



LASERJET PRO 300 COLOR MFP LASERJET PRO 400 COLOR MFP

Service Manual



M375
M475



HP LaserJet Pro 300 color MFP M375 and HP LaserJet Pro 400 color MFP M475 Printers

Service Manual

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Conventions used in this guide

 **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

- Removal and replacement strategy
- Service approach
- Removal and replacement procedures

Removal and replacement strategy

This chapter discusses 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 problem solving at 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 locate. When replacing wire harnesses, always use the provided wire loops, lance points, or wire-harness guides.

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.

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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

- Number 2 Phillips screwdriver with a magnetic tip and a 152-mm (6-inch) shaft length
- Precision slotted screwdriver with a 1 mm (0.04 in) blade width

 **NOTE:** This fine-point tool is required to release the front door pins. The width of the blade must be 2 mm (0.08 in) or less to be able to drive the door pins out of the mounting holes.

- Small, slotted screwdriver
- Needle-nose pliers
- Snap-ring pliers
- ESD mat (if one is available)
- Penlight (optional)


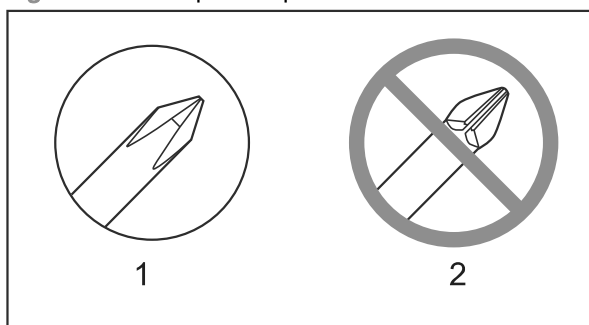
 **CAUTION:** Always use a Phillips screwdriver (callout 1). Do not use a pozidrive screwdriver (callout 2) or any motorized screwdriver. These can damage screws or screw threads.

Figure 1-1 Phillips and pozidrive screwdriver comparison


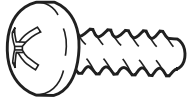

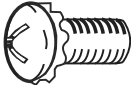
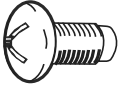


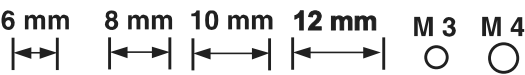
Types of screws

⚠ WARNING! Make sure that components are replaced with the correct screw type. Using the incorrect screw (for example, substituting a long screw for the correct shorter screw) can cause damage to the product or interfere with product operation. Do not intermix screws that are removed from one component by using the screws that are removed from another component.

📝 NOTE: The screw illustrations in the following table are for reference only. Screws might vary in size and appearance from those shown in this table.

Table 1-1 Common fasteners

| Example | Description | Size | Part Number |
|---|----------------------------------|-------|----------------|
|  | Screw, with washer | M3X8 | XA9-1420-000CN |
| | | M4X6 | XB2-7400-605CN |
| | | M4X12 | XA9-1422-000CN |
|  | Screw, tapping, truss head | M4X10 | XB4-7401-005CN |
| | | M4X15 | XB4-7401-609CN |
|  | Screw, TP | M3X4 | XB6-7300-405CN |
| | | M3X6 | XB6-7300-605CN |
|  | Screw, D | M3X6 | XA9-1670-000CN |
| | | M3X8 | XA9-1671-000CN |
|  | Screw, machine | M3X4 | XB6-7300-409CN |
| | Screw, machine, flat head | M3X4 | XA9-0679-000CN |
| | Screw, machine, flanged pan head | M3X6 | XB6-7300-805CN |



Service approach

Before performing service

- Remove all media from the product.
- Turn off the power using the power switch.
- Unplug the power cable and interface cable(s).
- Place the product on an ESD mat (if one is available). If an ESD workstation or mat is not available, ground yourself by touching the sheet-metal chassis *before* touching an ESD-sensitive part.
- Remove the toner cartridges.
- Remove the tray 2 cassette.

After performing service

- Connect the power cable.
- Reinstall the toner cartridges.
- Reinstall the tray 2 cassette.

Post-service tests

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

Test 1 (print-quality test)

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

Test 2 (copy-quality test)

1. Verify that you have completed the necessary reassembly steps.
2. Make sure that the input tray contains clean, unmarked paper.
3. Attach the power cable, and then turn on the product.
4. Verify that the expected start-up sounds occur.
5. Print a configuration page, and then verify that the expected printing sounds occur.
6. Place the configuration page in the document feeder.
7. Print a copy job, and then verify the results.
8. Clean the outside of the product by using a damp cloth.

Test 3 (fax-quality test; fax models only)

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

Parts removal order

Figure 1-2 Parts removal order (1 of 2)

| Component | Remove | Remove | Remove | Remove | Remove | Remove | Remove | Remove |
|---|------------------------|-------------------|------------------|-----------------------------------|------------------------------------|------------------------------------|----------------------|-------------------|
| Pickup roller (Tray 2 and Tray 3) | Tray 2 | | | | | | | |
| Separation roller (Trays 2 or 3) | Tray 2 | | | | | | | |
| Document feeder pickup roller assembly | | | | | | | | |
| Pickup roller and separation pad (Tray 1) | Tray 2 | | | | | | | |
| Print-cartridge drawer | | | | | | | | |
| DRUM cover | | | | | | | | |
| Right cover | | | | | | | | |
| Document feeder input tray | | | | | | | | |
| Scanner assembly | Right cover | | | | | | | |
| Right-front cover and power button | Right cover | | | | | | | |
| Rear-upper cover (duplex product) | | | | | | | | |
| Paper-feed guide assembly | | | | | | | | |
| Rear door stopper and link caps (simplex product) | | | | | | | | |
| Rear door (simplex product) | | | | | | | | |
| Rear door (duplex product) | | | | | | | | |
| Rear cover and feed guide (simplex product) | Right cover | Rear door stopper | Rear door | | | | | |
| Rear-lower cover and Rear door links (duplex product) | Right cover | Rear door | Rear-upper cover | | | | | |
| Rear door rib assembly (duplex product) | Right cover | Rear door | Rear-upper cover | Rear-lower cover | | | | |
| Link guide | | | | | | | | |
| Control panel and right-arm mount | Right cover | | | | | | | |
| Upper-cover assembly (Simplex products) | Right cover | Scanner assembly | Rear door | Rear cover | Control panel and right-arm mount | Right-front cover and power button | | |
| Upper-cover assembly (Duplex products) | Right cover | Scanner assembly | Rear-upper cover | Control panel and right-arm mount | Right-front cover and power button | | | |
| Left cover (Simplex products) | Right cover | Scanner assembly | Rear door | Rear cover | Upper-cover assembly | | | |
| Left cover (Duplex products) | Right cover | Scanner assembly | Rear-lower cover | Upper-cover assembly | | | | |
| Front-door assembly (Simplex products) | Print-cartridge drawer | Right cover | Scanner assembly | Rear door | Rear cover | Upper-cover assembly | Left cover | Right-front cover |
| Front-door assembly (Duplex products) | Print-cartridge drawer | Right cover | Scanner assembly | Rear-upper cover | Rear door | Rear-lower cover | Upper-cover assembly | Left cover |
| Intermediate transfer belt (ITB) | Print-cartridge drawer | | | | | | | |
| Drum motor (M1) and developer motor (M2) | Right cover | | | | | | | |
| Intermediate PCA | Right cover | | | | | | | |
| Formatter PCA and fax PCA | Right cover | | | | | | | |

Figure 1-3 Parts removal order (2 of 2)

| Component | Remove | Remove | Remove | Remove | Remove | Remove | Remove |
|---|------------------------|-------------------|------------------|-----------------------------------|------------------------------------|------------------------------------|----------------------|
| Pickup roller (Tray 2 and Tray 3) | Tray 2 | | | | | | |
| Separation roller (Trays 2 or 3) | Tray 2 | | | | | | |
| Document feeder pickup roller assembly | | | | | | | |
| Pickup roller and separation pad (Tray 1) | Tray 2 | | | | | | |
| Print-cartridge drawer | | | | | | | |
| DBMM cover | | | | | | | |
| Right cover | | | | | | | |
| Document feeder input tray | | | | | | | |
| Scanner assembly | Right cover | | | | | | |
| Right-front cover and power button | Right cover | | | | | | |
| Rear-upper cover (duplex product) | | | | | | | |
| Paper-feed guide assembly | | | | | | | |
| Rear door stopper and link caps (simplex product) | | | | | | | |
| Rear door (simplex product) | | | | | | | |
| Rear door (duplex product) | | | | | | | |
| Rear cover and feed guide (simplex product) | Right cover | Rear door stopper | Rear door | | | | |
| Rear-lower cover and Rear door links (duplex product) | Right cover | Rear door | Rear-upper cover | | | | |
| Rear door rib assembly (duplex product) | Right cover | Rear door | Rear-upper cover | Rear-lower cover | | | |
| Link guide | | | | | | | |
| Control panel and right-arm mount | Right cover | | | | | | |
| Upper-cover assembly (Simplex products) | Right cover | Scanner assembly | Rear door | Rear cover | Control panel and right-arm mount | Right-front cover and power button | |
| Upper-cover assembly (Duplex products) | Right cover | Scanner assembly | Rear-upper cover | Control panel and right-arm mount | Right-front cover and power button | | |
| Left cover (Simplex products) | Right cover | Scanner assembly | Rear door | Rear cover | Upper-cover assembly | | |
| Left cover (Duplex products) | Right cover | Scanner assembly | Rear-lower cover | Upper-cover assembly | | | |
| Front-door assembly (Simplex products) | Print-cartridge drawer | Right cover | Scanner assembly | Rear door | Rear cover | Upper-cover assembly | Left cover |
| Front-door assembly (Duplex products) | Print-cartridge drawer | Right cover | Scanner assembly | Rear-upper cover | Rear door | Rear-lower cover | Upper-cover assembly |
| Intermediate transfer belt (ITB) drum motor (M1) and developer motor (M2) | Right cover | | | | | | |
| Intermediate PCA | Right cover | | | | | | |
| Formatter PCA and fax PCA | Right cover | | | | | | |

Removal and replacement procedures


Rollers and pads

Transfer roller


The transfer roller is a component of the paper-feed assembly and not available as an individual FRU. To remove and replace the transfer roller, install a replacement paper-feed guide assembly. See [Paper-feed guide assembly on page 31](#).


Pickup roller (Tray 2 and Tray 3)

The roller must be rotated into the service position to remove it.

 **CAUTION:** Avoid touching the spongy roller surface unless you are going to replace the roller. Skin oils on the roller can cause paper pickup problems.

1. Turn the product on, and wait for it to reach the Ready state. Perform the following steps to rotate the roller to the service position.

 **NOTE:** If you have removed Tray 2 to service the product, reinstall the tray before turning the power on.


 **TIP:** The following steps rotate the engine pickup roller *and* the Tray 1 pickup roller into the service position.

- a. Simultaneously press the Left Arrow ◀ button and the Cancel ✕ button to open the 2ndry Service menu.

- b. Touch the Pick Roller item.

Touch the OK button to confirm that you want the roller to rotate.

- c. Listen for the roller to rotate. When the roller is done rotating, unplug the power cable and then place the power button in the off position.

 **CAUTION:** It is important to place the power button in the off position **after** unplugging the power cable so that the product power does not come on immediately when the power cable is plugged in again.

- d. Remove Tray 2.

- e. Perform the remaining steps in this procedure to remove the roller. After replacing the roller, plug the power cable into the product, and then use the power button to turn the power on.

2. Carefully raise the front of the product.

⚠ WARNING! Do not place the product face-up resting on the rear cover and rear door. Excess toner might enter the laser/scanner assembly and contaminate the mirrors, causing print-quality problems. The laser/scanner is not a FRU. If the laser/scanner mirrors are contaminated, the entire product must be replaced.

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

Do not lift the product grasping the front door and Tray 2 cavity.

📝 NOTE: The roller is located inside the tray cavity.

Figure 1-4 Remove the pickup roller (1 of 2)



3. Use a pair of snap-ring pliers to release two locking tabs and remove the pickup roller.

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

NOTE: If you do not have a pair of snap-ring pliers, use your fingers to release the tabs.

Figure 1-5 Remove the pickup roller (2 of 2)



Separation roller (Trays 2 or 3)

⚠ CAUTION: Avoid touching the spongy roller surface unless you are going to replace the roller. Skin oils on the roller can cause paper pickup problems.

1. Remove Tray 2 (if installed), and then carefully raise the front of the product.

⚠ WARNING! Do not place the product face-up resting on the rear cover and rear door. Excess toner might enter the laser/scanner assembly and contaminate the mirrors, causing print-quality problems. The laser/scanner is not a FRU. If the laser/scanner mirrors are contaminated, the entire product must be replaced.

⚠ CAUTION: Do not lift the product grasping the front door and Tray 2 cavity.

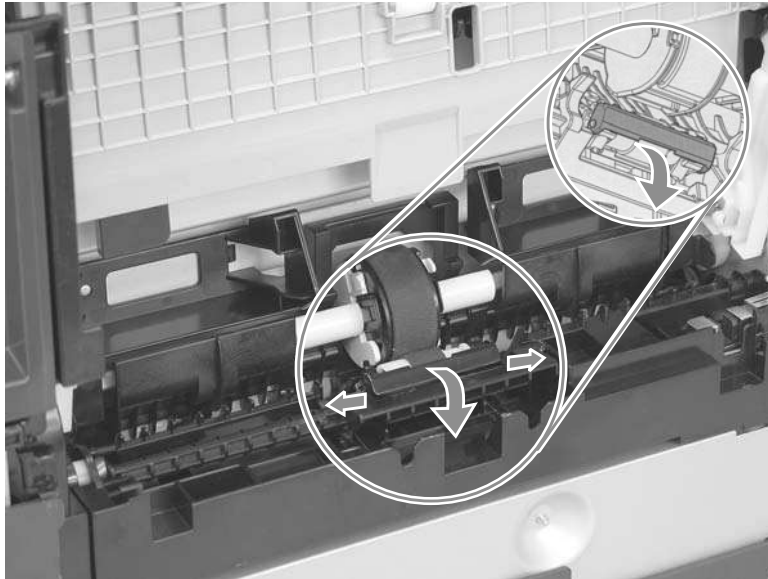
📝 NOTE: The roller is located inside the tray cavity.

