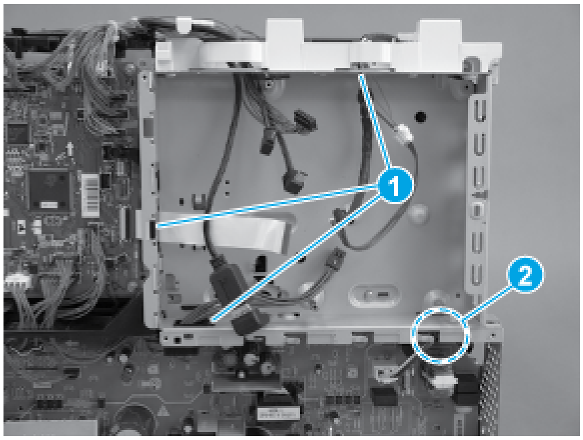
Figure 7-2473 Remove the LVPS cover



4. Pass two wire harnesses and one flat cable (callout 1) through the opening in the formatter case, and then release one wire harness from the retainer (callout 2).

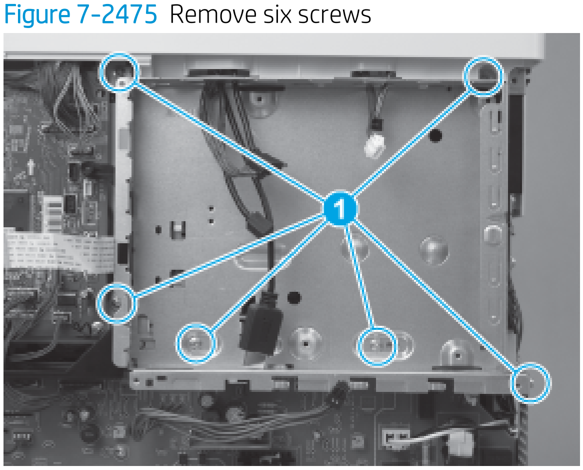
⚠ CAUTION: The flat cable might be attached to the formatter case with double-sided tape. Make sure that this tape is released, so that the flat cable is not damaged when the formatter case is removed.

Figure 7-2474 Release wire harnesses and flat cable



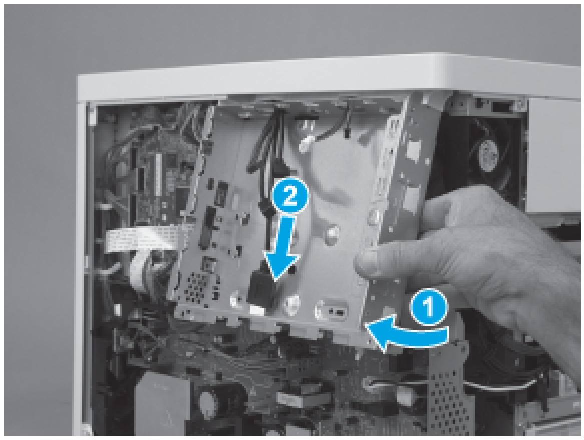
5. Remove six screws (callout 1).

Figure 7-2475 Remove six screws



6. Rotate the bottom of the formatter case away from the printer (callout 1), and then pull it down (callout 2) to release it.

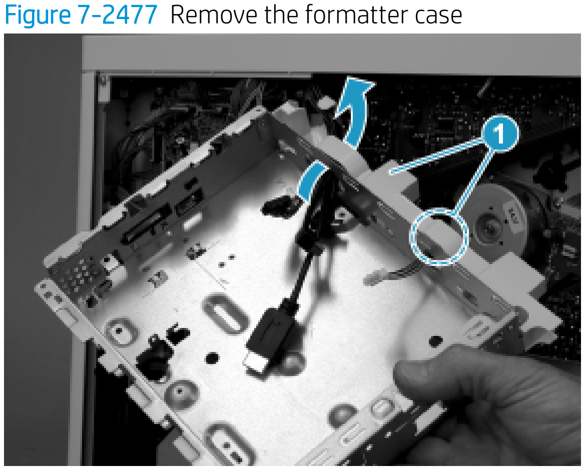
Figure 7-2476 Release the formatter case



7. Pass the wire harnesses through the opening in the formatter case to remove it.

IMPORTANT: If the formatter case is removed so that it can be replaced, make sure to transfer the memory PCA (island of data) and plastic bracket (callout 1) to the replacement case.

Figure 7-2477 Remove the formatter case

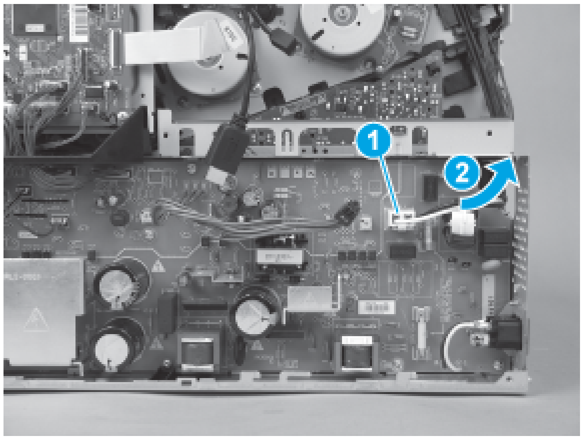


Remove the low-voltage power supply (LVPS)

Follow these steps to remove the low-voltage power supply (LVPS).

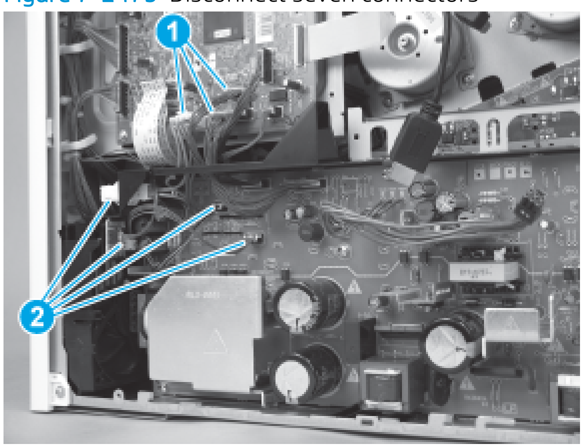
1. Disconnect one wire harness (callout 1), and then pass the wire harness through the opening (callout 2) in the chassis.

Figure 7-2478 Disconnect one wire harness



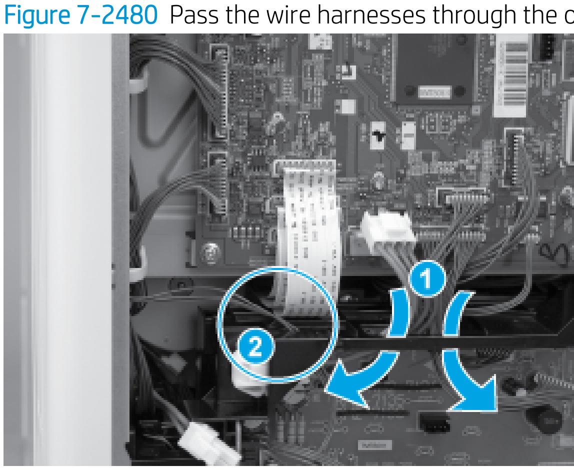
2. Disconnect three connectors on the DC controller (callout 1), and then disconnect four connectors (callout 2) on the LVPS.

Figure 7-2479 Disconnect seven connectors



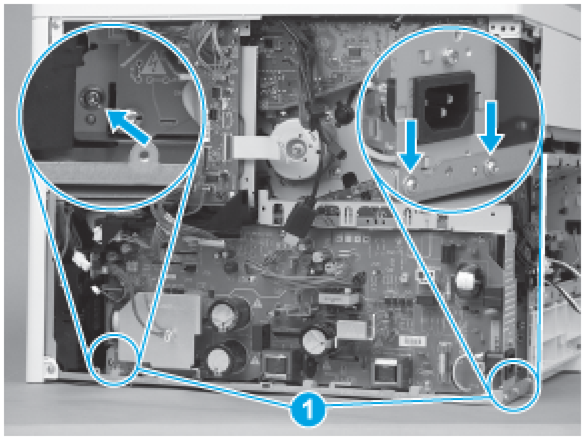
3. Pass the wire harnesses from the DC controller to the LVPS through the opening in the chassis (callout 1), and then release the wire harnesses from the retainer (callout 2).

Figure 7-2480 Pass the wire harnesses through the opening



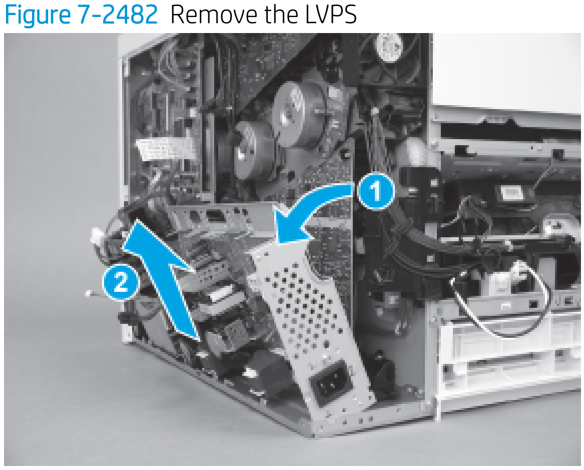
4. Remove three screws (callout 1).

Figure 7-2481 Remove three screws



5. Rotate the top of the LVPS away from the printer (callout 1), and then slide it up and out (callout 2) of the printer to remove it.

Figure 7-2482 Remove the LVPS

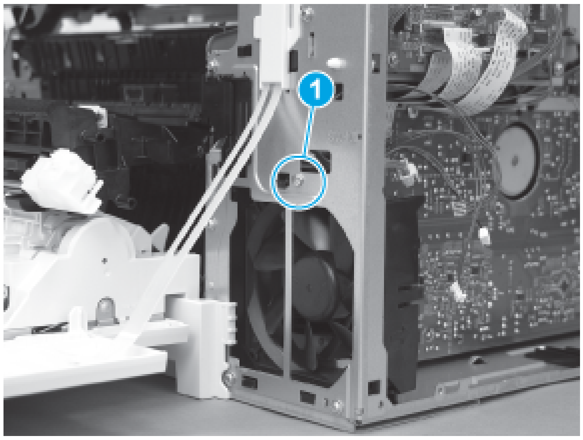


Remove the power supply fan (FM1)

Follow these steps to remove the power supply fan.

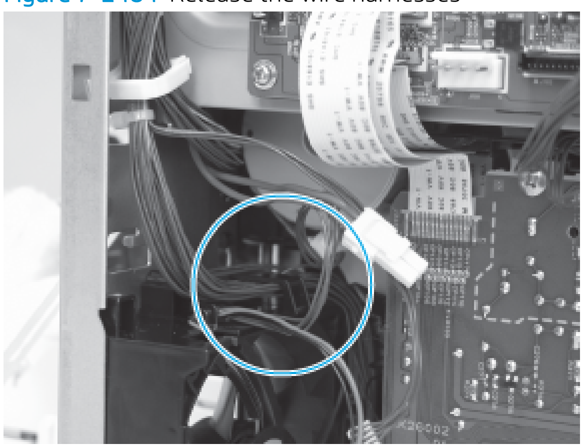
1. Remove one screw (callout 1).

Figure 7-2483 Remove one screw



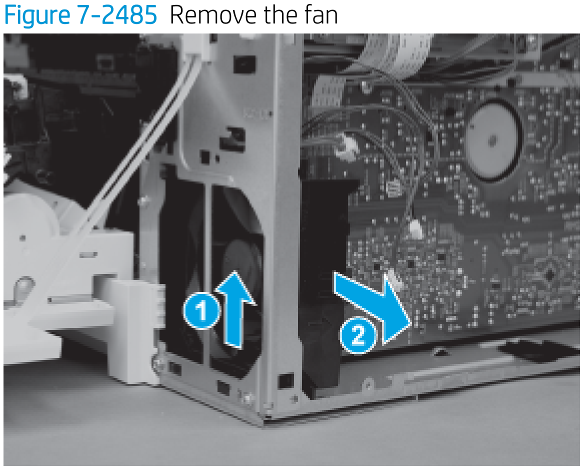
2. Release the wire harnesses from the retainer on the top of the fan bracket.

Figure 7-2484 Release the wire harnesses



3. Lift the fan up (callout 1), and then slide it out of the printer (callout 2) to remove it.

Figure 7-2485 Remove the fan

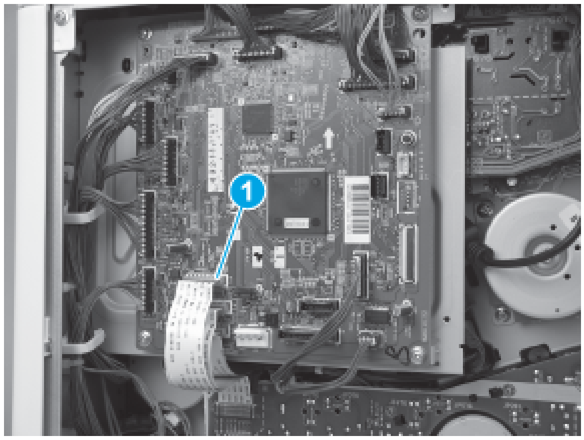


Remove the high-voltage power supply D (HVPSD)

Follow these steps to remove the high-voltage power supply D (HVPSD).

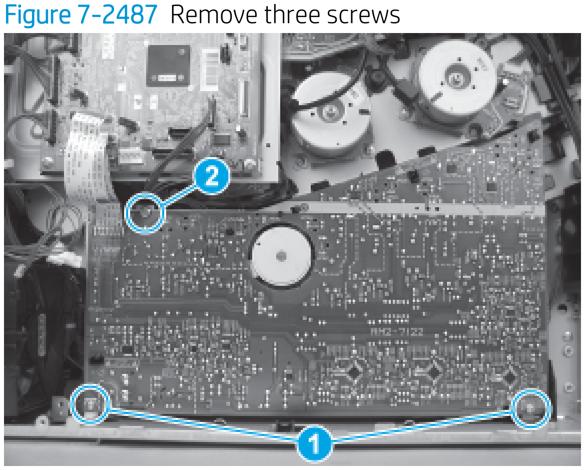
1. Disconnect one flat cable (callout 1) on the DC controller.

Figure 7-2486 Disconnect one flat cable



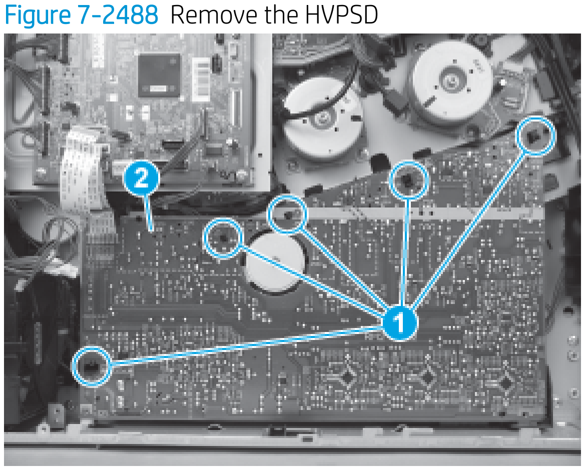
2. Remove two screws (callout 1), and then remove one self tapping screw (callout 2) on the HVPSD.

Figure 7-2487 Remove three screws



3. Release five tabs (callout 1), and then remove the HVPSD (callout 2).

Figure 7-2488 Remove the HVPSD

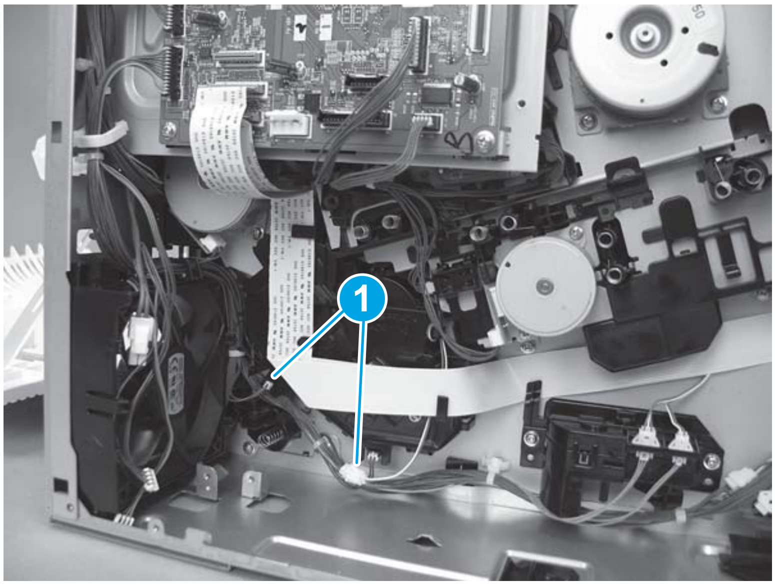


Remove the auto close assembly

Follow these steps to remove the auto close assembly.

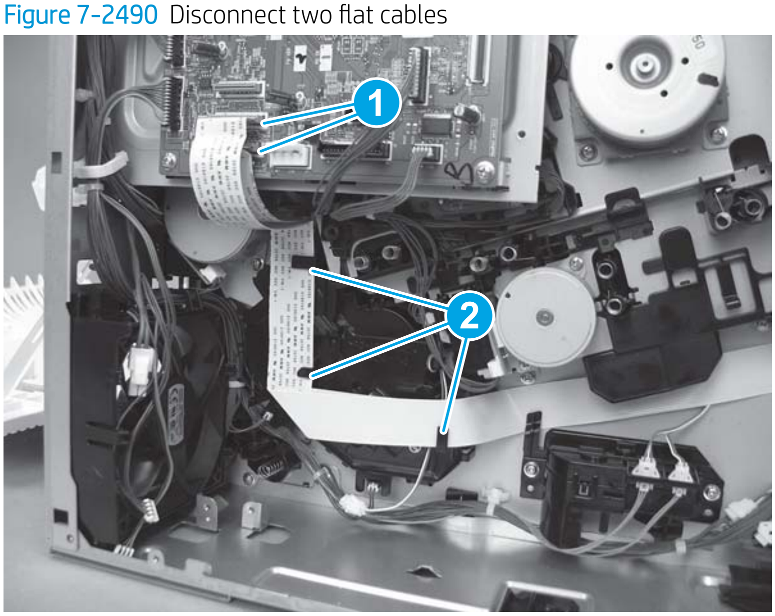
1. Disconnect two connectors (callout 1).

Figure 7-2489 Disconnect two connectors



2. Disconnect two flat cables (callout 1), and then release them from the retainers (callout 2).

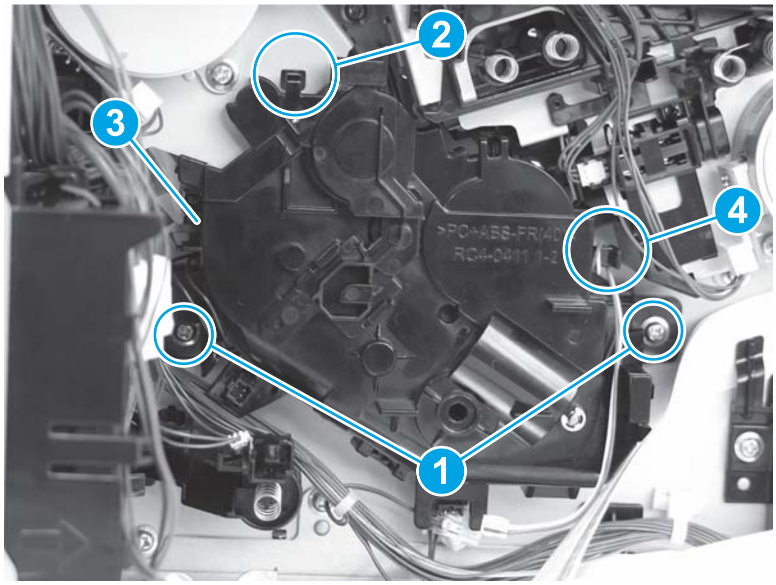
Figure 7-2490 Disconnect two flat cables



3. Remove two screws (callout 1), release one tab (callout 2), and then remove the lifter drive assembly (callout 3).

NOTE: Release one wire harness from the retainer (callout 4) as the assembly is removed.

Figure 7-2491 Remove the assembly



Remove the DC controller (DCC) and sheet-metal bracket

Follow these steps to remove the DC controller and sheet-metal bracket together.

NOTE: 

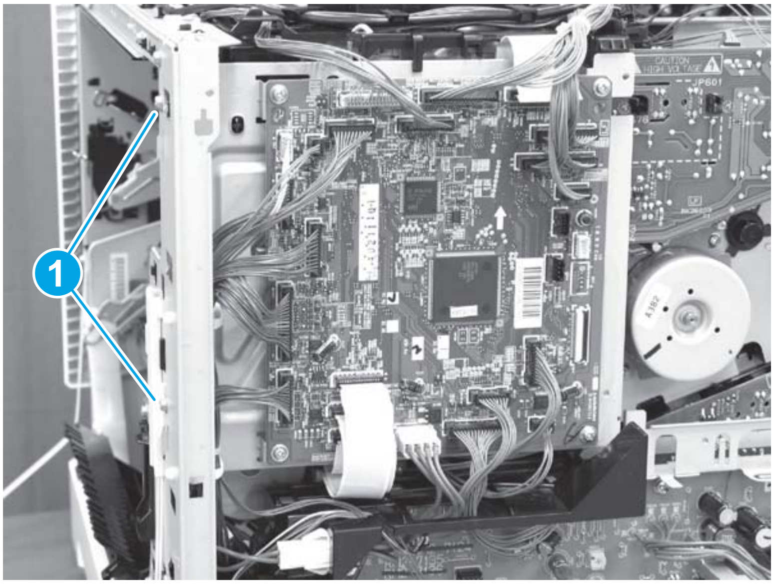
ESD sensitive part.

1. Disconnect all of the connectors, and then remove two screws (callout 1).

Empty DCC connectors

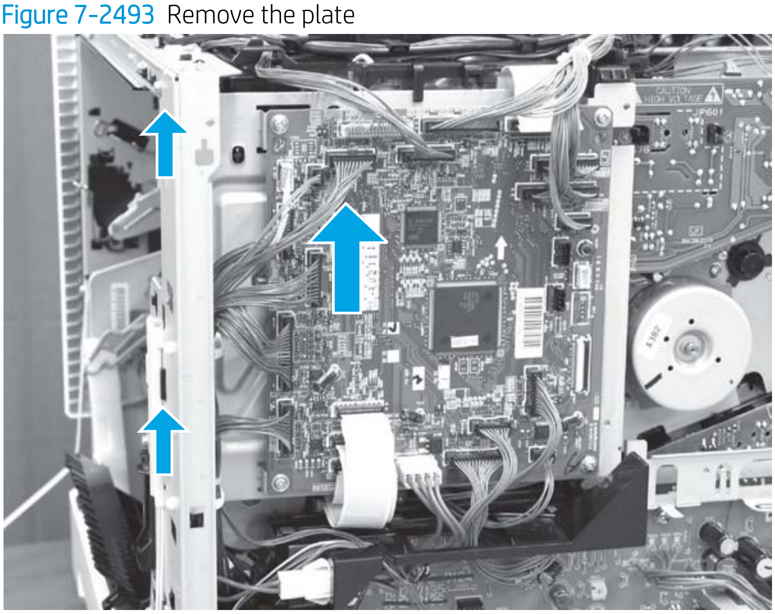
- J140
- J141
- J143

Figure 7-2492 Remove two screws



2. Lift up on the DC controller and sheet-metal plate to remove it.

Figure 7-2493 Remove the plate

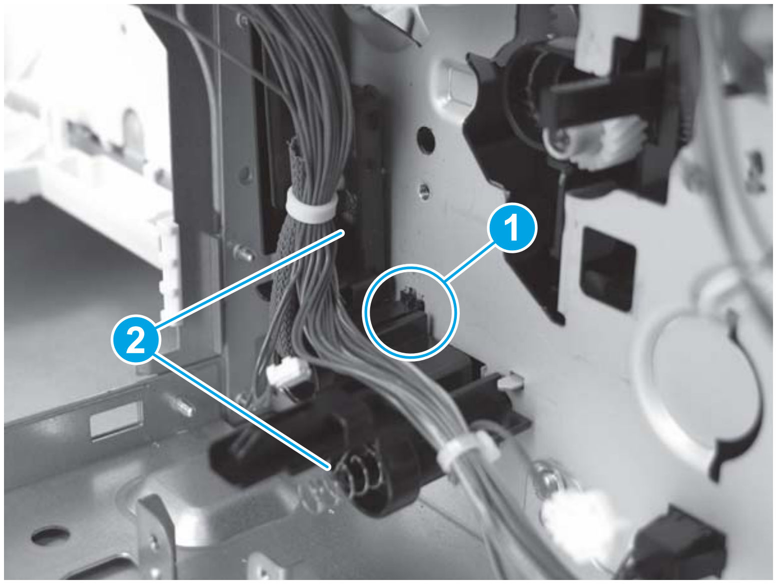


Remove the pickup drive assembly and motor (M5)

Follow these steps to remove the pickup drive assembly and motor.

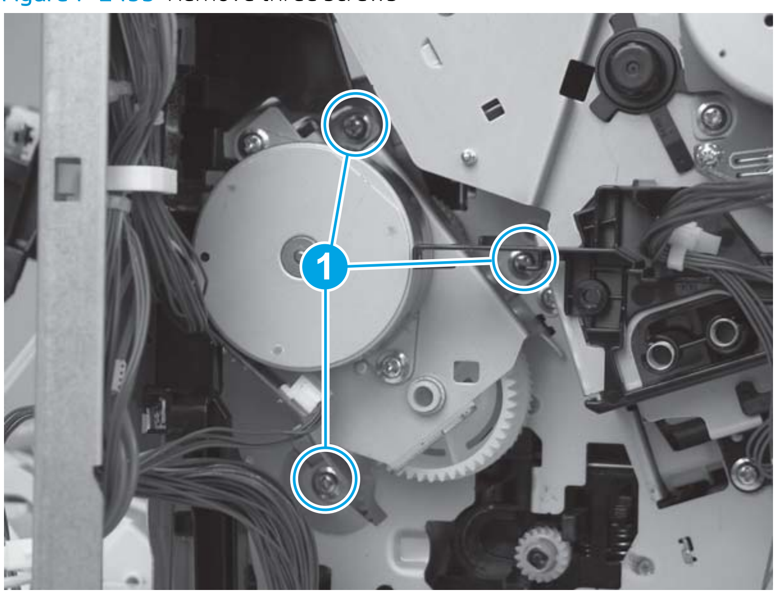
1. Release one tab (callout 1), and then move the guide (callout 2) out of the way.

Figure 7-2494 Move the guide out of the way



2. Remove three screws (callout 1).

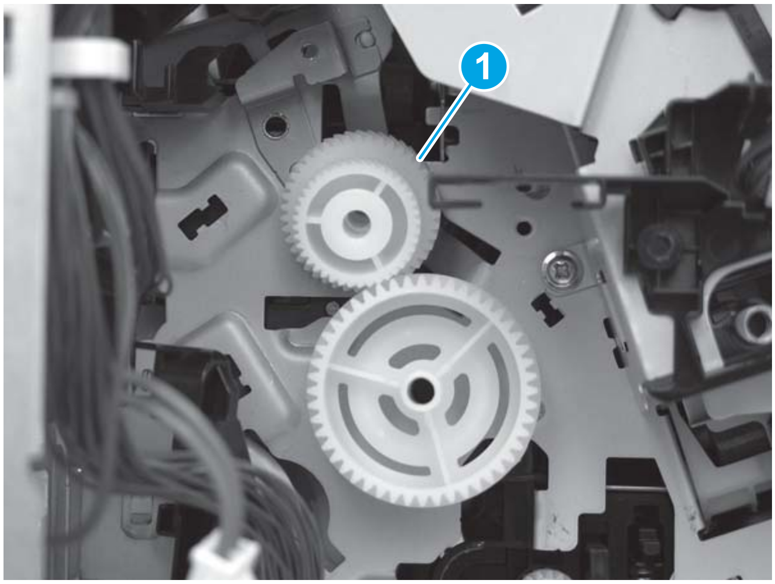
Figure 7-2495 Remove three screws



3. Remove the assembly.

⚠ CAUTION: One gear on the back side of the assembly is not captive. Handle the assembly carefully.

Figure 7-2496 Remove the assembly



4. If the gear (callout 1) was not removed with the assembly in the previous step, remove it now.

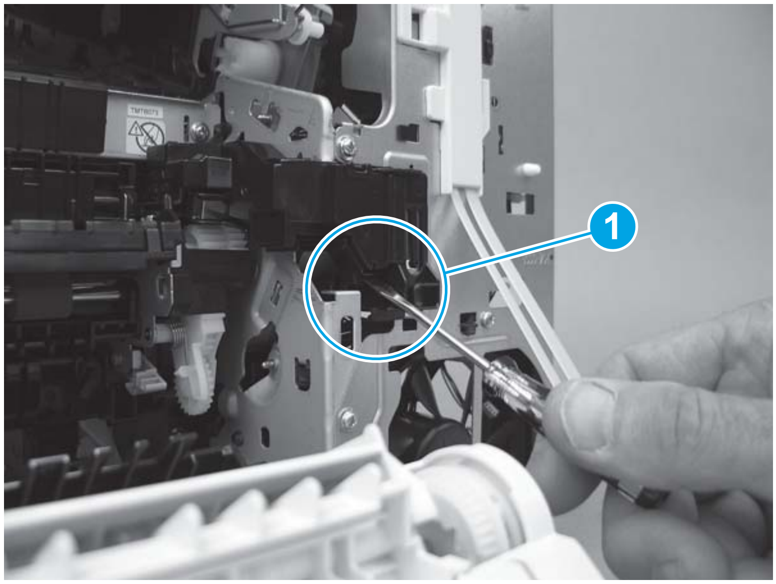
Figure 7-2497 Remove the gear if installed

Remove the registration assembly

Follow these steps to remove the registration assembly.

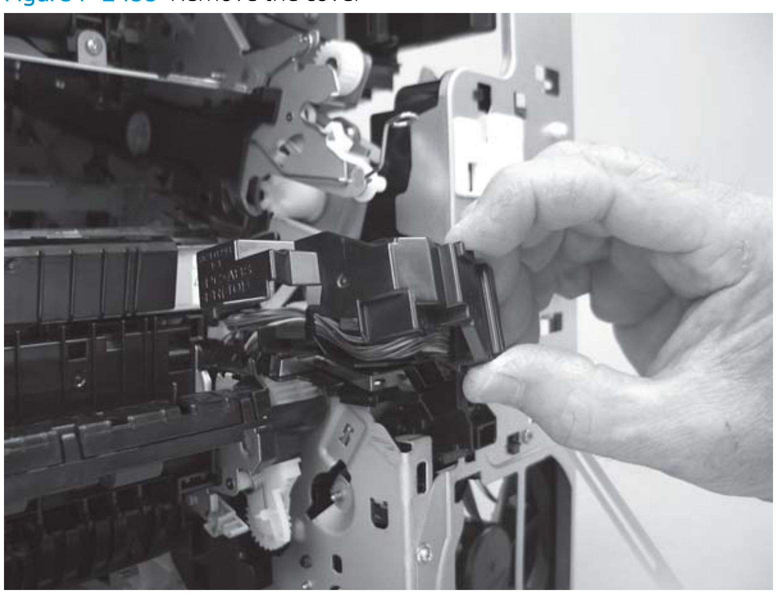
1. At the right side of the printer, release one tab (callout 1).

Figure 7-2498 Release one tab



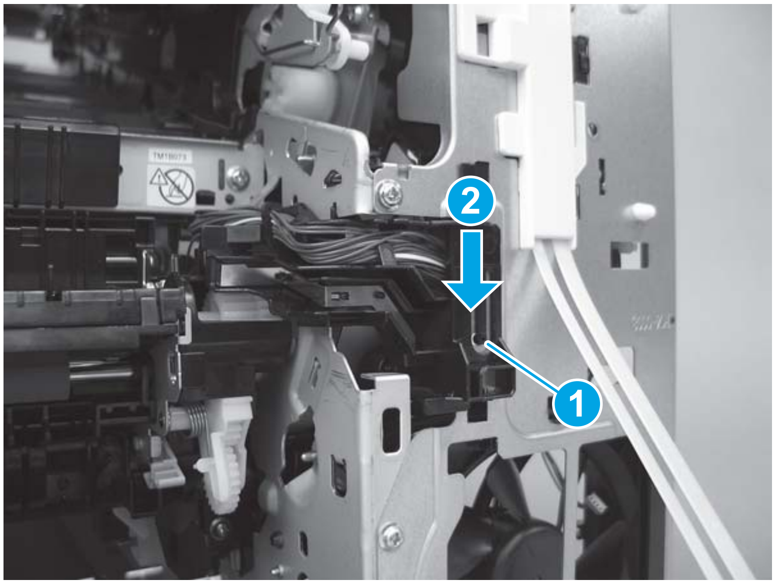
2. Remove the cover.

Figure 7-2499 Remove the cover



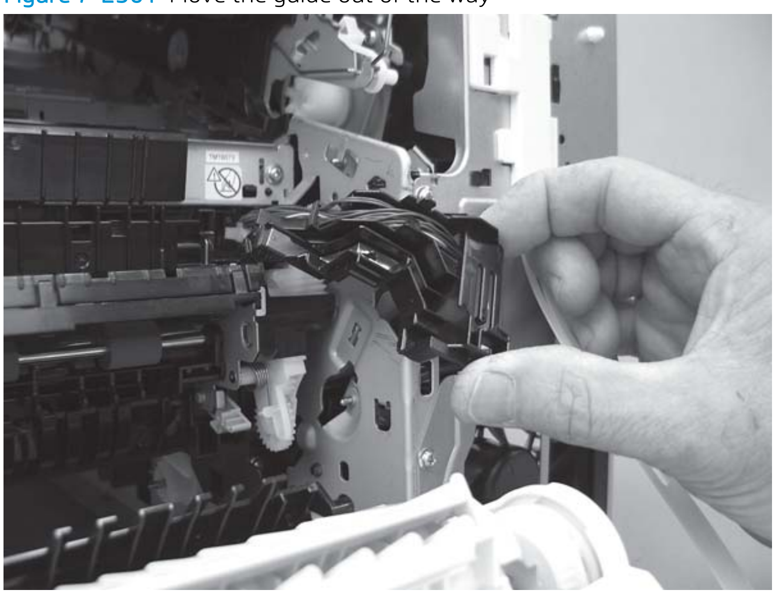
3. Release one tab (callout 1), and then push down on the guide (callout 2) to release it.

Figure 7-2500 Release the guide



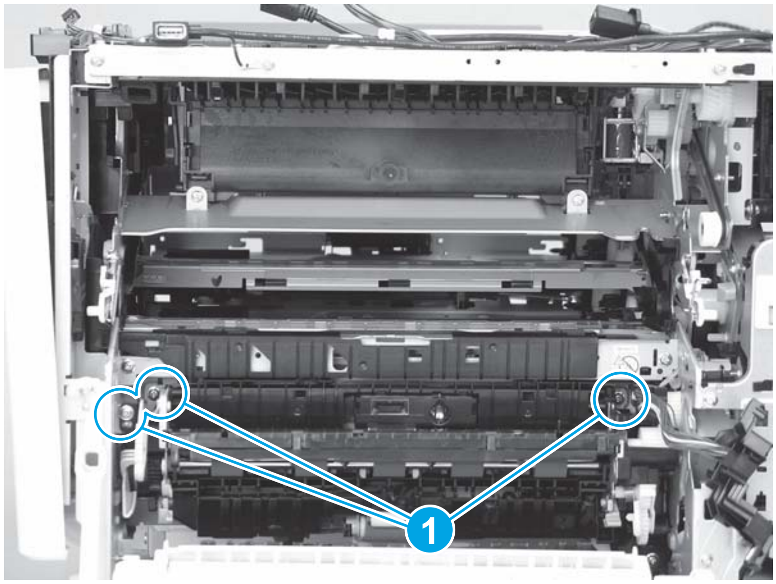
4. Move the guide out of the way.

Figure 7-2501 Move the guide out of the way



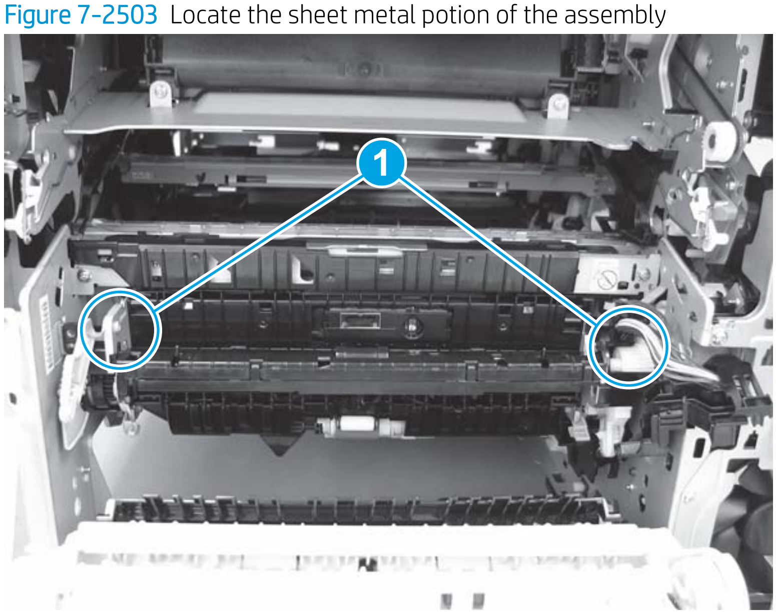
5. Remove three screws (callout 1).

Figure 7-2502 Remove three screws



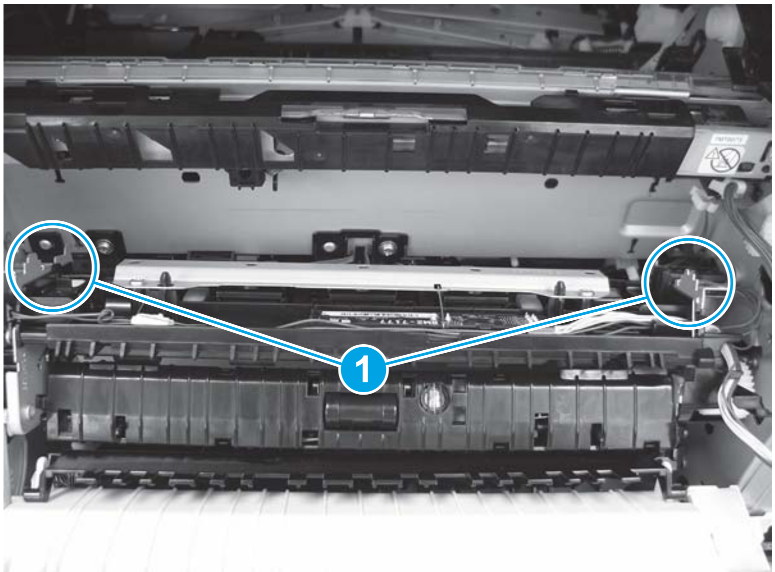
6. Before proceeding, locate the sheet metal portion (callout 1) of the assembly. When handling the assembly, use the sheet metal as handles.

Figure 7-2503 Locate the sheet metal potion of the assembly



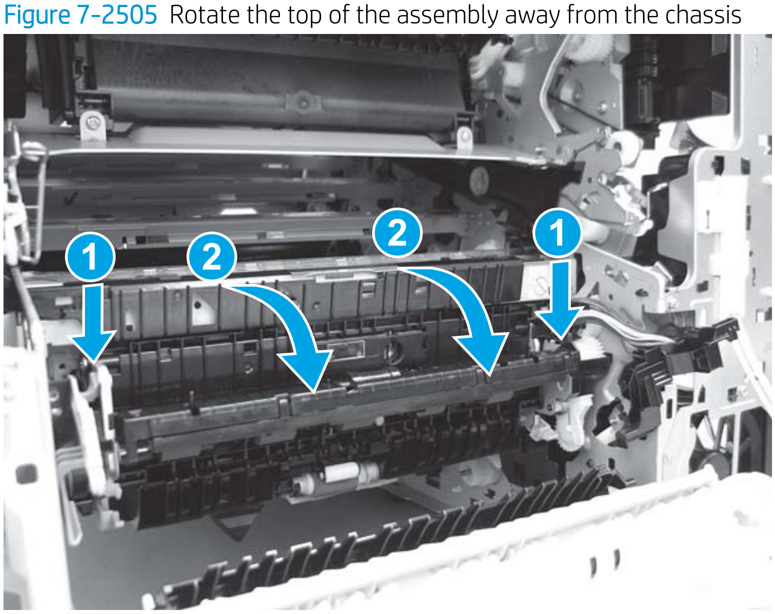
7. Before proceeding, take note of the sheet-metal tabs (callout 1) on the back of the assembly that fasten it to the chassis (the figure shows the assembly removed so the tabs can be viewed).

Figure 7-2504 Locate the sheet metal potion of the assembly



8. Grasp the sheet-metal handles (callout 1), and then rotate the top of the assembly away from the chassis (callout 2) to release the top tabs.

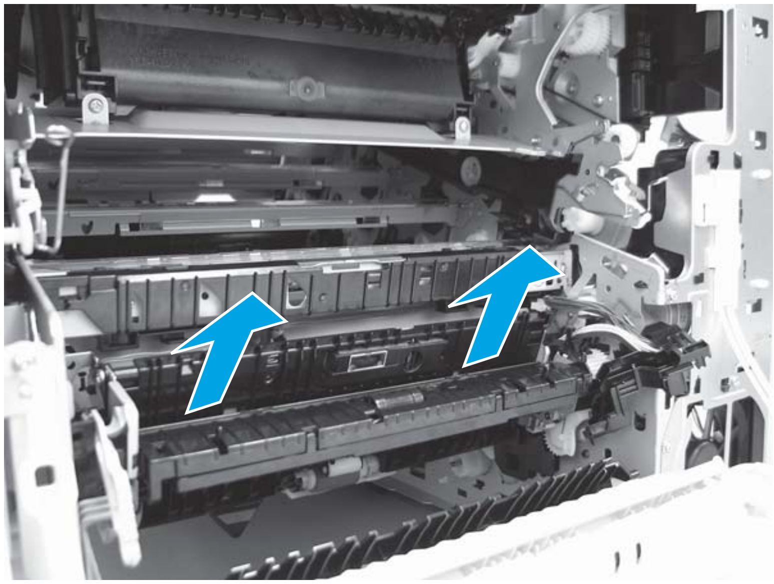
Figure 7-2505 Rotate the top of the assembly away from the chassis



9. Pull up on the assembly to release the bottom tabs.

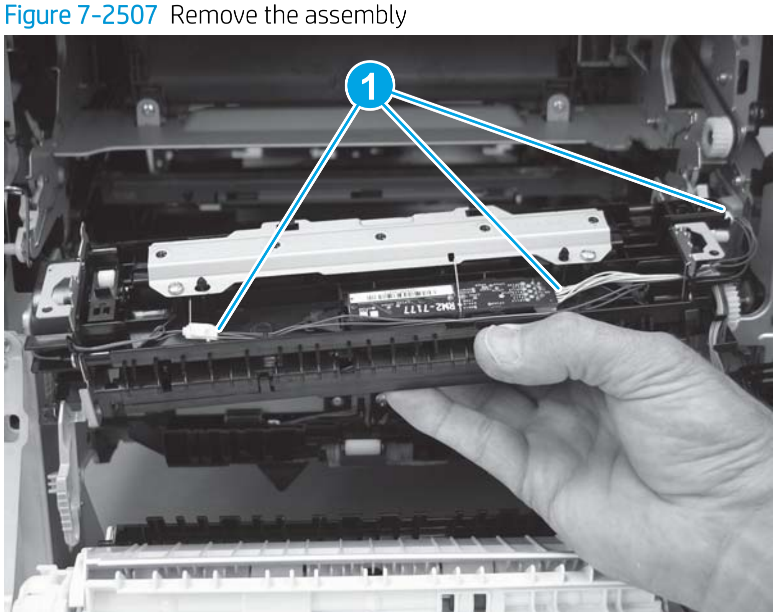
⚠ CAUTION: The assembly is still attached to the printer by a wire harness. Do not attempt to completely remove the assembly.

Figure 7-2506 Release the bottom tabs



10. Turn the registration assembly over to access the back side, disconnect three connectors (callout 1), and then remove the assembly.

Figure 7-2507 Remove the assembly

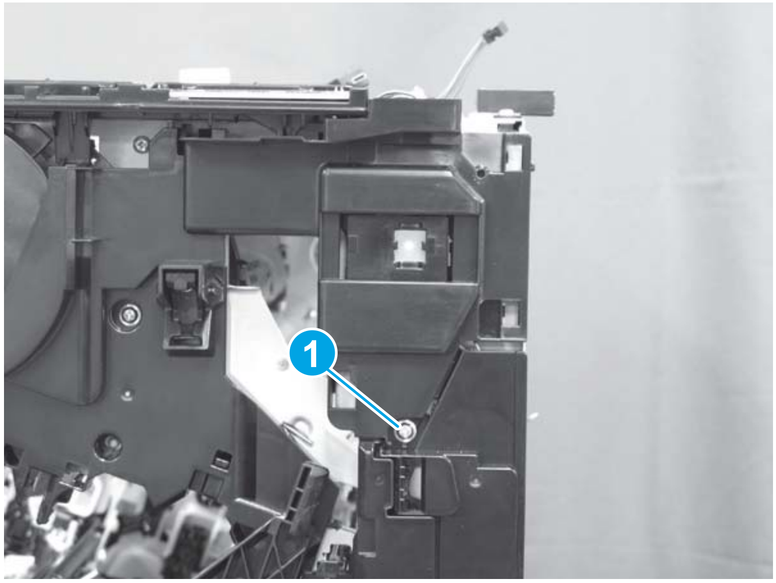


Remove the paper density-detect assembly

Follow these steps to remove the density-detect assembly.

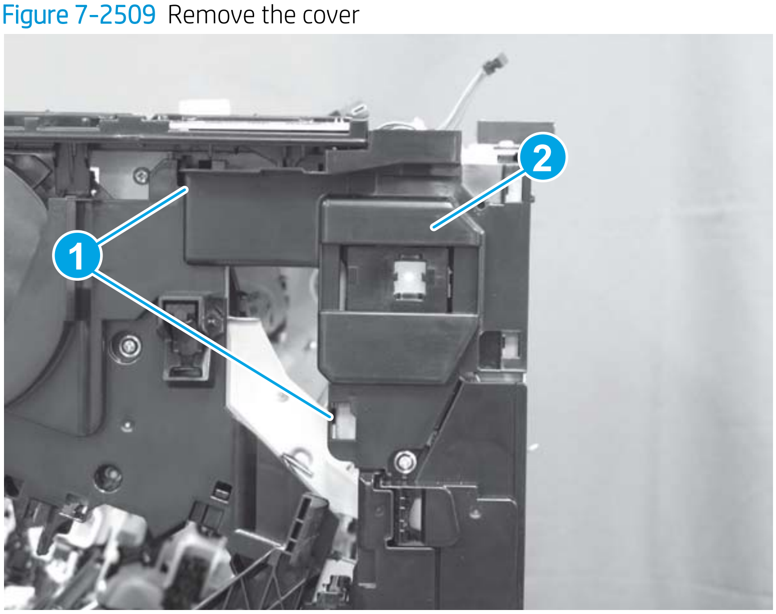
1. Remove one screw (callout 1).

Figure 7-2508 Remove one screw



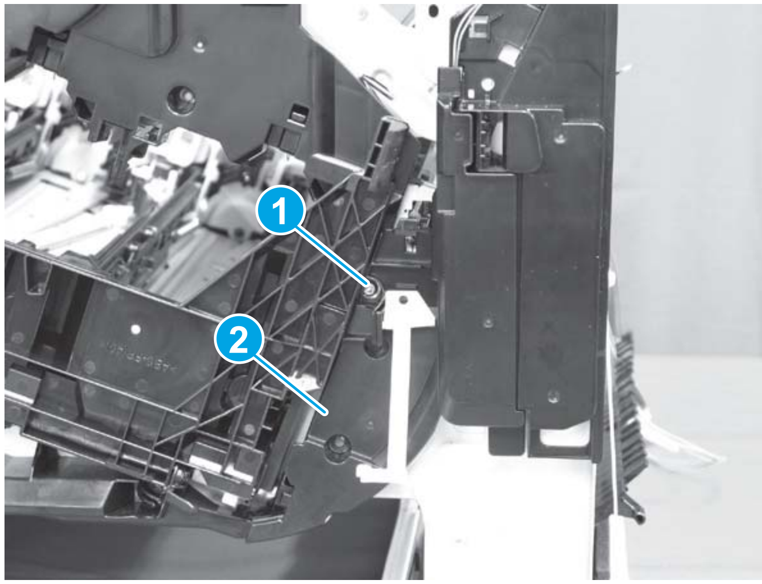
2. Release two tabs (callout 1), and then remove the cover (callout 2).

Figure 7-2509 Remove the cover



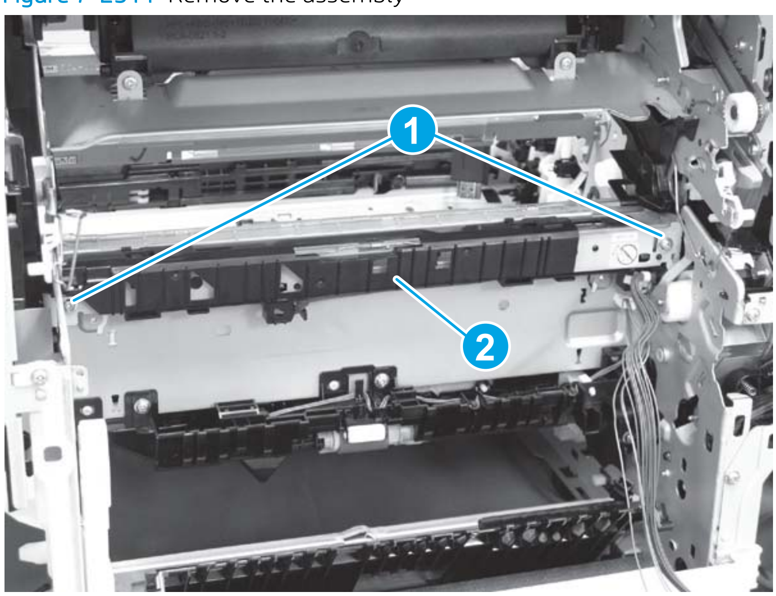
3. Remove one screw (callout 1), and then remove the cover (callout 2).

Figure 7-2510 Remove the cover



4. Remove two screws (callout 1), and then remove the density-detect assembly (callout 2)..

Figure 7-2511 Remove the assembly



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Main-drive assembly

Learn about removing and replacing the main drive assembly.

Before performing service

Turn the printer power off

- Disconnect the power cable.

WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-84 Part information

Part number	Part description
B5L25-67902	Main-drive assembly with instruction guide

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

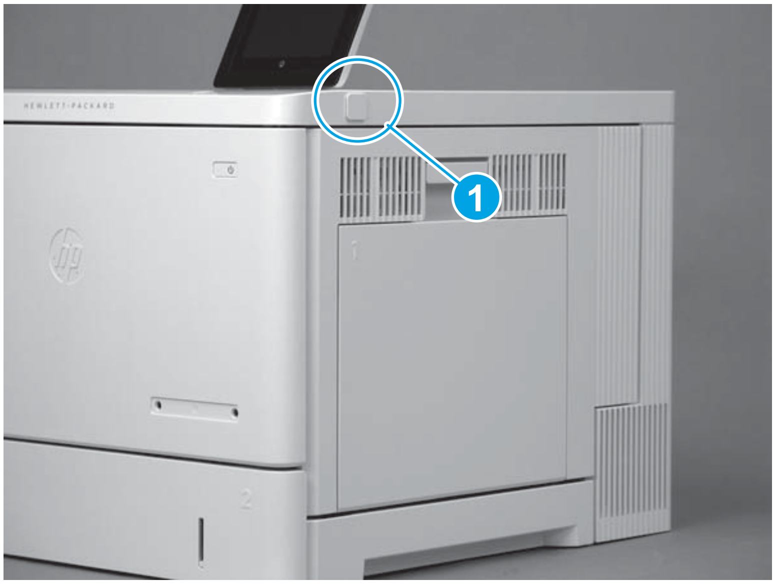
Remove the USB cover (SFP)

Follow these steps to remove the USB cover.

NOTE: This procedure is for SFP models only.

1. Locate the USB cover (callout 1).

Figure 7-2512 Locate the USB cover



2. Pull the cover off of the printer to remove it.

Figure 7-2513 Remove the cover

Remove the fuser

Follow these steps to remove the fuser.

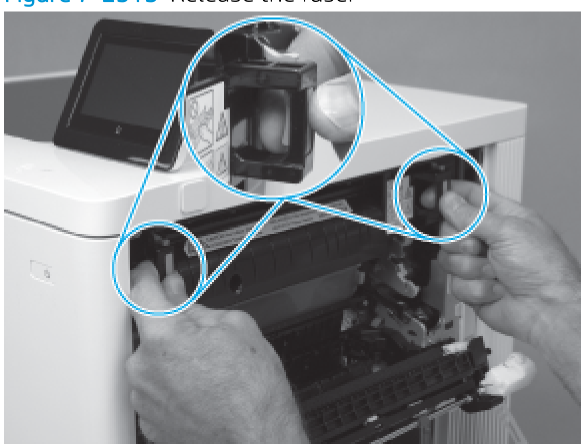
1. Open the right door.

> ⚠ CAUTION: The fuser is very hot. After turning the printer power off, allow the fuser to cool for at least 30 minutes before removing it.

Figure 7-2514 Open the right door

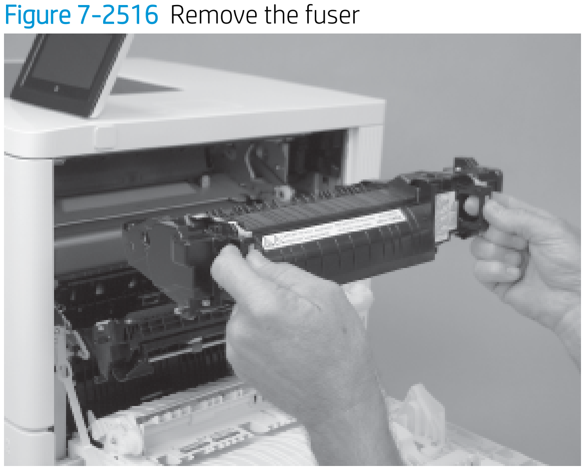
2. Grasp the two fuser handles, and then squeeze the two blue triggers on the handles to release the fuser.

Figure 7-2515 Release the fuser



3. Slide the fuser straight out of the printer to remove it.

Figure 7-2516 Remove the fuser



Remove the ITB

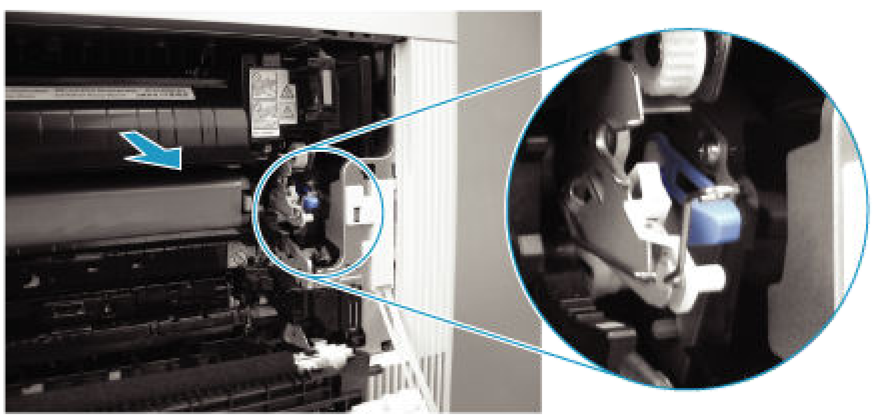
Follow these steps to remove the ITB.

1. Open the right door.

Figure 7-2517 Open the right door

2. Pull the blue lever to release the ITB drive coupling.

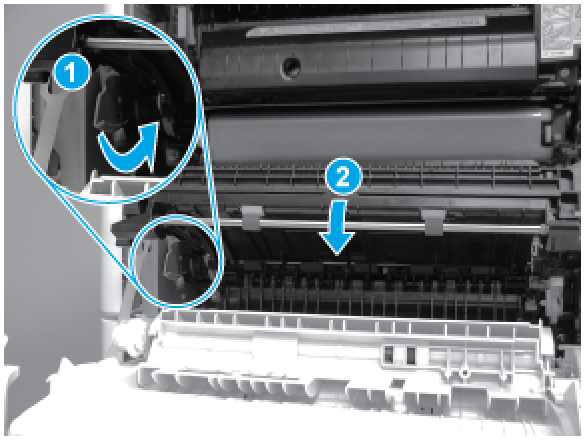
Figure 7-2518 Release the ITB drive coupling



3. Push in on the blue arm to release the secondary transfer roller assembly, and then completely lower the assembly.

> NOTE: Press the blue arm on the secondary transfer roller assembly a second time to release the roller assembly when it stops at the halfway open position.

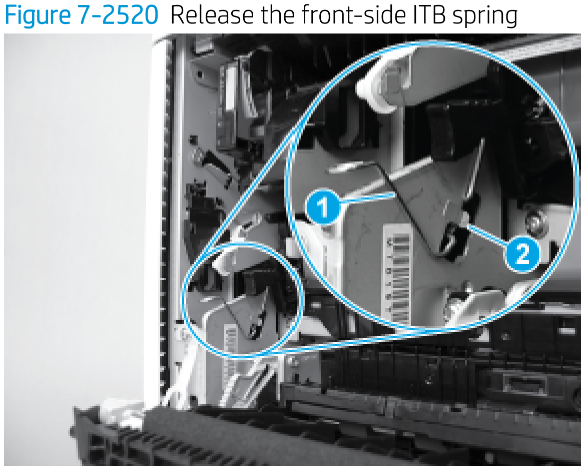
Figure 7-2519 Lower the secondary transfer roller assembly



4. Release the left-side ITB spring (callout 1) from the tab (callout 2).

> NOTE: For late production M552/M553 printers and all M554/m555 printers, this ITB spring is not installed.

Figure 7-2520 Release the front-side ITB spring

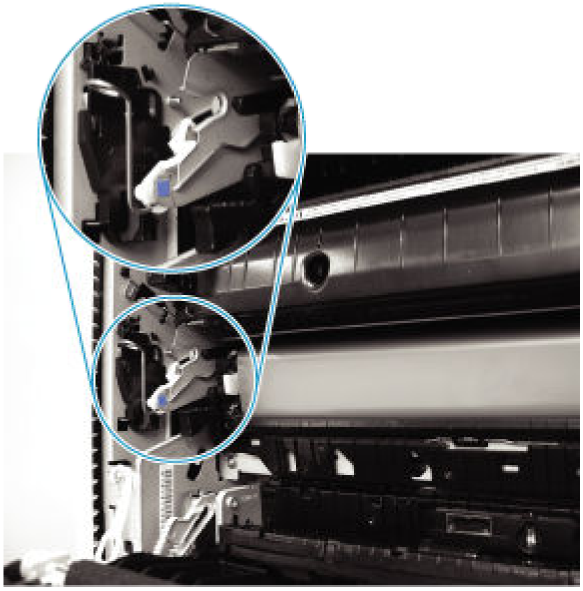


5. Place the left-side ITB spring on the holder to keep it out of the way.

NOTE: For late production M552/M553 printers and all M554/m555 printers, this ITB spring is not installed.

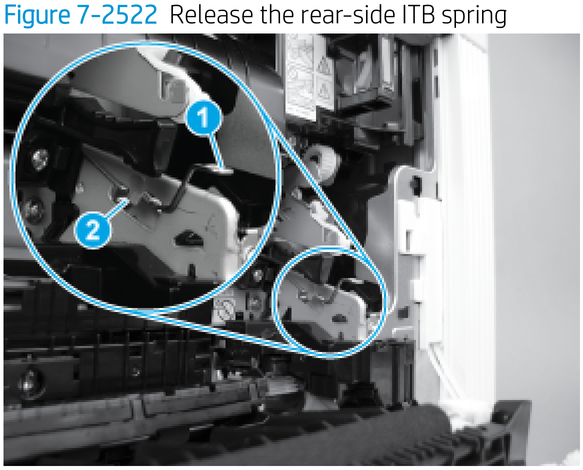
TIP: The holder is colored blue to help locate it.

Figure 7-2521 Place the spring on the holder



6. Release the right-side ITB spring (callout 1) from the tab (callout 2).

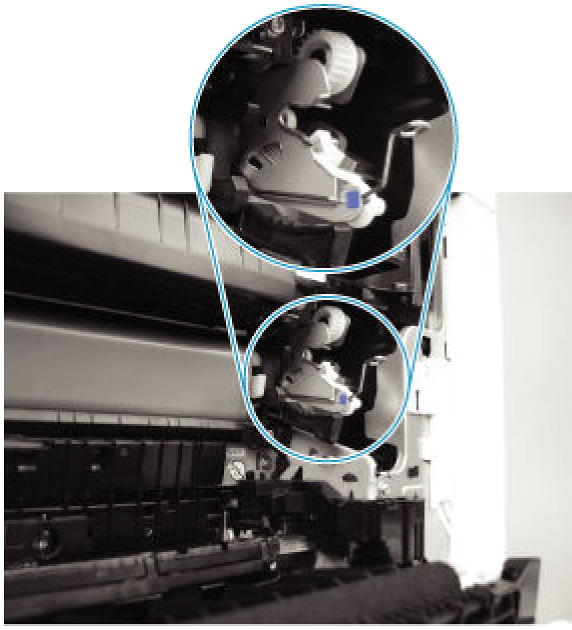
Figure 7-2522 Release the rear-side ITB spring



7. Place the right-side ITB spring on the holder to keep it out of the way.

TIP: The holder is colored blue to help locate it.

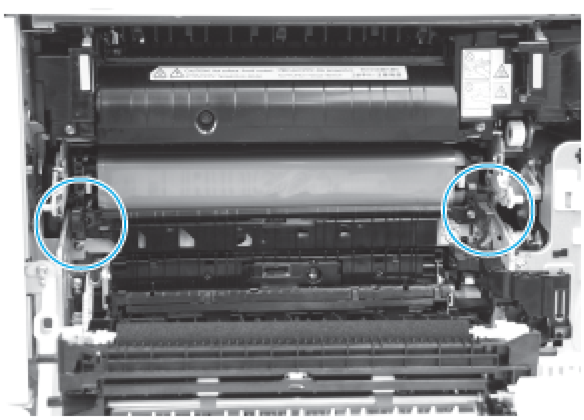
Figure 7-2523 Place the spring on the holder



8. Grasp the two blue handles on the ITB.

CAUTION: If the ITB is removed to access other assemblies in the printer, use care. The ITB is a sensitive assembly. Be careful when handling the ITB so that it is not damaged. Always place the ITB in a safe and protected location.

Figure 7-2524 Grasp the ITB handles



9. Pull the ITB out of the printer to remove it.

CAUTION: Do not touch the grey-plastic belt. Skin oils and fingerprints on the belt can cause print-quality problems.

Figure 7-2525 Remove the ITB

Remove the control panel (M553x/M555/E55040)

Follow these steps to remove the control panel.

NOTE: This procedure is for the M553x/M555/E55040 printers only.

M555 models: Removing the control panel is similar to the procedure below. For the M555, a flat cable connects the control panel to the formatter.

1. Tilt the control panel up.

Figure 7-2526 Tilt the control panel up

2. Use the small flat-blade screwdriver supplied in this kit to release the control-panel screws cover tabs.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-2527 Release the control-panel screws cover tabs

3. Rotate the cover up to remove it.

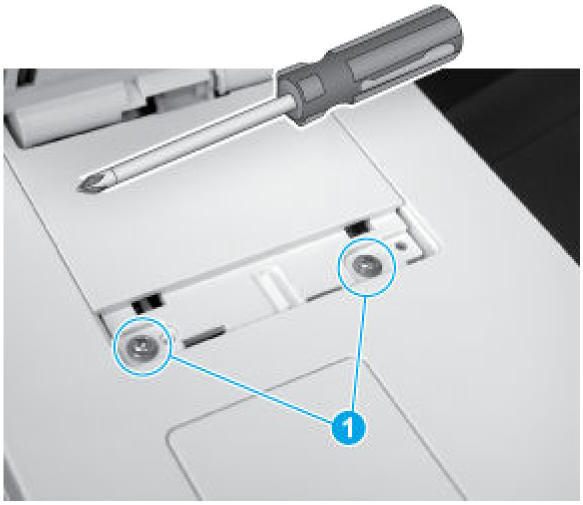
Figure 7-2528 Remove the cover

4. Use the small Phillips screwdriver supplied in this kit to remove two screws (callout 1).

IMPORTANT: Store the screws in a secure place where they cannot fall down into the printer.

TIP: The screwdriver has a reversible shaft. Simply pull the shaft out of the handle, and then reinstall it with the desired end facing out.

Figure 7-2529 Remove two screws



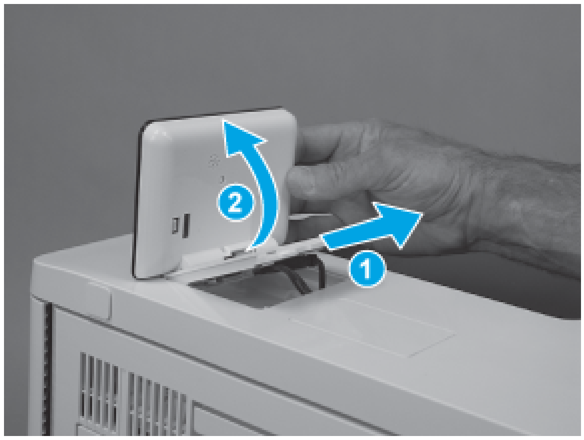
5. Rotate the control-panel base toward the front of the printer.

Figure 7-2530 Rotate the control-panel base up

6. Slightly slide the control-panel base toward the rear of the printer (callout 1) to release it, and then turn the control panel over (callout 2) to access the bottom side.

⚠ CAUTION: The control panel is still attached to the printer. Do not attempt to completely remove the control panel.

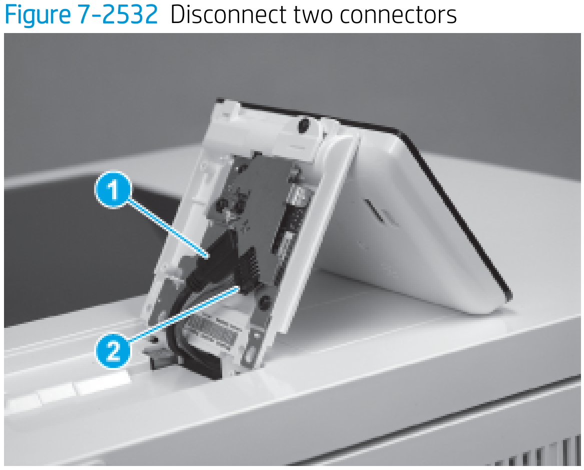
Figure 7-2531 Turn the control panel over



7. Disconnect one USB cable (callout 1), one connector (callout 2), and then remove the control panel.

NOTE: **M555 only**: Disconnect one flat cable (not shown), and then remove the control panel.

Figure 7-2532 Disconnect two connectors



Remove Tray 2

Learn about removing Tray 2.

NOTE: A SFP printer is shown in this section. However, the procedure is correct for all printer models.

The figures in this section show Tray 2. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5. Always carefully read the instructions that accompany the figures.

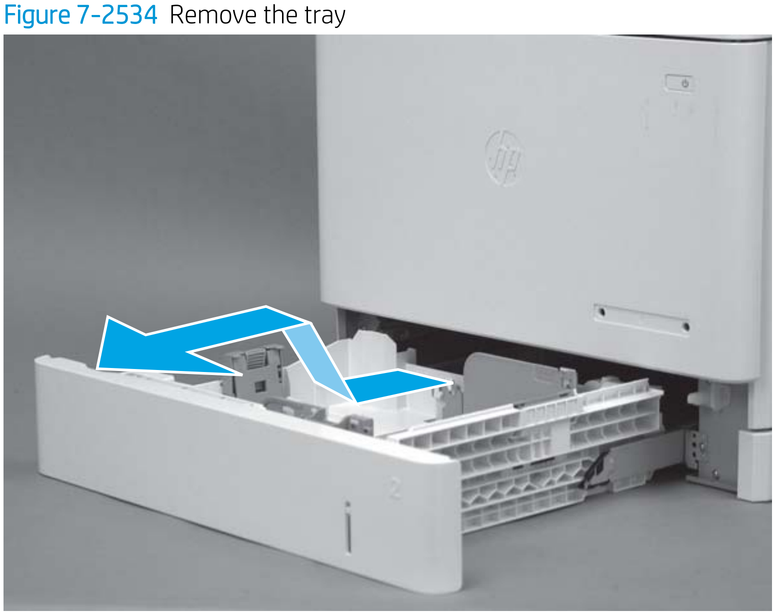
1. Pull the tray out until it stops.

Figure 7-2533 Pull the tray out

2. Lift the front of the tray, and then pull it out of the printer to remove it.

NOTE: **For a replacement tray:** If the tray has Fixed Tray Guides installed and are still required, move hardware to new tray. If necessary, order new kit: 3GY25–67901 Kit - Fixed Tray Guide. Only one kit required per engine.

Figure 7-2534 Remove the tray



Remove the toner collection unit (TCU)

Follow these steps to remove the toner collection unit (TCU).

NOTE: The figures in this topic show a SFP printer, However, the procedure is correct for MFP printers.

1. Open the front door.

Figure 7-2535 Open the front door

2. Open the TCU.

NOTE: The toner collection hatch cover automatically closes when the TCU is opened.

Figure 7-2536 Open the TCU

3. Pull the TCU away from the printer at an angle to remove it.

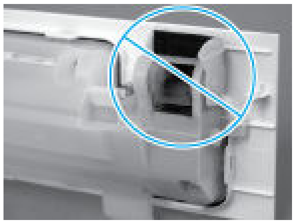
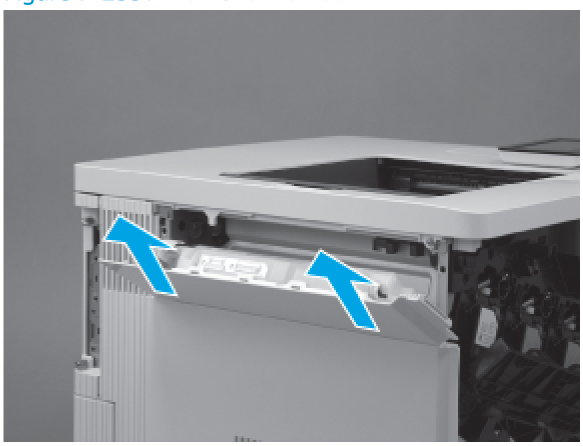
> ⚠ CAUTION: Do not open the toner collection hatch cover when handling the TCU. If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.
>
> 

Figure 7-2537 Remove the TCU



Remove the formatter cover

Follow these steps to remove the formatter cover.

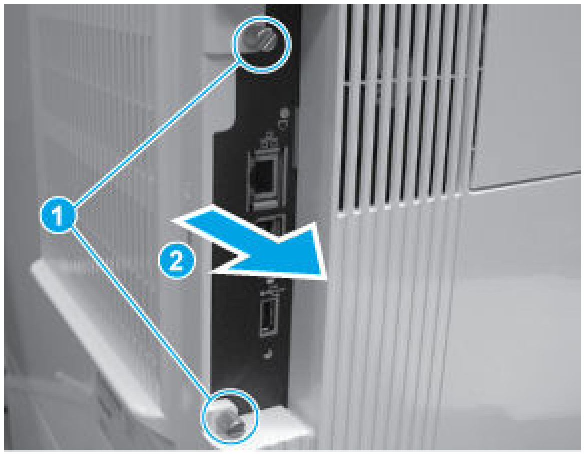
1. Locate the formatter cover.

Figure 7-2538 Locate the formatter cover

2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-2539 Loosen the thumbscrews



Remove the formatter (SFP)

Follow these steps to remove the formatter.

NOTE: This procedure is for SFP models only.

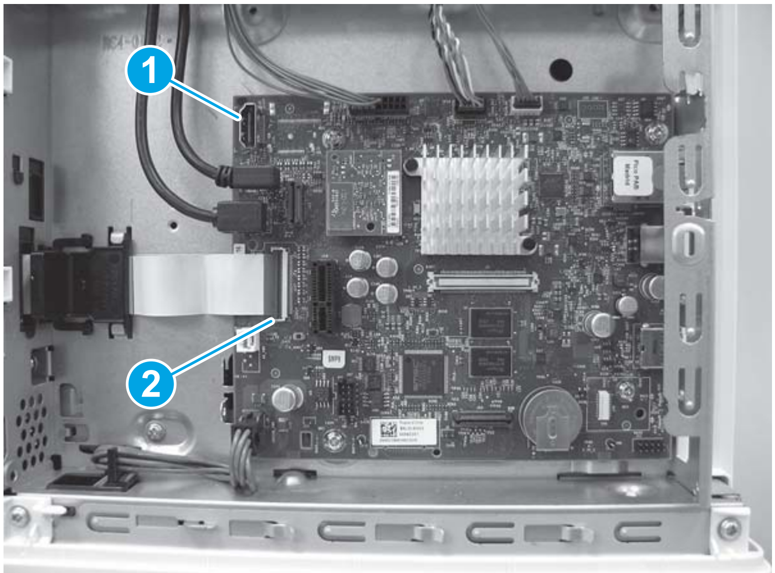
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - M553n/dn and M552dn: J2 (callout 1; this is the touchscreen connector for the M553x and E55040 printers)
   - All models: J9 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J18 (this connector is empty unless the optional hard-disk drive is installed)
   - M553n/dn and M552dn: J25 (this is the wireless connector for the M553x and E55040 models)
   - All models: J57
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

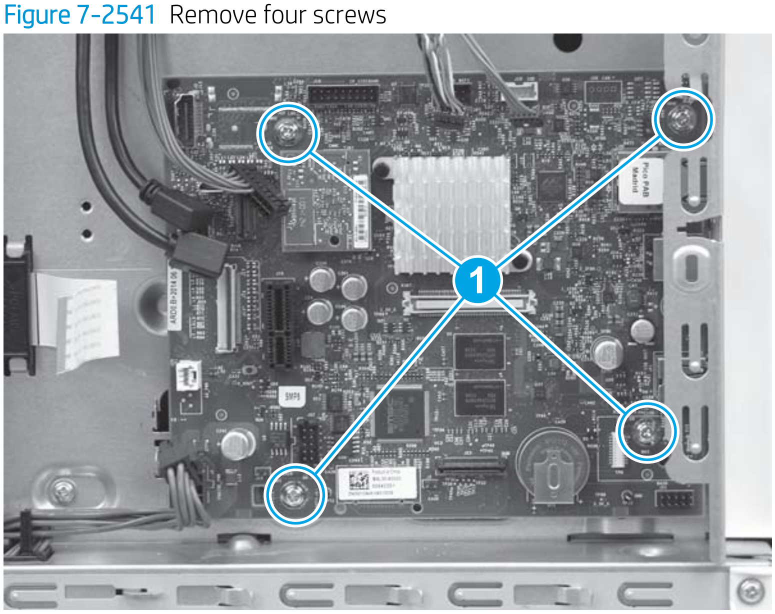
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-2540 Disconnect all connectors



2. Remove four screws (callout 1), and then remove the formatter..

Figure 7-2541 Remove four screws



Remove the hard-disk drive (HDD)

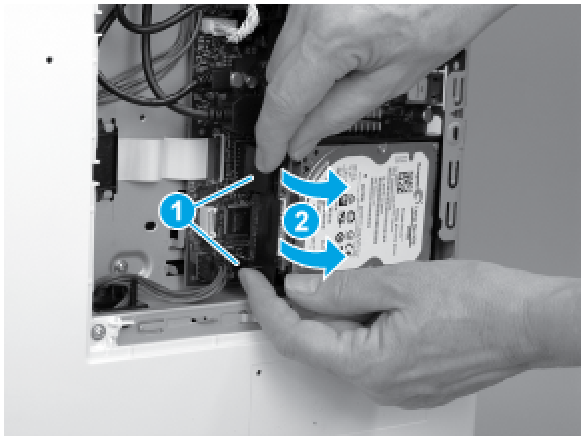
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-2542 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-2543 Remove the HDD

Remove the fax PCA (fax models)

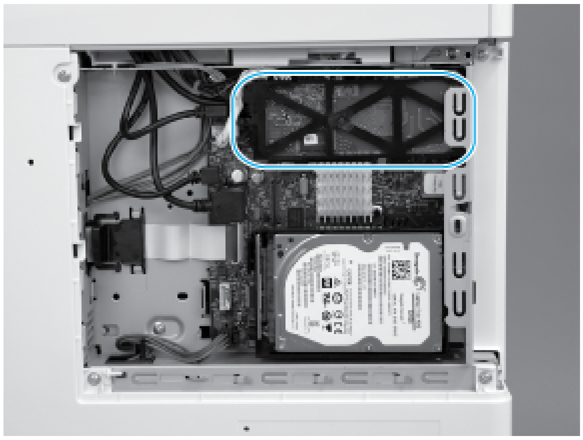
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

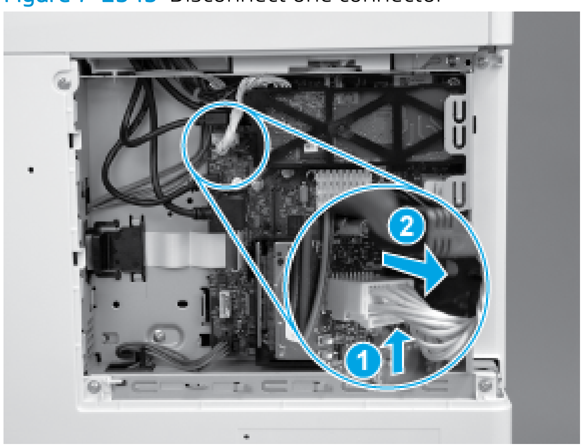
1. Locate the fax PCA component on the formatter.

Figure 7-2544 Locate the fax PCA



2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-2545 Disconnect one connector

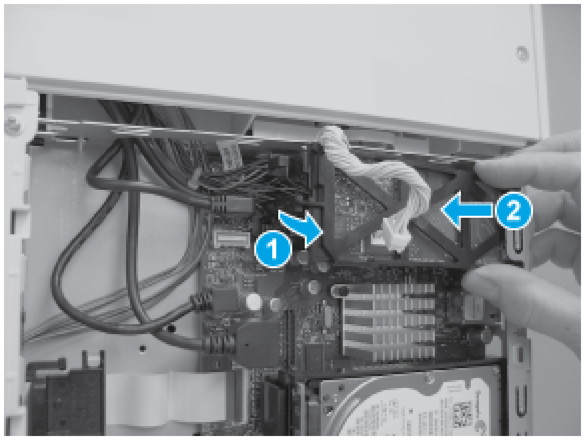


3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-2546 Release one latch

4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-2547 Remove the fax PCA



Remove the formatter (MFP)

Follow these steps to remove the formatter (MFP).

NOTE: This procedure is for MFP models only.

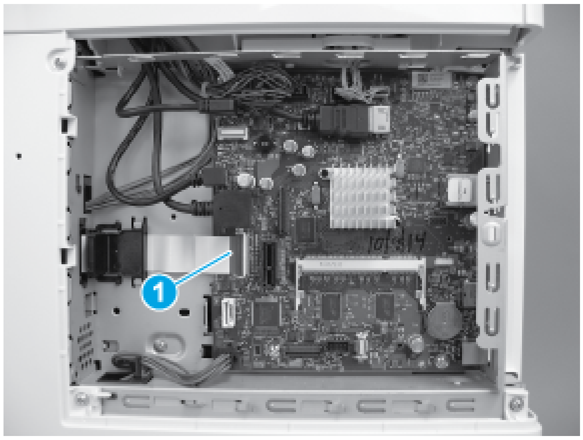
1. Disconnect all of the connectors on the formatter.

   The following connectors are empty:

   - All models: J1 (this connector is empty unless the optional DIMM is installed)
   - All models: J3
   - M577dn: J15 (this is the fax connector for the M577f/z/c models)
   - All models: J21 (this connector is empty unless the optional internal USB ports component is installed)
   - All models: J23
   - All models: J24
   - All models: J51
   - All models: J57
   - All models: J97
   - All models: J98 (this connector is empty unless the optional trusted platform module (TPM) is installed)

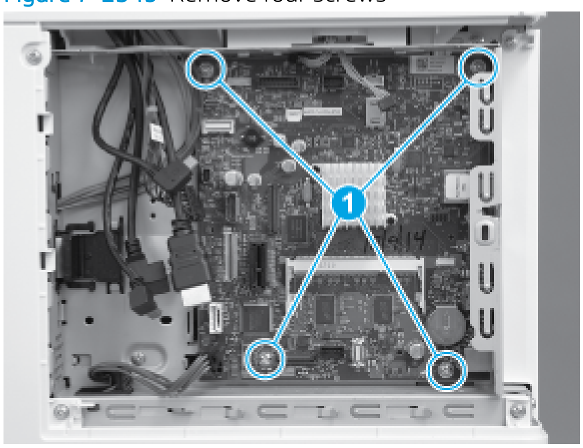
   IMPORTANT: The flat-cable connector (callout 1) is a Zero Insertion Force (ZIF) connector that uses a hinged retainer to secure the flat cable. The hinged retainer must be opened to release the flat cable.

Figure 7-2548 Disconnect all connectors



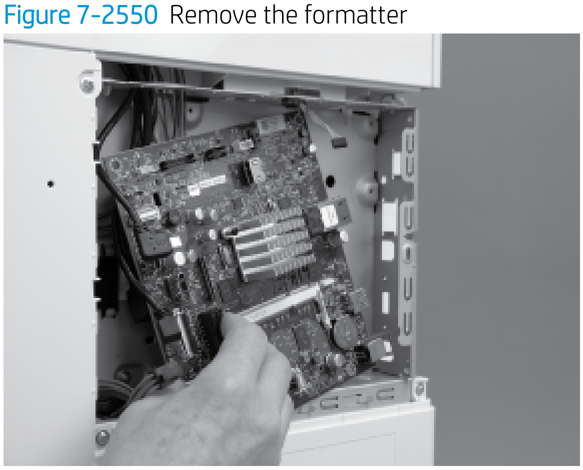
2. Remove four screws (callout 1).

Figure 7-2549 Remove four screws



3. Remove the formatter.

Figure 7-2550 Remove the formatter



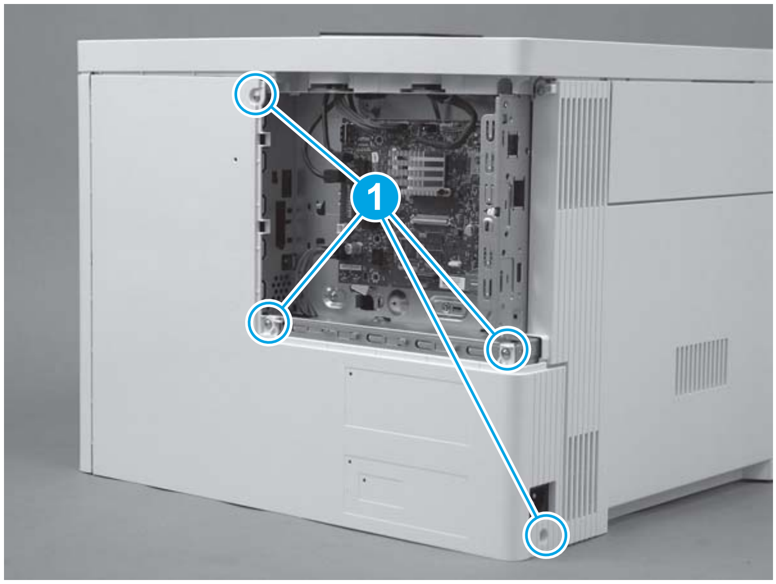
Remove the rear cover (SFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for SFP models only.

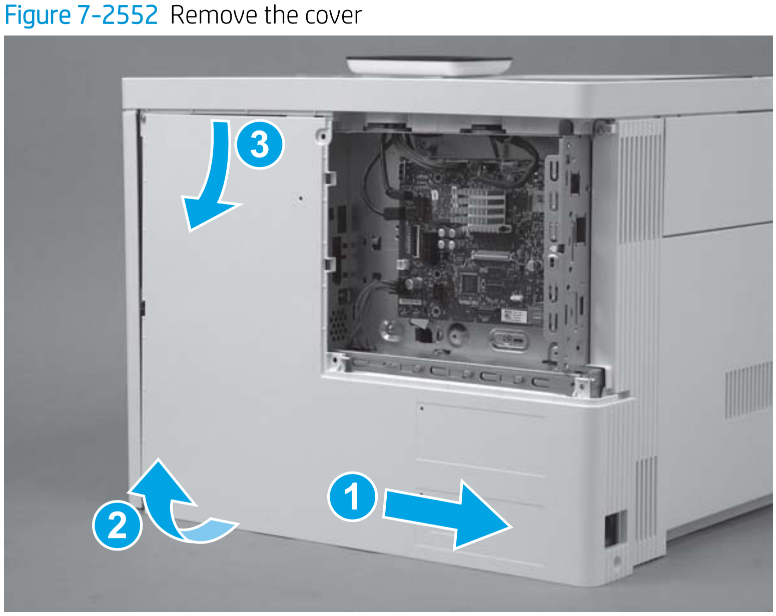
1. Remove four screws (callout 1).

Figure 7-2551 Remove four screws



2. Slightly slide the cover to the right (callout 1), rotate the bottom of the cover away from the printer (callout 2), and then pull the top of the cover away from the printer (callout 3) to remove the cover.

Figure 7-2552 Remove the cover



Remove the rear upper cover (MFP)

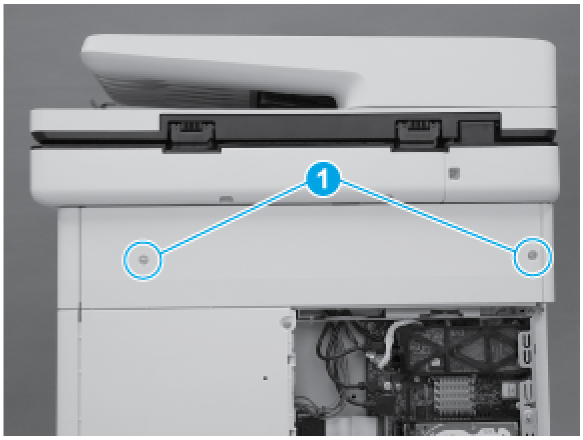
Follow these steps to remove the rear upper cover.

NOTE: This procedure is for MFP models only.

1. Remove two screws (callout 1).

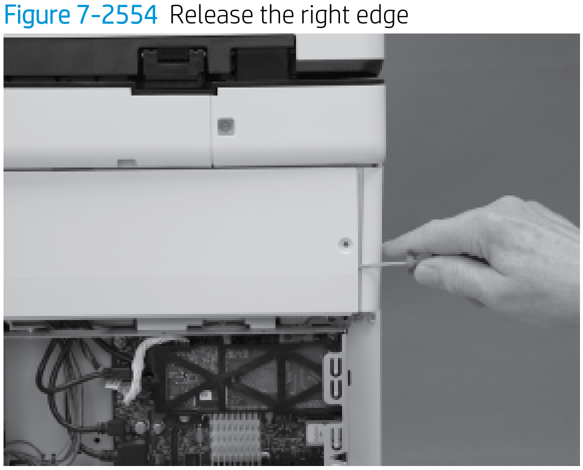
TIP: These two screws are self-tapping screws for plastic. When reinstalling them, rotate the screws counterclockwise to align them with the existing thread pattern, and then carefully turn them clockwise to tighten. Do not overtighten. This will prevent stripping the threads inside the screw holes.

