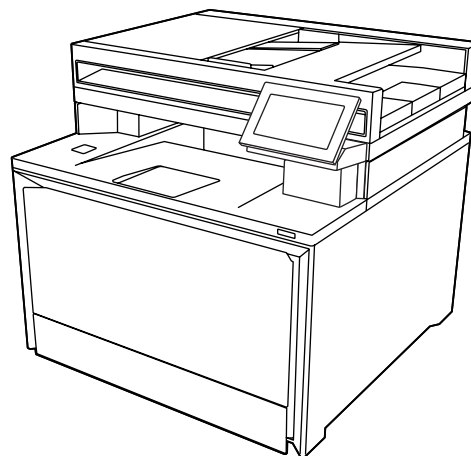
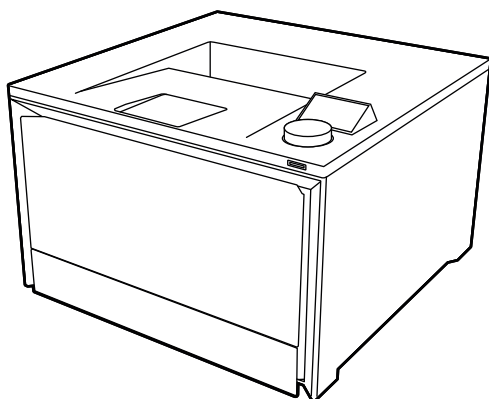




HP Color LaserJet Pro 4201
HP Color LaserJet Pro 4202
HP Color LaserJet Pro 4203
HP Color LaserJet Pro MFP 4301
HP Color LaserJet Pro MFP 4302
HP Color LaserJet Pro MFP 4303

Service Manual



www.hp.com/support/colorlj4201
www.hp.com/support/colorlj4202
www.hp.com/support/colorlj4203

www.hp.com/support/colorlj4301MFP
www.hp.com/support/colorlj4302MFP
www.hp.com/support/colorlj4303MFP



HP Color LaserJet Pro 4201, 4202, 4203, 4301, 4302, 4303 - Service Manual

SUMMARY

This guide provides theory of operation, troubleshooting, and repair information.

Legal information

Copyright and License

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Edition 2, 05/2023

Revision history

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Table Revision history

Revision number	Revision date	Revision notes
2	05/2023	Updated part numbers: See Removal and replacement: Control panel and FFC (SFP) on page 249 , Right cover, see Removal and replacement: Right cover (MFP) on page 297 , Engine controller PCA, see Removal and replacement: Engine controller PCA on page 618 , FFC, see Control panel (SFP) on page 981 . Added control panel FFC. See Removal and replacement: Control panel, base cover, and base (MFP) on page 262
1	02/2023	Service manual initial release.

Conventions used in this guide

Learn about the conventions used in this publication.



TIP: Tips provide helpful hints or shortcuts.



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



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



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

HP service and support

Learn about access to additional service and support information.

Additional service and support for channel partners

Channel partners can use the HP Partner Portal or the Channel Services Delivery Platform (CSDP) to access the HP Web-based Interactive Search Engine (WISE).

Find information about the following topics.

- Service manuals, service cost data, and service advisories
- The latest control panel message (CPMD) troubleshooting information
- Remove and replace part instructions and videos
- Solutions for printer issues and emerging issues
- Printer specifications, warranty, and regulatory information
- Install, configure, and how to information



[View a video of how to use the HP Partner First Portal to access WISE.](#)

Access WISE for Channel partners (HP Partner Portal)


1. Sign-in to the HP Partner Portal (click <https://partner.hp.com> to access the sign-in page).
2. Select the **Services & Support** item (near the top of the screen).
3. Select the **Technical Support (WISE)** item.
4. Select the **Technical Documentation** item.
5. Use the WISE portal to search for printer information.

Access WISE for Channel partners (CSDP)

1. Sign-in to the CSDP portal (click csdp.hp.com to access the sign-in page).
2. Select the **Knowledge and Training** item.
3. Select the **HP Technical Documentation** item.
4. Use the WISE portal to search for printer information.

Additional service and support for HP internal personnel

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

 [View a video of how to access WISE for internal HP users.](#)

Americas (AMS)

- [WISE - English](#)
- [WISE - Spanish](#)
- [WISE - Portuguese](#)
- [WISE - French](#)

Asia Pacific / Japan (APJ)

- [WISE - English](#)
- [WISE - Japanese](#)
- [WISE - Korean](#)
- [WISE - Chinese \(simplified\)](#)
- [WISE - Chinese \(traditional\)](#)
- [WISE - Thai](#)

Europe / Middle East / Africa (EMEA)

- [WISE - English](#)

Additional technical support WISE videos

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

 [View a video of how to use WISE to find technical support videos \(model number search\).](#)

 [View a video of ow to use WISE to find technical support videos \(Product detail page \[PDP\] search\).](#)

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1 Printer information, configurations, and specifications

Learn about printer configuration and specifications.

Document feeder / scanner

Learn about the printer document feeder and scanner configuration and specifications.

 **NOTE:** This section is for MFP printers only.

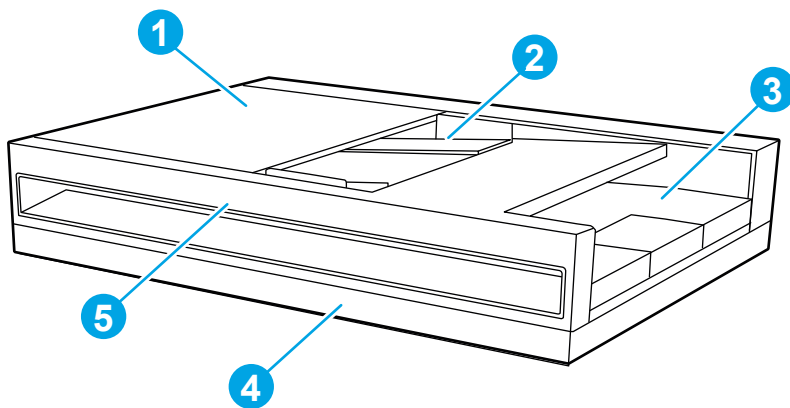
Information (document feeder and scanner)

Learn about the document feeder and scanner.

Document feeder and scanner front view

Identify certain parts of the document feeder and scanner.

Figure 1-1 Document feeder and scanner front view



Item	Description
1	Jam access door
2	Input tray (source documents)
3	Output bin (source documents)
4	Flatbed scanner

Item	Description
5	Document feeder

Base printer

Learn about the base printer (engine) configuration and specifications.

Information (base printer)

Learn about the base printer.

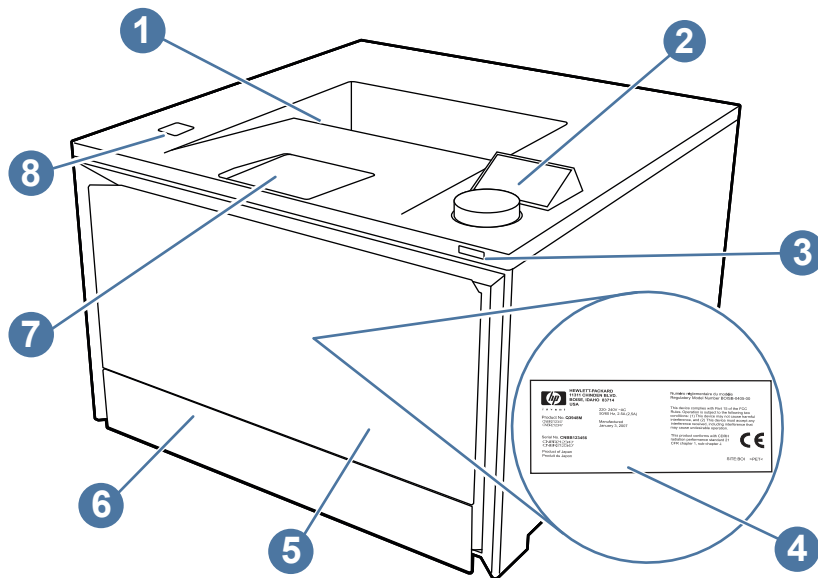
Printer views (SFP)

Identify certain parts of the printer and the control panel.

Printer front view

Identify the parts on the front of the printer.

Figure 1-2 Printer front view

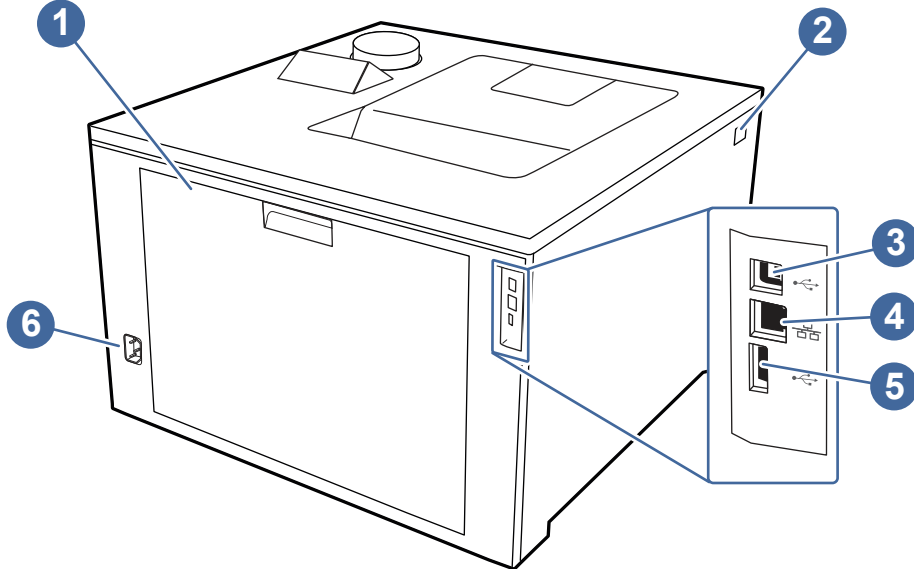


Number	Description
1	Output bin
2	Control panel with dial controller
3	Power on/off button
4	Regulatory label (inside the front door)
5	Front door/Tray 1 (provides toner cartridge access)
6	Tray 2
7	Output bin extension
8	Walk-up USB port for printing without a computer (dw models only)

Printer back view

Identify the parts on the back of the printer.

Figure 1-3 Printer rear view



Number	Description
1	Rear door (provides access for clearing jams)
2	Front door release button
3	USB interface port used for connecting the printer via USB
4	Ethernet port
5	USB port (for job storage and private printing)
6	Power connection

Control panel view

The control-panel display provides access to the printer features.

For information about using the dial control panel, see [How to use the dial control panel on page 4](#).

NOTE: For more information about the printer control panel features, go to www.hp.com/support/colorlj4201-4203 or www.hp.com/support/colorlj4201-4203plus or www.hp.com/support/colorlj4301-4303 or www.hp.com/support/colorlj4301-4303plus.

NOTE: The features that appear on the dial control panel and the order in which they appear can vary, depending on the printer configuration.

Figure 1-4 Control panel view

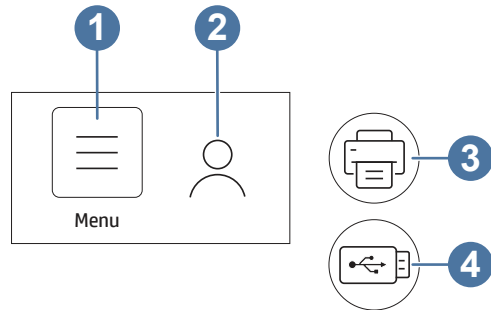



Table 1-1 Control panel features

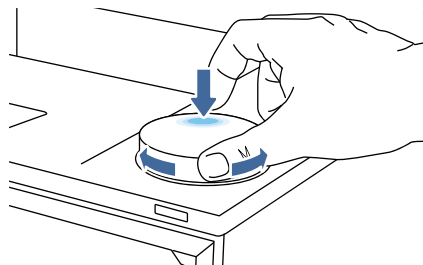
Number	Item	Description
1	Menu	Select this item to open the Menu sub-menus: <ul style="list-style-type: none"> • Info • Status • Print • Supplies • Trays • Settings • Tools • Help
2	Sign in	Select this item to enter a password for the printer, if one has been assigned.
3	Print	Select this item to print a file from the USB flash drive.
4	USB Drive	Select this item to update the firmware from a USB flash drive.

 **NOTE:** While the control panel does not have a standard [Cancel](#) button, during many printer processes a [Cancel](#) option appears on the control panel. This permits users to cancel a process before the printer completes it.

How to use the dial control panel

Use the following actions to operate the printer's dial control panel.

Figure 1-5 Twist or press



Rotate the control-panel dial to the right or left to scroll through available menus, and then press down on the control-panel dial to select an item


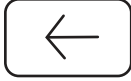
 **NOTE:** To open a shortcut menu, long-press down on the dial. This shortcut menu provides options to quickly go back or return to the Main Menu, see the printer status, or access the Help menu.

Figure 1-6 Go back



Rotate the dial to select the Back arrow, and then press the dial to return to the previous menu.

Printer views (MFP)

Identify certain parts of the printer and the control panel.

Printer front view

Identify the parts on the front of the printer.

Figure 1-7 Printer front view

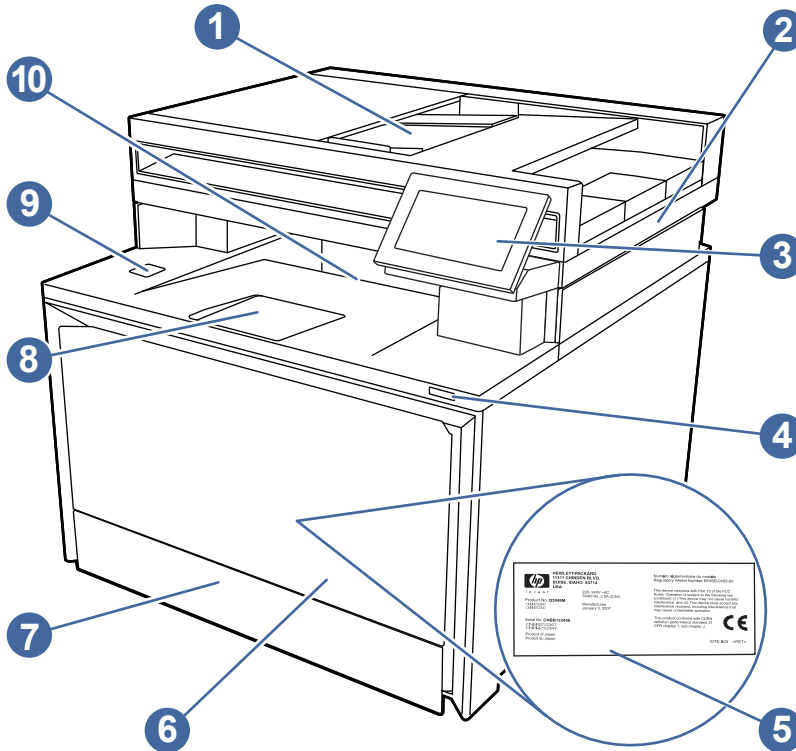


Table 1-2 Front printer components

Number	Description
1	Document feeder
2	Scanner
3	Color touchscreen control panel (tilts up for easier viewing)
4	Power on/off button

Table 1-2 Front printer components (continued)

Number	Description
5	Regulatory label (inside the front door)
6	Front door/Tray 1 (provides access to toner cartridges)
7	Tray 2
8	Output bin extension
9	Walk-up USB port (for printing and scanning without a computer)
10	Output bin

Printer back view

Identify the parts on the back of the printer.

Figure 1-8 Printer rear view

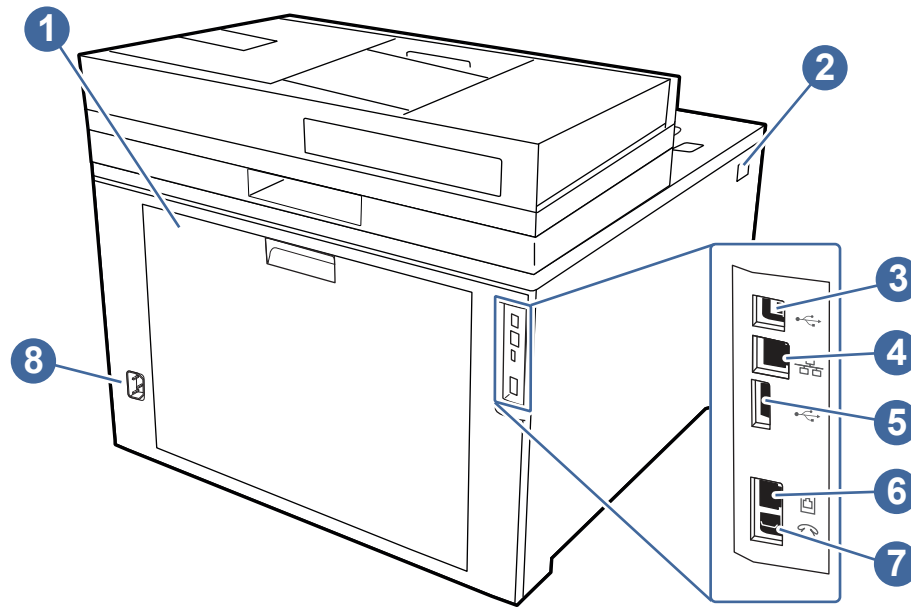


Table 1-3 Rear printer components


Number	Description
1	Rear door (provides access for clearing jams)
2	Front door release button
3	USB interface port used for connecting the printer via USB
4	Ethernet port
5	USB port (for job storage and private printing)
6	Fax "line in" port (for attaching the fax phone line to the printer)
	NOTE: Fax models only.

Table 1-3 Rear printer components (continued)

Number	Description
7	Telephone "line out" port (for attaching an extension phone, answering machine, or other device) NOTE: Fax models only. This port should remain covered when not in use.
8	Power connection

Control-panel view

Use the touchscreen control panel to obtain printer and job status information, and to configure the printer.

 **NOTE:** Tilt the control panel for easier viewing.


 **NOTE:** The features that appear on the Home screen can vary, depending on the printer configuration.

Figure 1-9 Printer control panel

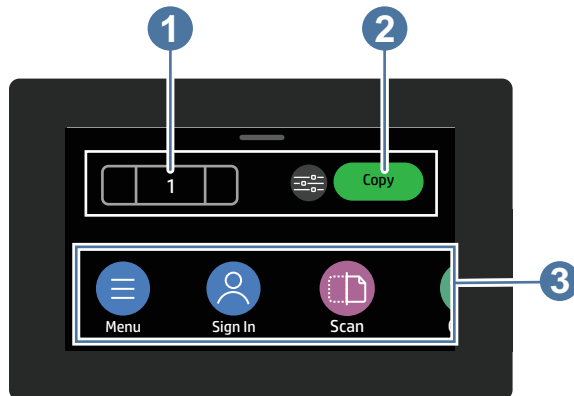


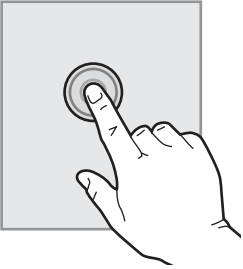
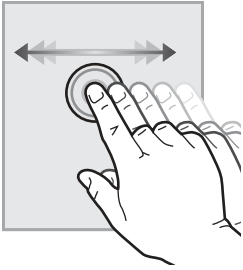
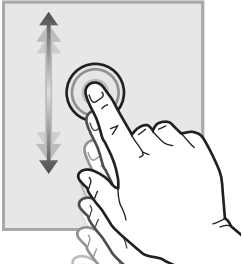
Table 1-4 Control panel components

Number	Item	Description
1	Number of copies field	Touch the field to adjust the number of copies to be printed.
2	Copy button	Touch the Copy button to start a copy job.
3	Applications area	Select any of the icons to open the application. Swipe the screen sideways to access more applications. NOTE: The available applications vary by printer. The administrator can configure which applications appear and the order in which they appear.

How to use the touchscreen control panel

Perform the following actions to use the printer touchscreen control panel.

Table 1-5 Touchscreen control panel actions

Action	Description	Example
Touch 	Touch an item on the screen to select that item or open that menu. Also, when scrolling through menus, briefly touch the screen to stop the scrolling.	Touch the Menu icon to view the sub-menus.
Swipe 	Touch the screen and then move your finger horizontally to scroll the screen sideways.	Swipe until the Help icon displays.
Scroll 	Touch the screen and then move your finger vertically to scroll the screen up and down. When scrolling through menus, briefly touch the screen to stop the scrolling.	Scroll through the sub-menus under Menu .

Specifications (base printer)

Learn about the base printer specifications.

Technical specifications (SFP)

learn about base printer specifications.

Technical specifications

Review the technical specifications for the printer.

See www.hp.com/support/colorlj4201-4203 or www.hp.com/support/colorlj4201-4203plus or www.hp.com/support/colorlj4301-4303 or www.hp.com/support/colorlj4301-4303plus for current information.

Product numbers for each model

- 4201dn - 4RA85F
- 4201dw - 4RA86F
- 4202dn - 4RA87F
- 4202dw - 4RA88F

Table 1-6 Paper handling specifications

Paper handling features	4201dn/dw	4202dn/dw
Tray 1 (50-sheet capacity)	✓	✓
Tray 2 (250-sheet capacity)	✓	✓
Optional 550-sheet accessory tray	Optional	Optional
Automatic duplex printing	✓	✓

Table 1-7 Connectivity specifications

Connectivity features	4201dn	4201dw	4202dn	4202dw
10/100/1000 Ethernet LAN connection with IPv4 and IPv6	✓	✓	✓	✓
Hi-Speed USB 2.0	✓	✓	✓	✓
Walk-up USB port	Not available	✓	Not available	✓
Built-in dual-band wireless card supporting wi-fi functionality	Not available	✓	Not available	✓

Table 1-8 Print specifications

Print features	4201dn/dw	4202dn/dw
Prints 33 pages per minute (ppm) on A4 and 35 ppm on letter-size paper	✓	✓
Job storage and private printing	✓	✓

Table 1-9 Other specifications

Other features	4201dn/dw	4202dn/dw
512 MB memory	✓	✓
Dial control panel	✓	✓

Technical specifications

Review the technical specifications for the printer.

See www.hp.com/support/colorlj4201-4203 or www.hp.com/support/colorlj4201-4203plus or www.hp.com/support/colorlj4301-4303 or www.hp.com/support/colorlj4301-4303plus for current information.

Product numbers for each model

- 4201dne - 4RA85E
- 4201dwe - 4RA86E
- 4202dne - 4RA87E
- 4202dwe - 4RA88E

Table 1-10 Paper handling specifications

Paper handling features	4201dne/dwe	4202dne/dwe
Tray 1 (50-sheet capacity)	✓	✓
Tray 2 (250-sheet capacity)	✓	✓
Optional 550-sheet accessory tray	Optional	Optional
Automatic duplex printing	✓	✓

Table 1-11 Connectivity specifications

Connectivity features	4201dne	4201dwe	4202dne	4202dwe
10/100/1000 Ethernet LAN connection with IPv4 and IPv6	✓	✓	✓	✓
Hi-Speed USB 2.0	✓	✓	✓	✓
Walk-up USB port	Not available	✓	Not available	✓
Built-in wireless card supporting wi-fi functionality	Not available	✓	Not available	✓

Table 1-12 Print specifications

Print features	4201dne/dwe	4202dne/dwe
Prints 33 pages per minute (ppm) on A4 and 35 ppm on letter-size paper	✓	✓
Job storage and private printing	✓	✓

Table 1-13 Other specifications

Other features	4201dne/dwe	4202dne/dwe
512 MB memory	✓	✓
Dial control panel	✓	✓

Technical specifications

Review the technical specifications for the printer.

See www.hp.com/support/colorlj4201-4203 or www.hp.com/support/colorlj4201-4203plus or www.hp.com/support/colorlj4301-4303 or www.hp.com/support/colorlj4301-4303plus for current information.

Product numbers for each model

- 4203dn - 4RA89A
- 4203dw - 5HH48A

Table 1-14 Paper handling specifications

Paper handling features	4203dn	4203dw
Tray 1 (50-sheet capacity)	✓	✓
Tray 2 (250-sheet capacity)	✓	✓
Optional 550-sheet accessory tray	Optional	Optional
Automatic duplex printing	✓	✓

Table 1-15 Connectivity specifications

Connectivity features	4203dn	4203dw
10/100/1000 Ethernet LAN connection with IPv4 and IPv6	✓	✓
Hi-Speed USB 2.0	✓	✓
Walk-up USB port	Not available	✓
Built-in wireless card supporting wi-fi functionality	Not available	✓

Table 1-16 Print specifications

Print features	4203dn	4203dw
Prints 33 pages per minute (ppm) on A4 and 35 ppm on letter-size paper	✓	✓
Job storage and private printing	✓	✓

Table 1-17 Other specifications

Other features	4203dn	4203dw
512 MB memory	✓	✓
Dial control panel	✓	✓

Technical specifications

Review the technical specifications for the printer.

See www.hp.com/support/colorlj4201-4203 or www.hp.com/support/colorlj4201-4203plus or www.hp.com/support/colorlj4301-4303 or www.hp.com/support/colorlj4301-4303plus for current information.

Product numbers for each model

- 4203cdn - 5HH53A

Table 1-18 Paper handling specifications

Paper handling features	4203cdn
Tray 1 (50-sheet capacity)	✓
Tray 2 (250-sheet capacity)	✓
Optional 550-sheet accessory tray	Optional
Automatic duplex printing	✓

Table 1-19 Connectivity specifications

Connectivity features	4203cdn
10/100/1000 Ethernet LAN connection with IPv4 and IPv6	✓
Hi-Speed USB 2.0	✓

Table 1-20 Print specifications

Print features	4203cdn
Prints 33 pages per minute (ppm) on A4 and 35 ppm on letter-size paper	✓
Job storage and private printing	✓

Table 1-21 Other specifications

Other features	4203cdn
512 MB memory	✓
Dial control panel	✓

Technical specifications (MFP)

learn about base printer specifications.

Technical specifications

Review the technical specifications for the printer.

See www.hp.com/support/colorlj4201-4203 or www.hp.com/support/colorlj4201-4203plus or www.hp.com/support/colorlj4301-4303 or www.hp.com/support/colorlj4301-4303plus for current information.

Product numbers for each model

- 4301dw - 4RA80F
- 4301fdn - 4RA81F

- 4301fdw - 4RA82F
- 4302dw - 4RA83F
- 4302fdn - 4RA84F
- 4302fdw - 5HH64F

Table 1-22 Paper handling specifications

Paper handling features	4301dw/fdn/fdw	4302dw/fdn/fdw
Tray 1 (50-sheet capacity)	✓	✓
Tray 2 (250-sheet capacity)	✓	✓
Optional 550-sheet accessory tray	Optional	Optional
Automatic duplex printing	✓	✓

Table 1-23 Connectivity specifications

Connectivity features	4301dw	4301fdn	4301fdw	4302dw	4302fdn	4302fdw
10/100/1000 Ethernet LAN connection with IPv4 and IPv6	✓	✓	✓	✓	✓	✓
Hi-Speed USB 2.0	✓	✓	✓	✓	✓	✓
Walk-up USB port	✓	✓	✓	✓	✓	✓
Built-in wireless card supporting wi-fi functionality	✓	Not available	✓	✓	Not available	✓

Table 1-24 Print specifications

Print features	4301dw/fdn/fdw	4302dw/fdn/fdw
Prints 33 pages per minute (ppm) on A4 and 35 ppm on letter-size paper	✓	✓
Job storage and private printing	✓	✓

Table 1-25 Copy and scan specifications

Copy and scan features	4301dw	4301fdn	4301fdw	4302dw	4302fdn	4302fdw
Copies up to 31 pages per minute (ppm) in black and white (single-sided, letter), or up to 26 ppm in color (single-sided, letter)	✓	✓	✓	✓	✓	✓
50-page document feeder with dual-head scanning for single-pass duplex copying and scanning	Not included	✓	✓	Not included	✓	✓
50-page document feeder with simplex copying and scanning	✓	Not included	Not included	✓	Not included	Not included

Table 1-25 Copy and scan specifications (continued)

Copy and scan features	4301dw	4301fdn	4301fdw	4302dw	4302fdn	4302fdw
Scan to E-mail, Scan to USB, and Scan to Network Folder options	✓	✓	✓	✓	✓	✓

Table 1-26 Other specifications

Other features	4301dw	4301fdn	4301fdw	4302dw	4302fdn	4302fdw
512 MB memory	✓	✓	✓	✓	✓	✓
Color touchscreen control panel	✓	✓	✓	✓	✓	✓
Fax features	Not included	✓	✓	Not included	✓	✓
HP Digital Fax (Fax to Email and Fax to Network Folder options)	Not included	✓	✓	Not included	✓	✓

Technical specifications

Review the technical specifications for the printer.

See www.hp.com/support/colorlj4201-4203 or www.hp.com/support/colorlj4201-4203plus or www.hp.com/support/colorlj4301-4303 or www.hp.com/support/colorlj4301-4303plus for current information.

Product numbers for each model

- 4301dwe - 4RA80E
- 4301fdne - 4RA81E
- 4301fdwe - 4RA82E
- 4302dwe - 4RA83E
- 4302fdne - 4RA84E
- 4302fdwe - 5HH64E

Table 1-27 Paper handling specifications

Paper handling features	4301dwe/fdne/fdwe	4302dwe/fdne/fdwe
Tray 1 (50-sheet capacity)	✓	✓
Tray 2 (250-sheet capacity)	✓	✓
Optional 550-sheet accessory tray	Optional	Optional
Automatic duplex printing	✓	✓

Table 1-28 Connectivity specifications

Connectivity features	4301dwe	4301fdne	4301fdwe	4302dwe	4302fdne	4302fdwe
10/100/1000 Ethernet LAN connection with IPv4 and IPv6	✓	✓	✓	✓	✓	✓
Hi-Speed USB 2.0	✓	✓	✓	✓	✓	✓
Walk-up USB port	✓	✓	✓	✓	✓	✓
Built-in wireless card supporting wi-fi functionality	✓	Not available	✓	✓	Not available	✓

Table 1-29 Print specifications

Print features	4301dwe/fdne/fdwe	4302dwe/fdne/fdwe
Prints 33 pages per minute (ppm) on A4 and 35 ppm on letter-size paper	✓	✓
Job storage and private printing	✓	✓

Table 1-30 Copy and scan specifications

Copy and scan features	4301dwe	4301fdne	4301fdwe	4302dwe	4302fdne	4302fdwe
Copies up to 31 pages per minute (ppm) in black and white (single-sided, letter), or up to 26 ppm in color (single-sided, letter)	✓	✓	✓	✓	✓	✓
50-page document feeder with dual-head scanning for single-pass duplex copying and scanning	Not included	✓	✓	Not included	✓	✓
50-page document feeder with simplex copying and scanning	✓	Not included	Not included	✓	Not included	Not included
Scan to E-mail, Scan to USB, and Scan to Network Folder options	✓	✓	✓	✓	✓	✓

Table 1-31 Other specifications

Other features	4301dwe	4301fdne	4301fdwe	4302dwe	4302fdne	4302fdwe
512 MB memory	✓	✓	✓	✓	✓	✓
Color touchscreen control panel	✓	✓	✓	✓	✓	✓
Fax features	Not included	✓	✓	Not included	✓	✓
HP Digital Fax (Fax to Email and Fax to Network Folder options)	Not included	✓	✓	Not included	✓	✓

Technical specifications

Review the technical specifications for the printer.

See www.hp.com/support/colorlj4201-4203 or www.hp.com/support/colorlj4201-4203plus or www.hp.com/support/colorlj4301-4303 or www.hp.com/support/colorlj4301-4303plus for current information.

Product numbers for each model

- 4303dw - 5HH65A
- 4303fdn - 5HH66A
- 4303fdw - 5HH67A

Table 1-32 Paper handling specifications

Paper handling features	4303dw	4303fdn	4303fdw
Tray 1 (50-sheet capacity)	✓	✓	✓
Tray 2 (250-sheet capacity)	✓	✓	✓
Optional 550-sheet accessory tray	Optional	Optional	Optional
Automatic duplex printing	✓	✓	✓

Table 1-33 Connectivity specifications

Connectivity features	4303dw	4303fdn	4303fdw
10/100/1000 Ethernet LAN connection with IPv4 and IPv6	✓	✓	✓
Hi-Speed USB 2.0	✓	✓	✓
Walk-up USB port	✓	✓	✓
Built-in wireless card supporting wi-fi functionality	✓	Not included	✓

Table 1-34 Print specifications

Print features	4303dw	4303fdn	4303fdw
Prints 33 pages per minute (ppm) on A4 and 35 ppm on letter-size paper	✓	✓	✓
Job storage and private printing	✓	✓	✓

Table 1-35 Copy and scan specifications

Copy and scan features	4303dw	4303fdn	4303fdw
Copies up to 31 pages per minute (ppm) in black and white (single-sided, letter), or up to 26 ppm in color (single-sided, letter)	✓	✓	✓
50-page document feeder with dual-head scanning for single-pass duplex copying and scanning	Not included	✓	✓

Table 1-35 Copy and scan specifications (continued)

Copy and scan features	4303dw	4303fdn	4303fdw
50-page document feeder with simplex copying and scanning	✓	Not included	Not included
Scan to E-mail, Scan to USB, and Scan to Network Folder options	✓	✓	✓

Table 1-36 Other specifications

Other features	4303dw	4303fdn	4303fdw
512 MB memory	✓	✓	✓
Color touchscreen control panel	✓	✓	✓
Fax features	Not included	✓	✓
HP Digital Fax (Fax to Email and Fax to Network Folder options)	Not included	✓	✓

Input devices

Learn about input device configuration and specifications.

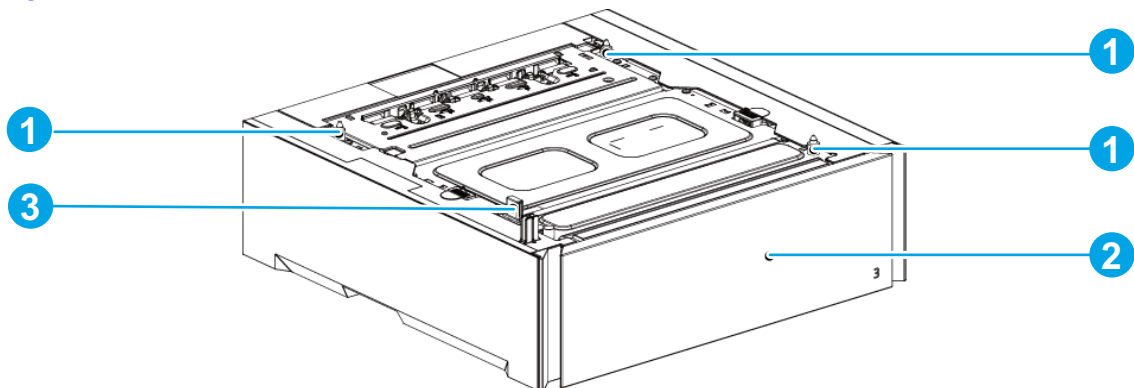
Information (input devices)

Learn about the printer input devices.

550-sheet paper feeder front view

Identify the parts on the 550-sheet paper feeder.

Figure 1-10 550-sheet paper feeder front view



Number	Description
1	Positioning pin
2	Tray 3 (cassette)
3	Connector

2 Printer installation and maintenance

Learn about printer installation and maintenance.


Document feeder / scanner

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

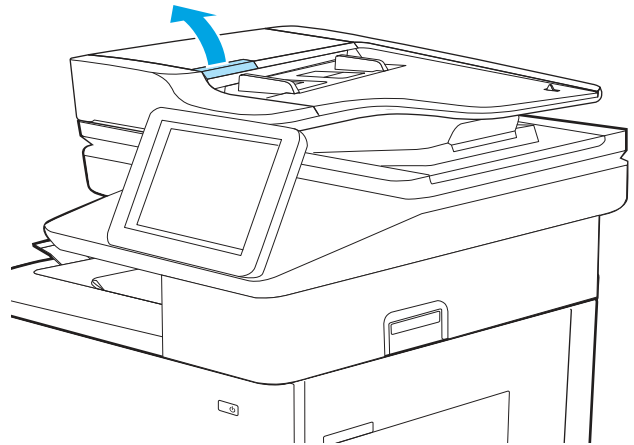
Clean the pickup rollers and separation pad in the document feeder (MFP)

Learn about cleaning the document feeder rollers and pads.

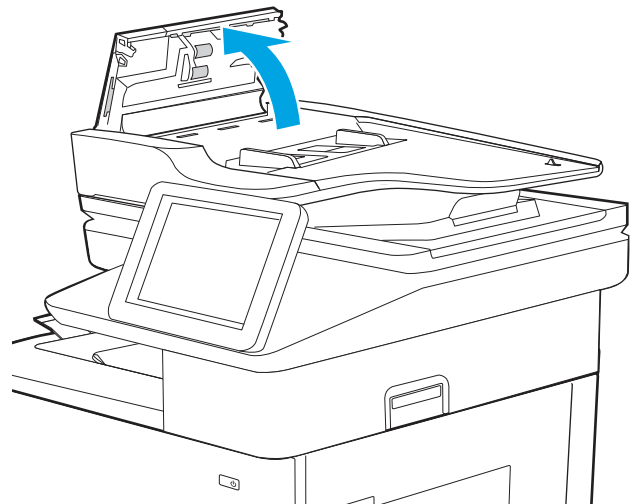
Over time, specks of debris might collect on the document feeder rollers and pads which can affect performance.

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


1. Lift the document-feeder latch.

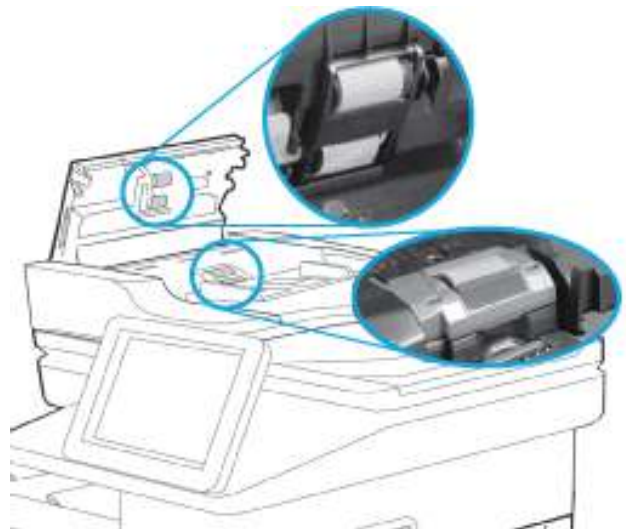


2. Open the document-feeder cover.



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

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



4. Close the document-feeder cover.

Check the scanner glass for dirt and smudges

Learn about solving copy-quality debris problems.

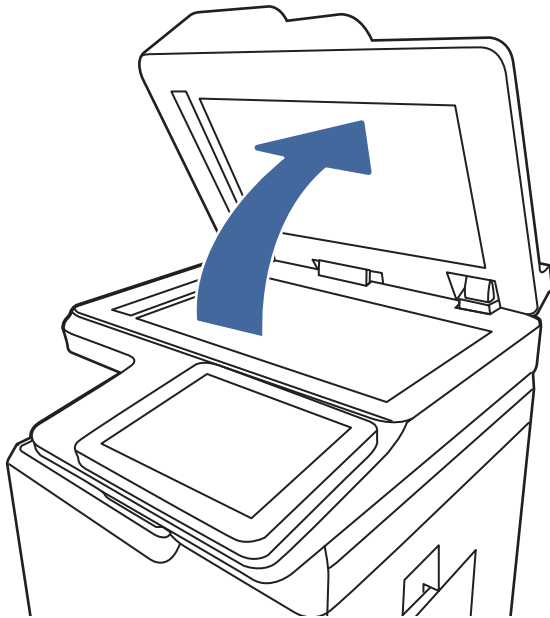
Over time, specks of debris might collect on the scanner glass and document feeder white plastic backing, which might cause print defects. Use the following procedure to clean the scanner if the printed pages have streaks, unwanted lines, black dots, poor print quality, or unclear text.

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

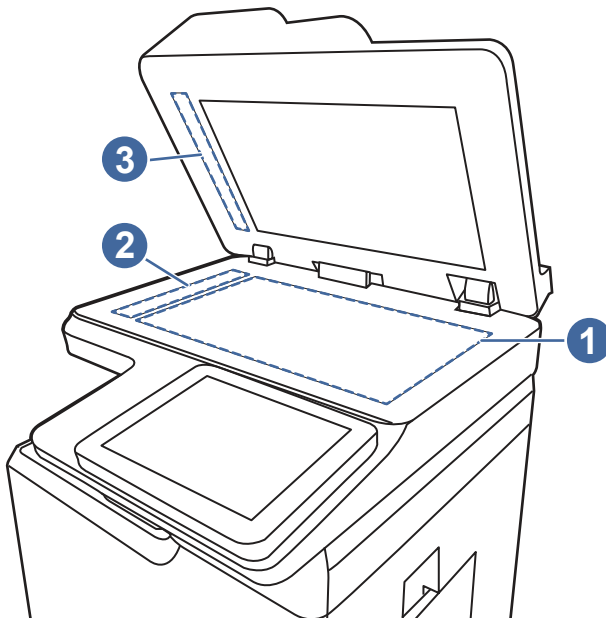
1. Press the power button to turn the printer off, and then disconnect the power cable from the electrical outlet.



2. Open the scanner lid.



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



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

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

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

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



Base printer

Learn about the base printer installation and maintenance.

Supplies and long-life consumables (LLCs)

Learn about supplies and LLCs.

Replace the toner cartridges

Replace the toner cartridges if you receive a message on the printer, or if you have print quality problems.

Toner cartridge information

Review details about ordering replacement toner cartridges.

The printer indicates when the toner-cartridge level is low and very low. The actual toner cartridge life remaining can vary. Consider having a replacement cartridge available to install when print quality is no longer acceptable.

The printer uses four colors and has a different toner cartridge for each color: cyan (C), magenta (M), yellow (Y), and black (K). The toner cartridges are inside the front door.

Continue printing with the current cartridge until redistributing the toner no longer yields acceptable print quality. To redistribute the toner, remove the toner cartridge from the printer and gently rock the cartridge back and forth end to end. For graphical representation, see the cartridge replacement instructions. Reinsert the toner cartridge into the printer, and then close the cover.

To purchase cartridges or check cartridge compatibility for the printer, go to www.hp.com/go/suresupply. Scroll to the bottom of the page and verify that the country/region is correct.



NOTE: Cartridges are for distribution and use with their designated product only; they will not work with other printer models.

Table 2-1 Supplies - For use with 4201/4301 models only

Item	Description	Part number (service/new)
210A Black Toner Crtg; standard	Standard-capacity black toner cartridge	W2100A
210A Cyan Toner Crtg; standard	Standard-capacity cyan toner cartridge	W2101A
210A Yellow Toner Crtg; standard	Standard-capacity yellow toner cartridge	W2102A
210A Magenta Toner Crtg; standard	Standard-capacity magenta toner cartridge	W2103A
210X Black Toner Crtg; high capacity	High-capacity black toner cartridge	W2100X

Table 2-1 Supplies - For use with 4201/4301 models only (continued)

Item	Description	Part number (service/new)
210X Cyan Toner Crtg; high capacity	High-capacity cyan toner cartridge	W2101X
210X Yellow Toner Crtg; high capacity	High-capacity yellow toner cartridge	W2102X
210X Magenta Toner Crtg; high capacity	High-capacity magenta toner cartridge	W2103X

Table 2-2 Supplies - For use with 4202/4302 models only

Item	Description	Part number (service/new)
220A Black Toner Crtg EMEA; standard	Standard-capacity black toner cartridge	W2200A
220A Cyan Toner Crtg EMEA; standard	Standard-capacity cyan toner cartridge	W2201A
220A Yellow Toner Crtg EMEA; standard	Standard-capacity yellow toner cartridge	W2202A
220A Magenta Toner Crtg EMEA; standard	Standard-capacity magenta toner cartridge	W2203A
220X Black Toner Crtg EMEA; high capacity	High-capacity black toner cartridge	W2200X
220X Cyan Toner Crtg EMEA; high capacity	High-capacity cyan toner cartridge	W2201X
220X Yellow Toner Crtg EMEA; high capacity	High-capacity yellow toner cartridge	W2202X
220X Magenta Toner Crtg EMEA; high capacity	High-capacity magenta toner cartridge	W2203X

Table 2-3 Supplies - For use with 4203/4303 models only

Item	Description	Part number (service/new)
230A Black Toner Crtg; standard	Standard-capacity black toner cartridge	W2300A
230A Cyan Toner Crtg; standard	Standard-capacity cyan toner cartridge	W2301A
230A Yellow Toner Crtg; standard	Standard-capacity yellow toner cartridge	W2302A
230A Magenta Toner Crtg; standard	Standard-capacity magenta toner cartridge	W2303A
230X Black Toner Crtg; high capacity	High-capacity black toner cartridge	W2300X
230X Cyan Toner Crtg; high capacity	High-capacity cyan toner cartridge	W2301X
230X Yellow Toner Crtg; high capacity	High-capacity yellow toner cartridge	W2302X

Table 2-3 Supplies - For use with 4203/4303 models only (continued)

Item	Description	Part number (service/new)
230X Magenta Toner Crtg; high capacity	High-capacity magenta toner cartridge	W2303X

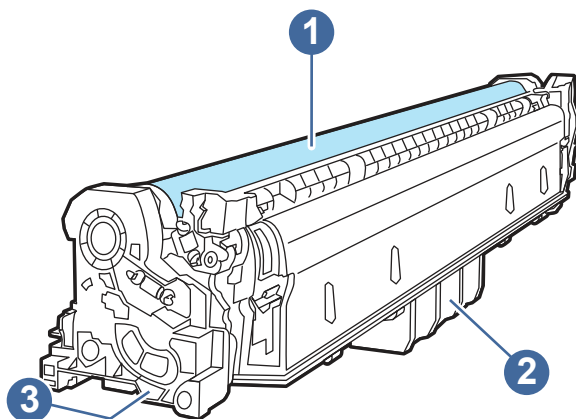
Do not remove the toner cartridge from its package until it is time to replace it.

CAUTION: To prevent damage to the toner cartridge, do not expose it to light for more than a few minutes. If the toner cartridge must be removed from the printer for an extended period of time, place the cartridge in the original plastic packaging, or cover the cartridge with a lightweight opaque item.

NOTE: High-yield toner cartridges contain more toner than standard cartridges for increased page yield. For more information, go to www.hp.com/go/toneryield.

The following illustration shows the toner cartridge components.

Figure 2-1 Toner cartridge components



Number	Description
1	Imaging drum CAUTION: Do not touch the imaging drum. Fingerprints can cause print-quality problems.
2	Handle
3	Memory chip

CAUTION: If toner gets on clothing, wipe it off by using a dry cloth and wash the clothes in cold water. Hot water sets toner into fabric.

NOTE: Information about recycling used toner cartridges is in the toner cartridge box or at www.hp.com/hprecycle.

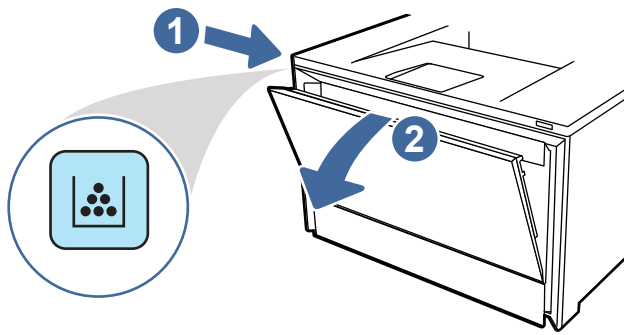
Remove and replace the toner cartridges

Follow these steps to replace the toner cartridges.

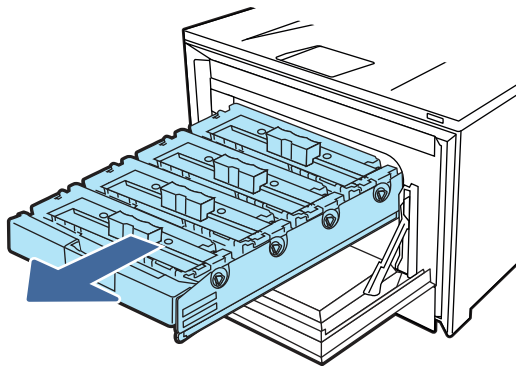


[View a video of how to replace the toner cartridges](#)

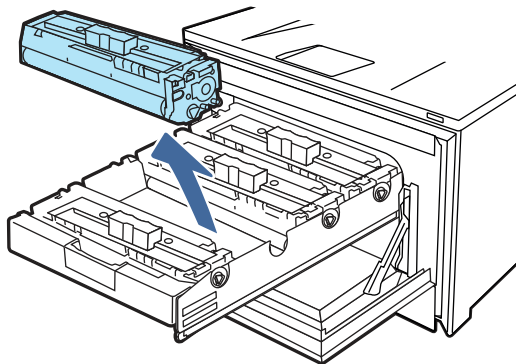
1. Open the front door by pressing the button on the left panel.



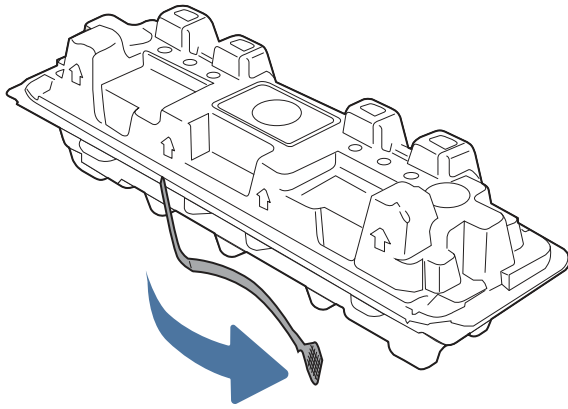
2. Grasp the blue handle on the toner cartridge drawer, and then pull out the drawer.



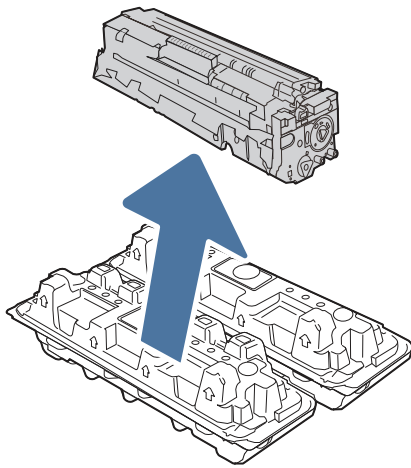
3. Grasp the handle on the toner cartridge, and then pull the toner cartridge straight up to remove it.



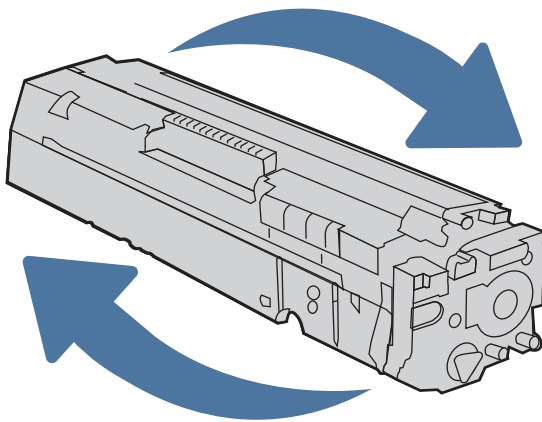
4. Remove the new toner cartridge package from the box, and then pull the release tab on the packaging.



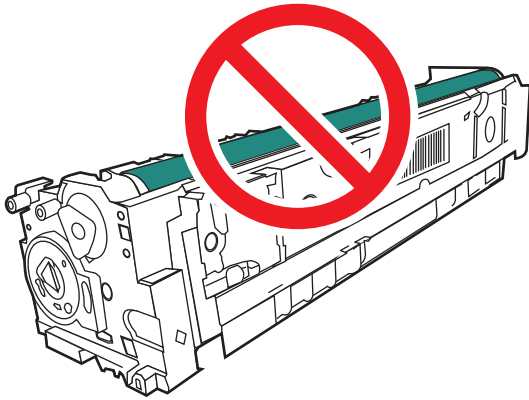
5. Remove the toner cartridge from the opened packaging shell. Place the used toner cartridge in the shell for recycling.



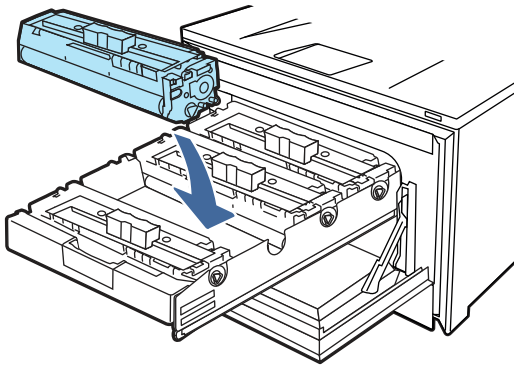
6. Hold both ends of the toner cartridge and rock it end to end to distribute the toner evenly inside the cartridge.



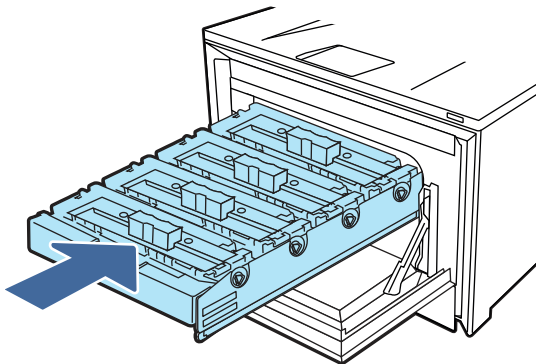
7. Do not touch the imaging drum on the bottom of the toner cartridge. Fingerprints on the imaging drum can cause print-quality problems. Also, do not expose the cartridge to light unnecessarily.



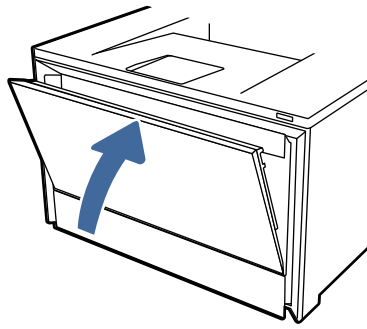
8. Insert the new toner cartridge into the drawer. Make sure that the color chip on the cartridge matches the color chip on the drawer.



9. Close the toner cartridge drawer.



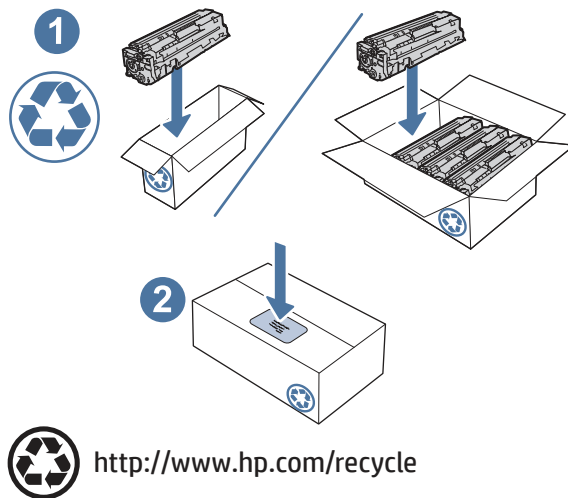
10. Close the front door.



11. Pack the used toner cartridge into the box the new cartridge came in, or use a large cardboard box and fill it with several cartridges you need to recycle. See the enclosed recycling guide for information about recycling.


In the US, a pre-paid shipping label is included in the box. In other countries/regions, go to www.hp.com/recycle to print a pre-paid shipping label.

Adhere the pre-paid shipping label to the box, and return the used cartridge to HP for recycling.

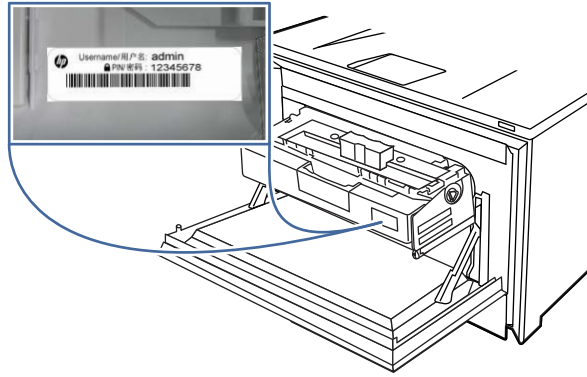


Security setup

Review the following information about the printer security features.

-  **IMPORTANT:** Access to the Embedded Web Server (EWS) requires a personal identification number (PIN). The default PIN for this printer is located on a sticker adhered to the front of the toner cartridge tray. Use this PIN to open the EWS when prompted.

The default PIN (password) can be changed in the EWS (**Settings** > **Security** > **Password Settings**).



Introduction

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

Assign or change the system password using the Embedded Web Server

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

Access to the Embedded Web Server (EWS) requires a personal identification number (PIN). The default PIN for this printer is located on a sticker adhered to the front of the toner cartridge tray. Use this PIN to open the EWS when prompted.



NOTE: If the default PIN has been changed, contact the printer administrator.

The default PIN (password) can be changed in the EWS (**Security > Access Control**).

1. Open the HP Embedded Web Server (EWS).
 - a. At the printer control panel, use the control-panel menus to print the [Connectivity Status Report](#) (MFP) or [Connectivity Status Page](#) (SFP). Do the following:
 - Open the **Menu > Tools > Reports/Status reports** menus.
 - **MFP:** Select the **Connectivity Status Report** item.
 - **SFP:** Select the **Connectivity Status Page** item.



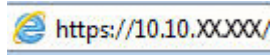
NOTE: **MFP:** Touch the [Print](#) button on the touchscreen to print the report.

SFP: Navigate and select the [Print](#) item in the menu list, and then press the dial to select it and print the report.

- b. Open a web browser, and in the address line, type the IP address or host name exactly as it appears on the [Connectivity Status Report](#) or [Connectivity Status Page](#) page. Press the [Enter](#) key on the computer keyboard. The EWS opens.



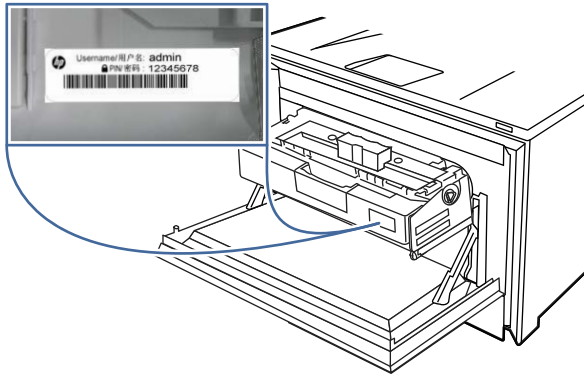
NOTE: If a message displays in the web browser indicating that the website might not be safe, select the option to continue to the website. Accessing this website will not harm the computer.




2. On the EWS Home page, open the **Security > Access Control** menus.

 **NOTE:** When prompted, enter the default PIN from the sticker adhered to the cartridge tray.

Figure 2-2 Printer default PIN location



3. Use the **Admin Account Password** fields to set the password, and then click **Apply**.


 **NOTE:** Make note of the password and store it in a safe place.

Cleaning

Learn about printer cleaning techniques and procedures.

Print a cleaning page

Learn how to print a cleaning page.

 **NOTE:** To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

During the printing process, paper, toner, and dust particles can accumulate inside the printer and can cause print-quality issues such as toner specks or spatter, smears, streaks, lines, or repeating marks.

Print a cleaning page from a dial control panel

1. Open the following menus:
 - [Menu](#)
 - [Tools](#)
 - [Troubleshooting](#)
 - [Print Quality Tools](#)
 - [Cleaning Page](#)
2. Navigate to and select the [Print](#) item in the menu list, and then press the dial to select it and print the report.

Print a cleaning page from a touchscreen control panel

1. Open the following menus:
 - Menu
 - Tools
 - Troubleshooting
 - Print Quality Tools
2. Touch the [Cleaning Page](#) item. A cleaning page prints.

Clean the Tray 1 pickup and separation rollers

Learn about cleaning the Tray 1 rollers.

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

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

Table 2-4 Part information

Part number	Part description
RM2-2758-000CN	Multipurpose feed assembly
RM2-2692-000CN	Separation roller assembly (Tray1/2/3)

Required tools

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

After performing service

Turn the printer power on


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

Post service test

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

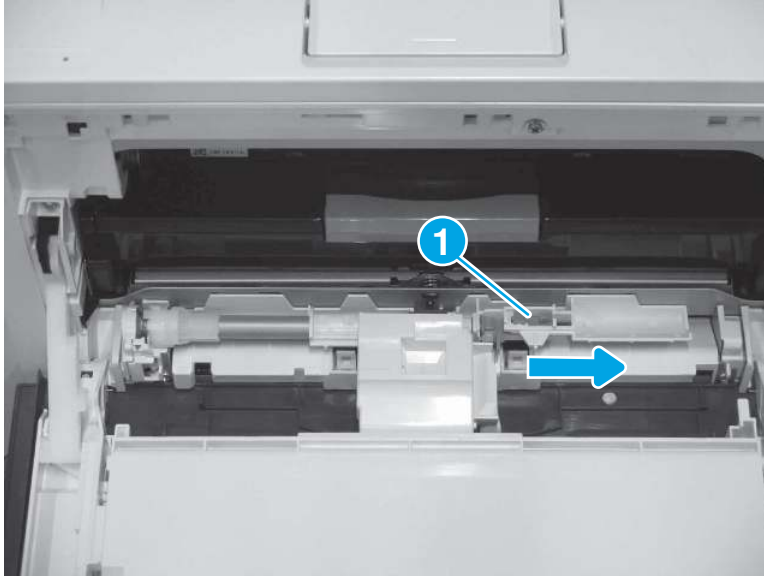
Remove the Tray 1 pickup roller assembly

Follow the procedure below to remove and replace the Tray 1 pickup roller assembly.

 **Reinstallation tip:** Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

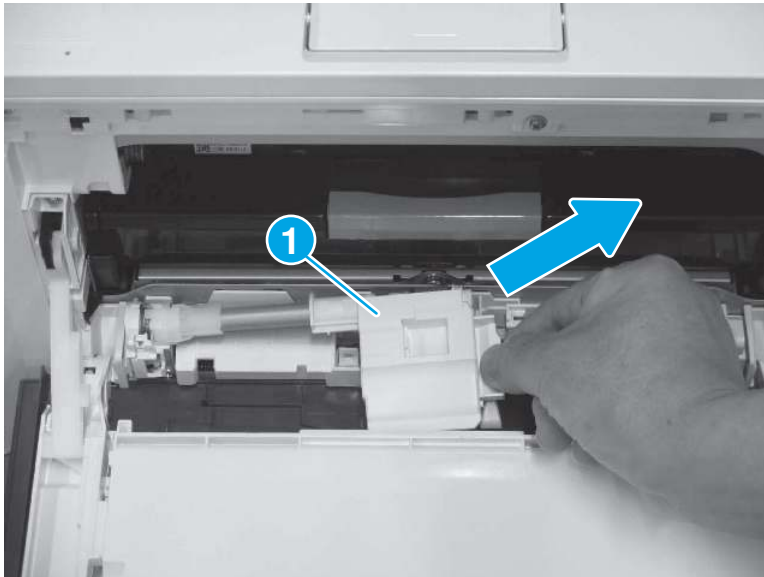
1. Open the cartridge door, and then depress the lever (callout 1) and slide it as shown below.

Figure 2-3 Release the Tray 1 pickup roller assembly



2. Slide the pickup roller assembly (callout 1) as shown below to remove it.

Figure 2-4 Remove the Tray 1 pickup roller assembly

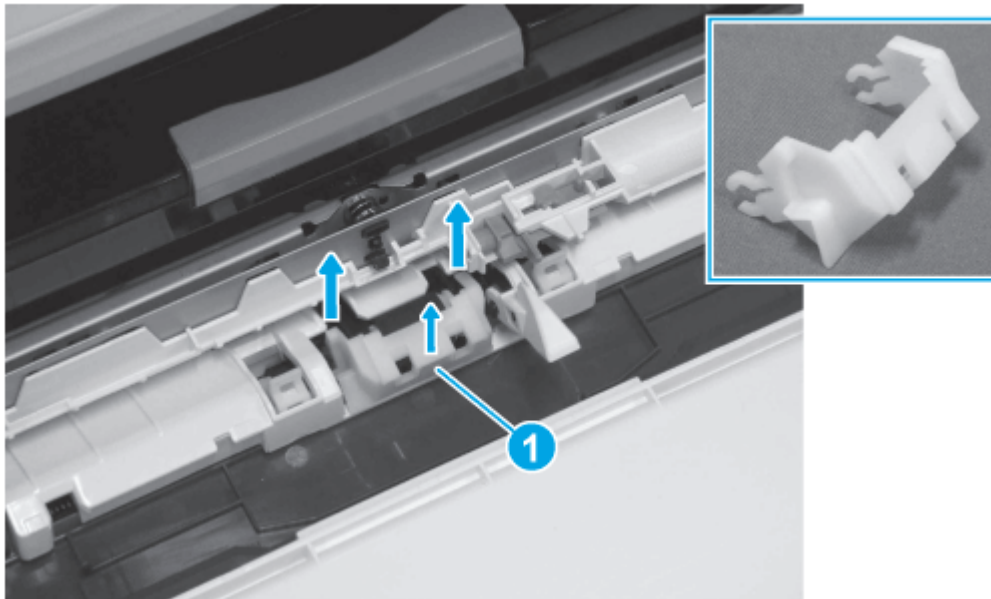


Remove the Tray 1 separation roller assembly

Follow the procedure below to remove and replace the Tray 1 separation roller assembly.

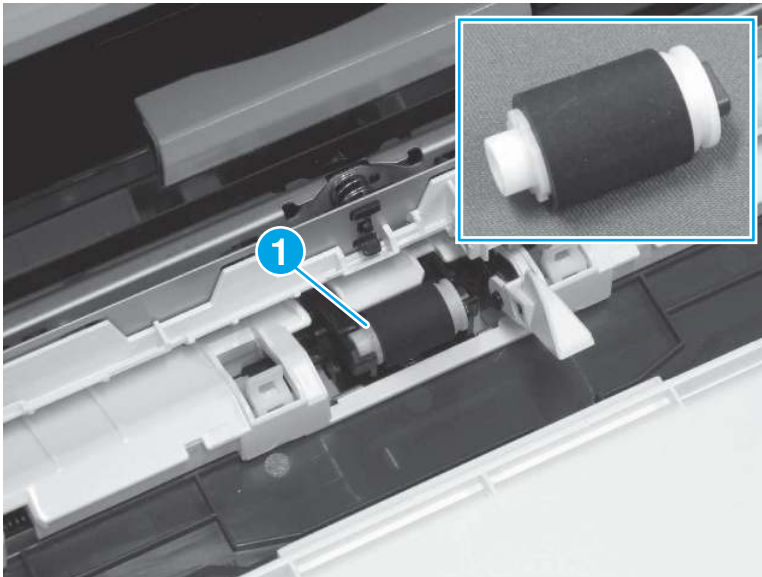
1. Pull up on the guide (callout 1) to remove it.

Figure 2-5 Remove the guide



2. Remove the Tray 1 separation roller (callout 1).

Figure 2-6 Remove the Tray 1 separation roller



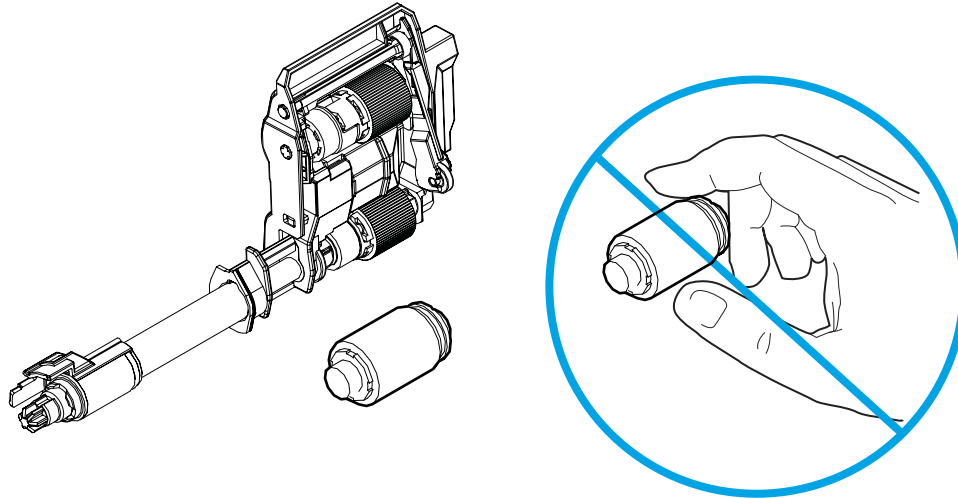
Clean the Tray 1 pickup and separation rollers

Carefully clean the Tray 1 pickup and separation rollers.

- Clean the Tray 1 pickup and separation roller.
- Use a damp, lint-free cloth to gently clean the rollers.

CAUTION: When handling the roller and/or pad, avoid touching the spongy surfaces. Skin oils and fingerprints on a roller surface can cause print-quality problems.

Figure 2-7 Clean the rollers



Special installation instructions - Tray 1 pickup roller assembly

Follow the special instructions below to install the Tray 1 pickup roller assembly.

- When the Tray 1 pickup roller assembly (callout 1) is installed, make sure that the alignment tab (callout 2) is in the slot (callout 3) on the assembly shaft.


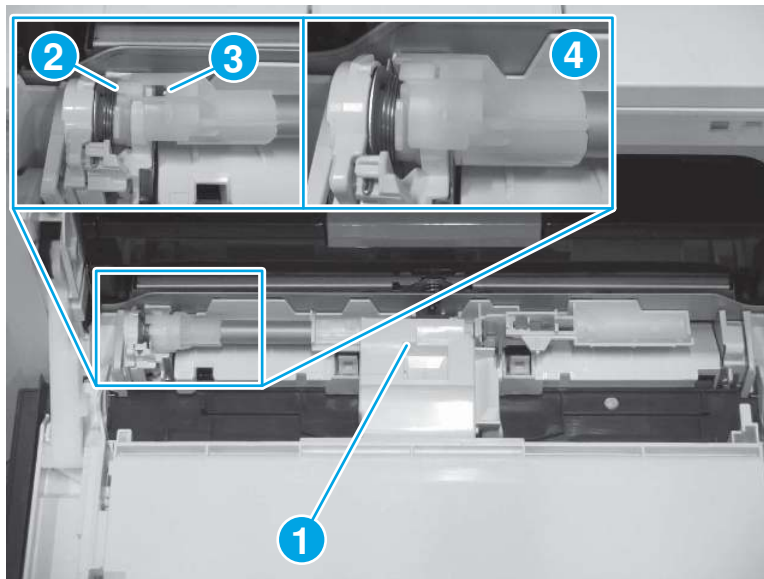
 **TIP:** When correctly installed, the tab fits completely into the slot (callout 4).

Figure 2-8 Install the Tray 1 pickup roller assembly



Clean the Tray 2 pickup, feed, and separation rollers

Learn about cleaning the Tray 2 rollers.

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

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

Table 2-5 Part information

Part number	Part description
RM2-2695-000CN	Paper pickup roller assembly NOTE: RM2-2695-000CN includes both the pickup and feed rollers (identical parts).
RM2-2692-000CN	Separation roller assembly (Tray1/2/3)

Required tools

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

After performing service

Turn the printer power on

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

Post service test

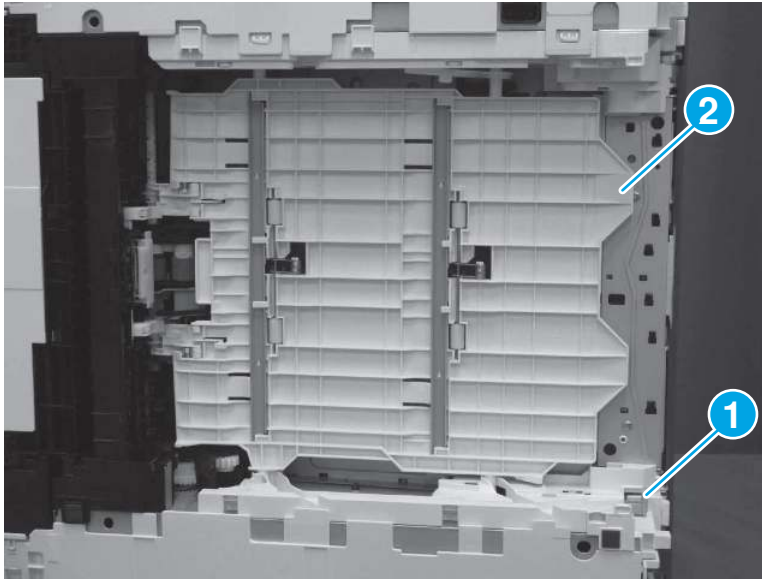
Print any pages necessary to make sure the printer is functioning correctly.

Remove the Tray 2 pickup and feed rollers

Follow the procedure below to remove and replace the Tray 2 pickup and feed rollers.

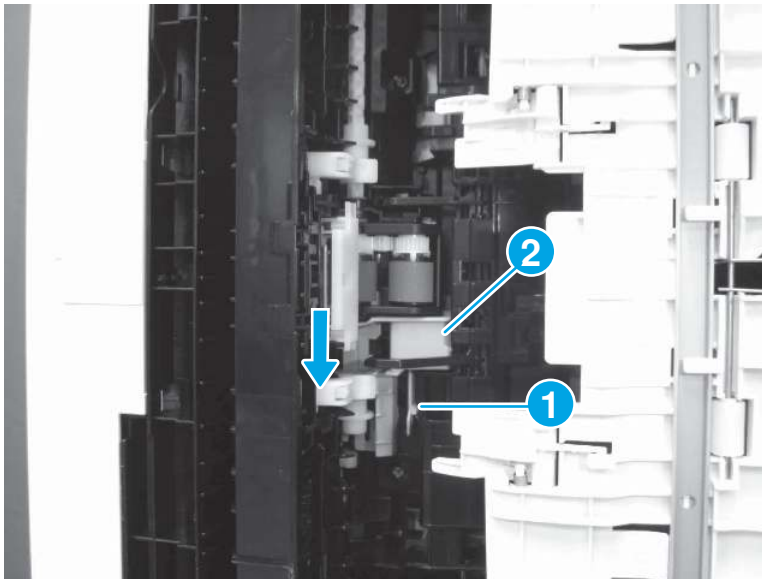
1. Position the printer on its left side, press the lever (callout 1) to release the MP feed guide (callout 2).

Figure 2-9 Release the MP tray guide



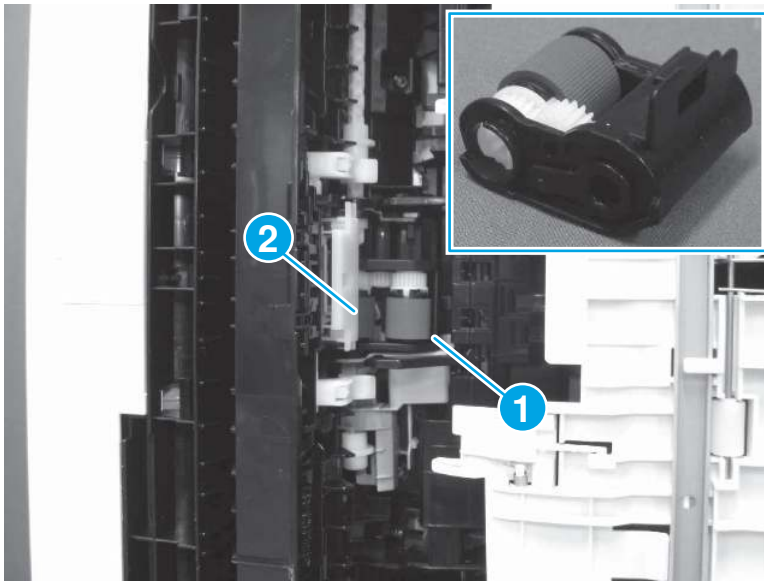
2. Push the lever (callout 1) and move the holder (callout 2) as shown below.

Figure 2-10 Move the holder



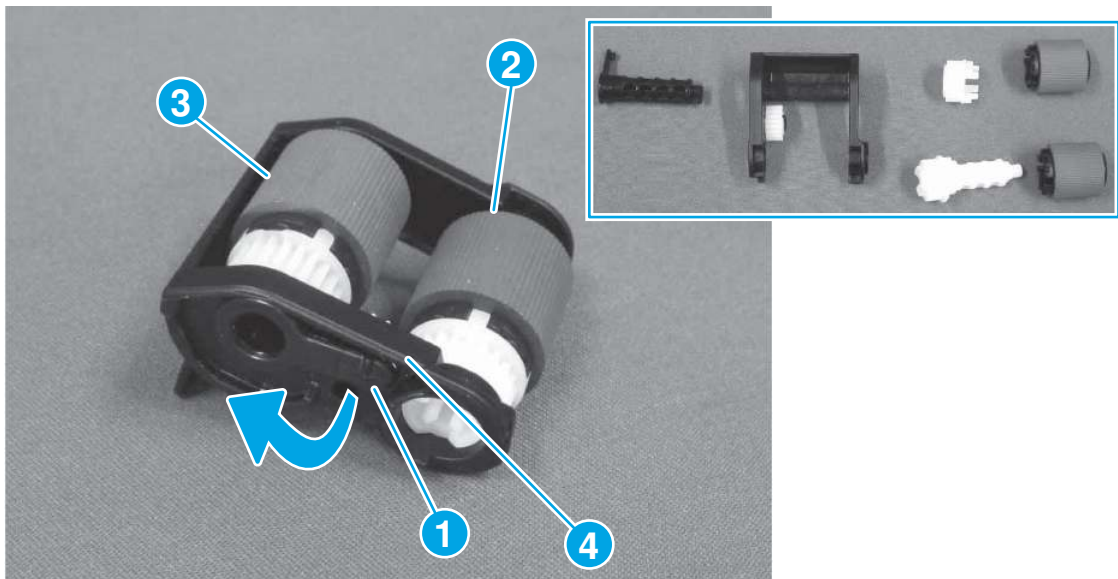
3. Remove the pickup roller (callout 1) and feed roller (callout 2) as an assembly.

Figure 2-11 Remove the roller assembly



4. Do the following:
 - a. Rotate the retainer (callout 1) as shown below to remove it.
 - b. Remove the pickup roller (callout 2) and the feed roller (callout 3) from the holder (callout 4).

Figure 2-12 Remove the rollers

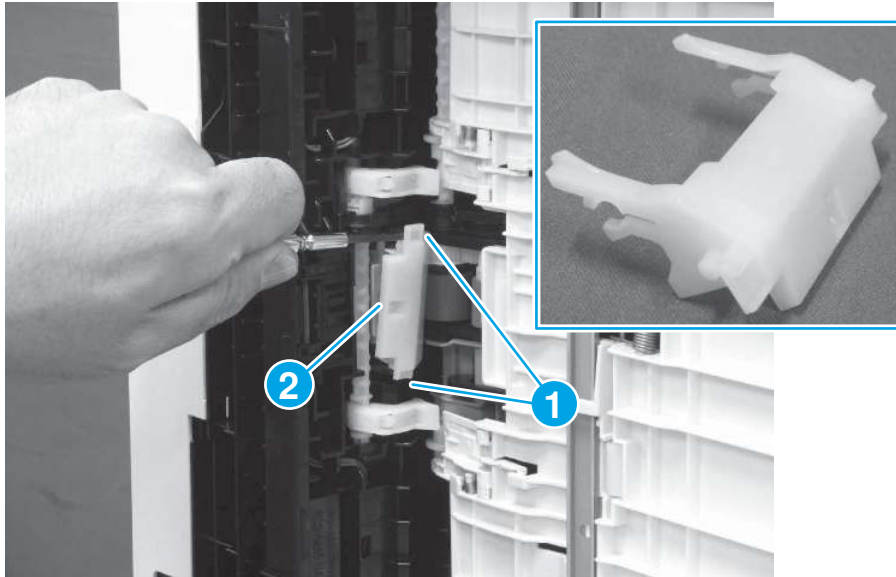


Remove the Tray 2 separation roller

Follow the procedure below to remove and replace the Tray 2 separation roller.

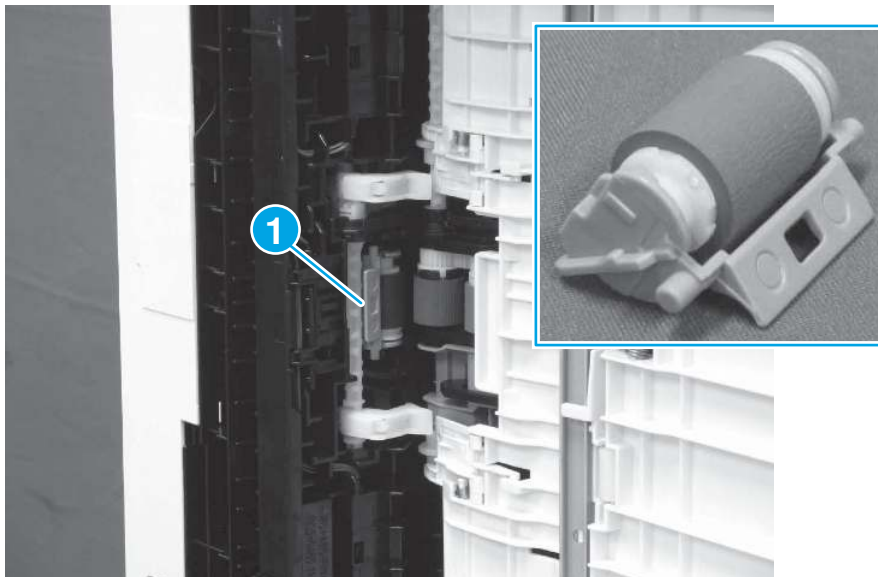
1. Position the printer on its left side, use a small flat-blade screwdriver to release two tabs (callout 1), and then remove the guide (callout 2).

Figure 2-13 Remove the guide



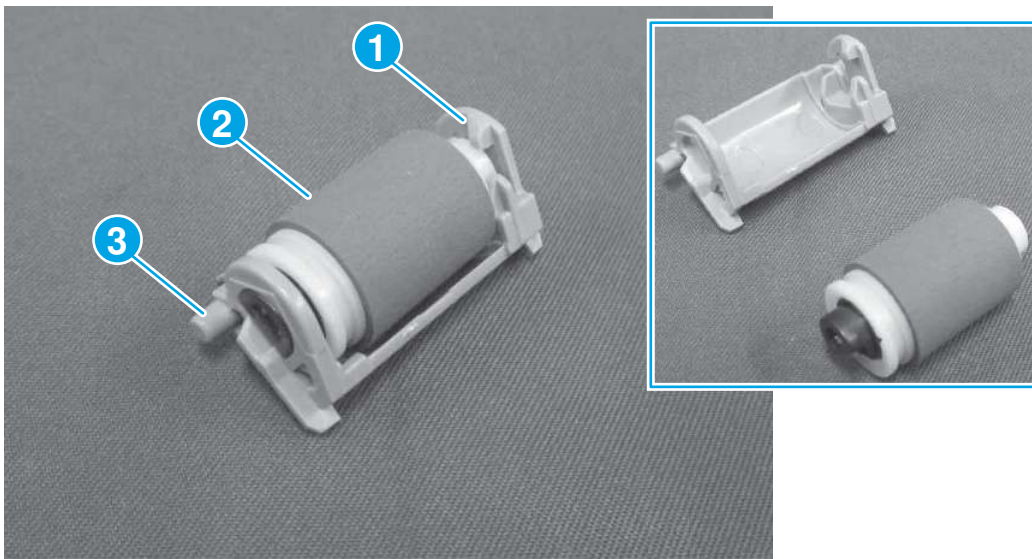
2. Remove the Tray 2 separation roller assembly (callout 1).

Figure 2-14 Move the roller assembly



3. Release one tab (callout 1), and then remove the roller (callout 2) from the holder (callout 3).

Figure 2-15 Disassemble the roller assembly



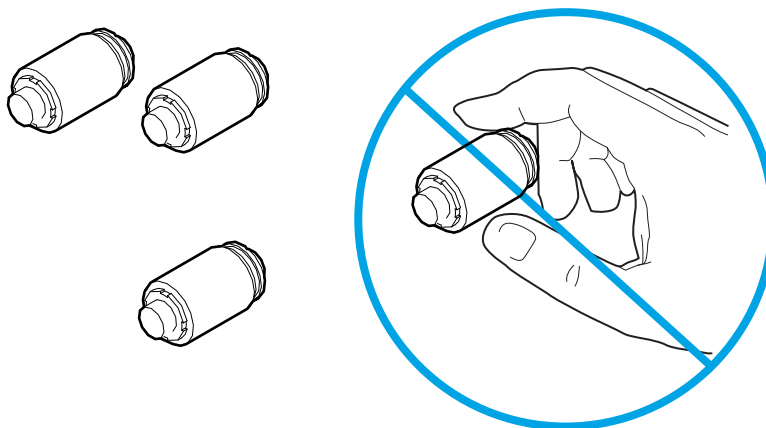
Clean the Tray 2 pickup, feed, and separation rollers

Carefully clean the Tray 1 pickup, feed, and separation rollers.

- Clean the Tray 1 pickup, feed, and separation roller.
 - Use a damp, lint-free cloth to gently clean the rollers.

CAUTION: When handling the roller and/or pad, avoid touching the spongy surfaces. Skin oils and fingerprints on a roller surface can cause print-quality problems.

Figure 2-16 Clean the rollers



Input devices

Learn about input device installation and maintenance.

Cleaning

Learn about input device cleaning techniques and procedures.

Clean the Tray 3 pickup, feed, and separation rollers

Learn about cleaning the Tray 3 rollers.

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

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

Table 2-6 Part information

Part number	Part description
RM2-2695-000CN	Paper pickup roller assembly NOTE: RM2-2695-000CN includes both the pickup and feed rollers (identical parts).
RM2-2692-000CN	Separation roller assembly (Tray1/2/3)

Required tools

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

After performing service

Turn the printer power on

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

Post service test

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

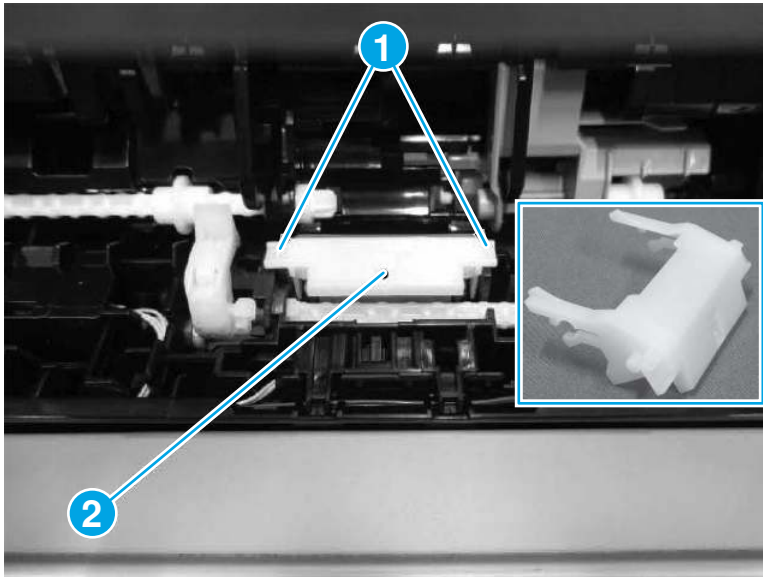
Remove the Tray 3 pickup and feed rollers

Follow the procedure below to remove and replace the Tray 3 pickup and feed rollers.

1. Turn the paper feeder over to gain access to the roller assembly.

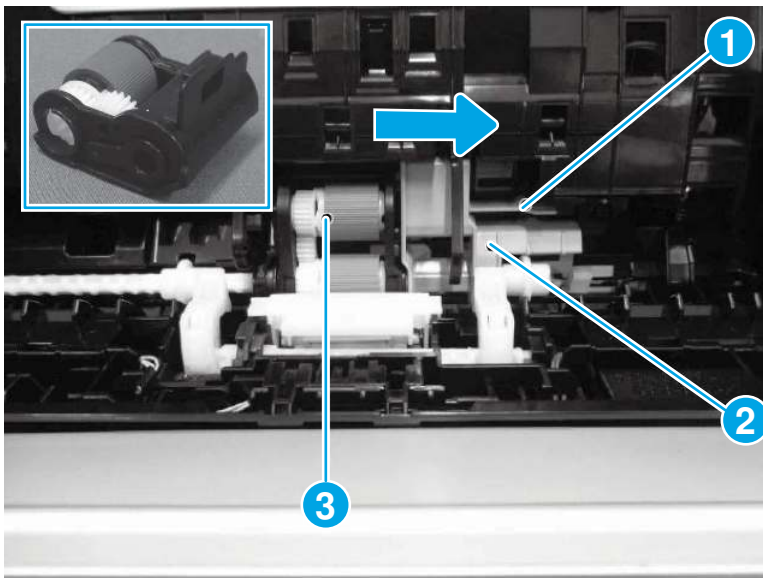
2. Use a small flat-blade screwdriver to release two tabs (callout 1), and then remove the cover (callout 2).

Figure 2-17 Remove the cover



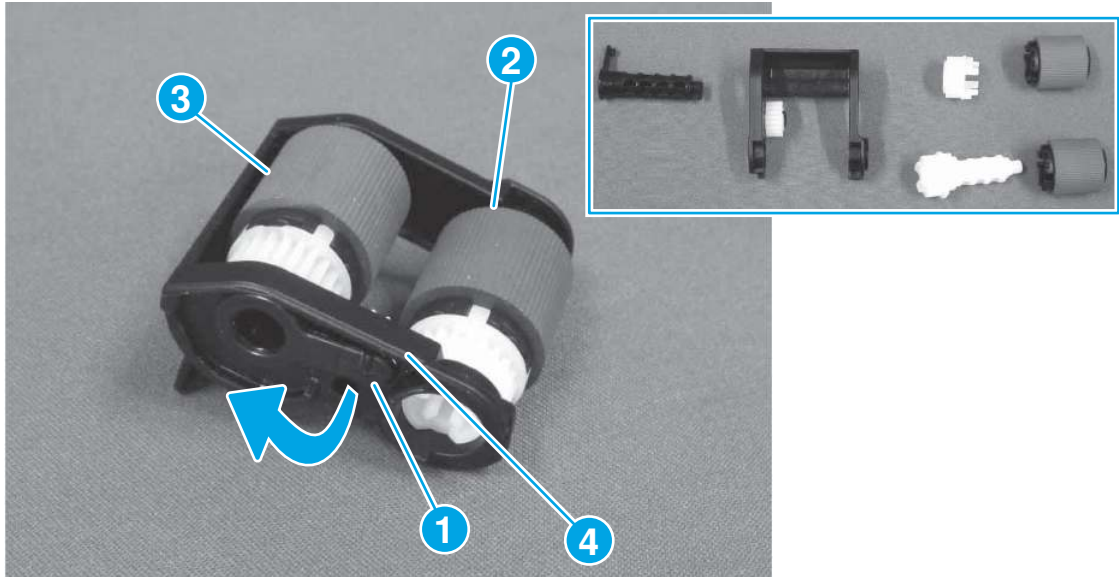
3. Push the lever (callout 1) and move the holder (callout 2) as shown below, and then remove the pickup/feed roller assembly (callout 3).

Figure 2-18 Remove the roller assembly



4. Do the following:
 - a. Rotate the retainer (callout 1) as shown below to remove it.
 - b. Remove the pickup roller (callout 2) and the feed roller (callout 3) from the holder (callout 4).

Figure 2-19 Remove the rollers

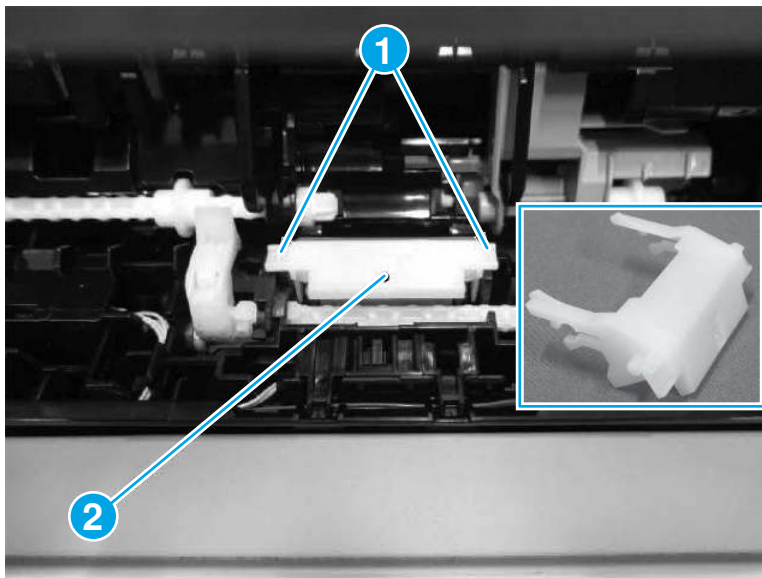


Remove the Tray 3 separation roller

Follow the procedure below to remove and replace the Tray 3 separation roller.

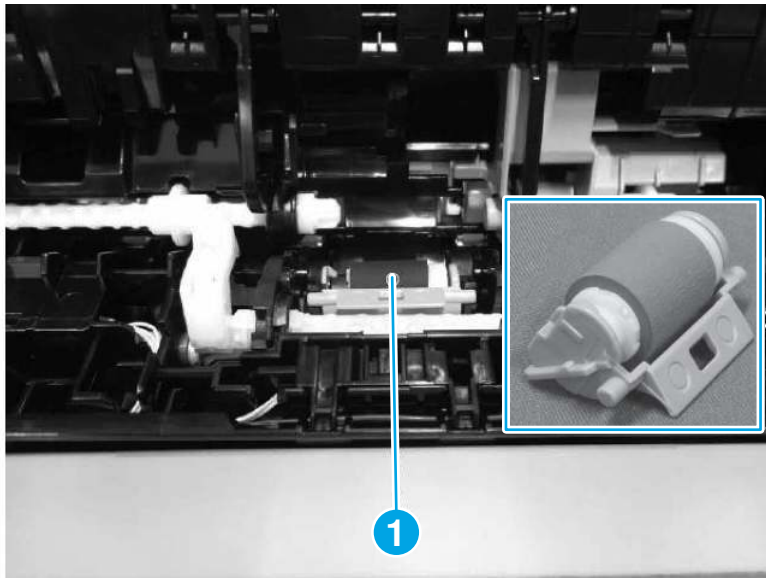
1. Turn the paper feeder over to gain access to the roller assembly.
2. Use a small flat-blade screwdriver to release two tabs (callout 1), and then remove the cover (callout 2).

Figure 2-20 Remove the cover



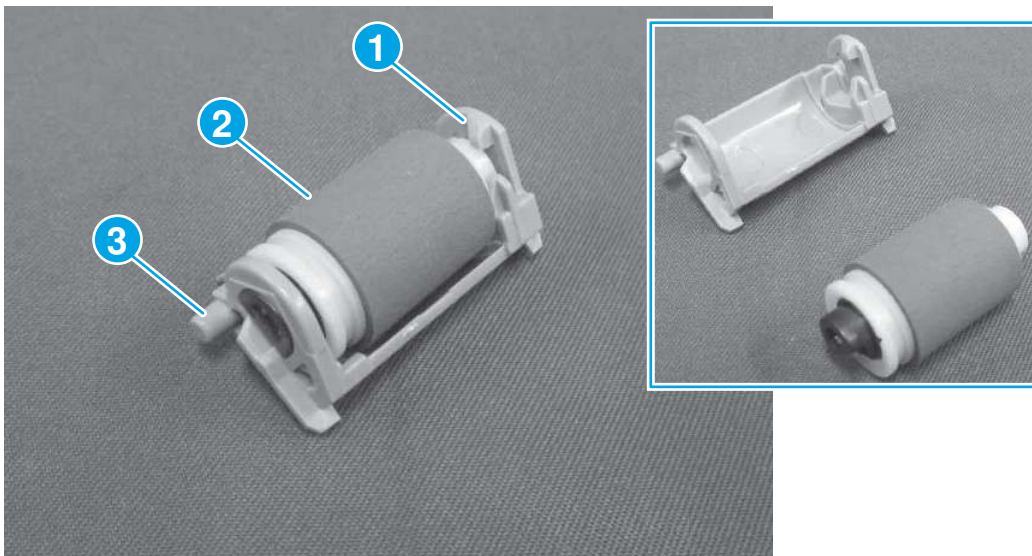
3. Remove the Tray 3 separation roller assembly (callout 1).

Figure 2-21 Move the roller assembly



4. Release one tab (callout 1), and then remove the roller (callout 2) from the holder (callout 3).

Figure 2-22 Disassemble the roller assembly



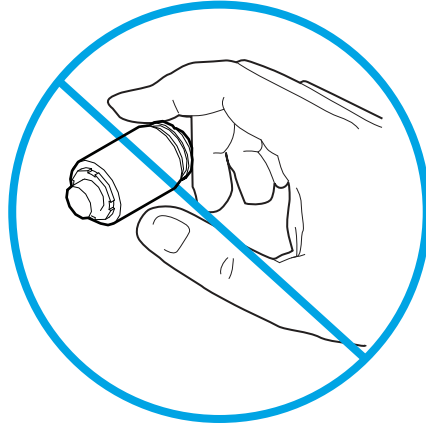
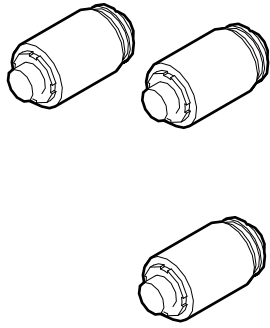
Clean the Tray 2 pickup, feed, and separation rollers

Carefully clean the Tray 1 pickup, feed, and separation rollers.

- Clean the Tray 1 pickup, feed, and separation roller.
 - Use a damp, lint-free cloth to gently clean the rollers.

⚠ CAUTION: When handling the roller and/or pad, avoid touching the spongy surfaces. Skin oils and fingerprints on a roller surface can cause print-quality problems.

Figure 2-23 Clean the rollers




3 Theory of operation

Learn about the printer theory of operation.

Document feeder / scanner

Learn about the printer document feeder and scanner components.


 **NOTE:** This section is for MFP printers only.

Scanner

Learn about the MFP printer sub-scanner assembly (SSA).

Scanning and image capture system

Learn about the scanning and image capture system.

 **NOTE:** This section is for MFP printers only.

The flatbed image scanner captures an electronic image of the document on the glass. The scanner does this by illuminating the document with LEDs (red, green, and blue) and capturing the image in the image sensor to create an electronic format of the document. The flatbed scanner consists of three main elements.

- **CIS scanner**

The CIS (contact image sensor) scanner captures an image using the printer's optical path. Red, green, and blue LEDs sequentially illuminate a small strip of the document (often called a raster line), and the optical system captures each color in a single row of CCD sensors that cover the entire page width. Because only one color is captured for each line per exposure, the three colors are recombined electronically to create the full color image. For monochromatic scans or copies, all three LEDs are illuminated to create a white light for the scan so the raster line can be captured in one exposure.

- **Mechanical drive system**

The drive system moves the CIS scanner along the document length to create the image. In this printer, the drive system consists of a small DC motor with an optical encoder, a drive belt, and a guide rod. The speed of the drive system is proportional to the scan resolution (300 ppi is much faster than 1200 ppi) and also proportional to the type of scan (color scans are slower than monochromatic scans).

- **Image processing system (formatter)**

The formatter processes the scanner data into either a copy or a scan to the computer. For copies, the image data is sent directly to the printer without being transmitted to the computer. Depending on user selections for the copy settings, the formatter enhances the scanner data significantly before sending it to the printer. Image data is captured at 300 ppi for copies and is user selectable for scans to the computer. Each pixel is represented by 8 bits for each of the three colors (256 levels for each color), for a total of 24 bits per pixel (24-bit color).

Document feeder

Learn about the MFP printer document feeder components.

Document feeder simplex operation

Learn about document feeder operation.

The document feeder will not function when the document feeder cover is open. The paper path is incomplete if the document feeder cover is lifted from the glass.

When the printer duplex scans from the document feeder, the paper moves through one time, because the document feeder has a contact image sensor (CIS) scanner for side two which is scanned simultaneously with side one.



NOTE: Duplex scanning is model specific. Some printer models might not support duplex scanning and printing.

The standard operation of the document feeder consists of the standby (paper loading) mode, pick, feed, and lift steps:

- **Standby (paper-loading) mode**

In standby mode, the lift plate is in the down position. When a document is loaded into the input tray, the paper-present sensor detects its presence.

When a copy/scan is initiated, the document feeder motor engages the gear train and raises the lift plate until the document makes contact with the pick roller. The document feeder then begins the pick, feed, and lower sequence.

- **Pick**

The pick roller rotates and moves one or more sheets forward into the document feeder where the sheets engage with the separation roller. The separation roller contacts the document feeder separation pad, which separates multiple sheets into a single sheet.

- **Feed**

The single sheet continues through the document feeder paper path (aided by the pre-scan rollers) until the leading edge of the page activates the top-of-form sensor. Activation of this sensor initiates the scan process, and the scanner acquires the image as the document moves over the document feeder glass. The post-scan rollers then eject the sheet into the output area. The pick and feed steps are repeated as long as paper is detected by the paper-present sensor.

- **Home**

When the top-of-form sensor detects the trailing edge of the last page, the last sheet is ejected and the motor turns on a sequence that rests the separation floor back down in standby mode, which allows it to detect when more media is loaded.

Base printer

Learn about the base printer components.

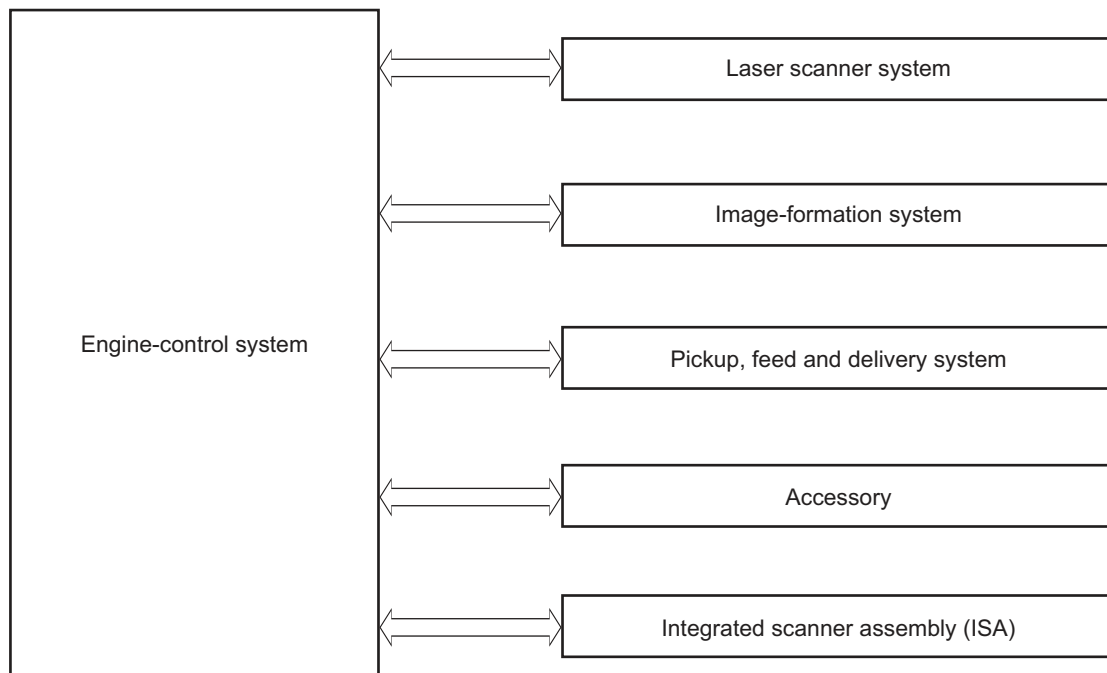
Basic operation


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

The basic printer operation comprises the following systems:

- The engine-control system (ECS)
- The laser/scanner system
- The image-formation system
- The pickup, feed and delivery system
- Accessory
- Integrated scanner assembly (ISA; MFP only)

Figure 3-1 Relationship between the main printer systems



 **NOTE:** The ISA is an MFP only system.

Sequence of operation

Learn about the printer sequence of operation.

The DC controller in the engine control system controls the operational sequence of the printer. The following table shows durations and operations for each period from when the printer is turned on until the motor stops rotating.

Table 3-1 Sequence of operation

Period	Duration	Description
Waiting	From the time the power is turned on, the door is closed, or when the printer exits sleep mode until the printer is ready for printing.	Setup to Ready state (Initialization) <ul style="list-style-type: none"> • Rotate cartridge fan • Heat fuser film in the fuser • Pressurize the pressure roller in the fuser • Pressurize the secondary transfer (T2) roller • Detect the toner cartridge presence • Separate all of the developer rollers • Rotate and stop each motor • Clean the intermediate transfer belt (ITB) • Clean the T2 roller
Standby	From the end of the waiting sequence, the last rotation until the engine control system (ECS) receives a print command, or until the printer is turned off.	Ready state <ul style="list-style-type: none"> • Enter active OFF or inactive OFF if a power control mode designation command is sent • Calibrate the printer if the calibration command is sent
Initial rotation	From the time the ECS receives a print command until the paper enters the paper path.	Prepare for print job <ul style="list-style-type: none"> • Rotates each motor • Output high-voltage bias • Prepares the laser/scanner unit • Warms the fuser heater
Printing	From the time the first sheet of paper enters the paper path until the last sheet has passed through the fuser.	Print job execution <ul style="list-style-type: none"> • Forms the image on the photosensitive drums • Transfers the toner to the paper • Fuses the toner image onto the paper
Last rotation	From the time the last sheet of paper exits the fuser until the motors stop rotating.	Print job ends <ul style="list-style-type: none"> • Stops the following: <ul style="list-style-type: none"> – Motor – Cartridge fan – High-voltage bias – Laser/scanner – Fuser heater • Cleans the ITB and T2 roller • If another print command is received, the printer enters the initial rotation period when the last rotation is complete.

Paper pickup, feed, and delivery system

Learn about the printer pickup, feed, and delivery operation.

The DC controller controls the pickup, feed and delivery system according to commands from the formatter. The DC controller controls each block to pickup, feed and deliver the paper.

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

- **Pickup-and-feed block:** From each pickup source to the fuser inlet
- **Fuser-and-delivery block:** From the fuser to the delivery destination
- **Duplex block:** From the duplex switch back section to duplex re-pickup section

Figure 3-2 Pickup, feed, and delivery system block diagram

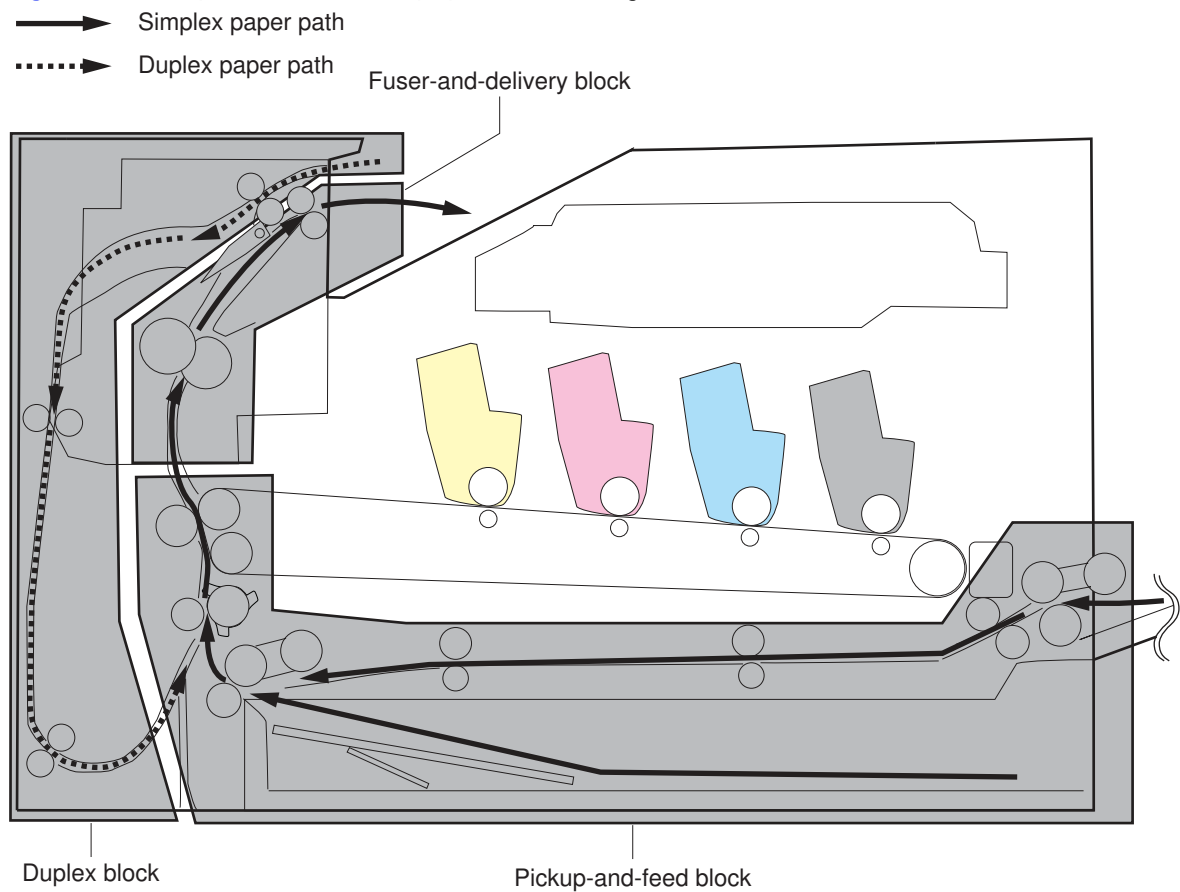


Figure 3-3 Pickup, feed, and delivery system sensors and switch

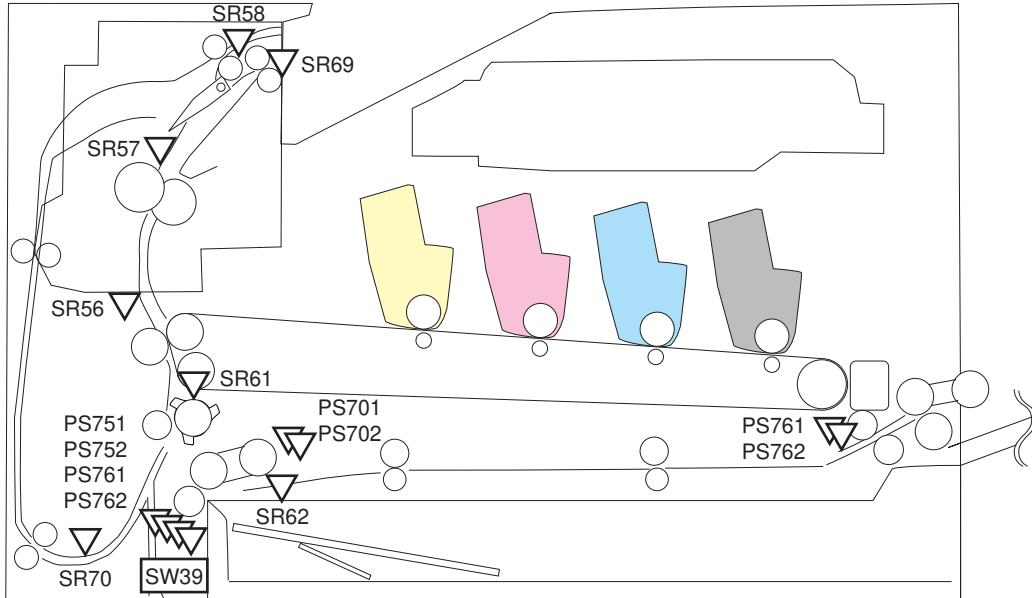


Table 3-2 Pickup, feed, and delivery system sensors and switch

Item	Description	Item	Description
SR56	Fuser loop sensor	SR702	Tray 2 media surface sensor
SR57	Fuser output sensor	SR751	Tray 2 media width sensor 1
SR58	Duplex switchback sensor	SR752	Tray 2 media width sensor 2
SR61	Registration sensor	SR761	Tray 2 media width sensor 3
SR62	Tray 2 media surface sensor	SR761	Tray 1 registration sensor
SR69	Output bin media-full sensor	SR762	Tray 2 media width sensor 4
SR70	Duplex feed sensor	SR762	Tray 1 feed sensor
SR701	Tray 2 lifting plate position sensor	SW 39	Tray 2 detection switch

Figure 3-4 Pickup, feed, and delivery system motors, clutch and solenoids

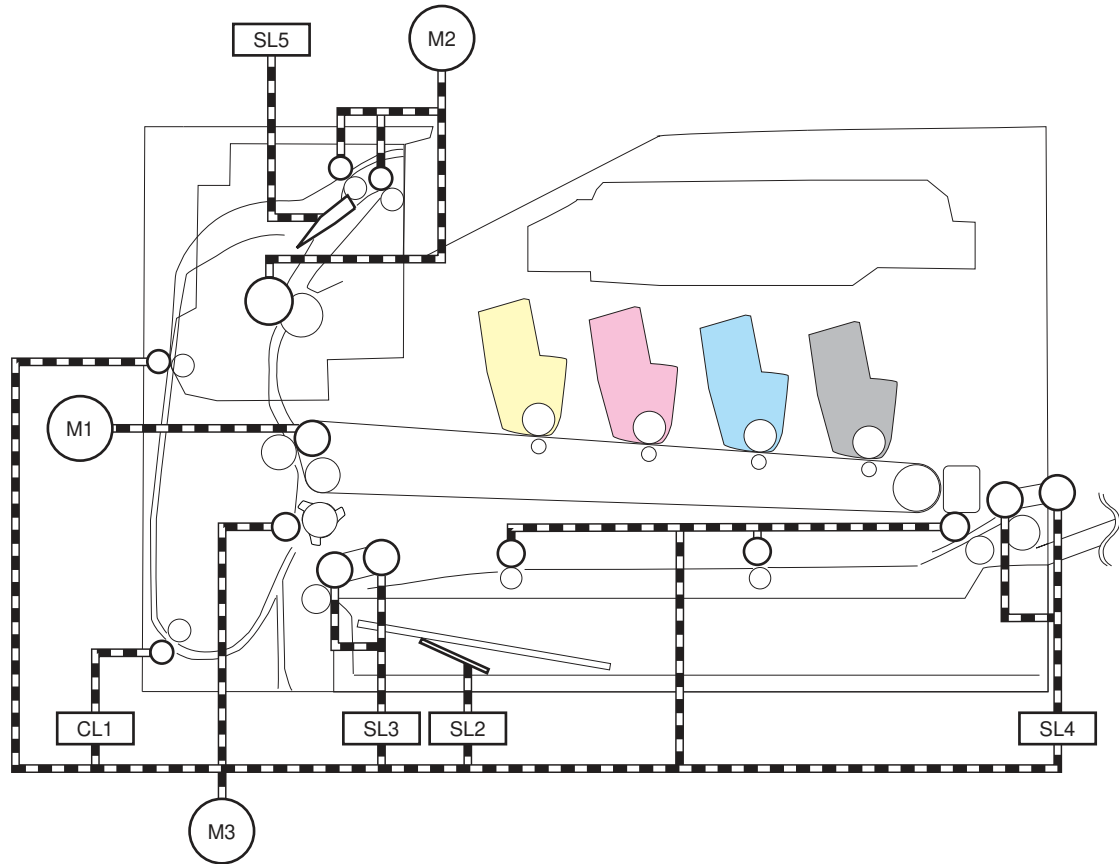


Table 3-3 Pickup, feed, and delivery system motors, clutch and solenoids

Item	Description
M1	Drum motor
M2	Fuser motor
M3	Feed motor
CL1	Duplex re-pickup clutch
SL2	Lifter solenoid
SL3	Tray 2 pickup solenoid
SL4	Tray 1 pickup solenoid
SL5	Duplex switchback solenoid

Pickup, feed, and delivery system feed speed control

The DC controller adjusts the feed speed to improve the print-quality depending on the paper type.

The paper is fed at a specified speed according to the print mode designated by the formatter.

Table 3-4

Print mode	Full color feed speed	Monochrome feed speed
Auto	Not available	Not available
Normal media 1	1/1	1/1
Normal media 2	1/1	1/1
Heavy media 1	1/2	1/2
Heavy media 2	1/2	1/2
Heavy media 3	1/2	1/2
Light media 1	1/1	1/1
Light media 2	1/1	1/1
Light media 3	1/1	1/1
Glossy media 1	1/3	1/3
Glossy media 2	1/3	1/3
Glossy media 3	1/3	1/3
Glossy film	1/3	1/3
Photo media 1	1/3	1/3
Photo media 2	Not available	Not available
Photo media 3	Not available	Not available
Envelope 1	1/2	1/2
Envelope 2	1/3	1/3
Envelope 3	Not available	Not available
OHT	1/3	1/3
Extra light media	1/1	1/1
Label	1/2	1/2
Designated media 1	Not available	Not available
Designated media 2	Not available	Not available
Designated media 3	Not available	Not available

Paper pickup, feed, and delivery system functions

Learn about pickup, feed, and delivery system functions.

The printer has the following pickup, feed and delivery functions.

Table 3-5 Paper pickup, feed, and delivery system functions

Function	Applied
Tray 2 media size detection	No
Tray 2 presence detection	Yes

Table 3-5 Paper pickup, feed, and delivery system functions (continued)

Function	Applied
Tray 2 media surface detection	Yes
Tray 2 media presence detection	Yes
Tray 2 media level detection	No
Tray 2 lift-up control	Yes
Tray 2 lift-down control	No
Tray 2 multiple-feed prevention mechanism	Yes
Tray 1 media presence detection	Yes
Tray 1 media width detection	Yes
Tray 1 last-media detection	No
Skew-feed prevention mechanism	Yes
Feed speed control	Yes
Loop control	Yes
Media detection	No
OHT detection	No
Image leading edge positioning	Yes
Media length detection	Yes
Media width detection	Yes
Pressure roller pressure release control	Yes
Output bin media-full detection	Yes
Automatic delivery	Yes
Duplex switchback control	Yes
Duplex feed control	Yes

Jam detection

Learn printer jam detection.

The printer uses the sensors and switches listed below to detect the presence of the paper and to verify that the paper is correctly feeding.

- Registration sensor (SR61)
- Tray 1 feed sensor (SR762)
- Fuser output sensor (SR57)
- Duplex switchback sensor (SR58)
- Duplex feed sensor (PS70)
- Fuser pressure release detection switch (SW41)

- Tray 3 feed sensor (PS10)

 **NOTE:** 550-sheet paper feeder only.

Figure 3-5 Paper pickup, feed, and delivery jam sensors

- ▶ Simplex paper path
- ⋯▶ Duplex paper path



Table 3-6 Jam detection


Jam type	Applied
No pick jam	Yes
Pickup stay jam	Yes
Fuser delivery delay jam	Yes
Fuser delivery stay jam	Yes
Delivery delay jam	No
Delivery stay jam	No
Switchback delay jam	Yes


Table 3-6 Jam detection (continued)

Jam type	Applied
Switchback stay jam	Yes
Duplex feed delay jam	Yes
Duplex feed stay jam	No
Duplex re-pickup delay jam	Yes
Fuser wrap jam	Yes
Multiple feed jam	No
Residual paper jam	Yes
Door open jam	Yes
Inappropriate to the delivery path jam	Yes
Transfer area wrap Jam	no

Formatter-control system

Learn about how the formatter operates.

 **CAUTION:** Under **NO** circumstances should a formatter from a different printer be installed during the repair or troubleshooting processes.

 **IMPORTANT:** When a formatter PCA or ECU/DCC is replaced a pairing operation must be completed to make the printer functional. For more information, see the formatter/DCC/ECU remove and replace procedures in the service manual or the service web topics.

The formatter performs the following functions:

- Controlling the sleep delay function
- Receives and processes print data from the various printer inputs
- Monitors control panel functions and relaying printer status information (through the control panel an bi-directional input/output)
- Develops and coordinates data placement and timing with the DC controller
- Stores font information
- Communicates with the host computer through the network or the bidirectional interface

The formatter receives a print job from the network or bidirectional interface and separates it into image information and instructions that control the printing process. The ECU/DCC synchronizes the image formation system with the paper input and output systems, and then signals the formatter to send the print image data.

Power management

Learn about printer power management.

Power management conserves power after the printer has been idle for an adjustable length of time.

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

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



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



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

Access the power management settings

1. Open the following menus:
 - [Menu](#)
 - [Settings](#)
 - [General](#)
 - [Energy](#)
2. Choose from the following energy settings:
 - [Sleep](#)
 - [Inactivity Shutdown](#) (MFP)
[Shutdown](#) (SFP)
 - [Disable Shutdown](#)

Printer job language (PDL)

Learn about printer job language (PDL).

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

- **Dynamic I/O switching:** The printer can be configured with a host on each I/O by using dynamic I/O switching. Even when the printer is offline, it can receive data from more than one I/O simultaneously, until the I/O buffer is full.
- **Context-sensitive switching:** The printer can automatically recognize the personality (PS or PCL) of each job and configure itself to serve that personality.

- **Isolation of print environment settings from one print job to the next:** For example, if a print job is sent to the printer in landscape mode, the subsequent print jobs print in landscape only if they are formatted for landscape printing.

Printer management language (PML)

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


Control panel

Learn about the control panel.

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

Walk-up USB


Learn about the walk-up USB function.

 **NOTE:** Touchscreen models only.

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

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

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

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

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


CPU

Learn about the printer microprocessor.

The formatter incorporates a 1200 MHz processor.

Input/output (I/O)

Learn about printer I/O functionality.

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

Universal serial bus (USB)

The printer includes a USB 2.0 connection.

Universal serial bus (USB) hosts


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

10/100/1000 networking

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

Fax

The printer includes a fax phone line connection.


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

Walk-up USB

The port is located on the left-side of the top cover.


Wireless

Wireless products contain a wireless card to enable 802.11b/g/n wireless communication with dual band support for 2.4Ghz and 5 Ghz.

 **NOTE:** Wireless models only.


Memory

Learn about printer memory functionality.

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

Firmware

The formatter stores the printer firmware. A firmware upgrade process is used to overwrite and upgrade the firmware.

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

Nonvolatile random access memory (NVRAM)

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

Flash memory

NAND: Stores fax memory.


Random access memory

The printer uses the following RAM:

- SFP: 512 MB
- MFP: 512 MB

HP Memory Enhancement technology (MEt)

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

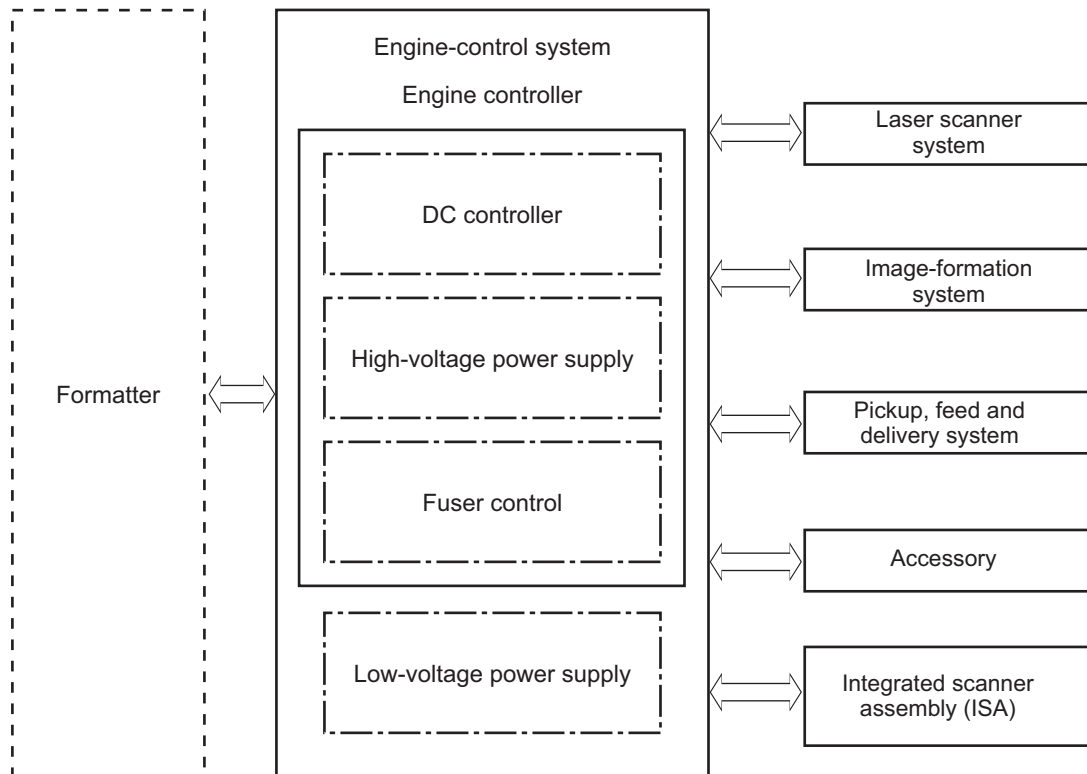
 **NOTE:** MEt is available only in PCL mode; it is not functional when printing in PS mode.


Engine-control unit

Learn about the engine control unit.

The engine-control unit includes the DC controller and the high-voltage power supply.

Figure 3-6 Engine-control unit




 **NOTE:** The ISA is an MFP only system.

DC controller

Learn about the DC controller (DCC).

The DCC is incorporated into the engine controller PCA.

 **IMPORTANT:** When a formatter PCA or ECU/DCC is replaced a pairing operation must be completed to make the printer functional. For more information, see the formatter/DCC/ECU remove and replace procedures in the service manual or the service web topics.

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

Figure 3-7 DCC block diagram

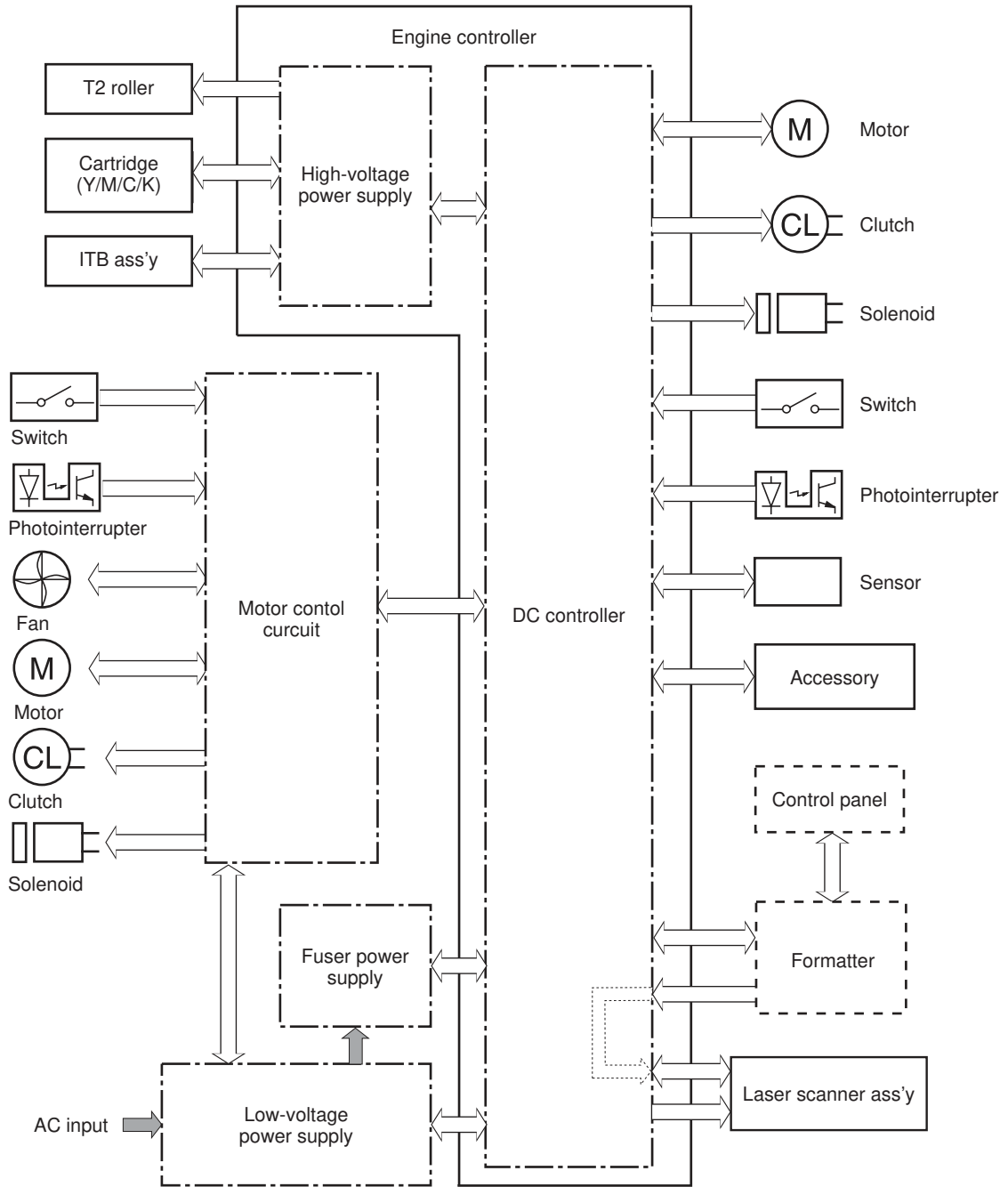


Table 3-7 Printer electrical components

Component type	Abbreviation	Component name
Motor	M1	Drum motor
Motor	M2	Fuser motor

Table 3-7 Printer electrical components (continued)

Component type	Abbreviation	Component name
Motor	M3	Feed motor
Motor	M4	Scanner motor
Fan	FM1	Cartridge fan
Clutch	CL1	Duplex re-pickup clutch
Solenoid	SL1	Developer alienation solenoid
Solenoid	SL2	Lifter solenoid
Solenoid	SL3	Cassette (Tray 2) pickup solenoid
Solenoid	SL4	Tray 1 pickup solenoid
Solenoid	SL5	Duplex switchback solenoid
Switch	SW39	Cassette (Tray 2) detection switch
Switch	SW40	Cartridge door switch
Switch	SW41	Fuser pressure release detection switch
Switch	SW42	Rear door switch
Switch	SW43	Power switch
Photointerrupter	SR56	Fuser loop sensor
Photointerrupter	SR57	Fuser output sensor
Photointerrupter	SR58	Duplex switchback sensor
Photointerrupter	SR61	Registration sensor
Photointerrupter	SR62	Tray 2 media surface sensor
Photointerrupter	SR64	Developer alienation sensor
Photointerrupter	SR69	Output bin media-full sensor
Photointerrupter	SR70	Duplex feed sensor
Photointerrupter	SR93	Toner collection full sensor
Photointerrupter	SR701	Tray 2 lifting plate position sensor
Photointerrupter	SR702	Tray 2 media surface sensor
Photointerrupter	SR751	Tray 2 media width sensor 1
Photointerrupter	SR752	Tray 2 media width sensor 2
Photointerrupter	SR761	Tray 1 registration sensor
Photointerrupter	SR761	Tray 2 media width sensor 3
Photointerrupter	SR762	Tray 1 feed sensor
Photointerrupter	SR762	Tray 2 media width sensor 4
Sensor	Not applicable	Registration density sensor
Sensor	TH1671	Temperature sensor
Sensor	TH1672	Temperature sensor

Table 3-7 Printer electrical components (continued)

Component type	Abbreviation	Component name
Sensor	SR1671	Humidity sensor

Motors

Learn about the printer motors.

Motor identification

The printer has four motors for the paper-feed and image-formation systems.



NOTE: The MFP integrated scanner assembly (ISA) motors are not included in the following table.

Table 3-8 Motors

Abbreviation	Component name	Components driven
M1	Drum motor	<ul style="list-style-type: none">• Photosensitive drum• Developer roller• ITB
M2	Fuser motor	<ul style="list-style-type: none">• Pressure roller• Output roller• Duplex switchback roller• Pressure/release of pressure roller end T2 roller
M3	Feed motor	<ul style="list-style-type: none">• Tray 1 pickup roller• Tray 1 feed roller• MP feed roller• Tray 2 pickup roller• Tray 2 feed roller• Registration roller• Duplex feed roller• Duplex re-pickup roller• Lift up the lifting plate in Tray 2
M4	Scanner motor	Scanner mirror

Failure detection

The DC controller determines the following motor failures:

- ITB motor startup abnormality (drum motor failure)
- ITB motor rotation abnormality (drum motor failure)

- Scanner motor startup abnormality (scanner motor failure)
- Scanner motor rotation abnormality (scanner motor failure)

Fans

Learn about the printer fans.

Fan identification

The printer has one fan for maintaining the internal printer temperature and for cooling the delivered paper

Table 3-9 Fans

Abbreviation	Component name	Cooling area	Type	Speed
FM1	Cartridge fan	Toner cartridge and around the low-voltage power supply	Intake	Variable (1/1 speed, 1/2 speed, 1/3 speed)

Failure detection

The DC controller determines the following fan failures:

- Cartridge fan (Fan motor 1 failure)

Low-voltage power supply

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

LVPS overview

The LVPS converts AC power into the DC voltages required by the printer systems and components.

Figure 3-8 LVPS block diagram

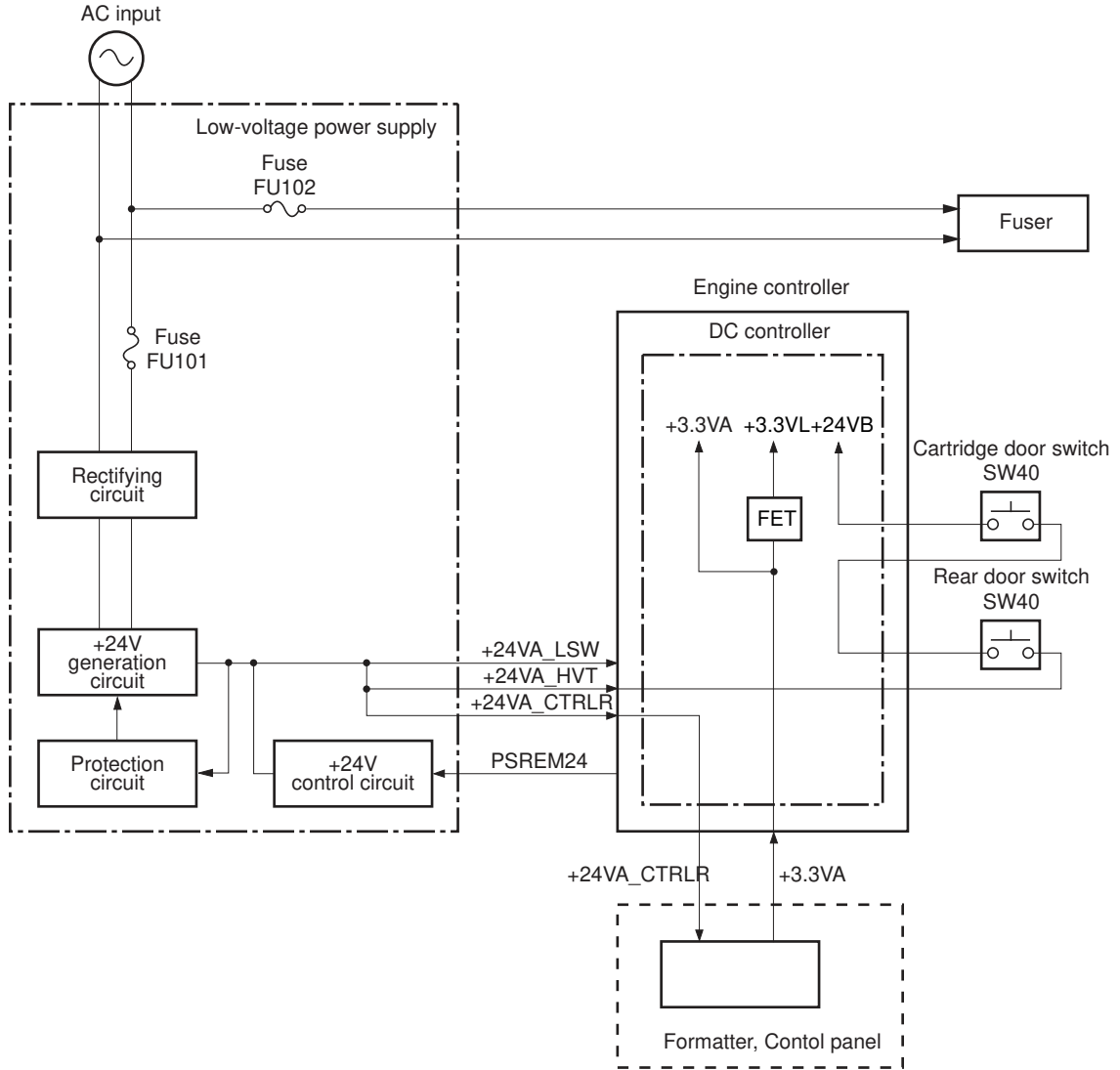


Table 3-10 DC controller voltages

Voltage	Description	Inactive OFF	Active OFF	Print/Standby
+24V	+24VA_LSW	OFF	OFF	ON
+24V	+24VA_CTRLR	From 24V to 7V	From 24V to 7V	ON
+24V	+24VA_HVT	OFF	OFF	ON
+24V	+24VB	OFF	OFF	ON
+3.3V	+3.3VA	ON	ON	ON
+3.3V	+3.3VL	OFF	OFF	ON

Overcurrent/Overvoltage protection

The overcurrent/overvoltage protection automatically stops supplying the DC voltage to the printer components whenever it detects excessive current or abnormal voltage.

The low-voltage power supply has a protective function against overcurrent and overvoltage to prevent failures in the power supply circuit.

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

CAUTION: Do not turn the power switch on until the overcurrent or overvoltage cause is found and corrected.

Additional, the low-voltage power supply has two fuses (FU101/FU102) to protect against overcurrent. If overcurrent flows into the AC line, the fuse activates to stop AC power.

Safety

For personal safety, the printer interrupts +24VB power when the cartridge door switch and rear door switch are turned off (see [Table 3-10 DC controller voltages on page 63](#)).

This stops DC power supply to the following loads:

- Primary charging bias
- Developing bias
- Transfer bias

The remote switch control circuit turns on or off the printer power so that the AC power flows even the power switch is turned off.

WARNING! Dangerous electrical current is present inside the printer even with the power switch in the off position. **Always** unplug the printer power cord before disassembling the printer.

LVPS functions

The low-voltage power supply functions of the printer are described below.

- **Inactive OFF**

Inactive OFF is a state when the power supply is off.

- **Active OFF**

Active OFF is a state of printer sleep. The low-voltage power supply output is supplied only to the formatter and DC controller.

The following table lists the low-voltage power supply functions.

Table 3-11 Low-voltage power supply functions

Failure detective function	Applied
Sleep mode	No
Power supply voltage detection	Yes
Automatic power OFF	No
Automatic power ON/OFF	No
Active OFF	Yes
Inactive OFF	Yes

Table 3-11 Low-voltage power supply functions (continued)

Failure detective function	Applied
Network mode	No
Power switch illumination	Yes
Low-voltage power supply failure detection	Yes
Power save mode	No

High-voltage power supply

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

HVPS overview

The HVPS supplies biases to the components listed below.

- Primary charging roller
- Developer roller
- T1 roller
- T2 roller


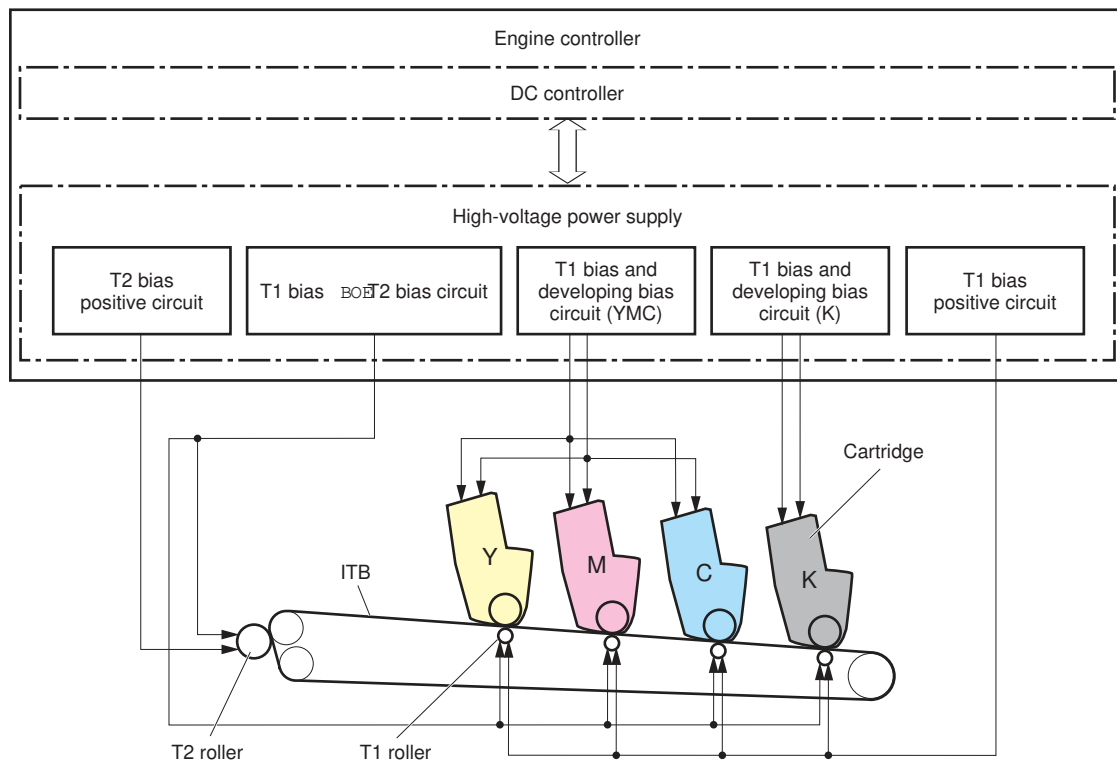
 **NOTE:** The primary charging roller and developer roller are in the toner cartridge.

Figure 3-9 HVPS block diagram



Fuser control

Learn about fuser control.

Fuser control overview

The fuser heater control circuit and the fuser safety circuit control the fuser temperature according to signals from the DC controller. The printer uses an on-demand fusing method.

Figure 3-10 Fuser control overview diagram

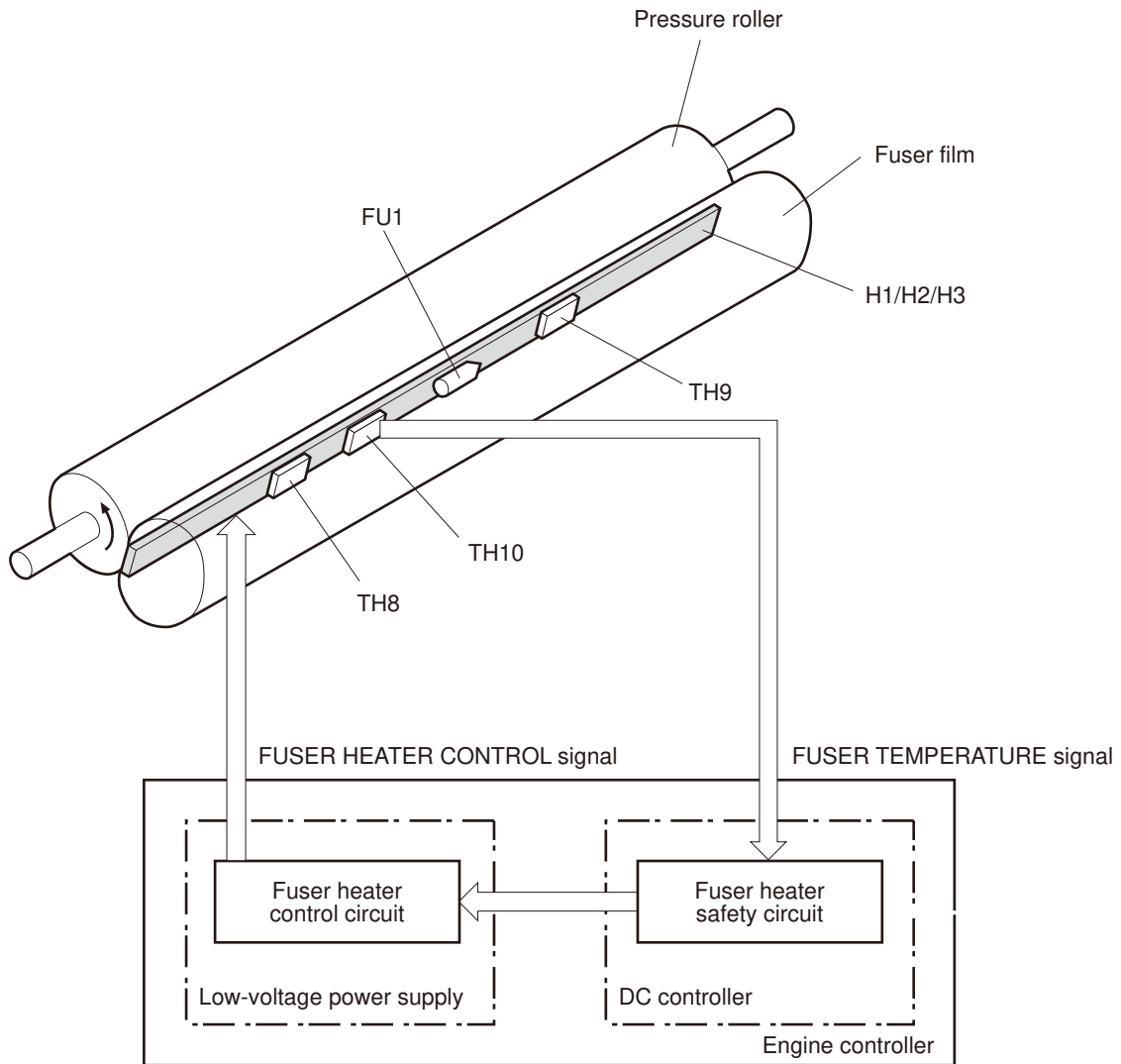


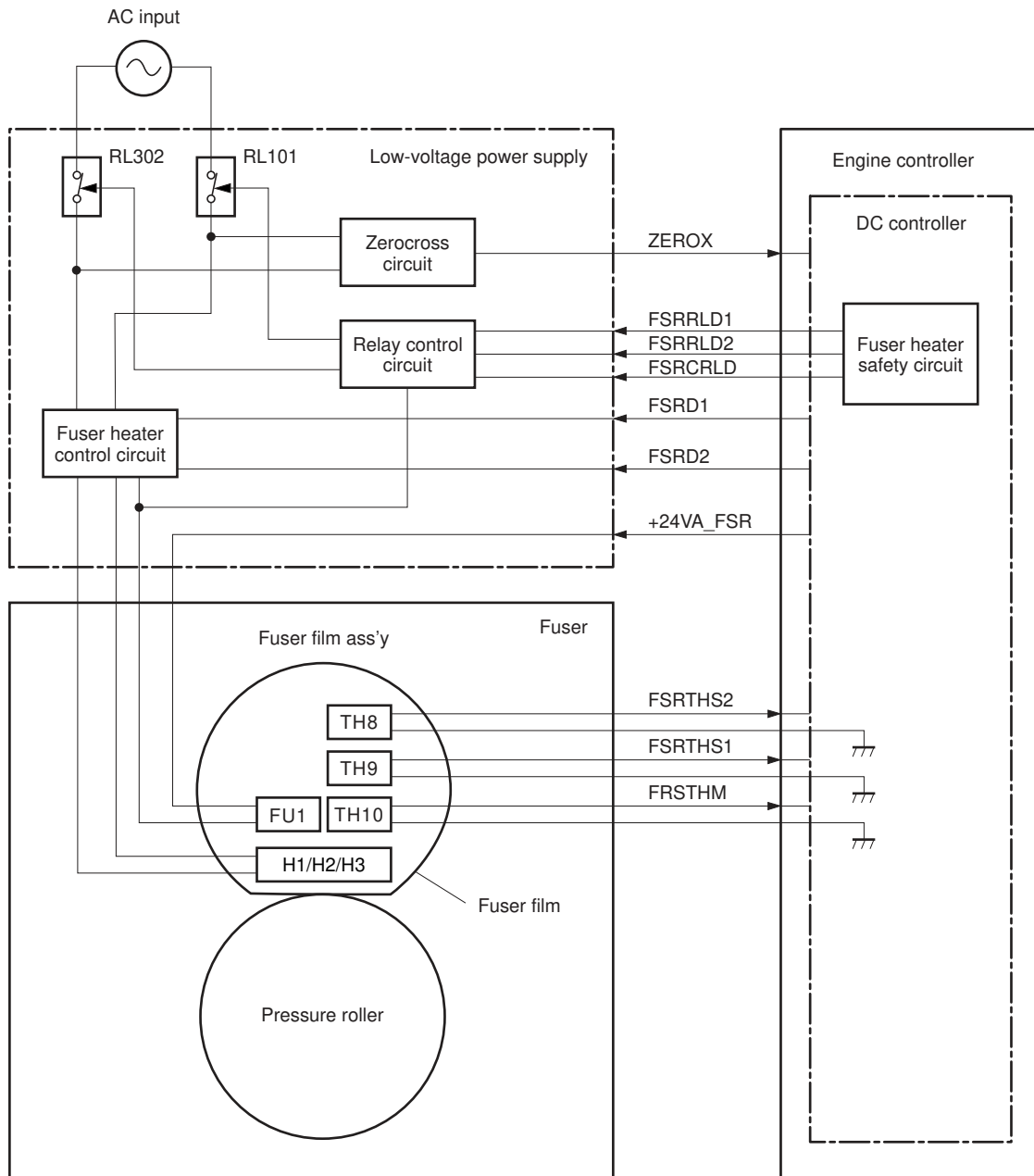
Table 3-12 Fuser control component functions

Item	Component name	Function
H1/H2/H3	Fuser heater	Heats the fuser roller

Table 3-12 Fuser control component functions (continued)

Item	Component name	Function
TH10	Main thermistor	Detects the center temperature of the fuser heater (contact type)
TH8	Sub thermistor 1	Detects the center temperature of the fuser heater (contact type)
TH9	Sub thermistor 2	Detects the center temperature of the fuser heater (contact type)
FU1	Temperature fuse	Prevents an abnormal temperature rise of fuser heater

Figure 3-11 Fuser control block diagram



Fuser heater protection

The fuser heater protective function detects an excessive temperature rise of the fuser and interrupts power supply to the fuser heater.

The three protective components listed below prevent the fuser heater from excessive rising temperature.

- **DC controller**

The DC controller monitors the detected temperature of the thermistor. The DC controller deactivates the FUSER HEATER CONTROL signal and turns off the relays (RL301/RL302) to interrupt power supply to the fuser heater when it detects an excessive temperature.

- **Fuser heater safety circuit**

The fuser heater safety circuit monitors the detected temperature of the thermistor. The fuser heater safety circuit turns off the relays (RL301/RL302) to interrupt power supply to the fuser heater when it detects an excessive temperature.

- **Temperature fuse**

The temperature fuse opens and relays (RL301/RL302) are turned off to interrupt power supply to the fuser heater when the temperature of the temperature fuse in the fuser film is abnormally high.

Fuser control functions

The fuser control functions of the printer are described below.

The following table lists the low-voltage power supply functions.

Table 3-13 Fuser control functions

Failure detective function	Applied
Fuser temperature control	Yes
Heat up error detection	Yes
Low temperature error detection	Yes
High temperature error detection	Yes
Breaking of a heater wire detection	Yes
Driving circuit failure detection (zero-cross detection circuit failure detection)	Yes
Low-voltage power supply failure detection	Yes
Fuser pressure release mechanism failure detection	Yes
New fuser detection	No
Fuser type discrepancy detection	No
Fuser type identification detection	No
Fuser presence detection	No
Fuser life detection	No
Fuser roller cleaning	Yes
Service fuser detection	Yes

Engine laser/scanner system

Learn about the engine laser/scanner system.

The DC controller controls the laser scanner system by following the instruction from the formatter.

The DC controller formats the latent electrostatic image on the surface of photosensitive drum by controlling the components of the laser scanner system by the VIDEO signals.

The laser scanner system consists of the components listed below.

- Laser assembly
- Scanner motor assembly
- BD sensor
- Scanner motor


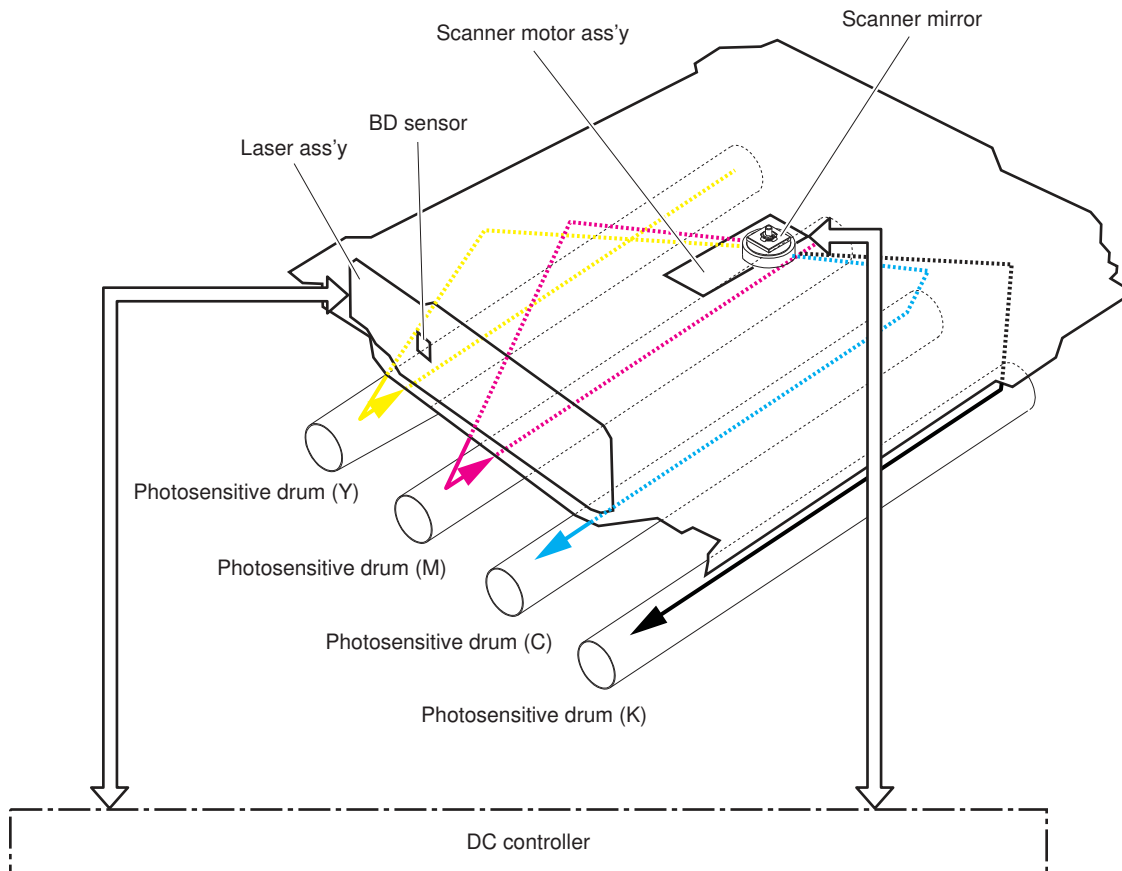
 **NOTE:** The printer has one laser scanner assembly for yellow, magenta, cyan and black.

Figure 3-12 Laser/scanner system diagram



Laser/scanner failure detection

Learn about laser scanner failure detection.

The DC controller detects the following laser scanner failure conditions and notifies the formatter:

Table 3-14 Laser scanner failure detection

Failure detective function	Applied
BD failure detection	No
Scanner motor start-up failure detection	Yes
Scanner motor rotational failure detection	Yes
Laser scanner failure detection	Yes

Image-formation process

Learn about the image-formation process.

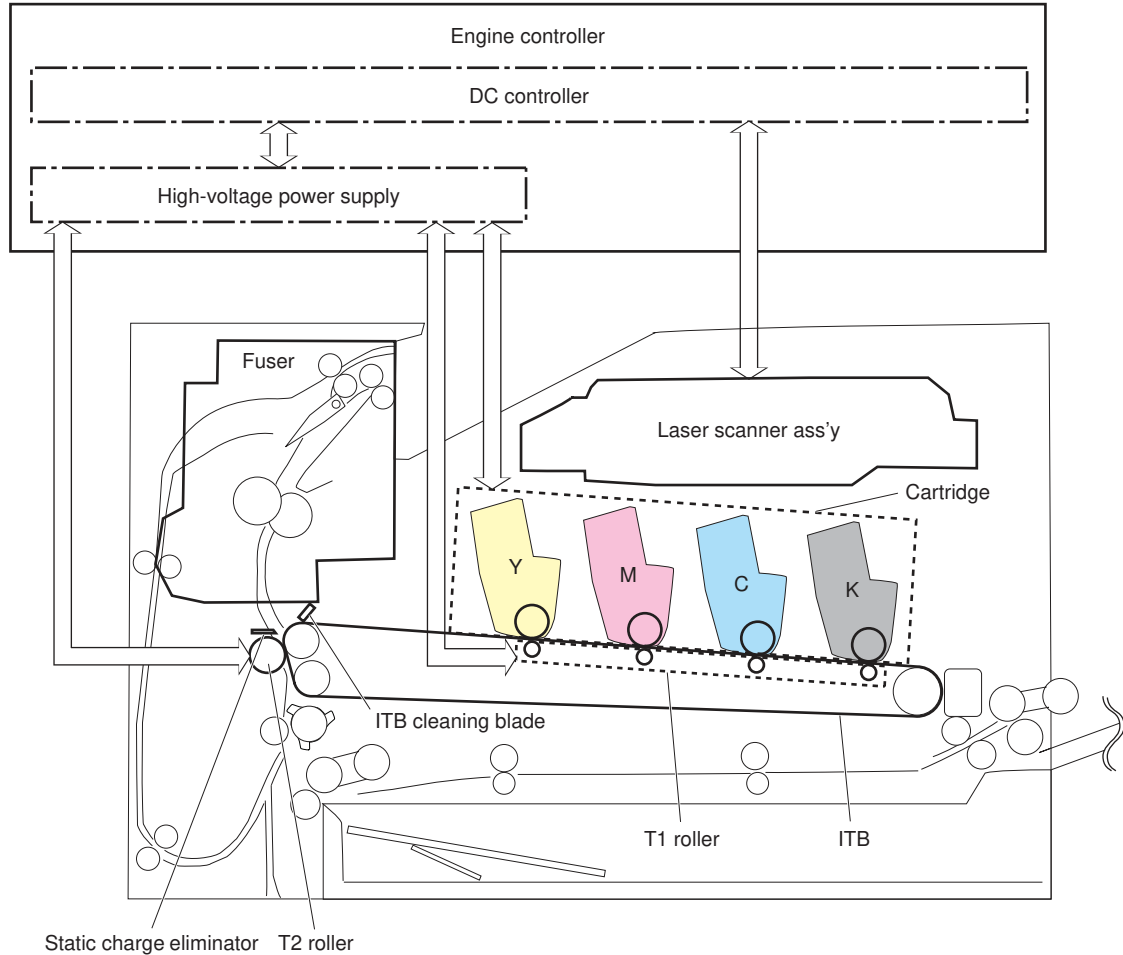
The DC controller controls the image-formation system according to commands from the formatter.

The DC controller controls the internal components of the image-formation system to form the toner image on the photosensitive drum surface. The toner image is then transferred to the print media and fused.

The main components of the image-formation system are listed below.

- Toner cartridges
- Intermediate Transfer Belt (ITB)
- T1 roller
- Secondary transfer (T2) roller
- Fuser
- Laser/scanner assembly
- High-voltage power supply (HVPS)

Figure 3-13 Image-formation system diagram



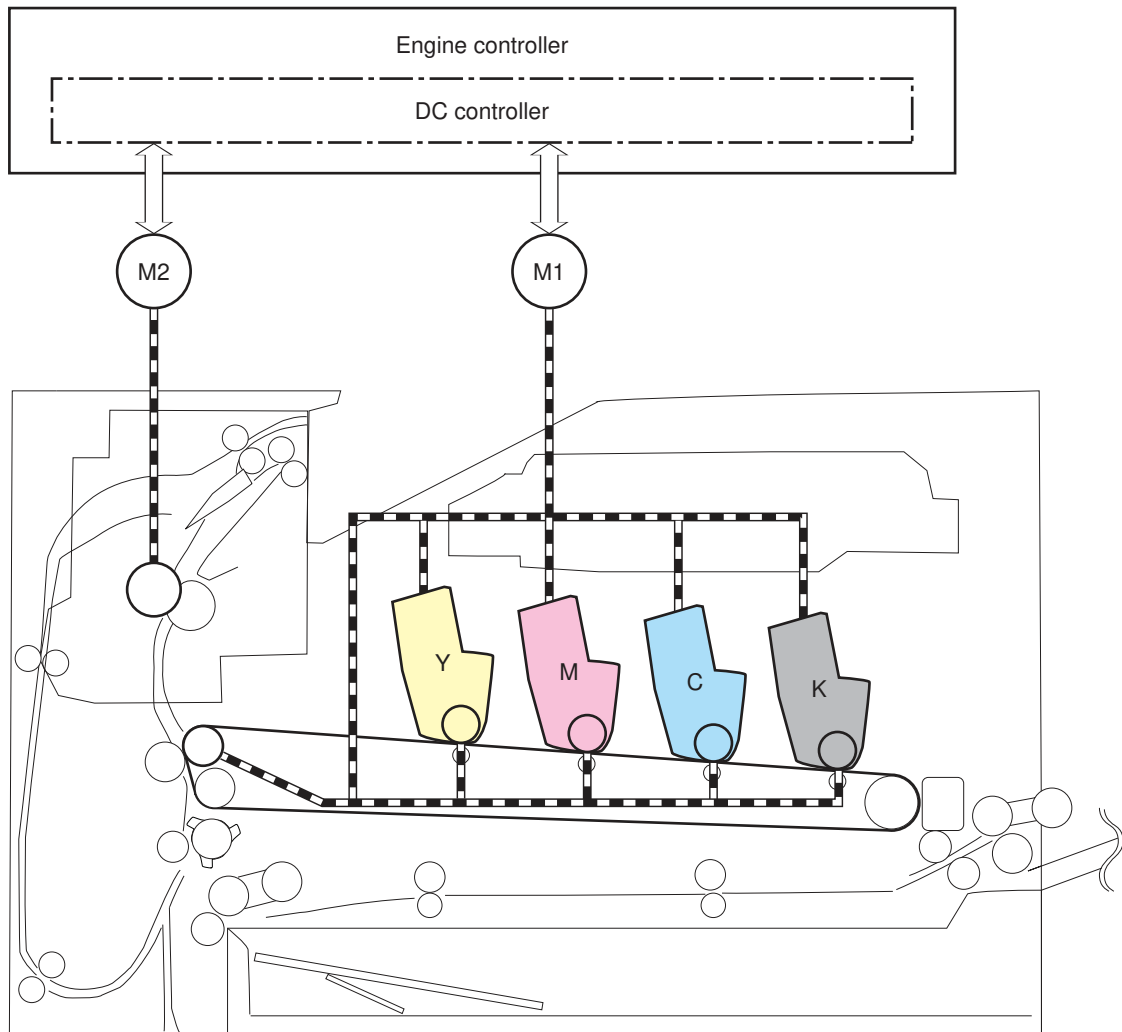
The DC controller rotates the motors listed below to drive each component.

- **Drum motor**
 - Photosensitive drum
 - Developer roller (follows the photosensitive drum)
 - Primary charging roller
 - ITB drive roller
 - ITB (follows the ITB drive roller)
 - T1 roller (follows the ITB)
 - T2 roller (follows the ITB)
- **Fuser motor**
 - Pressure roller
 - Fuser film (follows the pressure roller)
 - Engage/disengage the T2 roller

- Engage/disengage the pressure roller

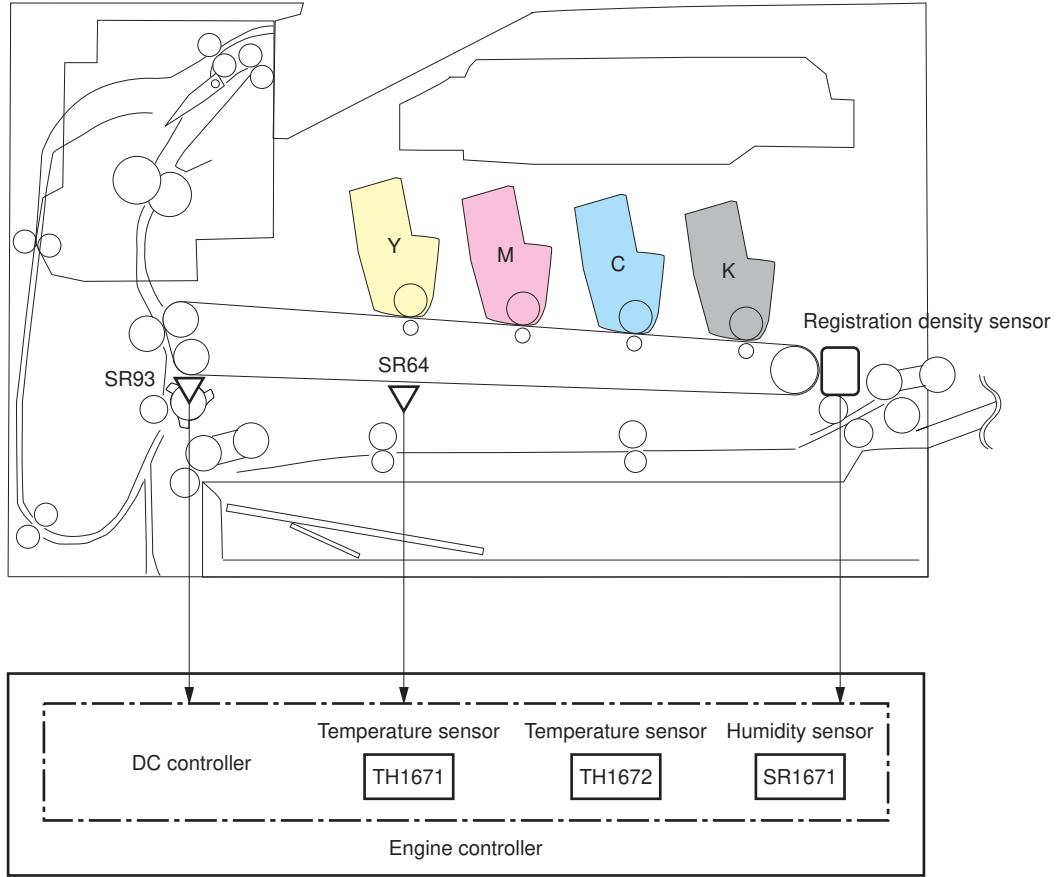
The primary charging roller and developer roller are in the toner cartridges.

Figure 3-14 Image-formation drive system diagram



Item	Component name
M1	Drum motor
M2	Fuser motor

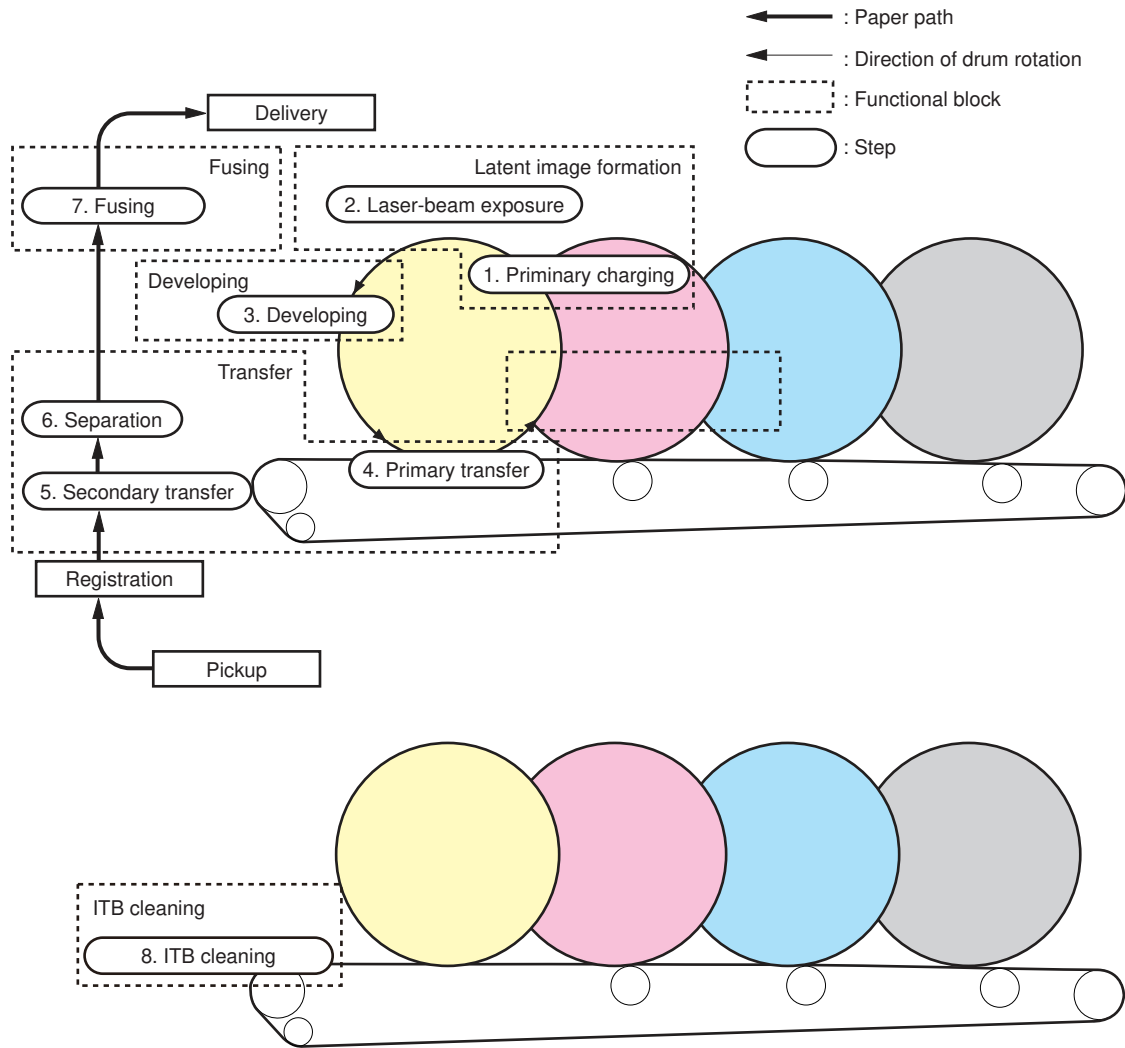
Figure 3-15 Image-formation sensor system diagram



Item	Component name
SR64	Developer alienation sensor
SR93	Toner collection full sensor
TH1671	Temperature sensor
TH1672	Temperature sensor
SR1671	Humidity sensor
Not applicable	Registration density sensor

The image-formation process consists of eight steps divided into five functional blocks.

Figure 3-16 Image-formation process



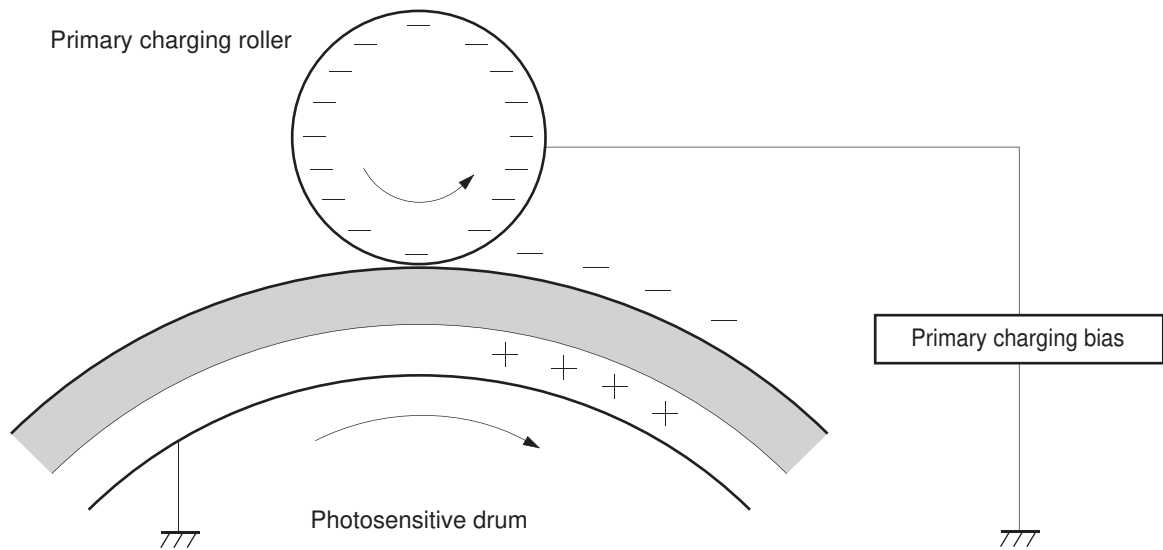
Functional block	Steps	Description
Latent image formation	1. Primary charging	An invisible latent image forms on the surface of the photosensitive drums.
Latent image formation	2. Laser-beam exposure	An invisible latent image forms on the surface of the photosensitive drums.
Developing	3. Developing	Toner adheres to the electrostatic latent image by color on each photosensitive drum.
Transfer	4. Primary transfer	The toner image transfers to the ITB and then to the paper.
Transfer	5. Secondary transfer	The toner image transfers to the ITB and then to the paper.
Transfer	6. Separation	The toner image transfers to the ITB and then to the paper.
Fusing	7. Fusing	The toner fuses to the paper to make a permanent image.
ITB cleaning block	8. ITB cleaning	Residual toner is removed from the ITB.

Step 1: Primary charging

Learn about the image formation primary charging step.

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

Figure 3-17 Primary charging

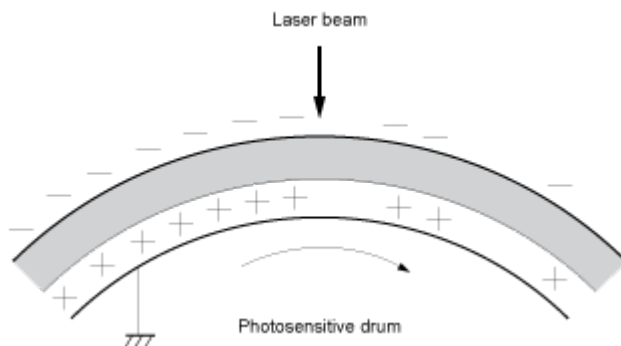


Step 2: Laser-beam exposure

Learn about the image formation laser-beam exposure step.

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

Figure 3-18 Laser-beam exposure



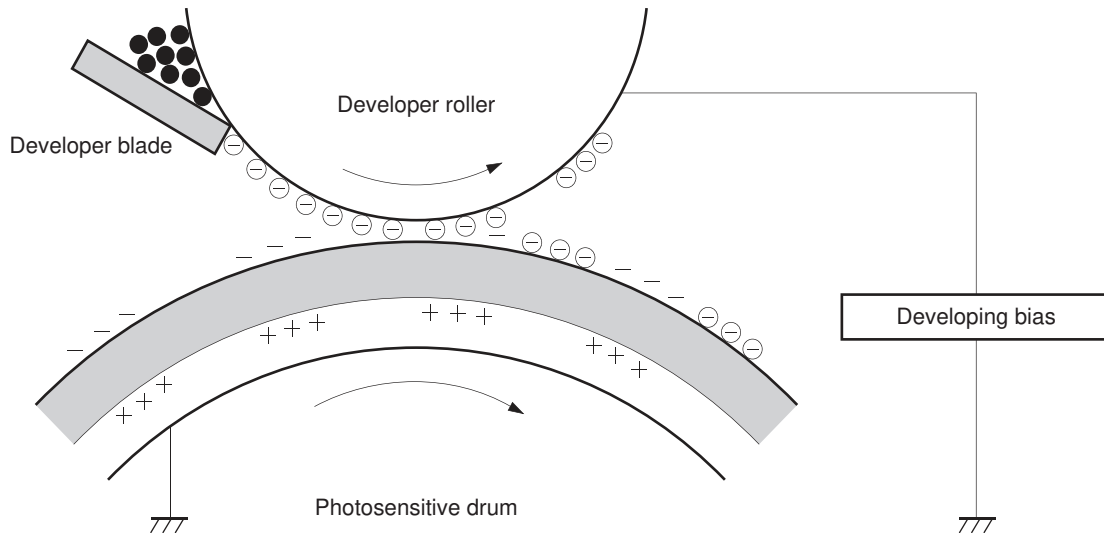
Step 3: Development

Learn about the image formation development step.

A developing bias is applied to the developing roller. The toner acquires a negative charge as a result of the friction from the developing roller rotating against the developing blade. Because the negatively

charged surface of the photosensitive drums were neutralized where they have been struck by the laser beam, the toner adheres to those areas on the drums. The latent image becomes visible on the surface of the drum.

Figure 3-19 Development

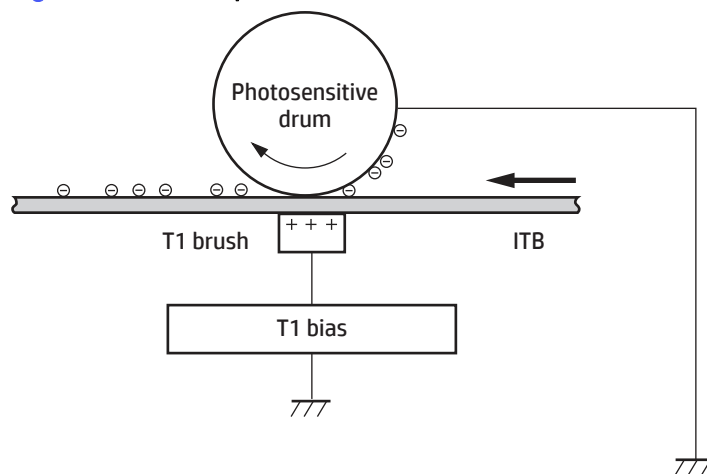


Step 4: Primary transfer

Learn about the image formation primary transfer step.

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

Figure 3-20 Primary transfer

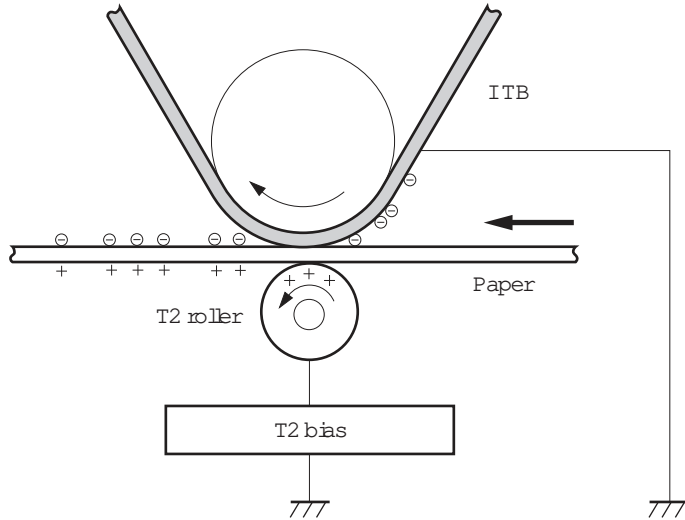


Step 5: Secondary transfer

Learn about the image formation secondary transfer step.

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

Figure 3-21 Secondary transfer

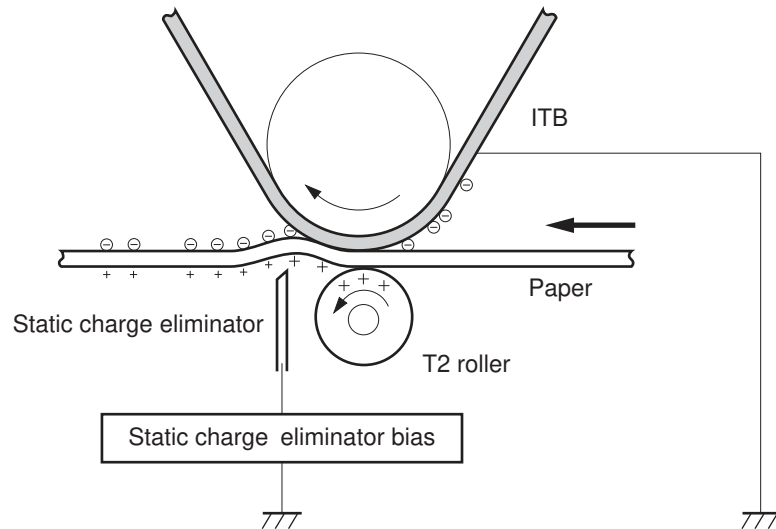


Step 6: Separation

Learn about the image formation separation step.

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

Figure 3-22 Separation

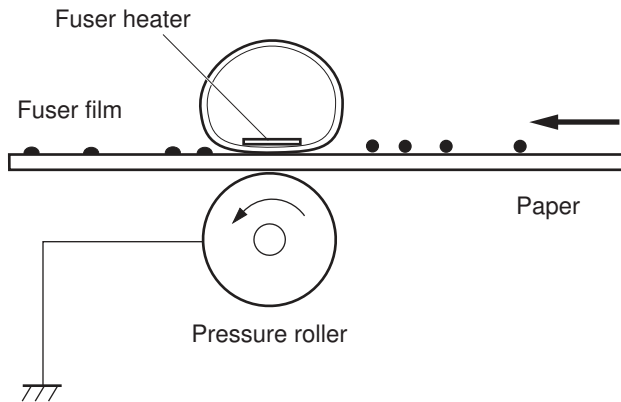


Step 7: Fusing

Learn about the image formation fusing step.

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

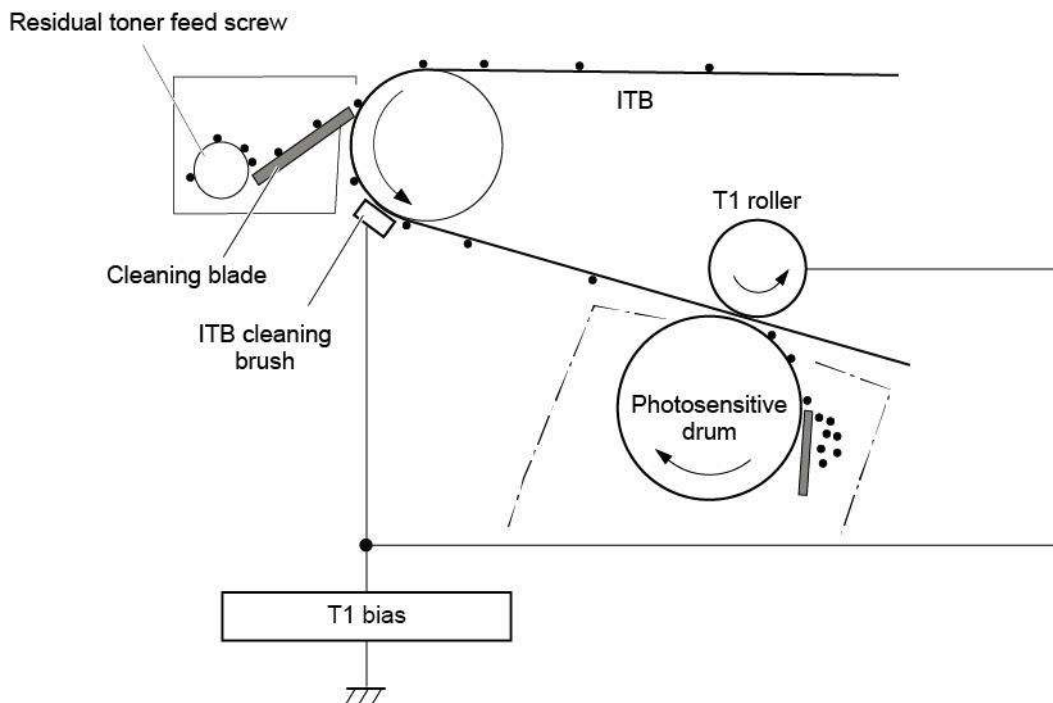
Figure 3-23 Fusing



Learn about the image formation ITB cleaning step.

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

Figure 3-24 ITB cleaning



Intermediate transfer belt assembly

Learn about the intermediate transfer belt (ITB) assembly.

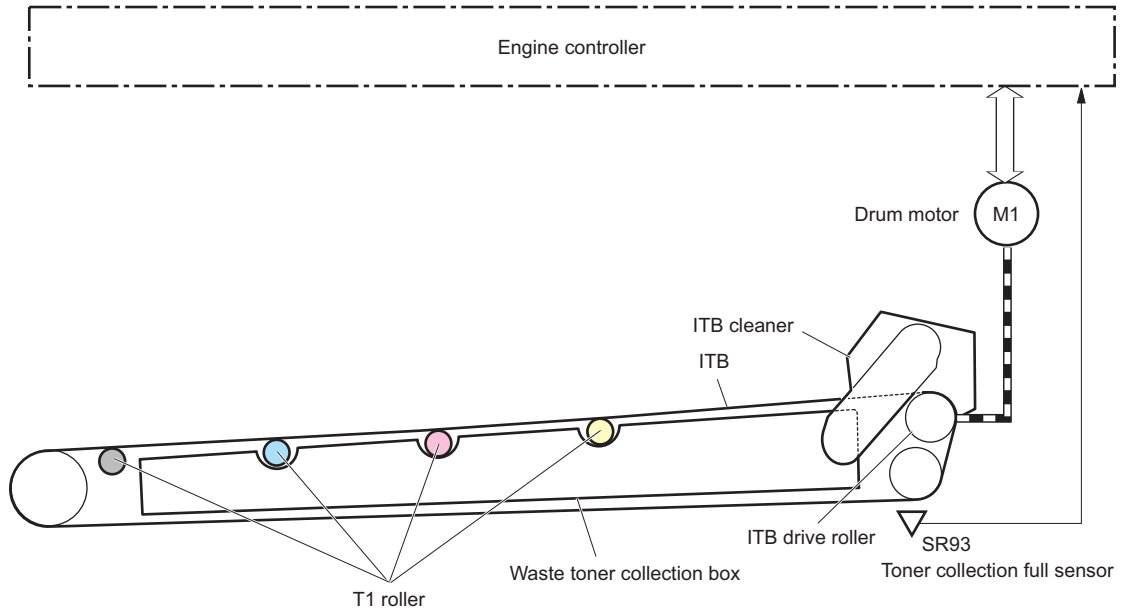
ITB overview

The ITB assembly accepts the toner images from the photosensitive drums and transfers the complete image to the paper.

The ITB has the following components:

- ITB assembly
- ITB drive roller
- T1 roller
- ITB cleaner
- Waste toner collection box

Figure 3-25 ITB block diagram



ITB functions

The printer has the following ITB assembly functions.

Table 3-15 ITB functions

Function	Applied
T1 roller alienation control	No
T1 roller alienation mechanism failure detection	No
ITB assembly life detection	Yes
ITB assembly presence detection	No
Blade cleaning mechanism	Yes
Electrostatic cleaning mechanism	No
ITB toner collection box full detection	Yes
ITB toner collection box presence detection	No
ITB perimeter detection	Yes
ITB seal detection sensor failure detection	No

Secondary transfer roller assembly

Learn about the secondary transfer roller (T2) assembly.

T2 roller assembly overview

The T2 roller assembly transfers the toner image on the ITB to the paper.

T2 roller assembly functions

The printer has the following T2 roller assembly functions.

Table 3-16 T2 roller assembly functions

Function	Applied
T2 roller cleaning mechanism	Yes
T2 roller assembly presence detection	No
T2 roller assembly life detection	No
T2 roller alienation control	Yes

Calibration

Learn about printer calibration.

Calibration overview

The printer self-calibrates to maintain print-quality. The calibration corrects color registration problems and color-density variations due to environmental changes or internal variations in the printer.

Calibration functions

The printer has the following calibration functions.

Table 3-17 Calibration functions

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

Toner cartridges

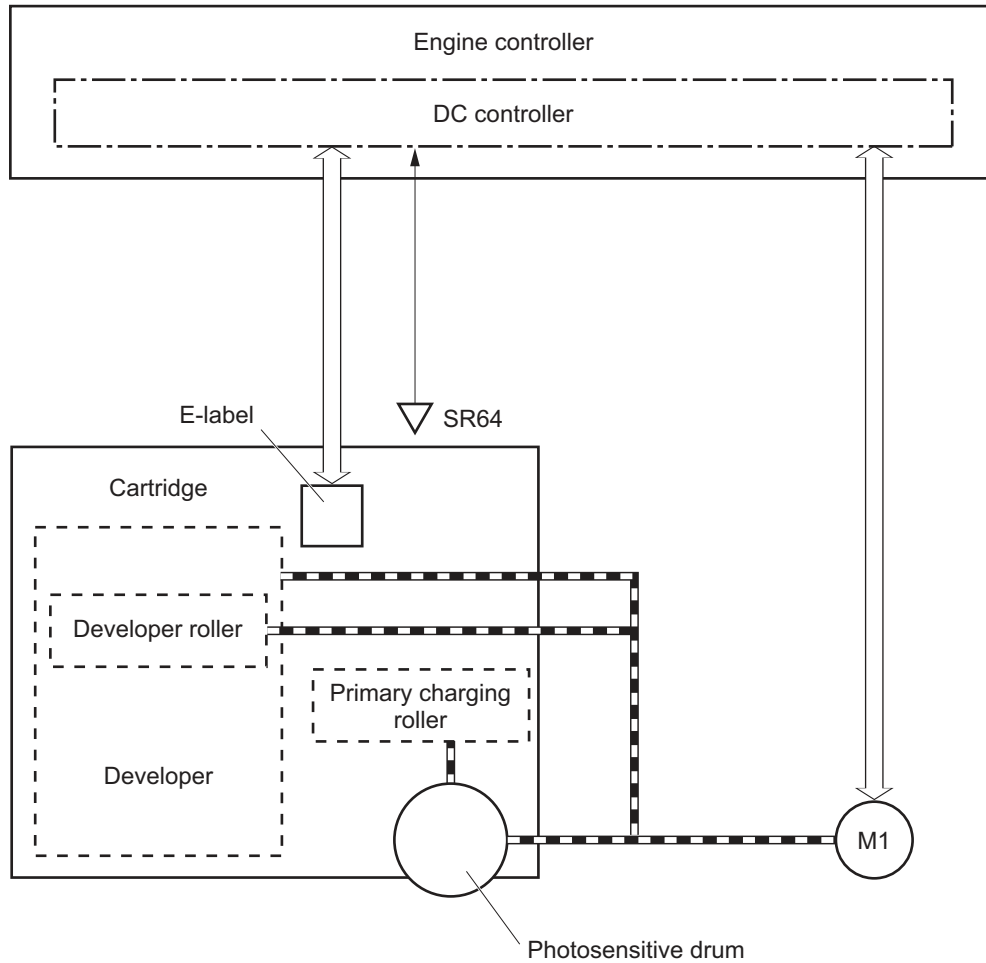
Learn about toner cartridge design.

Toner cartridge overview

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

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

Figure 3-26 Toner cartridge block diagram



Toner cartridge functions

The printer has the following toner cartridge control functions.

Table 3-18 Toner cartridge control functions

Function	Applied
Toner cartridge presence detection	Yes
Toner level detection	Yes
Toner cartridge life detection	Yes
Toner cartridge mis-installation detection	Yes

Table 3-18 Toner cartridge control functions (continued)

Function	Applied
Developer alienation control	Yes
Developer alienation mechanism abnormality	Yes
Drum discharge mechanism	No

Input devices

Learn about the input devices.

550-sheet paper feeder

Learn about 550-sheet paper feeder theory of operation.

550-sheet paper feeder overview

The optional paper feeder is installed at bottom of the printer. It picks up paper and feeds it to the printer. The paper feeder controller controls the operational sequence of the paper feeder.

Figure 3-27 550-sheet paper feeder paper path diagram

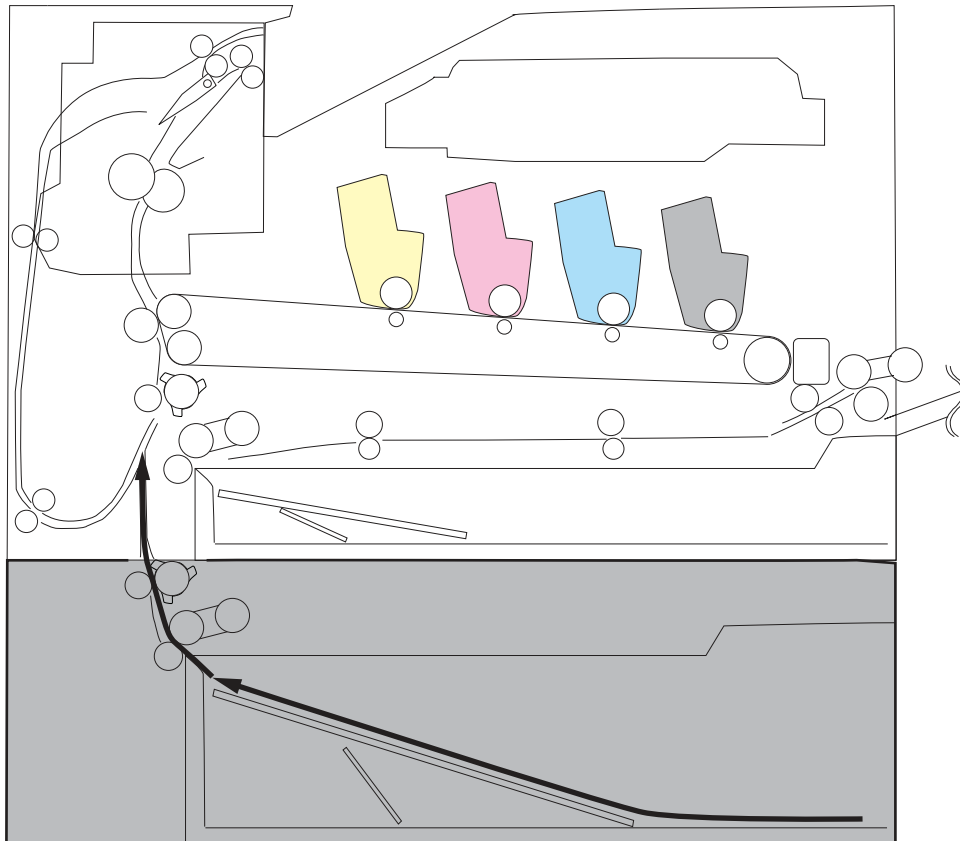
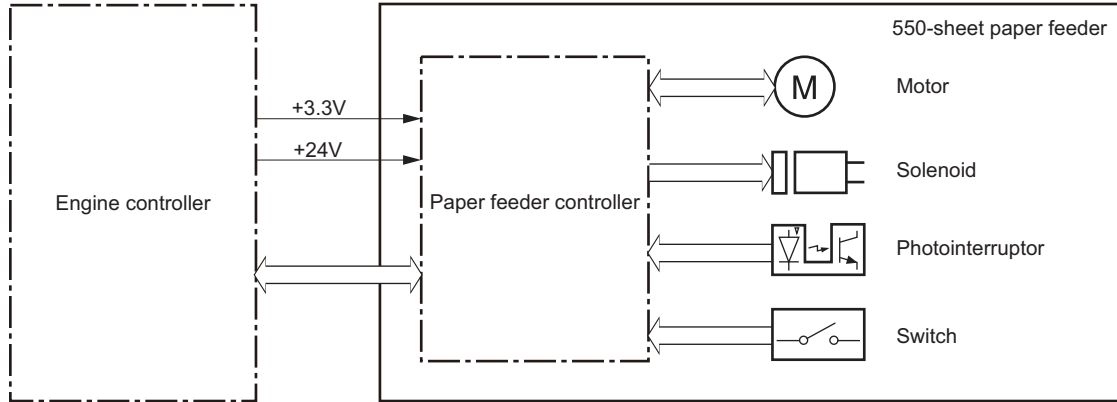


Figure 3-28 550-sheet paper feeder controller diagram



Component Type	Item	Component name
Motor	M5	Tray 3 feed motor
Solenoid	SL6	Tray 3 lifter solenoid
Solenoid	SL7	Tray 3 pickup solenoid
Photointerrupter	SR10	Tray 3 feed sensor
Photointerrupter	SR11	Tray 3 media surface sensor
Photointerrupter	PS701	Tray 3 lifting plate position sensor
Photointerrupter	PS702	Tray 3 media out sensor
Photointerrupter	PS751	Tray 3 media width sensor 1
Photointerrupter	PS752	Tray 3 media width sensor 2
Photointerrupter	PS761	Tray 3 media width sensor 3
Photointerrupter	PS762	Tray 3 media width sensor 4
Switch	SW52	Tray 3 detection switch

550-sheet paper feeder motor control

The paper feeder have the motor for the paper-feed and cassette lift-up.

Table 3-19 550-sheet paper feeder motor list

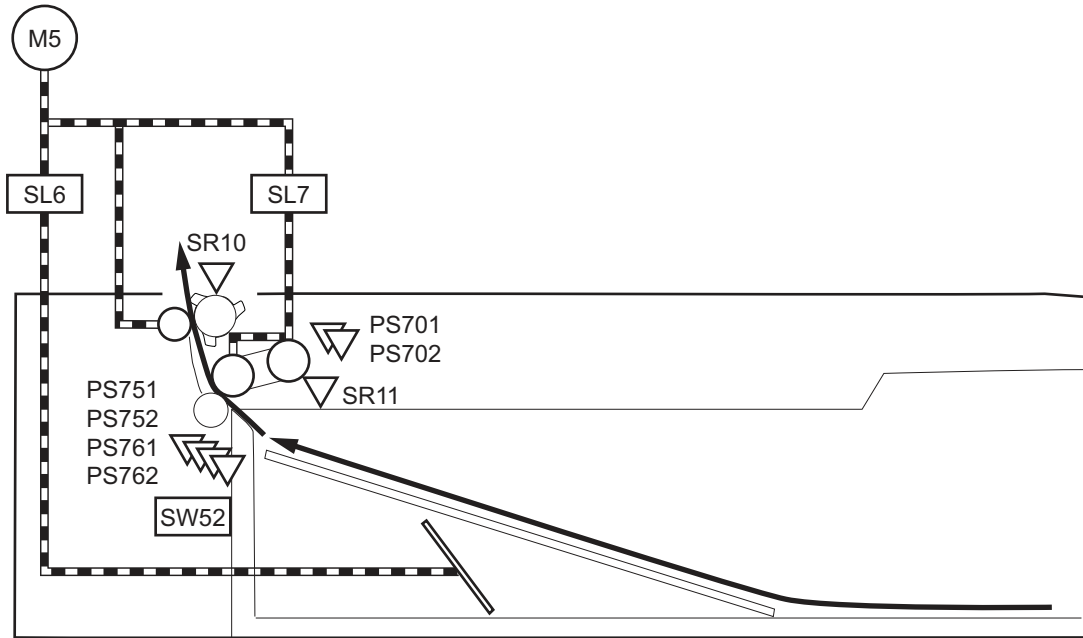
Item	Component name	Component driven
M5	Tray 3 feed motor	<ul style="list-style-type: none"> Tray 3 pickup roller Tray 3 feed roller and PF feed roller Lift up the lifting plate in the Tray 3

NOTE: The paper feeder does not have detective function of the motor failures.

550-sheet paper feeder pickup and feed operation

The paper feeder picks up the sheet of paper one by one in the paper feeder cassette and feeds it to the printer.

Figure 3-29 550-sheet paper feeder electrical components diagram



Item	Component name
M5	Tray 3 feed motor
SL6	Tray 3 lifter solenoid
SL7	Tray 3 pickup solenoid
SR10	Tray 3 feed sensor
SR11	Tray 3 media surface sensor
PS701	Tray 3 lifting plate position sensor
PS702	Tray 3 media out sensor
PS751	Tray 3 media width sensor 1
PS752	Tray 3 media width sensor 2
PS761	Tray 3 media width sensor 3
PS762	Tray 3 media width sensor 4
SW52	Tray 3 detection switch

550-sheet paper feeder functions

The 550-sheet paper feeder functions are described below.

Table 3-20 550-sheet paper feeder functions

Function	Applied
Cassette lift-up control	Yes
Cassette presence detection	Yes
Cassette media size detection	Yes

Table 3-20 550-sheet paper feeder functions (continued)

Function	Applied
Cassette media stack surface detection	Yes
Cassette media out detection	Yes
Cassette media level detection	No
Multiple-feed prevention	Yes
Cassette pickup roller presence detection	No
Cassette pickup roller alienation detection	No
Automatic delivery	Yes

550-sheet paper feeder jam detection

The printer uses the sensors and switches listed below to detect the presence of the paper and to verify that the paper is correctly feeding.

- Tray 3 feed sensor (PS10)

Figure 3-30 550-sheet paper feeder jam sensor

- ▶ Simplex paper path
- ⋯▶ Duplex paper path



4 Solve problems

Learn about solving printer problems.

How to search for printer documentation

The CPMD, error codes, and other support documentation for each printer is available on the HP portals.

For HP internal access to WISE, go to [WISE](#).


For HP channel partners access WISE, see [Accessing WISE for HP channel partners \(HP Partner Portal\) on page 94](#) or [Accessing WISE for HP channel partners \(CSDP\) on page 93](#).

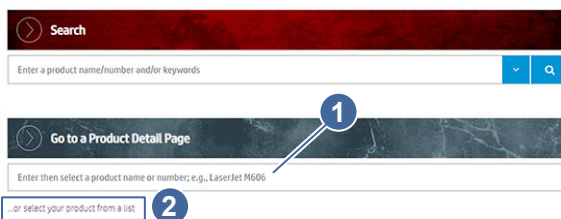
WISE is available to call agents, service technicians, and HP internal users. The level of detail available depends on your access credentials. To learn how to find support content in WISE, [watch the video here](#).

How to search WISE for printer information and documentation


These instructions are for HP internal use by call agents, service technicians, and other internal users.

To learn how to find support content in WISE, watch the video here: [Finding Error Code and Control Panel Message Document in WISE](#).

 **TIP:** The Product Detail Page (PDP) is available from the WISE home page. Enter, and then select a product name or number in the **Go to a Product Detail Page** area (callout 1), or select the **...or select your product from a list** item (callout 2) on the WISE home page.



Many types of printer documentation and information are available on WISE. This section details methods for finding error code descriptions and solutions.

 **TIP:** To view a list of control panel message documents (CPMD) per printer, search for the following topic in **WISE**: HP LaserJet, OfficeJet, PageWide, ScanJet Enterprise - Control panel message document (CPMD) list or click the link below.

- [HP LaserJet, HP OfficeJet, HP PageWide, HP ScanJet - Control panel messages document \(CPMD\), Service manual, and Service cost data list](#)

Use one of the following methods to search for CPMD error code information.

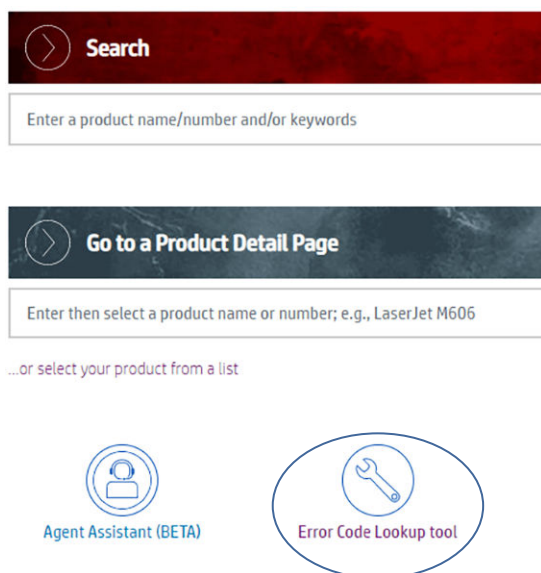
- [Method 1: Use the WISE home page Error Code Lookup tool on page 88](#)
- [Method 2: Search for error codes using the WISE search function on page 89](#)
- [Method 3: Search for error codes using the Product Detail Page on page 91](#)

Method 1: Use the WISE home page Error Code Lookup tool

Use the WISE Error Code Lookup tool to find error code troubleshooting procedures using the following steps.

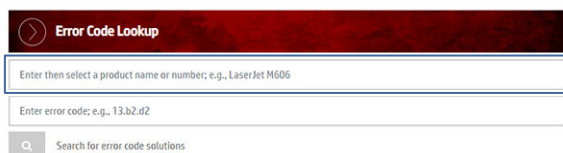
1. On the WISE home page, click the **Error Code Lookup tool** icon.

Figure 4-1 WISE Error Code Lookup tool icon



2. Enter a printer model number (for example, M606) in the **Error Code Lookup** dialog box.

Figure 4-2 WISE Error Code Lookup tool dialog box

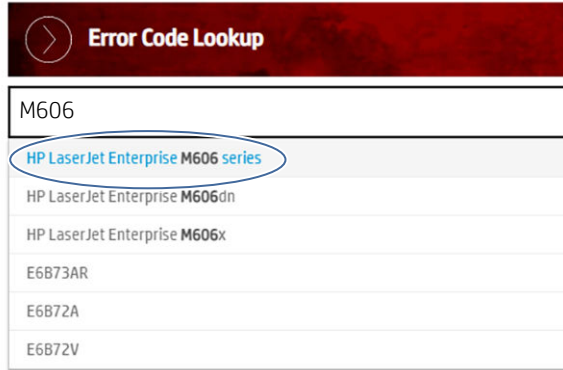


3. A drop-down list appears. Click on the full printer series name (for example, HP LaserJet Enterprise M606 series) in the list.



NOTE: Selecting the **series** item from the drop-down list is recommended for the most accurate search return.

Figure 4-3 WISE Error Code Lookup tool drop-down list



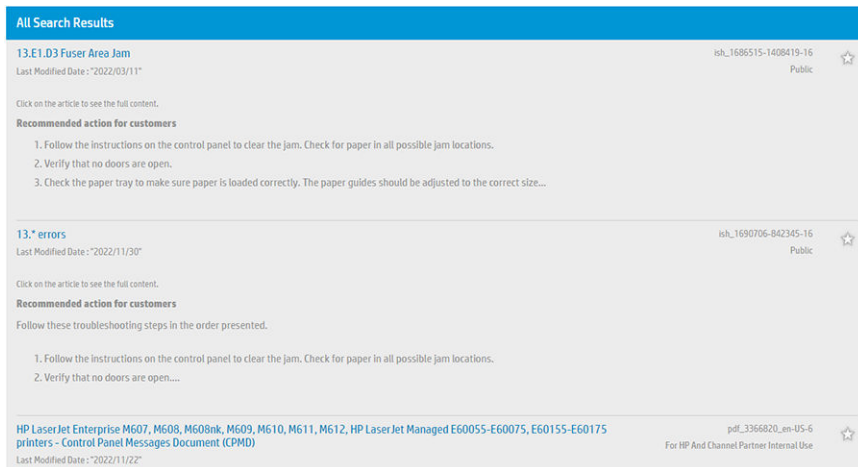
4. Type the error code (for example, 13.b2.d2) in the **Error Code Lookup** keyword field, and then select the search icon.

Figure 4-4 WISE Error Code Lookup tool search



5. The error code troubleshooting content displays in the **All Search Results** area.

Figure 4-5 WISE Search results

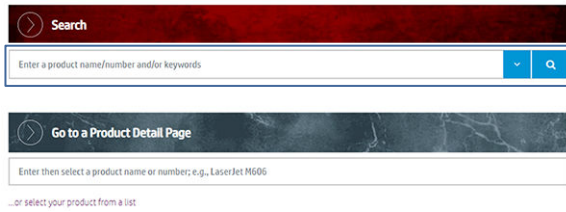


Method 2: Search for error codes using the WISE search function

Use the WISE search function to find error code troubleshooting procedures using the following steps.

1. On the WISE home page, enter a printer model number (for example, M606) in the **Search** dialog box.

Figure 4-6 WISE Search dialog box

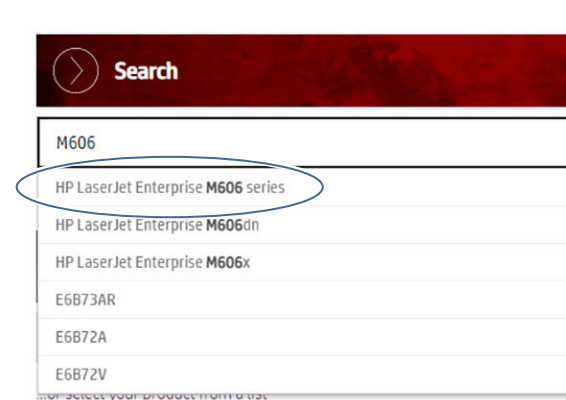


2. A drop-down list appears. Click on the full printer series name (for example, HP LaserJet Enterprise M606 series) in the list.



NOTE: Selecting the **series** item from the drop-down list is recommended for the most accurate search return.

Figure 4-7 WISE Search drop-down list



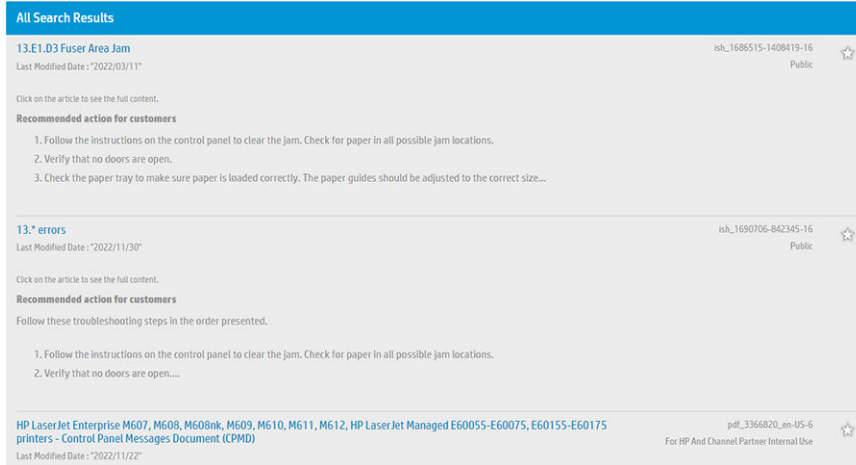
3. Type the error code (for example, 13.E1.D3) in the **Search** keyword field, and then select the search icon.

Figure 4-8 WISE Search



4. The error code troubleshooting content displays in the **All Search Results** area.

Figure 4-9 WISE Search results



Method 3: Search for error codes using the Product Detail Page

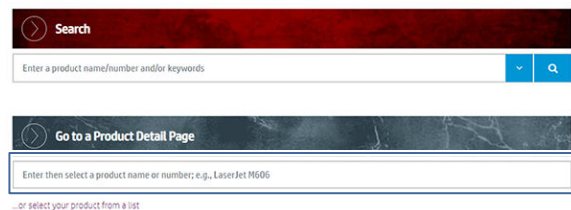
Use the WISE Product Detail Page (PDP) to find error code troubleshooting procedures using the following steps.

1. On the WISE home page, enter a printer model number (for example, M606) in the **Go to a Product Detail page** dialog box.



TIP: To find a PDP from a list of products by product type, select the **...or select your product from a list** item just below the dialog box.

Figure 4-10 WISE PDP dialog box

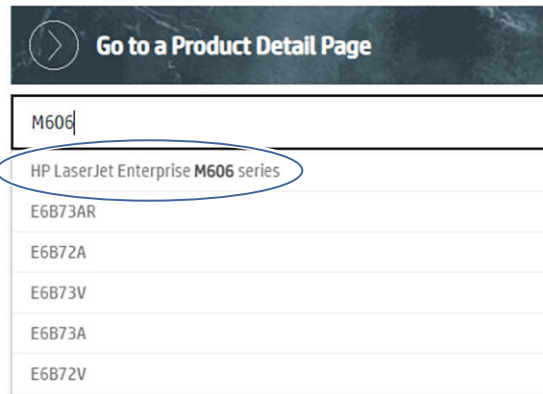


2. A drop-down list appears. Click on the full printer series name (for example, HP LaserJet Enterprise M606 series) in the list.



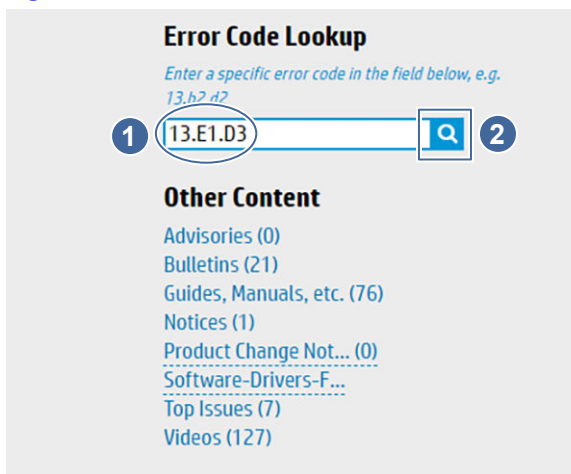
NOTE: Selecting the **series** item from the drop-down list is recommended for the most accurate search return.

Figure 4-11 WISE PDP drop-down list



3. Type the error code (for example, 13.E1.D3) in the **Error Code Lookup** field, and then select the search icon.

Figure 4-12 WISE PDP search



4. The error code troubleshooting content displays in the **All Search Results** area.

Figure 4-13 WISE PDP search results



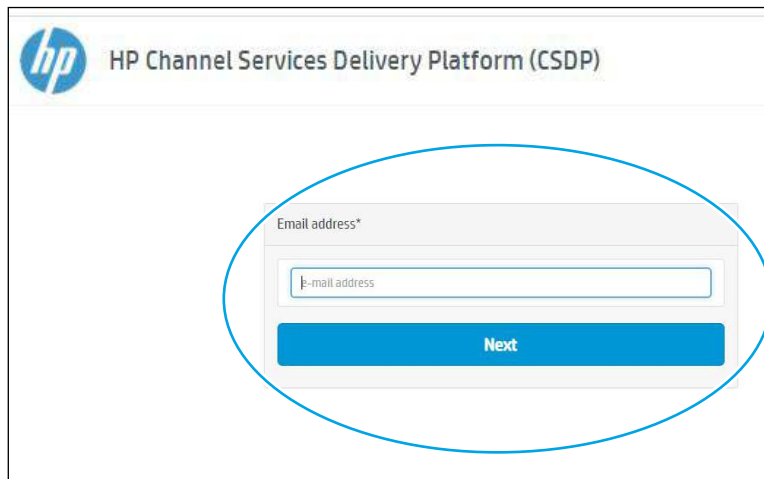
Accessing WISE for HP channel partners (CSDP)

Learn how to access WISE by accessing the HP Channel Services Delivery Platform (CSDP) if you are an HP Channel Partner.

IMPORTANT: A Partner Admin must requested access, via the CSDP portal, to create a new user before you can sign into the CDSP portal.

1. Sign-in to the CSDP portal (click csdp.hp.com to access the sign-in page).

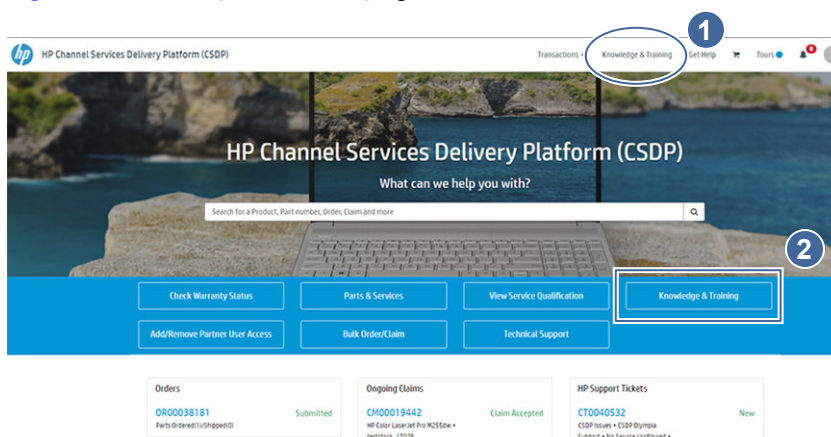
Figure 4-14 CSDP sign-in page



2. On the CSDP home page, click the **Knowledge and Training** item.

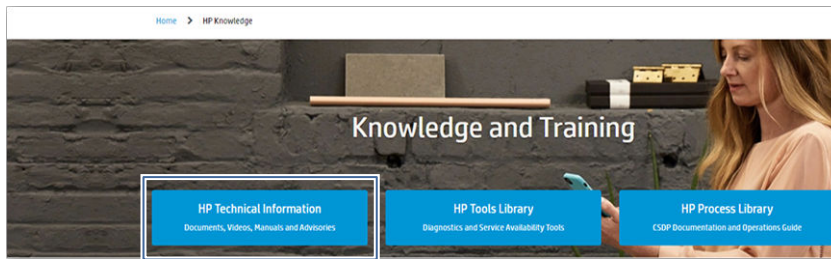
TIP: Use the **Knowledge and Training** item at the top of the CSDP home page (callout 1), or the **Knowledge and Training** action icon (callout 2).

Figure 4-15 CSDP portal home page



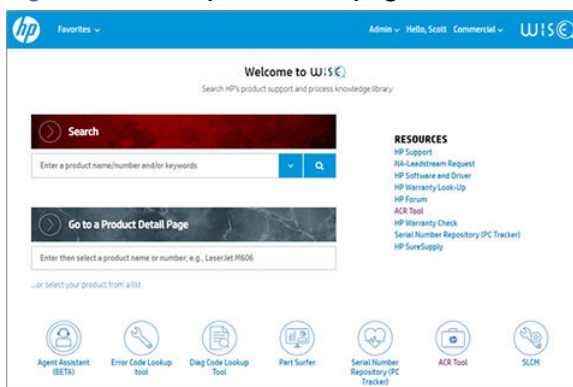
3. Select **HP Technical Documentation** on the **Knowledge and Training** page to open the WISE portal home page.

Figure 4-16 CSDP portal HP Knowledge and Training page



4. Use the WISE portal to search for printer information.

Figure 4-17 WISE portal home page



Accessing WISE for HP channel partners (HP Partner Portal)

Learn how to access WISE by accessing the HP Partner Portal if you are an HP Channel Partner.



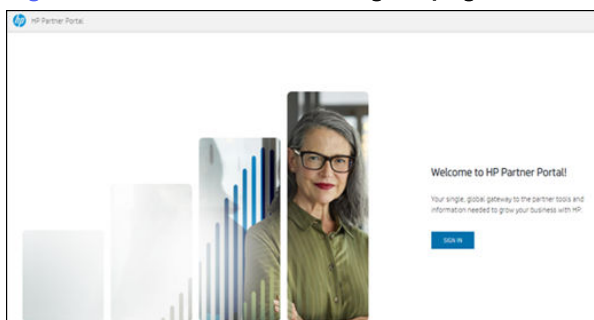
NOTE: If this is your first visit to the HP Partner Portal, you will be asked to create an account. Follow the setup directions using your HP Partner credentials.



[View a video of how to access WISE for HP channel partners](#)

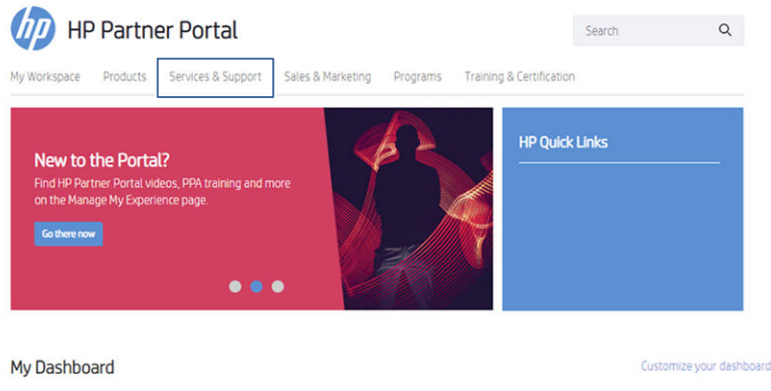
1. Sign-in to the HP Partner Portal (click <https://partner.hp.com> to access the sign-in page).

Figure 4-18 HP Partner Portal sign-in page



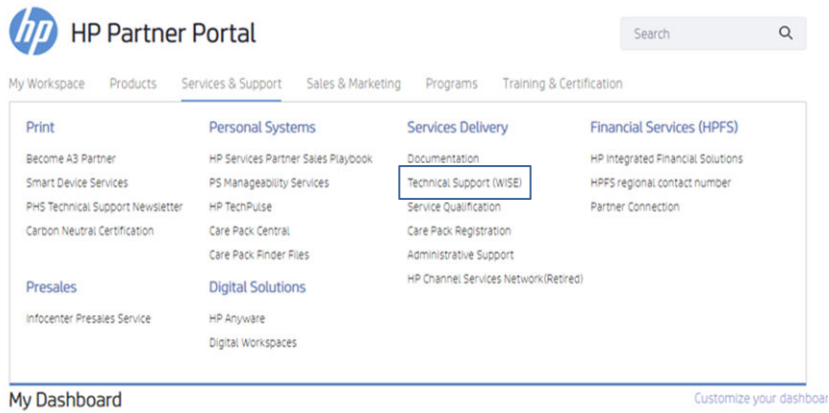
2. On the HP Partner Portal home page, click the **Services & Support** item.

Figure 4-19 HP Partner Portal home page



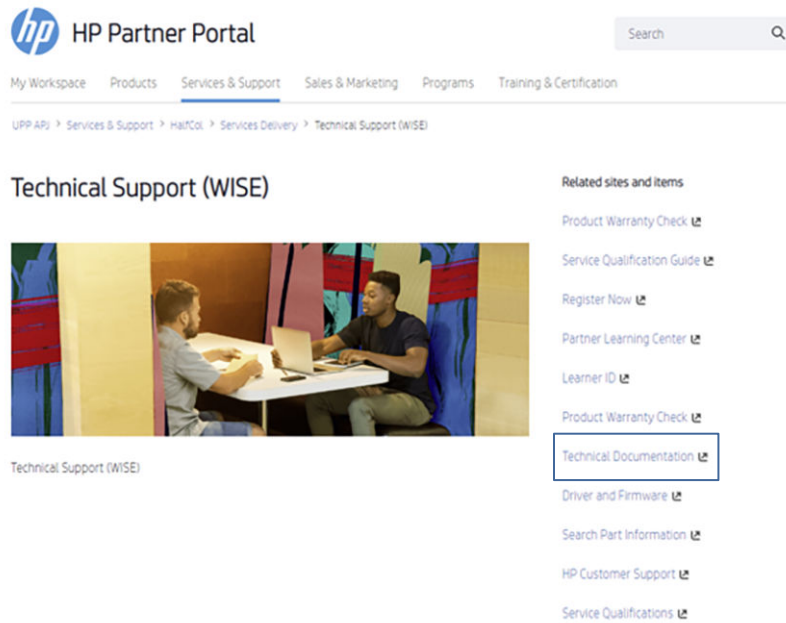
3. Select the **Technical Support (WISE)** item.

Figure 4-20 HP Partner Portal Service & Support page



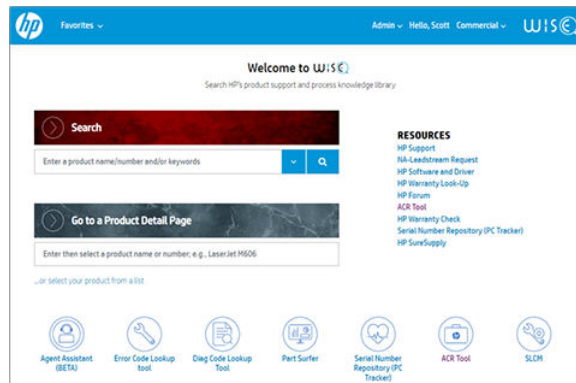
4. Select the **Technical Documentation** item.

Figure 4-21 HP Partner Portal Technical Support (WISE)page



5. Use the WISE portal to search for printer information.

Figure 4-22 WISE portal home page



Determine the problem source


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


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

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

Before beginning any troubleshooting procedure, check the following issues:

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

 **NOTE:** To print a configuration page using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

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

Pre-troubleshooting checklist

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

Table 4-1 Pre-troubleshooting checklist

General topic	Questions
Environment	<ul style="list-style-type: none"> • Is the printer installed on a solid, level surface (+/- 1°)? • Is the power-supply voltage within ± 10 volts of the specified power source? • Is the power-supply plug inserted in the printer and the wall outlet (not a surge protector)? • Is the operating environment within the specified parameters? • Is the printer exposed to ammonia gas, such as that produced by diazo copiers or office cleaning materials? <p>NOTE: Diazo copiers produce ammonia gas as part of the copying processes. Ammonia gas (from cleaning supplies or a diazo copier) can have an adverse effect on some printer components (for example, the toner cartridge or cartridges OPC).</p> <ul style="list-style-type: none"> • Is the printer exposed to direct sunlight? • Is the printer exposed to an air conditioning or heating vent that can cause temperature fluctuations?
Media	<ul style="list-style-type: none"> • Does the customer use only supported media? • Is the media in good condition (no curls, folds, or distortion)? • Is the media stored correctly and within environmental limits?
Input trays	<ul style="list-style-type: none"> • Is the amount of media in the tray within specifications? • Is the media correctly placed in the tray? • Are the paper guides aligned with the stack (no gaps in the stack or excessive pressure causing the stack to bow)? • Is the tray (or trays) correctly installed in the printer?
Toner cartridge	<ul style="list-style-type: none"> • Is the toner cartridge (or cartridges) installed correctly? <p>NOTE: If country/region specific toner cartridges are available for the printer, make sure the correct cartridge is installed.</p>

Table 4-1 Pre-troubleshooting checklist (continued)

General topic	Questions
Transfer unit and fuser	<ul style="list-style-type: none">• Are the transfer unit and fuser installed correctly? <p>NOTE: For printers with an intermediate transfer belt (ITB), is the ITB installed correctly and fully seated. If a replacement ITB was installed, was all of the packing materials removed?</p>
Covers	<ul style="list-style-type: none">• Is the toner cartridge door closed?
Condensation	<ul style="list-style-type: none">• Does condensation occur following a temperature change (particularly in winter following cold storage)? If so, wipe affected parts dry or leave the printer on for 10 to 20 minutes.• Was a toner cartridge (or cartridges) opened soon after being moved from a cold to a warm room? If so, allow the toner cartridge (or cartridges) to sit at room temperature for 1 to 2 hours.
Miscellaneous	<ul style="list-style-type: none">• Check for and remove any non-HP components (toner cartridges, memory modules, and EIO cards) from the printer.• Remove the printer from the network and ensure that the failure is associated with the printer before beginning troubleshooting.• For any color print-quality issues (color printers only), calibrate the printer, and then print a diagnostics page to verify print quality.

Troubleshooting flowchart

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

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



NOTE: For solutions that require printing a page, see the following.

To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

Table 4-2 Troubleshooting flowchart

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

Table 4-2 Troubleshooting flowchart (continued)

Step	Question		Action
	Yes ↓	No →	<p>Basic printer functions should start up when the printer is connected into an electrical outlet and the power switch is pushed to the on position.</p> <p>During normal operation cooling fans and/or motors should be operating. Place a hand over fan intake or exhaust vents to determine if the fan or fans are spinning. Lean close to the printer to hear motors rotating.</p> <p>If fans and/or motors are operating, the dc side of the power supply is functioning.</p> <p>Always make sure that the printer is plugged into a known-functioning wall receptacle. Remove power strips and plug the printer directly into a wall receptacle.</p> <p>After the control panel display is functional, see step 2.</p>
<p>2</p> <p>Control panel messages</p>	Do the printer firmware icons appear on the control panel?		
	Yes ↓	No →	<p>After the errors have been corrected, go to step 3.</p> <p>Use the control panel message document (CPMD) section in this manual to correct any displayed error messages.</p>
<p>3</p> <p>Event log</p>	<p>Use the event log to see the history of errors with this printer.</p> <p>Does the event log print?</p> <p>NOTE: The event log can also be accessed from the HP EWS page (Printer management > Event Log).</p>		<ul style="list-style-type: none"> • MFP: Menu > Tools > Reports > Event Log • SFP: Menu > Tools > Reports > Status Reports > Event Log
	Yes ↓	No →	<p>If the event log does not print, check for error messages.</p> <p>If paper jams inside the printer, see the jams section of the printer service manual.</p> <p>If error messages display on the control panel when trying to print an event log, see the control panel message document (CPMD) section of this manual.</p> <p>After successfully printing and evaluating the event log, see step 4.</p>
<p>4</p> <p>Information pages</p>	<p>Open the Reports menu and print the configuration pages to verify that all the accessories are installed.</p> <p>Are all the accessories installed?</p>		

Table 4-2 Troubleshooting flowchart (continued)

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

Firmware upgrades

Learn about printer firmware upgrades.

HP offers periodic printer updates. Use one of the following methods to upgrade the printer firmware.

- [HP Embedded Web Server on page 102](#)
- [USB flash drive \(control-panel menu\) on page 104](#)

For a firmware upgrade using the USB method, download the most recent firmware upgrade for the printer, go to:

- In the US, go to www.hp.com/support/colorlj4201-4203 or www.hp.com/support/colorlj4201-4203plus or www.hp.com/support/colorlj4301-4303 or www.hp.com/support/colorlj4301-4303plus.

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




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

- b. Select the driver language and operating system.

- c. Locate the firmware download, and then select **Download**.
- Outside the U.S., go to www.hp.com/support.
 - Select your country/region.
 - Select **Drivers & Downloads**.
 - Enter the product name in the **Find my product** dialogue box, and then select **Go**.

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

- Select the appropriate product by name.

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

- Select the driver language and operating system.
- Locate the firmware download, and then select **Download**.


Determine the installed revision of firmware

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

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

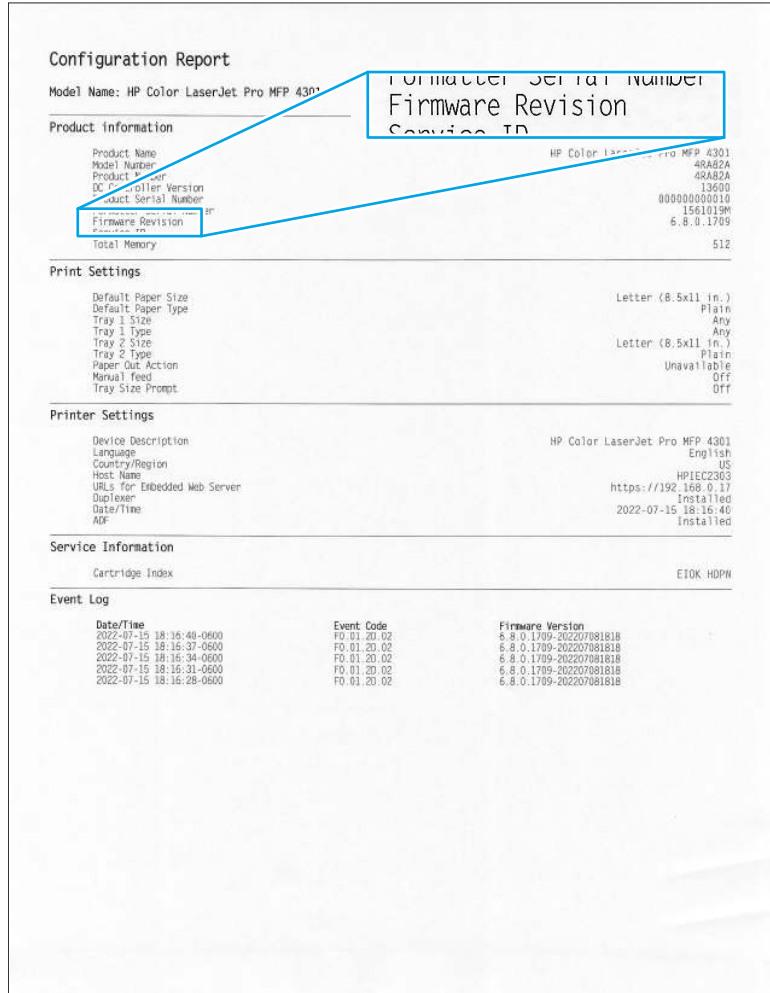
Print the configuration page

1. Open the following menus:
 - [Menu](#)
 - [Tools](#)
 - [Reports](#)
 - [Status Reports](#)
2. Select the [Configuration Report](#) item.

 **NOTE:** **MFP:** Touch the [Print](#) button on the touchscreen to print the report.

SFP: Navigate to and select the [Print](#) item in the menu list, and then press the dial to select it and print the report.

Figure 4-23 Configuration page firmware version



HP Embedded Web Server

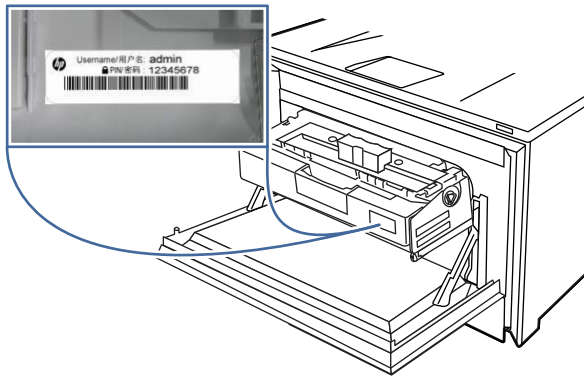
Learn how to perform a firmware upgrade using the HP Embedded Web Server.


Access to the Embedded Web Server (EWS) requires a personal identification number (PIN). The default PIN for this printer is located on a sticker adhered to the front of the toner cartridge tray. Use this PIN to open the EWS when prompted.




NOTE: If the default PIN has been changed, contact the printer administrator.

Figure 4-24 Printer default PIN location



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

1. At the printer control panel, use the control-panel menus to print the **Connectivity Status Report** (MFP) or **Connectivity Status Page** (SFP) page. Do the following:
 - a. Open the **Menu > Tools > Reports Status Reports** menus.
 - b. **MFP:** Select the **Connectivity Status Report** item.
SFP: Select the **Connectivity Status Page** item.

 **NOTE:** **MFP:** Touch the **Print** button on the touchscreen to print the report.

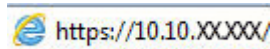
SFP: Navigate and select the **Print** item in the menu list, and then press the dial to select it and print the report.

2. Open a web browser, and in the address line, type the IP address or host name exactly as it appears on the **Connectivity Status Report** or **Connectivity Status Page**. Press the **Enter** key on the computer keyboard. The EWS opens.


 **NOTE:** When prompted, enter the default PIN from the sticker adhered to the cartridge tray.


If the default PIN has been changed, contact the printer administrator.

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



3. On the EWS Home page, open the **Printer Management > Firmware Update** menus.

 **NOTE:** The EWS page automatically checks to see if the installed firmware is the latest version. If it is not, follow the steps on the page to update the firmware.

 **TIP:** For automatic firmware updates, select the **Firmware Update Settings** item and use the toggle button to enable or disable the setting.

4. After a firmware update, print a configuration page and verify that the latest firmware version is installed.

USB flash drive (control-panel menu)

Learn how to perform a USB flash drive firmware upgrade.

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



NOTE: If the firmware file has not already been downloaded, go to [Firmware upgrades on page 100](#) for more information.

2. Open the following menus:

- Menu
- Tools
- Maintenance
- Firmware
- Update Printer from USB

3. When prompted, insert a USB storage device in the walk-up USB port, and then select the [Refresh](#) item.

4. Navigate to and then select the correct .bdl file.



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

5. Select the [Upgrade](#) item.



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

6. When the upgrade is complete, the printer initializes.

7. After a firmware update, print a configuration page and verify that the latest firmware version is installed.

Comprehensive list of troubleshooting tools

Learn about the printer troubleshooting tools.

Engine test

Learn about troubleshooting the printer using the engine test diagnostic.



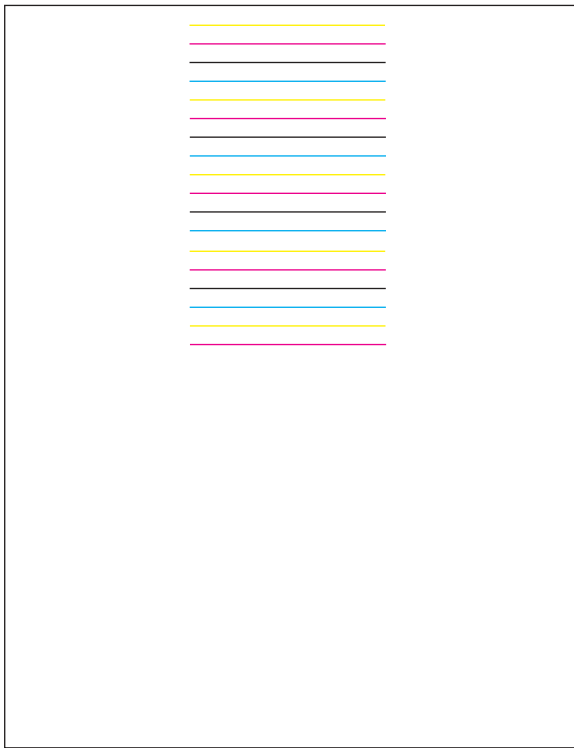
NOTE: To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

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

- Depress and hold the cartridge door release button, and then open and close the cartridge door four times within a one and one-half (1.5) second time period to print a simplex engine test page.

- Depress and hold the cartridge door release button, and then open and close the cartridge door five times (or more) within a one and one-half (1.5) second time period to print a duplex engine test page.

Figure 4-25 Sample engine test page



Control panel diagnostics

Learn about troubleshooting control panel problems.

The printer includes diagnostic tests for the control panel.


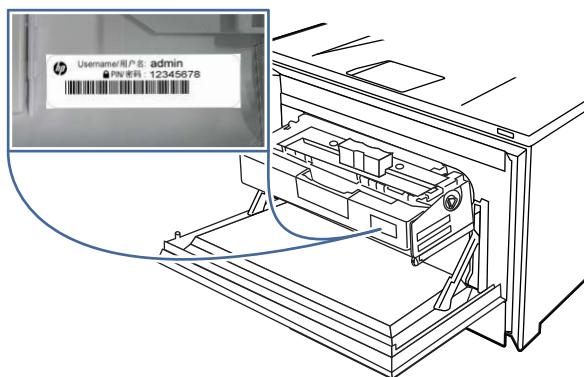
 **NOTE:** Access to the [Service](#) menu (and the EWS) requires a personal identification number (PIN). The default PIN for this printer is located on a sticker adhered to the front of the toner cartridge tray. Use this PIN to open the EWS when prompted.

Figure 4-26 Printer default PIN location



Control panel display diagnostics (MFP/SFP)

1. Open the following menus:
 - [Menu](#)
 - [Tools](#)
 - [Service](#)
2. Enter the default service personal identification number (PIN).



NOTE: If the default PIN has been changed, contact the printer administrator.

3. From the [Service](#) menu, open the following menus:



NOTE: The SFP also includes a rotary dial test. See [Control panel dial diagnostic \(SFP only\) on page 106](#).

- [Service Tests](#)
 - [Display Tests](#)
4. Do one of the following:
 - **MFP:** Touch the **Proceed** button to step through control panel test screens.
 - **SFP:** Press the dial to select the **Proceed** item. When complete, the message **Test passed** appears on the display.

Control panel dial diagnostic (SFP only)

1. Open the following menus:
 - [Menu](#)
 - [Tools](#)
 - [Service](#)
 2. Enter the default service personal identification number (PIN).
-
3. From the [Service](#) menu, open the following menus:
 - [Service Tests](#)
 - [Dial Test](#)
 4. Follow the prompts on the display to test the control-panel dial.

Defeating interlocks

Learn about defeating printer interlocks.



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

Different tests can be used to isolate different types of issues. For assembly or noise isolation, run the diagnostic test when the toner cartridge door or rear door is open.

Defeating the door interlocks allows observation of the paper pick operation.

Defeat the cartridge door interlock

1. Open the cartridge door.
2. Insert a folded piece of paper into the slot.


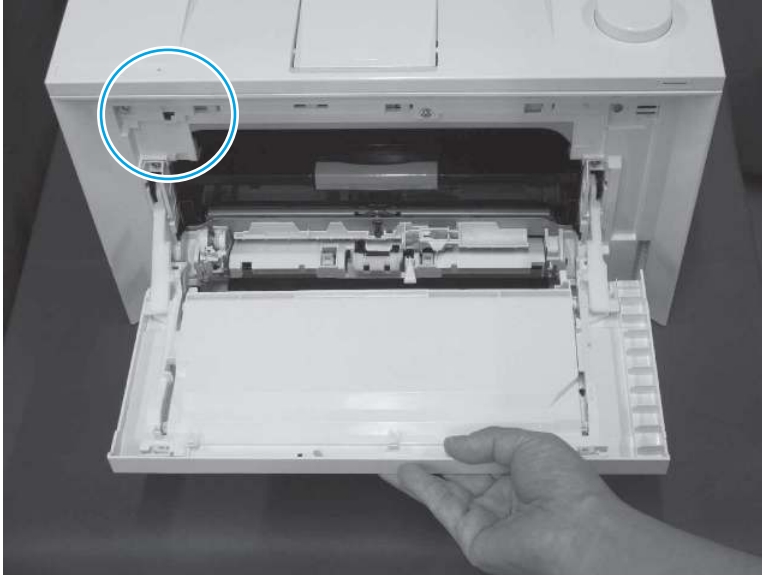
 **TIP:** Fold a stiff piece of paper, for example a business card or index card, into a strip, and insert the strip into the slot for the front door logic switch.

Figure 4-27 Defeat the cartridge door interlock



Defeat the rear door interlock

1. Open the rear door.
2. Insert a folded piece of paper into the slot.


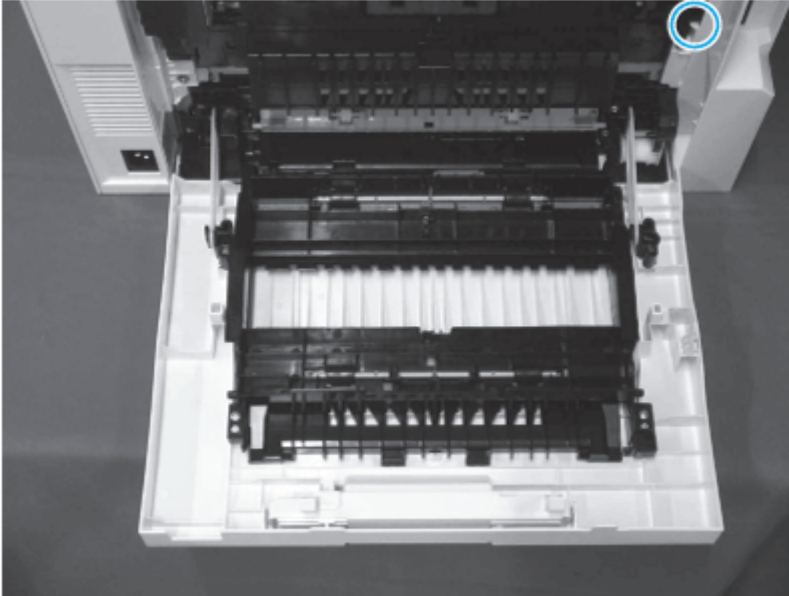
 **TIP:** Fold a stiff piece of paper, for example a business card or index card, into a strip, and insert the strip into the slot for the front door logic switch.

Figure 4-28 Defeat the rear door interlock



LED Diagnostics (formatter)

Learn about troubleshooting the printer using formatter LEDs.

Network LEDs (network models only)

The formatter has two network port LEDs. When the printer is connected to a properly working network through a network cable, the amber LED indicates network activity, and the green LED indicates the link status.

A blinking amber LED indicates network traffic. If the green LED is off, a link has failed. For link failures, check all of the network cable connections. In addition, try to manually configure the network card link speed setting by using the printer control panel.

Change the Link Speed setting

1. Open the following menus:
 - [Menu](#)
 - [Settings](#)
 - [Network \(MFP\)](#)
 - [Network Settings \(SFP\)](#)
 - [Ethernet \(MFP\)](#)
 - [Ethernet Settings \(SFP\)](#)
 - [Link Speed](#)
2. Select from a list of link speed options.

Scanner tests (MFP)

Learn about scanner tests.

The printer includes diagnostic scanner tests for the MFP printer.


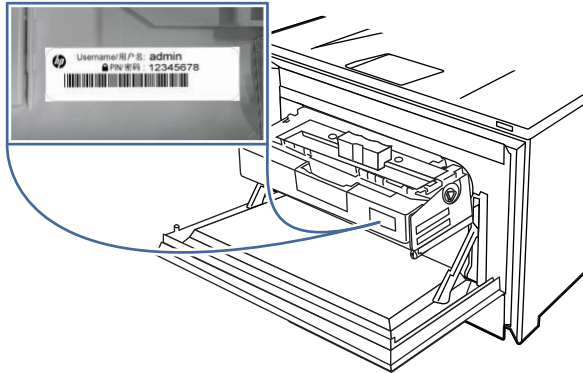

 **NOTE:** Access to the [Service](#) menu (and the EWS) requires a personal identification number (PIN). The default PIN for this printer is located on a sticker adhered to the front of the toner cartridge tray. Use this PIN to open the EWS when prompted.

Figure 4-29 Printer default PIN location



Access the scanner tests


1. Open the following menus:
 - [Menu](#)
 - [Tools](#)
 - [Service](#)
2. Enter the default service personal identification number (PIN).

 **NOTE:** If the default PIN has been changed, contact the printer administrator.


3. From the [Service](#) menu, open the following menus:
 - [Service Tests](#)
4. Choose from the following tests:
 - [Scan Motor Test](#)

 **NOTE:** Touch the **Start** button to begin the test.

- [Continuous Flatbed Scan](#)

 **NOTE:** Touch the **Dismiss** button to exit the test. Touch the **Proceed** button to start the test.

- [Continuous Copy](#)

 **NOTE:** Touch the **Dismiss** button to exit the test. Touch the **Proceed** button to start the test.

Individual component tests

Learn about printer individual component tests.

Test individual components (SFP)

1. Open the following menus:

- [Menu](#)
- [Tools](#)
- [Service](#)

2. Enter the default service personal identification number (PIN)

The default PIN for this printer is located on a on a sticker adhered to the front of the toner cartridge tray.



NOTE: If the default PIN has been changed, contact the printer administrator.

3. Open the [Service Tests](#) menu, and then select from the following component tests:

- [Dial Test](#)

Use the [Dial Test](#) item to test the control-panel rotary dial. Select [Start](#) to begin, and then follow the prompts on the display.

- [Display Test](#)

Use the [Display Test](#) item to test the control-panel display. Select [Proceed](#) to begin an internal test. If the message **Test Passed** displays, select **Cancel** to exit.

- [Walk-up USB Port Test](#)

Use the [Walk-up USB Port Test](#) item to test the front USB port. Insert a USB storage device in the front USB port, and then select [Proceed](#) to begin. If the message **USB Device Connected** displays, the test was successful.

Test individual components (MFP)

1. Open the following menus:

- [Menu](#)
- [Tools](#)
- [Service](#)

2. Enter the default service personal identification number (PIN)

The default PIN for this printer is located on a on a sticker adhered to the front of the toner cartridge tray.



NOTE: If the default PIN has been changed, contact the printer administrator.

3. Open the [Service Tests](#) menu, and then select from the following component tests:

- [Scan Motor Test](#)

Use the [Scan Motor Test](#) item to rotate the scan motor through a cycle. Select the [Start](#) button to begin.

- [Continuous Flatbed Scan](#)

Use the [Continuous Flatbed Scan](#) item to continuously scan a page from the flatbed.

Place a page on the flatbed, and then select the [Proceed](#) button. The printer continuously scans and prints the page until the [Dismiss](#) button is selected.

- [Continuous Copy](#)

Use the [Continuous Copy](#) item to continuously copy a page from the flatbed.

Place a page on the flatbed, and then select the [Proceed](#) button. The printer continuously copies and prints the page until the [Dismiss](#) button is selected.

- [Display Test](#)

Use the [Display Test](#) item to test the control-panel display. Select [Proceed](#) to begin (the display screen changes each time the [Proceed](#) button is selected).

- [Walk-up USB Port Test](#)

Use the [Walk-up USB Port Test](#) item to test the front USB port. Insert a USB storage device in the front USB port, and then select [Proceed](#) to begin. If the message **USB Device Connected** displays, the test was successful.

Diagrams: Block diagrams

View block diagrams for the printer.

Sensors and switches

View printer and paper feeder sensors and switches diagrams.

Sensors and switches (base printer)

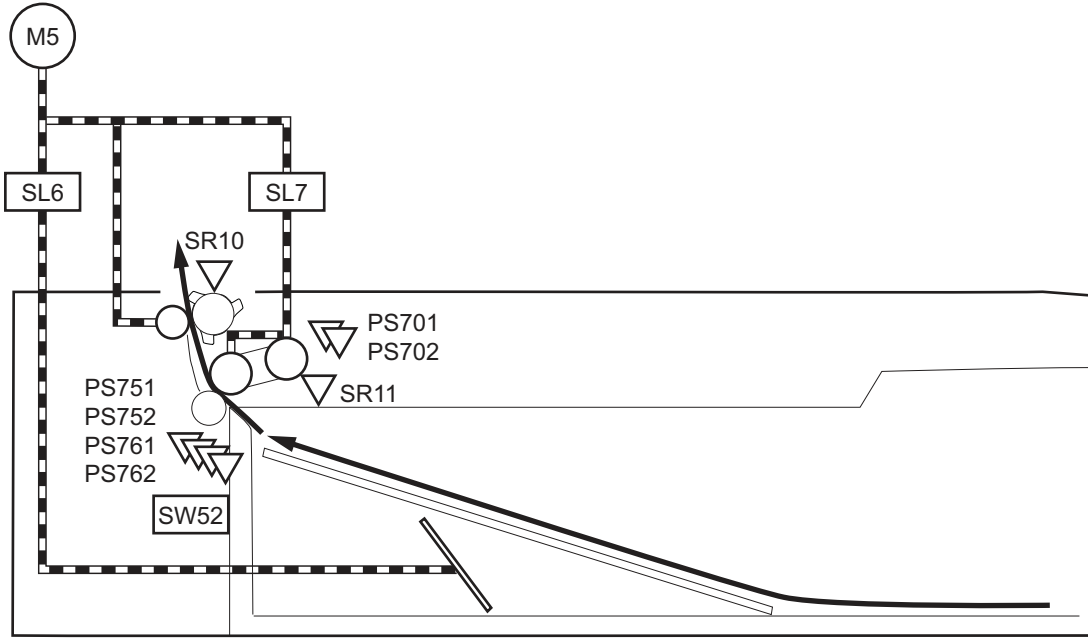
Figure 4-30 Sensors and switches (base printer)



Item	Description	Item	Description
SR10	Tray 3 feed sensor	PS702	Tray 2 media surface sensor
NOTE: 550-sheet paper feeder only.			
SR56	Fuser loop sensor	PS751	Tray 2 media width sensor 1
SR57	Fuser output sensor	PS752	Tray 2 media width sensor 2
SR58	Duplex switchback sensor	PS761	Tray 2 media width sensor 3
SR61	Registration sensor	PS761	Tray 1 registration sensor
SR62	Tray 2 media surface sensor	PS762	Tray 2 media width sensor 4
SR69	Output bin media-full sensor	PS762	Tray 1 feed sensor
SR70	Duplex feed sensor	SW39	Tray 2 detection switch
PS701	Tray 2 lifting plate position sensor	SW41	Fuser pressure release detection switch

Sensors and switches (550-sheet paper feeder)

Figure 4-31 Sensors and switches (550-sheet paper feeder)



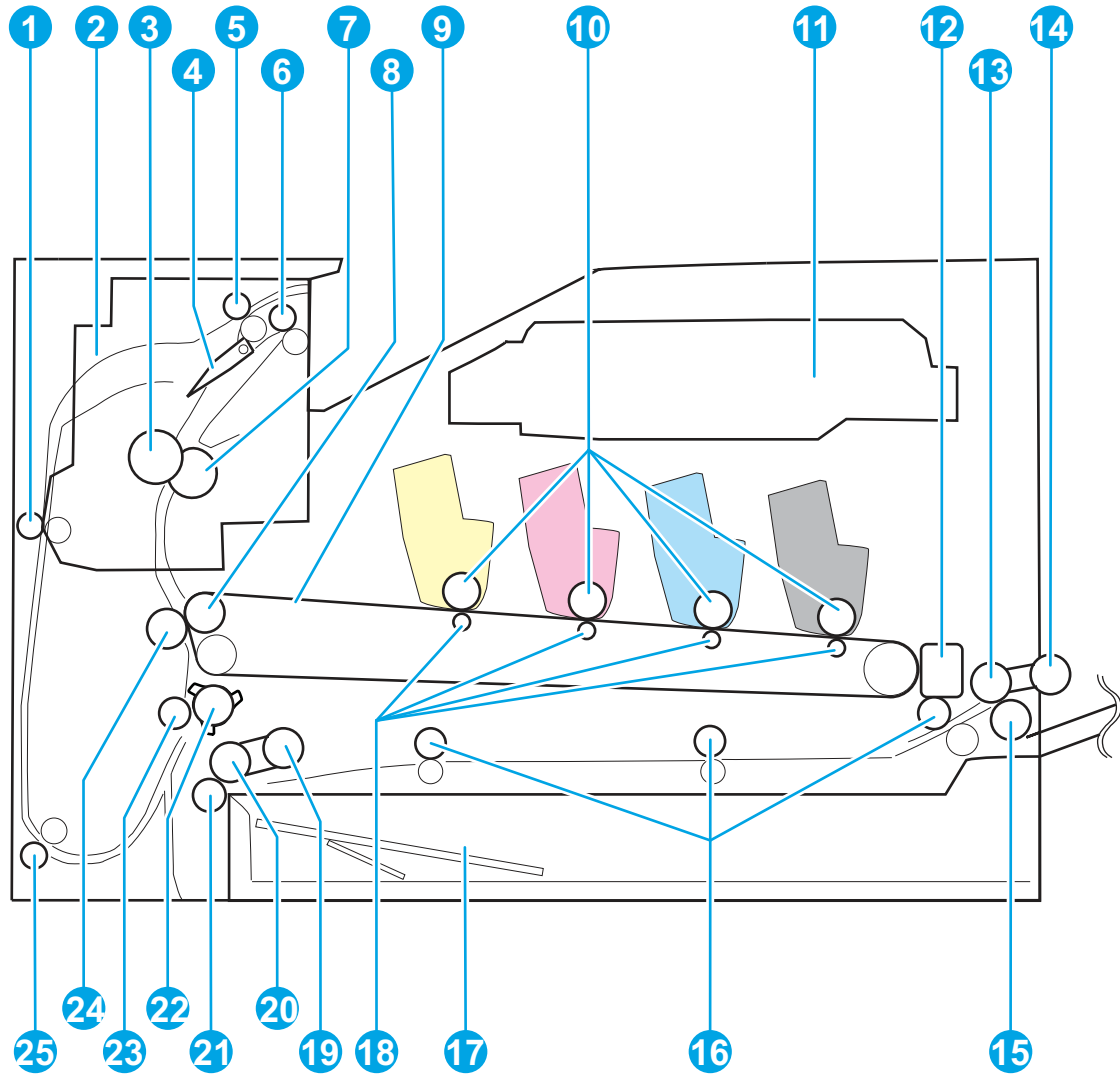
Item	Description	Item	Description
SR10	Tray 3 feed sensor	PS752	Tray 3 media width sensor 2
SR11	Tray 3 media surface sensor	PS761	Tray 3 media width sensor 3
PS701	Tray 3 lifting plate position sensor	PS762	Tray 3 media width sensor 4
PS702	Tray 3 media out sensor	SW5	
PS751	Tray 3 media width sensor 1		Tray 3 detection switch

Cross section diagrams

View printer and paper feeder cross section diagrams.