Figure 1-6 Remove the pickup roller (1 of 3)



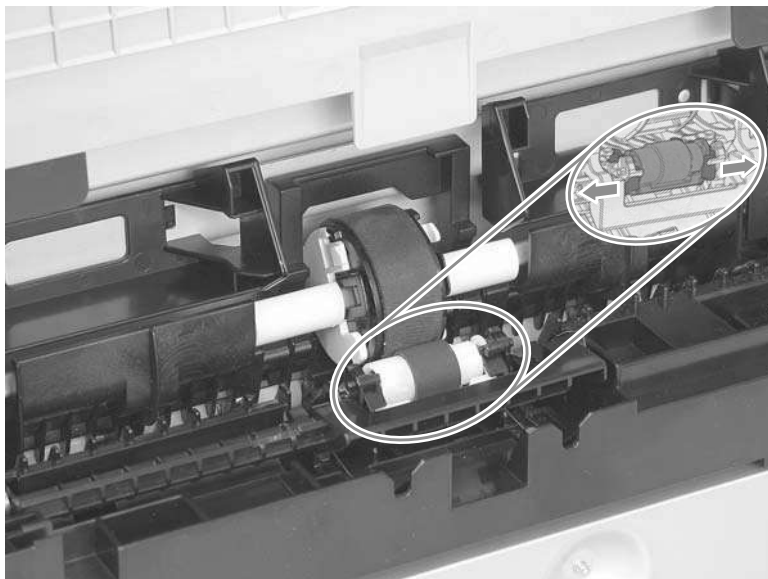
2. Release the two roller-cover locking pins, and then remove the cover.

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



3. Release the roller holder to release the roller-locking pins. Remove the separation roller.

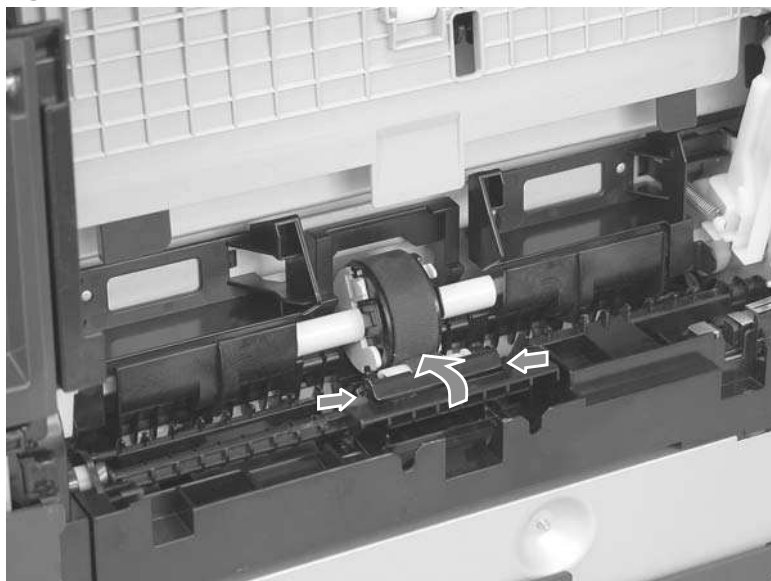
Figure 1-8 Remove the separation roller (3 of 3)




Reinstall the separation roller

1. Install the replacement separation roller.
2. Reinstall the separation roller cover on the locking pins, and then rotate it toward the roller until you hear it snap into place.

Figure 1-9 Reinstall the separation roller



Document feeder pickup roller assembly

 **IMPORTANT:** The document feeder pickup roller must be shipped in the down position.

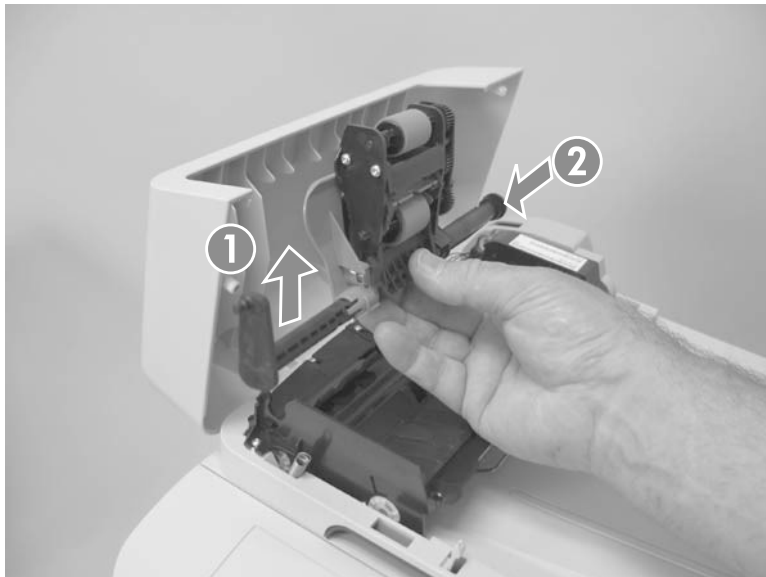
1. Open the document feeder cover.
2. Disconnect one spring (callout 1).

Figure 1-10 Remove the document feeder pickup roller assembly (1 of 2)




3. Lift up on the end of the assembly, and then slide it toward the control panel to remove it.

Figure 1-11 Remove the document feeder pickup roller assembly (2 of 2)




Pickup roller and separation pad (Tray 1)


The roller must be rotated into the service position to remove it.

 **CAUTION:** Avoid touching the spongy roller surface unless you are going to replace the roller. Skin oils on the roller can cause paper pickup problems.

 **NOTE:** Always replace the separation pad when replacing the pickup roller.

1. Turn the product on, and wait for it to reach the Ready state. Perform the following steps to rotate the roller to the service position.


 **NOTE:** If you have removed Tray 2 to service the product, reinstall the tray before turning the power on.


 **TIP:** The following steps rotate the engine pickup roller *and* the Tray 1 pickup roller into the service position.

- a. Open the 2ndry Service menu by pressing the Left Arrow ◀ ◀ button and the Cancel ✕ button simultaneously.
- b. Use the arrow buttons to select **Pick Roller**, and then press the OK button.

Touch the OK button again to confirm that you want the roller to rotate.

- c. Listen for the roller to rotate. When the roller is done rotating, unplug the power cable and then place the power button in the off position.

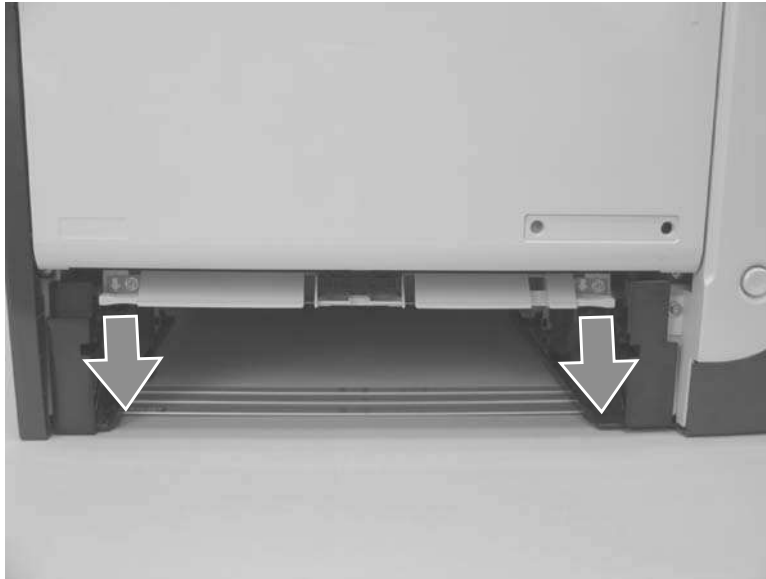
 **NOTE:** Failure to unplug the product at this point will result in the roller being in the incorrect position for the repair procedure.

 **CAUTION:** It is important to place the power button in the off position **after** unplugging the power cable so that the product power does not come on immediately when the power cable is plugged in again.

- d. Remove Tray 2.
- e. Perform the remaining steps in this procedure to remove the roller. After replacing the roller, plug the power cable into the product, and then use the power button to turn the power on.

2. Lower the Tray 1 paper pickup assembly by pushing down on the edges of the assembly.

Figure 1-12 Remove the Tray 1 pickup roller (1 of 3)



3. Carefully raise the front of the product.

⚠ WARNING! Do not place the product face-up resting on the rear cover and rear door. Excess toner might enter the laser/scanner assembly and contaminate the mirrors, causing print-quality problems. The laser/scanner is not a FRU. If the laser/scanner mirrors are contaminated, the entire product must be replaced.

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

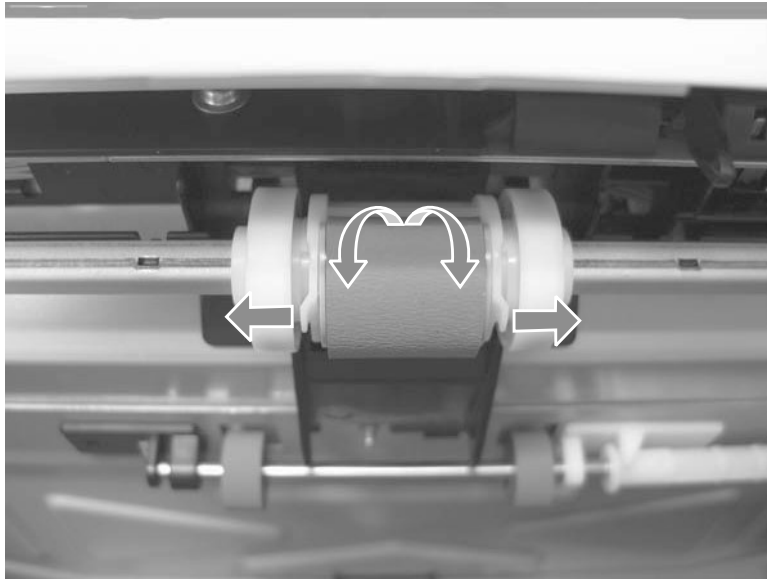
CAUTION: Do not lift the product grasping the front door and Tray 2 cavity.

Figure 1-13 Remove the Tray 1 pickup roller (2 of 3)



4. Release two tabs, and then rotate the roller away from the product to remove it.

Figure 1-14 Remove the Tray 1 pickup roller (3 of 3)



5. Release the retainer tabs, and then remove the separation pad from the base.


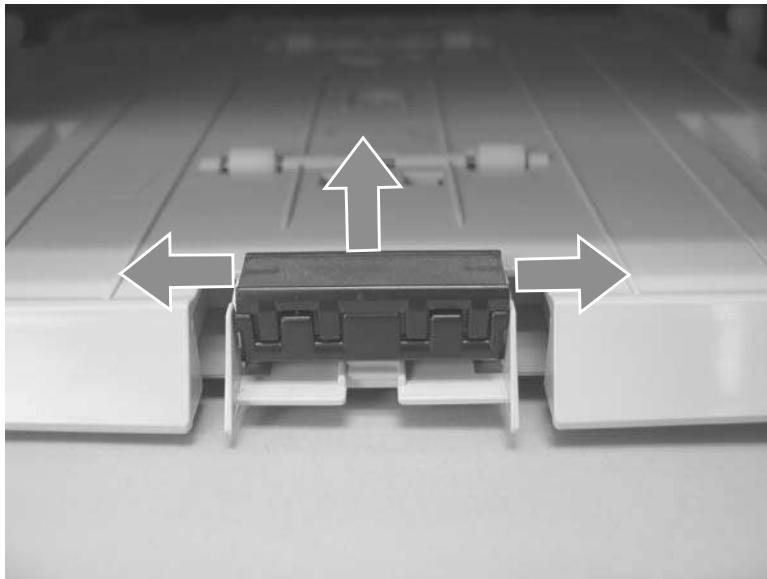
 **NOTE:** The separation pad base can easily be dislodged when the pad is removed. If the base is dislodged, do not loose the spring under the base (it is not captive).

Figure 1-15 Remove the Tray 1 separation pad



Main assemblies

Print-cartridge drawer

1. Open the front door.
2. Partially pull out the print-cartridge drawer, and then use a small flat blade screwdriver to release one tab (callout 1) on the left side of the product.