Figure 7-2553 Remove two screws



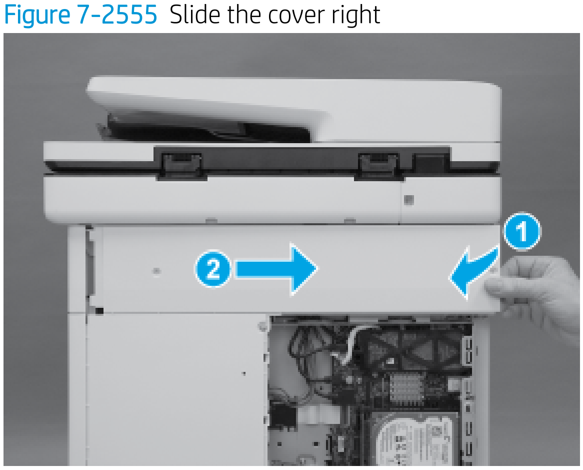
2. Use a small, flat blade screwdriver to release the right edge of the cover.

Figure 7-2554 Release the right edge



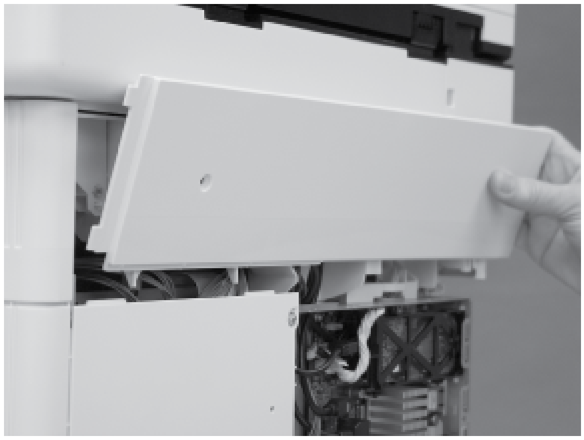
3. Pull the right edge of the cover (callout 1) away from the printer, and then slide the cover to the right (callout 2).

Figure 7-2555 Slide the cover right



4. Remove the cover.

Figure 7-2556 Remove the cover



Remove the rear cover (MFP)

Follow these steps to remove the rear cover.

NOTE: This procedure is for MFP models only.

1. Remove four screws (callout 1).

Figure 7-2557 Remove four screws

2. Slide the cover to the right to remove it.

Figure 7-2558 Remove the cover

Remove the left upper cover (MFP)

Follow these steps to remove the left upper cover.

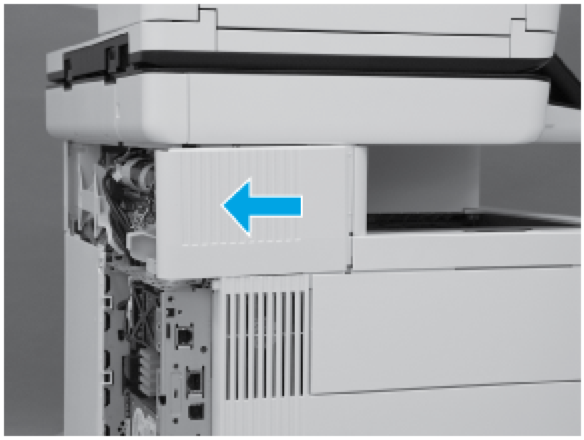
NOTE: This procedure is for MFP models only.

1. At the left side of the printer, release one tab (callout 1).

Figure 7-2559 Release one tab

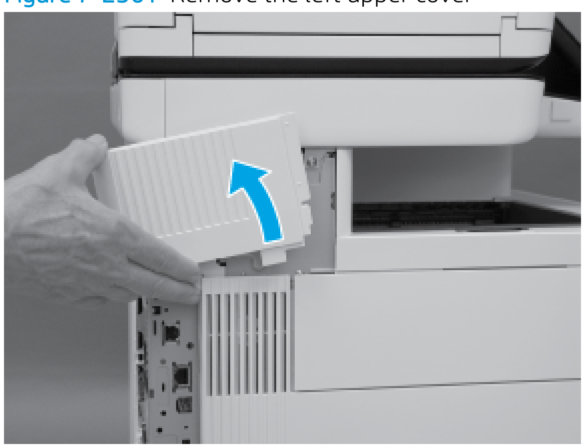
2. Slide the left upper cover toward the back of the printer.

Figure 7-2560 Slide the cover back



3. Rotate the cover up to remove it.

Figure 7-2561 Remove the left upper cover



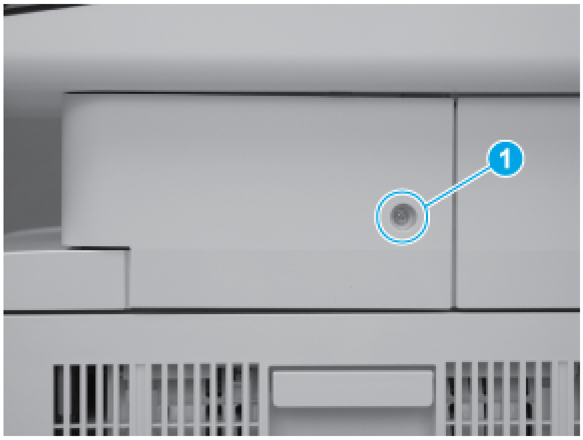
Remove the right front upper cover (MFP non-stapler models)

Follow these steps to remove the right front upper cover.

NOTE: This procedure is for non-stapler models only.

1. Remove one screw (callout 1).

Figure 7-2562 Remove one screw



2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-2563 Release two tabs

3. Rotate the front of the cover to the right to remove it.

Figure 7-2564 Rotate the cover

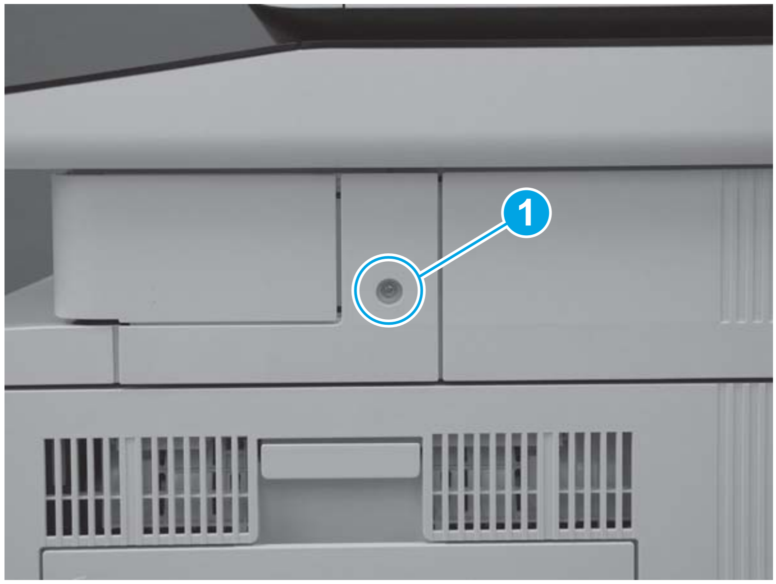
Remove the stapler cover (MFP stapler models)

Follow these steps to remove the stapler cover.

NOTE: This procedure is for stapler models only.

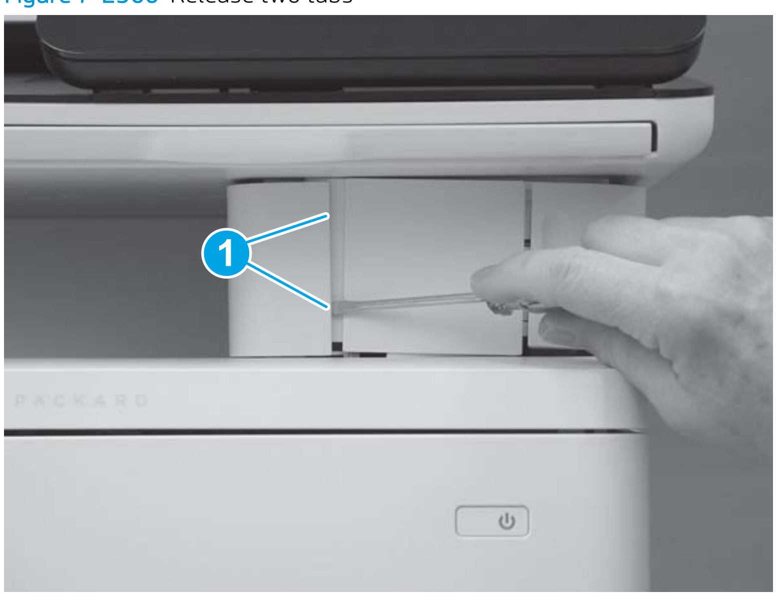
1. Remove one screw (callout 1).

Figure 7-2565 Remove one screw



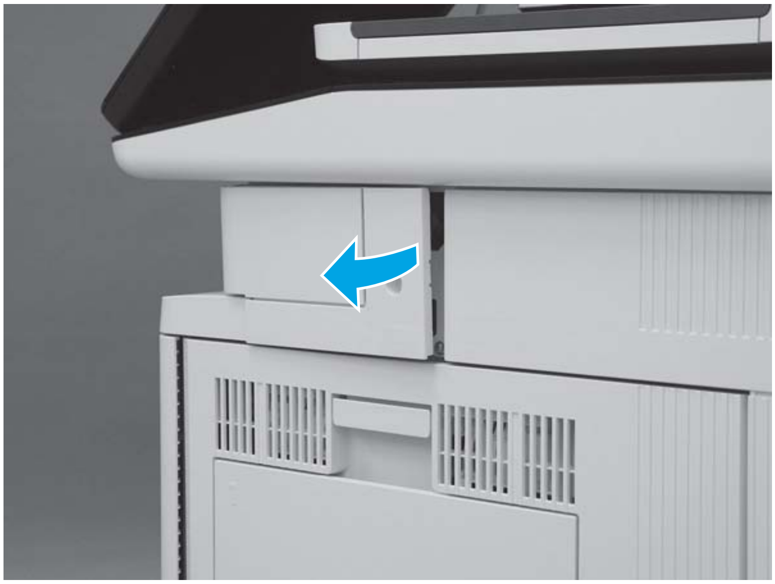
2. Release two tabs at the front edge of the cover (callout 1).

Figure 7-2566 Release two tabs



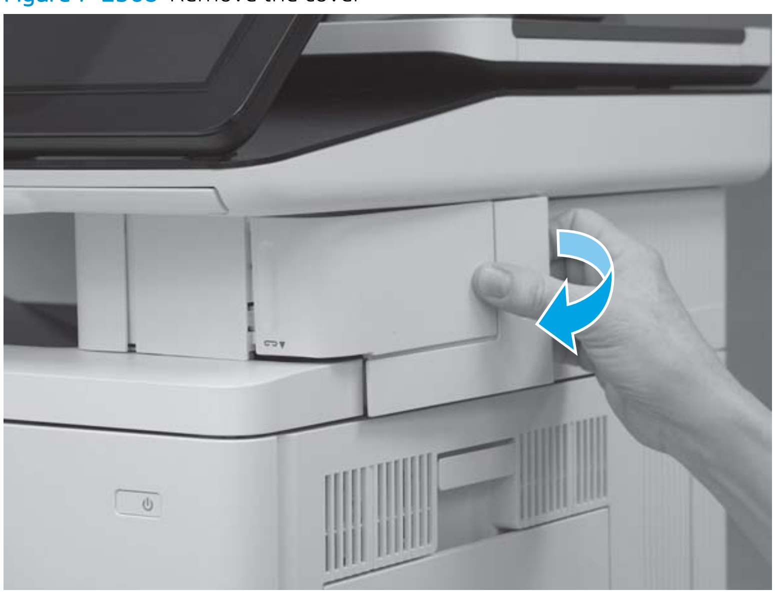
3. Release the back edge of the cover.

Figure 7-2567 Release the back edge of the cover



4. Rotate the cover away from the printer to remove it.

Figure 7-2568 Remove the cover



Remove the integrated scanner assembly (ISA) (MFP)

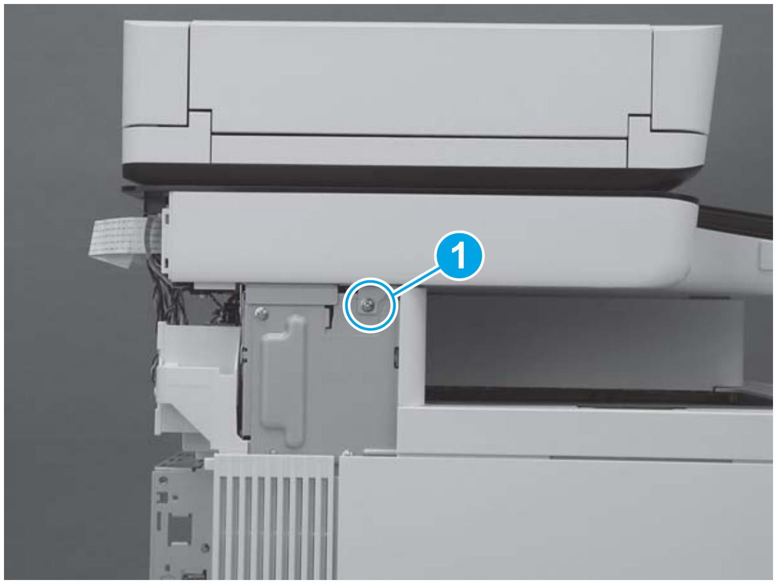
Follow these steps to remove the integrated scanner assembly (ISA).

NOTE: This procedure is for MFP models only.

NOTE: The ISA includes the document feeder, image scanner, scanner control board (SCB), control panel, keyboard (flow models) and NFC PCA (not all models).

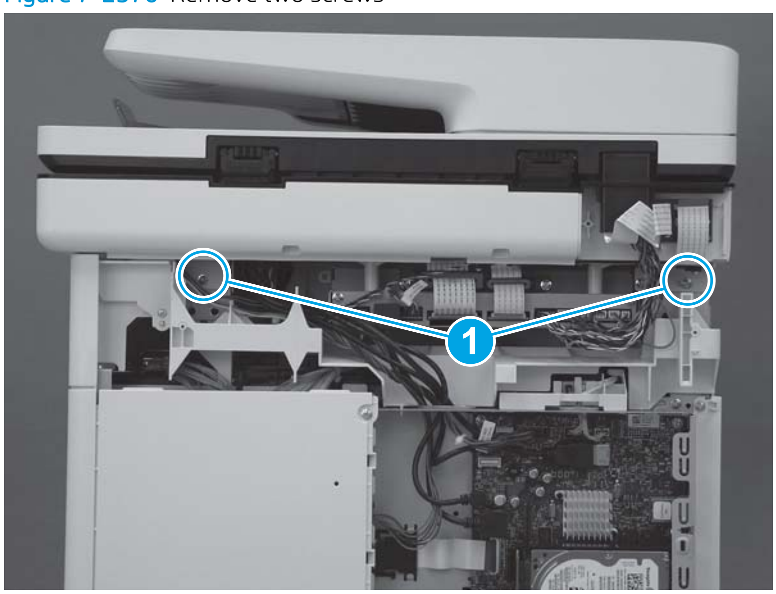
1. At the left side of the printer, remove one screw (callout 1).

Figure 7-2569 Remove one screw



2. At the back of the printer, remove two screws (callout 1).

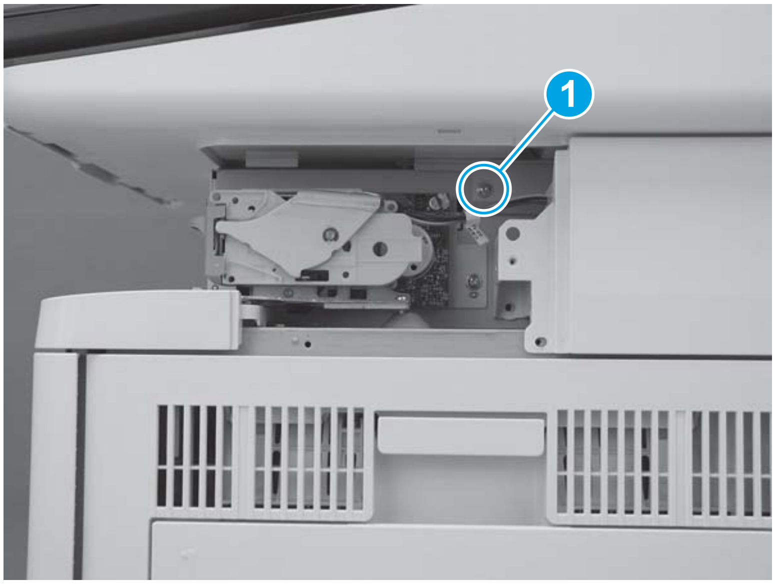
Figure 7-2570 Remove two screws



3. At the right side of the printer, remove one screw (callout 1).

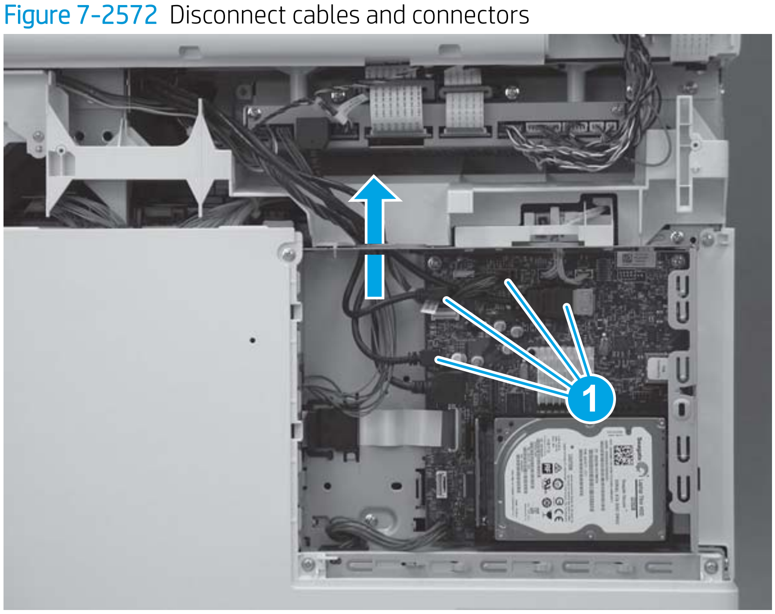
NOTE: The M577z is shown in the figure below. The procedure is correct for all MFP models.

Figure 7-2571 Remove one screw



4. Disconnect four connectors (callout 1) on the formatter, and then pass the wire harnesses and cables through the top opening in the formatter case (callout 2).

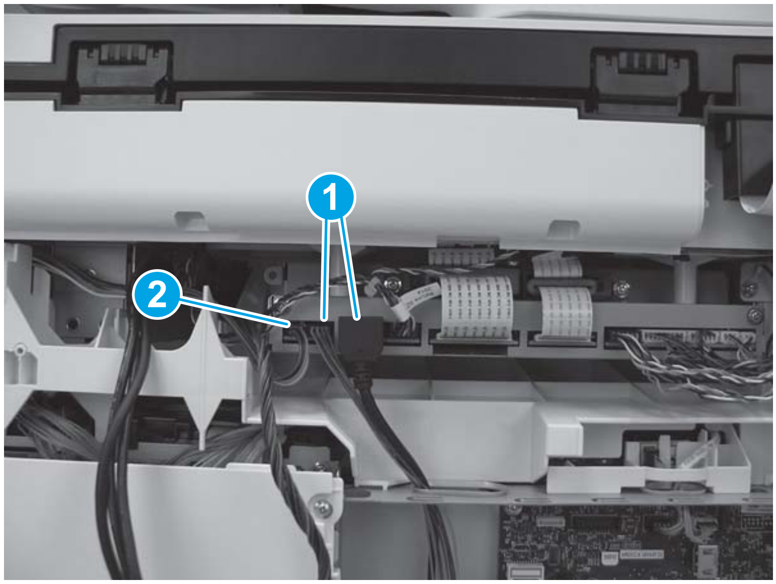
Figure 7-2572 Disconnect cables and connectors



5. Disconnect two connectors on the scanner control board (callout 1).

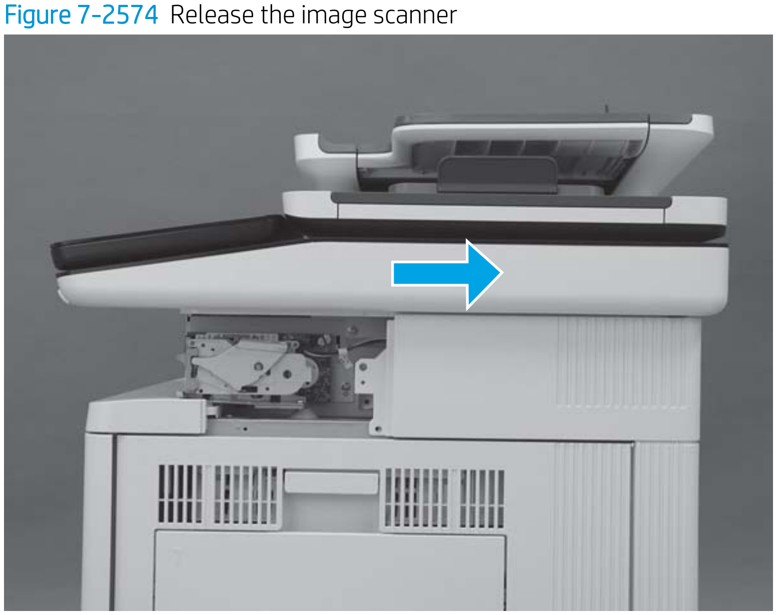
MFP stapler models: Disconnect one connector for the stapler on the scanner control board (callout 2).

Figure 7-2573 Disconnect connectors



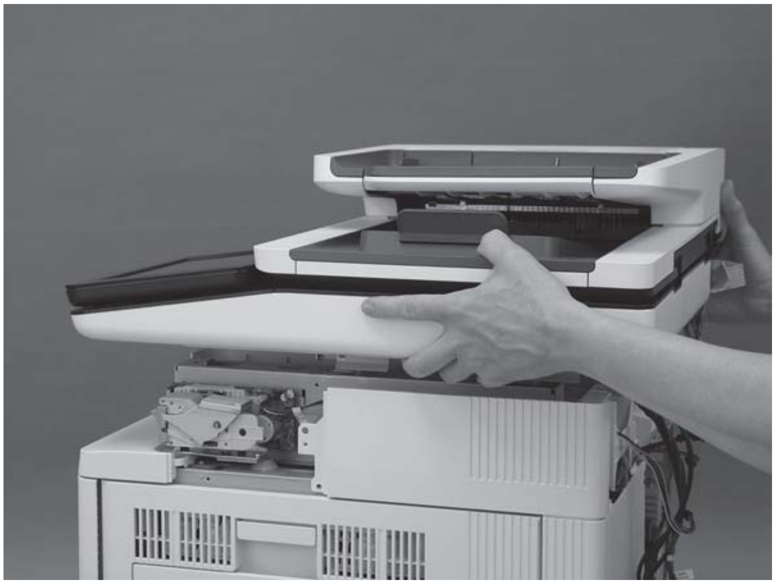
6. Slide the image scanner toward the back of the printer to release it.

Figure 7-2574 Release the image scanner



7. Lift the ISA straight up to remove it.

Figure 7-2575 Remove the ISA



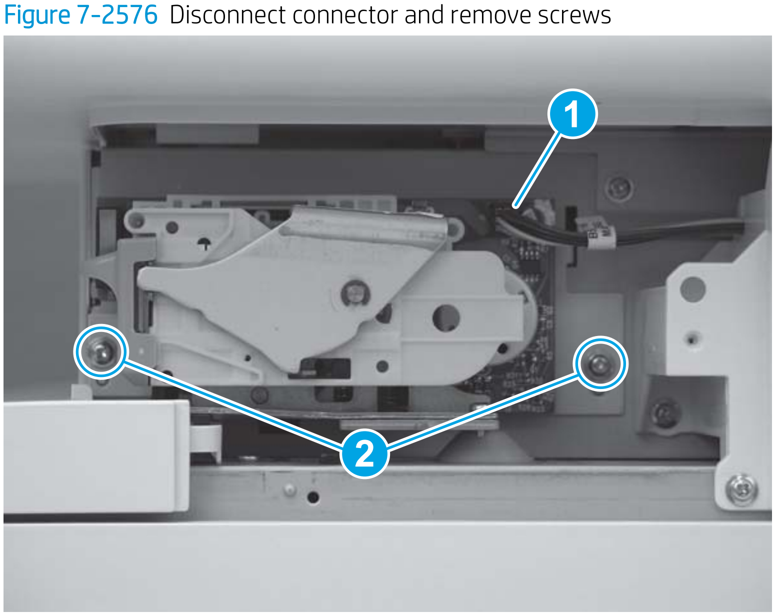
Remove the stapler unit (MFP stapler models)

Follow these steps to remove the stapler unit.

NOTE: This step is for stapler models only.

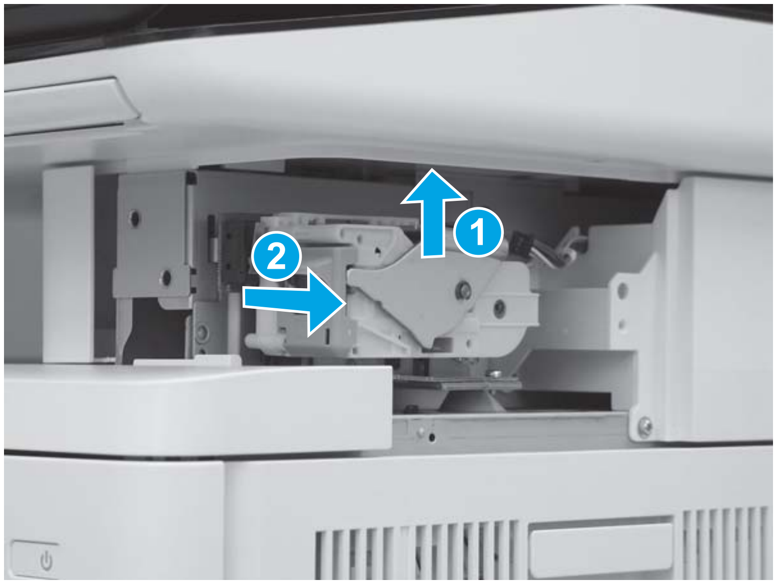
1. Disconnect one connector (callout 1), and then remove two screws (callout 2).

Figure 7-2576 Disconnect connector and remove screws



2. Slide the stapler unit up (callout 1), and then pull it away from the printer (callout 2) to remove it.

Figure 7-2577 Remove the stapler unit



Remove the right upper cover (MFP)

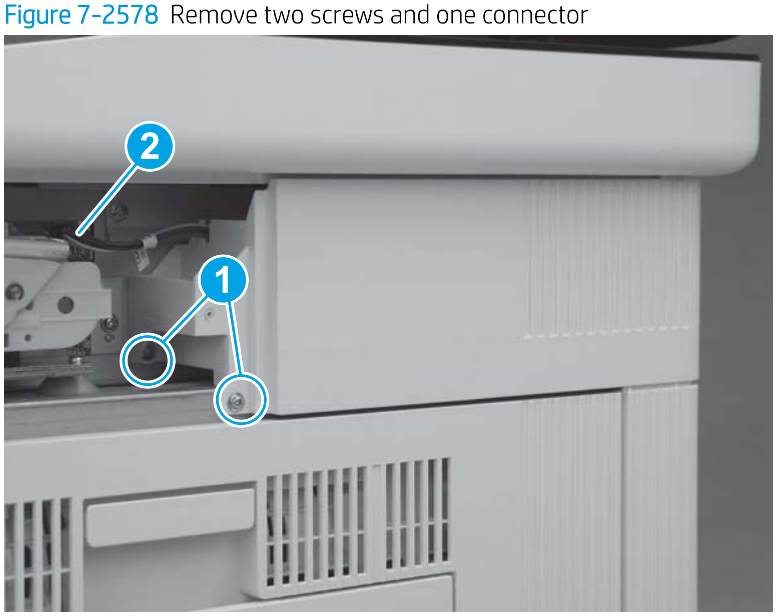
Follow these steps to remove the right upper cover.

NOTE: This procedure is for MFP models only.

1. At the right side of the printer, remove two screws (callout 1).

   M577/M578z: Disconnect one connector (callout 2).

   Figure 7-2578 Remove two screws and one connector

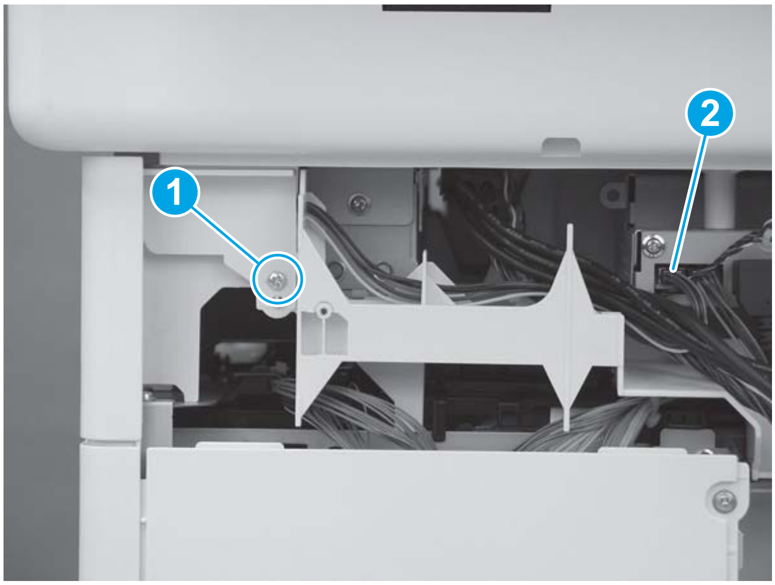


2. At the back of the printer, remove one screw (callout 1).

M577/M578z: Disconnect one connector (callout 2).

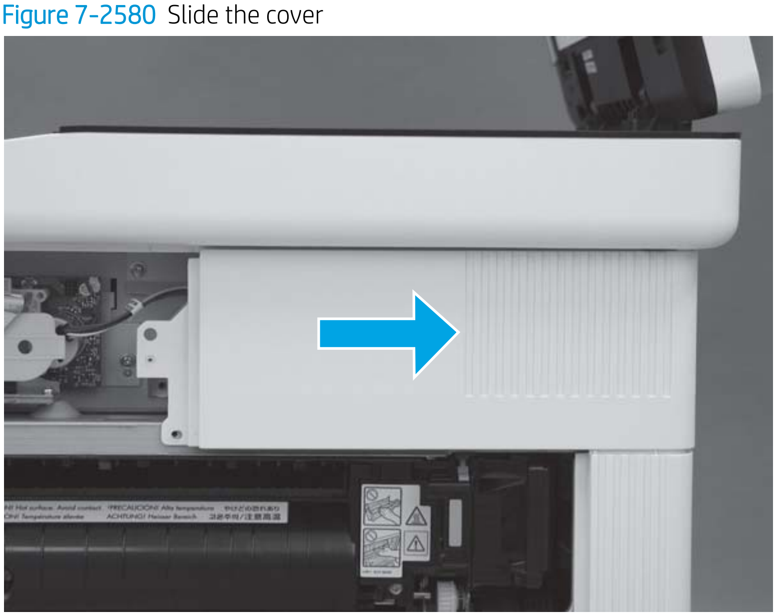
Reinstallation tip: This screw is smaller than the screws removed in the previous step. When reinstalling the right upper cover, make sure that this screw is installed in the correct position.

Figure 7-2579 Remove one screw and connector



3. Slide the cover toward the back of the printer.

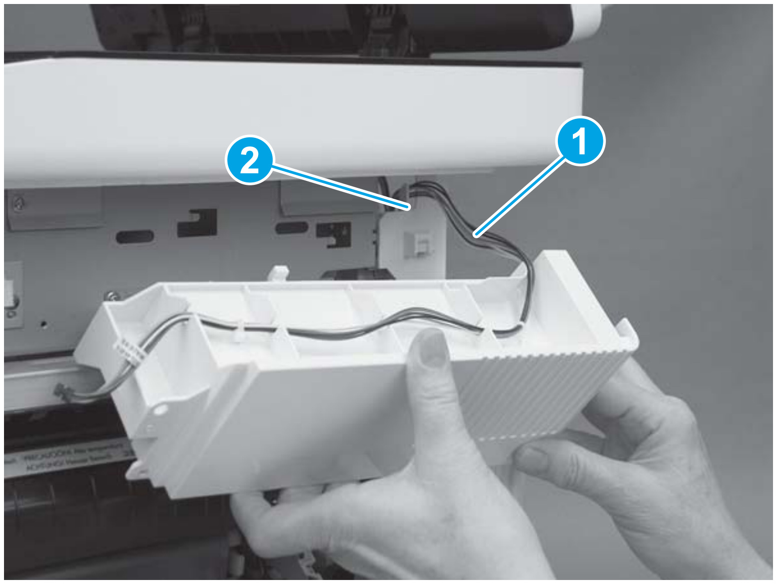
Figure 7-2580 Slide the cover



4. Lift the cover away from the printer to remove it.

   M577/M578z: Release the cables (callout 1) through the slot (callout 2) in the printer.

   Figure 7-2581 Remove the cover

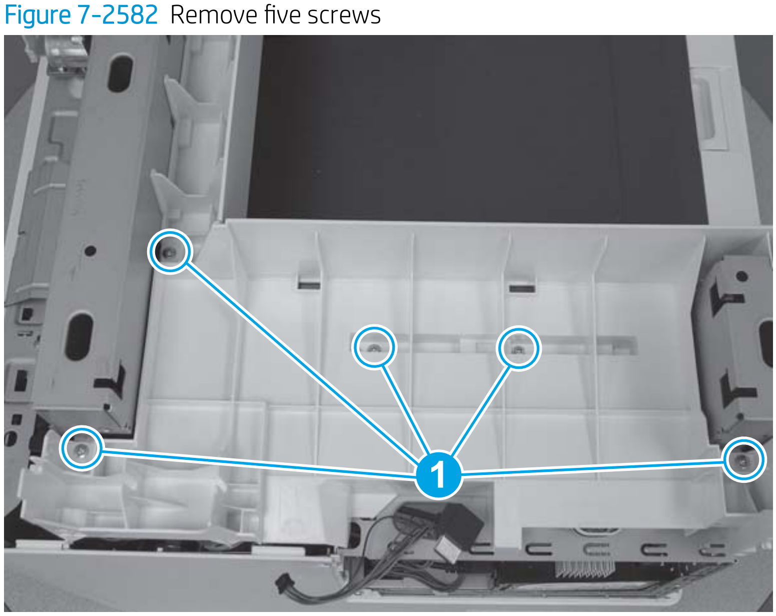
Remove the top rear cover (MFP)

Follow these steps to remove the top rear cover.

NOTE: This procedure is for MFP models only.

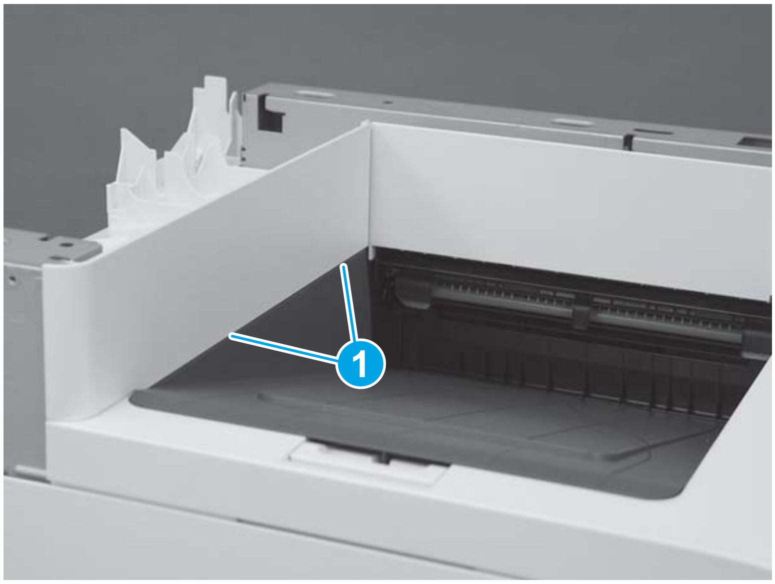
1. At the top of the printer, remove five screws (callout 1).

   Figure 7-2582 Remove five screws

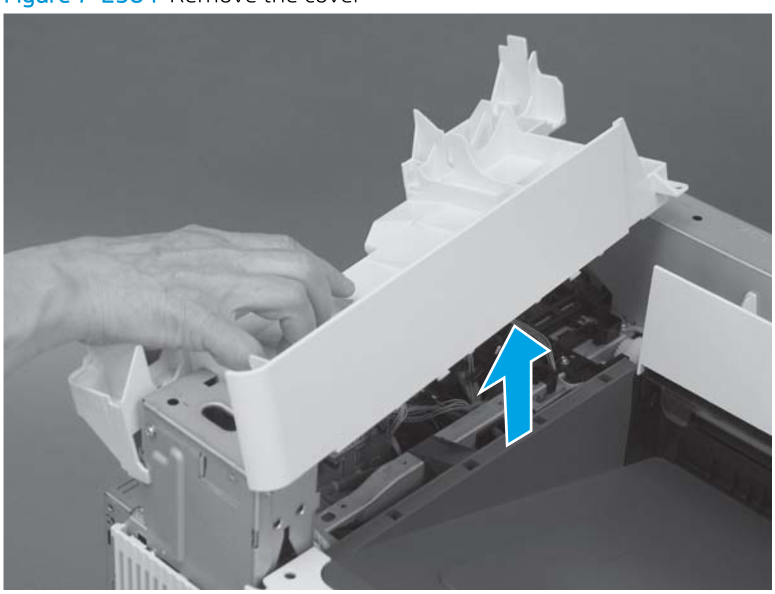
2. Release two tabs (callout 1) on the front edge of the cover.

Figure 7-2583 Release two tabs



3. Remove the top rear cover.

Figure 7-2584 Remove the cover



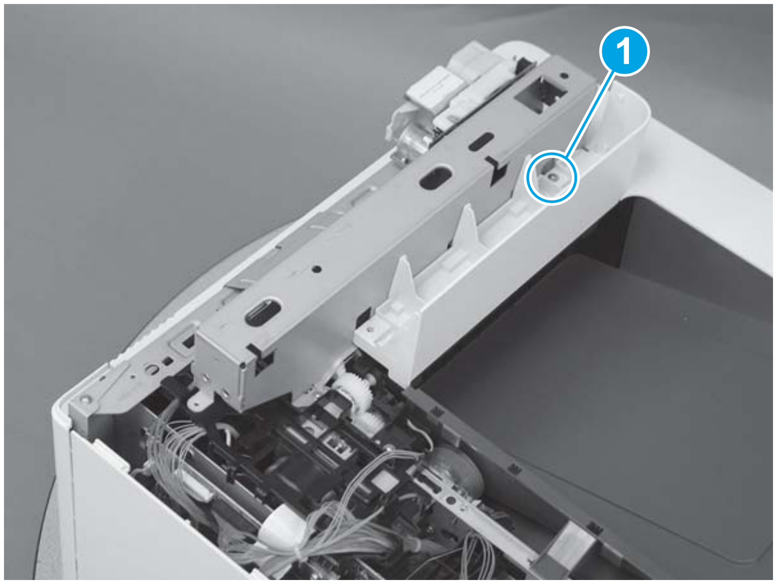
Remove the paper feed cover (MFP)

Follow these steps to remove the paper feed cover.

NOTE: This procedure is for MFP models only.

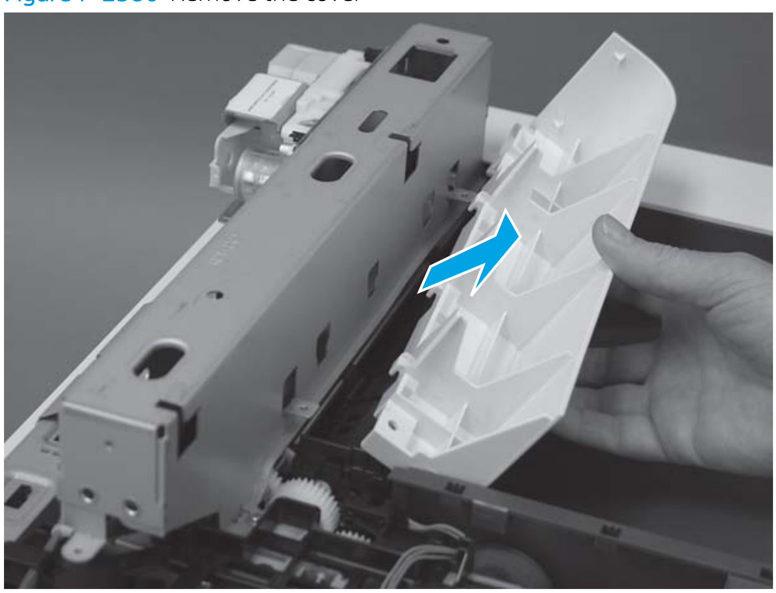
1. Remove one screw (callout 1).

Figure 7-2585 Remove one screw



2. Lift the cover up to remove it.

Figure 7-2586 Remove the cover



Remove the top cover (MFP)

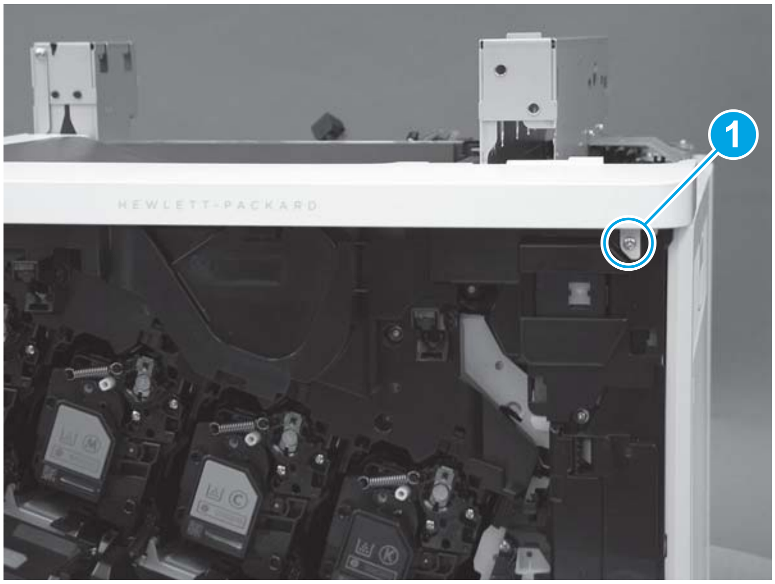
Follow these steps to remove the top cover.

NOTE: This procedure is for MFP models only.

1. At the front of the printer, remove one screw (callout 1).

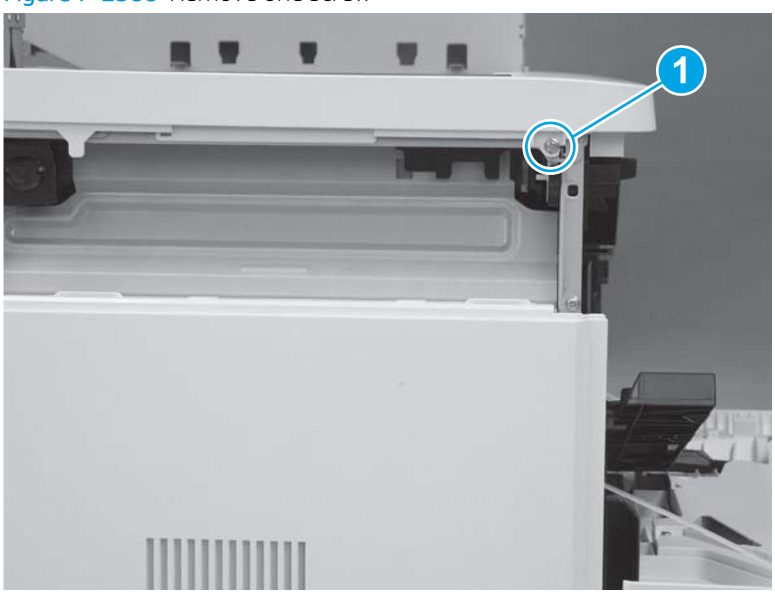
Reinstallation tip: This screw is longer and a different type of screw than the screw removed in the next step. When reinstalling the top cover, make sure that this screw is installed in the correct position.

Figure 7-2587 Remove one screw



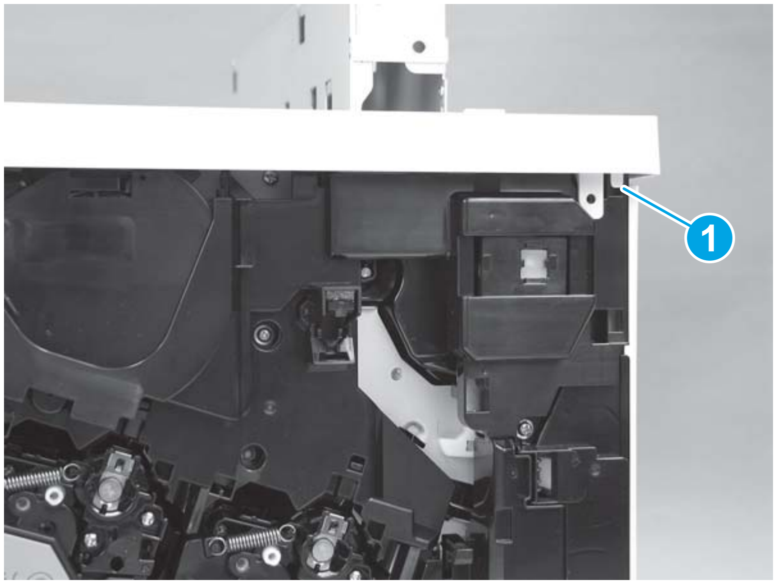
2. At the left side of the printer, remove one screw (callout 1).

Figure 7-2588 Remove one screw



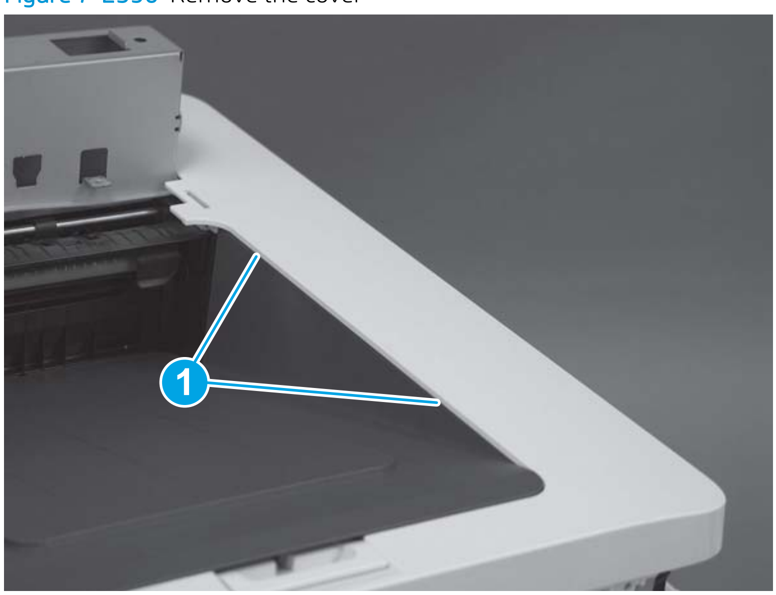
3. At the front of the printer, release one tab (callout 1).

Figure 7-2589 Release one tab



4. At the top of the printer, release two tabs (callout 1) next to the output bin, and then remove the top cover.

Figure 7-2590 Remove the cover



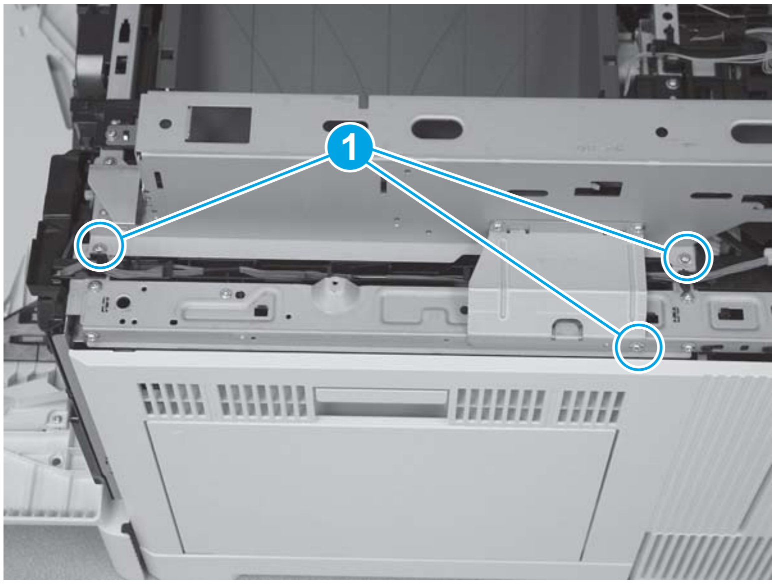
Remove the top bracket (MFP)

Follow these steps to remove the top bracket.

NOTE: This procedure is for MFP models only.

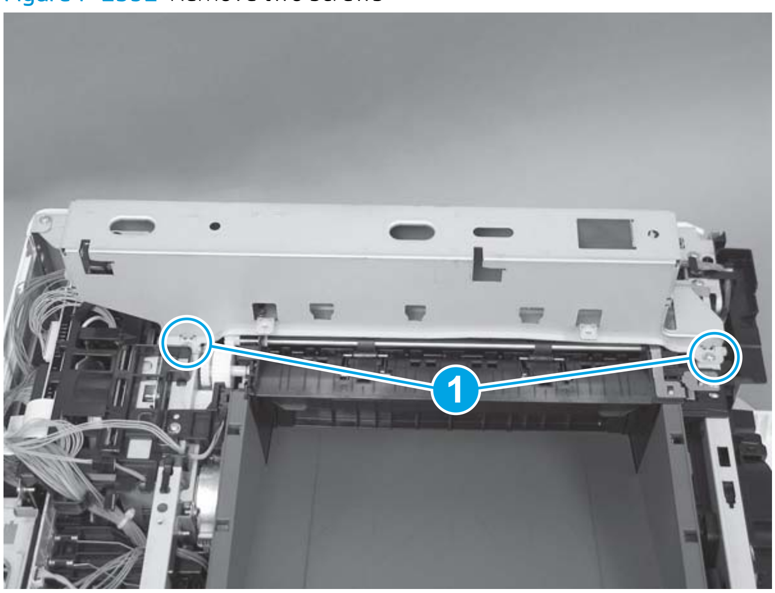
1. At the top of the printer, remove three screws (callout 1).

Figure 7-2591 Remove three screws



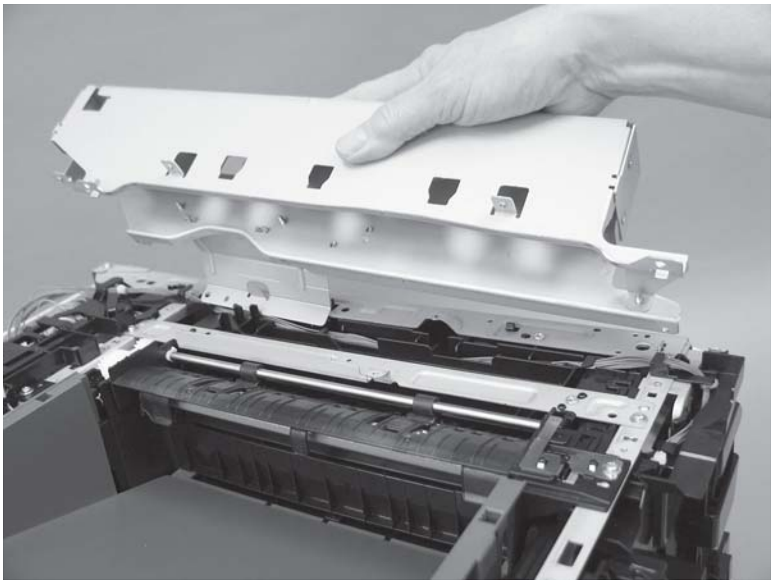
2. At the top of the printer, remove two screws (callout 1).

Figure 7-2592 Remove two screws



3. Lift the top bracket up to remove it.

Figure 7-2593 Remove the bracket



Remove the left cover

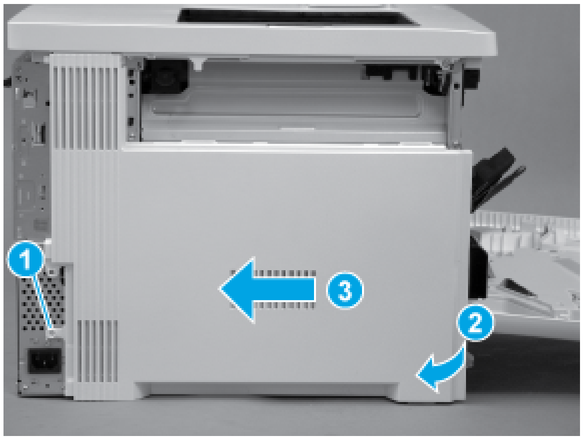
Follow these steps to remove the left cover.

1. At the left side of the printer, remove one screw (callout 1).

Figure 7-2594 Remove one screw

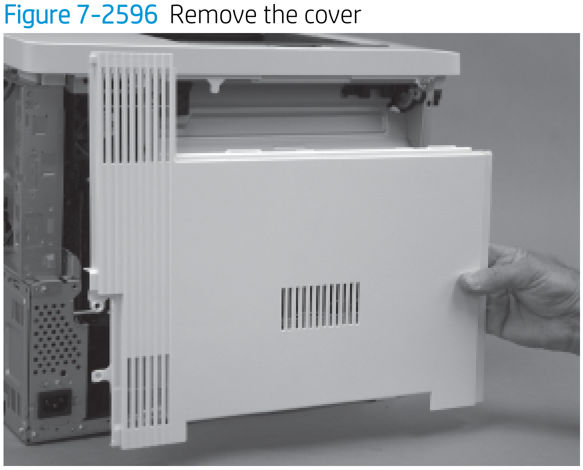
2. Release one tab (callout 1), rotate the front edge of the cover away from the printer (callout 2), and then slide the cover (callout 3) toward the rear of the printer to release it.

Figure 7-2595 Release the cover



3. Remove the cover.

Figure 7-2596 Remove the cover



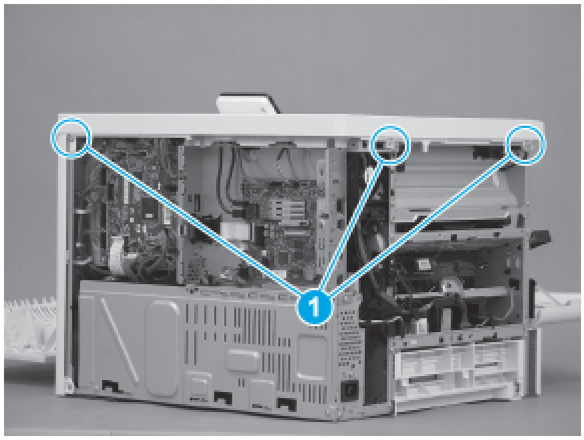
Remove the upper cover (SFP)

Follow these steps to remove the upper cover.

NOTE: This procedure is for SFP models only.

1. Remove three screws (callout 1).

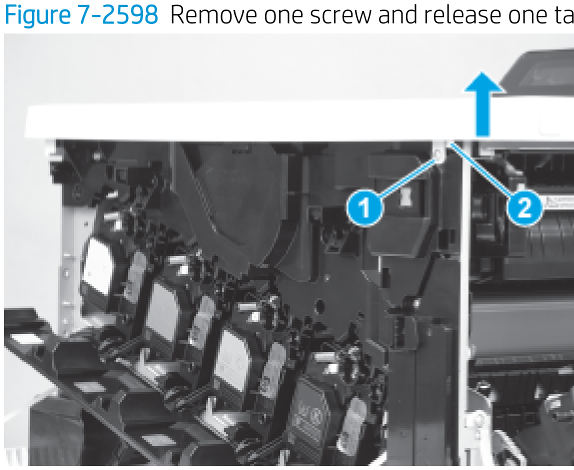
Figure 7-2597 Remove three screws



2. Remove one screw (callout 1), release one tab (callout 2), and then slightly separate the corner of the cover from the chassis.

NOTE: This is a self-tapping plastic-thread screw. Make sure that this screw is used in this location when it is reinstalled.

Figure 7-2598 Remove one screw and release one tab

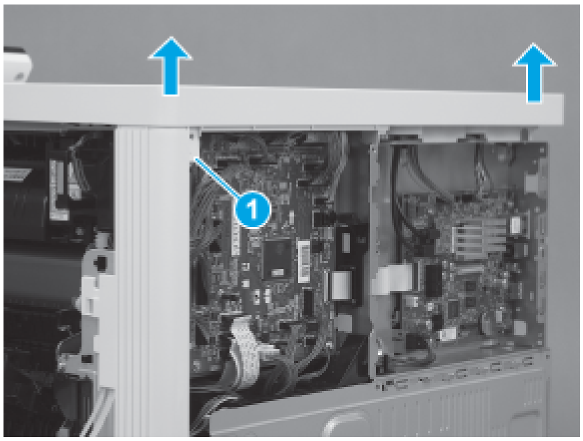


3. Release one tab (callout 1), and then lift up on the cover to release it.

IMPORTANT: **M554 models**: Disconnect the control-panel flat cable at the formatter.

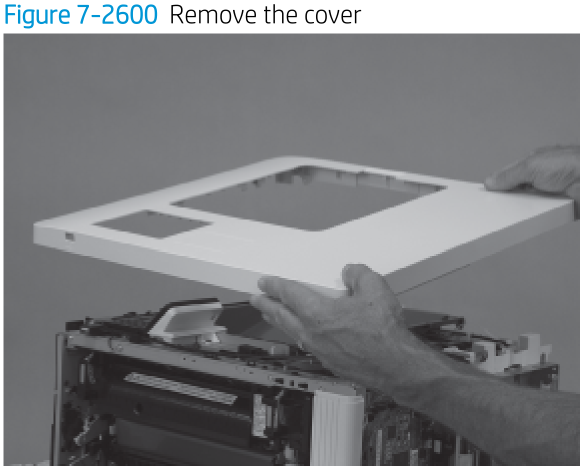
NOTE: If the cover does not release, check for addition tabs by locating the triangles embossed in the cover at tab locations.

Figure 7-2599 Release the cover



4. Remove the cover.

Figure 7-2600 Remove the cover

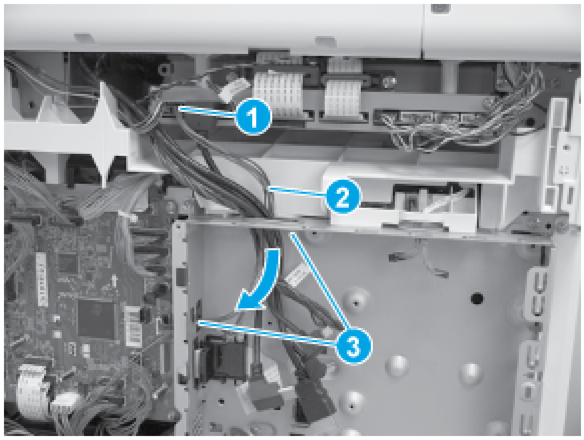


Remove the formatter case

Follow these steps to remove the formatter case.

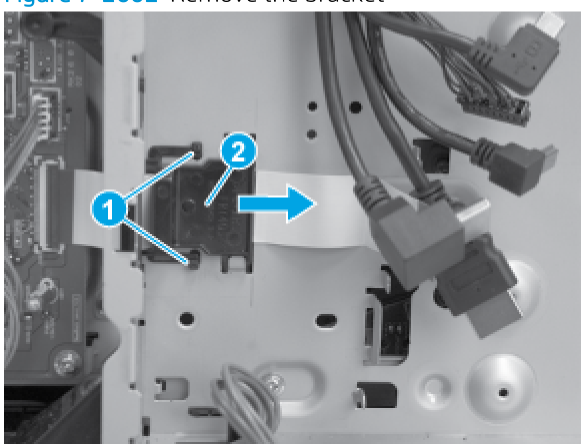
1. **MFP only**: Disconnect one connector (callout 1), and then pass the wire harness (callout 2) through two openings in the formatter case (callout 3).

Figure 7-2601 Disconnect one connector



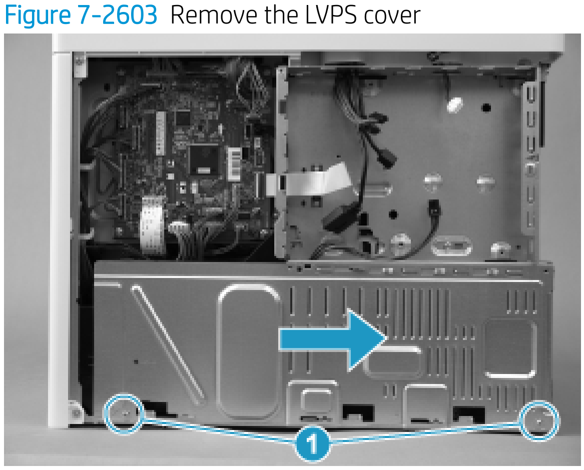
2. Release two tabs (callout 1) on the black plastic bracket. Hold the tabs in the released position, and then slide the bracket (callout 2) to the right to remove it from the formatter case.

Figure 7-2602 Remove the bracket



3. Remove two screws (callout 1), and then slide the low-voltage power supply (LVPS) cover to the right to remove it.

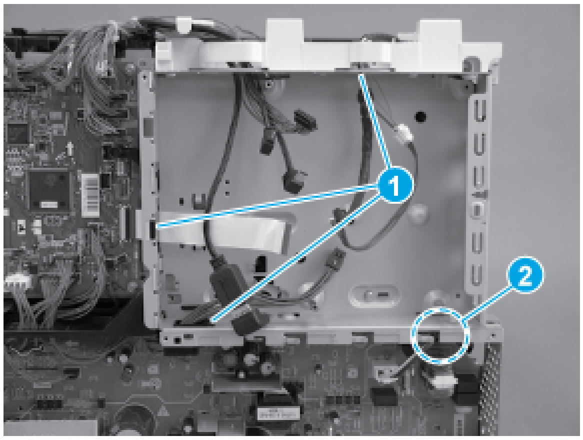
Figure 7-2603 Remove the LVPS cover



4. Pass two wire harnesses and one flat cable (callout 1) through the opening in the formatter case, and then release one wire harness from the retainer (callout 2).

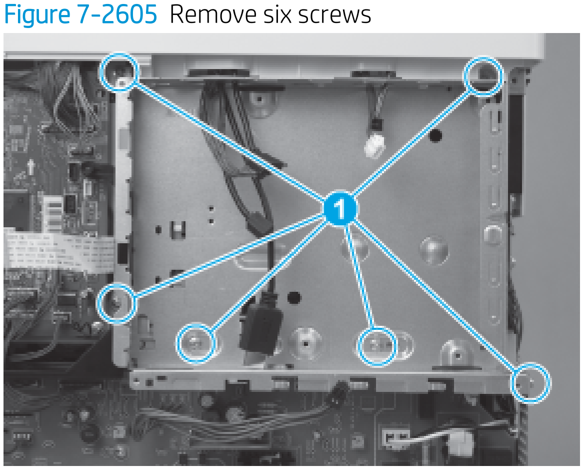
⚠ CAUTION: The flat cable might be attached to the formatter case with double-sided tape. Make sure that this tape is released, so that the flat cable is not damaged when the formatter case is removed.

Figure 7-2604 Release wire harnesses and flat cable



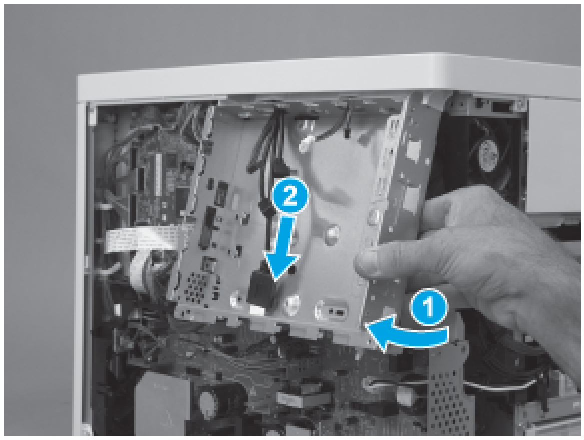
5. Remove six screws (callout 1).

Figure 7-2605 Remove six screws



6. Rotate the bottom of the formatter case away from the printer (callout 1), and then pull it down (callout 2) to release it.

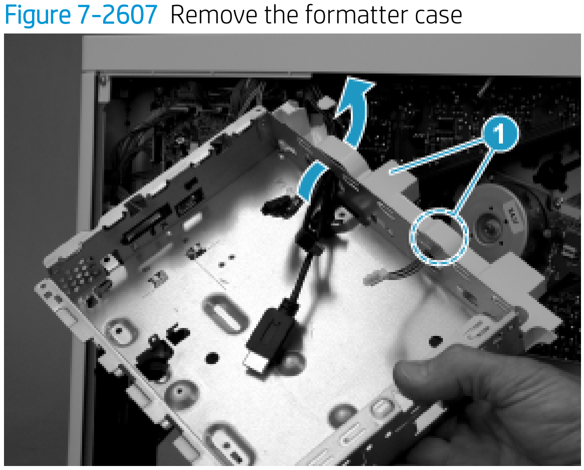
Figure 7-2606 Release the formatter case



7. Pass the wire harnesses through the opening in the formatter case to remove it.

IMPORTANT: If the formatter case is removed so that it can be replaced, make sure to transfer the memory PCA (island of data) and plastic bracket (callout 1) to the replacement case.

Figure 7-2607 Remove the formatter case



Remove the right rear cover

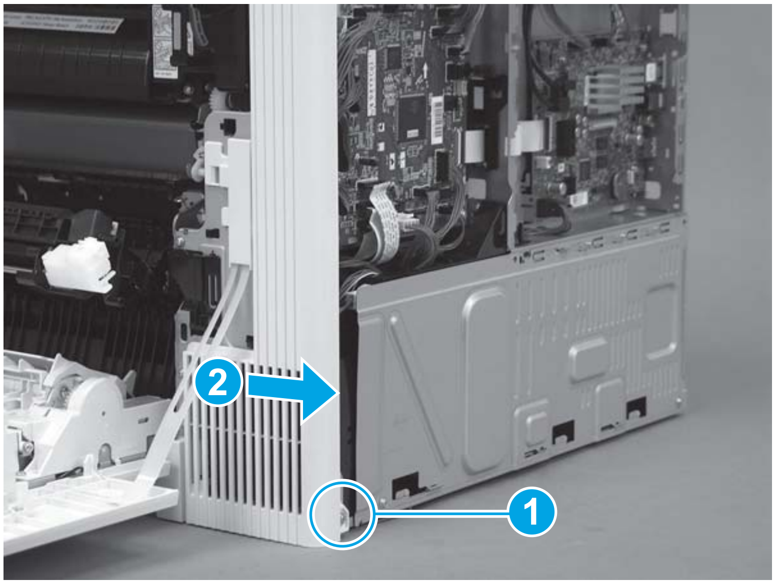
Follow these steps to remove the right rear cover.

NOTE: The figures in this topic show a SFP model. However, the procedure is correct for an MFP.

1. Remove one screw (callout 1), and then slide the cover toward the rear of the printer (callout 2) to release it.

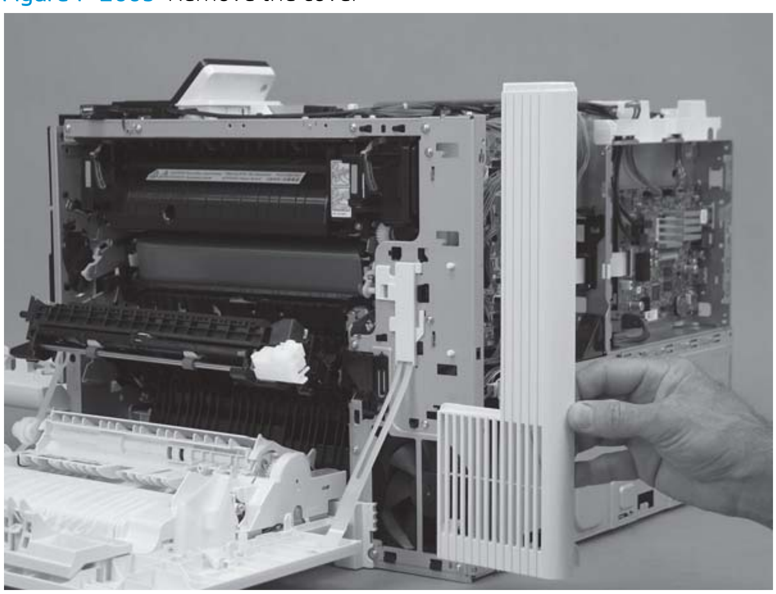
TIP: If the right door is closed, open it now.

Figure 7-2608 Release the cover



2. Remove the cover.

Figure 7-2609 Remove the cover

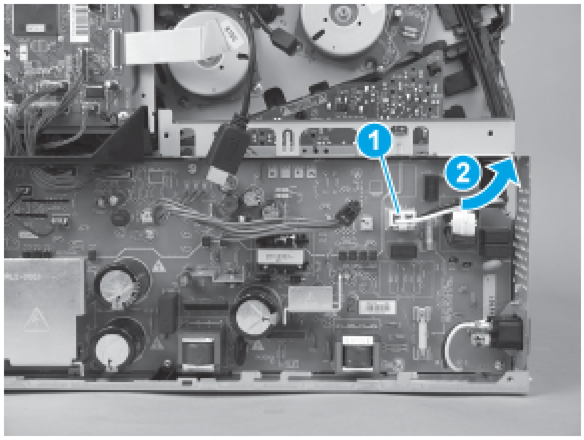


Remove the low-voltage power supply (LVPS)

Follow these steps to remove the low-voltage power supply (LVPS).

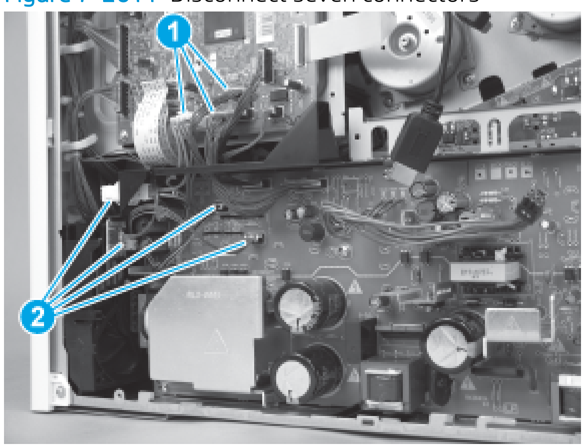
1. Disconnect one wire harness (callout 1), and then pass the wire harness through the opening (callout 2) in the chassis.

Figure 7-2610 Disconnect one wire harness



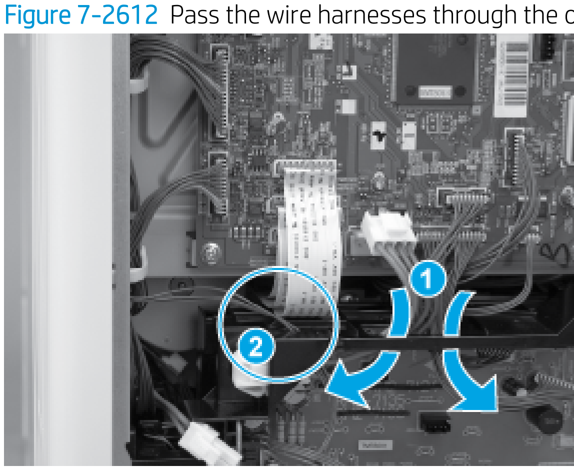
2. Disconnect three connectors on the DC controller (callout 1), and then disconnect four connectors (callout 2) on the LVPS.

Figure 7-2611 Disconnect seven connectors



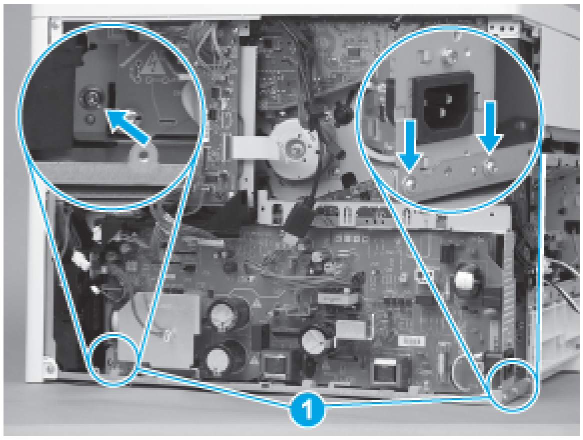
3. Pass the wire harnesses from the DC controller to the LVPS through the opening in the chassis (callout 1), and then release the wire harnesses from the retainer (callout 2).

Figure 7-2612 Pass the wire harnesses through the opening



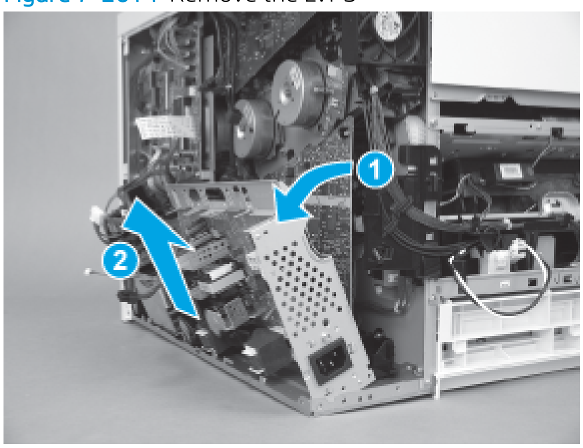
4. Remove three screws (callout 1).

Figure 7-2613 Remove three screws



5. Rotate the top of the LVPS away from the printer (callout 1), and then slide it up and out (callout 2) of the printer to remove it.

Figure 7-2614 Remove the LVPS

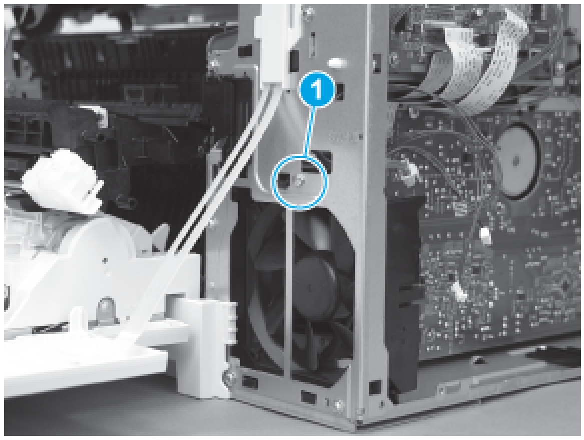


Remove the power supply fan (FM1)

Follow these steps to remove the power supply fan.

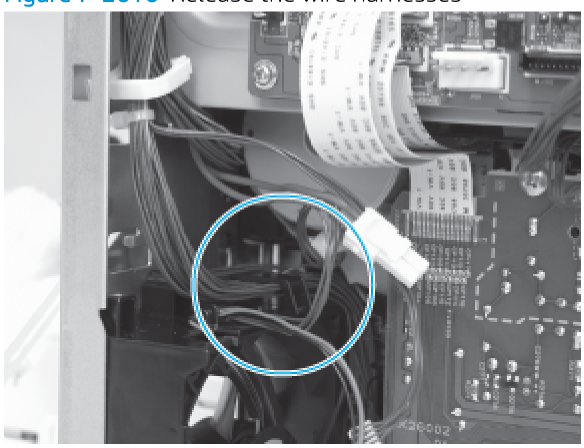
1. Remove one screw (callout 1).

Figure 7-2615 Remove one screw



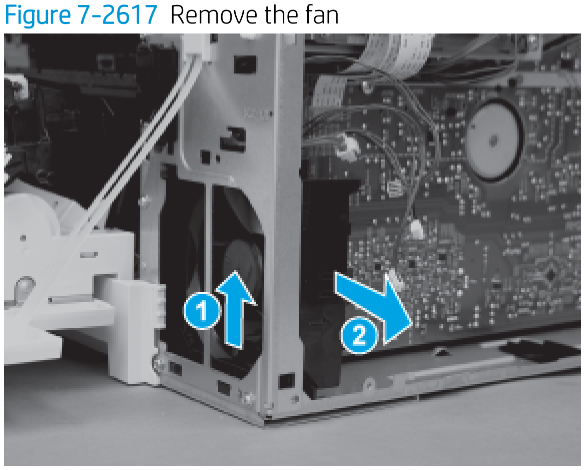
2. Release the wire harnesses from the retainer on the top of the fan bracket.

Figure 7-2616 Release the wire harnesses



3. Lift the fan up (callout 1), and then slide it out of the printer (callout 2) to remove it.

Figure 7-2617 Remove the fan

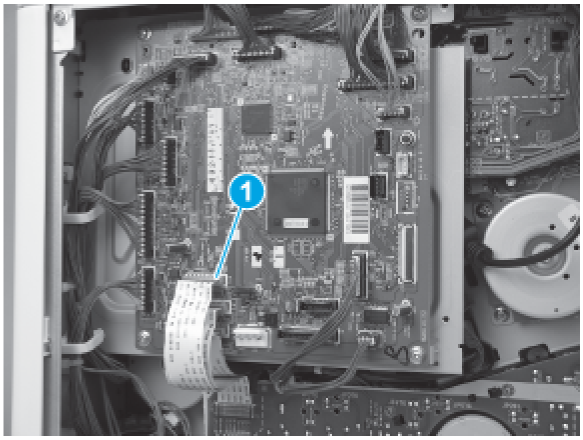


Remove the high-voltage power supply D (HVPSD)

Follow these steps to remove the high-voltage power supply D (HVPSD).

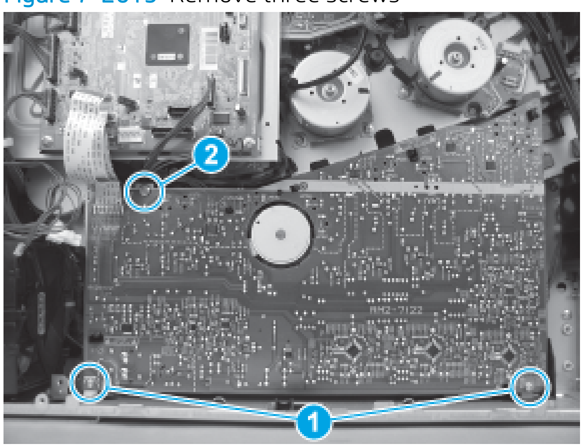
1. Disconnect one flat cable (callout 1) on the DC controller.

Figure 7-2618 Disconnect one flat cable



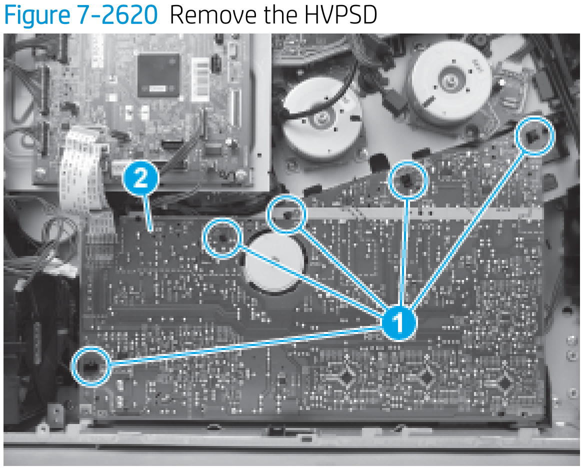
2. Remove two screws (callout 1), and then remove one self tapping screw (callout 2) on the HVPSD.

Figure 7-2619 Remove three screws



3. Release five tabs (callout 1), and then remove the HVPSD (callout 2).

Figure 7-2620 Remove the HVPSD

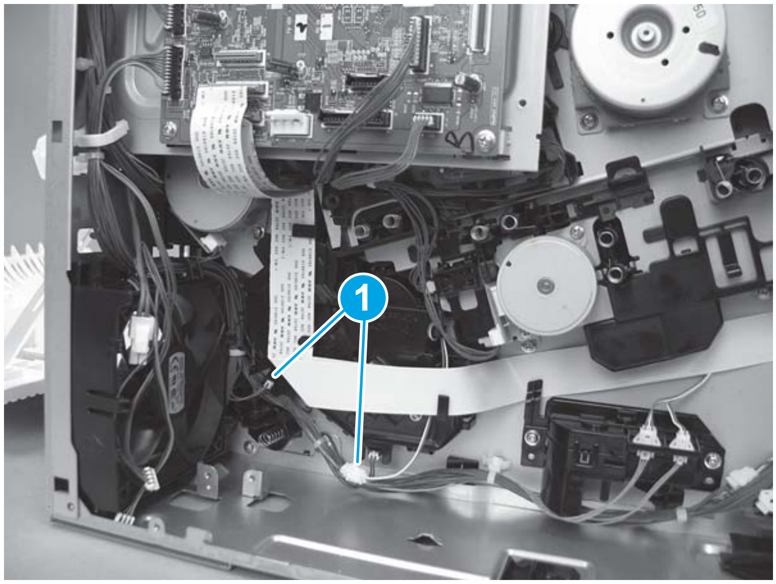


Remove the auto close assembly

Follow these steps to remove the auto close assembly.

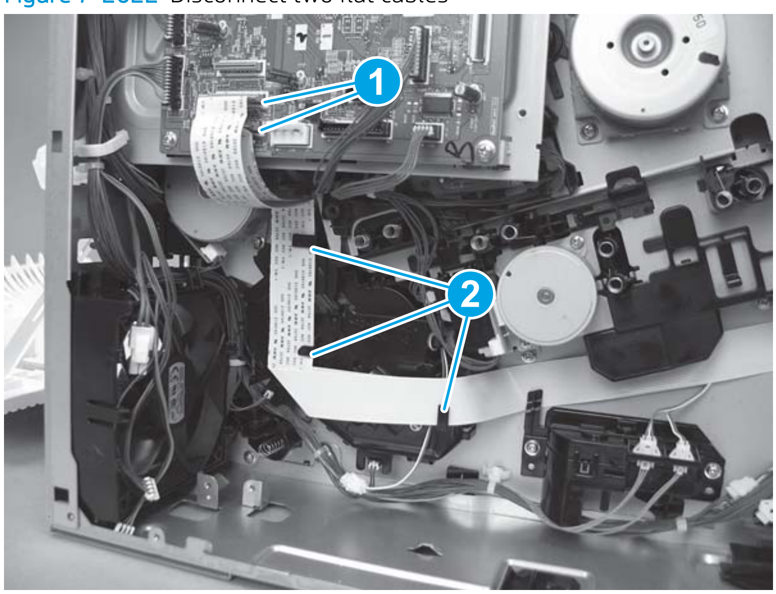
1. Disconnect two connectors (callout 1).

Figure 7-2621 Disconnect two connectors



2. Disconnect two flat cables (callout 1), and then release them from the retainers (callout 2).

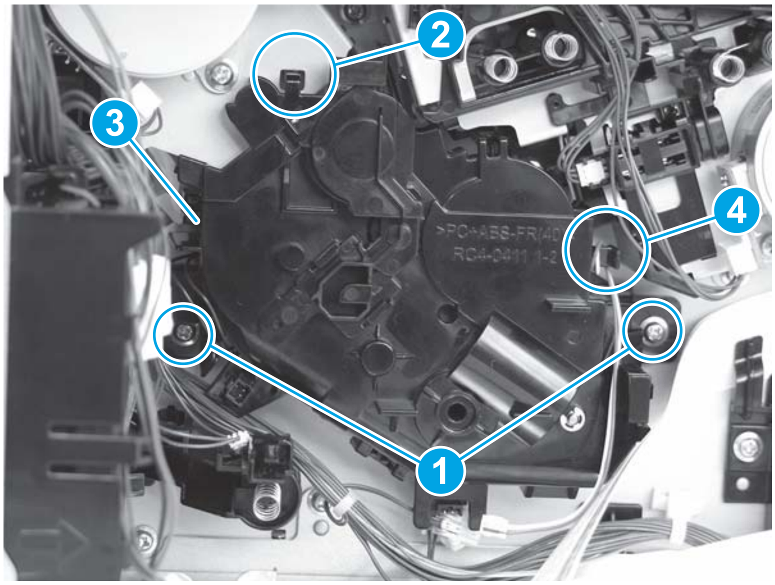
Figure 7-2622 Disconnect two flat cables



3. Remove two screws (callout 1), release one tab (callout 2), and then remove the lifter drive assembly (callout 3).

NOTE: Release one wire harness from the retainer (callout 4) as the assembly is removed.

Figure 7-2623 Remove the assembly



Remove the DC controller (DCC) and sheet-metal bracket

Follow these steps to remove the DC controller and sheet-metal bracket together.

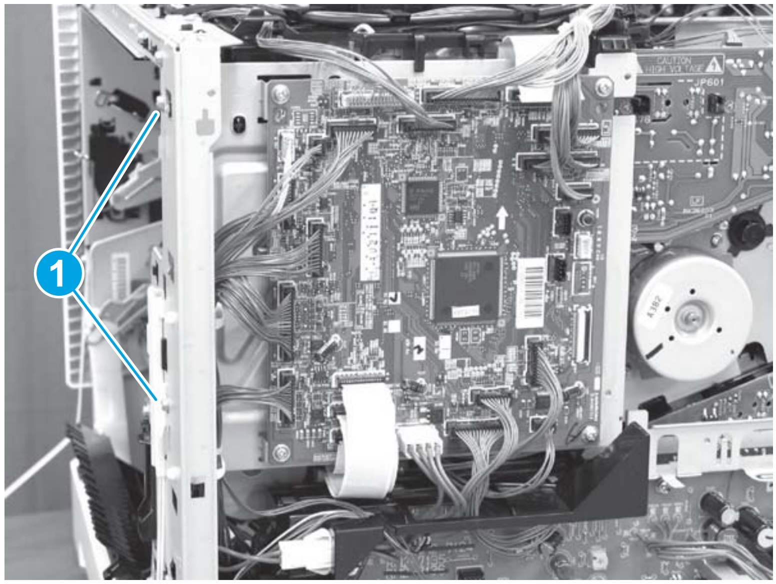
NOTE: ESD sensitive part.

1. Disconnect all of the connectors, and then remove two screws (callout 1).

   Empty DCC connectors

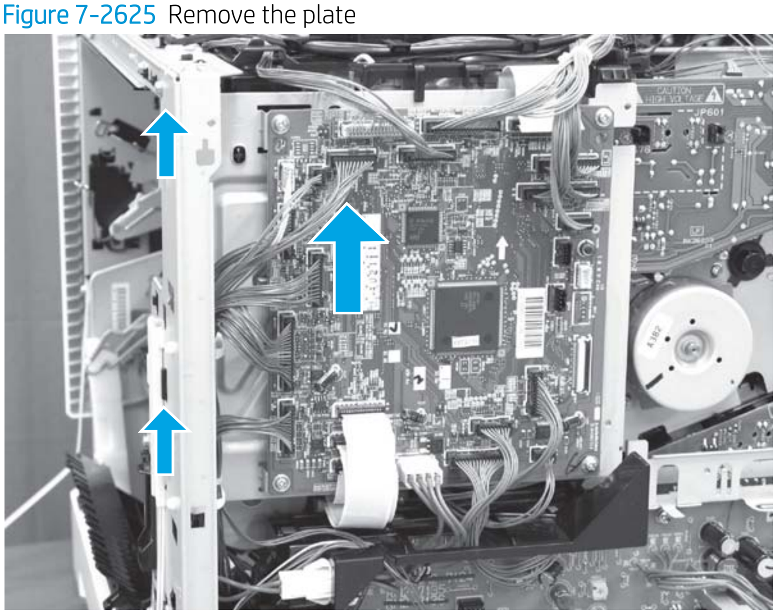
   - J140
   - J141
   - J143

Figure 7-2624 Remove two screws



2. Lift up on the DC controller and sheet-metal plate to remove it.

Figure 7-2625 Remove the plate



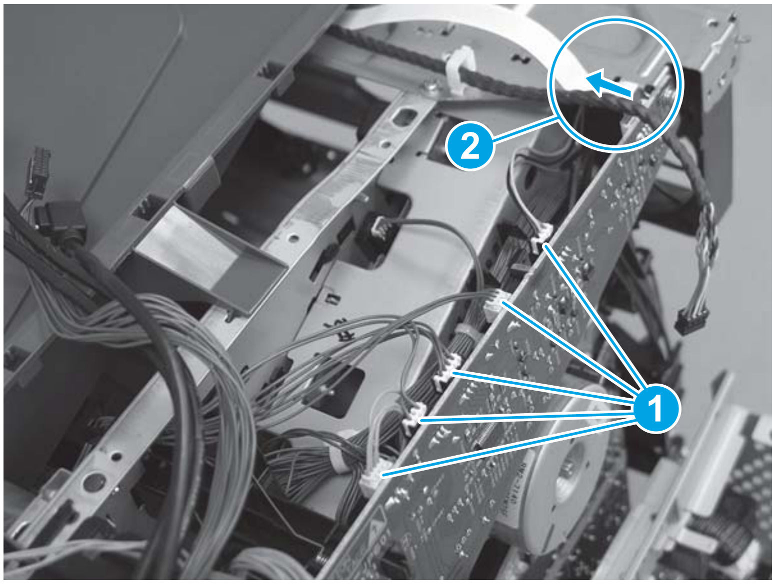
Remove the high-voltage power supply T (HVPST)

Follow these steps to remove the high-voltage power supply T.