Cross-sectional view of the printer

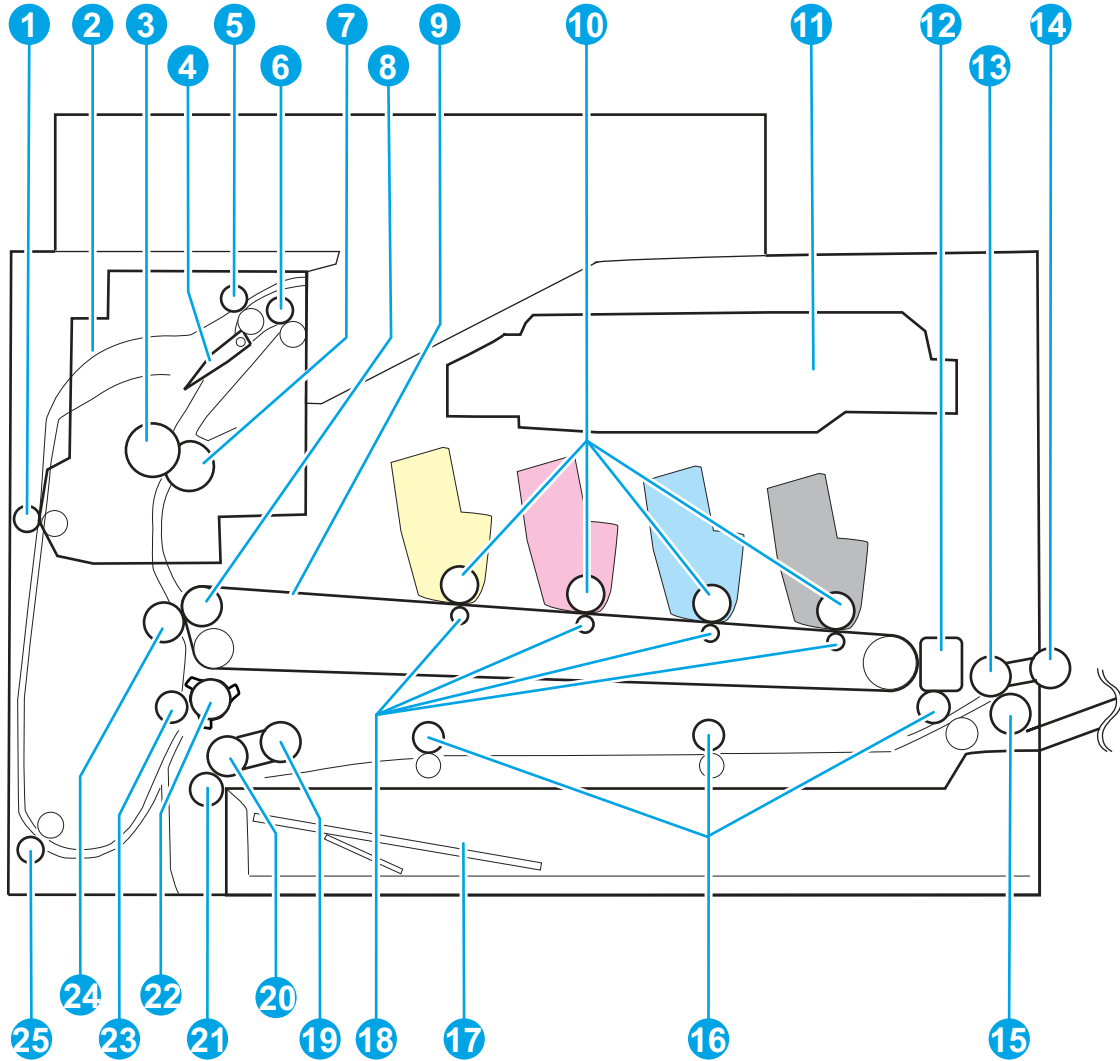
Figure 4-32 Cross-sectional view of the printer (SFP)



Item	Description	Item	Description
1	Duplex feed roller	14	Tray 1 pickup roller
2	Fuser	15	Tray 1 separation roller
3	Pressure roller	16	MP feed roller
4	Duplex flapper	17	Tray 2
5	Duplex switchback roller	18	T1 roller
6	Output roller	19	Tray 2 pickup roller
7	Fuser film assembly	20	Tray 2 feed roller
8	ITB drive roller	21	Tray 2 separation roller
9	ITB	22	Registration shutter
10	Photosensitive drum	23	Registration roller
11	Laser scanner assembly	24	T2 roller

Item	Description	Item	Description
12	Registration density sensor	25	Duplex re-pickup roller
13	Tray 1 feed roller		

Figure 4-33 Cross-sectional view of the printer (MFP)

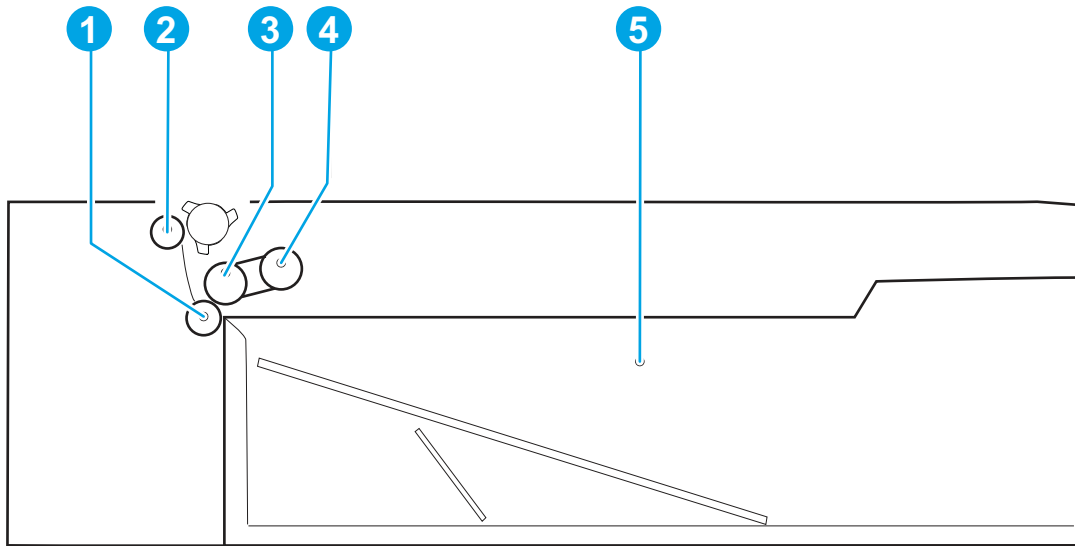


Item	Description	Item	Description
1	Duplex feed roller	14	Tray 1 pickup roller
2	Fuser	15	Tray 1 separation roller
3	Pressure roller	16	MP feed roller
4	Duplex flapper	17	Tray 2
5	Duplex switchback roller	18	T1 roller
6	Output roller	19	Tray 2 pickup roller
7	Fuser film assembly	20	Tray 2 feed roller
8	ITB drive roller	21	Tray 2 separation roller

Item	Description	Item	Description
9	ITB	22	Registration shutter
10	Photosensitive drum	23	Registration roller
11	Laser scanner assembly	24	T2 roller
12	Registration density sensor	25	Duplex re-pickup roller
13	Tray 1 feed roller		

Cross-sectional view of the 550-sheet paper feeder

Figure 4-34 Cross-sectional view of the 550-sheet paper feeder



Item	Description
1	Tray 3 separation roller
2	PF feed roller
3	Tray 3 feed roller
4	Tray 3 pickup roller
5	Tray 3

Printed circuit assembly (PCA) connector locations

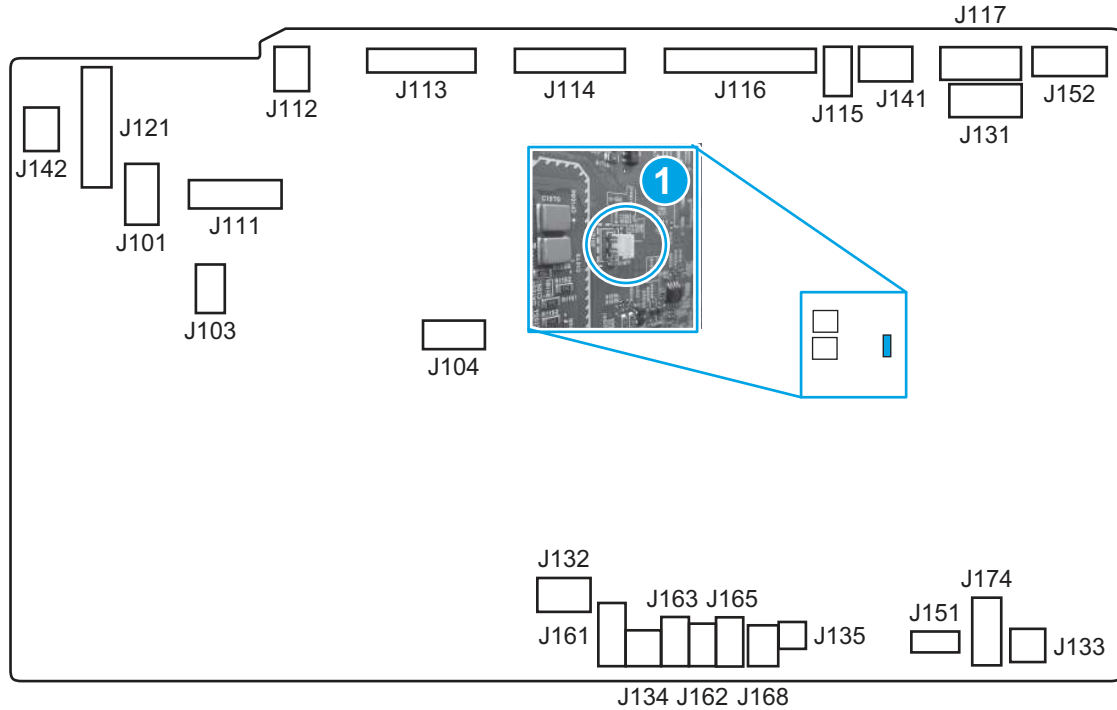
View printed circuit assembly (PCA) diagrams.

Engine controller PCA connections

CAUTION: There is an environmental sensor (callout 1) mounted on the engine controller PCA. **Do not** apply pressure to this sensor to avoid damaging it.

NOTE: Humidity sensor (SR1671) and temperature sensors (TH1671, TH1672) are mounted directly on the ECU assembly.

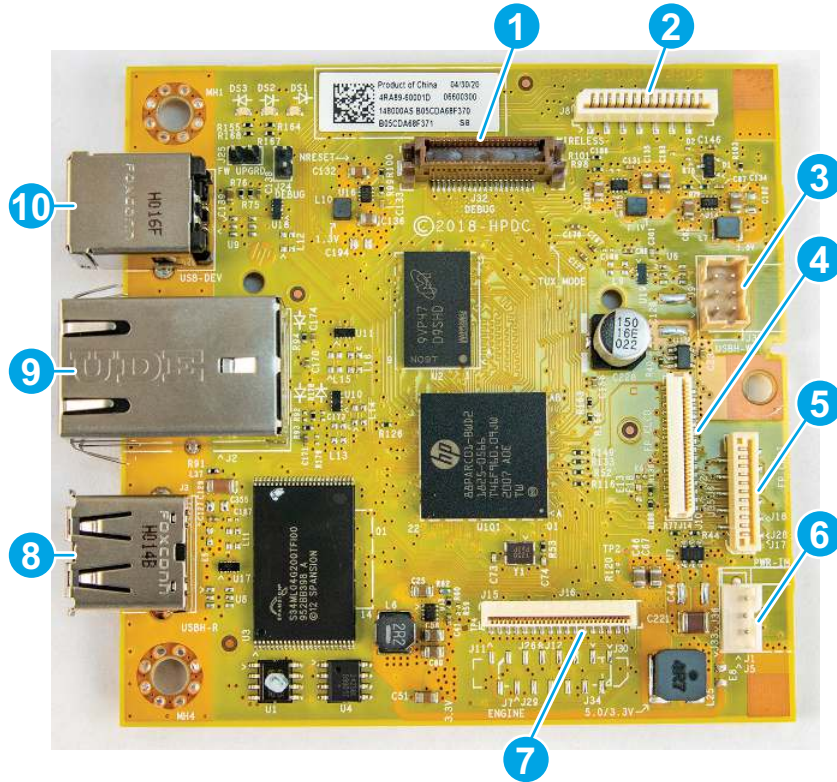
Figure 4-35 Engine controller PCA connections



Item	Description	Item	Description
J101	Not used	J133	Tray 1 pickup solenoid (SL4)
J103	Not used	J134	Tray 2 pickup solenoid (SL3)
J104	Not used	J135	Duplex re-pickup clutch (CL1)
J111	Formatter	J141	Cartridge door switch (SW40)
J112	Formatter	J142	Rear door switch (SW 42)
J113	Laser PCA	J151	Registration density sensor
J114	Laser PCA	J152	E-labels (4)
J115	Scanner motor (M4)	J161	Sensor PCA (SR61/62)
J116	Fuser motor (M2) PCA	J162	Tray 2 detection switch (SW39)
J117	Fuser motor (M2) PCA	J163	Media width sensor PCA2 (SR752)
J121	Fuser PCA (SR56/57/58/69, SL2, SW41, TH8/9/10)	J165	Media width sensor PCA1 (SR751)
J131	Drum motor (M1)	J168	Duplex feed sensor (SR70)
J132	Feed motor (M3)	J174	Paper feeder

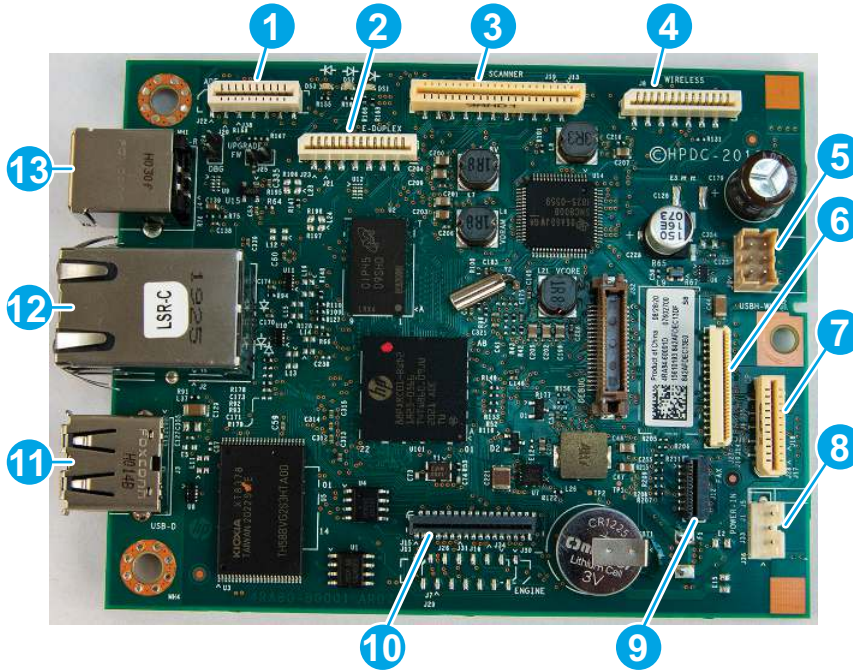
Formatter PCA connections

Figure 4-36 Formatter PCA connections (SFP)



Item	Description	Item	Description
1	Factory use only (debug) NOTE: This connector is not present on production formatters.	6	Power
2	Wireless PCA	7	Engine controller PCA
3	Front USB	8	USB (job storage and private printing)
4	Empty	9	Ethernet
5	Control panel	10	USB (direct connect via USB cable)

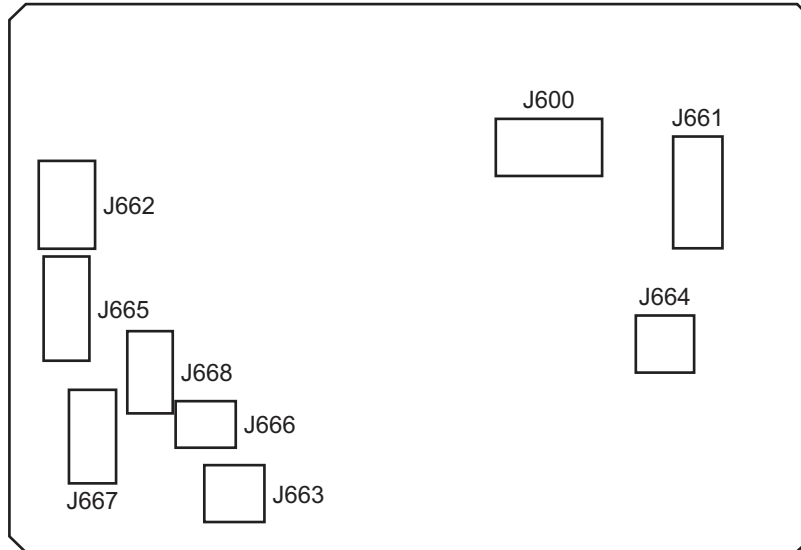
Figure 4-37 Formatter PCA connections (MFP)



Item	Description	Item	Description
1	Document feeder	8	Power
2	E-Duplex	9	Fax PCA
3	Scanner	10	Factory use only (debug)
			NOTE: This connector is not present on production formatters.
4	Wireless PCA	11	Engine controller PCA
5	Front USB	12	USB (job storage and private printing)
6	Control panel	13	Ethernet
7	Empty	14	USB (direct connect via USB cable)

550-sheet paper feeder PCA connectors

Figure 4-38 550-sheet paper feeder PCA connectors



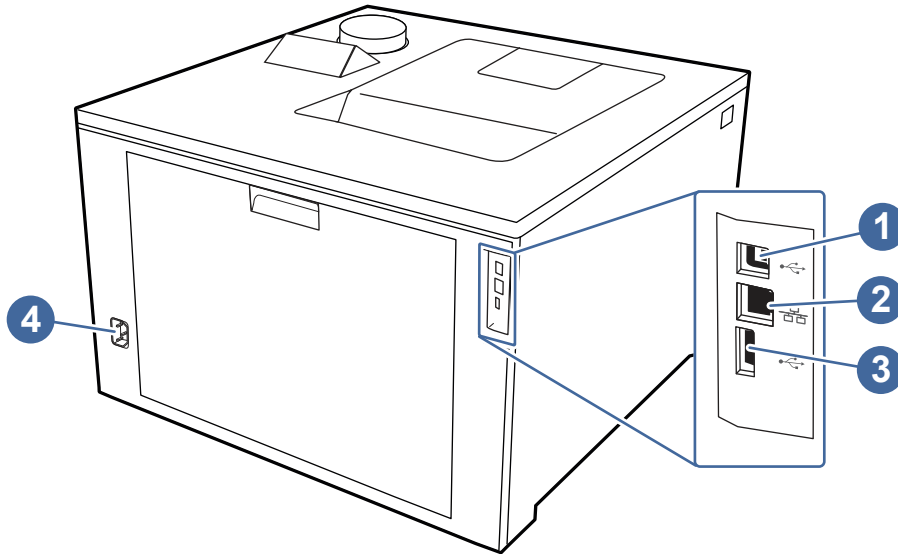
Item	Description	Item	Description
J600	Not used	J665	Tray 3 sensor PCA
J661	Printer	J666	Tray 3 detection switch (SW52)
J662	Tray 3 feed motor (M5)	J667	Tray 3 media width sensor PCA1 (PS751, PS752)
J663	Tray 3 lifter solenoid (SL6)	J668	Tray 3 media width sensor PCA2 (PS761, PS762)
J664	Tray 3 pickup solenoid (SL7)		

Diagrams: External plug and port locations

View printer external plugs and ports diagrams.

External plug and port locations (SFP)

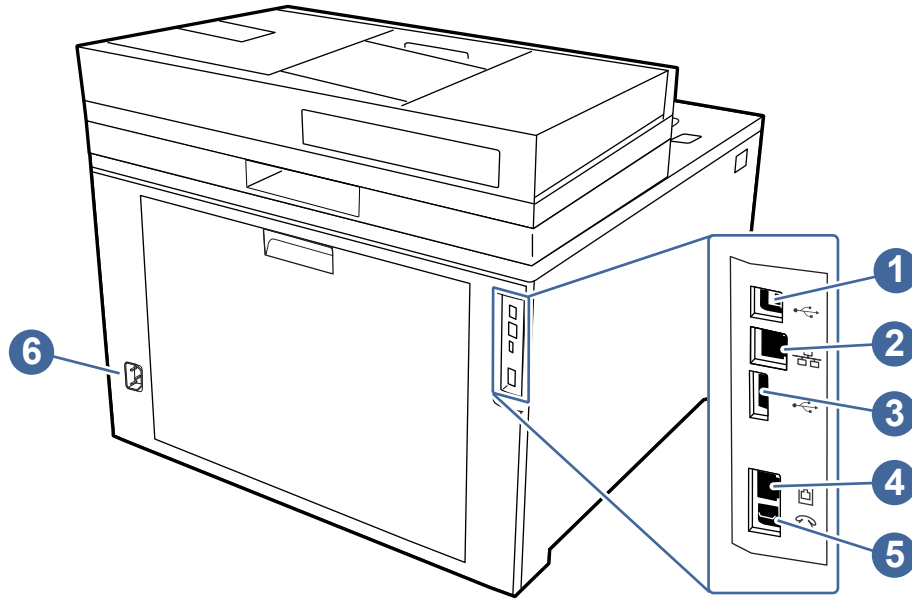
Figure 4-39 External plug and port locations (SFP)



Item	Description
1	USB interface port used for connecting the printer via USB
2	Ethernet port
3	USB port (for job storage and private printing)
4	Power connection

External plug and port locations (MFP)

Figure 4-40 External plug and port locations (MFP)



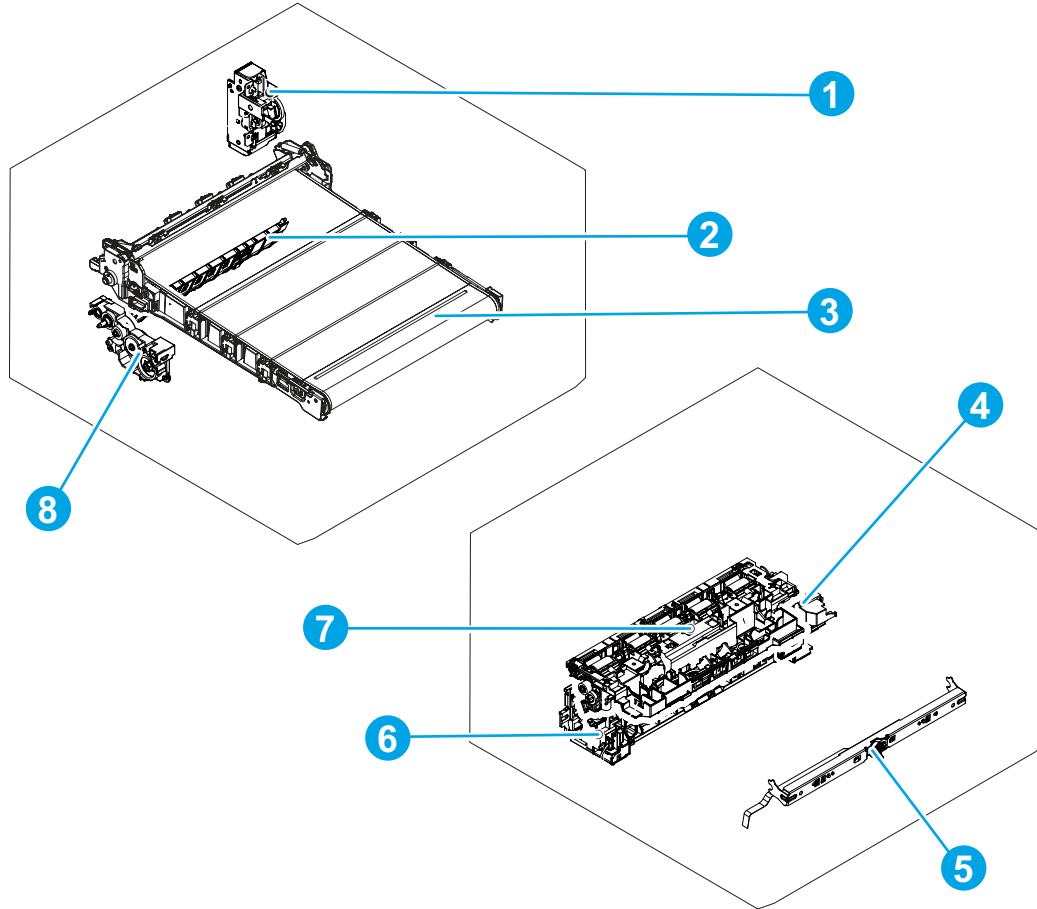
Item	Description
1	USB interface port used for connecting the printer via USB
2	Ethernet port
3	USB port (for job storage and private printing)
4	Fax "line in" port (for attaching the fax phone line to the printer) NOTE: Fax models only.
5	Telephone "line out" port (for attaching an extension phone, answering machine, or other device) NOTE: Fax models only.
6	Power connection

Diagrams: Locations of major assemblies

View printer major component locations diagrams.

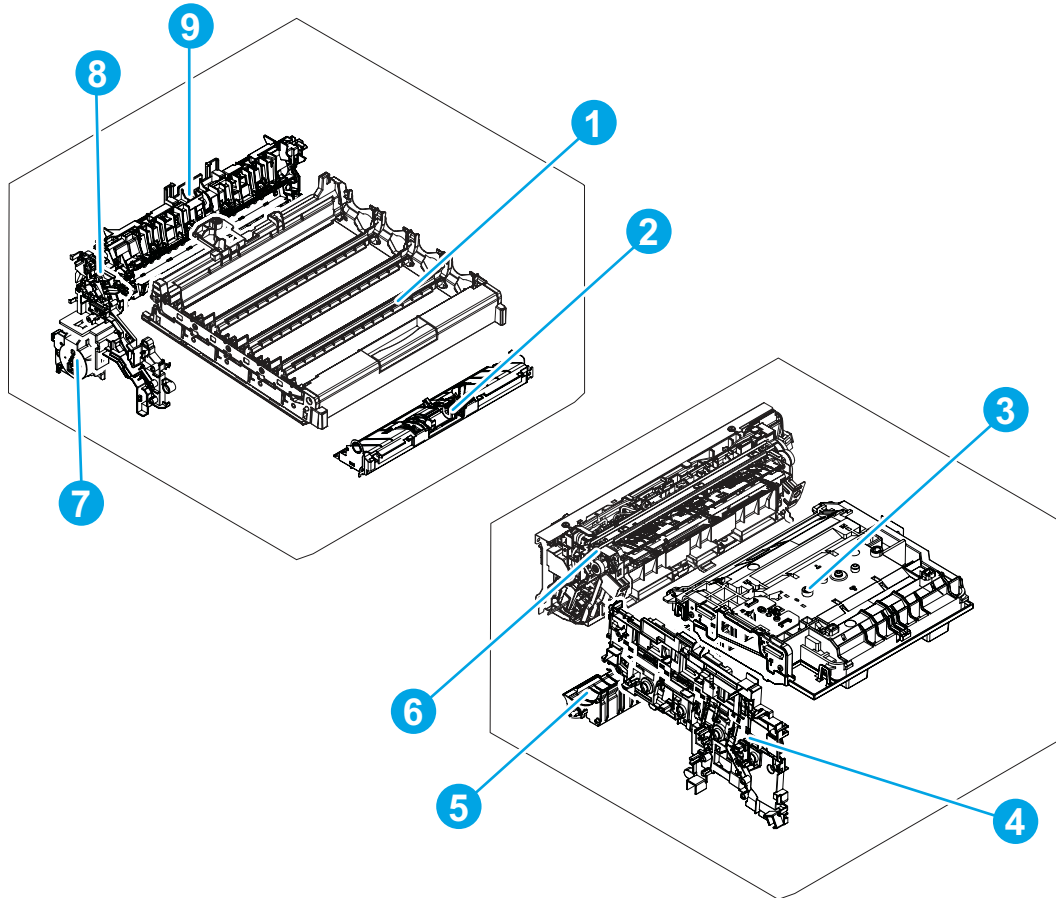
Main assemblies (base printer)

Figure 4-41 Main assemblies (base printer; 1 of 2)



Item	Description	Item	Description
1	Duplex drive assembly	5	Registration density sensor assembly
2	Duplex upper guide assembly	6	Feed lower guide assembly
3	ITB assembly	7	Feed upper guide assembly
4	Lifter drive assembly	8	Pickup drive assembly

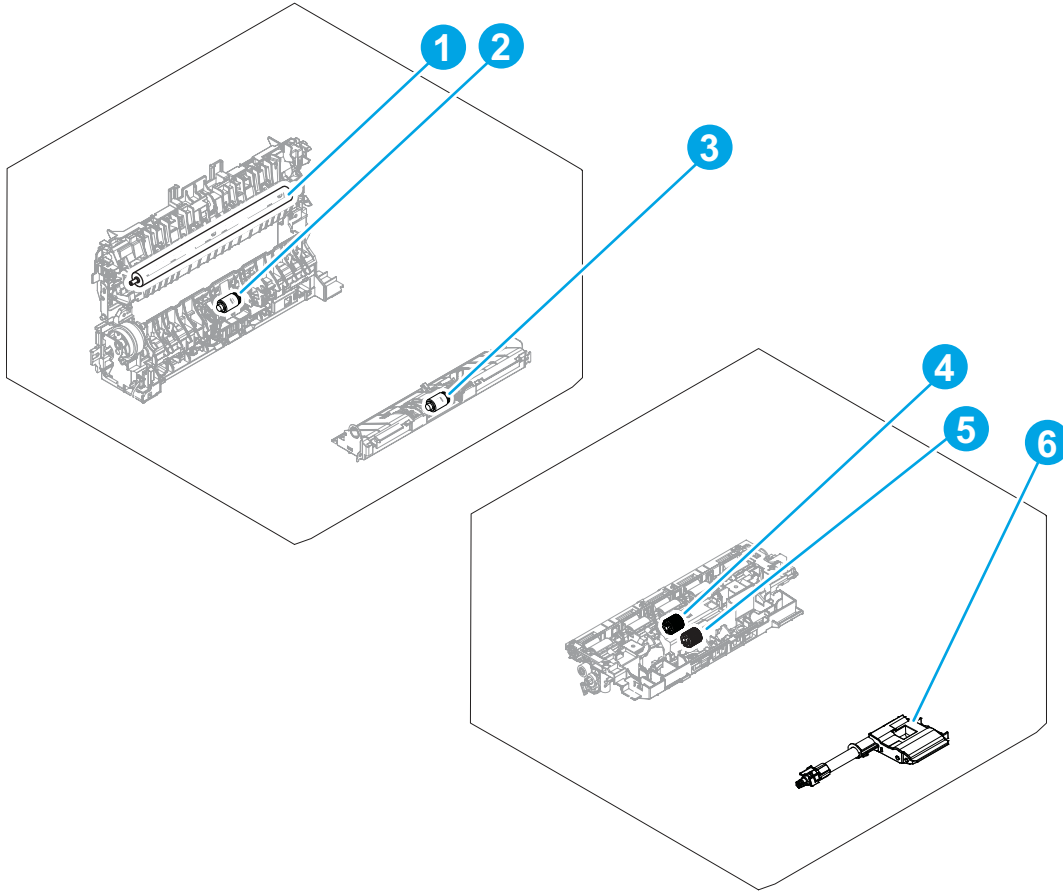
Figure 4-42 Main assemblies (base printer; 2 of 2)



Item	Description	Item	Description
1	Cartridge tray assembly	6	Fuser
2	MP lower guide assembly	7	Duplex re-pickup clutch assembly
3	Laser scanner assembly	8	Interlock holder assembly
4	PCA holder assembly	9	T2 assembly
5	Duplex guide assembly		

Rollers and pads (base printer)

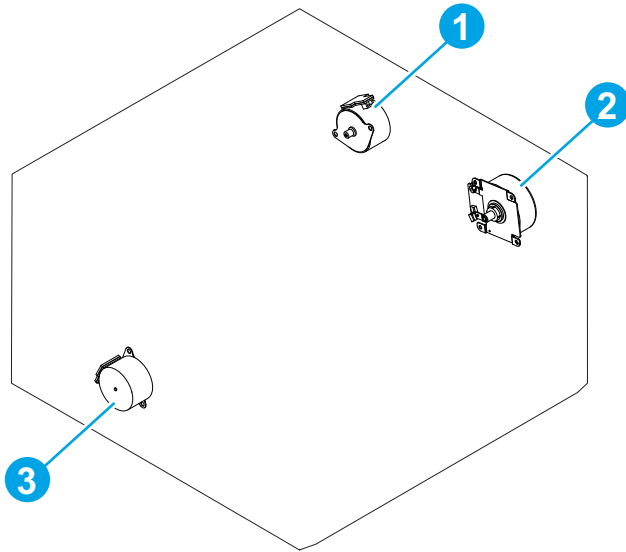
Figure 4-43 Rollers and pads (base printer)



Item	Description	Item	Description
1	T2 roller	4	Tray 2 feed roller
2	Tray 2 separation roller	5	Tray 2 pickup roller
3	Tray 1 separation roller	6	Tray 1 pickup roller assembly

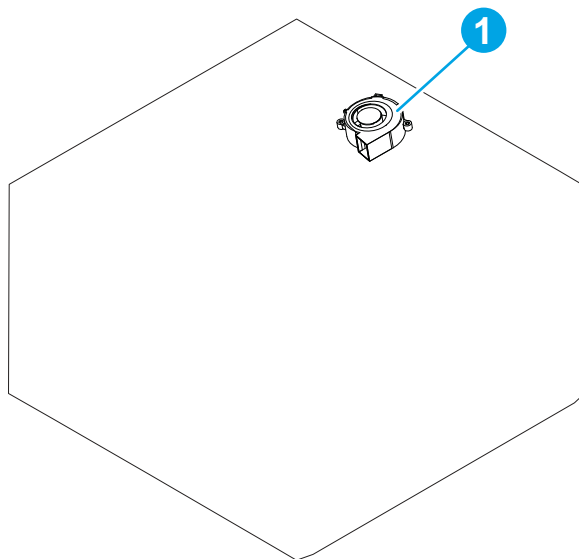
Motors and fans (base printer)

Figure 4-44 Motors (base printer)



Item	Description
1	Fuser motor (M2)
2	Drum motor (M1)
3	Feed motor (M3)

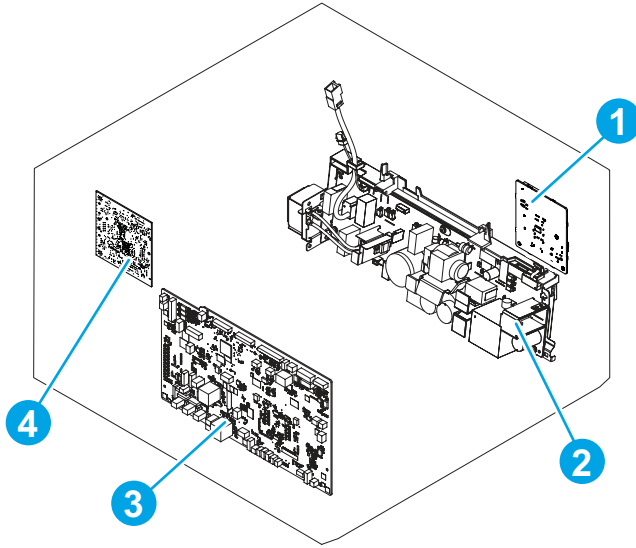
Figure 4-45 Fans (base printer)



Item	Description
1	Cartridge fan (FM1)

Printed circuit assemblies (PCAs; base printer)

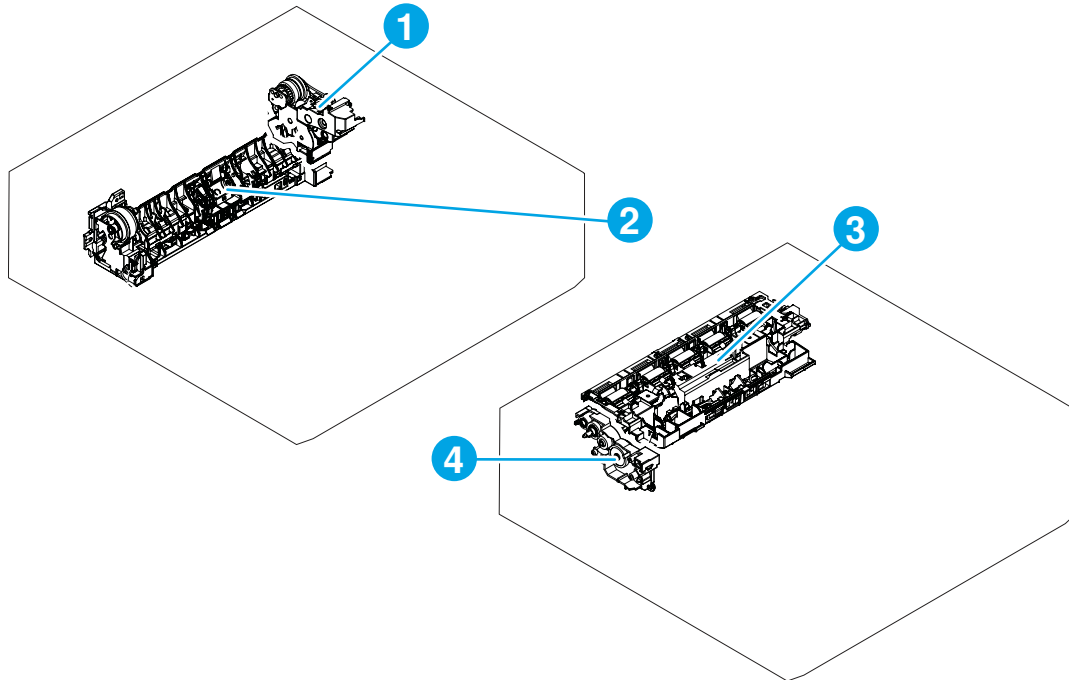
Figure 4-46 PCAs (base printer)



Item	Description
1	Fuser motor PCA
2	Low-voltage power supply (LVPS)
3	Engine controller PCA
4	Formatter PCA

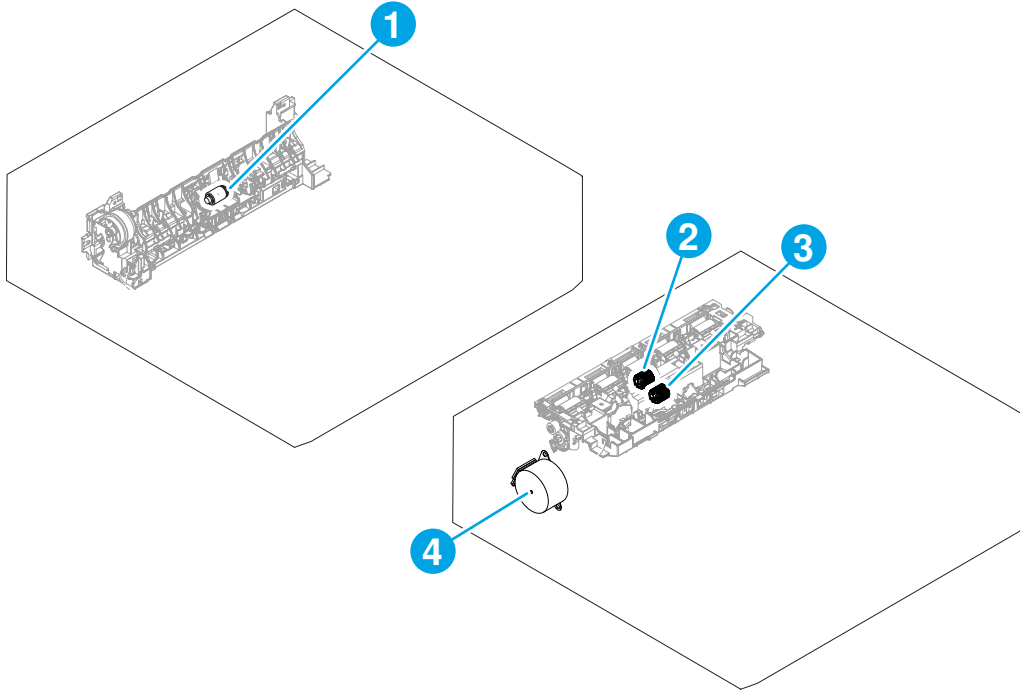
Major assemblies (550-sheet paper feeder)

Figure 4-47 Major assemblies (550-sheet paper feeder; 1 of 2)



Item	Description
1	Lifter drive assembly
2	Feed lower guide assembly
3	Feed upper guide assembly
4	Pickup drive assembly

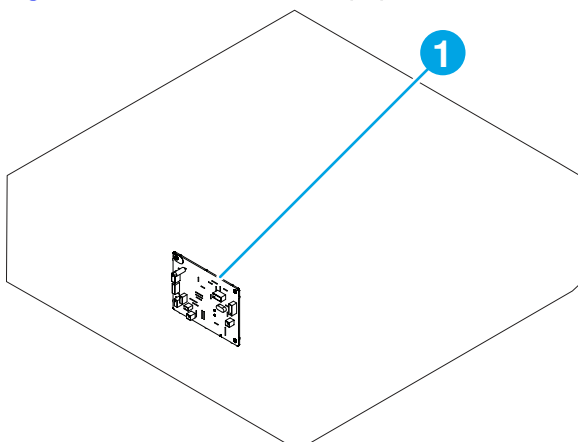
Figure 4-48 Major assemblies (550-sheet paper feeder, 2 of 2)



Item	Description
1	Separation roller
2	Feed roller
3	Pickup roller
4	Tray 3 feed motor

Printed circuit assemblies (PCAs; 550-sheet paper feeder)

Figure 4-49 PCAs (550-sheet paper feeder)

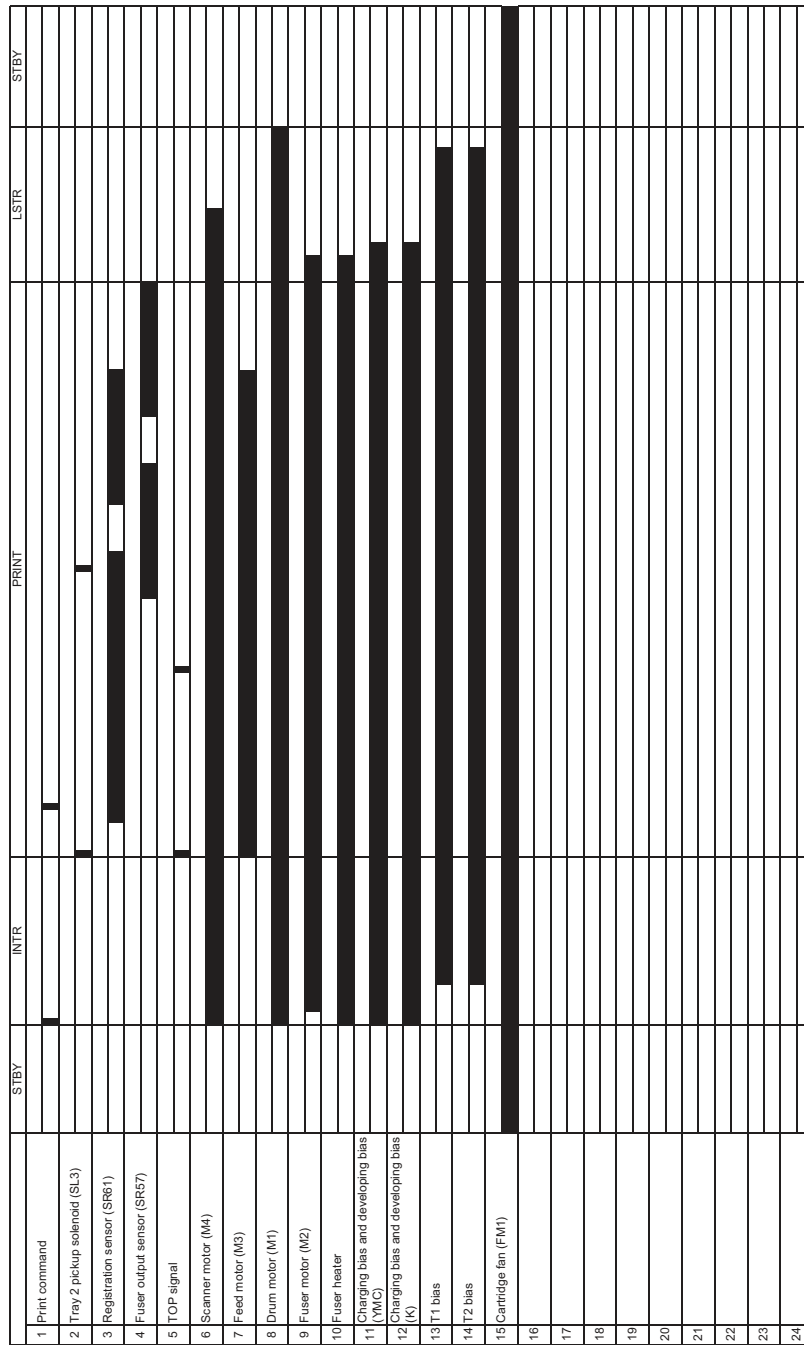


Item	Description
1	PF controller PCA

Diagrams: General timing chart

View the printer timing chart diagram (two consecutive prints on LTR paper, full color 1:1 speed).

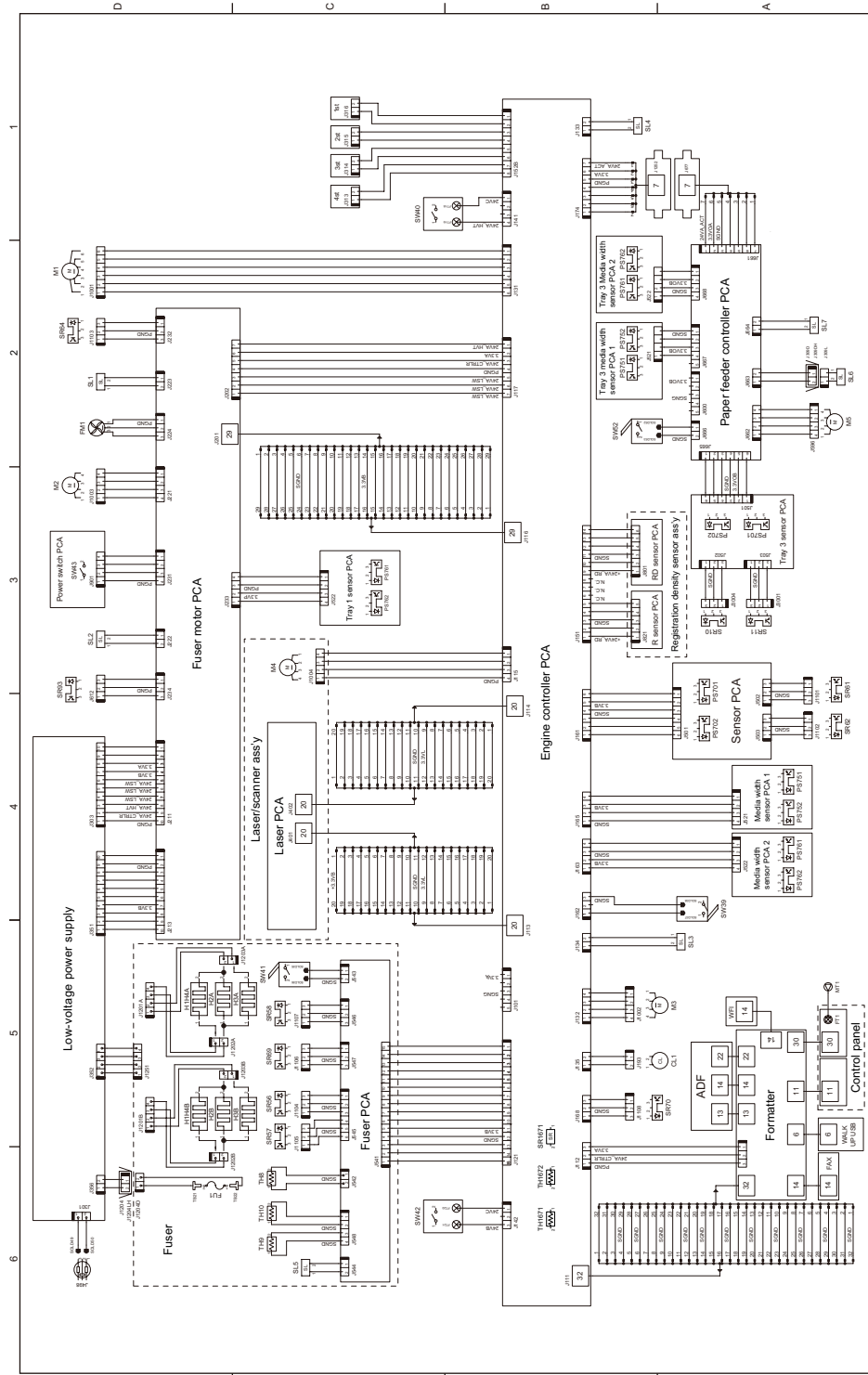
Figure 4-50 Timing chart



Diagrams: General circuit diagrams

View the printer circuit diagram.

Figure 4-51 General circuit diagram (base printer)



Internal test and information pages

Learn about printer test and information pages.

Configuration Report

Print and find printer information on the Configuration Report.

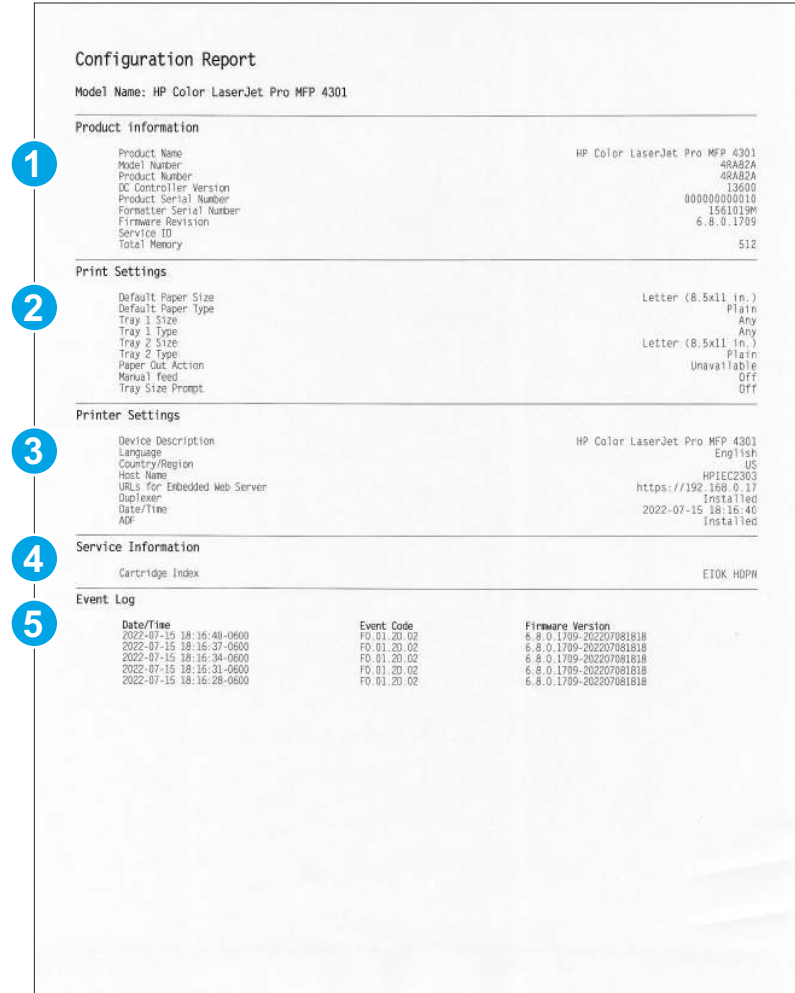


NOTE: This page might differ between MFP and SFP printers.

Print a Configuration Report

1. Open the following menus:
 - [Menu](#)
 - [Tools](#)
 - [Status Reports](#)
2. Select the [Configuration Report](#) item.
3. Do one of the following:
 - **MFP:** Touch the **Print** button to print the page.
 - **SFP:** Navigate to and select the **Print** item at the top of the menu to print the page.

Figure 4-52 Sample MFP Configuration Report



Item	Description
1	Printer information
2	Print Settings
3	Printer Settings
4	Service Information
5	Event Log

Certain information, such as the firmware revision, the EWS IP address, and the most recent event log entries, are especially helpful while servicing the printer.

Table 4-3 Important information on the Configuration Report

Type of information	Specific information	Configuration Report location
Firmware Serial Number	Firmware information	Product information
Firmware Revision	Firmware information	Product information
Total Memory	Total RAM information	Product information
URLs for Embedded Web Server	IP address to access the EWS	Printer Settings

Table 4-3 Important information on the Configuration Report (continued)

Type of Information	Specific Information	Configuration Report location
Event-log information	Error information	Event Log

Connectivity Status Report

Print and find printer information on the Connectivity Status Report.

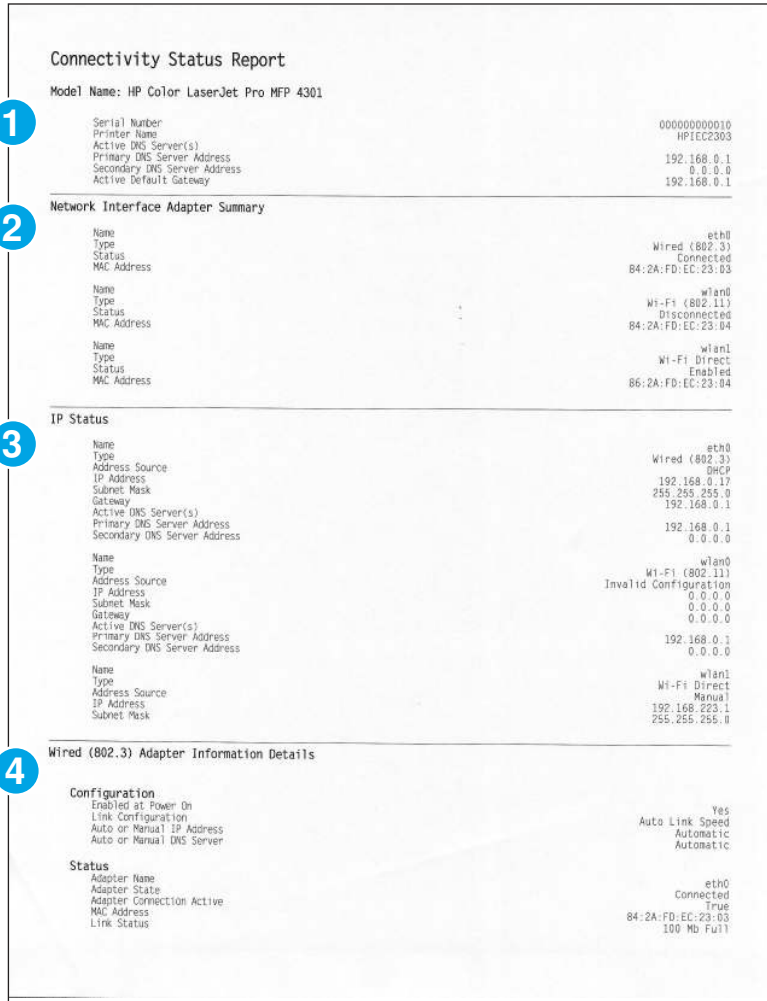


NOTE: This page might differ between MFP and SFP printers.

Print a Connectivity Status Report

1. Open the following menus:
 - [Menu](#)
 - [Tools](#)
 - [Status Reports](#)
2. Select the [Connectivity Status Report](#) item.
3. Do one of the following:
 - **MFP:** Touch the **Print** button to print the page.
 - **SFP:** Navigate to and select the **Print** item at the top of the menu to print the page.

Figure 4-53 Sample MFP Connectivity Status Report



Item	Description
1	Model Name (and information)
2	Network Interface Adapter Summary
3	IP Status
4	Wired (802.3) Adapter Information Details

Diagnostics Report

Print and find printer information on the Diagnostics Report.

Print a Diagnostics Report

1. Open the following menus:

- [Menu](#)
- [Tools](#)
- [Status Reports](#)

2. Select the [Diagnostics Report](#) item.
3. Do one of the following:
 - **MFP:** Touch the **Print** button to print the page.
 - **SFP:** Navigate to and select the **Print** item at the top of the menu to print the page.

Figure 4-54 Sample Diagnostics Report



Item	Description
1	Calibration Information
2	Color Density

Reports menu

Learn about the control-panel [Reports](#) menu.

- **Menu > Tools > Reports > Status Reports**
- **MFP:** Touch the **Print** button to print the page.
- **SFP:** Navigate to and select the **Print** item at the top of the menu to print the page.

Table 4-4 Reports menu

Report	Description
Network Security Report	Printer network information. For example, information about 802.1x and certificates.
Usage Report	Printer usage information. For example, information about calculated equivalent impressions (by type) and scan counts by destination (MFP only).
Scan to Network Folder Setup (MFP only)	Printer scan to network location information. For example, information about what's needed before you begin and using the printer home page (EWS) for scanning to a network folder setup.
Wi-Fi Quick Start Guide	Printer wi-fi printing setup information. For example, information about different methods to setup wi-fi printing and how to test the installation.
Diagnostics Report	Printer diagnostic information. For example, information about the calibration and color density..
HP Supplies Status Report	Printer supplies information. For example, information about cartridge status and how to order supplies.
Scan to Email Setup (MFP only)	Printer scan to email information. For example, information about what's needed before you begin and using the printer home page (EWS) for scanning to email setup.
Web Access Test Report	Printer web access information For example, information about errors, gateway and DNS testing, and the current configuration.
Configuration Report	Printer information. For example, information about the installed firmware revision, total installed memory, and the Embedded Web Server (EWS) IP address.
Wi-Fi Direct Report	Printer wi-fi information. For example, information about how to print using wi-fi direct with different operating systems.
Connectivity Status Report	Printer connectivity information. For example, information about the IP status and wired adapter details.
Job Log	Printer job log information. For example, information about the user, job name, and date for printer jobs.
Wi-Fi Metrics Data Report	Printer wi-fi metrics data information. For example, information about connectivity details, signal strength, and the IP address usage history.
Web Services Information page	Printer web-services information. For example, information about the HP Smart feature and printing from a mobile device.
Scan to Computer Setup (MFP only)	Printer scan to computer information. For example, information about setting up the HP software.
Wi-Fi Network Test Results	Printer wi-fi network test information. For example, information about errors/solutions, diagnostic results, and current configuration.
Network Configuration Report	Printer network configuration information. For example, information about IPV4/IPV6 settings, security settings, and automatic firmware updates.
Event Log	Printer error log information. For example, information about the date/time, type, and description of the error.

Menu (SFP)

Learn about the control-panel menu sub-menus.

To access the menus, select [Menu](#) on the control-panel Home screen.

Info menu (SFP)

Learn about the control-panel Info menu.

To access the sub-menu: **Menu > Info**.

Table 4-5 Info menu

Menu Item	First level	Description
Print Details		Select this item to print a Configuration Report .
Wi-Fi Details: [STATUS]	[STATUS]	Select Print Details to print a Network Configuration Report.
	Band Frequency	Select Settings to go to the Wi-Fi settings menu.
	Network Name	<ul style="list-style-type: none">• Status
	Host Name	<ul style="list-style-type: none">• Wi-Fi Setup Wizard
	Bonjour Name	<ul style="list-style-type: none">• Wi-Fi Protected Setup
	IP Address	<ul style="list-style-type: none">• Wi-Fi Details
	IPv6 Status	<ul style="list-style-type: none">• IPv4: (toggle on/off and set the configuration method - DHCP/Auto IP/Manual)
	MAC Address	<ul style="list-style-type: none">• 5 GHz Band Frequency: (toggle on/off)
	Print Details	
	Settings	
Ethernet Details: [STATUS]	[STATUS]	Select Print Details to print a Network Configuration Report.
	Host Name	Select Settings to go to the Ethernet settings menu.
	Bonjour Name	<ul style="list-style-type: none">• Ethernet Details
	IP Address	<ul style="list-style-type: none">• IPv4:
	IPv6 Status	<ul style="list-style-type: none">• IPv6:
	MAC Address	<ul style="list-style-type: none">• Link Speed
	Print Details	
	Settings	
Wi-Fi Direct: [STATUS]	[STATUS]	Select Settings to go to the Wi-Fi Direct settings menu.
	Wi-Fi Direct Name	<ul style="list-style-type: none">• Status: (toggle on/off)
	Connection Method	<ul style="list-style-type: none">• View Details
	Devices Connected	<ul style="list-style-type: none">• Connection Method (Automatic/Manual)
	Settings	
Firmware Version:		Displays the installed firmware version identification number.

Status menu (SFP)

Learn about the control-panel Status menu.

To access the sub-menu: **Menu > Status**.

Table 4-6 Status menu

Menu Item	Description
Status Jobs	Displays the status of print jobs.
Job Log	View the job log list. Select Job Log Print to print the log.
Messages	View any current printer messages. For example, Network Connection Unavailable displays if the printer is not connected to a network.

Print menu (SFP)

Learn about the control-panel Print menu.

To access the sub-menu: **Menu > Print**.

Table 4-7 Print menu

Menu Item	Description
Print from USB	Print from a list of available files on a USB storage device (connected to the walk-up USB port).
Job Storage	Print from a list of available files on a USB storage device (connected to the rear USB port). NOTE: This feature must be enabled from the printer home page (EWS).

Supplies menu (SFP)

Learn about the control-panel Supplies menu.

To access the sub-menu: **Menu > Supplies**.

Table 4-8 Supplies menu

Menu Item	First level	Description
Estimated Levels	Estimated Levels	Displays a graphical representation of each toner cartridges toner level.
	[Cartridge number]	Select a cartridge level bar, and then press down on the dial to select it and display the following:
	Print Details (Select this item to print an HP Supplies Status Report)	<ul style="list-style-type: none"> • Low Warnings Thresholds (set a percentage of remaining toner that triggers the warning) • Very Low Behavior (select from Continue, Prompt to Continue, or Stop for the black and color cartridges) • Store Supply Usage Data (toggle on/off) • Cartridge Protection (toggle on/off) <p>NOTE: Enabling cartridge protection is permanent.</p> <ul style="list-style-type: none"> • Authorized HP Cartridges Policy (toggle on/off)
	Settings	
Transfer Kit: [STATUS]		Displays the status of the printer transfer kit.
Get Help		Displays HP Plus Information.
Settings	Low Warnings Thresholds	Use the Low Warnings Thresholds item to set a percentage of remaining toner that triggers the warning.
	Very Low Behavior	Use the Very Low Behavior item to set the cartridge low behavior. Select from Continue , Prompt to Continue , or Stop for the black and color cartridges.
	Store Supply Usage Data	Use the Store Supply Usage Data item to enable or disable this option.
	Cartridge Protection	Use the Cartridge Protection item to enable this option
	NOTE: Enabling cartridge protection is permanent.	
	Authorized HP Cartridges Policy	NOTE: Enabling cartridge protection is permanent. Use this Authorized HP Cartridges Policy item to enable or disable this option.

Trays menu (SFP)

Learn about the control-panel Trays menu.

To access the sub-menu: **Menu > Trays.**

Table 4-9 Trays menu

Menu Item	First level	Description
Tray 1: [SIZE]	Paper Size	Select form a list of available paper size/types.
	Paper Type	
Tray 2: [SIZE]	Paper Size	Select form a list of available paper size/types.
	Paper Type	

Settings menu (SFP)

Learn about the control-panel Settings menu.

To access the sub-menu: **Menu > Settings**.

Table 4-10 Settings menu

Menu item	First level	Second level	Description
General	Date and Time	Set Date	Set the date and time.
		Set Time	NOTE: Select Apply to save the settings.
General	Energy	Sleep	Set the printer power management behavior.
		Shutdown	
		Disable Shutdown	
General	[LANGUAGE]		Chose from a list of available languages.
General	Quiet Mode		Toggle the setting on/off.
General	Inactivity Timeout		Set the amount of inactivity time before the printer goes to sleep.
General	[COUNTRY/ REGION]		Chose from a list of available country/regions.
General	Jam Recovery:	Automatic	Set the printer jam recovery behavior.
		On	
		Off	
Network Settings	Wi-Fi	Status: [STATUS]	Use the Status: [STATUS] item to toggle Wi-Fi on/off.
		Wi-Fi Setup Wizard	Use the Wi-Fi Setup Wizard item to quickly connect to available Wi-Fi routers.
		Wi-Fi Protected Setup	Use the Wi-Fi Protected Setup item to setup up a Wi-Fi connection using the WPS function of a router.
		Wi-Fi Details	Use the Wi-Fi Details item to print a Network Configuration Report.
		IPv4: [STATUS]	
		5 GHz Band Frequency: [STATUS]	Use the IPv4: [STATUS] item to toggle the option on/off and set the configuration method (DHCP / Auto IP / Manual).
		Use the 5 GHz Band Frequency: [STATUS] item to toggle the option on/off.	

Table 4-10 Settings menu (continued)

Menu Item	First level	Second level	Description
Network Settings	Ethernet Settings	Ethernet Details	Use the Ethernet Details item to display:
		IPv4:	<ul style="list-style-type: none"> • [STATUS]
		IPv6:	<ul style="list-style-type: none"> • Host Name
		Link Speed	<ul style="list-style-type: none"> • Bonjour Name • IP Address <p>CAUTION: Changing the IP address removes the printer from the network.</p> <ul style="list-style-type: none"> • IPv6 Status • Print Details (print a Network Configuration Report) <p>Use the IPv4: or IPv6: item to toggle the setting on/off and to set the configuration method (DHCP/Auto IP/Manual).</p> <p>CAUTION: Changing the IP address removes the printer from the network.</p> <p>Use the Link Speed item to select the link speed form a list of available speeds.</p>
Network Settings	Wi-Fi Direct	[STATUS]	Use the [STATUS] item to toggle Wi-Fi Direct on/off.
		View Details	Use the View Details item to display:
		[Connection Method]	<ul style="list-style-type: none"> • [STATUS] • Wi-Fi Direct Name • [Connection Method] • Wi-Fi Direct Password (not readable) • Devices Connected <p>Use the [Connection Method] item to choose between an Automatic or Manual connection.</p>
Network Settings	Bluetooth Low Energy	On	Use the Bluetooth Low Energy item to toggle the setting on/off.
		Off	NOTE: Bluetooth Low Energy is an ultra-low power wireless technology that provides connections between the printer and other devices. This feature is enabled by default.
Network Settings	Host Name		Use the Host Name item to set a unique host name.
Network Settings	Bonjour Name		Use the Bonjour Name item to set a unique bonjour name.
			NOTE: After changing the Bonjour Name , anyone connected to the printer will need to reconnect
Network Settings	Proxy		Use the Proxy item to toggle proxy settings on/off.
Network Settings	Security	Disable Firewall	Use the Disable Firewall item to enable or disable firewall protection.
		Reset 802.1x Authentication	Select Yes or No to activate the Reset 802.1x Authentication item.
		Reset Security	Use the Reset Security item to restore security defaults.

Table 4-10 Settings menu (continued)

Menu Item	First level	Second level	Description
Network Settings	Network Reports	Print Network Settings Network Security Connectivity Status Page	Select the appropriate item to print the report.
Network Settings	Restore Network Settings		Use the Restore Network Settings item to restore network setting defaults. CAUTION: This item restores all network settings to original values including proxy settings and the administrator password for the Embedded Web Server (EWS).
Printer Update	Printer Updates Allow Upgrades:	Auto Update Notify	Use this item to set firmware update behavior (HP recommends using the Auto Update setting). NOTE: This printer uses dynamic security measures to block cartridges using a non-HP chip. Periodic firmware updates maintain the effectiveness of these measures and might block cartridges that previously worked. The printer is intended to work only with new or reused cartridges that have a new or reused HP chip.
Events and Notifications			Displays a list of events or notifications if available.
Tray Settings	Manual Feed Size/Type Prompt Paper Out Action		Use the Manual Feed item to toggle this option on/off Use the Size/Type Prompt to enable a displayed prompt for tray size and type (Display/Do Not Display). Use the Paper Out Action item to set the paper out behavior. Set the Auto Continue Time-Out (set a specific time period) and Auto Continue Action (cancel or override prompt) items.
Supplies	Low Warnings Thresholds (set a percentage of remaining toner that triggers the warning) Very Low Behavior (select from Continue, Prompt to Continue, or Stop for the black and color cartridges) Store Supply Usage Data (toggle on/off) Cartridge Protection (toggle on/off) Authorized HP Cartridges Policy (toggle on/off)		Use the Low Warnings Thresholds item to set a percentage of remaining toner that triggers the warning. Use the Very Low Behavior item to select from Continue , Prompt to Continue , or Stop for the low cartridge behavior. Use the Store Supply Usage Data item to toggle the option on/off. Use the Cartridge Protection item to toggle the option on/off. NOTE: Enabling cartridge protection is permanent. Use the Authorized HP Cartridges Policy item to toggle the option on/off.

Table 4-10 Settings menu (continued)

Menu Item	First level	Second level	Description
Security	Device Announcement Agent		Use the Device Announcement Agent item to toggle the option on/off. NOTE: When enabled, the printer uses the Device Announcement Agent to locate the Security Manager server, and then requests secure communications.

Tools menu (SFP)

Learn about the control-panel Tools menu.

To access the sub-menu: **Menu > Tools**.

Table 4-11 Tools menu

Menu Item	First level	Second level	Description
Troubleshooting	Print Quality	Cleaning Page	Use the Cleaning Page item to perform a cleaning operation. Select Print to start the process. NOTE: The cleaning process takes a few minutes to complete.
Troubleshooting	Print Quality	Color Calibration	Choose from the following: <ul style="list-style-type: none">• Calibrate Now Perform a calibration now.• Power On Calibration Choose a time interval for a calibration to begin after the printer power is turned on• Time-Based Calibration Choose a time interval between calibrations from a list.

Table 4-11 Tools menu (continued)

Menu Item	First level	Second level	Description
Maintenance	Restore Settings	Reset Printer Supply Region Reset User Settings Reset User Data Restore All Factory Defaults	<p>Use the Reset Printer Supply Region item to automatically reset the printer supply region. Select Reset to begin the process or select Cancel to exit without resetting.</p> <p>Use the Reset User Settings item to reset any customer unique settings to factory defaults. Select Restore to begin the process or select Cancel to exit without resetting.</p> <p>Use the Reset User Data item to reset any customer unique data to factory defaults. Select Restore to begin the process or select Cancel to exit without resetting.</p> <p>Use the Restore All Factory Defaults item to reset all configured settings to factory defaults. Select Restore to begin the process or select Cancel to exit without resetting.</p> <p>NOTE: All configured settings are reset including:</p> <ul style="list-style-type: none"> • Administrator passwords • Network configurations • Stored jobs (if available) • HP Workpath licenses (if available) • Web Services account information
Maintenance	Firmware	View Details Check for Update Update Printer from USB	<p>Use the View Details item to determine the currently installed firmware version number.</p> <p>Use the Check for Update item to automatically check for and install an available firmware upgrade.</p> <p>Select Yes to begin the process or select No to exit without resetting.</p> <p>NOTE: All configured settings are reset when an upgrade is installed:</p> <ul style="list-style-type: none"> • Administrator passwords • Network configurations • Stored jobs (if available) • HP Workpath licenses (if available) • Selected country/region and language • Web Services account information <p>Use the Update Printer from USB item to upgrade the firmware using the printer front USB port. For more information, go to USB flash drive (control-panel menu) on page 104.</p>
Service			<p>To access the Service menu, enter the default service personal identification number (PIN).</p> <p>The default PIN for this printer is located on a sticker adhered to the front of the toner cartridge tray.</p> <p>NOTE: If the default PIN has been changed, contact the printer administrator.</p>

Table 4-11 Tools menu (continued)

Menu Item	First level	Second level	Description
Service	Information	Product Number	Use the Product Number item to determine the printer product number.
		Serial Number	Use the Serial Number item to determine the printer serial number.
		Country/Region Language: [LANGUAGE]	Use the Country/Region Language: [LANGUAGE] item to determine the printer country/region and language setting.
		Service Counts	Use the Service Counts item to display the following page counts:
		Firmware Version	Use the Firmware Version item to determine the currently installed firmware version number
		Event Log	Use the Event Log item to view a list of the latest event log entries.
		Wi-Fi Region: [COUNTRY]	Use the Wi-Fi Region: [COUNTRY] item to determine the Wi-Fi region setting.
Service	Service Resets	Reset User Settings	Use the Reset User Settings item to reset any customer unique settings to factory defaults. Select Proceed to begin the process or select Dismiss to exit without resetting.
		Reset User Data	Use the Reset User Data item to reset any customer unique data to factory defaults. Select Proceed to begin the process or select Dismiss to exit without resetting.
		Restore All Factory Defaults	Use the Restore All Factory Defaults item to reset all configured settings to factory defaults. Select Proceed to begin the process or select Dismiss to exit without resetting.
		Transfer Kit Reset	Use the Transfer Kit Reset item to reset the transfer kit firmware counter after installing a replacement transfer kit. Select Reset to begin the process or select Cancel to exit without resetting.
		Reset	Use the Reset item to test print using a different set of toner cartridges. Select OK to enter the mode or select Cancel to exit.
		Repair Mode	<p>NOTE: All configured settings are reset including:</p> <ul style="list-style-type: none"> • Administrator passwords • Network configurations • Stored jobs (if available) • HP Workpath licenses (if available) • Web Services account information <p>Immediately after selecting OK, install one or more test cartridges in the printer.</p> <p>NOTE: The printer remains in Repair Mode until up to 75 pages have been printed using the test cartridges</p>

Table 4-11 Tools menu (continued)

Menu Item	First level	Second level	Description
Service	System Configuration	Serial Number	Use the Serial Number item to restore/change the printer serial number if necessary. Select Set to set the number.
		Service ID	Use the Service ID item to display the service ID number.
		Ethernet MAC Address [ALPHNUMNERIC]	Use the Ethernet MAC Address item to change the Ethernet MAC address.
		Wi-Fi MAC Address [ALPHNUMNERIC]	Use the Wi-Fi MAC Address item to change the Wi-Fi MAC address.
		Change	Use the Change item to change the current boot mode.
Service	Connectivity	Connectivity Status Page	Use the Connectivity Status Page item to print a Connectivity Status Page
		Connectivity Diagnostics	Use the Connectivity Diagnostics item to print a Wi-Fi Network Test Results page.
		Wi-Fi Metrics Data Report	Use the Wi-Fi Metrics Data Report item to print a Wi-Fi Metrics Data Report.
Service	Service Tests	Dial Test	Use the Dial Test item to test the control-panel rotary dial. Select Start to begin, and then follow the prompts on the display.
		Display Test	Use the Display Test item to test the control-panel display. Select Proceed to begin an internal test. If the message Test Passed displays, select Cancel to exit.
		Walk-up USB Port Test	Use the Walk-up USB Port Test item to test the front USB port. Insert a USB storage device in the front USB port, and then select Proceed to begin. If the message USB Device Connected displays, the test was successful.

Menu (MFP)

Learn about the control-panel menu sub-menus.

To access the menus, select [Menu](#) on the control-panel Home screen.

Info menu (MFP)

Learn about the control-panel Info menu.

To access the sub-menu: **Menu > Info**.

Table 4-12 Info menu

Menu Item	First level	Description
Printer	Printer Information [NAME/SERIALNUMBER]	Use the Printer item to view printer information. <ul style="list-style-type: none"> Printer name Printer serial number

Table 4-12 Info menu (continued)

Menu Item	First level	Description
Connectivity	Wi-Fi	Use the Connectivity item to view the following information: <ul style="list-style-type: none">• Wi-Fi status and host name• Ethernet status and host name• Wi-Fi Direct status
	Ethernet	
	Wi-Fi Direct	

Jobs menu (MFP)

Learn about the control-panel Jobs menu.

To access the sub-menu: **Menu > Jobs**.

Table 4-13 Jobs menu

Menu Item	Description
IN PROGRESS	View a list of current print jobs.
History	View a list of past print jobs.

Supplies menu (MFP)

Learn about the control-panel Supplies menu.

To access the sub-menu: **Menu > Supplies**.

Table 4-14 Supplies menu



Menu Item	First level	Description
Cartridges	Estimated Levels	Displays a graphical representation of each toner cartridges toner level. Select a cartridge level bar to display the following: <ul style="list-style-type: none">• Cartridge warnings (if applicable)• Cartridge number Select Print to print a HP Supplies Status Report or X to exit. NOTE: Select More Info to display HP Plus Information.
		Transfer Kit

Paper menu (MFP)

Learn about the control-panel Paper menu.

To access the sub-menu: **Menu > Paper**.

Table 4-15 Paper menu

Menu Item	First level	Second level	Description
Tray 1 [GRAPHICAL REPRESENTATION]	 (setup icon)	Manual Feed Prompt	Use the Manual Feed Prompt item to select Tray 1 feed behavior.
		Manual Feed	Toggle the Manual Feed item on/off.
		Size/Type Prompt	Toggle the Size/Type Prompt item on/off.
		Paper Out Action	Use the Paper Out Action item to select and configure: <ul style="list-style-type: none"> • Auto Continue Time-Out (select from a list of time periods) • Auto Continue Action <ul style="list-style-type: none"> – Override Size and Type – Cancel
Tray 1 [GRAPHICAL REPRESENTATION]	Modify	Size	Select form a list of available paper size/types.
		Type	
Tray 2 [GRAPHICAL REPRESENTATION]	 (setup icon)	Manual Feed Prompt	Use the Manual Feed Prompt item to select Tray 1 feed behavior.
		Manual Feed	Toggle the Manual Feed item on/off.
		Size/Type Prompt	Toggle the Size/Type Prompt item on/off.
		Paper Out Action	Use the Paper Out Action item to select and configure: <ul style="list-style-type: none"> • Auto Continue Time-Out (select from a list of time periods) • Auto Continue Action <ul style="list-style-type: none"> – Override Size and Type – Cancel
Tray 2 [GRAPHICAL REPRESENTATION]	Modify	Size	Select form a list of available paper size/types.
		Type	

Settings menu (MFP)

Learn about the control-panel Settings menu.

To access the sub-menu: **Menu > Settings**.

Table 4-16 Settings menu

Menu Item	First level	Second level	Description
General	Date and Time	Time Zone	Set the time zone, date and time.
		Set Date	NOTE: Select Save to save the settings.
		Set Time	

Table 4-16 Settings menu (continued)

Menu Item	First level	Second level	Description
General	Energy	Sleep Inactivity Shutdown Disable Shutdown	Set the printer power management behavior.
General	Language [LANGUAGE]		Chose from a list of available languages.
General	Quiet Mode		Toggle the setting on/off.
General	Inactivity Timeout		Set the amount of inactivity time before the printer goes to sleep.
General	Country/Region [COUNTRY/REGION]		Chose from a list of available country/regions.
General	Jam Recovery [SETTING]	Automatic On Off	Set the printer jam recovery behavior.
Network Settings	Wi-Fi	Wi-Fi Print Start Guide Wi-Fi Setup Wizard Wi-Fi Protected Setup View Details Wi-Fi Test Report IPv4 IPv6 5 GHz Band Frequency Configuration Summary	<p>Use the Wi-Fi item to toggle this option on/off.</p> <p>Use the Print Start Guide item to print a getting started guide (select Print).</p> <p>Use the Wi-Fi Setup Wizard item to quickly connect to available Wi-Fi routers (select Start).</p> <p>Use the Wi-Fi Protected Setup item to setup up a Wi-Fi connection using the WPS function of a router (select Start).</p> <p>Use the View Details item to view configuration settings or print a Network Configuration Report (select Print Details to print the report).</p> <p>Use the Wi-Fi Test Report item to print a test report (select Print).</p> <p>Use the IPv4 or IPv6 item to change IPv# settings. For example, IPV# Configuration, DNS Configuration Method, and Primary DNS settings.</p> <p>CAUTION: Changing the IP address removes the printer from the network.</p> <p>Use the 5 GHz Band Frequency item to toggle the option on/off.</p> <p>Use the Configuration Summary item to view a summary of configuration settings (select Print Details to print the summary).</p>

Table 4-16 Settings menu (continued)

Menu Item	First level	Second level	Description
Network Settings	Ethernet Settings	View Details (select Print Details to print the details) IPv4: IPv6: Link Speed Configuration Summary	<p>Use the View Details item to display:</p> <ul style="list-style-type: none"> • [STATUS] • Host Name • Bonjour Name • IP Address • IPv6 Status • MAC Address (print a Network Configuration Report) <p>Use the IPv4 or IPv6 item to change IPv# settings. For example, IPv# Configuration, DNS Configuration Method, and Primary DNS settings.</p> <p>CAUTION: Changing the IP address removes the printer from the network.</p> <p>Use the Link Speed item to select the link speed form a list of available speeds.</p> <p>Use the Configuration Summary item to view a summary of configuration settings (select Print Details to print the summary).</p>
Network Settings	Wi-Fi Direct	Wi-Fi Direct View Details Wi-Fi Direct [NAME] Channel [#] Connection Method [CONNECTIONMETHOD]	<p>Use the Wi-Fi Direct item to toggle this option on/off.</p> <p>Use the View Details item to display:</p> <ul style="list-style-type: none"> • [STATUS] • Wi-Fi Direct Name • [Connection Method] • Wi-Fi Direct Password • Devices Connected <p>Use the Wi-Fi Direct item to change the Wi-Fi Direct Name.</p> <p>Use the Channel item to change the channel setting.</p> <p>Use the Connection Method item to choose an Automatic or Manual connection.</p>
Network Settings	Bluetooth Low Energy		<p>Use the Bluetooth Low Energy item to toggle the setting on/off.</p> <p>NOTE: Bluetooth Low Energy is an ultra-low power wireless technology that provides connections between the printer and other devices. This feature is enabled by default.</p>
Network Settings	AirPrint		Use the AirPrint item to toggle this option on/off.
Network Settings	IPv4		Use the IPv4 item to toggle this option on/off.
Network Settings	IPv6		Use the IPv6 item to toggle this option on/off.
Network Settings	Host Name		Use the Host Name item to set a unique host name.

Table 4-16 Settings menu (continued)

Menu Item	First level	Second level	Description
Network Settings	Bonjour Name		Use the Bonjour Name item to set a unique Bonjour name. NOTE: After changing the Bonjour Name , anyone connected to the printer will need to reconnect
Network Settings	Proxy Settings [###.###.###.###]		Use the Proxy item to set: <ul style="list-style-type: none"> • Toggle the option on/off • Proxy Type <ul style="list-style-type: none"> – Configuration Script – Manual • Proxy Server (change the proxy server IP address) <p>Select Apply to save the settings.</p>
Network Settings	Security	Disable Firewall Reset 802.1x Authentication Reset Security Announcement Agent	<p>Use the Disable Firewall item to enable or disable firewall protection.</p> <p>Select Yes or No to reset the Reset 802.1x Authentication item.</p> <p>Use the Reset Security item to restore security defaults. Select Reset to continue or Cancel to exit.</p> <p>Use the Announcement Agent item to toggle the option on/off.</p> <p>NOTE: When enabled, the printer uses the Device Announcement Agent to locate the Security Manager server, and then requests secure communications.</p>
Network Settings	Network Reports	Network Configuration Report Network Security Report Wi-Fi Test Report	Select Print to print the report.
Network Settings	Restore Network Settings	Yes No	Use the Restore Network Settings item to restore network setting defaults. CAUTION: This item restores all network settings to original values including proxy settings and the administrator password for the Embedded Web Server (EWS).
Printer Update	Allow Upgrades:	Auto Update (Recommended) Notify	Use this item to set firmware update behavior (HP recommends using the Auto Update setting). NOTE: Firmware updates can improve, enhance, or extend your printer's functionality and features, protect against security threats, and serve other purposes.
Tray Settings	Manual Feed Prompt Manual Feed Size/Type Prompt Paper Out Action		<p>Use the Manual Feed Prompt item to select manual feed behavior.</p> <p>Toggle the Manual Feed item on/off.</p> <p>Toggle the Size/Type Prompt item on/off.</p> <p>Use the Paper Out Action item to set the paper out behavior. Set the Auto Continue Time-Out (set a specific time period) and Auto Continue Action (cancel or override prompt) items.</p>

Table 4-16 Settings menu (continued)

Menu Item	First level	Second level	Description
Fax Settings	Fax Setup	Fax Header Name	<p>Use the Country/Region and Fax Header Name items to set the country/region where the printer is installed, and the Fax header test.</p> <p>To finish the fax setup process, select Next to answer a series of questions to complete the fax setup process.</p> <p>NOTE: If required, a prompt will indicate a distinctive ring setting is required.</p>
Fax Settings	Fax Send	Fax Dialing Scan and Fax method Fax Number Confirmation Error Correction Mode Overlay Fax Header Billing Code Fax Notifications	<p>Use the Fax Dialing item to set the following:</p> <ul style="list-style-type: none"> • Redial on Error (use a slider bar to set sensitivity) • Redial on No Answer (use a slider bar to set sensitivity) • Redial on Busy (use a slider bar to set sensitivity) • Redial Interval (use a slider bar to set interval) • Fax Send Speed (choose from Slow (9600 bps), Medium (14400 bps), or Fast (33600 bps)) • Pulse Dialing Mode (toggle on/off) • Dialing Prefix (enter a dialing prefix if one is required) <p>Use the Scan and Fax method item to toggle this option on/off.</p> <p>Use the Error Correction Mode item to toggle this option on/off.</p> <p>Use the Overlay Fax Header item to toggle this option on/off.</p> <p>Use the Billing Code item to toggle this option on/off.</p> <p>Use the Fax Notifications to choose from Do not notify, Notify when job completes, or Notify only if job fails.</p>

Table 4-16 Settings menu (continued)

Menu Item	First level	Second level	Description
Fax Settings	Fax Receive	Auto Answer	Use the Auto Answer item to toggle this option on/off.
		Rings to Answer	Use the Rings to Answer item to set the number of rings before the printer answers for a fax.
		Ring Volume	Use the Ring Volume to choose from a Low , High , or Off ring volume.
		Distinctive Ring	Use the Distinctive Ring item to choose from a list of distinctive fax rings.
		Error Correction Mode	Use the Error Correction Mode item to toggle this option on/off.
		2-Sided Fax Printing	Use the 2-Sided Fax Printing item to toggle this option on/off.
		Stamp Received Faxes	Use the Stamp Received Faxes item to toggle this option on/off.
		Fit to Page	Use the Fit to Page item to toggle this option on/off.
		Paper Tray	Use the Paper Tray to choose from Tray 1 , Tray 2 , or Automatic fax delivery bins.
		Fax Notifications	Use the Fax Notifications to choose from Do not notify , Notify when job completes , or Notify only if job fails .
		Junk Fax Blocking	Use the Junk Fax Blocking item to add phone numbers to block from receiving a fax from.
		Fax Receive Speed	Use the Fax Receive Speed item to (choose from Slow (9600 bps) , Medium (14400 bps) , or Fast (33600 bps)).
		Detect Dial Tone	Use the Detect Dial Tone item to toggle this option on/off.
Fax Settings	Fax Forwarding	Fax Forwarding	Use the Fax Forwarding item to toggle this option on/off.
		Fax Forward + Print	Use the Fax Forward + Print item to toggle this option on/off.
		Enter the Fax Number	Use the Enter the Fax Number item to enter the phone number where the fax should be forwarded.
Fax Settings	Fax Archive		Follow the instructions on the control-panel display to configure the Fax Archive item.
Supplies	Low Warnings Thresholds		Use the Low Warnings Thresholds item to set a percentage of remaining toner that triggers the warning.
	Very Low Behavior		Use the Very Low Behavior item to select from Continue , Prompt to Continue , or Stop for the low cartridge behavior.
	Store Supply Usage Data		Use the Store Supply Usage Data item to toggle the option on/off.
	Cartridge Protection		Use the Cartridge Protection item to toggle the option on/off.
	Authorized HP Cartridges Policy		NOTE: Enabling cartridge protection is permanent. Use the Authorized HP Cartridges Policy item to toggle the option on/off.

Tools menu (MFP)

Learn about the control-panel Tools menu.

To access the sub-menu: **Menu > Tools**.

Table 4-17 Tools menu

Menu item	First level	Second level	Description
Troubleshooting	Print Quality	Cleaning Page	<p>Use the Cleaning Page item to perform a cleaning operation.</p> <p>Select Print to start the process.</p> <p>NOTE: The cleaning process takes a few minutes to complete.</p>
Troubleshooting	Print Quality	Color Calibration	<p>Choose from the following:</p> <ul style="list-style-type: none"> • Calibrate Now Perform a calibration now. • Power On Calibration Choose a time interval for a calibration to begin after the printer power is turned on • Time-Based Calibration Choose a time interval between calibrations from a list.
Troubleshooting	Fax	Fax T.30 Trace Report Fax Text Report Clear Fax Log/Memory PBX Ring Detect	<p>Use the Fax T.30 Trace Report item to select from:</p> <ul style="list-style-type: none"> • Never automatically print • Print after every fax • Print only after sending faxes • Print only after receiving faxes • Print only after problems sending faxes • Print only after problems receiving faxes • Print after any fax problems <p>Use the Fax Text Report item to print a Fax Test Report.</p> <p>Use the Clear Fax Log/Memory item to clear the log and memory.</p> <p>Use the PBX Ring Detect to toggle this option on/off.</p> <p>NOTE: Enabling PBX Mode prevents false detection of extension phones being picked up if the voltage changes between rings.</p>

Table 4-17 Tools menu (continued)

Menu Item	First level	Second level	Description
Maintenance	Restore Settings	Reset Printer Supply Region Reset User Settings Reset User Data Restore All Factory Defaults	<p>Use the Reset Printer Supply Region item to automatically reset the printer supply region. Select Reset to begin the process or select Cancel to exit without resetting.</p> <p>Use the Reset User Settings item to reset any customer unique settings to factory defaults. Select Restore to begin the process or select Cancel to exit without resetting.</p> <p>Use the Reset User Data item to reset any customer unique data to factory defaults. Select Restore to begin the process or select Cancel to exit without resetting.</p> <p>Use the Restore All Factory Defaults item to reset all configured settings to factory defaults. Select Restore to begin the process or select Cancel to exit without resetting.</p> <p>NOTE: All configured settings are reset including:</p> <ul style="list-style-type: none"> • Administrator passwords • Network configurations • Stored jobs (if available) • HP Workpath licenses (if available) • Web Services account information
Maintenance	Firmware	Check Update Printer from USB	<p>Use the Firmware item to determine the currently installed firmware version number.</p> <p>Use the Check item to automatically check for and install an available firmware upgrade.</p> <p>NOTE: All configured settings are reset when an upgrade is installed:</p> <ul style="list-style-type: none"> • Administrator passwords • Network configurations • Stored jobs (if available) • HP Workpath licenses (if available) • Selected country/region and language • Web Services account information <p>Use the Update Printer from USB item to upgrade the firmware using the printer front USB port. For more information, go to USB flash drive (control-panel menu) on page 104.</p>
Service			<p>To access the Service menu, enter the default service personal identification number (PIN).</p> <p>The default PIN for this printer is located on a on a sticker adhered to the front of the toner cartridge tray.</p> <p>NOTE: If the default PIN has been changed, contact the printer administrator.</p>

Table 4-17 Tools menu (continued)

Menu Item	First level	Second level	Description
Service	Information	Product Number	Use the Product Number item to determine the printer product number.
		Serial Number	Use the Serial Number item to determine the printer serial number.
		Country/Region Language	Use the Country/Region Language: [LANGUAGE] item to determine the printer country/region and language setting.
		Firmware Version	Use the Firmware Version item to determine the currently installed firmware version number
		Event Log	Use the Event Log item to view a list of the latest event log entries.
		Wi-Fi Region	Use the Wi-Fi Region: [COUNTRY] item to determine the Wi-Fi region setting.
Service	Service Resets	Reset User Settings	Use the Reset User Settings item to reset any customer unique settings to factory defaults. Select Proceed to begin the process or select Dismiss to exit without resetting.
		Reset User Data	Use the Reset User Data item to reset any customer unique data to factory defaults. Select Proceed to begin the process or select Dismiss to exit without resetting.
		Restore All Factory Defaults	Use the Restore All Factory Defaults item to reset all configured settings to factory defaults. Select Proceed to begin the process or select Dismiss to exit without resetting.
		Transfer Kit Reset	Use the Transfer Kit Reset item to reset the transfer kit firmware counter after installing a replacement transfer kit. Select Reset to begin the process or select Cancel to exit without resetting.
		Repair Mode	Use the Repair Mode item to test print using a different set of toner cartridges. Select OK to enter the mode or select Cancel to exit. Immediately after selecting OK , install one or more test cartridges in the printer. NOTE: The printer remains in Repair Mode until up to 75 pages have been printed using the test cartridges

Table 4-17 Tools menu (continued)

Menu Item	First level	Second level	Description
Service	System Configuration	Serial Number	Use the Serial Number item to restore/change the printer serial number if necessary. Select Set to set the number.
		Service ID	Use the Service ID item to display the service ID number.
		Ethernet MAC Address [ALPHNUMNERIC]	Use the Ethernet MAC Address item to change the Ethernet MAC address.
		Wi-Fi MAC Address [ALPHNUMNERIC]	Use the Wi-Fi MAC Address item to change the Wi-Fi MAC address.
		Boot Mode	Use the Boot Mode item to change the current boot mode.
Service	Fax Diagnostics	Hook Operations	Use the Hook Operations item to choose from Go On Hook or Go Off Hook and view Line Current and Line Voltage values.
		Generate Random Data	Use the Generate Random Data item to select from a list of speeds and then select the Start button to begin.
		Generate Dialing Tones/Pulses	Use the Generate Dialing Tones/Pulses item to select from:
		Generate/Dial Phone Number	<ul style="list-style-type: none"> • Pulse Burst • Tone Burst
		Generate Single Modem Tone	<ul style="list-style-type: none"> • Continuous Tone
		Fax Transit Signal Loss	<ul style="list-style-type: none"> • Last Digits <ul style="list-style-type: none"> – Use the Select Any item to select the digits.
		Ring Settings	Select the Start button to begin.
		Fax Parameters	Use the Generate/Dial Phone Number item to select either Tone or Pulse , and then enter a Fax Number .
		Show All Fax Locations	Select the Start button to begin. Use the Generate Single Modem Tone item to choose from:
			<ul style="list-style-type: none"> • 1100 Hz • 1300 Hz • 1800 Hz • 2100 Hz
	Select the Start button to begin. Use the Fax Transit Signal Loss item to add an Enter Transmit Level (0 to 30) value, and then select Proceed to begin. Use the Ring Settings item to select either Off or On . If rings are enabled, use the + or - buttons to set the Ring Frequency and Ring Interval values. Use the Fax Parameters item to set a Parameter Number . Select the Save button to save the setting. Use the Show All Fax Locations item to toggle this option on/off.		

Table 4-17 Tools menu (continued)

Menu Item	First level	Second level	Description
Service	Connectivity	Connectivity Status Page	Use the Connectivity Status Page item to print a Connectivity Status Page
		Connectivity Diagnostics	Use the Connectivity Diagnostics item to print a Wi-Fi Network Test Results page.
		Wi-Fi Metrics Data Report	Use the Wi-Fi Metrics Data Report item to print a Wi-Fi Metrics Data Report.
Service	Service Tests	Scan Motor Test	Use the Scan Motor Test item to rotate the scan motor through a cycle. Select the Start button to begin.
		Continuous Flatbed Scan	Use the Continuous Flatbed Scan item to continuously scan a page from the flatbed.
		Continuous Copy	Place a page on the flatbed, and then select the Proceed button. The printer continuously scans and prints the page until the Dismiss button is selected.
		Display Test	Use the Display Test item to test the control-panel display. Select Proceed to begin (the display screen changes each time the Proceed button is selected).
		Walk-up USB Port Test	Use the Walk-up USB Port Test item to test the front USB port. Insert a USB storage device in the front USB port, and then select Start to begin. If the message USB Device Connected displays, the test was successful.

Power on troubleshooting

Learn about power on troubleshooting.

Power-on checks

Learn about power-on checks.

The basic printer functions should start up when the printer is connected into an electrical outlet and the power switch is pushed to the on position. If the printer does not start, use the information in this section to isolate and solve the problem.

If the control panel display remains blank, random patterns display, or asterisks remain on the control panel display, perform power-on checks to find the cause of the problem.

Power on troubleshooting overview

Learn about general power on troubleshooting.


During normal operation, a cooling fan begins to spin briefly after the printer power is turned on. Place a hand over the fan intake vents located on the right-side cover. When the fan is correctly operating, air passing into the printer is felt. Lean close to the printer to hear the fan operating. If the fan is operating, the dc side of the power supply is functioning.

After the fan is operating, the main motor turns on (unless the top cover is open, a jam condition is sensed, or the paper-path sensors are damaged). Visually and audibly determine that the main motor is turned on.

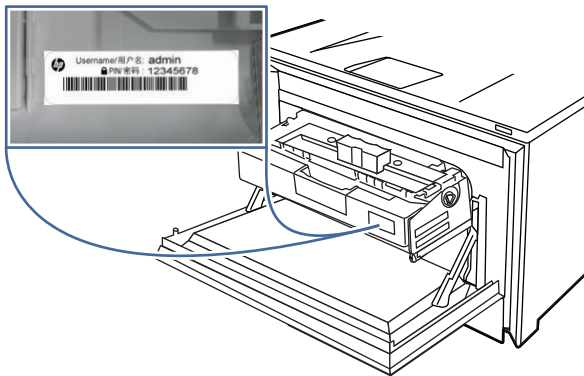
If the fan and main motor are operating correctly, the next troubleshooting step is to isolate print engine, formatter, and control panel problems. Perform an engine test. If the formatter is damaged, it might interfere with the engine test. If the engine-test page does not print, try removing the formatter, and then performing the engine test again. If the engine test is then successful, the problem is almost certainly with the formatter, the control panel, or the cable that connects them.

Troubleshooting power-on or blank control panel problems


If the printer is not powering on correctly, use the following steps to begin troubleshooting the problem.

 **IMPORTANT:** Access to the Embedded Web Server (EWS) requires a personal identification number (PIN). The default PIN for this printer is located on a sticker adhered to the front of the toner cartridge tray. Use this PIN to open the EWS when prompted.


The default PIN (password) can be changed in the EWS (**Settings > Security > Password Settings**).



1. Verify that power is available to the printer. If the printer is plugged into a surge protector or uninterruptible power supply (UPS), remove it. Plug the printer directly into a known operating wall receptacle (make sure that the wall receptacle provides the correct voltage and current for the printer).

 **NOTE:** Unplug any other devices on the same circuit that the printer is using.

2. Try another known operating wall receptacle and a different power cord.
3. To eliminate a thermal switch issue, unplug the power cord and leave it unplugged for over 20 minutes. Re-attach the power cord, and then turn the power on again.
4. During normal operation, a cooling fan or fans begin to spin briefly after the printer power is turned on. Place a hand over the cover vent or vents to feel air passing out of the printer. Lean close to the printer to hear the fan or fans operating.

 **NOTE:** Operational fans, motors, and control-panel lights indicate the following:

- AC power is present at the printer.
- The power supply is providing either or both 24 Vdc and 5 Vdc voltages.
- The DC controller microprocessor is functioning.

5. If the printer powers on, but the control panel is blank, make sure that the control-panel display wire harness or harnesses and flat flexible cable or cables (FFCs) are connected.



NOTE: If the printer has frozen while in Sleep mode or Sleep delay, loading a document in the document feeder or pressing a control-panel button should cause the printer to wake up from Sleep mode or Sleep delay.

If the control panel is not responding, or if it appears black or blank, try the following:

- a. Turn the printer power off, and then on again.
 - b. Verify that the system is correctly functioning by printing a test page. Does the test page print correctly?

Is the printer HP Embedded Web Server (EWS) accessible?
 - c. Verify that the control panel is correctly functioning. If it is not, turn the printer off and reseal the control-panel assembly cable connections at the control-panel assembly and the formatter.
 - d. Try upgrading the firmware. If the firmware upgrade fails to resolve the problem, and the printer still freezes while in Sleep mode or Sleep delay, elevate the case.
 - e. If the error persists and the EWS functions correctly, replace the control-panel assembly.
6. If normal start-up noises are not heard, turn the printer off, and then remove any installed accessories.
 7. Turn the printer on, and then listen for start-up noises. If normal start-up noises are heard, the problem might be with an accessory.
 8. Perform an engine test.



NOTE: To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).


9. If the engine test page prints, the print engine is operating normally. Replace the formatter. The **formatter and ECU/DCC must be paired** by using a special HP Android application.
- CAUTION:** Under **NO** circumstances should a formatter from a different printer be installed during the repair or troubleshooting processes.
10. If after replacing the formatter normal start-up noises are still not heard, replace the ECU/DCC. The **formatter and ECU/DCC must be paired** by using a special HP Android application.
 11. If the print engine appears to be correctly operating (the engine test page successfully printed) and the control panel is still blank, replace the power supply.

Troubleshooting an unresponsive printer

If the printer powers up normally and the control panel displays correctly, but the printer appears unresponsive to print jobs, use the following steps to troubleshoot the issue.

1. The control panel should be in a ready or sleep state. If an error message displays, resolve the error. Resolve any supply issues.

2. For network connection errors, verify that the network port is active and that the cables are securely seated, or a Wi-Fi signal is present.
 - a. Check the network cable connections between the printer and the computer or network port. Make sure that the connections are secure.
 - b. Make sure that the cables are not faulty by trying different cables, if possible.
3. Check the network LEDs (callout 1) to see if they indicate any issues.

 **NOTE:** The figure below is representational only. Network LED location varies by printer.

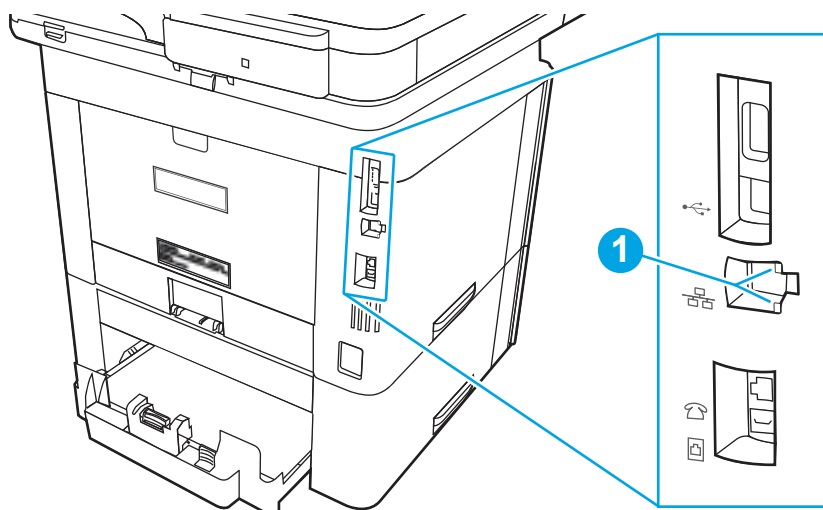





Table 4-18 Network LEDs

LED light pattern	Description
	Solid green light and flashing yellow light indicates a successful network connection.
	No lights on indicates a faulty network connection. Disconnect and reconnect the cable to the port. In the Network Settings Menu, verify the link settings and make sure that the port is enabled.


4. Use one of the following options to print a configuration report and printer status report.

 **NOTE:** To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).


Print a configuration report

- a. Open the following menus:
 - [Menu](#)
 - [Tools](#)
 - [Status Reports](#)

- b. Select the [Configuration Report](#) item.
- c. Do one of the following:
 - **MFP:** Touch the **Print** button to print the page.
 - **SFP:** Navigate to and select the **Print** item at the top of the menu to print the page.

 **NOTE:** This page might differ between MFP and SFP printers.

5. Check to see if there is a newer version of the firmware available (find the currently installed version on the [Configuration Report](#)). If there is, update the firmware.

 **NOTE:** If firmware updates are enabled on the printer, go to the control panel navigate to [Menu](#) > [Tools](#) > [Maintenance](#) > [Firmware](#), and then select one of the following:

- [Check for Update](#) (SFP)
- [Check](#) (MFP)

If an update is available, it will be automatically installed. If the latest firmware is already installed, a message appears stating the most current updates have been installed.

If the event log on the [Configuration Report](#) shows a recent error, resolve the problem.

6. Verify that the correct print driver for this printer is installed. Check the program to make sure that the print driver for this printer is used. The print driver can be downloaded from support.hp.com.
7. Print a short document from a different program that has worked in the past. If this solution works, the problem is with the program. If this solution does not work (the document does not print), complete these steps:
 - a. Try printing the job from another computer that has the printer software installed.
 - b. If the printer is connected to the network, connect the printer directly to a host computer with a USB cable. Redirect the printer to the correct port, or reinstall the software (make sure to select the new connection type).


For more information about troubleshooting an unresponsive printer and about troubleshooting connectivity issues, see the "Performance and connectivity troubleshooting" section of the Service manual.

Engine diagnostics

Learn about internal engine diagnostics that help in troubleshooting print quality, paper path, noise, assembly, and timing issues.

Engine test

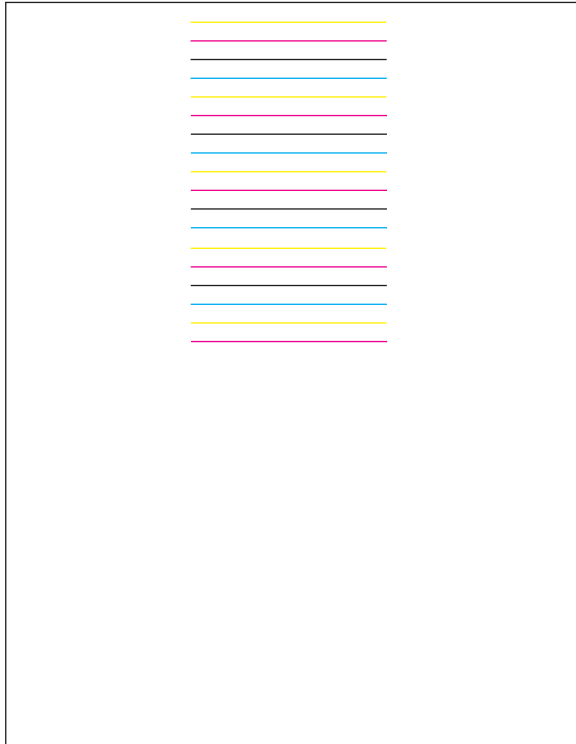
Learn about troubleshooting the printer using the engine test diagnostic.

 **NOTE:** To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

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

- Depress and hold the cartridge door release button, and then open and close the cartridge door four times within a one and one-half (1.5) second time period to print a simplex engine test page.
- Depress and hold the cartridge door release button, and then open and close the cartridge door five times (or more) within a one and one-half (1.5) second time period to print a duplex engine test page.

Figure 4-55 Sample engine test page



Defeating interlocks

Learn about defeating printer interlocks.



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

Different tests can be used to isolate different types of issues. For assembly or noise isolation, run the diagnostic test when the toner cartridge door or rear door is open.

Defeating the door interlocks allows observation of the paper pick operation.

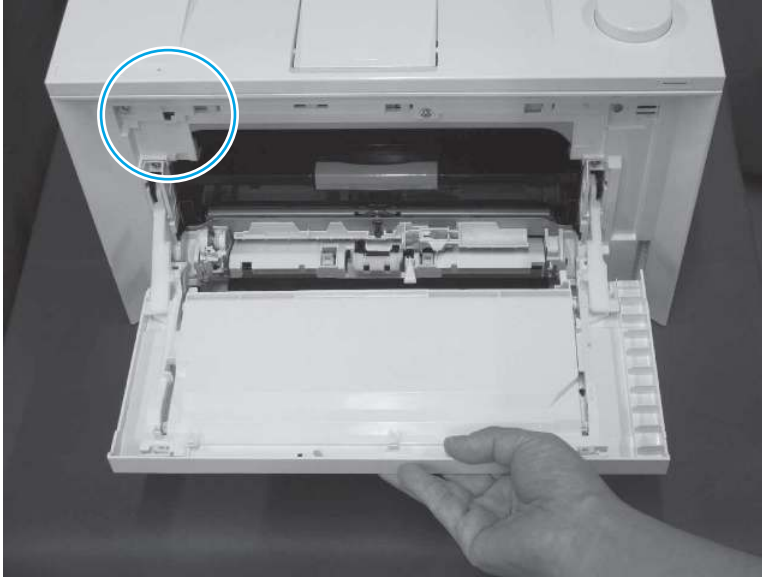
Defeat the cartridge door interlock

1. Open the cartridge door.
2. Insert a folded piece of paper into the slot.



TIP: Fold a stiff piece of paper, for example a business card or index card, into a strip, and insert the strip into the slot for the front door logic switch.

Figure 4-56 Defeat the cartridge door interlock



Defeat the rear door interlock

1. Open the rear door.
2. Insert a folded piece of paper into the slot.


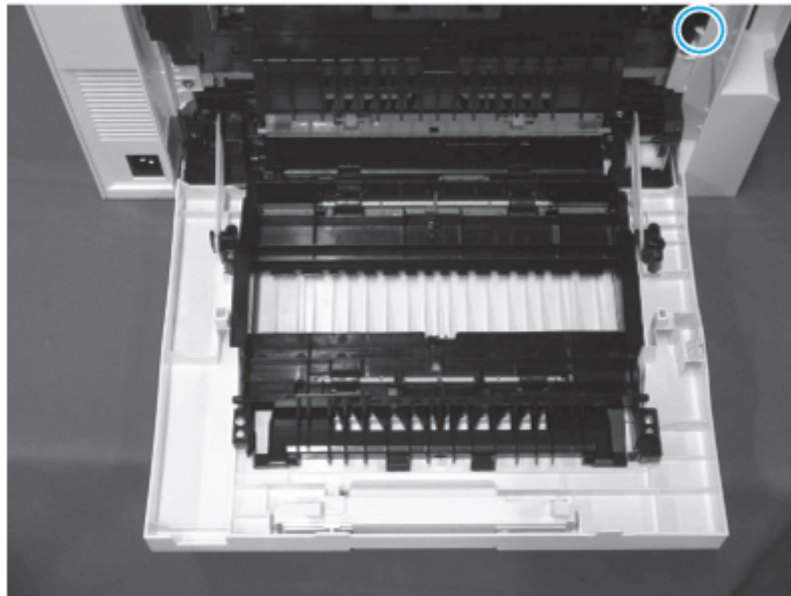
 **TIP:** Fold a stiff piece of paper, for example a business card or index card, into a strip, and insert the strip into the slot for the front door logic switch.

Figure 4-57 Defeat the rear door interlock



LED Diagnostics (formatter)

Learn about troubleshooting the printer using formatter LEDs.

Network LEDs (network models only)

The formatter has two network port LEDs. When the printer is connected to a properly working network through a network cable, the amber LED indicates network activity, and the green LED indicates the link status.

A blinking amber LED indicates network traffic. If the green LED is off, a link has failed. For link failures, check all of the network cable connections. In addition, try to manually configure the network card link speed setting by using the printer control panel.

Change the Link Speed setting

1. Open the following menus:
 - [Menu](#)
 - [Settings](#)
 - [Network](#) (MFP)
 - [Network Settings](#) (SFP)
 - [Ethernet](#) (MFP)
 - [Ethernet Settings](#) (SFP)
 - [Link Speed](#)
2. Select from a list of link speed options.

Use the solve problems checklist

If the printer is not correctly functioning, complete the steps (in the order given) in the following checklist.

If the printer fails a checklist step, follow the corresponding troubleshooting suggestions for that step. If a checklist step resolves the problem, skip the remaining checklist items.

1. Make sure that the printer is set up correctly.
 - a. Check the power-cable connections.
 - b. Make sure that the line voltage is correct for the printer power configuration. See the label that is on the printer for voltage requirements. If you are using a power strip and its voltage is not within specifications, plug the printer directly into the wall. If it is already plugged into the wall, try a different outlet.
2. Check the cable connections.
 - a. Check the cable connection between the printer 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: Make sure that the network light is lit. The network light is next to the network port on the back of the printer.

If the printer remains unable to connect to the network, uninstall and then reinstall the printer. 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 you are using meets specifications.

5. Make sure that the paper is loaded correctly in the input tray.
6. Make sure that the printer software is installed correctly.
7. Verify that you have installed the printer driver for this printer, and that you are selecting this printer from the list of available printers.
8. Print a configuration page.



NOTE: To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

- a. Open the following menus:
 - [Menu](#)
 - [Tools](#)
 - [Status Reports](#)
- b. Select the [Configuration Report](#) item.
- c. Do one of the following:
 - **MFP:** Touch the **Print** button to print the page.
 - **SFP:** Navigate to and select the **Print** item at the top of the menu to print the page.

After printing the configuration page, check the following

- 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 each toner cartridges are installed correctly.
 - c. If the page jams in the printer, clear the jam.
 - d. If the print quality is unacceptable, complete the following steps:
 - Verify that the print settings are correct for the paper you are using.
 - Solve print-quality problems.
9. Print a small document from a different program that has printed 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 printer software installed.
 - b. Check the cable connection. Direct the printer to the correct port, or reinstall the software, selecting the connection type you are using.

Control panel troubleshooting

If the control panel is not responding normally or has display issues, use the following procedures to troubleshoot the issues.

Control-panel diagnostics

Learn about control-panel diagnostics.

Control-panel diagnostics (SFP)

1. Open the following menus:

- [Menu](#)
- [Tools](#)
- [Service](#)

2. Enter the default service personal identification number (PIN)

The default PIN for this printer is located on a on a sticker adhered to the front of the toner cartridge tray.



NOTE: If the default PIN has been changed, contact the printer administrator.

3. Open the [Service Tests](#) menu, and then select from the following diagnostics:

- [Dial Test](#)

Use the [Dial Test](#) item to test the control-panel rotary dial. Select [Start](#) to begin, and then follow the prompts on the display.

- [Display Test](#)

Use the [Display Test](#) item to test the control-panel display. Select [Proceed](#) to begin an internal test. If the message **Test Passed** displays, select **Cancel** to exit.

Control-panel diagnostics (MFP)

1. Open the following menus:

- [Menu](#)
- [Tools](#)
- [Service](#)

2. Enter the default service personal identification number (PIN)

The default PIN for this printer is located on a on a sticker adhered to the front of the toner cartridge tray.



NOTE: If the default PIN has been changed, contact the printer administrator.


3. Open the [Service Tests](#) menu, and then select from the following diagnostics:

- [Display Test](#)

Use the [Display Test](#) item to test the control-panel display. Select [Proceed](#) to begin (the display screen changes each time the [Proceed](#) button is selected).

Control panel messages document (CPMD)

Learn about the printer control panel messages document (CPMD).

 **NOTE:** A complete CPMD is not included in this service manual.

Go to the HP internal portal (WISE) for CPMD information.

How to search for printer documentation

The CPMD, error codes, and other support documentation for each printer is available on the HP portals.

For HP internal access to WISE, go to [WISE](#).


For HP channel partners access WISE, see [Accessing WISE for HP channel partners \(HP Partner Portal\) on page 94](#) or [Accessing WISE for HP channel partners \(CSDP\) on page 93](#).

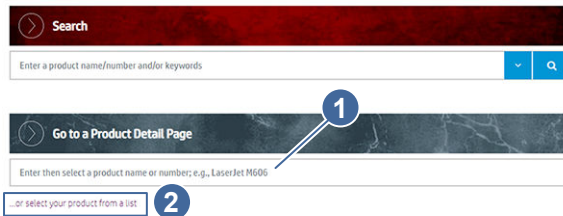
WISE is available to call agents, service technicians, and HP internal users. The level of detail available depends on your access credentials. To learn how to find support content in WISE, [watch the video here](#).

How to search WISE for printer information and documentation


These instructions are for HP internal use by call agents, service technicians, and other internal users.

To learn how to find support content in WISE, watch the video here: [Finding Error Code and Control Panel Message Document in WISE](#).

 **TIP:** The Product Detail Page (PDP) is available from the WISE home page. Enter, and then select a product name or number in the **Go to a Product Detail Page** area (callout 1), or select the **...or select your product from a list** item (callout 2) on the WISE home page.



Many types of printer documentation and information are available on WISE. This section details methods for finding error code descriptions and solutions.

 **TIP:** To view a list of control panel message documents (CPMD) per printer, search for the following topic in **WISE**: HP LaserJet, OfficeJet, PageWide, ScanJet Enterprise - Control panel message document (CPMD) list or click the link below.

- [HP LaserJet, HP OfficeJet, HP PageWide, HP ScanJet - Control panel messages document \(CPMD\), Service manual, and Service cost data list](#)

Use one of the following methods to search for CPMD error code information.

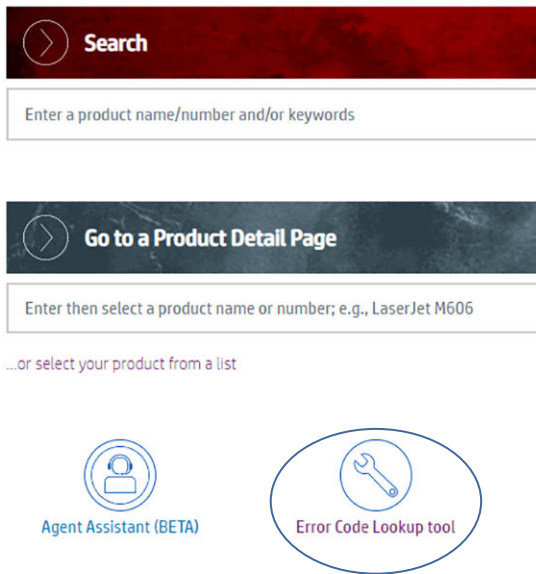
- [Method 1: Use the WISE home page Error Code Lookup tool on page 169](#)
- [Method 2: Search for error codes using the WISE search function on page 171](#)
- [Method 3: Search for error codes using the Product Detail Page on page 173](#)

Method 1: Use the WISE home page Error Code Lookup tool

Use the WISE Error Code Lookup tool to find error code troubleshooting procedures using the following steps.

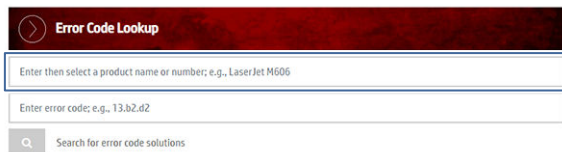
1. On the WISE home page, click the **Error Code Lookup tool** icon.

Figure 4-58 WISE Error Code Lookup tool icon



2. Enter a printer model number (for example, M606) in the **Error Code Lookup** dialog box.

Figure 4-59 WISE Error Code Lookup tool dialog box

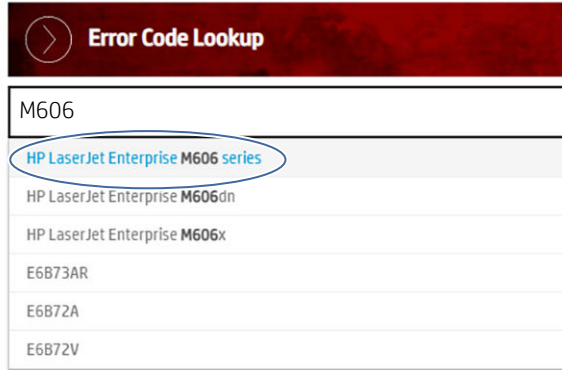


3. A drop-down list appears. Click on the full printer series name (for example, HP LaserJet Enterprise M606 series) in the list.



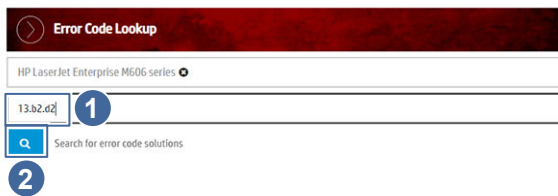
NOTE: Selecting the **series** item from the drop-down list is recommended for the most accurate search return.

Figure 4-60 WISE Error Code Lookup tool drop-down list



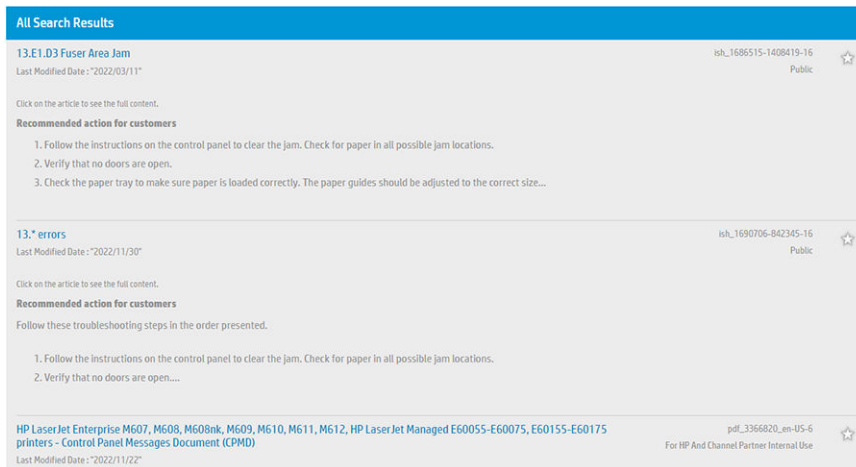
4. Type the error code (for example, 13.b2.d2) in the **Error Code Lookup** keyword field, and then select the search icon.

Figure 4-61 WISE Error Code Lookup tool search



5. The error code troubleshooting content displays in the **All Search Results** area.

Figure 4-62 WISE Search results

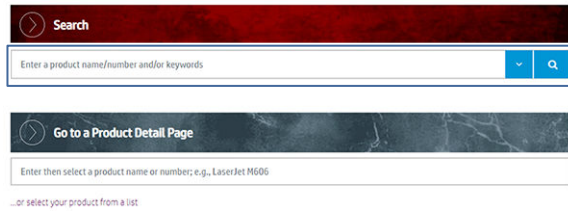


Method 2: Search for error codes using the WISE search function

Use the WISE search function to find error code troubleshooting procedures using the following steps.

1. On the WISE home page, enter a printer model number (for example, M606) in the **Search** dialog box.

Figure 4-63 WISE Search dialog box



2. A drop-down list appears. Click on the full printer series name (for example, HP LaserJet Enterprise M606 series) in the list.


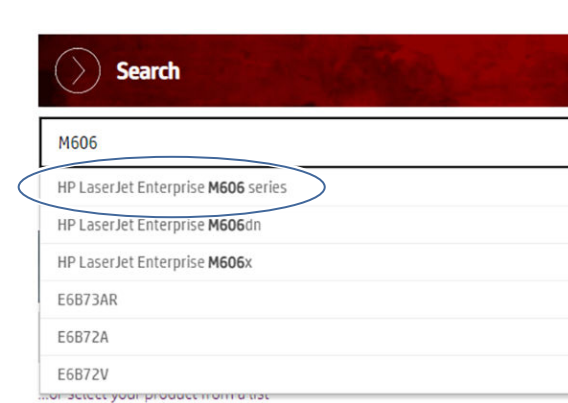
 **NOTE:** Selecting the **series** item from the drop-down list is recommended for the most accurate search return.

Figure 4-64 WISE Search drop-down list



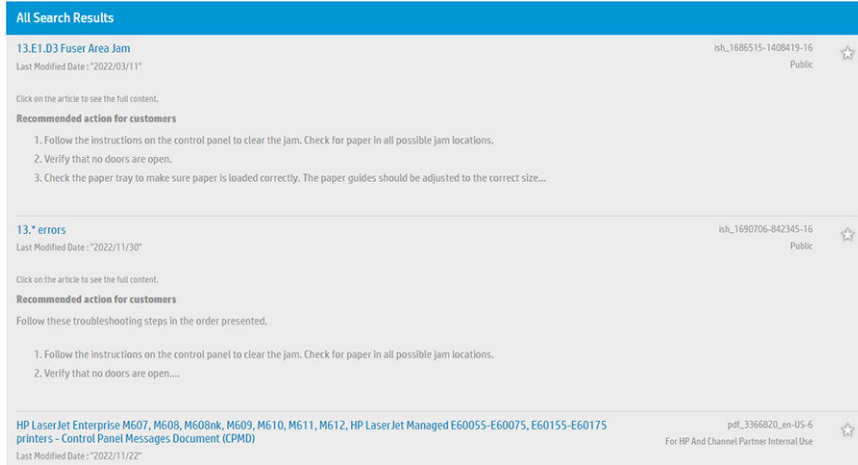
3. Type the error code (for example, 13.E1.D3) in the **Search** keyword field, and then select the search icon.

Figure 4-65 WISE Search



4. The error code troubleshooting content displays in the **All Search Results** area.

Figure 4-66 WISE Search results



Method 3: Search for error codes using the Product Detail Page

Use the WISE Product Detail Page (PDP) to find error code troubleshooting procedures using the following steps.

1. On the WISE home page, enter a printer model number (for example, M606) in the **Go to a Product Detail page** dialog box.


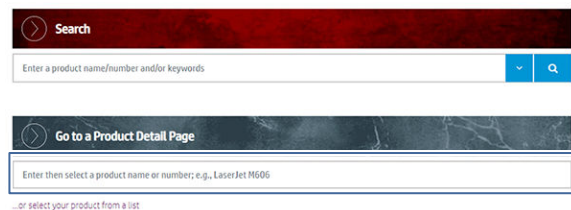
 **TIP:** To find a PDP from a list of products by product type, select the **...or select your product from a list** item just below the dialog box.

Figure 4-67 WISE PDP dialog box



2. A drop-down list appears. Click on the full printer series name (for example, HP LaserJet Enterprise M606 series) in the list.


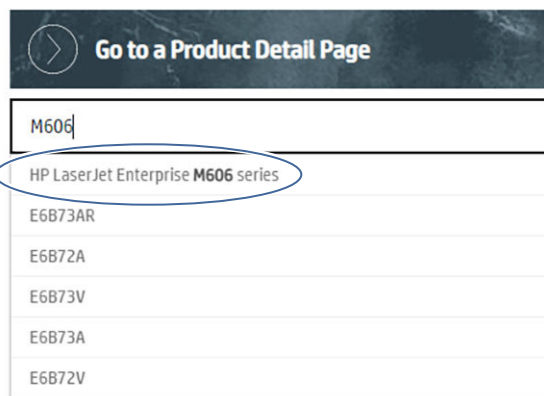
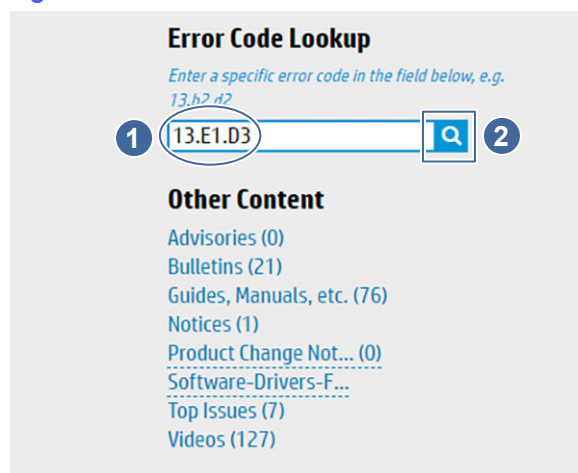
 **NOTE:** Selecting the **series** item from the drop-down list is recommended for the most accurate search return.

Figure 4-68 WISE PDP drop-down list



3. Type the error code (for example, 13.E1.D3) in the **Error Code Lookup** field, and then select the search icon.

Figure 4-69 WISE PDP search



4. The error code troubleshooting content displays in the **All Search Results** area.

Figure 4-70 WISE PDP search results



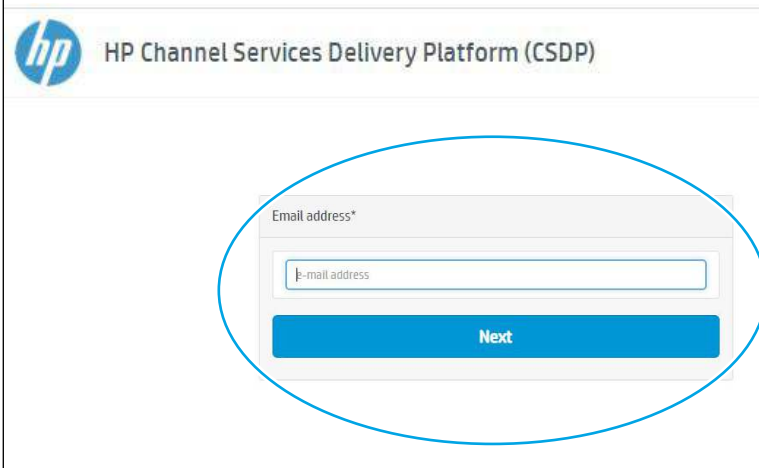
Accessing WISE for HP channel partners (CSDP)

Learn how to access WISE by accessing the HP Channel Services Delivery Platform (CSDP) if you are an HP Channel Partner.

IMPORTANT: A Partner Admin must requested access, via the CSDP portal, to create a new user before you can sign into the CSDP portal.

1. Sign-in to the CSDP portal (click csdp.hp.com to access the sign-in page).

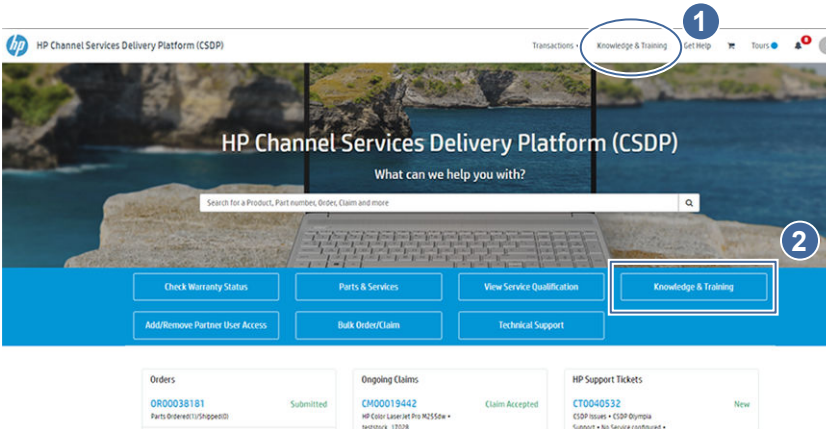
Figure 4-71 CSDP sign-in page



2. On the CSDP home page, click the **Knowledge and Training** item.

TIP: Use the **Knowledge and Training** item at the top of the CSDP home page (callout 1), or the **Knowledge and Training** action icon (callout 2).

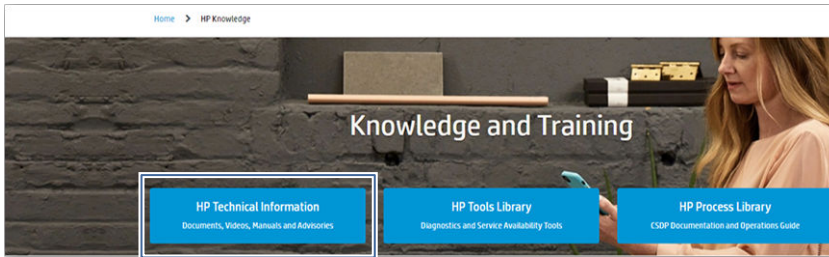
Figure 4-72 CSDP portal home page



Orders	Ongoing Claims	HP Support Tickets
OR00038181 Parts Ordered/Not Shipped	Submitted	CT0040532 CSDP Issue - CSDP Olympia Support - No Service configured
	CM00019442 HP Color LaserJet Pro M255dn • Serial: 171028	Claim Accepted
		New

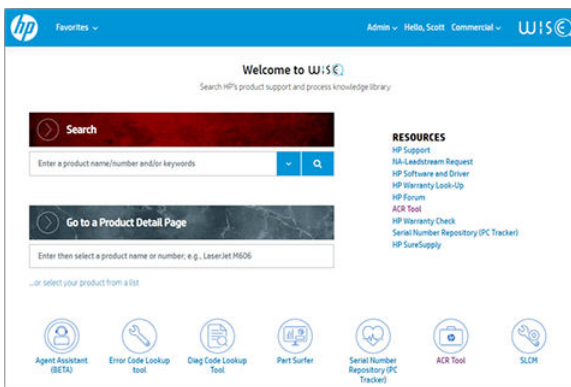
3. Select **HP Technical Documentation** on the **Knowledge and Training** page to open the WISE portal home page.

Figure 4-73 CSDP portal HP Knowledge and Training page



4. Use the WISE portal to search for printer information.

Figure 4-74 WISE portal home page



Accessing WISE for HP channel partners (HP Partner Portal)

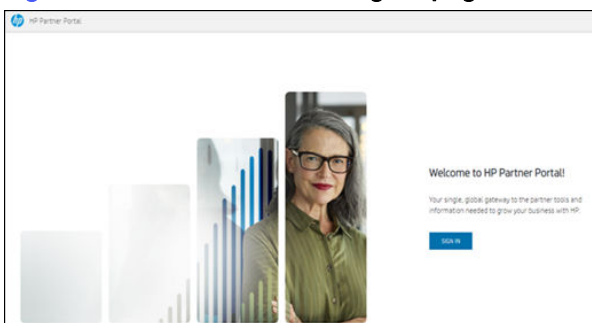
Learn how to access WISE by accessing the HP Partner Portal if you are an HP Channel Partner.

NOTE: If this is your first visit to the HP Partner Portal, you will be asked to create an account. Follow the setup directions using your HP Partner credentials.

[View a video of how to access WISE for HP channel partners](#)

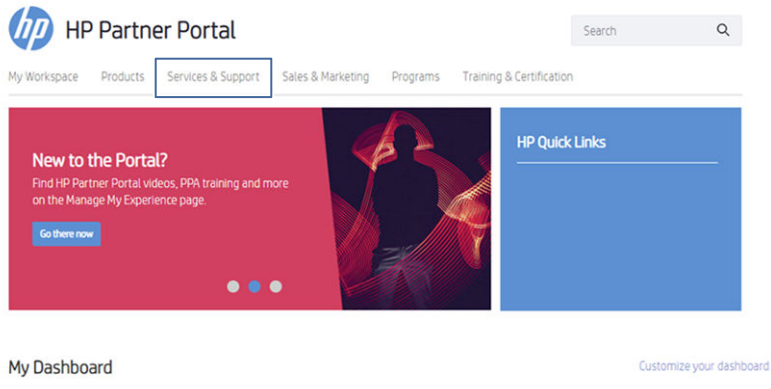
1. Sign-in to the HP Partner Portal (click <https://partner.hp.com> to access the sign-in page).

Figure 4-75 HP Partner Portal sign-in page



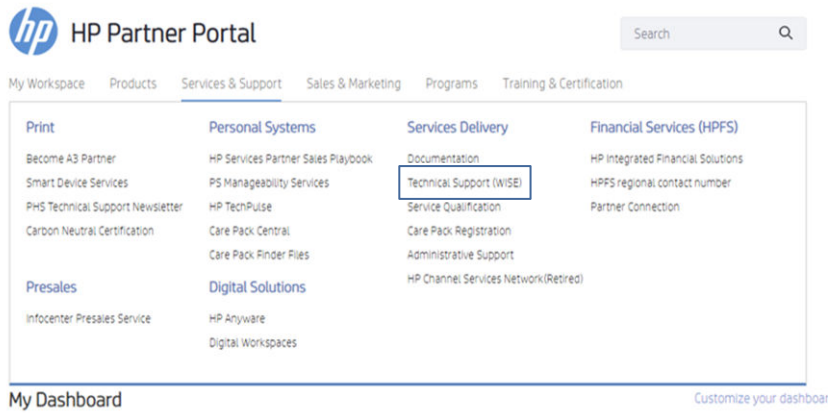
2. On the HP Partner Portal home page, click the **Services & Support** item.

Figure 4-76 HP Partner Portal home page



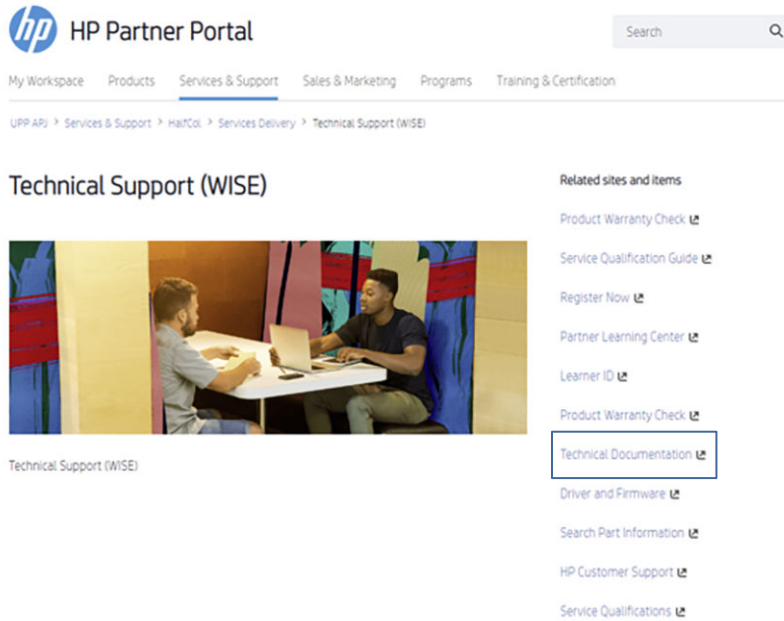
3. Select the **Technical Support (WISE)** item.

Figure 4-77 HP Partner Portal Service & Support page



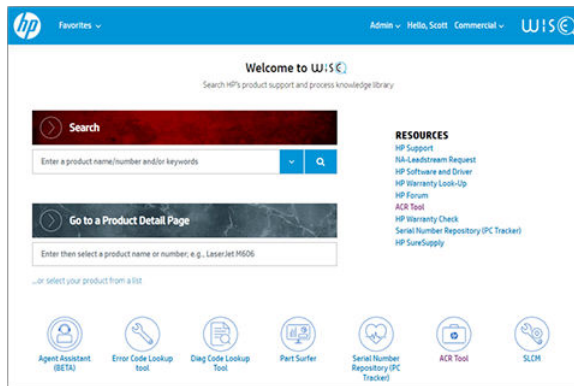
4. Select the **Technical Documentation** item.

Figure 4-78 HP Partner Portal Technical Support (WISE)page



5. Use the WISE portal to search for printer information.

Figure 4-79 WISE portal home page



Error-code and control-panel-message troubleshooting overview

This section provides information on error codes and searching for information.

Error codes (types and structure)

Error codes and control-panel messages display on the printer control panel to indicate the current printer status or situations that might require action. Error codes are numerical, or alphanumeric, and have a set structure with six characters (example: 13.WX.YZ).

- The first two characters are numeric and represent the system component that is causing the error. For example, in error code 10 . 22 . 15, **10 = Supplies** for HP LaserJets.
- The remaining four characters (W, X, Y, and Z values) further define the error.

The CPMD is a comprehensive list of error codes, diagnostic and troubleshooting steps to clear or resolve the error, and other helpful information such as service mode pins and part numbers.

The CPMD is continually updated and republished with the latest information for the following error codes.

Table 4-19 ERROR CODES: The first two characters

Error code	System Component	System Error Description
10.WX.YZ	Supplies	Supply error or supply memory error.
11.WX.YZ	Real-time clock	Internal error with the clock on the formatter.
13.WX.YZ	Jam	Paper jam or open door jam error.
20.WX.YZ	Printer memory	Insufficient memory or buffering error.
21.WX.YZ	Page	Page complexity causing a decompression error when trying to process job.
30.WX.YZ	Scanner	Flatbed scanner error occurring inside the unit.
31.WX.YZ	Document feeder	Document feeder, scanner, or jam error.
33.WX.YZ	Security	Backup, Disk, EFI BIOS, Firmware integrity (SureStart), or Trusted Platform Module (TPM) notification or error.
40.WX.YZ	Input/Output (I/O)	Partition manager, secure erase, or USB accessory error.
41.WX.YZ	Fuser, Laser scanner, or Paper path	Miscellaneous error including general and misprint or mismatch errors typically involving (but not limited to) the fuser, the laser scanner, or the paper path.
46.WX.YZ	Engine	Engine communication error.
50.WX.YZ	Fuser	Fuser error.
51.WX.YZ	Laser scanner	Laser scanner beam error.
52.WX.YZ	Laser scanner	Laser scanner startup error.
54.WX.YZ	Sensor	Sensor error (not jam related).
55.WX.YZ	DC controller	DC controller communication error.
56.WX.YZ	Paper handling	Paper input/output or accessory error.
57.WX.YZ	Fan	Fan error.
58.WX.YZ	Sensor	Engine sensor failure.
59.WX.YZ	Motor	Motor error.
60.WX.YZ	Tray motor error	Tray lifting or pick up error.
65.WX.YZ	Connector	Output accessory connection error.
66.WX.YZ	Output accessory	Output accessory error.
67.WX.YZ	Input accessory	Input accessory connection error
69.WX.YZ	Duplexer	Duplexer error.

Table 4-19 ERROR CODES: The first two characters (continued)

Error code	System Component	System Error Description
F0.WX.YZ.ZZ	Firmware related error	Firmware relate errors This can include any of the following Firmware error types: <ul style="list-style-type: none">• System• Connectivity• Scanner• Security• Job• Send• IOT

Printer service information

Last update: May 10, 2023

Service mode PIN number:

4201, 4202, 4203, 4301, 4302, 4303: The default PIN for this printer is located on a sticker adhered to the front of the toner cartridge tray.



NOTE: When possible, always update the printer firmware to the latest available version at HP.com as part of the troubleshooting performed for any of the following errors.

If the default PIN has been changed, contact the printer administrator.

Solve paper handling problems

Review the following information to solve paper handling problems.

Clear paper jams (SFP)

Use the procedures in this section to clear jammed paper from the printer paper path.



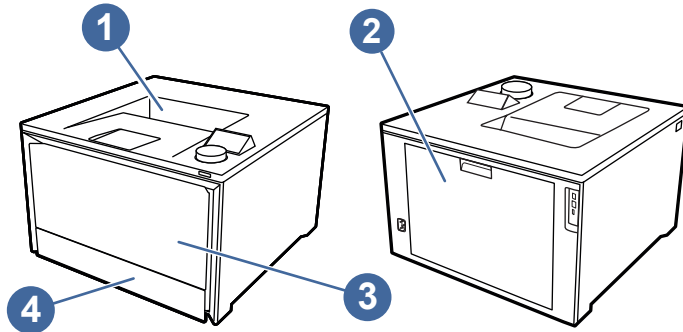
NOTE: To avoid tearing the paper, pull the jammed paper out slowly and gently.

Figures in this section are representational only. The actual printer being serviced might look slightly different depending on the model and installed accessories.

Paper jam locations

Jams can occur in these locations.

Figure 4-80 Paper jam locations



Number	Description
1	Output bin
2	Rear door/Duplexer
3	Tray 1
4	Tray 2

Help animations for clearing paper jams

Learn about printer jam clearing help animations.


Clearing jam help animations are available on the control panel.

To view an animation, open the following menus:

- [Menu](#)
- [Help](#)
- [How to Videos](#)

Experiencing frequent or recurring paper jams?

Follow the steps to solve problems with frequent paper jams. If the first step does not resolve the problem continue with the next step until you have resolved the problem.

 **NOTE:** To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

1. If paper has jammed in the printer, clear the jam and then print a configuration page to test the printer.
2. Check that the tray is configured for the correct paper size and type on the printer control panel. Adjust paper settings if necessary.
 - a. Open the following menus:
 - [Menu](#)
 - [Trays](#)
 - b. Verify that the tray is correctly configured for the paper size and type.

3. Turn the printer off, wait 30 seconds, and then turn it on again.
4. Print a cleaning page to remove excess toner from inside the printer.
 - a. **SFP:** Open the following menus:
 - Menu
 - Tools
 - Troubleshooting
 - Print Quality Tools
 - Cleaning Page
 - b. Navigate to and select the **Print** item in the menu list, and then press the dial to select it and print the report.
- a. **MFP:** Open the following menus:
 - Menu
 - Tools
 - Troubleshooting
 - Print Quality Tools
- b. Touch the **Cleaning Page** item. A cleaning page prints.
5. Print a configuration page to test the printer.
 - a. Open the following menus:
 - Menu
 - Tools
 - Status Reports
 - b. Select the **Configuration Report** item.
 - c. Do one of the following:
 - **MFP:** Touch the **Print** button to print the page.
 - **SFP:** Navigate to and select the **Print** item at the top of the menu to print the page.

13.02 Jam error in Tray 1

Use the following procedure to clear paper jams in Tray 1.

Recommended action for customers

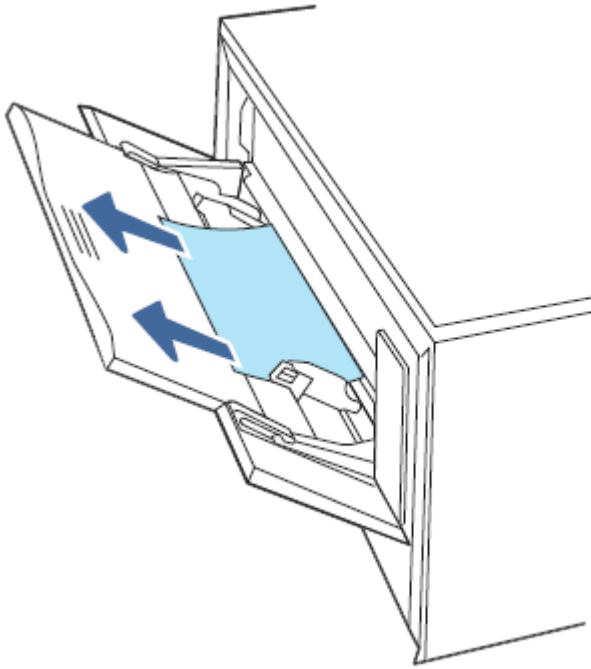
When a jam occurs, the control panel displays a message that assists in clearing the jam.

- **13.02.yz Paper jam in Tray 1**

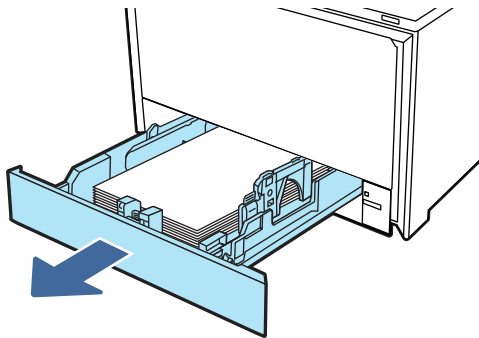
Y and Z are variables and can be any of the following 0-9 or A-F.

 [View a video of how to clear a jam in Tray 1](#)

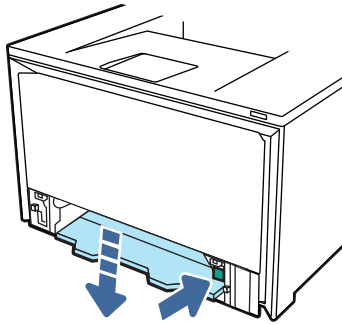
1. If you can see the jammed sheet in Tray 1, remove the jammed sheet by pulling it straight out.



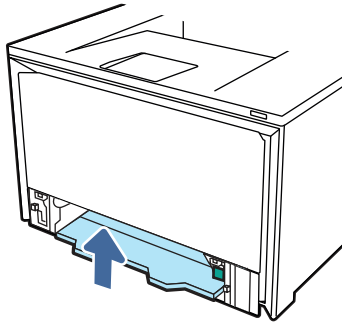
2. If you cannot see the jammed sheet, close Tray 1, and then remove Tray 2.



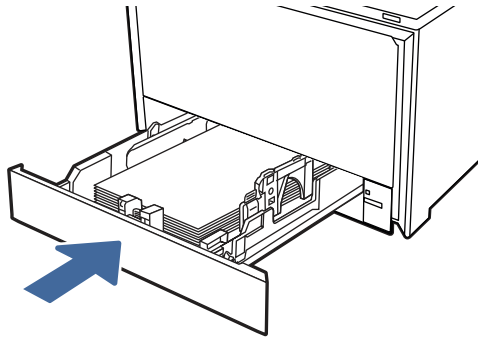
3. At the right side of the Tray 2 cavity, press the tab to lower the tray plate, and then remove any paper. Remove the jammed sheet by gently pulling it straight out.



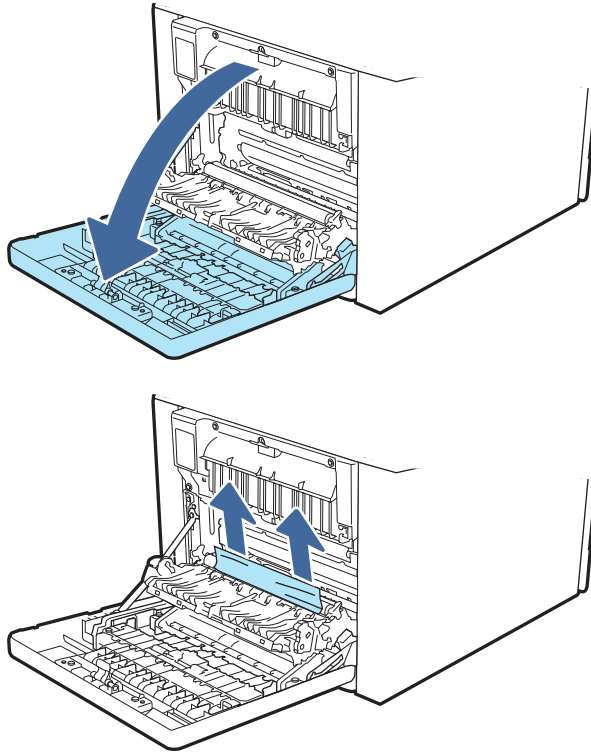
4. Push the tray plate back up into place.



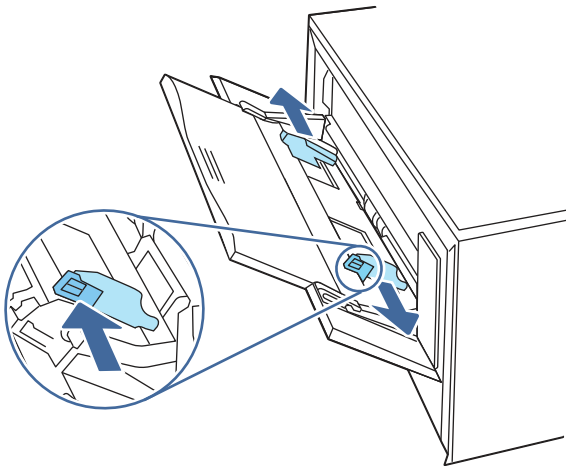
5. Reinstall Tray 2.



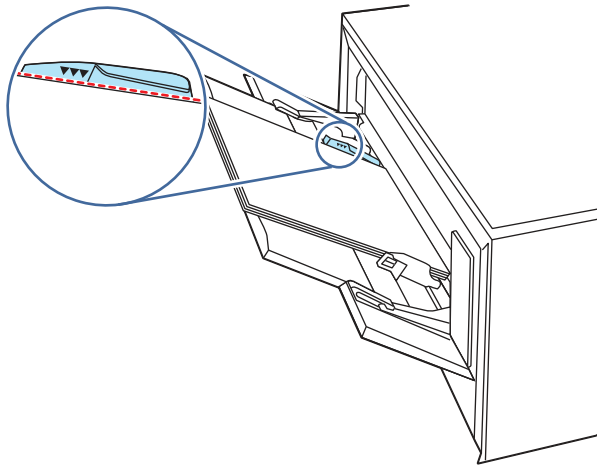
6. Open the rear door and look for and clear any paper present or obstructions in the paper path.



7. Make sure the type and quality of the paper being used meets the HP specifications for the printer.
8. Reopen Tray 1 and load paper into the tray. Ensure the tray guides are set to the correct paper size.



9. Ensure the tray is not overfilled. Paper should be below the 3 triangles in the following image.



10. If the error persists, contact your HP-authorized service or support provider, or contact customer support at www.hp.com/go/contactHP.

13.03 Jam error in Tray 2

Use the following procedure to check for a paper jam in Tray 2.

Recommended action for customers

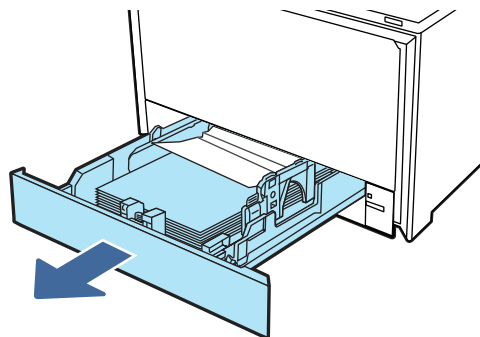
When a jam occurs, the control panel displays a message that assists in clearing the jam.

- **13.03.yz Paper jam in Tray 2**

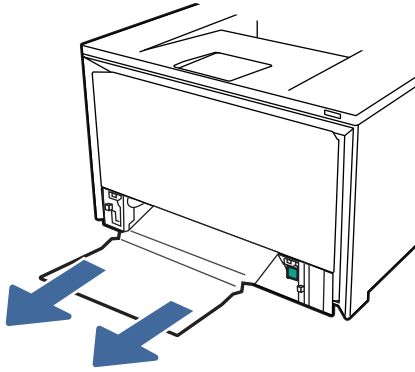
Y and Z are variables and can be any of the following 0-9 or A-F.

 [View a video of how to clear a jam in Tray 2](#)

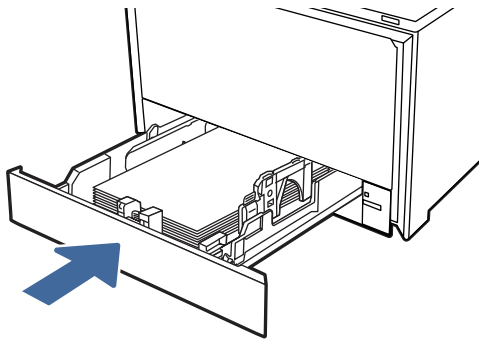
1. Pull the tray completely out of the printer.




2. Remove any jammed or damaged sheets of paper.

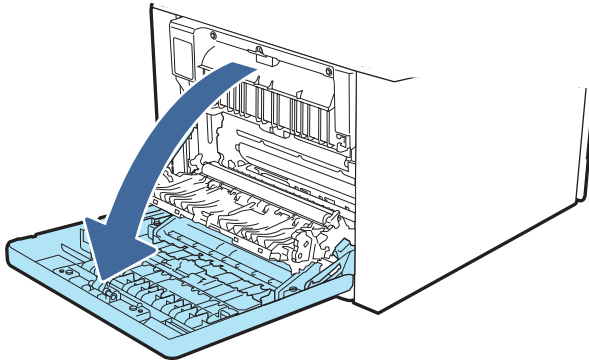


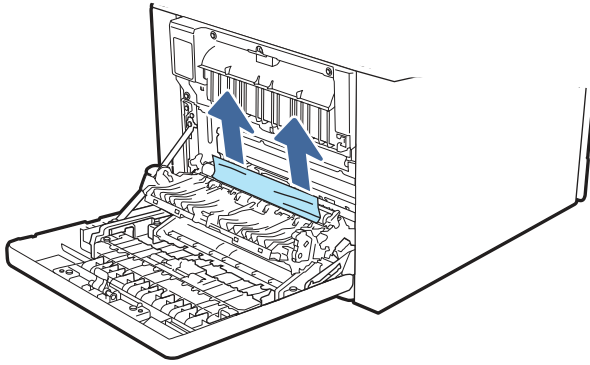
3. Reinsert and close Tray 2.



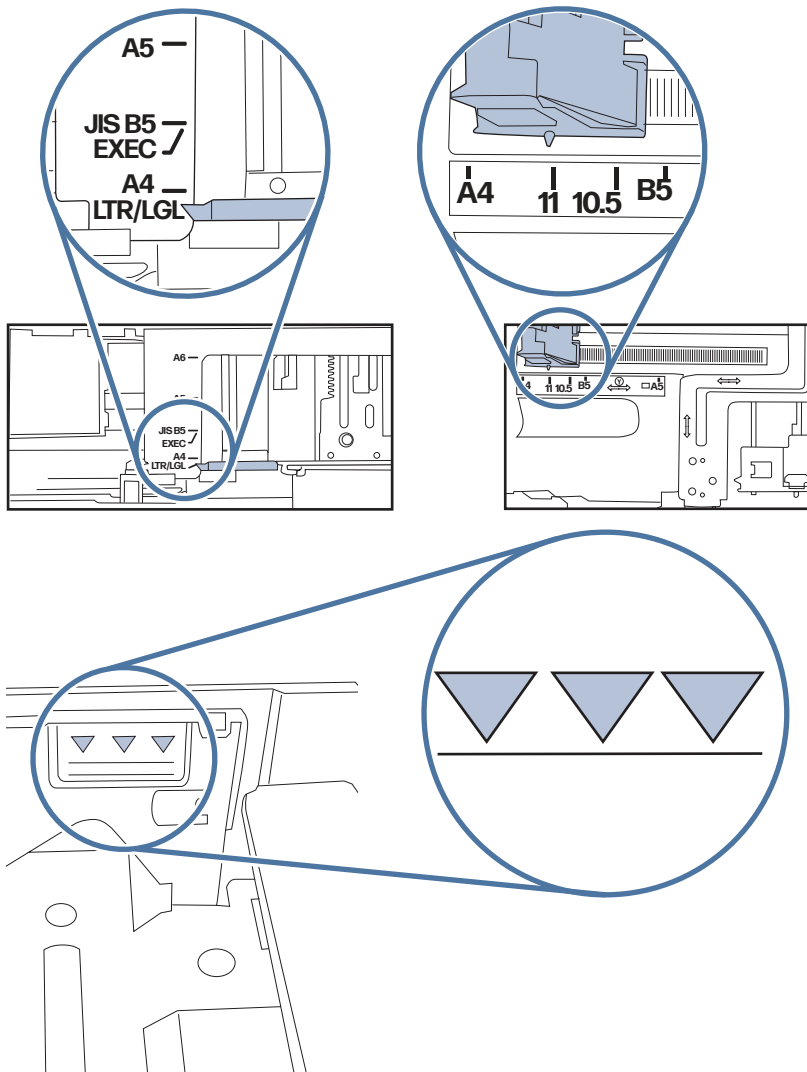
 **NOTE:** When reinserting the paper, make sure the paper guides are adjusted properly for the paper size.

4. Open the rear door and look for and clear any paper present or obstructions in the paper path.





5. Ensure the type and quality of the paper being used meets the HP specifications for the printer.
6. If the error persists, ensure that the tray width and length guides are set to the correct paper size for the paper being installed into the tray and that the tray is not over filled above the fill mark (line below 3 triangles). See following images.



7. If the error persists, contact your HP-authorized service or support provider, or contact customer support at www.hp.com/go/contactHP.

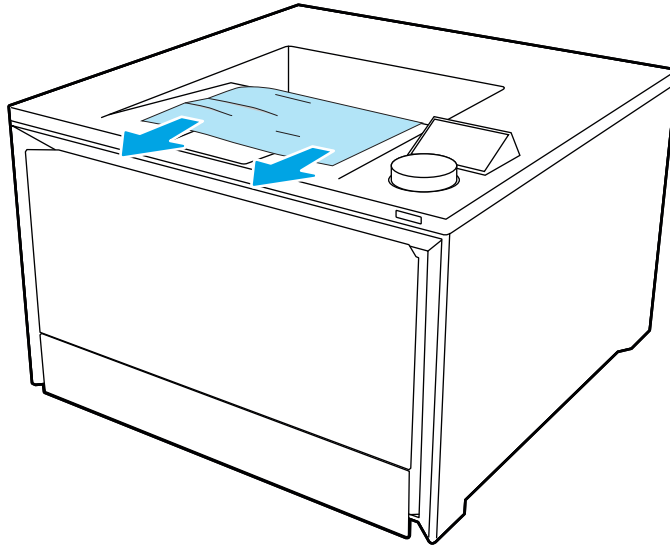
13.10.yz, 13.11.yz, 13.13.yz Jam error in the output bin

Use the following procedure to check for paper in all possible jam locations related to the output bin.

Recommended action for customers

When a jam occurs, the control panel displays an error message that assists in clearing the jam.

- If paper is visible in the output bin, grasp the leading edge and remove it.



13.08, 13.09, 13.14, or 13.15 Jam error in the rear door

Use the following procedure to check for paper in all possible jam locations inside the rear door.

Recommended action for customers

When a jam occurs, the control panel displays a message that assists in clearing the jam.

- 13.08.yz Paper jam in rear door
- 13.09.yz Paper jam in rear door
- 13.14.yz Paper jam in rear door
- 13.15.yz Paper jam in rear door

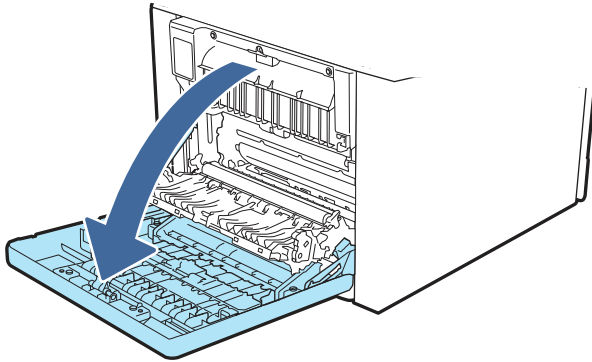
Y and Z are variables and can be any of the following 0-9 or A-F.



[View a video of how to clear a jam in the rear door](#)

1. Check the output area of the printer. If paper is extruding out slowly pull it out of the printer.

2. At the rear of the printer, open the rear door.



3. Remove any jammed or damaged sheets of paper from the rear door of the printer.



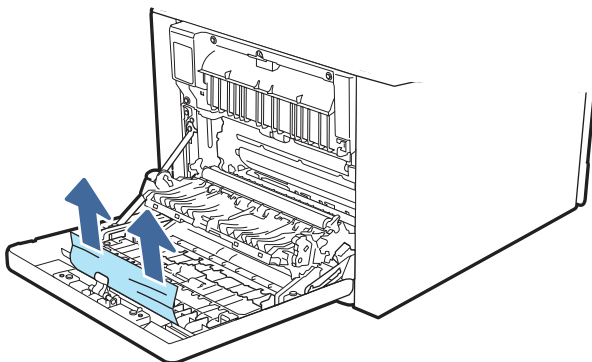
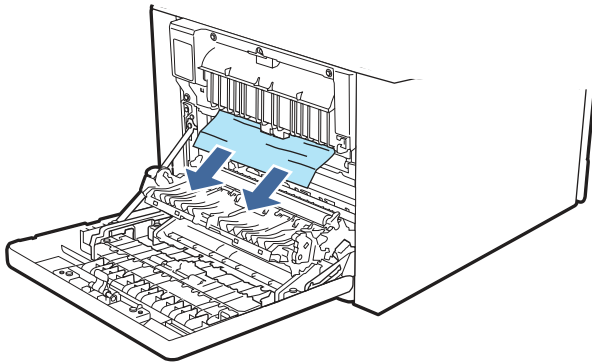
CAUTION:



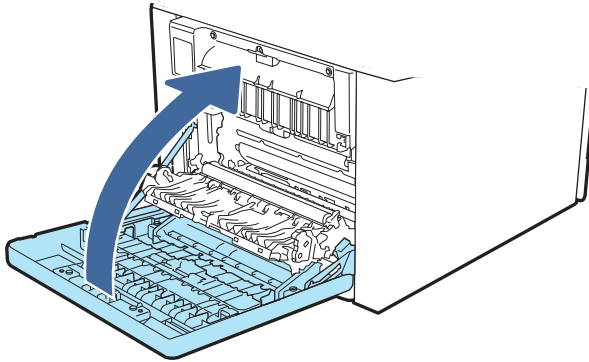
The fuser is located above the rear door, and it is hot. Do not attempt to reach into the area above the rear door until the fuser is cool.



NOTE: Check all places paper inside the rear door for paper.



4. Close the rear door.



5. If the error persists, ensure the type and quality of the paper being used meets the HP specifications for the printer.
6. If the error persists, contact your HP-authorized service or support provider, or contact customer support at www.hp.com/go/contactHP.

Jam error in the fuser output

Use the following procedure to check for paper in all possible jam locations in the fuser area.

Recommended action for customers

When a jam occurs, the control panel displays a message that assists in clearing the jam.

- **Jam in rear door**



CAUTION:

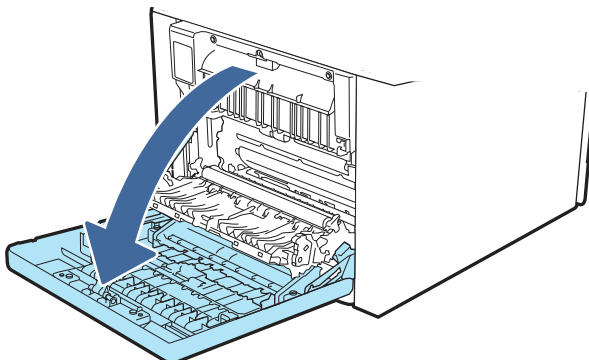


The fuser can be hot while the printer is in use. Wait for the fuser to cool before handling it.

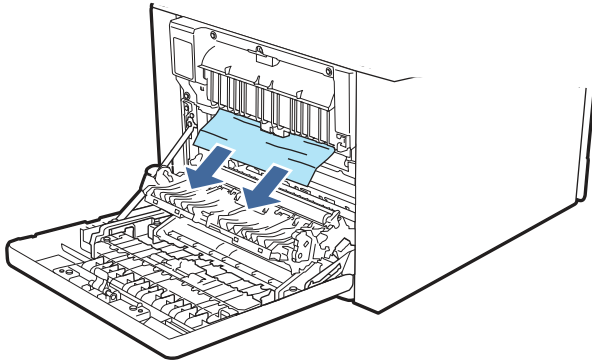


[View a video of how to clear a jam in the fuser area](#)

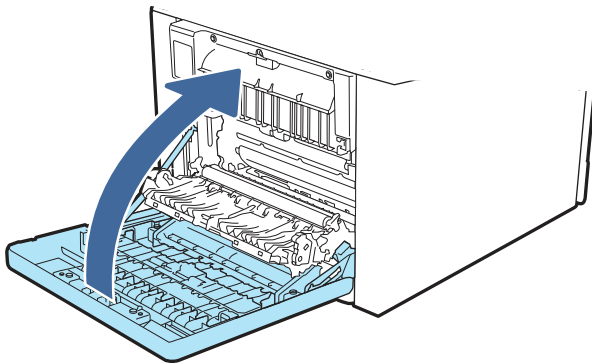
1. Open the rear door.



2. Gently pull out any jammed paper from the rollers in the rear door area.



3. Close the rear door.



4. If the error persists, ensure the type and quality of the paper being used meets the HP specifications for the printer.
5. If the error persists, contact your HP-authorized service or support provider, or contact customer support at www.hp.com/go/contactHP.


Change jam recovery

Use the following procedure to change jam recovery from the control panel.

1. Open the following menus:
 - Menu
 - Settings
 - General
 - Jam Recovery
2. Choose from the following settings:
 - Automatic
 - On
 - Off

Clear paper jams (MFP)

Use the procedures in this section to clear jammed paper from the printer paper path.

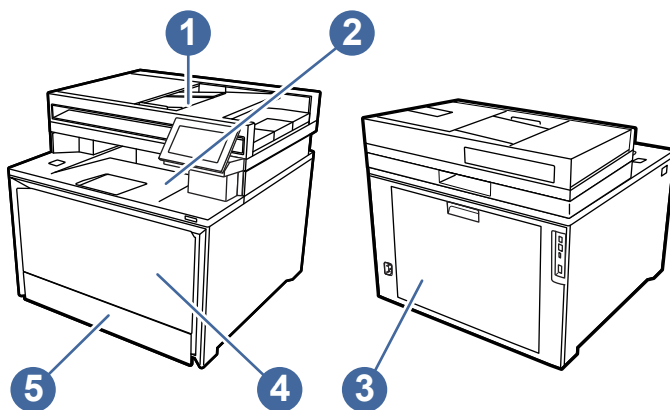
 **NOTE:** To avoid tearing the paper, pull the jammed paper out slowly and gently.

Figures in this section are representational only. The actual printer being serviced might look slightly different depending on the model and installed accessories.

Paper jam locations

Jams can occur in these locations.

Figure 4-81 Jam locations



Number	Description
1	Document feeder
2	Output bin
3	Rear door/Duplexer
4	Tray 1
5	Tray 2

Help animations for clearing paper jams

Learn about printer jam clearing help animations.

Clearing jam help animations are available on the control panel.

To view an animation, open the following menus:

- [Menu](#)
- [Help](#)
- [How to Videos](#)

Experiencing frequent or recurring paper jams?

Follow the steps to solve problems with frequent paper jams. If the first step does not resolve the problem continue with the next step until you have resolved the problem.



NOTE: To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

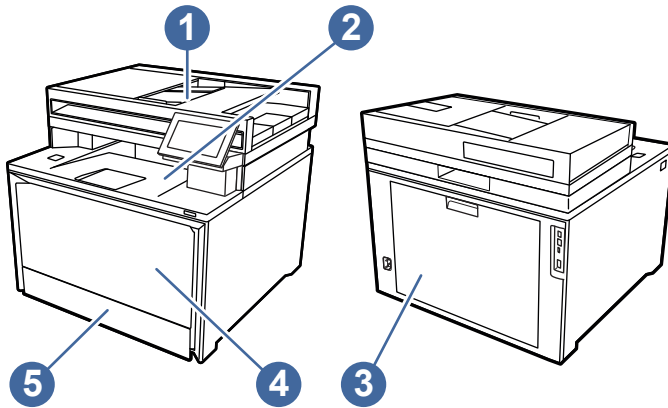
1. If paper has jammed in the printer, clear the jam and then print a configuration page to test the printer.
2. Check that the tray is configured for the correct paper size and type on the printer control panel. Adjust paper settings if necessary.
 - a. Open the following menus:
 - [Menu](#)
 - [Trays](#)
 - b. Verify that the tray is correctly configured for the paper size and type.
3. Turn the printer off, wait 30 seconds, and then turn it on again.
4. Print a cleaning page to remove excess toner from inside the printer.
 - a. **SFP:** Open the following menus:
 - [Menu](#)
 - [Tools](#)
 - [Troubleshooting](#)
 - [Print Quality Tools](#)
 - [Cleaning Page](#)
 - b. Navigate to and select the [Print](#) item in the menu list, and then press the dial to select it and print the report.
 - a. **MFP:** Open the following menus:
 - [Menu](#)
 - [Tools](#)
 - [Troubleshooting](#)
 - [Print Quality Tools](#)
 - b. Touch the [Cleaning Page](#) item. A cleaning page prints.
5. Print a configuration page to test the printer.
 - a. Open the following menus:
 - [Menu](#)
 - [Tools](#)
 - [Status Reports](#)
 - b. Select the [Configuration Report](#) item.

- c. Do one of the following:
- **MFP:** Touch the **Print** button to print the page.
 - **SFP:** Navigate to and select the **Print** item at the top of the menu to print the page.

Paper jam locations

Jams can occur in these locations.

Figure 4-82 Jam locations



Number	Description
1	Document feeder
2	Output bin
3	Rear door/Duplexer
4	Tray 1
5	Tray 2

13.02 Jam error in Tray 1

Use the following procedure to clear paper jams in Tray 1.

Recommended action for customers

When a jam occurs, the control panel displays a message that assists in clearing the jam.

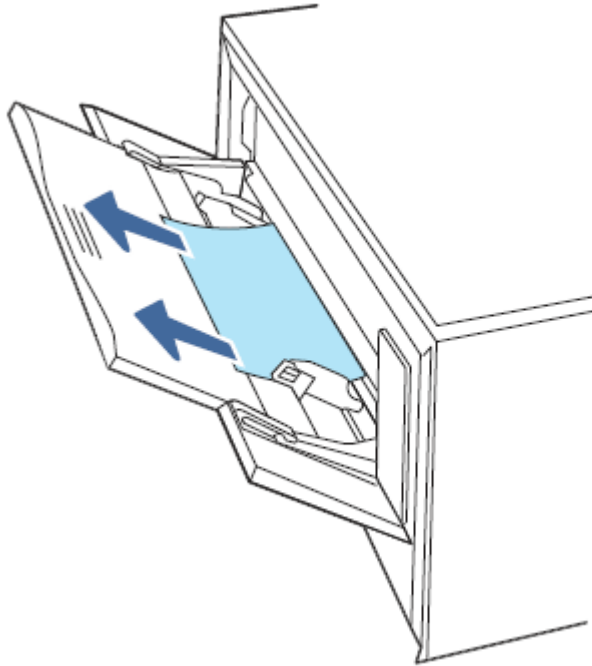
- **13.02.yz Paper jam in Tray 1**

Y and Z are variables and can be any of the following 0-9 or A-F.

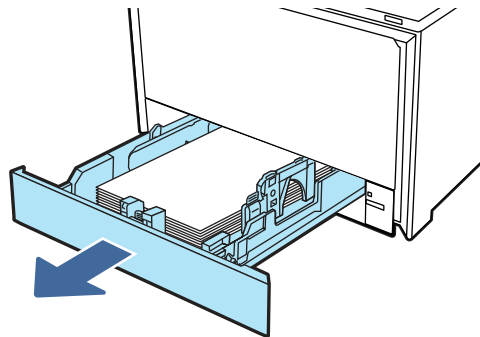


[View a video of how to clear a jam in Tray 1](#)

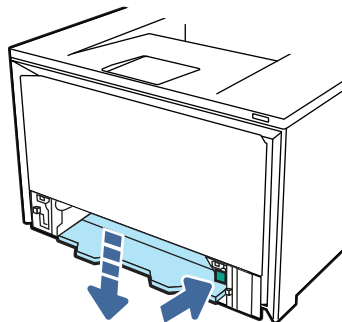
1. If you can see the jammed sheet in Tray 1, remove the jammed sheet by pulling it straight out.



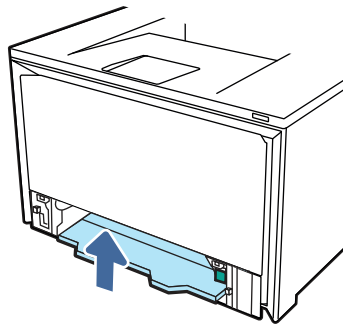
2. If you cannot see the jammed sheet, close Tray 1, and then remove Tray 2.



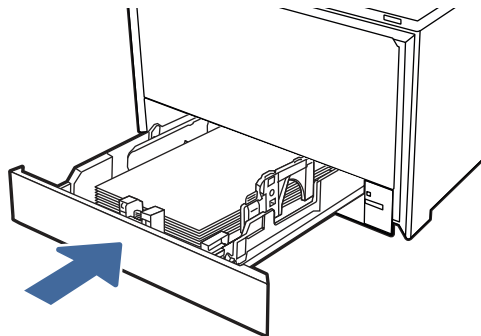
3. At the right side of the Tray 2 cavity, press the tab to lower the tray plate, and then remove any paper. Remove the jammed sheet by gently pulling it straight out.



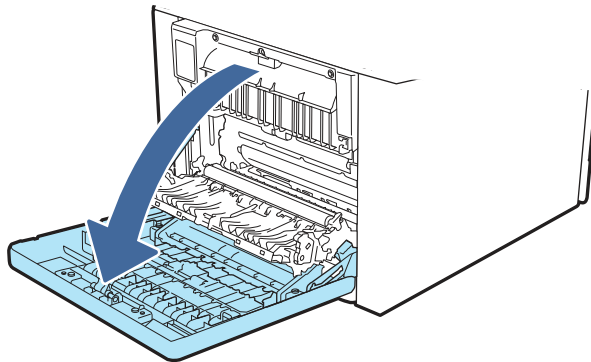
4. Push the tray plate back up into place.

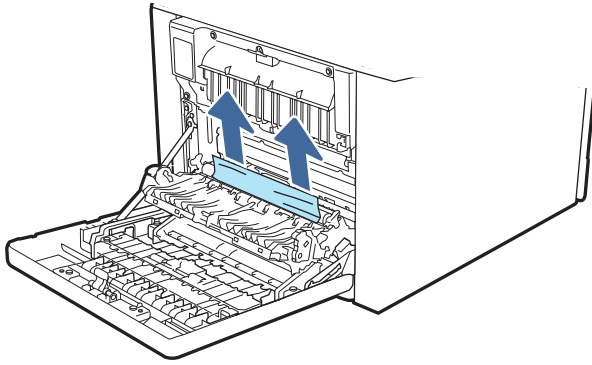


5. Reinstall Tray 2.

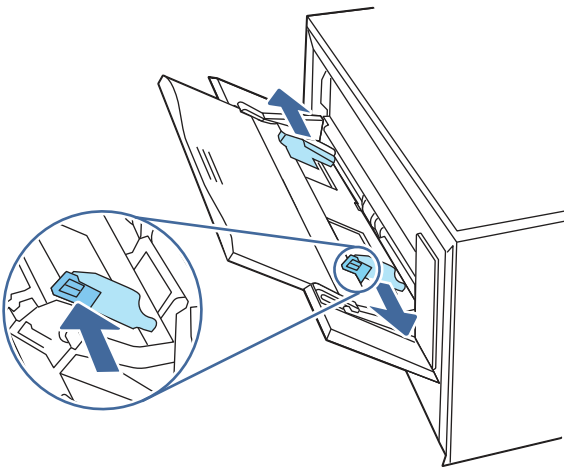


6. Open the rear door and look for and clear any paper present or obstructions in the paper path.

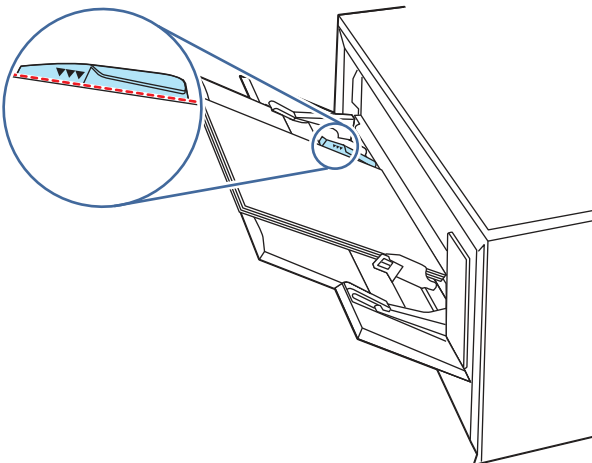




7. Make sure the type and quality of the paper being used meets the HP specifications for the printer.
8. Reopen Tray 1 and load paper into the tray. Ensure the tray guides are set to the correct paper size.



9. Ensure the tray is not overfilled. Paper should be below the 3 triangles in the following image.



10. If the error persists, contact your HP-authorized service or support provider, or contact customer support at www.hp.com/go/contactHP.

13.03 Jam error in Tray 2

Use the following procedure to check for a paper jam in Tray 2.

Recommended action for customers

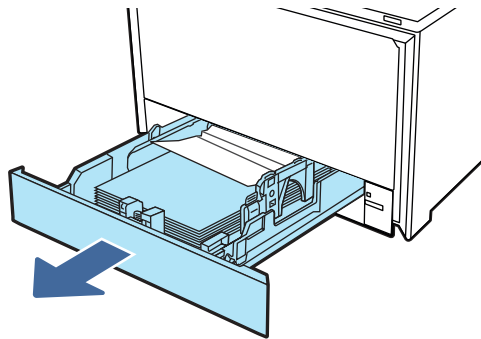
When a jam occurs, the control panel displays a message that assists in clearing the jam.

- **13.03.yz Paper jam in Tray 2**

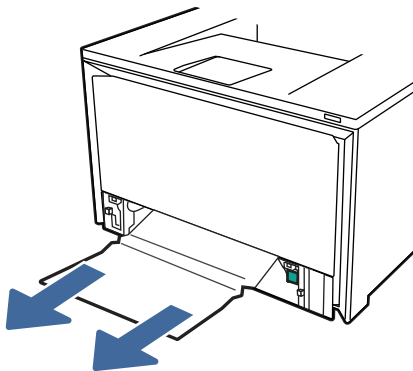
Y and Z are variables and can be any of the following 0-9 or A-F.

 [View a video of how to clear a jam in Tray 2](#)

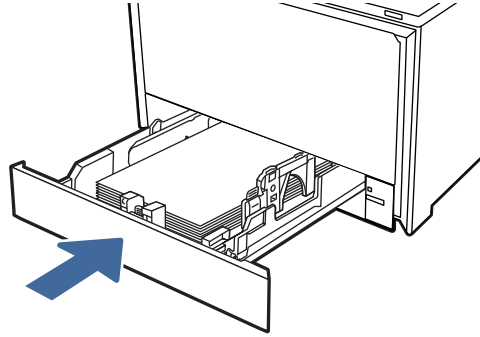
1. Pull the tray completely out of the printer.




2. Remove any jammed or damaged sheets of paper.

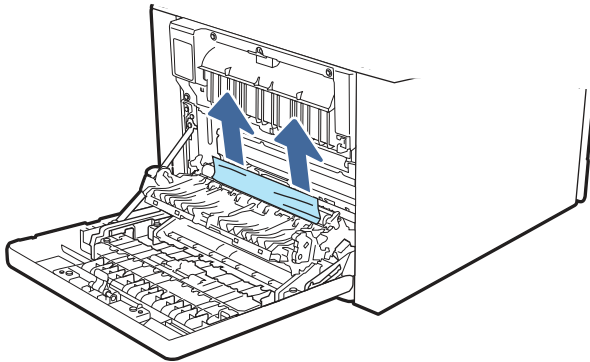
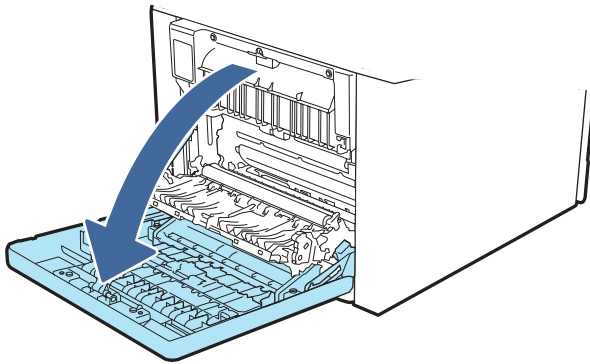


3. Reinsert and close Tray 2.



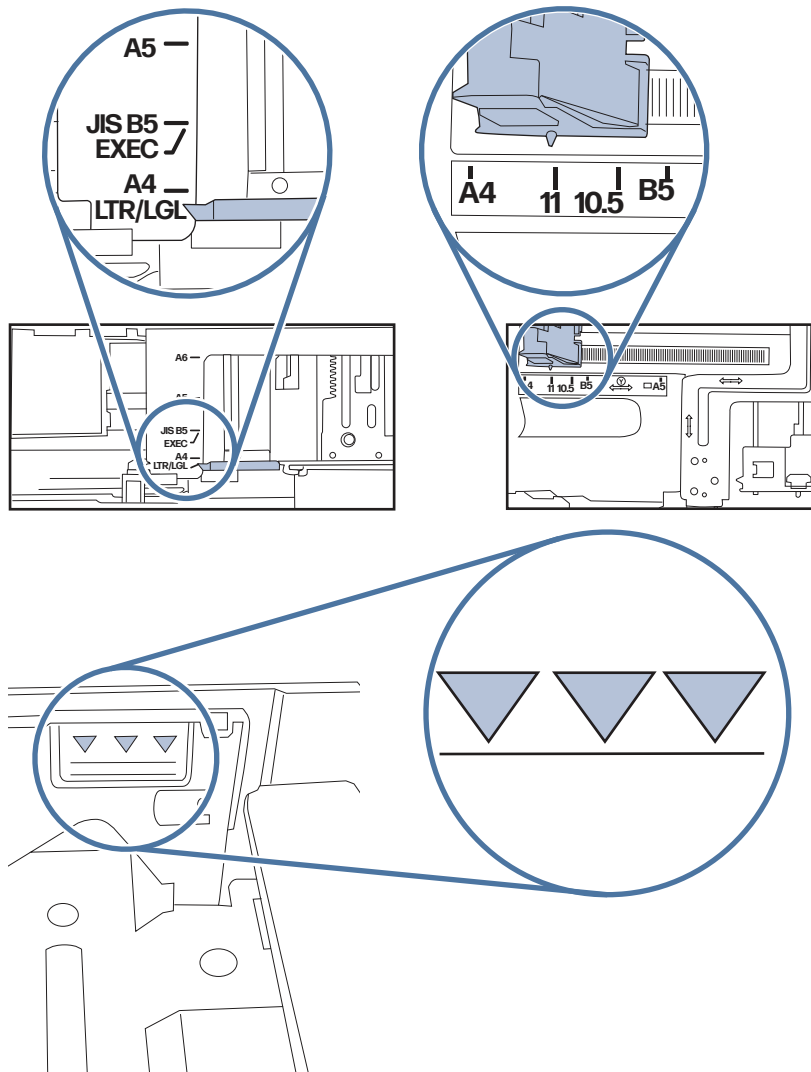
 **NOTE:** When reinserting the paper, make sure the paper guides are adjusted properly for the paper size.

4. Open the rear door and look for and clear any paper present or obstructions in the paper path.



5. Ensure the type and quality of the paper being used meets the HP specifications for the printer.

6. If the error persists, ensure that the tray width and length guides are set to the correct paper size for the paper being installed into the tray and that the tray is not over filled above the fill mark (line below 3 triangles). See following images.



7. If the error persists, contact your HP-authorized service or support provider, or contact customer support at www.hp.com/go/contactHP.

13.10.yz, 13.11.yz, 13.13.yz Jam error in the output bin

Use the following procedure to check for paper in all possible jam locations related to the output bin.

Recommended action for customers

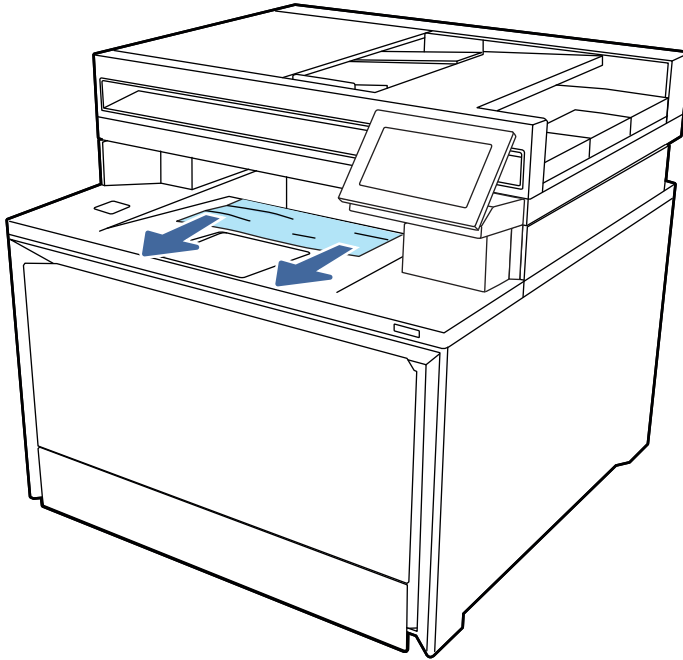
When a jam occurs, the control panel displays an error message that assists in clearing the jam.

- 13.10.yz Paper jam in output bin
- 13.11.yz Paper jam in output bin
- 13.13.yz Paper jam in output bin

Y and Z are variables and can be any of the following 0-9 or A-F.

 [View a video of how to clear a jam in the output bin](#)

- If paper is visible in the output bin, grasp the leading edge and remove it.



13.08, 13.09, 13.14, or 13.15 Jam error in the rear door

Use the following procedure to check for paper in all possible jam locations inside the rear door.

Recommended action for customers

When a jam occurs, the control panel displays a message that assists in clearing the jam.

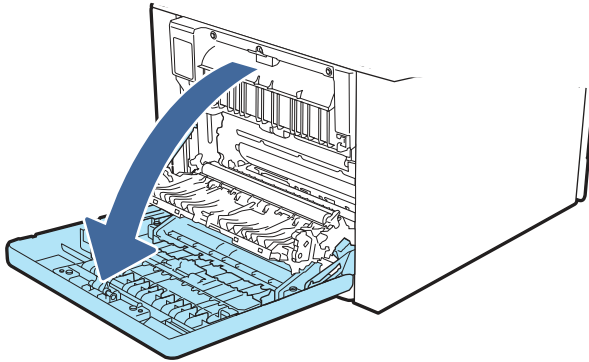
- 13.08.yz Paper jam in rear door
- 13.09.yz Paper jam in rear door
- 13.14.yz Paper jam in rear door
- 13.15.yz Paper jam in rear door

Y and Z are variables and can be any of the following 0-9 or A-F.

 [View a video of how to clear a jam in the rear door](#)

1. Check the output area of the printer. If paper is extruding out slowly pull it out of the printer.

2. At the rear of the printer, open the rear door.



3. Remove any jammed or damaged sheets of paper from the rear door of the printer.



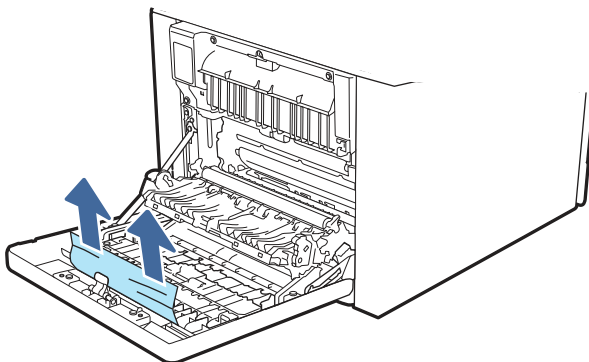
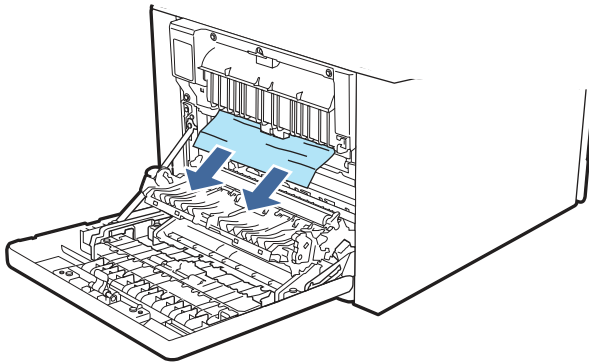
CAUTION:



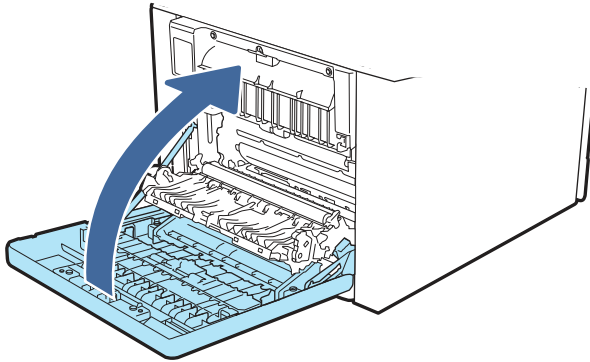
The fuser is located above the rear door, and it is hot. Do not attempt to reach into the area above the rear door until the fuser is cool.



NOTE: Check all places paper inside the rear door for paper.



4. Close the rear door.



5. If the error persists, ensure the type and quality of the paper being used meets the HP specifications for the printer.
6. If the error persists, contact your HP-authorized service or support provider, or contact customer support at www.hp.com/go/contactHP.

Jam error in the fuser output

Use the following procedure to check for paper in all possible jam locations in the fuser area.

Recommended action for customers

When a jam occurs, the control panel displays a message that assists in clearing the jam.

- **Jam in rear door**



CAUTION:

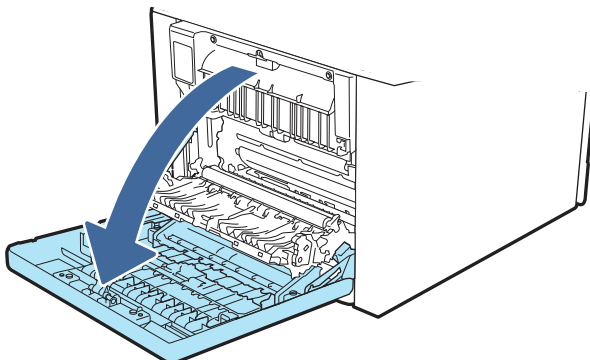


The fuser can be hot while the printer is in use. Wait for the fuser to cool before handling it.

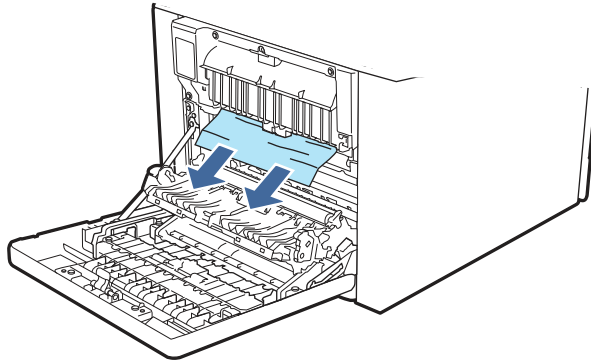


[View a video of how to clear a jam in the fuser area](#)

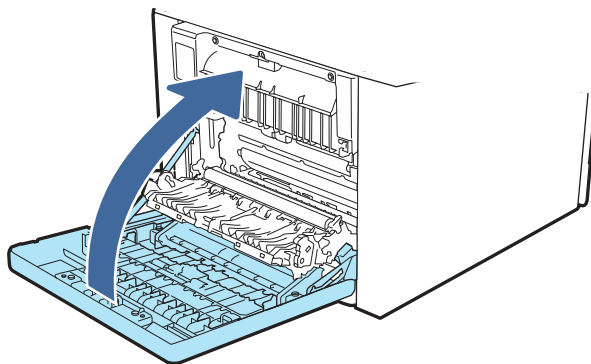
1. Open the rear door.



2. Gently pull out any jammed paper from the rollers in the rear door area.



3. Close the rear door.



4. If the error persists, ensure the type and quality of the paper being used meets the HP specifications for the printer.
5. If the error persists, contact your HP-authorized service or support provider, or contact customer support at www.hp.com/go/contactHP.

Change jam recovery

Use the following procedure to change jam recovery from the control panel.

1. Open the following menus:
 - Menu
 - Settings
 - General
 - Jam Recovery
2. Choose from the following settings:
 - Automatic
 - On
 - Off

Printer feeds incorrect page size

Review the following information when the printer feeds an incorrect page size.



NOTE: To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

Table 4-20 Printer feeds incorrect page size

Cause	Solution
The correct size paper is not loaded in the tray.	Load the correct size paper in the tray.
The correct size paper is not selected in the software program or printer driver.	Confirm that the settings in the software program and printer driver are correct, because the software program settings override the printer driver and control panel settings, and the printer driver settings override the control panel settings.
The correct size paper for the tray is not selected in the printer control panel.	From the control panel, select the correct size paper for the tray.
The paper size is not configured correctly for the tray.	Print a configuration page to determine the paper size for which the tray is configured.
The guides in the tray are not against the paper.	Verify that the paper guides are touching the paper.

Printer pulls from incorrect tray

Review the following information when the printer pulls from an incorrect tray.



NOTE: To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

Table 4-21 Printer pulls from incorrect tray

Cause	Solution
A driver for a different printer is in use.	Use a driver for this printer.
The specified tray is empty.	Load paper in the specified tray.
The paper size is not configured correctly for the input tray.	Print a configuration page or use the control panel to determine the paper size for which the tray is configured.
The guides in the tray are not against the paper.	Verify that the guides are touching the paper.

Printer will not duplex or duplexes incorrectly (duplex models)

Review the following information when the printer will not duplex or duplexes incorrectly.

Table 4-22 Printer will not duplex (print 2-sided jobs) or duplexes incorrectly

Cause	Solution
The duplex job is trying to use unsupported paper.	Verify that the paper is supported for duplex printing.
The printer driver is not set up for duplex printing.	Set up the printer driver to enable duplex printing.

Table 4-22 Printer will not duplex (print 2-sided jobs) or duplexes incorrectly (continued)

Cause	Solution
The first page is printing on the back of preprinted forms or letterhead.	Load preprinted forms and letterhead in Tray 1 with the letterhead or printed side down, with the top of the page leading into the printer. For Tray 2-X, load the paper printed side up with the top of the page toward the right of the printer.
The printer model does not support automatic 2-sided printing.	The printer model does not support automatic 2-sided printing.

Paper does not feed from Tray 2-X

Review the following information when the paper does not feed from Tray 2-X.


 **NOTE:** To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

Table 4-23 Paper does not feed from Tray 2-X

Cause	Solution
The correct size paper is not loaded.	Load the correct size paper.
The input tray is empty.	Load paper in the input tray.
The correct paper type for the input tray is not selected in the printer control panel.	From the printer control panel, select the correct paper type for the input tray. Trays configured for a paper type with a specific weight range will not match a print job that specifies an exact weight, even if the specified weight is within the weight range.
Paper from a previous jam has not been completely removed.	Open the printer and remove any paper in the paper path. Closely inspect the fuser area for jams.
None of the optional trays appear as input tray options.	The optional trays only display as available if they are installed. Verify that any optional trays are correctly installed. Verify that the printer driver has been configured to recognize the optional trays.
An optional tray is incorrectly installed.	Print a configuration page to confirm that the optional tray is installed. If not, verify that the tray is correctly attached to the printer.
The paper size is not configured correctly for the input tray.	Print a configuration page or use the control panel to determine the paper size for which the tray is configured.
The guides in the tray are not against the paper.	Verify that the guides are touching the paper.

Output is curled or wrinkled

Review the following information when the output is curled or wrinkled.

Table 4-24 Output is curled or wrinkled

Cause	Solution
Paper does not meet the specifications for this printer.	Use only paper that meets the HP paper specifications for this printer. Non-recycled, 75 g/m ² (20 lb) paper is optimal for office use.

Table 4-24 Output is curled or wrinkled (continued)

Cause	Solution
The correct paper type for the input tray is not selected in the printer control panel.	From the printer control panel, select the correct paper type for the input tray. Trays configured for a paper type with a specific weight range will not match a print job that specifies an exact weight, even if the specified weight is within the weight range.
Paper is damaged or in poor condition.	Remove paper from the input tray and load paper that is in good condition.
The printer is operating in an excessively humid environment.	Verify that the printing environment is within humidity specifications.
The print job consist of large, solid-filled areas.	Large, solid-filled areas can cause excessive curl. Try using a different pattern.
Paper used was not stored correctly and might have absorbed moisture.	Remove paper and replace it with paper from a fresh, unopened package. Store paper in a plastic bag to protect it from humidity.
Paper has poorly cut edges.	Remove paper, flex it, rotate it 180 degrees or turn it over, and then reload it into the input tray. Do not fan paper. If the problem persists, replace the paper.
The specific paper type was not configured for the tray or selected in the software.	Configure the software for the paper (see the software documentation). Configure the tray for the paper.
The paper has previously been used for a print job.	Do not re-use paper.

The printer does not pick up paper

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



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

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

1. Open the printer and remove any jammed sheets of paper.
2. Load the tray with the correct size of paper for the job.
3. Make sure the paper size and type are set correctly on the printer control panel.
4. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides to the appropriate indentation in the tray.
5. Check the printer control panel to see if the printer is waiting for an acknowledgment to the feed the paper manually prompt. Load paper, and continue.
6. The rollers above the tray might be contaminated. Clean the rollers with a lint-free cloth dampened with warm water.

The printer picks up multiple sheets of paper

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

1. Remove the stack of paper from the tray and flex it, rotate it 180 degrees, and flip it over. *Do not fan the paper.* Return the stack of paper to the tray.
2. Use only paper that meets HP specifications for this printer.
3. Use paper that is not wrinkled, folded, or damaged. If necessary, use paper from a different package.
4. Make sure the tray is not overfilled. If it is, remove the entire stack of paper from the tray, straighten the stack, and then return some of the paper to the tray.
5. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides to the appropriate indentation in the tray.
6. Make sure the printing environment is within recommended specifications.
7. The tray pick and/or feed rollers might be contaminated. Clean the rollers with a lint-free cloth dampened with warm water.

The document feeder jams, skews, or picks up multiple sheets of paper (MFP)

Learn about MFP document feeder paper handling problems.

Review the following information when the document feeder jams, skews, or picks up multiple sheets of paper.

- Check to see if there are areas on the page that might have had staples removed. This can cause jams and/or mispicks.
- The original might have something on it, such as staples or self-adhesive notes that must be removed.
- Check that all rollers are in place and correctly installed.
- Make sure that the top document-feeder cover is closed.
- The pages might not be placed correctly. Straighten the pages and adjust the paper guides to center the stack.
- The paper guides must be touching the sides of the paper stack to work correctly. Make sure that the paper stack is straight, and the guides are against the paper stack.
- The document feeder input tray or output bin might contain more than the maximum number of pages. Make sure the paper stack fits below the guides in the input tray and remove pages from the output bin.
- Verify that there are no pieces of paper, staples, paper clips, or other debris in the paper path.
- Clean the document-feeder rollers and the separation pad. Use compressed air or a clean, lint-free cloth moistened with warm water. If misfeeds still occur, replace the rollers.
- Use the control panel menus to check the status of the document-feeder kit and replace it if necessary.

Paper does not feed automatically

Review the following information when the paper does not feed automatically.



NOTE: To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

Table 4-25 Paper does not feed automatically

Cause	Solution
Manual feed is selected in the software program.	Load Tray 1 with paper, or, if the paper is loaded, press the OK button.
The correct size paper is not loaded.	Load the correct size paper.
The input tray is empty.	Load paper into the input tray.
Paper from a previous jam has not been completely removed.	Open the printer and remove any paper in the paper path.
The paper size is not configured correctly for the input tray.	Print a configuration page or use the control panel to determine the paper size for which the tray is configured.
The guides in the tray are not against the paper.	Verify that the rear and width paper guides are touching the paper.

Image-quality troubleshooting

Learn about image-quality troubleshooting.

Use the information in this topic to troubleshoot and resolve image-quality (what you see on the final printed page) problems including copy-quality, print-quality, and color problems (color printers only).

Various printer hardware problems can cause image-quality defects. This topic is a guide to the steps used to isolate the specific areas of the printer that are causing image-quality defects on the printed page, and to provide solutions to resolve those image-quality defects.

Image-quality problems are defined as:


- **Print-quality (PQ) problems:** PQ problems are associated with the print engine (printer base) of an MFP printer (single function non MFP image-quality problems are always PQ defects). PQ defects appear on pages that are **printed** by the print engine and not fed through an integrated scanner assembly (ISA).
- **Copy-quality (CQ) problems:** CQ problems are associated with the integrated-scanner assembly (ISA) portion of an MFP printer. CQ defects appear on pages that are **copied** using the document feeder or flatbed glass.

If the print defect is already known to be a PQ or CQ problem, skip to the appropriate troubleshooting topic listed below. Otherwise, follow the steps in the next section below to get started troubleshooting image-quality problems.

- **Print-quality (PQ) problems:** See [Print-quality troubleshooting on page 211](#).
- **Copy-quality (CQ) problems:** See [Copy-quality troubleshooting on page 227](#).

Get started troubleshooting image-quality problems

Print a demonstration page to identify the defect as a PQ (print engine) or CQ (ISA) problem.

 **NOTE:** If the image defect appears on the printed demonstration page, the issue is a print-quality (PQ) problem (associated with the print engine and not the document feeder or flatbed glass) and not a CQ problem.

Make sure that the demonstration page is printed on **plain paper**.

Enterprise printers

1. Select **Reports > Other pages**.
2. Select [Demonstration Page](#).

Pro printers


1. At the printer, scroll to or select [Setup](#).
2. Go to [Reports](#), and then select [Demonstration Page](#).

Does the demonstration page show any image-quality defects?

- **Yes:** If defects appear on the printed demonstration page the issue is PQ related. See [Print-quality troubleshooting on page 211](#).
- **No:** If defects does not appear on the printed demonstration page the issue is CQ related. See [Copy-quality troubleshooting on page 227](#).

Print-quality troubleshooting

Learn about the print-quality troubleshooting.


 **NOTE:** Print-quality (PQ) problems are associated with the print engine (printer base) of an MFP printer (single function non MFP image-quality problems are always PQ defects). PQ defects appear on pages that are **printed** by the print engine and not feed through an integrated scanner assembly (ISA).


Repetitive image defect ruler

Review the following information about a repetitive image defect ruler.

When troubleshooting the source of some print image defects, one solution is to identify if it is a repetitive defect (does the print quality defect appear multiple times on the printed page?). If this is the case, use a ruler to measure occurrences of repetitive image defects to help solve image-quality problems. For more information, see [Using a ruler to measure between repetitive defects](#).

Use a ruler to measure occurrences of repetitive image defects to help solve image-quality problems. Place the ruler next to the first occurrence of the defect on the page. Find the distance between identical defects and use the table below to identify the component that is causing the defect.

 **CAUTION:** Do not use solvents or oils to clean rollers. Instead, rub the roller with a lint-free cloth. If dirt is difficult to remove, rub the roller with a lint-free cloth that has been dampened with water.

 **NOTE:** The primary charging roller, photosensitive drum, and developer roller cannot be cleaned because they are internal assemblies in the toner cartridge or imaging drum. If one of these assemblies is causing the defect, replace the toner cartridge.

The primary fuser sleeve unit or pressure roller cannot be cleaned because they are internal assemblies in the fuser. If one of these assemblies is causing the defect, replace the fuse


 **TIP:** To make a printer specific repetitive defect ruler, use a metric ruler to transfer the measurements in the table below to a transparency or the edge of a piece of paper—clearly label each ruler mark with the associated defective assembly.


Table 4-26 Repetitive defects


Assembly	Distance between defects	Notes
Developer roller	23.2 mm (0.91 in)	Appears as dropouts.
Primary charging roller	24.5 mm (0.96 in)	Appears as dropouts.
Resupply roller	30.6 mm (1.20 in)	
Registration roller	49 mm (1.9 in)	Appears as dirt on the page.
Secondary transfer roller and Station Pitch	51.8 mm (2.03 in)	Appears as dropouts or dirt on the back of the page.
Fuser roller	57.5 mm (2.26 in)	Appear as dirt on the page.
Pressure roller	63 mm (2.5 in)	Appears as dropouts or dirt on the back of the page.
Photosensitive drum	64.6 mm (2.54 in)	Appear as dirt or appears as dropouts.

Use a ruler to measure between repetitive defects

The figures in this section show color repetitive defect pages. However, the process for measuring repetitive defects is valid for mono pages.

1. Identify a repetitive defect on the page.

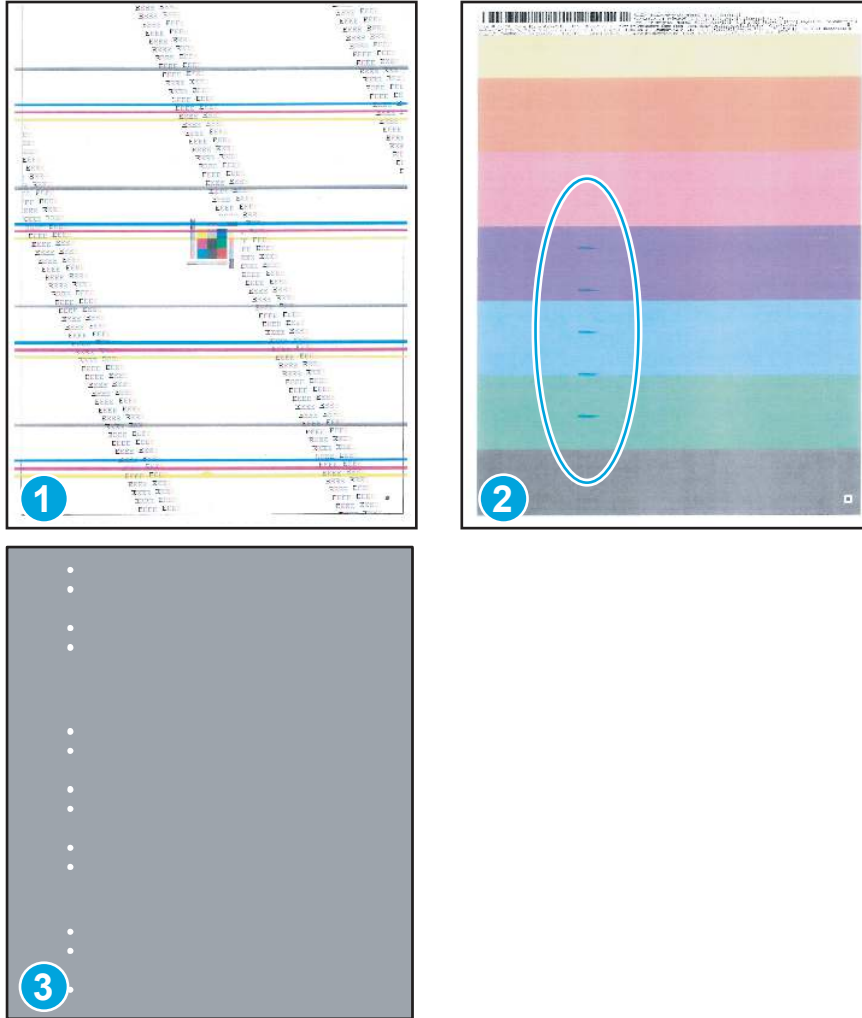
 **TIP:** Print a cleaning page to see if that resolves the defect.

 **NOTE:** Some printers allow loading Letter and A4 media in short-edge-first or long-edge-first orientation in the paper trays. When measuring repetitive defects, make sure to place the ruler at the leading edge of the page. This is the edge of the page that feeds into the printer first.

The example pages below show the following types of repetitive defects.

- Lines (callout 1)
- Smudges (callout 2)
- Dots or spots (callout 3)

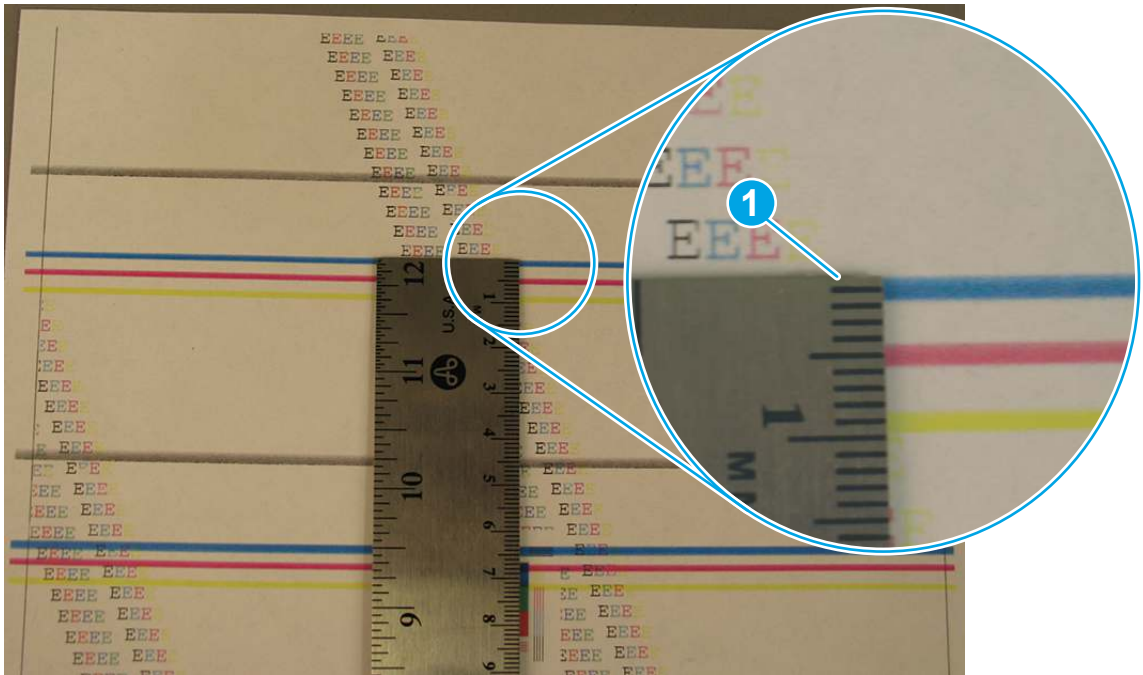
Figure 4-83 Examples of repetitive defects



NOTE: These are examples only, other types of repetitive defects might appear on a page.

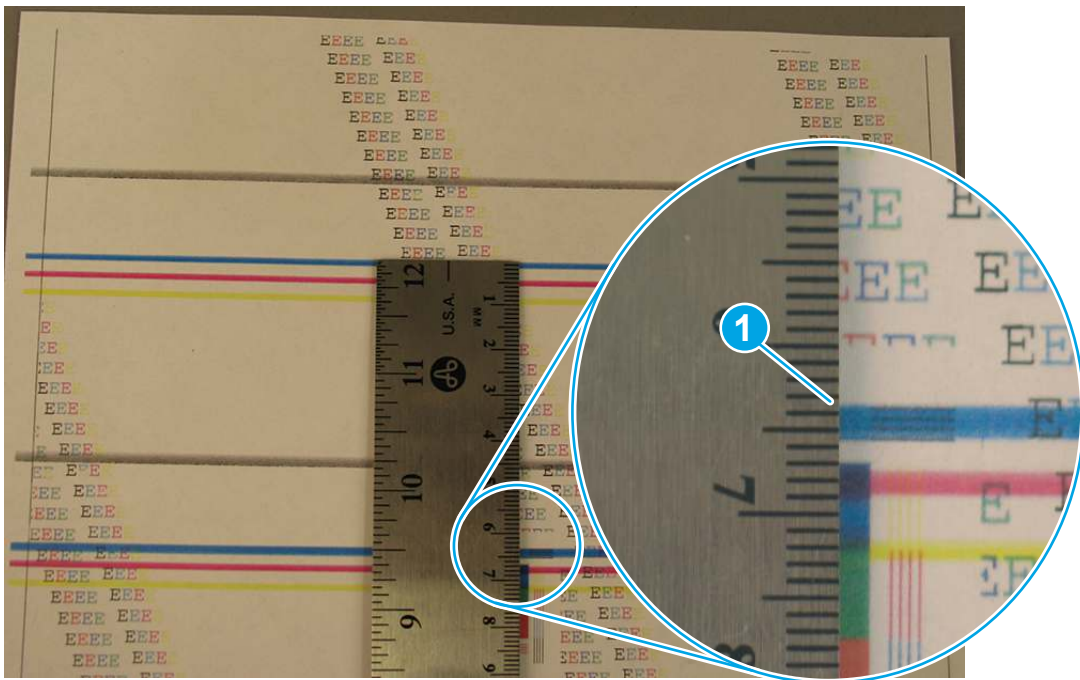
2. Position a metric ruler on the page with the “zero” ruler mark at one occurrence of the defect (callout 1).

Figure 4-84 Place the ruler on the page



3. Locate the next occurrence of the defect (callout 1).

Figure 4-85 Locate the next repetitive defect



4. Measure the distance (in millimeters) between the two occurrences (callout 1), and then use the Repetitive defects table to determine the defective assembly.


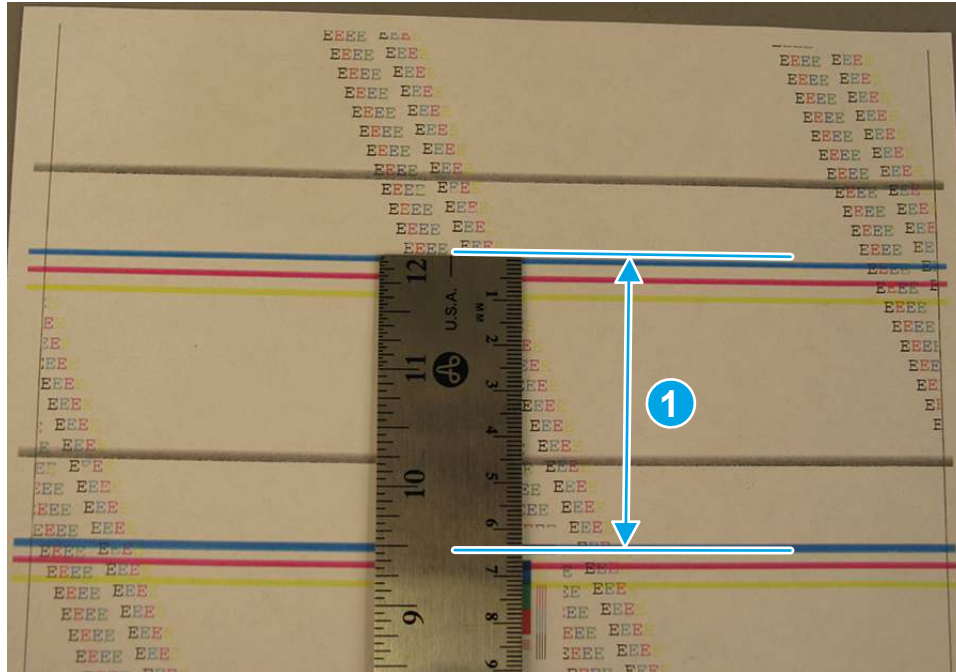
 **TIP:** Always measure from and to the same point on the defects. For example, if the ruler is “zeroed” at the top edge of a defect, measure to the top edge of the next occurrence of that defect.

Figure 4-86 Determine the defective assembly



Print from a different software program

Try printing from a different software program.

If the page prints correctly, the problem is with the software program from which you were printing.

Check the paper-type setting for the print job

Check the paper type setting when printing from a software program and the printed pages have smears, fuzzy or dark print, curled paper, scattered dots of toner, loose toner, or small areas of missing toner.

Check the paper type setting on the control panel

Check the paper type setting on the printer control panel, and change the setting as needed.

1. Open the following menus:
 - Menu
 - Trays (SFP)
 - Paper (MFP)
2. Do one of the following:
 - **SFP:** Select **Tray 1 > Paper Type**.

- **MFP:** Select **Tray 1 > ModifyType**.

Check the paper type setting (Windows)

Check the paper type setting for Windows, and change the setting as needed.



NOTE: The print driver settings will override any control panel settings.

1. From the software program, select the **Print** option.
2. Select the printer, and then click the **Properties** or **Preferences** button.
3. Click the **Paper/Quality** tab.
4. From the **Paper Type** drop-down list, click the **More...** option.
5. Expand the list of **Type is:** options.
6. Expand the category of paper types that best describes your paper.
7. Select the option for the type of paper you are using, and click the **OK** button.
8. Click the **OK** button to close the **Document Properties** dialog box. In the **Print** dialog box, click the **OK** button to print the job.

Check the paper type setting (macOS)

Check the paper type setting for macOS, and change the setting as needed.

1. Click the **File** menu, and then click the **Print** option.
2. In the **Printer** menu, select the printer.
3. Click **Show Details** or **Copies & Pages**.
4. Open the menu drop-down list, and then click the **Paper/Quality** menu.
5. Select a type from the **Media Type** drop-down list.
6. Click the **Print** button.

Check toner-cartridge status

Follow these steps to check the estimated life remaining in the toner cartridges and if applicable, the status of other replaceable maintenance parts.

Step one: Print the Supplies Status Page

The supplies status page indicates the cartridge status.



TIP: Use the following menus as an alternate method of checking the supplies status:

- **SFP: Menu > Supplies > Estimated Levels**
- **MFP: Menu > Supplies > Cartridges > Estimated Levels**

1. Open the following menus:
 - Menu
 - Tools

- Reports
 - Status Reports
2. Select the [HP Supplies Status Report](#) item.
 - **SFP:** Navigate to and select the [Print](#) item at the top of the menu to print the page.
 - **SFP:** Touch the [Print](#) button to print the page.

Step two: Check supplies status

Check the supplies status report as follows.

1. Look at the supplies status report to check the percent of life remaining for the toner cartridges and, if applicable, the status of other replaceable maintenance parts.

Print quality problems can occur when using a toner cartridge that is at its estimated end of life. The supplies status page indicates when a supply level is very low. After an HP supply has reached the very low threshold, HP's premium protection warranty on that supply has ended.

The toner cartridge does not need to be replaced now unless the print quality is no longer acceptable. Consider having a replacement available to install when print quality is no longer acceptable.

If you determine that you need to replace a toner cartridge or other replaceable maintenance parts, the supplies status page lists the genuine HP part numbers.

2. Check to see if you are using a genuine HP cartridge.

A genuine HP toner cartridge has the word "HP" on it, or has the HP logo on it. For more information on identifying HP cartridges go to www.hp.com/go/learnaboutsupplies.

Print a cleaning page

Learn how to print a cleaning page.



NOTE: To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

During the printing process, paper, toner, and dust particles can accumulate inside the printer and can cause print-quality issues such as toner specks or spatter, smears, streaks, lines, or repeating marks.

Print a cleaning page from a dial control panel

1. Open the following menus:
 - [Menu](#)
 - [Tools](#)
 - [Troubleshooting](#)
 - [Print Quality Tools](#)
 - [Cleaning Page](#)
2. Navigate to and select the [Print](#) item in the menu list, and then press the dial to select it and print the report.

Print a cleaning page from a touchscreen control panel

1. Open the following menus:
 - Menu
 - Tools
 - Troubleshooting
 - Print Quality Tools
2. Touch the **Cleaning Page** item. A cleaning page prints.

Visually inspect the toner cartridge or cartridges

Follow these steps to inspect each toner cartridge:

1. Remove the toner cartridge from the printer, 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.
-
- ⚠ CAUTION:** Do not touch the imaging drum. 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 toner cartridge.
 5. Reinstall the toner cartridge and print a few pages to see if the problem has resolved.

Check paper and the printing environment

Use the following information to check the paper selection and the printing environment.

Step one: Use paper that meets HP specifications

Some print-quality problems arise from using paper that does not meet HP specifications.

- Always use a paper type and weight that this printer supports.
- Use paper that is of good quality and free of cuts, nicks, tears, spots, loose particles, dust, wrinkles, voids, staples, and curled or bent edges.
- Use paper that has not been previously printed on.
- Use paper that does not contain metallic material, such as glitter.
- Use paper that is designed for use in laser printers. Do not use paper that is designed only for use in Inkjet printers.
- Use paper that is not too rough. Using smoother paper generally results in better print quality.

Step two: Check the environment

The environment can directly affect print quality and is a common cause of print-quality or paper-feeding issues. Try the following solutions:

- Move the printer away from drafty locations, such as open windows or doors, or air-conditioning vents.
- Make sure the printer is not exposed to temperatures or humidity outside of printer specifications.
- Do not place the printer in a confined space, such as a cabinet.
- Place the printer on a sturdy, level surface.
- Remove anything that is blocking the vents on the printer. The printer requires good air flow on all sides, including the top.
- Protect the printer from airborne debris, dust, steam, grease, or other elements that can leave residue inside the printer.

Try a different print driver

Try a different print driver when printing from a software program and the printed pages have unexpected lines in graphics, missing text, missing graphics, incorrect formatting, or substituted fonts.

Download any of the following drivers from the HP Web site: www.hp.com/support/colorlj4201-4203 or www.hp.com/support/colorlj4201-4203plus or www.hp.com/support/colorlj4301-4303 or www.hp.com/support/colorlj4301-4303plus.

Table 4-27 Print drivers

Driver	Description
HP PCL 6 driver	This printer-specific print driver supports Windows 7 and newer operating systems that support version 3 drivers. For a list of supported operating systems, go to www.hp.com/go/support .
HP PCL-6 driver	This product-specific print driver supports Windows 8 and newer operating systems that support version 4 drivers. For a list of supported operating systems, go to www.hp.com/go/support .
HP UPD PS driver	<ul style="list-style-type: none"> • Recommended for printing with Adobe software programs or with other highly graphics-intensive software programs • Provides support for printing from Postscript emulation needs, or for Postscript flash font support
HP UPD PCL 6	<ul style="list-style-type: none"> • Recommended for printing in all Windows environments • Provides the overall best speed, print quality, and printer feature support for most users • Developed to align with Windows Graphic Device Interface (GDI) for best speed in Windows environments • Might not be fully compatible with third-party and custom software programs that are based on PCL 5

Troubleshoot image defects

Review examples of image defects and steps to resolve these defects.

Table 4-28 Image defects table quick reference



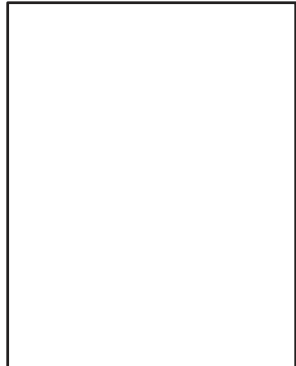

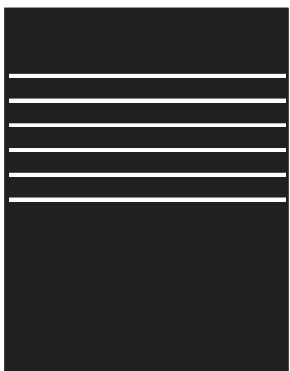
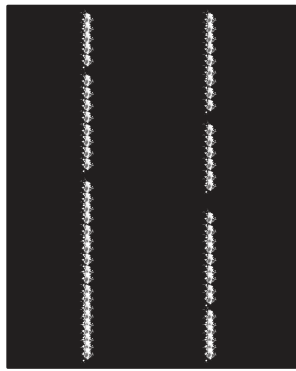
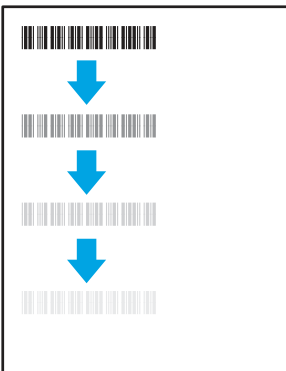


Defect	Defect	Defect
<p>Table 4-36 Light print on page 225</p> 	<p>Table 4-34 Gray background or dark print on page 224</p> 	<p>Table 4-31 Blank page - No print on page 223</p> 
<p>Table 4-30 Black page on page 222</p> 	<p>Table 4-29 Banding defects on page 222</p> 	<p>Table 4-38 Streak defects on page 226</p> 
<p>Table 4-33 Fixing/fuser defects on page 223</p> 	<p>Table 4-35 Image placement defects on page 225</p> 	<p>Table 4-32 Color plane registrations defects (color models only) on page 223</p> 

Table 4-28 Image defects table quick reference (continued)

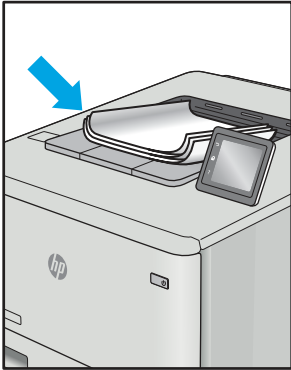

Defect	Defect	Defect
<p>Table 4-37 Output defects on page 226</p> 		

Image defects, no matter the cause, can often be resolved using the same steps. Use the following steps as a starting point for solving image defect issues.

1. Reprint the document. Print quality defects can be intermittent in nature or can go away completely with continued printing.
2. Check the condition of the cartridge or cartridges. If a cartridge is in a **Very Low** state (it has passed the rated life), replace the cartridge.
3. Make sure that the driver and tray print mode settings match the media that is loaded in the tray. Try using a different ream of media or a different tray. Try using a different print mode.
4. Make sure the printer is within the supported operating temperature/humidity range.
5. Make sure that the paper type, size, and weight are supported by the printer. See the printer support page at support.hp.com for a list of the supported paper sizes and types for the printer.

 **NOTE:** The term "fusing" refers to the part of the printing process where toner is affixed to paper.

The following examples depict letter-size paper that has passed through the printer with the short edge first.

Table 4-29 Banding defects

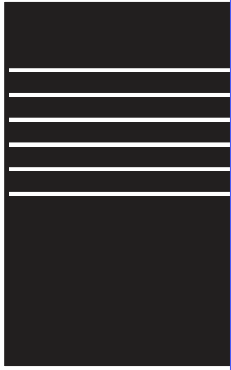
Sample	Description	Possible solutions
	<p>Dark or light lines which repeat down the length of the page, and are wide-pitch and/or impulse bands. They might be sharp or soft in nature. The defect displays only in areas of fill, not in text or sections with no printed content.</p>	<ol style="list-style-type: none"> 1. Reprint the document. 2. Try printing from another tray. 3. Replace the cartridge. 4. Use a different paper type. 5. Enterprise models only. From the Home screen on the printer control panel, go to the Adjust Paper Types menu, and then choose a print mode that is designed for a slightly heavier media than what you are using. This slows the print speed and might improve the print quality. 6. If the issue persists, go to support.hp.com.

Table 4-30 Black page

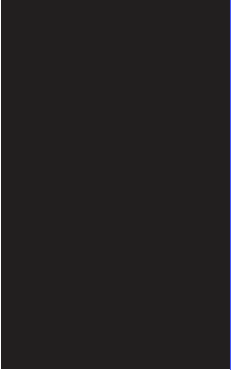
Sample	Description	Possible solutions
	<p>The entire printed page is black.</p>	<ol style="list-style-type: none"> 1. Visually inspect the cartridge to check for damage. 2. Make sure that the cartridge is installed correctly. 3. Replace the cartridge. 4. If the issue persists, go to support.hp.com.

Table 4-31 Blank page - No print

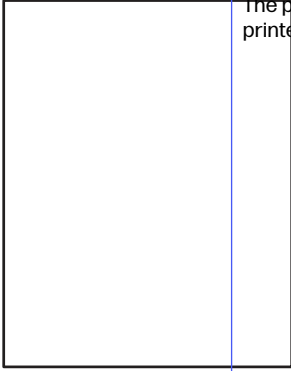
Sample	Description	Possible solutions
	The page is completely blank and contains no printed content.	<ol style="list-style-type: none"> 1. Make sure that the cartridges are genuine HP cartridges. 2. Make sure that the cartridge is installed correctly. 3. Print with a different cartridge. 4. Check the paper type in the paper tray and adjust the printer settings to match. If necessary, select a lighter paper type. 5. If the issue persists, go to support.hp.com.

Table 4-32 Color plane registrations defects (color models only)

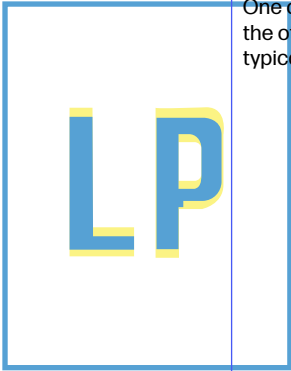
Sample	Description	Possible solutions
	One or more color plane(s) is not aligned with the other color planes. This registration error will typically occur with yellow.	<ol style="list-style-type: none"> 1. Reprint the document. 2. From the printer control panel, calibrate the printer. 3. If a cartridge has reached a Very Low state, or the printed output is severely faded, replace the cartridge. 4. From the printer control panel use the Restore Calibration feature to reset the printer's calibration settings to the factory defaults. 5. If the issue persists, go to support.hp.com.

Table 4-33 Fixing/fuser defects


Sample	Description	Possible solutions
	Slight shadows or offsets of the image are repeated down the page. The repeated image might fade with each recurrence.	<ol style="list-style-type: none"> 1. Reprint the document. 2. Check the paper type in the paper tray and adjust the printer settings to match. If necessary, select a lighter paper type. 3. If the issue persists, go to support.hp.com.

Table 4-33 Fixing/fuser defects (continued)

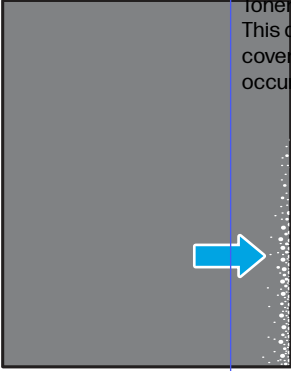
Sample	Description	Possible solutions
	<p>Toner rubs off along either edge of the page. This defect is more common at the edges of high-coverage jobs, and on light media types, but can occur anywhere on the page.</p>	<ol style="list-style-type: none"> 1. Reprint the document. 2. Check the paper type in the paper tray and adjust the printer settings to match. If necessary, select a heavier paper type. 3. Enterprise models only: From the printer control panel, go to the Edge-to-Edge menu and then select Normal. Reprint the document. 4. Enterprise models only: From the printer control panel, select Auto Include Margins and then reprint the document. 5. If the issue persists, go to support.hp.com.

Table 4-34 Gray background or dark print

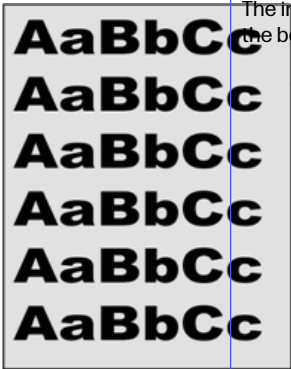
Sample	Description	Possible solutions
	<p>The image or text is darker than expected and/or the background is gray.</p>	<ol style="list-style-type: none"> 1. Make sure that the paper in the trays has not already been run through the printer. 2. Use a different paper type. 3. Reprint the document. 4. Mono models only: From the Home screen on the printer control panel, go to the Adjust Toner Density menu, and then adjust the toner density to a lower level. 5. Make sure that the printer is within the supported operating temperature and humidity range. 6. Replace the cartridge. 7. If the issue persists, go to support.hp.com.

Table 4-35 Image placement defects

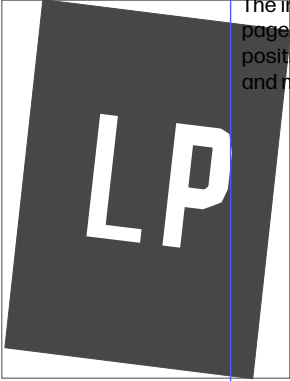
Sample	Description	Possible solutions
	<p>The image is not centered, or is skewed on the page. The defect occurs when the paper is not positioned properly as it is pulled from the tray and moves through the paper path.</p>	<ol style="list-style-type: none"> 1. Reprint the document. 2. Remove the paper and then reload the tray. Make sure that all the paper edges are even on all sides. 3. Make sure that the top of the paper stack is below the tray-full indicator. Do not overfill the tray. 4. Make sure that the paper guides are adjusted to the correct size for the paper. Do not adjust the paper guides tightly against the paper stack. Adjust them to the indentations or markings in the tray. 5. If the issue persists, go to support.hp.com.

Table 4-36 Light print

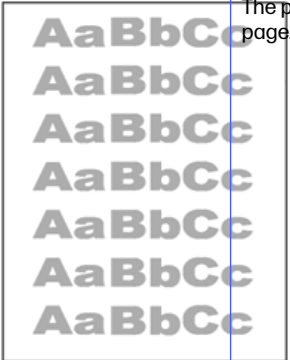
Sample	Description	Possible solutions
	<p>The printed content is light or faded on the entire page.</p>	<ol style="list-style-type: none"> 1. Reprint the document. 2. Remove the cartridge, and then shake it to redistribute the toner. Reinsert the toner cartridges into the printer and close the cover. For a graphical representation of this procedure, see <i>Replace the toner cartridges</i>. 3. Mono models only: Make sure that the EconoMode setting is disabled, both at the printer control panel and in the print driver. 4. Make sure that the cartridge is installed correctly. 5. Print a Supplies Status Page and check the life and usage of the cartridge. 6. Replace the cartridge. 7. If the issue persists, go to support.hp.com.

Table 4-37 Output defects

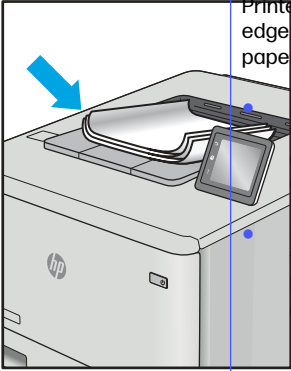
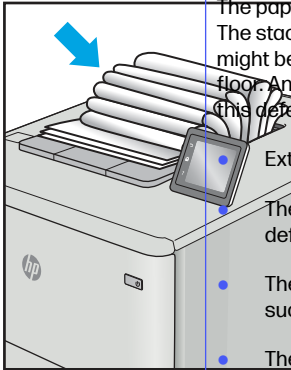
Sample	Description	Possible solutions
	<p>Printed pages have curled edges. The curled edge can be along the short or long side of the paper. Two types of curl are possible:</p> <ul style="list-style-type: none"> • Positive curl: The paper curls toward the printed side. The defect occurs in dry environments or when printing high-coverage pages. • Negative curl: The paper curls away from the printed side. The defect occurs in high-humidity environments or when printing low-coverage pages. 	<ol style="list-style-type: none"> 1. Reprint the document. 2. Positive curl: From the printer control panel, select a heavier paper type. The heavier paper type creates a higher temperature for printing. Negative curl: From the printer control panel, select a lighter paper type. The lighter paper type creates a lower temperature for printing. Try storing the paper in a dry environment prior to use, or use freshly opened paper. 3. Print in duplex mode. 4. If the issue persists, go to support.hp.com.
	<p>The paper does not stack well in the output tray. The stack might be uneven, skewed, or the pages might be pushed out of the tray and onto the floor. Any of the following conditions can cause this defect:</p> <ul style="list-style-type: none"> • Extreme paper curl • The paper in the tray is wrinkled or deformed • The paper is a non-standard paper type, such as envelopes • The output tray is too full 	<ol style="list-style-type: none"> 1. Reprint the document. 2. Extend the output bin extension. 3. If the defect is caused by extreme paper curl, refer to the troubleshooting steps for "Output curl." 4. Use a different paper type. 5. Use freshly opened paper. 6. Remove the paper from the output tray before the tray gets too full. 7. If the issue persists, go to support.hp.com.

Table 4-38 Streak defects

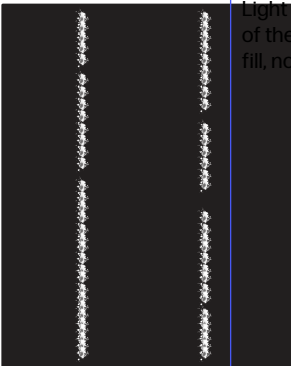
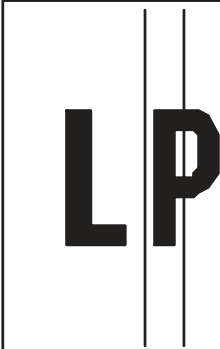

Sample	Description	Possible solutions
	<p>Light vertical streaks that usually span the length of the page. The defect displays only in areas of fill, not in text or sections with no printed content.</p>	<ol style="list-style-type: none"> 1. Reprint the document. 2. Remove the cartridge, and then shake it to redistribute the toner. Reinsert the toner cartridges into the printer and close the cover. For a graphical representation of this procedure, see <i>Replace the toner cartridges</i>. 3. If the issue persists, go to support.hp.com. <p>NOTE: Both light and dark vertical streaks can occur when the printing environment is outside the specified range for temperature or humidity. Refer to your printer's environmental specifications for allowable temperature and humidity levels.</p>

Table 4-38 Streak defects (continued)

Sample	Description	Possible solutions
	<p>Dark vertical lines which occur down the length of the page. The defect might occur anywhere on the page, in areas of fill or in sections with no printed content. On color models, these lines or streaks will also be visible on the ITB cleaning page.</p>	<ol style="list-style-type: none"> 1. Reprint the document. 2. Remove the cartridge, and then shake it to redistribute the toner. Reinsert the toner cartridges into the printer and close the cover. For a graphical representation of this procedure, see <i>Replace the toner cartridges</i>. 3. Print a cleaning page. 4. Check the toner level in the cartridge. 5. If the issue persists, go to support.hp.com.


Copy-quality troubleshooting

Learn about copy-quality troubleshooting.

 **NOTE:** Copy-quality (CQ) problems are associated with the integrated-scanner assembly (ISA) portion of an MFP printer. CQ defects appear on pages that are **copied** using the document feeder or flatbed glass.

Identify the location and type of the CQ problem

Resolving CQ problems involves isolating the defect to the document feeder or flatbed glass. Comparing printed output between the document feeder and the flatbed glass might determine the ISA location that is causing the CQ defect.

 **NOTE:** If a CQ defect appears on printed output from both the document feeder **and** the flatbed glass, carefully inspect the original source for a print-quality (PQ) problem.

Document feeder isolation test

1. Mark a printed page in a way that clearly identifies it as the source document used in this isolation procedure.
2. Place the source page in the document feeder, and then make a copy.
3. Mark the copied output page to clearly identify it as output from the document feeder.
4. Compare the original and copied pages. Defects appearing on the copied page are caused by a problem in the document feeder.

Flatbed isolation test

1. Mark a printed page in a way that clearly identifies it as the source document used in this isolation procedure.
2. Place the source page on the flatbed glass, and then make a copy.
3. Mark the copied output page to clearly identify it as output from the flatbed.
4. Compare the original and copied pages. Defects appearing on the copied page are caused by a problem in the flatbed.

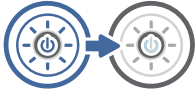
Check the scanner glass for dirt and smudges

Learn about solving copy-quality debris problems.

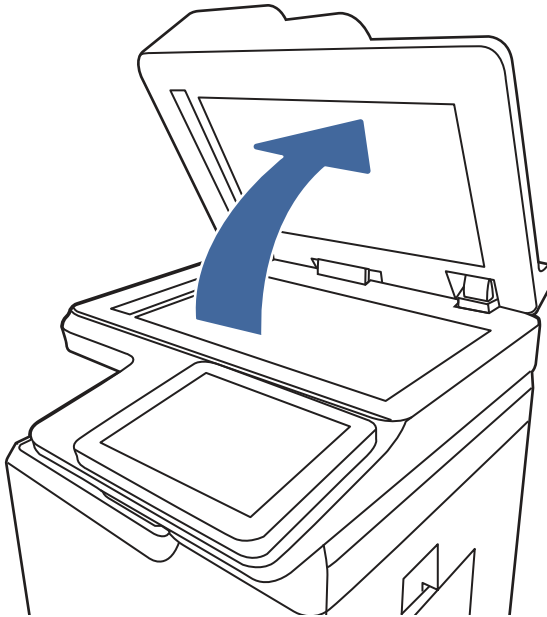
Over time, specks of debris might collect on the scanner glass and document feeder white plastic backing, which might cause print defects. Use the following procedure to clean the scanner if the printed pages have streaks, unwanted lines, black dots, poor print quality, or unclear text.

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

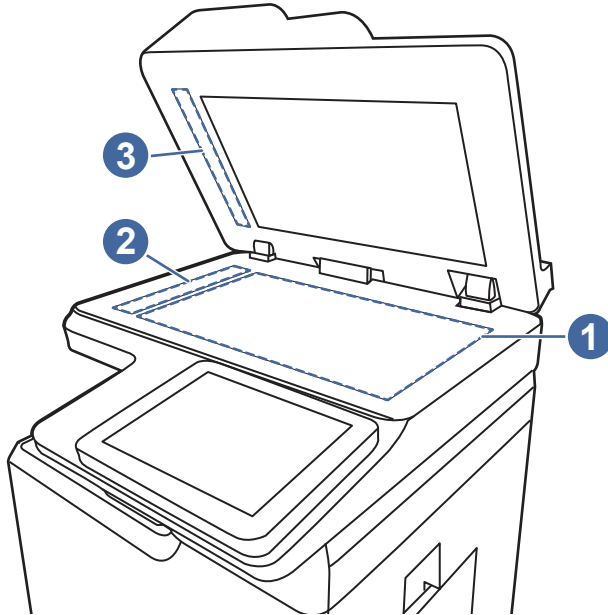
1. Press the power button to turn the printer off, and then disconnect the power cable from the electrical outlet.



2. Open the scanner lid.



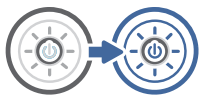
3. Clean the scanner glass (callout 1) and the document feeder strips (callout 2, callout 3) with a soft cloth or sponge that has been moistened with nonabrasive glass cleaner.



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

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

4. Dry the glass and white plastic parts with a chamois or a cellulose sponge to prevent spotting.
5. Connect the power cable to an outlet, and then press the power button to turn the printer on.



Vertical lines, bands, or streaks

Learn about vertical lines, bands, or streaks copy-quality problems.

Vertical lines or streaks appear on copies and/or scans in the same direction that the paper feeds when copying and/or scanning from the document feeder. Lines or streaks might be visible on the front and/or the back side of the page. Copies and/or scans from the flatbed glass look normal. Printouts also look normal.

The line or streak might be black or in color, and can also be present on fax or digital send output (for example, when using [Scan to folder](#) or [Scan to email](#) features).

NOTE: HP has determined that **99%** of all lines and streaks on copies made by feeding the original documents through the document feeder are caused by **debris on the document feeder glass strip**. Even small specks can cause the light reflected off the original to be distorted, resulting in a line, streak, or smudge on copies or scans made from the document feeder.

Even if the document feeder glass strip and/or flatbed glass has been wiped clean, the defect might persist. Persistent vertical lines, bands, or streaks when copying from the document feeder might mean that the debris causing the print quality are not readily visible and cannot be removed with a quick cleaning.

Use the procedures below to resolve persistent lines, bands, or streak copy-quality (CQ) problems.

Locate debris and thoroughly clean the document feeder glass

1. Place a blank sheet of paper in the document feeder and mark an **X** in the lower right corner as shown.

Figure 4-87 Load the document feeder



2. Press the **Start** button to make a copy of the blank page.
3. Place the copied paper face-up on the flatbed glass with the **X** located as shown.



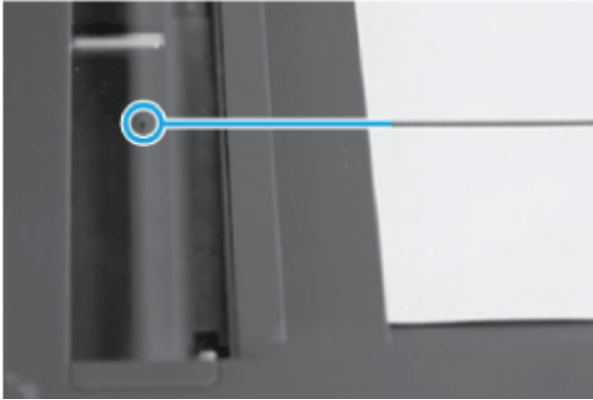
NOTE: Make sure the upper left corner of the copy is aligned with the upper left corner of the flatbed glass.

Figure 4-88 Place the copy on the flatbed



4. Follow the line or streak on the paper to the area on the document feeder glass that is causing the CQ problem.

Figure 4-89 Identify the CQ defect location



5. Use a fingernail to loosen any stubborn debris.

⚠ WARNING! Use only a fingernail. Other objects can scratch the document feeder glass.

Clean this specific area again (with a lint-free cloth dampened with water), and then dry the glass with a soft, lint-free cloth.

Figure 4-90 Clean the glass



6. Make another copy or scan to determine if the defect is gone.

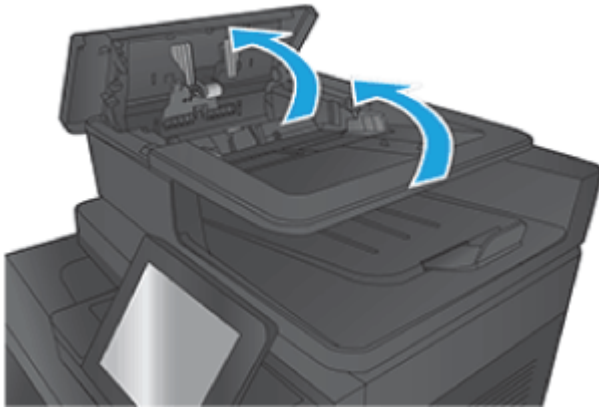
Clean the duplexer scanner glass (model specific)

📝 NOTE: Not all MFP printers use a background selector for duplex printing.

If a *Side 2 Background Selector* cannot be located for the printer (it might not include one) skip this procedure.

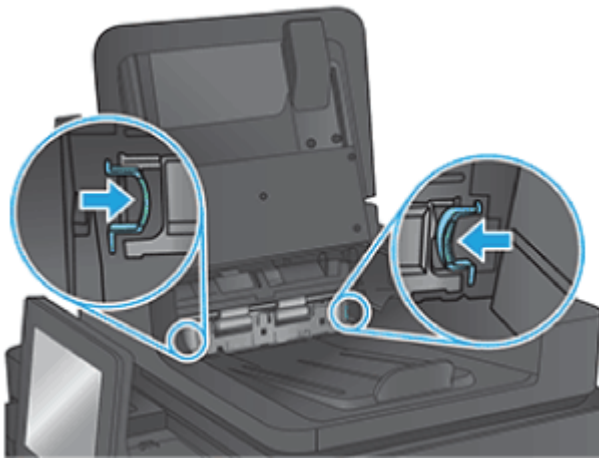
1. Release the latch and open the document feeder jam-access door.

Figure 4-91 Open the jam-access door



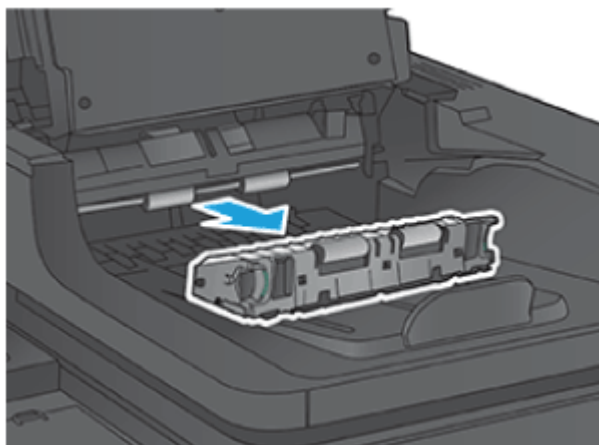
2. Unlock the Side 2 Background Selector by pressing and holding both green tabs inward towards each other.

