

# Introduction

This chapter describes the removal and replacement of field-replaceable units (FRUs) only.


Replacing FRUs is generally the reverse of removal. Occasionally, notes and tips are included to provide directions for difficult or critical replacement procedures.

HP does *not* support repairing individual subassemblies or troubleshooting to the component level.

Note the length, diameter, color, type, and location of each screw. Be sure to return each screw to its original location during reassembly.


Incorrectly routed or loose wire harnesses can interfere with other internal components and can become damaged or broken. Frayed or pinched harness wires can be difficult to find. When replacing wire harnesses, always use the provided wire loops, lance points, or wire-harness guides and retainers.


## Removal and replacement strategy


 **WARNING!** Turn the product off, wait 5 seconds, and then remove the power cord before attempting to service the product. If this warning is not followed, severe injury can result, in addition to damage to the product. The power must be on for certain functional checks during troubleshooting. However, disconnect the power supply during parts removal.

Never operate or service the product with the protective cover removed from the laser/scanner assembly. The reflected beam, although invisible, can damage your eyes.

The sheet-metal parts can have sharp edges. Be careful when handling sheet-metal parts.

 **CAUTION:** Do not bend or fold the flat flexible cables (FFCs) during removal or installation. Also, do not straighten pre-folds in the FFCs. You *must* fully seat all FFCs in their connectors. Failure to fully seat an FFC into a connector can cause a short circuit in a PCA.

 **NOTE:** To install a self-tapping screw, first turn it counterclockwise to align it with the existing thread pattern, and then carefully turn it clockwise to tighten. Do not overtighten. If a self-tapping screw-hole becomes stripped, repair the screw-hole or replace the affected assembly.

 **TIP:** For clarity, some photos in this chapter might show components removed that would not be removed to service the product. If necessary, remove the components listed at the beginning of a procedure before proceeding to service the product.

Some components require inspection, cleaning, or replacement when a product is serviced. Use the table below to identify these components, and determine if any service related action is necessary.


**Table 1-1 Components inspection**

| Component                    | If the product has printed less than 10,000 pages...   | If the product has printed more than 10,000 pages... |
|------------------------------|--|--|
| Pickup roller (product base) | <ul style="list-style-type: none"><li>Inspect</li><li>Clean</li><li>Replace if damaged</li></ul> | If this component is damaged, discard the product.   |

**Table 1-1 Components inspection (continued)**

| Component   | If the product has printed less than 10,000 pages...   | If the product has printed more than 10,000 pages...                           |
|---|--|--|
| Separation roller (product base)                                | <ul style="list-style-type: none"><li>• Inspect</li><li>• Clean</li><li>• Replace if damaged</li></ul>   | If this component is damaged, discard the product.                             |
| Document feeder pick arm assembly (includes the pickup rollers) | <ul style="list-style-type: none"><li>• Inspect</li><li>• Clean</li><li>• Replace if damaged</li></ul>   | If this component is damaged, discard the product.                             |
| Document feeder separation pad                                  | If the product has printed <b>less than</b> 15,000 pages... <ul style="list-style-type: none"><li>• Inspect</li><li>• Clean</li><li>• Replace if damaged</li></ul> | If the product has printed <b>more than</b> 15,000 pages, discard the product. |
| Intermediate transfer belt (ITB)                                | <ul style="list-style-type: none"><li>• Inspect</li><li>• Clean</li><li>• Replace if damaged</li></ul>   | If this component is damaged, discard the product.                             |
| Transfer roller   | <ul style="list-style-type: none"><li>• Inspect</li><li>• Clean</li><li>• Replace if damaged</li></ul>   | If this component is damaged, discard the product.                             |
| Fuser   | <ul style="list-style-type: none"><li>• Inspect</li><li>• Clean</li><li>• Replace if damaged</li></ul>   | If this component is damaged, discard the product.                             |
| Covers  | <ul style="list-style-type: none"><li>• Inspect</li><li>• Clean</li><li>• Replace if damaged</li></ul>   | If this component is damaged, discard the product.                             |

# Electrostatic discharge

- △ **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Look for the ESD reminder when removing product parts. Always perform service work at an ESD-protected workstation or mat, or use an ESD strap. If an ESD workstation, mat, or strap is not available, ground yourself by touching the sheet-metal chassis *before* touching an ESD-sensitive part.

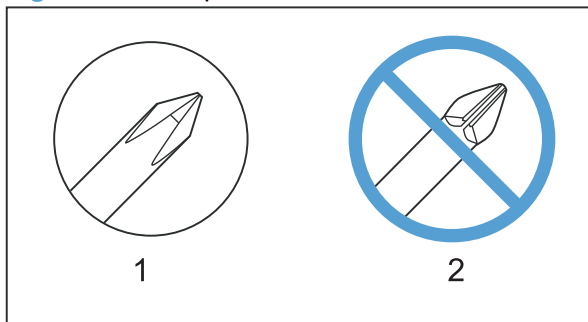
Protect the ESD-sensitive parts by placing them in ESD pouches when they are out of the product.

## Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152-mm (6-in) shaft length
- Small flat-blade screwdriver
- Torx driver (#10)
- Needle-nose pliers
- ESD mat or ESD strap (if one is available)
- Penlight (optional)

- △ **CAUTION:** Always use a Phillips screwdriver (callout 1). Do not use a Pozidrive screwdriver (callout 2) or any motorized screwdriver. These can damage screws or screw threads.

**Figure 1-1** Phillips and Pozidrive screwdriver comparison



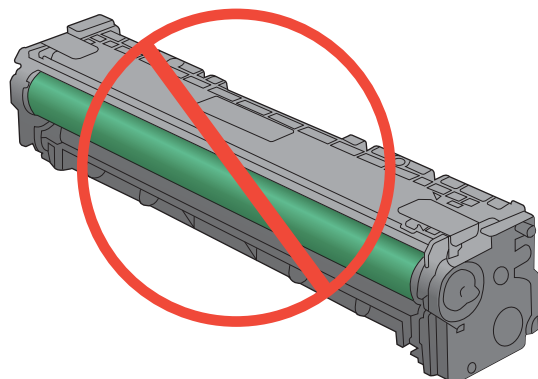
# Service approach

## Before performing service

- Remove all paper from the product.
- Turn off the power using the power switch.
- Unplug the power cable and interface cable or cables.
- Place the product on an ESD workstation or mat, or use an ESD strap (if one is available). If an ESD workstation, mat, or strap is not available, ground yourself by touching the sheet-metal chassis *before* touching an ESD-sensitive part.
- Remove the print cartridges.

△ **CAUTION:** Do not touch the imaging drum on the bottom of the print cartridge. Finger prints on the imaging drum can cause print-quality problems.

Do not allow the image drum to contact any surface when the cartridges are set down. Protect the image drum at all times. Dust and debris can stick to the drum and cause print-quality problems.



## After performing service

- Plug in the interface cables, and then the power cable.
- Reinstall the print cartridges.
- Load paper in the product.

## Post-service tests

After service has been completed, perform the following tests to verify that the repair or replacement was successful.

### Test 1 (print-quality test)

1. Verify that you have completed the necessary reassembly steps.
2. Ensure that the input tray contains clean, unmarked paper.
3. With the power cord and interface cables attached, turn on the product.
4. Verify that the expected start up sounds occur.
5. Print a configuration page, and then verify that the expected printing sounds occur.
6. Print a demo page, and then verify that the print quality is as expected.
7. Send a print job from the host computer, and then verify that the output meets expectations.
8. If necessary, restore any customer-specified settings.
9. Clean the outside of the product with a damp cloth.

### Test 2 (copy-quality test)

1. Verify that you have completed the necessary reassembly steps.
2. Ensure that the input tray contains clean, unmarked paper.
3. With the power cord attached, turn on the product.
4. Verify that the expected start up sounds occur.
5. Print a configuration page, and then verify that the expected printing sounds occur.
6. Place the configuration page in the document feeder, or on the flatbed glass.
7. Print a copy job, and then verify the results.
8. Clean the outside of the product with a damp cloth.

### Test 3 (fax-quality test)

1. Place the configuration page in the document feeder.
2. Type a valid fax number and send the fax job.
3. Verify that the send quality and receive quality meet expectations.

## Parts removal order

Use the following diagram to determine which parts must be removed before removing other parts.

**Figure 1-2** Parts-removal tree

| Component                                       | Remove                     | Remove  | Remove               | Remove                         | Remove  | Remove            | Remove           | Remove  | Remove    | Remove                         |
|---|----------------------------|---|----------------------|--------------------------------|---|-------------------|------------------|---------|-----------|--------------------------------|
| Pickup roller                                   |                            |   |                      |                                |   |                   |                  |         |           |                                |
| Separation roller                               |                            |   |                      |                                |   |                   |                  |         |           |                                |
| Transfer roller                                 |                            |   |                      |                                |   |                   |                  |         |           |                                |
| Print cartridge drawer                          |                            |   |                      |                                |   |                   |                  |         |           |                                |
| Right cover                                     |                            |   |                      |                                |   |                   |                  |         |           |                                |
| Right-front cover1 and cover 2                  | Right cover                |   |                      |                                |   |                   |                  |         |           |                                |
| Control panel                                   | Right cover                | Right-front cover1/2                            |                      |                                |   |                   |                  |         |           |                                |
| Left cover                                      |                            |   |                      |                                |   |                   |                  |         |           |                                |
| Document-feeder and scanner assembly            | Right cover                |   |                      |                                |   |                   |                  |         |           |                                |
| Rear-center cover                               | Right cover                |   |                      |                                |   |                   |                  |         |           |                                |
| Rear-upper cover                                | Right cover                | Left cover                                      | Rear-center cover    |                                |   |                   |                  |         |           |                                |
| Speaker   | Right cover                | Control panel                                   |                      |                                |   |                   |                  |         |           |                                |
| Top cover                                       | Right cover                | Right-front cover1/2                            | Control panel        | Left cover                     | Document-feeder and scanner assembly            | Rear-center cover | Rear-upper cover | Speaker |           |                                |
| Front door and front-lower cover                | Print cartridge drawer     | Left cover                                      |                      |                                |   |                   |                  |         |           |                                |
| Rear door and rear-lower cover                  | Right cover                | Left cover                                      | Rear-center cover    |                                |   |                   |                  |         |           |                                |
| Paper guide assembly                            |                            |   |                      |                                |   |                   |                  |         |           |                                |
| USB port PCA and bracket                        | Right cover                | Right-front cover1/2                            |                      |                                |   |                   |                  |         |           |                                |
| Wireless PCA                                    | Right cover                |   |                      |                                |   |                   |                  |         |           |                                |
| DC controller PCA                               | Right cover                |   |                      |                                |   |                   |                  |         |           |                                |
| Formatter PCA, fax card PCA and support bracket | Right cover                |   |                      |                                |   |                   |                  |         |           |                                |
| Fuser motor                                     | Right cover                | Formatter PCA, fax card PCA and support bracket |                      |                                |   |                   |                  |         |           |                                |
| Main motor                                      | Right cover                | Formatter PCA, fax card PCA and support bracket |                      |                                |   |                   |                  |         |           |                                |
| Intermediate transfer belt (ITB)                | Print cartridge drawer     | Right cover                                     | Left cover           | Rear-center cover              |   |                   |                  |         |           |                                |
| Power supply (high voltage)                     | Right cover                | Right-front cover1/2                            | Control panel        | Left cover                     | Document-feeder and scanner assembly            | Rear-center cover | Rear-upper cover | Speaker | Top cover |                                |
| Power supply (low voltage)                      | Right cover                | Left cover                                      | Rear-center cover    | Rear door and rear-lower cover | Formatter PCA, fax card PCA and support bracket |                   |                  |         |           |                                |
| Power supply (fuser)                            | Right cover                | Left cover                                      | Rear-center cover    | Rear door and rear-lower cover |   |                   |                  |         |           |                                |
| Fuser   | Right cover                | Right-front cover1/2                            | Control panel        | Left cover                     | Document-feeder and scanner assembly            | Rear-center cover | Rear-upper cover | Speaker | Top cover | Rear door and rear-lower cover |
| Document feeder input tray                      |                            |   |                      |                                |   |                   |                  |         |           |                                |
| Document feeder cover                           |                            |   |                      |                                |   |                   |                  |         |           |                                |
| Document feeder pick arm assembly               | Document feeder input tray | Document feeder cover                           |                      |                                |   |                   |                  |         |           |                                |
| Document feeder core                            | Document feeder input tray | Document feeder cover                           |                      |                                |   |                   |                  |         |           |                                |
| Document feeder pinch rollers                   | Document feeder input tray | Document feeder cover                           | Document feeder core |                                |   |                   |                  |         |           |                                |
| Document feeder base assembly                   | Document feeder input tray | Document feeder cover                           | Document feeder core |                                |   |                   |                  |         |           |                                |
| Document feeder floating hinges                 | Document feeder input tray | Document feeder cover                           | Document feeder core | Document feeder base assembly  |   |                   |                  |         |           |                                |

# Removal and replacement procedures


## Pickup roller

You might have to rotate the pickup roller to gain access to the roller locking tabs.


1. Remove the input tray and tilt the product back until the pickup roller is visible.

If the locking tabs on each side of the roller are not accessible, use the following procedure in this step to rotate the roller and access the tabs.


If the tabs are visible, proceed to the next step.

- a. Reinstall the input tray, and then turn the product on.
- b. Touch the Setup  button.
- c. Touch the middle of the screen along the left-hand edge (callout 1), and then immediately touch the lower-right corner (callout 2) of the screen.



- d. When the Home screen appears, touch the Setup  button again.
  - e. Touch the [2ndary Service](#) button.
  - f. Touch the arrow buttons (at the right- or left-side of the touch screen) until the [Pick roller](#) button appears.
  - g. Touch the [Pick roller](#) button.
  - h. Touch the [OK](#) button to confirm that you want the pick roller to rotate.
  - i. Turn the product power off, and then remove the power cord and the interface cable.
2. Carefully place the product front-side up.

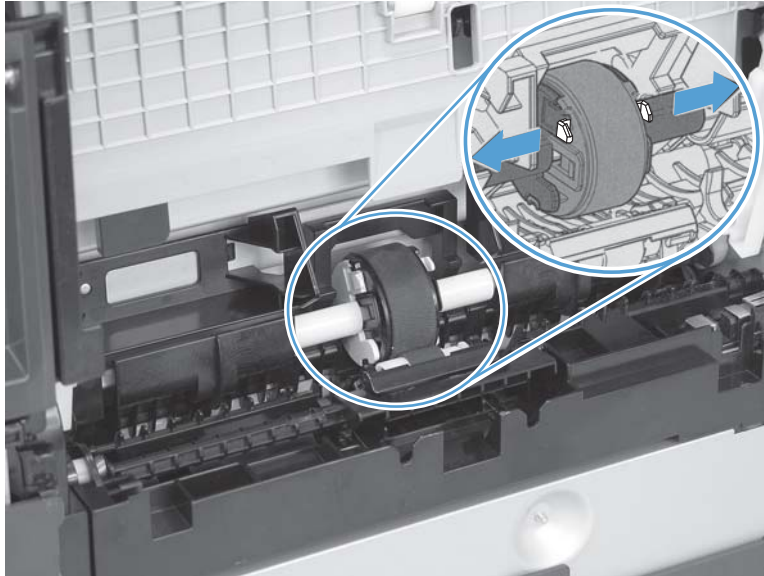
△ **CAUTION:** The document-feeder and scanner cover are not captive and can open suddenly if the product is placed front-side up. Always support the document-feeder and scanner cover before placing the product front-side up.

 **NOTE:** Debris can scratch or damage the back of the product. Before you place the product front-side up, remove any debris from the work surface. If possible, set the product on a clean, dry cloth to prevent scratching and damage.

3. Release two white plastic locking tabs and remove the pickup roller.

△ **CAUTION:** Do not touch the spongy roller surface unless you are going to replace the roller. Skin oils on the roller can cause paper pickup problems.

**Figure 1-3** Remove the pickup roller





## Separation roller

- △ **CAUTION:** Do not touch the spongy roller surface unless you are going to replace the roller. Skin oils on the roller can cause paper pickup problems.

1. Remove paper tray (if installed), and then carefully place the product front-side up.

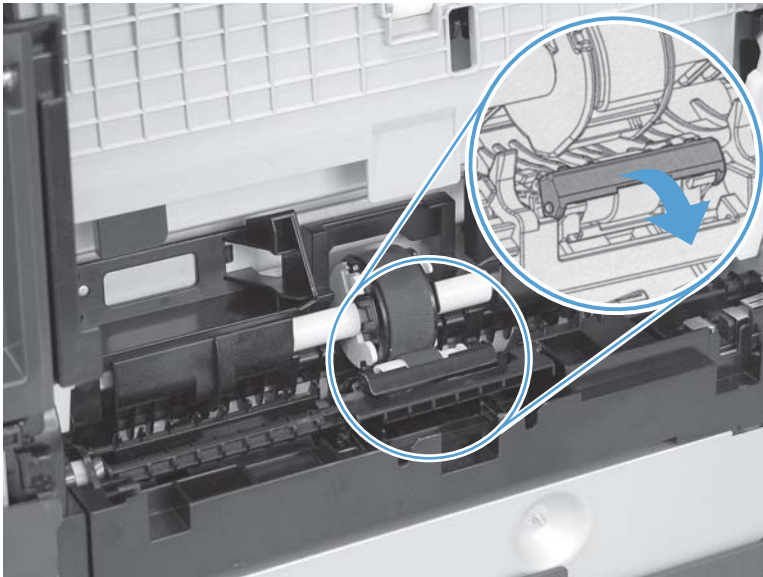
- △ **CAUTION:** The document-feeder and scanner cover are not captive and can open suddenly if the product is placed front-side up. Always support the document-feeder and scanner cover before placing the product front-side up.

- 📝 **NOTE:** Debris can scratch or damage the back of the product. Before you place the product front-side up, remove any debris from the work surface. If possible, set the product on a clean, dry cloth to prevent scratching and damage.

2. Carefully release the roller cover and rotate it down and away from the roller.

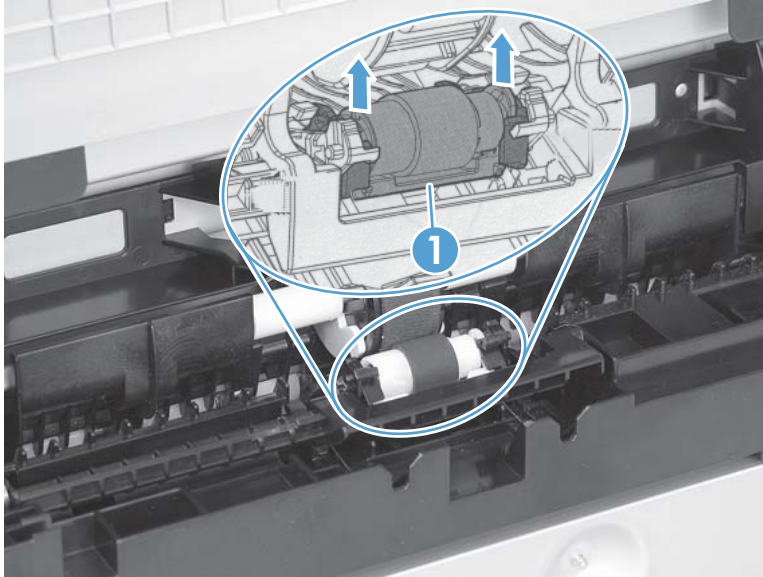
- 💡 **Reinstallation tip** Make sure that this cover snaps into place over the roller when the roller and holder are reinstalled.

**Figure 1-4** Remove the separation roller (1 of 2)



3. Use a small flat blade screwdriver to gently pry up on the roller and holder assembly (callout 1) to remove the roller and holder assembly.

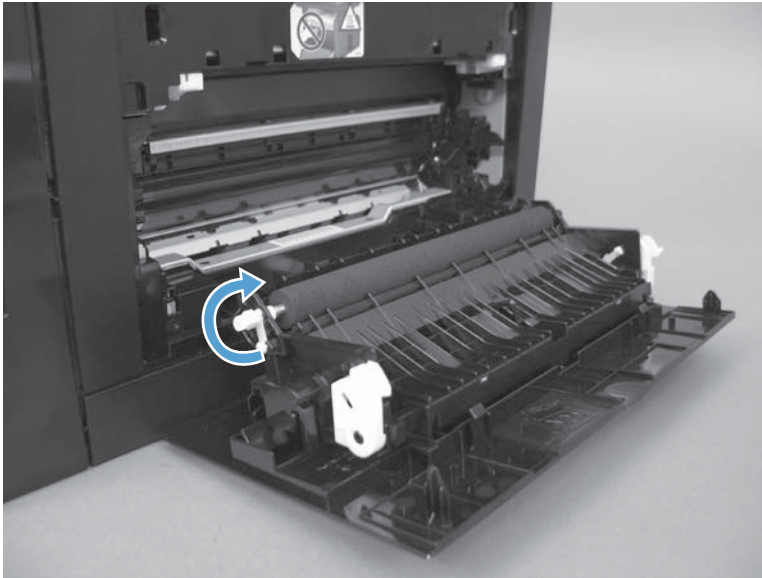
**Figure 1-5** Remove the separation roller (2 of 2)




## Transfer roller

1. Open the rear door.
2. Release the retainer clip and then rotate it until the pin on the clip aligns with the slot in the mounting bracket.

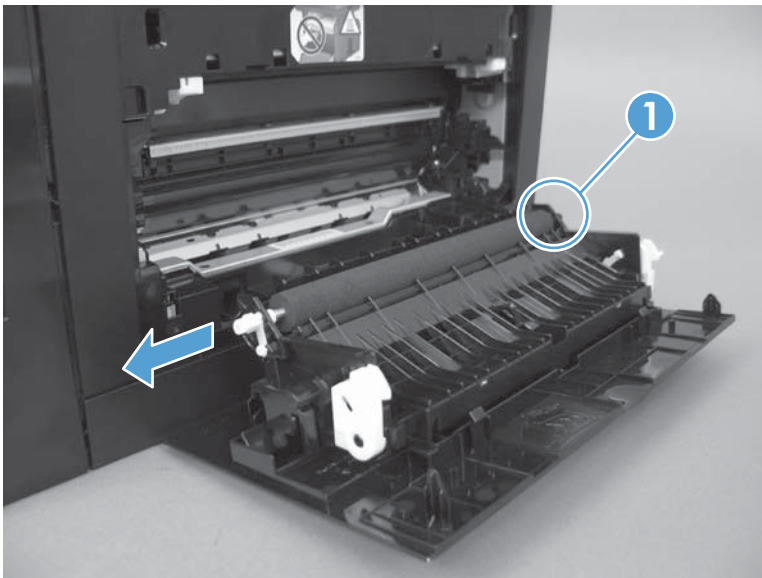
**Figure 1-6** Remove the transfer roller (1 of 3)



3. Remove the clip. Repeat these steps for the remaining retainer clip (located at the opposite end of the roller shaft).

 **TIP:** One of the clips (callout 1) is made from a black conductive plastic. Make sure that the clips are reinstalled on correct the end of the transfer roller.

**Figure 1-7** Remove the transfer roller (2 of 3)



4. Slide the roller to one side to disengage the roller shaft from the mounting bracket, and then remove the transfer roller.

△ **CAUTION:** Do not touch the black sponge portion of the roller. Skin oils can cause print-quality problems.

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**Figure 1-8** Remove the transfer roller (3 of 3)



## Print-cartridge drawer

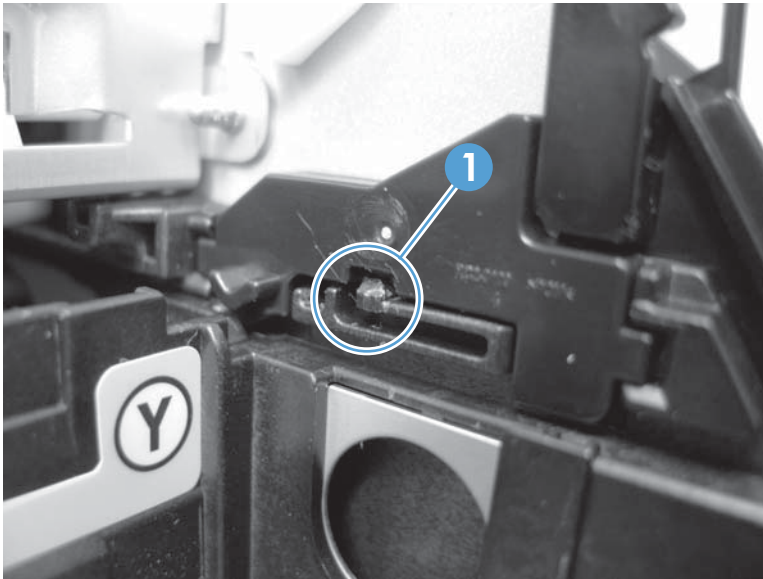
1. Open the front door and pull out the print-cartridge drawer.

**Figure 1-9** Remove the print-cartridge drawer (1 of 5)



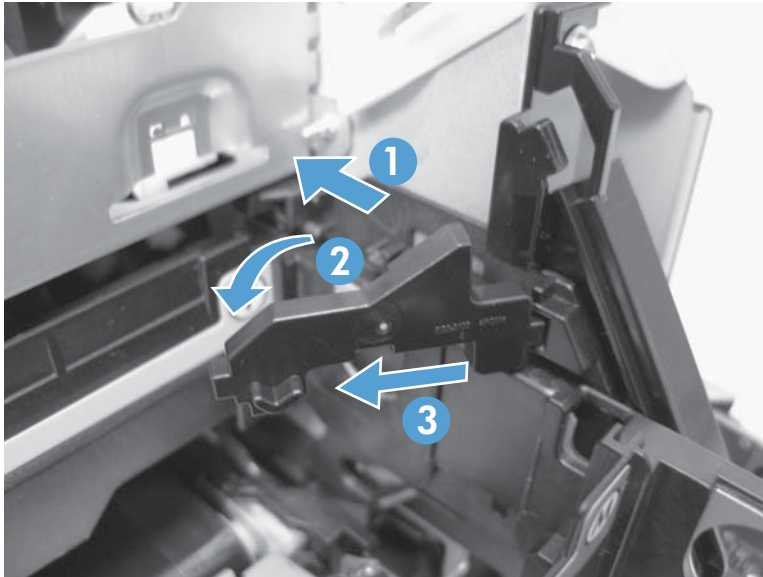
2. Use a small flat blade screwdriver to release one tab (callout 1) on the cartridge-drawer stop.

**Figure 1-10** Remove the print-cartridge drawer (2 of 5)



3. Push in on the edge of the top cover (callout 1), rotate the end of the drawer stop toward the center of the print-cartridge drawer (callout 2), and then remove the drawer stop (callout 3)

**Figure 1-11** Remove the print-cartridge drawer (3 of 5)



4. Repeat the previous steps to remove the remaining drawer stop.

**Figure 1-12** Remove the print-cartridge drawer (4 of 5)



5. Pull the print-cartridge drawer out of the product to remove it.

**Figure 1-13** Remove the print-cartridge drawer (5 of 5)

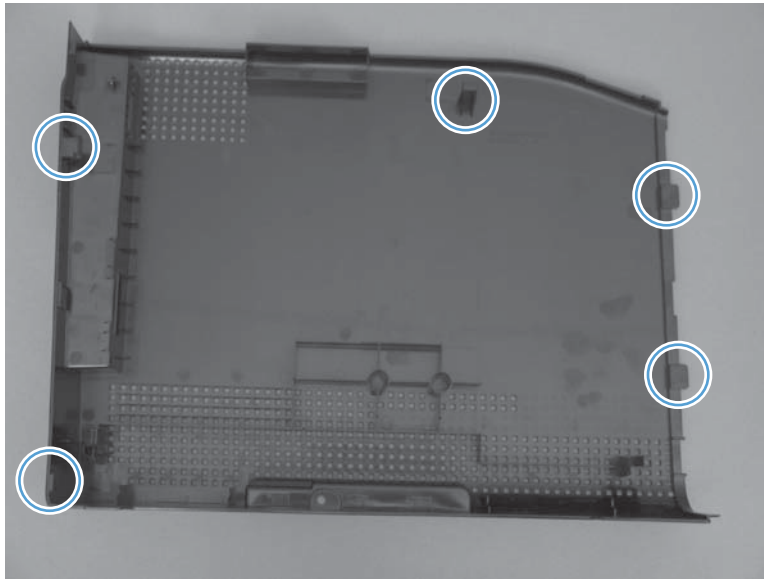




## Right cover

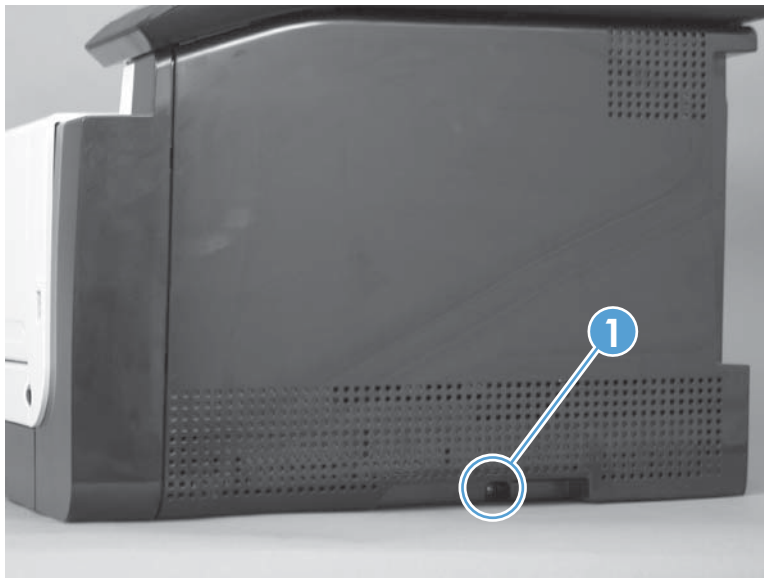
1. Before proceeding, note the locations of the retaining clips on the back of the cover.