Figure 1-16 Remove the print-cartridge drawer (1 of 3)



3. Carefully rotate the print-cartridge drawer toward the right side of the product to release it.

Figure 1-17 Remove the print-cartridge drawer (2 of 3)



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

Figure 1-18 Remove the print-cartridge drawer (3 of 3)



DIMM cover

1. Open the DIMM cover.
2. Lift the cover up to release it, and then remove the cover.

Figure 1-19 Remove the DIMM cover

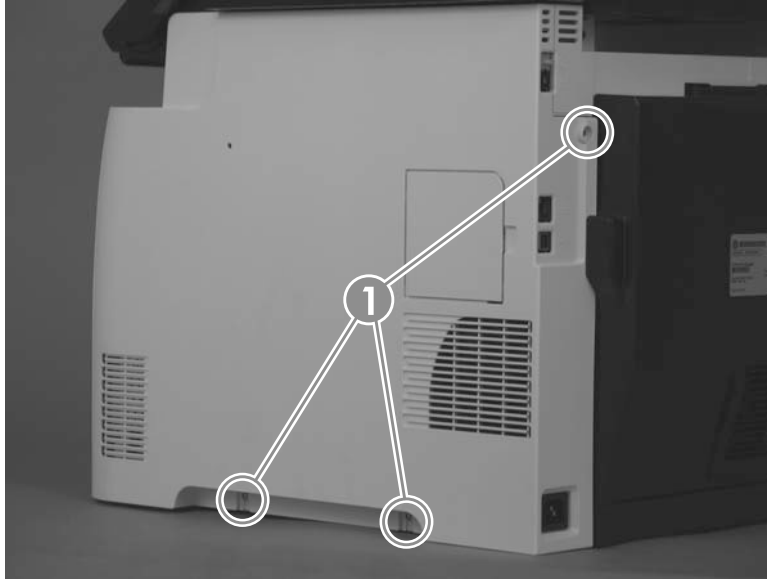


Right cover

 **NOTE:** For duplex products, open the rear door.

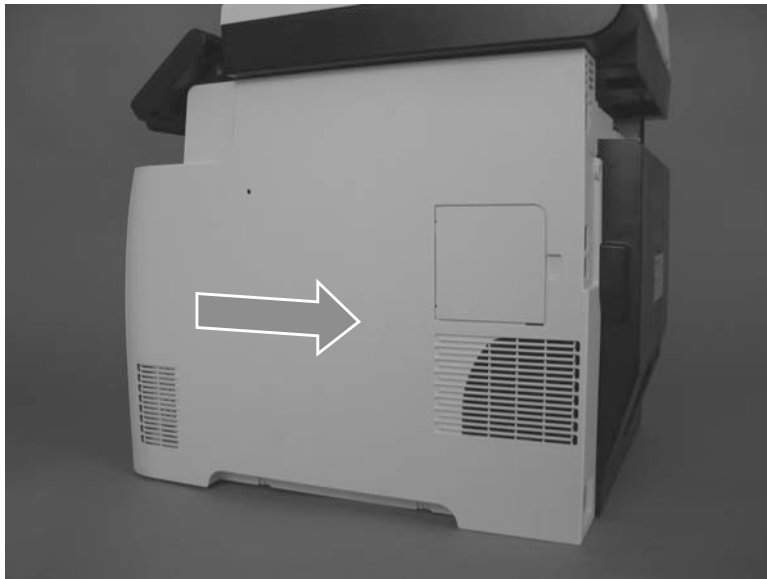
1. Remove three screws (callout 1).

Figure 1-20 Remove the right cover (1 of 3)



2. Slide the right cover toward the back of the product.

Figure 1-21 Remove the right cover (2 of 3)



3. Remove the right cover.

Figure 1-22 Remove the right cover (3 of 3)



Document feeder input tray

- ▲ Open the document feeder top cover.

Figure 1-23 Remove the document feeder input tray (2 of 2)



Rotate the document feeder input tray up to release it, and then remove the tray.


 **TIP:** Hold down the scanner lid while removing the tray. It might take considerable pressure to release the tray from the document feeder.

Figure 1-24 Remove the document feeder input tray (2 of 2)



Scanner assembly

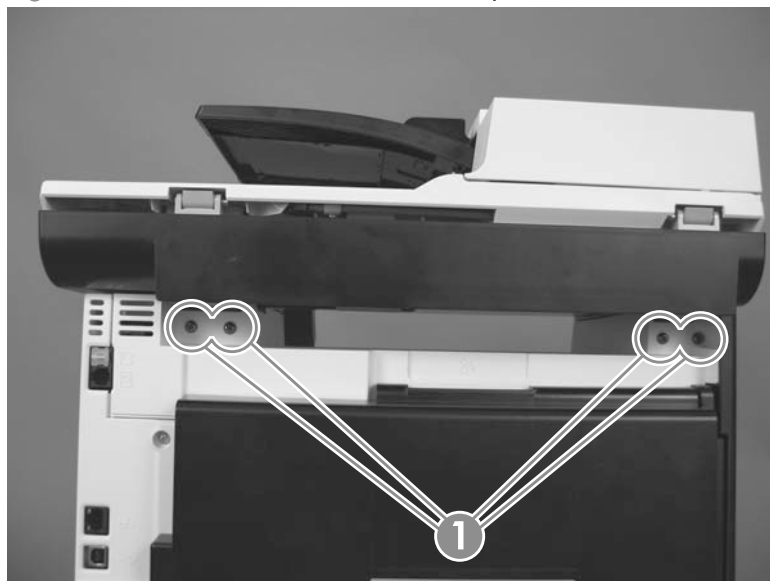
1. Remove the right cover. See [Right cover on page 23](#).
2. Disconnect one FFCs (callout 1), two connectors (callout 2), and one ground-wire connector (callout 3).

Figure 1-25 Remove the scanner assembly (1 of 4)



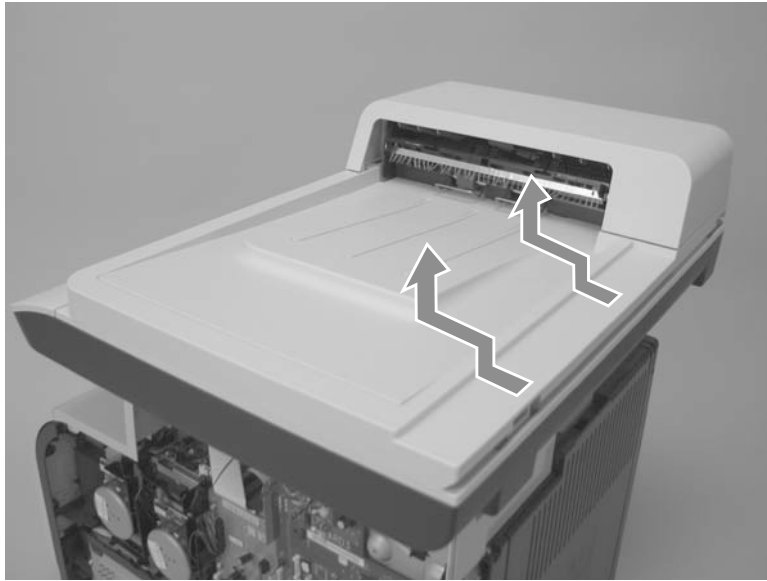
3. Remove four screws (callout 1).

Figure 1-26 Remove the scanner assembly (2 of 4)



4. Slightly lift up the back of the scanner, and then slide it toward the front of the product.

Figure 1-27 Remove the scanner assembly (3 of 4)



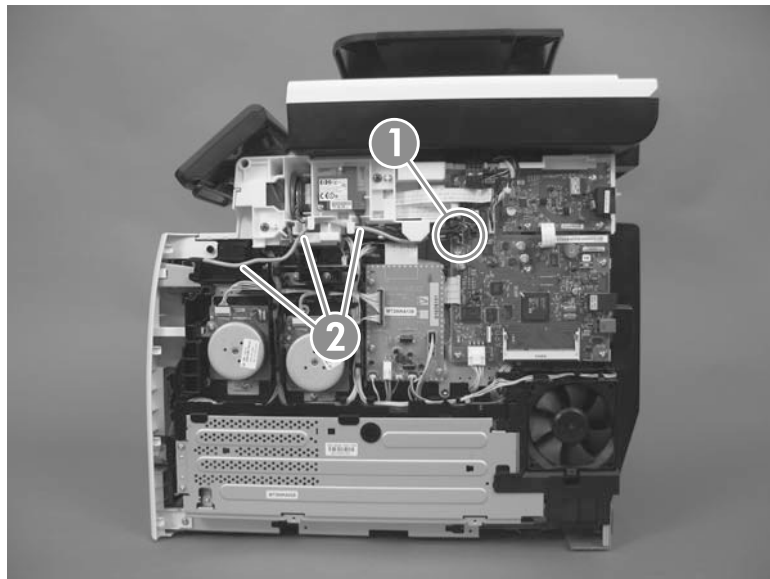
5. Lift the scanner straight up and off of the product.

Figure 1-28 Remove the scanner assembly (4 of 4)

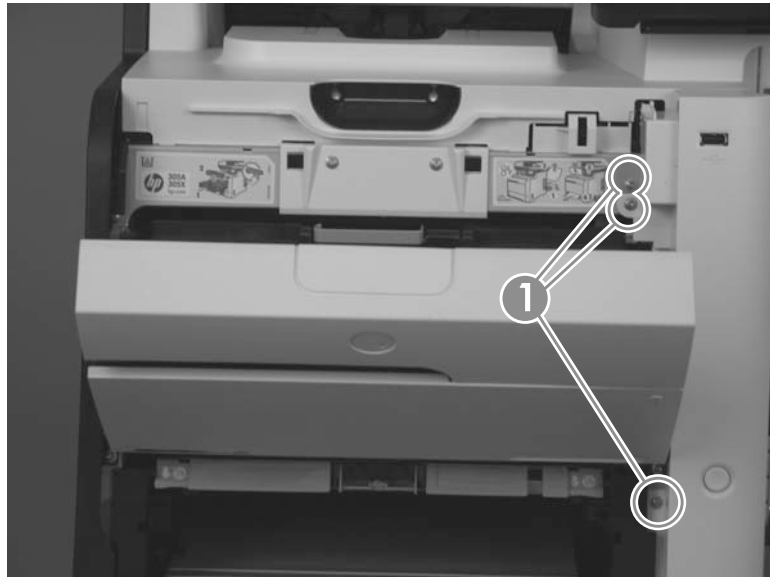


Right-front cover and power button

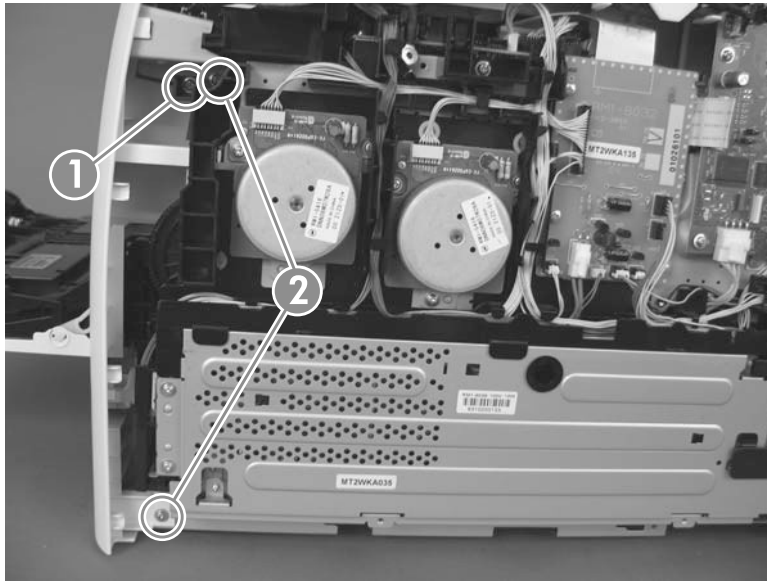
1. Remove the right cover. See [Right cover on page 23](#).
2. Disconnect the USB PCA connector from the formatter PCA (callout 1), and then release the wire from the retainer (callout 2).



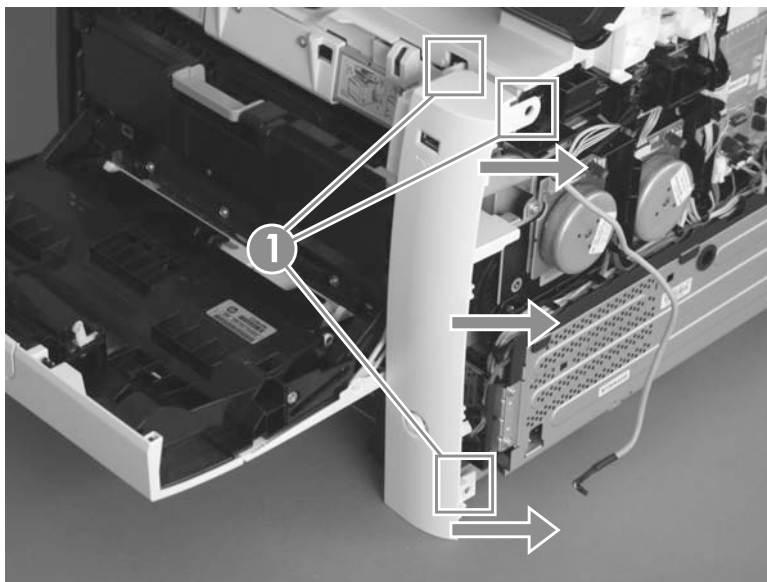
3. Open the front door, and then remove three screws (callout 1).



4. Remove one screw and retainer (callout 1), and then remove two screws (callout 2).



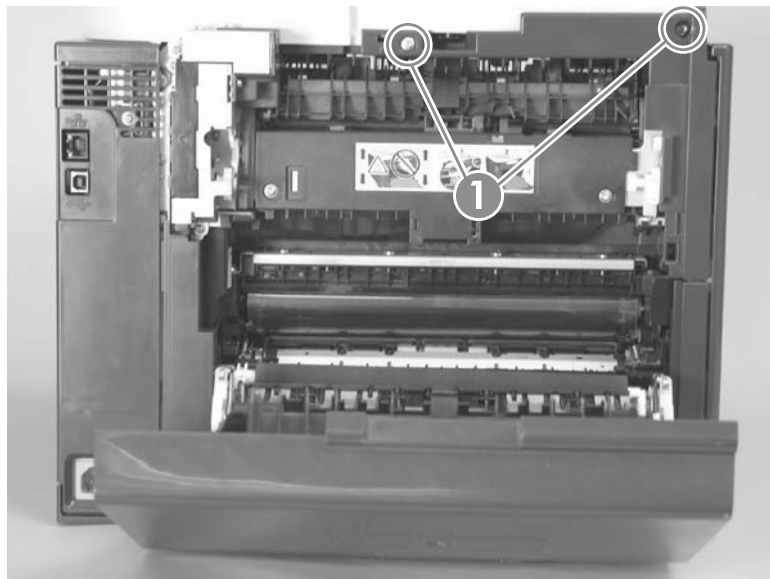
5. Slide the cover slightly toward the right to release three tabs (callout 1), and then remove the cover.