Figure 4-92 Release the Side 2 Background Selector



3. While holding the green tabs, pull out and remove the Side 2 Background Selector.

Figure 4-93 Remove the Side 2 Background Selector



4. Rotate the top to reveal the white and black backside reflector (circled in blue).


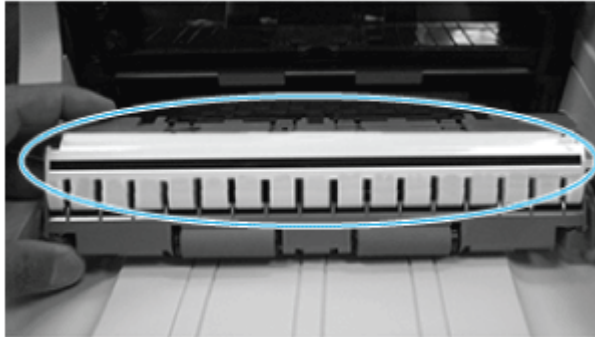

 **NOTE:** If the white and black areas do not come clean, wipe the surface thoroughly with a damp cloth again. Dry the area with a soft, dry cloth to prevent spotting.


Figure 4-94 Locate the backside reflector



5. With the background selector removed from the document feeder, clean the inside of the scan module.
6. In the back area from where the background selector was removed, locate the Side 2 Scan Module glass found under the top area.

 **NOTE:** The glass surface of the Side 2 Scan module sits horizontally flat and might not be easily viewable.

7. Use a soft, lint-free cloth moistened with water and apply pressure upwards behind the rollers to clean the Side 2 Scan Module Glass, making sure to that the entire width of the glass is cleaned from left to right.

 **NOTE:** If needed, lens cleaner or non-abrasive glass cleaner can be applied to the cloth before cleaning the glass. Spray only onto the cloth and not directly onto the glass or device. Do not spray water or glass cleaner on the glass as it can seep under it and possibly damage the printer. Do not use abrasives, acetone, benzene, ethyl alcohol, or carbon tetrachloride on the glass; these can damage it and/or leave residue on the glass resulting in degraded copy/scan quality.

8. Reverse the removal steps to reinstall the Side 2 Background Selector.
9. Make another copy or scan to determine if the defect is gone.

Modify printer settings to improve scan or copy quality

Learn about printer settings to improve scan or copy quality.

A color calibration can improve color registration scan or copy quality.

Perform a color calibration

1. Open the following menus:
 - Menu

- Tools
 - Troubleshooting
 - Print Quality
2. Choose from the following settings:

- Calibrate Now


 **NOTE:** HP recommends selecting the [Calibrate Now](#) item to immediately improve color registration scan or copy quality.

- Power On Calibration
- Time-Based Calibration

Light or faint copies (color models)

Learn how to resolve light or faint copy-quality problems.

Are you attempting to copy or scan highlighted text?

 **NOTE:** When digitally sending or copying highlighted images or text objects, the image might appear lighter than expected or does not show up at all with certain brands/types of highlighter pens.

Highlighters come in bright, often fluorescent colors. Fluorescent highlighter inks tend to reflect more light than that which is absorbed by the paper source. This reflection might cause the image to not show up as well as non-fluorescent colors depending upon the scanner/MFP being used.

The most common color for highlighters is yellow, but many other colors are also found such as pink, blue, green, orange, and purples. Yellow is often the preferred color to use when making a photocopy as it tends to not produce as much of a shadow on copies or scans.

There are different color and ink properties depending upon the brand of highlighters used. Due to these differences, scanning of the images might vary greatly from not being seen at all to changing colors (for example, orange highlighter might appear brown in the copy or scan or yellow highlighter might appear green).

Does the printer have the latest firmware version installed?

To verify the currently installed firmware revision and upgrade the firmware if necessary, go to [Firmware upgrades on page 100](#).

Performance and connectivity troubleshooting

Learn about performance and connectivity troubleshooting.

Solve fax or email problems

Learn about solving fax and email problems.

Fax or email troubleshooting information is not provided in this service manual. The most current information is available in WISE. Search using model number then use "fax troubleshooting" as the search term.

For HP Channel partners, open the HP Partner First Portal located at <https://partner.hp.com>, and then do the following:

1. Select the **Services & Support** tab, and then select **Technical Support**.
2. Select **Technical Documentation**.
3. You will be taken to the WISE portal.

For HP service personnel, go to one of the following Web-based Interactive Search Engines (WISE) sites:

Americas (AMS)

- [WISE - English](#)
- [WISE - Spanish](#)
- [WISE - Portuguese](#)
- [WISE - French](#)

Asia Pacific / Japan (APJ)


- [WISE - English](#)
- [WISE - Japanese](#)
- [WISE - Korean](#)
- [WISE - Chinese \(simplified\)](#)
- [WISE - Chinese \(traditional\)](#)
- [WISE - Thai](#)

Europe / Middle East / Africa (EMEA)

- [WISE - English](#)

Solve performance problems

Review the following information and procedures to solve performance problems.

 **NOTE:** Tray 1 and Tray 2 are optimal for paper pickup when using special paper or media other than 75-80gsm (20lb) plain paper. For Tray 1 and Tray 2 the printer increases the number of attempts to pick up a page, which increases the reliability of successfully picking the page from the tray and decreases the possibility of a mis-pick jam.

HP recommends using Tray 1 or Tray 2 if the printer is experiencing excessive or reoccurring jams from trays other than Tray 1 and Tray 2, or for print jobs that require media other than 75-80gsm (20lb) plain paper.

Factors affecting print performance

Review the following information about factors affecting print performance.


 **NOTE:** To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

Table 4-39 Solve performance problems

Problem	Cause	Solution
Pages print but are totally blank.	The document might contain blank pages.	Check the original document to see if content is present on all of the pages.
Pages print but are totally blank.	The printer might be malfunctioning.	To check the printer, print a Configuration page.
Pages print but are totally blank.	Make sure that the printer is not feeding multiple pages (especially if very thin paper is used).	Make sure that the paper meets HP specifications for this printer. For a complete list of specific HP-brand paper that this printer supports, go to www.hp.com/support/colorlj4201-4203 or www.hp.com/support/colorlj4201-4203plus or www.hp.com/support/colorlj4301-4303 or www.hp.com/support/colorlj4301-4303plus .
Pages print very slowly. NOTE: Some software programs process print jobs slowly.	Heavier paper types can slow the print job.	Print on a different type of paper.
Pages print very slowly. NOTE: Some software programs process print jobs slowly.	Complex pages can print slowly.	Proper fusing might require a slower print speed to ensure the best print quality.
Pages print very slowly. NOTE: Some software programs process print jobs slowly.	Large batches, narrow paper, and special paper such as gloss, transparency, cardstock, and HP Tough Paper can slow the print job.	Print in smaller batches, on a different type of paper, or on a different size of paper.
Pages did not print.	The printer might not be pulling paper correctly.	Make sure paper is loaded in the tray correctly.
Pages did not print.	The paper is jamming in the printer.	Clear the jam.
Pages did not print.	The USB cable might be defective or incorrectly connected.	<ul style="list-style-type: none"> • Disconnect the USB cable at both ends and reconnect it. • Try printing a job that has printed in the past. • Try using a different USB cable.
Pages did not print.	Other devices are running on the host computer.	The printer might not share a USB port. If an external hard drive or network switchbox is connected to the same port as the printer, the other device might be interfering with the printer. To connect and use the printer, disconnect the other device or use two USB ports on the host computer.
Pages did not print.	The print job might not have arrived at the printer.	Check the printer status queue. Also, the Printing message should appear on the control panel display.

Print speeds

Print speed is the number of pages that print in one minute. Print speed depends on different engine-process speeds or operational pauses between printed pages during normal printer operation. Factors that determine the print speed of the printer include the following:

- Page formatting time

The printer must pause for each page to be formatted before it prints. Complex pages take more time to format, resulting in reduced print speed. However, most jobs print at full engine speed.

- Media size

Legal-size media reduces print speed because it is longer than the standard Letter- or A4-size media. A reduce print speed is used when printing on narrow media to prevent the edges of the fuser from overheating.

- Media mode

Some media types require a reduced print speed to achieve maximum print quality on that media. For example, glossy, heavy, and specialty media (for example, envelopes or photos) require a reduced print speed. To maximize the print speed for special media types, make sure that the correct media type in the print driver is selected.

- Printer temperature

To prevent printer damage, print speed is reduced if the printer reaches a specific internal temperature (thermal slow down). The starting temperature of the printer, ambient environment temperature, and the print job size effect the number of pages that can be printed before the printer reduces the print speed. Thermal slow down reduces print speed by printing four pages and then pausing for an amount of time before printing continues.

- Other print speed reduction factors

Other factors (especially during large print jobs) that can cause reduced print speeds include:

- Density control sequence; occurs every 150 pages and takes about 120 seconds

The printer does not print

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



NOTE: To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

1. Make sure the printer is turned on and that the control panel indicates it is ready.
 - If the control panel does not indicate the printer is ready, turn the printer off and then on again.
 - If the control panel indicates the printer is ready, try sending the job again.
2. If the control panel indicates the printer has an error, resolve the error and then try sending the job again.

3. Make sure the cables are all connected correctly. If the printer is connected to a network, check the following items:
 - Check the bottom LED next to the network connection on the printer. If the network is active, the light is green.
 - Make sure that a network cable and not a phone cord is used to connect to the network.
 - Make sure the network router, hub, or switch is turned on and that it is working correctly.
4. Install the HP software for the printer. Using generic printer drivers can cause delays clearing jobs from the print queue.
5. From the list of printers on your computer, right-click the name of this product, click **Properties**, and open the **Ports** tab.
 - If a network cable is used to connect to the network, make sure the printer name listed on the **Ports** tab matches the one on the printer configuration page.
 - If a USB cable is used, and the printer is connected to a wireless network, make sure the box is checked next to **Virtual printer port for USB**.
6. If a personal firewall system on the computer is used, it might be blocking communication with the printer. Try temporarily disabling the firewall to see if it is the source of the problem.
7. If the host computer or the printer is connected to a wireless network, low signal quality or interference might be delaying print jobs.

The printer prints slowly

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

1. Make sure the computer meets the minimum specifications for this printer. For a list of specifications, go to this Web site: www.hp.com/support/colorlj4201-4203 or www.hp.com/support/colorlj4201-4203plus or www.hp.com/support/colorlj4301-4303 or www.hp.com/support/colorlj4301-4303plus.
2. When the printer is configured to print on some paper types, such as heavy paper, the printer prints more slowly so it can correctly fuse the toner to the paper. If the paper type setting is not correct for the type of paper you are using, change the setting to the correct paper type.
3. If the host computer or the printer is connected to a wireless network, low signal quality or interference might be delaying print jobs.

Solve wired network problems

Review the following information and procedures to solve wired network problems.

Introduction


Learn about solving wired network problems.

Certain types of problems can indicate there is a network communication problem. These problems include the following issues:

- The periodic loss of ability to communicate with the printer
- The printer cannot be found during driver installation

- A periodic failure to print

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

 **NOTE:** To print using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

Poor physical connection


Use the following procedure when the printer has a poor physical connection.

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

The computer is using the incorrect IP address for the printer

Use the following procedure when the computer is using the incorrect IP address for the printer.

1. Open the printer properties and click the **Ports** tab. Verify that the current IP address for the printer is selected. The printer IP address is listed on the printer configuration page.

 **NOTE:** To print a configuration page using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

2. If you installed the printer using the HP standard TCP/IP port, select the box labeled **Always print to this printer, even if its IP address changes**.
3. If you installed the printer using a Microsoft standard TCP/IP port, use the hostname instead of the IP address.
4. If the IP address is correct, delete the printer and then add it again.

The computer is unable to communicate with the printer

Use the following procedure when the computer is unable to communicate with the printer.

1. Test network communication by pinging the network.
 - a. Open a command-line prompt on your computer.
 - For Windows, click **Start**, click **Run**, type `cmd`, and then press **Enter**.
 - For macOS, go to **Applications**, then **Utilities**, and open **Terminal**.
 - b. Type `ping` followed by the IP address for your printer.
 - c. If the window displays round-trip times, the network is working.

2. If the ping command failed, verify that the network hubs are on, and then verify that the network settings, the printer, and the computer are all configured for the same network.

The printer is using incorrect link and duplex settings for the network

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

New software programs might be causing compatibility problems

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

The computer or workstation might be set up incorrectly

Use the following procedure when the computer or workstation might be set up incorrectly.

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

The printer is disabled, or other network settings are incorrect

Use the following procedure when the printer is disabled, or other network settings are incorrect.

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



NOTE: To print a configuration page using an HP Plus printer, the printer must have genuine original HP toner cartridges installed, must have an ongoing internet connection and an active HP Plus account (for more information, go to hp.com/plus).

2. Reconfigure the network settings if necessary.

5 Removal and replacement

When servicing the printer, several items must be considered to ensure a successful repair and to avoid damage to the printer or personal injury. Learn about these considerations and find detailed instructions for removing and replacing printer parts.

Document feeder / scanner

Learn about document feeder and scanner parts removal and replacement.

Field-replaceable units (FRUs)

Learn about FRU parts removal and replacement.

Covers, panels, and doors

Learn about covers, panels, and doors removal and replacement.

Removal and replacement: ADF top cover (with rollers)

Learn about document feeder top cover.

Mean time to repair: 5 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-1 Part information

Part number	Part description
4RA80-67006	ADF top cover assembly (includes rollers)

Required tools

- Small flat-blade screwdriver

After performing service

Turn the printer power on


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

Post service test

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

1. Remove the document feeder top cover

Follow the procedure below to remove and replace the document feeder top cover.

 **NOTE:** The document feeder top cover includes the rollers.

1. Open the document feeder top cover.

Figure 5-1 Open the cover



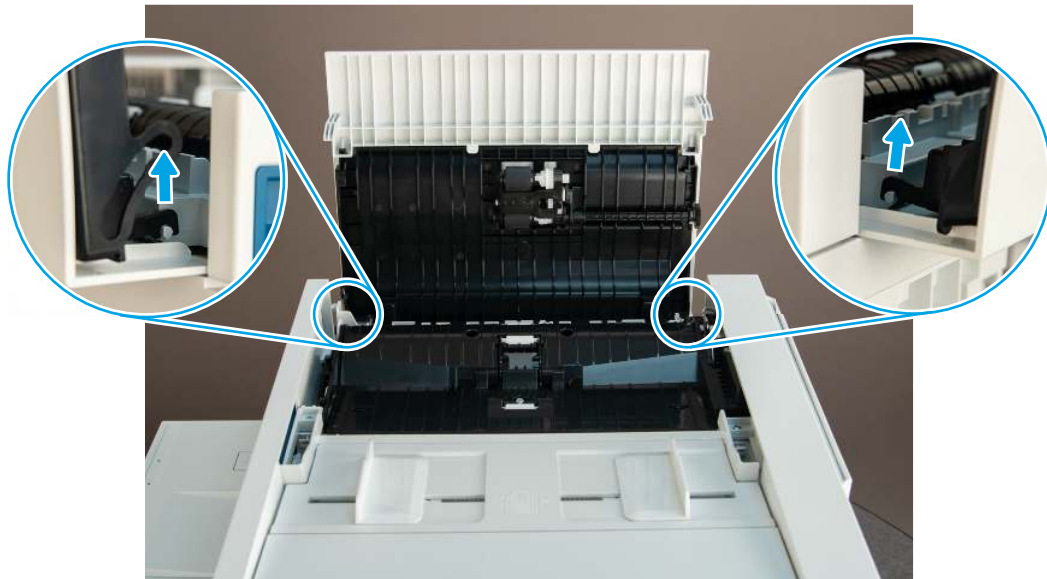
2. Release the cover retainer clip.

Figure 5-2 Release the clip



3. Pull straight up on each hinge clip to release them.

Figure 5-3 Release the hinge clips



4. Remove the document feeder cover.

Figure 5-4 Remove the cover



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Internal parts and assemblies

Learn how to remove and replace the printer internal parts and assemblies.

Removal and replacement: Integrated scanner assembly (ISA) lift assembly and slider pin (MFP)

Learn about ISA lift assembly and slider pin removal.

Mean time to repair: 4 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-2 Part information

Part number	Part description
B3Q10-60128	ISA lift assembly
B3Q10-40041	ISA lift slider pin

Required tools

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

After performing service

Turn the printer power on

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

Post service test

No post service test is available for this assembly.

1. Remove the ISA lift assembly (MFP)

Follow the procedure below to remove and replace the ISA lift assembly (MFP).

⚠ CAUTION: Firmly grasp the ISA while performing the steps in this task. The ISA hinges are not captive in the top cover mounting bosses when the lift assembly is detached.

Do not allow the ISA to slip off of the top cover.

1. Open the ISA, release one tab (callout 1), and then rotate the ISA slider pin (callout 2) towards the front of the printer to release it.

Figure 5-5 Release the slider pin



2. Remove the slider pin.

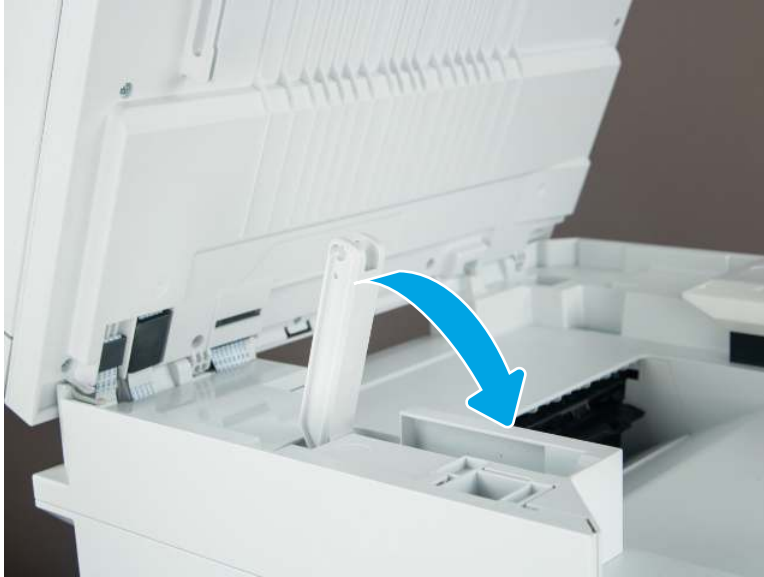
Figure 5-6 Remove the slider pin



3. Support the ISA, and then lower the ISA lift assembly support arm to the closed position.

CAUTION: The ISA hinges are not captive in the top cover mounting bosses. Do not allow the ISA to slip off of the top cover.

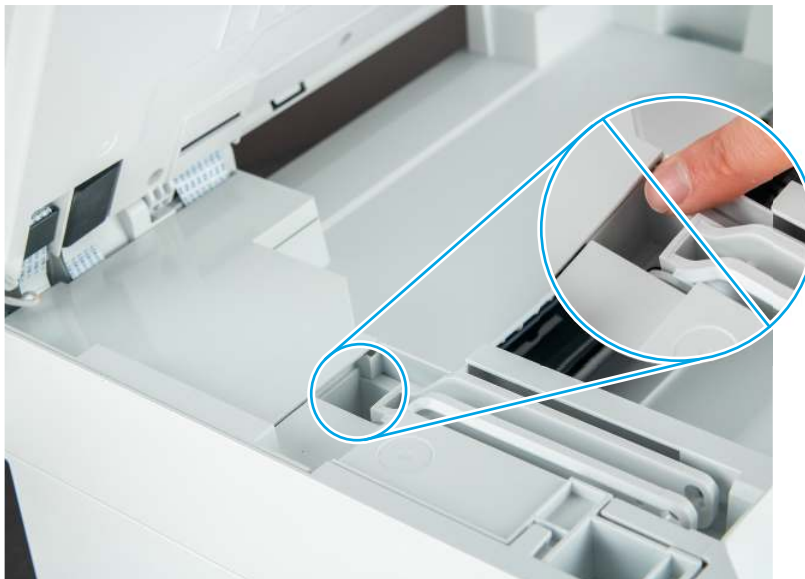
Figure 5-7 Lower the lift assembly arm



4. Before proceeding, read the following caution statement.

⚠ CAUTION: The lift assembly support arm is spring loaded and can unexpectedly spring into the open position. To avoid injury, do not place a finger in the screw well when the support arm is in the closed position.

Figure 5-8 Spring loaded lift assembly support arm



5. Remove one screw (callout 1).

Figure 5-9 Remove one screw



6. Remove the ISA lift assembly.

Figure 5-10 Remove the assembly



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.



1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Whole-unit replacement (WUR)

Learn about WUR parts removal and replacement.

Control panel (WUR)

Learn about control panel whole-unit replacement.

Removal and replacement: Control panel and FFC (SFP)

Learn about control panel and FFC (SFP) removal.

 [View a video of removing and replacing the control panel and FFC \(SFP\).](#)


Mean time to repair: 22 minutes

Service level: Medium

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-3 Part Information

Part number	Part description
4RA89-60101	Dial control panel with display

Table 5-3 Part information (continued)

Part number	Part description
RK3-0383-000CN	Cable, flexible flat

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on


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

Post service test

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

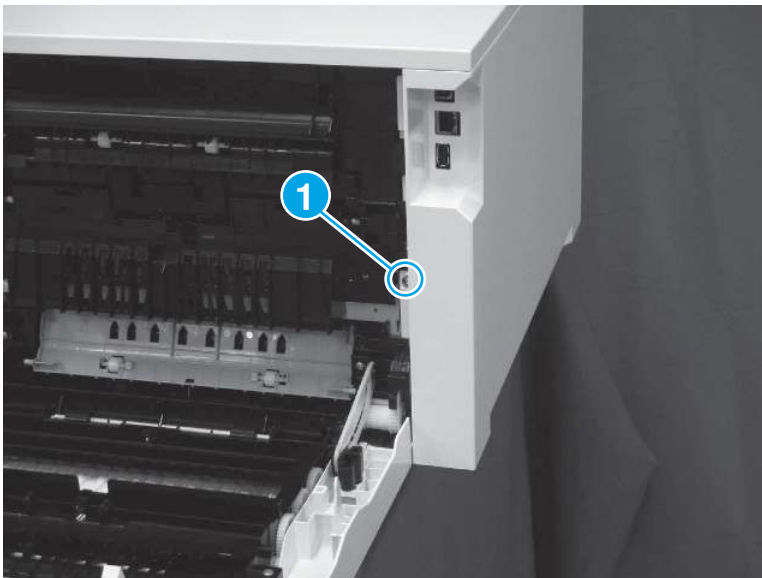
1. Remove the left cover and cartridge door button (SFP)

Follow the procedure below to remove and replace the left cover and cartridge door button (SFP).

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

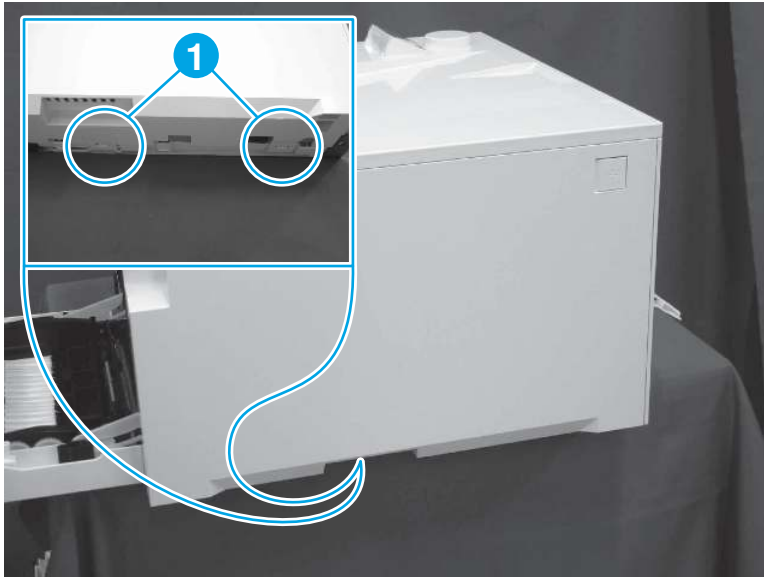
1. Remove one screw (callout 1).

Figure 5-11 Remove one screw



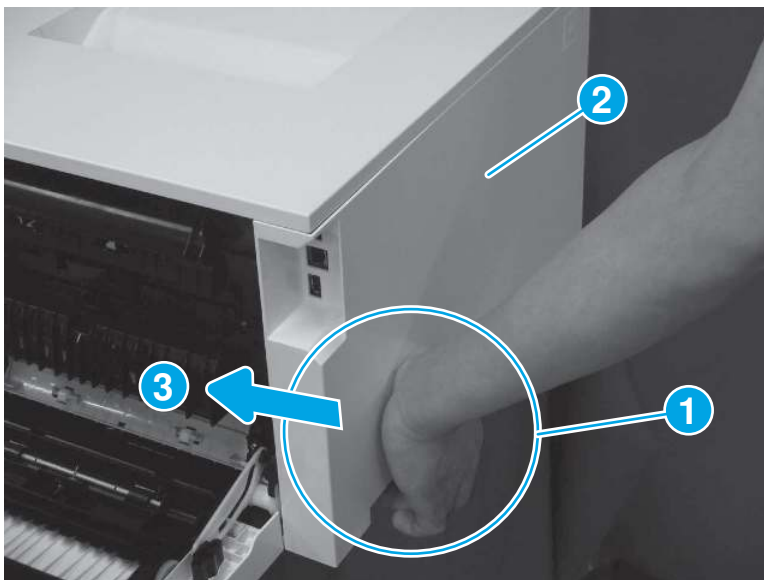
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-12 Release two tabs



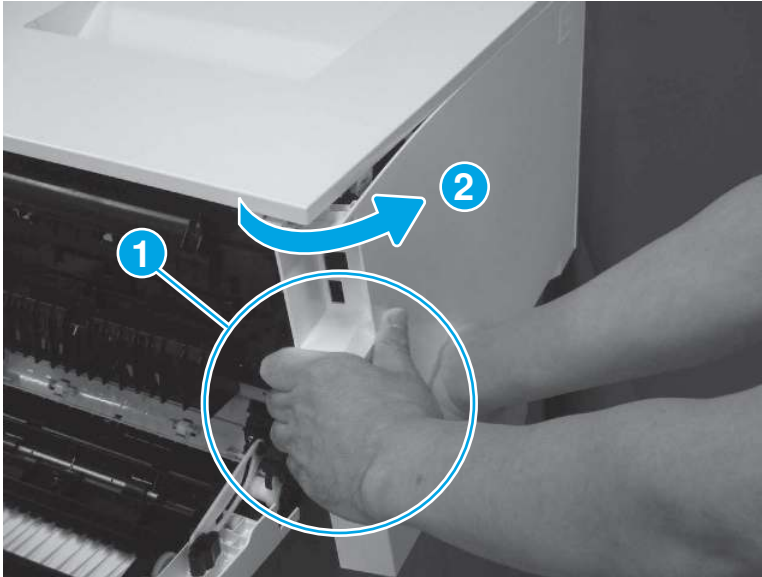
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-13 Release the rear cover corner



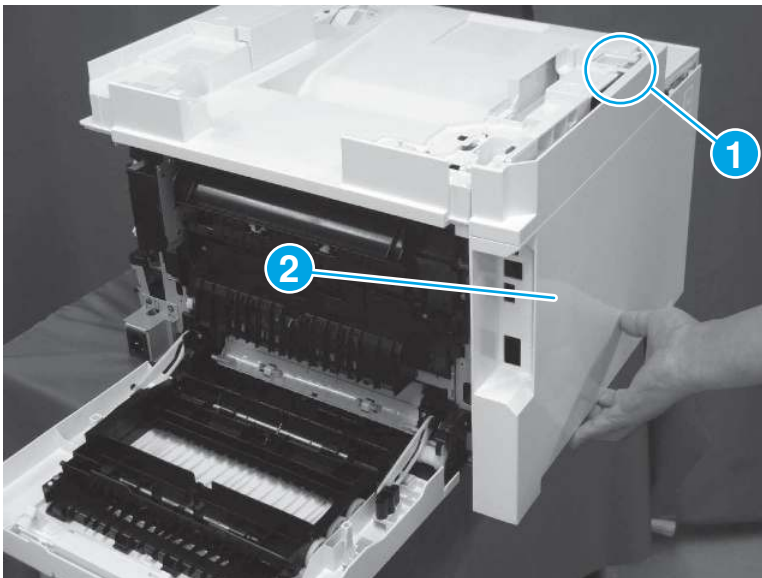
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-14 Disengage the cover corner



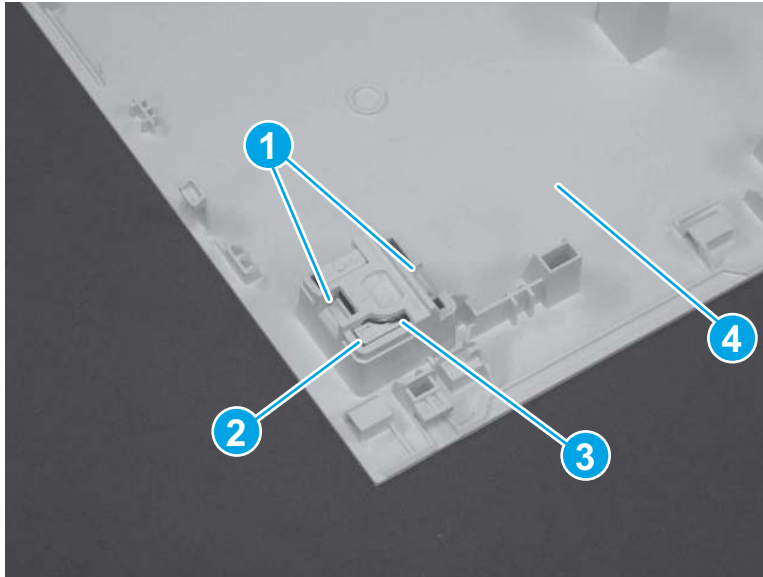
5. Remove the left cover (callout 1).

Figure 5-15 Remove the cover




6. Release two tabs (callout 1), and then remove the cartridge door button (callout 2) and one spring (callout 3) from the left cover (callout 4).

Figure 5-16 Remove the cartridge door button



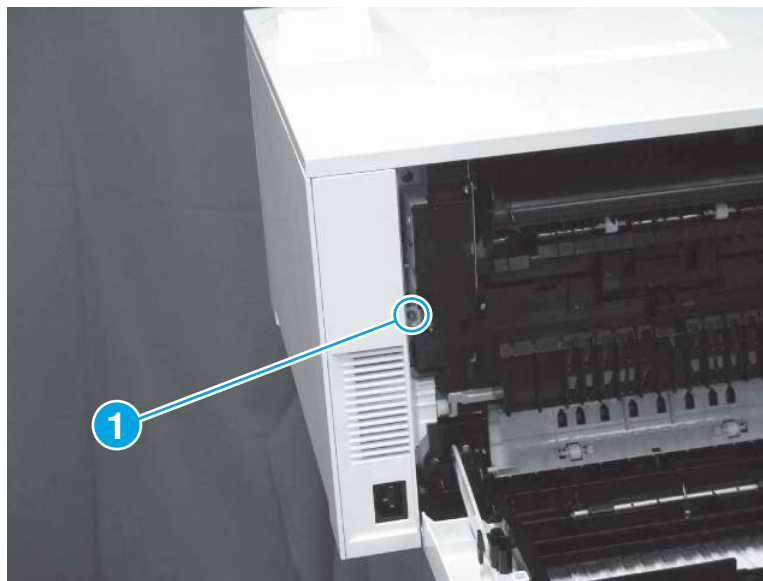
2. Remove the right cover (SFP)

Follow the procedure below to remove and replace the right cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

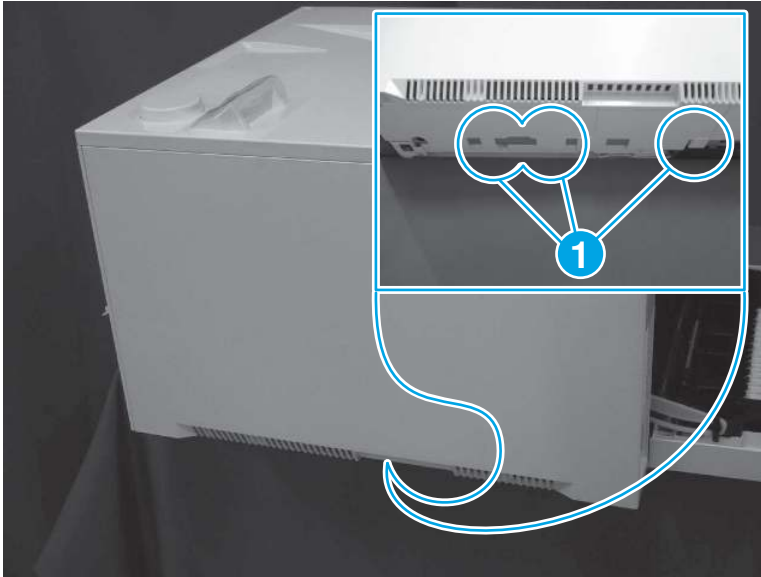
1. Remove one screw (callout 1).

Figure 5-17 Remove one screw



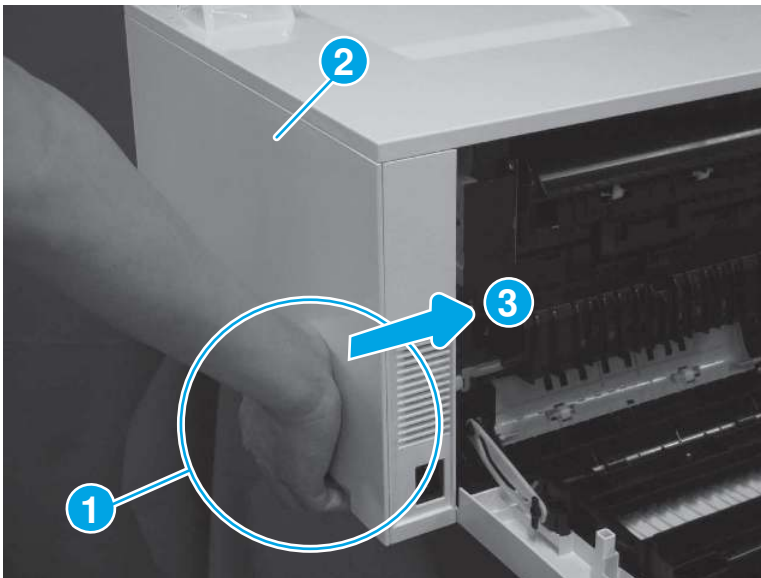
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-18 Release three tabs



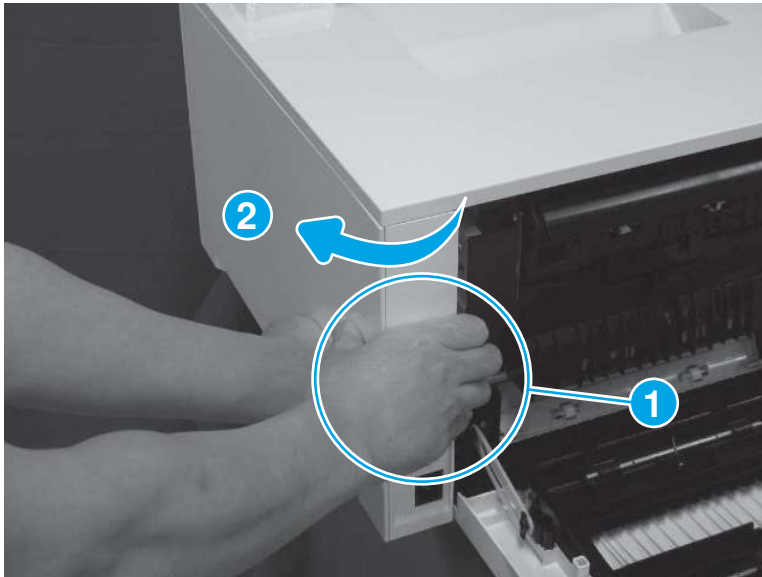
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-19 Release the rear cover corner



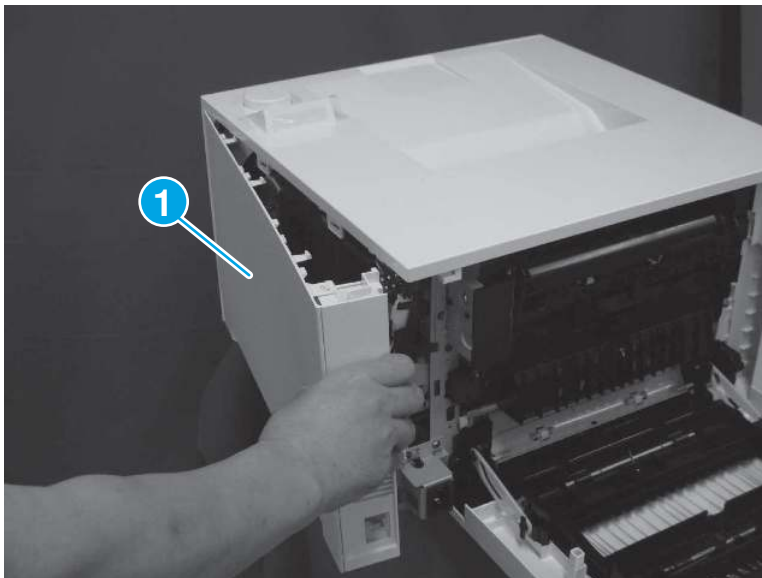
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-20 Disengage the cover corner




5. Remove the right cover (callout 1).

Figure 5-21 Remove the cover



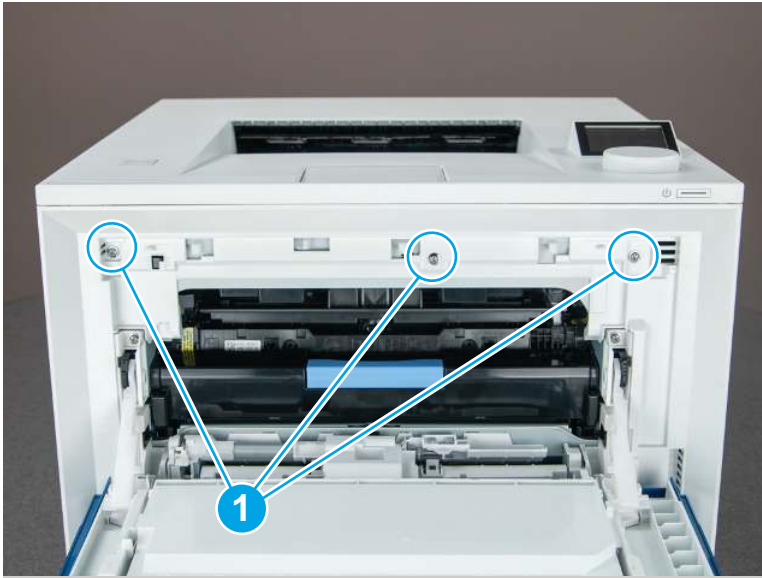
3. Remove the front cover (SFP)

Follow the procedure below to remove and replace the front cover.

 **Reinstallation tip:** Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

1. Remove three screws (callout 1).

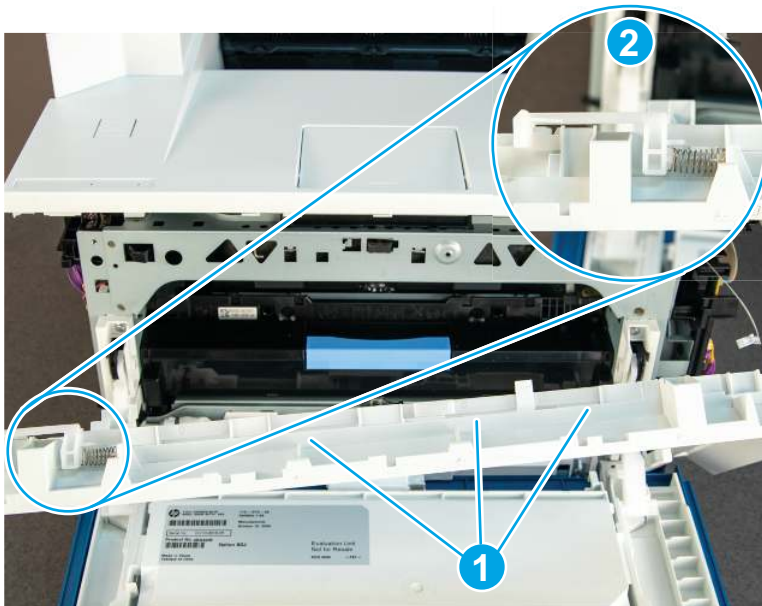
Figure 5-22 Remove three screws



2. Before proceeding, take note of the door release arm (callout 1). This arm can be easily dislodged when the cover is removed.

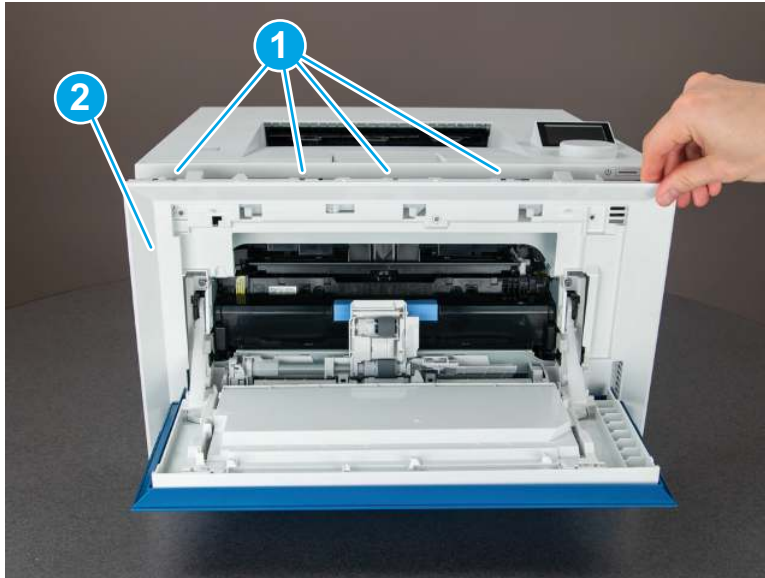
⚠ CAUTION: Do not lose the spring (callout 2) when removing the front cover.

Figure 5-23 Door release arm




3. Release four tabs (callout 1), and then remove the front cover (callout 2).

Figure 5-24 Remove the cover




4. Remove the top cover (SFP)

Follow the procedure below to remove and replace the top cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

1. **Wireless model only:** Raise and support the left side of the printer, remove one screw, and then separate the wireless PCA from the cover.

 **CAUTION:** Do not attempt to completely remove the wireless PCA. Instead, gently move it out of the way.


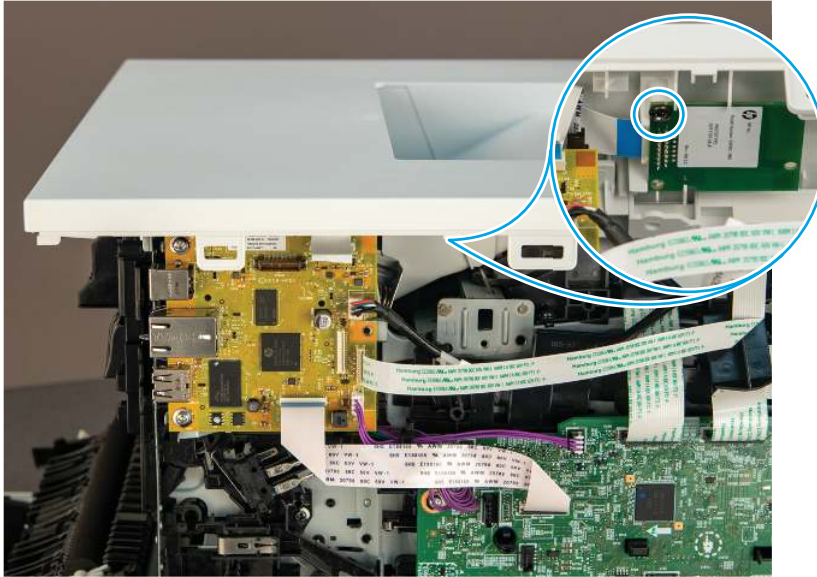
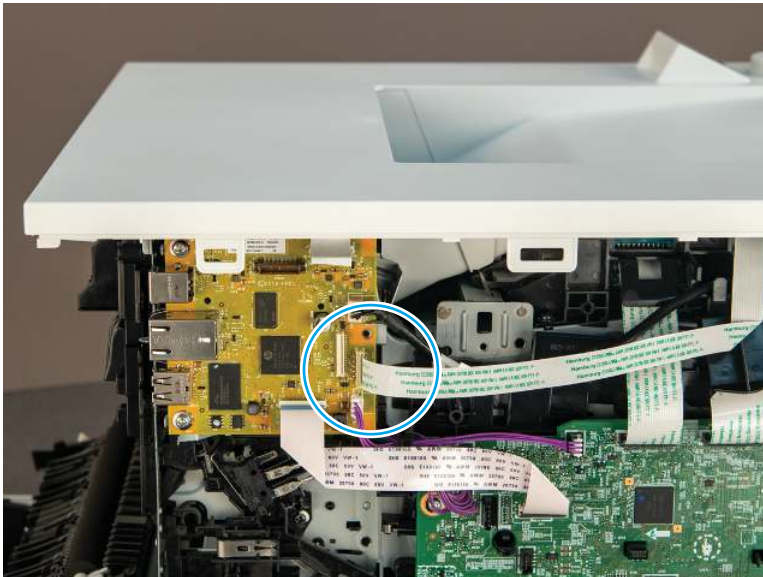
 **TIP:** To remove the screw without raising the printer, use a short-barrel screwdriver.

Figure 5-25 Remove one screw



2. Disconnect one flat-flexible cable (FFC).

Figure 5-26 Disconnect one FFC



3. Disconnect one FFC, and then remove one screw to release the ground wire.



NOTE: The front cover is shown installed in the figure below. However, this step is correct for removing the top cover.

Figure 5-27 Disconnect one FFC and remove one screw



4. Sliding the cover from the back of the printer towards the front to remove it.

Figure 5-28 Remove the cover

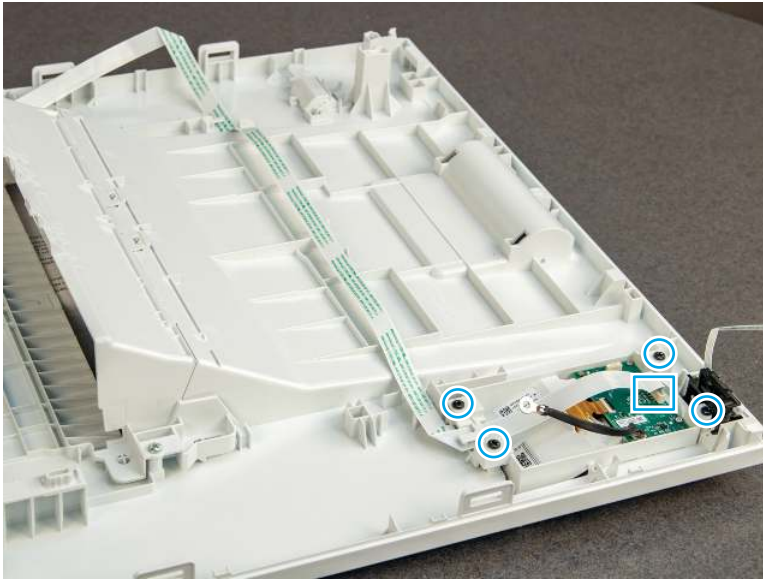


5. Remove the control panel and FFC (SFP)

Follow the procedure below to remove and replace the control panel and power switch (SFP).

1. Disconnect one flat-flexible cable (FFC), and then remove four screws.

Figure 5-29 Disconnect one FFC and remove four screws



2. Remove control panel.



NOTE: Release and remove the control panel FFC from the top cover.

Figure 5-30 Remove the control panel



6. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

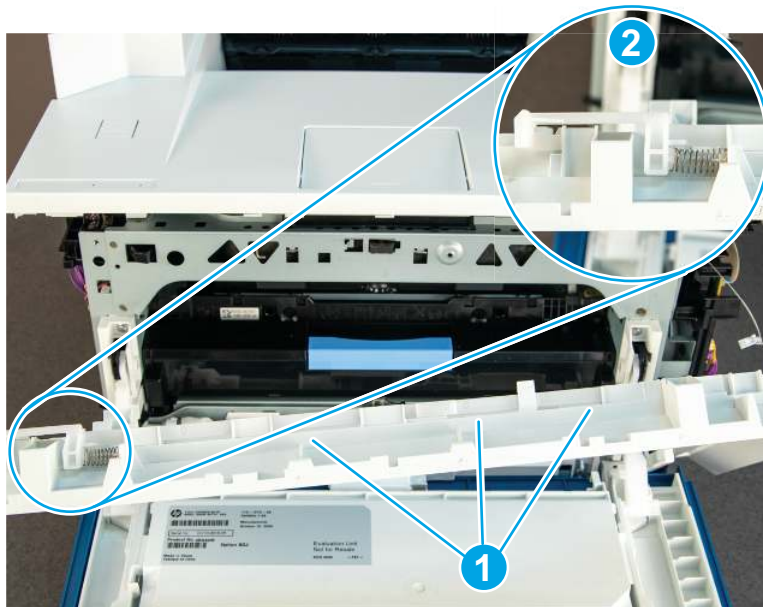
7. Special installation instructions - Front cover

Follow the special instructions below to install the front cover.

NOTE:  Front cover installation is **identical** for both the SFP and MFP models.

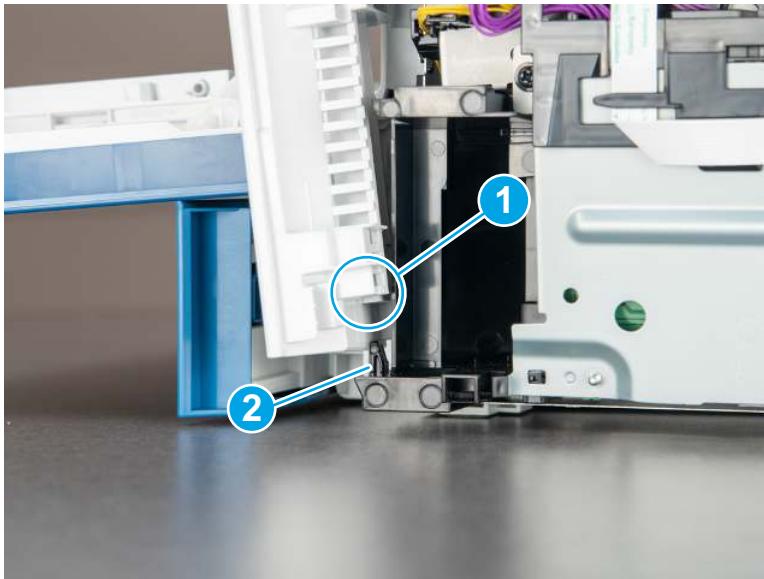
1. If the door release arm becomes dislodged when handling the cover, install it as shown below (callout 1, 2).

Figure 5-31 Door release arm installed



2. At the right and left side of the front cover, align the holes (callout 1) in the cover with the alignment pins (callout 2) on the chassis.

Figure 5-32 Cover alignment pins



3. Rotate the top of the cover towards the printer to install it.


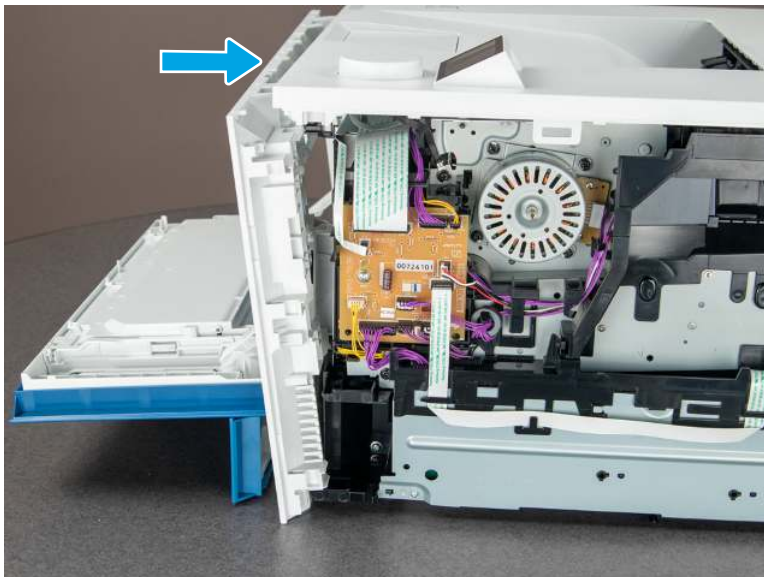
 **IMPORTANT:** Verify that the spring loaded door release button (on the left side of the cover) correctly functions.

Figure 5-33 Install the cover



Removal and replacement: Control panel, base cover, and base (MFP)

Learn about control panel (MFP) removal.

 [View a video of removing and replacing the control panel, base cover, and base \(MFP\).](#)

Mean time to repair: 12 minutes

Service level: Medium

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-4 Part information

Part number	Part description
4RA83-60101	Control panel touchscreen assembly
4RA83-40005	Control panel base
4RA83-40006	Control panel base cover
RK3-1382-000CN	Control panel flat flexible cable

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

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

Post service test

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

1. Remove the control panel (MFP)

Follow the procedure below to remove and replace the control panel (MFP).

1. Open the ISA.

Figure 5-34 Open the ISA



2. Release one tab (callout 1), and then rotate the slider pin towards the front of the printer (callout 2) to release it. Remove the slider pin.

CAUTION: When the slider pin is removed the ISA is not captive. Do not dislodge and drop the ISA.

Figure 5-35 Remove the slider pin



3. Support the ISA, and then remove one screw.

Figure 5-36 Remove screw



4. Reinstall the slider pin to secure the ISA.

Figure 5-37 Reinstall the slider pin



5. Remove two screws.

Figure 5-38 Remove two screws



6. Release one tab, rotate one end of the mount base cover up (callout 1), and then slide the cover as shown (callout 2) to remove it.



NOTE: If the mount base cover is the target service part, stop now and skip the remaining removal steps.

Figure 5-39 Remove the cover



7. Disconnect two FFCs.



NOTE: These are zero-insertion force (ZIF) connectors. To remove the FFCs, first release the locking clip on the connector, and then pull the cable straight out of the connector.



Reinstallation tip: Make sure that the line on the FFC tab is parallel with the connector body.

Figure 5-40 Disconnect two FFCs



8. Remove four screws.


 **NOTE:** Two of the screws are self-tapping threads (black), and two of the screws are machine thread (silver).

Figure 5-41 Remove four screws



9. Lift the control panel and mount base straight up and off of the printer to release them together.


 **NOTE:** When handling the assembly, do not lose the ferrite (callout 1).

Figure 5-42 Lift straight up



10. Remove control panel and mount base.

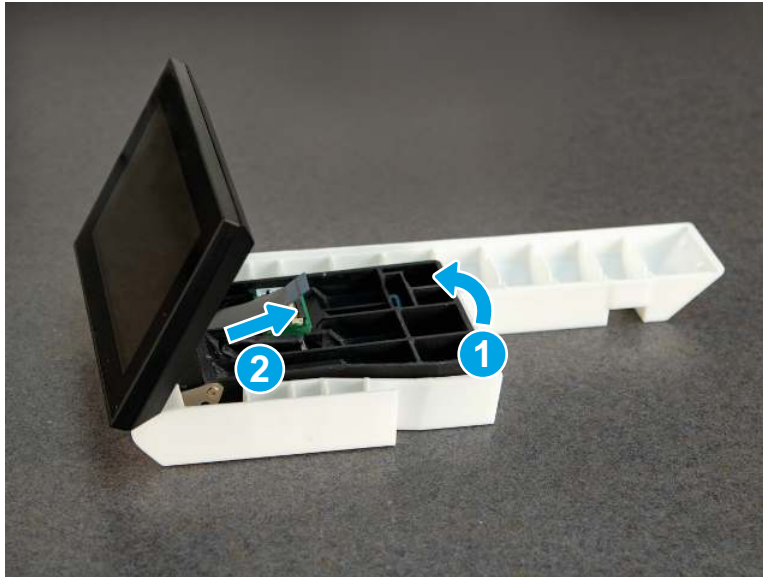
⚠ CAUTION: Control panel and base are not captive. Be careful not to drop the touchscreen.

Figure 5-43 Remove control panel and mount base



11. Rotate one end of the control panel up and away from the mount base (callout 1), and then slide it as shown (callout 2) to remove it.

Figure 5-44 Separate control panel and base



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Integrated scanner assembly (WUR)

Learn about integrated scanner assembly (ISA) whole-unit replacement.

Removal and replacement: Integrated scanner assembly (ISA)

Learn about ISA removal.



[View a video of removing and replacing the ISA.](#)

Mean time to repair: 13 minutes

Service level: Medium

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-5 Part information

Part number	Part description
4RA80-67002	ISA assembly duplex blue and folded FFC
4RA80-67004	ISA assembly duplex gray and folded FFC
4RA80-67003	ISA assembly simplex blue and folded FFC
4RA80-67005	ISA assembly simplex gray and folded FFC

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on


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


Post service test

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

1. Remove the left cover (MFP)

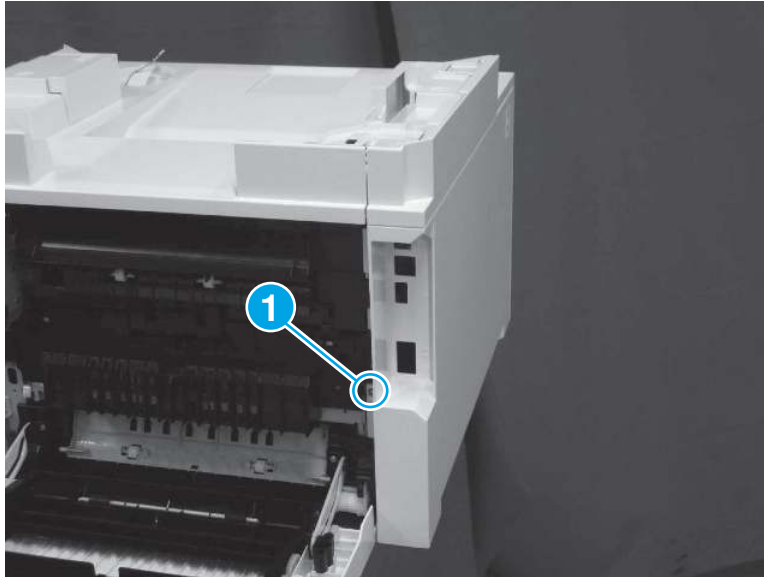
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

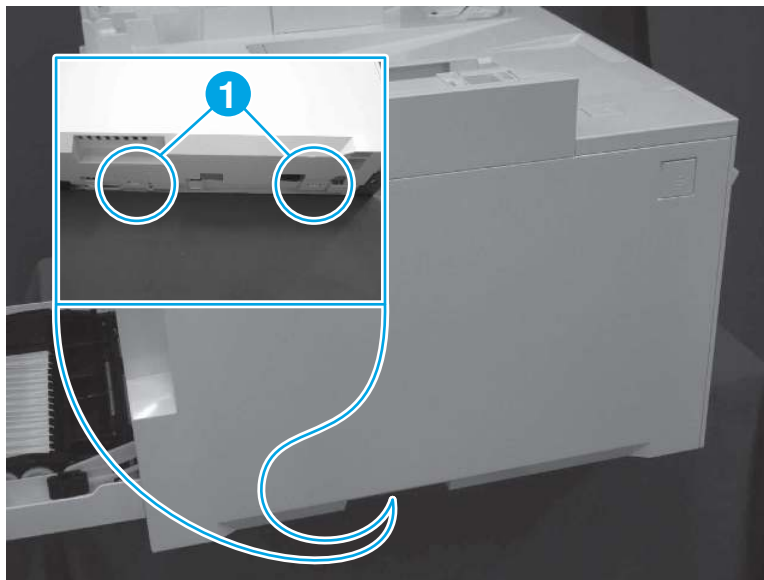
1. Remove one screw (callout 1).

Figure 5-45 Remove one screw



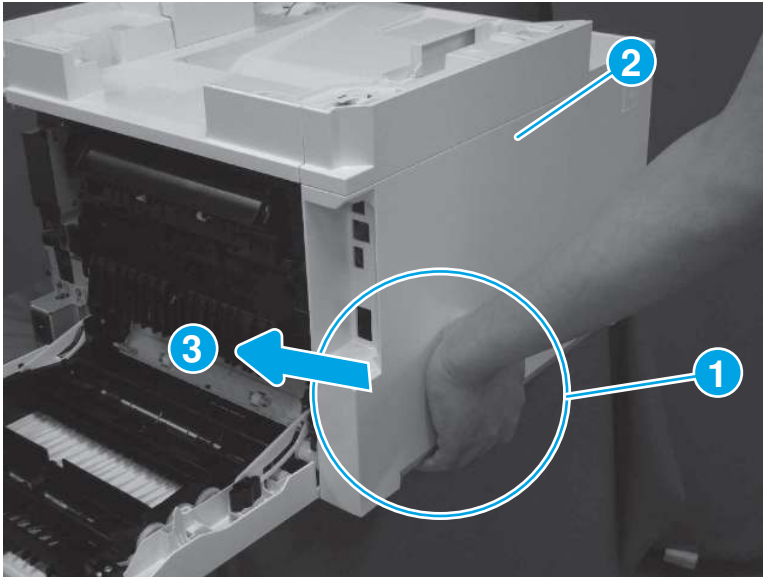
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-46 Release two tabs



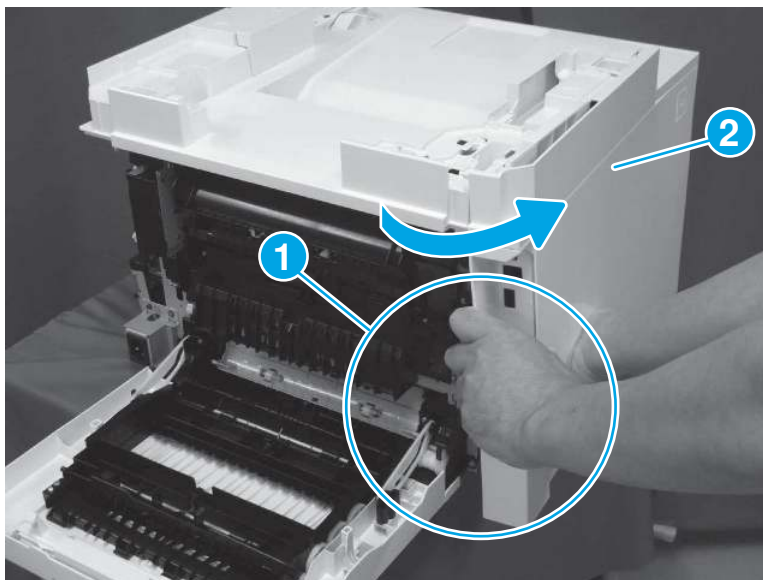
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-47 Release the rear cover corner



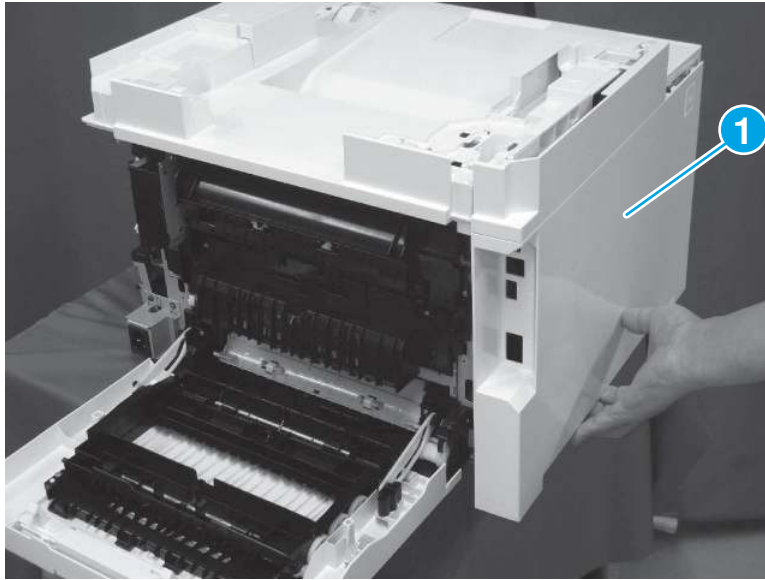
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-48 Disengage the cover corner



5. Remove the left cover (callout 1).

Figure 5-49 Remove the cover

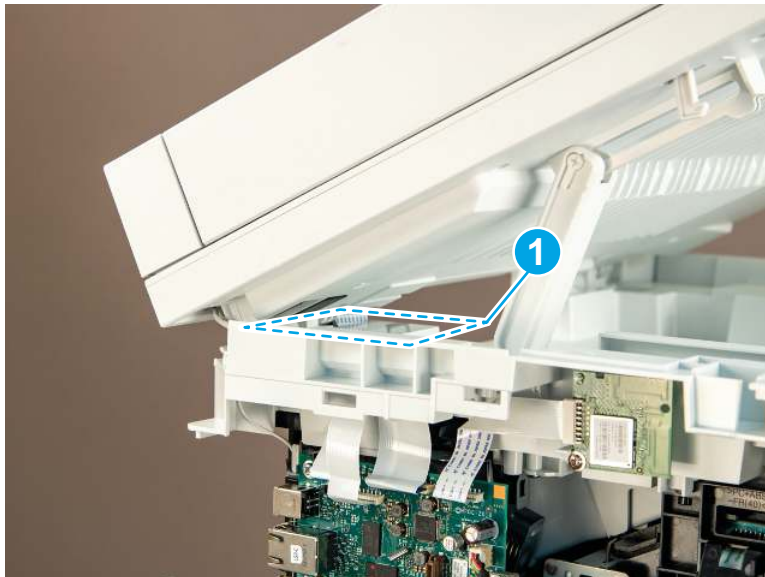


2. Remove the ISA (MFP)

Follow the procedure below to remove and replace the ISA.

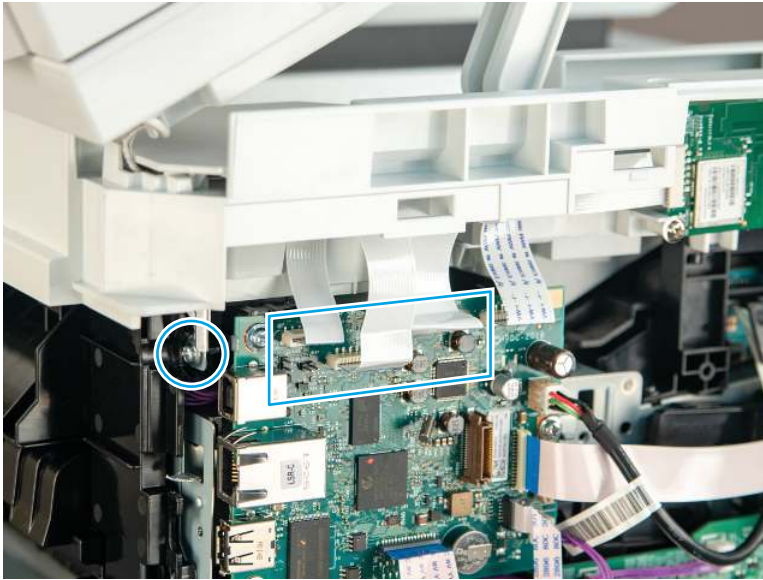
1. Open the ISA, and then remove the ISA FFC cover (callout 1).

Figure 5-50 Remove the FFC cover



2. Disconnect three FFCs, and then remove one screw to release the ground cable.

Figure 5-51 Disconnect FFCs and remove screw



3. Release one tab (callout 1), and then rotate the ISA slider pin (callout 2) towards the front of the printer to release it. Remove the slider pin.

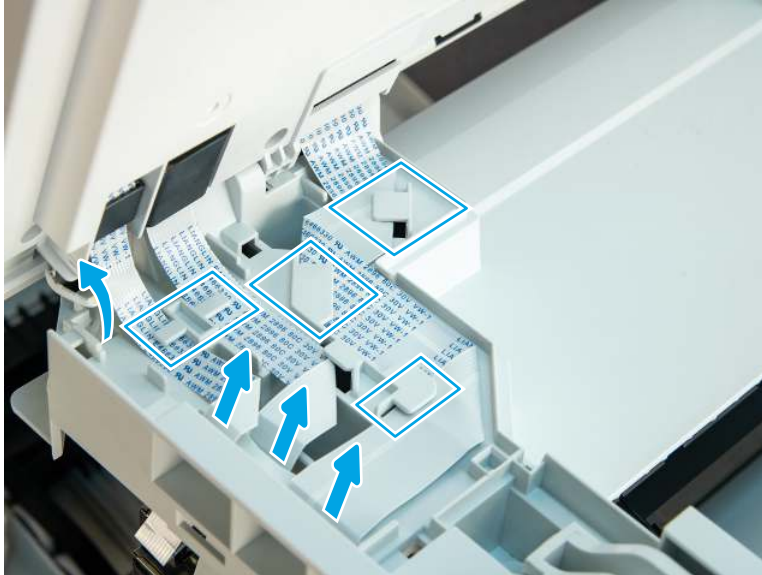
⚠ CAUTION: When the slider pin is removed, the ISA is not captive and can suddenly detach from the printer.

Figure 5-52 Remove the slider pin



4. Support the ISA, release the FFCs from the retainers, and then carefully pass the FFCs and the ground wire up through the slots in the top cover.

Figure 5-53 Release the FFCs and ground wire



5. Slide ISA as shown below to release it.

Figure 5-54 Release the ISA



6. Remove the ISA.

Figure 5-55 Remove the ISA



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Base printer

Learn about base printer parts removal and replacement.

Field-replaceable units (FRUs)

Learn about FRU parts removal and replacement.

Covers, panels, and doors

Learn about covers, panels, and doors removal and replacement.

Removal and replacement: Tray 3 cassette front cover

Learn about Tray 3 cassette front cover removal.



NOTE: A replacement Tray 3 kit only includes the cassette (not the front cover). Use this procedure to remove the tray front cover from the discarded cassette, and then install it on the replacement cassette.

Mean time to repair: 4 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-6 Part information

Part number	Part description
28N93-67001	550-sheet paper tray

NOTE: This is a replacement Tray 3 cassette only (no front cover).

Required tools

- Small flat-blade screwdriver

After performing service

Turn the printer power on

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

Post service test

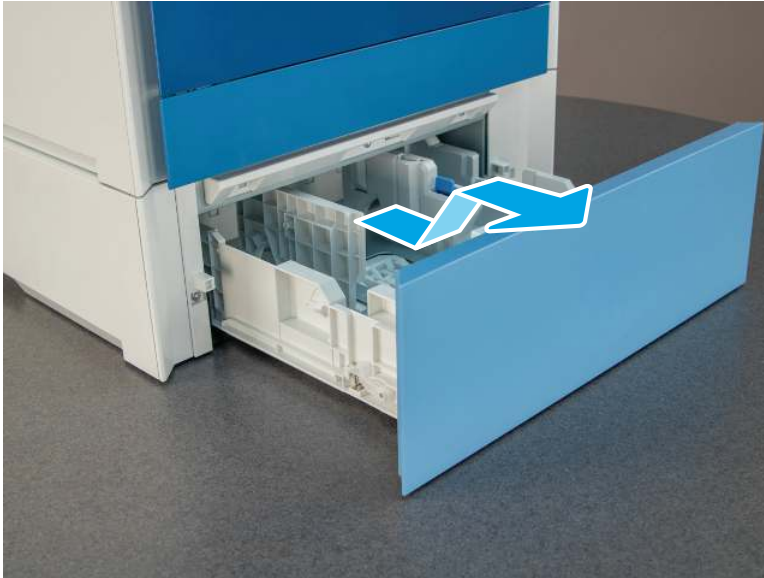
Print any pages necessary to make sure the printer is functioning correctly.

1. Remove Tray 3

Follow the procedure below to remove Tray 3.

- Pull the tray out until it stops, lift the front edge up, and then remove the tray.

Figure 5-56 Remove the tray



2. Remove the Tray 3 cassette front cover

Follow the procedure below to remove the Tray 3 cassette front cover.

1. Turn the tray over, place it on a flat surface, and then release four tabs.


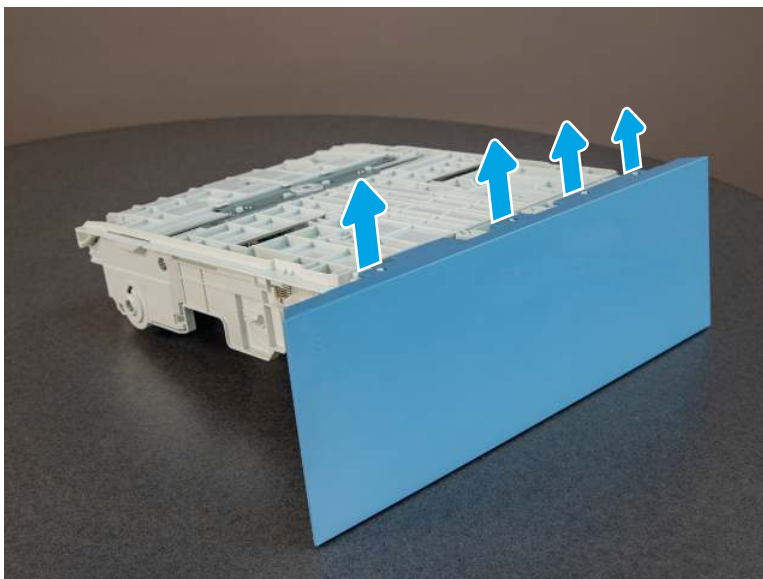
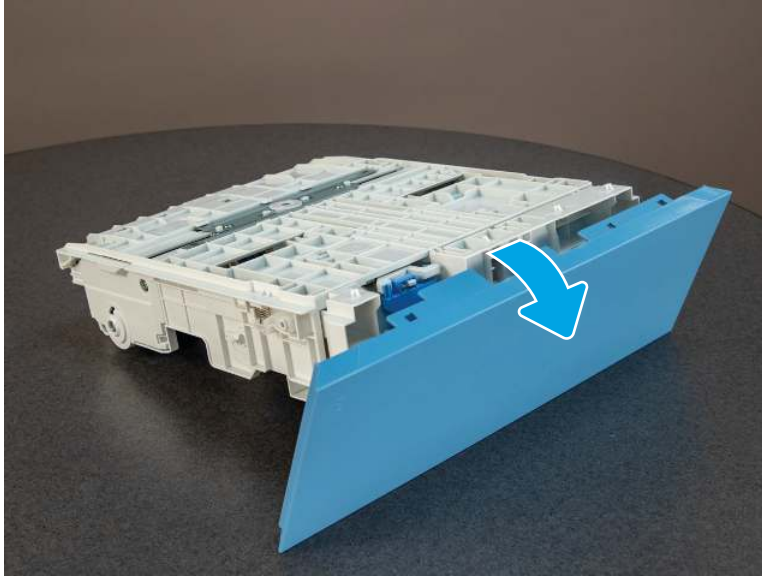
 **NOTE:** Release the tabs from the left- to right-side as shown below.

Figure 5-57 Release four tabs



2. Rotate the bottom edge of the cover away from the cassette to remove it.

Figure 5-58 Remove the cover



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



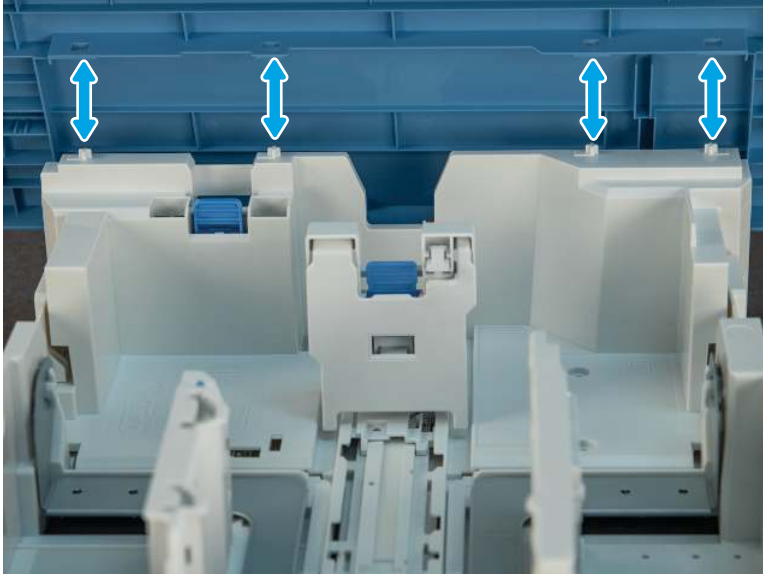
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

4. Install the Tray 3 cassette front cover

Follow the procedure below to install the Tray 3 cassette front cover.

1. Position the top edge of the cover on the cassette with the alignment pins (on the cassette body) in the holes in the front cover.

Figure 5-59 Align holes and pins



2. Rotate the bottom edge of the cover toward the cassette to install it.


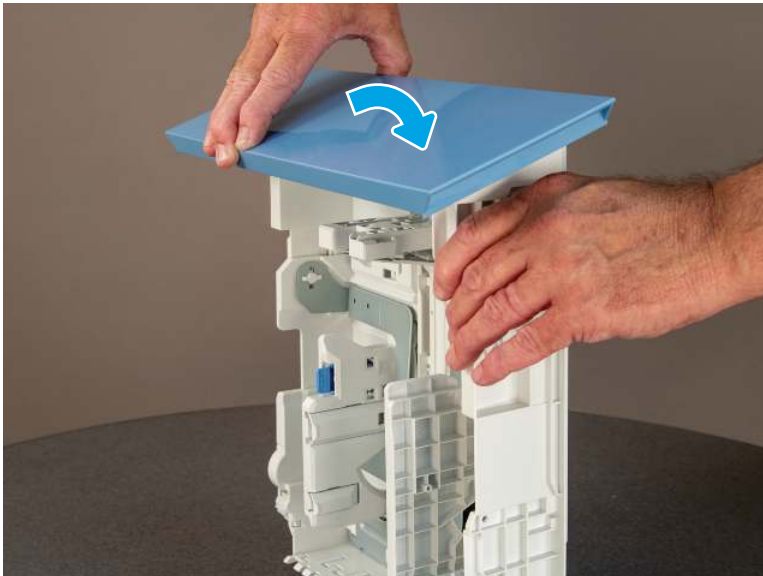
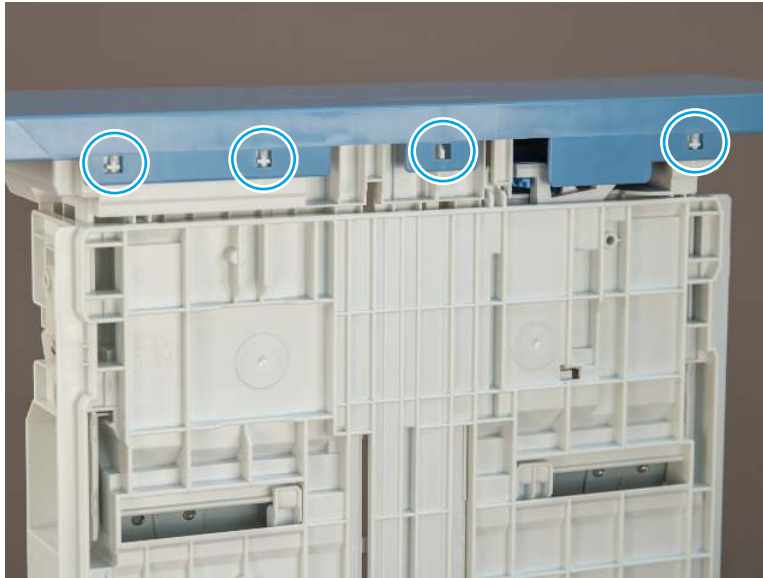
 **NOTE:** An audible click is heard when the bottom edge of the cover snaps onto the cassette.

Figure 5-60 Install the cover



3. Verify that the pins on the bottom edge of the cassette are fully seated in the holes on the cover.

Figure 5-61 Verify that the installation is correct

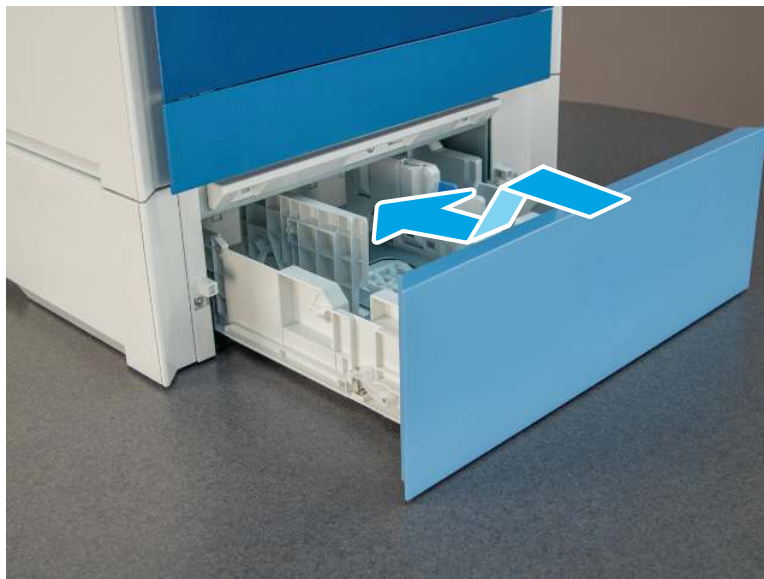


5. Install Tray 3

Follow the procedure below to install Tray 3.

- Install the tray.

Figure 5-62 Install the tray



Removal and replacement: Integrated scanner assembly (ISA) FFC cover (MFP)

Learn about ISA cable cover removal (MFP).

Mean time to repair: 2 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-7 Part Information

Part number	Part description
4RA80-40045	Cover, FFC

Required tools

- Small flat-blade screwdriver

After performing service

Turn the printer power on

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

Post service test

No post service test is available for this assembly.

1. Remove the ISA FFC cover (MFP)

Follow the procedure below to remove and replace the ISA FFC cover (MFP).

1. Open the ISA.

Figure 5-63 Open the ISA



2. Remove the ISA FFC cover (callout 1).

Figure 5-64 Remove the cover



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.



1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Left cover and cartridge door button (SFP)

Learn about left cover and cartridge door button removal (SFP).


Mean time to repair: 4 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-8 Part information

Part number	Part description
RC5-5450-000CN	Cover, left (SFP)
RC5-5411-000CN	Button, cartridge door

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on


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

Post service test

No post service test is available for this assembly.

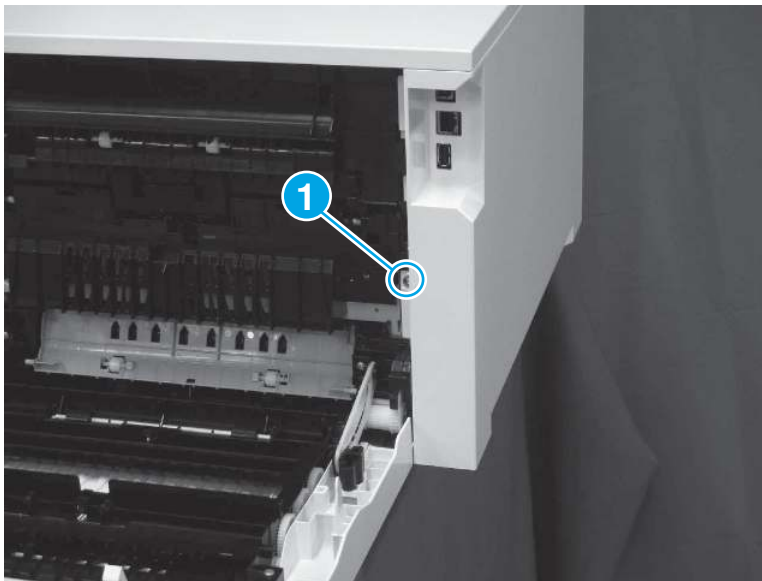
1. Remove the left cover and cartridge door button (SFP)

Follow the procedure below to remove and replace the left cover and cartridge door button (SFP).

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

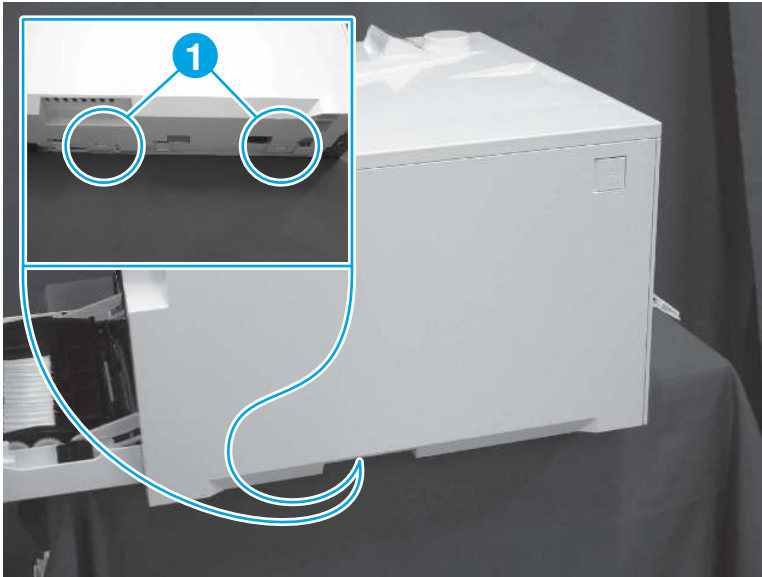
1. Remove one screw (callout 1).

Figure 5-65 Remove one screw



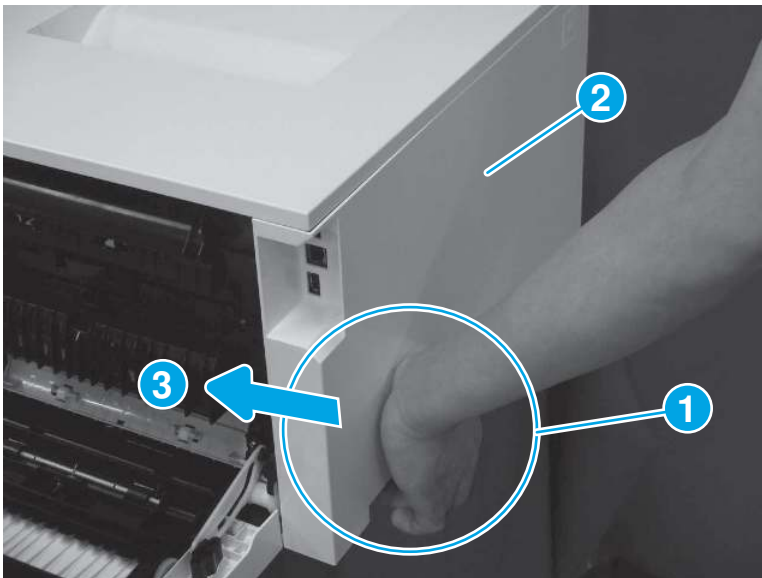
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-66 Release two tabs



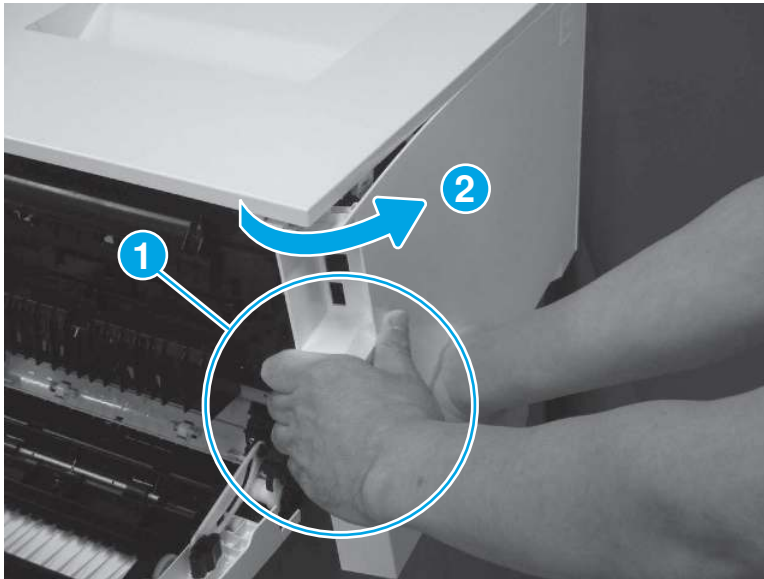
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-67 Release the rear cover corner



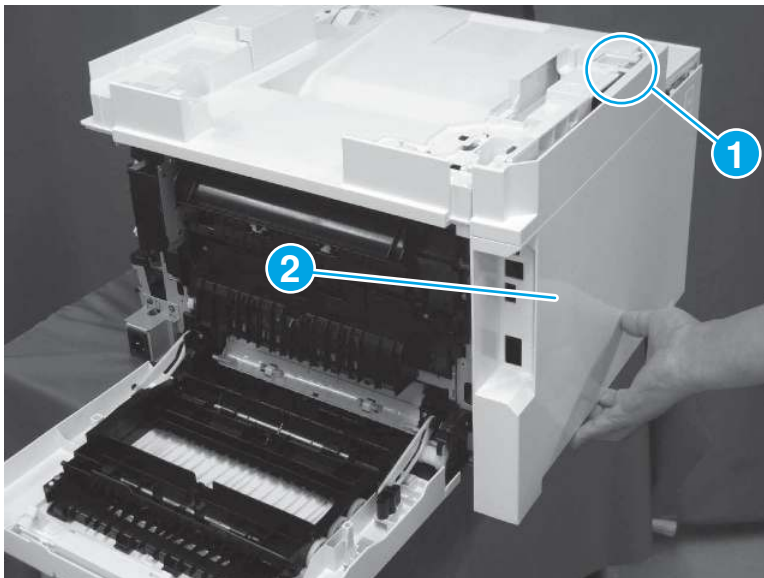
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-68 Disengage the cover corner



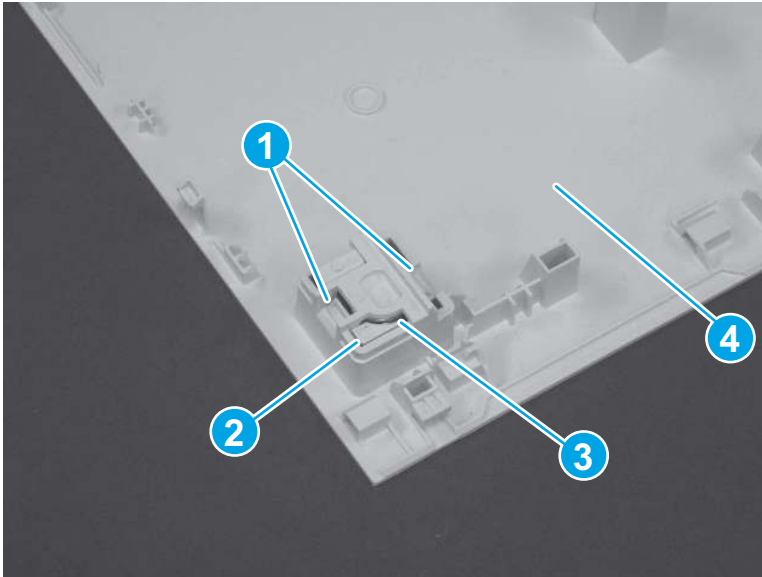
5. Remove the left cover (callout 1).

Figure 5-69 Remove the cover



6. Release two tabs (callout 1), and then remove the cartridge door button (callout 2) and one spring (callout 3) from the left cover (callout 4).

Figure 5-70 Remove the cartridge door button



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Left cover and cartridge door button (MFP)

Learn about left cover and cartridge door button removal (MFP).


Mean time to repair: 4 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-9 Part information

Part number	Part description
RC5-5462-000CN	Cover, left (MFP)
RC5-5411-000CN	Button, cartridge door

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on


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

Post service test

No post service test is available for this assembly.

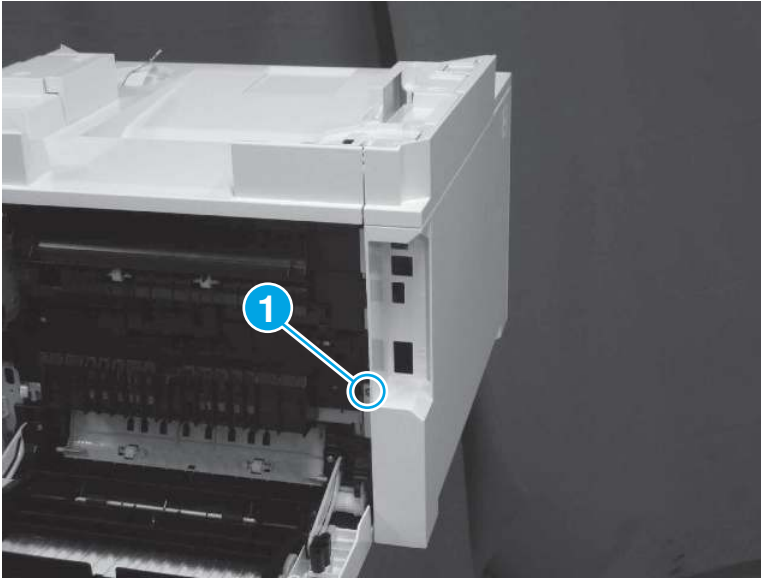
1. Remove the left cover (MFP)

Follow the procedure below to remove and replace the left cover (MFP).

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

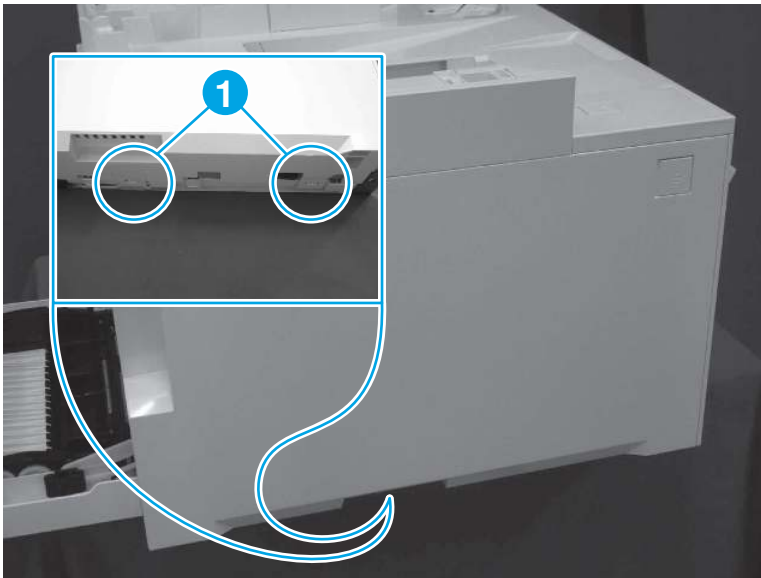
1. Remove one screw (callout 1).

Figure 5-71 Remove one screw



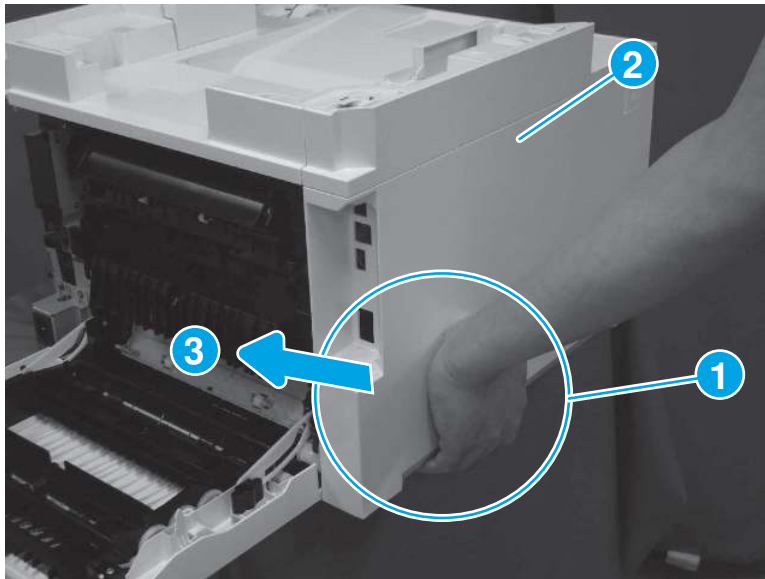
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-72 Release two tabs



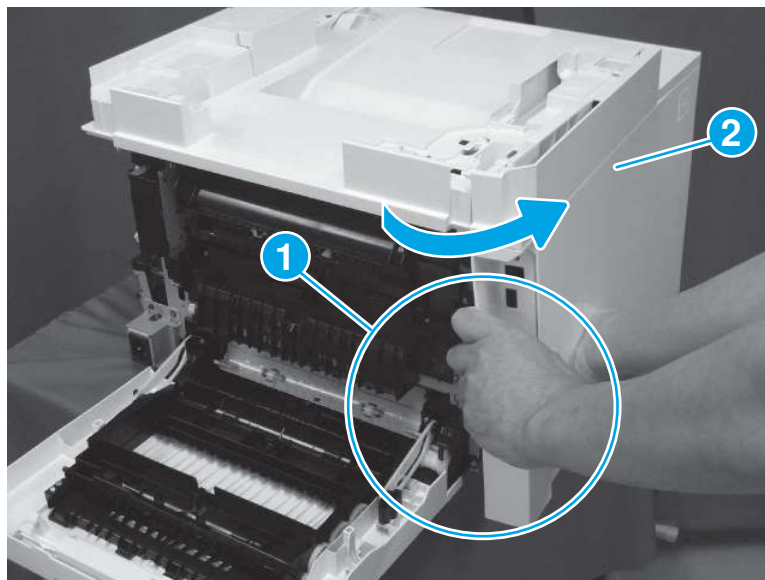
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-73 Release the rear cover corner



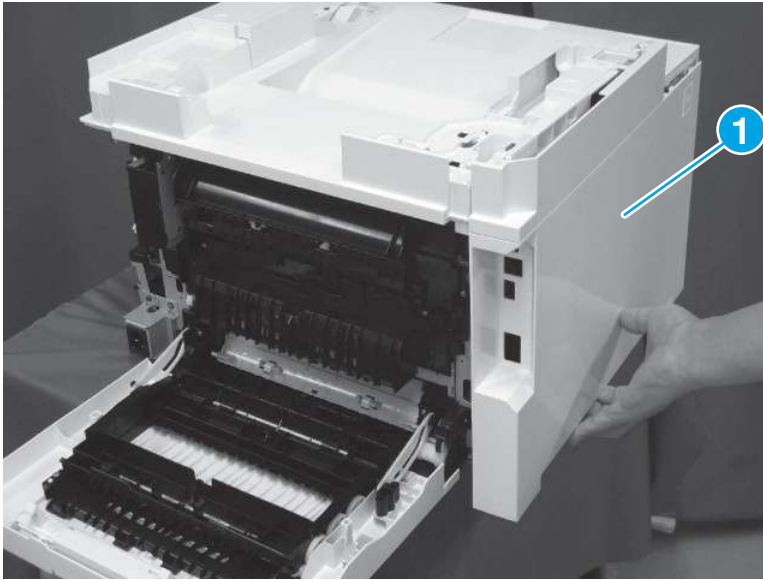
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-74 Disengage the cover corner



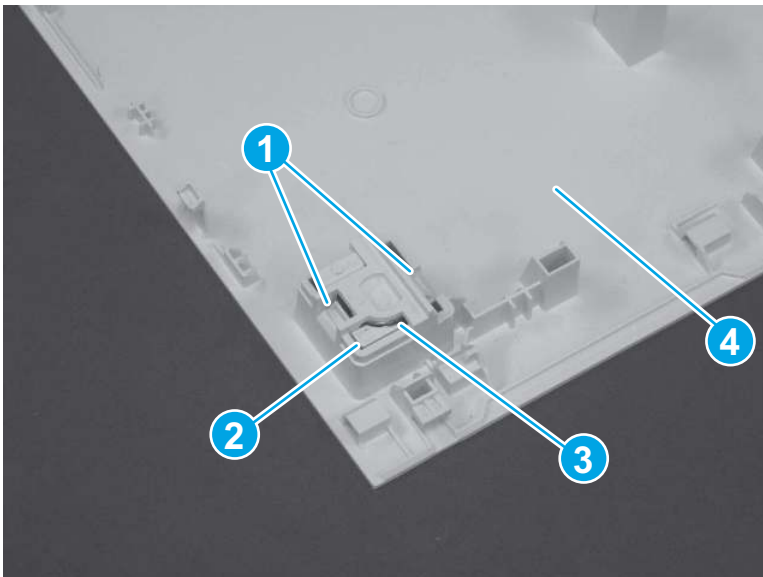
5. Remove the left cover (callout 1).

Figure 5-75 Remove the cover



6. Release two tabs (callout 1), and then remove the cartridge door button (callout 2) and one spring (callout 3) from the left cover (callout 4).

Figure 5-76 Remove the cartridge door button



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.



1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right cover (SFP)

Learn about right cover removal (SFP).


Mean time to repair: 3 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-10 Part information

Part number	Part description
RM2-2812-000CN	Cover, right (SFP)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on


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

Post service test

No post service test is available for this assembly.

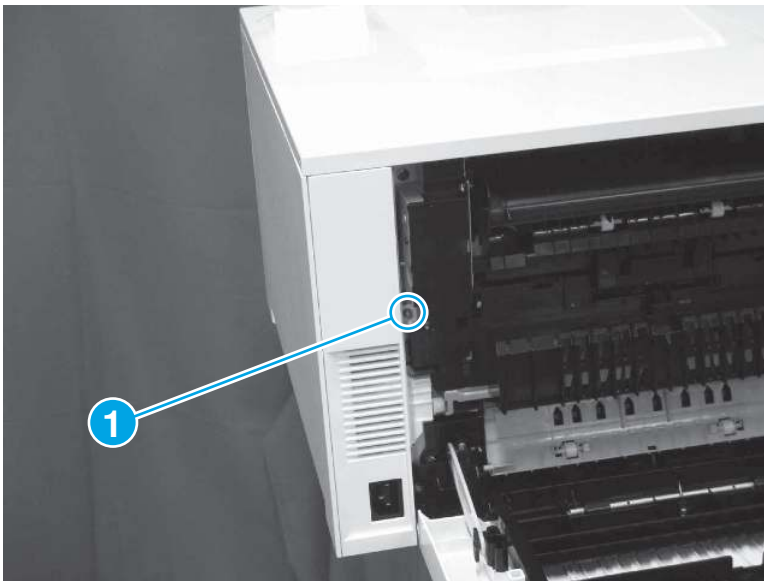
1. Remove the right cover (SFP)

Follow the procedure below to remove and replace the right cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

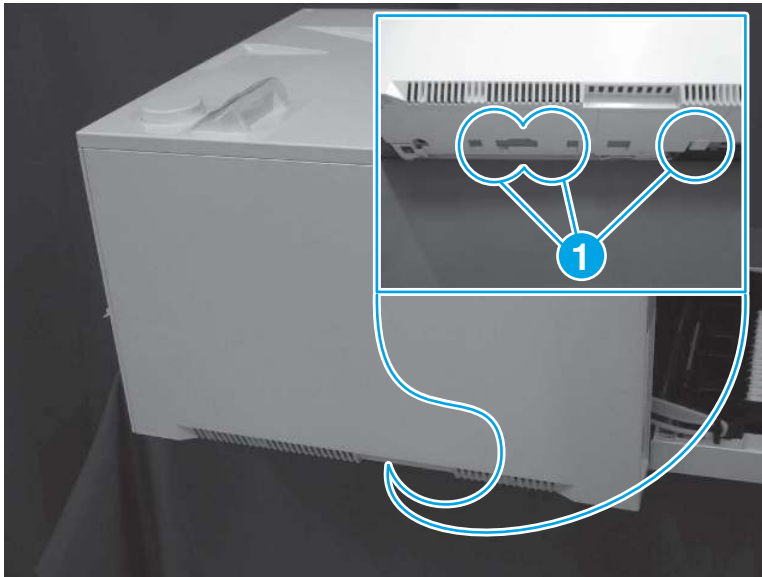
1. Remove one screw (callout 1).

Figure 5-77 Remove one screw



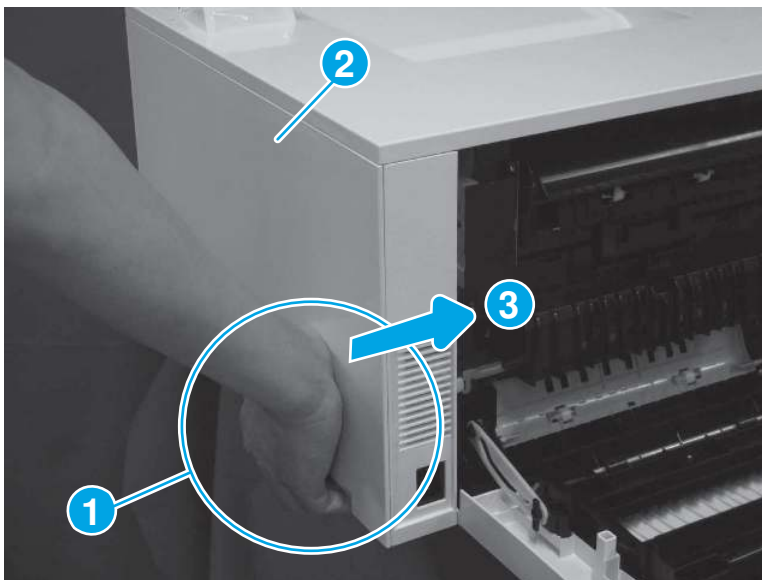
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-78 Release three tabs



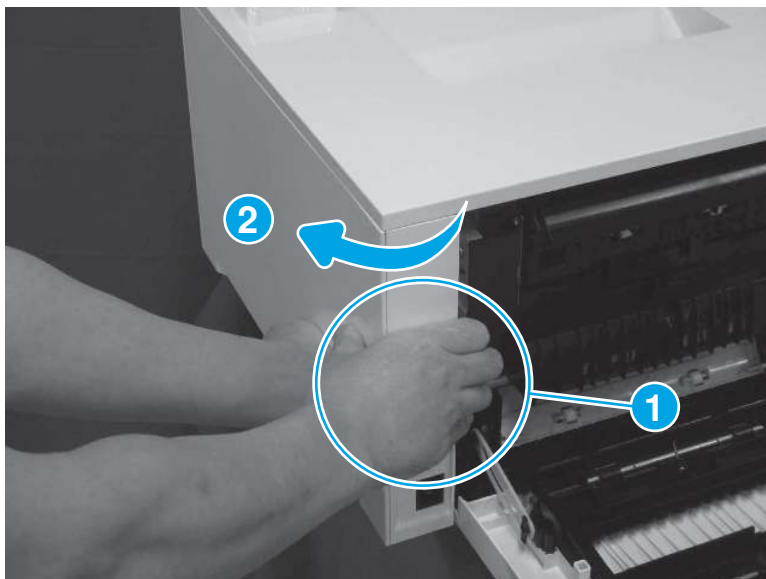
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-79 Release the rear cover corner



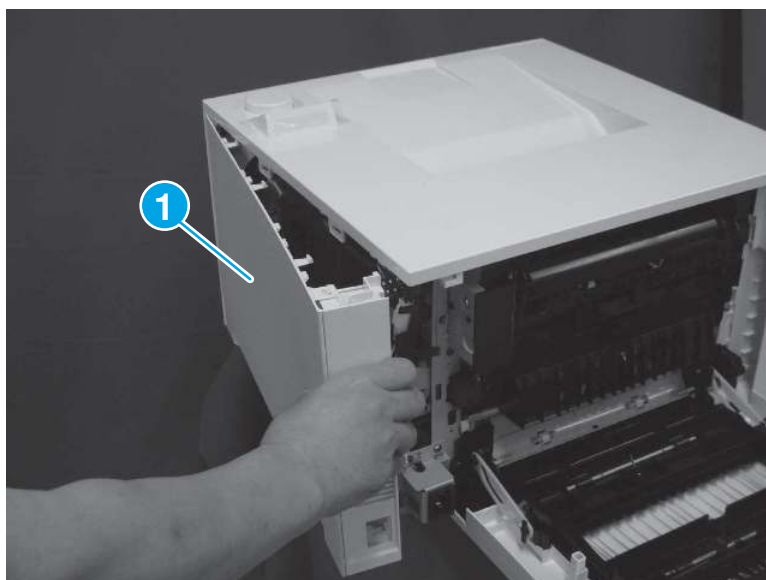
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-80 Disengage the cover corner



5. Remove the right cover (callout 1).

Figure 5-81 Remove the cover



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.



1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Right cover (MFP)

Learn about right cover removal (MFP).


Mean time to repair: 3 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-11 Part information

Part number	Part description
RM2-2827-000CN	Cover, right (MFP)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on


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

Post service test

No post service test is available for this assembly.

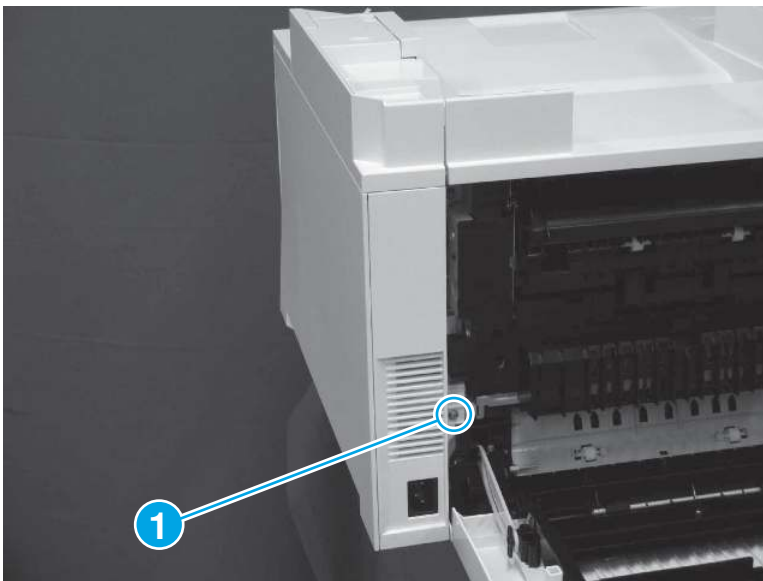
1. Remove the right cover (MFP)

Follow the procedure below to remove and replace the right cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

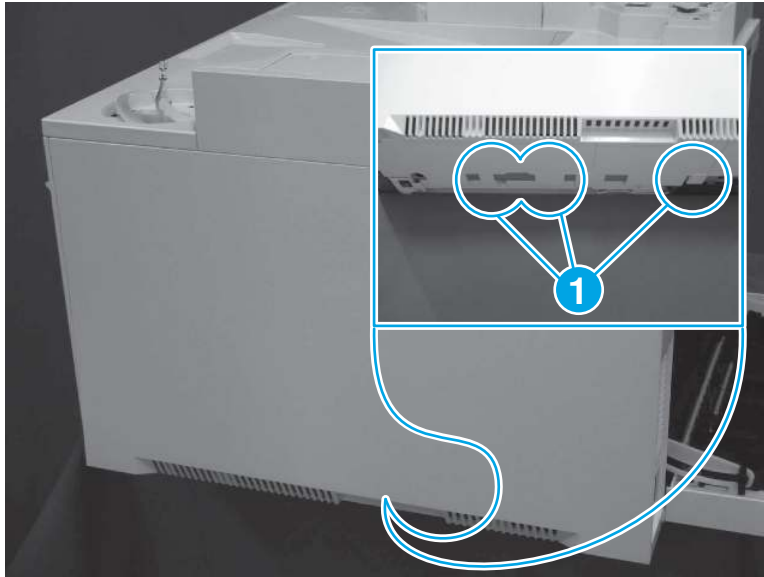
1. Remove one screw (callout 1).

Figure 5-82 Remove one screw



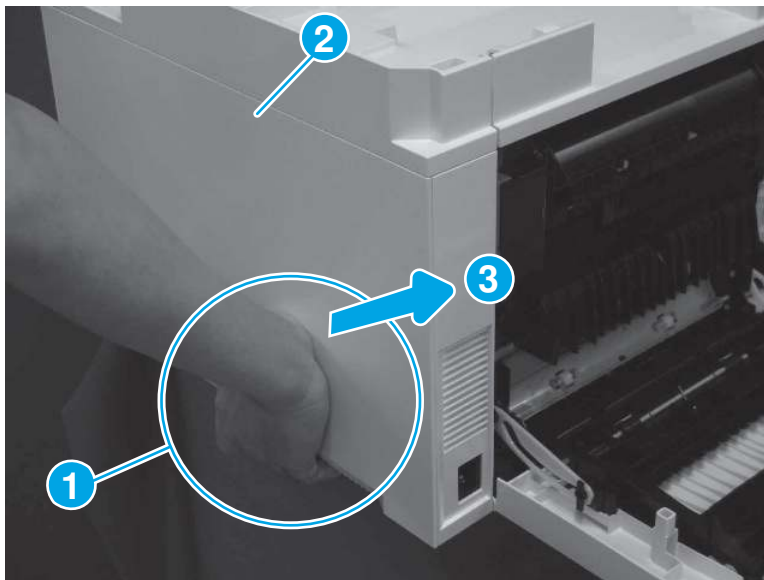
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-83 Release three tabs



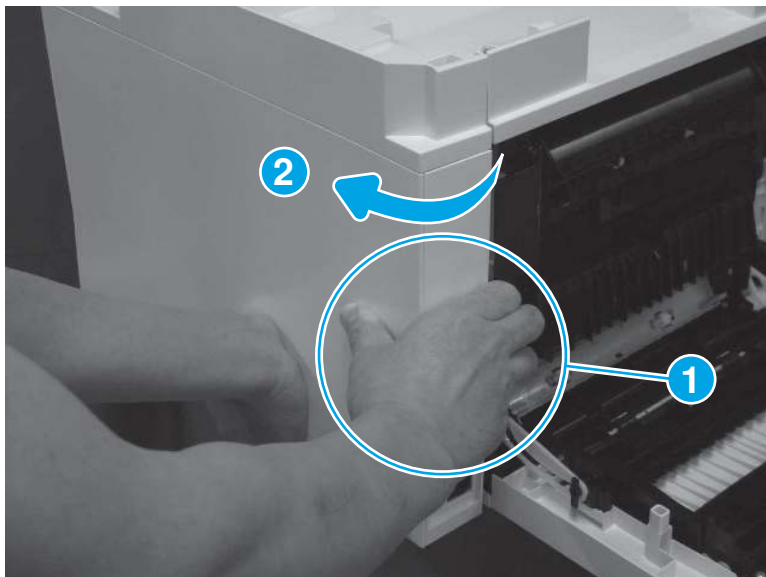
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-84 Release the rear cover corner



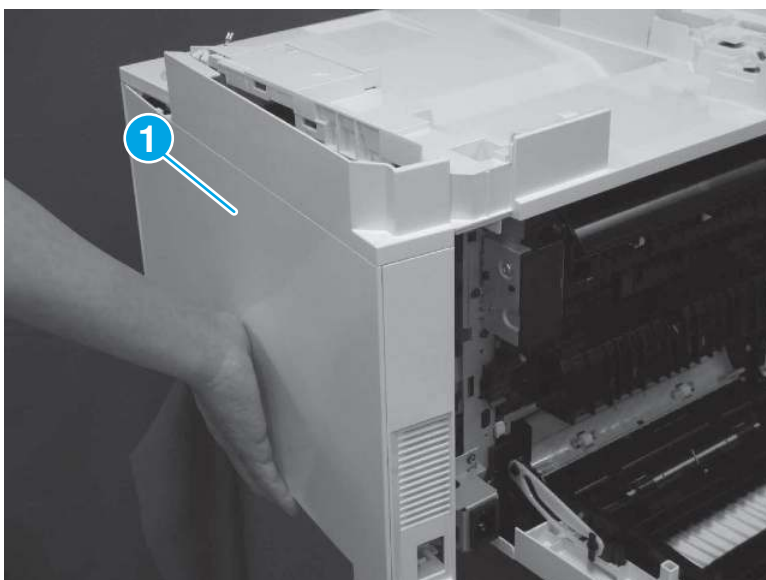
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-85 Disengage the cover corner



5. Remove the right cover (callout 1).

Figure 5-86 Remove the cover



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.



1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Front cover

Learn about front cover removal.


Mean time to repair: 11 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-12 Part information

Part number	Part description
RM2-2824-000CN	Cover, front assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on


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


Post service test

No post service test is available for this assembly.

1. Remove the left cover (SFP)

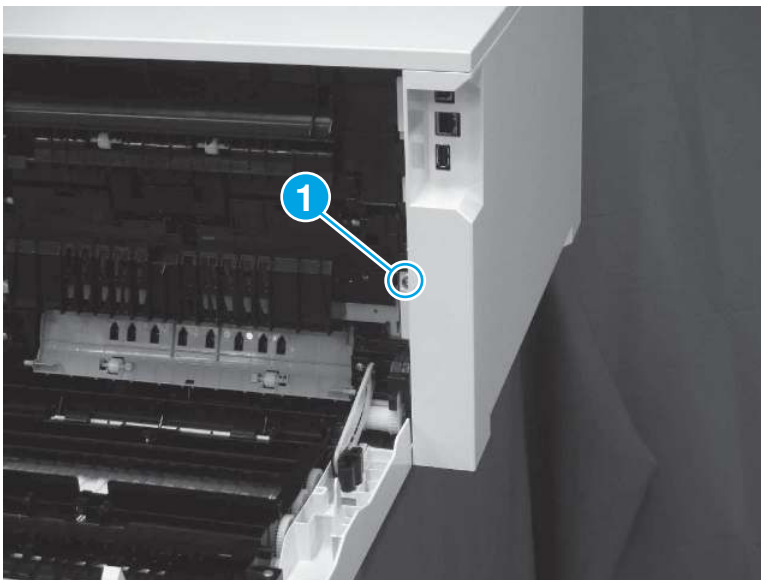
Follow the procedure below to remove and replace the left cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

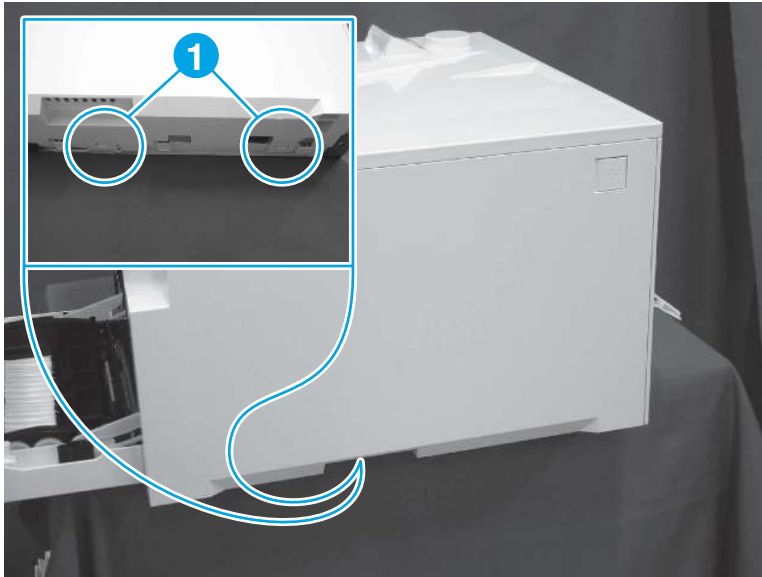
1. Remove one screw (callout 1).

Figure 5-87 Remove one screw



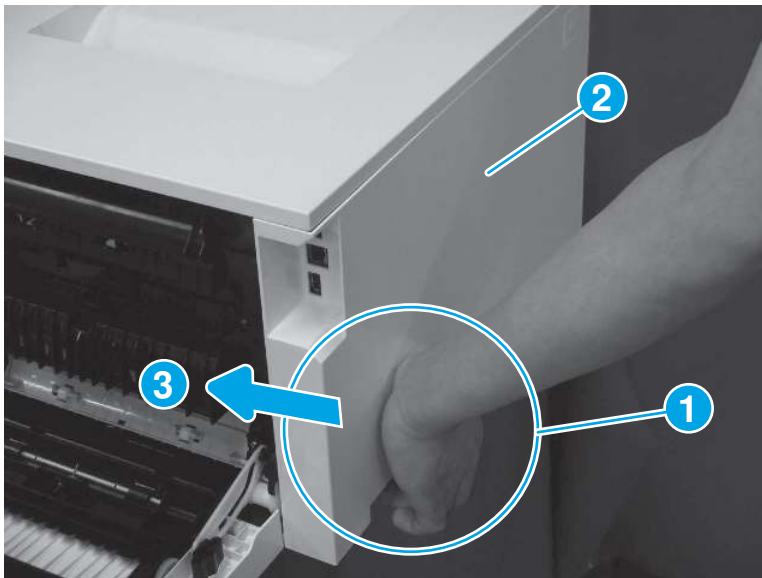
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-88 Release two tabs



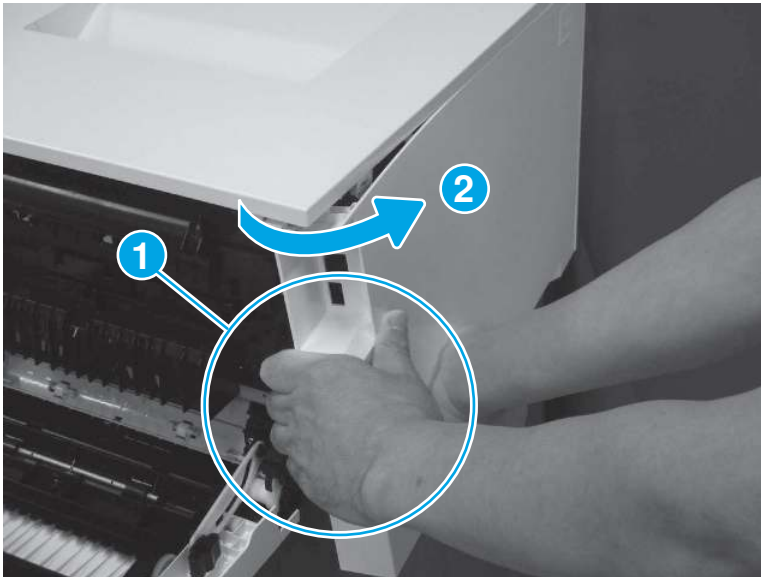
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-89 Release the rear cover corner



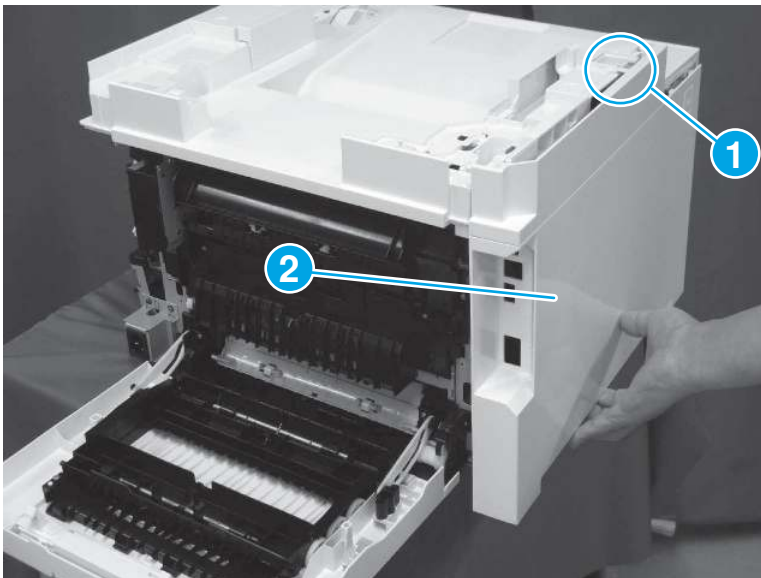
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-90 Disengage the cover corner




5. Remove the left cover (callout 1).


Figure 5-91 Remove the cover



2. Remove the left cover (MFP)

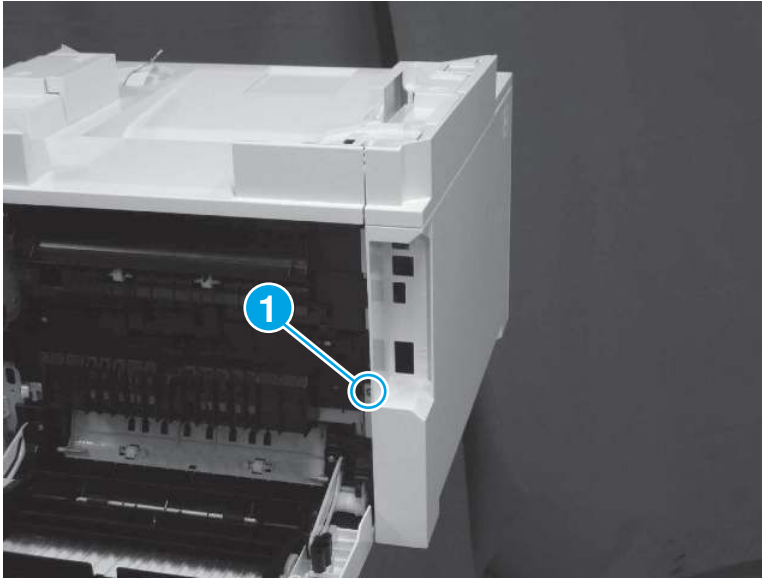
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

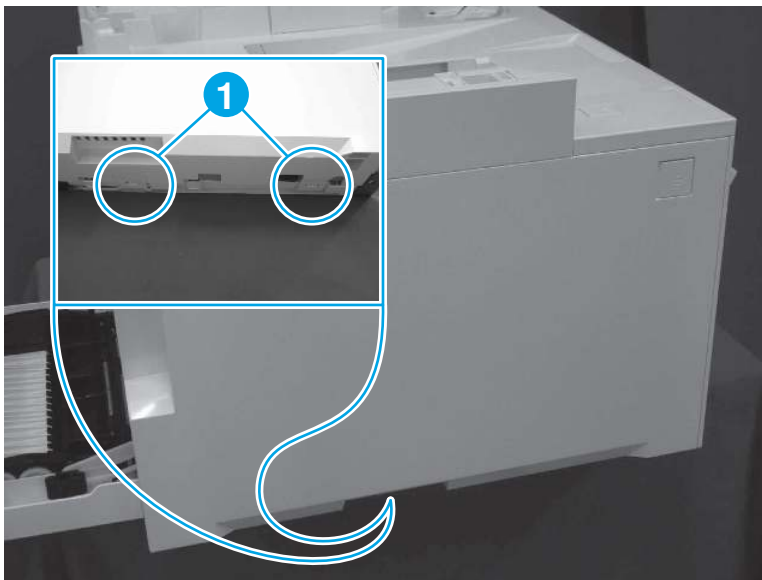
1. Remove one screw (callout 1).

Figure 5-92 Remove one screw



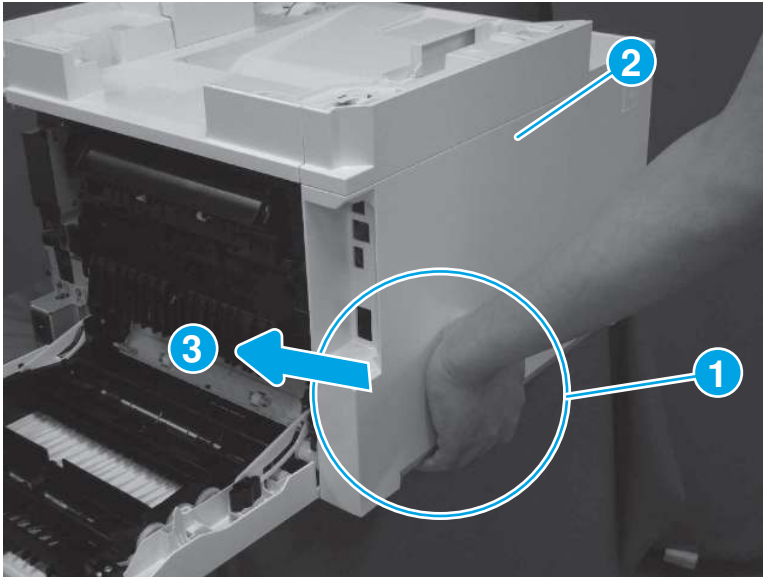
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-93 Release two tabs



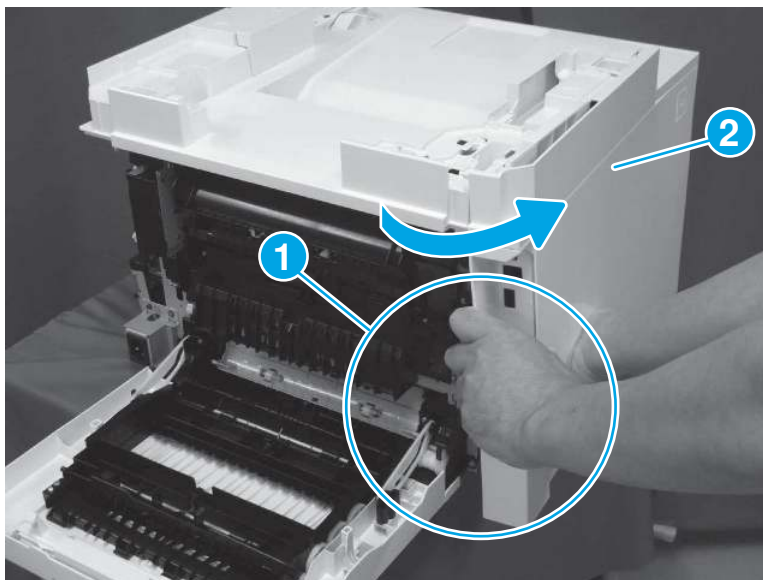
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-94 Release the rear cover corner



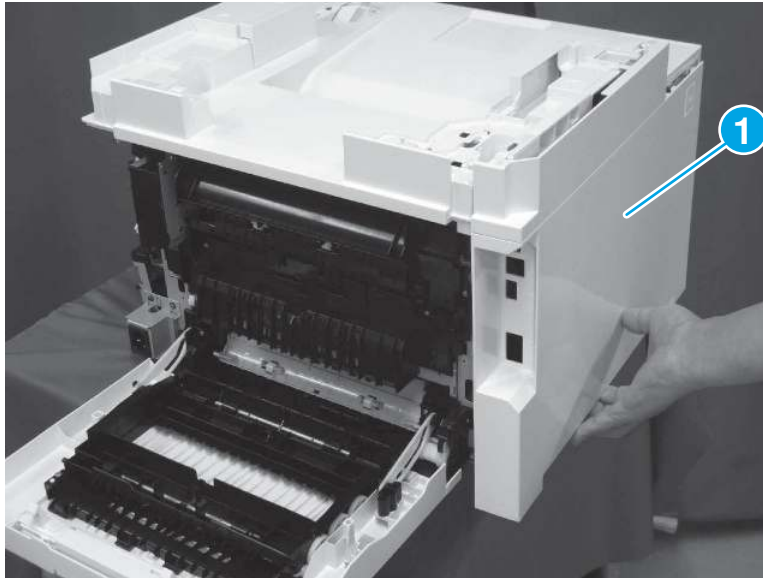
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-95 Disengage the cover corner




5. Remove the left cover (callout 1).

Figure 5-96 Remove the cover



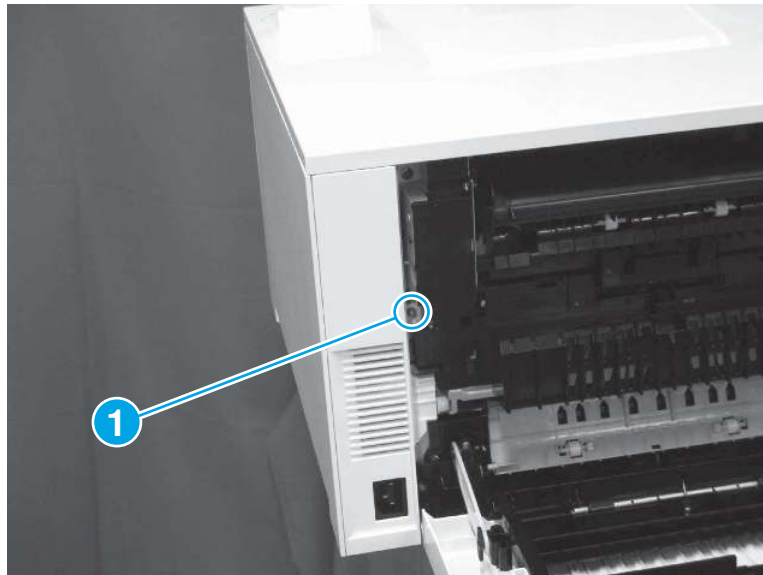
3. Remove the right cover (SFP)

Follow the procedure below to remove and replace the right cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

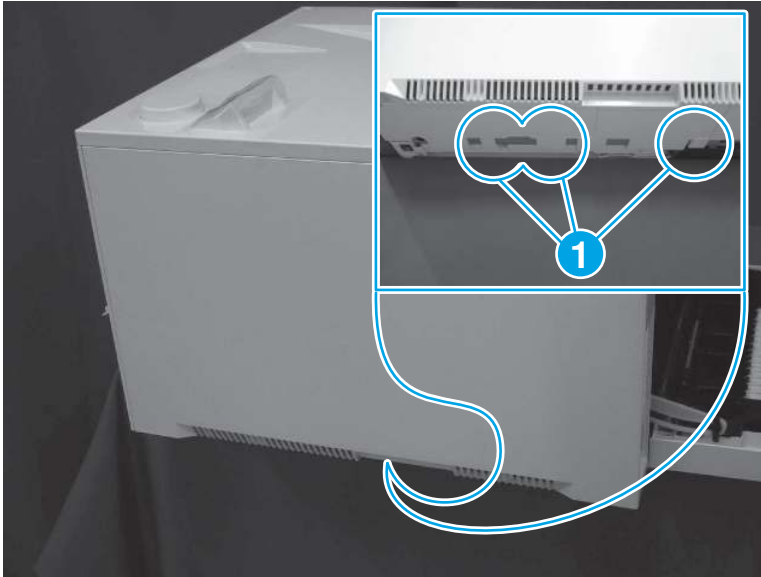
1. Remove one screw (callout 1).

Figure 5-97 Remove one screw



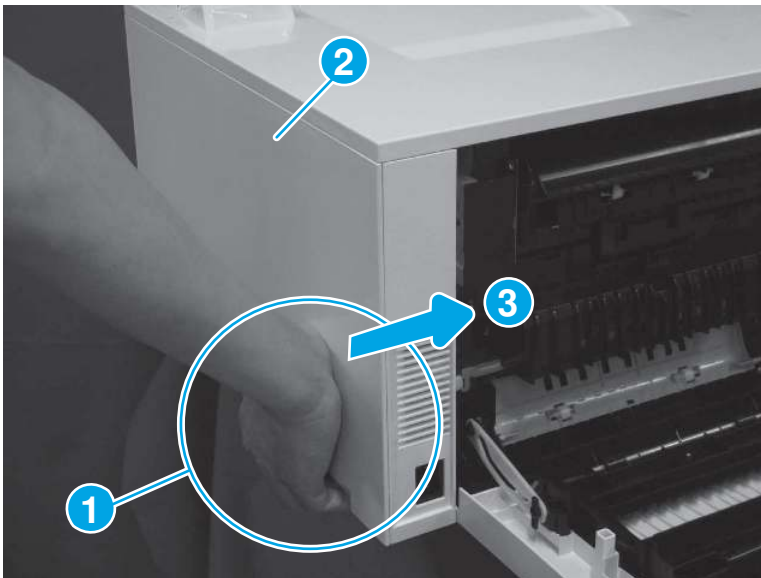
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-98 Release three tabs



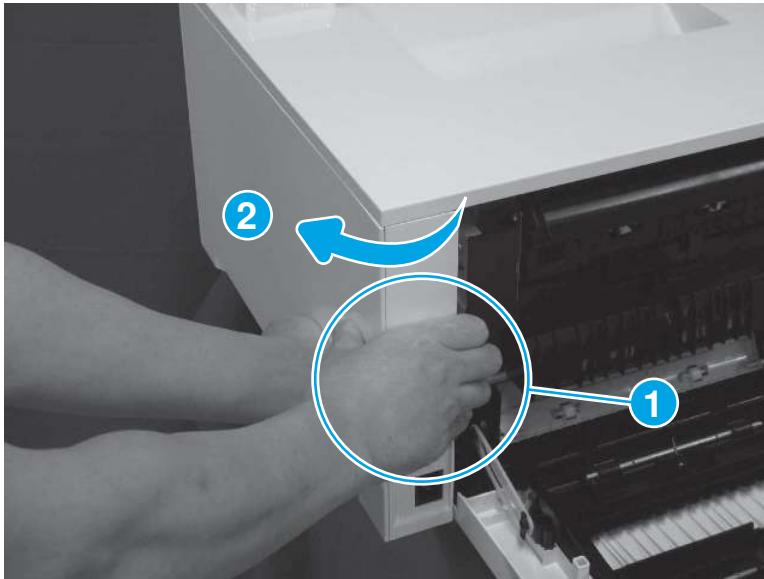
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-99 Release the rear cover corner



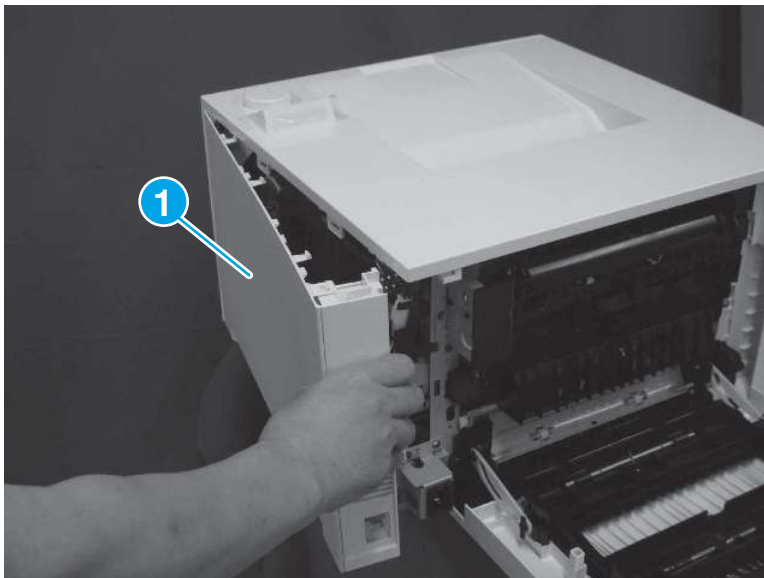
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-100 Disengage the cover corner



5. Remove the right cover (callout 1).

Figure 5-101 Remove the cover



4. Remove the right cover (MFP)

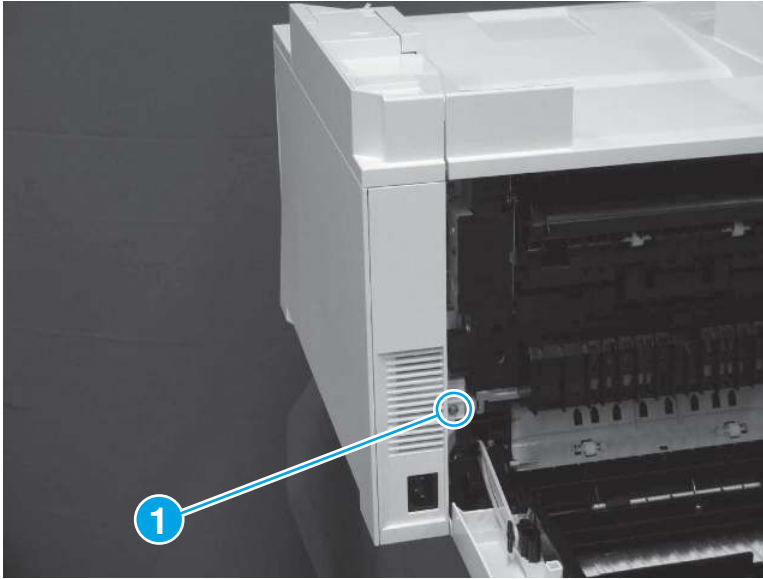
Follow the procedure below to remove and replace the right cover (MFP).



NOTE: The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

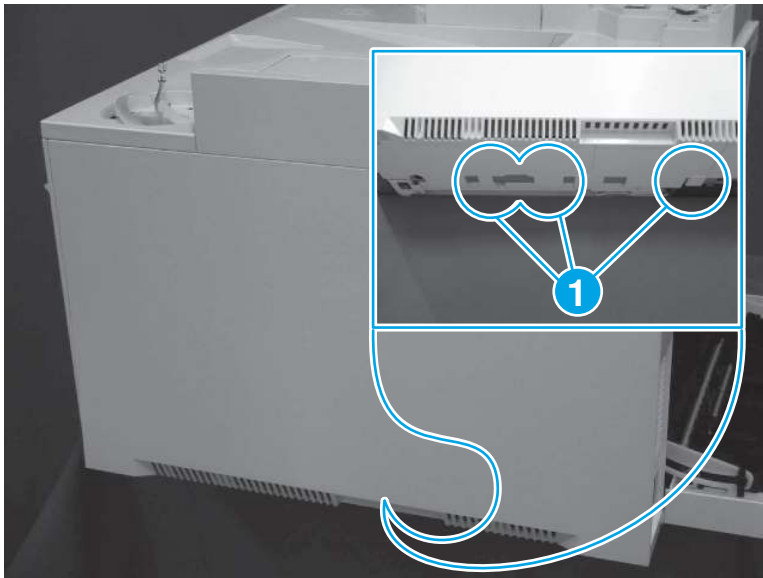
1. Remove one screw (callout 1).

Figure 5-102 Remove one screw



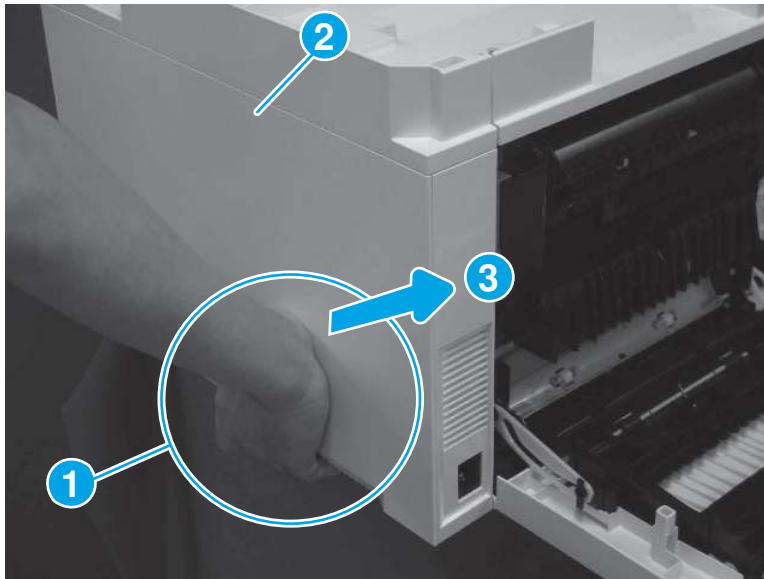
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-103 Release three tabs



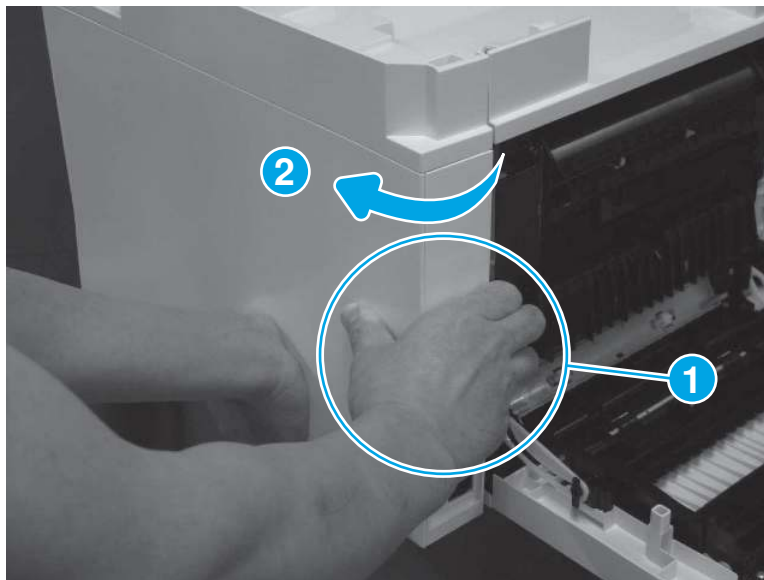
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-104 Release the rear cover corner



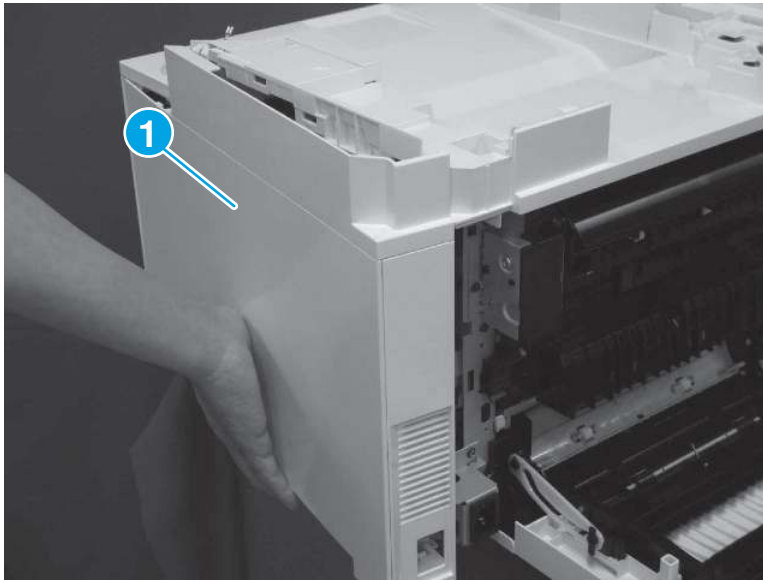
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-105 Disengage the cover corner



5. Remove the right cover (callout 1).


Figure 5-106 Remove the cover



5. Remove the front cover

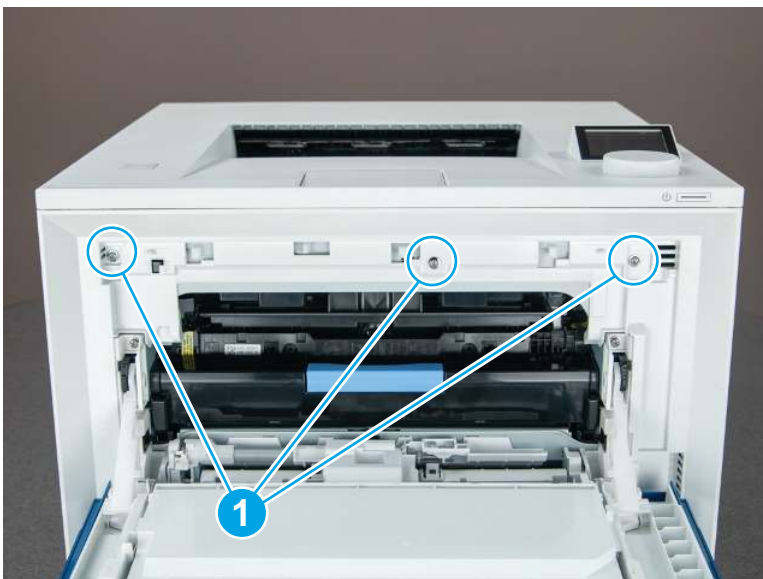
Follow the procedure below to remove and replace the front cover.

 **NOTE:** Front cover removal is **identical** for both SFP and MFP models.

 **Reinstallation tip:** Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

1. Remove three screws (callout 1).

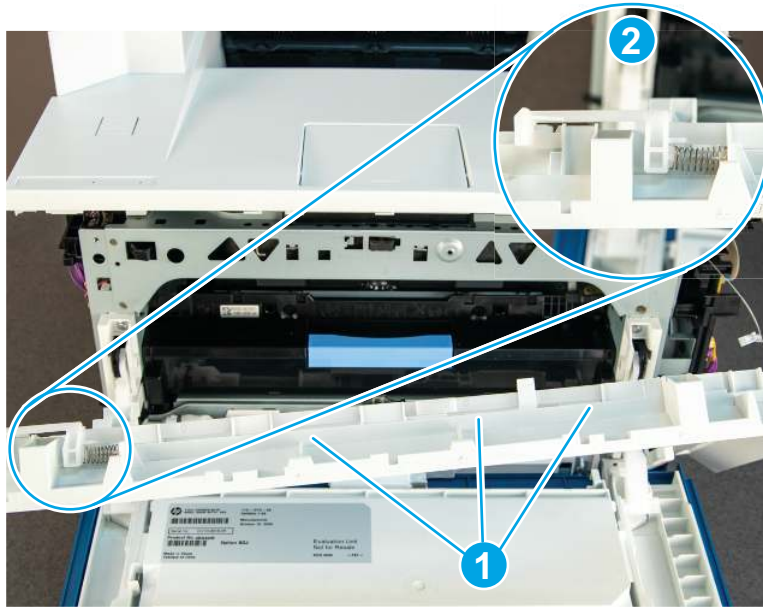
Figure 5-107 Remove three screws



2. Before proceeding, take note of the door release arm (callout 1). This arm can be easily dislodged when the cover is removed.

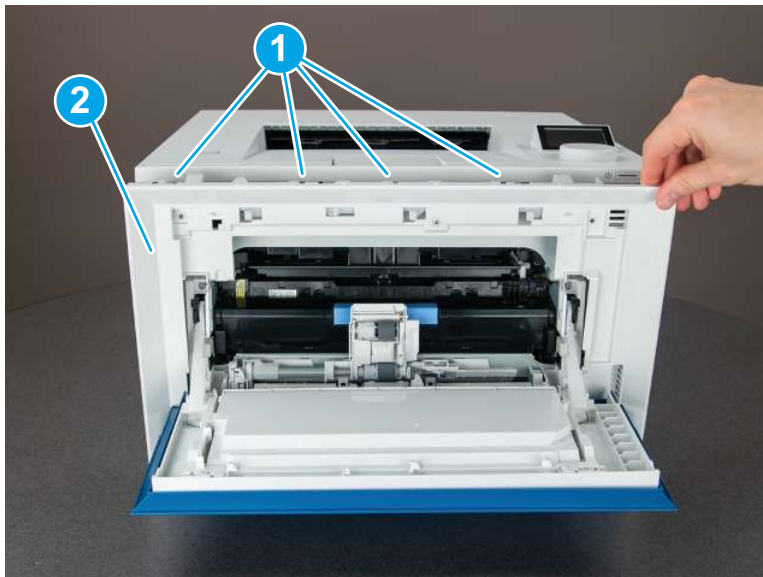
CAUTION: Do not lose the spring (callout 2) when removing the front cover.

Figure 5-108 Door release arm



3. Release four tabs (callout 1), and then remove the front cover (callout 2).

Figure 5-109 Remove the cover




6. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

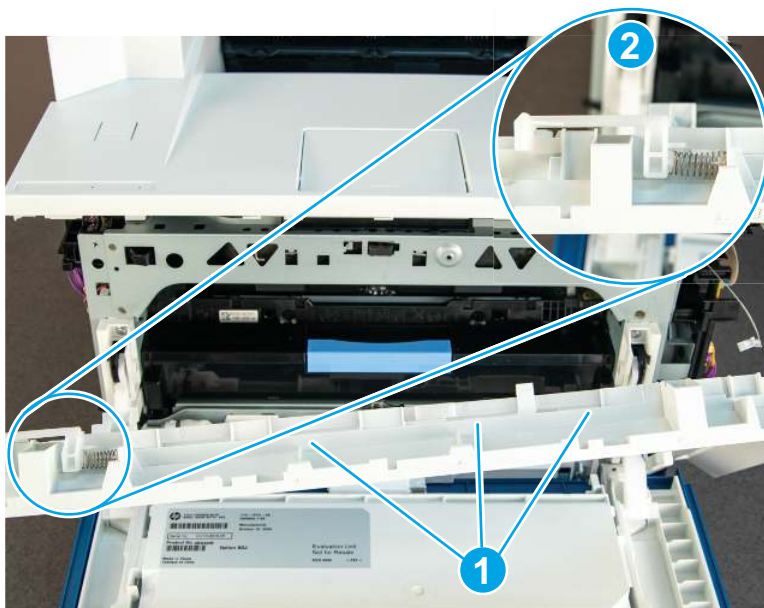
7. Special installation instructions - Front cover

Follow the special instructions below to install the front cover.

NOTE:  Front cover installation is **identical** for both the SFP and MFP models.

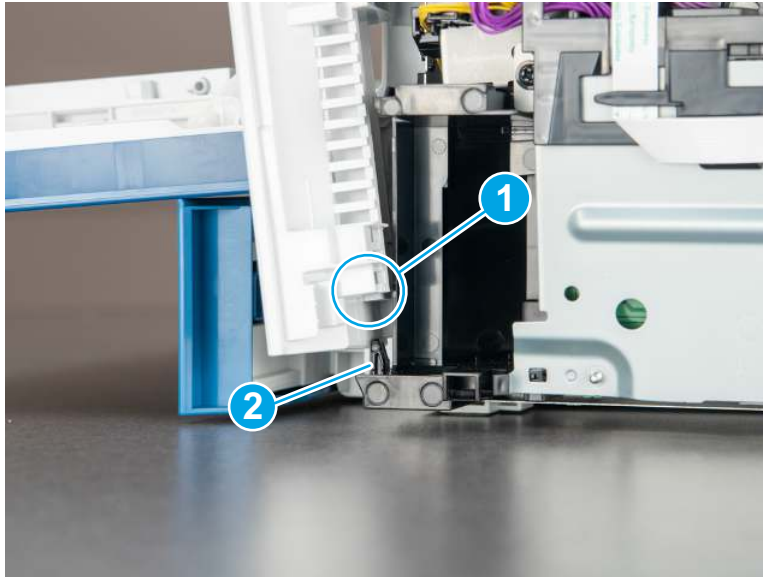
1. If the door release arm becomes dislodged when handling the cover, install it as shown below (callout 1, 2).

Figure 5-110 Door release arm installed



2. At the right and left side of the front cover, align the holes (callout 1) in the cover with the alignment pins (callout 2) on the chassis.

Figure 5-111 Cover alignment pins



3. Rotate the top of the cover towards the printer to install it.


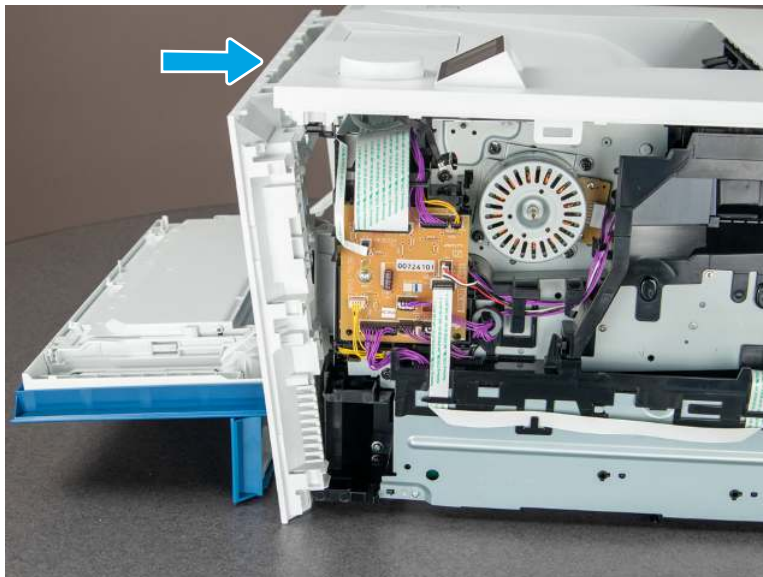
 **IMPORTANT:** Verify that the spring loaded door release button (on the left side of the cover) correctly functions.

Figure 5-112 Install the cover



Removal and replacement: Top cover (SFP)

Learn about top cover (SFP) removal.


Mean time to repair: 18 minutes

Service level: Medium

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-13 Part information

Part number	Part description
RM2-2814-000CN	Cover, top assembly (SFP) (network model)
RM2-2815-000CN	Cover, top assembly (SFP) (wireless model)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on


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


Post service test

No post service test is available for this assembly.

1. Remove the left cover (SFP)

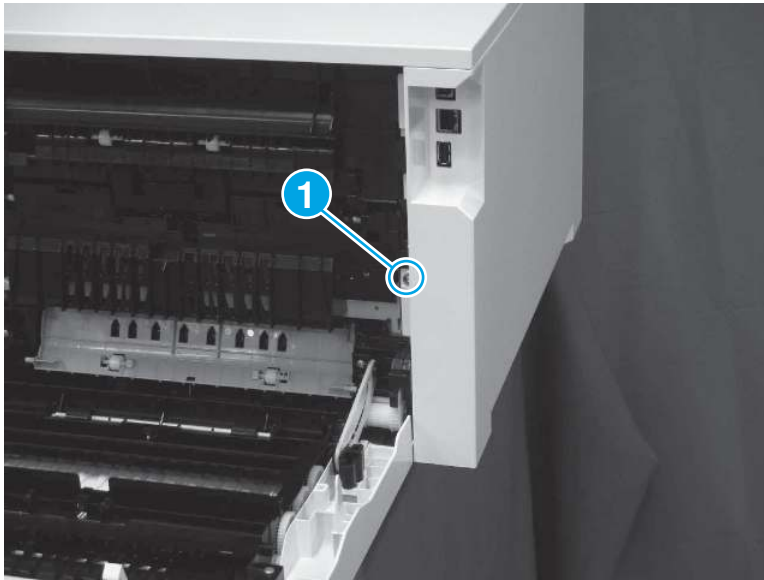
Follow the procedure below to remove and replace the left cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

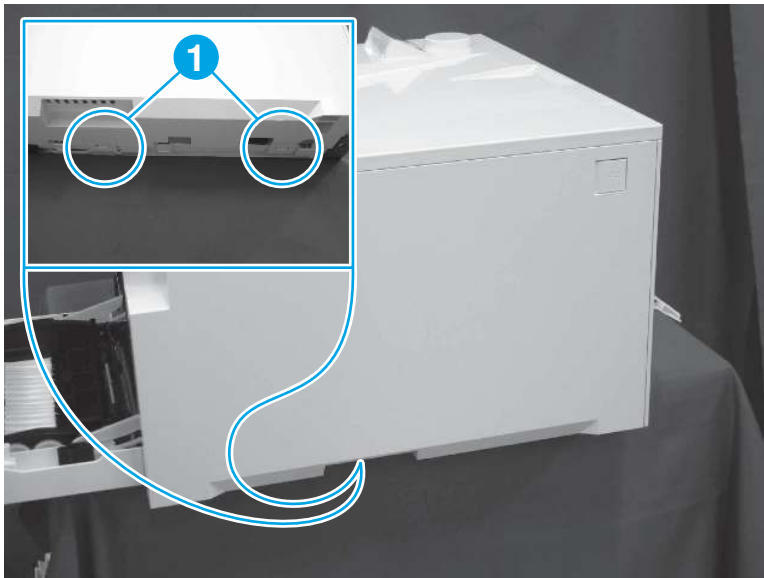
1. Remove one screw (callout 1).

Figure 5-113 Remove one screw



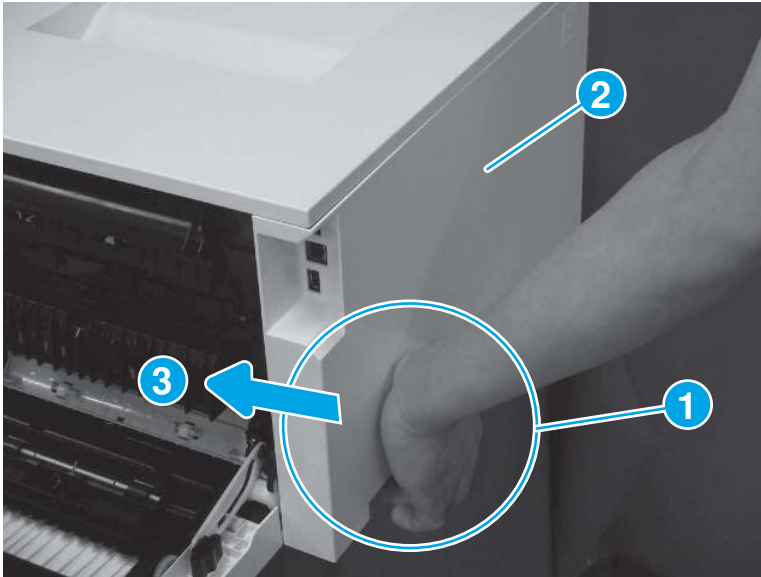
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-114 Release two tabs



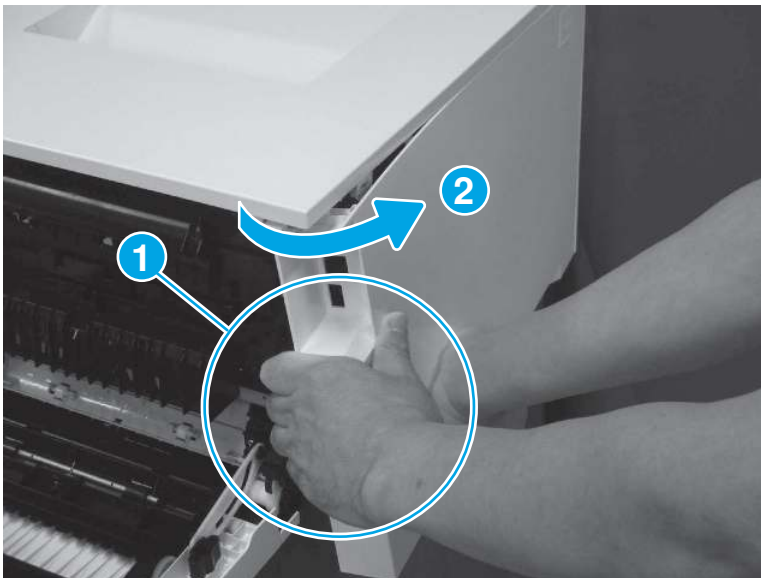
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-115 Release the rear cover corner



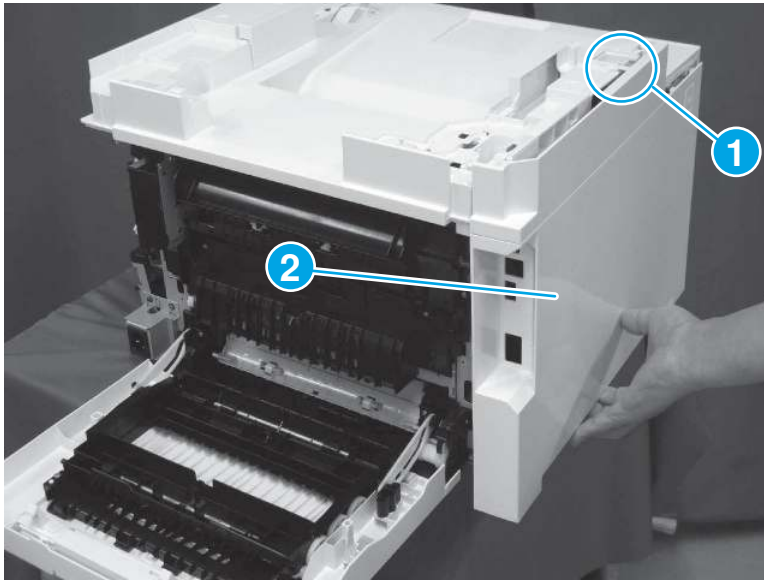
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-116 Disengage the cover corner




5. Remove the left cover (callout 1).

Figure 5-117 Remove the cover



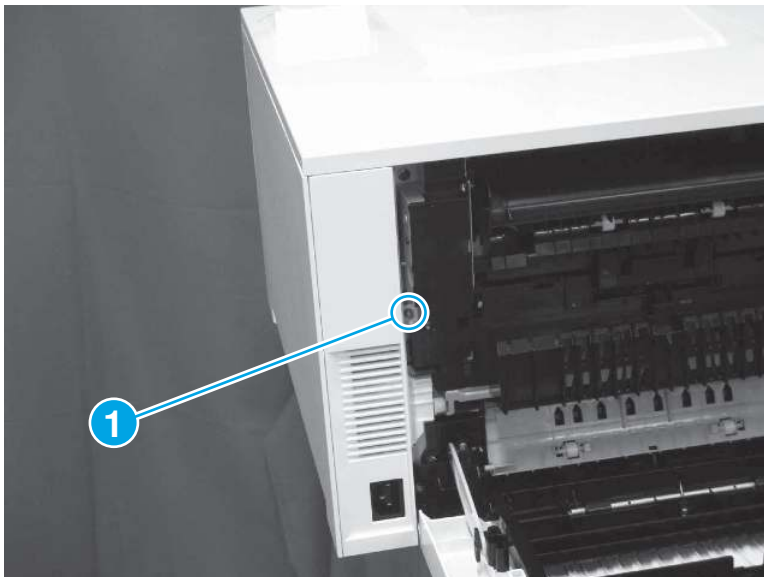
2. Remove the right cover (SFP)

Follow the procedure below to remove and replace the right cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

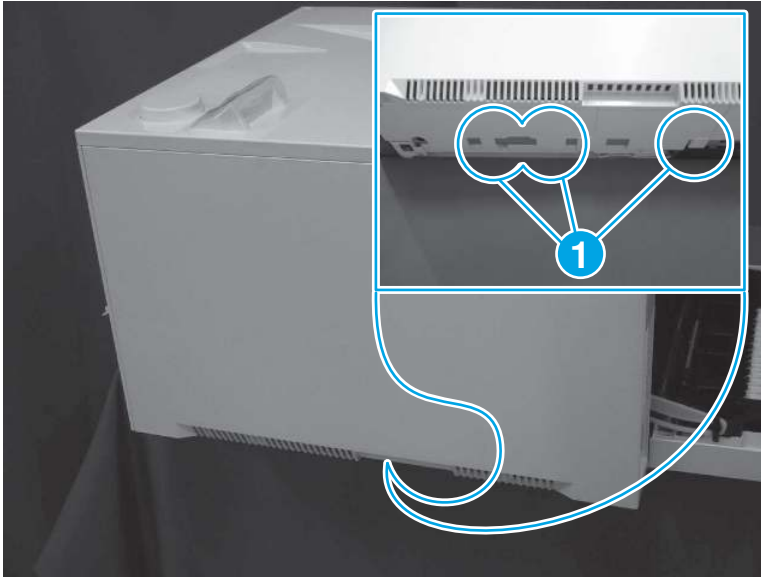
1. Remove one screw (callout 1).

Figure 5-118 Remove one screw



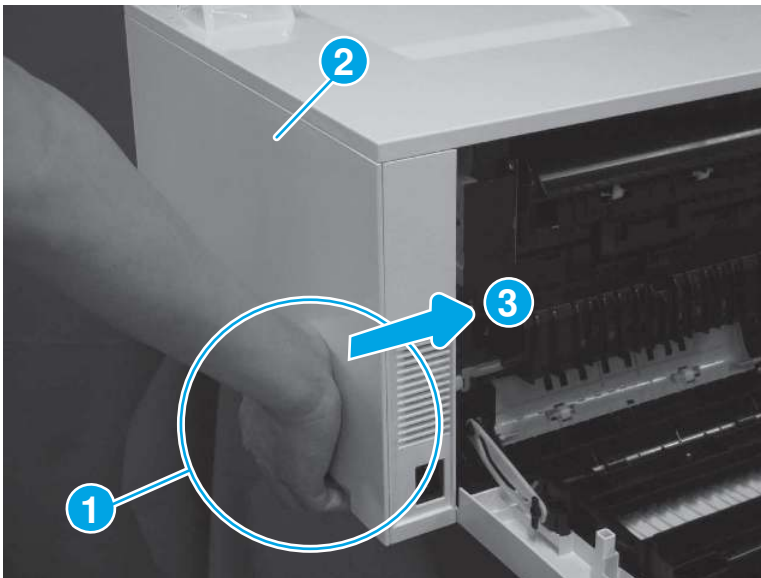
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-119 Release three tabs



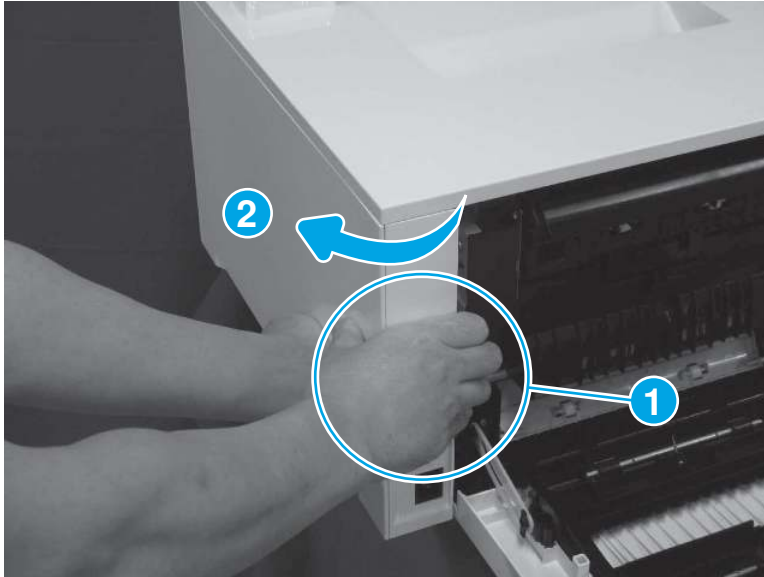
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-120 Release the rear cover corner



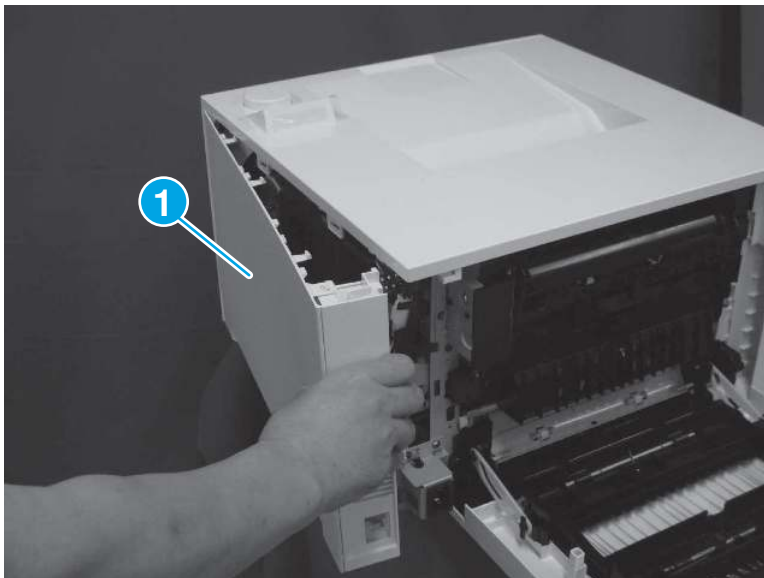
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-121 Disengage the cover corner




5. Remove the right cover (callout 1).

Figure 5-122 Remove the cover



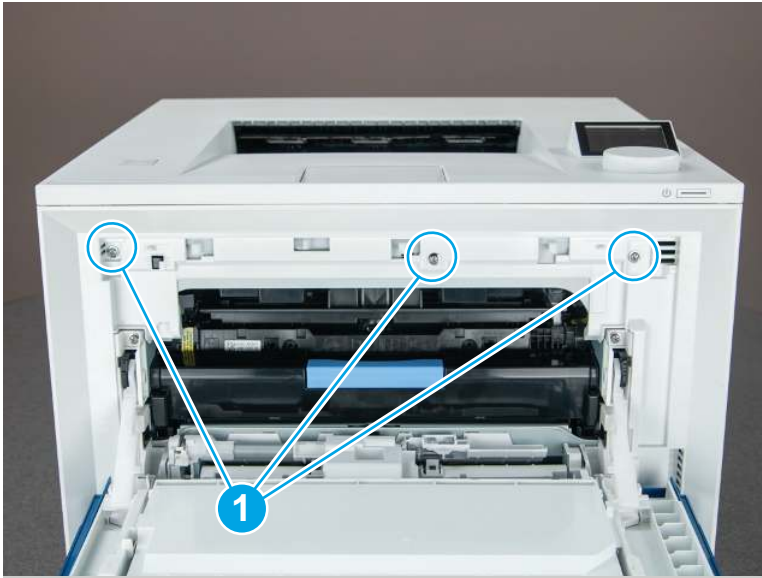
3. Remove the front cover (SFP)

Follow the procedure below to remove and replace the front cover.

 **Reinstallation tip:** Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

1. Remove three screws (callout 1).

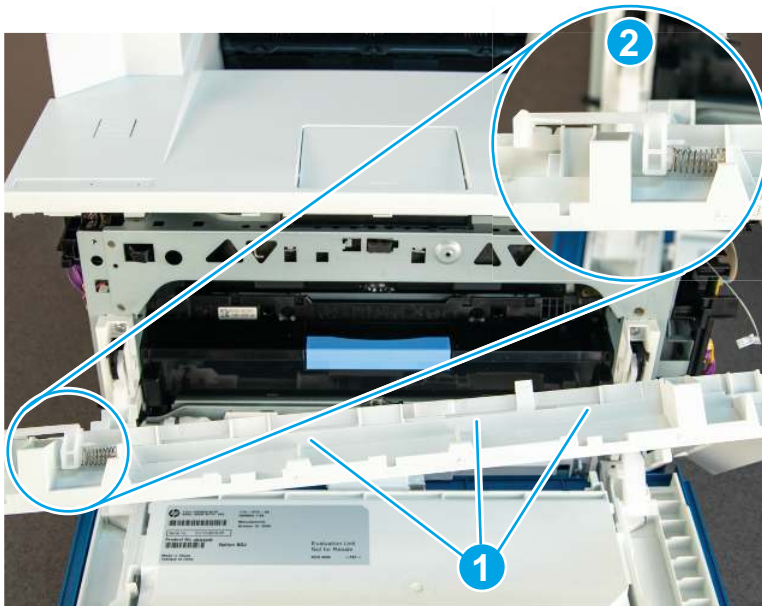
Figure 5-123 Remove three screws



2. Before proceeding, take note of the door release arm (callout 1). This arm can be easily dislodged when the cover is removed.

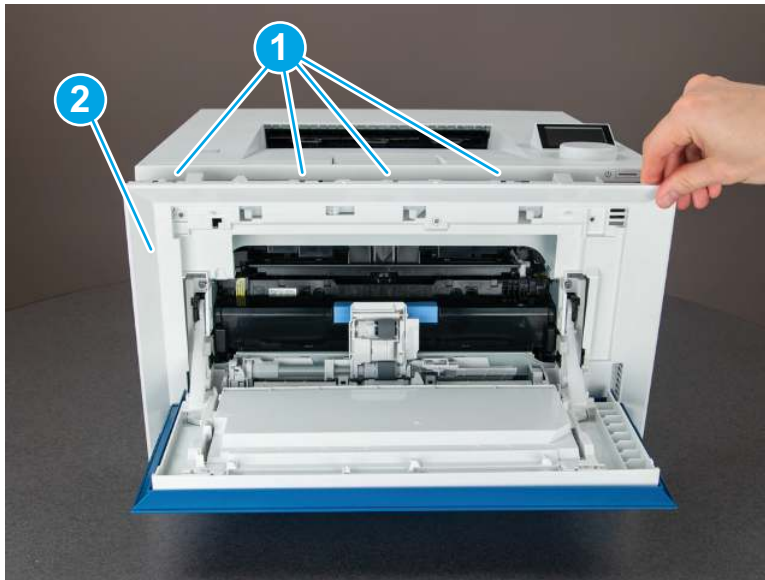
⚠ CAUTION: Do not lose the spring (callout 2) when removing the front cover.

Figure 5-124 Door release arm




3. Release four tabs (callout 1), and then remove the front cover (callout 2).

Figure 5-125 Remove the cover




4. Remove the top cover (SFP)

Follow the procedure below to remove and replace the top cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

1. **Wireless model only:** Raise and support the left side of the printer, remove one screw, and then separate the wireless PCA from the cover.

 **CAUTION:** Do not attempt to completely remove the wireless PCA. Instead, gently move it out of the way.


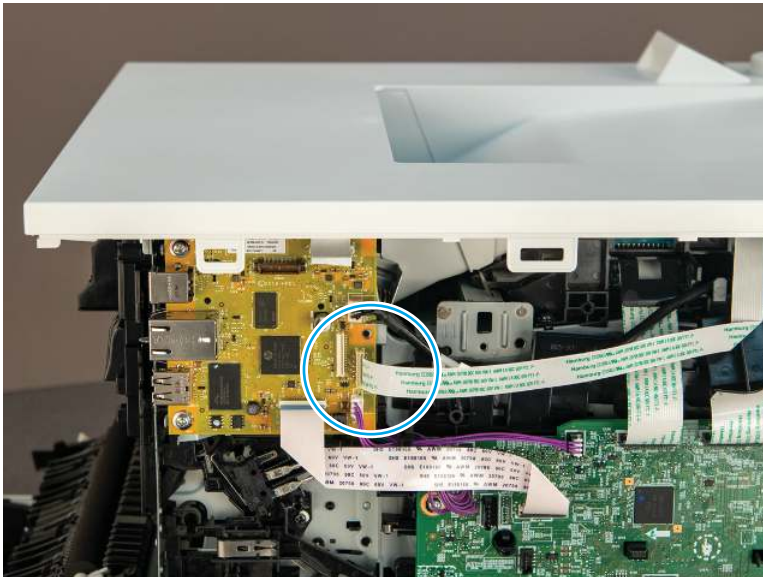
 **TIP:** To remove the screw without raising the printer, use a short-barrel screwdriver.

Figure 5-126 Remove one screw



2. Disconnect one flat-flexible cable (FFC).

Figure 5-127 Disconnect one FFC

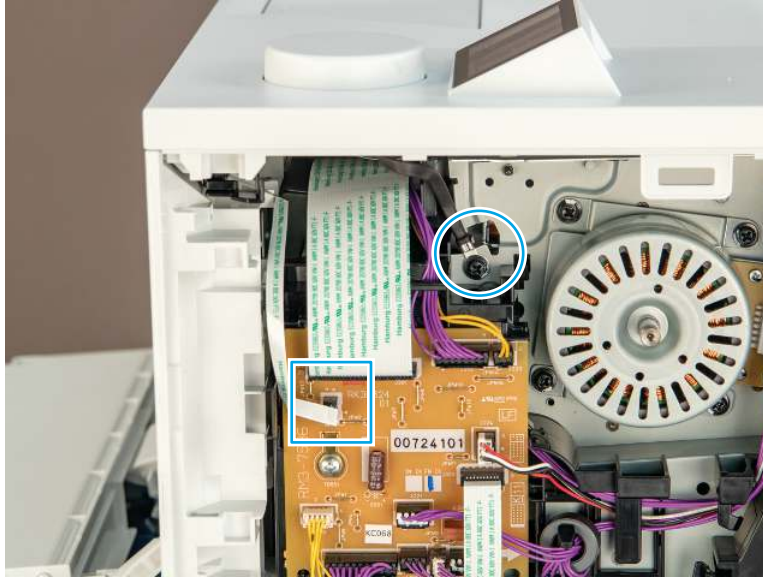


3. Disconnect one FFC, and then remove one screw to release the ground wire.



NOTE: The front cover is shown installed in the figure below. However, this step is correct for removing the top cover.

Figure 5-128 Disconnect one FFC and remove one screw



4. Sliding the cover from the back of the printer towards the front to remove it.

Figure 5-129 Remove the cover



5. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

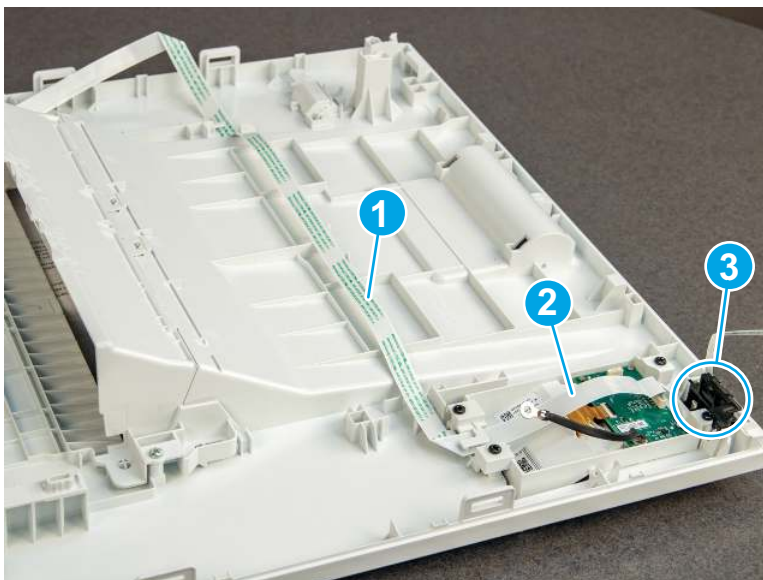
NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

6. Special installation instructions - Top cover (SFP)

Follow the procedure below to install a **replacement** top cover (SFP).

1. The following items must be removed from the discarded top cover, and then installed on a replacement top cover.
 - **Callout 1:** Control panel FFC
 - **Callout 2:** Control panel
 - **Callout 3:** Power switch

Figure 5-130 Control panel FFC, control panel, and power switch



2. To remove the control panel, do the following:
 - a. Disconnect one flat-flexible cable (FFC; callout 1).
 - b. Remove four screws (callout 2).
 - c. Remove the control panel (callout 3) from the discarded top cover (callout 4), and then install it on the replacement cover.


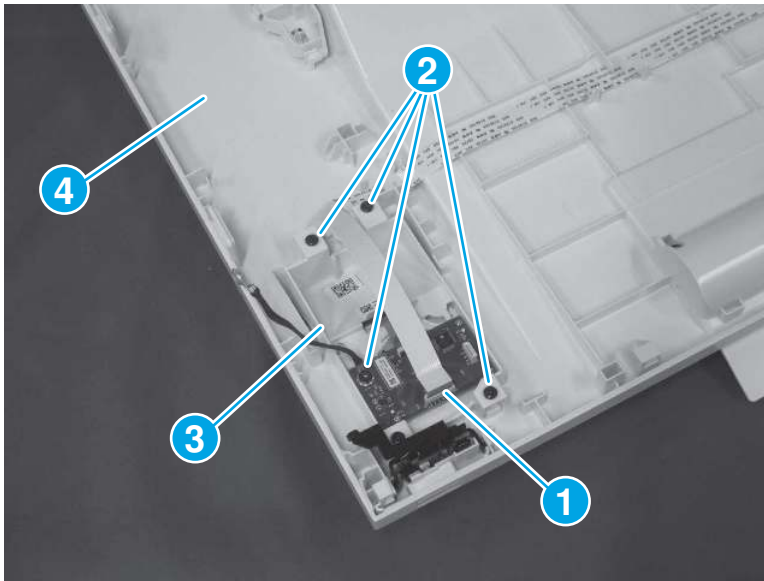
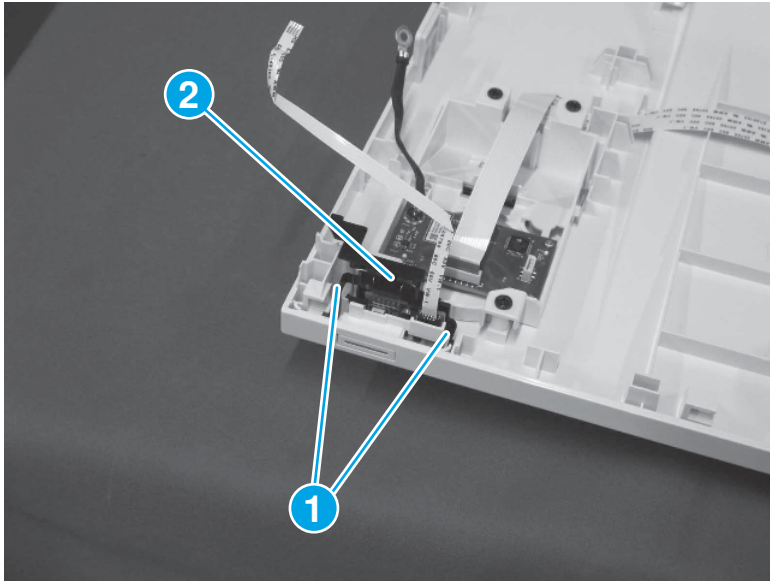
 **NOTE:** Also install the control panel FFC on the replacement cover.

Figure 5-131 Remove the control panel



3. To remove the power switch, do the following:
 - a. Release two tabs (callout 2).
 - b. Remove the power switch PCA and the holder (callout 2) together from the top cover.

Figure 5-132 Remove the power switch



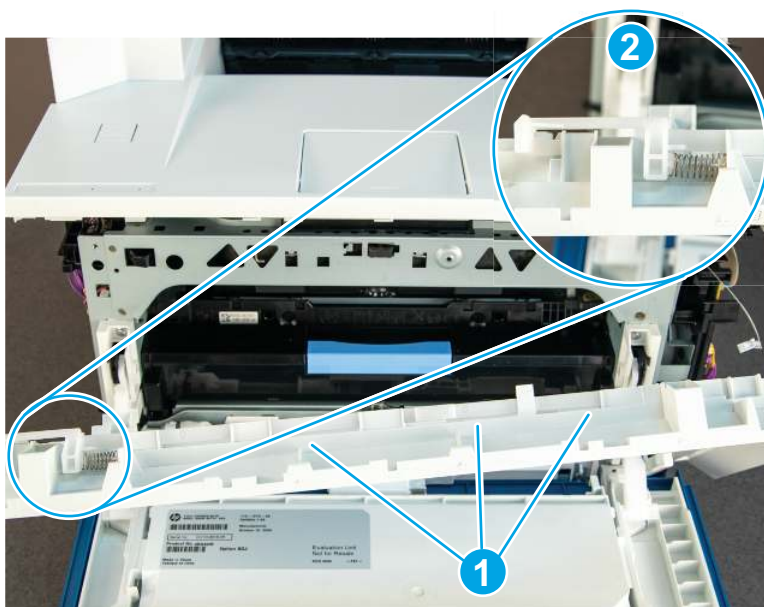
7. Special installation instructions - Front cover

Follow the special instructions below to install the front cover.

 **NOTE:** Front cover installation is **identical** for both the SFP and MFP models.

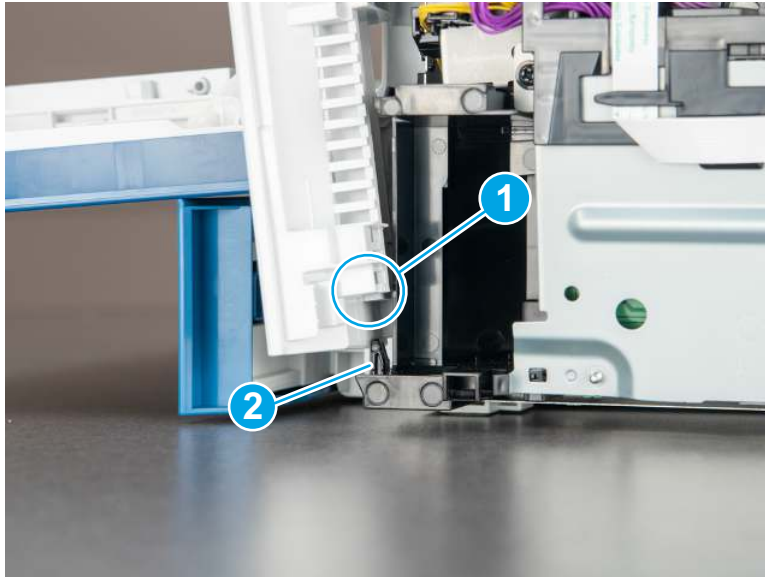
1. If the door release arm becomes dislodged when handling the cover, install it as shown below (callout 1, 2).

Figure 5-133 Door release arm installed



2. At the right and left side of the front cover, align the holes (callout 1) in the cover with the alignment pins (callout 2) on the chassis.

Figure 5-134 Cover alignment pins



3. Rotate the top of the cover towards the printer to install it.


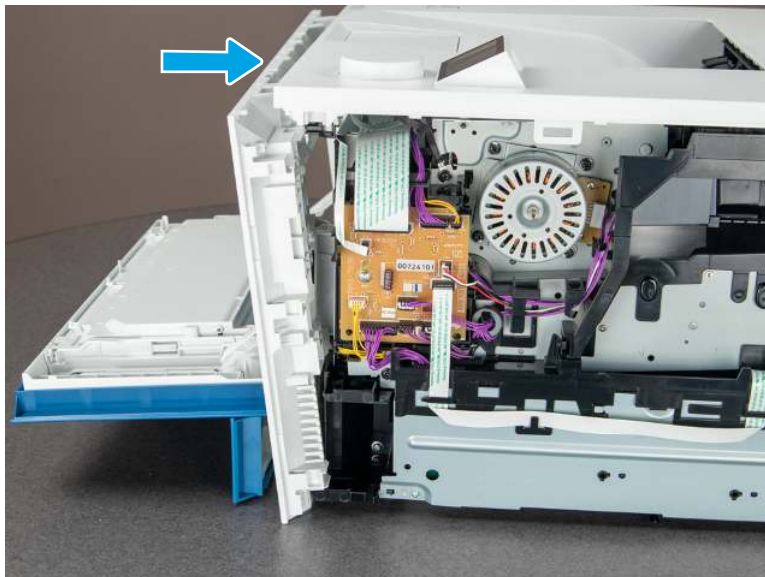
 **IMPORTANT:** Verify that the spring loaded door release button (on the left side of the cover) correctly functions.

Figure 5-135 Install the cover



Removal and replacement: Top cover (MFP)

Learn about top cover (MFP) removal.


Mean time to repair: 28 minutes

Service level: Medium

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-14 Part information

Part number	Part description
RM2-2762-000CN	Cover, top assembly (MFP)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on


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


Post service test

No post service test is available for this assembly.

1. Remove the left cover (MFP)

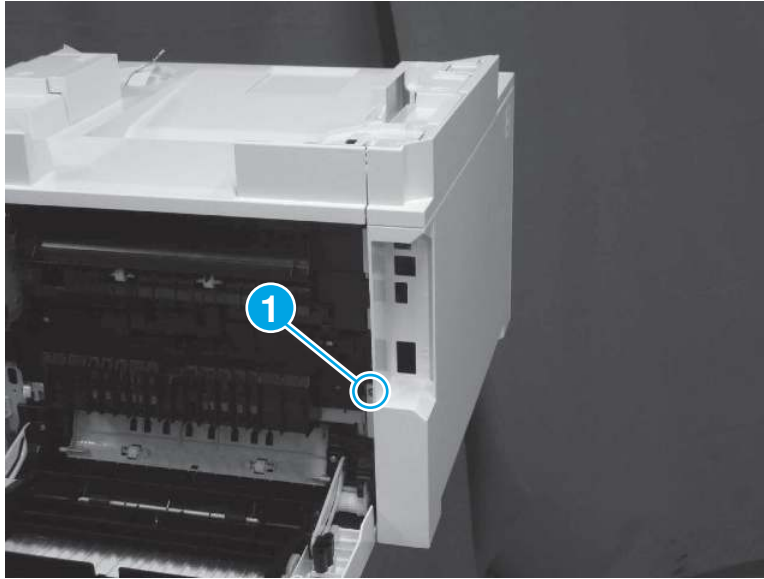
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

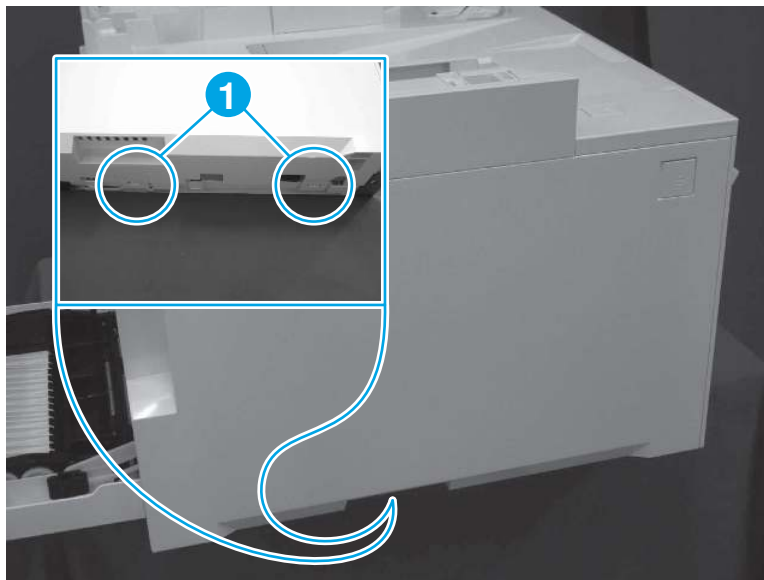
1. Remove one screw (callout 1).

Figure 5-136 Remove one screw



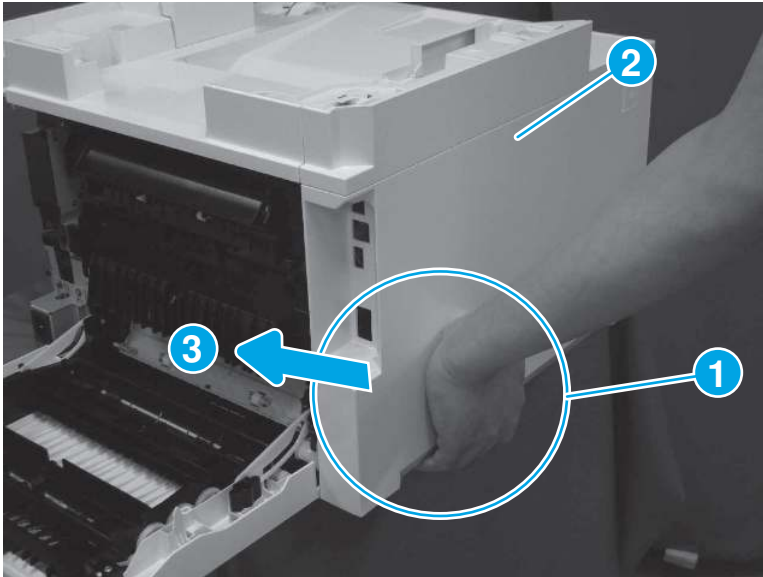
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-137 Release two tabs



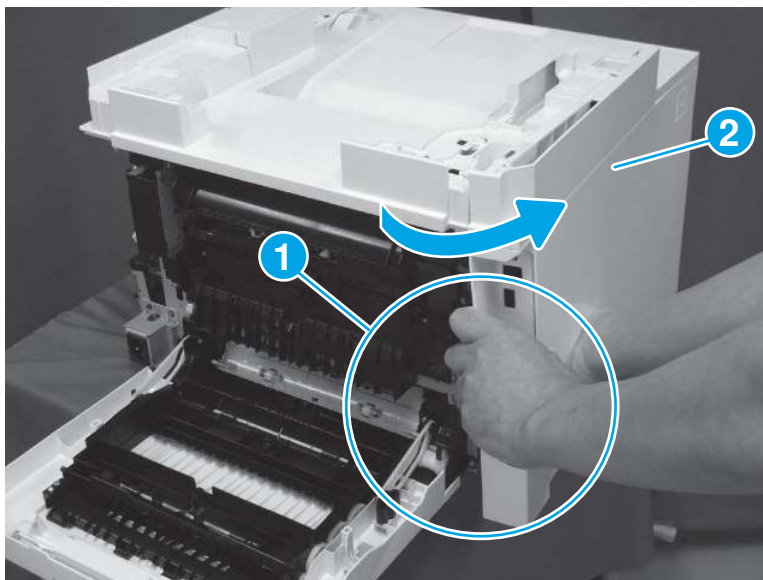
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-138 Release the rear cover corner



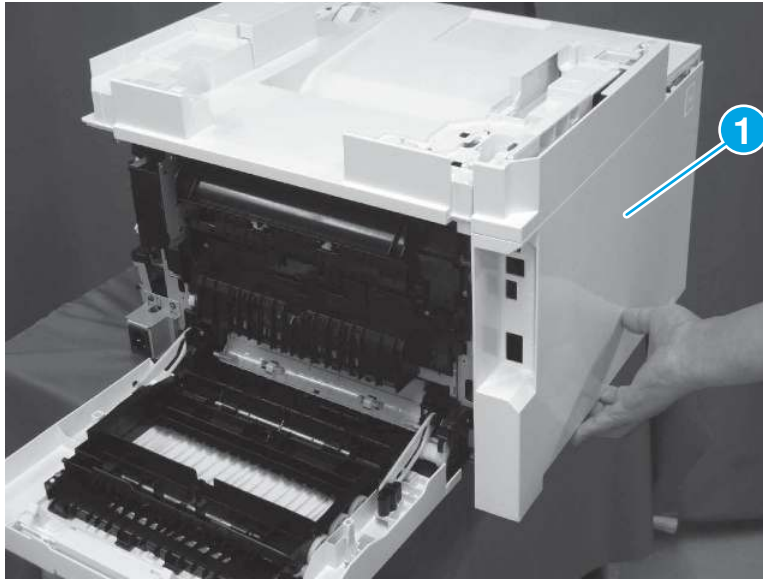
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-139 Disengage the cover corner



5. Remove the left cover (callout 1).

Figure 5-140 Remove the cover

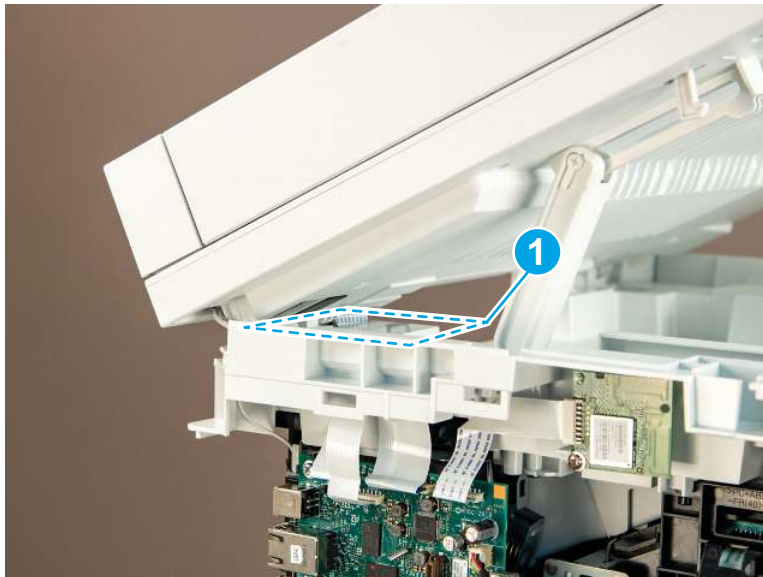


2. Remove the ISA (MFP)

Follow the procedure below to remove and replace the ISA.

1. Open the ISA, and then remove the ISA FFC cover (callout 1).

Figure 5-141 Remove the FFC cover



2. Disconnect three FFCs, and then remove one screw to release the ground cable.

Figure 5-142 Disconnect FFCs and remove screw



3. Release one tab (callout 1), and then rotate the ISA slider pin (callout 2) towards the front of the printer to release it. Remove the slider pin.

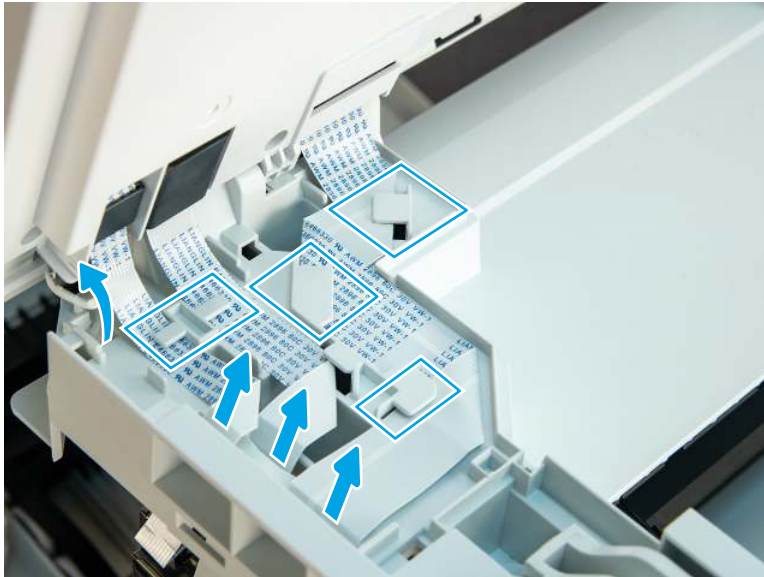
⚠ CAUTION: When the slider pin is removed, the ISA is not captive and can suddenly detach from the printer.

Figure 5-143 Remove the slider pin



4. Support the ISA, release the FFCs from the retainers, and then carefully pass the FFCs and the ground wire up through the slots in the top cover.

Figure 5-144 Release the FFCs and ground wire



5. Slide ISA as shown below to release it.

Figure 5-145 Release the ISA




6. Remove the ISA.

Figure 5-146 Remove the ISA



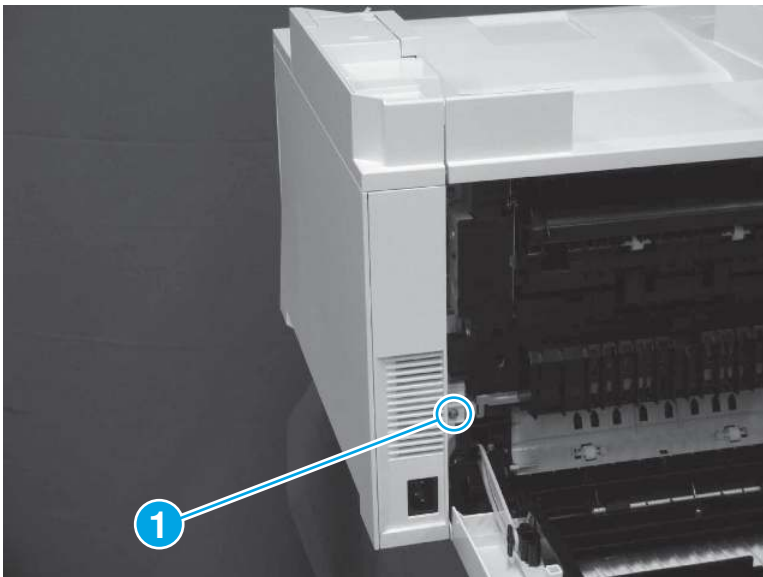
3. Remove the right cover (MFP)

Follow the procedure below to remove and replace the right cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

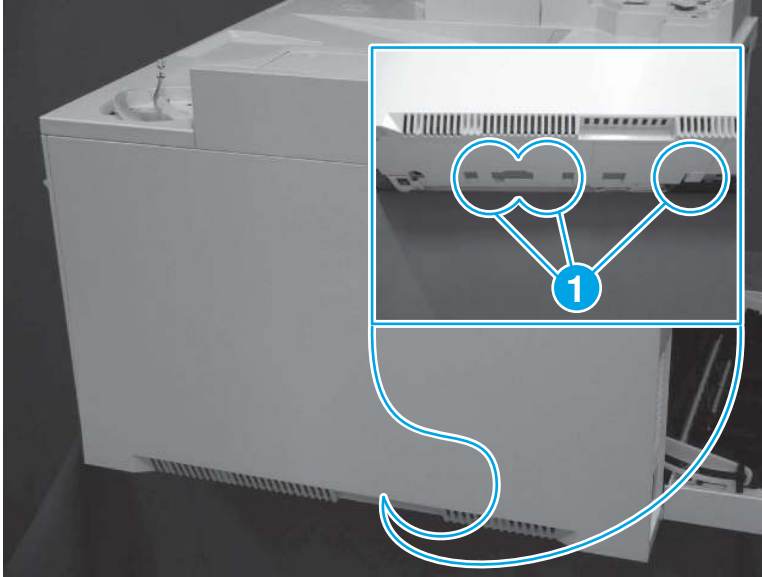
1. Remove one screw (callout 1).

Figure 5-147 Remove one screw



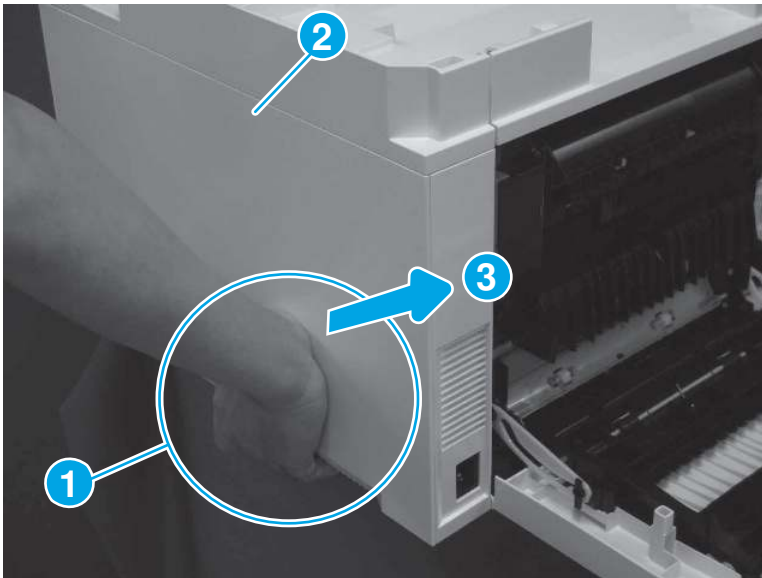
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-148 Release three tabs



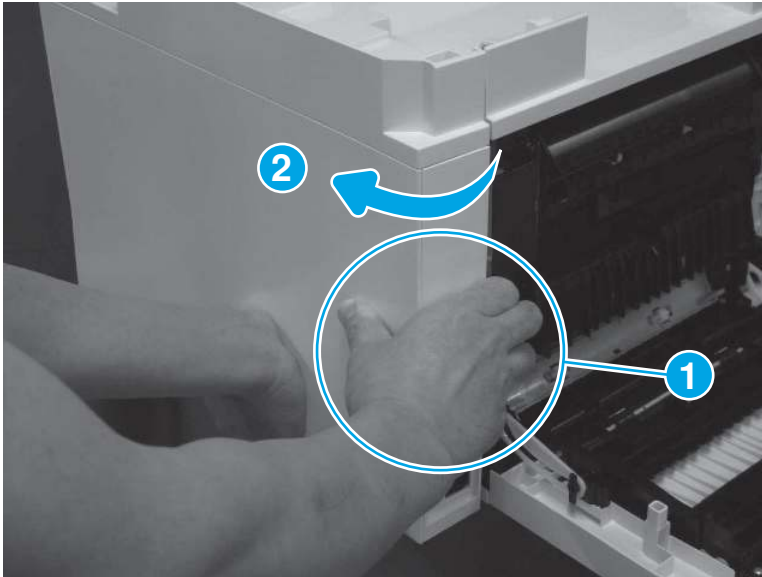
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-149 Release the rear cover corner



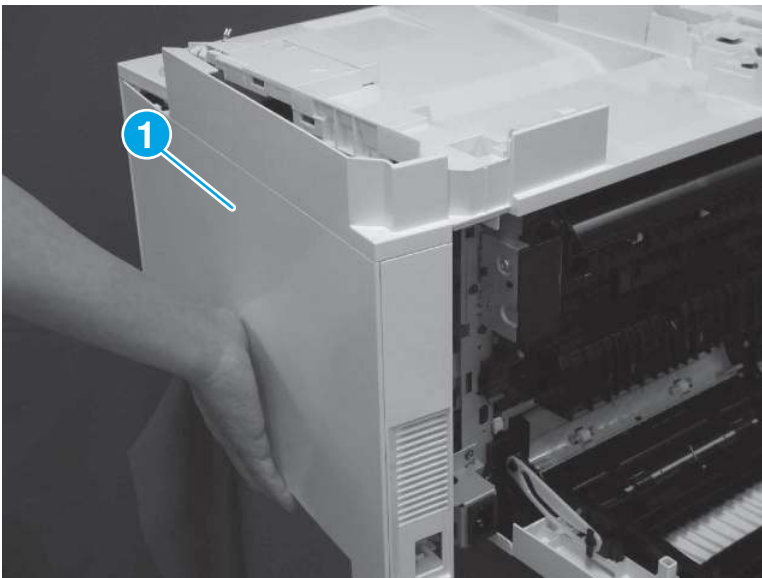
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-150 Disengage the cover corner




5. Remove the right cover (callout 1).

Figure 5-151 Remove the cover



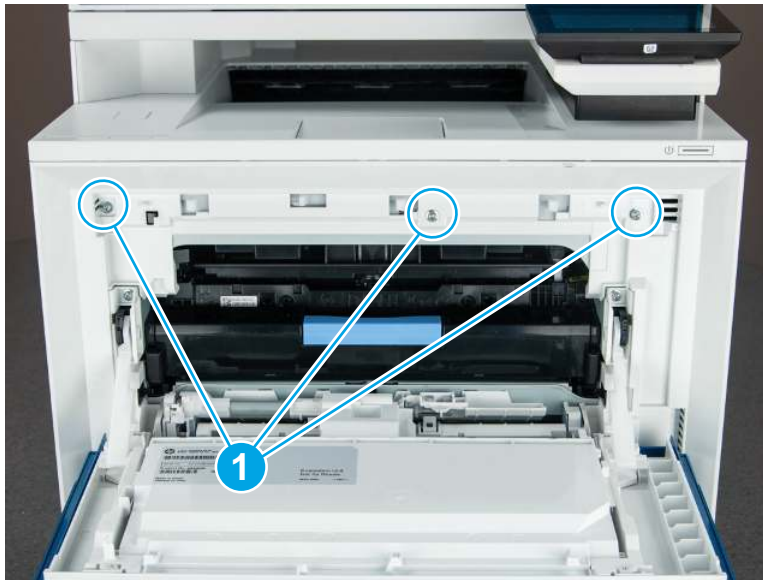
4. Remove the front cover (MFP)

Follow the procedure below to remove and replace the front cover.

 **Reinstallation tip:** Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

1. Remove three screws (callout 1).

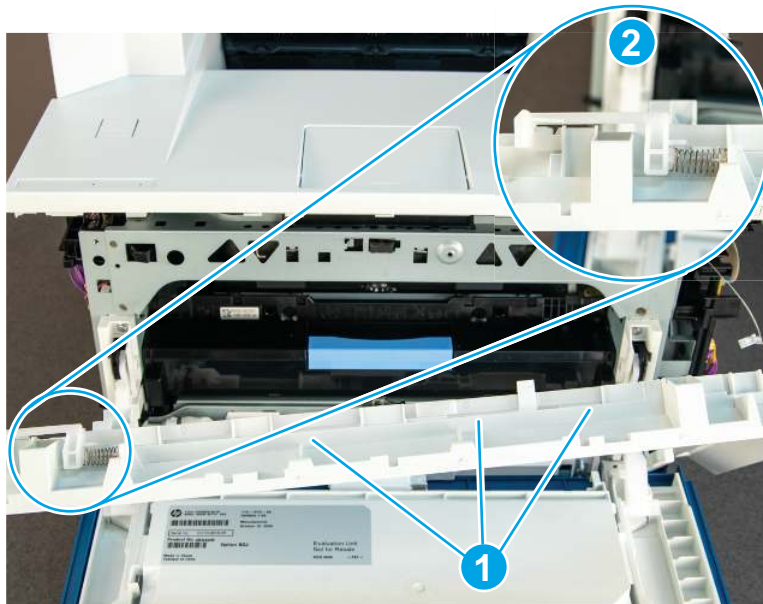
Figure 5-152 Remove three screws



2. Before proceeding, take note of the door release arm (callout 1). This arm can be easily dislodged when the cover is removed.

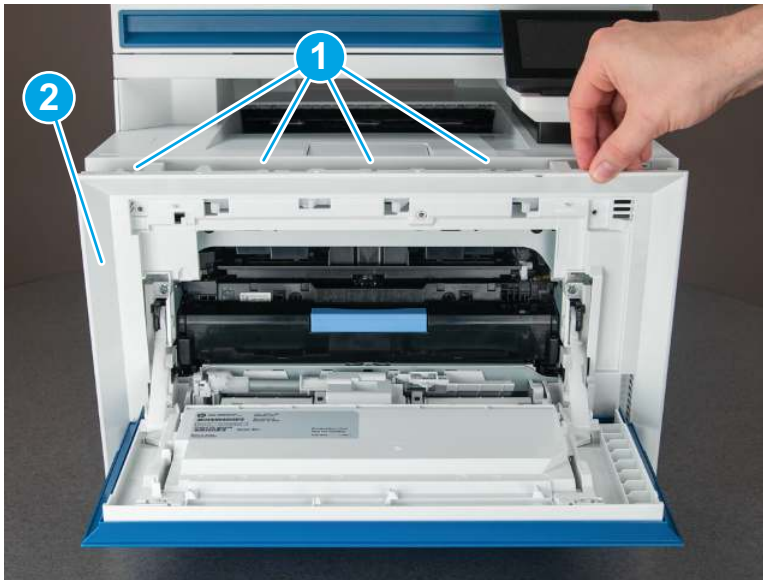
CAUTION: Do not lose the spring (callout 2) when removing the front cover.

Figure 5-153 Door release arm




3. Release four tabs (callout 1), and then remove the front cover (callout 2).

Figure 5-154 Remove the cover



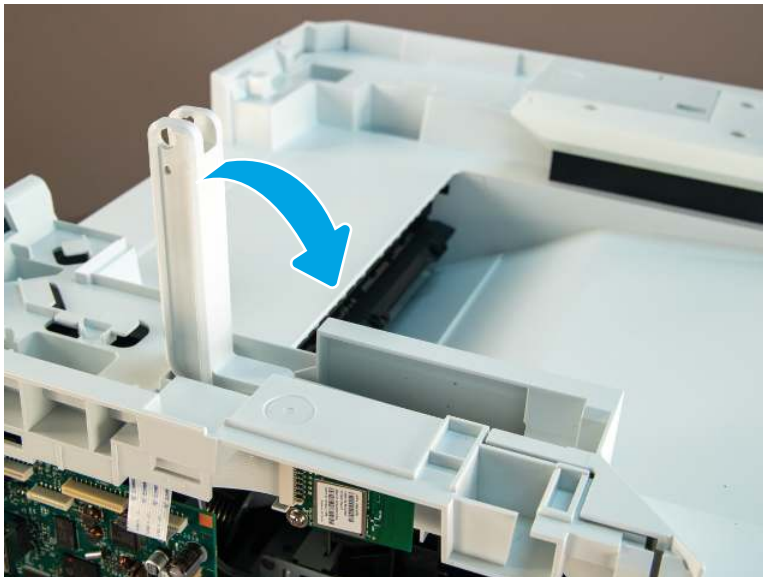
5. Remove the top cover (MFP)

Follow the procedure below to remove and replace the top cover (MFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

1. Close the ISA lift arm.

Figure 5-155 Close the ISA lift arm



2. Remove one screw.

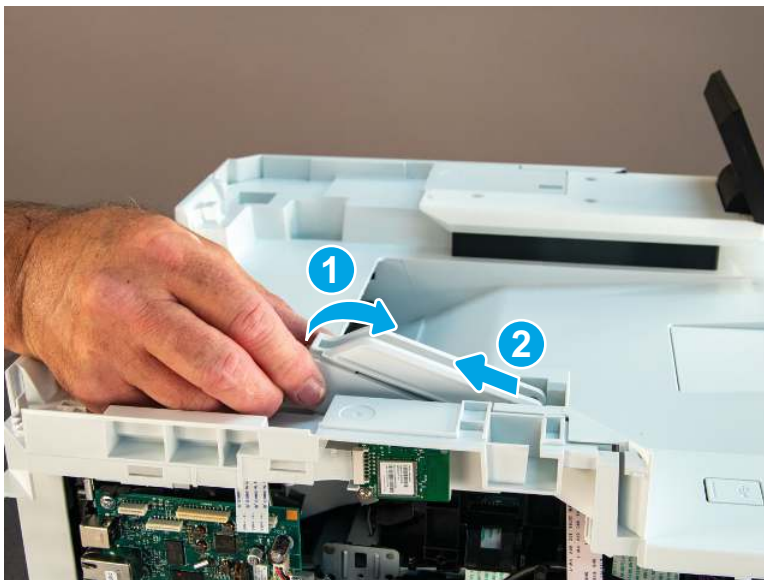
⚠ CAUTION: The support arm is spring loaded and can unexpectedly spring into the open position. To avoid injury, do not place a finger in the screw well when the support arm is in the closed position.

Figure 5-156 Remove one screw



3. Rotate one end of the lift arm up (callout 1), and then slide the lift arm as shown below (callout 2) to release it. Remove the lift arm.

Figure 5-157 Remove the lift arm



4. Do the following:
 - a. Disconnect one FFC (control panel; callout 1).

- b. Remove one screw (callout 2), and then separate the wireless PCA from the top cover.


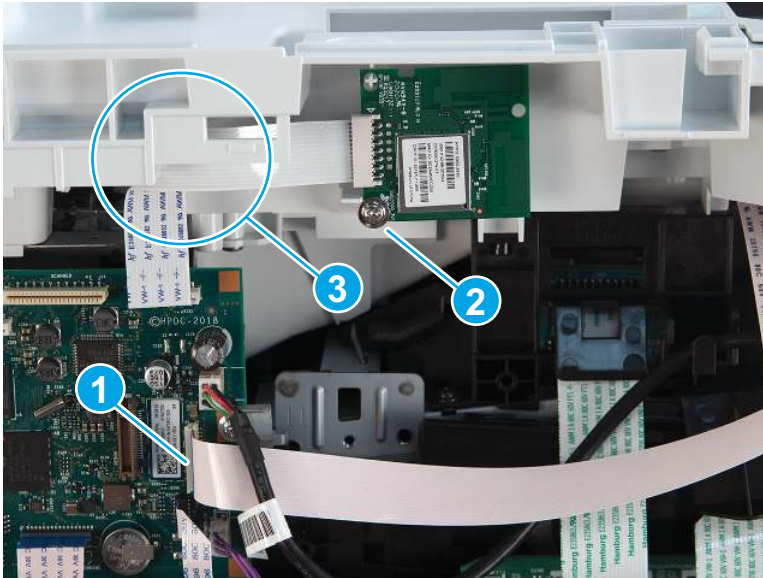
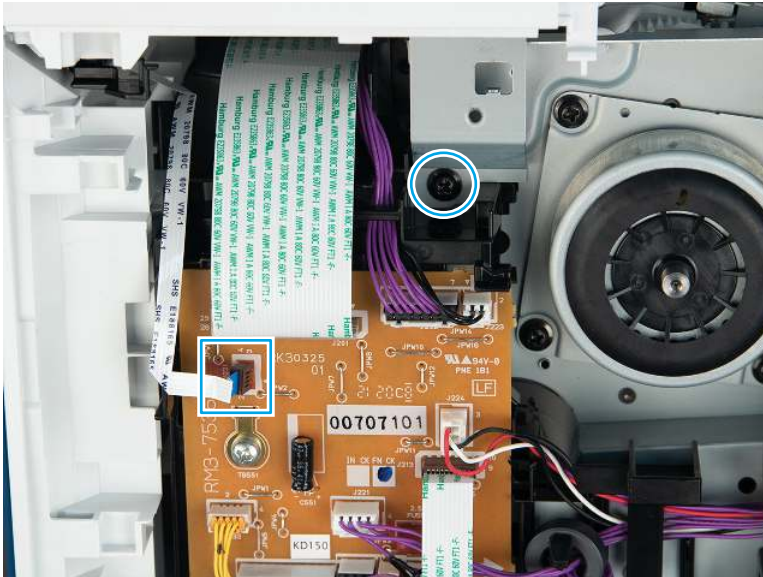
 **NOTE:** The wireless PCA does not need to be completely removed. Instead, release the FFC from the retainer (callout 3), and then gently move it out of the way.

Figure 5-158 Disconnect FFC and move the wireless PCA



5. Disconnect one FFC (power button), and then remove one screw (grounding sheet-metal plate).

Figure 5-159 Disconnect one FFC and remove one screw



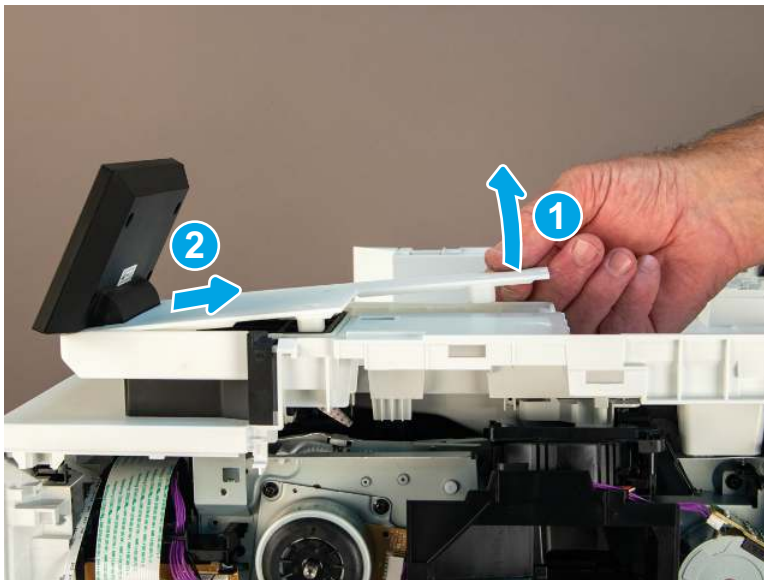
6. Remove three screws.

Figure 5-160 Remove three screws




7. Release one tab and rotate one end of the base cover up (callout 1), and then slide the cover as shown (callout 2) to remove it.

Figure 5-161 Remove the cover



8. Disconnect two FFCs.

 **NOTE:** These are zero-insertion force (ZIF) connectors. To remove the FFCs, first release the locking clip on the connector, and then pull the cable straight out of the connector.


 **TIP:** For reinstallation, make sure that the line of the FFC is parallel with the body.

Figure 5-162 Disconnect two FFCs



9. Remove four screws.



NOTE: Two of the screws are self-tapping threads (black), and two of the screws are machine thread (silver).

Figure 5-163 Remove four screws

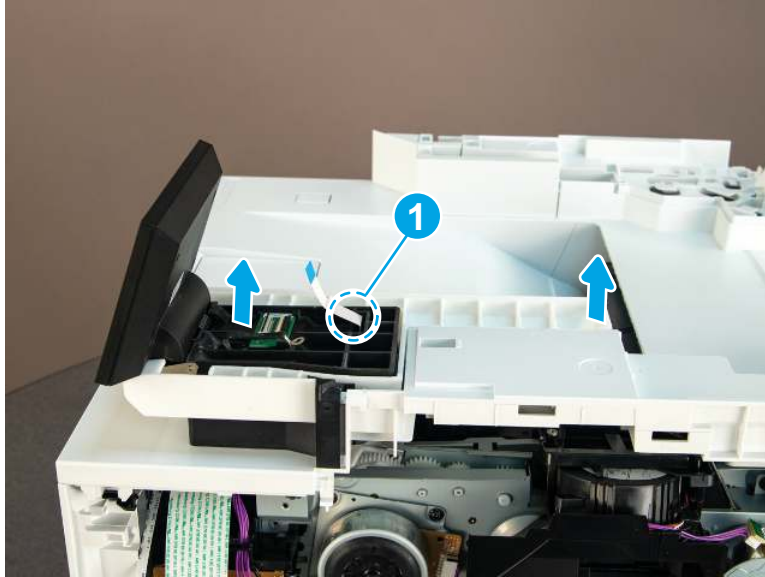


10. Lift the control panel and base straight up and off of the printer to remove them together.



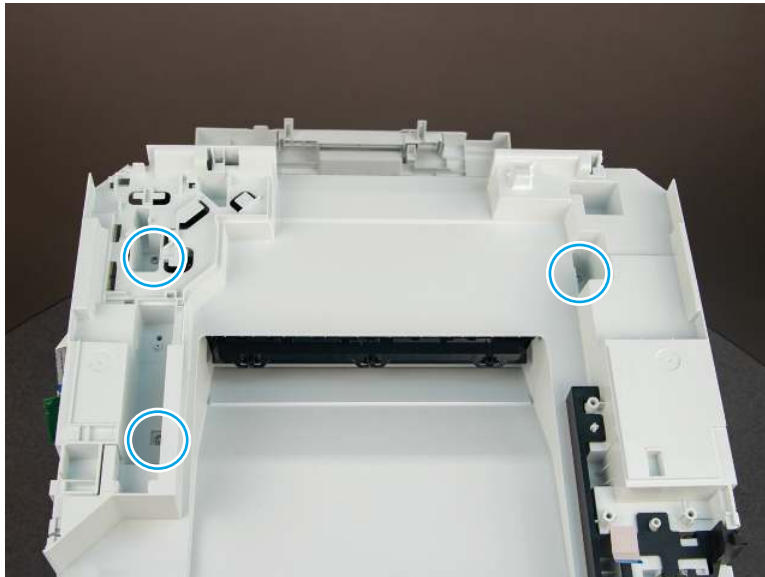
NOTE: When handling the assembly, do not lose the ferrite (callout 1).

Figure 5-164 Remove control panel and base



11. Remove three screws.

Figure 5-165 Remove three screws



12. Sliding the cover from the back of the printer to the front to remove it.


 **TIP:** Slightly move the control-panel ground bracket (circled) back and forth to help release the top cover.

Figure 5-166 Remove the cover



13. **When the cover is reinstalled:** Make sure that the front USB assembly is correctly positioned under the cover.

Figure 5-167 Front USB assembly



6. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

7. Special installation instructions - top cover (MFP)

Use the following special installation instructions to install a replacement top cover (MFP).

1. The following items must be removed from the discarded top cover, and then installed on a replacement top cover.

- **Callout 1:** Control panel ground bracket
- **Callout 2:** Control panel pillar cover (located on the top side of the cover)


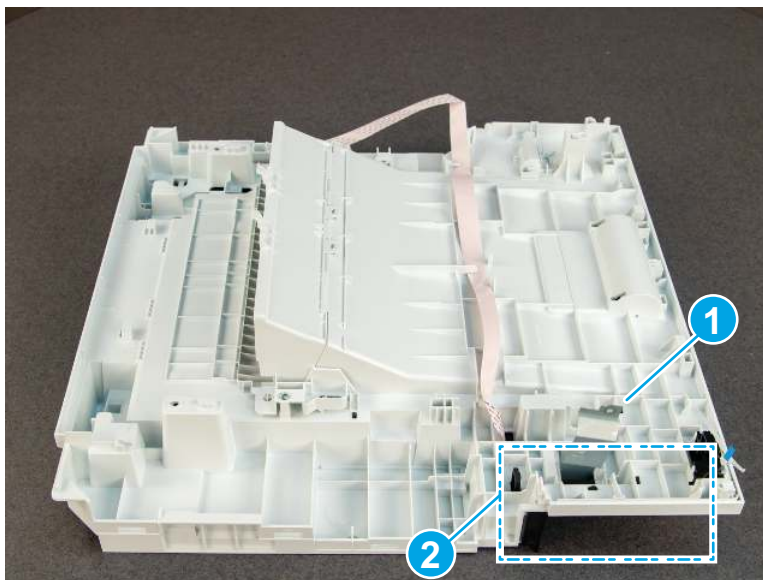

NOTE:  The control panel FFC and power switch are included with a replacement top cover (RM2-2762-000CN).

Figure 5-168 Power switch and ground bracket

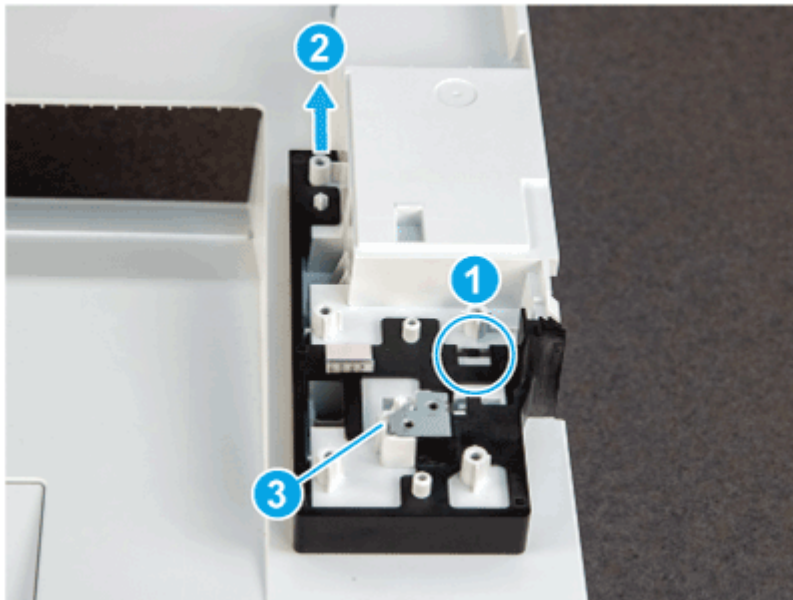


2. Remove the control-panel pillar cover and ground bracket. Do the following:

 **NOTE:** The figure below shows a black-plastic pillar cover. On production model printers, the pillar cover is white.

- a. Release one tab (callout 1).
- b. Lift up on the end of the cover (callout 2).
- c. Remove the cover and ground bracket (callout 3) together.

Figure 5-169 Remove the cover and bracket



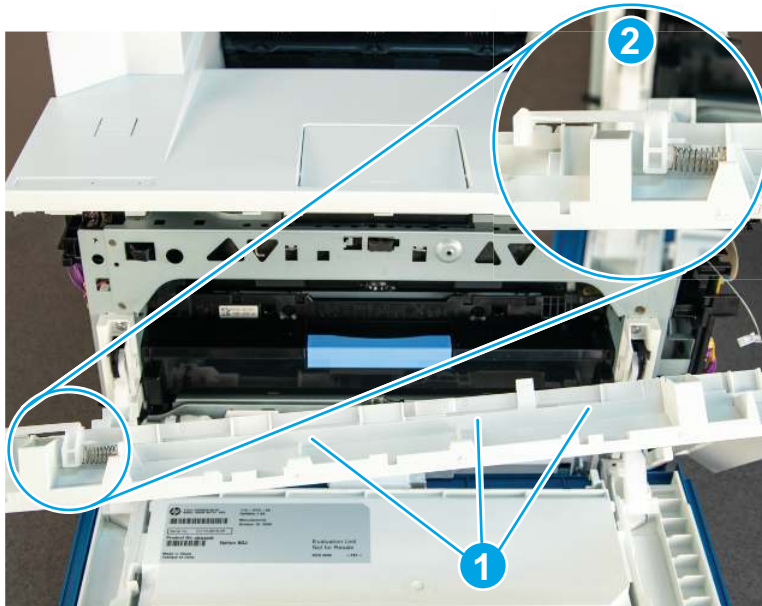
8. Special installation instructions - Front cover

Follow the special instructions below to install the front cover.

 **NOTE:** Front cover installation is **identical** for both the SFP and MFP models.

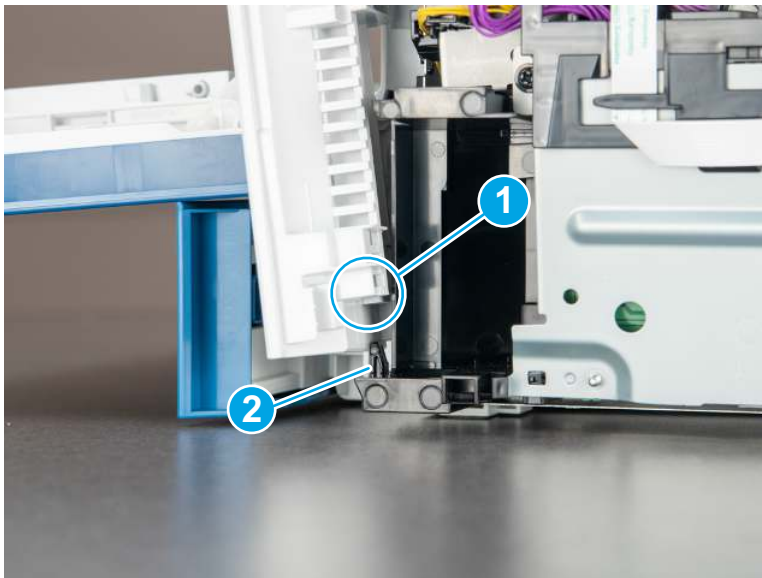
1. If the door release arm becomes dislodged when handling the cover, install it as shown below (callout 1, 2).

Figure 5-170 Door release arm installed



2. At the right and left side of the front cover, align the holes (callout 1) in the cover with the alignment pins (callout 2) on the chassis.

Figure 5-171 Cover alignment pins



3. Rotate the top of the cover towards the printer to install it.


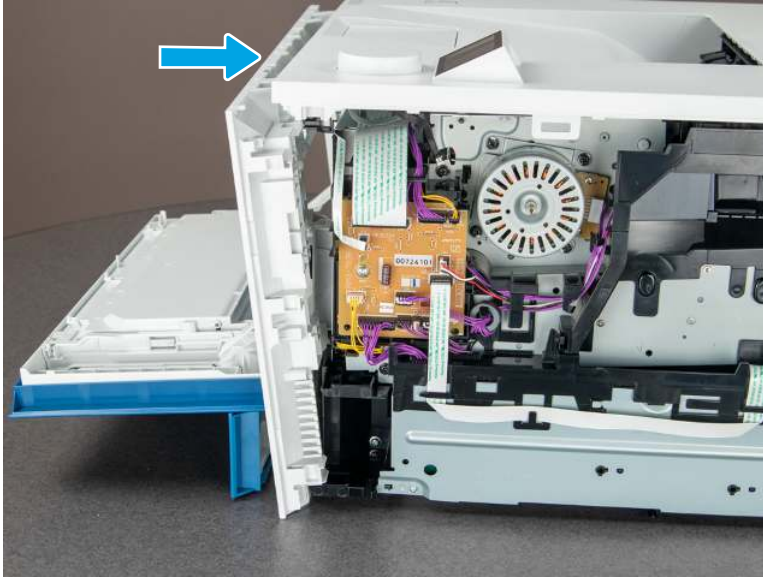
 **IMPORTANT:** Verify that the spring loaded door release button (on the left side of the cover) correctly functions.

Figure 5-172 Install the cover



Removal and replacement: Rear door

Learn about rear door removal.

Mean time to repair: 5 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-15 Part information

Part number	Part description
RM2-2754-000CN	Rear door assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

- Connect the power cable.

- Use the power switch to turn the power on.

Post service test

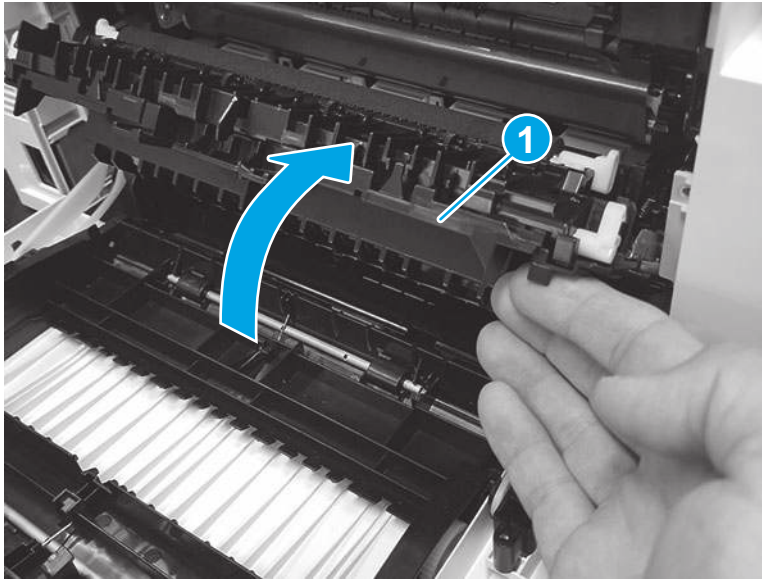
No post service test is available for this assembly.

1. Remove the rear door

Follow the procedure below to remove and replace the rear door.

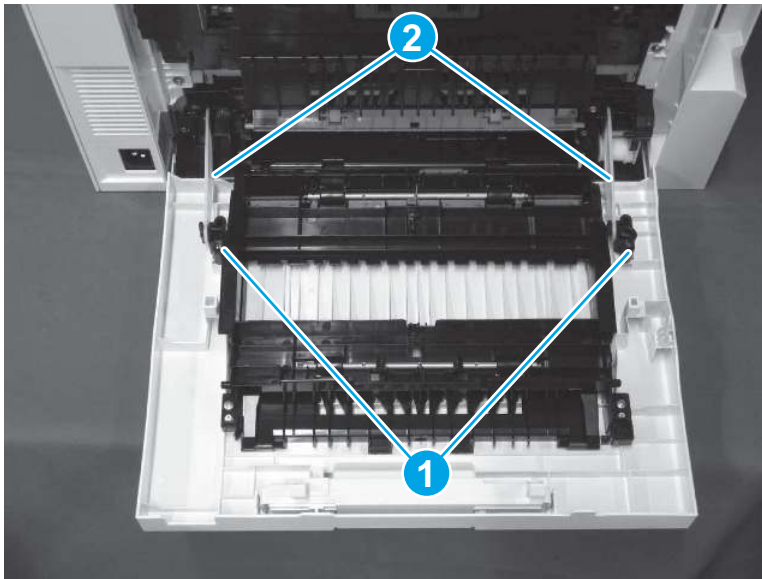
1. Open the rear door, and then raise the secondary transfer feed assembly (callout 1) up and into the locked position.

Figure 5-173 Place the T2 feed assembly in the locked position



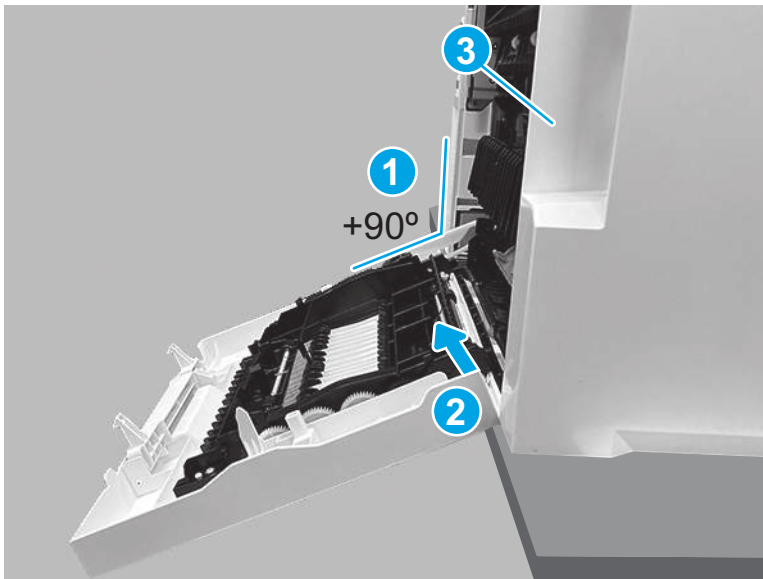
2. Remove two screws (callout 1), and then release the left- and right-side retainer arms (callout 2)

Figure 5-174 Release the retainer arms



- Carefully position the printer at the edge of the work surface and allow the rear door to open to an angle greater than 90 degrees (callout 1). Slide the door away (callout 2) from the formatter side of the printer (callout 3) to release it, and then remove the rear door.

Figure 5-175 Remove the door



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

- Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

- Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

- To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Cartridge door

Learn about cartridge door removal.



[View a video of removing and replacing the cartridge door.](#)

Mean time to repair: 10 minutes

Service level: Medium

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-16 Part information

Part number	Part description
RM2-2843-000CN	Cartridge door assembly (blue) (SFP)
RM2-2847-000CN	Cartridge door assembly (gray) (SFP)
RM2-2844-000CN	Cartridge door assembly (blue) (MFP)
RM2-2848-000CN	Cartridge door assembly (gray) (MFP)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- Small flat-blade screwdriver

After performing service

Turn the printer power on

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

Post service test

No post service test is available for this assembly.

1. Remove the Tray 1 pickup roller assembly

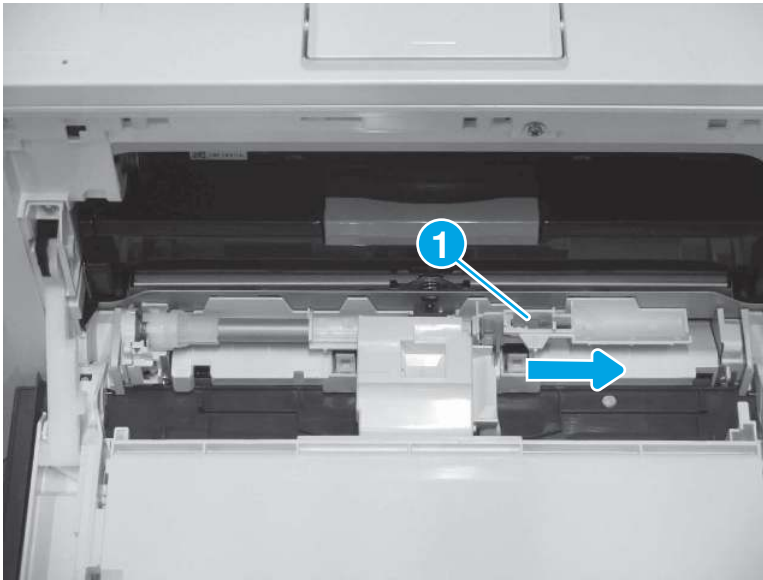
Follow the procedure below to remove and replace the Tray 1 pickup roller assembly.



Reinstallation tip: Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

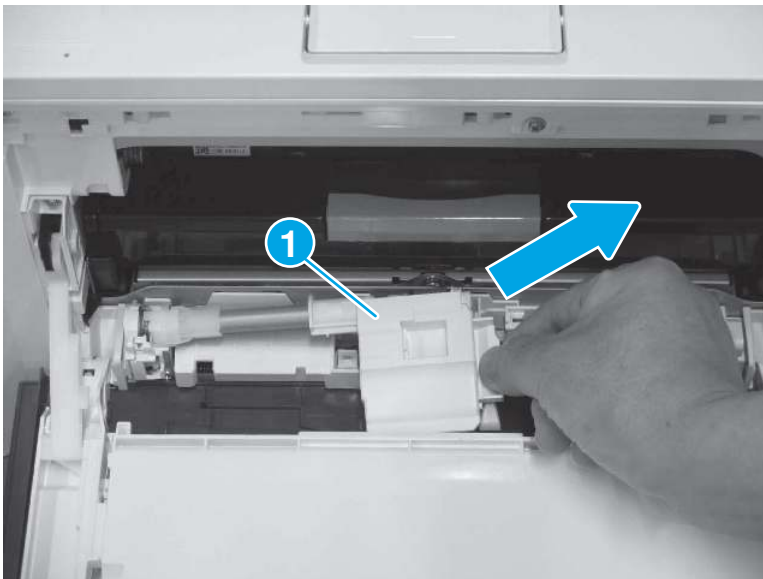
1. Open the cartridge door, and then depress the lever (callout 1) and slide it as shown below.

Figure 5-176 Release the Tray 1 pickup roller assembly



2. Slide the pickup roller assembly (callout 1) as shown below to remove it.

Figure 5-177 Remove the Tray 1 pickup roller assembly

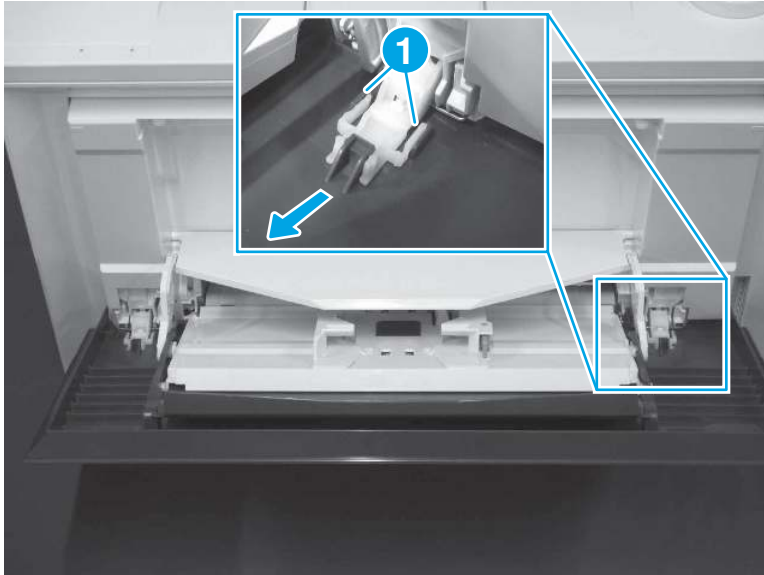


2. Remove the cartridge door assembly

Follow the procedure below to remove and replace the cartridge door assembly.

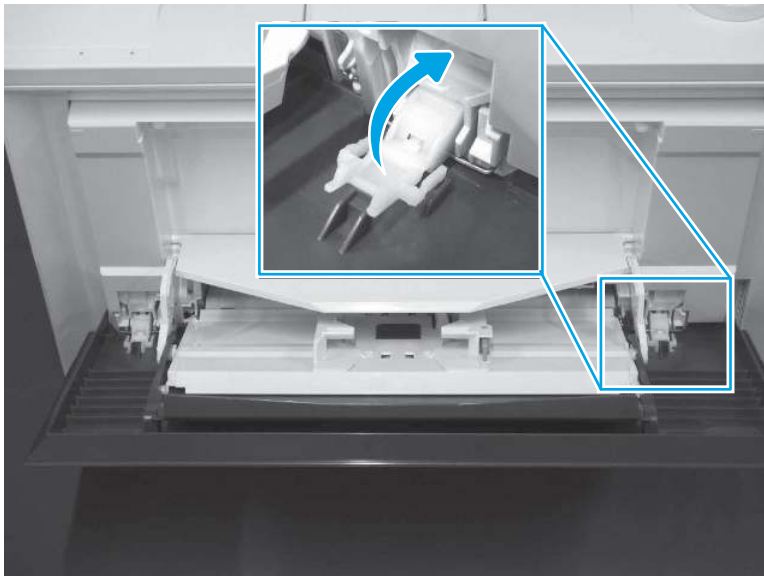
1. **Right-side door hinge:** Slightly pull Tray 1 away from the printer while releasing two tabs (callout 1) on the hinge.

Figure 5-178 Release two tabs (right hinge)



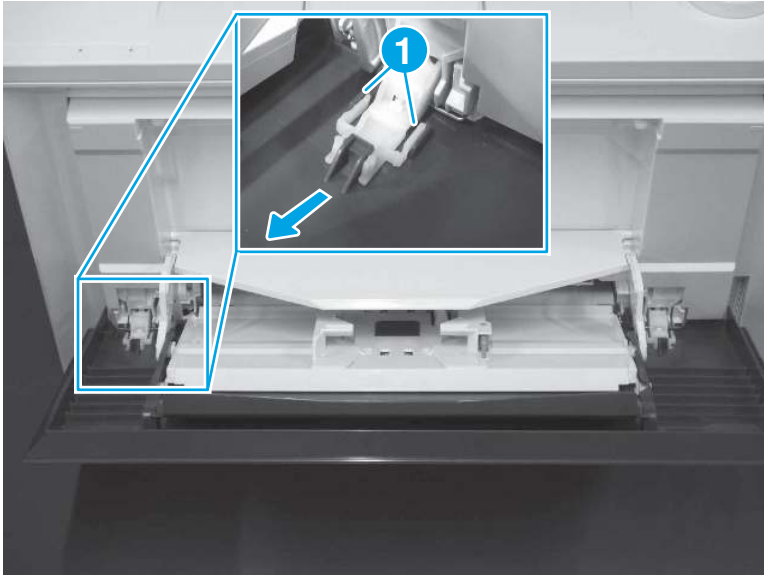
2. **Right-side door hinge:** Rotate the hinge up and away from the cover.

Figure 5-179 Remove the hinge (right side)



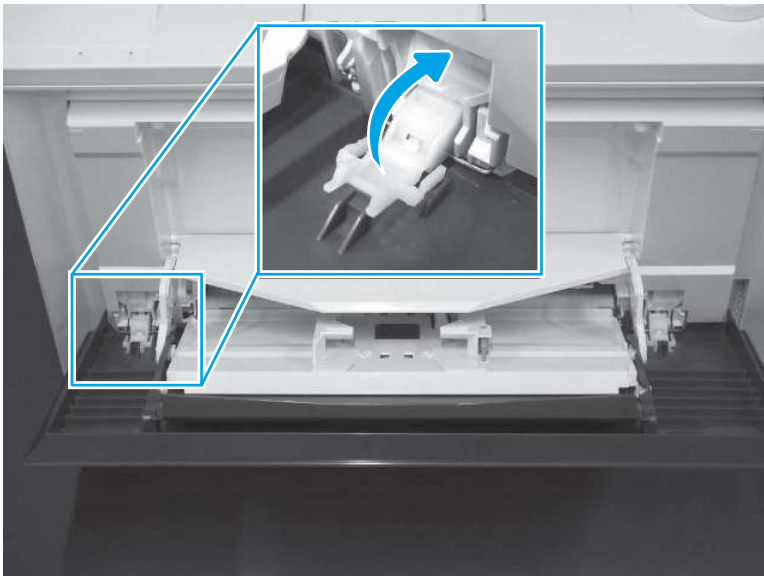
3. **Left-side door hinge:** Slightly pull Tray 1 away from the printer while releasing two tabs (callout 1) on the hinge.

Figure 5-180 Release two tabs (left hinge)



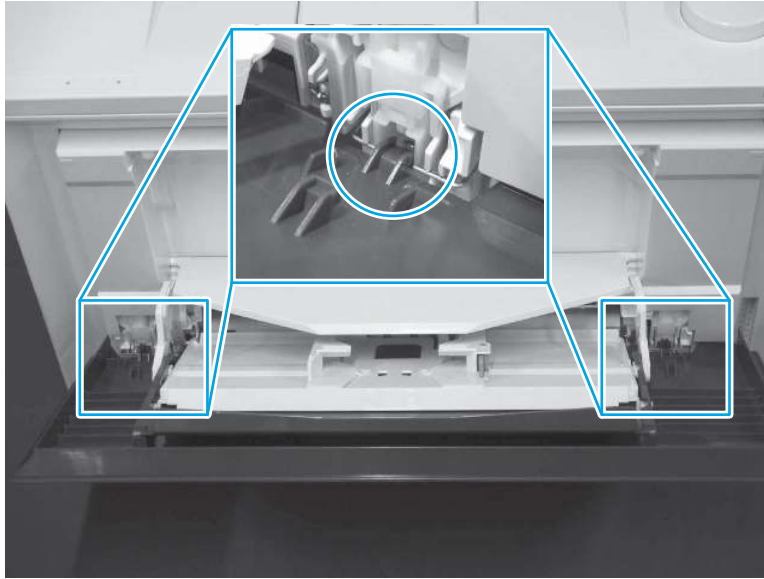
4. **Left-side door hinge:** Rotate the hinge up and away from the cover.

Figure 5-181 Remove the hinge (left side)



5. Release Tray 1 from the right- and left-side retainer hooks.

Figure 5-182 Release the retainer hooks



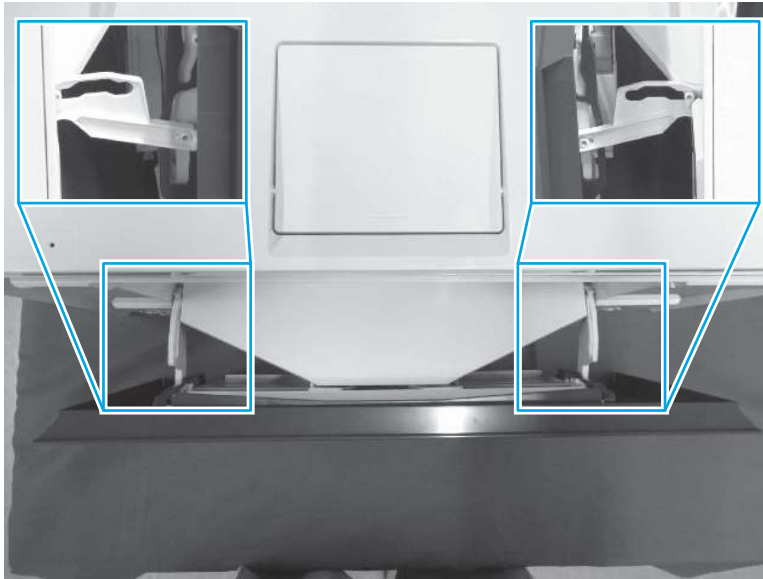
6. Position Tray 1 (callout 1) in the upright position resting on the work surface.