NOTE: ESD sensitive part.

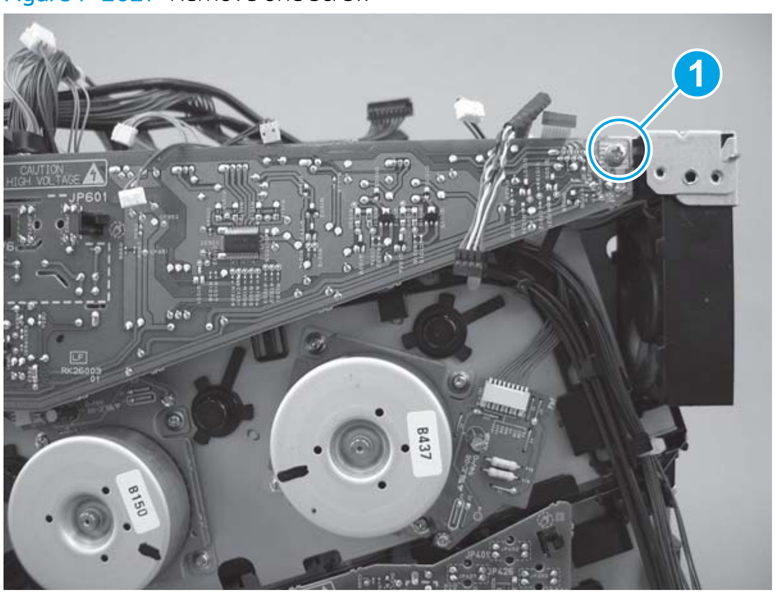
1. Disconnect five connectors (callout 1), and then disconnect one flat cable (callout 2).

Figure 7-2626 Disconnect five connectors and one flat cable



2. Remove one screw (callout 1).

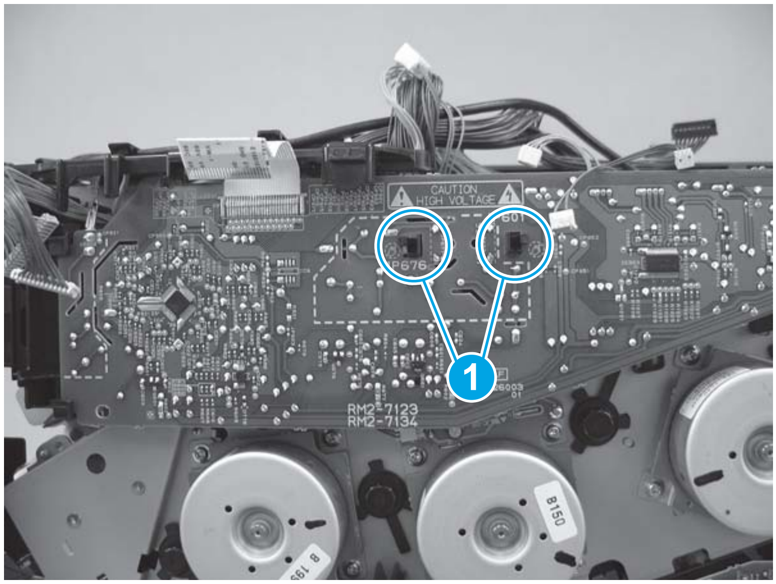
Figure 7-2627 Remove one screw



3. Release two tabs (callout 1), and then separate the HVPST from the printer.

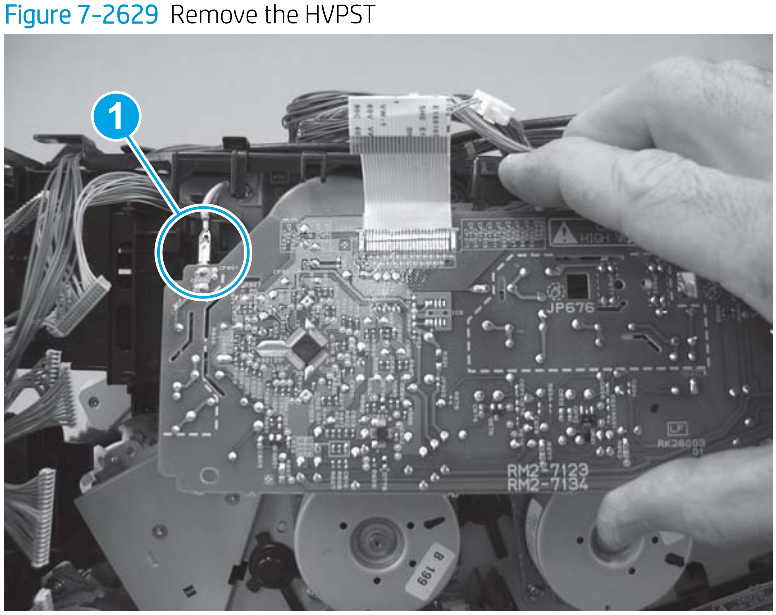
⚠ CAUTION: Do not attempt to completely remove the HVPST. It is still connected to the printer by ground wire harness.

Figure 7-2628 Release the HVPST



4. Release one ground wire connector (callout 1), and then remove the HVPST.

Figure 7-2629 Remove the HVPST



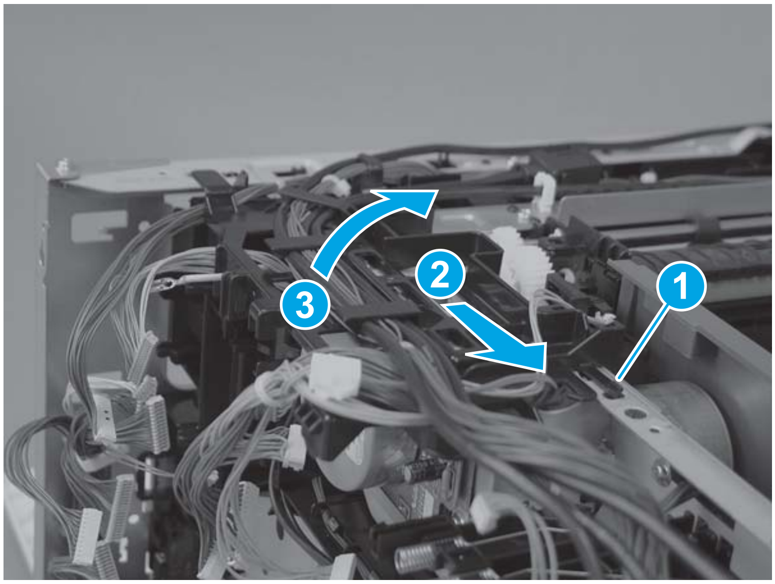
Remove the fuser drive assembly

Follow these steps to remove the fuser drive assembly.

1. Release one tab (callout 1), slide the guide to release it (callout 2), and then rotate the guide up and away from the chassis to move it out of the way (callout 3).

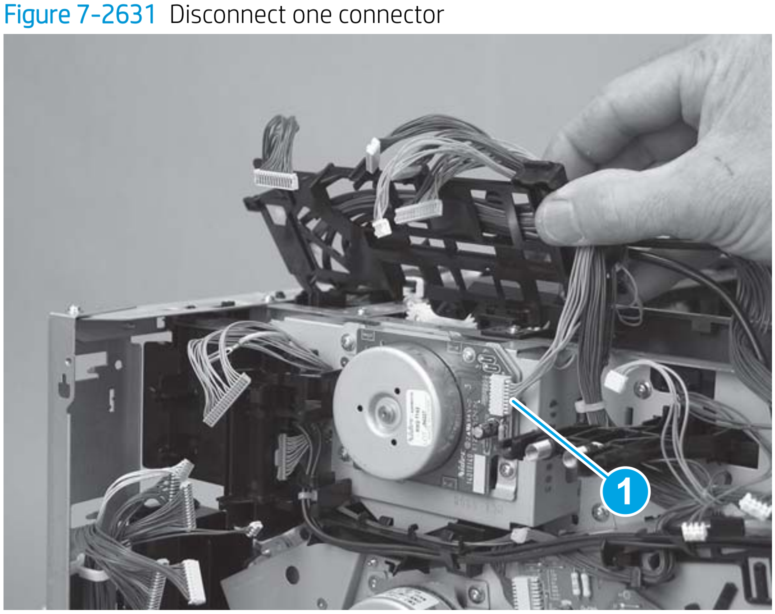
⚠ CAUTION: One wire harnesses in the guide is still attached to the fuser motor. Do not attempt to completely remove the guide.

Figure 7-2630 Move the guide out of the way



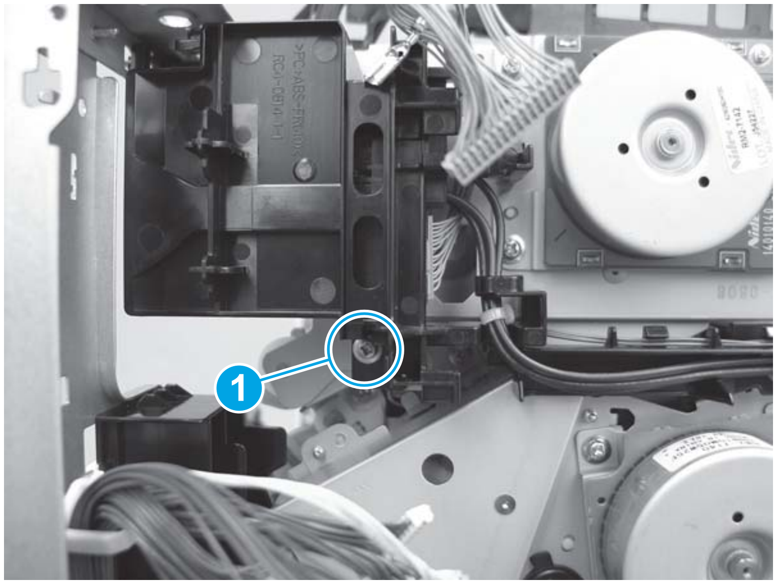
2. Disconnect one connector (callout 1).

Figure 7-2631 Disconnect one connector



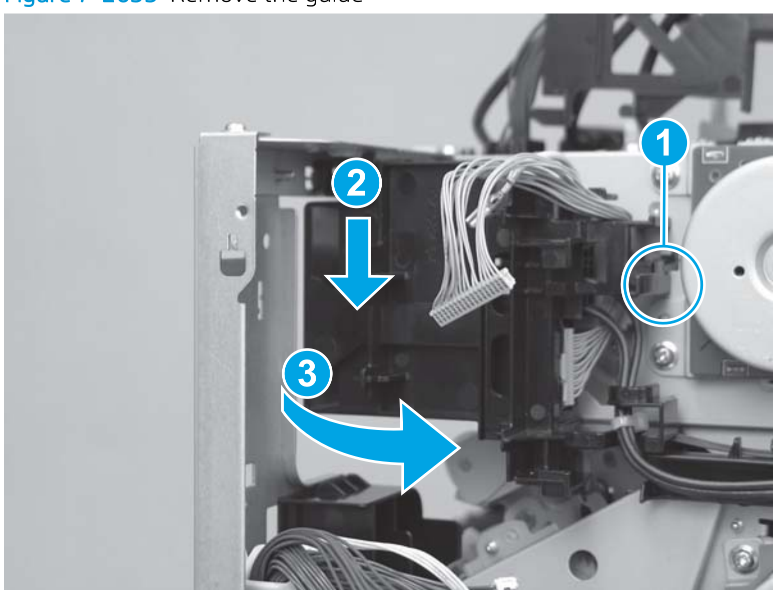
3. Remove one screw (callout 1).

Figure 7-2632 Remove one screw



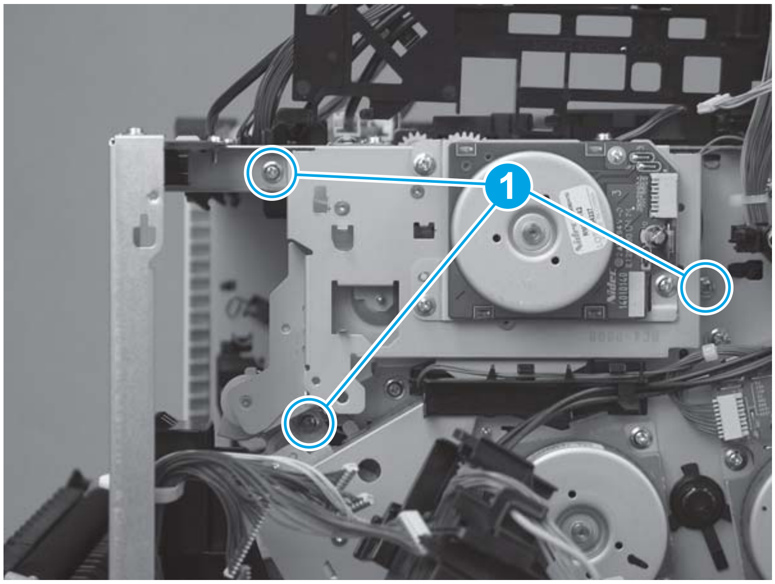
4. Release one tab (callout 1), slide the guide down to release it (callout 2), and then rotate the guide away from the chassis to remove it (callout 3).

Figure 7-2633 Remove the guide



5. Remove three screws (callout 1).

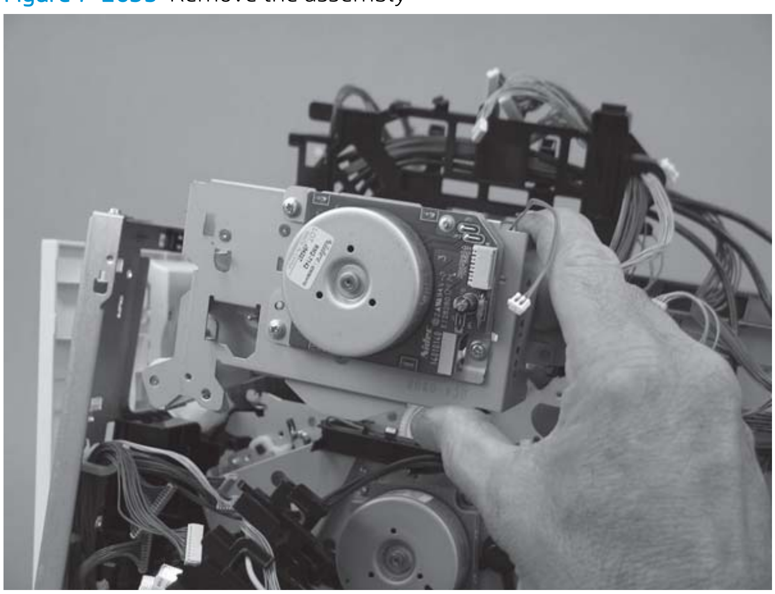
Figure 7-2634 Remove three screws



6. Remove the assembly.

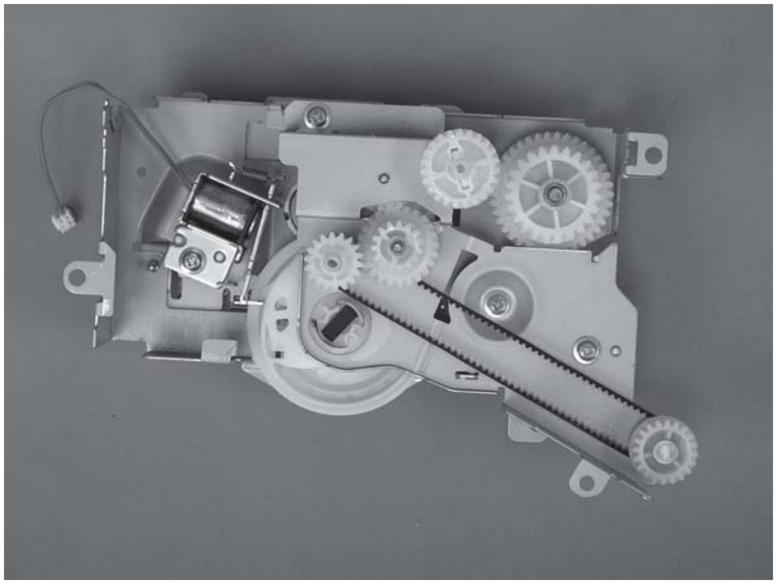
⚠ CAUTION: Two gears on the back side of the assembly are not captive. Handle the assembly carefully.

Figure 7-2635 Remove the assembly



7. **Optional step:** Two gears (callout 1) on the back side of the assembly are not captive. If the gears are dislodged, install them as shown.

Figure 7-2636 Remove the assembly



Remove the main-drive assembly

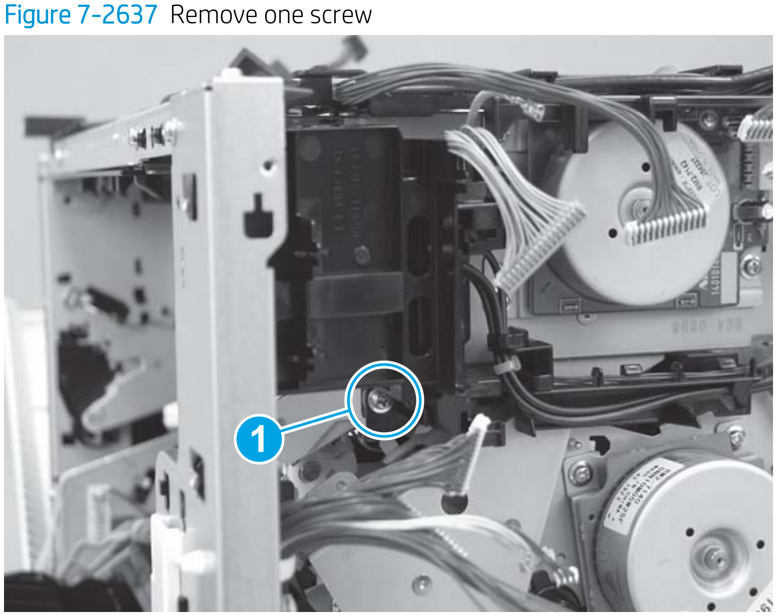
Follow these steps to remove the main-drive assembly.

IMPORTANT: If the toner cartridges have not already been removed prior to servicing the product, remove them now.

The toner cartridges are sensitive to strong light. Set them aside and cover them with paper to protect them.

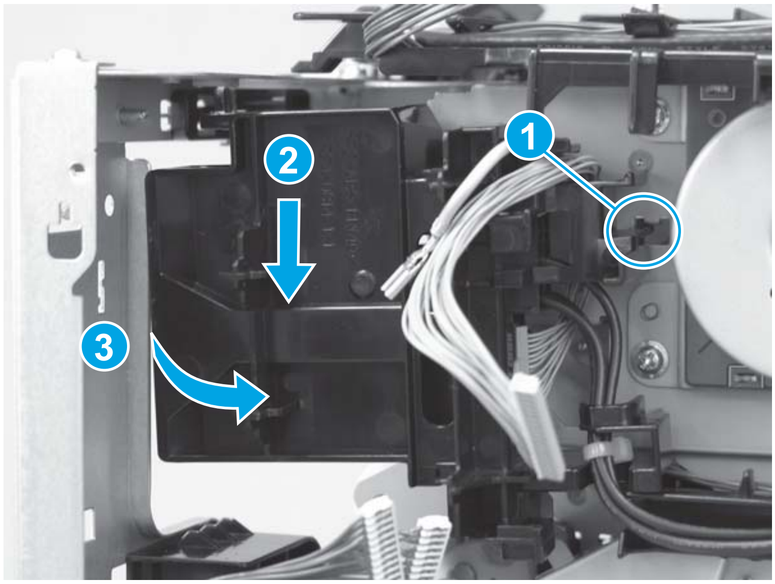
1. At the rear side of the printer, remove one screw (callout 1).

Figure 7-2637 Remove one screw



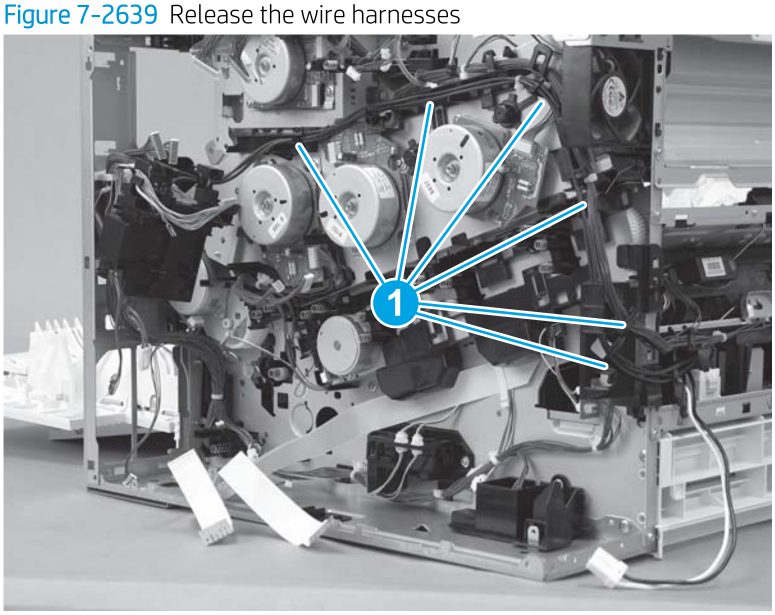
2. Release one tab (callout 1), push down on the cover (callout 2), and then rotate the cover away (callout 3) from the printer to remove it.

Figure 7-2638 Remove the cover



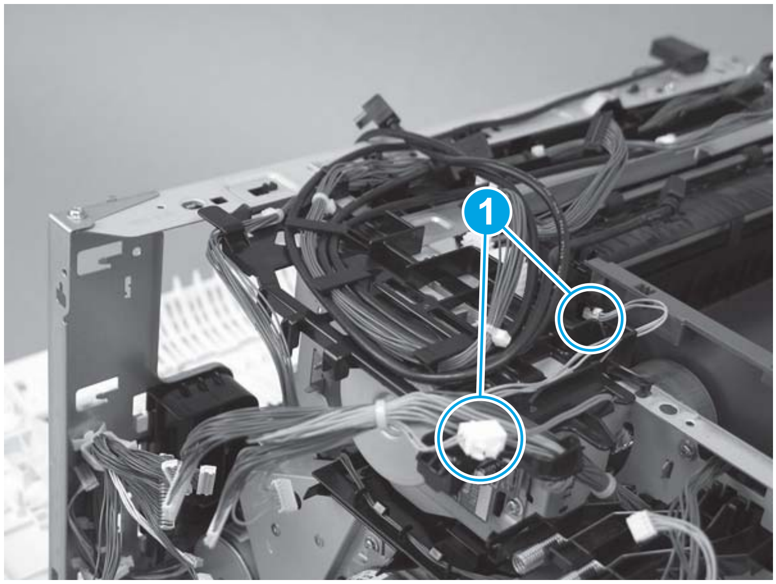
3. Release the wire harnesses from the guides (callout 1).

Figure 7-2639 Release the wire harnesses



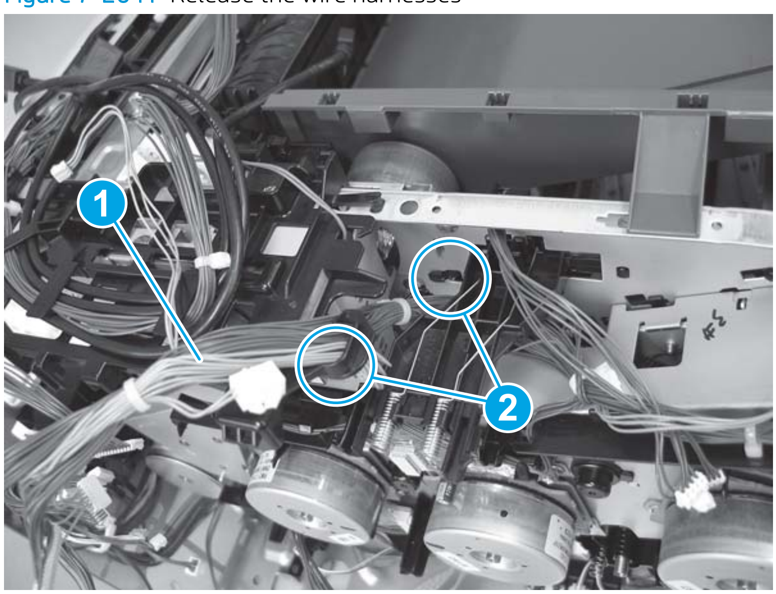
4. At the top of the printer, disconnect two connectors (callout 1).

Figure 7-2640 Disconnect two connectors



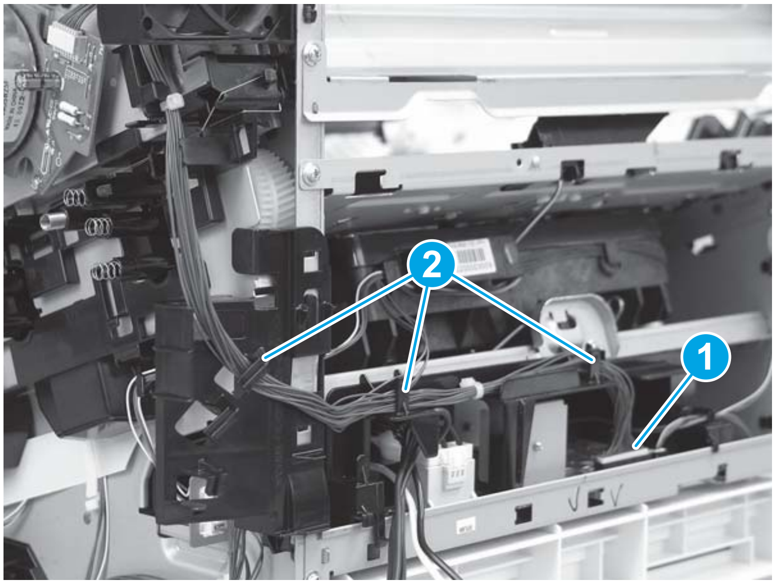
5. Release the wire harnesses (callout 1) from the retainers (callout 2).

Figure 7-2641 Release the wire harnesses



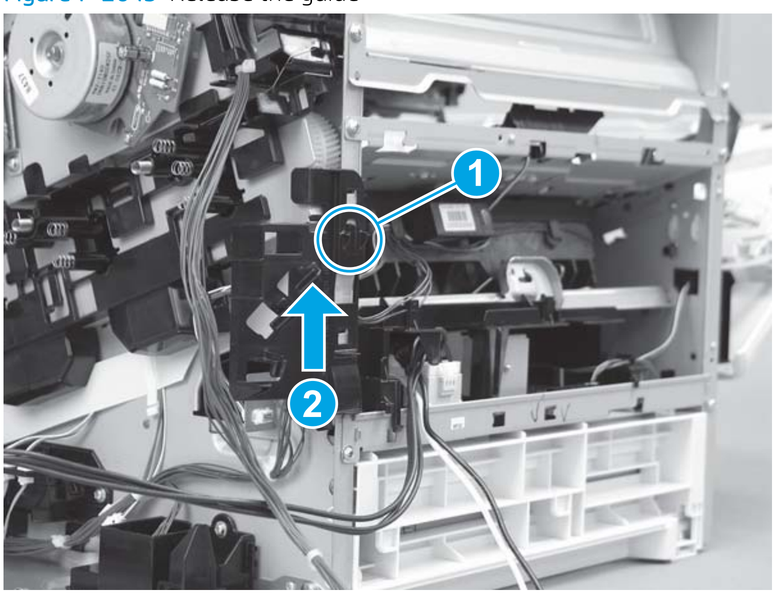
6. At the left side of the printer, disconnect one connector (callout 1), and then release the wire harnesses from the retainers (callout 2).

Figure 7-2642 Disconnect one connector



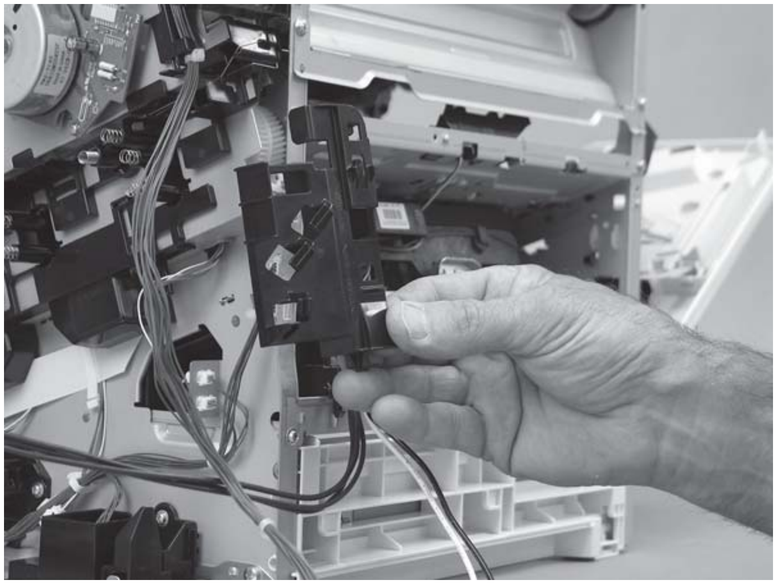
7. Release one tab (callout 1), and then push up on the guide (callout 2) to release it.

Figure 7-2643 Release the guide



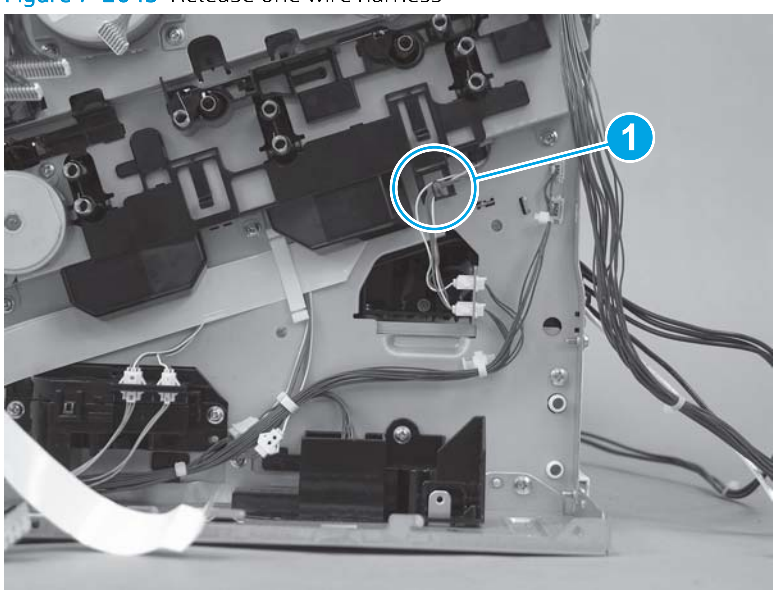
8. Remove the guide.

Figure 7-2644 Remove the guide



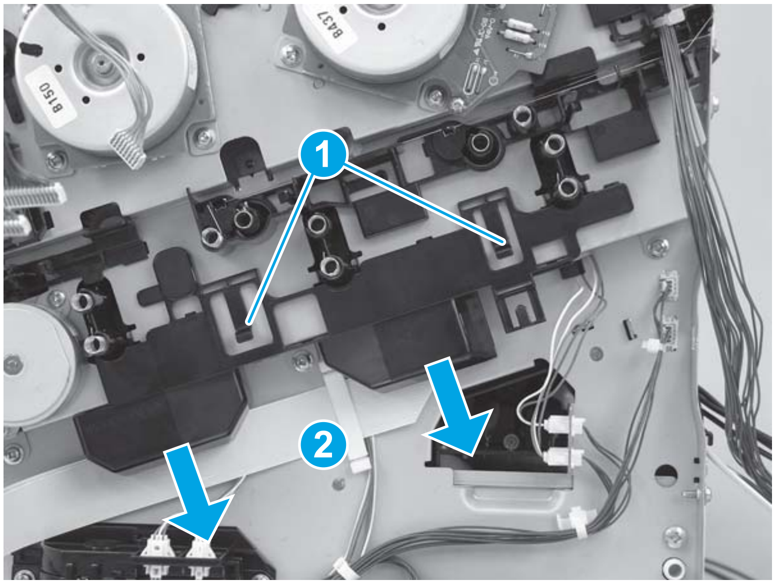
9. Release one wire harness (callout 1) from the retainer.

Figure 7-2645 Release one wire harness



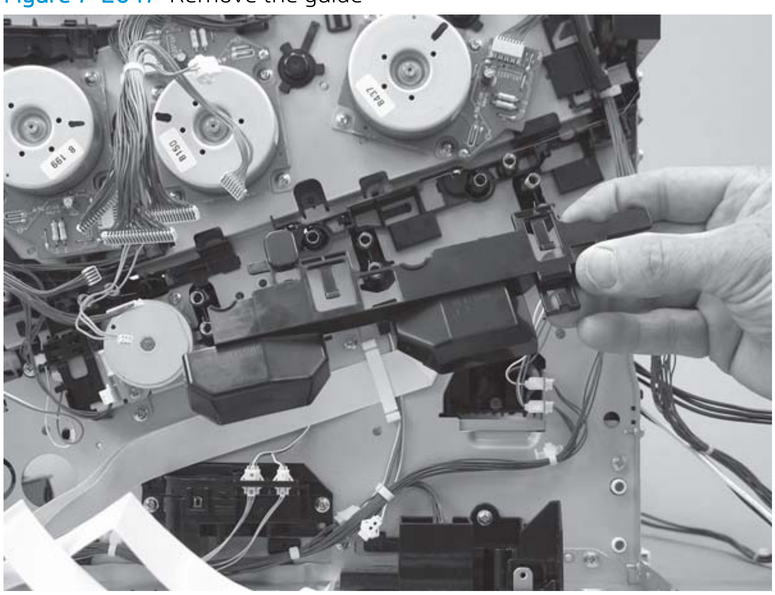
10. Release two tabs (callout 1), and then pull down on the guide (callout 2) to release it.

Figure 7-2646 Release the guide



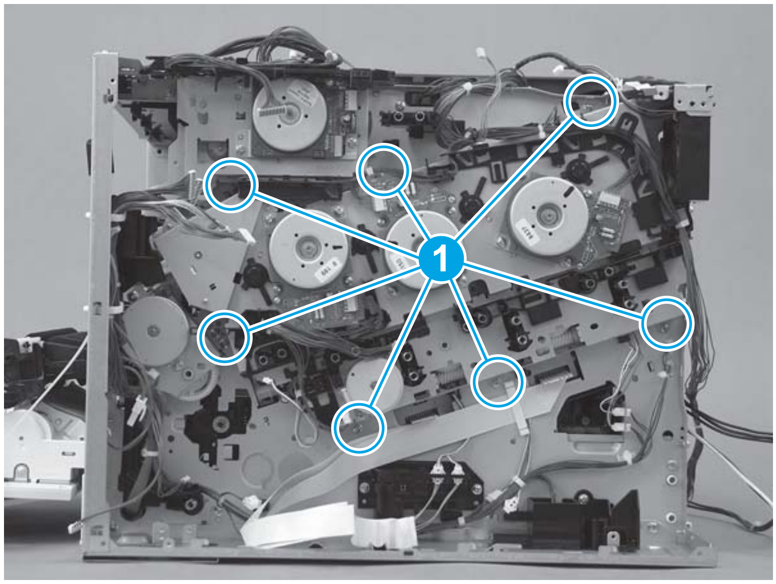
11. Remove the guide.

Figure 7-2647 Remove the guide



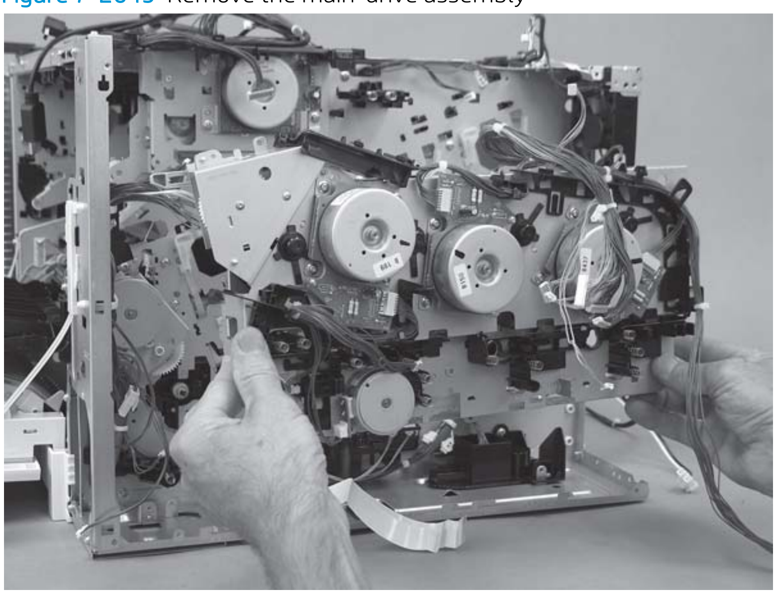
12. Remove seven screws (callout 1).

Figure 7-2648 Remove seven screws



13. Carefully remove the main-drive assembly.

Figure 7-2649 Remove the main-drive assembly



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Install the main-drive assembly

Follow these steps to install the main-drive assembly.

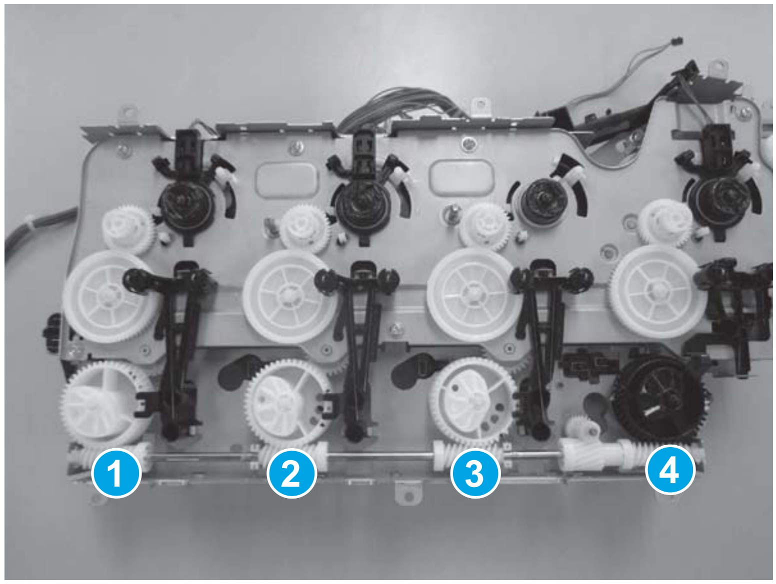
CAUTION: When handling the drive assembly, take care not to wipe any of the grease off of the gears on the back side of the assembly.

1. Check the main drive cam alignment.

   The cams on the back side of the assembly must be correctly aligned before the replacement assembly is installed.

   a. Locate the 4 gears and cams (callouts 1-4) on the back side of the assembly.

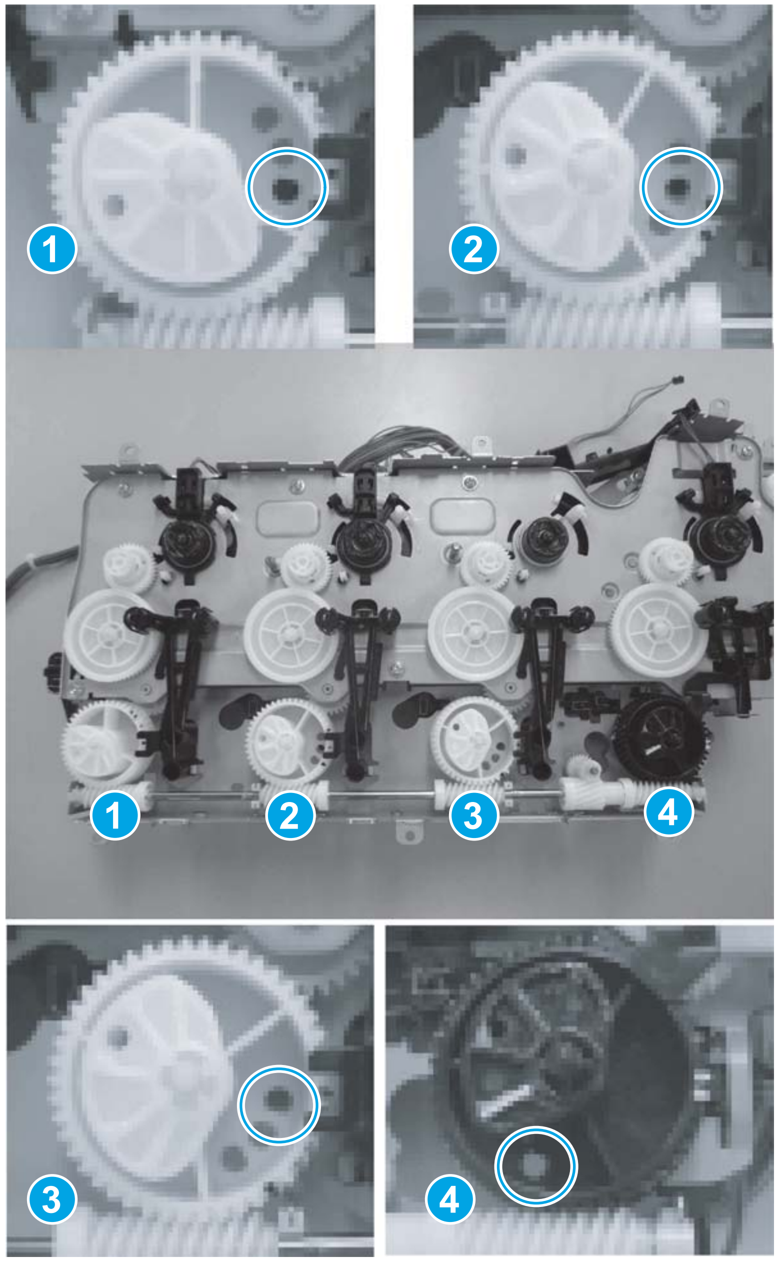
Figure 7-2650 Main drive gear and cam locations



b. Verify the alignment of the holes in the 4 gears with the holes in the assembly chassis as shown.

TIP: Rotate the shaft under the gears to change the alignment if necessary.

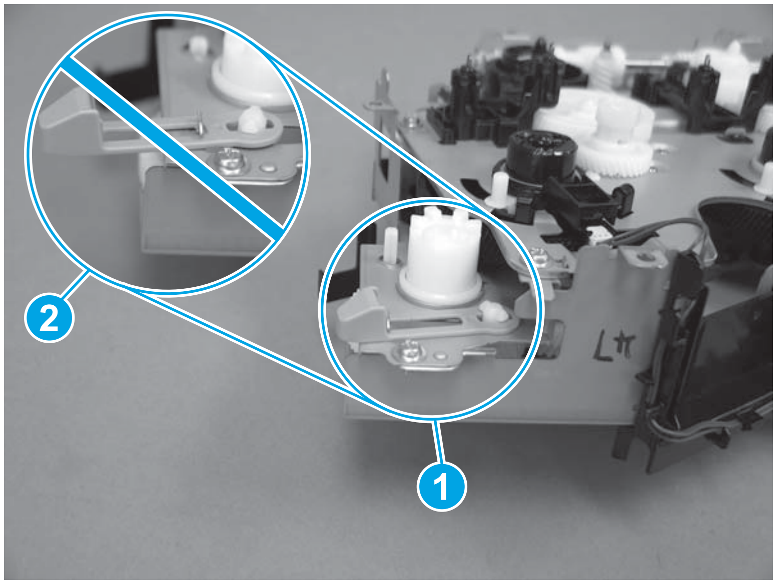
Figure 7-2651 Main drive gear and cam locations



2. Before proceeding, make sure that the blue ITB drive handle is in the locked (callout 1; pushed in) position on the replacement main-drive assembly.

NOTE: If the drive handle is in the unlocked (callout 2; pulled out) position it will be difficult to install assembly.

Figure 7-2652 Check the blue ITB drive handle



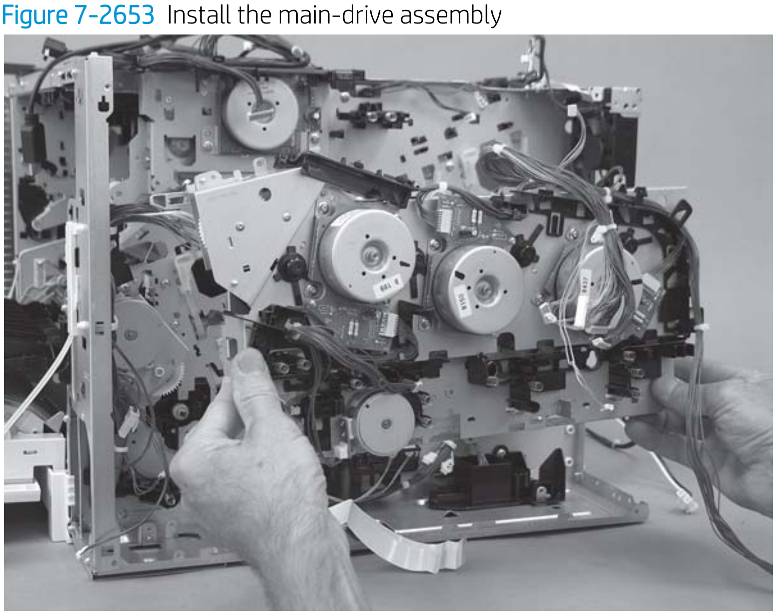
3. With the **front door closed**, carefully position the replacement main-drive assembly on the printer.

CAUTION: When handling the assembly, take care not to wipe any of the grease off of the gears on the back side of the assembly.

TIP: Place the bottom of the assembly on the printer first, and then rotate the top of the assembly onto the printer.

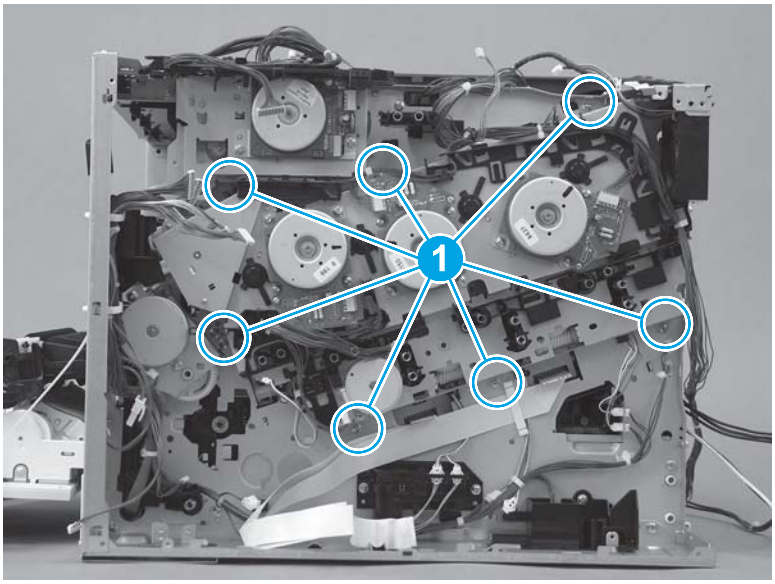
Make sure that the entire assembly fits flush up against the chassis.

Figure 7-2653 Install the main-drive assembly



4. Install seven screws (callout 1).

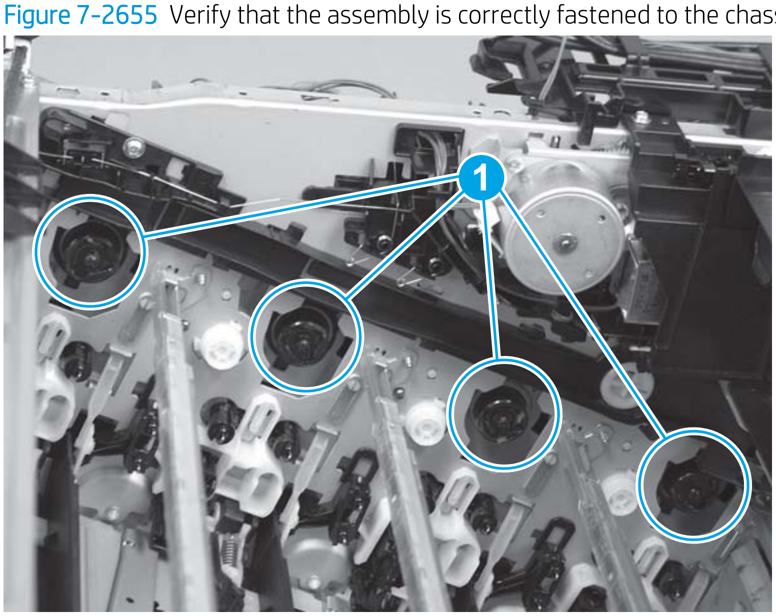
Figure 7-2654 Install seven screws



5. To verify that the assembly is correctly fastened to the chassis, open and close the front door while observing the cartridge drive gears (callout 1). The gears must freely move in and out when the door is opened and closed.

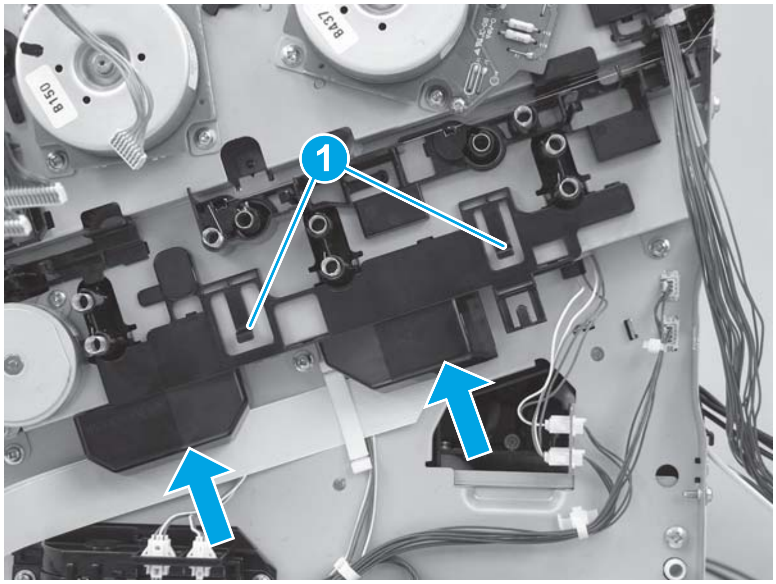
NOTE: If the gears do not move freely, remove the assembly, reposition it on the chassis, and then verify that the gears move freely.

Figure 7-2655 Verify that the assembly is correctly fastened to the chassis



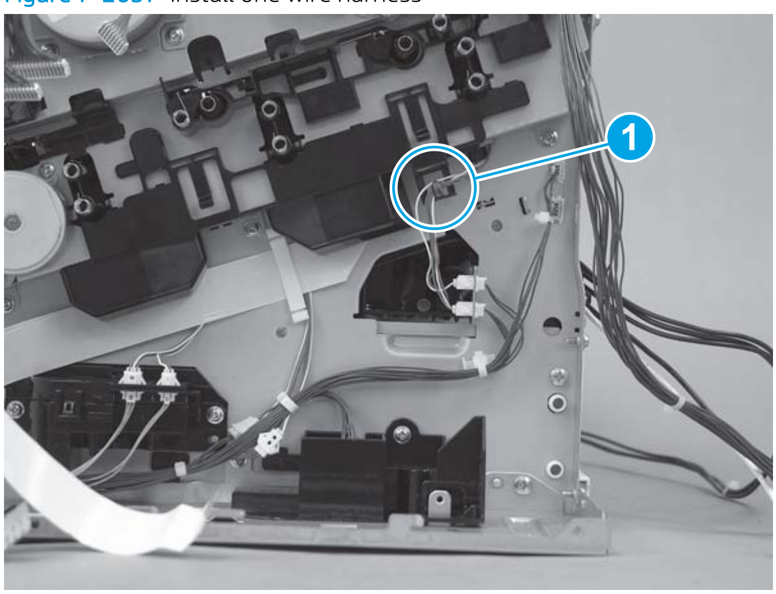
6. Position the guide on the assembly, push up to install it, and then make sure that the two tabs (callout 1) snap into place

Figure 7-2656 Install the guide



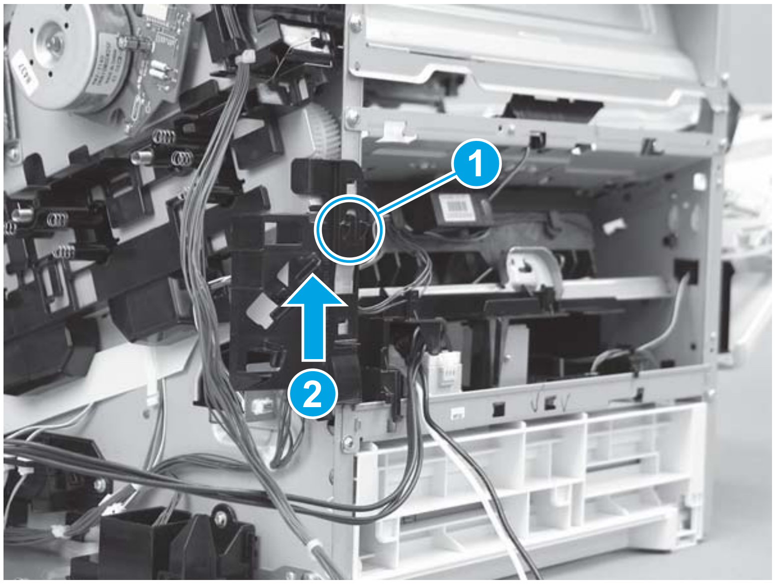
7. Install one wire harness (callout 1) on the retainer.

Figure 7-2657 Install one wire harness



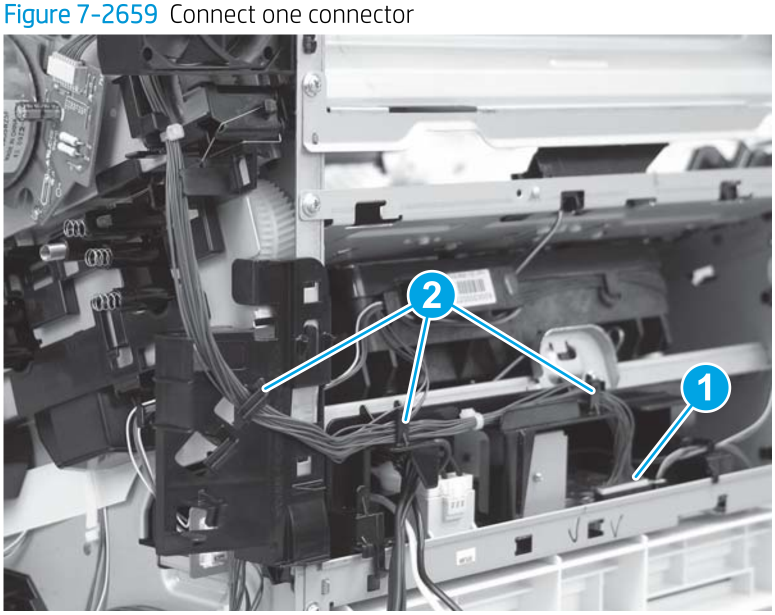
8. Position the guide on the assembly, push up to install it, and then make sure that the two tabs (callout 1) snap into place.

Figure 7-2658 Install the guide



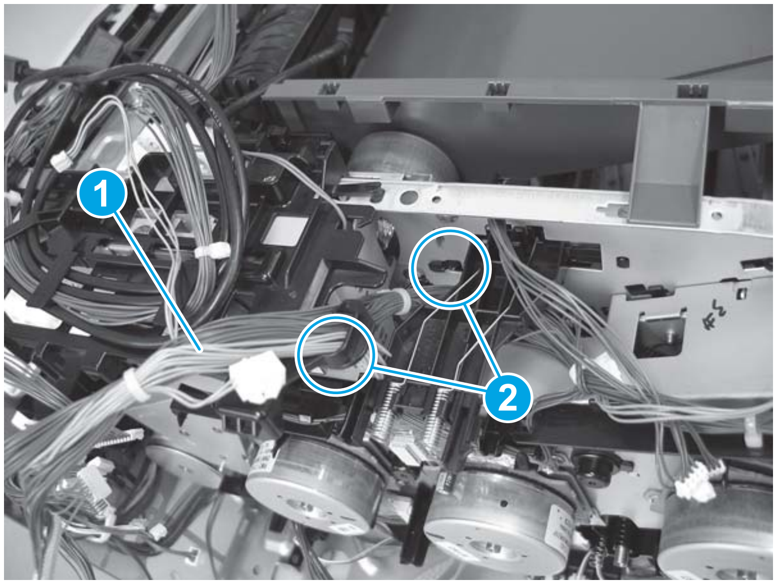
9. At the left side of the printer, connect one connector (callout 1), and then release the wire harnesses from the retainers (callout 2).

Figure 7-2659 Connect one connector



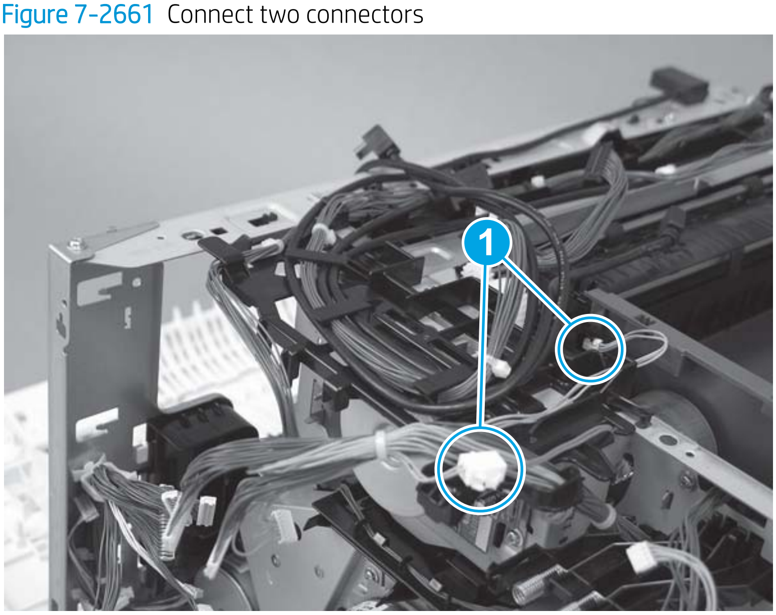
10. At the top of the printer, install the wire harnesses (callout 1) in the retainers (callout 2).

Figure 7-2660 Install the wire harnesses



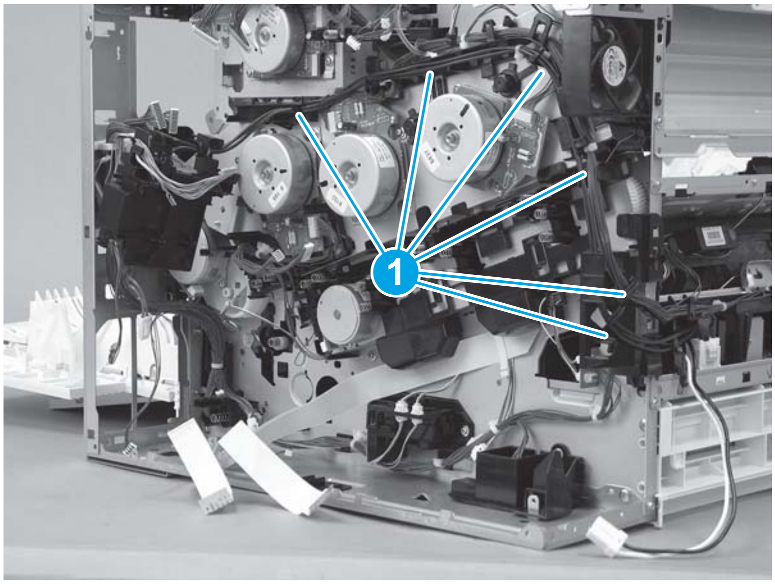
11. Connect two connectors (callout 1).

Figure 7-2661 Connect two connectors



12. Install the wire harnesses in the guides (callout 1).

Figure 7-2662 Install the wire harnesses



13. At the rear side of the printer do the following:

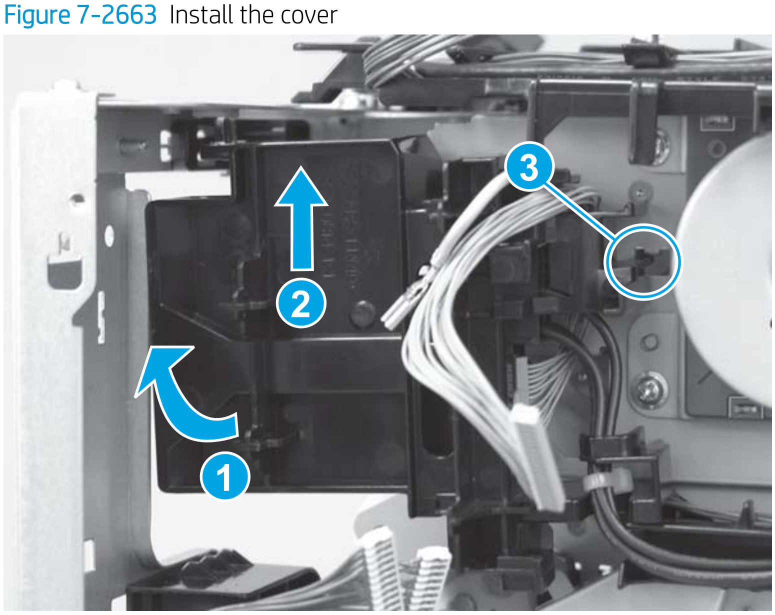
    1. Position the right edge of the cover on the printer.

    2. Rotate the left edge of the cover toward (callout 1) the printer to install it.

    3. Push up on the cover (callout 2) to engage it.

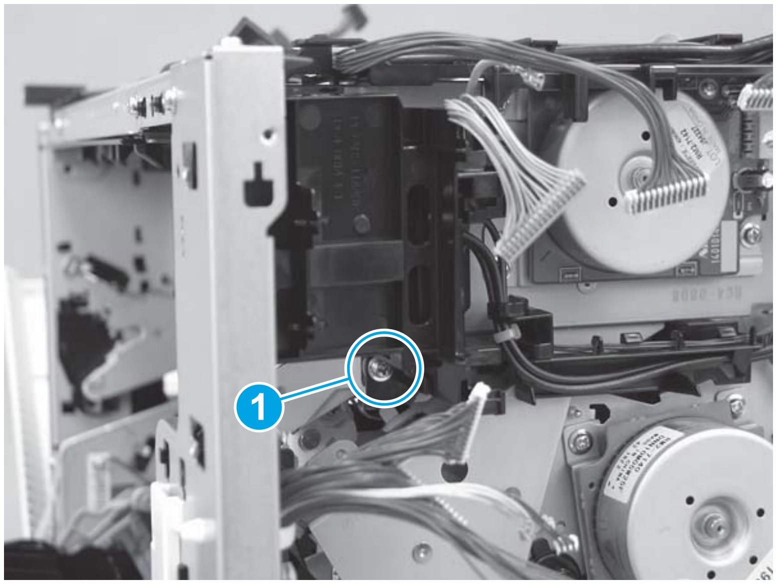
    4. Make sure that one tab (callout 3) snaps into place.

Figure 7-2663 Install the cover



14. Install one screw (callout 1).

Figure 7-2664 Install one screw



Removal and replacement: 550-sheet paper feeder

Learn how to remove and replace the 550-sheet paper feeder parts and assemblies.

Removal and replacement: Tray 3, Tray 4, or Tray 5

Learn about removing and replacing Tray 3, Tray 4, or Tray 5.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

> ⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.
>
> If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-85 Part information

Part number	Part description
RM2-5150-020CN	Tray 3, Tray 4, or Tray 5

Required tools

- Small flat-blade screwdriver
- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

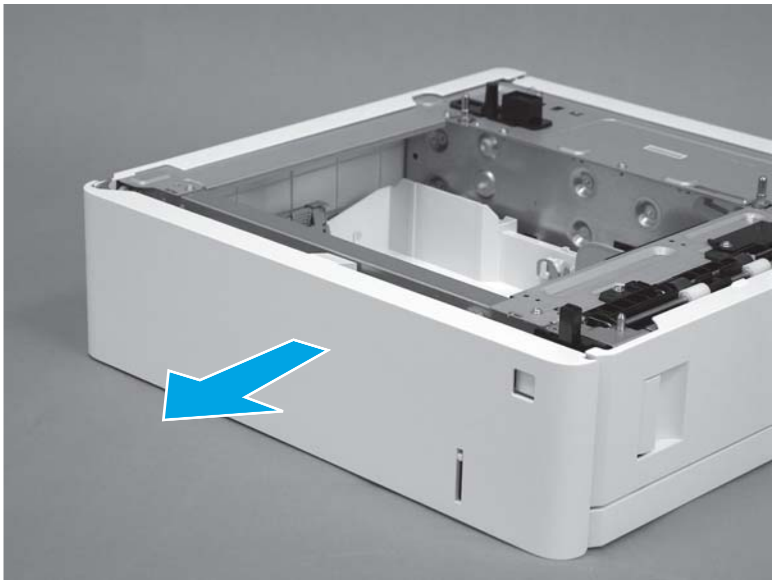
No post service test is available for this assembly.

Remove the tray

Follow these steps to remove Tray 3, Tray 4, or Tray 5.

1. Pull the tray out until it stops.

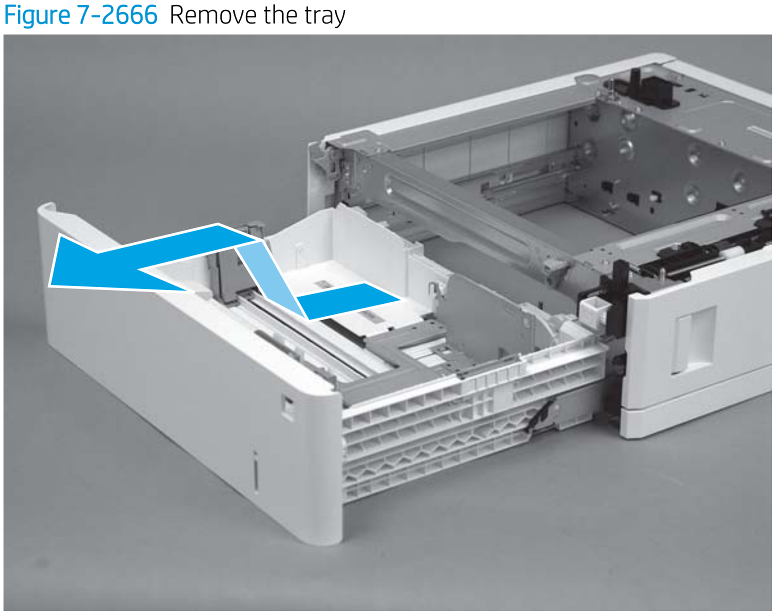
Figure 7-2665 Pull the tray out



2. Lift the front of the tray, and then pull it out of the printer to remove it.

NOTE: **For a replacement tray:** If the tray has Fixed Tray Guides installed and are still required, move hardware to new tray. If necessary, order new kit: 3GY25–67901 Kit - Fixed Tray Guide. Only one kit required per engine.

Figure 7-2666 Remove the tray



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Rear cover (1x550-sheet paper feeder)

Learn about removing and replacing the rear cover (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-86 Part information

Part number	Part description
RC4-1792-000CN	Rear cover (1x550-sheet paper feeder)

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

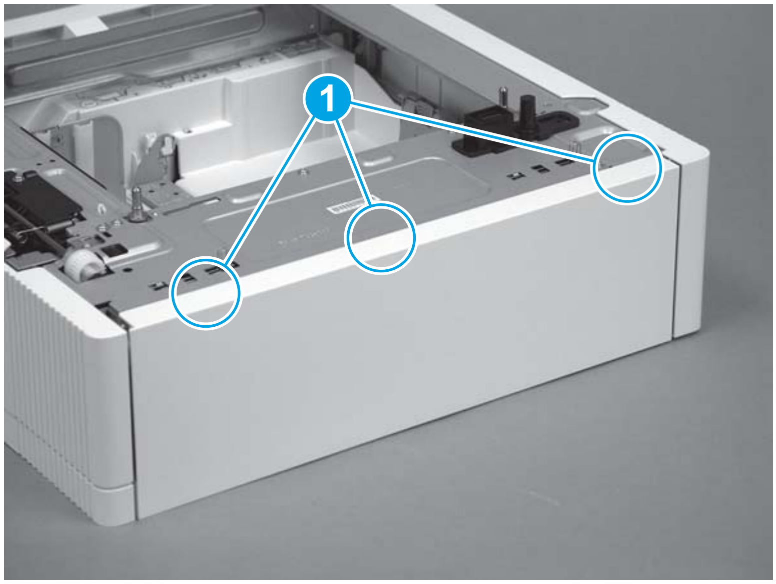
No post service test is available for this assembly.

Remove the rear cover

Follow these steps to remove the rear cover.

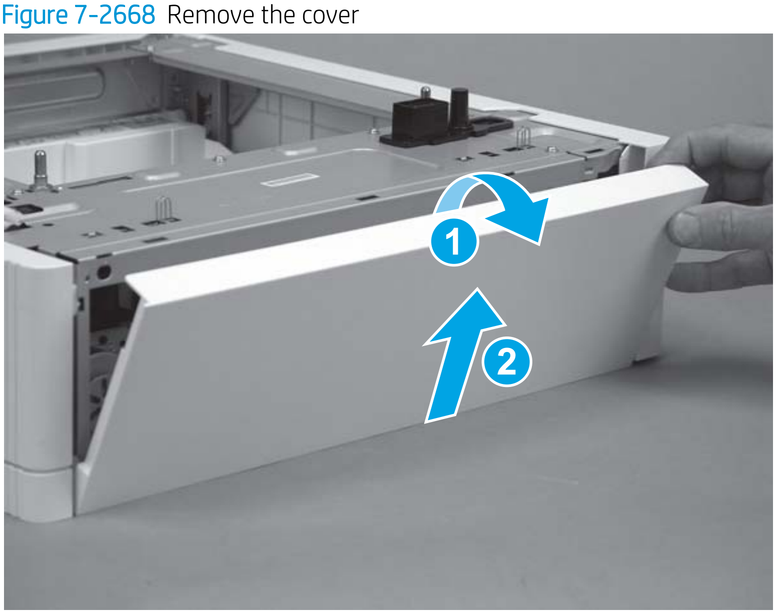
1. Release three tabs (callout 1).

Figure 7-2667 Release three tabs



2. Rotate the top of the cover away from the accessory (callout 1), and then lift it up to remove it (callout 2).

Figure 7-2668 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right door (1x550-sheet paper feeder)

Learn about removing and replacing the right door (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-87 Part information

Part number	Part description
RM2-5146-000CN	Right door (1x550-sheet paper feeder)

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

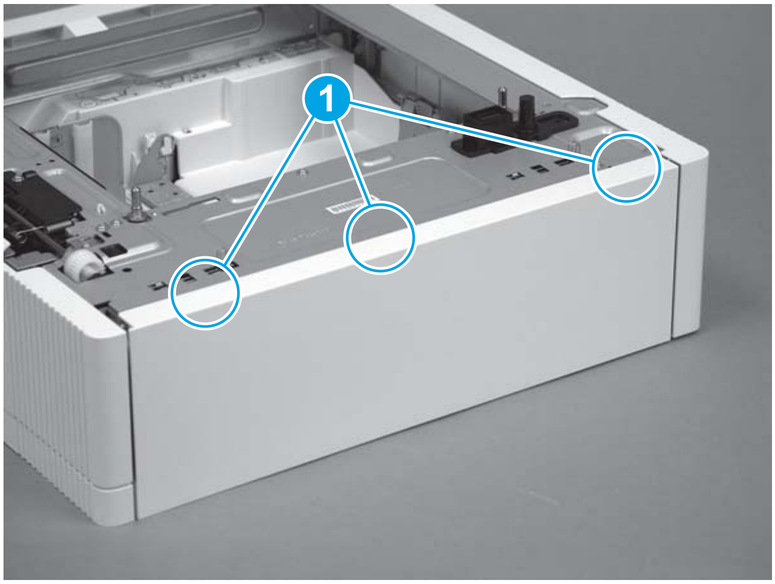
No post service test is available for this assembly.

Remove the rear cover

Follow these steps to remove the rear cover.

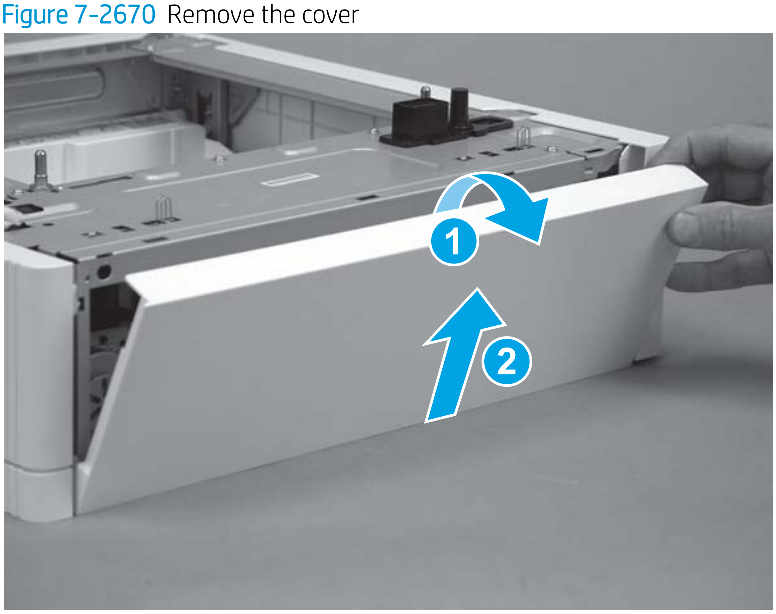
1. Release three tabs (callout 1).

Figure 7-2669 Release three tabs



2. Rotate the top of the cover away from the accessory (callout 1), and then lift it up to remove it (callout 2).

Figure 7-2670 Remove the cover

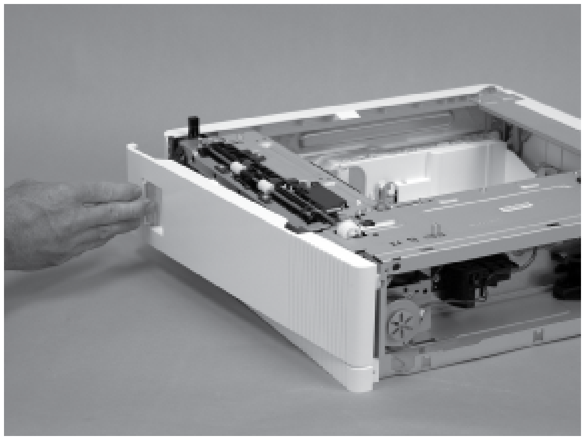


Remove the right door

Follow these steps to remove the right door.

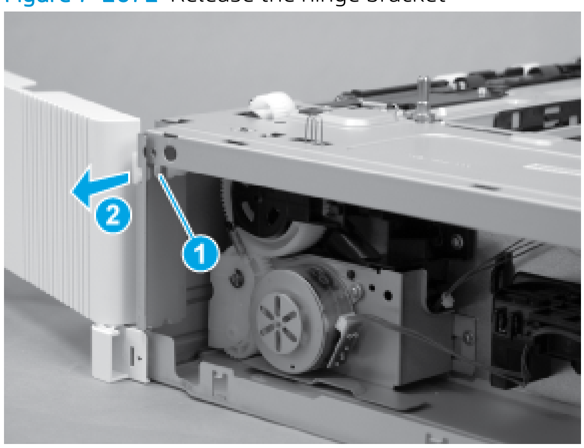
1. Open the door.

Figure 7-2671 Open the door



2. Release one tab (callout 1), and then slide the door-hinge bracket away from the chassis (callout 2) to release it.

Figure 7-2672 Release the hinge bracket

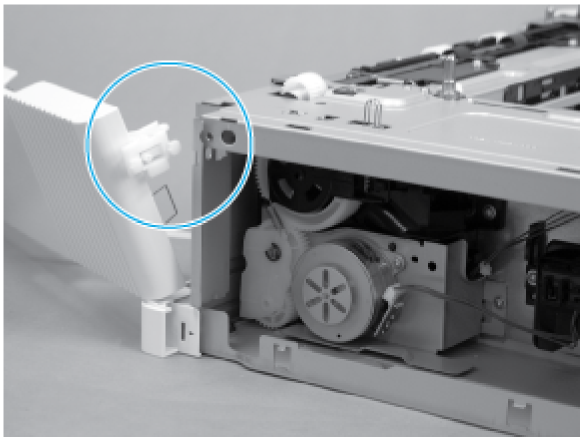


3. Remove the door-hinge bracket from the chassis.

⚠ CAUTION: The door is still attached to the accessory by the door link. Do not attempt to completely remove the door.

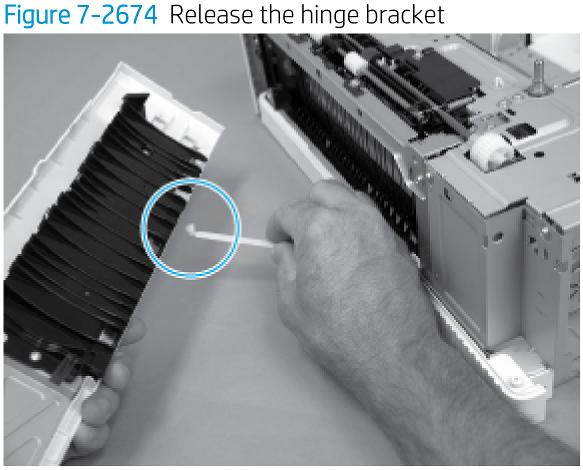
The door hinge bracket is not captive. Do not lose it when handling the door.

Figure 7-2673 Remove the hinge bracket



4. Release the door link from the slot in the door to remove the right door.

Figure 7-2674 Release the hinge bracket



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right door hinge bracket (1x550-sheet paper feeder)

Learn about removing and replacing the right door hinge bracket (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-88 Part information

Part number	Part description
RC4-1781-000CN	Right door hinge bracket (1x550-sheet paper feeder)

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

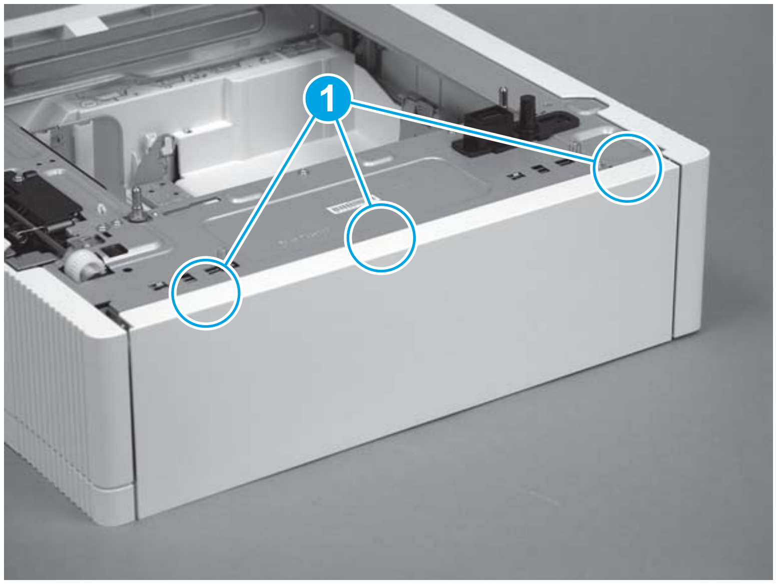
No post service test is available for this assembly.

Remove the rear cover

Follow these steps to remove the rear cover.

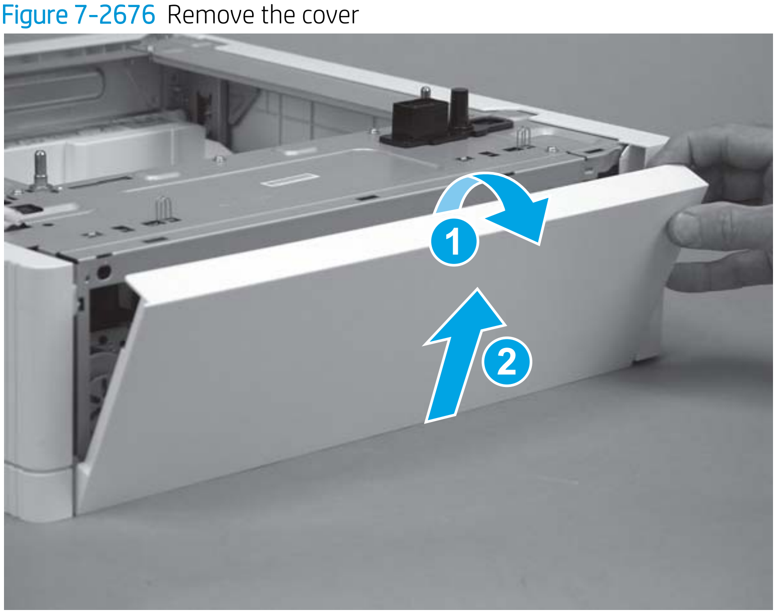
1. Release three tabs (callout 1).

Figure 7-2675 Release three tabs



2. Rotate the top of the cover away from the accessory (callout 1), and then lift it up to remove it (callout 2).

Figure 7-2676 Remove the cover

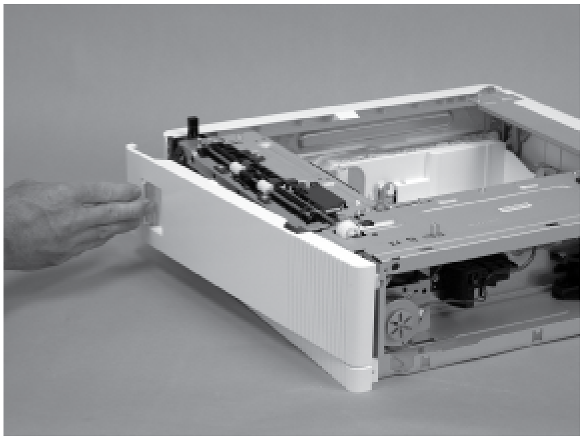


Remove the right door

Follow these steps to remove the right door.

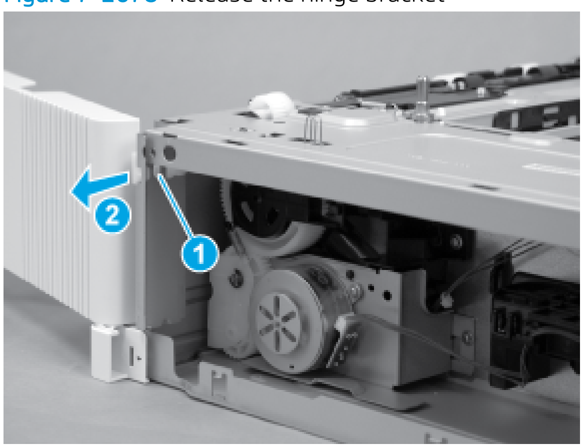
1. Open the door.

Figure 7-2677 Open the door



2. Release one tab (callout 1), and then slide the door-hinge bracket away from the chassis (callout 2) to release it.

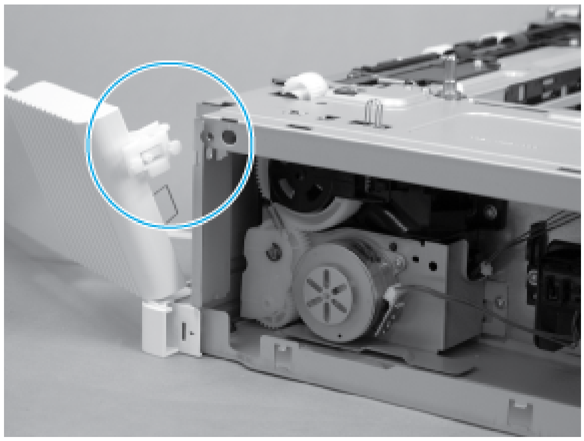
Figure 7-2678 Release the hinge bracket



3. Remove the door-hinge bracket from the chassis.

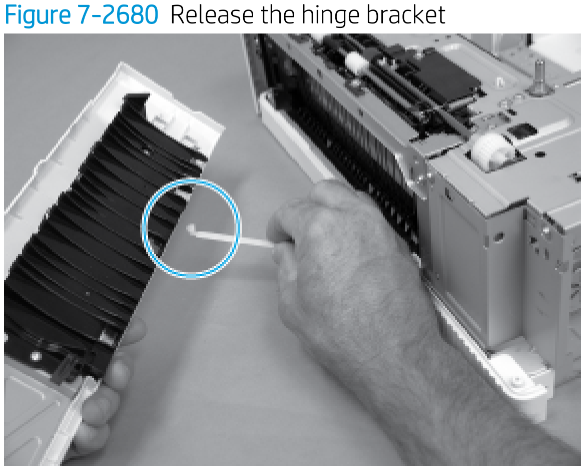
> ⚠ CAUTION: The door is still attached to the accessory by the door link. Do not attempt to completely remove the door.
>
> The door hinge bracket is not captive. Do not lose it when handling the door.

Figure 7-2679 Remove the hinge bracket



4. Release the door link from the slot in the door to remove the right door.

Figure 7-2680 Release the hinge bracket

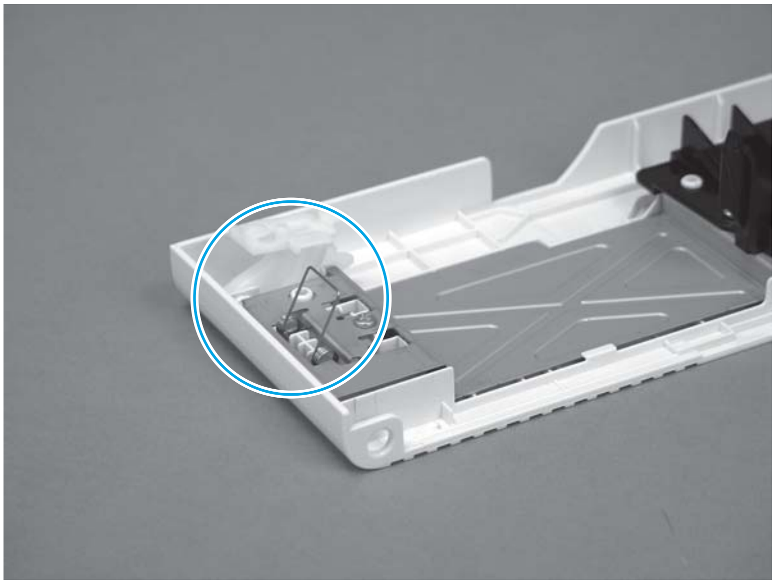


Remove the right door hinge bracket

Follow these steps to remove the right door hinge bracket.

▲ Separate the right door hinge bracket form the door to remove it.

Figure 7-2681 Remove the hinge bracket



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right-lower cover (1x550-sheet paper feeder)

Learn about removing and replacing the right-lower cover (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

> ⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.
>
> If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-89 Part information

Part number	Part description
RC4-1793-000CN	Right-lower cover (1x550-sheet paper feeder)

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

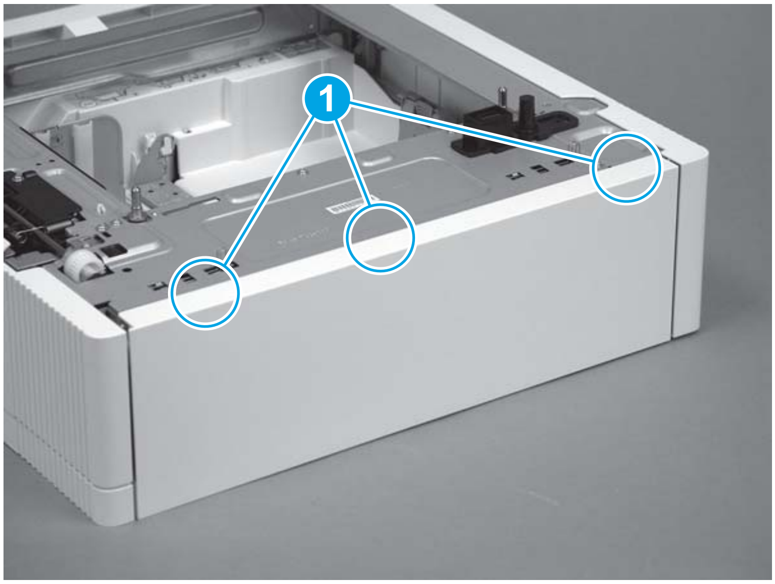
No post service test is available for this assembly.