**Figure 1-14** Remove the right cover (1 of 5)



2. Remove one screw (callout 1).

**Figure 1-15** Remove the right cover (2 of 5)





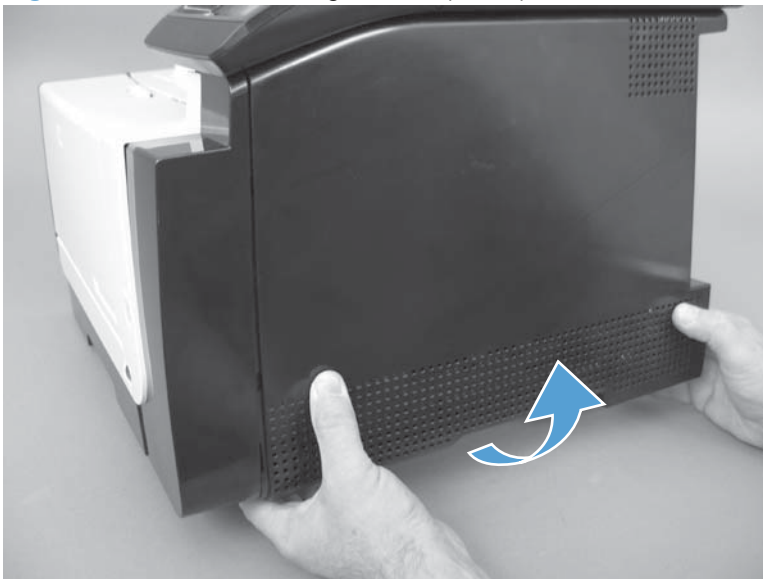
3. Release two tabs (callout 1), and then slightly separate the back side of the cover from the product.

**Figure 1-16** Remove the right cover (3 of 5)



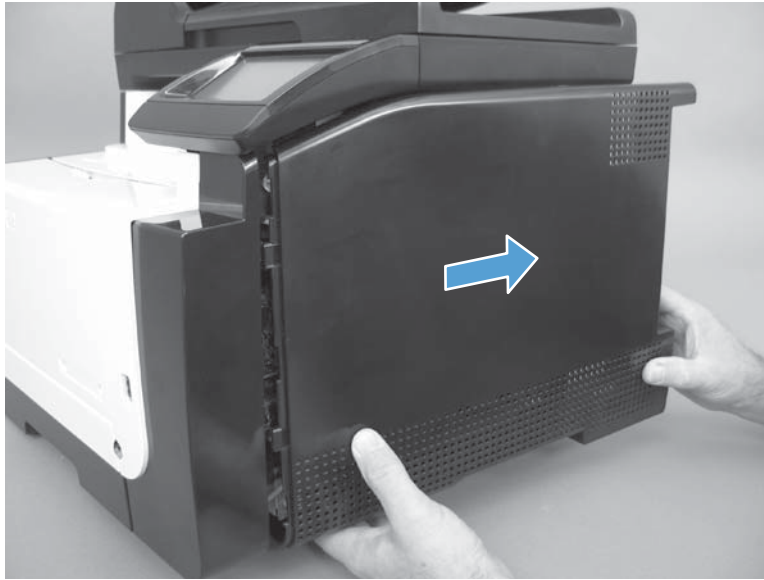
4. Pull down on the bottom-front corner of the cover, and then slightly rotate the bottom of the cover away from the product.

**Figure 1-17** Remove the right cover (4 of 5)



5. Slide the cover toward the back of the product to remove it.

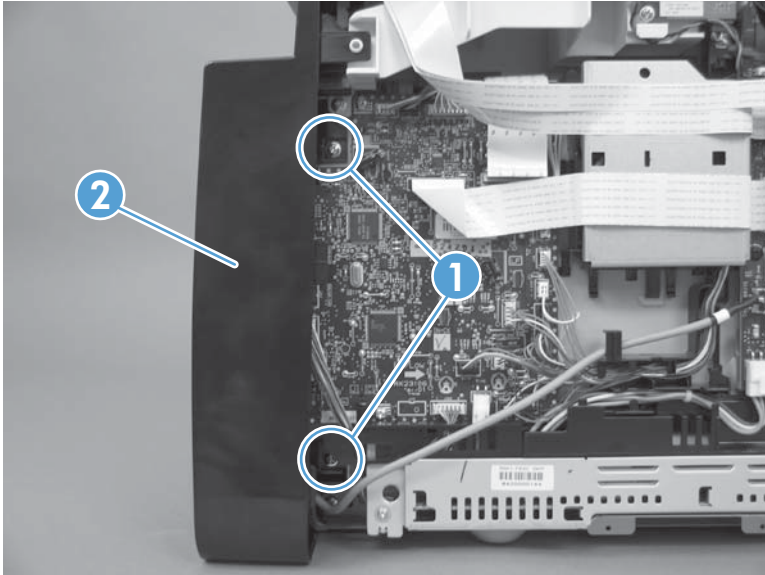
**Figure 1-18** Remove the right cover (5 of 5)



## Right-front cover-1 and cover-2

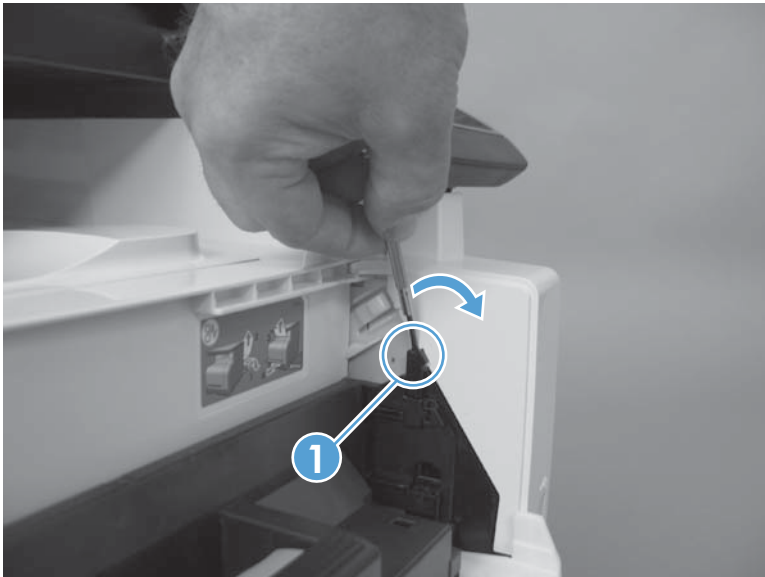
1. Remove the right cover. See [Right cover on page 17](#).
2. Remove two screws (callout 1), and then remove the right-front cover-2 (callout 2)

**Figure 1-19** Remove the right-front cover (1 of 4)



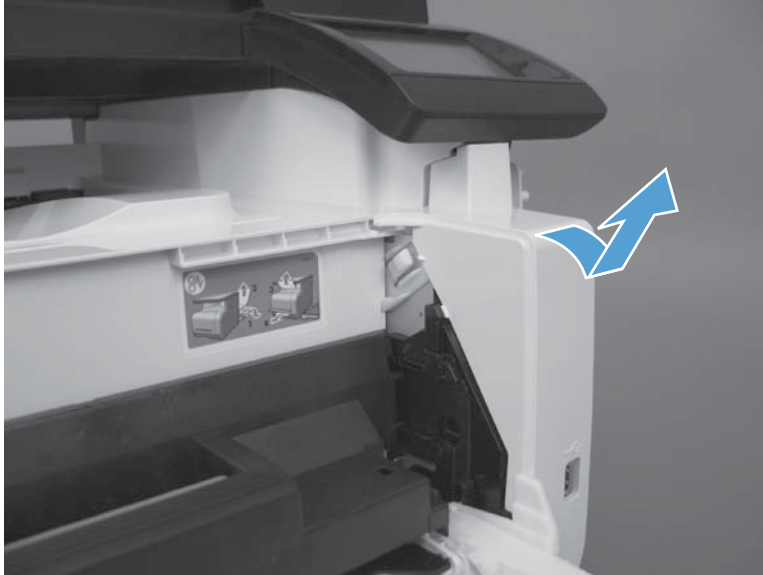
3. Open the front door, and then use a small flat blade screwdriver to release one tab (callout 1).

**Figure 1-20** Remove the right-front cover (2 of 4)



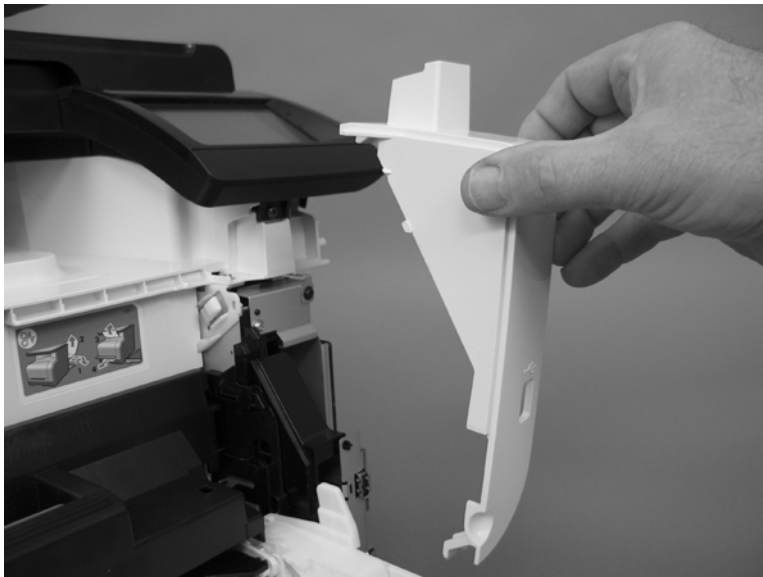
4. Rotate the top of the right-front cover-1 away from the product, and then lift the cover up to release it.

**Figure 1-21** Remove the right-front cover (3 of 4)



5. Remove the right-front cover-1.

**Figure 1-22** Remove the right-front cover (4 of 4)



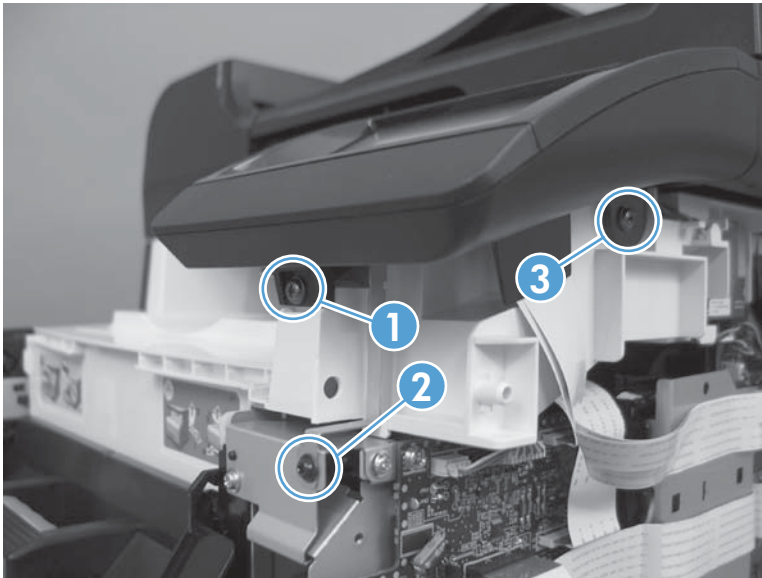
## Control panel

1. Remove the following components:
  - Right cover. See [Right cover on page 17](#).
  - Right-front cover-1 and cover-2. See [Right-front cover-1 and cover-2 on page 20](#).
2. Remove one locator screw (callout 1), and then remove the ESD bracket screw (callout 2) and the mounting screw (callout 3).



**NOTE:** When the control panel is reinstalled, install the locator screw (callout 1) first to correctly position the control panel on the product. Install the ESD bracket screw (callout 2) and the mounting screw (callout 3) after the locator screw is tightened.

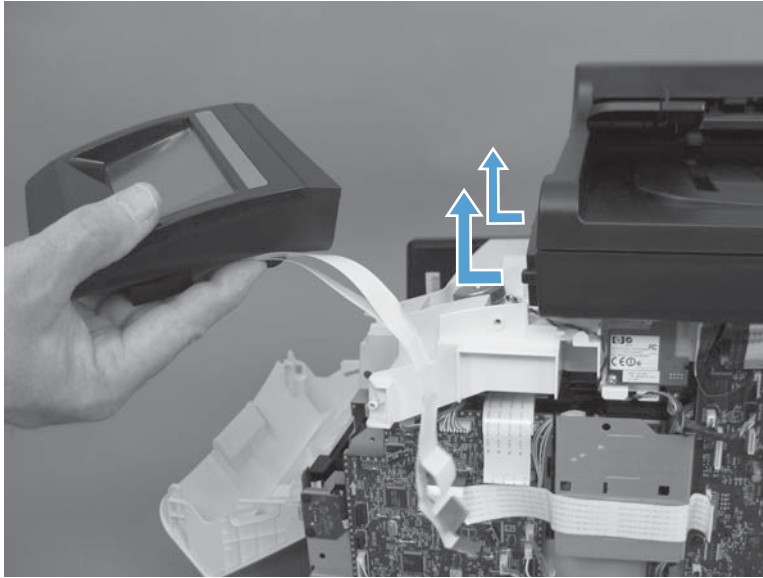
**Figure 1-23** Remove the control panel (1 of 5)



3. Slightly slide the control panel toward the front of the product, and then lift it off of the product.

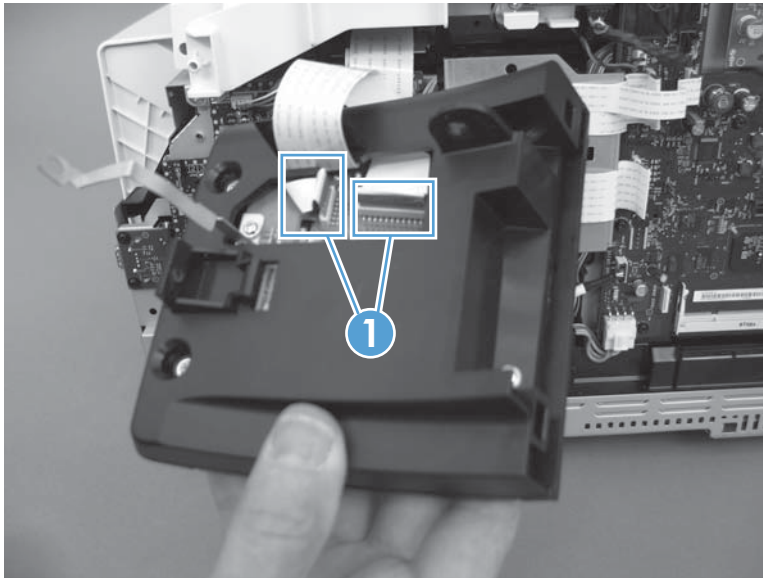
△ **CAUTION:** The control panel is still attached to the product by the FFCs. Do not damage the FFCs when you separate the control panel from the product.

**Figure 1-24** Remove the control panel (2 of 5)




4. Disconnect two FFCs (callout 1) from the bottom of the control-panel PCA.

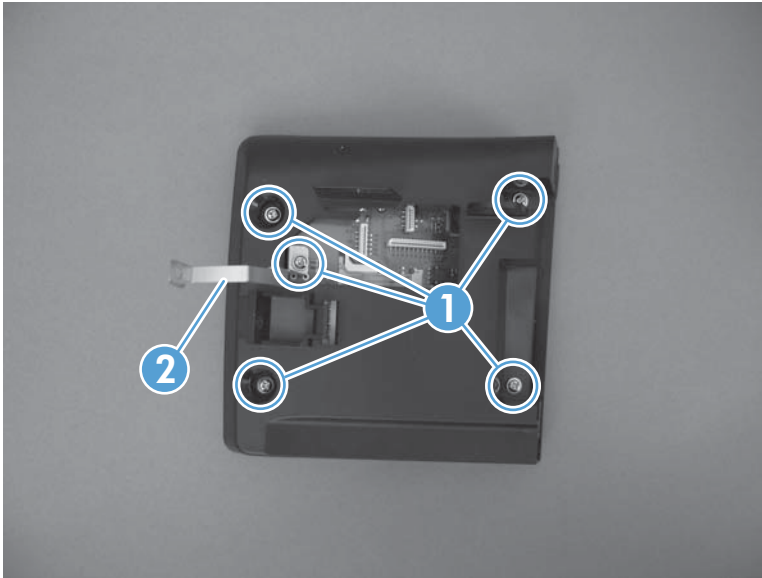
**Figure 1-25** Remove the control panel (3 of 5)



5. Turn the control panel over, and then remove five screws (callout 1) and the ESD bracket (callout 2).

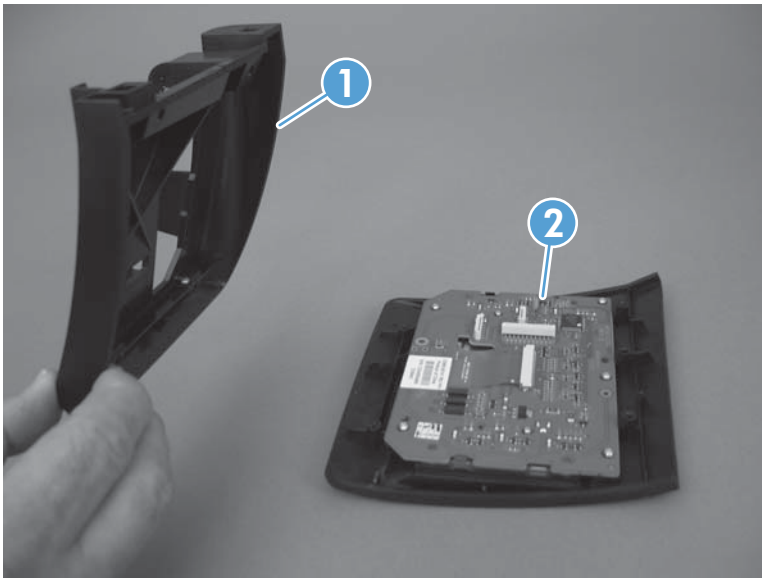
 **NOTE:** Install the ESD bracket on the replacement control-panel PCA assembly.

**Figure 1-26** Remove the control panel (4 of 5)



6. Separate the control-panel base (callout 1) from the control-panel PCA assembly (callout 2).

**Figure 1-27** Remove the control panel (5 of 5)

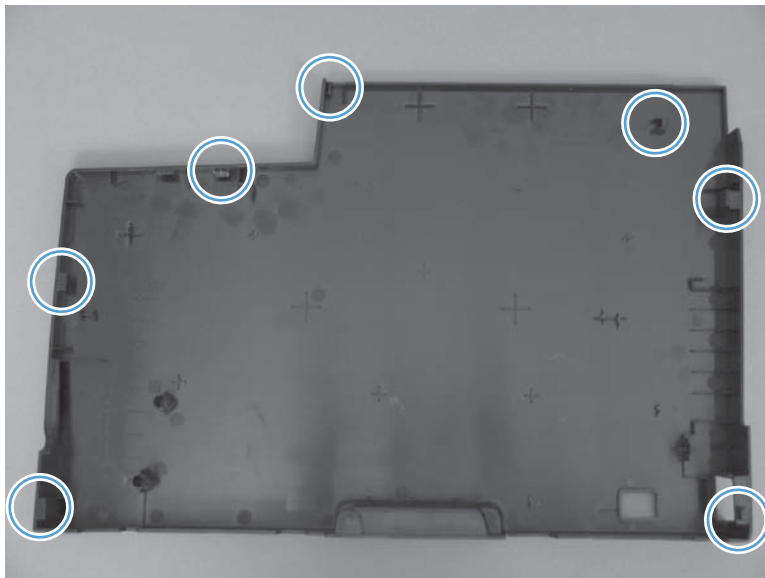




## Left cover

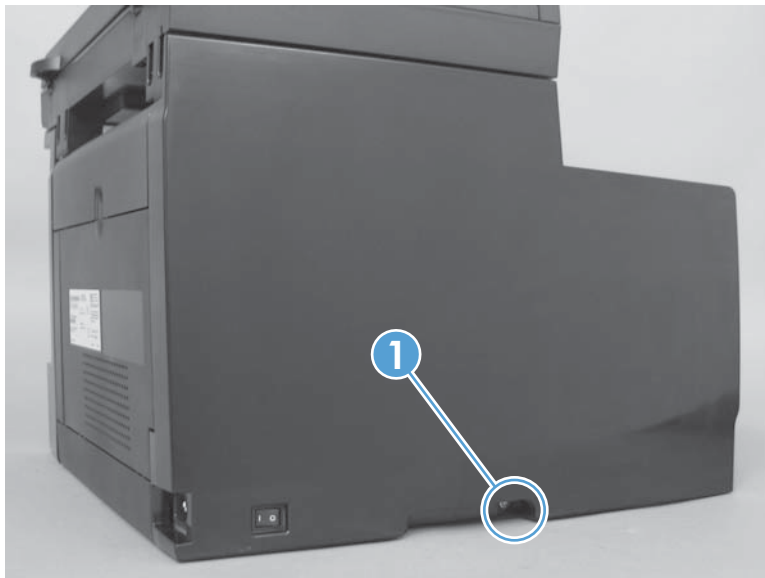
1. Before proceeding, note the locations of the retaining tabs on the back of the left cover.

**Figure 1-28** Remove the left cover (1 of 6)



2. Remove one screw (callout 1).

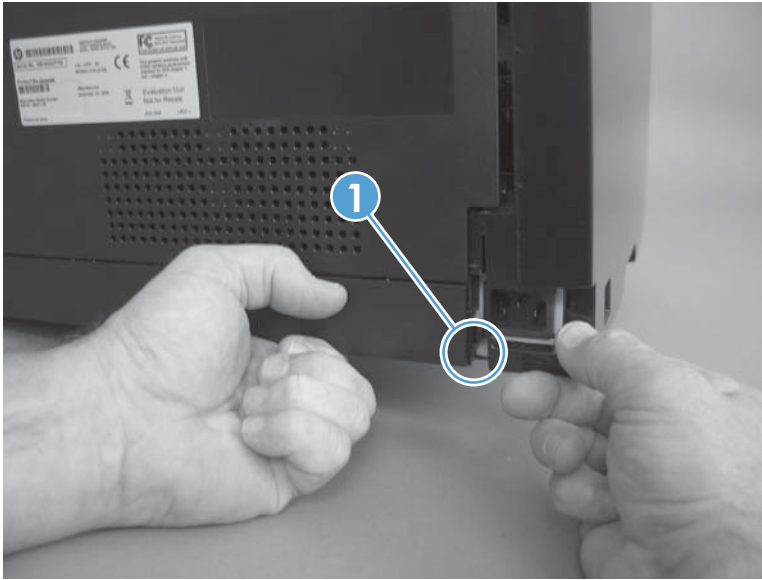
**Figure 1-29** Remove the left cover (2 of 6)





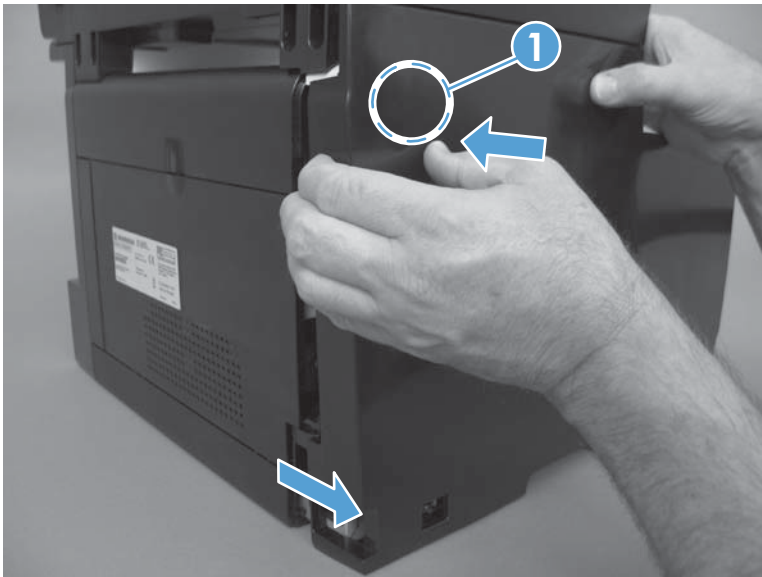
3. Release one tab (callout 1).

**Figure 1-30** Remove the left cover (3 of 6)



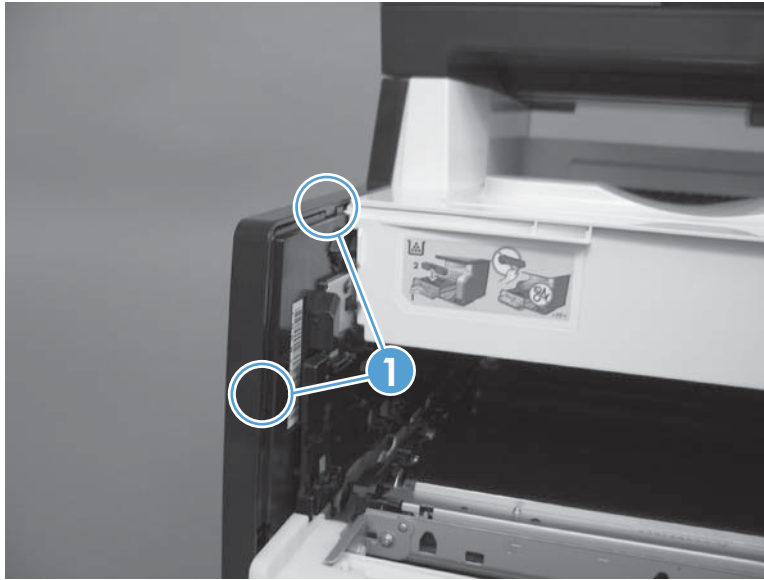
4. Push in on the back side of the cover to release one tab (callout 1), and rotate the back edge of the cover away from the product.

**Figure 1-31** Remove the left cover (4 of 6)



5. Open the front door, and then use a small flat blade screwdriver to release two tabs (callout 1)

**Figure 1-32** Remove the left cover (5 of 6)



6. Rotate the cover toward the front of the product, and then remove the cover.

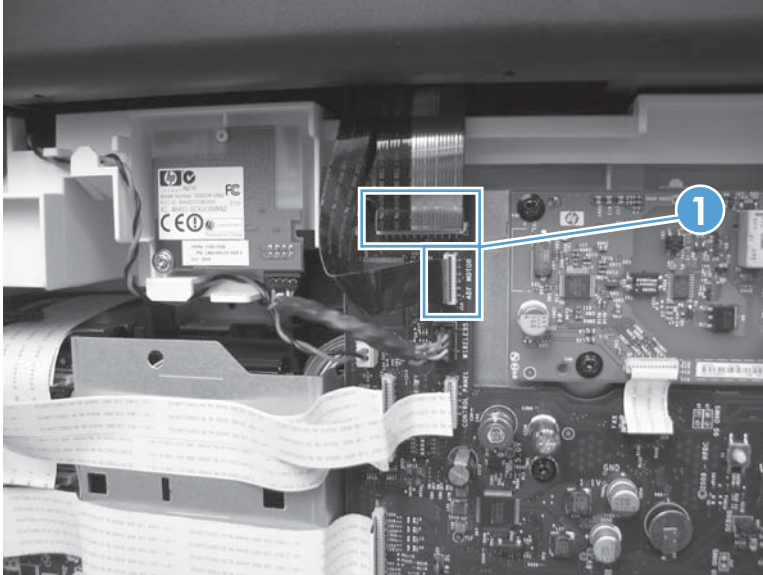
**Figure 1-33** Remove the left cover (6 of 6)



## Document-feeder and scanner assembly

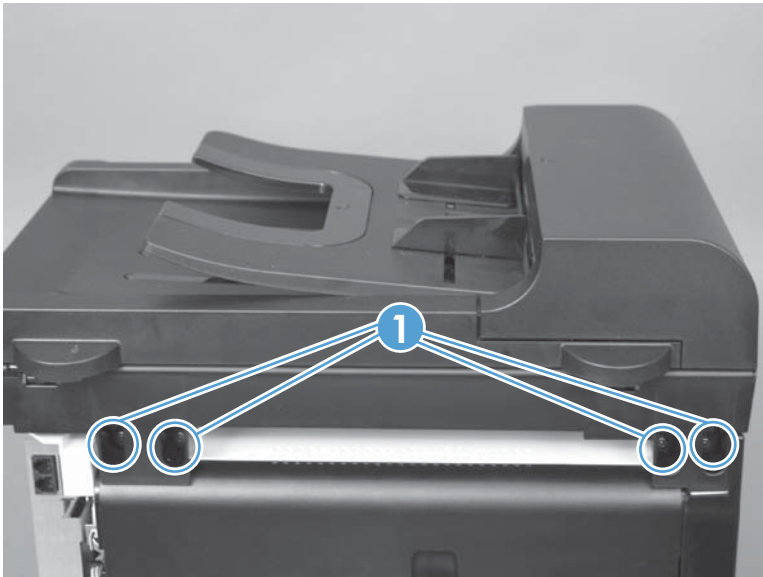
1. Remove the right cover. See [Right cover on page 17](#).
2. Disconnect two FFCs (callout 1).