Figure 5-183 Position Tray 1



7. Release the right- and left-side arms, and then remove Tray 1.

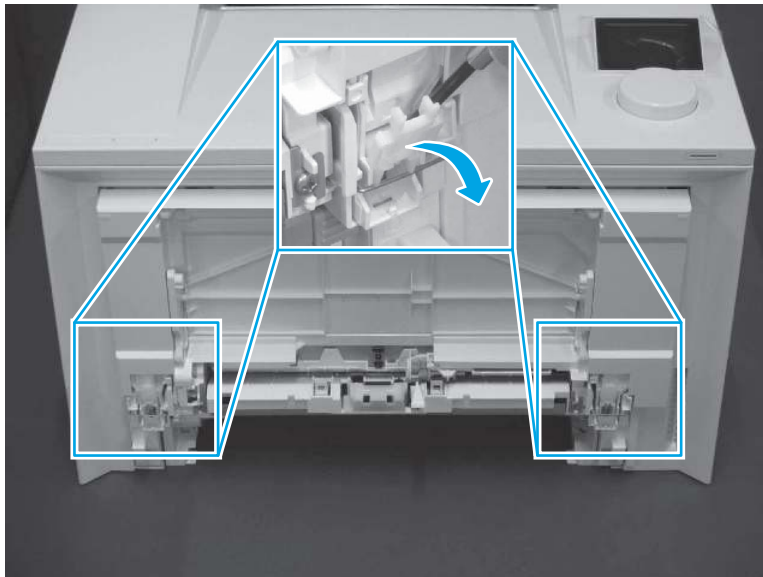
Figure 5-184 Release the arms and remove the tray



8. Use a small flat-blade screwdriver to remove the right- and left-side hinges.

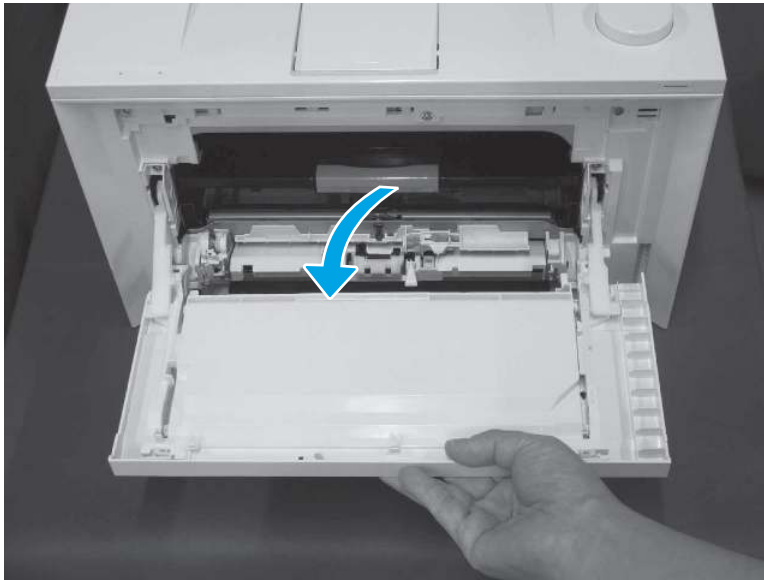
 **Reinstallation tip:** For a replacement cover only. Install these hinges on the replacement assembly.

Figure 5-185 Remove the hinges



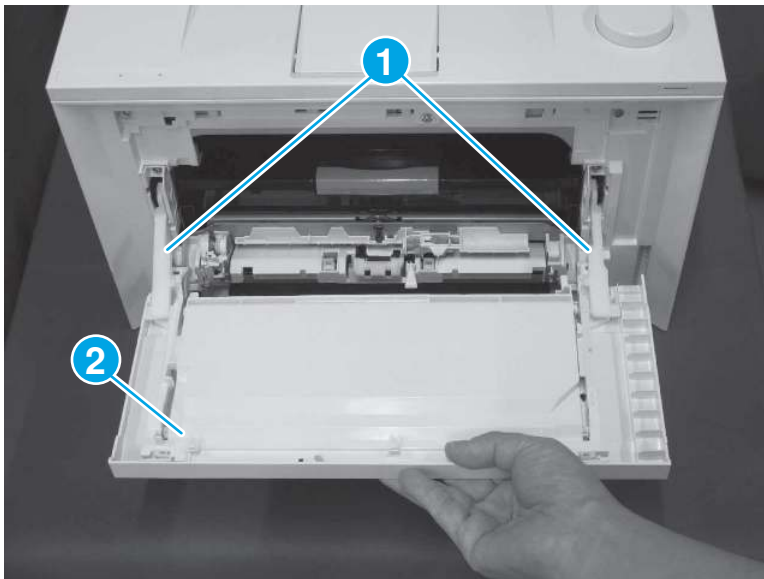
9. Open the cartridge door.

Figure 5-186 Open the door



10. Remove the right- and left-side link arms (callout 1), and then remove the cartridge door (callout 2).

Figure 5-187 Remove the link arms and cartridge door



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

4. Special installation instructions - Tray 1 pickup roller assembly

Follow the special instructions below to install the Tray 1 pickup roller assembly.

- When the Tray 1 pickup roller assembly (callout 1) is installed, make sure that the alignment tab (callout 2) is in the slot (callout 3) on the assembly shaft.


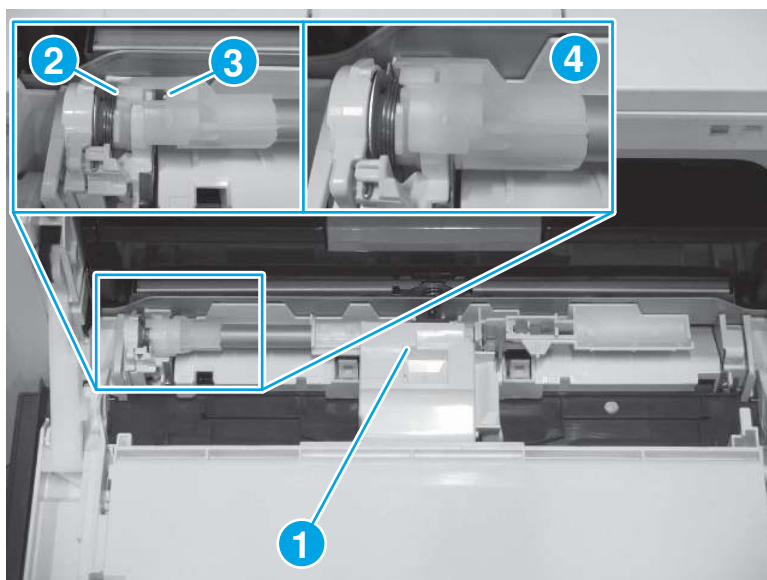
TIP:  When correctly installed, the tab fits completely into the slot (callout 4).

Figure 5-188 Install the Tray 1 pickup roller assembly



Removal and replacement: Duplexing bottom cover

Learn about duplexing bottom cover removal.

Mean time to repair: 6 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-17 Part Information

Part number	Part description
RC5-6129-000CN	Cover, duplexing bottom

Required tools

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

After performing service

Turn the printer power on

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

Post service test

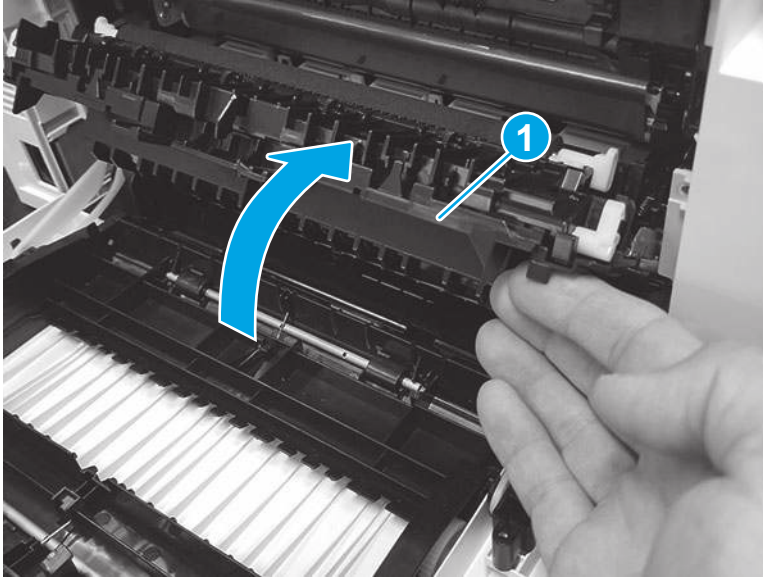
No post service test is available for this assembly.

1. Remove the rear door

Follow the procedure below to remove and replace the rear door.

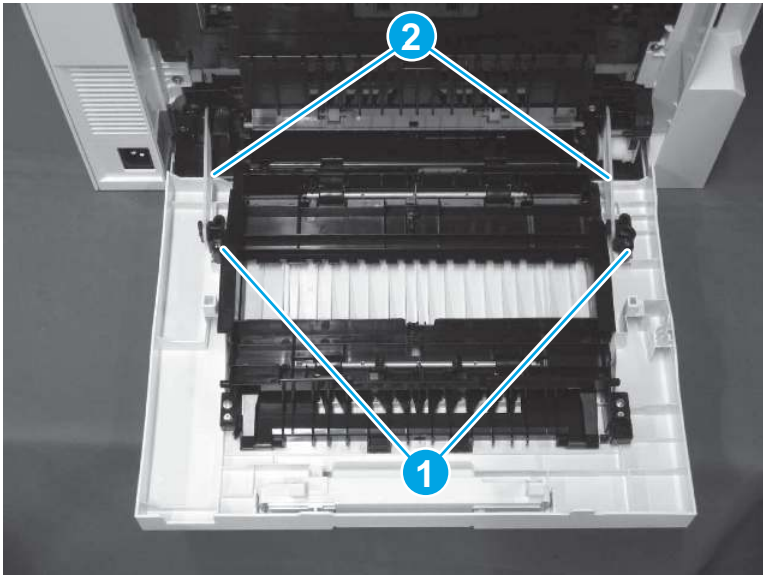
1. Open the rear door, and then raise the secondary transfer feed assembly (callout 1) up and into the locked position.

Figure 5-189 Place the T2 feed assembly in the locked position



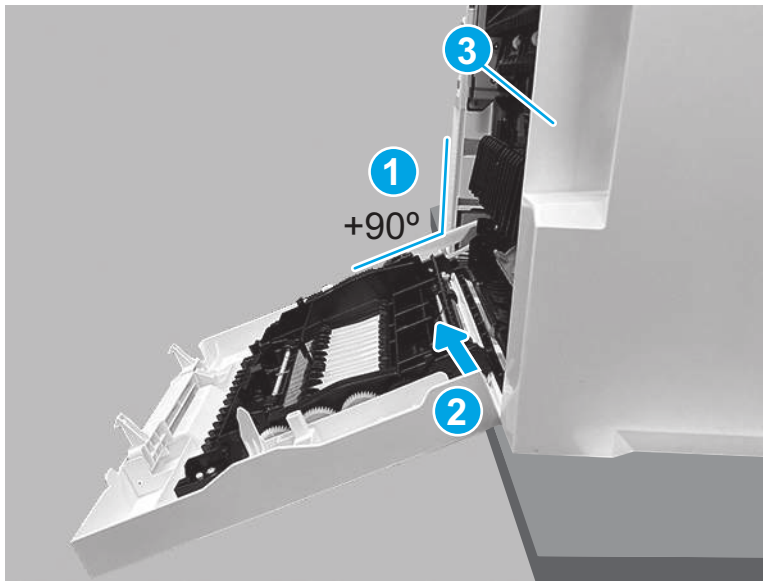
2. Remove two screws (callout 1), and then release the left- and right-side retainer arms (callout 2)

Figure 5-190 Release the retainer arms



- Carefully position the printer at the edge of the work surface and allow the rear door to open to an angle greater than 90 degrees (callout 1). Slide the door away (callout 2) from the formatter side of the printer (callout 3) to release it, and then remove the rear door.

Figure 5-191 Remove the door

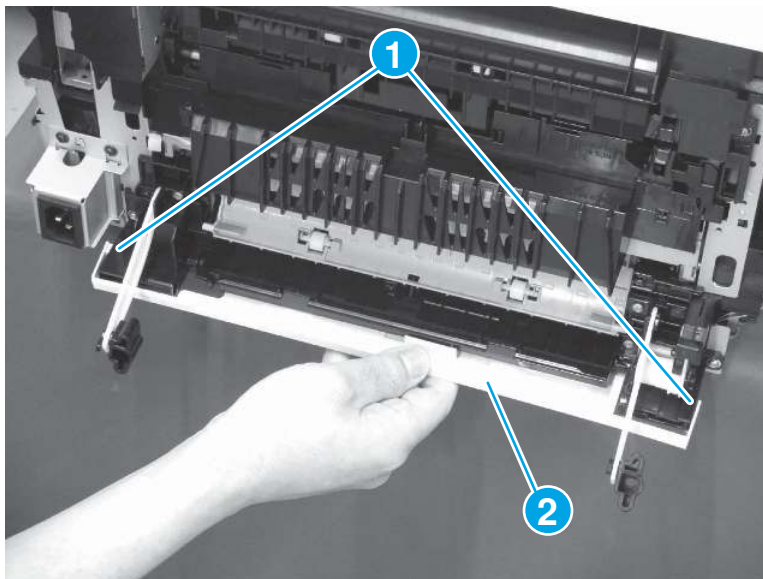


2. Remove the duplexing bottom cover

Follow the procedure below to remove and replace the duplexing bottom cover.

- Release two tabs (callout 1), and then remove the duplexing bottom cover (callout 2).


Figure 5-192 Remove the duplexing bottom cover



3. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Internal parts and assemblies

Learn how to remove and replace the printer internal parts and assemblies.

Removal and replacement: Front USB

Learn about front USB removal.

 [View a video of removing and replacing the front USB.](#)

Mean time to repair: 23 minutes (SFP)


Mean time to repair: 33 minutes (MFP)

Service level: Medium (SFP/MFP)

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-18 Part information

Part number	Part description
5851-7005	Assy-USB A F Panel Mount To WTB 335mm (front USB port)

Required tools

- Small flat-blade screwdriver

After performing service

Turn the printer power on


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


Post service test

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

1. Remove the left cover (SFP)

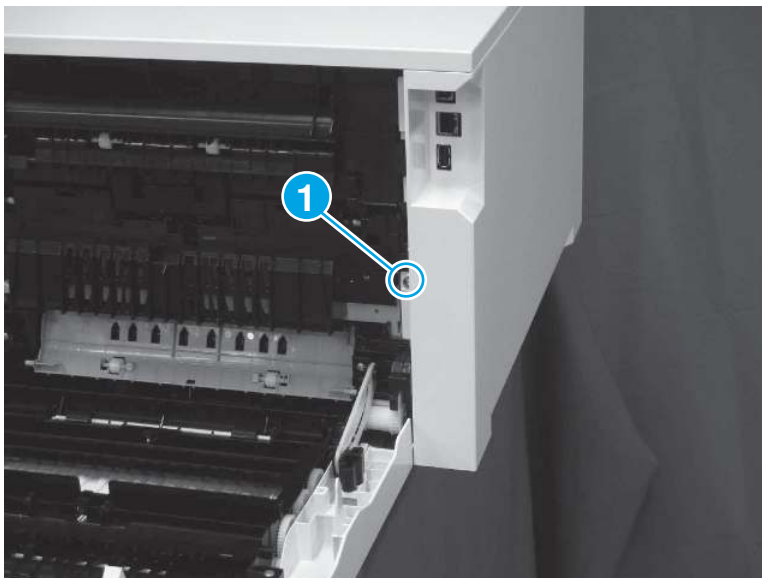
Follow the procedure below to remove and replace the left cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

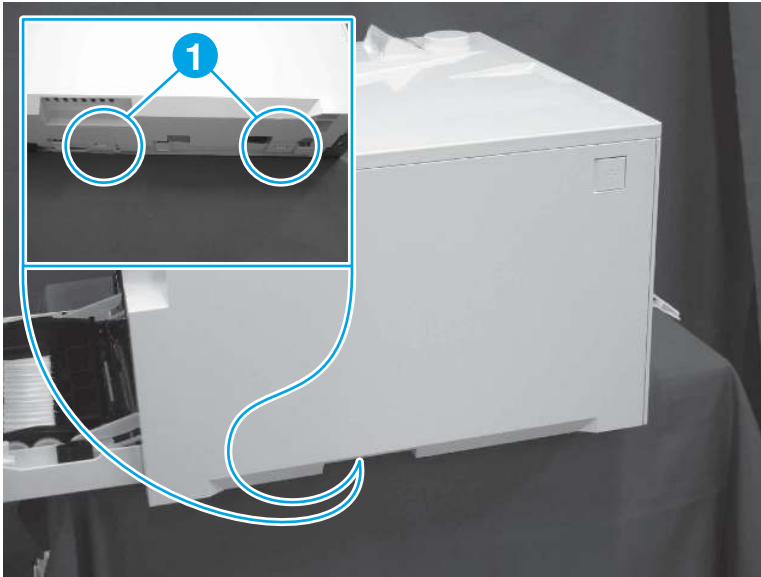
1. Remove one screw (callout 1).

Figure 5-193 Remove one screw



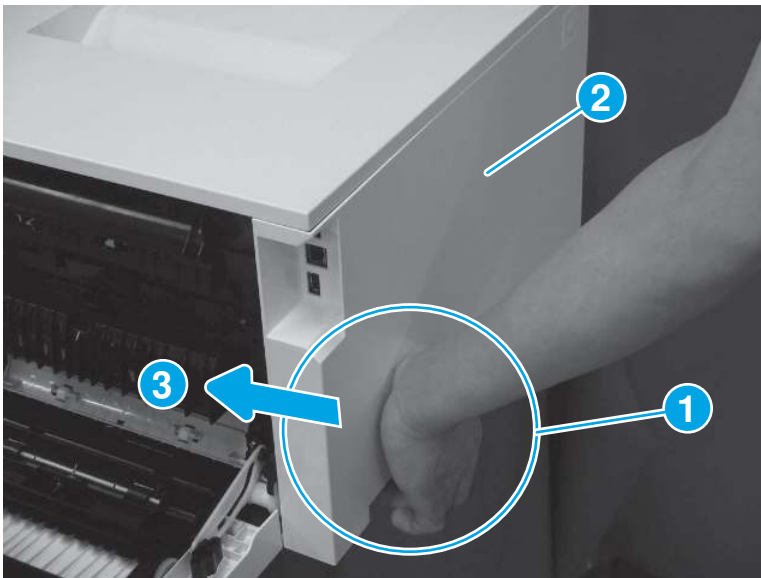
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-194 Release two tabs



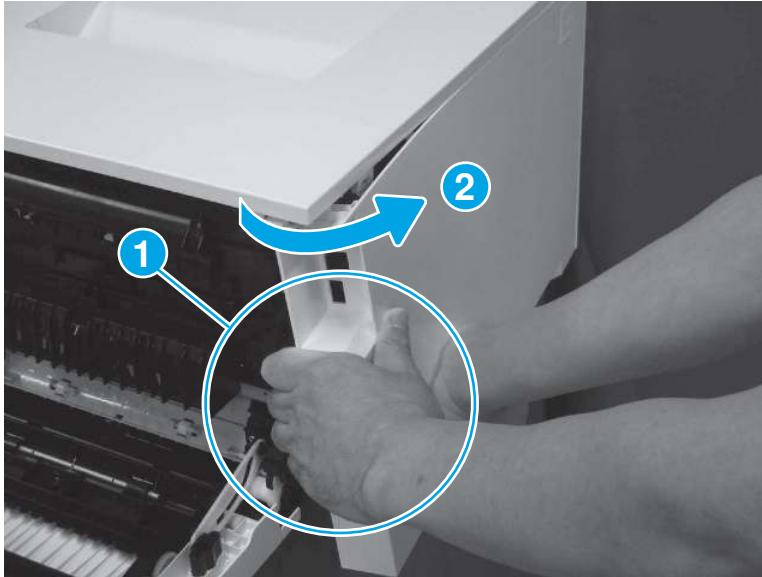
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-195 Release the rear cover corner



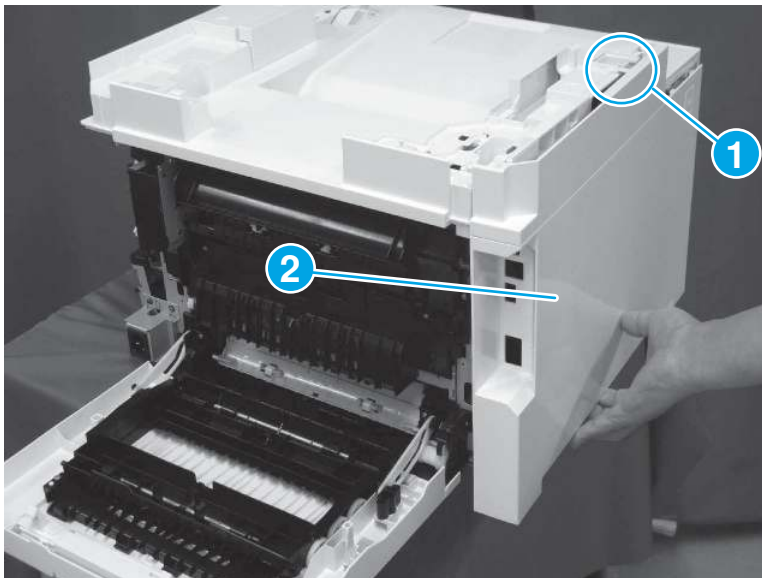
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-196 Disengage the cover corner




5. Remove the left cover (callout 1).


Figure 5-197 Remove the cover



2. Remove the left cover (MFP)

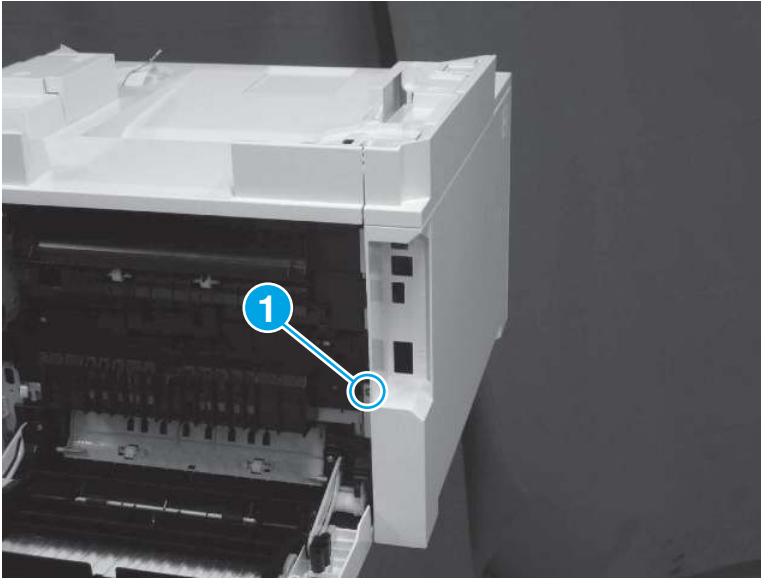
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

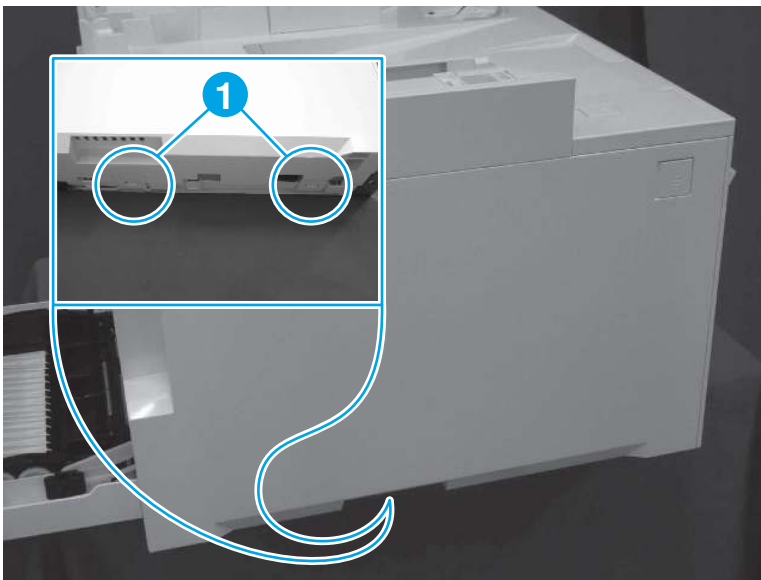
1. Remove one screw (callout 1).

Figure 5-198 Remove one screw



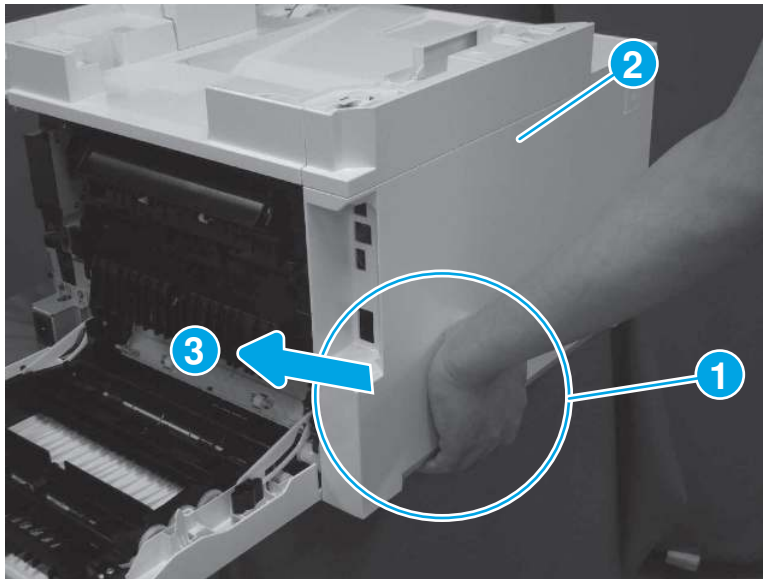
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-199 Release two tabs



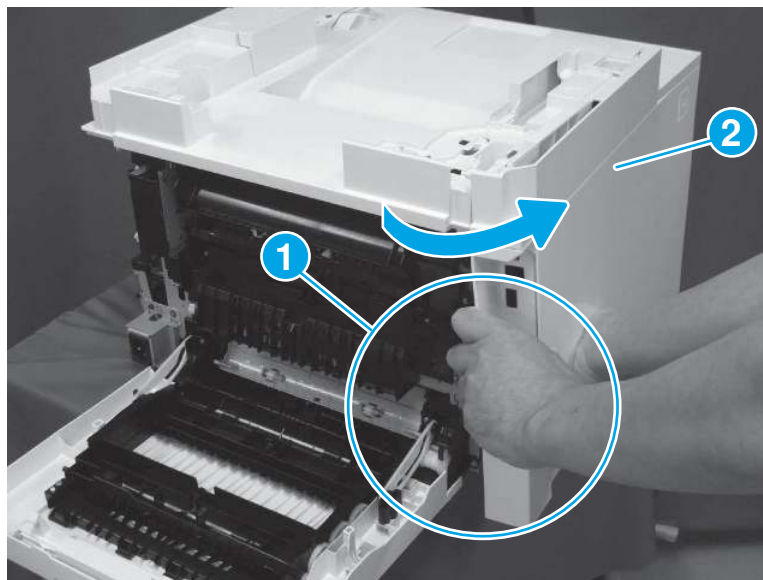
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-200 Release the rear cover corner



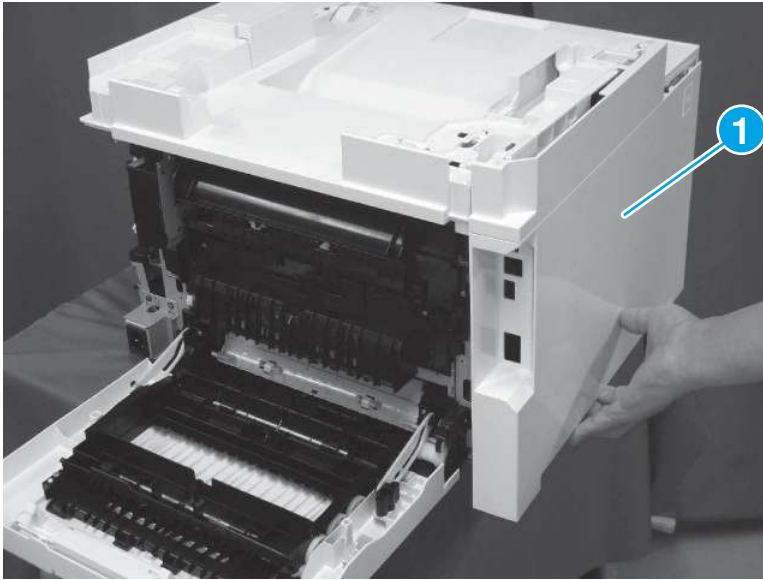
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-201 Disengage the cover corner



5. Remove the left cover (callout 1).

Figure 5-202 Remove the cover

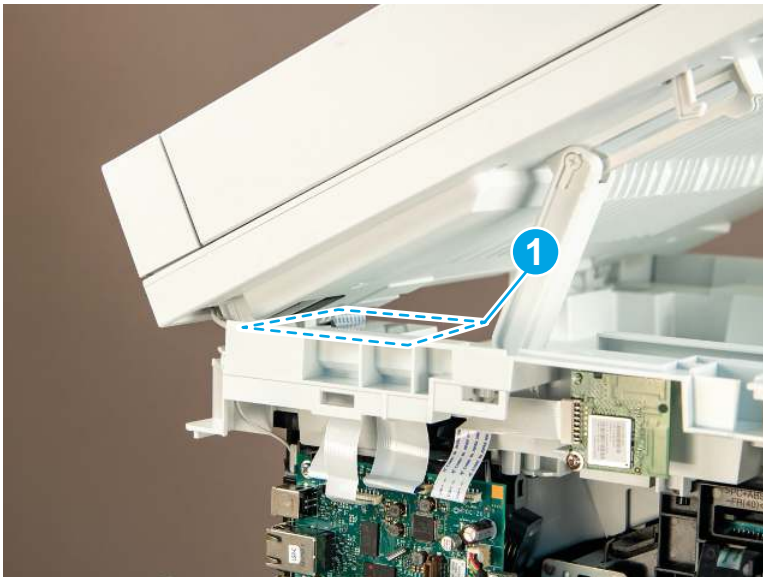


3. Remove the ISA (MFP)

Follow the procedure below to remove and replace the ISA.

1. Open the ISA, and then remove the ISA FFC cover (callout 1).

Figure 5-203 Remove the FFC cover



2. Disconnect three FFCs, and then remove one screw to release the ground cable.

Figure 5-204 Disconnect FFCs and remove screw



3. Release one tab (callout 1), and then rotate the ISA slider pin (callout 2) towards the front of the printer to release it. Remove the slider pin.

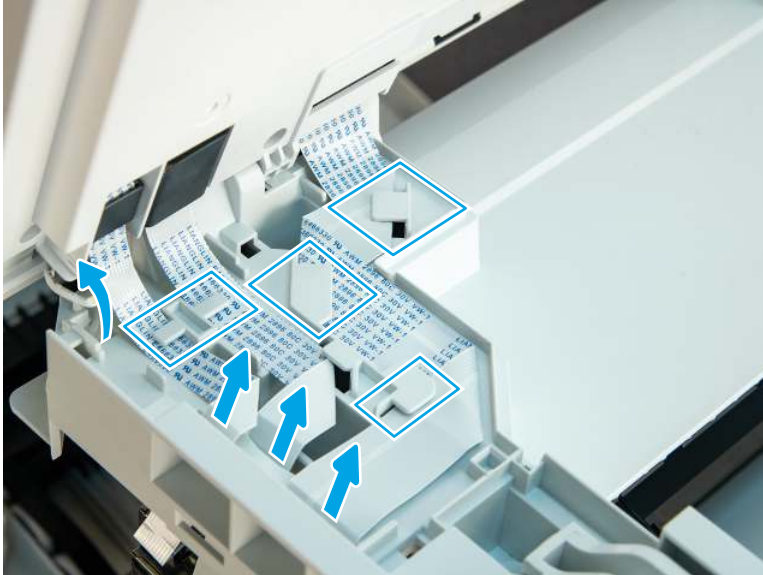
⚠ CAUTION: When the slider pin is removed, the ISA is not captive and can suddenly detach from the printer.

Figure 5-205 Remove the slider pin



4. Support the ISA, release the FFCs from the retainers, and then carefully pass the FFCs and the ground wire up through the slots in the top cover.

Figure 5-206 Release the FFCs and ground wire



5. Slide ISA as shown below to release it.

Figure 5-207 Release the ISA




6. Remove the ISA.

Figure 5-208 Remove the ISA



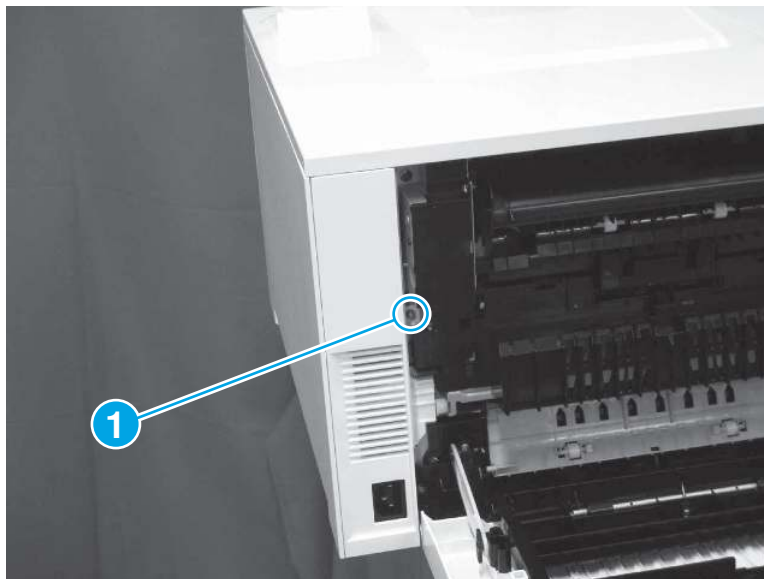
4. Remove the right cover (SFP)

Follow the procedure below to remove and replace the right cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

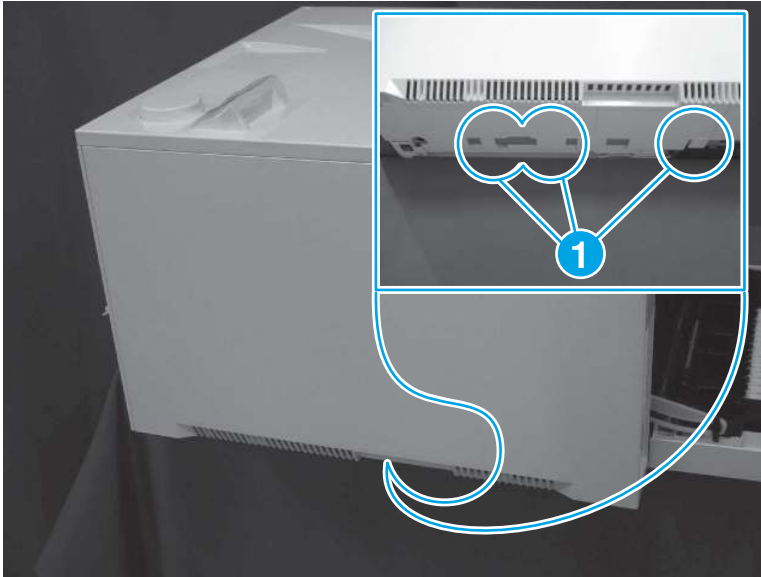
1. Remove one screw (callout 1).

Figure 5-209 Remove one screw



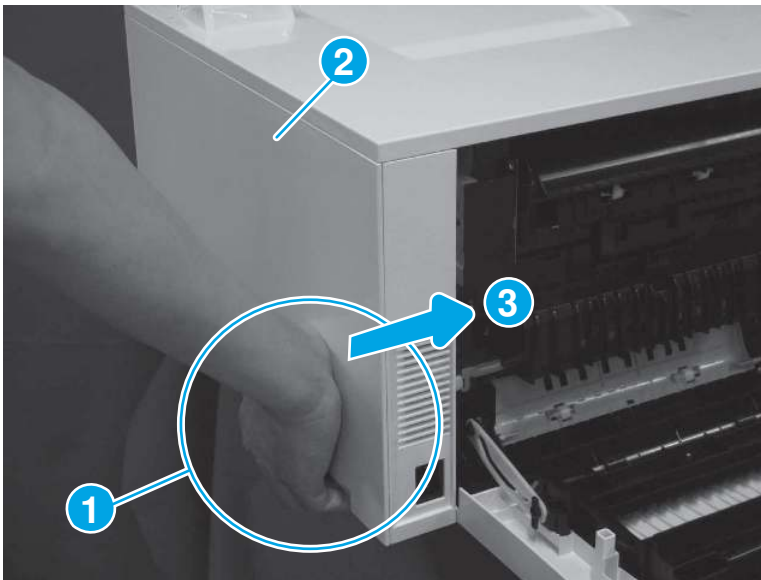
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-210 Release three tabs



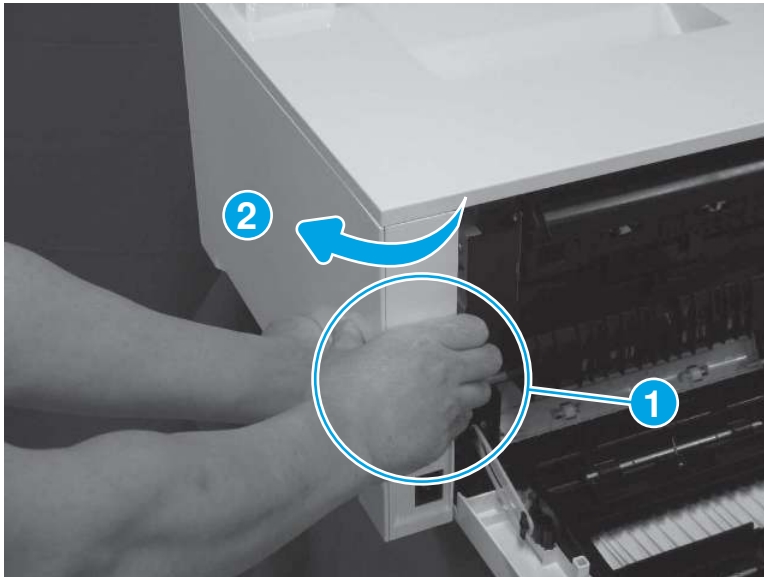
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-211 Release the rear cover corner



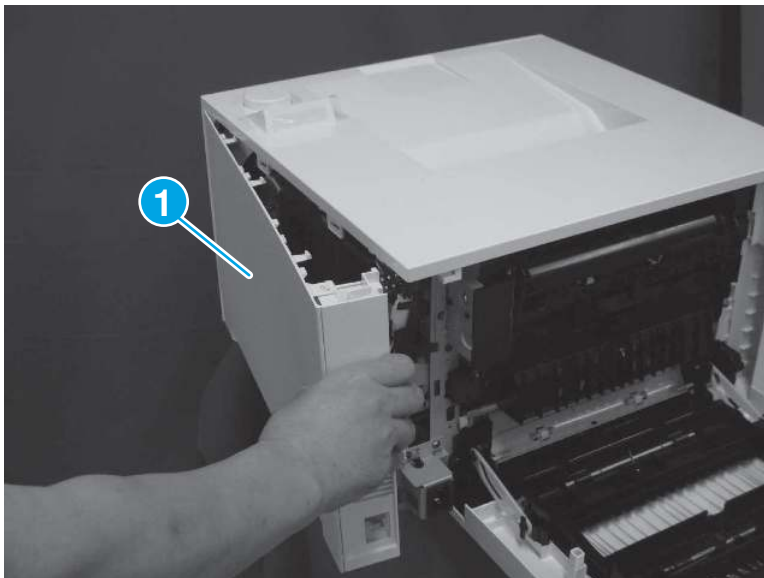
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-212 Disengage the cover corner




5. Remove the right cover (callout 1).

Figure 5-213 Remove the cover



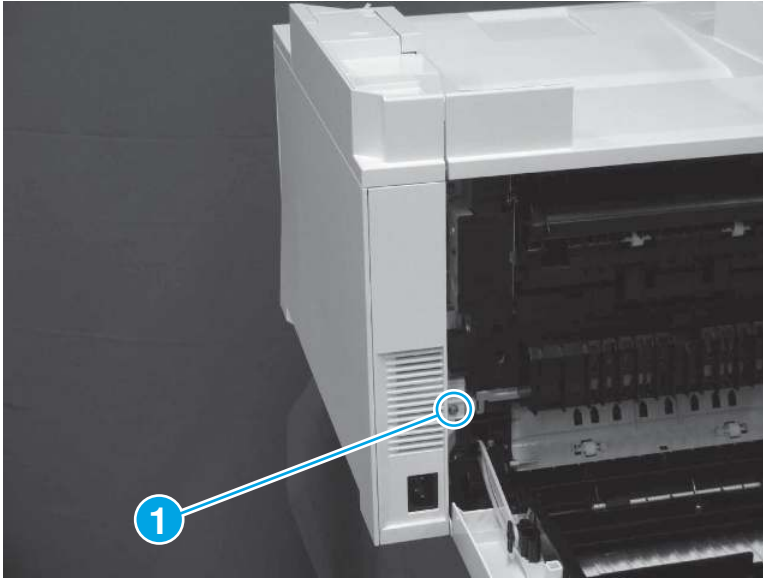
5. Remove the right cover (MFP)

Follow the procedure below to remove and replace the right cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

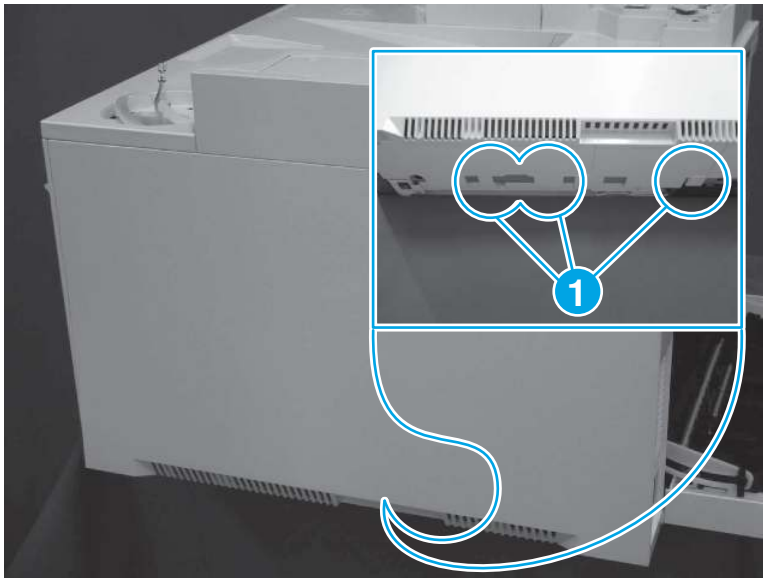
1. Remove one screw (callout 1).

Figure 5-214 Remove one screw



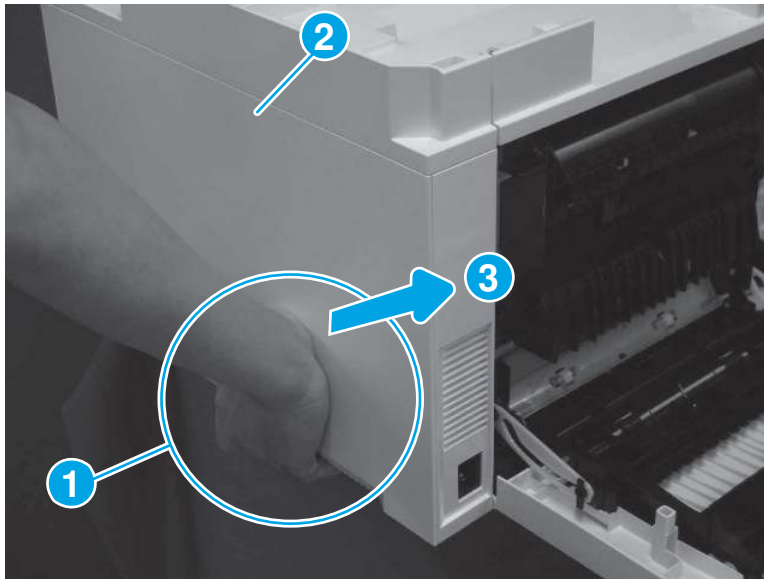
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-215 Release three tabs



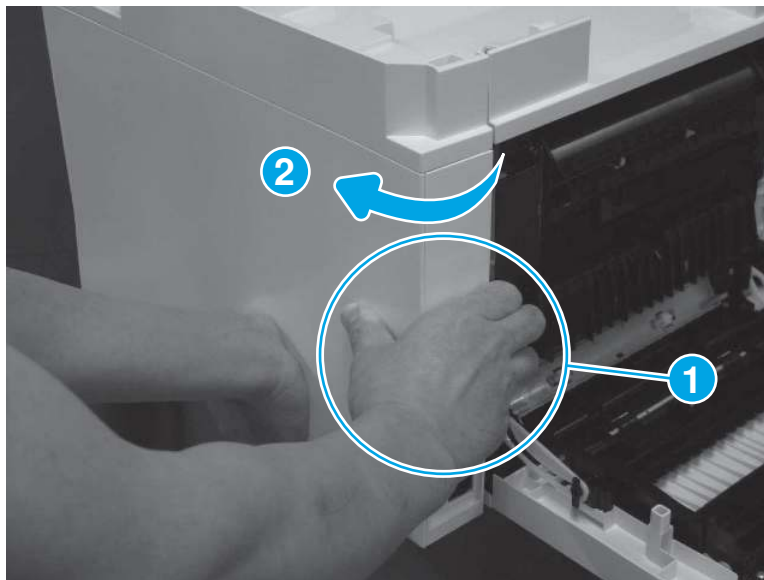
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-216 Release the rear cover corner



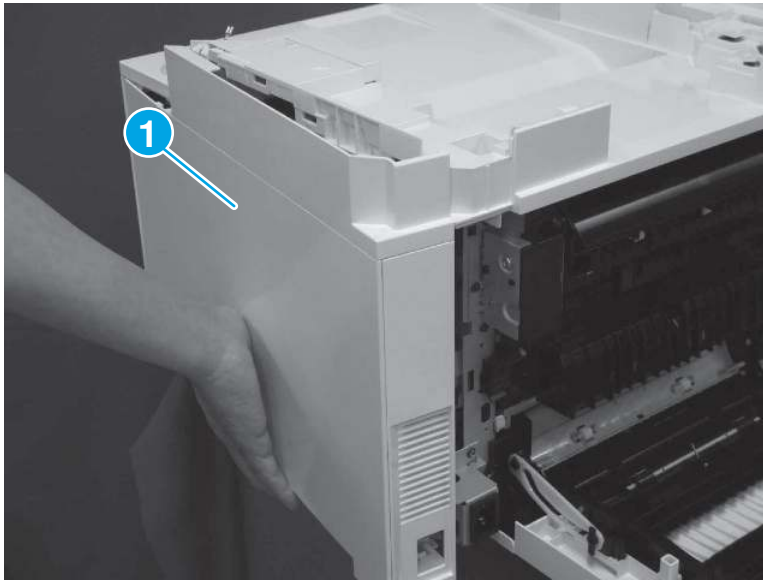
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-217 Disengage the cover corner



5. Remove the right cover (callout 1).


Figure 5-218 Remove the cover



6. Remove the front cover

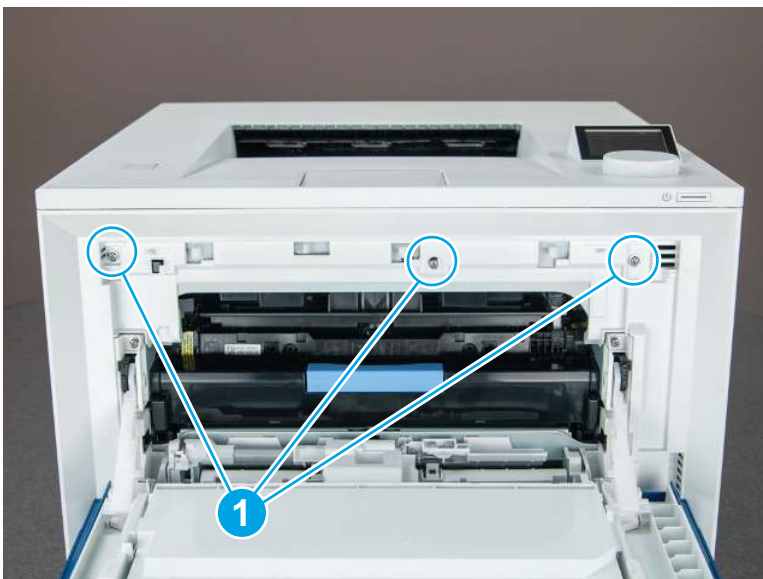
Follow the procedure below to remove and replace the front cover.

 **NOTE:** Front cover removal is **identical** for both SFP and MFP models.

 **Reinstallation tip:** Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

1. Remove three screws (callout 1).

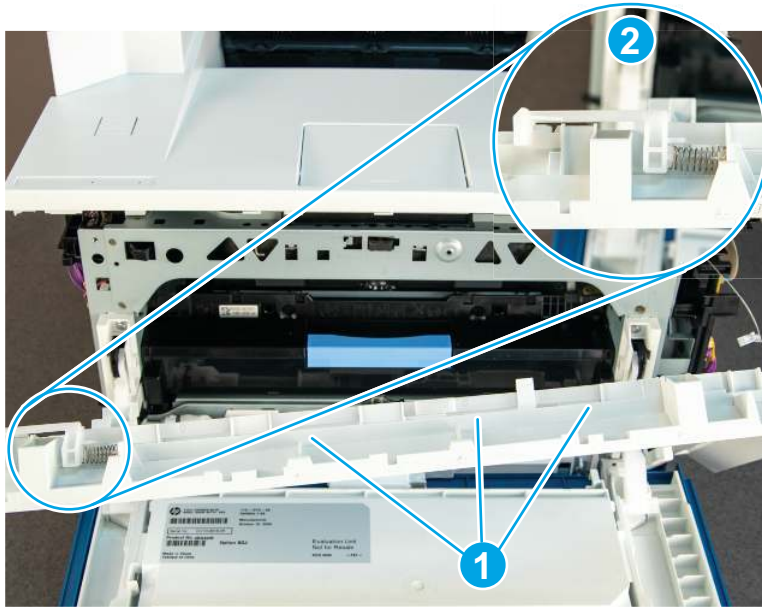
Figure 5-219 Remove three screws



2. Before proceeding, take note of the door release arm (callout 1). This arm can be easily dislodged when the cover is removed.

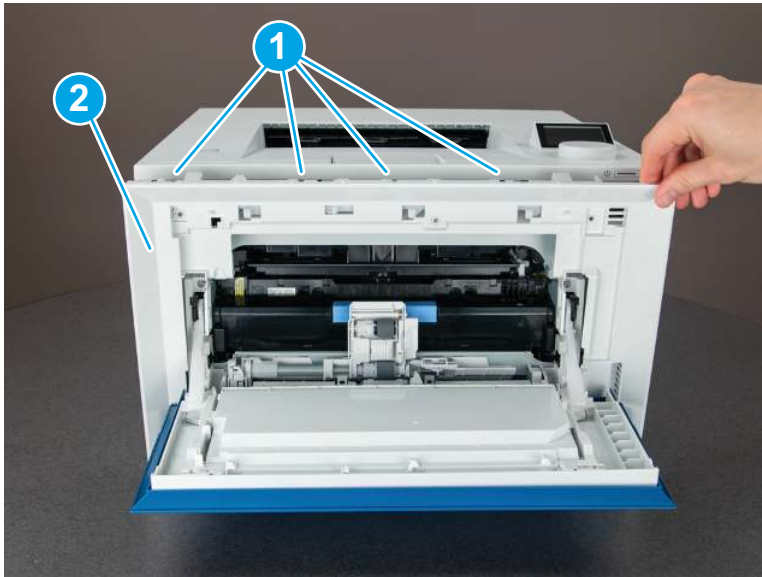
⚠ CAUTION: Do not lose the spring (callout 2) when removing the front cover.

Figure 5-220 Door release arm



3. Release four tabs (callout 1), and then remove the front cover (callout 2).

Figure 5-221 Remove the cover



7. Remove the top cover (SFP)

Follow the procedure below to remove and replace the top cover (SFP).

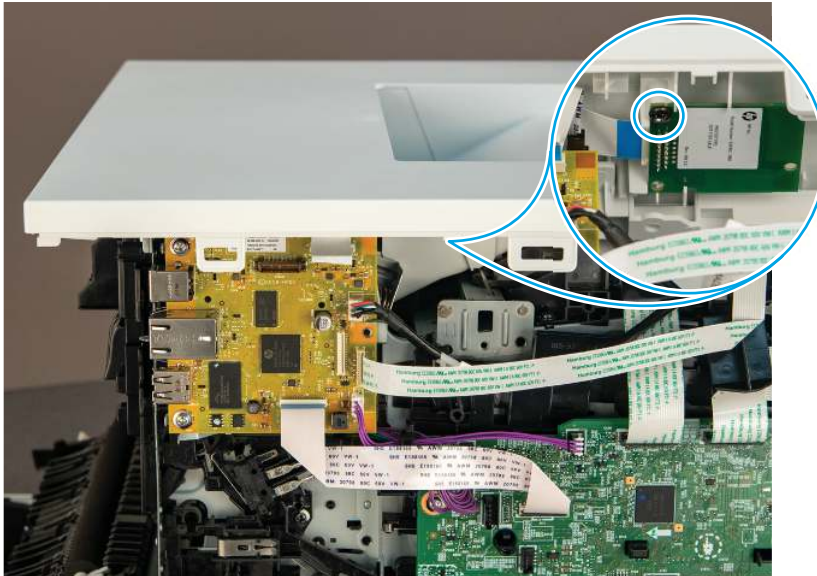
📝 NOTE: The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

1. **Wireless model only:** Raise and support the left side of the printer, remove one screw, and then separate the wireless PCA from the cover.

CAUTION: Do not attempt to completely remove the wireless PCA. Instead, gently move it out of the way.

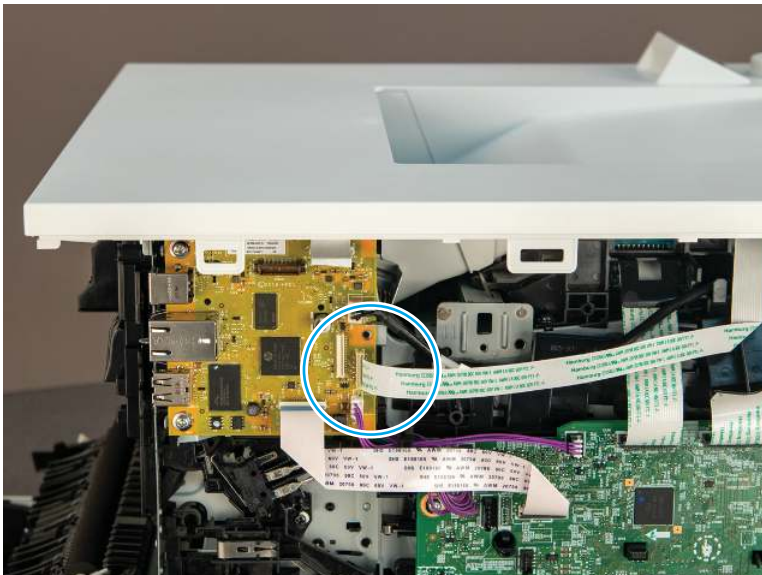
TIP: To remove the screw without raising the printer, use a short-barrel screwdriver.

Figure 5-222 Remove one screw



2. Disconnect one flat-flexible cable (FFC).

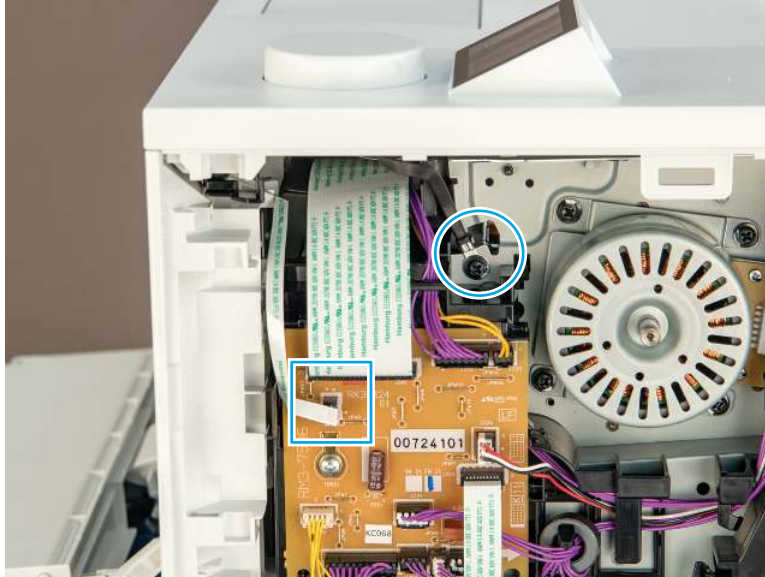
Figure 5-223 Disconnect one FFC



3. Disconnect one FFC, and then remove one screw to release the ground wire.

NOTE: The front cover is shown installed in the figure below. However, this step is correct for removing the top cover.

Figure 5-224 Disconnect one FFC and remove one screw




4. Sliding the cover from the back of the printer towards the front to remove it.

Figure 5-225 Remove the cover



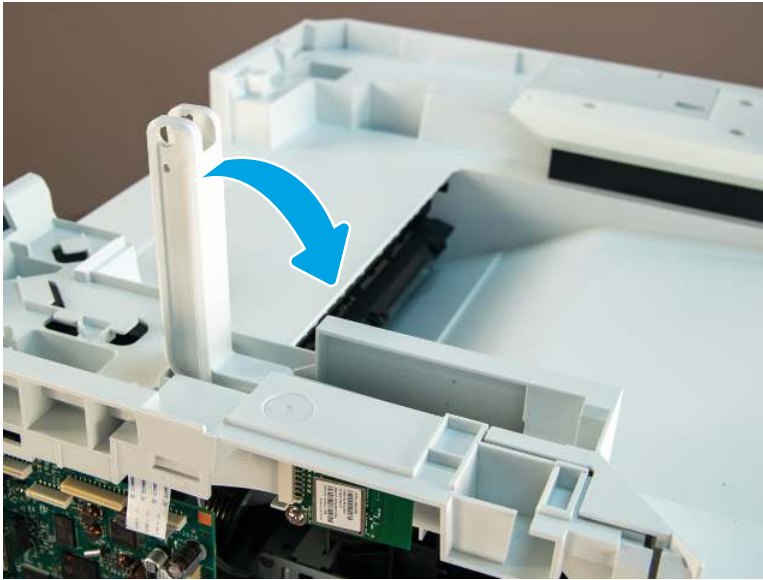
8. Remove the top cover (MFP)

Follow the procedure below to remove and replace the top cover (MFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

1. Close the ISA lift arm.

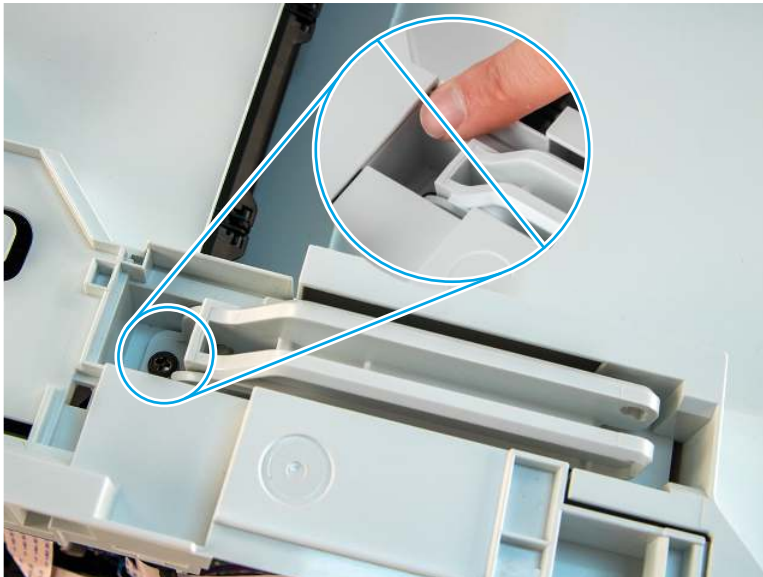
Figure 5-226 Close the ISA lift arm



2. Remove one screw.

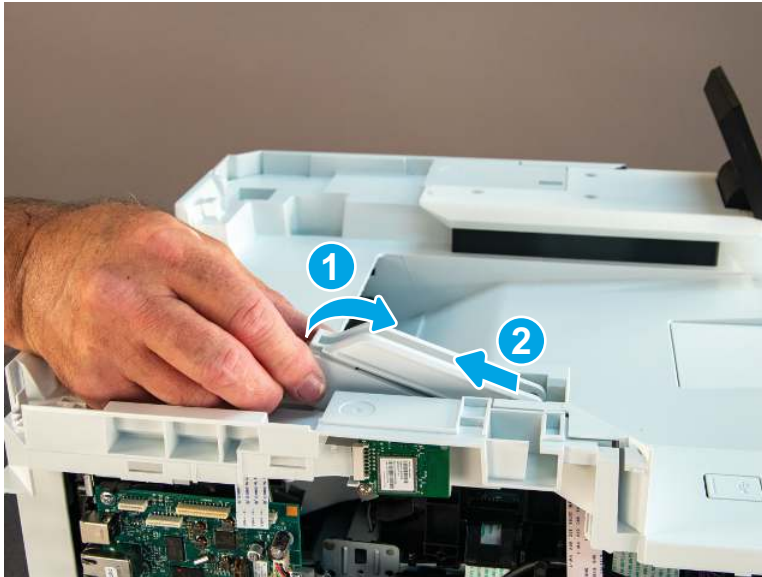
⚠ CAUTION: The support arm is spring loaded and can unexpectedly spring into the open position. To avoid injury, do not place a finger in the screw well when the support arm is in the closed position.

Figure 5-227 Remove one screw



3. Rotate one end of the lift arm up (callout 1), and then slide the lift arm as shown below (callout 2) to release it. Remove the lift arm.

Figure 5-228 Remove the lift arm



4. Do the following:
 - a. Disconnect one FFC (control panel; callout 1).
 - b. Remove one screw (callout 2), and then separate the wireless PCA from the top cover.


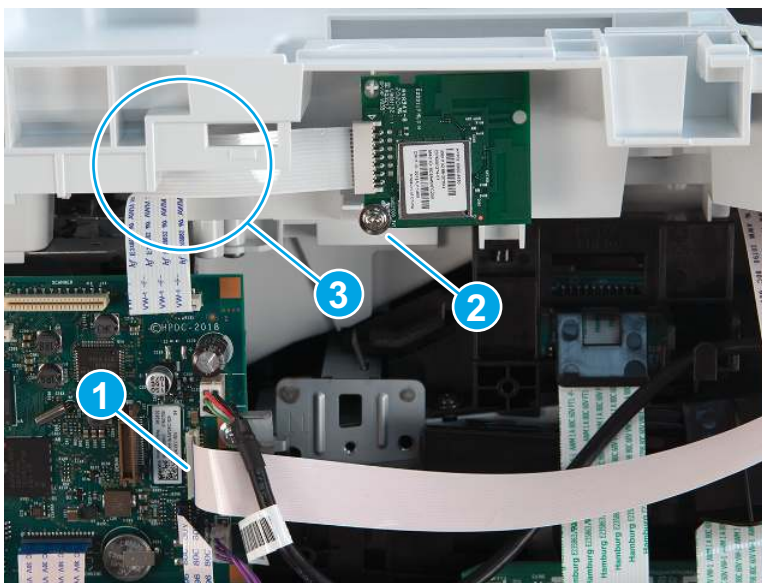
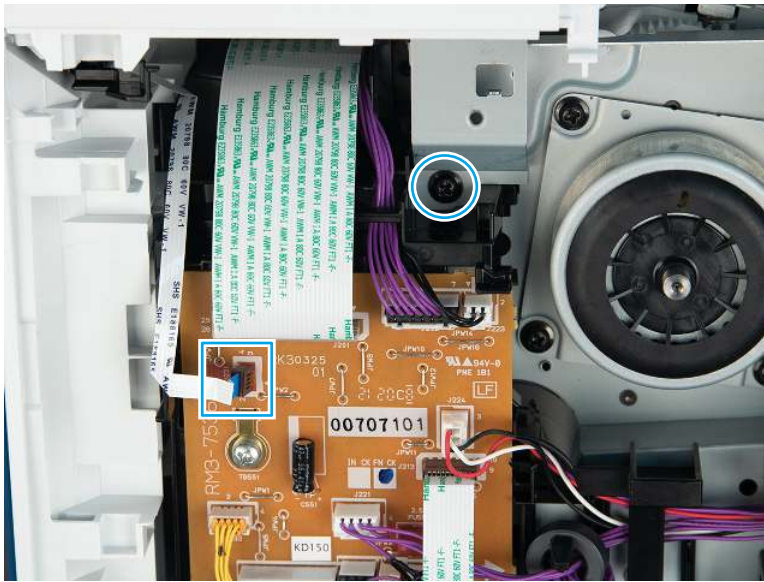
 **NOTE:** The wireless PCA does not need to be completely removed. Instead, release the FFC from the retainer (callout 3), and then gently move it out of the way.

Figure 5-229 Disconnect FFC and move the wireless PCA



5. Disconnect one FFC (power button), and then remove one screw (grounding sheet-metal plate).

Figure 5-230 Disconnect one FFC and remove one screw



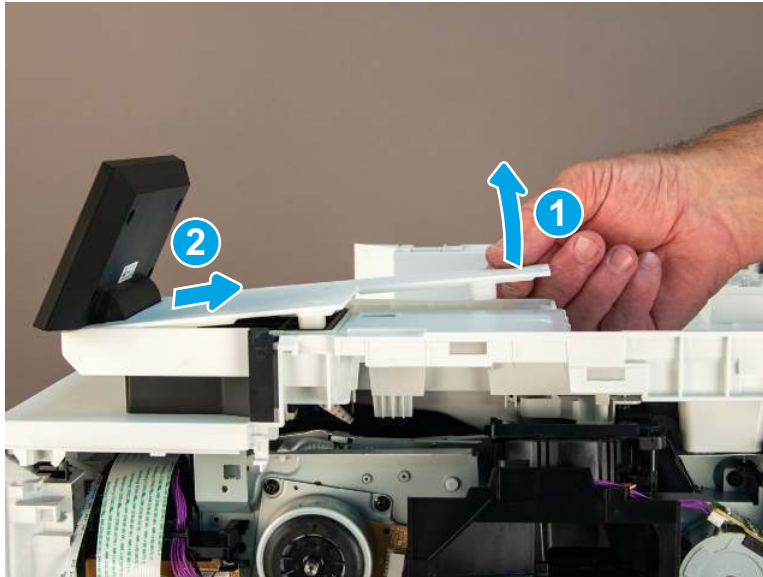
6. Remove three screws.

Figure 5-231 Remove three screws




7. Release one tab and rotate one end of the base cover up (callout 1), and then slide the cover as shown (callout 2) to remove it.

Figure 5-232 Remove the cover



8. Disconnect two FFCs.

 **NOTE:** These are zero-insertion force (ZIF) connectors. To remove the FFCs, first release the locking clip on the connector, and then pull the cable straight out of the connector.


 **TIP:** For reinstallation, make sure that the line of the FFC is parallel with the body.

Figure 5-233 Disconnect two FFCs



9. Remove four screws.


 **NOTE:** Two of the screws are self-tapping threads (black), and two of the screws are machine thread (silver).

Figure 5-234 Remove four screws



10. Lift the control panel and base straight up and off of the printer to remove them together.


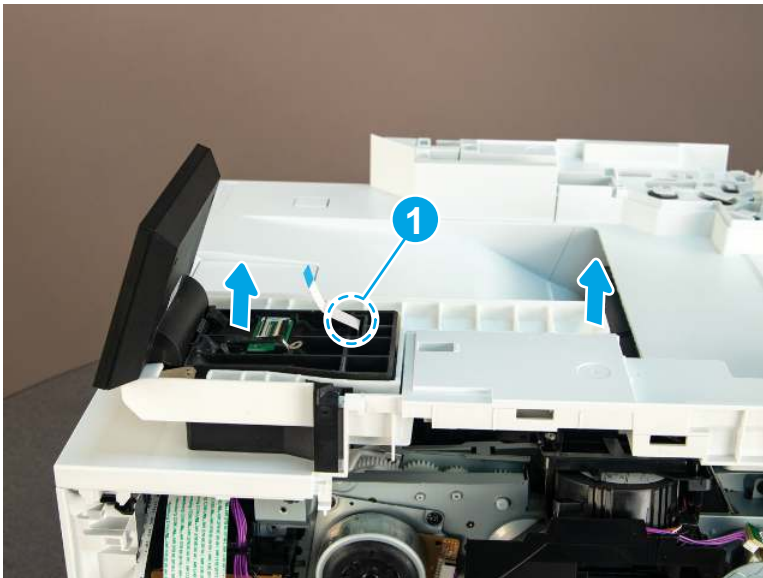
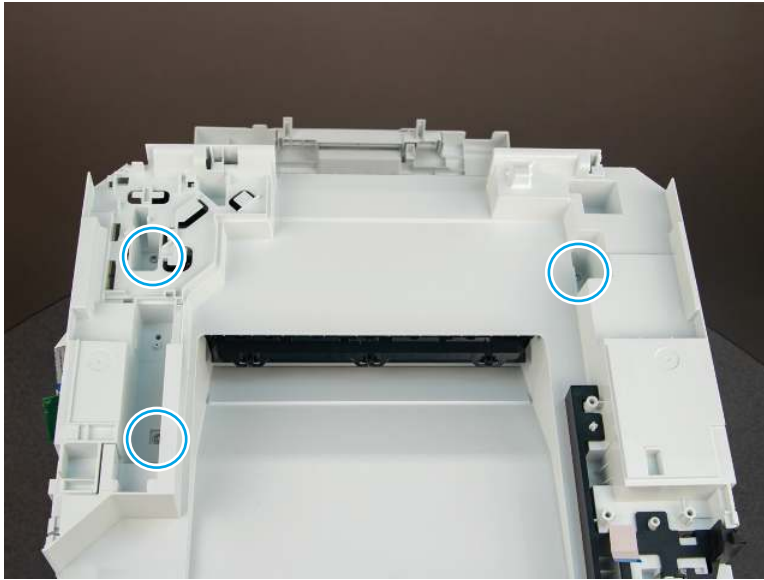
 **NOTE:** When handling the assembly, do not lose the ferrite (callout 1).

Figure 5-235 Remove control panel and base



11. Remove three screws.

Figure 5-236 Remove three screws



12. Sliding the cover from the back of the printer to the front to remove it.


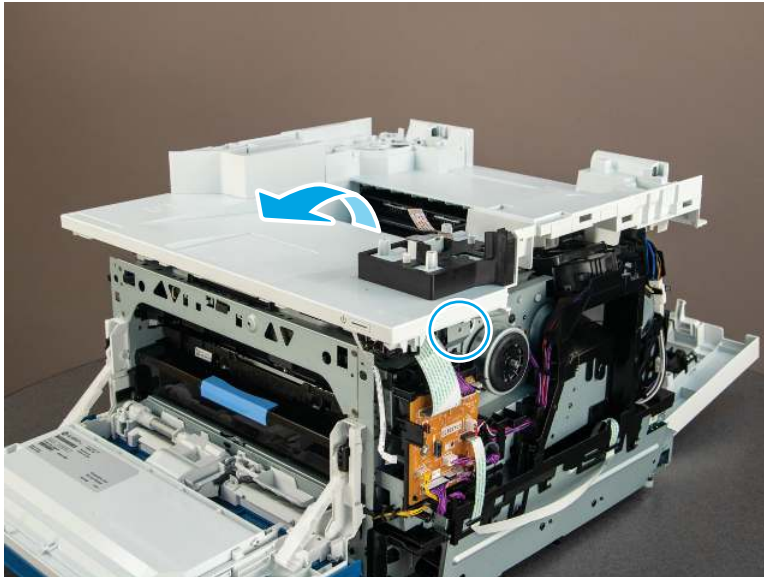
 **TIP:** Slightly move the control-panel ground bracket (circled) back and forth to help release the top cover.

Figure 5-237 Remove the cover



13. **When the cover is reinstalled:** Make sure that the front USB assembly is correctly positioned under the cover.

Figure 5-238 Front USB assembly



9. Remove the front USB

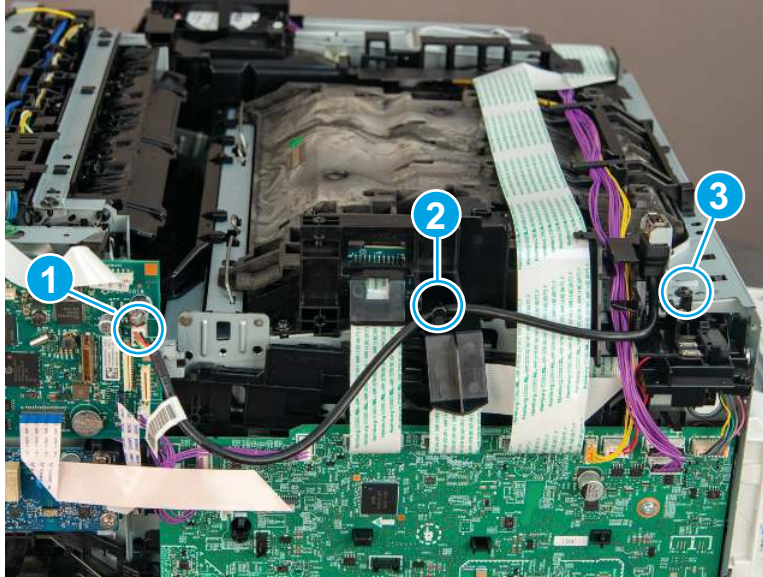
Follow the procedure below to remove the front USB.



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

1. Do the following:
 - a. Disconnect one connector (callout 1).
 - b. Release the wire harness from the retainer (callout 2).
 - c. Remove one screw (callout 3), and then remove the front USB and bracket together.

Figure 5-239 Remove the assembly



2. Remove one screw, and then separate the front USB and cable from the bracket.

Figure 5-240 Separate the assembly from the bracket



10. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

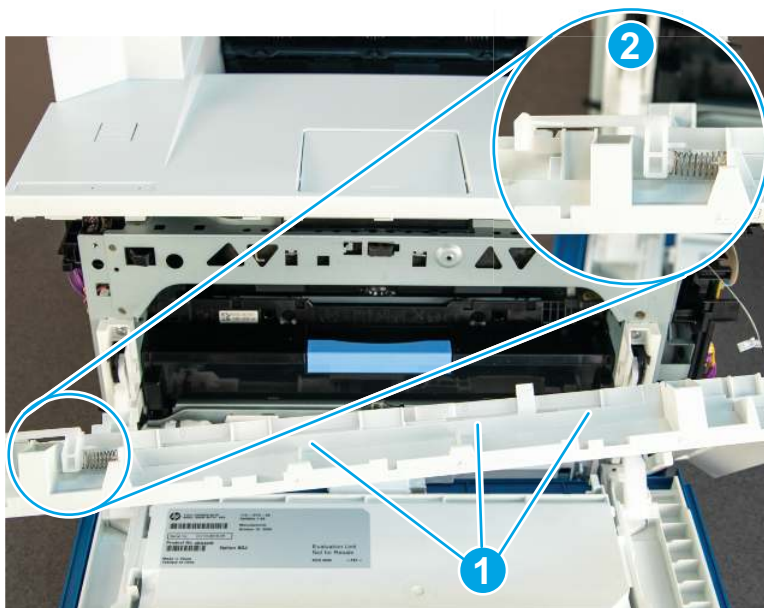
11. Special installation instructions - Front cover

Follow the special instructions below to install the front cover.

NOTE:  Front cover installation is **identical** for both the SFP and MFP models.

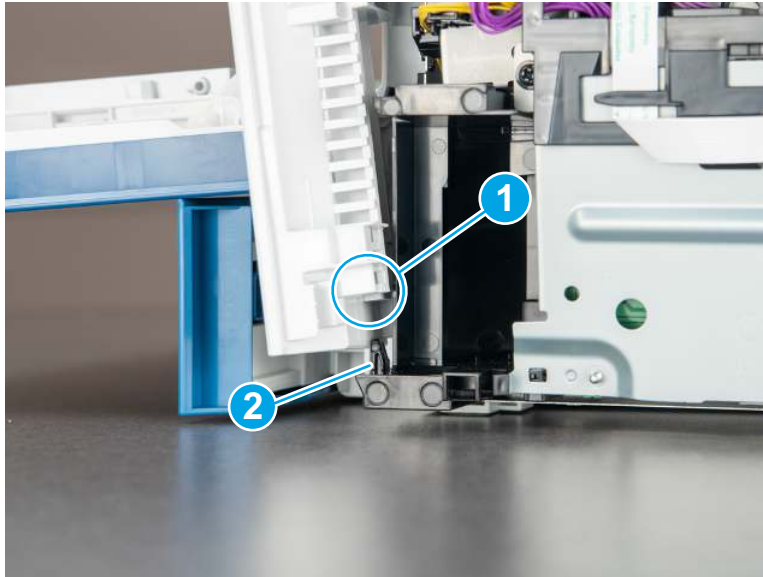
1. If the door release arm becomes dislodged when handling the cover, install it as shown below (callout 1, 2).

Figure 5-241 Door release arm installed



2. At the right and left side of the front cover, align the holes (callout 1) in the cover with the alignment pins (callout 2) on the chassis.

Figure 5-242 Cover alignment pins



3. Rotate the top of the cover towards the printer to install it.


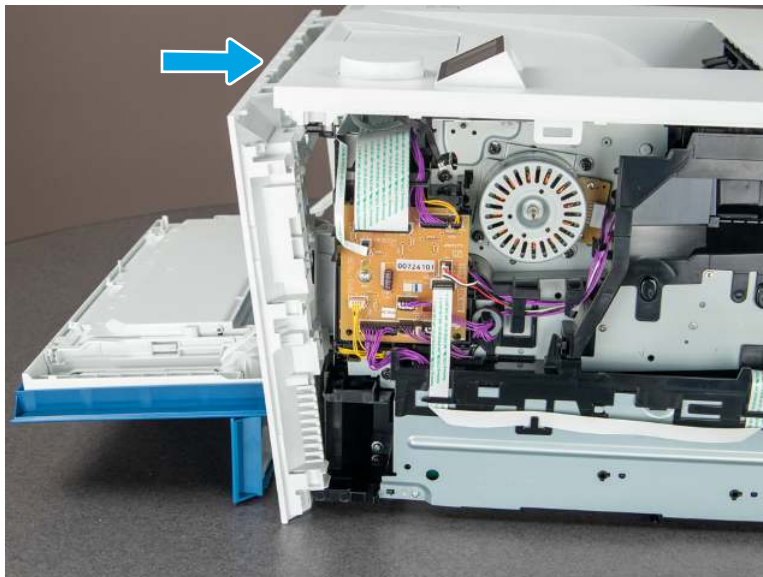
 **IMPORTANT:** Verify that the spring loaded door release button (on the left side of the cover) correctly functions.

Figure 5-243 Install the cover



Removal and replacement: Wireless PCA (SFP)

Learn about wireless (WiFi) PCA


Mean time to repair: 6 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-19 Part information

Part number	Part description
0960-4630	WIFI PCA 802.11N Dual Band Radio

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on


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


Post service test

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

1. Remove the left cover (SFP)

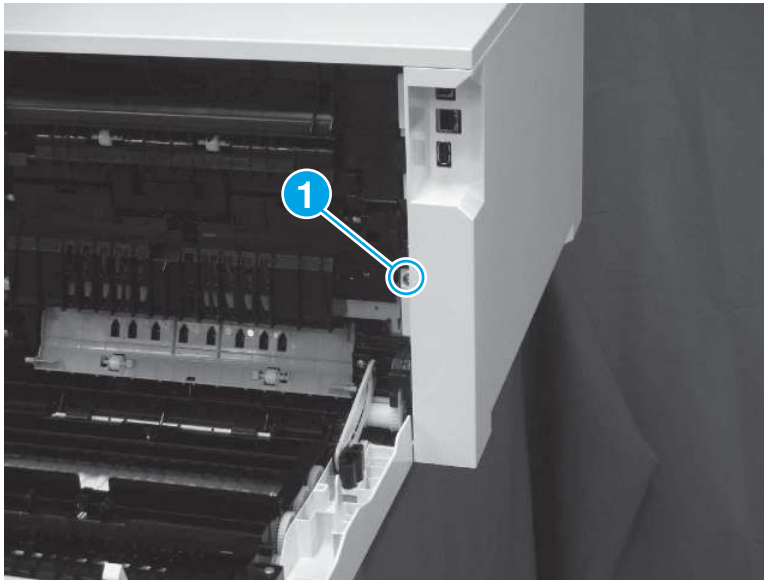
Follow the procedure below to remove and replace the left cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

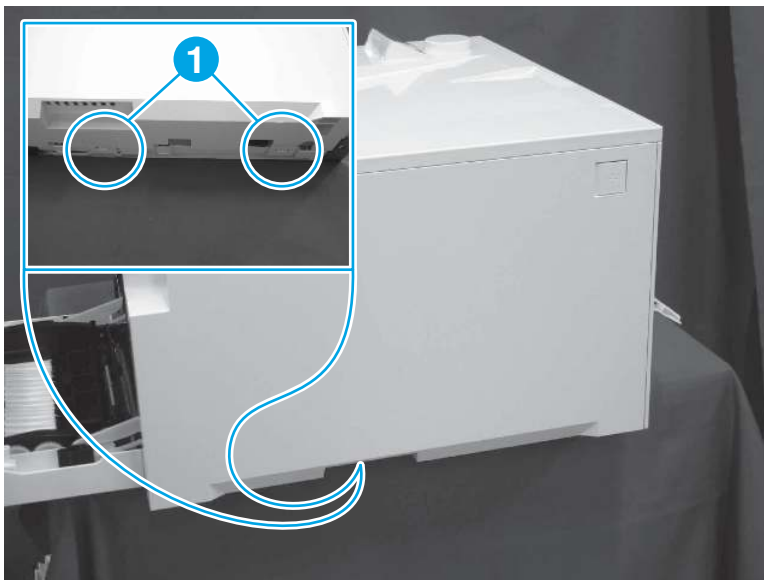
1. Remove one screw (callout 1).

Figure 5-244 Remove one screw



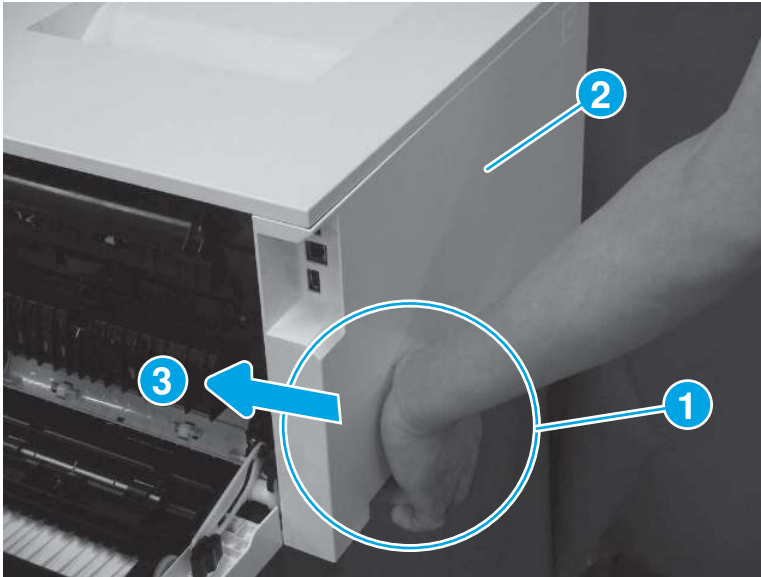
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-245 Release two tabs



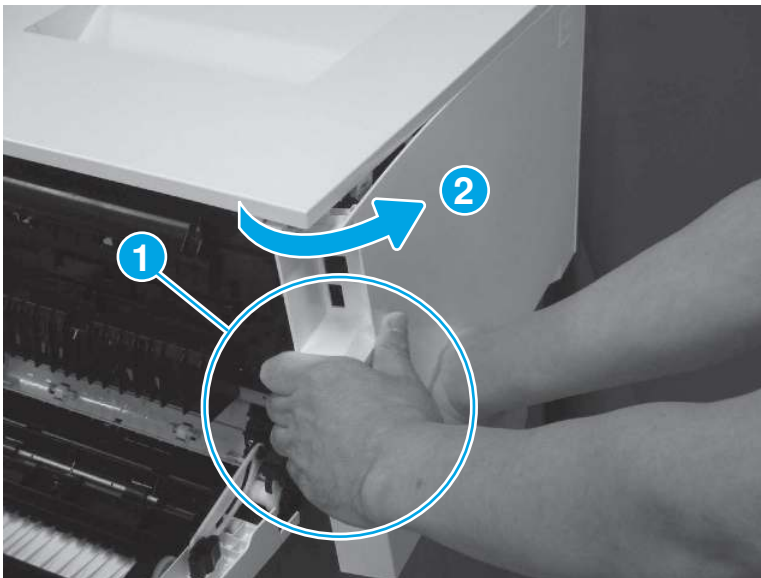
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-246 Release the rear cover corner



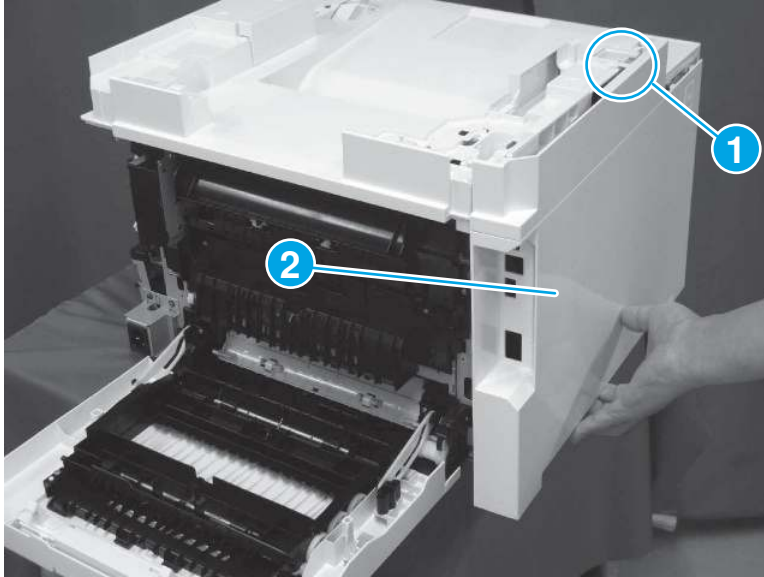
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-247 Disengage the cover corner



5. Remove the left cover (callout 1).

Figure 5-248 Remove the cover



2. Remove the Wireless PCA PCA (SFP)

Follow the procedure below to remove the wireless PCA (SFP)

1. Raise and support the left side of the printer, and then remove one screw.


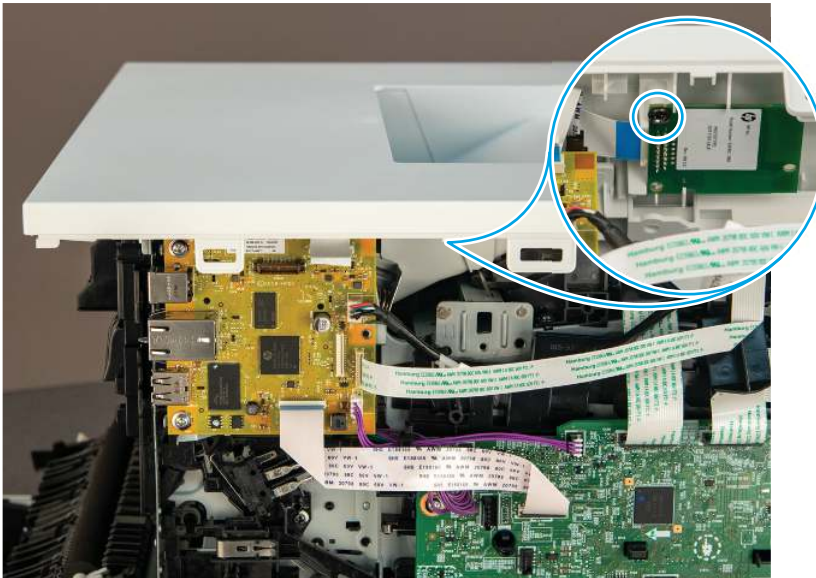
 **TIP:** To remove the screw without raising the printer, use a short-barrel screwdriver.

Figure 5-249 Remove one screw



2. Disconnect one FFC and then remove the wireless PCA.

Figure 5-250 Remove the PCA



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Wireless PCA (MFP)

Learn about wireless (WiFi) PCA


Mean time to repair: 6 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-20 Part information

Part number	Part description
0960-4630	WIFI PCA 802.11N Dual Band Radio

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on


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


Post service test

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

1. Remove the left cover (MFP)

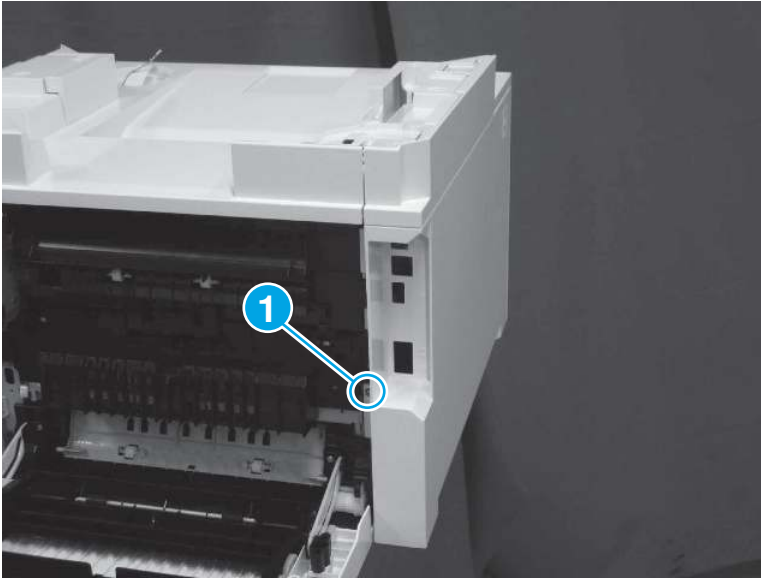
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

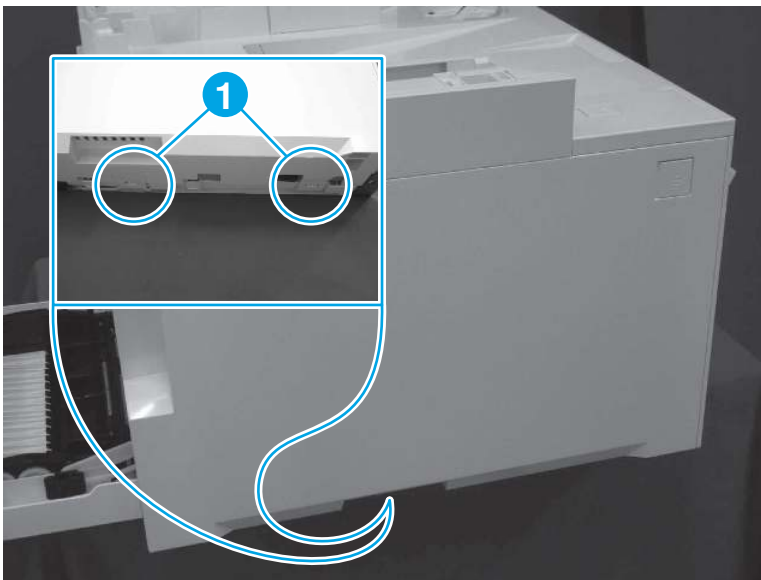
1. Remove one screw (callout 1).

Figure 5-251 Remove one screw



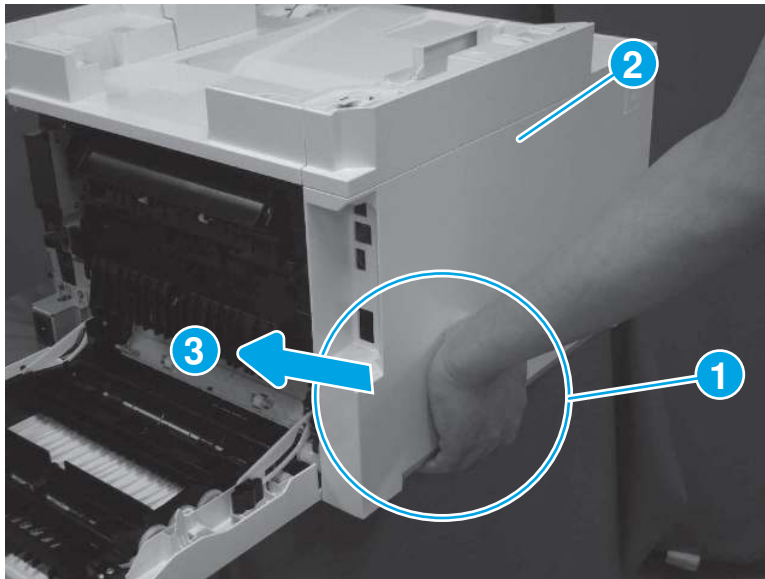
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-252 Release two tabs



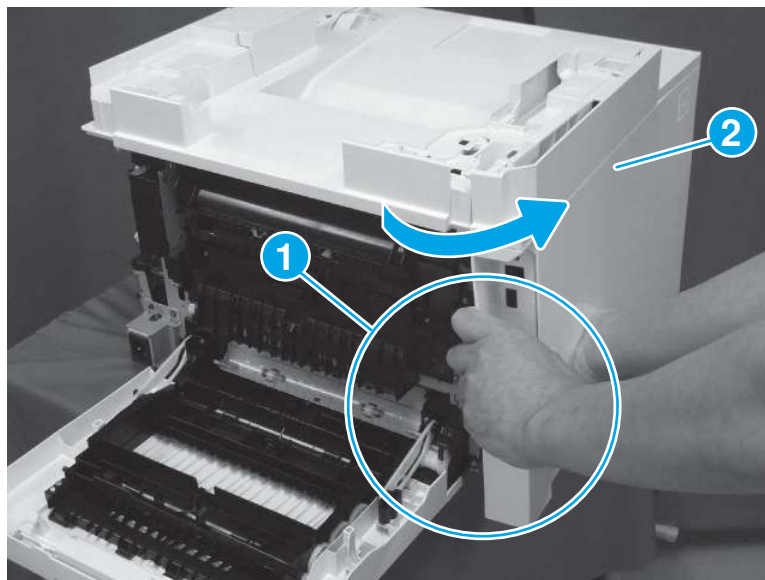
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-253 Release the rear cover corner



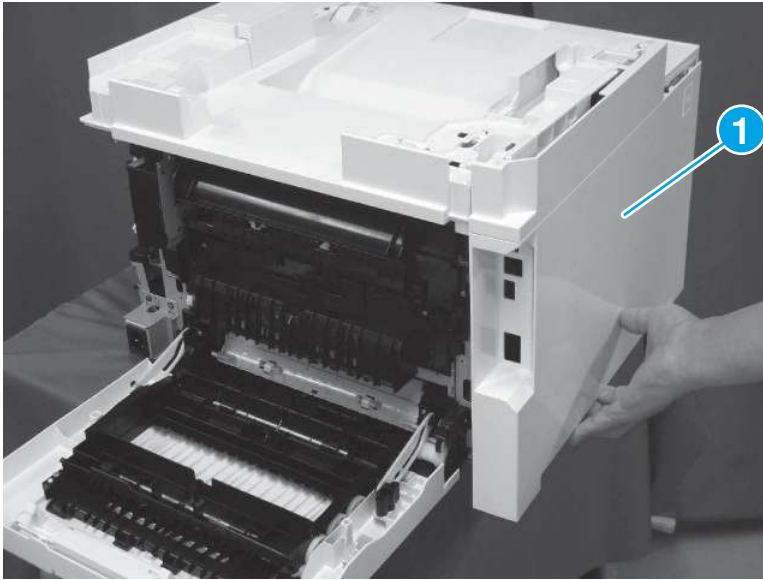
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-254 Disengage the cover corner



5. Remove the left cover (callout 1).

Figure 5-255 Remove the cover



2. Remove the wireless PCA (MFP)

Follow the procedure below to remove the wireless PCA (MFP)

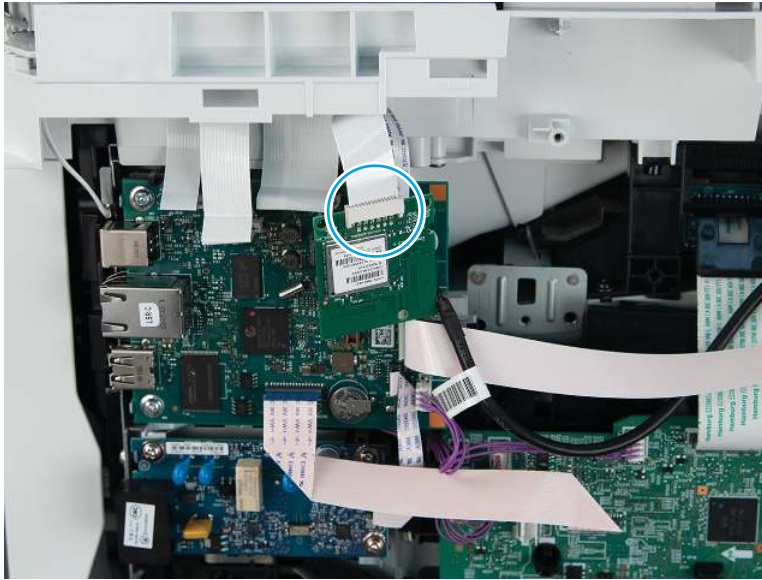
1. Remove one screw, and then carefully separate the wireless PCA from the printer.

Figure 5-256 Remove one screw



2. Disconnect one FFC and then remove the wireless PCA.

Figure 5-257 Remove the PCA



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Fax PCA (MFP)

Learn about fax PCA


Mean time to repair: 8 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-21 Part information

Part number	Part description
W1A78-67906	Fax PCA kit (USA)
W1A78-67907	Fax PCA kit (EURO)
W1A78-67908	Fax PCA kit (Brazil)
W1A78-67909	Fax PCA kit (Philippines)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on


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


Post service test

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

1. Remove the left cover (MFP)

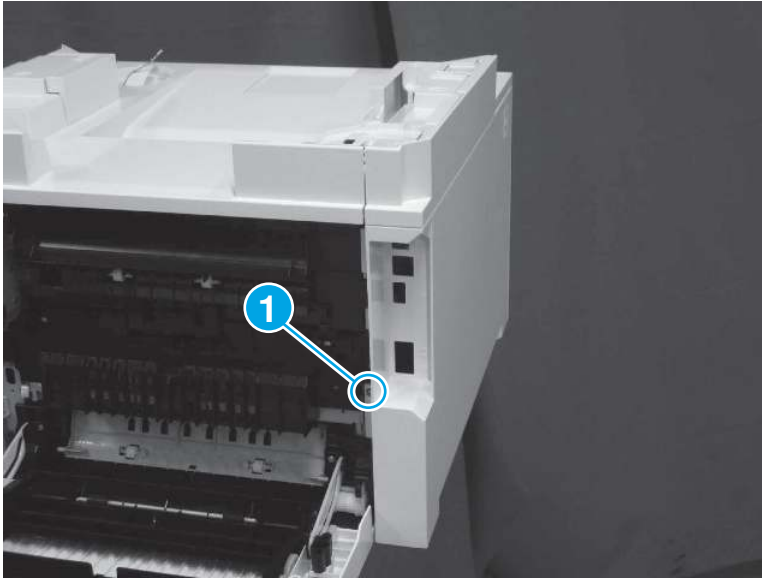
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

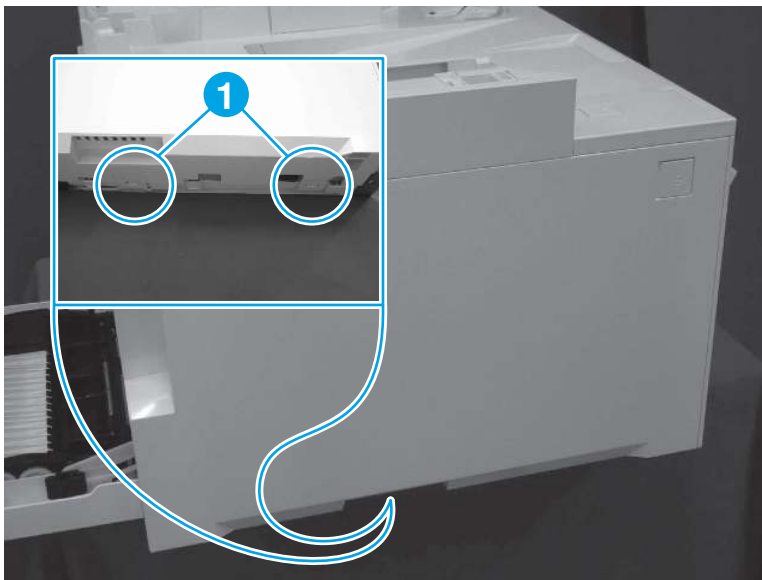
1. Remove one screw (callout 1).

Figure 5-258 Remove one screw



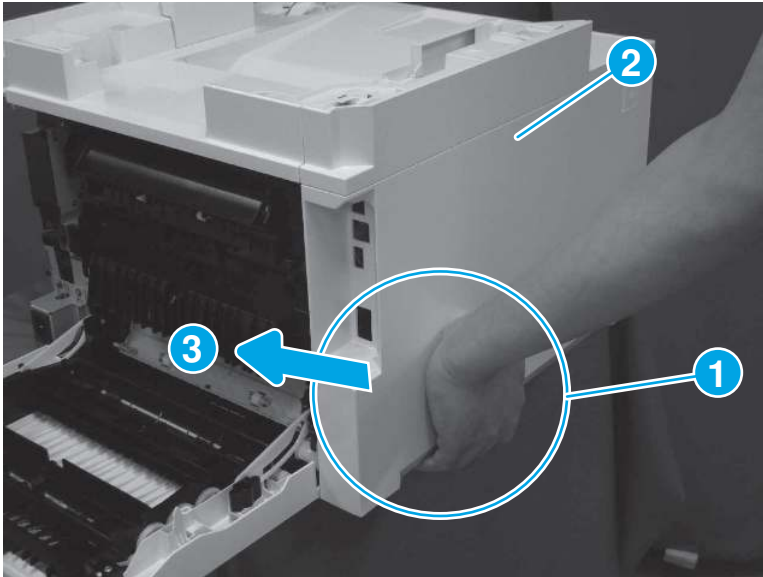
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-259 Release two tabs



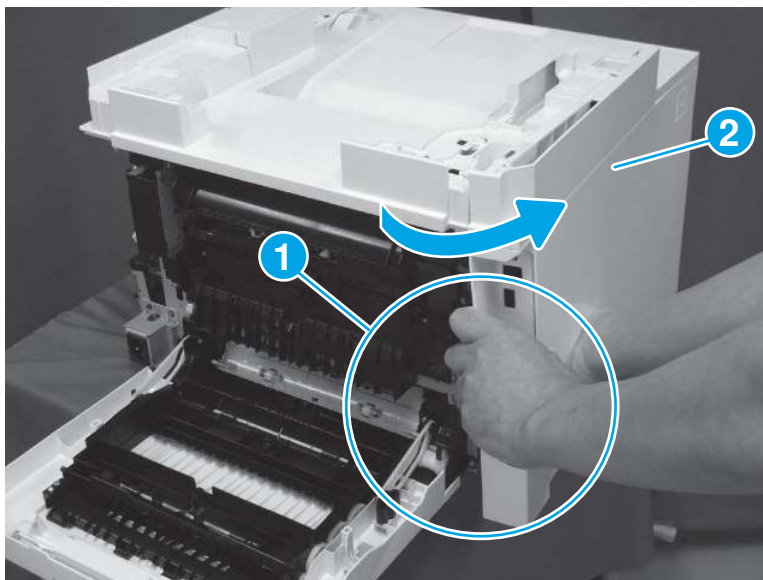
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-260 Release the rear cover corner



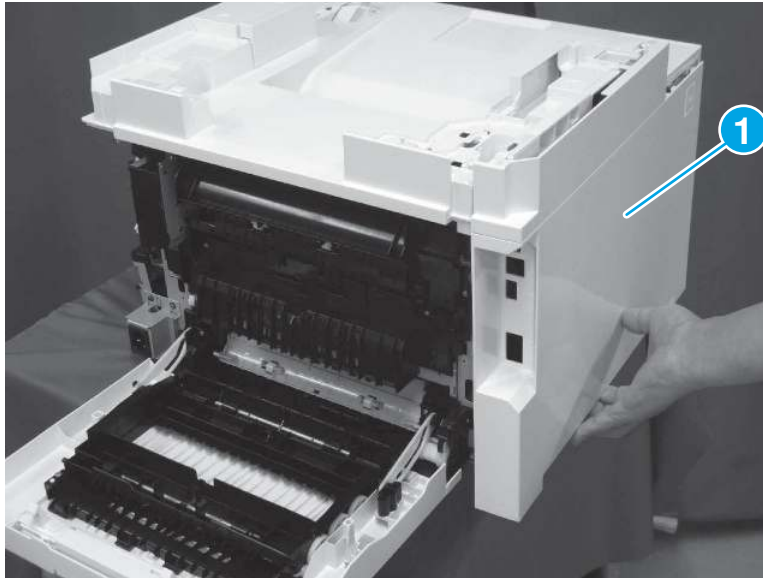
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-261 Disengage the cover corner



5. Remove the left cover (callout 1).

Figure 5-262 Remove the cover

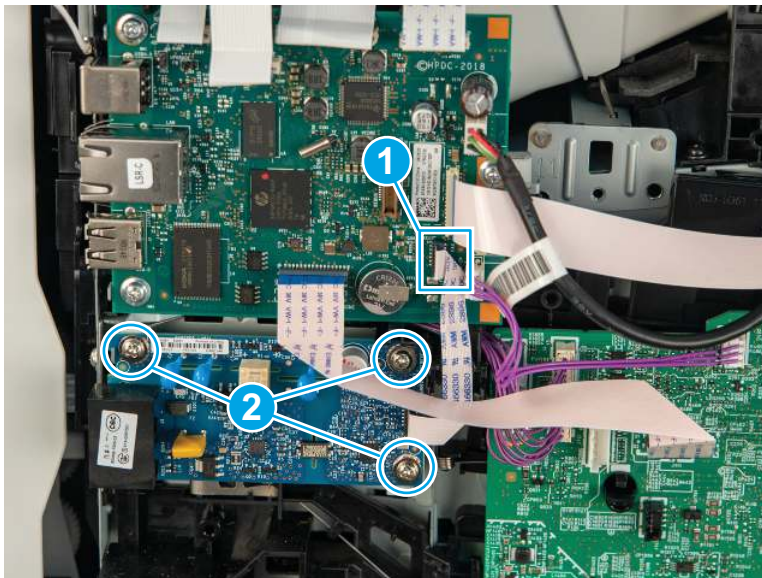


2. Remove the Fax PCA (MFP)

Follow the procedure below to remove the fax PCA (MFP)

- Disconnect one FCC connector (callout 1), remove three screws (callout 2), and then remove the fax PCA.

Figure 5-263 Remove the fax PCA



3. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: MP paper feed assembly

Learn about MP paper feed guide removal.


Mean time to repair: 5 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-22 Part information

Part number	Part description
RM2-2741-000	MP paper feed assembly

Required tools

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

After performing service

Turn the printer power on


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


Post service test

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

1. Remove the left cover (SFP)

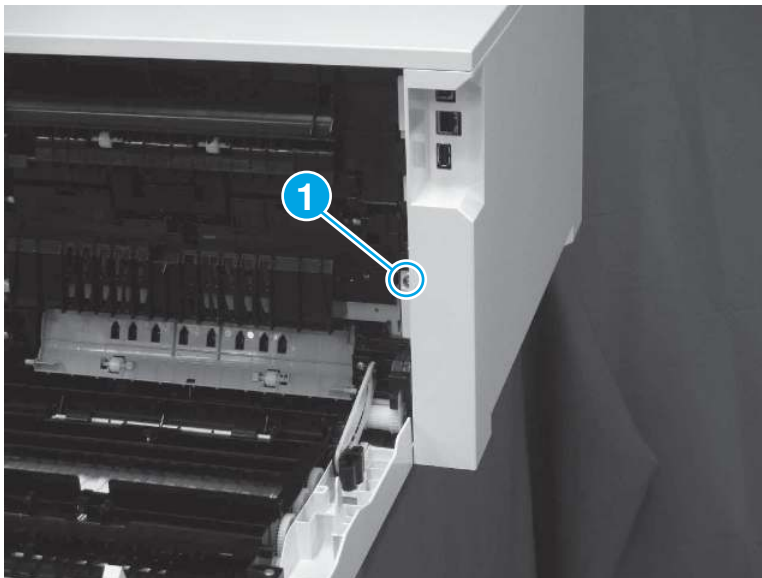
Follow the procedure below to remove and replace the left cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

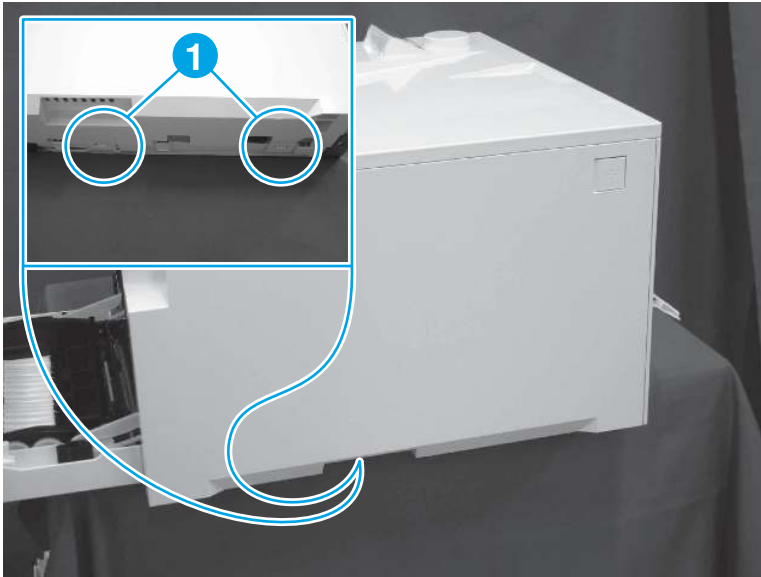
1. Remove one screw (callout 1).

Figure 5-264 Remove one screw



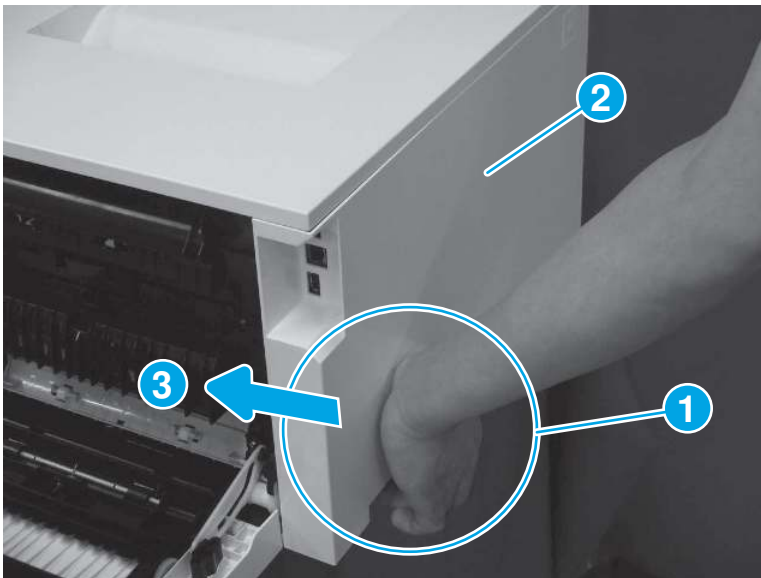
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-265 Release two tabs



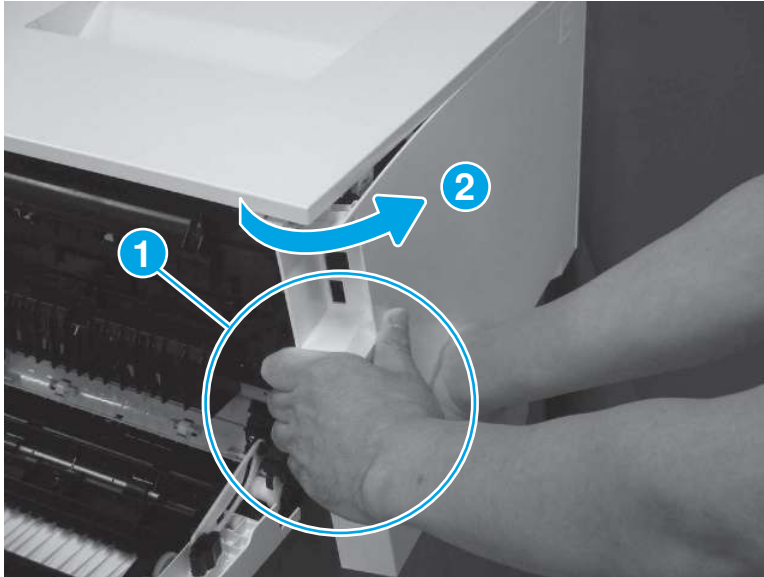
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-266 Release the rear cover corner



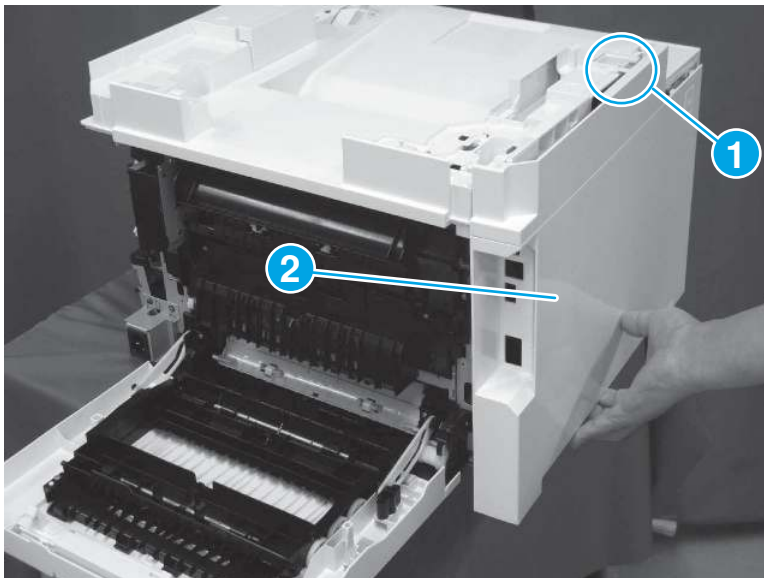
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-267 Disengage the cover corner




5. Remove the left cover (callout 1).


Figure 5-268 Remove the cover



2. Remove the left cover (MFP)

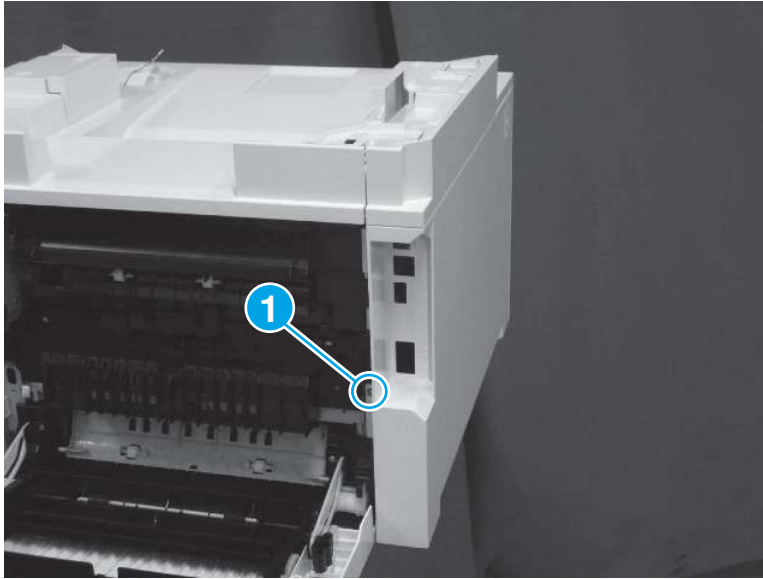
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

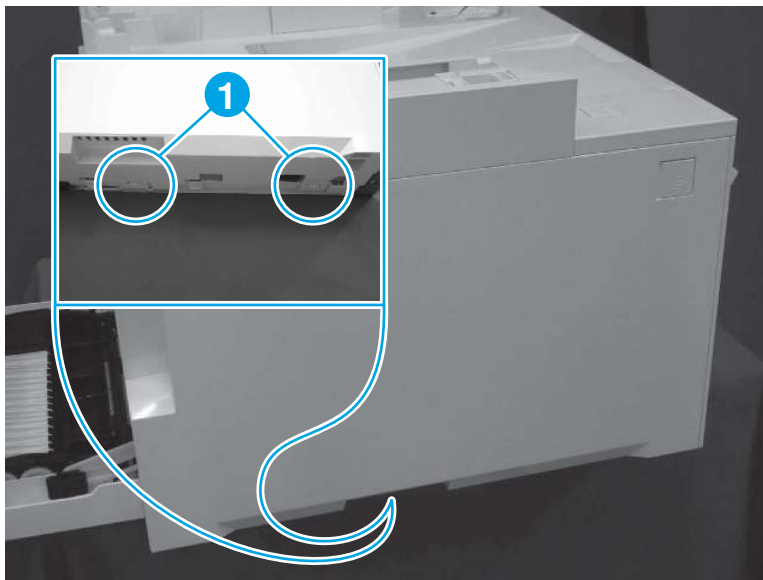
1. Remove one screw (callout 1).

Figure 5-269 Remove one screw



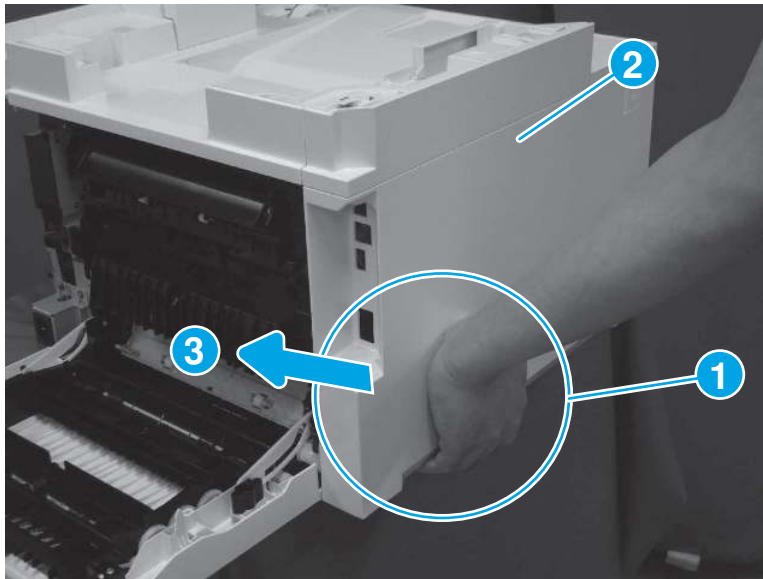
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-270 Release two tabs



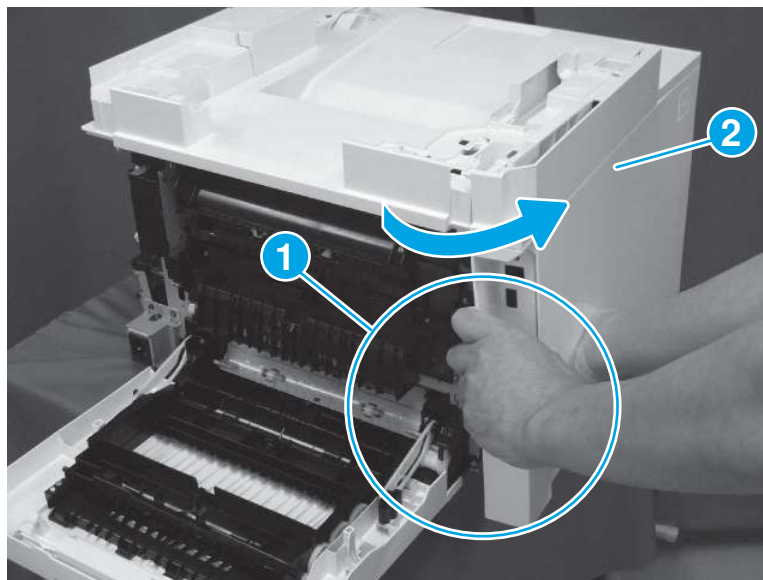
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-271 Release the rear cover corner



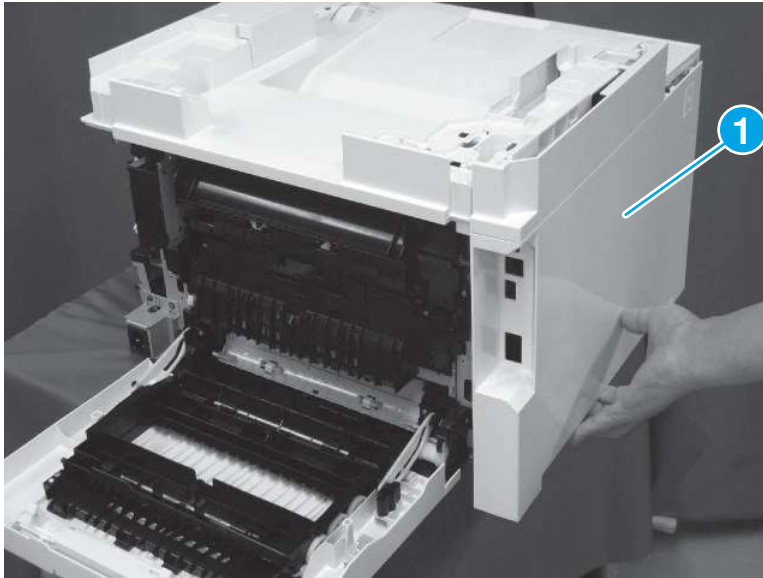
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-272 Disengage the cover corner




5. Remove the left cover (callout 1).

Figure 5-273 Remove the cover



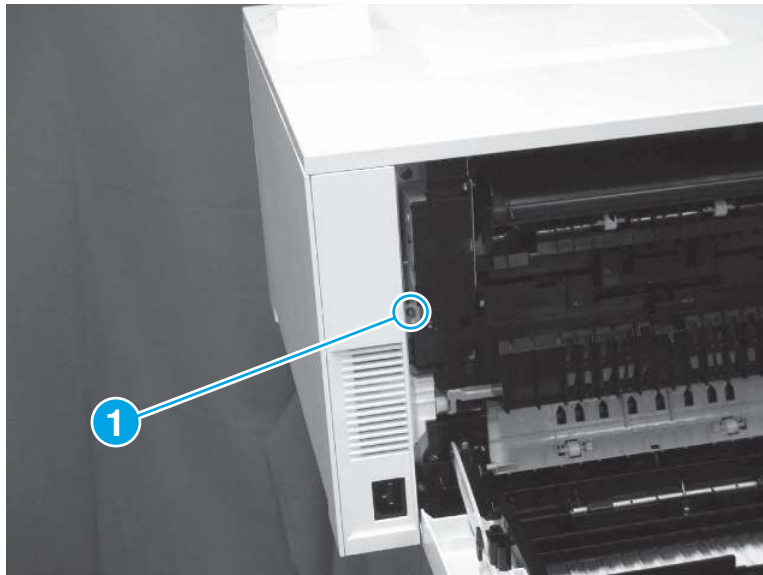
3. Remove the right cover (SFP)

Follow the procedure below to remove and replace the right cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

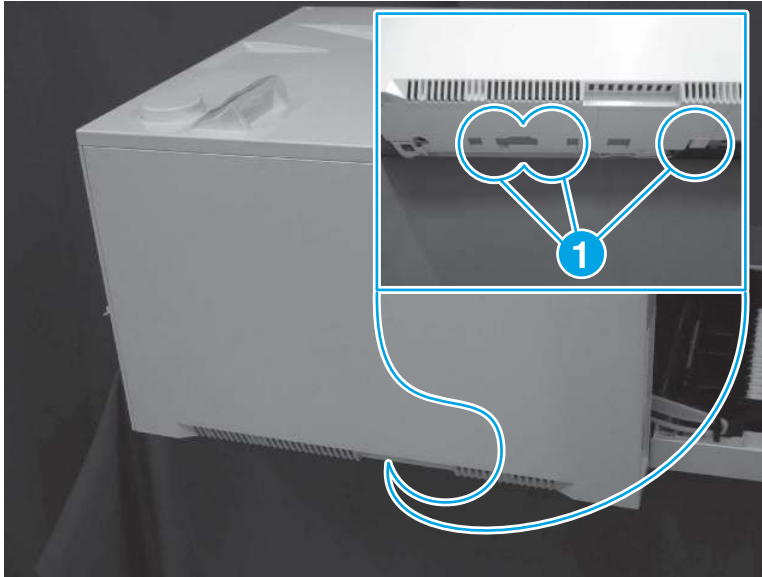
1. Remove one screw (callout 1).

Figure 5-274 Remove one screw



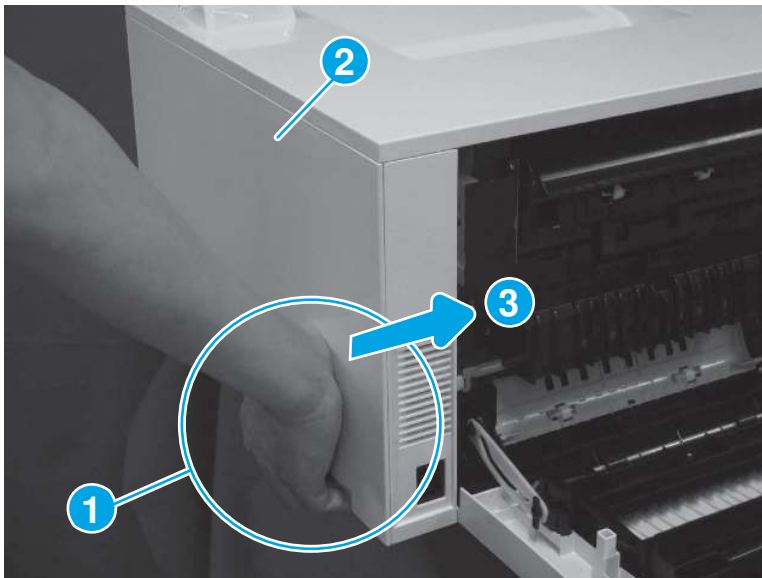
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-275 Release three tabs



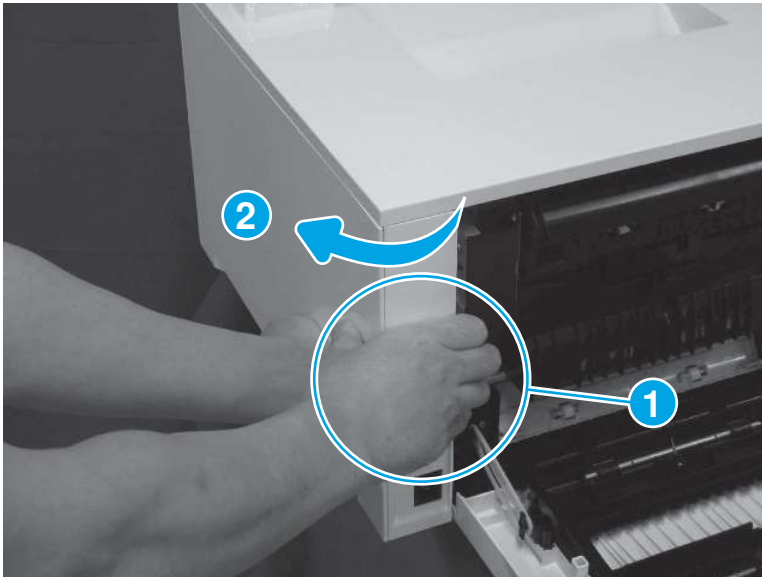
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-276 Release the rear cover corner



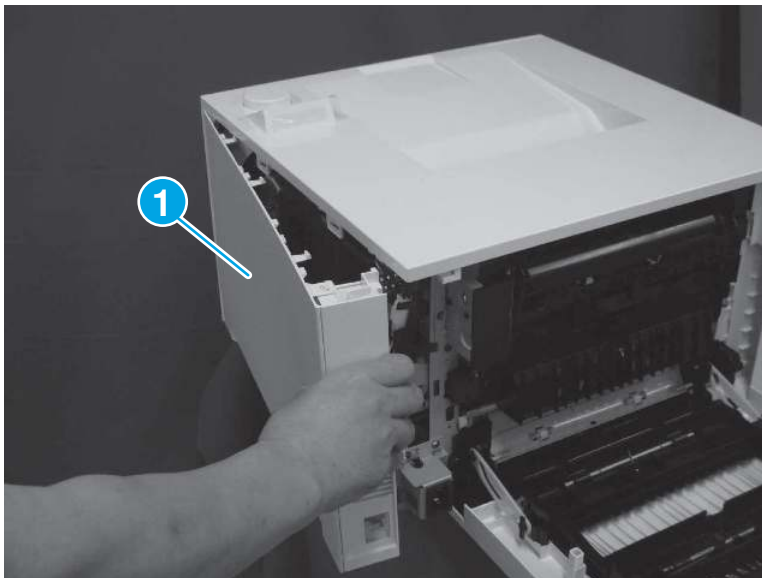
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-277 Disengage the cover corner




5. Remove the right cover (callout 1).

Figure 5-278 Remove the cover



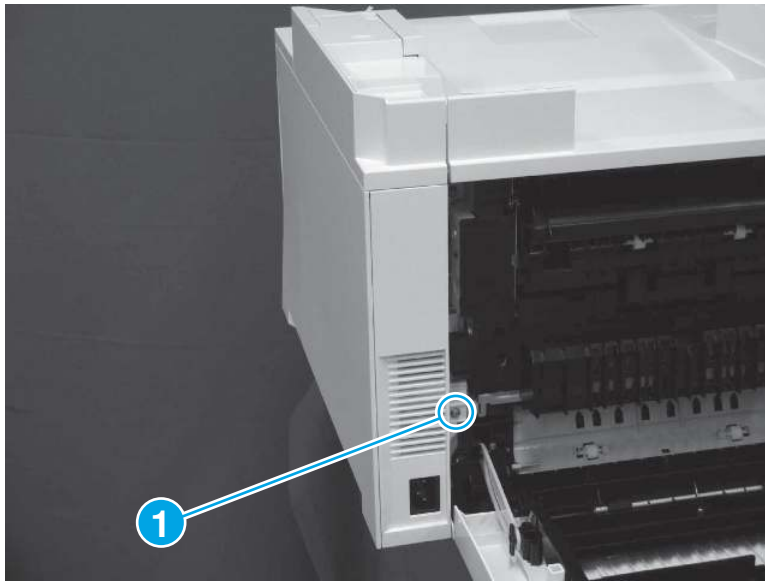
4. Remove the right cover (MFP)

Follow the procedure below to remove and replace the right cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

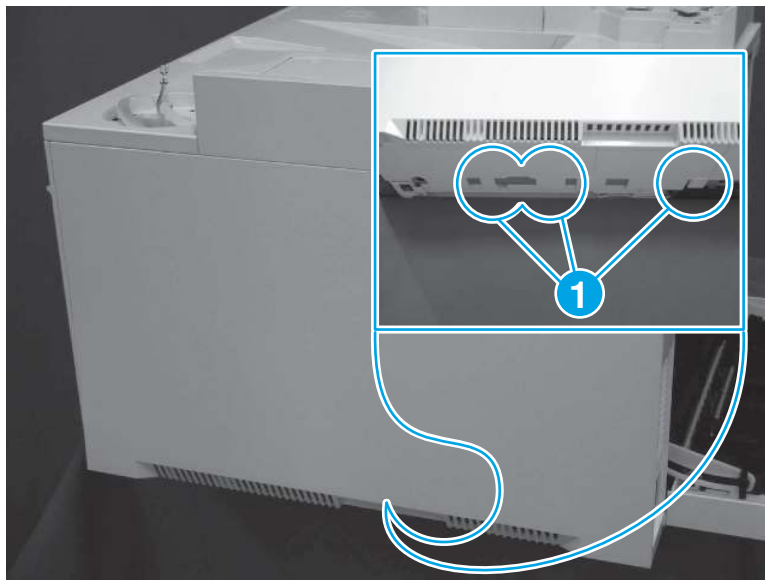
1. Remove one screw (callout 1).

Figure 5-279 Remove one screw



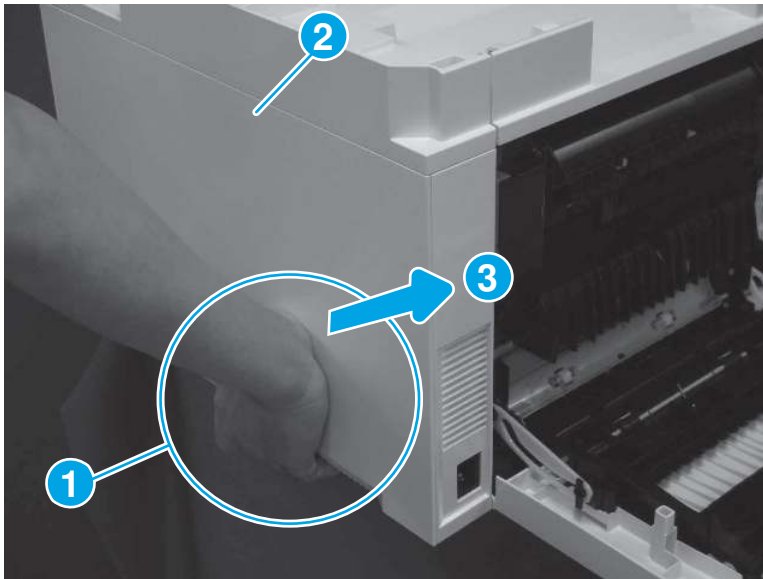
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-280 Release three tabs



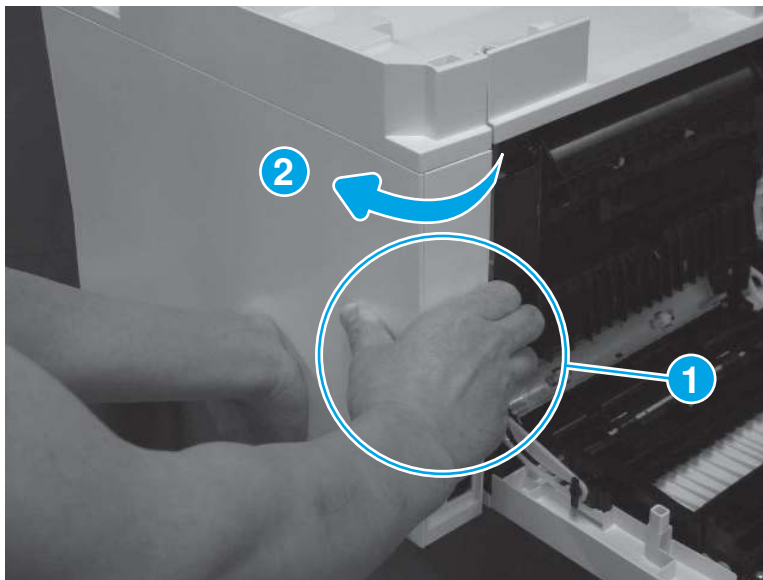
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-281 Release the rear cover corner



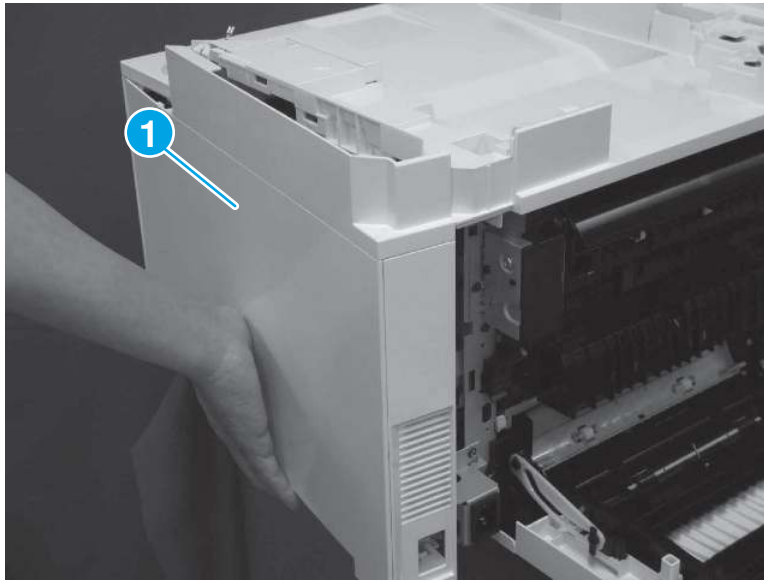
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-282 Disengage the cover corner



5. Remove the right cover (callout 1).

Figure 5-283 Remove the cover



5. Remove the MP paper feed assembly

Follow the procedure below to remove the MP paper feed assembly.

1. Position the printer with the rear-door side down.

Figure 5-284 Position the printer



2. Press the green button to release the assembly.

Figure 5-285 Release the assembly



3. Slide the assembly up (callout 1), and then toward the right-side of the printer (callout 2) to remove it.


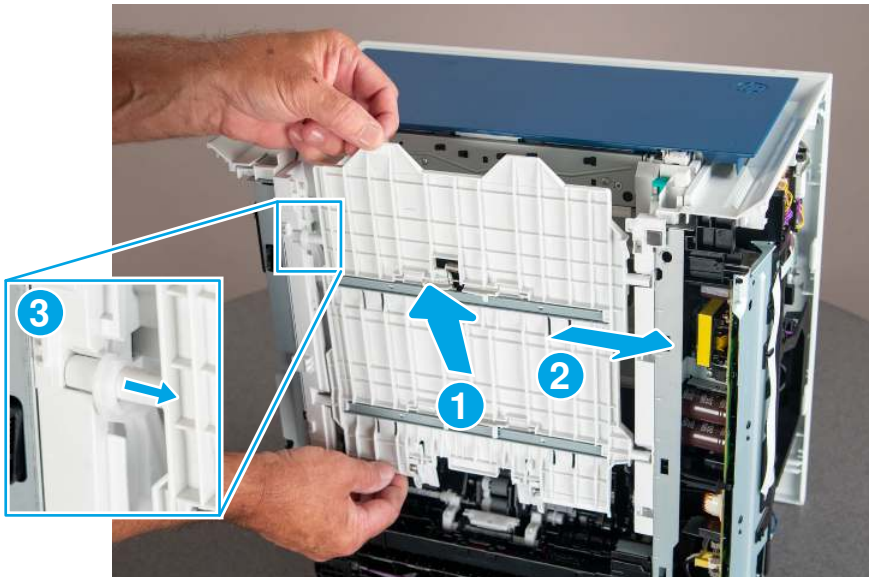
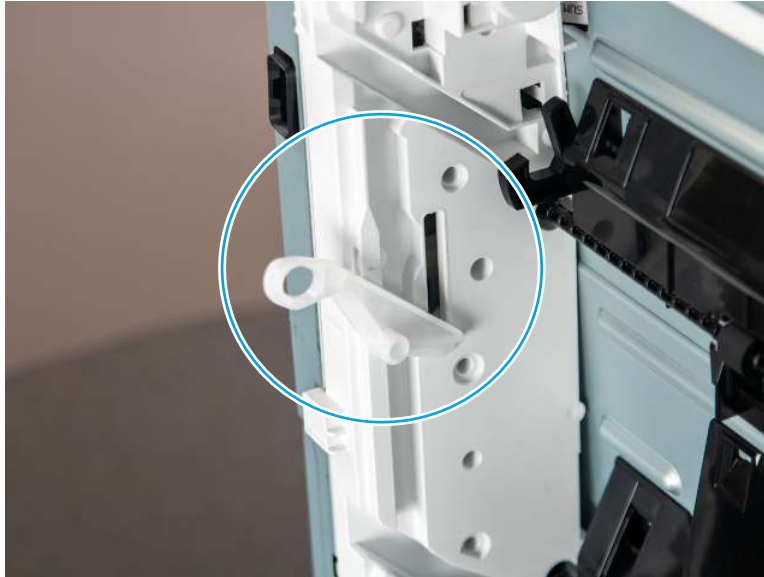
 **NOTE:** There is a retainer arm (callout 3) on one of the assembly legs. Carefully disengage the retainer arm and leg when removing the assembly.

Figure 5-286 Remove the assembly



4. If the retainer arm becomes dislodged, reinstall it as shown below.

Figure 5-287 Install the retainer arm



6. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Tray 1 pickup roller assembly

Learn about Tray 1 pickup roller assembly removal.



[View a video of removing and replacing the Tray 1 pickup roller assembly.](#)

Mean time to repair: 2 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-23 Part information

Part number	Part description
RM2-2758-000CN	Multipurpose feed assembly

Required tools

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

After performing service

Turn the printer power on

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

Post service test

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

1. Remove the Tray 1 pickup roller assembly

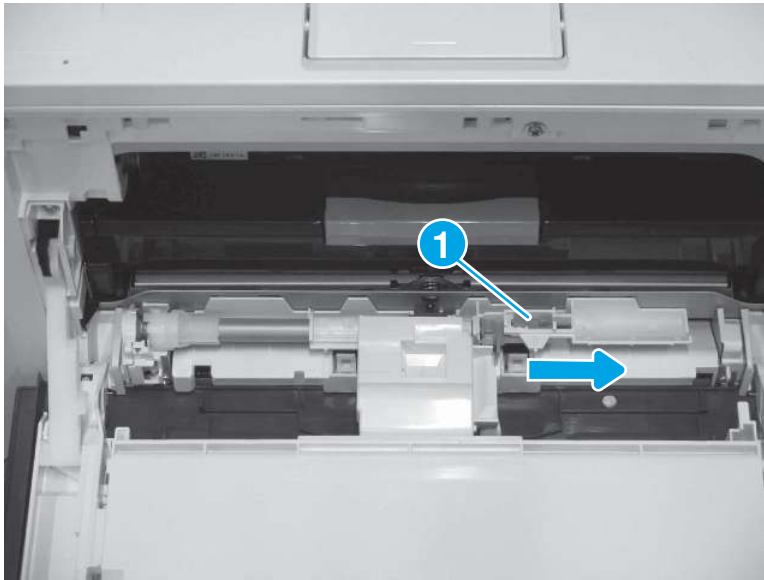
Follow the procedure below to remove and replace the Tray 1 pickup roller assembly.



Reinstallation tip: Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

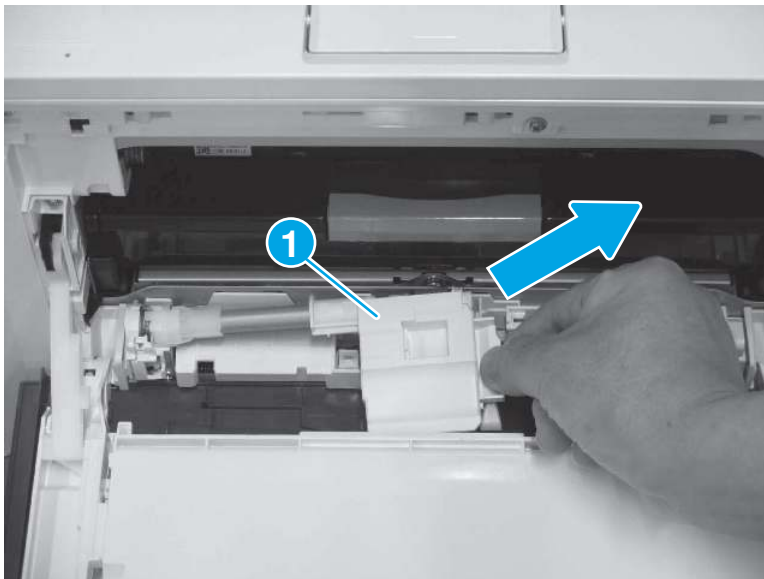
1. Open the cartridge door, and then depress the lever (callout 1) and slide it as shown below.

Figure 5-288 Release the Tray 1 pickup roller assembly



2. Slide the pickup roller assembly (callout 1) as shown below to remove it.

Figure 5-289 Remove the Tray 1 pickup roller assembly



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

3. Special installation instructions - Tray 1 pickup roller assembly

Follow the special instructions below to install the Tray 1 pickup roller assembly.

- When the Tray 1 pickup roller assembly (callout 1) is installed, make sure that the alignment tab (callout 2) is in the slot (callout 3) on the assembly shaft.


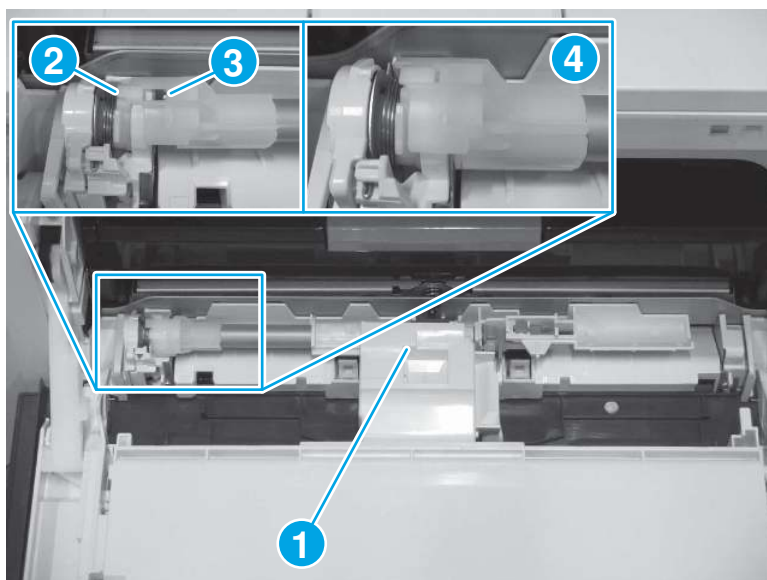
TIP:  When correctly installed, the tab fits completely into the slot (callout 4).

Figure 5-290 Install the Tray 1 pickup roller assembly



Removal and replacement: Tray 1 separation roller

Learn about Tray 1 separation roller assembly removal.



[View a video of removing and replacing the Tray 1 separation roller assembly.](#)

Mean time to repair: 3 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-24 Part information

Part number	Part description
RM2-2692-000CN	Separation roller assembly (Tray1/2/3)

Required tools

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

After performing service

Turn the printer power on

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

Post service test

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

1. Remove the Tray 1 pickup roller assembly

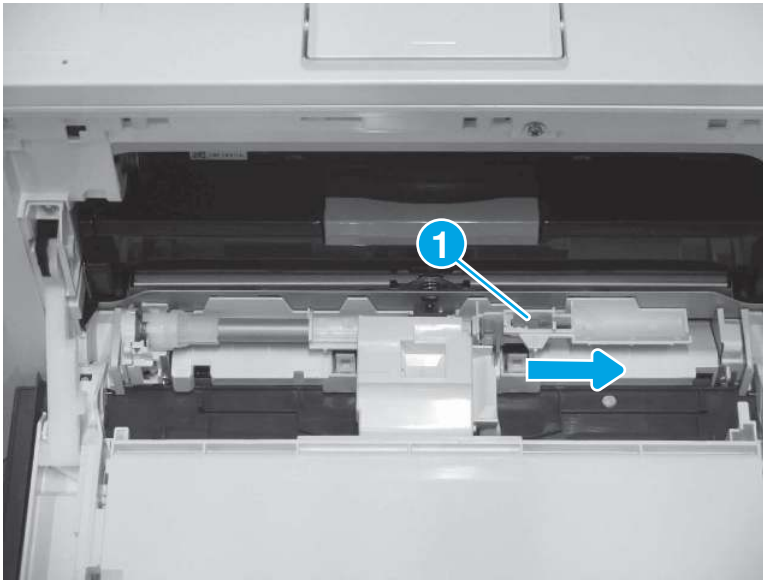
Follow the procedure below to remove and replace the Tray 1 pickup roller assembly.



Reinstallation tip: Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

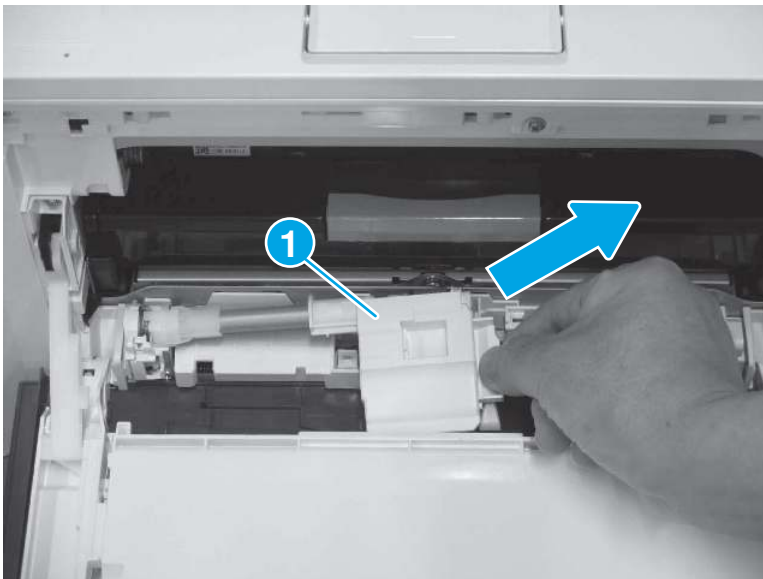
1. Open the cartridge door, and then depress the lever (callout 1) and slide it as shown below.

Figure 5-291 Release the Tray 1 pickup roller assembly



2. Slide the pickup roller assembly (callout 1) as shown below to remove it.

Figure 5-292 Remove the Tray 1 pickup roller assembly

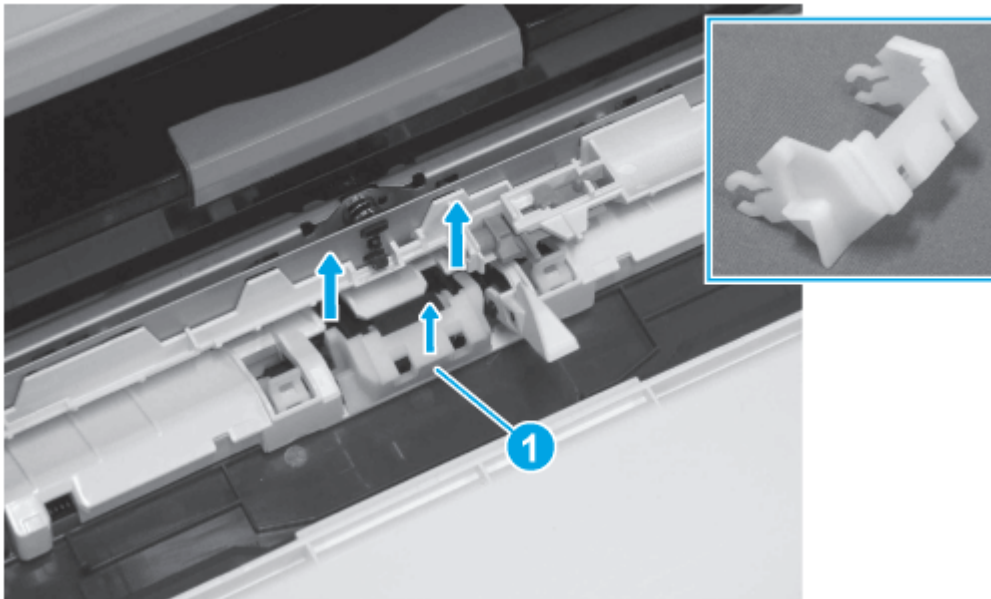


2. Remove the Tray 1 separation roller assembly

Follow the procedure below to remove and replace the Tray 1 separation roller assembly.

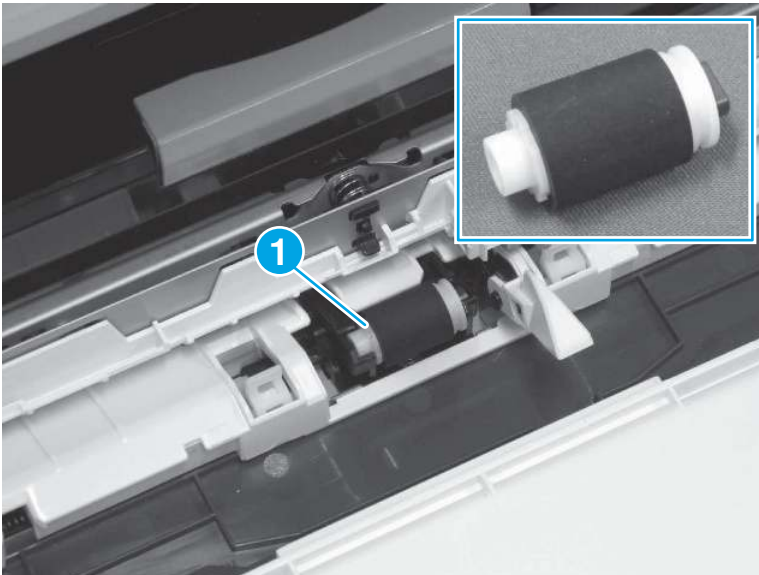
1. Pull up on the guide (callout 1) to remove it.

Figure 5-293 Remove the guide



2. Remove the Tray 1 separation roller (callout 1).

Figure 5-294 Remove the Tray 1 separation roller



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

4. Special installation instructions - Tray 1 pickup roller assembly

Follow the special instructions below to install the Tray 1 pickup roller assembly.

- When the Tray 1 pickup roller assembly (callout 1) is installed, make sure that the alignment tab (callout 2) is in the slot (callout 3) on the assembly shaft.


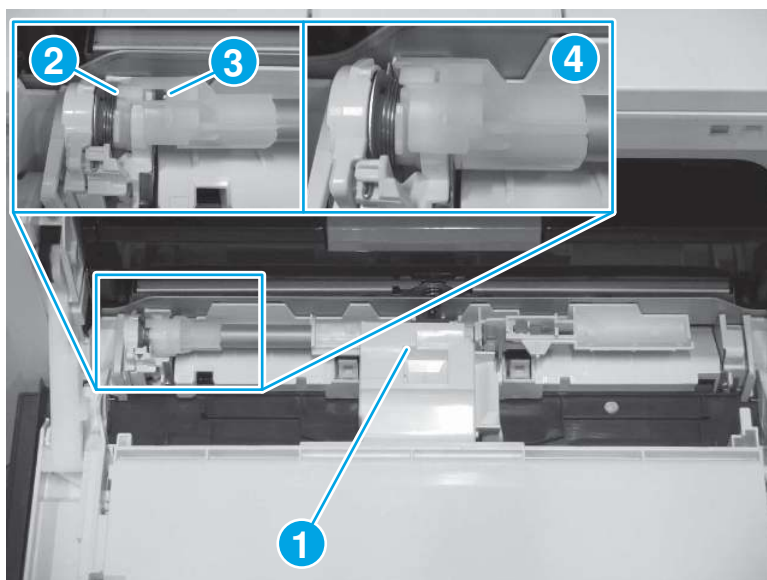
TIP:  When correctly installed, the tab fits completely into the slot (callout 4).

Figure 5-295 Install the Tray 1 pickup roller assembly



Removal and replacement: Tray 2 pickup and feed rollers

Learn about Tray 2 pickup and feed rollers assembly removal.



[View a video of removing and replacing the Tray 2 pickup and feed rollers.](#)

Mean time to repair: 4 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-25 Part information

Part number	Part description
RM2-2695-000CN	Paper pickup roller assembly

NOTE: RM2-2695-000CN includes both the pickup and feed rollers (identical parts).

Required tools

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

After performing service

Turn the printer power on

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

Post service test

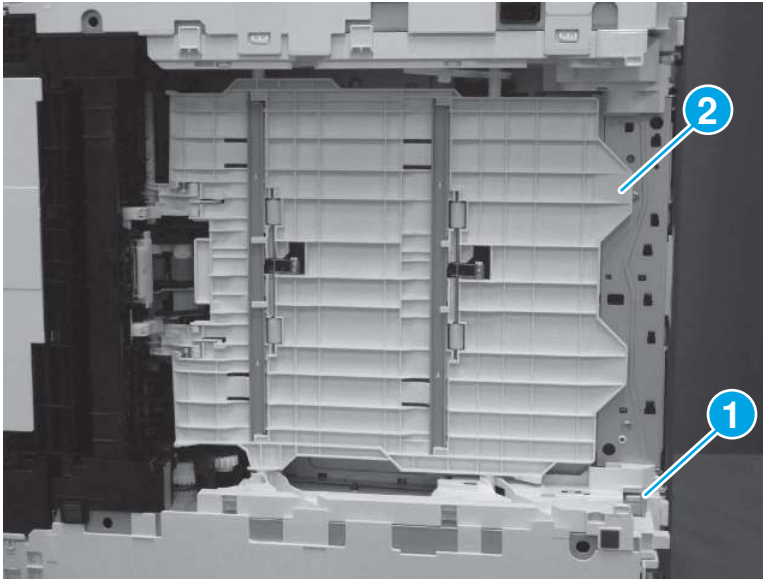
Print any pages necessary to make sure the printer is functioning correctly.

1. Remove the Tray 2 pickup and feed rollers

Follow the procedure below to remove and replace the Tray 2 pickup and feed rollers.

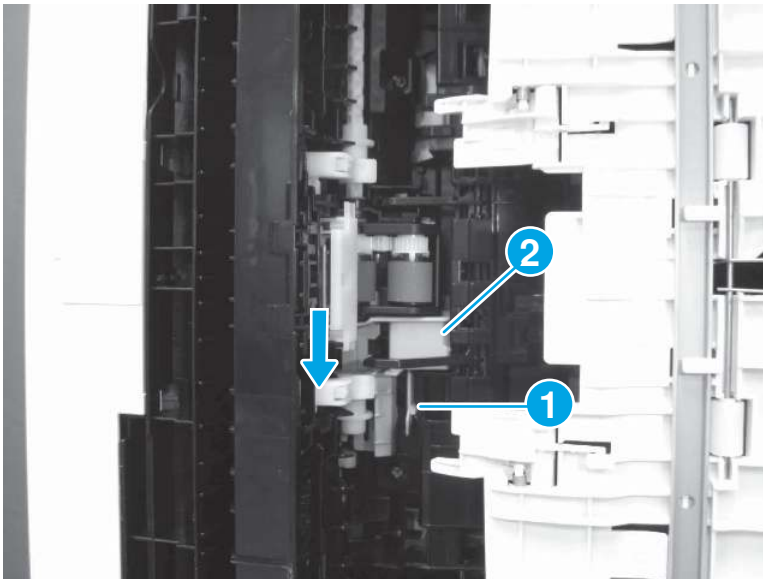
1. Position the printer on its left side, press the lever (callout 1) to release the MP feed guide (callout 2).

Figure 5-296 Release the MP tray guide



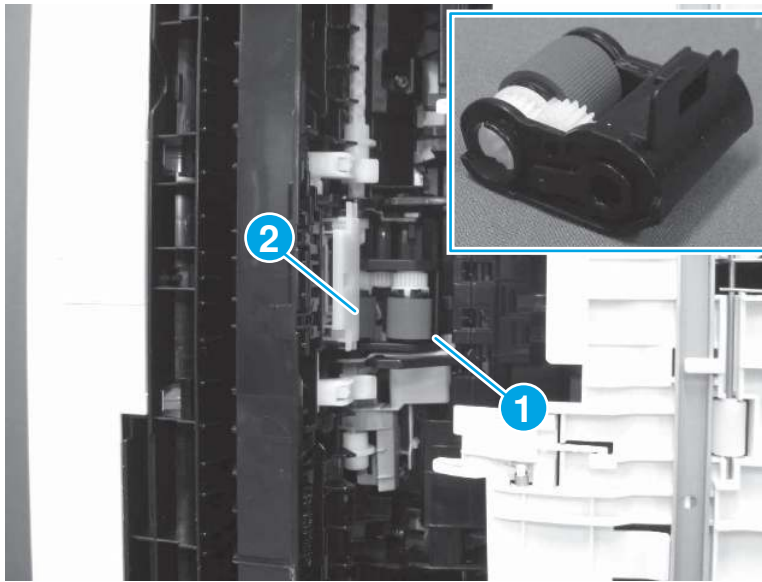
2. Push the lever (callout 1) and move the holder (callout 2) as shown below.

Figure 5-297 Move the holder



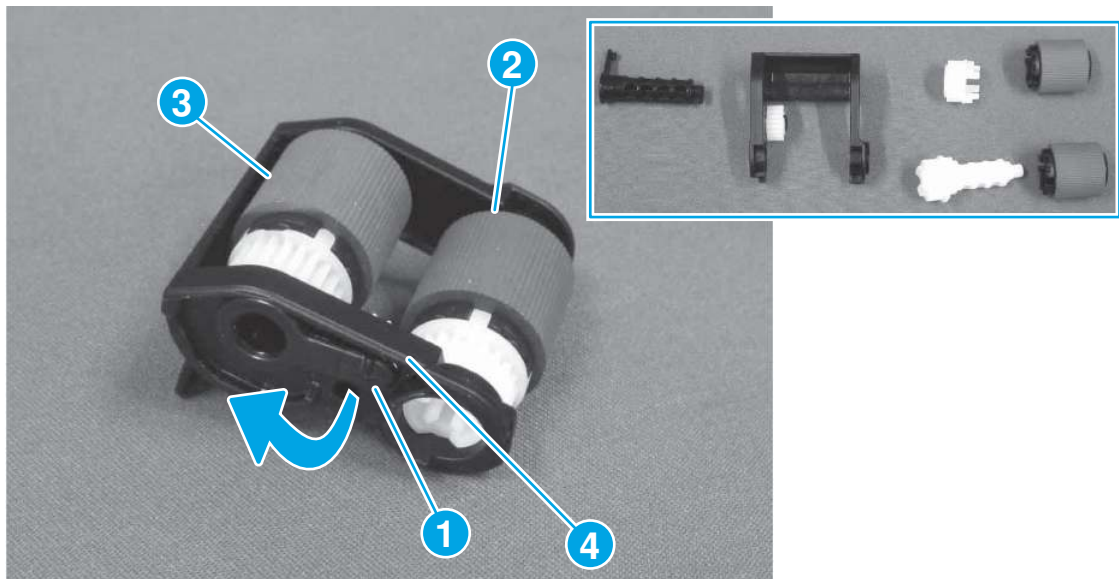
3. Remove the pickup roller (callout 1) and feed roller (callout 2) as an assembly.

Figure 5-298 Remove the roller assembly



4. Do the following:
 - a. Rotate the retainer (callout 1) as shown below to remove it.
 - b. Remove the pickup roller (callout 2) and the feed roller (callout 3) from the holder (callout 4).

Figure 5-299 Remove the rollers



2. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Tray 2 separation roller

Learn about Tray 2 separation roller assembly removal.

 [View a video of removing and replacing the Tray 2 separation roller.](#)


Mean time to repair: 5 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-26 Part information

Part number	Part description
RM2-2692-000CN	Separation roller assembly (Tray1/2/3)

Required tools

- Small flat-blade screwdriver

After performing service

Turn the printer power on

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

Post service test

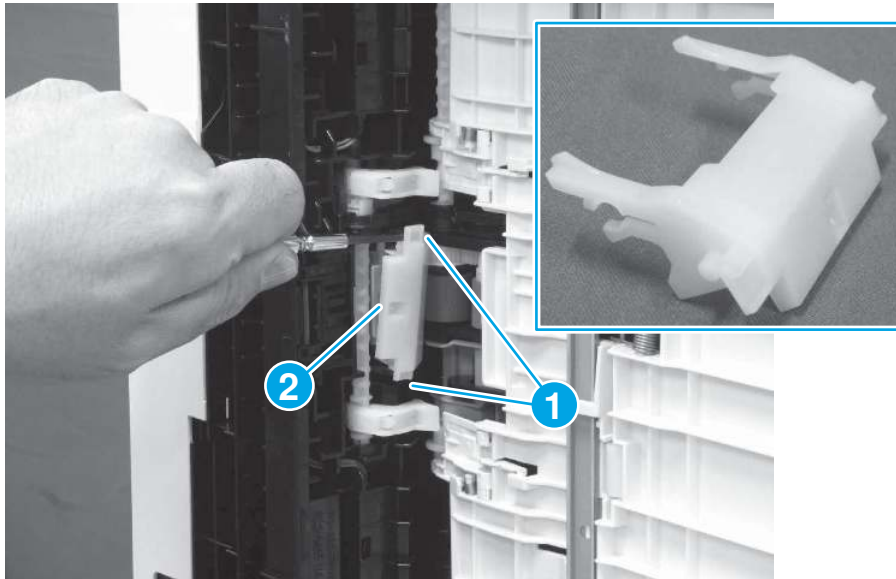
Print any pages necessary to make sure the printer is functioning correctly.

1. Remove the Tray 2 separation roller

Follow the procedure below to remove and replace the Tray 2 separation roller.

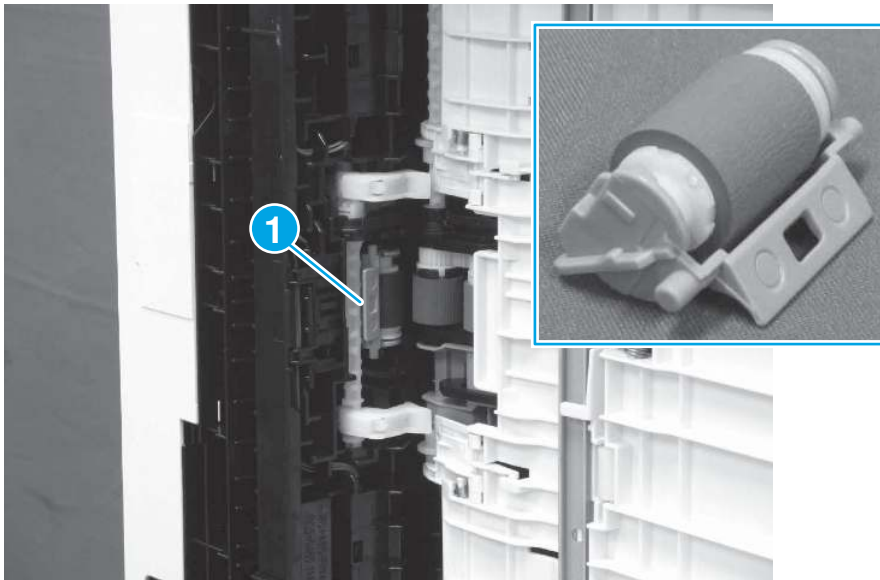
1. Position the printer on its left side, use a small flat-blade screwdriver to release two tabs (callout 1), and then remove the guide (callout 2).

Figure 5-300 Remove the guide



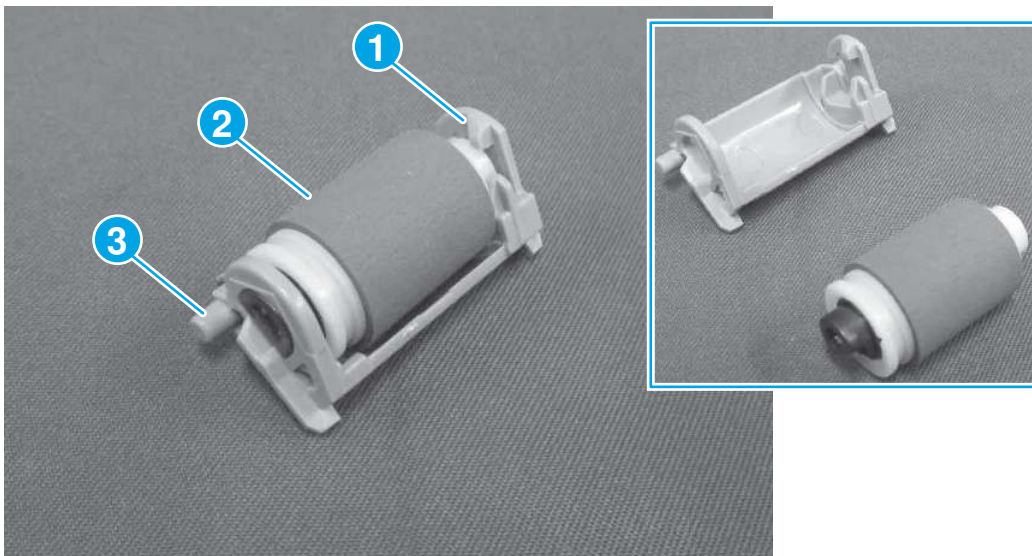
2. Remove the Tray 2 separation roller assembly (callout 1).

Figure 5-301 Move the roller assembly



3. Release one tab (callout 1), and then remove the roller (callout 2) from the holder (callout 3).

Figure 5-302 Disassemble the roller assembly



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.



1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Secondary transfer roller (T2)

Learn about T2 roller removal.


Mean time to repair: 3 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-27 Part information

Part number	Part description
RM2-6455-000CN	Secondary transfer roller assembly

Required tools

- Small flat-blade screwdriver

After performing service

Turn the printer power on

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

Post service test

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

1. Remove the secondary transfer roller (T2)

Follow the procedure below to remove and replace the T2 roller.

- Do the following:
 - a. Open the rear door, and then release two tabs (callout 1)
 - b. Pull on the bushing (callout 2) to release it.

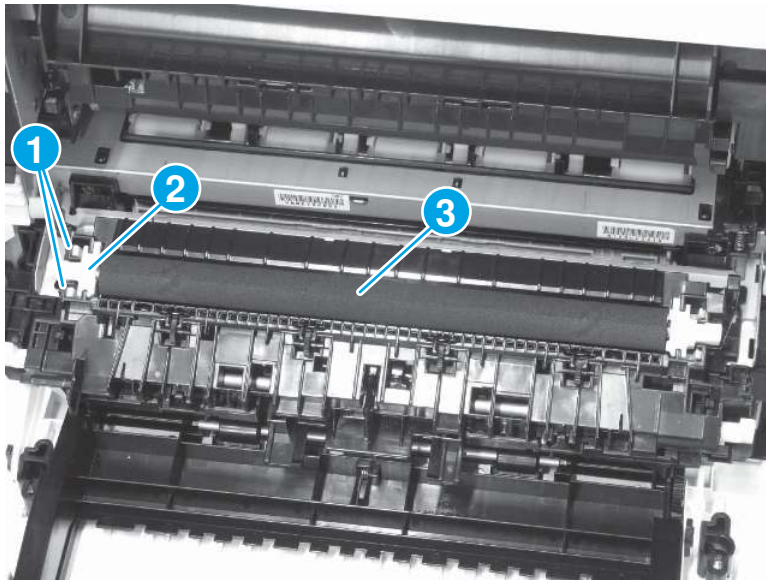
⚠ CAUTION: There is a non-captive spring located under the bushing. When the bushing is removed from the holder the spring might still be attached to the bushing. Do not lose the spring while handling the assembly.

- c. Remove the T2 roller.

📌 IMPORTANT: For a replacement t2 roller: Do not touch the spongy portion of the roller. Skin oils on the roller can cause paper-handling and print-quality problems. HP recommends using disposable gloves or thoroughly washing your hands before handling the assembly.

📌 NOTE: Do not discard the two white plastic bushings (located on the left- and right-ends of the roller shaft). These bushings are not included with the replacement assembly.

Figure 5-303 Remove the roller



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Secondary transfer roller (T2) assembly

Learn about T2 assembly removal.

Mean time to repair: 5 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.



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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-28 Part information

Part number	Part description
RM2-2755-000CN	Secondary transfer feed assembly

Required tools

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

After performing service

Turn the printer power on

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

Post service test

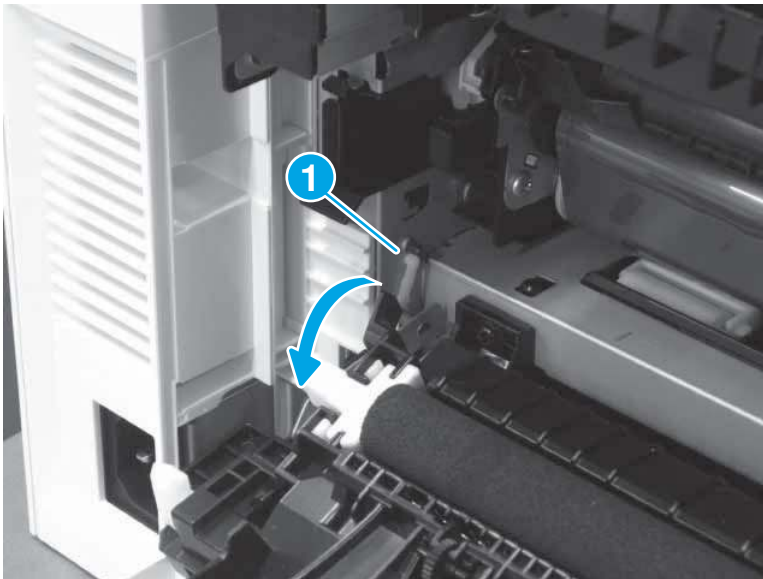
Print any pages necessary to make sure the printer is functioning correctly.

1. Remove the secondary transfer roller (T2) assembly

Follow the procedure below to remove and replace the T2 roller assembly.

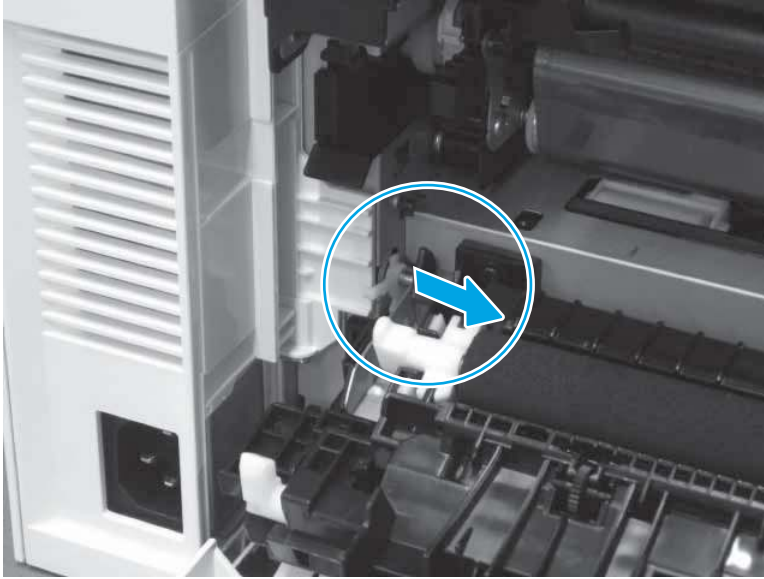
1. Open the rear door, and then rotate the bushing (callout 1) in the direction shown below.

Figure 5-304 Rotate the bushing



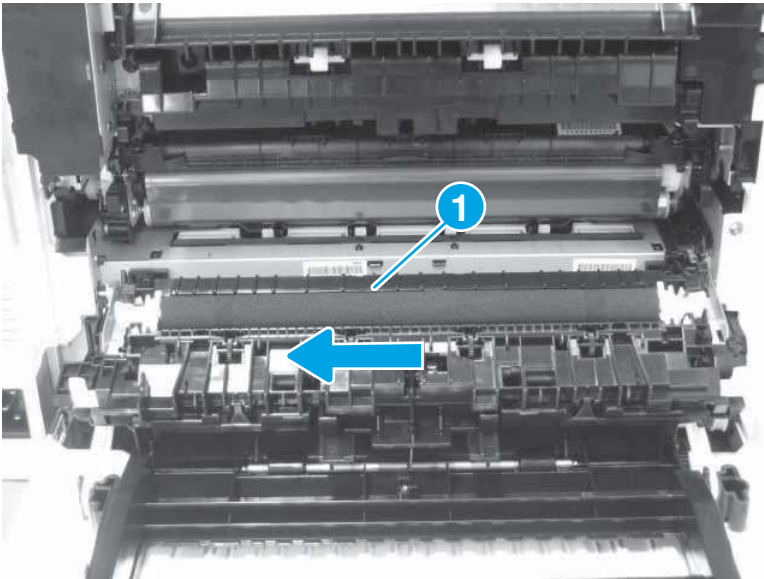
2. Slide the bushing in the direction shown below.

Figure 5-305 Slide the bushing



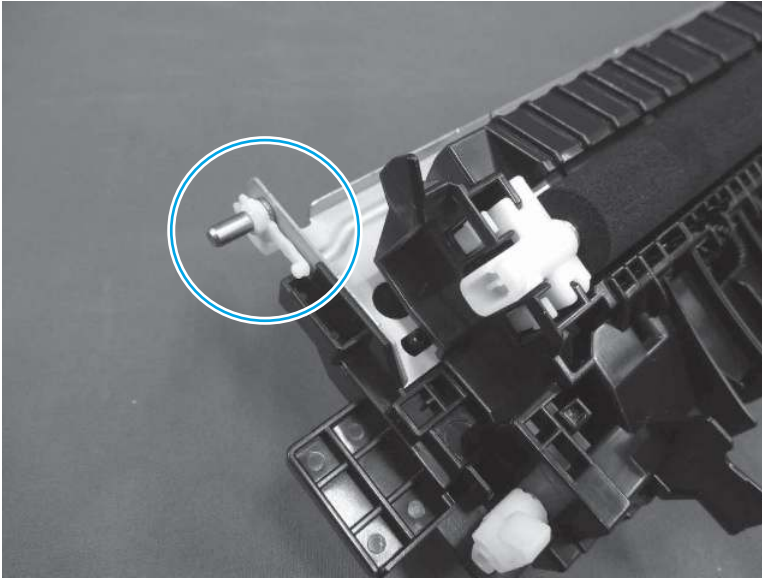
3. Slide the T2 assembly (callout 1) in the direction shown below to remove it.

Figure 5-306 Remove the T2 assembly



4. The bushing shown in the figure below is supplied with the replacement assembly.

Figure 5-307 T2 assembly bushing



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Intermediate transfer belt (ITB)

Learn about ITB removal.



[View a video of removing and replacing the ITB.](#)

Mean time to repair: 5 minutes

Service level: Easy



IMPORTANT: Before ITB removal, do the following:

1. Make sure that the cartridge door and rear door are closed.
2. Turn the printer power on (initial rotation), and then turn the power off.
3. Open the cartridge door and rear door.
4. Pull the cartridge tray out of the printer until it stops.

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-29 Part information

Part number	Part description
RM2-2811-000CN	Intermediate transfer belt

Required tools

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

After performing service

Turn the printer power on


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

Post service test

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

1. Remove the intermediate transfer belt (ITB)

Follow the procedure below to remove and replace the ITB.

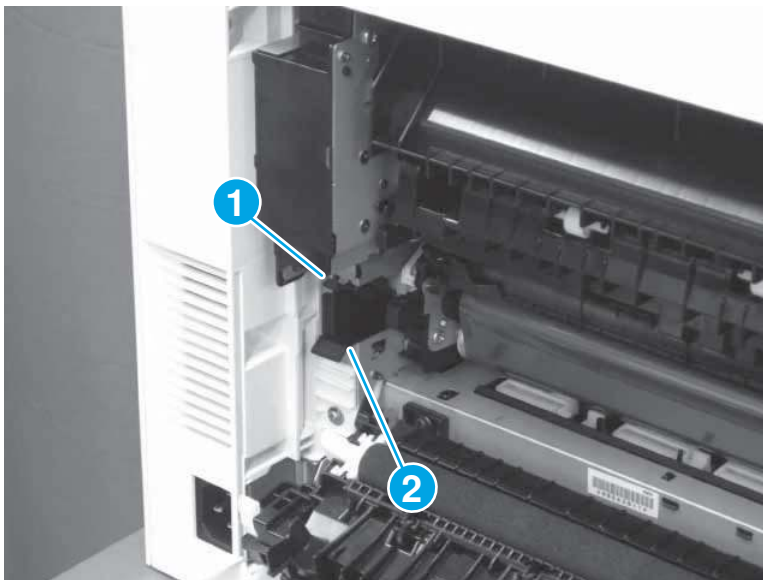
 **IMPORTANT:** Before ITB removal, do the following:

1. Make sure that the cartridge door and rear door are closed.
2. Turn the printer power on (initial rotation), and then turn the power off.
3. Open the cartridge door and rear door.
4. Pull the cartridge tray out of the printer until it stops.

Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

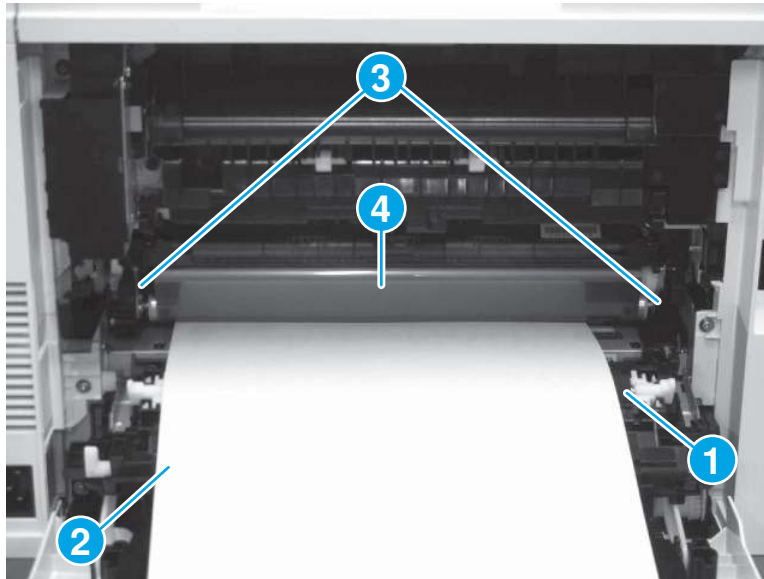
1. Press the tab (callout 1) while pulling out on the coupling release lever (callout 2).

Figure 5-308 Pull the coupling release lever out



2. Do the following:
 - a. Cover the secondary transfer (T2) roller (callout 1) with a sheet of clean paper (callout 2).
 - b. Grasp the left- and right-side ITB grips (callout 3), and then pull the ITB (callout 4) straight out of the printer to remove it.

Figure 5-309 Remove the ITB



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

3. Special installation instructions - ITB

Follow the special instructions below to install the ITB.

Before installing the ITB, use the steps below do the following:

- Make sure that the drive gear on the ITB and the gear inside the printer are correctly aligned (in phase) with each other (see step 1).
- For a replacement ITB, use the control-panel menus to reset the firmware counter (see step 2).

1. Check the gear alignment.

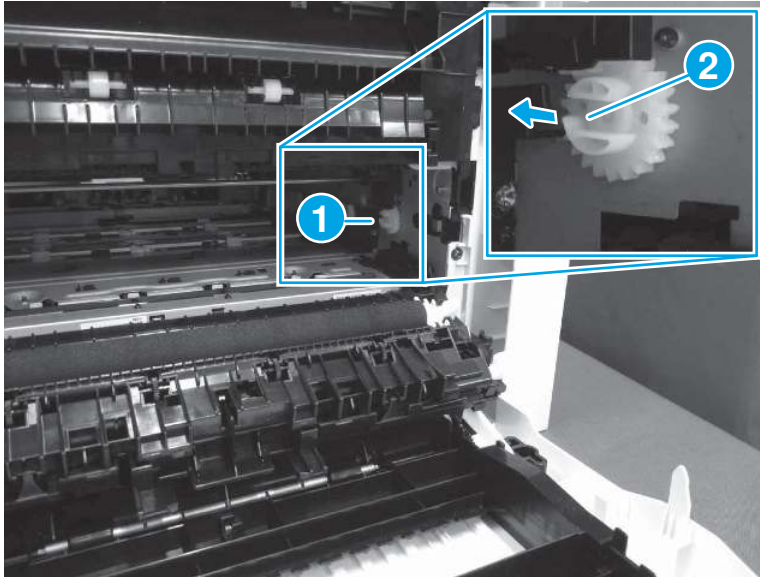
- a.** Make sure that the gear (callout 1) inside the printer is positioned with the gear rib (callout 2) away from the rear door opening.



NOTE: If the gear is not positioned correctly, do the following:

1. Make sure that the cartridge door and rear door are closed.
2. Turn the printer power on (initial rotation), and then turn the power off.

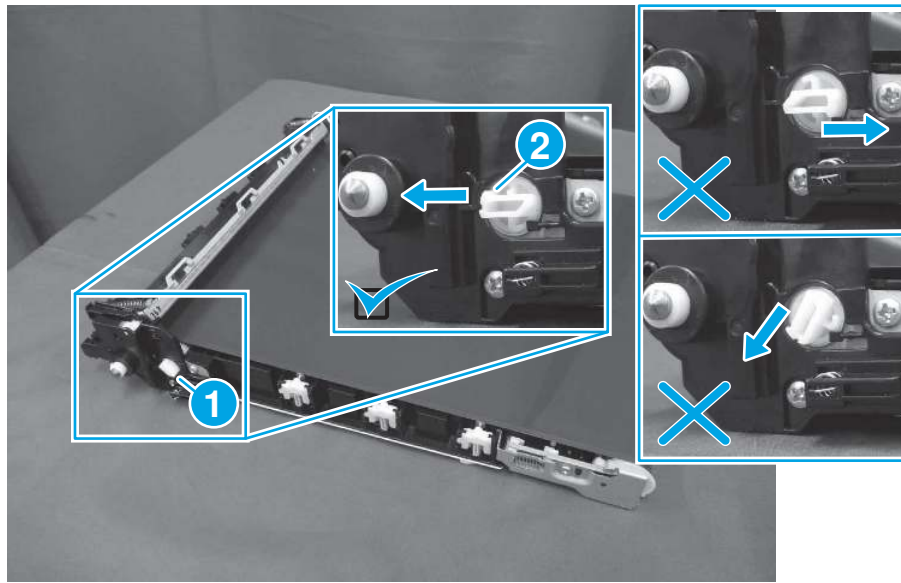
Figure 5-310 Check the ITB printer gear




- b.** Make sure that the gear (callout 1) on the ITB is positioned with the gear rib (callout 2) towards the handle grip end of the ITB.



NOTE: If the gear is not positioned correctly, rotate the gear to the correct position.:




2. Reset the firmware counter (replacement ITB only).

 **NOTE:** If the ITB was removed to gain access to other assemblies, skip this step.

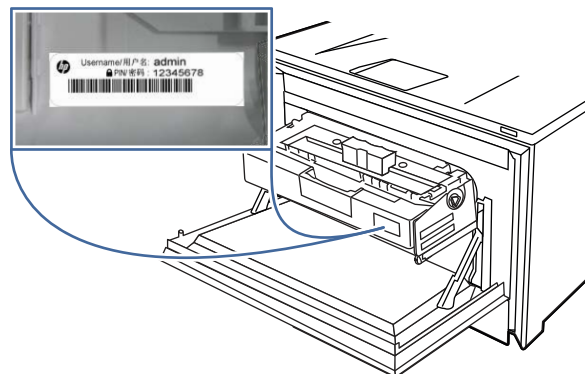
If a **replacement** ITB was installed, perform the steps below to reset the firmware counter.

- a. From the control panel Home screen, open the **Menu** item, and then navigate to and select the **Tools** menu.
- b. Navigate to and select the **Service** menu.
- c. Type in the **Service** menu personal identification number (PIN).

 **NOTE:** The default PIN (for access to the **Service** menu and the printer EWS page) for this printer is located on a sticker adhered to the front of the toner cartridge tray. Use this PIN to open the **Service** menu (or EWS) when prompted.

If the default PIN has been changed, contact the printer administrator to obtain it.

Figure 5-311 Printer default PIN location



- d. Navigate to and select the **Service Resets** menu.

- e. Navigate to and select the [Transfer Kit Resets](#) item, and then select [Resets](#) to initiate the process.

Removal and replacement: Feed motor

Learn about feed motor removal.


Mean time to repair: 6 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-30 Part information

Part number	Part description
RK3-0335-000CN	Motor, stepping DC (feed; M3)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on


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


Post service test

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

1. Remove the left cover (SFP)

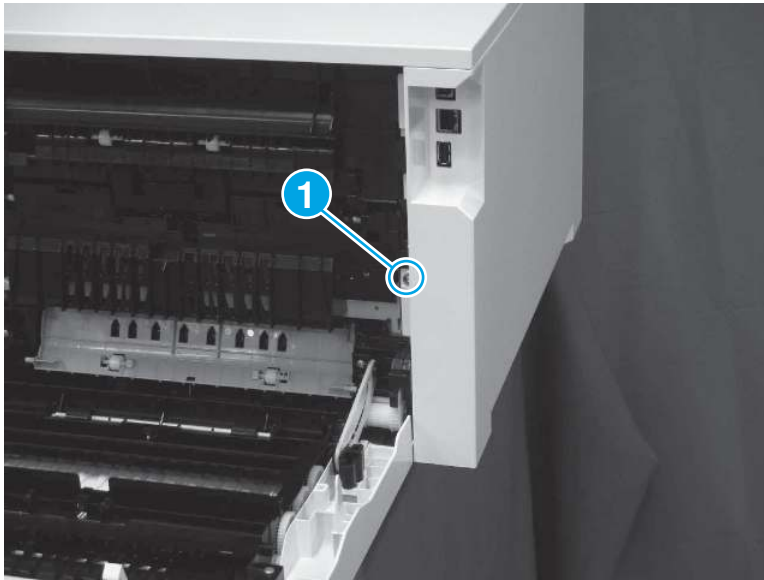
Follow the procedure below to remove and replace the left cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

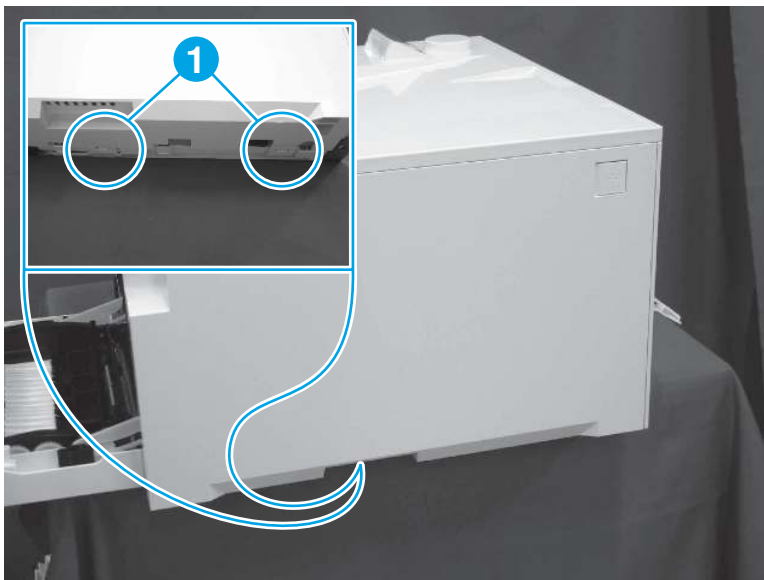
1. Remove one screw (callout 1).

Figure 5-312 Remove one screw



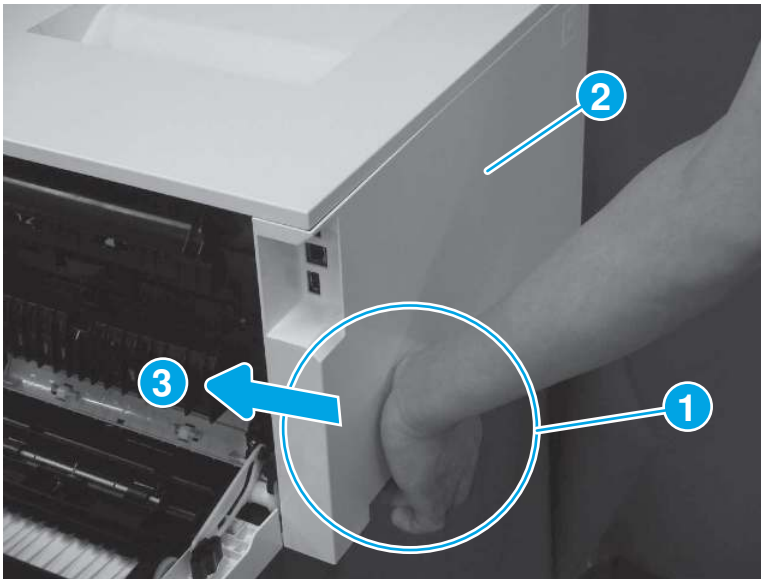
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-313 Release two tabs



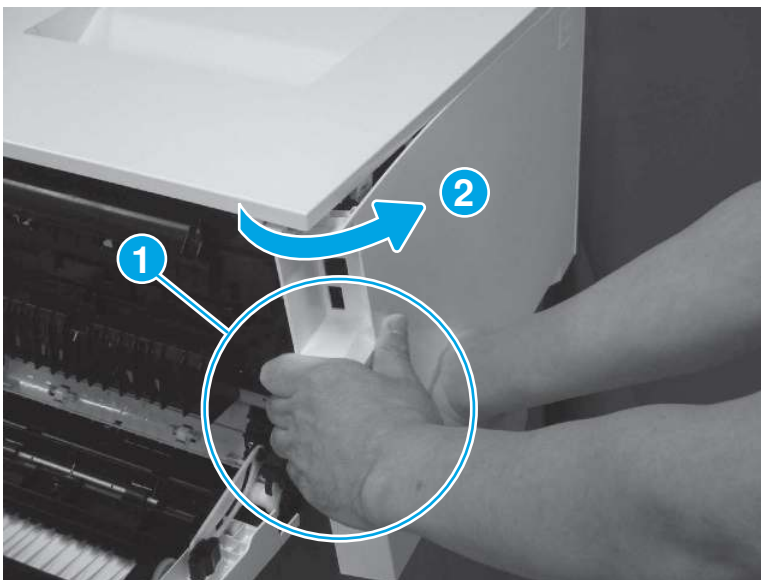
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-314 Release the rear cover corner



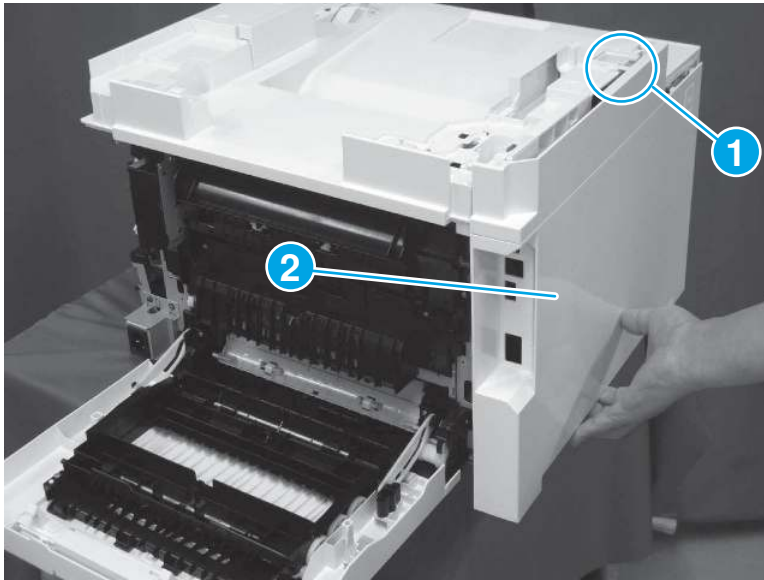
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-315 Disengage the cover corner




5. Remove the left cover (callout 1).


Figure 5-316 Remove the cover



2. Remove the left cover (MFP)

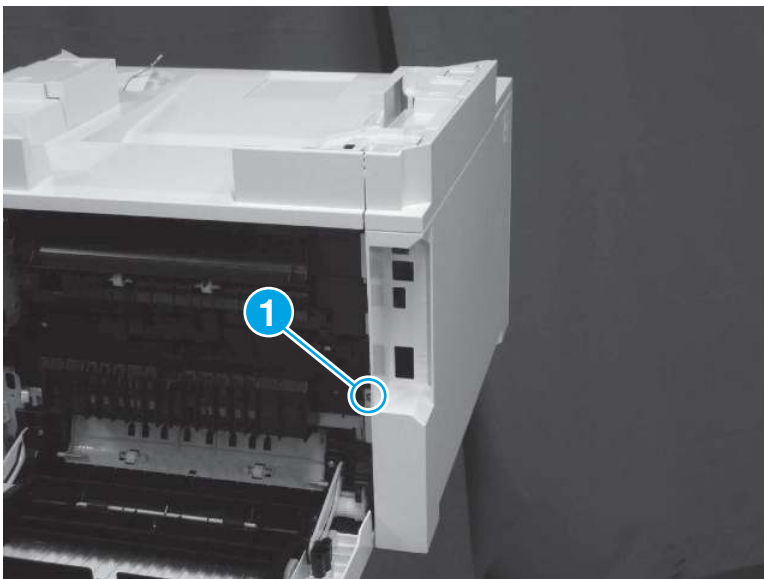
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

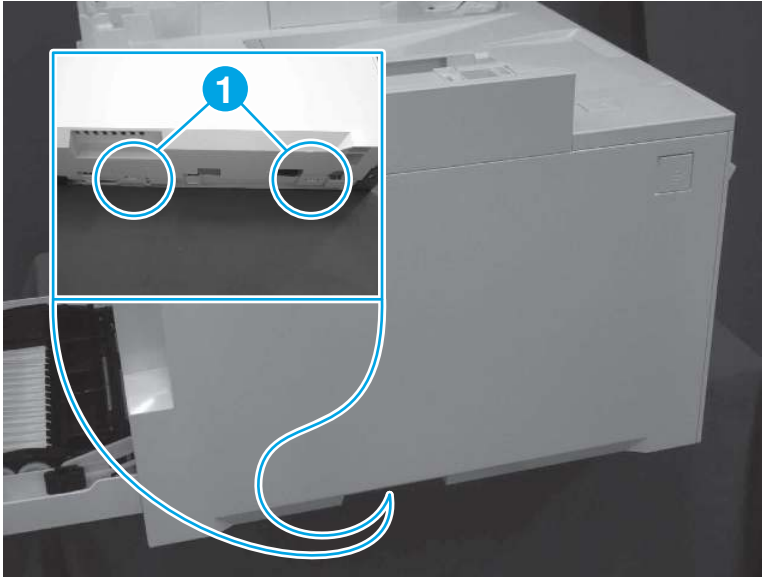
1. Remove one screw (callout 1).

Figure 5-317 Remove one screw



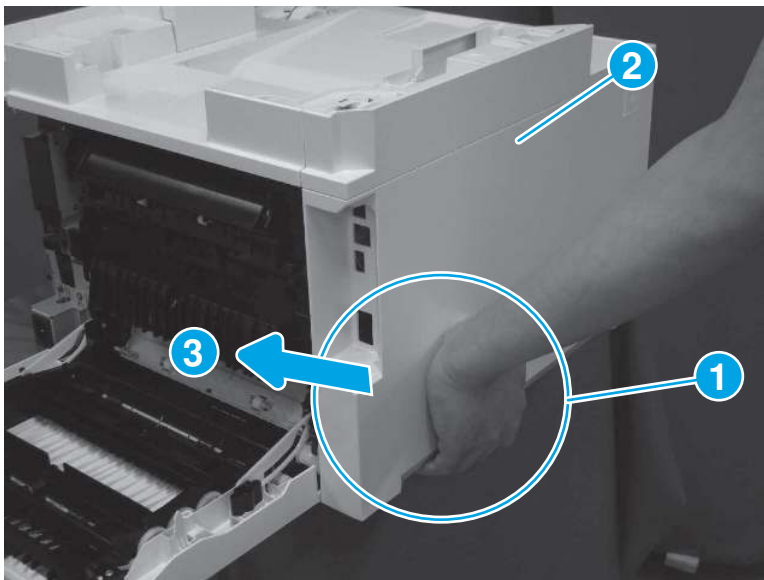
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-318 Release two tabs



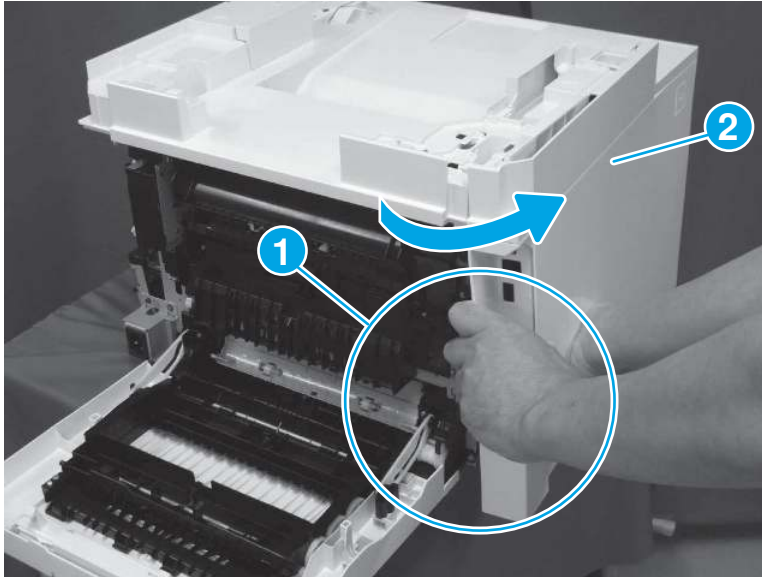
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-319 Release the rear cover corner



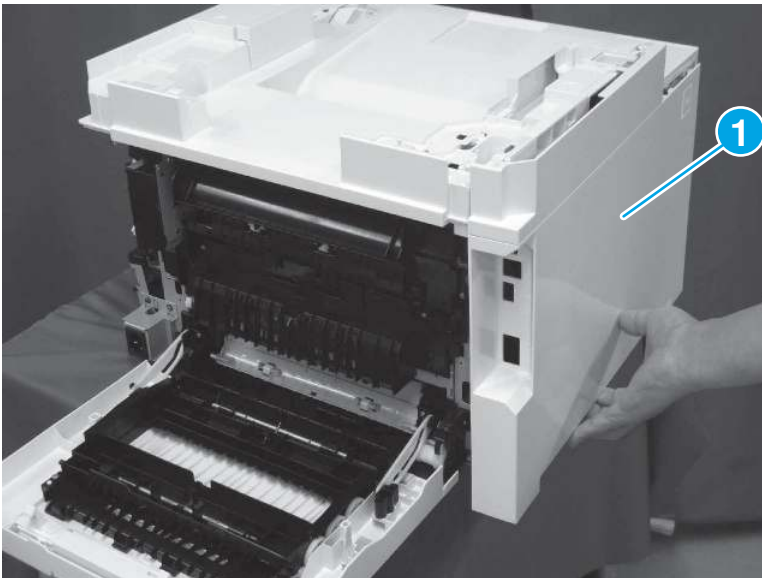
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-320 Disengage the cover corner



5. Remove the left cover (callout 1).

Figure 5-321 Remove the cover

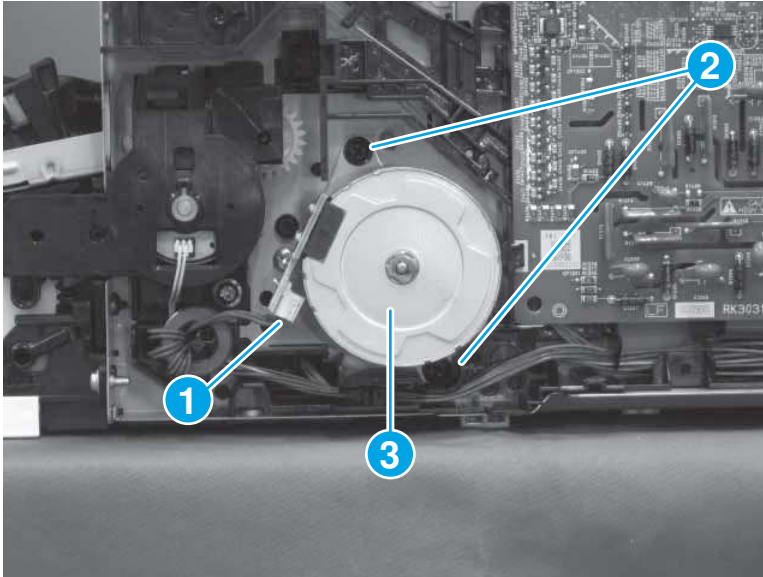


3. Remove the feed motor

Follow the procedure below to remove and replace the feed motor.

- Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).

Figure 5-322 Remove the feed motor



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Drum motor

Learn about drum motor removal.


Mean time to repair: 8 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-31 Part information

Part number	Part description
RM2-2779-000CN	Main motor assembly (drum; M1)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on


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

Post service test

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

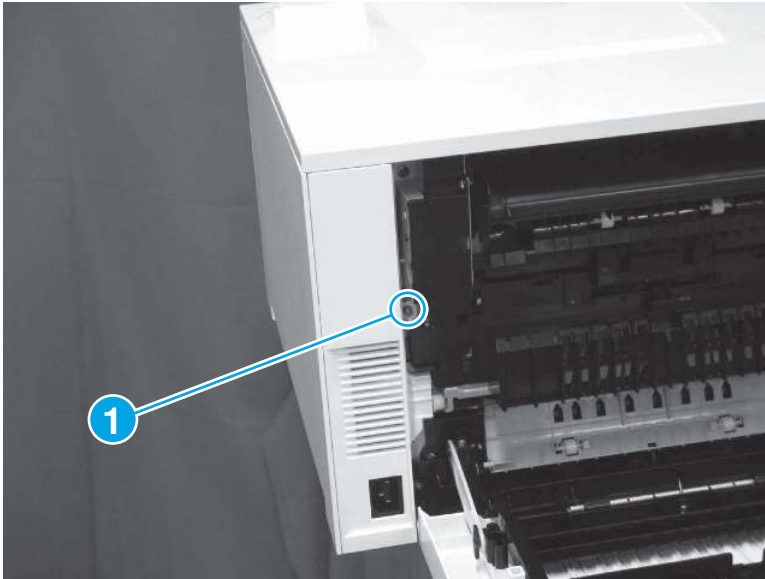
1. Remove the right cover (SFP)

Follow the procedure below to remove and replace the right cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

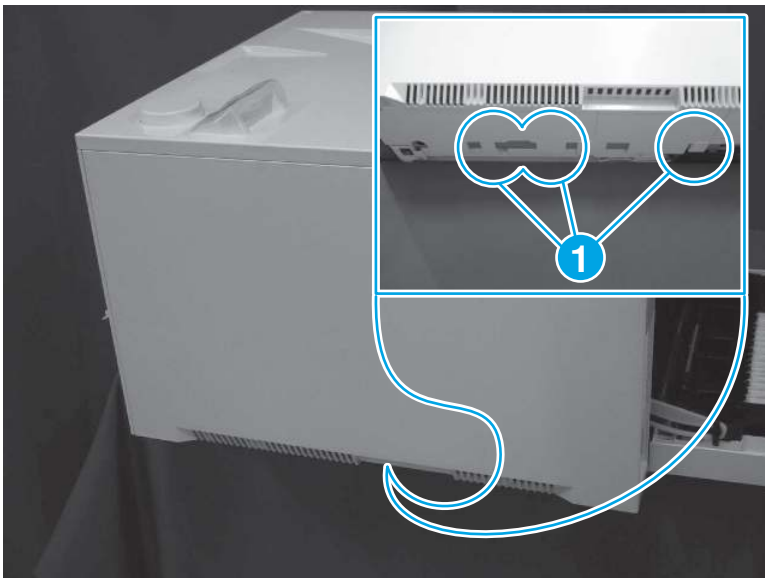
1. Remove one screw (callout 1).

Figure 5-323 Remove one screw



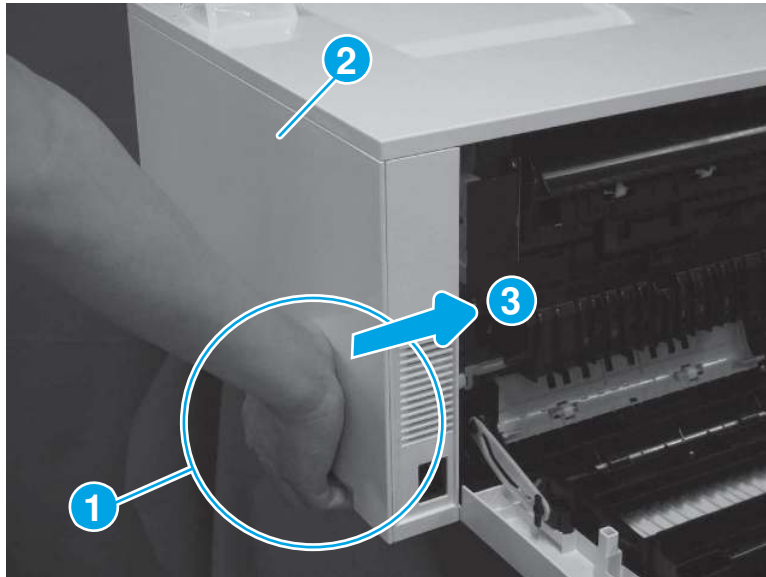
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-324 Release three tabs



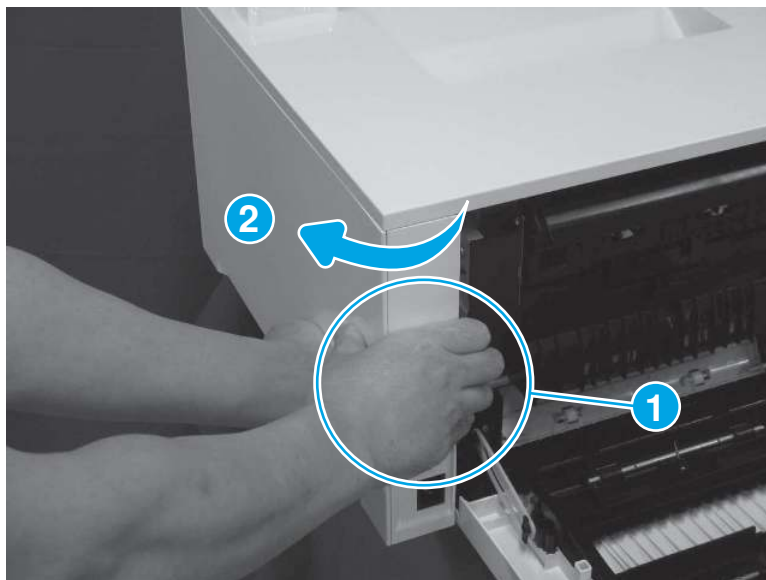
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-325 Release the rear cover corner



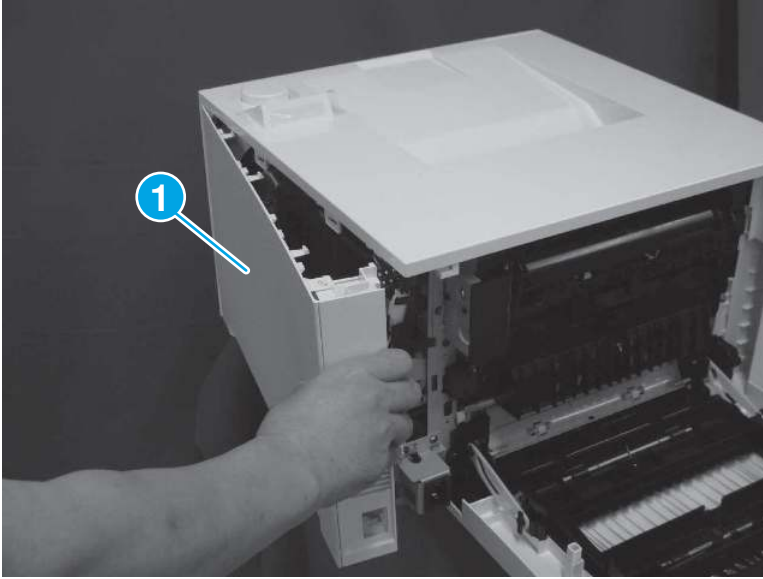
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-326 Disengage the cover corner




5. Remove the right cover (callout 1).

Figure 5-327 Remove the cover



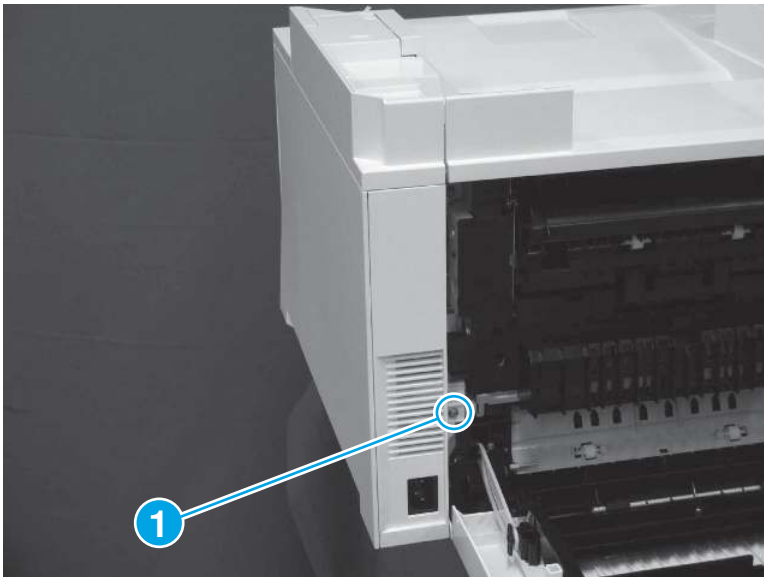
2. Remove the right cover (MFP)

Follow the procedure below to remove and replace the right cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

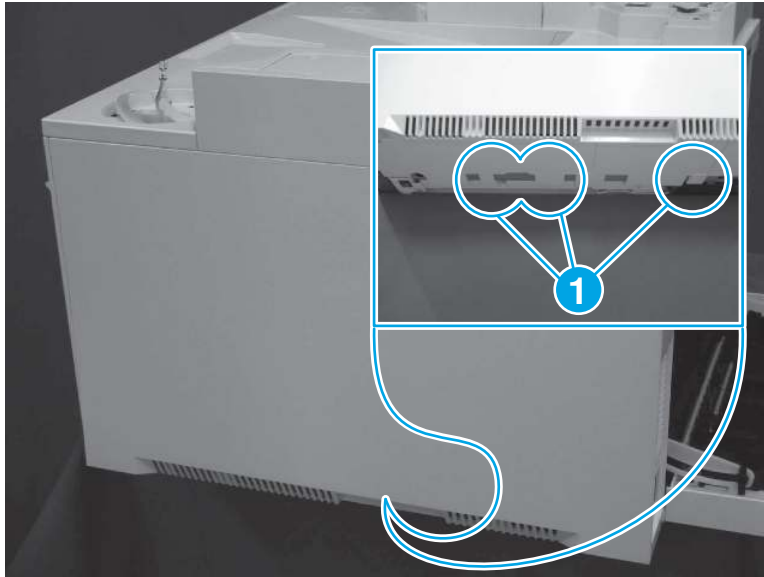
1. Remove one screw (callout 1).

Figure 5-328 Remove one screw



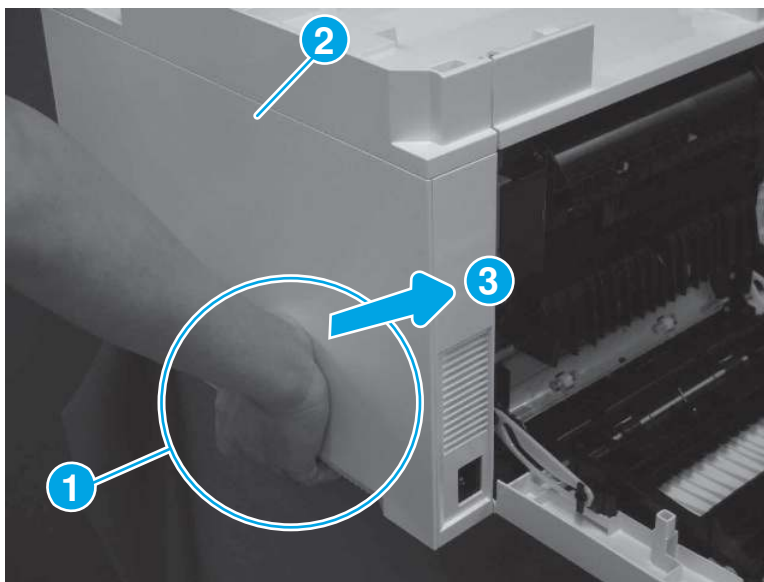
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-329 Release three tabs



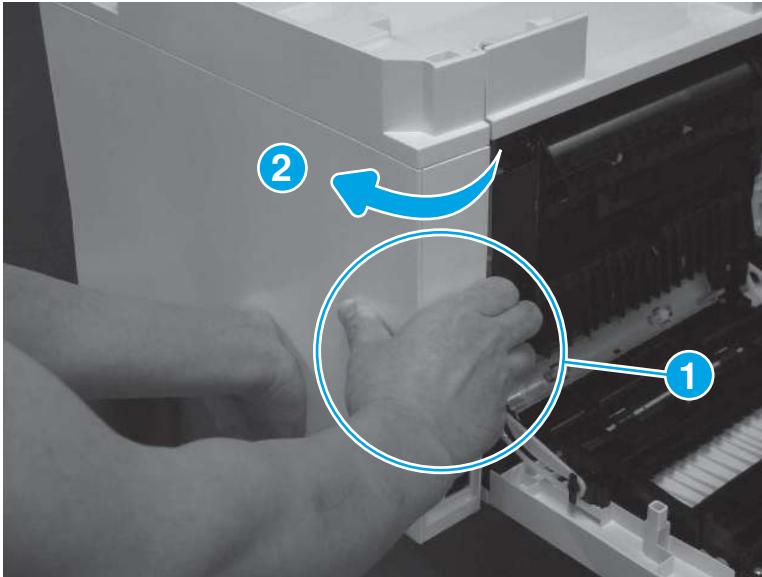
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-330 Release the rear cover corner



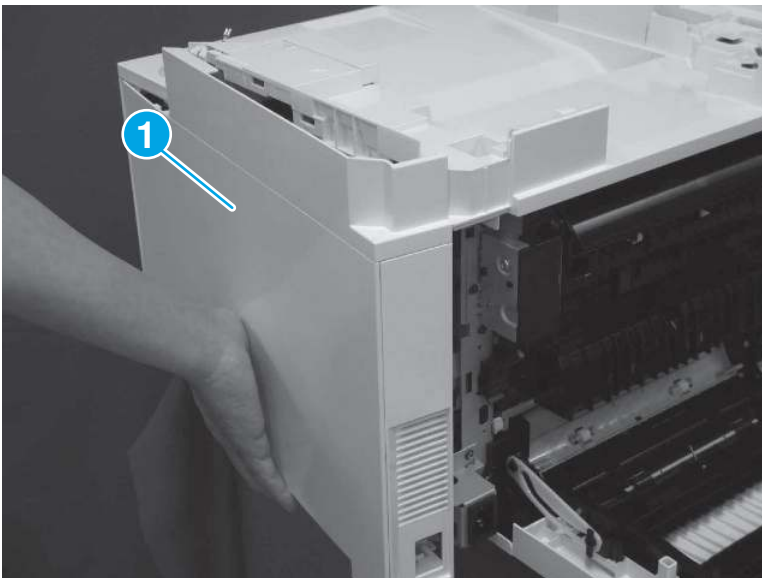
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-331 Disengage the cover corner



5. Remove the right cover (callout 1).

Figure 5-332 Remove the cover

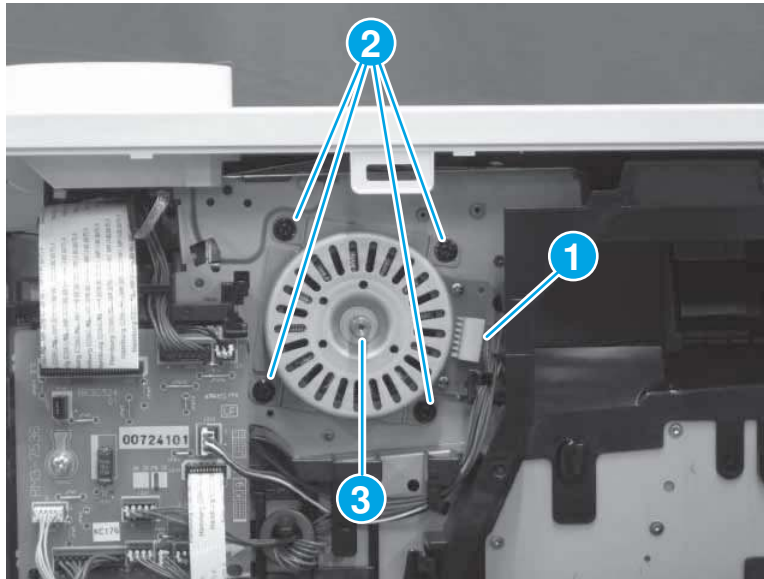


3. Remove the drum motor

Follow the procedure below to remove and replace the drum motor.

- Disconnect one connector (callout 1), remove four screws (callout 2), and then remove the drum motor (callout 3).

Figure 5-333 Remove the drum motor



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Fuser motor

Learn about fuser motor removal.


Mean time to repair: 9 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-32 Part information

Part number	Part description
RK3-0334-000CN	Motor, stepping DC (fuser; M2)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

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

Post service test

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

1. Remove the right cover (SFP)

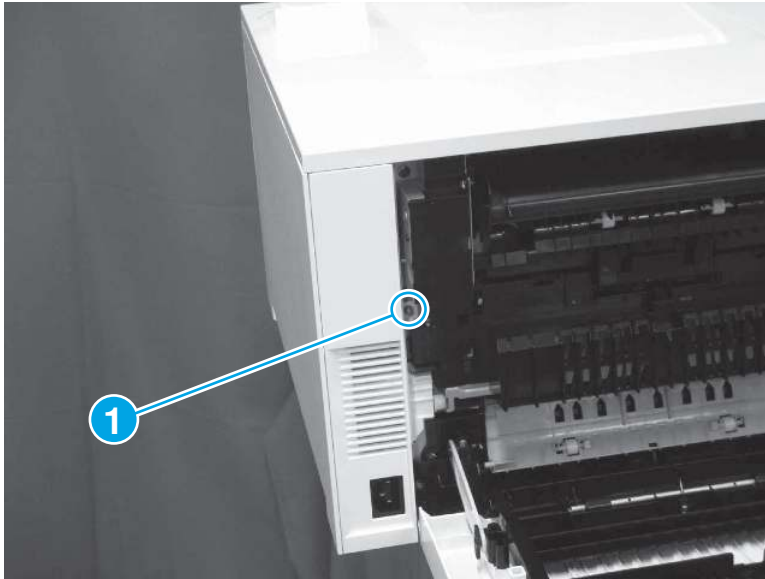
Follow the procedure below to remove and replace the right cover (SFP).



NOTE: The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

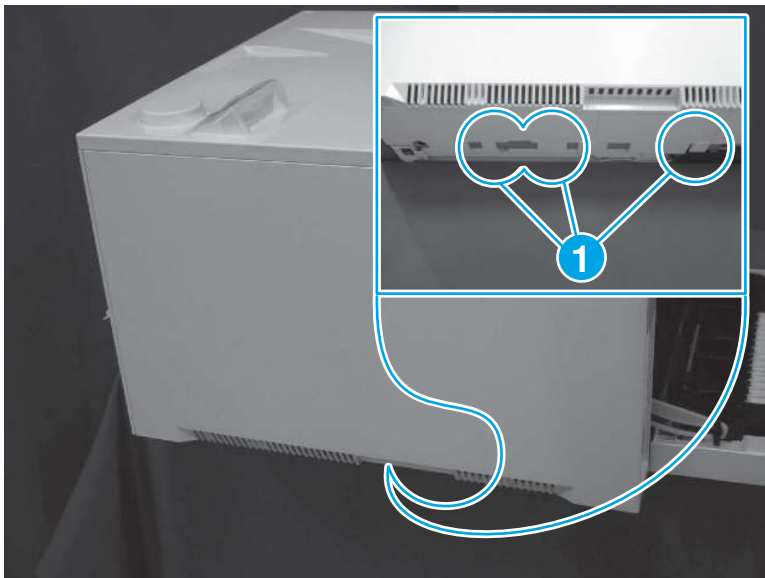
1. Remove one screw (callout 1).

Figure 5-334 Remove one screw



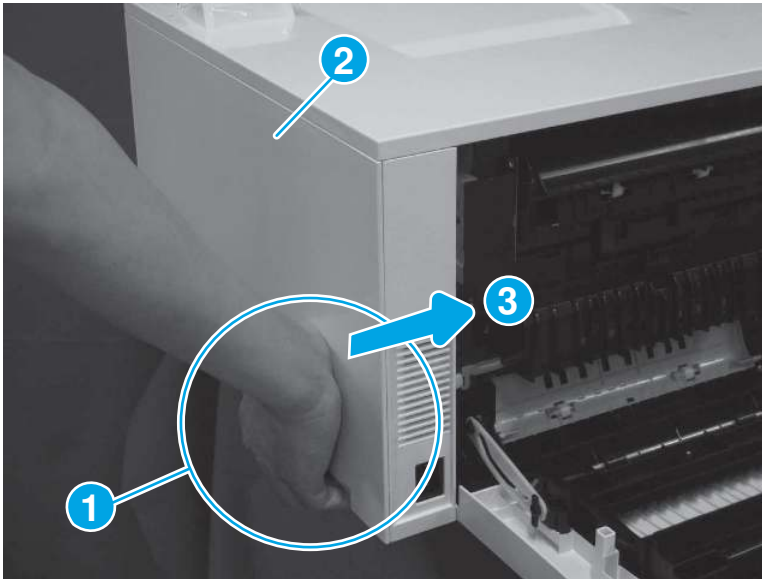
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-335 Release three tabs



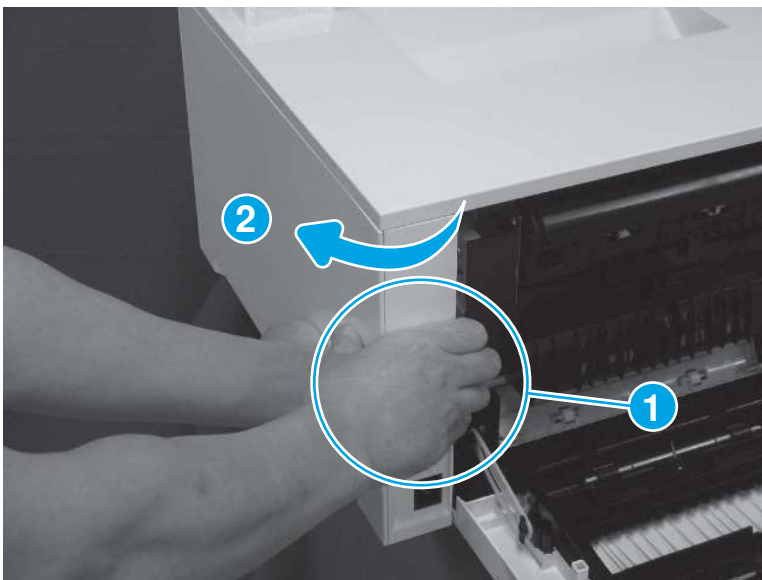
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-336 Release the rear cover corner



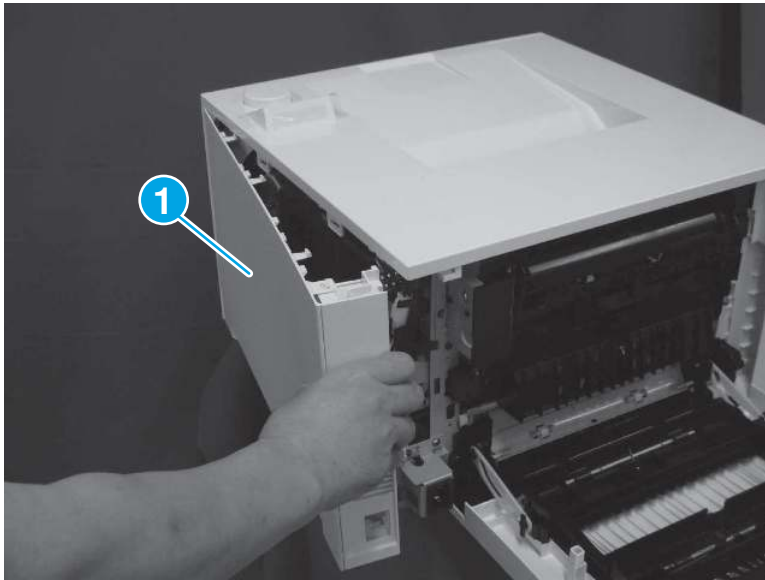
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-337 Disengage the cover corner



5. Remove the right cover (callout 1).

Figure 5-338 Remove the cover



2. Remove the right cover (MFP)

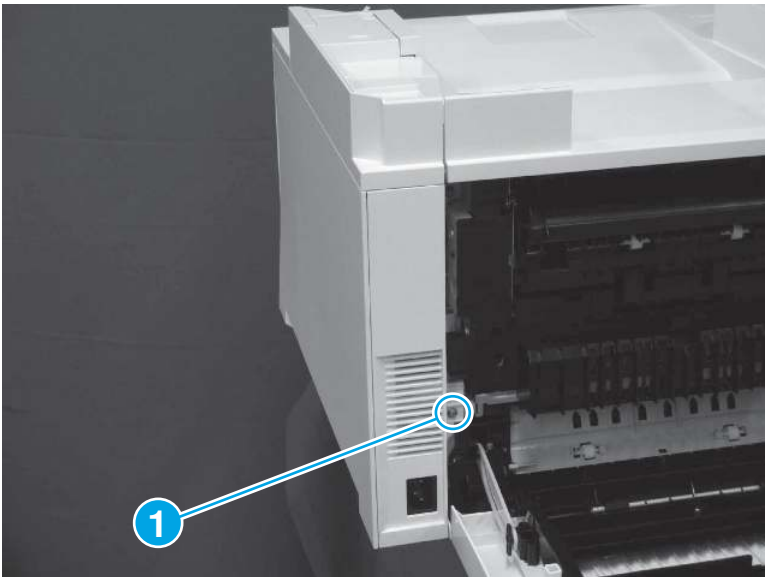
Follow the procedure below to remove and replace the right cover (MFP).



NOTE: The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

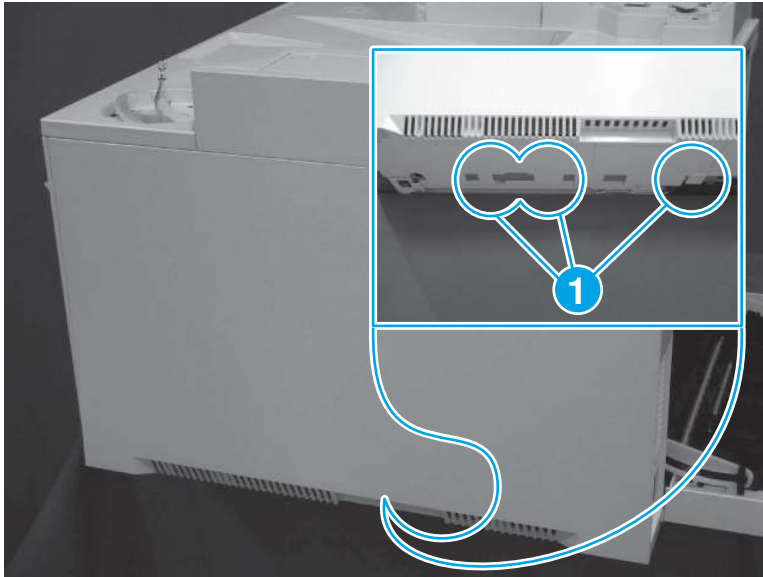
1. Remove one screw (callout 1).

Figure 5-339 Remove one screw



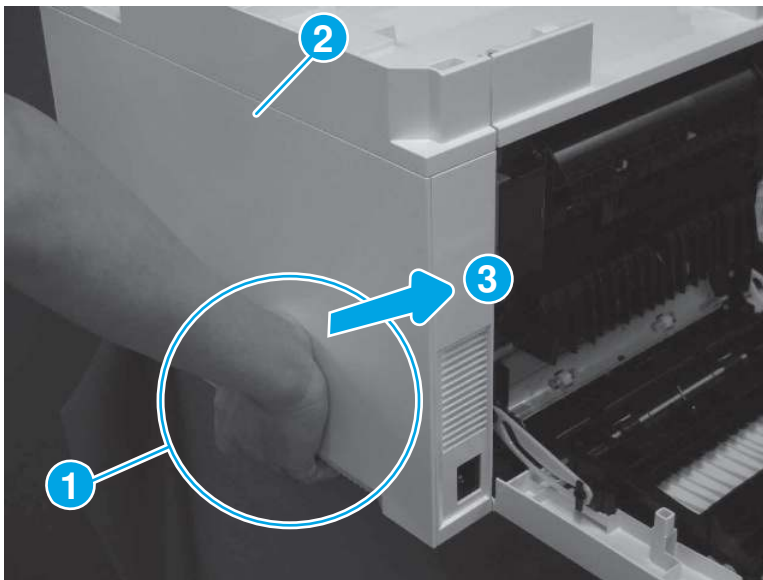
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-340 Release three tabs



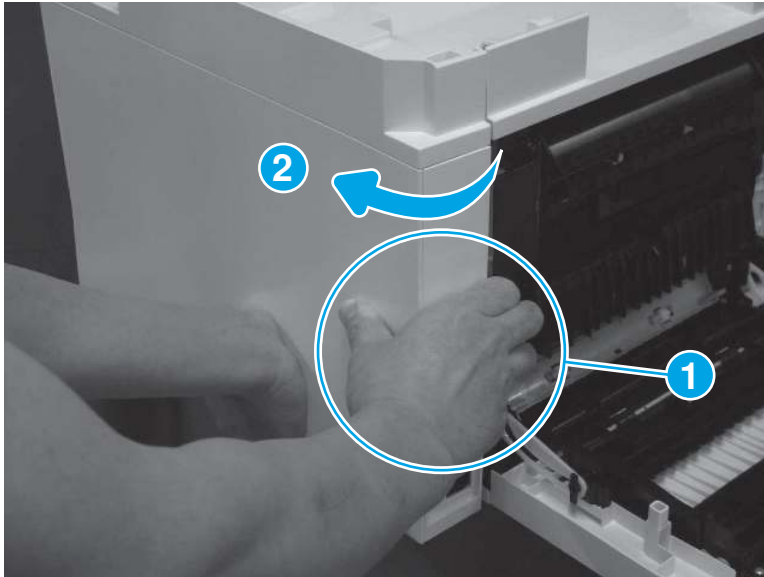
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-341 Release the rear cover corner



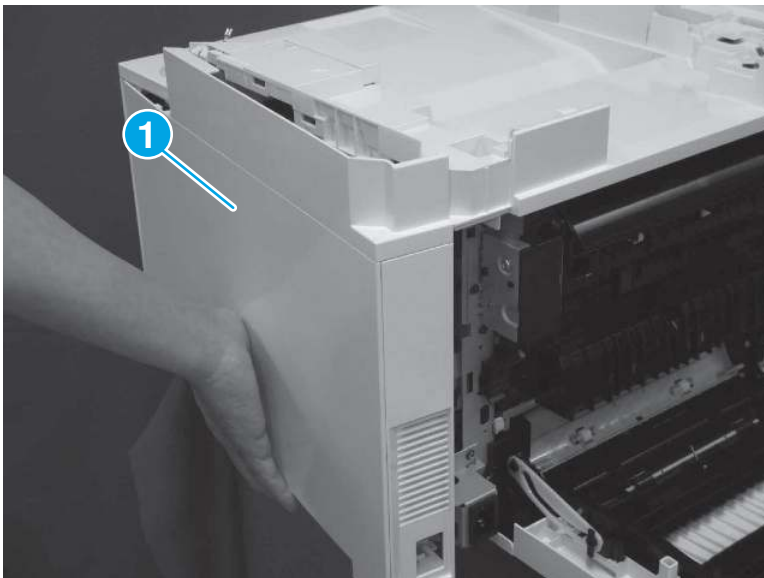
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-342 Disengage the cover corner




5. Remove the right cover (callout 1).

Figure 5-343 Remove the cover



3. Remove the fuser motor

Follow the procedure below to remove and replace the fuser motor.

 **NOTE:** Some covers and guides are shown removed in the figures below for clarity. However, only the right cover needs to be removed to service this motor.

1. Disconnect three connectors.


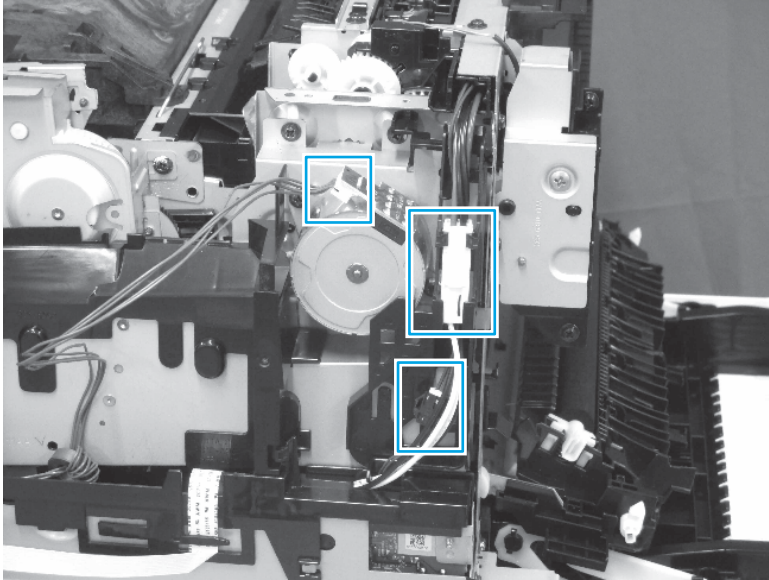
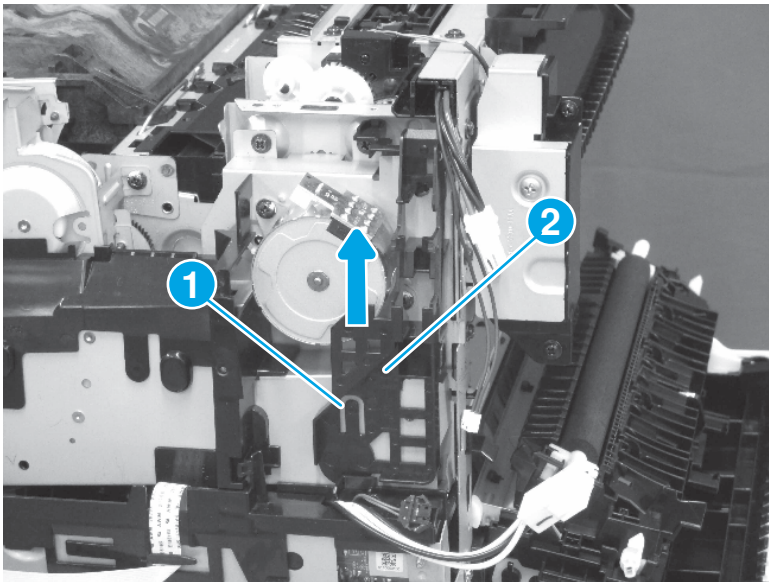
 **Reinstallation tip:** Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

Figure 5-344 Disconnect connectors



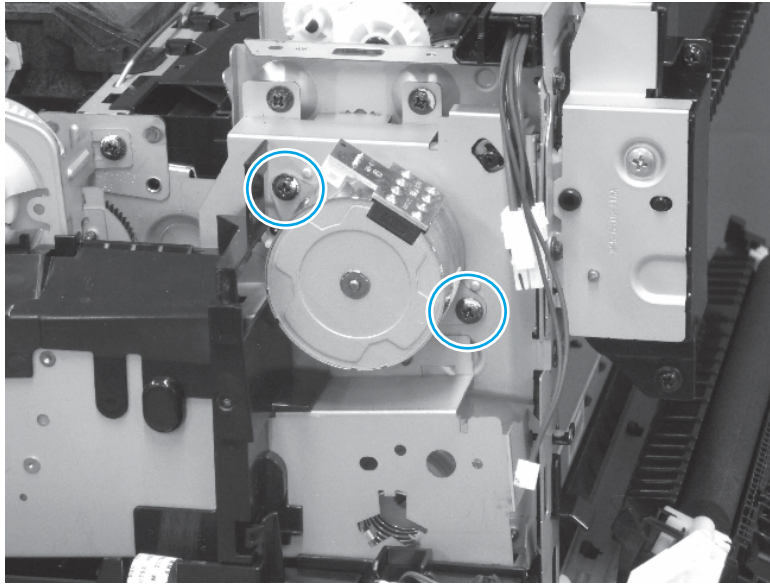
2. Release one tab (callout 1), slide the guide (callout 2) straight up to release it, and then remove the guide.

Figure 5-345 Remove the guide



3. Remove two screws, and then remove the fuser motor.

Figure 5-346 Remove the motor



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



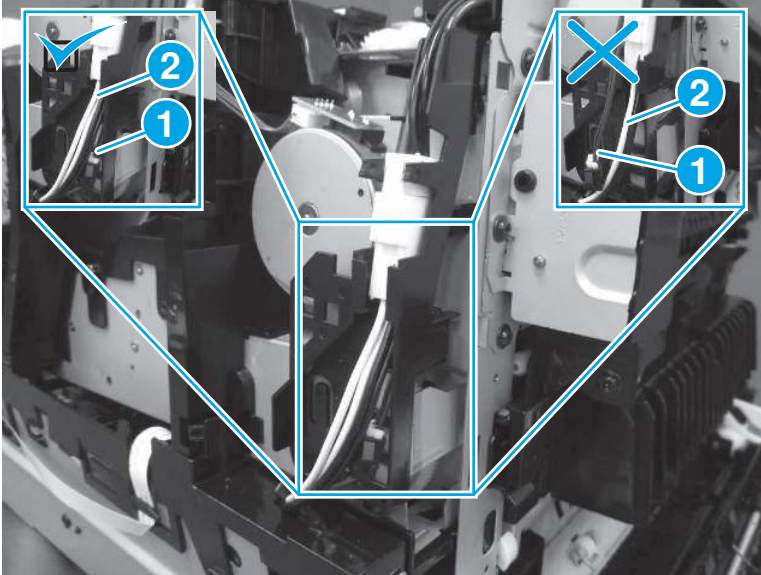
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

5. Special installation instructions - Fuser motor

Follow the special instructions below to install the fuser motor.

- Make sure that the fuser temperature fuse cable (callout 1) is positioned behind the thick cable (callout 2). This prevents the fuser cable from unnecessary movement.

Figure 5-347 Check the fuser temperature fuse cable



Removal and replacement: Fuser motor PCA

Learn about fuser motor PCA removal.

Mean time to repair: 10 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-33 Part information

Part number	Part description
RM3-7536-000CN	Fixing motor control PCA

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on


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

Post service test

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

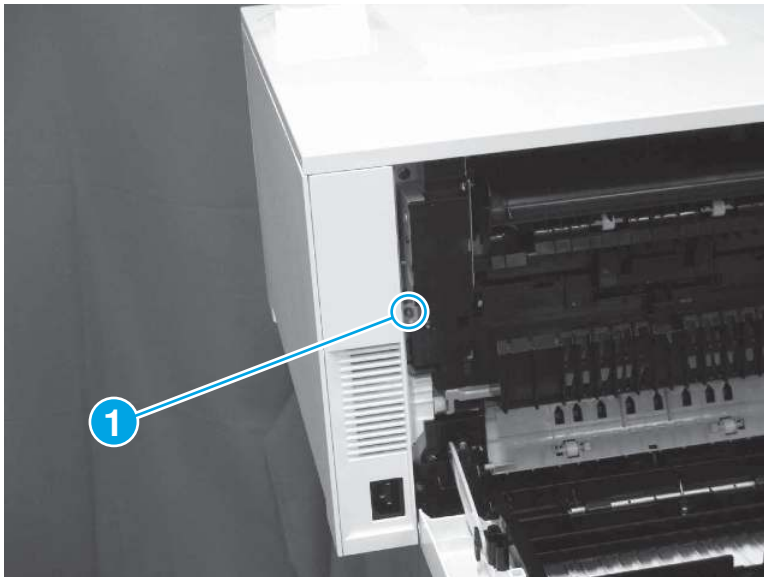
1. Remove the right cover (SFP)

Follow the procedure below to remove and replace the right cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

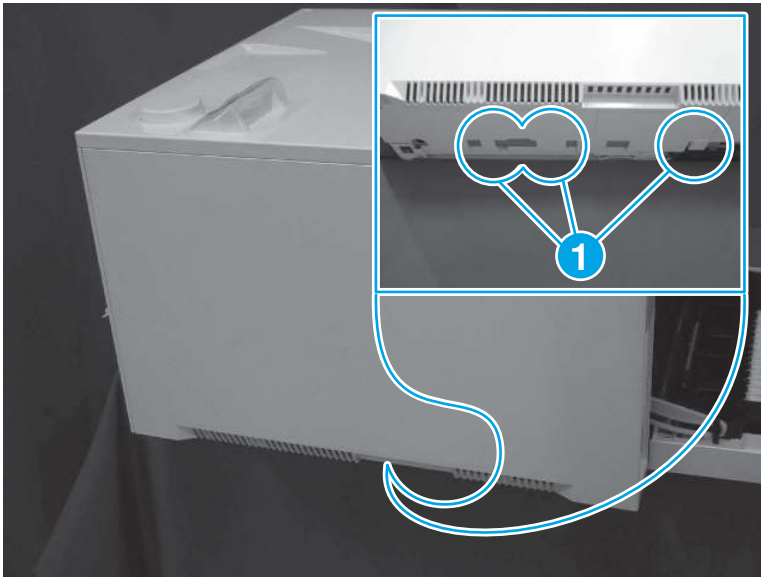
1. Remove one screw (callout 1).

Figure 5-348 Remove one screw



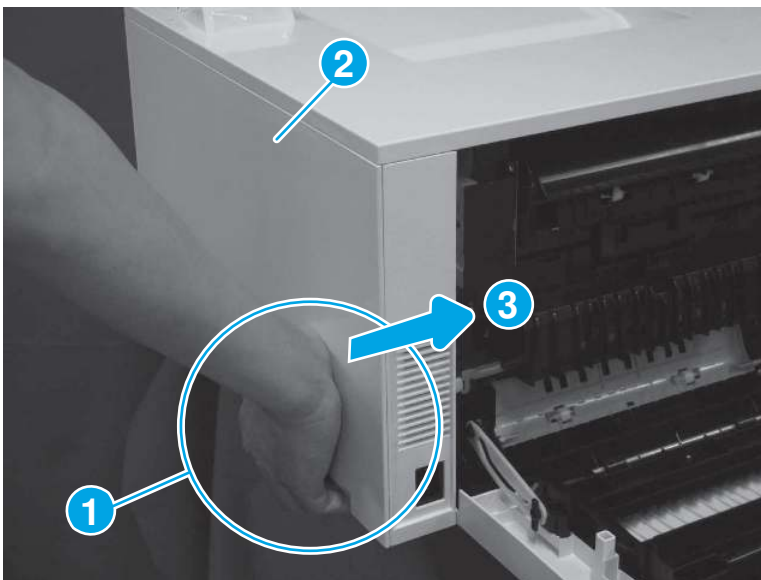
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-349 Release three tabs



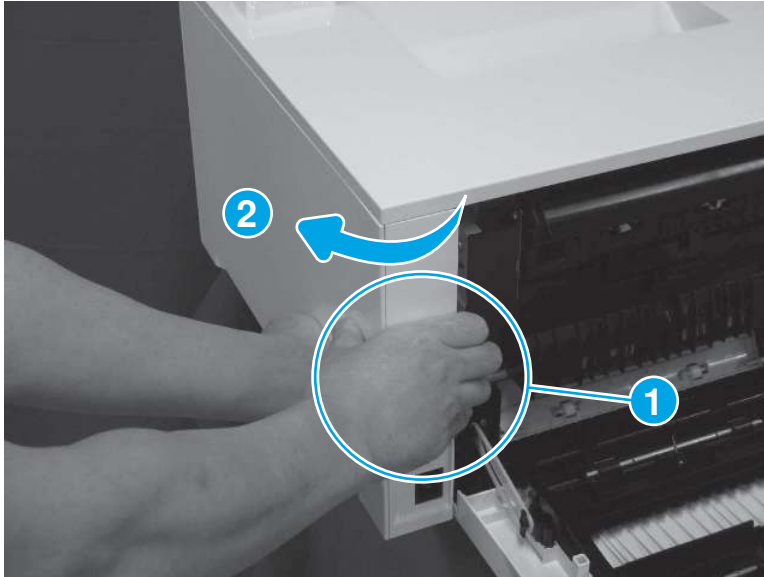
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-350 Release the rear cover corner



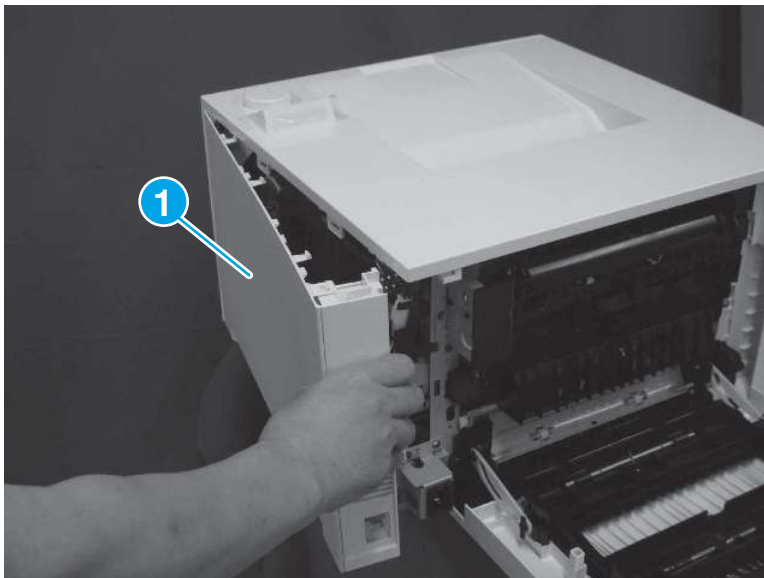
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-351 Disengage the cover corner



5. Remove the right cover (callout 1).

Figure 5-352 Remove the cover



2. Remove the right cover (MFP)

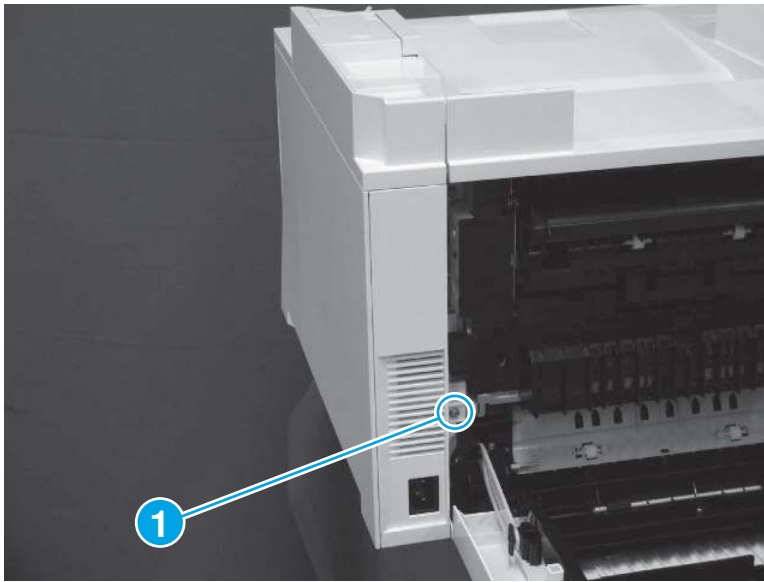
Follow the procedure below to remove and replace the right cover (MFP).



NOTE: The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

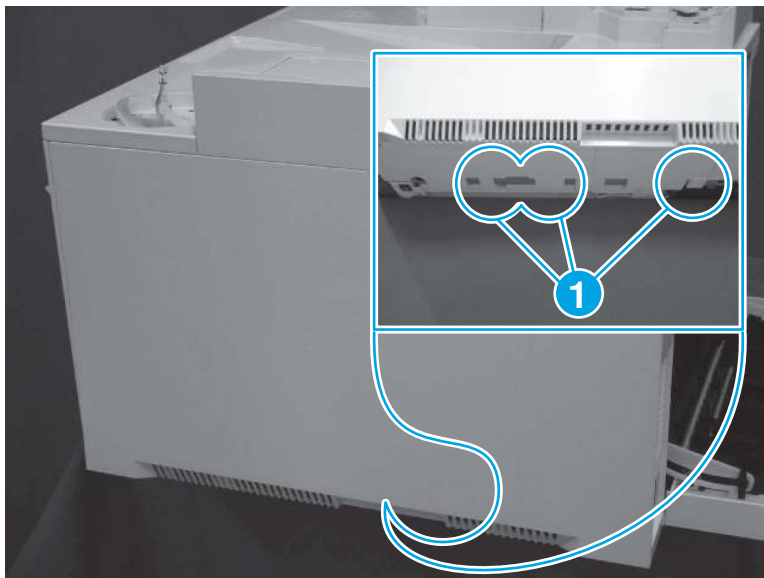
1. Remove one screw (callout 1).

