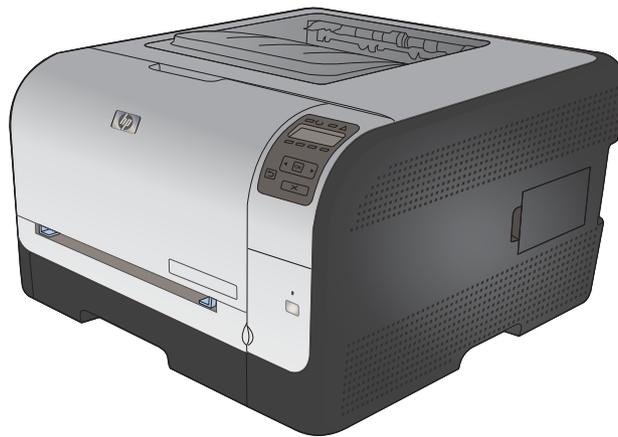




# LASERJET PRO CP1520

COLOR PRINTER SERIES

## Service Manual







# HP LaserJet Pro CP1520 Color Printer series

Service Manual

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## Conventions used in this guide

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 **TIP:** Tips provide helpful hints or shortcuts.

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

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

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

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# 1 Removal and replacement

- [Introduction](#)
- [Removal and replacement strategy](#)
- [Electrostatic discharge](#)
- [Required tools](#)
- [Service approach](#)
- [Removal and replacement procedures](#)

# 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 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.

---

# 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.

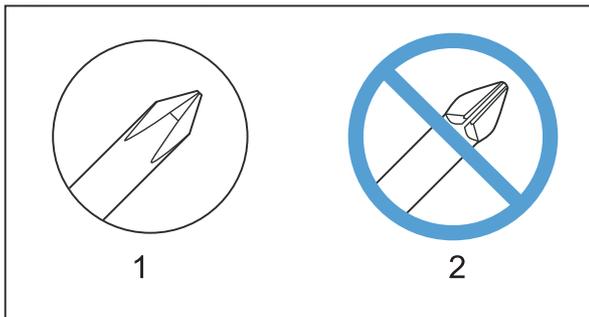
Protect the ESD-sensitive parts by placing them in ESD pouches when they are out of the product.

## Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152-mm (6-in) shaft length
- Small flat-blade screwdriver
- 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 Pozidriv screwdriver (callout 2) or any motorized screwdriver. These can damage screws or screw threads.

**Figure 1-1** Phillips and Pozidriv 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 cartridge.

## After performing service

- Plug in the power cable.
- Reinstall the print cartridge.
- Load paper in the product.

## Post-service test

Perform the following test to verify that the repair or replacement was successful.

## Print-quality test

1. Verify that you have completed the necessary reassembly steps.
2. Make sure that the tray contains clean, unmarked paper.
3. Attach the power cord and interface cable or interface cables, and then turn on the product.
4. Verify that the expected startup 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. Clean the outside of the product with a damp cloth.

## Parts removal order

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

**Figure 1-2** Parts-removal order

Component	Remove	Remove	Remove	Remove	Remove	Remove	Remove
Print cartridges	Cartridge drawer						
Pickup roller	Tray 2						
Separation roller	Tray 2						
Transfer roller							
Feed assembly							
Right cover	Tray 2						
Left cover	Tray 2						
Front door and Tray 1 door							
Control-panel module	Right cover						
Rear-side cover	Right cover						
Rear-upper cover	Right cover	Left cover	Rear-side cover				
Rear door and rear-lower cover	Right cover	Left cover	Rear-side cover				
Top cover	Right cover	Left cover	Control panel module	Rear-side cover	Rear-upper cover		
Main motor	Right cover						
Fuser motor	Right cover						
Intermediate transfer belt	Right cover	Left cover	Rear-side cover				
DC controller PCA	Right cover	Left cover	Control panel module	Rear-side cover	Rear-upper cover		
Formatter PCA	Right cover						
Wireless PCA	Right cover	Control-panel module	Rear-side cover	Rear-upper cover	Top cover		
Power supply (high-voltage)	Right cover	Left cover	Control panel module	Rear-side cover	Rear-upper cover		
Power supply (low-voltage)	Right cover	Left cover	Rear-side cover	Rear door and rear-door lower cover			
Power supply (fuser)	Right cover	Left cover	Rear-side cover	Rear door and rear-door lower cover			
Fuser	Right cover	Left cover	Control panel module	Rear-side cover	Rear-upper cover	Rear door and rear-door lower cover	Top cover

# Removal and replacement procedures

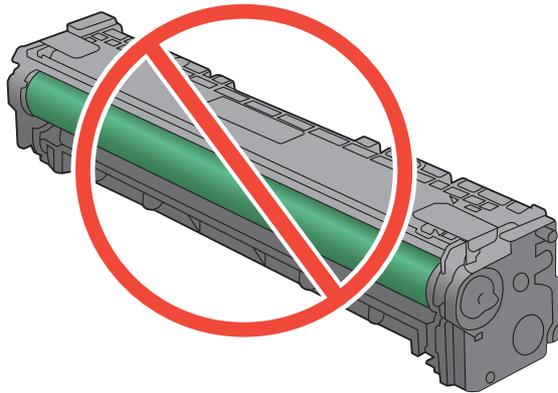
## Remove the print cartridges

△ **CAUTION:** If toner gets on your clothing, wipe it off with a dry cloth and wash the clothing in cold water. *Hot water sets toner into the fabric.*

1. Open the front door and pull out the print-cartridge drawer.
2. Grasp the handle on the print cartridge, and then pull the cartridge straight up to remove it. Repeat this step for the remaining 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.



**Figure 1-3** Remove the print cartridge



3. Close the print-cartridge and front doors.

## Rollers

### Pickup roller

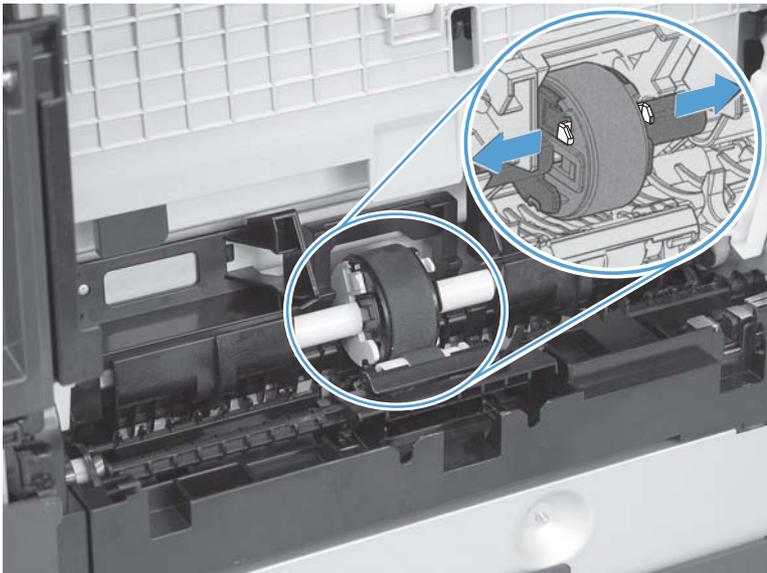
△ **CAUTION:** Do not touch the spongy roller surface unless you are going to replace the roller. Skin oils on the roller can cause paper pickup problems.

1. Use the following procedure to rotate the roller into the position required to remove it.
  - Open the Secondary Service menu by pressing and holding both the Left arrow (◀) and the **Cancel** button simultaneously.
  - Use the arrow buttons to select **Pick roller**, and then press the **OK** button.
  - Press the **OK** button again to confirm that you want the pick roller to rotate.
  - Turn the power off.
2. Remove Tray 2, and then carefully place 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 the two white plastic locking tabs and remove the pickup roller.

**Figure 1-4** 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.

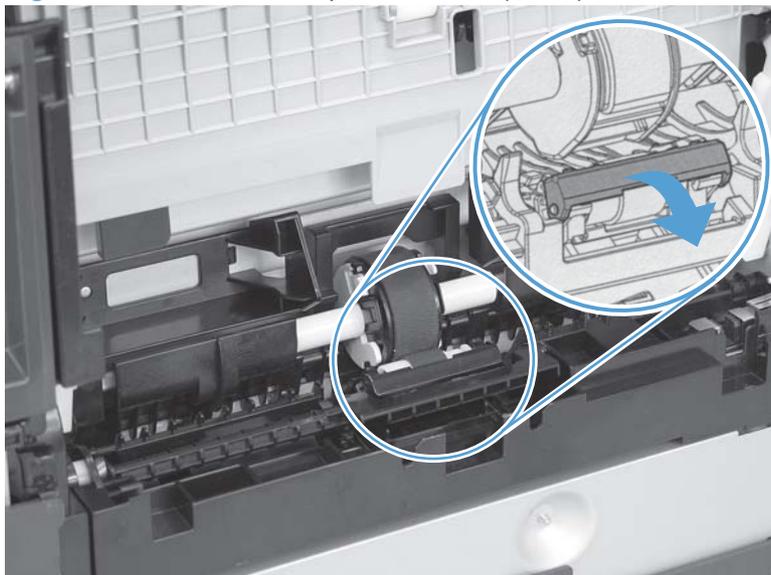
1. Remove paper tray (if installed), and then carefully place the product front-side up.

📝 **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.

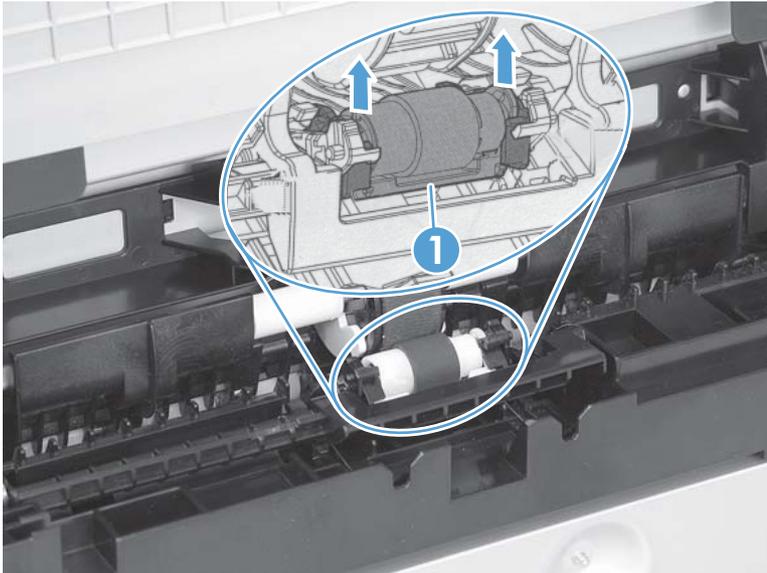
💡 **Reinstallation tip** Make sure that this cover snaps into place over the roller when the roller and holder are reinstalled.

**Figure 1-5** 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.

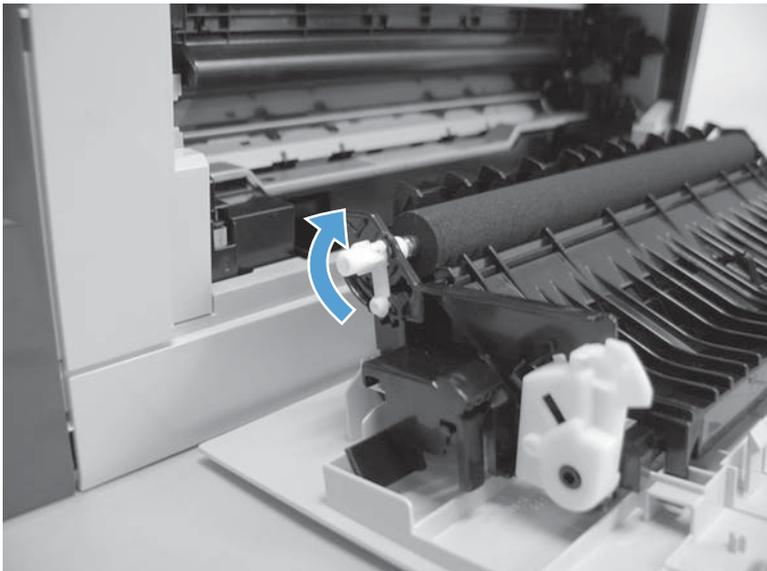
**Figure 1-6** Remove the separation roller (2 of 2)



## 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.

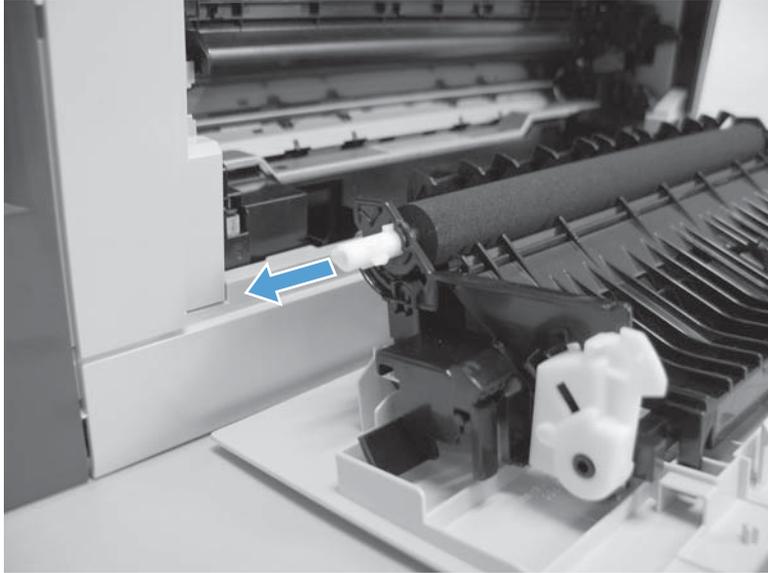
**Figure 1-7** Remove the transfer roller (1 of 3)



3. Remove the clip. Repeat these steps for the remaining retainer clip.

 **TIP:** One of the clips is made from a black conductive plastic. Make sure that the clips are reinstalled on the side of the transfer roller that they are removed from.

**Figure 1-8** 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.

**Figure 1-9** Remove the transfer roller (3 of 3)

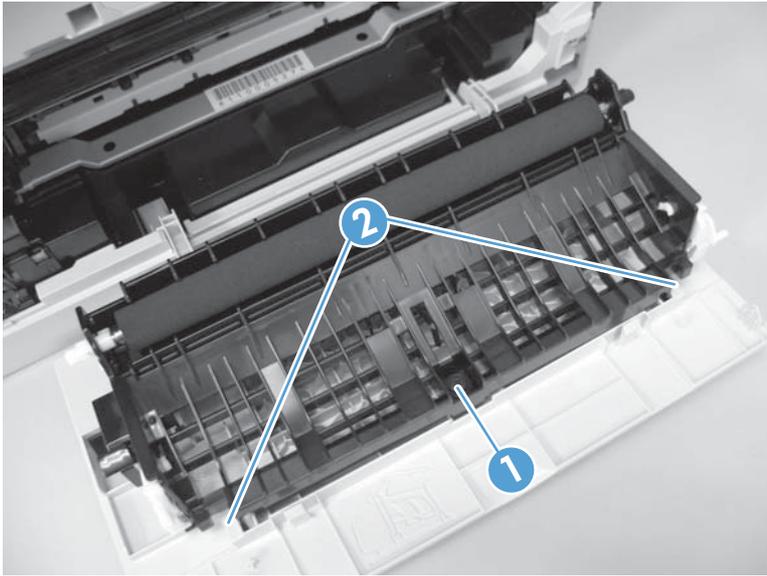


## Feed assembly

1. Open the rear door.

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

**Figure 1-10** Remove the feed assembly (1 of 2)



3. Remove the transfer roller assembly

**Figure 1-11** Remove the feed assembly (2 of 2)



## External panels, covers, and doors

### Right cover

1. Remove Tray 2.

2. Remove one screw (callout 1).

**Figure 1-12** Remove the right cover (1 of 4)



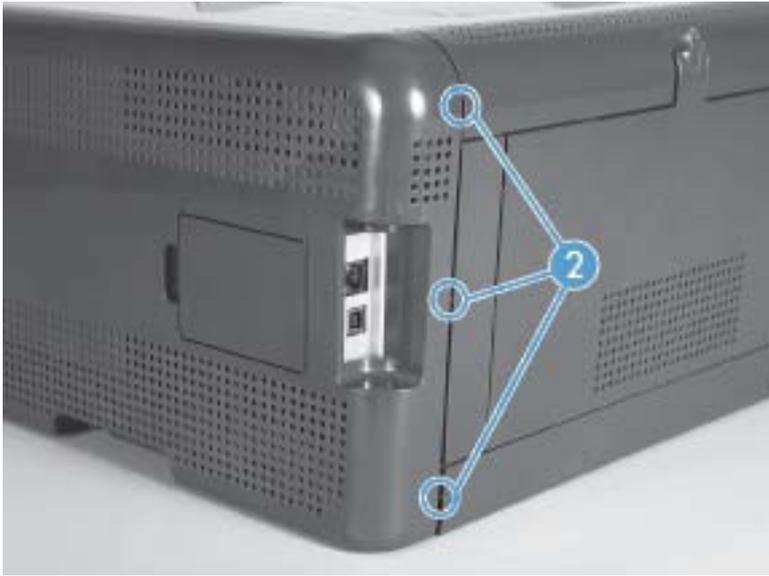
3. Carefully pry the front of the right cover away from the product to release one tab.

**Figure 1-13** Remove the right cover (2 of 4)



4. Use a small flatblade screwdriver to release three tabs (callout 2) at the back of the product.

**Figure 1-14** Remove the right cover (3 of 4)



5. Rotate the bottom of the cover away from the product, and then slide it up to remove it.

**Figure 1-15** Remove the right cover (4 of 4)



## Left cover

1. Remove Tray 2.
2. Remove one screw (callout 1).

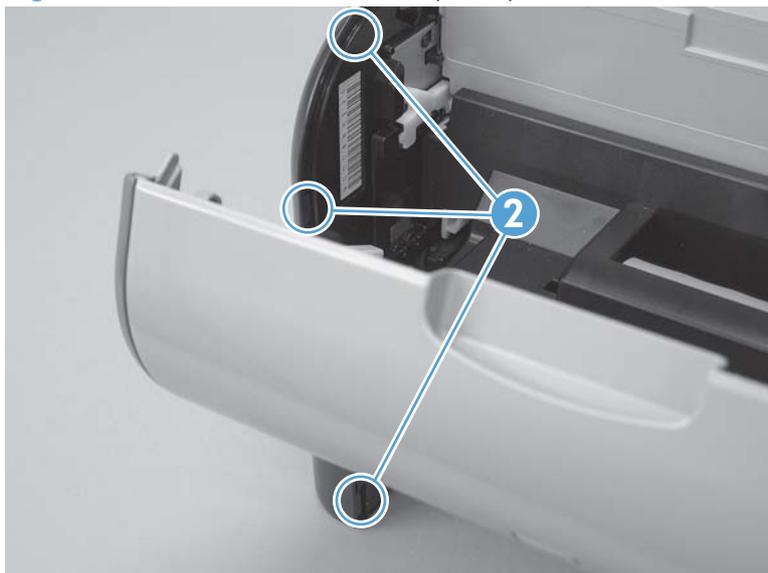
**Figure 1-16** Remove the left cover (1 of 4)



3. Open the front door, and then use a small flatblade screwdriver to release three tabs (callout 2).

 **NOTE:** It might be easier to release the tabs if you first release the bottom tab, then the middle tab, and then the top tab.

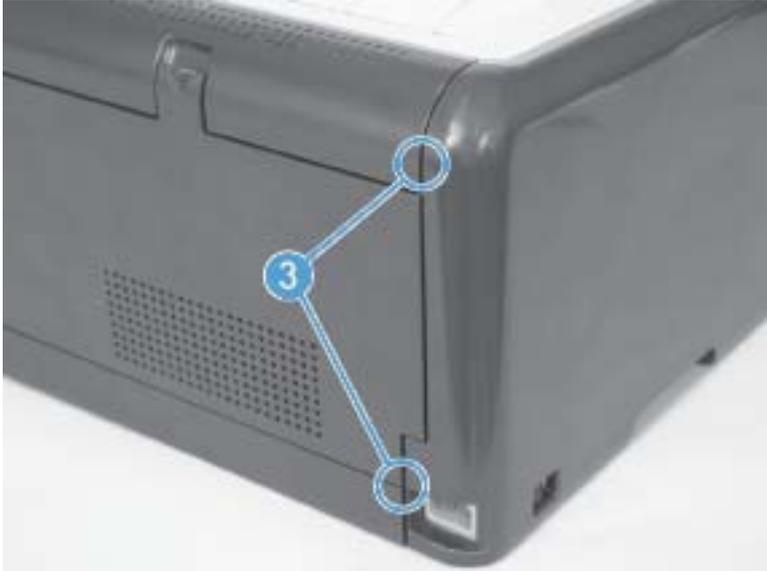
**Figure 1-17** Remove the left cover (2 of 4)



4. Use a small flatblade screwdriver to release two tabs (callout 3) at the back of the product.

△ **CAUTION:** The bottom tab might be difficult to release. Make sure that you do not break the tab.

**Figure 1-18** Remove the left cover (3 of 4)



5. Rotate the bottom of the cover away from the product, and then slide it up to remove it.

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



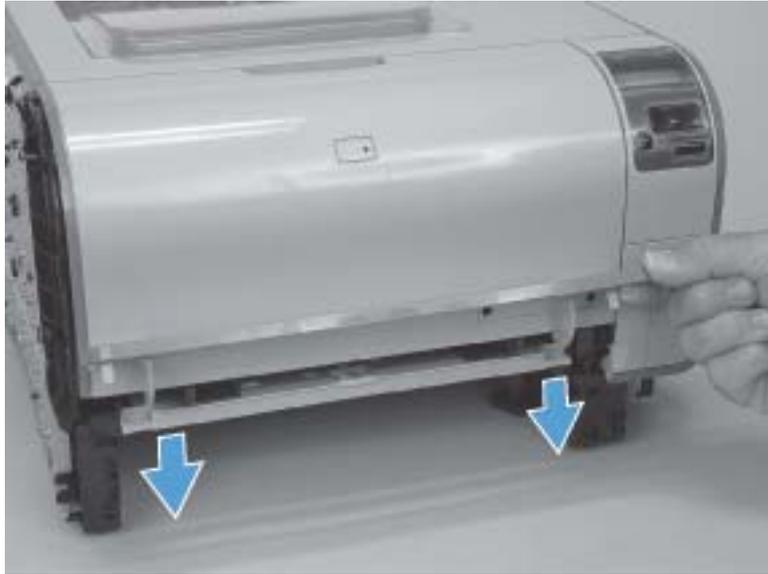
## Front door and Tray 1 door

The Tray 1 door is located below the front door.

1. Open the Tray 1 door.

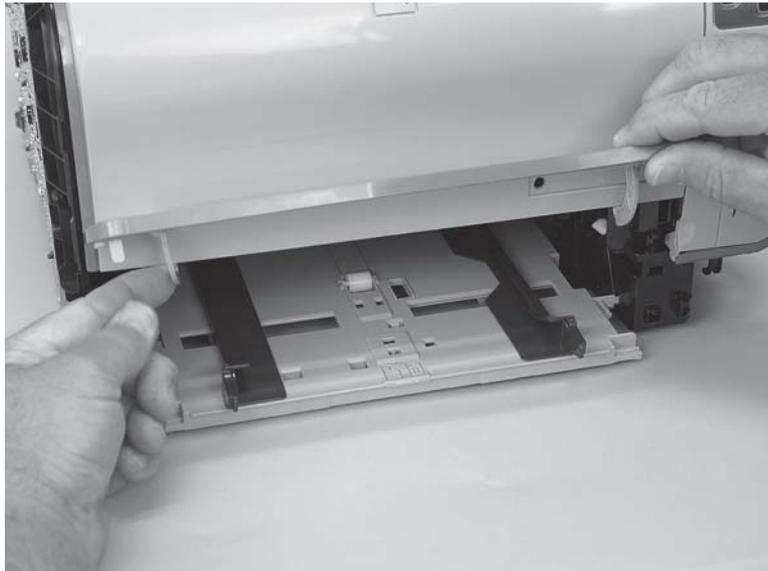
Push down on the priority-feed tray to release it.

**Figure 1-20** Remove the front door and Tray 1 door (1 of 7)



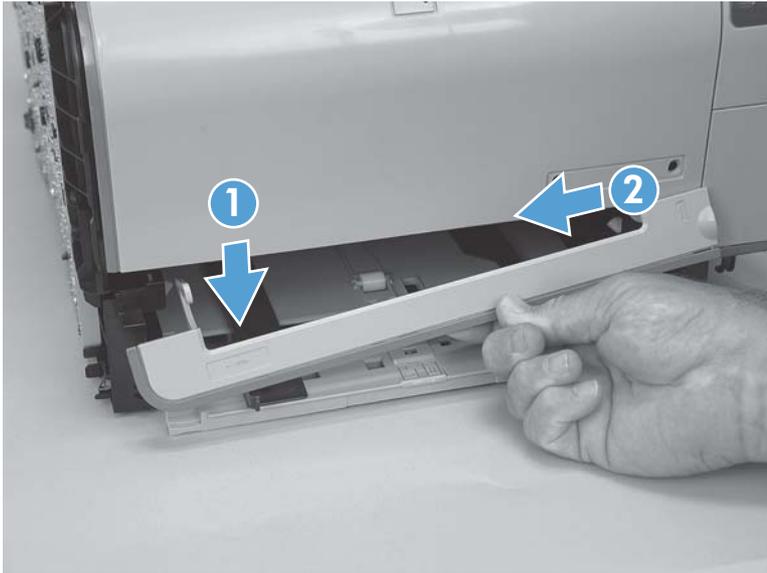
2. Carefully push the left-side Tray 1 door hinge in toward the center of the door to release it from the hinge pin.

**Figure 1-21** Remove the front door and Tray 1 door (2 of 7)



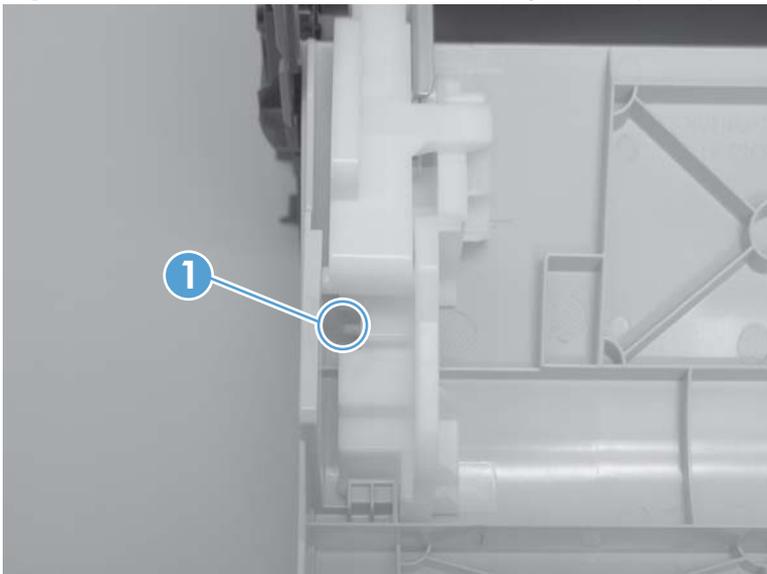
3. Lower the left side of the door and then slide it to the left to release the right-side hinge. Remove the door.

**Figure 1-22** Remove the front door and Tray 1 door (3 of 7)



4. Open the front door, and then use a small flatblade screwdriver to release one tab (callout 1) on the left-side front-door cam.

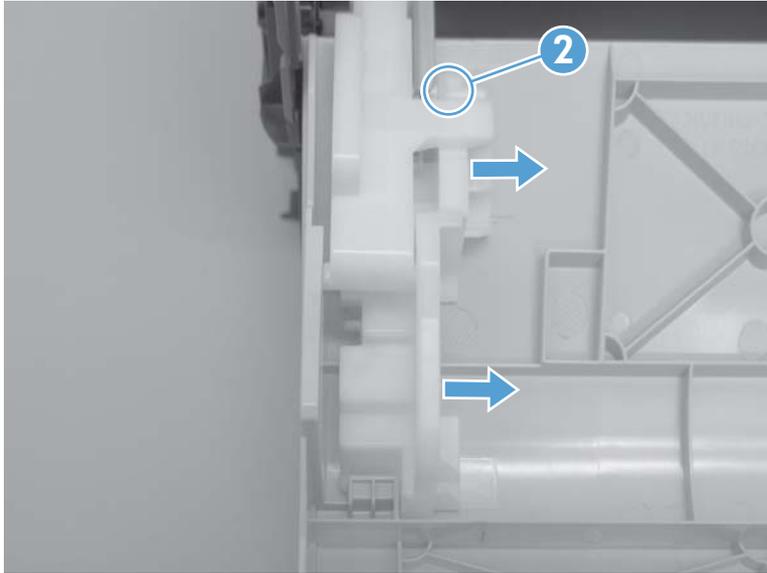
**Figure 1-23** Remove the front door and Tray 1 door (4 of 7)



5. Slide the cam toward the center of the door to remove it. Repeat this step for the right-side front-door cam.

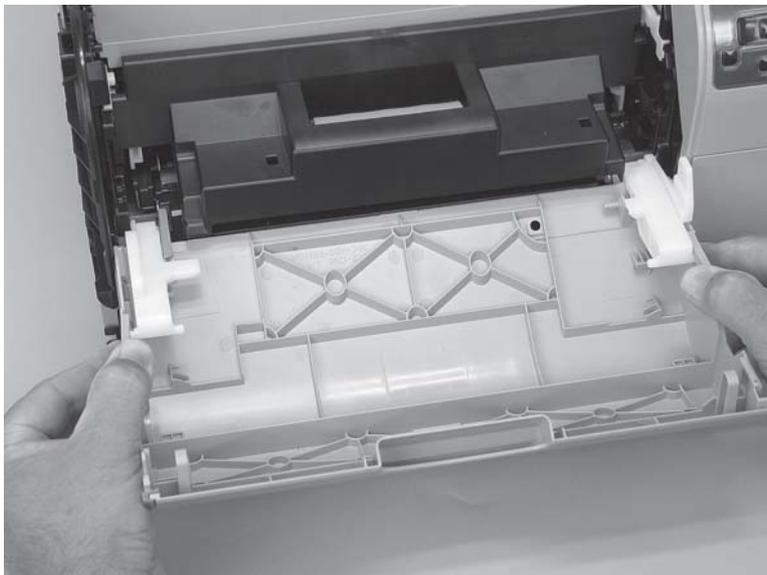
△ **CAUTION:** The hinge pin (callout 2) on the cam can be easily broken. You must apply even pressure on the cam to remove it without using any twisting motion that might break the hinge pin off of the cam.

**Figure 1-24** Remove the front door and Tray 1 door (5 of 7)



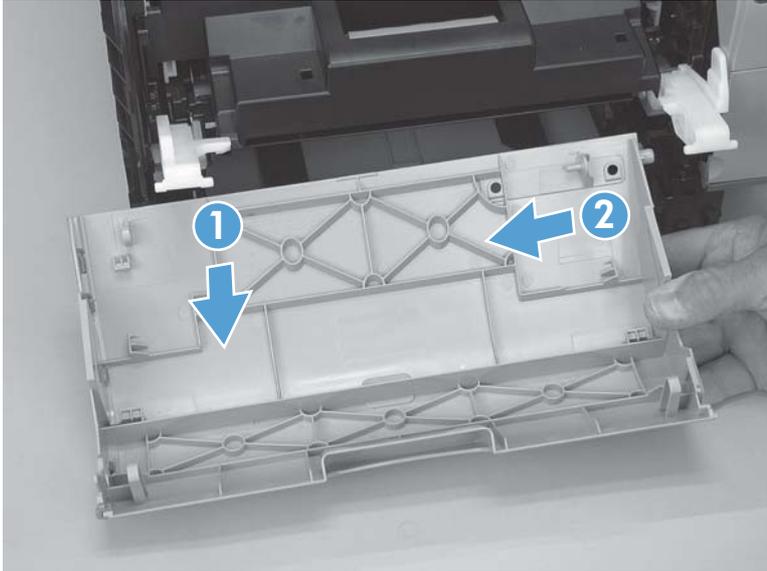
6. Carefully flex the edges of the door to release the right- and left-side door retainer arms.

**Figure 1-25** Remove the front door and Tray 1 door (6 of 7)



7. 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 1-26** Remove the front door and Tray 1 door (7 of 7)

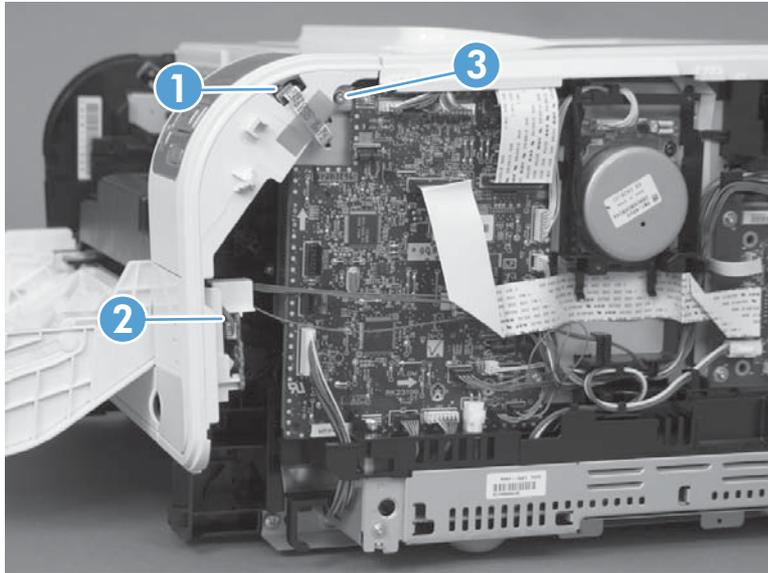


## Control-panel module

△ **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.

1. Remove the right cover. See [Right cover on page 10](#).
2. Open the front door.
3. Disconnect one FFC (callout 1), one wire-harness connector (callout 2), and then remove one screw (callout 3).

**Figure 1-27** Remove the control-panel module (1 of 3)



💡 **TIP:** The control-panel mounting screw (callout 3) is a self-tapping screw. When reinstalling the control-panel module, make sure that you replace this screw in the correct position in the product.

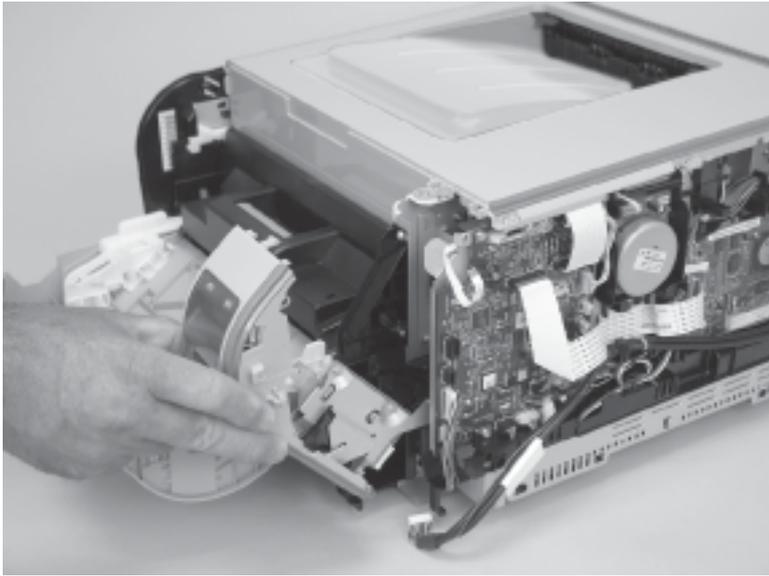
4. Use a small flatblade screwdriver to release one tab (callout 4).