Remove the rear cover

Follow these steps to remove the rear cover.

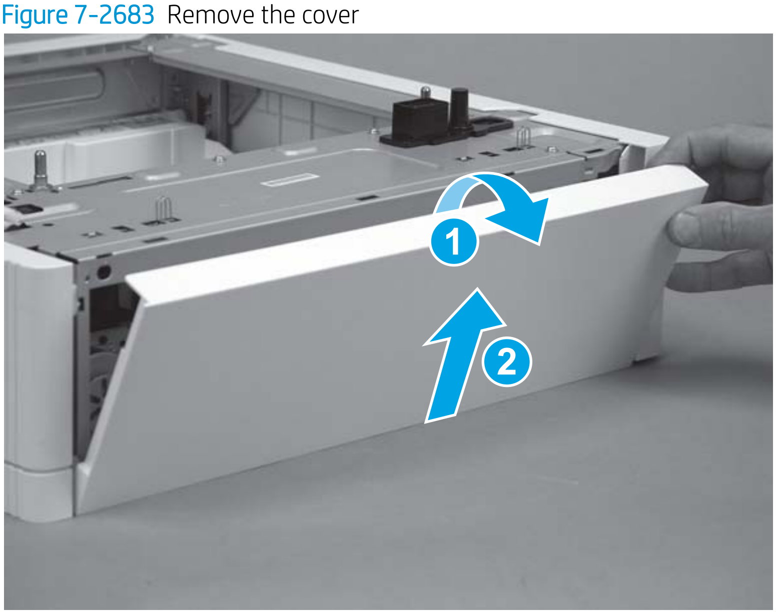
1. Release three tabs (callout 1).

Figure 7-2682 Release three tabs



2. Rotate the top of the cover away from the accessory (callout 1), and then lift it up to remove it (callout 2).

Figure 7-2683 Remove the cover

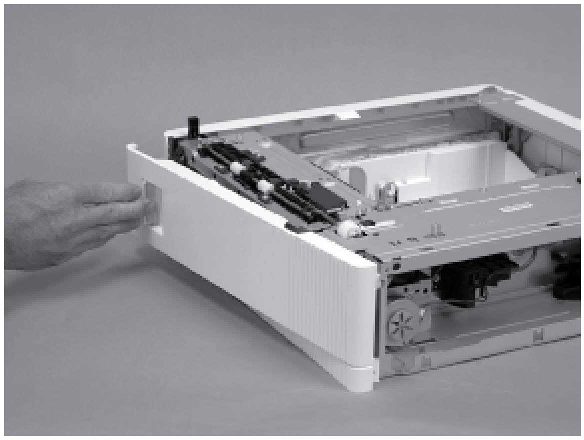


Remove the right door

Follow these steps to remove the right door.

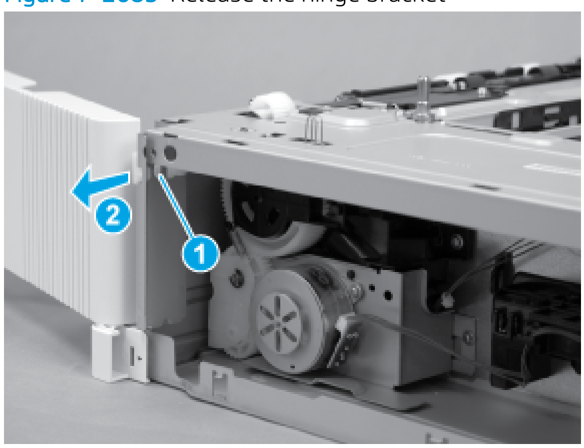
1. Open the door.

Figure 7-2684 Open the door



2. Release one tab (callout 1), and then slide the door-hinge bracket away from the chassis (callout 2) to release it.

Figure 7-2685 Release the hinge bracket

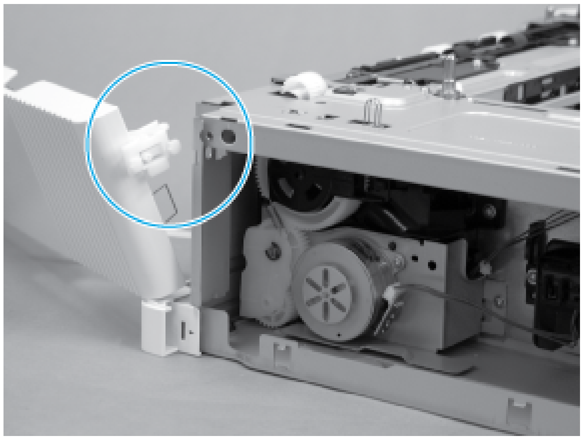


3. Remove the door-hinge bracket from the chassis.

⚠ CAUTION: The door is still attached to the accessory by the door link. Do not attempt to completely remove the door.

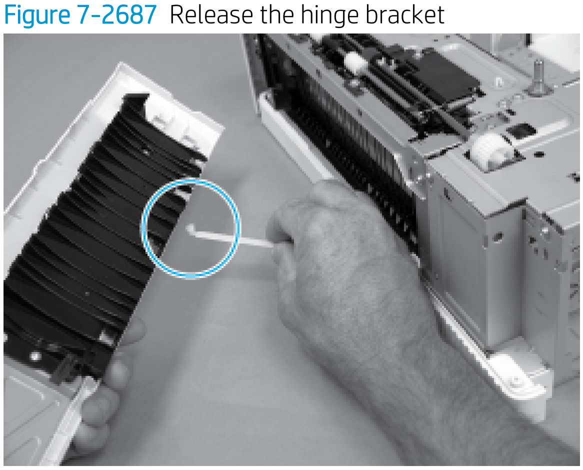
The door hinge bracket is not captive. Do not lose it when handling the door.

Figure 7-2686 Remove the hinge bracket



4. Release the door link from the slot in the door to remove the right door.

Figure 7-2687 Release the hinge bracket

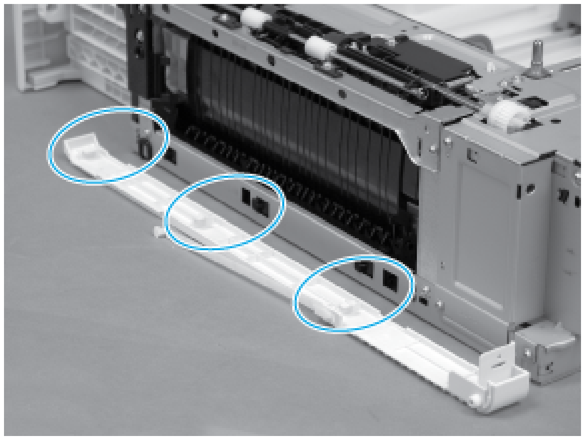


Remove the right-lower cover

Follow these steps to remove the right-lower cover.

1. Before proceeding, take note of the location of the three mounting tabs on the back side of the cover.

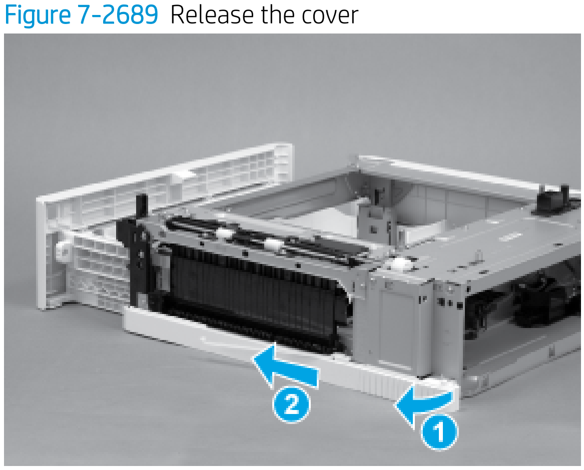
Figure 7-2688 Cover mounting tabs



2. Partially open the tray, slightly flex the end of the cover away from the accessory (callout 1), and then slide it towards the front of the accessory (callout 2) to release it.

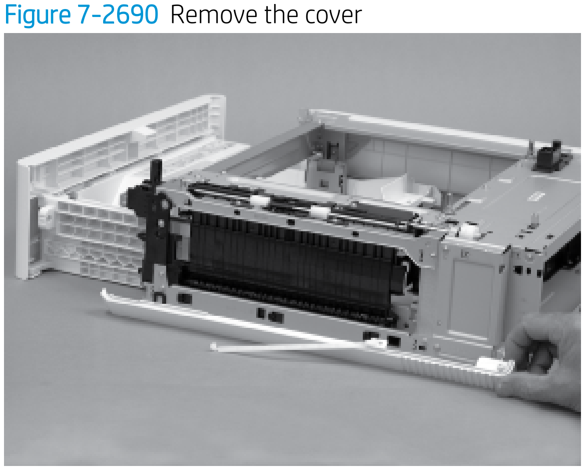
CAUTION: The three mounting tabs on the back side of the cover are easily damaged. Do not over flex the end of the cover when it is released. Push in on the middle tab to protect it when removing the cover.

Figure 7-2689 Release the cover



3. Remove the right-lower cover.

Figure 7-2690 Remove the cover

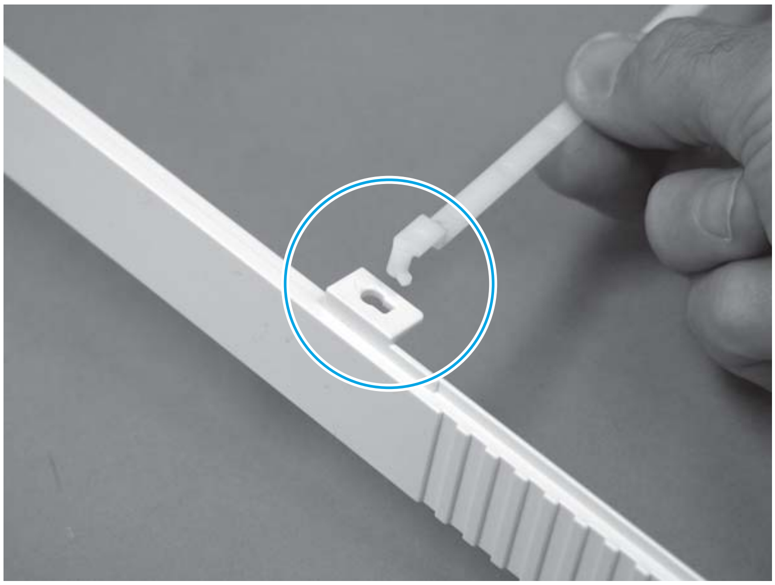


Remove the right-door link

Follow these steps to remove the right-door link.

▲ Rotate the door link to align the keyed end of the link to pass through the keyed potion of the right-lower cover to remove it.

Figure 7-2691 Remove the right-door link



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right-door link (1x550-sheet paper feeder)

Learn about removing and replacing the right-door link (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-90 Part information

Part number	Part description
RC4-1778-000CN	Right-door link (1x550-sheet paper feeder)

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

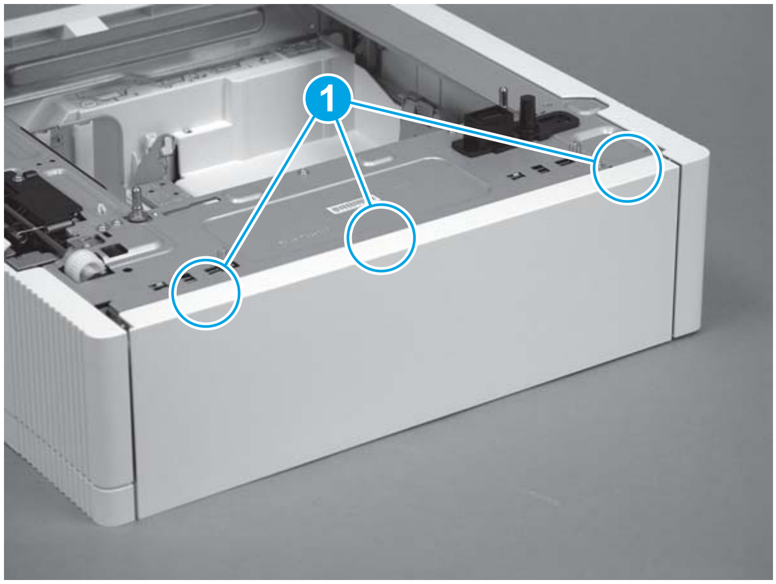
No post service test is available for this assembly.

Remove the rear cover

Follow these steps to remove the rear cover.

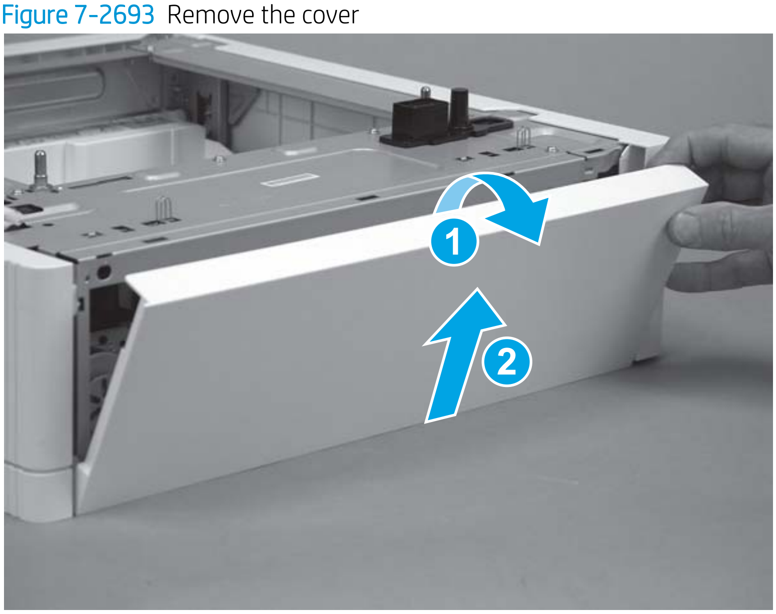
1. Release three tabs (callout 1).

Figure 7-2692 Release three tabs



2. Rotate the top of the cover away from the accessory (callout 1), and then lift it up to remove it (callout 2).

Figure 7-2693 Remove the cover

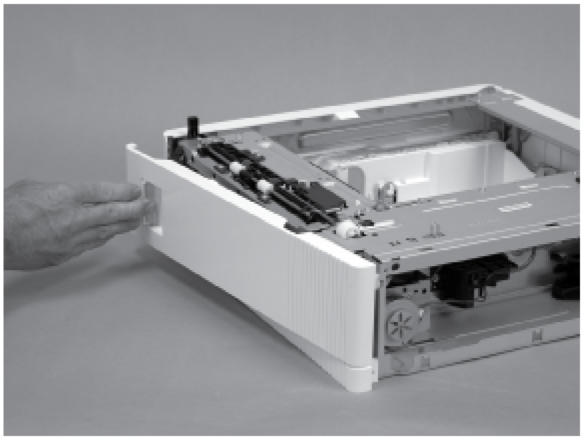


Remove the right door

Follow these steps to remove the right door.

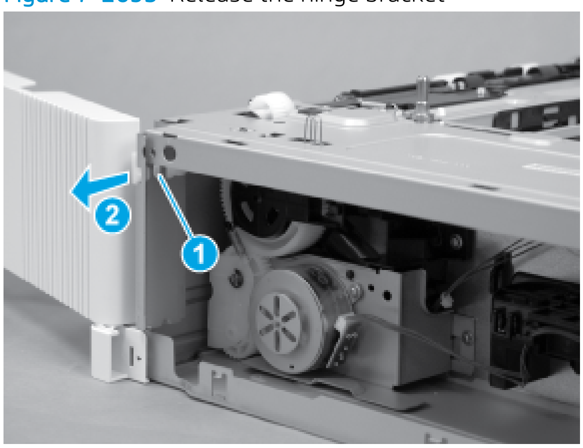
1. Open the door.

Figure 7-2694 Open the door



2. Release one tab (callout 1), and then slide the door-hinge bracket away from the chassis (callout 2) to release it.

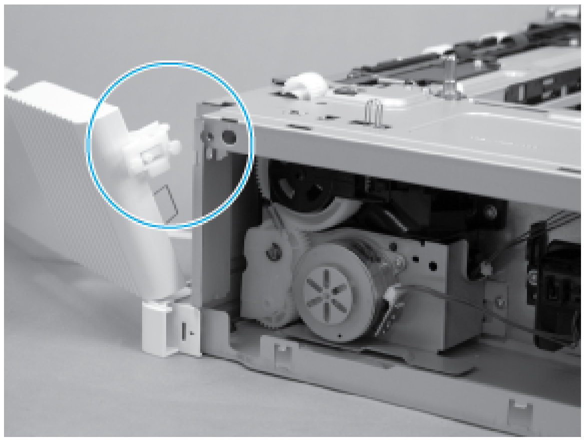
Figure 7-2695 Release the hinge bracket



3. Remove the door-hinge bracket from the chassis.

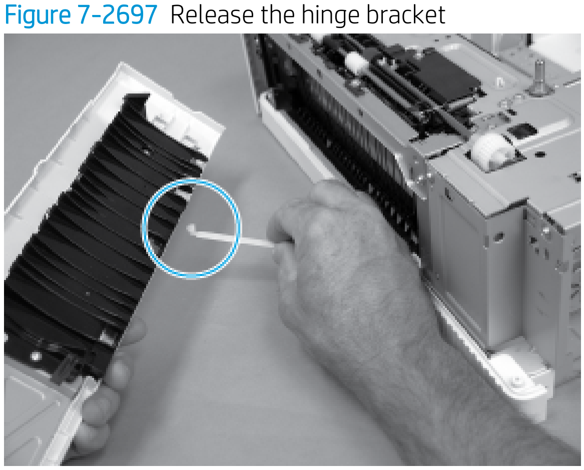
> ⚠ CAUTION: The door is still attached to the accessory by the door link. Do not attempt to completely remove the door.
>
> The door hinge bracket is not captive. Do not lose it when handling the door.

Figure 7-2696 Remove the hinge bracket



4. Release the door link from the slot in the door to remove the right door.

Figure 7-2697 Release the hinge bracket

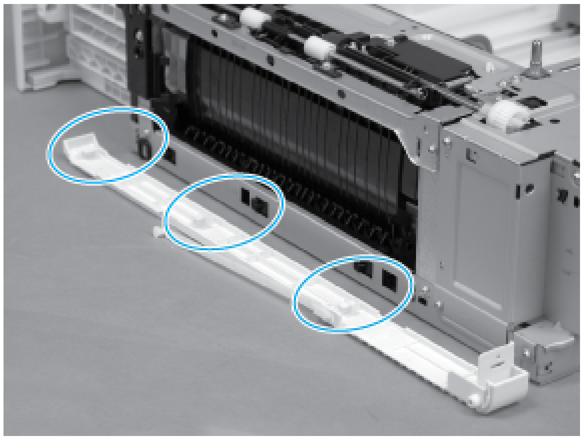


Remove the right-lower cover

Follow these steps to remove the right-lower cover.

1. Before proceeding, take note of the location of the three mounting tabs on the back side of the cover.

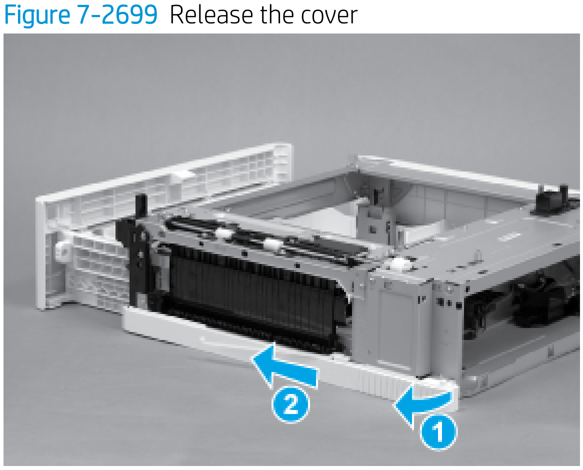
Figure 7-2698 Cover mounting tabs



2. Partially open the tray, slightly flex the end of the cover away from the accessory (callout 1), and then slide it towards the front of the accessory (callout 2) to release it.

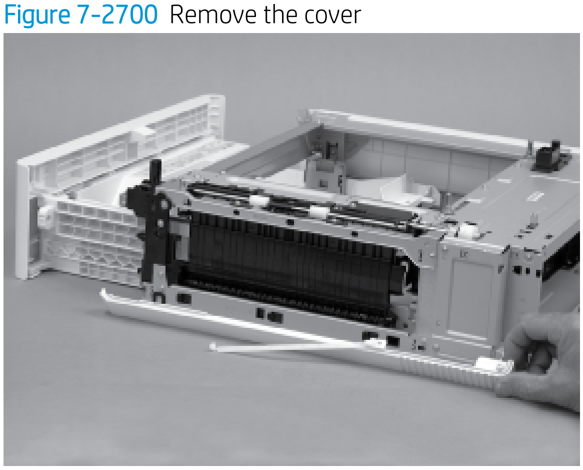
⚠ CAUTION: The three mounting tabs on the back side of the cover are easily damaged. Do not over flex the end of the cover when it is released. Push in on the middle tab to protect it when removing the cover.

Figure 7-2699 Release the cover



3. Remove the right-lower cover.

Figure 7-2700 Remove the cover

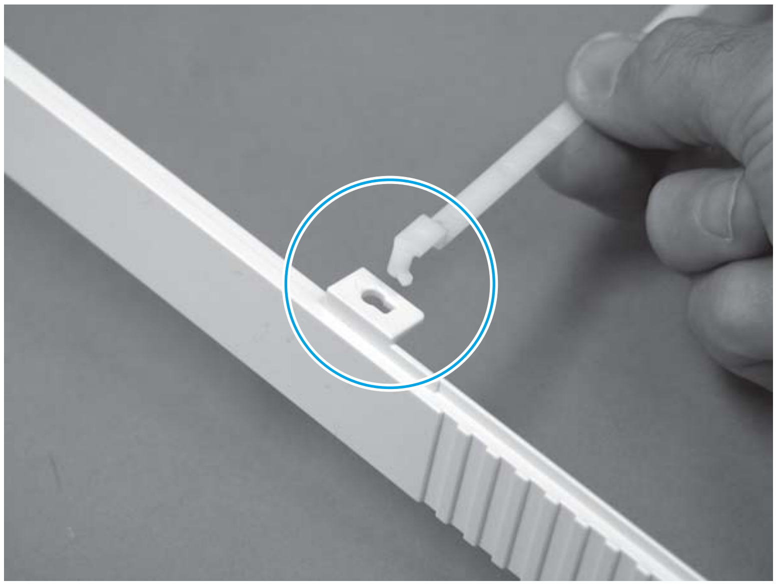


Remove the right-door link

Follow these steps to remove the right-door link.

▲ Rotate the door link to align the keyed end of the link to pass through the keyed potion of the right-lower cover to remove it.

Figure 7-2701 Remove the right-door link



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Left cover (1x550-sheet paper feeder)

Learn about removing and replacing the left cover (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-91 Part information

Part number	Part description
RC4-1791-000CN	Left cover (1x550-sheet paper feeder)

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

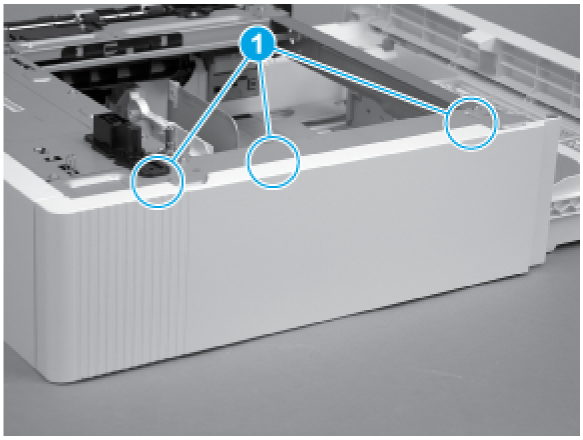
No post service test is available for this assembly.

Remove the left cover

Follow these steps to remove the left cover.

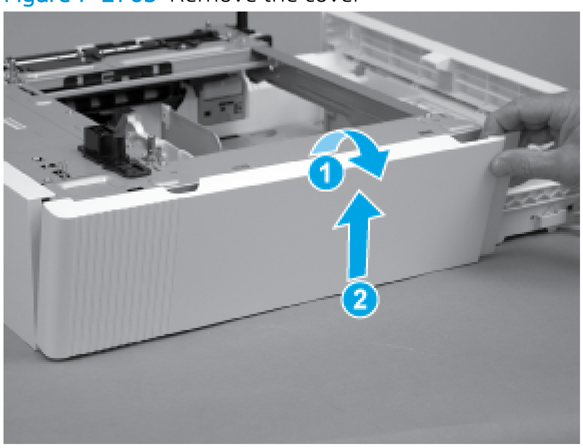
1. Partially pull the tray out of the accessory, and then release three tabs (callout 1).

Figure 7-2702 Release three tabs



2. Rotate the top of the cover away from the accessory (callout 1), and then lift it up to remove it (callout 2).

Figure 7-2703 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: OP drawer holder (1x550-sheet paper feeder)

Learn about removing and replacing the drawer holder (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

> ⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.
>
> If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-92 Part information

Part number	Part description
RC4-0445-000CN	OP drawer holder (1x550-sheet paper feeder)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

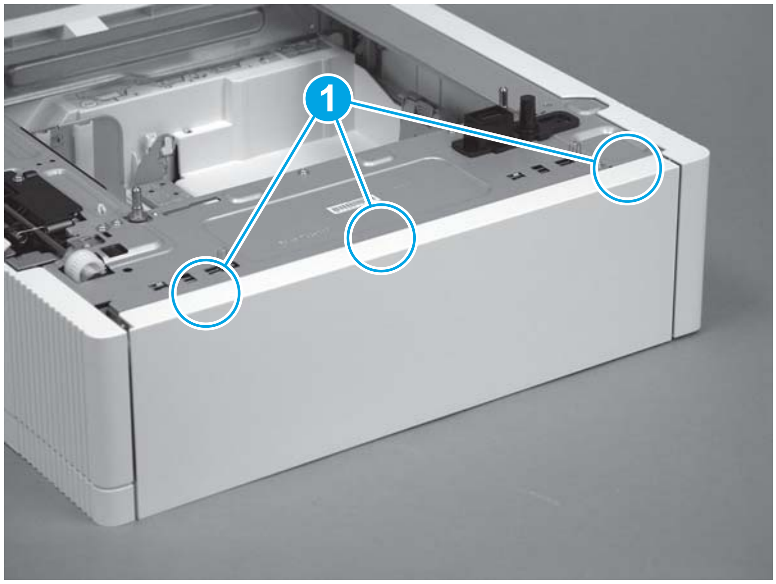
No post service test is available for this assembly.

Remove the rear cover

Follow these steps to remove the rear cover.

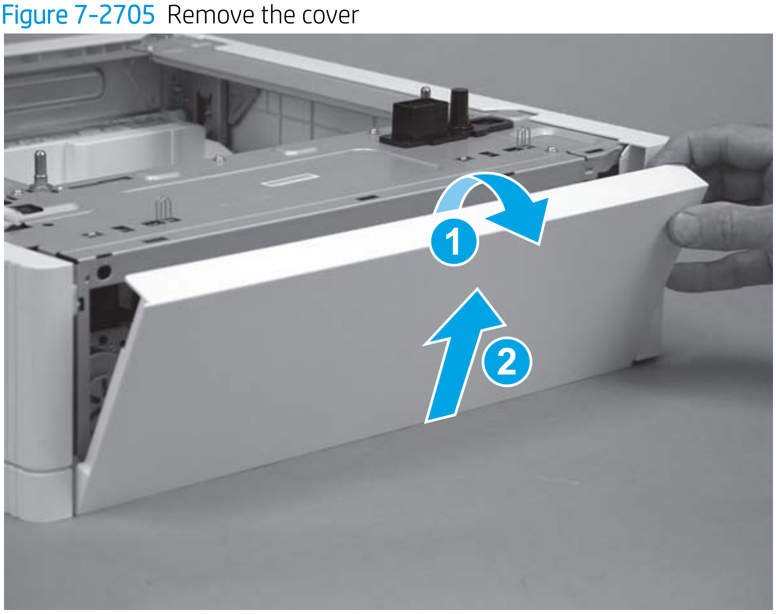
1. Release three tabs (callout 1).

Figure 7-2704 Release three tabs



2. Rotate the top of the cover away from the accessory (callout 1), and then lift it up to remove it (callout 2).

Figure 7-2705 Remove the cover

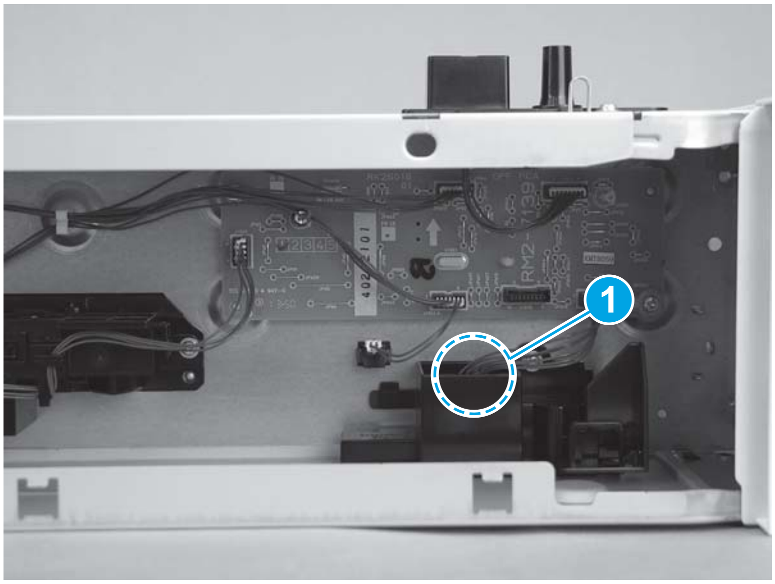


Remove the OP drawer holder

Follow these steps to remove the OP drawer holder.

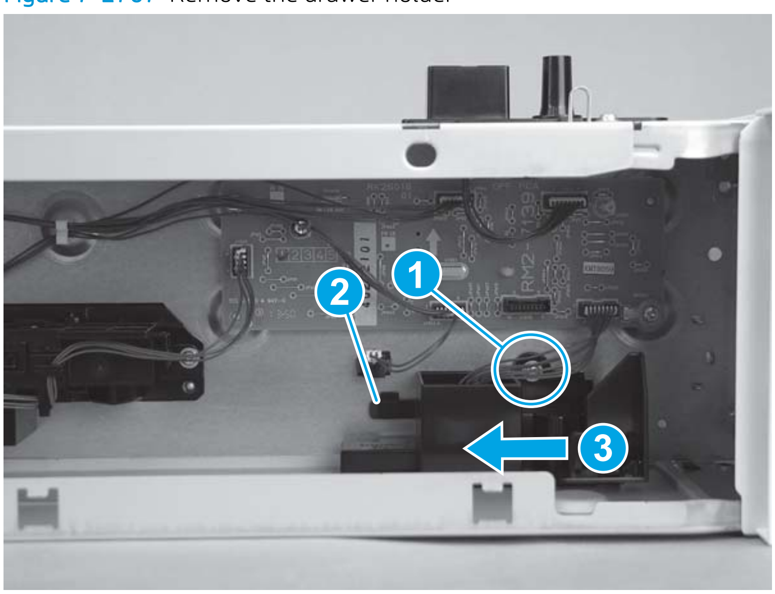
1. Disconnect one connector (callout 1).

Figure 7-2706 Disconnect one connector



2. Remove one screw (callout 1), release one tab (callout 2), and then slide the OP drawer holder as shown (callout 3) to remove it.

Figure 7-2707 Remove the drawer holder



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Auto close assembly (1x550-sheet paper feeder)

Learn about removing and replacing the auto close assembly (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-93 Part information

Part number	Part description
RM2-5147-000CN	Auto close assembly (1x550-sheet paper feeder)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

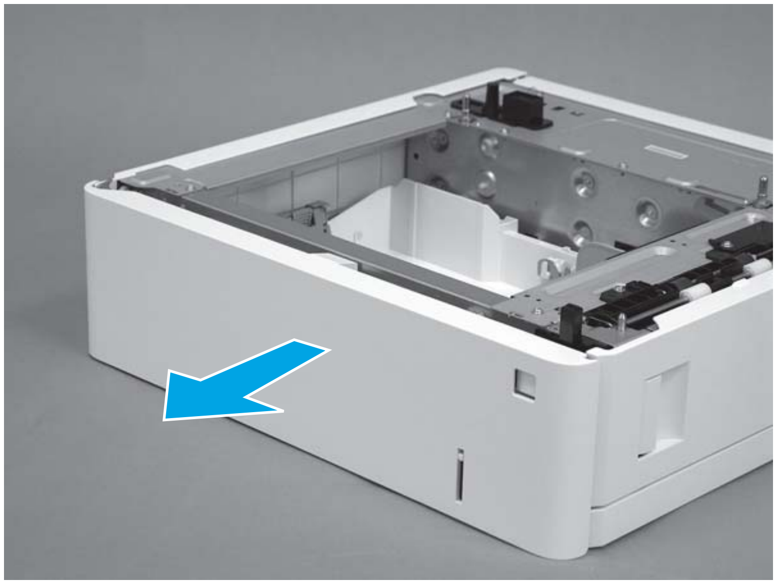
No post service test is available for this assembly.

Remove the tray

Follow these steps to remove Tray 3, Tray 4, or Tray 5.

1. Pull the tray out until it stops.

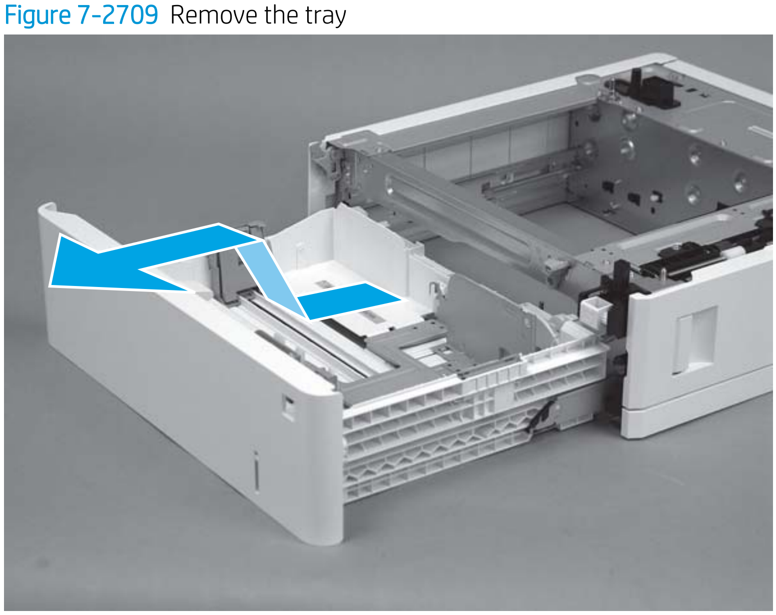
Figure 7-2708 Pull the tray out



2. Lift the front of the tray, and then pull it out of the printer to remove it.

NOTE: **For a replacement tray:** If the tray has Fixed Tray Guides installed and are still required, move hardware to new tray. If necessary, order new kit: 3GY25–67901 Kit - Fixed Tray Guide. Only one kit required per engine.

Figure 7-2709 Remove the tray



Removal and replacement: Rear cover (1x550-sheet paper feeder)

Learn about removing and replacing the rear cover (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-94 Part information

Part number	Part description
RC4-1792-000CN	Rear cover (1x550-sheet paper feeder)

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

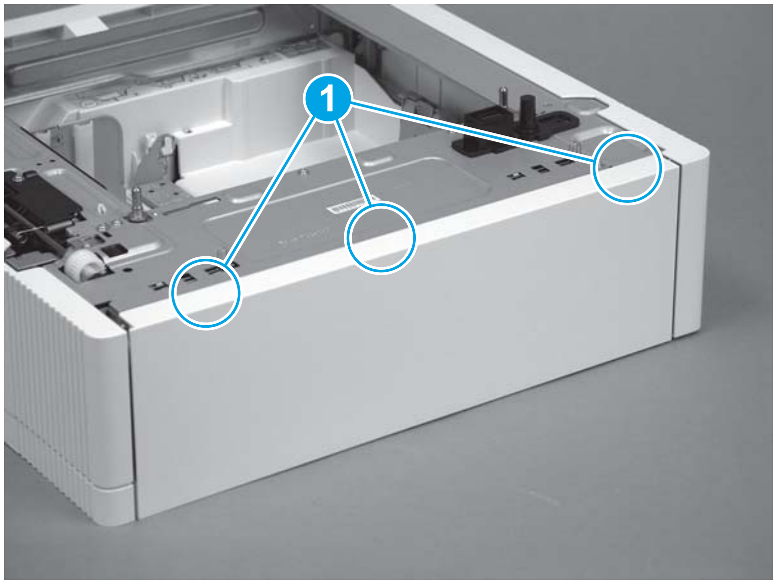
No post service test is available for this assembly.

Remove the rear cover

Follow these steps to remove the rear cover.

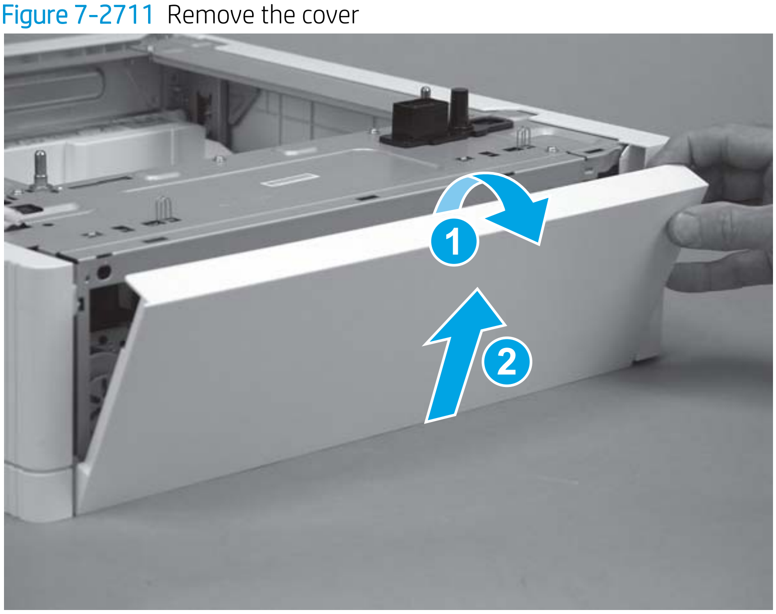
1. Release three tabs (callout 1).

Figure 7-2710 Release three tabs



2. Rotate the top of the cover away from the accessory (callout 1), and then lift it up to remove it (callout 2).

Figure 7-2711 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

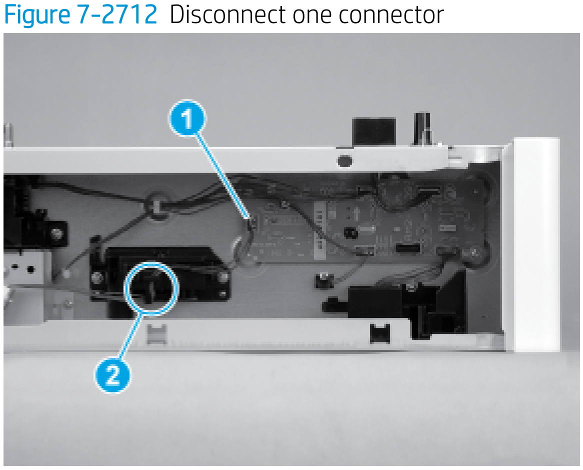
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Remove the auto close assembly

Follow these steps to remove the auto close assembly.

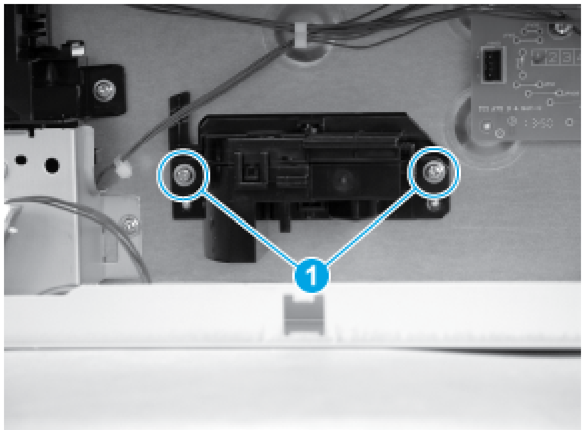
1. Disconnect one connector (callout 1; J903), and then release the wire harness from the retainer (callout 2).

Figure 7-2712 Disconnect one connector



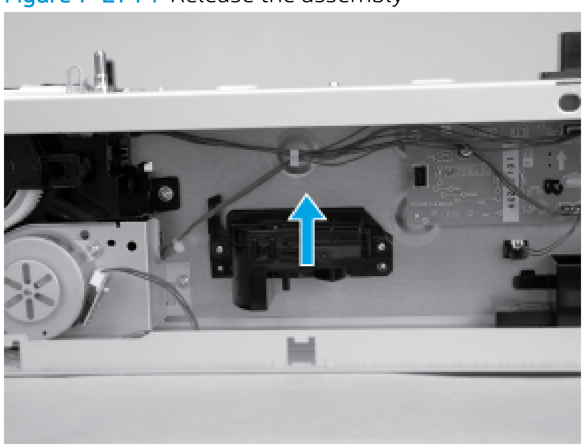
2. Remove two screws (callout 1).

Figure 7-2713 Remove two screws



3. Lift up on the assembly to release it.

Figure 7-2714 Release the assembly



4. Remove the auto close assembly.

Figure 7-2715 Remove the assembly

Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

   NOTE: HP recommends responsible disposal of the defective part.

   http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

   CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

   IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

   NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

   NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Switch button (SW12) (1x550-sheet paper feeder)

Learn about removing and replacing the switch button (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-95 Part information

Part number	Part description
WC2-5806-000CN	Switch button (SW12) (1x550-sheet paper feeder)

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

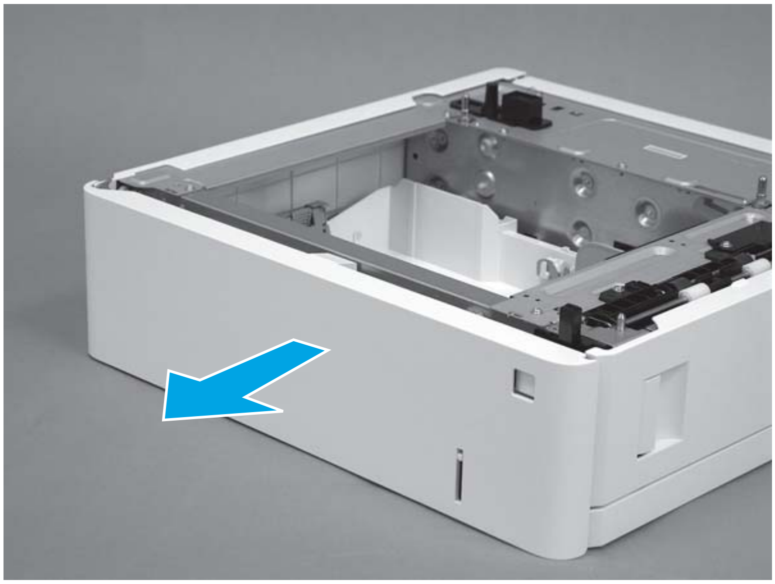
No post service test is available for this assembly.

Remove the tray

Follow these steps to remove Tray 3, Tray 4, or Tray 5.

1. Pull the tray out until it stops.

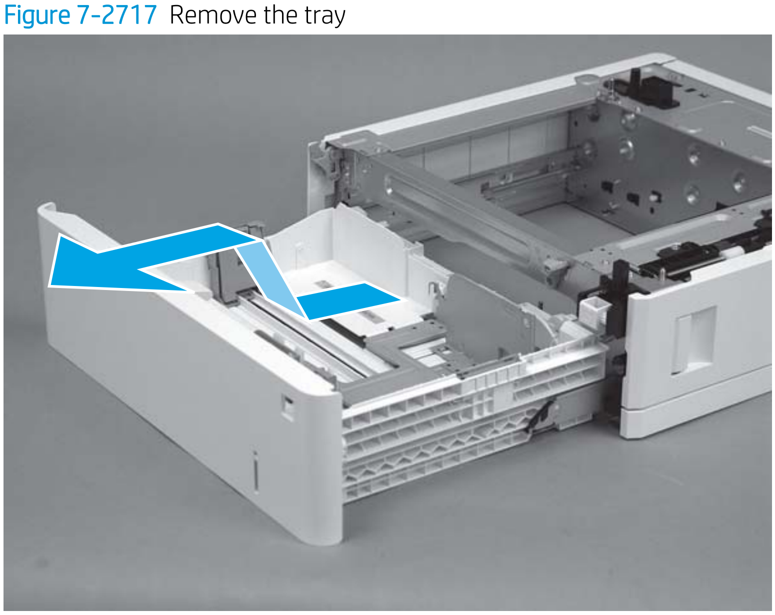
Figure 7-2716 Pull the tray out



2. Lift the front of the tray, and then pull it out of the printer to remove it.

NOTE: **For a replacement tray:** If the tray has Fixed Tray Guides installed and are still required, move hardware to new tray. If necessary, order new kit: 3GY25–67901 Kit - Fixed Tray Guide. Only one kit required per engine.

Figure 7-2717 Remove the tray



Removal and replacement: Rear cover (1x550-sheet paper feeder)

Learn about removing and replacing the rear cover (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-96 Part information

Part number	Part description
RC4-1792-000CN	Rear cover (1x550-sheet paper feeder)

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

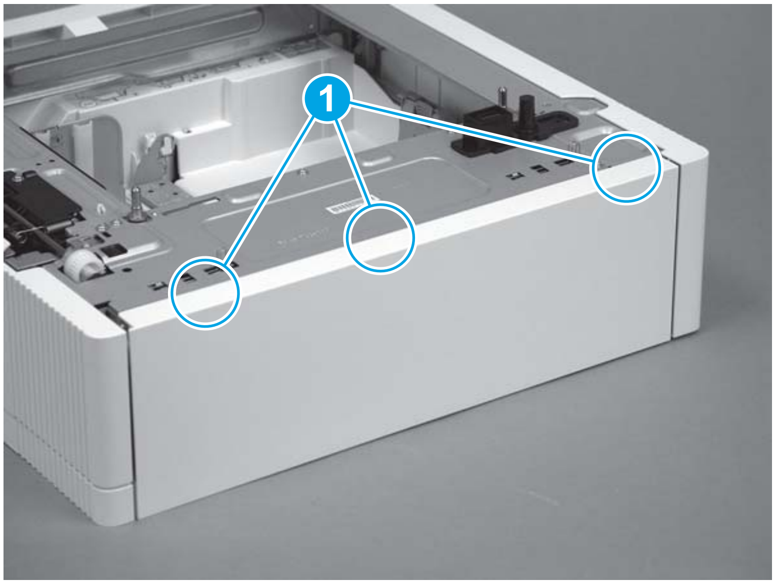
No post service test is available for this assembly.

Remove the rear cover

Follow these steps to remove the rear cover.

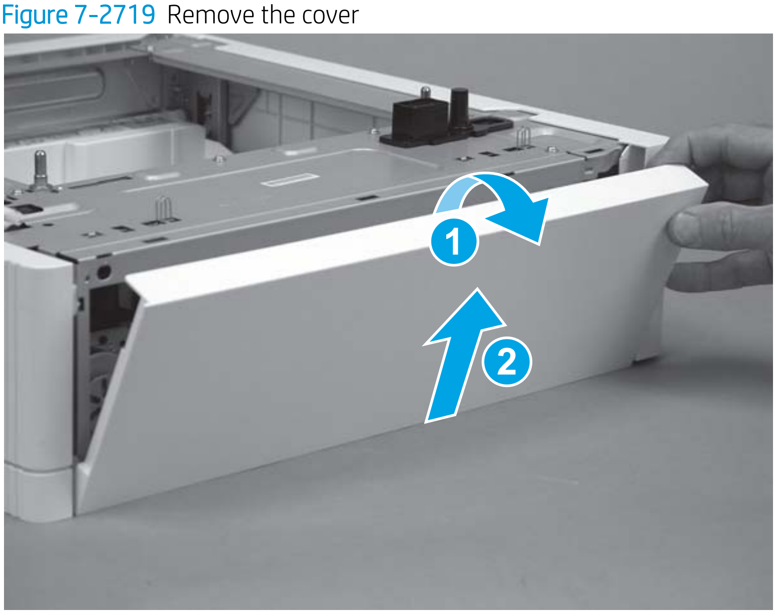
1. Release three tabs (callout 1).

Figure 7-2718 Release three tabs



2. Rotate the top of the cover away from the accessory (callout 1), and then lift it up to remove it (callout 2).

Figure 7-2719 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

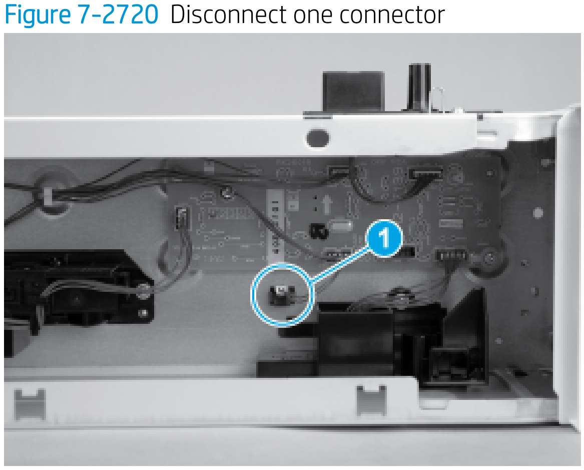
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Remove the switch button (SW12)

Follow these steps to remove the switch button.

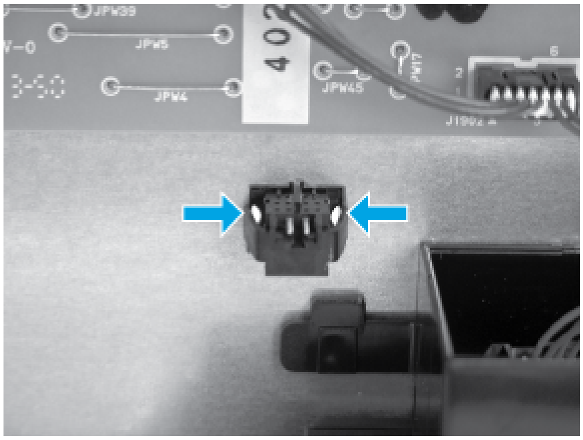
1. Disconnect one connector (callout 1).

Figure 7-2720 Disconnect one connector



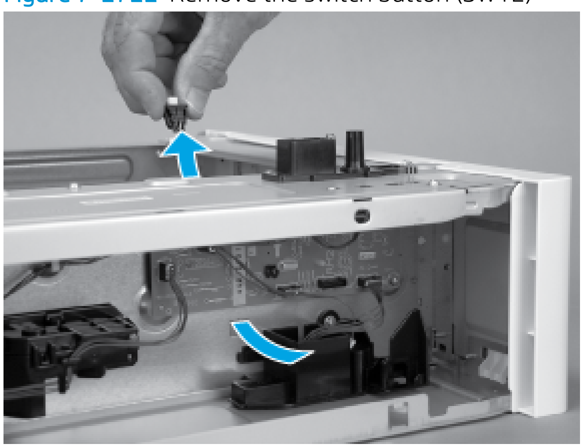
2. Squeeze two tabs to release them, and then push the switch through the opening in the chassis into the tray cavity.

Figure 7-2721 Squeeze two tabs



3. Remove the switch button (SW12).

Figure 7-2722 Remove the switch button (SW12)



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Drawer connector holder (1x550-sheet paper feeder)

Learn about removing and replacing the drawer connector holder (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-97 Part information

Part number	Part description
RC4-1741-000CN	Drawer connector holder (1x550-sheet paper feeder)

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

No post service test is available for this assembly.

Removal and replacement: Rear cover (1x550-sheet paper feeder)

Learn about removing and replacing the rear cover (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-98 Part information

Part number	Part description
RC4-1792-000CN	Rear cover (1x550-sheet paper feeder)

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

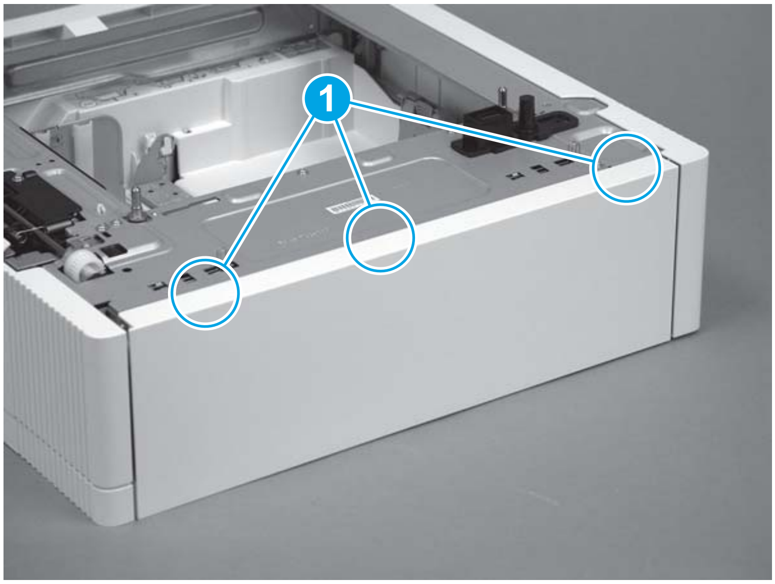
No post service test is available for this assembly.

Remove the rear cover

Follow these steps to remove the rear cover.

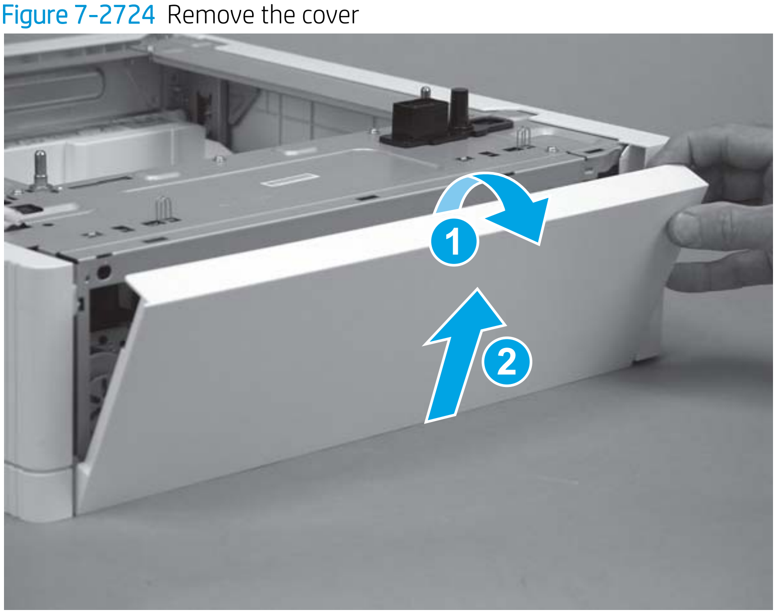
1. Release three tabs (callout 1).

Figure 7-2723 Release three tabs



2. Rotate the top of the cover away from the accessory (callout 1), and then lift it up to remove it (callout 2).

Figure 7-2724 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

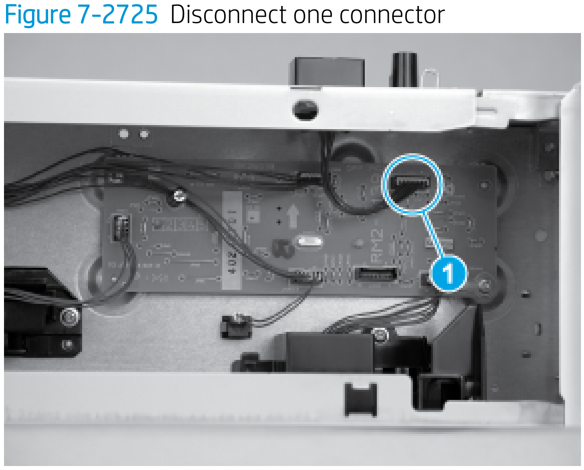
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Remove the drawer connector holder

Follow these steps to remove the drawer connector holder.

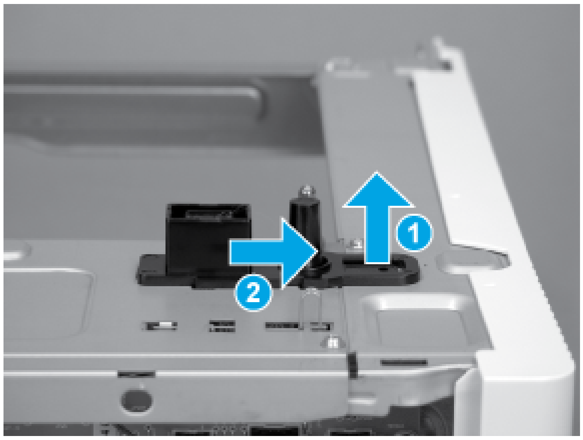
1. Disconnect one connector (callout 1; J901).

Figure 7-2725 Disconnect one connector



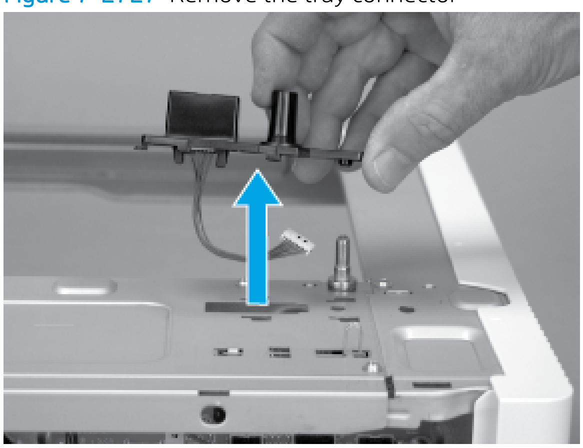
2. Release one tab (callout 1), and then slide the drawer connector holder as shown (callout 2) to release it.

Figure 7-2726 Release one tab



3. Remove the drawer connector holder.

Figure 7-2727 Remove the tray connector



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Paper-feeder drive PCA (1x550-sheet paper feeder)

Learn about removing and replacing the paper-feeder drive PCA (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

  WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-99 Part information

Part number	Part description
RM2-7139-000CN	Paper-feeder drive PCA (1x550-sheet paper feeder)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Removal and replacement: Rear cover (1x550-sheet paper feeder)

Learn about removing and replacing the rear cover (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-100 Part information

Part number	Part description
RC4-1792-000CN	Rear cover (1x550-sheet paper feeder)

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

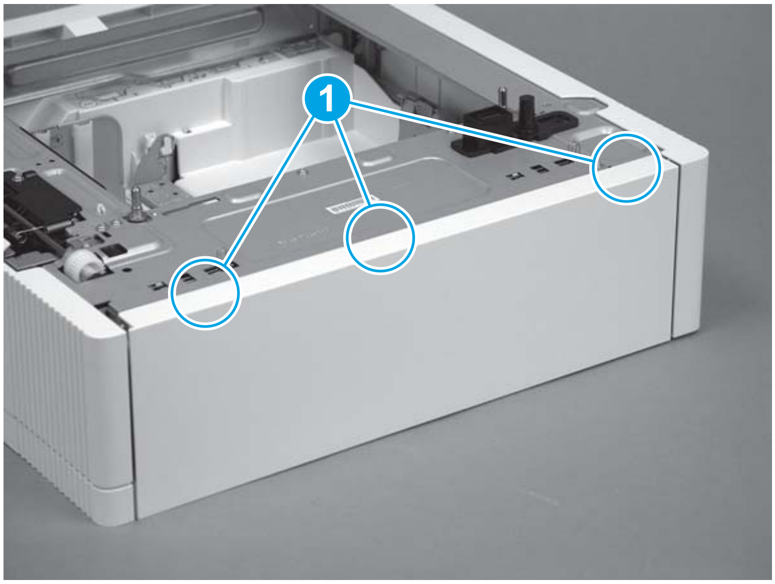
No post service test is available for this assembly.

Remove the rear cover

Follow these steps to remove the rear cover.

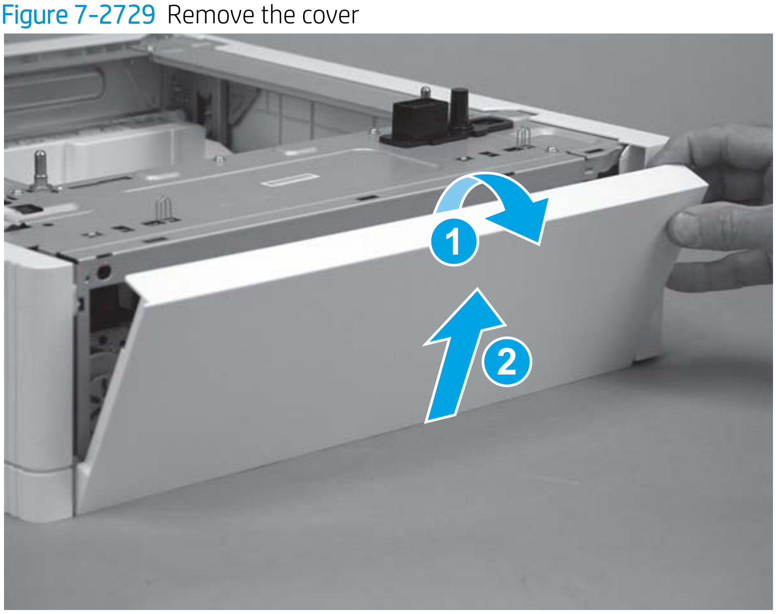
1. Release three tabs (callout 1).

Figure 7-2728 Release three tabs



2. Rotate the top of the cover away from the accessory (callout 1), and then lift it up to remove it (callout 2).

Figure 7-2729 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

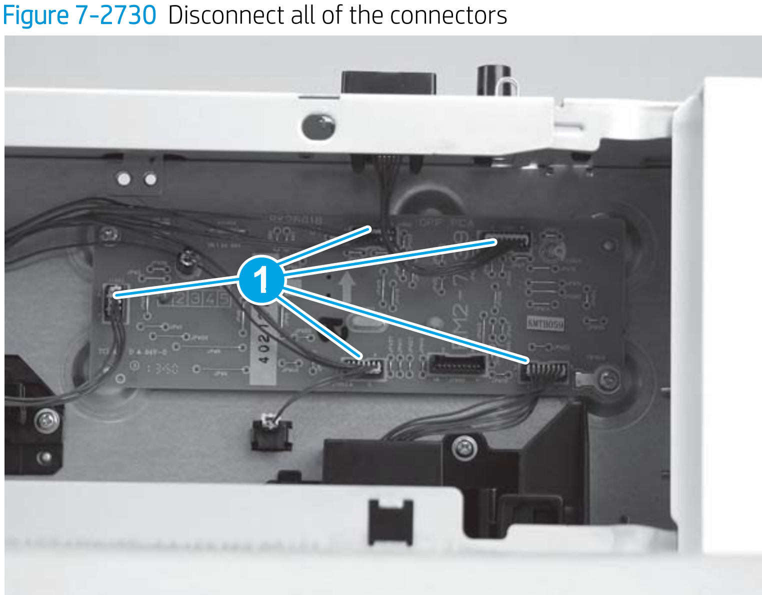
Remove the paper-feeder drive PCA

Follow these steps to remove the paper-feeder drive PCA.

1. Disconnect 5 connectors (callout 1).

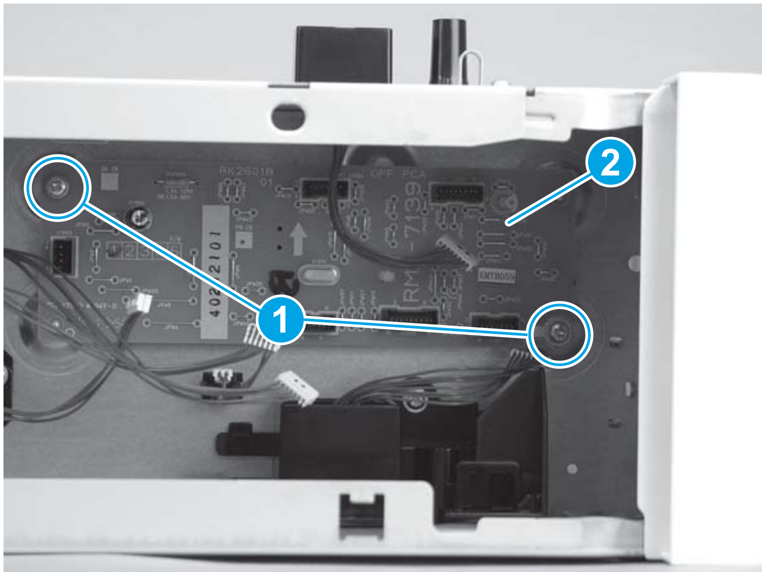
NOTE: The J908 connector is empty.

Figure 7-2730 Disconnect all of the connectors



2. Remove two screws (callout 1), and then remove the paper-feeder drive PCA (callout 2).

Figure 7-2731 Remove the PCA



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Paper-feed assembly (1x550-sheet paper feeder)

Learn about removing and replacing the paper-feed assembly (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

> ⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.
>
> If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-101 Part information

Part number	Part description
RM2-5145-000CN	Paper-feed assembly (1x550-sheet paper feeder)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- Small flat-blade screwdriver

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

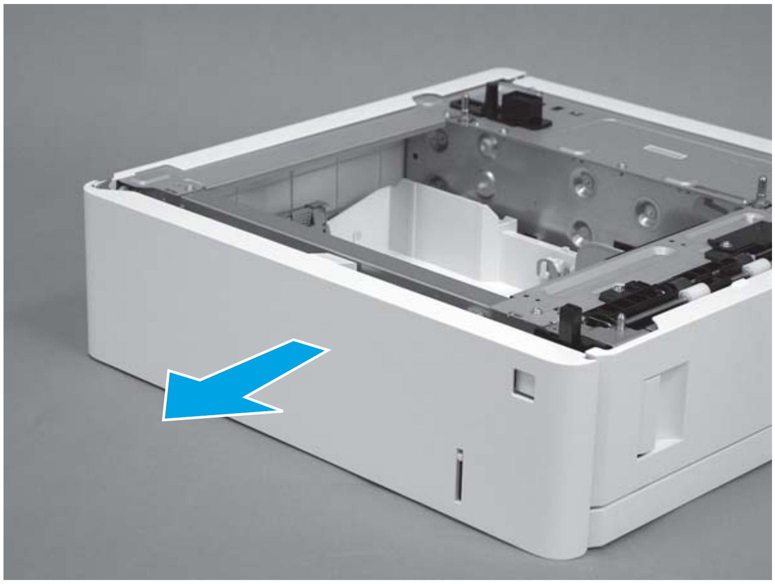
Print any pages necessary to make sure the printer is functioning correctly.

Remove the tray

Follow these steps to remove Tray 3, Tray 4, or Tray 5.

1. Pull the tray out until it stops.

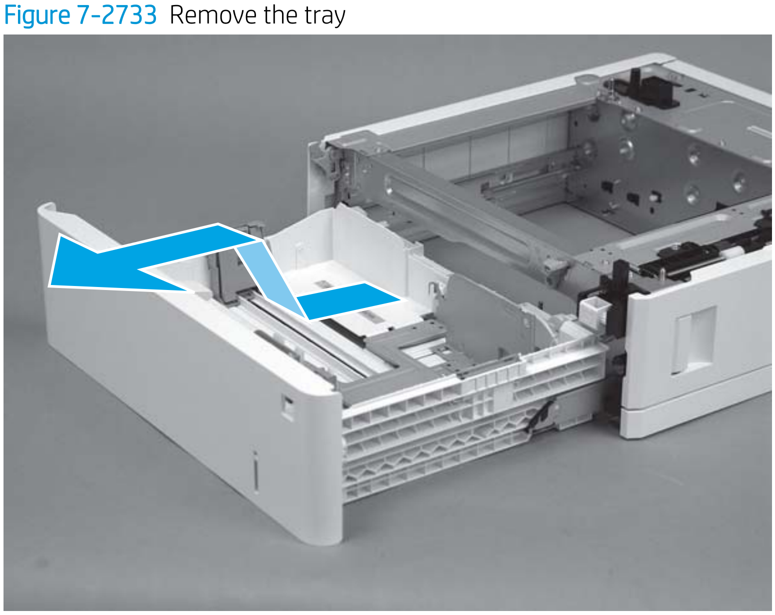
Figure 7-2732 Pull the tray out



2. Lift the front of the tray, and then pull it out of the printer to remove it.

NOTE: **For a replacement tray:** If the tray has Fixed Tray Guides installed and are still required, move hardware to new tray. If necessary, order new kit: 3GY25–67901 Kit - Fixed Tray Guide. Only one kit required per engine.

Figure 7-2733 Remove the tray



Removal and replacement: Rear cover (1x550-sheet paper feeder)

Learn about removing and replacing the rear cover (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-102 Part information

Part number	Part description
RC4-1792-000CN	Rear cover (1x550-sheet paper feeder)

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

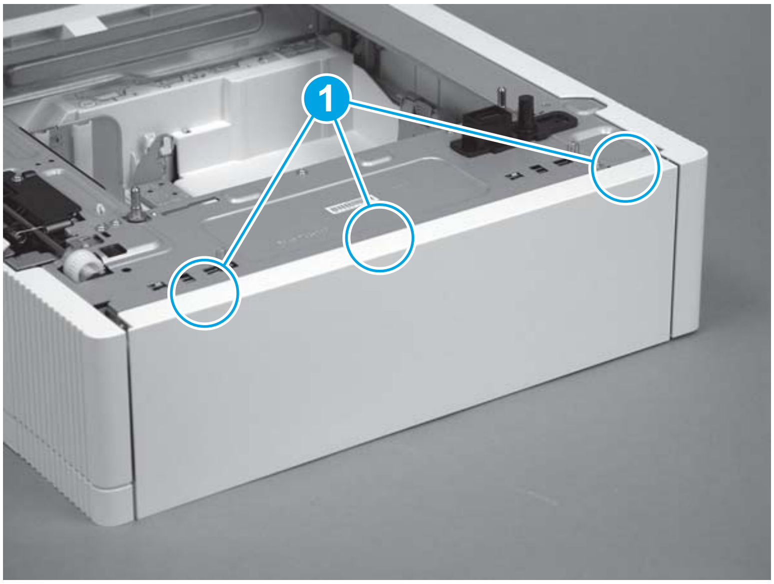
No post service test is available for this assembly.

Remove the rear cover

Follow these steps to remove the rear cover.

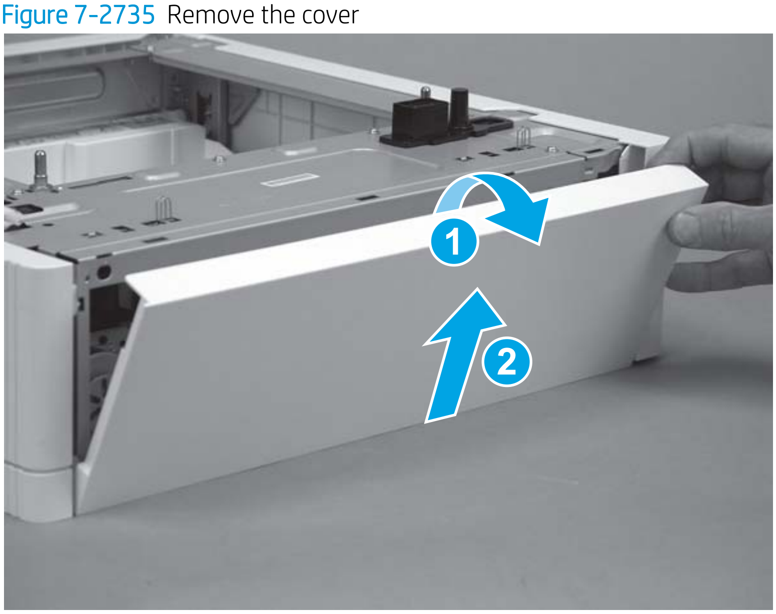
1. Release three tabs (callout 1).

Figure 7-2734 Release three tabs



2. Rotate the top of the cover away from the accessory (callout 1), and then lift it up to remove it (callout 2).

Figure 7-2735 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

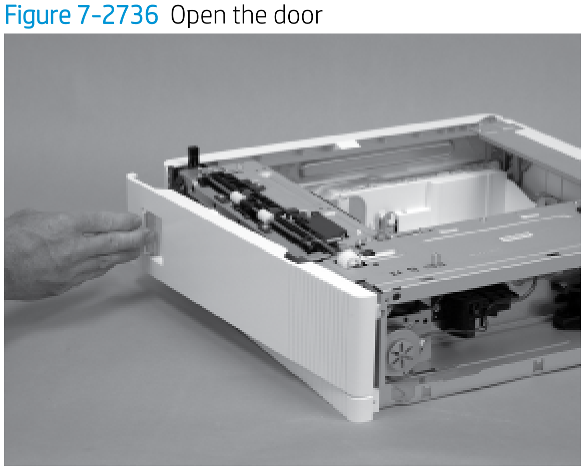
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Remove the right door

Follow these steps to remove the right door.

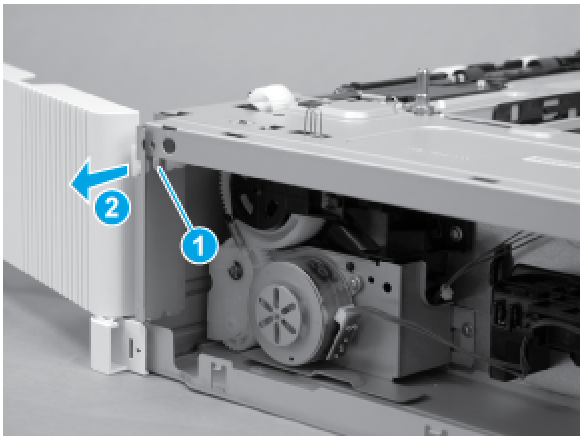
1. Open the door.

Figure 7-2736 Open the door



2. Release one tab (callout 1), and then slide the door-hinge bracket away from the chassis (callout 2) to release it.

Figure 7-2737 Release the hinge bracket

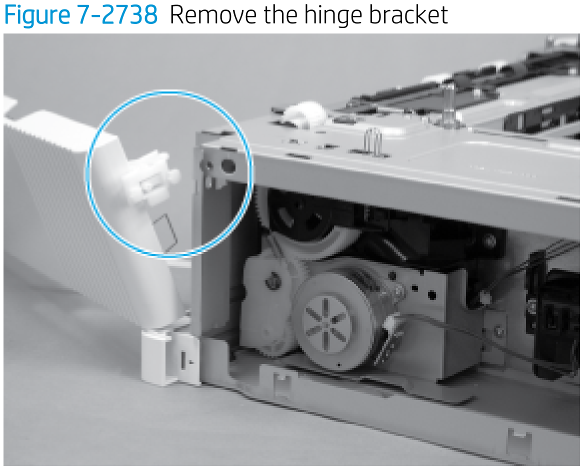


3. Remove the door-hinge bracket from the chassis.

⚠ CAUTION: The door is still attached to the accessory by the door link. Do not attempt to completely remove the door.

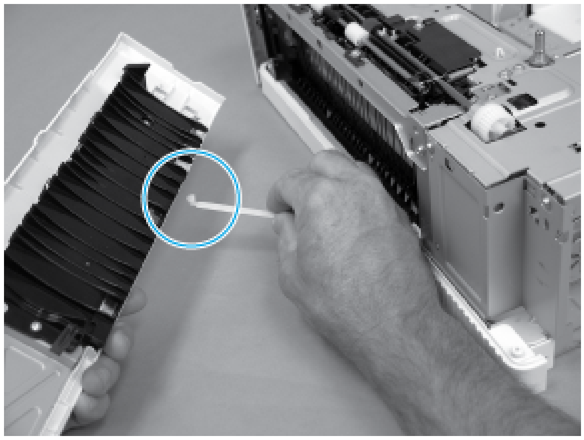
The door hinge bracket is not captive. Do not lose it when handling the door.

Figure 7-2738 Remove the hinge bracket



4. Release the door link from the slot in the door to remove the right door.

Figure 7-2739 Release the hinge bracket

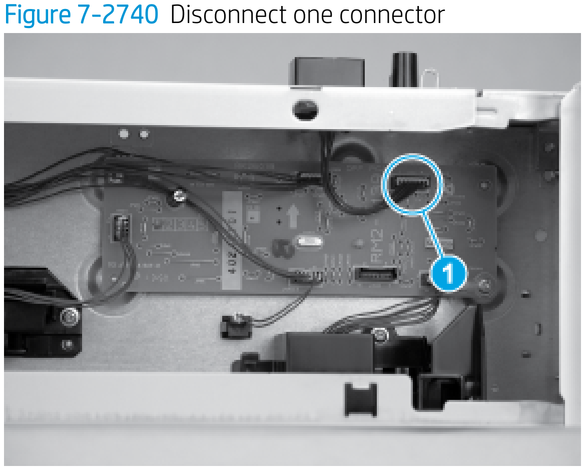


Remove the drawer connector holder

Follow these steps to remove the drawer connector holder.

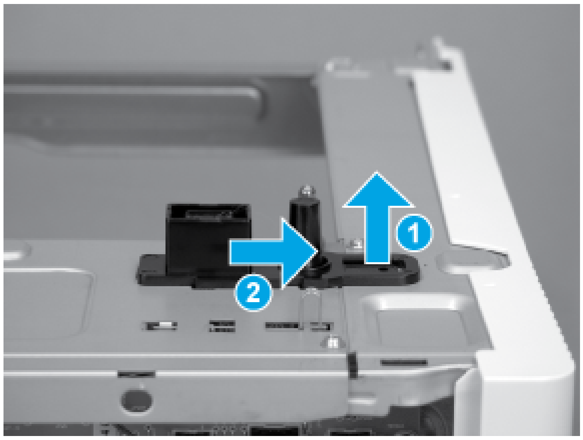
1. Disconnect one connector (callout 1; J901).

Figure 7-2740 Disconnect one connector



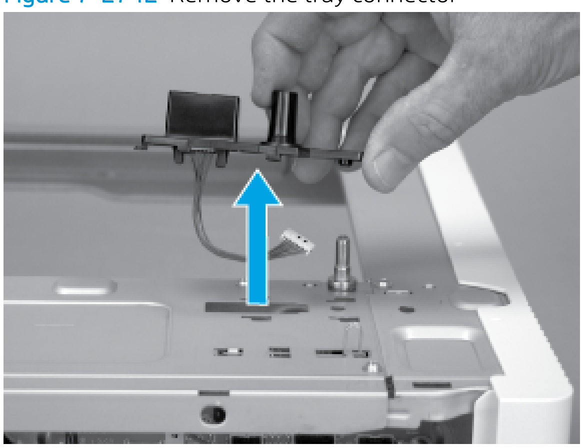
2. Release one tab (callout 1), and then slide the drawer connector holder as shown (callout 2) to release it.

Figure 7-2741 Release one tab



3. Remove the drawer connector holder.

Figure 7-2742 Remove the tray connector

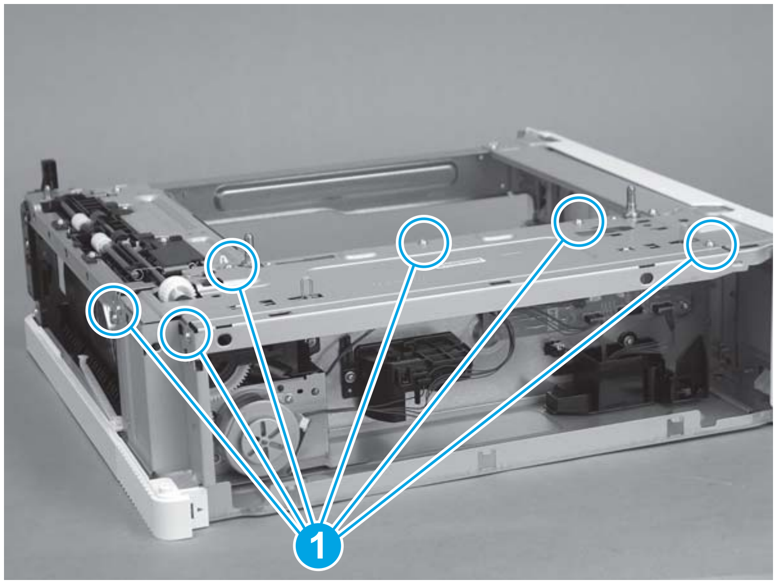


Remove the paper feed assembly

Follow these steps to remove the paper feed assembly.

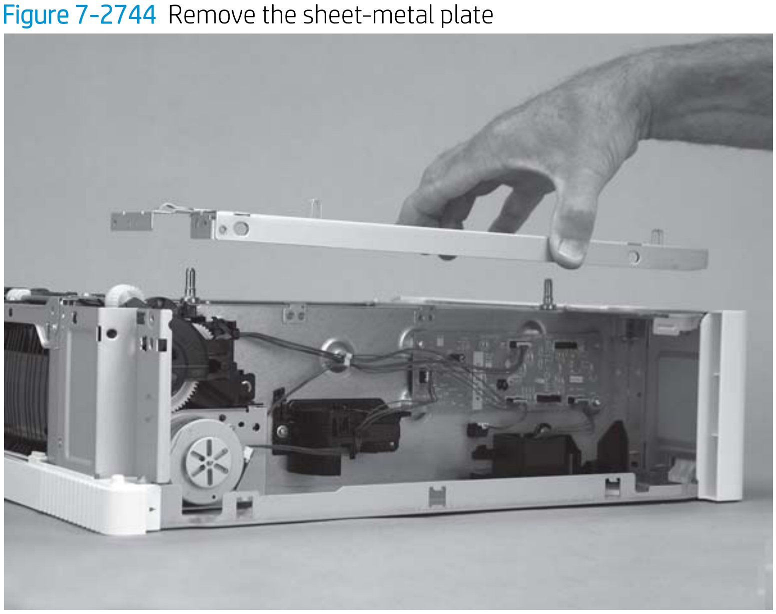
1. Remove six screws (callout 1).

Figure 7-2743 Remove six screws



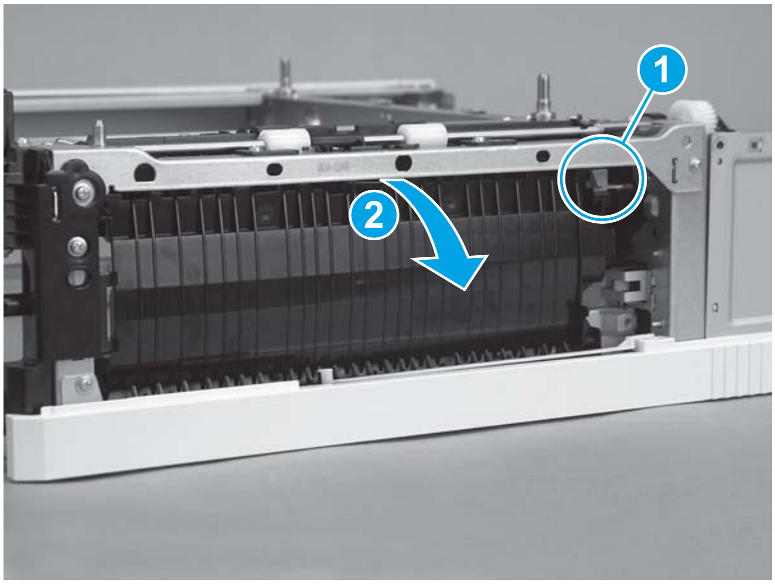
2. Remove the sheet-metal plate.

Figure 7-2744 Remove the sheet-metal plate



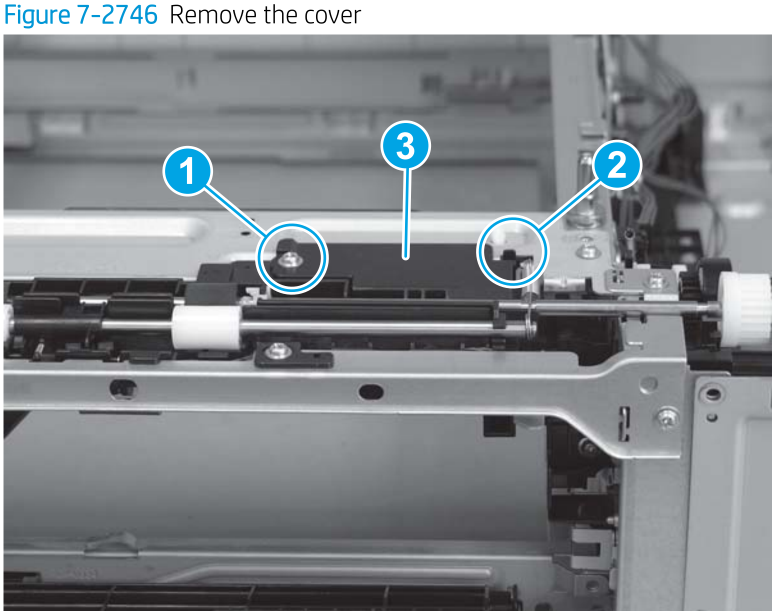
3. Release the green jam handle (callout 1), and then rotate the paper feed guide down (callout 2) and out of the way.

Figure 7-2745 Release the paper feed guide



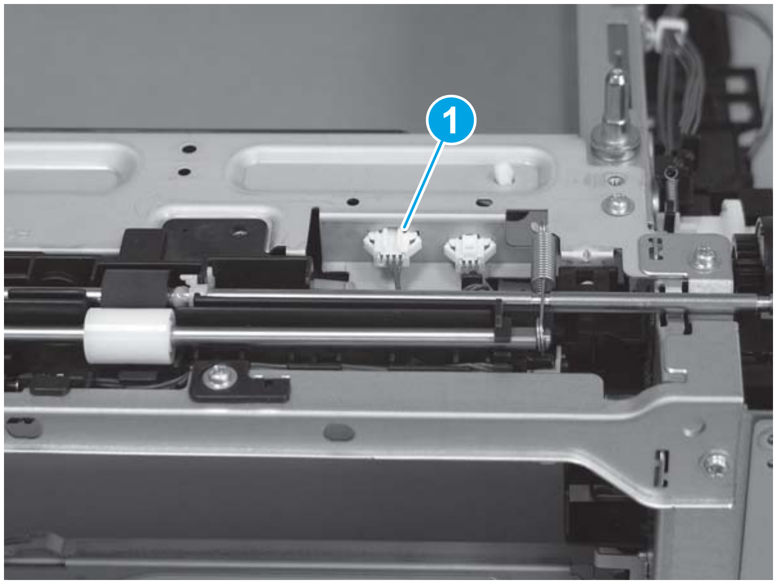
4. Remove one screw (callout 1), release one tab (callout 2), and then remove the cover (callout 3).

Figure 7-2746 Remove the cover



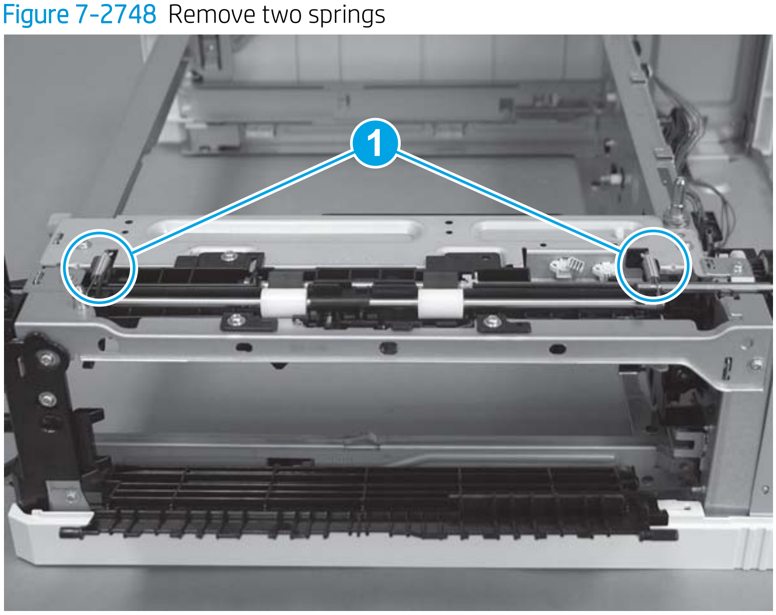
5. Disconnect one connector (callout 1).