Figure 5-353 Remove one screw



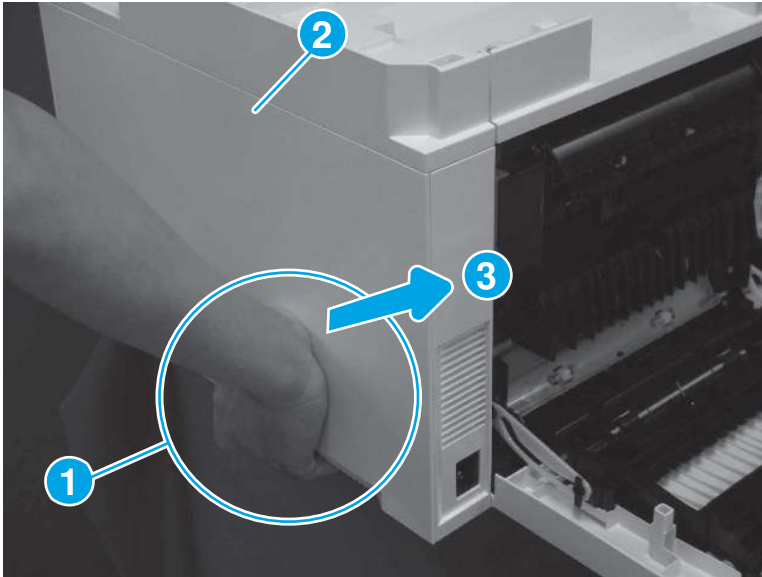
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-354 Release three tabs



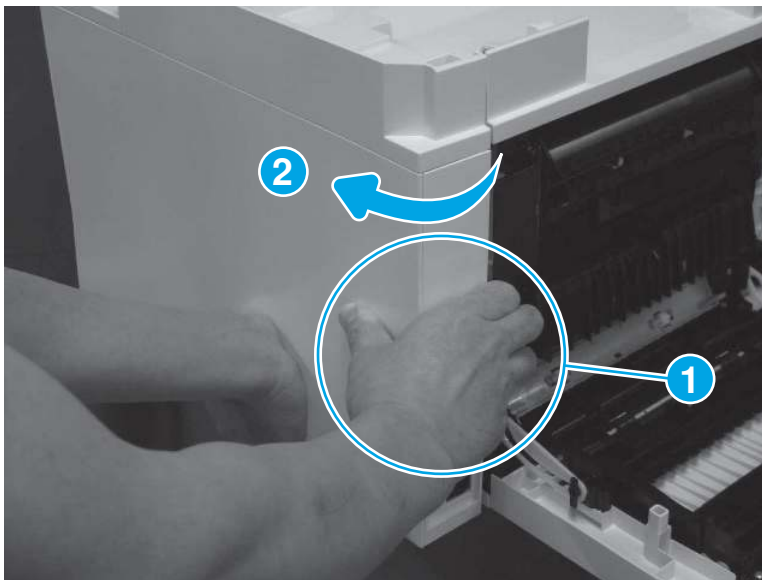
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-355 Release the rear cover corner



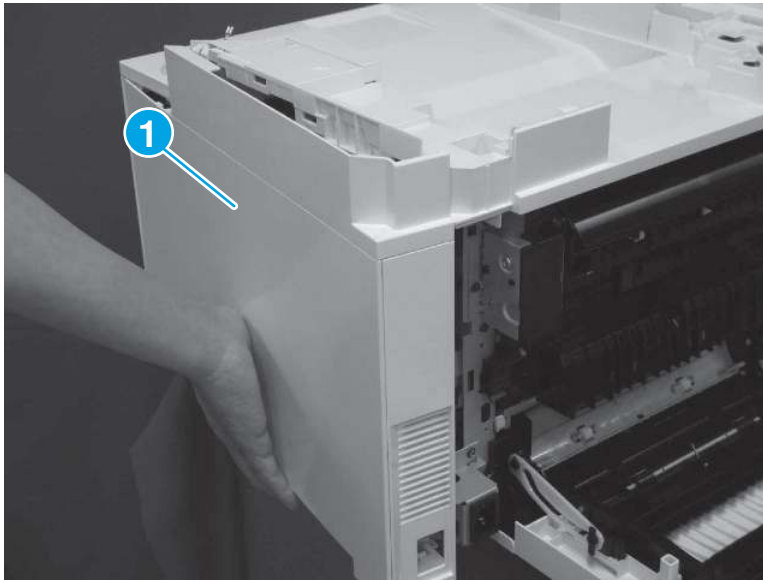
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-356 Disengage the cover corner



5. Remove the right cover (callout 1).

Figure 5-357 Remove the cover

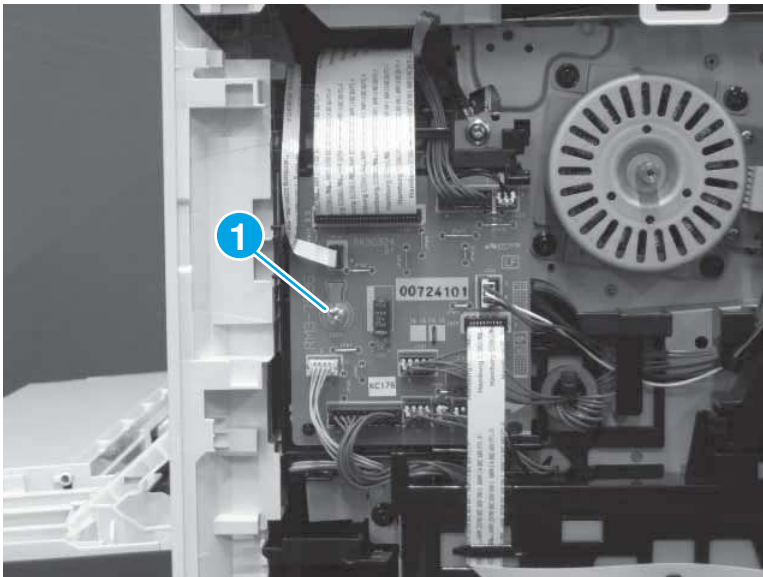


3. Remove the fuser motor PCA

Follow the procedure below to remove and replace the fuser motor PCA.

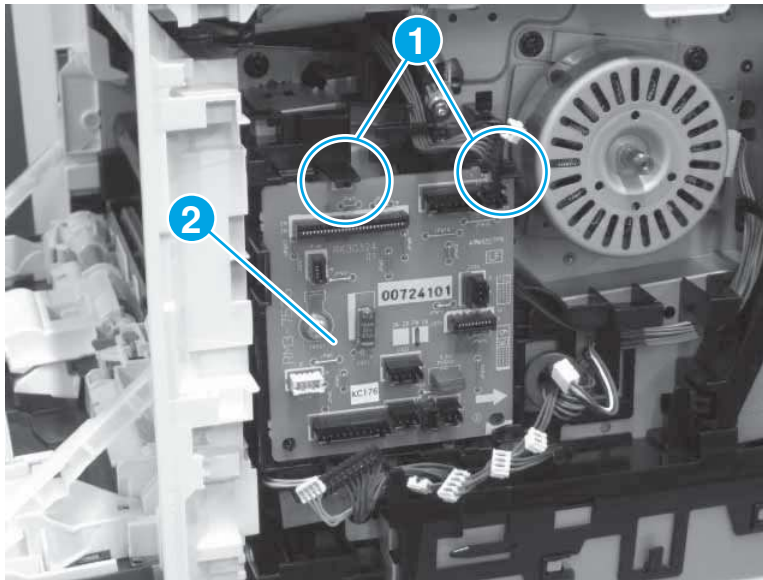
1. Disconnect twelve connectors on the fuser motor PCA, and then remove one screw (callout 1).

Figure 5-358 Disconnect connectors and remove one screw




2. Release two tabs (callout 1), and then remove the fuser motor PCA (callout 2).

Figure 5-359 Remove the fuser motor PCA



3. To reinstall the PCA, do the following:
 - a. Slide the PCA from the left-side toward the right-side to install it on the holder (callout 1).

 **IMPORTANT:** Make sure that none of the FFCs or wire harness are trapped behind the PCA when reinstalling it.
 - b. Verify that the holder alignment pin (callout 2), boss (callout 3), and tabs (callout 4) are engaged with the PCA.


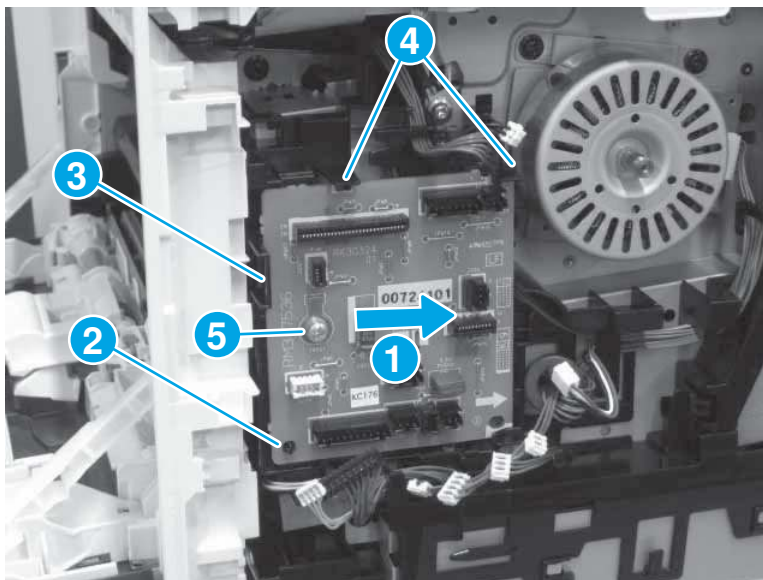
 **NOTE:** With the PCA firmly held in place, reinstall the screw (callout 5).

Figure 5-360 Reinstall the fuser motor PCA



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Cartridge fan

Learn about cartridge fan removal.



[View a video of removing and replacing the cartridge fan.](#)

Mean time to repair: 30 minutes

Service level: Medium

Before performing service

Turn the printer power off

- Disconnect the power cable.



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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-34 Part information

Part number	Part description
RK3-0397-000CN	Fan (cartridge; FM1)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- Small flat-blade screwdriver
- Needle-nose pliers

After performing service

Turn the printer power on


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


Post service test

No post service test is available for this assembly.

1. Remove the left cover (SFP)

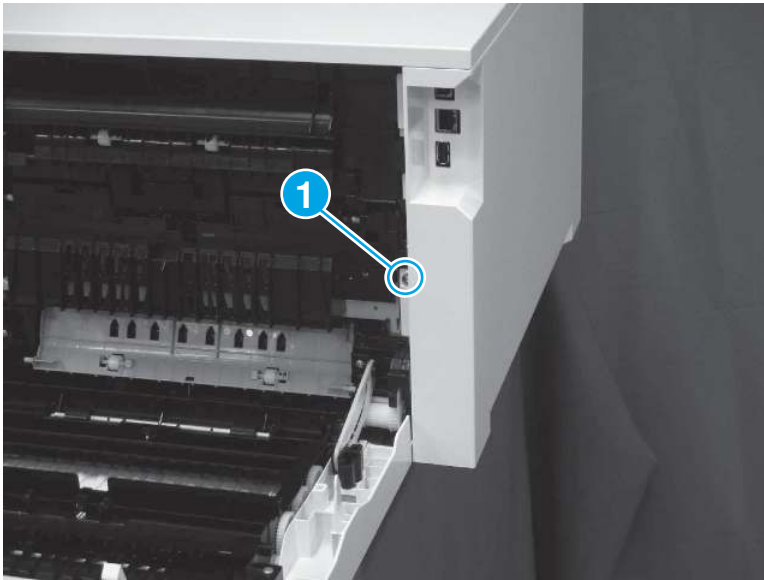
Follow the procedure below to remove and replace the left cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

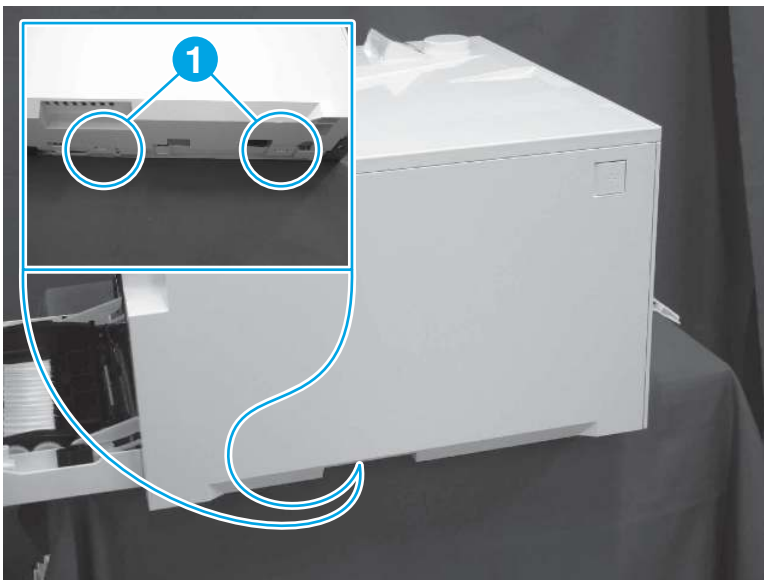
1. Remove one screw (callout 1).

Figure 5-361 Remove one screw



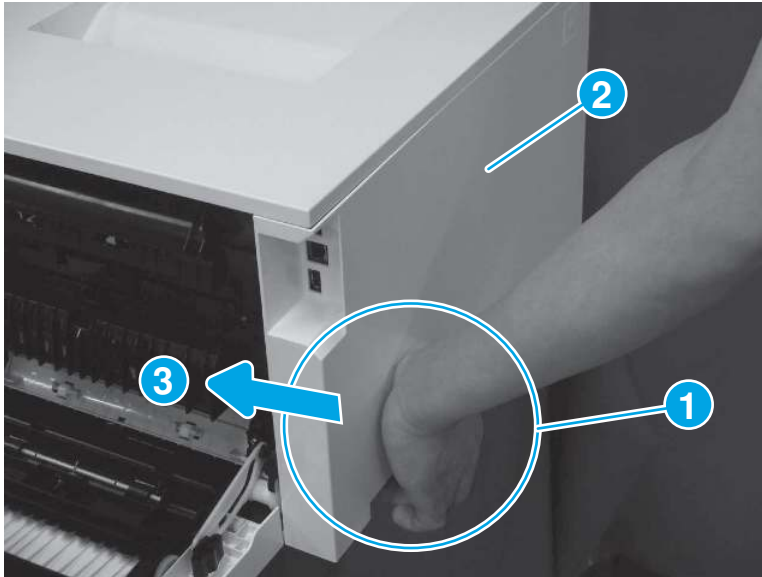
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-362 Release two tabs



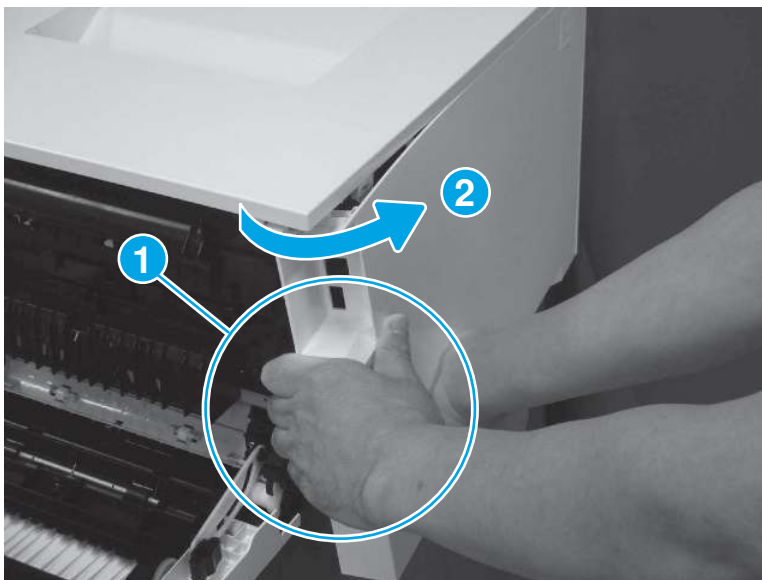
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-363 Release the rear cover corner



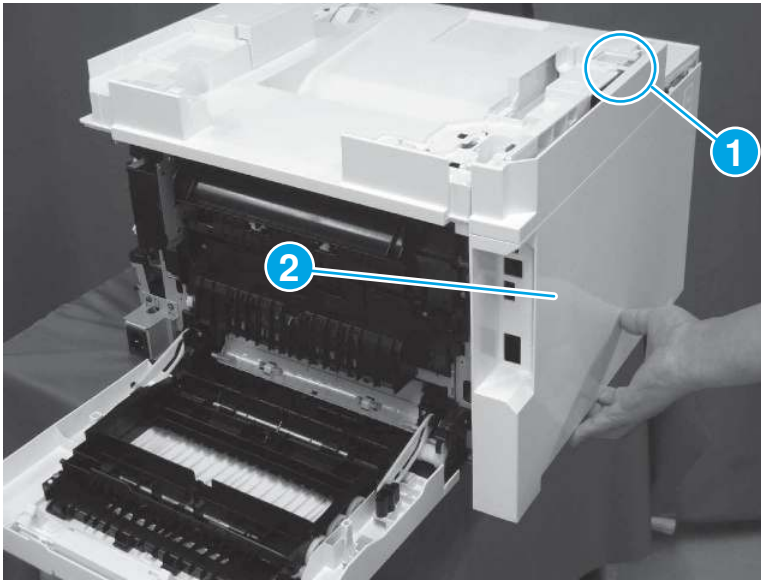
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-364 Disengage the cover corner




5. Remove the left cover (callout 1).


Figure 5-365 Remove the cover



2. Remove the left cover (MFP)

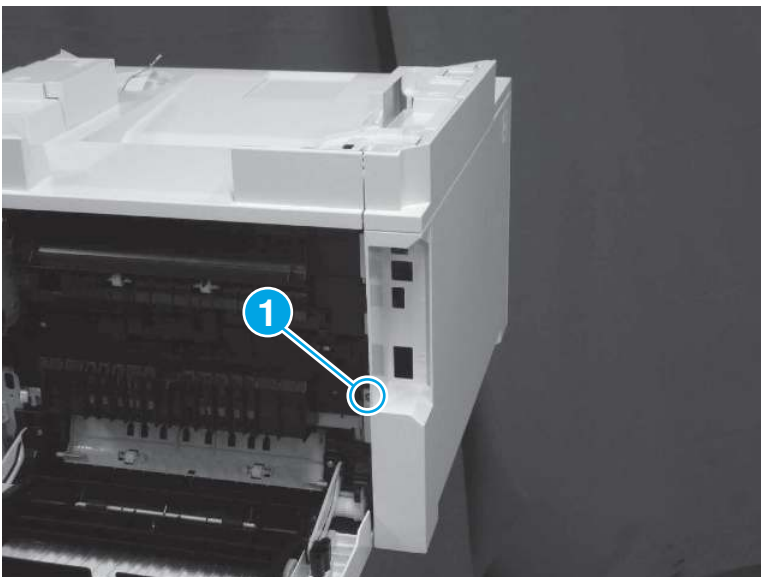
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

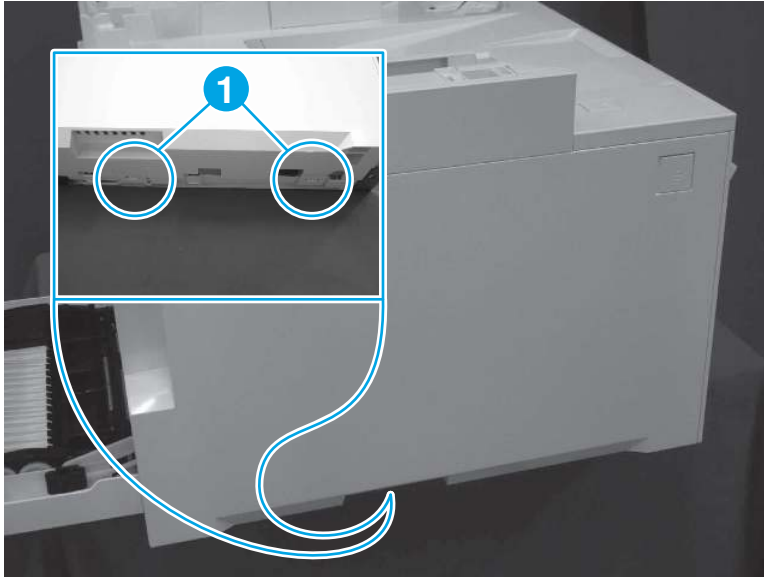
1. Remove one screw (callout 1).

Figure 5-366 Remove one screw



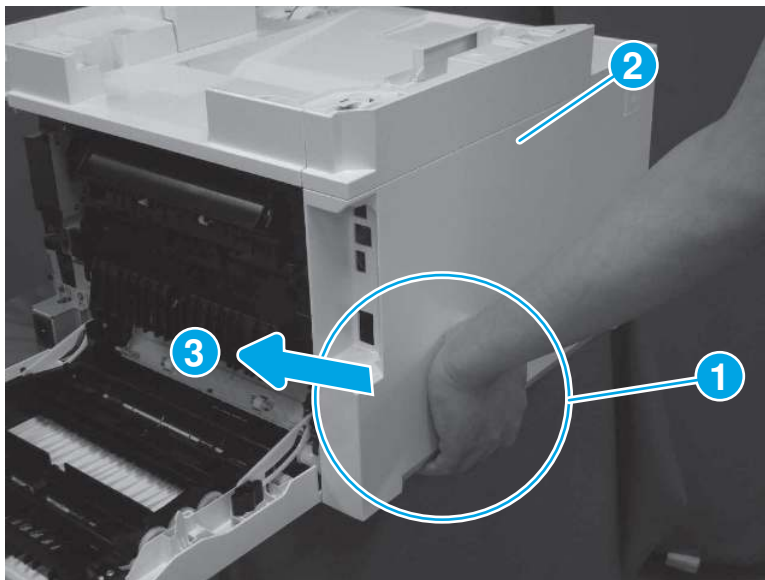
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-367 Release two tabs



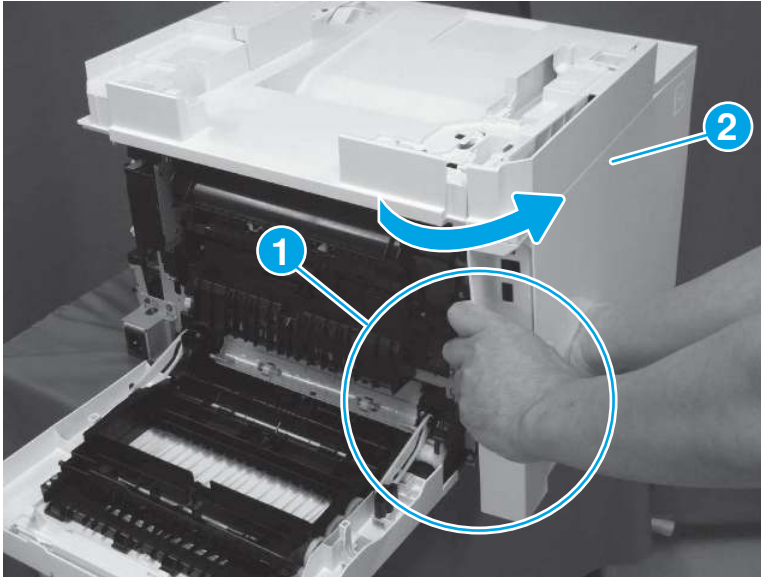
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-368 Release the rear cover corner



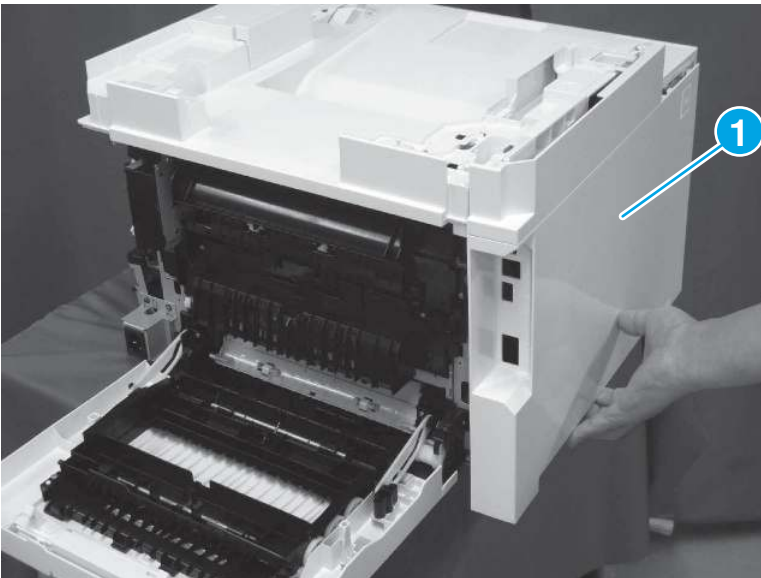
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-369 Disengage the cover corner



5. Remove the left cover (callout 1).

Figure 5-370 Remove the cover

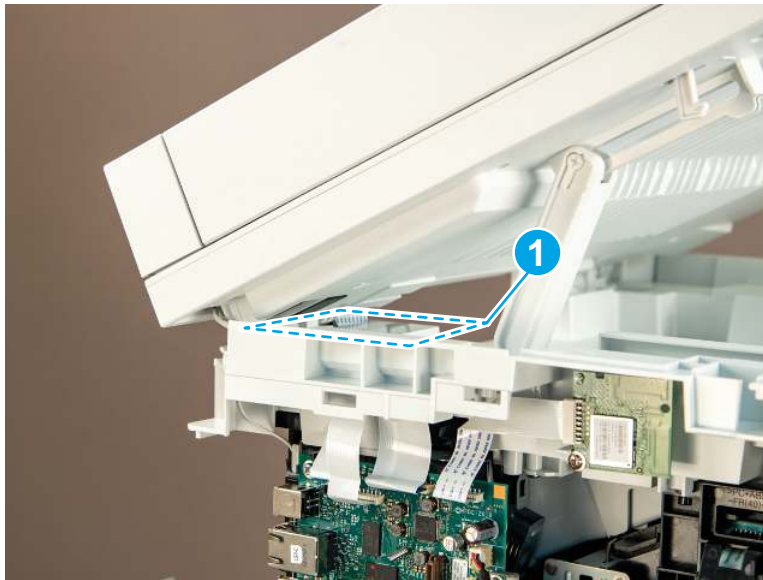


3. Remove the ISA (MFP)

Follow the procedure below to remove and replace the ISA.

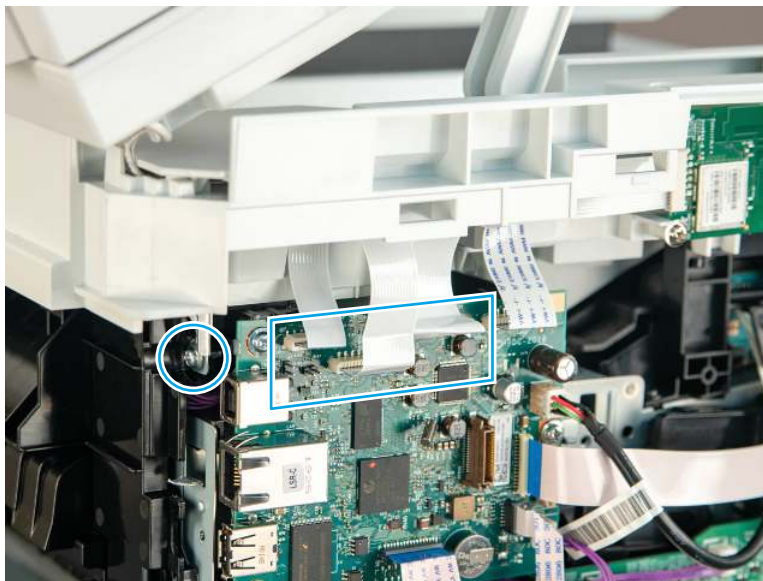
1. Open the ISA, and then remove the ISA FFC cover (callout 1).

Figure 5-371 Remove the FFC cover



2. Disconnect three FFCs, and then remove one screw to release the ground cable.

Figure 5-372 Disconnect FFCs and remove screw



3. Release one tab (callout 1), and then rotate the ISA slider pin (callout 2) towards the front of the printer to release it. Remove the slider pin.

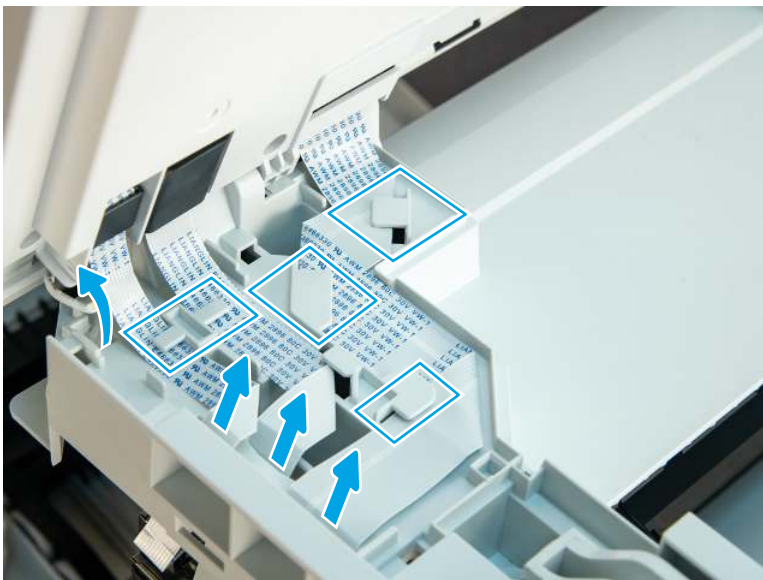
⚠ CAUTION: When the slider pin is removed, the ISA is not captive and can suddenly detach from the printer.

Figure 5-373 Remove the slider pin



4. Support the ISA, release the FFCs from the retainers, and then carefully pass the FFCs and the ground wire up through the slots in the top cover.

Figure 5-374 Release the FFCs and ground wire



5. Slide ISA as shown below to release it.

Figure 5-375 Release the ISA



6. Remove the ISA.

Figure 5-376 Remove the ISA



4. Remove the right cover (SFP)

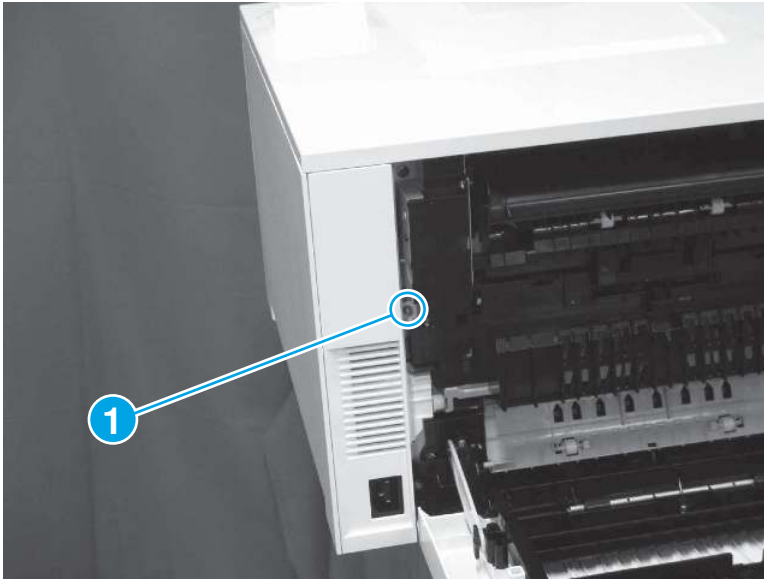
Follow the procedure below to remove and replace the right cover (SFP).



NOTE: The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

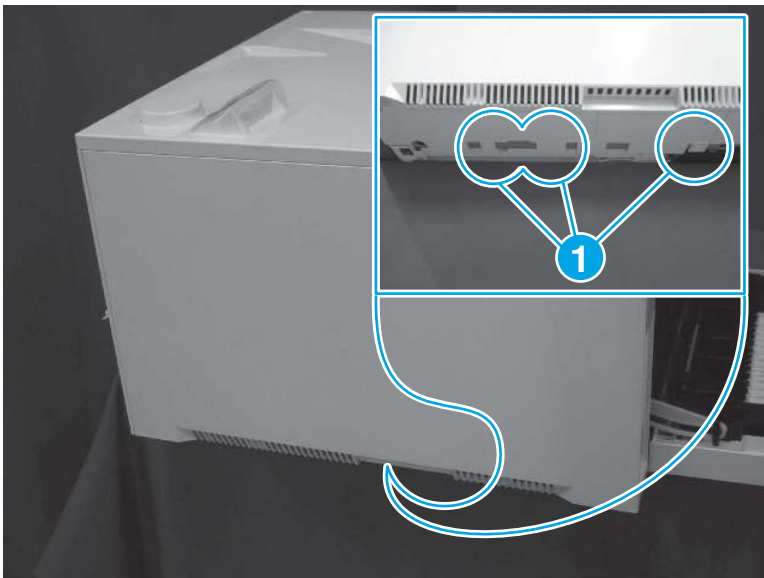
1. Remove one screw (callout 1).

Figure 5-377 Remove one screw



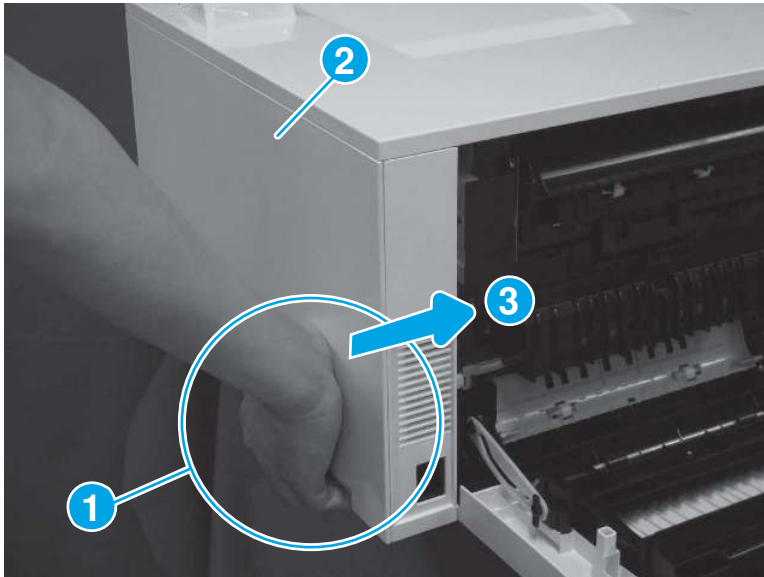
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-378 Release three tabs



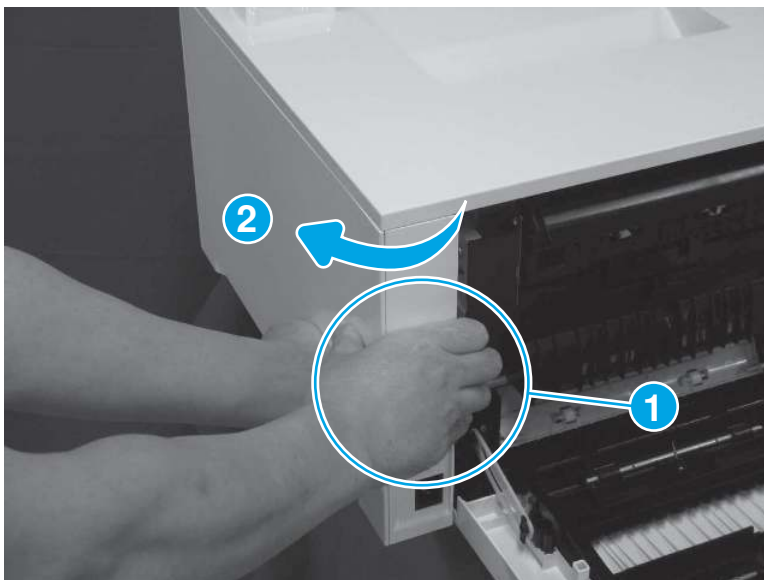
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-379 Release the rear cover corner



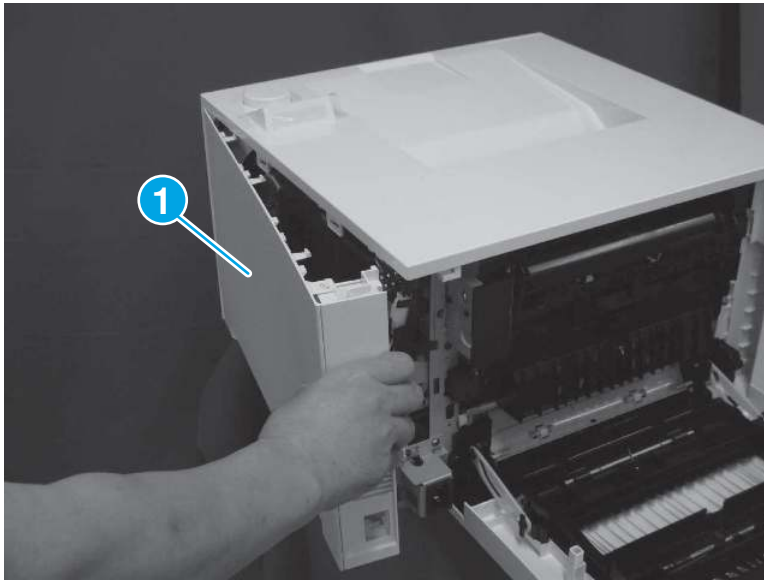
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-380 Disengage the cover corner




5. Remove the right cover (callout 1).

Figure 5-381 Remove the cover



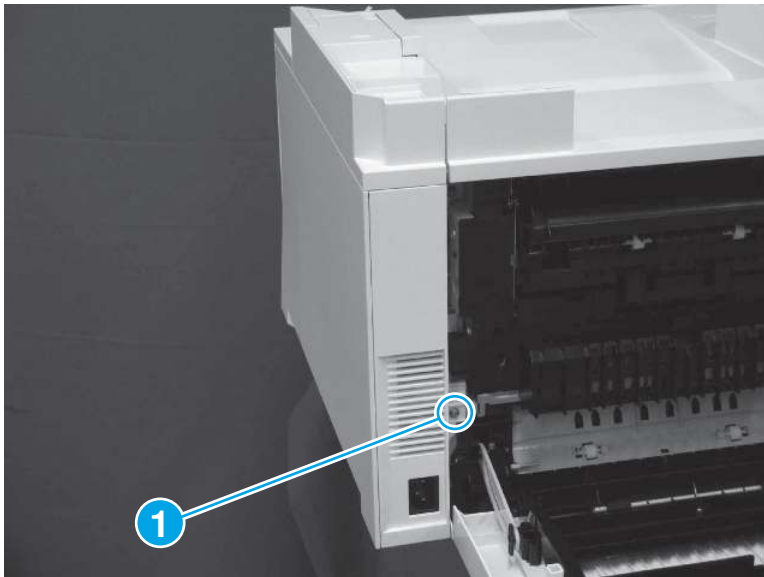
5. Remove the right cover (MFP)

Follow the procedure below to remove and replace the right cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

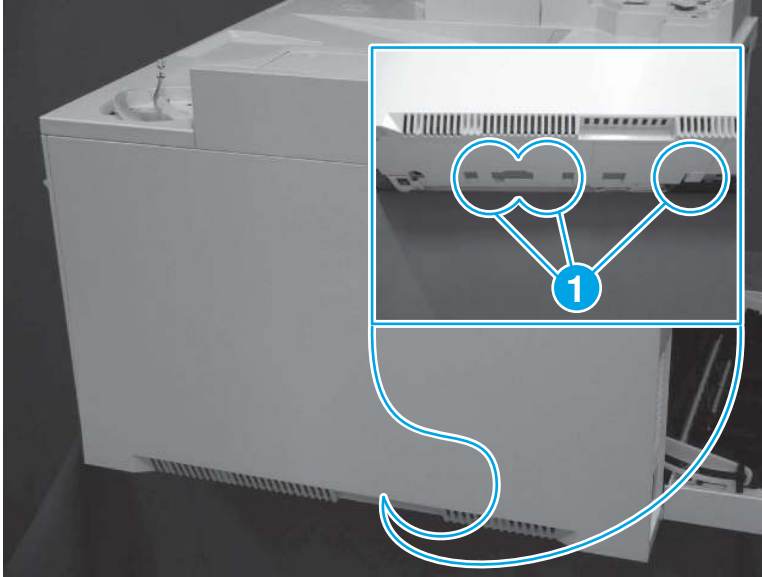
1. Remove one screw (callout 1).

Figure 5-382 Remove one screw



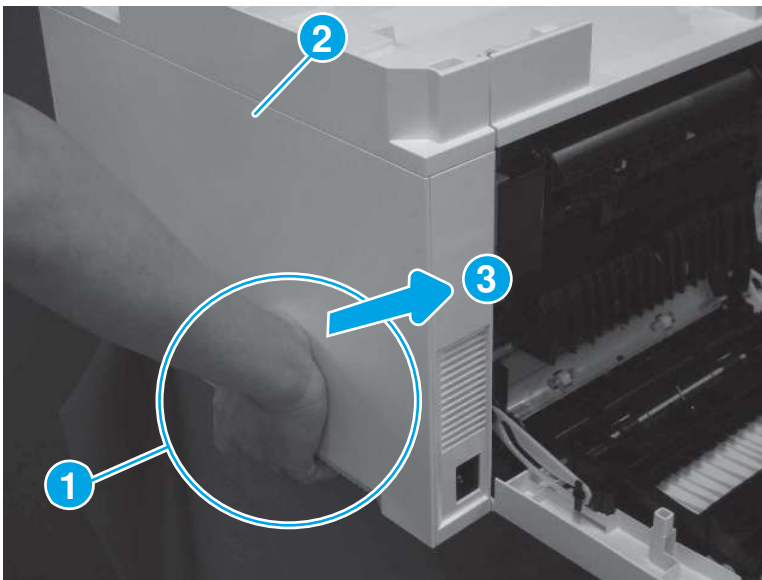
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-383 Release three tabs



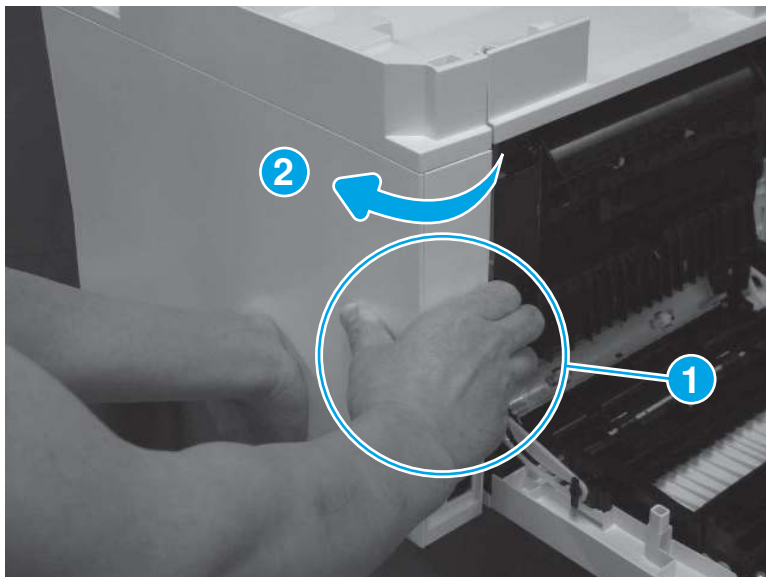
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-384 Release the rear cover corner



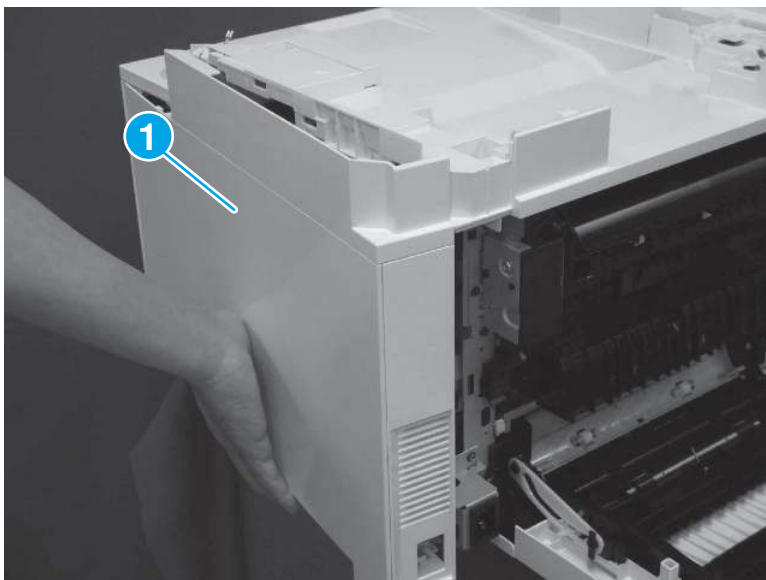
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-385 Disengage the cover corner



5. Remove the right cover (callout 1).


Figure 5-386 Remove the cover



6. Remove the front cover

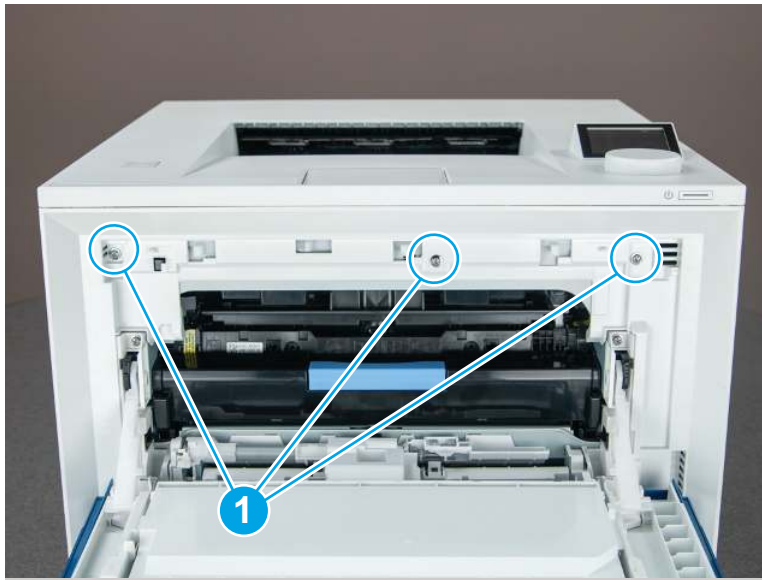
Follow the procedure below to remove and replace the front cover.

 **NOTE:** Front cover removal is **identical** for both SFP and MFP models.

 **Reinstallation tip:** Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

1. Remove three screws (callout 1).

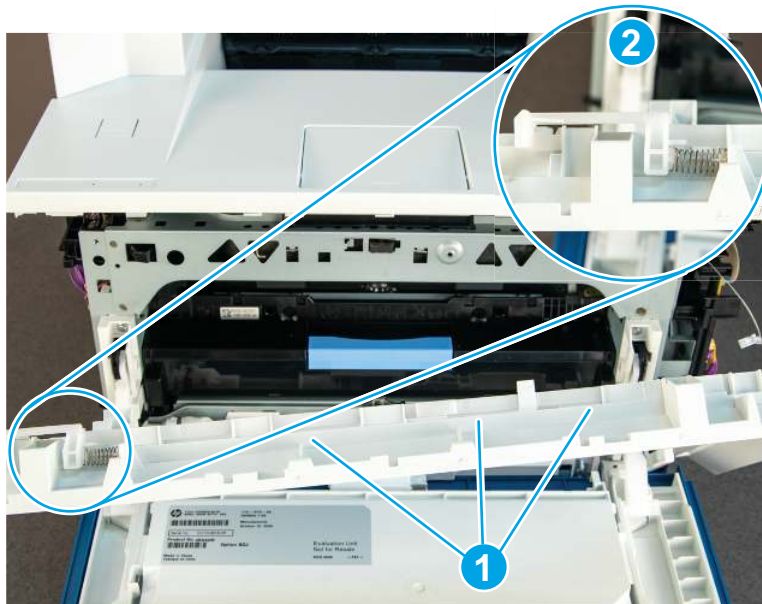
Figure 5-387 Remove three screws



2. Before proceeding, take note of the door release arm (callout 1). This arm can be easily dislodged when the cover is removed.

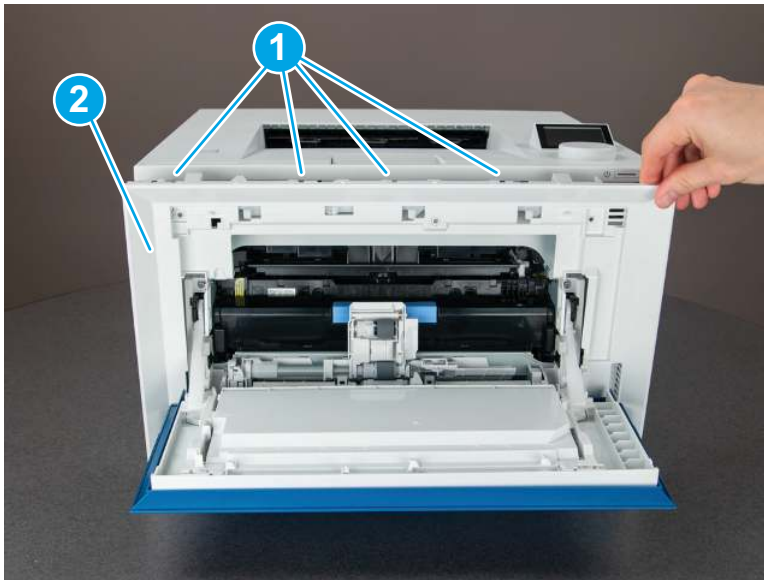
CAUTION: Do not lose the spring (callout 2) when removing the front cover.

Figure 5-388 Door release arm




3. Release four tabs (callout 1), and then remove the front cover (callout 2).

Figure 5-389 Remove the cover




7. Remove the top cover (SFP)

Follow the procedure below to remove and replace the top cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

1. **Wireless model only:** Raise and support the left side of the printer, remove one screw, and then separate the wireless PCA from the cover.

 **CAUTION:** Do not attempt to completely remove the wireless PCA. Instead, gently move it out of the way.


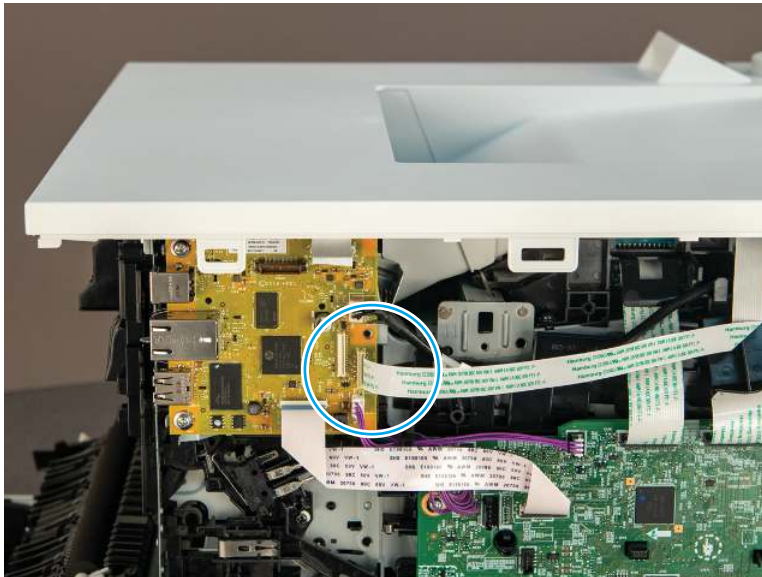
 **TIP:** To remove the screw without raising the printer, use a short-barrel screwdriver.

Figure 5-390 Remove one screw



2. Disconnect one flat-flexible cable (FFC).

Figure 5-391 Disconnect one FFC

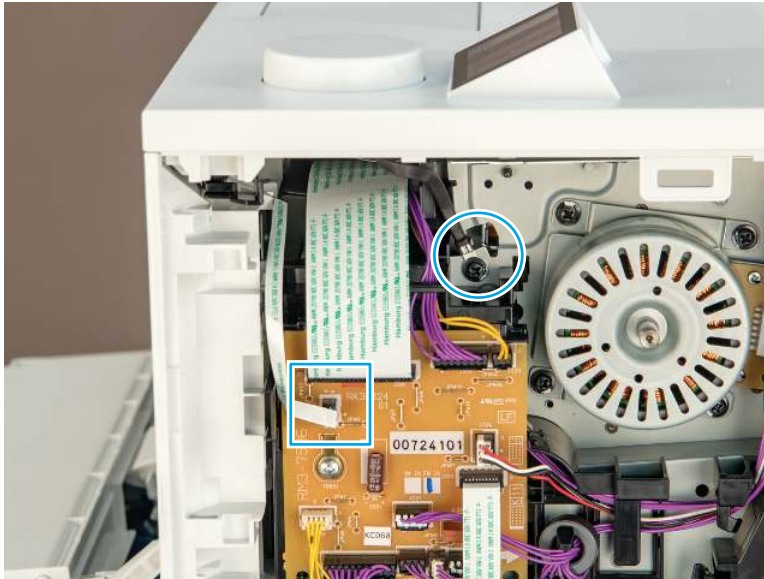


3. Disconnect one FFC, and then remove one screw to release the ground wire.



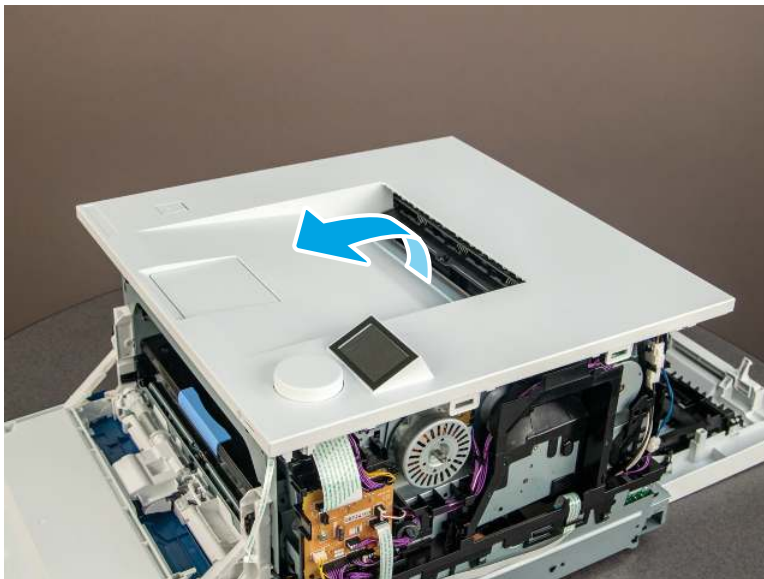
NOTE: The front cover is shown installed in the figure below. However, this step is correct for removing the top cover.

Figure 5-392 Disconnect one FFC and remove one screw




4. Sliding the cover from the back of the printer towards the front to remove it.

Figure 5-393 Remove the cover



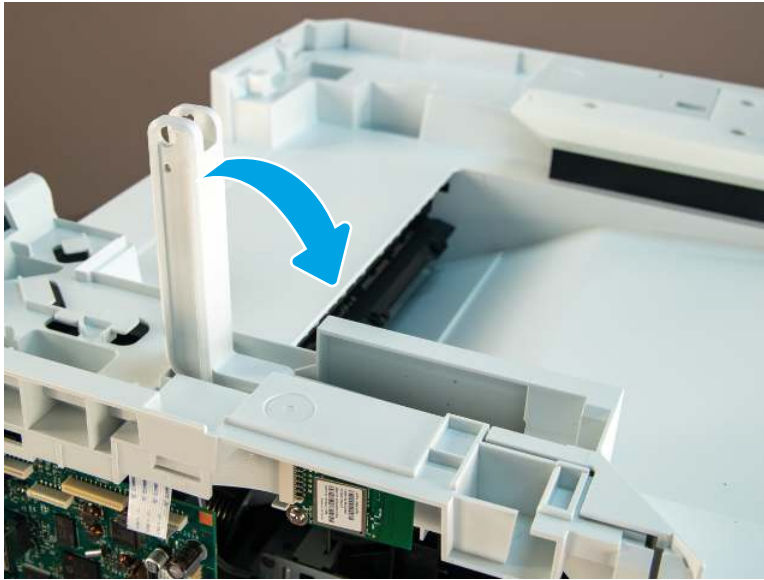
8. Remove the top cover (MFP)

Follow the procedure below to remove and replace the top cover (MFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

1. Close the ISA lift arm.

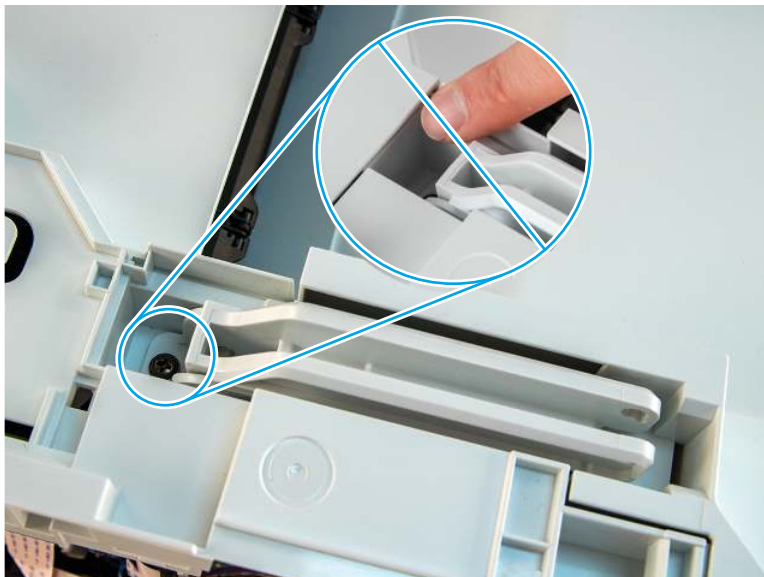
Figure 5-394 Close the ISA lift arm



2. Remove one screw.

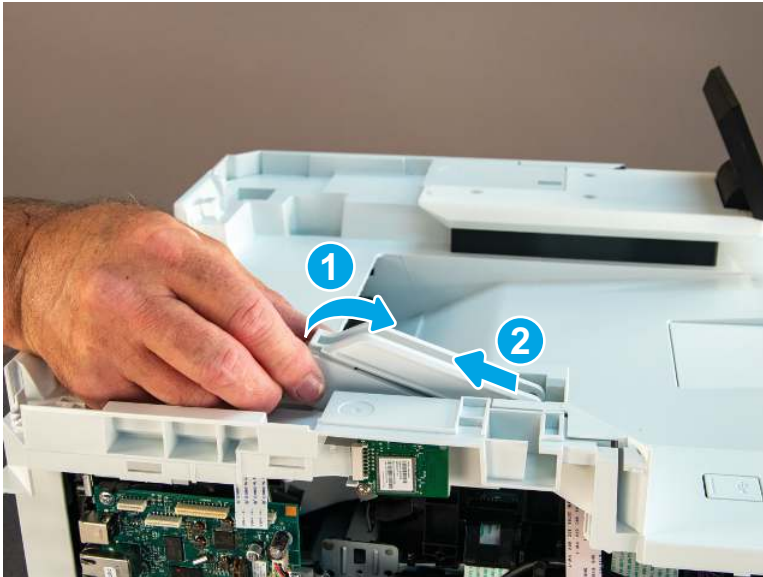
⚠ CAUTION: The support arm is spring loaded and can unexpectedly spring into the open position. To avoid injury, do not place a finger in the screw well when the support arm is in the closed position.

Figure 5-395 Remove one screw



3. Rotate one end of the lift arm up (callout 1), and then slide the lift arm as shown below (callout 2) to release it. Remove the lift arm.

Figure 5-396 Remove the lift arm



4. Do the following:
 - a. Disconnect one FFC (control panel; callout 1).
 - b. Remove one screw (callout 2), and then separate the wireless PCA from the top cover.


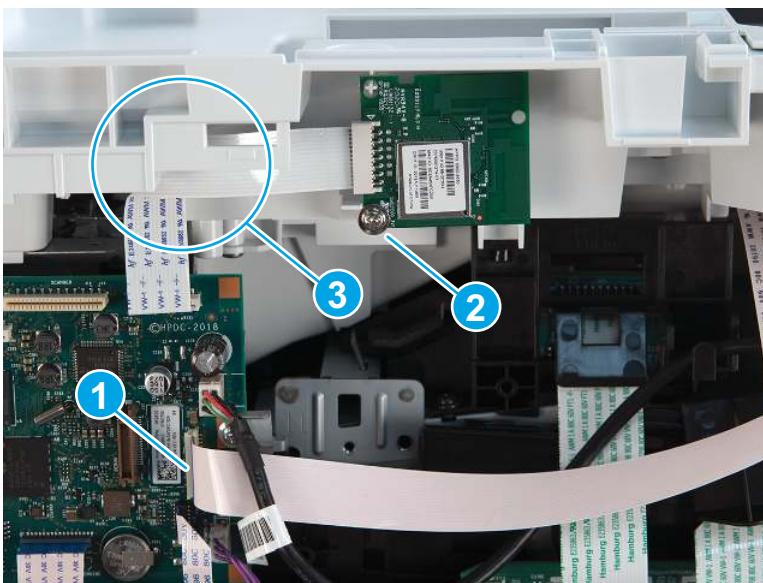
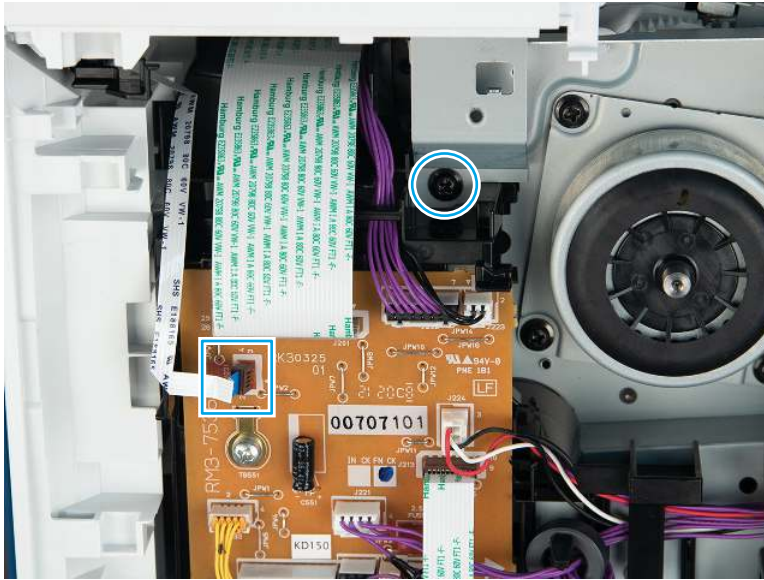
 **NOTE:** The wireless PCA does not need to be completely removed. Instead, release the FFC from the retainer (callout 3), and then gently move it out of the way.

Figure 5-397 Disconnect FFC and move the wireless PCA



5. Disconnect one FFC (power button), and then remove one screw (grounding sheet-metal plate).

Figure 5-398 Disconnect one FFC and remove one screw



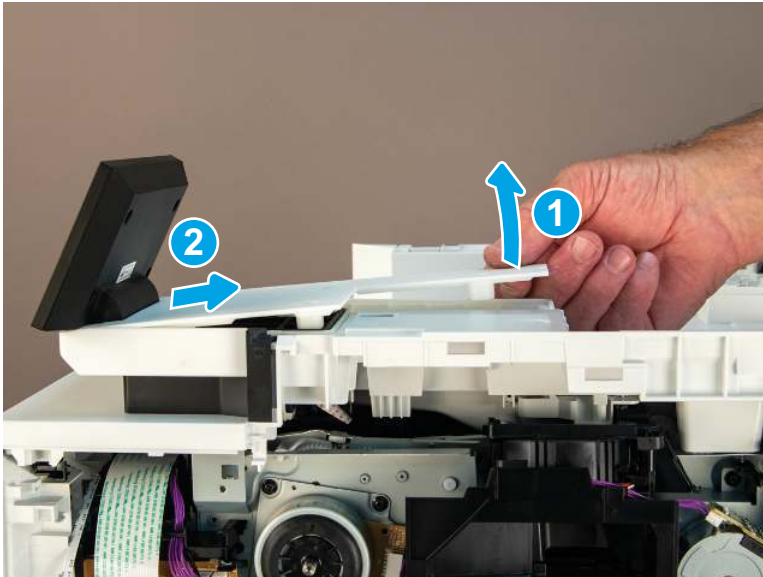
6. Remove three screws.

Figure 5-399 Remove three screws




7. Release one tab and rotate one end of the base cover up (callout 1), and then slide the cover as shown (callout 2) to remove it.

Figure 5-400 Remove the cover



8. Disconnect two FFCs.

 **NOTE:** These are zero-insertion force (ZIF) connectors. To remove the FFCs, first release the locking clip on the connector, and then pull the cable straight out of the connector.


 **TIP:** For reinstallation, make sure that the line of the FFC is parallel with the body.

Figure 5-401 Disconnect two FFCs



9. Remove four screws.


 **NOTE:** Two of the screws are self-tapping threads (black), and two of the screws are machine thread (silver).

Figure 5-402 Remove four screws



10. Lift the control panel and base straight up and off of the printer to remove them together.


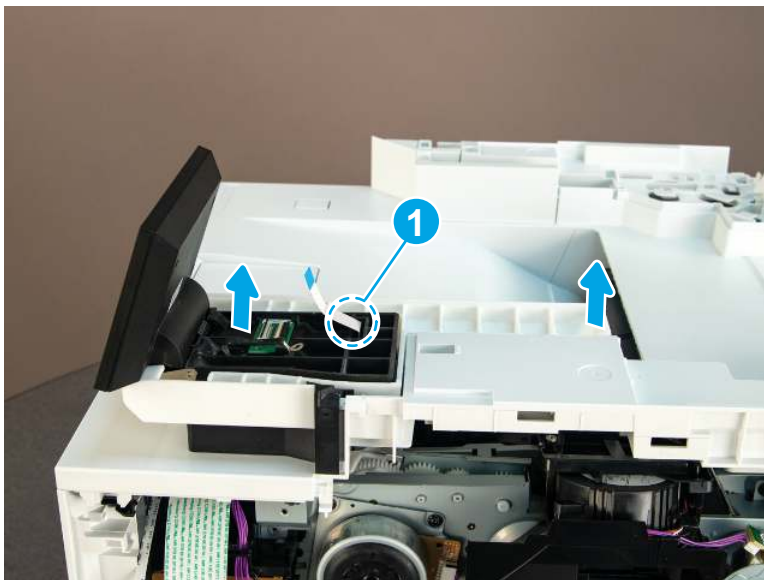
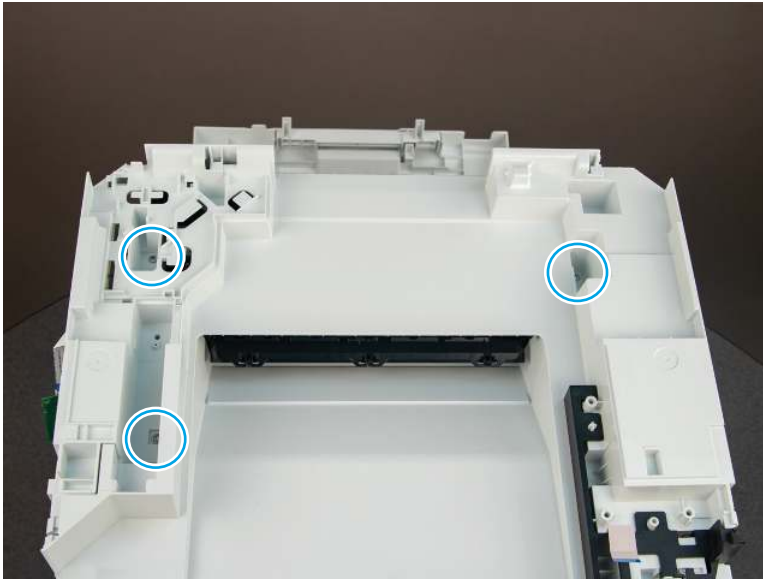
 **NOTE:** When handling the assembly, do not lose the ferrite (callout 1).

Figure 5-403 Remove control panel and base



11. Remove three screws.

Figure 5-404 Remove three screws



12. Sliding the cover from the back of the printer to the front to remove it.


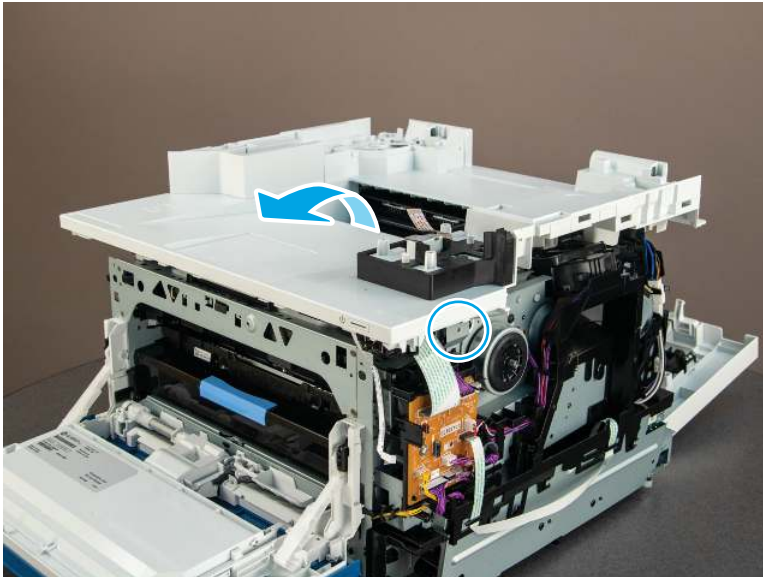
 **TIP:** Slightly move the control-panel ground bracket (circled) back and forth to help release the top cover.

Figure 5-405 Remove the cover




13. **When the cover is reinstalled:** Make sure that the front USB assembly is correctly positioned under the cover.

Figure 5-406 Front USB assembly



9. Remove the cartridge fan

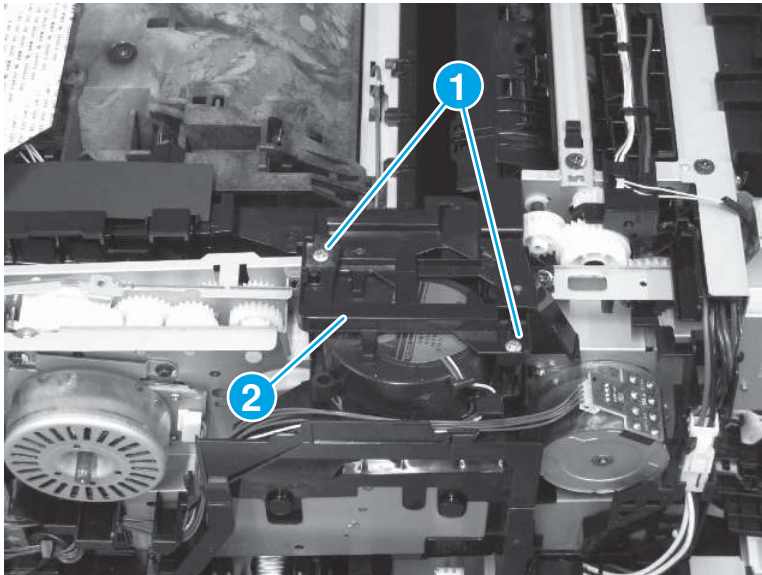
Follow the procedure below to remove and replace the cartridge fan.

-  **NOTE:** The fan installed in your printer might look different than the one shown in the figures below. However, these instructions are valid for BOTH cartridge fans.



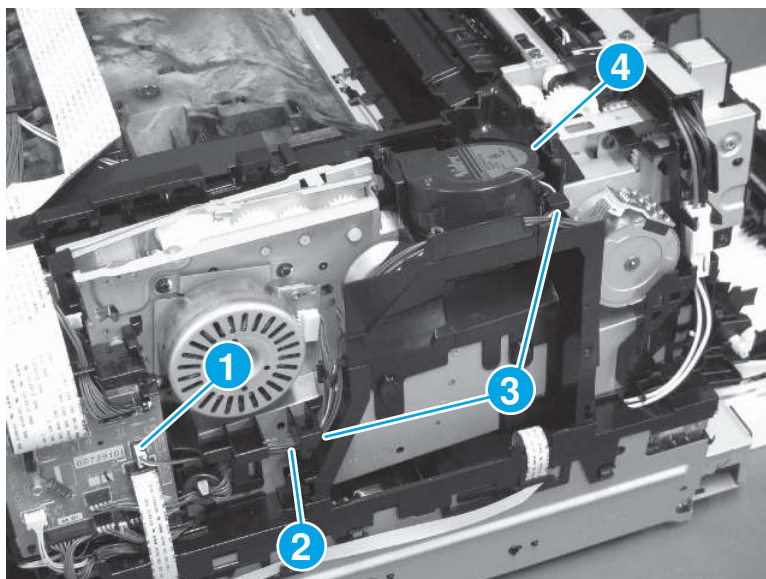
1. Remove two screws (callout 1), and then remove the holder (callout 2).

Figure 5-407 Remove the holder



2. Disconnect one connector (callout 1), release the cable (callout 2) from the guide (callout 3), and then remove the cartridge fan (callout 4).

Figure 5-408 Remove the cartridge fan



10. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



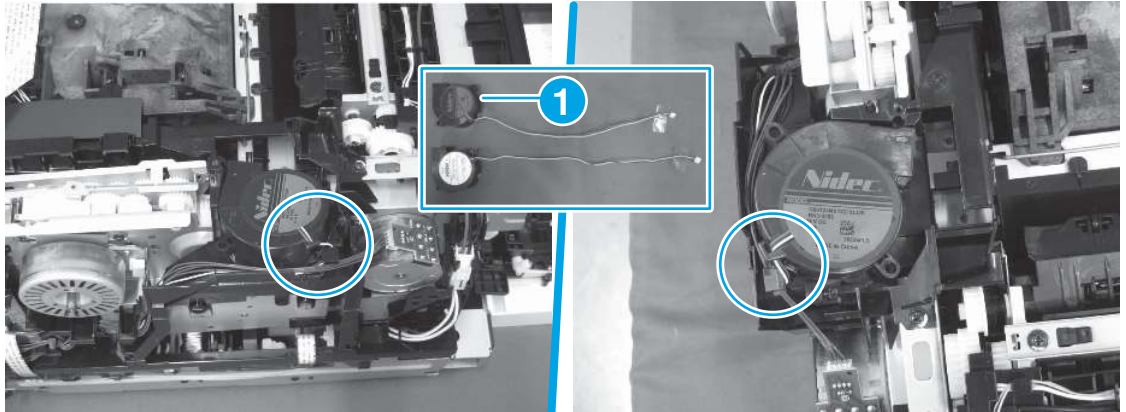
NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

11. Special installation instructions - Cartridge fan

Follow the special instructions below to install the cartridge fan.

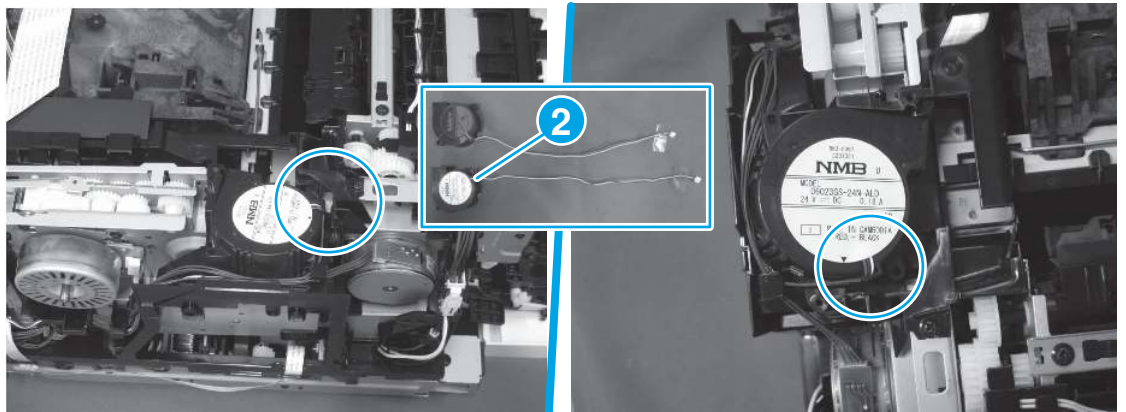
- One of two types of cartridge fan are installed in the printer. Adjust the position of the cartridge fan cable as necessary depending on which type of fan is installed.
- **Short cable cartridge fan** (callout 1)

Figure 5-409 Install the cartridge fan (1 of 2)



- **Long cable cartridge fan** (callout 2)

Figure 5-410 Install the cartridge fan (2 of 2)



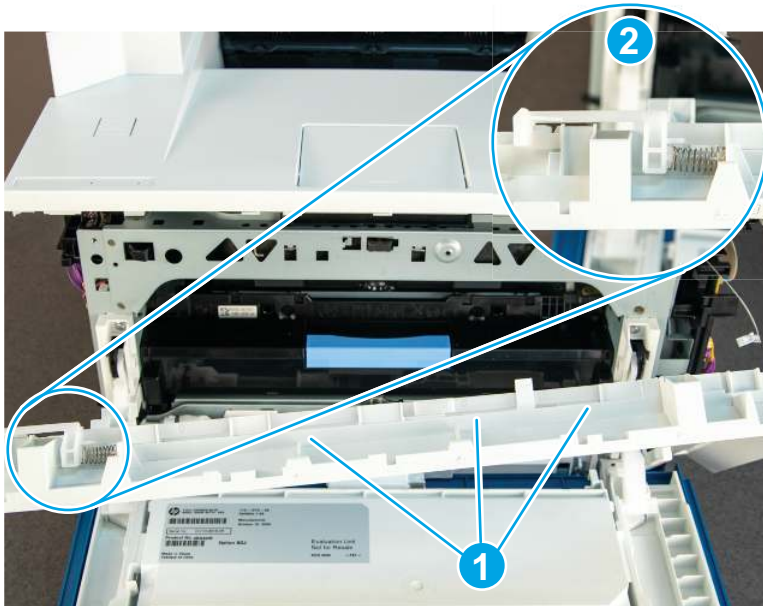
12. Special installation instructions - Front cover

Follow the special instructions below to install the front cover.

 **NOTE:** Front cover installation is **identical** for both the SFP and MFP models.

1. If the door release arm becomes dislodged when handling the cover, install it as shown below (callout 1, 2).

Figure 5-411 Door release arm installed



2. At the right and left side of the front cover, align the holes (callout 1) in the cover with the alignment pins (callout 2) on the chassis.

Figure 5-412 Cover alignment pins



3. Rotate the top of the cover towards the printer to install it.


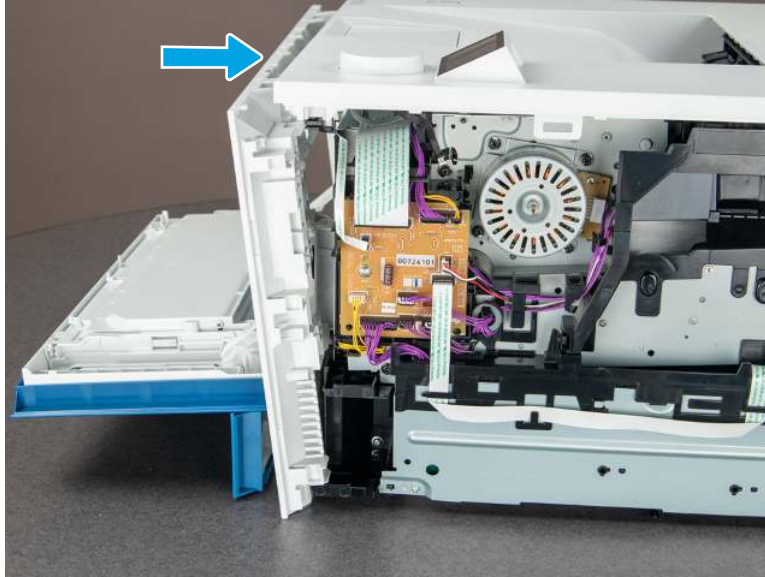
 **IMPORTANT:** Verify that the spring loaded door release button (on the left side of the cover) correctly functions.

Figure 5-413 Install the cover



Removal and replacement: Cartridge tray

Learn about cartridge tray removal.

 [View a video of removing and replacing the cartridge tray.](#)


Mean time to repair: 12 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-35 Part information

Part number	Part description
RM2-2750-000CN	Cartridge tray assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- Small flat-blade screwdriver
- Needle-nose pliers

After performing service

Turn the printer power on


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


Post service test

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

1. Remove the left cover (SFP)

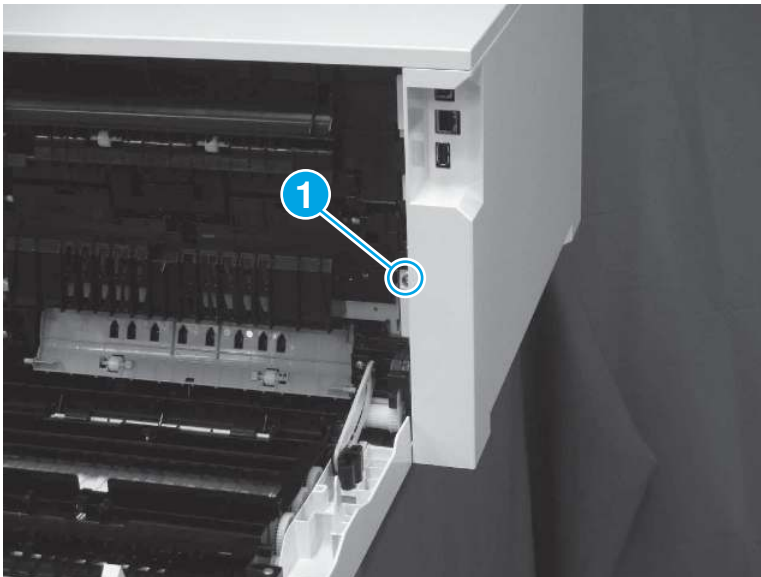
Follow the procedure below to remove and replace the left cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

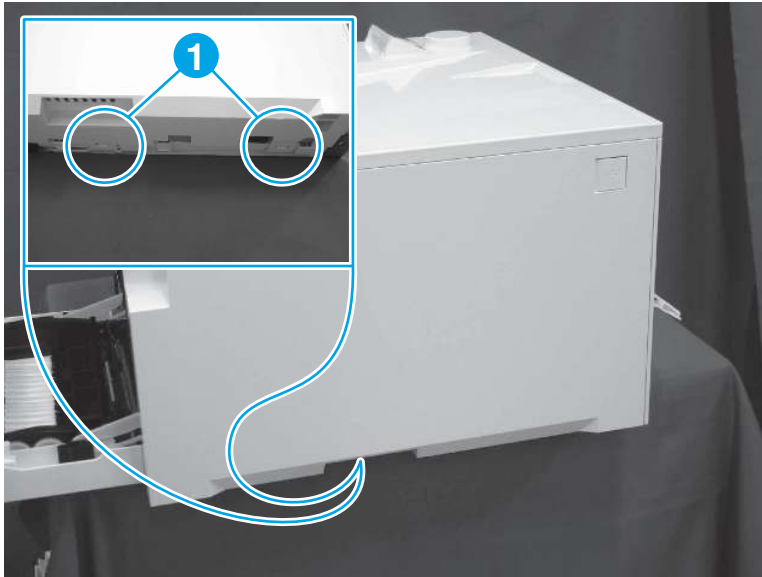
1. Remove one screw (callout 1).

Figure 5-414 Remove one screw



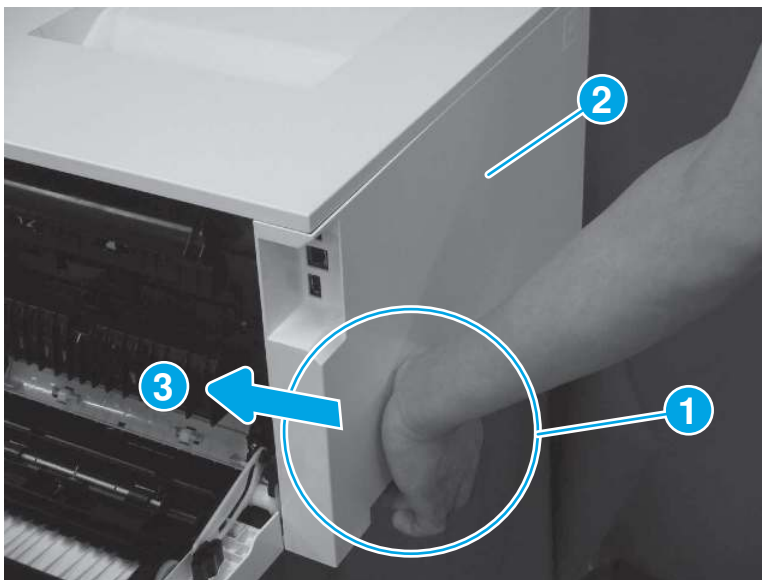
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-415 Release two tabs



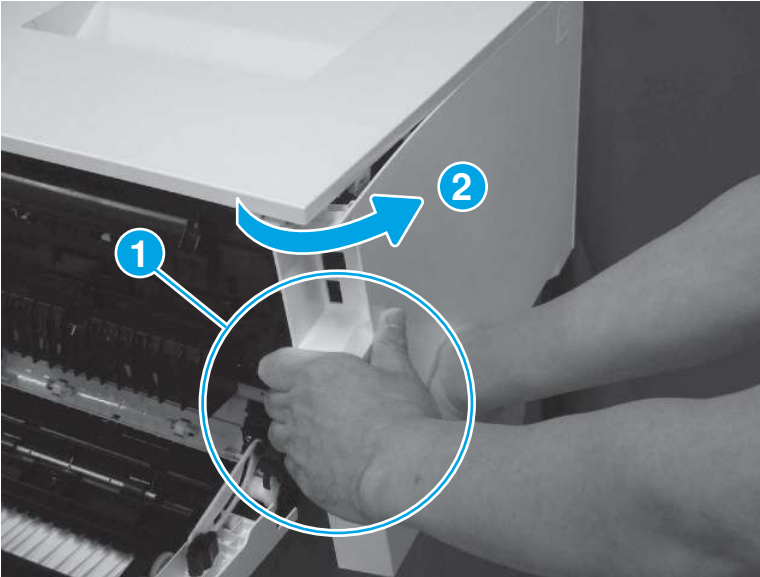
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-416 Release the rear cover corner



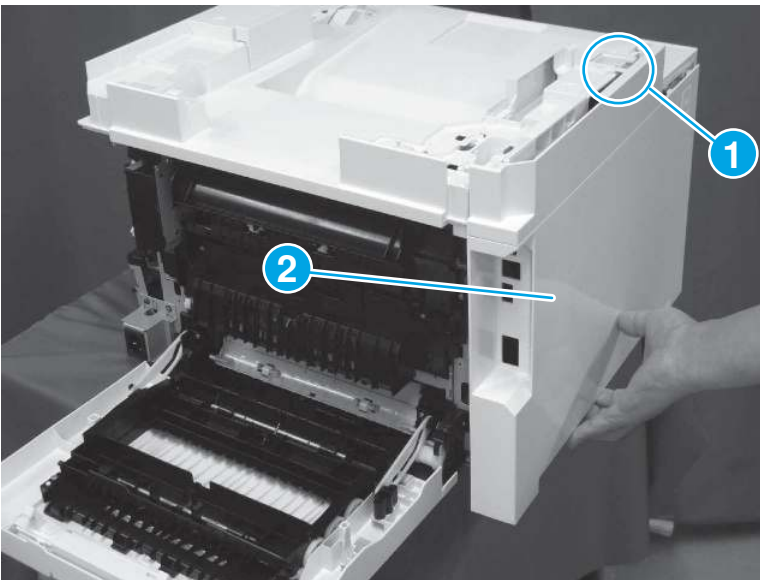
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-417 Disengage the cover corner




5. Remove the left cover (callout 1).


Figure 5-418 Remove the cover



2. Remove the left cover (MFP)

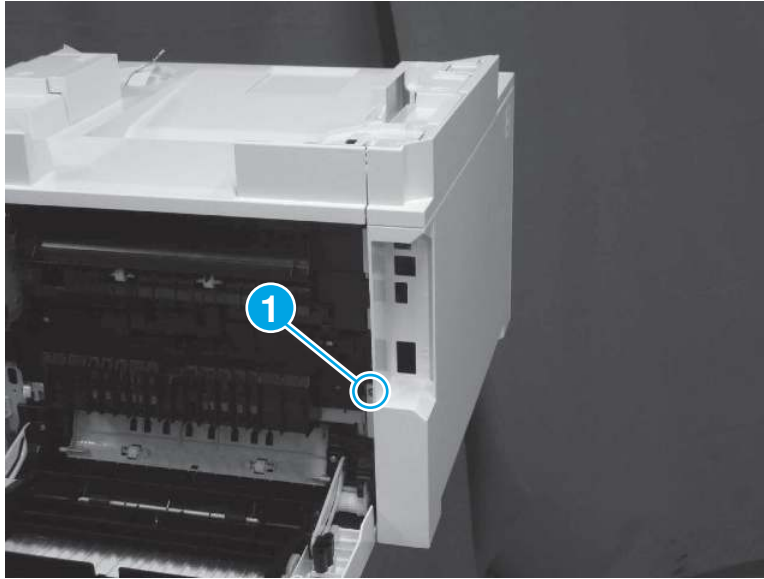
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

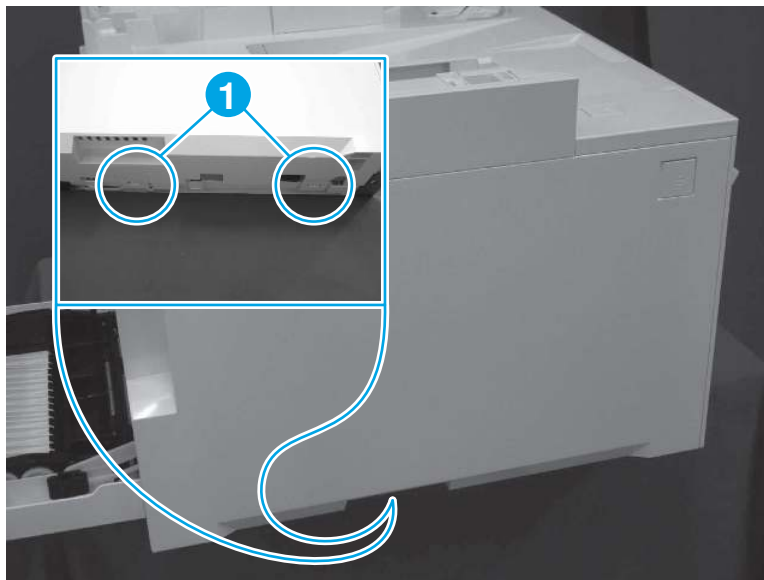
1. Remove one screw (callout 1).

Figure 5-419 Remove one screw



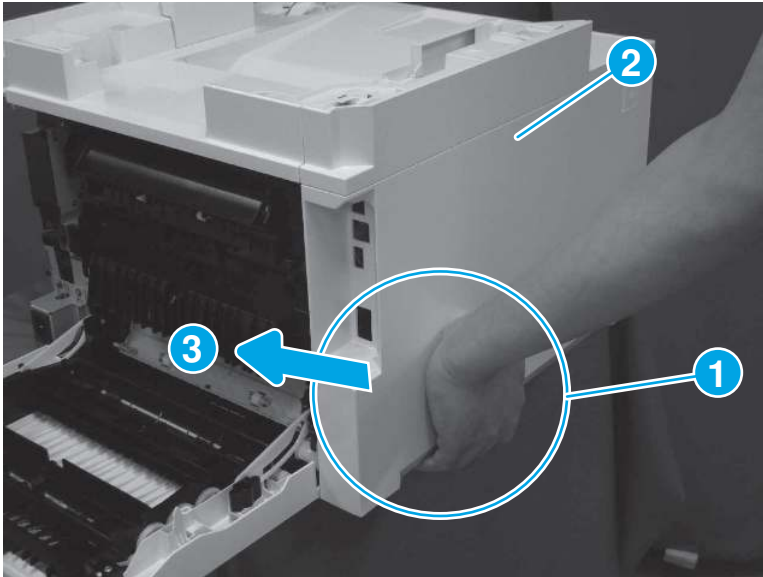
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-420 Release two tabs



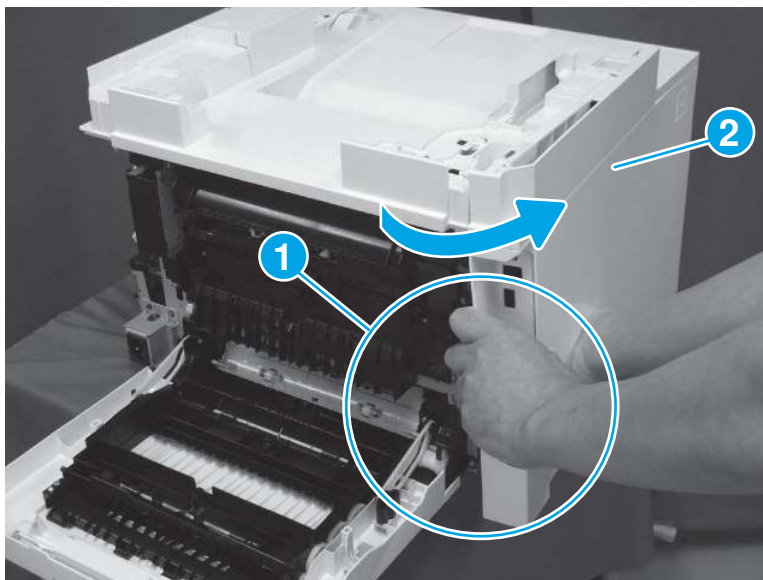
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-421 Release the rear cover corner



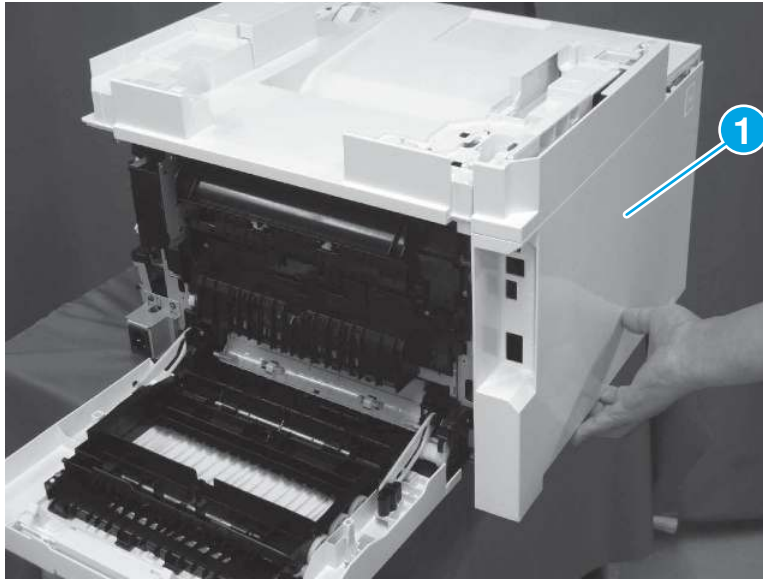
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-422 Disengage the cover corner




5. Remove the left cover (callout 1).

Figure 5-423 Remove the cover



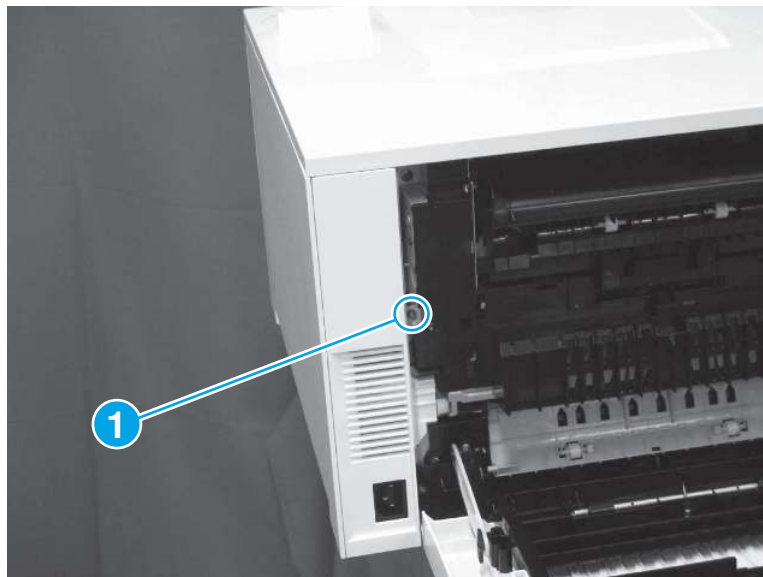
3. Remove the right cover (SFP)

Follow the procedure below to remove and replace the right cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

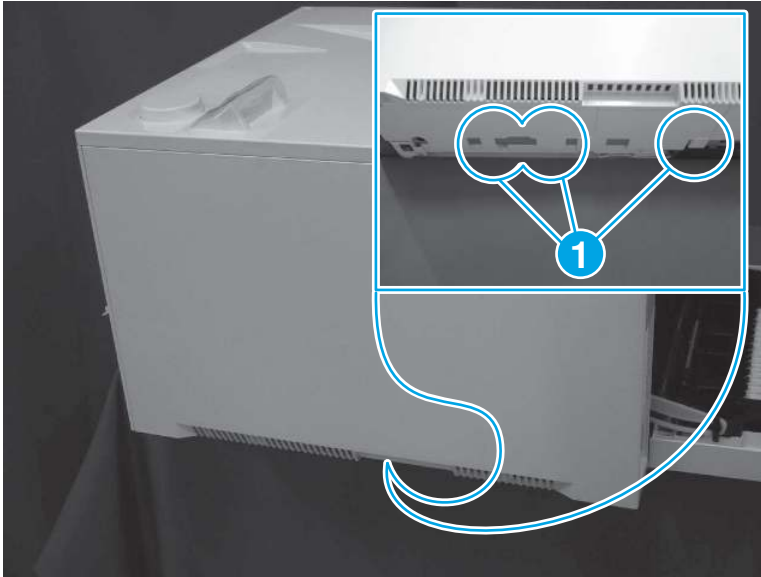
1. Remove one screw (callout 1).

Figure 5-424 Remove one screw



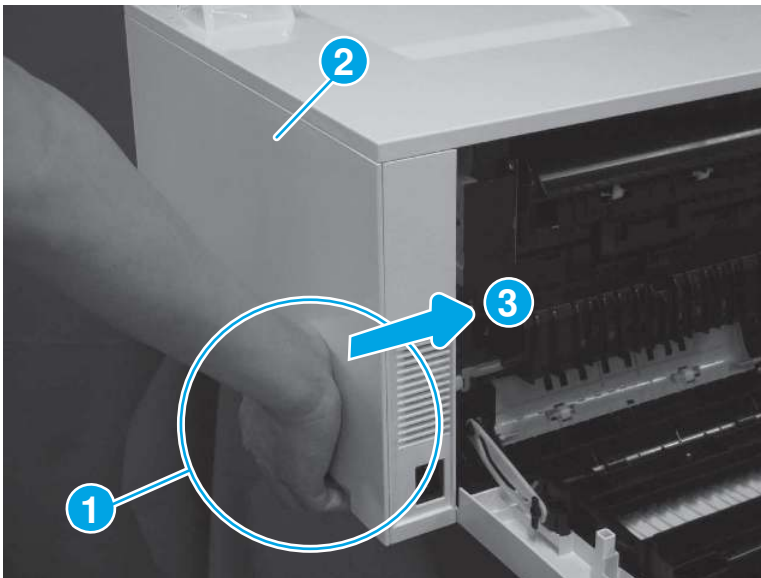
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-425 Release three tabs



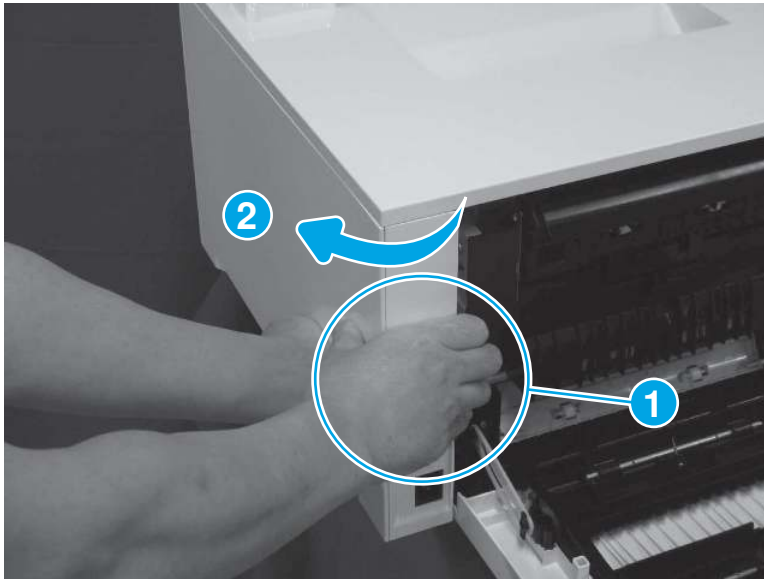
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-426 Release the rear cover corner



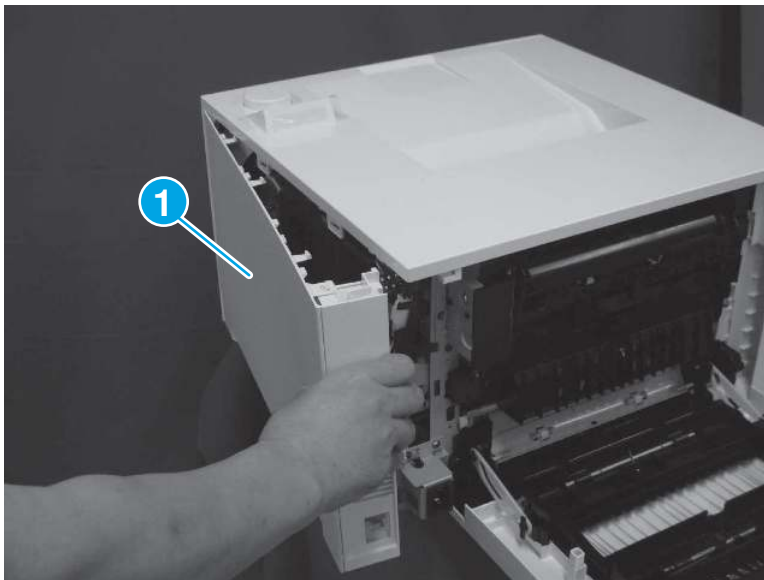
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-427 Disengage the cover corner



5. Remove the right cover (callout 1).

Figure 5-428 Remove the cover



4. Remove the right cover (MFP)

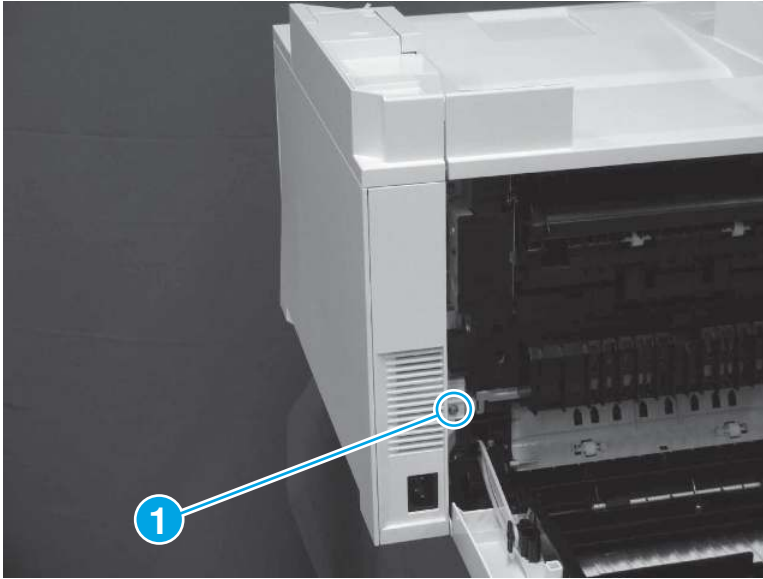
Follow the procedure below to remove and replace the right cover (MFP).



NOTE: The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

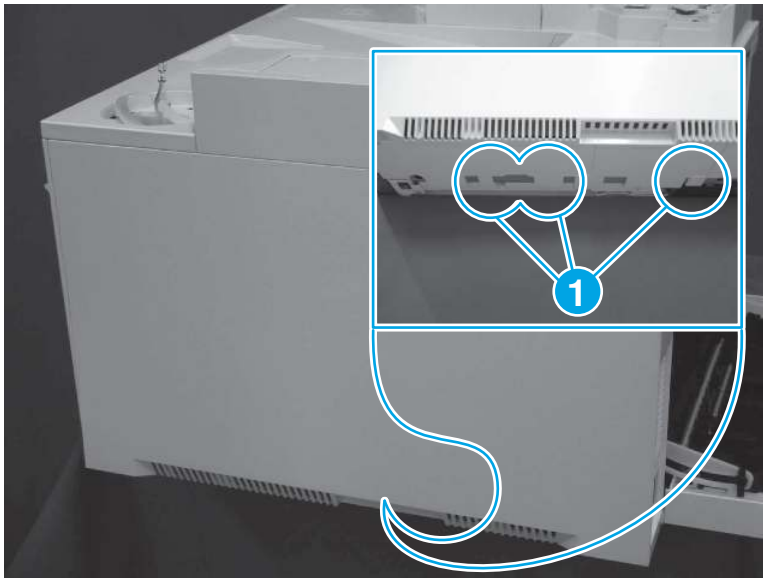
1. Remove one screw (callout 1).

Figure 5-429 Remove one screw



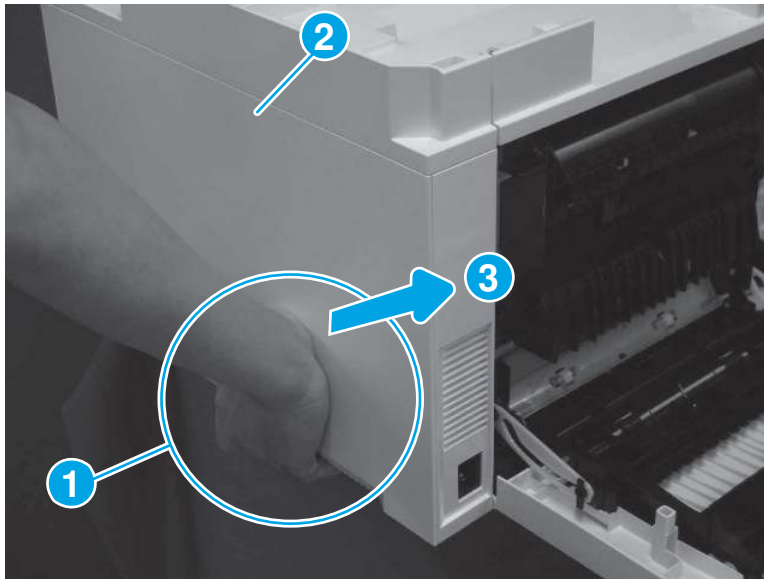
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-430 Release three tabs



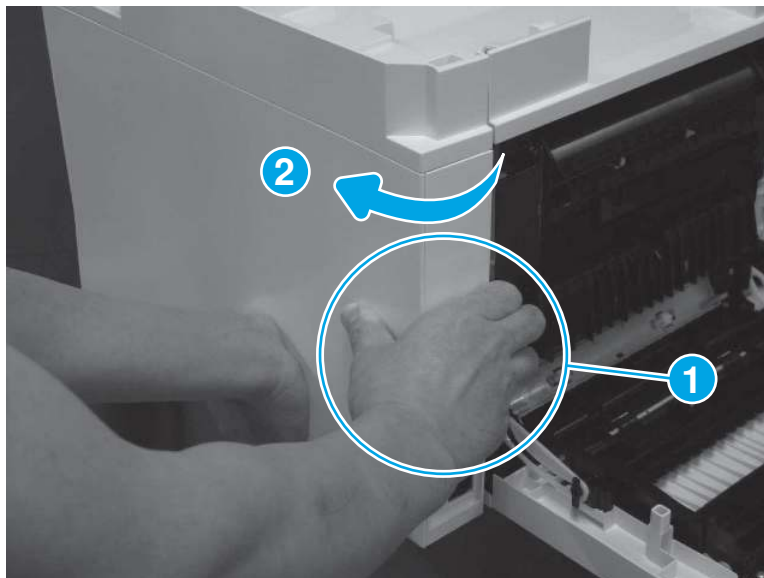
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-431 Release the rear cover corner



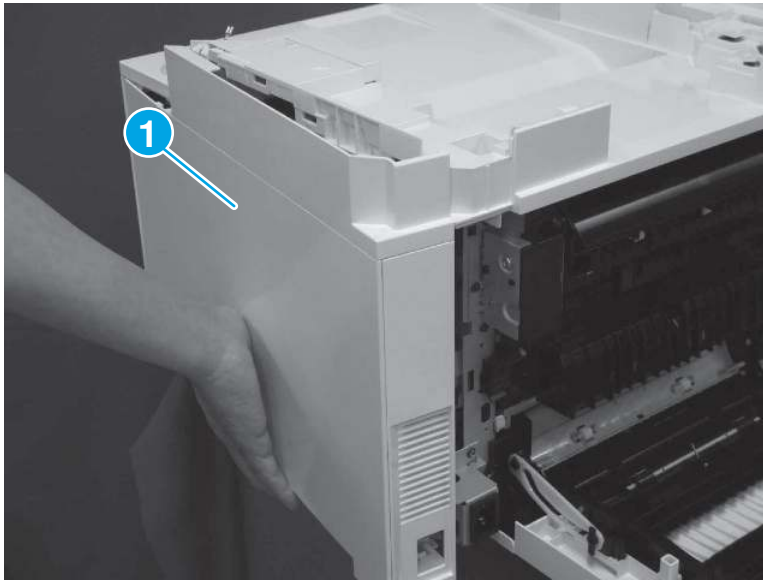
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-432 Disengage the cover corner



5. Remove the right cover (callout 1).


Figure 5-433 Remove the cover



5. Remove the front cover

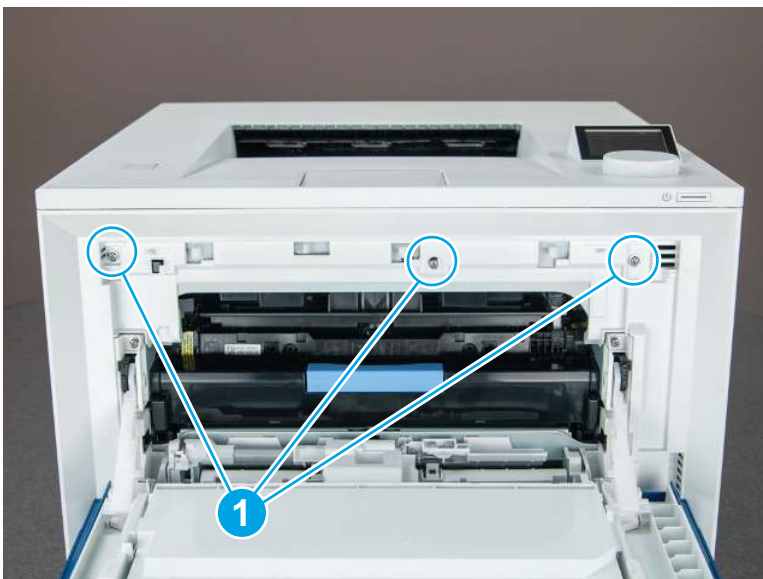
Follow the procedure below to remove and replace the front cover.

 **NOTE:** Front cover removal is **identical** for both SFP and MFP models.

 **Reinstallation tip:** Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

1. Remove three screws (callout 1).

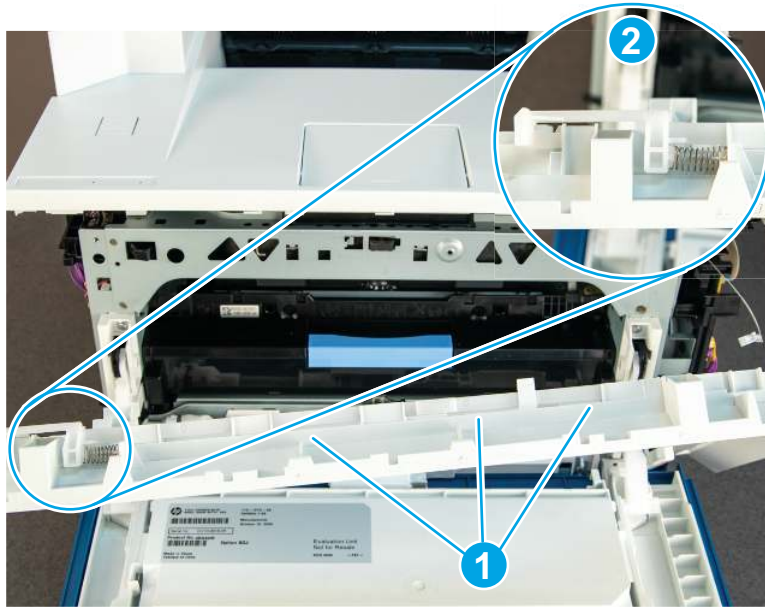
Figure 5-434 Remove three screws



2. Before proceeding, take note of the door release arm (callout 1). This arm can be easily dislodged when the cover is removed.

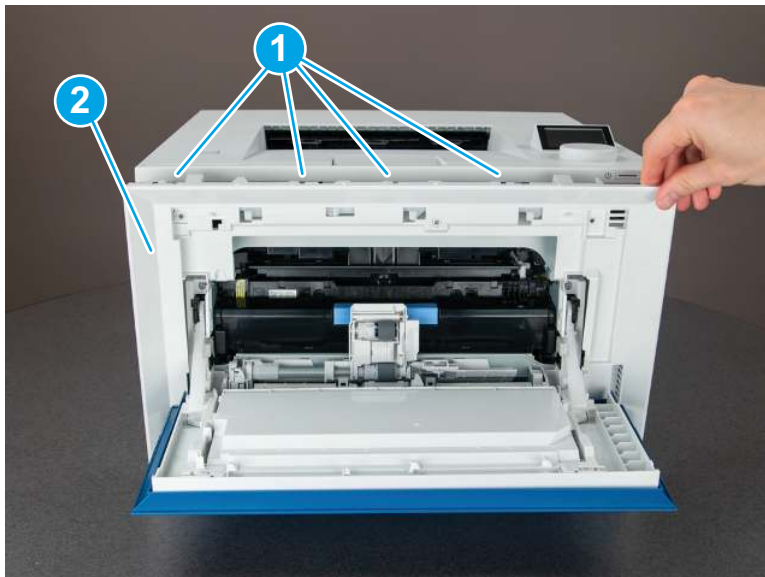
⚠ CAUTION: Do not lose the spring (callout 2) when removing the front cover.

Figure 5-435 Door release arm



3. Release four tabs (callout 1), and then remove the front cover (callout 2).

Figure 5-436 Remove the cover

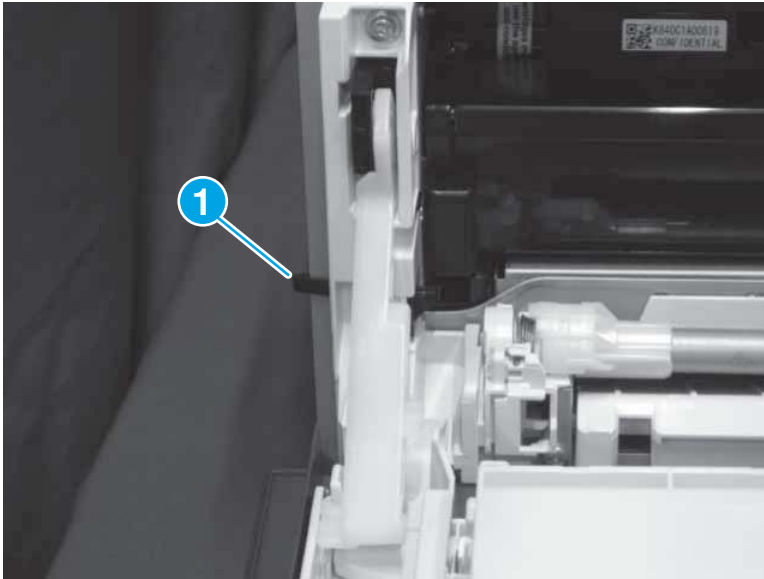


6. Remove the cartridge tray

Follow the procedure below to remove and replace the cartridge tray.

1. Release one tab (left side).

Figure 5-437 Release one tab (left side)



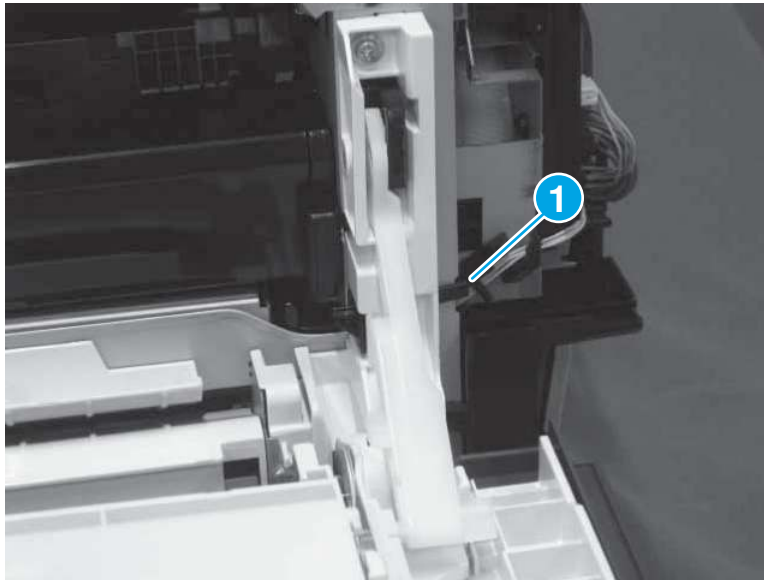
2. Use a pair of needle-nose pliers to remove the stopper (callout 1) (left side).

Figure 5-438 Remove the stopper (left side)



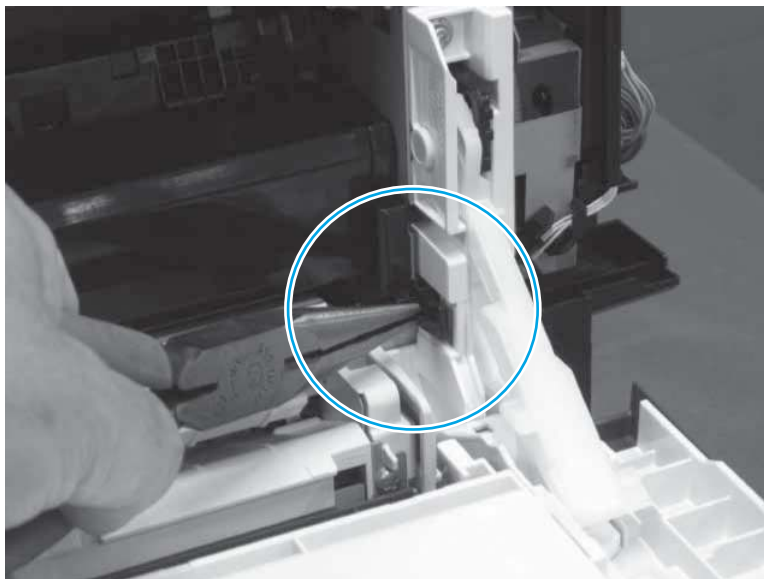
3. Release one tab (right side).

Figure 5-439 Release on tab (right side)



4. Use a pair of needle-nose pliers to remove the stopper (callout 1) (right side).

Figure 5-440 Remove the stopper (right side)



5. Pull the cartridge tray (callout 1) out of the printer to remove it.


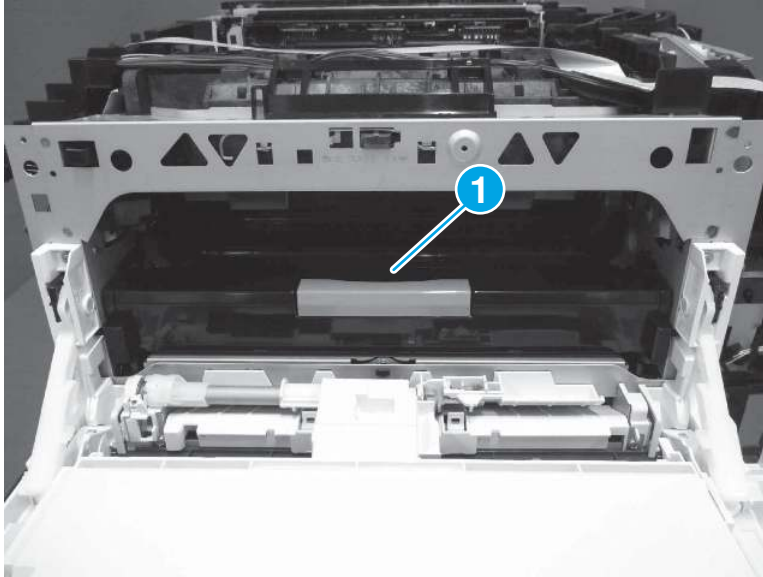
 **NOTE:** Slightly lift up on the front of the tray while removing it.

Figure 5-441 Remove the cartridge tray



7. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

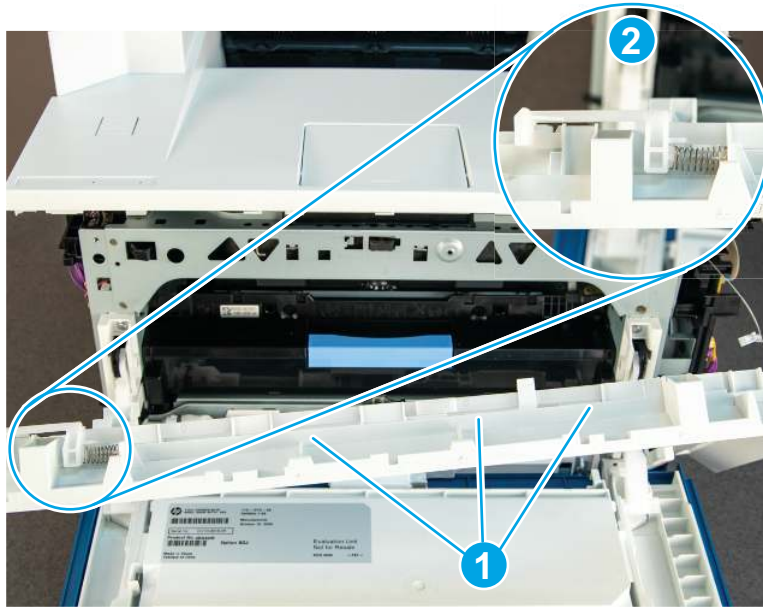
8. Special installation instructions - Front cover

Follow the special instructions below to install the front cover.

 **NOTE:** Front cover installation is **identical** for both the SFP and MFP models.

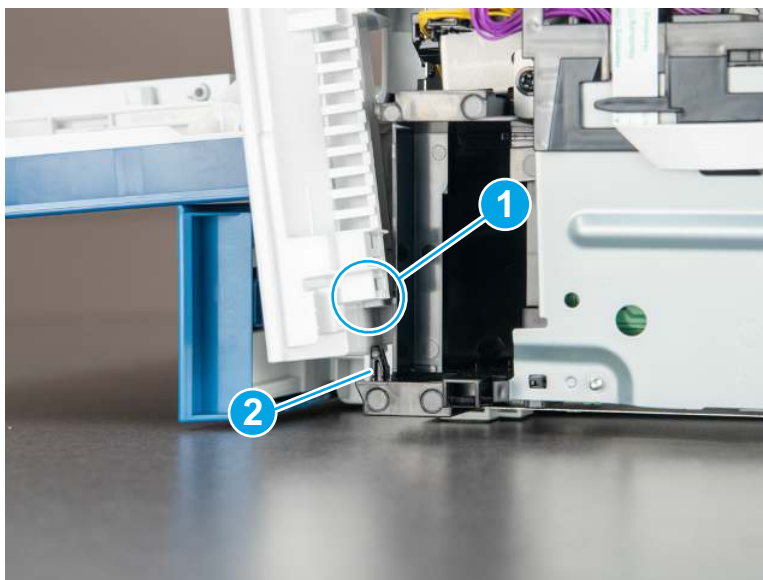
1. If the door release arm becomes dislodged when handling the cover, install it as shown below (callout 1, 2).

Figure 5-442 Door release arm installed



2. At the right and left side of the front cover, align the holes (callout 1) in the cover with the alignment pins (callout 2) on the chassis.

Figure 5-443 Cover alignment pins



3. Rotate the top of the cover towards the printer to install it.


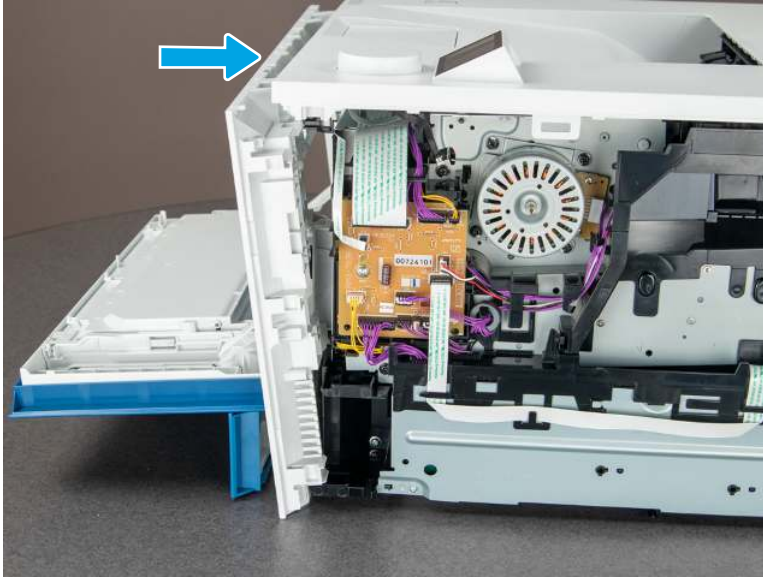

 **IMPORTANT:** Verify that the spring loaded door release button (on the left side of the cover) correctly functions.

Figure 5-444 Install the cover



Removal and replacement: Fuser/duplex drive assembly

Learn about fuser/duplex drive removal.

 **IMPORTANT:** The power button **must** be used to turn the printer power off prior to removing the fuser. Unplugging the printer to turn the power off (without using the power button) does not disengage the fuser, making it impossible to remove.

 [View a video of removing and replacing the fuser/duplex drive assembly.](#)


Mean time to repair: 20 minutes

Service level: Medium

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-36 Part information

Part number	Part description
RM2-2731-000CN	Fuser assembly (110-127V)
RM2-2732-000CN	Fuser assembly (220-240V)
RM2-2841-000CN	Duplex drive assembly (SFP)
RM2-2842-000CN	Duplex drive assembly (MFP)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- Small flat-blade screwdriver

After performing service

Turn the printer power on


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


Post service test

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

1. Remove the left cover (SFP)

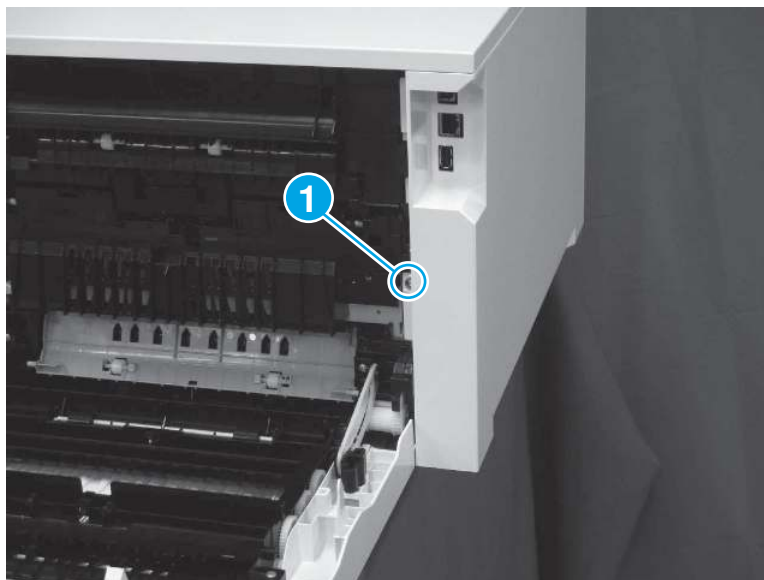
Follow the procedure below to remove and replace the left cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

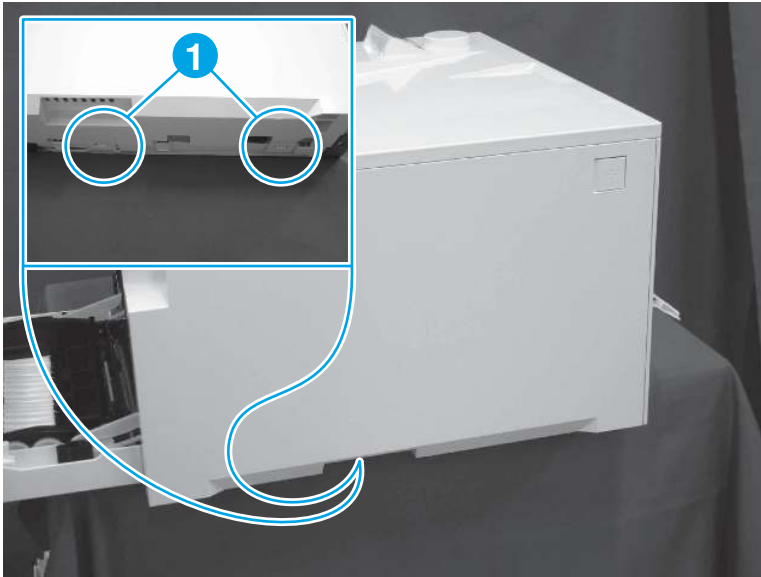
1. Remove one screw (callout 1).

Figure 5-445 Remove one screw



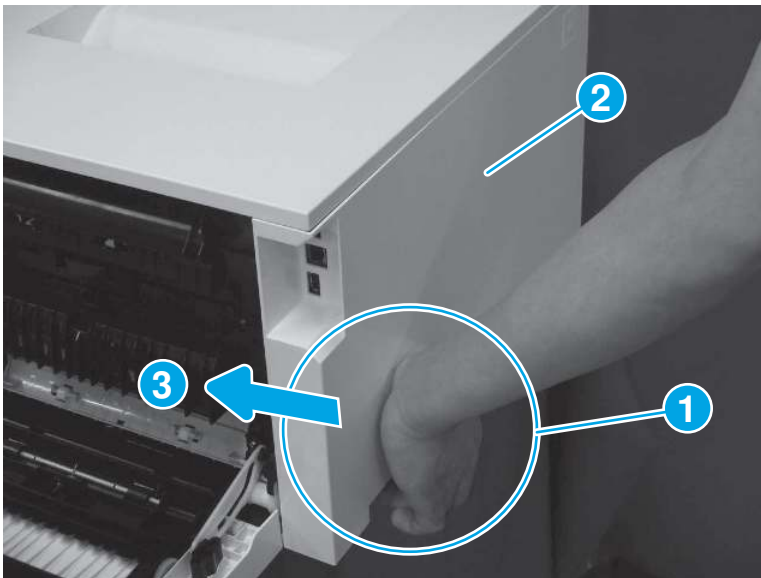
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-446 Release two tabs



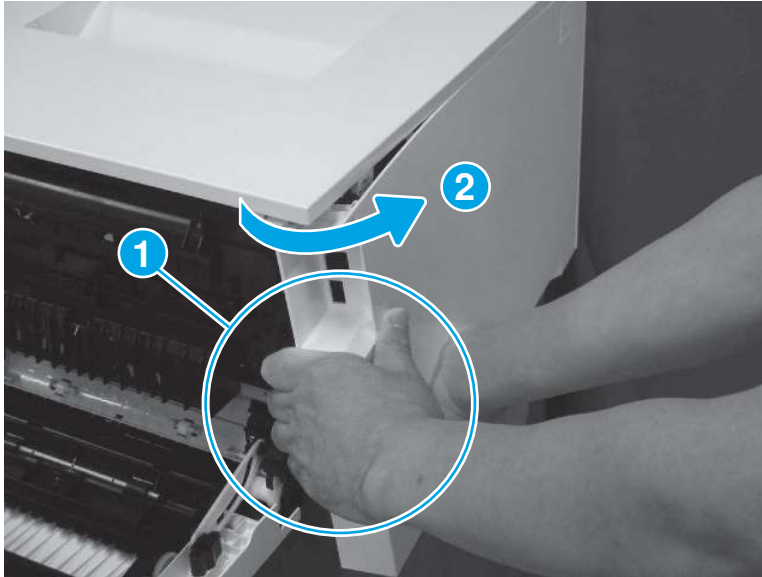
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-447 Release the rear cover corner



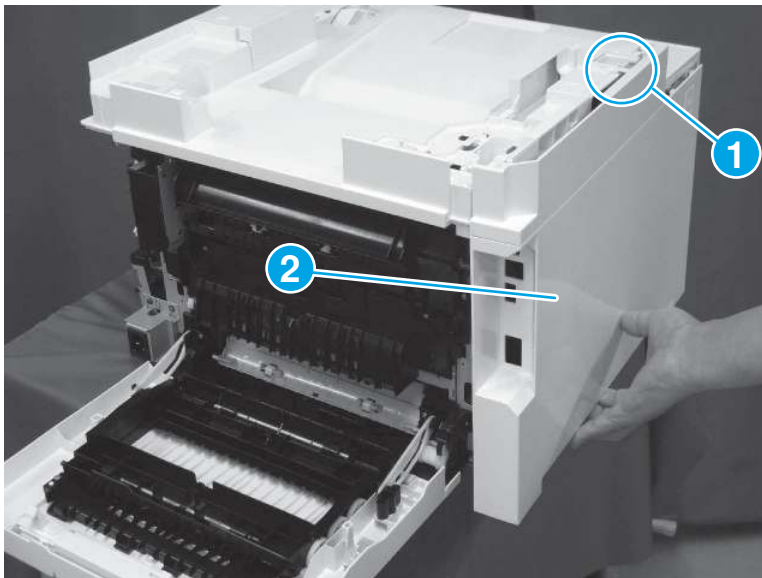
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-448 Disengage the cover corner




5. Remove the left cover (callout 1).


Figure 5-449 Remove the cover



2. Remove the left cover (MFP)

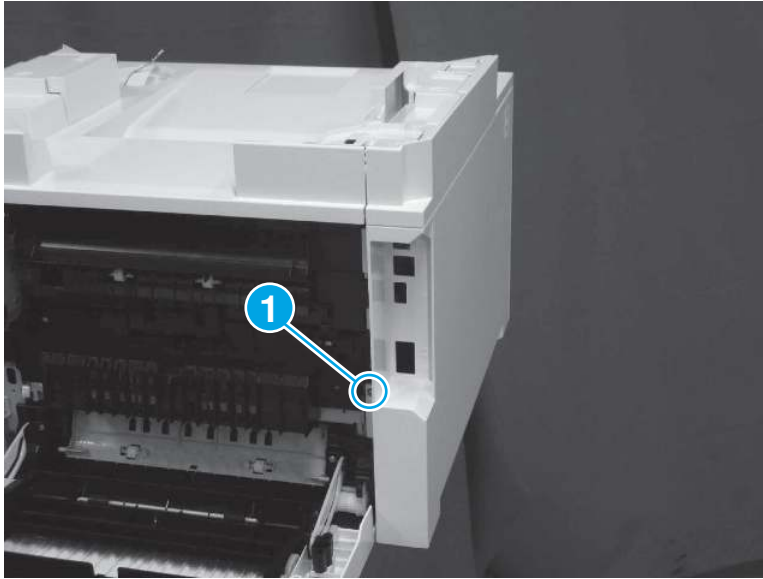
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

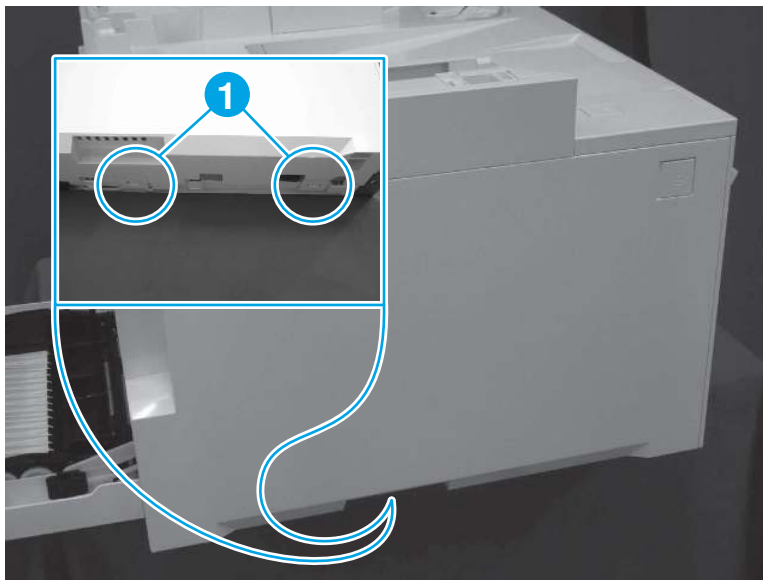
1. Remove one screw (callout 1).

Figure 5-450 Remove one screw



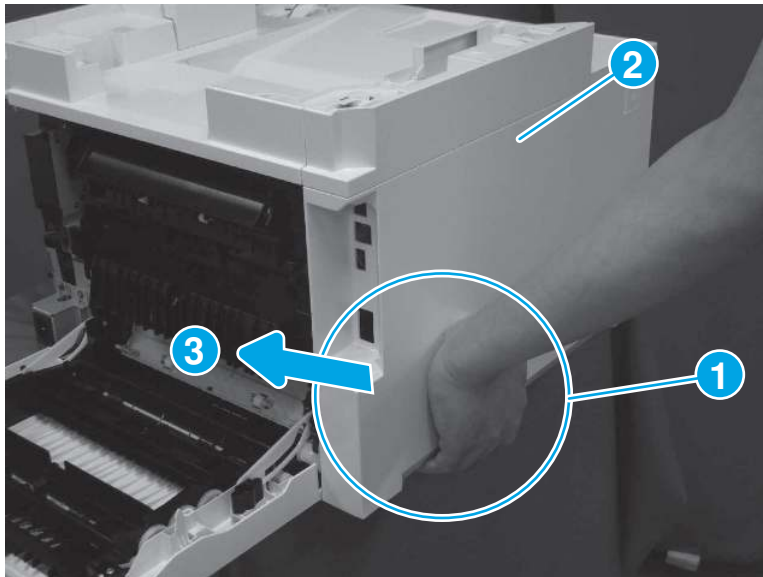
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-451 Release two tabs



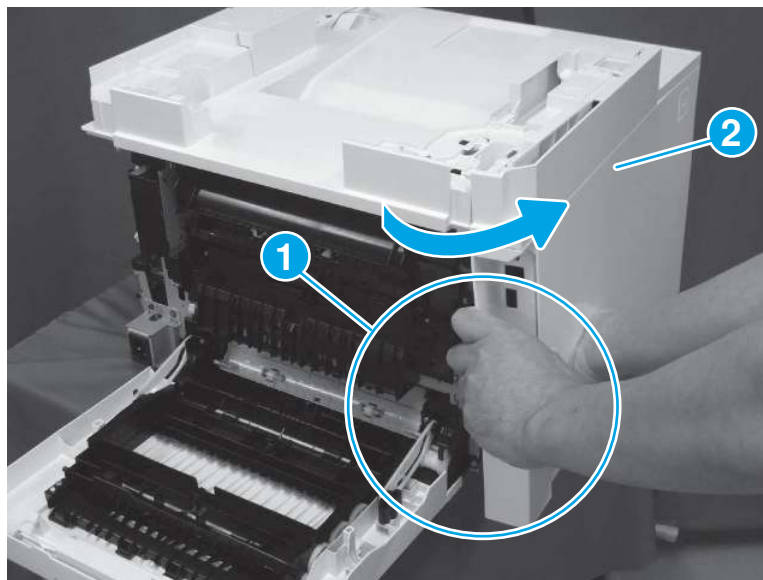
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-452 Release the rear cover corner



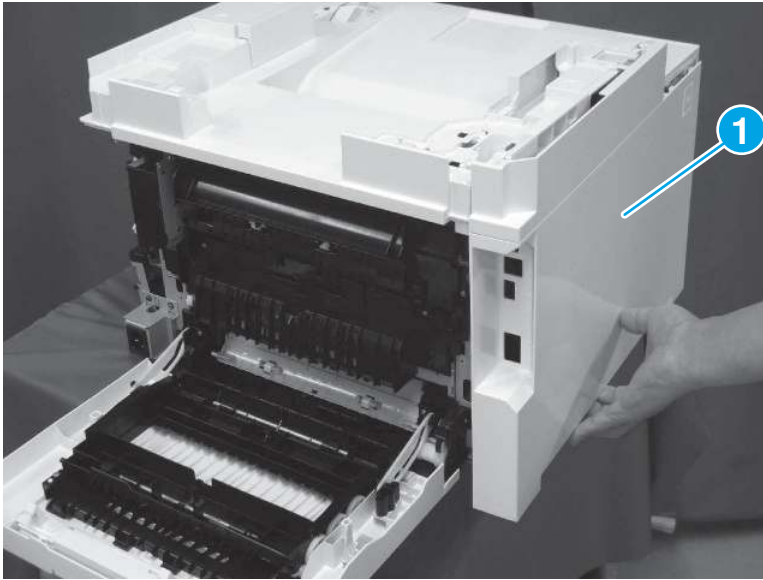
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-453 Disengage the cover corner




5. Remove the left cover (callout 1).

Figure 5-454 Remove the cover



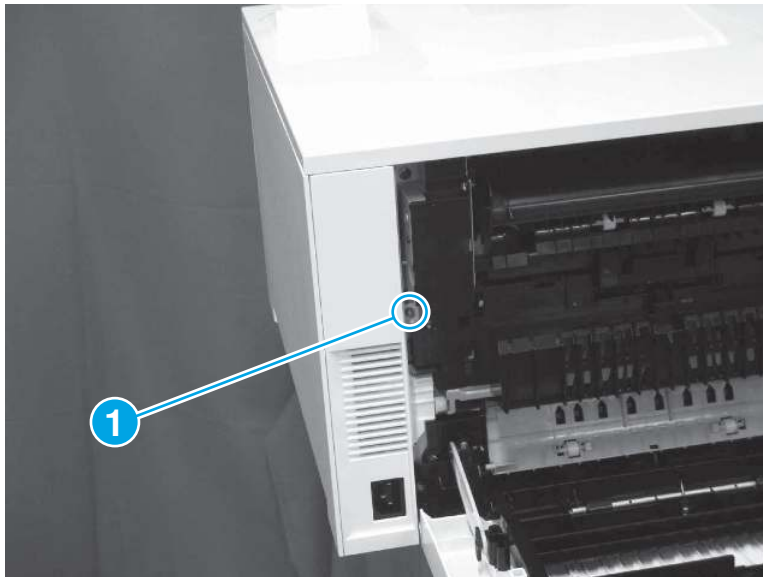
3. Remove the right cover (SFP)

Follow the procedure below to remove and replace the right cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

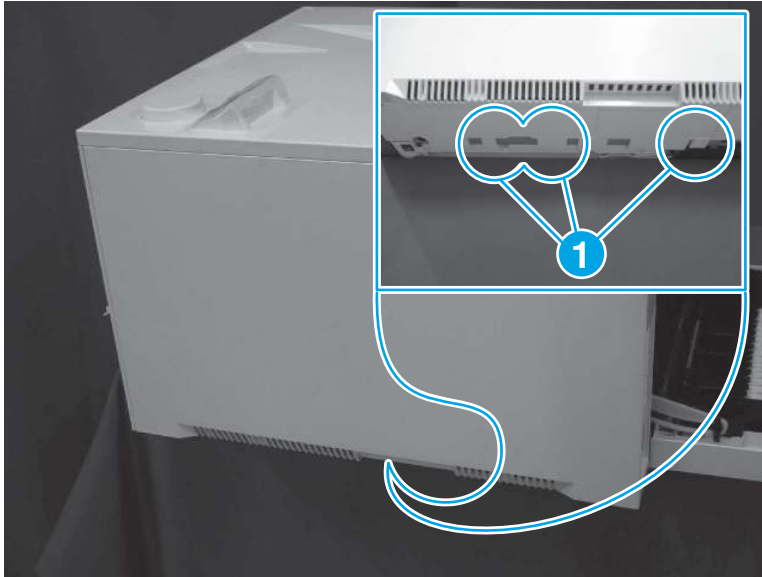
1. Remove one screw (callout 1).

Figure 5-455 Remove one screw



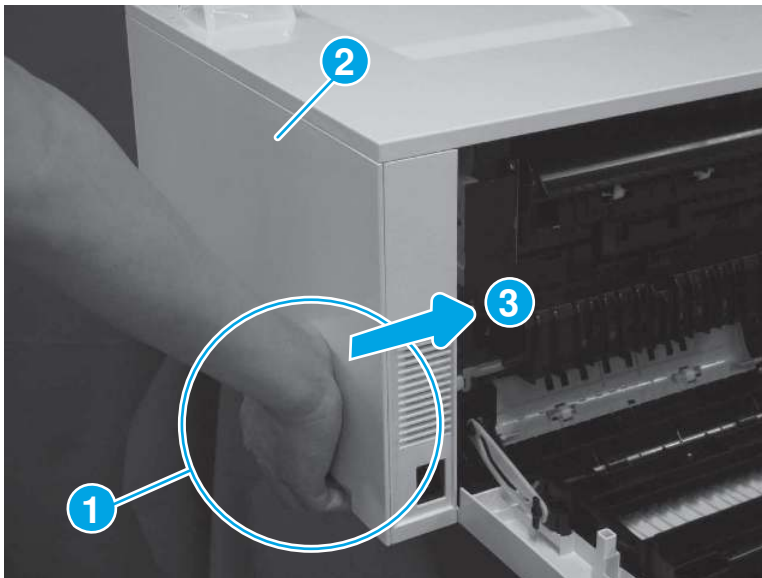
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-456 Release three tabs



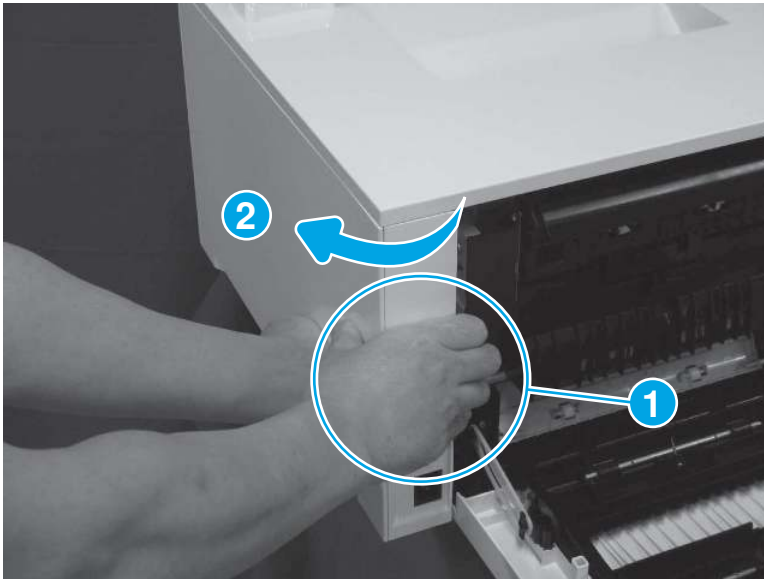
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-457 Release the rear cover corner



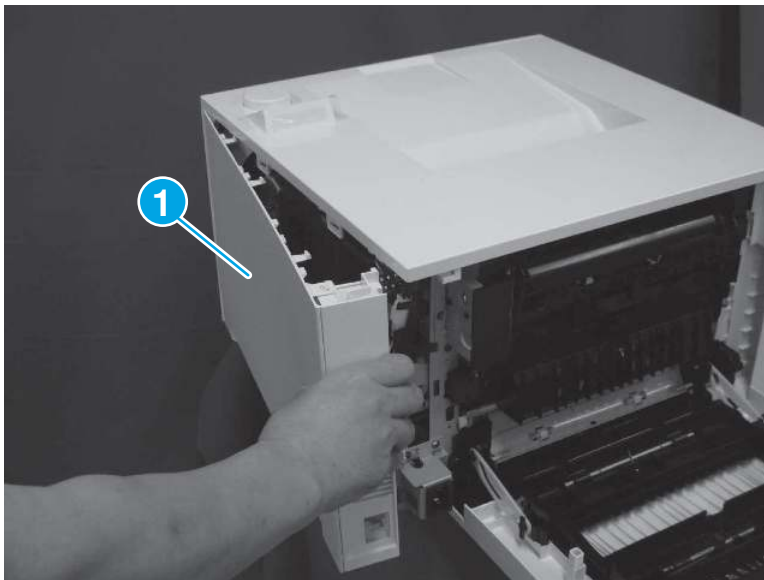
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-458 Disengage the cover corner




5. Remove the right cover (callout 1).

Figure 5-459 Remove the cover



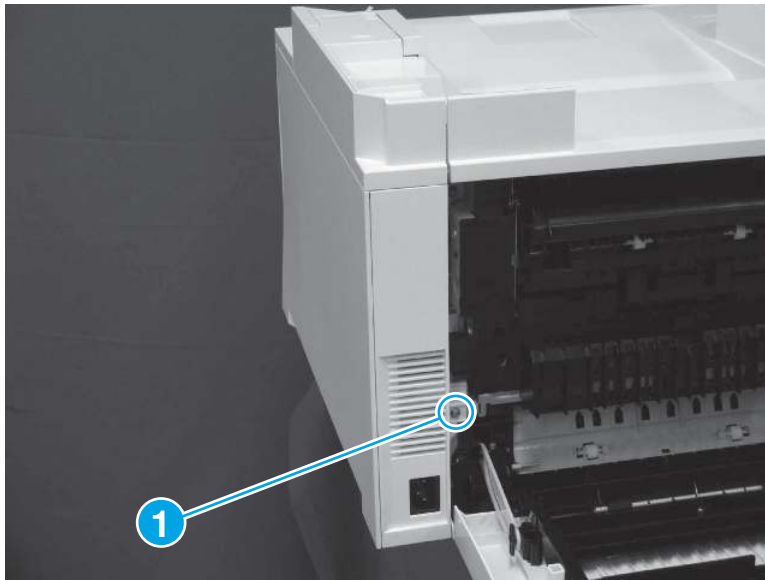
4. Remove the right cover (MFP)

Follow the procedure below to remove and replace the right cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

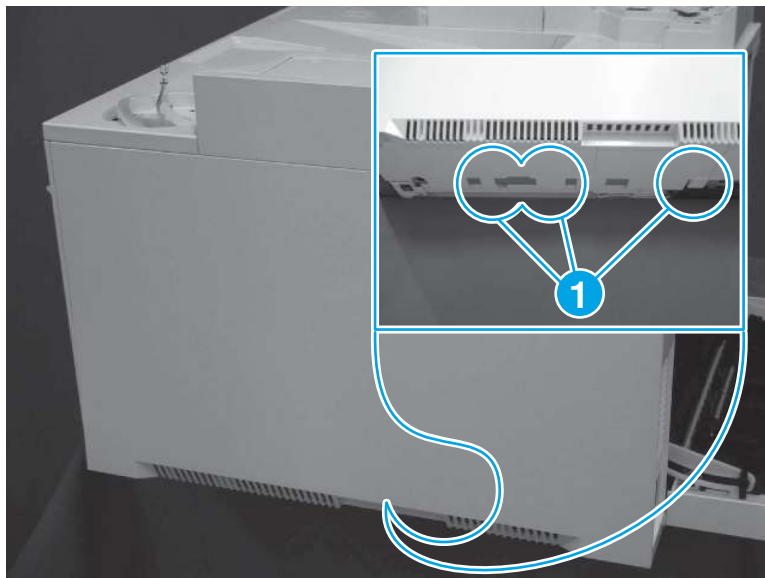
1. Remove one screw (callout 1).

Figure 5-460 Remove one screw



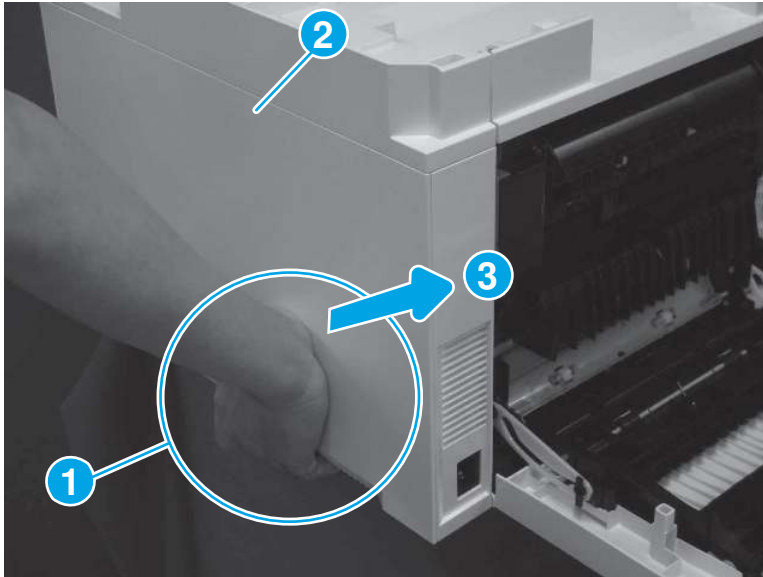
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-461 Release three tabs



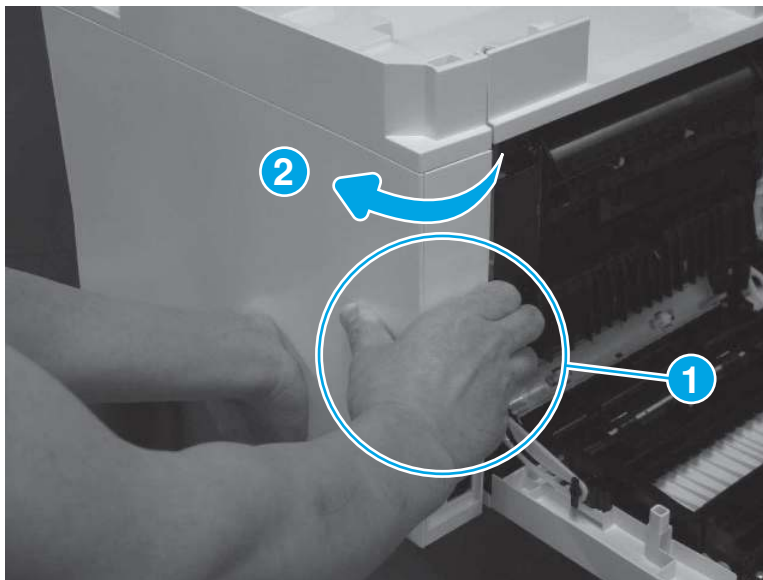
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-462 Release the rear cover corner



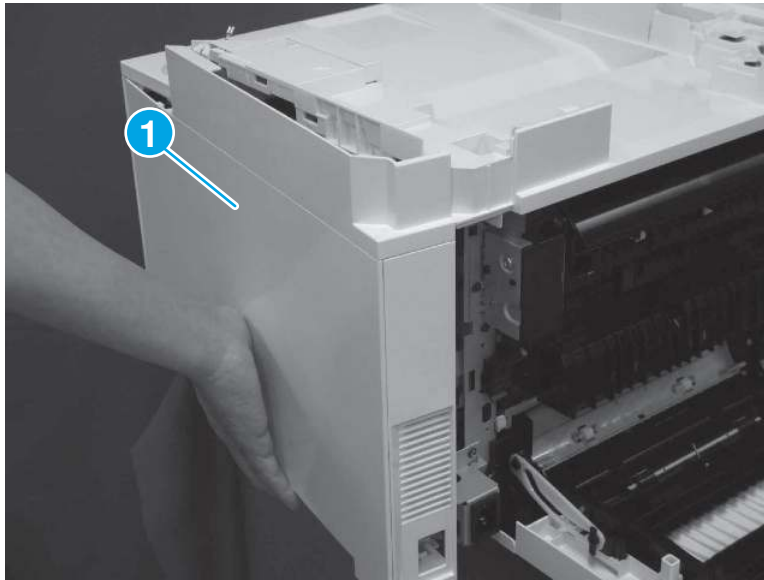
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-463 Disengage the cover corner



5. Remove the right cover (callout 1).

Figure 5-464 Remove the cover



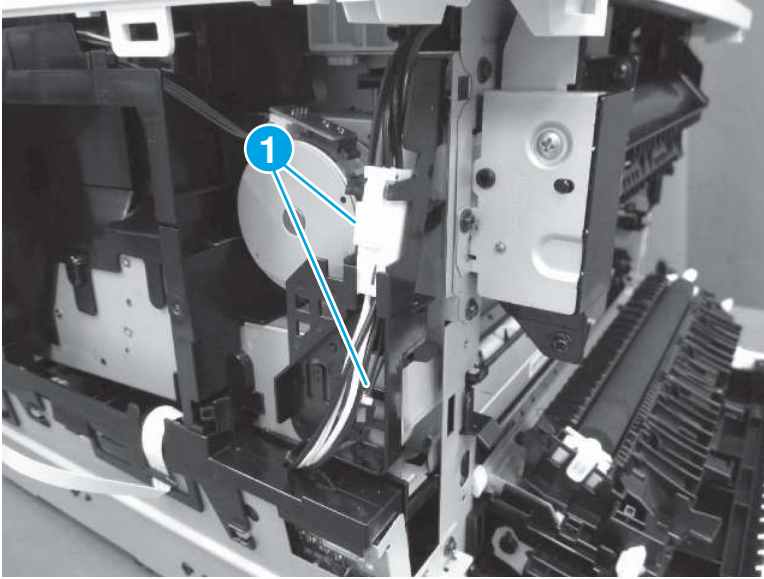
5. Remove the fuser/duplex drive assembly

Follow the procedure below to remove and replace the fuser.

-
- CAUTION:** The fuser is hot. Wait at least 30 minutes after turning the printer power off before removing the fuser.
 - IMPORTANT:** The power button **must** be used to turn the printer power off prior to removing the fuser. Unplugging the printer to turn the power off (without using the power button) does not disengage the fuser, making it impossible to remove.
 - NOTE:** The fuser and duplex drive are removed as one assembly. If the fuser is being replaced, remove the duplex drive from the discarded fuser and then install it on the replacement fuser.
 - Reinstallation tip:** Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).
-

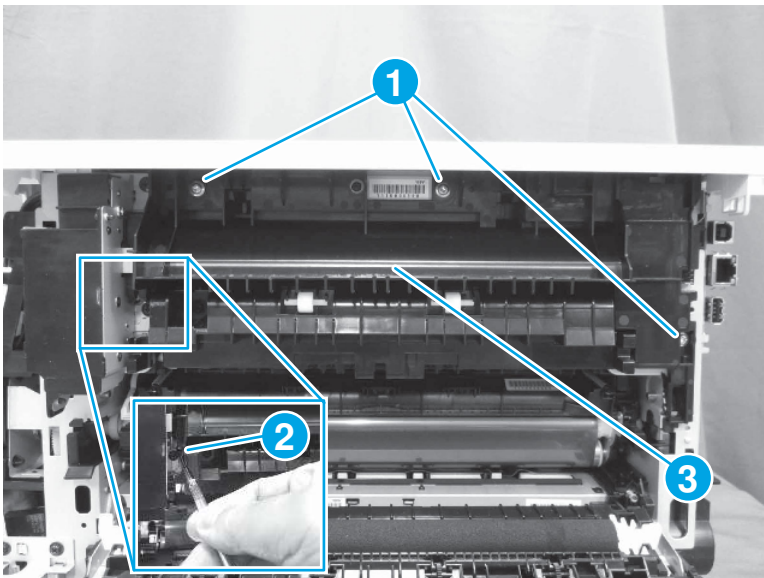
1. Disconnect two connectors (callout 1).

Figure 5-465 Disconnect two connectors



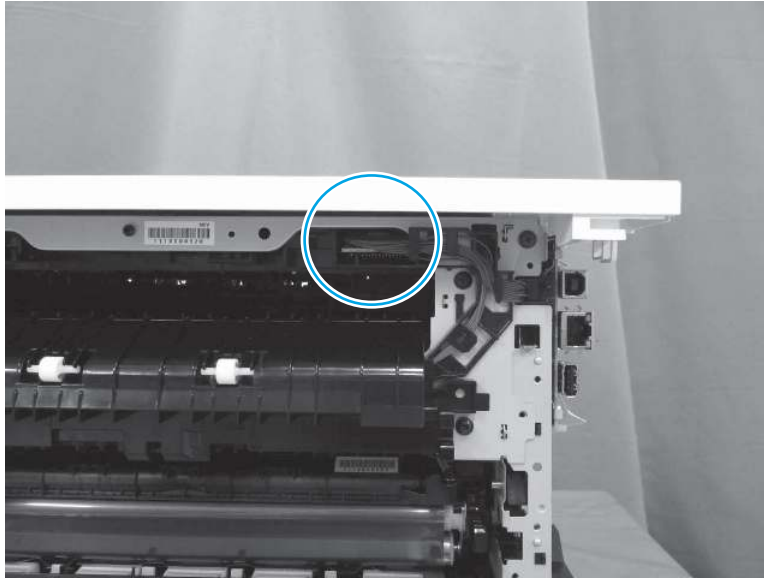
2. Remove three screws (callout 1), release one tab (callout 2), and then remove the switchback guide (callout 3).

Figure 5-466 Remove the switchback guide




3. Disconnect one connector.

Figure 5-467 Disconnect one connector

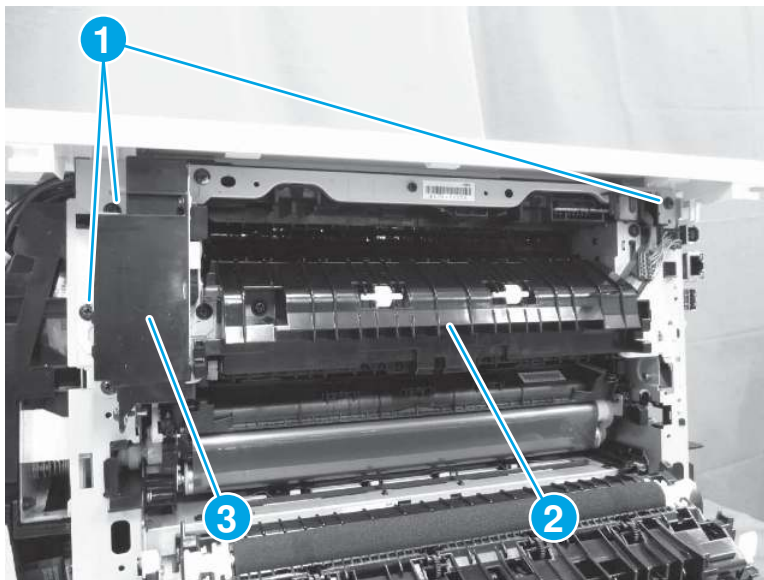


4. Remove three screws (callout 1), and then remove the fuser (callout 2) and duplex drive assembly (callout 3) together.

 **NOTE: Fuser/duplex drive assembly dependency part removal:** If the fuser and duplex drive are being removed to gain access to other assemblies, stop and skip the remaining steps in this topic.

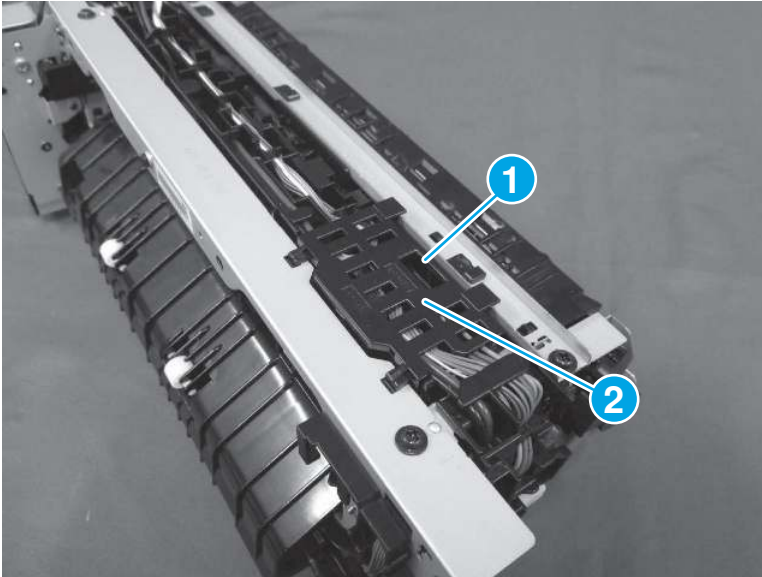
Fuser or duplex drive assembly replacement part removal: For a replacement fuser or duplex drive, use the steps below to remove the duplex drive assembly, and then install it on the replacement fuser.

Figure 5-468 Remove the fuser and duplex drive assembly



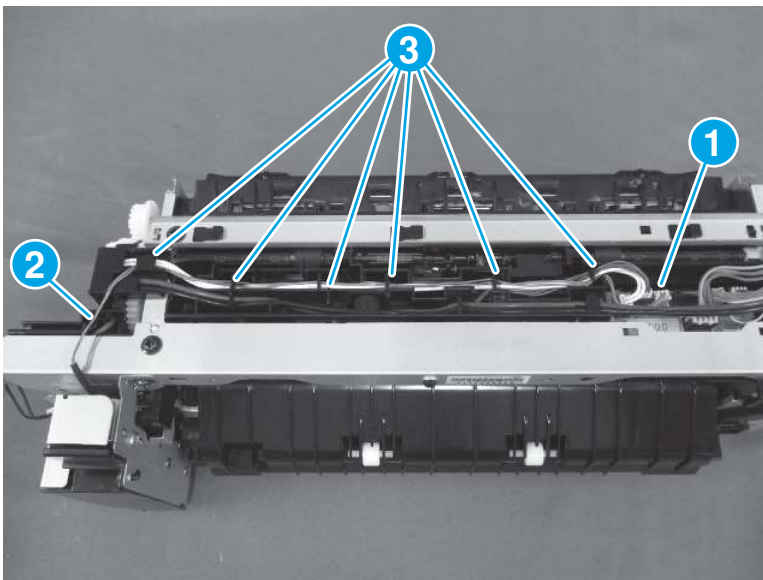
5. **Replacement fuser or duplex drive only:** Release one tab (callout 1), and then remove the cover (callout 2).

Figure 5-469 Remove the cover



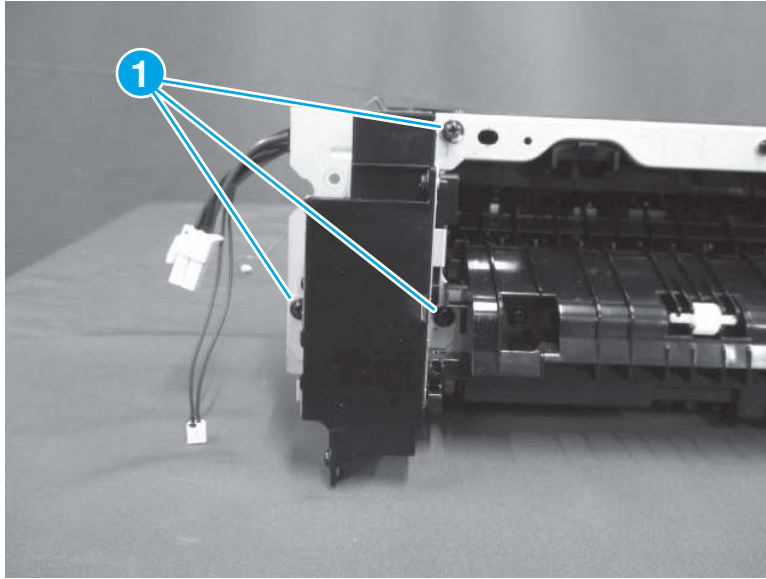
6. **Replacement fuser or duplex drive only:** Disconnect one connector (callout 1), and then release the cable (callout 2) from retainers (callout 3).

Figure 5-470 Disconnect one connector and release the cable



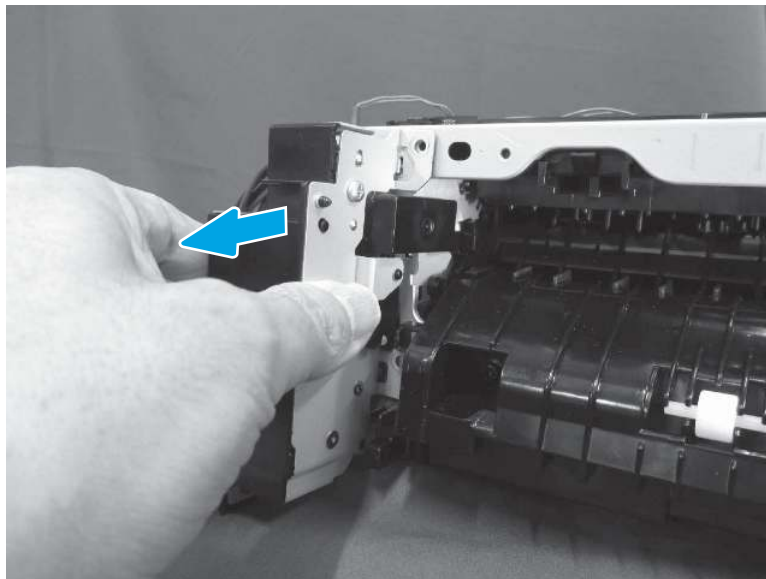
7. **Replacement fuser or duplex drive only:** Remove three screws (callout 1).

Figure 5-471 Remove three screws



8. **Replacement fuser or duplex drive only:** Remove the duplex drive assembly.

Figure 5-472 Remove the duplex drive assembly



6. **Unpack the replacement assembly**

Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

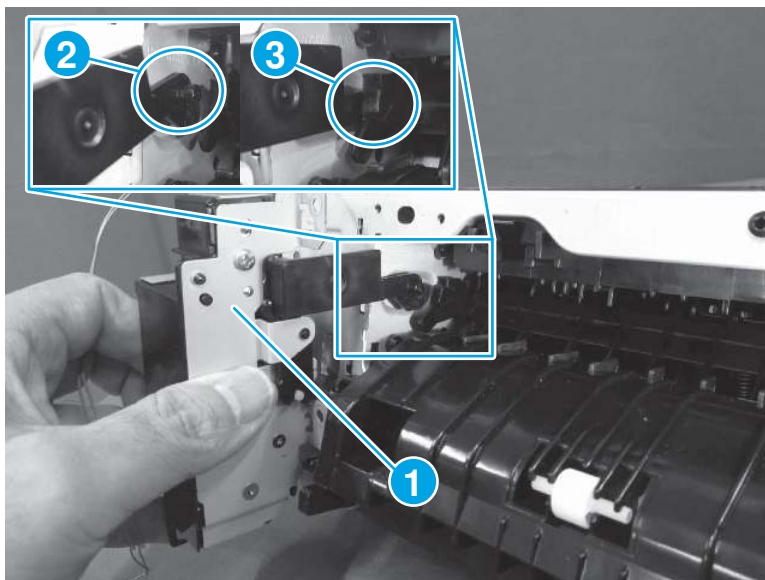
NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

7. Special installation instructions - Fuser/duplex drive assembly

Follow the special instructions below to install the fuser/duplex drive assembly.

1. **Replacement fuser only:** When the duplex drive assembly (callout 1) is installed, make sure that the boss (callout 2) on the drive lever fits into the guide of the flapper (callout 3).

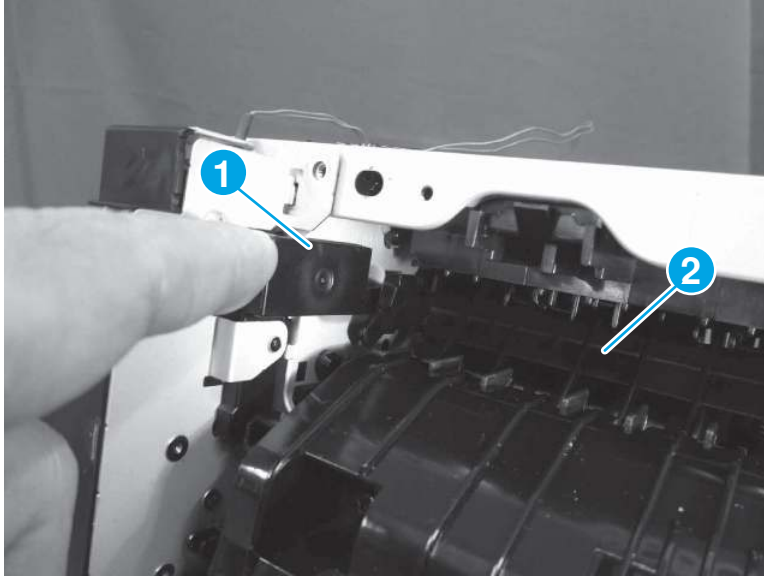
Figure 5-473 Duplex drive lever and flapper



2. **Replacement fuser only:** Actuate the duplex drive lever (callout 1) and make sure that the lever and the flapper (callout 2) move together.

Reverse the removal steps to finish installing the duplex drive assembly on the fuser.

Figure 5-474 Check the lever and flapper



3. **Fuser/duplex drive assembly:** Make sure that the gear on the printer is correctly positioned. The opening in the gear circumference must face out and away from the printer.


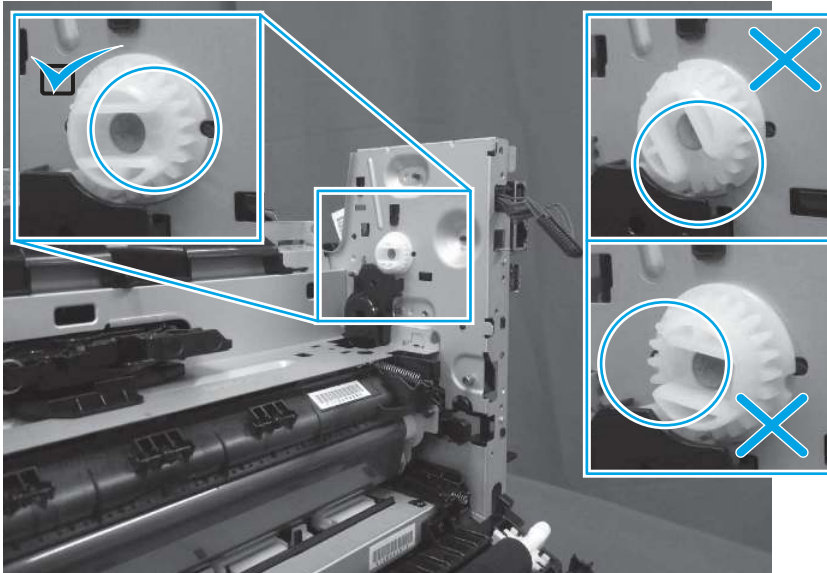
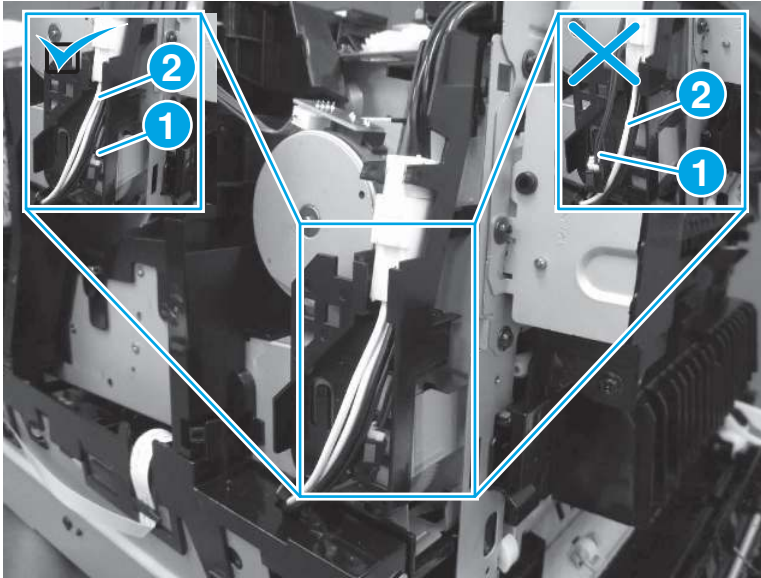
 **NOTE:** If the gear is not correctly positioned, rotate it until it is correctly aligned.

Figure 5-475 Check the gear



4. **Fuser/duplex drive assembly:** Make sure that the fuser temperature fuse cable (callout 1) is positioned behind the thick cable (callout 2). This prevents the fuser cable from unnecessary movement.

Figure 5-476 Check the fuser temperature fuse cable



Removal and replacement: Laser/scanner assembly

Learn about laser/scanner removal.

 [View a video of removing and replacing the laser/scanner.](#)

Mean time to repair: 35 minutes

Service level: Medium

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-37 Part information

Part number	Part description
RM2-2630-000CN	Laser scanner assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

- Small flat-blade screwdriver

After performing service

Turn the printer power on


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


Post service test

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

1. Remove the left cover (SFP)

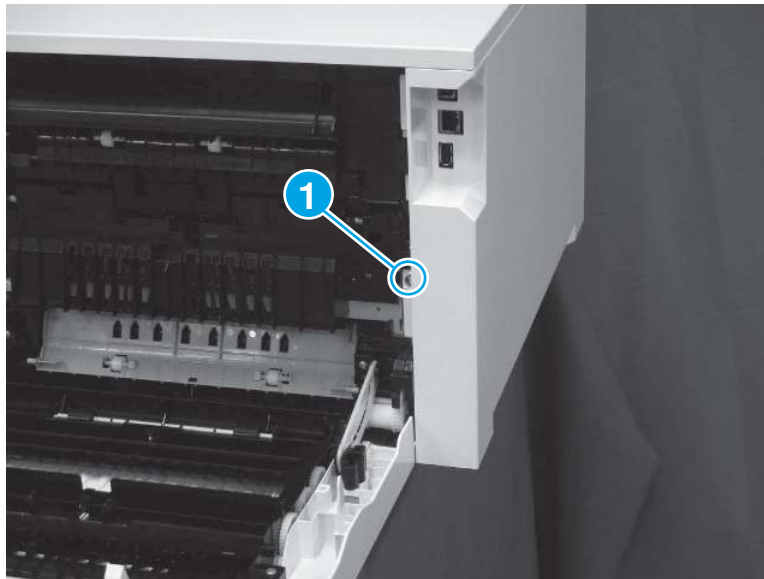
Follow the procedure below to remove and replace the left cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

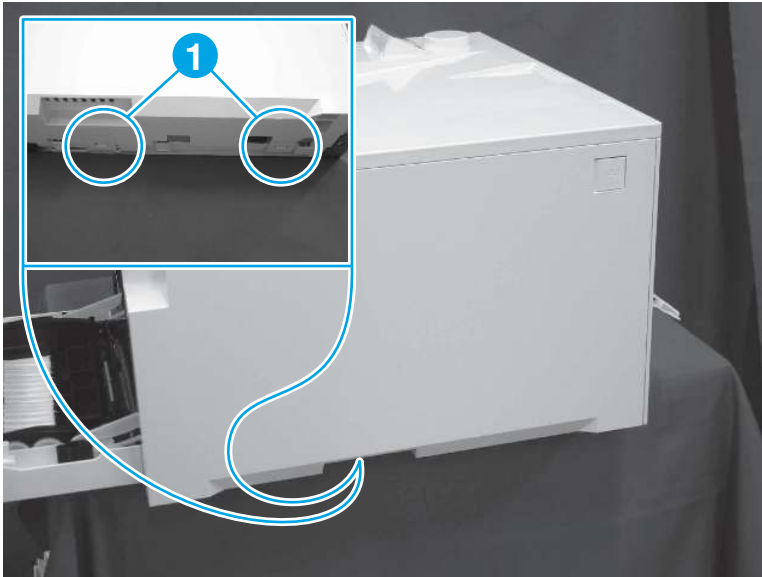
1. Remove one screw (callout 1).

Figure 5-477 Remove one screw



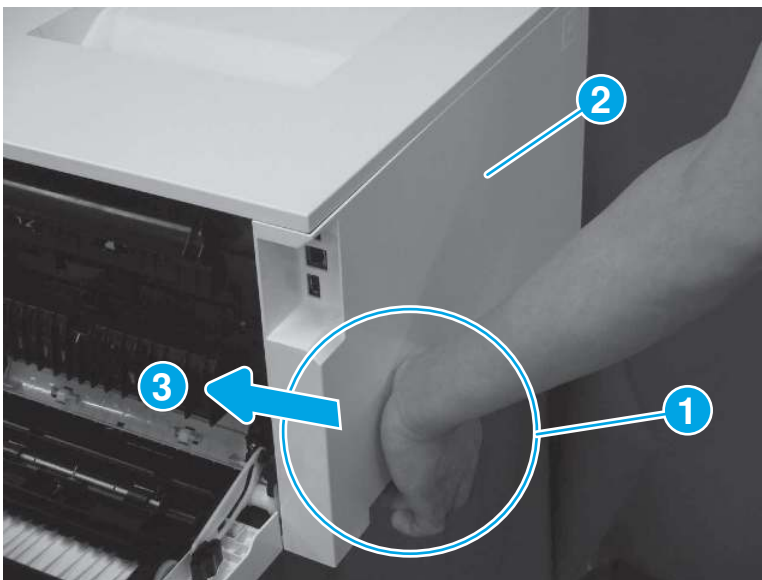
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-478 Release two tabs



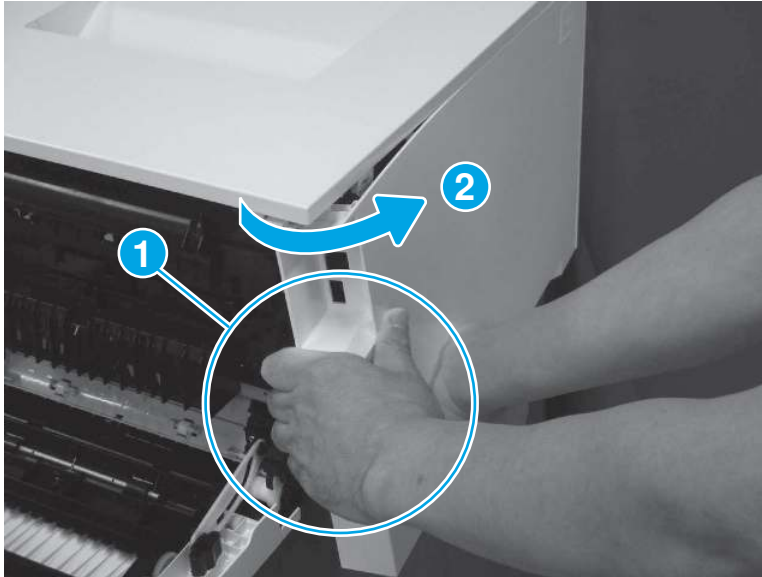
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-479 Release the rear cover corner



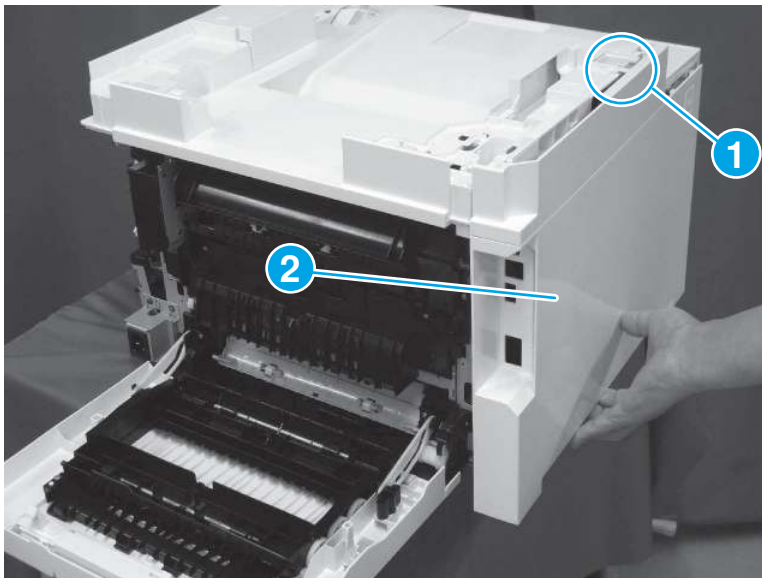
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-480 Disengage the cover corner




5. Remove the left cover (callout 1).


Figure 5-481 Remove the cover



2. Remove the left cover (MFP)

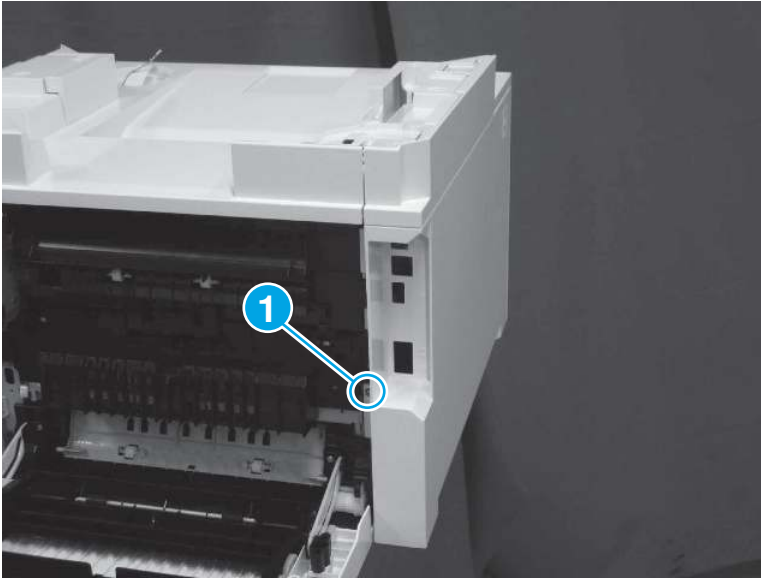
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

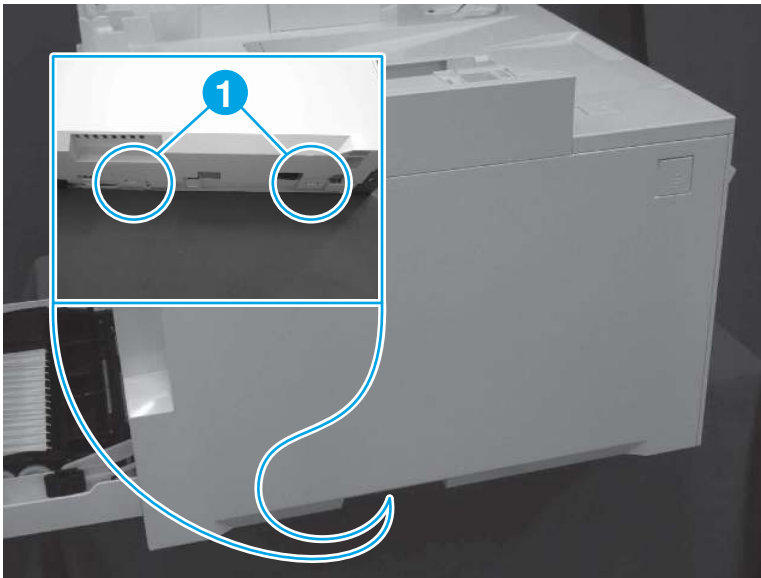
1. Remove one screw (callout 1).

Figure 5-482 Remove one screw



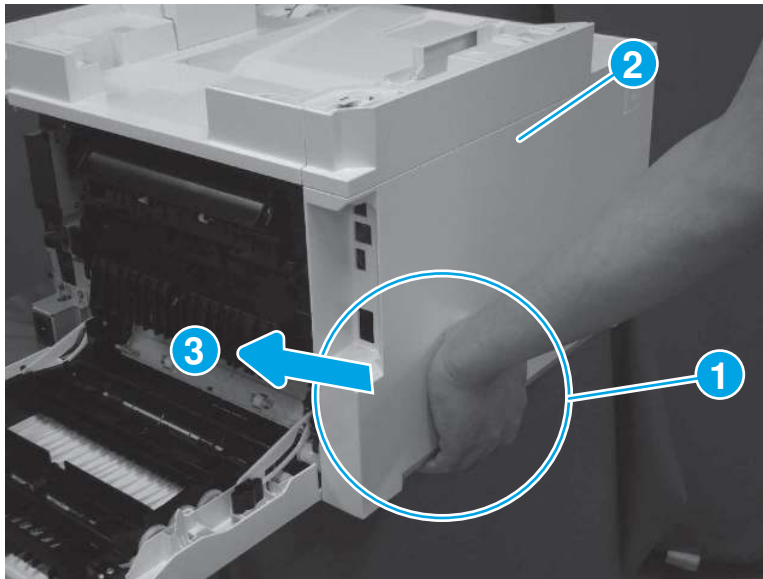
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-483 Release two tabs



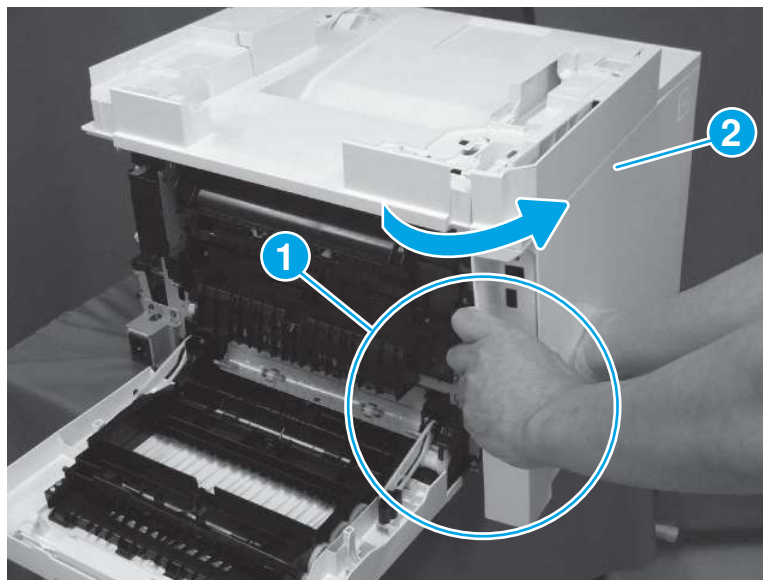
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-484 Release the rear cover corner



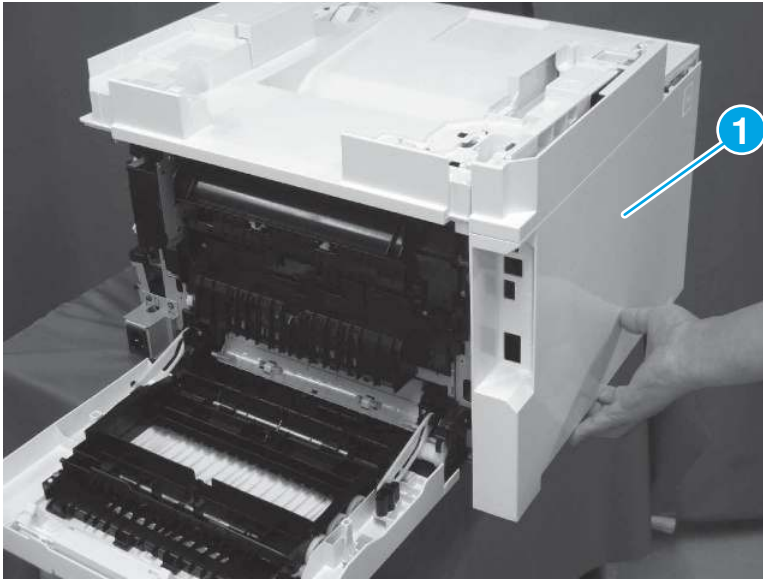
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-485 Disengage the cover corner



5. Remove the left cover (callout 1).

Figure 5-486 Remove the cover

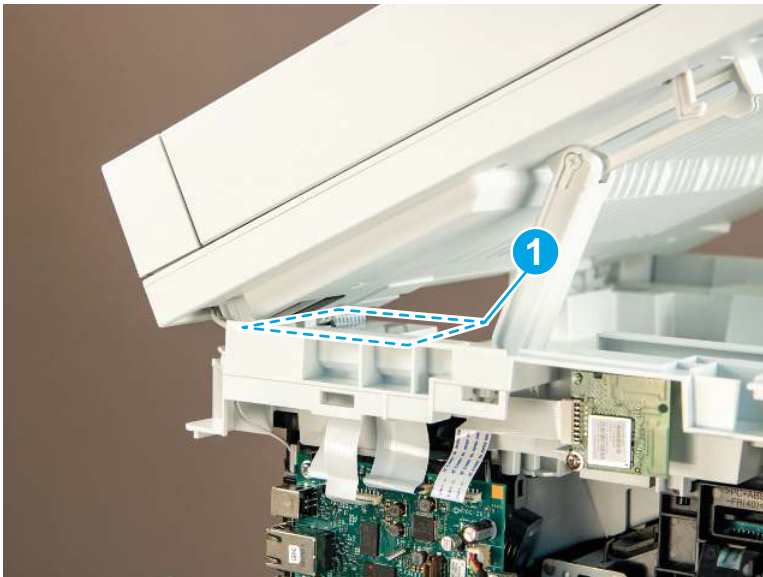


3. Remove the ISA (MFP)

Follow the procedure below to remove and replace the ISA.

1. Open the ISA, and then remove the ISA FFC cover (callout 1).

Figure 5-487 Remove the FFC cover



2. Disconnect three FFCs, and then remove one screw to release the ground cable.

Figure 5-488 Disconnect FFCs and remove screw



3. Release one tab (callout 1), and then rotate the ISA slider pin (callout 2) towards the front of the printer to release it. Remove the slider pin.

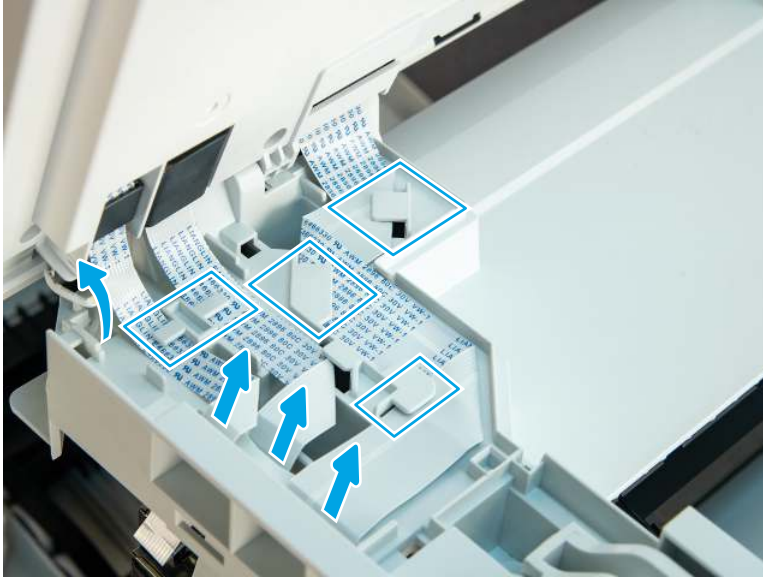
CAUTION: When the slider pin is removed, the ISA is not captive and can suddenly detach from the printer.

Figure 5-489 Remove the slider pin



4. Support the ISA, release the FFCs from the retainers, and then carefully pass the FFCs and the ground wire up through the slots in the top cover.

Figure 5-490 Release the FFCs and ground wire



5. Slide ISA as shown below to release it.

Figure 5-491 Release the ISA




6. Remove the ISA.

Figure 5-492 Remove the ISA



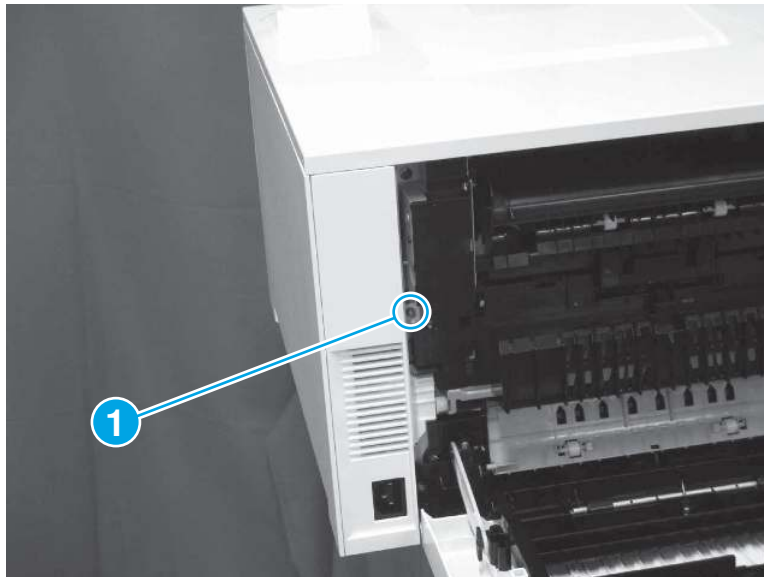
4. Remove the right cover (SFP)

Follow the procedure below to remove and replace the right cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

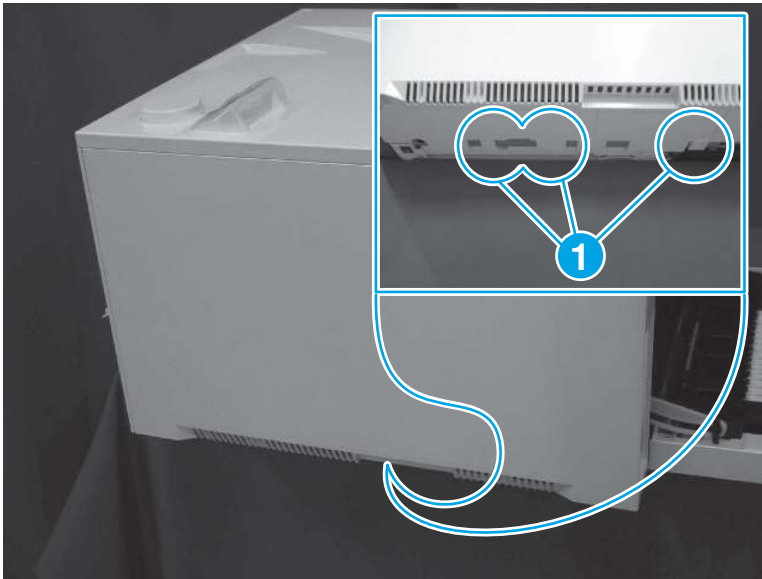
1. Remove one screw (callout 1).

Figure 5-493 Remove one screw



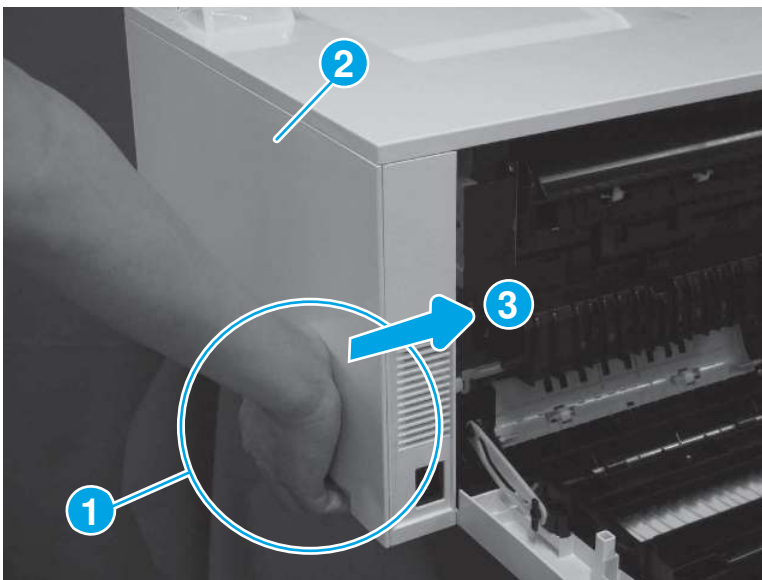
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-494 Release three tabs



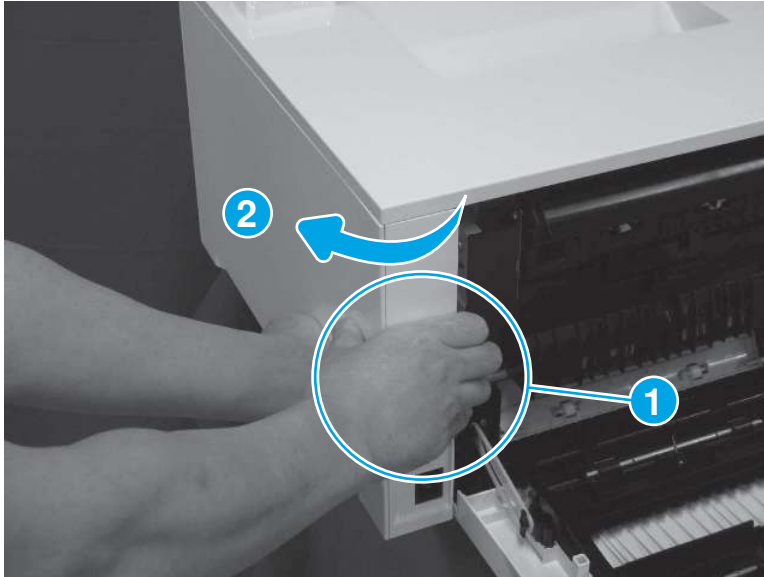
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-495 Release the rear cover corner



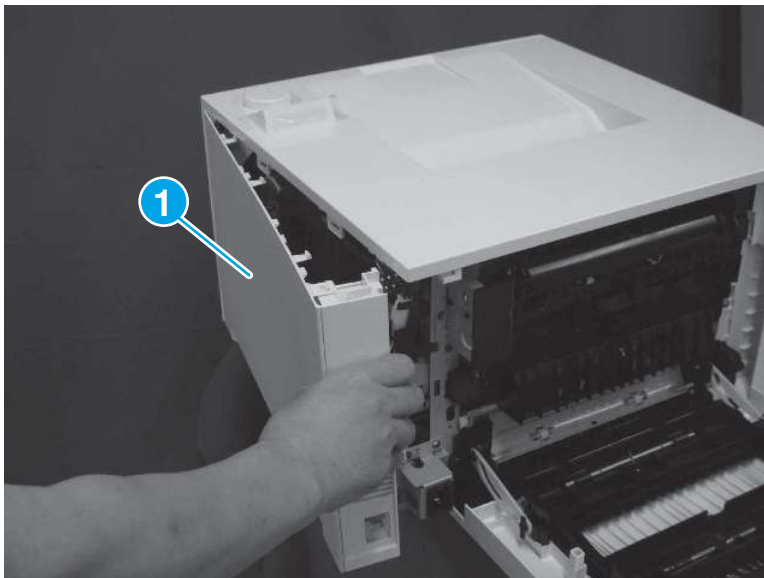
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-496 Disengage the cover corner




5. Remove the right cover (callout 1).

Figure 5-497 Remove the cover



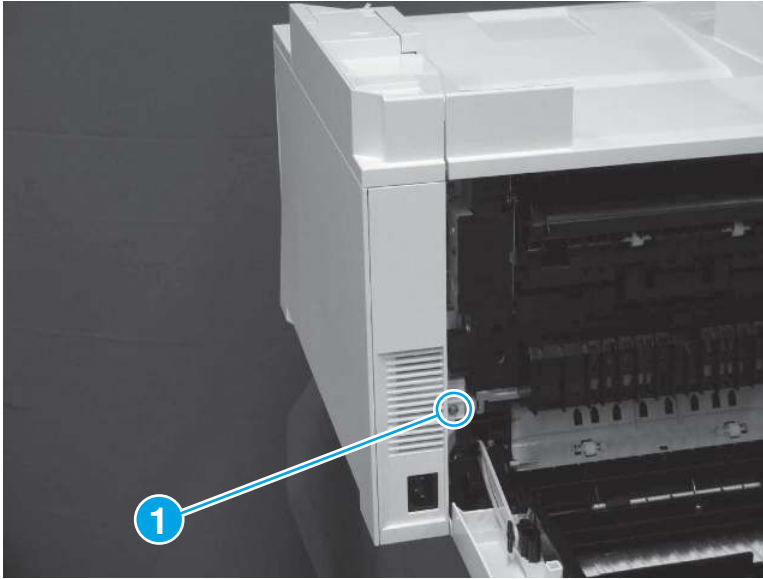
5. Remove the right cover (MFP)

Follow the procedure below to remove and replace the right cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

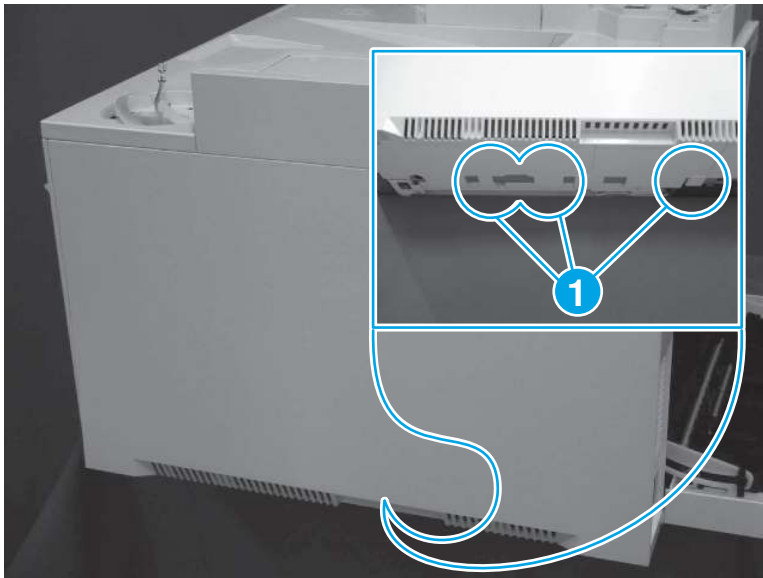
1. Remove one screw (callout 1).

Figure 5-498 Remove one screw



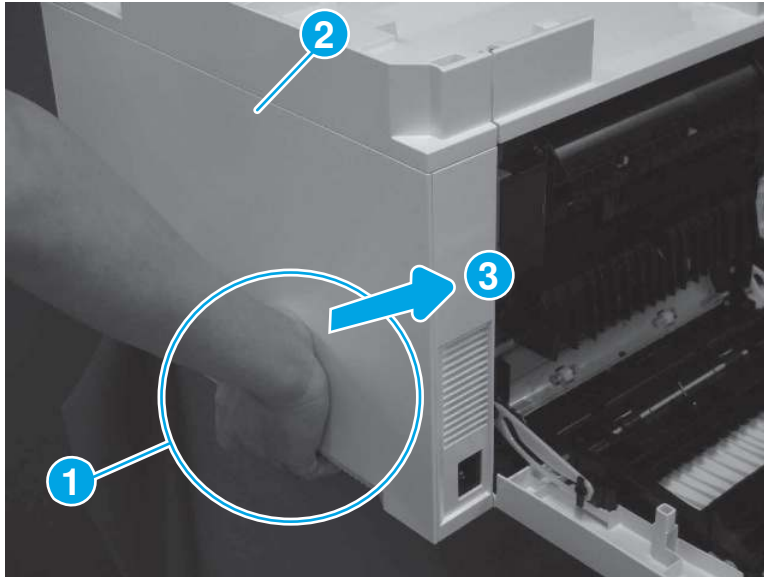
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-499 Release three tabs



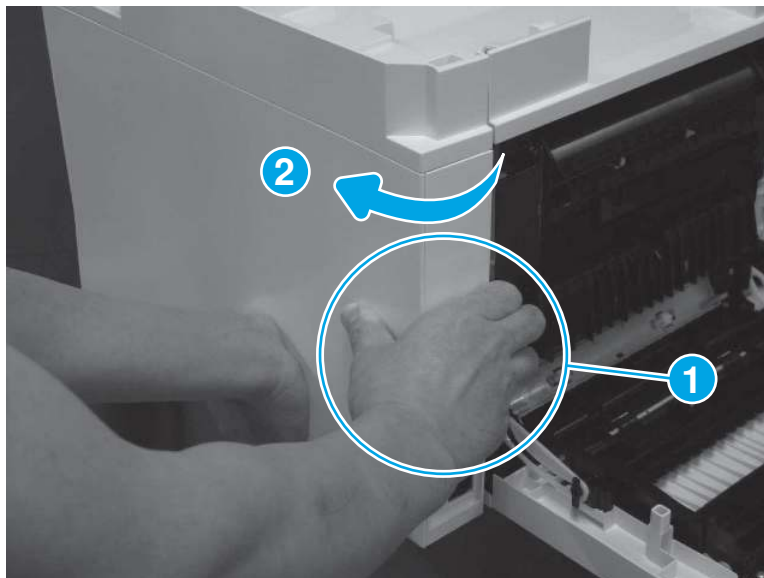
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-500 Release the rear cover corner



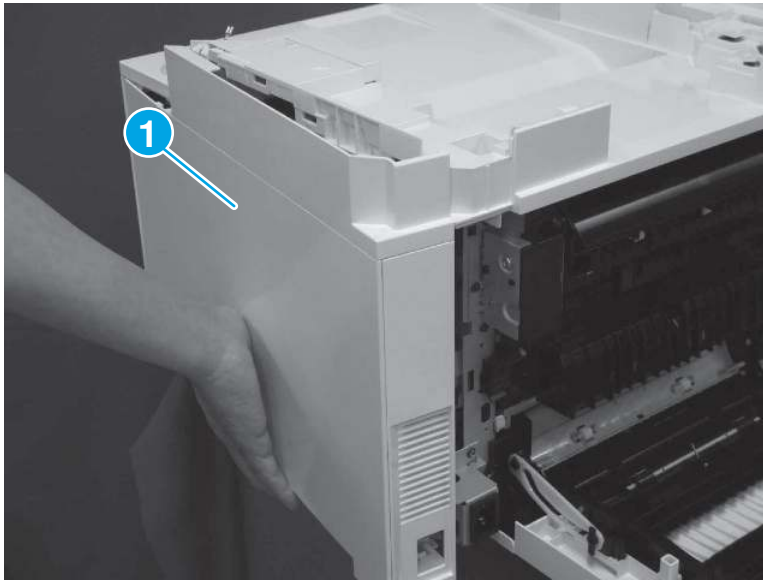
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-501 Disengage the cover corner



5. Remove the right cover (callout 1).


Figure 5-502 Remove the cover



6. Remove the front cover

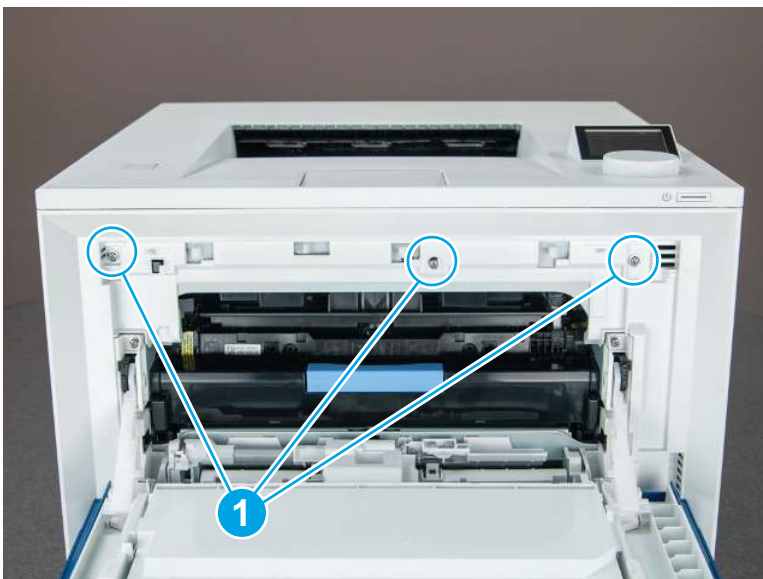
Follow the procedure below to remove and replace the front cover.

 **NOTE:** Front cover removal is **identical** for both SFP and MFP models.

 **Reinstallation tip:** Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

1. Remove three screws (callout 1).

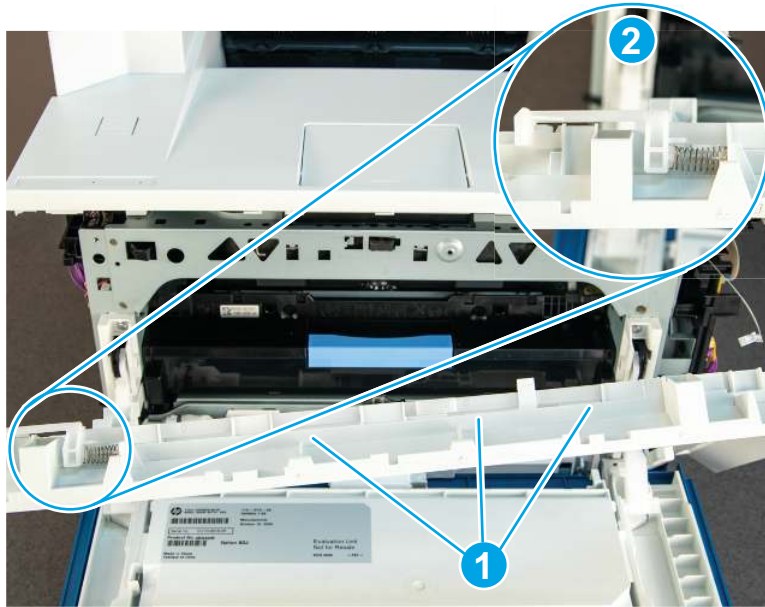
Figure 5-503 Remove three screws



2. Before proceeding, take note of the door release arm (callout 1). This arm can be easily dislodged when the cover is removed.

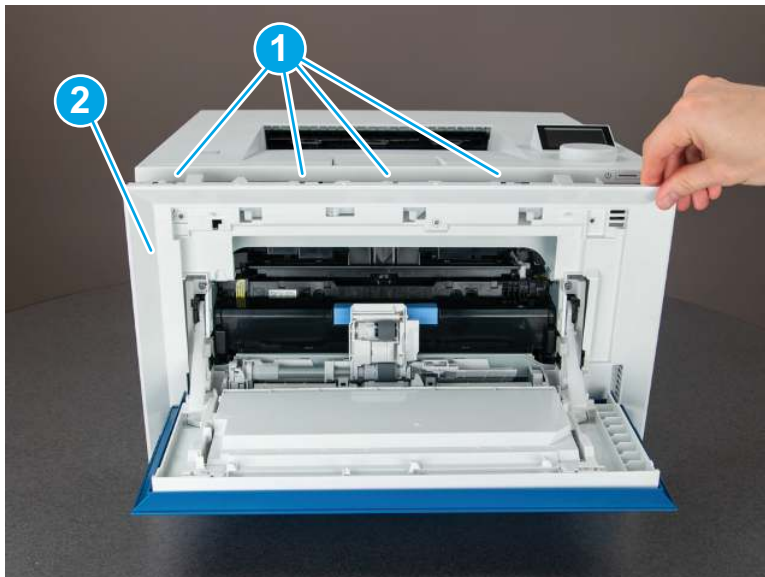
⚠ CAUTION: Do not lose the spring (callout 2) when removing the front cover.

Figure 5-504 Door release arm



3. Release four tabs (callout 1), and then remove the front cover (callout 2).

Figure 5-505 Remove the cover



7. Remove the top cover (SFP)

Follow the procedure below to remove and replace the top cover (SFP).

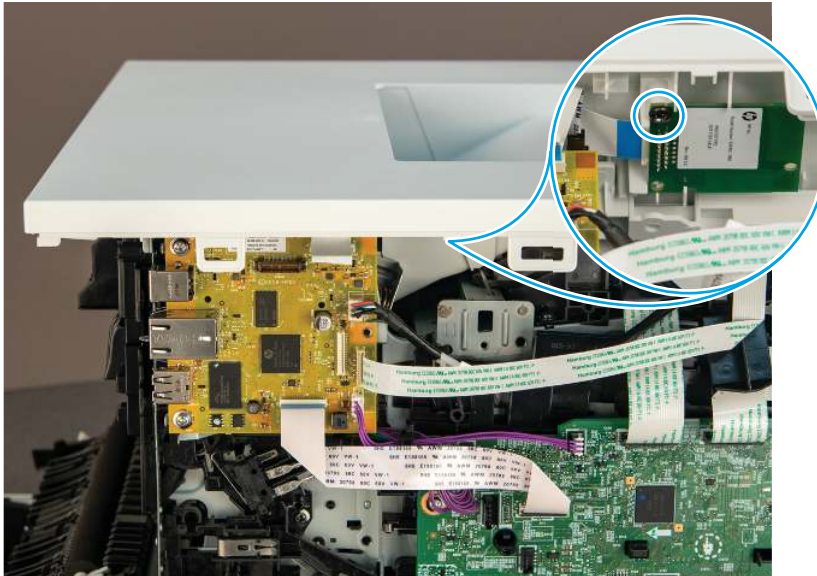
📝 NOTE: The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

1. **Wireless model only:** Raise and support the left side of the printer, remove one screw, and then separate the wireless PCA from the cover.

CAUTION: Do not attempt to completely remove the wireless PCA. Instead, gently move it out of the way.

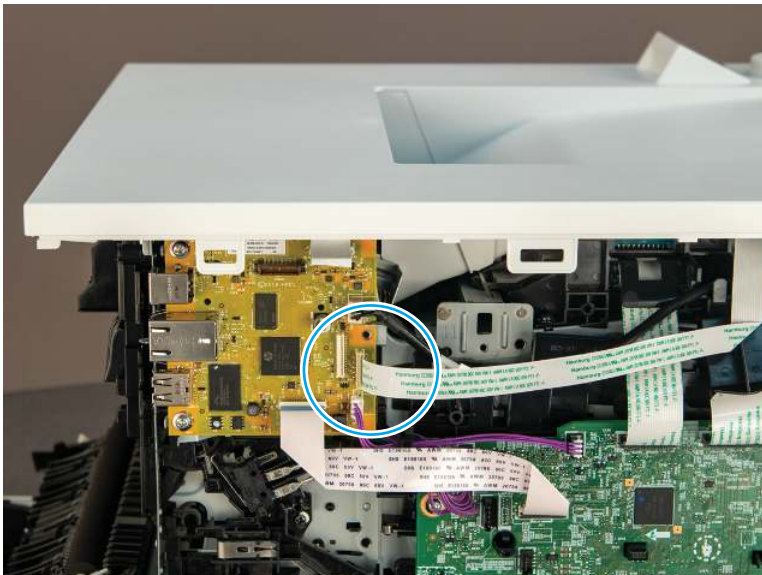
TIP: To remove the screw without raising the printer, use a short-barrel screwdriver.

Figure 5-506 Remove one screw



2. Disconnect one flat-flexible cable (FFC).

Figure 5-507 Disconnect one FFC



3. Disconnect one FFC, and then remove one screw to release the ground wire.

NOTE: The front cover is shown installed in the figure below. However, this step is correct for removing the top cover.

Figure 5-508 Disconnect one FFC and remove one screw




4. Sliding the cover from the back of the printer towards the front to remove it.

Figure 5-509 Remove the cover



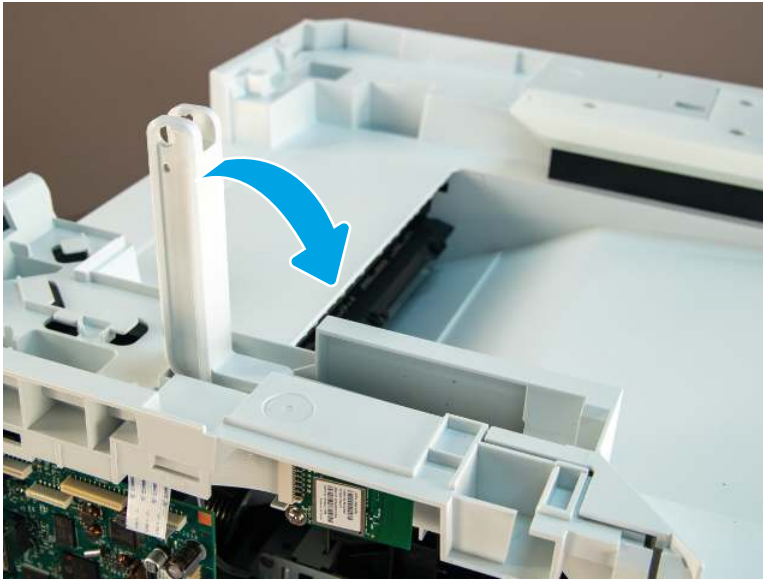
8. Remove the top cover (MFP)

Follow the procedure below to remove and replace the top cover (MFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

1. Close the ISA lift arm.

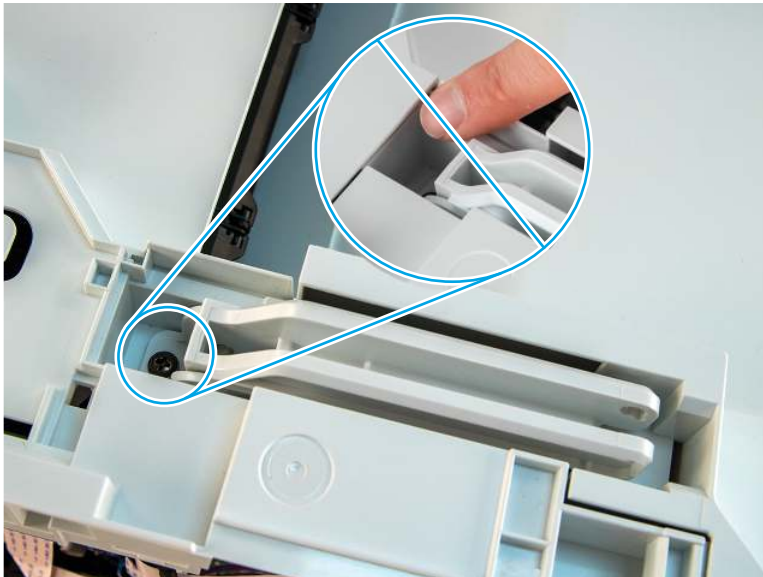
Figure 5-510 Close the ISA lift arm



2. Remove one screw.

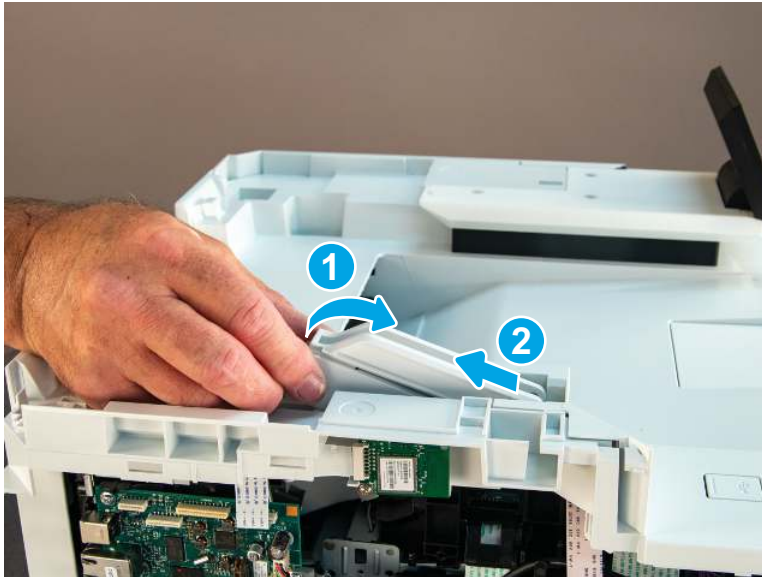
⚠ CAUTION: The support arm is spring loaded and can unexpectedly spring into the open position. To avoid injury, do not place a finger in the screw well when the support arm is in the closed position.

Figure 5-511 Remove one screw



3. Rotate one end of the lift arm up (callout 1), and then slide the lift arm as shown below (callout 2) to release it. Remove the lift arm.

Figure 5-512 Remove the lift arm



4. Do the following:
 - a. Disconnect one FFC (control panel; callout 1).
 - b. Remove one screw (callout 2), and then separate the wireless PCA from the top cover.


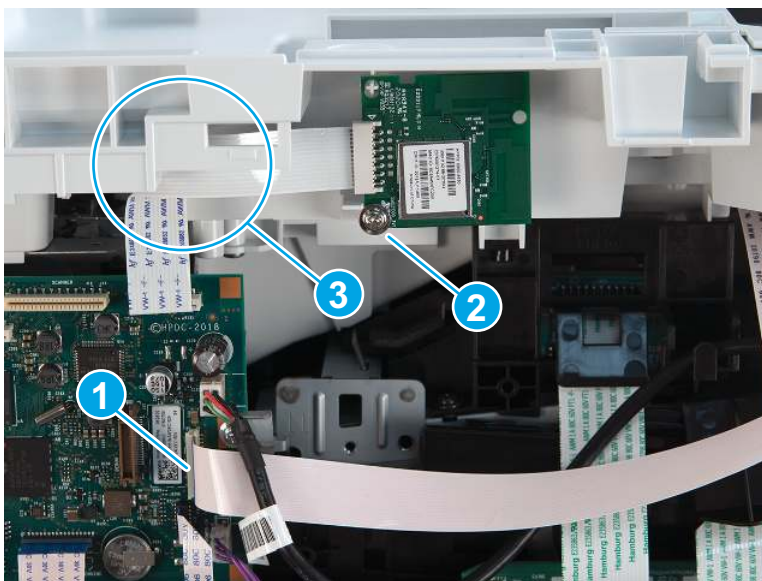
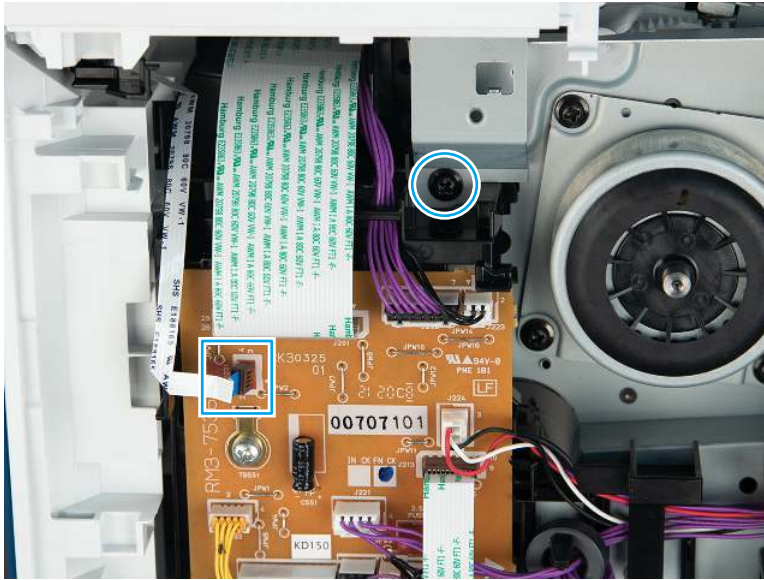
 **NOTE:** The wireless PCA does not need to be completely removed. Instead, release the FFC from the retainer (callout 3), and then gently move it out of the way.

Figure 5-513 Disconnect FFC and move the wireless PCA



5. Disconnect one FFC (power button), and then remove one screw (grounding sheet-metal plate).

Figure 5-514 Disconnect one FFC and remove one screw



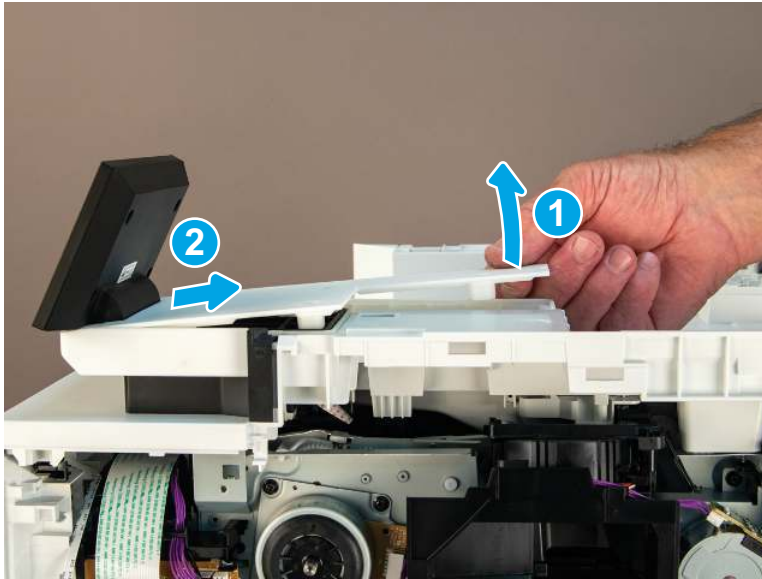
6. Remove three screws.

Figure 5-515 Remove three screws




7. Release one tab and rotate one end of the base cover up (callout 1), and then slide the cover as shown (callout 2) to remove it.

Figure 5-516 Remove the cover



8. Disconnect two FFCs.

 **NOTE:** These are zero-insertion force (ZIF) connectors. To remove the FFCs, first release the locking clip on the connector, and then pull the cable straight out of the connector.


 **TIP:** For reinstallation, make sure that the line of the FFC is parallel with the body.

Figure 5-517 Disconnect two FFCs



9. Remove four screws.


 **NOTE:** Two of the screws are self-tapping threads (black), and two of the screws are machine thread (silver).

Figure 5-518 Remove four screws



10. Lift the control panel and base straight up and off of the printer to remove them together.


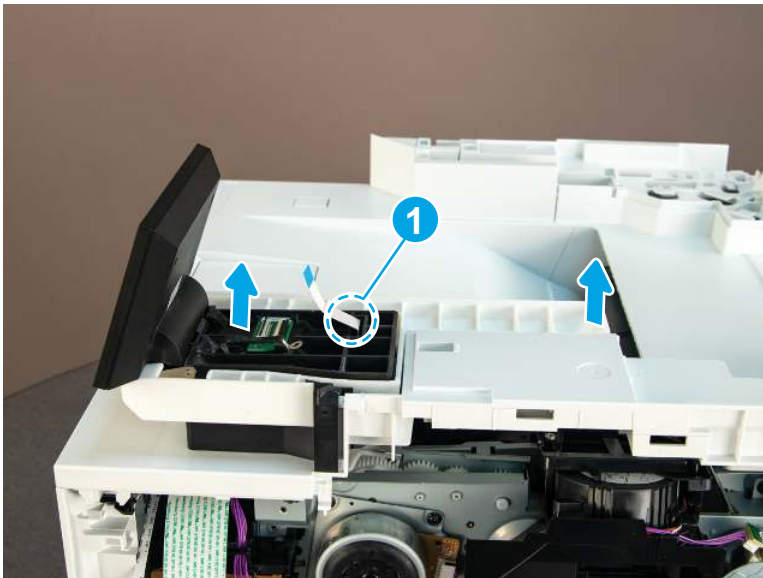
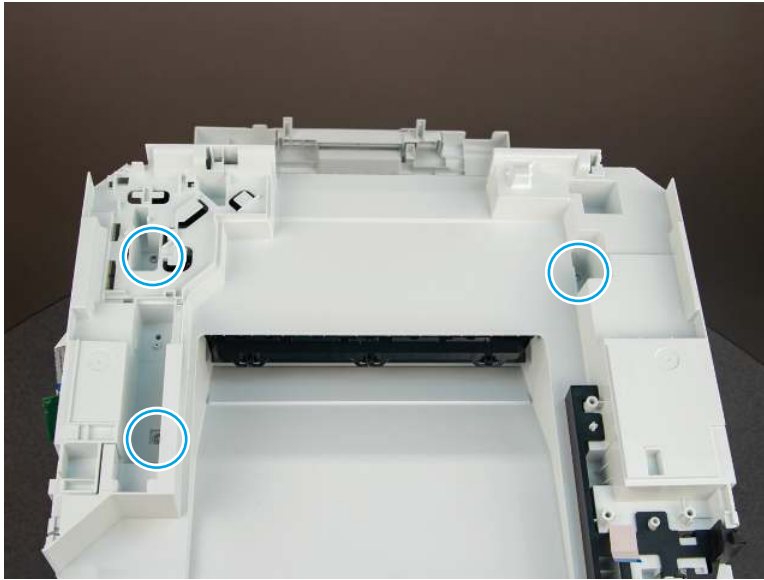
 **NOTE:** When handling the assembly, do not lose the ferrite (callout 1).

Figure 5-519 Remove control panel and base



11. Remove three screws.

Figure 5-520 Remove three screws



12. Sliding the cover from the back of the printer to the front to remove it.


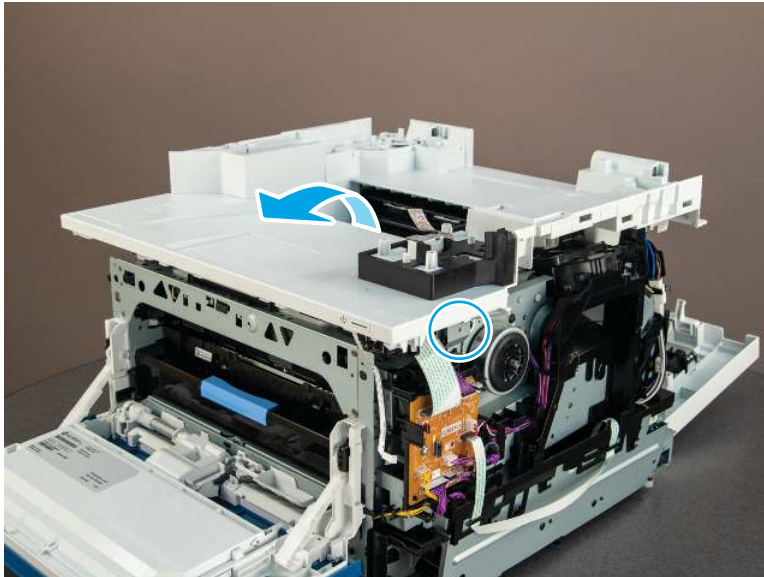
 **TIP:** Slightly move the control-panel ground bracket (circled) back and forth to help release the top cover.

Figure 5-521 Remove the cover




13. **When the cover is reinstalled:** Make sure that the front USB assembly is correctly positioned under the cover.

Figure 5-522 Front USB assembly



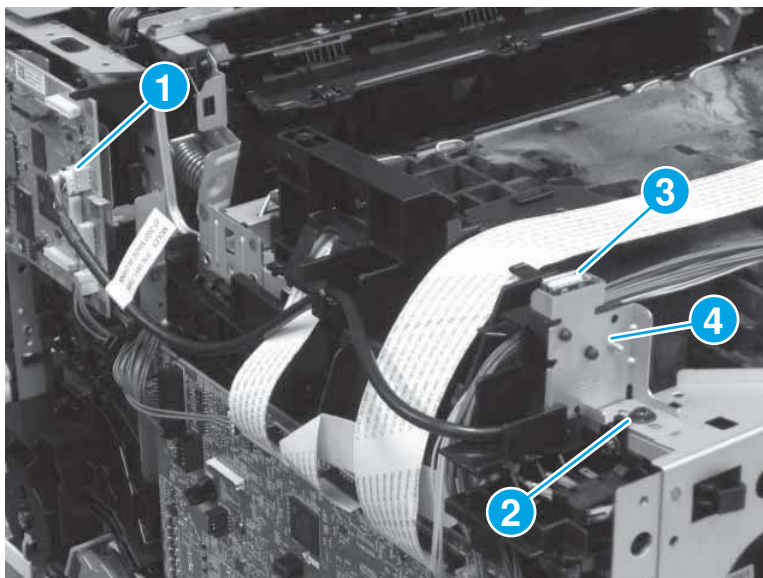
9. Remove the laser/scanner assembly

Follow the procedure below to remove and replace the laser/scanner.

 **Reinstallation tip:** Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

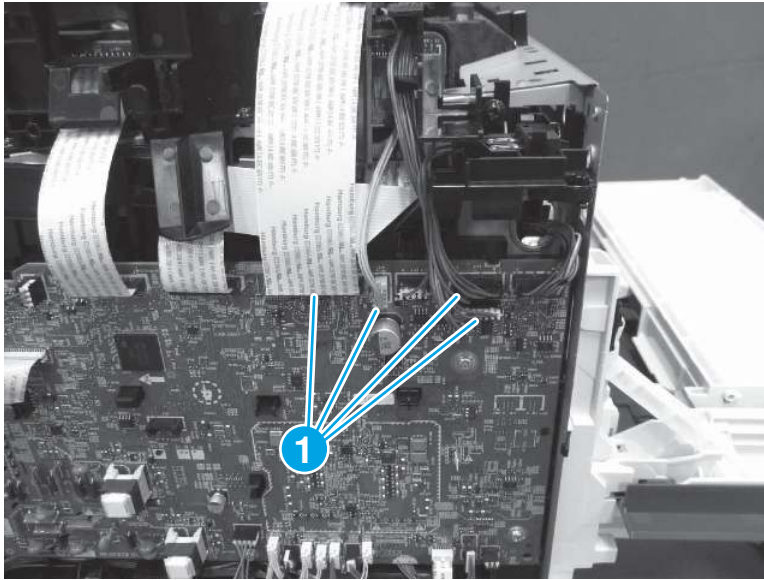
1. Disconnect one connector (callout 1), Remove one screw (callout 2), and then remove the USB cable (callout 3) and the plate (callout 4).

Figure 5-523 Disconnect one connector, remove one screw, remove USB cable



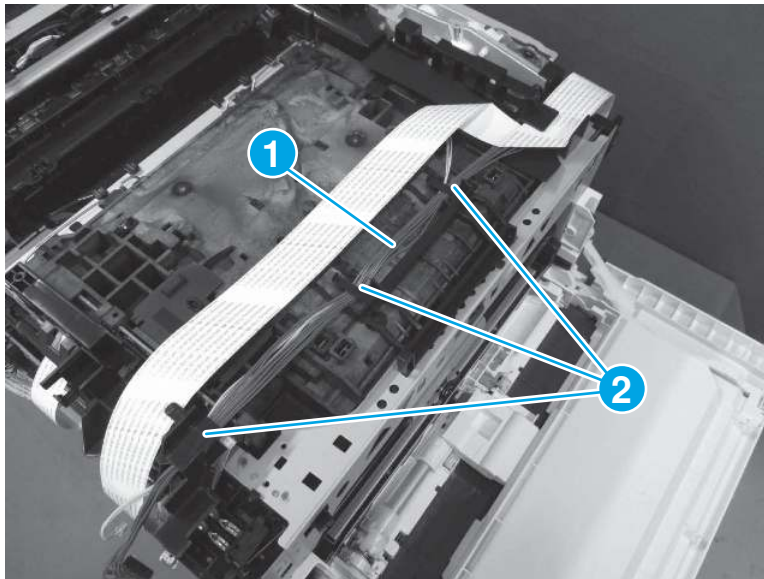
2. Disconnect one flat-flexible cable and three connectors (callout 1).

Figure 5-524 Disconnect the FFC and connectors



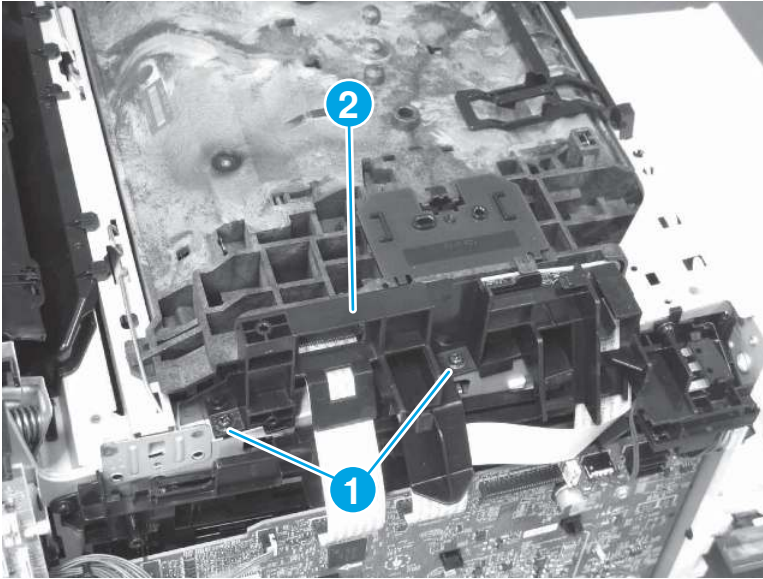
3. Release the cable harness (callout 1) from the retainers (callout 2).

Figure 5-525 Release the cable harness



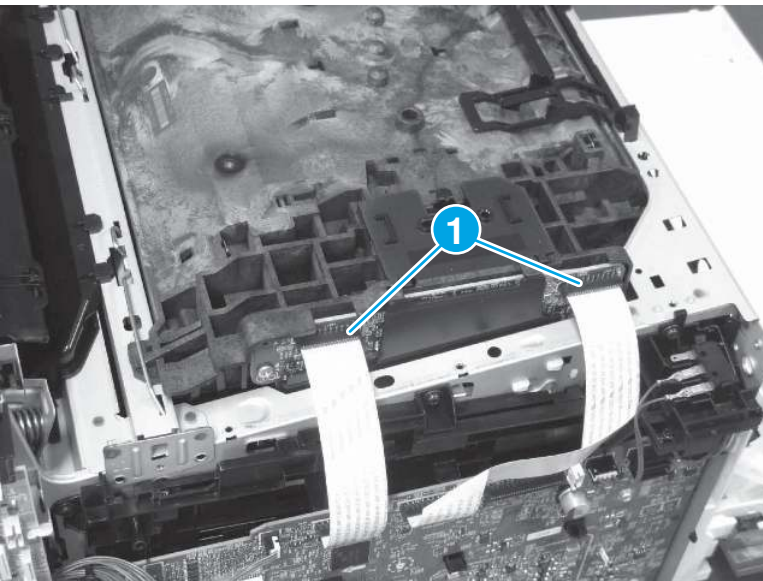
4. Remove two screws (callout 1), and then remove the guide (callout 2).

Figure 5-526 Remove the guide



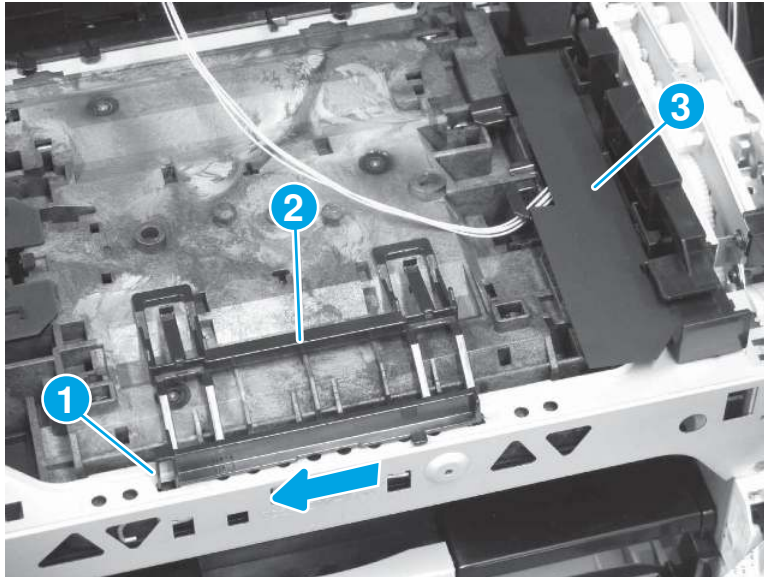
5. Disconnect two FFCs (callout 1).

Figure 5-527 Disconnect two FFCs



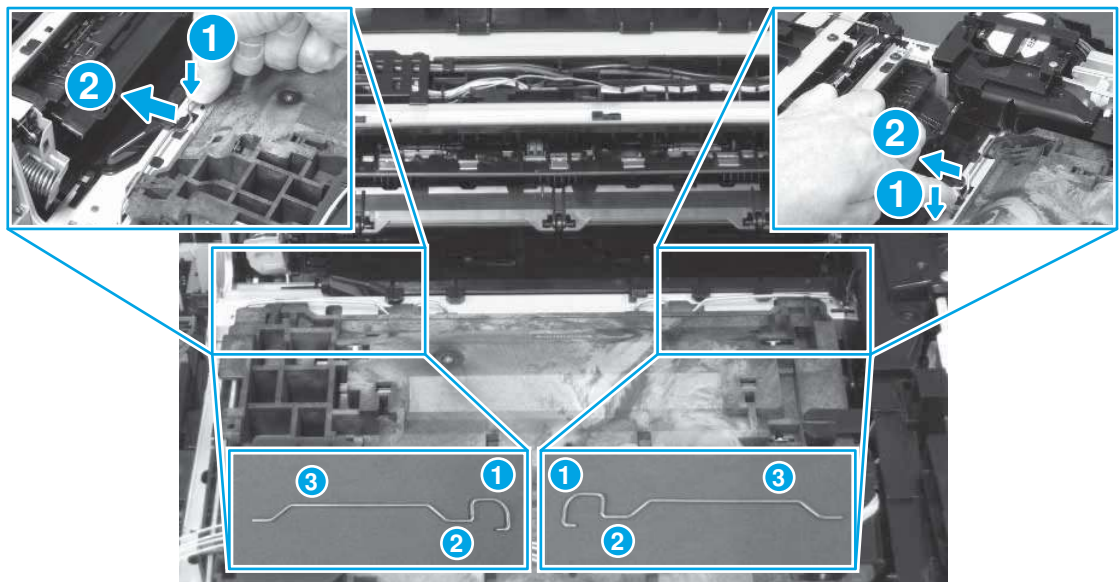
6. Release one tab (callout 1), slide the cable guide (callout 2) as shown to remove it, and then remove the scanner upper sheet (callout 3).

Figure 5-528 Remove the scanner upper sheet



7. Press down on the spring (callout 1), and then slide the middle portion of the spring as shown below (callout 2). Unhook the left- and right-side springs (callout 3) to remove them.

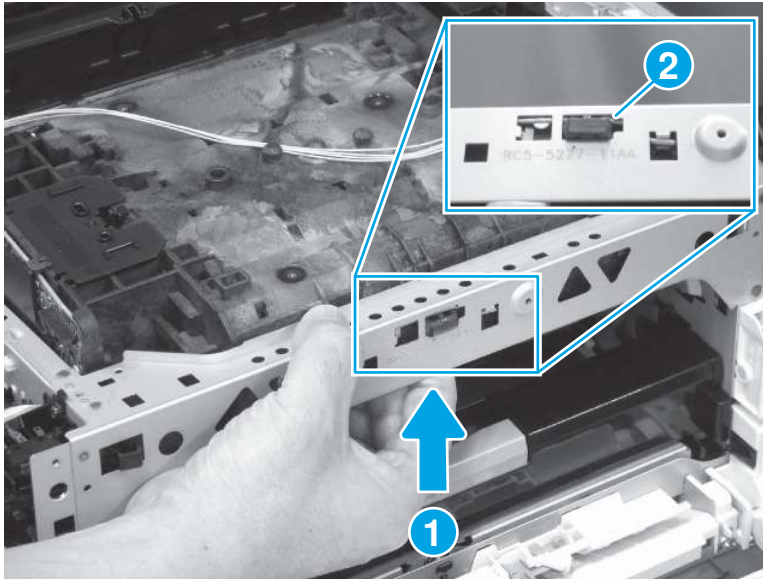
Figure 5-529 Remove two springs



8. Slightly lift up the laser/scanner assembly (callout 1) to release one boss (callout 2).

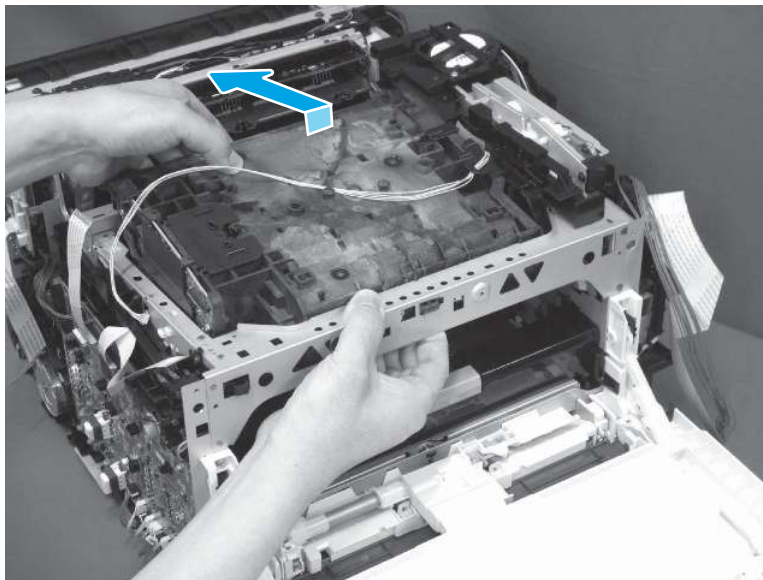
CAUTION: There is a spring (not shown) installed on the assembly that can become dislodged. Do not lose the spring while handling the assembly. Reinstall the spring if necessary.

Figure 5-530 Release the boss



9. Slide the laser/scanner as shown below, and then remove it.

Figure 5-531 Remove the laser/scanner assembly



10. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.



1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.


 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

11. Special installation instructions - Laser/scanner assembly

Follow the special instructions below to install a replacement laser/scanner assembly.

 **NOTE:** **Lase/scanner assembly dependency part removal:** If the laser/scanner assembly was removed to gain access to other assemblies, stop and skip the special installation steps in this topic. Reverse the removal steps to install the assembly.

Laser/scanner assembly replacement part removal: For a replacement laser scanner, use the steps below to remove the cable cover, and then install it on the replacement laser/scanner.

1. Release two tabs (callout 1), and then separate the cable cover (callout 2) from the discarded laser/scanner assembly.


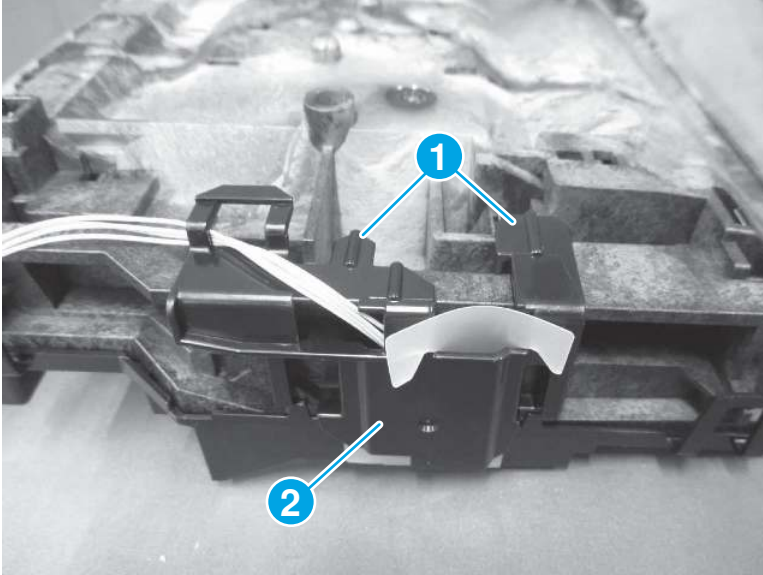
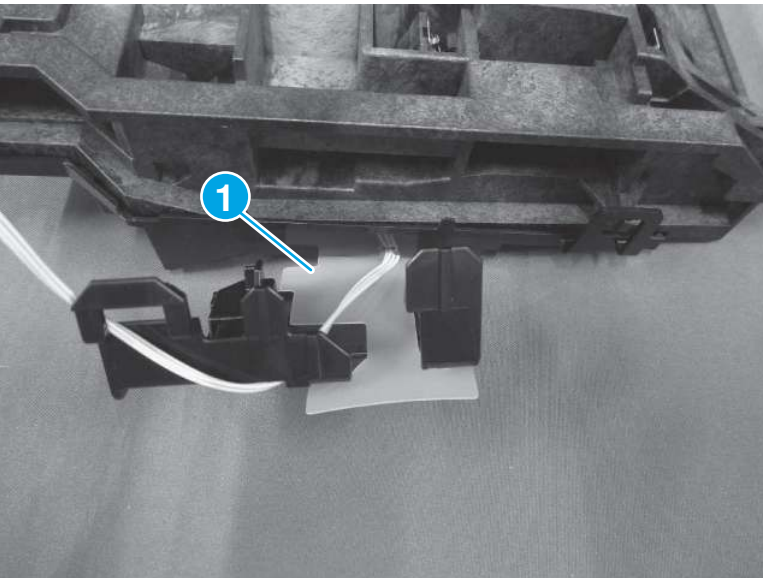
 **CAUTION:** Do not attempt to completely remove the cover. It is still attached to the laser/scanner assembly by a cable.