Rear-upper cover (duplex product)

1. Open the rear cover.
2. Remove two screws (callout 1).

Figure 1-29 Remove the rear-upper cover (1 of 2)




3. Slightly separate the cover from the product, and then rotate the cover down and then away from the product to remove it.

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

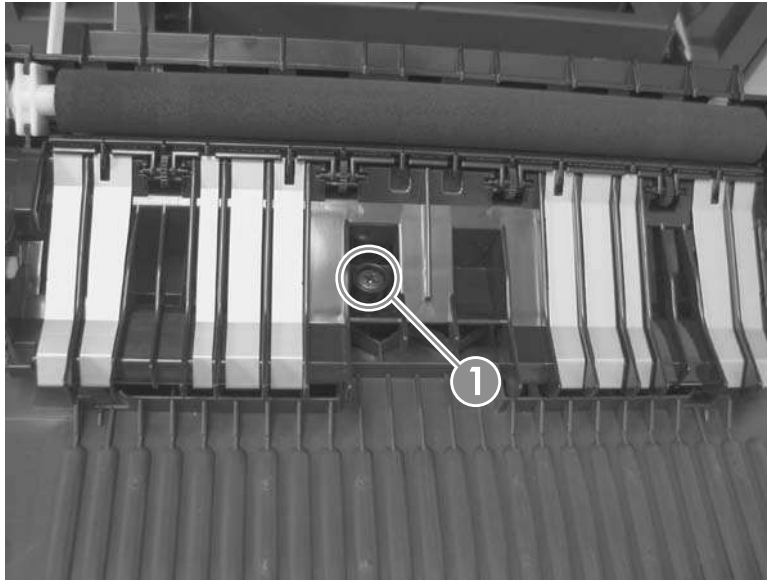


Paper-feed guide assembly

 **NOTE:** A simplex model is shown below. Duplex and simplex models use the same paper-feed guide assembly, and the removal and replacement processes are identical.

1. Release one screw (callout 1).

Figure 1-31 Remove the feed assembly (1 of 2)



2. Remove the feed assembly.


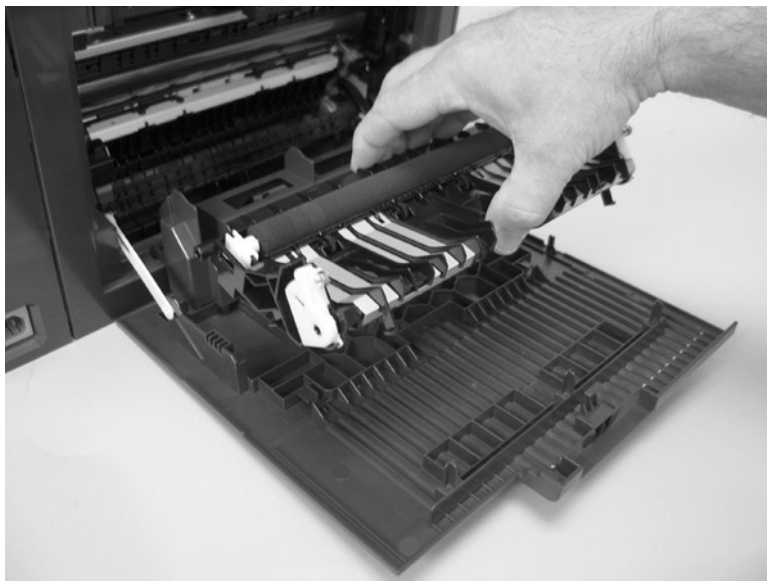
 **TIP:** When the feed assembly is correctly reinstalled, the assembly will be able to move in relation to the door. It should not be secured firmly to the door.

Figure 1-32 Remove the feed assembly (2 of 2)



Rear-door stopper and link caps (simplex product)

1. Open the rear door.
2. Use a pair of needle-nose pliers to release two tabs, and then remove the link cap.

Figure 1-33 Remove the Rear-door stopper and link caps (simplex product) (1 of 2)



3. Use a small flat blade screwdriver to carefully remove the remaining link cap, and then remove the Rear-door stopper.

Figure 1-34 Remove the Rear-door stopper and link cap (simplex product) (2 of 2)



Rear door (simplex product)

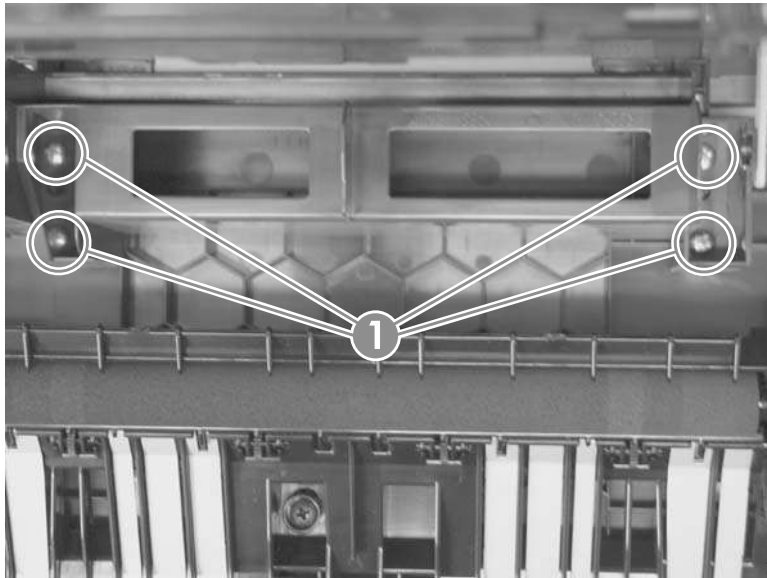
1. Open the rear door.
2. Use a pair of needle-nose pliers to release two tabs, and then remove the link cap.

Figure 1-35 Remove the rear door (simplex product) (1 of 4)



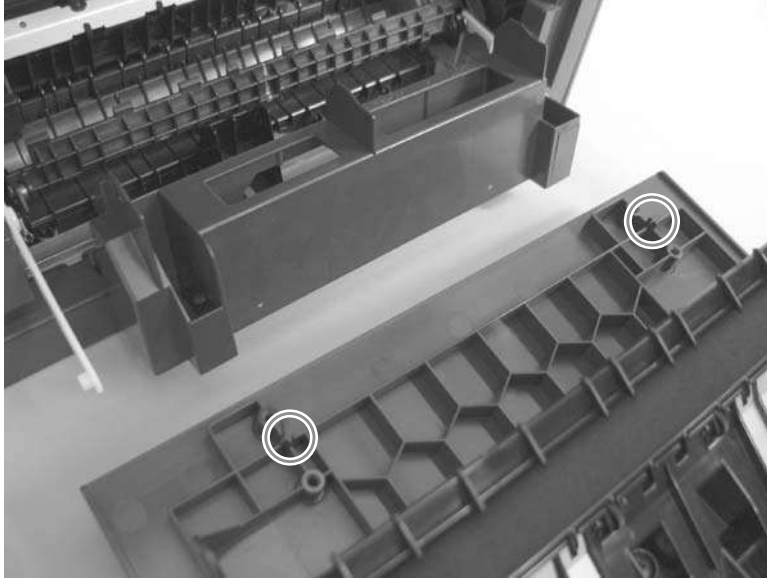
3. Remove four screws (callout 1).

Figure 1-36 Remove the rear door (simplex product) (2 of 4)



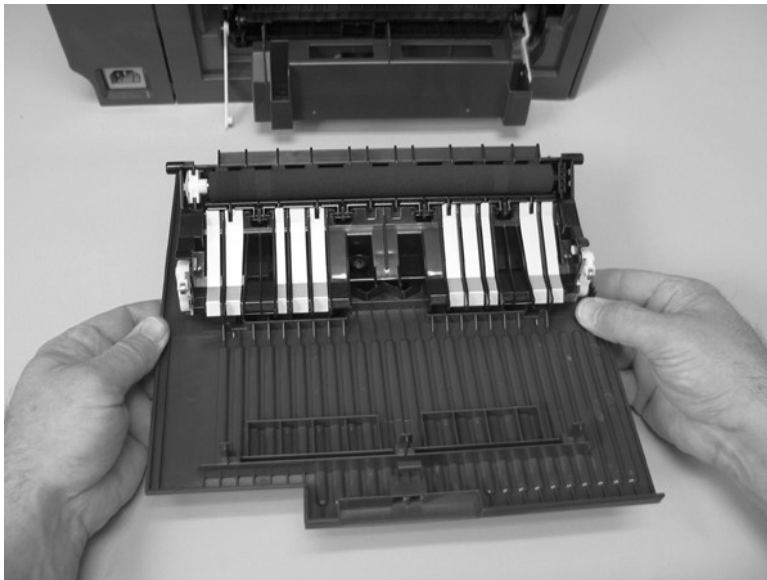
4. Before you remove the rear door, take note of the alignment pins on the door.

Figure 1-37 Remove the rear door (simplex product) (3 of 4)



5. Remove the rear door.

Figure 1-38 Remove the rear door (simplex product) (4 of 4)



Rear door (duplex product)

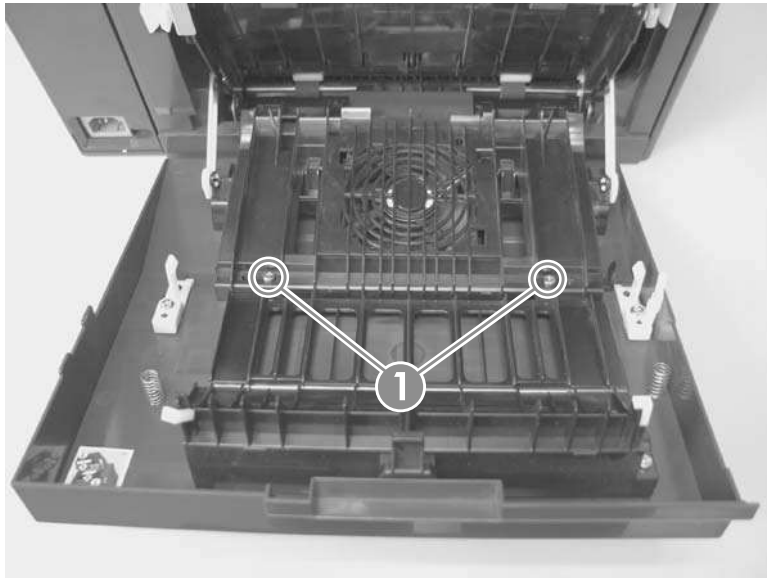
1. Open the rear door.
2. Use the green handle to close the duplex-feed assembly.

Figure 1-39 Remove the rear door (duplex product) (1 of 4)



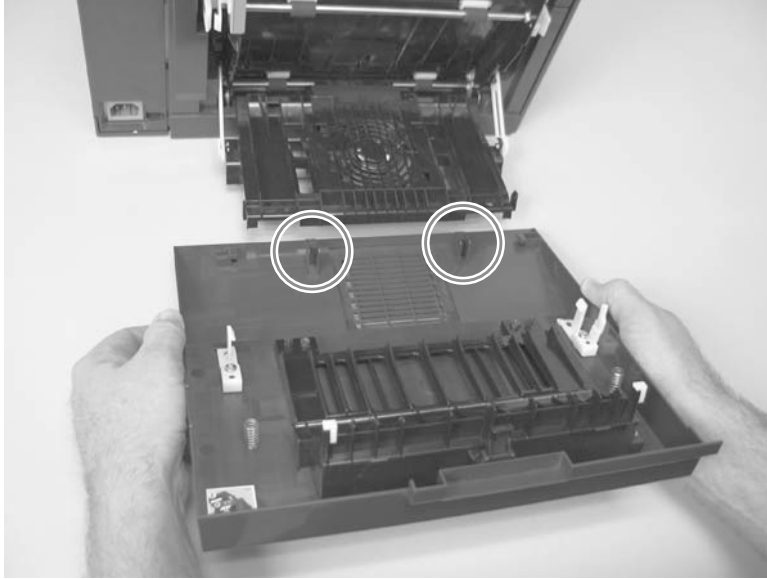
3. Remove two screws (callout 1).

Figure 1-40 Remove the rear door (duplex product) (2 of 4)



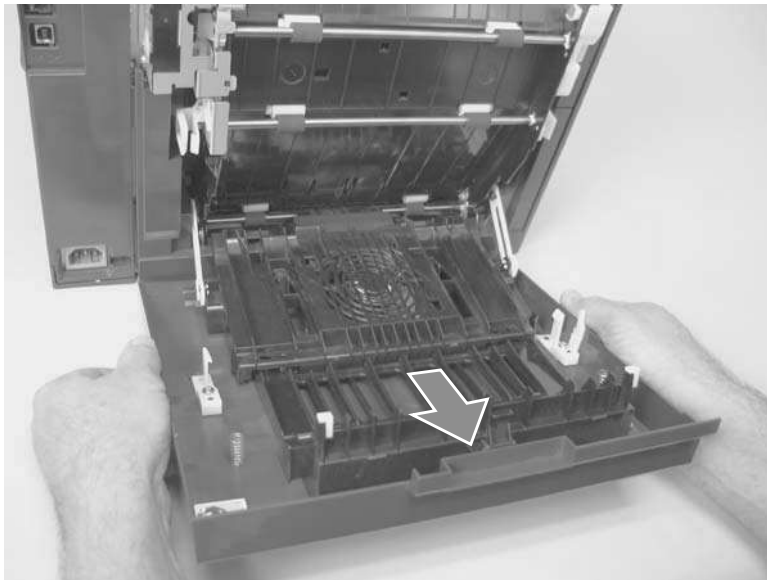
4. Before you remove the rear door, take note of the mounting tabs on the door.

Figure 1-41 Remove the rear door (duplex product) (3 of 4)



5. Slide the door away from the product to release two tabs, and then remove the door.

Figure 1-42 Remove the rear door (duplex product) (4 of 4)



Rear cover and feed guide (simplex product)

Before proceeding, remove the following components:

- Right cover. See [Right cover on page 23](#).
- Rear-door stopper. See [Rear-door stopper and link caps \(simplex product\) on page 32](#).
- Rear door. See [Rear door \(simplex product\) on page 33](#) or [Rear door \(duplex product\) on page 35](#).