Figure 7-2747 Disconnect one connector



6. Remove two springs (callout 1).

Figure 7-2748 Remove two springs



7. Remove three screws (callout 1).

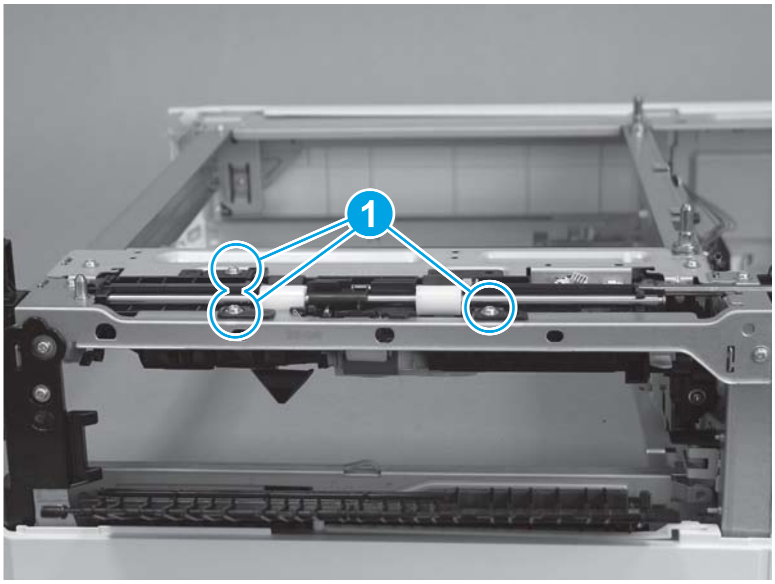


Figure 7-2749 Remove three screws

8. Slightly raise the tray end of the assembly, and then release two alignment pins (callout 1).

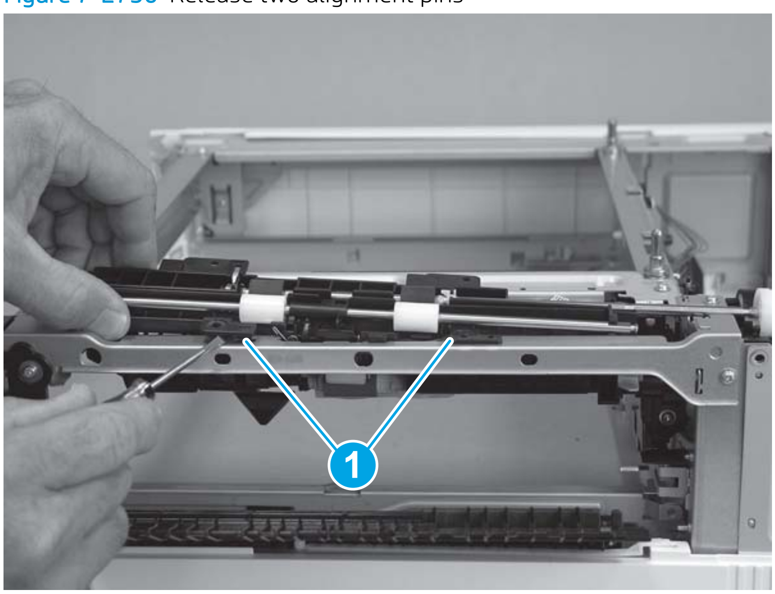
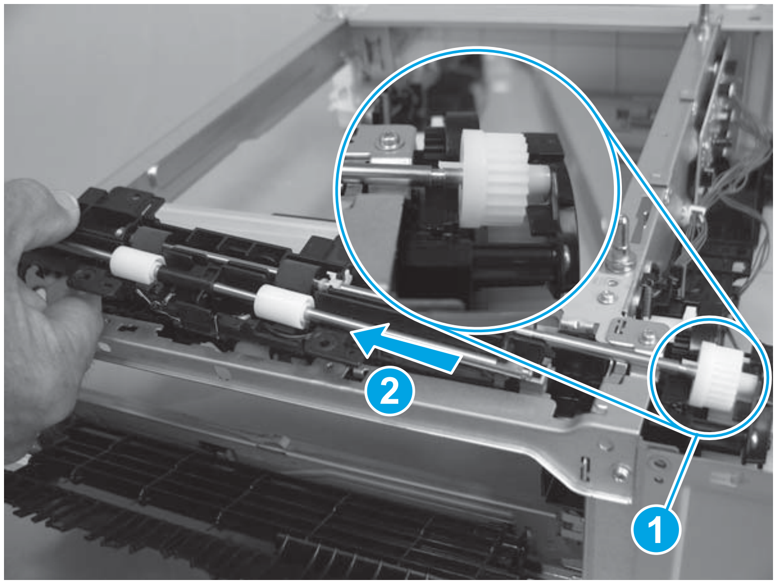


Figure 7-2750 Release two alignment pins

9. Release one tab on the gear (callout 1), slide the assembly away (callout 2) from the lifter drive assembly to release the shaft from the gear, and then remove the paper feed assembly.

Figure 7-2751 Remove the paper feed assembly



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Paper pickup assembly (1x550-sheet paper feeder)

Learn about removing and replacing the paper pickup assembly (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-103 Part information

Part number	Part description
RM2-5154-000CN	Paper pickup assembly (1x550-sheet paper feeder) NOTE: The tray pickup and separation roller assembly is included with the paper pickup assembly.

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- Small flat-blade screwdriver

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

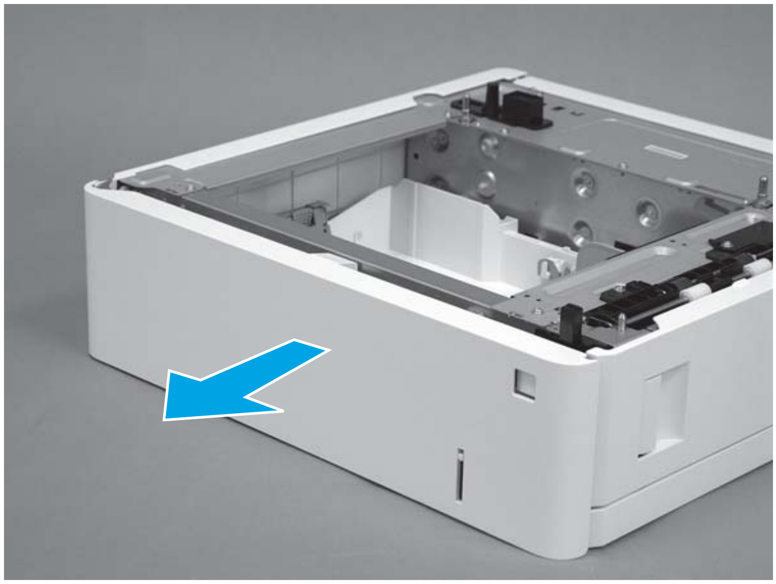
Print any pages necessary to make sure the printer is functioning correctly.

Remove the tray

Follow these steps to remove Tray 3, Tray 4, or Tray 5.

1. Pull the tray out until it stops.

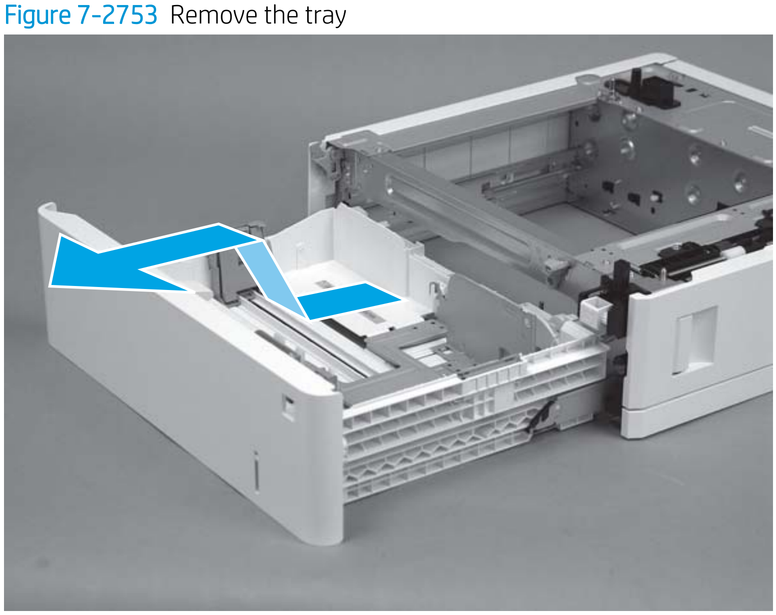
Figure 7-2752 Pull the tray out



2. Lift the front of the tray, and then pull it out of the printer to remove it.

NOTE: **For a replacement tray:** If the tray has Fixed Tray Guides installed and are still required, move hardware to new tray. If necessary, order new kit: 3GY25–67901 Kit - Fixed Tray Guide. Only one kit required per engine.

Figure 7-2753 Remove the tray



Removal and replacement: Rear cover (1x550-sheet paper feeder)

Learn about removing and replacing the rear cover (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-104 Part information

Part number	Part description
RC4-1792-000CN	Rear cover (1x550-sheet paper feeder)

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

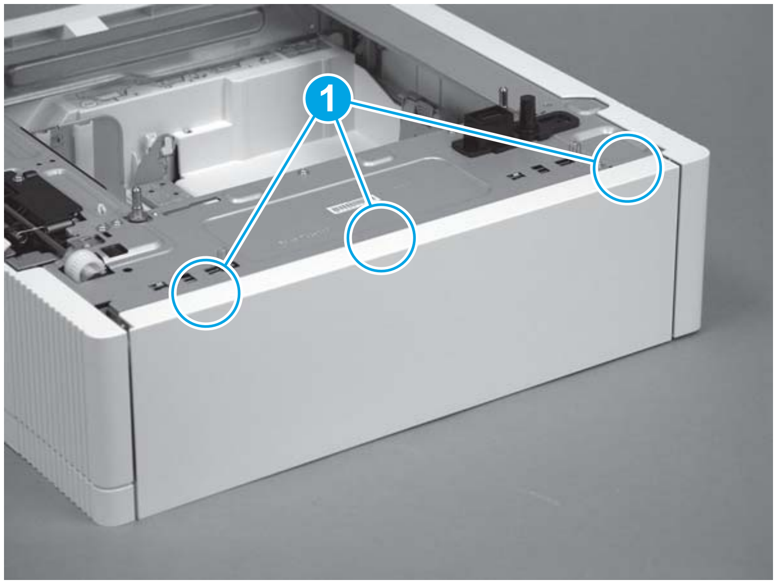
No post service test is available for this assembly.

Remove the rear cover

Follow these steps to remove the rear cover.

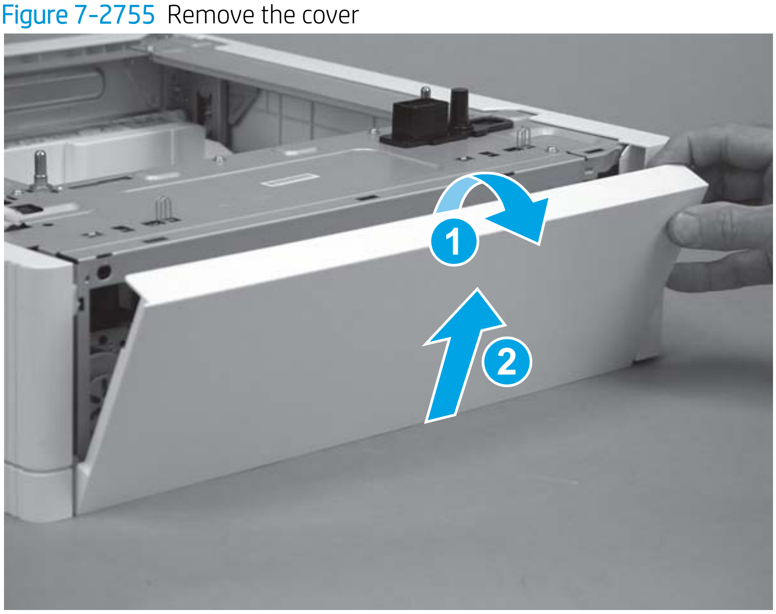
1. Release three tabs (callout 1).

Figure 7-2754 Release three tabs



2. Rotate the top of the cover away from the accessory (callout 1), and then lift it up to remove it (callout 2).

Figure 7-2755 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

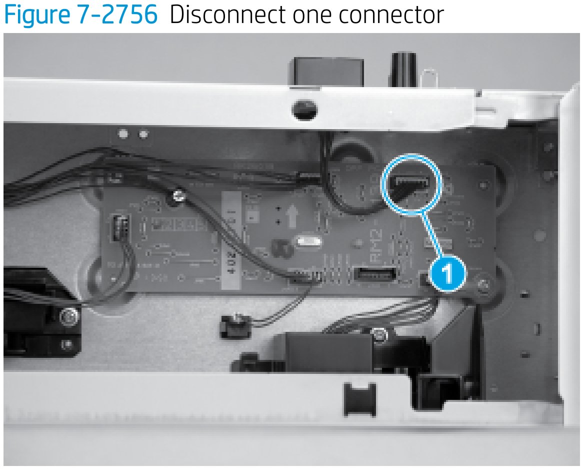
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Remove the drawer connector holder

Follow these steps to remove the drawer connector holder.

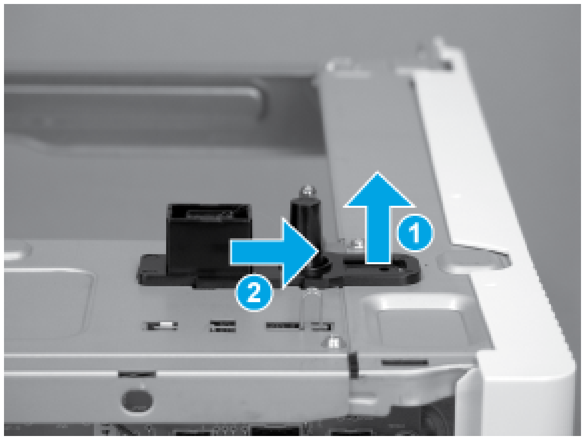
1. Disconnect one connector (callout 1; J901).

Figure 7-2756 Disconnect one connector



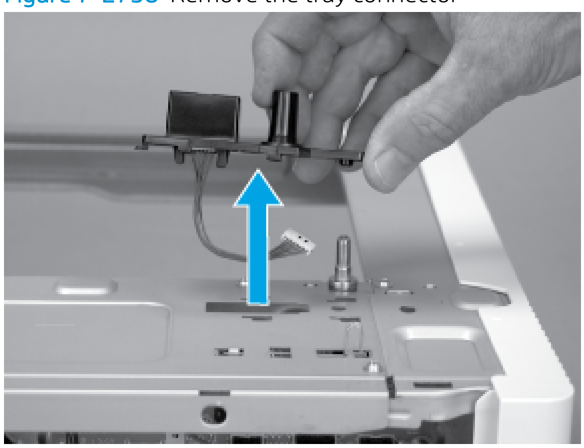
2. Release one tab (callout 1), and then slide the drawer connector holder as shown (callout 2) to release it.

Figure 7-2757 Release one tab



3. Remove the drawer connector holder.

Figure 7-2758 Remove the tray connector

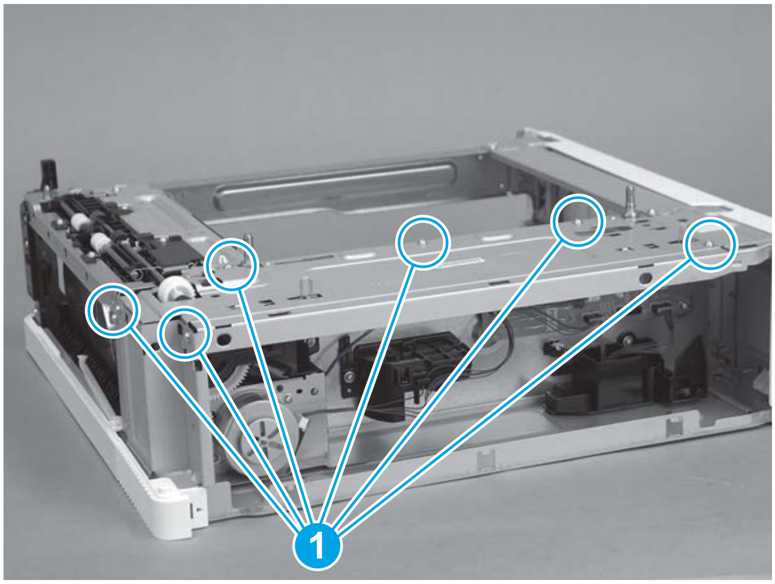


Remove the paper feed assembly

Follow these steps to remove the paper feed assembly.

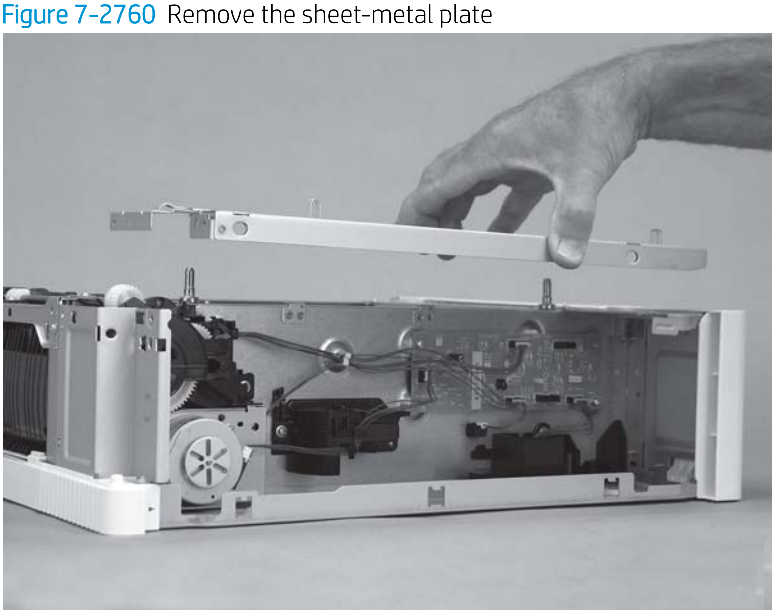
1. Remove six screws (callout 1).

Figure 7-2759 Remove six screws



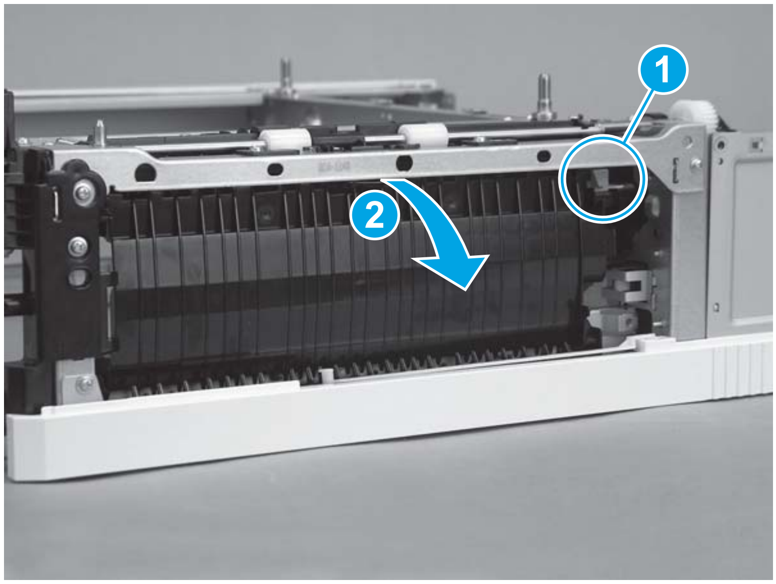
2. Remove the sheet-metal plate.

Figure 7-2760 Remove the sheet-metal plate



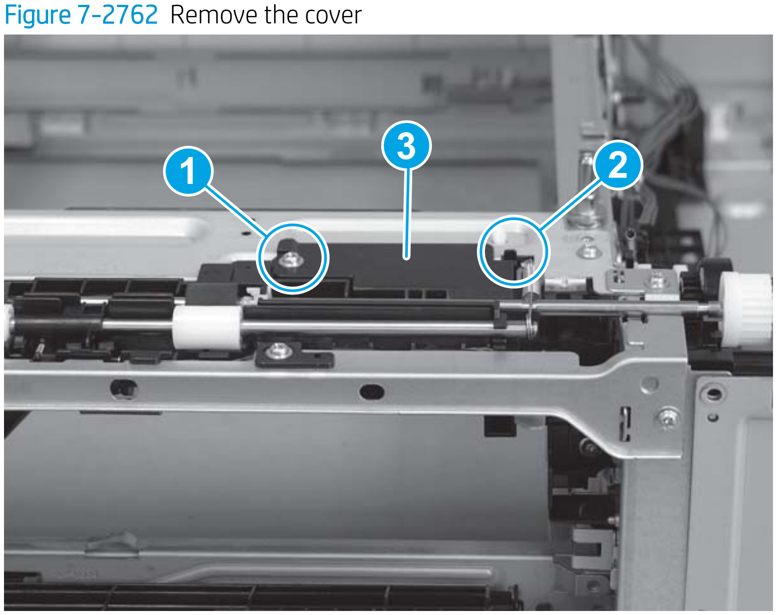
3. Release the green jam handle (callout 1), and then rotate the paper feed guide down (callout 2) and out of the way.

Figure 7-2761 Release the paper feed guide



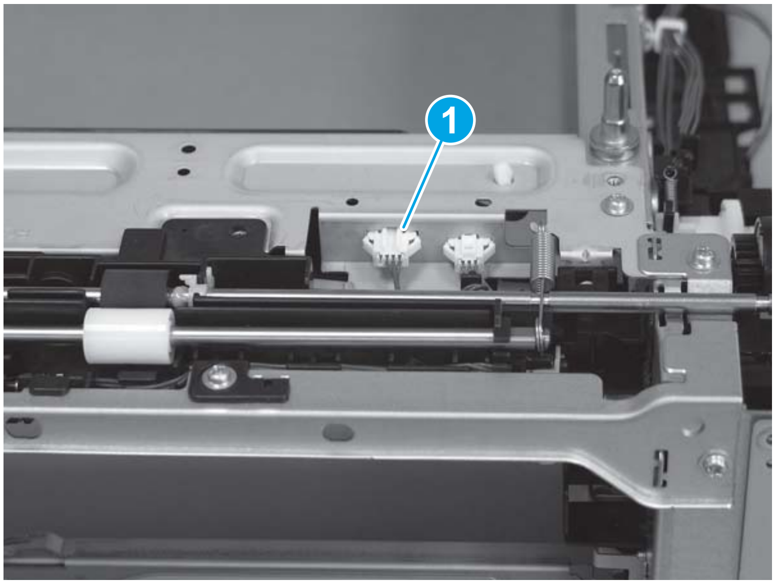
4. Remove one screw (callout 1), release one tab (callout 2), and then remove the cover (callout 3).

Figure 7-2762 Remove the cover



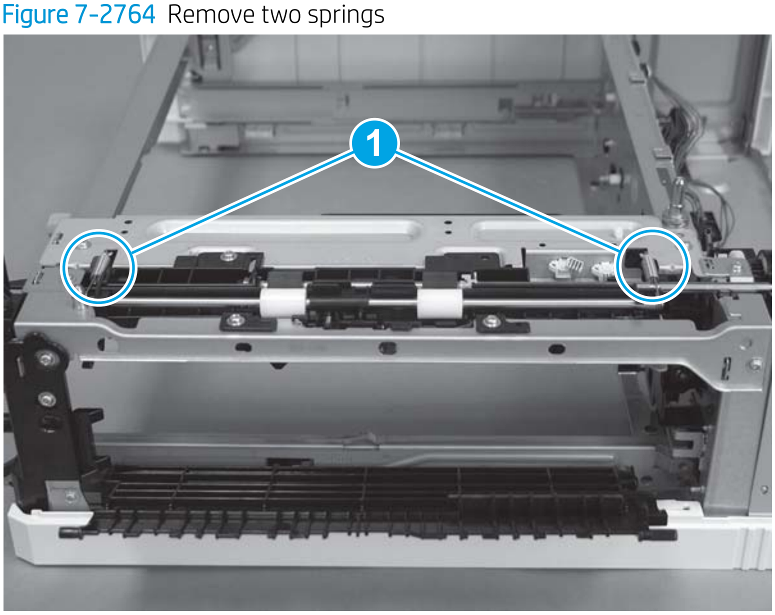
5. Disconnect one connector (callout 1).

Figure 7-2763 Disconnect one connector



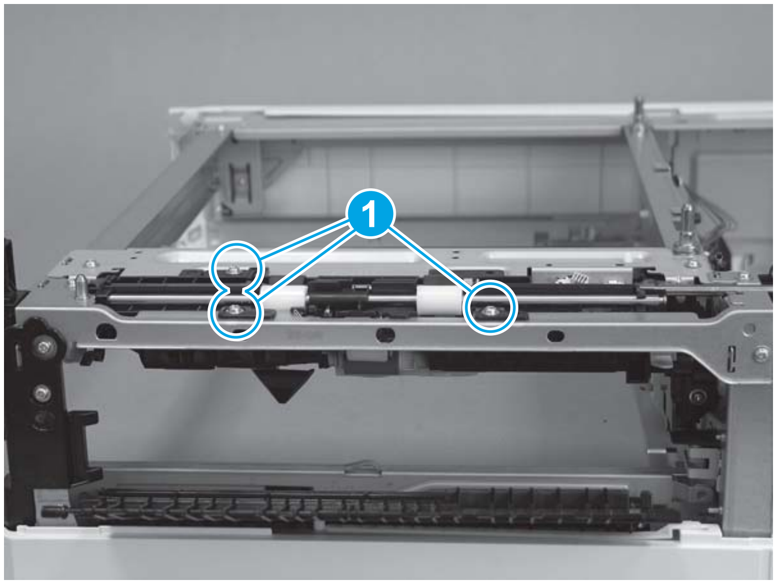
6. Remove two springs (callout 1).

Figure 7-2764 Remove two springs



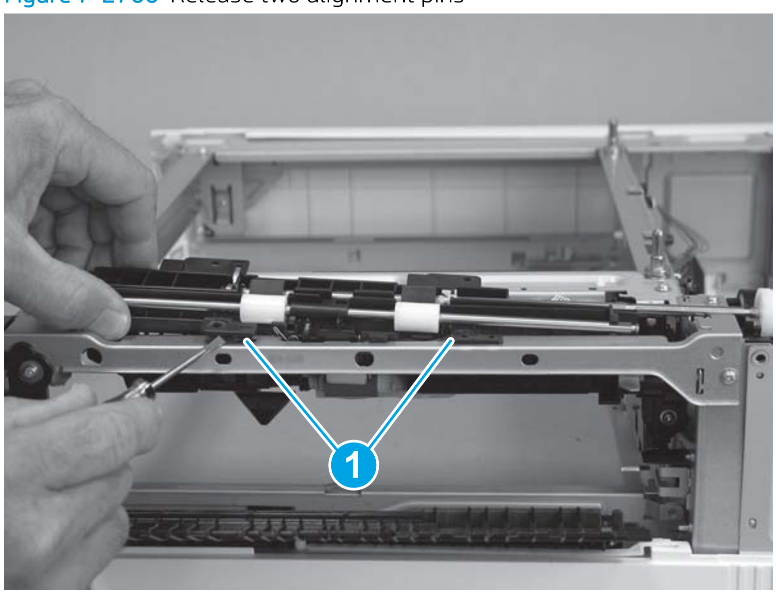
7. Remove three screws (callout 1).

Figure 7-2765 Remove three screws



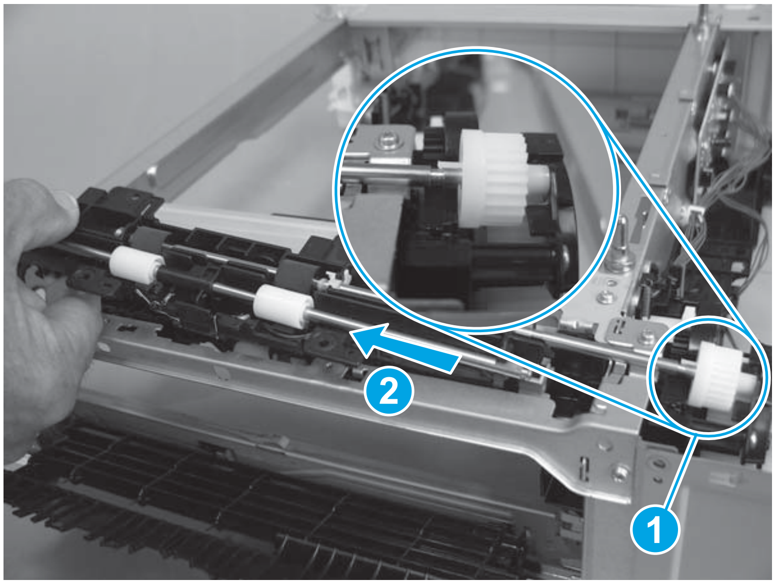
8. Slightly raise the tray end of the assembly, and then release two alignment pins (callout 1).

Figure 7-2766 Release two alignment pins



9. Release one tab on the gear (callout 1), slide the assembly away (callout 2) from the lifter drive assembly to release the shaft from the gear, and then remove the paper feed assembly.

Figure 7-2767 Remove the paper feed assembly

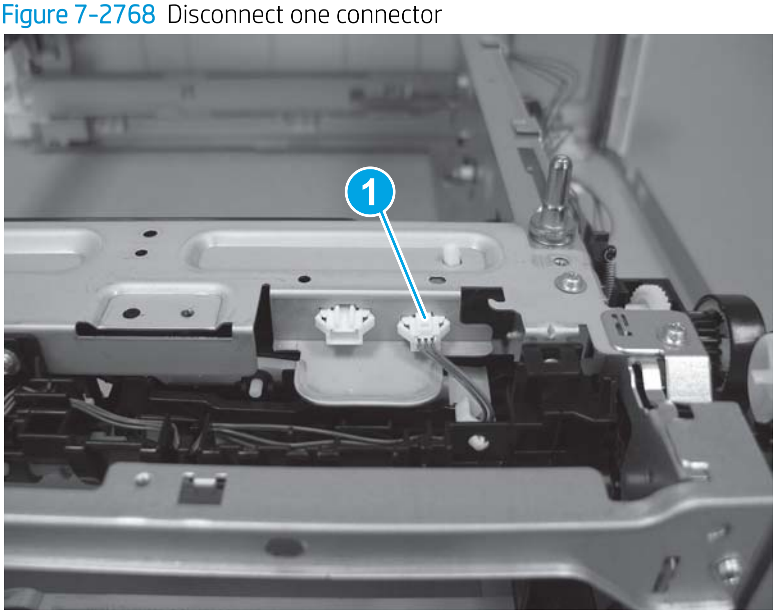


Remove the paper pickup assembly

Follow these steps to remove the paper pickup assembly.

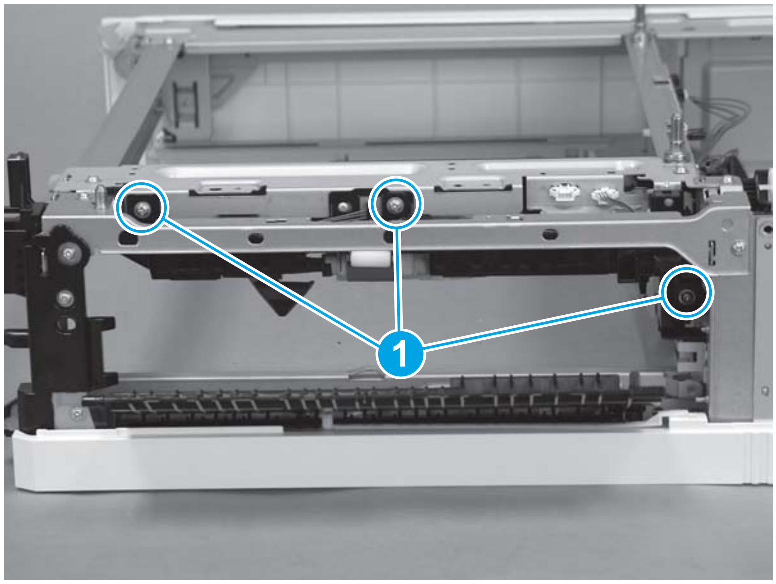
1. Disconnect one connector (callout 1).

Figure 7-2768 Disconnect one connector



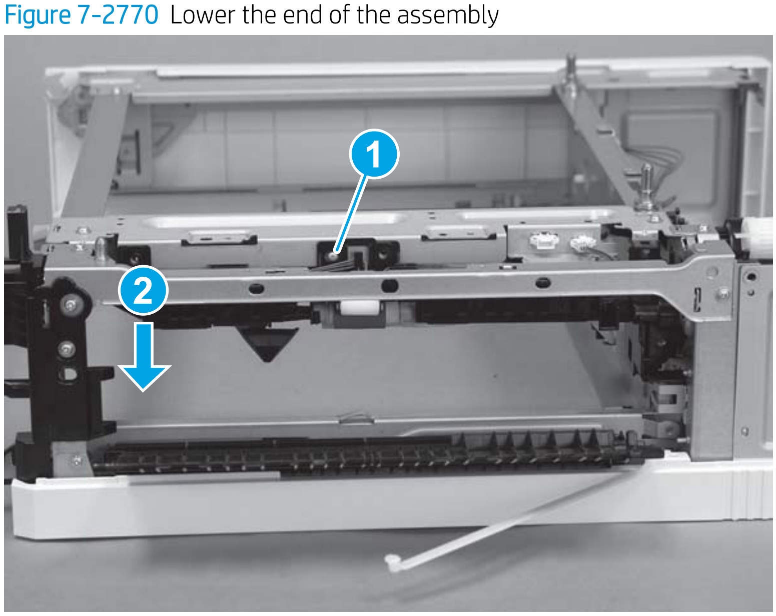
2. Remove three screws (callout 1).

Figure 7-2769 Remove three screws



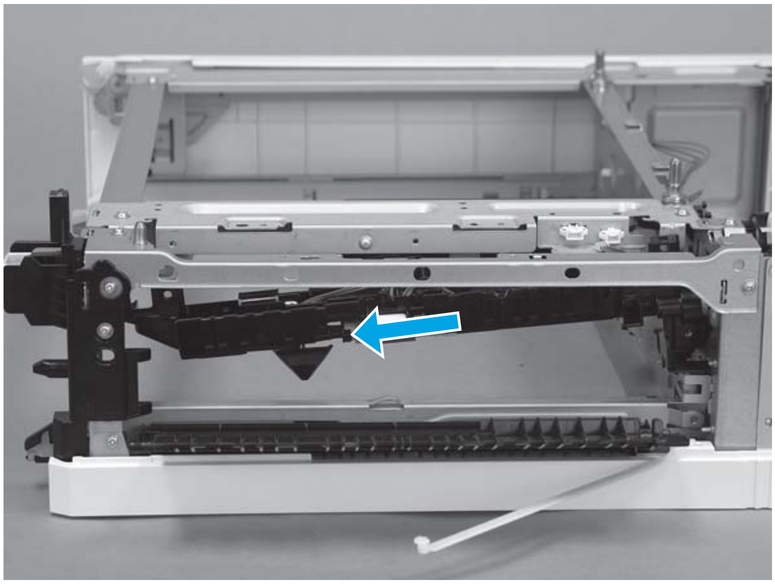
3. Release one alignment pins (callout 1), and then lower the left end of the assembly (callout 2)—the end near the tray cavity.

Figure 7-2770 Lower the end of the assembly



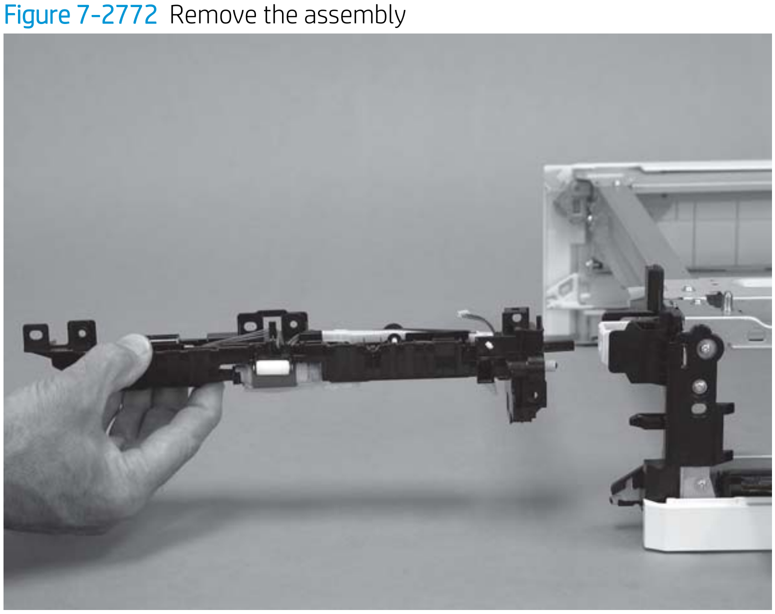
4. Slide the paper pickup assembly to the left to release it from the drive gear on the lifter drive assembly.

Figure 7-2771 Release the assembly from the drive gear



5. Remove the paper pickup assembly through the tray cavity.

Figure 7-2772 Remove the assembly



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Feeder drive assembly (1x550-sheet paper feeder)

Learn about removing and replacing the feeder drive assembly (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

> ⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.
>
> If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-105 Part information

Part number	Part description
RM2-5148-000CN	Feeder drive assembly (1x550-sheet paper feeder)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- Small flat-blade screwdriver

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

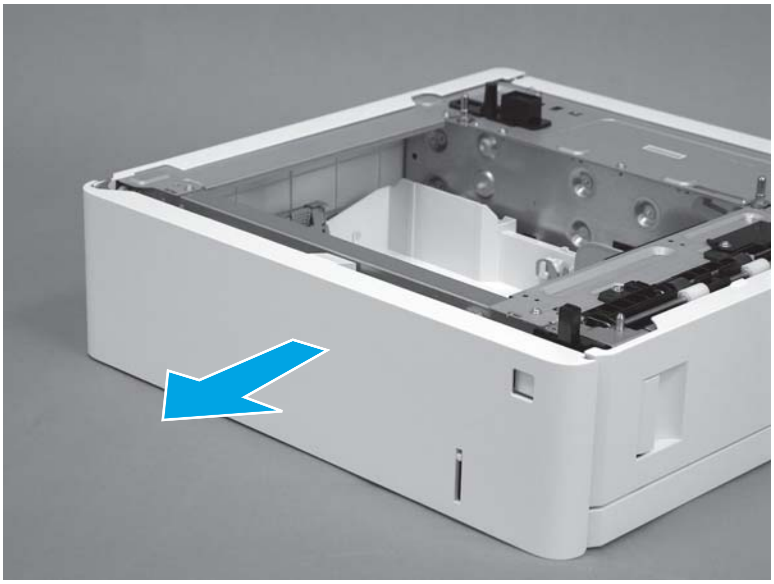
Print any pages necessary to make sure the printer is functioning correctly.

Remove the tray

Follow these steps to remove Tray 3, Tray 4, or Tray 5.

1. Pull the tray out until it stops.

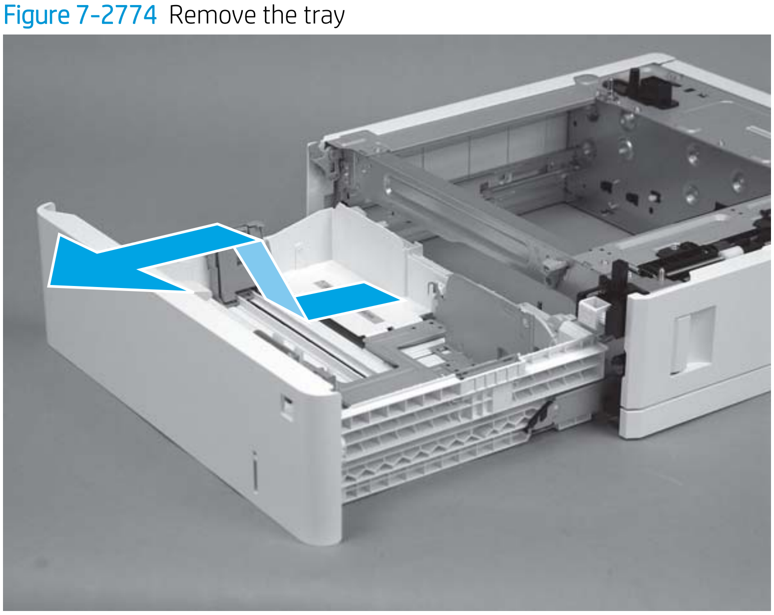
Figure 7-2773 Pull the tray out



2. Lift the front of the tray, and then pull it out of the printer to remove it.

NOTE: **For a replacement tray:** If the tray has Fixed Tray Guides installed and are still required, move hardware to new tray. If necessary, order new kit: 3GY25–67901 Kit - Fixed Tray Guide. Only one kit required per engine.

Figure 7-2774 Remove the tray



Removal and replacement: Rear cover (1x550-sheet paper feeder)

Learn about removing and replacing the rear cover (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-106 Part information

Part number	Part description
RC4-1792-000CN	Rear cover (1x550-sheet paper feeder)

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

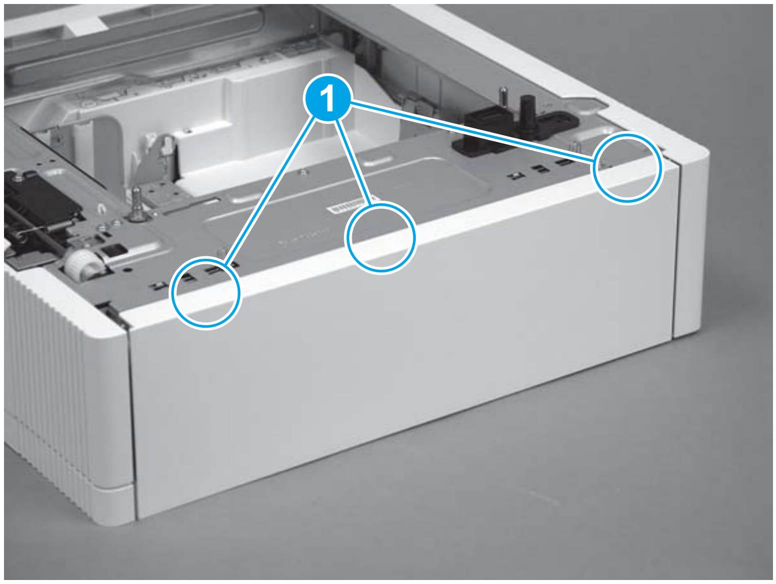
No post service test is available for this assembly.

Remove the rear cover

Follow these steps to remove the rear cover.

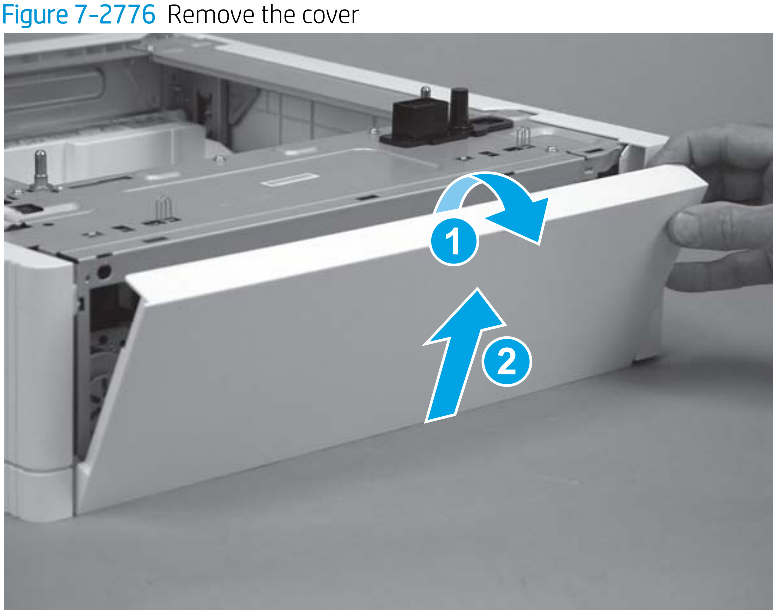
1. Release three tabs (callout 1).

Figure 7-2775 Release three tabs



2. Rotate the top of the cover away from the accessory (callout 1), and then lift it up to remove it (callout 2).

Figure 7-2776 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

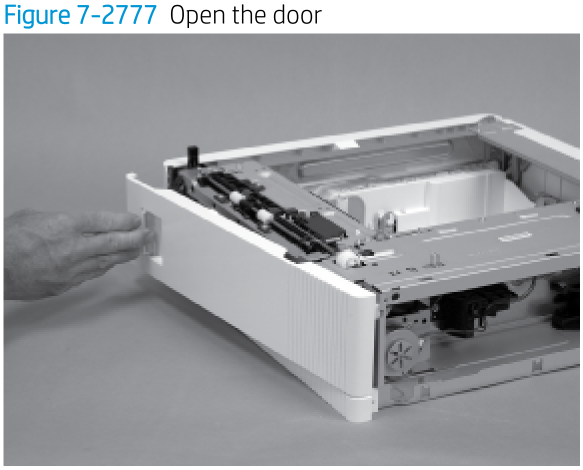
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Remove the right door

Follow these steps to remove the right door.

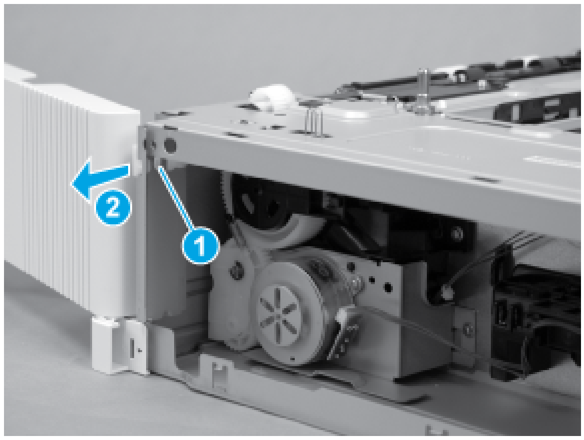
1. Open the door.

Figure 7-2777 Open the door



2. Release one tab (callout 1), and then slide the door-hinge bracket away from the chassis (callout 2) to release it.

Figure 7-2778 Release the hinge bracket

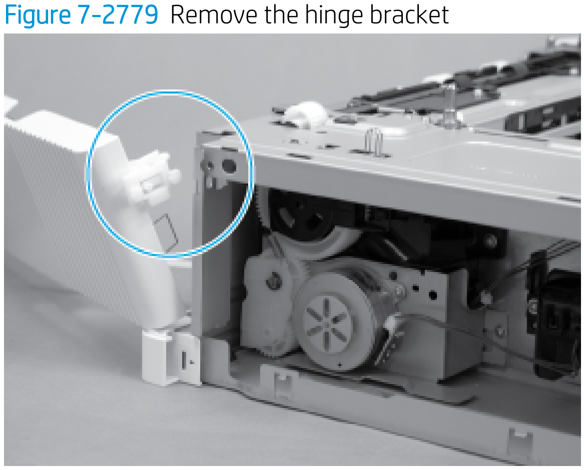


3. Remove the door-hinge bracket from the chassis.

⚠ CAUTION: The door is still attached to the accessory by the door link. Do not attempt to completely remove the door.

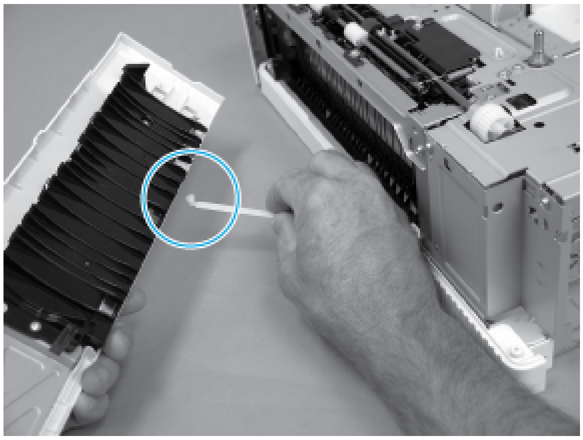
The door hinge bracket is not captive. Do not lose it when handling the door.

Figure 7-2779 Remove the hinge bracket



4. Release the door link from the slot in the door to remove the right door.

Figure 7-2780 Release the hinge bracket

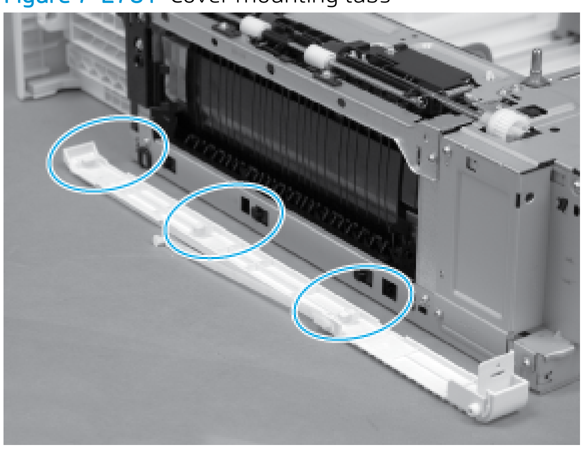


Remove the right-lower cover

Follow these steps to remove the right-lower cover.

1. Before proceeding, take note of the location of the three mounting tabs on the back side of the cover.

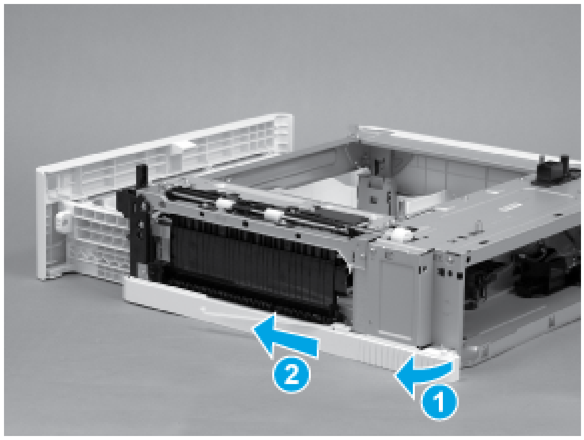
Figure 7-2781 Cover mounting tabs



2. Partially open the tray, slightly flex the end of the cover away from the accessory (callout 1), and then slide it towards the front of the accessory (callout 2) to release it.

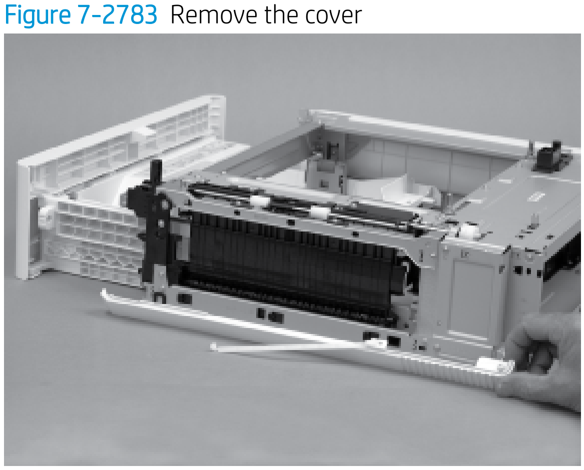
> ⚠ CAUTION: The three mounting tabs on the back side of the cover are easily damaged. Do not over flex the end of the cover when it is released. Push in on the middle tab to protect it when removing the cover.

Figure 7-2782 Release the cover



3. Remove the right-lower cover.

Figure 7-2783 Remove the cover

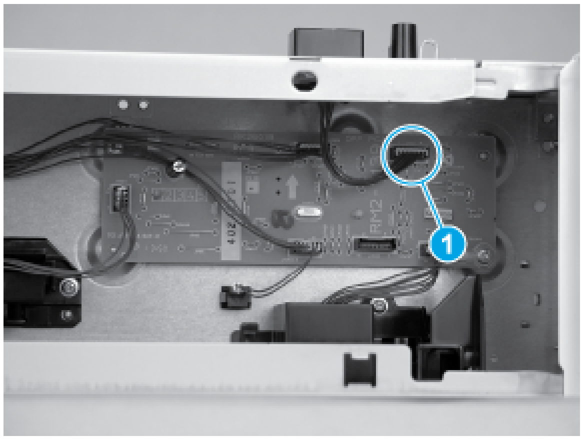


Remove the drawer connector holder

Follow these steps to remove the drawer connector holder.

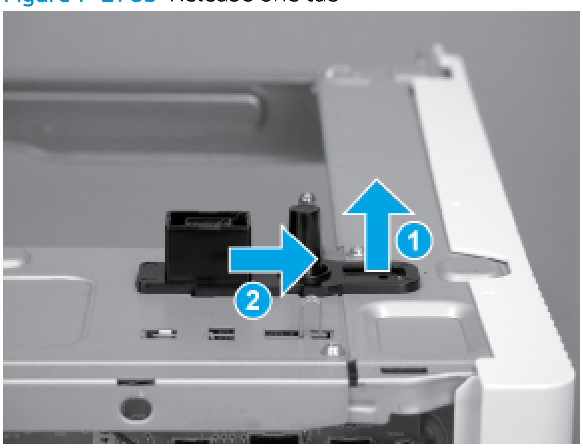
1. Disconnect one connector (callout 1; J901).

Figure 7-2784 Disconnect one connector



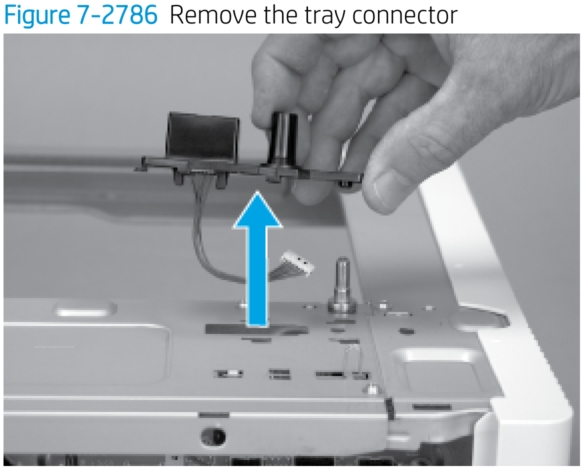
2. Release one tab (callout 1), and then slide the drawer connector holder as shown (callout 2) to release it.

Figure 7-2785 Release one tab



3. Remove the drawer connector holder.

Figure 7-2786 Remove the tray connector

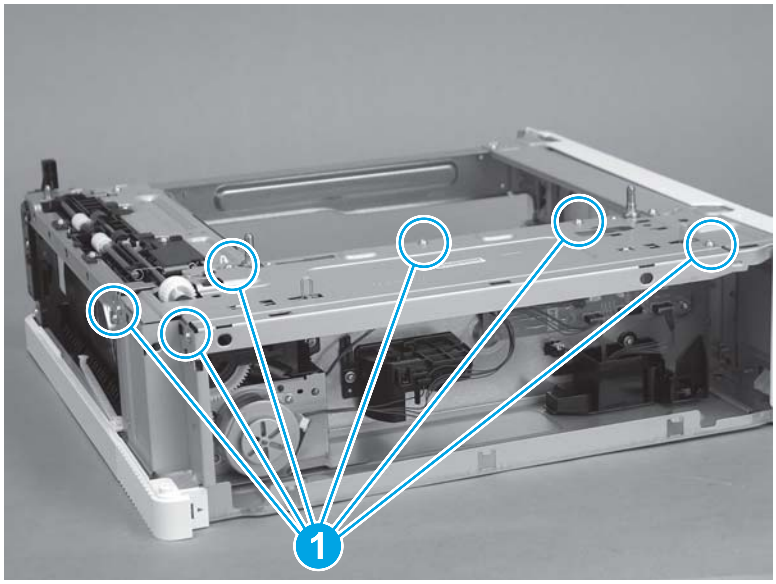


Remove the feeder drive assembly

Follow these steps to remove the feeder drive assembly.

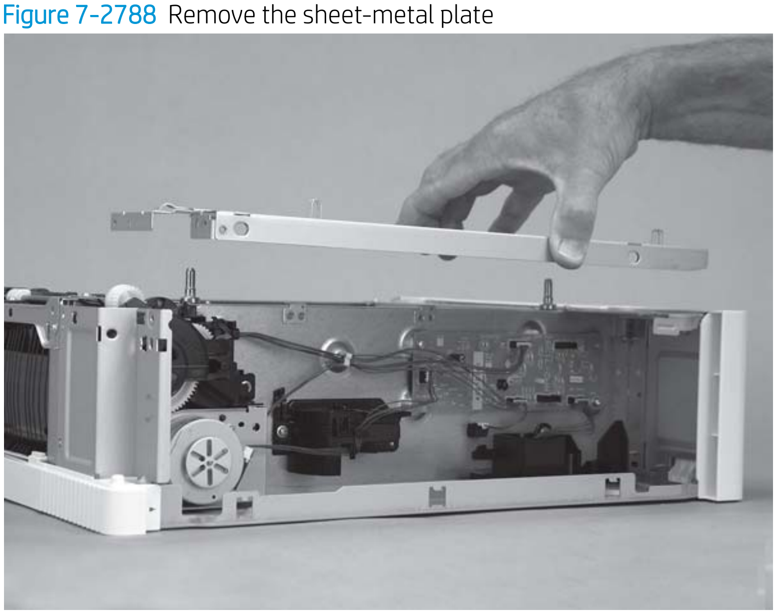
1. Remove six screws (callout 1).

Figure 7-2787 Remove six screws



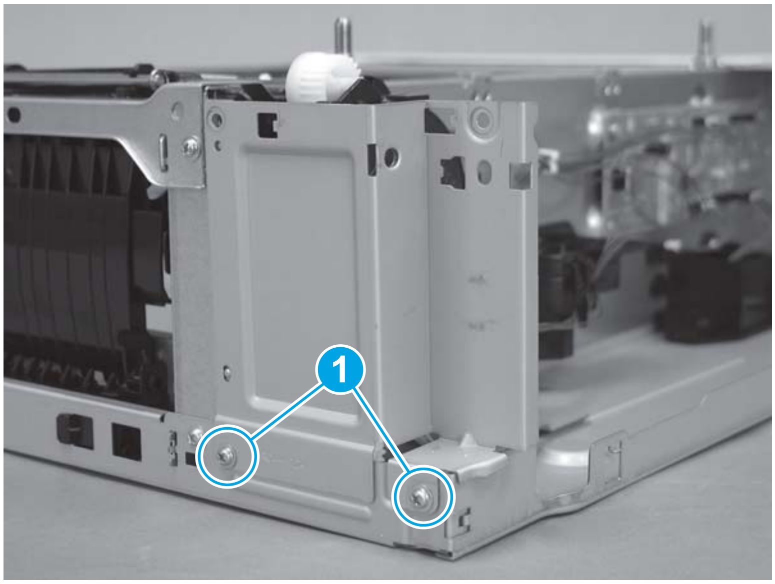
2. Remove the sheet-metal plate.

Figure 7-2788 Remove the sheet-metal plate



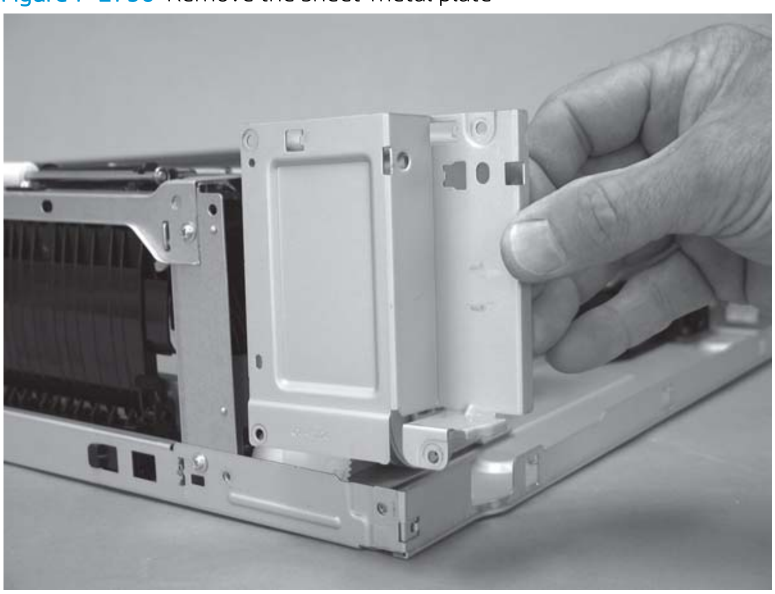
3. Remove two screws (callout 1).

Figure 7-2789 Remove two screws



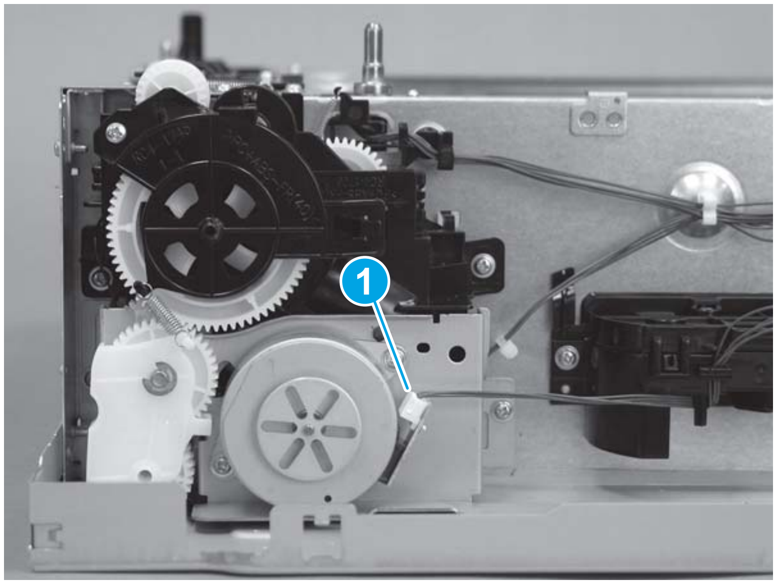
4. Remove the sheet-metal plate.

Figure 7-2790 Remove the sheet-metal plate



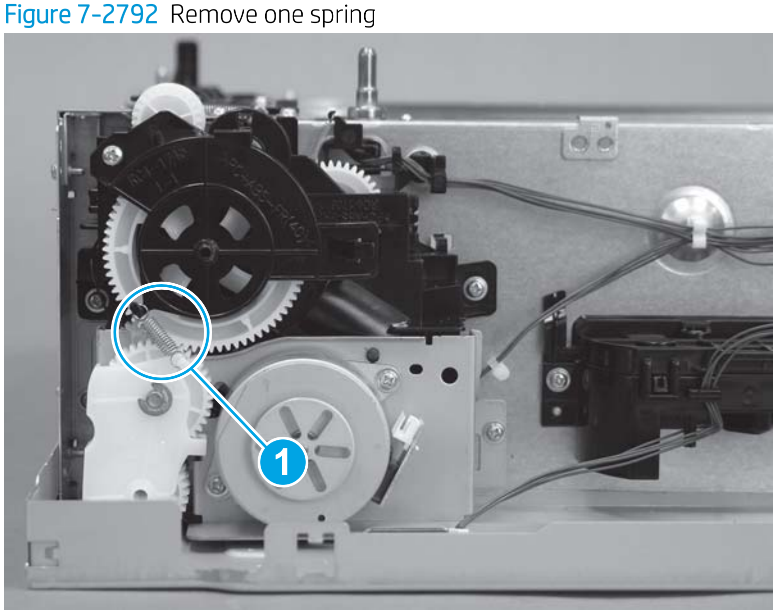
5. Disconnect one connector (callout 1).

Figure 7-2791 Disconnect one connector



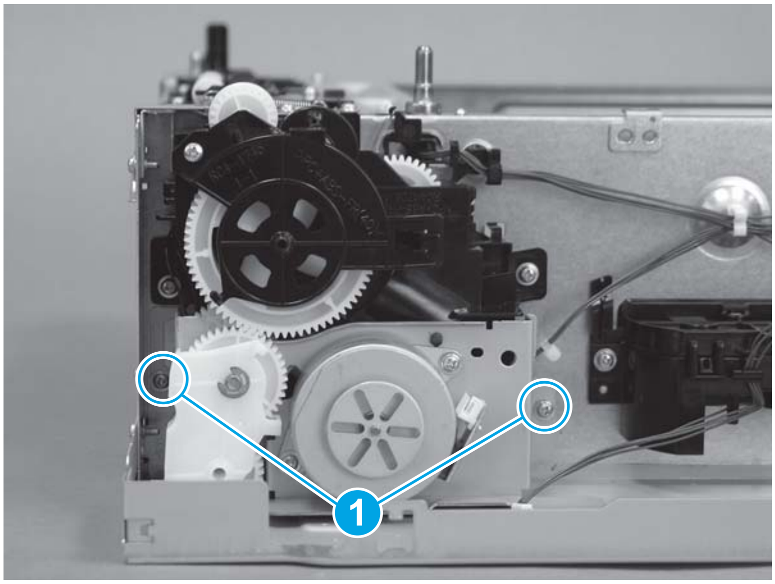
6. Remove one spring (callout 1).

Figure 7-2792 Remove one spring



7. Remove two screws (callout 1).

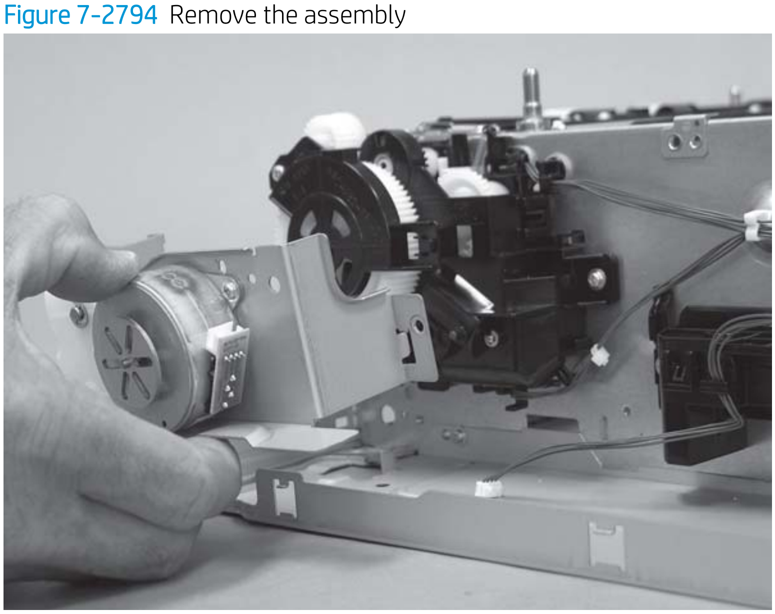
Figure 7-2793 Remove two screws



8. Remove the feeder drive assembly.

⚠ CAUTION: If the assembly is being removed to access another part, take care not to wipe any of the grease off of the gears.

Figure 7-2794 Remove the assembly



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Lifter drive assembly (1x550-sheet paper feeder)

Learn about removing and replacing the lifter drive assembly (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-107 Part information

Part number	Part description
RM2-5149-000CN	Lifter drive assembly (1x550-sheet paper feeder)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- Small flat-blade screwdriver

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

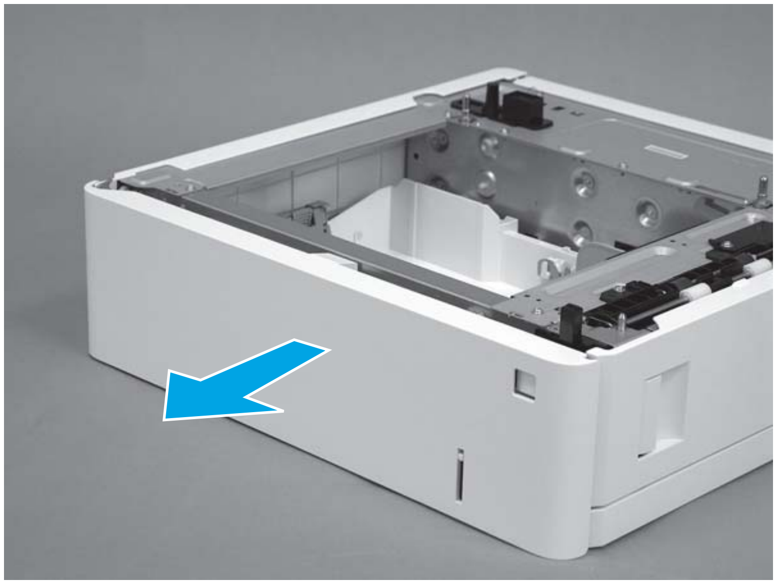
Print any pages necessary to make sure the printer is functioning correctly.

Remove the tray

Follow these steps to remove Tray 3, Tray 4, or Tray 5.

1. Pull the tray out until it stops.

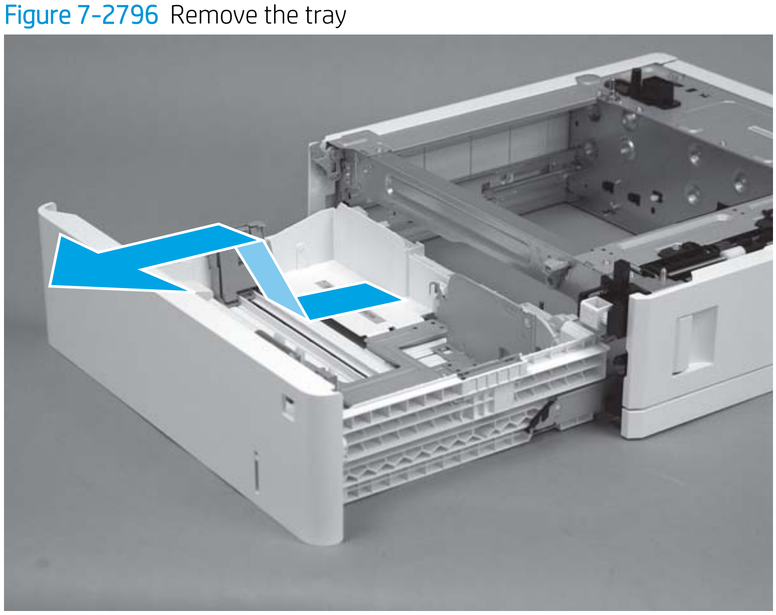
Figure 7-2795 Pull the tray out



2. Lift the front of the tray, and then pull it out of the printer to remove it.

NOTE: **For a replacement tray:** If the tray has Fixed Tray Guides installed and are still required, move hardware to new tray. If necessary, order new kit: 3GY25–67901 Kit - Fixed Tray Guide. Only one kit required per engine.

Figure 7-2796 Remove the tray



Removal and replacement: Rear cover (1x550-sheet paper feeder)

Learn about removing and replacing the rear cover (1x550-sheet paper feeder).

Before performing service

Turn the printer power off

- Disconnect the power cable.

  ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

⚠ CAUTION: To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

If toner gets on the skin or clothing, wipe it off with dry tissue paper and wash in cold water. Hot water sets toner and it might be difficult, or impossible, to remove.

Use the table below to identify the correct part number for your printer, and then go to https://parts.hp.com/hpparts to order the part.

Table 7-108 Part information

Part number	Part description
RC4-1792-000CN	Rear cover (1x550-sheet paper feeder)

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

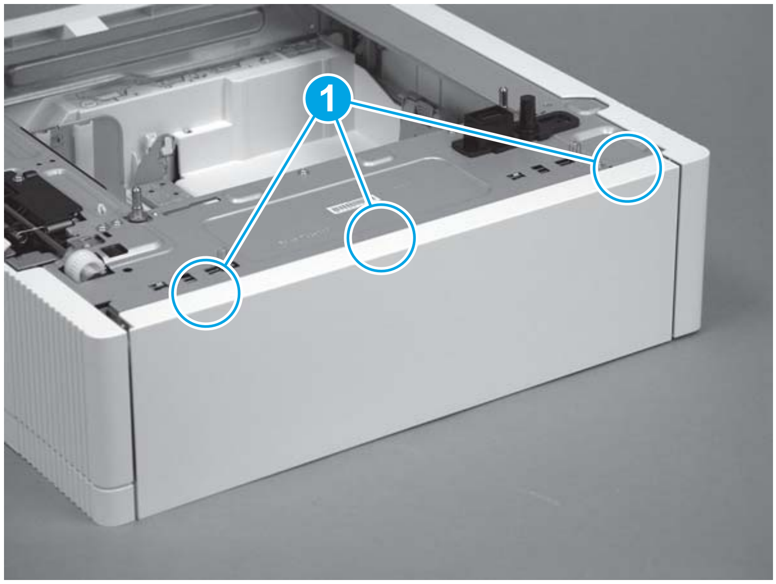
No post service test is available for this assembly.

Remove the rear cover

Follow these steps to remove the rear cover.

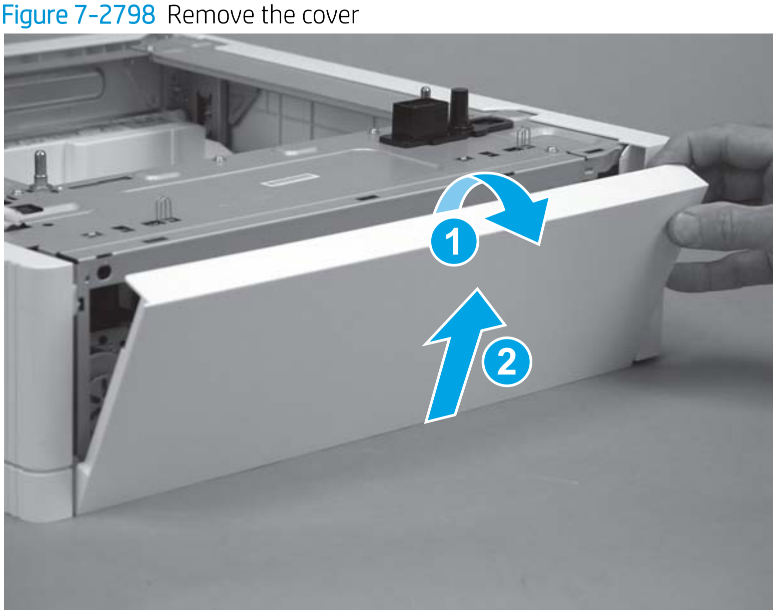
1. Release three tabs (callout 1).

Figure 7-2797 Release three tabs



2. Rotate the top of the cover away from the accessory (callout 1), and then lift it up to remove it (callout 2).

Figure 7-2798 Remove the cover



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

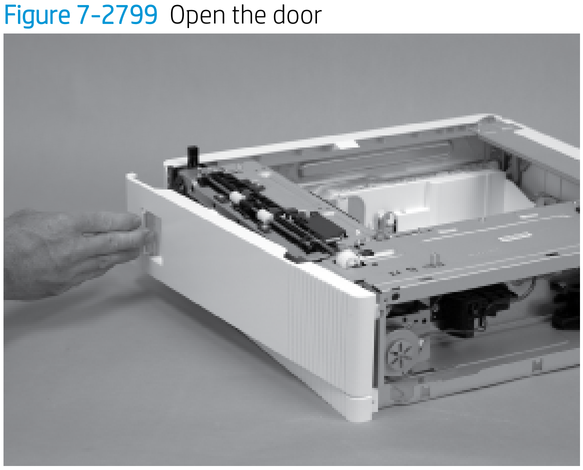
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Remove the right door

Follow these steps to remove the right door.

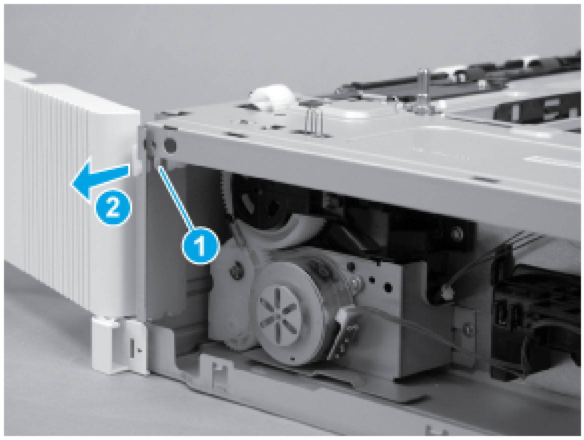
1. Open the door.

Figure 7-2799 Open the door



2. Release one tab (callout 1), and then slide the door-hinge bracket away from the chassis (callout 2) to release it.

Figure 7-2800 Release the hinge bracket

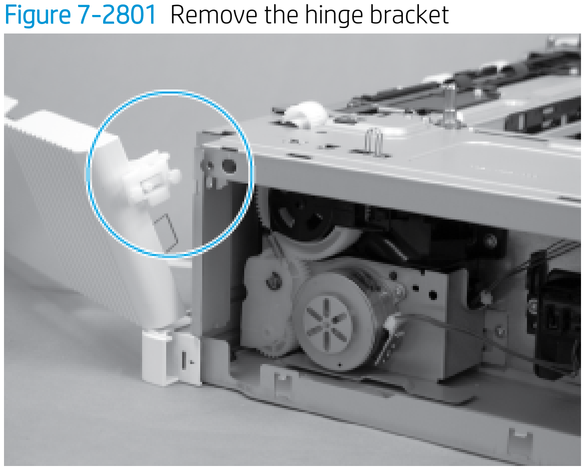


3. Remove the door-hinge bracket from the chassis.

⚠ CAUTION: The door is still attached to the accessory by the door link. Do not attempt to completely remove the door.

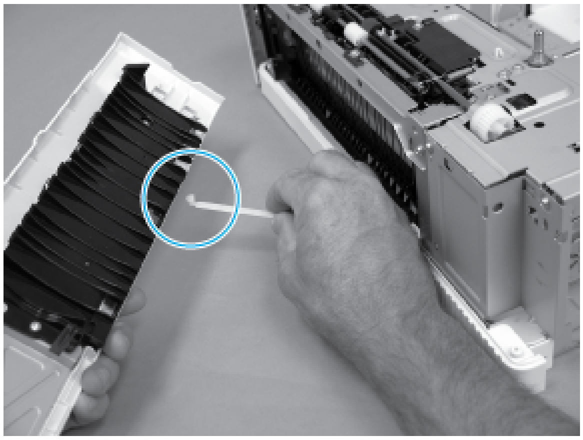
The door hinge bracket is not captive. Do not lose it when handling the door.

Figure 7-2801 Remove the hinge bracket



4. Release the door link from the slot in the door to remove the right door.

Figure 7-2802 Release the hinge bracket

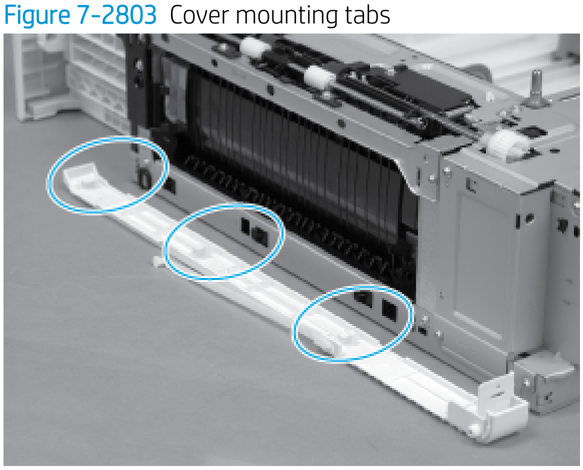


Remove the right-lower cover

Follow these steps to remove the right-lower cover.

1. Before proceeding, take note of the location of the three mounting tabs on the back side of the cover.

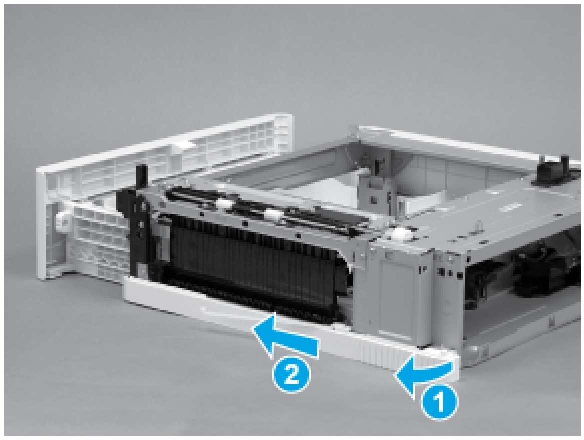
Figure 7-2803 Cover mounting tabs



2. Partially open the tray, slightly flex the end of the cover away from the accessory (callout 1), and then slide it towards the front of the accessory (callout 2) to release it.

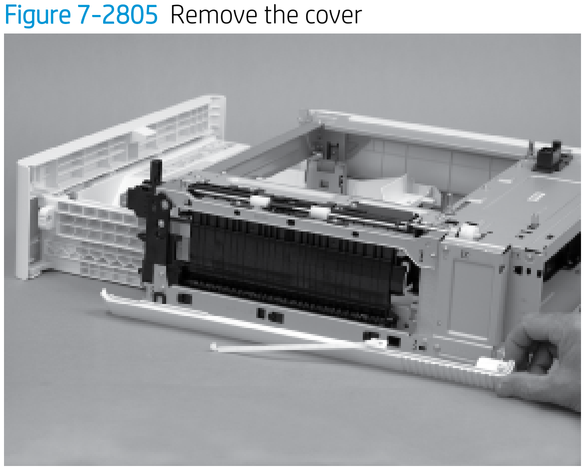
⚠ CAUTION: The three mounting tabs on the back side of the cover are easily damaged. Do not over flex the end of the cover when it is released. Push in on the middle tab to protect it when removing the cover.

Figure 7-2804 Release the cover



3. Remove the right-lower cover.

Figure 7-2805 Remove the cover

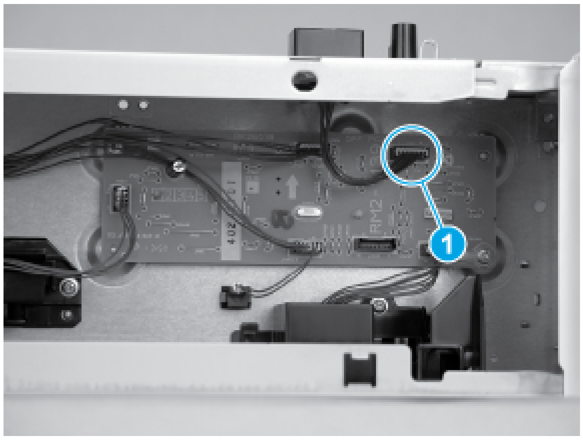


Remove the drawer connector holder

Follow these steps to remove the drawer connector holder.

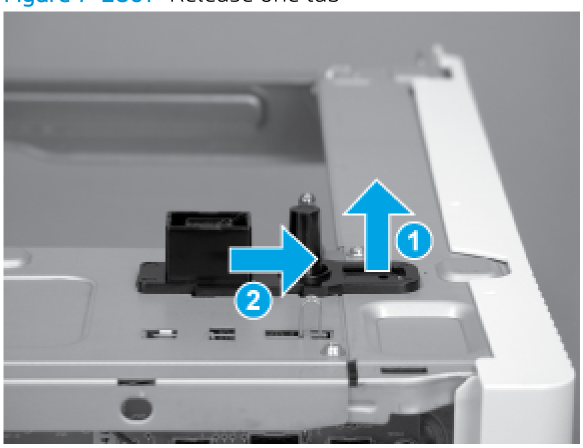
1. Disconnect one connector (callout 1; J901).

Figure 7-2806 Disconnect one connector



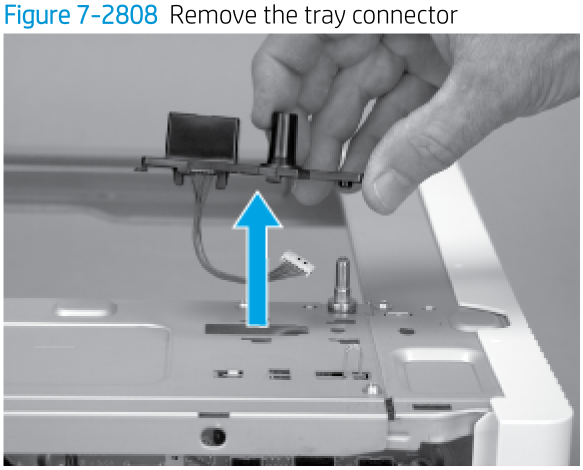
2. Release one tab (callout 1), and then slide the drawer connector holder as shown (callout 2) to release it.

Figure 7-2807 Release one tab



3. Remove the drawer connector holder.

Figure 7-2808 Remove the tray connector

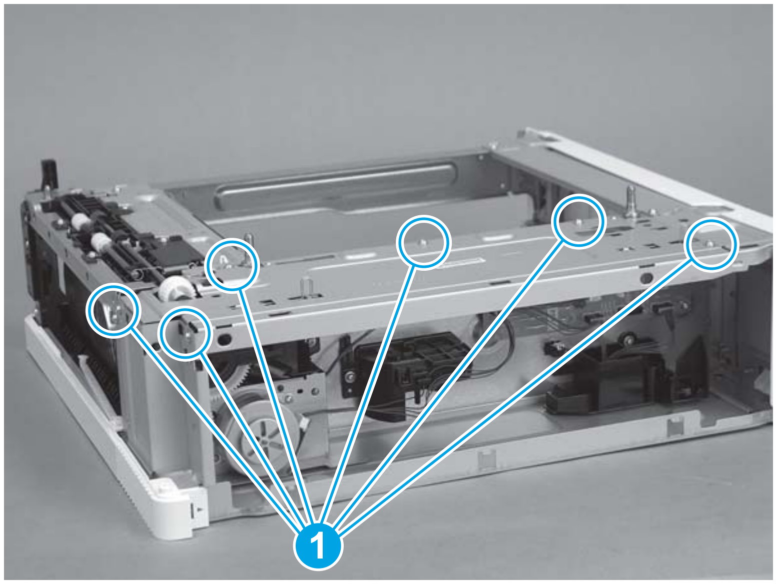


Remove the feeder drive assembly

Follow these steps to remove the feeder drive assembly.

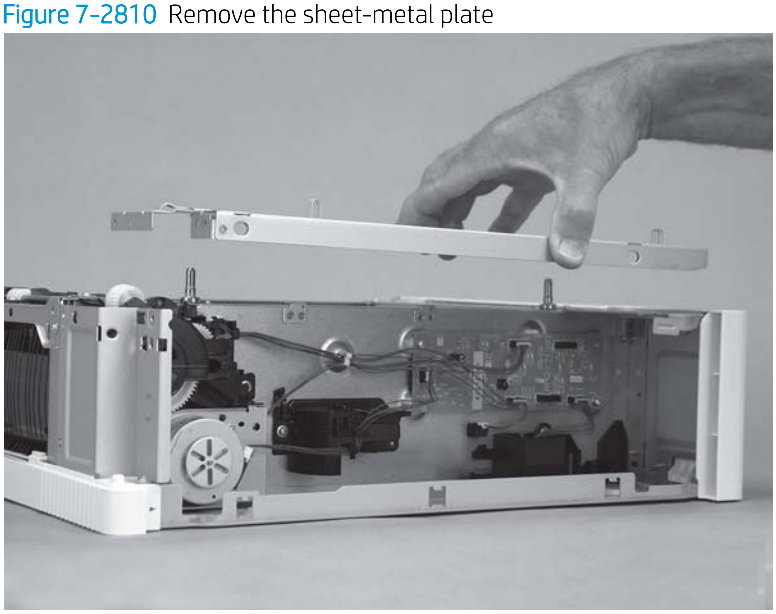
1. Remove six screws (callout 1).