**Figure 1-28** Remove the control-panel module (2 of 3)



5. Rotate the top of the control-panel module away from the product to remove it.

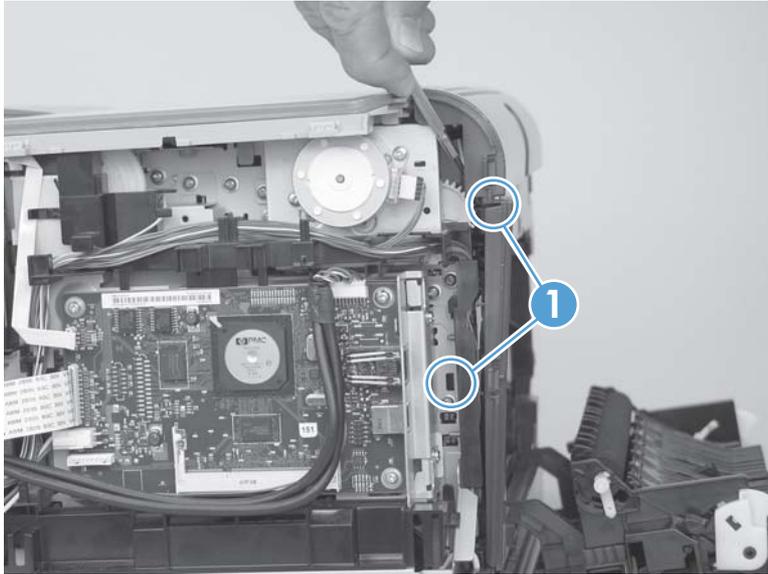
**Figure 1-29** Remove the control-panel module (3 of 3)



## Rear-side cover

1. Remove the right cover. See [Right cover on page 10](#).
2. Open the rear door.
3. Use a small flatblade screwdriver to release two tabs (callout 1).

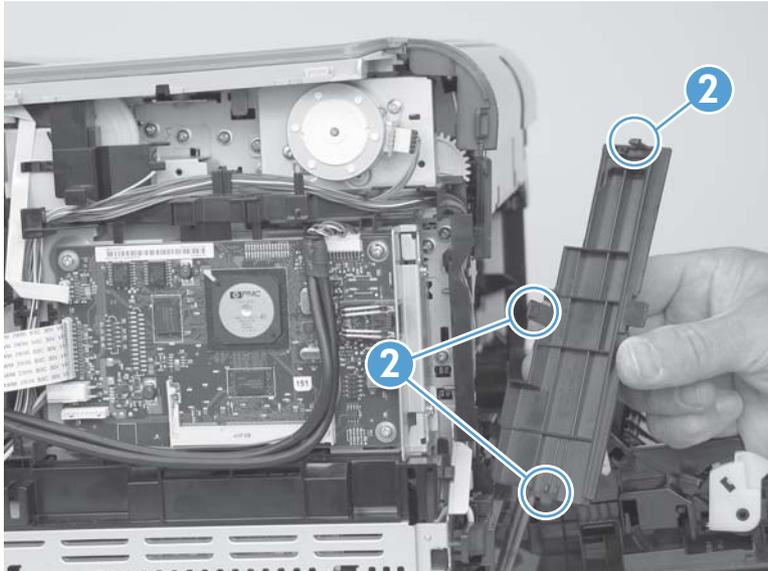
**Figure 1-30** Remove the rear-side cover (1 of 2)



4. Remove the rear-side cover.

 **TIP:** Note the location of the mounting tabs (callout 2) on the rear-side cover.

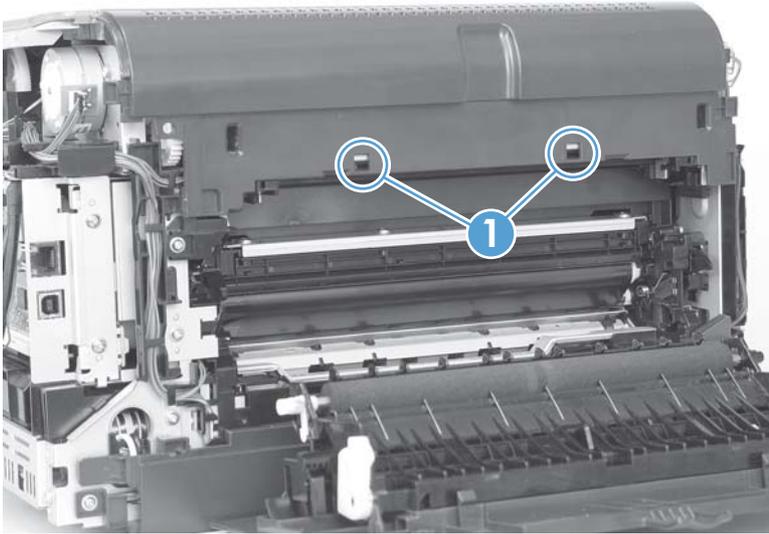
**Figure 1-31** Remove the rear-side cover (2 of 2)



## Rear-upper cover

1. Remove the following components:
  - Right cover. See [Right cover on page 10](#).
  - Left cover. See [Left cover on page 13](#).
  - Rear-side cover. See [Rear-side cover on page 21](#).
2. Open the rear door.
3. Use a small flatblade screwdriver to release two tabs (callout 1).

**Figure 1-32** Remove the rear-upper cover (1 of 2)



4. Pull the rear-upper cover away from the product to remove it.

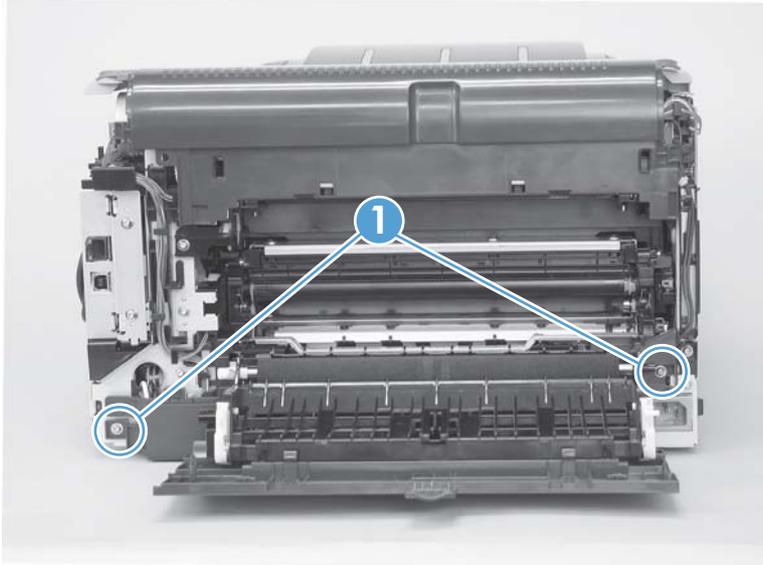
**Figure 1-33** Remove the rear-upper cover (2 of 2)



## Rear door and rear-lower cover

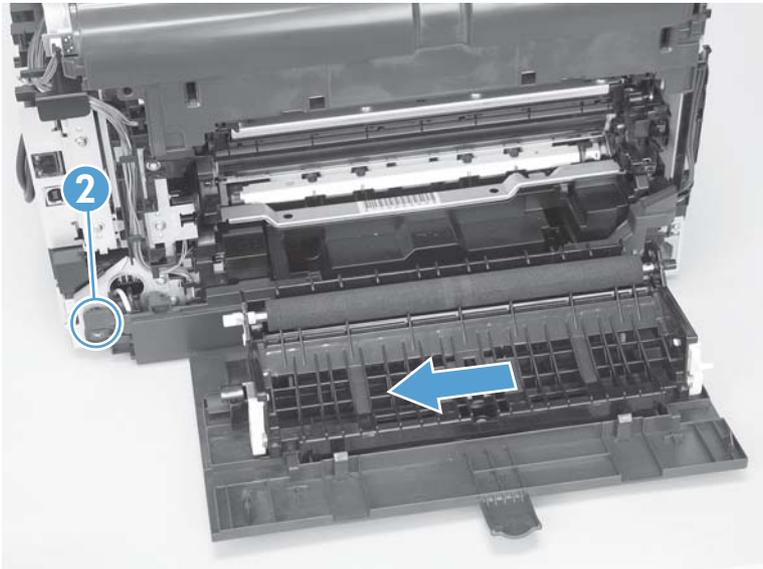
1. Remove the following components:
  - Right cover. See [Right cover on page 10](#).
  - Left cover. See [Left cover on page 13](#).
  - Rear-side cover. See [Rear-side cover on page 21](#).
2. Remove two screws (callout 1).

**Figure 1-34** Remove the rear door and rear-lower cover (1 of 4)



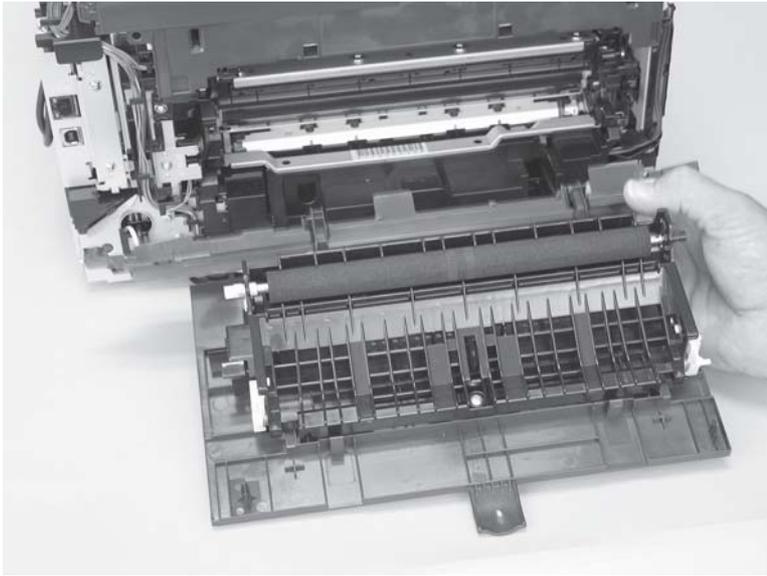
3. Release one pin (callout 2), and then slide the rear door and rear-lower cover toward the side of the product with the interface connectors.

**Figure 1-35** Remove the rear door and rear-lower cover (2 of 4)



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

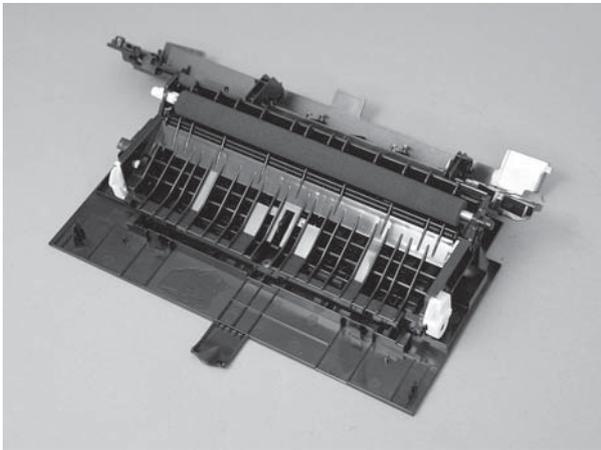
**Figure 1-36** Remove the rear door and rear-lower cover (3 of 4)



5. Rotate the rear-door hinge arms and slide it off of the hinge pins on the rear-lower cover to separate the rear cover from the rear door.

 **NOTE:** If you are installing a replacement rear-lower door, remove the feed assembly from the discarded door, and then install it on the replacement door. See [Feed assembly on page 9](#).

**Figure 1-37** Remove the rear door and rear-lower cover (4 of 4)



## Top cover

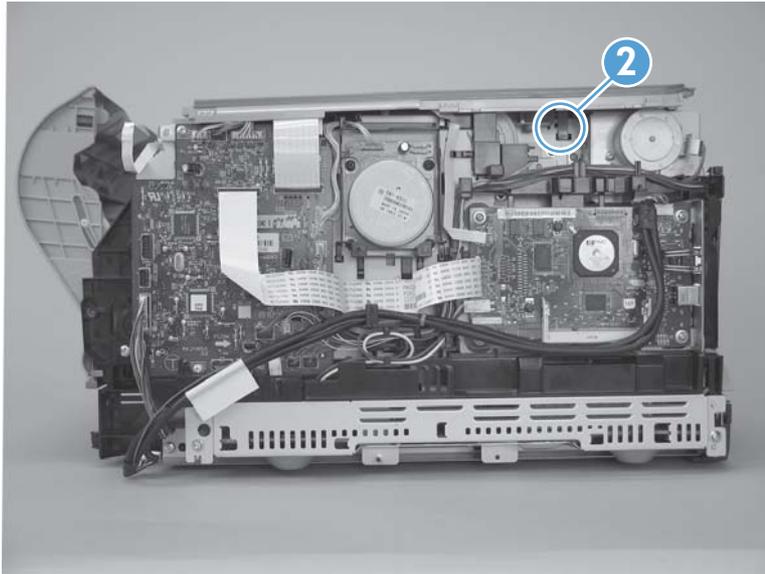
1. Remove the following components:
  - Right cover. See [Right cover on page 10](#).
  - Left cover. See [Left cover on page 13](#).
  - Control-panel module. See [Control-panel module on page 19](#).
  - Rear-side cover. See [Rear-side cover on page 21](#).
  - Rear-upper cover. See [Rear-upper cover on page 22](#).
2. Partially open the front door.
3. Remove one screw (callout 1).

**Figure 1-38** Remove the top cover (1 of 4)



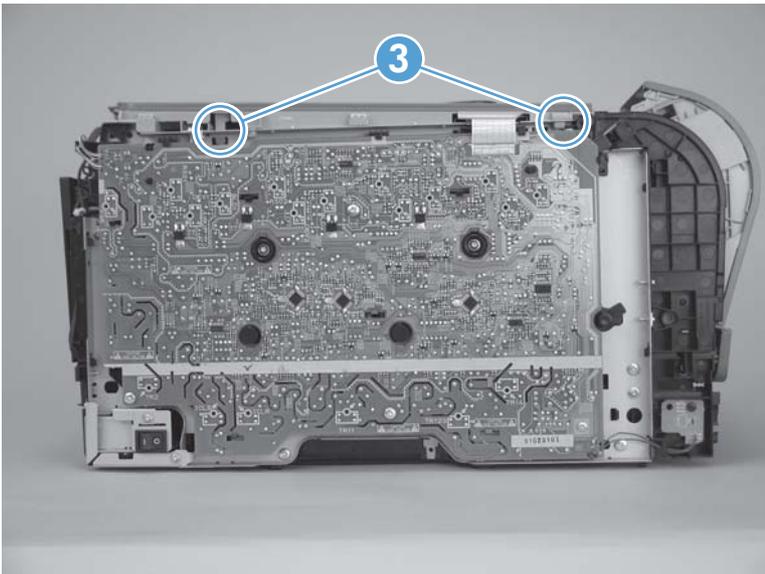
4. Release one tab (callout 2).

**Figure 1-39** Remove the top cover (2 of 4)



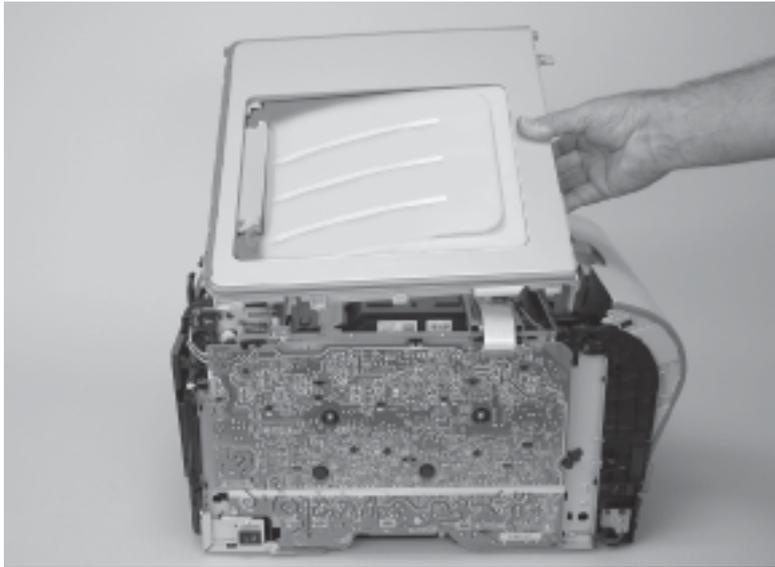
5. Release two tabs (callout 3).

**Figure 1-40** Remove the top cover (3 of 4)



6. Remove the top cover.

**Figure 1-41** Remove the top cover (4 of 4)

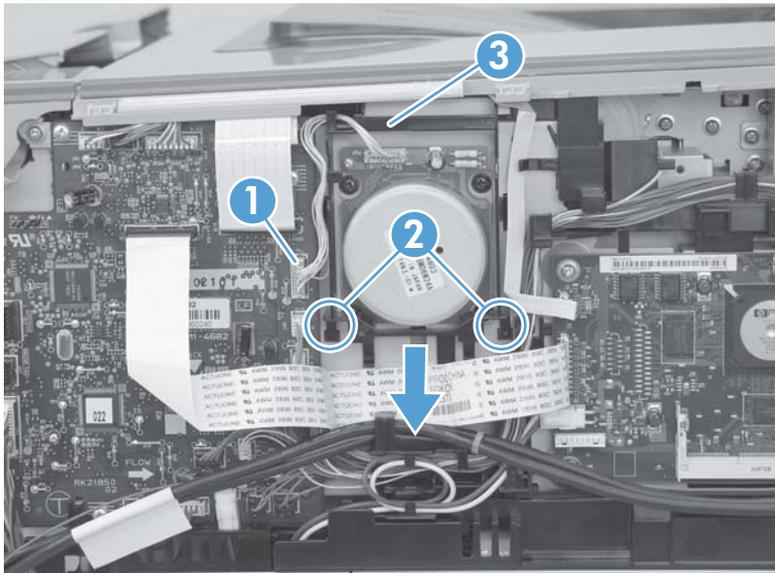


## Internal assemblies

### Main motor

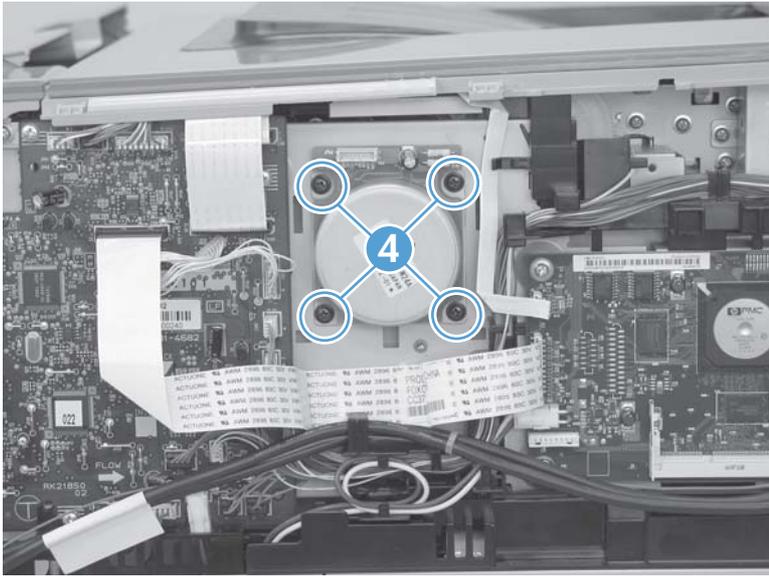
1. Remove the right cover. See [Right cover on page 10](#).
2. Disconnect one wire-harness connector (callout 1), and then release two tabs (callout 2) to release the retainer (callout 3). Slide the retainer down and separate it from the chassis.

**Figure 1-42** Remove the main motor (1 of 2)



3. Remove four screws (callout 4), and then remove the main motor.

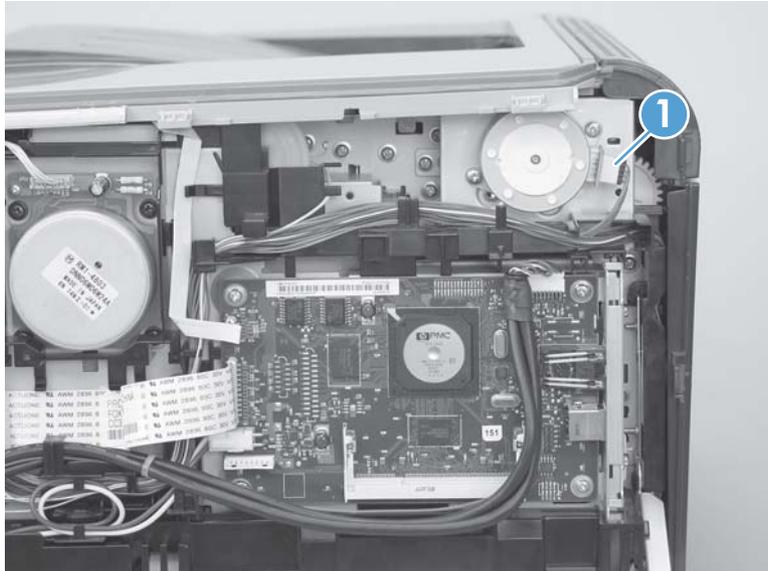
**Figure 1-43** Remove the main motor (2 of 2)



## Fuser motor

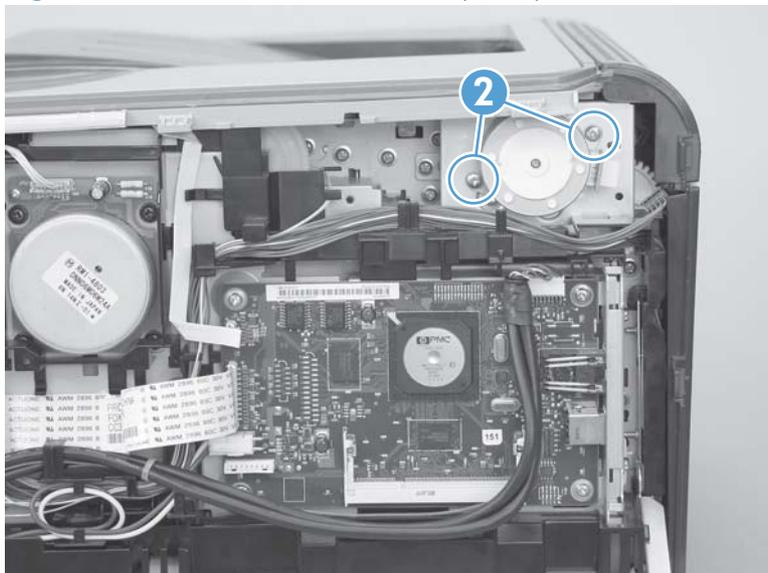
1. Remove the right cover. See [Right cover on page 10](#).
2. Disconnect one wire-harness connector (callout 1).

**Figure 1-44** Remove the fuser motor (1 of 2)



3. Remove two screws (callout 2), and then remove the fuser motor.

**Figure 1-45** Remove the fuser motor (2 of 2)



## Intermediate transfer belt (ITB)

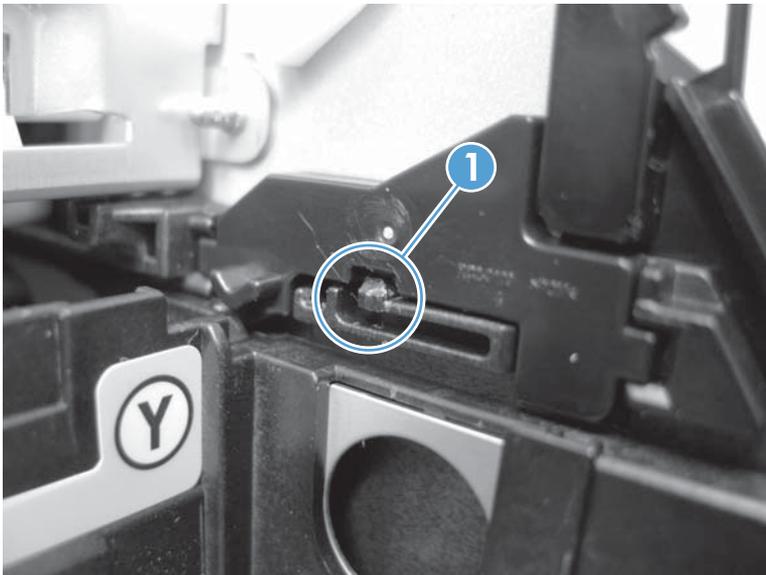
1. Remove the following components:
  - Right cover. See [Right cover on page 10](#).
  - Left cover. See [Left cover on page 13](#).
  - Rear-side cover. See [Rear-side cover on page 21](#).
2. Open the front door and pull out the print-cartridge drawer.

**Figure 1-46** Remove the ITB (1 of 9)



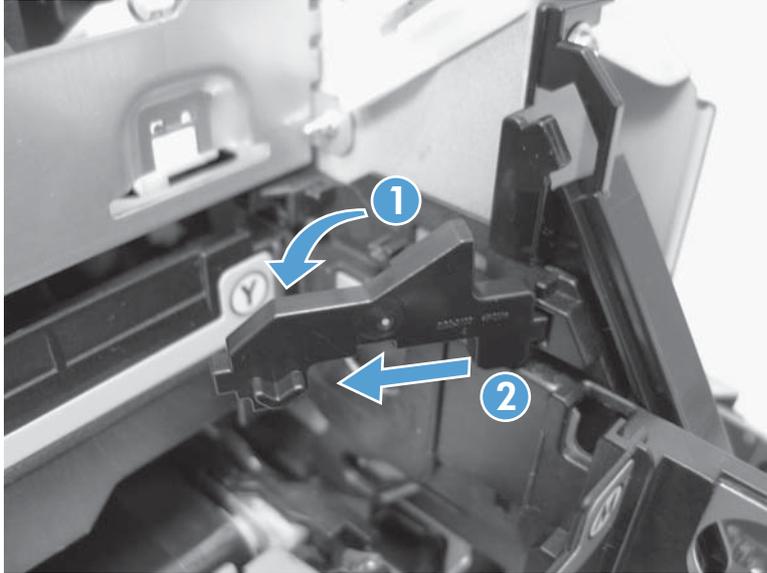
3. Release one tab (callout 1).

**Figure 1-47** Remove the ITB (2 of 9)



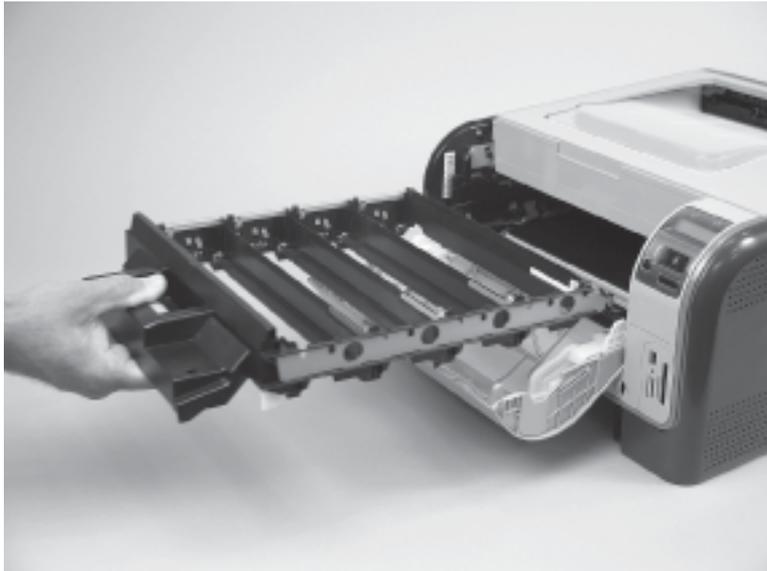
4. Rotate the cartridge-drawer retainer (callout 1) away from the chassis, and then remove it (callout 2). Repeat the previous step and this step for the left-side cartridge-drawer retainer.

**Figure 1-48** Remove the ITB (3 of 9)



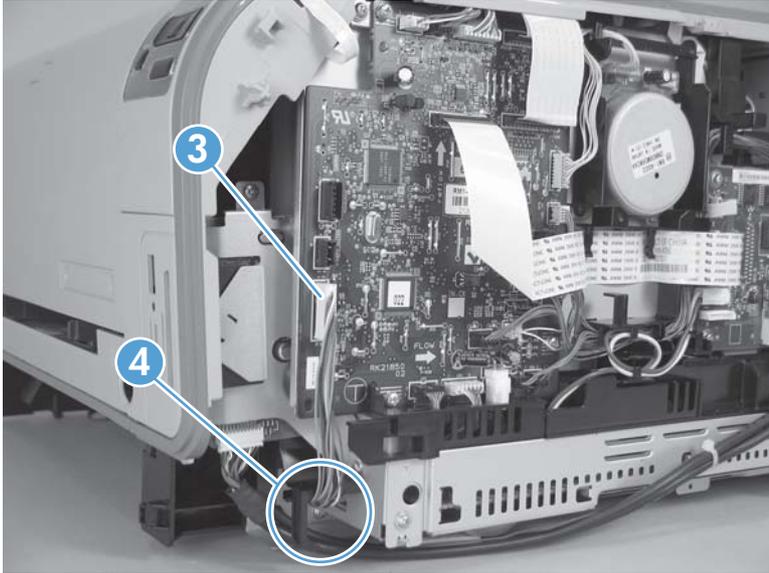
5. Pull the print-cartridge drawer straight out of the product to remove it.

**Figure 1-49** Remove the ITB (4 of 9)



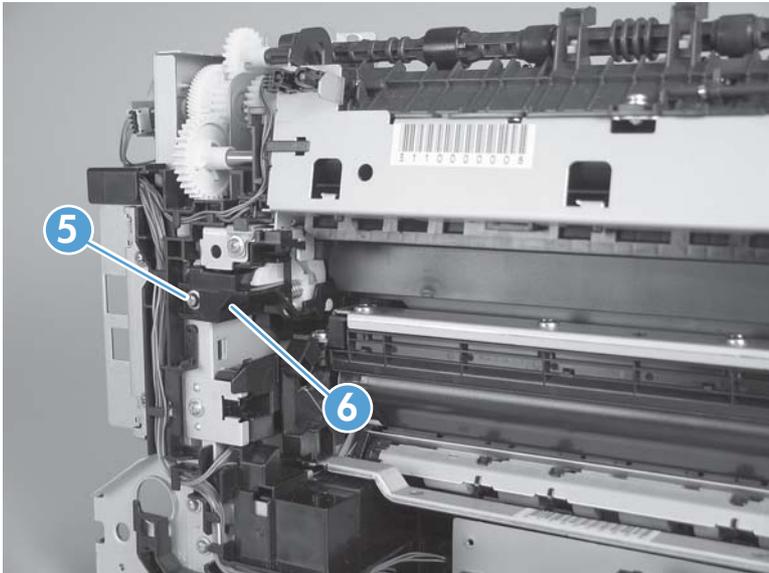
6. Disconnect one wire-harness connector (callout 3), and then release the wire harness from the retainer (callout 4).

**Figure 1-50** Remove the ITB (5 of 9)



7. Open the rear door.
8. Remove one screw (callout 5), and then remove the print-cartridge drawer stop (callout 6).

**Figure 1-51** Remove the ITB (6 of 9)

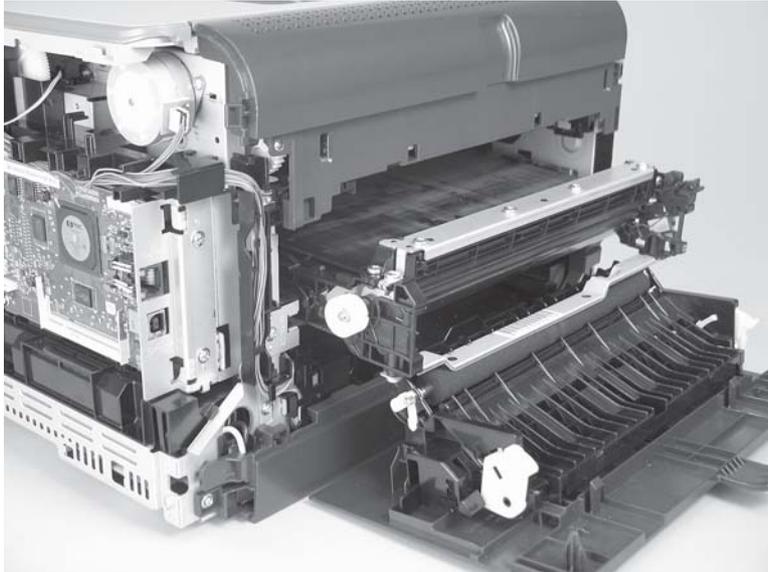


- Carefully lift up on the black plastic portion of the ITB, and then pull it *partially* out of the product (the ITB wire harness will prevent the ITB from being fully removed).

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

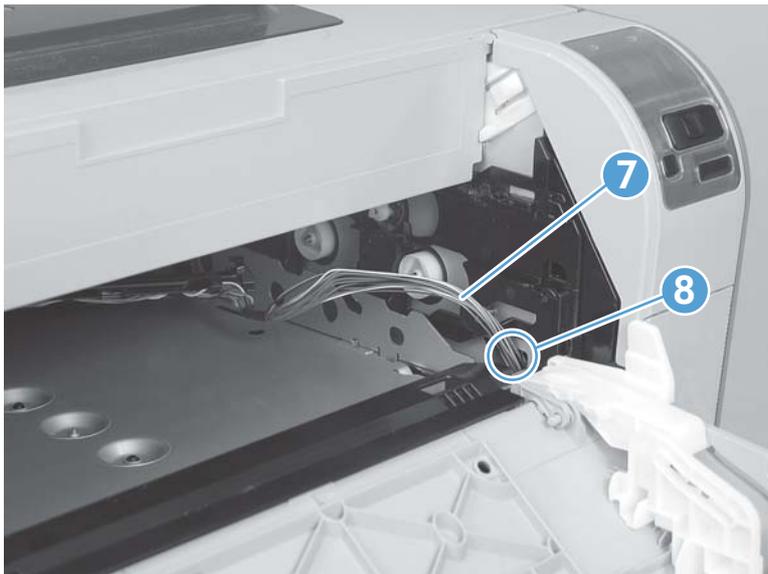
⚠ **CAUTION:** Avoid touching the black plastic transfer belt. Skin oils on the belt might cause print-quality problems.

**Figure 1-52** Remove the ITB (7 of 9)



- Feed the ITB wire harness (callout 7) through an opening in the chassis (callout 8).

**Figure 1-53** Remove the ITB (8 of 9)



11. 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 [Figure 1-55 Reinstall the ITB \(1 of 2\) on page 35](#).
- △ **CAUTION:** Make sure that the ITB wire harness does not get damaged as the ITB is removed from the chassis.

**Figure 1-54** Remove the ITB (9 of 9)



## 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 1-55** Reinstall the ITB (1 of 2)



- When handling the ITB, always hold it using 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 1-53 Remove the ITB \(8 of 9\) on page 33](#). Finish installing the ITB.

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

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

**Figure 1-56** Reinstall the ITB (2 of 2)



## DC controller PCA

### Special consideration

- ⚠ **WARNING!** Do not install a *replacement* formatter PCA and DC controller PCA at the same time, and then turn the product power on.

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 [DC controller PCA on page 37](#).

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 on page 40](#).
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.

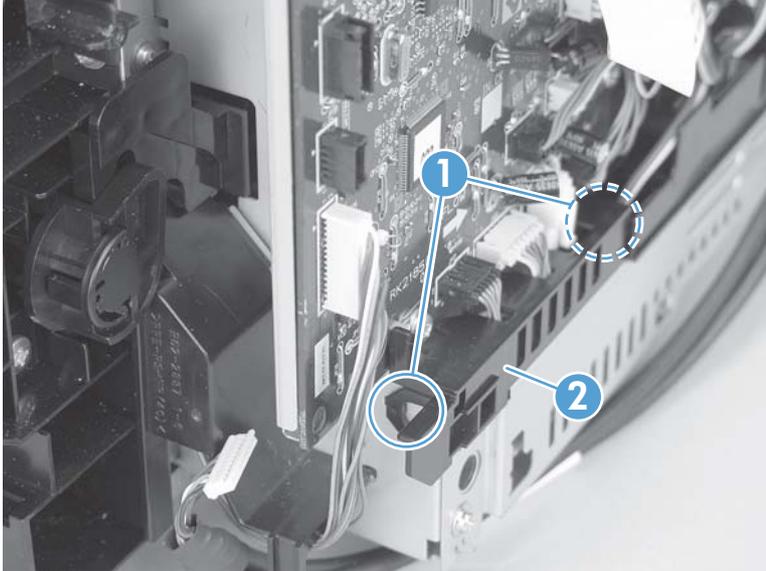


Some parts are sensitive to electrostatic discharge (ESD). Look for the ESD reminder when removing product parts. Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, ground yourself by touching the sheet-metal chassis *before* touching an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

1. Remove the following components:
  - Right cover. See [Right cover on page 10](#).
  - Left cover. See [Left cover on page 13](#).
  - Control-panel module. See [Control-panel module on page 19](#).
  - Rear-side cover. See [Rear-side cover on page 21](#).