Remove the rear cover and feed guide (simplex product)

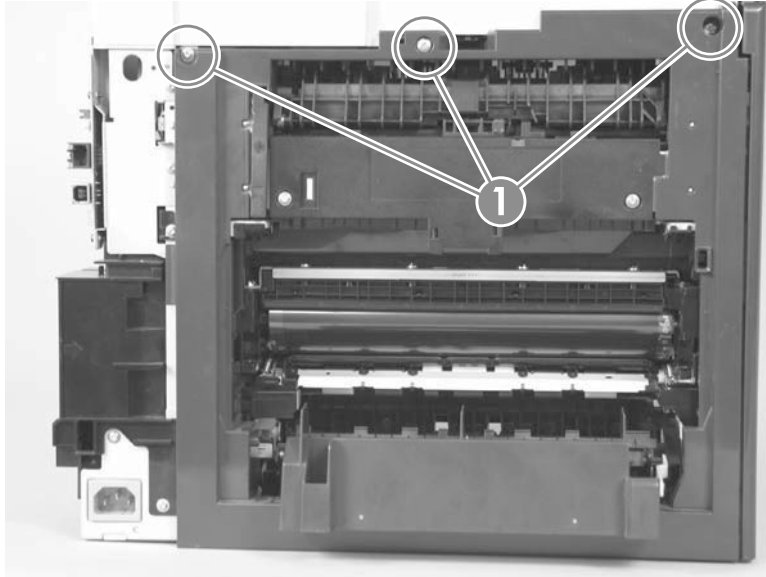
1. Carefully release the link guide from the pivot pin on the feed guide.

Figure 1-43 Remove the rear cover and feed guide (simplex product) (1 of 6)



2. Remove three screws (callout 1).

Figure 1-44 Remove the rear cover and feed guide (simplex product) (2 of 6)



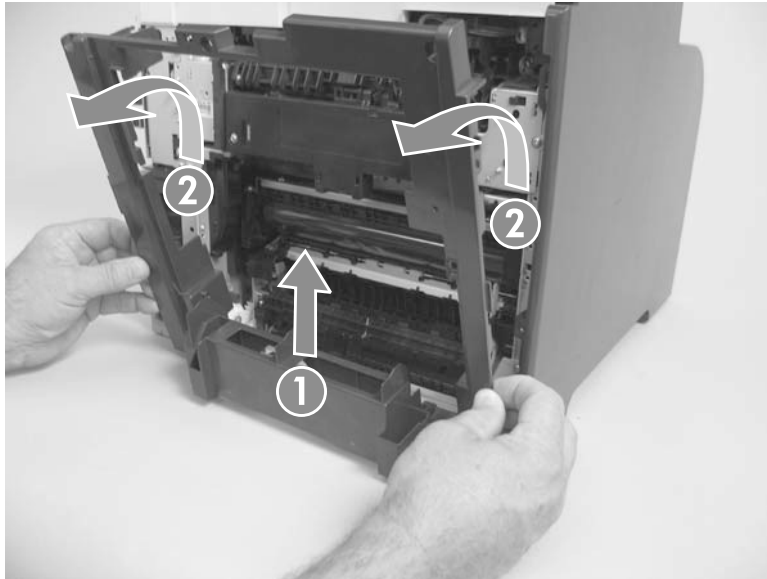
3. Release two tabs (callout 1).


Figure 1-45 Remove the rear cover and feed guide (simplex product) (3 of 6)

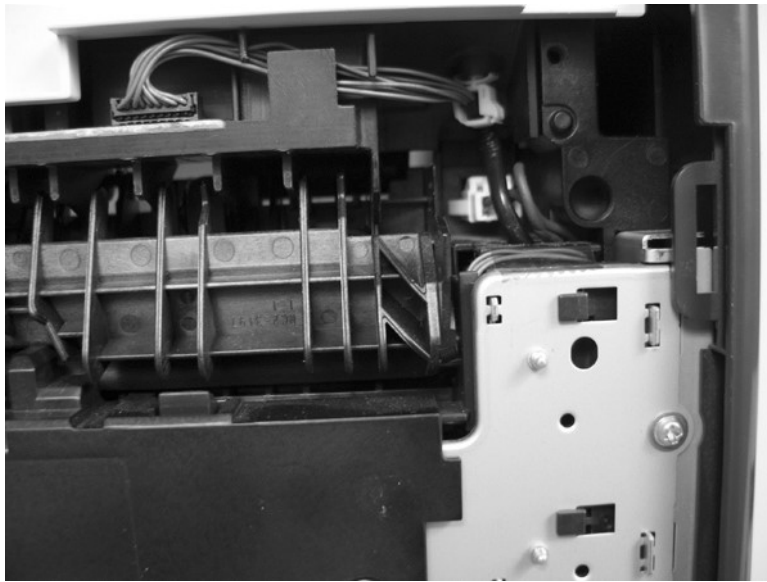


4. Carefully lift the cover up and then rotate it away from the product to remove it.

Figure 1-46 Remove the rear cover and feed guide (simplex product) (4 of 6)

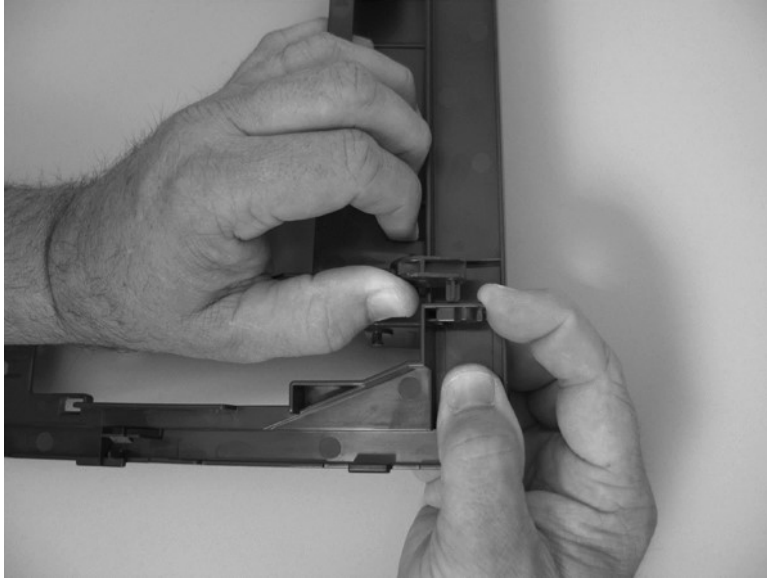


 **Reinstallation tip** Make sure that the wire harnesses at the top of the chassis near the left-side cover are correctly retained so that they are not pinched when the rear cover is reinstalled.



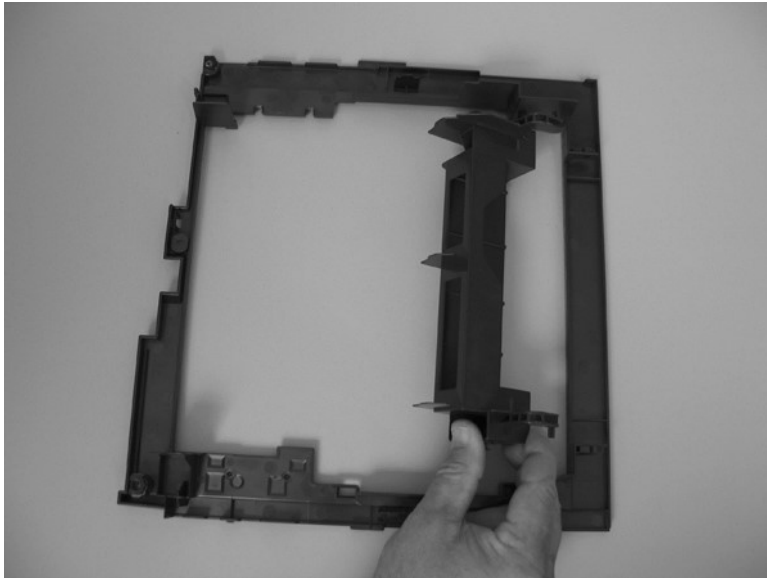
5. Carefully release a feed-guide hinge pin from the rear cover to release the feed guide.

Figure 1-47 Remove the rear cover and feed guide (simplex product) (5 of 6)



6. Remove the feed guide.

Figure 1-48 Remove the rear cover and feed guide (simplex product) (6 of 6)



Rear-lower cover and rear-door links (duplex product)

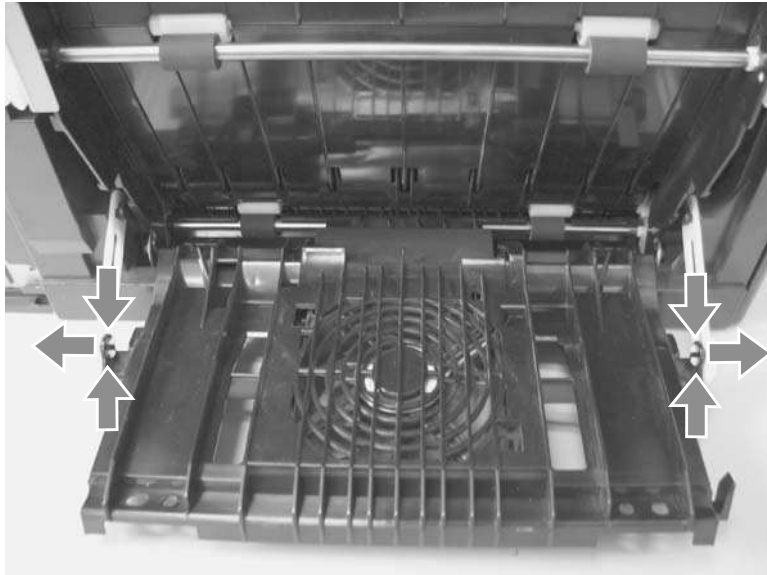
Before proceeding, remove the following components:

- Right cover. See [Right cover on page 23](#).
- Rear door. See [Rear door \(simplex product\) on page 33](#) or [Rear door \(duplex product\) on page 35](#).
- Rear upper cover. See [Rear-upper cover \(duplex product\) on page 30](#).

Remove the rear-lower cover and rear-door links (duplex product)

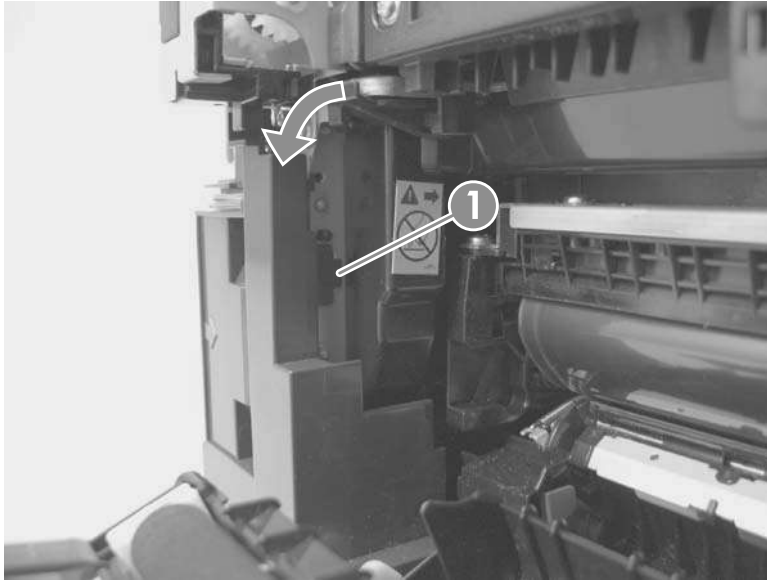
1. Use a pair of needle-nose pliers to release two tabs, and then remove the rear-door link cap. Repeat this step for the remaining rear-door link cap.

Figure 1-49 Remove the rear- lower cover and rear-door links (duplex product) (1 of 6)



2. Open the duplex-feed assembly, release one tab (callout 1), and then slightly separate the cover from the product.

Figure 1-50 Remove the rear-lower cover and rear-door links (duplex product) (2 of 6)



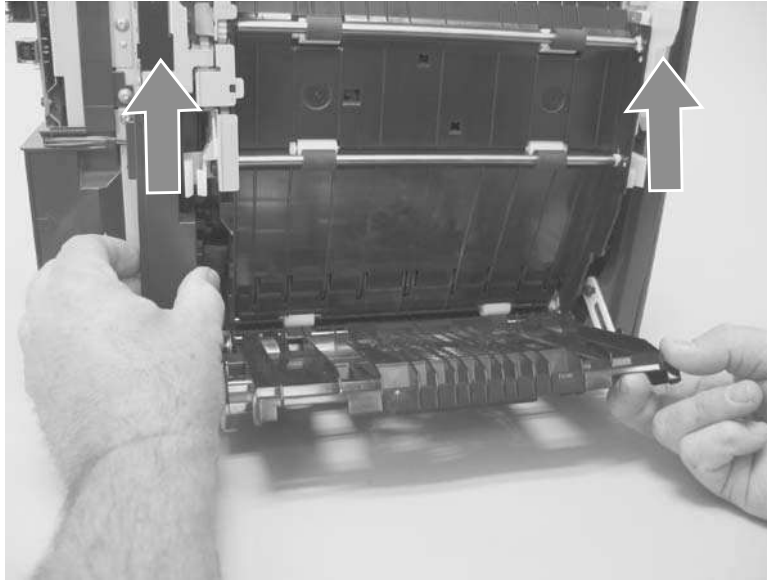
3. Release one tab (callout 1) and slightly separate the cover from the product.