**Figure 1-34** Remove the document-feeder and scanner assembly (1 of 3)



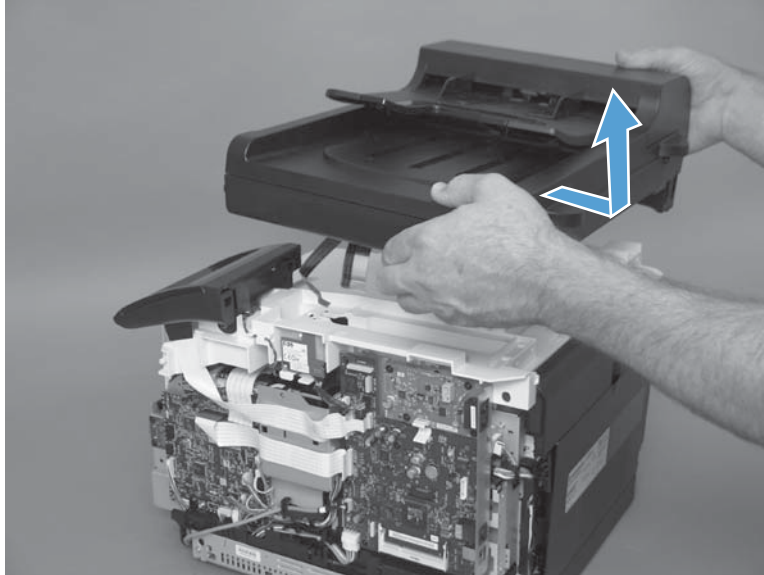
3. Remove four screws (callout 1).

**Figure 1-35** Remove the document-feeder and scanner assembly (2 of 3)



4. Slightly slide the document-feeder and scanner assembly toward the rear of the product, and then lift it straight up and off of the product.

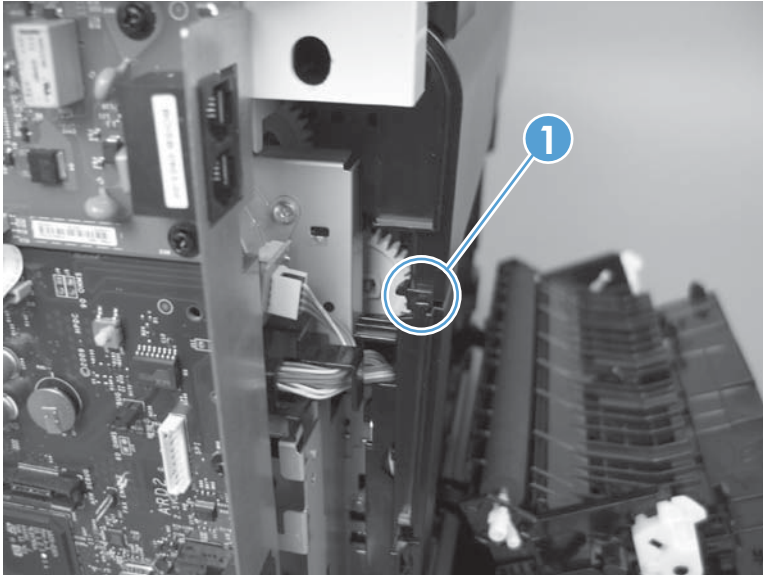
**Figure 1-36** Remove the document-feeder and scanner assembly (3 of 3)



## Rear-center cover

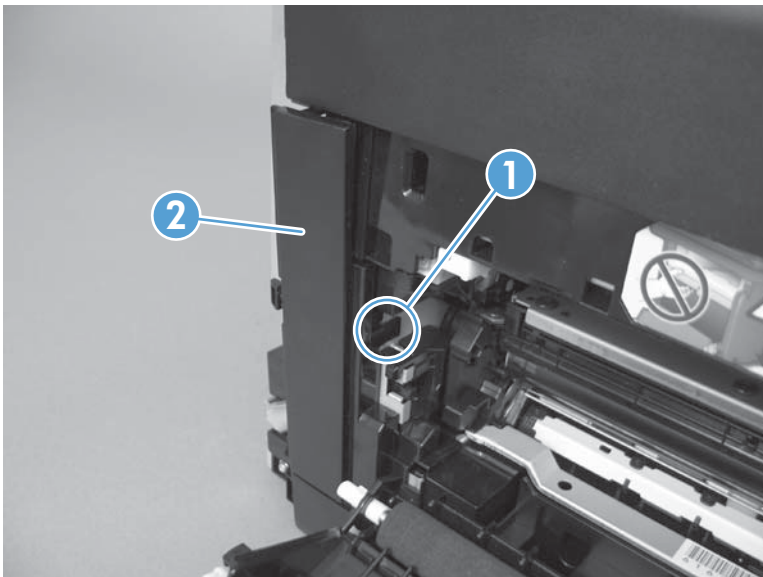
1. Remove the right cover. See [Right cover on page 17](#).
2. Open the rear door.
3. Use a small flat blade screwdriver to release one tab (callout 1), and then slightly separate the top of the cover from the product.

**Figure 1-37** Remove the rear-center cover (1 of 2)



4. Release one tab (callout 1), and then remove the rear-center cover (callout 2).

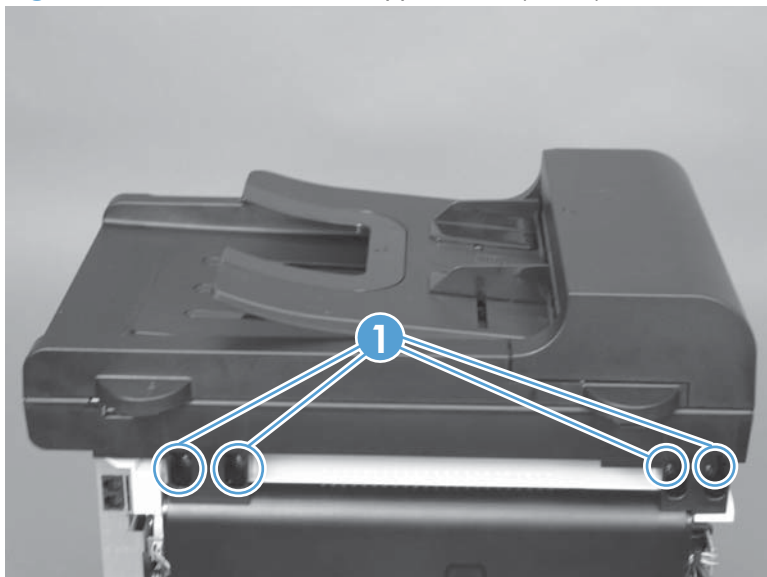
**Figure 1-38** Remove the rear-center cover (2 of 2)



## Rear-upper cover

1. Remove the following components:
  - Right cover. See [Right cover on page 17](#).
  - Left cover. See [Left cover on page 25](#).
  - Rear-center cover. See [Rear-center cover on page 30](#).
2. Remove four screws (callout 1).

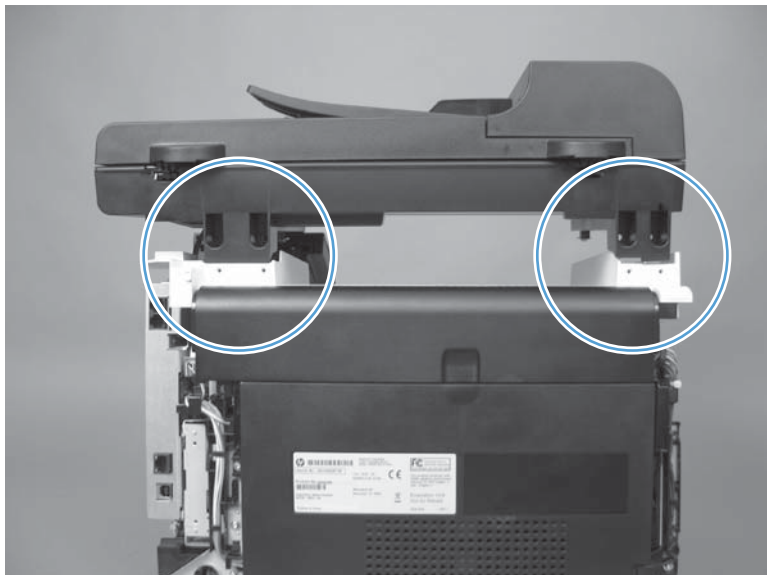
**Figure 1-39** Remove the rear-upper cover (1 of 4)



3. Slightly separate the scanner assembly from the product base.

△ **CAUTION:** The scanner assembly is still connected to the product base by two FFCs. Separate the assembly from the base only enough to remove the cover.

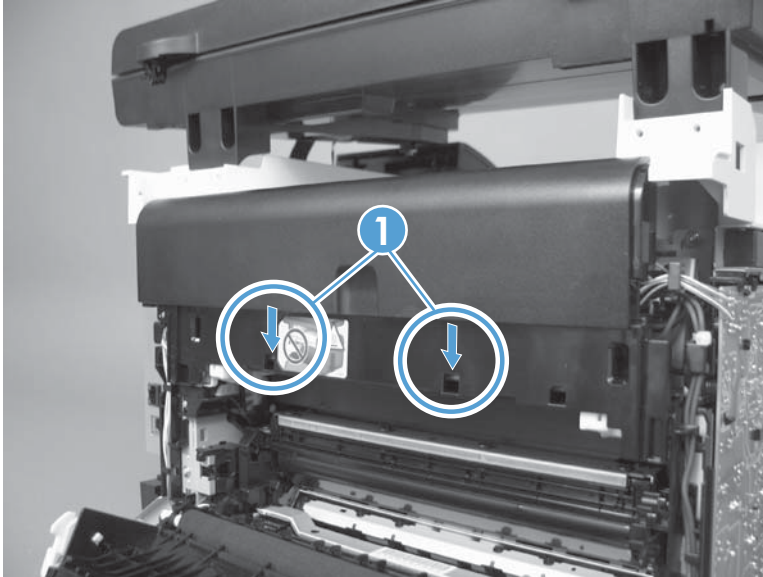
**Figure 1-40** Remove the rear-upper cover (2 of 4)





4. Open the rear door. Use a small flat blade screwdriver to push down on two tabs (callout 1) to release them.

**Figure 1-41** Remove the rear-upper cover (3 of 4)



5. Rotate the bottom of the rear-upper cover away from the product to remove it.

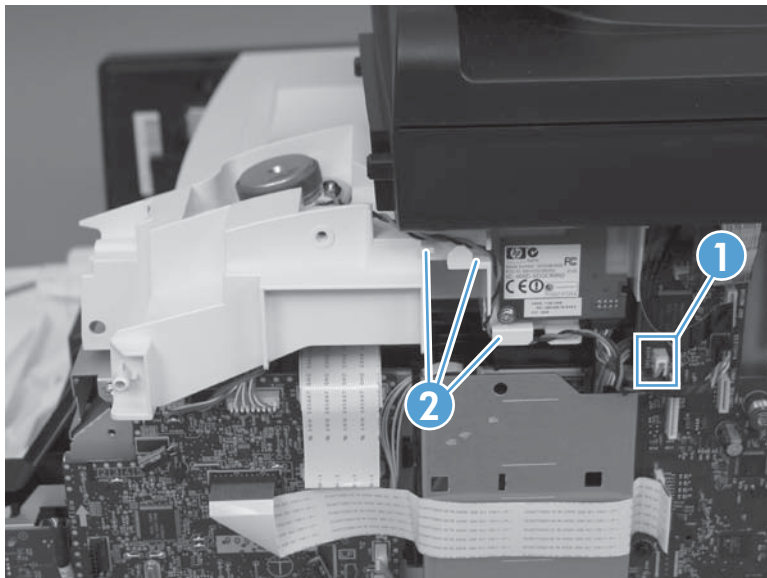
**Figure 1-42** Remove the rear-upper cover (4 of 4)



## Speaker

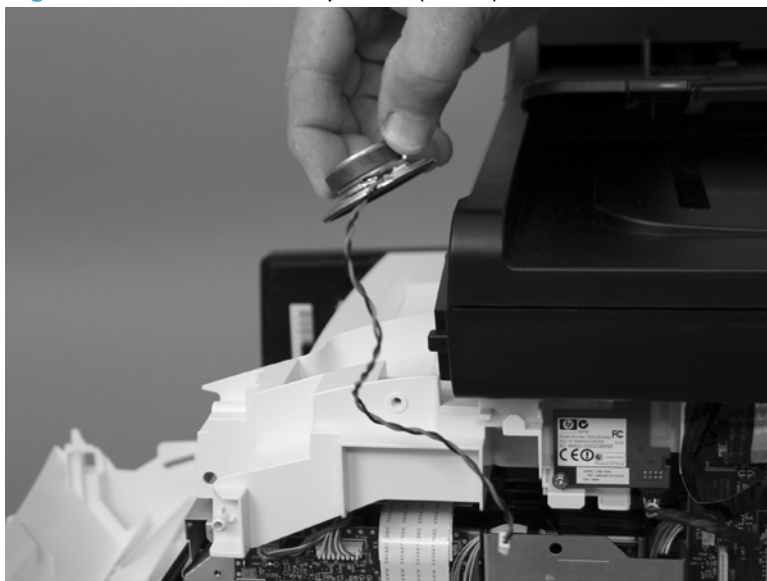
1. Remove the following components:
  - Right cover. See [Right cover on page 17](#).
  - Right-front cover-1 and cover-2. See [Right-front cover-1 and cover-2 on page 20](#).
  - Control panel. See [Control panel on page 22](#).
2. Disconnect one wire-harness connector (callout 1), and then release the wire harness from the retainers (callout 2).

**Figure 1-43** Remove the speaker (1 of 2)



3. Disconnect one wire-harness connector (callout 1), and then release the wire harness from the retainers (callout 2).

**Figure 1-44** Remove the speaker (2 of 2)

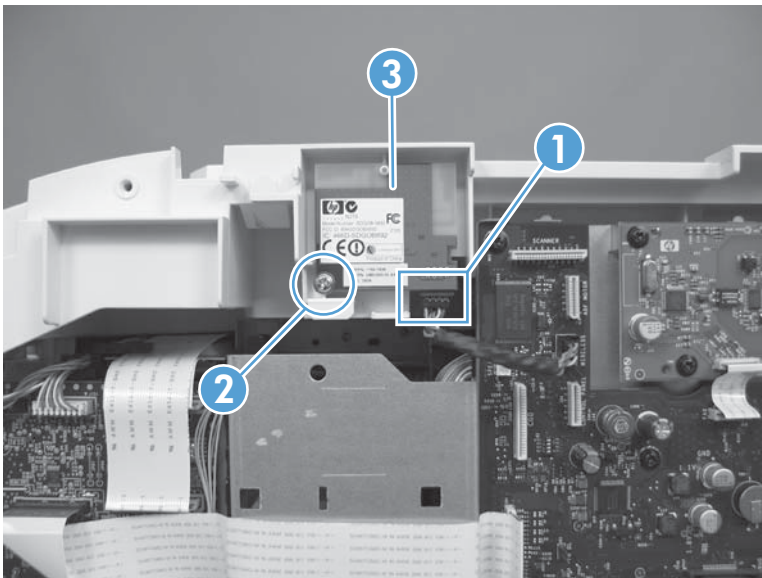




## Top cover

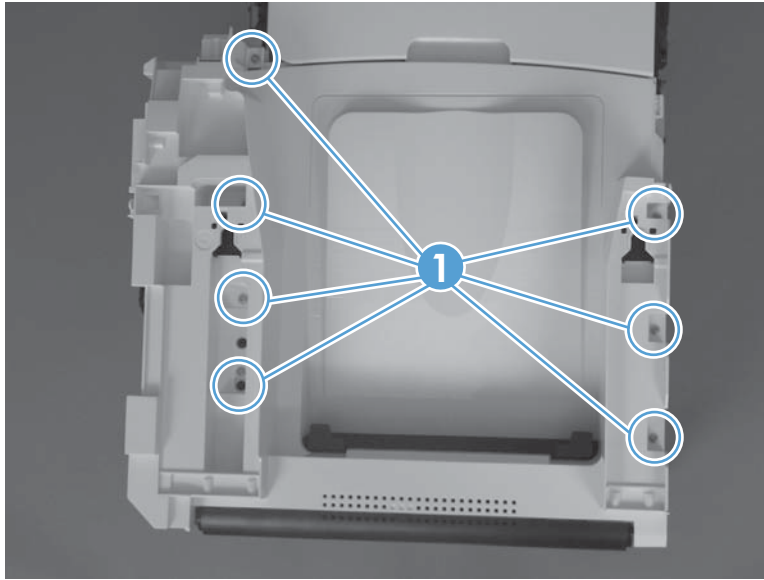
1. Remove the following components:
  - Right cover. See [Right cover on page 17](#).
  - Right-front cover-1 and cover-2. See [Right-front cover-1 and cover-2 on page 20](#).
  - Control panel. See [Control panel on page 22](#).
  - Left cover. See [Left cover on page 25](#).
  - Document-feeder and scanner assembly. See [Document-feeder and scanner assembly on page 28](#).
  - Rear-center cover. See [Rear-center cover on page 30](#).
  - Rear-upper cover. See [Rear-upper cover on page 31](#).
  - [Speaker on page 33](#).
2. Wireless models only: Disconnect one wire-harness connector (callout 1), remove one screw (callout 2), and then remove the wireless PCA (callout 3).

**Figure 1-45** Remove the top cover (1 of 3)



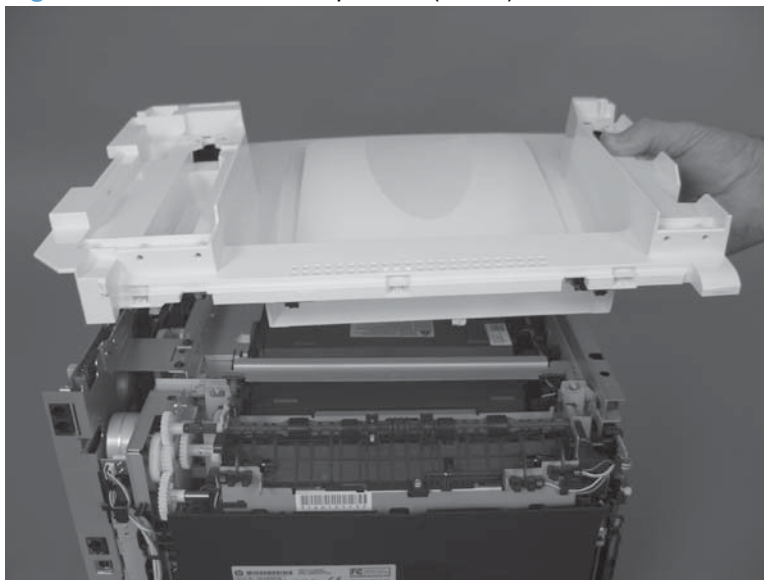
3. Remove seven screws (callout 1).

**Figure 1-46** Remove the top cover (2 of 3)



4. Remove the top cover.

**Figure 1-47** Remove the top cover (3 of 3)



## Front door and front-lower cover

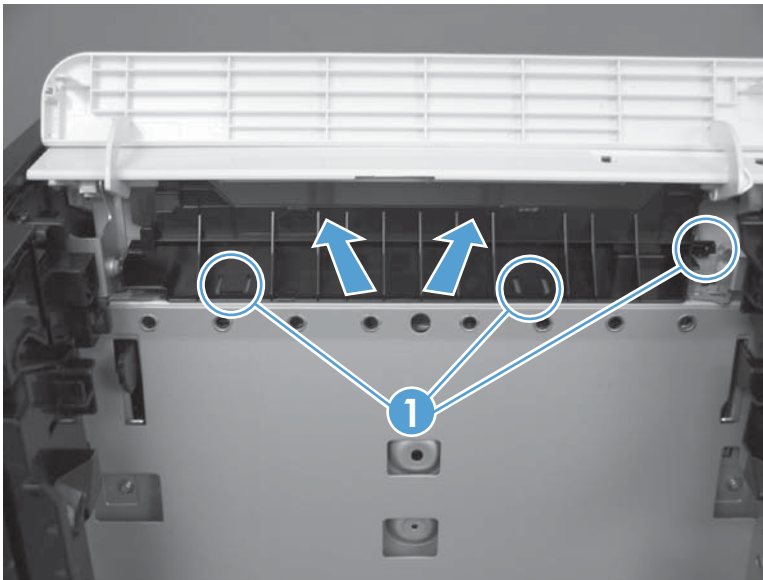
1. Remove the following components:
  - Print-cartridge drawer. See [Print-cartridge drawer on page 14](#).
  - Left cover. See [Left cover on page 25](#).
2. Remove the paper tray (if installed), and then carefully place the product front-side up

---

△ **CAUTION:** The document-feeder and scanner cover are not captive and can open suddenly if the product is placed front-side up. Always support the document-feeder and scanner cover before placing the product front-side up.

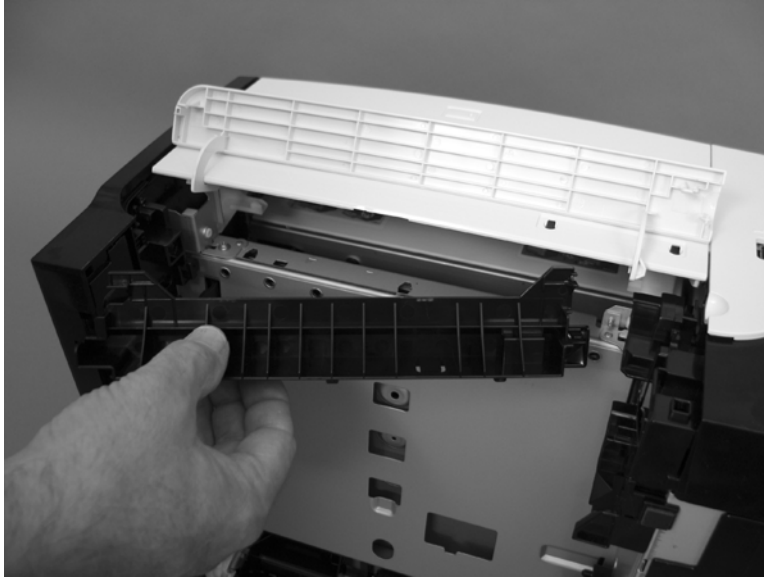
---
3. Release three tabs (callout 1) and then push the guide into the product (away from the input-tray cavity).

**Figure 1-48** Remove the front door and front-lower cover (1 of 8)



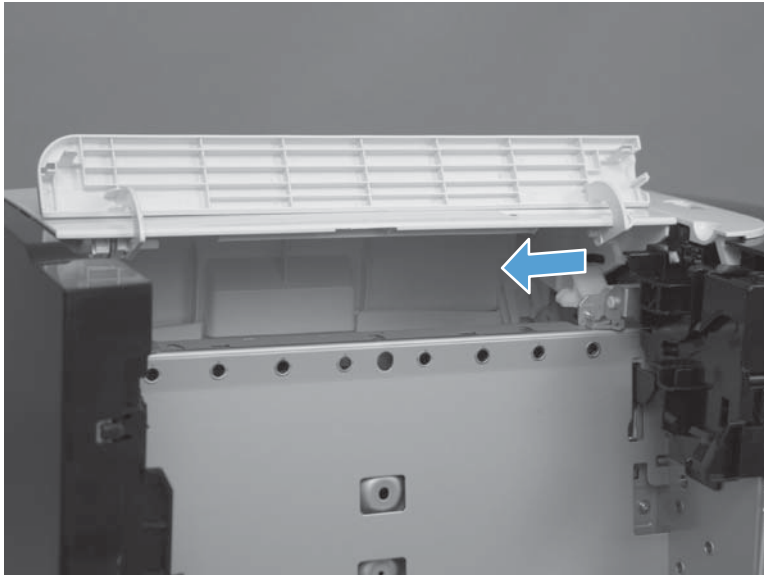
4. Remove the guide.

**Figure 1-49** Remove the front door and front-lower cover (2 of 8)



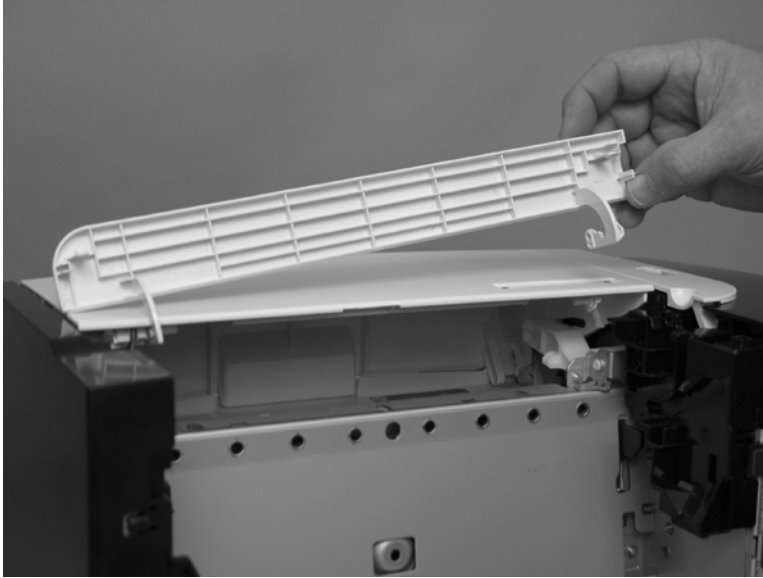
5. Carefully push the right-side front-lower door hinge in toward the center of the door to release it from the hinge pin.

**Figure 1-50** Remove the front door and front-lower cover (3 of 8)



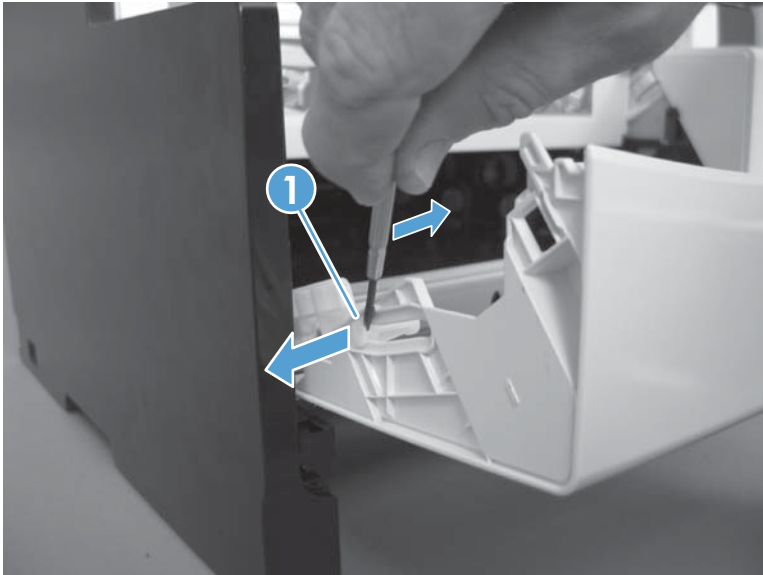
6. Slide the door to the right to release the left-side hinge. Remove the front-lower door.

**Figure 1-51** Remove the front door and front-lower cover (4 of 8)




7. Use a small flat blade screwdriver to release one retainer pin (callout 1) on the left-side front-door cam. Remove the retainer pin.

**Figure 1-52** Remove the front door and front-lower cover (5 of 8)



8. Repeat the previous step for the right-side retainer pin.

 **Reinstallation tip** The door pins are keyed to the door cam. The pins must be correctly positioned when they are reinstalled or they will not completely seat in the door cam.

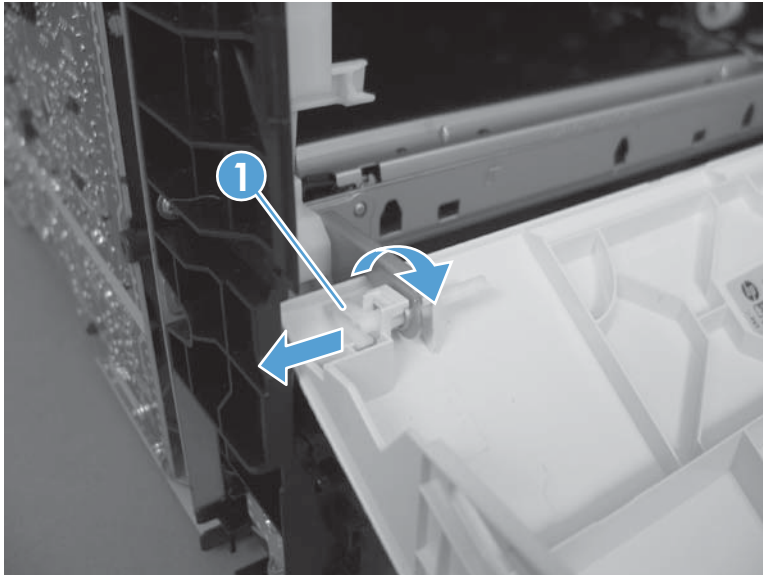
**Figure 1-53** Remove the front door and front-lower cover (6 of 8)



9. Release one tab (callout 1), rotate the door retainer clip up and away from the door, and then remove the clip.

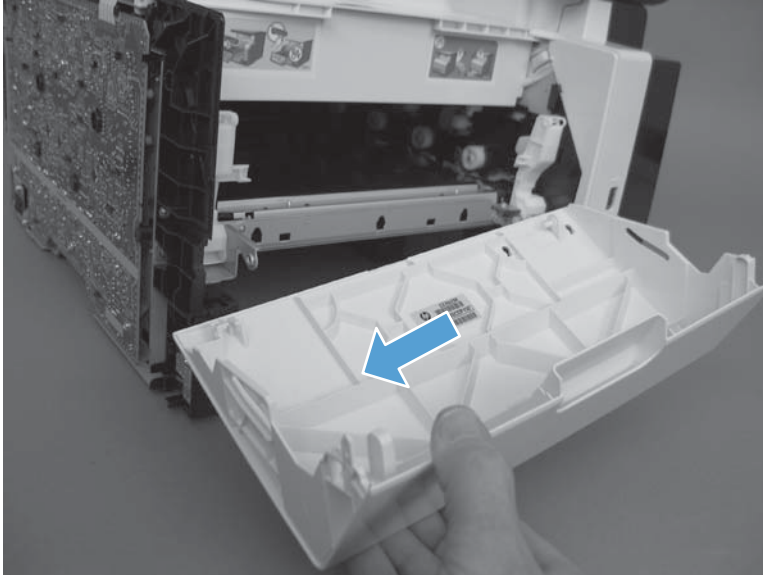
 **NOTE:** Support the door when this clip is removed.