- Rear-upper cover. See [Rear-upper cover on page 22](#).
  - Top cover. See [Top cover on page 25](#).
2. Release two tabs (callout 1), and then remove the protective cover (callout 2).

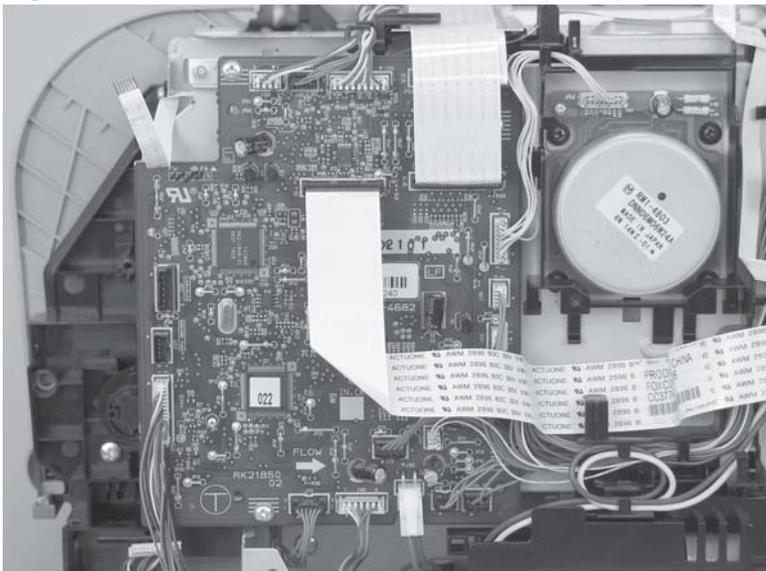
**Figure 1-57** Remove the DC controller PCA (1 of 3)



3. Disconnect all of the FFCs and wire-harness connectors from the DC controller PCA.
- Three FFCs: J107, J108, and J115
  - Wire harness
    - 15 wire-harness connectors: J012, J104, J105, J109, J110, J111, J112, J113, J116, J117, J118, J119, J120, J121, and J124

 **NOTE:** J126 and J127 are not used.

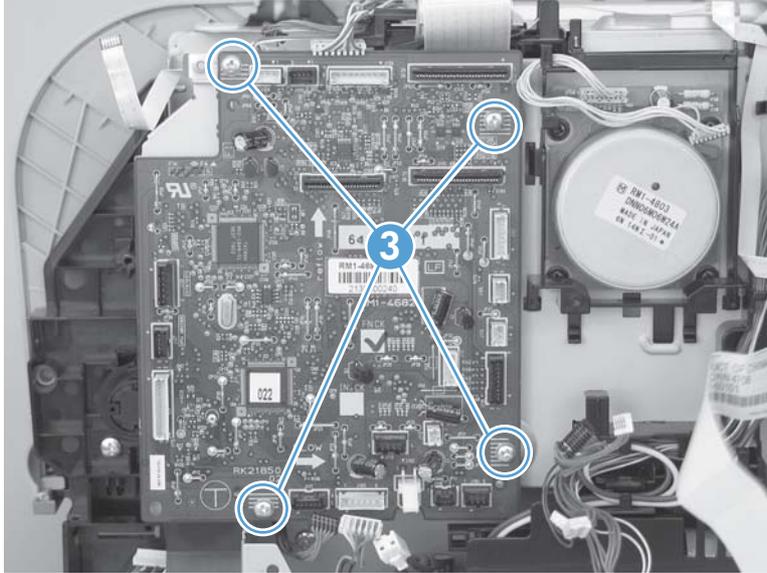
**Figure 1-58** Remove the DC controller PCA (2 of 3)



4. Remove four screws (callout 3), and then remove the DC controller PCA.

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

**Figure 1-59** Remove the DC controller PCA (3 of 3)



## Formatter PCA

### Special consideration

- ⚠ **WARNING!** Do not install a *replacement* formatter PCA and DC controller PCA at the same time, and then turn the product power on.

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.

### 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 40](#).

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 37](#).
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.

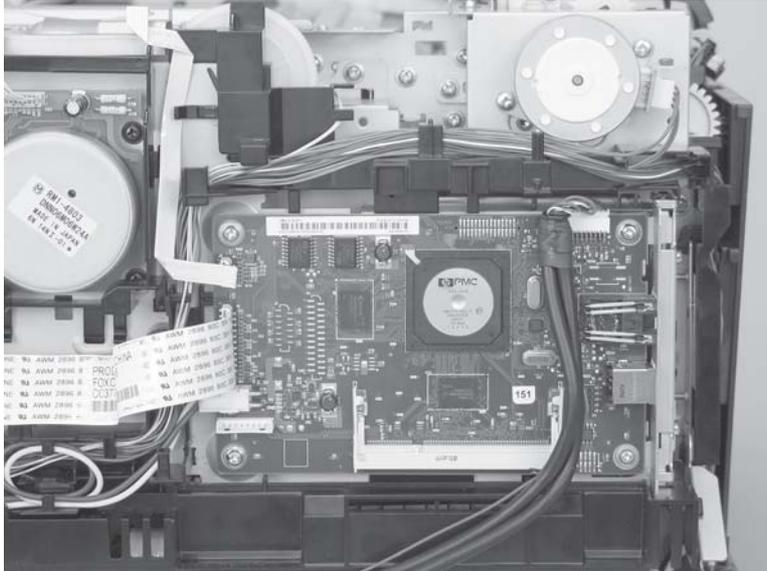


Some parts are sensitive to electrostatic discharge (ESD). Look for the ESD reminder when removing product parts. Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, ground yourself by touching the sheet-metal chassis *before* touching an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

1. Remove the right cover. See [Right cover on page 10](#).

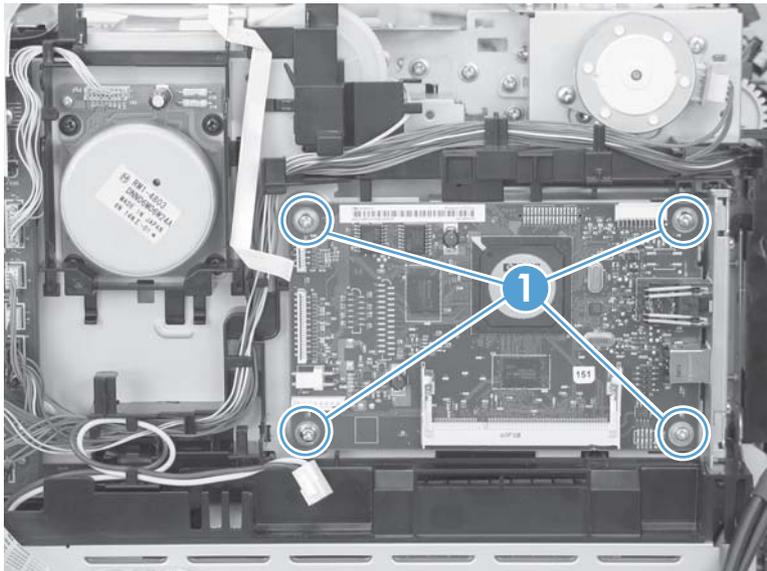
2. Disconnect all of the FFCs and wire-harness connectors from the formatter PCA.
  - FFCs
    - J2 and J5
  - Wire-harness connectors
    - J1 and P4

**Figure 1-60** Remove the formatter PCA (1 of 2)



3. Remove four screws (callout 1), and then remove the formatter PCA.

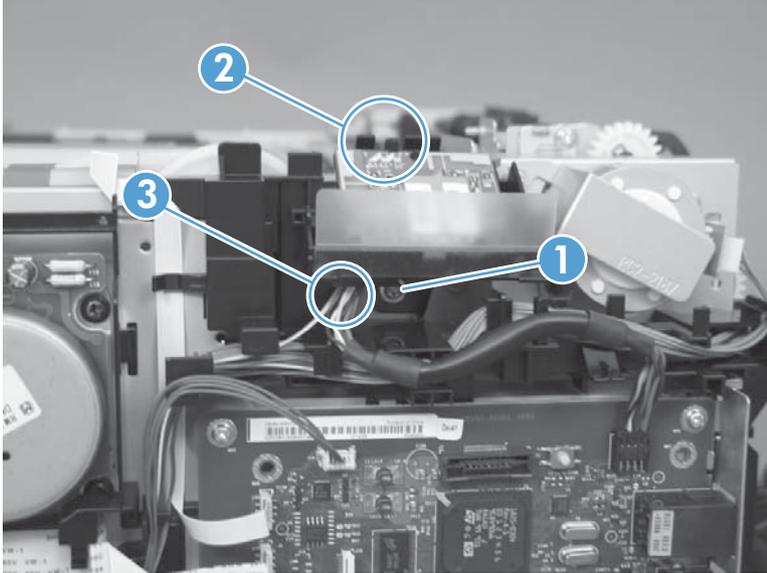
**Figure 1-61** Remove the formatter PCA (2 of 2)



## Wireless PCA

1. Remove the following components:
  - Right cover. See [Right cover on page 10](#).
2. Remove one screw (callout 1)
3. Release one tab (callout 2)
4. Disconnect one wire-harness connector (callout 3)

**Figure 1-62** Remove the wireless PCA

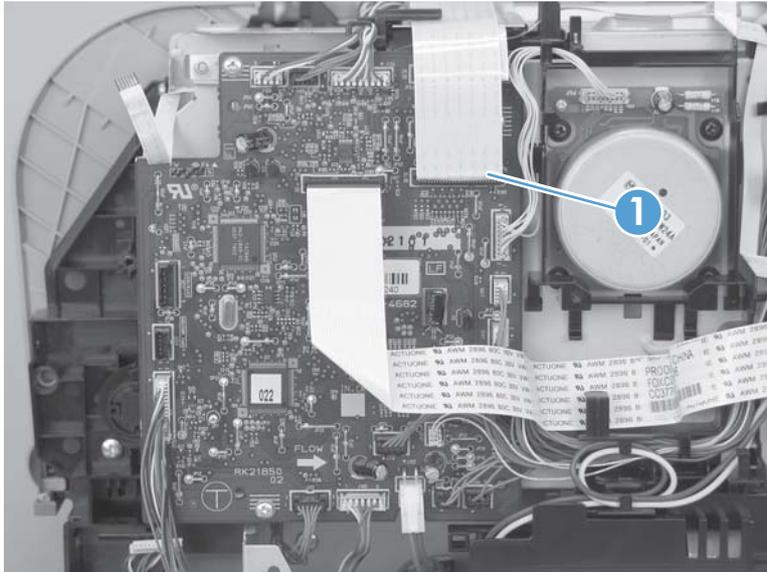


## Power supply (high-voltage)

△ **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.

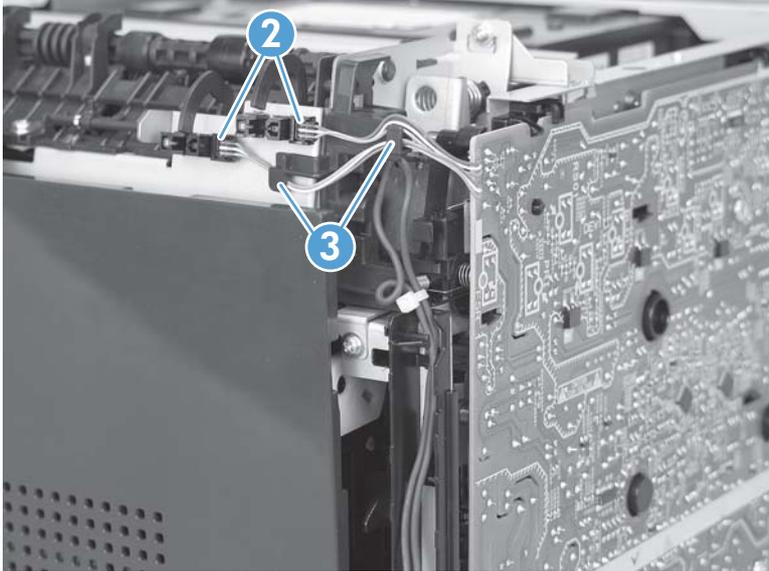
1. Remove the following components:
  - Right cover. See [Right cover on page 10](#).
  - Left cover. See [Left cover on page 13](#).
  - Control-panel module. See [Control-panel module on page 19](#).
  - Rear-side cover. See [Rear-side cover on page 21](#).
  - Rear-upper cover. See [Rear-upper cover on page 22](#).
  - Top cover. See [Top cover on page 25](#).
2. Disconnect one FFC (callout 1; J107) on the DC controller.

**Figure 1-63** Remove the power supply (high-voltage; 1 of 6)



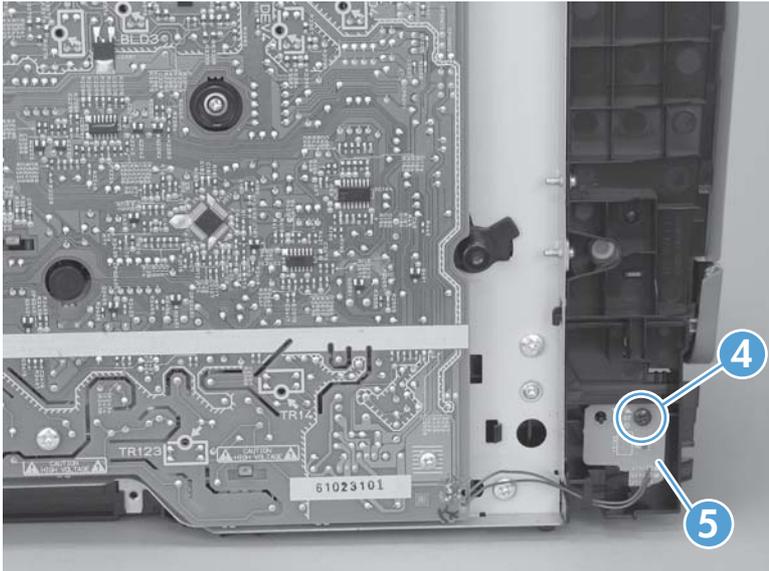
3. Disconnect two wire-harness connectors (callout 2) and release the wire harness from the retainer (callout 3).

**Figure 1-64** Remove the power supply (high-voltage; 2 of 6)



4. Remove one screw (callout 4), and then release the sub-PCA from the chassis (callout 5).

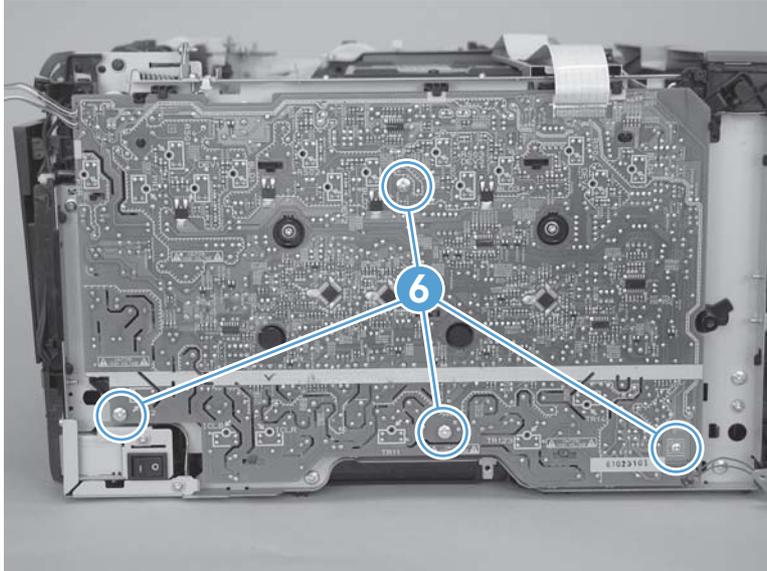
**Figure 1-65** Remove the power supply (high-voltage; 3 of 6)



5. Remove four screws (callout 6).

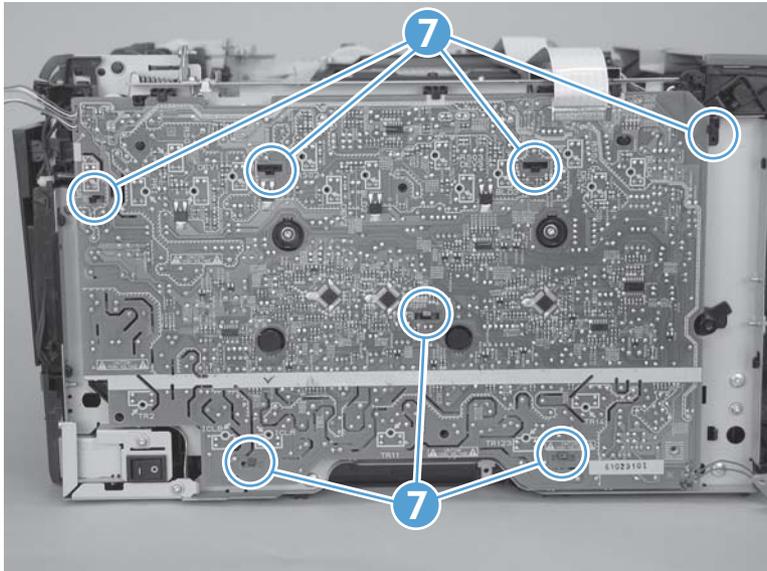
 **NOTE:** The screw at the lower back of the power supply is a ground screw. Make sure that this screw is placed in the correct position when the power supply is reinstalled.

**Figure 1-66** Remove the power supply (high-voltage; 4 of 6)



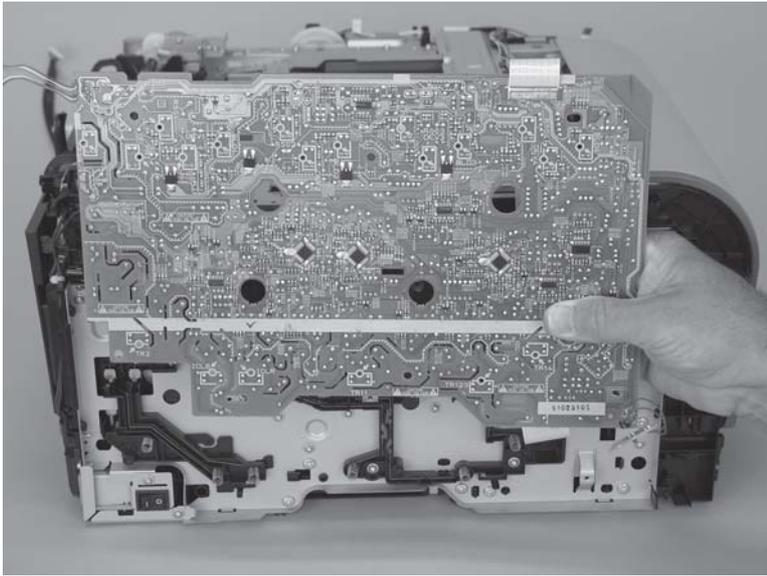
6. Release seven tabs (callout 7).

**Figure 1-67** Remove the power supply (high-voltage; 5 of 6)



7. Remove the power supply.

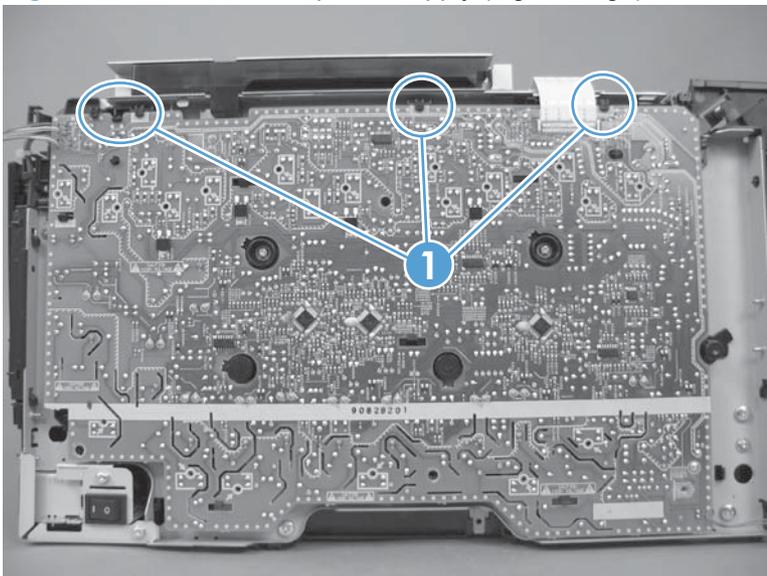
**Figure 1-68** Remove the power supply (high-voltage; 6 of 6)



#### 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 1-69** Reinstall the power supply (high voltage)

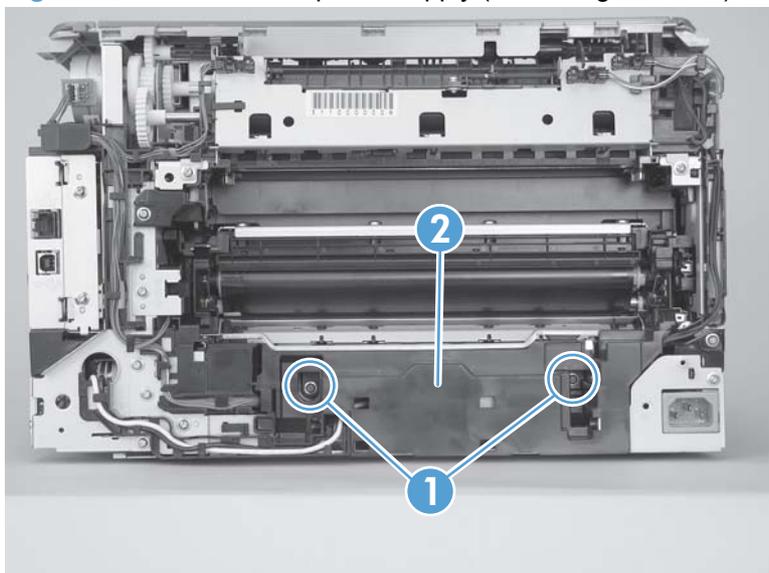


## Power supply (low-voltage)

△ **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.

1. Remove the following components:
  - Right cover. See [Right cover on page 10](#).
  - Left cover. See [Left cover on page 13](#).
  - Rear-side cover. See [Rear-side cover on page 21](#).
  - Rear door and rear-lower cover. See [Rear door and rear-lower cover on page 23](#).
2. Remove two screws (callout 1) and the power-supply cover (callout 2).

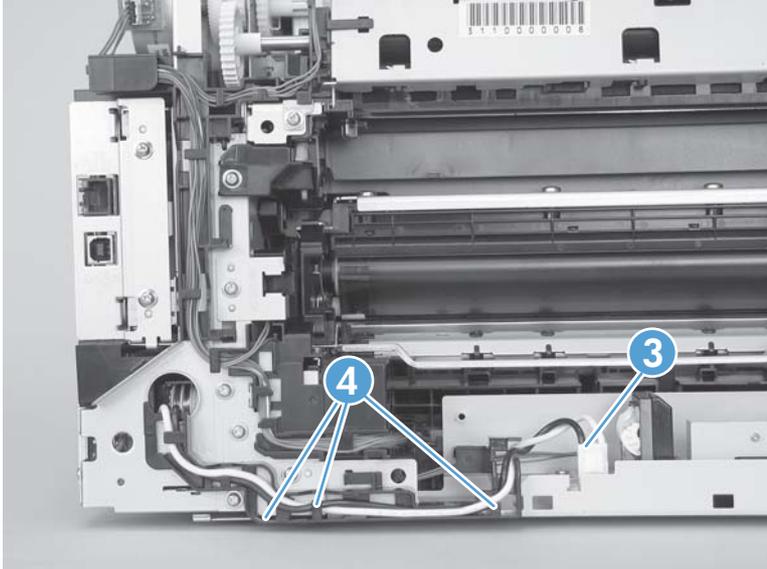
**Figure 1-70** Remove the power supply (low-voltage; 1 of 10)



3. Disconnect one wire-harness connector (callout 3) and release the wire harness from the retainer (callout 4).

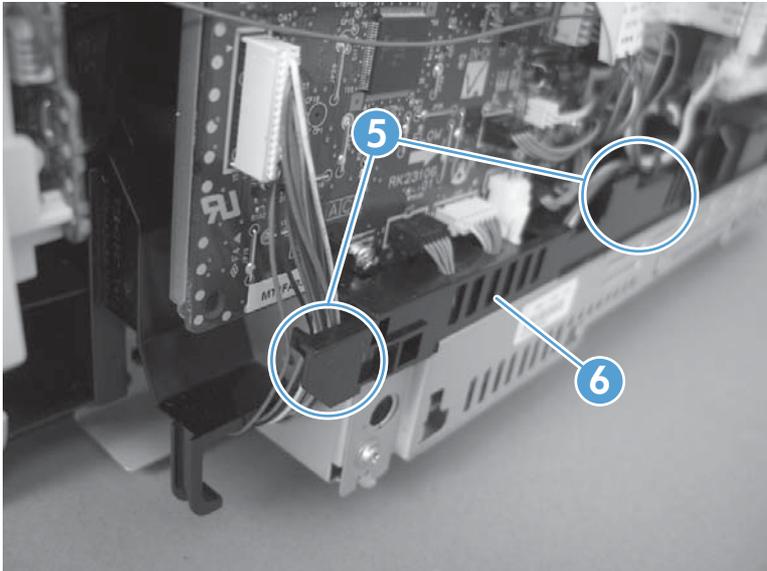
 **TIP:** It might be easier to release one tab, and then remove the retainer from the product chassis.

**Figure 1-71** Remove the power supply (low-voltage; 2 of 10)



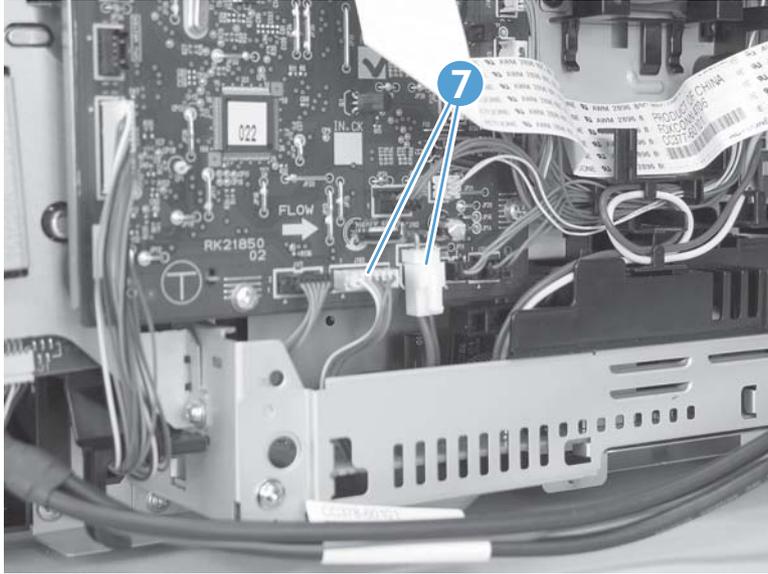
4. Release two tabs (callout 5), and then remove the protective cover (callout 6).

**Figure 1-72** Remove the power supply (low-voltage; 3 of 10)



5. Disconnect two wire-harness connectors (callout 7; J102 and J103).

**Figure 1-73** Remove the power supply (low-voltage; 4 of 10)

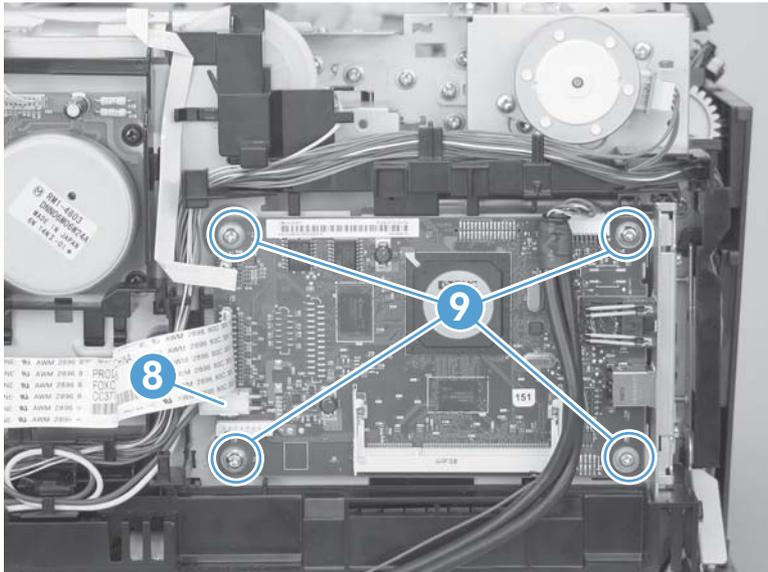


6. Disconnect one connector (callout 8; P4), and then remove four screws (callout 9) to release the formatter PCA from the chassis.

**NOTE:** You do not need to remove the PCA. Instead, release it from the chassis so it can be moved out of the way.

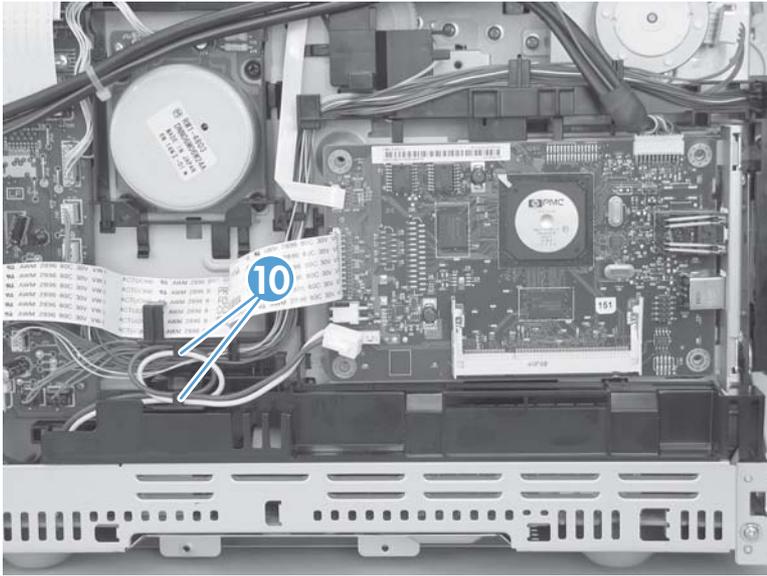
**TIP:** When you reinstall the formatter PCA, make sure that all of the connectors on the PCA are fully seated.

**Figure 1-74** Remove the power supply (low-voltage; 5 of 10)



7. Release the wire harness (callout 10) from the retainer.

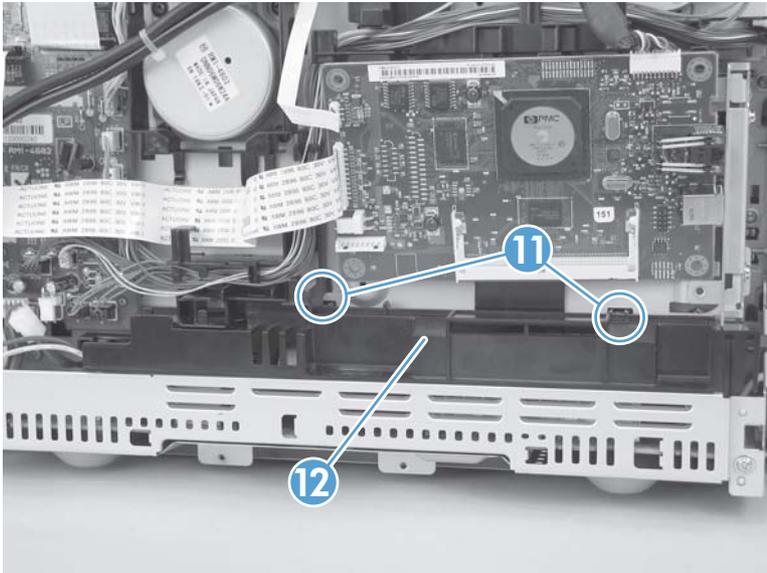
**Figure 1-75** Remove the power supply (low-voltage; 6 of 10)



8. Release two tabs (callout 11), and then carefully remove the retainer (callout 12).

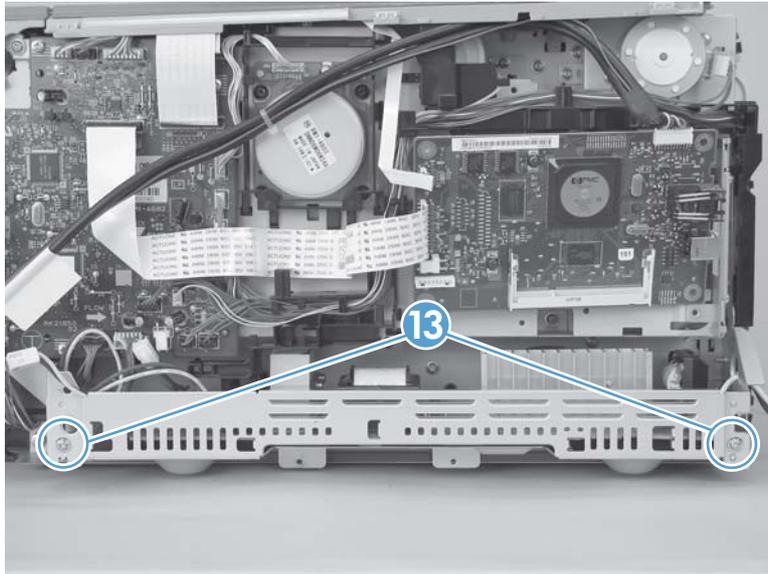
 **NOTE:** It might be easier to remove this retainer if you first move the cable that connects the formatter PCA out of the way, and hold the formatter PCA out and away from the chassis.

**Figure 1-76** Remove the power supply (low-voltage; 7 of 10)



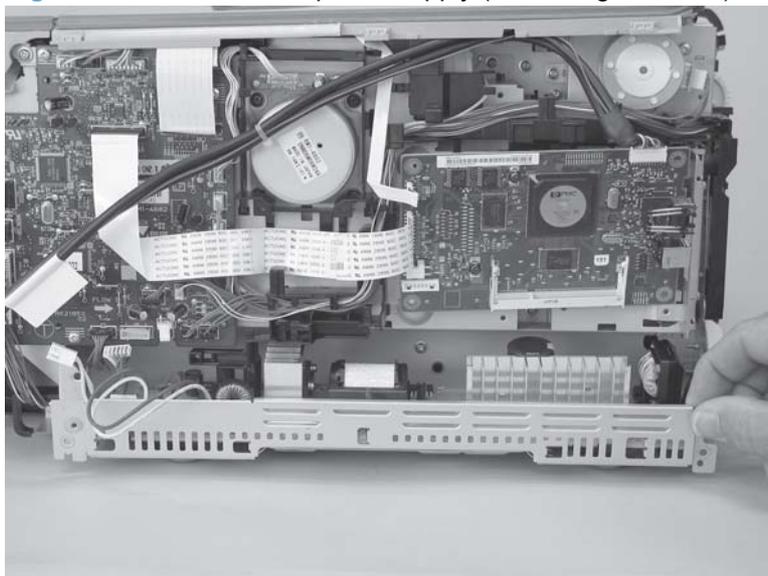
9. Remove two screws (callout 13).