Figure 1-51 Remove the rear-lower cover and rear-door links (duplex product) (3 of 6)



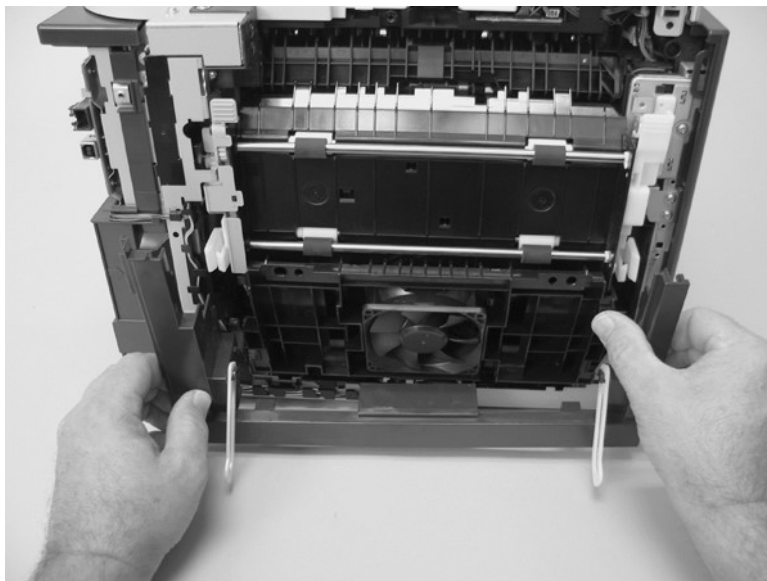
4. Close the duplex assembly, and then lift up on one side of the cover, and then the other side of the cover to release it.

Figure 1-52 Remove the rear-lower cover and link-guides (duplex product) (4 of 6)



5. Slightly lift up the rear-door rib assembly, and then carefully slide the cover away from the product to remove it.

Figure 1-53 Remove the rear-lower cover and link-guides (duplex product) (5 of 6)



6. Rotate the rear-door link until the slot in the link aligns with the tap on the link-hinge pin, and then remove the rear-door link. Repeat this step for the remaining rear-door link.


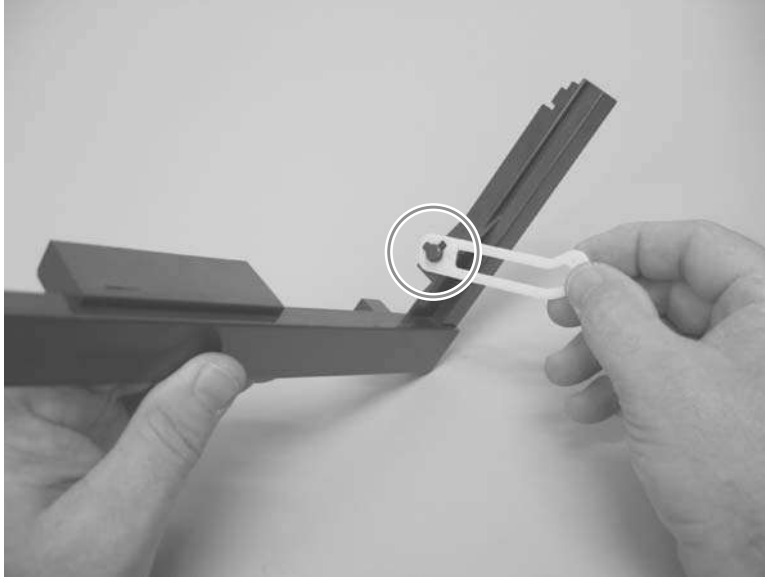
 **NOTE:** If you are installing a replacement rear-lower cover, remove the rear-door links from the discarded cover, and then install them on the replacement cover.

Figure 1-54 Remove the rear-lower cover and rear-door links (duplex product) (6 of 6)




Rear-door rib assembly (duplex product)

Before proceeding, remove the following components:

- Right cover. See [Right cover on page 23](#).
- Rear door. See [Rear door \(simplex product\) on page 33](#) or [Rear door \(duplex product\) on page 35](#).
- Rear upper cover. See [Rear-upper cover \(duplex product\) on page 30](#).
- Rear-lower cover. See [Rear-lower cover and rear-door links \(duplex product\) on page 41](#).

Remove the rear-door rib assembly (duplex product)

 **NOTE:** The duplex fan (FM2) is a component of the rear-door rib assembly.

1. Disconnect one connector (callout 1).


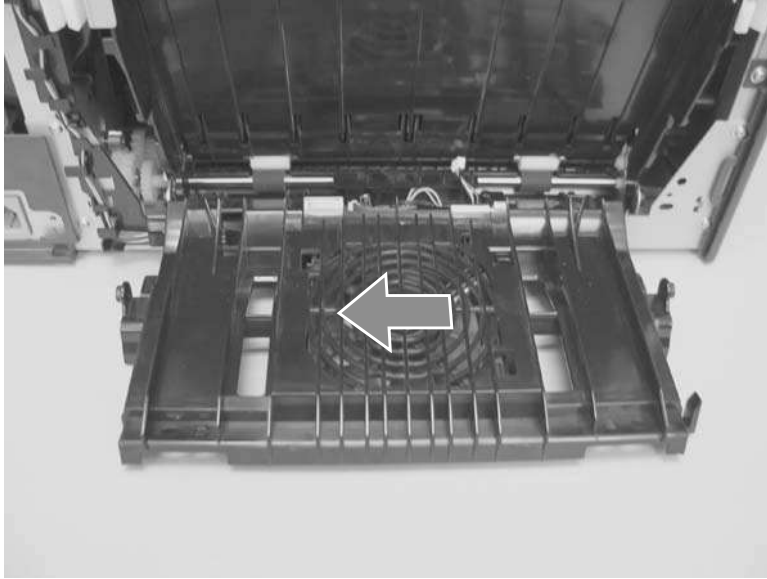
 **TIP:** The PCA can be dislodged when disconnecting the connector. To secure the PCA, carefully push it towards the inside of the product to clear the mounting tabs near the rib assembly (callout 2 shows the PCA correctly positioned under the tabs). Slide the PCA towards the rib assembly to position the edge of the PCA under the mounting tabs.

Figure 1-55 Remove the rear-door rib assembly (duplex product) (1 of 3)



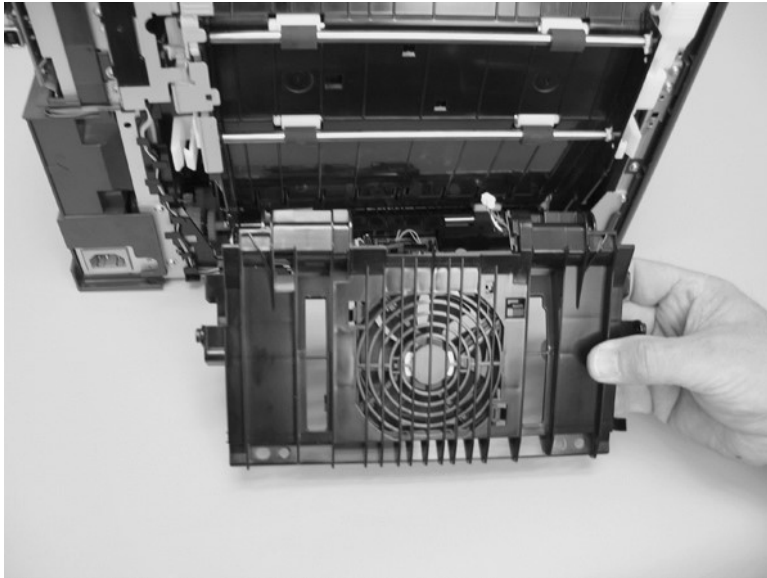
2. Slide the assembly toward the power cable side of the product to release the hinge pin.

Figure 1-56 Remove the rear-door rib assembly (duplex product) (2 of 3)



3. Remove the assembly.

Figure 1-57 Remove the rear-door rib assembly (duplex product) (3 of 3)



Link guide

The link guide rarely fails and is not a FRU.

The link is attached to the paper guide (callout 1) and the rear door (simplex products; callout 2) or duplexing-feed guide assembly (duplex products; callout 3).

If the link-guide attachment at the rear door or duplexing-feed guide assembly fails, replace the appropriate component.

The interior paper guide is not replaceable. If the link-guide to paper guide attachment fails, you must replace the entire product.

Figure 1-58 Replace the link guide (simplex products)

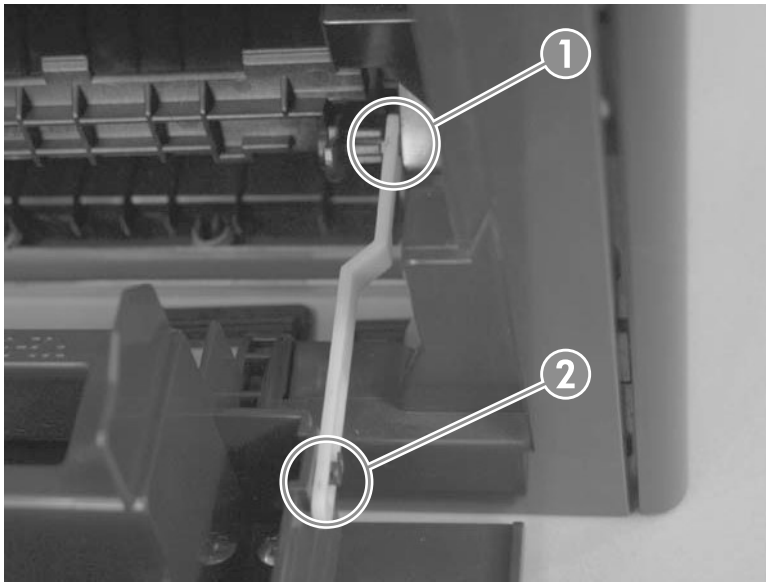
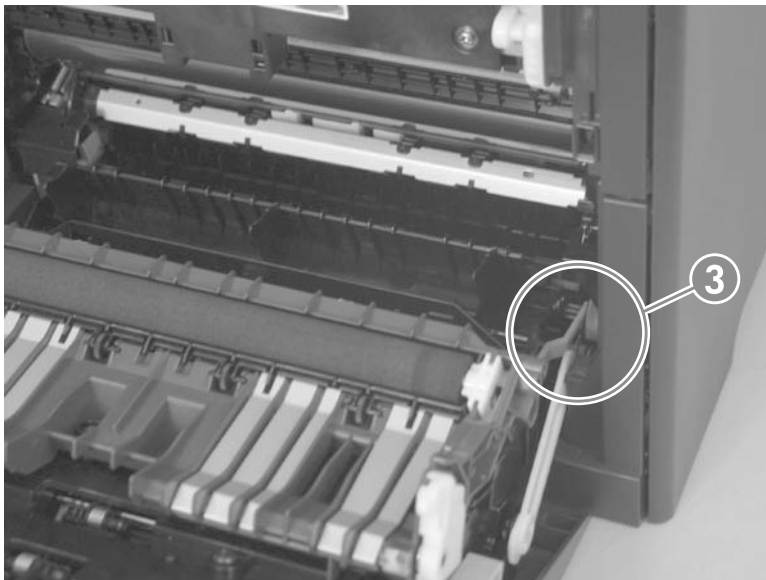


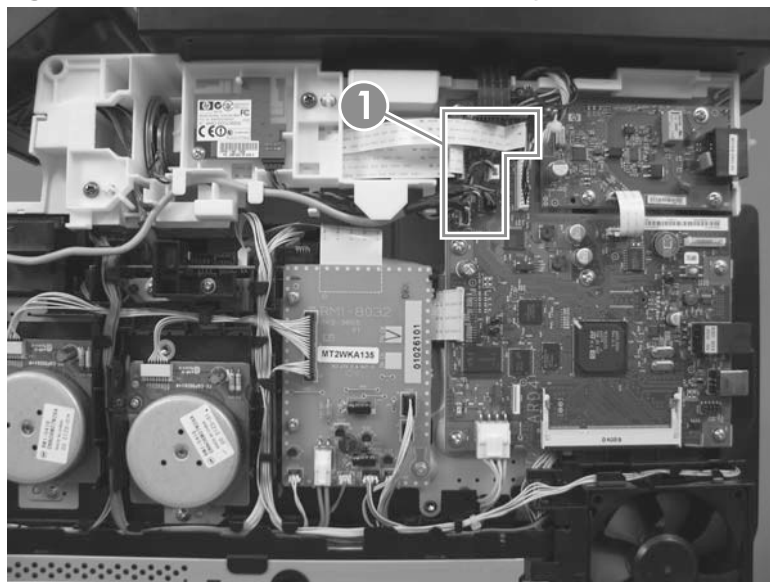
Figure 1-59 Replace the link guide (duplex products)



Control panel and right-arm mount

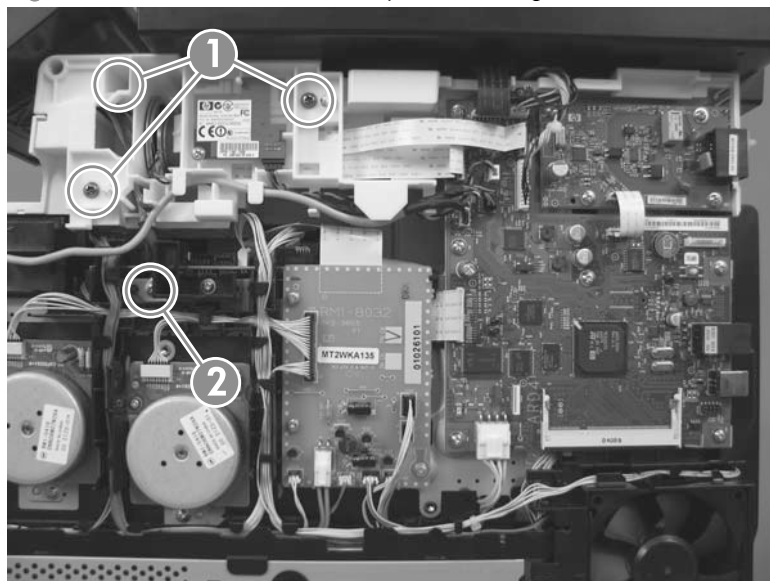
1. Remove the Right cover. See [Right cover on page 23](#).
2. Disconnect two FFCs and three connectors (callout 1) from the formatter PCA. Remove the USB PCA connector from the retainer.