Figure 5-532 Separate the cable cover from the discarded laser/scanner



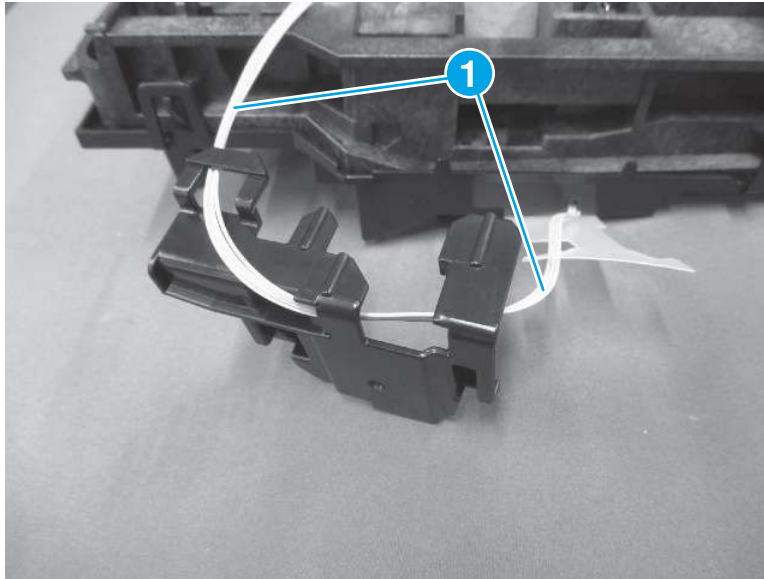
2. Remove the sheet (callout 1) from the cover.

Figure 5-533 Remove the sheet




3. Release the cable (callout 1) from the cover.

Figure 5-534 Release the cable



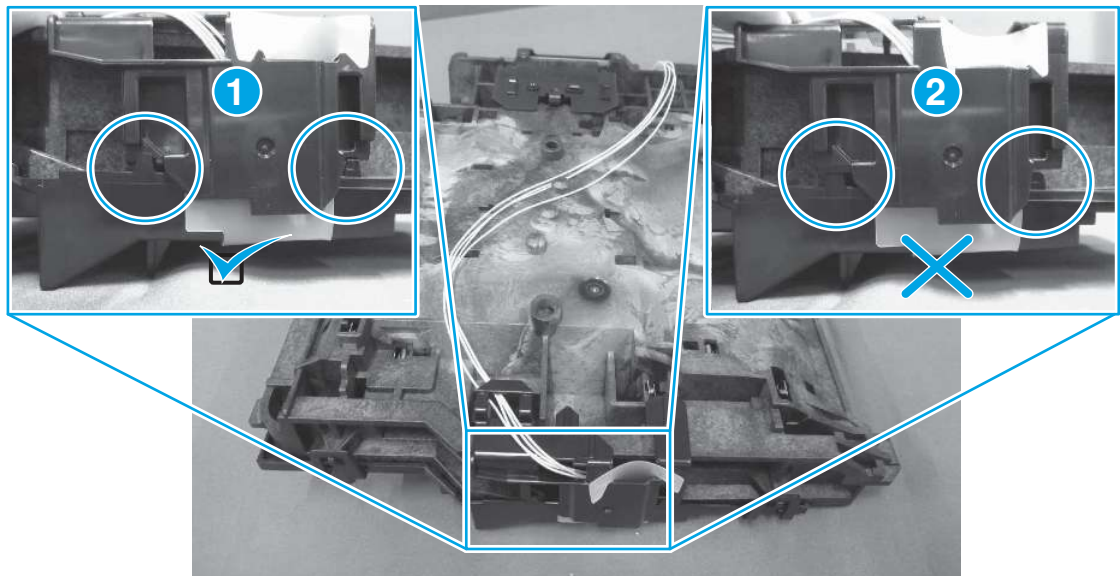
4. When the cover is installed on the replacement laser/scanner, make sure that the lower tabs are correctly positioned in front of the laser/scanner chassis.

 **NOTE:** If the tabs are incorrectly positioned, the cover will not lock in place.

- Correctly positioned tabs (callout 1).
- Incorrectly positioned tabs (callout 2).

Reverse the removal steps to finish installing the laser/scanner assembly.

Figure 5-535 Install the cover



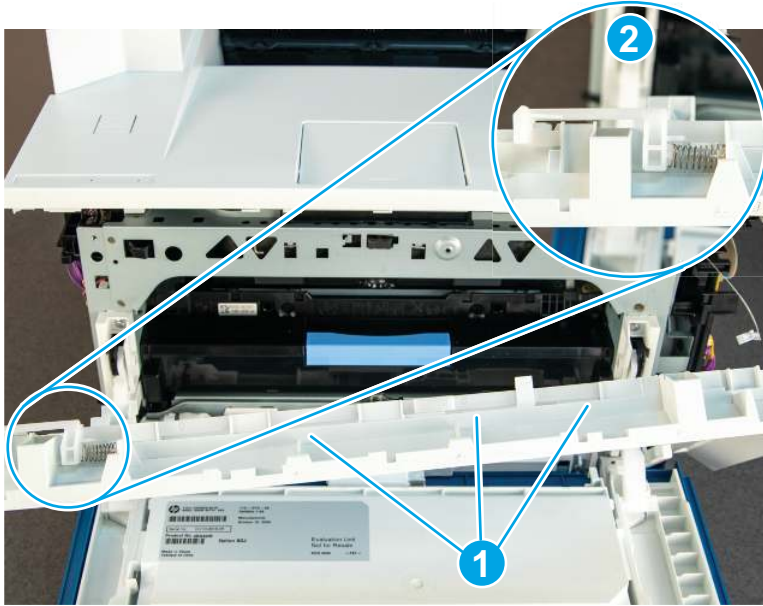
12. Special installation instructions - Front cover

Follow the special instructions below to install the front cover.

 **NOTE:** Front cover installation is **identical** for both the SFP and MFP models.

1. If the door release arm becomes dislodged when handling the cover, install it as shown below (callout 1, 2).

Figure 5-536 Door release arm installed



2. At the right and left side of the front cover, align the holes (callout 1) in the cover with the alignment pins (callout 2) on the chassis.

Figure 5-537 Cover alignment pins



3. Rotate the top of the cover towards the printer to install it.


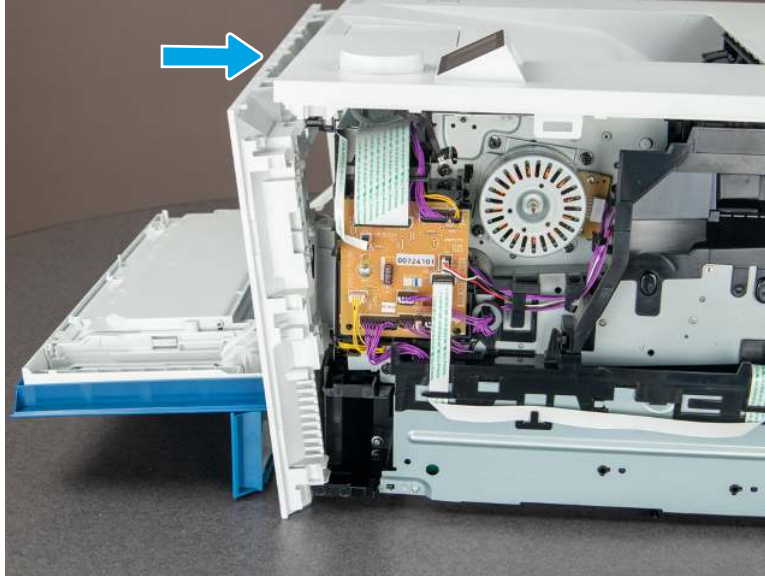
 **IMPORTANT:** Verify that the spring loaded door release button (on the left side of the cover) correctly functions.

Figure 5-538 Install the cover



Removal and replacement: Low-voltage power supply (LVPS)

Learn about LVPS removal.


Mean time to repair: 10 minutes

Service level: Medium

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-38 Part information

Part number	Part description
RM2-2834-000CN	Low-voltage power supply (110-127V)
RM2-2835-000CN	Low-voltage power supply (220-240V)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

- Small flat-blade screwdriver

After performing service

Turn the printer power on


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

Post service test

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

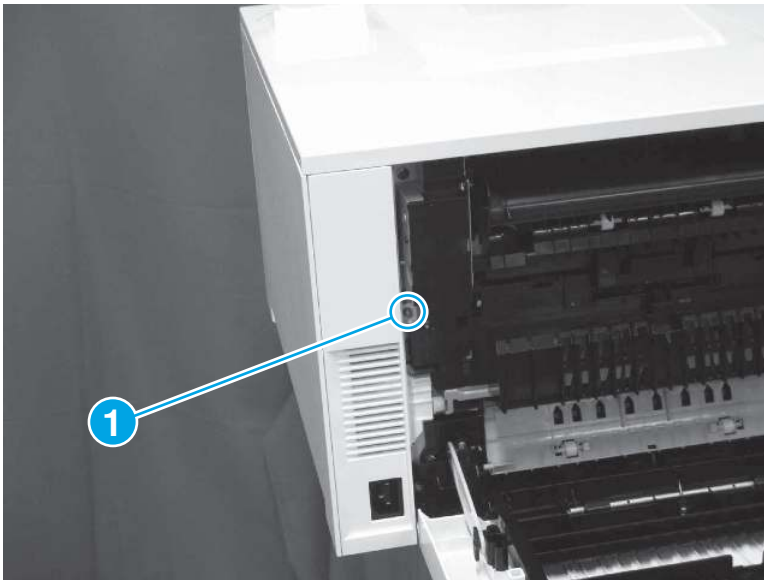
1. Remove the right cover (SFP)

Follow the procedure below to remove and replace the right cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

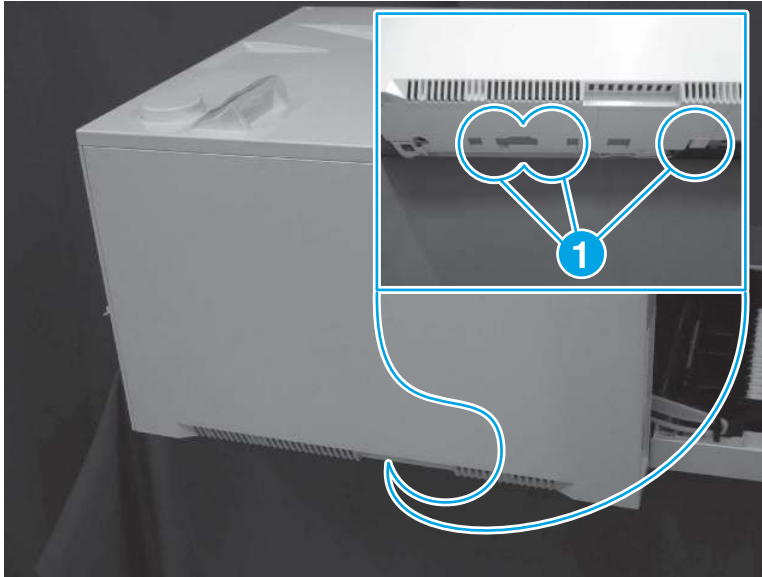
1. Remove one screw (callout 1).

Figure 5-539 Remove one screw



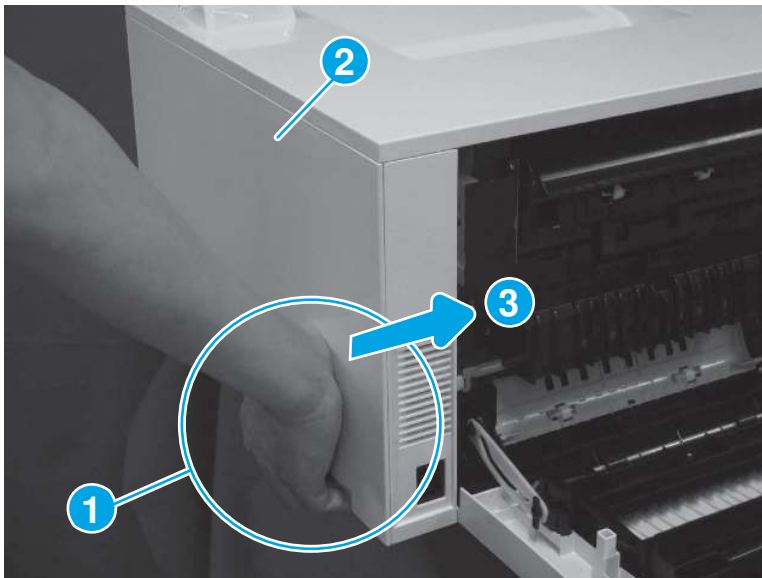
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-540 Release three tabs



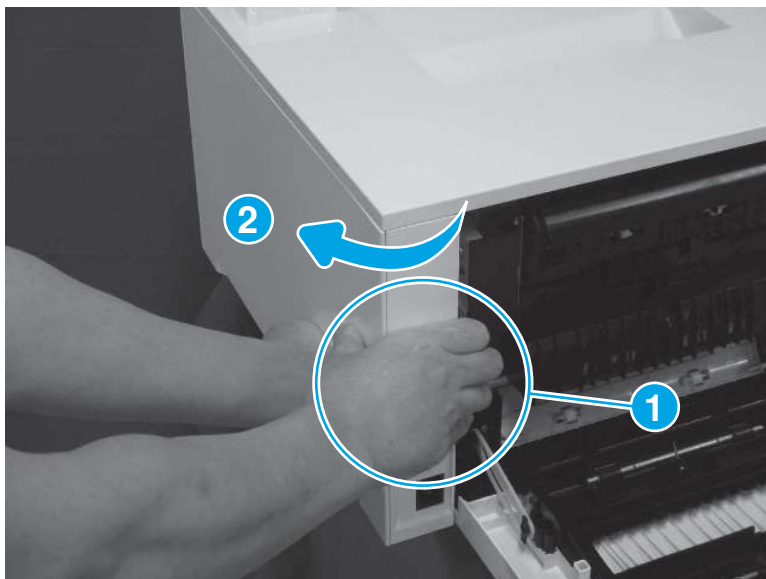
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-541 Release the rear cover corner



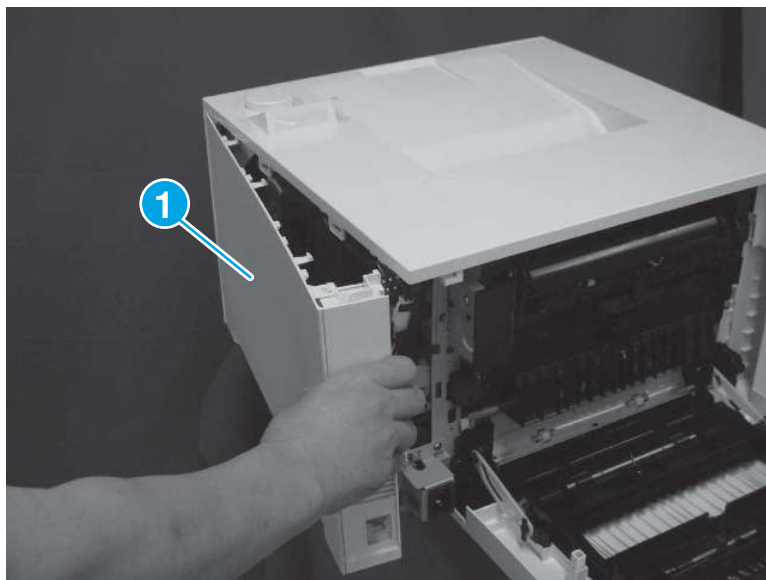
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-542 Disengage the cover corner




5. Remove the right cover (callout 1).

Figure 5-543 Remove the cover



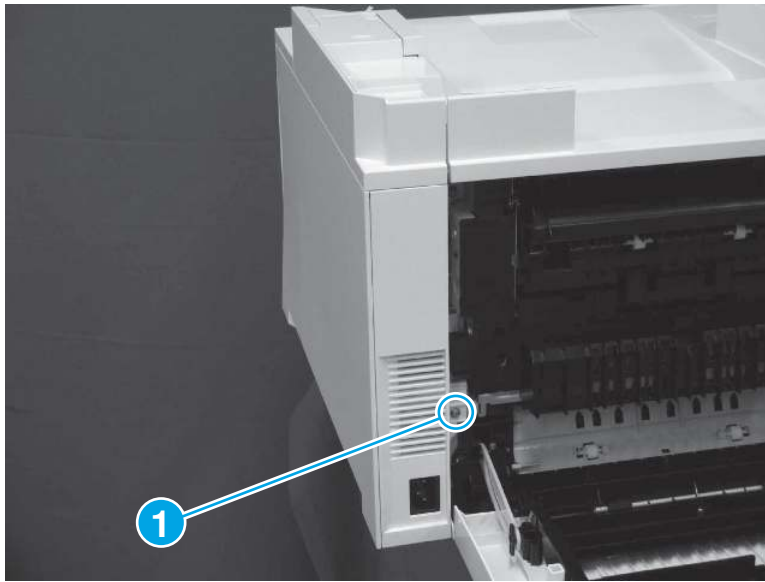
2. Remove the right cover (MFP)

Follow the procedure below to remove and replace the right cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

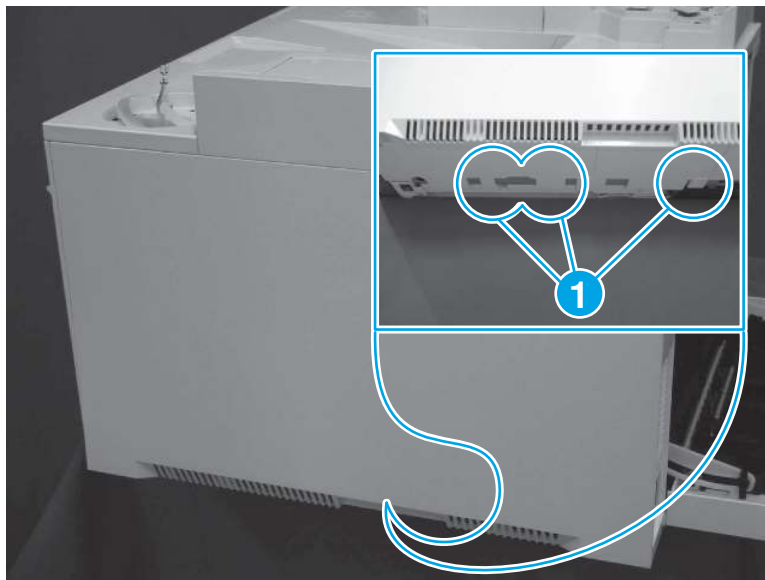
1. Remove one screw (callout 1).

Figure 5-544 Remove one screw



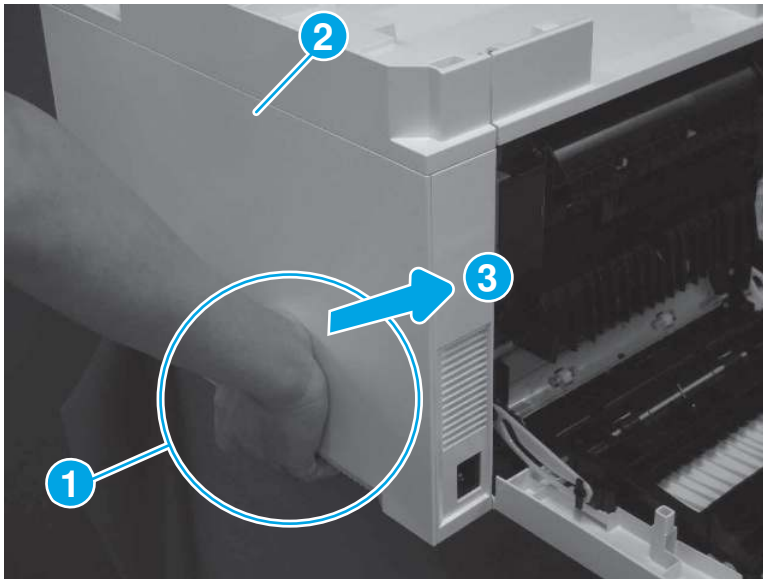
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-545 Release three tabs



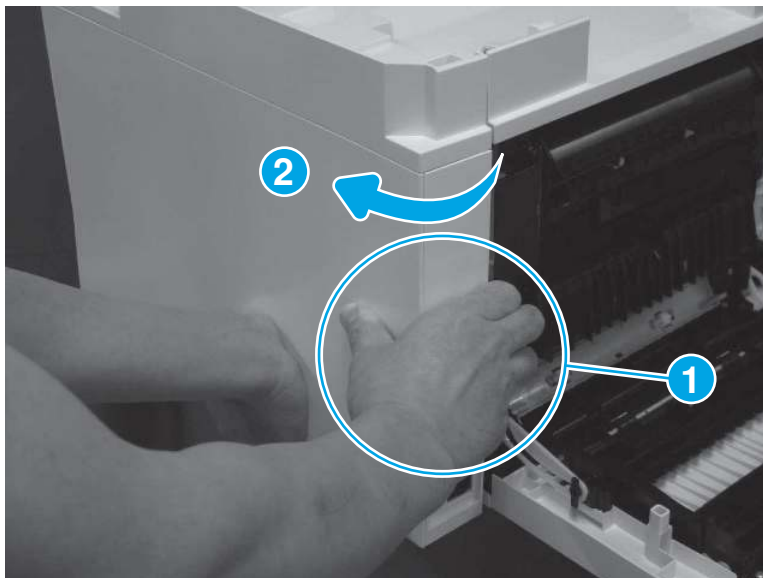
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-546 Release the rear cover corner



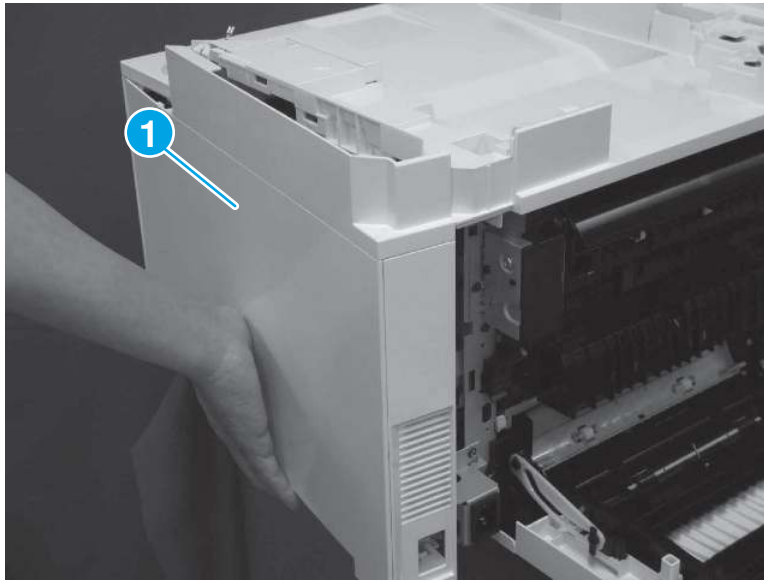
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-547 Disengage the cover corner



5. Remove the right cover (callout 1).

Figure 5-548 Remove the cover



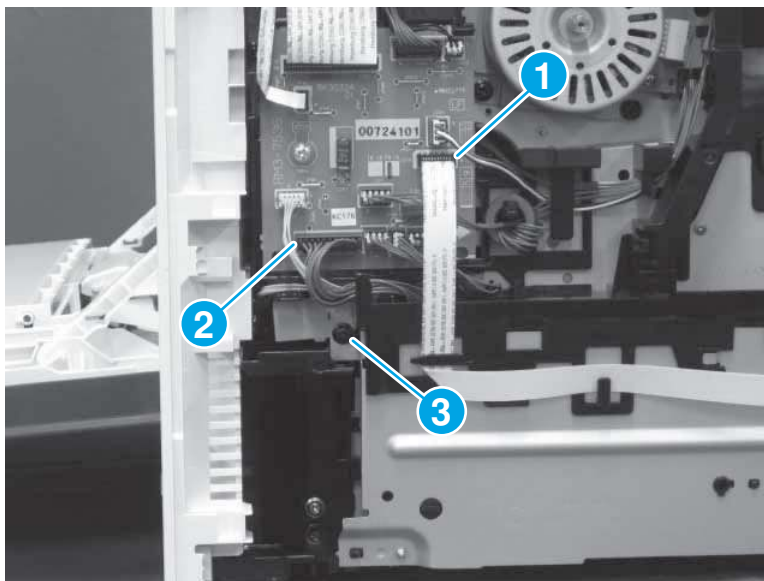
3. Remove the low-voltage power supply (LVPS)

Follow the procedure below to remove and replace the LVPS.

CAUTION:  ESD sensitive part.

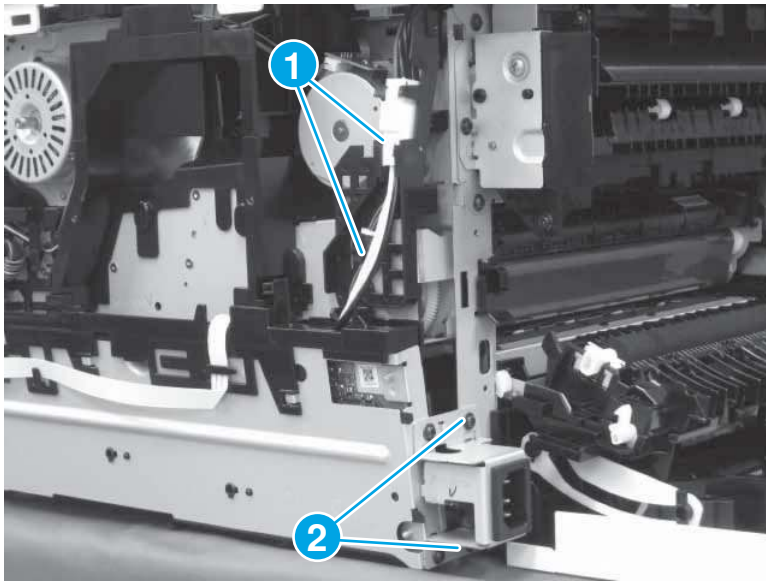
1. Disconnect one flat-flexible cable (FFC; callout 1) and one connector (callout 2), and then remove one screw (callout 3).

Figure 5-549 Disconnect FFC, connector, and remove one screw



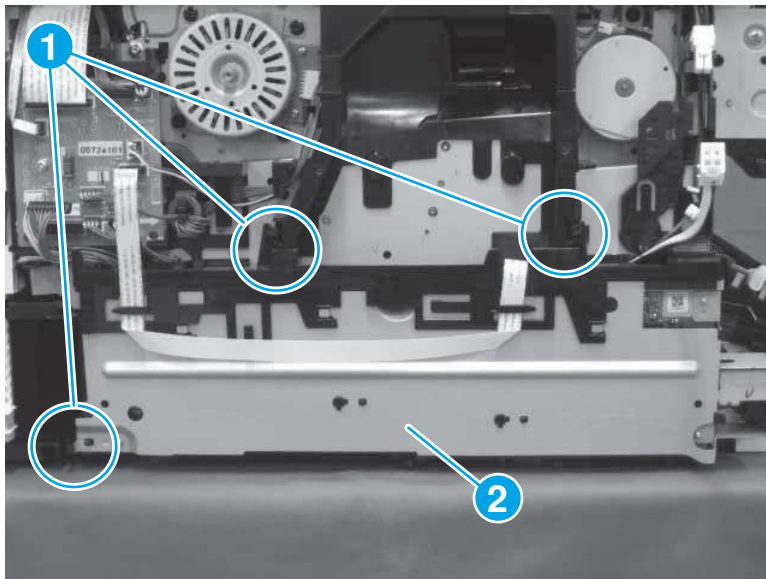
2. Disconnect two connectors (callout 1), and then remove two screws (callout 2).

Figure 5-550 Disconnect connectors and remove screws



3. Release three tabs (callout 1), and then remove the LVPS (callout 2).

Figure 5-551 Remove the LVPS



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

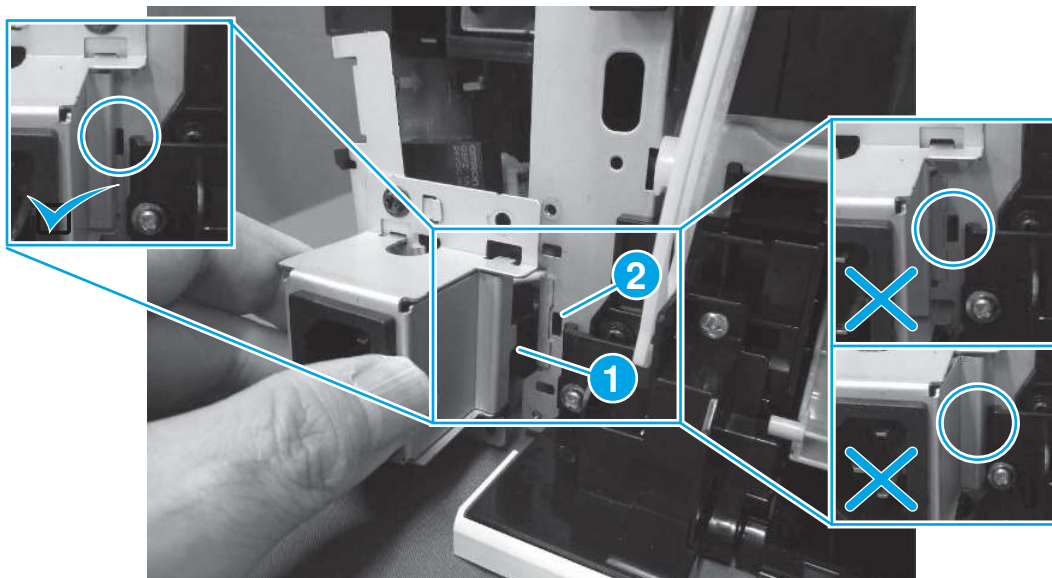
5. Special installation instructions - Low-voltage power supply (LVPS)

Follow the special instructions below to install a replacement LVPS.

CAUTION:  ESD sensitive part.

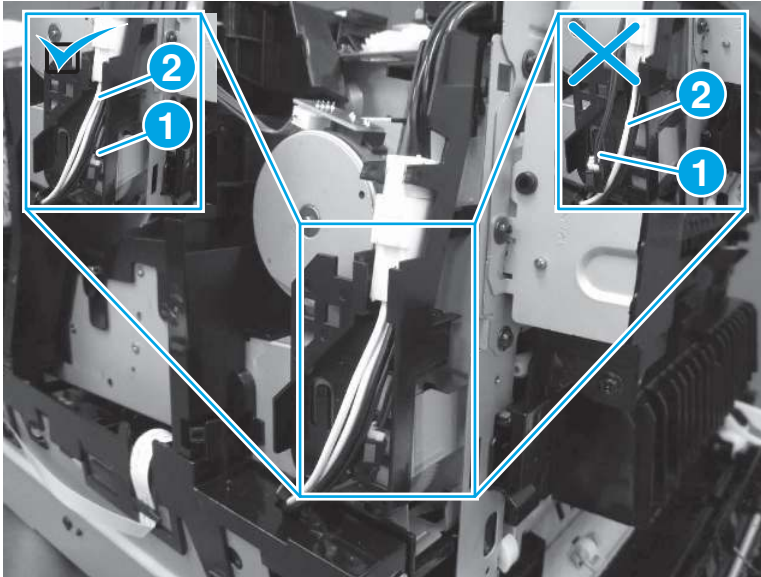
1. When the LVPS is installed, make sure that the sheet-metal tab (callout 1) near the power receptacle is inserted in the slot (callout 2) in the chassis.

Figure 5-552 Install the LVPS tab



2. Make sure that the fuser temperature fuse cable (callout 1) is positioned behind the thick cable (callout 2). This prevents the fuser cable from unnecessary movement.

Figure 5-553 Check the fuser temperature fuse cable



Removal and replacement: MP lower guide assembly

Learn about MP lower guide removal.

 [View a video of removing and replacing the MP lower guide.](#)

Mean time to repair: 45 minutes (SFP)

Mean time to repair: 55 minutes (MFP)

Service level: Difficult (SFP/MFP)

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-39 Part information

Part number	Part description
RM2-2749-000CN	Multipurpose guide assembly, lower

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

- Small flat-blade screwdriver

After performing service

Turn the printer power on

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

Post service test

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

1. Remove the Tray 1 pickup roller assembly

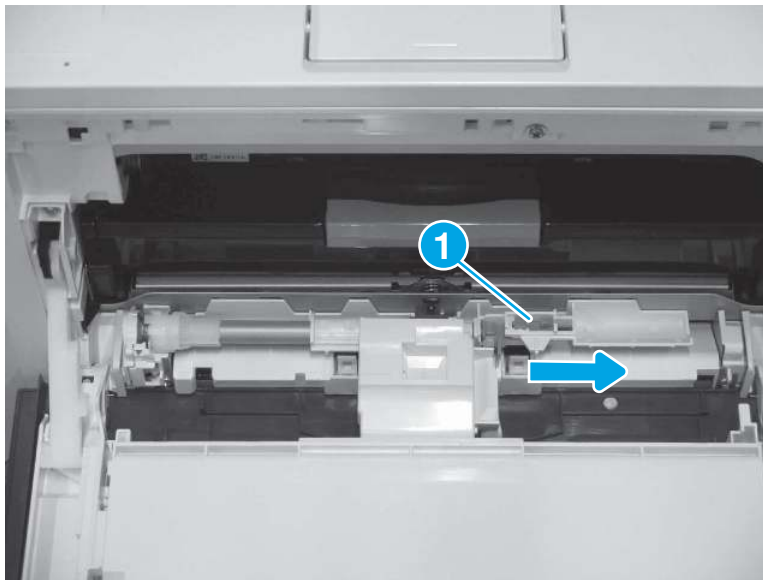
Follow the procedure below to remove and replace the Tray 1 pickup roller assembly.



Reinstallation tip: Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

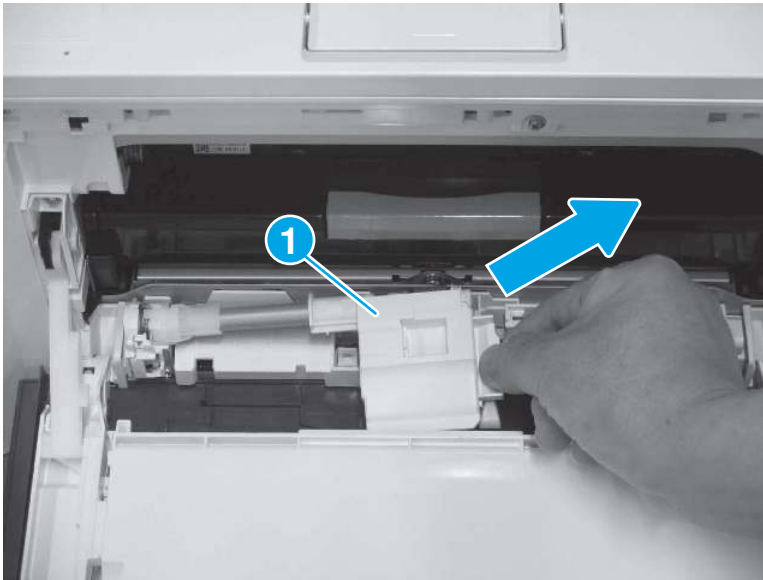
1. Open the cartridge door, and then depress the lever (callout 1) and slide it as shown below.

Figure 5-554 Release the Tray 1 pickup roller assembly



2. Slide the pickup roller assembly (callout 1) as shown below to remove it.

Figure 5-555 Remove the Tray 1 pickup roller assembly

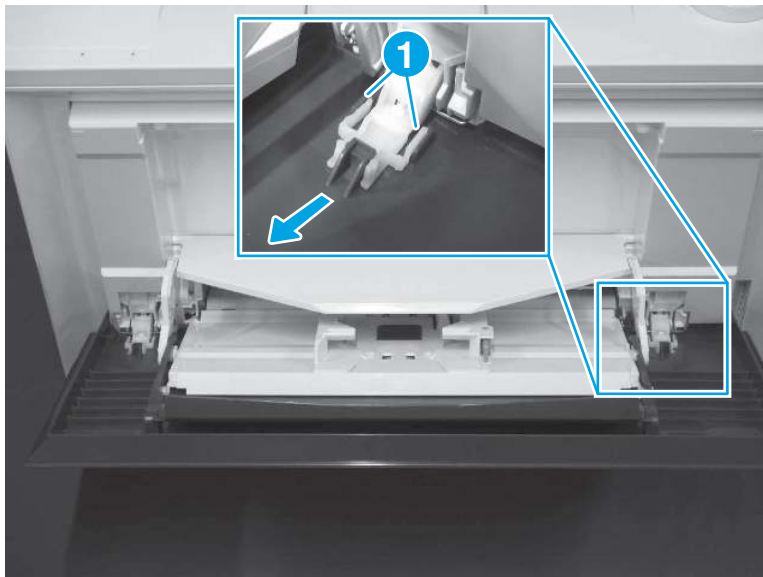


2. Remove the cartridge door assembly

Follow the procedure below to remove and replace the cartridge door assembly.

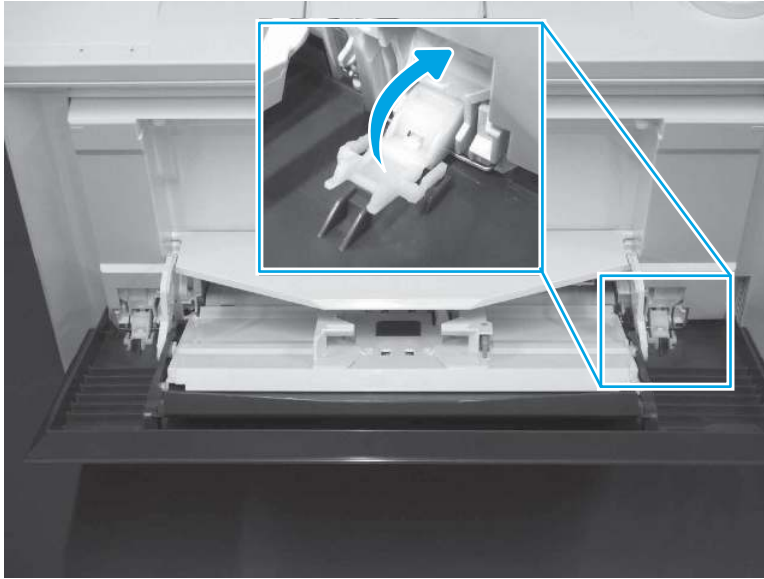
1. **Right-side door hinge:** Slightly pull Tray 1 away from the printer while releasing two tabs (callout 1) on the hinge.

Figure 5-556 Release two tabs (right hinge)



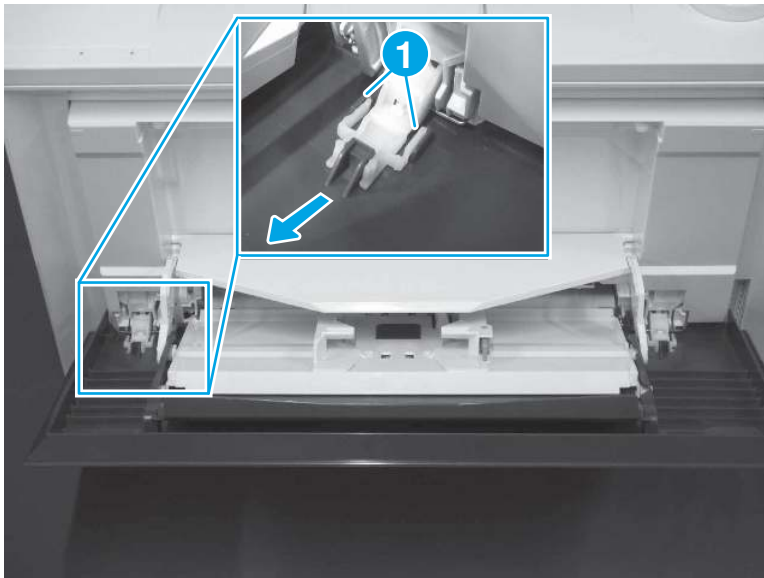
2. **Right-side door hinge:** Rotate the hinge up and away from the cover.

Figure 5-557 Remove the hinge (right side)



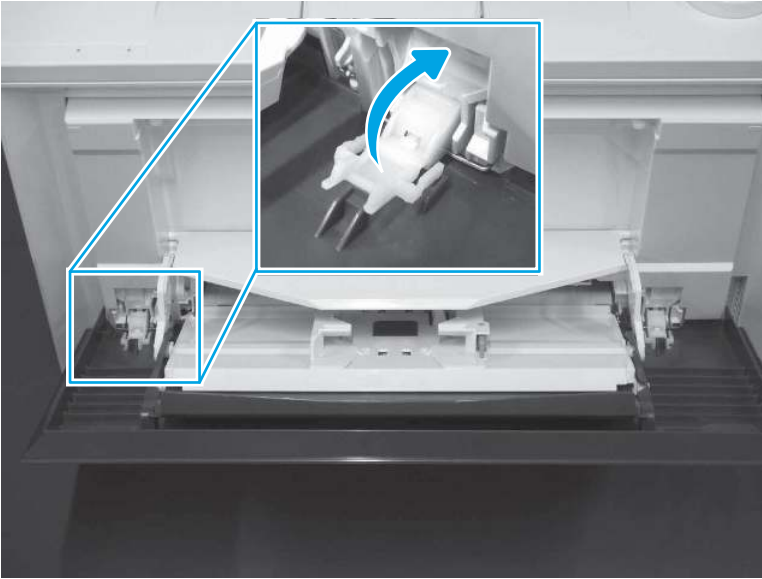
3. **Left-side door hinge:** Slightly pull Tray 1 away from the printer while releasing two tabs (callout 1) on the hinge.

Figure 5-558 Release two tabs (left hinge)



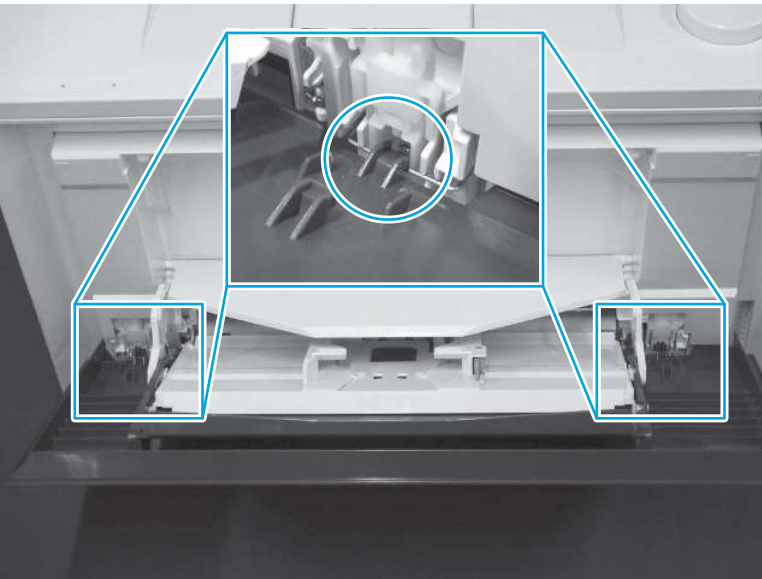
4. **Left-side door hinge:** Rotate the hinge up and away from the cover.

Figure 5-559 Remove the hinge (left side)



5. Release Tray 1 from the right- and left-side retainer hooks.

Figure 5-560 Release the retainer hooks



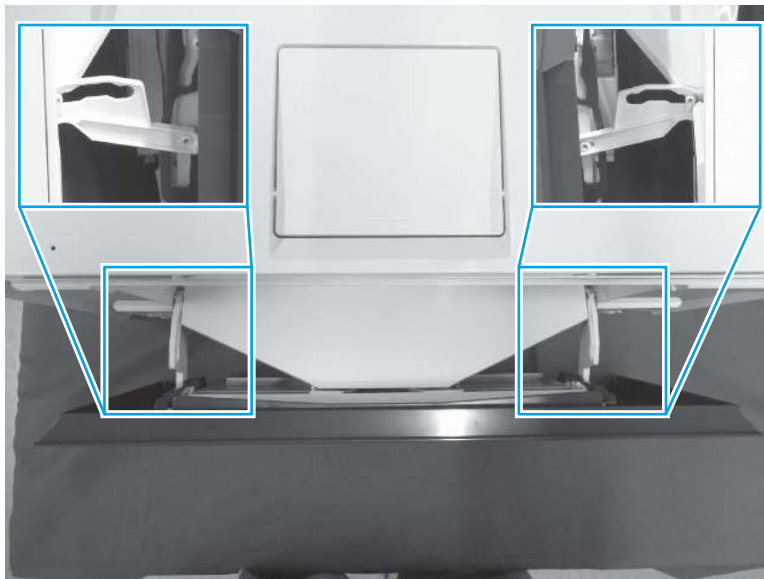
6. Position Tray 1 (callout 1) in the upright position resting on the work surface.

Figure 5-561 Position Tray 1



7. Release the right- and left-side arms, and then remove Tray 1.

Figure 5-562 Release the arms and remove the tray



8. Use a small flat-blade screwdriver to remove the right- and left-side hinges.


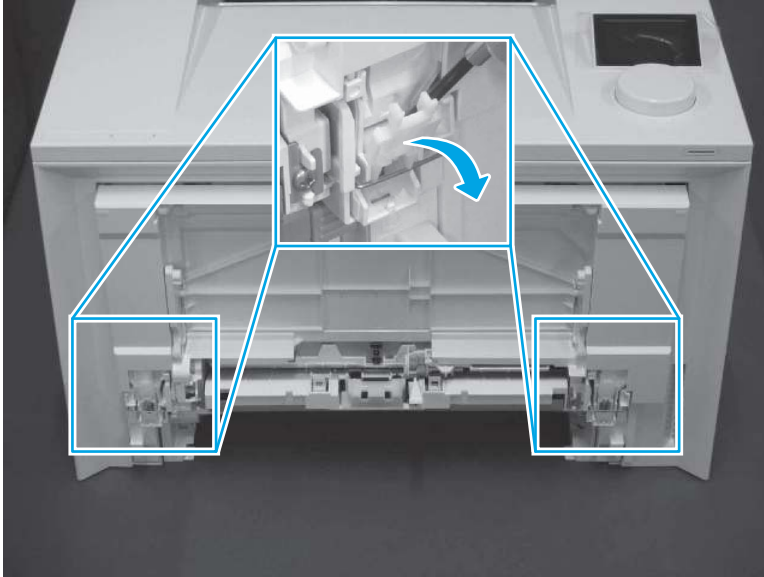
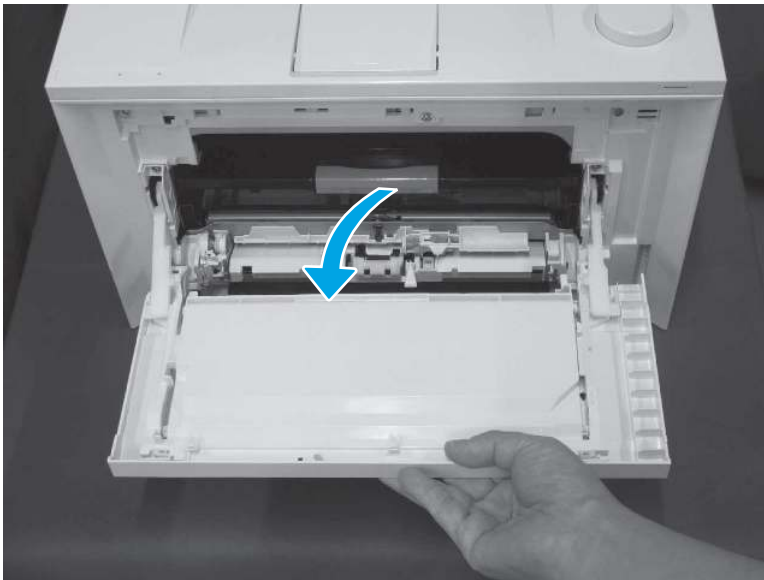
 **Reinstallation tip:** For a replacement cover only: Install these hinges on the replacement assembly.

Figure 5-563 Remove the hinges



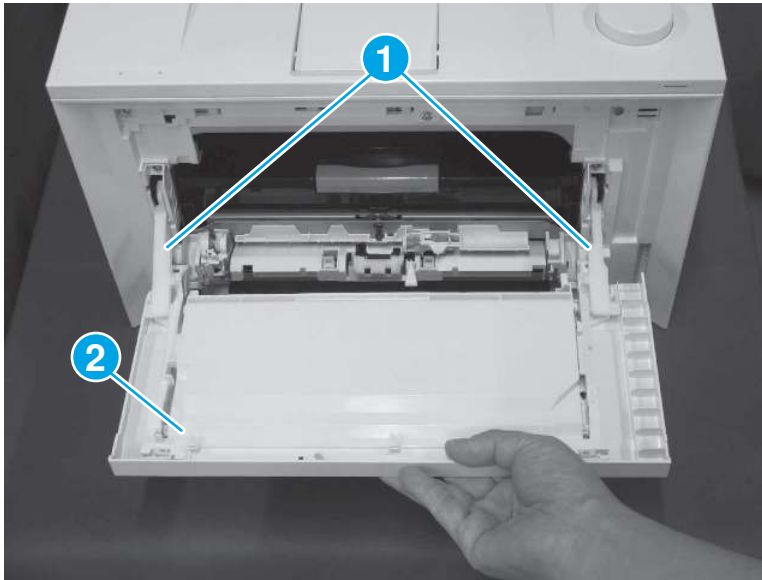
9. Open the cartridge door.

Figure 5-564 Open the door




10. Remove the right- and left-side link arms (callout 1), and then remove the cartridge door (callout 2).


Figure 5-565 Remove the link arms and cartridge door



3. Remove the left cover (SFP)

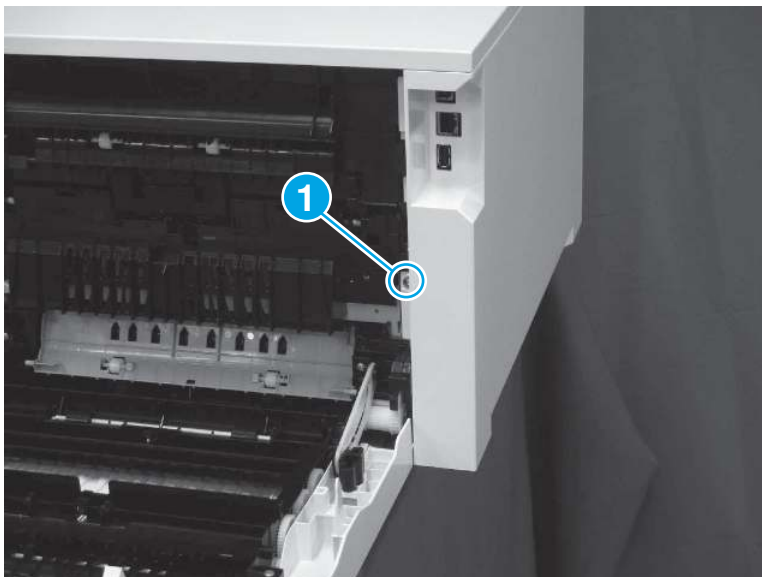
Follow the procedure below to remove and replace the left cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

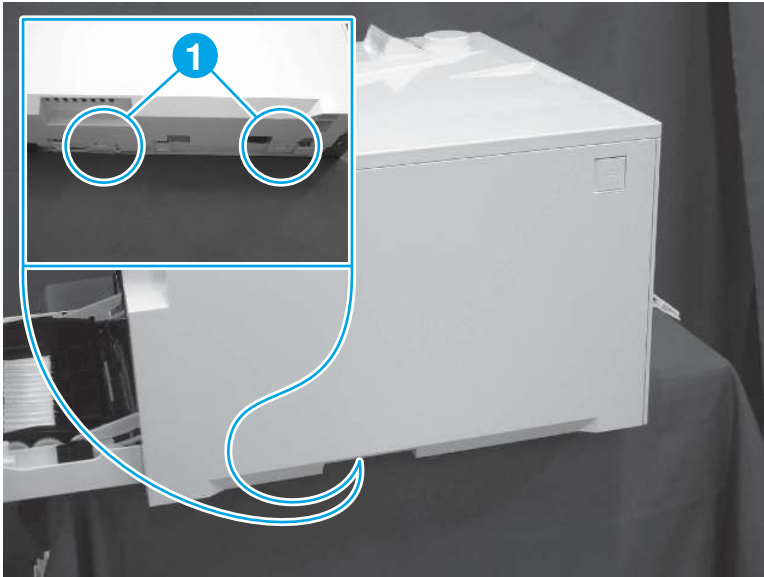
1. Remove one screw (callout 1).

Figure 5-566 Remove one screw



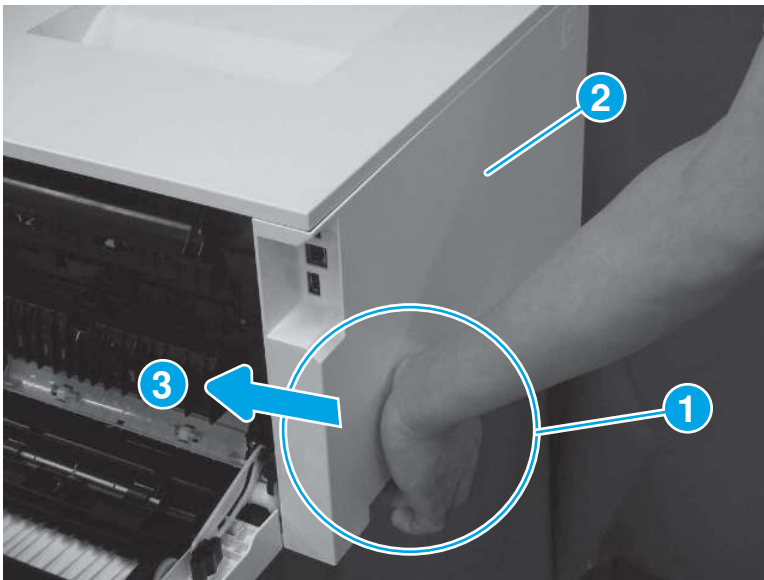
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-567 Release two tabs



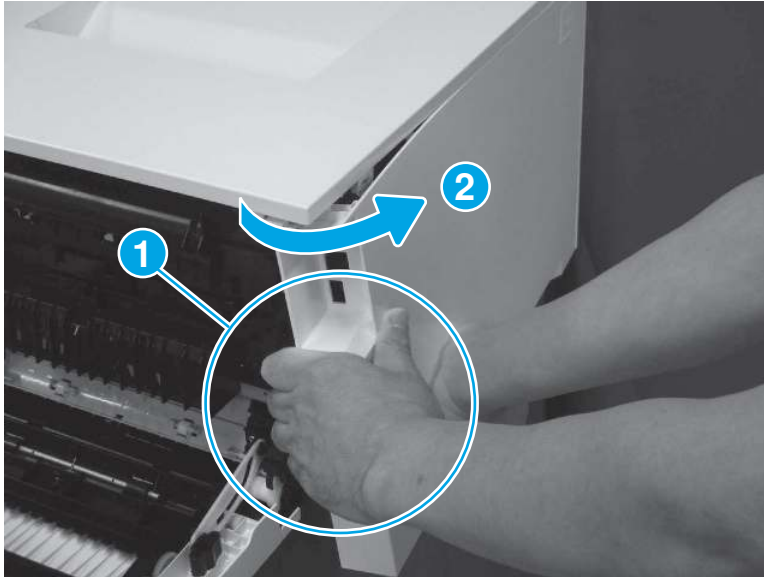
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-568 Release the rear cover corner



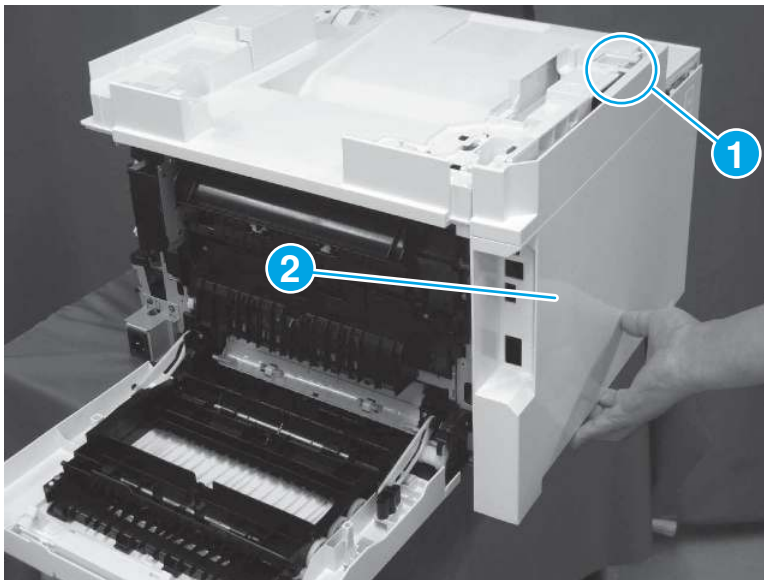
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-569 Disengage the cover corner




5. Remove the left cover (callout 1).


Figure 5-570 Remove the cover



4. Remove the left cover (MFP)

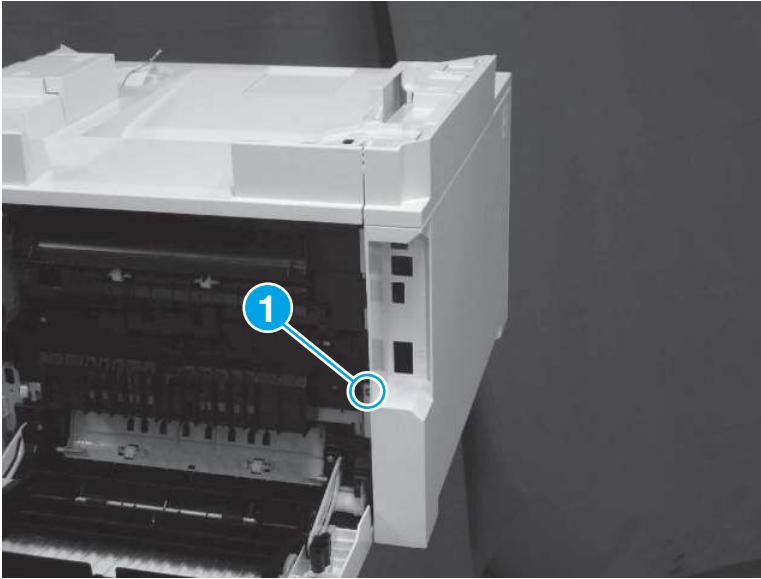
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

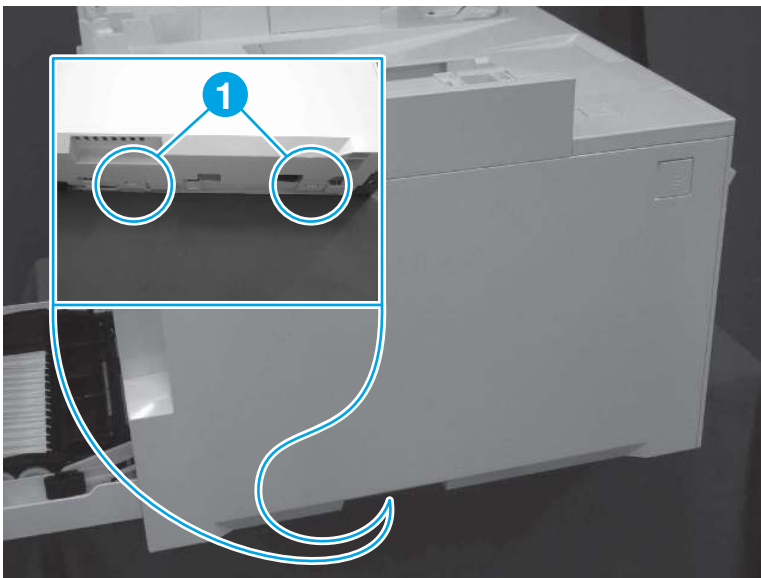
1. Remove one screw (callout 1).

Figure 5-571 Remove one screw



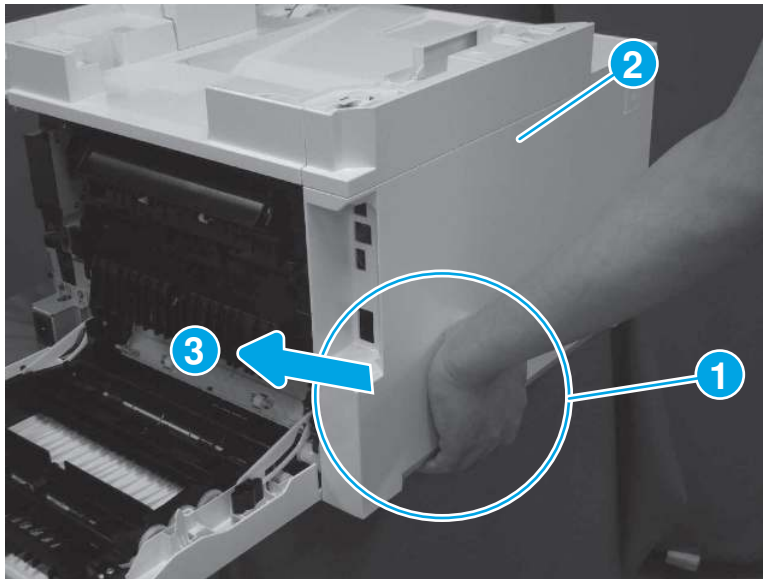
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-572 Release two tabs



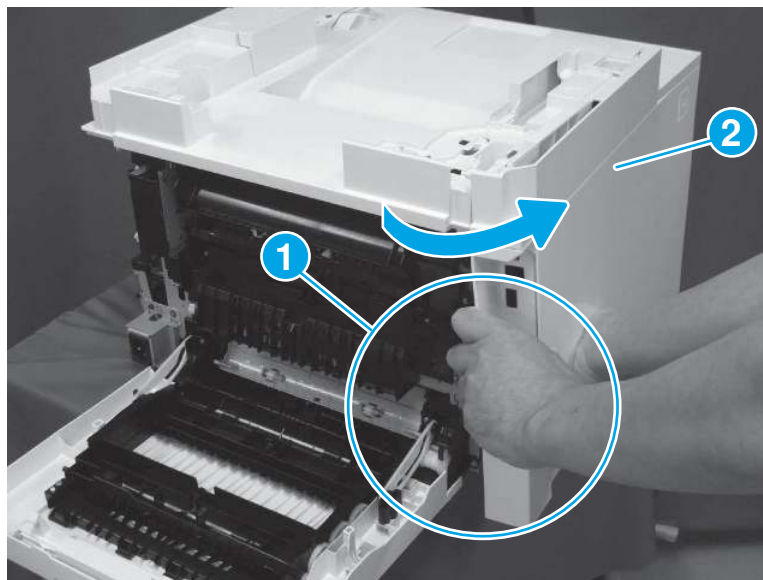
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-573 Release the rear cover corner



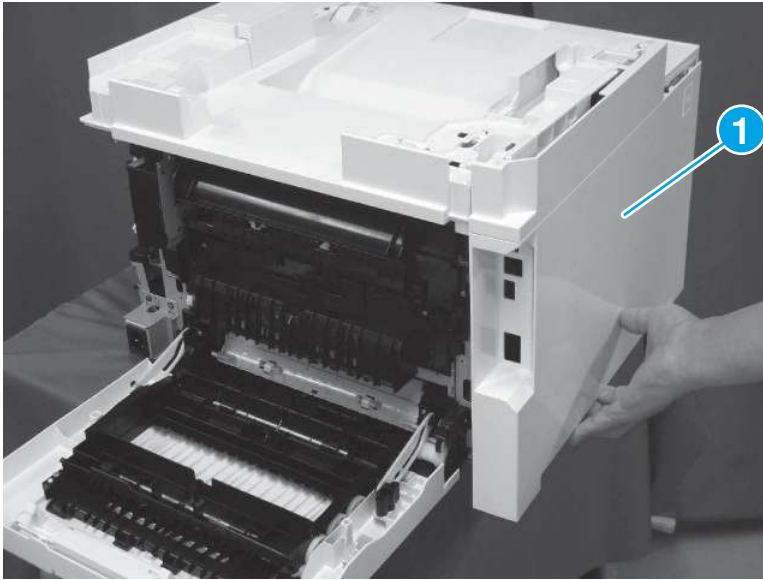
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-574 Disengage the cover corner



5. Remove the left cover (callout 1).

Figure 5-575 Remove the cover

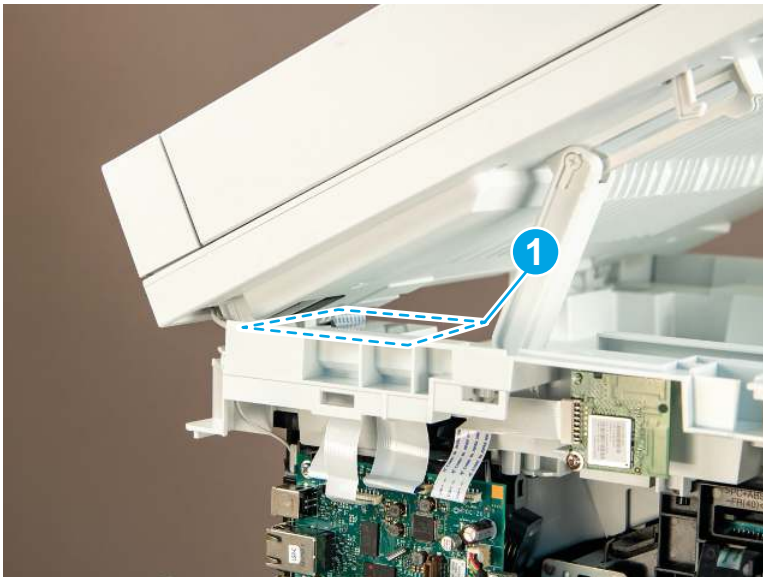


5. Remove the ISA (MFP)

Follow the procedure below to remove and replace the ISA.

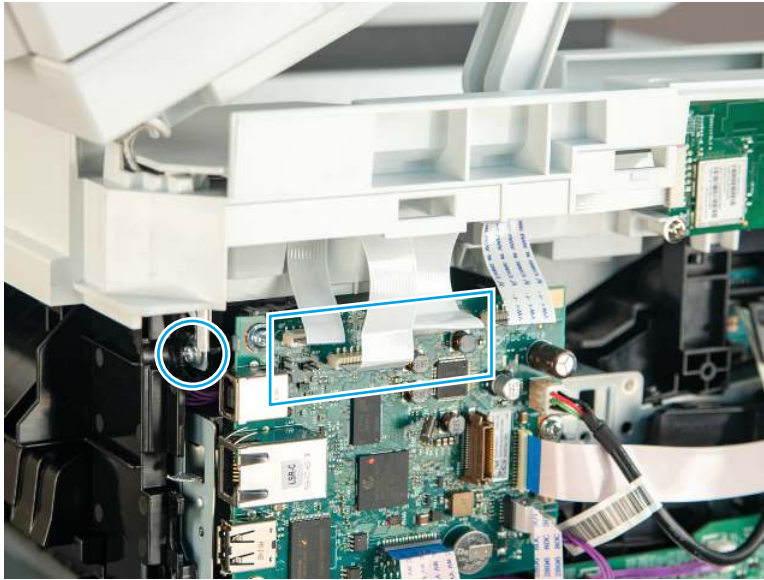
1. Open the ISA, and then remove the ISA FFC cover (callout 1).

Figure 5-576 Remove the FFC cover



2. Disconnect three FFCs, and then remove one screw to release the ground cable.

Figure 5-577 Disconnect FFCs and remove screw



3. Release one tab (callout 1), and then rotate the ISA slider pin (callout 2) towards the front of the printer to release it. Remove the slider pin.

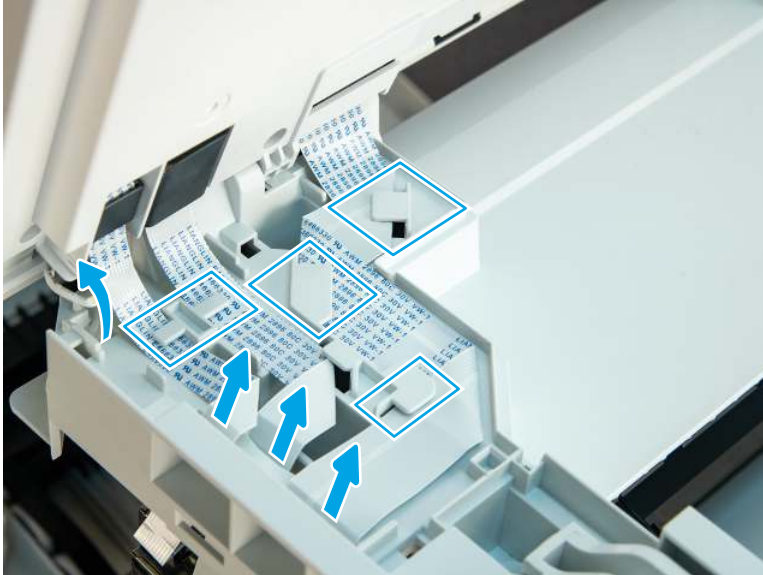
⚠ CAUTION: When the slider pin is removed, the ISA is not captive and can suddenly detach from the printer.

Figure 5-578 Remove the slider pin



4. Support the ISA, release the FFCs from the retainers, and then carefully pass the FFCs and the ground wire up through the slots in the top cover.

Figure 5-579 Release the FFCs and ground wire



5. Slide ISA as shown below to release it.

Figure 5-580 Release the ISA




6. Remove the ISA.

Figure 5-581 Remove the ISA



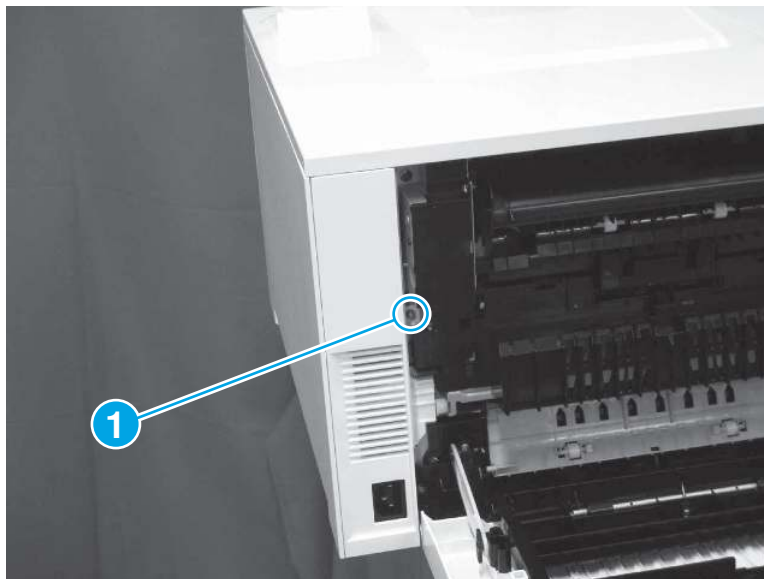
6. Remove the right cover (SFP)

Follow the procedure below to remove and replace the right cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

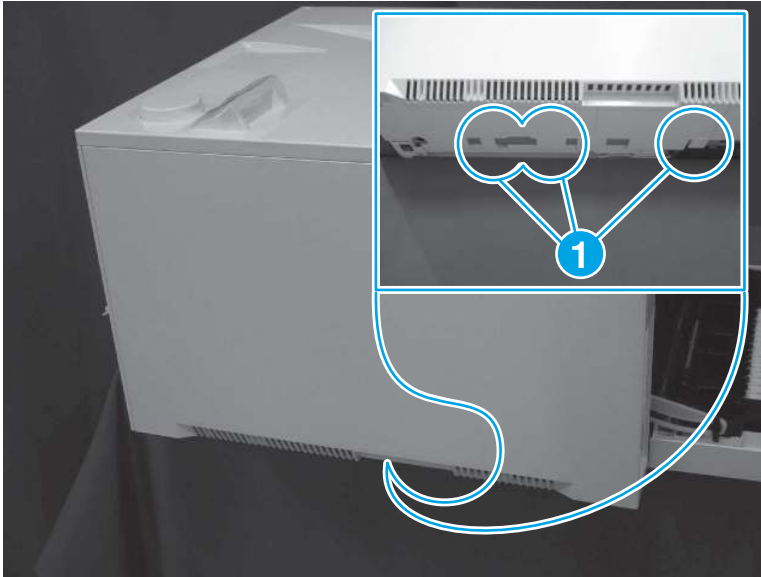
1. Remove one screw (callout 1).

Figure 5-582 Remove one screw



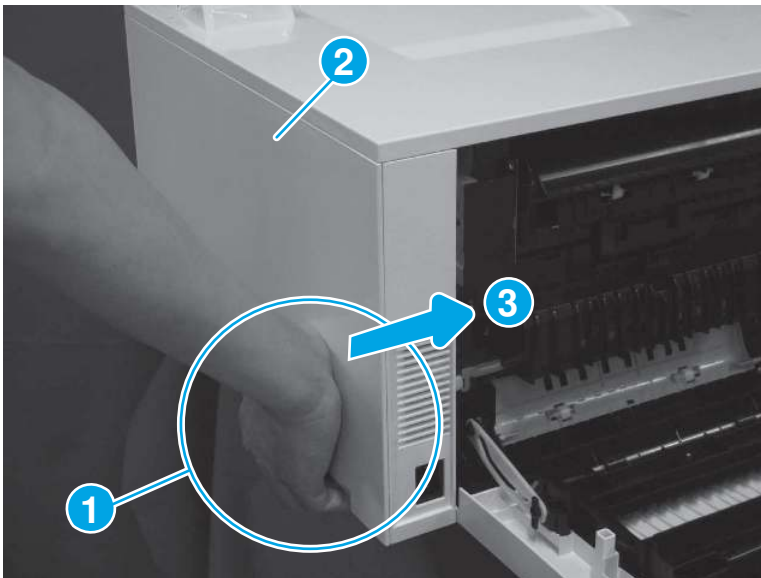
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-583 Release three tabs



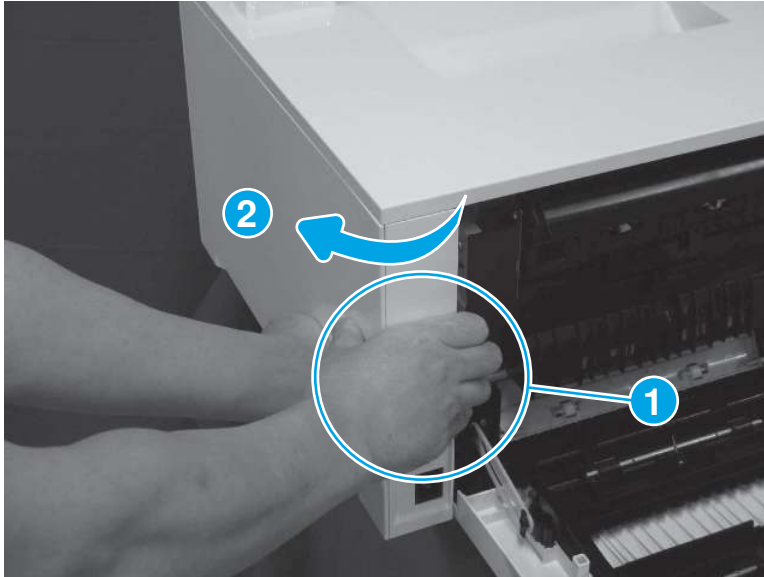
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-584 Release the rear cover corner



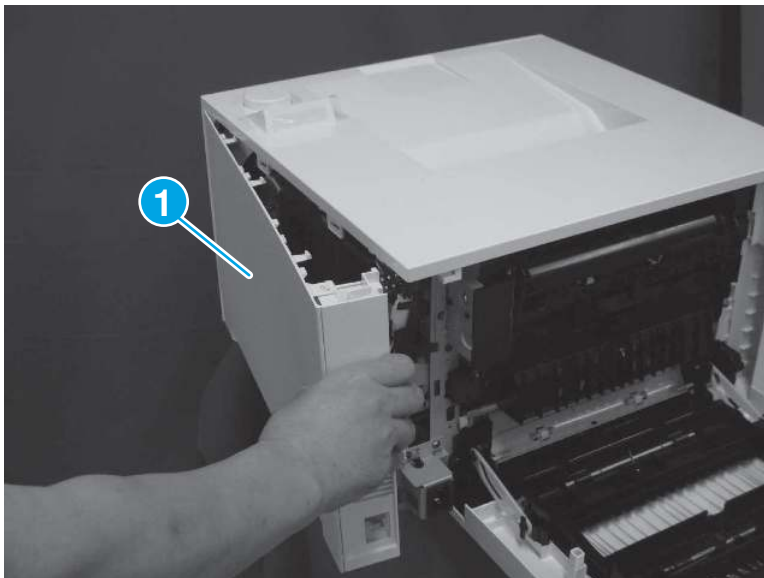
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-585 Disengage the cover corner



5. Remove the right cover (callout 1).

Figure 5-586 Remove the cover



7. Remove the right cover (MFP)

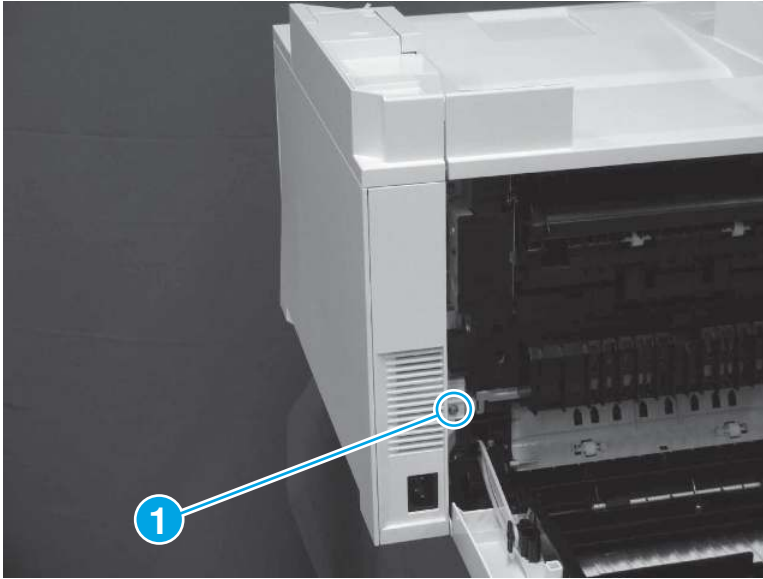
Follow the procedure below to remove and replace the right cover (MFP).



NOTE: The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

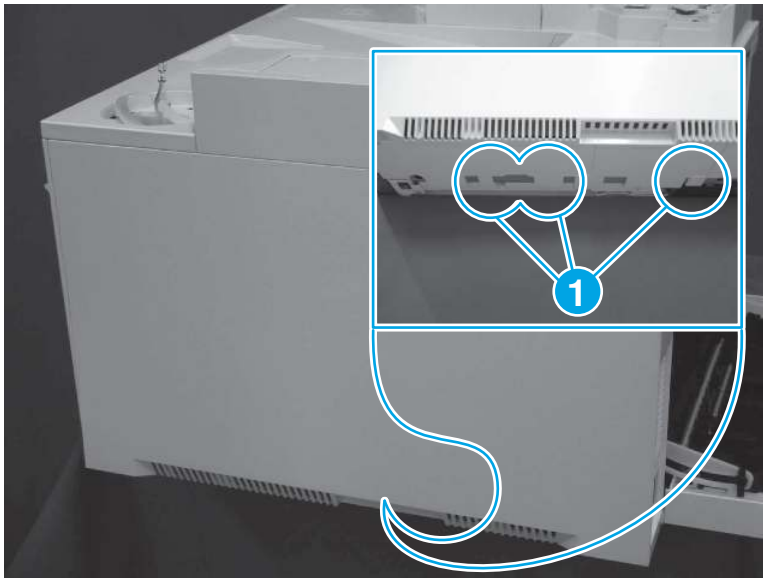
1. Remove one screw (callout 1).

Figure 5-587 Remove one screw



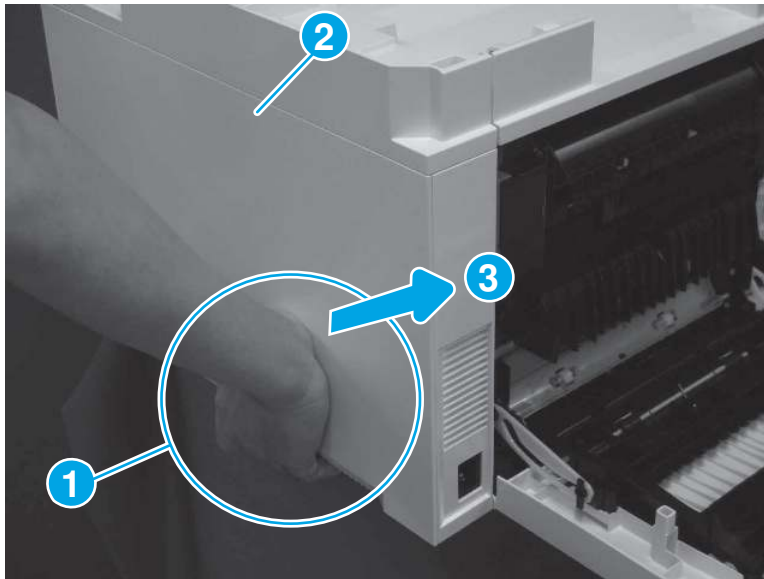
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-588 Release three tabs



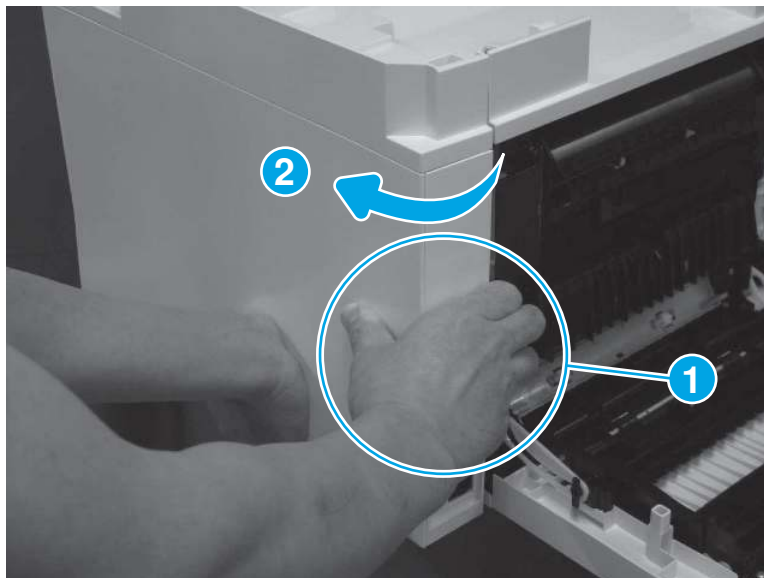
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-589 Release the rear cover corner



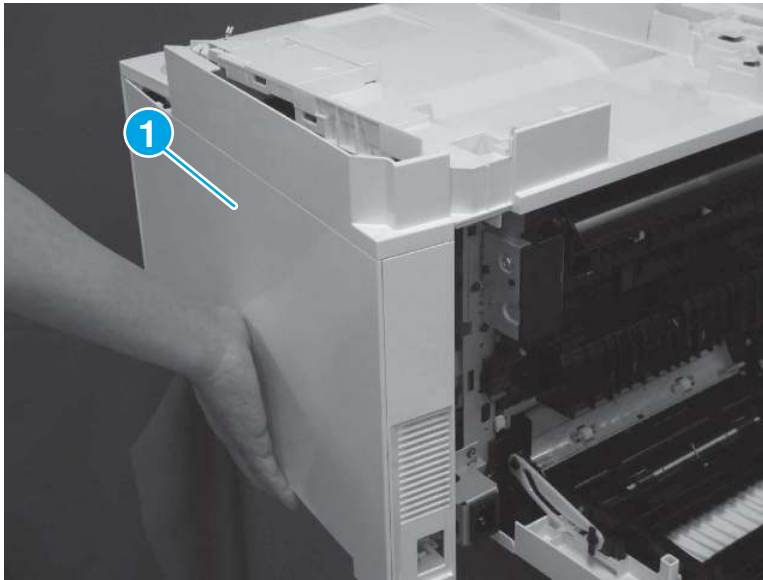
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-590 Disengage the cover corner



5. Remove the right cover (callout 1).


Figure 5-591 Remove the cover



8. Remove the front cover

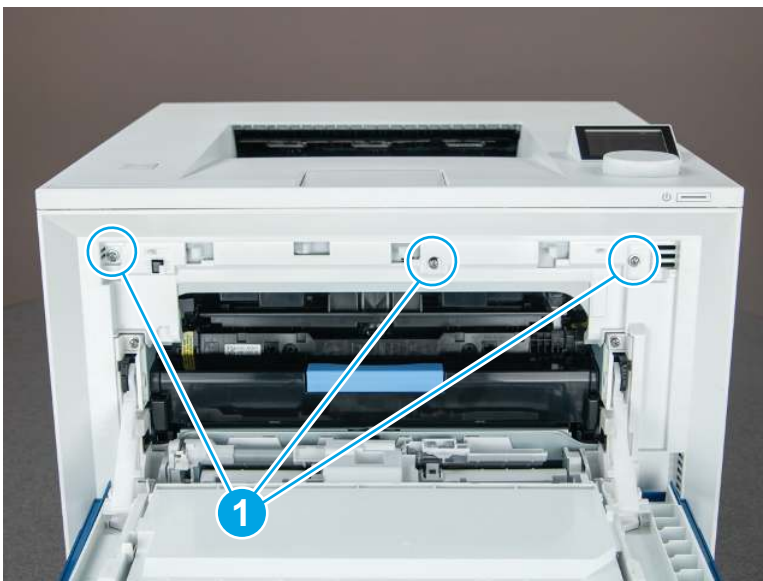
Follow the procedure below to remove and replace the front cover.

 **NOTE:** Front cover removal is **identical** for both SFP and MFP models.

 **Reinstallation tip:** Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

1. Remove three screws (callout 1).

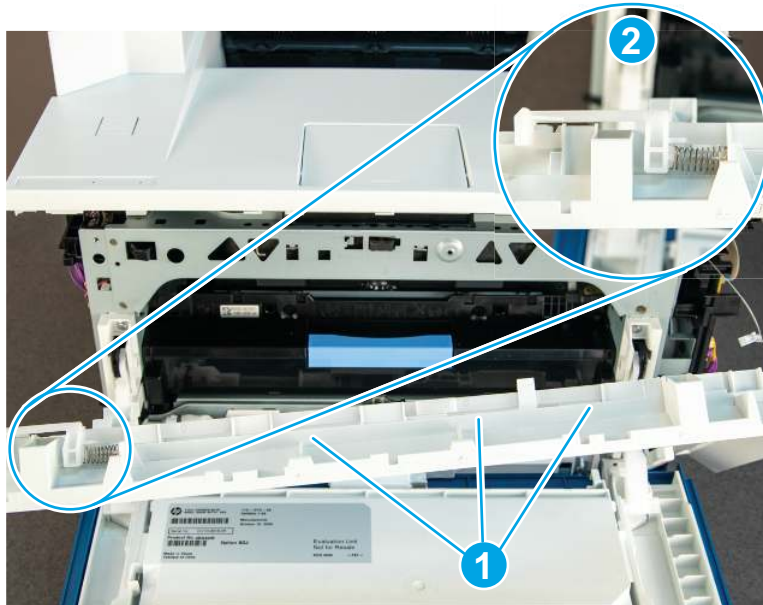
Figure 5-592 Remove three screws



2. Before proceeding, take note of the door release arm (callout 1). This arm can be easily dislodged when the cover is removed.

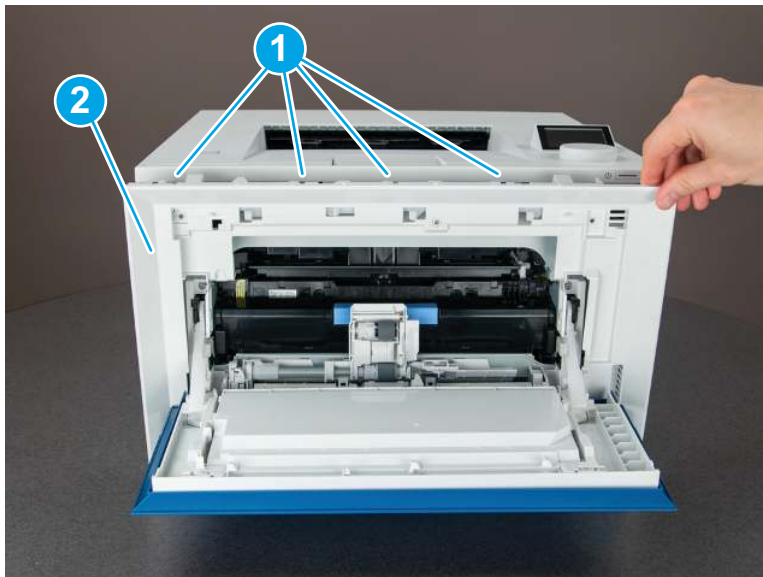
⚠ CAUTION: Do not lose the spring (callout 2) when removing the front cover.

Figure 5-593 Door release arm



3. Release four tabs (callout 1), and then remove the front cover (callout 2).

Figure 5-594 Remove the cover



9. Remove the top cover (SFP)

Follow the procedure below to remove and replace the top cover (SFP).

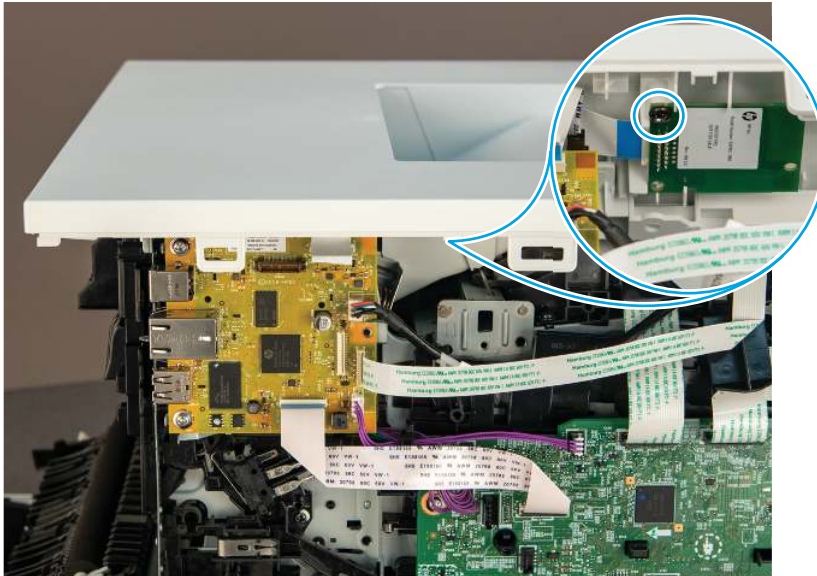
📝 NOTE: The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

1. **Wireless model only:** Raise and support the left side of the printer, remove one screw, and then separate the wireless PCA from the cover.

CAUTION: Do not attempt to completely remove the wireless PCA. Instead, gently move it out of the way.

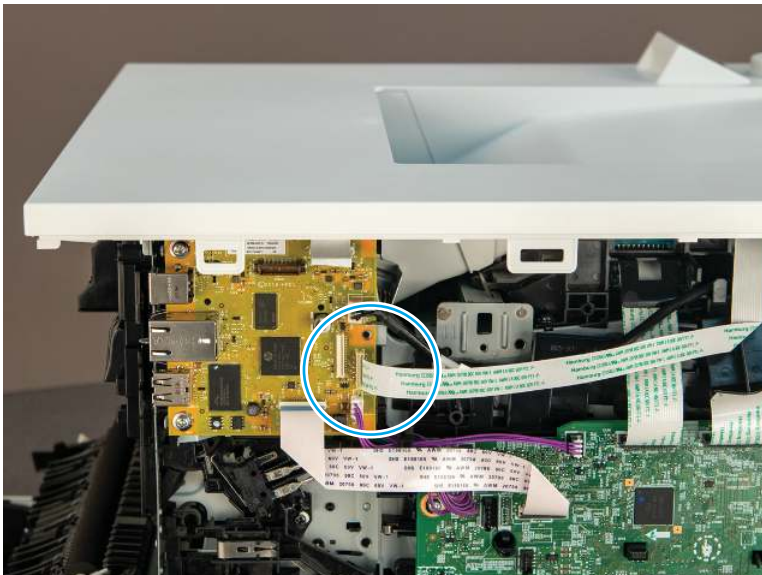
TIP: To remove the screw without raising the printer, use a short-barrel screwdriver.

Figure 5-595 Remove one screw



2. Disconnect one flat-flexible cable (FFC).

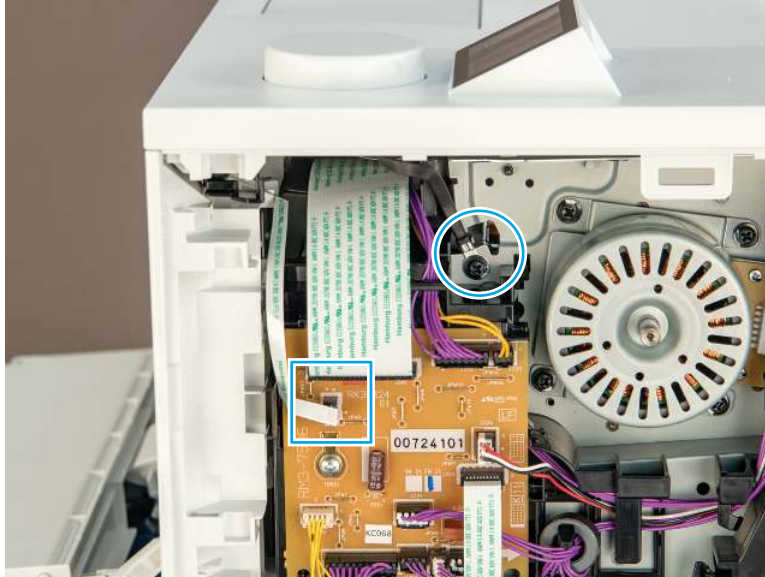
Figure 5-596 Disconnect one FFC



3. Disconnect one FFC, and then remove one screw to release the ground wire.

NOTE: The front cover is shown installed in the figure below. However, this step is correct for removing the top cover.

Figure 5-597 Disconnect one FFC and remove one screw




4. Sliding the cover from the back of the printer towards the front to remove it.

Figure 5-598 Remove the cover



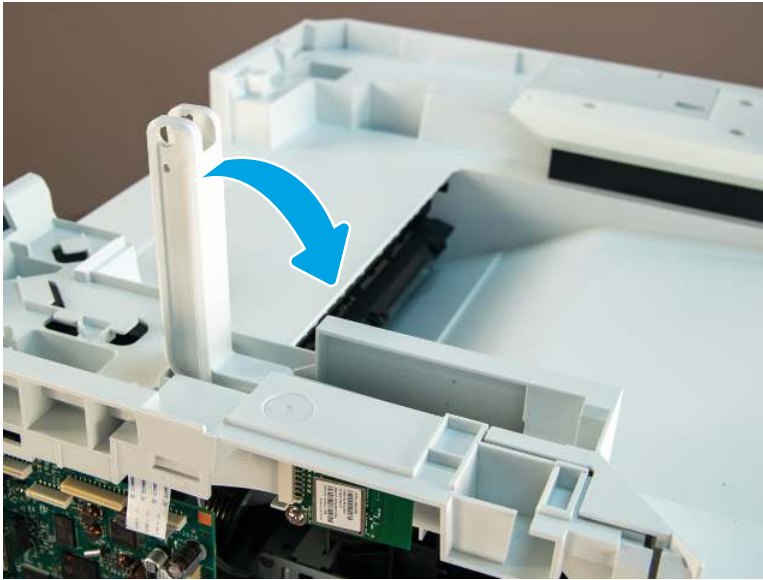
10. Remove the top cover (MFP)

Follow the procedure below to remove and replace the top cover (MFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

1. Close the ISA lift arm.

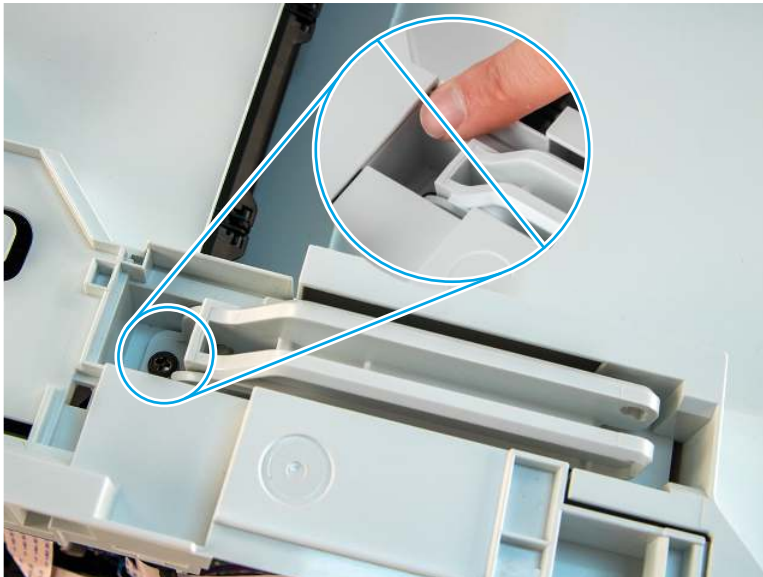
Figure 5-599 Close the ISA lift arm



2. Remove one screw.

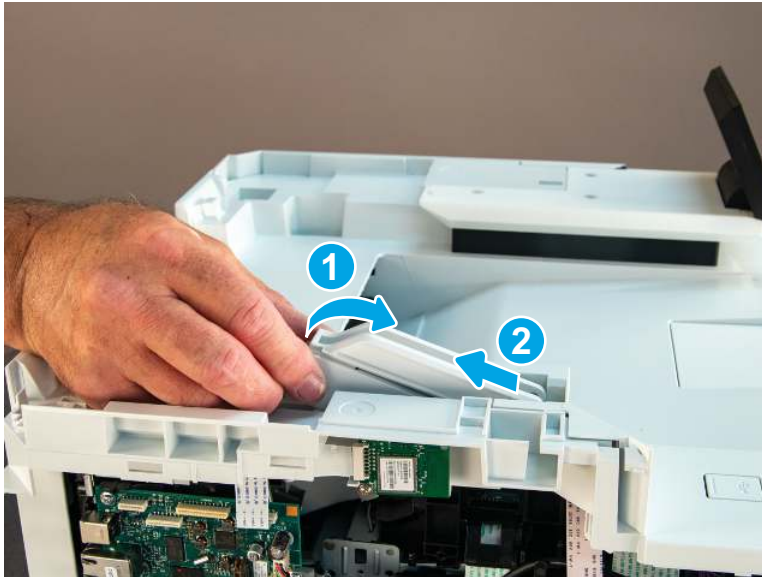
⚠ CAUTION: The support arm is spring loaded and can unexpectedly spring into the open position. To avoid injury, do not place a finger in the screw well when the support arm is in the closed position.

Figure 5-600 Remove one screw



3. Rotate one end of the lift arm up (callout 1), and then slide the lift arm as shown below (callout 2) to release it. Remove the lift arm.

Figure 5-601 Remove the lift arm



4. Do the following:
 - a. Disconnect one FFC (control panel; callout 1).
 - b. Remove one screw (callout 2), and then separate the wireless PCA from the top cover.


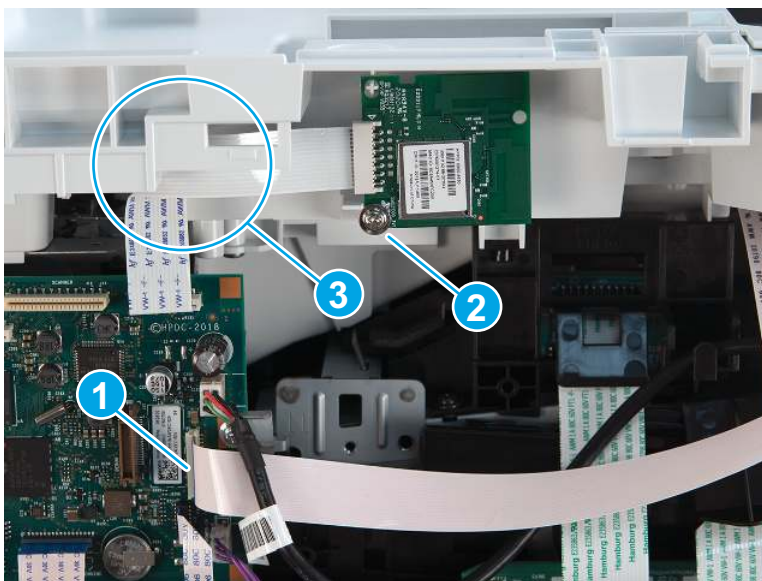
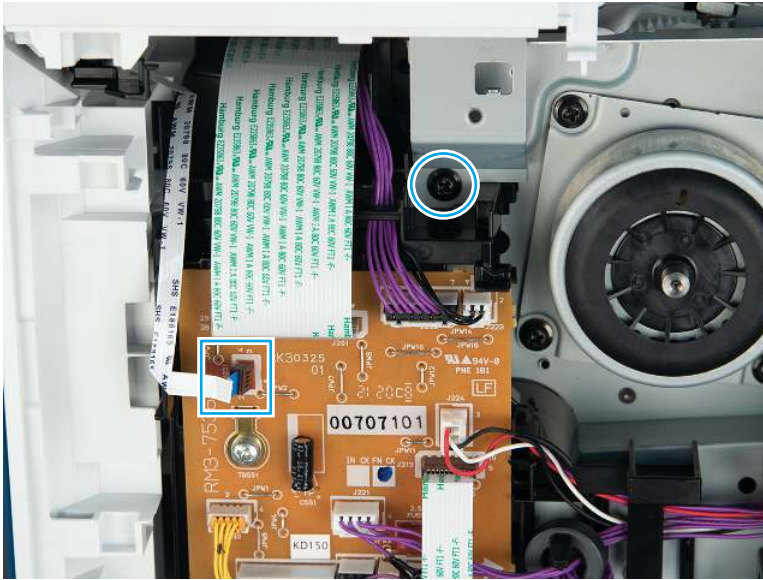
 **NOTE:** The wireless PCA does not need to be completely removed. Instead, release the FFC from the retainer (callout 3), and then gently move it out of the way.

Figure 5-602 Disconnect FFC and move the wireless PCA



5. Disconnect one FFC (power button), and then remove one screw (grounding sheet-metal plate).

Figure 5-603 Disconnect one FFC and remove one screw



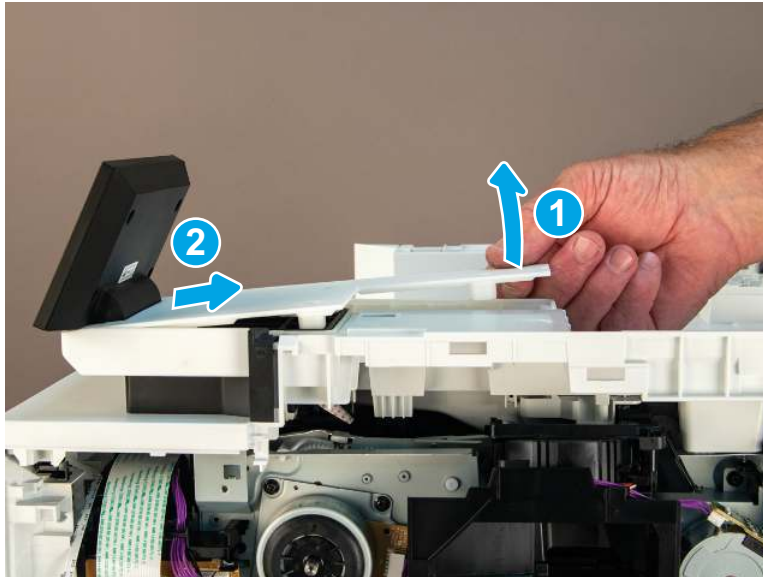
6. Remove three screws.

Figure 5-604 Remove three screws




7. Release one tab and rotate one end of the base cover up (callout 1), and then slide the cover as shown (callout 2) to remove it.

Figure 5-605 Remove the cover



8. Disconnect two FFCs.

 **NOTE:** These are zero-insertion force (ZIF) connectors. To remove the FFCs, first release the locking clip on the connector, and then pull the cable straight out of the connector.


 **TIP:** For reinstallation, make sure that the line of the FFC is parallel with the body.

Figure 5-606 Disconnect two FFCs



9. Remove four screws.


 **NOTE:** Two of the screws are self-tapping threads (black), and two of the screws are machine thread (silver).

Figure 5-607 Remove four screws



10. Lift the control panel and base straight up and off of the printer to remove them together.


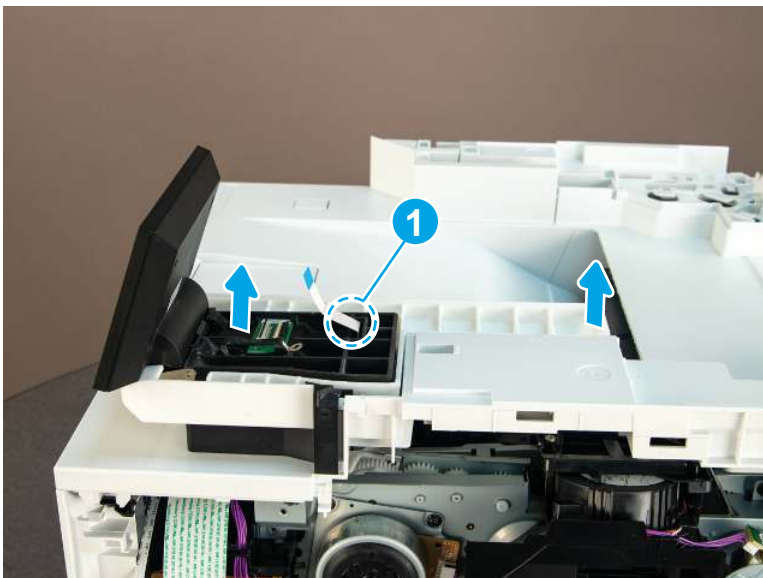
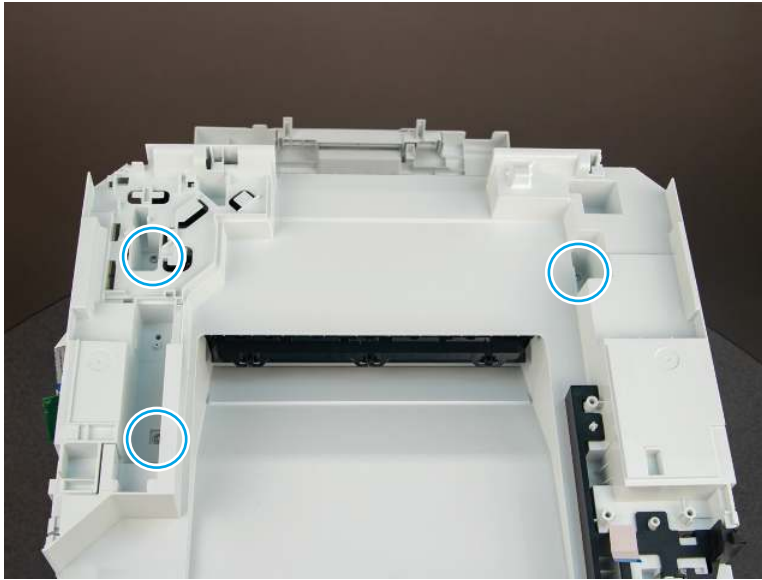
 **NOTE:** When handling the assembly, do not lose the ferrite (callout 1).

Figure 5-608 Remove control panel and base



11. Remove three screws.

Figure 5-609 Remove three screws



12. Sliding the cover from the back of the printer to the front to remove it.


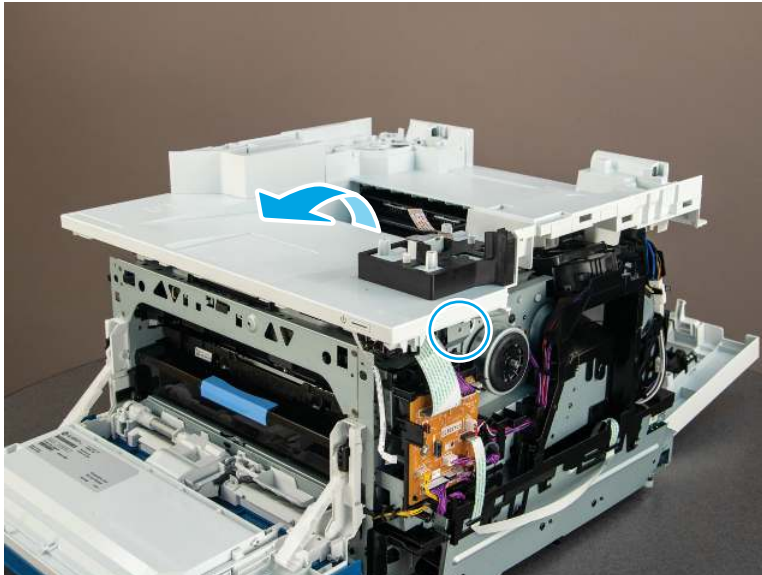
 **TIP:** Slightly move the control-panel ground bracket (circled) back and forth to help release the top cover.

Figure 5-610 Remove the cover



13. **When the cover is reinstalled:** Make sure that the front USB assembly is correctly positioned under the cover.

Figure 5-611 Front USB assembly



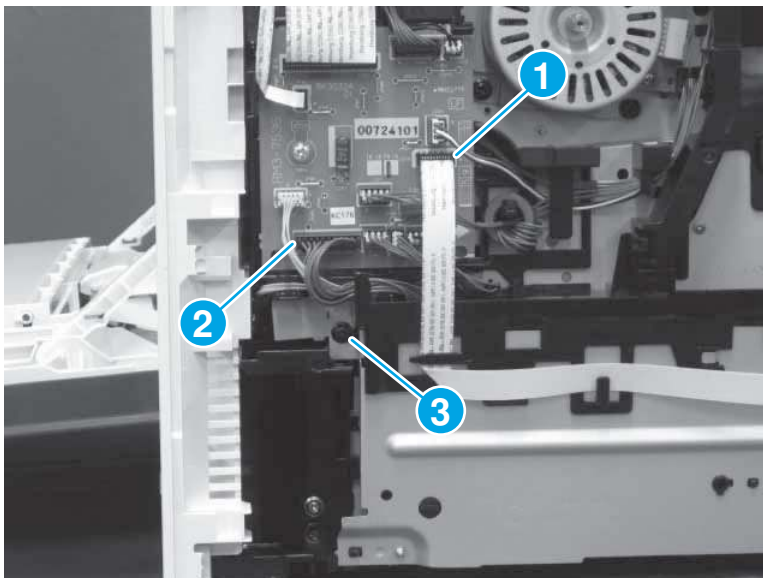
11. Remove the low-voltage power supply (LVPS)

Follow the procedure below to remove and replace the LVPS.

CAUTION:  ESD sensitive part.

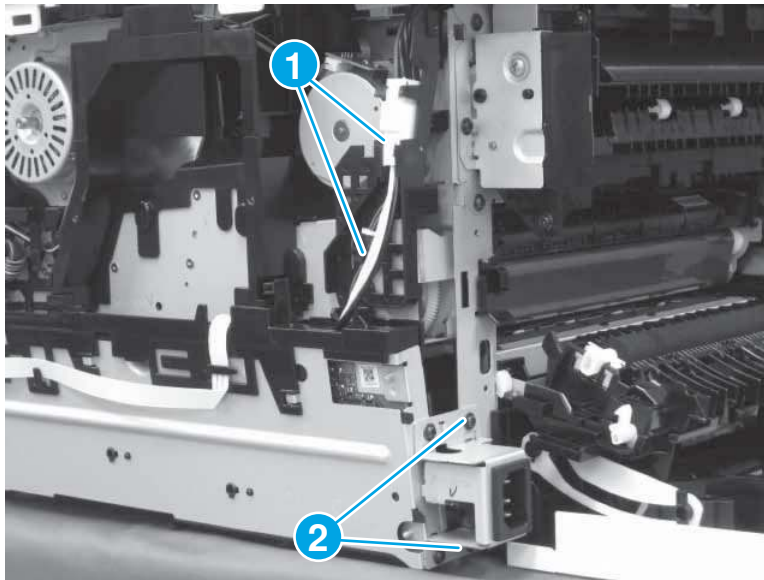
1. Disconnect one flat-flexible cable (FFC; callout 1) and one connector (callout 2), and then remove one screw (callout 3).

Figure 5-612 Disconnect FFC, connector, and remove one screw



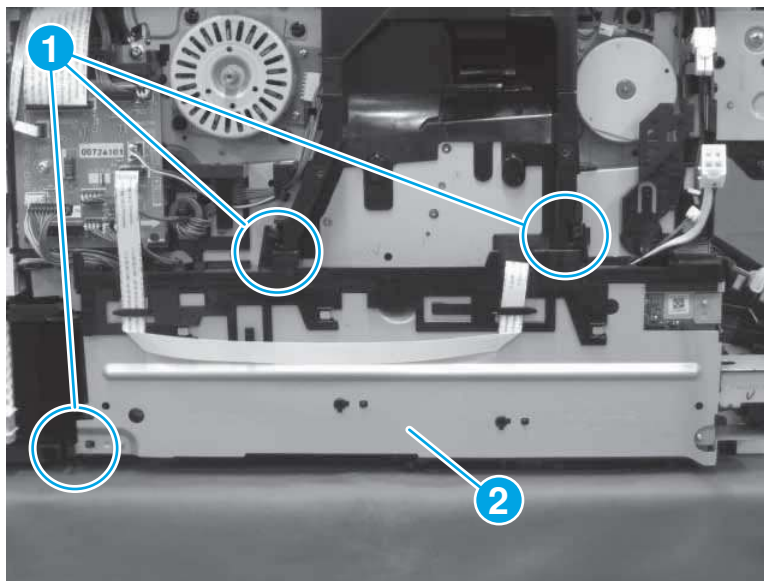
2. Disconnect two connectors (callout 1), and then remove two screws (callout 2).

Figure 5-613 Disconnect connectors and remove screws



3. Release three tabs (callout 1), and then remove the LVPS (callout 2).

Figure 5-614 Remove the LVPS

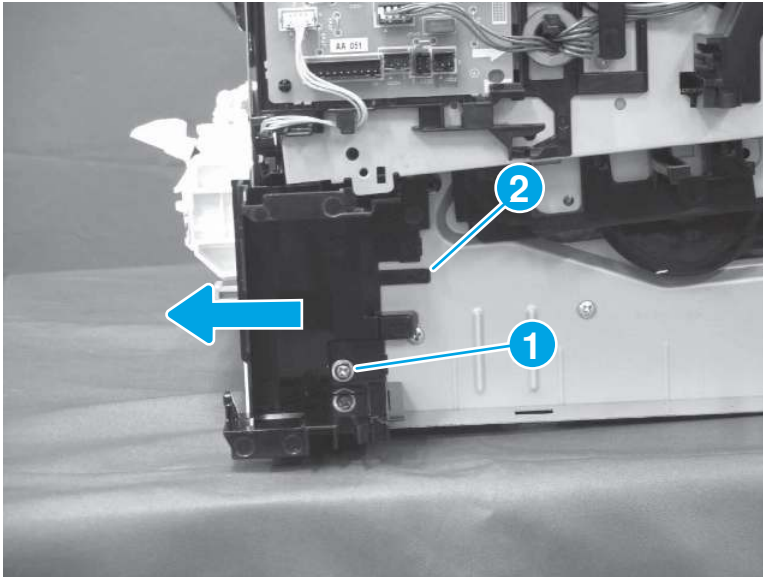


12. Remove the MP lower guide

Follow the procedure below to remove and replace the MP lower guide.

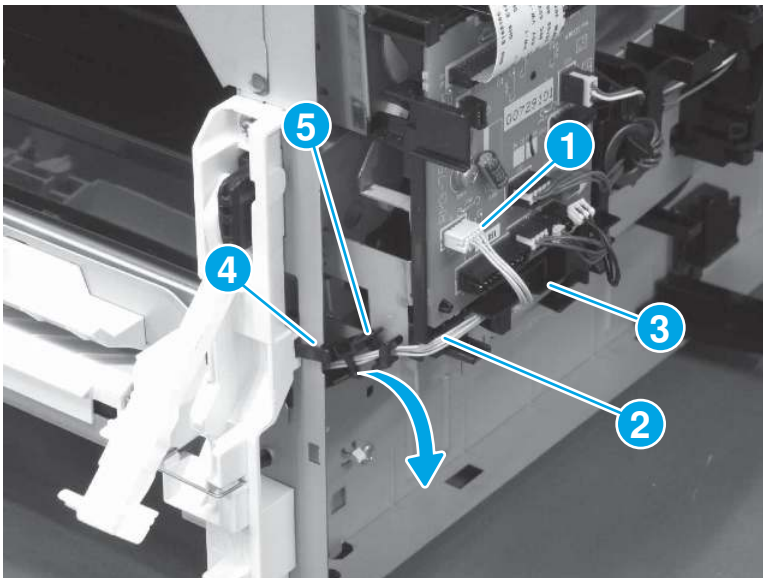
1. Remove one screw (callout 1), release one tab (callout 2), and then slide the cover as shown below to remove it.

Figure 5-615 Remove the cover



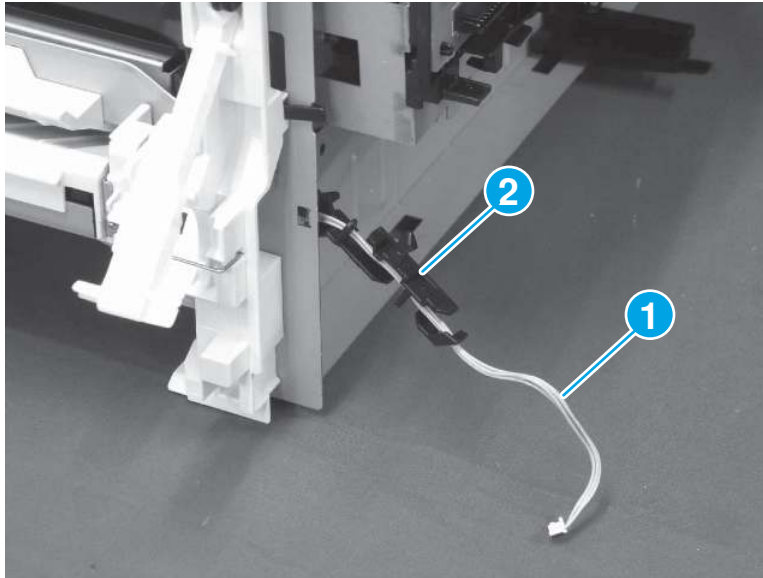
2. Do the following:
 - a. Disconnect one connector (callout 1).
 - b. Release the cable (callout 2) from the guide (callout 3).
 - c. Release one tab (callout 4).
 - d. Rotate the guide (callout 5) as shown below to remove it.

Figure 5-616 Remove the guide



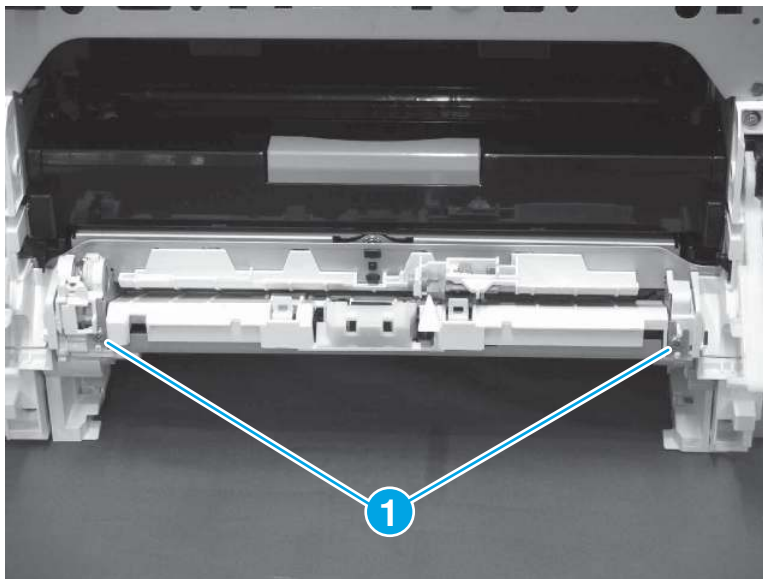
3. Release the cable (callout 1) from the guide (callout 2).

Figure 5-617 Release the cable



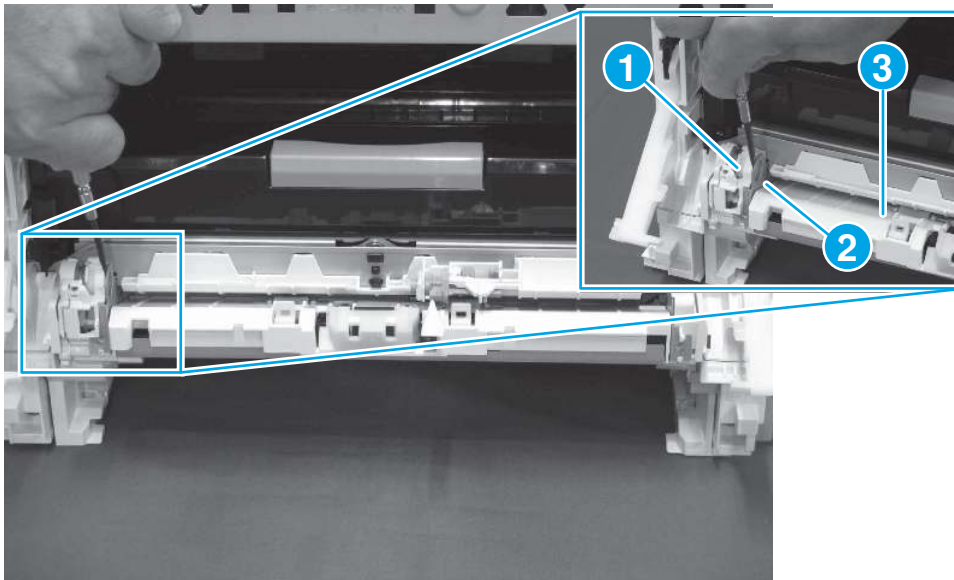
4. Remove two screws (callout 1).

Figure 5-618 Remove two screws



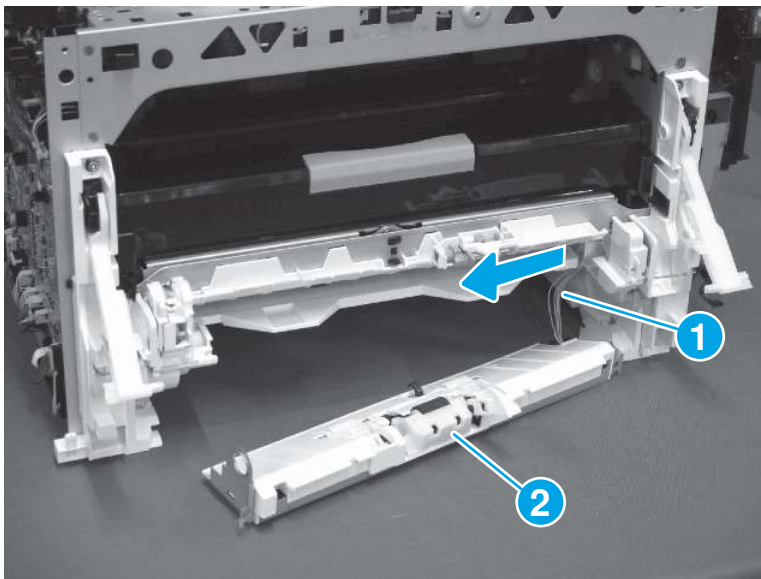
5. Open the holder (callout 1) and plate (callout 2), and then pull the MP lower guide (callout 3) out.

Figure 5-619 Release the MP lower guide



6. Pull the cable (callout 1) as shown below, and then remove the MP lower guide (callout 2).

Figure 5-620 Remove the MP lower guide



13. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

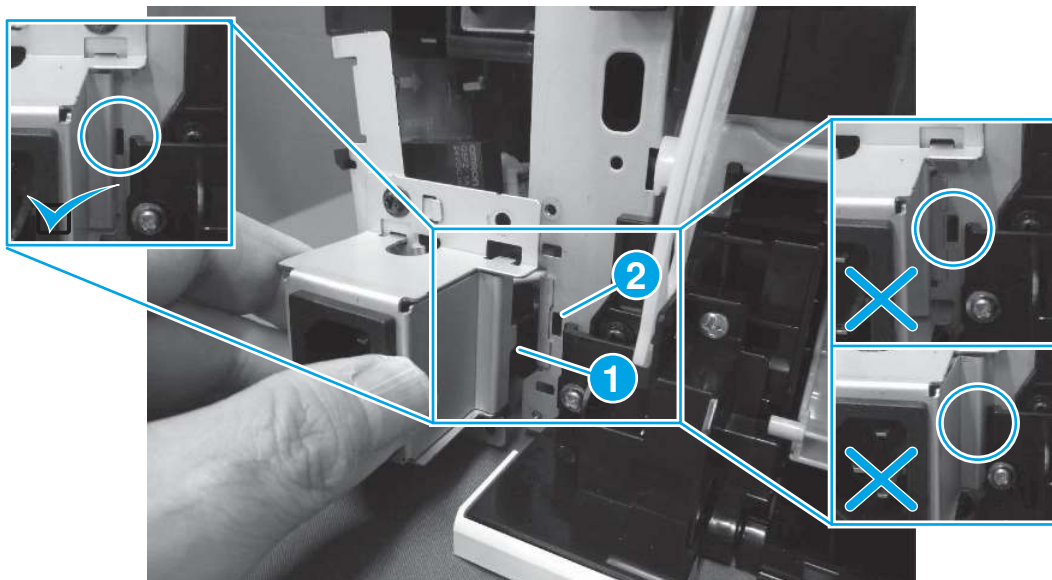
14. Special installation instructions - Low-voltage power supply (LVPS)

Follow the special instructions below to install a replacement LVPS.

CAUTION:  ESD sensitive part.

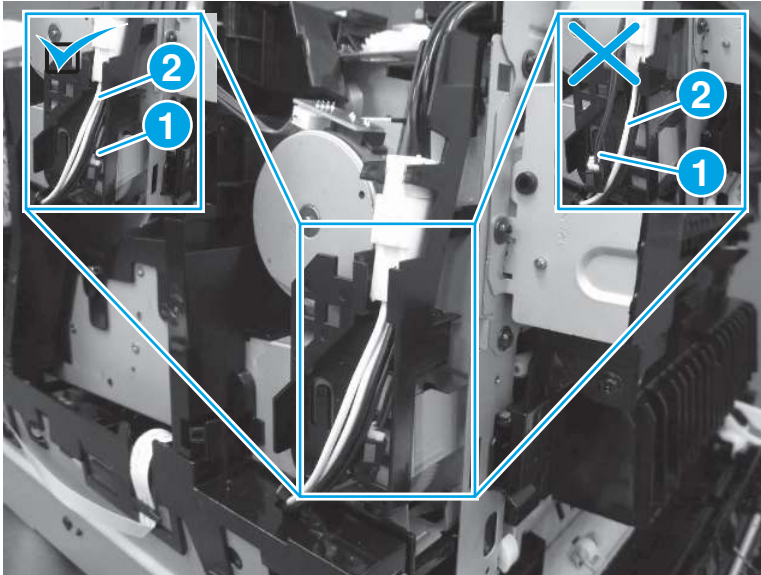
1. When the LVPS is installed, make sure that the sheet-metal tab (callout 1) near the power receptacle is inserted in the slot (callout 2) in the chassis.

Figure 5-621 Install the LVPS tab



2. Make sure that the fuser temperature fuse cable (callout 1) is positioned behind the thick cable (callout 2). This prevents the fuser cable from unnecessary movement.

Figure 5-622 Check the fuser temperature fuse cable



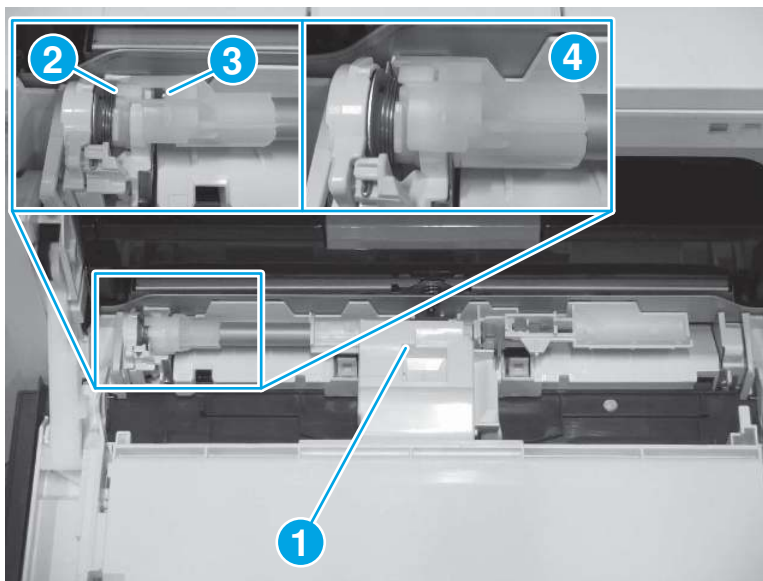
15. Special installation instructions - Tray 1 pickup roller assembly

Follow the special instructions below to install the Tray 1 pickup roller assembly.

- When the Tray 1 pickup roller assembly (callout 1) is installed, make sure that the alignment tab (callout 2) is in the slot (callout 3) on the assembly shaft.

 **TIP:** When correctly installed, the tab fits completely into the slot (callout 4).

Figure 5-623 Install the Tray 1 pickup roller assembly



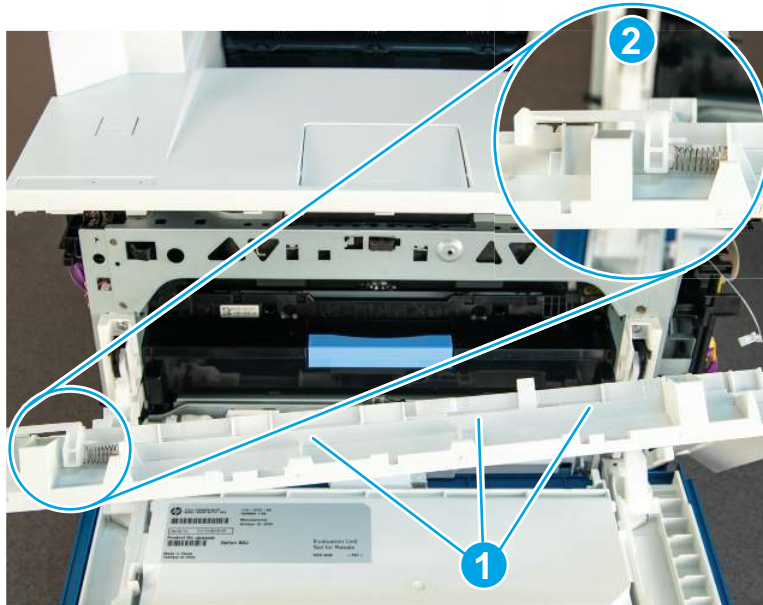
16. Special installation instructions - Front cover

Follow the special instructions below to install the front cover.

 **NOTE:** Front cover installation is **identical** for both the SFP and MFP models.

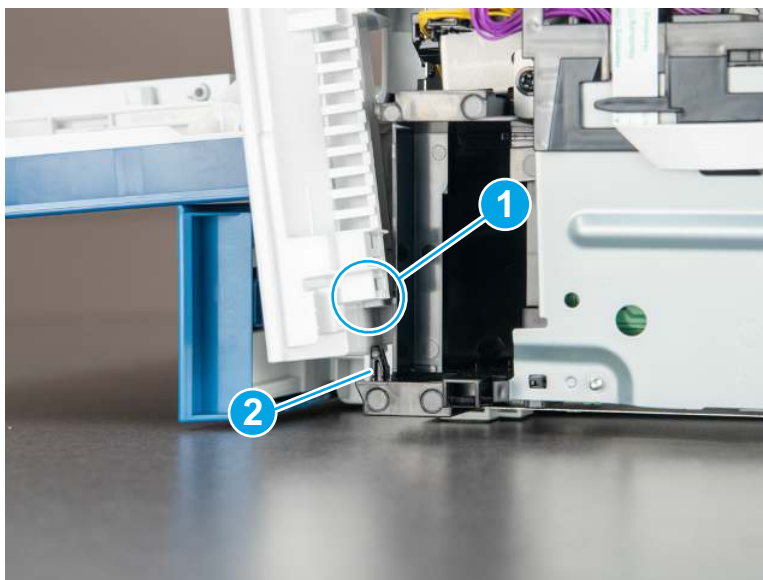
1. If the door release arm becomes dislodged when handling the cover, install it as shown below (callout 1, 2).

Figure 5-624 Door release arm installed



2. At the right and left side of the front cover, align the holes (callout 1) in the cover with the alignment pins (callout 2) on the chassis.

Figure 5-625 Cover alignment pins



3. Rotate the top of the cover towards the printer to install it.


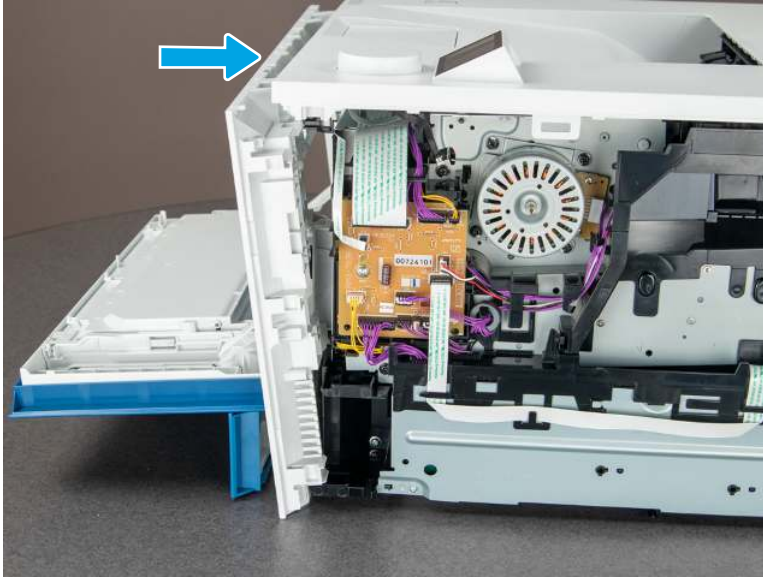

 **IMPORTANT:** Verify that the spring loaded door release button (on the left side of the cover) correctly functions.

Figure 5-626 Install the cover



Removal and replacement: Engine controller PCA

Learn about engine controller PCA removal.

 **IMPORTANT:** When a formatter PCA or ECU/DC controller is replaced a pairing operation must be completed to make the printer functional.

HP is currently developing an application based process to pair the formatter and ECU/DC controller.

This application is expected to be available on or about March 2023 for this printer. If a formatter or ECU/DC controller **must** be replaced prior to the availability of the pairing process, HP recommends a whole unit replacement.

This service manual will be re-released with instructions about how to use the HP formatter and ECU/DC controller pairing application as soon as the information becomes available.


Mean time to repair: 15 minutes

Service level: Medium

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-40 Part information

Part number	Part description
RM3-7577-010CN	Engine controller PCA

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on


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


Post service test

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

1. Remove the left cover (SFP)

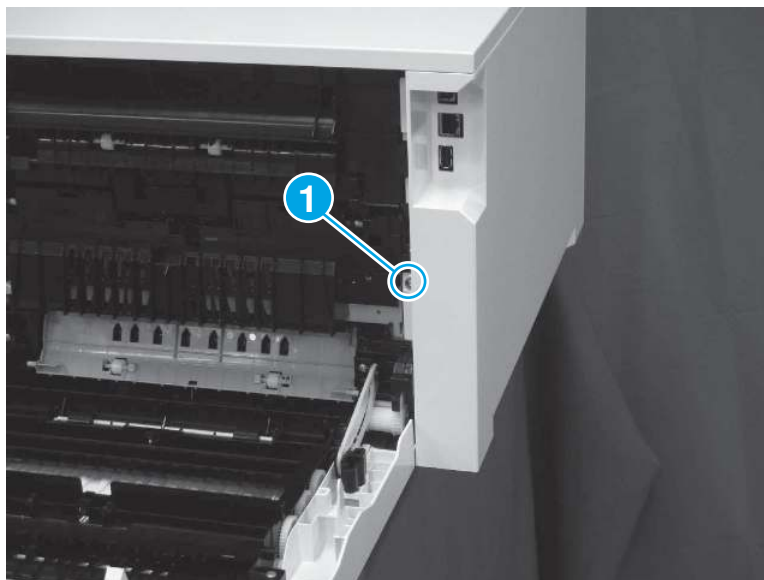
Follow the procedure below to remove and replace the left cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

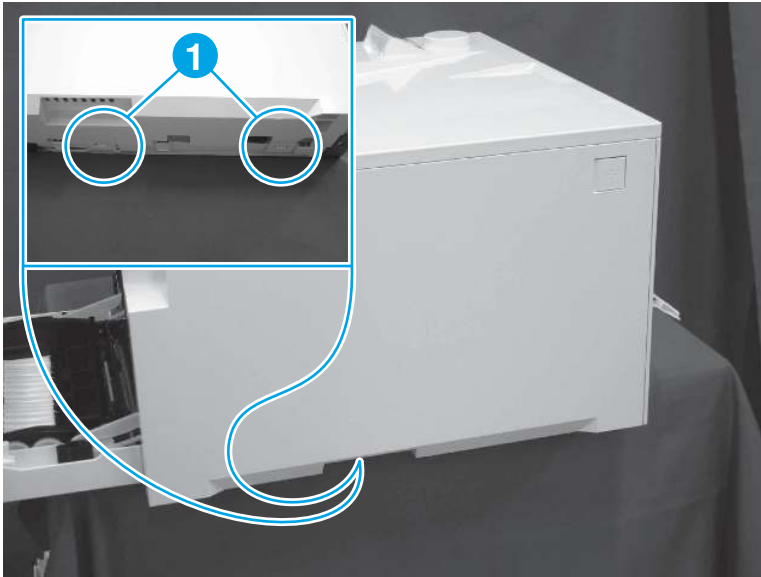
1. Remove one screw (callout 1).

Figure 5-627 Remove one screw



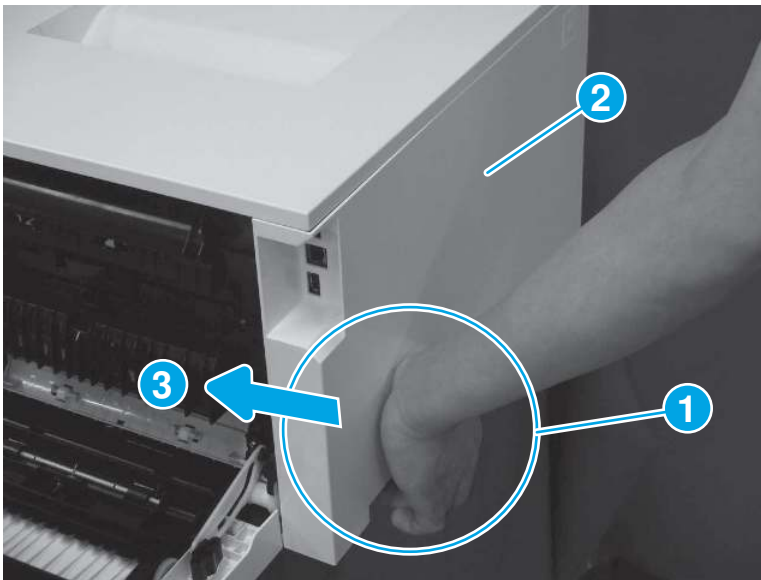
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-628 Release two tabs



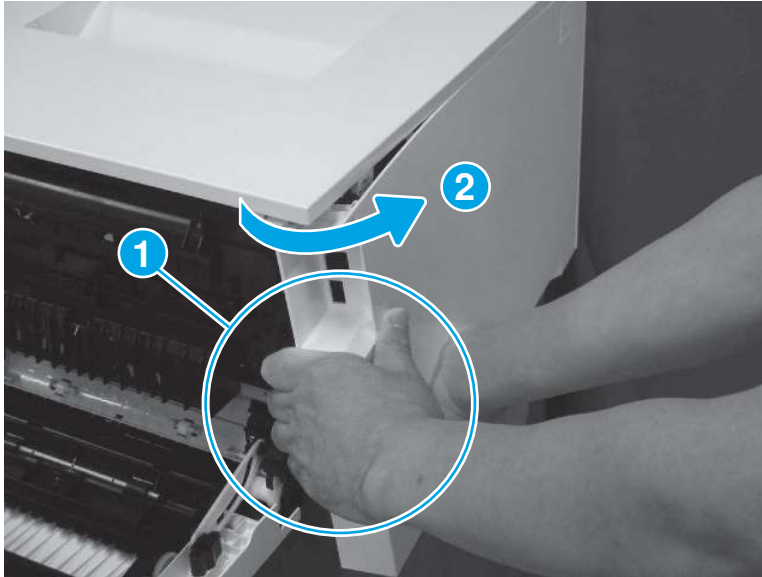
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-629 Release the rear cover corner



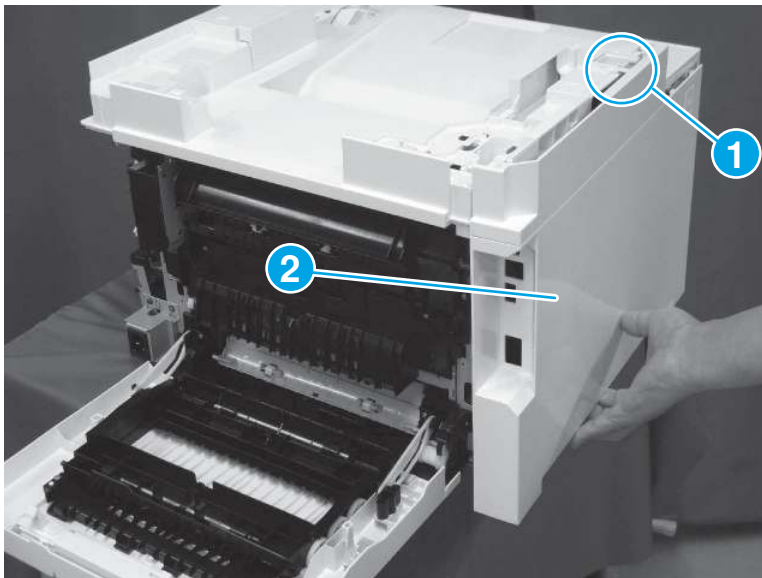
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-630 Disengage the cover corner




5. Remove the left cover (callout 1).


Figure 5-631 Remove the cover



2. Remove the left cover (MFP)

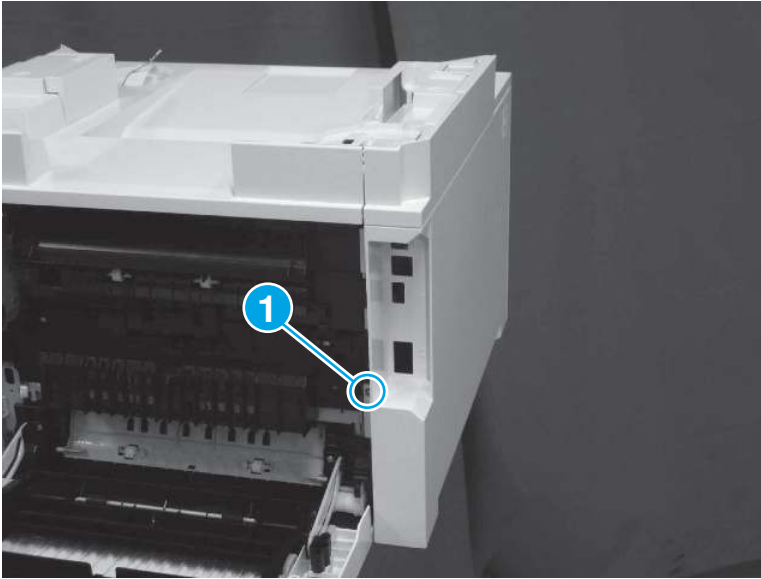
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

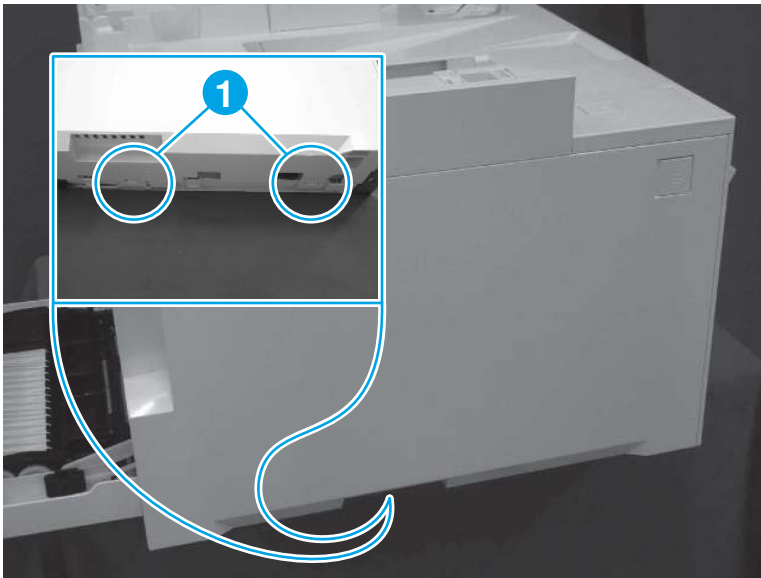
1. Remove one screw (callout 1).

Figure 5-632 Remove one screw



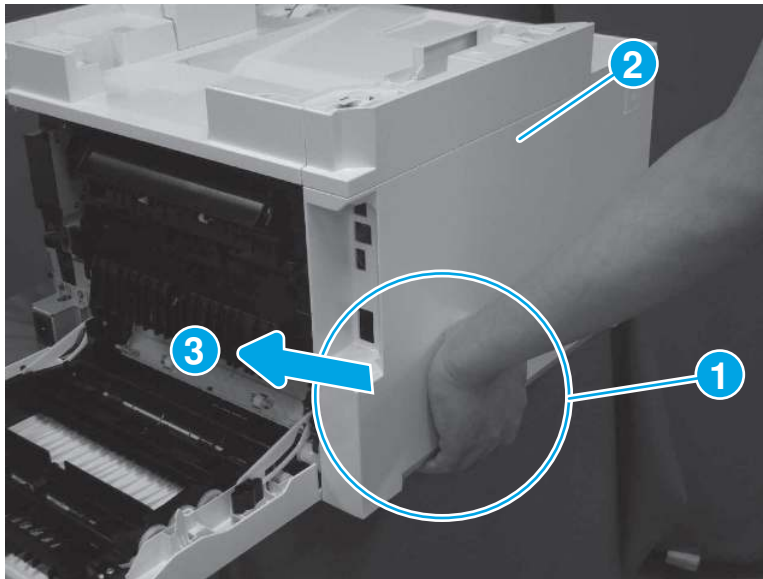
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-633 Release two tabs



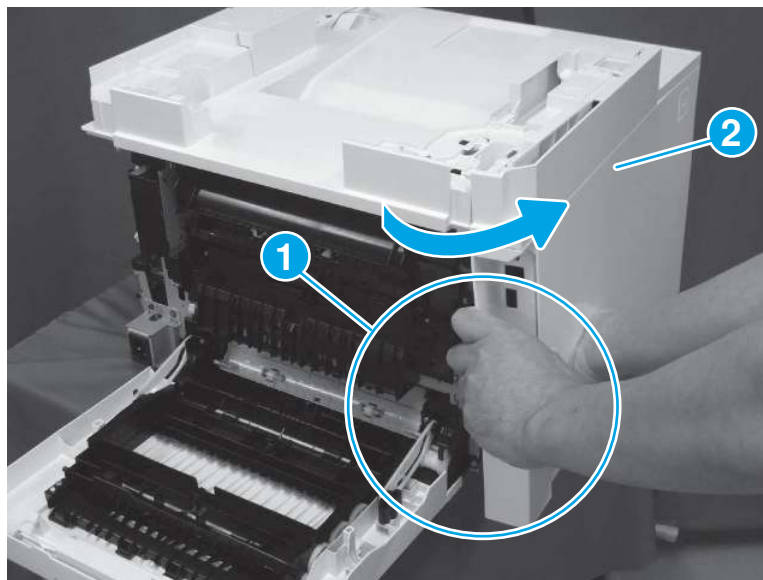
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-634 Release the rear cover corner



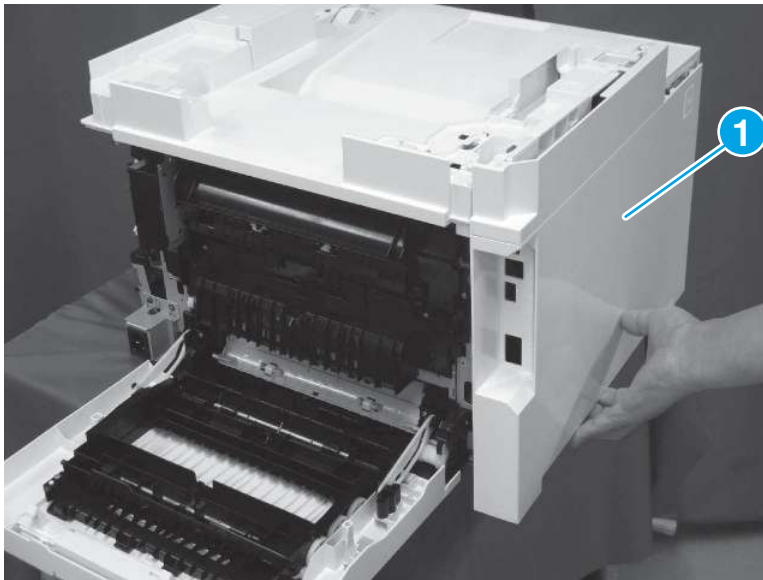
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-635 Disengage the cover corner



5. Remove the left cover (callout 1).

Figure 5-636 Remove the cover



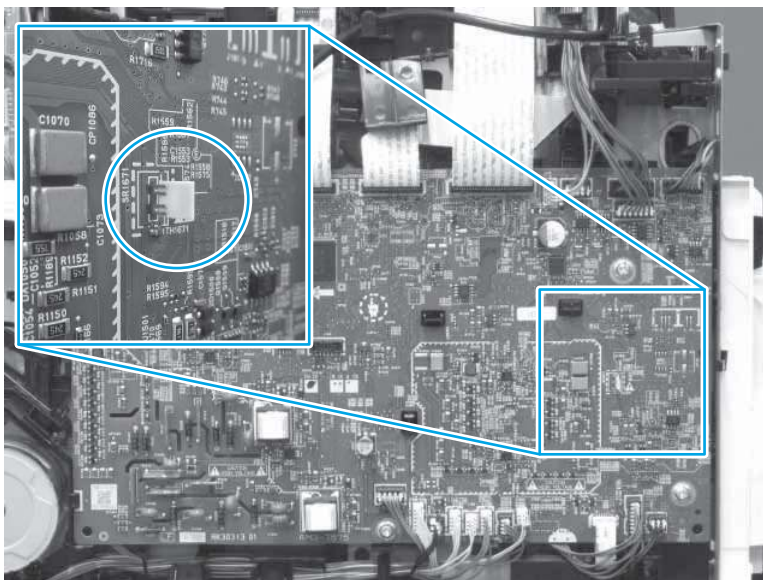
3. Remove the engine controller PCA

Follow the procedure below to remove and replace the engine controller PCA (ECU).

CAUTION:  ESD sensitive part.

1. Before proceeding, take note that there is an environmental sensor mounted on the engine controller PCA. **Do not** apply pressure to this sensor to avoid damaging it.

Figure 5-637 Engine controller environmental sensor location

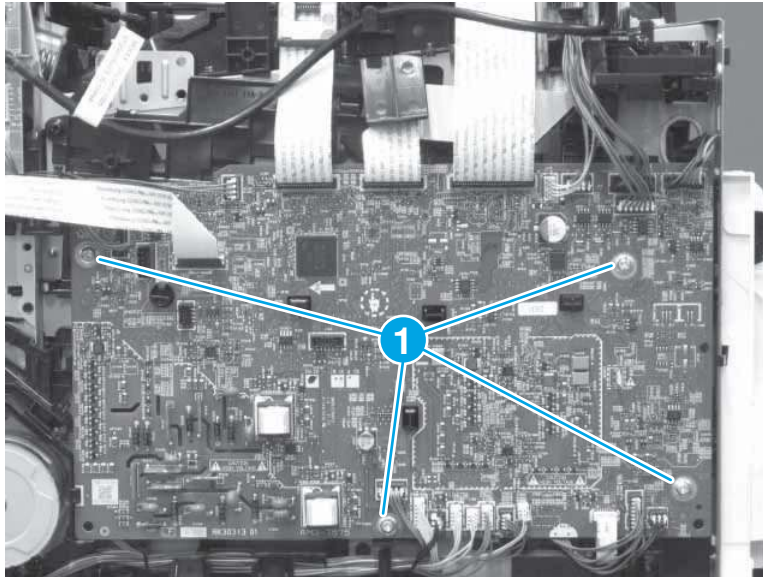


2. Disconnect all of the connectors on the engine controller PCA, and then remove four screws (callout 1).

CAUTION: Before proceeding take note of the media width sensors connectors and wire harnesses at ECU PCA locations J163 (media width sensor 2; yellow wire harness) and J165 (media width sensor 1; red wire harness). These connectors and wire harness are interchangeable. The PCA is embossed with **YELLOW** (connector J163) and **RED** (connector J165).

Make sure that the correct wire harness is plugged into the appropriate connector to avoid unexpected printer operation.

Figure 5-638 Disconnect connectors and remove screws



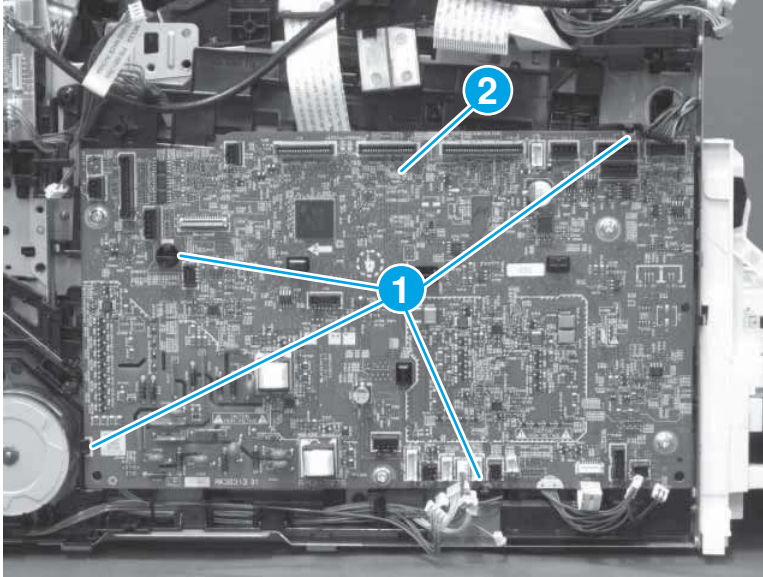
3. Release four tabs (callout 1), and then remove the engine controller PCA (callout 2).

CAUTION: There are three clear plastic light guides installed in the PCB holder behind the PCA that are not captive. Do not lose these parts when the PCA is removed.

Reinstallation tip: If a replacement formatter is being installed, **make sure** to read and follow the special installation instructions in the topic (located immediately after the unpack and recycle step).

The ECU/DCC must be paired with the formatter to be functional.

Figure 5-639 Remove the engine controller PCA



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

5. HP Onsite Repair Application

This topic describes the steps to pair a formatter and DC controller (DCC) / Engine controller unit (ECU).

When a formatter or DCC/ECU is replaced a pairing operation must be completed to make the printer functional. Use the HP Onsite Repair Application (App) to complete this procedure.

CAUTION: Only install a new (unpaired) **Service Formatter PCA** or **Service DC controller (DCC) / Engine controller unit (ECU)** when a replacement PCA is required.

IMPORTANT: If both a formatter **and** DCC/ECU need to be replaced, they must be installed and paired sequentially (one at a time). Do not replace both PCAs at the same time. Always replace one PCA, perform the pairing operation, and then replace and pair the second PCA.

To use the HP Onsite Repair App, first review the following:

- [Hardware requirements for using the HP Onsite Repair App on page 627](#)
- [Create an HP Onsite Repair App account or sign-in on page 628](#)

Hardware requirements for using the HP Onsite Repair App

The repair application has the following hardware requirements:

- Android device (Android OS 7.1 or later)



- Internet access



- USB OTG cable

IMPORTANT: Make sure that the OTG cable connector fits the Android device USB connector.

- Android device connector (Micro-USB or Type-C; callout 1)
- Type-A USB printer cable connector (callout 2)



- Standard A-B USB printer cable



Create an HP Onsite Repair App account or sign-in

The HP Onsite Repair App requires an HPID account.

1. If you do not already have an HPID account, create one now.



NOTE: If you already have an HPID account, skip this step and go to **Step 2**.

- a. Open the HP Onsite Repair App, and then select the [Sign up](#) item.

A screenshot of the HP Onsite Repair App sign-in screen. The screen displays the text "Sign in using my:" followed by a text input field labeled "Username or Email Address". Below the input field is a blue button labeled "NEXT". Underneath the button is a checkbox labeled "Remember me". Below the checkbox is a link that says "Forgot your username or password?". At the bottom of the screen, there is a link that says "Don't have an account? Sign up".

- b. On the [Sign up](#) screen, type in the following account information:

- First and last name
- Email address (no need to pre-register your email account)
- Mobile phone number
- Password and password confirmation
- Change the default country or region if necessary

Create your HP account
One account connects you to all of your HP applications

Already have an HP account? Sign in

First name *

Last name *

Email address *

+1 Mobile Number

Password *

Confirm password *

Country or region *
United States

HP may email me with personalized offers, support updates, and event news.

Your HP account identity information is used in accordance with the [HP Privacy Statement](#).

CREATE ACCOUNT

- c. Select the **CREATE ACCOUNT** button to create the user account.

Create your HP account
One account connects you to all of your HP applications

Already have an HP account? Sign in

First name *

Last name *

Email address *

+1 Mobile Number

Password *

Confirm password *

Country or region *
United States

HP may email me with personalized offers, support updates, and event news.

Your HP account identity information is used in accordance with the [HP Privacy Statement](#).

CREATE ACCOUNT

2. Open the HP Onsite Repair App, and then do the following:
 - a. At the sign-in screen, enter your user-name or email address, and then select the **NEXT** button.

Sign in using my:

Username or Email Address

NEXT


Remember me

[Forgot your username or password?](#)

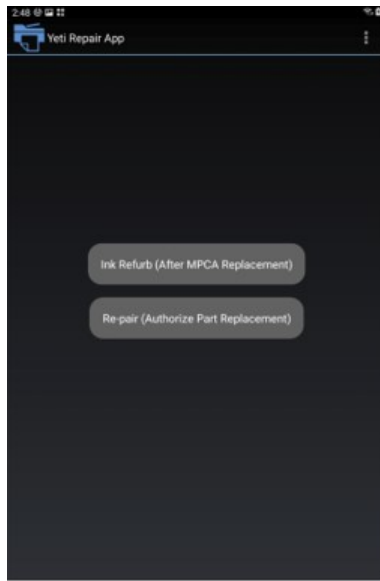
Don't have an account? [Sign up](#)

- b. From the HP Onsite Repair App operations screen, you can begin the formatter and DCC/ECU pairing process.

The app can only perform a formatter and DCC/ECU pairing operation. There is no need for disassociating the printer from the HP account as the customer receives the same printer back after servicing.

 **IMPORTANT:** If the printer was previously setup and claimed on the HP portal (on-boarded), a printer user or administrator must complete the on-boarding process again. Previous on-board information is not retained when using the HP Onsite Repair App to pair a formatter and DCC/ECU.

On-boarding is optional and only needed if the printer was previously on-boarded.




Step 1 - HP Onsite Repair App: Pairing type identification

Follow these steps to identify the type of formatter and DCC / ECU pairing required.

 **CAUTION:** Only install a new (unpaired) **Service Formatter PCA** or **Service DC controller (DCC) / Engine controller unit (ECU)** when a replacement PCA is required.

For a replacement assembly, do not install a previously used (paired) PCA.

1. Use the instructions in the printer *Service Manual* to remove and replace either the formatter or DCC/ECU.

 **IMPORTANT:** If both a formatter **and** DCC/ECU need to be replaced, they must be installed and paired sequentially (one at a time). Do not replace both PCAs at the same time. Always replace one PCA, perform the pairing operation, and then replace and pair the second PCA.

2. Do one of the following:

- **Formatter replacement**

- a. The message **Initializing**, a **Language** prompt, or hpsmart.com/setup appears on the control-panel display.


 **NOTE:** If an error message appears, make sure that the replacement formatter is an unused brand-new **Service Formatter PCA**.

Do not install replacement previously used PCAs (paired) in this printer.

b. Go to *Step 2 - HP Onsite Repair APP: Prepare a formatter for pairing*.

- **DCC/ECU replacement**

a. The message **Ready** appears on the control-panel display. However, the repair process is **not** complete.


 **NOTE:** If an error message appears, make sure that the replacement DCC/ECU is an unused brand-new **Service DC controller (DCC) / Engine controller unit (ECU)**.


Do not install replacement previously used PCAs (paired) in this printer.

b. Go to *Step 3 - HP Onsite Repair App: Pairing operation*.

Step 2 - HP Onsite Repair App: Prepare a formatter for pairing


Follow these steps to prepare a formatter for pairing.

 **IMPORTANT:** If both a formatter **and** DCC/ECU need to be replaced, they must be installed and paired sequentially (one at a time). Do not replace both PCAs at the same time. Always replace one PCA, perform the pairing operation, and then replace and pair the second PCA.

 **NOTE:** If a formatter is **not** being paired, skip this step. Go to *Step 3 - HP Onsite App: Pairing operation*.

When a replacement formatter is installed, the printer serial number must be configured on the formatter before pairing.

Use the control panel to access the **Service Menu > System Configuration > Serial Number** menus.

 **NOTE:** Detailed instructions are provided below.


Use the printer serial number found on a label adhered to the printer.

1. Configure the printer serial number on the replacement formatter:

- a. Turn the printer power on. When prompted, select a **Language** setting.
- b. Select a **Country/Region** setting.
- c. When the **Connection Method** screen appears, select the **USB/Connect Later** option.
- d. A warning message appears on the control-panel display describing the benefits of connecting to a network or the internet.

At the bottom of the screen, select the **Skip Connecting** option.

e. When the **Date and Time** menu appears, set the date and time.

 **NOTE:** If needed, select the **Continue** option.


f. When the message **Thank you for choosing HP!** appears, select the **Continue** option.

g. From the Home screen, open the following menus:


- **Menu**
- **Tools**

- [Service](#)

To access the [Service](#) menu, enter the default service personal identification number (PIN): **12345678**, and then select the [Sign In](#) item.

 **IMPORTANT:** The default PIN for all service formatters is **12345678**.

- h. Open the [System Configuration](#) sub menu.
- i. Select the [Serial Number](#) field, and then click the **back arrow** or **X** (touchscreen MFP models) to delete the default serial number.
- j. Enter the serial number found on a label inside the printer front door.


 **NOTE:** If the [Service ID](#) is known, enter it into the [Service ID](#) field now.

- k. Exit the menus, turn the printer power off, and then turn it on again.

2. When initialized, the printer is ready for the pairing operation. Go to ***Step 3 - HP Onsite Repair App: Pairing operation***.

Step 3 - HP Onsite Repair App: Pairing operation

Follow these steps to complete the pairing operation.

 **IMPORTANT:** If both a formatter **and** DCC/ECU need to be replaced, they must be installed and paired sequentially (one at a time). Do not replace both PCAs at the same time. Always replace one PCA, perform the pairing operation, and then replace and pair the second PCA.

1. Use a USB OTG cable (Micro-USB or Type-C) and a standard A-B USB cable to connect an Android device to the printer.


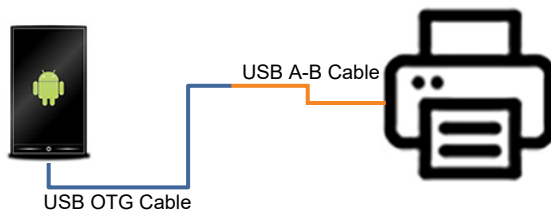
 **NOTE:** Verify that the Android device is connected to the internet.

Figure 5-640 Android to printer connection



2. Open and log into the HP Onsite Repair App, and then select the **Re-pair (Authorized Parts Replacement)** button.


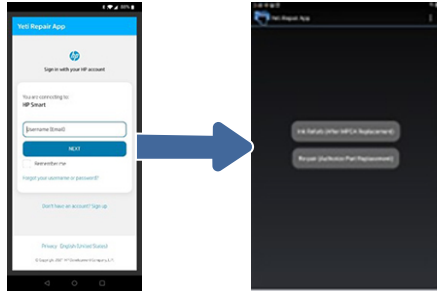
 **NOTE:** For more information about logging into the app, or how to create a new account, see ***Create an HP Onsite Repair App account or sign-in***.

Figure 5-641 Log in and select Re-pair



3. Select the **OK** button to confirm the Android device is connected to the printer, and then select the **OK** button to continue the operation.


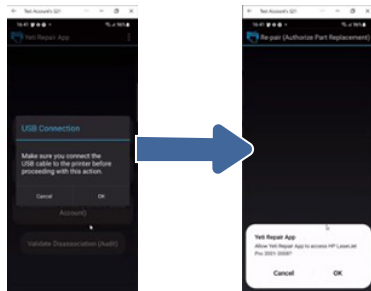
 **NOTE:** Make sure that the Android device is correctly connected to the printer using the OTG and A-B USB cables.

Figure 5-642 Select OK to confirm and continue



4. Select the **OK** button to confirm the displayed printer serial number, and then select the **OK** button to retrieve the printer *Fingerprint*.


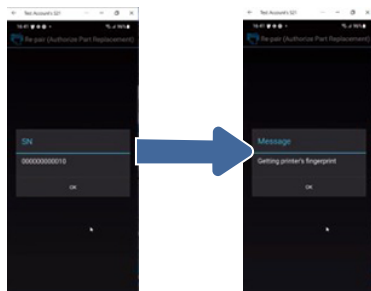
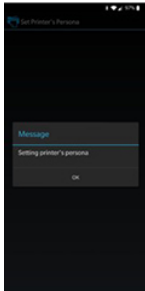
 **NOTE:** Make sure that the displayed serial number matches the serial number printed on the label adhered to the printer.

Figure 5-643 Select OK to accept the printer serial number and Fingerprint



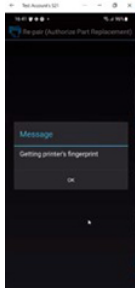
5. Select the **OK** button to send a Repair Authorization Request to the HP Stratus Cloud on the internet and retrieve the printer *Persona*.

Figure 5-644 Select OK to retrieve the printer *Persona*




6. Select the **OK** button to retrieve the printer *Fingerprint*.

Figure 5-645 Select OK to retrieve the printer *Fingerprint*

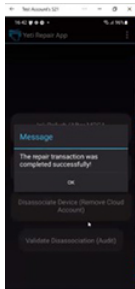


7. The message **The repair transaction was completed successfully** appears when the formatter and DCC/ECU pairing operation is complete. Select the **OK** button to send a Repair Acknowledgment Request to the HP Stratus Cloud on the internet.

 **IMPORTANT:** If the printer was previously setup and claimed on the HP portal (on-boarded), a printer user or administrator must complete the on-boarding process again. Previous on-board information is not retained when using the HP Onsite Repair App to pair a formatter and DCC/ECU.


On-boarding is optional and only needed if the printer was previously on-boarded.

Figure 5-646 Select OK to acknowledge the pairing



Removal and replacement: Formatter PCA

Learn about formatter PCA removal.

 **IMPORTANT:** When a formatter PCA or ECU/DC controller is replaced a pairing operation must be completed to make the printer functional.

HP is currently developing an application based process to pair the formatter and ECU/DC controller.

This application is expected to be available on or about March 2023 for this printer. If a formatter or ECU/DC controller **must** be replaced prior to the availability of the pairing process, HP recommends a whole unit replacement.

This service manual will be re-released with instructions about how to use the HP formatter and ECU/DC controller pairing application as soon as the information becomes available.

Mean time to repair: 5 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-41 Part information

Part number	Part description
4RA85-67001	Formatter PCA 4201dn and 4201dne
4RA86-67001	Formatter PCA 4201dw and 4201dwe
4RA87-67001	Formatter PCA 4202dn and 4202dne
4RA88-67001	Formatter PCA 4202dw and 4202dwe
5HH48-67001	Formatter PCA 4203dw
5HH53-67001	Formatter PCA 4203cdn
4RA80-67001	Formatter PCA 4301dw and 4301dwe
4RA81-67001	Formatter PCA 4301fdn and 4301fdne
4RA82-67001	Formatter PCA 4301fdw and 4301fdwe
4RA83-67001	Formatter PCA 4302dw and 4302dwe
4RA84-67001	Formatter PCA 4302fdn and 4302fdne
5HH64-67001	Formatter PCA 4302fdw and 4302fdwe
5HH65-67001	Formatter PCA 4303dw
5HH66-67001	Formatter PCA 4303fdn
5HH67-67001	Formatter PCA 4303fdw

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on


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


Post service test

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

1. Remove the left cover (SFP)

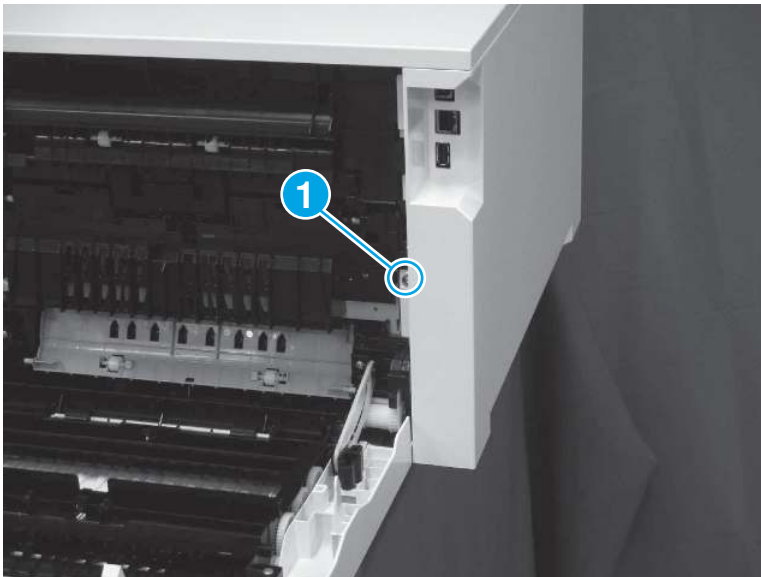
Follow the procedure below to remove and replace the left cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

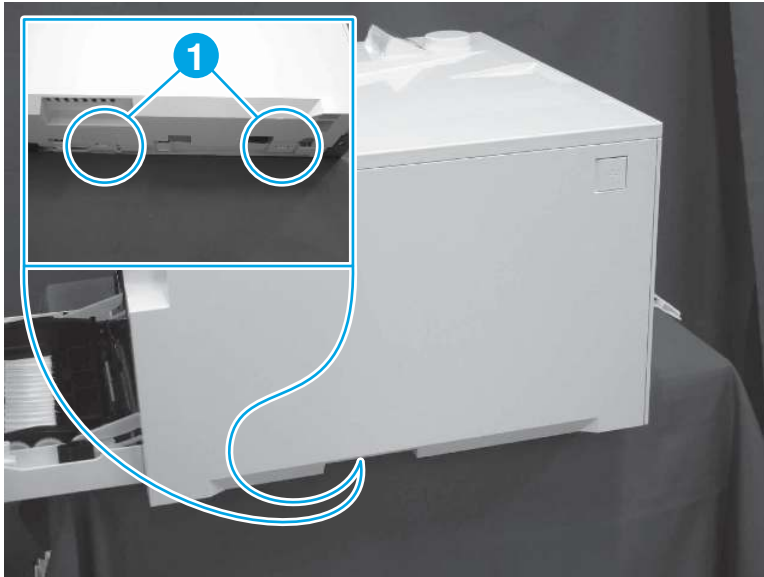
1. Remove one screw (callout 1).

Figure 5-647 Remove one screw



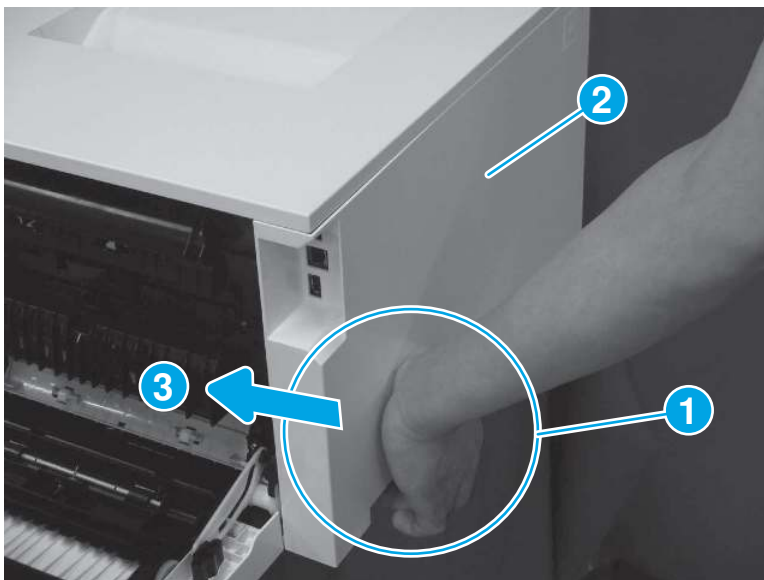
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-648 Release two tabs



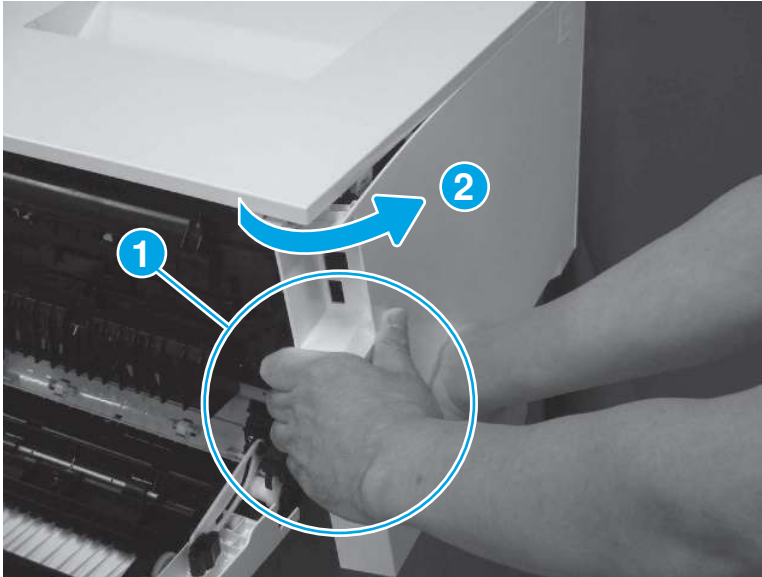
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-649 Release the rear cover corner



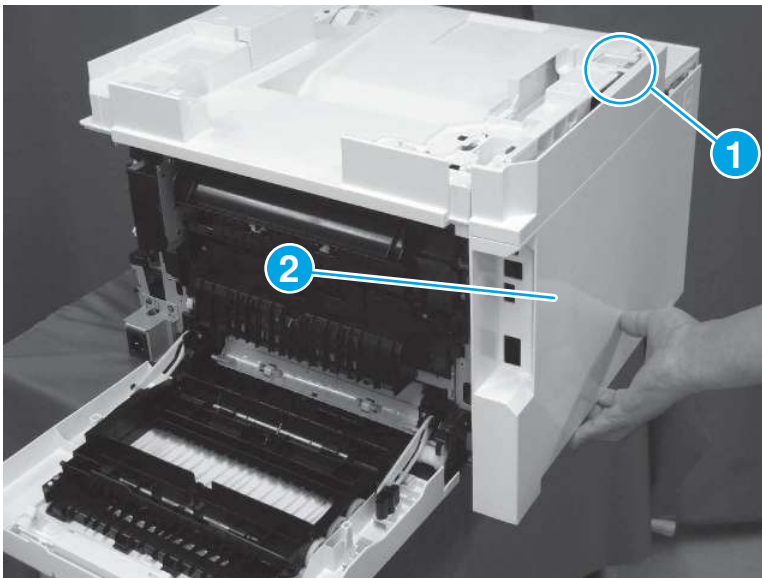
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-650 Disengage the cover corner




5. Remove the left cover (callout 1).


Figure 5-651 Remove the cover



2. Remove the left cover (MFP)

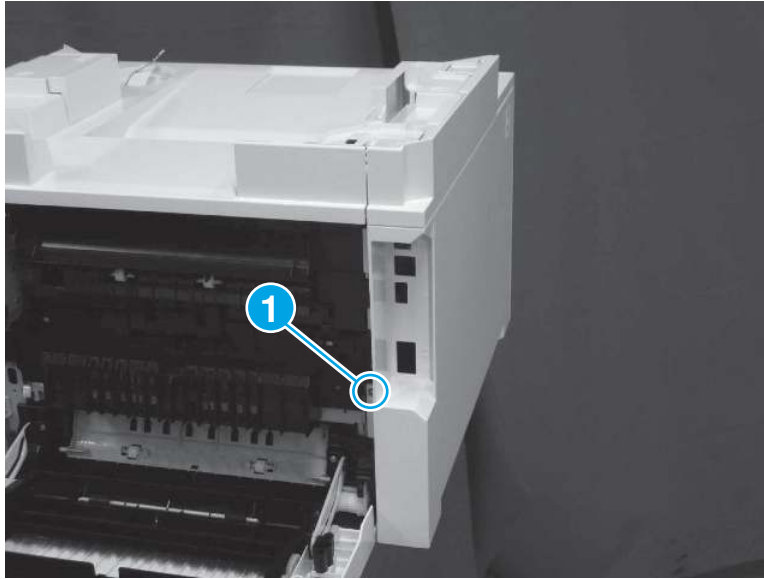
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

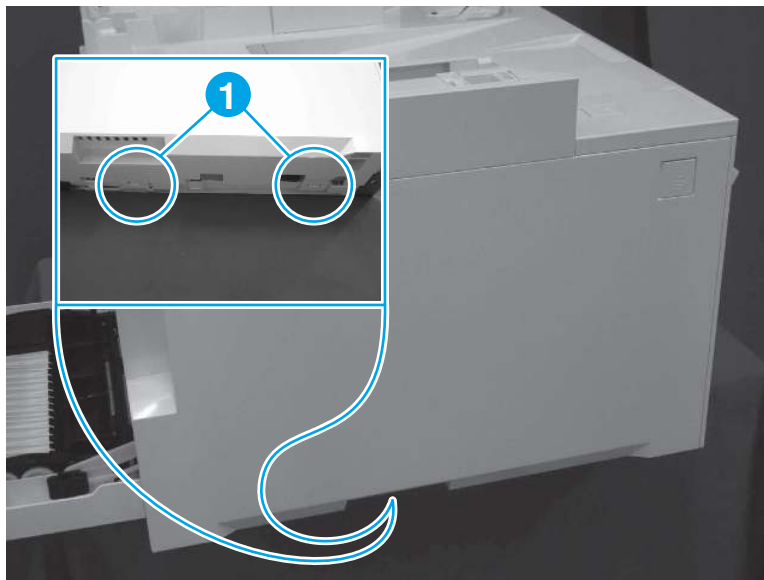
1. Remove one screw (callout 1).

Figure 5-652 Remove one screw



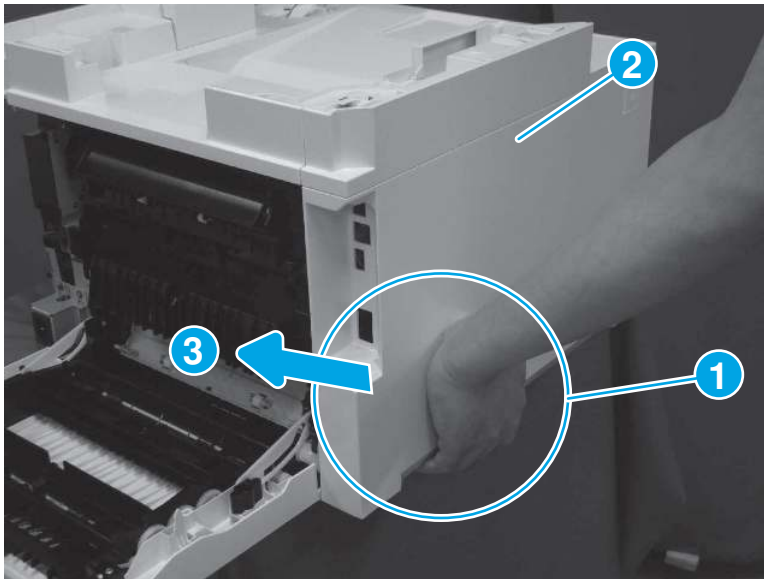
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-653 Release two tabs



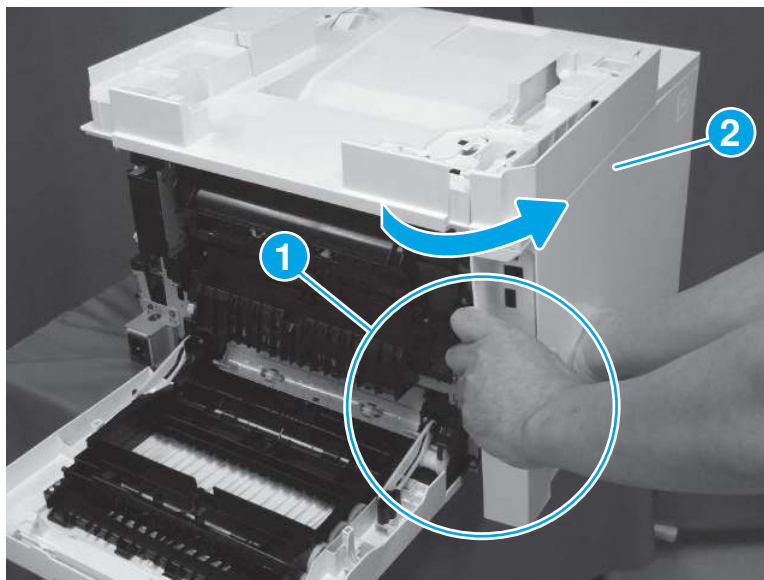
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-654 Release the rear cover corner



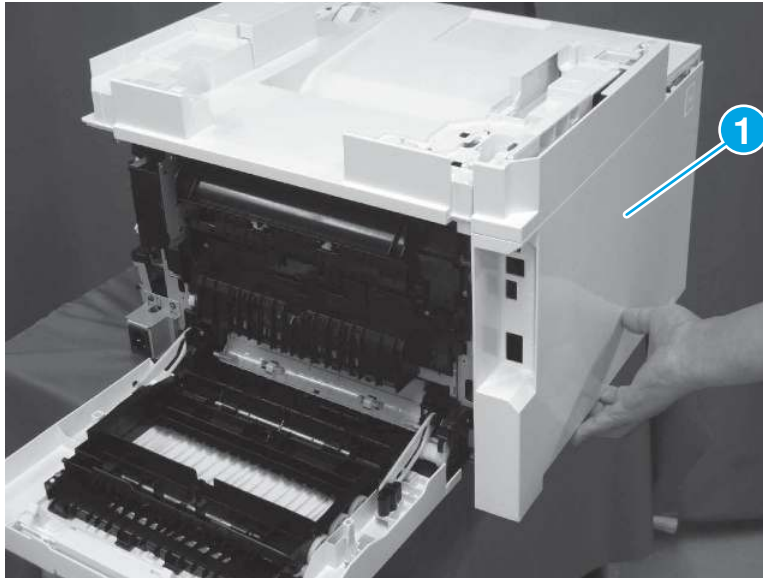
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-655 Disengage the cover corner



5. Remove the left cover (callout 1).

Figure 5-656 Remove the cover



3. Remove the formatter PCA

Follow the procedure below to remove and replace the formatter PCA.


CAUTION:  ESD sensitive part.

1. Disconnect all of the connectors on the formatter PCA.

Figure 5-657 Disconnect all of the connectors (SFP/MFP)

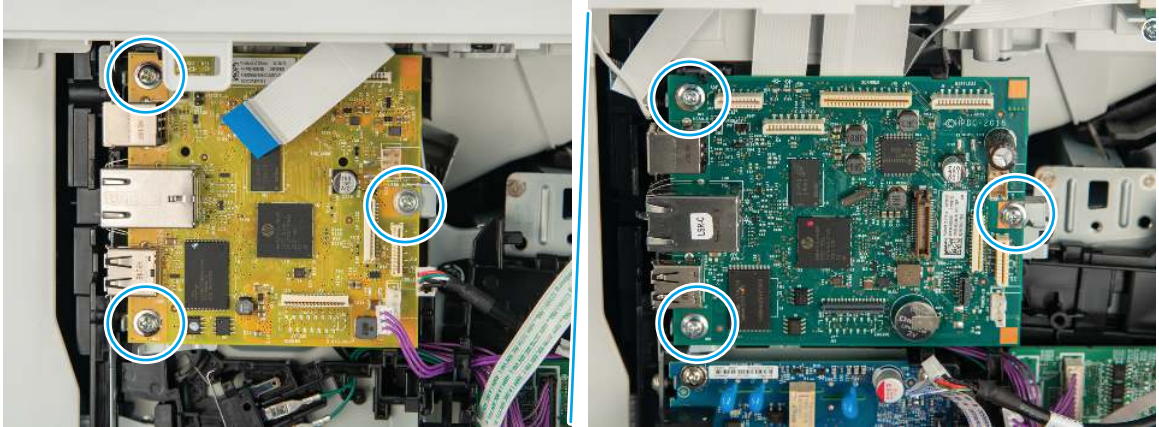


2. Remove three screws, and then remove the formatter PCA.

 **Reinstallation tip:** If a replacement formatter is being installed, make sure to read and follow the special installation instructions in the topic (located immediately after the unpack and recycle step).

The formatter must be paired with the ECU/DCC to be functional.

Figure 5-658 Remove the formatter PCA (SFP/MFP)



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.


5. HP Onsite Repair Application

This topic describes the steps to pair a formatter and DC controller (DCC) / Engine controller unit (ECU).

When a formatter or DCC/ECU is replaced a pairing operation must be completed to make the printer functional. Use the HP Onsite Repair Application (App) to complete this procedure.



CAUTION: Only install a new (unpaired) **Service Formatter PCA** or **Service DC controller (DCC) / Engine controller unit (ECU)** when a replacement PCA is required.

 **IMPORTANT:** If both a formatter **and** DCC/ECU need to be replaced, they must be installed and paired sequentially (one at a time). Do not replace both PCAs at the same time. Always replace one PCA, perform the pairing operation, and then replace and pair the second PCA.

To use the HP Onsite Repair App, first review the following:

- [Hardware requirements for using the HP Onsite Repair App on page 643](#)
- [Create an HP Onsite Repair App account or sign-in on page 644](#)

Hardware requirements for using the HP Onsite Repair App

The repair application has the following hardware requirements:


- Android device (Android OS 7.1 or later)



- Internet access



- USB OTG cable

 **IMPORTANT:** Make sure that the OTG cable connector fits the Android device USB connector.

- Android device connector (Micro-USB or Type-C; callout 1)
- Type-A USB printer cable connector (callout 2)



- Standard A-B USB printer cable



Create an HP Onsite Repair App account or sign-in

The HP Onsite Repair App requires an HPID account.

1. If you do not already have an HPID account, create one now.



NOTE: If you already have an HPID account, skip this step and go to **Step 2**.

- a. Open the HP Onsite Repair App, and then select the [Sign up](#) item.

A screenshot of the HP Onsite Repair App sign-in screen. The screen displays the text "Sign in using my:" followed by a text input field labeled "Username or Email Address". Below the input field is a blue button labeled "NEXT". Underneath the button is a checkbox labeled "Remember me". Below the checkbox is a link that says "Forgot your username or password?". At the bottom of the screen, there is a link that says "Don't have an account? Sign up".

- b. On the [Sign up](#) screen, type in the following account information:
 - First and last name
 - Email address (no need to pre-register your email account)
 - Mobile phone number
 - Password and password confirmation
 - Change the default country or region if necessary

Create your HP account
One account connects you to all of your HP applications

Already have an HP account? Sign in

First name *

Last name *

Email address *

+1 Mobile Number

Password *

Confirm password *

Country or region *
United States

HP may email me with personalized offers, support updates, and event news.

Your HP account identity information is used in accordance with the [HP Privacy Statement](#).

CREATE ACCOUNT

- c. Select the **CREATE ACCOUNT** button to create the user account.

Create your HP account
One account connects you to all of your HP applications

Already have an HP account? Sign in

First name *

Last name *

Email address *

+1 Mobile Number

Password *

Confirm password *

Country or region *
United States

HP may email me with personalized offers, support updates, and event news.

Your HP account identity information is used in accordance with the [HP Privacy Statement](#).

CREATE ACCOUNT

2. Open the HP Onsite Repair App, and then do the following:
 - a. At the sign-in screen, enter your user-name or email address, and then select the **NEXT** button.

Sign in using my:

Username or Email Address

NEXT


Remember me

[Forgot your username or password?](#)

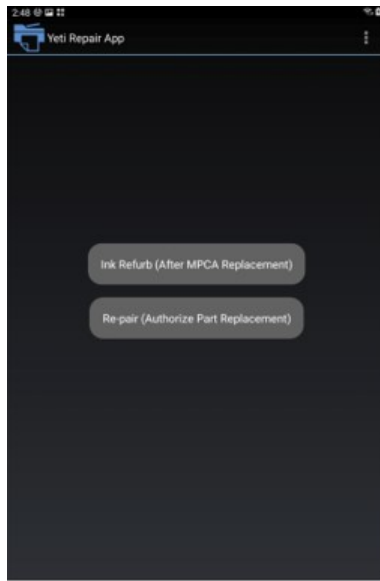
Don't have an account? [Sign up](#)

- b. From the HP Onsite Repair App operations screen, you can begin the formatter and DCC/ECU pairing process.

The app can only perform a formatter and DCC/ECU pairing operation. There is no need for disassociating the printer from the HP account as the customer receives the same printer back after servicing.

 **IMPORTANT:** If the printer was previously setup and claimed on the HP portal (on-boarded), a printer user or administrator must complete the on-boarding process again. Previous on-board information is not retained when using the HP Onsite Repair App to pair a formatter and DCC/ECU.

On-boarding is optional and only needed if the printer was previously on-boarded.




Step 1 - HP Onsite Repair App: Pairing type identification

Follow these steps to identify the type of formatter and DCC / ECU pairing required.

 **CAUTION:** Only install a new (unpaired) **Service Formatter PCA** or **Service DC controller (DCC) / Engine controller unit (ECU)** when a replacement PCA is required.

For a replacement assembly, do not install a previously used (paired) PCA.

1. Use the instructions in the printer *Service Manual* to remove and replace either the formatter or DCC/ECU.

 **IMPORTANT:** If both a formatter **and** DCC/ECU need to be replaced, they must be installed and paired sequentially (one at a time). Do not replace both PCAs at the same time. Always replace one PCA, perform the pairing operation, and then replace and pair the second PCA.

2. Do one of the following:

- **Formatter replacement**

- a. The message **Initializing**, a **Language** prompt, or hpsmart.com/setup appears on the control-panel display.


 **NOTE:** If an error message appears, make sure that the replacement formatter is an unused brand-new **Service Formatter PCA**.

Do not install replacement previously used PCAs (paired) in this printer.

b. Go to *Step 2 - HP Onsite Repair APP: Prepare a formatter for pairing*.

- **DCC/ECU replacement**

a. The message **Ready** appears on the control-panel display. However, the repair process is **not** complete.


 **NOTE:** If an error message appears, make sure that the replacement DCC/ECU is an unused brand-new **Service DC controller (DCC) / Engine controller unit (ECU)**.


Do not install replacement previously used PCAs (paired) in this printer.

b. Go to *Step 3 - HP Onsite Repair App: Pairing operation*.

Step 2 - HP Onsite Repair App: Prepare a formatter for pairing


Follow these steps to prepare a formatter for pairing.

 **IMPORTANT:** If both a formatter **and** DCC/ECU need to be replaced, they must be installed and paired sequentially (one at a time). Do not replace both PCAs at the same time. Always replace one PCA, perform the pairing operation, and then replace and pair the second PCA.

 **NOTE:** If a formatter is **not** being paired, skip this step. Go to *Step 3 - HP Onsite App: Pairing operation*.

When a replacement formatter is installed, the printer serial number must be configured on the formatter before pairing.

Use the control panel to access the **Service Menu > System Configuration > Serial Number** menus.


 **NOTE:** Detailed instructions are provided below.

Use the printer serial number found on a label adhered to the printer.

1. Configure the printer serial number on the replacement formatter:
 - a. Turn the printer power on. When prompted, select a **Language** setting.
 - b. Select a **Country/Region** setting.
 - c. When the **Connection Method** screen appears, select the **USB/Connect Later** option.
 - d. A warning message appears on the control-panel display describing the benefits of connecting to a network or the internet.

At the bottom of the screen, select the **Skip Connecting** option.

e. When the **Date and Time** menu appears, set the date and time.

 **NOTE:** If needed, select the **Continue** option.


f. When the message **Thank you for choosing HP!** appears, select the **Continue** option.

g. From the Home screen, open the following menus:


- **Menu**
- **Tools**

- **Service**

To access the **Service** menu, enter the default service personal identification number (PIN): **12345678**, and then select the **Sign In** item.

 **IMPORTANT:** The default PIN for all service formatters is **12345678**.

- h. Open the **System Configuration** sub menu.
- i. Select the **Serial Number** field, and then click the **back arrow** or **X** (touchscreen MFP models) to delete the default serial number.
- j. Enter the serial number found on a label inside the printer front door.


 **NOTE:** If the **Service ID** is known, enter it into the **Service ID** field now.

- k. Exit the menus, turn the printer power off, and then turn it on again.

2. When initialized, the printer is ready for the pairing operation. Go to **Step 3 - HP Onsite Repair App: Pairing operation**.

Step 3 - HP Onsite Repair App: Pairing operation

Follow these steps to complete the pairing operation.

 **IMPORTANT:** If both a formatter **and** DCC/ECU need to be replaced, they must be installed and paired sequentially (one at a time). Do not replace both PCAs at the same time. Always replace one PCA, perform the pairing operation, and then replace and pair the second PCA.

1. Use a USB OTG cable (Micro-USB or Type-C) and a standard A-B USB cable to connect an Android device to the printer.


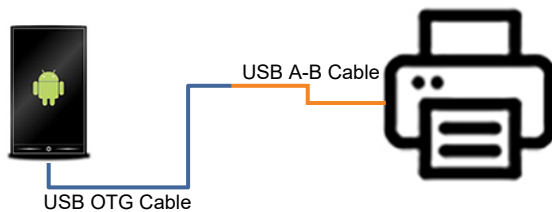
 **NOTE:** Verify that the Android device is connected to the internet.

Figure 5-659 Android to printer connection



2. Open and log into the HP Onsite Repair App, and then select the **Re-pair (Authorized Parts Replacement)** button.


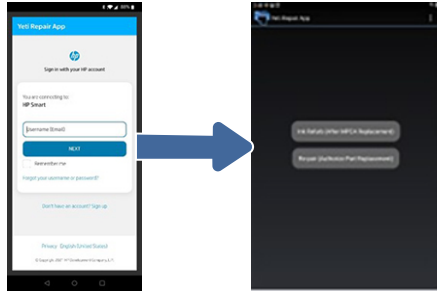
 **NOTE:** For more information about logging into the app, or how to create a new account, see **Create an HP Onsite Repair App account or sign-in**.

Figure 5-660 Log in and select Re-pair



3. Select the **OK** button to confirm the Android device is connected to the printer, and then select the **OK** button to continue the operation.


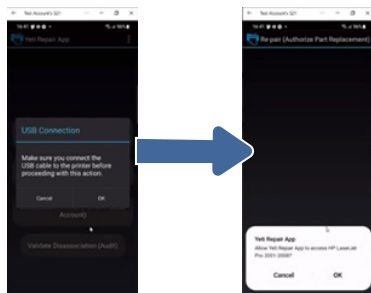
 **NOTE:** Make sure that the Android device is correctly connected to the printer using the OTG and A-B USB cables.

Figure 5-661 Select OK to confirm and continue



4. Select the **OK** button to confirm the displayed printer serial number, and then select the **OK** button to retrieve the printer *Fingerprint*.


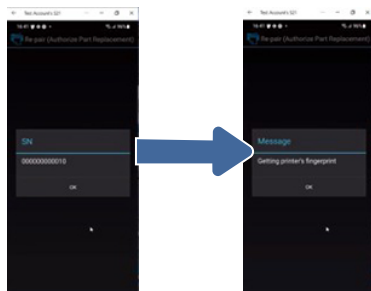
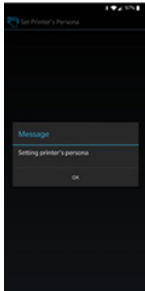
 **NOTE:** Make sure that the displayed serial number matches the serial number printed on the label adhered to the printer.

Figure 5-662 Select OK to accept the printer serial number and Fingerprint



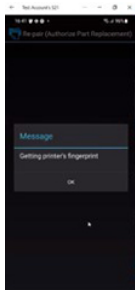
5. Select the **OK** button to send a Repair Authorization Request to the HP Stratus Cloud on the internet and retrieve the printer *Persona*.

Figure 5-663 Select OK to retrieve the printer *Persona*



6. Select the **OK** button to retrieve the printer *Fingerprint*.

Figure 5-664 Select OK to retrieve the printer *Fingerprint*



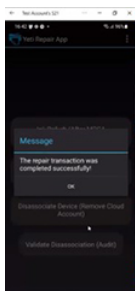
7. The message **The repair transaction was completed successfully** appears when the formatter and DCC/ECU pairing operation is complete. Select the **OK** button to send a Repair Acknowledgment Request to the HP Stratus Cloud on the internet.



IMPORTANT: If the printer was previously setup and claimed on the HP portal (on-boarded), a printer user or administrator must complete the on-boarding process again. Previous on-board information is not retained when using the HP Onsite Repair App to pair a formatter and DCC/ECU.

On-boarding is optional and only needed if the printer was previously on-boarded.

Figure 5-665 Select OK to acknowledge the pairing



Removal and replacement: Interlock holder assembly

Learn about interlock holder assembly removal.


Mean time to repair: 60 minutes

Service level: Difficult

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-42 Part Information

Part number	Part description
RM2-2759-000CN	Interlock holder assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on


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


Post service test

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

1. Remove the left cover (SFP)

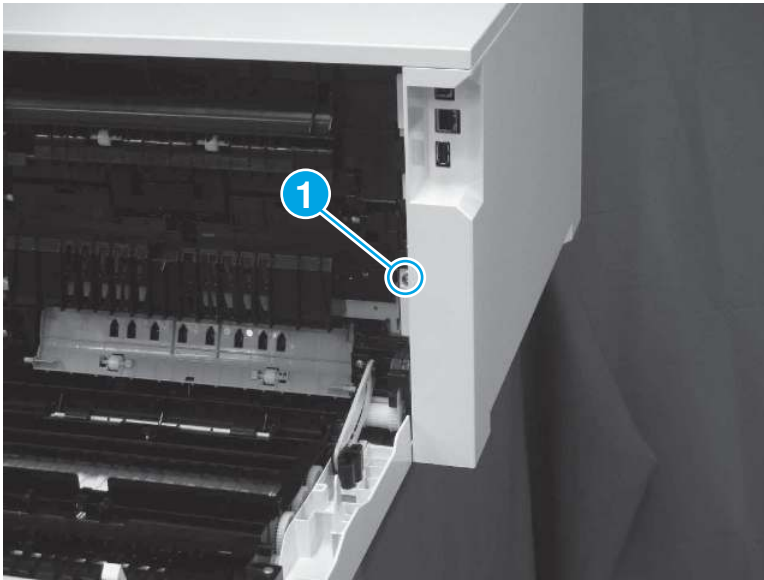
Follow the procedure below to remove and replace the left cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

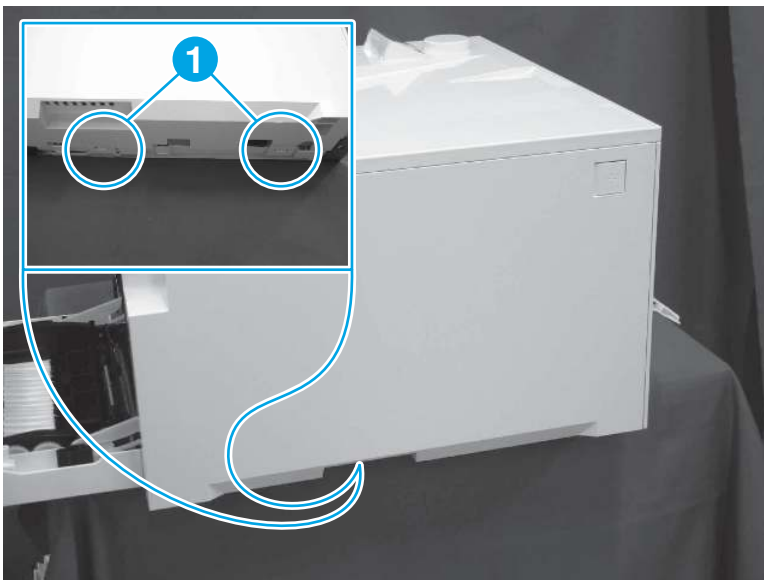
1. Remove one screw (callout 1).

Figure 5-666 Remove one screw



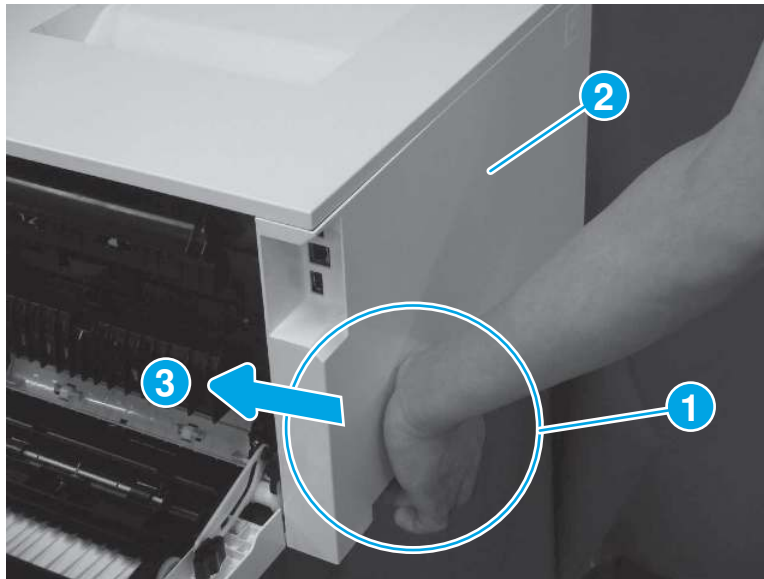
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-667 Release two tabs



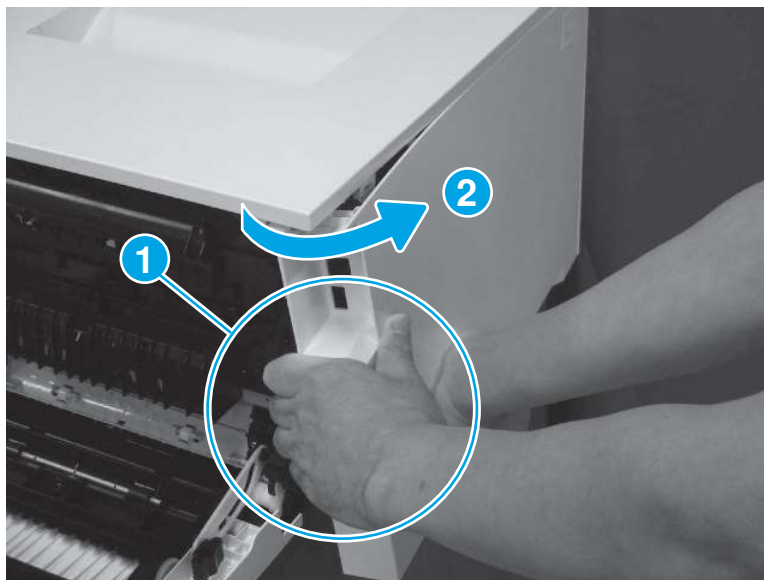
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-668 Release the rear cover corner



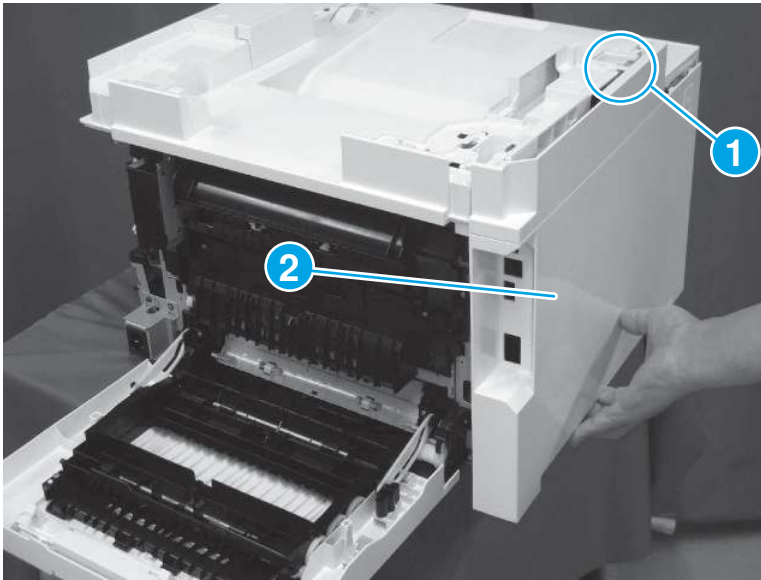
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-669 Disengage the cover corner




5. Remove the left cover (callout 1).


Figure 5-670 Remove the cover



2. Remove the left cover (MFP)

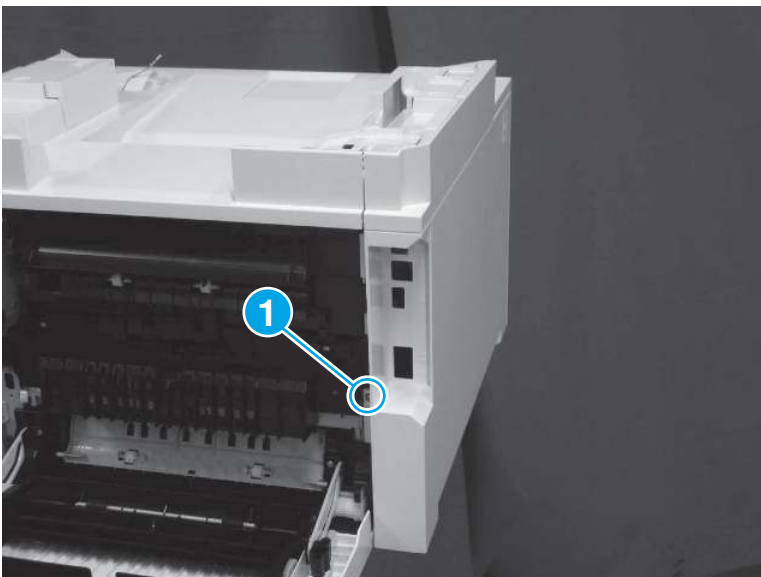
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

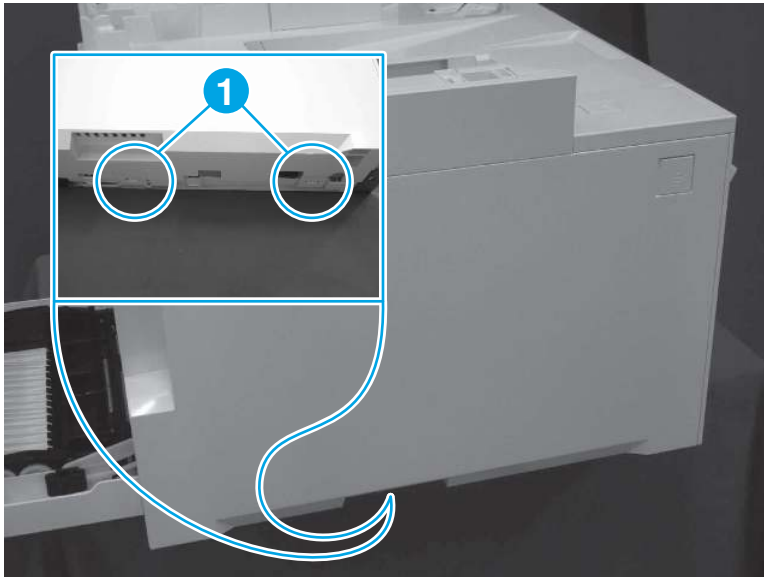
1. Remove one screw (callout 1).

Figure 5-671 Remove one screw



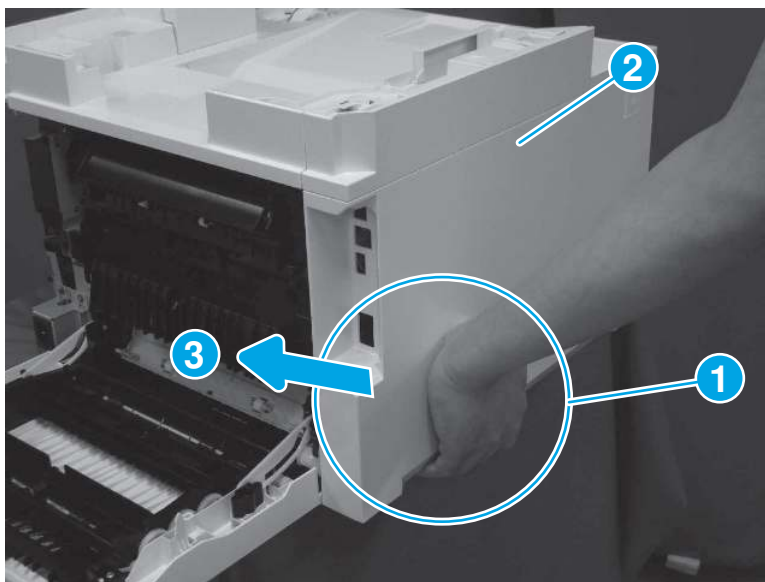
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-672 Release two tabs



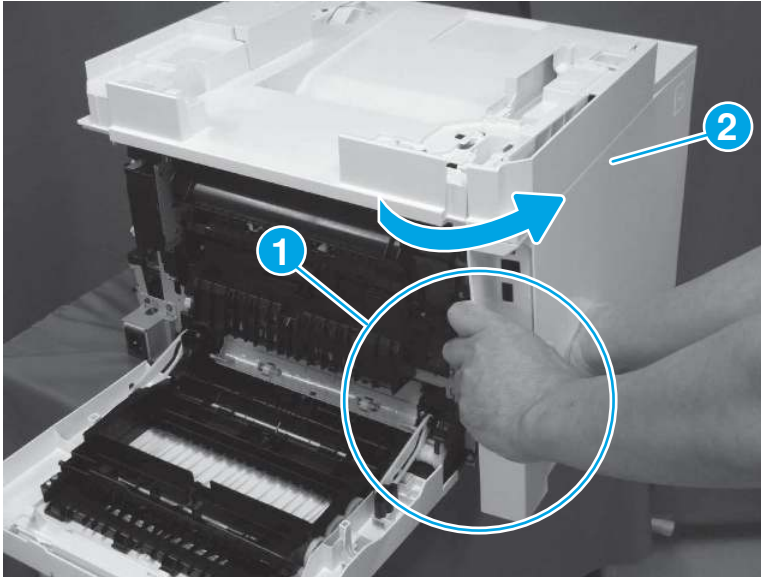
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-673 Release the rear cover corner



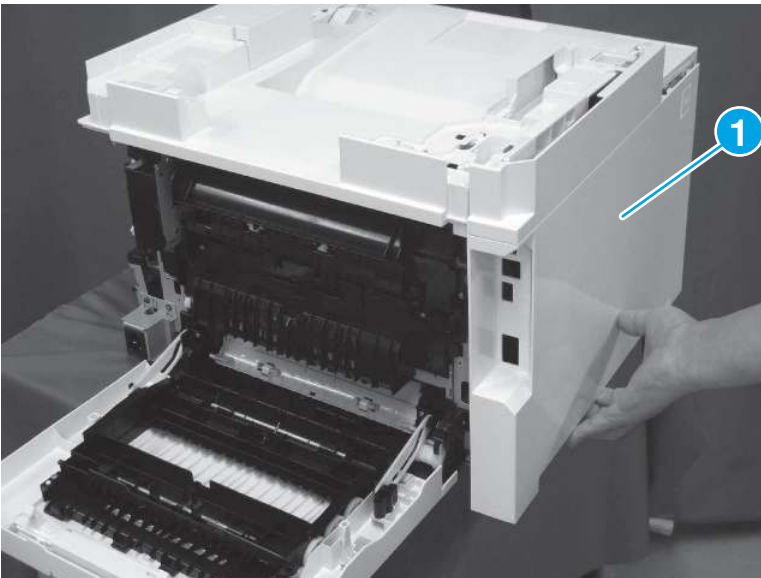
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-674 Disengage the cover corner



5. Remove the left cover (callout 1).

Figure 5-675 Remove the cover

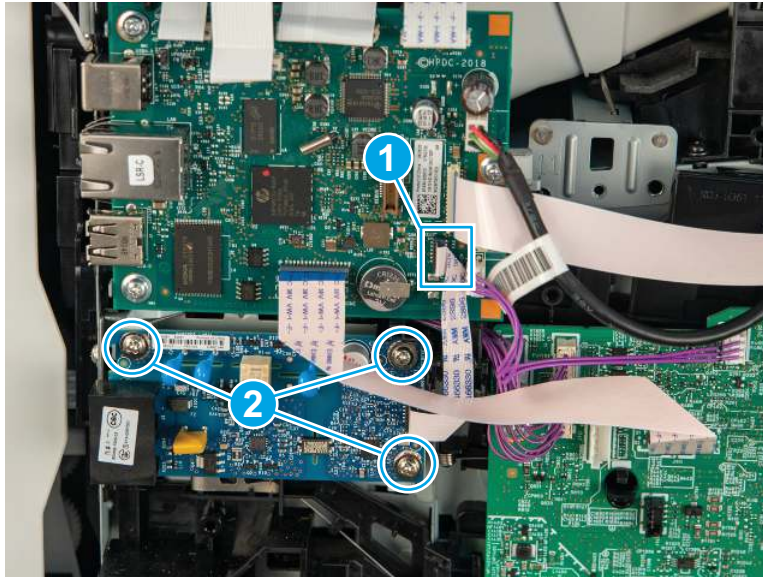


3. Remove the Fax PCA and bracket (MFP)

Follow the procedure below to remove the fax PCA and bracket(MFP)

1. Disconnect one FCC connector (callout 1), remove three screws (callout 2), and then remove the fax PCA.

Figure 5-676 Remove the fax PCA



2. Remove three screws (callout 1), and then remove the fax sheet-metal mounting bracket.


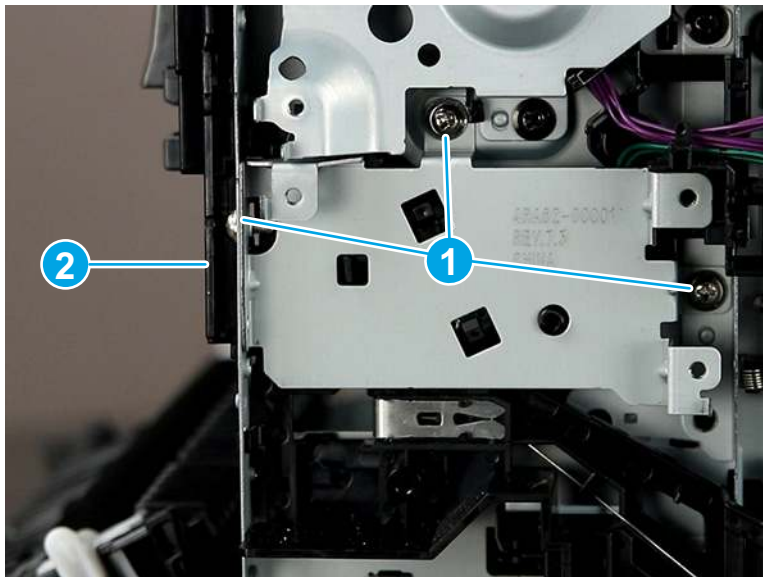
 **TIP:** For better access to one of the screws, loosen (but do not remove) one screw (not shown) to allow the black plastic bracket (callout 2) to move out of the way.

Figure 5-677 Remove the bracket



4. Remove the ISA (MFP)

Follow the procedure below to remove and replace the ISA.

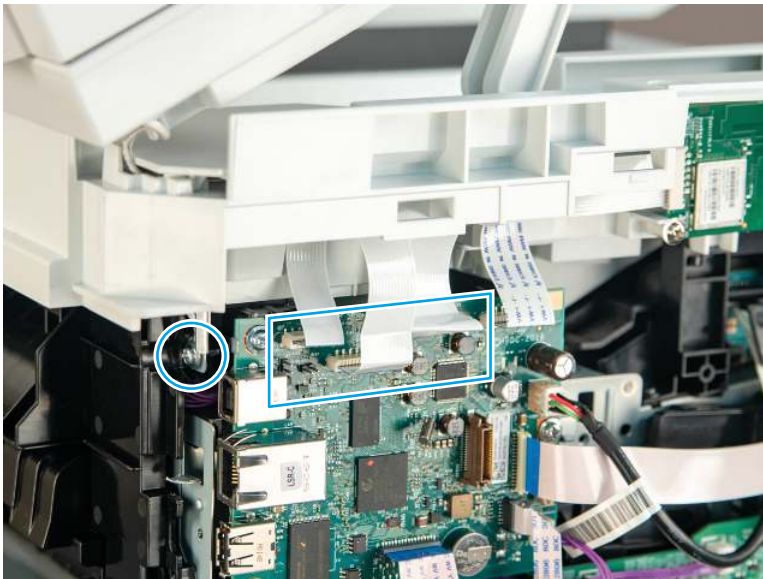
1. Open the ISA, and then remove the ISA FFC cover (callout 1).

Figure 5-678 Remove the FFC cover



2. Disconnect three FFCs, and then remove one screw to release the ground cable.

Figure 5-679 Disconnect FFCs and remove screw



3. Release one tab (callout 1), and then rotate the ISA slider pin (callout 2) towards the front of the printer to release it. Remove the slider pin.

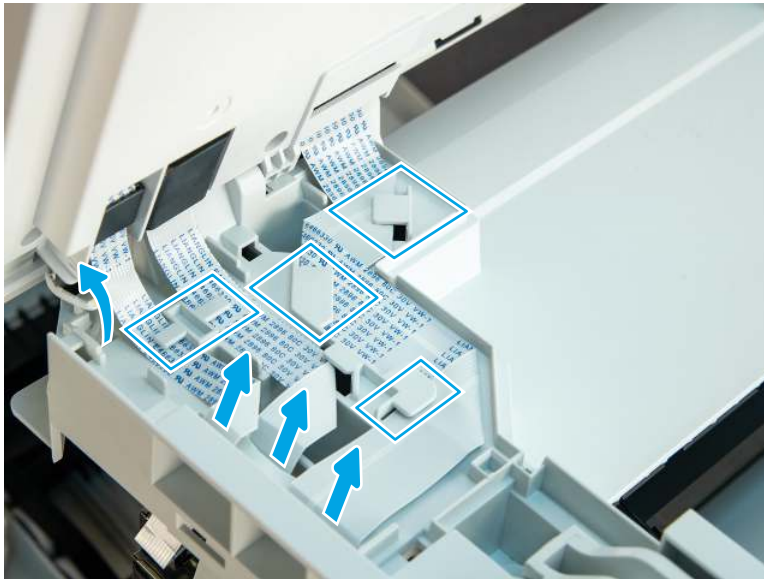
⚠ CAUTION: When the slider pin is removed, the ISA is not captive and can suddenly detach from the printer.

Figure 5-680 Remove the slider pin



4. Support the ISA, release the FFCs from the retainers, and then carefully pass the FFCs and the ground wire up through the slots in the top cover.

Figure 5-681 Release the FFCs and ground wire



5. Slide ISA as shown below to release it.

Figure 5-682 Release the ISA



6. Remove the ISA.

Figure 5-683 Remove the ISA



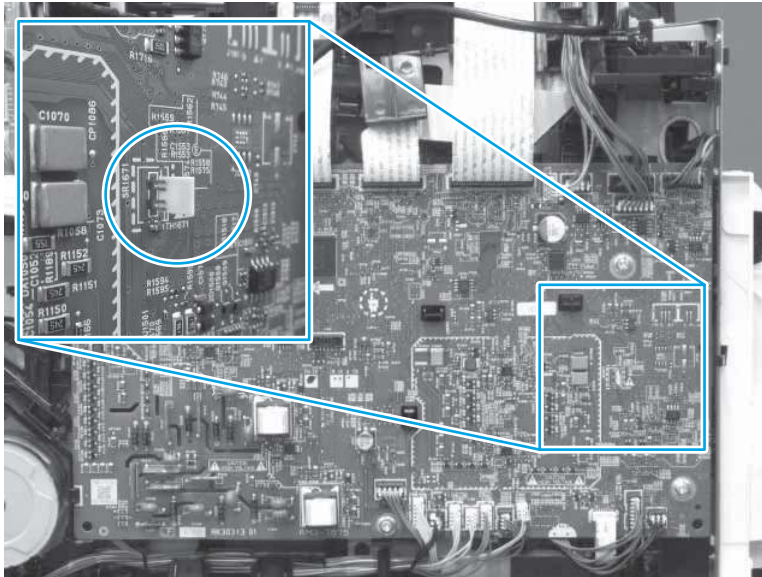
5. Remove the engine controller PCA

Follow the procedure below to remove and replace the engine controller PCA (ECU).

 **CAUTION:**  ESD sensitive part.

1. Before proceeding, take note that there is an environmental sensor mounted on the engine controller PCA. **Do not** apply pressure to this sensor to avoid damaging it.

Figure 5-684 Engine controller environmental sensor location

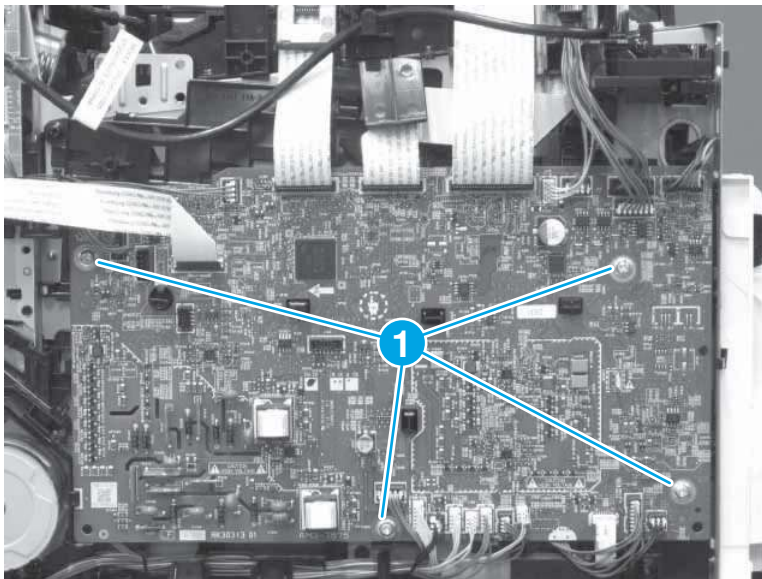


2. Disconnect all of the connectors on the engine controller PCA, and then remove four screws (callout 1).

⚠ CAUTION: Before proceeding take note of the media width sensors connectors and wire harnesses at ECU PCA locations J163 (media width sensor 2; yellow wire harness) and J165 (media width sensor 1; red wire harness). These connectors and wire harness are interchangeable. The PCA is embossed with **YELLOW** (connector J163) and **RED** (connector J165).

Make sure that the correct wire harness is plugged into the appropriate connector to avoid unexpected printer operation.

Figure 5-685 Disconnect connectors and remove screws



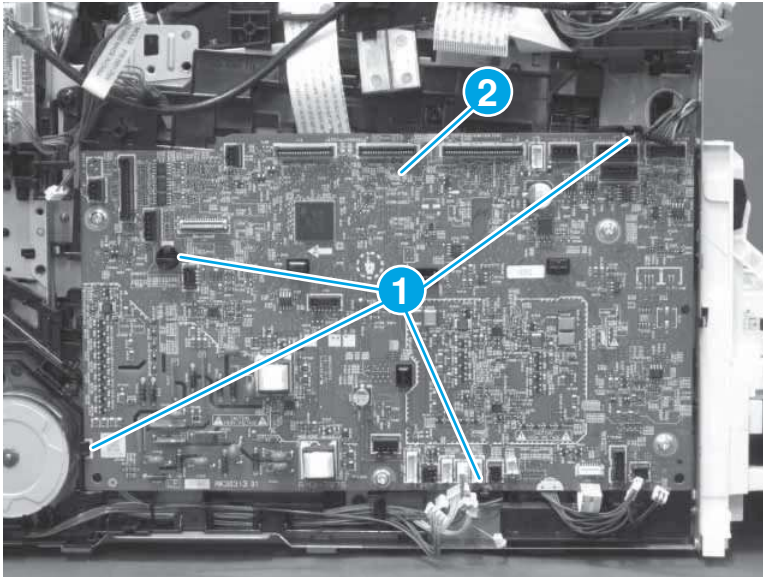
3. Release four tabs (callout 1), and then remove the engine controller PCA (callout 2).

CAUTION: There are three clear plastic light guides installed in the PCB holder behind the PCA that are not captive. Do not lose these parts when the PCA is removed.

Reinstallation tip: If a replacement formatter is being installed, **make sure** to read and follow the special installation instructions in the topic (located immediately after the unpack and recycle step).

The ECU/DCC must be paired with the formatter to be functional.

Figure 5-686 Remove the engine controller PCA



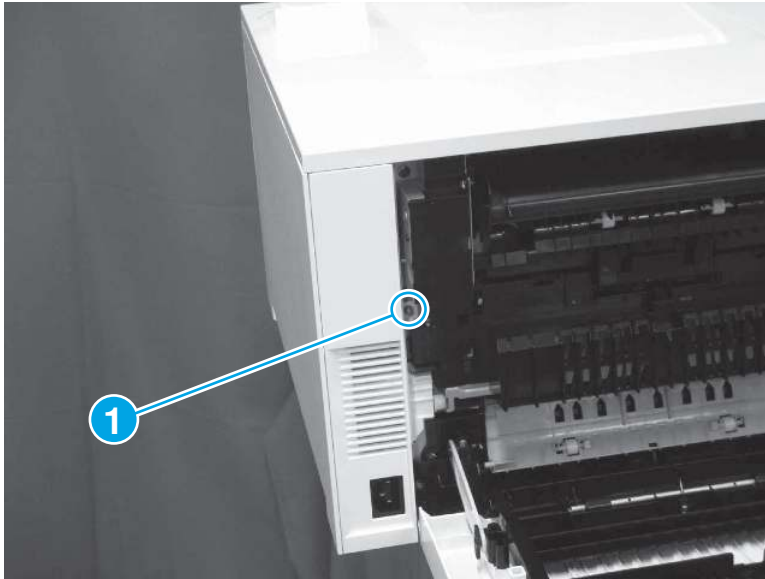
6. Remove the right cover (SFP)

Follow the procedure below to remove and replace the right cover (SFP).

NOTE: The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

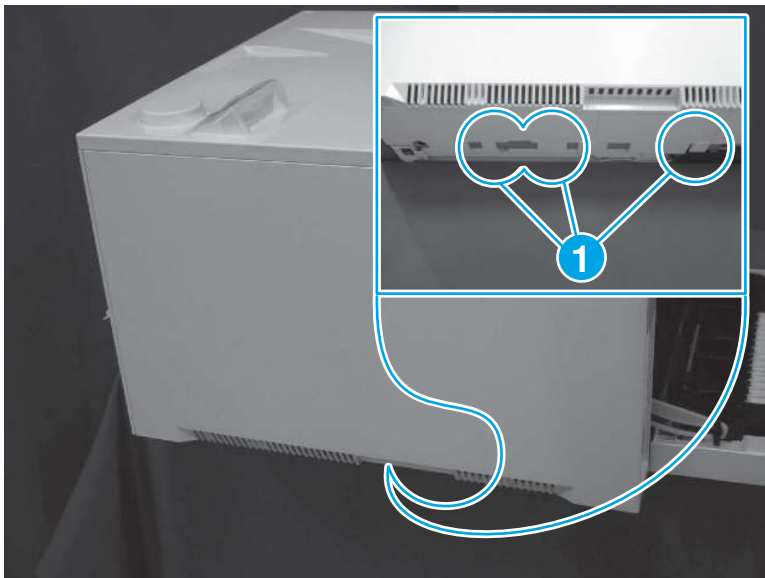
1. Remove one screw (callout 1).

Figure 5-687 Remove one screw



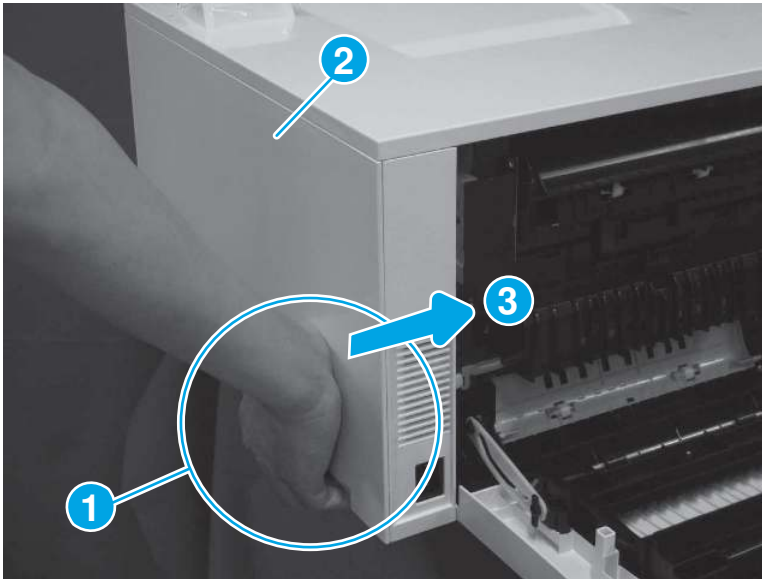
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-688 Release three tabs



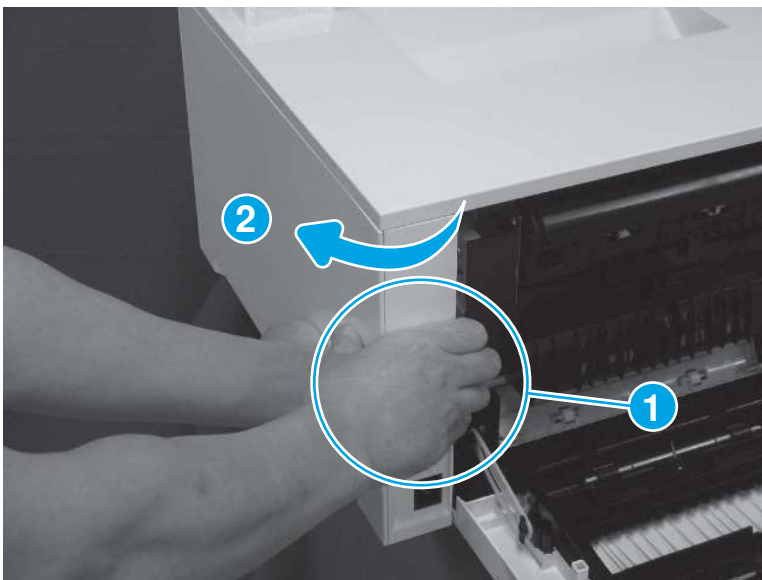
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-689 Release the rear cover corner



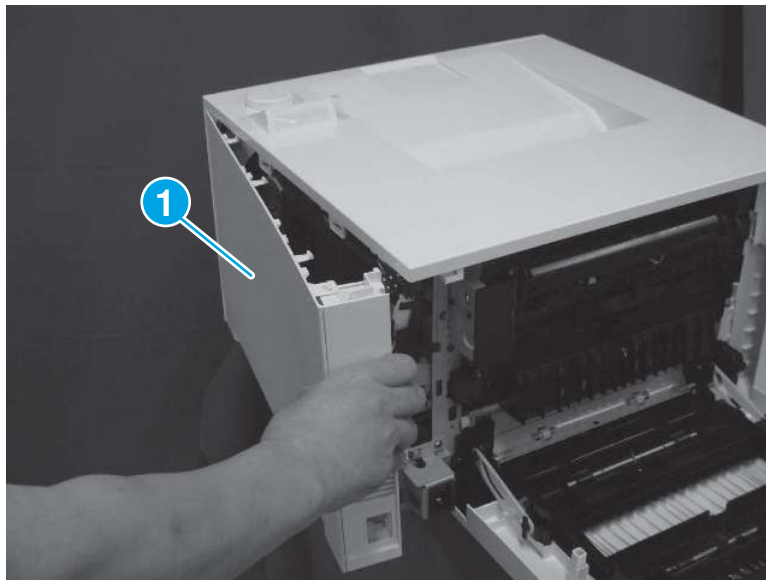
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-690 Disengage the cover corner




5. Remove the right cover (callout 1).

Figure 5-691 Remove the cover



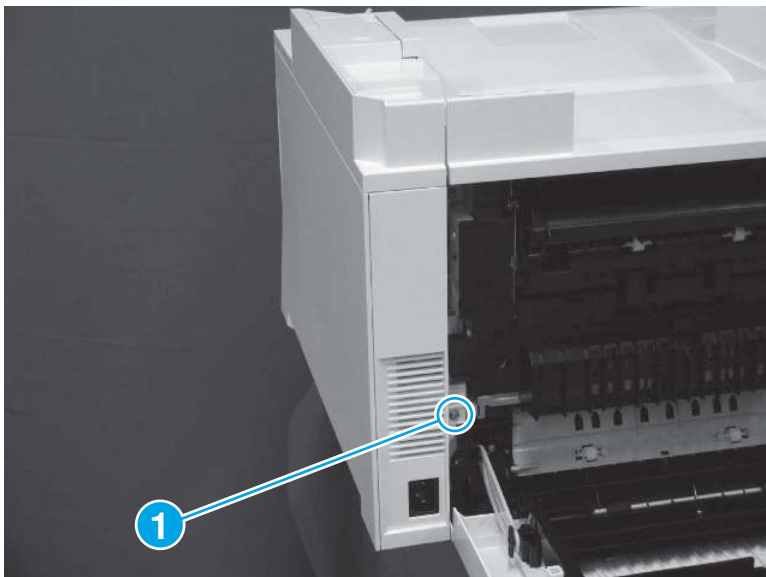
7. Remove the right cover (MFP)

Follow the procedure below to remove and replace the right cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

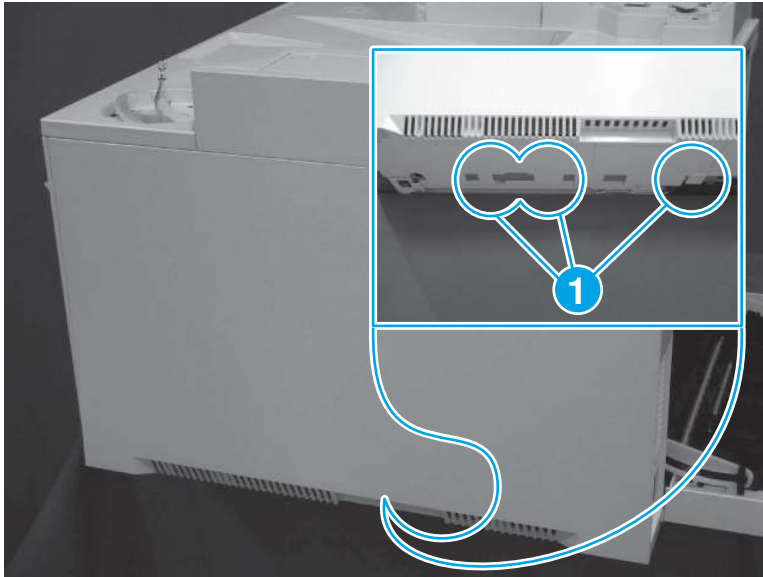
1. Remove one screw (callout 1).

Figure 5-692 Remove one screw



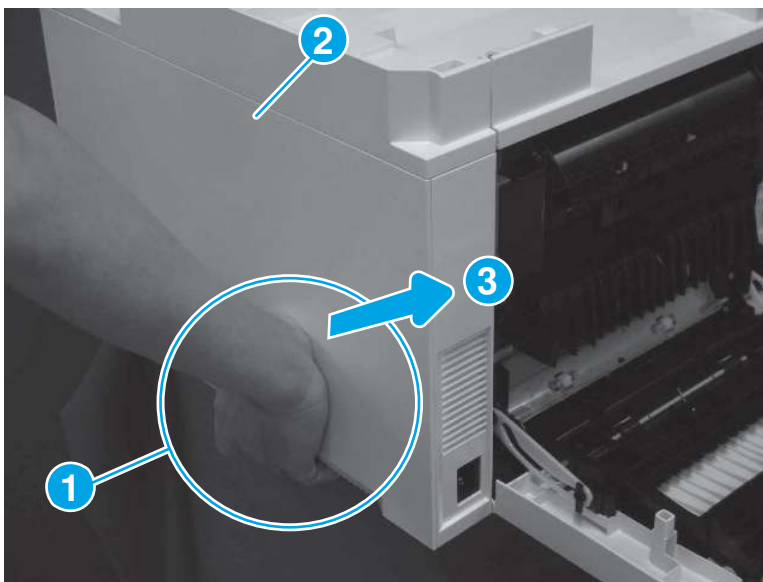
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-693 Release three tabs



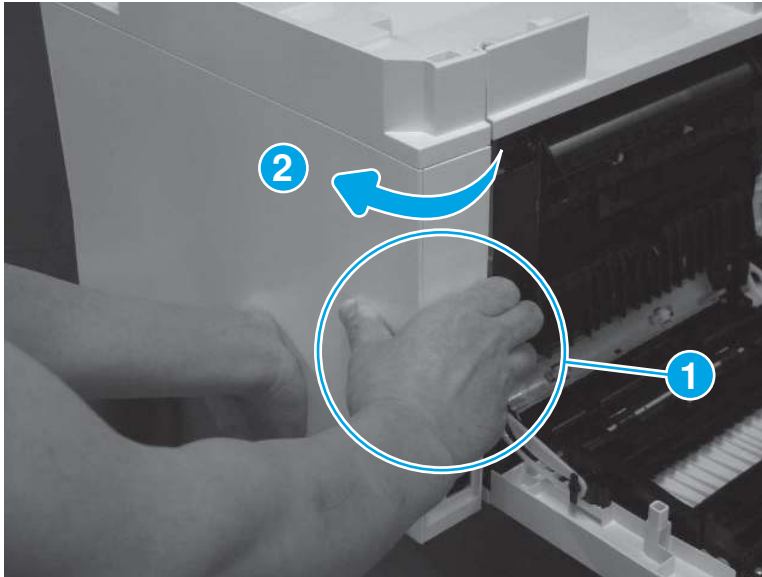
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-694 Release the rear cover corner



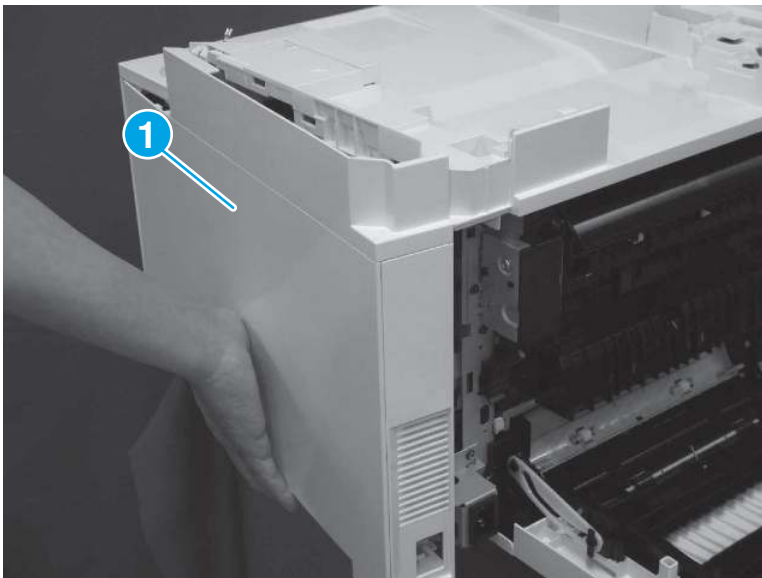
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-695 Disengage the cover corner



5. Remove the right cover (callout 1).


Figure 5-696 Remove the cover



8. Remove the front cover

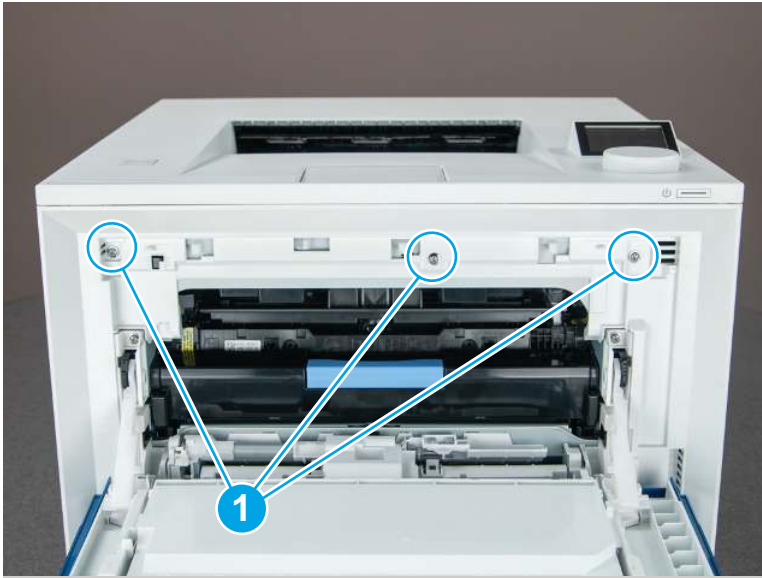
Follow the procedure below to remove and replace the front cover.

 **NOTE:** Front cover removal is **identical** for both SFP and MFP models.

 **Reinstallation tip:** Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

1. Remove three screws (callout 1).

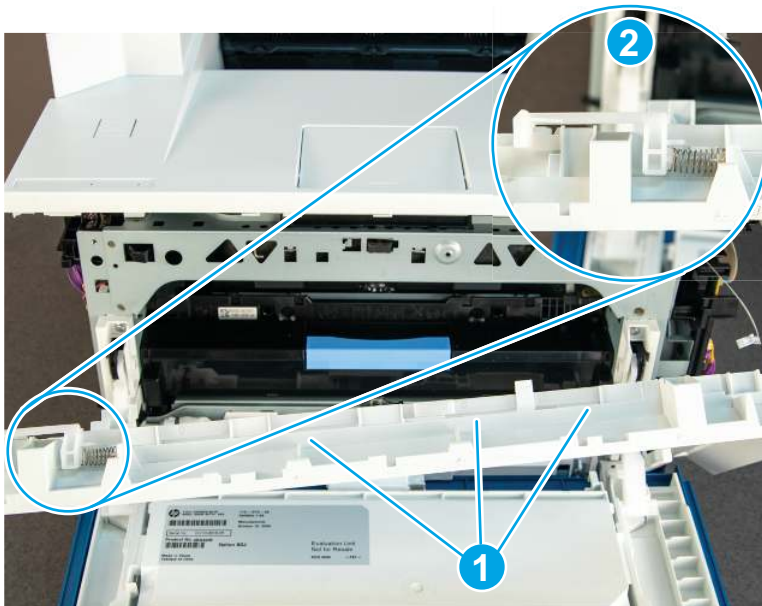
Figure 5-697 Remove three screws



2. Before proceeding, take note of the door release arm (callout 1). This arm can be easily dislodged when the cover is removed.

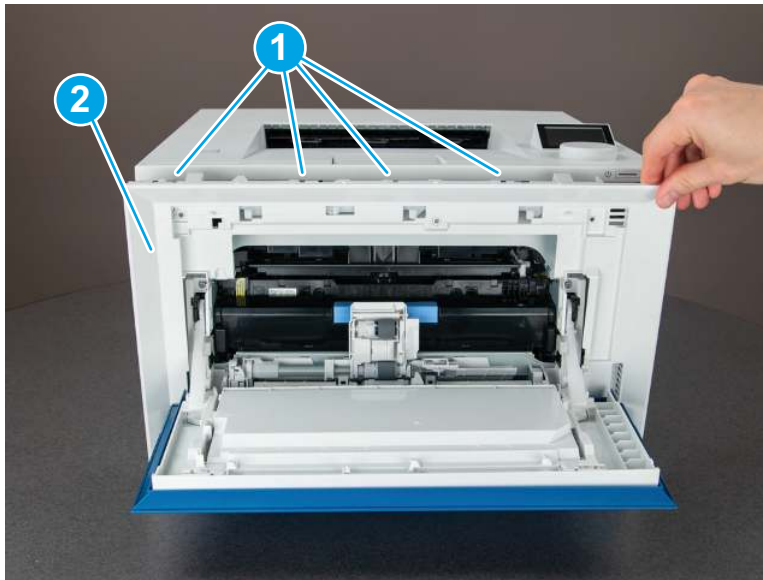
⚠ CAUTION: Do not lose the spring (callout 2) when removing the front cover.

Figure 5-698 Door release arm




3. Release four tabs (callout 1), and then remove the front cover (callout 2).

Figure 5-699 Remove the cover




9. Remove the top cover (SFP)

Follow the procedure below to remove and replace the top cover (SFP).

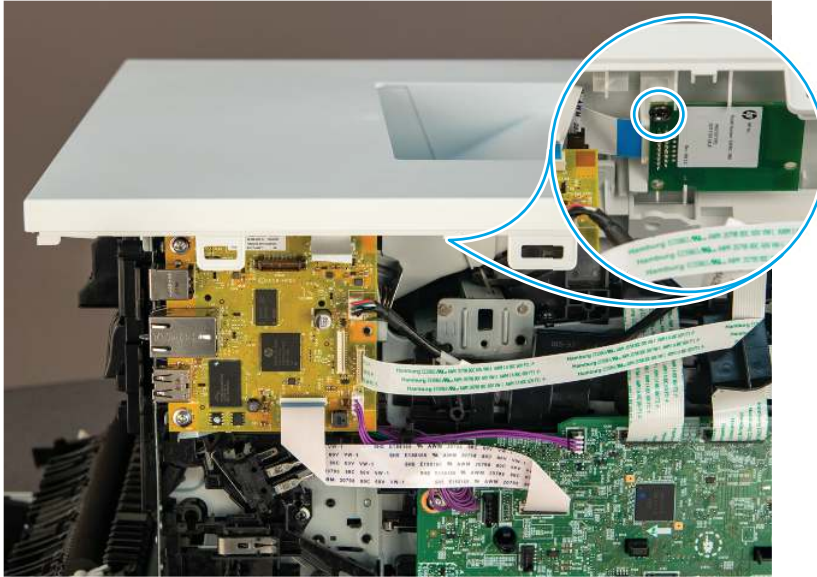
 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

1. **Wireless model only:** Raise and support the left side of the printer, remove one screw, and then separate the wireless PCA from the cover.

 **CAUTION:** Do not attempt to completely remove the wireless PCA. Instead, gently move it out of the way.

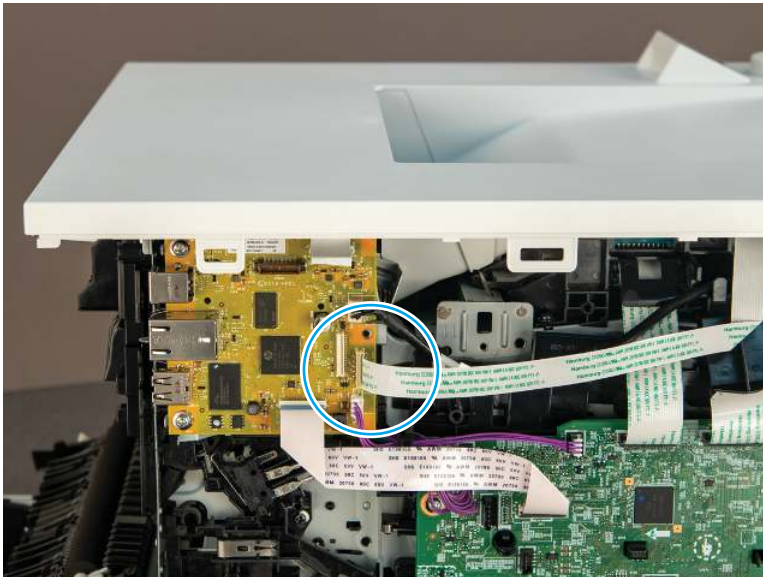
 **TIP:** To remove the screw without raising the printer, use a short-barrel screwdriver.

Figure 5-700 Remove one screw



2. Disconnect one flat-flexible cable (FFC).

Figure 5-701 Disconnect one FFC

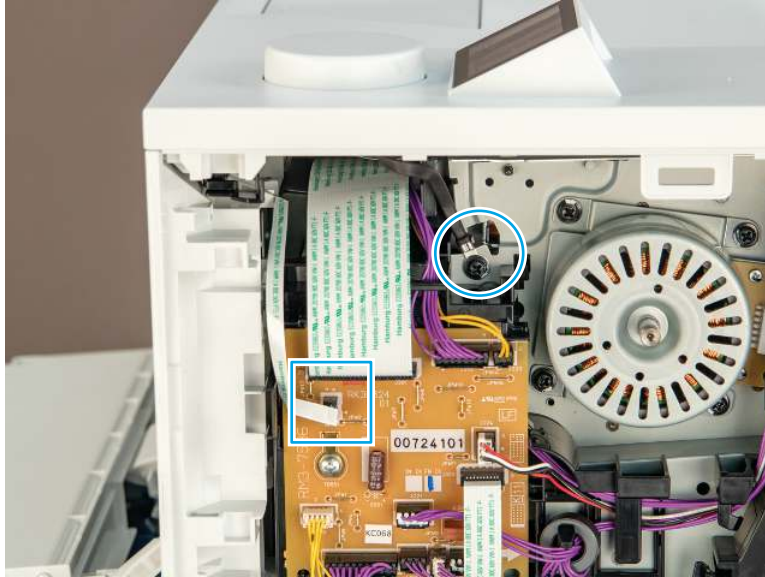


3. Disconnect one FFC, and then remove one screw to release the ground wire.



NOTE: The front cover is shown installed in the figure below. However, this step is correct for removing the top cover.