**Figure 1-77** Remove the power supply (low-voltage; 8 of 10)



10. Pull the power supply away from the chassis (it will not come completely out).

**Figure 1-78** Remove the power supply (low-voltage; 9 of 10)

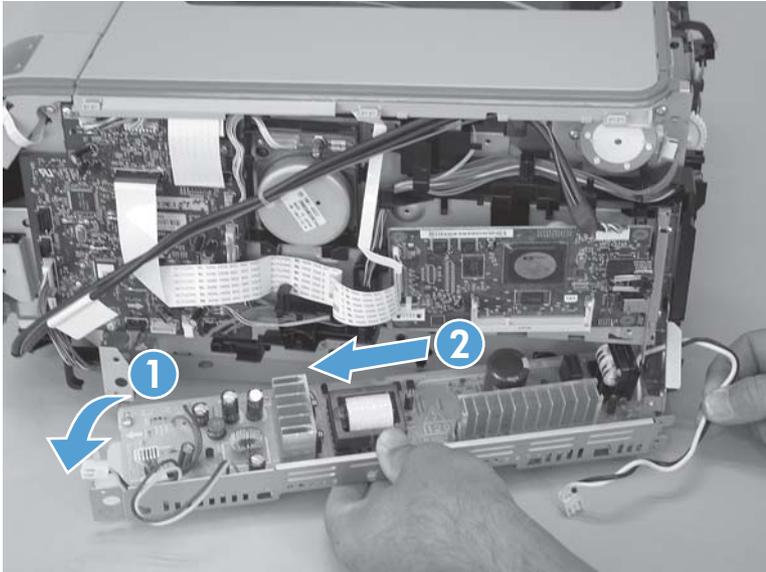


11. Rotate the end of the power supply near the control-panel module out and away from the product until it clears the chassis, and then slide the power supply toward the control-panel module to remove it.

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

 **TIP:** Make sure that the tab on the right end of the power-supply chassis fits into the slot on the product chassis, and the left-hand side of the tray rides on top of the ledge of the chassis, when the power supply is reinstalled.

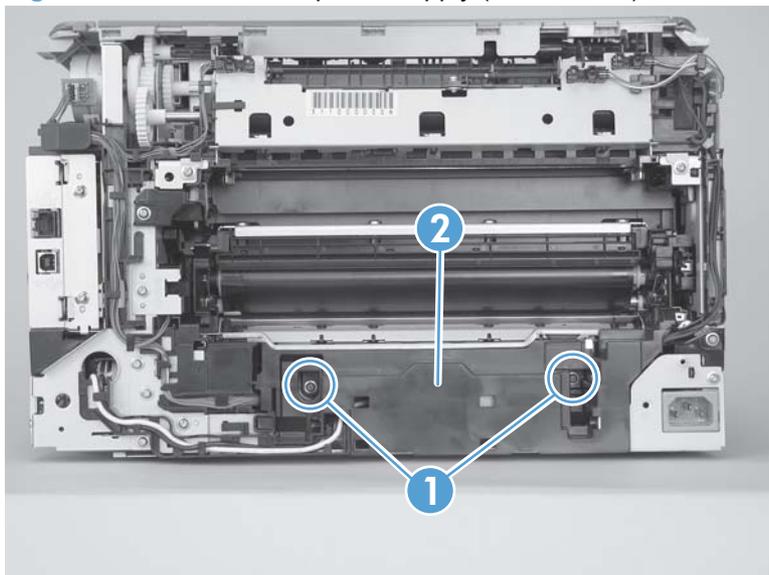
**Figure 1-79** Remove the power supply (low-voltage; 10 of 10)



## Power supply (fuser)

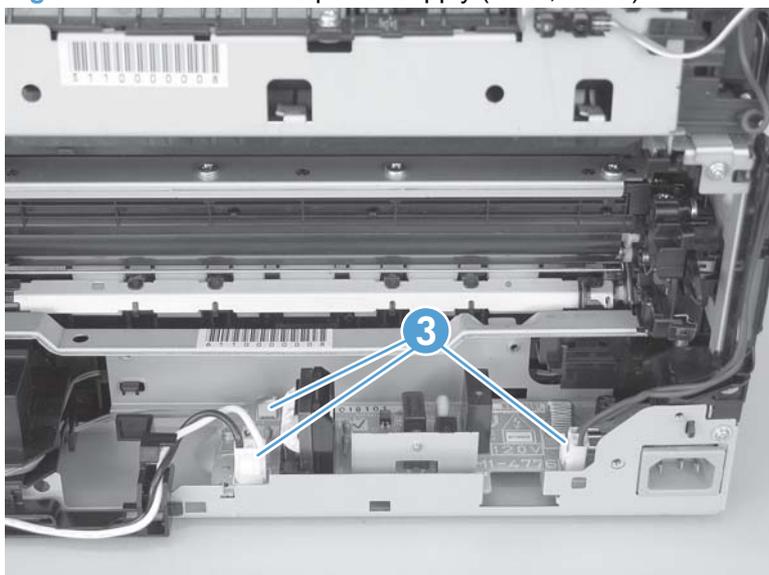
1. Remove the following components:
  - Right cover. See [Right cover on page 10](#).
  - Left cover. See [Left cover on page 13](#).
  - Rear-side cover. See [Rear-side cover on page 21](#).
  - Rear door and rear-lower cover. See [Rear door and rear-lower cover on page 23](#).
2. Remove two screws (callout 1) and the power-supply cover (callout 2).

**Figure 1-80** Remove the power supply (fuser; 1 of 5)



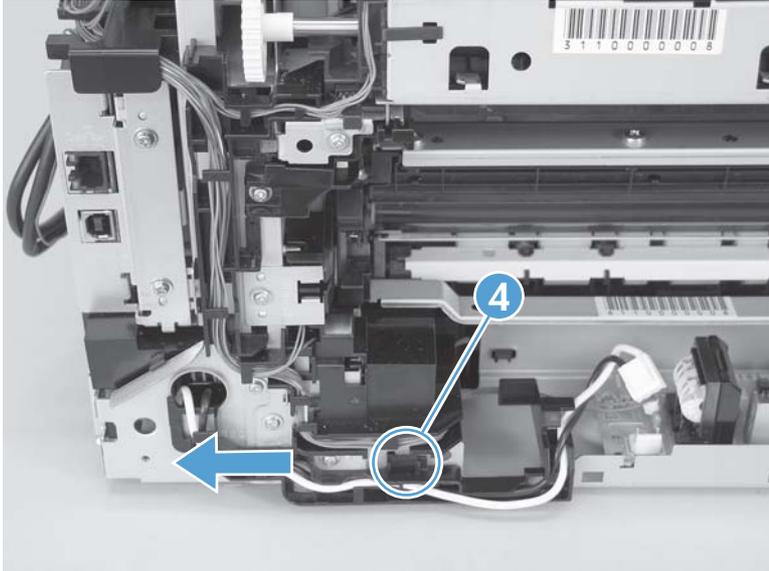
3. Disconnect three wire-harness connectors (callout 3).

**Figure 1-81** Remove the power supply (fuser; 2 of 5)



4. Release one tab (callout 4), slide the retainer toward the interface connectors to release it, and then separate the retainer from the chassis.

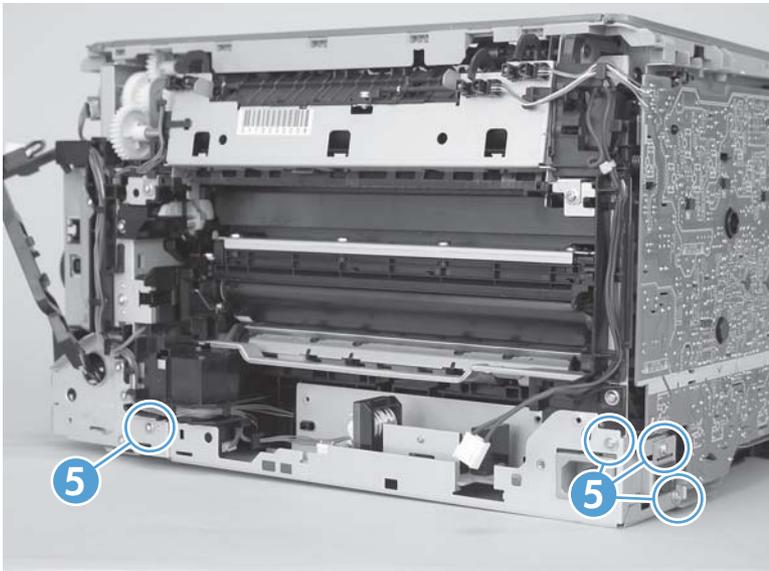
**Figure 1-82** Remove the power supply (fuser; 3 of 5)



5. Remove four screws (callout 5).

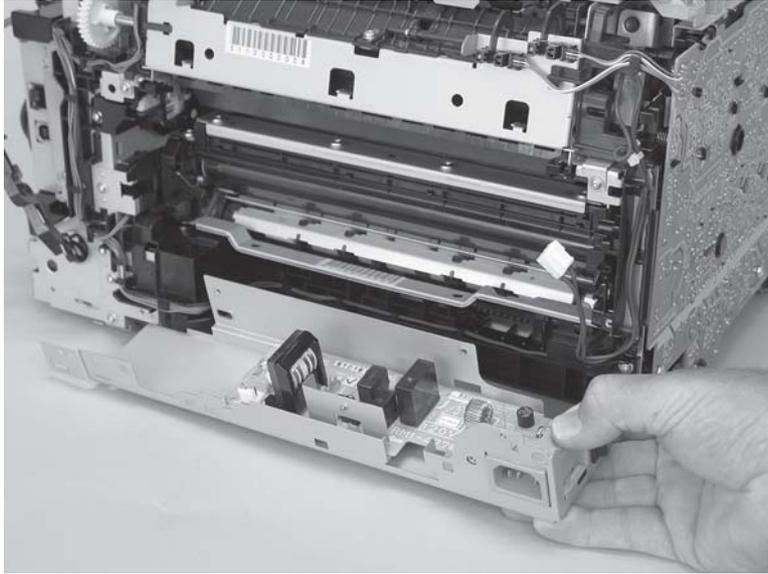
 **NOTE:** The two screws near the power switch are ground screws. Make sure that these screws are placed in the correct positions when the power supply is reinstalled.

**Figure 1-83** Remove the power supply (fuser; 4 of 5)



6. Remove the power supply.

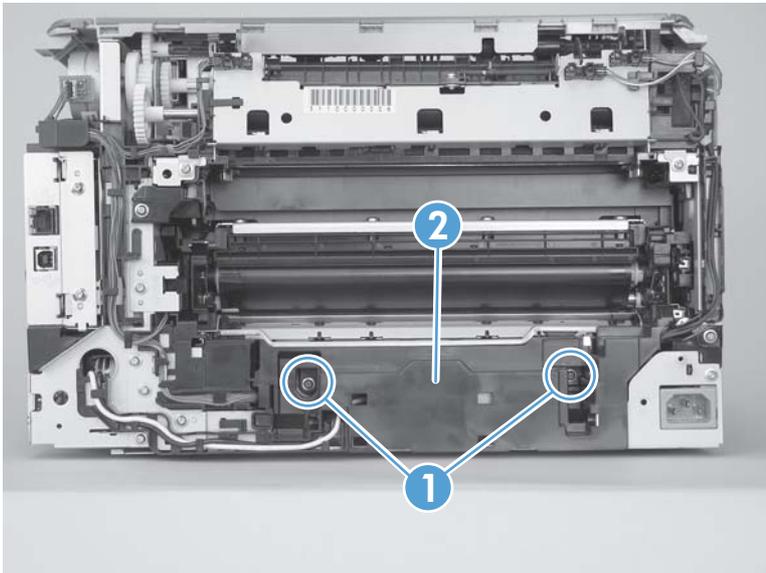
**Figure 1-84** Remove the power supply (fuser; 5 of 5)



## Fuser

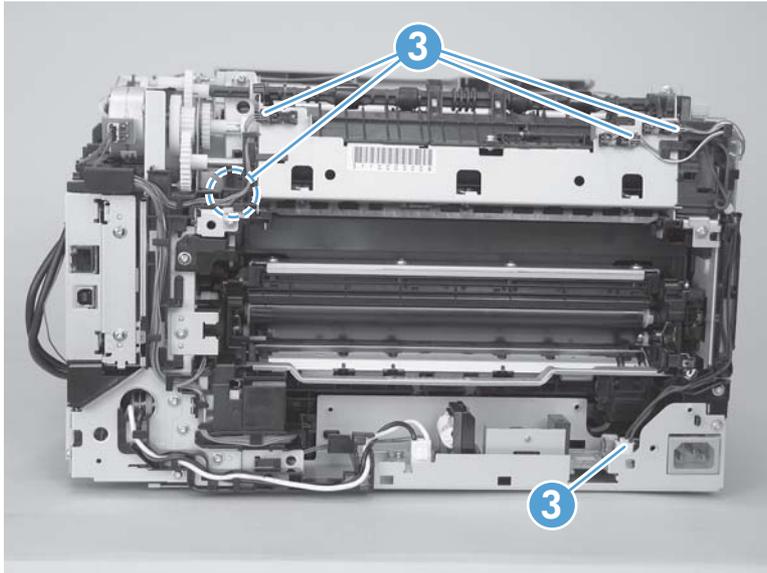
1. Remove the following components:
  - Right cover. See [Right cover on page 10](#).
  - Left cover. See [Left cover on page 13](#).
  - Control-panel module. See [Control-panel module on page 19](#).
  - Rear-side cover. See [Rear-side cover on page 21](#).
  - Rear-upper cover. See [Rear-upper cover on page 22](#).
  - Rear door and rear-lower cover. See [Rear door and rear-lower cover on page 23](#).
  - Top cover. See [Top cover on page 25](#).
2. Remove two screws (callout 1) and the power-supply cover (callout 2).

**Figure 1-85** Remove the fuser (1 of 4)



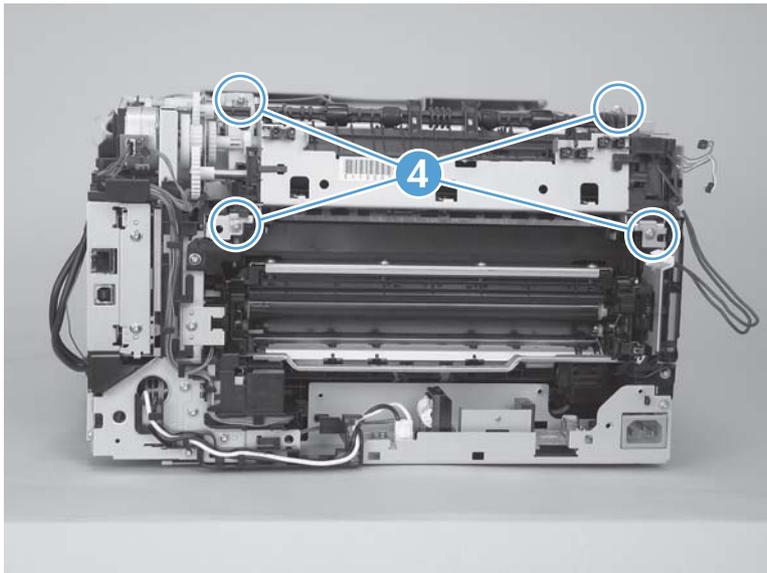
3. Disconnect five wire-harness connectors (callout 3). Remove the wire harness from the guides and one retainer.

**Figure 1-86** Remove the fuser (2 of 4)



4. Remove four screws (callout 4).

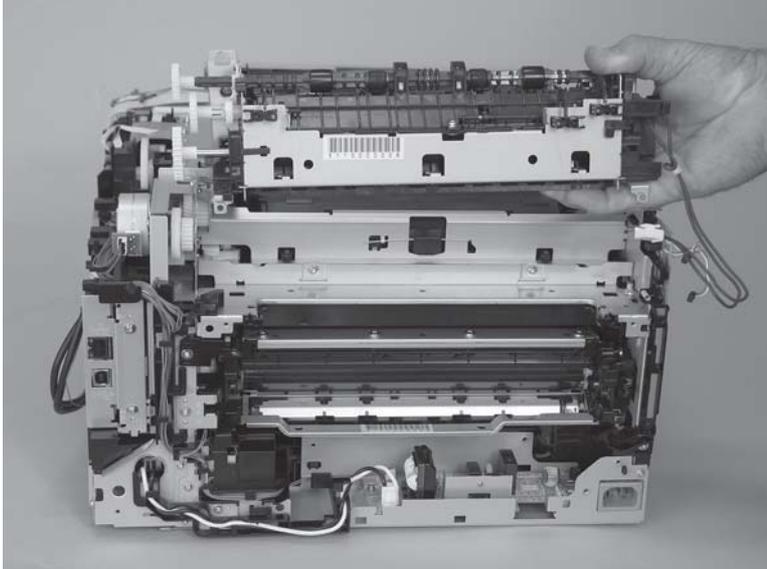
**Figure 1-87** Remove the fuser (3 of 4)



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 1-88** Remove the fuser (4 of 4)



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## 2 Solve problems

- [Solve problems checklist](#)
- [Menu map](#)
- [Troubleshooting process](#)
- [Tools for troubleshooting](#)
- [Paper feeds incorrectly or becomes jammed](#)
- [Solve image quality problems](#)
- [Clean the product](#)
- [The product does not print or it prints slowly](#)
- [Solve connectivity problems](#)
- [Service mode functions](#)
- [Product updates](#)

## Solve problems checklist

1. Make sure that the product is set up correctly.
  - a. Press the power button to turn on the product or to deactivate the Auto-Off mode.
  - b. Check the power-cable connections.
  - c. Make sure that the line voltage is correct for the product power configuration. (See the label that is on the back of the product for voltage requirements.) If you are using a power strip and its voltage is not within specifications, plug the product directly into the wall. If it is already plugged into the wall, try a different outlet.
2. Check the cabling.
  - a. Check the cable connection between the product and the computer. Make sure that the connection is secure.
  - b. Make sure that the cable itself is not faulty by using a different cable, if possible.
  - c. Check the network connection (HP Color LaserJet CP1525nw only): Make sure the network light is lit. The network light is next to the network port on the back of the product.

If the product remains unable to connect to the network, uninstall and then reinstall the product. If the error persists, contact a network administrator.
3. Check to see if any messages appear on the control panel.
4. Make sure that the paper that you are using meets specifications.
5. Make sure that the paper is loaded correctly in the input tray.
6. Make sure that the product software is installed correctly.
7. Verify that you have installed the printer driver for this product, and that you are selecting this product from the list of available printers.
8. Print a configuration page.
  - a. If the page does not print, verify that the input tray contains paper and that the paper is properly loaded.
  - b. Make sure that the print cartridge is installed correctly.
  - c. If the page jams in the product, clear the jam.
  - d. If the print quality is unacceptable, complete the following steps:
    - Verify that the print settings are correct for the paper that you are using.
    - Solve print-quality problems.
9. Print a small document from a different program that has worked in the past. If this solution works, then the problem is with the program you are using. If this solution does not work (the document does not print), complete these steps:
  - a. Try printing the job from another computer that has the product software installed.
  - b. Check the cable connection. Direct the product to the correct port, or reinstall the software, selecting the connection type that you are using.

## Menu map

Use the **Reports** menu to print a menu map of the control panel-menu layout. The active settings for each menu are listed.

1. Press **OK** to open the menus.
2. Press the left arrow ◀ or right arrow ▶ button to navigate to **Reports**, and then press the **OK** button.
3. Press the left arrow ◀ or right arrow ▶ button to navigate to **Menu structure**, and then press the **OK** button to print the report.
4. Press **X** to exit the menus.

# Troubleshooting process

When the product malfunctions or encounters an unexpected situation, the product control panel alerts you to the situation. This chapter contains information to help diagnose and solve problems.

- Use the pre-troubleshooting checklist to evaluate the source of the problem and to reduce the number of steps that are required to fix the problem.
- Use the troubleshooting flowchart to pinpoint the root cause of hardware malfunctions. The flowchart guides you to the section of this chapter that contains steps for correcting the malfunction.

Before beginning any troubleshooting procedure, check the following issues:

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

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

## Pre-troubleshooting checklist

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

General topic	Questions
Environment	<ul style="list-style-type: none"><li>• Is the product installed on a solid, level surface (+/- 1°)?</li><li>• Is the power-supply voltage within <math>\pm 10</math> volts of the specified power source?</li><li>• Is the power-supply plug inserted in the product and the outlet?</li><li>• Is the operating environment within the specified parameters?</li><li>• Is the product exposed to ammonia gas, such as that produced by diazo copiers or office cleaning materials?  <b>NOTE:</b> Diazo copiers produce ammonia gas as part of the copying processes. Ammonia gas (from cleaning supplies or a diazo copier) can have an adverse affect on some product components (for example, the print-cartridge OPC).</li><li>• Is the product exposed to direct sunlight?</li></ul>
Media	<ul style="list-style-type: none"><li>• Does the customer use only supported media?</li><li>• Is the media in good condition (no curls, folds, or distortion)?</li><li>• Is the media stored correctly and within environmental limits?</li></ul>
Input trays	<ul style="list-style-type: none"><li>• Is the amount of media in the tray within specifications?</li><li>• Is the media correctly placed in the tray?</li><li>• Are the paper guides aligned with the stack?</li><li>• Is the cassette correctly installed in the product?</li></ul>
Print cartridges	<ul style="list-style-type: none"><li>• Is each print cartridge installed correctly?</li></ul>
Transfer unit and fuser	<ul style="list-style-type: none"><li>• Are the transfer unit and fuser installed correctly?</li></ul>

General topic	Questions
Covers	<ul style="list-style-type: none"> <li>• Is the front cover closed?</li> </ul>
Condensation	<ul style="list-style-type: none"> <li>• Does condensation occur following a temperature change (particularly in winter following cold storage)? If so, wipe affected parts dry or leave the product on for 10 to 20 minutes.</li> <li>• Was a print cartridge opened soon after being moved from a cold to a warm room? If so, allow the print cartridge to sit at room temperature for 1 to 2 hours.</li> </ul>
Miscellaneous	<ul style="list-style-type: none"> <li>• Check for and remove any non-HP components (print cartridges, memory modules, and EIO cards) from the product.</li> <li>• If the hardware or software configuration has not changed or the problem is not associated with any specific software, see the complete service manual for this product.</li> <li>• Remove the product from the network and ensure that the failure is associated with the product before beginning troubleshooting.</li> <li>• For any print-quality issues, calibrate the product.</li> </ul>

## Power-on checks

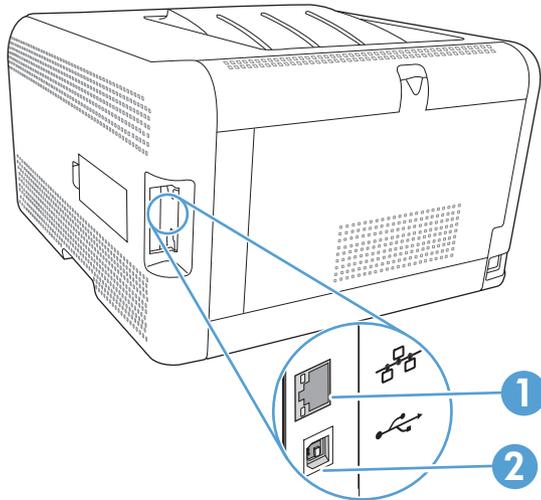
When you turn on the product, if it does not make any sound or if the control-panel display is blank, check the following items:

- Verify that the product is plugged directly into an active electrical outlet that has the correct voltage. Do not plug the product into a surge protector or power strip.
- Verify that the on/off switch is in the on position.
- Verify that the formatter is seated and operating correctly.
- Remove any HP Jetdirect accessories or other devices, and then try to turn the product on again.
- Make sure that the control-panel display is connected.
- Check the two fuses on the power supply.
- If necessary, replace the power supply.
- If necessary, replace the DC controller.

# Tools for troubleshooting

## Diagrams

### Plug/jack locations



- |   |                       |
|---|-----------------------|
| 1 | Network port          |
| 2 | Hi-Speed USB 2.0 port |

## Locations of major components

Figure 2-1 Major components

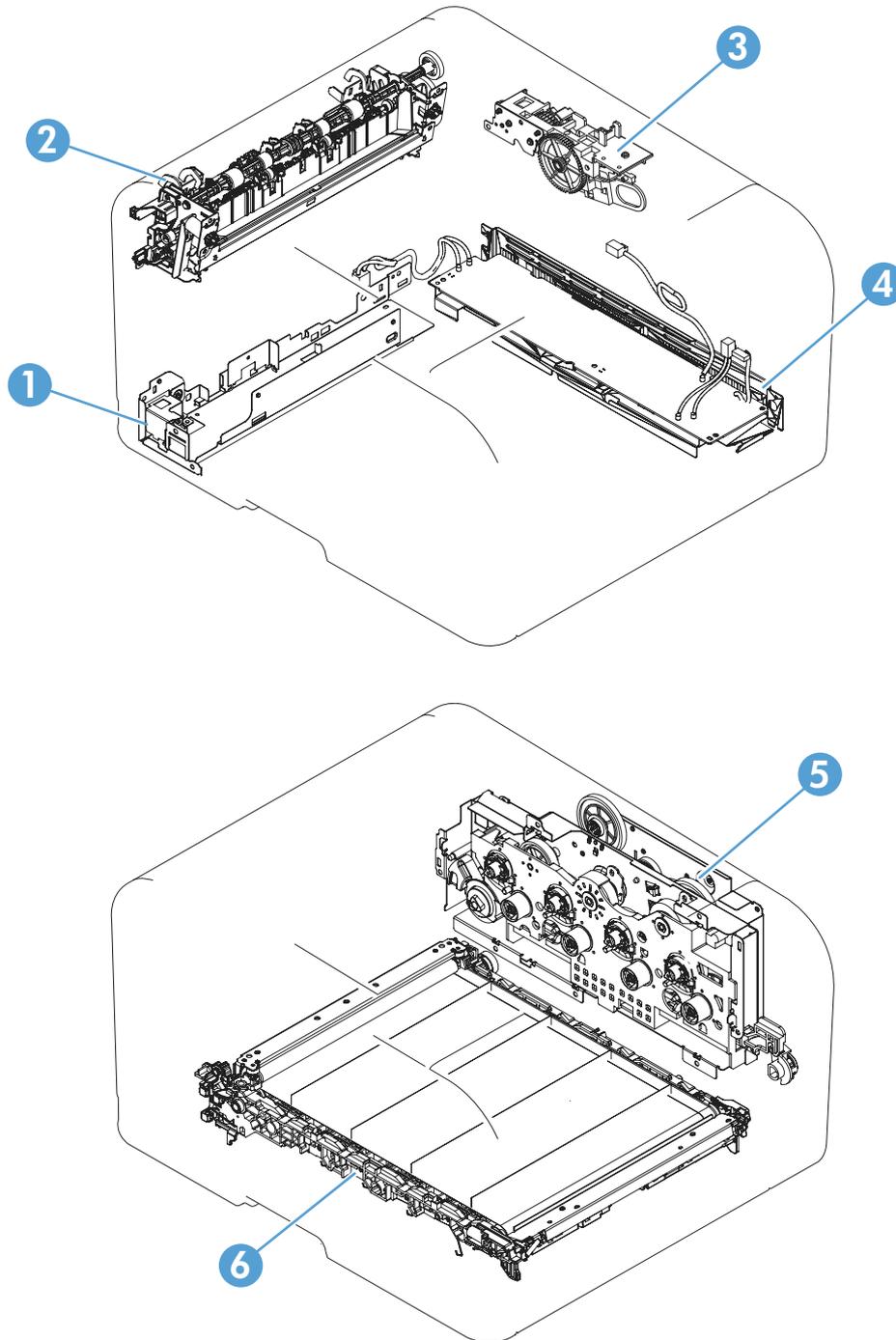


Table 2-1 Major components

Item	Description
1	Fuser power supply
2	Fuser assembly

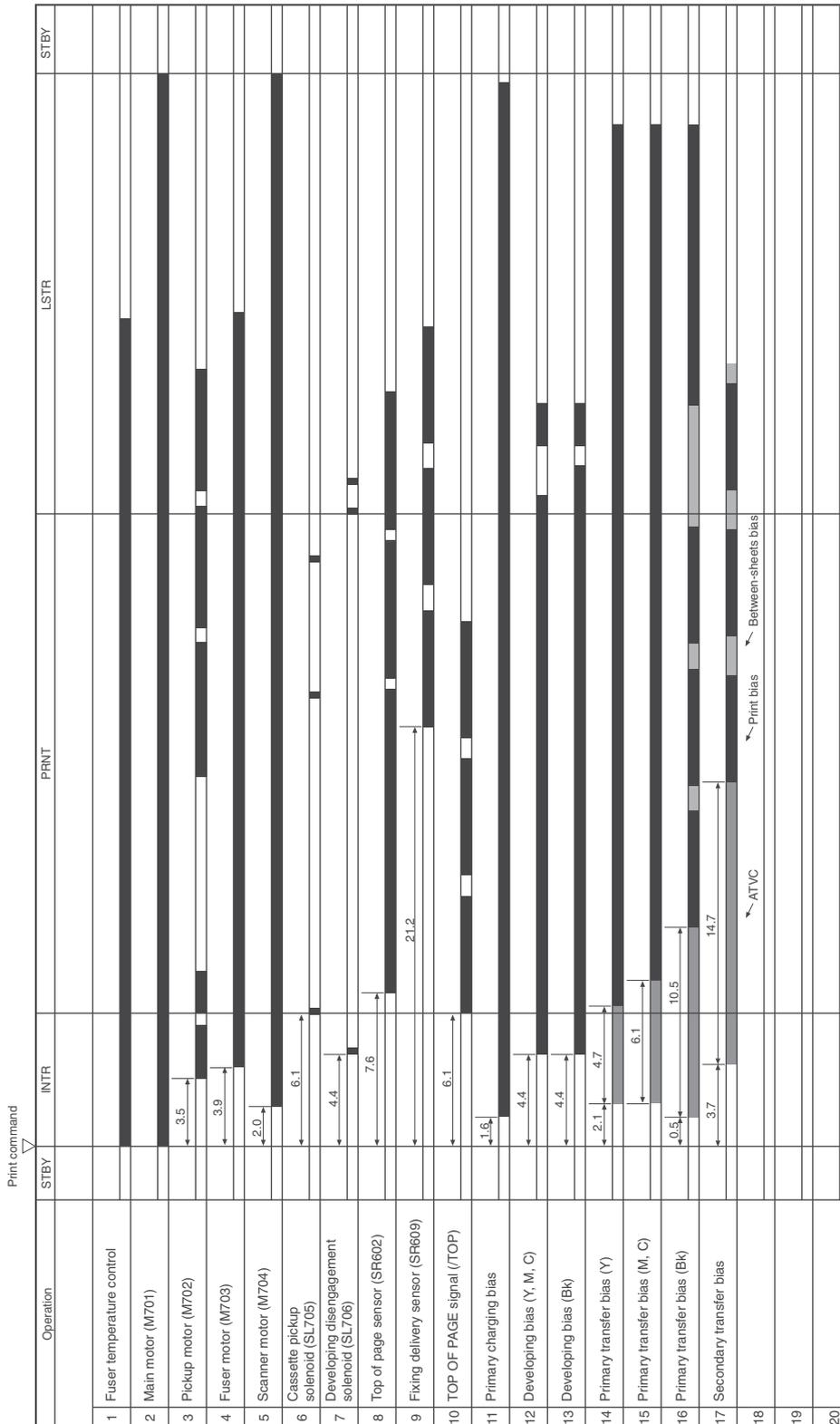
**Table 2-1 Major components (continued)**

Item	Description
3	Sub-drive assembly
4	Low-voltage power supply
5	Main drive assembly
6	ITB assembly

## General timing charts

The following charts lists the approximate timing for this product, specified in seconds.

Figure 2-2 Timing diagram





## Use HP ToolboxFX

The HP Color LaserJet CP1520 Series Toolbox is a program you can use to complete the following tasks:

- Check the product status.
- Configure the product settings.
- View troubleshooting information.

You can view the HP Color LaserJet CP1520 Series Toolbox program when the product is directly connected to your computer or is connected to the network. You must perform a recommended software installation to use the HP Color LaserJet CP1520 Series Toolbox program.

---

 **NOTE:** The HP Color LaserJet CP1520 Series Toolbox program is not supported for Windows Server 2003, Server 2008, Vista Starter, or Mac operating systems.

You do not have to have Internet access to open and use the HP Color LaserJet CP1520 Series Toolbox program.

---

## View the HP Color LaserJet CP1520 Series Toolbox

Open the HP Color LaserJet CP1520 Series Toolbox program in one of these ways:

- In the Windows system tray, double-click the HP Color LaserJet CP1520 Series Toolbox icon (.
- On the Windows **Start** menu, click **Programs** (or **All Programs** in Windows XP and Vista), click **HP**, click the name of this product, and then click the HP Color LaserJet CP1520 Series Toolbox item.

The HP Color LaserJet CP1520 Series Toolbox program contains the following folders:

- Device Status
- Help
- System Settings
- Print Settings
- Network Settings

## HP ToolboxFX sections

### Status

The **Status** folder contains links to the following main pages:

- **Device status.** This page indicates product conditions such as a jam or an empty tray. After you correct a problem, click **Refresh status** to update the product status.
- **Supplies status.** View details such as the estimated percent of life remaining in the print cartridge and the number of pages printed with the current print cartridge. This page also has links for ordering supplies and for finding recycling information.
- **Device configuration.** View a detailed description of the current product configuration, including the amount of memory installed and whether optional trays are installed.
- **Network summary.** View a detailed description of the current network configuration, including the IP address and network status.
- **Reports.** Print the configuration page and other information pages, such as the supplies status page.
- **Color usage job log.** View color usage information for the product.

### Event log

The event log is a table where the product events are logged for your reference. The log contains codes that correspond to the error messages that appear on the product control panel display. The number in the Page Count column specifies the total number of pages that the product had printed when the error occurred.

### Help

The **Help** folder contains links to the following main pages:

- **Color Printing Tools.** Open Microsoft Office Basic Colors or the full palette of color with associated RGB values.

### System Settings

The **System Settings** folder contains links to the following main pages:

- **Device Information.** View information such as the product description and a contact person.
- **Paper Setup.** Configure trays or change the product paper-handling settings, such as default paper size and default paper type.
- **Print Quality.** Change the print-quality settings.
- **Print Density.** Change the print-density settings, such as contrast, highlights, midtones, and shadows.
- **Paper Types.** Change the mode settings for each paper type, such as letterhead, prepunched, or glossy paper.
- **System Setup.** Change the system settings, such as jam recovery and auto continue. Change the **Cartridge low threshold** setting, which sets the toner level that causes a low toner alert.

- **Save/Restore Settings.** Save the current settings for the product to a file on your computer. Use this file to load the same settings onto another product or to restore these settings to this product at a later time.
- **Product Security.** Set a password to protect the device settings. After a password is set, users are prompted to enter the password before being allowed to change device settings. This password is the same as the embedded Web server password.

## Device Information

The Device Information page stores data about your product for future reference. The information that you type in the fields on this page displays on the configuration page. You can type any character in each of these fields.



---

**NOTE:** You must click **Apply** before your changes take effect.

---

## Paper Setup

Use these options to configure your default product settings. These are the same options that are available on the control panel menus.

The following options are available for handling print jobs when the product is out of paper.

- Select the **Wait forever** option to make the product wait until you load the correct paper and press the **OK** button. This is the default setting.
- Select the **Cancel** option to automatically cancel the print job after a specified delay.
- Select the **Override** option to print on a different size or type after a specified delay.

If you select either the **Override** or **Cancel** options, specify the number of seconds to delay. Press the right arrow ► button to increase the time, up to 3600 seconds. Press the left arrow ◀ button to decrease the time.

The **Paper out time** field specifies how long the product waits before acting on your selections. You can specify from 0 to 3600 seconds.

---

 **NOTE:** You must click **Apply** before your changes take effect.

---

## Print Quality

Use these options to improve the appearance of your print jobs. These are the same options that are available on the control panel menus.

### Color Calibration

- **Power On Calibration.** Specify whether the product should calibrate when you turn it on.
- **Calibration Timing.** Specify how frequently the product should calibrate.
- **Calibrate Now.** Set the product to calibrate immediately.