**Figure 1-54** Remove the front door and front-lower cover (7 of 8)



10. Lower the left side of the door, and then slide it to the left to release the right-side door hinge pin. Remove the door.

**Figure 1-55** Remove the front door and front-lower cover (8 of 8)

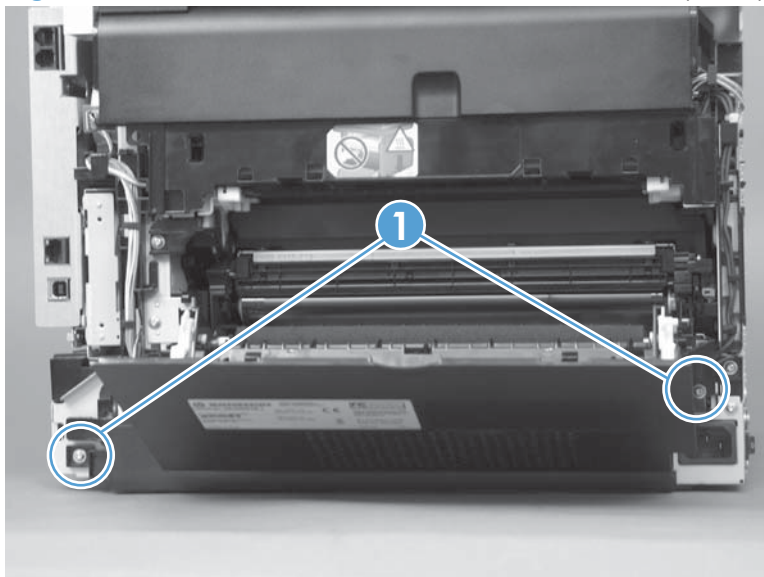




## Rear door and rear-lower cover

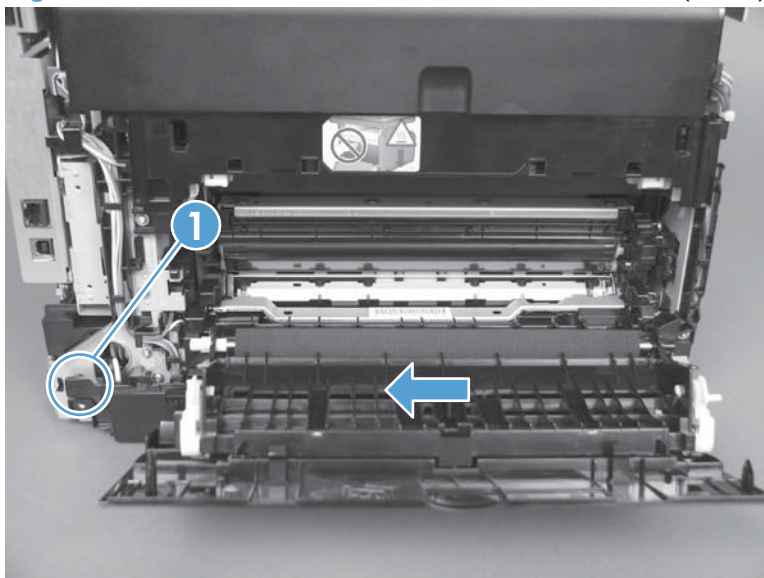
1. Remove the following components:
  - Right cover. See [Right cover on page 17](#).
  - Left cover. See [Left cover on page 25](#).
  - Rear-center cover. See [Rear-center cover on page 30](#).
2. Remove two screws (callout 1)

**Figure 1-56** Remove the rear door and rear-lower cover (1 of 5)



3. Release one pin (callout 1) and then slide the rear door and rear-lower cover towards the side of the product with the interface connectors.

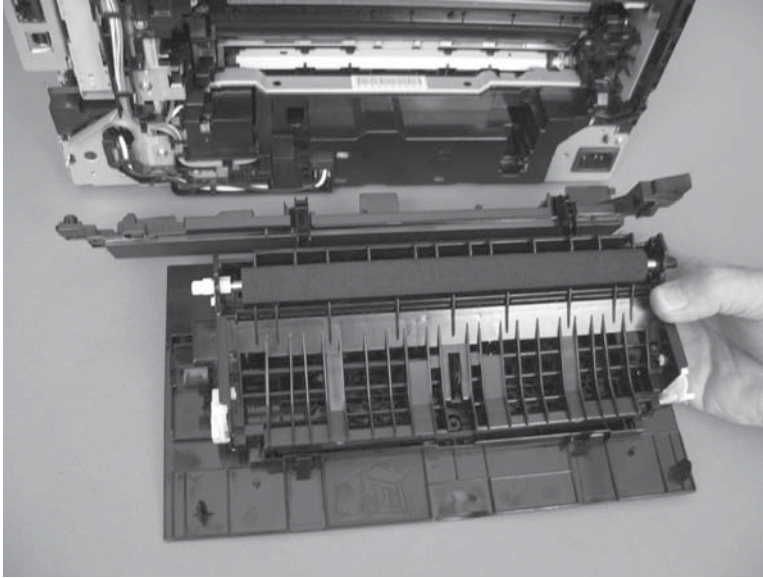
**Figure 1-57** Remove the rear door and rear-lower cover (2 of 5)





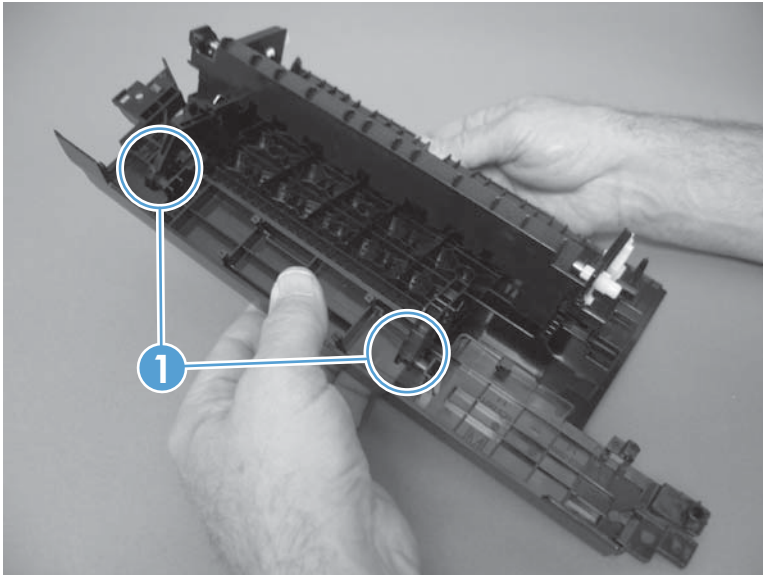
4. Remove the rear door and rear-lower cover.

**Figure 1-58** Remove the rear door and rear-lower cover (3 of 5)




5. Carefully pry the rear-door hinge arms off of the hinge pins (callout 1) on the rear-lower cover to separate the rear cover from the rear door.

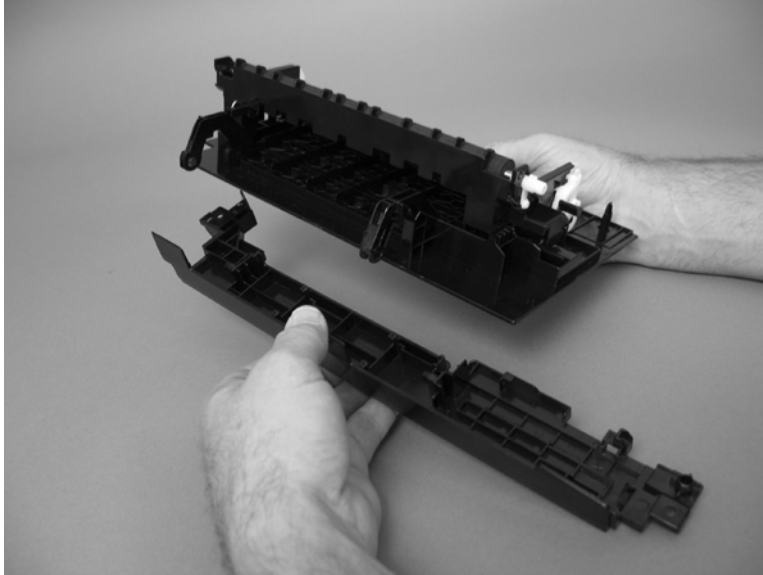
**Figure 1-59** Remove the rear door and rear-lower cover (4 of 5)



6. Separate the rear cover from the rear door.

 **NOTE:** If you are installing a replacement rear-lower door, remove the paper-guide assembly from the discarded door, and then install it on the replacement door. See [Paper-guide assembly on page 44](#).

**Figure 1-60** Remove the rear door and rear-lower cover (5 of 5)



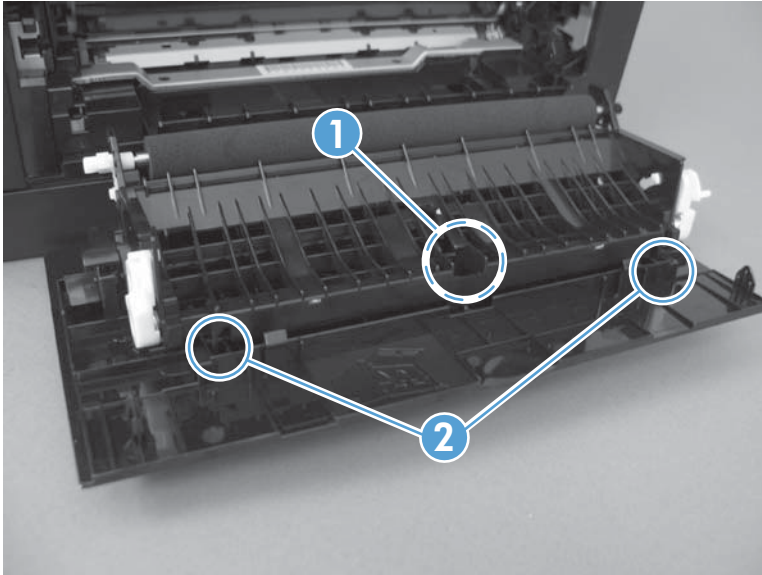
## Main assemblies

 **NOTE:** The laser scanner installed in this product is not replaceable.

### Paper-guide assembly

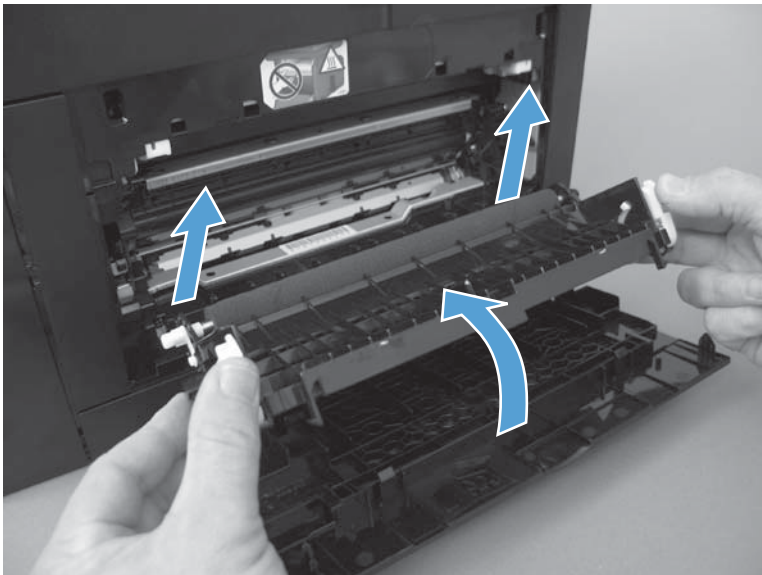
1. Release one captive screw (callout 1) and release two tabs (callout 2).

**Figure 1-61** Remove the paper-guide assembly (1 of 2)





2. Rotate the assembly up and away from the rear door to release it, and then remove the paper-guide assembly

**Figure 1-62** Remove the paper-guide assembly (2 of 2)



## USB port PCA and bracket

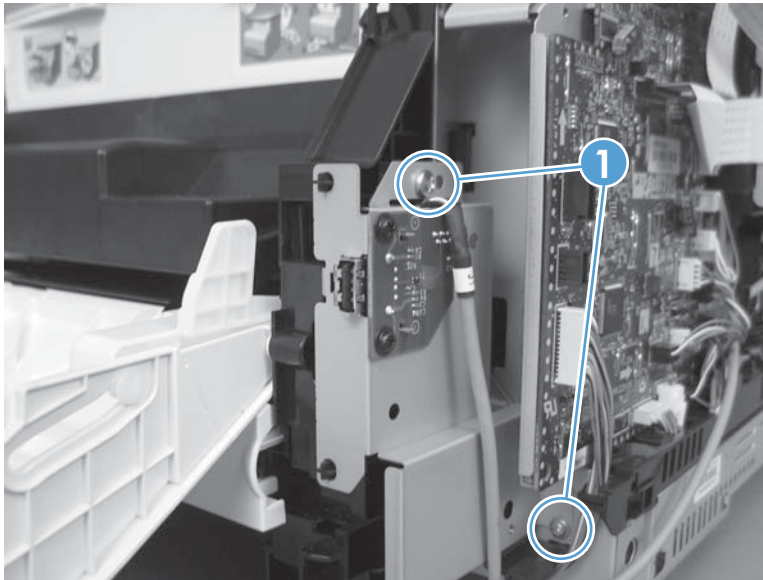
 **NOTE:** To replace only the USB port PCA, you do not need to remove the sheet-metal bracket. Remove the two screws securing the PCA to the bracket, and then disconnect one wire-harness connector.

 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, ground yourself by touching the sheet-metal chassis *before* touching an ESD-sensitive part.

1. Remove the following components:
  - Right cover. See [Right cover on page 17](#).
  - Right-front cover-1 and cover-2. See [Right-front cover-1 and cover-2 on page 20](#).
2. Remove two screws (callout 1), and then remove the USB port and sheet-metal mounting bracket.

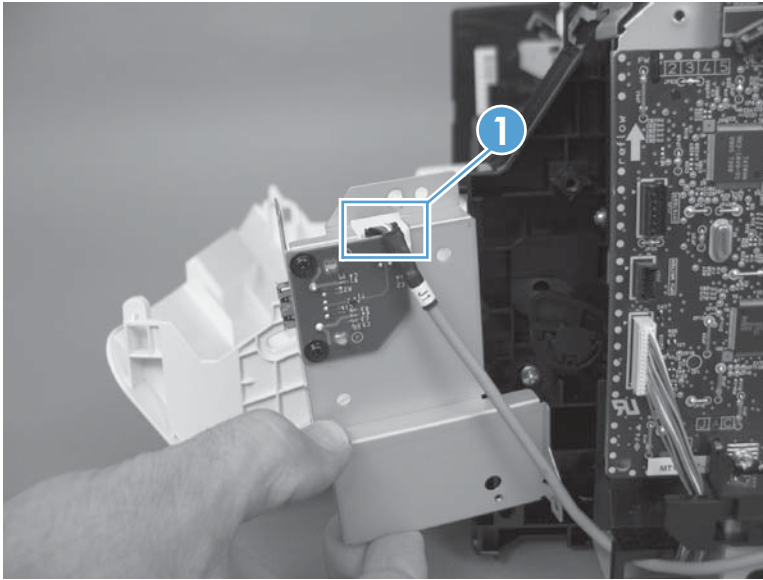
 **CAUTION:** The USB port PCA is still connected to the product by the wire harness.

**Figure 1-63** Remove the USB port PCA and bracket (1 of 3)



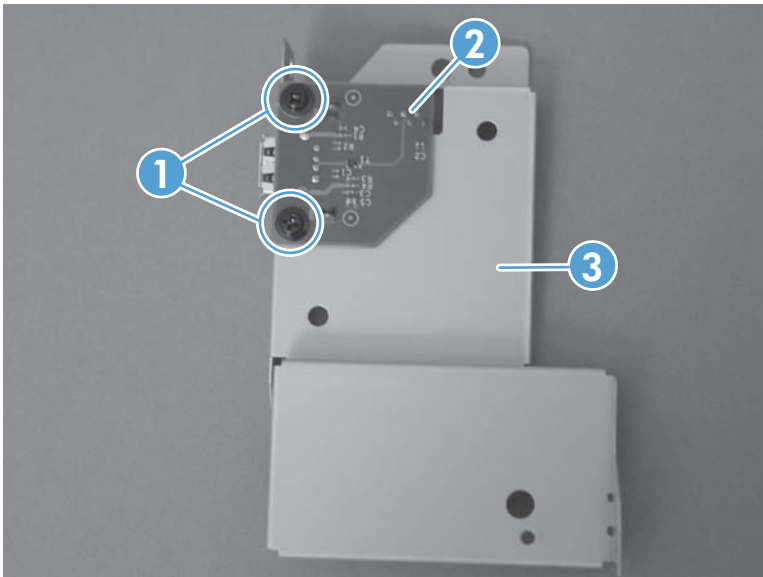
3. Disconnect one wire-harness connector (callout 1).

**Figure 1-64** Remove the USB port PCA and bracket (2 of 3)



4. Remove two screws (callout 1), and then separate the USB port PCA (callout 2) from the mounting bracket (callout 3) to remove it.

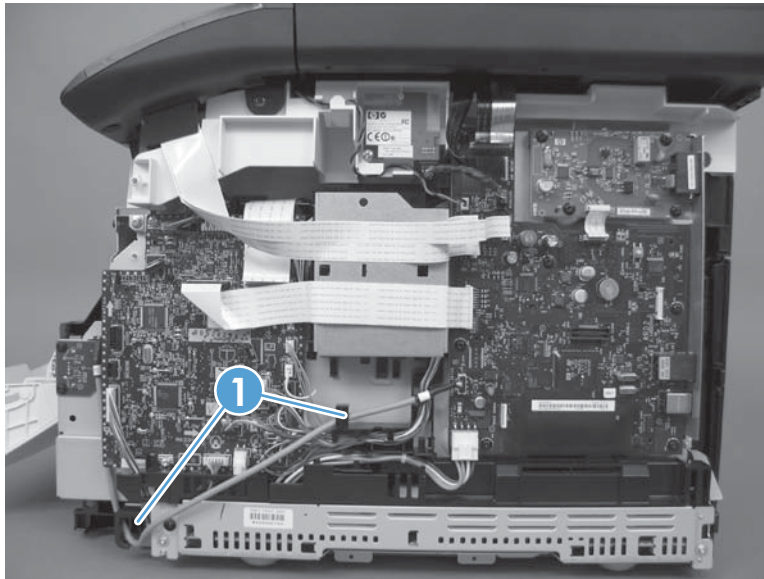
**Figure 1-65** Remove the USB port PCA and bracket (3 of 3)



### Reinstall the USB port PCA


- When the USB port PCA and mounting bracket are reinstalled, make sure that the cable is routed behind the cable retainers (callout 1)

**Figure 1-66** Reinstall the USB port PCA and bracket



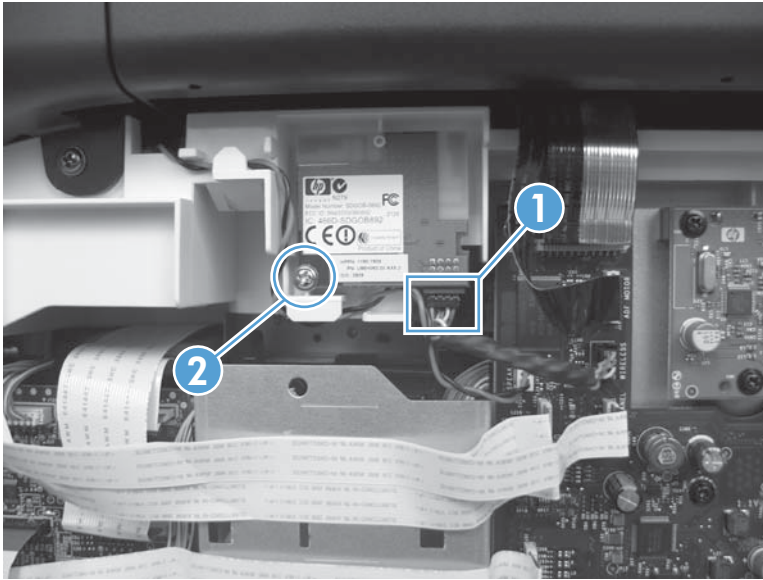


## Wireless PCA (wireless models only)

△ **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, ground yourself by touching the sheet-metal chassis *before* touching an ESD-sensitive part.

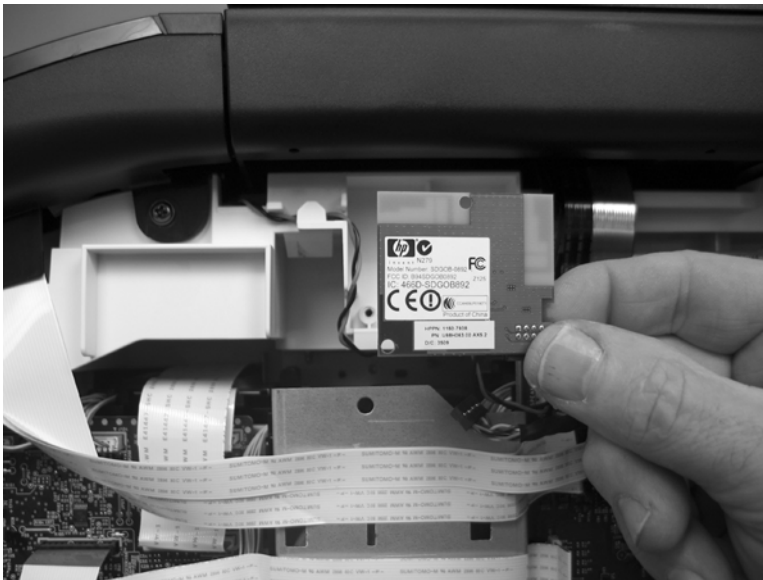
1. Remove the right cover. See [Right cover on page 17](#).
2. Disconnect one wire-harness connector, and then remove one screw (callout 2).

**Figure 1-67** Remove the wireless PCA (1 of 2)



3. Remove the wireless PCA.

**Figure 1-68** Remove the wireless PCA (2 of 2)





## DC controller PCA

### Special considerations

⚠ **WARNING!** Do not install a *replacement* formatter PCA and DC controller PCA at the same time.

The formatter PCA and the DC controller PCA store important product configuration information (NVRAM data) that will be lost if both PCAs are replaced at the same time. When the product power is turned on, the formatter will restore the NVRAM data to a replacement DC controller.

Replacing both the DC controller and the formatter at the same time will result in severe print-quality problems.

### Replacing the DC controller PCA before the formatter PCA

Use the following procedure if you need to install a replacement DC controller *and* a replacement formatter PCA.

📝 **NOTE:** If you are only installing a replacement DC controller PCA, proceed to [Remove the DC controller PCA on page 49](#).

1. Install a replacement DC controller PCA.
2. Turn the product power on, and wait for the print-cartridge volume indicators to appear on the control-panel display.

📝 **NOTE:** This allows important product information to be written to the replacement DC controller PCA.

3. Turn the product power off.
4. Install a replacement formatter PCA. See [Formatter PCA, fax card PCA, and support bracket on page 53](#).
5. Turn the product power on.

### Remove the DC controller PCA


⚠ **CAUTION:** Do not bend or fold the flat flexible cables (FFCs) during removal or installation. Also, do not straighten pre-folds in the FFCs. You *must* make sure that all FFCs are fully seated in their connectors. Failure to fully seat an FFC into a connector can cause a short circuit in a PCA.



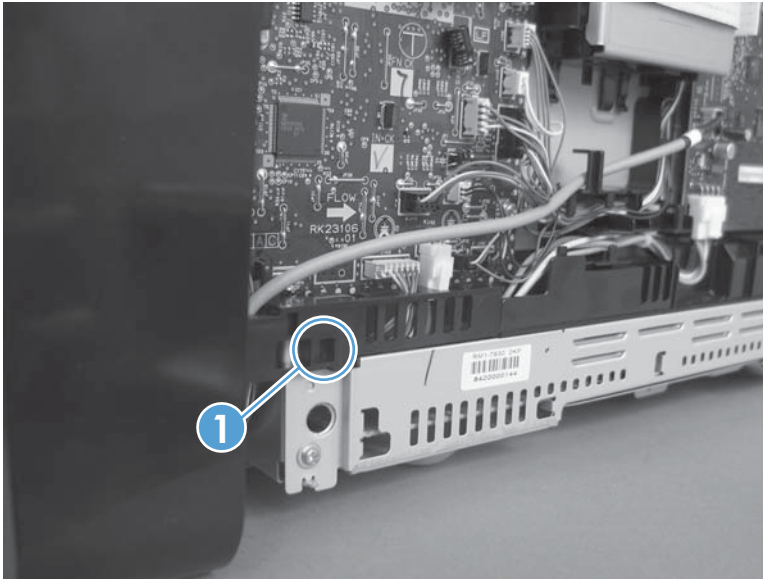
Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, ground yourself by touching the sheet-metal chassis *before* touching an ESD-sensitive part.

1. Remove the right cover. See [Right cover on page 17](#).

2. Release one tab (callout 1) on the black-plastic protective cover.

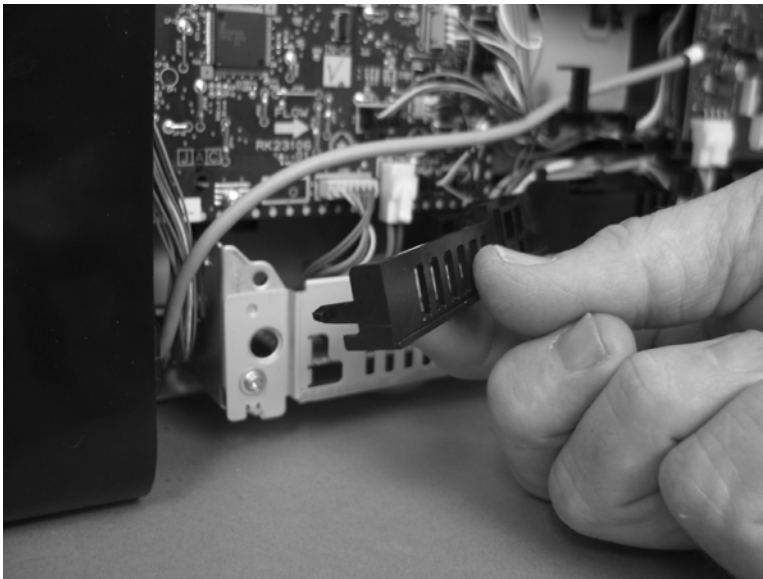
 **NOTE:** This cover is located near the lower-right side of the product below the DC controller.

**Figure 1-69** Remove the DC controller PCA (1 of 5)



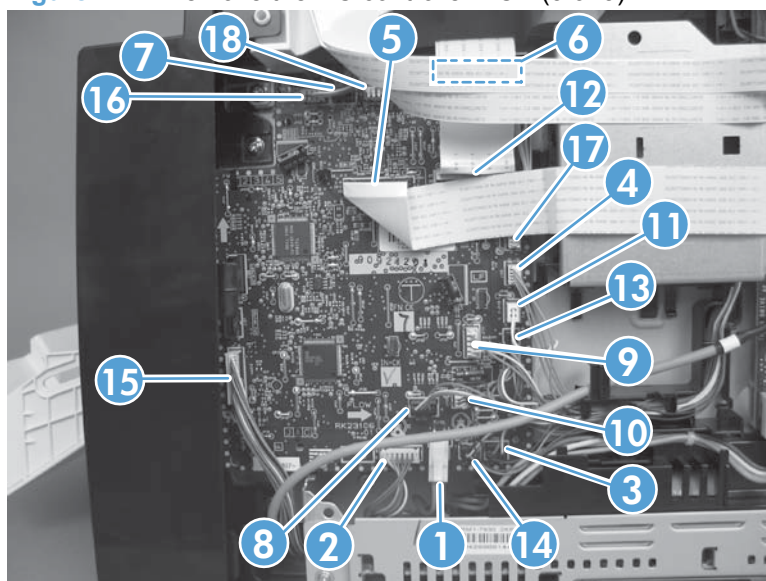
3. Remove the cover.