Figure 5-702 Disconnect one FFC and remove one screw




4. Sliding the cover from the back of the printer towards the front to remove it.

Figure 5-703 Remove the cover



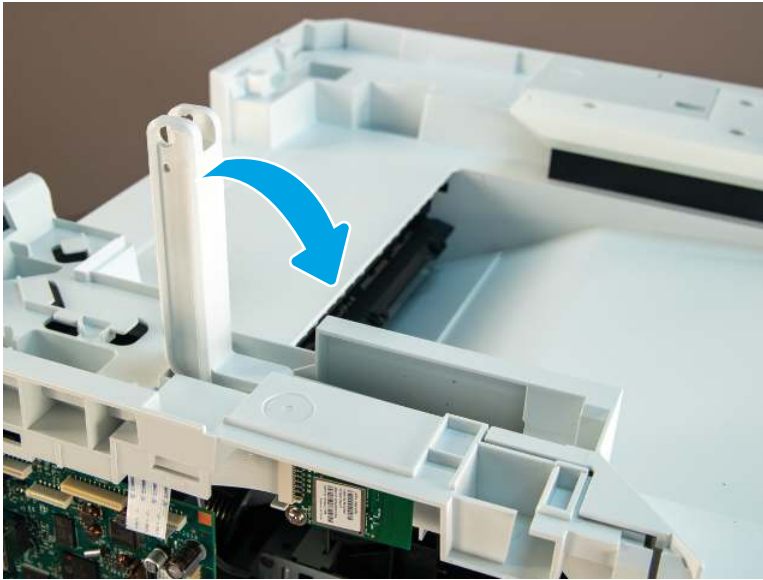
10. Remove the top cover (MFP)

Follow the procedure below to remove and replace the top cover (MFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

1. Close the ISA lift arm.

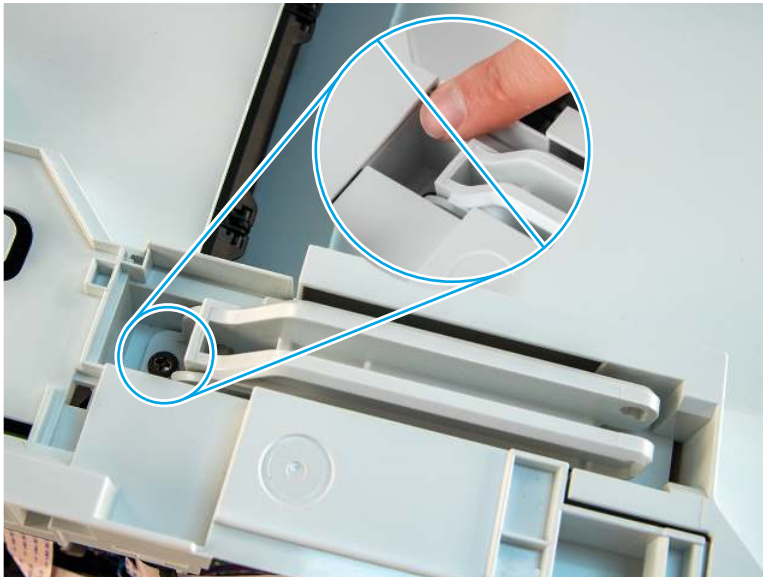
Figure 5-704 Close the ISA lift arm



2. Remove one screw.

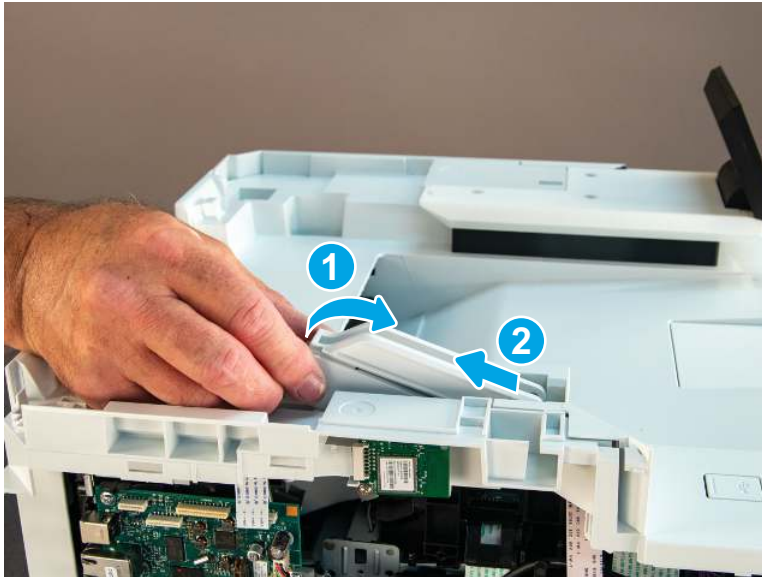
⚠ CAUTION: The support arm is spring loaded and can unexpectedly spring into the open position. To avoid injury, do not place a finger in the screw well when the support arm is in the closed position.

Figure 5-705 Remove one screw



3. Rotate one end of the lift arm up (callout 1), and then slide the lift arm as shown below (callout 2) to release it. Remove the lift arm.

Figure 5-706 Remove the lift arm



4. Do the following:
 - a. Disconnect one FFC (control panel; callout 1).
 - b. Remove one screw (callout 2), and then separate the wireless PCA from the top cover.


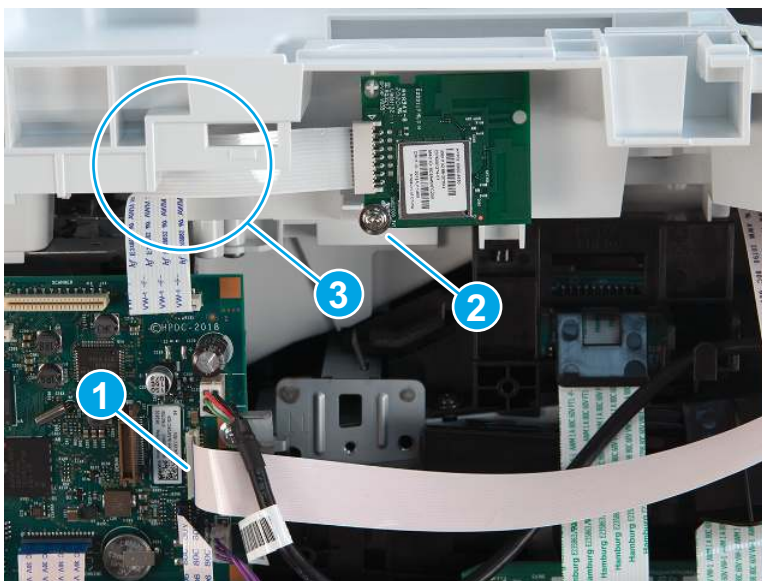
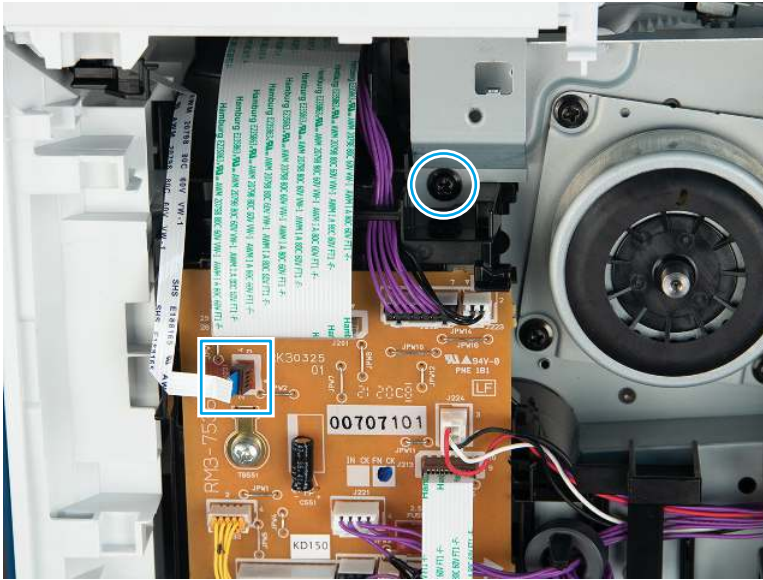
 **NOTE:** The wireless PCA does not need to be completely removed. Instead, release the FFC from the retainer (callout 3), and then gently move it out of the way.

Figure 5-707 Disconnect FFC and move the wireless PCA



5. Disconnect one FFC (power button), and then remove one screw (grounding sheet-metal plate).

Figure 5-708 Disconnect one FFC and remove one screw



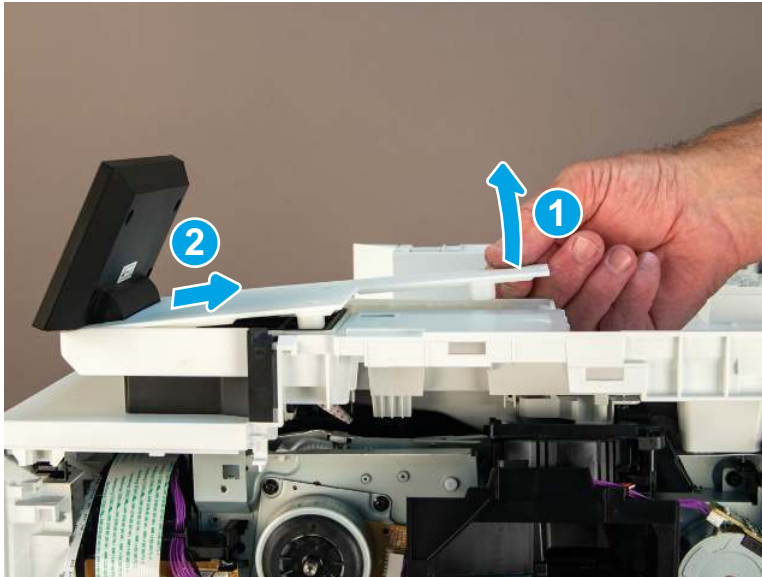
6. Remove three screws.

Figure 5-709 Remove three screws




7. Release one tab and rotate one end of the base cover up (callout 1), and then slide the cover as shown (callout 2) to remove it.

Figure 5-710 Remove the cover



8. Disconnect two FFCs.

 **NOTE:** These are zero-insertion force (ZIF) connectors. To remove the FFCs, first release the locking clip on the connector, and then pull the cable straight out of the connector.


 **TIP:** For reinstallation, make sure that the line of the FFC is parallel with the body.

Figure 5-711 Disconnect two FFCs



9. Remove four screws.


 **NOTE:** Two of the screws are self-tapping threads (black), and two of the screws are machine thread (silver).

Figure 5-712 Remove four screws

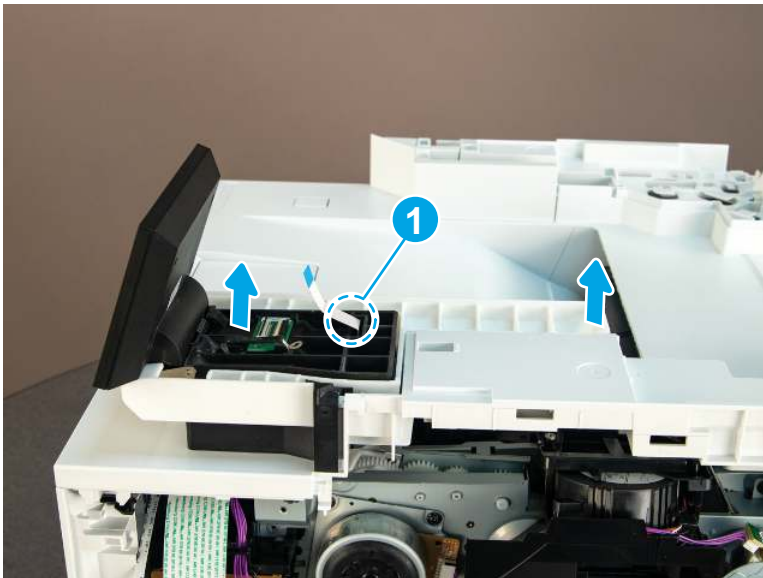


10. Lift the control panel and base straight up and off of the printer to remove them together.



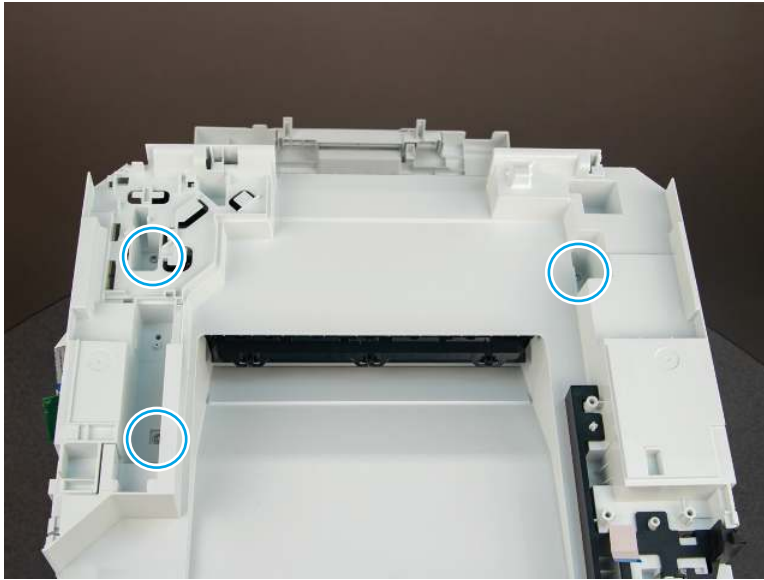
NOTE: When handling the assembly, do not lose the ferrite (callout 1).

Figure 5-713 Remove control panel and base



11. Remove three screws.

Figure 5-714 Remove three screws



12. Sliding the cover from the back of the printer to the front to remove it.


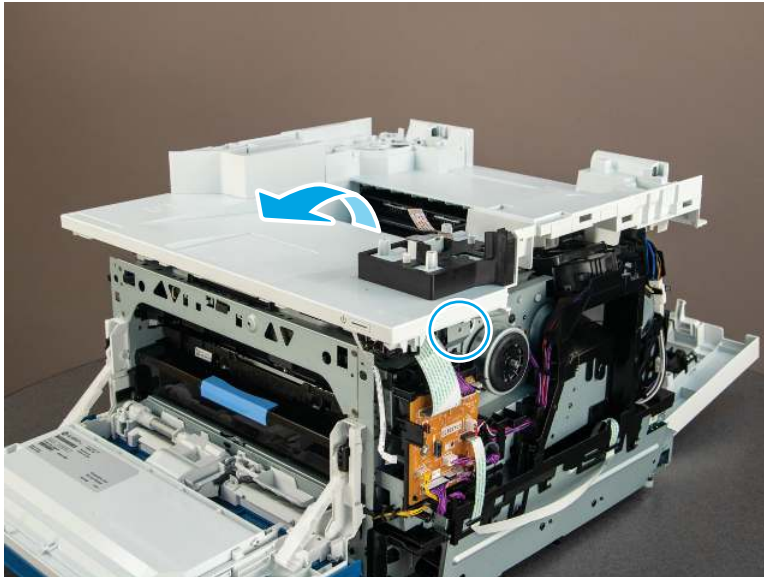
 **TIP:** Slightly move the control-panel ground bracket (circled) back and forth to help release the top cover.

Figure 5-715 Remove the cover



13. **When the cover is reinstalled:** Make sure that the front USB assembly is correctly positioned under the cover.

Figure 5-716 Front USB assembly



11. Remove the formatter PCA

Follow the procedure below to remove and replace the formatter PCA.


CAUTION:  ESD sensitive part.

1. Disconnect all of the connectors on the formatter PCA.

Figure 5-717 Disconnect all of the connectors (SFP/MFP)

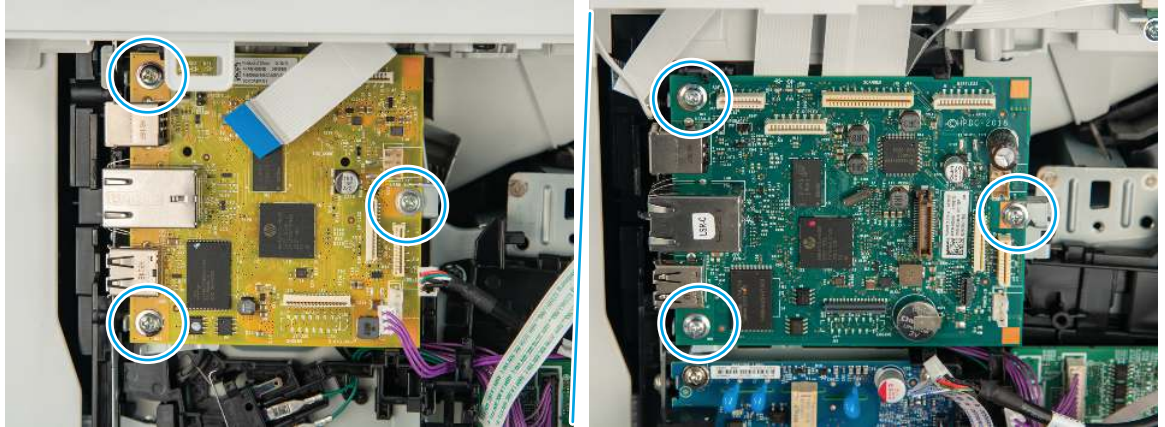


2. Remove three screws, and then remove the formatter PCA.

 **Reinstallation tip:** If a replacement formatter is being installed, make sure to read and follow the special installation instructions in the topic (located immediately after the unpack and recycle step).

The formatter must be paired with the ECU/DCC to be functional.

Figure 5-718 Remove the formatter PCA (SFP/MFP)

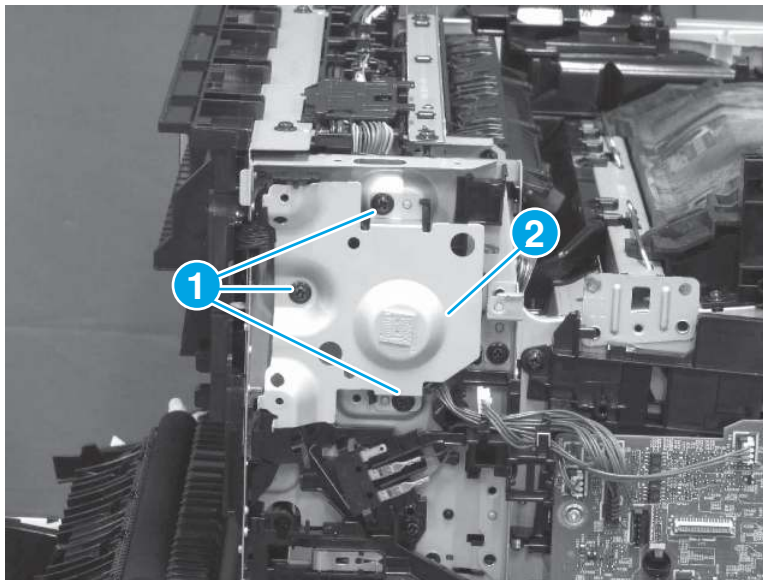


12. Remove the interlock holder assembly

Follow the procedure below to remove and replace the interlock holder assembly.

1. Remove three screws (callout 1, and then remove the plate (callout 2).

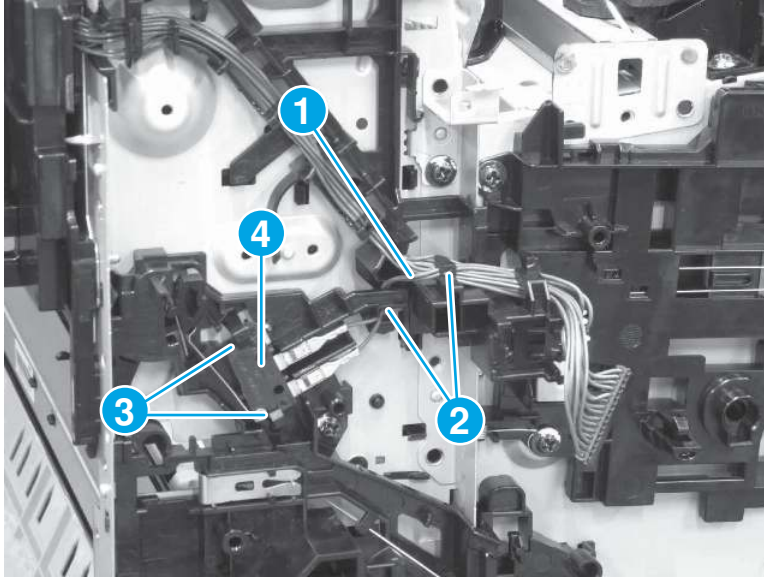
Figure 5-719 Remove the plate



2. Release the cable (callout 1) from the guides (callout 2), release two tabs (callout 3), and then separate the interlock switch (callout 4) from the holder.

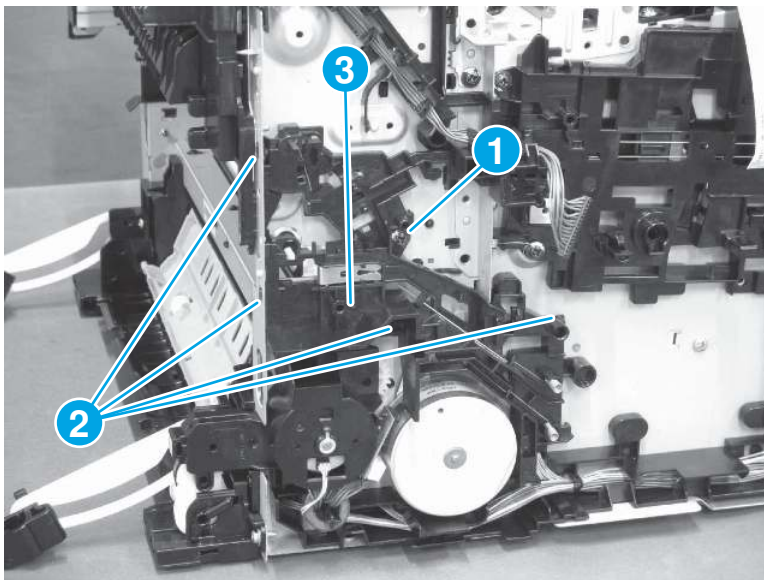
⚠ CAUTION: Do not attempt to completely remove the interlock switch. It is still connected to the wire cables.

Figure 5-720 Separate the interlock switch from the holder



3. Remove one screw (callout 1), release four tabs (callout 2), and then remove the interlock holder assembly (callout 3).

Figure 5-721 Remove the interlock holder assembly



13. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

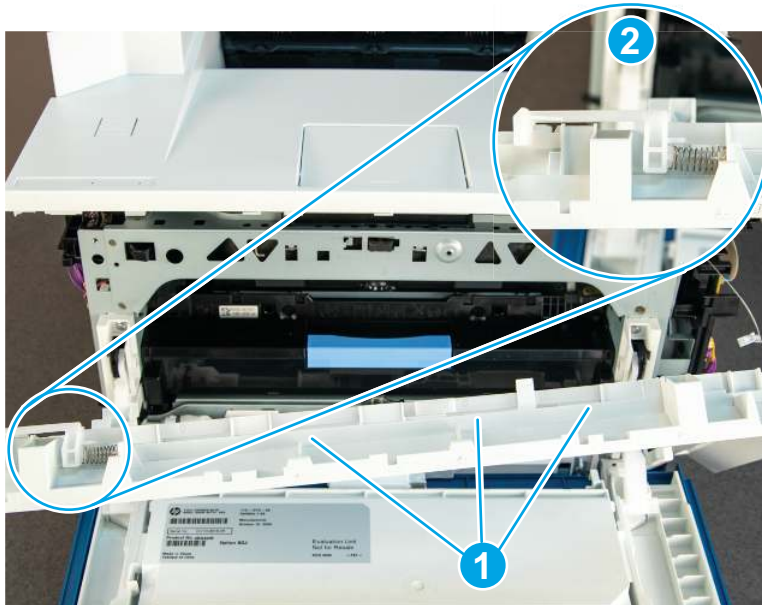
14. Special installation instructions - Front cover

Follow the special instructions below to install the front cover.

NOTE:  Front cover installation is **identical** for both the SFP and MFP models.

1. If the door release arm becomes dislodged when handling the cover, install it as shown below (callout 1, 2).

Figure 5-722 Door release arm installed



2. At the right and left side of the front cover, align the holes (callout 1) in the cover with the alignment pins (callout 2) on the chassis.

Figure 5-723 Cover alignment pins



3. Rotate the top of the cover towards the printer to install it.


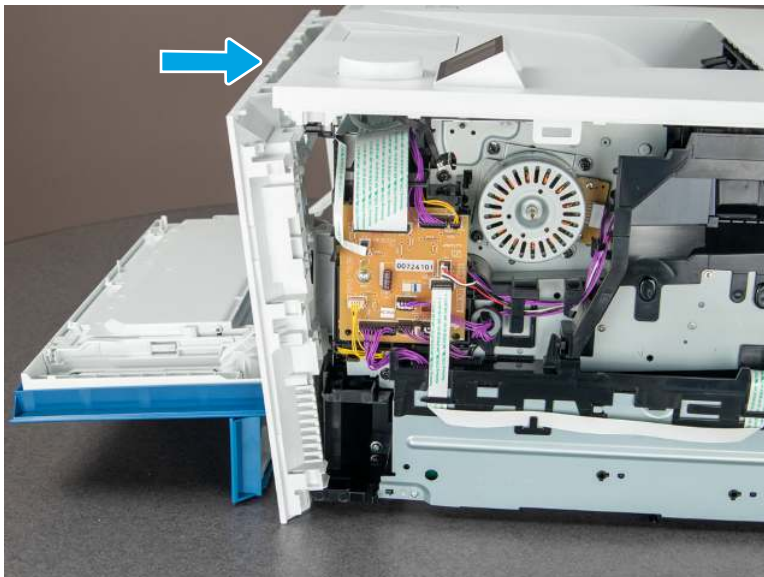
 **IMPORTANT:** Verify that the spring loaded door release button (on the left side of the cover) correctly functions.

Figure 5-724 Install the cover



Removal and replacement: PCA holder assembly

Learn about PCA holder assembly removal.

 [View a video of removing and replacing the PCA holder assembly.](#)


Mean time to repair: 80 minutes

Service level: Difficult

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-43 Part information

Part number	Part description
RM2-2819-000CN	PCA holder assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on


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


Post service test

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

1. Remove the left cover (SFP)

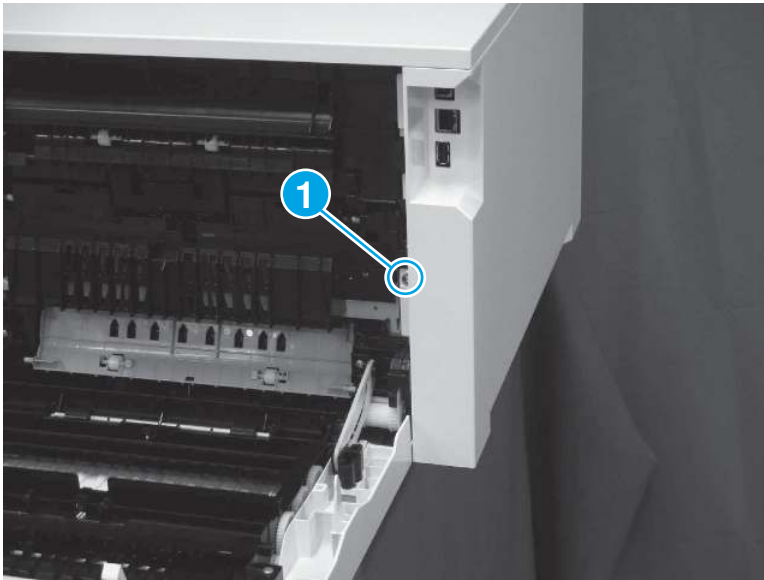
Follow the procedure below to remove and replace the left cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

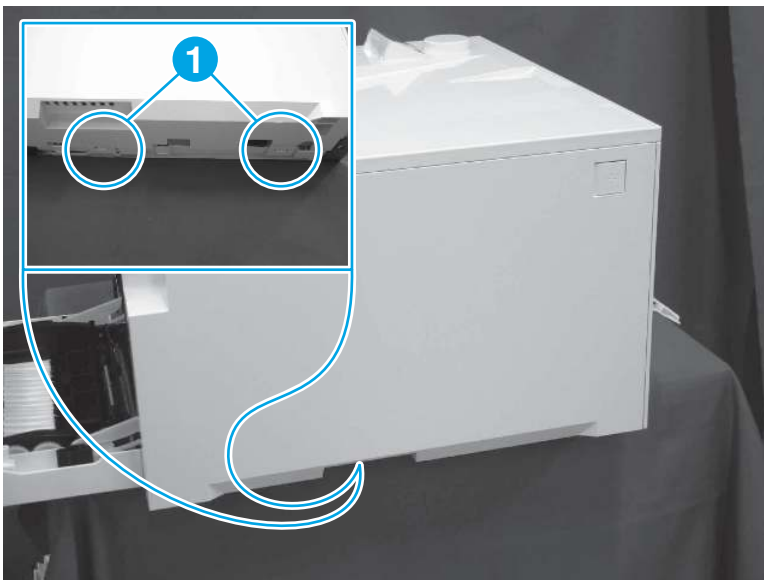
1. Remove one screw (callout 1).

Figure 5-725 Remove one screw



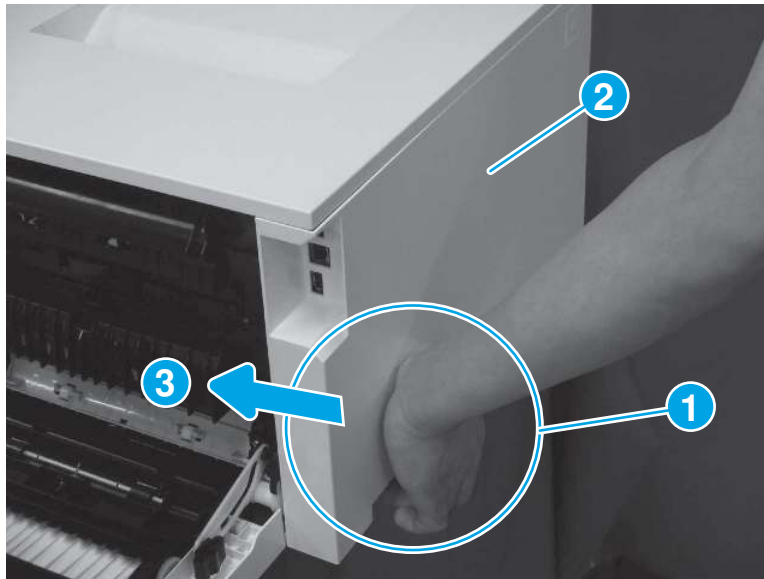
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-726 Release two tabs



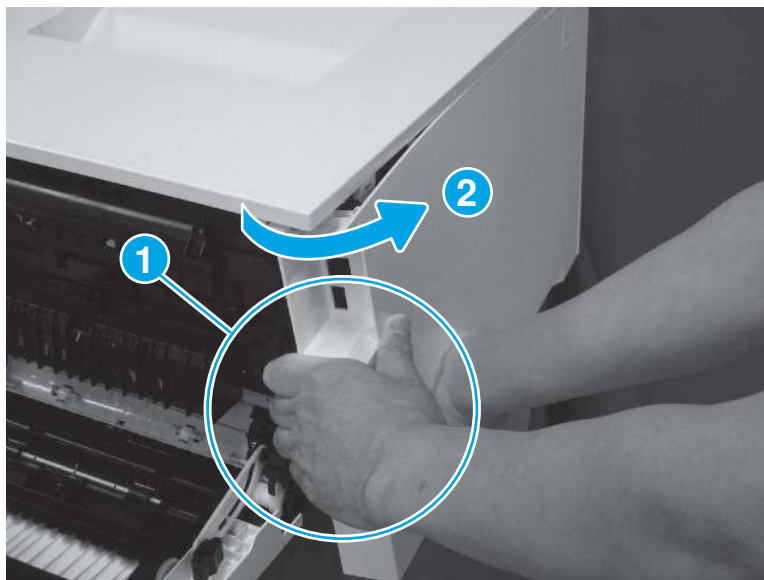
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-727 Release the rear cover corner



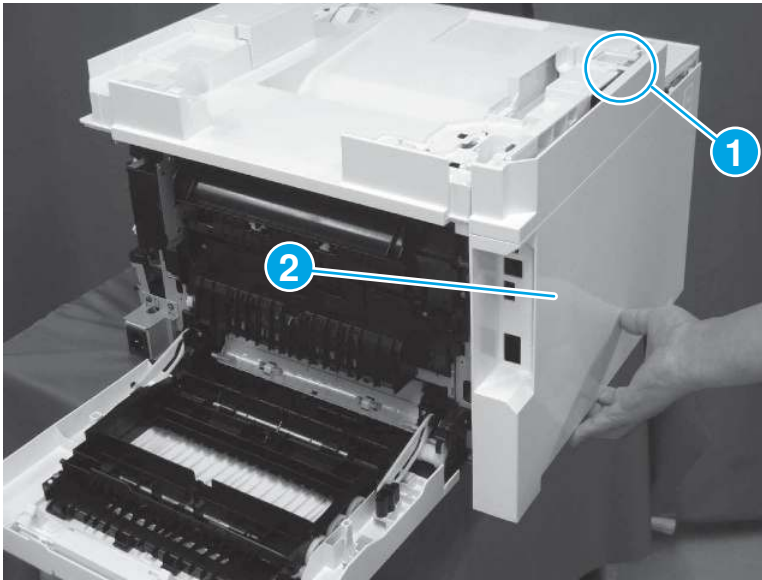
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-728 Disengage the cover corner




5. Remove the left cover (callout 1).


Figure 5-729 Remove the cover



2. Remove the left cover (MFP)

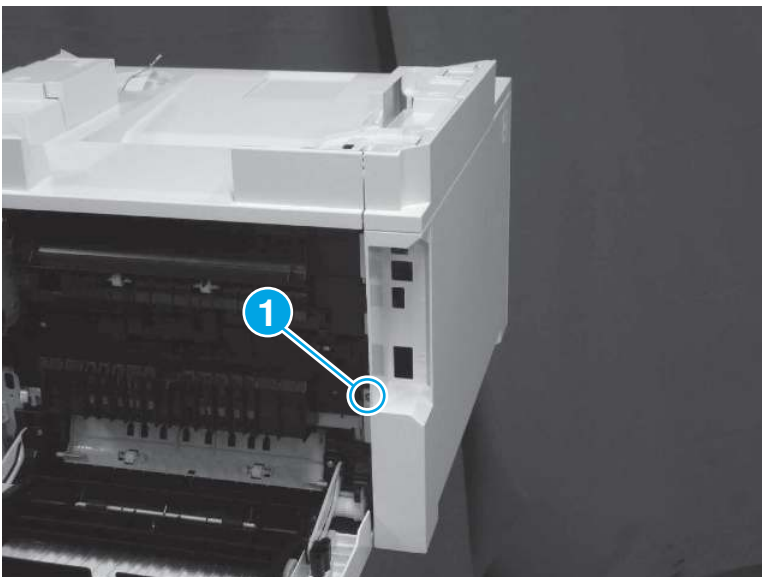
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

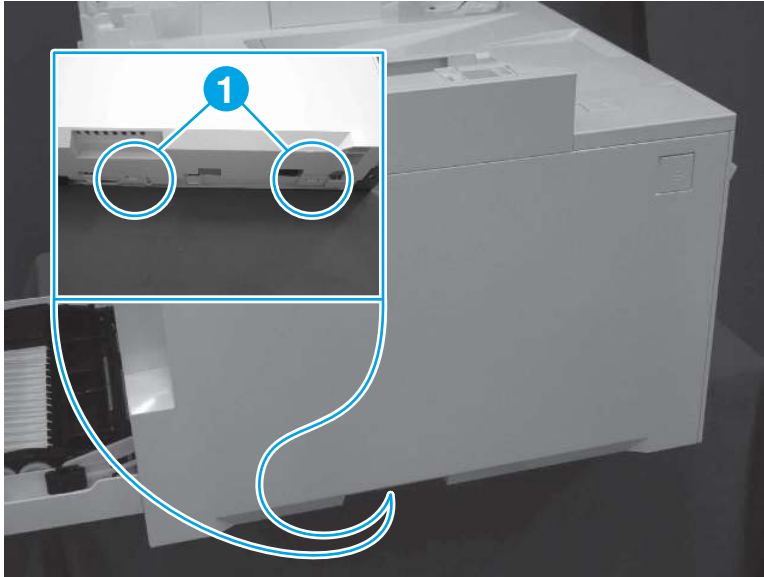
1. Remove one screw (callout 1).

Figure 5-730 Remove one screw



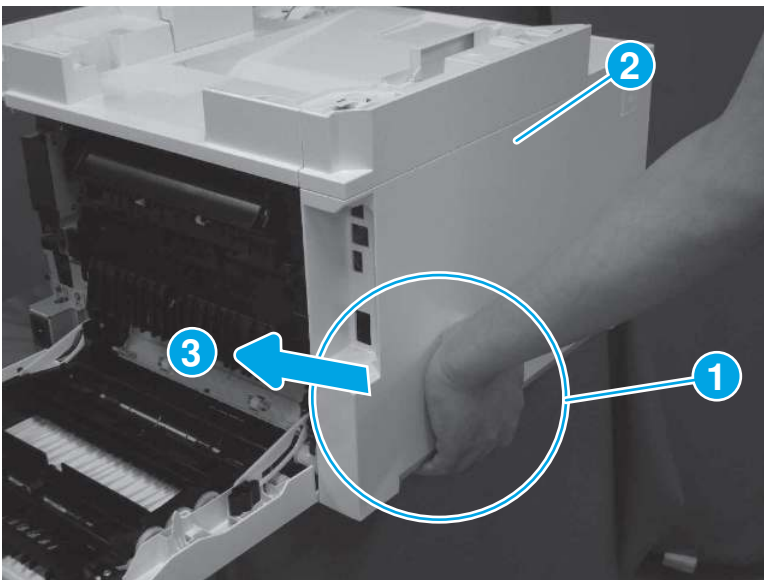
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-731 Release two tabs



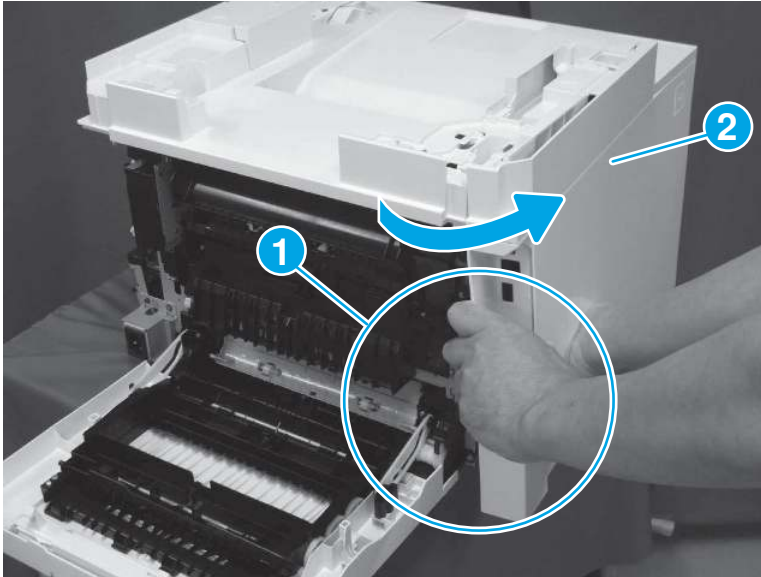
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-732 Release the rear cover corner



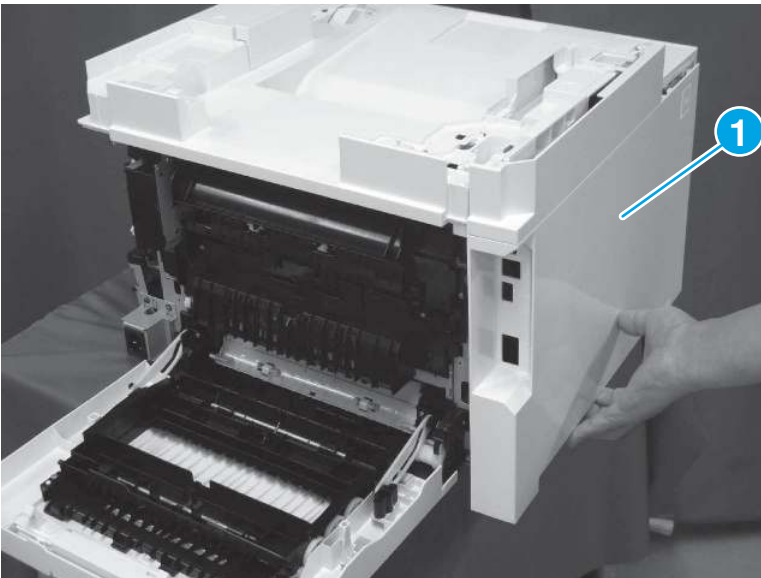
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-733 Disengage the cover corner



5. Remove the left cover (callout 1).

Figure 5-734 Remove the cover

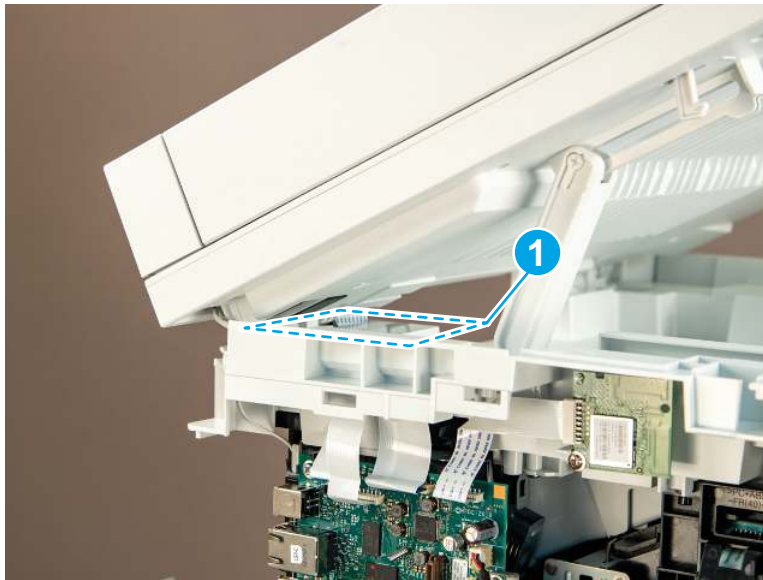


3. Remove the ISA (MFP)

Follow the procedure below to remove and replace the ISA.

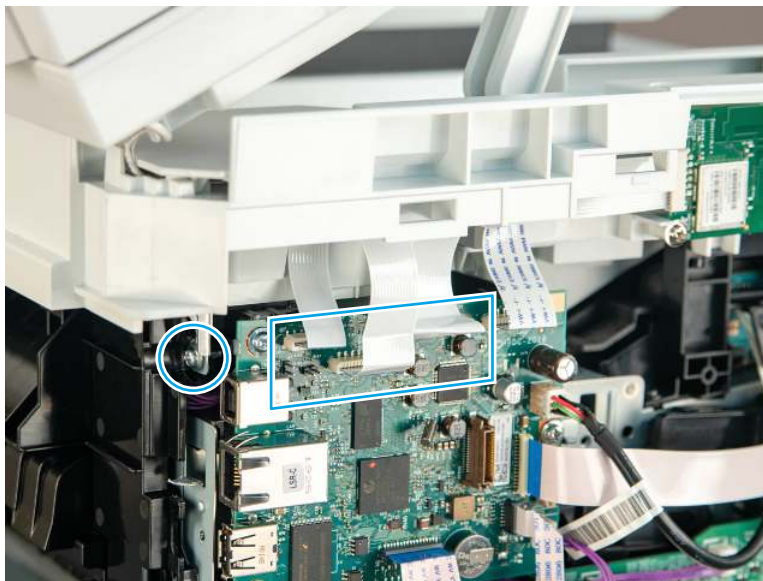
1. Open the ISA, and then remove the ISA FFC cover (callout 1).

Figure 5-735 Remove the FFC cover



2. Disconnect three FFCs, and then remove one screw to release the ground cable.

Figure 5-736 Disconnect FFCs and remove screw



3. Release one tab (callout 1), and then rotate the ISA slider pin (callout 2) towards the front of the printer to release it. Remove the slider pin.

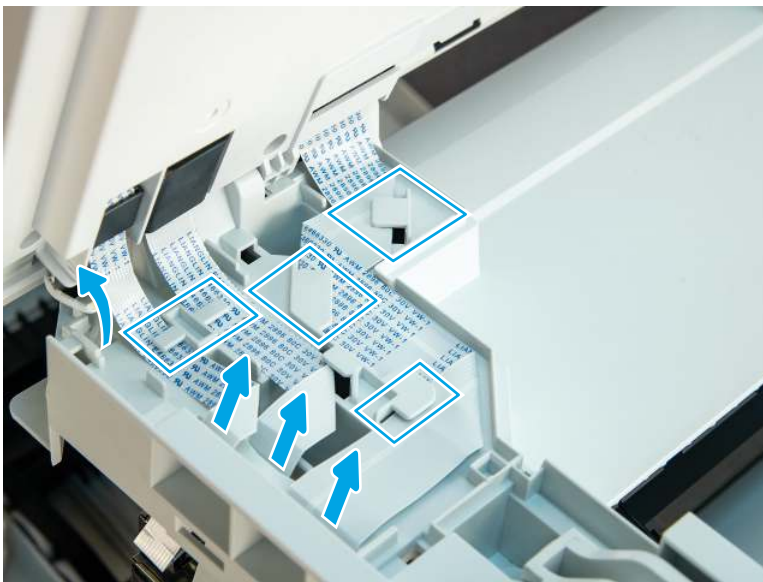
⚠ CAUTION: When the slider pin is removed, the ISA is not captive and can suddenly detach from the printer.

Figure 5-737 Remove the slider pin



4. Support the ISA, release the FFCs from the retainers, and then carefully pass the FFCs and the ground wire up through the slots in the top cover.

Figure 5-738 Release the FFCs and ground wire



5. Slide ISA as shown below to release it.

Figure 5-739 Release the ISA



6. Remove the ISA.

Figure 5-740 Remove the ISA



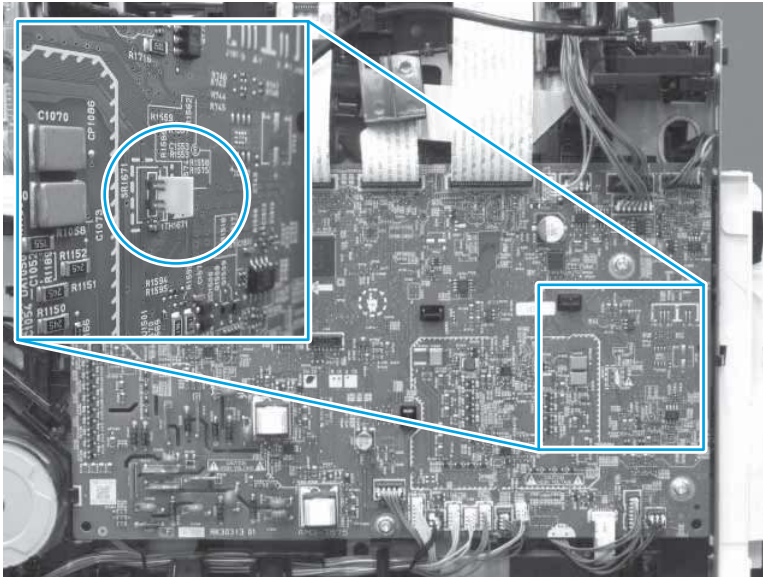
4. Remove the engine controller PCA

Follow the procedure below to remove and replace the engine controller PCA (ECU).

 **CAUTION:**  ESD sensitive part.

1. Before proceeding, take note that there is an environmental sensor mounted on the engine controller PCA. **Do not** apply pressure to this sensor to avoid damaging it.

Figure 5-741 Engine controller environmental sensor location

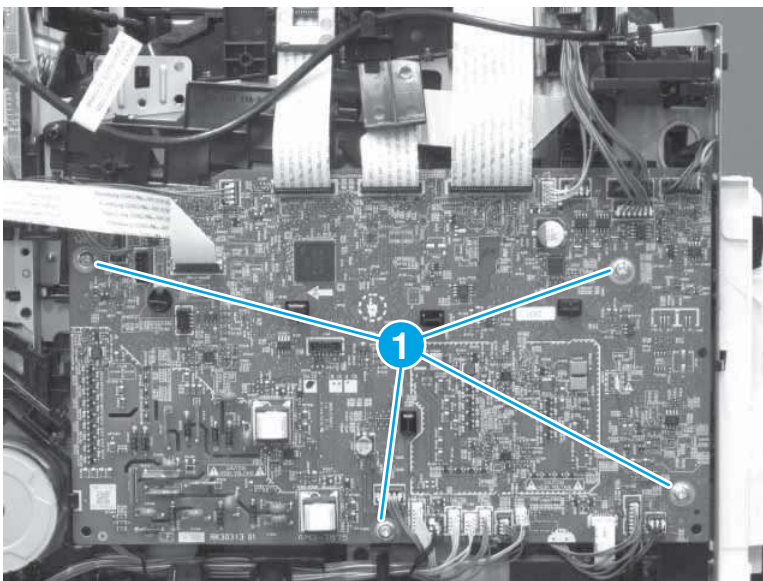


2. Disconnect all of the connectors on the engine controller PCA, and then remove four screws (callout 1).

⚠ CAUTION: Before proceeding take note of the media width sensors connectors and wire harnesses at ECU PCA locations J163 (media width sensor 2; yellow wire harness) and J165 (media width sensor 1; red wire harness). These connectors and wire harness are interchangeable. The PCA is embossed with **YELLOW** (connector J163) and **RED** (connector J165).

Make sure that the correct wire harness is plugged into the appropriate connector to avoid unexpected printer operation.

Figure 5-742 Disconnect connectors and remove screws



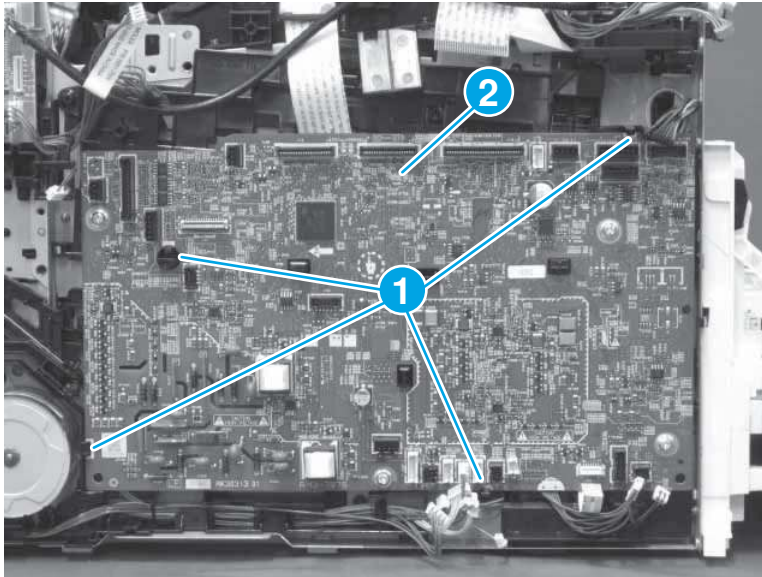
3. Release four tabs (callout 1), and then remove the engine controller PCA (callout 2).

CAUTION: There are three clear plastic light guides installed in the PCB holder behind the PCA that are not captive. Do not lose these parts when the PCA is removed.

Reinstallation tip: If a replacement formatter is being installed, **make sure** to read and follow the special installation instructions in the topic (located immediately after the unpack and recycle step).

The ECU/DCC must be paired with the formatter to be functional.

Figure 5-743 Remove the engine controller PCA



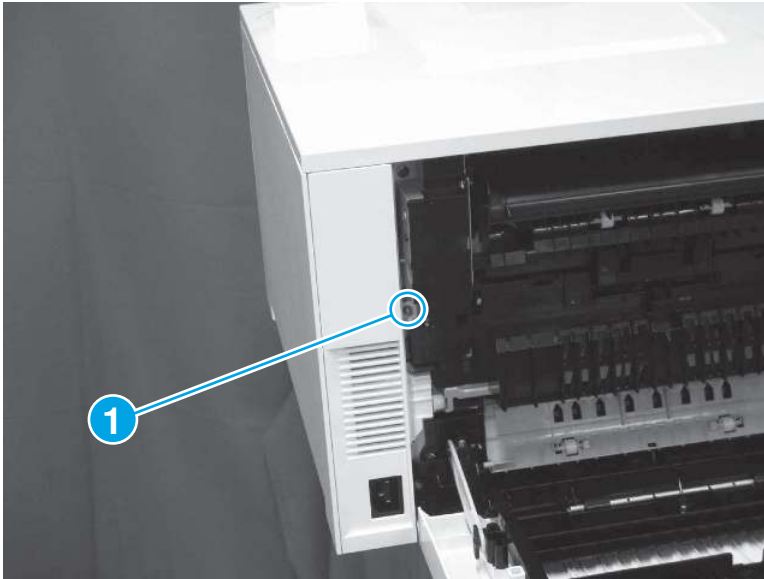
5. Remove the right cover (SFP)

Follow the procedure below to remove and replace the right cover (SFP).

NOTE: The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

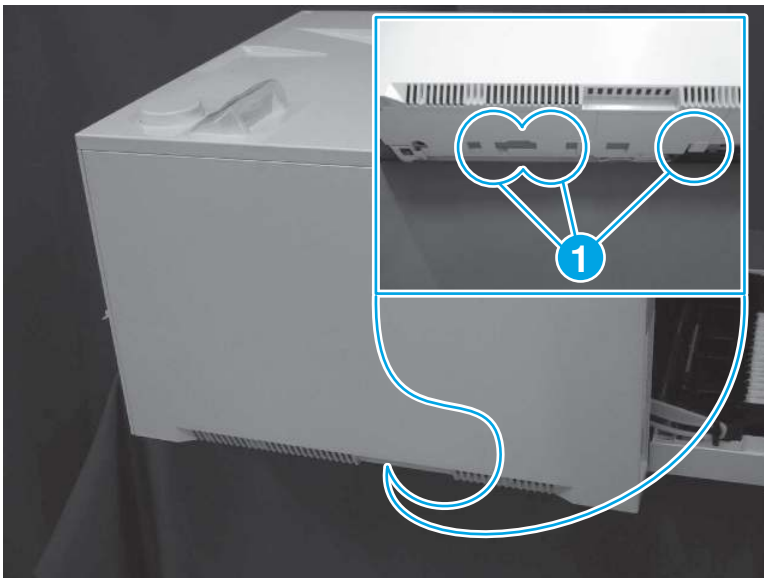
1. Remove one screw (callout 1).

Figure 5-744 Remove one screw



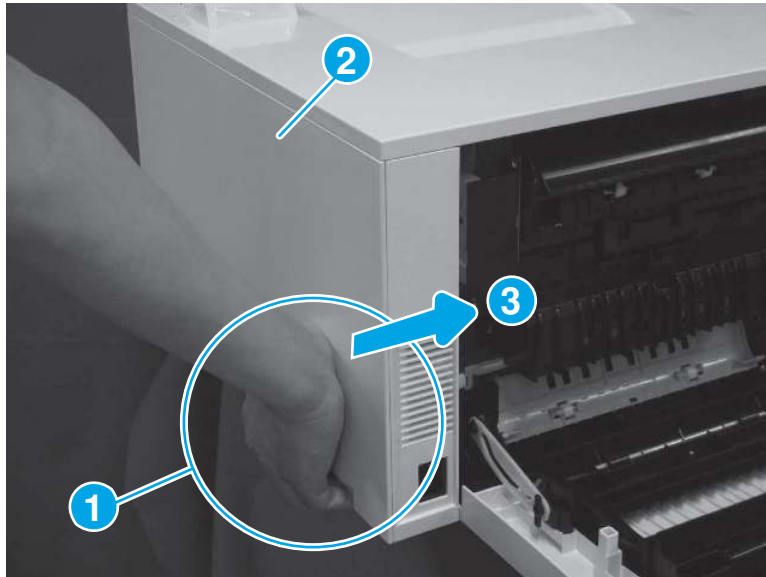
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-745 Release three tabs



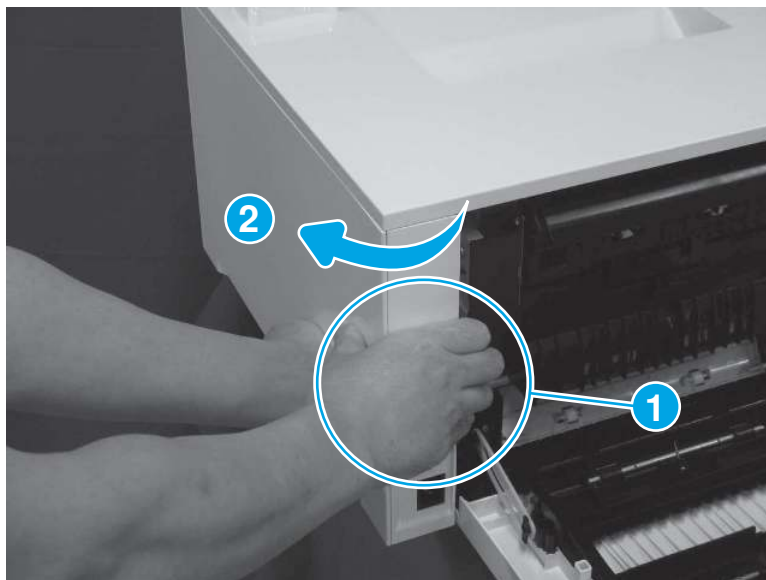
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-746 Release the rear cover corner



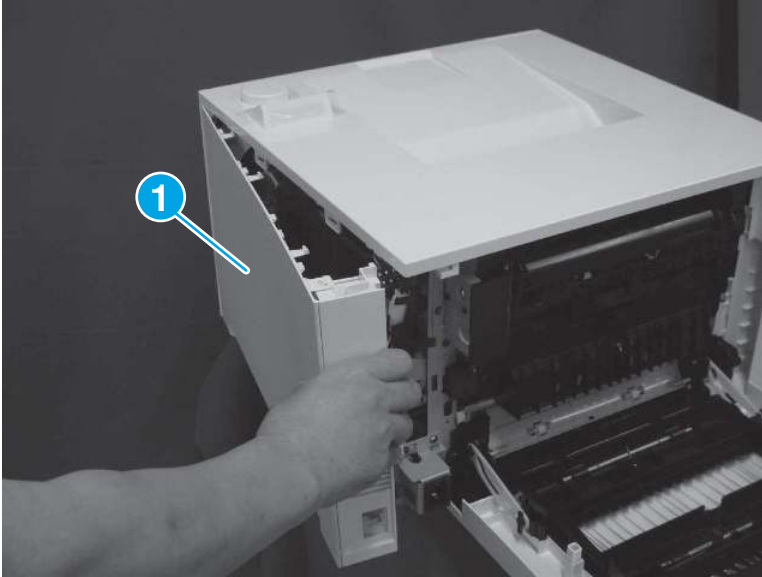
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-747 Disengage the cover corner




5. Remove the right cover (callout 1).

Figure 5-748 Remove the cover



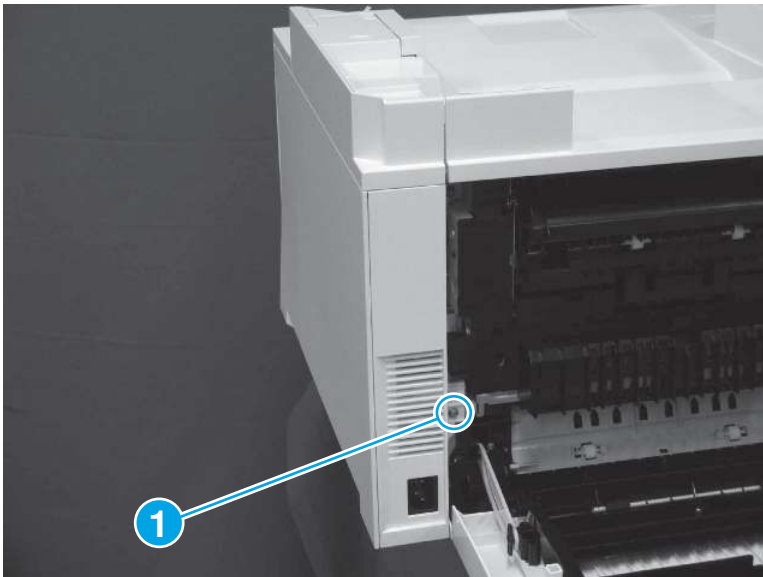
6. Remove the right cover (MFP)

Follow the procedure below to remove and replace the right cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

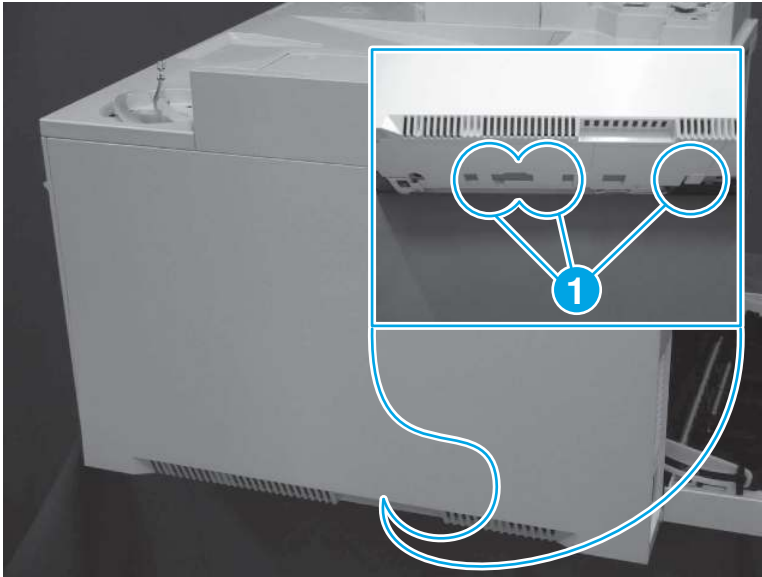
1. Remove one screw (callout 1).

Figure 5-749 Remove one screw



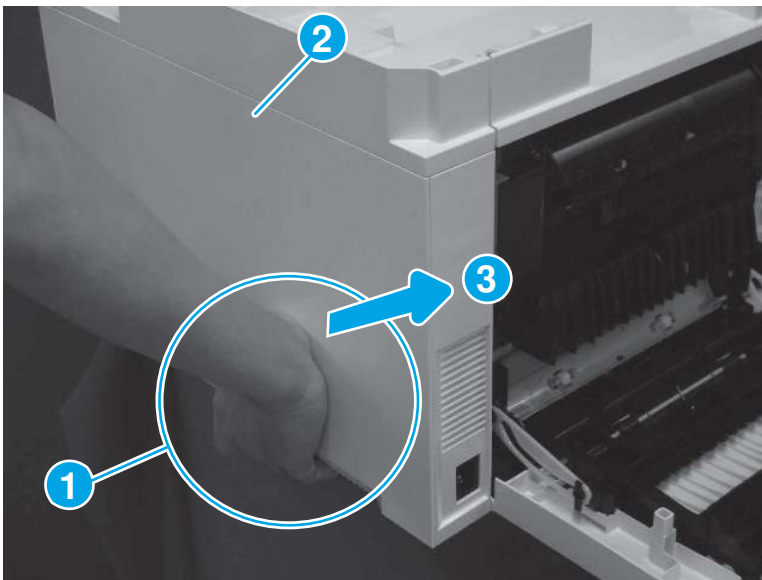
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-750 Release three tabs



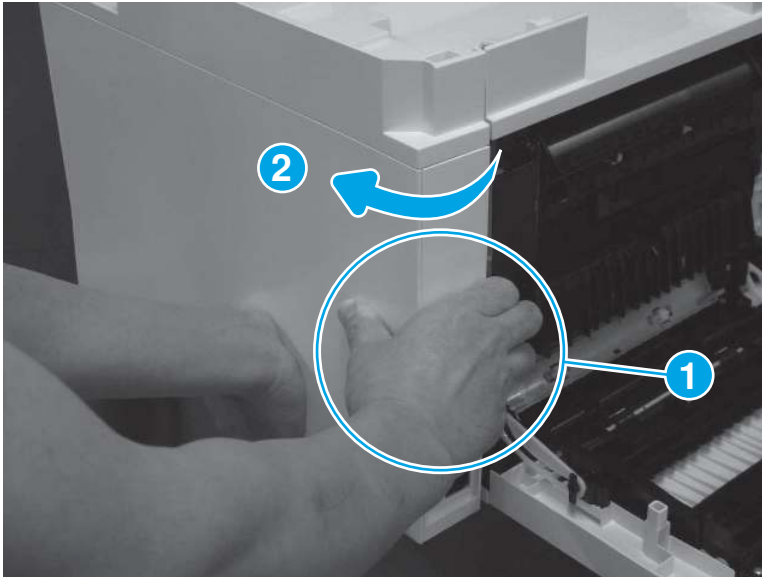
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-751 Release the rear cover corner



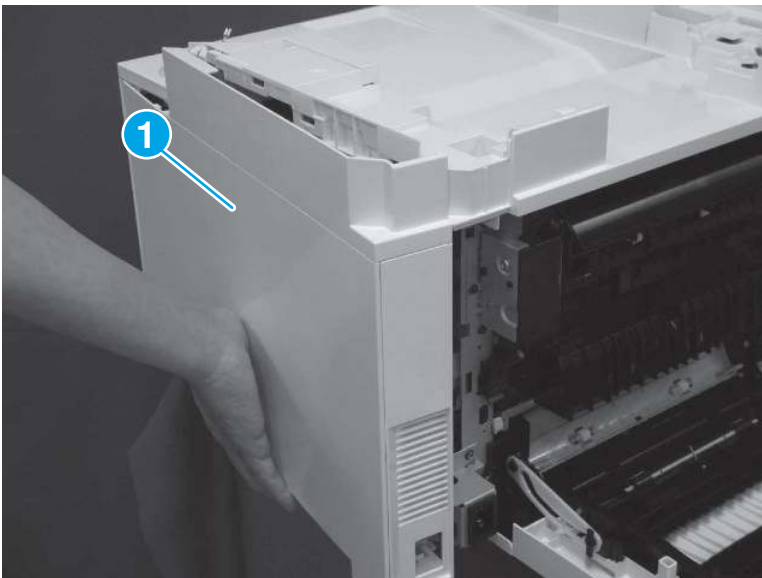
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-752 Disengage the cover corner



5. Remove the right cover (callout 1).


Figure 5-753 Remove the cover



7. Remove the front cover

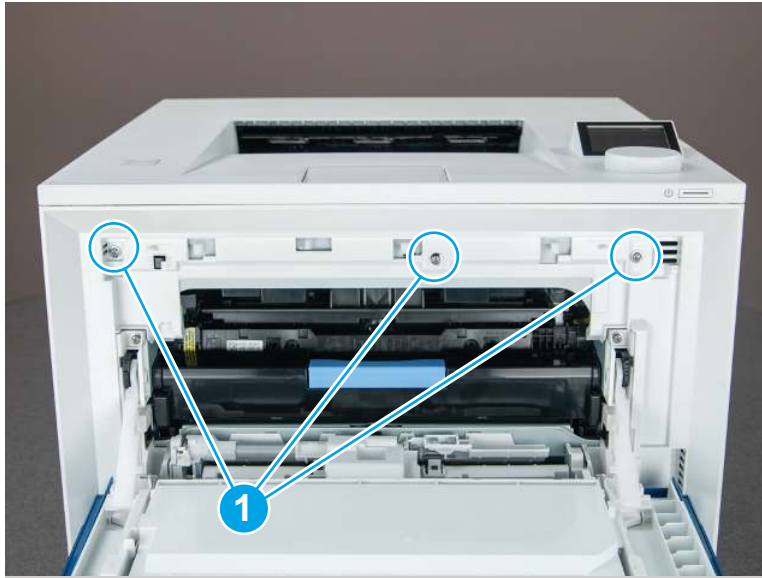
Follow the procedure below to remove and replace the front cover.

 **NOTE:** Front cover removal is **identical** for both SFP and MFP models.

 **Reinstallation tip:** Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

1. Remove three screws (callout 1).

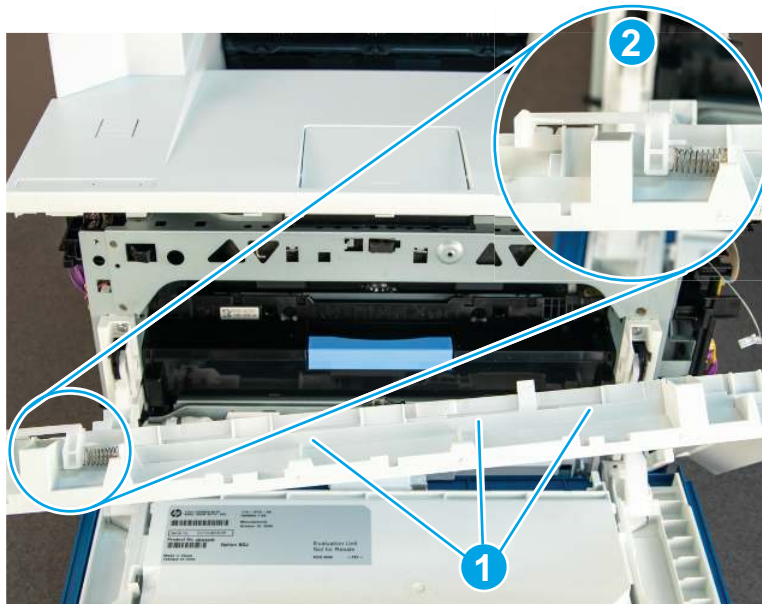
Figure 5-754 Remove three screws



2. Before proceeding, take note of the door release arm (callout 1). This arm can be easily dislodged when the cover is removed.

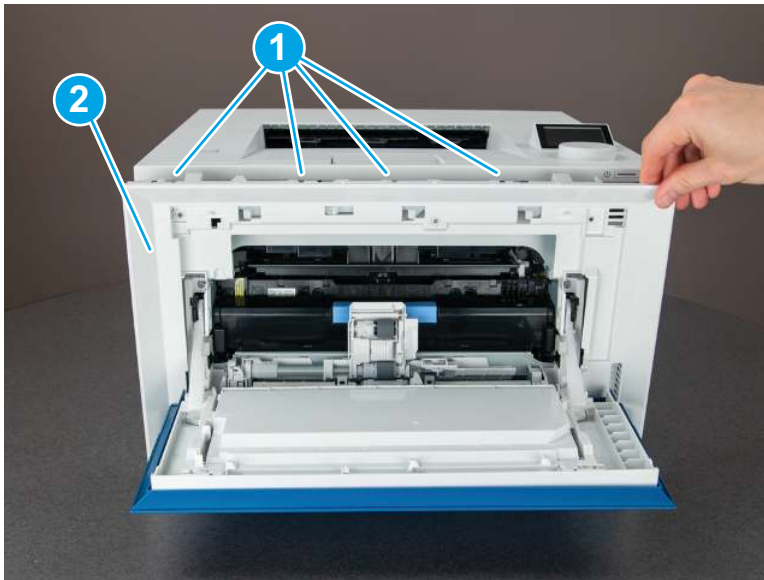
⚠ CAUTION: Do not lose the spring (callout 2) when removing the front cover.

Figure 5-755 Door release arm




3. Release four tabs (callout 1), and then remove the front cover (callout 2).

Figure 5-756 Remove the cover




8. Remove the top cover (SFP)

Follow the procedure below to remove and replace the top cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

1. **Wireless model only:** Raise and support the left side of the printer, remove one screw, and then separate the wireless PCA from the cover.

 **CAUTION:** Do not attempt to completely remove the wireless PCA. Instead, gently move it out of the way.


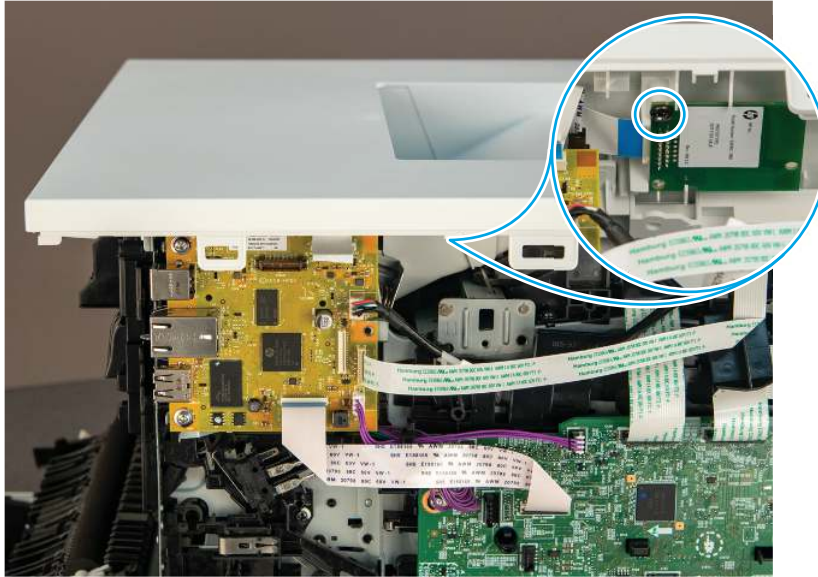
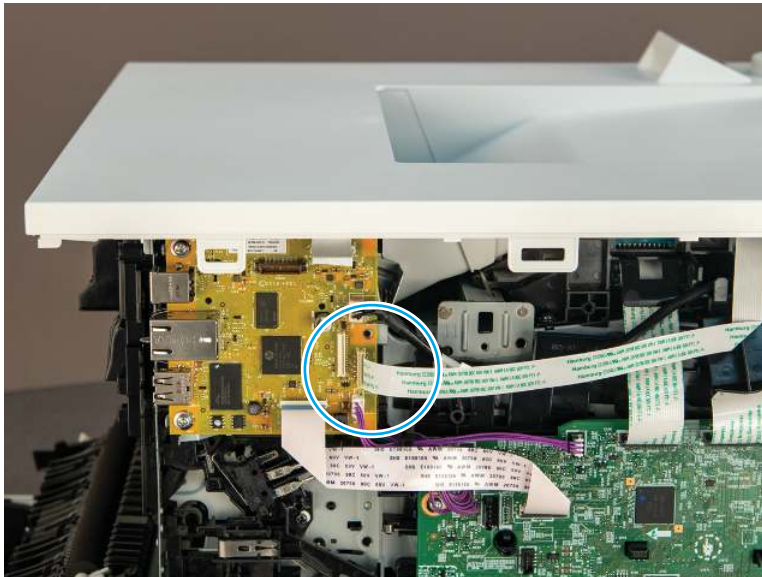
 **TIP:** To remove the screw without raising the printer, use a short-barrel screwdriver.

Figure 5-757 Remove one screw



2. Disconnect one flat-flexible cable (FFC).

Figure 5-758 Disconnect one FFC



3. Disconnect one FFC, and then remove one screw to release the ground wire.



NOTE: The front cover is shown installed in the figure below. However, this step is correct for removing the top cover.

Figure 5-759 Disconnect one FFC and remove one screw




4. Sliding the cover from the back of the printer towards the front to remove it.

Figure 5-760 Remove the cover



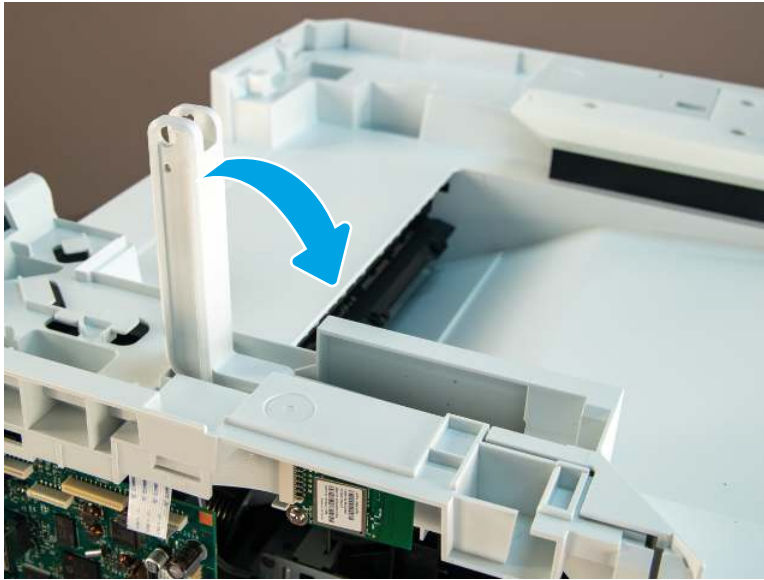
9. Remove the top cover (MFP)

Follow the procedure below to remove and replace the top cover (MFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

1. Close the ISA lift arm.

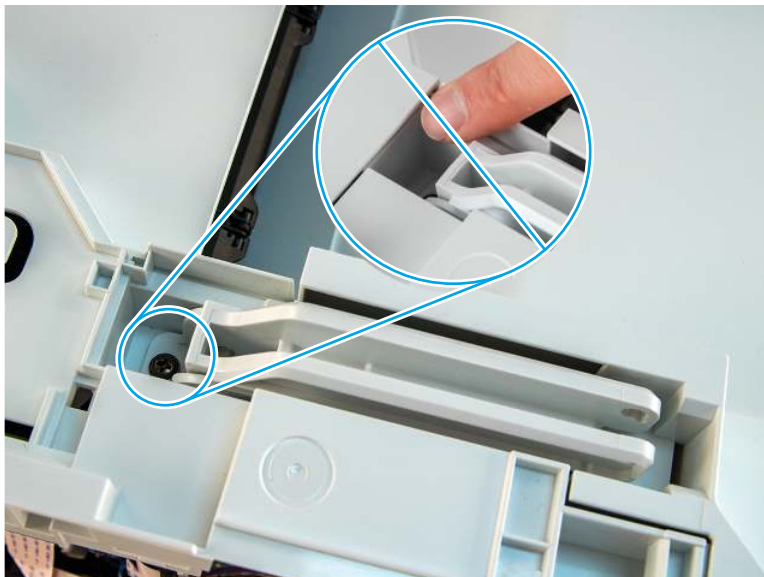
Figure 5-761 Close the ISA lift arm



2. Remove one screw.

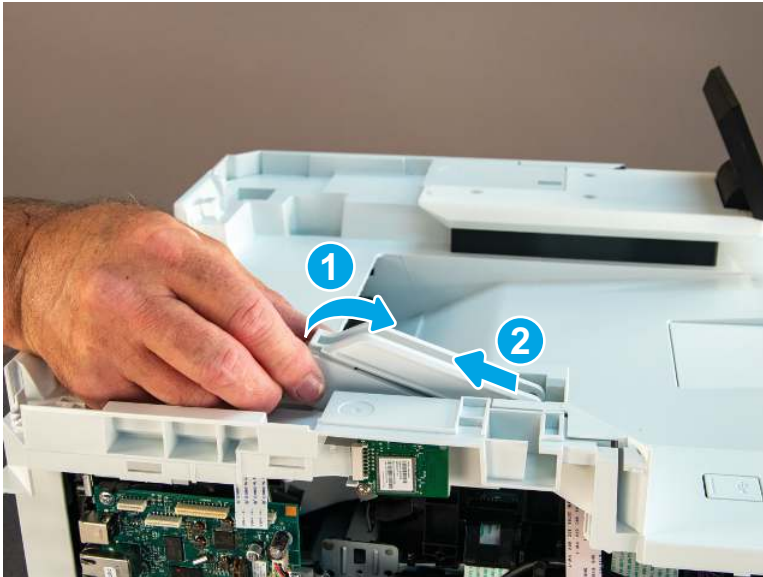
⚠ CAUTION: The support arm is spring loaded and can unexpectedly spring into the open position. To avoid injury, do not place a finger in the screw well when the support arm is in the closed position.

Figure 5-762 Remove one screw



3. Rotate one end of the lift arm up (callout 1), and then slide the lift arm as shown below (callout 2) to release it. Remove the lift arm.

Figure 5-763 Remove the lift arm



4. Do the following:
 - a. Disconnect one FFC (control panel; callout 1).
 - b. Remove one screw (callout 2), and then separate the wireless PCA from the top cover.


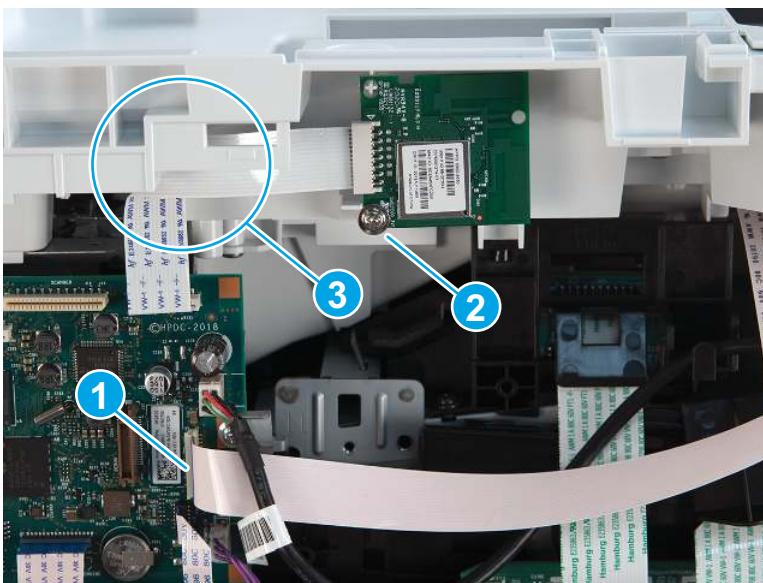
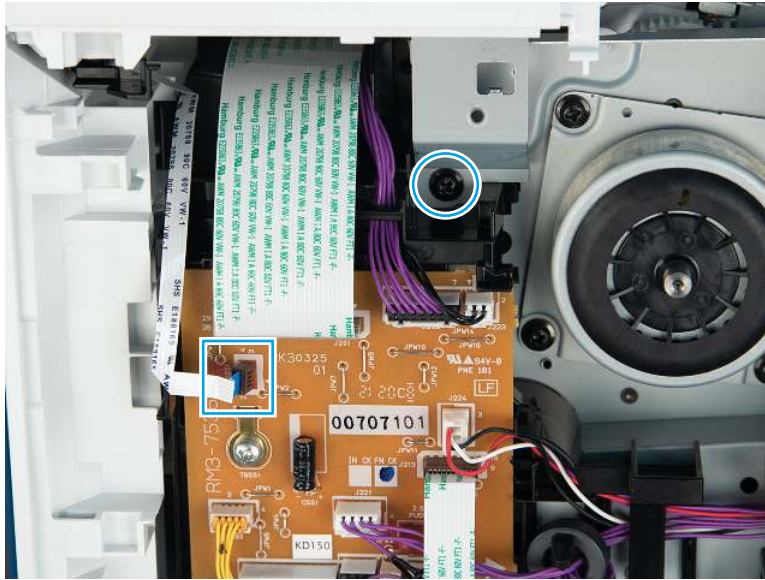
 **NOTE:** The wireless PCA does not need to be completely removed. Instead, release the FFC from the retainer (callout 3), and then gently move it out of the way.

Figure 5-764 Disconnect FFC and move the wireless PCA



5. Disconnect one FFC (power button), and then remove one screw (grounding sheet-metal plate).

Figure 5-765 Disconnect one FFC and remove one screw



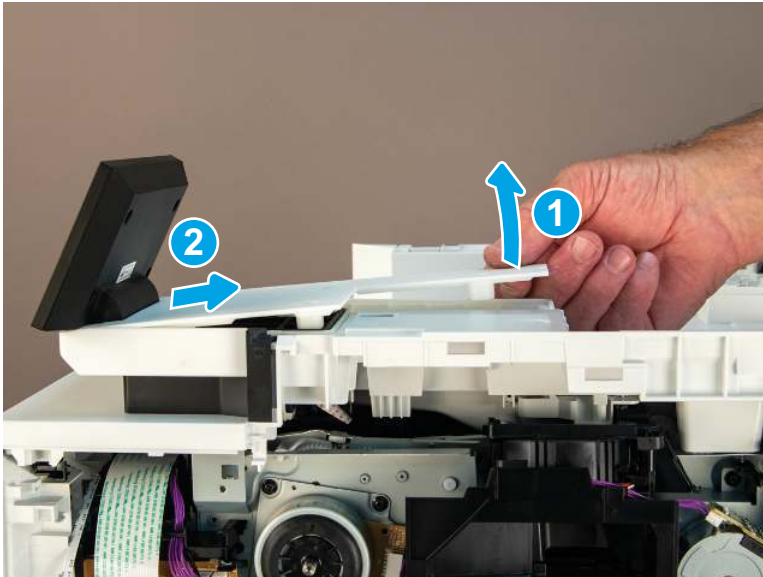
6. Remove three screws.

Figure 5-766 Remove three screws




7. Release one tab and rotate one end of the base cover up (callout 1), and then slide the cover as shown (callout 2) to remove it.

Figure 5-767 Remove the cover



8. Disconnect two FFCs.

 **NOTE:** These are zero-insertion force (ZIF) connectors. To remove the FFCs, first release the locking clip on the connector, and then pull the cable straight out of the connector.


 **TIP:** For reinstallation, make sure that the line of the FFC is parallel with the body.

Figure 5-768 Disconnect two FFCs



9. Remove four screws.


 **NOTE:** Two of the screws are self-tapping threads (black), and two of the screws are machine thread (silver).

Figure 5-769 Remove four screws



10. Lift the control panel and base straight up and off of the printer to remove them together.


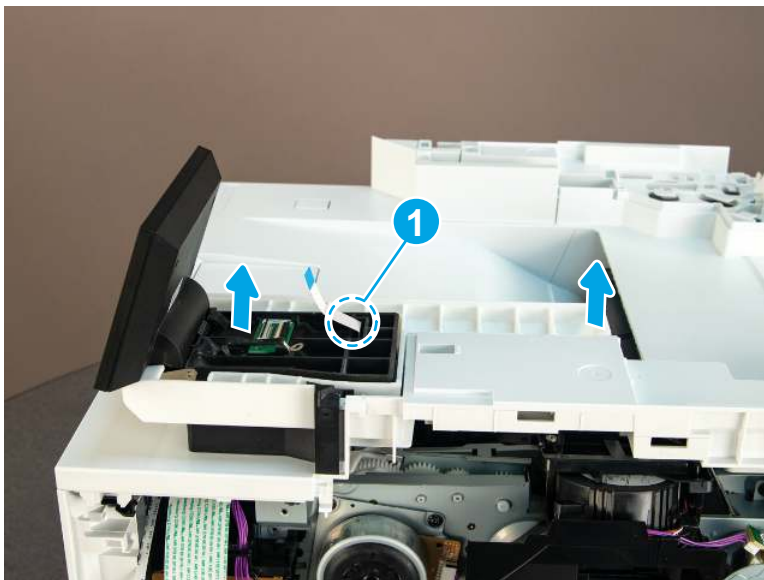
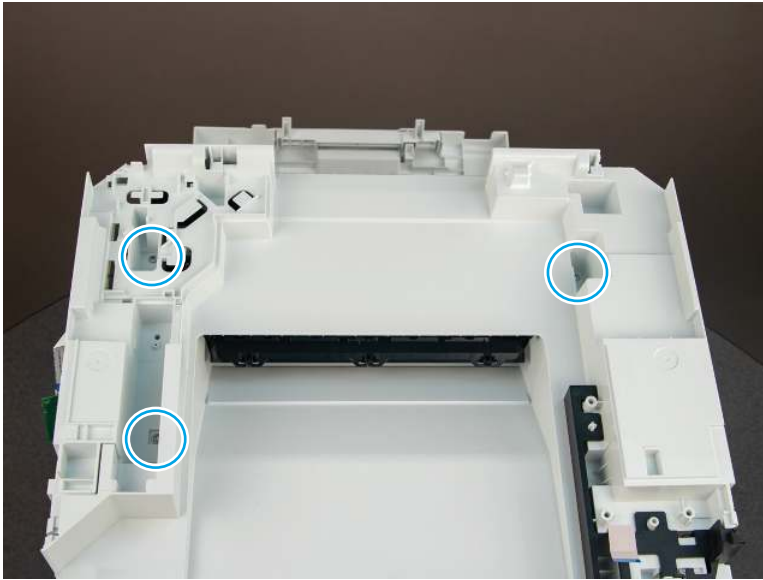
 **NOTE:** When handling the assembly, do not lose the ferrite (callout 1).

Figure 5-770 Remove control panel and base



11. Remove three screws.

Figure 5-771 Remove three screws



12. Sliding the cover from the back of the printer to the front to remove it.


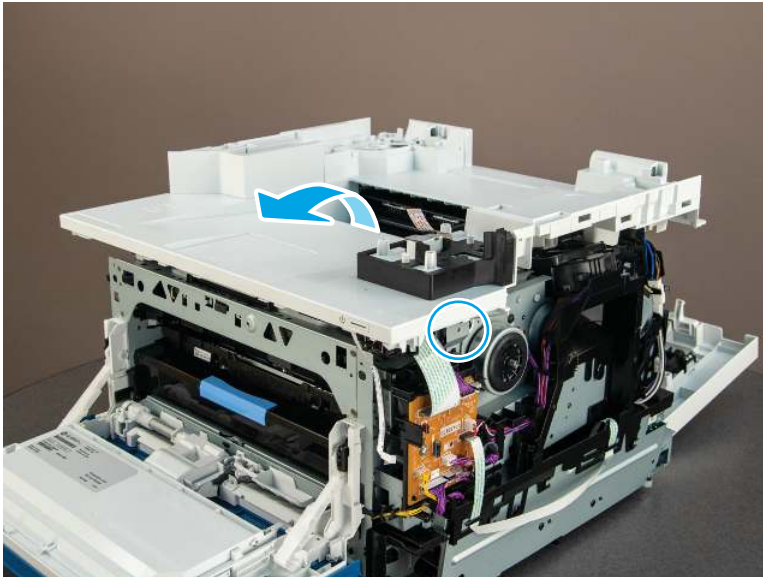
 **TIP:** Slightly move the control-panel ground bracket (circled) back and forth to help release the top cover.

Figure 5-772 Remove the cover



13. **When the cover is reinstalled:** Make sure that the front USB assembly is correctly positioned under the cover.

Figure 5-773 Front USB assembly



10. Remove the formatter PCA

Follow the procedure below to remove and replace the formatter PCA.


CAUTION:  ESD sensitive part.

1. Disconnect all of the connectors on the formatter PCA.

Figure 5-774 Disconnect all of the connectors (SFP/MFP)

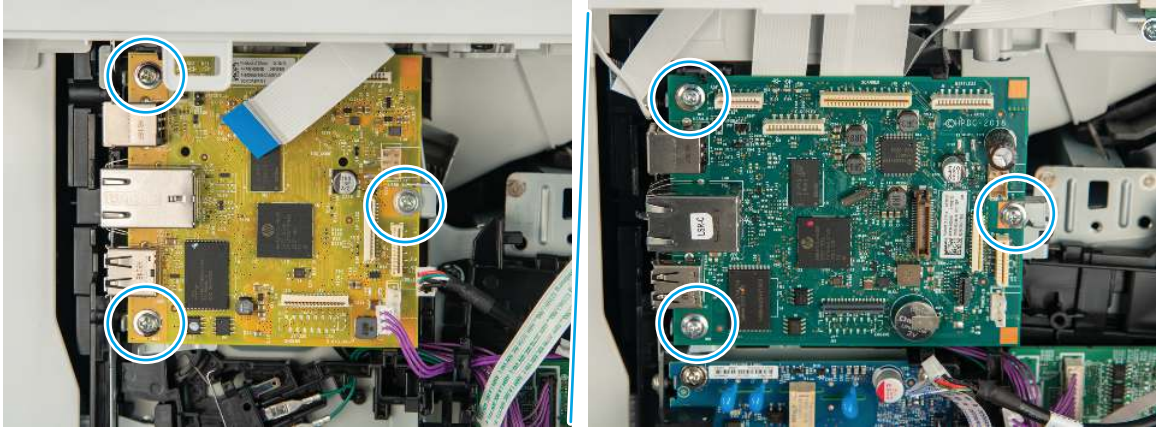


2. Remove three screws, and then remove the formatter PCA.

 **Reinstallation tip:** If a replacement formatter is being installed, make sure to read and follow the special installation instructions in the topic (located immediately after the unpack and recycle step).

The formatter must be paired with the ECU/DCC to be functional.

Figure 5-775 Remove the formatter PCA (SFP/MFP)

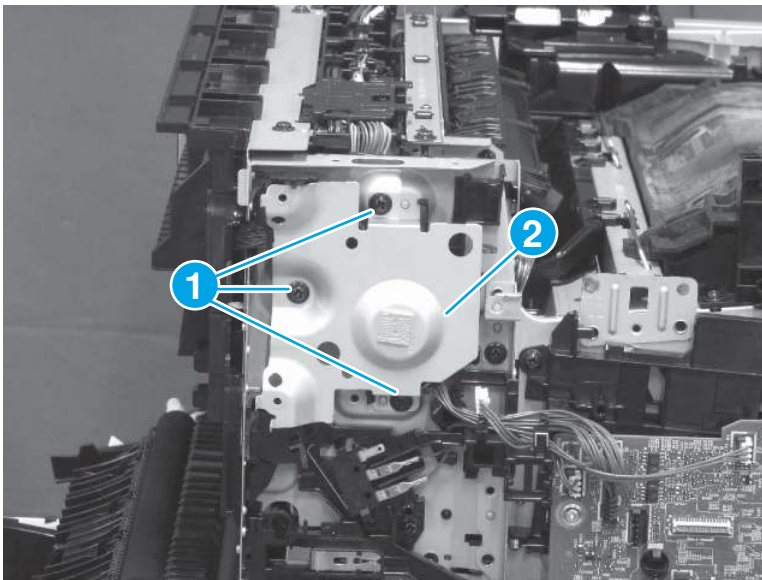


11. Remove the interlock holder assembly

Follow the procedure below to remove and replace the interlock holder assembly.

1. Remove three screws (callout 1, and then remove the plate (callout 2).

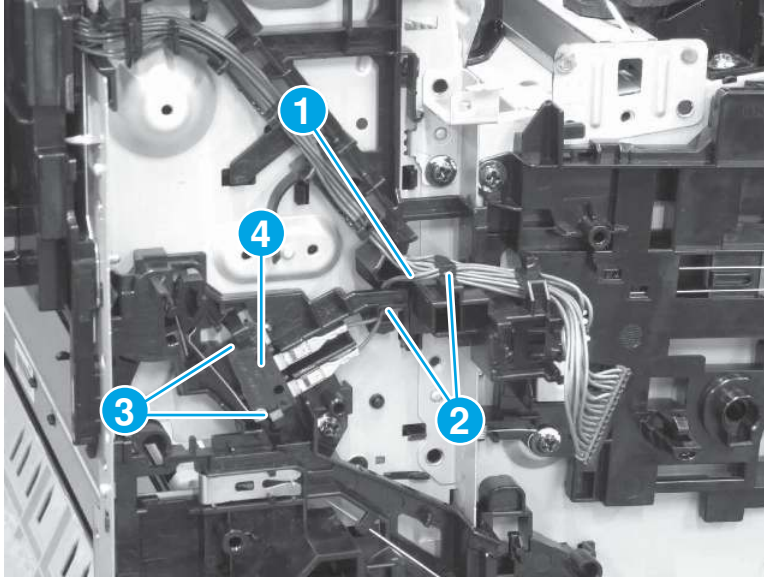
Figure 5-776 Remove the plate



2. Release the cable (callout 1) from the guides (callout 2), release two tabs (callout 3), and then separate the interlock switch (callout 4) from the holder.

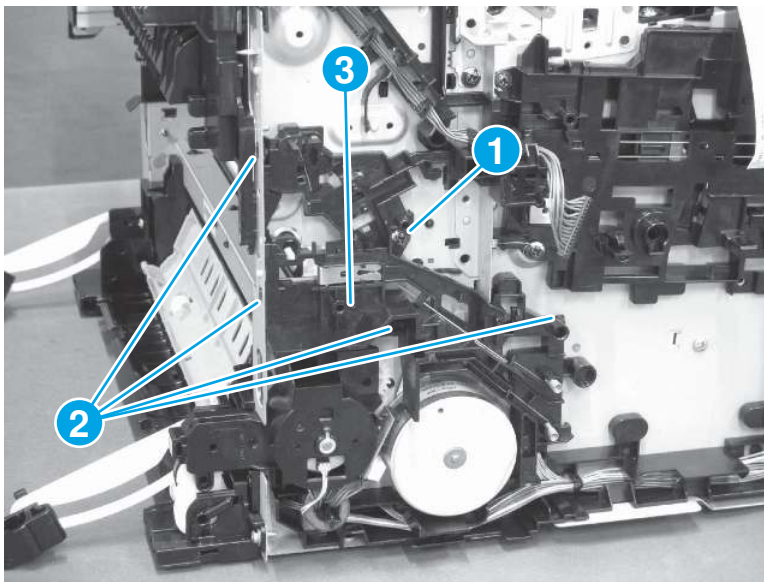
CAUTION: Do not attempt to completely remove the interlock switch. It is still connected to the wire cables.

Figure 5-777 Separate the interlock switch from the holder



3. Remove one screw (callout 1), release four tabs (callout 2), and then remove the interlock holder assembly (callout 3).

Figure 5-778 Remove the interlock holder assembly

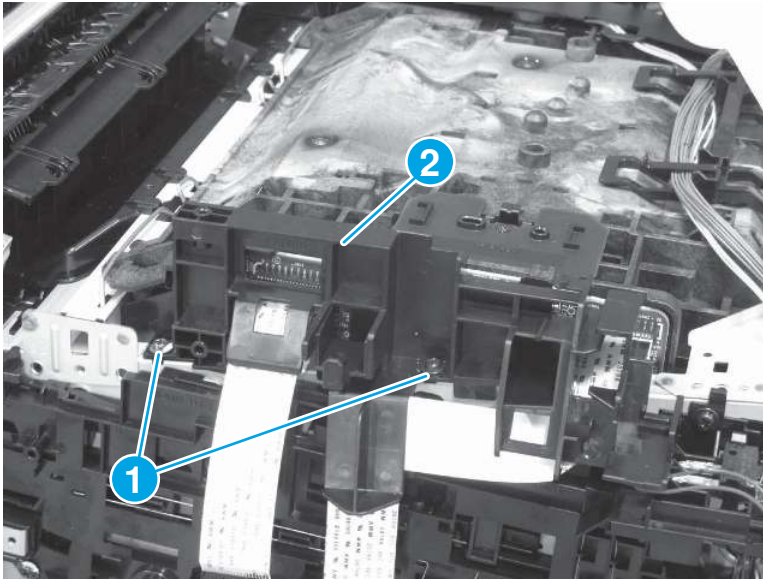


12. Remove the PCA holder assembly

Follow the procedure below to remove and replace the PCA holder assembly.

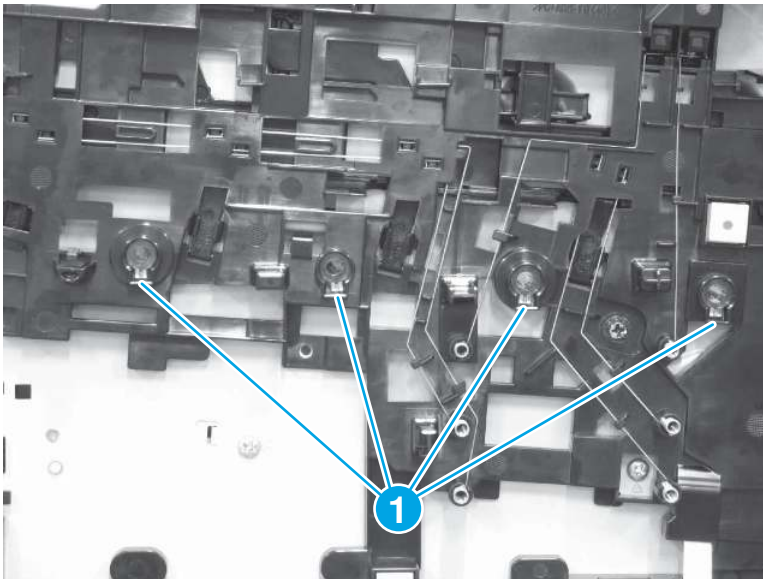
1. Remove two screws (callout 1), and then remove the guide (callout 2).

Figure 5-779 Remove the guide



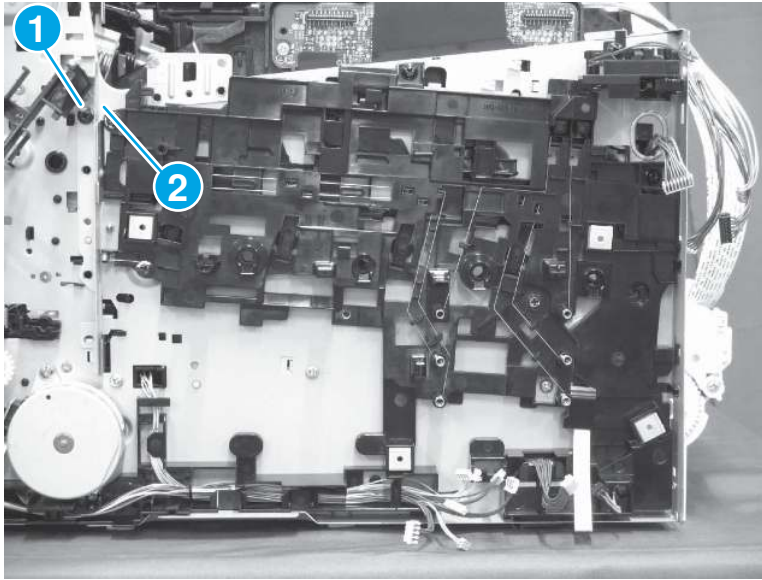
2. Remove four light guides (callout 1).

Figure 5-780 Remove four light guides



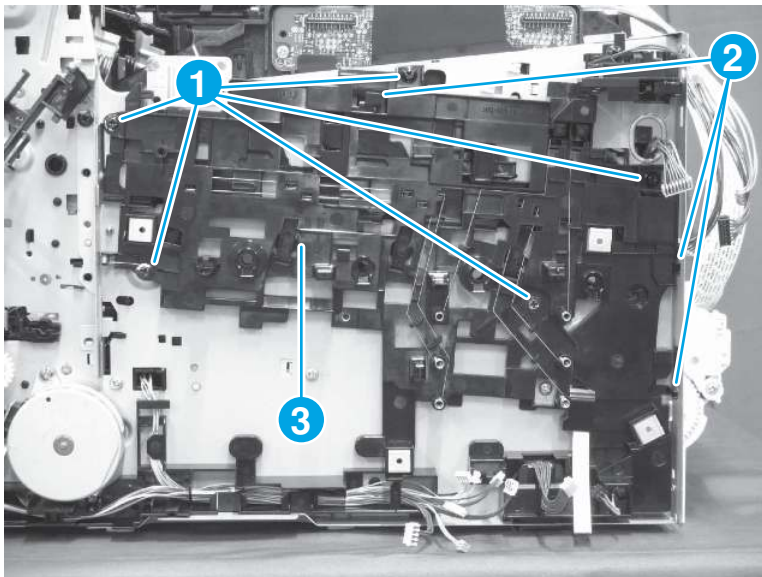
3. Remove one screw (callout 1), and then remove the sheet-metal bracket (callout 2).

Figure 5-781 Remove the bracket



4. Remove five screws (callout 1), release three tabs (callout 2), and then remove the PCA holder assembly (callout 3).

Figure 5-782 Remove the PCA holder assembly

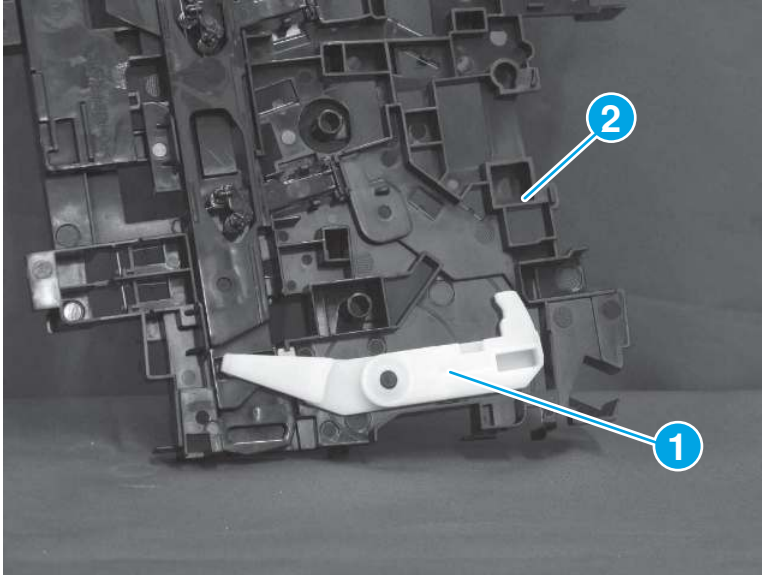


5. **For a replacement PCA holder assembly only.** Remove the rail link (callout 1) from the PCA holder assembly, and then install it on the replacement PCA assembly.



NOTE: If the rail link is not on the PCA holder assembly, check the printer chassis.

Figure 5-783 Remove the rail link



13. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

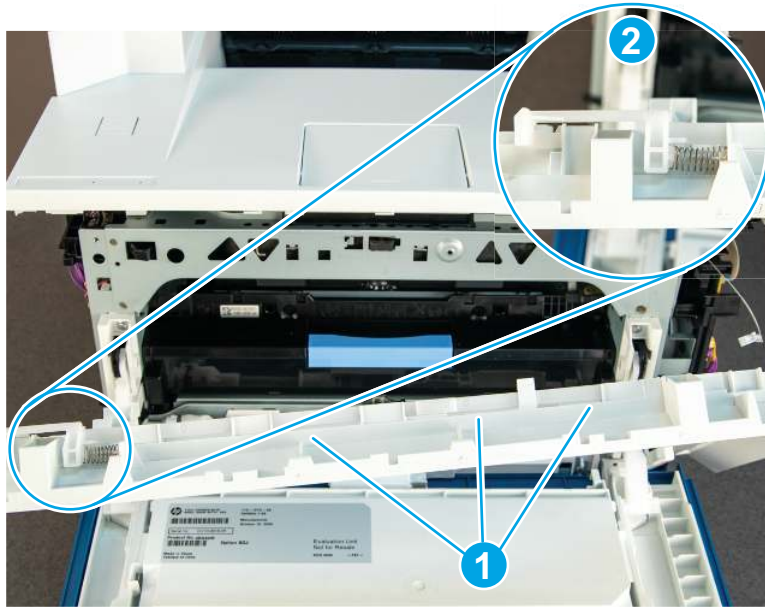
14. Special installation instructions - Front cover

Follow the special instructions below to install the front cover.

 **NOTE:** Front cover installation is **identical** for both the SFP and MFP models.

1. If the door release arm becomes dislodged when handling the cover, install it as shown below (callout 1, 2).

Figure 5-784 Door release arm installed



2. At the right and left side of the front cover, align the holes (callout 1) in the cover with the alignment pins (callout 2) on the chassis.

Figure 5-785 Cover alignment pins



3. Rotate the top of the cover towards the printer to install it.


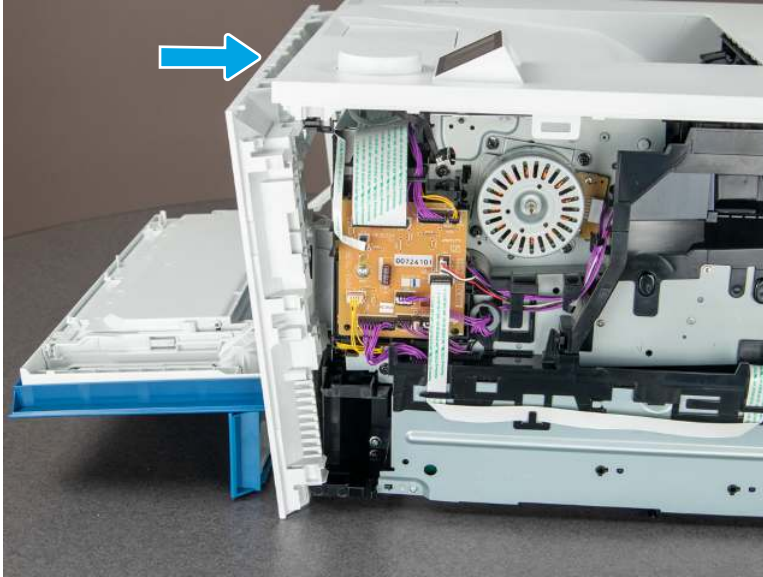
 **IMPORTANT:** Verify that the spring loaded door release button (on the left side of the cover) correctly functions.

Figure 5-786 Install the cover



Removal and replacement: Registration density sensor

Learn about registration density sensor removal.



[View a video of removing and replacing the registration density sensor.](#)

Mean time to repair: 90 minutes

Service level: Difficult

Before performing service

Turn the printer power off

- Disconnect the power cable.



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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-44 Part information

Part number	Part description
RM2-2710-000CN	Density detect sensor assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- Small flat-blade screwdriver
- Needle-nose pliers

After performing service

Turn the printer power on


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

Post service test

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

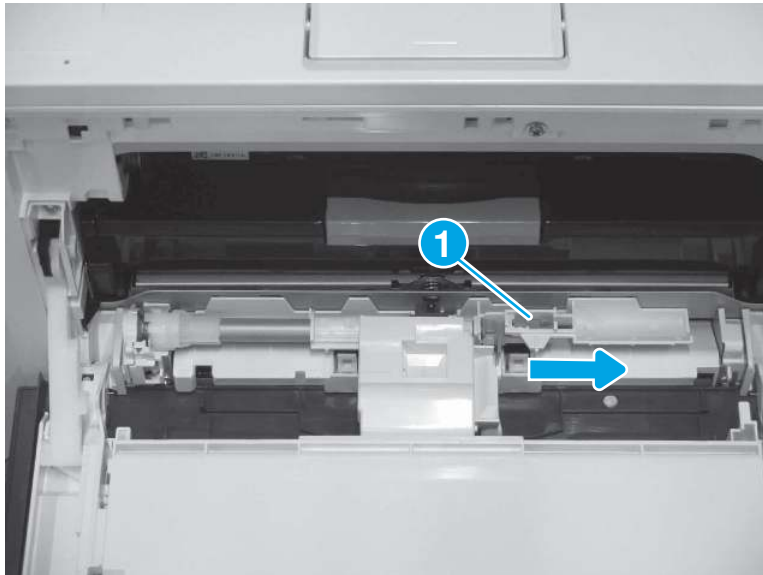
1. Remove the Tray 1 pickup roller assembly

Follow the procedure below to remove and replace the Tray 1 pickup roller assembly.

 **Reinstallation tip:** Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

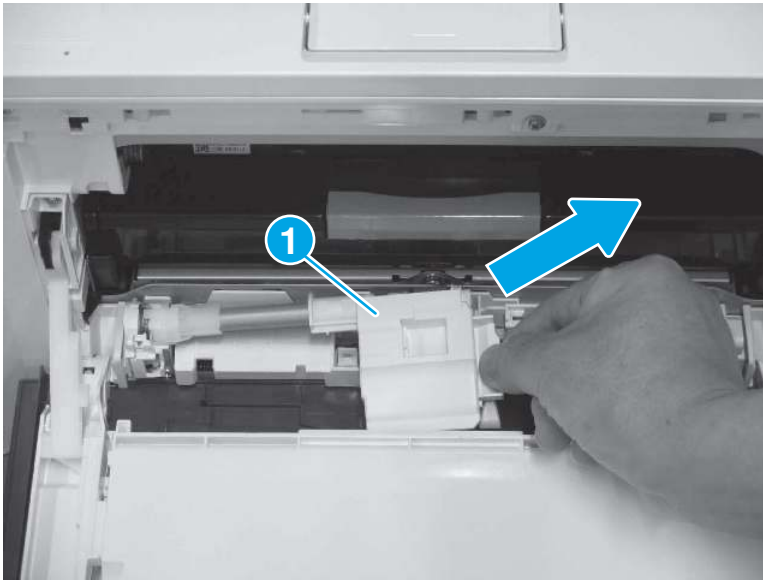
1. Open the cartridge door, and then depress the lever (callout 1) and slide it as shown below.

Figure 5-787 Release the Tray 1 pickup roller assembly




2. Slide the pickup roller assembly (callout 1) as shown below to remove it.

Figure 5-788 Remove the Tray 1 pickup roller assembly



2. Remove the intermediate transfer belt (ITB)

Follow the procedure below to remove and replace the ITB.

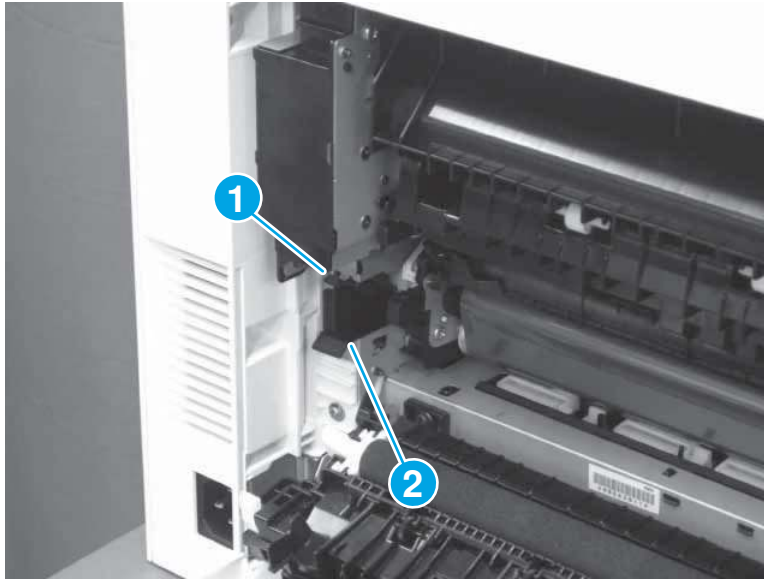
 **IMPORTANT:** Before ITB removal, do the following:

1. Make sure that the cartridge door and rear door are closed.
2. Turn the printer power on (initial rotation), and then turn the power off.
3. Open the cartridge door and rear door.
4. Pull the cartridge tray out of the printer until it stops.

Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

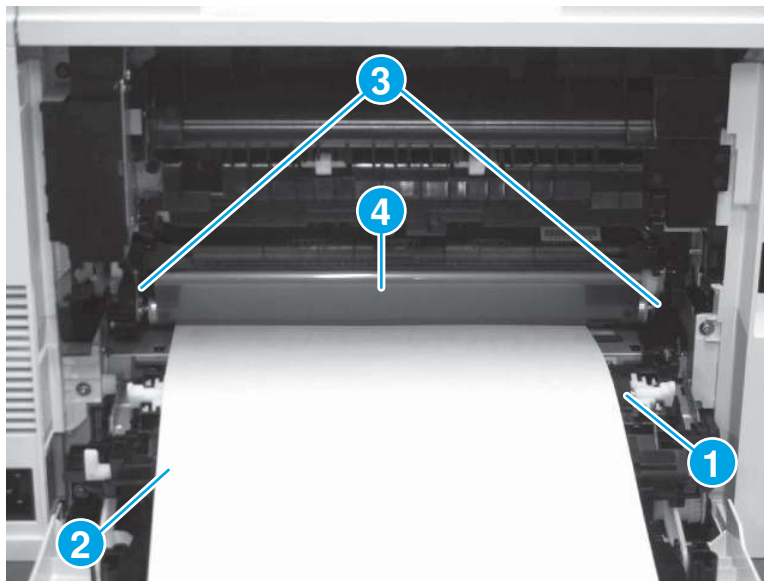
1. Press the tab (callout 1) while pulling out on the coupling release lever (callout 2).

Figure 5-789 Pull the coupling release lever out




2. Do the following:
 - a. Cover the secondary transfer (T2) roller (callout 1) with a sheet of clean paper (callout 2).
 - b. Grasp the left- and right-side ITB grips (callout 3), and then pull the ITB (callout 4) straight out of the printer to remove it.


Figure 5-790 Remove the ITB



3. Remove the left cover (SFP)

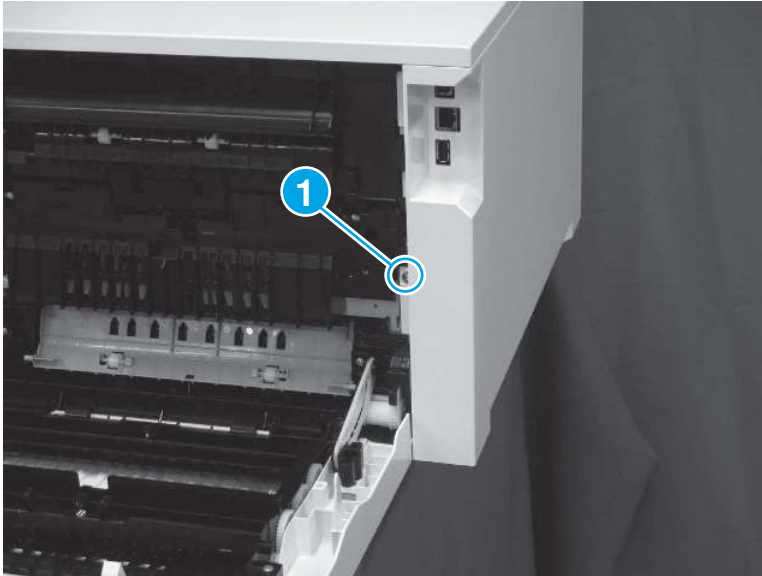
Follow the procedure below to remove and replace the left cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

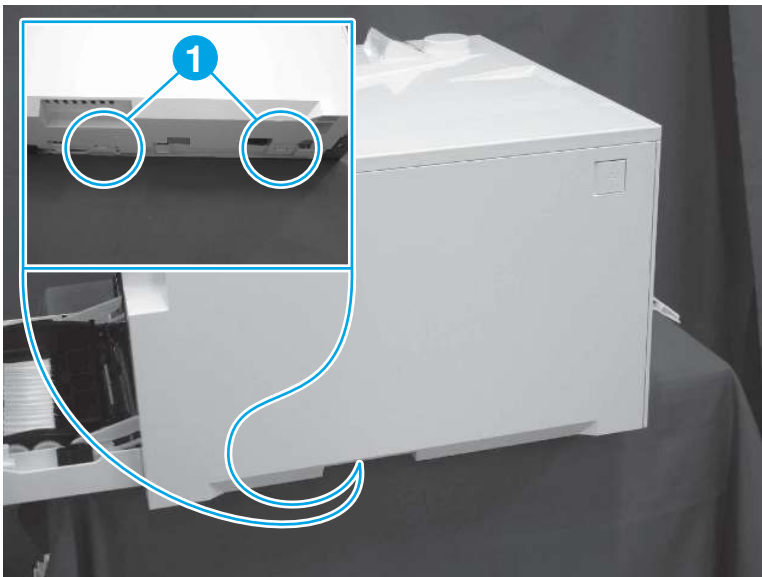
1. Remove one screw (callout 1).

Figure 5-791 Remove one screw



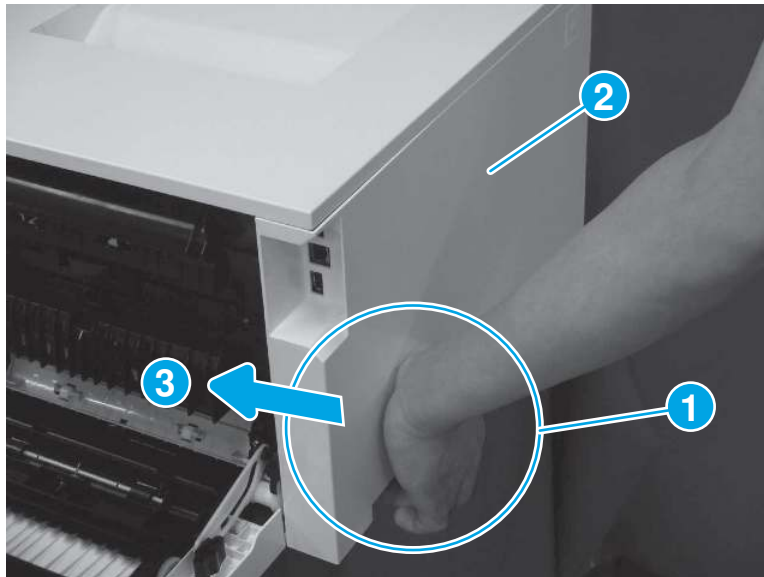
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-792 Release two tabs



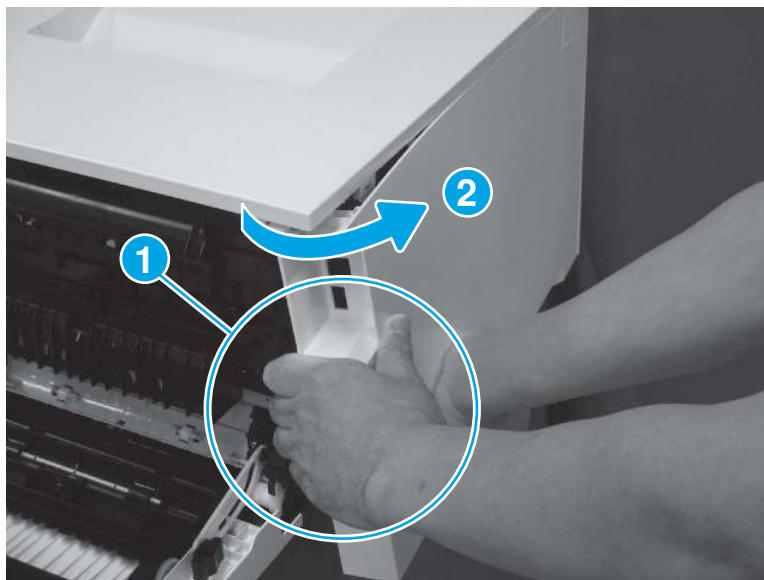
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-793 Release the rear cover corner



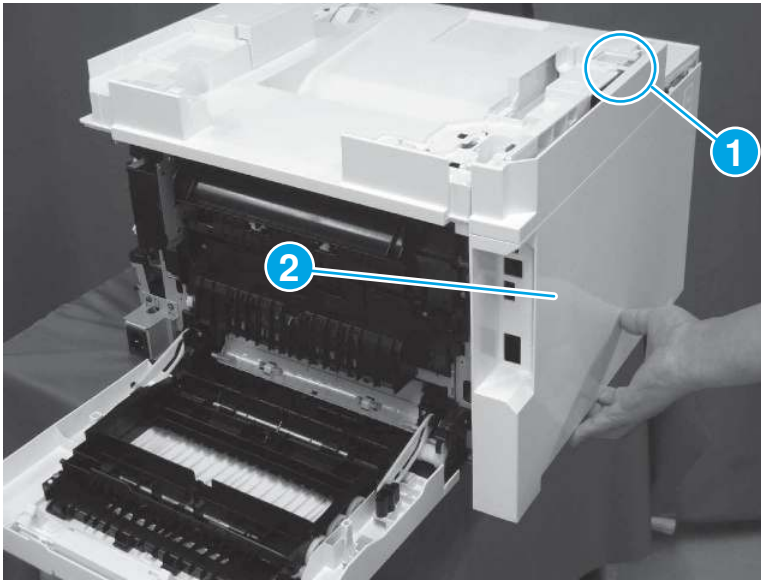
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-794 Disengage the cover corner




5. Remove the left cover (callout 1).


Figure 5-795 Remove the cover



4. Remove the left cover (MFP)

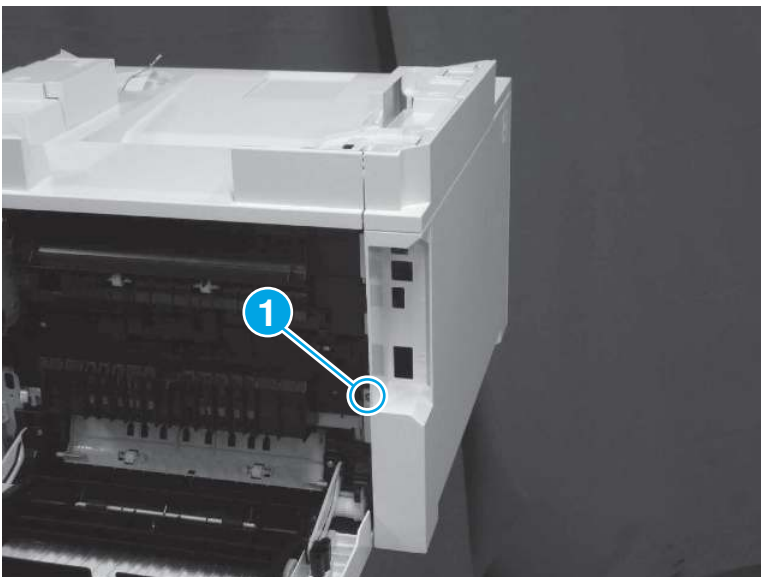
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

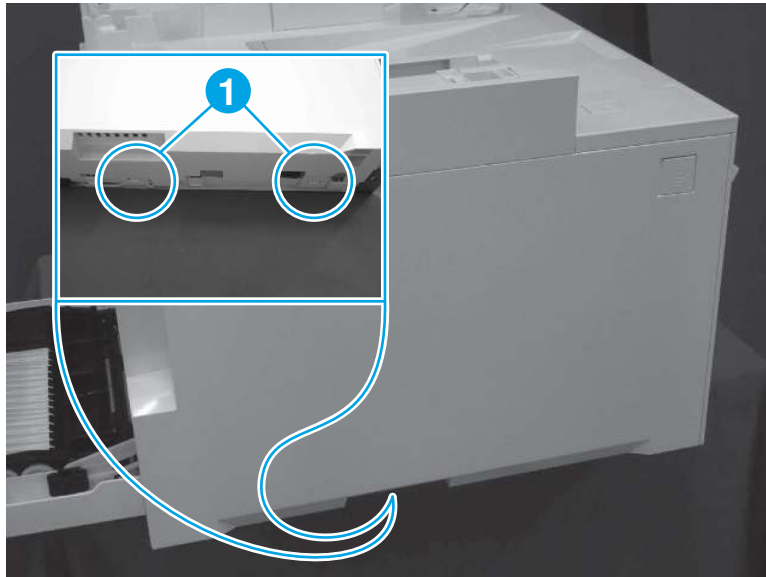
1. Remove one screw (callout 1).

Figure 5-796 Remove one screw



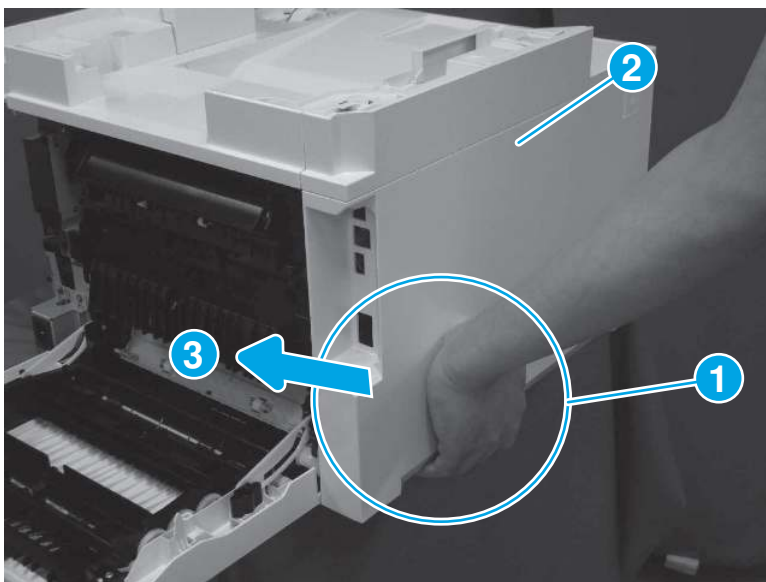
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-797 Release two tabs



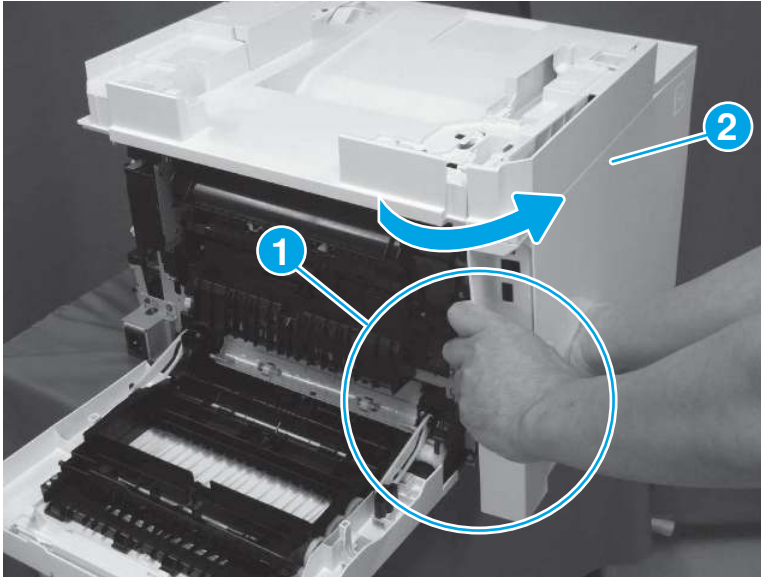
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-798 Release the rear cover corner



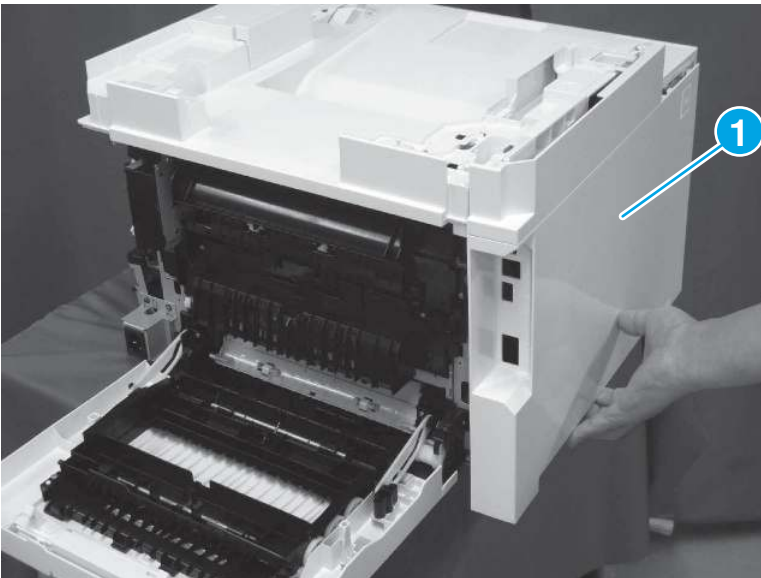
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-799 Disengage the cover corner



5. Remove the left cover (callout 1).

Figure 5-800 Remove the cover

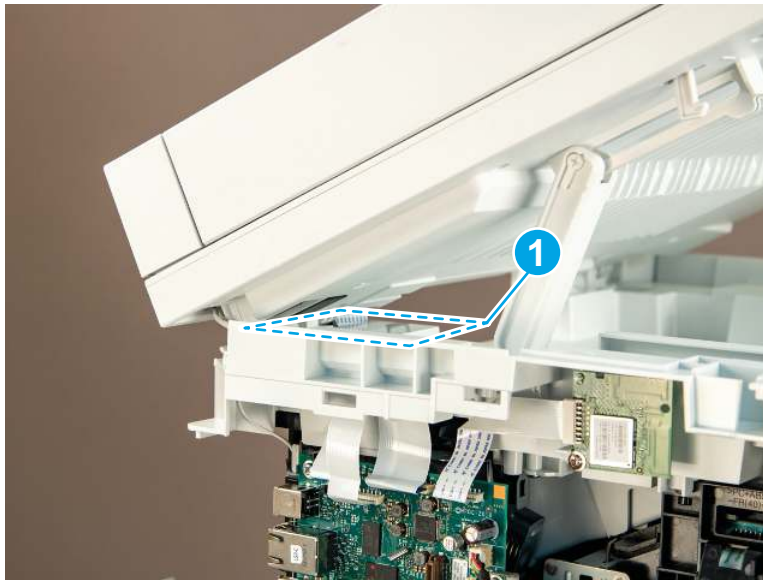


5. Remove the ISA (MFP)

Follow the procedure below to remove and replace the ISA.

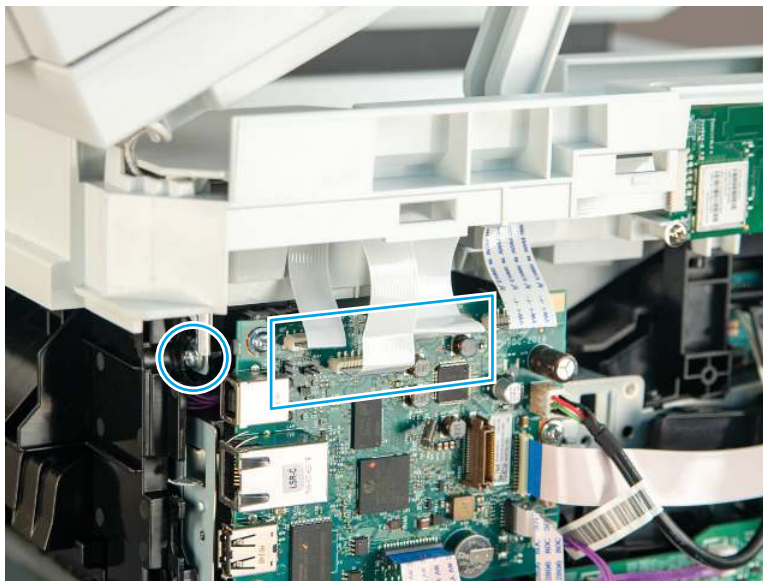
1. Open the ISA, and then remove the ISA FFC cover (callout 1).

Figure 5-801 Remove the FFC cover



2. Disconnect three FFCs, and then remove one screw to release the ground cable.

Figure 5-802 Disconnect FFCs and remove screw



3. Release one tab (callout 1), and then rotate the ISA slider pin (callout 2) towards the front of the printer to release it. Remove the slider pin.

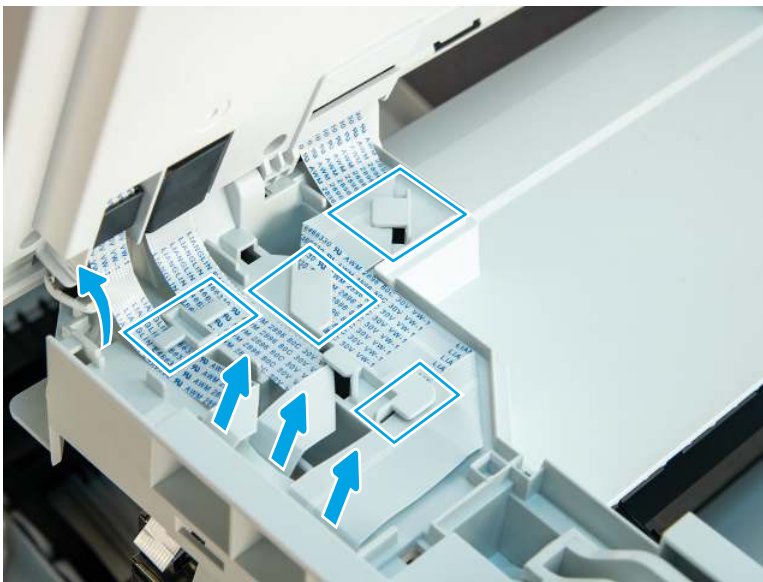
⚠ CAUTION: When the slider pin is removed, the ISA is not captive and can suddenly detach from the printer.

Figure 5-803 Remove the slider pin



4. Support the ISA, release the FFCs from the retainers, and then carefully pass the FFCs and the ground wire up through the slots in the top cover.

Figure 5-804 Release the FFCs and ground wire



5. Slide ISA as shown below to release it.

Figure 5-805 Release the ISA



6. Remove the ISA.

Figure 5-806 Remove the ISA



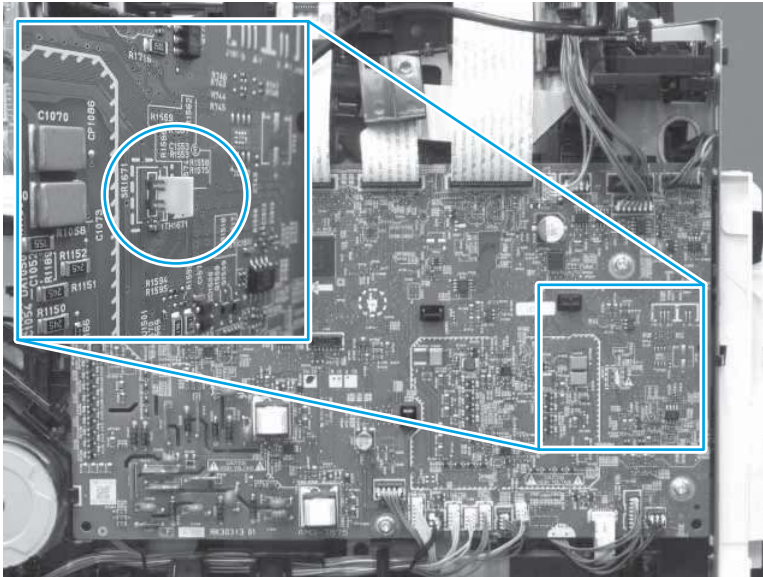
6. Remove the engine controller PCA

Follow the procedure below to remove and replace the engine controller PCA (ECU).

 **CAUTION:**  ESD sensitive part.

1. Before proceeding, take note that there is an environmental sensor mounted on the engine controller PCA. **Do not** apply pressure to this sensor to avoid damaging it.

Figure 5-807 Engine controller environmental sensor location

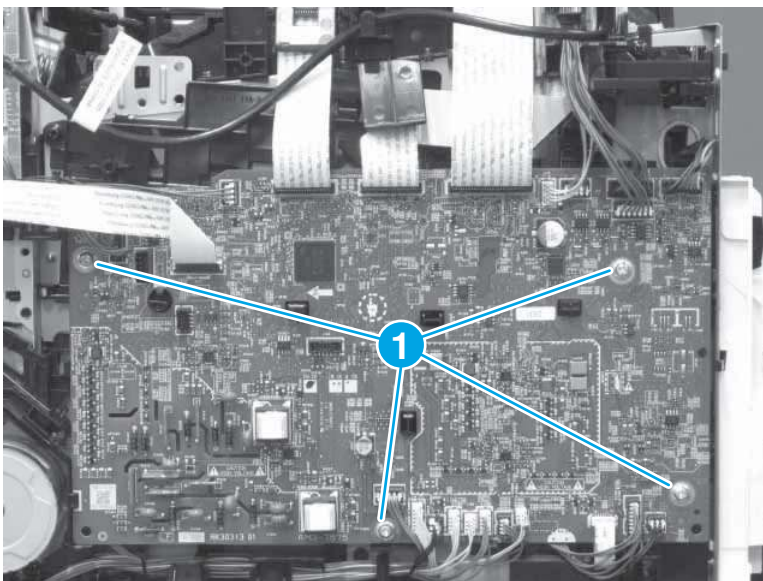


2. Disconnect all of the connectors on the engine controller PCA, and then remove four screws (callout 1).

CAUTION: Before proceeding take note of the media width sensors connectors and wire harnesses at ECU PCA locations J163 (media width sensor 2; yellow wire harness) and J165 (media width sensor 1; red wire harness). These connectors and wire harness are interchangeable. The PCA is embossed with **YELLOW** (connector J163) and **RED** (connector J165).

Make sure that the correct wire harness is plugged into the appropriate connector to avoid unexpected printer operation.

Figure 5-808 Disconnect connectors and remove screws



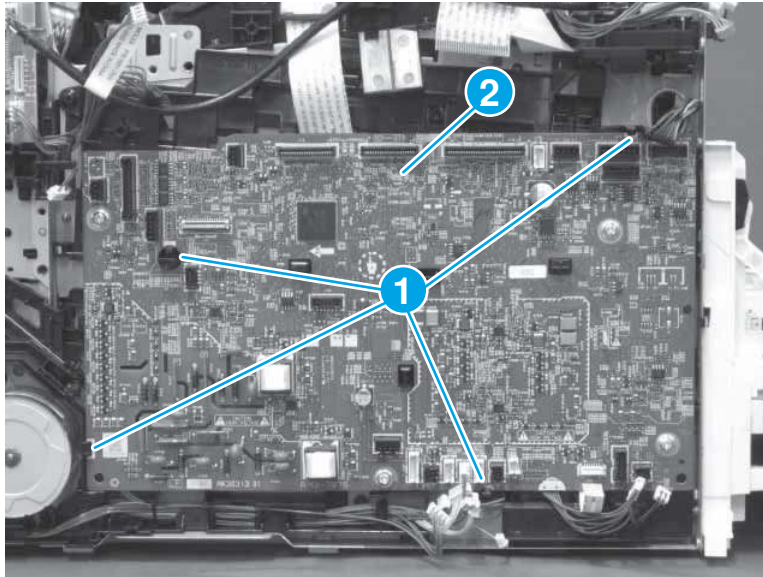
3. Release four tabs (callout 1), and then remove the engine controller PCA (callout 2).

CAUTION: There are three clear plastic light guides installed in the PCB holder behind the PCA that are not captive. Do not lose these parts when the PCA is removed.

Reinstallation tip: If a replacement formatter is being installed, **make sure** to read and follow the special installation instructions in the topic (located immediately after the unpack and recycle step).

The ECU/DCC must be paired with the formatter to be functional.

Figure 5-809 Remove the engine controller PCA



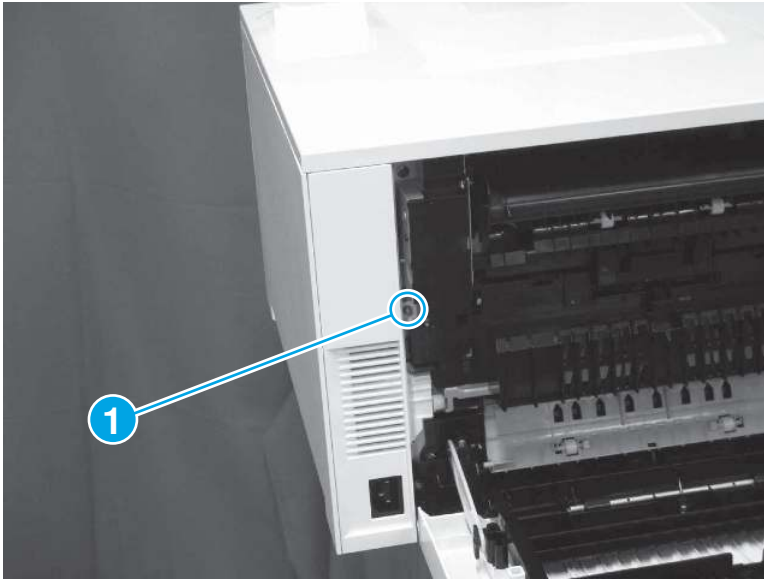
7. Remove the right cover (SFP)

Follow the procedure below to remove and replace the right cover (SFP).

NOTE: The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

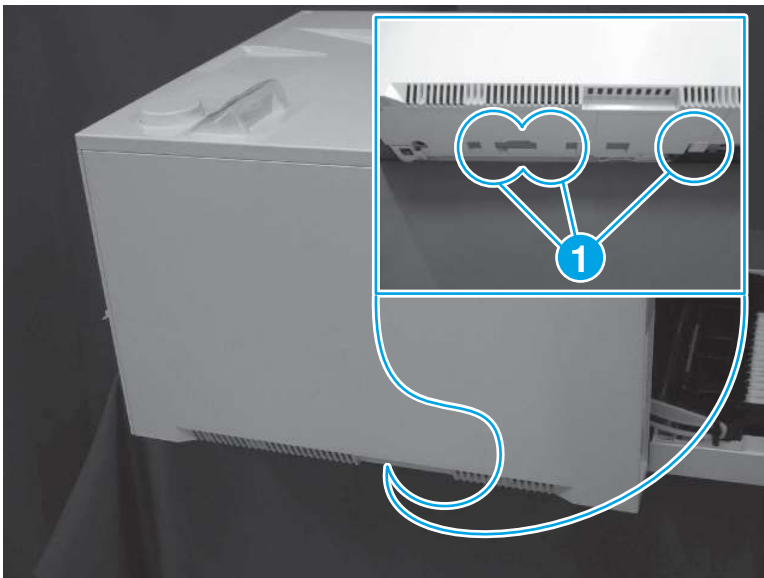
1. Remove one screw (callout 1).

Figure 5-810 Remove one screw



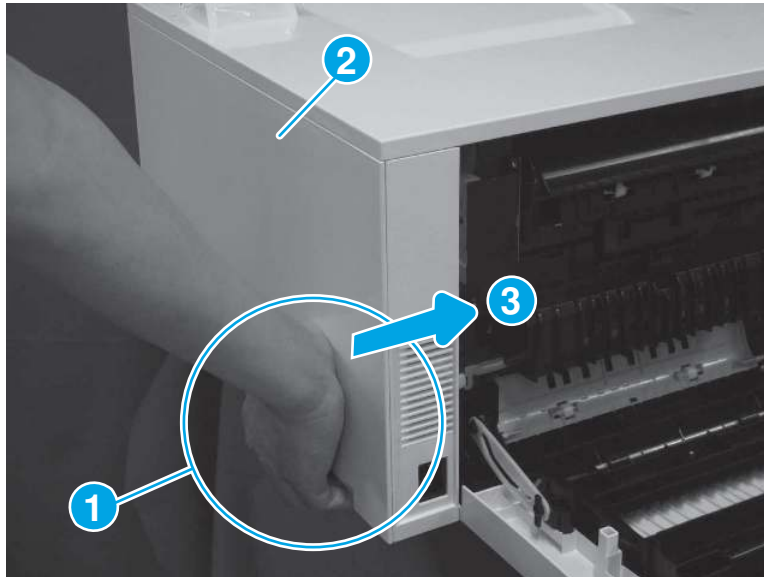
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-811 Release three tabs



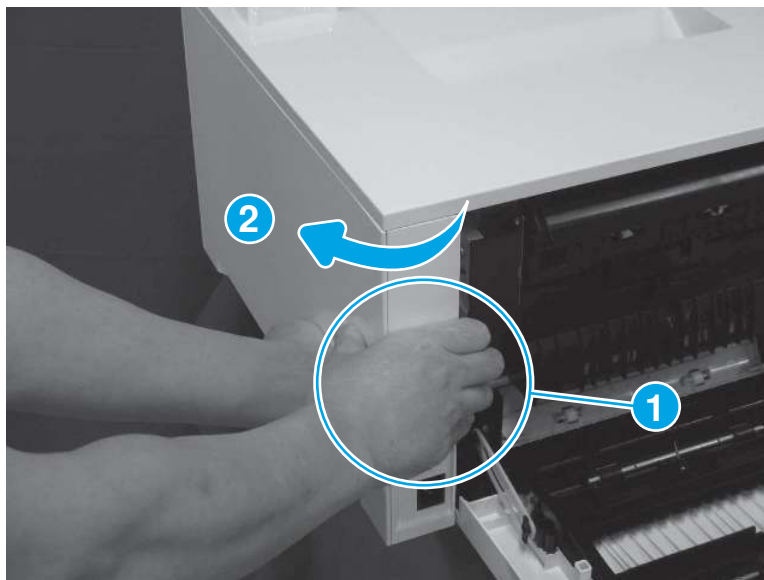
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-812 Release the rear cover corner



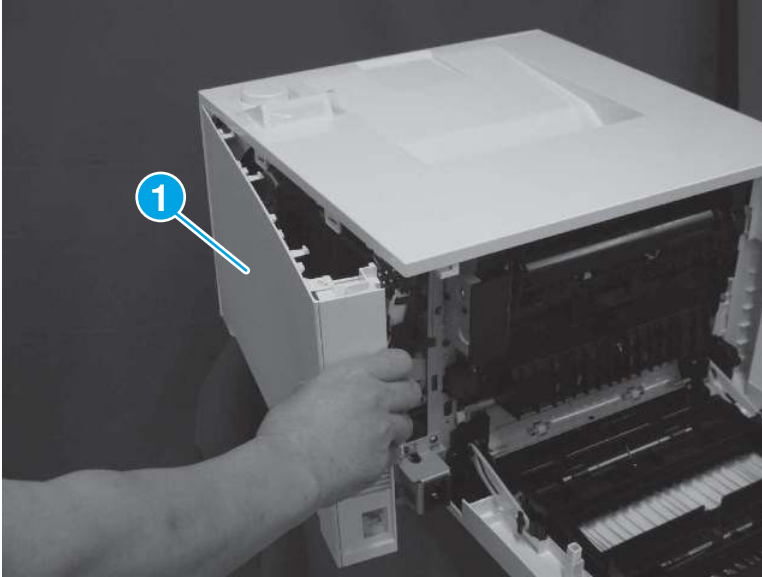
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-813 Disengage the cover corner




5. Remove the right cover (callout 1).

Figure 5-814 Remove the cover



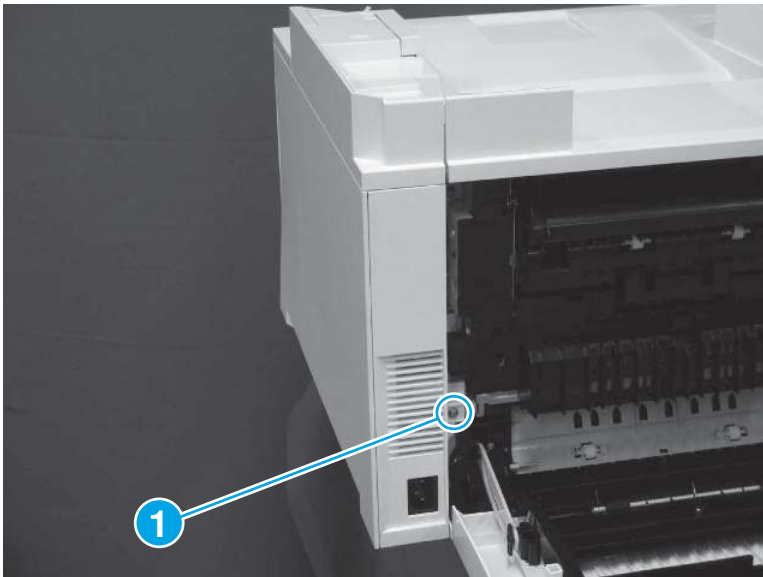
8. Remove the right cover (MFP)

Follow the procedure below to remove and replace the right cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

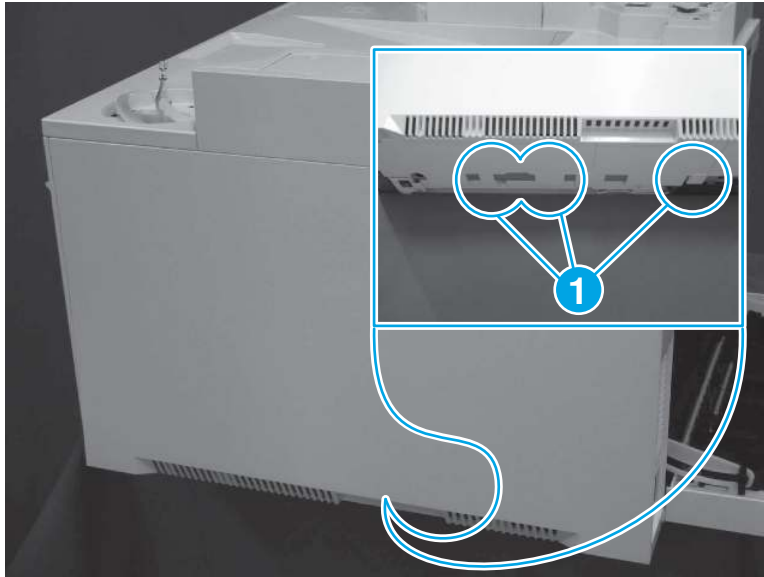
1. Remove one screw (callout 1).

Figure 5-815 Remove one screw



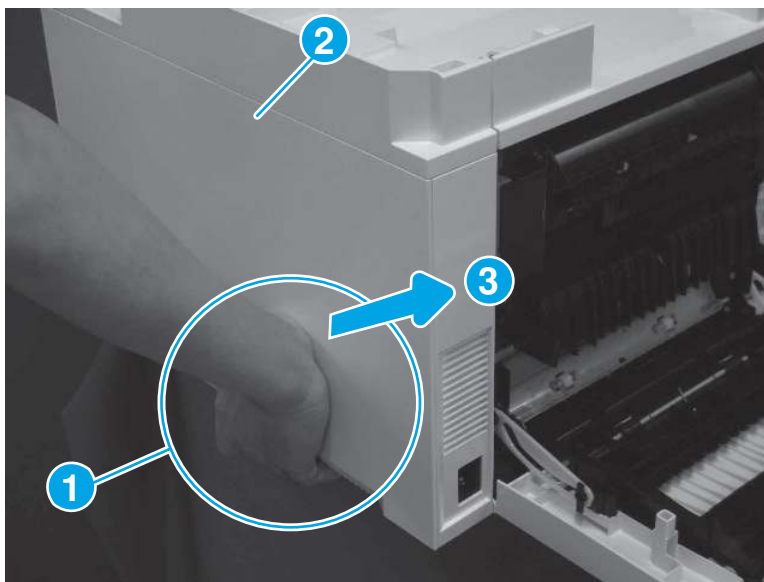
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-816 Release three tabs



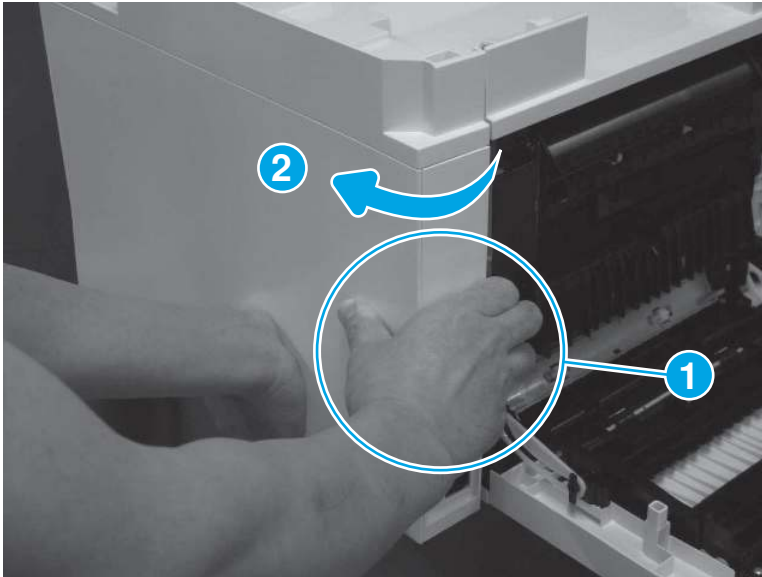
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-817 Release the rear cover corner



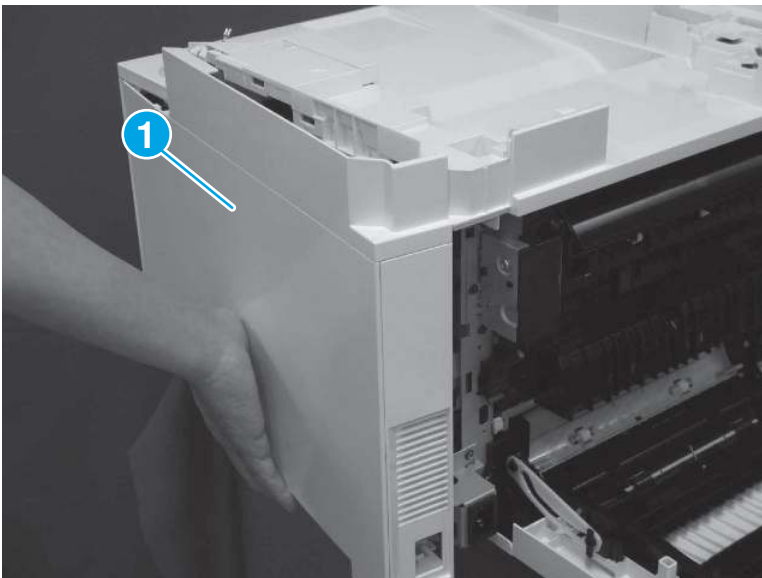
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-818 Disengage the cover corner



5. Remove the right cover (callout 1).


Figure 5-819 Remove the cover



9. Remove the front cover

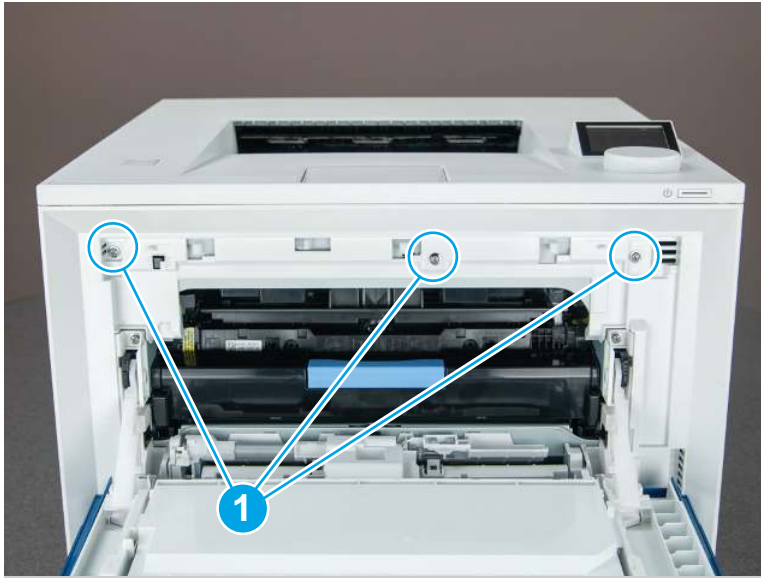
Follow the procedure below to remove and replace the front cover.

 **NOTE:** Front cover removal is **identical** for both SFP and MFP models.

 **Reinstallation tip:** Make sure to follow the special installation instructions for this part or step (located after the unpack and recycle or cleaning section).

1. Remove three screws (callout 1).

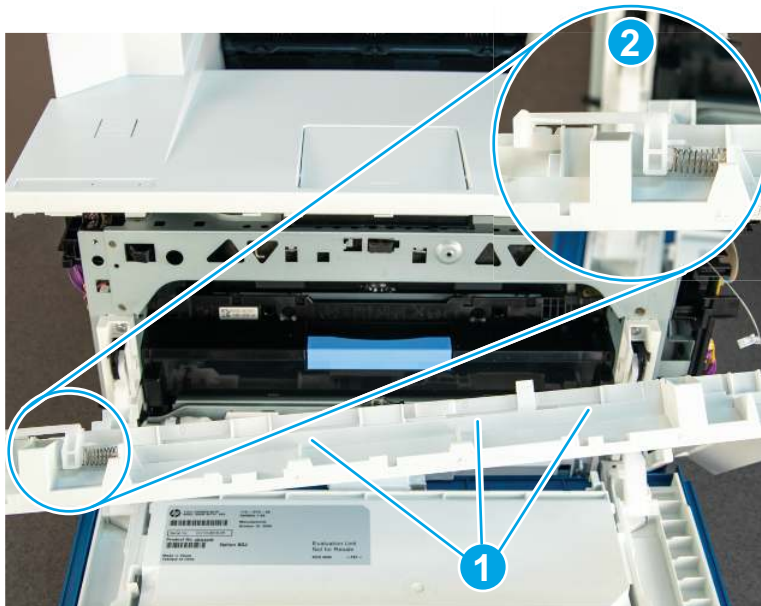
Figure 5-820 Remove three screws



2. Before proceeding, take note of the door release arm (callout 1). This arm can be easily dislodged when the cover is removed.

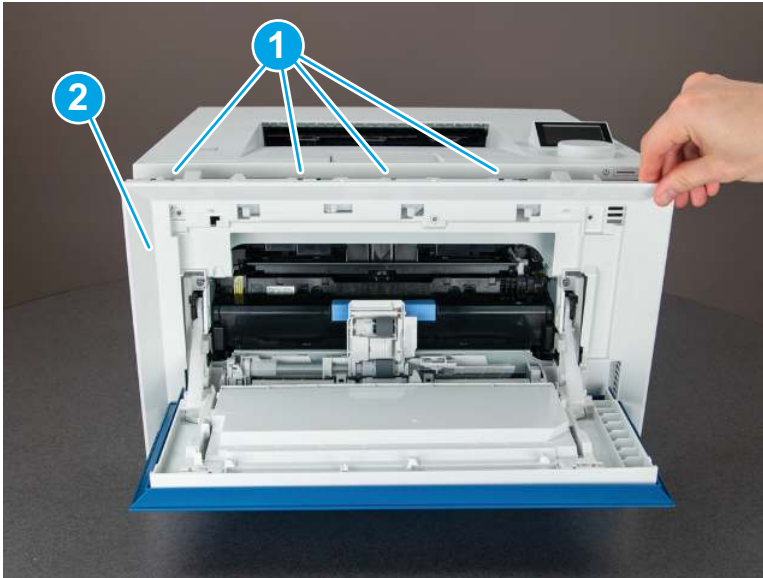
⚠ CAUTION: Do not lose the spring (callout 2) when removing the front cover.

Figure 5-821 Door release arm



3. Release four tabs (callout 1), and then remove the front cover (callout 2).

Figure 5-822 Remove the cover

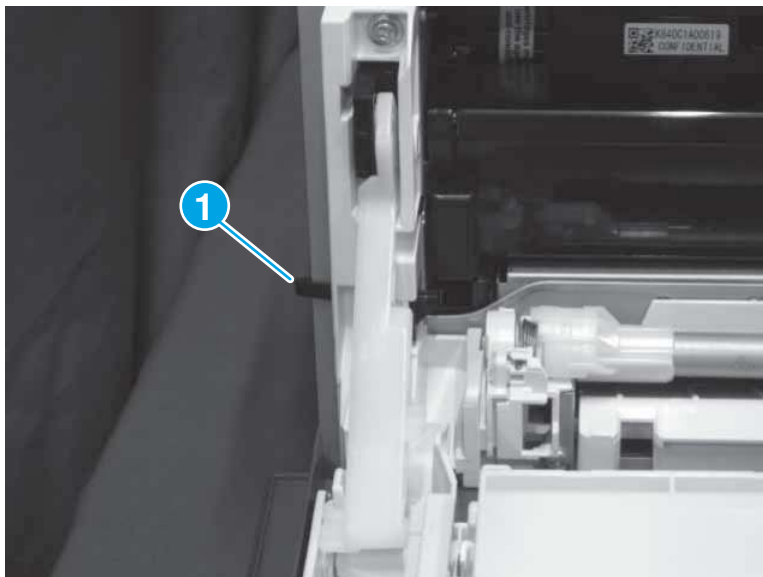


10. Remove the cartridge tray

Follow the procedure below to remove and replace the cartridge tray.

1. Release one tab (left side).

Figure 5-823 Release one tab (left side)



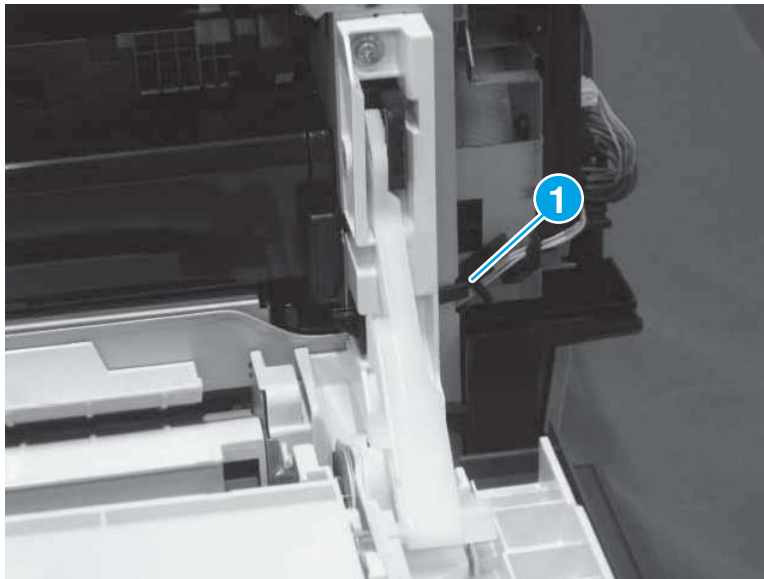
2. Use a pair of needle-nose pliers to remove the stopper (callout 1) (left side).

Figure 5-824 Remove the stopper (left side)



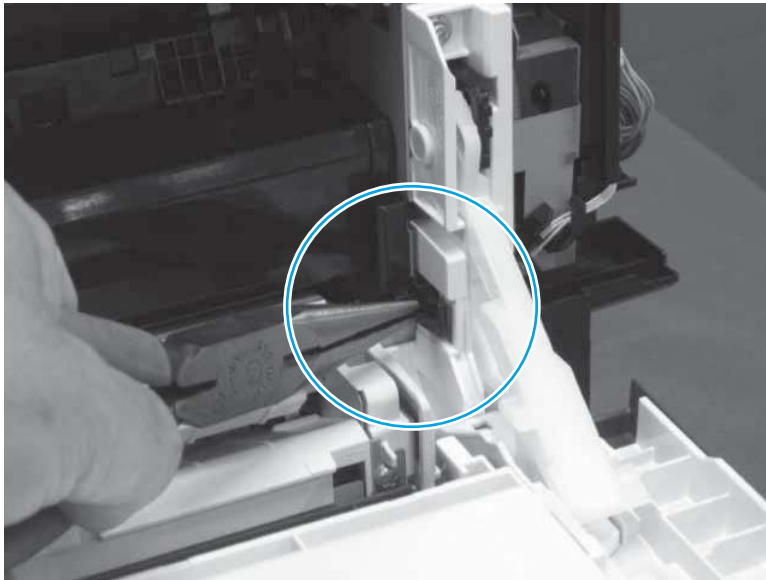
3. Release one tab (right side).

Figure 5-825 Release on tab (right side)



4. Use a pair of needle-nose pliers to remove the stopper (callout 1) (right side).

Figure 5-826 Remove the stopper (right side)



5. Pull the cartridge tray (callout 1) out of the printer to remove it.


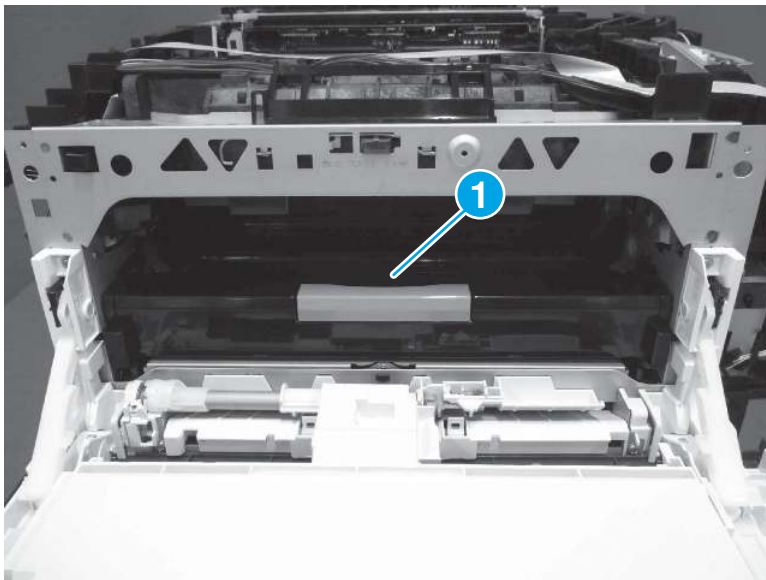

 **NOTE:** Slightly lift up on the front of the tray while removing it.

Figure 5-827 Remove the cartridge tray



11. Remove the top cover (SFP)

Follow the procedure below to remove and replace the top cover (SFP).

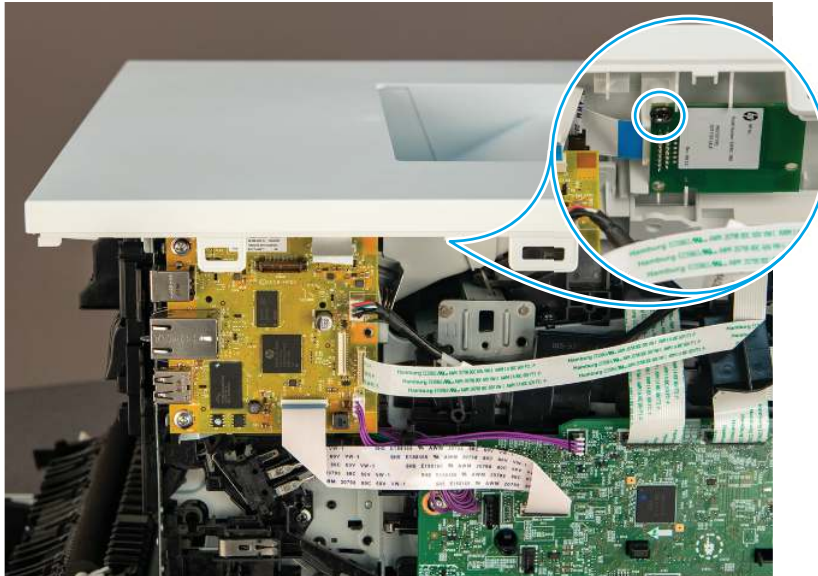
 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

1. **Wireless model only:** Raise and support the left side of the printer, remove one screw, and then separate the wireless PCA from the cover.

CAUTION: Do not attempt to completely remove the wireless PCA. Instead, gently move it out of the way.

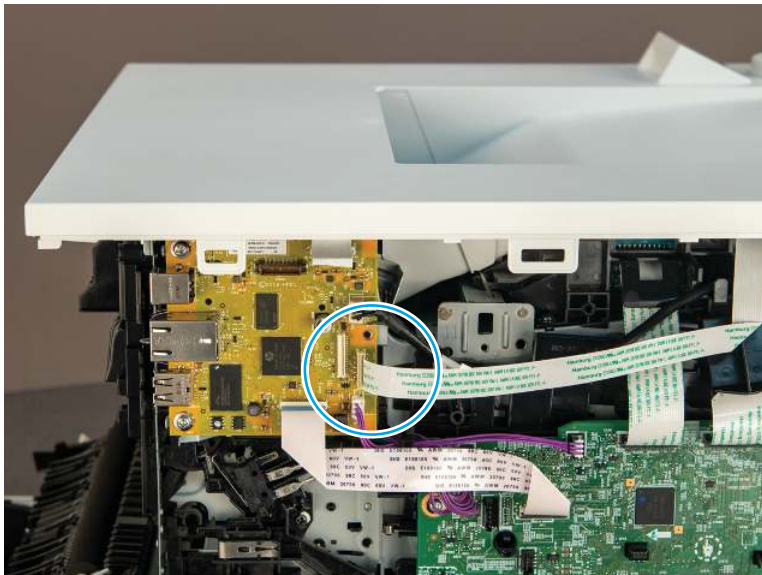
TIP: To remove the screw without raising the printer, use a short-barrel screwdriver.

Figure 5-828 Remove one screw



2. Disconnect one flat-flexible cable (FFC).

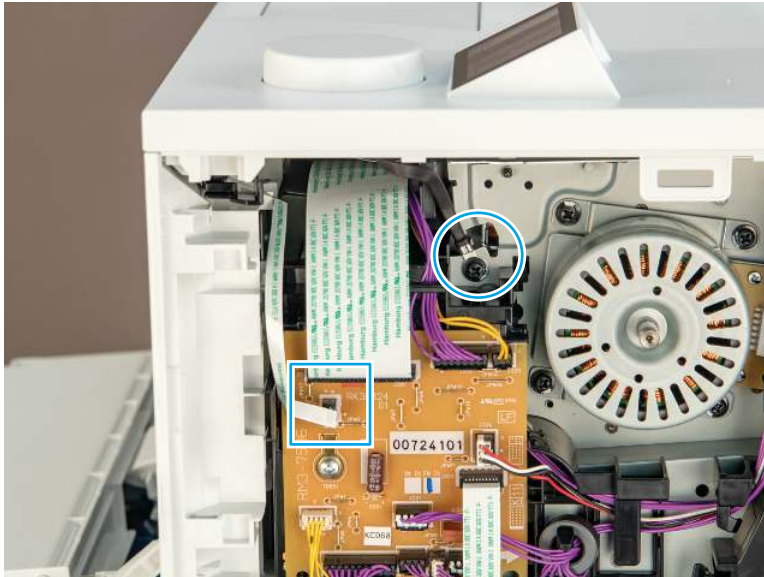
Figure 5-829 Disconnect one FFC



3. Disconnect one FFC, and then remove one screw to release the ground wire.

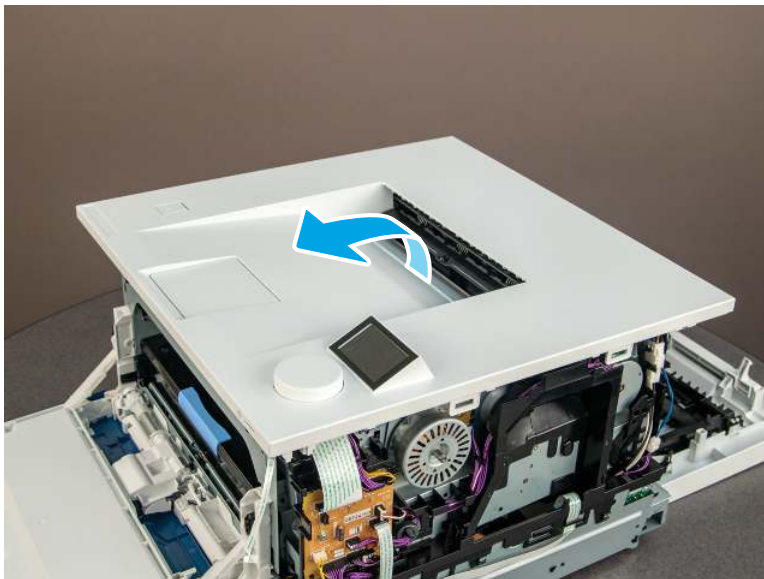
NOTE: The front cover is shown installed in the figure below. However, this step is correct for removing the top cover.

Figure 5-830 Disconnect one FFC and remove one screw




4. Sliding the cover from the back of the printer towards the front to remove it.

Figure 5-831 Remove the cover



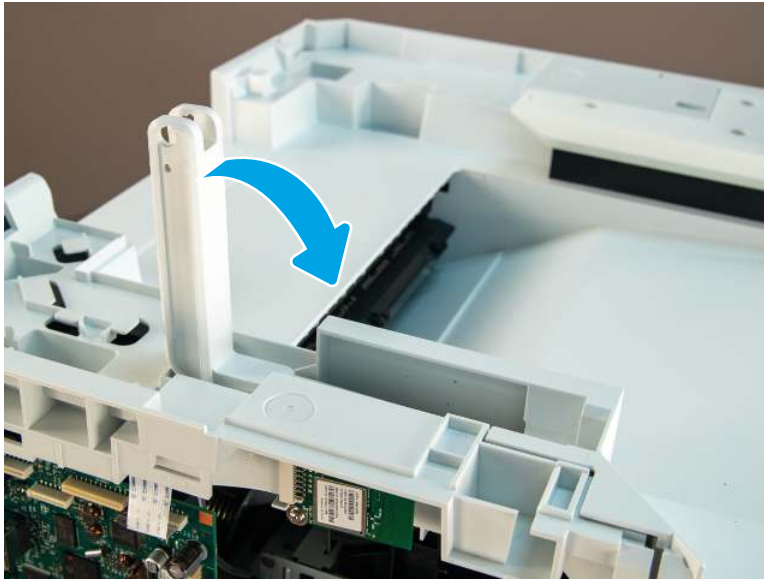
12. Remove the top cover (MFP)

Follow the procedure below to remove and replace the top cover (MFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

1. Close the ISA lift arm.

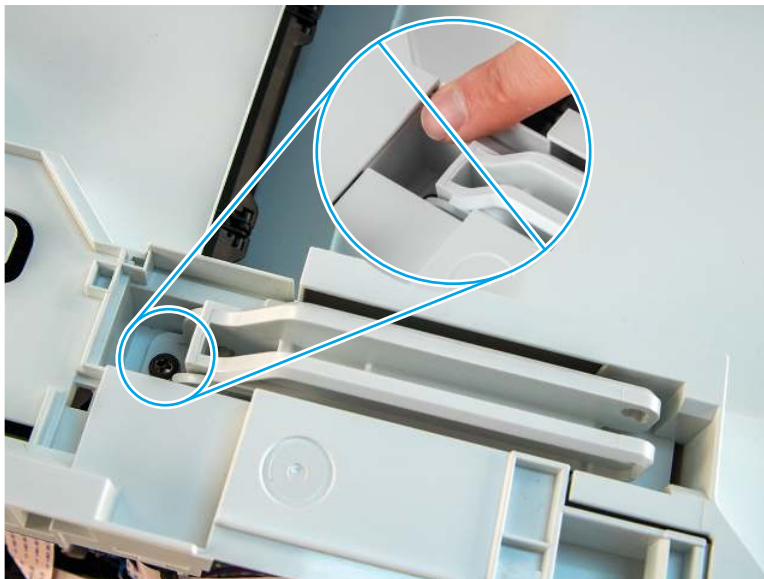
Figure 5-832 Close the ISA lift arm



2. Remove one screw.

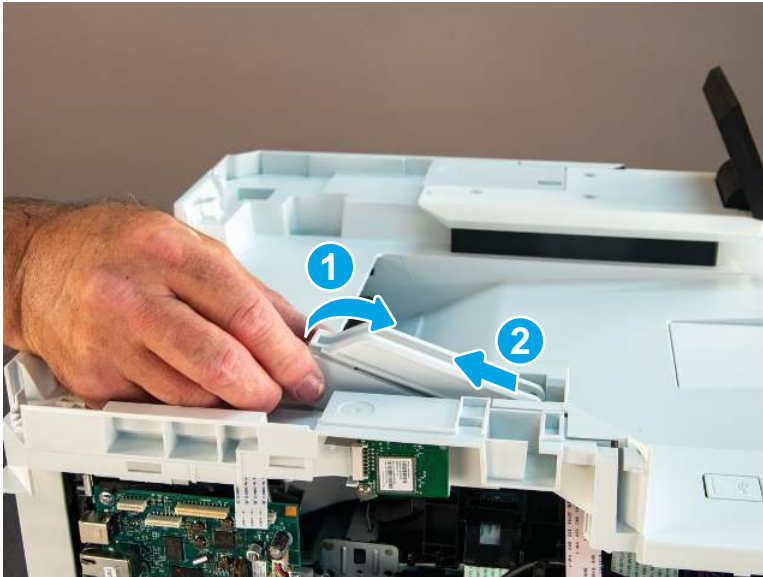
⚠ CAUTION: The support arm is spring loaded and can unexpectedly spring into the open position. To avoid injury, do not place a finger in the screw well when the support arm is in the closed position.

Figure 5-833 Remove one screw



3. Rotate one end of the lift arm up (callout 1), and then slide the lift arm as shown below (callout 2) to release it. Remove the lift arm.

Figure 5-834 Remove the lift arm



4. Do the following:
 - a. Disconnect one FFC (control panel; callout 1).
 - b. Remove one screw (callout 2), and then separate the wireless PCA from the top cover.


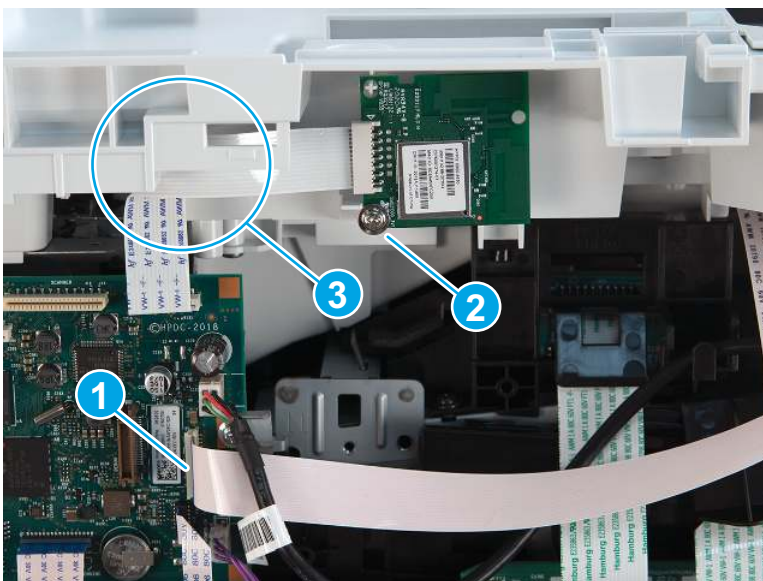
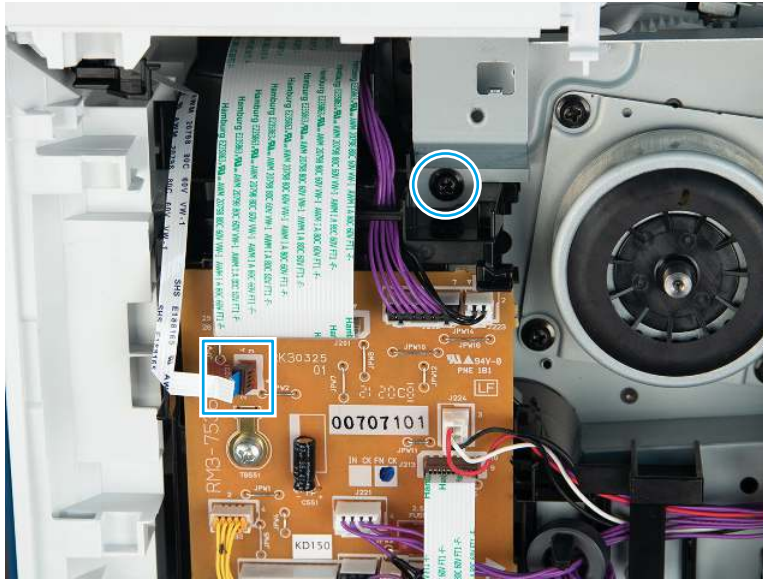
 **NOTE:** The wireless PCA does not need to be completely removed. Instead, release the FFC from the retainer (callout 3), and then gently move it out of the way.

Figure 5-835 Disconnect FFC and move the wireless PCA



5. Disconnect one FFC (power button), and then remove one screw (grounding sheet-metal plate).

Figure 5-836 Disconnect one FFC and remove one screw



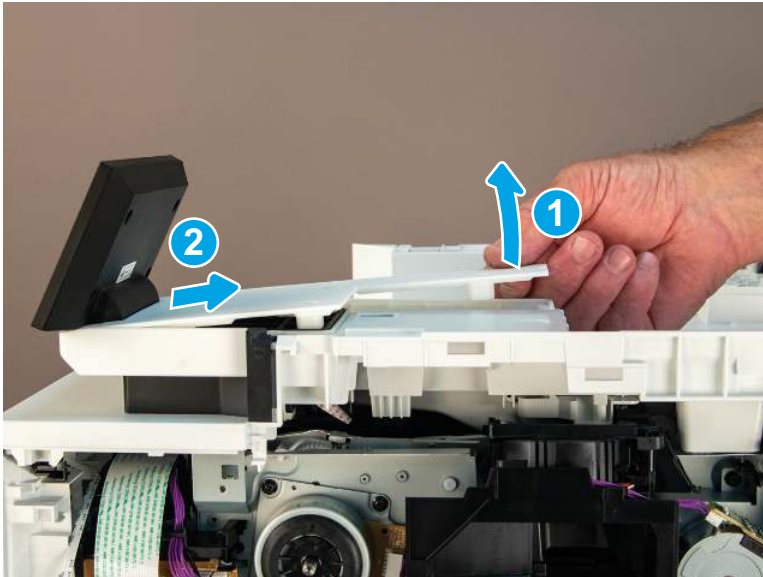
6. Remove three screws.

Figure 5-837 Remove three screws




7. Release one tab and rotate one end of the base cover up (callout 1), and then slide the cover as shown (callout 2) to remove it.

Figure 5-838 Remove the cover



8. Disconnect two FFCs.

 **NOTE:** These are zero-insertion force (ZIF) connectors. To remove the FFCs, first release the locking clip on the connector, and then pull the cable straight out of the connector.


 **TIP:** For reinstallation, make sure that the line of the FFC is parallel with the body.

Figure 5-839 Disconnect two FFCs



9. Remove four screws.


 **NOTE:** Two of the screws are self-tapping threads (black), and two of the screws are machine thread (silver).

Figure 5-840 Remove four screws



10. Lift the control panel and base straight up and off of the printer to remove them together.


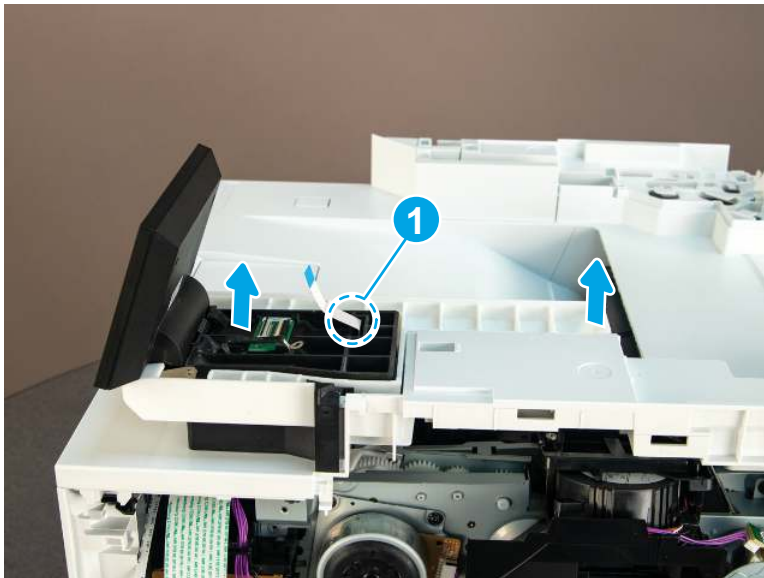
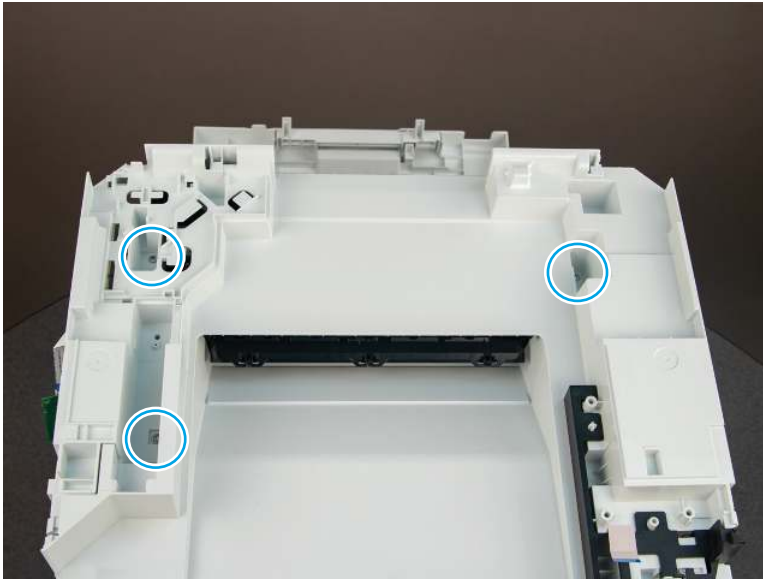
 **NOTE:** When handling the assembly, do not lose the ferrite (callout 1).

Figure 5-841 Remove control panel and base



11. Remove three screws.

Figure 5-842 Remove three screws



12. Sliding the cover from the back of the printer to the front to remove it.


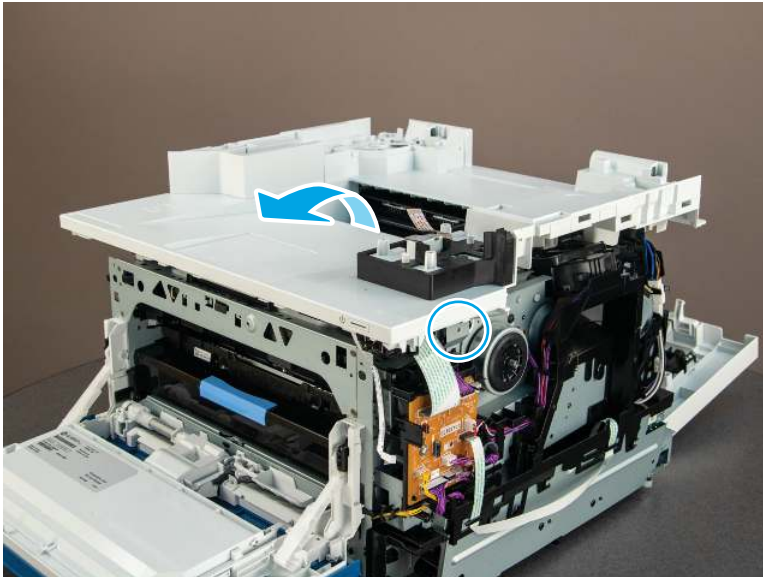
 **TIP:** Slightly move the control-panel ground bracket (circled) back and forth to help release the top cover.

Figure 5-843 Remove the cover



13. **When the cover is reinstalled:** Make sure that the front USB assembly is correctly positioned under the cover.

Figure 5-844 Front USB assembly



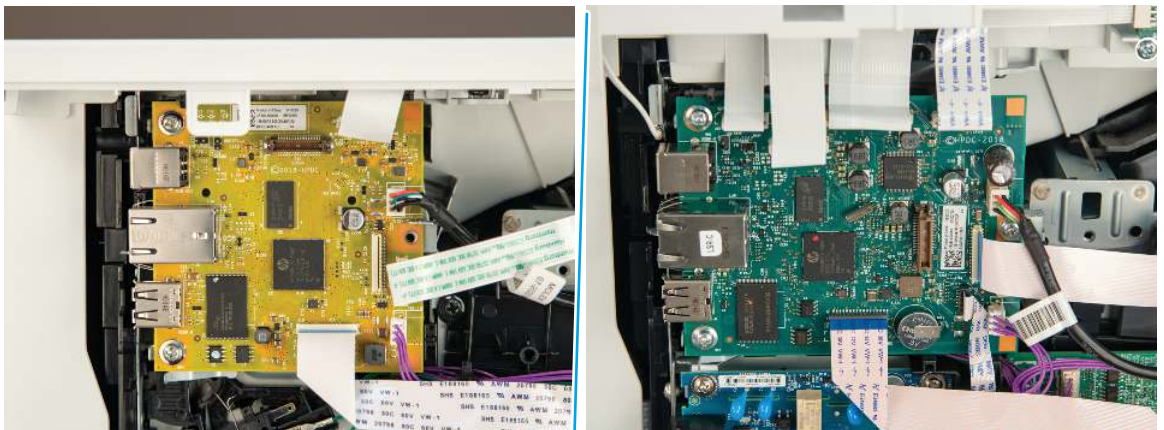
13. Remove the formatter PCA

Follow the procedure below to remove and replace the formatter PCA.


CAUTION:  ESD sensitive part.

1. Disconnect all of the connectors on the formatter PCA.

Figure 5-845 Disconnect all of the connectors (SFP/MFP)

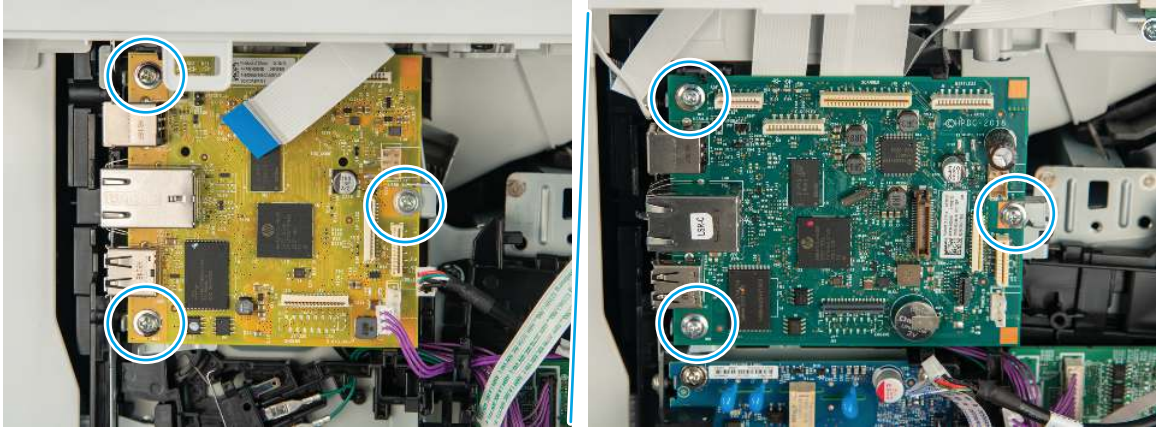


2. Remove three screws, and then remove the formatter PCA.

 **Reinstallation tip:** If a replacement formatter is being installed, make sure to read and follow the special installation instructions in the topic (located immediately after the unpack and recycle step).

The formatter must be paired with the ECU/DCC to be functional.

Figure 5-846 Remove the formatter PCA (SFP/MFP)

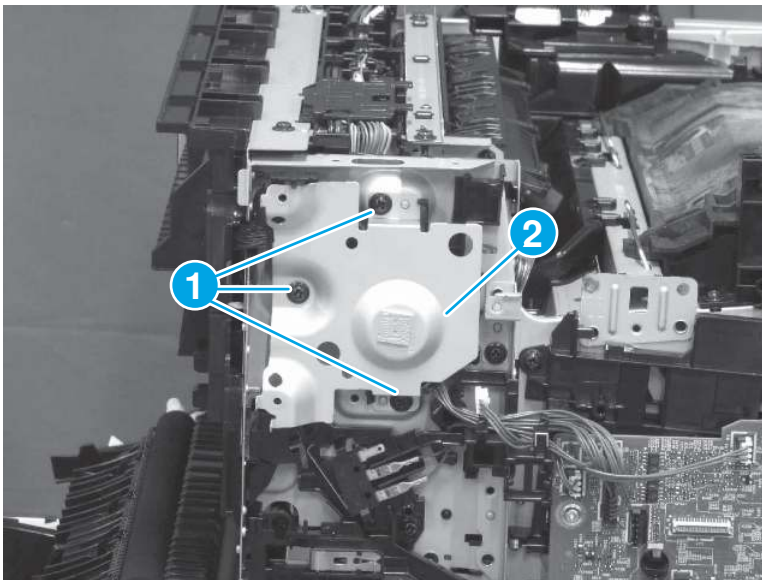


14. Remove the interlock holder assembly

Follow the procedure below to remove and replace the interlock holder assembly.

1. Remove three screws (callout 1, and then remove the plate (callout 2).

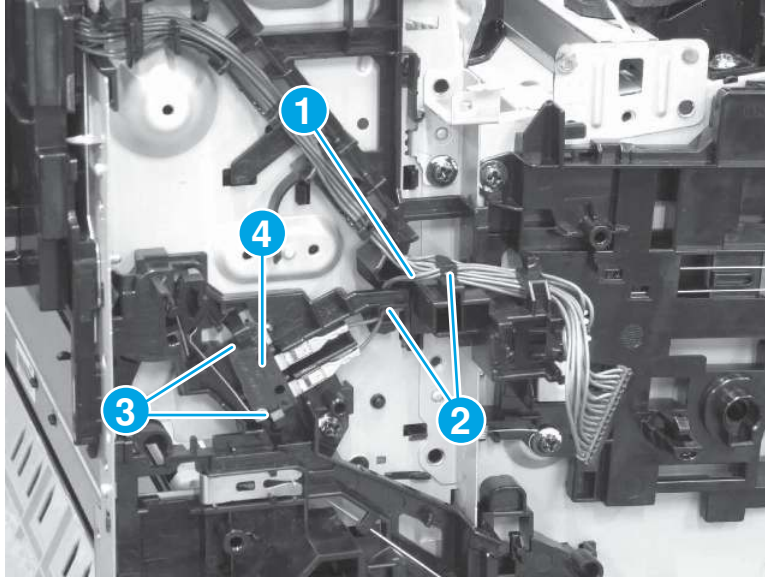
Figure 5-847 Remove the plate



2. Release the cable (callout 1) from the guides (callout 2), release two tabs (callout 3), and then separate the interlock switch (callout 4) from the holder.

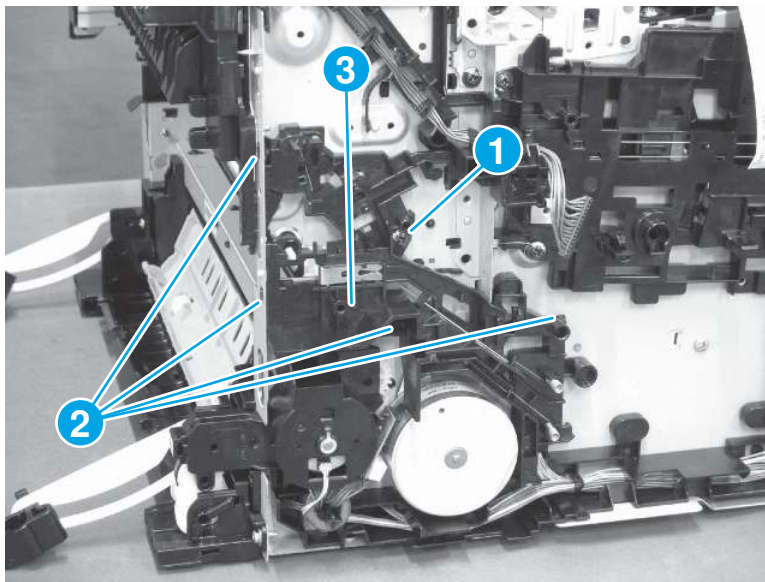
⚠ CAUTION: Do not attempt to completely remove the interlock switch. It is still connected to the wire cables.

Figure 5-848 Separate the interlock switch from the holder



3. Remove one screw (callout 1), release four tabs (callout 2), and then remove the interlock holder assembly (callout 3).

Figure 5-849 Remove the interlock holder assembly

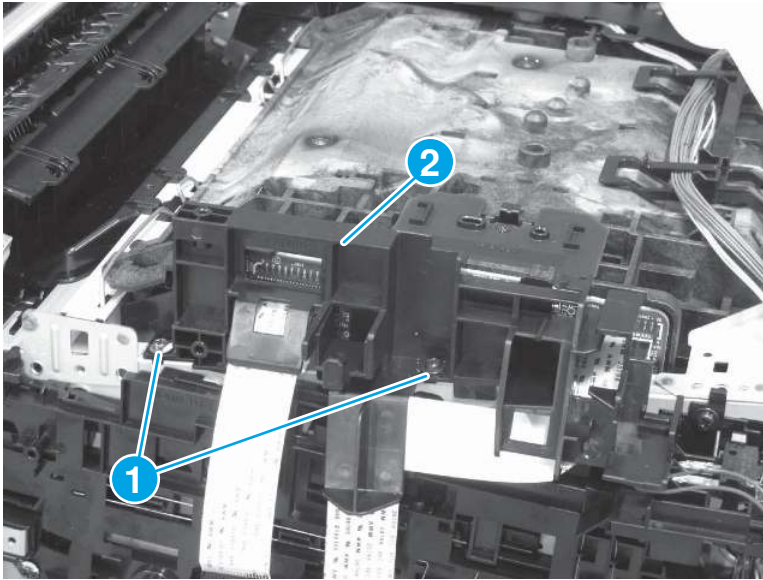


15. Remove the PCA holder assembly

Follow the procedure below to remove and replace the PCA holder assembly.

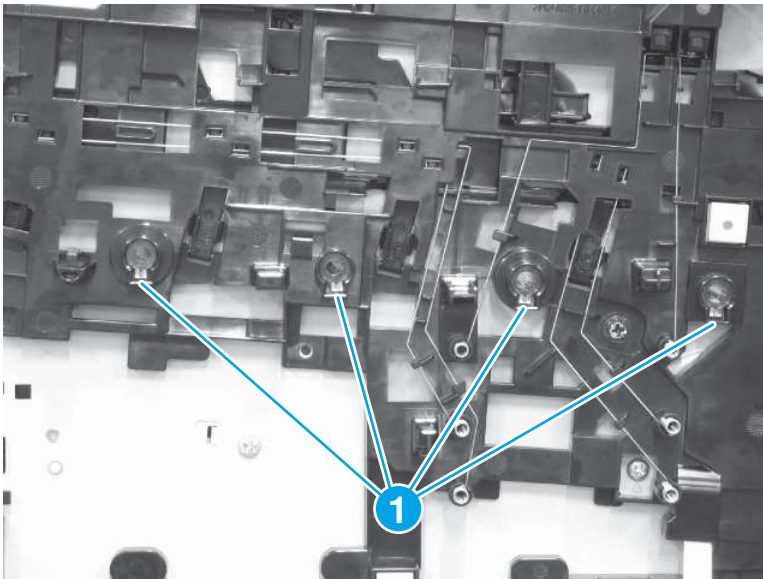
1. Remove two screws (callout 1), and then remove the guide (callout 2).

Figure 5-850 Remove the guide



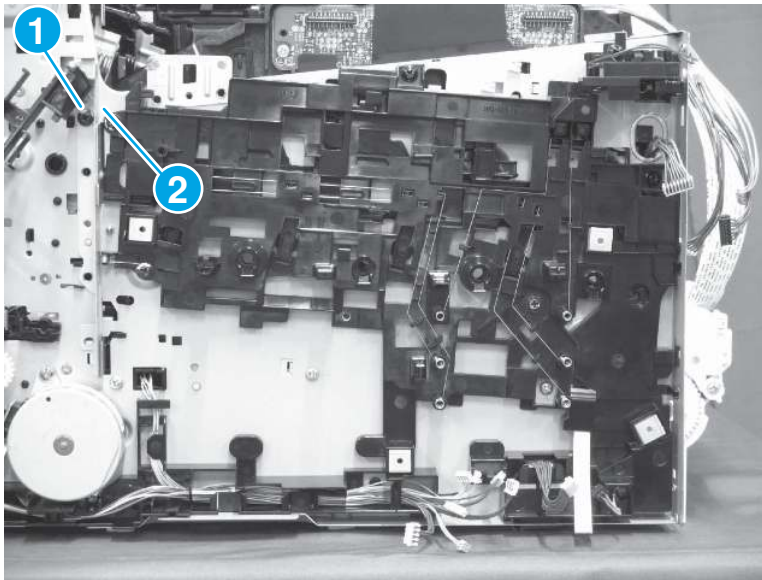
2. Remove four light guides (callout 1).

Figure 5-851 Remove four light guides



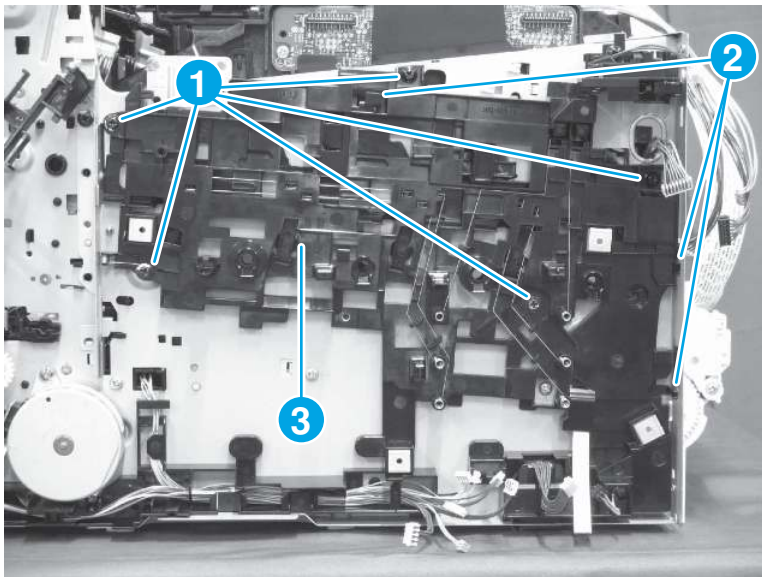
3. Remove one screw (callout 1), and then remove the sheet-metal bracket (callout 2).

Figure 5-852 Remove the bracket



4. Remove five screws (callout 1), release three tabs (callout 2), and then remove the PCA holder assembly (callout 3).

Figure 5-853 Remove the PCA holder assembly

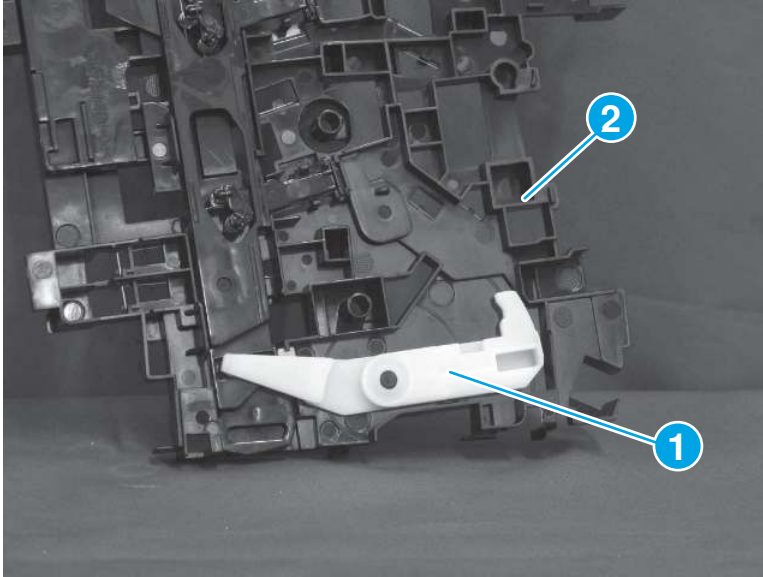


5. **For a replacement PCA holder assembly only.** Remove the rail link (callout 1) from the PCA holder assembly, and then install it on the replacement PCA assembly.



NOTE: If the rail link is not on the PCA holder assembly, check the printer chassis.

Figure 5-854 Remove the rail link

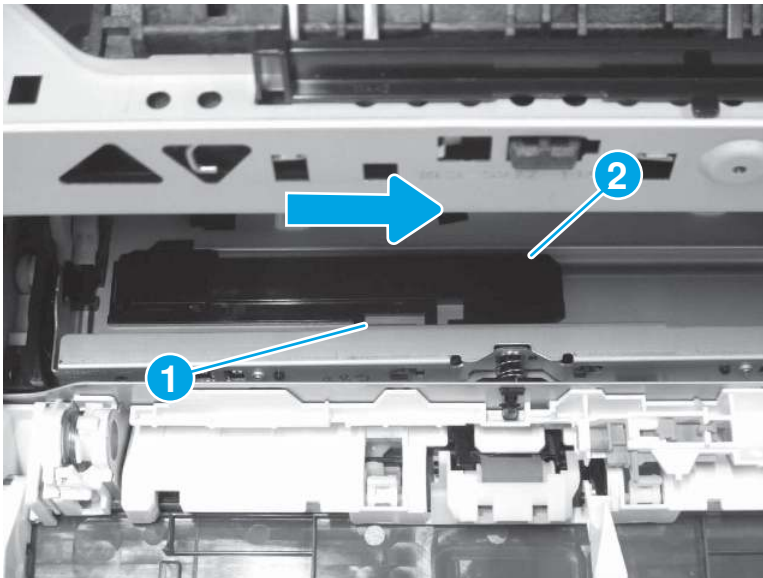


16. Remove the registration density sensor

Follow the procedure below to remove and replace the registration density sensor.

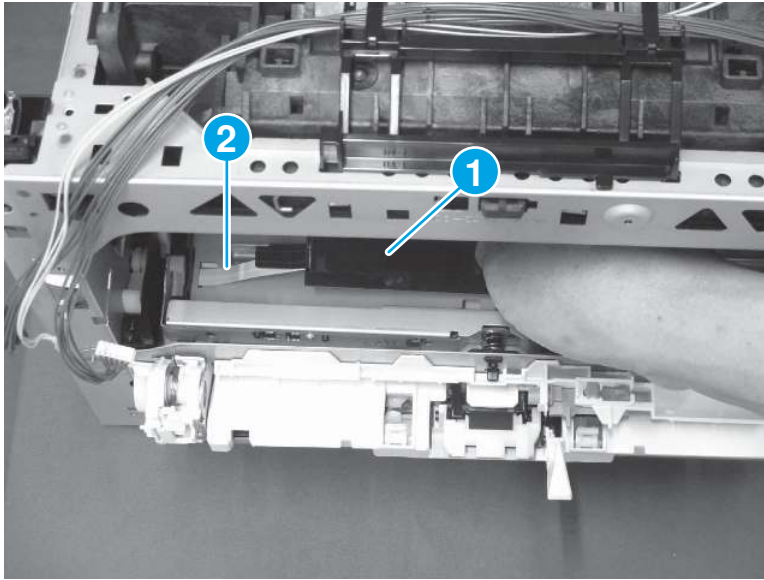
1. Release one tab, and then slide the cable guide (callout 2) as shown below to release it.

Figure 5-855 Release the cable guide



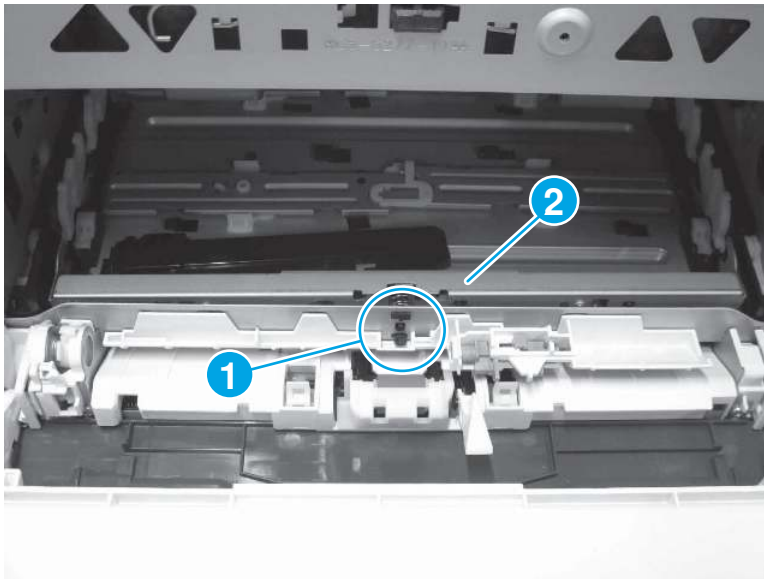
2. Remove the cable guide (callout 1) and the flat-flexible cable (FFC; callout 2) together out of the way.

Figure 5-856 Remove the guide and FFC



3. Release two tabs (callout 1), and then remove the registration density sensor (callout 2).

Figure 5-857 Remove the registration density sensor



17. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

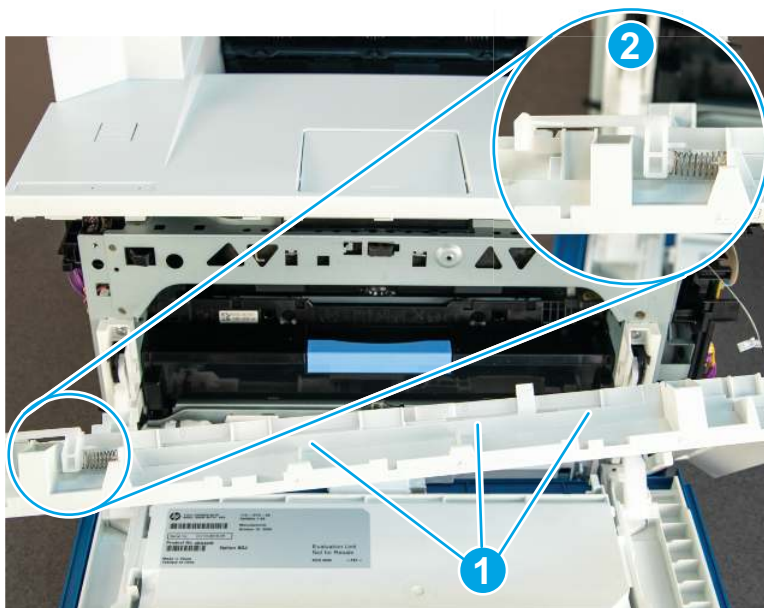
18. Special installation instructions - Front cover

Follow the special instructions below to install the front cover.

NOTE:  Front cover installation is **identical** for both the SFP and MFP models.

1. If the door release arm becomes dislodged when handling the cover, install it as shown below (callout 1, 2).

Figure 5-858 Door release arm installed



2. At the right and left side of the front cover, align the holes (callout 1) in the cover with the alignment pins (callout 2) on the chassis.

Figure 5-859 Cover alignment pins



3. Rotate the top of the cover towards the printer to install it.


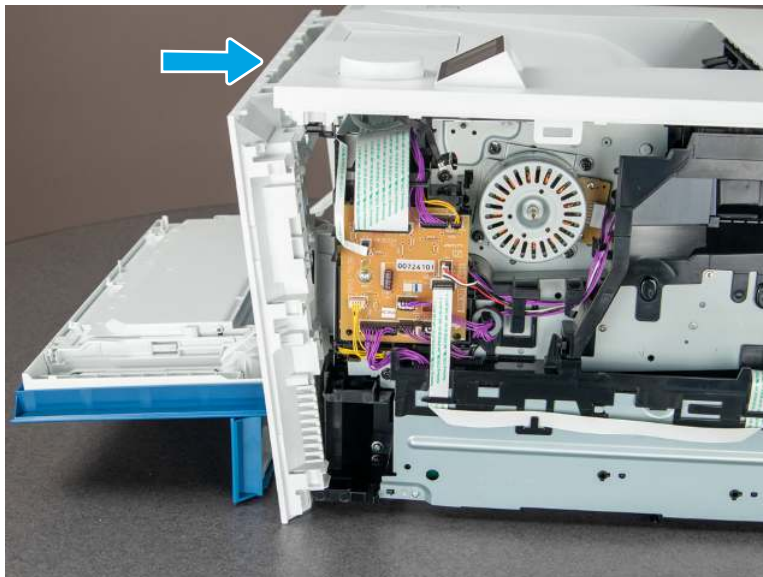
 **IMPORTANT:** Verify that the spring loaded door release button (on the left side of the cover) correctly functions.

Figure 5-860 Install the cover



19. Special installation instructions - ITB

Follow the special instructions below to install the ITB.

Before installing the ITB, use the steps below do the following:

- Make sure that the drive gear on the ITB and the gear inside the printer are correctly aligned (in phase) with each other (see step 1).
- For a replacement ITB, use the control-panel menus to reset the firmware counter (see step 2).

1. Check the gear alignment.

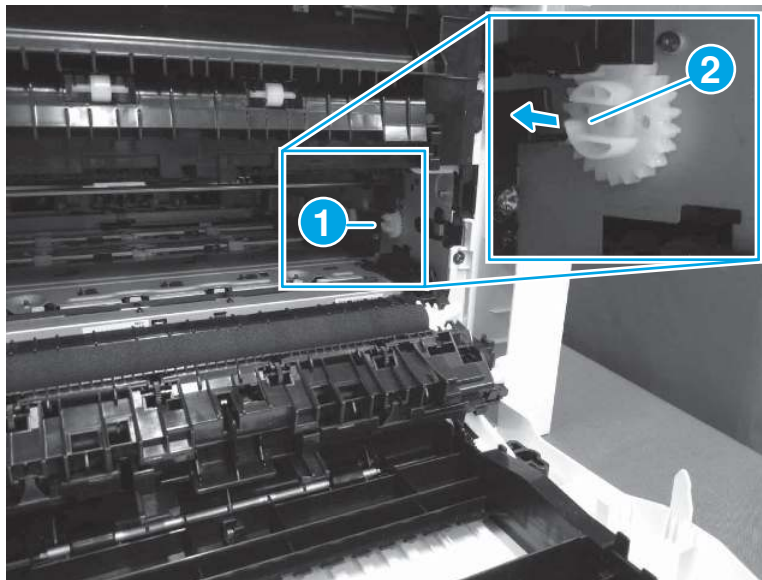
- a.** Make sure that the gear (callout 1) inside the printer is positioned with the gear rib (callout 2) away from the rear door opening.



NOTE: If the gear is not positioned correctly, do the following:

1. Make sure that the cartridge door and rear door are closed.
2. Turn the printer power on (initial rotation), and then turn the power off.

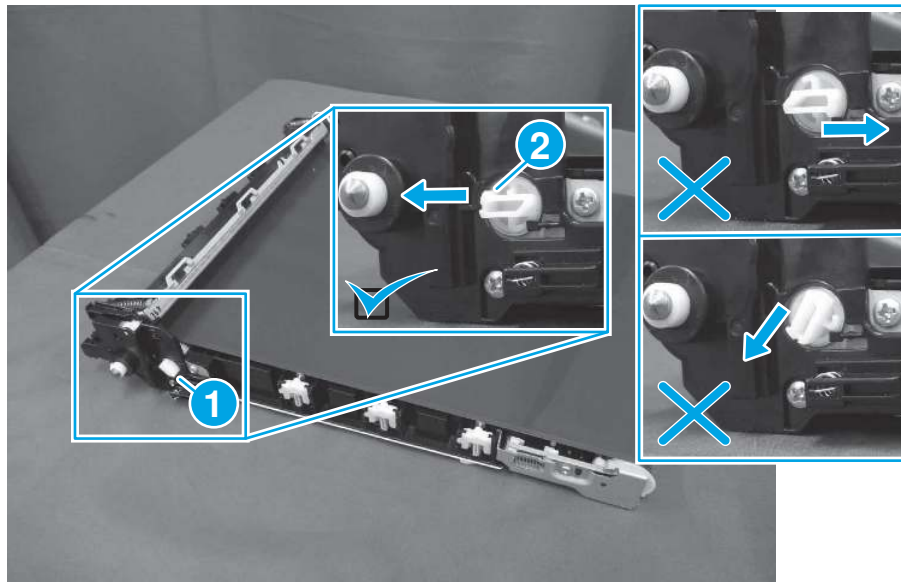
Figure 5-861 Check the ITB printer gear




- b.** Make sure that the gear (callout 1) on the ITB is positioned with the gear rib (callout 2) towards the handle grip end of the ITB.



NOTE: If the gear is not positioned correctly, rotate the gear to the correct position.:




2. Reset the firmware counter (replacement ITB only).

 **NOTE:** If the ITB was removed to gain access to other assemblies, skip this step.

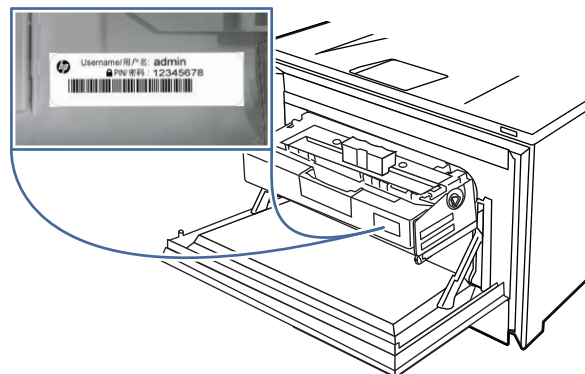
If a **replacement** ITB was installed, perform the steps below to reset the firmware counter.

- a. From the control panel Home screen, open the **Menu** item, and then navigate to and select the **Tools** menu.
- b. Navigate to and select the **Service** menu.
- c. Type in the **Service** menu personal identification number (PIN).

 **NOTE:** The default PIN (for access to the **Service** menu and the printer EWS page) for this printer is located on a sticker adhered to the front of the toner cartridge tray. Use this PIN to open the **Service** menu (or EWS) when prompted.

If the default PIN has been changed, contact the printer administrator to obtain it.

Figure 5-862 Printer default PIN location



- d. Navigate to and select the **Service Resets** menu.

- e. Navigate to and select the [Transfer Kit Resets](#) item, and then select [Resets](#) to initiate the process.

20. Special installation instructions - Tray 1 pickup roller assembly

Follow the special instructions below to install the Tray 1 pickup roller assembly.

- When the Tray 1 pickup roller assembly (callout 1) is installed, make sure that the alignment tab (callout 2) is in the slot (callout 3) on the assembly shaft.


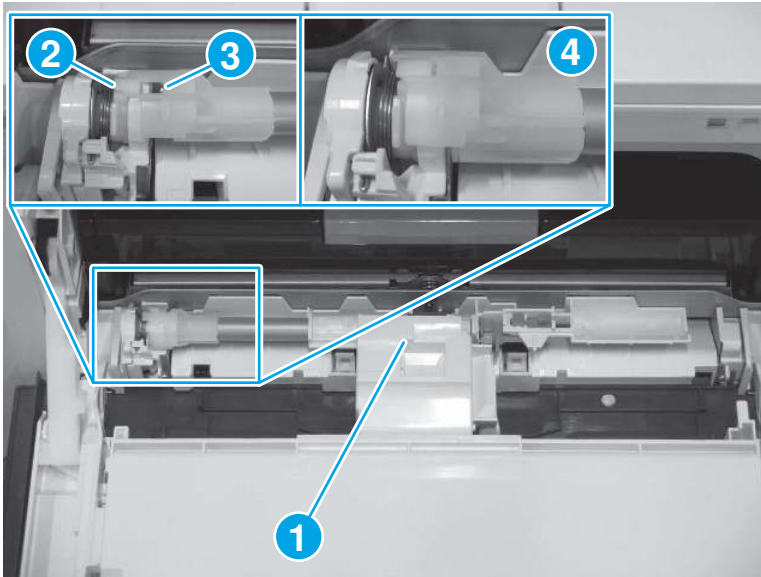
 **TIP:** When correctly installed, the tab fits completely into the slot (callout 4).

Figure 5-863 Install the Tray 1 pickup roller assembly



Removal and replacement: Duplex upper guide

Learn about duplex upper guide removal.


Mean time to repair: 5 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-45 Part information

Part number	Part description
RM2-2716-000CN	Duplexing guide assembly, upper

Required tools

- Small flat-blade screwdriver

After performing service

Turn the printer power on

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

Post service test

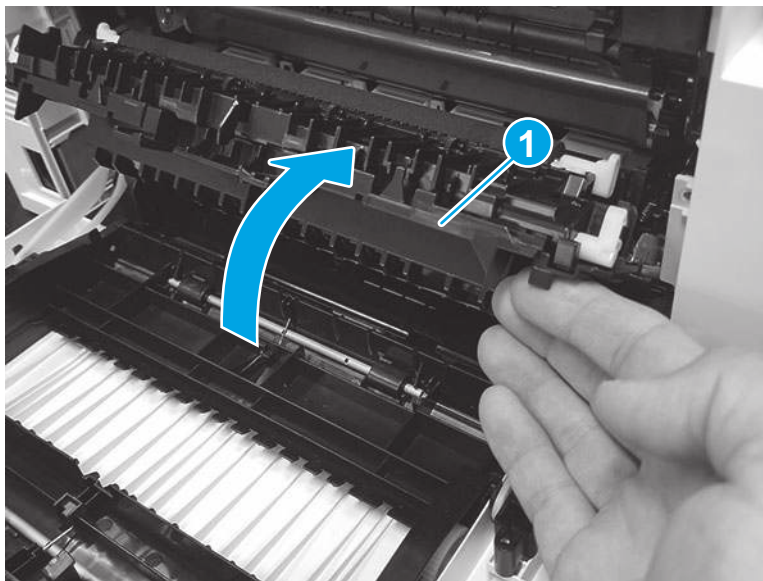
Print any pages necessary to make sure the printer is functioning correctly.

1. Remove the rear door

Follow the procedure below to remove and replace the rear door.

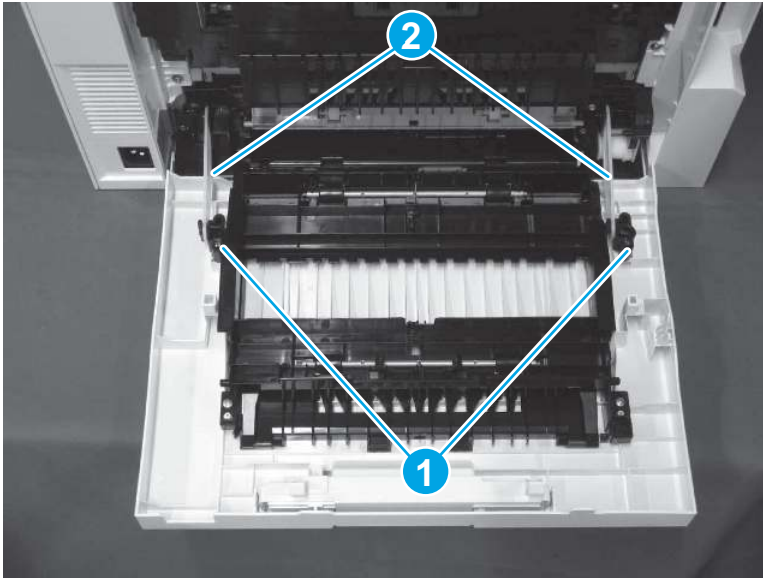
1. Open the rear door, and then raise the secondary transfer feed assembly (callout 1) up and into the locked position.

Figure 5-864 Place the T2 feed assembly in the locked position



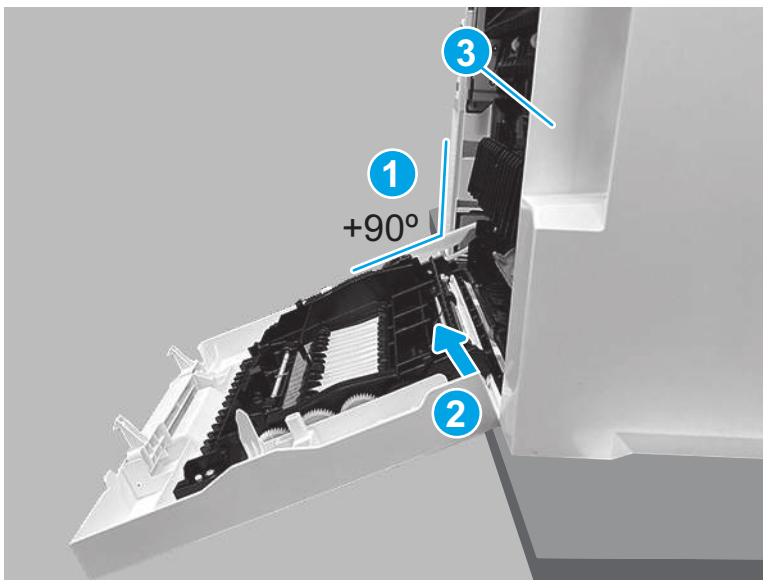
2. Remove two screws (callout 1), and then release the left- and right-side retainer arms (callout 2)

Figure 5-865 Release the retainer arms



3. Carefully position the printer at the edge of the work surface and allow the rear door to open to an angle greater than 90 degrees (callout 1). Slide the door away (callout 2) from the formatter side of the printer (callout 3) to release it, and then remove the rear door.

Figure 5-866 Remove the door



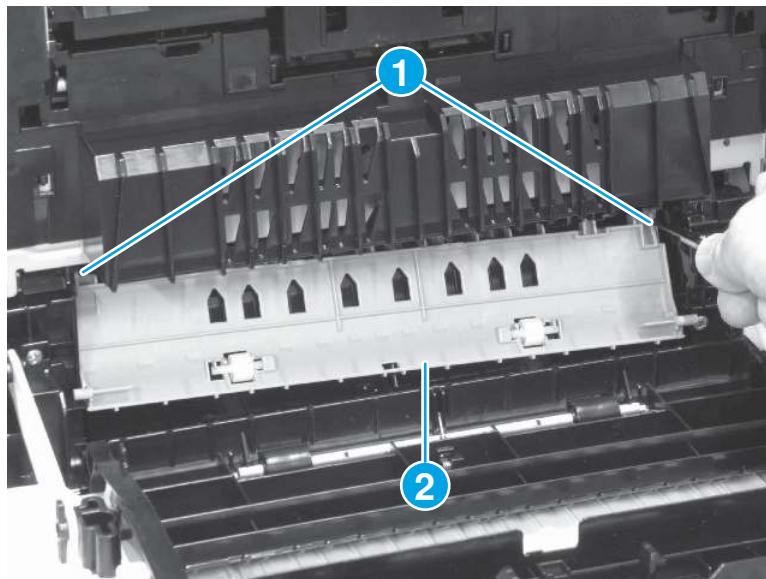
2. Remove the duplex upper guide

Follow the procedure below to remove and replace the duplex upper guide.

- Use a small flat-blade screwdriver to release one boss at each end of the guide (callout 1), and then remove the guide (callout 2).

CAUTION: Parts of this assembly are fragile and can easily be damaged during removal.

Figure 5-867 Remove the duplex upper guide



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Duplex re-pick clutch

Learn about duplex re-pick clutch removal.


Mean time to repair: 10 minutes

Service level: Medium

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-46 Part Information

Part number	Part description
RM2-2714-000CN	Duplexing clutch assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on


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


Post service test

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

1. Remove the left cover (SFP)

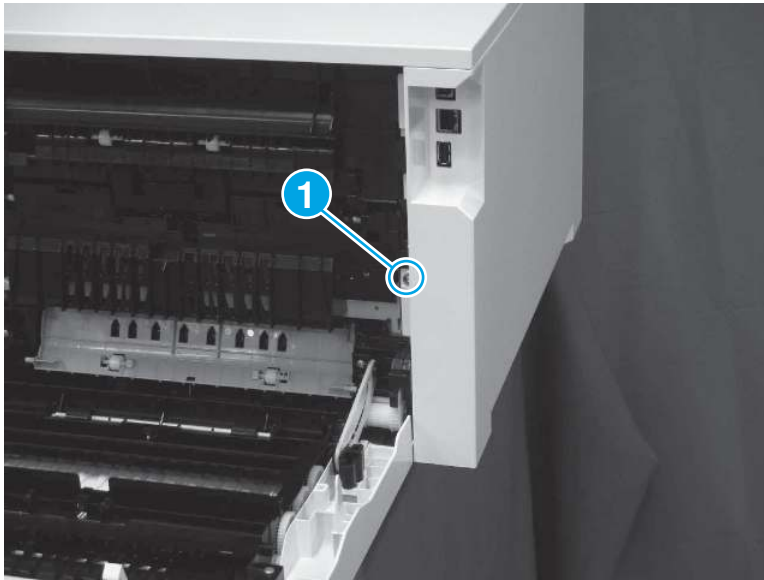
Follow the procedure below to remove and replace the left cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

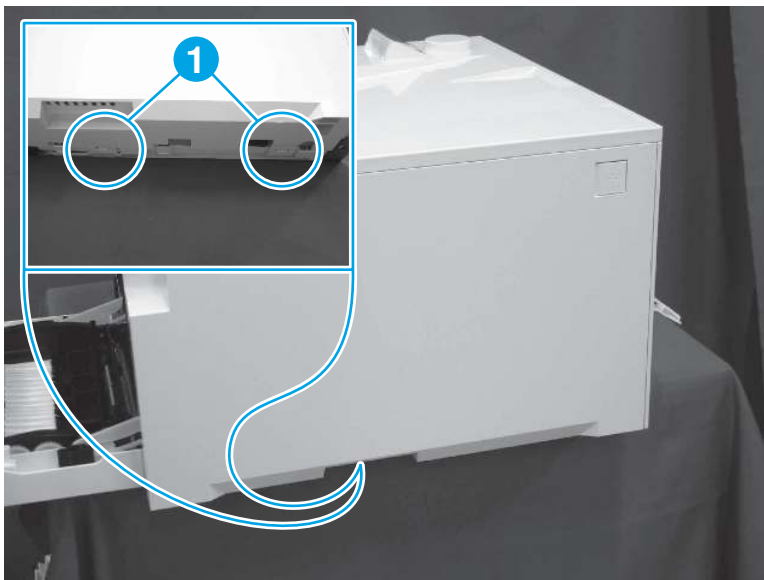
1. Remove one screw (callout 1).

Figure 5-868 Remove one screw



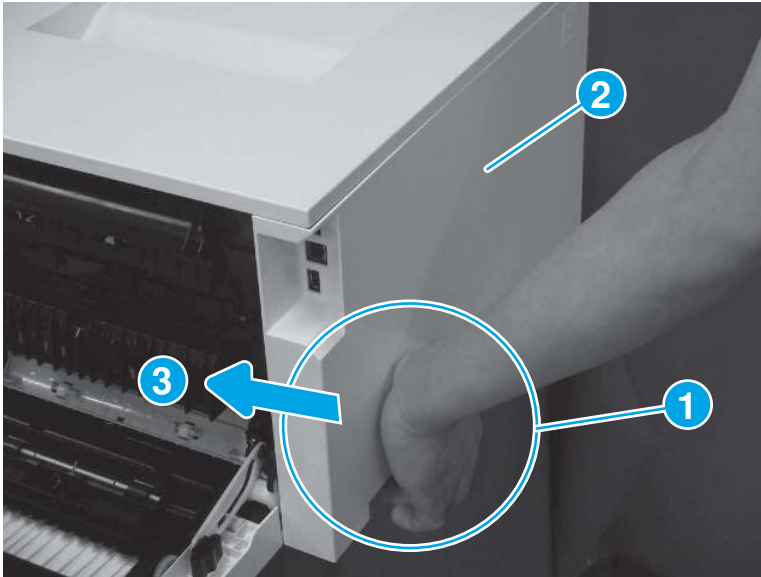
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-869 Release two tabs



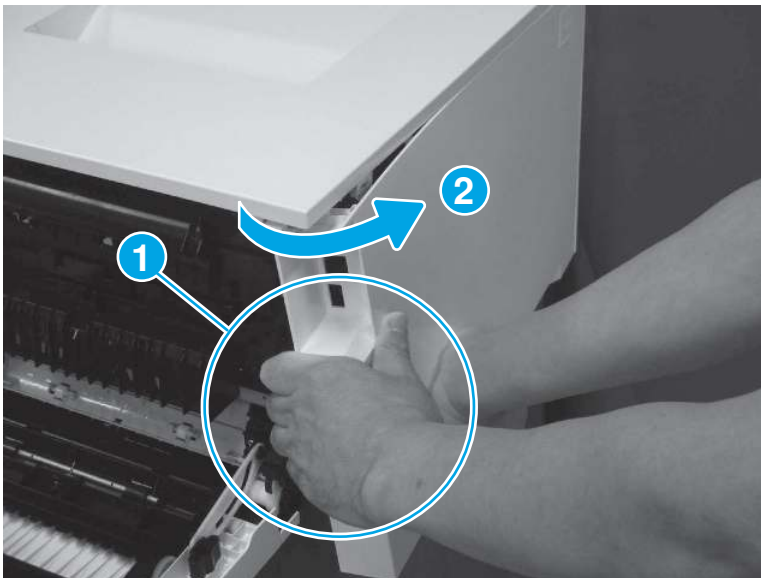
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-870 Release the rear cover corner



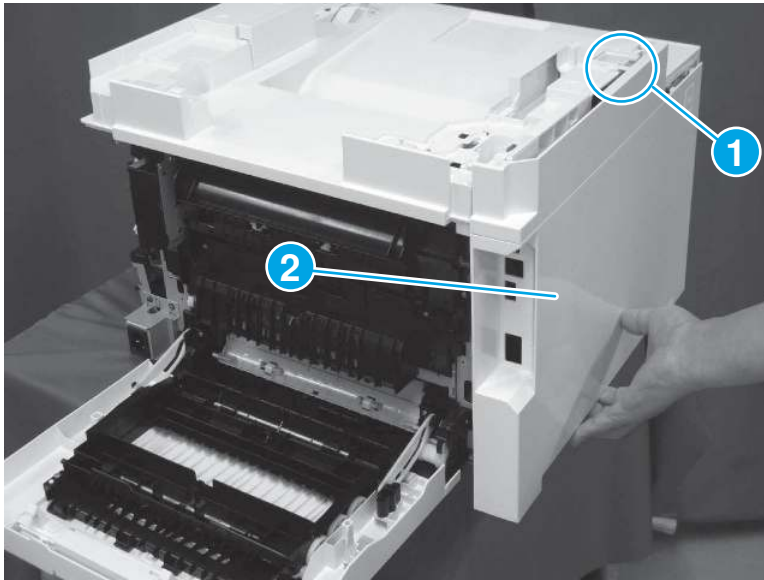
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-871 Disengage the cover corner




5. Remove the left cover (callout 1).


Figure 5-872 Remove the cover



2. Remove the left cover (MFP)

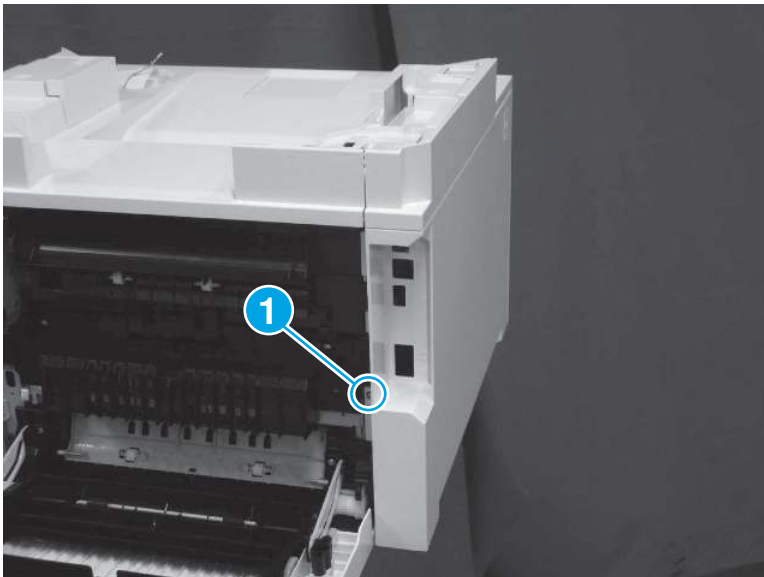
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

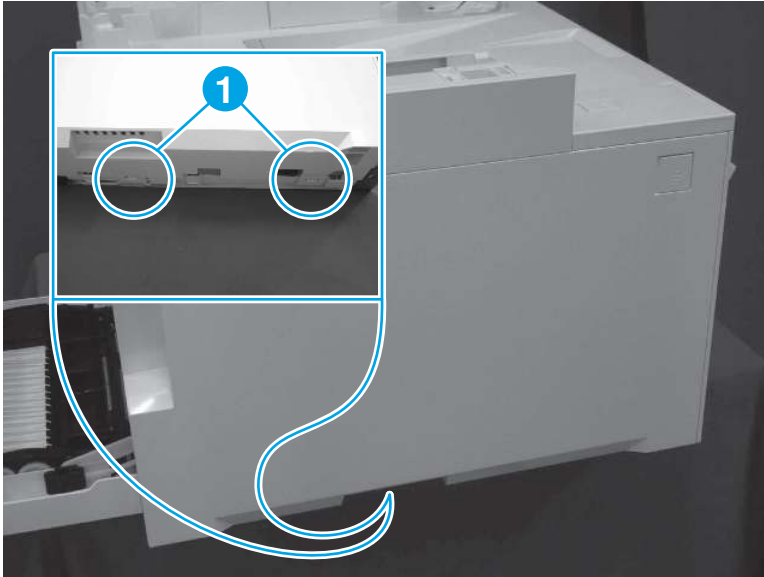
1. Remove one screw (callout 1).

Figure 5-873 Remove one screw



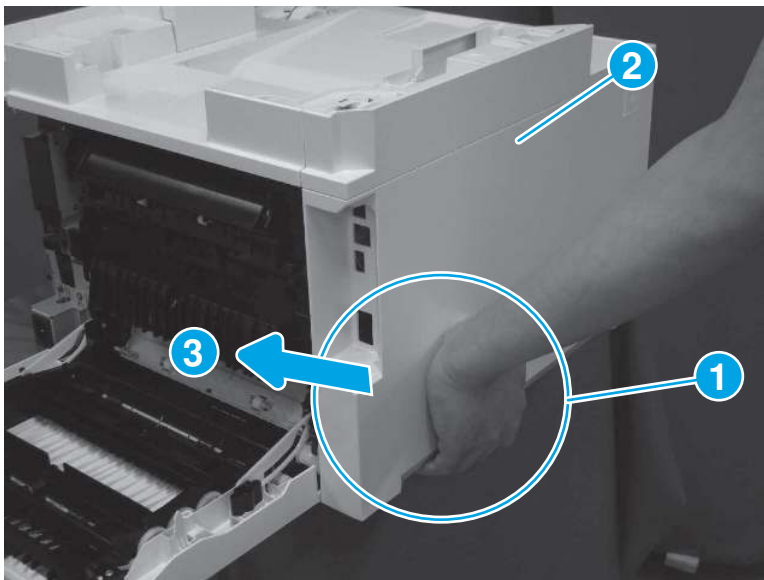
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-874 Release two tabs



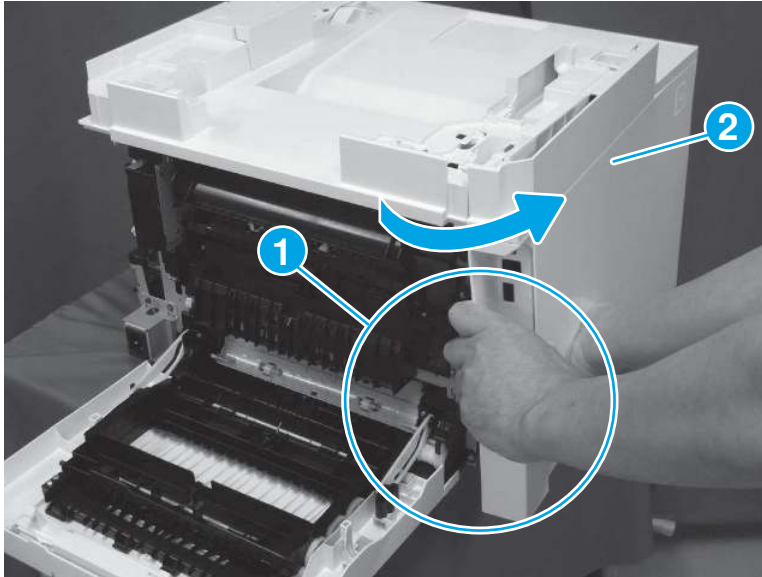
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-875 Release the rear cover corner



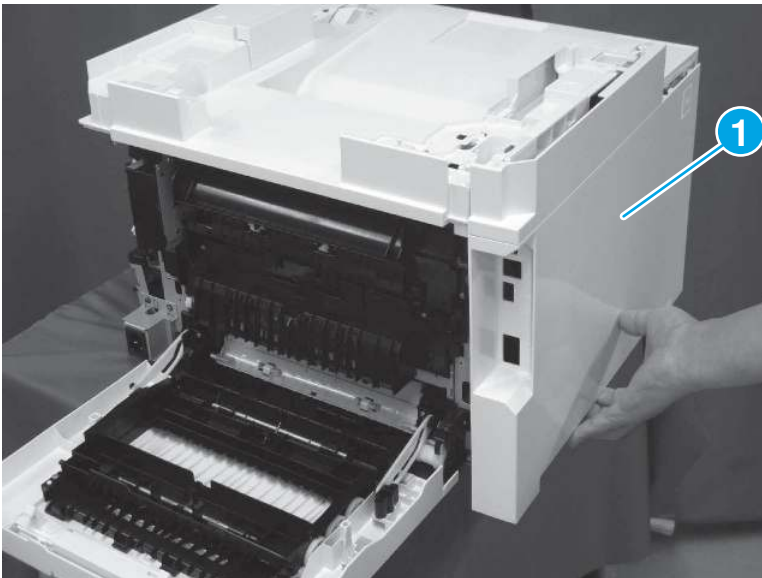
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-876 Disengage the cover corner



5. Remove the left cover (callout 1).

Figure 5-877 Remove the cover

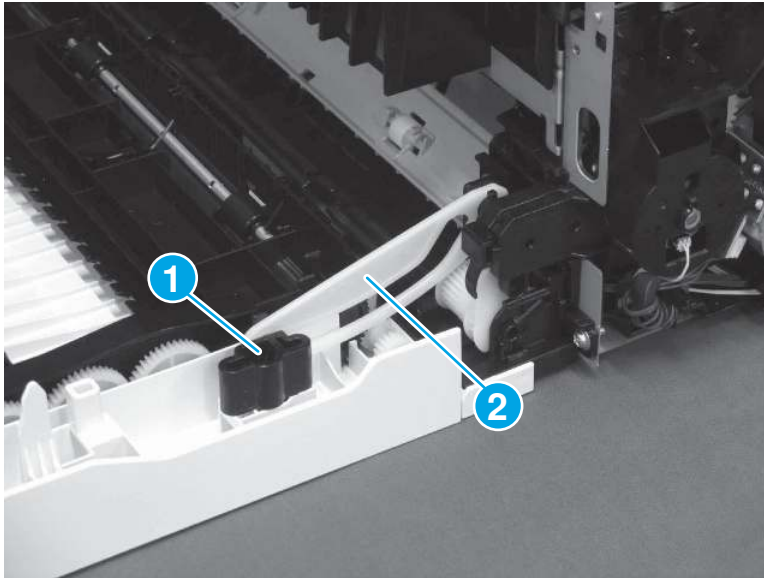


3. Remove the duplex re-pick clutch

Follow the procedure below to remove and replace the duplex re-pick clutch.

1. Remove one screw (callout 1), and then remove the hinge (callout 2).

Figure 5-878 Remove the hinge



2. Release the retainer (callout 1), rotate the shaft as shown below (callout 2) to remove it, and then remove the gear (callout 3).


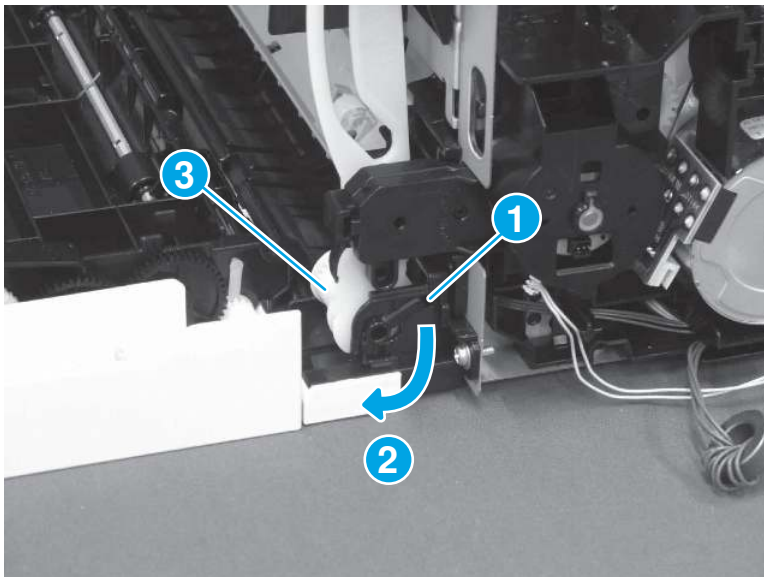
 **Reinstallation tip:** Take note of how the gear is installed before removing it. The shaft cannot be reinstalled if the gear is incorrectly installed.

Figure 5-879 Remove the gear



3. Disconnect one connector (callout 1), remove one screw (callout 2), and then release one tab (callout 3).


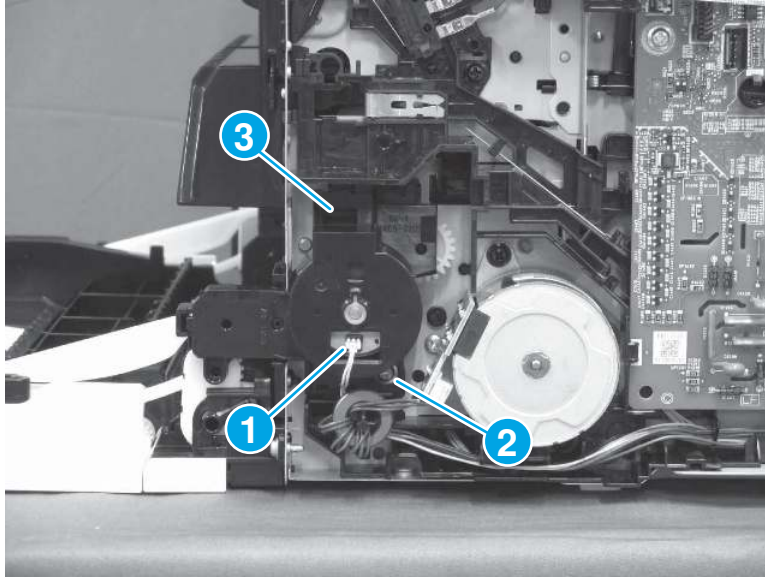
 **NOTE:** The connector (callout 1) has a tab that must be released to disconnect it. It can be difficult to disconnect when the duplex re-pick clutch is installed. It might be easier to remove the duplex re-pick clutch (see the following step), and then disconnect the connector.

Figure 5-880 Disconnect one connector, remove one screw, and release one tab

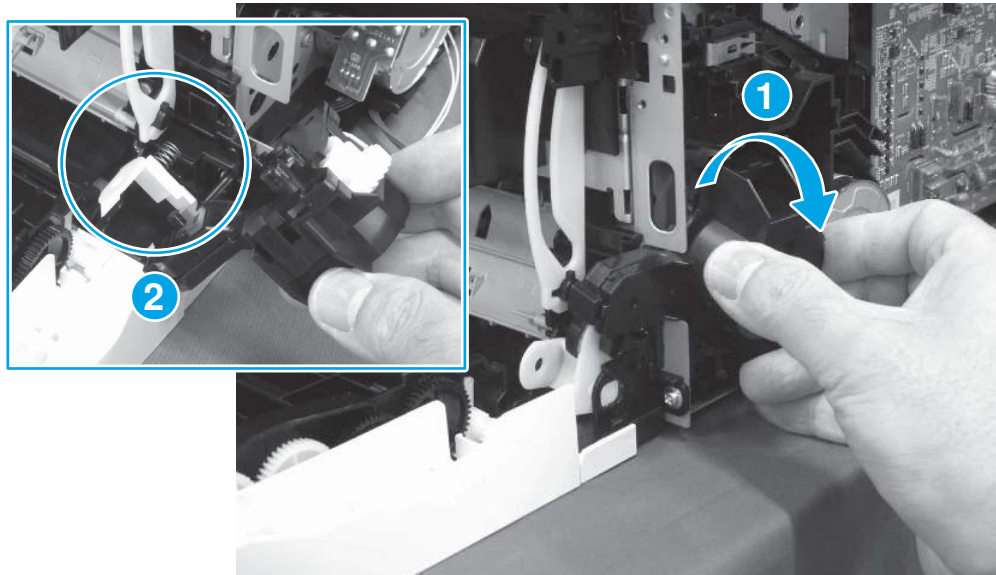


4. Remove the duplex re-pick clutch (callout 1).

CAUTION: When handling the assembly, do not lose the spring that is inside the left gear holder (callout 2).

Reinstallation tip: For a replacement duplex re-pick clutch only: Remove the spring from the assembly (callout 2), and then install it on the replacement duplex re-pick clutch.

Figure 5-881 Remove the duplex re-pick clutch





4. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.

NOTE: HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Duplex guide assembly

Learn about duplex guide assembly removal.


Mean time to repair: 18 minutes

Service level: Medium

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-47 Part information

Part number	Part description
RM2-2760-000CN	Duplexing guide assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- Needle-nose pliers

After performing service

Turn the printer power on


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


Post service test

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

1. Remove the left cover (SFP)

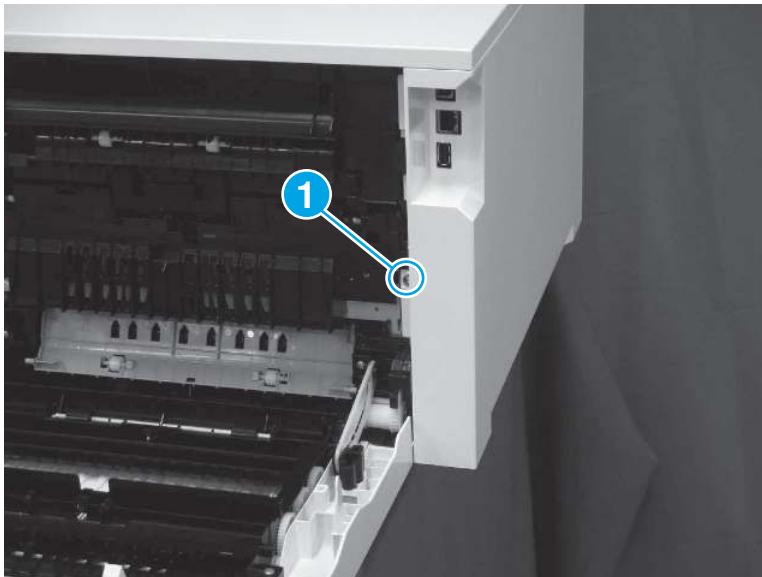
Follow the procedure below to remove and replace the left cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

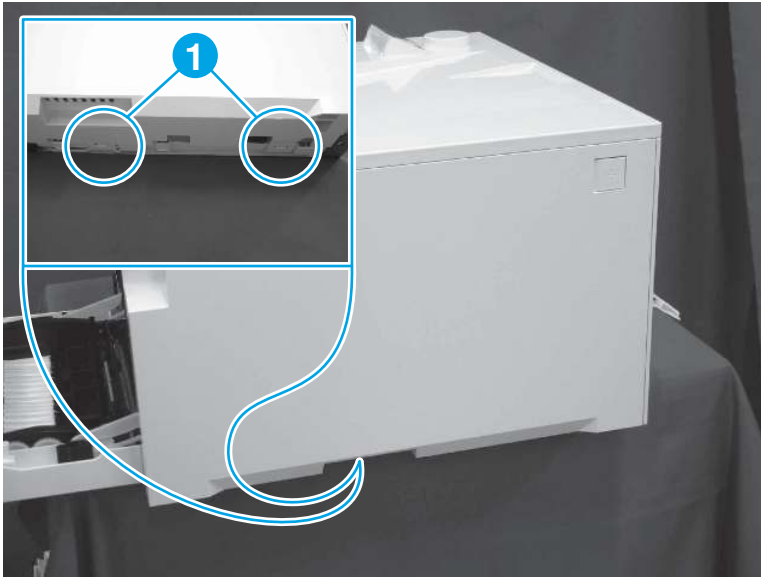
1. Remove one screw (callout 1).