Figure 7-2809 Remove six screws



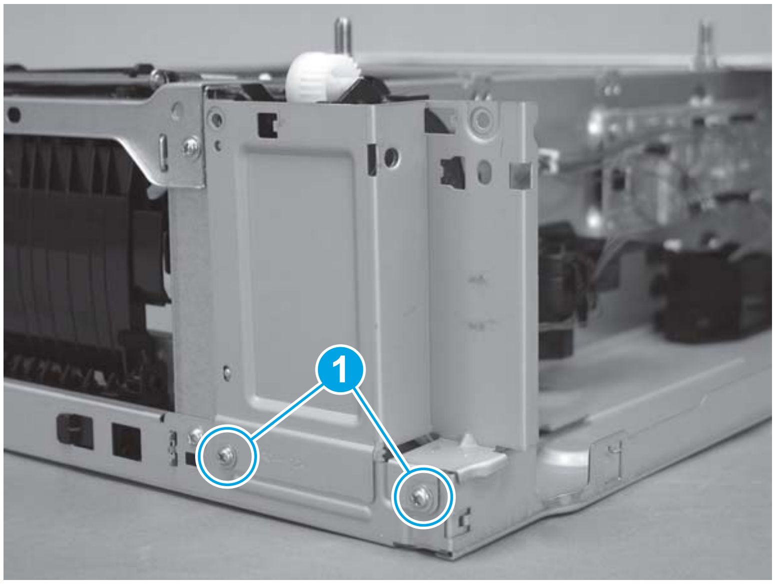
2. Remove the sheet-metal plate.

Figure 7-2810 Remove the sheet-metal plate



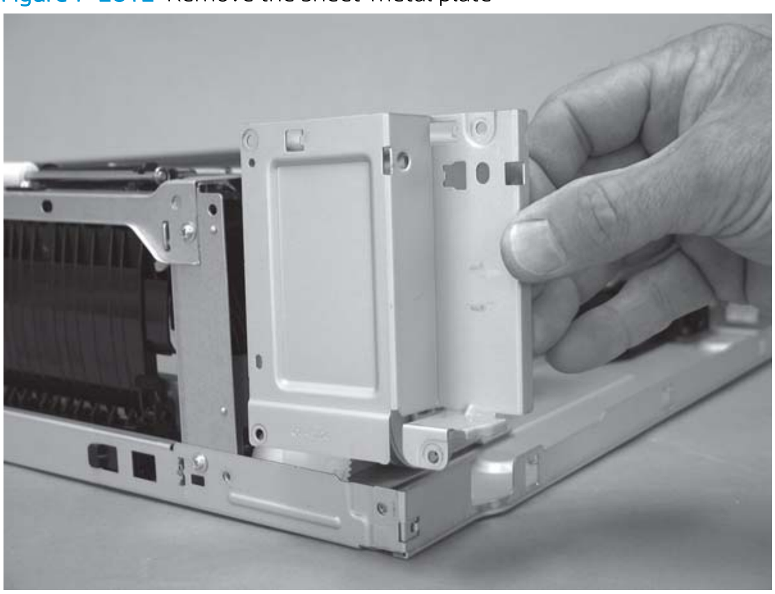
3. Remove two screws (callout 1).

Figure 7-2811 Remove two screws



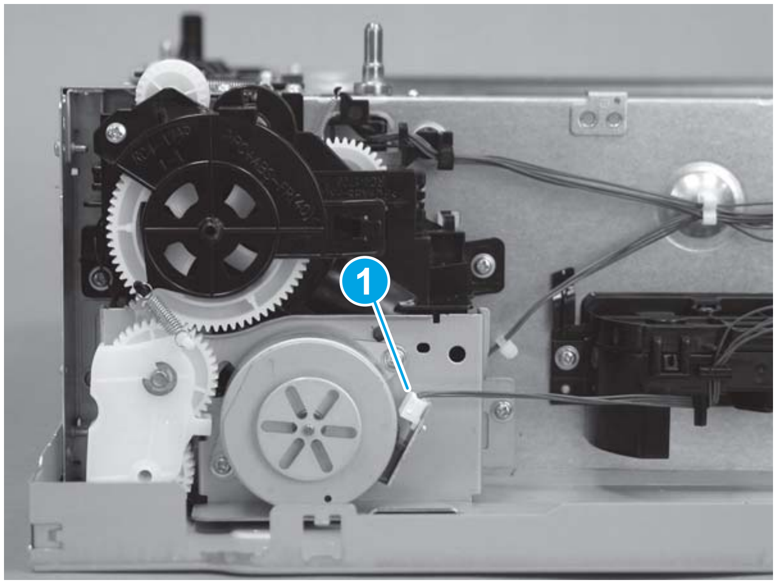
4. Remove the sheet-metal plate.

Figure 7-2812 Remove the sheet-metal plate



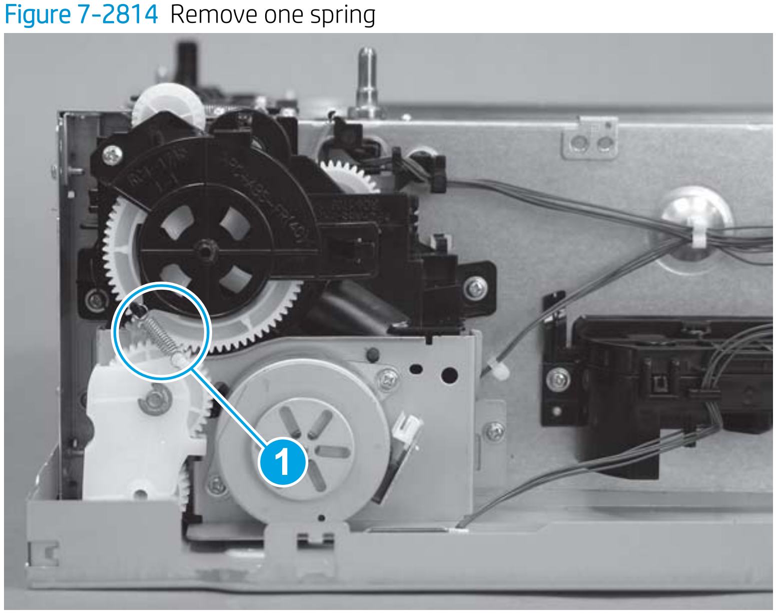
5. Disconnect one connector (callout 1).

Figure 7-2813 Disconnect one connector



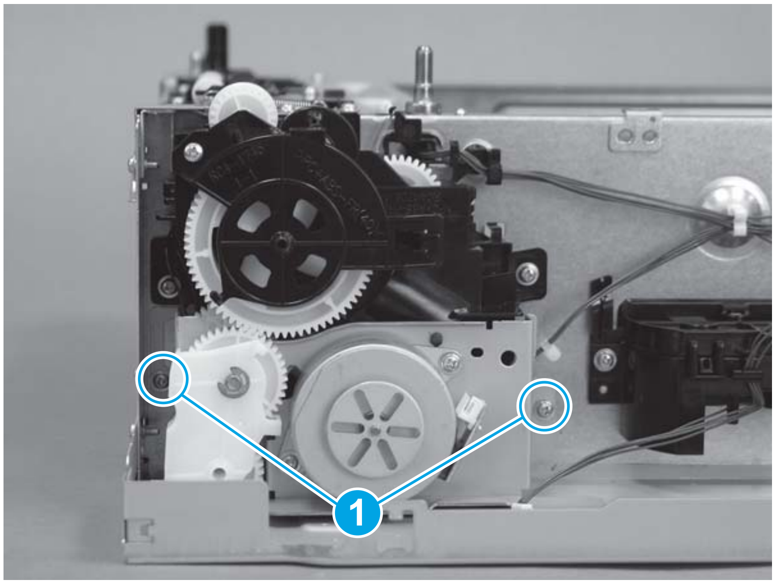
6. Remove one spring (callout 1).

Figure 7-2814 Remove one spring



7. Remove two screws (callout 1).

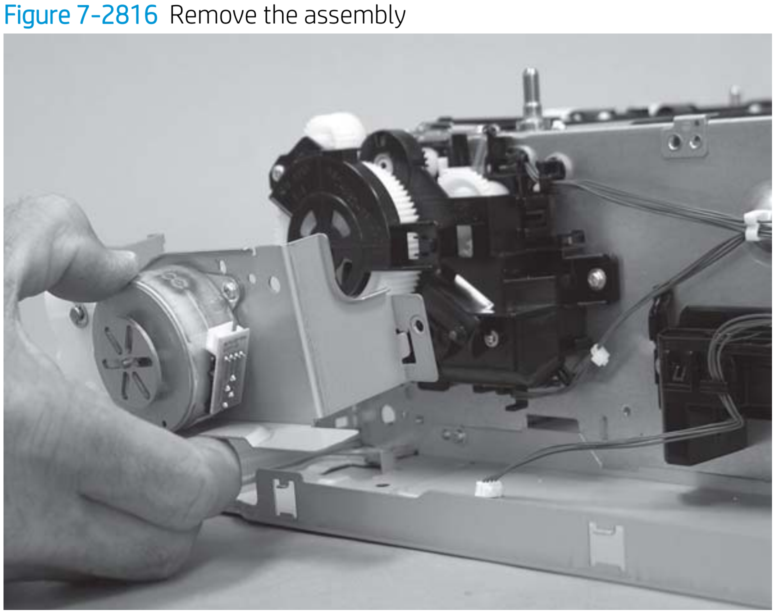
Figure 7-2815 Remove two screws



8. Remove the feeder drive assembly.

⚠ CAUTION: If the assembly is being removed to access another part, take care not to wipe any of the grease off of the gears.

Figure 7-2816 Remove the assembly

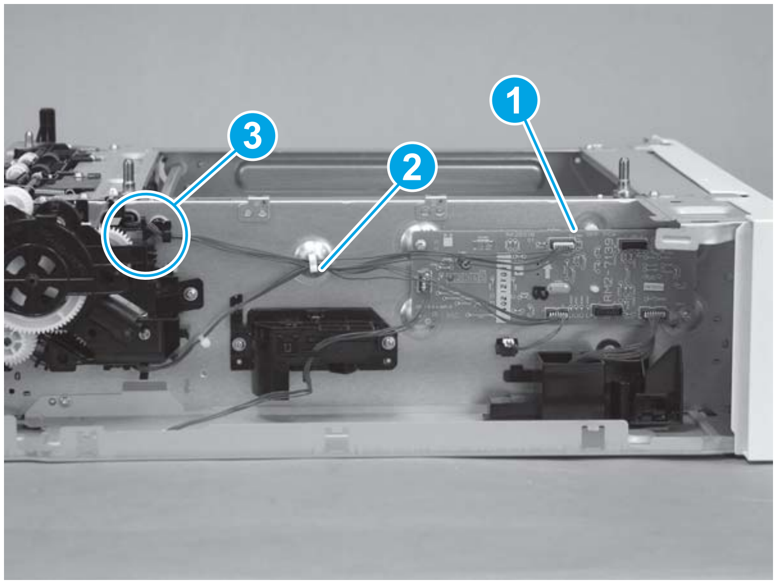


Remove the lifter drive assembly

Follow these steps to remove the lifter drive assembly.

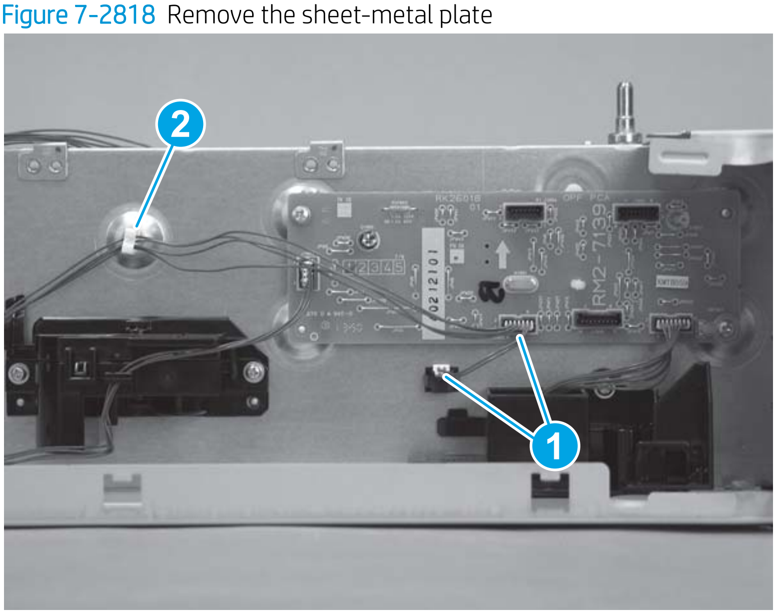
1. Disconnect one connector (callout 1; J904), and then release the wire harness from the retainer (callout 2) and the guide (callout 3).

Figure 7-2817 Disconnect one connector



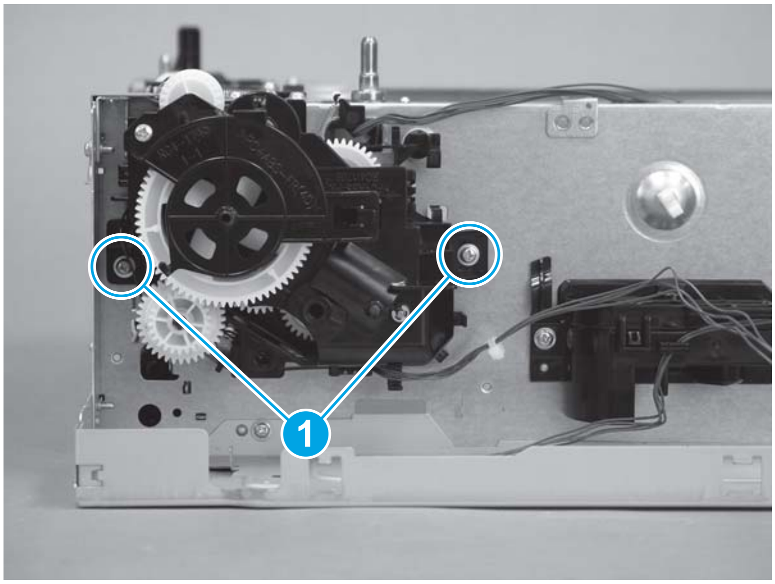
2. Disconnect two connectors (callout 1; J902 and the switch button), and then release the wire harness from the retainer (callout 2).

Figure 7-2818 Remove the sheet-metal plate



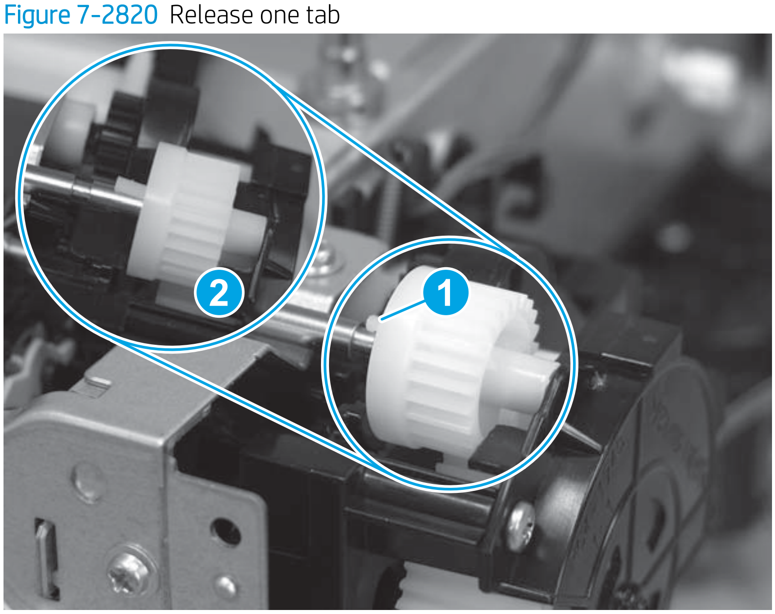
3. Remove two screws (callout 1).

Figure 7-2819 Remove two screws



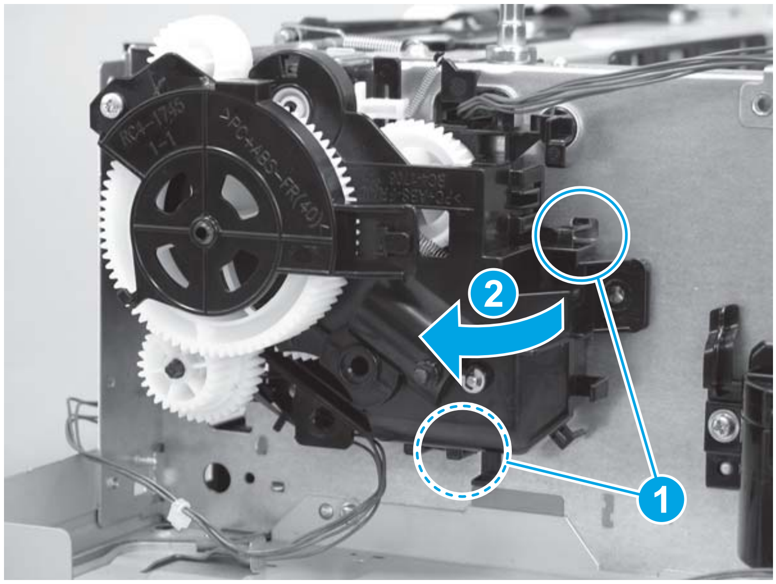
4. Release one tab (callout 1), and then slightly pull the lifter drive assembly away from the chassis to release one gear (callout 2).

Figure 7-2820 Release one tab



5. Release two tabs (callout 1), and then rotate the assembly—as shown—away from the chassis (callout 2) to release it.

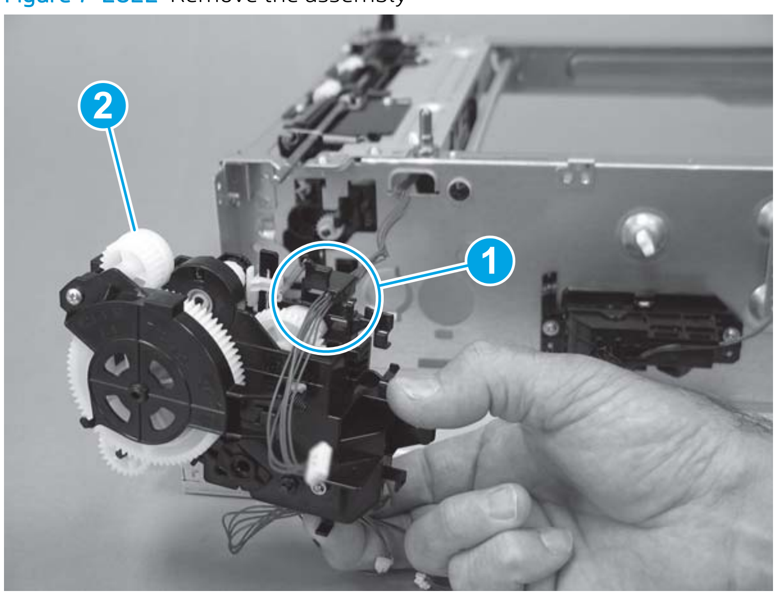
Figure 7-2821 Release two tabs



6. To remove the lifter drive assembly, feed the wire harness thorough the opening (callout 1) in the assembly.

Reinstallation tip: If a replacement assembly is installed, transfer the gear (callout 2) to the replacement assembly.

Figure 7-2822 Remove the assembly



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Remove and replacement: Accessories

Learn how to remove and replace the accessories.

Removal and replacement: Fixed tray guide kit

Learn about removing and replacing the fixed tray guide kit.

NOTE: The procedure in this section shows Tray 2 in the figures. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5.

Before performing service

Turn the printer power off

- Disconnect the power cable.

WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-109 Part information

Part number	Part description
5851-7708	Fixed tray guide kit with instruction guide NOTE: The kit includes four length guide locks, four width guide locks, and eight screws. Only one kit is required per printer.

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Print any pages necessary to make sure the printer is functioning correctly.

Remove Tray 2

Learn about removing Tray 2.

NOTE: A SFP printer is shown in this section. However, the procedure is correct for all printer models.

The figures in this section show Tray 2. However, this procedure is also correct for Tray 3, Tray 4, or Tray 5. Always carefully read the instructions that accompany the figures.

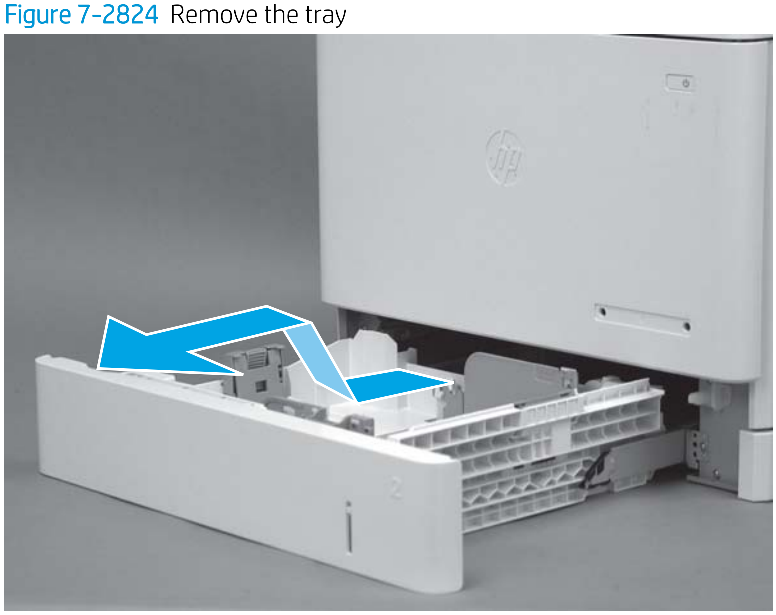
1. Pull the tray out until it stops.

Figure 7-2823 Pull the tray out

2. Lift the front of the tray, and then pull it out of the printer to remove it.

> NOTE: **For a replacement tray:** If the tray has Fixed Tray Guides installed and are still required, move hardware to new tray. If necessary, order new kit: 3GY25–67901 Kit - Fixed Tray Guide. Only one kit required per engine.

Figure 7-2824 Remove the tray



Install the fixed tray guide

Learn about installing the fixed tray guide.

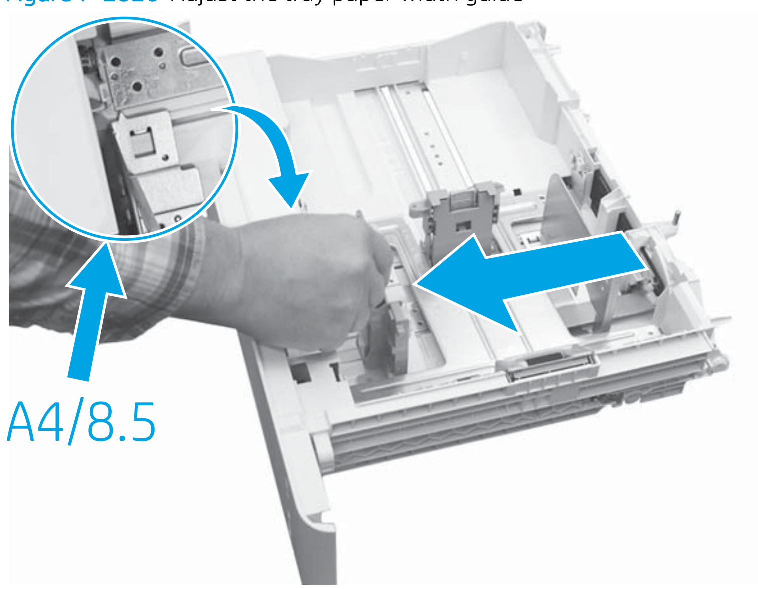
1. Identify the kit components.

- **Callout 1**: Width guide lock
- **Callout 2**: Length guide lock
- **Callout 3**: Screws (self tapping)

Figure 7-2825 Identify kit components

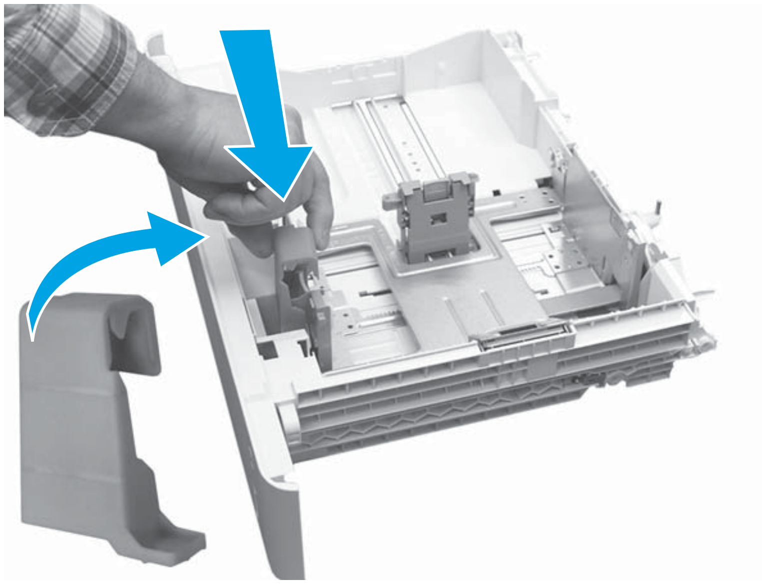
2. Adjust the sliding tray paper width guide to the **A4/8.5** setting.

Figure 7-2826 Adjust the tray paper width guide



3. Install the width guide lock over the width guide in the tray.

Figure 7-2827 Install the width guide lock

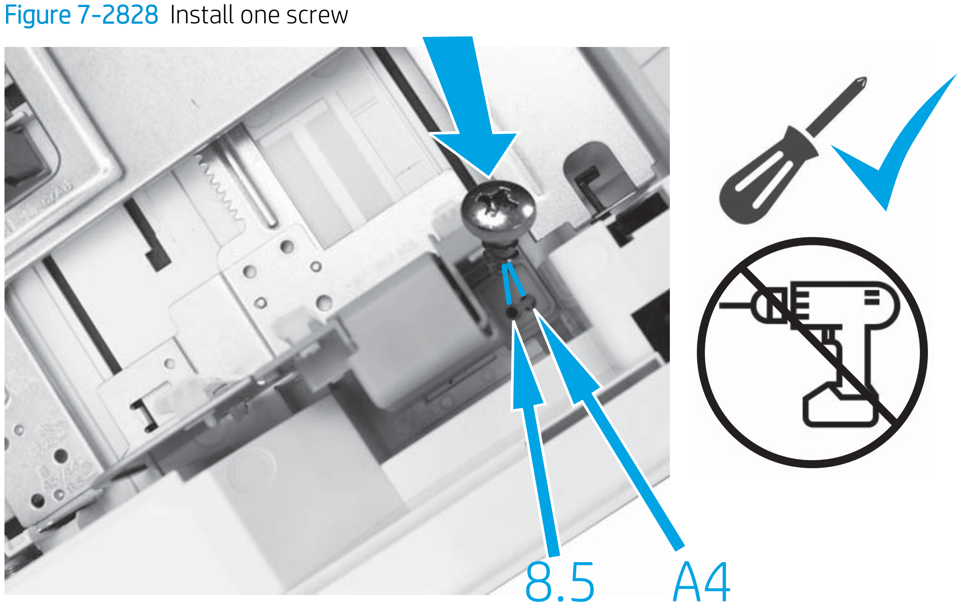


4. Install one screw to secure the lock in place.

⚠ CAUTION: Do not use a power screwdriver to install the screw.

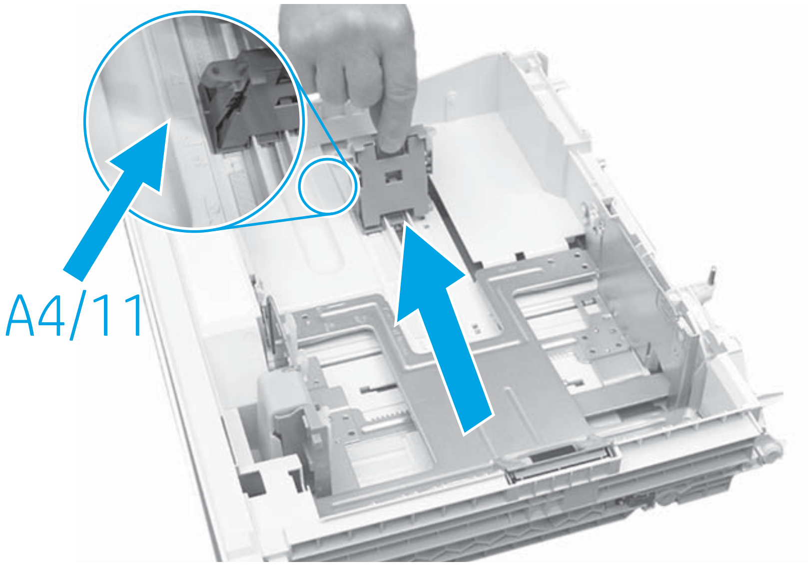
NOTE: Verify that the tray paper width guide is set to the **A4/8.5** setting.

Figure 7-2828 Install one screw



5. Adjust the sliding tray paper length guide to the **A4/11** setting.

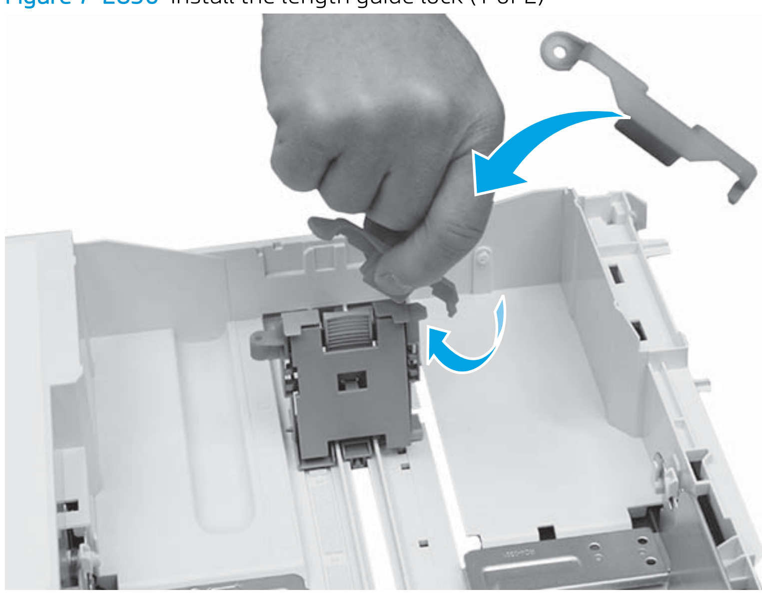
Figure 7-2829 Adjust the tray paper length guide



6. To install the length guide lock on the length guide in the tray, do the following:

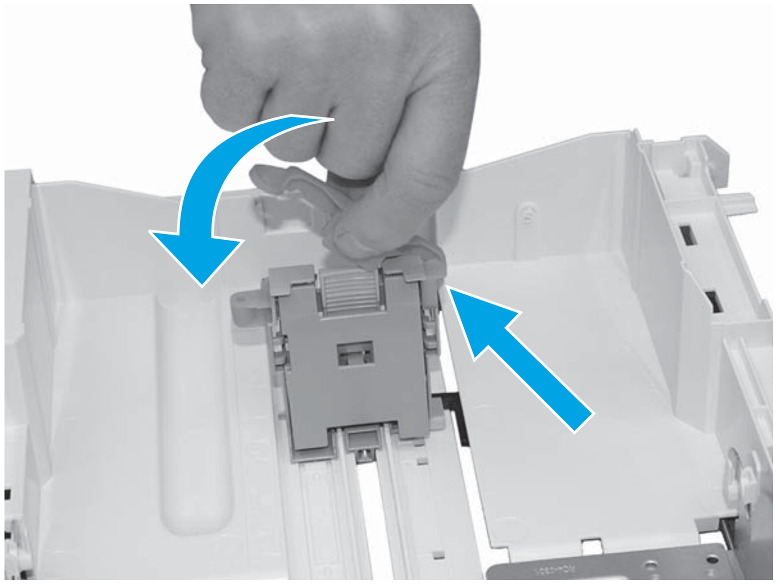
   1. Position the hooked end of the lock under the rear edge of the length guide (as shown).

      Figure 7-2830 Install the length guide lock (1 of 2)

2. Rotate the lock down and onto the length guide.

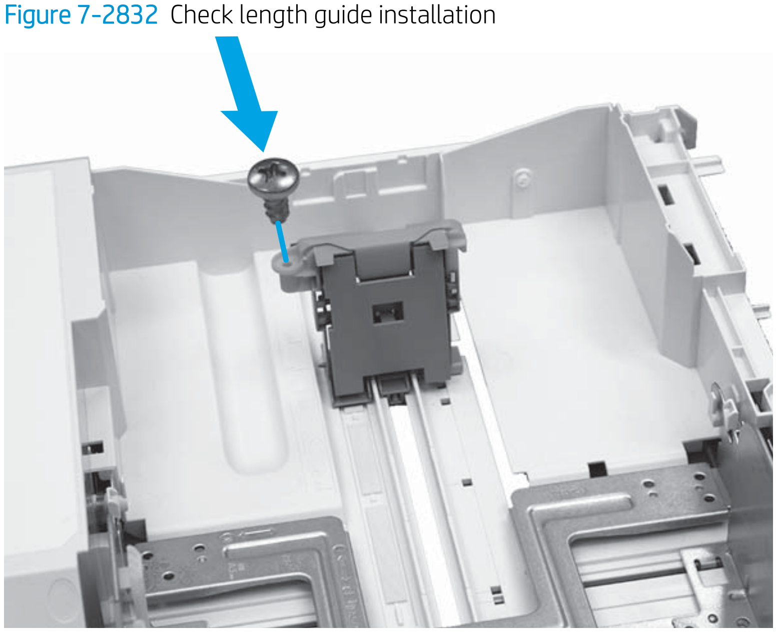
Figure 7-2831 Install the length guide lock (2 of 2)



7. Verify that the lock is correctly installed on the length guide. The lock mounting screw hole must align with the hole in the guide.

IMPORTANT: If the hole in the lock and the guide are not aligned, remove the lock and reinstall it.

Figure 7-2832 Check length guide installation

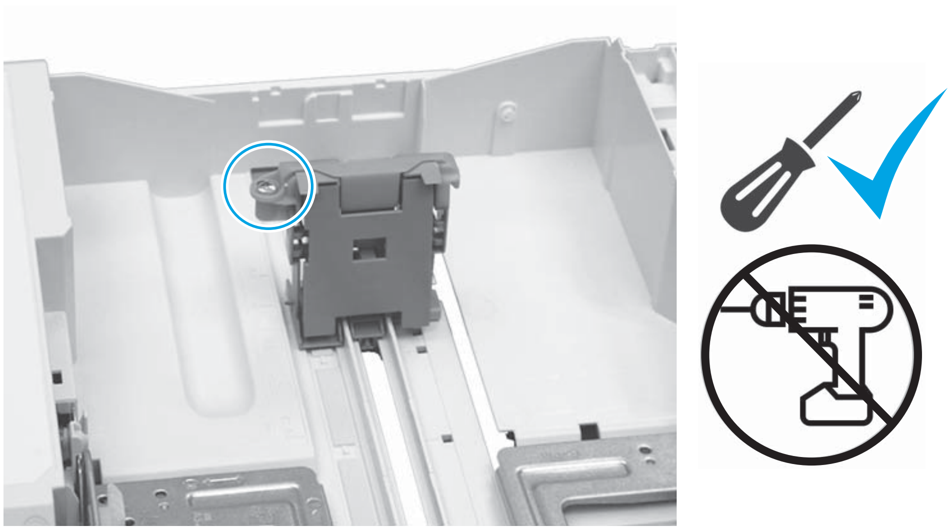


8. Install one screw to secure the lock in place.

CAUTION: Do not use a power screwdriver to install the screw.

NOTE: Reinstall the tray.

Figure 7-2833 Install one screw



Removal and replacement: Trusted platform module (M552/M553)

Learn about removing and replacing the trusted platform module (TPM).

IMPORTANT: M554 and M555: The TPM is a factory installed component and not a service part. For problems with the TPM, see the printer control-panel messages document (CPMD).

Click here to access the current CPMD for this printer.

Before performing service

Turn the printer power off

- Disconnect the power cable.

WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-110 Part information

Part number	Part description
F5S62-61001	Trusted platform module (TPM) with instruction guide

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

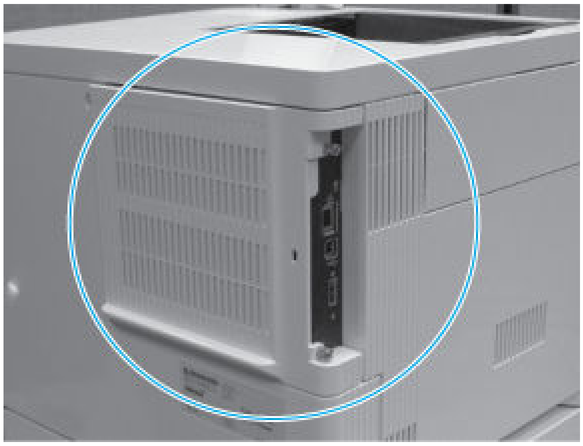
Print any pages necessary to make sure the printer is functioning correctly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

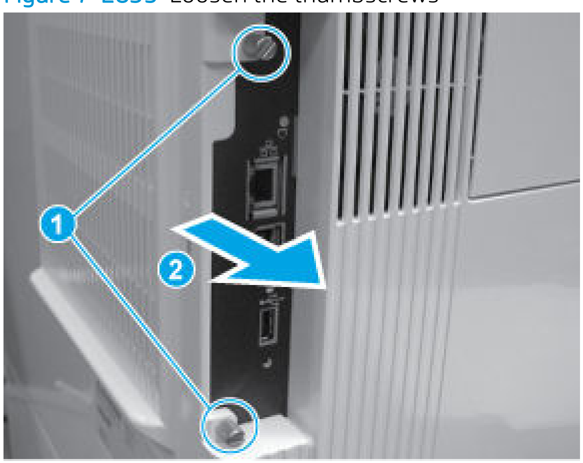
Figure 7-2834 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-2835 Loosen the thumbscrews



Remove the hard-disk drive (HDD)

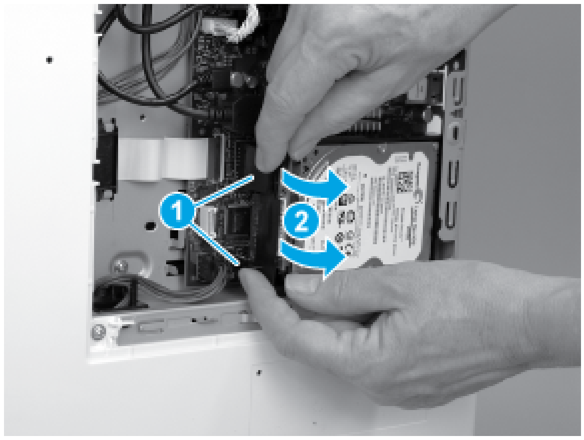
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-2836 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-2837 Remove the HDD

Remove the trusted platform module (TPM)

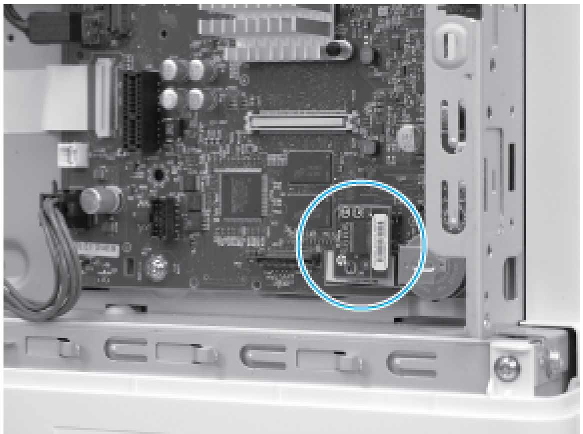
Follow these steps to remove the trusted platform module (TPM).

CAUTION: ESD sensitive part.

NOTE: Removing the TPM is only necessary for formatter or TPM accessory replacement.

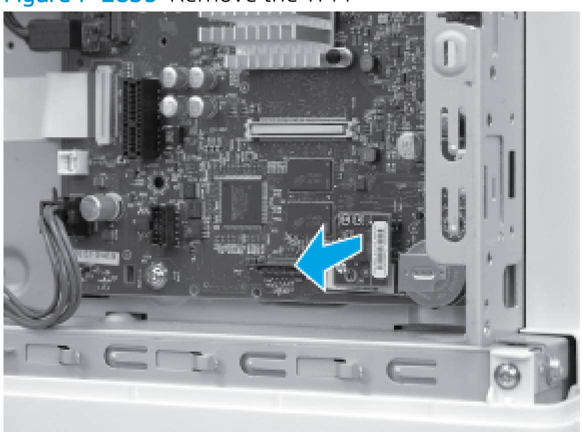
1. Locate the TPM component on the formatter.

Figure 7-2838 Locate the TPM



2. Pull the TPM straight off of the formatter to remove it.

Figure 7-2839 Remove the TPM



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Install the trusted platform module (TPM)

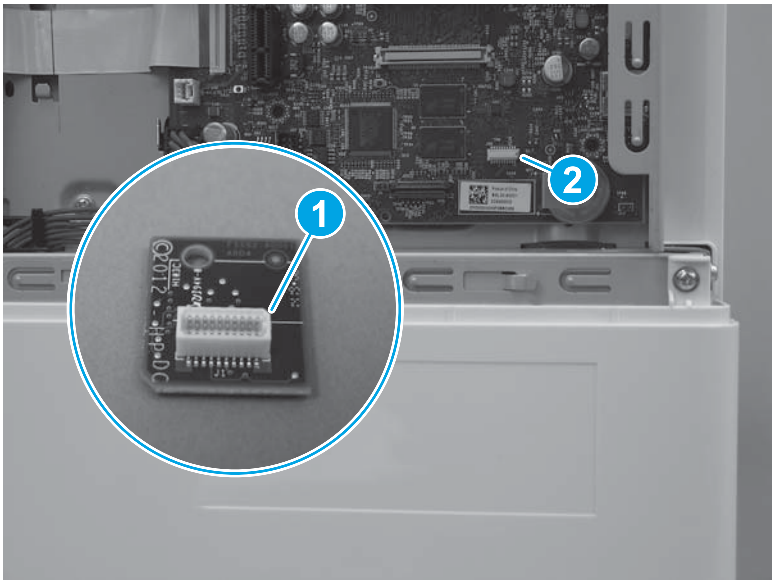
Follow these steps to install the trusted platform module (TPM).

CAUTION: ESD sensitive part.

1. Align the connector on the TPM (callout 1) with the connector on the formatter (callout 2), and then push the TPM onto the formatter to install it.

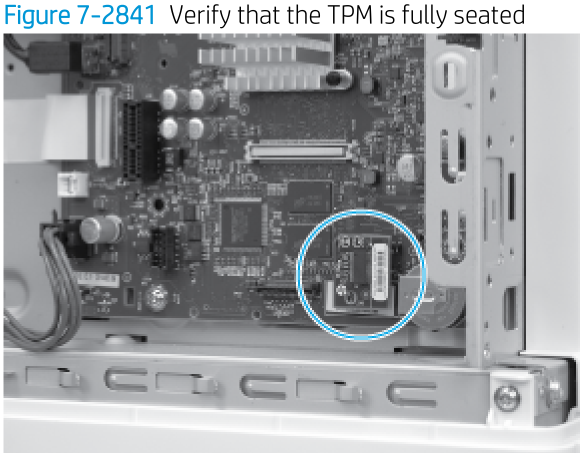
NOTE: The TPM can only be install in one direction on the formatter.

Figure 7-2840 Install the TPM



2. Verify that the TPM is fully seated in the connector.

Figure 7-2841 Verify that the TPM is fully seated



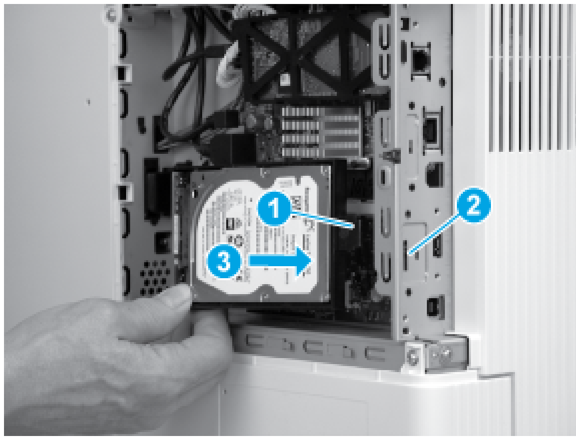
Install the HDD

Follow these steps to install the HD).

An MFP printer is shown in this section. However, the procedure is correct for all printer models.

1. Align the end of the bracket (callout 1) with the slot in the chassis (callout 2), and then slide the HDD into the printer (callout 3) to engage the bracket with the chassis.

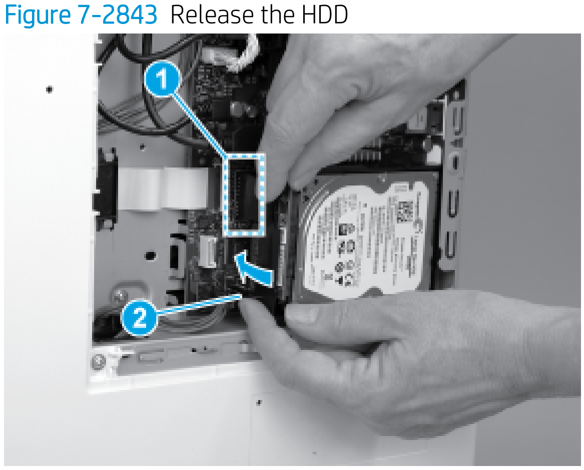
Figure 7-2842 Install the holder



2. Hold the HDD connector latch (callout 1) in the released position, and then rotate the HDD down and into the connector on the formatter to install it.

NOTE: Make sure that the tab (callout 2) snaps into place, and that the HDD is securely installed.

Figure 7-2843 Release the HDD



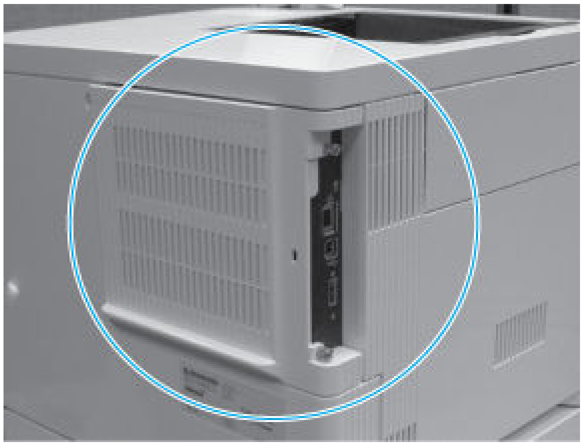
Install the formatter cover

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

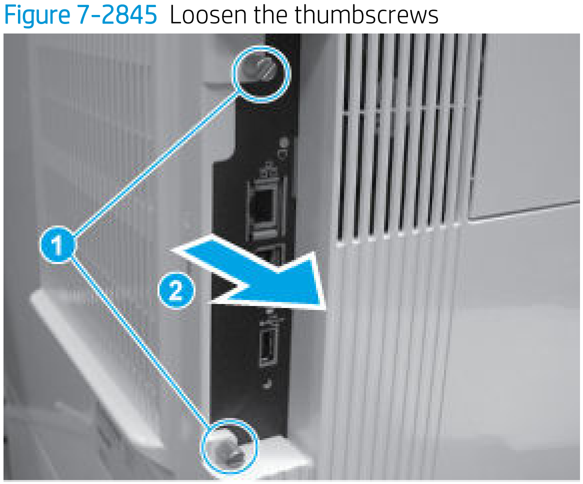
   Figure 7-2844 Locate the formatter cover

2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

   TIP: If needed, use the edge of a coin to turn the thumbscrews.

   Figure 7-2845 Loosen the thumbscrews

Removal and replacement: Trusted platform module (M577/E57540)

Learn about removing and replacing the trusted platform module (TPM).

IMPORTANT: M578: The TPM is a factory installed component and not a service part. For problems with the TPM, see the printer control-panel messages document (CPMD).

Click here to access the current CPMD for this printer.

Before performing service

Turn the printer power off

- Disconnect the power cable.

WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-111 Part information

Part number	Part description
F5S62-61001	Trusted platform module (TPM) with instruction guide

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

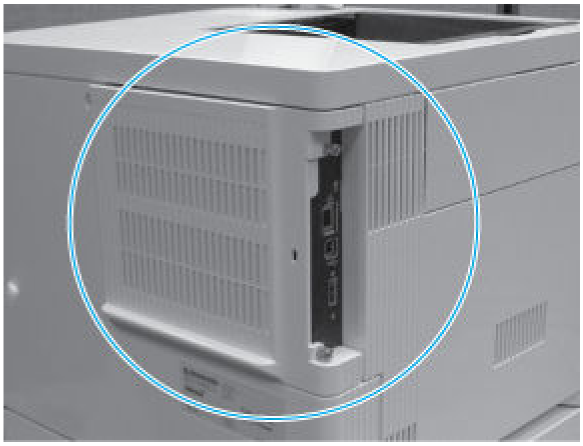
Print any pages necessary to make sure the printer is functioning correctly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

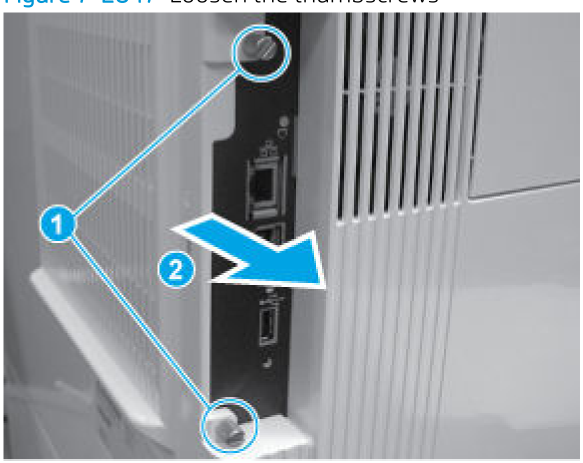
Figure 7-2846 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-2847 Loosen the thumbscrews



Remove the hard-disk drive (HDD)

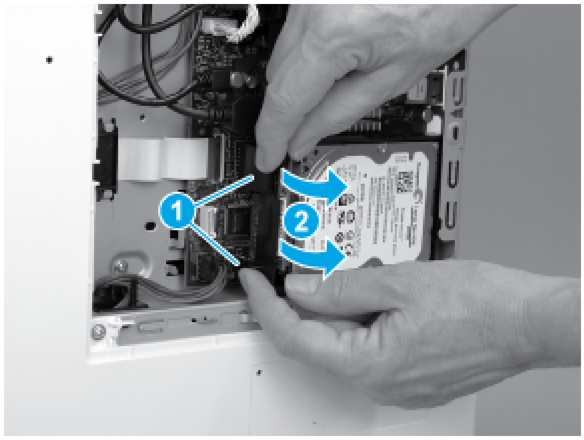
Follow these steps to remove the hard-disk drive (HDD).

NOTE: This procedure is for HDD (or optionally installed HDD) models only.

NOTE: If a HDD is not installed, skip this step.

1. Release two tabs (callout 1). Hold the tabs in the released position, and then rotate the hard disk drive (HDD) up (callout 2) to release the connector from the formatter

Figure 7-2848 Release the HDD



2. Slide the HDD away from the printer to remove it.

Figure 7-2849 Remove the HDD

Remove the trusted platform module (TPM)

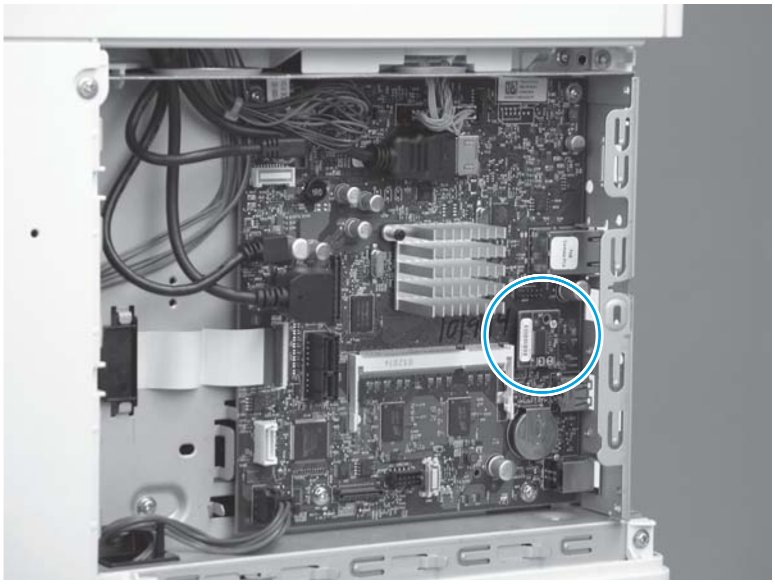
Follow these steps to remove the trusted platform module (TPM).

CAUTION: ESD sensitive part.

NOTE: Removing the TPM is only necessary for formatter or TPM accessory replacement.

1. Locate the TPM component on the formatter.

Figure 7-2850 Locate the TPM



2. Pull the TPM straight off of the formatter to remove it.

Figure 7-2851 Remove the TPM

Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Install the trusted platform module (TPM)

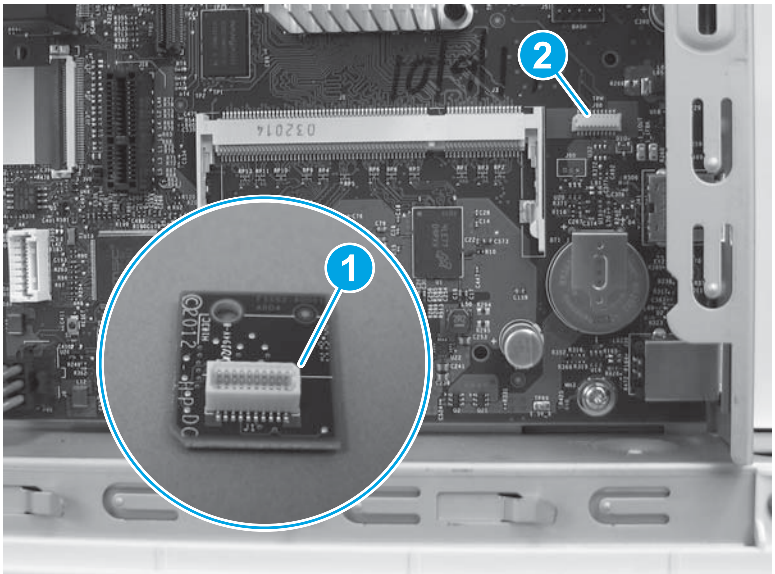
Follow these steps to install the trusted platform module (TPM).

CAUTION: ESD ESD sensitive part.

1. Align the connector on the TPM (callout 1) with the connector on the formatter (callout 2), and then push the TPM onto the formatter to install it.

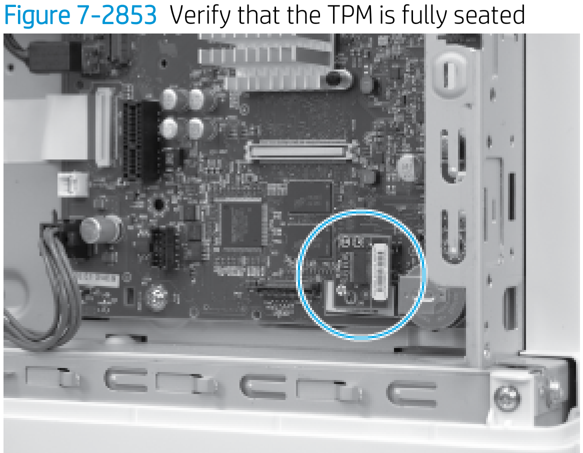
NOTE: The TPM can only be install in one direction on the formatter.

Figure 7-2852 Install the TPM



2. Verify that the TPM is fully seated in the connector.

Figure 7-2853 Verify that the TPM is fully seated



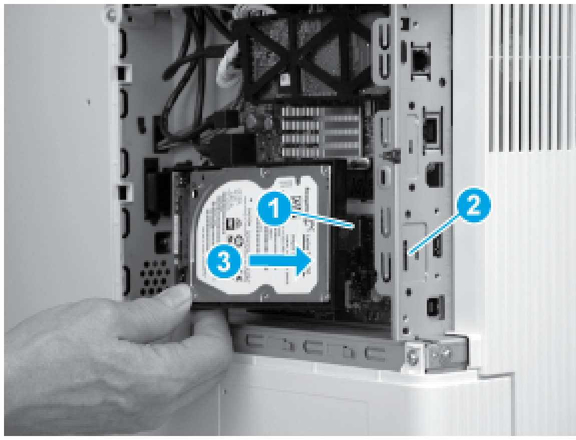
Install the HDD

Follow these steps to install the HD).

An MFP printer is shown in this section. However, the procedure is correct for all printer models.

1. Align the end of the bracket (callout 1) with the slot in the chassis (callout 2), and then slide the HDD into the printer (callout 3) to engage the bracket with the chassis.

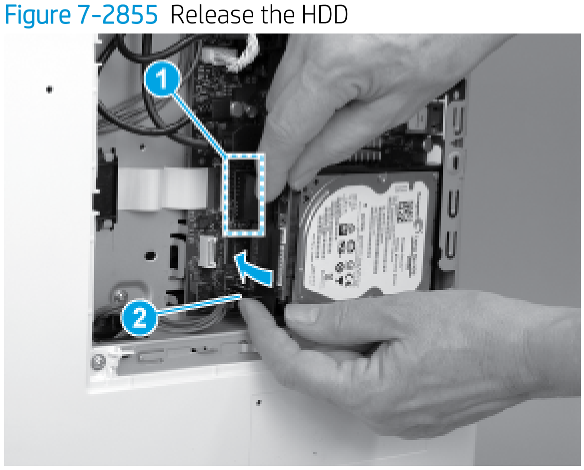
Figure 7-2854 Install the holder



2. Hold the HDD connector latch (callout 1) in the released position, and then rotate the HDD down and into the connector on the formatter to install it.

> NOTE: Make sure that the tab (callout 2) snaps into place, and that the HDD is securely installed.

Figure 7-2855 Release the HDD



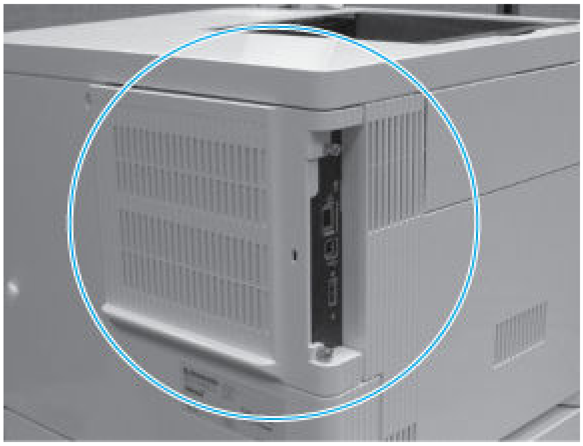
Install the formatter cover

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

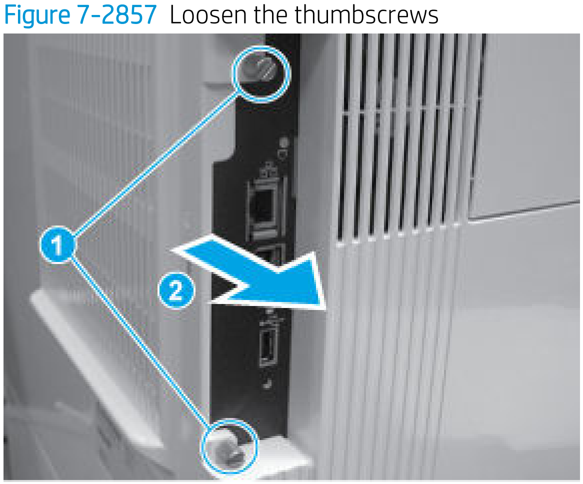
Figure 7-2856 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-2857 Loosen the thumbscrews



Removal and replacement: Internal USB ports (M552/M553/M554/M555/E55040)

Learn about removing and replacing the internal USB ports.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-112 Part information

Part number	Part description
B5L28-67902	Internal USB ports

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

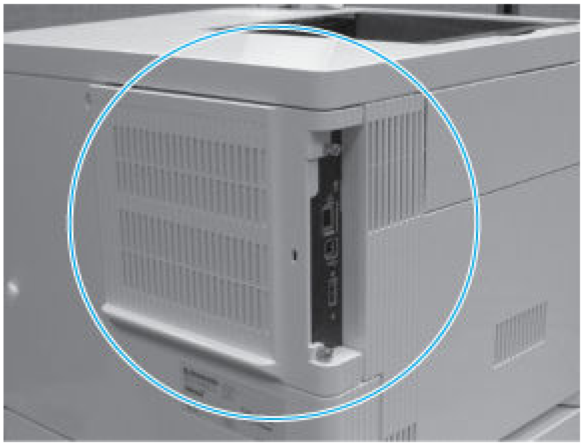
Print any pages necessary to make sure the printer is functioning correctly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

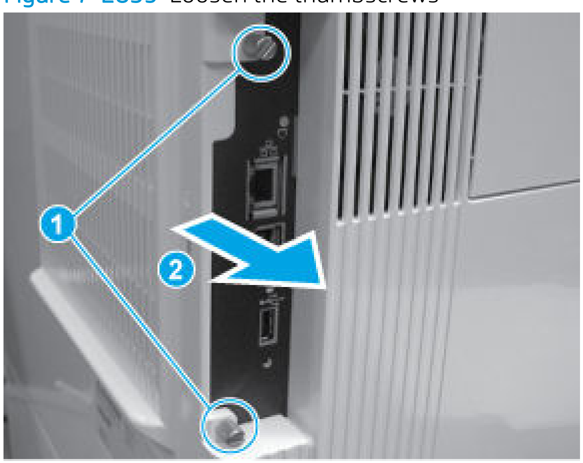
Figure 7-2858 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-2859 Loosen the thumbscrews



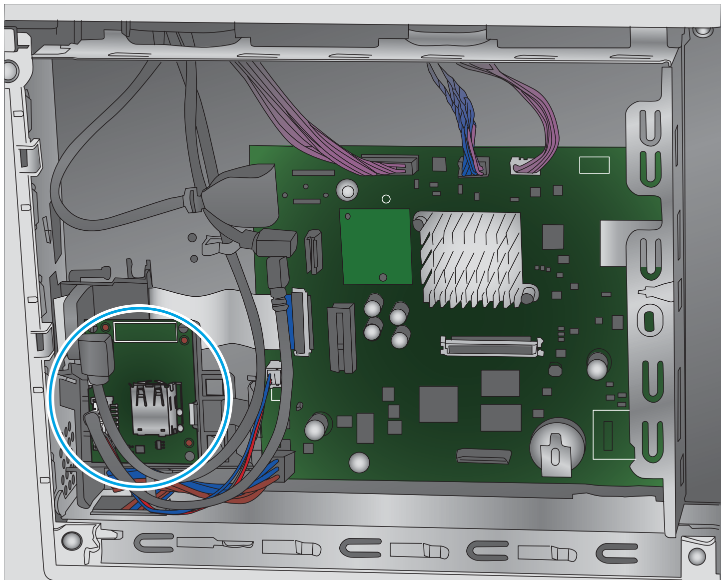
Remove the trusted platform module (TPM)

Follow these steps to remove the trusted platform module (TPM).

CAUTION: ESD sensitive part.

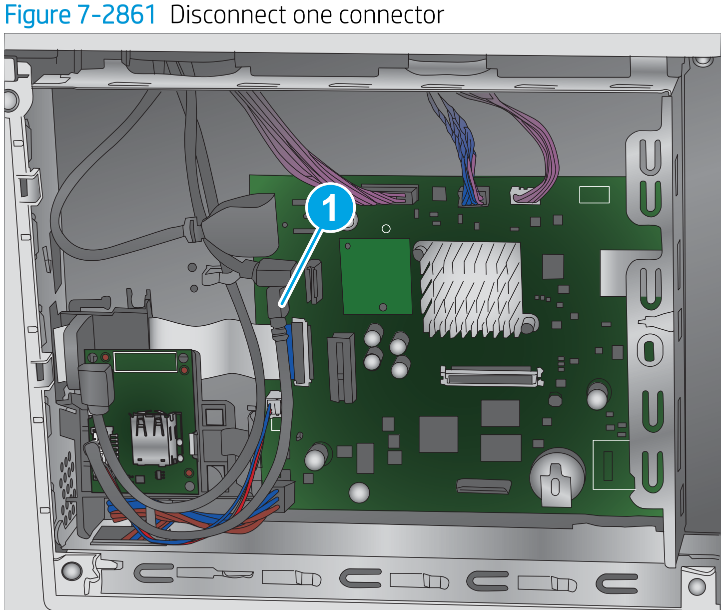
1. Locate the internal USB ports module on the formatter.

Figure 7-2860 Locate the USB ports module



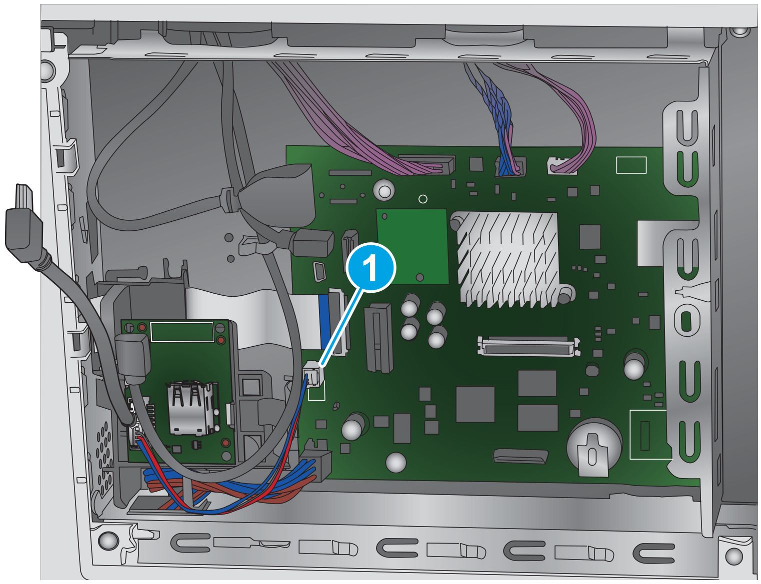
2. Disconnect one connector (callout 1).

Figure 7-2861 Disconnect one connector



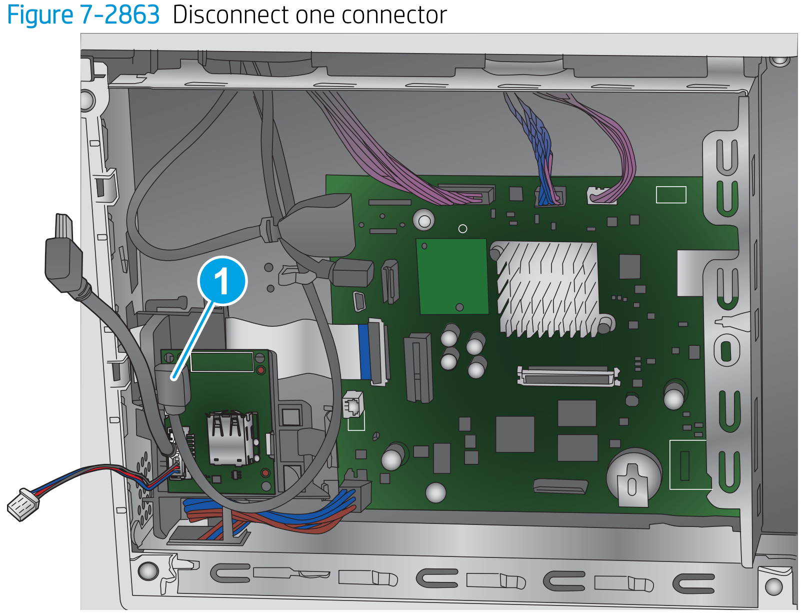
3. Disconnect one connector (callout 1).

Figure 7-2862 Disconnect one connector



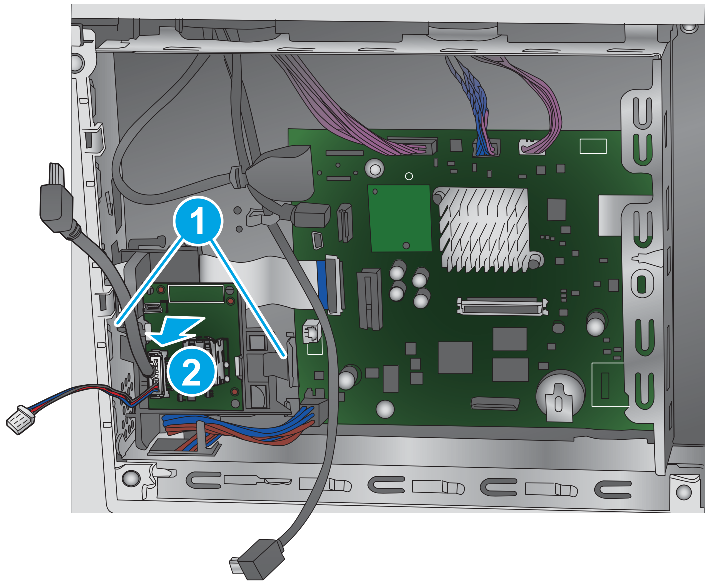
4. Disconnect one connector (callout 1).

Figure 7-2863 Disconnect one connector



5. Release two tabs (callout 1), and then remove the internal USB ports module (callout 2).

Figure 7-2864 Remove the module



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

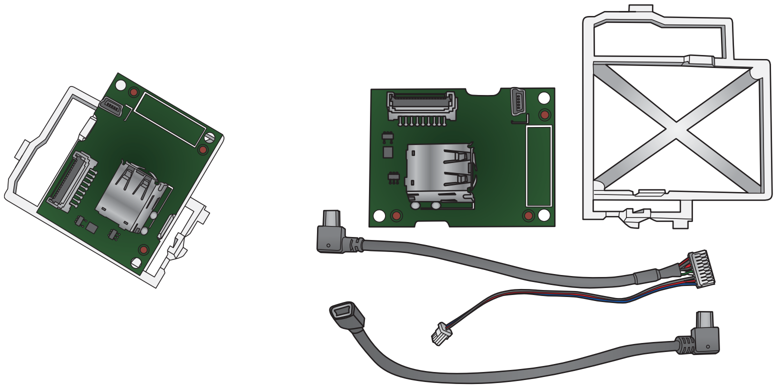
Install the internal USB ports module

Follow these steps to install the internal USB ports module.

⚠ CAUTION: ESD sensitive part.

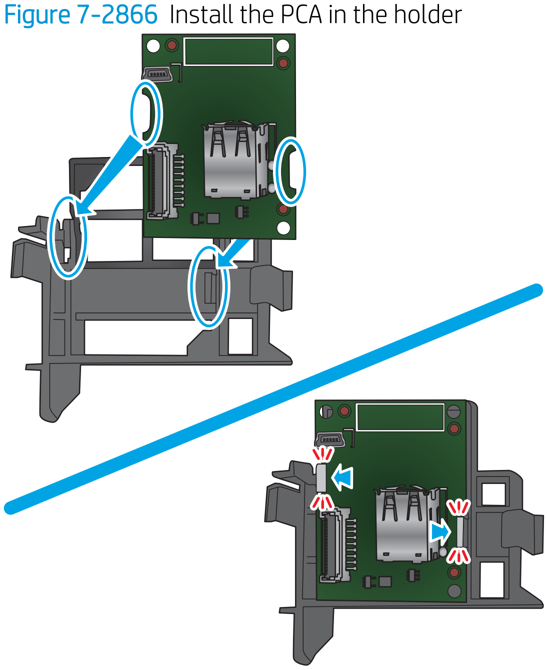
1. Use the figure below to identify the correct internal USB ports components for the SFP model.

Figure 7-2865 Identify the USB ports components



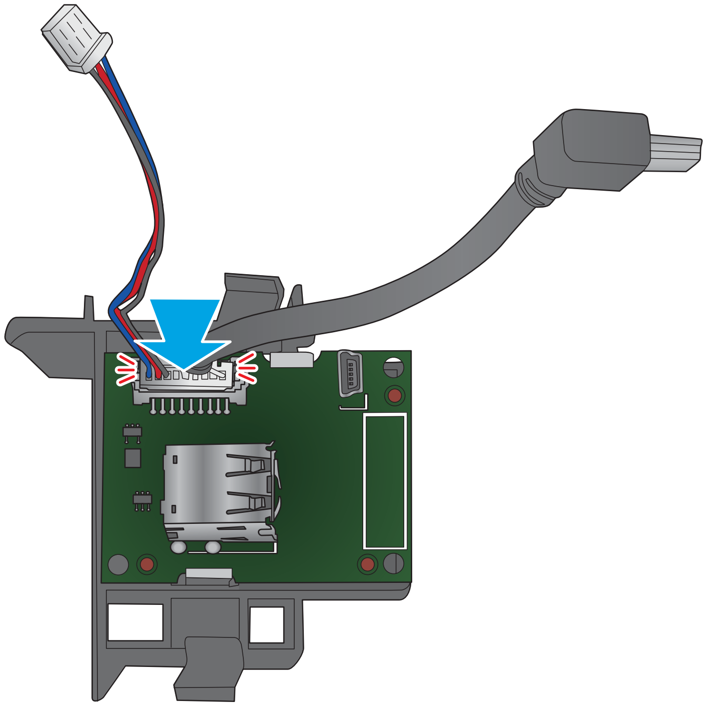
2. Position the notches on the internal USB ports PCA over the clips on the PCA holder and press down to attach the PCA to the holder. Make sure that the clips snap into place.

Figure 7-2866 Install the PCA in the holder



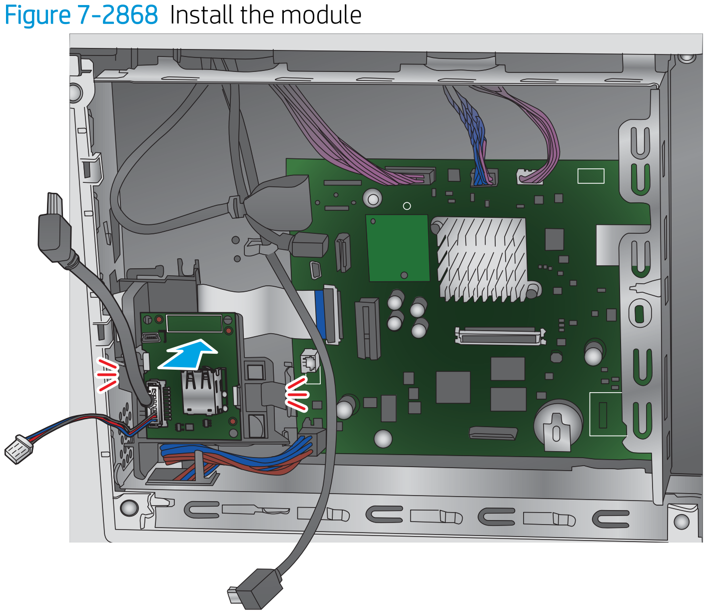
3. Connect the cable harness to the PCA.

Figure 7-2867 Connect the cable harness



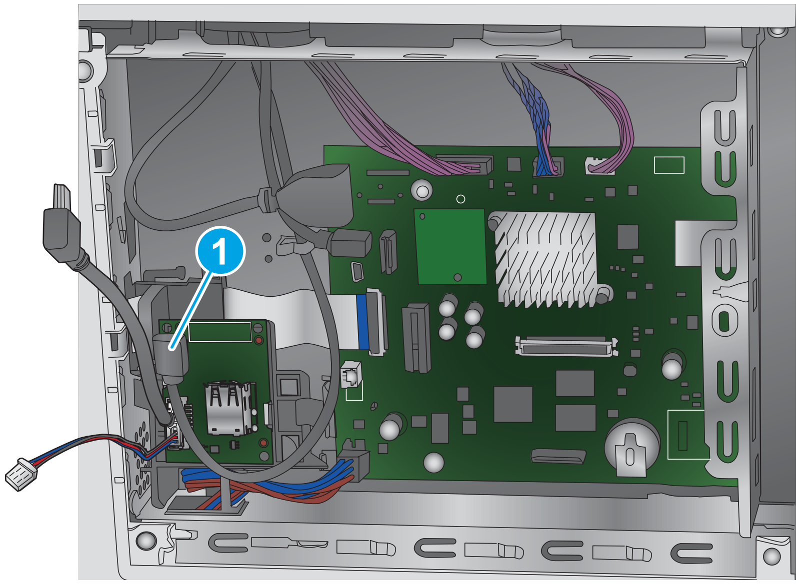
4. Press the internal USB ports module toward the formatter case until the clips snap into place.

Figure 7-2868 Install the module



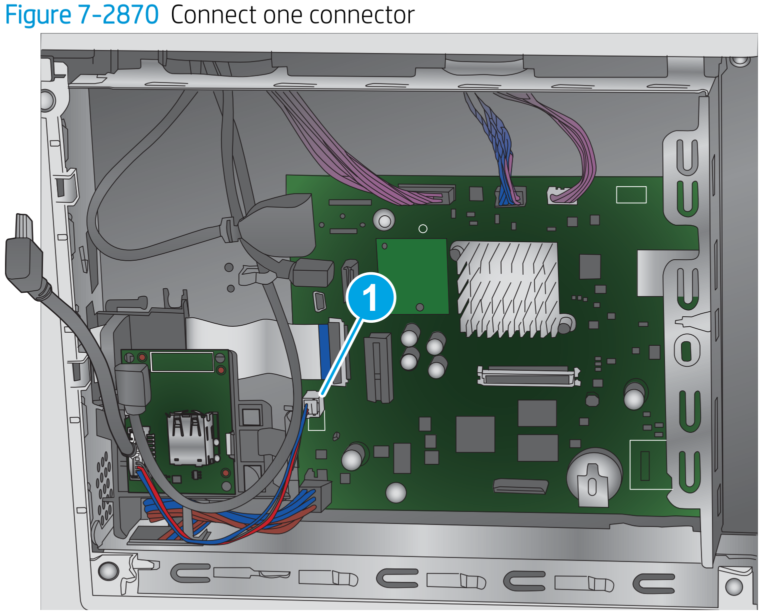
5. Connect one connector (callout 1).

Figure 7-2869 Connect one connector



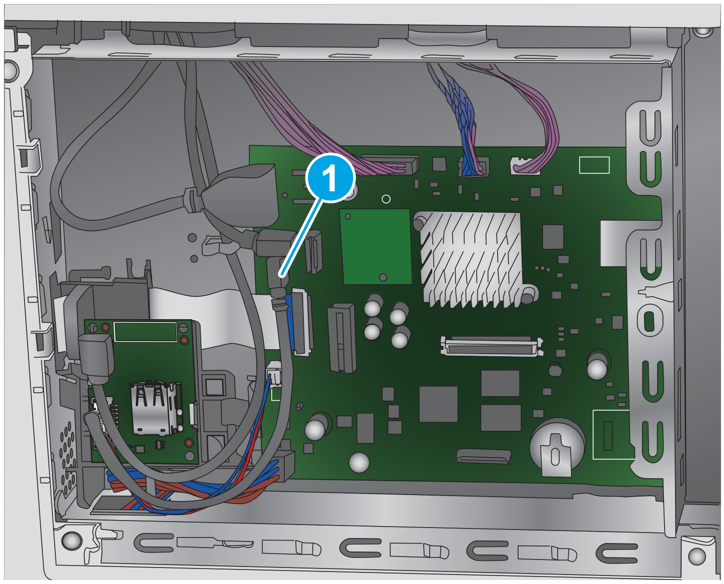
6. Connect one connector (callout 1).

Figure 7-2870 Connect one connector



7. Connect one connector (callout 1).

Figure 7-2871 Connect one connector



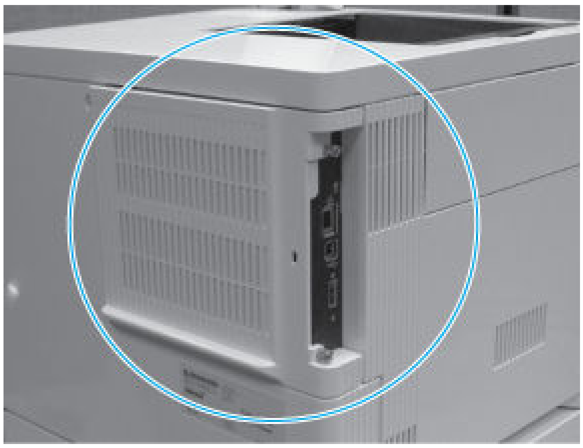
Install the formatter cover

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

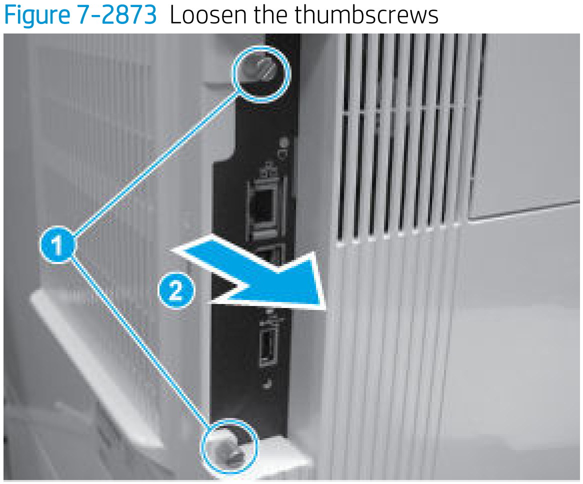
Figure 7-2872 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-2873 Loosen the thumbscrews



Removal and replacement: Internal USB ports (M577/M578/E57540)

Learn about removing and replacing the internal USB ports.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-113 Part information

Part number	Part description
B5L28-67902	Internal USB ports

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

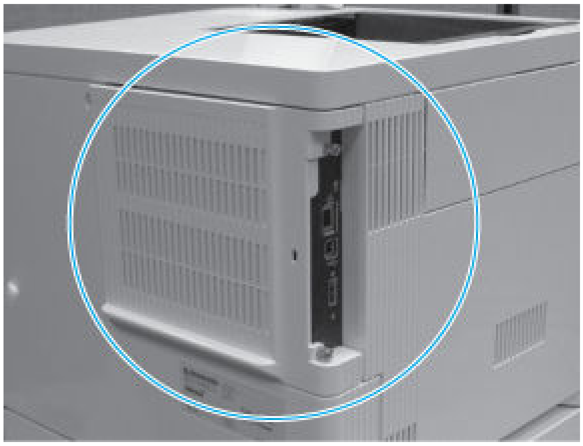
Print any pages necessary to make sure the printer is functioning correctly.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

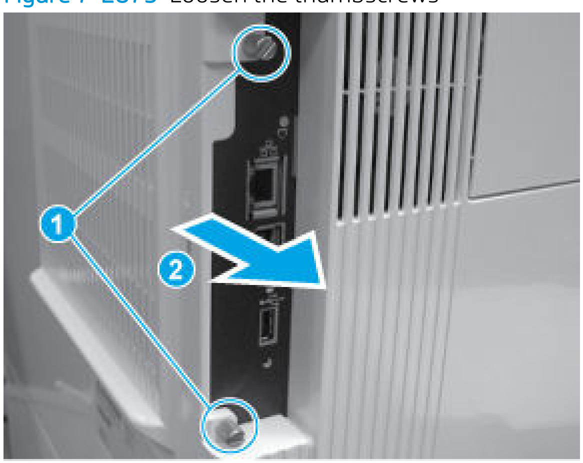
Figure 7-2874 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-2875 Loosen the thumbscrews



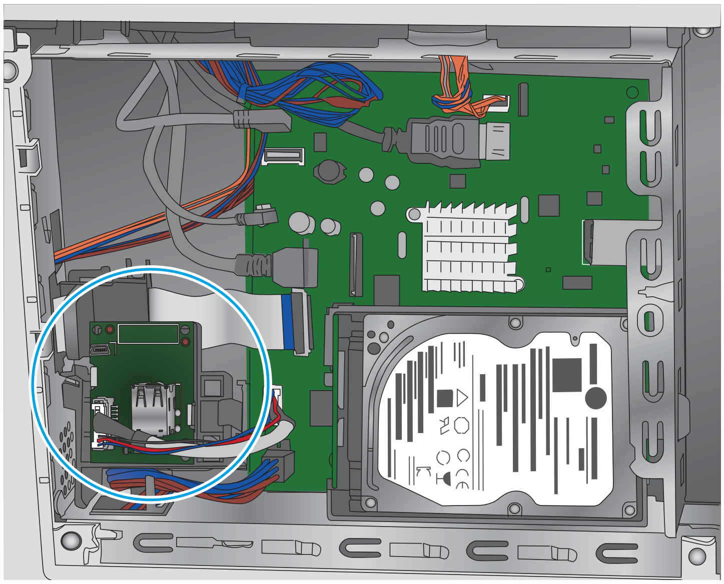
Remove the trusted platform module (TPM)

Follow these steps to remove the trusted platform module (TPM).

CAUTION: ESD sensitive part.

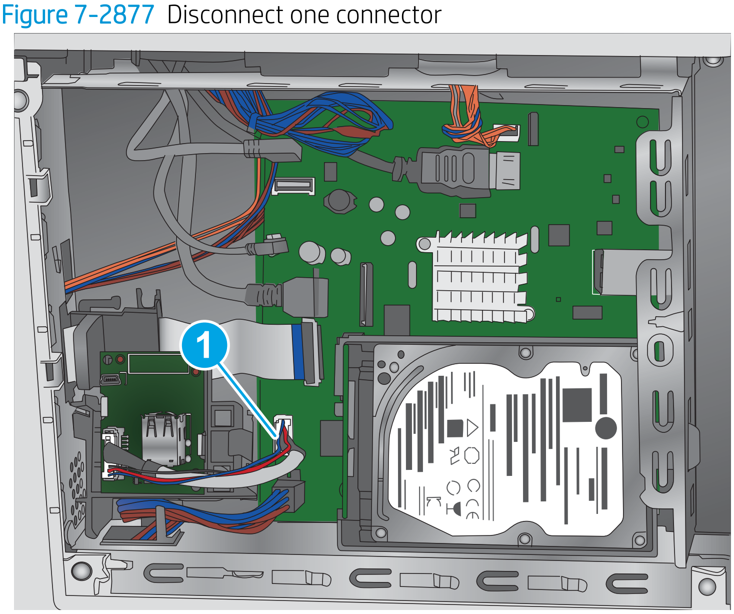
1. Locate the internal USB ports module on the formatter.

Figure 7-2876 Locate the USB ports module



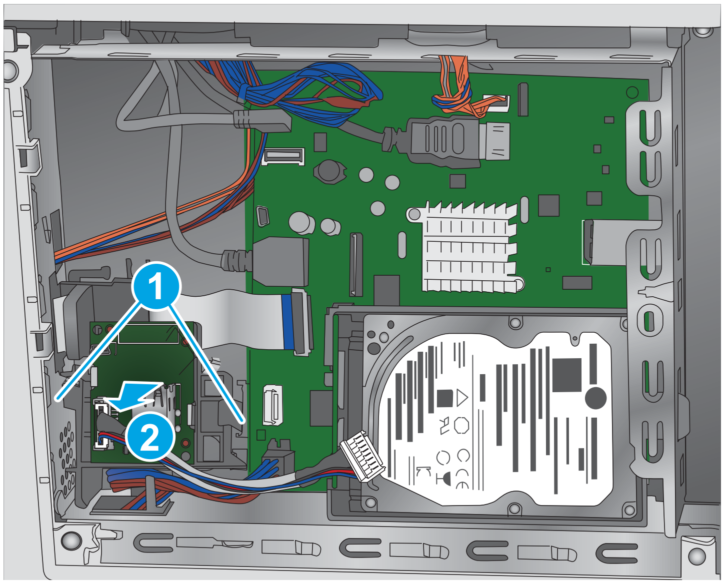
2. Disconnect one connector (callout 1).

Figure 7-2877 Disconnect one connector



3. Release two tabs (callout 1), and then remove the internal USB ports module (callout 2).

Figure 7-2878 Remove the module



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

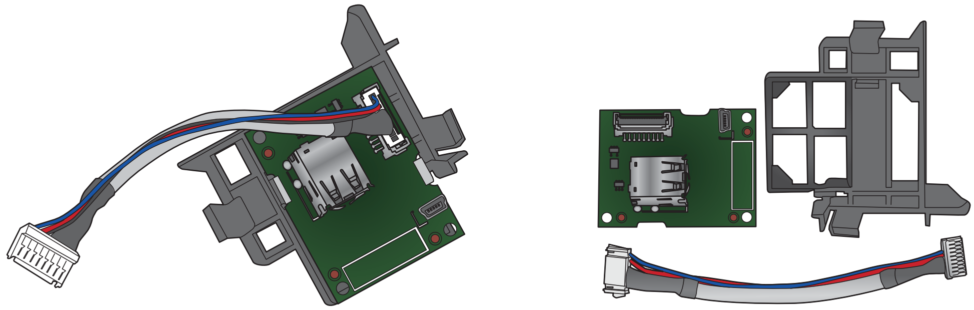
Install the internal USB ports module

Follow these steps to install the internal USB ports module.