---

 **NOTE:** You must click **Apply** before your changes take effect.

---

## Print Density

Use these settings to make fine adjustments in the amount of each color of toner that is used for your printed documents.

- **Contrasts.** Contrast is the range of difference between light (highlight) and dark (shadow) colors. To increase the overall range between light and dark colors, increase the **Contrasts** setting.
- **Highlights.** Highlights are colors that are nearly white. To darken highlight colors, increase the **Highlights** setting. This adjustment does not affect midtone or shadow colors.
- **Midtones.** Midtones are colors that are halfway between white and solid density. To darken midtone colors, increase the **Midtones** setting. This adjustment does not affect highlight or shadow colors.
- **Shadows.** Shadows are colors that are nearly solid density. To darken shadow colors, increase the **Shadows** setting. This adjustment does not affect highlight or midtone colors.

## Paper Types

Use these options to configure print modes that correspond to the various media types. To reset all modes to factory default settings, select **Restore modes**.

 **NOTE:** You must click **Apply** before your changes take effect.

---

## System Setup

Use these system settings to configure miscellaneous print settings. These settings are not available on the control panel.

 **NOTE:** You must click **Apply** before your changes take effect.

---

## Print Settings

The HP Color LaserJet CP1520 Series Toolbox **Print Settings** tab contains links to the following main pages:

- **Printing.** Change the default product print settings, such as number of copies and paper orientation.
- **PCL5c.** View and change the PCL5c settings.
- **PostScript.** View and change the PS settings.

## Printing

Use these options to configure the settings for all print functions. These are the same options that are available on the control panel.

 **NOTE:** You must click **Apply** before your changes take effect.

---

## PCL5c

Use these options to configure the settings when you are using the PCL print personality.

 **NOTE:** You must click **Apply** before your changes take effect.

---

## PostScript

Use this option when you are using the PostScript print personality. When the **Print PostScript error** option is turned on, the PostScript error page automatically prints when PostScript errors occur.

 **NOTE:** You must click **Apply** before your changes take effect.

---

## Network Settings

The network administrator can use this tab to control the network-related settings for the product when it is connected to an IP-based network.

 **NOTE:** You cannot configure wireless network settings by using HP ToolboxFX.

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## Shop for Supplies

This button, at the top of each page, links to a Web site where you can order replacement supplies. You must have Internet access to use this feature.

## Other Links

This section contains links that connect you to the Internet. You must have Internet access to use any of these links. If you use a dial-up connection and did not connect when you first opened the HP Color LaserJet CP1520 Series Toolbox program, you must connect before you can visit these Web sites. Connecting might require that you close the HP Color LaserJet CP1520 Series Toolbox program and reopen it.

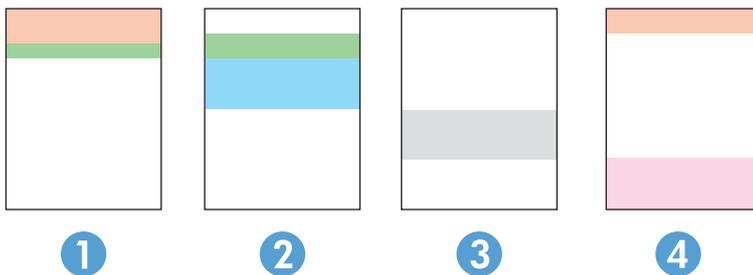
- **HP Instant Support.** Connects to the HP Instant Support Web site.
- **Support and Troubleshooting.** Connects to the support site for the product where you can search for help with a specific problem.
- **Product Registration.** Connects to the HP product registration Web site.

## Internal print-quality test pages

### Interpret the Print Quality Page

1. On the product control panel, open the **Reports** menu.
2. Select the **Print Quality Page** item to print it.

This page contains five bands of color, which are divided into four groups as indicated in the following illustration. By examining each group, you can isolate the problem to a particular print cartridge.



Section	Print-cartridge
1	Yellow
2	Cyan
3	Black
4	Magenta

- If dots or streaks appear in only one of the groups, replace the print cartridge that correlates with that group.
- If dots appear in more than one group, print a cleaning page. If this does not solve the problem, determine if the dots are always the same color; for example, if magenta dots appear in all five color bands. If the dots are all the same color, replace that print cartridge.
- If streaks appear in multiple color bands, contact HP. A component other than the print cartridge is probably causing the problem.

## Clean the product

During the printing process, paper, toner, and dust particles can accumulate inside the product. Over time, this buildup can cause print-quality problems such as toner specks or smearing. This product has a cleaning mode that can correct and prevent these problems.

1. At the product control panel, press the **OK** button.
2. Press the right arrow ► to highlight the **Service** menu, and then press the **OK** button.
3. Press the right arrow ► to highlight the **Cleaning Page** option, and then press the **OK** button.

## Configuration page

The configuration page lists current product settings and properties. This page also contains a status log report. To print a configuration page, do one of the following:

1. Press **OK** to open the menus.
2. Press the left arrow ◀ or right arrow ► button to navigate to **Reports**, and then press the **OK** button.
3. Press the left arrow ◀ or right arrow ► button to navigate to the report you want to print, and then press the **OK** button to print the report.
4. Press **Cancel X** to exit the menus.

## Print-quality troubleshooting tools

### Repetitive image defects

If the product output has a consistent, repetitive defect, use the table in this section to determine which part needs to be replaced based on the measured distance between the repetitions of the defect.

Repetitive defects for the ITB normally appear on every other page, because the ITB is longer than a page. However, the period of the repetitive defect can vary depending on the type of media, and a repetitive defect can occur more than once on the same page.

 **NOTE:** The following table replaces the graphical repetitive defect ruler. You can make your own ruler by using these measurements.

**Table 2-2 Repetitive image defects**

Distance between identical defects	Component	Notes
22.3 mm (0.87 in)	Developer roller (one rotation)	Appears in a single color plane
26.7 mm (1.05 in)	Charger roller	Appears in a single color plane.
28.5 mm (1.12 in)	Developer RS roller (one rotation)	Inside developer, it and removes and supplies toner to the developer sleeve.
44.0 mm (1.73 in)	Registration roller	
56.5 mm (2.22 in)	Fuser film (one rotation)	Appears in all color planes.
56.8 mm (2.23 in)	Fuser pressure roller (one rotation)	Appears in all color planes.
57.0 mm (2.24 in)	Transfer roller	Appears in all color planes.
69.0 mm (2.71 in)	Cartridge-to-cartridge spacing	Distance between each color OPC.
75.8 mm (2.98 in)	OPC drum (one rotation)	Appears in a single color plane and might be either a dark or white spot.
633.6 mm (24.94 in)	ITB	Because the ITB is longer than a page, you might have to look at multiple pages to determine if a repetitive defect is present.
69.0 mm (2.71 in)	ITB drive roller pitch	

### Calibrate the product to align the colors

If the printed output has colored shadows, blurry graphics, or areas that have poor color, you might need to calibrate the product to align the colors. Print the Diagnostics Page from the Reports menu on the control panel to check the color alignment. If the blocks of color on that page are not aligned with each other, you need to calibrate the product.

1. On the product control panel, open the **System Setup** menu.
2. Open the Print quality menu, and select the **Calibrate color** item.
3. Select the **Calibrate now** option.

## Control panel menus

- [Reports menu](#)
- [Quick Forms menu](#)
- [System Setup menu](#)
- [Service menu](#)
- [Network Setup menu](#)

## Reports menu

Use the **Reports** menu to print reports that provide information about the product.

Menu item	Description
<b>Demo page</b>	Prints a color page that demonstrates print quality.
<b>Menu structure</b>	Prints a map of the control panel-menu layout. The active settings for each menu are listed.
<b>Config report</b>	Prints a list of all the product settings. Includes network information when the product is connected to a network.
<b>Supplies status</b>	Prints the status for each print cartridge, including the following information: <ul style="list-style-type: none"><li>• Estimated percentage of cartridge life remaining</li><li>• Approximate pages remaining</li><li>• Part numbers for HP print cartridges</li><li>• Number of pages printed</li><li>• Information about ordering new HP print cartridges and recycling used HP print cartridges</li></ul>
<b>Network Summary</b>	Prints a list of all product network settings
<b>Usage page</b>	Prints a page that lists PCL pages, PCL 6 pages, PS pages, pages that were jammed or mispicked in the product, monochrome (black and white) or color pages; and reports the page count  HP Color LaserJet CP1525nw only: prints a page that lists the information above, and the monochrome (black and white) or color pages printed, number of memory cards inserted, number of PictBridge connections, and the PictBridge page count
<b>PCL font list</b>	Prints a list of all the PCL fonts that are installed
<b>PS font list</b>	Prints a list of all the PostScript (PS) fonts that are installed
<b>PCL6 font list</b>	Prints a list of all the PCL6 fonts that are installed
<b>Color usage log</b>	Prints a report that shows the user name, application name, and color usage information on a job-by-job basis
<b>Service page</b>	The <b>Service page</b> provides information on supported paper types, copy settings and other miscellaneous settings that are not on the configuration page.
<b>Diagnostics page</b>	Prints the calibration and color diagnostics pages
<b>Print Quality</b>	Prints a color test page which can be useful for diagnosing print quality defects.

## Quick Forms menu

Menu item	Sub-menu item	Description
Notebook Paper	Narrow Rule	Prints pages that have preprinted lines
	Wide Rule	
	Child Rule	
Graph Paper	1/8 inch	Prints pages that have preprinted graph lines
	5 mm	
Checklist	1-Column	Prints pages that have preprinted lines with check boxes
	2-Column	
Music Paper	Portrait	Prints pages that have preprinted lines for writing music
	Landscape	

## System Setup menu

In the following table, items that have asterisks (\*) indicate the factory default setting.

Menu item	Sub-menu item	Sub-menu item	Description
Language			Select the language for the control panel display messages and the product reports.
Paper Setup	Def. paper size	Letter	Sets the size for printing internal reports or any print job that does not specify a size.  <b>NOTE:</b> The default setting is determined by the choice of location during the initial product setup.
		A4	
		Legal	
	Def. paper type	A list of available paper types appears.	Select the paper type for printing internal reports or any print job that does not specify a type.
	Tray 2	Paper type Paper size	Select the default size and type for Tray 2 from the list of available sizes and types.

Menu item	Sub-menu item	Sub-menu item	Description
	<b>Paper out action</b>	<b>Wait forever*</b> <b>Cancel</b> <b>Override</b>	<p>Select how the product should react when a print job requires a size or type that is not available or when a specified tray is empty.</p> <p>Select the <b>Wait forever</b> option to make the product wait until you load the correct paper and press the <b>OK</b> button. This is the default setting.</p> <p>Select the <b>Override</b> option to print on a different size or type after a specified delay.</p> <p>Select the <b>Cancel</b> option to automatically cancel the print job after a specified delay.</p> <p>If you select either the <b>Override</b> or <b>Cancel</b> options, the control panel prompts you to specify the number of seconds to delay. Press the right arrow ► button to increase the time, up to 3600 seconds. Press the left arrow ◀ button to decrease the time.</p>
<b>Print quality</b>	<b>Calibrate color</b>	<b>After power on</b> <b>Calibrate now</b>	<p><b>After power on:</b> Select how soon the product should calibrate after you turn it on. The default setting is <b>15 minutes</b>.</p> <p><b>Calibrate now:</b> Makes the product perform a calibration immediately. If a job is processing, the product calibrates after the job is complete. If an error message displays, you must clear the error first.</p>
<b>PowerSave Time</b>	<b>Sleep Delay</b>	<b>15 minutes*</b> <b>30 Minutes</b> <b>1 Hour</b> <b>2 Hours</b> <b>Off</b> <b>1 Minute</b>	<p>Sets how long the product remains idle before it enters <b>PowerSave</b> mode. The product automatically exits <b>PowerSave</b> mode when you send a print job or press a control panel button.</p>
<b>Display contrast</b>	<b>Medium*</b> <b>Darker</b> <b>Darkest</b> <b>Lightest</b> <b>Lighter</b>		<p>Select the level of contrast for the display.</p>

Menu item	Sub-menu item	Sub-menu item	Description
At Very Low	Black Cartridge	Stop	Set how the product behaves when the black print cartridge reaches the very low threshold.
		Prompt*	
		Continue	<ul style="list-style-type: none"> <li>• <b>Stop:</b> The product stops printing until you replace the print cartridge.</li> <li>• <b>Prompt:</b> The product stops printing and prompts you to replace the print cartridge. You can acknowledge the prompt and continue printing.</li> <li>• <b>Continue:</b> The product alerts you that the print cartridge is very low, but it continues printing.</li> </ul>
	Color Cartridges	Stop	Set how the product behaves when the one of the color print cartridges reaches the very low threshold.
		Prompt*	
		Continue	
		Print Black	
			<ul style="list-style-type: none"> <li>• <b>Stop:</b> The product stops printing until you replace the print cartridge.</li> <li>• <b>Prompt:</b> The product stops printing and prompts you to replace the print cartridge. You can acknowledge the prompt and continue printing.</li> <li>• <b>Continue:</b> The product alerts you that the print cartridge is very low, but it continues printing.</li> <li>• <b>Print Black:</b> The product alerts you that the print cartridge is very low, but it continues printing in black only. To configure the product to print in color and use the remaining toner in the print cartridge past very low, follow these steps: <ul style="list-style-type: none"> <li>1. On the product control panel, press the <b>OK</b> button, and then press the <b>System Setup</b> button.</li> <li>2. Press the <b>At Very Low</b> button, and then press the <b>Color Cartridges</b> button. Press the <b>Continue</b> button.</li> </ul> </li> </ul> <p>When you choose to replace the very low print cartridge, color printing resumes automatically.</p>

Menu item	Sub-menu item	Sub-menu item	Description
<b>User-Defined Low</b>	<b>Black</b>		Type the percentage of estimated life remaining at which the product alerts you that the print cartridge is low.
	<b>Cyan</b>		
	<b>Magenta</b>		
	<b>Yellow</b>		
<b>Courier font</b>	<b>Regular</b>		Selects a version of the Courier font. The default is <b>Regular</b> .
	<b>Dark</b>		

## Service menu

Use this menu to restore default settings, clean the product, and activate special modes that affect print output. Items that have asterisks (\*) indicate the factory default setting.

Menu item	Sub-menu item	Description
<b>Cleaning Page</b>		Use this option to clean the product if you see toner specks or other marks on the printed output. The cleaning process removes dust and excess toner from the paper path.  When you select this item, the product prompts you to load plain paper in Tray 1 and then press the <b>OK</b> button to start the cleaning process. Wait until the process is complete. Discard the page that prints.
<b>USB Speed</b>	<b>High*</b>	Sets the USB speed to <b>High</b> or <b>Full</b> . For the product to actually operate at high speed, it must have high speed enabled and be connected to an EHCI host controller that is also operating at high speed. This menu item also does not reflect the current operating speed of the product.
	<b>Full</b>	
<b>Less paper curl</b>	<b>On</b>	If printed pages are consistently curled, use this option to set the product to a mode that reduces curl.
	<b>Off*</b>	
<b>Archive print</b>	<b>On</b>	If you are printing pages that will be stored for a long time, use this option to set the product to a mode that reduces toner smearing and dusting.
	<b>Off*</b>	
<b>Firmware Date</b>		Displays the current firmware datecode.
<b>Restore defaults</b>		Sets all customized copy settings to the factory default values.

## Network Setup menu

Use this menu to establish network configuration settings.

Menu item	Sub-menu item	Description
<b>Wireless Menu</b> (wireless products only)	<b>WPS Setup</b>	If your wireless router supports this feature, use this method to set up the product on a wireless network. This is the simplest method.
	<b>Run Network Test</b>	Tests the wireless network and prints a report with the results.
	<b>Turn Wireless On/Off</b>	Enable or disable the wireless network feature.
<b>TCP IP config</b>	<b>Automatic</b>	Select <b>Automatic</b> to automatically configure all the TCP/IP settings.
	<b>Manual</b>	Select <b>Manual</b> to manually configure the IP address, subnet mask, and default gateway.  The default setting is <b>Automatic</b> .
<b>Auto Crossover</b>	<b>On</b>	This item is used when you are connecting the product directly to a personal computer using an Ethernet cable (you might have to set this to <b>On</b> or <b>Off</b> depending on the computer being used).  The default setting is <b>On</b> .
	<b>Off</b>	
<b>Network services</b>	<b>IPv4</b>	This item is used by the network administrator to limit the network services available on this product.  <b>On</b>  <b>Off</b>  The default setting is <b>On</b> .
	<b>IPv6</b>	
<b>Show IP Address</b>	<b>No</b>	<b>No:</b> The product IP address will not appear on the control panel display.  <b>Yes:</b> The product IP address will appear on the control panel display.  The default setting is <b>No</b> .
	<b>Yes</b>	
<b>Link Speed</b>	<b>Automatic (Default)</b>	Sets the link speed manually if needed.
	<b>10T Full</b>	After setting the link speed, the product automatically restarts.
	<b>10T Half</b>	
	<b>100TX Full</b>	
	<b>100TX Half</b>	
<b>Restore defaults</b>	Press <b>OK</b> to restore the network configuration settings to the default values.	

## Interpret control panel messages

### Control panel message types

The control panel messages indicate the current product status or situations that might require action.

Alert and warning messages appear temporarily and might require you to acknowledge the message by pressing the **OK** button to resume or by pressing the **Cancel**  button to cancel the job. With certain warnings, the job might not complete or the print quality might be affected. If the alert or warning message is related to printing and the auto-continue feature is on, the product will attempt to resume the printing job after the warning has appeared for 10 seconds without acknowledgement.

Critical error messages can indicate some kind of failure. Turning off and then turning on the power might fix the problem. If a critical error persists, the product might require service.

Status-alert messages appear on the computer screen (in addition to control panel messages) when the product has certain problems. If a status-alert message is available, a  appears in the **Status alert** column in the following table.

### Control panel messages

Control panel message	Status alert	Description	Recommended action
10.XXXX Supply error		<p>The e-label for one of the print cartridges cannot be read or is missing.</p> <ul style="list-style-type: none"><li>• 10.0000 = black e-label error</li><li>• 10.0001 = cyan e-label error</li><li>• 10.0002 = magenta e-label error</li><li>• 10.0003 = yellow e-label error</li><li>• 10.1000 = black e-label is missing</li><li>• 10.1001 = cyan e-label is missing</li><li>• 10.1002 = magenta e-label is missing</li><li>• 10.1003 = yellow e-label is missing</li></ul>	<p>Reinstall the print cartridge.</p> <p>Turn the product off and then on.</p> <p>If the problem is not solved, replace the print cartridge.</p>
49 Error Turn off then on		<p>The product experienced an internal error.</p>	<p>Turn the product off, wait at least 30 seconds, and then turn the product on and wait for it to initialize.</p> <p>If you are using a surge protector, remove it. Plug the product directly into the wall socket. Turn the product power on.</p>

Control panel message	Status alert	Description	Recommended action
50.10 Fuser error	✓	Fuser is defective (abnormal high temperature of the thermistor)	<ol style="list-style-type: none"> <li>1. Reconnect the connectors of the fuser unit (J802) and DC controller PCA (J104).</li> <li>2. Measure the resistance between the connector J802-1 and J802-3 on the fuser. If the resistance is not within the range from approximately 220 kΩ to 660 kΩ (at ambient temperatures), replace the fuser.</li> <li>3. Replace the fuser power supply unit.</li> </ol>
50.12 Fuser error	✓	Fuser is defective (Fuser 1 pressure release mechanism failure)	<ol style="list-style-type: none"> <li>1. Reconnect the connectors of the DC controller PCA (J110, J115).</li> <li>2. Check the sensor flag of the fuser pressure release sensor. If the sensor flag is damaged, replace it.</li> <li>3. Replace the fuser motor.</li> <li>4. Replace the high-voltage power supply unit.</li> <li>5. Replace the fuser unit.</li> </ol>
50.2 Fuser error	✓	Fuser is defective (warm-up failure)	<ol style="list-style-type: none"> <li>1. Reconnect the connectors of the fuser unit (J802) and DC controller PCA (J104).</li> <li>2. Measure the resistance between the connector J801-1 and J801-3 on the fuser. If the resistance is not within the range from approximately 220 kΩ to 660 kΩ (at ambient temperatures), replace the fuser.</li> <li>3. Reconnect the connectors of the fuser power supply unit (J201, J202, J203).</li> <li>4. Measure the resistance between the connector J801-1 and J801-2 on the fuser. If the resistance is not within the range from approximately 21 Ω to 25 Ω (at ambient temperatures), replace the fuser.</li> <li>5. If the message persists, replace the fuser power supply unit.</li> </ol>

Control panel message	Status alert	Description	Recommended action
50.3 Fuser error	✓	Fuser is defective (abnormally low temperature of the thermistor)	<ol style="list-style-type: none"> <li>1. Reconnect the connectors of the fuser (J802) and DC controller PCA (J104).</li> <li>2. Measure the resistance between the connector J802-1 and J802-3 on the fuser. If the resistance is not within the range from approximately 220 kΩ to 660 kΩ (at ambient temperatures), replace the fuser.</li> <li>3. Reconnect the connectors of the fuser power supply unit (J201, J202, J203).</li> <li>4. Measure the resistance between the connector J801-1 and J801-2 on the fuser. If the resistance is not within the range from approximately 21 Ω to 25 Ω (at ambient temperatures), replace the fuser.</li> <li>5. Replace the fuser.</li> <li>6. Replace the fuser power supply unit.</li> </ol>
50.6 Fuser error	✓	Fuser is defective (drive circuit failure)	<ol style="list-style-type: none"> <li>1. Reconnect the connectors of the fuser power supply unit (J201, J202, J203) and DC controller PCA (J105).</li> <li>2. Check the power source. If the power generator is used, improve the situation.  <b>NOTE:</b> If the product does not meet the power requirement of 40 to 70Hz frequency, the fuser temperature control does not work properly and this causes malfunction.</li> <li>3. Replace the fuser power supply unit.</li> </ol>
51.XX Error Turn off then on	✓	Optical unit is defective.	<p>Reconnect the connectors of the laser driver PCA (J501) and the DC controller PCA (J108, J109).</p> <p>If the problem is not solved, replace the product.</p>

Control panel message	Status alert	Description	Recommended action
<b>54.XX Error</b> Turn off then on	✓	The product has experienced a density sensor error.	Turn the product power off, wait at least 30 seconds, and then turn the product power on and wait for it to initialize.  If you are using a surge protector, remove it. Plug the product directly into the wall socket. Turn the product power on.
<b>55.X Error</b> Turn off then on	✓	The product has experienced a DC controller memory error.	Turn the product power off, wait at least 30 seconds, and then turn the product power on and wait for it to initialize.  If you are using a surge protector, remove it. Plug the product directly into the wall socket. Turn the product power on.
<b>57 Fan error</b> Turn off then on	✓	The product has experienced a problem with its internal fan.	Turn the product power off, wait at least 30 seconds, and then turn the product power on and wait for it to initialize.  If you are using a surge protector, remove it. Plug the product directly into the wall socket. Turn the product power on.
<b>59.X Error</b> Turn off then on	✓	The product has experienced a problem with one of the motors.  <b>59.20:</b> Main motor is defective (start-up failure)  <b>59.30:</b> Main motor is defective (rotational failure)	Turn the product power off, wait at least 30 seconds, and then turn the product power on and wait for it to initialize.  If you are using a surge protector, remove it. Plug the product directly into the wall socket. Turn the product power on.  If the problem is not solved, follow these steps. <ol style="list-style-type: none"> <li>1. Reconnect the connectors of the main motor (J701) and DC controller PCA (J121).</li> <li>2. If the problem persists, replace the main motor.</li> </ol>

Control panel message	Status alert	Description	Recommended action
<b>79 Error</b> Turn off then on		The product has experienced an internal firmware error.	Turn the product power off, wait at least 30 seconds, and then turn the product power on and wait for it to initialize.  If you are using a surge protector, remove it. Plug the product directly into the wall socket. Turn the product power on.
<b>79 Service error</b> Turn off then on		An incompatible DIMM is installed.	<ol style="list-style-type: none"> <li>1. Turn the product power off.</li> <li>2. Install a DIMM that the product supports.</li> <li>3. Turn the product on.</li> </ol>
<b>Black Cartridge Low</b>	✓	If this message appears when a new cartridge is installed, follow the steps in the Recommended action column.	<ol style="list-style-type: none"> <li>1. Reinstall the cartridge.</li> <li>2. Reconnect the connector of the DC controller PCA (J124).</li> <li>3. If the problem is not solved, replace the cartridge.</li> </ol>
<b>Black in wrong position</b>	✓	The print cartridge is installed in the incorrect slot.	Make sure that each print cartridge is installed in the correct slot. From front to back, the print cartridges are installed in this order: black, cyan, magenta, and yellow.
<b>Black Very Low</b>	✓	The print cartridge is at the end of its useful life, and the <b>At Very Low</b> menu item in the <b>System Setup</b> menu is set to <b>Continue</b> .	<p>To ensure optimal print quality, HP recommends replacing the print cartridge at this point. You can continue printing until you notice a decrease in print quality. Actual cartridge life may vary.</p> <p>Once an HP supply has reached "very low", HP's premium Protection Warranty on that supply has ended. All print defects or cartridge failures incurred when an HP supply is used in continue at very low mode will not be considered to be defects in materials or workmanship in the supply under the HP Print Cartridge Warranty Statement.</p>
<b>Cyan Cartridge Low</b>	✓	If this message appears when a new cartridge is installed, follow the steps in the Recommended action column.	<ol style="list-style-type: none"> <li>1. Reinstall the cartridge.</li> <li>2. Reconnect the connector of the DC controller PCA (J124).</li> <li>3. If the problem is not solved, replace the cartridge.</li> </ol>

Control panel message	Status alert	Description	Recommended action
Cyan in wrong position	✓	The print cartridge is installed in the incorrect slot.	Make sure that each print cartridge is installed in the correct slot. From front to back, the print cartridges are installed in this order: black, cyan, magenta, and yellow.
Cyan Very Low	✓	The print cartridge is at the end of its useful life, and the <b>At Very Low</b> menu item in the <b>System Setup</b> menu is set to <b>Continue</b> .	<p>To ensure optimal print quality, HP recommends replacing the print cartridge at this point. You can continue printing until you notice a decrease in print quality. Actual cartridge life may vary.</p> <p>Once an HP supply has reached “very low”, HP’s premium Protection Warranty on that supply has ended. All print defects or cartridge failures incurred when an HP supply is used in continue at very low mode will not be considered to be defects in materials or workmanship in the supply under the HP Print Cartridge Warranty Statement.</p>
Device error Press [OK]		An internal error occurred.	Press the <b>OK</b> button to resume the job.
Front door open	✓	The product front door is open.	<p>Close the door.</p> <p>If the problem is not solved, follow these steps.</p> <ol style="list-style-type: none"> <li>1. Reconnect the connector of the DC controller PCA (J115).</li> <li>2. Check the sensor flag of the front door. If the sensor flag is damaged, replace the front door unit.</li> </ol>
Genuine HP supply installed		A genuine HP supply was installed. This message will appear briefly after the supply is installed and then be replaced by the message Ready.	No action necessary.
Incorrect supplies	✓	More than one print cartridge is installed in the incorrect slot.	Be sure that each print cartridge is in the correct slot. From front to back, the print cartridges are installed in this order: black, cyan, magenta, yellow.
Install <Color> cartridge	✓	The print cartridge is either not installed or not correctly installed in the product.	Install the print cartridge.

Control panel message	Status alert	Description	Recommended action
Invalid driver Press [OK]	✓	You are using an incorrect printer driver.	Select the correct printer driver.
Jam in <location>	✓	The product has detected a jam.	Clear the jam from the location indicated. The job should continue to print. If it does not, try reprinting the job.
Jam in tray # Clear jam and then Press [OK]	✓	The product has detected a jam.	Clear the jam from the location indicated, and then press the <b>OK</b> button.
Load paper	✓	Tray 2 is empty.	Load paper into Tray 2.
Load tray # <TYPE> <SIZE>	✓	A tray is configured for the paper type and size that the print job is requesting, but that tray is empty.	<p>Load the correct paper into the tray, or press the <b>OK</b> button to use paper in a different tray.</p> <p>If the problem is not solved, follow these steps.</p> <ol style="list-style-type: none"> <li>1. Reconnect the connectors of the priority slot media presence sensor (J604) and DC controller PCA (J116, J117).</li> <li>2. Check the sensor flag and spring of the priority slot media presence sensor and cassette media presence sensor. Replace the priority slot drive unit or the cassette.</li> </ol>
Load tray 1 plain <SIZE> Cleaning Page [OK] to start	✓	The product is ready to process the cleaning operation.	Load Tray 1 with plain paper in the size indicated, and then press the <b>OK</b> button.
Load tray 1 <TYPE> <SIZE>	✓	No trays are configured for the paper type and size that the print job is requesting.	Load the correct paper into Tray 1, or press the <b>OK</b> button to use paper in a different tray.
Magenta Cartridge Low	✓	If this message appears when a new cartridge is installed, follow the steps in the Recommended action column.	<ol style="list-style-type: none"> <li>1. Reinstall the cartridge.</li> <li>2. Reconnect the connector of the DC controller PCA (J124).</li> <li>3. If the problem is not solved, replace the cartridge.</li> </ol>
Magenta in wrong position	✓	The print cartridge is installed in the incorrect slot.	Make sure that each print cartridge is installed in the correct slot. From front to back, the print cartridges are installed in this order: black, cyan, magenta, and yellow.

Control panel message	Status alert	Description	Recommended action
<b>Magenta Very Low</b>	✓	The print cartridge is at the end of its useful life, and the <b>At Very Low</b> menu item in the <b>System Setup</b> menu is set to <b>Continue</b> .	<p>To ensure optimal print quality, HP recommends replacing the print cartridge at this point. You can continue printing until you notice a decrease in print quality. Actual cartridge life may vary.</p> <p>Once an HP supply has reached “very low”, HP’s premium Protection Warranty on that supply has ended. All print defects or cartridge failures incurred when an HP supply is used in continue at very low mode will not be considered to be defects in materials or workmanship in the supply under the HP Print Cartridge Warranty Statement.</p>
<b>Manual duplex</b> <b>Load tray # Press [OK]</b>		The first side of a manual duplex job has printed, and the page needs to be loaded to process the second side.	Load the page in the indicated tray with the side to be printed face up, and the top of the page away from you, and then press the <b>OK</b> button.
<b>Manual feed &lt;TYPE&gt; &lt;SIZE&gt;</b> <b>Press [OK] for available media</b>	✓	The product is set for manual feed mode.	Press the <b>OK</b> button to clear the message <i>or</i> load the correct paper into Tray 1.
<b>Memory is low</b> <b>Press [OK]</b>	✓	The product memory is almost full.	<p>Press the <b>OK</b> button to finish the job, or press the <b>Cancel</b>  button to cancel the job.</p> <p>Break the job into smaller jobs that contain fewer pages.</p>
<b>Misprint</b> <b>Press [OK]</b>	✓	Paper has been delayed as it moves through the product.	Press the <b>OK</b> button to clear the message.
<b>Non HP supply installed</b>	✓	A non-HP supply is installed.	<p>If you believe you purchased an HP supply, go to <a href="http://www.hp.com/go/antcounterfeit">www.hp.com/go/antcounterfeit</a>.</p> <p>Service or repairs that are required as a result of using non-HP supplies are not covered under HP warranty.</p>
<b>Print failure</b> <b>Press [OK] If error repeats turn off then on</b>	✓	The product cannot process the page.	<p>Press the <b>OK</b> button to continue printing the job, but output might be affected.</p> <p>If the error persists, turn the power off and then on. Resend the print job.</p>

Control panel message	Status alert	Description	Recommended action
Rear door open	✓	The product rear door is open.	<p>Close the door.</p> <p>If the problem is not solved, follow these steps.</p> <ol style="list-style-type: none"> <li>1. Reconnect the connector of the DC controller PCA (J115).</li> <li>2. Check the sensor flag of the rear door. If the sensor flag is damaged, replace the rear door.</li> </ol>
Remove shipping locks from <color> cartridge	✓	A print cartridge shipping lock is installed.	Be sure that the print cartridge shipping lock has been removed.
Remove shipping locks from all cartridges	✓	A print cartridge shipping lock is installed on one or more print cartridges.	Be sure that each print cartridge shipping lock (orange pull tab on the left end of new print cartridges) has been removed.
Replace <color>	✓	The print cartridge is at the end of its useful life, and the <b>At Very Low</b> menu item in the <b>System Setup</b> menu is set to <b>Stop</b> .	<p>To ensure optimal print quality, HP recommends replacing the print cartridge at this point. You can continue printing until you notice a decrease in print quality. Actual cartridge life may vary.</p> <p>Once an HP supply has reached "very low", HP's premium Protection Warranty on that supply has ended. All print defects or cartridge failures incurred when an HP supply is used in continue at very low mode will not be considered to be defects in materials or workmanship in the supply under the HP Print Cartridge Warranty Statement.</p>
Supplies low	✓	More than one supply item is low.	<p>Check the supply level gauges on the control panel, or print a supplies status page to determine which print cartridges are low.</p> <p>Printing will continue until a "Very Low" message displays. Consider having replacement supplies on hand.</p>

Control panel message	Status alert	Description	Recommended action
<b>Unexpected size in tray #</b> <b>Load [size] Press [OK]</b>	✓	The product has detected paper in the tray that does not match the configuration for the tray.	Load the correct paper into the tray, or configure the tray for the size that you have loaded.  If the problem is not solved, follow these steps. <ol style="list-style-type: none"> <li>1. Reconnect the connectors of the DC controller PCA (J116).</li> <li>2. If the error still persists, replace the product.</li> </ol>
<b>Unsupported [color] installed</b> <b>Press [OK] to continue</b>	✓	The product has detected that a print cartridge not made by HP has been installed.	Press the <b>OK</b> button to continue printing.  If you believe you purchased an HP supply, please call the HP Fraud hotline at 1-877-219-3183. Service or repairs that are required as a result of using non-HP supplies is not covered under HP warranty.
<b>Used &lt;color&gt; Cartridge in use</b>	✓	A print cartridge reached the default low threshold while it was installed in a product.	No action necessary.
<b>Used supplies in use</b>	✓	A print cartridge reached the default low threshold while it was installed in a product.	No action necessary.
<b>Used supply installed</b> <b>To accept Press [OK]</b>	✓	A print cartridge reached the default low threshold while it was installed in a product.	Press the <b>OK</b> button to continue.
<b>Yellow Cartridge Low</b>	✓	If this message appears when a new cartridge is installed, follow the steps in the Recommended action column.	<ol style="list-style-type: none"> <li>1. Reinstall the cartridge.</li> <li>2. Reconnect the connector of the DC controller PCA (J124).</li> <li>3. If the problem is not solved, replace the cartridge.</li> </ol>

Control panel message	Status alert	Description	Recommended action
Yellow in wrong position	✓	The print cartridge is installed in the incorrect slot.	Make sure that each print cartridge is installed in the correct slot. From front to back, the print cartridges are installed in this order: black, cyan, magenta, and yellow.
Yellow Very Low	✓	The print cartridge is at the end of its useful life, and the <b>At Very Low</b> menu item in the <b>System Setup</b> menu is set to <b>Continue</b> .	<p>To ensure optimal print quality, HP recommends replacing the print cartridge at this point. You can continue printing until you notice a decrease in print quality. Actual cartridge life may vary.</p> <p>Once an HP supply has reached “very low”, HP’s premium Protection Warranty on that supply has ended. All print defects or cartridge failures incurred when an HP supply is used in continue at very low mode will not be considered to be defects in materials or workmanship in the supply under the HP Print Cartridge Warranty Statement.</p>

# Paper feeds incorrectly or becomes jammed

- [The product does not pick up paper](#)
- [The product picks up multiple sheets of paper](#)
- [Prevent paper jams](#)
- [Clear jams](#)

## The product does not pick up paper

If the product does not pick up paper from the tray, try these solutions.

1. Open the product and remove any jammed sheets of paper.
2. Load the tray with the correct size of paper for your job.
3. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides so they are touching the paper stack without bending it.
4. Check the product control panel to see if the product is waiting for you to acknowledge a prompt to feed the paper manually. Load paper, and continue.

## The product picks up multiple sheets of paper

If the product picks up multiple sheets of paper from the tray, try these solutions.