**Figure 1-70** Remove the DC controller PCA (2 of 5)




4. Disconnect fifteen wire-harness connectors and three FFCs from the DC controller PCA.

**Figure 1-71** Remove the DC controller PCA (3 of 5)

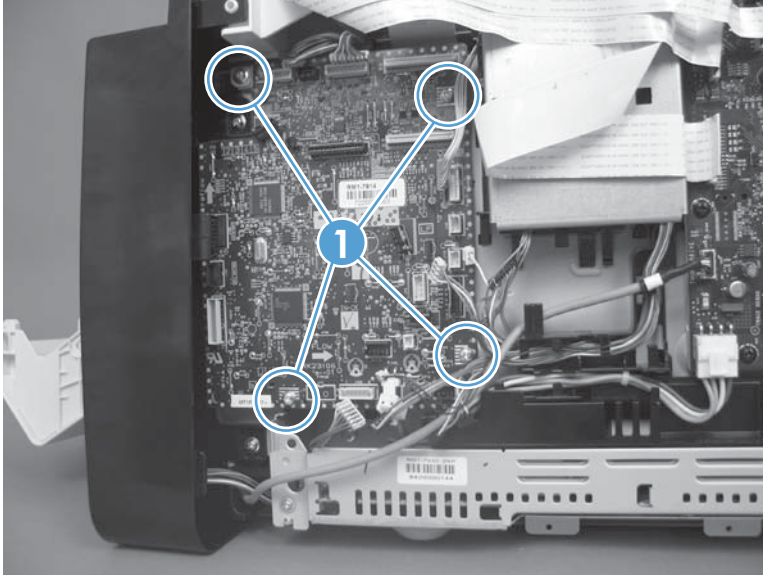


| Item | Description                               | Item | Description                               | Item | Description                             |
|------|---|------|---|------|---|
| 1    | J102<br>Low-voltage power supply (+24 v)  | 7    | J109<br>Scanner motor                     | 13   | J116<br>Pickup assembly sensors         |
| 2    | J103<br>Low-voltage power supply (+3.3 v) | 8    | J110<br>Fuser motor                       | 14   | J118<br>Media width sensor              |
| 3    | J104<br>Fuser thermistor                  | 9    | J111<br>Pickup assembly motor             | 15   | J119<br>ITB assembly sensors            |
| 4    | J105<br>Fuser power                       | 10   | J112<br>Developing disengagement solenoid | 16   | J120<br>Developing home position sensor |
| 5    | J107<br>Formatter                         | 11   | J113<br>Pickup solenoid                   | 17   | J121<br>Main motor                      |
| 6    | J108<br>Laser                             | 12   | J115<br>High-voltage power supply         | 18   | J124<br>E-label                         |

5. Remove four screws (callout 1).

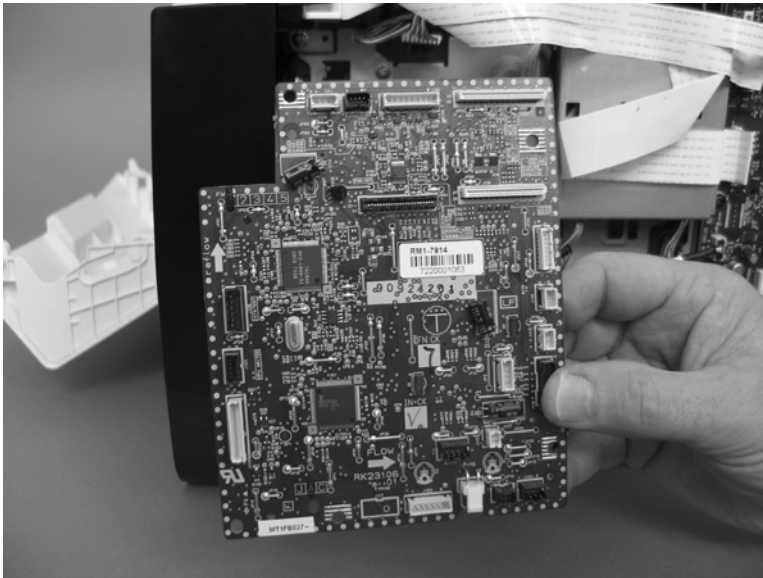
 **NOTE:** These four screws are ground screws. Make sure that the correct screws are used to reinstall the DC controller PCA.

**Figure 1-72** Remove the DC controller PCA (4 of 5)



6. Remove the DC controller PCA.

**Figure 1-73** Remove the DC controller PCA (5 of 5)



## Formatter PCA, fax card PCA, and support bracket

### Special considerations

 **WARNING!** Do not install a *replacement* formatter PCA and DC controller PCA at the same time.


The formatter PCA and the DC controller PCA store important product configuration information (NVRAM data) that will be lost if both PCAs are replaced at the same time. When the product power is turned on, the DC controller will restore the NVRAM data on the replacement formatter.

Replacing both the formatter and the DC controller at the same time will result in severe print-quality problems.


 **NOTE:** The base model does not have a fax card installed.

### Replacing the formatter PCA before the DC controller PCA

Use the following procedure if you need to install a replacement formatter PCA *and* a replacement DC controller.


 **NOTE:** If you are only installing a replacement formatter PCA, proceed to [Remove the formatter PCA on page 53](#).


1. Install a replacement formatter PCA.
2. Turn the product power on, and wait for the print-cartridge volume indicators to appear on the control-panel display.

 **NOTE:** This allows important product information to be written to the replacement formatter PCA.

3. Turn the product power off.
4. Install a replacement DC controller. See [DC controller PCA on page 49](#).
5. Turn the product power on.

### Remove the formatter PCA

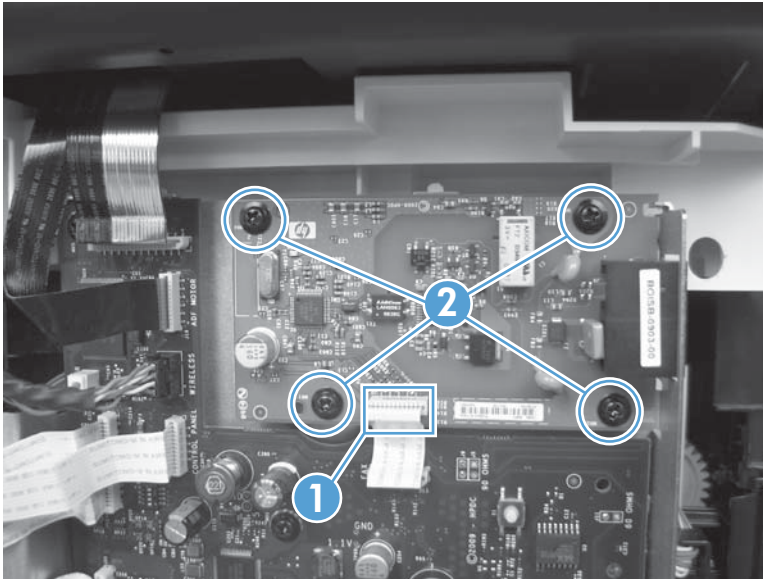
 **CAUTION:** Do not bend or fold the flat flexible cables (FFCs) during removal or installation. Also, do not straighten pre-folds in the FFCs. You *must* make sure that all FFCs are fully seated in their connectors. Failure to fully seat an FFC into a connector can cause a short circuit in a PCA.

 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, ground yourself by touching the sheet-metal chassis *before* touching an ESD-sensitive part.

1. Remove the right cover. See [Right cover on page 17](#).

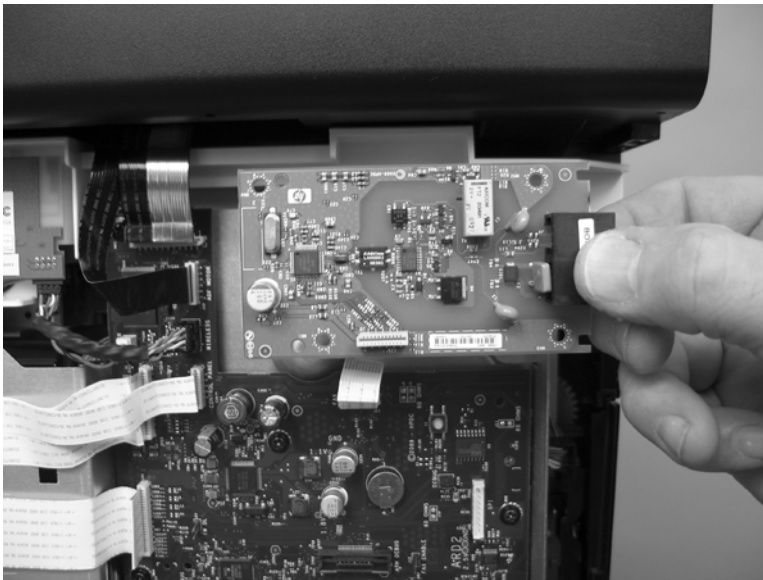
2. Disconnect one connector (callout 1), and remove four screws (callout 2).

**Figure 1-74** Remove the formatter PCA, fax card PCA, and support bracket (1 of 8)



3. Remove the Fax PCA.

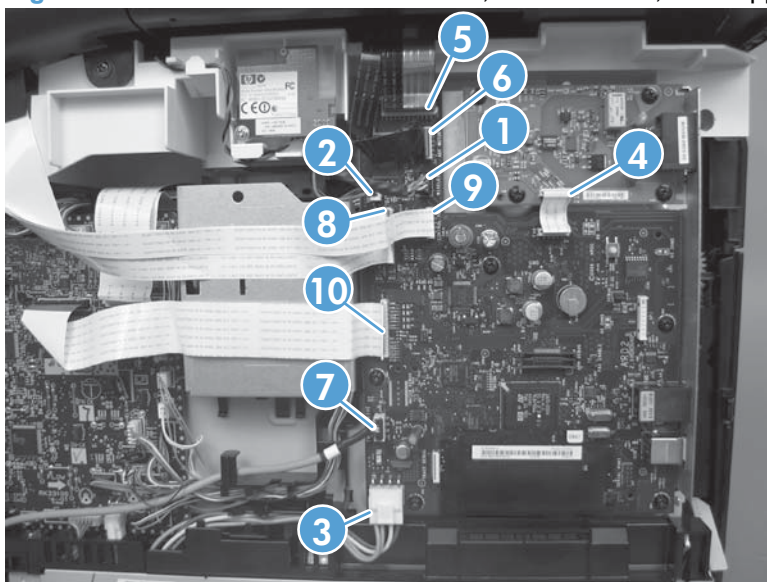
**Figure 1-75** Remove the formatter PCA, fax card PCA, and support bracket (2 of 8)





4. Disconnect six wire-harness connectors and four FFCs on the formatter PCA.

**Figure 1-76** Remove the formatter PCA, fax card PCA, and support bracket (3 of 8)

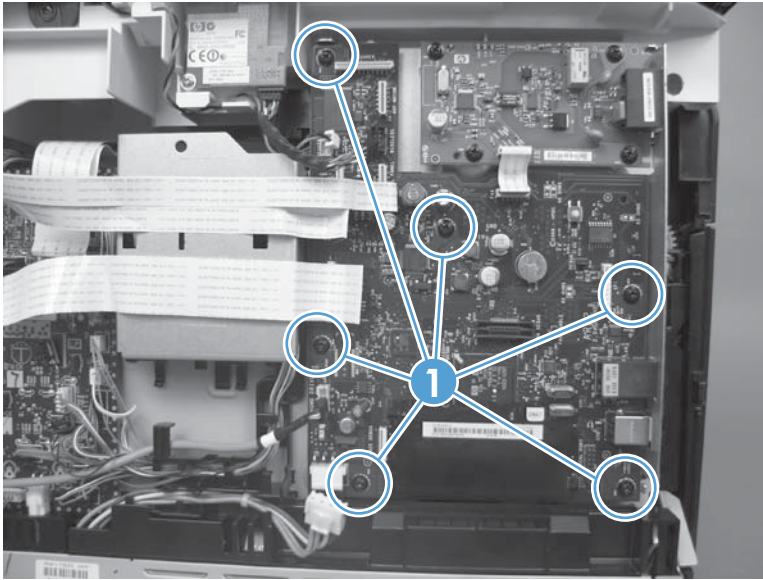


| Item | Description                               | Item | Description                        |
|------|---|------|------------------------------------|
| 1    | J1<br>Wireless PCA (wireless models only) | 6    | J18<br>Document feeder motor (ADF) |
| 2    | J8<br>Speaker                             | 7    | J19<br>USB PCA (thumb drive)       |
| 3    | J10<br>Power (LVPS)                       | 8    | J23<br>Control panel               |
| 4    | J13<br>Fax PCA                            | 9    | J24<br>Control panel               |
| 5    | J17<br>Scanner                            | 10   | J31<br>Video                       |



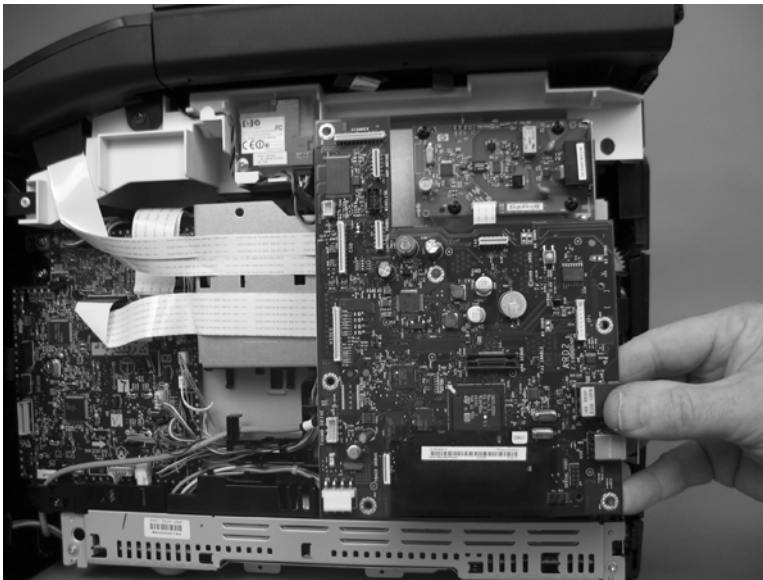
5. Remove six screws (callout 1).

**Figure 1-77** Remove the formatter PCA, fax card PCA, and support bracket (4 of 8)



6. Remove the formatter PCA.

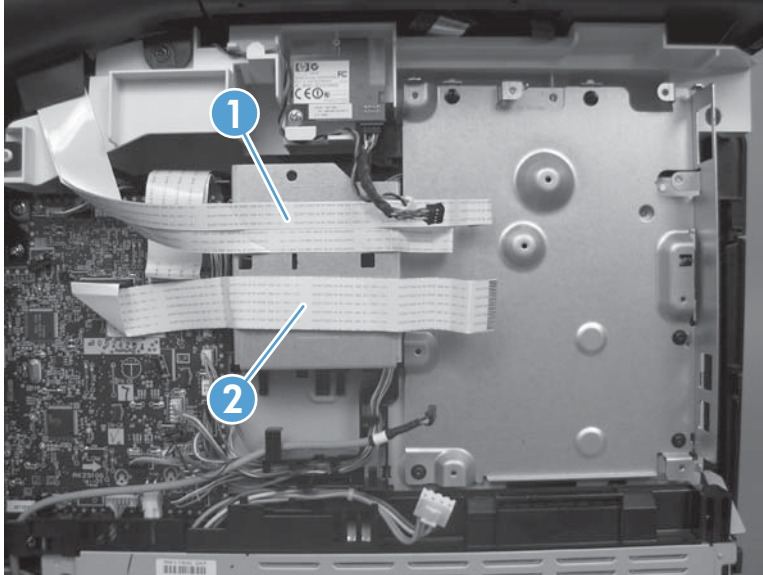
**Figure 1-78** Remove the formatter PCA, fax card PCA, and support bracket (5 of 8)



7. Remove one FFC (callout 1) from the support bracket. Disconnect one FFC (callout 2) from the DC controller.

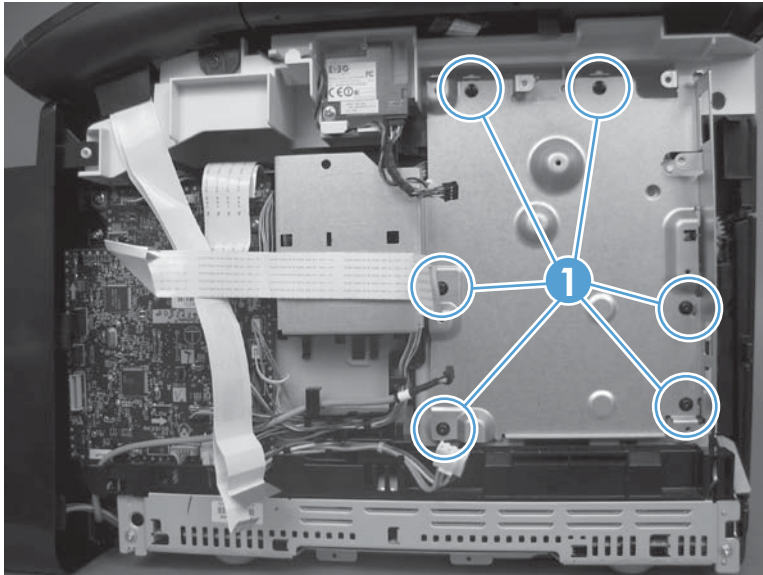
△ **CAUTION:** One FFC (callout 2) is fastened to the support bracket with insulating adhesive foam tape. If you are replacing the support bracket, you will need to adhere this FFC to the replacement bracket with the same type of material. This FFC **must** be shielded from direct contact with the support bracket.

**Figure 1-79** Remove the formatter PCA, fax card PCA, and support bracket (6 of 8)



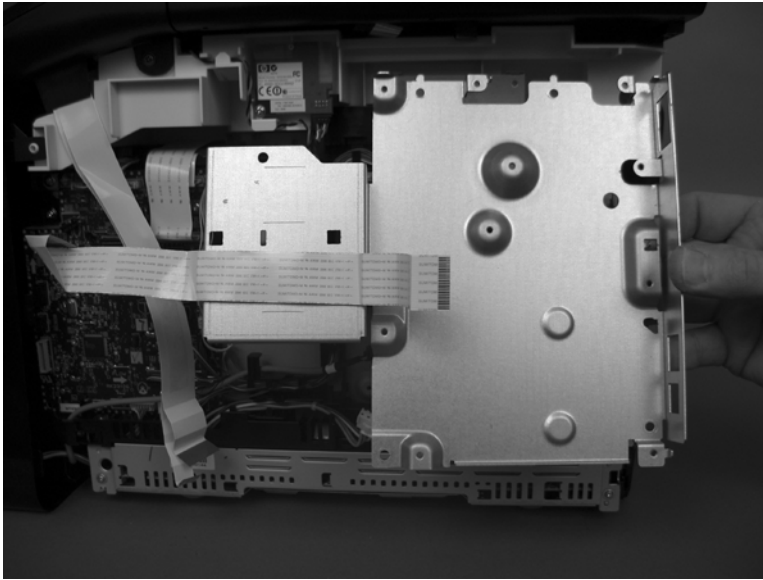
8. Remove six screws (callout 1).

**Figure 1-80** Remove the formatter PCA, fax card PCA, and support bracket (7 of 8)



9. Remove the support bracket.

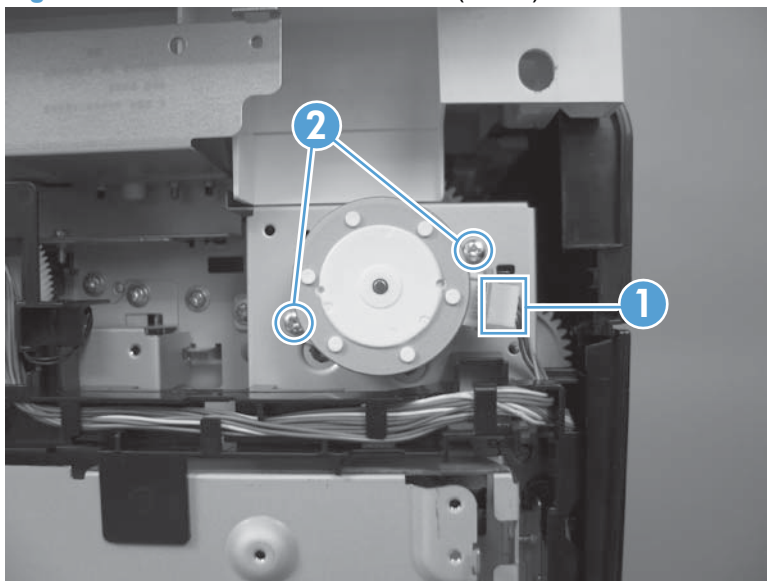
**Figure 1-81** Remove the formatter PCA, fax card PCA, and support bracket (8 of 8)



## Fuser motor

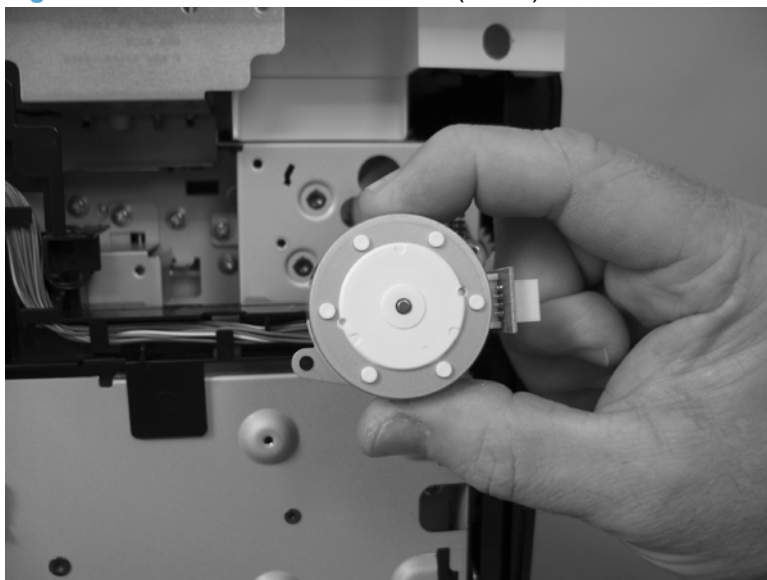
1. Remove the following components:
  - Right cover. See [Right cover on page 17](#).
  - Formatter PCA, fax PCA, and support bracket. See [Formatter PCA, fax card PCA, and support bracket on page 53](#).
2. Disconnect one wire-harness connector (callout 1), and then remove two screws (callout 2).

**Figure 1-82** Remove the fuser motor (1 of 2)



3. Slightly slide the motor up so that the gear on the motor shaft is centered in the mounting bracket hole, and then pull the motor away from the product. The gear will pass through the large hole in the bracket.

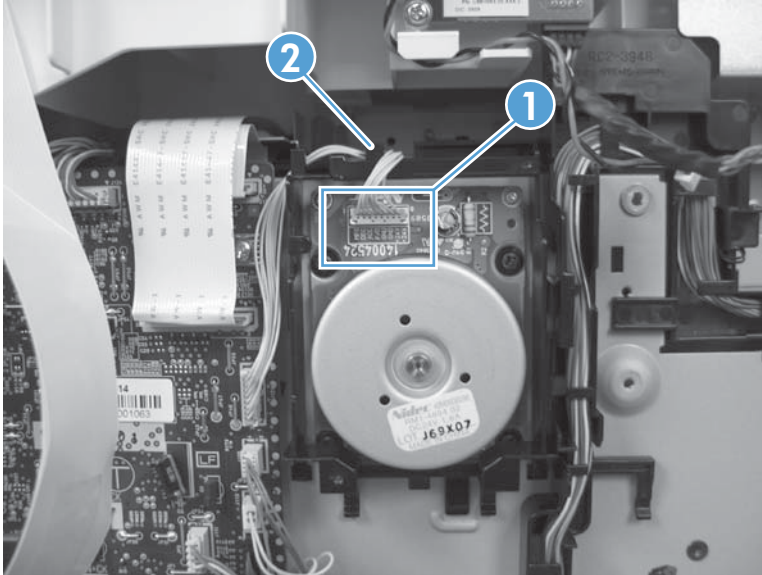
**Figure 1-83** Remove the fuser motor (2 of 2)



## Main motor

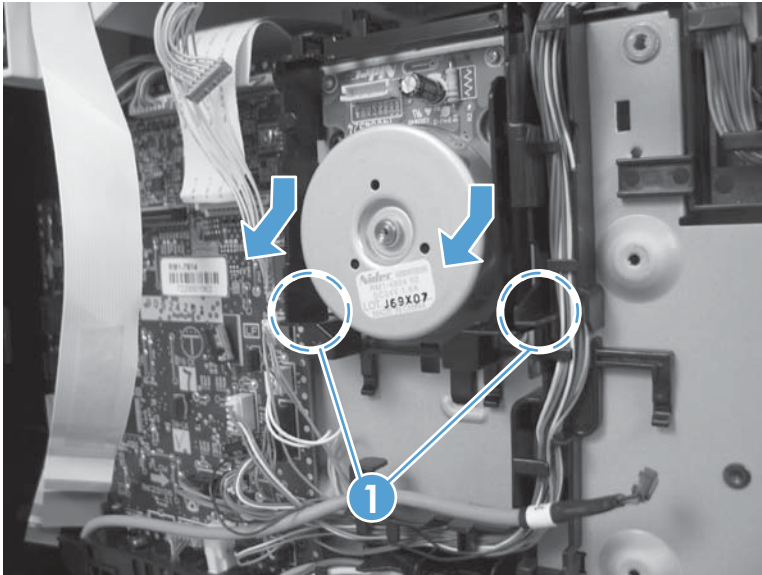
1. Remove the following components:
  - Right cover. See [Right cover on page 17](#).
  - Formatter PCA, fax PCA, and support bracket. See [Formatter PCA, fax card PCA, and support bracket on page 53](#).
2. Disconnect one wire-harness connector (callout 1), and then release the wire harness from the retainer (callout 2).

**Figure 1-84** Remove the main motor (1 of 4)



3. Release two tabs (callout 1), and then pull down on the black-plastic wire-harness retainer to release it.

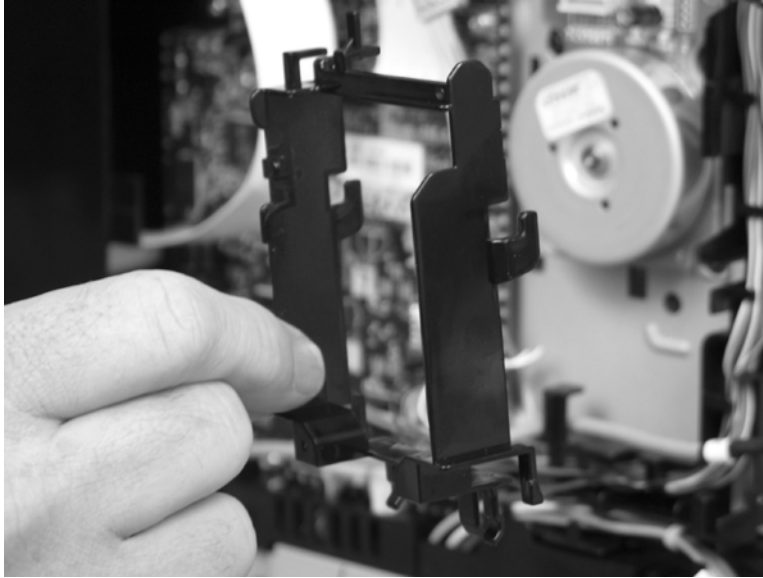
**Figure 1-85** Remove the main motor (2 of 4)





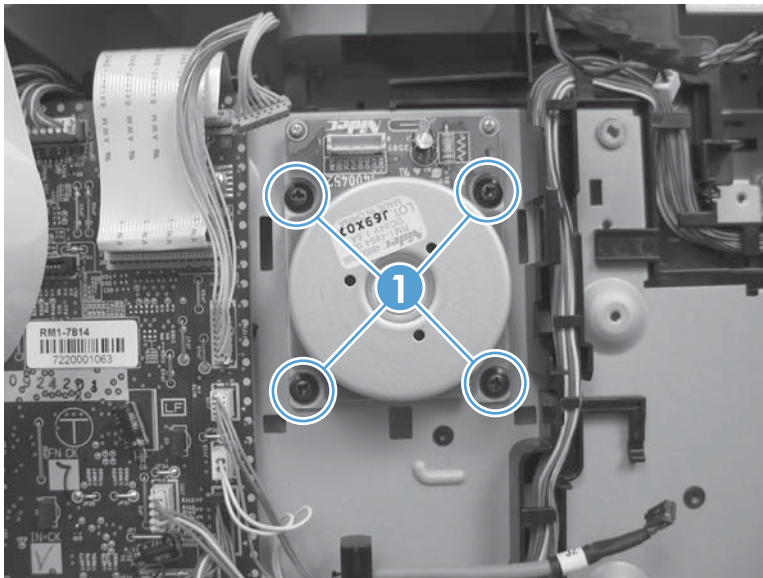
4. Remove the wire retainer.

**Figure 1-86** Remove the main motor (3 of 4)



5. Remove four screws (callout 1) and then remove the main motor.

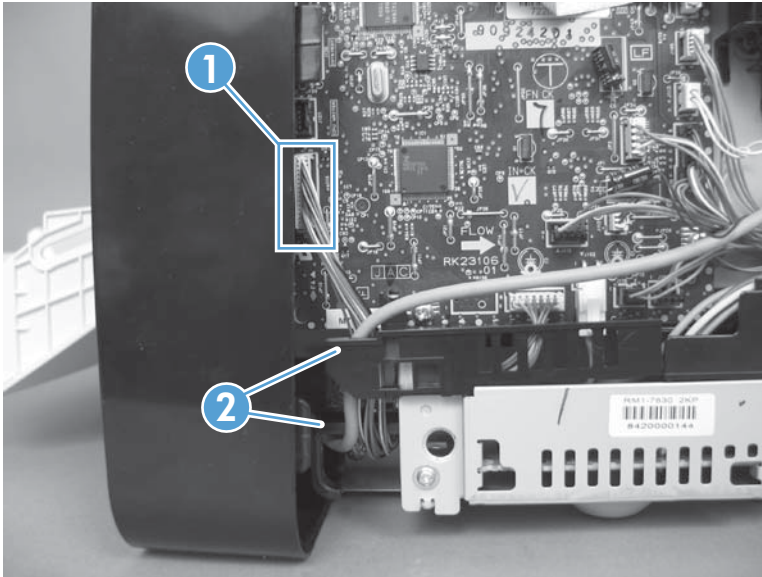
**Figure 1-87** Remove the main motor (4 of 4)



## Intermediate transfer belt (ITB)

1. Remove the following components:
  - Print-cartridge drawer. See [Print-cartridge drawer on page 14](#).
  - Right cover. See [Right cover on page 17](#).
  - Left cover. See [Left cover on page 25](#).
  - Rear-center cover. See [Rear-center cover on page 30](#).
2. Disconnect one wire-harness connector (callout 1), and then release the wire harness from the retainer (callout 2).