⚠ CAUTION: ESD sensitive part.

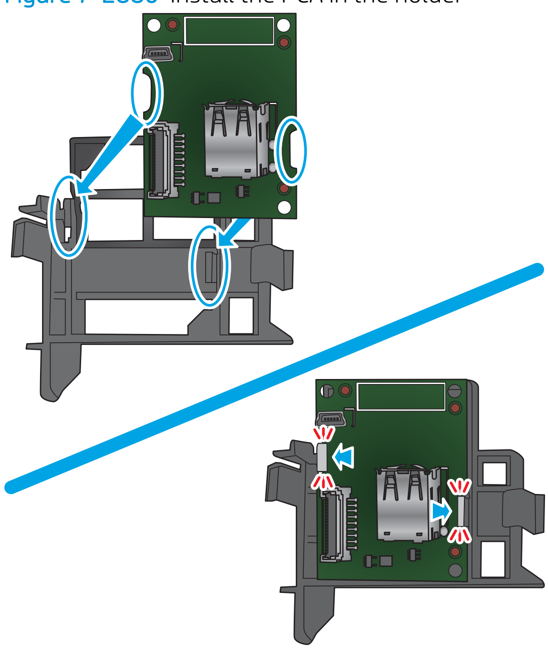
1. Use the figure below to identify the correct internal USB ports components for the SFP model.

Figure 7-2879 Identify the USB ports components



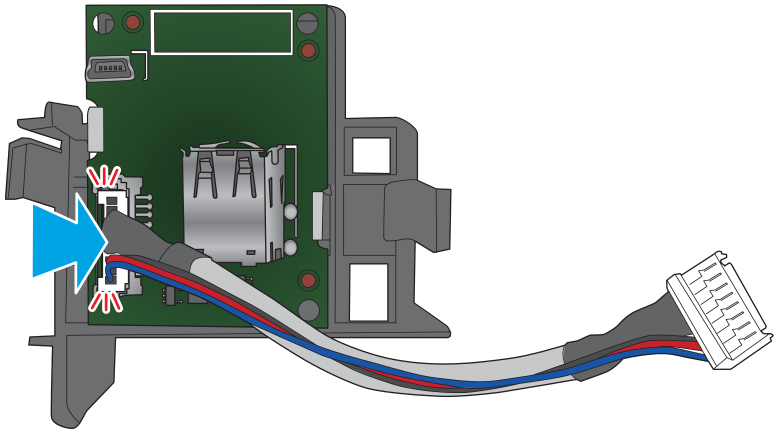
2. Position the notches on the internal USB ports PCA over the clips on the PCA holder and press down to attach the PCA to the holder. Make sure that the clips snap into place.

Figure 7-2880 Install the PCA in the holder



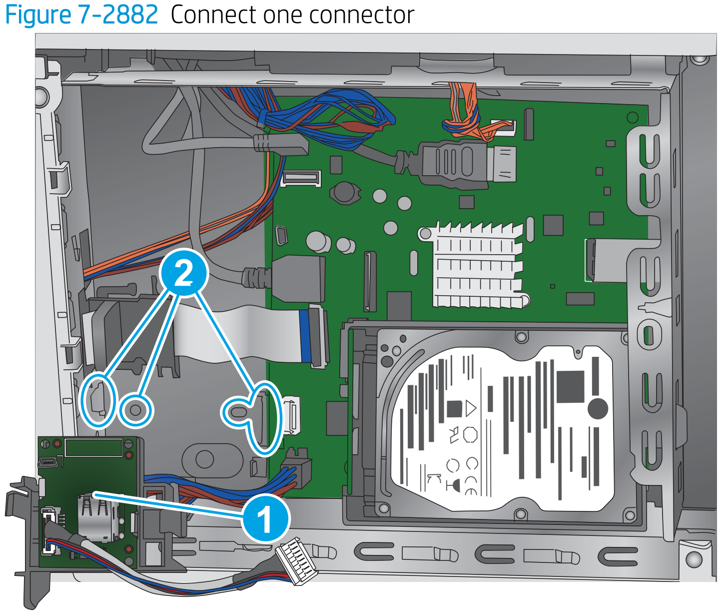
3. Connect the cable harness to the PCA.

Figure 7-2881 Connect the cable harness



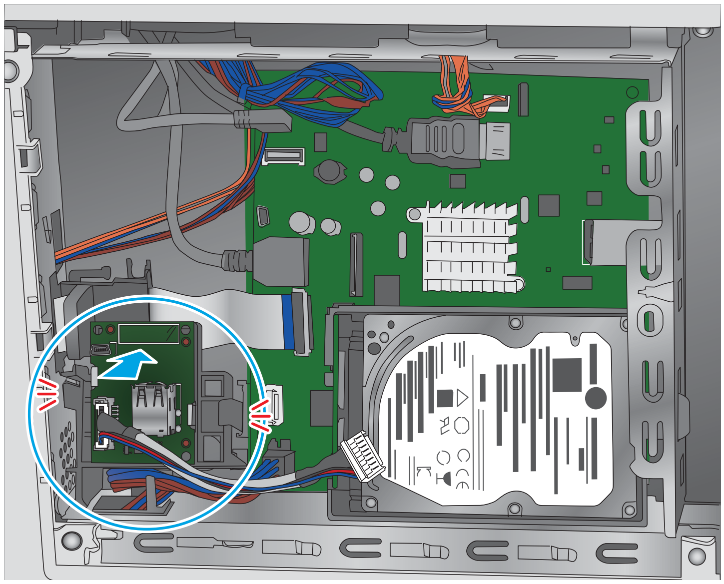
4. Position the clips and locator pins on the internal USB ports module holder (callout 1) in the holes (callout 2) in the formatter case.

Figure 7-2882 Connect one connector



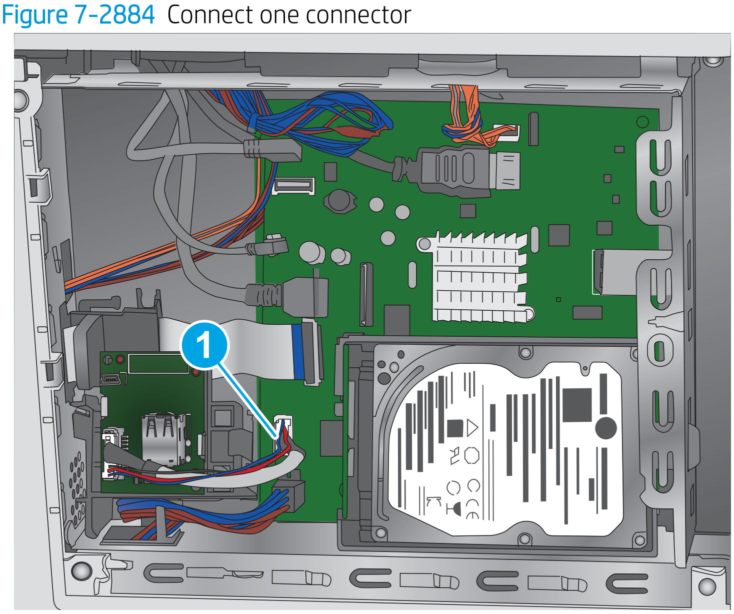
5. Press the internal USB ports module toward the formatter case until the clips snap into place.

Figure 7-2883 Install the module



6. Connect one connector (callout 1).

Figure 7-2884 Connect one connector



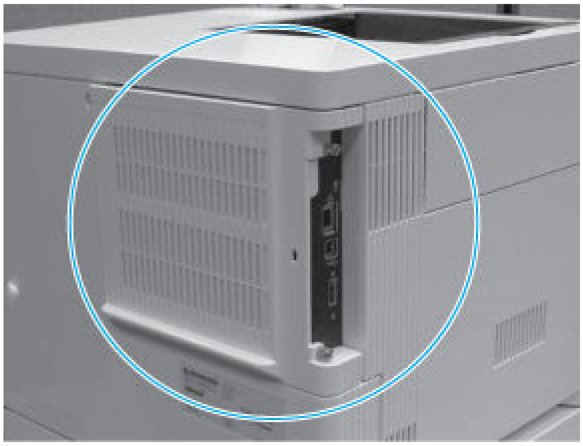
Install the formatter cover

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

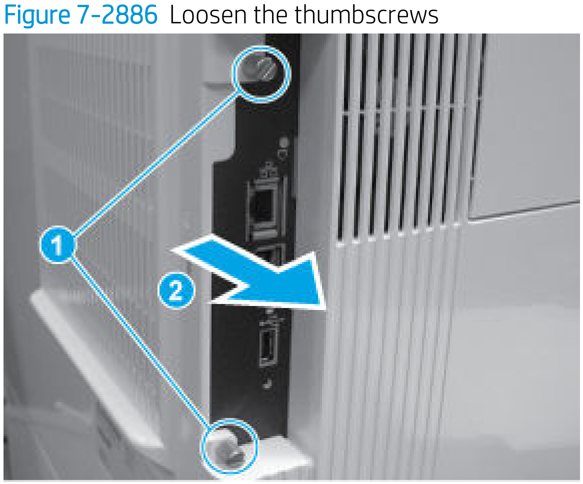
Figure 7-2885 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-2886 Loosen the thumbscrews



Removal and replacement: Fax PCA (M577/M578/E57540)

Learn about removing and replacing the fax PCA.

Before performing service

Turn the printer power off

- Disconnect the power cable.

> ⚠ WARNING! To avoid damage to the printer, turn the printer off, wait 30 seconds, and then remove the power cord before attempting to service the printer.

If the part is damaged and cannot be cleaned, use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 7-114 Part information

Part number	Part description
B5L53-67901	Analog FAX 600 kit

Required tools

- No special tools are required to remove or install this assembly.

After performing service

Turn the printer power on

- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

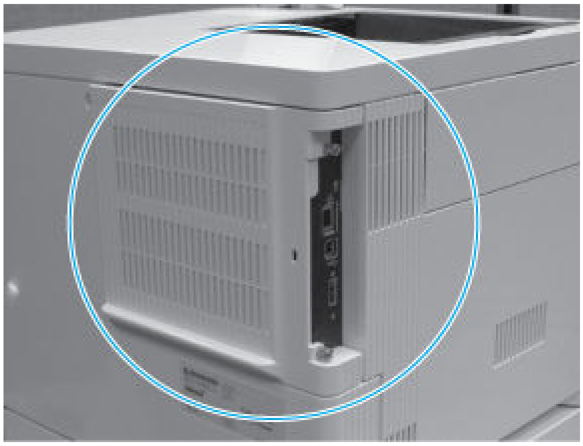
If possible, send and receive a fax from the printer.

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

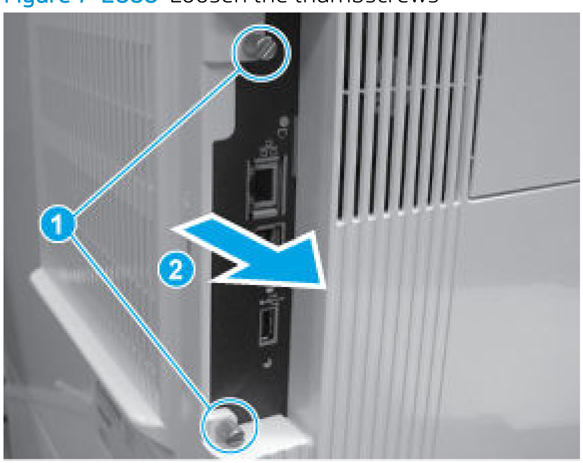
Figure 7-2887 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-2888 Loosen the thumbscrews



Remove the fax PCA (fax models)

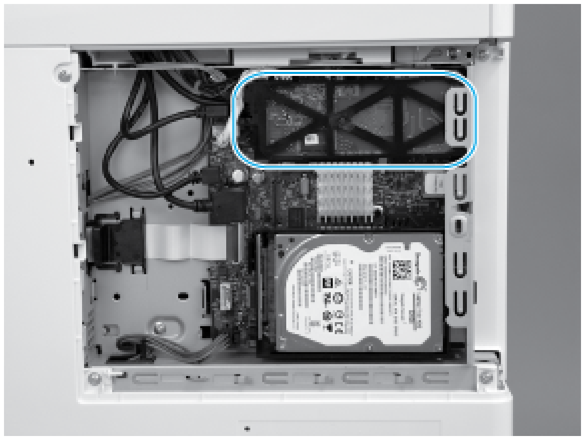
Follow these steps to remove the fax PCA (fax models).

CAUTION: ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

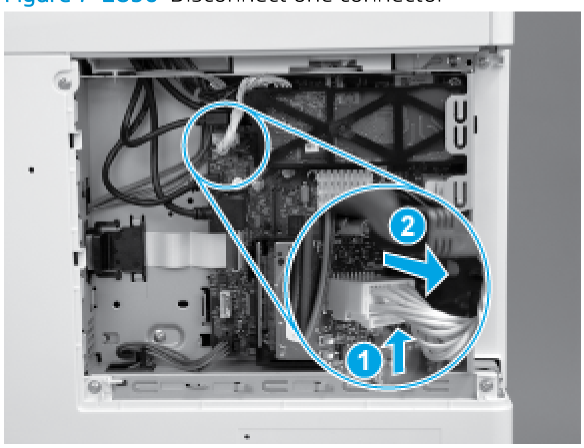
1. Locate the fax PCA component on the formatter.

Figure 7-2889 Locate the fax PCA



2. Release the connector latch (callout 1), and then pull the connector away from the formatter (callout 2) to disconnect it.

Figure 7-2890 Disconnect one connector

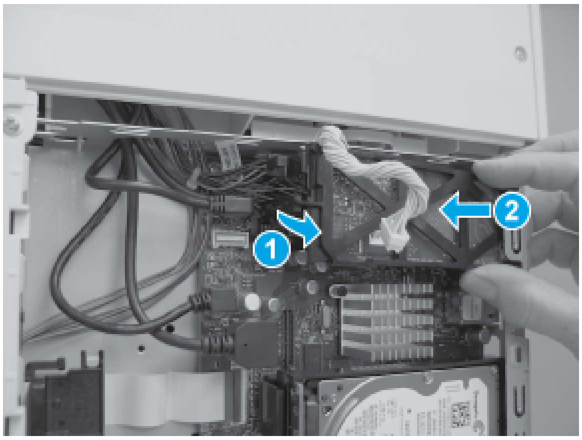


3. Release one retainer (callout 1) by pressing the bracket arms together.

Figure 7-2891 Release one latch

4. Rotate the end of the fax PCA (callout 1) away from the formatter, and then slide the PCA left (callout 2) to remove it.

Figure 7-2892 Remove the fax PCA



Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.

http://www8.hp.com/us/en/hp-information/environment/product-recycling.html

2. Unpack the replacement part from the packaging.

CAUTION: ESD Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Install the fax PCA (fax models)

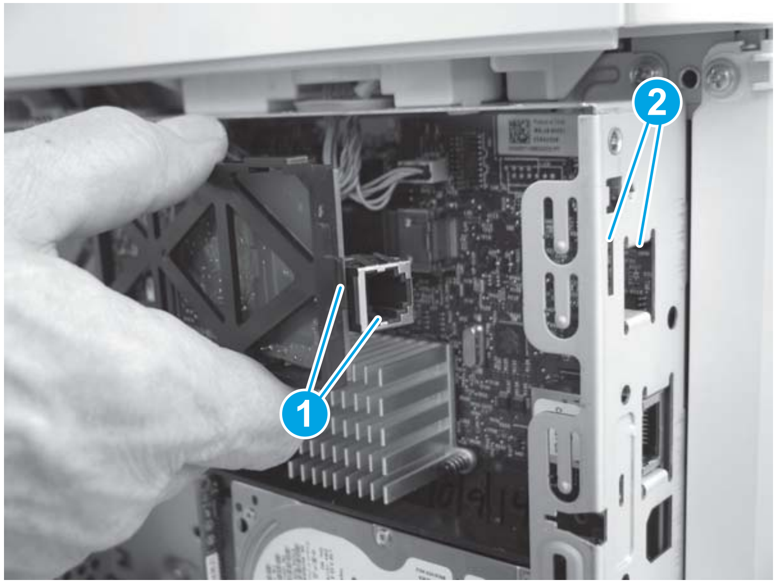
Follow these steps to install the fax PCA (fax models).

CAUTION: ESD ESD sensitive part.

NOTE: This procedure is for fax (or optionally installed fax) models only.

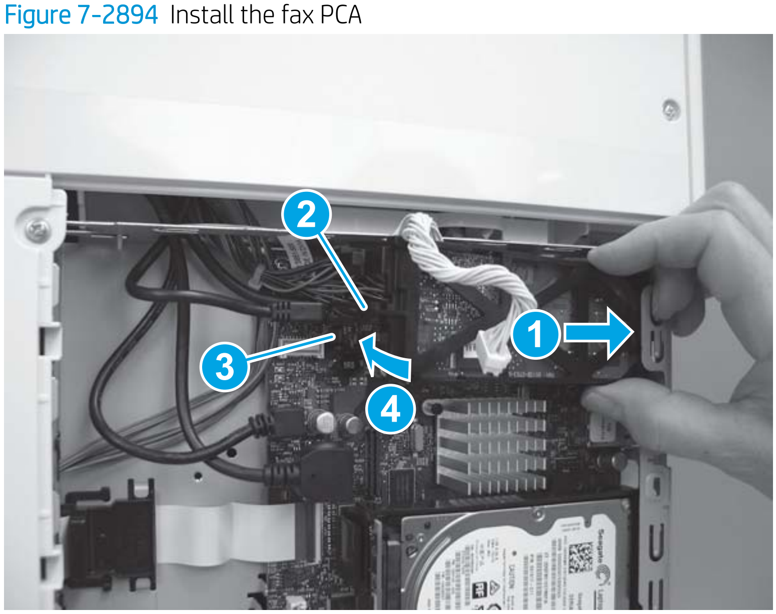
1. Position the tab and telephone port (callout 1) on the fax PCA in the slots (callout 2) in the formatter case.

Figure 7-2893 Position the fax PCA



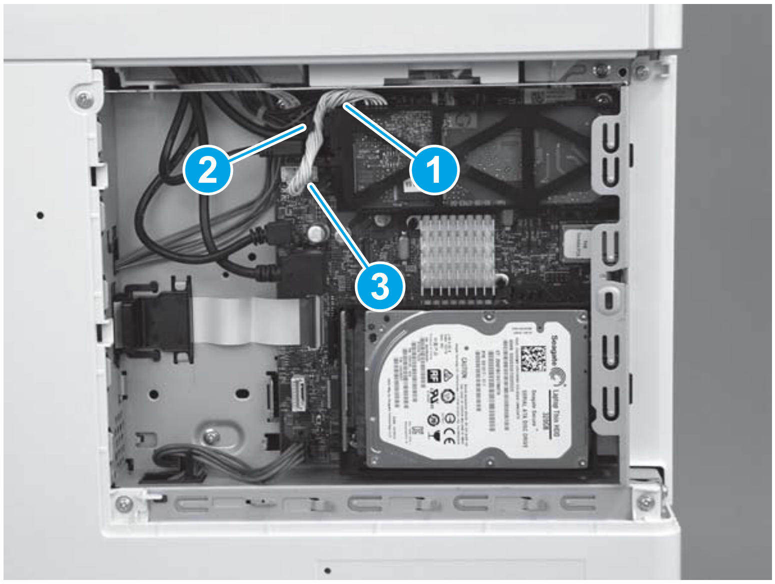
2. Slide the fax PCA to the right (callout 1) until the tab and telephone port described in the previous step and seated in the formatter case. Position the retainer (callout 2) in the slot (callout 3) in the formatter. Rotate the end of the fax PCA toward the formatter (callout 4) until the retainer snaps into place.

Figure 7-2894 Install the fax PCA



3. Position the cable (callout 1) in the guide (callout 2), and then connect one connector (callout 3).

Figure 7-2895 Connect the connector



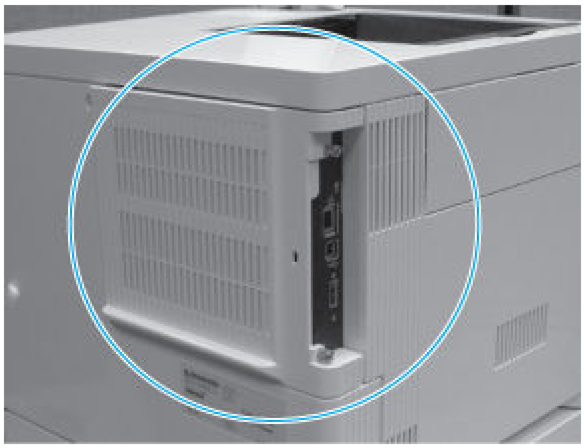
Install the formatter cover

Remove the formatter cover

Follow these steps to remove the formatter cover.

1. Locate the formatter cover.

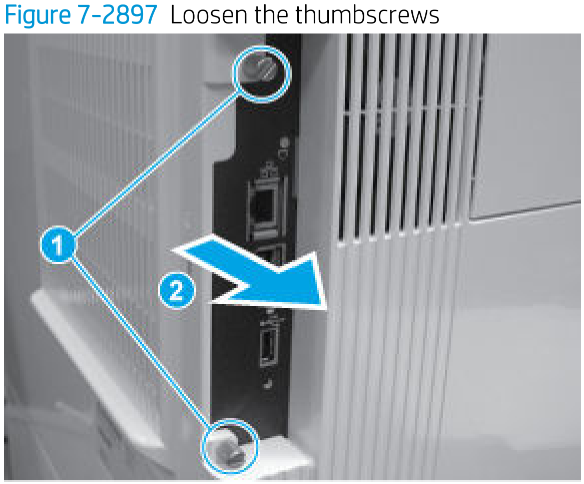
Figure 7-2896 Locate the formatter cover



2. Loosen the two thumbscrews (callout 1). Grasp the two thumbscrews, and then slide the cover away from the printer (callout 2) to remove it.

TIP: If needed, use the edge of a coin to turn the thumbscrews.

Figure 7-2897 Loosen the thumbscrews



8 Parts and diagrams

Printer parts information including exploded assembly diagrams and part number lists.

HP service and support

Learn about HP access to additional service and support information.

Additional service and support for channel partners

Channel partners go to partner.hp.com, and then use the steps below to access the HP Web-based Interactive Search Engine (WISE).

Access WISE for Channel partners

1. Select Services & Support (near the top of the screen).
2. Under Services Delivery, select Technical Support.
3. Select Technical Documentation.

Find information about the following topics

- Service manuals
- Service advisories
- Up-to-date control panel message (CPMD) troubleshooting
- Solutions for printer issues and emerging issues
- Remove and replace part instructions and videos
- Install and configure
- Printer specifications
- Warranty and regulatory information

Additional service and support for HP internal personnel

HP internal personnel, go to one of the following Web-based Interactive Search Engine (WISE) sites:

Americas (AMS)

- WISE - English
- WISE - Spanish
- WISE - Portuguese
- WISE - French

Asia Pacific / Japan (APJ)

- WISE - English
- WISE - Japanese
- WISE - Korean
- WISE - Chinese (simplified)
- WISE - Chinese (traditional)
- WISE - Thai

Europe / Middle East / Africa (EMEA)

- WISE - English

Additional technical support WISE videos

The videos below provide additional ways to access printer information using WISE.

Order parts by authorized service providers

Find information about ordering parts and supplies for the printer.

Ordering

Order parts by authorized service providers.

Table 8-1 Ordering

Item or provider	Description
Order supplies and paper	www.hp.com/go/suresupply
Order parts from authorized service providers	www.hp.com/buy/parts or partsurfer.hp.com
Order through service or support providers	Contact an HP-authorized service or support provider.
Order using the HP Embedded Web Server (EWS)	To access, in a supported web browser on your computer, enter the printer IP address or host name in the address/URL field. The EWS contains a link to the HP SureSupply web site, which provides options for purchasing Original HP supplies.

Orderable parts

Not all of the parts shown in the exploded assembly diagrams are orderable parts.

Refer to the tables following the diagrams or the alphabetical/numerical parts lists to determine if a part is orderable.

Supplies and accessories

Learn about the supplies and accessories that are available for the printer.

To order cartridges, visit http://www.hp.com (some portions of the HP Web site are available in English only). Ordering cartridges online is not supported in all countries/regions. However, many countries/regions have information about ordering by telephone, locating a local store, and printing a shopping list. In addition, go to hp.com/supplies to obtain information about purchasing HP products in your country/region.

Use only the replacement cartridges that have the same cartridge number as the cartridge that is being replaced. Find the cartridge number in the following places:

- On the label of the cartridge that is being replaced.
- On a sticker inside the printer. Open the cartridge door to locate the sticker.
- Open the printer software (**HP Printer Assistant**), and then click **Shop**▶**Shop For Supplies Online**.
- Open the HP Embedded Web Server (EWS), and then click **Tools**▶**Supply Status** (under the **Product Information** item).

Table 8-2 Supplies part numbers

Item	Description	Part number (service)	Product number (new)
Toner cartridge (M552/M553/M557/E55040/E57540)	HP 508A Black Original LaserJet Toner Cartridge	CF360-67901	CF360A

Table 8-2 Supplies part numbers (continued)

Item	Description	Part number (service)	Product number (new)
Toner cartridge (M552/M553/M557/ E55040/E57540)	HP 508X High Yield Black Original LaserJet Toner Cartridge	CF360-67902	CF360X
Toner cartridge (M552/M553/M557/ E55040/E57540)	HP 508A Cyan Original LaserJet Toner Cartridge	CF361-67901	CF361A
Toner cartridge (M552/M553/M557/ E55040/E57540)	HP 508X High Yield Cyan Original LaserJet Toner Cartridge	CF361-67902	CF361X
Toner cartridge (M552/M553/M557/ E55040/E57540)	HP 508A Yellow Original LaserJet Toner Cartridge	CF362-67901	CF362A
Toner cartridge (M552/M553/M557/ E55040/E57540)	HP 508X High Yield Yellow Original LaserJet Toner Cartridge	CF362-67902	CF362X
Toner cartridge (M552/M553/M557/ E55040/E57540)	HP 508A Magenta Original LaserJet Toner Cartridge	CF363-67901	CF363A
Toner cartridge (M552/M553/M557/ E55040/E57540)	HP 508X High Yield Magenta Original LaserJet Toner Cartridge	CF363-67902	CF363X
Toner cartridge (E55040/E57540)	HP Cartridge LJ Black Managed Toner	W9060–67901	W9060MC (~ 15,000 pages)
Toner cartridge (E55040/E57540)	HP Cartridge LJ Cyan Managed Toner	W9061–67901	W9061MC (~ 12,000 pages)
Toner cartridge (E55040/E57540)	HP Cartridge LJ Yellow Managed Toner	W9062–67901	W9062MC (~ 12,000 pages)
Toner cartridge (E55040/E57540)	HP Cartridge LJ Magenta Managed Toner	W9063–67901	W9063MC (~ 12,000 pages)
Toner cartridge (M554/M555/M578)	HP Cartridge-212A Black LaserJet Toner	7ZU81-67905	W2120A (5,500 pages)
Toner cartridge (M554/M555/M578)	HP Cartridge-212X High Yield Black LaserJet Toner	7ZU81-67909	W2120X (13,000 pages)
Toner cartridge (M554/M555/M578)	HP Cartridge-212A Cyan LaserJet Toner	7ZU81-67906	W2121A (4,500 pages)
Toner cartridge (M554/M555/M578)	HP Cartridge-212X High Yield Cyan LaserJet Toner	7ZU81-67910	W2121X (10,000 pages)
Toner cartridge (M554/M555/M578)	HP Cartridge-212A Yellow LaserJet Toner	7ZU81-67907	W2122A (4,500 pages)
Toner cartridge (M554/M555/M578)	HP Cartridge-212X High Yield Yellow LaserJet Toner	7ZU81-67911	W2122X (10,000 pages)
Toner cartridge (M554/M555/M578)	HP Cartridge-212A Magenta LaserJet Toner	7ZU81-67908	W2123A (4,500 pages)

Table 8-2 Supplies part numbers (continued)

Item	Description	Part number (service)	Product number (new)
Toner cartridge (M554/M555/M578)	HP Cartridge-212X High Yield Magenta LaserJet Toner	7ZU81-67912	W2123AX (10,000 pages)
HP toner-collection unit	Replacement toner-collection unit with attached door.	B5L37-67901	B5L37A
HP Staple Cartridge Pack (stapler models only)	Replacement staple cartridges. Contains two staple cartridges of 1500 staples each.	Q7432-67001	Q7432A
HP LaserJet 200 ADF Roller Replacement Kit (M577/M578/E57540)	Replacement feed rollers for the document feeder.	W5U23–67901	B5L52A
Fuser kit (110V)	Fuser	B5L35-67902	B5L35A
Fuser kit (220V)	Fuser	B5L36-67902	B5L36A

Table 8-3 Accessories (M552, M553, M554, M555, and E55040)

Item	Description	Part number (service)	Product number
550-sheet paper feeder NOTE: The M552 model accepts one 550-sheet paper feeder. The M553 and E55040 models accept up to three 550-sheet paper feeders.	Optional 550-sheet paper feeder (included with the x model)	B5L34-67901	B5L34A
Printer stand and storage	Optional stand with storage to support the printer Recommended when using multiple optional paper feeders.	B5L51-67901	B5L51A
HP secure 500 GB high-performance hard disk drive NOTE: Not supported for the M552dn.	Optional hard drive	B5L29-67903	B5L29A
1GB DDR3 Slim DIMM (SFP) NOTE: M553/M554/M555/E55040 only.	Optional DIMM for expanding the memory	5851-6422	G6W84A
HP internal USB ports	Two optional USB ports for connecting third-party devices	B5L28-67902	B5L28A
HP Trusted Platform Module (TPM) (M552/M553/E55040) NOTE: M554 and M555: The TPM is a factory installed component and not an accessory.	Automatically encrypts all data that passes through the product	F5S62-61001	F5S62A

Table 8-4 Accessories (M577, M578, and E57540)

Item	Description	Part number (service)	Product number
550-sheet paper feeder NOTE: The printer supports up to three 550-sheet paper feeders.	Optional 550-sheet paper feeder (included with the x model)	B5L34-67901	B5L34A
Fixed tray guide kit	Fixed tray guide kit for cassette trays	5851-7708	
Printer stand and storage	Optional stand with storage to support the printer Recommended when using multiple optional paper feeders.	B5L51-67901	B5L51A
HP secure 500 GB high-performance hard disk drive	Optional hard drive	B5L29-67903	B5L29A
1GB DDR3 x32 144-Pin 800MHz SODIMM (MFP)	Optional DIMM for expanding the memory	E5K48-67902	E5K48A
HP internal USB ports	Two optional USB ports for connecting third-party devices	B5L28-67902	B5L28A
HP Trusted Platform Module (TPM) (M577/ E57540) NOTE: M578: The TPM is a factory installed component and not an accessory.	Automatically encrypts all data that passes through the product	F5S62-61001	F5S62A
HP LaserJet Keyboard Overlay Kit for Simplified Chinese & Traditional Chinese	Language-specific, adhesive overlay for the physical keyboard	5851-6002	A7W12A
HP LaserJet Keyboard Overlay Kit for Swedish	Language-specific, adhesive overlay for the physical keyboard	A7W14-67901	A7W14A
HP Smartcard NIPRNet Solution for US Government NOTE: Requires installing the HP Internal USB ports accessory (B5L28A).	Non-secure Internet Protocol (IP) Router Network for transmitting non-classified information		CC543B
HP Smartcard NIPRNet Solution for US Government NOTE: Requires installing the HP Internal USB ports accessory (B5L28A).	Secret Internet Protocol (IP) Router Network for transmitting classified information		F8B30A
HP Foreign Interface Harness	Optional port for connecting third-party devices	B5L31-67902	B5L31A
HP LaserJet MFP Analog Fax Accessory 600	Optional fax accessory for the dn model	B5L53-67901	B5L53A
HP Jetdirect 2900nw Print Server	USB wireless print server accessory		J8031A
HP Jetdirect 3000w NFC/Wireless Accessory	Wi-Fi direct accessory for “touch” printing from mobile devices		J8030A

Customer self-repair parts

Learn about printer customer self-repair parts.

Customer self-repair (CSR) parts are available for many HP LaserJet printers to reduce repair time.

NOTE: More information about the CSR program and benefits can be found at www.hp.com/go/csr-support and www.hp.com/go/csr-faq.

Genuine HP replacement parts can be ordered at www.hp.com/buy/parts or by contacting an HP-authorized service or support provider. When ordering, one of the following will be needed: part number, serial number (found on back of printer), product number, or printer name.

- Parts listed as **A**: Easy
- Parts listed as **B**: Difficult and/or require tools

Table 8-5 Customer self-repair (CSR) parts

Kit name	Description	CSR level	Part number
Control panel kit (M553x/M555/E55040dw/ E55040dn	Control panel	A	B5L24-67903
Control panel kit (MFP)	Control panel	A	B5L47-67018
Secondary transfer roller kit	Secondary transfer roller	A	RM2-6575-000CN
Intermediate transfer belt (ITB)	ITB	B	RM2-6576-000CN
Tray 2-5 roller kit	Rollers for Tray 2 and the optional 550-sheet paper feeders	A	RM2-6577-000CN
ADF roller replacement Kit	Replacement feed rollers for the document feeder	A	W5U23-67901
Fuser kit (110V)	Fuser	A	B5L35-67902
Fuser kit (220V)	Fuser	A	B5L36-67902
embedded MultiMedia Card (eMMC) kit (SFP)	eMMC module	A	5851-6436
500 GB secure high-performance hard disk drive (MFP)	Replacement hard disk drive	A	5851-6712
White backing kit A4 (MFP)	White backing for the document feeder (with retention clips)	A	5851-7740
Retention clip kit (MFP)	Retention clips for the document feeder white backing	A	5851-6573
Keyboard kit (flow models)	Keyboard (US)	A	B5L47-67019
Keyboard kit (flow models)	Keyboard (UK)	A	B5L47-67020
Keyboard overlay kit (FR, IT, RU, DE, ES: UK Kybd) (flow models)	Keyboard overlay	A	5851-6019
Keyboard overlay kit (FR-CN, ES-LA, ES: US Kybd) (flow models)	Keyboard overlay	A	5851-6020
Keyboard overlay kit (FR-SW, DE-SW, DA: UK Kybd) (flow models)	Keyboard overlay	A	5851-6021
Keyboard overlay kit (ZHTW, ZHCN) (flow models)	Keyboard overlay	A	5851-6022

Table 8-5 Customer self-repair (CSR) parts (continued)

Kit name	Description	CSR level	Part number
Keyboard overlay kit (ES, PT) (flow models)	Keyboard overlay	A	5851-6023
Keyboard overlay kit (JA-KG, JA-KT) (flow models)	Keyboard overlay	A	5851-6024

How to use parts lists and diagrams

Learn how to use the parts lists and diagrams.

The figures in this chapter show the major sub-assemblies in the printer and their component parts. A parts list table follows each exploded view assembly diagram. The table lists the item number, the associated part number, and the description of each part. If a part is not listed in the table, then it is not a field replacement unit (FRU).

NOTE: Be sure to order the correct part. When looking for part numbers for electrical parts, pay careful attention to the voltage that is listed in the part description. Doing so will make sure that the selected part number is for the correct printer model.

NOTE: The abbreviation “PCA” stands for “printed circuit-board assembly.” Components described as a PCA might consist of a single circuit board or a circuit board plus other parts, such as cables and sensors.

Document feeder and image scanner (M577/M578/E57540)

Parts diagram and part list for the document feeder and image scanner.

Figure 8-1 Document feeder and image scanner (M577/M578/E57540)

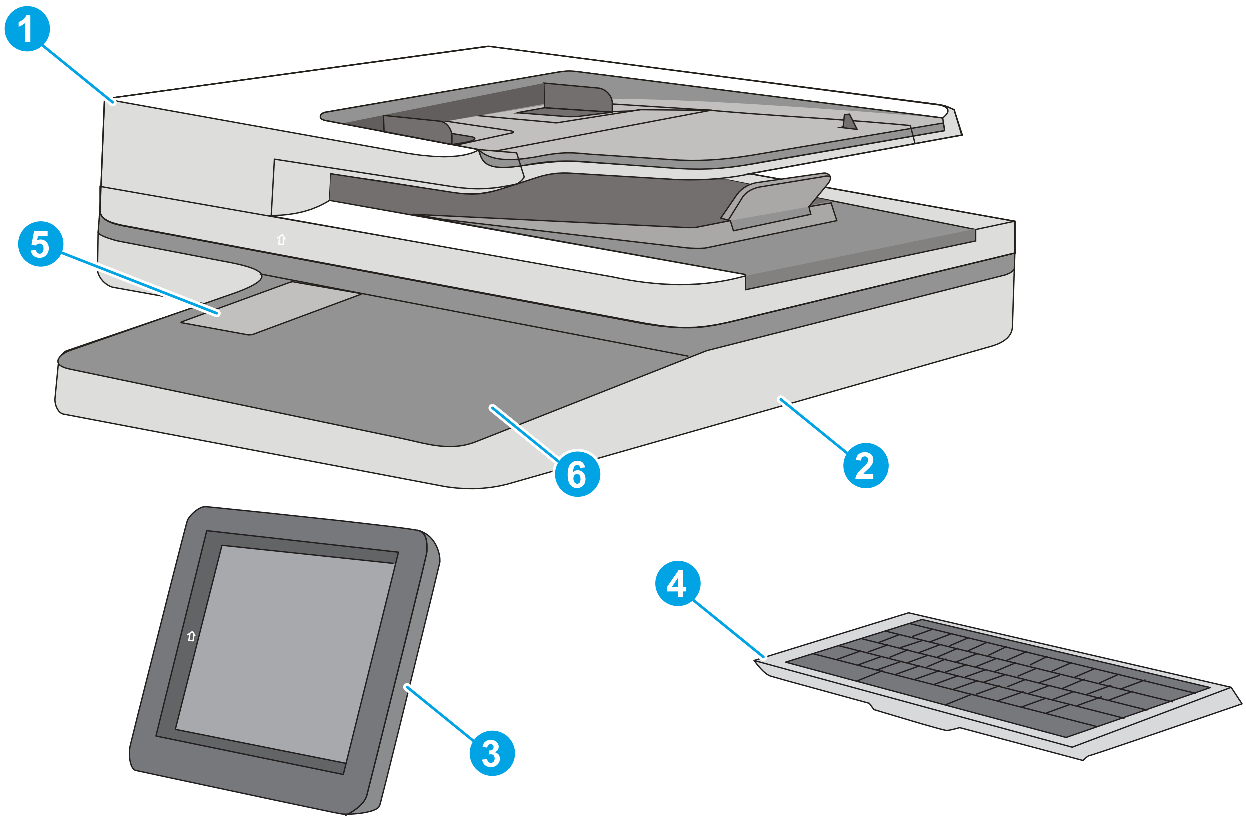


Table 8-6 Document feeder and image scanner (M577/M578/E57540)

Ref No	Part number	Description	Qty
1	B5L47-67906	Kit - ADF whole unit Enterprise	1
1	B5L47-67907	Kit - ADF whole unit Workflow	1
2	B5L46-67904	Image scanner (M577/M578/E57540) kit; includes white backing and retention clips	1
3	B5L47-67018	Control panel (M577/M578/E57540) kit	1
4	B5L47-67019	Keyboard US (M577/M578/E57540 flow models)	1
4	B5L47-67020	Keyboard UK (M577/M578/E57540 flow models)	1
5	B5L46-40021	Cover, HIP (M577/M578/E57540)	1
6	B5L46-40026	Bezel, control panel with NFC icon (M577)	1
6	B5L46-40020	Bezel, control panel without NFC icon (M577/M578/E57540)	1
Not shown	B5L47-67903	Scan control board (M577/M578/E57540)	1
Not shown	B5L46-40002	Cover, keyboard (M577/M578/E57540 flow models)	1
Not shown	B5L46-40011	Cover, rear (image scanner; M577/M578/E57540)	1
Not shown	B5L46-40028	Cover, USB (M577/M578/E57540)	1
Not shown	B5L46-40024	Cover, right front upper (M577/M578/E57540)	1
Not shown	B5L46-60121	Cover assembly, stapler (M577/M578/E57540 stapler models)	1
Not shown	B5L46-60102	Stapler (M577/M578/E57540 stapler models)	1
Not shown	B5L46-60102	Hinge, left document feeder (M577/M578/E57540)	1
Not shown	COM39-60065	Hinge, right document feeder (M577/M578/E57540)	1
Not shown	B5L46-60121	Cable, stapler (M577/M578/E57540 stapler models)	1
Not shown	5851-5939	Cable, WU USB control panel (M577/M578/E57540)	1
Not shown	5851-5938	Cable, HIP USB control panel (M577/M578/E57540)	1
Not shown	5851-5936	Cable, HDMI control panel (M577/M578/E57540)	1
Not shown	5851-5935	Cable, 18-pin control panel (M577/M578/E57540)	1
Not shown	B5L46-60114	Cable, HDMI PAB to SCAM (M577/M578/E57540)	1
Not shown	5851-6019	Keyboard overlay kit (FR, IT, RU, DE, ES: UK Kybd)	1
Not shown	5851-6020	Keyboard overlay kit (FR-CN, ES-LA, ES: US Kybd)	1
Not shown	5851-6021	Keyboard overlay kit (FR-SW, DE-SW, DA: UK Kybd)	1
Not shown	5851-6022	Keyboard overlay kit (ZHTW, ZHCN)	1

Table 8-6 Document feeder and image scanner (M577/M578/E57540) (continued)

Ref No	Part number	Description	Qty
Not shown	5851-6023	Keyboard overlay kit (ES/PT)	1
Not shown	5851-6024	Keyboard overlay kit (JA-KG, JA-KT)	1

Parts and diagrams: Covers (M552/M553/M554/M555/E55040)

Parts diagram and parts list for the SFP printer covers.

Figure 8-2 Covers (M552/M553/M554/M555/E55040)

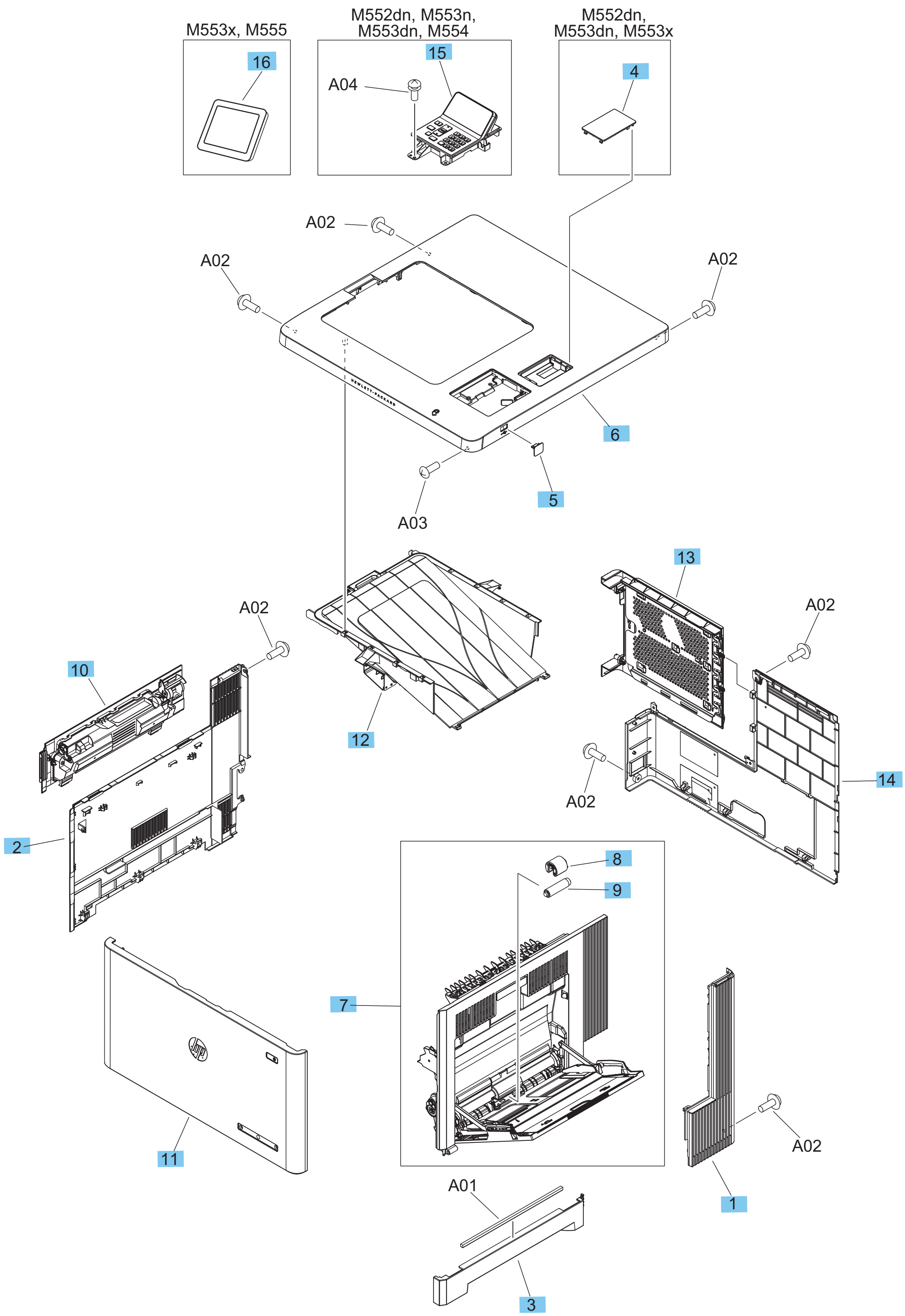


Table 8-7 Covers (M552/M553/M554/M555/E55040)

Ref No	Part number	Description	Qty
1	RC4-0178-000CN	Cover, right rear	1
2	RC4-0179-000CN	Cover, left	1
3	RC4-0183-000CN	Handle, right	1
4	RC4-0213-000CN	Cover, HIP (M552dn, M553dn, M553x/E55040)	1
5	RC4-0213-000CN	Cover, USB	1
6	RL2-0096-000CN	Cover, upper (M553n)	1
6	RL2-0097-000CN	Cover, upper (M553x/E55040)	1
6	RL2-0098-000CN	Cover, upper (M552dn, M553dn)	1
7	RM2-0019-000CN	Door assembly, right	1
8	B5L24-67905	Roller, pickup, Tray 1 (part of Tray 1 roller kit)	1
9	B5L24-67905	Roller, separation, Tray 1 (part of Tray 1 roller kit)	1
10	B5L37-67901	Toner collection unit	1
11	B5L25-67901	Cover, front (M552, M553/E55040)	1
12	RM2-0044-000CN	Output bin	1
13	RM2-0084-000CN	Cover, formatter	1
14	RM2-0085-000CN	Cover, rear	1
15	RM2-7180-000CN	Control panel (M552dn, M553n, M553dn)	1
15	RM2-6582-000CN	Control panel (M554)	1
16	B5L24-67903	Control panel (M553x/E55040)	1
16	K0Q15-67904	Kit - control panel 4.3 inch CLJ M555	1
Not shown	RK3-1532-000CN	Cable, control panel (M554)	1
Not shown	RK3-1534-000CN	Cable, control panel (M555)	1

Parts and diagrams: Covers (M577/M578/E57540)

Parts diagram and parts list for the MFP printer covers.

Figure 8-3 Covers (M577/M578/E57540)

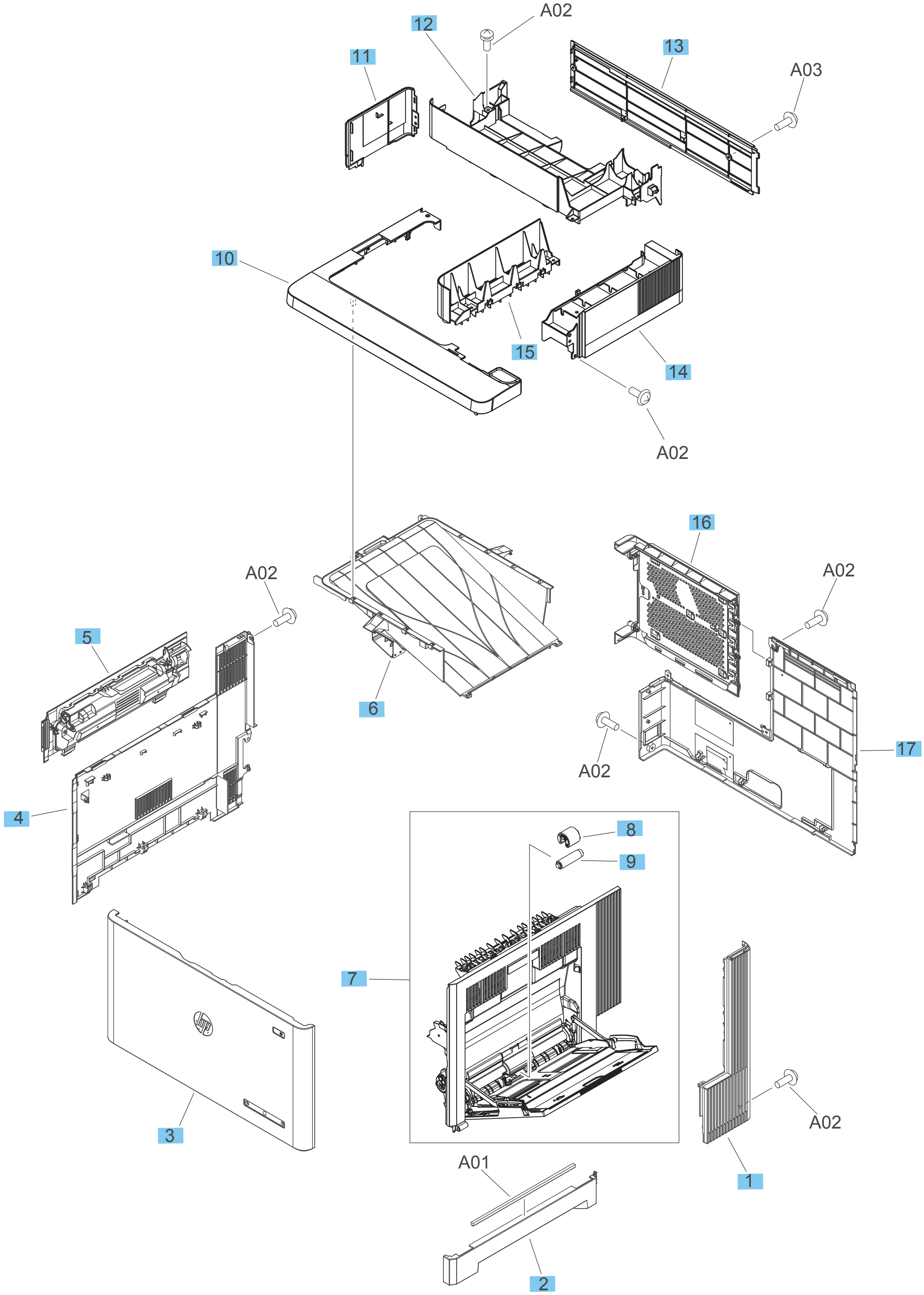


Table 8-8 Covers (M577/M578/E57540)

Ref No	Part number	Description	Qty
1	RC4-0178-000CN	Cover, right rear	1
2	RC4-0183-000CN	Handle, right	1
3	B5L46-67906	Cover, front (MFP)	1
4	RC4-0179-000CN	Cover, left	1
5	B5L37-67901	Toner collection unit	1
6	RM2-0044-000CN	Output bin	1
7	RM2-0019-000CN	Right door assembly	1
8	B5L24-67905	Roller, pickup, Tray 1 (part of Tray 1 roller kit)	1
9	B5L24-67905	Roller, separation, Tray 1 (part of Tray 1 roller kit)	1
10	RL2-0769-000CN	Cover, top (M577/M578/E57540)	1
11	RL2-0770-000CN	Cover, left upper (M577/M578/E57540)	1
12	RC4-3383-000CN	Cover, top rear (M577/M578/E57540)	1
13	RL2-0771-000CN	Cover, rear upper (M577/M578/E57540)	1
14	RL2-0772-000CN	Cover, right upper (M577/M578/E57540)	1
15	RC4-3382-000CN	Cover, paper feed (M577/M578/E57540)	1
16	RM2-0084-000CN	Cover, formatter	1
17	RM2-0085-000CN	Cover, rear	1

Parts and diagrams: Internal assemblies (1 of 5)

Parts diagram and parts list for the internal printer assemblies.

Figure 8-4 Internal assemblies (1 of 5)

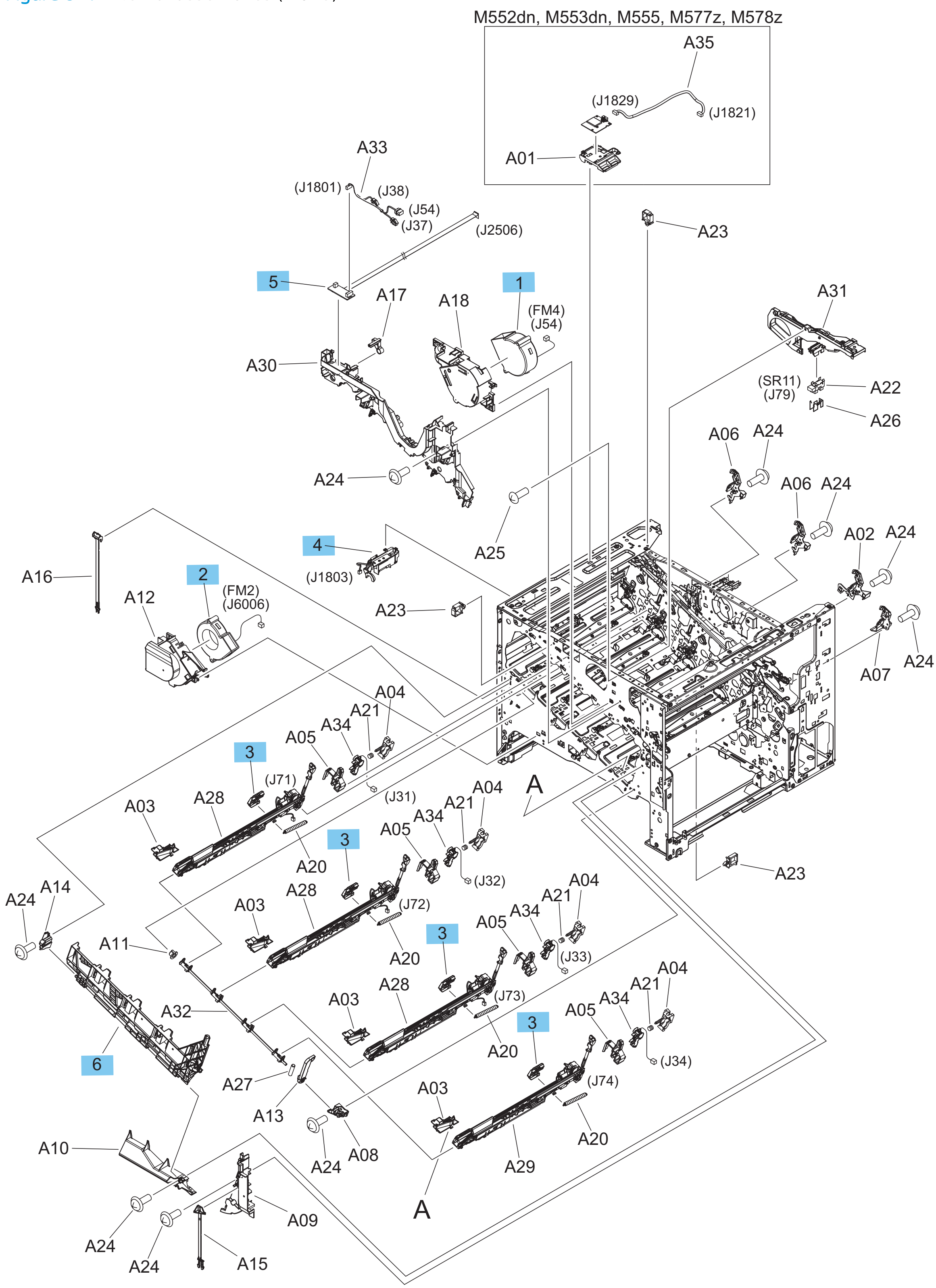


Table 8-9 Internal assemblies (1 of 5)

Ref No	Part number	Description	Qty
1	RK2-2418-000CN	Fan, fuser (FM4)	1
2	RK2-6124-000CN	Fan, cartridge (FM2)	1
3	RM2-0086-000CN	Glass cleaner assembly, dust-proof	4
4	RM2-7130-000CN	Waste toner detect PCA assembly	1
5	RM2-7156-000CN	Connecting PCA assembly	1
6	RL2-0013-010CN	Inner door	1
Not shown	1150-7968	Wireless PCA, embedded	1
Not shown	B5L24-60002	Near field communication (NFC) PCA, embedded (M553x/M555/E55040)	1
Not shown	B5L24-60001	Near field communication (NFC) PCA, embedded (M577z\E57540)	1

Parts and diagrams: Internal assemblies (2 of 5)

Parts diagram and parts list for the internal printer assemblies.

Figure 8-5 Internal assemblies (2 of 5)

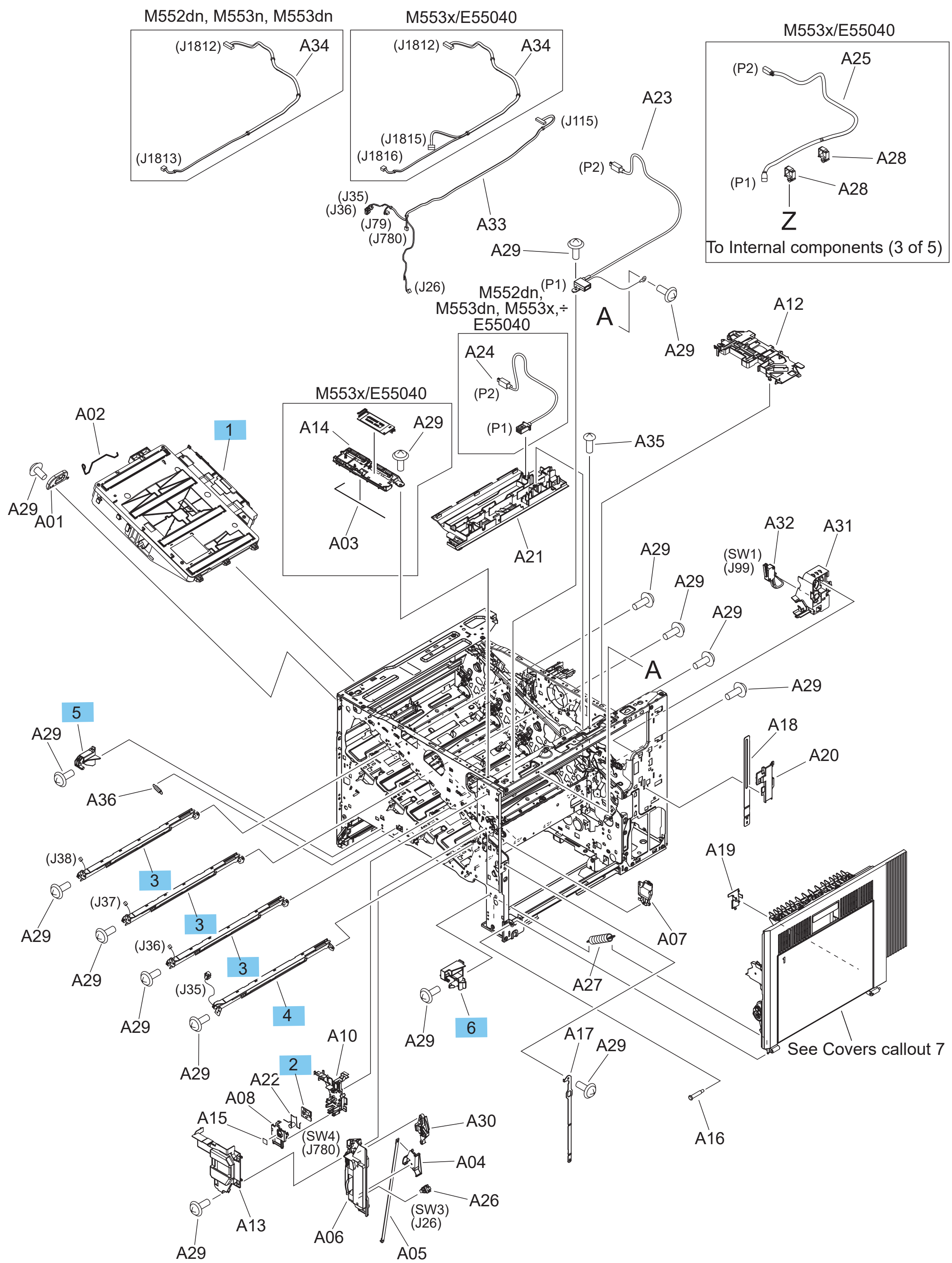


Table 8-10 Internal assemblies (2 of 5)

Ref No	Part number	Description	Qty
1	RM2-6545-000CN	Laser/scanner assembly	1
2	RM2-7133-000CN	Switch PCA assembly (SW4)	1
3	RM2-7168-000CN	Pre-exposure PCA assembly	3
4	RM2-7169-000CN	Pre-exposure PCA assembly	1
5	RC4-0132-000CN	Hinge, cover, front	1
6	RC4-0159-000CN	Hinge, cover, front	1

Parts and diagrams: Internal assemblies (3 of 5)

Parts diagram and parts list for the internal printer assemblies.

Figure 8-6 Internal assemblies (3 of 5)

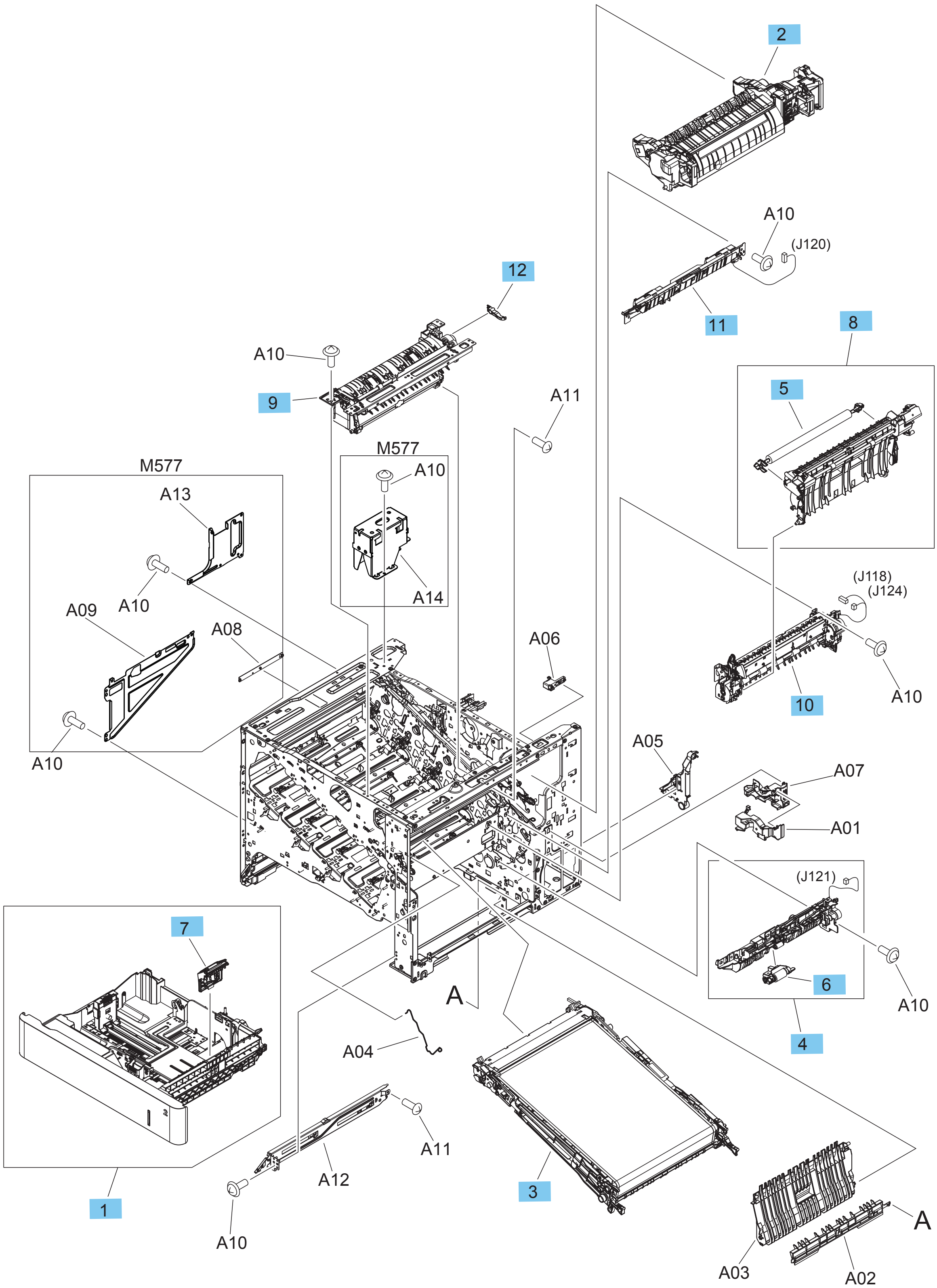


Table 8-11 Internal assemblies (3 of 5)

Ref No	Part number	Description	Qty
1	RM2-0007-000CN	Cassette (Tray 2)	1
2	B5L35-67902	Fuser kit (110V)	1
2	B5L36-67902	Fuser kit (220V)	3
3	RM2-6576-000CN	Intermediate transfer belt (ITB)	1
3	B5L24-69001	Intermediate transfer belt (ITB) (Refurbished)	1
4	RM2-0017-000CN	Paper pickup assembly	1
5	RM2-6576-000CN	Roller, secondary transfer (includes ITB)	1
6	RM2-6577-000CN	Roller, paper pickup (part of Tray 2-5 roller kit)	1
7	RM2-6577-000CN	Roller, separation (part of Tray 2-5 roller kit)	1
8	RM2-0090-000CN	Secondary transfer assembly (M553n)	1
8	RM2-0022-000CN	Secondary transfer assembly (M552, M553dn, M553x, M554, M555, E55040, M577, M578, E57540)	1
9	RM2-0092-000CN	Paper delivery assembly (M553n)	1
9	RM2-0016-000CN	Paper delivery assembly (M552, M553dn, M553x, M554, M555, E55040, M577, M578, E57540)	1
10	RM2-0093-000CN	Registration assembly (M553n)	1
10	RM2-0018-000CN	Registration assembly (M552, M553dn, M553x, M554, M555, E55040, M577, M578, E57540)	1
11	RM2-7160-000CN	Density detect assembly	1
12	RC4-0830-000CN	Arm, solenoid	1

Parts and diagrams: Internal assemblies (4 of 5)

Parts diagram and parts list for the internal printer assemblies.

Figure 8-7 Internal assemblies (4 of 5)

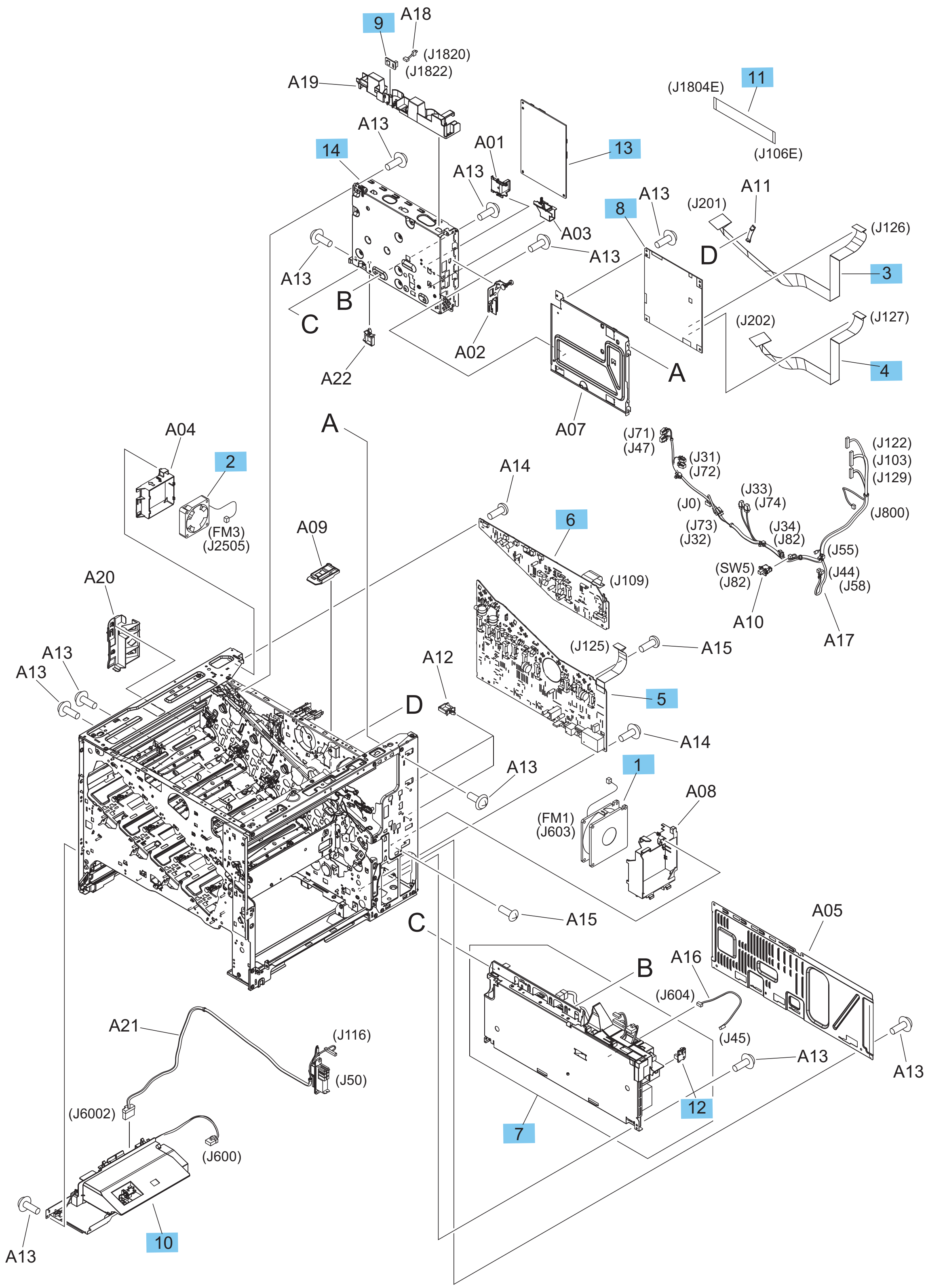


Table 8-12 Internal assemblies (4 of 5)

Ref No	Part number	Description	Qty
1	RK2-2416-000CN	Fan, power-supply (FM1)	1
2	RK2-2728-000CN	Fan, delivery (FM3)	1
3	RK2-6101-000CN	Cable, flexible flat	1
4	RK2-6103-000CN	Cable, flexible flat	1
5	RM2-7122-000CN	HVPS (D) PCA assembly	1
6	RM2-7134-000CN	HVPS (T) PCA assembly (M553n)	1
6	RM2-7123-000CN	HVPS (T) PCA assembly (M552, M553dn, M553x, M554, M555, E55040, M577, M578, E57540)	1
7	RM3-7157-000CN	Low-voltage power supply (110V)	1
7	RM3-7158-000CN	Low-voltage power supply (220V)	1
8	RM3-7458-000CN	DC controller PCA assembly (M552, M553, M555, E55040)	1
8	RM3-7459-000CN	DC controller PCA assembly (M577, E57540)	1
8	RM3-8465-000CN	DC controller PCA assembly (M554, M555)	1
8	RM3-8468-000CN	DC controller PCA assembly (M554, M555)	1
9	RM2-7138-000CN	Memory PCA assembly	1
10	RM3-7159-000CN	Fuser power supply PCA (110)	1
10	RM3-7160-000CN	Fuser power supply PCA (220V)	1
11	RK2-6111-000CN	Cable, flexible flat	1
12	RM2-7154-000CN	Environmental sensor PCA assembly	1
13	B5L23-67903	Formatter (M552)	1
13	B5L23-67904	Formatter (M552 India and China only)	1
13	B5L24-67909	Formatter (M553n, M553dn, M553dh)	1
13	B5L24-67908	Formatter (M553n, M553dn, M553dh India and China only)	1
13	B5L26-67901	Formatter (M553x, E55040)	1
13	B5L26-67902	Formatter (M553x, E55040 India and China only)	1
13	B5L46-67909	Formatter (M577, E57540)	1
13	B5L46-67911	Formatter (M577, E57540)	1
13	7ZU81-67904	Formatter (M554dn China/India)	1
13	7ZU81-67903	Formatter (M554dn)	1
13	7ZU78-67904	Formatter (M555dn China/India)	1
13	7ZU78-67903	Formatter (M555dn)	1
13	7ZU79-67904	Formatter (M555x China/India)	1

Table 8-12 Internal assemblies (4 of 5) (continued)

Ref No	Part number	Description	Qty
13	7ZU79-67903	Formatter (M555x)	1
13	7ZU85-67904	Formatter (M578 China/India)	1
13	7ZU85-67903	Formatter (M578)	1
14	RC4-0152-000CN	Formatter case	1
Not shown	B5L53-67901	Fax PCA (M577/M578/E57540 fax models)	1

Parts and diagrams: Internal assemblies (5 of 5)

Parts diagram and parts list for the internal printer assemblies.

Figure 8-8 Internal assemblies (5 of 5)

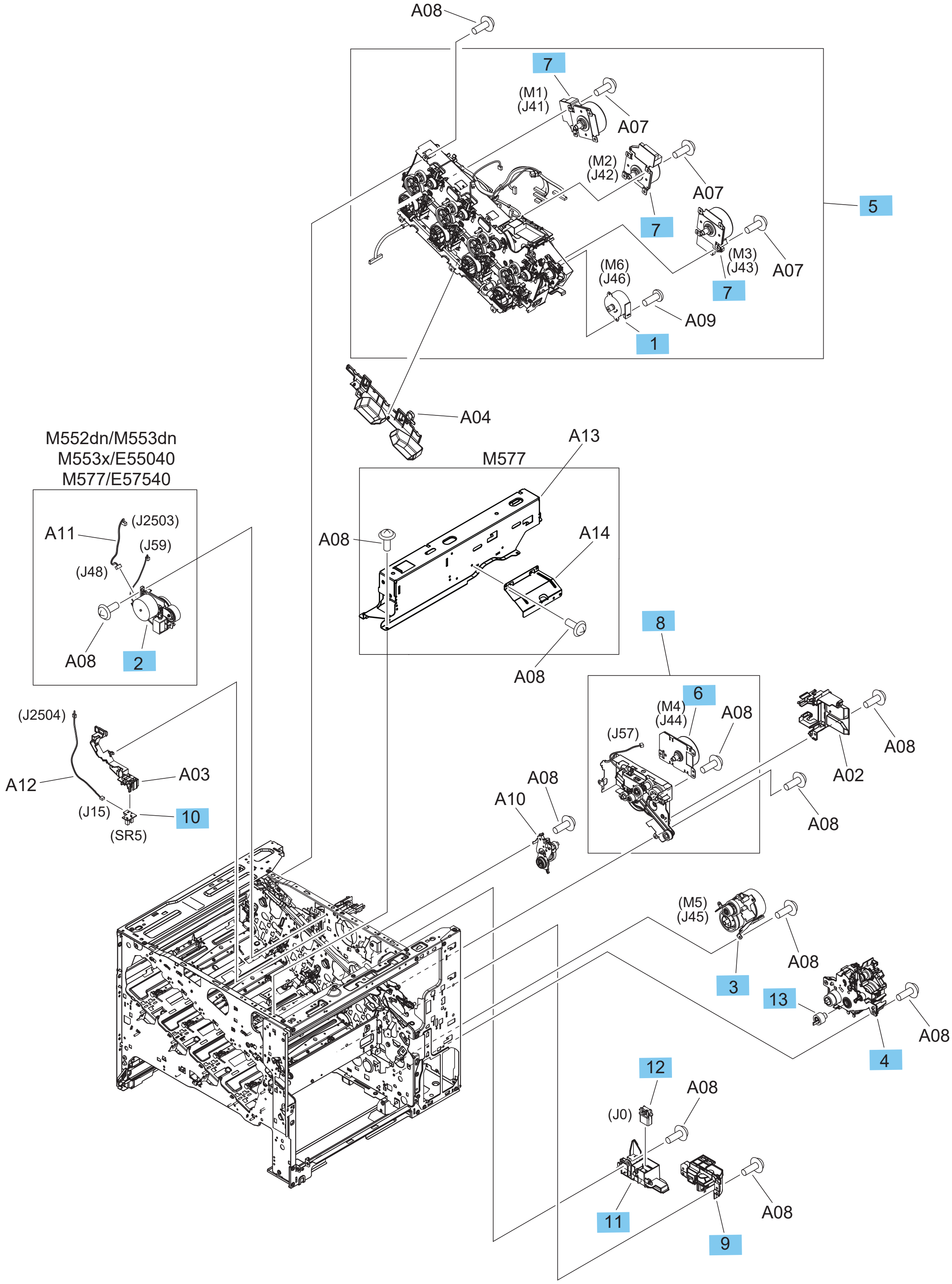


Table 8-13 Internal assemblies (5 of 5)

Ref No	Part number	Description	Qty
1	RK2-6027-000CN	Motor, stepping (M6)	1
2	RM2-0006-000CN	Duplexing drive assembly (M7, CL2; duplex models)	1
3	RM2-0008-000CN	Paper pickup drive assembly (M5)	1
4	RM2-0010-000CN	Lifter drive assembly (CL1)	1
5	B5L25-67902	Main motor drive assembly	1
6	RM2-0077-000CN	Motor assembly, fuser (M4)	1
7	RM2-0078-000CN	Motor assembly, drum (M1, M2, M3)	3
8	RM2-0091-010CN	Fuser drive assembly (M553n)	1
8	RM2-0009-010CN	Fuser drive assembly (M552, M553dn, M553x, M554, M555, E55040, M577, M578, E57540)	1
9	RM2-5147-000CN	Auto close assembly	1
10	RM2-7157-000CN	Estrangement detect PCA assembly (SR5)	1
11	RC4-0445-000CN	Holder, OP Drawer	1
12	VS1-7258-000CN	Connector, drawer	1
13	RU8-0577-000CN	Gear 18T	1

Parts and diagrams: 550-sheet paper feeder covers

Parts diagram and part list for the 550-sheet paper feeder covers.

Figure 8-9 550-sheet paper feeder covers

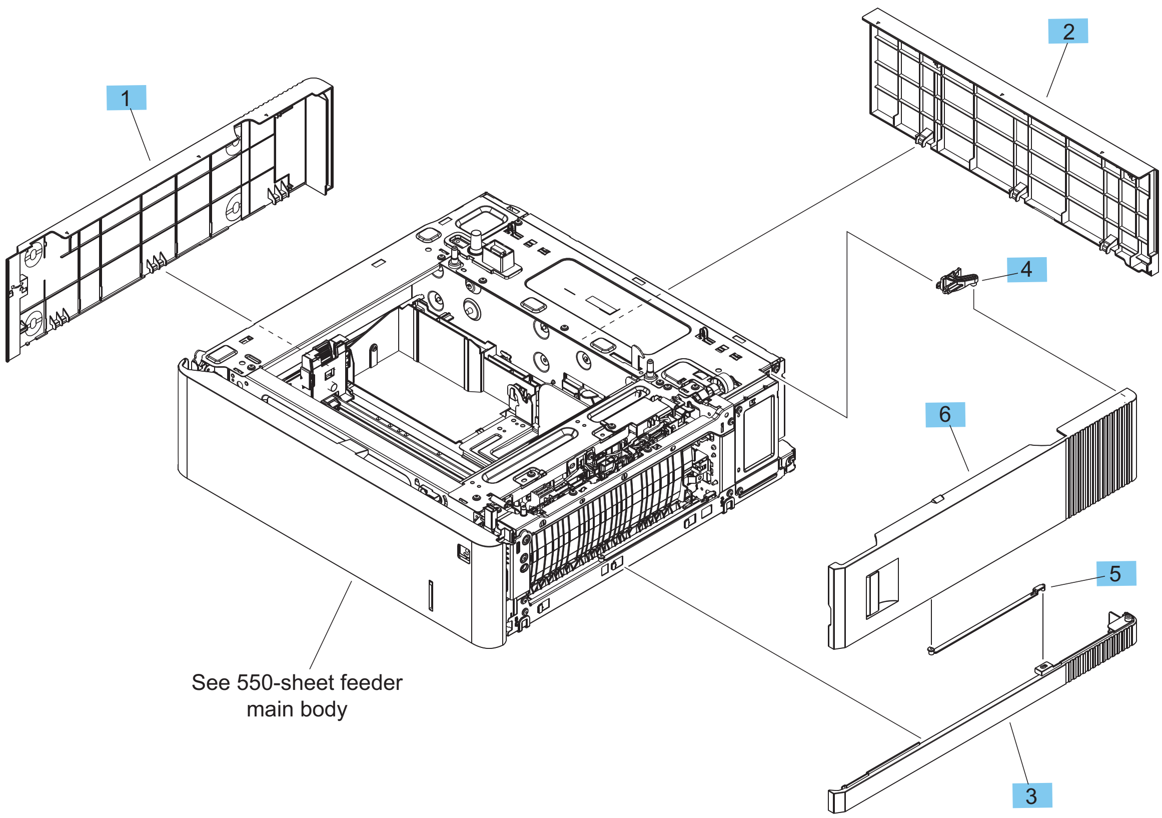


Table 8-14 550-sheet paper feeder covers

Ref No	Part number	Description	Qty
1	RC4-1791-000CN	Cover, left (550-sheet feeder)	1
2	RC4-1792-000CN	Cover, rear (550-sheet feeder)	1
3	RC4-1793-000CN	Cover, right lower (550-sheet feeder)	1
4	RC4-1781-000CN	Hinge, door, right (550-sheet feeder)	1
5	RC4-1778-000CN	Link, door, right (550-sheet feeder)	1
6	RM2-5146-000CN	Door assembly, right (550-sheet feeder)	1

Parts and diagrams: 550-sheet paper feeder main body

Parts diagram and part list for the 550-sheet paper feeder main body.