1. Remove the stack of paper from the tray and flex it, rotate it 180 degrees, and flip it over. *Do not fan the paper.* Return the stack of paper to the tray.
2. Use only paper that meets HP specifications for this product.
3. Use paper that is not wrinkled, folded, or damaged. If necessary, use paper from a different package.
4. Make sure the tray is not overfilled. If it is, remove the entire stack of paper from the tray, straighten the stack, and then return some of the paper to the tray.
5. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides so they are touching the paper stack without bending it.

## Prevent paper jams

To reduce the number of paper jams, try these solutions.

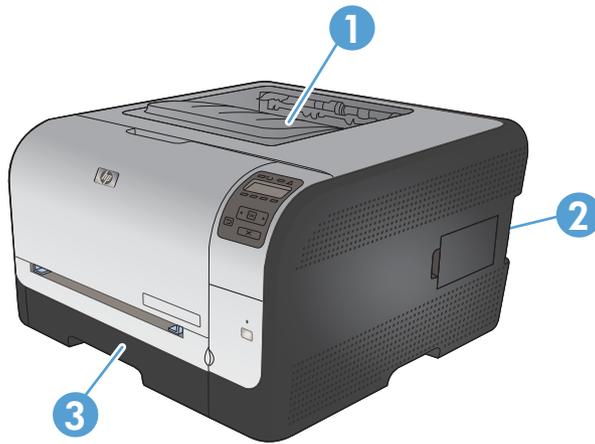
1. Use only paper that meets HP specifications for this product.
2. Use paper that is not wrinkled, folded, or damaged. If necessary, use paper from a different package.
3. Use paper that has not previously been printed or copied on.
4. Make sure the tray is not overfilled. If it is, remove the entire stack of paper from the tray, straighten the stack, and then return some of the paper to the tray.
5. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides so they are touching the paper stack without bending it.

6. Make sure that the tray is fully inserted in the product.
7. If you are printing on heavy, embossed, or perforated paper, use the manual feed feature and feed sheets one at a time.

## Clear jams

### Jam locations

Use this illustration to find the locations of jams.



- 
- |   |            |
|---|------------|
| 1 | Output bin |
| 2 | Rear door  |
| 3 | Trays      |
-

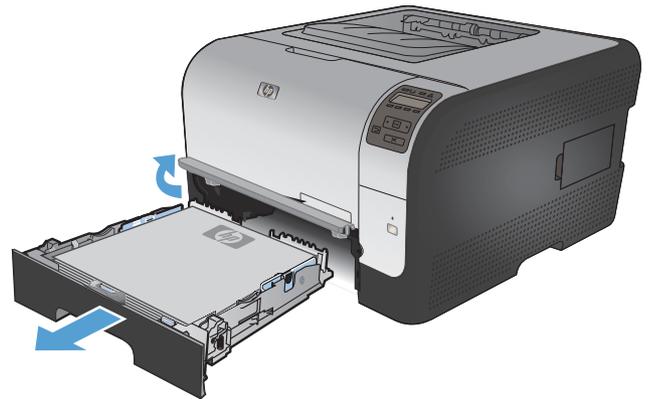
## Jam in Tray 1

 **NOTE:** If the sheet tears, remove all fragments before resuming printing.

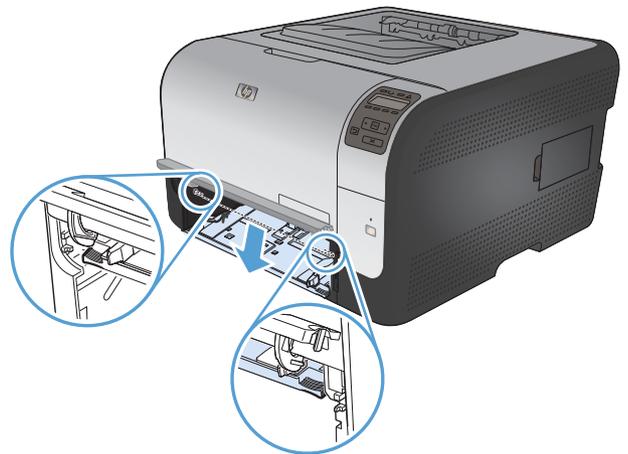
1. If you can see the jammed sheet, remove the jammed sheet by pulling it straight out.



2. If you cannot see the jammed sheet, open the Tray 1 door and pull out Tray 2.

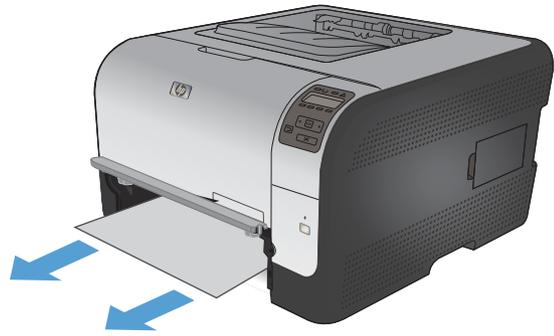


3. Push down on two tabs to release the Tray 1 panel.

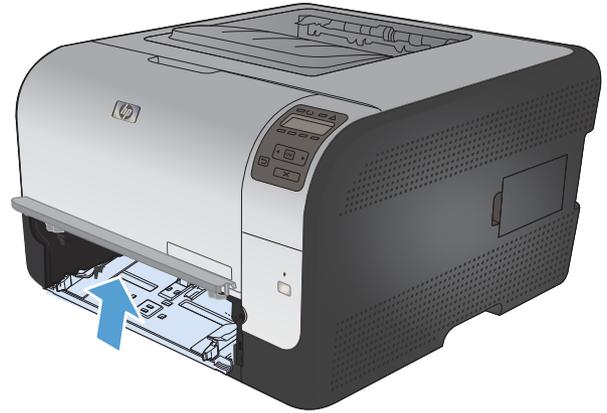


4. Remove the jammed sheet by pulling it straight out.

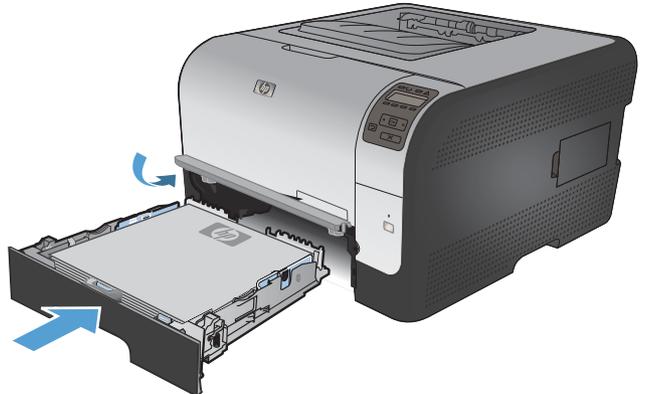
**CAUTION:** Do not pull up on the jammed sheet. Be sure to pull it straight out.



5. Push up on two tabs to replace the Tray 1 panel.

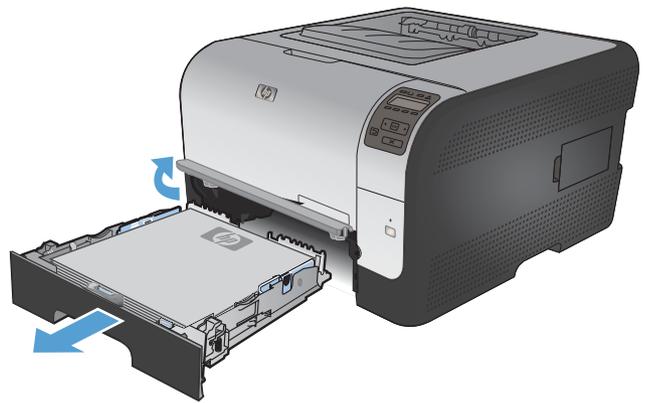


6. Replace Tray 2

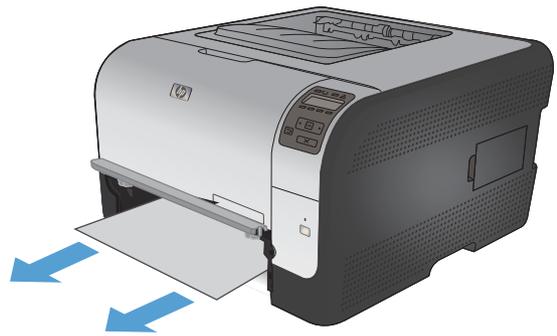


## Jam in Tray 2

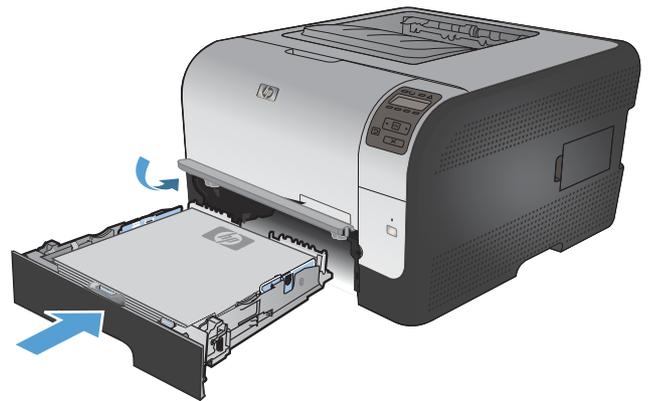
1. Pull out Tray 2 and place it on a flat surface.



2. Remove the jammed sheet by pulling it straight out.



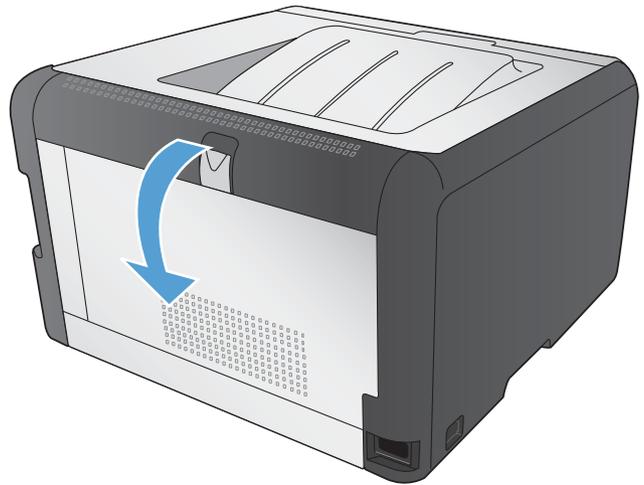
3. Replace Tray 2.



4. Press the **OK** button to continue printing.

## Jam in the fuser area

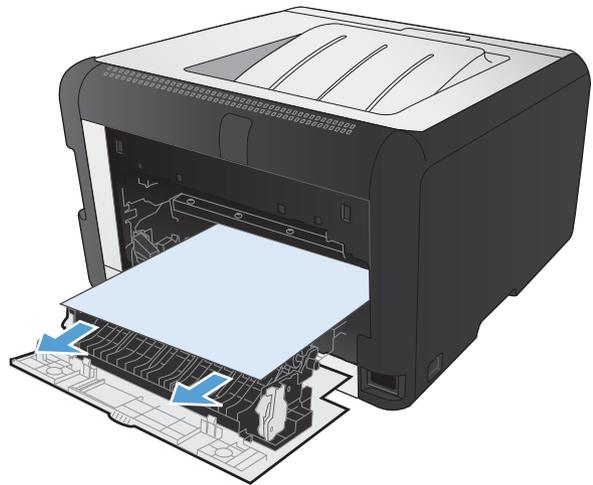
1. Open the rear door.



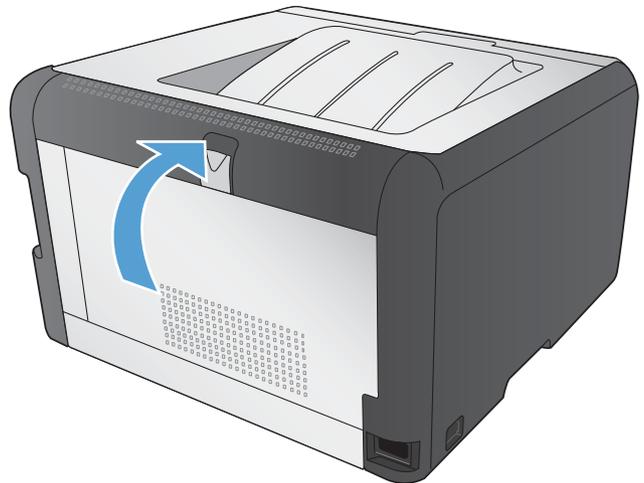
2. Remove any jammed sheets.

**NOTE:** If the sheet tears, remove all fragments before resuming printing.

**CAUTION:** Wait until the fuser area has cooled before clearing the jam.



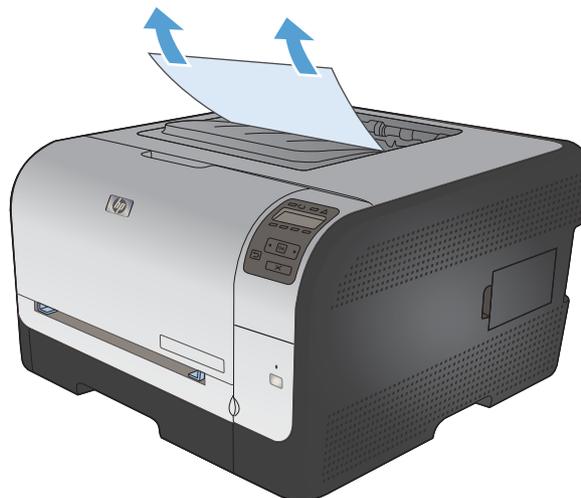
3. Close the rear door.



## Jam in the output bin

1. Look for jammed paper in the output bin area.
2. Remove any visible paper.

**NOTE:** If the sheet tears, remove all fragments before resuming printing.



3. Open and then close the rear door to clear the message.



# Solve image quality problems

You can prevent most print-quality problems by following these guidelines.

- [Use the correct paper type setting in the printer driver](#)
- [Adjust color settings in the printer driver](#)
- [Use paper that meets HP specifications](#)
- [Print a cleaning page](#)
- [Calibrate the product to align the colors](#)
- [Check the print cartridges](#)
- [Use the printer driver that best meets your printing needs](#)

## Use the correct paper type setting in the printer driver

Check the paper type setting if you are having any of the following problems:

- Toner is smearing on the printed pages.
- Repeated marks occur on the printed pages.
- Printed pages are curled.
- Toner flakes off the printed pages.
- Printed pages have small unprinted areas.

## Change the paper type setting for Windows

1. On the **File** menu in the software program, click **Print**.
2. Select the product, and then click the **Properties** or **Preferences** button.
3. Click the **Paper/Quality** tab.
4. From the **Paper type** drop-down list, click the **More...** option.
5. Expand the list of **Type is:** options.
6. Expand each category of paper types until you find the paper type that you are using.
7. Select the option for the type of paper you are using, and click the **OK** button.

## Change the paper type setting for Mac

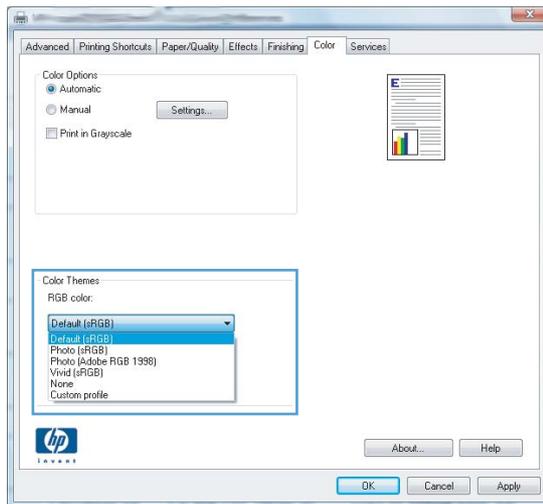
1. On the **File** menu in the software program, click the **Print** option.
2. In the **Copies & Pages** menu, click the **Page Setup** button.
3. Select a size from the **Paper Size** drop-down list, and then click the **OK** button.
4. Open the **Finishing** menu.

5. Select a type from the **Media-type** drop-down list.
6. Click the **Print** button.

## Adjust color settings in the printer driver

### Change the color theme for a print job

1. On the **File** menu in the software program, click **Print**.
2. Click **Properties** or **Preferences**.
3. Click the **Color** tab.
4. Select a color theme from the **Color Themes** drop-down list.



- **Default (sRGB)**: This theme sets the product to print RGB data in raw device mode. When using this theme, manage color in the software program or in the operating system for correct rendering.
- **Vivid**: The product increases the color saturation in the midtones. Use this theme when printing business graphics.
- **Photo**: The product interprets RGB color as if it were printed as a photograph using a digital mini lab. The product renders deeper, more saturated colors differently than with the Default (sRGB) theme. Use this theme when printing photos.
- **Photo (Adobe RGB 1998)**: Use this theme with printing digital photos that use the AdobeRGB color space rather than sRGB. Turn off color management in the software program when using this theme.
- **None**

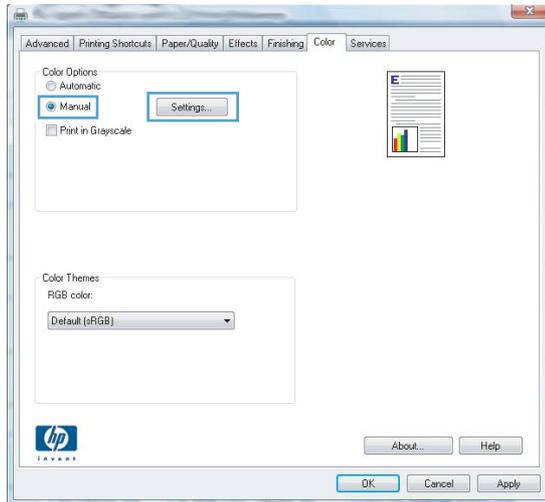
### Change the color options

Change the color options settings for the current print job from the color tab of the printer driver.

1. On the **File** menu in the software program, click **Print**.
2. Click **Properties** or **Preferences**.

3. Click the **Color** tab.
4. Click the **Automatic** or **Manual** setting.
  - **Automatic** setting: Select this setting for most color print jobs
  - **Manual** setting: Select this setting to adjust the color settings independent from other settings.

 **NOTE:** Changing color settings manually can impact output. HP recommends that only color graphics experts change these settings.



5. Click the **Print in Grayscale** option to print a color document in black and white. Use this option to print color documents for photocopying or faxing.
6. Click the **OK** button.

## Use paper that meets HP specifications

Use different paper if you are having any of the following problems:

- The printing is too light or seems faded in areas.
- Specks of toner are on the printed pages.
- Toner is smearing on the printed pages.
- Printed characters seem misformed.
- Printed pages are curled.

Always use a paper type and weight that this product supports. In addition, follow these guidelines when selecting paper:

- Use paper that is of good quality and free of cuts, nicks, tears, spots, loose particles, dust, wrinkles, voids, staples, and curled or bent edges.
- Use paper that has not been previously printed on.

- Use paper that is designed for use in laser printers. Do not use paper that is designed only for use in Inkjet printers.
- Use paper that is not too rough. Using smoother paper generally results in better print quality.

## Print a cleaning page

Print a cleaning page to remove dust and excess toner from the paper path if you are having any of the following problems:

- Specks of toner are on the printed pages.
- Toner is smearing on the printed pages.
- Repeated marks occur on the printed pages.

Use the following procedure to print a cleaning page.

1. At the product control panel, press the **OK** button.
2. Press the right arrow ► to highlight the **Service** menu, and then press the **OK** button.
3. Press the right arrow ► to highlight the **Cleaning Page** option, and then press the **OK** button.

## Calibrate the product to align the colors

If the printed output has colored shadows, blurry graphics, or areas that have poor color, you might need to calibrate the product to align the colors. Print the Diagnostics Page from the Reports menu on the control panel to check the color alignment. If the blocks of color on that page are not aligned with each other, you need to calibrate the product.

1. On the product control panel, open the **System Setup** menu.
2. Open the Print quality menu, and select the **Calibrate color** item.
3. Select the **Calibrate now** option.

## Check the print cartridges

Check each print cartridge, and replace it if necessary, if you are having any of the following problems:

- The printing is too light or seems faded in areas.
- Printed pages have small unprinted areas.
- Printed pages have streaks or bands.

If you determine that you need to replace a print cartridge, print the supplies status page to find the part number for the correct genuine HP print cartridge.

Type of print cartridge	Steps to resolve the problem
Refilled or remanufactured print cartridge	Hewlett Packard Company cannot recommend the use of non-HP supplies, either new or remanufactured. Because they are not HP products, HP cannot influence their design or control their quality. If you are using a refilled or remanufactured print cartridge and are not satisfied with the print quality, replace the print cartridge with a genuine HP print cartridge that has the words “HP” or “Hewlett-Packard” on it, or has the HP logo on it.
Genuine HP print cartridge	<ol style="list-style-type: none"> <li data-bbox="639 401 1444 485">1. The product control panel or the <b>Supplies status</b> page indicates <b>Very Low</b> status when the print cartridge has reached the end of its estimated life. Replace the print cartridge if print quality is no longer acceptable.</li> <li data-bbox="639 491 1444 611">2. Print a Print Quality Page from the <b>Reports</b> menu on the control panel. If streaks or marks are in one color on the page, you might have a defect in that color cartridge. See the instructions in this document for interpreting the page. Replace the print cartridge if necessary.</li> <li data-bbox="639 617 1444 701">3. Visually inspect the print cartridge for damage. See the instructions that follow. Replace the print cartridge if necessary.</li> <li data-bbox="639 707 1444 802">4. If printed pages have marks that repeat several times at the same distance apart, print a cleaning page. If this does not solve the problem, use the repetitive defects ruler in this document to identify the cause of the problem.</li> </ol>

## Print the Supplies Status page

The **Supplies status** page indicates the estimated life remaining in print cartridges. It also lists the part number for the correct genuine HP print cartridge for your product so you can order a replacement print cartridge, as well as other useful information.

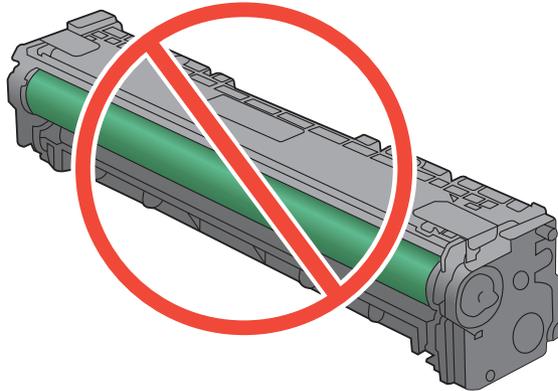
1. On the product control panel, open the **Reports** menu.
2. Select the **Supplies status** page to print it.

## Inspect the print cartridge for damage

1. Remove the print cartridge from the product, and verify that the sealing tape has been removed.
2. Check the memory chip for damage.

3. Examine the surface of the green imaging drum on the bottom of the print cartridge.

△ **CAUTION:** Do not touch the green roller (imaging drum) on the bottom of the cartridge. Fingerprints on the imaging drum can cause print-quality problems.



4. If you see any scratches, fingerprints, or other damage on the imaging drum, replace the print cartridge.
5. If the imaging drum does not appear to be damaged, rock the print cartridge gently several times and reinstall it. Print a few pages to see if the problem has resolved.

## Repeating defects

If defects repeat at any of the following intervals on the page, a print cartridge might be damaged.

- 22 mm
- 27 mm
- 29 mm
- 76 mm

## Use the printer driver that best meets your printing needs

You might need to use a different printer driver if the printed page has unexpected lines in graphics, missing text, missing graphics, incorrect formatting, or substituted fonts.

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### HP PCL 6 driver

- Provided as the default driver. This driver is automatically installed unless you select a different one.
  - Recommended for all Windows environments
  - Provides the overall best speed, print quality, and product-feature support for most users
  - Developed to align with the Windows Graphic Device Interface (GDI) for the best speed in Windows environments
  - Might not be fully compatible with third-party and custom software programs that are based on PCL 5
-

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**HP UPD PS driver**

- Recommended for printing with Adobe® software programs or with other highly graphics-intensive software programs
- Provides support for printing from postscript emulation needs, or for postscript flash font support

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**HP UPD PCL 5**

- Recommended for general office printing in Windows environments
  - Compatible with previous PCL versions and older HP LaserJet products
  - The best choice for printing from third-party or custom software programs
  - The best choice when operating with mixed environments, which require the product to be set to PCL 5 (UNIX, Linux, mainframe)
  - Designed for use in corporate Windows environments to provide a single driver for use with multiple printer models
  - Preferred when printing to multiple printer models from a mobile Windows computer
- 

Download additional printer drivers from this Web site: [www.hp.com/support/ljcp1520series](http://www.hp.com/support/ljcp1520series).

## Clean the product

During the printing process, paper, toner, and dust particles can accumulate inside the product. Over time, this buildup can cause print-quality problems such as toner specks or smearing. This product has a cleaning mode that can correct and prevent these problems.

1. At the product control panel, press the **OK** button.
2. Press the right arrow ► to highlight the **Service** menu, and then press the **OK** button.
3. Press the right arrow ► to highlight the **Cleaning Page** option, and then press the **OK** button.

# The product does not print or it prints slowly

## The product does not print

If the product does not print at all, try the following solutions.

1. Make sure the product is turned on and that the control panel indicates it is ready.
  - If the control panel does not indicate the product is ready, turn the product off and then on again.
  - If the control panel indicates the product is ready, try sending the job again.
2. If the control panel indicates the product has an error, resolve the error and then try sending the job again.
3. Make sure the cables are all connected correctly. If the product is connected to a network, check the following items:
  - Check the light next to the network connection on the product. If the network is active, the light is green.
  - Make sure that you are using a network cable and not a phone cord to connect to the network.
  - Make sure the network router, hub, or switch is turned on and that it is working correctly.
4. Install the HP software from the CD that came with the product. Using generic printer drivers can cause delays clearing jobs from the print queue.
5. From the list of printers on your computer, right-click the name of this product, click **Properties**, and open the **Ports** tab.
  - If you are using a network cable to connect to the network, make sure the printer name listed on the **Ports** tab matches the product name on the product configuration page.
  - If you are using a USB cable and are connecting to a wireless network, make sure the box is checked next to **Virtual printer port for USB**.
6. If you are using a personal firewall system on the computer, it might be blocking communication with the product. Try temporarily disabling the firewall to see if it is the source of the problem.
7. If your computer or the product is connected to a wireless network, low signal quality or interference might be delaying print jobs.

## The product prints slowly

If the product prints, but it seems slow, try the following solutions.

1. Make sure the computer meets the minimum specifications for this product. For a list of specifications, go to this Web site: [www.hp.com/support/ljcp1520series](http://www.hp.com/support/ljcp1520series).
2. When you configure the product to print on some paper types, such as heavy paper, the product prints more slowly so it can correctly fuse the toner to the paper. If the paper type setting is not correct for the type of paper you are using, change the setting to the correct paper type.
3. If your computer or the product is connected to a wireless network, low signal quality or interference might be delaying print jobs.

# Solve connectivity problems

## Solve direct-connect problems

If you have connected the product directly to a computer, check the cable.

- Verify that the cable is connected to the computer and to the product.
- Verify that the cable is not longer than 5 m (16.4 ft). Try using a shorter cable.
- Verify that the cable is working correctly by connecting it to another product. Replace the cable if necessary.

## Solve network problems

Check the following items to verify that the product is communicating with the network. Before beginning, print a configuration page from the product control panel and locate the product IP address that is listed on this page.

- [Poor physical connection](#)
- [The computer is using the incorrect IP address for the product](#)
- [The computer is unable to communicate with the product](#)
- [The product is using incorrect link and duplex settings for the network](#)
- [New software programs might be causing compatibility problems](#)
- [The computer or workstation might be set up incorrectly](#)
- [The product is disabled, or other network settings are incorrect](#)

### Poor physical connection

1. Verify that the product is attached to the correct network port using a cable of the correct length.
2. Verify that cable connections are secure.
3. Look at the network port connection on the back of the product, and verify that the amber activity light and the green link-status light are lit.
4. If the problem continues, try a different cable or port on the hub.

### The computer is using the incorrect IP address for the product

1. Open the printer properties and click the **Ports** tab. Verify that the current IP address for the product is selected. The product IP address is listed on the product configuration page.
2. If you installed the product using the HP standard TCP/IP port, select the box labeled **Always print to this printer, even if its IP address changes**.
3. If you installed the product using a Microsoft standard TCP/IP port, use the hostname instead of the IP address.
4. If the IP address is correct, delete the product and then add it again.

## The computer is unable to communicate with the product

1. Test network communication by pinging the network.
  - a. Open a command-line prompt on your computer. For Windows, click **Start**, click **Run**, and then type `cmd`.
  - b. Type `ping` followed by the IP address for your product.
  - c. If the window displays round-trip times, the network is working.
2. If the ping command failed, verify that the network hubs are on, and then verify that the network settings, the product, and the computer are all configured for the same network.

## The product is using incorrect link and duplex settings for the network

Hewlett-Packard recommends leaving this setting in automatic mode (the default setting). If you change these settings, you must also change them for your network.

## New software programs might be causing compatibility problems

Verify that any new software programs are correctly installed and that they use the correct printer driver.

## The computer or workstation might be set up incorrectly

1. Check the network drivers, printer drivers, and the network redirection.
2. Verify that the operating system is configured correctly.

## The product is disabled, or other network settings are incorrect

1. Review the configuration page to check the status of the network protocol. Enable it if necessary.
2. Reconfigure the network settings if necessary.

# Service mode functions

## Service menu

Use the control-panel **Service** menu to troubleshoot device problems.

## Service menu settings

The **Service** menu is used to calibrate, restore factory default settings, and clean the print paper path.

The following **Service** menu items are available:

- **Restore defaults**—used to reset all customer-accessible menu settings back to the factory default settings (except language) via the control panel or software

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 **NOTE:** This **Service** menu item does not reset factory-settable settings, including formatter number, page counts, factory paper settings, language, and so on.

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- **PowerSave**—used to configure the amount of idle time before the engine enters sleep mode
- **Cleaning page**—used to remove dust and toner from the print paper path
- **USB speed**—used to set the USB speed to high or full
- **Less Paper Curl**—used to put the product into a mode that reduces paper curl
- **Archive Print**—used to put the product into a mode that produces output less susceptible to toner smearing and dusting for preservation and archival.
- **Firmware Date**—used to display the product's firmware date code.

## Restore the factory-set defaults

1. Press **OK** to open the menus.
2. Use the **Left arrow** ◀ or the **Right arrow** ▶ button to select the **Service** menu, and then press the **OK (Select)** button.
3. Use the left arrow ◀ or the right arrow ▶ button to select the **Restore defaults** item, and then press the **OK** button.

The product automatically restarts.

## Secondary service menu

Use the secondary service menu to print service-related reports and to run special tests. Customers do not have access to this menu.

## Open the secondary service menu

1. Make sure the product is in the **Ready** state.
2. Press the Left arrow (◀) and the **Cancel** button simultaneously.
3. Press < and > to navigate through the menu.

## Secondary service menu structure

Table 2-3 Secondary Service menu

Menu item	Sub-menu item	Description
Service Reports	Cont. Self-Test	Print a continuous configuration page.
	Error Report	Print an error report.
Location	A list of available locations appears	<p>This item sets certain product parameters that are dependent on the location, such as the default paper size and the symbol set.</p> <p>Scroll to the appropriate location and select <b>Yes</b> to set the location. The product automatically restarts after you change the location.</p>
Display test		<p>Use this test to verify that the LEDs and characters on the control-panel display function correctly.</p> <p>At the beginning of the test, each of the LEDs is turned on one-at-time. Press the <b>OK</b> button to continue to the next LED.</p> <p>After the LED test is complete, the character test begins by testing the pixels on each line. Then, each of the 255 characters is displayed in groups of 16. Press the <b>OK</b> button to continue to the next group of 16 characters. You can cancel the test at any time by pressing the Cancel <b>X</b>.</p>
Button test		Use this test to verify that the control-panel buttons function correctly. The display prompts you to press each button.
Firmware date		This item shows the current date code of the firmware.
Color Cal.	Adjust color	Use this item to adjust density settings for contrast, highlights, midtones, and shadows. Adjust each color individually.
	Timing	Use this item to specify how frequently the product should automatically perform a color calibration. The default setting is 48 hours. You can turn automatic calibration off.
Enter MAC Addr.		Use this item to specify the MAC address for the product. The MAC address is in hexadecimal code. Use the right arrow <b>▶</b> button to scroll through the possible values for each character. When a digit is correct, press the <b>OK</b> button to move to the next digit.
LED Test		The LED's turn on one at a time during the test. Press <b>OK</b> to continue to the next LED.
Clean Belt		This item runs additional belt-cleaning cycles.
Pick roller		This item puts the pickup roller in position for replacement.

## Engine resets

### Engine test page

1. With the product power off, open the front and rear doors.
2. Turn the power on, and close both doors within ten seconds.
3. An engine test page (a page containing multiple horizontal colored lines) will print.

## Cold reset

The traditional cold reset function found in other HP LaserJet products is not supported for this product. The equivalent function is the **Restore defaults** option in the **Service** menu.

Restoring the default settings unlocks menus that have been previously locked and resets all control-panel menu items to the factory defaults. It does *not* reset the serial number and the page counts.

 **NOTE:** Before restoring defaults, print a menu structure report and a configuration page. Use the information on these pages to reset customer-specific settings.

△ **CAUTION:** All HP Jetdirect settings are also reset. Be sure to print a configuration page before restoring defaults. Make note of the IP address that is listed on the Jetdirect configuration page. You might need to restore the IP address after restoring defaults.

## NVRAM initialization

△ **CAUTION:** All HP Jetdirect settings are also reset. Be sure to print a configuration page before performing an NVRAM initialization. Make note of the IP address that is listed on the Jetdirect configuration page. You need to restore the IP address after performing an NVRAM initialization.

Performing an NVRAM initialization resets the following settings and information:

- All menu settings are reset to factory default values.
- All localization settings, including language and country/region, are reset.

After performing an NVRAM initialization, reconfigure any computers that print to this product so that the computers can recognize the product.

### Perform an NVRAM initialization

1. Turn the product off.
2. Simultaneously press the right arrow ► button and the Cancel ✕ button. Keep these buttons depressed as you turn the product on.
3. When the **Permanent storage init.** message appears on the display, release both buttons.
4. When the product has finished the NVRAM initialization, it returns to the **Ready** state.

## Product updates

Software and firmware updates and installation instructions for this product are available at [www.hp.com/support/ljcp1520series](http://www.hp.com/support/ljcp1520series). Click **Downloads and drivers**, click the operating system, and then select the download for the product.



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# 3 Parts and diagrams

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 **NOTE:** In this chapter, part numbers are only listed for available replaceable parts.

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- [Order parts by authorized service providers](#)
- [How to use the parts lists and diagrams](#)
- [Assembly locations](#)
- [Covers, panels, and doors](#)
- [Internal assemblies](#)
- [Alphabetical parts list](#)
- [Numerical parts list](#)

# Order parts by authorized service providers

## Order replacement parts

**Table 3-1 Order parts, accessories, and supplies**

Order supplies and paper	<a href="http://www.hp.com/go/suresupply">www.hp.com/go/suresupply</a>
Order genuine HP parts or accessories	<a href="http://www.hp.com/buy/parts">www.hp.com/buy/parts</a>
Order through service or support providers	Contact an HP-authorized service or support provider.