Figure 1-60 Remove the control panel and right-arm mount (1 of 3)



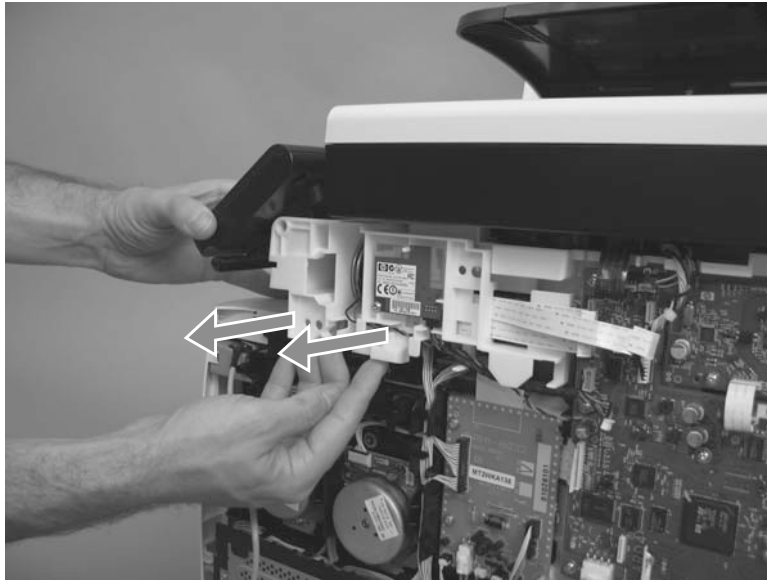
3. Remove three screws (callout 1) and disconnect the ground wire (callout 2).

Figure 1-61 Remove the control panel and right-arm mount (2 of 3)



4. Slide the control panel right-arm mount to the right to remove it from the scanner chassis.

Figure 1-62 Remove the control panel and right-arm mount (3 of 3)



Reinstall the control panel and right-arm mount

1. Slide the control panel right-arm mount assembly into the mounting points on the scanner chassis.
2. Install three screws (callout 1) and attach the grounding wire (callout 2).


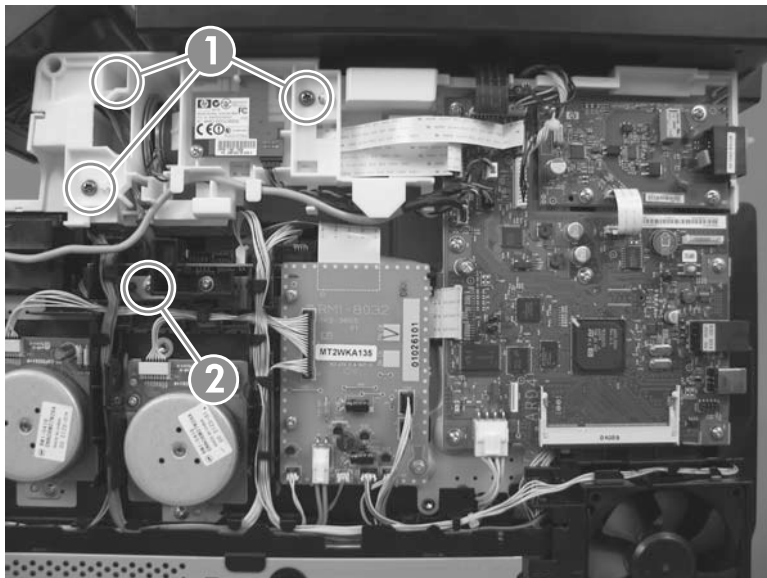
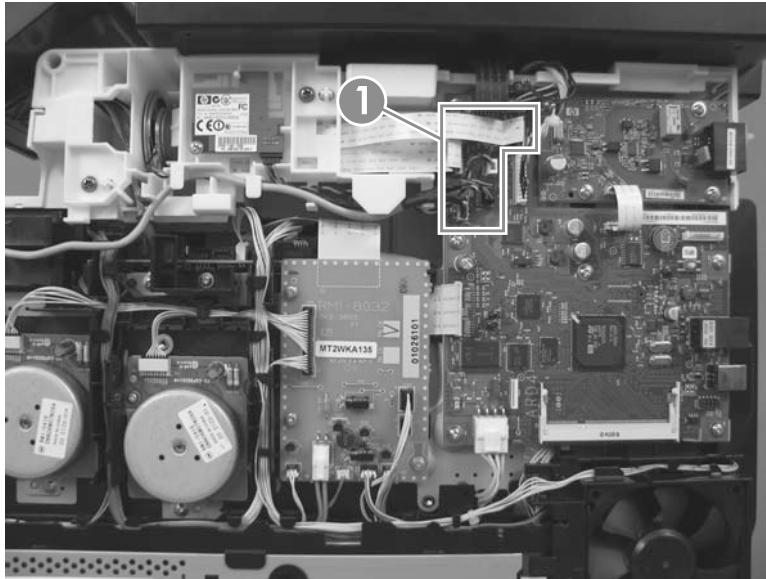
 **IMPORTANT:** The grounding wire and the two FFCs must move freely. If the grounding wire is tangled with the FFCs, or is retracted too far into the control panel swivel, it might be too short to reach the mounting point on the chassis.

Figure 1-63 Reinstall the control panel and right-arm mount (1 of 2)



3. Attach two FFCs and three connectors (callout 1). Install the USB PCA connector in the retainer.

Figure 1-64 Reinstall the control panel and right-arm mount (2 of 2)



Upper-cover assembly

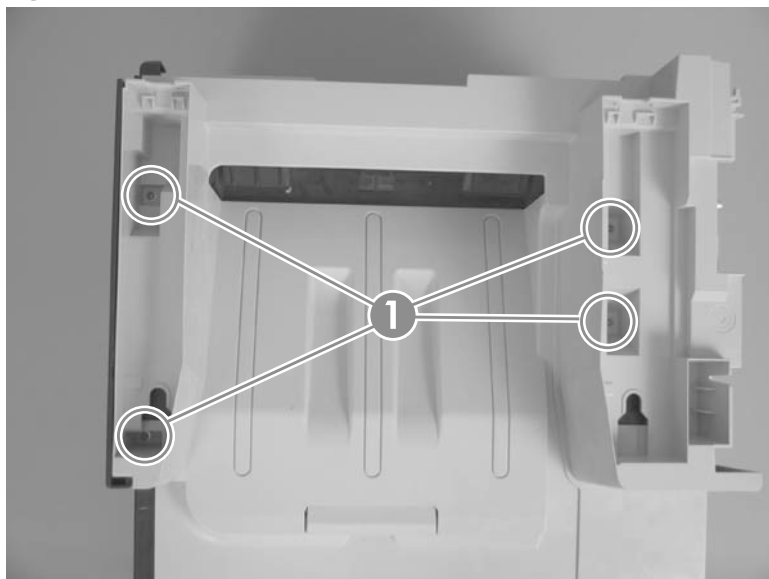
Before proceeding, remove the following components:

- Right cover. See [Right cover on page 23](#).
- Scanner assembly. See [Scanner assembly on page 26](#).
- Simplex products
 - Rear door. See [Rear door \(simplex product\) on page 33](#).
 - Rear cover. See [Rear cover and feed guide \(simplex product\) on page 37](#).
- Duplex products
 - Rear upper cover. See [Rear-upper cover \(duplex product\) on page 30](#).
- Control panel and right-arm mount. See [Control panel and right-arm mount on page 48](#).
- Right-front cover and power button. See [Right-front cover and power button on page 28](#).

Remove the upper-cover assembly

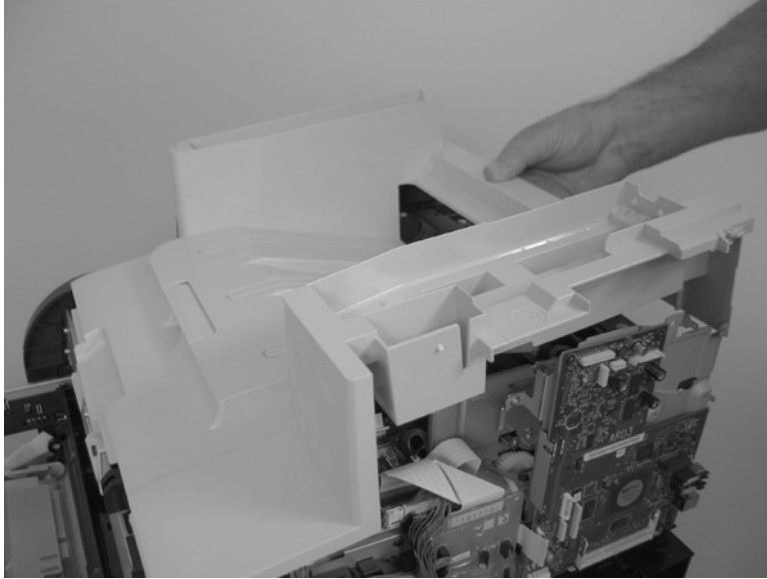
1. Remove four screws (callout 1).

Figure 1-65 Remove the upper-cover assembly (1 of 3)



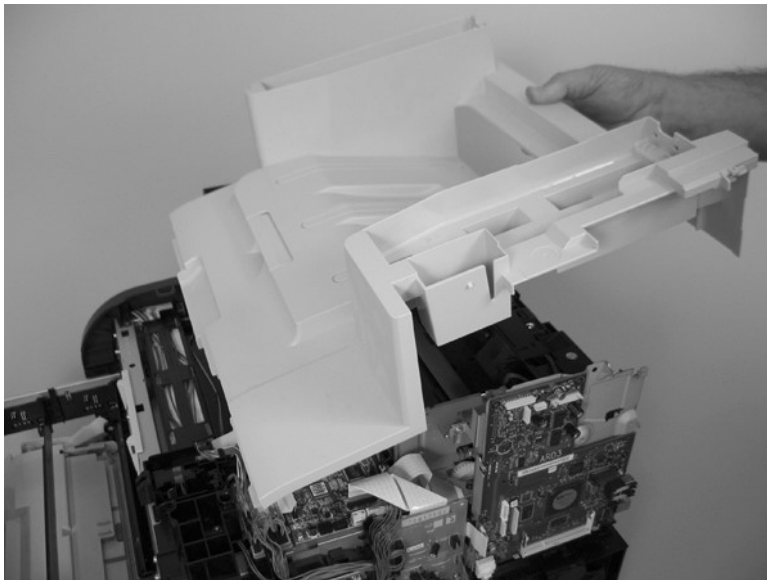
2. Slightly raise the back of the cover up and off of the product.

Figure 1-66 Remove the upper-cover assembly (2 of 3)



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

Figure 1-67 Remove the upper-cover assembly (3 of 3)



Reinstall the upper-cover assembly

1. Position the upper-cover so that the front-left corner of the upper cover engages the left-side cover (callout 1).

Figure 1-68 Reinstall the upper-cover assembly (1 of 3)



2. Slightly push the cover toward the front of the product to engage the front-locking tabs (callout 1) with the holes in the chassis.


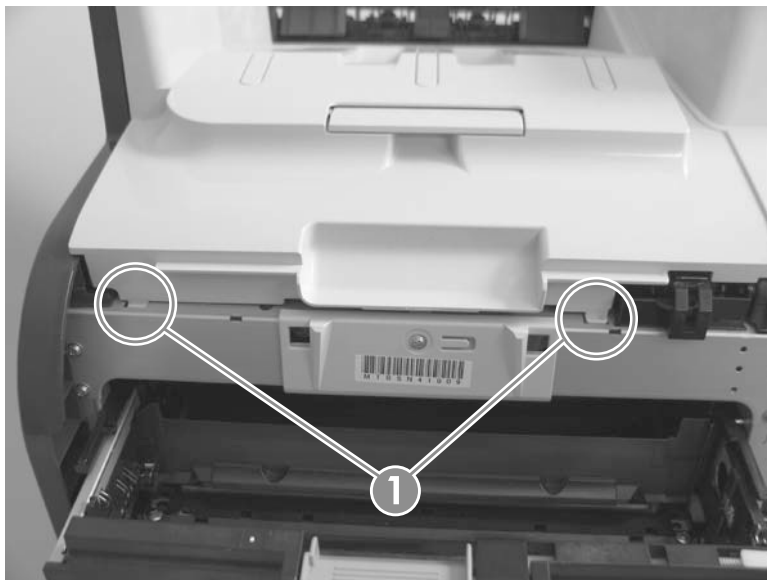
 **NOTE:** Make sure that the right-front edge of the upper cover (where the product right-front cover will be installed) is correctly positioned on the chassis.

Figure 1-69 Reinstall the upper-cover assembly (2 of 3)



3. Carefully pry the right-rear corner of the upper cover away from the product until the cover fits over the chassis.

Lower the cover onto the product.

Figure 1-70 Reinstall the upper-cover assembly (3 of 3)



Left cover

Before proceeding, remove the following components:

- Right cover. See [Right cover on page 23](#).
- Scanner assembly. See [Scanner assembly on page 26](#).
- Simplex products
 - Rear door. See [Rear door \(simplex product\) on page 33](#).
 - Rear cover. See [Rear cover and feed guide \(simplex product\) on page 37](#).
- Duplex products
 - Rear-lower cover. See [Rear-lower cover and rear-door links \(duplex product\) on page 41](#).
- Upper-cover assembly. See [Upper-cover assembly on page 51](#).