Figure 8-10 550-sheet paper feeder main body

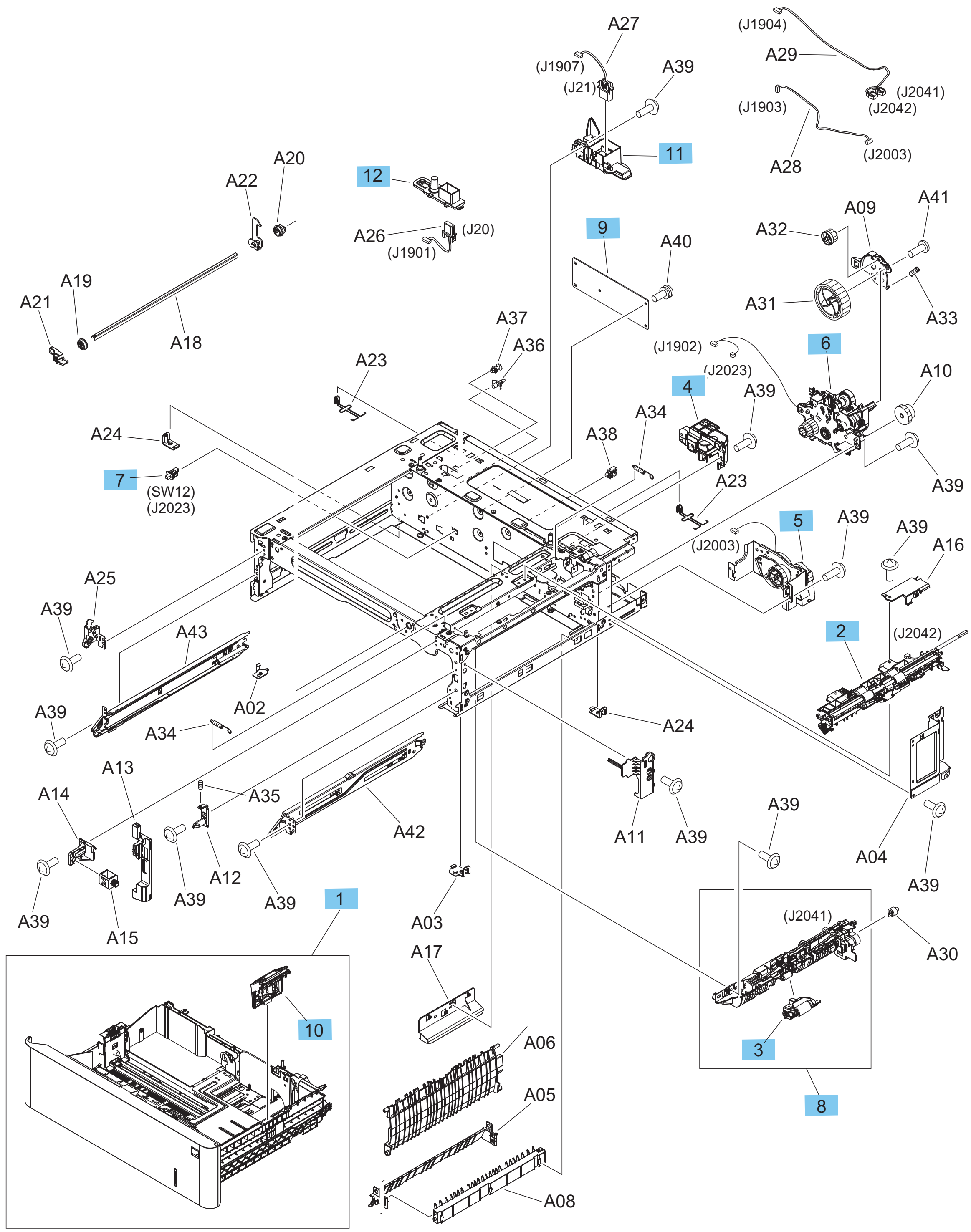


Table 8-15 550-sheet paper feeder main body

Ref No	Part number	Description	Qty
1	RM2-5150-000CN	Cassette (tray; 550-sheet feeder)	1
2	RM2-5145-000CN	Paper feed assembly (550-sheet feeder)	1
3	RM2-6577-000CN	Roller, pickup (550-sheet feeder; part of Tray 2-5 roller kit)	1
4	RM2-5147-000CN	Auto close assembly (550-sheet feeder)	1
5	RM2-5148-000CN	Feed drive assembly (550-sheet feeder)	1
6	RM2-5149-000CN	Lifter drive assembly (550-sheet feeder)	1
7	WC2-5806-000CN	Switch button (SW21; 550-sheet feeder)	1
8	RM2-5154-000CN	Paper pickup assembly (550-sheet feeder)	1
9	RM2-7139-000CN	Paper feed drive PCA assembly (550-sheet feeder)	1
10	RM2-6577-000CN	Roller, separation (550-sheet feeder; part of Tray 2-5 roller kit)	1
11	RC4-0445-000CN	Holder, OP drawer (550-sheet feeder)	1
12	RC4-1741-000CN	Holder, drawer connector (550-sheet feeder)	1

Alphabetical parts list

Table 8-16 Alphabetical parts list

Description	Part number	Table and page
	5851-6021	Document feeder and image scanner (M577/M578/E57540) on page 2023
	7ZU78-67904	Internal assemblies (4 of 5) on page 2044
	B5L24-67905	Covers (M552/M553/M554/M555/E55040) on page 2028
	B5L46-60102	Document feeder and image scanner (M577/M578/E57540) on page 2023
	B5L47-67903	Document feeder and image scanner (M577/M578/E57540) on page 2023
Arm, solenoid	RC4-0830-000CN	Internal assemblies (3 of 5) on page 2040
Auto close assembly	RM2-5147-000CN	Internal assemblies (5 of 5) on page 2047
Auto close assembly (550-sheet feeder)	RM2-5147-000CN	550-sheet paper feeder main body on page 2051
Bezel, control panel with NFC icon (M577)	B5L46-40026	Document feeder and image scanner (M577/M578/E57540) on page 2023
Bezel, control panel without NFC icon (M577/M578/E57540)	B5L46-40020	Document feeder and image scanner (M577/M578/E57540) on page 2023
Cable, 18-pin control panel (M577/M578/E57540)	5851-5935	Document feeder and image scanner (M577/M578/E57540) on page 2023
Cable, control panel (M554)	RK3-1532-000CN	Covers (M552/M553/M554/M555/E55040) on page 2028
Cable, control panel (M555)		Covers (M552/M553/M554/M555/E55040) on page 2028
Cable, flexible flat	RK2-6101-000CN	Internal assemblies (4 of 5) on page 2044
Cable, flexible flat	RK2-6103-000CN	Internal assemblies (4 of 5) on page 2044

Table 8-16 Alphabetical parts list (continued)

Description	Part number	Table and page
Cable, flexible flat	RK2-6111-000CN	Internal assemblies (4 of 5) on page 2044
Cable, HDMI control panel (M577/M578/E57540)	5851-5936	Document feeder and image scanner (M577/ M578/E57540) on page 2023
Cable, HDMI PAB to SCAM (M577/M578/E57540)	B5L46-60114	Document feeder and image scanner (M577/ M578/E57540) on page 2023
Cable, HIP USB control panel (M577/M578/E57540)	5851-5938	Document feeder and image scanner (M577/ M578/E57540) on page 2023
Cable, stapler (M577/M578/E57540 stapler models)	B5L46-60121	Document feeder and image scanner (M577/ M578/E57540) on page 2023
Cable, WU USB control panel (M577/M578/E57540)	5851-5939	Document feeder and image scanner (M577/ M578/E57540) on page 2023
Cassette (Tray 2)	RM2-0007-000CN	Internal assemblies (3 of 5) on page 2040
Cassette (tray; 550-sheet feeder)	RM2-5150-000CN	550-sheet paper feeder main body on page 2051
Connecting PCA assembly	RM2-7156-000CN	Internal assemblies (1 of 5) on page 2035
Connector, drawer	VS1-7258-000CN	Internal assemblies (5 of 5) on page 2047
Control panel (M552dn, M553n, M553dn)	RM2-7180-000CN	Covers (M552/M553/ M554/M555/E55040) on page 2028
Control panel (M553x/E55040)	B5L24-67903	Covers (M552/M553/ M554/M555/E55040) on page 2028
Control panel (M554)	RM2-6582-000CN	Covers (M552/M553/ M554/M555/E55040) on page 2028
Control panel (M577/M578/E57540) kit	B5L47-67018	Document feeder and image scanner (M577/ M578/E57540) on page 2023
Cover assembly, stapler (M577/M578/E57540 stapler models)	B5L46-60121	Document feeder and image scanner (M577/ M578/E57540) on page 2023

Table 8-16 Alphabetical parts list (continued)

Description	Part number	Table and page
Cover, formatter	RM2-0084-000CN	Covers (M552/M553/M554/M555/E55040) on page 2028
Cover, formatter	RM2-0084-000CN	Covers (M577/M578/E57540) on page 2032
Cover, front (M552, M553/E55040)	B5L25-67901	Covers (M552/M553/M554/M555/E55040) on page 2028
Cover, front (MFP)	B5L46-67906	Covers (M577/M578/E57540) on page 2032
Cover, HIP (M552dn, M553dn, M553x/E55040)	RC4-0213-000CN	Covers (M552/M553/M554/M555/E55040) on page 2028
Cover, HIP (M577/M578/E57540)	B5L46-40021	Document feeder and image scanner (M577/M578/E57540) on page 2023
Cover, keyboard (M577/M578/E57540 flow models)	B5L46-40002	Document feeder and image scanner (M577/M578/E57540) on page 2023
Cover, left	RC4-0179-000CN	Covers (M552/M553/M554/M555/E55040) on page 2028
Cover, left	RC4-0179-000CN	Covers (M577/M578/E57540) on page 2032
Cover, left (550-sheet feeder)	RC4-1791-000CN	550-sheet paper feeder covers on page 2049
Cover, left upper (M577/M578/E57540)	RL2-0770-000CN	Covers (M577/M578/E57540) on page 2032
Cover, paper feed (M577/M578/E57540)	RC4-3382-000CN	Covers (M577/M578/E57540) on page 2032
Cover, rear	RM2-0085-000CN	Covers (M552/M553/M554/M555/E55040) on page 2028
Cover, rear	RM2-0085-000CN	Covers (M577/M578/E57540) on page 2032
Cover, rear (550-sheet feeder)	RC4-1792-000CN	550-sheet paper feeder covers on page 2049
Cover, rear (image scanner; M577/M578/E57540)	B5L46-40011	Document feeder and image scanner (M577/M578/E57540) on page 2023
Cover, rear upper (M577/M578/E57540)	RL2-0771-000CN	Covers (M577/M578/E57540) on page 2032

Table 8-16 Alphabetical parts list (continued)

Description	Part number	Table and page
Cover, right front upper (M577/M578/E57540)	B5L46-40024	Document feeder and image scanner (M577/ M578/E57540) on page 2023
Cover, right lower (550-sheet feeder)	RC4-1793-000CN	550-sheet paper feeder covers on page 2049
Cover, right rear	RC4-0178-000CN	Covers (M552/M553/ M554/M555/E55040) on page 2028
Cover, right rear	RC4-0178-000CN	Covers (M577/M578/ E57540) on page 2032
Cover, right upper (M577/M578/E57540)	RL2-0772-000CN	Covers (M577/M578/ E57540) on page 2032
Cover, top (M577/M578/E57540)	RL2-0769-000CN	Covers (M577/M578/ E57540) on page 2032
Cover, top rear (M577/M578/E57540)	RC4-3383-000CN	Covers (M577/M578/ E57540) on page 2032
Cover, upper (M552dn, M553dn)	RL2-0098-000CN	Covers (M552/M553/ M554/M555/E55040) on page 2028
Cover, upper (M553n)	RL2-0096-000CN	Covers (M552/M553/ M554/M555/E55040) on page 2028
Cover, upper (M553x/E55040)	RL2-0097-000CN	Covers (M552/M553/ M554/M555/E55040) on page 2028
Cover, USB	RC4-0213-000CN	Covers (M552/M553/ M554/M555/E55040) on page 2028
Cover, USB (M577/M578/E57540)	B5L46-40028	Document feeder and image scanner (M577/ M578/E57540) on page 2023
DC controller PCA assembly (M552, M553, M555, E55040)	RM3-7458-000CN	Internal assemblies (4 of 5) on page 2044
DC controller PCA assembly (M554, M555)	RM3-8465-000CN	Internal assemblies (4 of 5) on page 2044
DC controller PCA assembly (M554, M555)	RM3-8468-000CN	Internal assemblies (4 of 5) on page 2044
DC controller PCA assembly (M577, E57540)	RM3-7459-000CN	Internal assemblies (4 of 5) on page 2044
Density detect assembly	RM2-7160-000CN	Internal assemblies (3 of 5) on page 2040
Door assembly, right	RM2-0019-000CN	Covers (M552/M553/ M554/M555/E55040) on page 2028

Table 8-16 Alphabetical parts list (continued)

Description	Part number	Table and page
Door assembly, right (550-sheet feeder)	RM2-5146-000CN	550-sheet paper feeder covers on page 2049
Duplexing drive assembly (M7, CL2; duplex models)	RM2-0006-000CN	Internal assemblies (5 of 5) on page 2047
Environmental sensor PCA assembly	RM2-7154-000CN	Internal assemblies (4 of 5) on page 2044
Estrangement detect PCA assembly (SR5)	RM2-7157-000CN	Internal assemblies (5 of 5) on page 2047
Fan, cartridge (FM2)	RK2-6124-000CN	Internal assemblies (1 of 5) on page 2035
Fan, delivery (FM3)	RK2-2728-000CN	Internal assemblies (4 of 5) on page 2044
Fan, fuser (FM4)	RK2-2418-000CN	Internal assemblies (1 of 5) on page 2035
Fan, power-supply (FM1)	RK2-2416-000CN	Internal assemblies (4 of 5) on page 2044
Fax PCA (M577/M578/E57540 fax models)	B5L53-67901	Internal assemblies (4 of 5) on page 2044
Feed drive assembly (550-sheet feeder)	RM2-5148-000CN	550-sheet paper feeder main body on page 2051
Formatter (M552 India and China only)	B5L23-67904	Internal assemblies (4 of 5) on page 2044
Formatter (M552)	B5L23-67903	Internal assemblies (4 of 5) on page 2044
Formatter (M553n, M553dn, M553dh India and China only)	B5L24-67908	Internal assemblies (4 of 5) on page 2044
Formatter (M553n, M553dn, M553dh)	B5L24-67909	Internal assemblies (4 of 5) on page 2044
Formatter (M553x, E55040 India and China only)	B5L26-67902	Internal assemblies (4 of 5) on page 2044
Formatter (M553x, E55040)	B5L26-67901	Internal assemblies (4 of 5) on page 2044
Formatter (M554dn China/India)	7ZU81-67904	Internal assemblies (4 of 5) on page 2044
Formatter (M554dn)	7ZU81-67903	Internal assemblies (4 of 5) on page 2044
Formatter (M555dn)	7ZU78-67903	Internal assemblies (4 of 5) on page 2044
Formatter (M555x China/India)	7ZU79-67904	Internal assemblies (4 of 5) on page 2044
Formatter (M555x)	7ZU79-67903	Internal assemblies (4 of 5) on page 2044

Table 8-16 Alphabetical parts list (continued)

Description	Part number	Table and page
Formatter (M577, E57540)	B5L46-67909	Internal assemblies (4 of 5) on page 2044
Formatter (M577, E57540)	B5L46-67911	Internal assemblies (4 of 5) on page 2044
Formatter (M578 China/India)	7ZU85-67904	Internal assemblies (4 of 5) on page 2044
Formatter (M578)	7ZU85-67903	Internal assemblies (4 of 5) on page 2044
Formatter case	RC4-0152-000CN	Internal assemblies (4 of 5) on page 2044
Fuser drive assembly (M552, M553dn, M553x, M554, M555, E55040, M577, M578, E57540)	RM2-0009-010CN	Internal assemblies (5 of 5) on page 2047
Fuser drive assembly (M553n)	RM2-0091-010CN	Internal assemblies (5 of 5) on page 2047
Fuser kit (110V)	B5L35-67902	Internal assemblies (3 of 5) on page 2040
Fuser kit (220V)	B5L36-67902	Internal assemblies (3 of 5) on page 2040
Fuser power supply PCA (110)	RM3-7159-000CN	Internal assemblies (4 of 5) on page 2044
Fuser power supply PCA (220V)	RM3-7160-000CN	Internal assemblies (4 of 5) on page 2044
Gear 18T	RU8-0577-000CN	Internal assemblies (5 of 5) on page 2047
Glass cleaner assembly, dust-proof	RM2-0086-000CN	Internal assemblies (1 of 5) on page 2035
Handle, right	RC4-0183-000CN	Covers (M552/M553/M554/M555/E55040) on page 2028
Handle, right	RC4-0183-000CN	Covers (M577/M578/E57540) on page 2032
Hinge, cover, front	RC4-0132-000CN	Internal assemblies (2 of 5) on page 2037
Hinge, cover, front	RC4-0159-000CN	Internal assemblies (2 of 5) on page 2037
Hinge, door, right (550-sheet feeder)	RC4-1781-000CN	550-sheet paper feeder covers on page 2049
Hinge, left document feeder (M577/M578/E57540)	B5L46-60102	Document feeder and image scanner (M577/M578/E57540) on page 2023
Hinge, right document feeder (M577/M578/E57540)	COM39-60065	Document feeder and image scanner (M577/M578/E57540) on page 2023

Table 8-16 Alphabetical parts list (continued)

Description	Part number	Table and page
Holder, drawer connector (550-sheet feeder)	RC4-1741-000CN	550-sheet paper feeder main body on page 2051
Holder, OP Drawer	RC4-0445-000CN	Internal assemblies (5 of 5) on page 2047
Holder, OP drawer (550-sheet feeder)	RC4-0445-000CN	550-sheet paper feeder main body on page 2051
HVPS (D) PCA assembly	RM2-7122-000CN	Internal assemblies (4 of 5) on page 2044
HVPS (T) PCA assembly (M552, M553dn, M553x, M554, M555, E55040, M577, M578, E57540)	RM2-7123-000CN	Internal assemblies (4 of 5) on page 2044
HVPS (T) PCA assembly (M553n)	RM2-7134-000CN	Internal assemblies (4 of 5) on page 2044
Image scanner (M577/M578/E57540) kit; includes white backing and retention clips	B5L46-67904	Document feeder and image scanner (M577/M578/E57540) on page 2023
Inner door	RL2-0013-010CN	Internal assemblies (1 of 5) on page 2035
Intermediate transfer belt (ITB)	RM2-6576-000CN	Internal assemblies (3 of 5) on page 2040
Intermediate transfer belt (ITB) (Refurbished)	B5L24-69001	Internal assemblies (3 of 5) on page 2040
Keyboard overlay kit (ES/PT)	5851-6023	Document feeder and image scanner (M577/M578/E57540) on page 2023
Keyboard overlay kit (FR-CN, ES-LA, ES: US Kybd)	5851-6020	Document feeder and image scanner (M577/M578/E57540) on page 2023
Keyboard overlay kit (FR, IT, RU, DE, ES: UK Kybd)	5851-6019	Document feeder and image scanner (M577/M578/E57540) on page 2023
Keyboard overlay kit (JA-KG, JA-KT)	5851-6024	Document feeder and image scanner (M577/M578/E57540) on page 2023
Keyboard overlay kit (ZHTW, ZHCN)	5851-6022	Document feeder and image scanner (M577/M578/E57540) on page 2023
Keyboard UK (M577/M578/E57540 flow models)	B5L47-67020	Document feeder and image scanner (M577/M578/E57540) on page 2023

Table 8-16 Alphabetical parts list (continued)

Description	Part number	Table and page
Keyboard US (M577/M578/E57540 flow models)	B5L47-67019	Document feeder and image scanner (M577/ M578/E57540) on page 2023
Kit - ADF whole unit Enterprise	B5L47-67906	Document feeder and image scanner (M577/ M578/E57540) on page 2023
Kit - ADF whole unit Workflow	B5L47-67907	Document feeder and image scanner (M577/ M578/E57540) on page 2023
Kit - control panel 4.3 inch CLJ M555	K0Q15-67904	Covers (M552/M553/ M554/M555/E55040) on page 2028
Laser/scanner assembly	RM2-6545-000CN	Internal assemblies (2 of 5) on page 2037
Lifter drive assembly (550-sheet feeder)	RM2-5149-000CN	550-sheet paper feeder main body on page 2051
Lifter drive assembly (CL1)	RM2-0010-000CN	Internal assemblies (5 of 5) on page 2047
Link, door, right (550-sheet feeder)	RC4-1778-000CN	550-sheet paper feeder covers on page 2049
Low-voltage power supply (110V)	RM3-7157-000CN	Internal assemblies (4 of 5) on page 2044
Low-voltage power supply (220V)	RM3-7158-000CN	Internal assemblies (4 of 5) on page 2044
Main motor drive assembly	B5L25-67902	Internal assemblies (5 of 5) on page 2047
Memory PCA assembly	RM2-7138-000CN	Internal assemblies (4 of 5) on page 2044
Motor assembly, drum (M1, M2, M3)	RM2-0078-000CN	Internal assemblies (5 of 5) on page 2047
Motor assembly, fuser (M4)	RM2-0077-000CN	Internal assemblies (5 of 5) on page 2047
Motor, stepping (M6)	RK2-6027-000CN	Internal assemblies (5 of 5) on page 2047
Near field communication (NFC) PCA, embedded (M553x/M555/E55040)	B5L24-60002	Internal assemblies (1 of 5) on page 2035
Near field communication (NFC) PCA, embedded (M577z \E57540)	B5L24-60001	Internal assemblies (1 of 5) on page 2035
Output bin	RM2-0044-000CN	Covers (M552/M553/ M554/M555/E55040) on page 2028
Output bin	RM2-0044-000CN	Covers (M577/M578/ E57540) on page 2032

Table 8-16 Alphabetical parts list (continued)

Description	Part number	Table and page
Paper delivery assembly (M552, M553dn, M553x, M554, M555, E55040, M577, M578, E57540)	RM2-0016-000CN	Internal assemblies (3 of 5) on page 2040
Paper delivery assembly (M553n)	RM2-0092-000CN	Internal assemblies (3 of 5) on page 2040
Paper feed assembly (550-sheet feeder)	RM2-5145-000CN	550-sheet paper feeder main body on page 2051
Paper feed drive PCA assembly (550-sheet feeder)	RM2-7139-000CN	550-sheet paper feeder main body on page 2051
Paper pickup assembly	RM2-0017-000CN	Internal assemblies (3 of 5) on page 2040
Paper pickup assembly (550-sheet feeder)	RM2-5154-000CN	550-sheet paper feeder main body on page 2051
Paper pickup drive assembly (M5)	RM2-0008-000CN	Internal assemblies (5 of 5) on page 2047
Pre-exposure PCA assembly	RM2-7168-000CN	Internal assemblies (2 of 5) on page 2037
Pre-exposure PCA assembly	RM2-7169-000CN	Internal assemblies (2 of 5) on page 2037
Registration assembly (M552, M553dn, M553x, M554, M555, E55040, M577, M578, E57540)	RM2-0018-000CN	Internal assemblies (3 of 5) on page 2040
Registration assembly (M553n)	RM2-0093-000CN	Internal assemblies (3 of 5) on page 2040
Right door assembly	RM2-0019-000CN	Covers (M577/M578/E57540) on page 2032
Roller, paper pickup (part of Tray 2-5 roller kit)	RM2-6577-000CN	Internal assemblies (3 of 5) on page 2040
Roller, pickup (550-sheet feeder; part of Tray 2-5 roller kit)	RM2-6577-000CN	550-sheet paper feeder main body on page 2051
Roller, pickup, Tray 1 (part of Tray 1 roller kit)	B5L24-67905	Covers (M577/M578/E57540) on page 2032
Roller, secondary transfer (includes ITB)	RM2-6576-000CN	Internal assemblies (3 of 5) on page 2040
Roller, separation (550-sheet feeder; part of Tray 2-5 roller kit)	RM2-6577-000CN	550-sheet paper feeder main body on page 2051
Roller, separation (part of Tray 2-5 roller kit)	RM2-6577-000CN	Internal assemblies (3 of 5) on page 2040
Roller, separation, Tray 1 (part of Tray 1 roller kit)	B5L24-67905	Covers (M552/M553/M554/M555/E55040) on page 2028
Roller, separation, Tray 1 (part of Tray 1 roller kit)	B5L24-67905	Covers (M577/M578/E57540) on page 2032
Secondary transfer assembly (M552, M553dn, M553x, M554, M555, E55040, M577, M578, E57540)	RM2-0022-000CN	Internal assemblies (3 of 5) on page 2040

Table 8-16 Alphabetical parts list (continued)

Description	Part number	Table and page
Secondary transfer assembly (M553n)	RM2-0090-000CN	Internal assemblies (3 of 5) on page 2040
Switch button (SW21; 550-sheet feeder)	WC2-5806-000CN	550-sheet paper feeder main body on page 2051
Switch PCA assembly (SW4)	RM2-7133-000CN	Internal assemblies (2 of 5) on page 2037
Toner collection unit	B5L37-67901	Covers (M552/M553/ M554/M555/E55040) on page 2028
Toner collection unit	B5L37-67901	Covers (M577/M578/ E57540) on page 2032
Waste toner detect PCA assembly	RM2-7130-000CN	Internal assemblies (1 of 5) on page 2035
Wireless PCA, embedded	1150-7968	Internal assemblies (1 of 5) on page 2035

Numerical parts list

Table 8-17 Numerical parts list

Part number	Description	Table and page
	Cable, control panel (M555)	Covers (M552/M553/ M554/M555/E55040) on page 2028
1150-7968	Wireless PCA, embedded	Internal assemblies (1 of 5) on page 2035
5851-5935	Cable, 18-pin control panel (M577/M578/E57540)	Document feeder and image scanner (M577/ M578/E57540) on page 2023
5851-5936	Cable, HDMI control panel (M577/M578/E57540)	Document feeder and image scanner (M577/ M578/E57540) on page 2023
5851-5938	Cable, HIP USB control panel (M577/M578/E57540)	Document feeder and image scanner (M577/ M578/E57540) on page 2023
5851-5939	Cable, WU USB control panel (M577/M578/E57540)	Document feeder and image scanner (M577/ M578/E57540) on page 2023
5851-6019	Keyboard overlay kit (FR, IT, RU, DE, ES: UK Kybd)	Document feeder and image scanner (M577/ M578/E57540) on page 2023
5851-6020	Keyboard overlay kit (FR-CN, ES-LA, ES: US Kybd)	Document feeder and image scanner (M577/ M578/E57540) on page 2023
5851-6021		Document feeder and image scanner (M577/ M578/E57540) on page 2023
5851-6022	Keyboard overlay kit (ZHTW, ZHCN)	Document feeder and image scanner (M577/ M578/E57540) on page 2023
5851-6023	Keyboard overlay kit (ES/PT)	Document feeder and image scanner (M577/ M578/E57540) on page 2023
5851-6024	Keyboard overlay kit (JA-KG, JA-KT)	Document feeder and image scanner (M577/ M578/E57540) on page 2023
7ZU78-67903	Formatter (M555dn)	Internal assemblies (4 of 5) on page 2044

Table 8-17 Numerical parts list (continued)

Part number	Description	Table and page
7ZU78-67904		Internal assemblies (4 of 5) on page 2044
7ZU79-67903	Formatter (M555x)	Internal assemblies (4 of 5) on page 2044
7ZU79-67904	Formatter (M555x China/India)	Internal assemblies (4 of 5) on page 2044
7ZU81-67903	Formatter (M554dn)	Internal assemblies (4 of 5) on page 2044
7ZU81-67904	Formatter (M554dn China/India)	Internal assemblies (4 of 5) on page 2044
7ZU85-67903	Formatter (M578)	Internal assemblies (4 of 5) on page 2044
7ZU85-67904	Formatter (M578 China/India)	Internal assemblies (4 of 5) on page 2044
B5L23-67903	Formatter (M552)	Internal assemblies (4 of 5) on page 2044
B5L23-67904	Formatter (M552 India and China only)	Internal assemblies (4 of 5) on page 2044
B5L24-60001	Near field communication (NFC) PCA, embedded (M577z \E57540)	Internal assemblies (1 of 5) on page 2035
B5L24-60002	Near field communication (NFC) PCA, embedded (M553x/M555/E55040)	Internal assemblies (1 of 5) on page 2035
B5L24-67903	Control panel (M553x/E55040)	Covers (M552/M553/M554/M555/E55040) on page 2028
B5L24-67905		Covers (M552/M553/M554/M555/E55040) on page 2028
B5L24-67905	Roller, pickup, Tray 1 (part of Tray 1 roller kit)	Covers (M577/M578/E57540) on page 2032
B5L24-67905	Roller, separation, Tray 1 (part of Tray 1 roller kit)	Covers (M552/M553/M554/M555/E55040) on page 2028
B5L24-67905	Roller, separation, Tray 1 (part of Tray 1 roller kit)	Covers (M577/M578/E57540) on page 2032
B5L24-67908	Formatter (M553n, M553dn, M553dh India and China only)	Internal assemblies (4 of 5) on page 2044
B5L24-67909	Formatter (M553n, M553dn, M553dh)	Internal assemblies (4 of 5) on page 2044
B5L24-69001	Intermediate transfer belt (ITB) (Refurbished)	Internal assemblies (3 of 5) on page 2040
B5L25-67901	Cover, front (M552, M553/E55040)	Covers (M552/M553/M554/M555/E55040) on page 2028

Table 8-17 Numerical parts list (continued)

Part number	Description	Table and page
B5L25-67902	Main motor drive assembly	Internal assemblies (5 of 5) on page 2047
B5L26-67901	Formatter (M553x, E55040)	Internal assemblies (4 of 5) on page 2044
B5L26-67902	Formatter (M553x, E55040 India and China only)	Internal assemblies (4 of 5) on page 2044
B5L35-67902	Fuser kit (110V)	Internal assemblies (3 of 5) on page 2040
B5L36-67902	Fuser kit (220V)	Internal assemblies (3 of 5) on page 2040
B5L37-67901	Toner collection unit	Covers (M552/M553/M554/M555/E55040) on page 2028
B5L37-67901	Toner collection unit	Covers (M577/M578/E57540) on page 2032
B5L46-40002	Cover, keyboard (M577/M578/E57540 flow models)	Document feeder and image scanner (M577/M578/E57540) on page 2023
B5L46-40011	Cover, rear (image scanner; M577/M578/E57540)	Document feeder and image scanner (M577/M578/E57540) on page 2023
B5L46-40020	Bezel, control panel without NFC icon (M577/M578/E57540)	Document feeder and image scanner (M577/M578/E57540) on page 2023
B5L46-40021	Cover, HIP (M577/M578/E57540)	Document feeder and image scanner (M577/M578/E57540) on page 2023
B5L46-40024	Cover, right front upper (M577/M578/E57540)	Document feeder and image scanner (M577/M578/E57540) on page 2023
B5L46-40026	Bezel, control panel with NFC icon (M577)	Document feeder and image scanner (M577/M578/E57540) on page 2023
B5L46-40028	Cover, USB (M577/M578/E57540)	Document feeder and image scanner (M577/M578/E57540) on page 2023
B5L46-60102		Document feeder and image scanner (M577/M578/E57540) on page 2023

Table 8-17 Numerical parts list (continued)

Part number	Description	Table and page
B5L46-60102	Hinge, left document feeder (M577/M578/E57540)	Document feeder and image scanner (M577/ M578/E57540) on page 2023
B5L46-60114	Cable, HDMI PAB to SCAM (M577/M578/E57540)	Document feeder and image scanner (M577/ M578/E57540) on page 2023
B5L46-60121	Cable, stapler (M577/M578/E57540 stapler models)	Document feeder and image scanner (M577/ M578/E57540) on page 2023
B5L46-60121	Cover assembly, stapler (M577/M578/E57540 stapler models)	Document feeder and image scanner (M577/ M578/E57540) on page 2023
B5L46-67904	Image scanner (M577/M578/E57540) kit; includes white backing and retention clips	Document feeder and image scanner (M577/ M578/E57540) on page 2023
B5L46-67906	Cover, front (MFP)	Covers (M577/M578/ E57540) on page 2032
B5L46-67909	Formatter (M577, E57540)	Internal assemblies (4 of 5) on page 2044
B5L46-67911	Formatter (M577, E57540)	Internal assemblies (4 of 5) on page 2044
B5L47-67018	Control panel (M577/M578/E57540) kit	Document feeder and image scanner (M577/ M578/E57540) on page 2023
B5L47-67019	Keyboard US (M577/M578/E57540 flow models)	Document feeder and image scanner (M577/ M578/E57540) on page 2023
B5L47-67020	Keyboard UK (M577/M578/E57540 flow models)	Document feeder and image scanner (M577/ M578/E57540) on page 2023
B5L47-67903		Document feeder and image scanner (M577/ M578/E57540) on page 2023
B5L47-67906	Kit - ADF whole unit Enterprise	Document feeder and image scanner (M577/ M578/E57540) on page 2023
B5L47-67907	Kit - ADF whole unit Workflow	Document feeder and image scanner (M577/ M578/E57540) on page 2023

Table 8-17 Numerical parts list (continued)

Part number	Description	Table and page
B5L53-67901	Fax PCA (M577/M578/E57540 fax models)	Internal assemblies (4 of 5) on page 2044
COM39-60065	Hinge, right document feeder (M577/M578/E57540)	Document feeder and image scanner (M577/M578/E57540) on page 2023
K0Q15-67904	Kit - control panel 4.3 inch CLJ M555	Covers (M552/M553/M554/M555/E55040) on page 2028
RC4-0132-000CN	Hinge, cover, front	Internal assemblies (2 of 5) on page 2037
RC4-0152-000CN	Formatter case	Internal assemblies (4 of 5) on page 2044
RC4-0159-000CN	Hinge, cover, front	Internal assemblies (2 of 5) on page 2037
RC4-0178-000CN	Cover, right rear	Covers (M552/M553/M554/M555/E55040) on page 2028
RC4-0178-000CN	Cover, right rear	Covers (M577/M578/E57540) on page 2032
RC4-0179-000CN	Cover, left	Covers (M552/M553/M554/M555/E55040) on page 2028
RC4-0179-000CN	Cover, left	Covers (M577/M578/E57540) on page 2032
RC4-0183-000CN	Handle, right	Covers (M552/M553/M554/M555/E55040) on page 2028
RC4-0183-000CN	Handle, right	Covers (M577/M578/E57540) on page 2032
RC4-0213-000CN	Cover, HIP (M552dn, M553dn, M553x/E55040)	Covers (M552/M553/M554/M555/E55040) on page 2028
RC4-0213-000CN	Cover, USB	Covers (M552/M553/M554/M555/E55040) on page 2028
RC4-0445-000CN	Holder, OP Drawer	Internal assemblies (5 of 5) on page 2047
RC4-0445-000CN	Holder, OP drawer (550-sheet feeder)	550-sheet paper feeder main body on page 2051
RC4-0830-000CN	Arm, solenoid	Internal assemblies (3 of 5) on page 2040
RC4-1741-000CN	Holder, drawer connector (550-sheet feeder)	550-sheet paper feeder main body on page 2051
RC4-1778-000CN	Link, door, right (550-sheet feeder)	550-sheet paper feeder covers on page 2049

Table 8-17 Numerical parts list (continued)

Part number	Description	Table and page
RC4-1781-000CN	Hinge, door, right (550-sheet feeder)	550-sheet paper feeder covers on page 2049
RC4-1791-000CN	Cover, left (550-sheet feeder)	550-sheet paper feeder covers on page 2049
RC4-1792-000CN	Cover, rear (550-sheet feeder)	550-sheet paper feeder covers on page 2049
RC4-1793-000CN	Cover, right lower (550-sheet feeder)	550-sheet paper feeder covers on page 2049
RC4-3382-000CN	Cover, paper feed (M577/M578/E57540)	Covers (M577/M578/E57540) on page 2032
RC4-3383-000CN	Cover, top rear (M577/M578/E57540)	Covers (M577/M578/E57540) on page 2032
RK2-2416-000CN	Fan, power-supply (FM1)	Internal assemblies (4 of 5) on page 2044
RK2-2418-000CN	Fan, fuser (FM4)	Internal assemblies (1 of 5) on page 2035
RK2-2728-000CN	Fan, delivery (FM3)	Internal assemblies (4 of 5) on page 2044
RK2-6027-000CN	Motor, stepping (M6)	Internal assemblies (5 of 5) on page 2047
RK2-6101-000CN	Cable, flexible flat	Internal assemblies (4 of 5) on page 2044
RK2-6103-000CN	Cable, flexible flat	Internal assemblies (4 of 5) on page 2044
RK2-6111-000CN	Cable, flexible flat	Internal assemblies (4 of 5) on page 2044
RK2-6124-000CN	Fan, cartridge (FM2)	Internal assemblies (1 of 5) on page 2035
RK3-1532-000CN	Cable, control panel (M554)	Covers (M552/M553/M554/M555/E55040) on page 2028
RL2-0013-010CN	Inner door	Internal assemblies (1 of 5) on page 2035
RL2-0096-000CN	Cover, upper (M553n)	Covers (M552/M553/M554/M555/E55040) on page 2028
RL2-0097-000CN	Cover, upper (M553x/E55040)	Covers (M552/M553/M554/M555/E55040) on page 2028
RL2-0098-000CN	Cover, upper (M552dn, M553dn)	Covers (M552/M553/M554/M555/E55040) on page 2028
RL2-0769-000CN	Cover, top (M577/M578/E57540)	Covers (M577/M578/E57540) on page 2032

Table 8-17 Numerical parts list (continued)

Part number	Description	Table and page
RL2-0770-000CN	Cover, left upper (M577/M578/E57540)	Covers (M577/M578/ E57540) on page 2032
RL2-0771-000CN	Cover, rear upper (M577/M578/E57540)	Covers (M577/M578/ E57540) on page 2032
RL2-0772-000CN	Cover, right upper (M577/M578/E57540)	Covers (M577/M578/ E57540) on page 2032
RM2-0006-000CN	Duplexing drive assembly (M7, CL2; duplex models)	Internal assemblies (5 of 5) on page 2047
RM2-0007-000CN	Cassette (Tray 2)	Internal assemblies (3 of 5) on page 2040
RM2-0008-000CN	Paper pickup drive assembly (M5)	Internal assemblies (5 of 5) on page 2047
RM2-0009-010CN	Fuser drive assembly (M552, M553dn, M553x, M554, M555, E55040, M577, M578, E57540)	Internal assemblies (5 of 5) on page 2047
RM2-0010-000CN	Lifter drive assembly (CL1)	Internal assemblies (5 of 5) on page 2047
RM2-0016-000CN	Paper delivery assembly (M552, M553dn, M553x, M554, M555, E55040, M577, M578, E57540)	Internal assemblies (3 of 5) on page 2040
RM2-0017-000CN	Paper pickup assembly	Internal assemblies (3 of 5) on page 2040
RM2-0018-000CN	Registration assembly (M552, M553dn, M553x, M554, M555, E55040, M577, M578, E57540)	Internal assemblies (3 of 5) on page 2040
RM2-0019-000CN	Door assembly, right	Covers (M552/M553/ M554/M555/E55040) on page 2028
RM2-0019-000CN	Right door assembly	Covers (M577/M578/ E57540) on page 2032
RM2-0022-000CN	Secondary transfer assembly (M552, M553dn, M553x, M554, M555, E55040, M577, M578, E57540)	Internal assemblies (3 of 5) on page 2040
RM2-0044-000CN	Output bin	Covers (M552/M553/ M554/M555/E55040) on page 2028
RM2-0044-000CN	Output bin	Covers (M577/M578/ E57540) on page 2032
RM2-0077-000CN	Motor assembly, fuser (M4)	Internal assemblies (5 of 5) on page 2047
RM2-0078-000CN	Motor assembly, drum (M1, M2, M3)	Internal assemblies (5 of 5) on page 2047
RM2-0084-000CN	Cover, formatter	Covers (M552/M553/ M554/M555/E55040) on page 2028
RM2-0084-000CN	Cover, formatter	Covers (M577/M578/ E57540) on page 2032

Table 8-17 Numerical parts list (continued)

Part number	Description	Table and page
RM2-0085-000CN	Cover, rear	Covers (M552/M553/ M554/M555/E55040) on page 2028
RM2-0085-000CN	Cover, rear	Covers (M577/M578/ E57540) on page 2032
RM2-0086-000CN	Glass cleaner assembly, dust-proof	Internal assemblies (1 of 5) on page 2035
RM2-0090-000CN	Secondary transfer assembly (M553n)	Internal assemblies (3 of 5) on page 2040
RM2-0091-010CN	Fuser drive assembly (M553n)	Internal assemblies (5 of 5) on page 2047
RM2-0092-000CN	Paper delivery assembly (M553n)	Internal assemblies (3 of 5) on page 2040
RM2-0093-000CN	Registration assembly (M553n)	Internal assemblies (3 of 5) on page 2040
RM2-5145-000CN	Paper feed assembly (550-sheet feeder)	550-sheet paper feeder main body on page 2051
RM2-5146-000CN	Door assembly, right (550-sheet feeder)	550-sheet paper feeder covers on page 2049
RM2-5147-000CN	Auto close assembly	Internal assemblies (5 of 5) on page 2047
RM2-5147-000CN	Auto close assembly (550-sheet feeder)	550-sheet paper feeder main body on page 2051
RM2-5148-000CN	Feed drive assembly (550-sheet feeder)	550-sheet paper feeder main body on page 2051
RM2-5149-000CN	Lifter drive assembly (550-sheet feeder)	550-sheet paper feeder main body on page 2051
RM2-5150-000CN	Cassette (tray; 550-sheet feeder)	550-sheet paper feeder main body on page 2051
RM2-5154-000CN	Paper pickup assembly (550-sheet feeder)	550-sheet paper feeder main body on page 2051
RM2-6545-000CN	Laser/scanner assembly	Internal assemblies (2 of 5) on page 2037
RM2-6576-000CN	Intermediate transfer belt (ITB)	Internal assemblies (3 of 5) on page 2040
RM2-6576-000CN	Roller, secondary transfer (includes ITB)	Internal assemblies (3 of 5) on page 2040
RM2-6577-000CN	Roller, paper pickup (part of Tray 2-5 roller kit)	Internal assemblies (3 of 5) on page 2040
RM2-6577-000CN	Roller, pickup (550-sheet feeder; part of Tray 2-5 roller kit)	550-sheet paper feeder main body on page 2051
RM2-6577-000CN	Roller, separation (550-sheet feeder; part of Tray 2-5 roller kit)	550-sheet paper feeder main body on page 2051

Table 8-17 Numerical parts list (continued)

Part number	Description	Table and page
RM2-6577-000CN	Roller, separation (part of Tray 2-5 roller kit)	Internal assemblies (3 of 5) on page 2040
RM2-6582-000CN	Control panel (M554)	Covers (M552/M553/ M554/M555/E55040) on page 2028
RM2-7122-000CN	HVPS (D) PCA assembly	Internal assemblies (4 of 5) on page 2044
RM2-7123-000CN	HVPS (T) PCA assembly (M552, M553dn, M553x, M554, M555, E55040, M577, M578, E57540)	Internal assemblies (4 of 5) on page 2044
RM2-7130-000CN	Waste toner detect PCA assembly	Internal assemblies (1 of 5) on page 2035
RM2-7133-000CN	Switch PCA assembly (SW4)	Internal assemblies (2 of 5) on page 2037
RM2-7134-000CN	HVPS (T) PCA assembly (M553n)	Internal assemblies (4 of 5) on page 2044
RM2-7138-000CN	Memory PCA assembly	Internal assemblies (4 of 5) on page 2044
RM2-7139-000CN	Paper feed drive PCA assembly (550-sheet feeder)	550-sheet paper feeder main body on page 2051
RM2-7154-000CN	Environmental sensor PCA assembly	Internal assemblies (4 of 5) on page 2044
RM2-7156-000CN	Connecting PCA assembly	Internal assemblies (1 of 5) on page 2035
RM2-7157-000CN	Estrangement detect PCA assembly (SR5)	Internal assemblies (5 of 5) on page 2047
RM2-7160-000CN	Density detect assembly	Internal assemblies (3 of 5) on page 2040
RM2-7168-000CN	Pre-exposure PCA assembly	Internal assemblies (2 of 5) on page 2037
RM2-7169-000CN	Pre-exposure PCA assembly	Internal assemblies (2 of 5) on page 2037
RM2-7180-000CN	Control panel (M552dn, M553n, M553dn)	Covers (M552/M553/ M554/M555/E55040) on page 2028
RM3-7157-000CN	Low-voltage power supply (110V)	Internal assemblies (4 of 5) on page 2044
RM3-7158-000CN	Low-voltage power supply (220V)	Internal assemblies (4 of 5) on page 2044
RM3-7159-000CN	Fuser power supply PCA (110)	Internal assemblies (4 of 5) on page 2044
RM3-7160-000CN	Fuser power supply PCA (220V)	Internal assemblies (4 of 5) on page 2044
RM3-7458-000CN	DC controller PCA assembly (M552, M553, M555, E55040)	Internal assemblies (4 of 5) on page 2044

Table 8-17 Numerical parts list (continued)

Part number	Description	Table and page
RM3-7459-000CN	DC controller PCA assembly (M577, E57540)	Internal assemblies (4 of 5) on page 2044
RM3-8465-000CN	DC controller PCA assembly (M554, M555)	Internal assemblies (4 of 5) on page 2044
RM3-8468-000CN	DC controller PCA assembly (M554, M555)	Internal assemblies (4 of 5) on page 2044
RU8-0577-000CN	Gear 18T	Internal assemblies (5 of 5) on page 2047
VS1-7258-000CN	Connector, drawer	Internal assemblies (5 of 5) on page 2047
WC2-5806-000CN	Switch button (SW21; 550-sheet feeder)	550-sheet paper feeder main body on page 2051

A Certificate of Volatility

View the product certificates of volatility.

Certificate of Volatility

Review the certificates of volatility for the printers.

Figure A-1 Certificate of Volatility (M522/M553; 1 of 2)

HP Certificate of Volatility

Model:	Part Number:	Address:
Color LaserJet Enterprise M552 and M553	M552n=B5L23A; M553n=B5L24A M553dn=B5L25A; M553x=B5L26A	HP Inc. 11311 Chinden Blvd Boise, ID 83714

Volatile Memory

Does the device contain volatile memory (Memory whose contents are lost when power is removed)?
☒ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below

Type (SRAM, DRAM, etc):	Size:	User Modifiable:	Function:	Steps to clear memory:
DRAM	1GB	☐ Yes ☒ No	Temporary storage for system operation and print buffer.	There are no steps to clear this data.
Type (SRAM, DRAM, etc):	Size:	User Modifiable: ☐ Yes ☐ No	Function:	Steps to clear memory:
Type (SRAM, DRAM, etc):	Size:	User Modifiable: ☐ Yes ☐ No	Function:	Steps to clear memory:

Non-Volatile Memory

Does the device contain non-volatile memory (Memory whose contents are retained when power is removed)?
☒ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below

Type (Flash, EEPROM, etc):	Size:	User Modifiable:	Function:	Steps to clear memory:
EEPROM	32KB	☐ Yes ☒ No	Store customer setting data for backup/restore	There are no steps to clear this data.
Type (Flash, EEPROM, etc): SPI	Size: 4MB	User Modifiable: ☐ Yes ☒ No	Function: BIOS	Steps to clear memory: There are no steps to clear this data.
Type (Flash, EEPROM, etc): None	Size:	User Modifiable: ☐ Yes ☐ No	Function:	Steps to clear memory:

Mass Storage

Does the device contain mass storage memory (Hard Disk Drive, Tape Backup)?
☒ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below

Type (HDD, Tape, etc):	Size:	User Modifiable:	Function:	Steps to clear memory:
eMMC	4GB	☒ Yes ☐ No	JEDI and user data	Firmware update
Type (HDD, Tape, etc):	Size:	User Modifiable: ☐ Yes ☐ No	Function:	Steps to clear memory:

USB

Does the item accept USB input and if so, for what purpose (i.e Print Jobs, device firmware updates, scan upload)?
☒ Yes ☐ No If Yes please describe below

Walk-up USB print

Can any data other than scan upload be sent to the USB device)?
☐ Yes ☐ No If Yes please describe below

Figure A-2 Certificate of Volatility (M522/M553; 2 of 2)

RF/RFID	
Does the item use RF or RFID for receive or transmit of any data including remote diagnostics. (e.g. Cellular phone, Bluetooth) ☐ Yes ☐ No If Yes please describe below	
Purpose	
Frequency:)	Bandwidth:
Modulation:	Effective Radiate Power (ERP):
Specifications:	

Other Transmission Capabilities	
Does the device employ any other methods of non-wired access to transmit or receive any data whatsoever (e.g. anything other than standard hard wired TCP/IP, direct USB, or parallel connections)? ☒ Yes ☐ No If Yes please describe below:	
Purpose: Wireless direct print.	
Frequency: 2.4Ghz	Bandwidth:
Modulation:	Effective Radiate Power (ERP:
Specifications: 802.11 b/g	

Other Capabilities
Does the device employ any other method of communications such as a Modem to transmit or receive any data whatsoever? ☒ Yes ☐ No If Yes please describe below:
Purpose: NFC; to support tap to print only
Specifications: NFC Tag Type 4 ISO 14443B Compliant

Author Information			
Name: Jose Luis (Boise, ID – LaserJet MFP R&D) 208-333-4489	Title: Security Technical Market Engineer	Email:	Business Unit: IPG
			Date Prepared: 1/22/15

Figure A-3 Certificate of Volatility (M554/M555; 1 of 2)

HP Certificate of Volatility		
Model: HP Color LaserJet Enterprise M554 and M555	Part Number: M554dn=7ZU81A M555dn=7ZU78A; M555x= 7ZU79A	Address: HP Inc 11311 Chinden Boulevard Boise, ID 83714

Volatile Memory				
Does the device contain volatile memory (Memory whose contents are lost when power is removed)? ☒ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (SRAM, DRAM, etc): DRAM	Size: 1GB	User Modifiable: ☐ Yes ☒ No	Function: Temporary storage for system operation and print buffer.	Steps to clear memory: When the printer is powered off the memory is erased.
Type (SRAM, DRAM, etc):	Size:	User Modifiable: ☐ Yes ☐ No	Function:	Steps to clear memory: .
Type (SRAM, DRAM, etc):	Size:	User Modifiable: ☐ Yes ☐ No	Function:	Steps to clear memory:

Non-Volatile Memory				
Does the device contain non-volatile memory (Memory whose contents are retained when power is removed)? ☒ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (Flash, EEPROM, etc): EEPROM	Size: 32KB	User Modifiable: ☐ Yes ☒ No	Function: Store customer setting data for backup/restore.	Steps to clear memory: There are no steps to clear this data.
Type (Flash, EEPROM, etc): SPI	Size: 4MB	User Modifiable: ☐ Yes ☒No	Function: BIOS	Steps to clear memory: There are no steps to clear this data.
Type (Flash, EEPROM, etc): None	Size:	User Modifiable: ☐ Yes ☐ No	Function:	Steps to clear memory:

Mass Storage				
Does the device contain mass storage memory (Hard Disk Drive, Tape Backup)? ☒ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (HDD, Tape, etc): eMMC	Size: 4GB	User Modifiable: ☒ Yes ☐ No	Function: OS and user data	Steps to clear memory: Firmware update
Type (HDD, Tape, etc):	Size:	User Modifiable: ☐ Yes ☐ No	Function:	Steps to clear memory:

USB
Does the item accept USB input and if so, for what purpose (i.e. Print Jobs, device firmware updates, scan upload)? ☒ Yes ☐ No If Yes please describe below
Walkup USB print, firmware updates
Can any data other than scan upload be sent to the USB device)? ☐ Yes ☒ No If Yes please describe below

Figure A-4 Certificate of Volatility (M554/M555; 2 of 2)

RF/RFID	
Does the item use RF or RFID for receive or transmit of any data including remote diagnostics. (e.g. Cellular phone, Bluetooth) ☐ Yes ☒ No If Yes please describe below	
Purpose:	
Frequency:	Bandwidth:
Modulation:	Effective Radiate Power (ERP):
Specifications:	

Other Transmission Capabilities	
Does the device employ any other methods of non-wired access to transmit or receive any data whatsoever (e.g. anything other than standard hard wired TCP/IP, direct USB, or parallel connections)? ☒ Yes ☐ No If Yes please describe below:	
Purpose: Wireless direct print (M555x only)	
Frequency: 2.4Ghz, 5GHz	Bandwidth: 2401 - 2495 MHz; depending on selected channel in 2.4GHz band. 5180 - 5825 MHz; depending on selected channel in 5GHz band.
Modulation:	Effective Radiate Power (ERP):
Specifications: 802.11 b/g/n	

Other Transmission Capabilities	
Does the device employ any other methods of non-wired access to transmit or receive any data whatsoever (e.g. anything other than standard hard wired TCP/IP, direct USB, or parallel connections)? ☒ Yes ☐ No If Yes please describe below:	
Purpose: M555x only Device Beaconing Secure Print Apps	
Frequency: 2.4Ghz	Bandwidth: 2400-2483.5 MHz; depending on selected channel.
Modulation:	Effective Radiate Power (ERP):
Specifications: BTLE4.0 compliant	

Other Capabilities
Does the device employ any other method of communications such as a Modem to transmit or receive any data whatsoever? ☐ Yes ☒ No If Yes please describe below:
Purpose:
Specifications:

Author Information			
Name: Jose Luis (Boise, ID – LaserJet MFP R&D) 208-333-4489	Title: Security Technical Market Engineer	Email:	Business Unit: IPG
			Date Prepared: 7/10/20

Figure A-5 Certificate of Volatility (M577; 1 of 2)

HP Certificate of Volatility

Model:	Part Number:	Address:
HP Color LaserJet Enterprise MFP M577	B5L46A=M577dn B5L47A= M577f B5L48A= M577z B5L54A= M577c	HP Inc. 11311 Chinden Blvd Boise, ID 83714

Volatile Memory

Does the device contain volatile memory (Memory whose contents are lost when power is removed)?
☒ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below

Type (SRAM, DRAM, etc):	Size:	User Modifiable:	Function:	Steps to clear memory:
DRAM	1792MB	☐ Yes ☒ No	Operation system and print/scan buffer	
Type (SRAM, DRAM, etc):	Size:	User Modifiable: ☐ Yes ☐ No	Function:	Steps to clear memory: .
Type (SRAM, DRAM, etc):	Size:	User Modifiable: ☐ Yes ☐ No	Function:	Steps to clear memory:

Non-Volatile Memory

Does the device contain non-volatile memory (Memory whose contents are retained when power is removed)?
☒ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below

Type (Flash, EEPROM, etc):	Size:	User Modifiable:	Function:	Steps to clear memory:
	32KB	☐ Yes ☒ No	Store customer setting data for backup/restore	
Type (Flash, EEPROM, etc):	Size: 4MB	User Modifiable: ☐ Yes ☒No	Function: BIOS	Steps to clear memory:
Type (Flash, EEPROM, etc):	Size:	User Modifiable: ☐ Yes ☐ No	Function:	Steps to clear memory:

Mass Storage

Does the device contain mass storage memory (Hard Disk Drive, Tape Backup)?
☒ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below

Type (HDD, Tape, etc):	Size:	User Modifiable:	Function:	Steps to clear memory:
HDD	320GB	☒ Yes ☐ No	OS and user data	firmware update

Type (HDD, Tape, etc):	Size:	User Modifiable:	Function:	Steps to clear memory:
		☐ Yes ☐ No		

USB

Does the item accept USB input and if so, for what purpose (i.e Print Jobs, device firmware updates, scan upload)?
☒ Yes ☐ No If Yes please describe below

Walkup USB Print

Can any data other than scan upload be sent to the USB device)?
☐ Yes ☒ No If Yes please describe below

RF/RFID

Does the item use RF or RFID for receive or transmit of any data including remote diagnostics. (e.g. Cellular phone, Bluetooth) ☐ Yes ☐ No If Yes please describe below

Purpose:	
Frequency:	Bandwidth:
Modulation:	Effective Radiate Power (ERP):
Specifications:	

Figure A-6 Certificate of Volatility (M577; 2 of 2)

Other Transmission Capabilities	
Does the device employ any other methods of non-wired access to transmit or receive any data whatsoever (e.g. anything other than standard hard wired TCP/IP, direct USB, or parallel connections)? ☒ Yes ☐ No If Yes please describe below:	
Purpose: WiFi Direct Print	
Frequency: 2.4 GHz	Bandwidth:
Modulation:	Effective Radiate Power (ERP):
Specifications: 802.11 b/g/n	

Other Capabilities
Does the device employ any other method of communications such as a Modem to transmit or receive any data whatsoever? ☒ Yes ☐ No If Yes please describe below: NFC
Purpose: To support Tap-to-Print only
Specifications: NFC Tag Type 4 ISO14443B Compliant

Author Information			
Name: Jose Luis (Boise, ID – LaserJet MFP R&D) 208-333-4489	Title: Security Technical Market Engineer	Email:	Business Unit: IPG
			Date Prepared: 1/22/15

Figure A-7 Certificate of Volatility (M578; 1 of 2)

HP Certificate of Volatility		
Model: HP Color LaserJet Enterprise MFP M578	Part Number: 7ZU85A=M578dn 7ZU86A=M578f 7ZU87A=M578c 7ZU88A=M578z	Address: HP Inc 11311 Chinden Boulevard Boise, ID 83714

Volatile Memory				
Does the device contain volatile memory (Memory whose contents are lost when power is removed)? ☒ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (SRAM, DRAM, etc): DRAM	Size: 1792MB	User Modifiable: ☐ Yes ☒ No	Function: Temporary storage for operation system and print/scan buffer.	Steps to clear memory: When the printer is powered off the memory is erased.
Type (SRAM, DRAM, etc):	Size:	User Modifiable: ☐ Yes ☐ No	Function:	Steps to clear memory: .
Type (SRAM, DRAM, etc):	Size:	User Modifiable: ☐ Yes ☐ No	Function:	Steps to clear memory:

Non-Volatile Memory				
Does the device contain non-volatile memory (Memory whose contents are retained when power is removed)? ☒ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (Flash, EEPROM, etc): EEPROM	Size: 32KB	User Modifiable: ☐ Yes ☒ No	Function: Store customer setting data for backup/restore.	Steps to clear memory: There are no steps to clear this data.
Type (Flash, EEPROM, etc): SPI	Size: 4MB	User Modifiable: ☐ Yes ☒No	Function: BIOS	Steps to clear memory: There are no steps to clear this data.
Type (Flash, EEPROM, etc): None	Size:	User Modifiable: ☐ Yes ☐ No	Function:	Steps to clear memory:

Mass Storage				
Does the device contain mass storage memory (Hard Disk Drive, Tape Backup)? ☒ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (HDD, Tape, etc): HDD	Size: 500GB	User Modifiable: ☒ Yes ☐ No	Function: OS and user data	Steps to clear memory: Firmware update
Type (HDD, Tape, etc):	Size:	User Modifiable: ☐ Yes ☐ No	Function:	Steps to clear memory:

USB
Does the item accept USB input and if so, for what purpose (i.e. Print Jobs, device firmware updates, scan upload)? ☒ Yes ☐ No If Yes please describe below
Walkup USB print, scan to USB, firmware updates
Can any data other than scan upload be sent to the USB device)? ☐ Yes ☒ No If Yes please describe below

Figure A-8 Certificate of Volatility (M578; 2 of 2)

RF/RFID	
Does the item use RF or RFID for receive or transmit of any data including remote diagnostics. (e.g. Cellular phone, Bluetooth) ☐ Yes ☒ No If Yes please describe below	
Purpose:	
Frequency:	Bandwidth:
Modulation:	Effective Radiate Power (ERP):
Specifications:	

Other Transmission Capabilities	
Does the device employ any other methods of non-wired access to transmit or receive any data whatsoever (e.g. anything other than standard hard wired TCP/IP, direct USB, or parallel connections)? ☒ Yes ☐ No If Yes please describe below:	
Purpose: Wireless direct print (M578z only)	
Frequency: 2.4Ghz, 5GHz	Bandwidth: 2401 - 2495 MHz; depending on selected channel in 2.4GHz band. 5180 - 5825 MHz; depending on selected channel in 5GHz band.
Modulation:	Effective Radiate Power (ERP):
Specifications: 802.11 b/g/n	

Other Transmission Capabilities	
Does the device employ any other methods of non-wired access to transmit or receive any data whatsoever (e.g. anything other than standard hard wired TCP/IP, direct USB, or parallel connections)? ☒ Yes ☐ No If Yes please describe below:	
Purpose: M578z only Device Beaconing Secure Print Apps	
Frequency: 2.4Ghz	Bandwidth: 2400-2483.5 MHz; depending on selected channel.
Modulation:	Effective Radiate Power (ERP):
Specifications: BTLE4.0 compliant	

Other Capabilities	
Does the device employ any other method of communications such as a Modem to transmit or receive any data whatsoever? ☐ Yes ☒ No If Yes please describe below:	
Purpose:	
Specifications:	

Purpose: WiFi	
Frequency: 2.4 GHz, 5 GHz band	*Data rate:* *802.11b: up to 11 Mbps* *802.11a/g: up to 54 Mbps* *802.11n: up to 300 Mbps*
Modulation: *CCK, DQPSK, DBPSK for DSSS* *64QAM, 16QAM, QPSK, BPSK for OFDM*	*Effective Radiate Power (EIRP):* *2.4 GHz* *2400 – 2483.5 MHz: 19.8 dBm Max* *5 GHz* *5150 – 5350 MHz: 22.5 dBm max* *5470 – 5725 MHz: 22.2 dBm max*
Specifications: 802.11 a/b/g/n *3.3V +/- 10%*	

Purpose: *BLE (Bluetooth Low Energy)*	
Frequency: 2.4 to 2.4835 GHz band	*Data rate:* *BT-LE: up to 2 Mbps*
Modulation: Gaussian frequency shift modulation	*Effective Radiate Power (EIRP): BLE: 1.2 dBm max*
Specifications: BTLE4.0 compliant *3.3V +/- 10%*	

Author Information			
Name: Jose Luis (Boise, ID – LaserJet MFP R&D) 208-333-4489	Title: Security Technical Market Engineer	Email:	Business Unit: IPG
			Date Prepared: 7/10/20

Figure A-9 Certificate of Volatility (E55040dn; 1 of 2)

HP Certificate of Volatility

Model:	Part Number:	Address:
HP Color LaserJet Managed E55040dn	E55040dn =3GX99A	HP Inc. 11311 Chinden Blvd Boise, ID 83714

Volatile Memory

Does the device contain volatile memory (Memory whose contents are lost when power is removed)?
☒ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below

Type (SRAM, DRAM, etc):	Size:	User Modifiable:	Function:	Steps to clear memory:
DRAM	1 GB	☐ Yes ☒ No	Used for temporary storage during the process of jobs, and for applications that are running on the OS.	When the printer is powered off the memory is erased.

Non-Volatile Memory

Does the device contain non-volatile memory (Memory whose contents are retained when power is removed)?
☐ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below

Type (Flash, EEPROM, etc):	Size:	User Modifiable:	Function:	Steps to clear memory:
IOD EEPROM	32KB	☐ Yes ☒ No	Store customer setting data for backup/restore	There are no steps to clear this data.
SPI	4MB	☐ Yes ☒No	BIOS	There are no steps to clear this data

Mass Storage

Does the device contain mass storage memory (Hard Disk Drive, Tape Backup)?
☐ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below

Type (HDD, Tape, etc):	Size:	User Modifiable:	Function:	Steps to clear memory:
eMMC	4GB	☒ Yes ☐ No	Stores data, OS, applications, digitally signed firmware images, persistent data, and temporary data for processing system functions	1. Power cycle the printer to erase the customer data partition cryptographically. 2. Instigate a non-secure fast erase from the EWS.

USB

Does the item accept USB input and if so, for what purpose (i.e. Print Jobs, device firmware updates, scan upload)?
☒ Yes ☐ No If Yes please describe below

Walk up USB Print

Can any data other than scan upload be sent to the USB device)?
☐ Yes ☒ No If Yes please describe below

RF/RFID

Does the item use RF or RFID for receive or transmit of any data including remote diagnostics. (e.g. Cellular phone, Bluetooth) ☐ Yes ☒ No If Yes please describe below

Purpose:	
Frequency:	Bandwidth
Modulation:	Effective Radiate Power (ERP):
Specifications:	

Figure A-10 Certificate of Volatility (E55040dn; 2 of 2)

Other Transmission Capabilities	
Does the device employ any other methods of non-wired access to transmit or receive any data whatsoever (e.g. anything other than standard hard wired TCP/IP, direct USB, or parallel connections)? ☐ Yes ☒ No If Yes please describe below:	
Purpose:	
Frequency:	Bandwidth:
Modulation:	Effective Radiate Power (ERP):
Specifications	

Other Capabilities
Does the device employ any other method of communications such as a Modem to transmit or receive any data whatsoever? ☐ Yes ☐ No If Yes please describe below:
Purpose:
Specifications:

Author Information			
Name	Title	Email	Business Unit
Robert Mejia	System Engineer	Technical.Marketing@hp.com	IPG
Date Prepared: 12/10/2019			

Figure A-11 Certificate of Volatility (E55040dw; 1 of 2)

HP Certificate of Volatility		
Model: HP Color LaserJet Managed E55040dw	Part Number: E55040dw =3GX98A	Address: HP Inc 11311 Chinden Blvd Boise, ID 83714

Volatile Memory				
Does the device contain volatile memory (Memory whose contents are lost when power is removed)? ☒ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (SRAM, DRAM, etc): DRAM	Size: 1 GB	User Modifiable: ☐ Yes ☒ No	Function: Used for temporary storage during the process of jobs, and for applications that are running on the OS.	Steps to clear memory: When the printer is powered off the memory is erased.

Non-Volatile Memory				
Does the device contain non-volatile memory (Memory whose contents are retained when power is removed)? ☐ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (Flash, EEPROM, etc): IOD EEPROM	Size: 32KB	User Modifiable: ☐ Yes ☒ No	Function: Store customer setting data for backup/restore	Steps to clear memory: There are no steps to clear this data.
Type (Flash, EEPROM, etc): SPI	Size: 4MB	User Modifiable: ☐ Yes ☒No	Function: BIOS	Steps to clear memory: There are no steps to clear this data

Mass Storage				
Does the device contain mass storage memory (Hard Disk Drive, Tape Backup)? ☐ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (HDD, Tape, etc): eMMC	Size: 4GB	User Modifiable: ☒ Yes ☐ No	Function: Stores data, OS, applications, digitally signed firmware images, persistent data, and temporary data for processing system functions	Steps to clear memory: 1. Power cycle the printer to erase the customer data partition cryptographically. 2. Instigate a non-secure fast erase from the EWS.

USB
Does the item accept USB input and if so, for what purpose (i.e. Print Jobs, device firmware updates, scan upload)? ☒ Yes ☐ No If Yes please describe below
Walk up USB Print
Can any data other than scan upload be sent to the USB device)? ☐ Yes ☒ No If Yes please describe below

RF/RFID	
Does the item use RF or RFID for receive or transmit of any data including remote diagnostics. (e.g. Cellular phone, Bluetooth) ☐ Yes ☒ No If Yes please describe below	
Purpose:	
Frequency:	Bandwidth
Modulation:	Effective Radiate Power (ERP):
Specifications:	

Figure A-12 Certificate of Volatility (E55040dw; 2 of 2)

Other Transmission Capabilities	
Does the device employ any other methods of non-wired access to transmit or receive any data whatsoever (e.g. anything other than standard hard wired TCP/IP, direct USB, or parallel connections)? ☒ Yes ☐ No If Yes please describe below:	
Purpose: Wireless direct print	
Frequency: 2.4Ghz	Bandwidth:
Modulation:	Effective Radiate Power (ERP):
Specifications 802.11 b/g/n	

Other Capabilities
Does the device employ any other method of communications such as a Modem to transmit or receive any data whatsoever? ☐ Yes ☐ No If Yes please describe below:
Purpose:
Specifications:

Author Information			
Name	Title	Email	Business Unit
Casey Campbell	Technical Marketing Engineer	Technical.Marketing@hp.com	IPG
Robert Mejia	System Engineer	Technical.Marketing@hp.com	IPG
Date Prepared: 04/10/2018			

Figure A-13 Certificate of Volatility (E57540c; 1 of 2)

HP Certificate of Volatility		
Model: HP Color LaserJet Managed MFP E57540c	Part Number: E57540c = 3GY26A	Address: HP Inc. 11311 Chinden Blvd Boise, ID 83714

Volatile Memory				
Does the device contain volatile memory (Memory whose contents are lost when power is removed)? ☐ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (SRAM, DRAM, etc): DRAM	Size: 1792MB	User Modifiable: ☐ Yes ☒ No	Function: Used for temporary storage during the processing of jobs and for applications running on the OS.	Steps to clear memory: When the printer is powered OFF, the memory is erased.

Non-Volatile Memory				
Does the device contain non-volatile memory (Memory whose contents are retained when power is removed)? ☐ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (Flash, EEPROM, etc): IOD EEPROM	Size: 32 KB	User Modifiable: ☐ Yes ☒ No	Function: Store customer setting data for backup/restore	Steps to clear memory: There are no steps to clear this data.
Type (Flash, EEPROM, etc): SPI	Size: 4MB	User Modifiable: ☐ Yes ☒No	Function: BIOS	Steps to clear memory: There are no steps to clear this data.

Mass Storage				
Does the device contain mass storage memory (Hard Disk Drive, Tape Backup)? ☐ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (HDD, Tape, etc): HDD	Size: 320GB	User Modifiable: ☒ Yes ☐ No	Function: Stores customer data, OS, applications, digitally signed firmware images, persistent data, and temporary data used for processing and system functions	Steps to clear memory: 1.Erase and Unlock Encrypted Disk – This changes the encryption keys rendering all data unreadable. 2.Secure Storage Erase – Erases temporary files and job data by overwriting information one or three times. 3.Secure Disk Erase – Industry standard ATA Secure Erase. Overwrites all data on the HDD. 4.Secure File Erase – Erases files when jobs finish processing by overwriting them one or three times.

USB
Does the item accept USB input and if so, for what purpose (i.e. Print Jobs, device firmware updates, scan upload)? ☒ Yes ☐ No If Yes please describe below
Print jobs, HP digitally signed firmware upgrades, 3rd party application loading. USB ports can be disabled.
Can any data other than scan upload be sent to the USB device)? ☒ Yes ☐ No If Yes please describe below
Diagnostic service logs can be uploaded. Print files can be printed via a USB thumb drive.

Figure A-14 Certificate of Volatility (E57540c; 2 of 2)

RF/RFID	
Does the item use RF or RFID for receive or transmit of any data including remote diagnostics. (e.g. Cellular phone, Bluetooth) ☐ Yes ☒ No If Yes please describe below	
Purpose:	
Frequency:	Bandwidth
Modulation:	Effective Radiate Power (ERP):
Specifications:	

Other Transmission Capabilities	
Does the device employ any other methods of non-wired access to transmit or receive any data whatsoever (e.g. anything other than standard hard wired TCP/IP, direct USB, or parallel connections)? ☐ Yes ☒ No If Yes please describe below:	
Purpose:	
Frequency:	Bandwidth:
Modulation:	Effective Radiate Power (ERP):
Specifications	

Other Capabilities
Does the device employ any other method of communications such as a Modem to transmit or receive any data whatsoever? ☐ Yes ☒ No If Yes please describe below:
Purpose:
Specifications:

Author Information			
Name	Title	Email	Business Unit
Casey Campbell	Technical Marketing Engineer	Technical.Marketing@hp.com	IPG
Robert Mejia	System Engineer	Technical.Marketing@hp.com	IPG
Date Prepared: 04/10/2018			

Figure A-15 Certificate of Volatility (E57540dn; 1 of 2)

HP Certificate of Volatility		
Model: HP Color LaserJet Managed MFP E57540dn	Part Number: E57540dn = 3GY25A	Address: HP Inc. 11311 Chinden Blvd Boise, ID 83714

Volatile Memory				
Does the device contain volatile memory (Memory whose contents are lost when power is removed)? ☐ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (SRAM, DRAM, etc): DRAM	Size: 1792MB	User Modifiable: ☐ Yes ☒ No	Function: Used for temporary storage during the processing of jobs and for applications running on the OS.	Steps to clear memory: When the printer is powered OFF, the memory is erased.

Non-Volatile Memory				
Does the device contain non-volatile memory (Memory whose contents are retained when power is removed)? ☐ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (Flash, EEPROM, etc): IOD EEPROM	Size: 32 KB	User Modifiable: ☐ Yes ☒ No	Function: Store customer setting data for backup/restore	Steps to clear memory: There are no steps to clear this data.
Type (Flash, EEPROM, etc): SPI	Size: 4MB	User Modifiable: ☐ Yes ☒No	Function: BIOS	Steps to clear memory: There are no steps to clear this data.

Mass Storage				
Does the device contain mass storage memory (Hard Disk Drive, Tape Backup)? ☐ Yes ☐ No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (HDD, Tape, etc): HDD	Size: 320GB	User Modifiable: ☒ Yes ☐ No	Function: Stores customer data, OS, applications, digitally signed firmware images, persistent data, and temporary data used for processing and system functions	Steps to clear memory: 1.Erase and Unlock Encrypted Disk – This changes the encryption keys rendering all data unreadable. 2.Secure Storage Erase – Erases temporary files and job data by overwriting information one or three times. 3.Secure Disk Erase – Industry standard ATA Secure Erase. Overwrites all data on the HDD. 4.Secure File Erase – Erases files when jobs finish processing by overwriting them one or three times.

USB
Does the item accept USB input and if so, for what purpose (i.e. Print Jobs, device firmware updates, scan upload)? ☒ Yes ☐ No If Yes please describe below
Print jobs, HP digitally signed firmware upgrades, 3rd party application loading. USB ports can be disabled.
Can any data other than scan upload be sent to the USB device)? ☒ Yes ☐ No If Yes please describe below
Diagnostic service logs can be uploaded. Print files can be printed via a USB thumb drive.

Figure A-16 Certificate of Volatility (E57540dn; 2 of 2)

RF/RFID	
Does the item use RF or RFID for receive or transmit of any data including remote diagnostics. (e.g. Cellular phone, Bluetooth) ☐ Yes ☒ No If Yes please describe below	
Purpose:	
Frequency:	Bandwidth
Modulation:	Effective Radiate Power (ERP):
Specifications:	

Other Transmission Capabilities	
Does the device employ any other methods of non-wired access to transmit or receive any data whatsoever (e.g. anything other than standard hard wired TCP/IP, direct USB, or parallel connections)? ☐ Yes ☒ No If Yes please describe below:	
Purpose:	
Frequency:	Bandwidth:
Modulation:	Effective Radiate Power (ERP):
Specifications	

Other Capabilities
Does the device employ any other method of communications such as a Modem to transmit or receive any data whatsoever? ☐ Yes ☒ No If Yes please describe below:
Purpose:
Specifications:

Author Information			
Name	Title	Email	Business Unit
Casey Campbell	Technical Marketing Engineer	Technical.Marketing@hp.com	IPG
Robert Mejia	System Engineer	Technical.Marketing@hp.com	IPG
Date Prepared: 4/10/2018			

Glossary of terms

802.11
802.11 is a set of standards for wireless local area network (WLAN) communication, developed by the IEEE LAN/MAN Standards Committee (IEEE 802).

802.11b/g/n
802.11b/g/n can share the same hardware and use the 2.4 GHz band. 802.11b supports bandwidth up to 11 Mbps, 802.11n supports bandwidth up to 150 Mbps. 802.11b/g/n devices might occasionally suffer interferences from microwave ovens, cordless telephones, and Bluetooth devices.

AC
An electric current that reverses its direction many times a second at regular intervals. For example, the 110V line current found in a typical US electrical wall receptacle.

AC Control Module (PageWide)
The AC Control Module controls the heating elements in the airflow assembly. Function include: voltage monitoring (ensuring correct operation in a low-quality-power environment), isolation (low voltage heater control signals are isolated from the high voltage AC power for safety), AC switching (power is switched on/off to the heater), and heating element configuration (heating element configuration is changed between series and parallel for temperature predictability).

ADF
An Automatic Document Feeder (ADF) is a device that automatically feeds an original sheet (or multiple sheets) of paper into the image scanner. The document feeder is a component of the integrated scanner assembly (ADF and image scanner).

Airflow System (PageWide)
The airflow system conditions the printed pages to avoid page curling due to the ink on the page. The airflow system functionally consists of a fan and heating elements. The pressurized air is blown on the page through the nozzles that are placed on the paper path of the airflow system between print and eject zone.

BOOTP
Bootstrap Protocol. A network protocol used by a network client to obtain its IP address automatically. This is usually done in the bootstrap process of computers or operating systems running on them. The BOOTP servers assigns an IP address from a pool of addresses to each client. BOOTP enables “diskless workstation” computers to obtain an IP address prior to loading any advanced operating system.

CCD
A Charged Coupled Device (CCD) is the scanner module which enables a scan job. A CCD locking mechanism is used to hold the CCD module to prevent any damage when the printer is moved.

CIS
A Contact Image Sensor (CIS) scanner captures an image using the printer's optical path. Red, green, and blue LEDs sequentially illuminate a small strip of the document (often called a raster line), and the optical system captures each color in a single row of Charged Coupled Device (CCD) sensors that cover the entire page width.

Collation
Collation is a process of printing a multiple-copy job in sets. When collation is selected, the device prints an entire set before printing additional copies.

Control Panel
The control panel is a flat, typically vertical panel or screen where the user can control and/or monitor the printer. The control panel is found on the front of the printer.

Coverage
Coverage is the printing term used for a toner usage measurement on printing. For example, 5% coverage means that an A4 sided paper has about 5% image or text on it. If the paper or original has complicated images or a large amount of text, the coverage will be higher and at the same time, a toner usage will be as much as the coverage.

DC
An electric current flowing in one direction only. Typically a low voltage load current supplied to an electrical assembly.

DCC
The DC controller (DCC) controls the operation of the printer sub-systems and electrical components. the DCC sends out various signals to operate motors, solenoids, and other printer components based on the print command and image data that the host computer sends the formatter.

Default
The value or setting that is in effect when a printer is unboxed, reset, or initialized.

DHCP
Dynamic Host Configuration Protocol (DHCP) is a client-server networking protocol. A DHCP server provides configuration parameters specific to the DHCP client host requesting, generally, information required by the client host to participate on an IP network. The DHCP also provides a mechanism for allocation of IP addresses to client hosts.

Digital Send Software
Digital send software allows a mufti-function printer (MFP) to scan and send information quickly and securely to email, network folders, other printers, and fax services.

DIMM
A Dual Inline Memory Module (DIMM) is a small circuit board that holds memory. The DIMM stores all data within the printer, such as printing data and received fax data.

DPI
Dots Per Inch (DPI) is a measurement of resolution that is used for scanning and printing. Generally, higher DPI results in a higher resolution (more visible detail in the image and a larger file size).

Duplex
A mechanism that automatically turns over a sheet of paper so that the printer can print (or scan) on both sides of the paper. A printer equipped with a duplex unit can print on both sides of the paper during one print cycle.

Duty Cycle
Duty cycle is the page quantity which does not affect printer performance for a month. Generally, the printer has the lifespan limitation such as pages per year. The lifespan means the average capacity of print-outs, usually within the warranty period. For example, if the duty cycle is 48,000 pages per month the printer limit is 2,400 pages a day (assuming 20 working days/month).

Dynamic Security
Dynamic Security is a toner cartridge design and process for authenticating genuine HP supplies. HP printers use toner cartridges that have security chips or electronic circuitry. Cartridges using a non-HP chip or modified or non-HP circuitry might not work (now or in the future).

e-Duplex

Single-pass electronic duplex (e-Duplex) printer use two separate scan modules to scan the front-side and back-side of an e-duplex copy job page in a single pass through the document feeder.

EMC

EMC is a measure of a device's ability to operate as intended in its shared operating environment while, at the same time, not affecting the ability of other equipment within the same environment to operate as intended.

EMI

EMI is the electromagnetic energy which affects the functioning of an electronic device. Electronic devices (like printers) are a source of EMI. Because it is rare for electronics to operate in isolation, products are generally engineered to function in the presence of some amount of EMI.

eMMC

An embedded Multi-Media Card is a compact memory device consisting of NAND flash memory and a simple storage controller.

Emulation

Emulation is a technique of one machine obtaining the same results as another. An emulator duplicates the functions of one system with a different system, so that the second system behaves like the first system. Emulation focuses on exact reproduction of external behavior. This is different from simulation, which concerns an abstract model of the system being simulated, often considering its internal state.

EPS

Encapsulated PostScript (EPS) is a PostScript (PS) code file which is used for storing font and vector graphic image information.

ESD

An electrostatic discharge (ESD) is a sudden flow of electricity between two electrically charged objects caused by contact, an electrical short, or dielectric breakdown. Discharge of built up static electricity.

Ethernet

Ethernet is a frame-based computer networking technology for local area networks (LANs). It defines wiring and signaling for the physical layer, and frame formats and protocols for the media access control (MAC)/data link layer of the OSI model. Ethernet is mostly standardized as IEEE 802.3. Ethernet has become the most widespread LAN technology in use during the 1990s to present.

Ferrite

A ferrite are used to reduce the amount of radio frequency noise (or interference) in a wire or cable. A ferrite enables proper EMC/EMI performance for regulatory purposes.

FFC

Flat Flexible Cables (FFCs) are designed for Printed Circuit Assembly (PCA) to PCA connections (for example, connecting a fax PCA to the formatter).

FIH

A Foreign Interface Harness (FIH) is a port that enables HP multifunction printers (MFPs) to use third-party devices to extend the capabilities of the MFP.

Firmware

The formatter stores the printer firmware. A remote firmware upgrade process is used to overwrite and upgrade the firmware.

Flash memory

Flash memory is non-volatile, meaning it retains stored data even when the power is turned off.

Flow integrated scanner assembly

A printer scanner assembly that includes a slide-out external physical keyboard.

Formatter (LaserJet)

The formatter controls printer functions like receiving and processes print data, developing and coordinating data placement and timing with the DC controller PCA, storing font and customer configuration information, communicating with the host computer, and monitoring control panel functions and relaying printer status information through the control panel.

FTP

FTP stands for File Transfer Protocol. FTP is a protocol designed for transferring files over the Internet. Files stored on an FTP server can be accessed using an FTP client, such as a web browser, FTP software program, or a command line interface.

Fuser Unit

The fuser unit is part of a laser printer that adheres the toner onto the printed page. It consists of a heat roller and a pressure roller. After toner is transferred onto the paper, the fuser unit applies heat and pressure to make sure that the toner stays on the paper permanently (which is why paper is warm when it comes out of a laser printer).

Gateway

A connection between computer networks, or between a computer network and a telephone line. A gateway is used to connect two different computer networks, especially a connection to the Internet.

Grayscale

Shades of gray that represent light and dark portions of a color image printed in monochrome. Colors are represented by a range of gray shades from white to black.

Halftone

Halftone is a way of reproducing a photograph or other image in which the various tones of gray or color are produced by variously sized dots of ink or toner. Halftone simulates grayscale by varying the number of dots. Highly colored areas consist of a large number of dots, while lighter areas consist of a smaller number of dots.

HDD

A Hard-Disk Drive (HDD) (commonly referred to as a hard drive or hard disk) is a non-volatile storage device which stores digitally-encoded data on rapidly rotating platters with magnetic surfaces.

IEEE

The Institute of Electrical and Electronics Engineers (IEEE) is an international non-profit, professional organization for the advancement of technology related to electricity.

Image scanner

The image scanner (or Sub Scanner Assembly) contains the components to digitally scan an original source document. The image scanner is a component of the integrated scanner assembly (ADF and image scanner).

IP address

An Internet Protocol (IP) address is a unique number that a device uses in order to identify and communicate with other devices on a network utilizing the Internet Protocol standard.

IPM

The Images Per Minute (IPM) is a method of measuring the speed of a printer. An IPM rate indicates the number of single-sided sheets a printer can complete in one minute.

IPP

The Internet Printing Protocol (IPP) defines a standard protocol for printing and managing print jobs, media size, resolution, etc. IPP can be used locally, or over the internet to reach hundreds of printers. IPP also supports access control, authentication, and encryption, making it a capable and secure printing solution.

ISA

The Integrated Scanner Assembly (ISA) includes the document feeder and image scanner.

ISO

The International Organization for Standardization (ISO) is an international standard-setting body composed of representatives from national standards bodies. In produces world-wide industrial and commercial standards.

JBIG
Joint Bi-level Image Experts Group (JBIG) is an image compression standard with no loss of accuracy or quality. It was designed for compression of binary images, particularly for faxes, but can also be used for other images.

JPEG
Joint Photographic Experts Group (JPEG) is a commonly used standard method of loss compression for photographic images. It is the format used for storing and transmitting photographs on the World Wide Web.

LDAP
The Lightweight Directory Access Protocol (LDAP) is a networking protocol for querying and modifying directory services running over TCP/IP.

LED
A Light-Emitting Diode (LED) is a semiconductor device that can indicate the status of a printer (formatter LEDs) or a component in a contact image sensor (CIS) scanner that helps capture an image.

LEDM
Low end data model (LEDM) provides one consistent data representation method and defines the dynamic and capabilities tickets shared between clients and devices, as well as the access protocol, event, security, and discovery methods.

LPDC
Late point differentiation configuration (LPDC) allows the channel partner to configure the speed to the printer depending on the customer's order. LPDC configuration is stored on the Trusted Platform Module (TPM).

LVPS - SMPS
Low Voltage Power Supplies (LVPS) and Switching Mode Power Supplies (SMPS) supply direct current (DC) voltages to various printer components and assemblies.

MAC address
Media Access Control (MAC) address is a unique identifier associated with a network adapter. MAC address is a unique 48–bit identifier usually written as 12 hexadecimal characters grouped in pairs (for example, 00–00–0c-34–11–4e). This address is usually hard-coded into a Network Interface Card (NIC) by the manufacturer, and used as an aid for routers trying to locate machines on a large network.

MEt
HP Memory Enhancement technology (MEt) effectively doubles the standard memory through a variety of font- and data-compression methods. MEt is available only in Printer Command Language (PCL) mode; it is not functional when printing in PostScript (PS) mode.

MFP
A Multi Function Printer (MFP) is a printer that incorporates multiple functionality in a single physical body. For example, an MFP printer can scan, digitally send, fax, copy, and print.

MHV
Miniature High Voltage (MHV) is designed for high voltage applications of BNC connectors (DC voltage between 500 V and 5 kV).

Modem
A device that modulates a carrier signal to encode digital information, and also demodulates such a carrier signal to decode transmitted information.

MPCA (PageWide)
The MPCA integrates both formatter (LaserJet) and engine control electronics (DC controller) into a single assembly. The Main PCA (MPCA) controls printer functions like receiving and processes print data, developing and coordinating data placement, storing font and customer configuration information, communicating with the host computer, and monitoring control panel functions and relaying printer status information through the control panel.

NAND
NAND is not an acronym (the term is short for **NOT AND** a Boolean operator and logic gate). NAND (flash) memory is non-volatile, meaning it retains stored data even when the power is turned off.

NVRAM
Nonvolatile random access memory (NVRAM) is used to store I/O and information about the print environment configuration (stored data even when the power is turned off).

OPC
Organic Photo Conductor (OPC) is a mechanism that makes a virtual image for print using a laser beam emitted from a laser printer. It is usually green or rust colored and has a cylinder shape. An imaging unit containing a drum slowly wears the drum surface during its usage in the printer, and it should be replaced appropriately due to wear from contact with the cartridge development brush, cleaning mechanism, and paper.

Originals
The first example of something, such as a document, photograph, or text which is copied, reproduced, or translated to produce additional copies. The original itself is not copied or derived from something else.

PCA
Printed Circuit Assembly (PCA). Once the printed circuit board (PCB) is complete, electronic components must be assembled to form a functional printed circuit assembly or PCA.

PCL
Printer Command Language (PCL) is a Page Description Language (PDL) developed by HP as a printer protocol. PCL has become an industry standard. Originally developed for early Inkjet printers, PCL has been released in varying levels for thermal, dot matrix printers and laser printers.

PDF
Portable Document Format (PDF) is a proprietary file format developed by Adobe Systems. A PDF represents two dimension documents in a device independent and resolution independent format.

PJL
Printer job language (PJL) is an integral part of printer configuration, in addition to the standard PCL and PostScript (PS). With standard cabling, the printer can use PJL to perform a variety of functions like dynamic I/O switching, context-sensitive switching, and isolation of print environment settings from one print job to the next.

PML
Printer management language (PML) allows remote configuration of the printer and status read-back from the printer through the I/O ports.

PostScript (PS)
PostScript (PS) is a Page Description Language (PDL) and programming language used primarily in electronic and desktop publishing. PostScript is run in an interpreter to generate an image.

PPM
Pages Per Minute (PPM) is a method of measurement for determining how fast a printer works, meaning the number of pages a printer can produce in one minute.

Print Media
Media like paper, envelopes, labels, and transparencies which can be used in a printer, scanner, fax, or copier.

Printer Driver
A program used to send commands and transfer data from the computer to the printer.

Printhead (PageWide)
The printhead converts the digital firing instructions from the printer electronics into properly formed and timed microscopic drops of the four ink colors.

Printhead Wiper (PageWide)

The printhead wiper system keeps the printhead nozzles firing correctly throughout the life of the printer as it performs the wiping and capping functions. The wiping function cleans the nozzles of ink residue and particulates. The capping function keeps the nozzles moist during storage and when the printer is idle.

Protocol

A convention or standard that controls or enables the connection, communication, and data transfer between two computing endpoints.

RAM

Random Access Memory (RAM) is the printer memory device where the data in current use is kept so it can be quickly retrieved by the device's processor. This memory is an important factor in avoiding errors and printing documents properly. Printer memory is used to store and process print jobs as they are sent to the printer from a computer. After printing, the job is cleared from the memory to make room for more print jobs. Printer memory is directly linked to two print characteristics: speed and print quality. More memory allows you to print faster and print larger, high-quality graphics.

Resolution

The sharpness of an image, measured in Dots Per Inch (DPI). The higher the DPI, the greater the resolution.

SCB

The Scanner Control Board (SCB) controls the functions of the image scanner components in the Sub Scanner Assembly (SSA).

Service fluid and aerosol management systems (PageWide)

There are two types of service fluid, shipping fluid and ink. The service fluid management system is contained entirely within the duplex module. Service fluid is discharged as droplets from the printhead, and then collected in a container inside the duplex module. Some of the droplets are called aerosol because they are lighter than air. Aerosol can float inside the printer and collect on the lens of optical sensors, producing false failures. The aerosol management system transports the aerosol and collects it in a safe place. Aerosol management consists of an aerosol fan, mounted on the rear wall of the air flow assembly, which creates air flow that pulls the aerosol through the holes in the platen and into the aerosol filter inside the duplex module.

SFP

A single-function printer only processes print jobs sent from a host computer or from an USB port on the printer.

SMB

Server Message Block (SMB) is a network protocol mainly applied to share files, printers, serial ports, and miscellaneous communications between nodes on a network. SMB also provides an authenticated inter-process communication mechanism.

SMTP

Simple Mail Transfer Protocol (SMTP) is the standard for email transmissions across the internet. SMTP is a relatively simple, text-based protocol, where one or more recipient of a message are specified and the message text is transferred. It is a client server protocol where the client transmits an email message to the server.

SODIMM

Small outline dual in-line memory module (SODIMM) is a thin profile memory storage device (a smaller alternative to a standard DIMM device).

SSA

The Sub-Scanner Assembly is the image scanner component of the Integrated Scanner Assembly (ISA; which includes the document feeder and the image scanner).

Subnet Mask

The subnet mask is used in conjunction with the network address to determine which part of the address is the network address and which part is the host address.

TCP/IP
The Transmission Control Protocol (TCP) and the Internet Protocol (IP) are the set of communications protocols that implement the protocol stack on which the internet and most commercial networks run.

TIFF
Tagged Image File Format (TIFF) is a variable-resolution bit mapped image format. TIFF describes image data that typically come from scanners. TIFF images use tags, keywords defining the characteristics of the image that is included in the file. This flexible and platform-independent format can be used for pictures that have been made by various image processing applications.

Toner Cartridge
A bottle or container that holds toner, which is used in a machine like a printer. Toner is a powder used in laser printers and photocopiers. The toner forms the text and images on printed paper. Toner can be fused by a combination of heat/pressure from the fuser, causing it to bind the fibers in the paper.

TPM
The HP Trusted Platform Module (TPM) is a security accessory for printers. The TPM strengthens protection of encrypted credentials and data stored on your printer. Certificate private keys are both generated by and protected by the TPM. Once installed, the printer and the TPM are sealed and the printer owns the TPM. The TPM may not be moved to another device without losing its ownership from the original printer. Installing a TPM accessory might necessitate a firmware upgrade. The TPM prevents the printer from starting if the TPM is missing. If the TPM is removed from the printer, a control-panel error message appears indicating that the TPM is missing.

TWAIN
An industry standard for scanners and software. By using a TWAIN compliant scanner with TWAIN-compliant software, a scan can be initiated from the program. TWAIN is an image capture API for Microsoft Windows and Apple Macintosh operating systems.

URL
Uniform Resource Locator (URL) is the global address of documents and resources on the internet. The first part of the address indicates what protocol to use. The second part specifies the IP address or the domain name where the resource is located.

USB
Universal Serial Bus (USB) is a standard that was developed by the USB Implementers Forum, Inc., to connect computers and peripherals. Unlike the parallel port, USB is designed to concurrently connect a single computer USB port to multiple peripherals.

Walk-up USB
Some printers support direct printing from a USB flash drive (the walk-up USB port is usually near the control panel).

Watermark
A watermark is a recognizable image or pattern in paper that appears lighter when viewed by transmitted light. Watermarks were first introduced in Bologna, Italy in 1282. Watermarks have been used by paper makers to identify their product, and also on postage stamps, currency, and other government documents to discourage counterfeiting.

XPS
XML Paper Specification (XPS) is a specification for a Page Description Language (PDL) and a new document format developed by Microsoft. This has benefits for portable document and electronic documents. It is an XML-based specification based on a new print path and vector-based, device-independent document format.

ZIF Connector
Zero insertion force (ZIF) connectors use a mechanical locking method to secure Flat Flexible Cables (FFCs) to a Printed Circuit Assembly (PCA).

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