## Related documentation and software

**Table 3-2 Related documentation and software**

Item	Description	Part number
<i>HP LaserJet Pro CP1520 Color Printer Series User Guide</i>	Product user guide	CE873-90901
<i>HP LaserJet Pro CP1520 Color Printer Series Service Manual</i>	English service manual (this manual)	CE873-90934

## Supplies part numbers

**Table 3-3 Supplies part numbers**

Part	Part number	Type/size
Print cartridges	CE320-67901	Black print cartridge with HP ColorSphere toner
	CE321-6702	Cyan print cartridge with HP ColorSphere toner
	CE322-67901	Yellow print cartridge with HP ColorSphere toner
	CE323-67901	Magenta print cartridge with HP ColorSphere toner

## Whole-unit replacement part numbers

 **NOTE:** Whole-unit replacement products include the formatter PCA.

**Table 3-4 Whole-unit replacement part numbers**

Item	Description	Part number
HP Color LaserJet CP1525n	110v WUR-881	CE874-69055 (exchange)
	220v WUR-882	CE874-69056 (exchange)
	220v WUR-899	CE874-69057 (exchange)
	110v WUR-881	CE874-67055 (exchange)
	220v WUR-882	CE874-67056 (exchange)
	-220v WUR-899	CE874-67057 (exchange)

**Table 3-4 Whole-unit replacement part numbers (continued)**

Item	Description	Part number
HP Color LaserJet CP1525nw	110v WUR-881	CE875-69055 (exchange)
	220v WUR-882	CE875-69056 (exchange)
	220v WUR-899	CE875-69057 (exchange)
	110v WUR-881	CE875-67055 (replacement)
	220v WUR-882	CE875-67056 (replacement)
	220v WUR-899	CE875-67057 (replacement)
HP LaserJet Pro CP1520 Color Printer series	Formatter	CE482-67901 (replacement)

## How to use the parts lists and diagrams

The figures in this chapter show the major subassemblies in the product and their component parts. A parts list table follows each exploded view assembly diagram. Each table lists the item number, the associated part number, and the description of each part. If a part is not listed in the table, then it is not a field replacement unit (FRU).

- 
- △ **CAUTION:** Be sure to order the correct part. When looking for part numbers for electrical components, pay careful attention to the voltage that is listed in the description column. Doing so will ensure that the part number selected is for the correct all-in-one model.
  
  - 📄 **NOTE:** In this manual, the abbreviation “PCA” stands for “printed circuit board assembly.” Components described as a PCA might consist of a single circuit board or a circuit board plus other parts, such as cables and sensors.
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# Assembly locations

## Base product (no optional trays or accessories)

Figure 3-1 Base product (no optional trays or accessories)

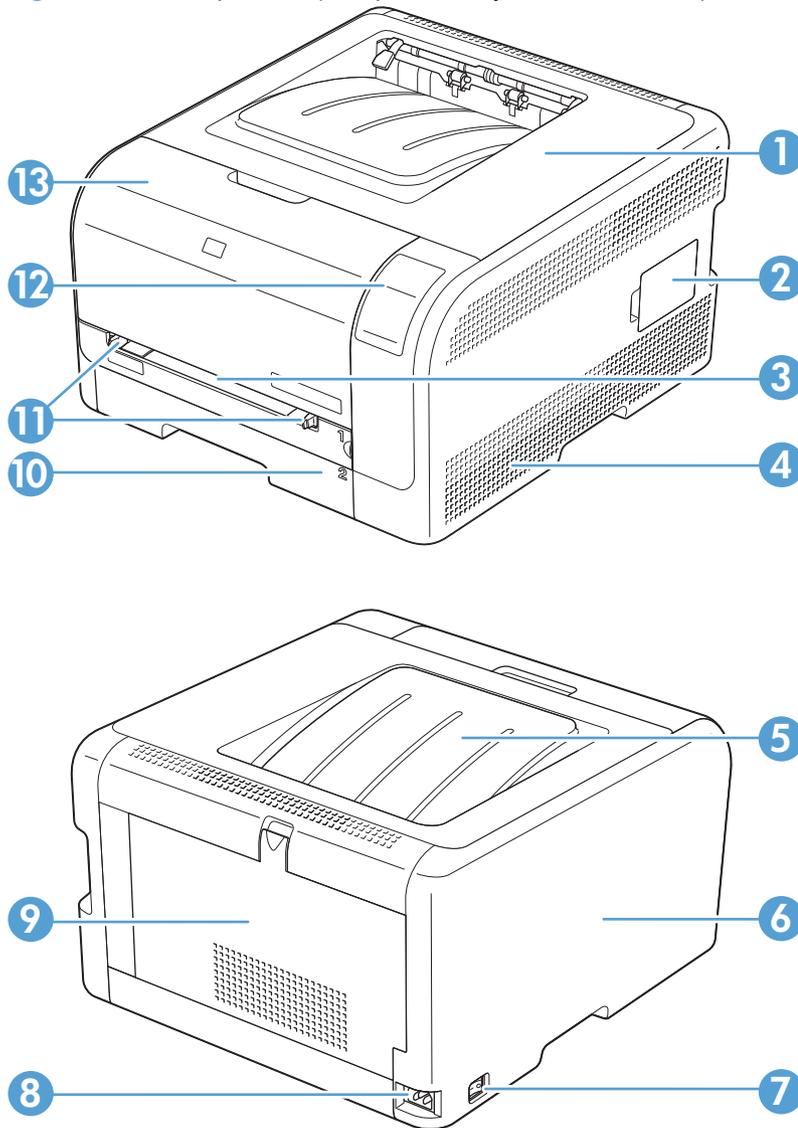
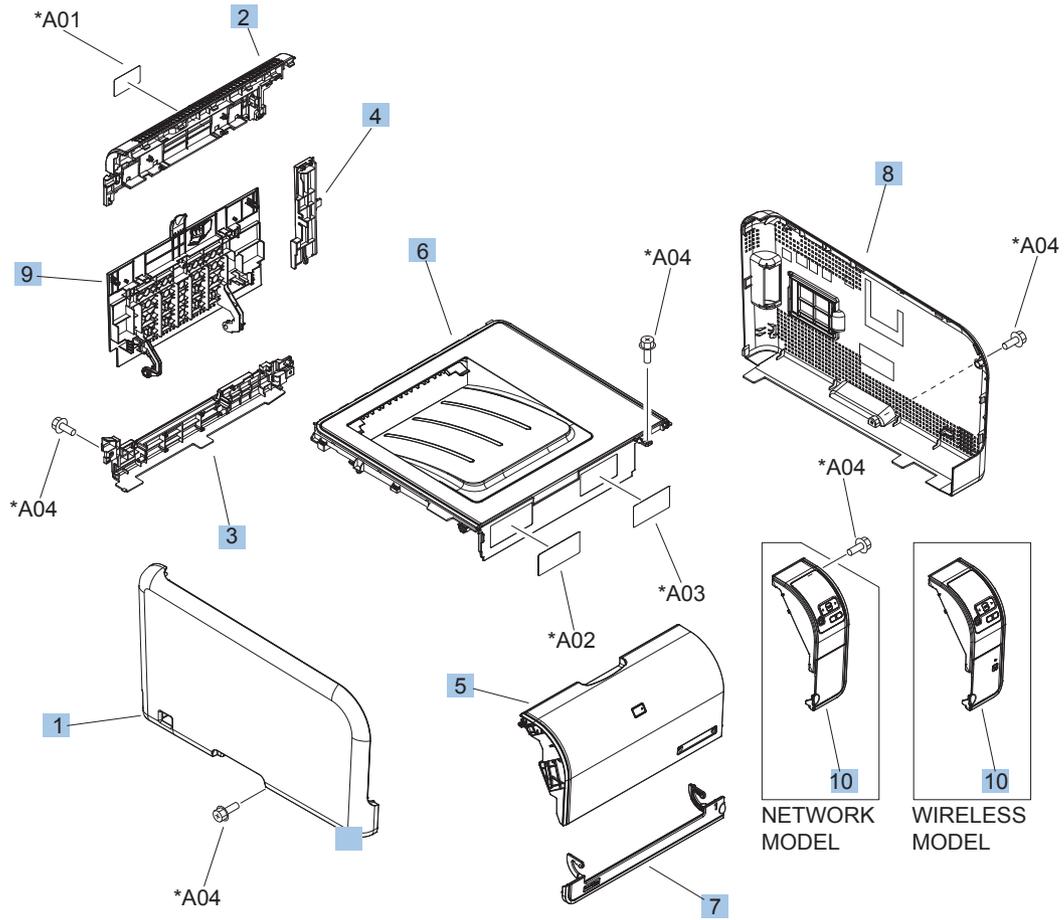


Table 3-5 Base product

Item	Description	Item	Description
1	Top cover unit	8	Power receptacle
2	DIMM cover	9	Rear door
3	Priority slot	10	Cassette
4	Right cover	11	Media side plate
5	Face-down output bin	12	Control panel
6	Left cover	13	Front door
7	Power switch		

# Covers, panels, and doors

Figure 3-2 Covers, panels, and doors

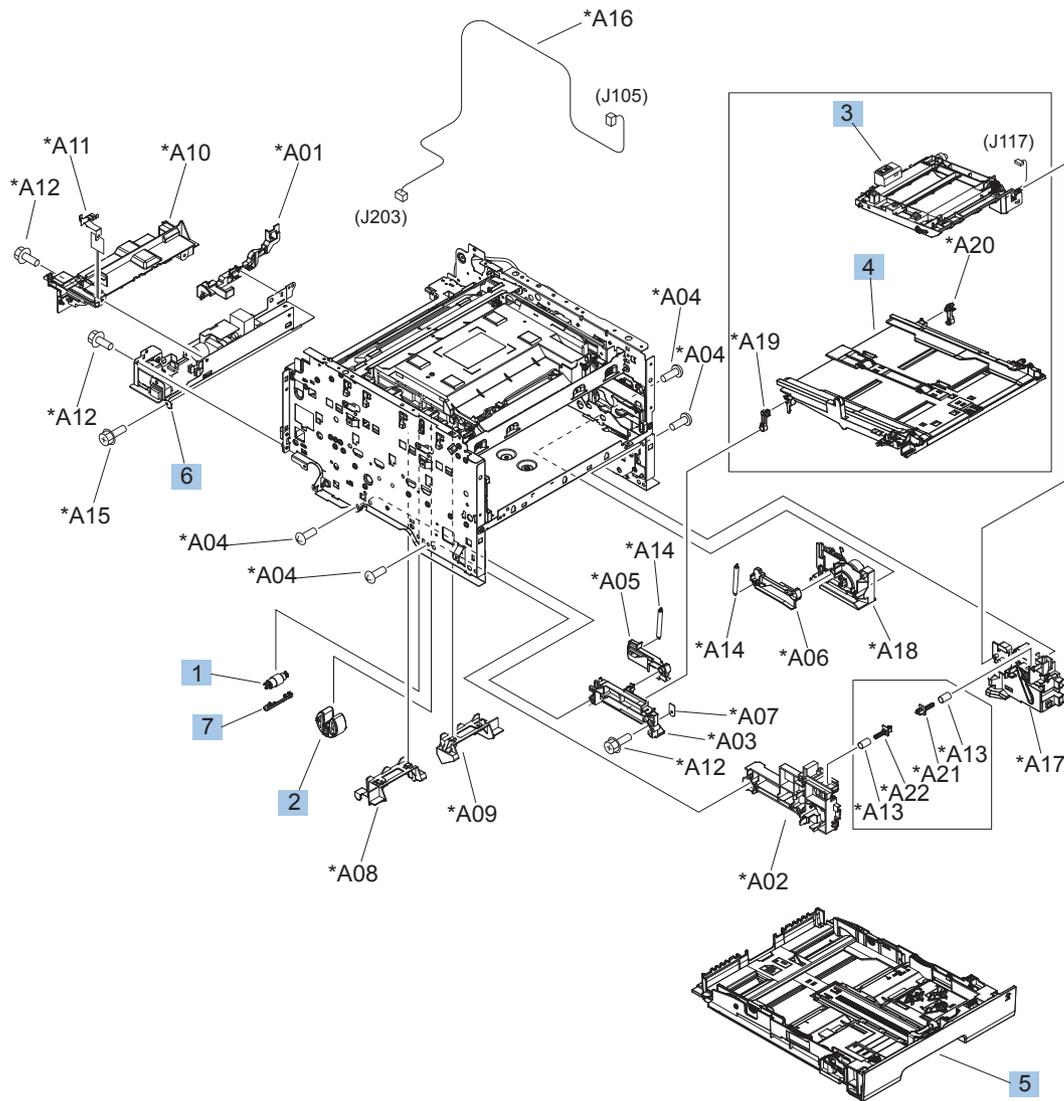


**Table 3-6 Covers, panels, and doors**

Ref	Description	Part number	Qty
1	Cover, left	RC3-0748-000CN	1
2	Cover, rear, upper	RC3-0754-000CN	1
3	Cover, rear, lower	RC3-0753-000CN	1
4	Cover, rear, center	RC3-0767-000CN	1
5	Door, front	RC3-1024-000CN	1
6	Upper cover assembly	RM1-7707-000CN	1
7	Priority slot cover assembly	RM1-7706-000CN	1
8	Right cover assembly	RM1-7709-000CN	1
9	Door, rear	RC3-0768-000CN	1
10	Control-panel assembly (network wireless model)	RM1-7708-000CN	1
10	Control-panel assembly (network model)	RM1-7856-000CN	1

# Internal assemblies

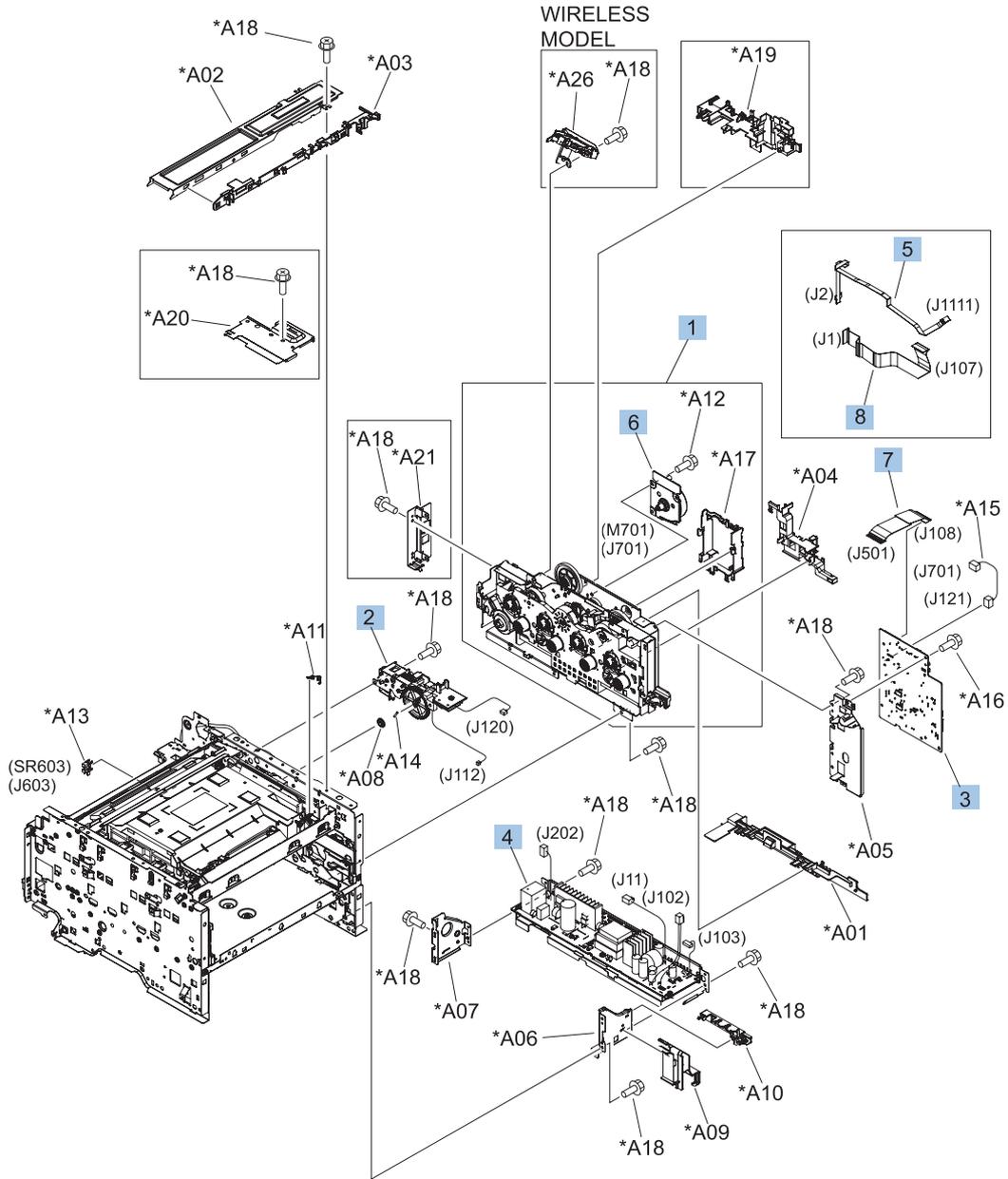
Figure 3-3 Internal components (1 of 4)



**Table 3-7 Internal components (1 of 4)**

Ref	Description	Part number	Qty
1	Roller, separation Assembly	RM1-4425-000CN	1
2	Roller, pickup assembly	RM1-4426-000CN	1
3	Drive assembly, priority slot	RM1-4459-000CN	1
4	Feed assembly, priority	RM1-7854-000CN	1
5	Cassette assembly	RM1-7704-000CN	1
6	Fuser power supply assembly (220V-240V)	RM1-7083-000CN	1
6	Fuser power supply assembly (110V-127V)	RM1-7082-000CN	1
7	Cover, holder	RC2-2014-000CN	1

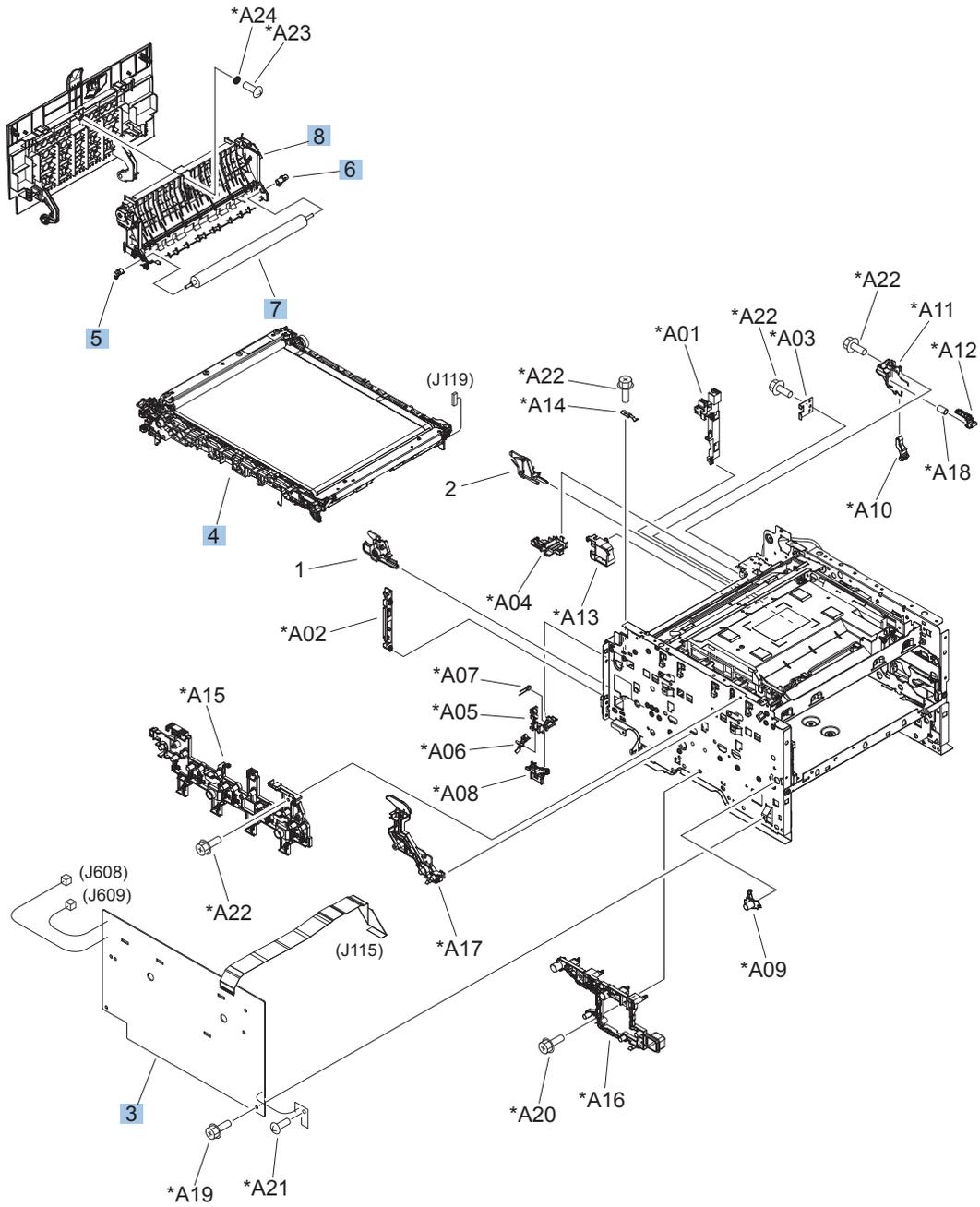
Figure 3-4 Internal components (2 of 4)



**Table 3-8 Internal components (2 of 4)**

Ref	Description	Part number	Qty
1	Main drive assembly	RM1-4443-000CN	1
2	Sub drive assembly	RM1-7861-000CN	1
3	DC controller PCA	RM1-7090-000CN	1
4	Low voltage power supply assembly (110V-127V)	RM1-7080-000CN	1
4	Low voltage power supply assembly (220V-240V)	RM1-7081-000CN	1
5	Cable, flexible flat	RK2-3129-000CN	1
6	Motor, DC	RL1-1617-000CN	1
7	Cable, flat	RK2-1955-000CN	1
8	Cable, flexible flat	RK2-3117-000CN	1

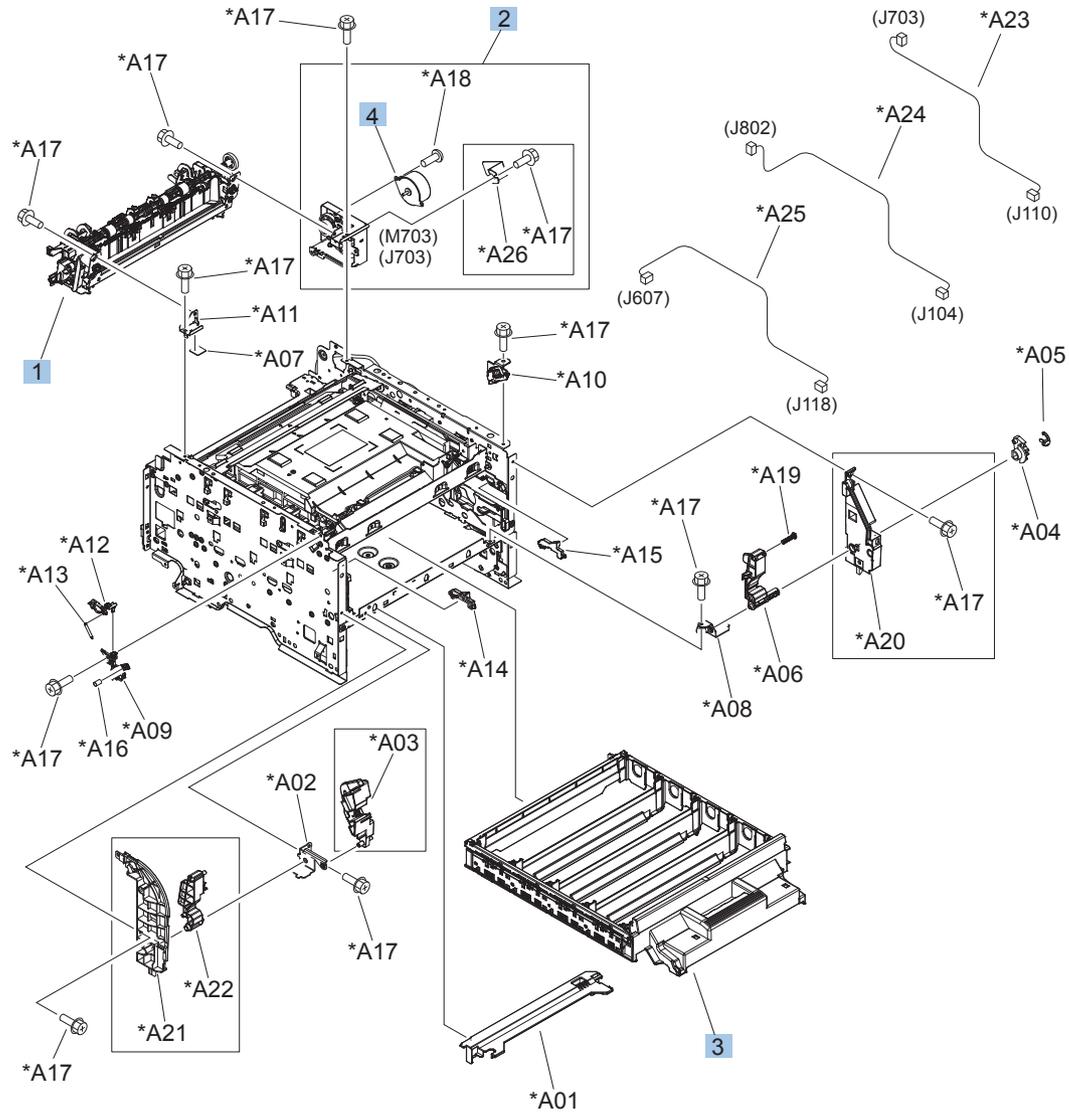
Figure 3-5 Internal components (3 of 4)



**Table 3-9 Internal components (3 of 4)**

Ref	Description	Part number	Qty
3	High voltage PCA	RM1-7090-000CN	1
4	Intermediate transfer belt assembly (ITB)	RM1-7866-000CN	1
5	Bushing, left side	RC2-2111-000CN	1
6	Bushing, right side	RC2-2112-000CN	1
7	Roller, transfer	RM1-4445-000CN	1
8	Paper feed guide assembly	RM1-4448-000CN	1

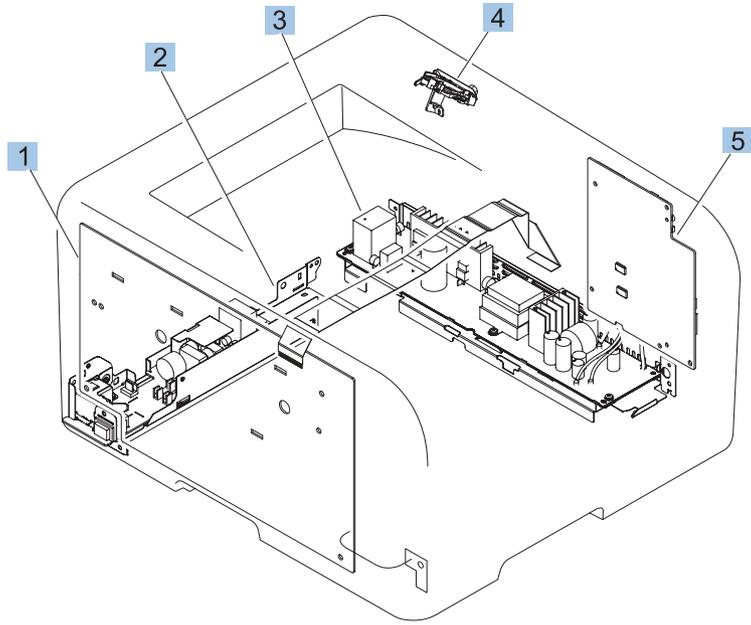
Figure 3-6 Internal components (4 of 4)



**Table 3-10 Internal components (4 of 4)**

Ref	Description	Part number	Qty
1	Fuser assembly (110V-127V)	RM1-4430-000CN	1
1	Fuser assembly (220V-240V)	RM1-4431-000CN	1
2	Fuser drive assembly	RM1-4450-000CN	1
3	Cartridge tray assembly	RM1-7853-000CN	1
4	Motor, stepping, DC	RK2-1872-000CN	1

Figure 3-7 PCA location



**Table 3-11 PCA location**

Ref	Description	Part number	Qty
1	High voltage PCA	RM1-7090-000CN	1
2	Fuser power supply assembly (110V-127V)	RM1-7082-000CN	1
2	Fuser power supply assembly (220V-240V)	RM1-7083-000CN	1
3	Low voltage power supply assembly (110V-127V)	RM1-7080-000CN	1
3	Low voltage power supply assembly (220V-240V)	RM1-7081-000CN	1
4	Wireless controller PCA	RM1-1150-7937CN	1
5	DC controller PCA	RM1-7041-000CN	1

# Alphabetical parts list

**Table 3-12 Alphabetical parts list**

Description	Part number	Table and page
Bushing, left side	RC2-2111-000CN	<a href="#">Internal components (3 of 4) on page 129</a>
Bushing, right side	RC2-2112-000CN	<a href="#">Internal components (3 of 4) on page 129</a>
Cable, flat	RK2-1955-000CN	<a href="#">Internal components (2 of 4) on page 127</a>
Cable, flexible flat	RK2-3129-000CN	<a href="#">Internal components (2 of 4) on page 127</a>
Cable, flexible flat	RK2-3117-000CN	<a href="#">Internal components (2 of 4) on page 127</a>
Cartridge tray assembly	RM1-7853-000CN	<a href="#">Internal components (4 of 4) on page 131</a>
Cassette assembly	RM1-7704-000CN	<a href="#">Internal components (1 of 4) on page 125</a>
Control-panel assembly (network model)	RM1-7856-000CN	<a href="#">Covers, panels, and doors on page 123</a>
Control-panel assembly (network wireless model)	RM1-7708-000CN	<a href="#">Covers, panels, and doors on page 123</a>
Cover, holder	RC2-2014-000CN	<a href="#">Internal components (1 of 4) on page 125</a>
Cover, left	RC3-0748-000CN	<a href="#">Covers, panels, and doors on page 123</a>
Cover, rear, center	RC3-0767-000CN	<a href="#">Covers, panels, and doors on page 123</a>
Cover, rear, lower	RC3-0753-000CN	<a href="#">Covers, panels, and doors on page 123</a>
Cover, rear, upper	RC3-0754-000CN	<a href="#">Covers, panels, and doors on page 123</a>
DC controller PCA	RM1-7090-000CN	<a href="#">Internal components (2 of 4) on page 127</a>
DC controller PCA	RM1-7041-000CN	<a href="#">PCA location on page 133</a>
Door, front	RC3-1024-000CN	<a href="#">Covers, panels, and doors on page 123</a>
Door, rear	RC3-0768-000CN	<a href="#">Covers, panels, and doors on page 123</a>
Drive assembly, priority slot	RM1-4459-000CN	<a href="#">Internal components (1 of 4) on page 125</a>
Feed assembly, priority	RM1-7854-000CN	<a href="#">Internal components (1 of 4) on page 125</a>
Fuser assembly (110V-127V)	RM1-4430-000CN	<a href="#">Internal components (4 of 4) on page 131</a>

**Table 3-12 Alphabetical parts list (continued)**

Description	Part number	Table and page
Fuser assembly (220V-240V)	RM1-4431-000CN	<a href="#">Internal components (4 of 4) on page 131</a>
Fuser drive assembly	RM1-4450-000CN	<a href="#">Internal components (4 of 4) on page 131</a>
Fuser power supply assembly (110V-127V)	RM1-7082-000CN	<a href="#">Internal components (1 of 4) on page 125</a>
Fuser power supply assembly (110V-127V)	RM1-7082-000CN	<a href="#">PCA location on page 133</a>
Fuser power supply assembly (220V-240V)	RM1-7083-000CN	<a href="#">Internal components (1 of 4) on page 125</a>
Fuser power supply assembly (220V-240V)	RM1-7083-000CN	<a href="#">PCA location on page 133</a>
High voltage PCA	RM1-7090-000CN	<a href="#">Internal components (3 of 4) on page 129</a>
High voltage PCA	RM1-7090-000CN	<a href="#">PCA location on page 133</a>
Intermediate transfer belt assembly (ITB)	RM1-7866-000CN	<a href="#">Internal components (3 of 4) on page 129</a>
Low voltage power supply assembly (110V-127V)	RM1-7080-000CN	<a href="#">Internal components (2 of 4) on page 127</a>
Low voltage power supply assembly (110V-127V)	RM1-7080-000CN	<a href="#">PCA location on page 133</a>
Low voltage power supply assembly (220V-240V)	RM1-7081-000CN	<a href="#">Internal components (2 of 4) on page 127</a>
Low voltage power supply assembly (220V-240V)	RM1-7081-000CN	<a href="#">PCA location on page 133</a>
Main drive assembly	RM1-4443-000CN	<a href="#">Internal components (2 of 4) on page 127</a>
Motor, DC	RL1-1617-000CN	<a href="#">Internal components (2 of 4) on page 127</a>
Motor, stepping, DC	RK2-1872-000CN	<a href="#">Internal components (4 of 4) on page 131</a>
Paper feed guide assembly	RM1-4448-000CN	<a href="#">Internal components (3 of 4) on page 129</a>
Priority slot cover assembly	RM1-7706-000CN	<a href="#">Covers, panels, and doors on page 123</a>
Right cover assembly	RM1-7709-000CN	<a href="#">Covers, panels, and doors on page 123</a>
Roller, pickup assembly	RM1-4426-000CN	<a href="#">Internal components (1 of 4) on page 125</a>
Roller, separation Assembly	RM1-4425-000CN	<a href="#">Internal components (1 of 4) on page 125</a>
Roller, transfer	RM1-4445-000CN	<a href="#">Internal components (3 of 4) on page 129</a>
Sub drive assembly	RM1-7861-000CN	<a href="#">Internal components (2 of 4) on page 127</a>

**Table 3-12 Alphabetical parts list (continued)**

Description	Part number	Table and page
Upper cover assembly	RM1-7707-000CN	<a href="#">Covers, panels, and doors on page 123</a>
Wireless controller PCA	RM1-1150-7937CN	<a href="#">PCA location on page 133</a>

# Numerical parts list

**Table 3-13 Numerical parts list**

Part number	Description	Table and page
RC2-2014-000CN	Cover, holder	<a href="#">Internal components (1 of 4) on page 125</a>
RC2-2111-000CN	Bushing, left side	<a href="#">Internal components (3 of 4) on page 129</a>
RC2-2112-000CN	Bushing, right side	<a href="#">Internal components (3 of 4) on page 129</a>
RC3-0748-000CN	Cover, left	<a href="#">Covers, panels, and doors on page 123</a>
RC3-0753-000CN	Cover, rear, lower	<a href="#">Covers, panels, and doors on page 123</a>
RC3-0754-000CN	Cover, rear, upper	<a href="#">Covers, panels, and doors on page 123</a>
RC3-0767-000CN	Cover, rear, center	<a href="#">Covers, panels, and doors on page 123</a>
RC3-0768-000CN	Door, rear	<a href="#">Covers, panels, and doors on page 123</a>
RC3-1024-000CN	Door, front	<a href="#">Covers, panels, and doors on page 123</a>
RK2-1872-000CN	Motor, stepping, DC	<a href="#">Internal components (4 of 4) on page 131</a>
RK2-1955-000CN	Cable, flat	<a href="#">Internal components (2 of 4) on page 127</a>
RK2-3117-000CN	Cable, flexible flat	<a href="#">Internal components (2 of 4) on page 127</a>
RK2-3129-000CN	Cable, flexible flat	<a href="#">Internal components (2 of 4) on page 127</a>
RL1-1617-000CN	Motor, DC	<a href="#">Internal components (2 of 4) on page 127</a>
RM1-1150-7937CN	Wireless controller PCA	<a href="#">PCA location on page 133</a>
RM1-4425-000CN	Roller, separation Assembly	<a href="#">Internal components (1 of 4) on page 125</a>
RM1-4426-000CN	Roller, pickup assembly	<a href="#">Internal components (1 of 4) on page 125</a>
RM1-4430-000CN	Fuser assembly (110V-127V)	<a href="#">Internal components (4 of 4) on page 131</a>
RM1-4431-000CN	Fuser assembly (220V-240V)	<a href="#">Internal components (4 of 4) on page 131</a>
RM1-4443-000CN	Main drive assembly	<a href="#">Internal components (2 of 4) on page 127</a>
RM1-4445-000CN	Roller, transfer	<a href="#">Internal components (3 of 4) on page 129</a>

**Table 3-13 Numerical parts list (continued)**

<b>Part number</b>	<b>Description</b>	<b>Table and page</b>
RM1-4448-000CN	Paper feed guide assembly	<a href="#">Internal components (3 of 4) on page 129</a>
RM1-4450-000CN	Fuser drive assembly	<a href="#">Internal components (4 of 4) on page 131</a>
RM1-4459-000CN	Drive assembly, priority slot	<a href="#">Internal components (1 of 4) on page 125</a>
RM1-7041-000CN	DC controller PCA	<a href="#">PCA location on page 133</a>
RM1-7080-000CN	Low voltage power supply assembly (110V-127V)	<a href="#">Internal components (2 of 4) on page 127</a>
RM1-7080-000CN	Low voltage power supply assembly (110V-127V)	<a href="#">PCA location on page 133</a>
RM1-7081-000CN	Low voltage power supply assembly (220V-240V)	<a href="#">Internal components (2 of 4) on page 127</a>
RM1-7081-000CN	Low voltage power supply assembly (220V-240V)	<a href="#">PCA location on page 133</a>
RM1-7082-000CN	Fuser power supply assembly (110V-127V)	<a href="#">Internal components (1 of 4) on page 125</a>
RM1-7082-000CN	Fuser power supply assembly (110V-127V)	<a href="#">PCA location on page 133</a>
RM1-7083-000CN	Fuser power supply assembly (220V-240V)	<a href="#">Internal components (1 of 4) on page 125</a>
RM1-7083-000CN	Fuser power supply assembly (220V-240V)	<a href="#">PCA location on page 133</a>
RM1-7090-000CN	DC controller PCA	<a href="#">Internal components (2 of 4) on page 127</a>
RM1-7090-000CN	High voltage PCA	<a href="#">Internal components (3 of 4) on page 129</a>
RM1-7090-000CN	High voltage PCA	<a href="#">PCA location on page 133</a>
RM1-7704-000CN	Cassette assembly	<a href="#">Internal components (1 of 4) on page 125</a>
RM1-7706-000CN	Priority slot cover assembly	<a href="#">Covers, panels, and doors on page 123</a>
RM1-7707-000CN	Upper cover assembly	<a href="#">Covers, panels, and doors on page 123</a>
RM1-7708-000CN	Control-panel assembly (network wireless model)	<a href="#">Covers, panels, and doors on page 123</a>
RM1-7709-000CN	Right cover assembly	<a href="#">Covers, panels, and doors on page 123</a>
RM1-7853-000CN	Cartridge tray assembly	<a href="#">Internal components (4 of 4) on page 131</a>
RM1-7854-000CN	Feed assembly, priority	<a href="#">Internal components (1 of 4) on page 125</a>
RM1-7856-000CN	Control-panel assembly (network model)	<a href="#">Covers, panels, and doors on page 123</a>

**Table 3-13 Numerical parts list (continued)**

Part number	Description	Table and page
RM1-7861-000CN	Sub drive assembly	<a href="#">Internal components (2 of 4) on page 127</a>
RM1-7866-000CN	Intermediate transfer belt assembly (ITB)	<a href="#">Internal components (3 of 4) on page 129</a>



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# A Service and support

- [Hewlett-Packard limited warranty statement](#)
- [HP's Premium Protection Warranty: LaserJet print cartridge limited warranty statement](#)
- [Data stored on the print cartridge](#)
- [End User License Agreement](#)
- [OpenSSL](#)
- [Customer support](#)
- [Repack the product](#)

# Hewlett-Packard limited warranty statement

HP PRODUCT	DURATION OF LIMITED WARRANTY
HP Color LaserJet CP1525n, CP1525nw	One-year product exchange

HP warrants to you, the end-user customer, that HP hardware and accessories will be free from defects in materials and workmanship after the date of purchase, for the period specified above. If HP receives notice of such defects during the warranty period, HP will, at its option, either repair or replace products which prove to be defective. Replacement products may be either new or equivalent in performance to new.