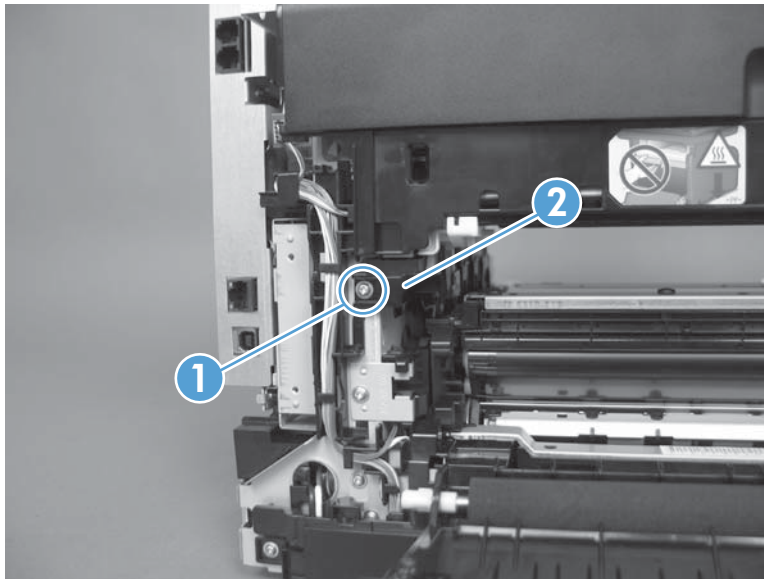
**Figure 1-88** Remove the ITB (1 of 5)





3. Open the rear door, and then remove one screw (callout 1), and then remove the print-cartridge drawer stop (callout 2).

**Figure 1-89** Remove the ITB (2 of 5)



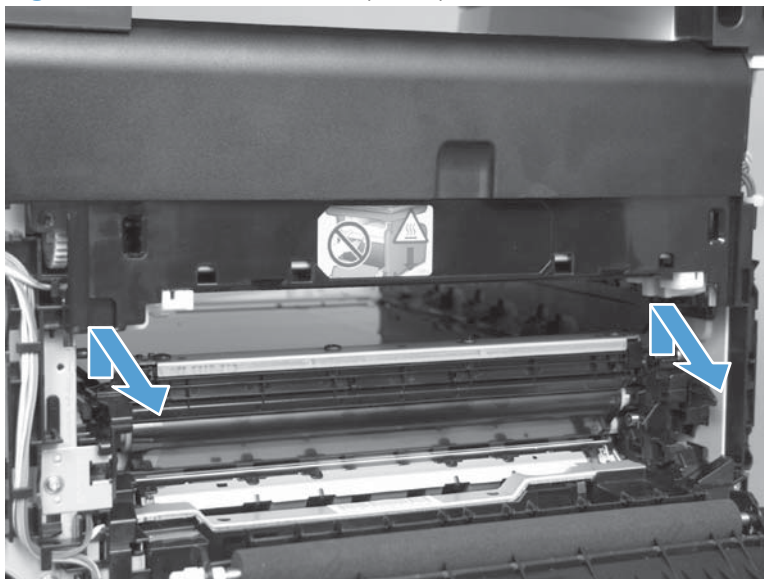
4. Carefully lift up on the black plastic portion of the ITB, and then pull it *partially* out of the product (the ITB wire harness will prevent the ITB from being fully removed).

⚠ **WARNING!** Only *partially* pull the ITB out of the product to avoid damage to the secondary-transfer (T2) roller.

See [Figure 1-92 Remove the ITB \(5 of 5\) on page 64](#) to see how to correctly handle the ITB to prevent damaging it. Do not lift the ITB by grasping the sheet-metal bracket.

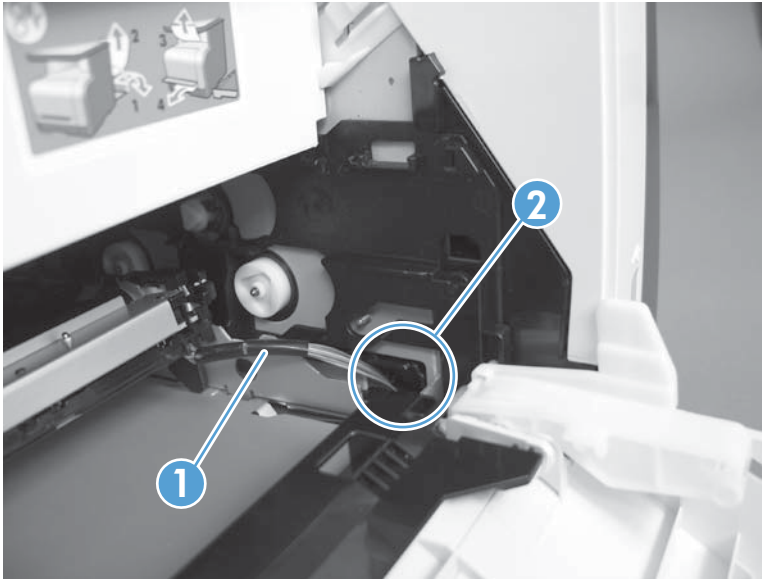
⚠ **CAUTION:** Avoid touching the black plastic transfer belt. Skin oils on the belt might cause print-quality problems.

**Figure 1-90** Remove the ITB (3 of 5)



5. Feed the ITB wire harness (callout 1) through an opening in the chassis (callout 2).

**Figure 1-91** Remove the ITB (4 of 5)

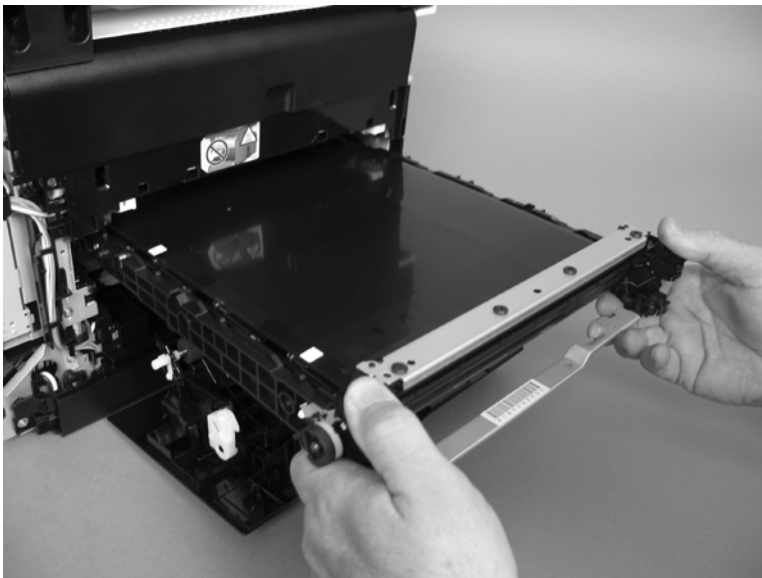


6. Carefully pull the ITB straight out of the product.

⚠ **WARNING!** Handle the ITB by its hard plastic sides to avoid damage to the sheet metal frame. The lower sheet-metal portion of the ITB frame can be easily bent. See callout 1 in [Figure 1-93 Reinstall the ITB \(1 of 2\) on page 65](#).

⚠ **CAUTION:** Make sure that the ITB wire harness does not get damaged as the ITB is removed from the chassis.

**Figure 1-92** Remove the ITB (5 of 5)

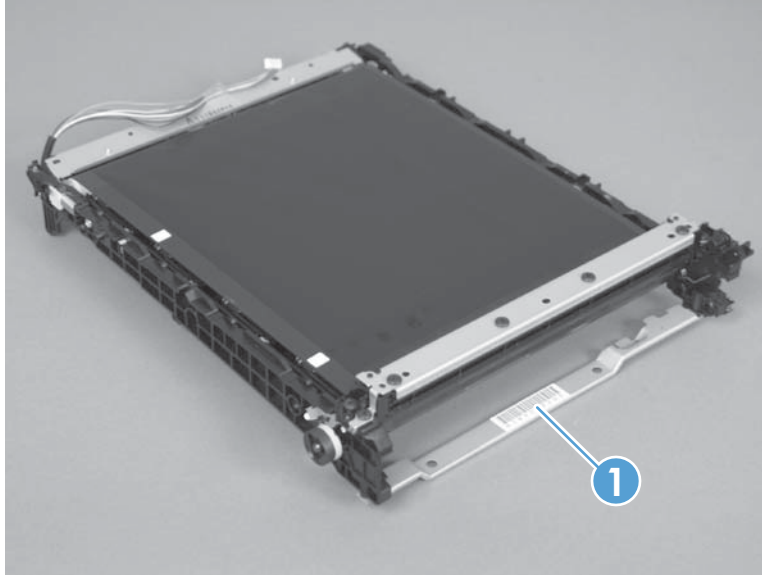


## Reinstall the ITB

Use the following guidelines when you install the ITB.

- **⚠ WARNING!** The lower sheet-metal portion of the ITB frame (callout 1) can be easily bent. Avoid handling the ITB by this part of the sheet-metal frame.

**Figure 1-93** Reinstall the ITB (1 of 2)



- When handling the ITB, always use the hard plastic portions of the assembly.
- **⚠ CAUTION:** Avoid touching the black-plastic transfer belt or roller. Skin oils on the belt or roller might cause print-quality problems.
- Do not let the transfer belt contact hard or sharp objects.
- **⚠ CAUTION:** Scratches, punctures, or other damage to the belt will cause print-quality problems.
- Make sure that the wire harness is not twisted or pinched after it is passed through the opening in the chassis, and that the ITB sits flat in the product.
- **📝 NOTE:** When the print-cartridge drawer is installed, it should easily slide in and out of the product and not contact any part of the ITB assembly.

- Tape the wire harness to the sheet-metal frame so that it will not catch on internal components as the ITB is installed.

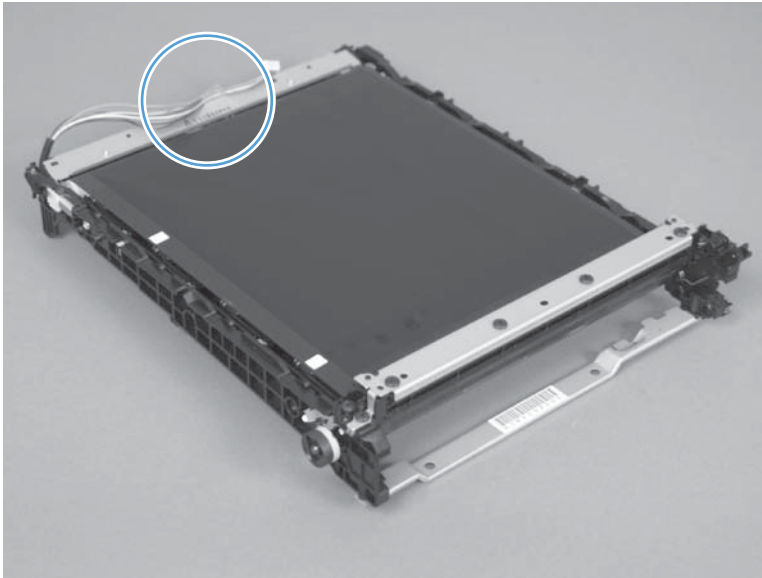
With the ITB partially installed, feed the wire harness through the opening in the chassis. See [Figure 1-91 Remove the ITB \(4 of 5\) on page 64](#). Finish installing the ITB.

**⚠ WARNING!** Do not place the tape so that it makes contact or adheres to the transfer belt. Tape or tape residue on the transfer belt will cause print-quality problems.

Make sure that the ITB is fully seated in the product before you reinstall the print-cartridge door stop.

**📝 NOTE:** Make sure that you remove all of the tape and tape residue after installing the ITB.

**Figure 1-94** Reinstall the ITB (2 of 2)



## Power supply (high-voltage)

- △ **CAUTION:** Do not bend or fold the flat flexible cables (FFCs) during removal or installation. Also, do not straighten pre-folds in the FFCs. You *must* make sure that all FFCs are fully seated in their connectors. Failure to fully seat an FFC into a connector can cause a short circuit in a PCA.



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, ground yourself by touching the sheet-metal chassis *before* touching an ESD-sensitive part.

1. Remove the following components:

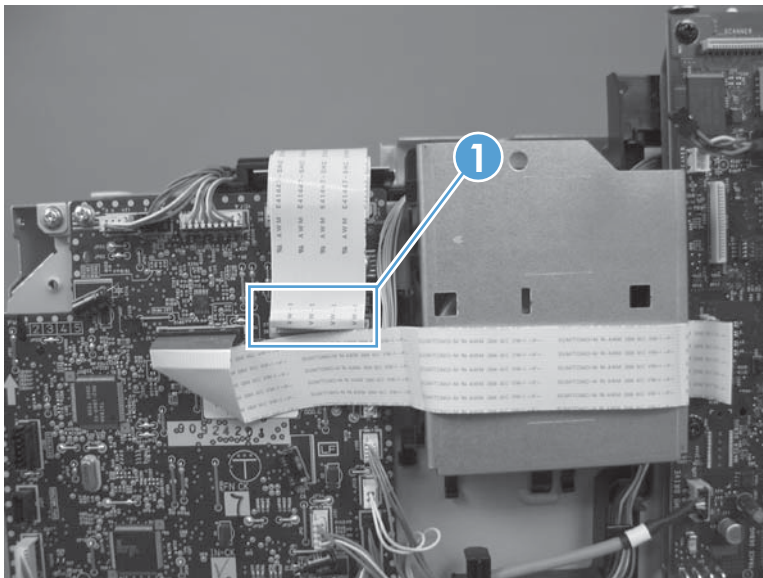
- Right cover. See [Right cover on page 17](#).
- Right-front cover-1 and cover-2. See [Right-front cover-1 and cover-2 on page 20](#).
- Control panel. See [Control panel on page 22](#).
- Left cover. See [Left cover on page 25](#).
- Document-feeder and scanner assembly. See [Document-feeder and scanner assembly on page 28](#).
- Rear-center cover. See [Rear-center cover on page 30](#).
- Rear-upper cover. See [Rear-upper cover on page 31](#).
- Speaker. See [Speaker on page 33](#).
- Top cover. See [Top cover on page 34](#).

2. Disconnect one FFC (callout 1).



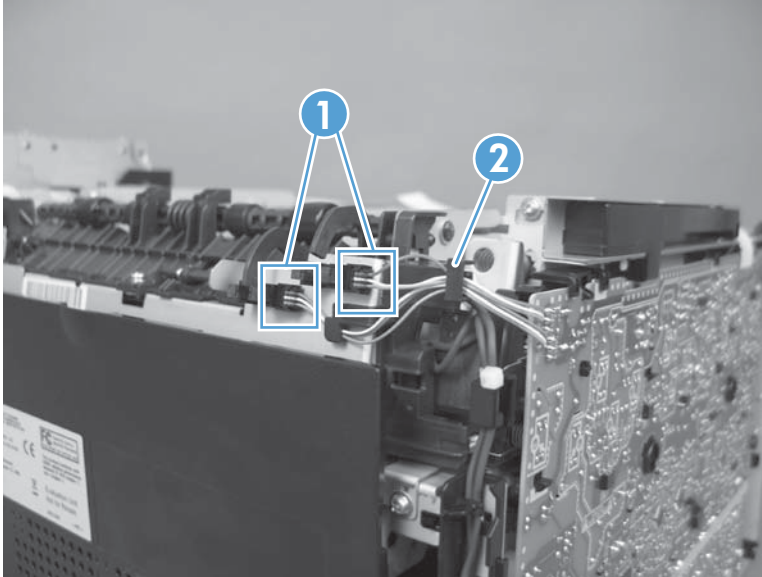
**NOTE:** This FFC connects the DC controller (shown below) to the high-voltage power supply.

**Figure 1-95** Remove the power supply (high-voltage; 1 of 6)



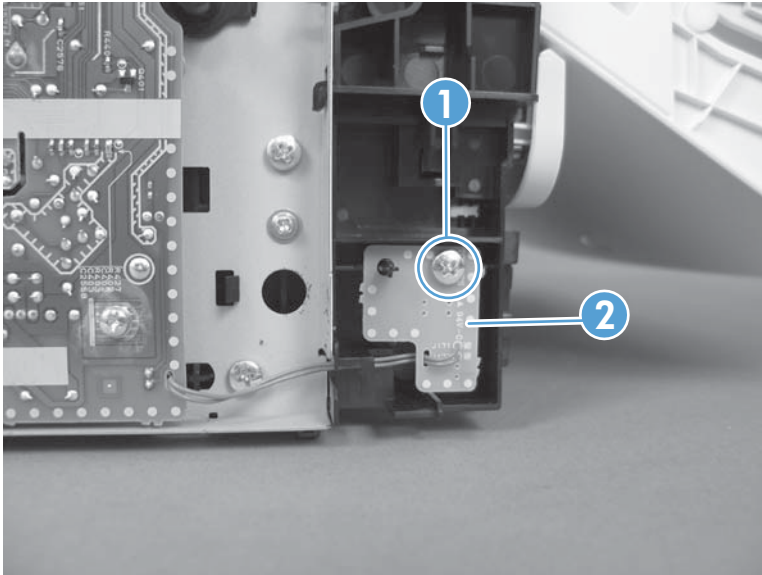
3. Disconnect two wire-harness connectors (callout 1) and release the wire harness from the retainer (callout 2).

**Figure 1-96** Remove the power supply (high-voltage; 2 of 6)



4. Remove one screw (callout 1) and then release the sub-PCA from the chassis (callout 2).

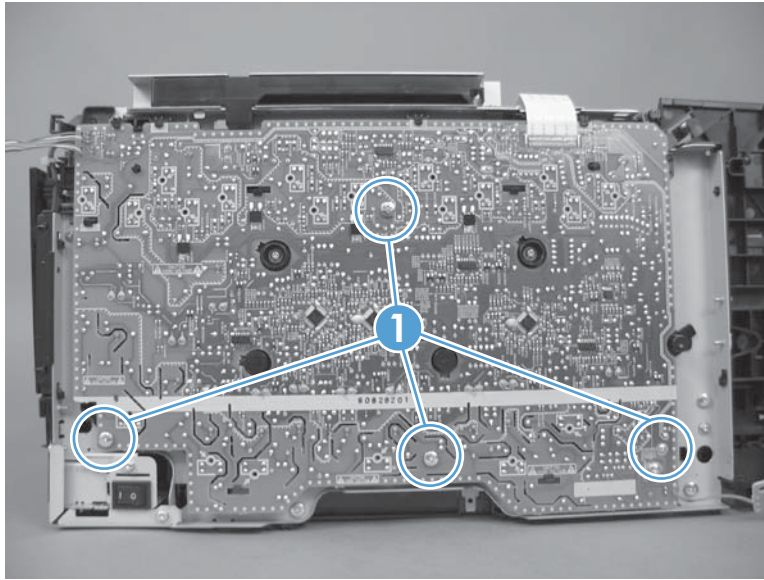
**Figure 1-97** Remove the power supply (high-voltage; 3 of 6)





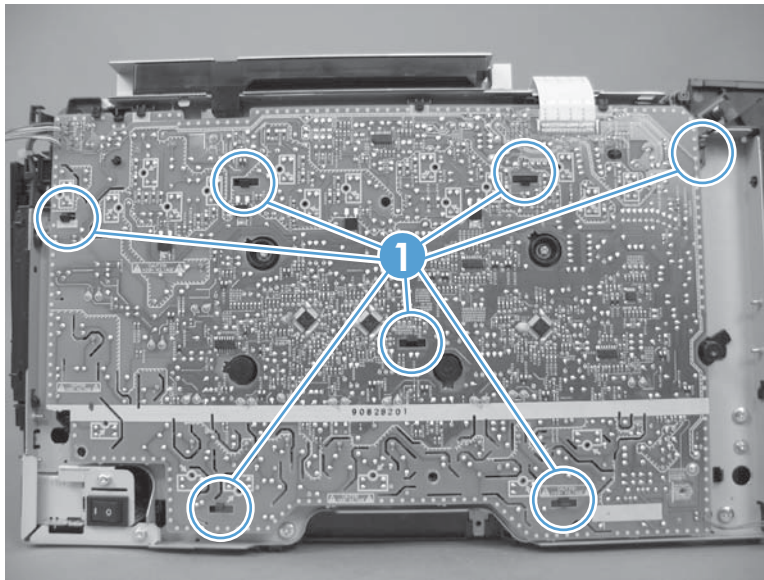
5. Remove four screws (callout 6).

**Figure 1-98** Remove the power supply (high-voltage; 4 of 6)



6. Release seven tabs (callout 8).

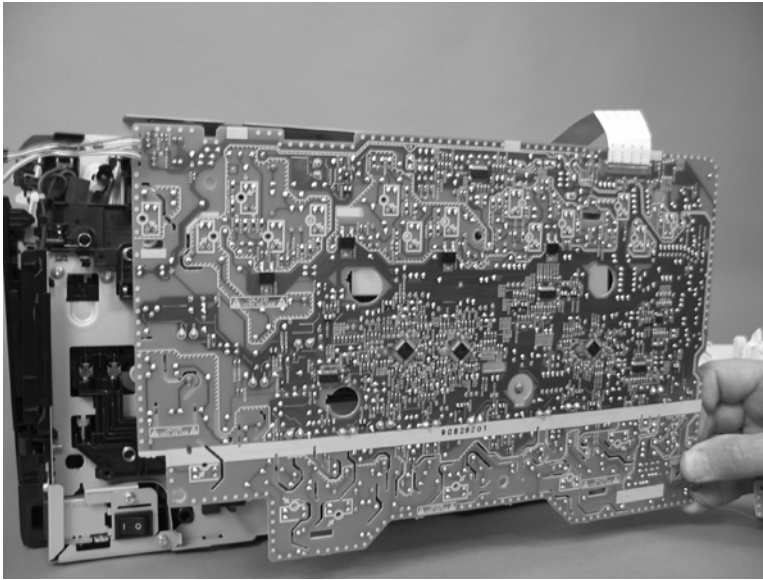
**Figure 1-99** Remove the power supply (high-voltage; 5 of 6)





7. Remove the power supply.

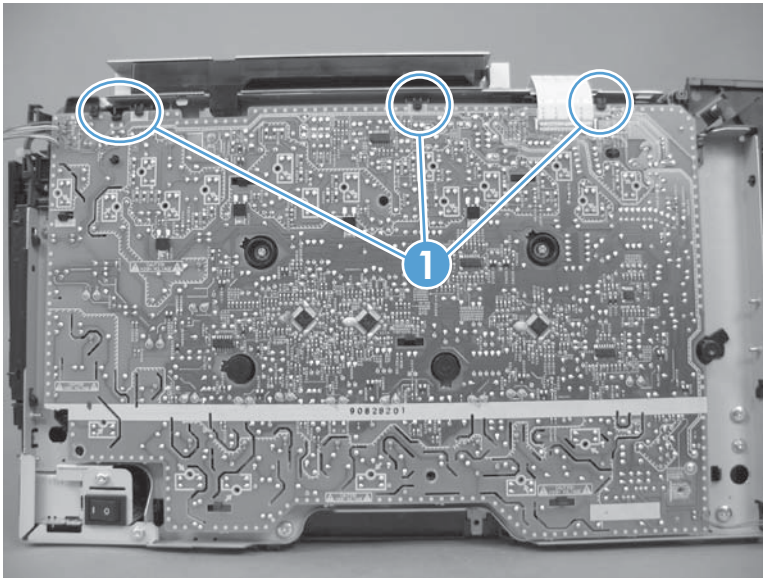
**Figure 1-100** Remove the power supply (high-voltage; 6 of 6)



#### Reinstall the power supply (high voltage)

- Make sure that the power supply is correctly positioned under the tabs (callout 1) located on the product chassis. If the power supply is not correctly installed, the product will not function correctly and a fuser open error (50.7000) might appear in the event log.

**Figure 1-101** Reinstall the power supply (high voltage)



## Power supply (low voltage)

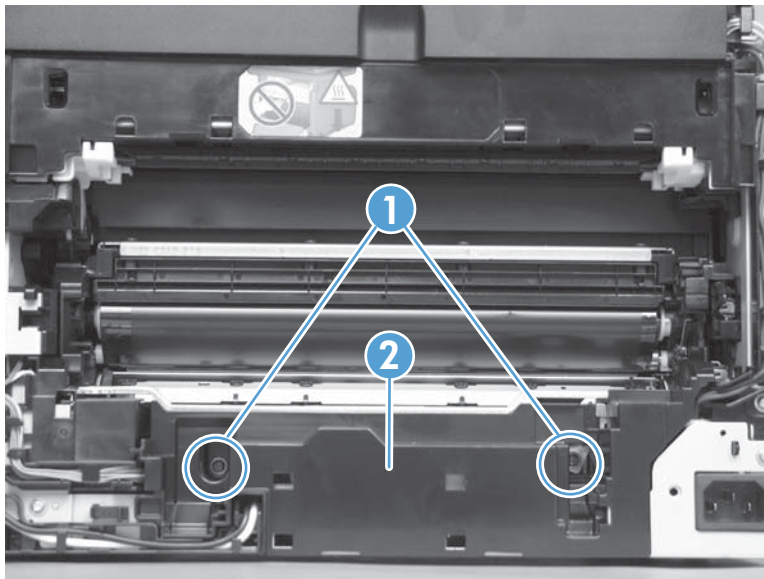
- △ **CAUTION:** Do not bend or fold the flat flexible cables (FFCs) during removal or installation. Also, do not straighten pre-folds in the FFCs. You *must* make sure that all FFCs are fully seated in their connectors. Failure to fully seat an FFC into a connector can cause a short circuit in a PCA.



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, ground yourself by touching the sheet-metal chassis *before* touching an ESD-sensitive part.

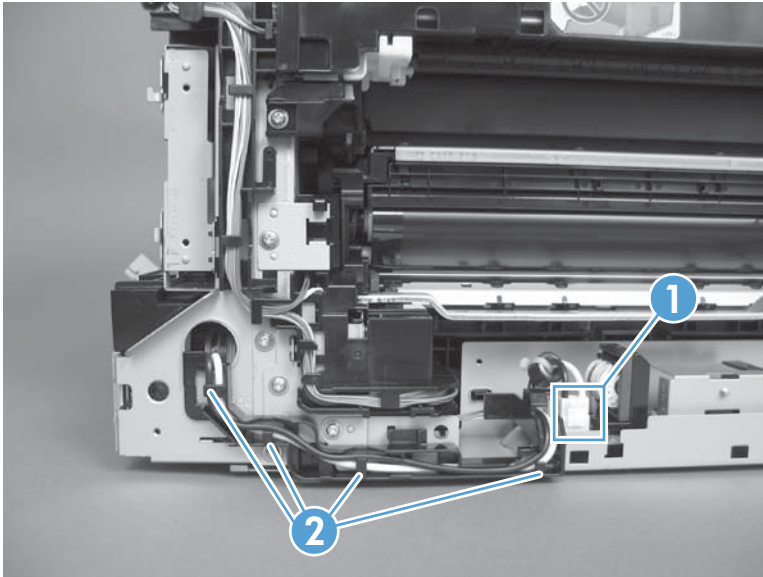
1. Remove the following components:
  - Right cover. See [Right cover on page 17](#).
  - Left cover. See [Left cover on page 25](#).
  - Rear-center cover. See [Rear-center cover on page 30](#).
  - Rear door and rear-lower cover. See [Rear door and rear-lower cover on page 41](#).
  - Formatter PCA, fax PCA, and support bracket. See [Formatter PCA, fax card PCA, and support bracket on page 53](#).
2. Remove two screws (callout 1) and the black-plastic cover (callout 2).

**Figure 1-102** Remove the power supply (low voltage; 1 of 8)




3. Disconnect one wire-harness connector (callout 1) and release the wire harness from the retainer (callout 2).

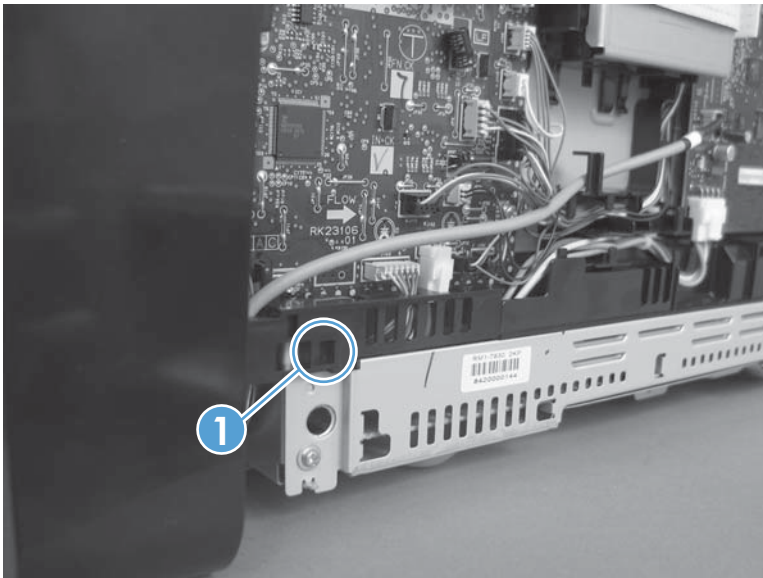
**Figure 1-103** Remove the power supply (low voltage; 2 of 8)



4. Release one tab (callout 1) on the black-plastic protective cover.

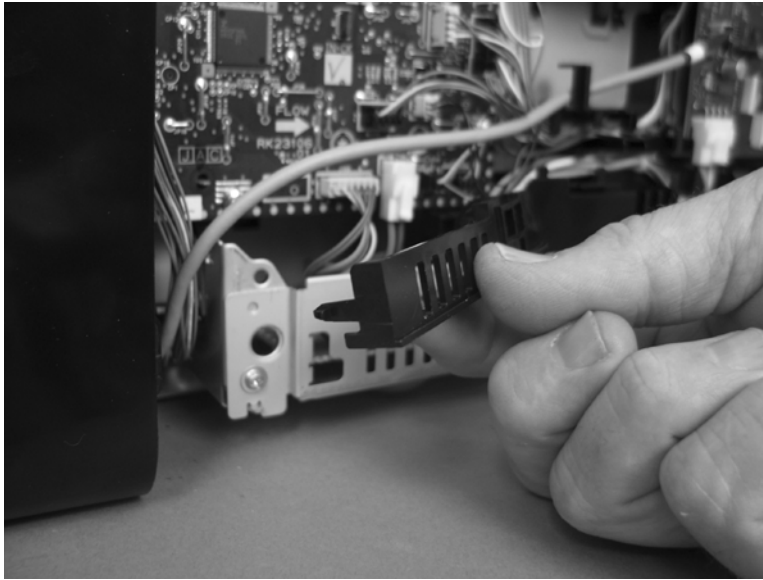
 **NOTE:** This cover is located near the lower-right side of the product below the DC controller.