Remove the left cover

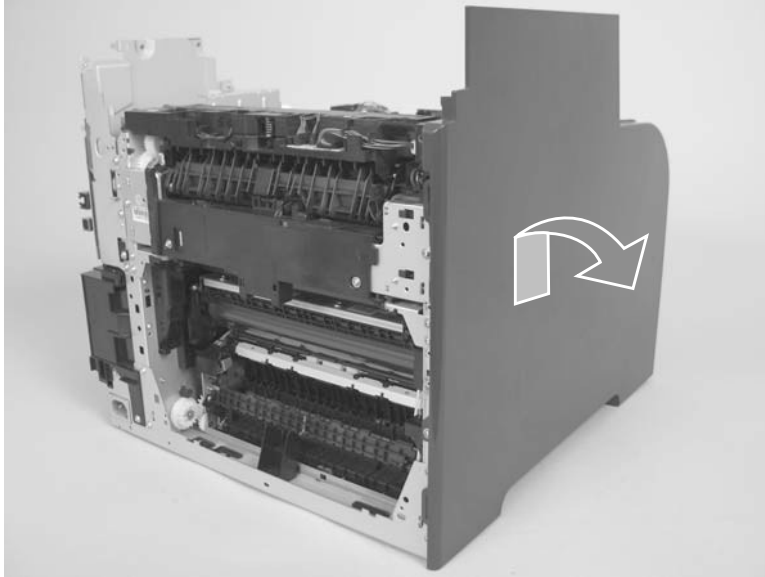
1. Remove one screw (callout 1).

Figure 1-71 Remove the left cover (1 of 3)



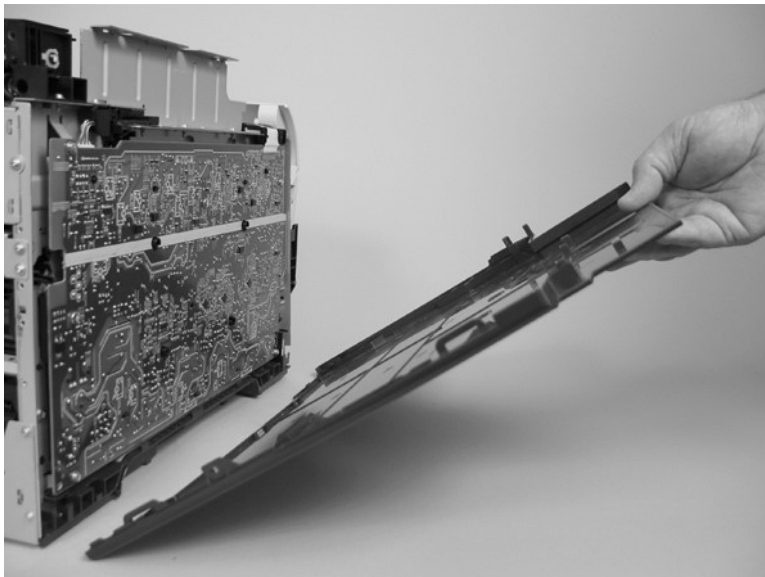
2. Slightly lift up on the cover, and then rotate the top of the cover away from the product.

Figure 1-72 Remove the left cover (2 of 3)



3. Remove the cover.

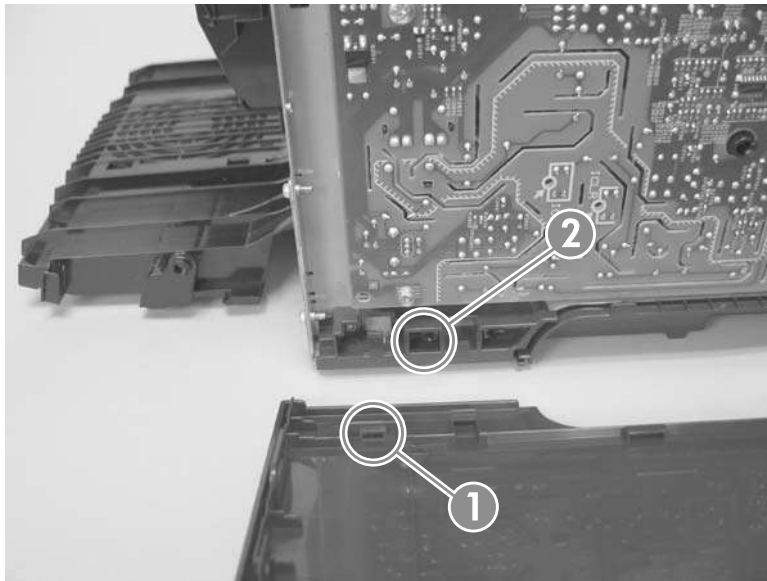
Figure 1-73 Remove the left cover (3 of 3)



Reinstall the left cover

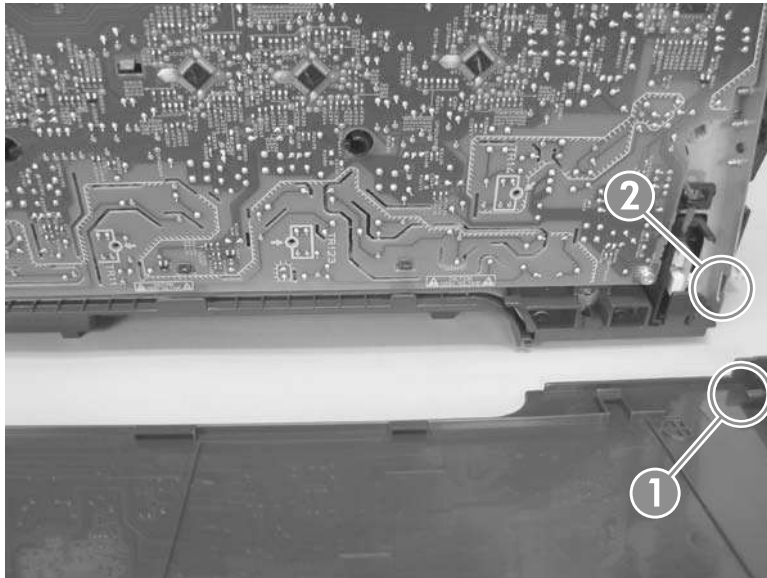
1. When you reinstall the left cover, make sure that the slot in the cover (callout 1) aligns with the tab (callout 2) on the product.

Figure 1-74 Reinstall the left cover (1 of 2)



2. When you reinstall the left cover, make sure that the pin on the cover (callout 1) aligns with the slot (callout 2) in the product.

Figure 1-75 Reinstall the left cover (2 of 2)



Front-door assembly

Before proceeding, remove the following components:

- Print-cartridge drawer. See [Print-cartridge drawer on page 20](#).
- Right cover. See [Right cover on page 23](#).
- Scanner assembly. See [Scanner assembly on page 26](#).
- Simplex product
 - Rear door. See [Rear door \(simplex product\) on page 33](#).
 - Rear cover. See [Rear cover and feed guide \(simplex product\) on page 37](#).
- Duplex product
 - Rear-upper cover. See [Rear-upper cover \(duplex product\) on page 30](#).
 - Rear door. See [Rear door \(duplex product\) on page 35](#).
 - Rear-lower cover. See [Rear-lower cover and rear-door links \(duplex product\) on page 41](#).
- Upper-cover assembly. See [Upper-cover assembly on page 51](#).
- Left cover. See [Left cover on page 55](#).
- Right-front cover. See [Right-front cover and power button on page 28](#).

Remove the front-door assembly

1. Locate the front-door pin on the left-side door link.

Figure 1-76 Remove the front-door assembly (1 of 10)



2. Use a precision point screwdriver to push the left-side door pin out of the link.


 **NOTE:** A precision point screwdriver is required to release the front door pins. The width of the blade must be 2 mm (0.08 in) or less to be able to push the door pins out of the mounting holes.

Figure 1-77 Remove the front-door assembly (2 of 10)



3. Use a precision point screwdriver to push the right-side door pin out of the link.


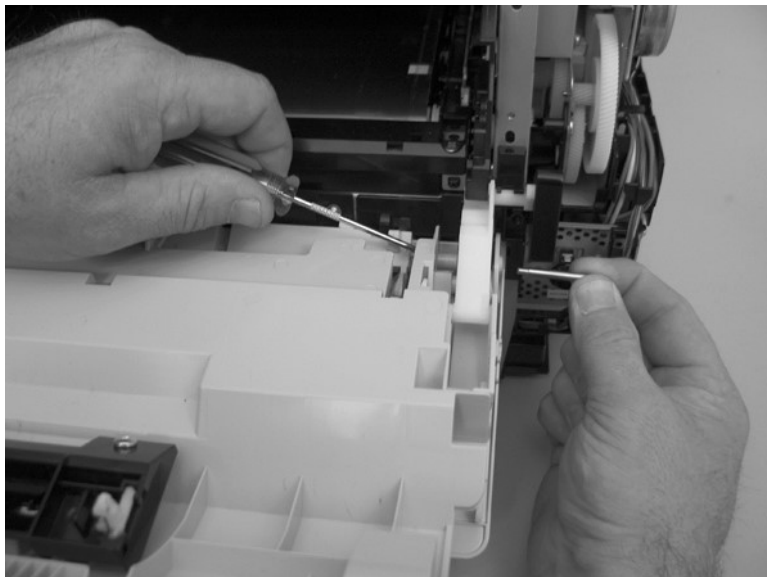
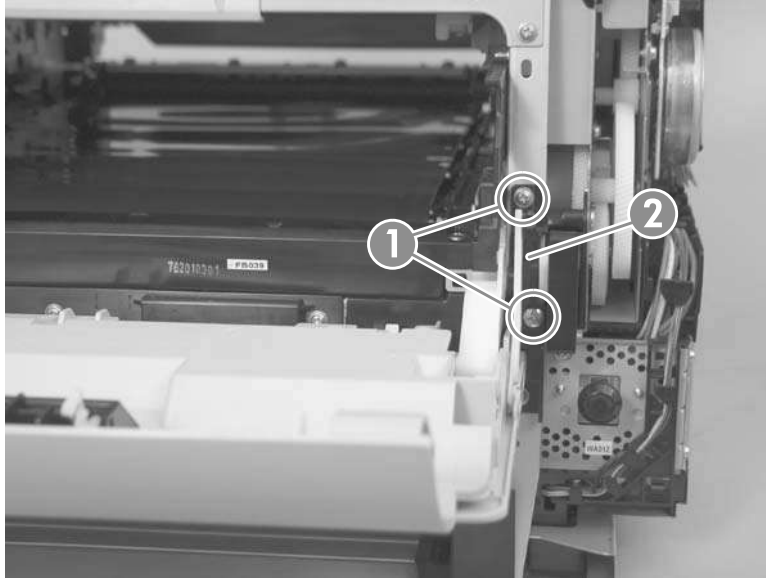
 **NOTE:** A precision point screwdriver is required to release the front door pins. The width of the blade must be 2 mm (0.08 in) or less to be able to push the door pins out of the mounting holes.

Figure 1-78 Remove the front-door assembly (3 of 10)



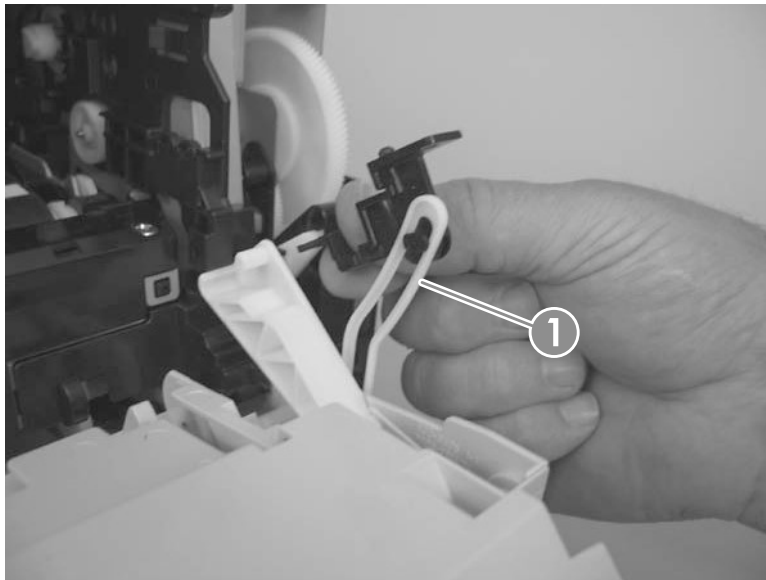
4. Remove two screws (callout 1) and the separate the door bushing (callout 2) from the chassis.

Figure 1-79 Remove the front-door assembly (4 of 10)



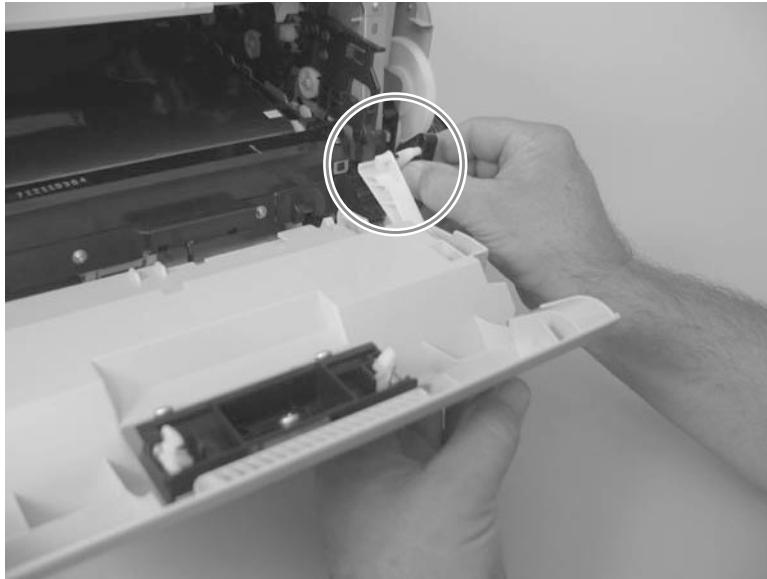
5. Release the bushing from the door-retainer link (callout 1).

Figure 1-80 Remove the front-door assembly (5 of 10)



6. Support the door assembly, and carefully release the pin on the right-side link.

Figure 1-81 Remove the front-door assembly (6 of 10)



7. Support the door assembly, and carefully release the upper pin on the left-side link.

Figure 1-82 Remove the front-door assembly (7 of 10)