HP warrants to you that HP software will not fail to execute its programming instructions after the date of purchase, for the period specified above, due to defects in material and workmanship when properly installed and used. If HP receives notice of such defects during the warranty period, HP will replace software which does not execute its programming instructions due to such defects.

HP does not warrant that the operation of HP products will be uninterrupted or error free. If HP is unable, within a reasonable time, to repair or replace any product to a condition as warranted, you will be entitled to a refund of the purchase price upon prompt return of the product.

HP products may contain remanufactured parts equivalent to new in performance or may have been subject to incidental use.

Warranty does not apply to defects resulting from (a) improper or inadequate maintenance or calibration, (b) software, interfacing, parts or supplies not supplied by HP, (c) unauthorized modification or misuse, (d) operation outside of the published environmental specifications for the product, or (e) improper site preparation or maintenance.

TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTIES ARE EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE. Some countries/regions, states or provinces do not allow limitations on the duration of an implied warranty, so the above limitation or exclusion might not apply to you. This warranty gives you specific legal rights and you might also have other rights that vary from country/region to country/region, state to state, or province to province.

HP's limited warranty is valid in any country/region or locality where HP has a support presence for this product and where HP has marketed this product. The level of warranty service you receive may vary according to local standards. HP will not alter form, fit or function of the product to make it operate in a country/region for which it was never intended to function for legal or regulatory reasons.

TO THE EXTENT ALLOWED BY LOCAL LAW, THE REMEDIES IN THIS WARRANTY STATEMENT ARE YOUR SOLE AND EXCLUSIVE REMEDIES. EXCEPT AS INDICATED ABOVE, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR LOSS OF DATA OR FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE. Some countries/regions, states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.

THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

## HP's Premium Protection Warranty: LaserJet print cartridge limited warranty statement

This HP product is warranted to be free from defects in materials and workmanship.

This warranty does not apply to products that (a) have been refilled, refurbished, remanufactured or tampered with in any way, (b) experience problems resulting from misuse, improper storage, or operation outside of the published environmental specifications for the printer product or (c) exhibit wear from ordinary use.

To obtain warranty service, please return the product to place of purchase (with a written description of the problem and print samples) or contact HP customer support. At HP's option, HP will either replace products that prove to be defective or refund your purchase price.

TO THE EXTENT ALLOWED BY LOCAL LAW, THE ABOVE WARRANTY IS EXCLUSIVE AND NO OTHER WARRANTY OR CONDITION, WHETHER WRITTEN OR ORAL, IS EXPRESSED OR IMPLIED AND HP SPECIFICALLY DISCLAIMS ANY IMPLIED WARRANTIES OR CONDITIONS OF MERCHANTABILITY, SATISFACTORY QUALITY, AND FITNESS FOR A PARTICULAR PURPOSE.

TO THE EXTENT ALLOWED BY LOCAL LAW, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR DIRECT, SPECIAL, INCIDENTAL, CONSEQUENTIAL (INCLUDING LOST PROFIT OR DATA), OR OTHER DAMAGE, WHETHER BASED IN CONTRACT, TORT, OR OTHERWISE.

THE WARRANTY TERMS CONTAINED IN THIS STATEMENT, EXCEPT TO THE EXTENT LAWFULLY PERMITTED, DO NOT EXCLUDE, RESTRICT OR MODIFY AND ARE IN ADDITION TO THE MANDATORY STATUTORY RIGHTS APPLICABLE TO THE SALE OF THIS PRODUCT TO YOU.

## Data stored on the print cartridge

The HP print cartridges used with this product contain a memory chip that assists in the operation of the product.

In addition, this memory chip collects a limited set of information about the usage of the product, which might include the following: the date when the print cartridge was first installed, the date when the print cartridge was last used, the number of pages printed using the print cartridge, the page coverage, the printing modes used, any printing errors that might have occurred, and the product model. This information helps HP design future products to meet our customers' printing needs.

The data collected from the print cartridge memory chip does not contain information that can be used to identify a customer or user of the print cartridge or their product.

HP collects a sampling of the memory chips from print cartridges returned to HP's free return and recycling program (HP Planet Partners: [www.hp.com/recycle](http://www.hp.com/recycle)). The memory chips from this sampling are read and studied in order to improve future HP products. HP partners who assist in recycling this print cartridge might have access to this data, as well.

Any third party possessing the print cartridge might have access to the anonymous information on the memory chip. If you prefer to not allow access to this information, you can render the chip inoperable. However, after you render the memory chip inoperable, the memory chip cannot be used in an HP product.

# End User License Agreement

PLEASE READ CAREFULLY BEFORE USING THIS SOFTWARE PRODUCT: This End-User License Agreement (“EULA”) is a contract between (a) you (either an individual or the entity you represent) and (b) Hewlett-Packard Company (“HP”) that governs your use of the software product (“Software”). This EULA does not apply if there is a separate license agreement between you and HP or its suppliers for the Software, including a license agreement in online documentation. The term “Software” may include (i) associated media, (ii) a user guide and other printed materials, and (iii) “online” or electronic documentation (collectively “User Documentation”).

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2. **LICENSE RIGHTS.** You will have the following rights provided you comply with all terms and conditions of this EULA:

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3. **UPGRADES.** To Use HP Software provided by HP as an upgrade, update, or supplement (collectively “Upgrade”), you must first be licensed for the original HP Software identified by HP as eligible for the Upgrade. To the extent the Upgrade supersedes the original HP Software, you may no longer use such HP Software. This EULA applies to each Upgrade unless HP provides other terms with the Upgrade. In case of a conflict between this EULA and such other terms, the other terms will prevail.

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7. CONSENT TO USE OF DATA. HP and its affiliates may collect and use technical information you provide in relation to (i) your Use of the Software or the HP Product, or (ii) the provision of support services related to the Software or the HP Product. All such information will be subject to HP's privacy policy. HP will not use such information in a form that personally identifies you except to the extent necessary to enhance your Use or provide support services.

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9. U.S. GOVERNMENT CUSTOMERS. If you are a U.S. Government entity, then consistent with FAR 12.211 and FAR 12.212, Commercial Computer Software, Computer Software Documentation, and Technical Data for Commercial Items are licensed under the applicable HP commercial license agreement.

10. COMPLIANCE WITH EXPORT LAWS. You will comply with all laws, rules, and regulations (i) applicable to the export or import of the Software, or (ii) restricting the Use of the Software, including any restrictions on nuclear, chemical, or biological weapons proliferation.

11. RESERVATION OF RIGHTS. HP and its suppliers reserve all rights not expressly granted to you in this EULA.

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Rev. 11/06

# OpenSSL

This product includes software developed by the OpenSSL Project for use in the OpenSSL Toolkit (<http://www.openssl.org/>)

THIS SOFTWARE IS PROVIDED BY THE OpenSSL PROJECT "AS IS" AND ANY EXPRESSED OR IMPLIED WARRANTIES, INCLUDING, BUT NOT LIMITED TO, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE ARE DISCLAIMED. IN NO EVENT SHALL THE OpenSSL PROJECT OR ITS CONTRIBUTORS BE LIABLE FOR ANY DIRECT, INDIRECT, INCIDENTAL, SPECIAL, EXEMPLARY, OR CONSEQUENTIAL DAMAGES (INCLUDING, BUT NOT LIMITED TO, PROCUREMENT OF SUBSTITUTE GOODS OR SERVICES;

LOSS OF USE, DATA, OR PROFITS; OR BUSINESS INTERRUPTION) HOWEVER CAUSED AND ON ANY THEORY OF LIABILITY, WHETHER IN CONTRACT, STRICT LIABILITY, OR TORT (INCLUDING NEGLIGENCE OR OTHERWISE) ARISING IN ANY WAY OUT OF THE USE OF THIS SOFTWARE, EVEN IF ADVISED OF THE POSSIBILITY OF SUCH DAMAGE.

This product includes cryptographic software written by Eric Young ([ey@cryptsoft.com](mailto:ey@cryptsoft.com)). This product includes software written by Tim Hudson ([tjh@cryptsoft.com](mailto:tjh@cryptsoft.com)).

# Customer support

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Get telephone support for your country/region	Country/region phone numbers are on the flyer that was in the box with your product or at <a href="http://www.hp.com/support/">www.hp.com/support/</a> .
Have the product name, serial number, date of purchase, and problem description ready.	
Get 24-hour Internet support	<a href="http://www.hp.com/support/ljcp1520series">www.hp.com/support/ljcp1520series</a>
Get support for products used with a Macintosh computer	<a href="http://www.hp.com/go/macosex">www.hp.com/go/macosex</a>
Download software utilities, drivers, and electronic information	<a href="http://www.hp.com/support/ljcp1520series">www.hp.com/support/ljcp1520series</a>
Order additional HP service or maintenance agreements	<a href="http://www.hp.com/go/carepack">www.hp.com/go/carepack</a>
Register your product	<a href="http://www.register.hp.com">www.register.hp.com</a>

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## Repack the product

If HP Customer Care determines that your product needs to be returned to HP for repair, follow these steps to repack the product before shipping it.

△ **CAUTION:** Shipping damage as a result of inadequate packing is the customer's responsibility.

1. Remove and retain any DIMMs cards that you have purchased and installed in the product.

△ **CAUTION:** Static electricity can damage electronic parts. When handling DIMMs, either wear an antistatic wrist strap, or frequently touch the surface of the DIMM antistatic package and then touch bare metal on the product.

2. Remove and retain the print cartridge.

△ **CAUTION:** It is *extremely important* to remove the print cartridge before shipping the product. A print cartridge that remains in the product during shipping can leak and cover the product engine and other parts with toner.

To prevent damage to the print cartridge, avoid touching the roller on it, and store the print cartridge in its original packing material or so that it is not exposed to light.

3. Remove and retain the power cable, interface cable, and optional accessories, such as an EIO card.

4. If possible, include print samples and 50 to 100 sheets of paper or other print media that did not print correctly.

5. In the U.S., call HP Customer Care to request new packing material. In other areas, use the original packing material, if possible. Hewlett-Packard recommends insuring the equipment for shipment.



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## B Product specifications

- [Physical specifications](#)
- [Power consumption, electrical specifications, and acoustic emissions](#)
- [Environmental specifications](#)

## Physical specifications

**Table B-1 Physical specifications**

Height	Depth	Width	Weight
254 mm (10.0 inches)	452 mm (17.8 inches)	399 mm (15.7 inches)	18.43 kg (40.64 lb)

## Power consumption, electrical specifications, and acoustic emissions

See [www.hp.com/support/ljcp1520series](http://www.hp.com/support/ljcp1520series) for current information.

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

## Environmental specifications

**Table B-2 Operating-environment specifications**

Environment	Recommended	Allowed
Temperature	17° to 25°C (62.6° to 77°F)	15° to 30°C (59° to 86°F)
Humidity	30% to 70% relative humidity (RH)	10% to 80% RH
Altitude	Not applicable	0 to 3048 m (0 to 10,000 ft)

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# C Regulatory information

- [FCC regulations](#)
- [Environmental product stewardship program](#)
- [Declaration of conformity](#)
- [Declaration of Conformity \(wireless models\)](#)
- [Safety statements](#)
- [Additional statements for wireless products](#)

## FCC regulations

This equipment has been tested and found to comply with the limits for a Class B digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses, and can radiate radio frequency energy. If this equipment is not installed and used in accordance with the instructions, it may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase separation between equipment and receiver.
- Connect equipment to an outlet on a circuit different from that to which the receiver is located.
- Consult your dealer or an experienced radio/TV technician.

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 **NOTE:** Any changes or modifications to the printer that are not expressly approved by HP could void the user's authority to operate this equipment.

Use of a shielded interface cable is required to comply with the Class B limits of Part 15 of FCC rules.

# Environmental product stewardship program

## Protecting the environment

Hewlett-Packard Company is committed to providing quality products in an environmentally sound manner. This product has been designed with several attributes to minimize impacts on our environment.

## Ozone production

This product generates no appreciable ozone gas (O<sub>3</sub>).

## Power consumption

Power usage drops significantly while in Ready or Sleep mode, which saves natural resources and saves money without affecting the high performance of this product. Hewlett-Packard printing and imaging equipment marked with the ENERGY STAR® logo is qualified to the U.S. Environmental Protection Agency's ENERGY STAR specifications for imaging equipment. The following mark will appear on ENERGY STAR qualified imaging products:



Additional ENERGY STAR qualified imaging product model information is listed at:

[www.hp.com/go/energystar](http://www.hp.com/go/energystar)

## Paper use

This product's manual duplex feature (two-sided printing) and N-up printing (multiple pages printed on one page) capability can reduce paper usage and the resulting demands on natural resources.

## Plastics

Plastic parts over 25 grams are marked according to international standards that enhance the ability to identify plastics for recycling purposes at the end of the product's life.

## HP LaserJet print supplies

It's easy to return and recycle your HP LaserJet print cartridges after use—free of charge—with HP Planet Partners. Multilingual program information and instructions are included in every new HP LaserJet print cartridge and supplies package. You help reduce the toll on the environment further when you return multiple cartridges together rather than separately.

HP is committed to providing inventive, high-quality products and services that are environmentally sound, from product design and manufacturing to distribution, customer use and recycling. When you participate in the HP Planet Partners program, we ensure your HP LaserJet print cartridges are recycled properly, processing them to recover plastics and metals for new products and diverting millions of tons of waste from landfills. Since this cartridge is being recycled and used in new materials, it will not be returned to you. Thank you for being environmentally responsible!

 **NOTE:** Use the return label to return original HP LaserJet print cartridges only. Please do not use this label for HP inkjet cartridges, non-HP cartridges, refilled or remanufactured cartridges or warranty returns. For information about recycling your HP inkjet cartridges please go to <http://www.hp.com/recycle>.

## Return and recycling instructions

### United States and Puerto Rico

The enclosed label in the HP LaserJet toner cartridge box is for the return and recycling of one or more HP LaserJet print cartridges after use. Please follow the applicable instructions below.

#### Multiple returns (more than one cartridge)

1. Package each HP LaserJet print cartridge in its original box and bag.
2. Tape the boxes together using strapping or packaging tape. The package can weigh up to 31 kg (70 lb).
3. Use a single pre-paid shipping label.

#### OR

1. Use your own suitable box, or request a free bulk collection box from [www.hp.com/recycle](http://www.hp.com/recycle) or 1-800-340-2445 (holds up to 31 kg (70 lb) of HP LaserJet print cartridges).
2. Use a single pre-paid shipping label.

#### Single returns

1. Package the HP LaserJet print cartridge in its original bag and box.
2. Place the shipping label on the front of the box.

#### Shipping

For all HP LaserJet print cartridge recycling returns, give the package to UPS during your next delivery or pickup, or take it to an authorized UPS drop-off center. For the location of your local UPS drop-off center, call 1-800-PICKUPS or visit [www.ups.com](http://www.ups.com). If you are returning via USPS label, give the package to a U.S. Postal Service carrier or drop off at a U.S. Postal Service Office. For more information, or to order additional labels or boxes for bulk returns, visit [www.hp.com/recycle](http://www.hp.com/recycle) or call 1-800-340-2445. Requested UPS pickup will be charged normal pickup rates. Information subject to change without notice.

#### Residents of Alaska and Hawaii

Do not use the UPS label. Call 1-800-340-2445 for information and instructions. The U.S. Postal Service provides no-cost cartridge return transportation services under an arrangement with HP for Alaska and Hawaii.

#### Non-U.S. returns

To participate in HP Planet Partners return and recycling program, just follow the simple directions in the recycling guide (found inside the packaging of your new product supply item) or visit [www.hp.com/recycle](http://www.hp.com/recycle). Select your country/region for information on how to return your HP LaserJet printing supplies.

## Paper

This product is capable of using recycled papers when the paper meets the guidelines outlined in the *HP LaserJet Printer Family Print Media Guide*. This product is suitable for the use of recycled paper according to EN12281:2002.

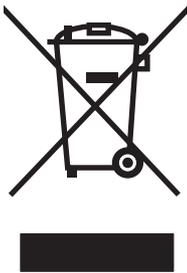
## Material restrictions

This HP product contains mercury in the fluorescent lamp of the scanner and/or control panel liquid crystal display that may require special handling at end-of-life.

This HP product does not contain a battery.

For recycling information, you can go to [www.hp.com/recycle](http://www.hp.com/recycle), or contact your local authorities or the Electronics Industries Alliance: [www.eiae.org](http://www.eiae.org).

## Disposal of waste equipment by users in private households in the European Union



This symbol on the product or on its packaging indicates that this product must not be disposed of with your other household waste. Instead, it is your responsibility to dispose of your waste equipment by handing it over to a designated collection point for the recycling of waste electrical and electronic equipment. The separate collection and recycling of your waste equipment at the time of disposal will help to conserve natural resources and ensure that it is recycled in a manner that protects human health and the environment. For more information about where you can drop off your waste equipment for recycling, please contact your local city office, your household waste disposal service or the shop where you purchased the product.

## Chemical substances

HP is committed to providing our customers with information about the chemical substances in our products as needed to comply with legal requirements such as REACH (Regulation EC No 1907/2006 of the European Parliament and the Council). A chemical information report for this product can be found at: [www.hp.com/go/reach](http://www.hp.com/go/reach).

## Material Safety Data Sheet (MSDS)

Material Safety Data Sheets (MSDS) for supplies containing chemical substances (for example, toner) can be obtained by accessing the HP Web site at [www.hp.com/go/msds](http://www.hp.com/go/msds) or [www.hp.com/hpinfo/community/environment/productinfo/safety](http://www.hp.com/hpinfo/community/environment/productinfo/safety).

## For more information

To obtain information about these environmental topics:

- Product environmental profile sheet for this and many related HP products
- HP's commitment to the environment
- HP's environmental management system
- HP's end-of-life product return and recycling program
- Material Safety Data Sheets

Visit [www.hp.com/go/environment](http://www.hp.com/go/environment) or [www.hp.com/hpinfo/globalcitizenship/environment](http://www.hp.com/hpinfo/globalcitizenship/environment).

# Declaration of conformity

## Declaration of Conformity

according to ISO/IEC 17050-1 and EN 17050-1

**Manufacturer's Name:** Hewlett-Packard Company DoC#: BOISB-0603-03-rel. 1.0

**Manufacturer's Address:** 11311 Chinden Boulevard  
Boise, Idaho 83714-1021, USA

**declares, that the product**

**Product Name:** HP Color LaserJet CP1525n

**Regulatory Model:<sup>2)</sup>** BOISB-0603-03

**Product Options:** ALL

**Print Cartridges:** CE320A, CE321A, CE322A, CE323A

**conforms to the following Product Specifications:**

**SAFETY:** IEC 60950-1:2005 / EN60950-1: 2006  
IEC 60825-1:2006 / EN 60825-1:2007 (Class 1 Laser/LED Product)  
IEC 62311:2007 / EN62311:2008  
GB4943-2001

**EMC:** CISPR22:2005 +A1/ EN55022:2006 +A1 - Class B<sup>1)</sup>  
EN 61000-3-2:2006  
EN 61000-3-3:1995 +A1 +A2  
EN 55024:1998 +A1 +A2  
FCC Title 47 CFR, Part 15 Class B / ICES-003, Issue 4  
GB9254-2008, GB17625.1-2003

**ENERGY USE:** Regulation (EC) No. 1275/2008

**Supplementary Information:**

The product herewith complies with the requirements of the EMC Directive 2004/108/EC and the Low Voltage Directive 2006/95/EC, the EuP Directive 2005/32/EC and carries the CE-Marking  accordingly.

This Device complies with Part 15 of the FCC Rules. Operation is subject to the following two Conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

1. The product was tested in a typical configuration with Hewlett-Packard Personal Computer Systems.
2. For regulatory purposes, these products are assigned a Regulatory model number. This number should not be confused with the product name or the product number(s).

**Boise, Idaho USA**

**September 2010**

**For Regulatory Topics only, contact:**

European Contact

Your Local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department HQ-TRE / Standards Europe, Herrenberger Strasse 140, D-71034, Böblingen (FAX: +49-7031-14-3143) [www.hp.com/go/certificates](http://www.hp.com/go/certificates)

USA Contact

Product Regulations Manager, Hewlett-Packard Company, PO Box 15, Mail Stop 160, Boise, Idaho 83707-0015 (Phone: 208-396-6000)

# Declaration of Conformity (wireless models)

## Declaration of Conformity

according to ISO/IEC 17050-1 and EN 17050-1

**Manufacturer's Name:** Hewlett-Packard Company DoC#: BOISB-0603-04-rel. 1.0  
**Manufacturer's Address:** 11311 Chinden Boulevard  
Boise, Idaho 83714-1021, USA

**declares, that the product**

**Product Name:** HP Color LaserJet CP1525nw  
**Regulatory Model:<sup>2)</sup>** BOISB-0603-04  
**Product Options:** ALL  
**Radio Module<sup>3)</sup>** SDGOB-0892  
**Print Cartridges:** CE320A, CE321A, CE322A, CE323A

**conforms to the following Product Specifications:**

**SAFETY:** IEC 60950-1:2005 / EN60950-1: 2006  
IEC 60825-1:2006 / EN 60825-1:2007 (Class 1 Laser/LED Product)  
IEC 62311:2007 / EN62311:2008  
GB4943-2001

**EMC:** CISPR22:2005 +A1/ EN55022:2006 +A1 - Class B<sup>1)</sup>  
EN 61000-3-2:2006  
EN 61000-3-3:1995 +A1 +A2  
EN 55024:1998 +A1 +A2  
FCC Title 47 CFR, Part 15 Class B / ICES-003, Issue 4  
GB9254-2008, GB17625.1-2003

**Radio<sup>3)</sup>** EN 301 489-1:V1.8.1 / EN 301 489-17:V1.3.2  
EN 300 328:V1.7.1  
FCC Title 47 CFR, Part 15 Subpart C (Section 15.247) / IC: RSS-210

**ENERGY USE:** Regulation (EC) No. 1275/2008

**Supplementary Information:**

The product herewith complies with the requirements of the EMC Directive 2004/108/EEC and the Low Voltage Directive 2006/95/EC, the EuP Directive 2005/32/EC, and carries the CE-Marking  accordingly.

This Device complies with Part 15 of the FCC Rules. Operation is subject to the following two Conditions: (1) this device may not cause harmful interference, and (2) this device must accept any interference received, including interference that may cause undesired operation.

1. The product was tested in a typical configuration with Hewlett-Packard Personal Computer Systems.
2. For regulatory purposes, these products are assigned a Regulatory model number. This number should not be confused with the product name or the product number(s).
3. This product uses a radio module device which Regulatory Model number is SDGOB-0892 as needed to meet technical regulatory requirements for the countries/regions this product will be sold.

**Boise, Idaho USA**

**September 2010**

**For Regulatory Topics only, contact:**

European Contact	Your Local Hewlett-Packard Sales and Service Office or Hewlett-Packard GmbH, Department HQ-TRE / Standards Europe, Herrenberger Strasse 140, D-71034, Böblingen (FAX: +49-7031-14-3143) <a href="http://www.hp.com/go/certificates">www.hp.com/go/certificates</a>
USA Contact	Product Regulations Manager, Hewlett-Packard Company, PO Box 15, Mail Stop 160, Boise, Idaho 83707-0015 (Phone: 208-396-6000)

# Safety statements

## Laser safety

The Center for Devices and Radiological Health (CDRH) of the U.S. Food and Drug Administration has implemented regulations for laser products manufactured since August 1, 1976. Compliance is mandatory for products marketed in the United States. The device is certified as a “Class 1” laser product under the U.S. Department of Health and Human Services (DHHS) Radiation Performance Standard according to the Radiation Control for Health and Safety Act of 1968. Since radiation emitted inside the device is completely confined within protective housings and external covers, the laser beam cannot escape during any phase of normal user operation.

- △ **WARNING!** Using controls, making adjustments, or performing procedures other than those specified in this user guide may result in exposure to hazardous radiation.

## Canadian DOC regulations

Complies with Canadian EMC Class B requirements.

« Conforme à la classe B des normes canadiennes de compatibilité électromagnétiques. « CEM ». »

## VCCI statement (Japan)

この装置は、情報処理装置等電波障害自主規制協議会（VCCI）の基準に基づくクラスB情報技術装置です。この装置は、家庭環境で使用することを目的としていますが、この装置がラジオやテレビジョン受信機に近接して使用されると、受信障害を引き起こすことがあります。  
取扱説明書に従って正しい取り扱いをして下さい。

## Power cord instructions

Make sure your power source is adequate for the product voltage rating. The voltage rating is on the product label. The product uses either 100-127 Vac or 220-240 Vac and 50/60 Hz.

Connect the power cord between the product and a grounded AC outlet.

- △ **CAUTION:** To prevent damage to the product, use only the power cord that is provided with the product.

## Power cord statement (Japan)

製品には、同梱された電源コードをお使い下さい。  
同梱された電源コードは、他の製品では使用出来ません。

## EMC statement (Korea)

B급 기기 (가정용 방송통신기기)	이 기기는 가정용(B급)으로 전자파적합등록을 한 기기로서 주로 가정에서 사용하는 것을 목적으로 하며, 모든 지역에서 사용할 수 있습니다.
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## Laser statement for Finland

### Luokan 1 laserlaite

Klass 1 Laser Apparat

HP Color LaserJet CP1525n, CP1525nw, laserkirjoitin on käyttäjän kannalta turvallinen luokan 1 laserlaite. Normaalisissa käytöissä kirjoittimen suojakotelointi estää lasersäteiden pääsyn laitteen ulkopuolelle. Laitteen turvallisuusluokka on määritetty standardin EN 60825-1 (2007) mukaisesti.

### **VAROITUS !**

Laitteen käyttäminen muulla kuin käyttöohjeessa mainitulla tavalla saattaa altistaa käyttäjän turvallisuusluokan 1 ylittävälle näkymättömälle lasersäteilylle.

### **WARNING !**

Om apparaten används på annat sätt än i bruksanvisning specificerats, kan användaren utsättas för osynlig laserstrålning, som överskrider gränsen för laserklass 1.

### **HUOLTO**

HP Color LaserJet CP1525n, CP1525nw - kirjoittimen sisällä ei ole käyttäjän huollettavissa olevia kohteita. Laitteen saa avata ja huoltaa ainoastaan sen huoltamiseen koulutettu henkilö. Tällaiseksi huoltotoimenpiteeksi ei katsota väriainekasetin vaihtamista, paperiradan puhdistusta tai muita käyttäjän käsikirjassa lueteltuja, käyttäjän tehtäväksi tarkoitettuja ylläpitotoimia, jotka voidaan suorittaa ilman erikoistyökaluja.

### **VARO !**

Mikäli kirjoittimen suojakotelo avataan, olet alttiina näkymättömälle lasersäteilylle laitteen ollessa toiminnassa. Älä katso säteeseen.

### **WARNING !**

Om laserprinterns skyddshölje öppnas då apparaten är i funktion, utsättas användaren för osynlig laserstrålning. Betrakta ej strålen.

Tiedot laitteessa käytettävän laserdiodin säteilyominaisuuksista: Aallonpituus 775-795 nm Teho 5 mW Luokan 3B laser.

## GS statement (Germany)

Das Gerät ist nicht für die Benutzung im unmittelbaren Gesichtsfeld am Bildschirmarbeitsplatz vorgesehen. Um störende Reflexionen am Bildschirmarbeitsplatz zu vermeiden, darf dieses Produkt nicht im unmittelbaren Gesichtsfeld platziert werden.

## Substances Table (China)

### 有毒有害物质表

根据中国电子信息产品污染控制管理办法的要求而出台

部件名称	有毒有害物质和元素					
	铅 (Pb)	汞 (Hg)	镉 (Cd)	六价铬 (Cr(VI))	多溴联苯 (PBB)	多溴二苯醚 (PBDE)
打印引擎	X	0	0	0	0	0
控制面板	0	0	0	0	0	0
塑料外壳	0	0	0	0	0	0
格式化板组件	X	0	0	0	0	0
碳粉盒	X	0	0	0	0	0

0609

0：表示在此部件所用的所有同类材料中，所含的此有毒或有害物质均低于 SJ/T11363-2006 的限制要求。

X：表示在此部件所用的所有同类材料中，至少一种所含的此有毒或有害物质高于 SJ/T11363-2006 的限制要求。

注：引用的“环保使用期限”是根据在正常温度和湿度条件下操作使用产品而确定的。

## Restriction on Hazardous Substances statement (Turkey)

Türkiye Cumhuriyeti: EEE Yönetmeliğine Uygundur

# Additional statements for wireless products

## FCC compliance statement—United States

### Exposure to radio frequency radiation

- △ **CAUTION:** The radiated output power of this device is far below the FCC radio frequency exposure limits. Nevertheless, the device shall be used in such a manner that the potential for human contact during normal operation is minimized.

In order to avoid the possibility of exceeding the FCC radio frequency exposure limits, human proximity to the antenna shall not be less than 20 cm ( 8 in)) during normal operation.

This device complies with Part 15 of FCC Rules. Operation is subject to the following two conditions: (1) this device may not cause interference, and (2) this device must accept any interference, including interference that may cause undesired operation of the device.

- △ **CAUTION:** Based on Section 15.21 of the FCC rules, changes of modifications to the operation of this product without the express approval by Hewlett-Packard Company may invalidate its authorized use.

## Australia statement

This device incorporates a radio-transmitting (wireless) device. For protection against radio transmission exposure, it is recommended that this device be operated no less than 20 cm from the head, neck, or body.

## Brazil ANATEL statement

Este equipamento opera em caráter secundário, isto é, não tem direito à proteção contra interferência prejudicial, mesmo de estações do mesmo tipo, e não pode causar interferência a sistemas operando em caráter primário.

## Canadian statements

**For Indoor Use.** This digital apparatus does not exceed the Class B limits for radio noise emissions from digital apparatus as set out in the radio interference regulations of the Canadian Department of Communications. The internal wireless radio complies with RSS 210 of Industry Canada.

**Pour l'usage d'intérieur.** Le présent appareil numérique n'émet pas de bruits radioélectriques dépassant les limites applicables aux appareils numériques de Classe B prescrites dans le règlement sur le brouillage radioélectrique édicté par le Ministère des Communications du Canada. Le composant RF interne est conforme à la norme CNR-210 d'Industrie Canada.

## European Union regulatory notice

The telecommunications functionality of this product may be used in the following EU and EFTA countries/regions:

Austria, Belgium, Bulgaria, Cyprus, Czech Republic, Denmark, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Italy, Latvia, Liechtenstein, Lithuania, Luxembourg, Malta, Netherlands, Norway, Poland, Portugal, Romania, Slovak Republic, Slovenia, Spain, Sweden, Switzerland, and United Kingdom.

## Notice for use in France

For 2.4 GHz Wireless LAN operation of this product certain restrictions apply: This equipment may be used indoor for the entire 2400-2483.5 MHz frequency band (channels 1-13). For outdoor use, only 2400-2454 MHz frequency band (channels 1-9) may be used. For the latest requirements, see [www.arcep.fr](http://www.arcep.fr).

L'utilisation de cet équipement (2.4 GHz Wireless LAN) est soumise à certaines restrictions : Cet équipement peut être utilisé à l'intérieur d'un bâtiment en utilisant toutes les fréquences de 2400-2483.5 MHz (Chaîne 1-13). Pour une utilisation en environnement extérieur, vous devez utiliser les fréquences comprises entre 2400-2454 MHz (Chaîne 1-9). Pour les dernières restrictions, voir, [www.arcep.fr](http://www.arcep.fr).

## Notice for use in Russia

Существуют определенные ограничения по использованию беспроводных сетей (стандарта 802.11 b/g) с рабочей частотой 2,4 ГГц: Данное оборудование может использоваться внутри помещений с использованием диапазона частот 2400-2483,5 МГц (каналы 1-13). При использовании внутри помещений максимальная эффективная изотропно-излучаемая мощность (ЭИИМ) должна составлять не более 100мВт.

## Korean statement

**당해 무선설비는 운용 중 전파혼선 가능성이 있음**

## Taiwan statement

### 低功率電波輻射性電機管理辦法

第十二條 經型式認證合格之低功率射頻電機，非經許可，公司、商號或使用者均不得擅自變更頻率、加大功率或變更原設計之特性及功能。

第十四條 低功率射頻電機之使用不得影響飛航安全及干擾合法通信；經發現有干擾現象時，應立即停用，並改善至無干擾時方得繼續使用。前項合法通信，指依電信法規定作業之無線電通信。低功率射頻電機須忍受合法通信或工業、科學及醫療用電波輻射性電機設備之干擾。



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