**Figure 1-104** Remove the power supply (low voltage; 3 of 8)



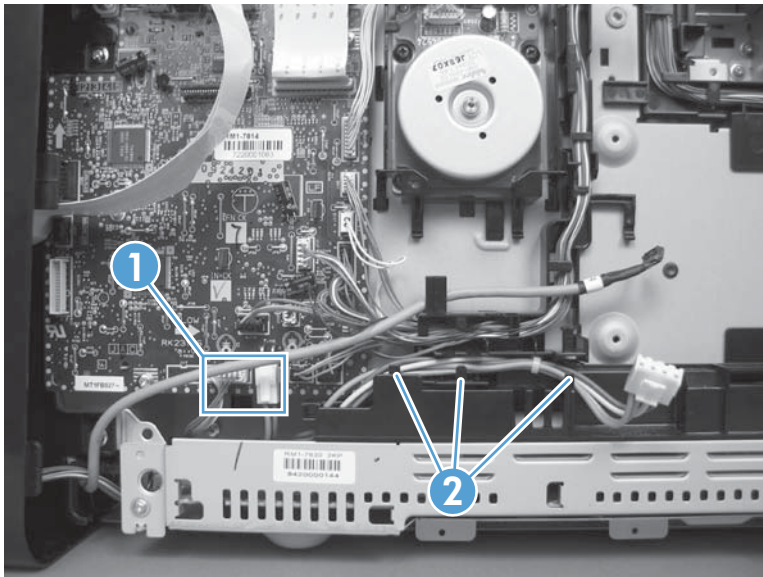
5. Remove the cover.

**Figure 1-105** Remove the power supply (low voltage; 4 of 8)



6. Disconnect two wire-harness connectors (callout 1), and then release the wire harnesses from the retainer (callout 2).

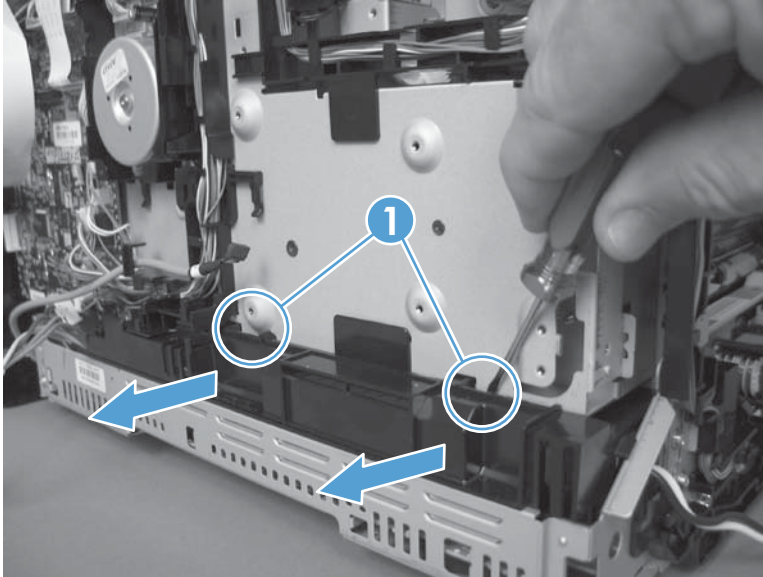
**Figure 1-106** Remove the power supply (low voltage; 5 of 8)





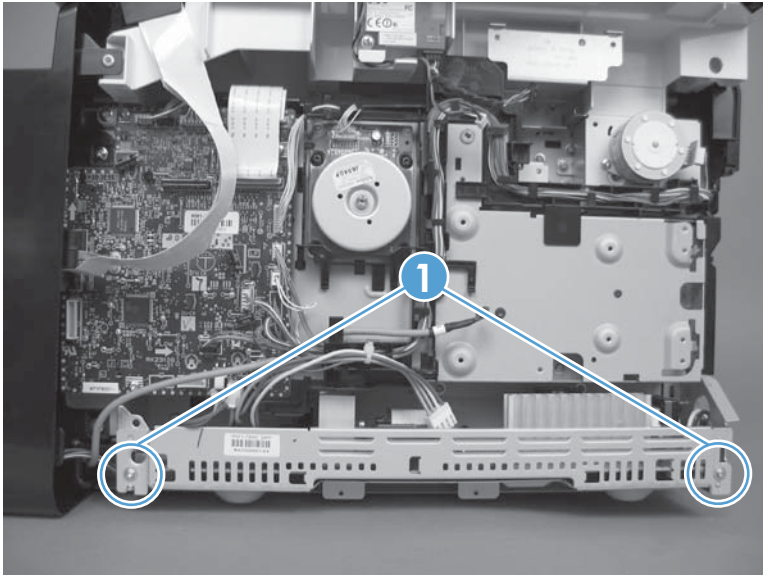
7. Release two tabs (callout 1), and then pull the black-plastic cover away from the product to remove it.

**Figure 1-107** Remove the power supply (low voltage; 6 of 8)




8. Remove two screws (callout 1).

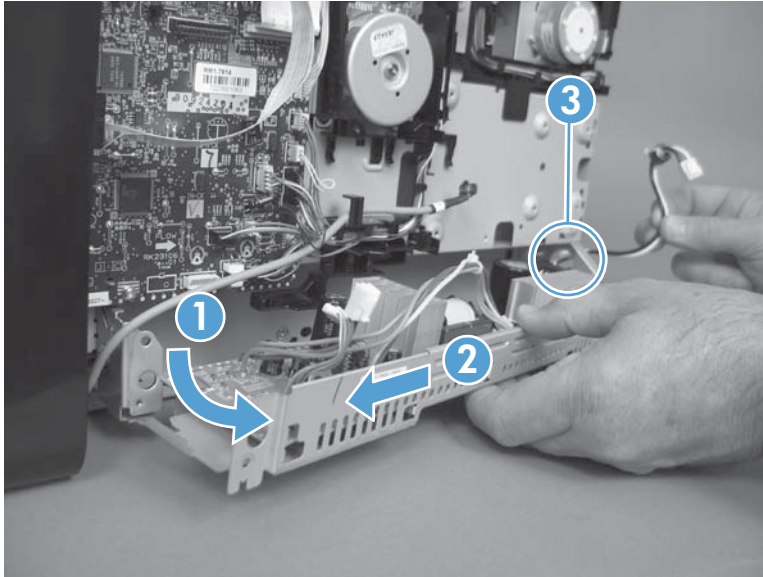
**Figure 1-108** Remove the power supply (low voltage; 7 of 8)



9. Rotate the end of the power supply near the front of the product out and away from the product (callout 1) until it clears the chassis, and then slide the power supply toward the front of the product to remove it (callout 2).

 **NOTE:** As you remove the power supply, feed the wire harness at the rear of the product through the opening in the chassis (callout 3).

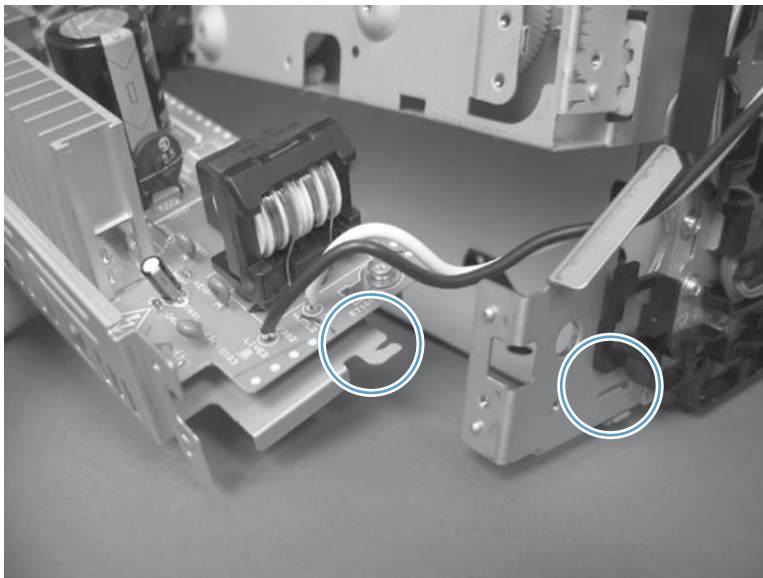
**Figure 1-109** Remove the power supply (low voltage; 8 of 8)



#### Reinstall the power supply (low voltage)

1. Make sure that the hook on the power supply tray is correctly engaged with the slot at the back side of the product chassis.

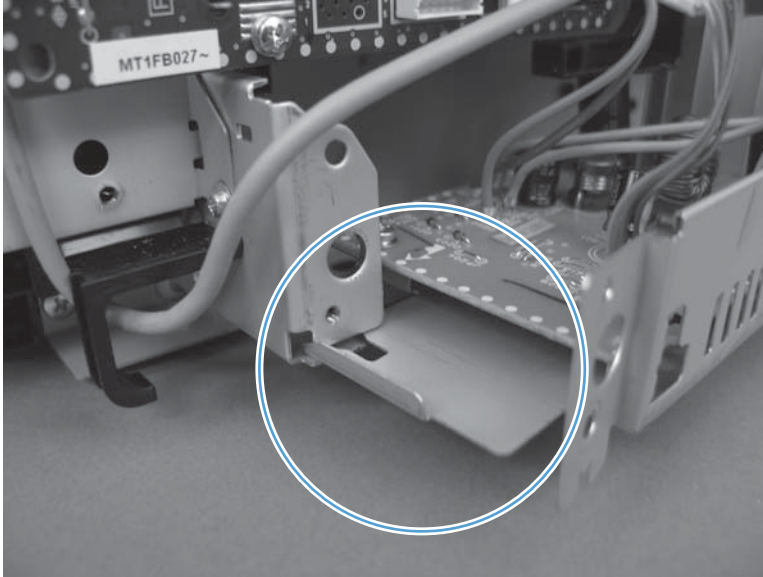
**Figure 1-110** Reinstall the power supply (low voltage; 1 of 2)






2. Make sure that the power supply tray is correctly engaged with the mounting rail near the front of the product chassis.

**Figure 1-111** Reinstall the power supply (low voltage; 2 of 2)

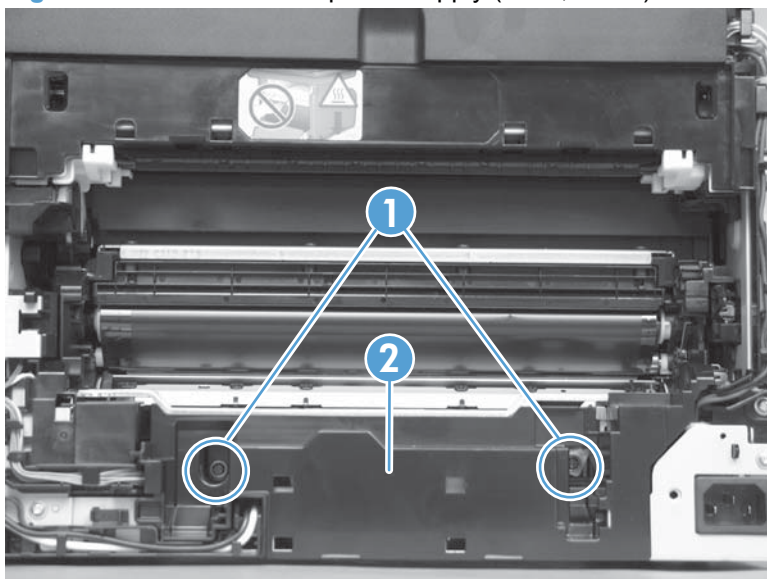


## Power supply (fuser)

△ **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, ground yourself by touching the sheet-metal chassis *before* touching an ESD-sensitive part.

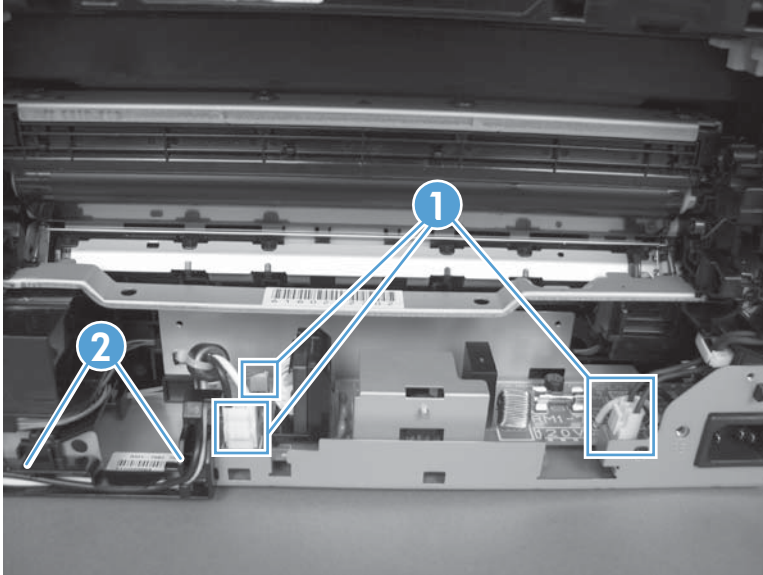
1. Remove the following components:
  - Right cover. See [Right cover on page 17](#).
  - Left cover. See [Left cover on page 25](#).
  - Rear-center cover. See [Rear-center cover on page 30](#).
  - Rear door and rear-lower cover. See [Rear door and rear-lower cover on page 41](#).
2. Remove two screws (callout 1) and the black-plastic cover (callout 2).

**Figure 1-112** Remove the power supply (fuser; 1 of 5)



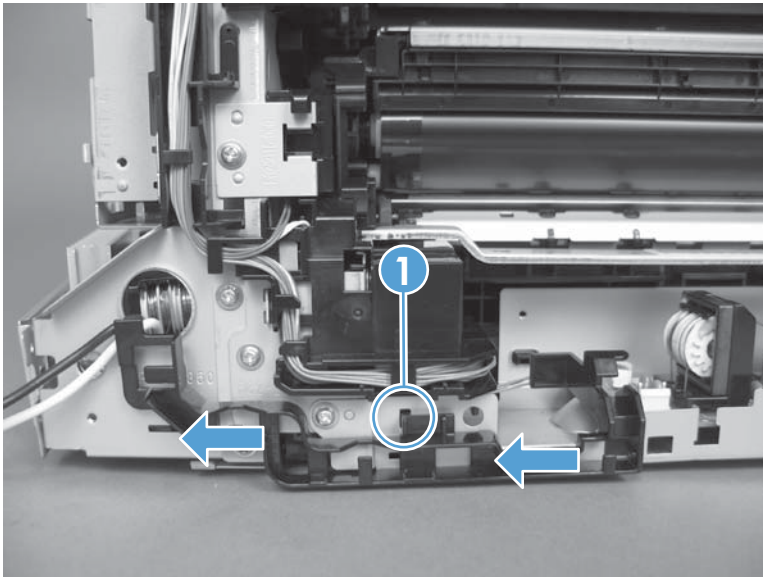
3. Disconnect three wire-harness connectors (callout 1), and then remove the wire harness from the retainer (callout 2).

**Figure 1-113** Remove the power supply (fuser; 2 of 5)




4. Release one tab (callout 1), slide the retainer toward the formatter side of the product to release it, and then remove the retainer from the chassis.

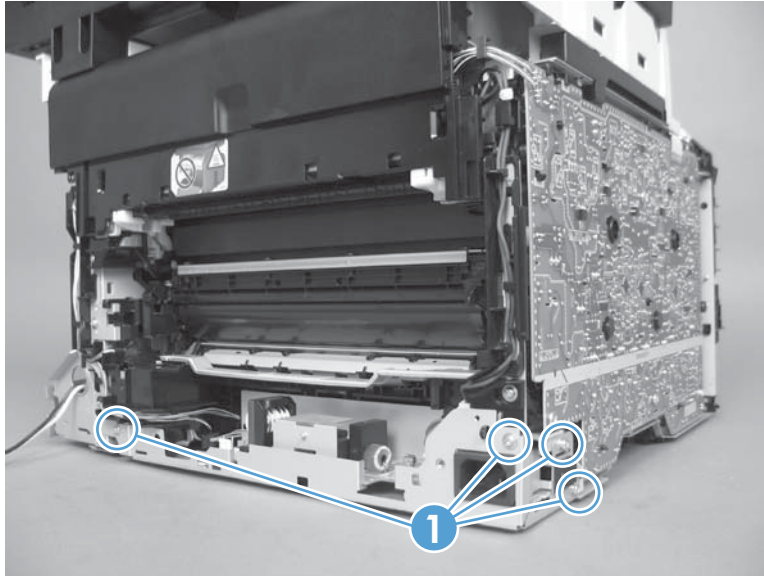
**Figure 1-114** Remove the power supply (fuser; 3 of 5)



5. Remove four screws (callout 1).

 **NOTE:** The two screws near the power switch are ground screws. Make sure that these screws are placed in the correct positions when the power supply is reinstalled.

**Figure 1-115** Remove the power supply (fuser; 4 of 5)



6. Remove the power supply.

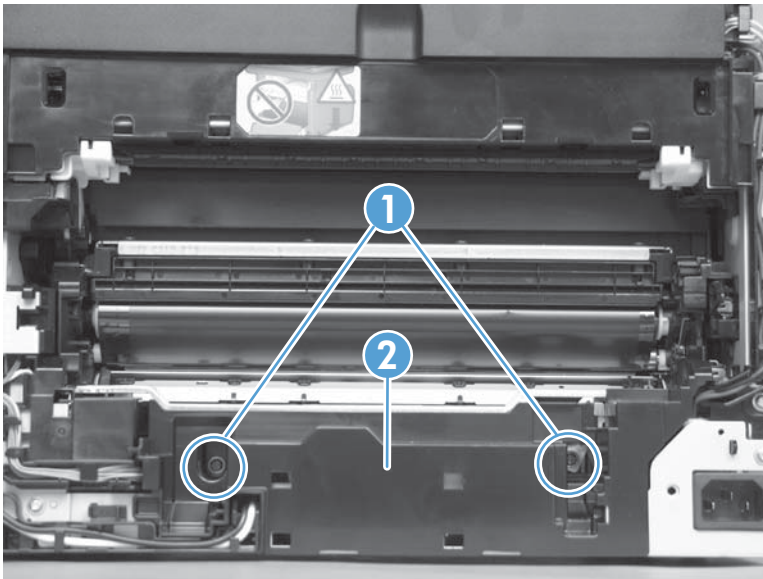
**Figure 1-116** Remove the power supply (fuser; 5 of 5)



## Fuser

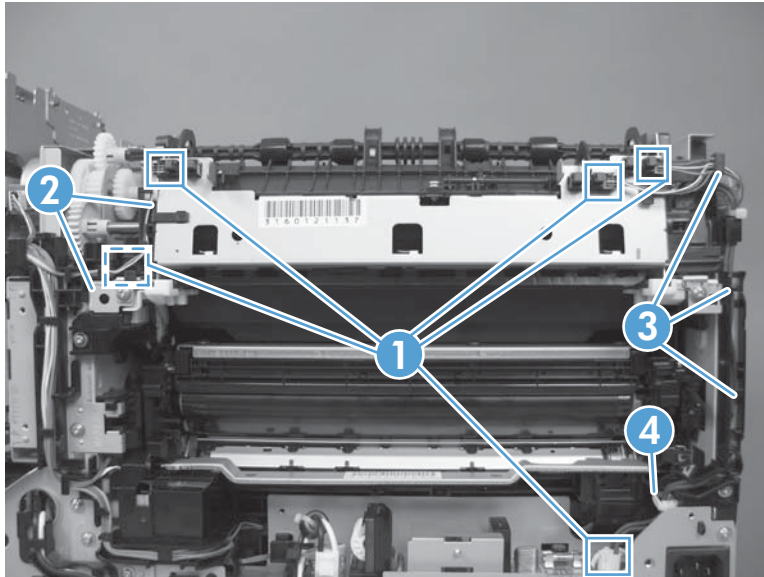
1. Remove the following components:
  - Right cover. See [Right cover on page 17](#).
  - Right-front cover-1 and cover-2. See [Right-front cover-1 and cover-2 on page 20](#).
  - Control panel. See [Control panel on page 22](#).
  - Left cover. See [Left cover on page 25](#).
  - Document-feeder and scanner assembly. See [Document-feeder and scanner assembly on page 28](#).
  - Rear-center cover. See [Rear-center cover on page 30](#).
  - Rear-upper cover. See [Rear-upper cover on page 31](#).
  - Speaker. See [Speaker on page 33](#).
  - Top cover. See [Top cover on page 34](#).
  - Rear door and rear-lower cover. See [Rear door and rear-lower cover on page 41](#).
2. Remove two screws (callout 1) and the black plastic cover (callout 2).

**Figure 1-117** Remove the fuser (1 of 4)



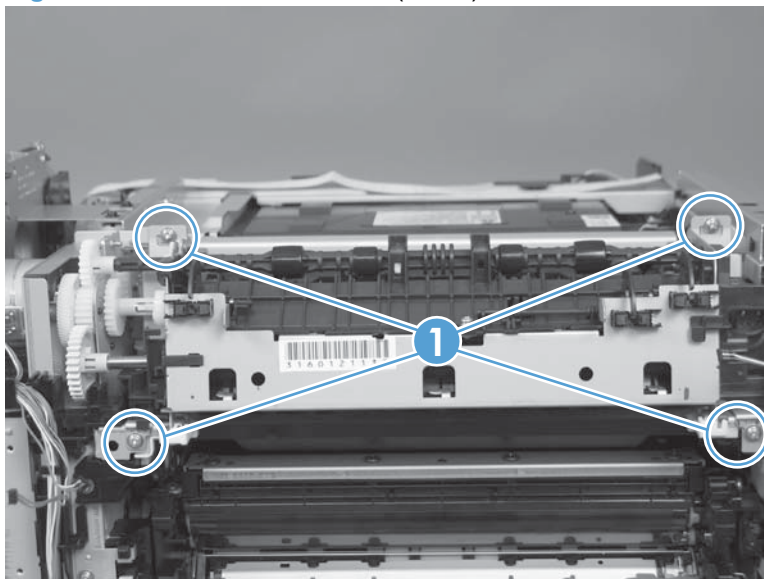
3. Disconnect five wire-harness connectors (callout 1). Remove the wire harness from the guides (callout 2 and callout 3) and one retainer (callout 4).

**Figure 1-118** Remove the fuser (2 of 4)



4. Remove four screws (callout 1).

**Figure 1-119** Remove the fuser (3 of 4)

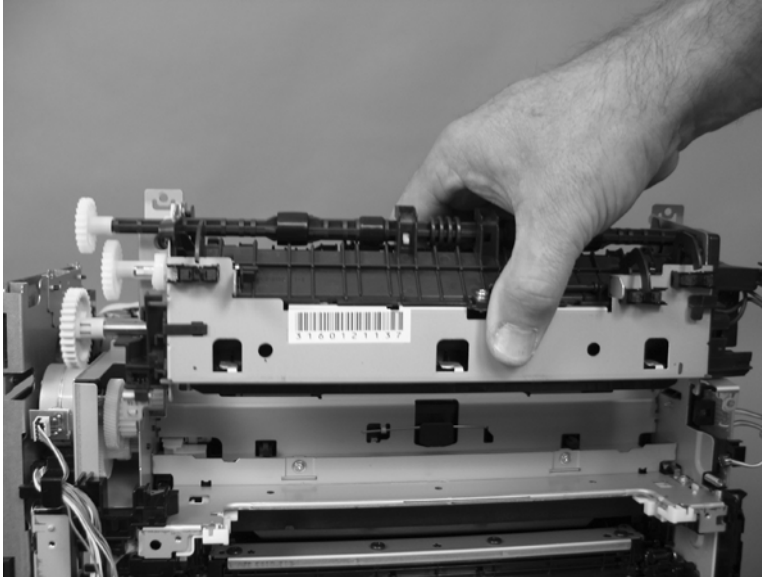





5. Remove the fuser.

- △ **CAUTION:** Handle the fuser carefully. The sensors that are mounted to the output side of the fuser can be easily dislodged. When the fuser is reinstalled, make sure that the sensors are present, and correctly fastened to the fuser assembly.

**Figure 1-120** Remove the fuser (4 of 4)



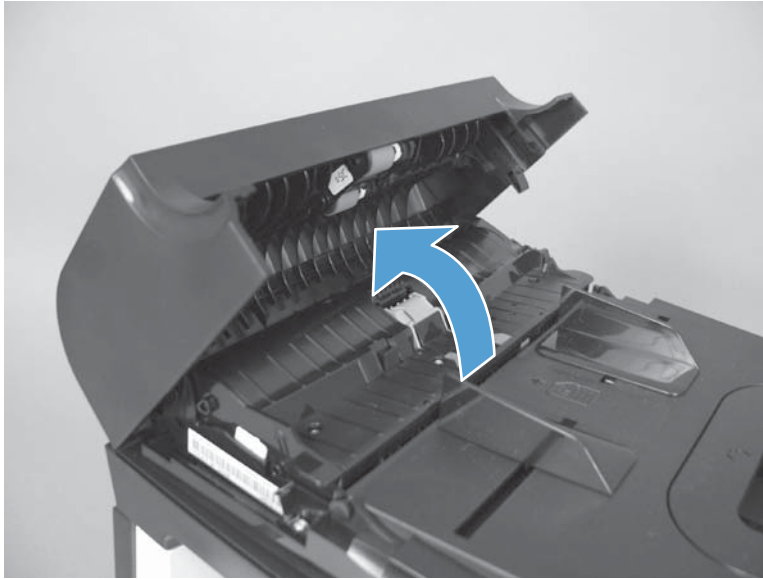
## Document feeder components

 **NOTE:** This section describes replacement and removal of individual document feeder components. To remove the complete document-feeder and scanner assembly, see [Document-feeder and scanner assembly on page 28](#).

### Document feeder separation pad

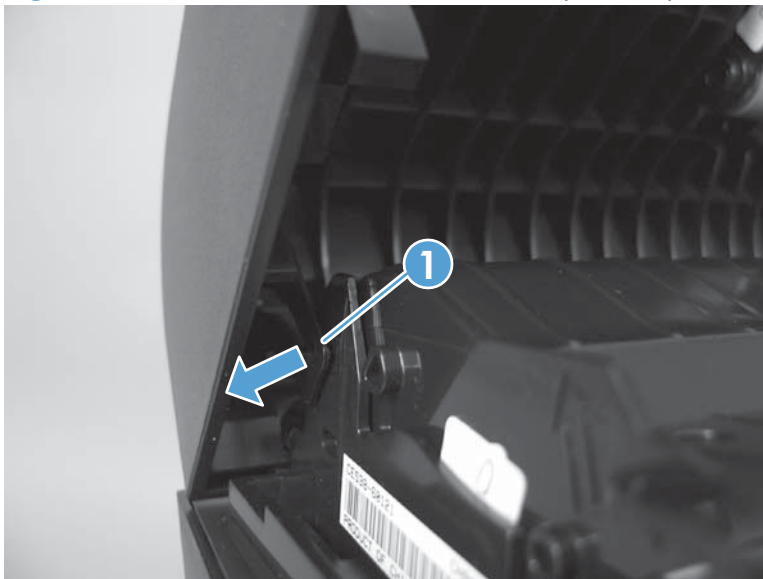
1. Open the document feeder top cover.

**Figure 1-121** Remove the document feeder separation pad assembly (1 of 7)



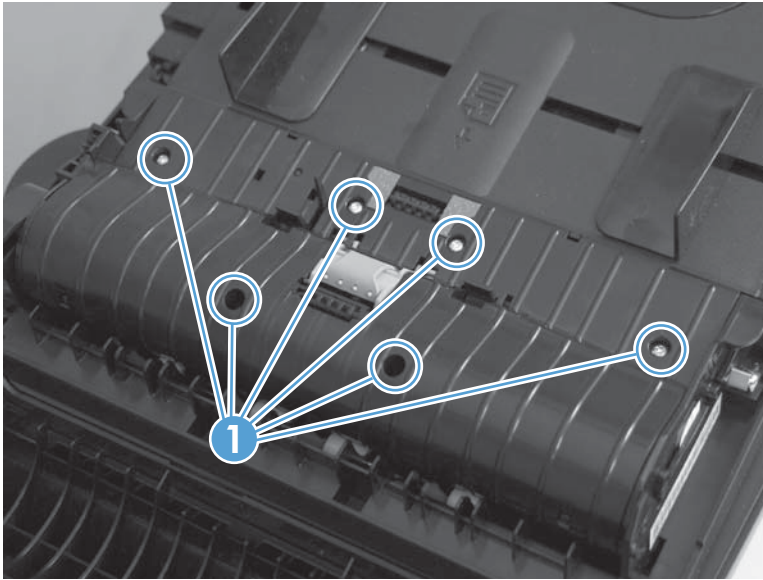
2. Release one tab, and then fully open the document feeder cover.

**Figure 1-122** Remove the document feeder separation pad assembly (2 of 7)



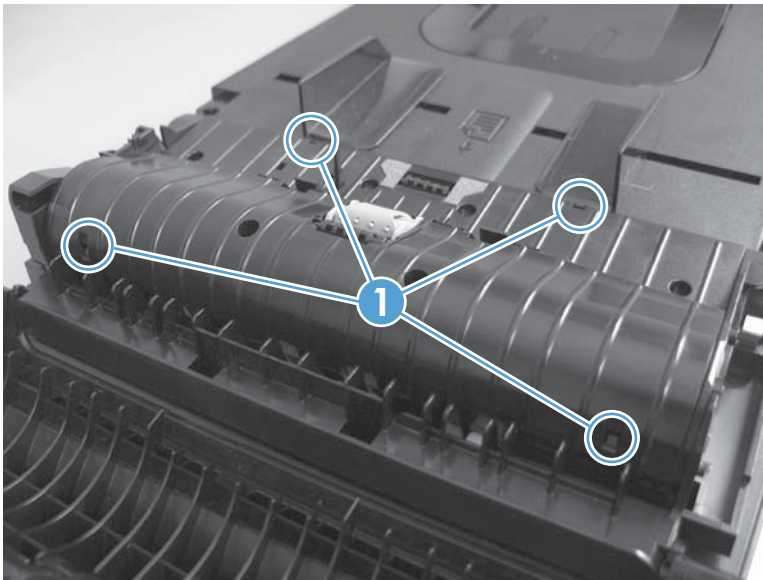
3. Remove six screws (callout 1).

**Figure 1-123** Remove the document feeder separation pad assembly (3 of 7)



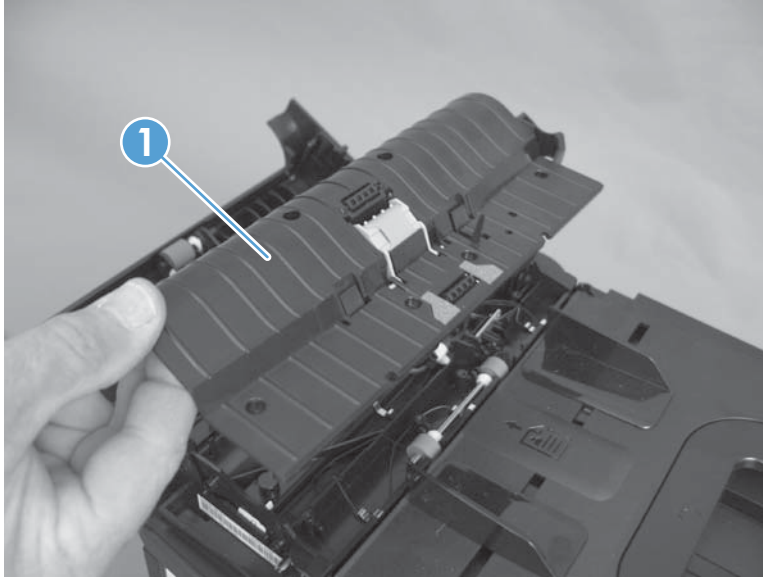
4. Release four tabs (callout 1) on the document feeder core cover.

**Figure 1-124** Remove the document feeder separation pad assembly (4 of 7)



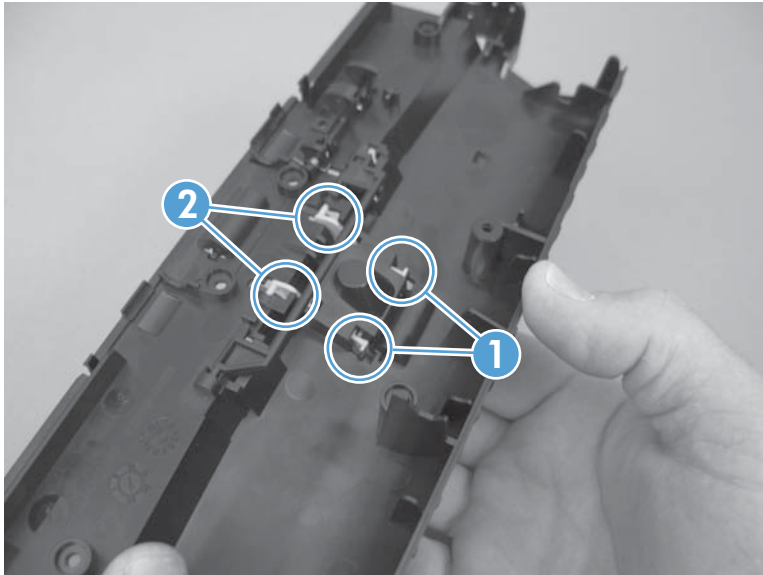
5. Remove the document feeder core cover (callout 1) from the base.

**Figure 1-125** Remove the document feeder separation pad assembly (5 of 7)



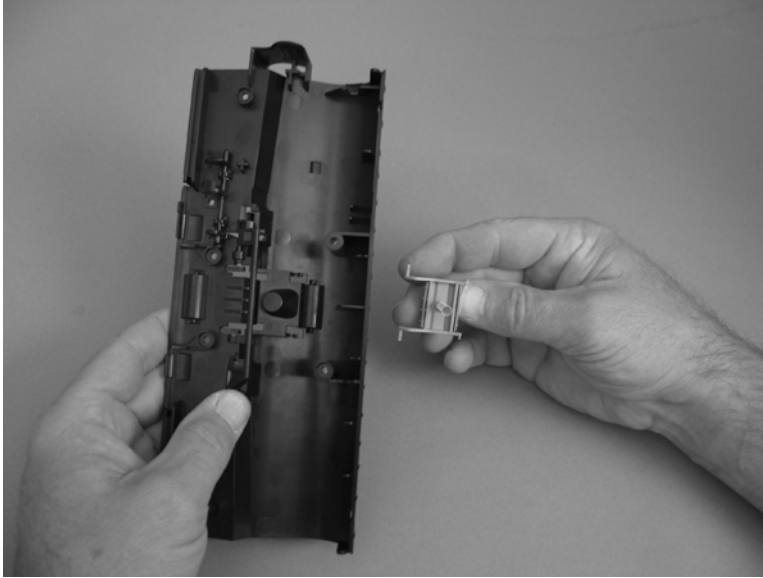
6. Push up on the separation pad assembly to release two pins (callout 1), and then slightly slide assembly in the core cover to release the remaining two pins (callout 2).

**Figure 1-126** Remove the document feeder separation pad assembly (6 of 7)



7. Remove the separation pad assembly from the core cover.

**Figure 1-127** Remove the document feeder separation pad assembly (7 of 7)



## Document feeder input tray

1. Open the document feeder cover.

**Figure 1-128** Remove the document feeder input tray (1 of 2)



2. Hold the scanner cover down, and then pull up on the document feeder tray to release two tabs, lift the document feeder tray up, and then remove it.

**Figure 1-129** Remove the document feeder input tray (2 of 2)





## Document feeder cover

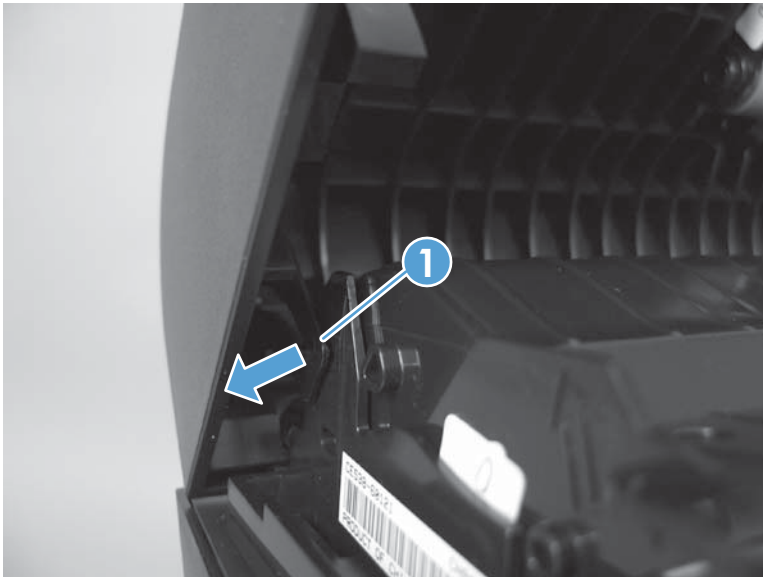
1. Open the document feeder cover.

**Figure 1-130** Remove the document feeder cover (1 of 3)



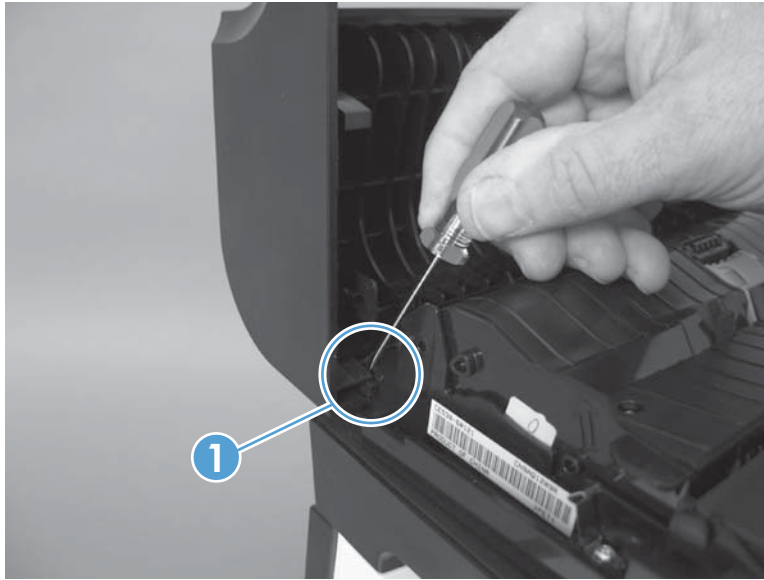
2. Release one tab (callout 1), and then fully open the document feeder cover.

**Figure 1-131** Remove the document feeder cover (2 of 3)



3. Release the hinges (callout 1), and then remove the document feeder cover.

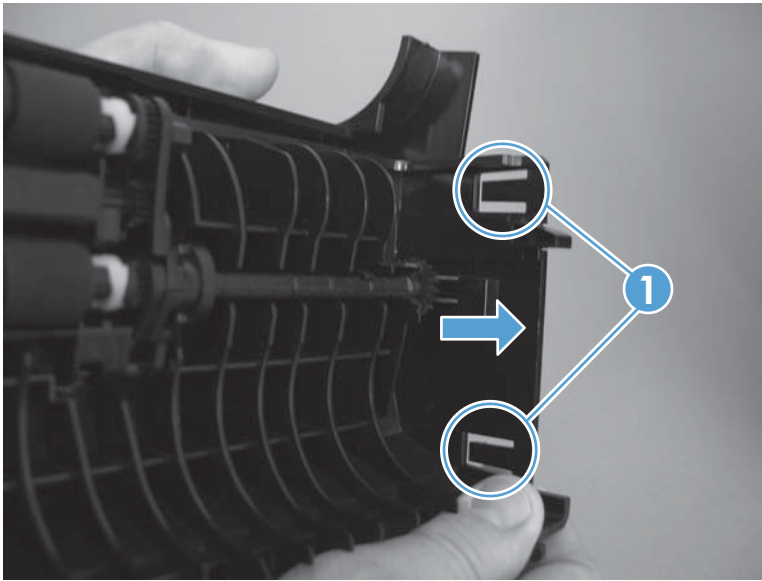
**Figure 1-132** Remove the document feeder cover (3 of 3)



## Document feeder pick arm assembly

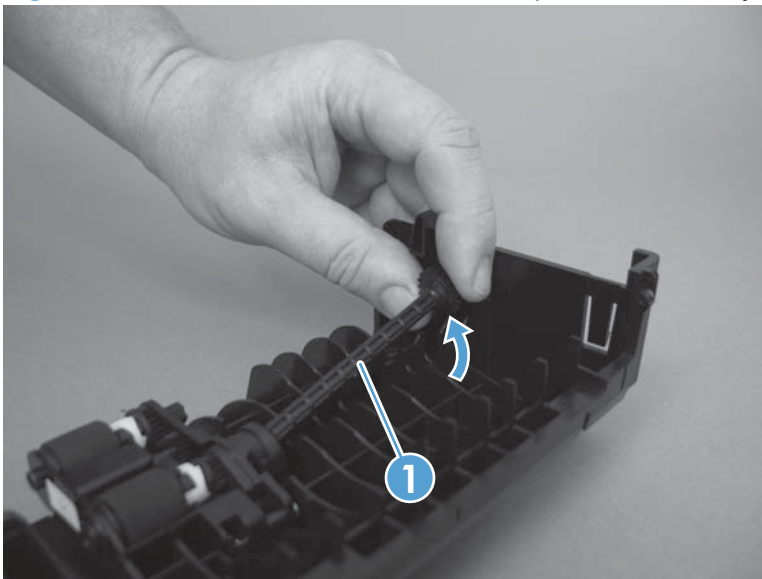
1. Remove the following components:
  - Document feeder input tray. See [Document feeder input tray on page 87](#).
  - Document feeder cover. See [Document feeder cover on page 88](#).
2. Release two tabs (callout 1) on each end of the inner cover (for a total of four tabs), and then lift the inner cover out of the outer cover.

**Figure 1-133** Remove the document feeder pick arm assembly (1 of 4)



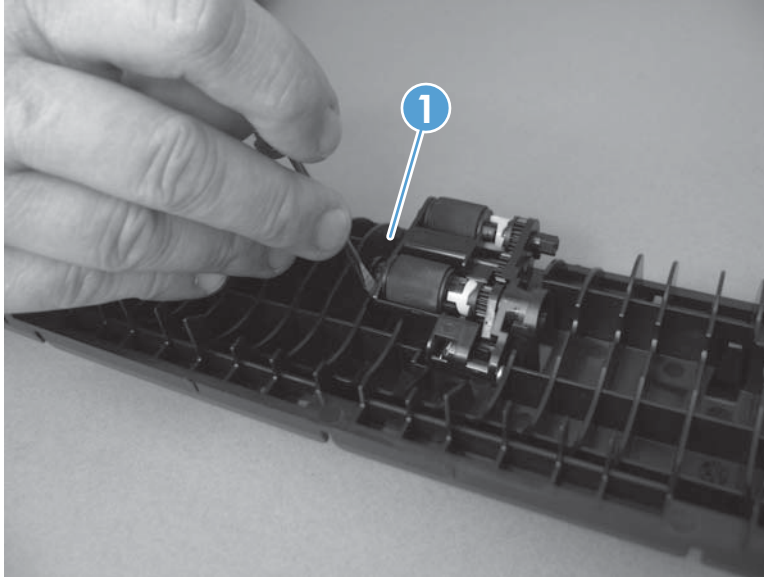
3. Remove the pick extension shaft (callout 1).

**Figure 1-134** Remove the document feeder pick arm assembly (2 of 4)



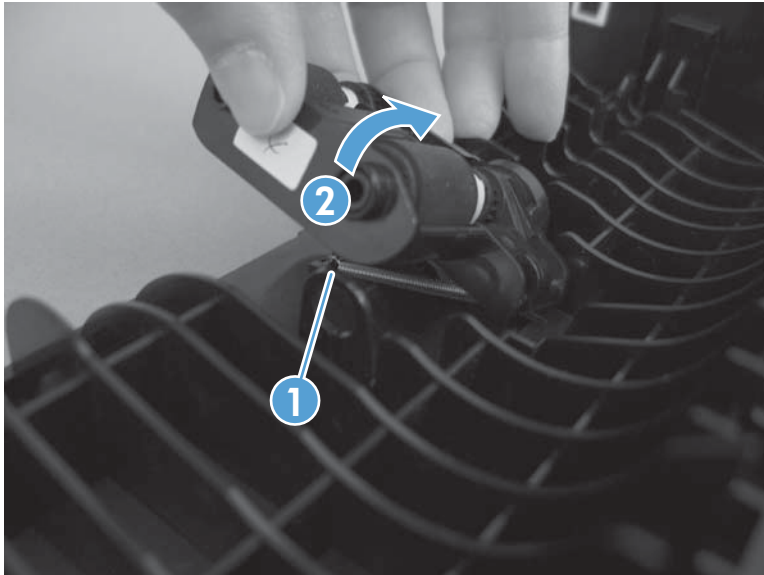
4. Release one tab (callout 1).

**Figure 1-135** Remove the document feeder pick arm assembly (3 of 4)



5. Disconnect the spring that is underneath the pick arm assembly (callout 1), and then rotate the pick arm assembly to remove it (callout 2).

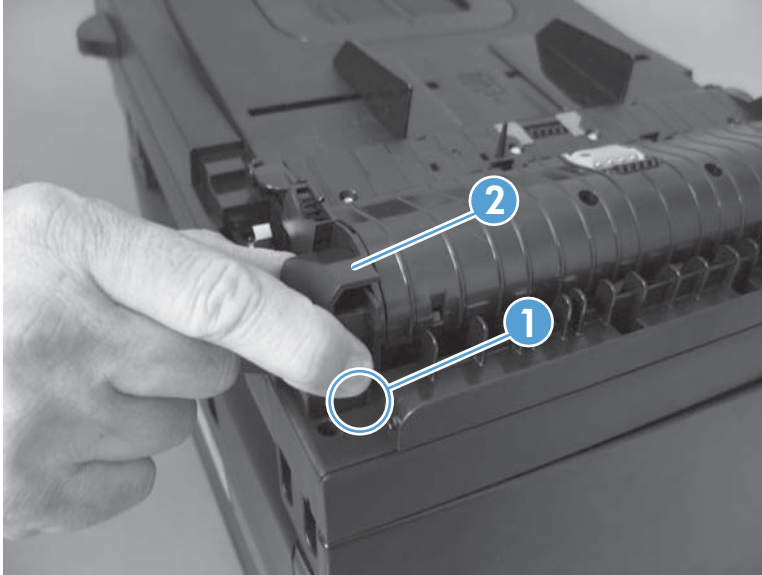
**Figure 1-136** Remove the document feeder pick arm assembly (4 of 4)



## Document feeder core assembly

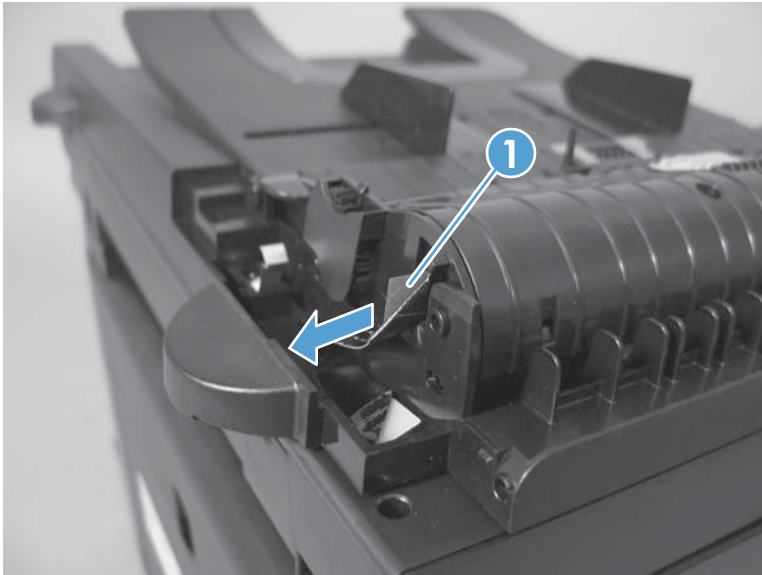
1. Remove the following components:
  - Document feeder input tray. See [Document feeder input tray on page 87](#).
  - Document feeder cover. See [Document feeder cover on page 88](#).
2. Release one tab (callout 1), and then remove the document feeder cable cover (callout 2).

**Figure 1-137** Remove the document feeder core assembly (1 of 3)



3. Remove one FFC using the blue tab (callout 1).

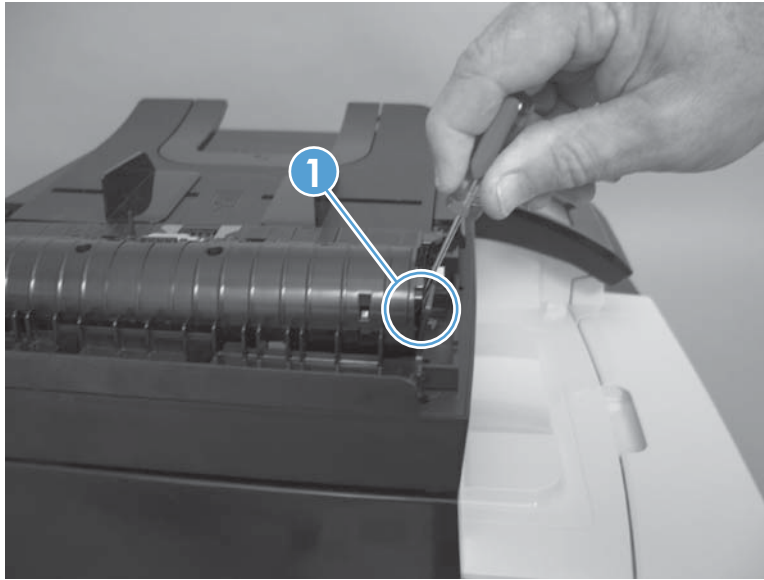
**Figure 1-138** Remove the document feeder core assembly (2 of 3)



**TIP:** The orientation of the FFC is important. When reinstalling it, make sure the blue tab is toward the product right side. If the FFC is installed upside down, the document feeder will not work.

4. Release one hinge (callout 1), and then remove the document feeder core assembly.

**Figure 1-139** Remove the document feeder core assembly (3 of 3)

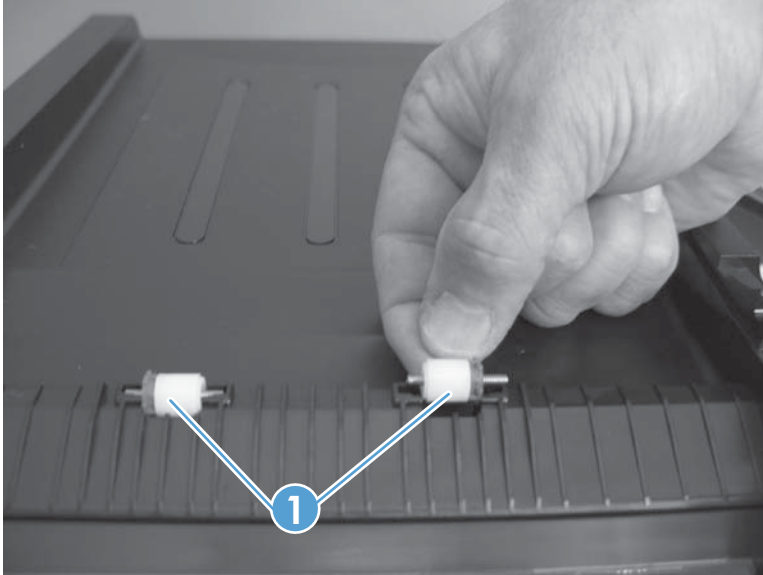




## Post scan pinch rollers


1. Remove the following components:
  - Document feeder input tray. See [Document feeder input tray on page 87](#).
  - Document feeder cover. See [Document feeder cover on page 88](#).
  - Document feeder core. See [Document feeder core assembly on page 92](#).
2. Remove the post scan pinch rollers (callout 1).

**Figure 1-140** Remove the post scan pinch rollers

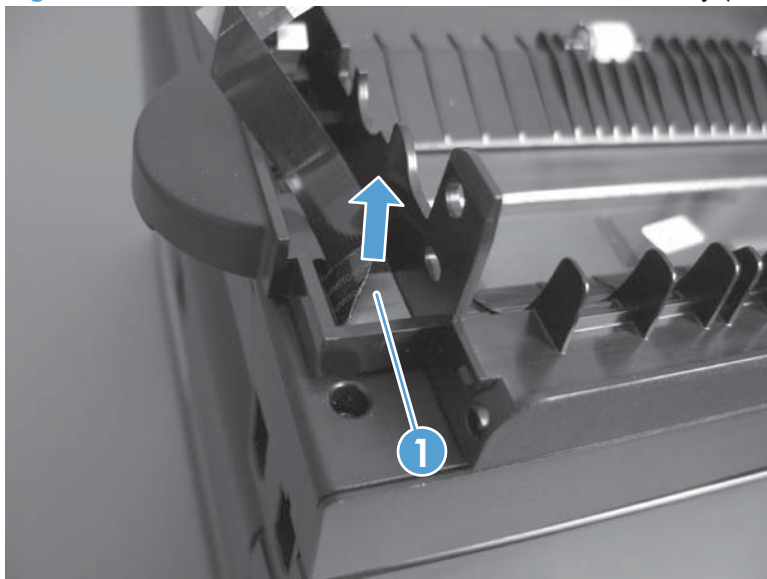


## Document feeder base assembly


1. Remove the following components:
  - Document feeder input tray. See [Document feeder input tray on page 87](#).
  - Document feeder cover. See [Document feeder cover on page 88](#).
  - Document feeder core. See [Document feeder core assembly on page 92](#).
2. Release the adhesive FFC protector on the document feeder base (callout 1).

 **Reinstallation tip** Use two-sided tape to replace the FFC protector during reassembly.

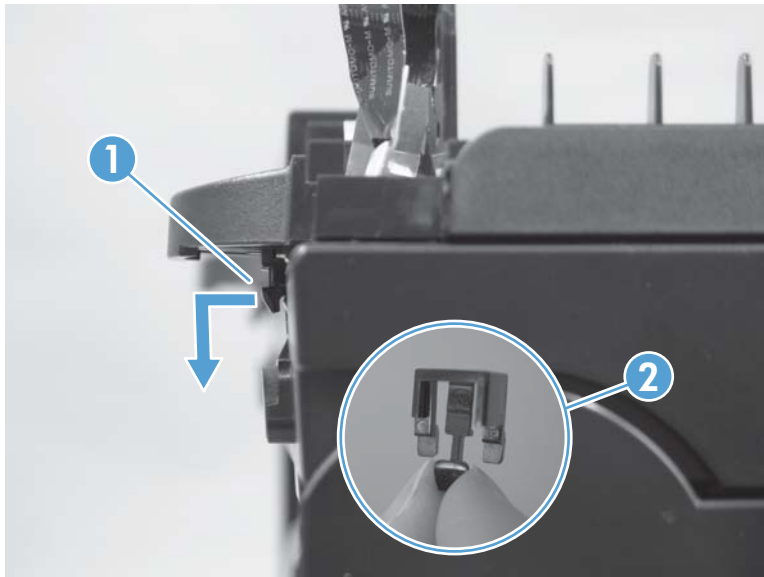
**Figure 1-141** Remove the document feeder base assembly (1 of 3)




3. Pull forward on the center tab on one of the solar locks to release the lock (callout 1), and then pull the solar lock straight down to remove it (callout 2). Repeat the procedure for the other solar lock.

 **TIP:** The solar locks can be difficult to remove. You might need to use a small flat-blade screwdriver to gently pry the two side tabs in order to release the solar lock from the groove in the document feeder hinge.

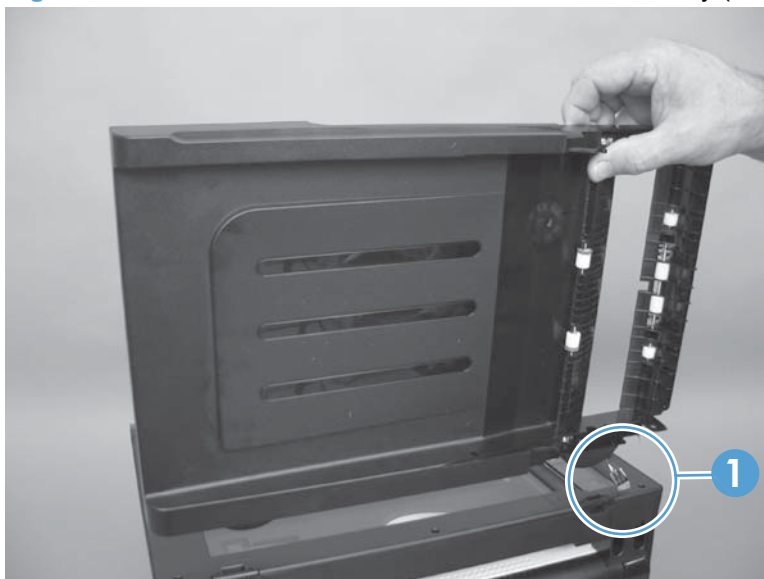
**Figure 1-142** Remove the document feeder base assembly (2 of 3)



4. Open the document feeder base, and then carefully remove it from the scanner assembly.

 **CAUTION:** Do not damage the FFC (callout 1) that runs through the document feeder base. Carefully feed the FFC through the slot during removal and during replacement.

**Figure 1-143** Remove the document feeder base assembly (3 of 3)



## Document feeder floating hinges

1. Remove the following components:
  - Document feeder input tray. See [Document feeder input tray on page 87](#).
  - Document feeder cover. See [Document feeder cover on page 88](#).
  - Document feeder core. See [Document feeder core assembly on page 92](#).
  - Document feeder base assembly. See [Document feeder base assembly on page 95](#).
2. Release two tabs on each hinge (callout 1), and then remove each hinge (callout 2).

**Figure 1-144** Remove the document feeder floating hinges