Figure 5-882 Remove one screw



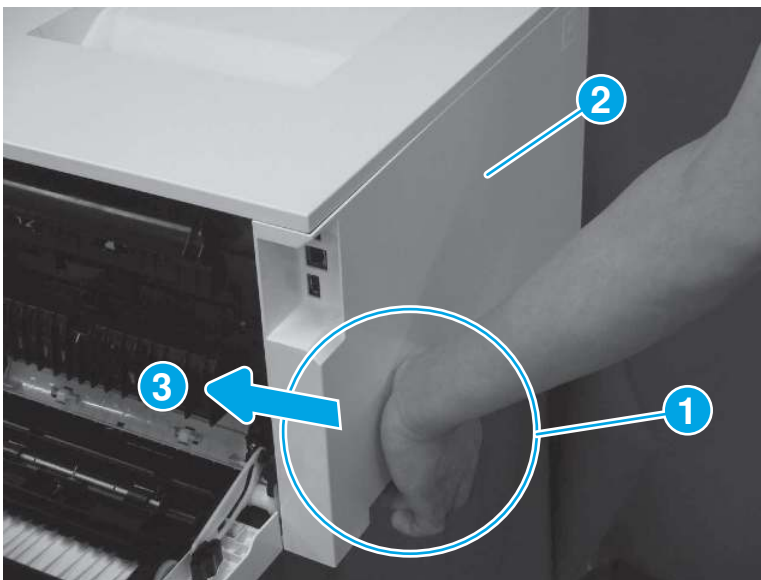
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-883 Release two tabs



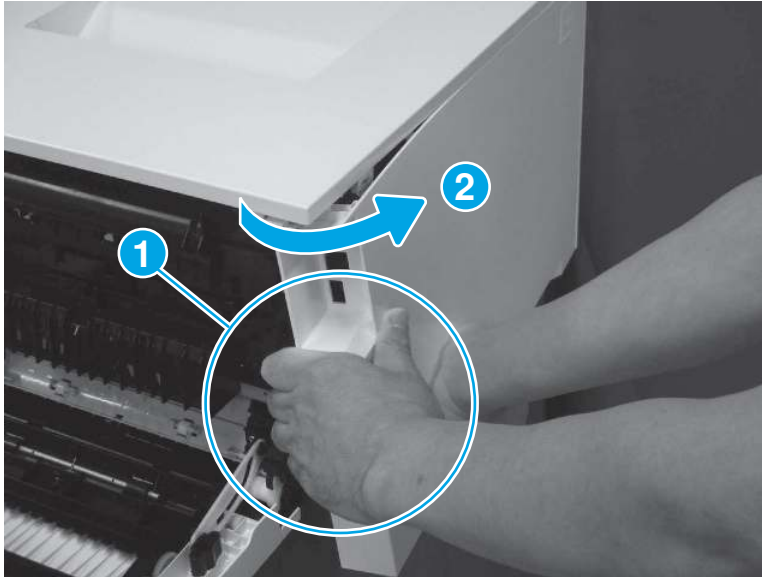
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-884 Release the rear cover corner



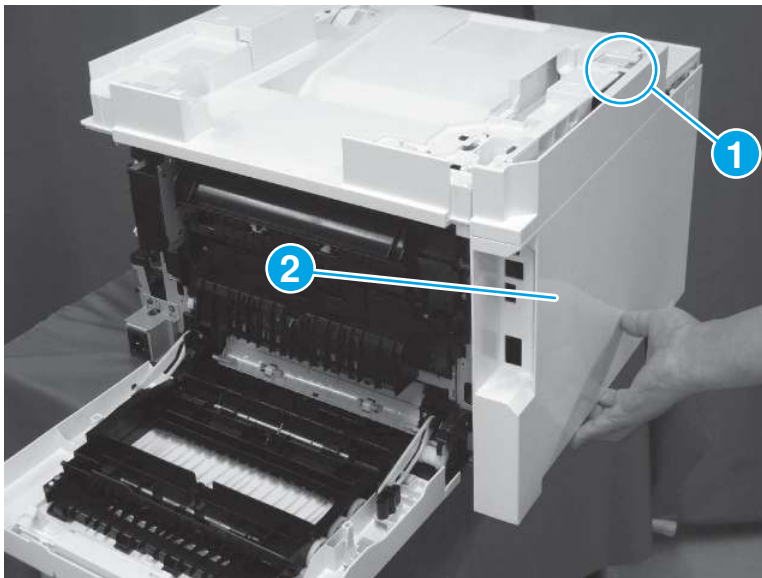
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-885 Disengage the cover corner




5. Remove the left cover (callout 1).


Figure 5-886 Remove the cover



2. Remove the left cover (MFP)

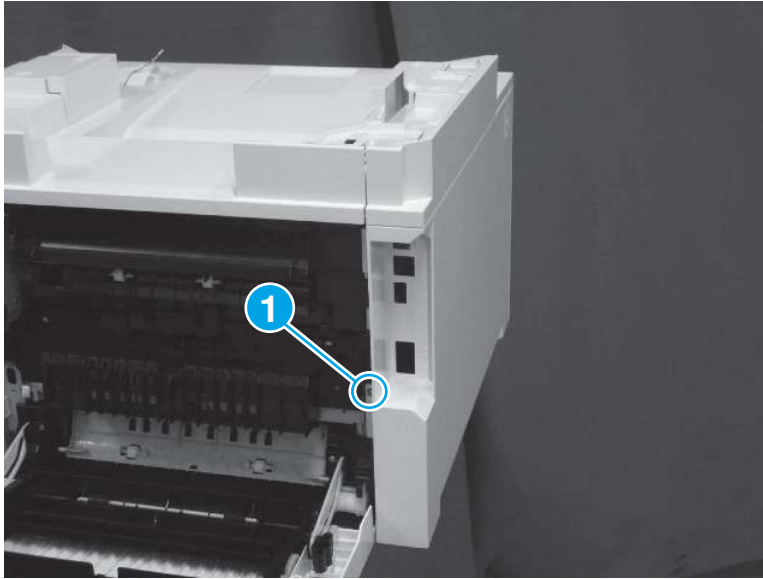
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

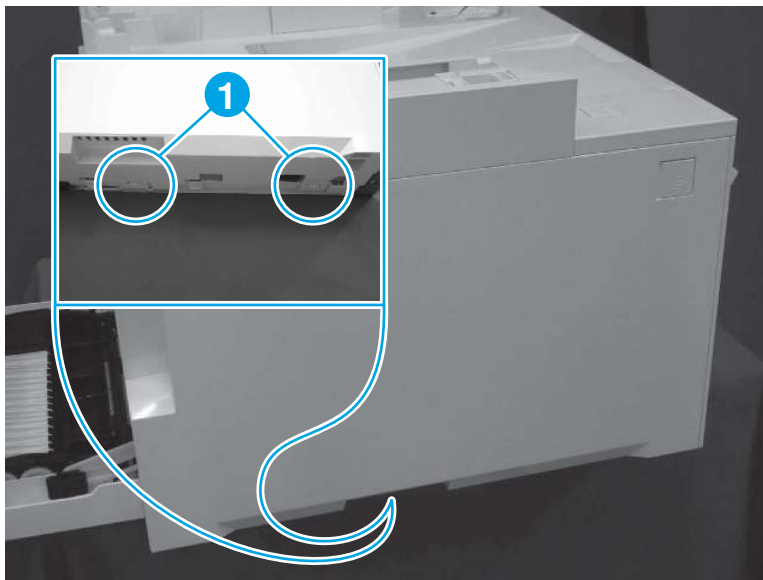
1. Remove one screw (callout 1).

Figure 5-887 Remove one screw



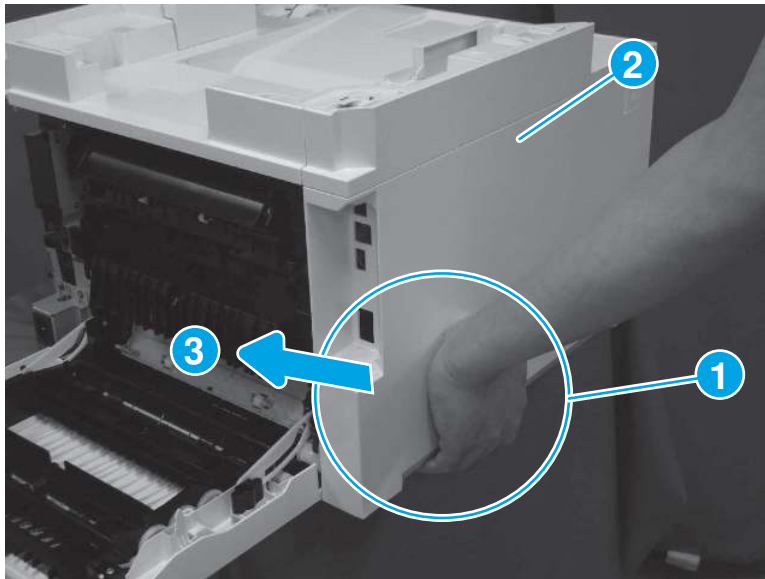
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-888 Release two tabs



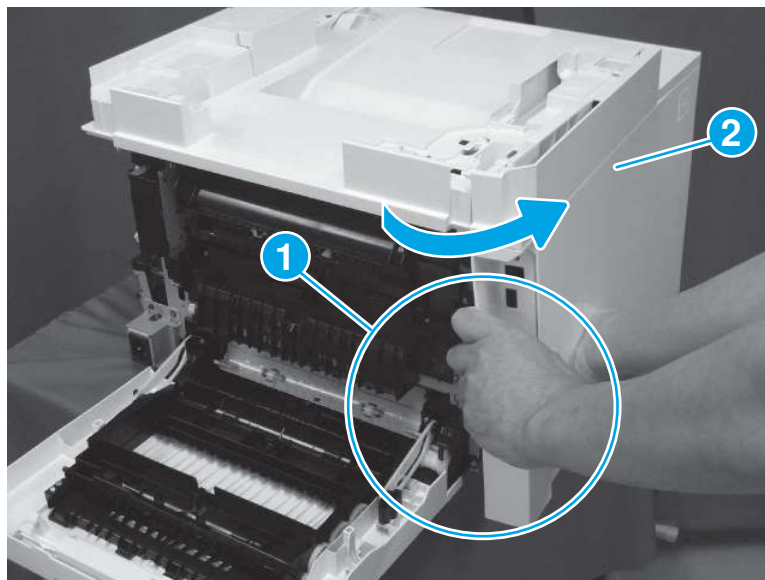
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-889 Release the rear cover corner



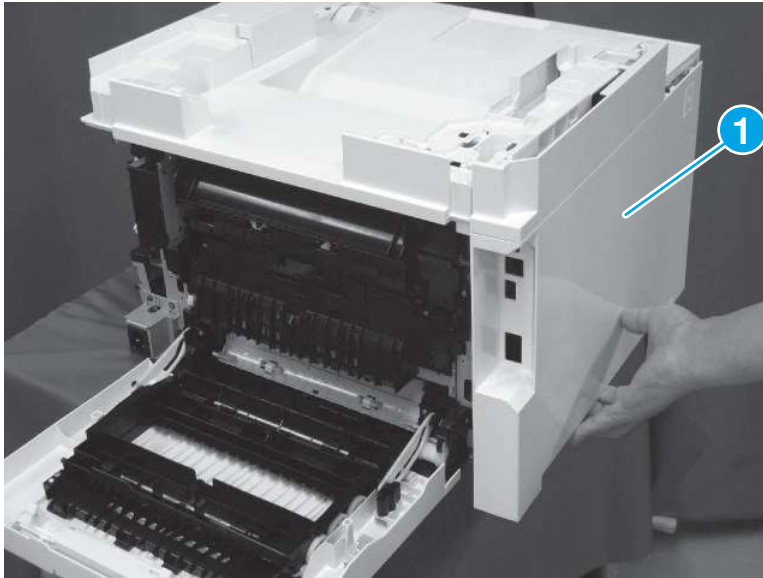
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-890 Disengage the cover corner



5. Remove the left cover (callout 1).

Figure 5-891 Remove the cover

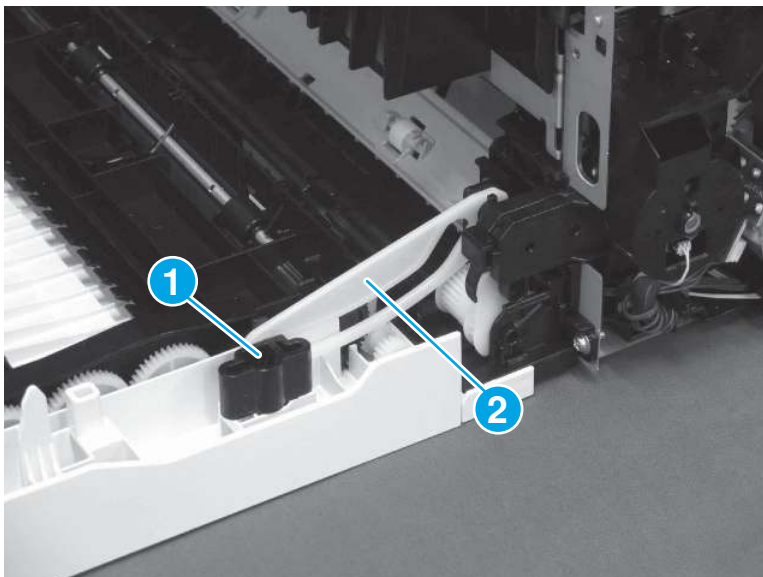


3. Remove the duplex re-pick clutch

Follow the procedure below to remove and replace the duplex re-pick clutch.

1. Remove one screw (callout 1), and then remove the hinge (callout 2).

Figure 5-892 Remove the hinge



2. Release the retainer (callout 1), rotate the shaft as shown below (callout 2) to remove it, and then remove the gear (callout 3).


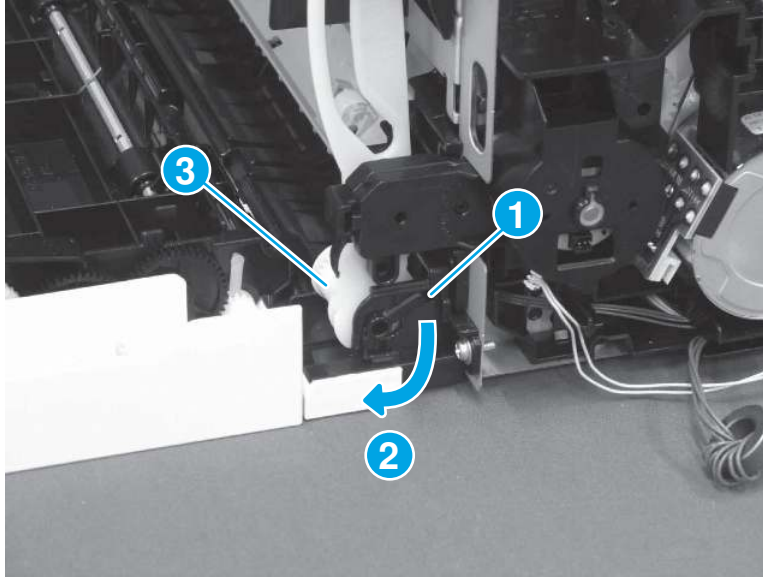
 **Reinstallation tip:** Take note of how the gear is installed before removing it. The shaft cannot be reinstalled if the gear is incorrectly installed.

Figure 5-893 Remove the gear



3. Disconnect one connector (callout 1), remove one screw (callout 2), and then release one tab (callout 3).


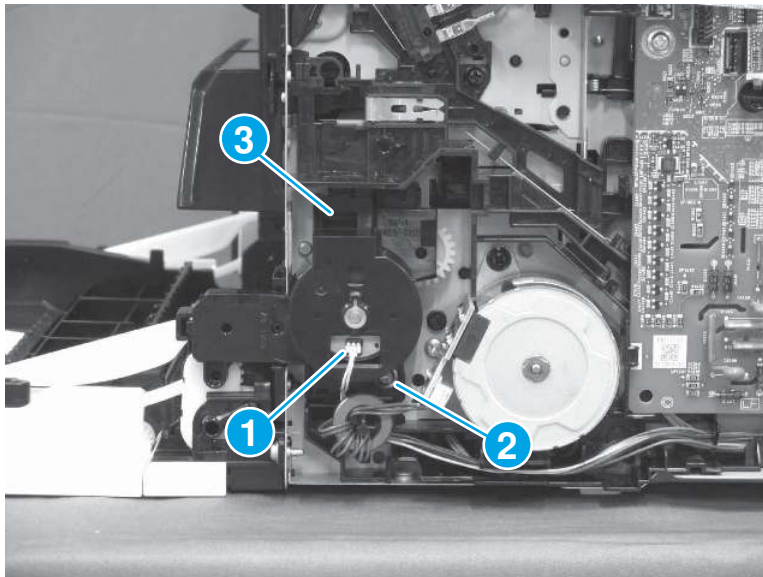

 **NOTE:** The connector (callout 1) has a tab that must be released to disconnect it. It can be difficult to disconnect when the duplex re-pick clutch is installed. It might be easier to remove the duplex re-pick clutch (see the following step), and then disconnect the connector.

Figure 5-894 Disconnect one connector, remove one screw, and release one tab

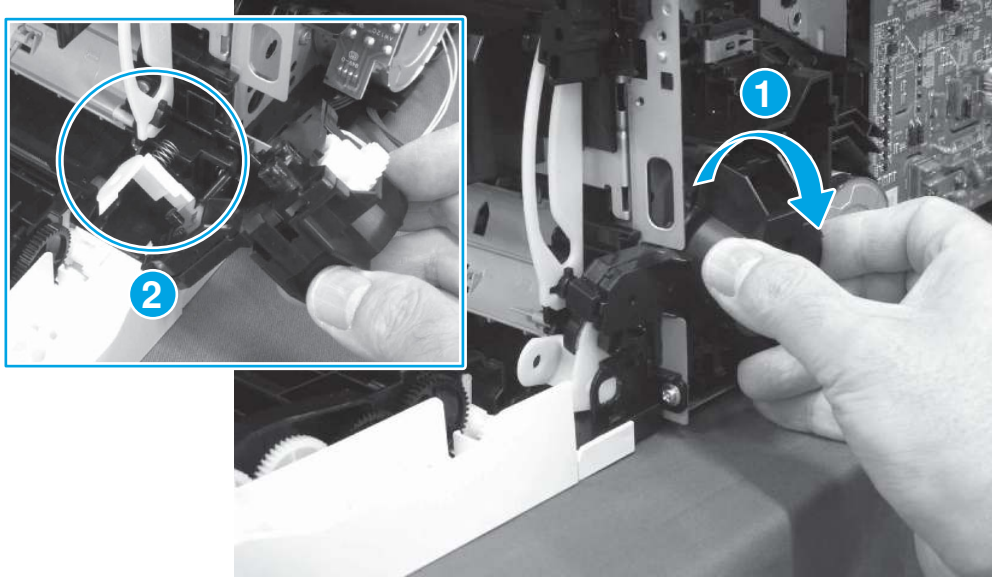


4. Remove the duplex re-pick clutch (callout 1).

 **CAUTION:** When handling the assembly, do not lose the spring that is inside the left gear holder (callout 2).

 **Reinstallation tip:** For a replacement duplex re-pick clutch only: Remove the spring from the assembly (callout 2), and then install it on the replacement duplex re-pick clutch.

Figure 5-895 Remove the duplex re-pick clutch

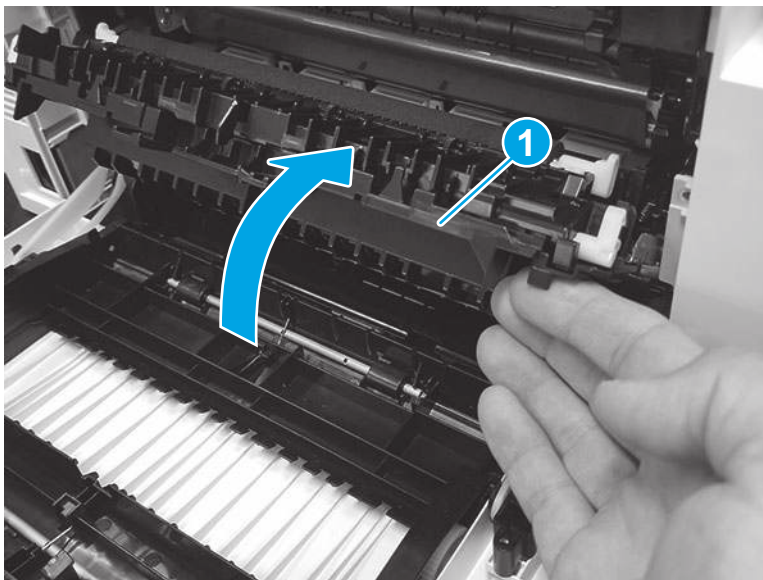


4. Remove the rear door

Follow the procedure below to remove and replace the rear door.

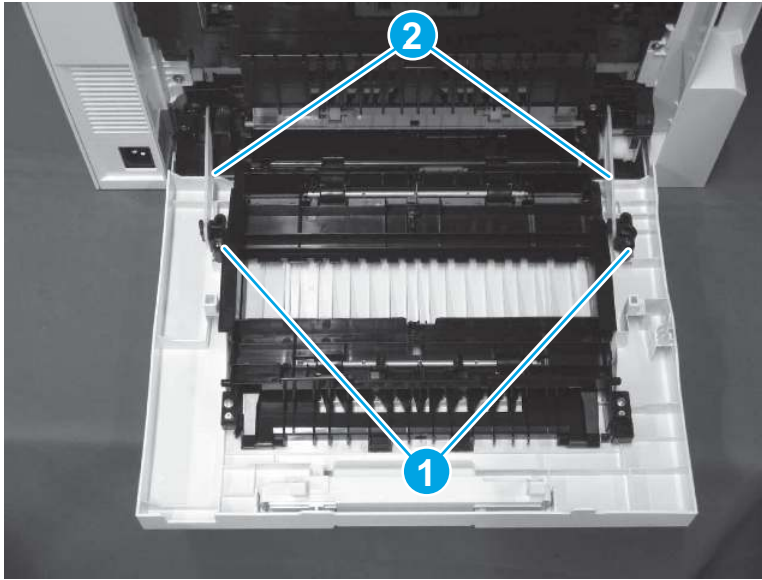
1. Open the rear door, and then raise the secondary transfer feed assembly (callout 1) up and into the locked position.

Figure 5-896 Place the T2 feed assembly in the locked position



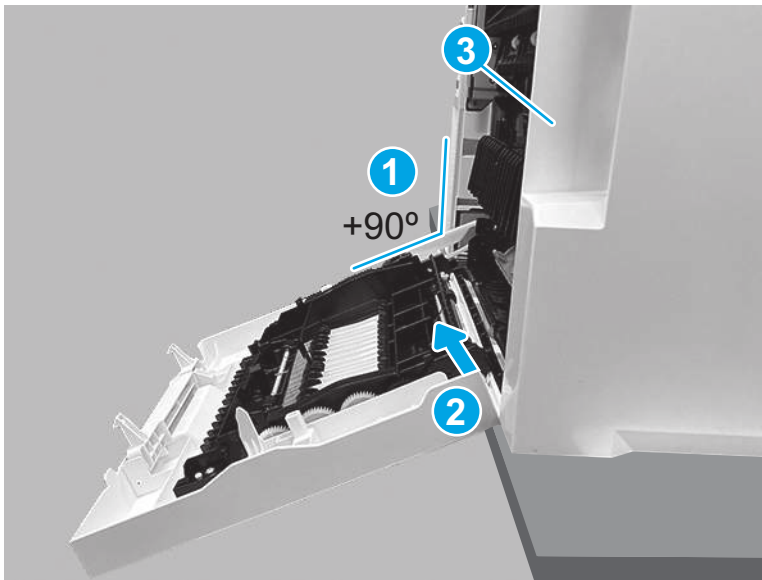
2. Remove two screws (callout 1), and then release the left- and right-side retainer arms (callout 2)

Figure 5-897 Release the retainer arms



3. Carefully position the printer at the edge of the work surface and allow the rear door to open to an angle greater than 90 degrees (callout 1). Slide the door away (callout 2) from the formatter side of the printer (callout 3) to release it, and then remove the rear door.

Figure 5-898 Remove the door

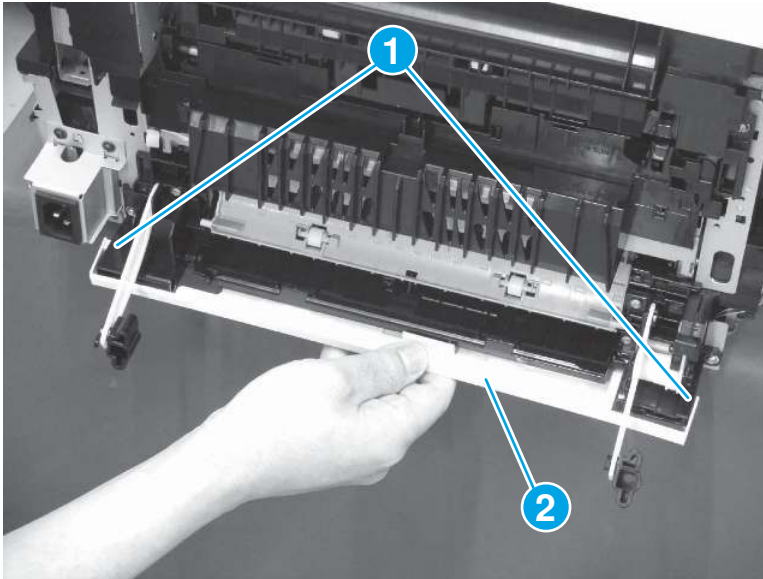


5. Remove the duplexing bottom cover

Follow the procedure below to remove and replace the duplexing bottom cover.

- Release two tabs (callout 1), and then remove the duplexing bottom cover (callout 2).

Figure 5-899 Remove the duplexing bottom cover



6. Remove the duplex guide assembly

Follow the procedure below to remove and replace the duplex guide assembly.

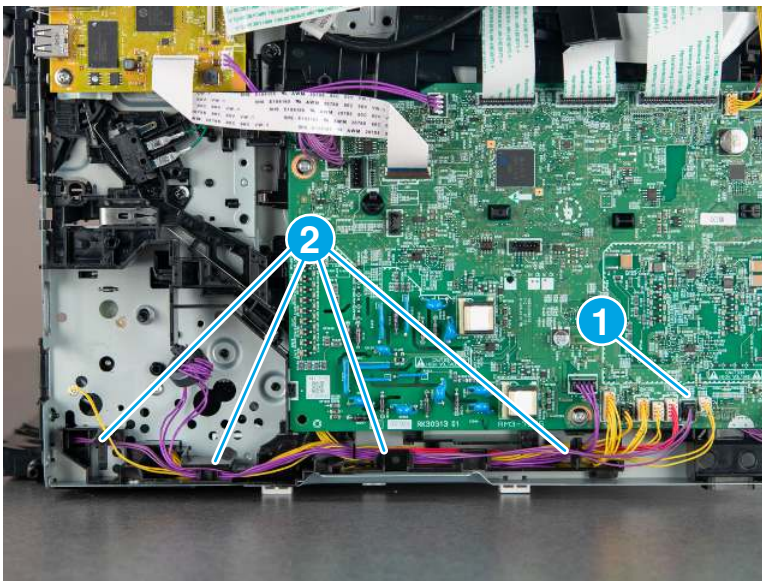
1. Disconnect one connector (callout 1), and then release the wire harness from the retainer (callout 2).



NOTE: The correct cable to release is the purple three-wire harness.

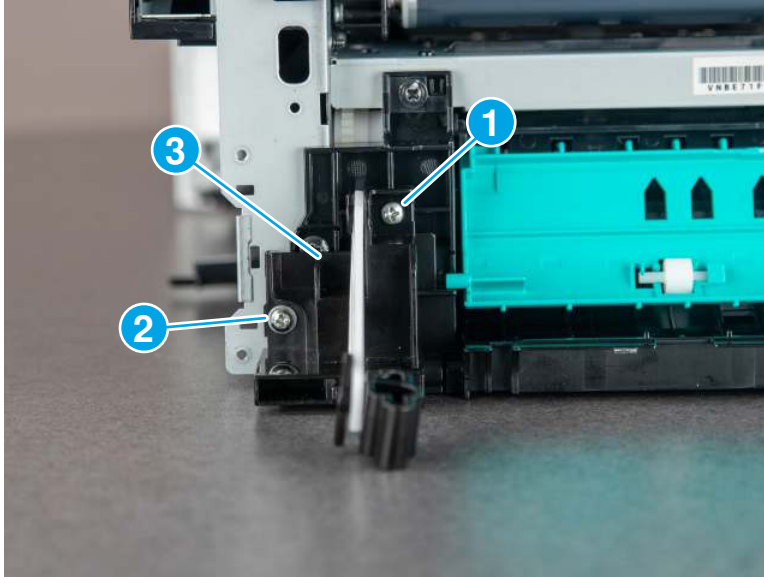
Disconnect other connectors and release other wire harnesses as necessary.

Figure 5-900 Disconnect one connector



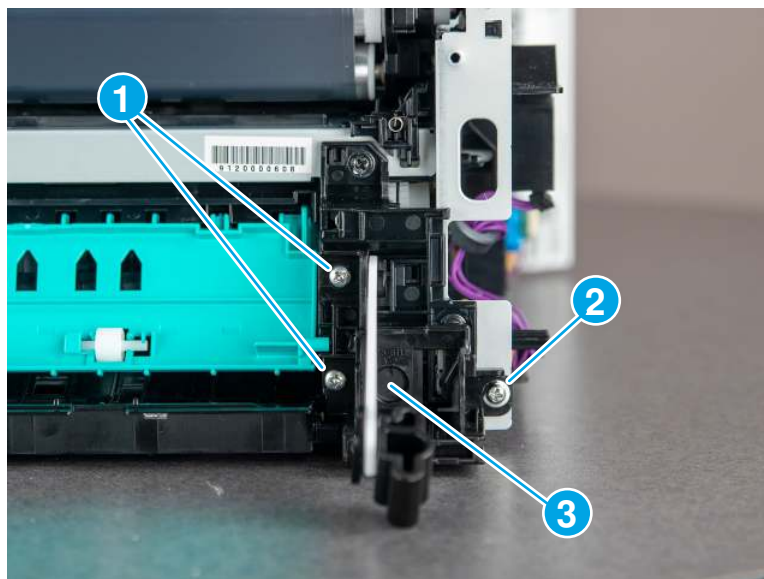
2. Do the following:
 - a. Remove one (tapping) screw (callout 1).
 - b. Remove one (TP) screw (callout 2)
 - c. Remove the holder (callout 3).

Figure 5-901 Remove two screws and the holder



3. Do the following:
 - a. Remove two (tapping) screws (callout 1).
 - b. Remove one (TP) screw (callout 2)
 - c. Remove the holder (callout 3).

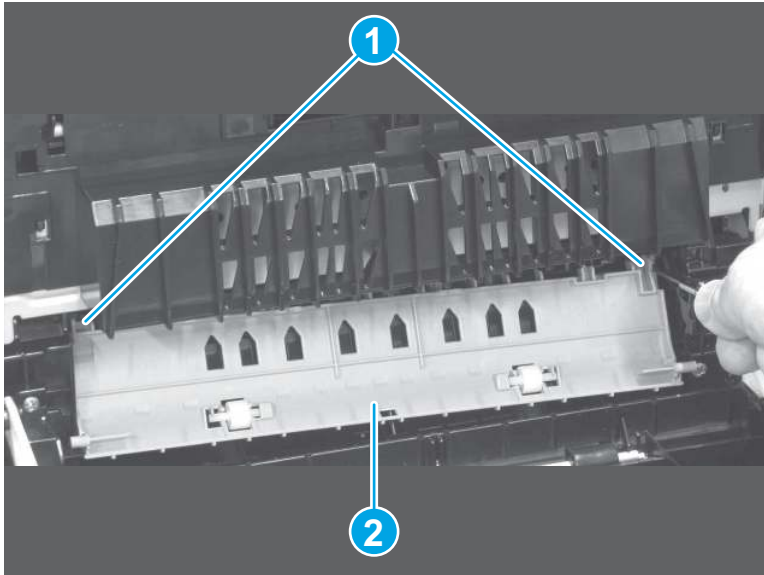
Figure 5-902 Remove three screws and the holder



4. Use a small flat-blade screwdriver to release one boss at each end of the duplex guide (callout 1), and then remove the guide (callout 2).

CAUTION: Parts of this assembly are fragile and can easily be damaged during removal.

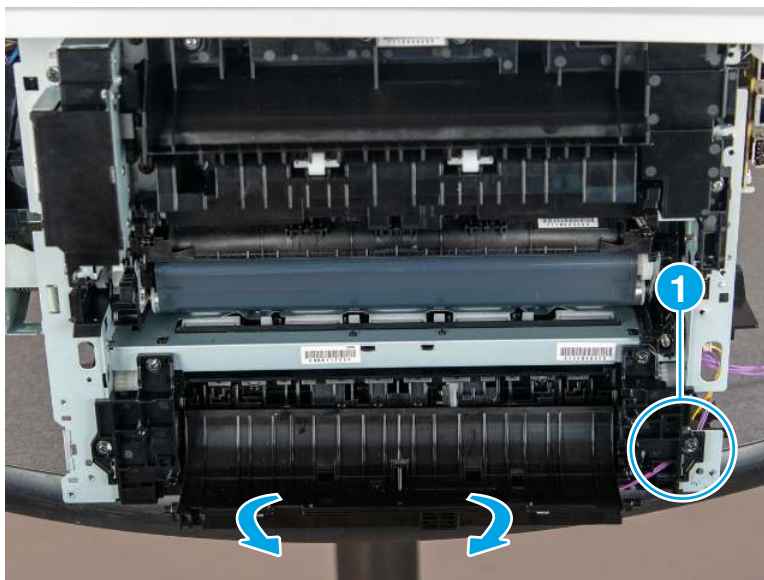
Figure 5-903 Remove the duplex upper guide



5. Carefully position the printer at the edge of the work surface. Slightly pull the duplex guide assembly down to release it, and then remove the assembly.

NOTE: Pass the wire harness through the opening in the chassis as the assembly is removed (callout 1).


Figure 5-904 Remove the duplex guide assembly



7. Unpack the replacement assembly



Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Feed lower guide assembly

Learn about feed lower guide assembly removal.


Mean time to repair: 40 minutes

Service level: Difficult

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-48 Part information

Part number	Part description
RM2-2736-000CN	Paper feed guide assembly, lower

Required tools

- Small flat-blade screwdriver
- Small flat-blade screwdriver
- Needle-nose pliers

After performing service

Turn the printer power on


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


Post service test

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

1. Remove the left cover (SFP)

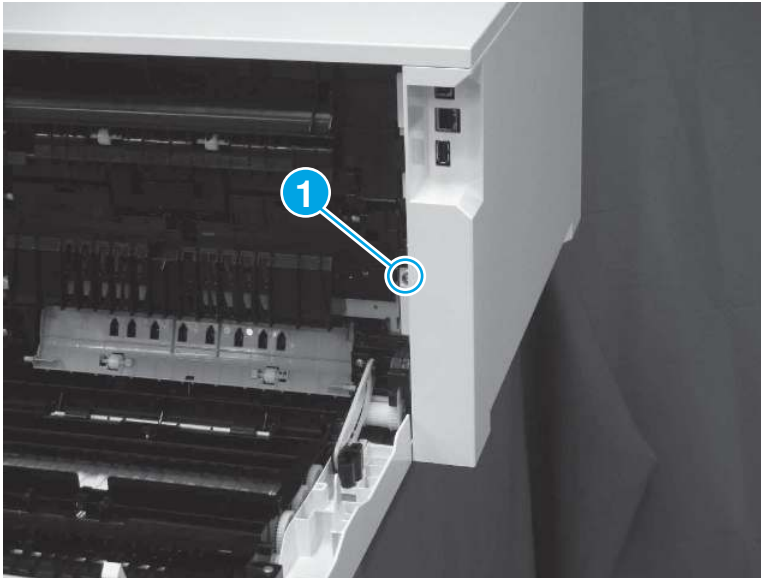
Follow the procedure below to remove and replace the left cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

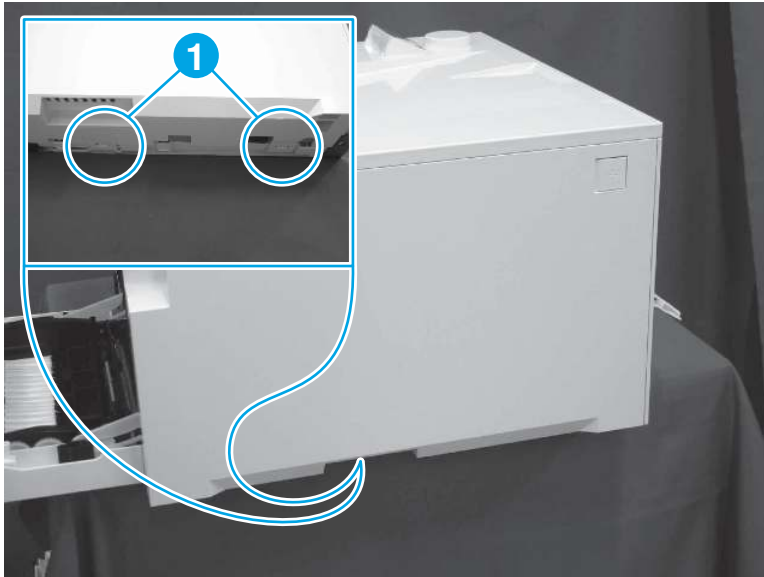
1. Remove one screw (callout 1).

Figure 5-905 Remove one screw



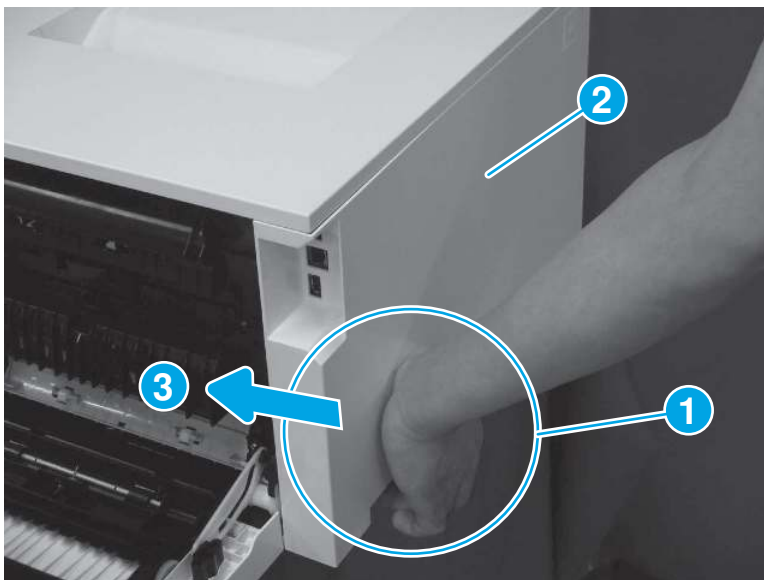
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-906 Release two tabs



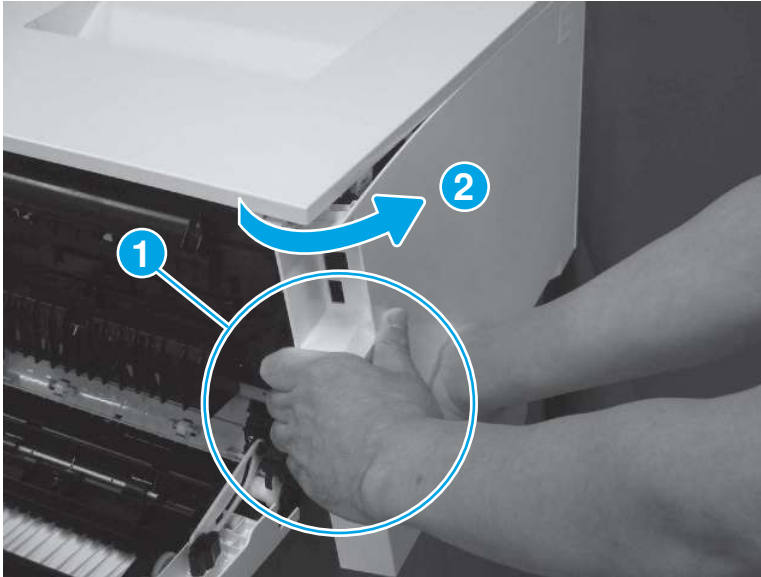
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-907 Release the rear cover corner



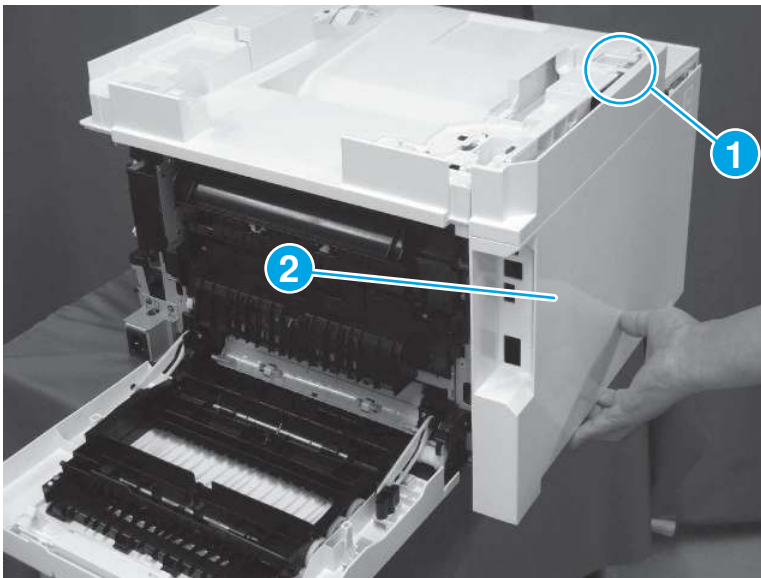
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-908 Disengage the cover corner




5. Remove the left cover (callout 1).


Figure 5-909 Remove the cover



2. Remove the left cover (MFP)

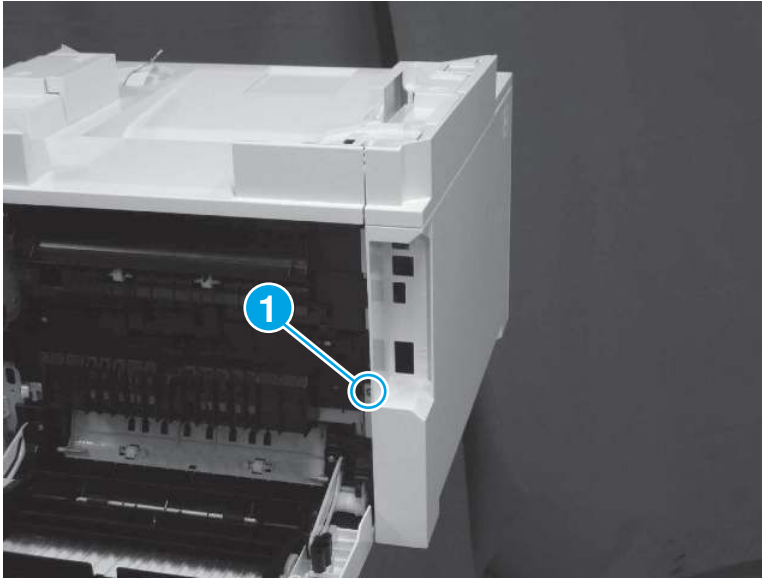
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

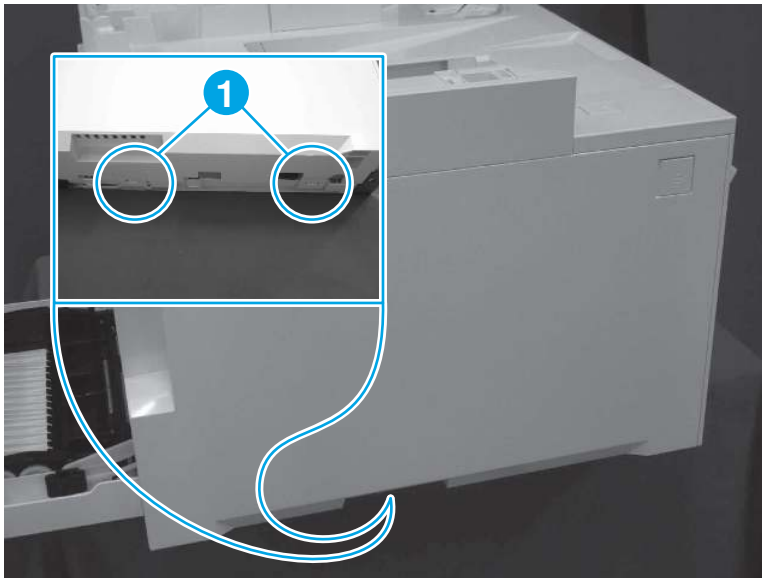
1. Remove one screw (callout 1).

Figure 5-910 Remove one screw



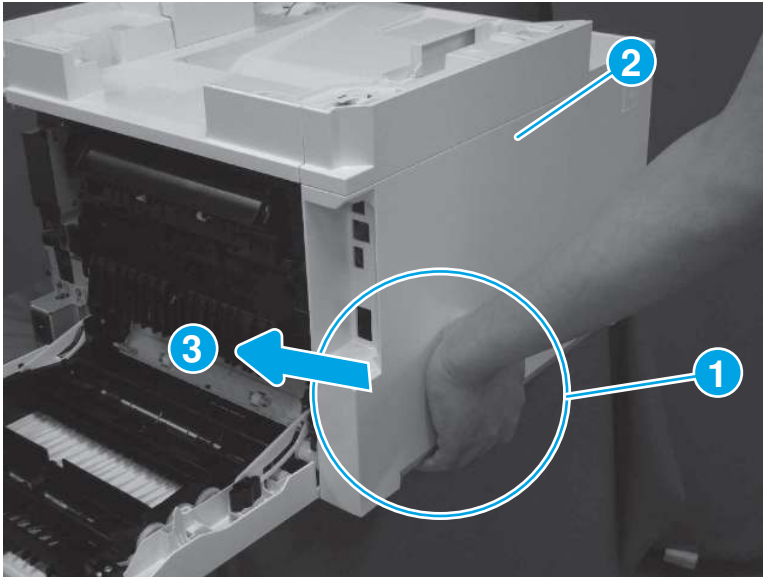
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-911 Release two tabs



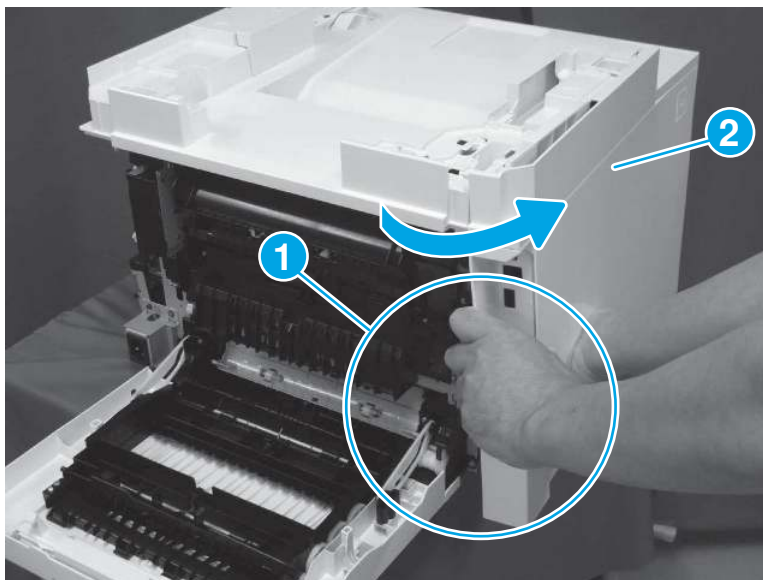
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-912 Release the rear cover corner



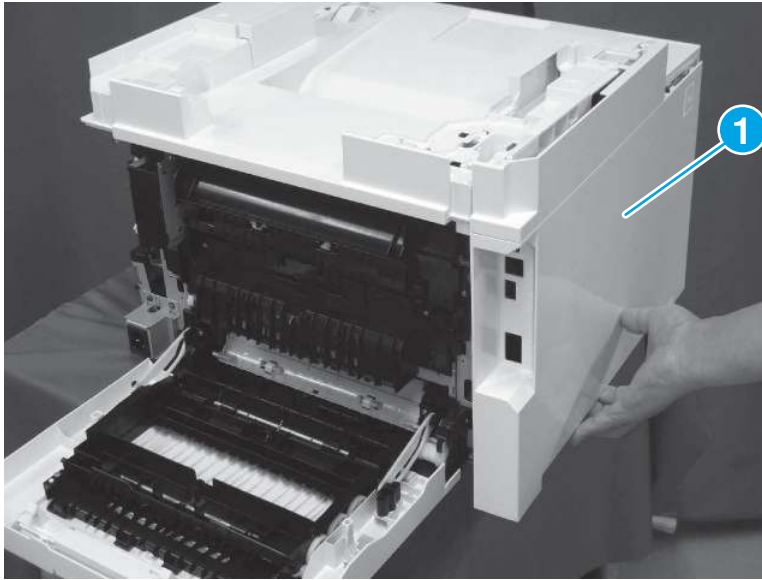
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-913 Disengage the cover corner



5. Remove the left cover (callout 1).

Figure 5-914 Remove the cover

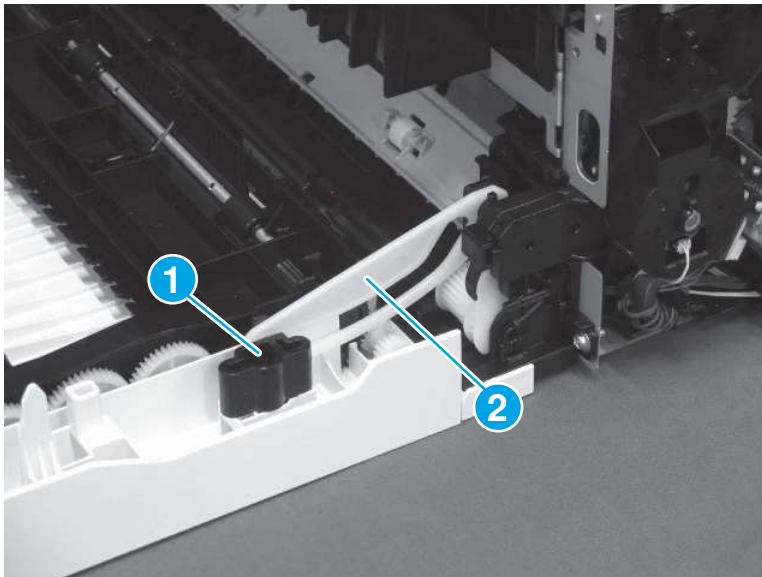


3. Remove the duplex re-pick clutch

Follow the procedure below to remove and replace the duplex re-pick clutch.

1. Remove one screw (callout 1), and then remove the hinge (callout 2).

Figure 5-915 Remove the hinge



2. Release the retainer (callout 1), rotate the shaft as shown below (callout 2) to remove it, and then remove the gear (callout 3).


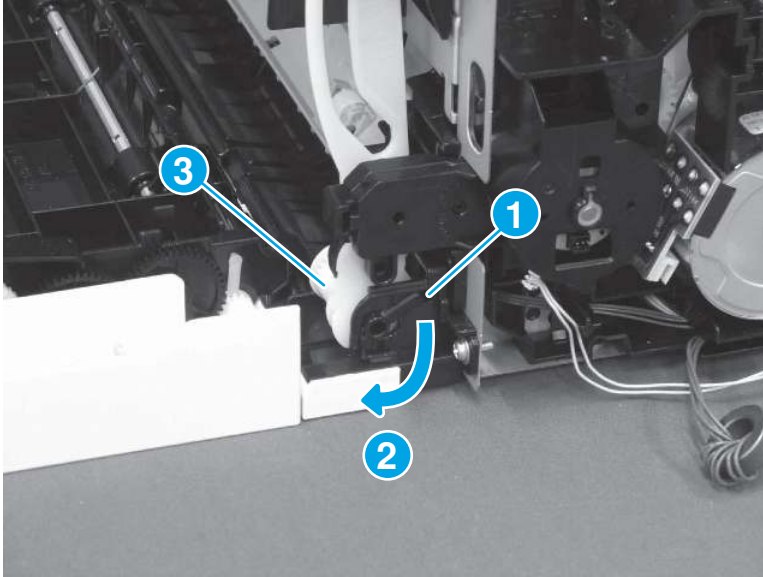
 **Reinstallation tip:** Take note of how the gear is installed before removing it. The shaft cannot be reinstalled if the gear is incorrectly installed.

Figure 5-916 Remove the gear



3. Disconnect one connector (callout 1), remove one screw (callout 2), and then release one tab (callout 3).


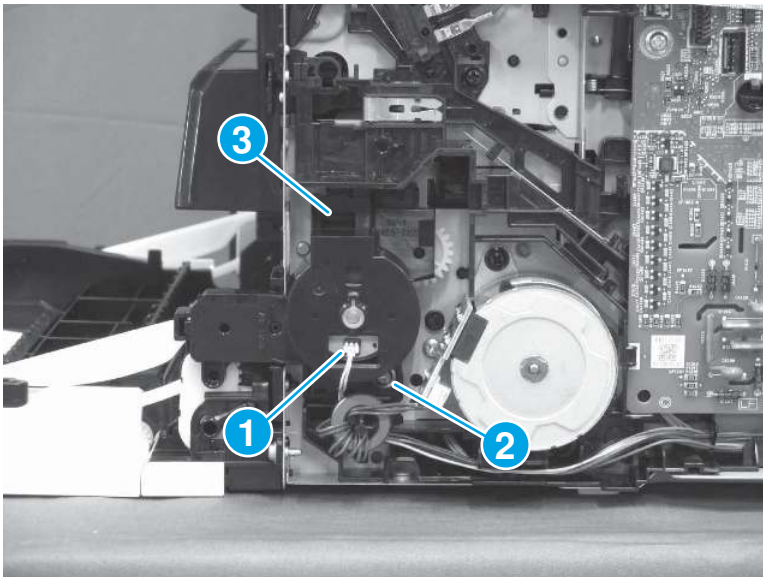

 **NOTE:** The connector (callout 1) has a tab that must be released to disconnect it. It can be difficult to disconnect when the duplex re-pick clutch is installed. It might be easier to remove the duplex re-pick clutch (see the following step), and then disconnect the connector.

Figure 5-917 Disconnect one connector, remove one screw, and release one tab

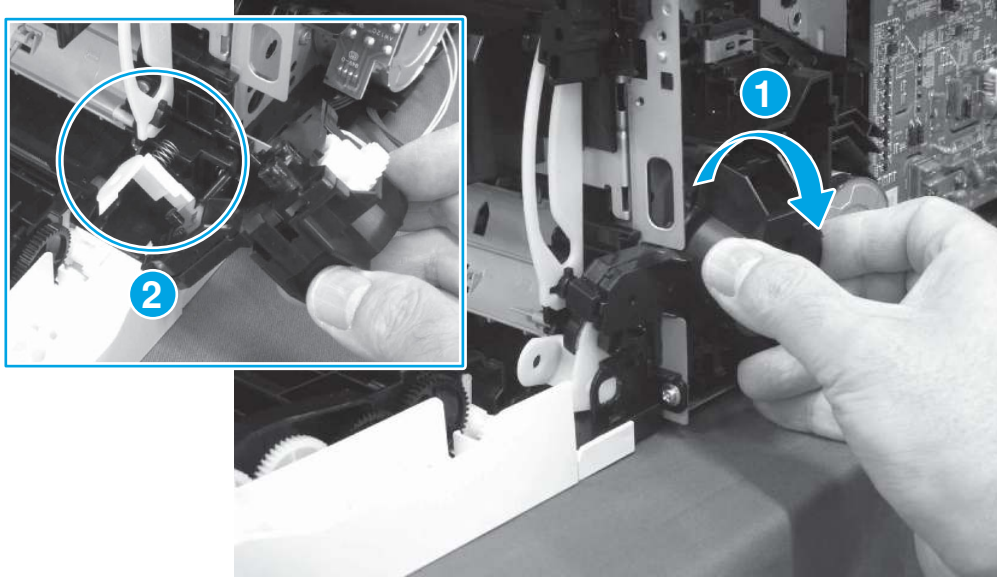


4. Remove the duplex re-pick clutch (callout 1).

 **CAUTION:** When handling the assembly, do not lose the spring that is inside the left gear holder (callout 2).

 **Reinstallation tip:** For a replacement duplex re-pick clutch only: Remove the spring from the assembly (callout 2), and then install it on the replacement duplex re-pick clutch.

Figure 5-918 Remove the duplex re-pick clutch

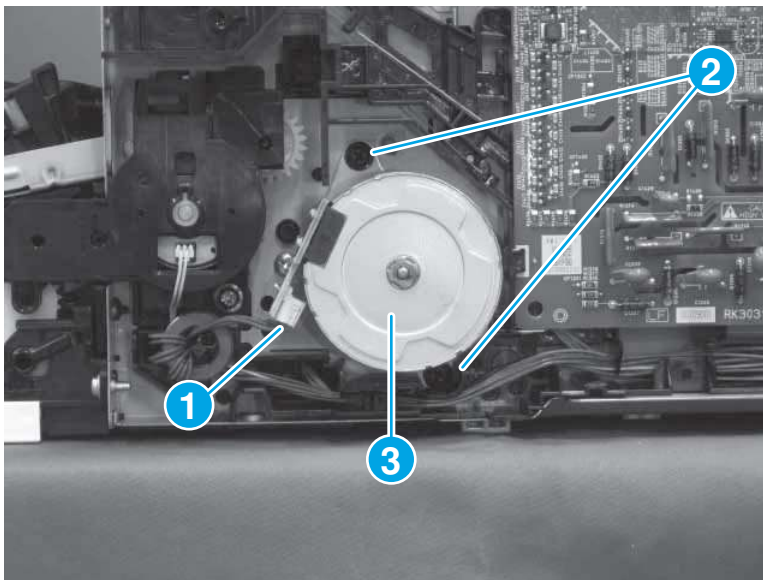


4. Remove the feed motor

Follow the procedure below to remove and replace the feed motor.


- Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).

Figure 5-919 Remove the feed motor



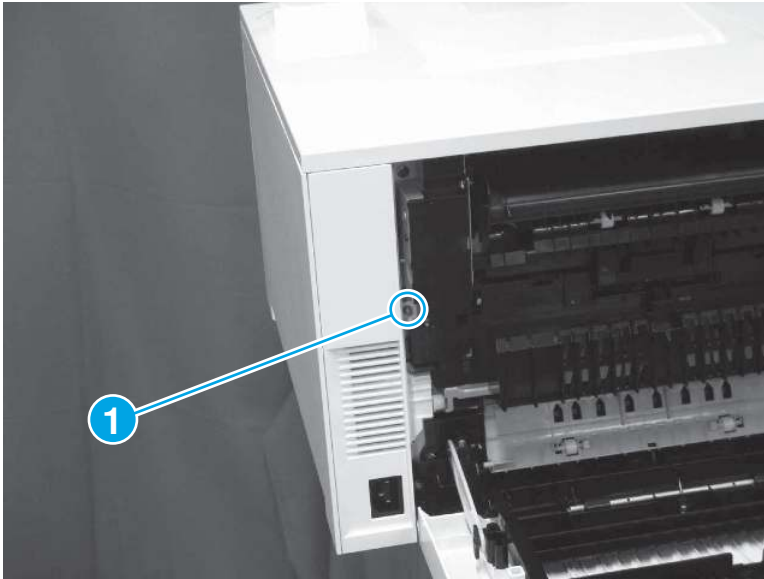
5. Remove the right cover (SFP)

Follow the procedure below to remove and replace the right cover (SFP).

-
-  **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.
-

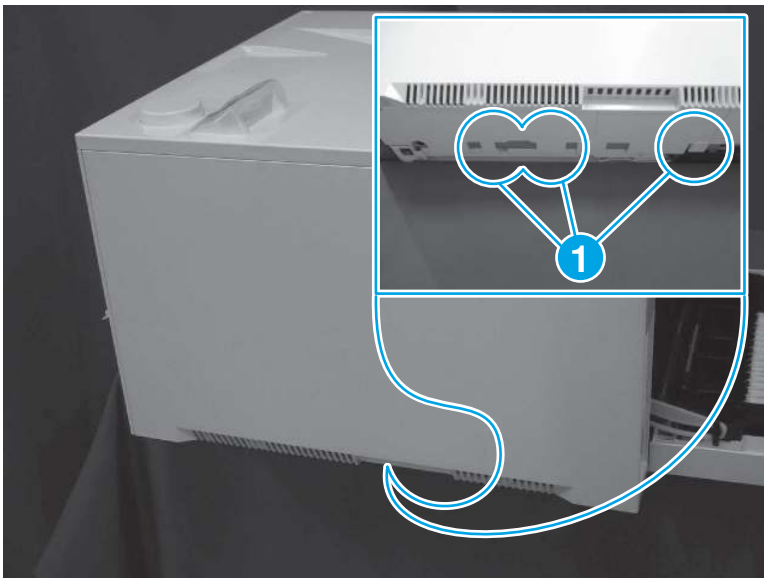
1. Remove one screw (callout 1).

Figure 5-920 Remove one screw



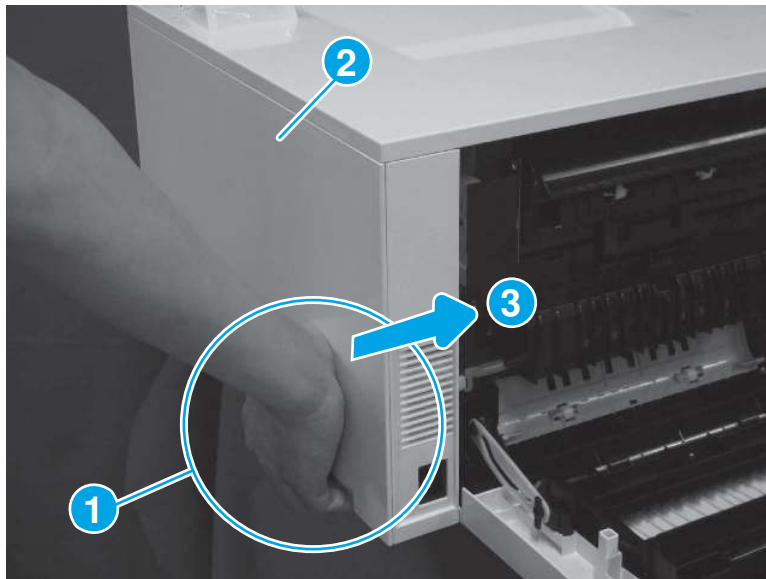
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-921 Release three tabs



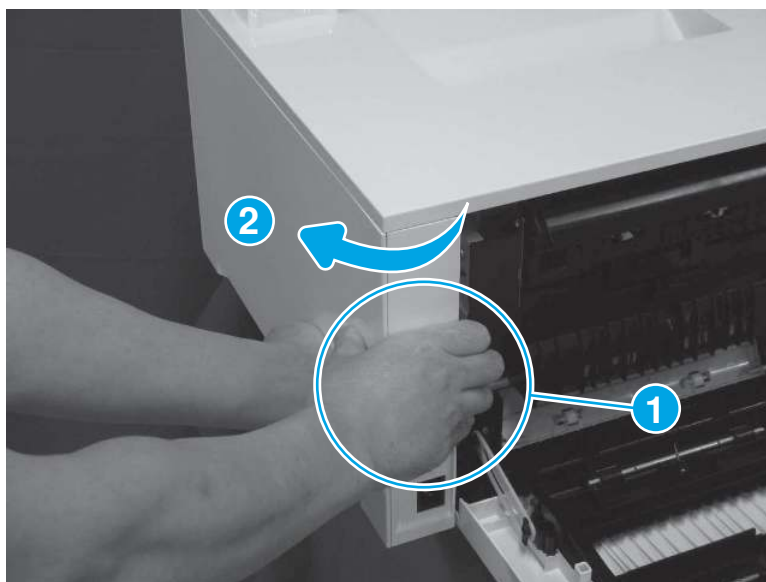
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-922 Release the rear cover corner



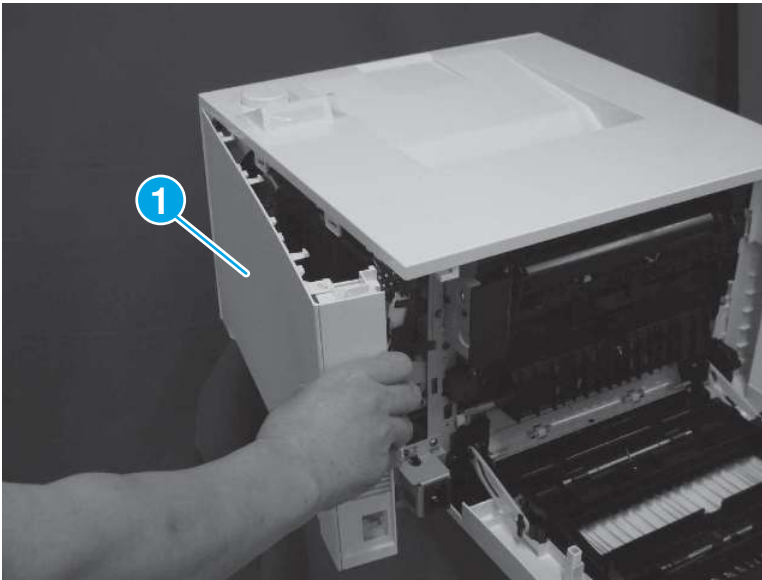
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-923 Disengage the cover corner




5. Remove the right cover (callout 1).

Figure 5-924 Remove the cover



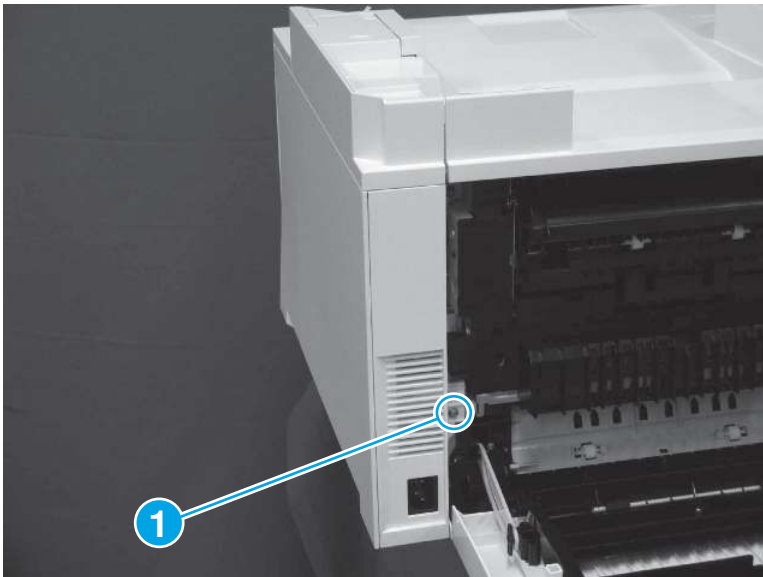
6. Remove the right cover (MFP)

Follow the procedure below to remove and replace the right cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

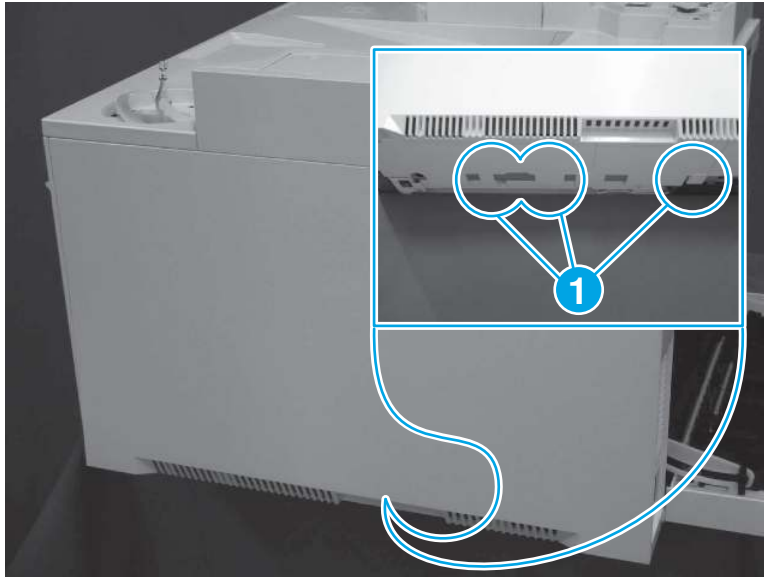
1. Remove one screw (callout 1).

Figure 5-925 Remove one screw



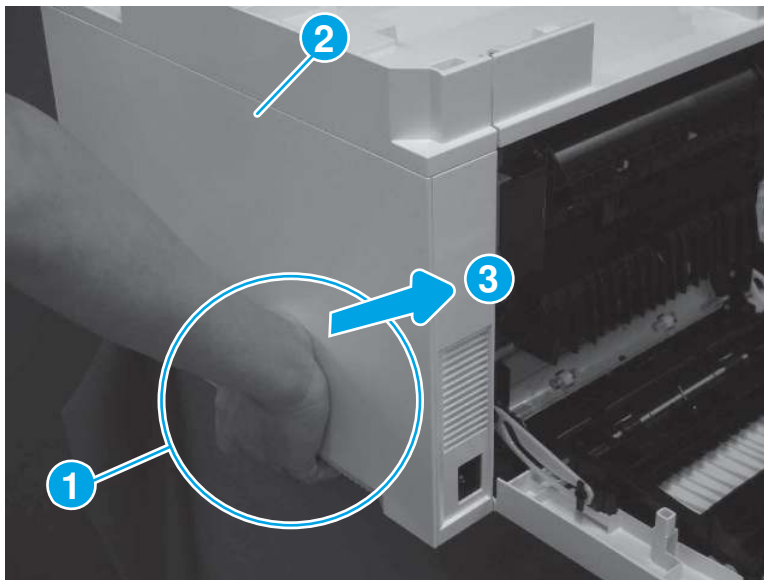
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-926 Release three tabs



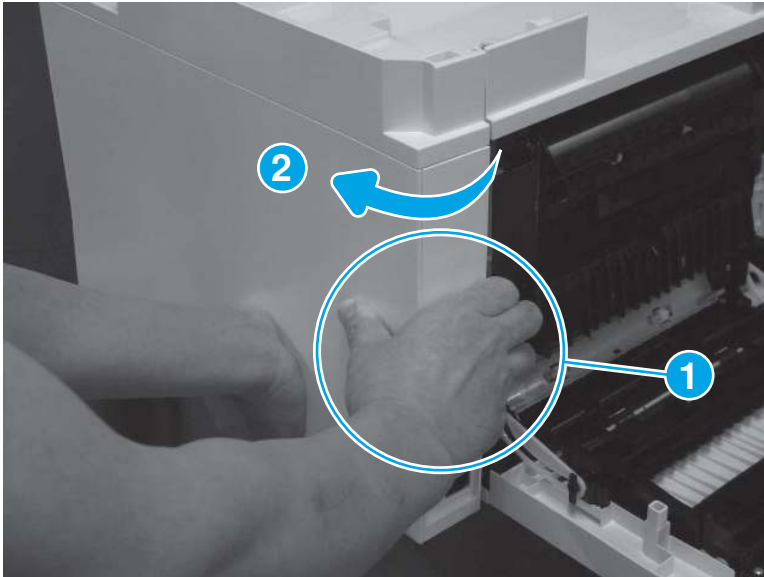
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-927 Release the rear cover corner



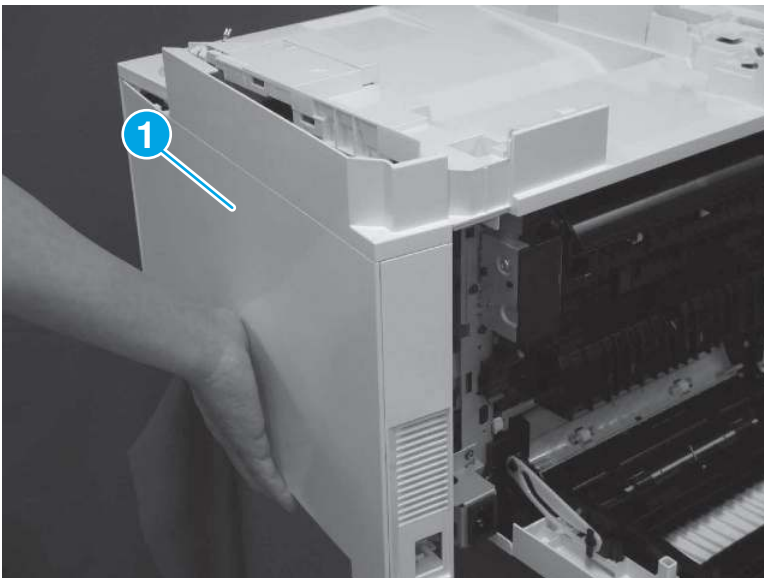
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-928 Disengage the cover corner



5. Remove the right cover (callout 1).

Figure 5-929 Remove the cover

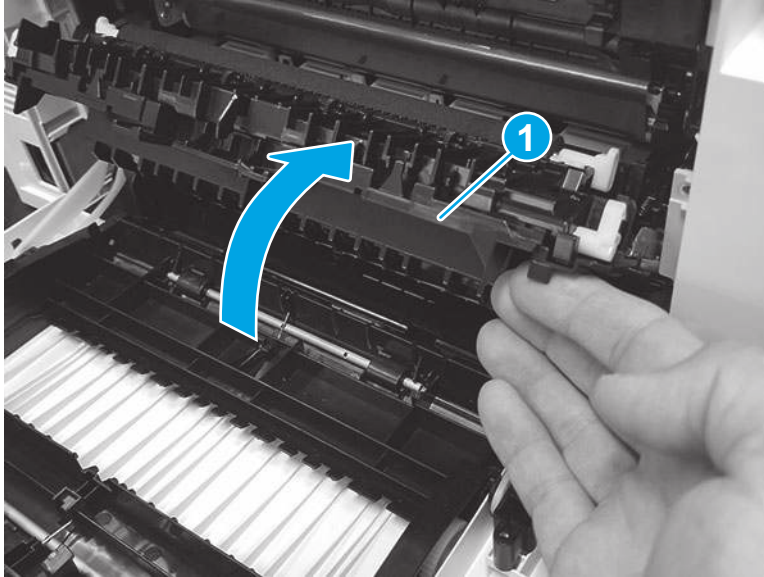


7. Remove the rear door

Follow the procedure below to remove and replace the rear door.

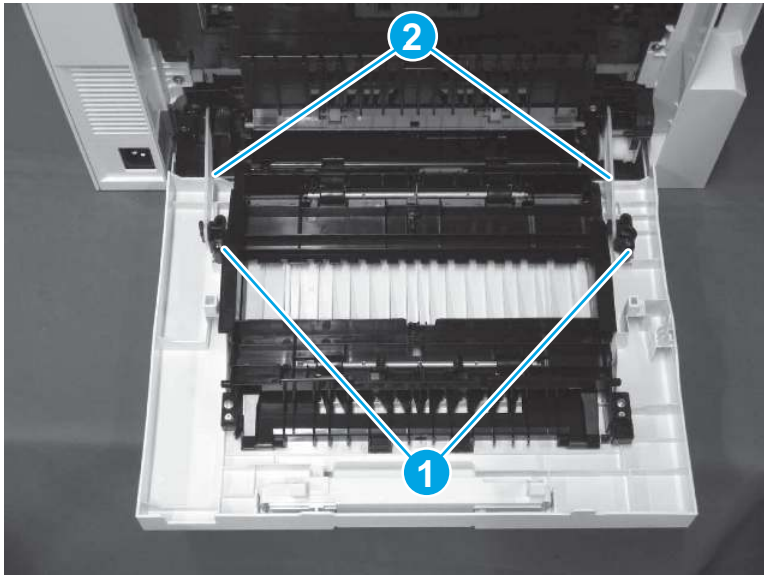
1. Open the rear door, and then raise the secondary transfer feed assembly (callout 1) up and into the locked position.

Figure 5-930 Place the T2 feed assembly in the locked position



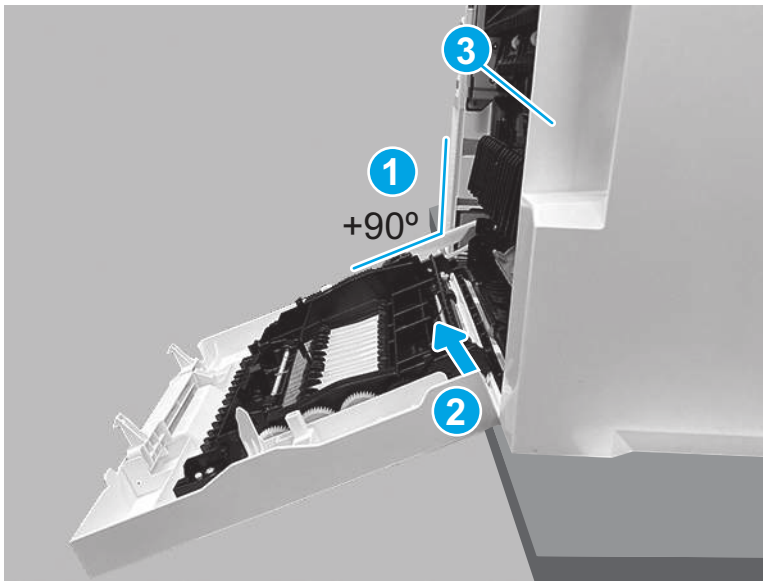
2. Remove two screws (callout 1), and then release the left- and right-side retainer arms (callout 2)

Figure 5-931 Release the retainer arms



- Carefully position the printer at the edge of the work surface and allow the rear door to open to an angle greater than 90 degrees (callout 1). Slide the door away (callout 2) from the formatter side of the printer (callout 3) to release it, and then remove the rear door.

Figure 5-932 Remove the door

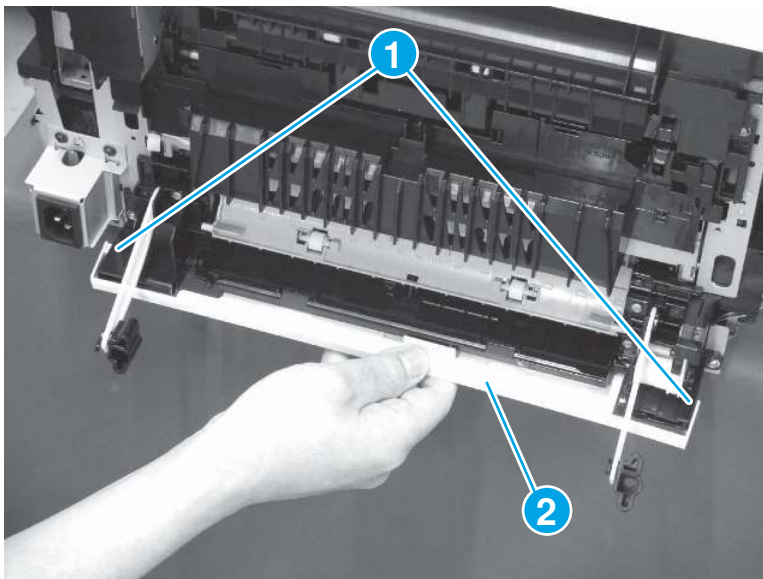


8. Remove the duplexing bottom cover

Follow the procedure below to remove and replace the duplexing bottom cover.

- Release two tabs (callout 1), and then remove the duplexing bottom cover (callout 2).

Figure 5-933 Remove the duplexing bottom cover

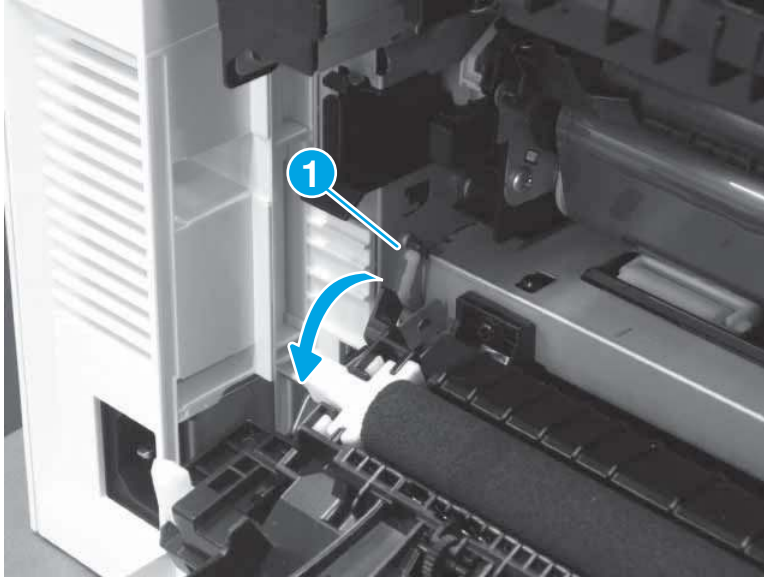


9. Remove the secondary transfer roller (T2) assembly

Follow the procedure below to remove and replace the T2 roller assembly.

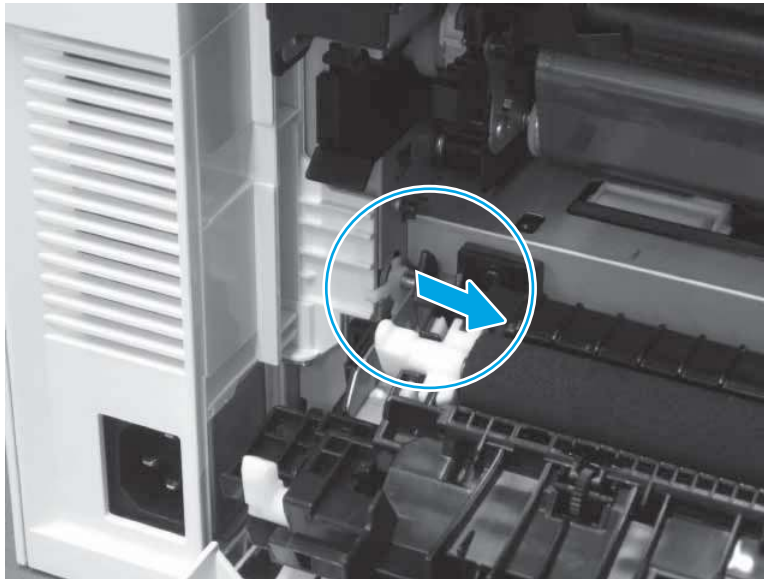
1. Open the rear door, and then rotate the bushing (callout 1) in the direction shown below.

Figure 5-934 Rotate the bushing



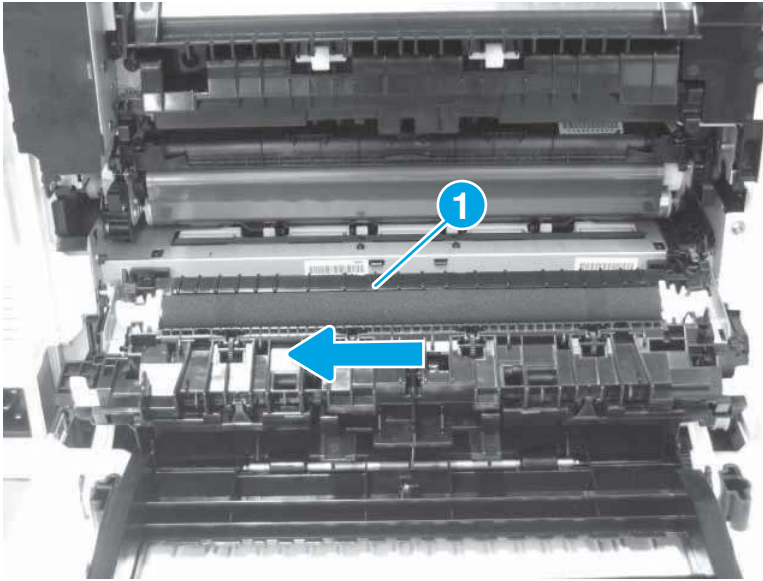
2. Slide the bushing in the direction shown below.

Figure 5-935 Slide the bushing



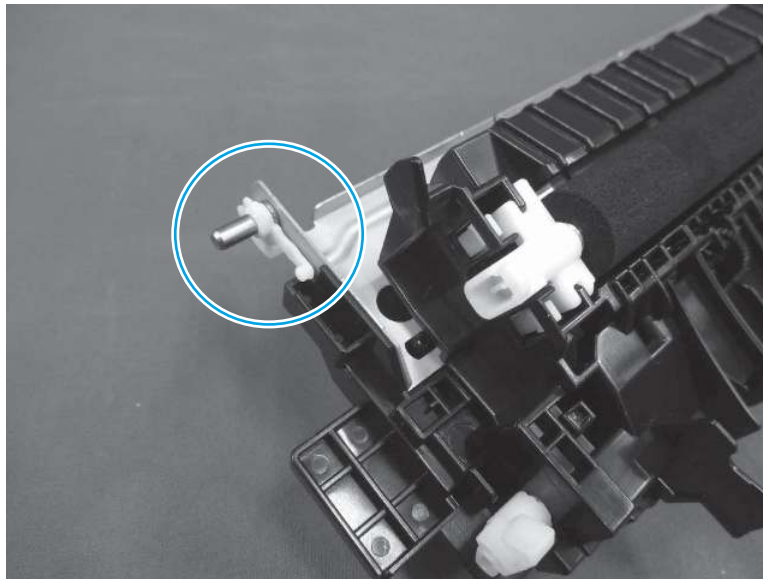
3. Slide the T2 assembly (callout 1) in the direction shown below to remove it.

Figure 5-936 Remove the T2 assembly



4. The bushing shown in the figure below is supplied with the replacement assembly.

Figure 5-937 T2 assembly bushing



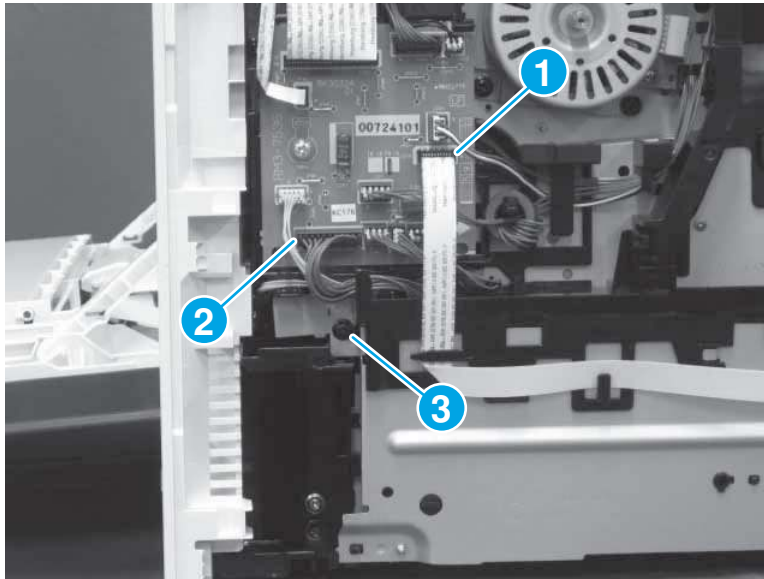
10. Remove the low-voltage power supply (LVPS)

Follow the procedure below to remove and replace the LVPS.

 **CAUTION:**  ESD sensitive part.

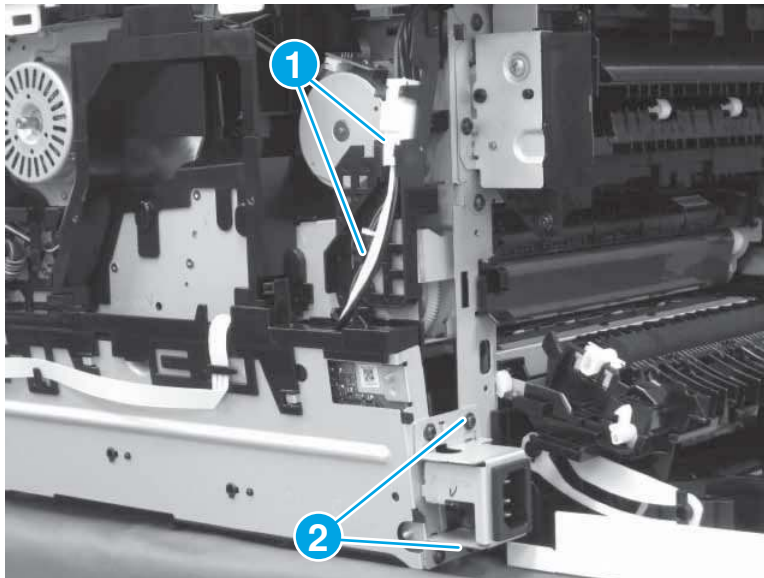
1. Disconnect one flat-flexible cable (FFC; callout 1) and one connector (callout 2), and then remove one screw (callout 3).

Figure 5-938 Disconnect FFC, connector, and remove one screw



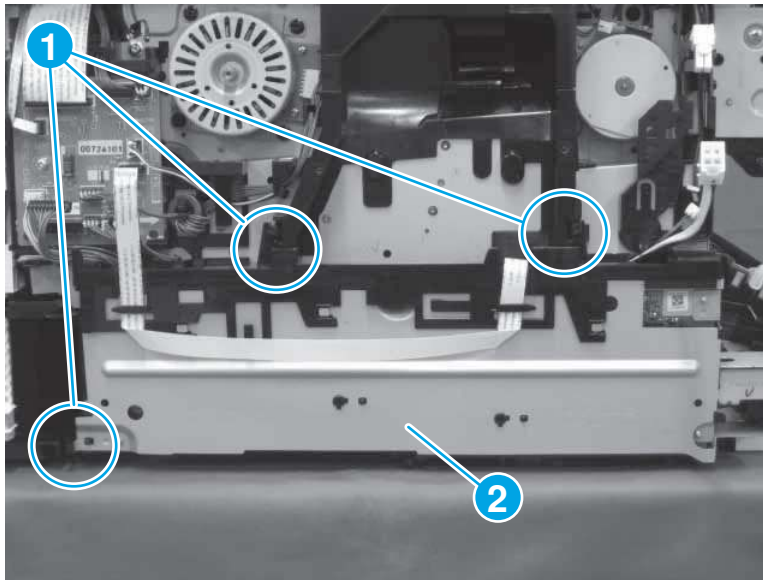
2. Disconnect two connectors (callout 1), and then remove two screws (callout 2).

Figure 5-939 Disconnect connectors and remove screws



3. Release three tabs (callout 1), and then remove the LVPS (callout 2).

Figure 5-940 Remove the LVPS



11. Remove the duplex guide assembly

Follow the procedure below to remove and replace the duplex guide assembly.

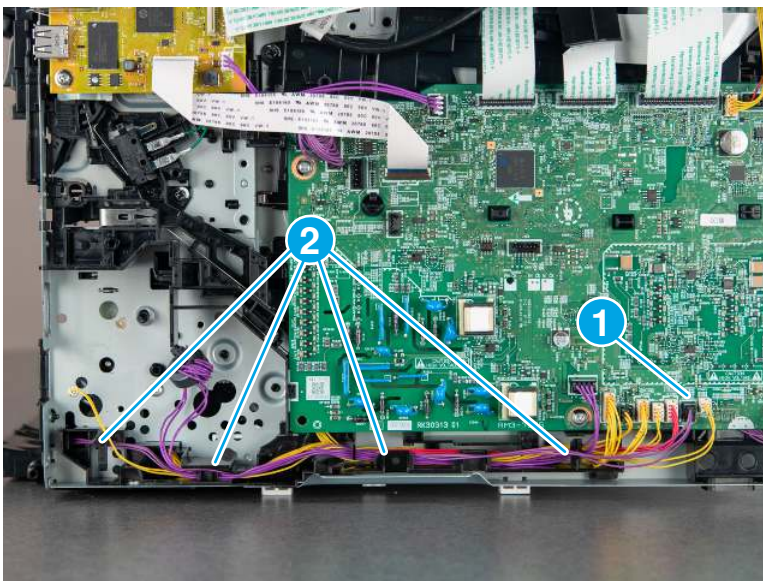
1. Disconnect one connector (callout 1), and then release the wire harness from the retainer (callout 2).



NOTE: The correct cable to release is the purple three-wire harness.

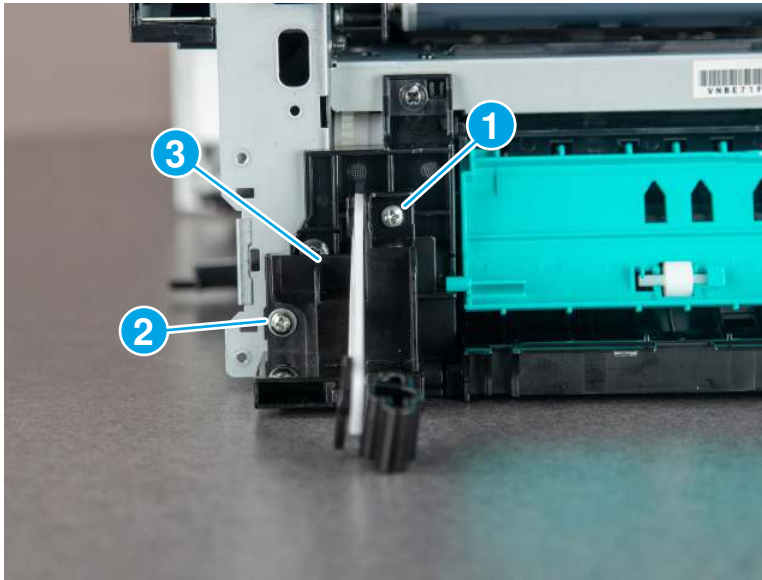
Disconnect other connectors and release other wire harnesses as necessary.

Figure 5-941 Disconnect one connector



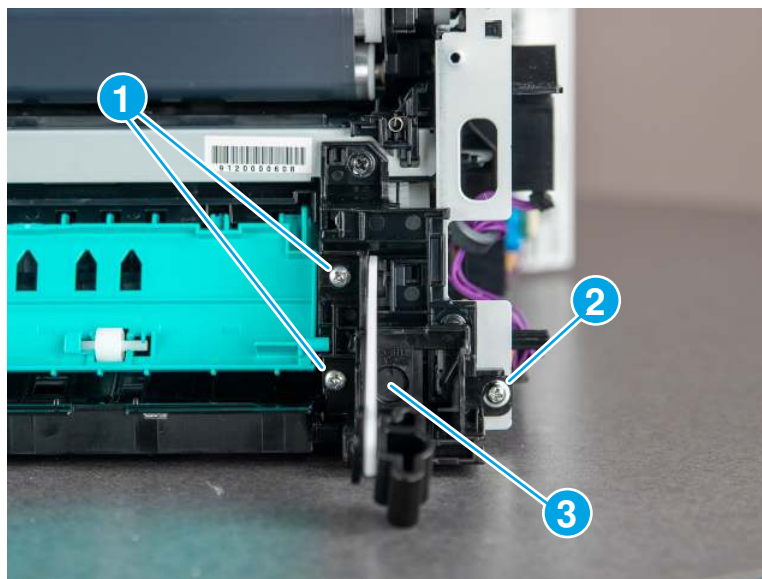
2. Do the following:
 - a. Remove one (tapping) screw (callout 1).
 - b. Remove one (TP) screw (callout 2)
 - c. Remove the holder (callout 3).

Figure 5-942 Remove two screws and the holder



3. Do the following:
 - a. Remove two (tapping) screws (callout 1).
 - b. Remove one (TP) screw (callout 2)
 - c. Remove the holder (callout 3).

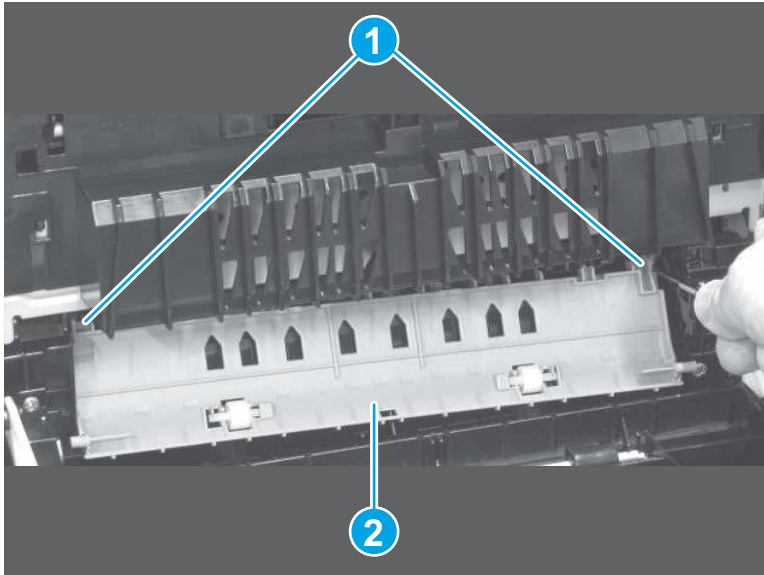
Figure 5-943 Remove three screws and the holder



4. Use a small flat-blade screwdriver to release one boss at each end of the duplex guide (callout 1), and then remove the guide (callout 2).

CAUTION: Parts of this assembly are fragile and can easily be damaged during removal.

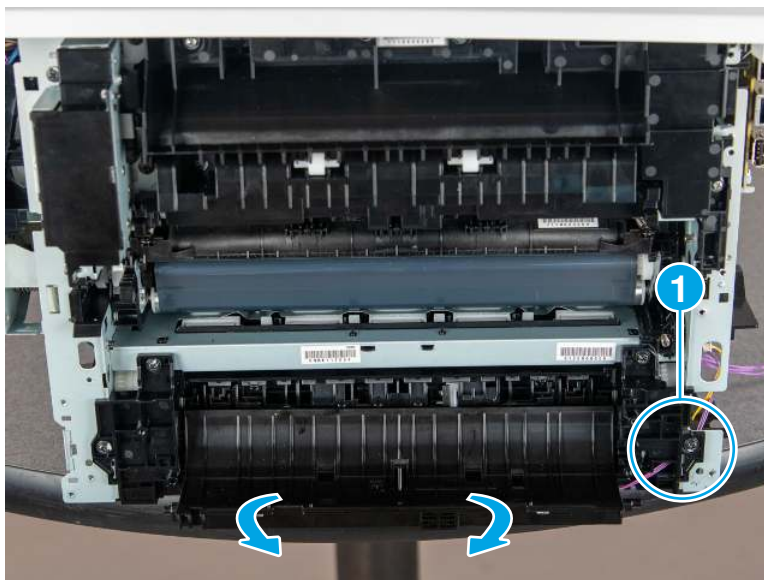
Figure 5-944 Remove the duplex upper guide



5. Carefully position the printer at the edge of the work surface. Slightly pull the duplex guide assembly down to release it, and then remove the assembly.

NOTE: Pass the wire harness through the opening in the chassis as the assembly is removed (callout 1).

Figure 5-945 Remove the duplex guide assembly

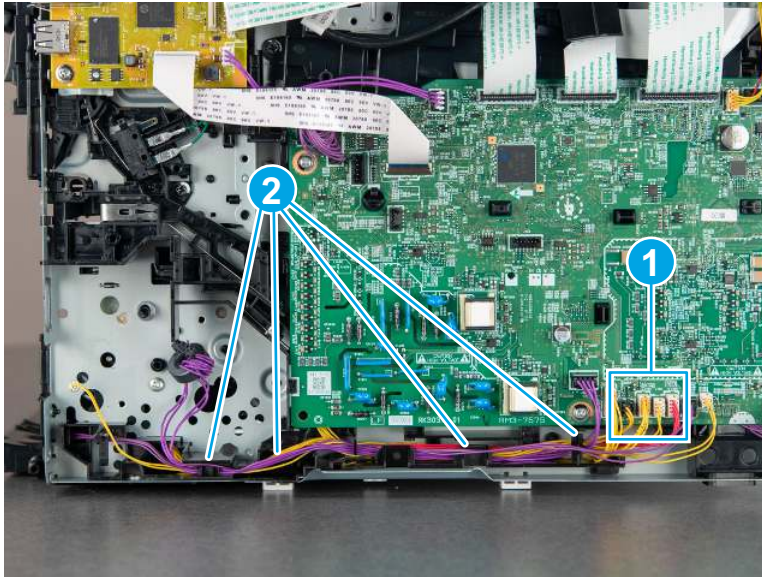


12. Remove the feed lower guide assembly

Follow the procedure below to remove and replace the feed lower guide assembly.

1. Disconnect four connectors (callout 1), and then release the wire harnesses from the guide (callout 2).

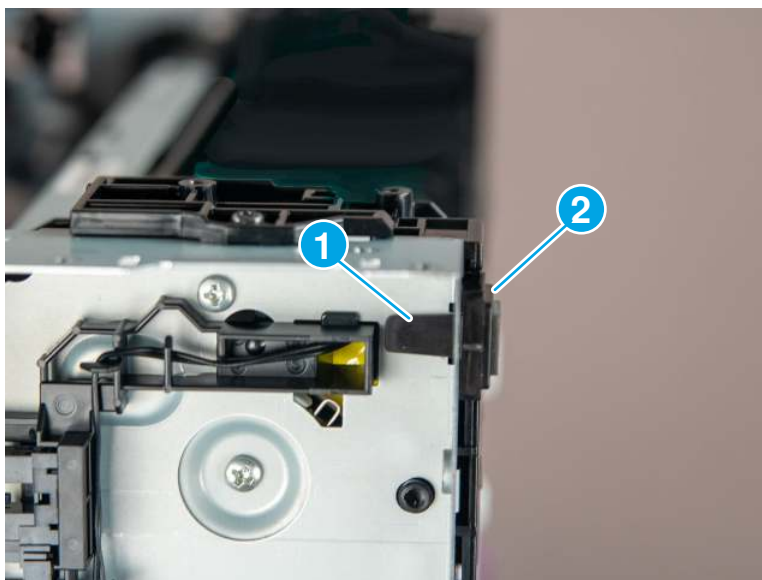
Figure 5-946 Disconnect connectors and release the wire harnesses



2. Position the printer with the front-side down, release one tab (callout 1), and then remove the rubber pad (callout 2). Repeat this step for the rubber pad on the opposite side.

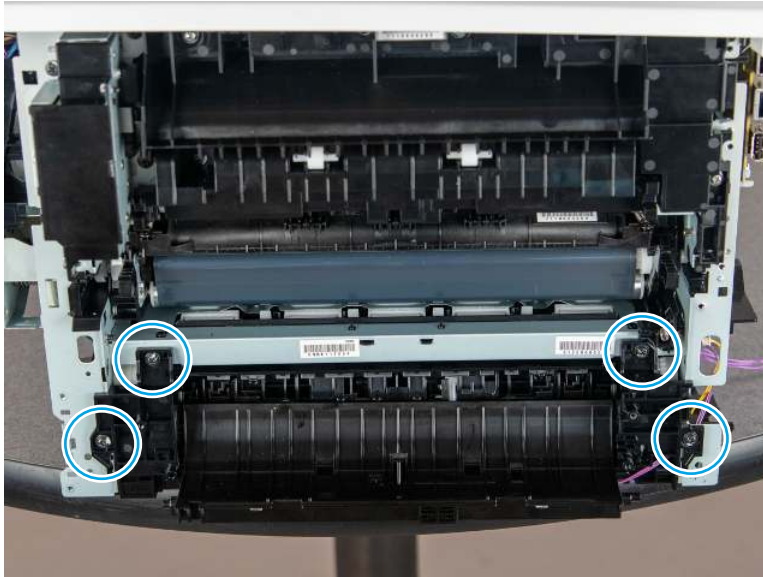
⚠ CAUTION: **MFP only:** The integrated scanner assembly (ISA) can suddenly open when the printer is placed in any position other than top-side up. Secure the ISA when repositioning the printer.

Figure 5-947 Remove the pad



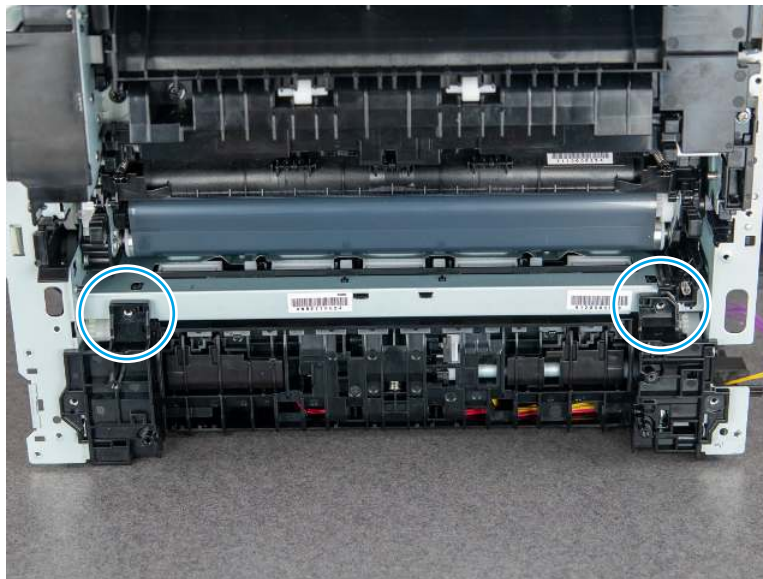
3. Position the printer with the top-side up (normal position), and then remove four screws.

Figure 5-948 Remove four screws



4. Use a small flat-blade screwdriver to release two bosses (callout 1).

Figure 5-949 Release two bosses

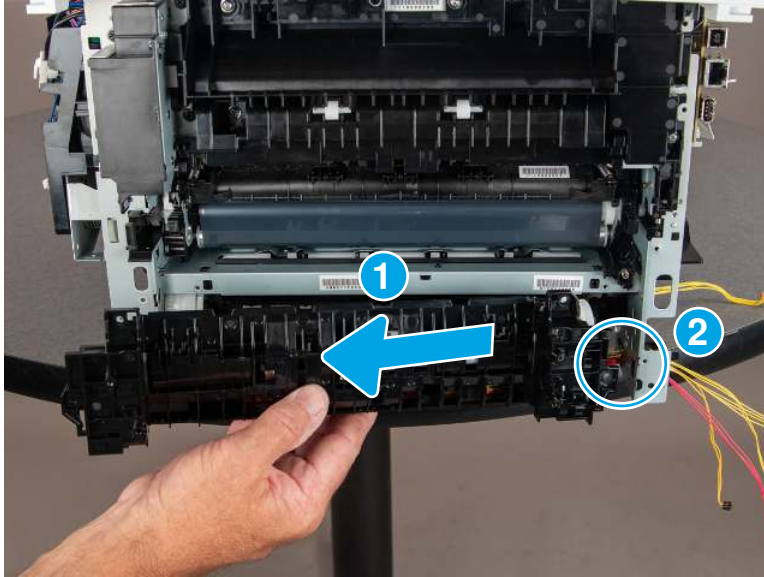


5. Carefully position the printer at the edge of the work surface. Slightly pull down on the assembly to release it, and then remove the feed lower guide assembly (callout 1).



NOTE: Carefully pull the wire harness through the opening in the chassis (callout 2) while removing the assembly.

Figure 5-950 Remove the feed lower guide assembly



13. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.


3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

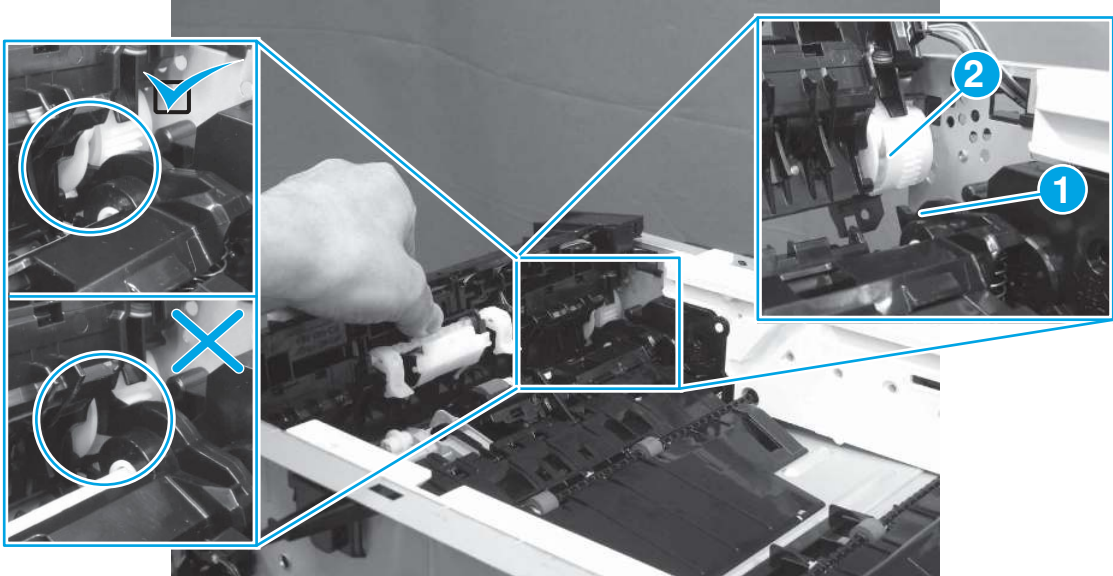
14. Special installation instructions - Feed lower guide assembly

Follow the special instructions below to install the feed lower guide assembly.

 **NOTE:** The printer is shown upside down in the figure below for clarity.

- When the assembly is installed, make sure that the link arm (callout 1) on the printer is correctly inserted in the gear (callout 2) of the feed lower guide assembly.

Figure 5-951 Install the feed lower guide assembly



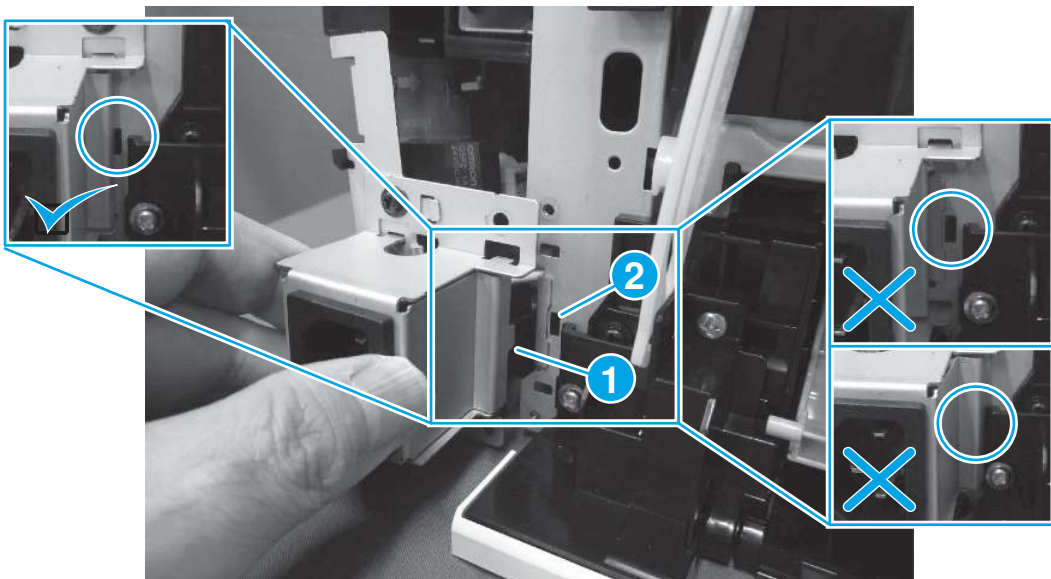
15. Special installation instructions - Low-voltage power supply (LVPS)

Follow the special instructions below to install a replacement LVPS.

 **CAUTION:**  ESD sensitive part.

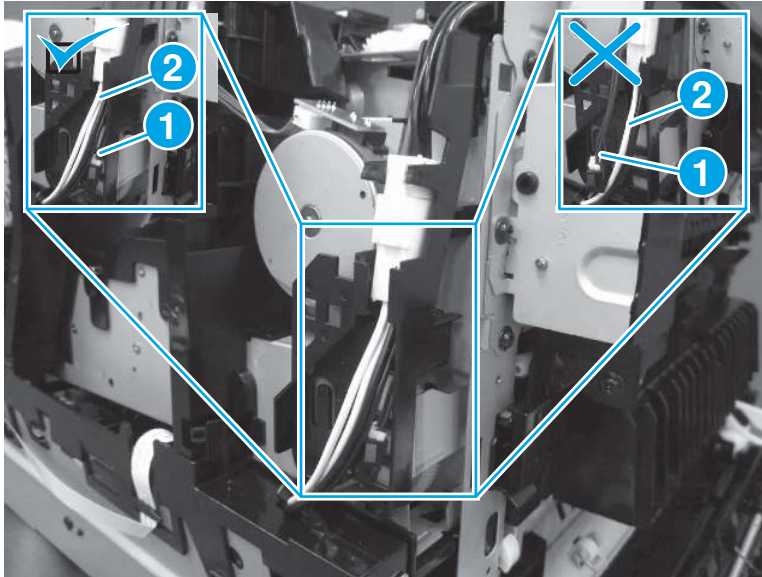
1. When the LVPS is installed, make sure that the sheet-metal tab (callout 1) near the power receptacle is inserted in the slot (callout 2) in the chassis.

Figure 5-952 Install the LVPS tab



2. Make sure that the fuser temperature fuse cable (callout 1) is positioned behind the thick cable (callout 2). This prevents the fuser cable from unnecessary movement.

Figure 5-953 Check the fuser temperature fuse cable



Removal and replacement: Lifter drive assembly

Learn about lifter drive assembly removal.

Mean time to repair: 45 minutes

Service level: Difficult

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-49 Part information

Part number	Part description
RM2-2711-000CN	Lifter drive assembly

Required tools

- Small flat-blade screwdriver
- Small flat-blade screwdriver
- Needle-nose pliers

After performing service

Turn the printer power on


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


Post service test

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

1. Remove the left cover (SFP)

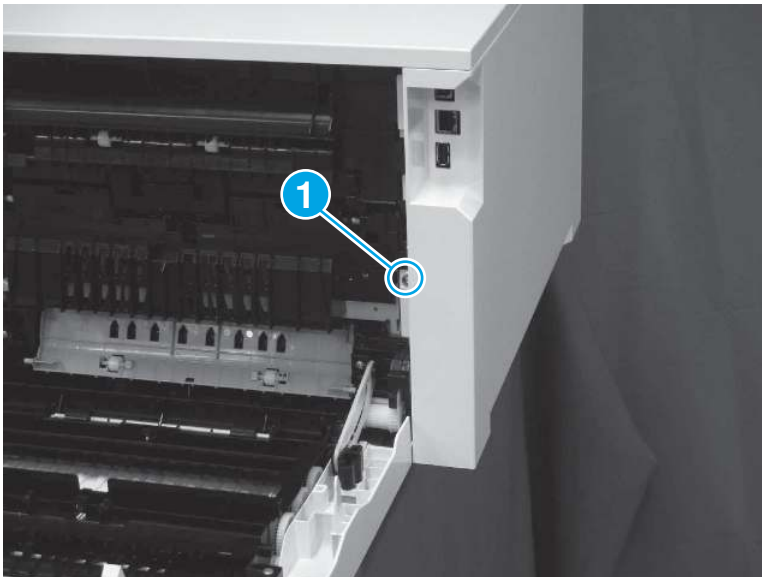
Follow the procedure below to remove and replace the left cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

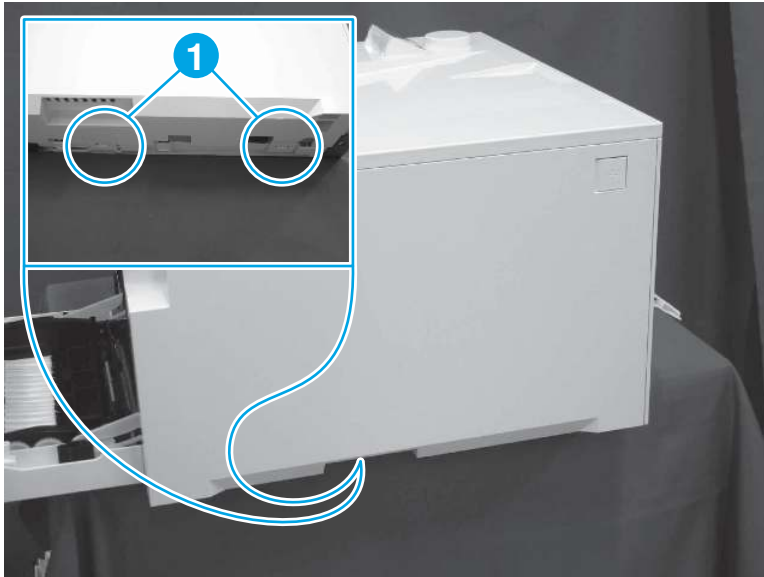
1. Remove one screw (callout 1).

Figure 5-954 Remove one screw



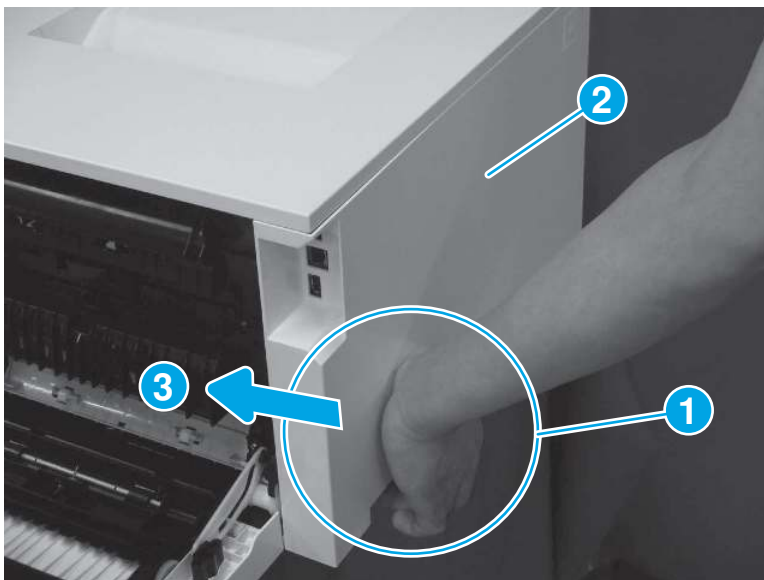
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-955 Release two tabs



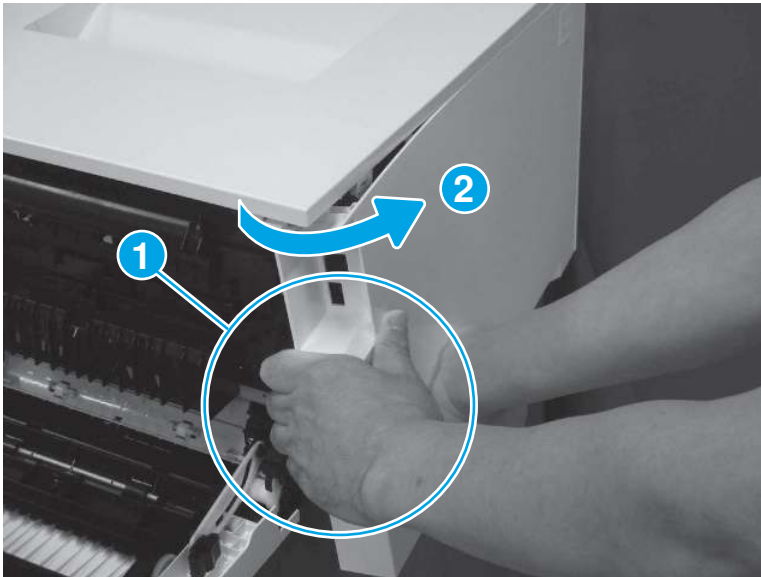
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-956 Release the rear cover corner



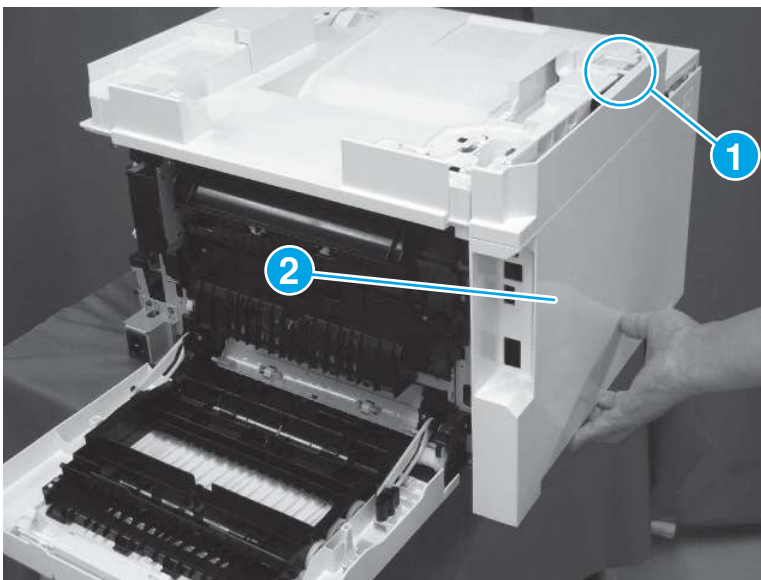
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-957 Disengage the cover corner




5. Remove the left cover (callout 1).


Figure 5-958 Remove the cover



2. Remove the left cover (MFP)

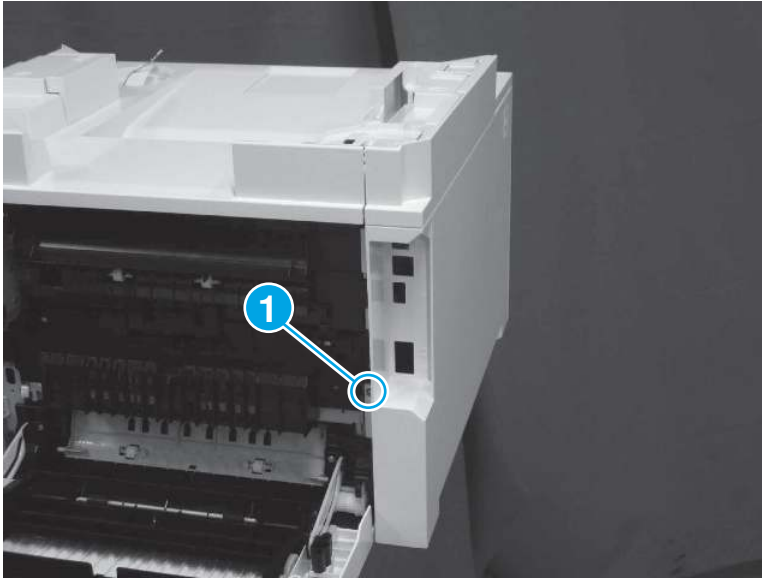
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

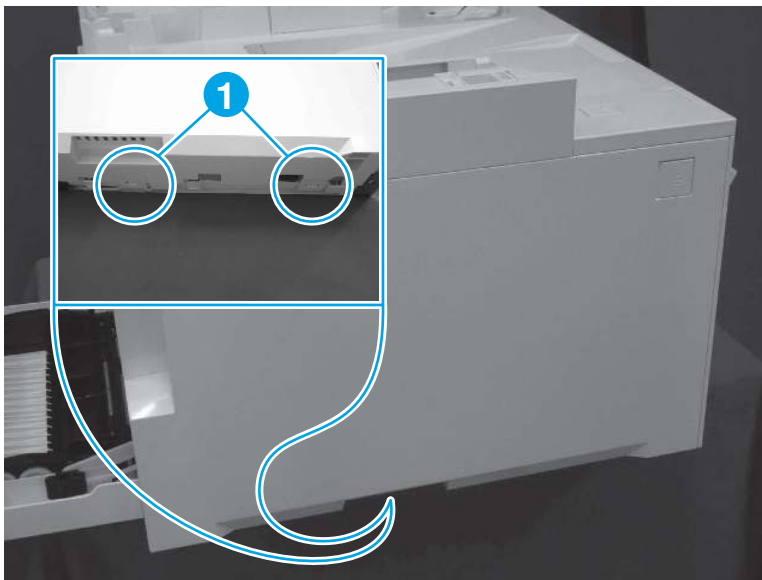
1. Remove one screw (callout 1).

Figure 5-959 Remove one screw



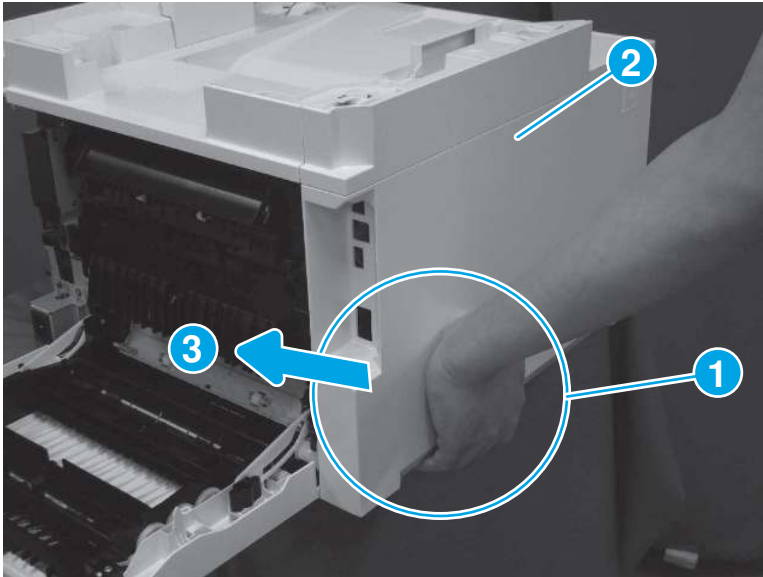
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-960 Release two tabs



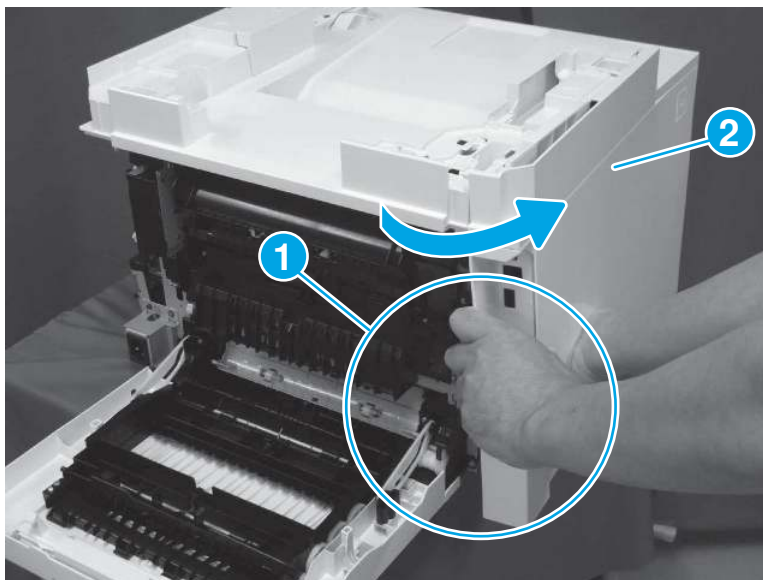
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-961 Release the rear cover corner



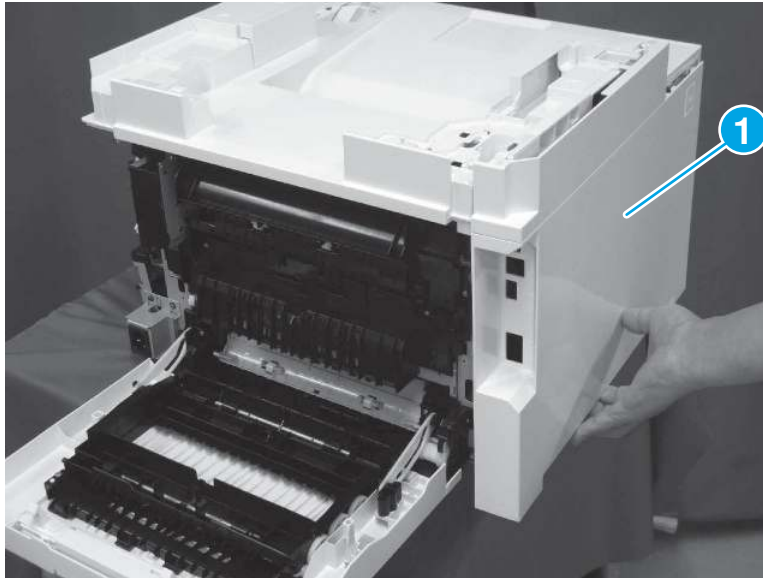
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-962 Disengage the cover corner



5. Remove the left cover (callout 1).

Figure 5-963 Remove the cover

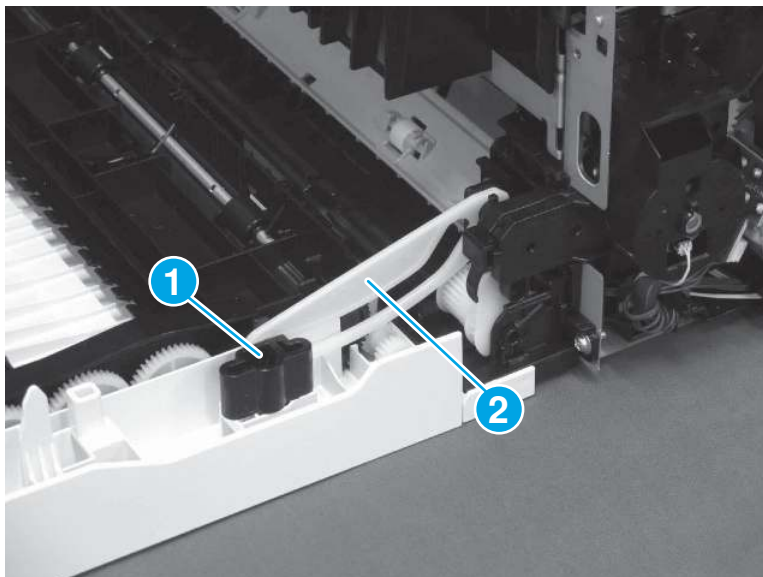


3. Remove the duplex re-pick clutch

Follow the procedure below to remove and replace the duplex re-pick clutch.

1. Remove one screw (callout 1), and then remove the hinge (callout 2).

Figure 5-964 Remove the hinge



2. Release the retainer (callout 1), rotate the shaft as shown below (callout 2) to remove it, and then remove the gear (callout 3).


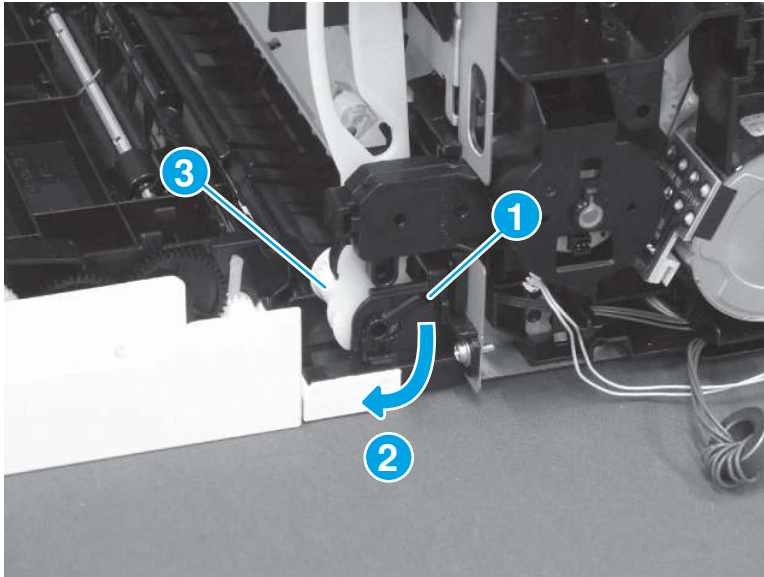
 **Reinstallation tip:** Take note of how the gear is installed before removing it. The shaft cannot be reinstalled if the gear is incorrectly installed.

Figure 5-965 Remove the gear



3. Disconnect one connector (callout 1), remove one screw (callout 2), and then release one tab (callout 3).


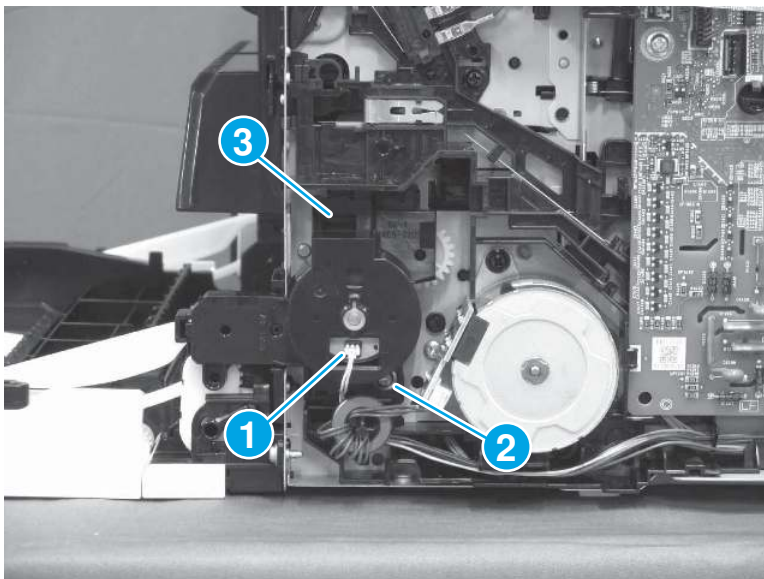

 **NOTE:** The connector (callout 1) has a tab that must be released to disconnect it. It can be difficult to disconnect when the duplex re-pick clutch is installed. It might be easier to remove the duplex re-pick clutch (see the following step), and then disconnect the connector.

Figure 5-966 Disconnect one connector, remove one screw, and release one tab

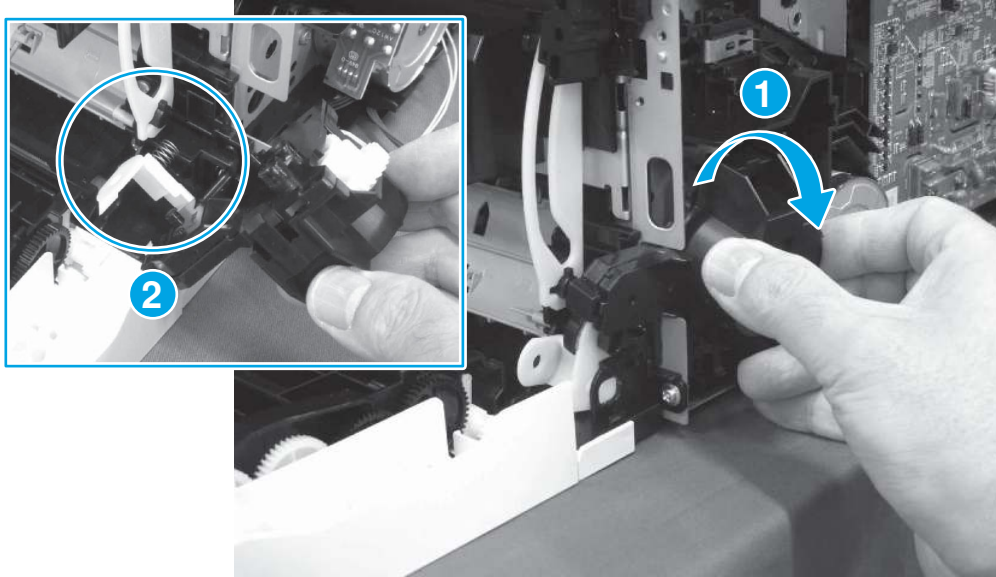


4. Remove the duplex re-pick clutch (callout 1).

 **CAUTION:** When handling the assembly, do not lose the spring that is inside the left gear holder (callout 2).

 **Reinstallation tip:** For a replacement duplex re-pick clutch only: Remove the spring from the assembly (callout 2), and then install it on the replacement duplex re-pick clutch.

Figure 5-967 Remove the duplex re-pick clutch

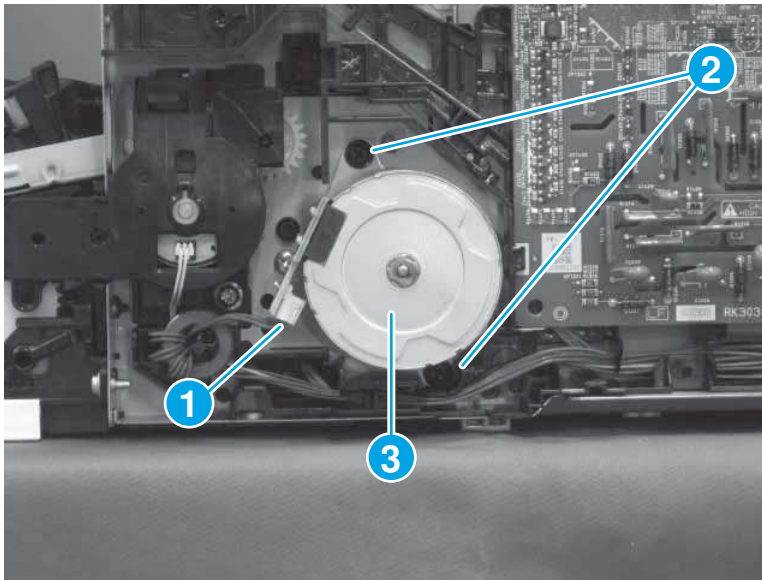


4. Remove the feed motor

Follow the procedure below to remove and replace the feed motor.


- Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).

Figure 5-968 Remove the feed motor



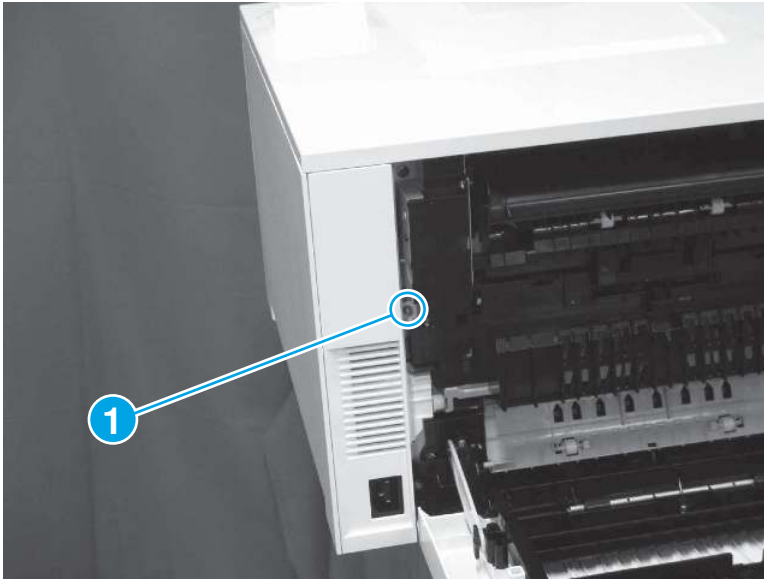
5. Remove the right cover (SFP)

Follow the procedure below to remove and replace the right cover (SFP).

-
-  **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.
-

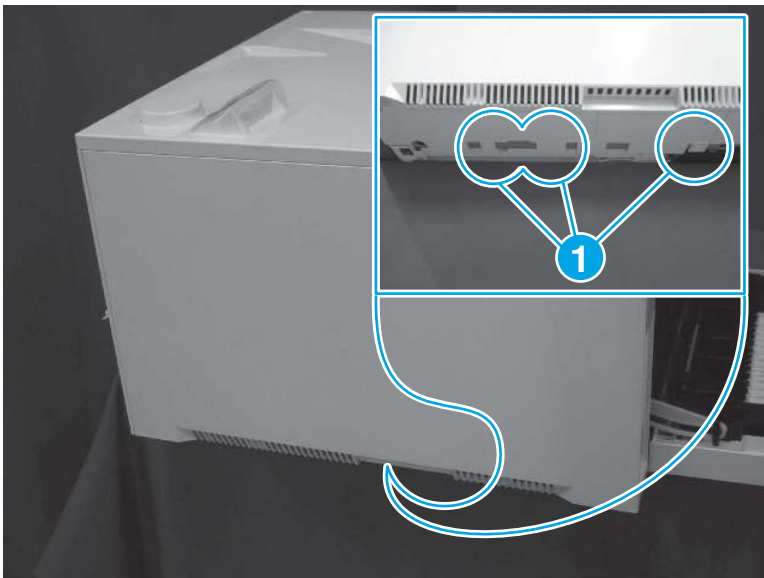
1. Remove one screw (callout 1).

Figure 5-969 Remove one screw



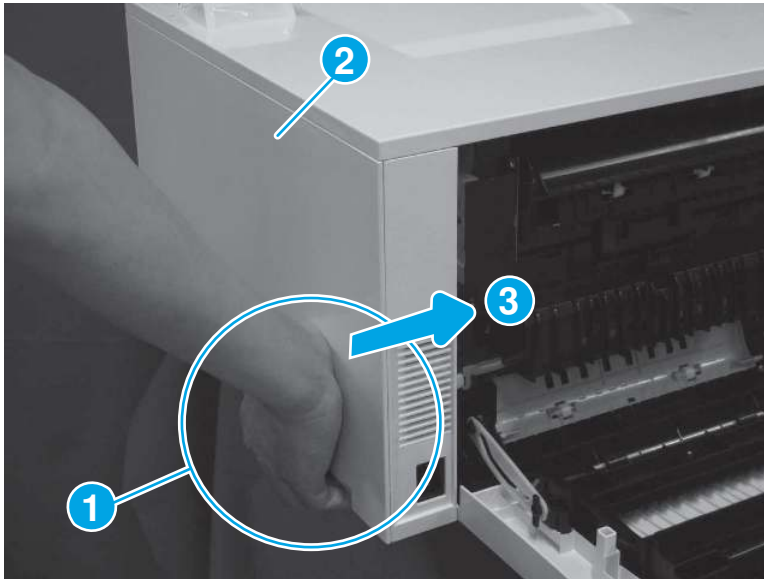
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-970 Release three tabs



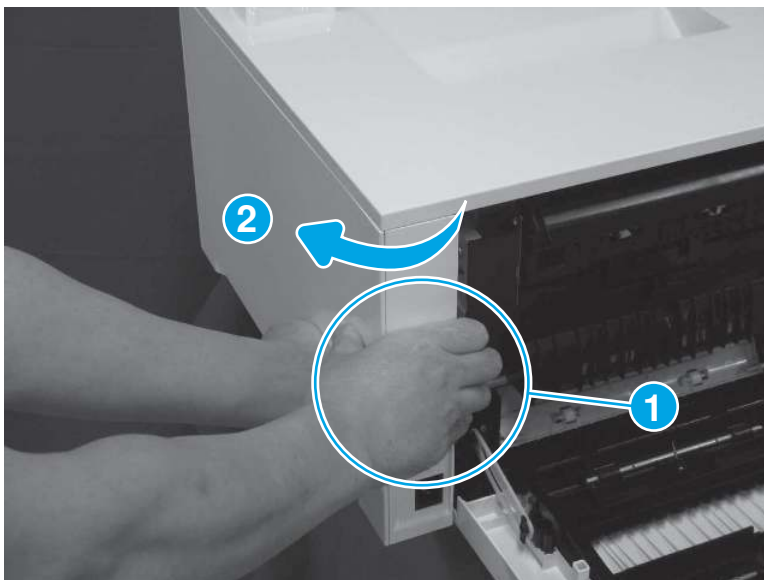
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-971 Release the rear cover corner



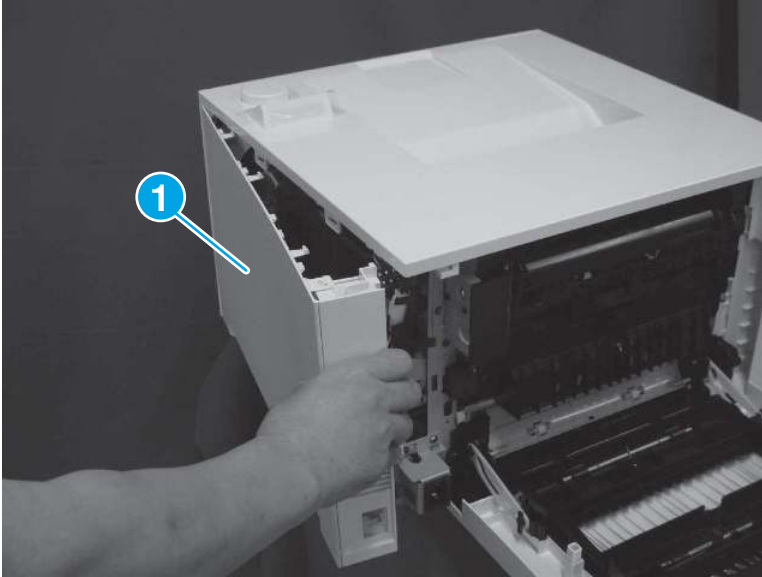
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-972 Disengage the cover corner




5. Remove the right cover (callout 1).

Figure 5-973 Remove the cover



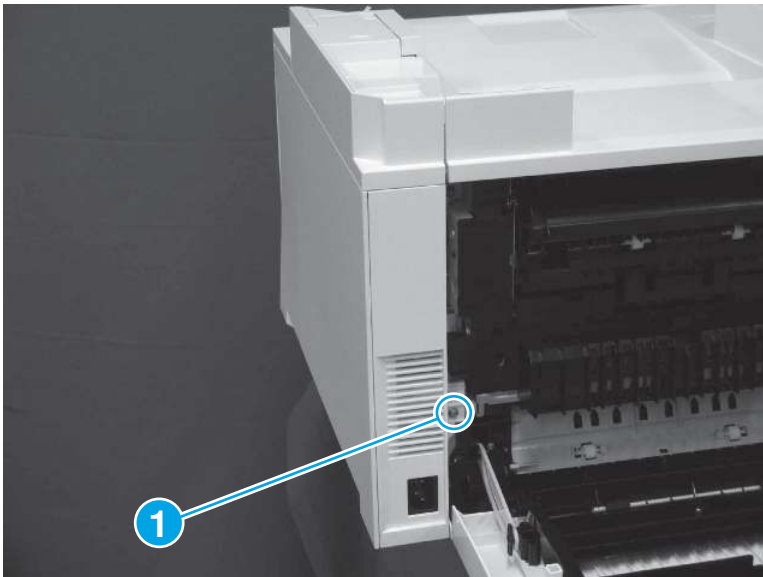
6. Remove the right cover (MFP)

Follow the procedure below to remove and replace the right cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

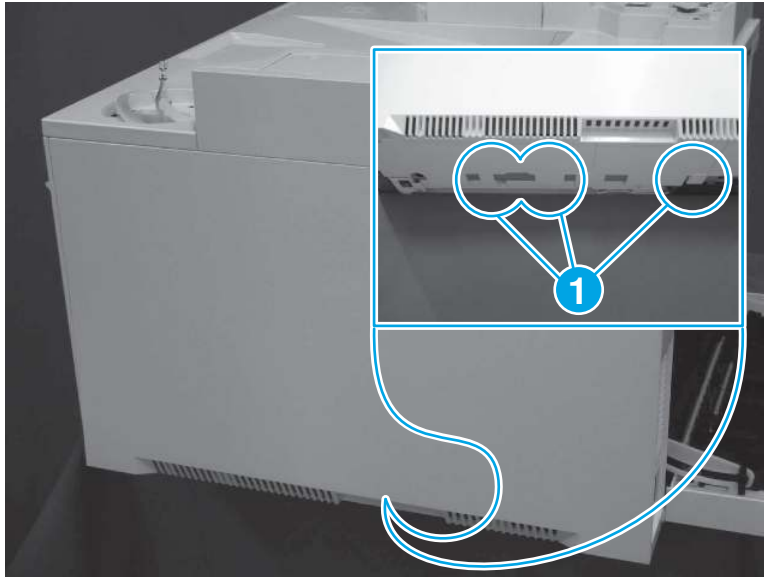
1. Remove one screw (callout 1).

Figure 5-974 Remove one screw



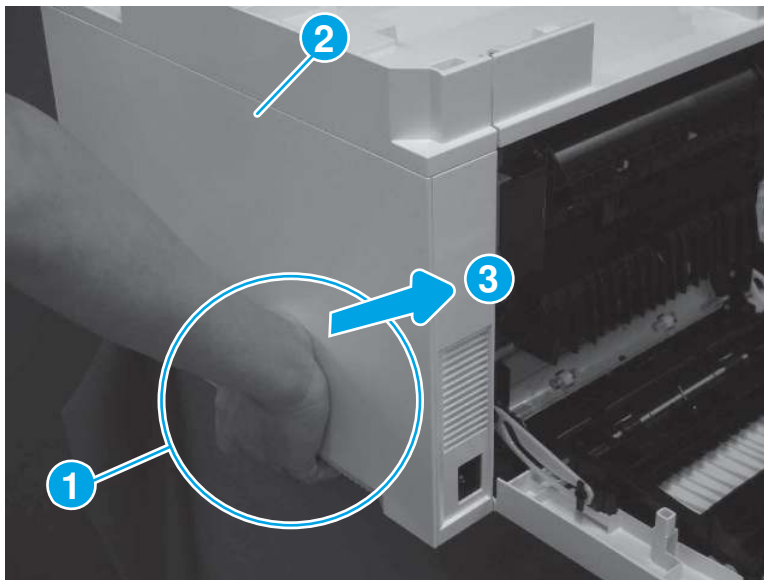
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-975 Release three tabs



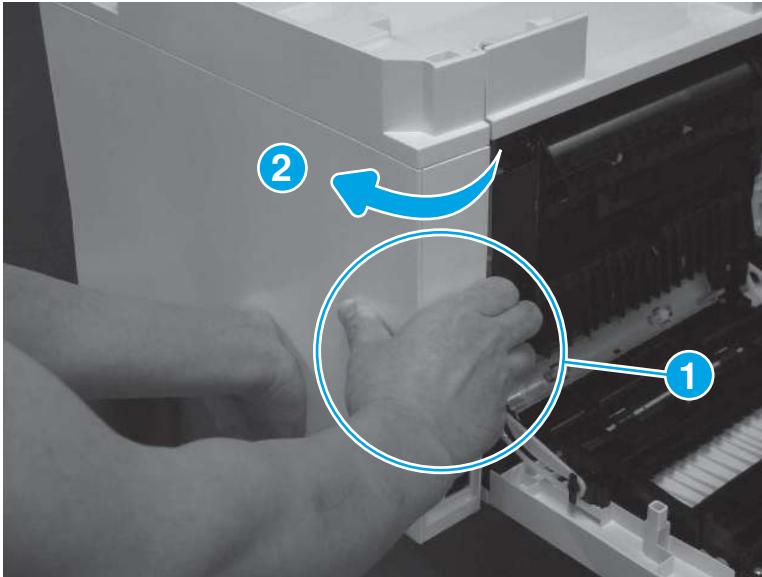
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-976 Release the rear cover corner



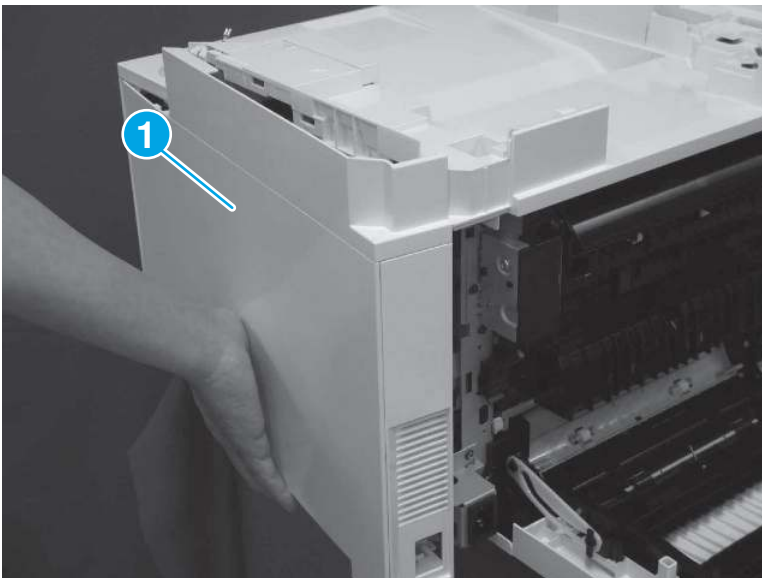
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-977 Disengage the cover corner



5. Remove the right cover (callout 1).

Figure 5-978 Remove the cover

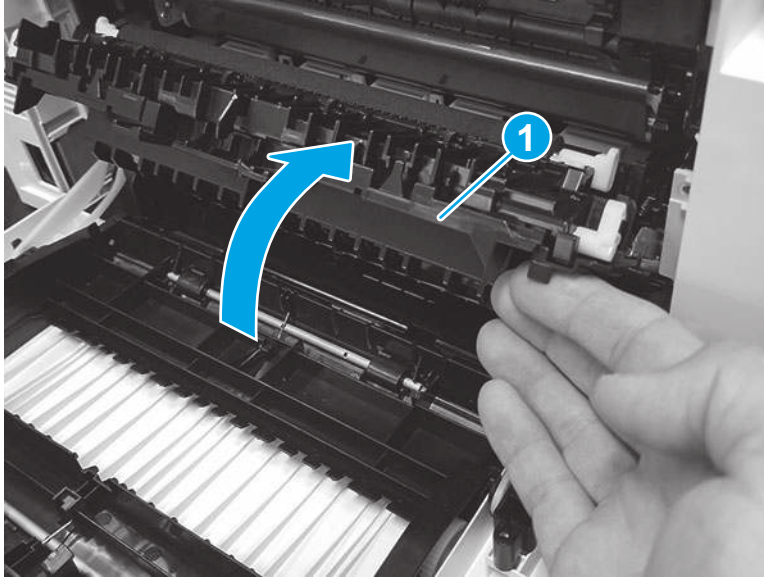


7. Remove the rear door

Follow the procedure below to remove and replace the rear door.

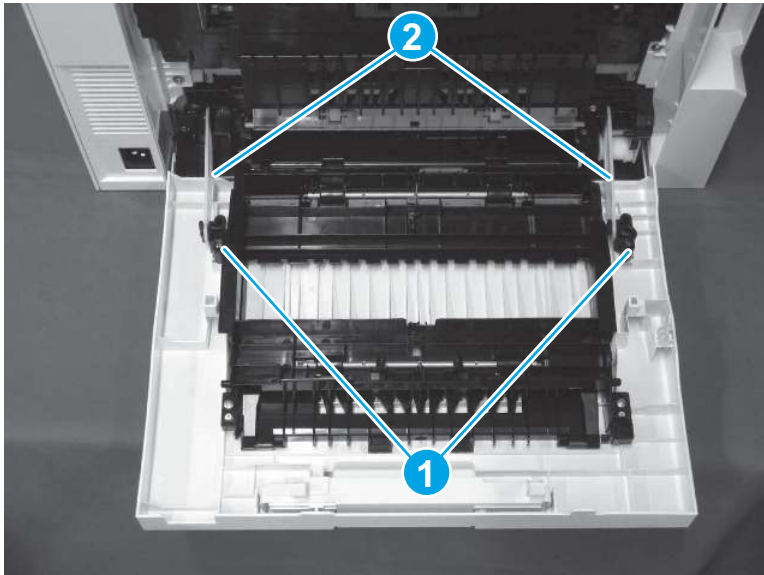
1. Open the rear door, and then raise the secondary transfer feed assembly (callout 1) up and into the locked position.

Figure 5-979 Place the T2 feed assembly in the locked position



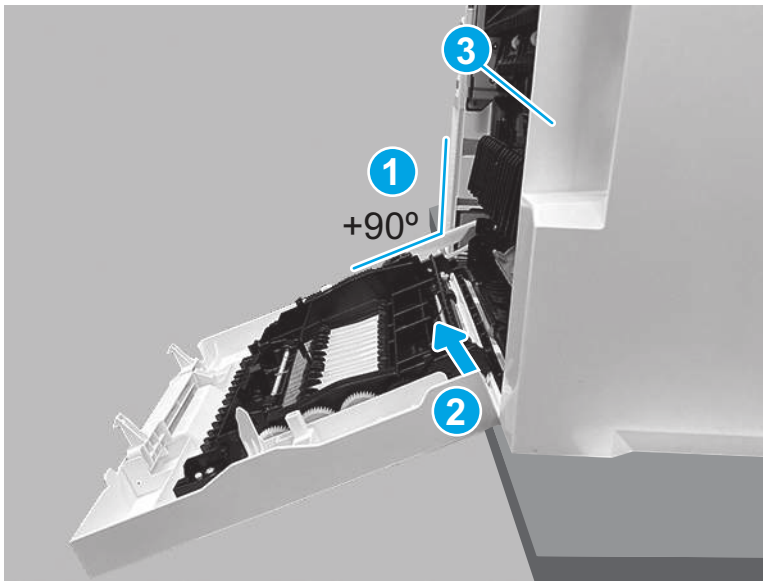
2. Remove two screws (callout 1), and then release the left- and right-side retainer arms (callout 2)

Figure 5-980 Release the retainer arms



3. Carefully position the printer at the edge of the work surface and allow the rear door to open to an angle greater than 90 degrees (callout 1). Slide the door away (callout 2) from the formatter side of the printer (callout 3) to release it, and then remove the rear door.

Figure 5-981 Remove the door

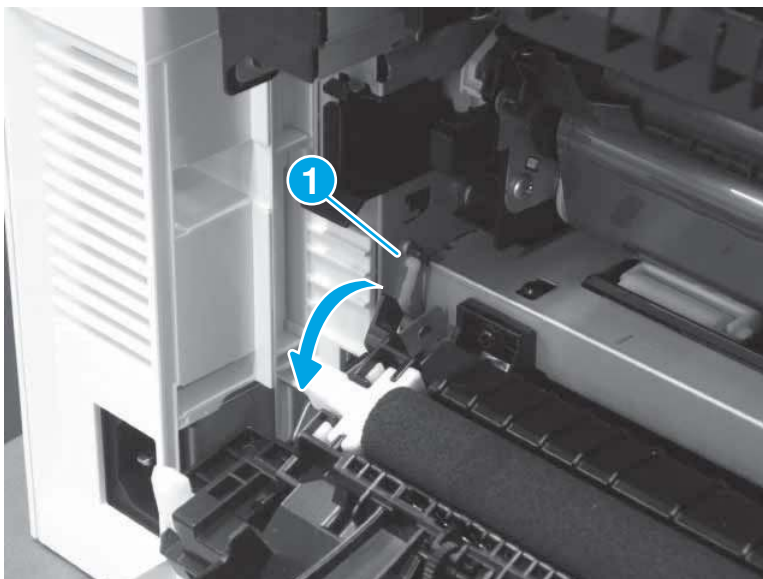


8. Remove the secondary transfer roller (T2) assembly

Follow the procedure below to remove and replace the T2 roller assembly.

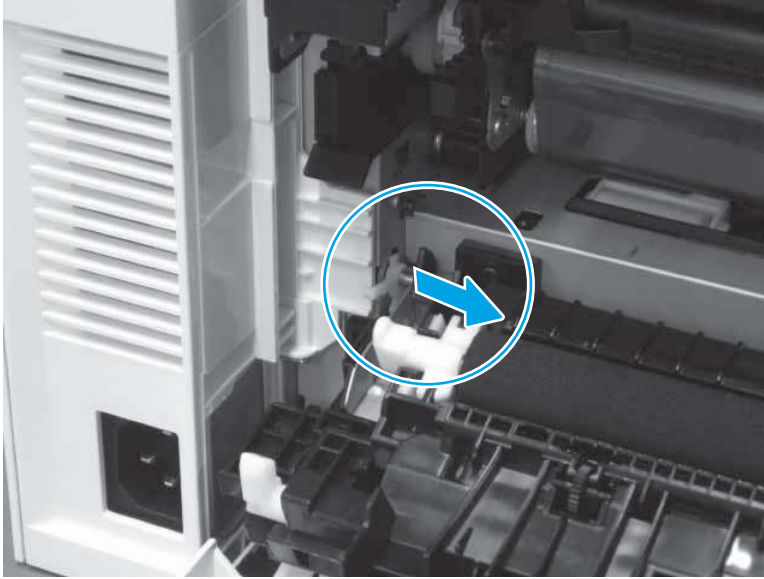
1. Open the rear door, and then rotate the bushing (callout 1) in the direction shown below.

Figure 5-982 Rotate the bushing



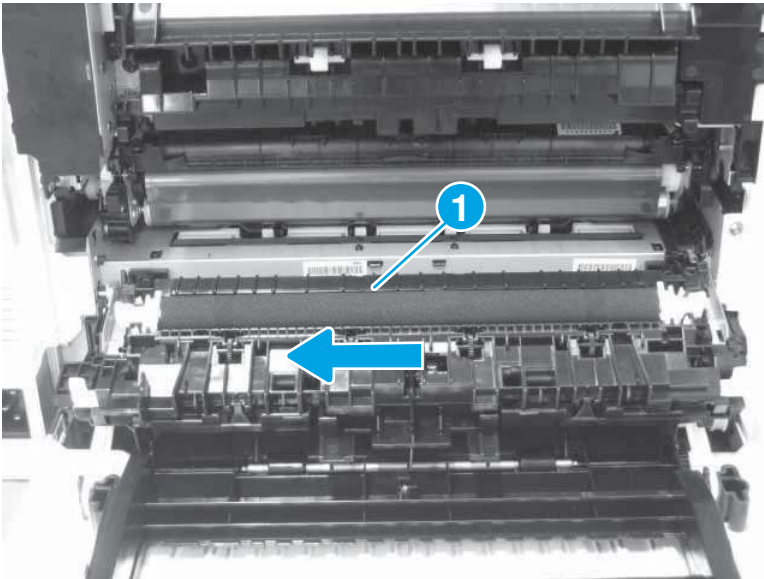
2. Slide the bushing in the direction shown below.

Figure 5-983 Slide the bushing



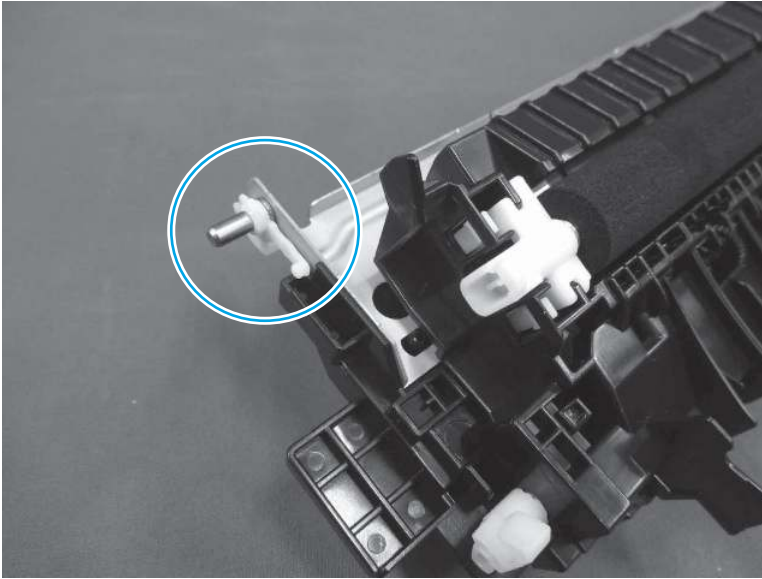
3. Slide the T2 assembly (callout 1) in the direction shown below to remove it.

Figure 5-984 Remove the T2 assembly



4. The bushing shown in the figure below is supplied with the replacement assembly.

Figure 5-985 T2 assembly bushing

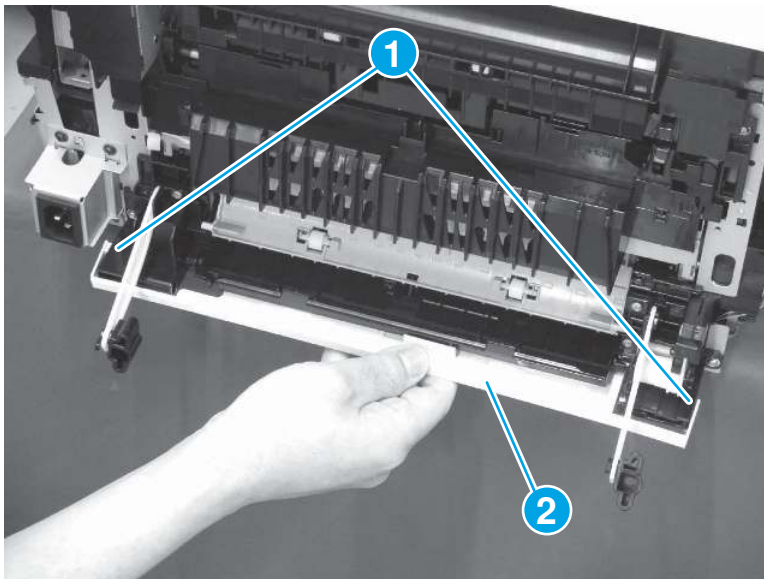


9. Remove the duplexing bottom cover

Follow the procedure below to remove and replace the duplexing bottom cover.

- Release two tabs (callout 1), and then remove the duplexing bottom cover (callout 2).

Figure 5-986 Remove the duplexing bottom cover



10. Remove the MP paper feed assembly

Follow the procedure below to remove the MP paper feed assembly.

1. Position the printer with the rear-door side down.

Figure 5-987 Position the printer



2. Press the green button to release the assembly.

Figure 5-988 Release the assembly



3. Slide the assembly up (callout 1), and then toward the right-side of the printer (callout 2) to remove it.


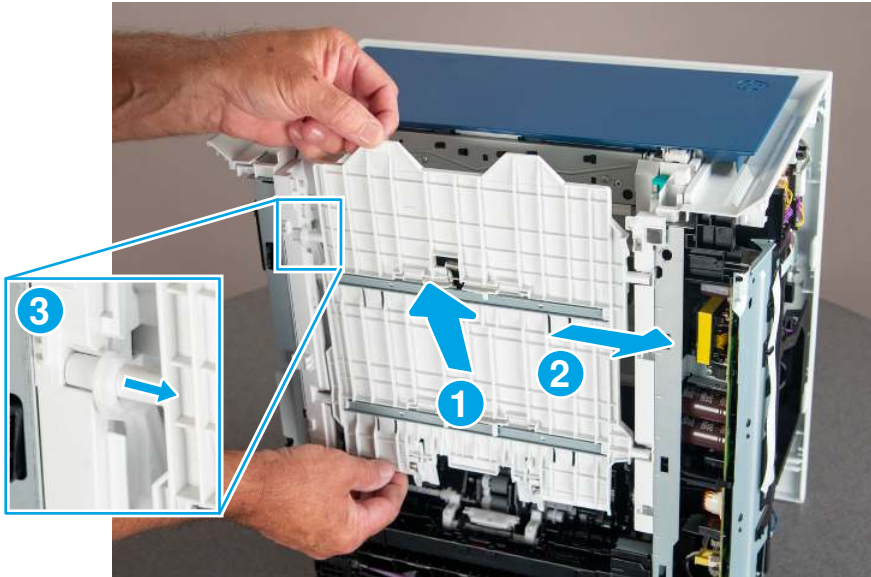
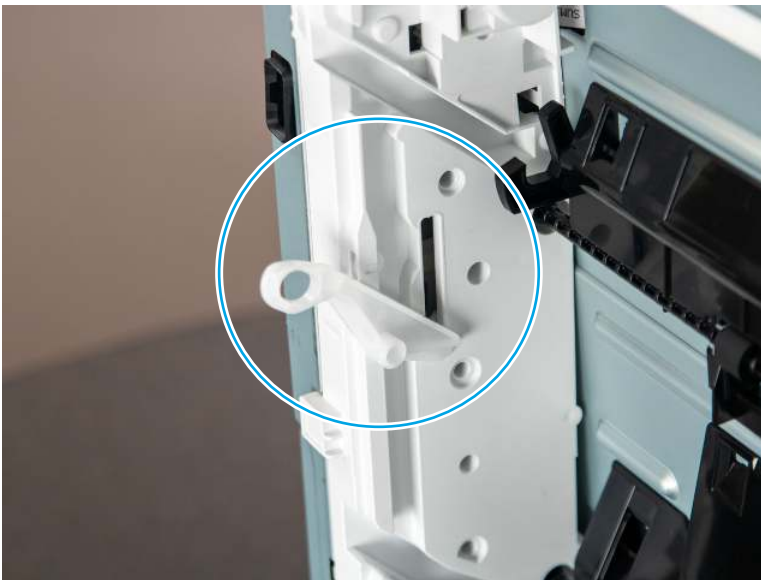
 **NOTE:** There is a retainer arm (callout 3) on one of the assembly legs. Carefully disengage the retainer arm and leg when removing the assembly.

Figure 5-989 Remove the assembly



4. If the retainer arm becomes dislodged, reinstall it as shown below.

Figure 5-990 Install the retainer arm



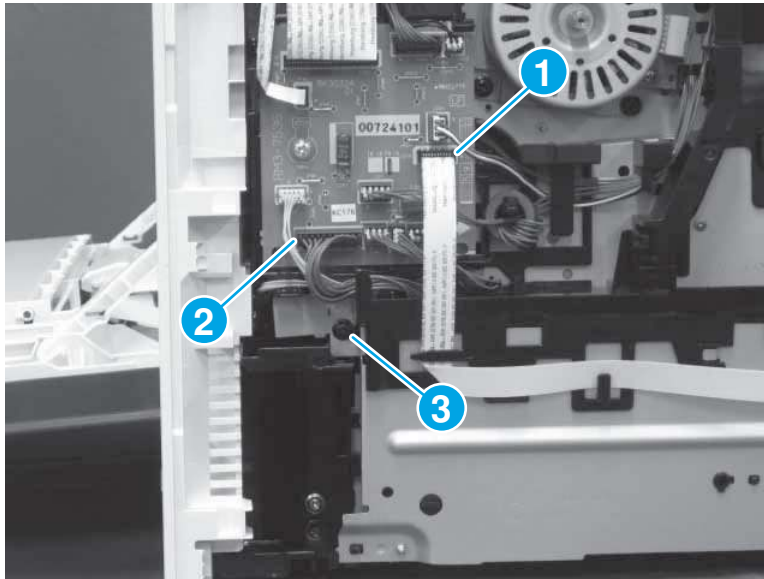
11. Remove the low-voltage power supply (LVPS)

Follow the procedure below to remove and replace the LVPS.

 **CAUTION:**  ESD sensitive part.

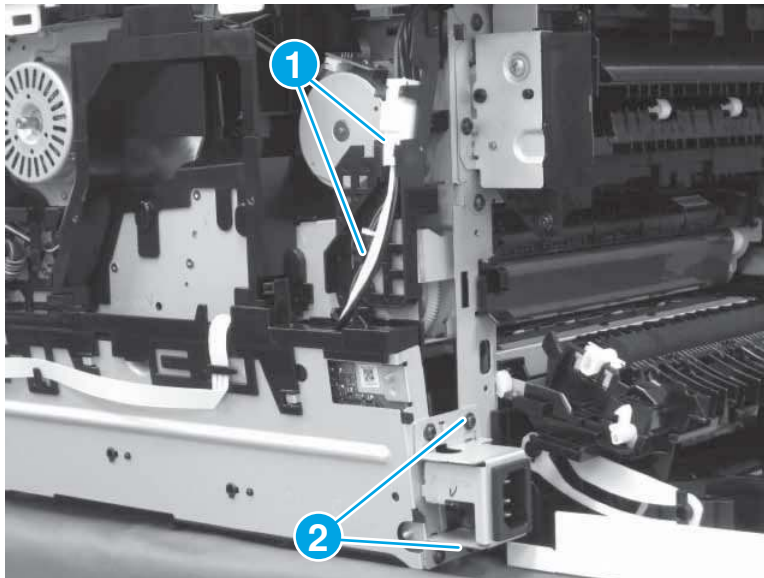
1. Disconnect one flat-flexible cable (FFC; callout 1) and one connector (callout 2), and then remove one screw (callout 3).

Figure 5-991 Disconnect FFC, connector, and remove one screw



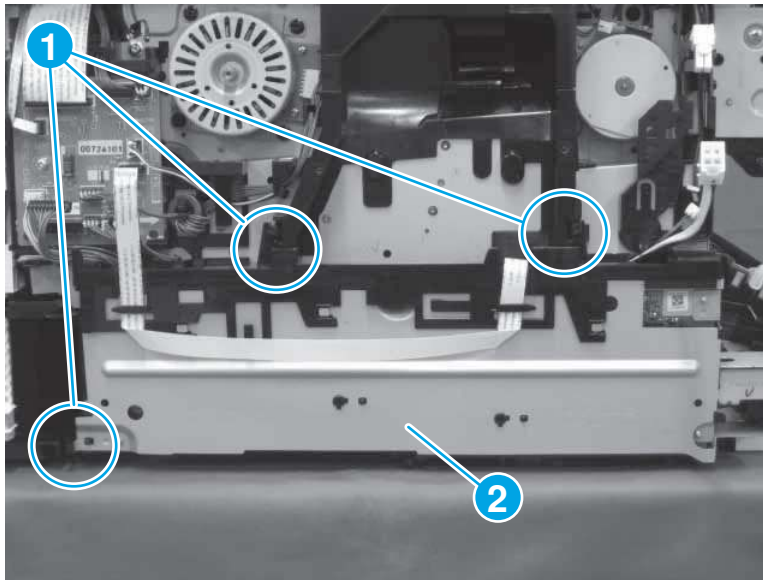
2. Disconnect two connectors (callout 1), and then remove two screws (callout 2).

Figure 5-992 Disconnect connectors and remove screws



3. Release three tabs (callout 1), and then remove the LVPS (callout 2).

Figure 5-993 Remove the LVPS



12. Remove the duplex guide assembly

Follow the procedure below to remove and replace the duplex guide assembly.

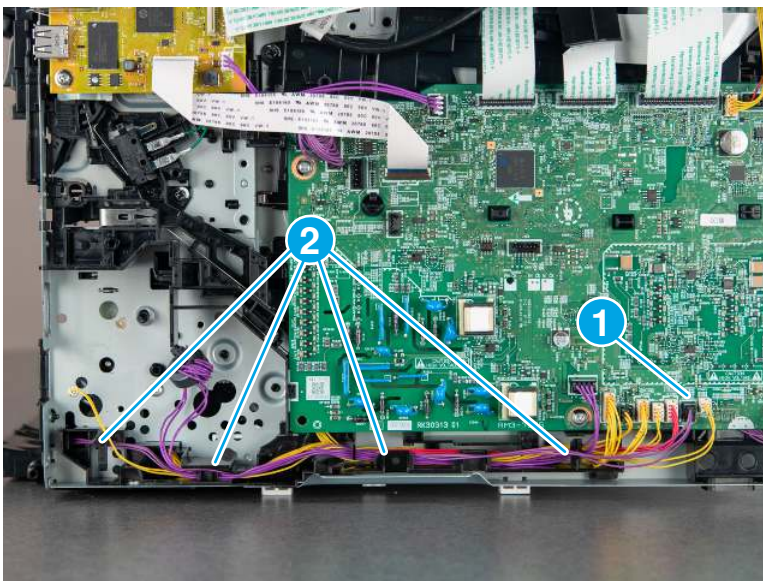
1. Disconnect one connector (callout 1), and then release the wire harness from the retainer (callout 2).



NOTE: The correct cable to release is the purple three-wire harness.

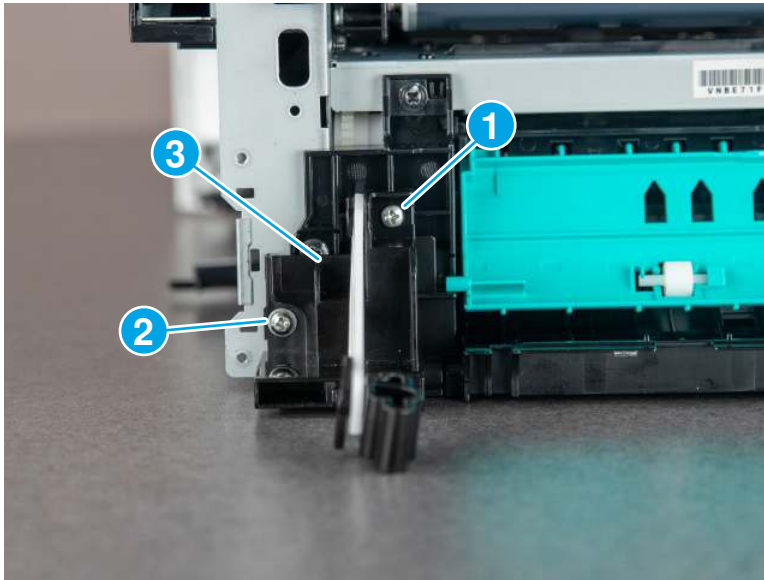
Disconnect other connectors and release other wire harnesses as necessary.

Figure 5-994 Disconnect one connector



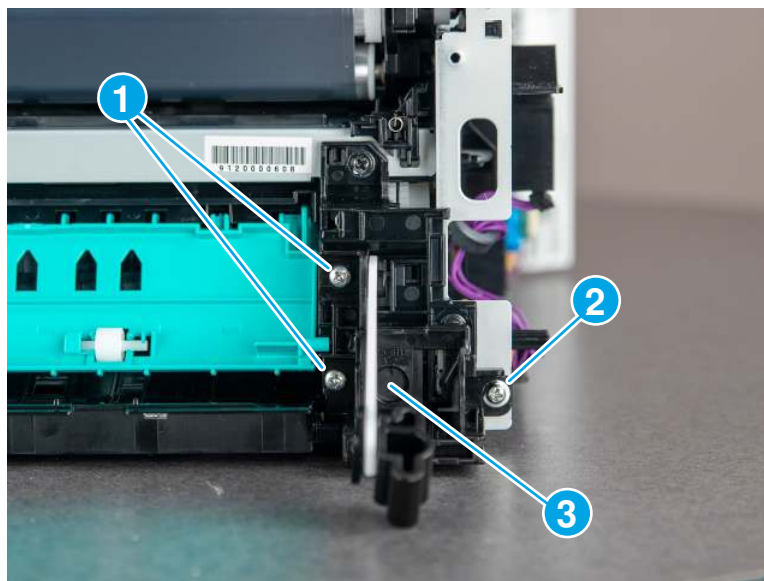
2. Do the following:
 - a. Remove one (tapping) screw (callout 1).
 - b. Remove one (TP) screw (callout 2)
 - c. Remove the holder (callout 3).

Figure 5-995 Remove two screws and the holder



3. Do the following:
 - a. Remove two (tapping) screws (callout 1).
 - b. Remove one (TP) screw (callout 2)
 - c. Remove the holder (callout 3).

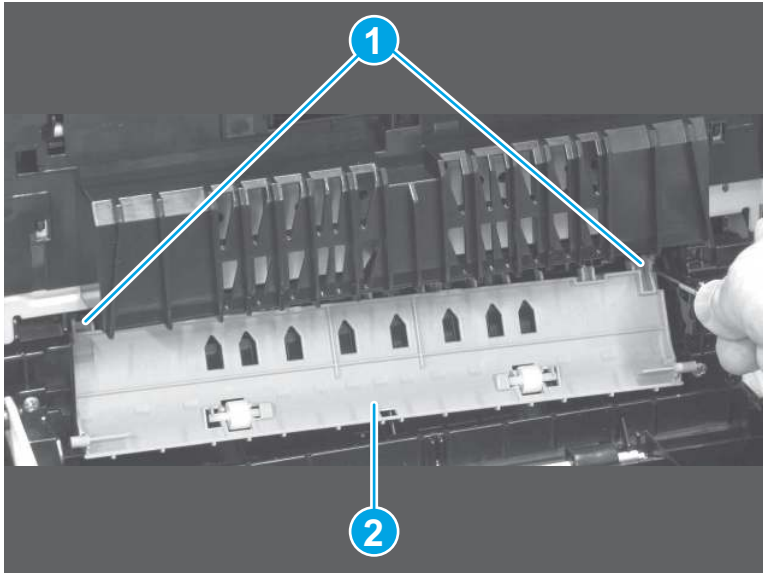
Figure 5-996 Remove three screws and the holder



4. Use a small flat-blade screwdriver to release one boss at each end of the duplex guide (callout 1), and then remove the guide (callout 2).

⚠ CAUTION: Parts of this assembly are fragile and can easily be damaged during removal.

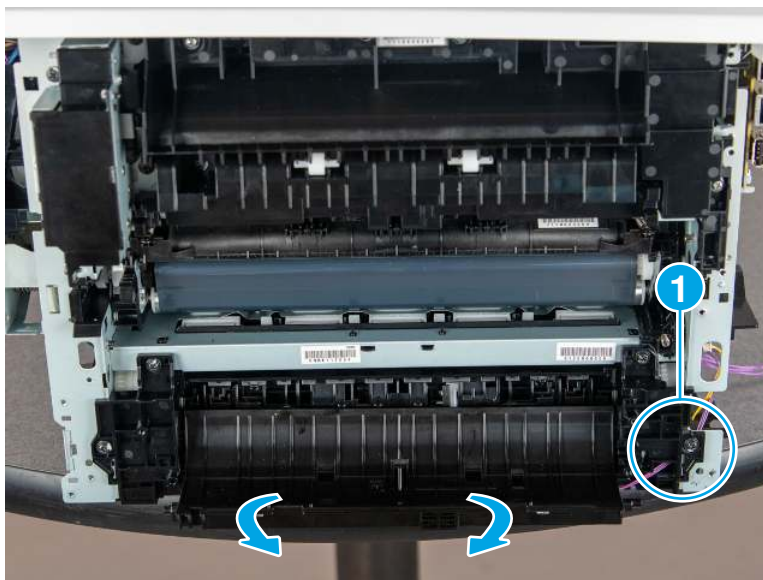
Figure 5-997 Remove the duplex upper guide



5. Carefully position the printer at the edge of the work surface. Slightly pull the duplex guide assembly down to release it, and then remove the assembly.

📝 NOTE: Pass the wire harness through the opening in the chassis as the assembly is removed (callout 1).

Figure 5-998 Remove the duplex guide assembly

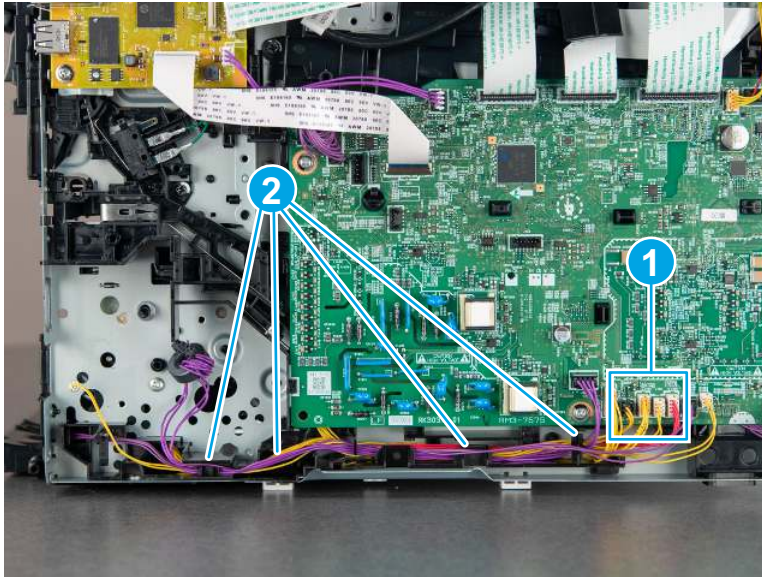


13. Remove the feed lower guide assembly

Follow the procedure below to remove and replace the feed lower guide assembly.

1. Disconnect four connectors (callout 1), and then release the wire harnesses from the guide (callout 2).

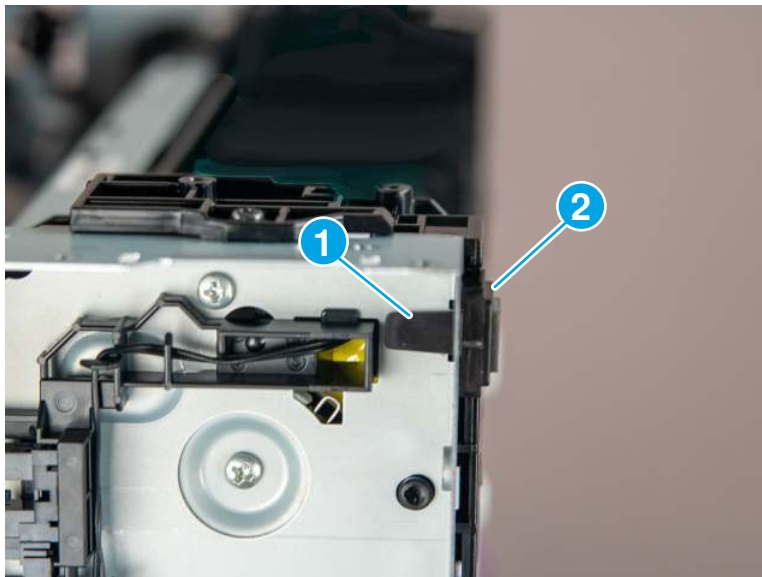
Figure 5-999 Disconnect connectors and release the wire harnesses



2. Position the printer with the front-side down, release one tab (callout 1), and then remove the rubber pad (callout 2). Repeat this step for the rubber pad on the opposite side.

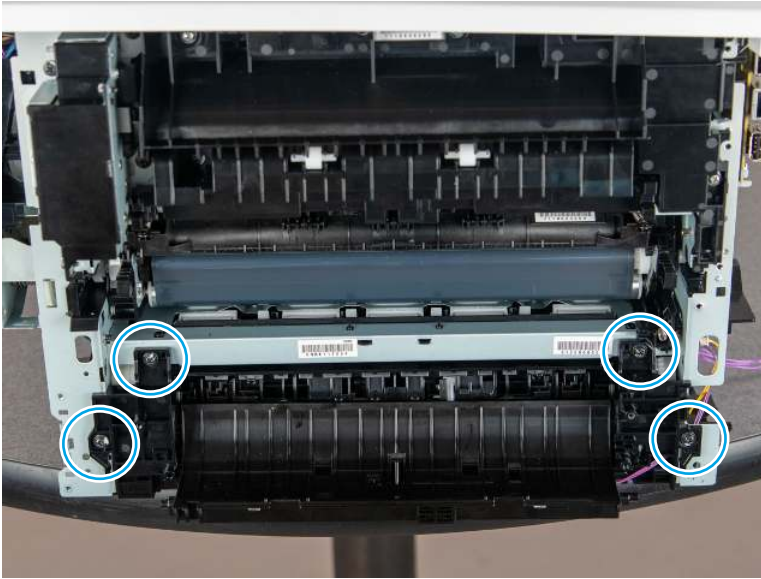
⚠ CAUTION: **MFP only:** The integrated scanner assembly (ISA) can suddenly open when the printer is placed in any position other than top-side up. Secure the ISA when repositioning the printer.

Figure 5-1000 Remove the pad



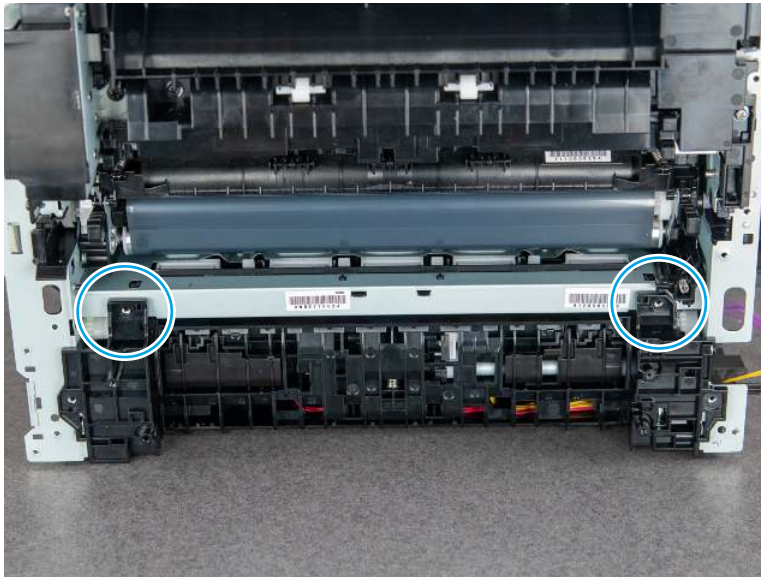
3. Position the printer with the top-side up (normal position), and then remove four screws.

Figure 5-1001 Remove four screws



4. Use a small flat-blade screwdriver to release two bosses (callout 1).

Figure 5-1002 Release two bosses

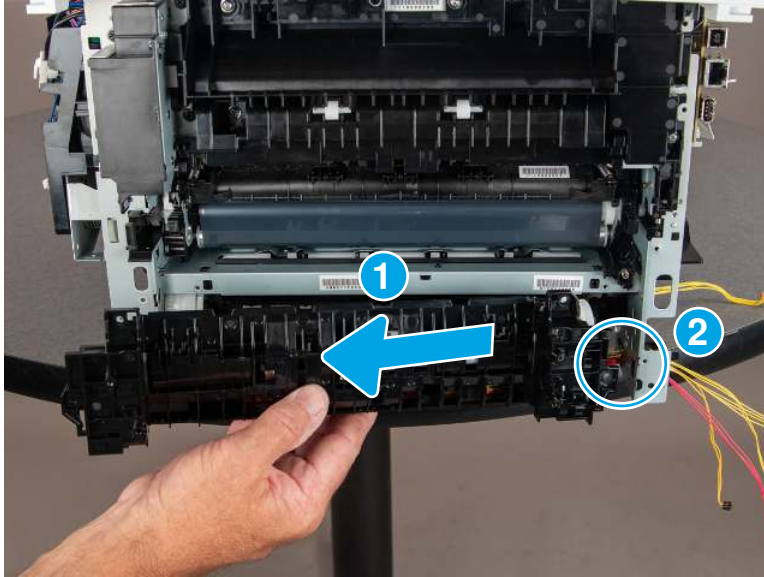


5. Carefully position the printer at the edge of the work surface. Slightly pull down on the assembly to release it, and then remove the feed lower guide assembly (callout 1).



NOTE: Carefully pull the wire harness through the opening in the chassis (callout 2) while removing the assembly.

Figure 5-1003 Remove the feed lower guide assembly

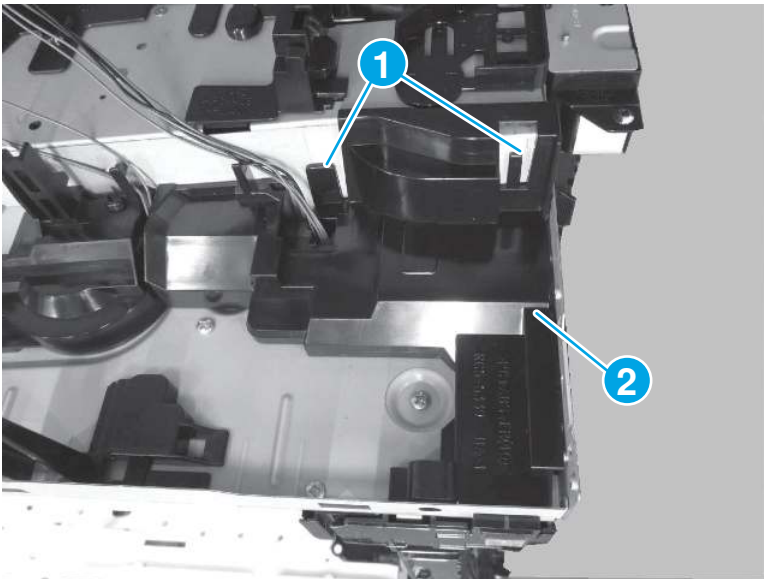


14. Remove the lifter drive assembly

Follow the procedure below to remove and replace the lifter drive assembly.

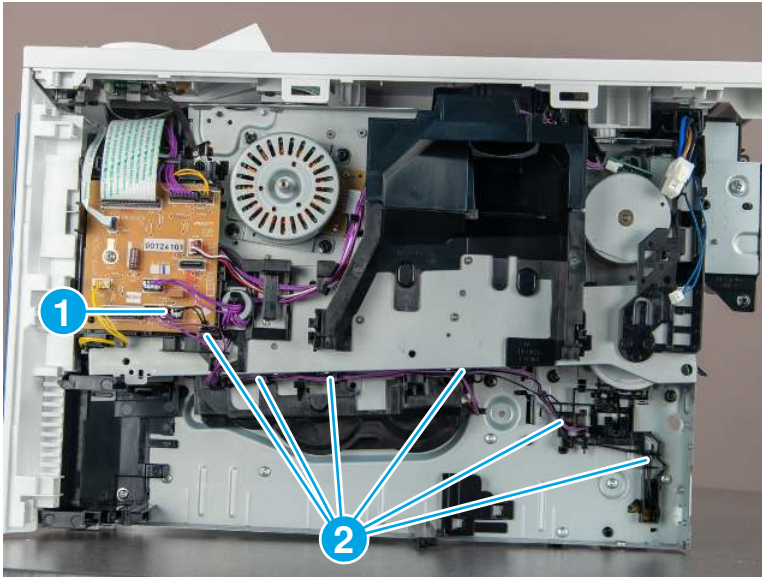
1. Release two tabs (callout 1), and then remove the cover (callout 2).

Figure 5-1004 Remove the cover



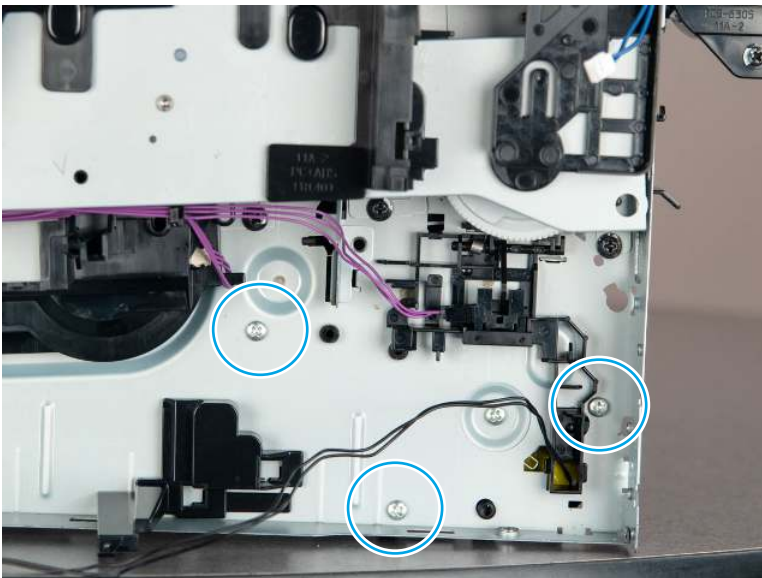
2. Disconnect one connector (callout 1), and then release the wire harness from the retainers (callout 2).

Figure 5-1005 Disconnect one connector



3. Remove three screws.

Figure 5-1006 Remove three screws



4. Position the printer with the front-side down, and then release one tab.

⚠ CAUTION: MFP only: The integrated scanner assembly (ISA) can suddenly open when the printer is placed in any position other than top-side up. Secure the ISA when repositioning the printer.

Figure 5-1007 Release one tab



5. Remove the lifter drive assembly.


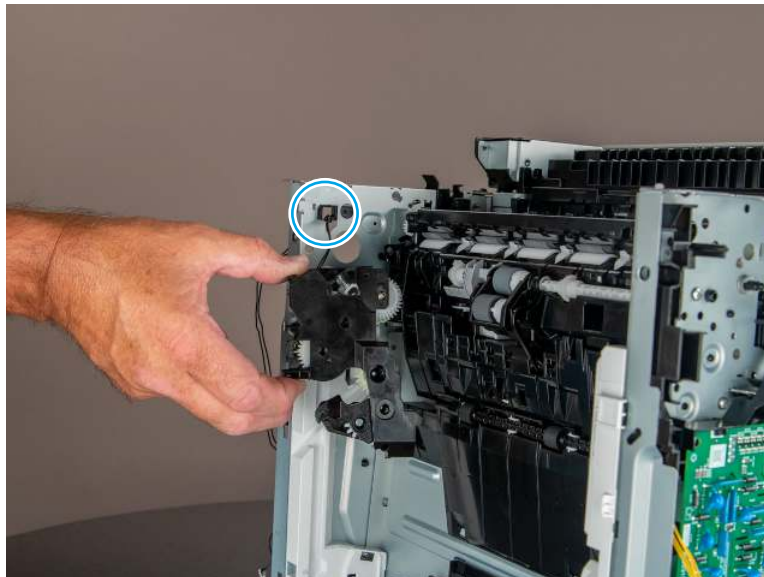
 **NOTE:** Carefully pull the wire harness through the opening in the chassis while removing the assembly.


Figure 5-1008 Remove the lifter drive assembly



15. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


 **NOTE:** HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.


NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

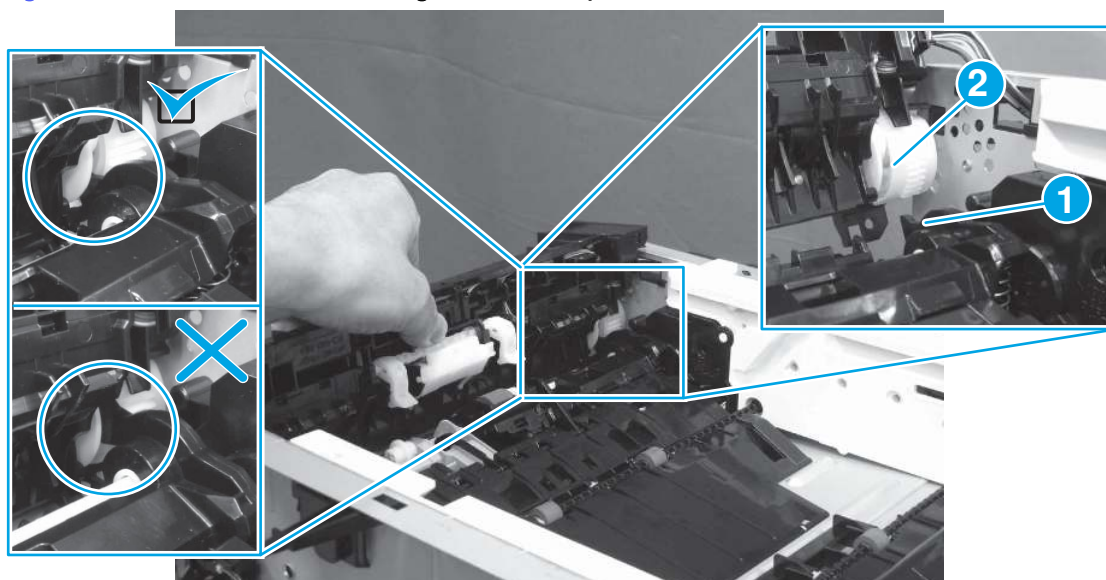
16. Special installation instructions - Feed lower guide assembly

Follow the special instructions below to install the feed lower guide assembly.

NOTE:  The printer is shown upside down in the figure below for clarity.

- When the assembly is installed, make sure that the link arm (callout 1) on the printer is correctly inserted in the gear (callout 2) of the feed lower guide assembly.

Figure 5-1009 Install the feed lower guide assembly



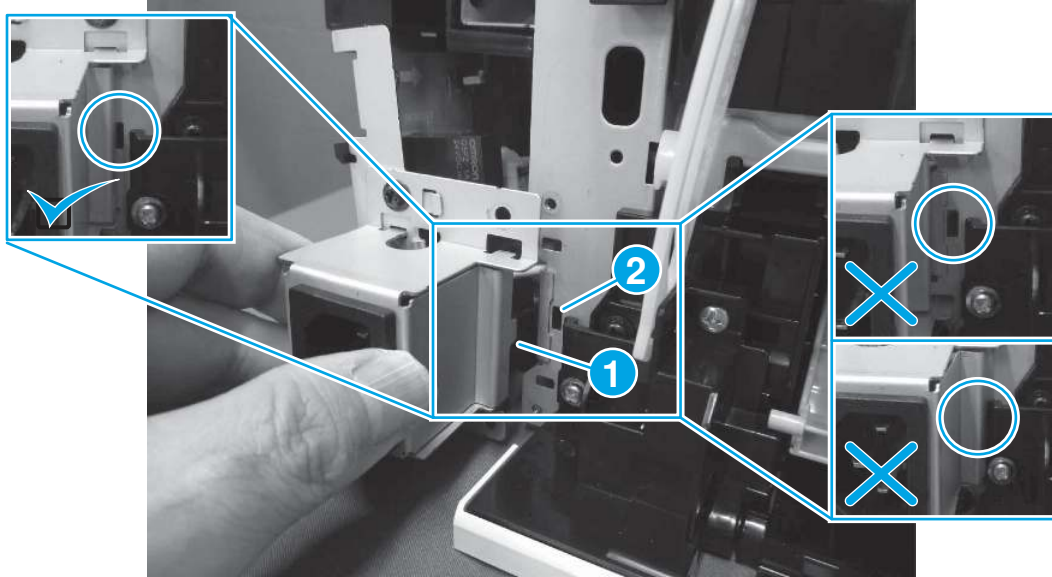
17. Special installation instructions - Low-voltage power supply (LVPS)

Follow the special instructions below to install a replacement LVPS.

 **CAUTION:**  ESD sensitive part.

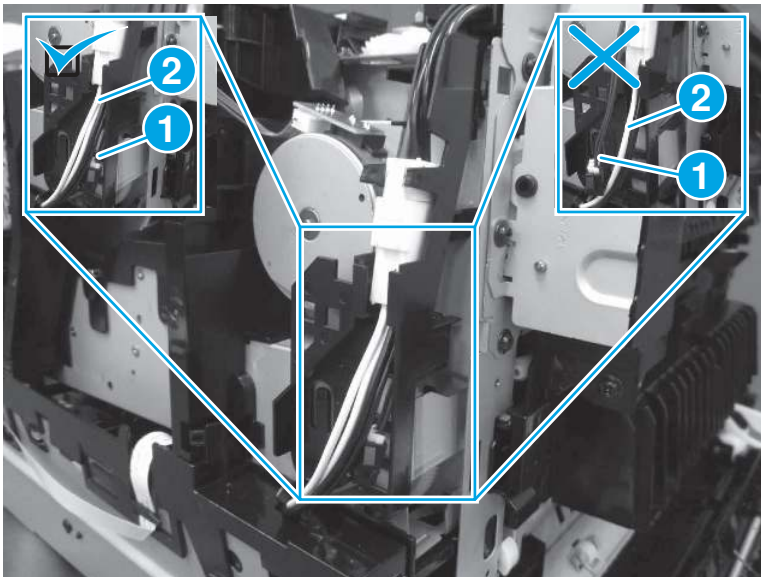
1. When the LVPS is installed, make sure that the sheet-metal tab (callout 1) near the power receptacle is inserted in the slot (callout 2) in the chassis.

Figure 5-1010 Install the LVPS tab



2. Make sure that the fuser temperature fuse cable (callout 1) is positioned behind the thick cable (callout 2). This prevents the fuser cable from unnecessary movement.

Figure 5-1011 Check the fuser temperature fuse cable



Removal and replacement: Feed upper guide assembly

Learn about feed upper guide assembly removal.


Mean time to repair: 55 minutes

Service level: Difficult

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-50 Part Information

Part number	Part description
RM2-2747-000CN	Paper feed guide assembly, upper

Required tools

- Small flat-blade screwdriver
- Small flat-blade screwdriver
- Needle-nose pliers

After performing service

Turn the printer power on

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

Post service test

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

1. Remove the left cover (SFP)

Follow the procedure below to remove and replace the left cover (SFP).



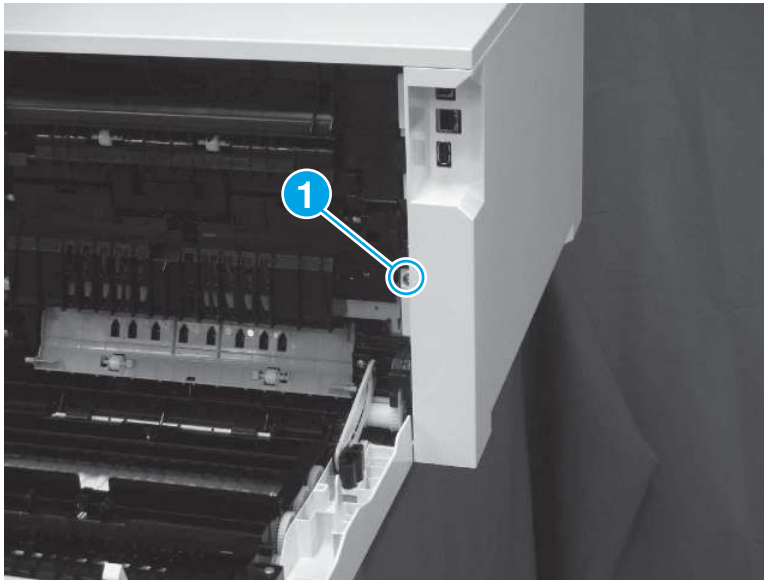
NOTE: The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.



TIP: There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

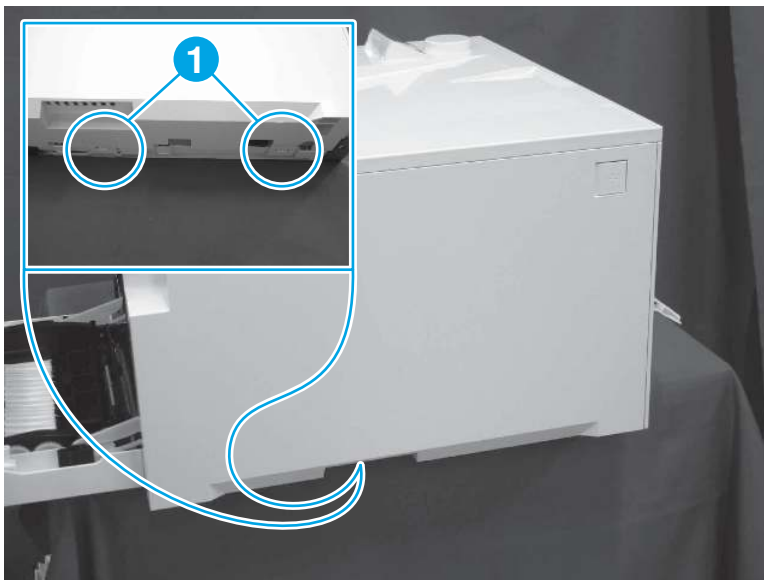
1. Remove one screw (callout 1).

Figure 5-1012 Remove one screw



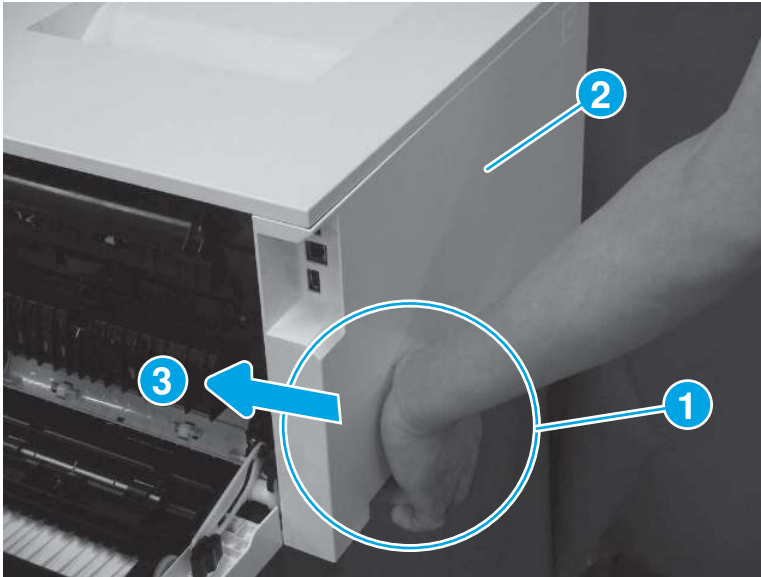
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-1013 Release two tabs



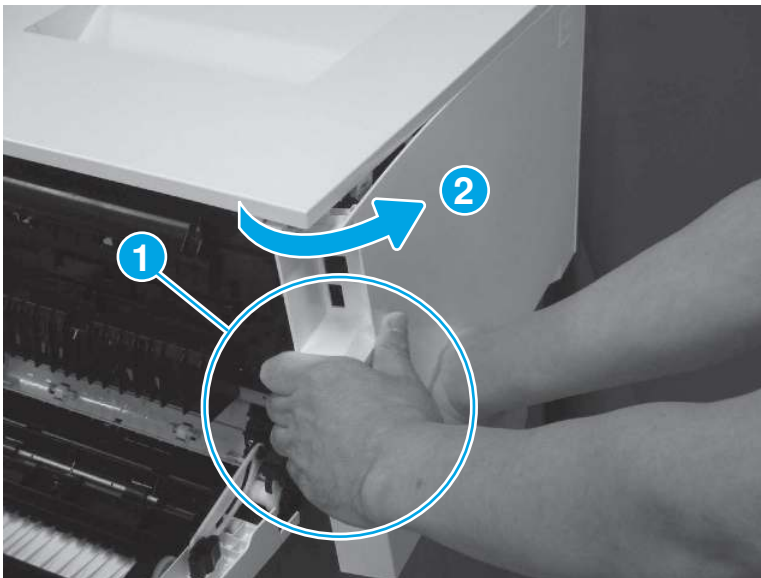
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-1014 Release the rear cover corner



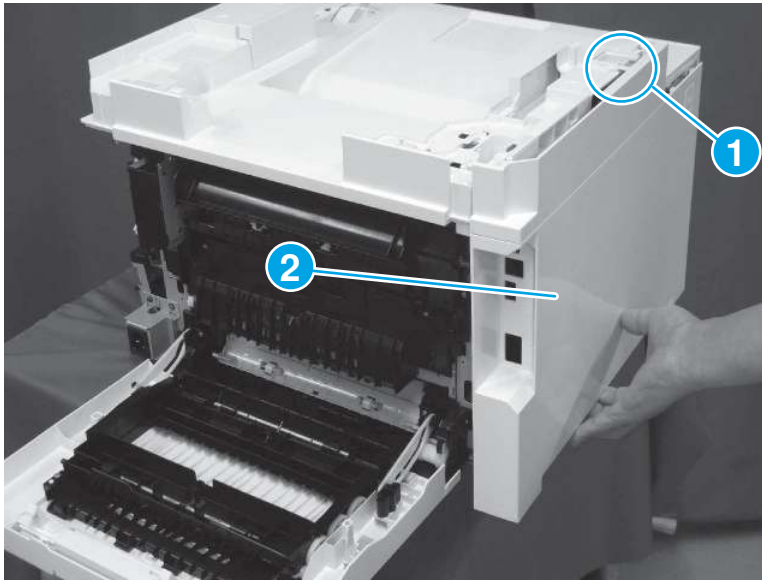
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-1015 Disengage the cover corner




5. Remove the left cover (callout 1).


Figure 5-1016 Remove the cover



2. Remove the left cover (MFP)

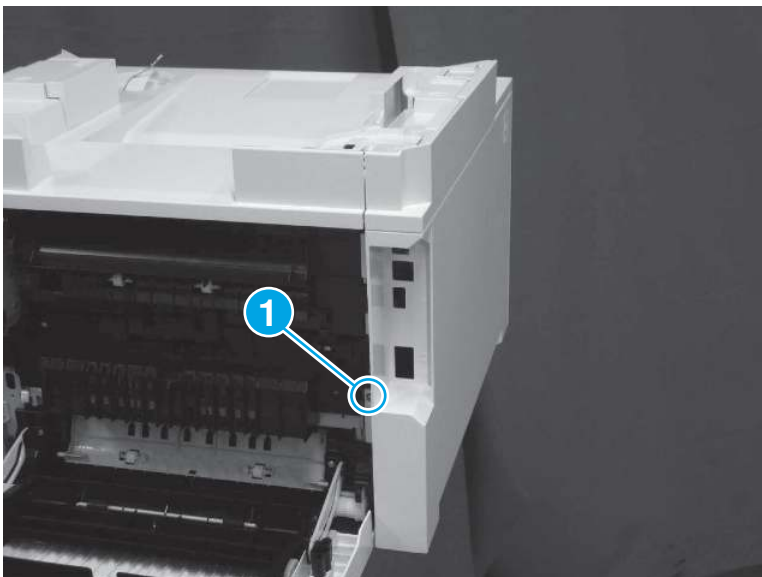
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

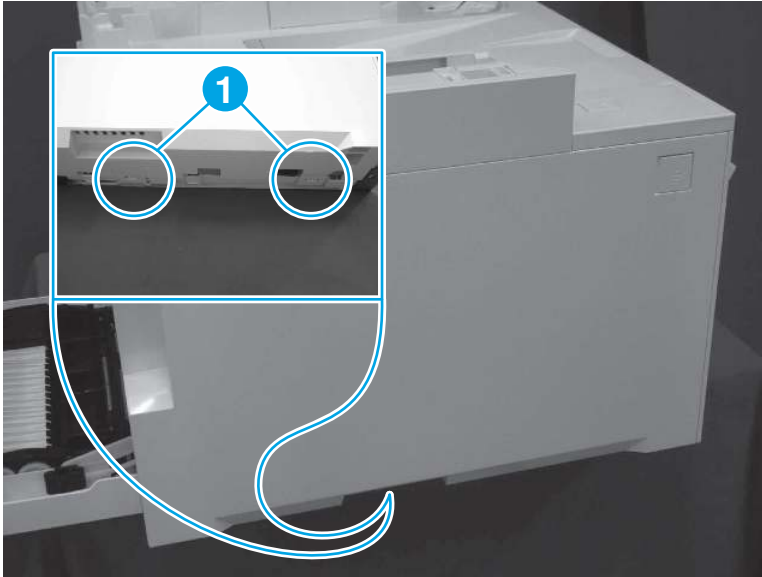
1. Remove one screw (callout 1).

Figure 5-1017 Remove one screw



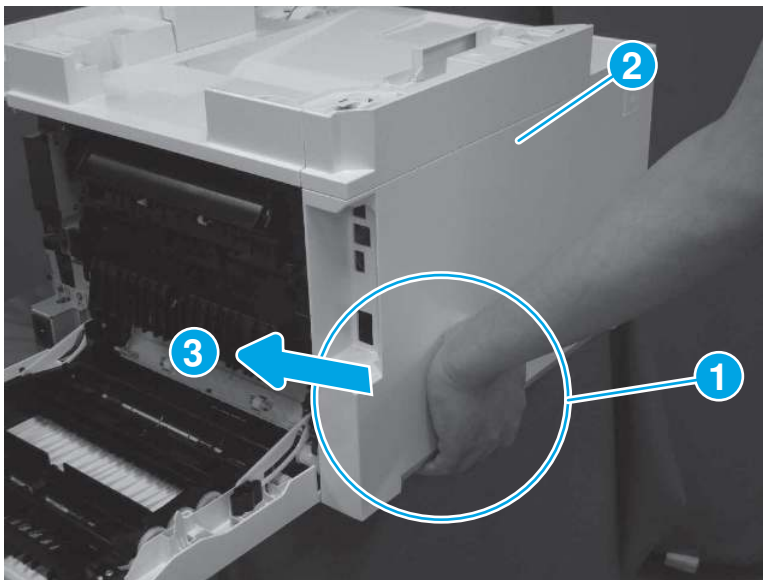
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-1018 Release two tabs



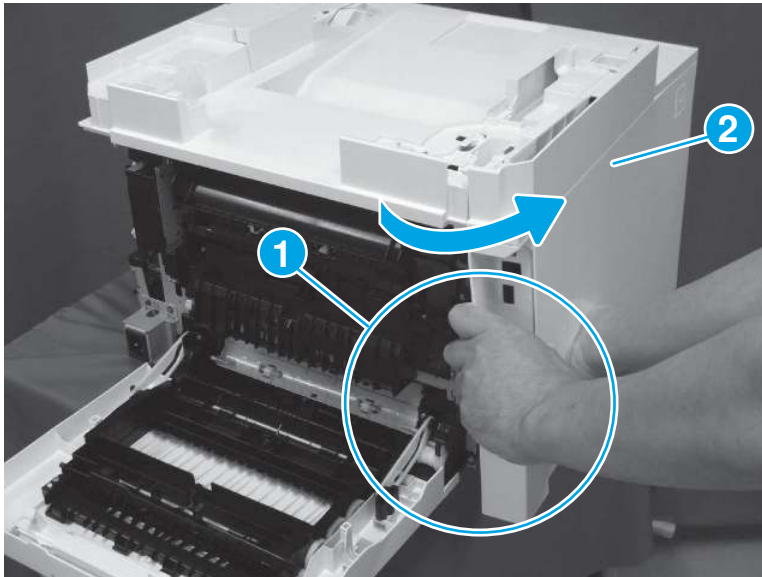
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-1019 Release the rear cover corner



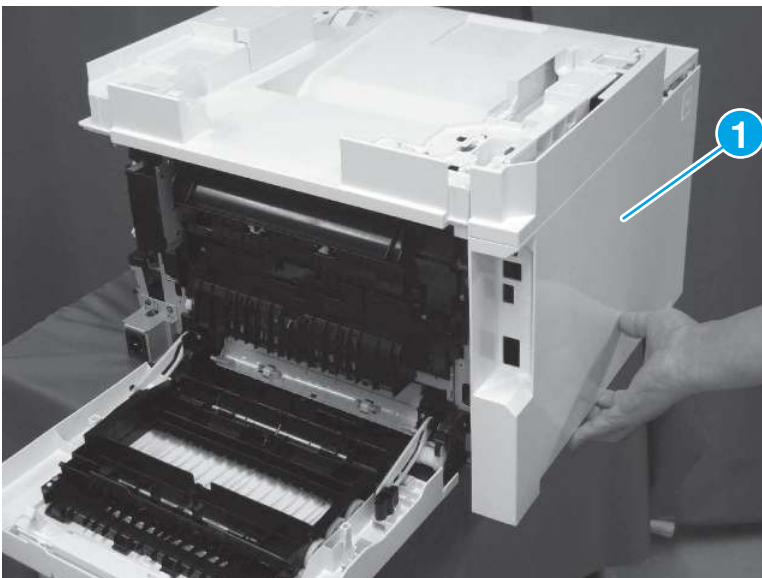
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-1020 Disengage the cover corner



5. Remove the left cover (callout 1).

Figure 5-1021 Remove the cover

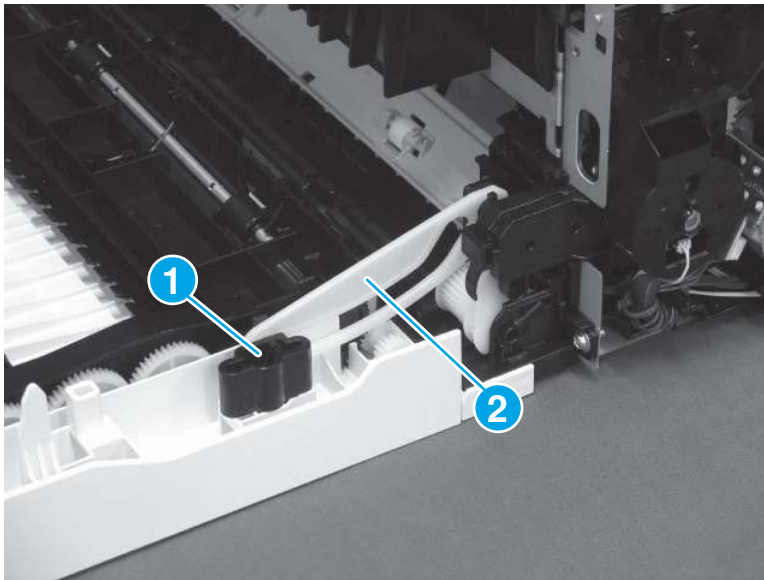


3. Remove the duplex re-pick clutch

Follow the procedure below to remove and replace the duplex re-pick clutch.

1. Remove one screw (callout 1), and then remove the hinge (callout 2).

Figure 5-1022 Remove the hinge



2. Release the retainer (callout 1), rotate the shaft as shown below (callout 2) to remove it, and then remove the gear (callout 3).


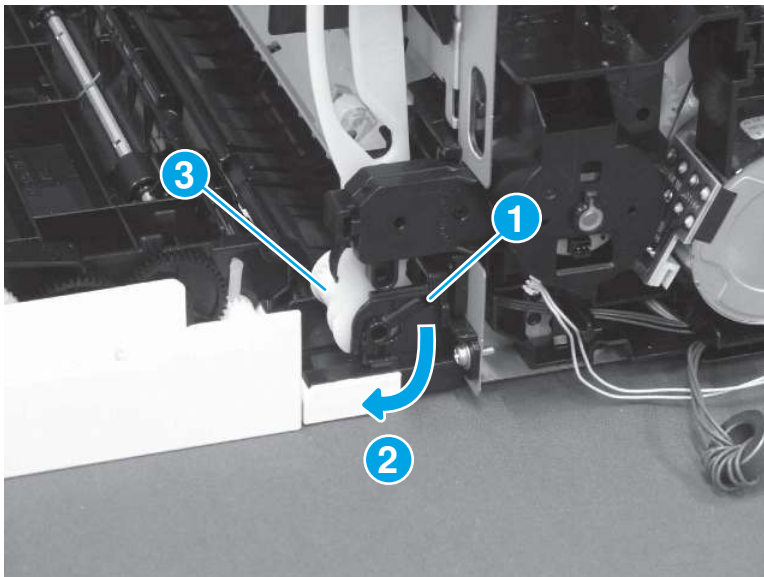
 **Reinstallation tip:** Take note of how the gear is installed before removing it. The shaft cannot be reinstalled if the gear is incorrectly installed.

Figure 5-1023 Remove the gear



3. Disconnect one connector (callout 1), remove one screw (callout 2), and then release one tab (callout 3).


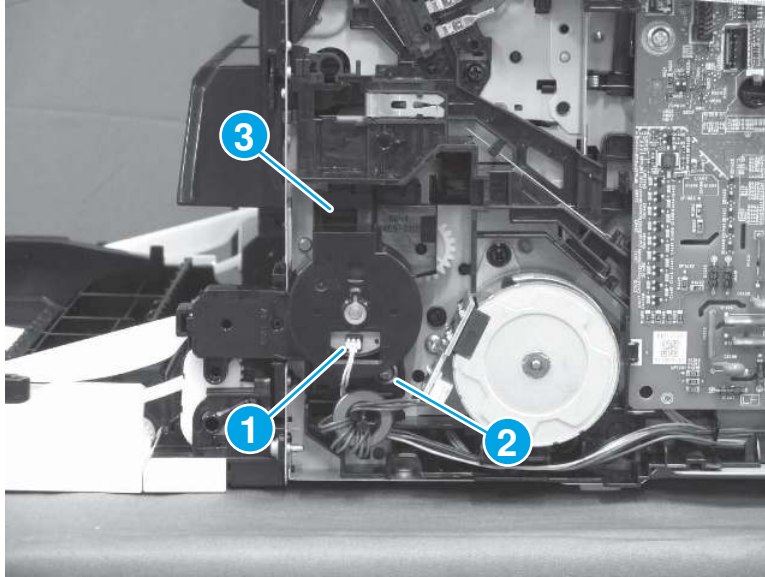
 **NOTE:** The connector (callout 1) has a tab that must be released to disconnect it. It can be difficult to disconnect when the duplex re-pick clutch is installed. It might be easier to remove the duplex re-pick clutch (see the following step), and then disconnect the connector.

Figure 5-1024 Disconnect one connector, remove one screw, and release one tab

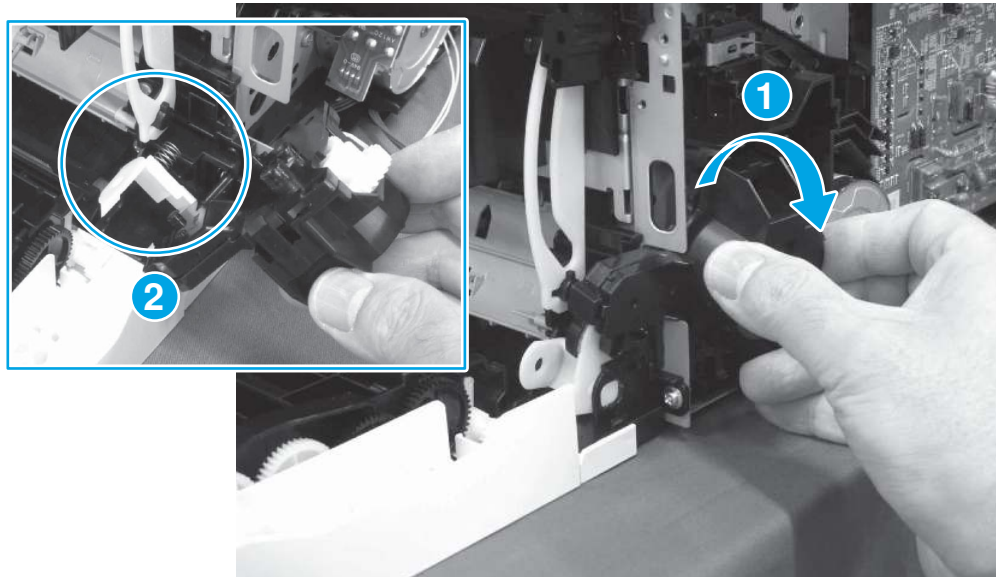


4. Remove the duplex re-pick clutch (callout 1).

⚠ CAUTION: When handling the assembly, do not lose the spring that is inside the left gear holder (callout 2).

💡 Reinstallation tip: For a replacement duplex re-pick clutch only: Remove the spring from the assembly (callout 2), and then install it on the replacement duplex re-pick clutch.

Figure 5-1025 Remove the duplex re-pick clutch

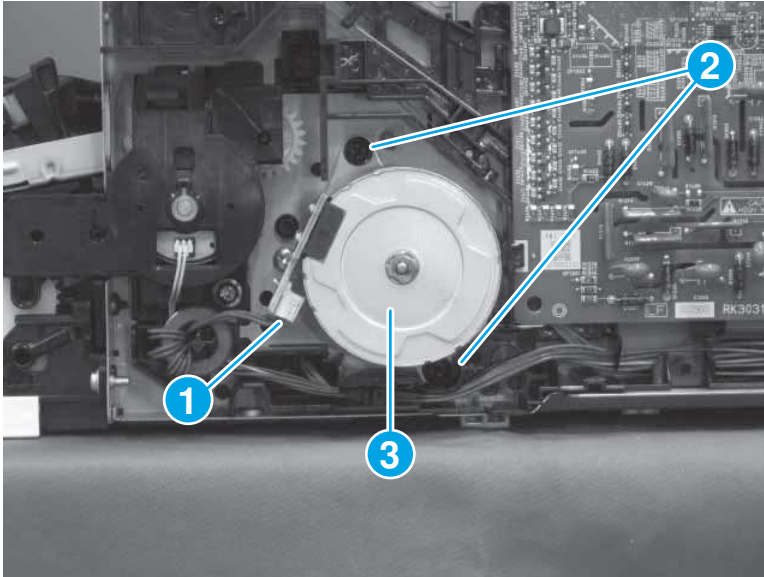


4. Remove the feed motor

Follow the procedure below to remove and replace the feed motor.


- Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).

Figure 5-1026 Remove the feed motor



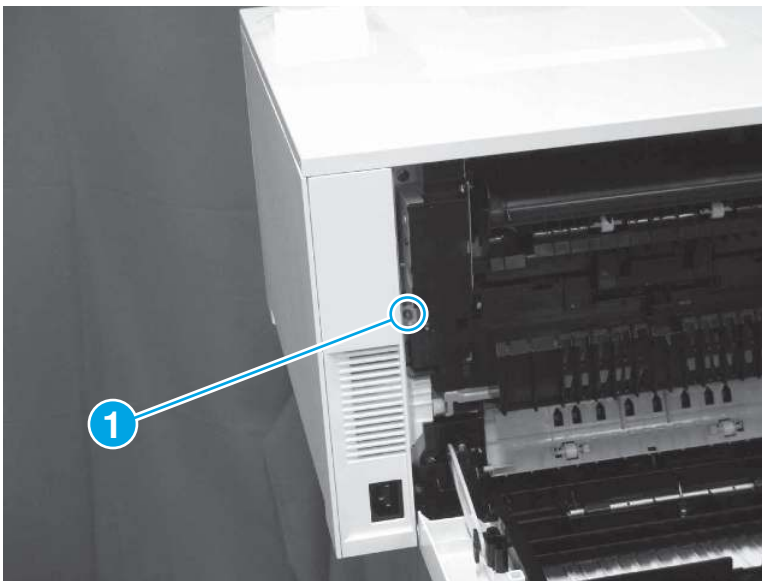
5. Remove the right cover (SFP)

Follow the procedure below to remove and replace the right cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

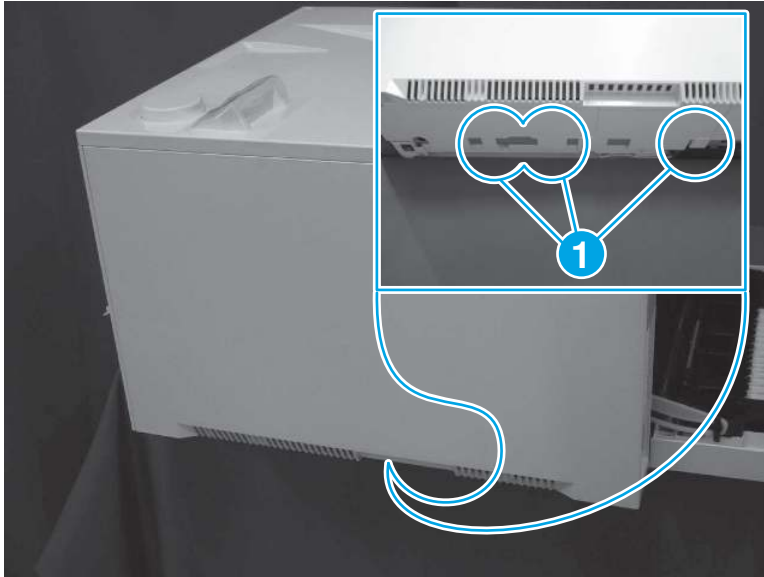
1. Remove one screw (callout 1).

Figure 5-1027 Remove one screw



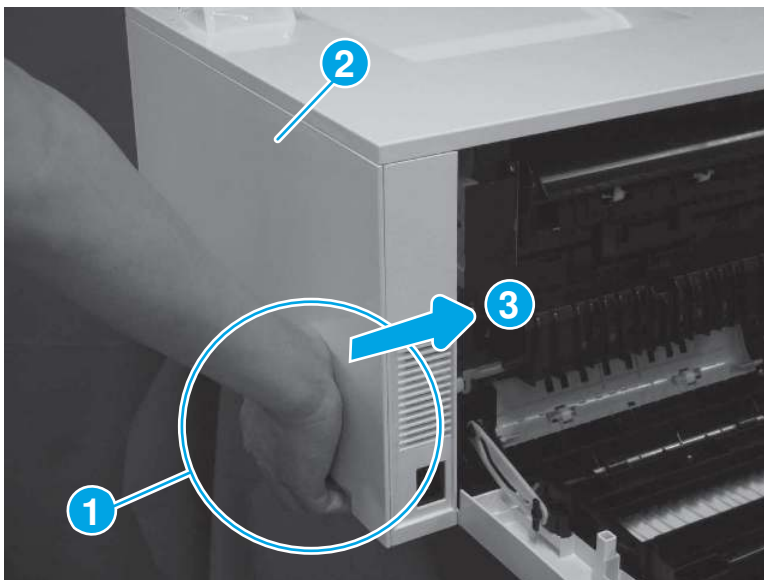
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-1028 Release three tabs



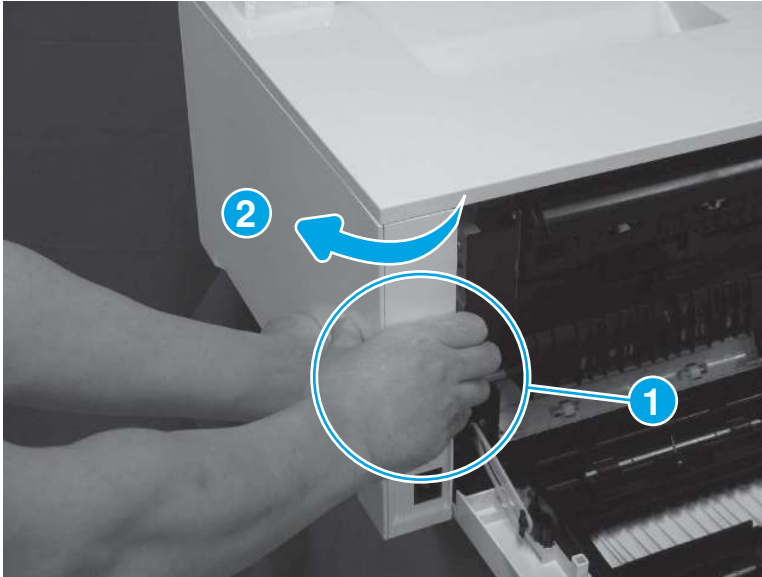
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-1029 Release the rear cover corner



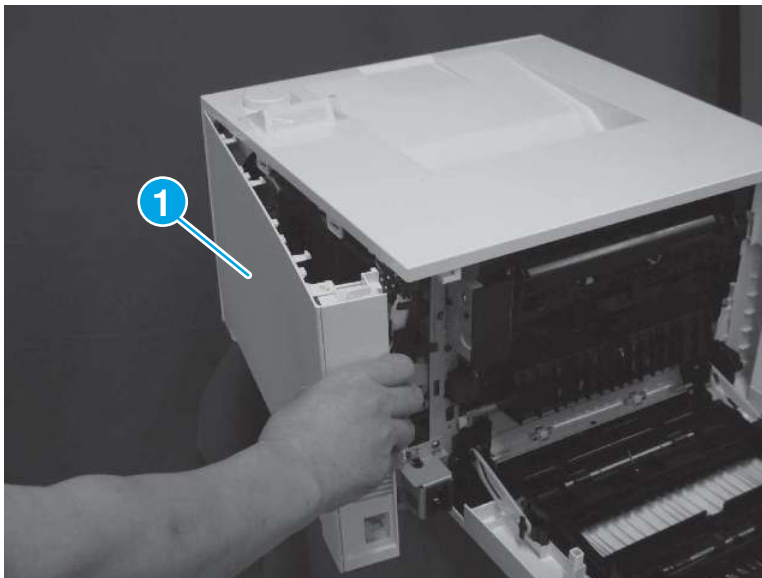
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-1030 Disengage the cover corner




5. Remove the right cover (callout 1).

Figure 5-1031 Remove the cover



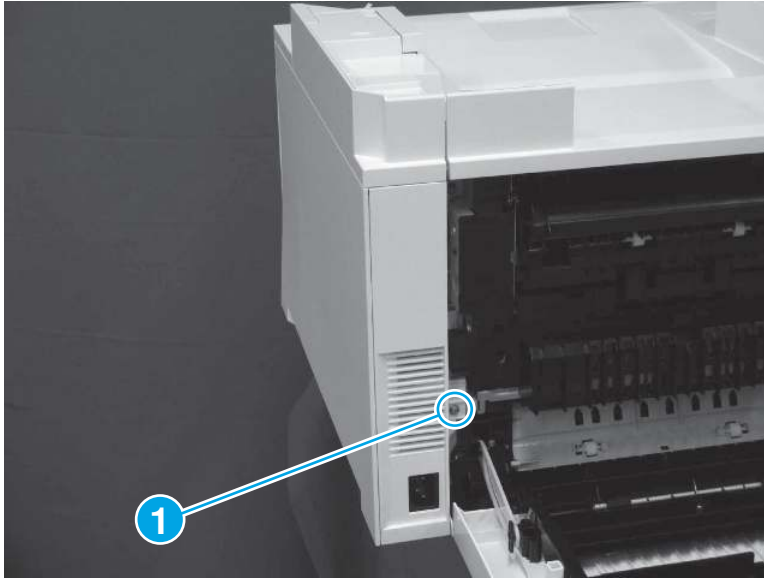
6. Remove the right cover (MFP)

Follow the procedure below to remove and replace the right cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

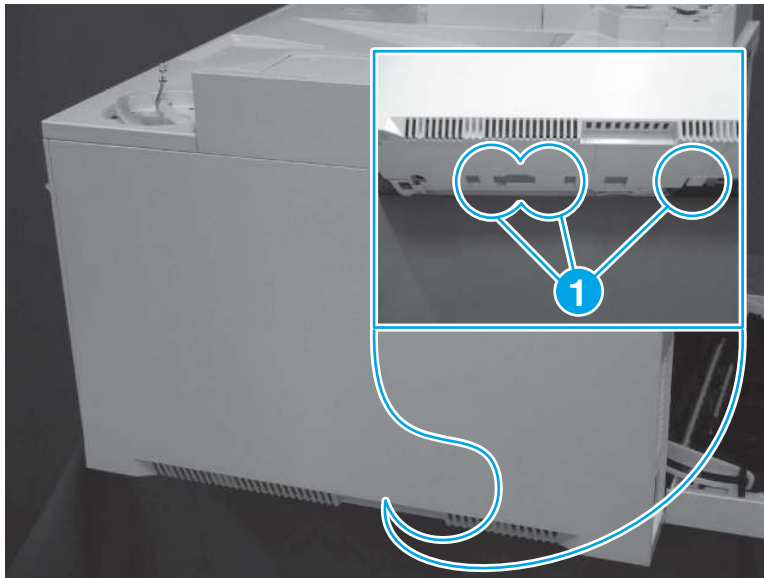
1. Remove one screw (callout 1).

Figure 5-1032 Remove one screw



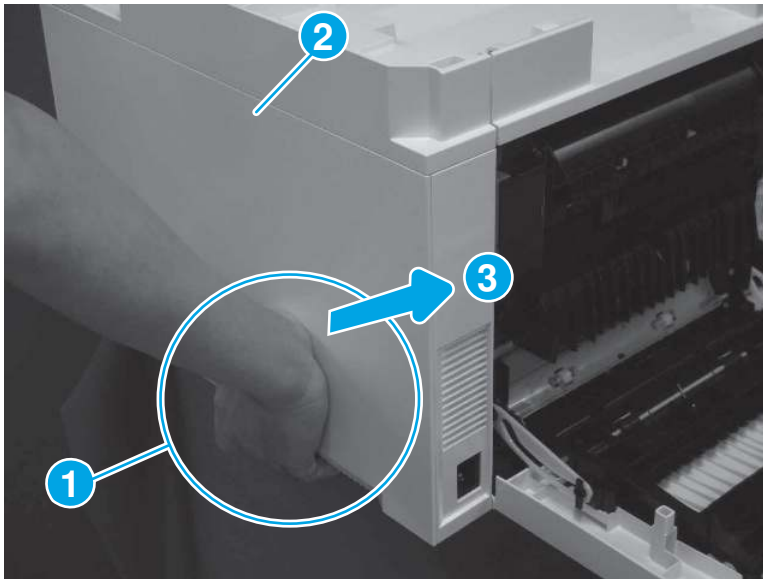
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-1033 Release three tabs



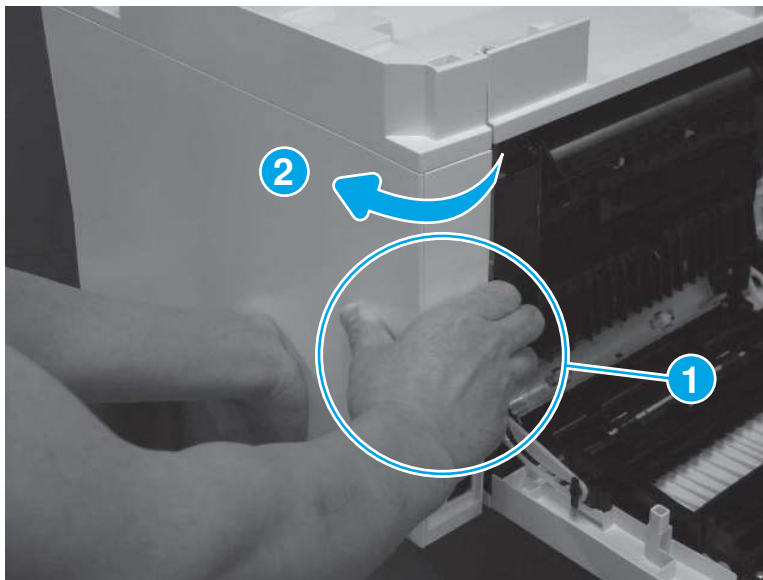
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-1034 Release the rear cover corner



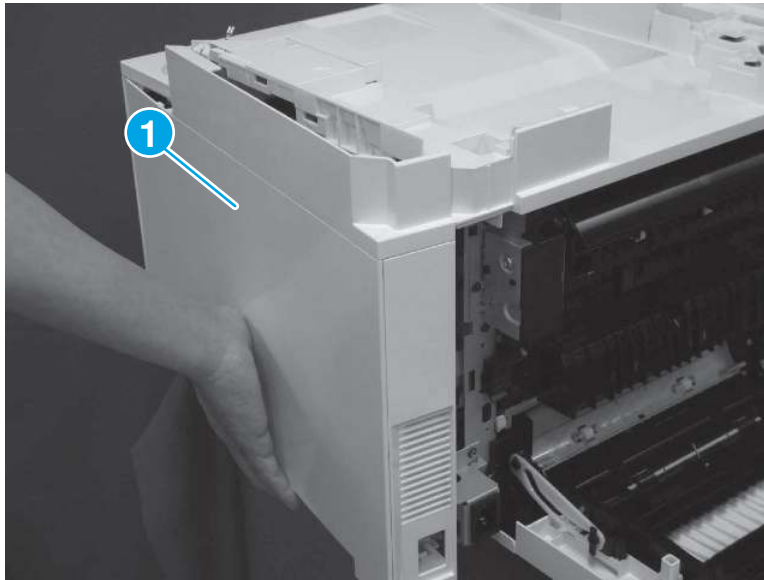
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-1035 Disengage the cover corner



5. Remove the right cover (callout 1).

Figure 5-1036 Remove the cover

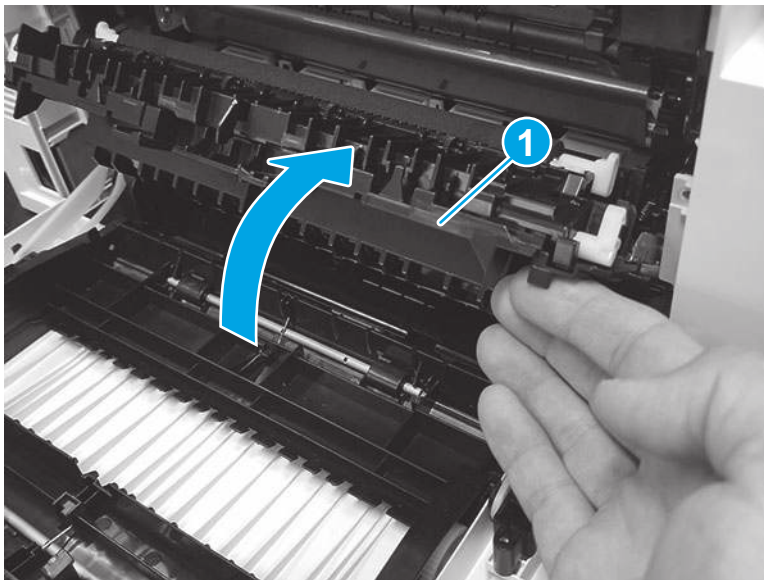


7. Remove the rear door

Follow the procedure below to remove and replace the rear door.

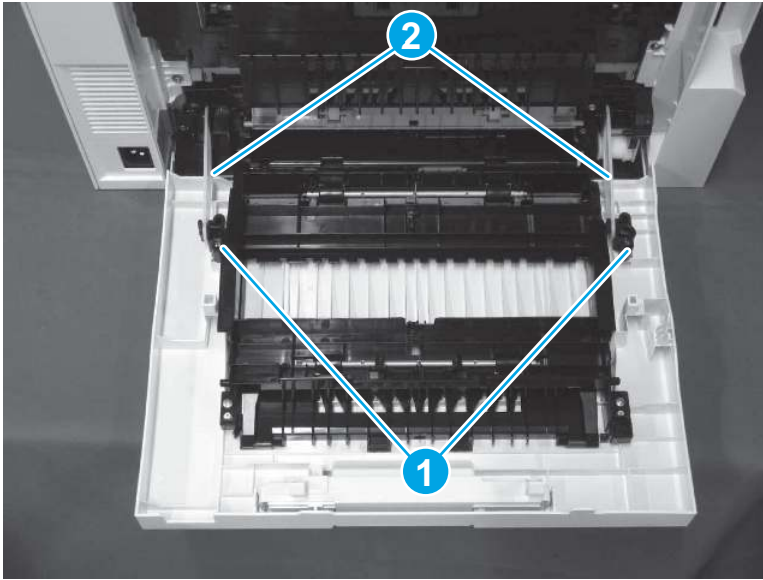
1. Open the rear door, and then raise the secondary transfer feed assembly (callout 1) up and into the locked position.

Figure 5-1037 Place the T2 feed assembly in the locked position



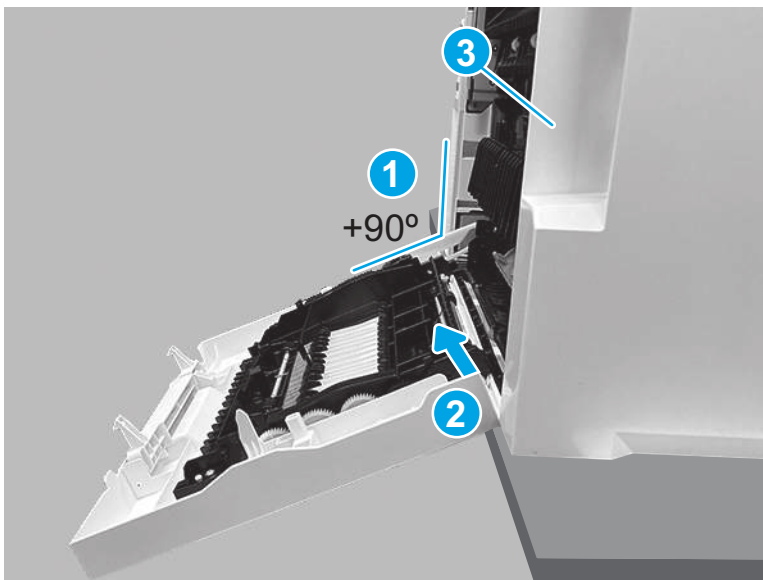
2. Remove two screws (callout 1), and then release the left- and right-side retainer arms (callout 2)

Figure 5-1038 Release the retainer arms



3. Carefully position the printer at the edge of the work surface and allow the rear door to open to an angle greater than 90 degrees (callout 1). Slide the door away (callout 2) from the formatter side of the printer (callout 3) to release it, and then remove the rear door.

Figure 5-1039 Remove the door

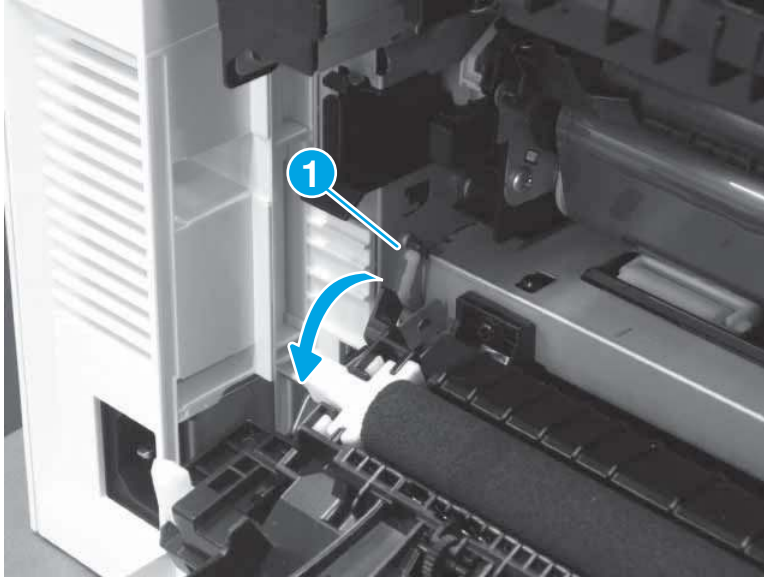


8. Remove the secondary transfer roller (T2) assembly

Follow the procedure below to remove and replace the T2 roller assembly.

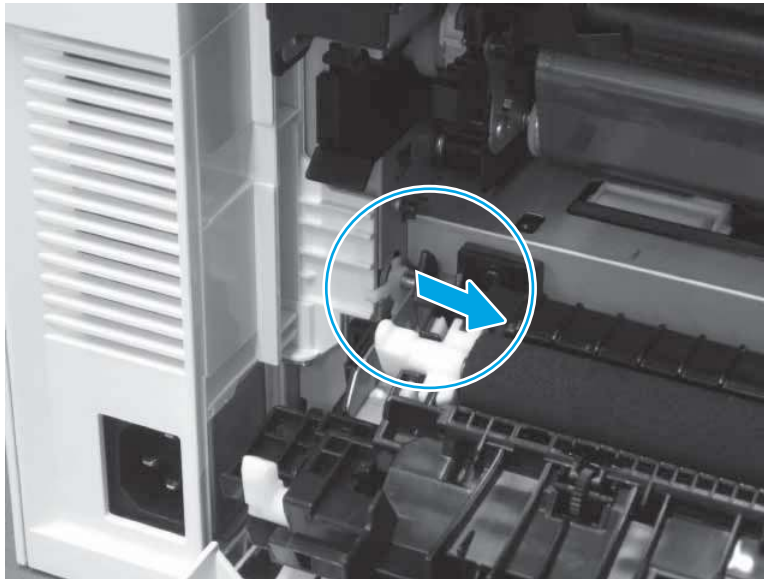
1. Open the rear door, and then rotate the bushing (callout 1) in the direction shown below.

Figure 5-1040 Rotate the bushing



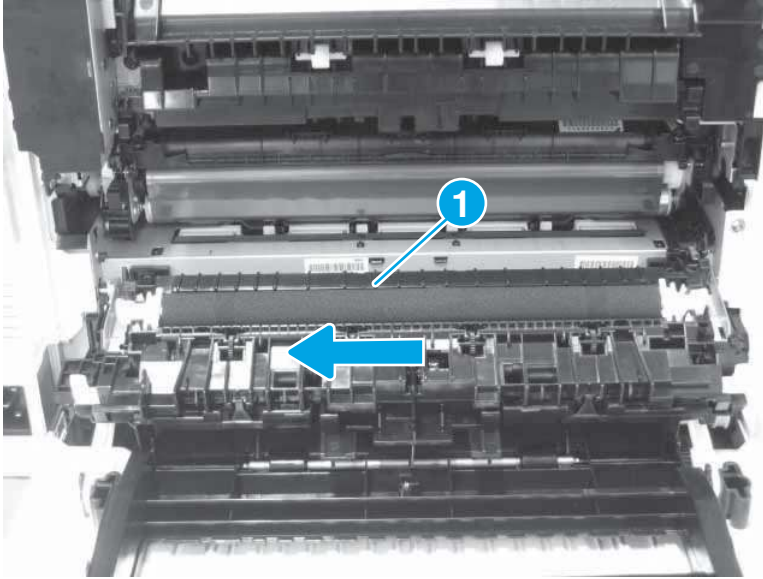
2. Slide the bushing in the direction shown below.

Figure 5-1041 Slide the bushing



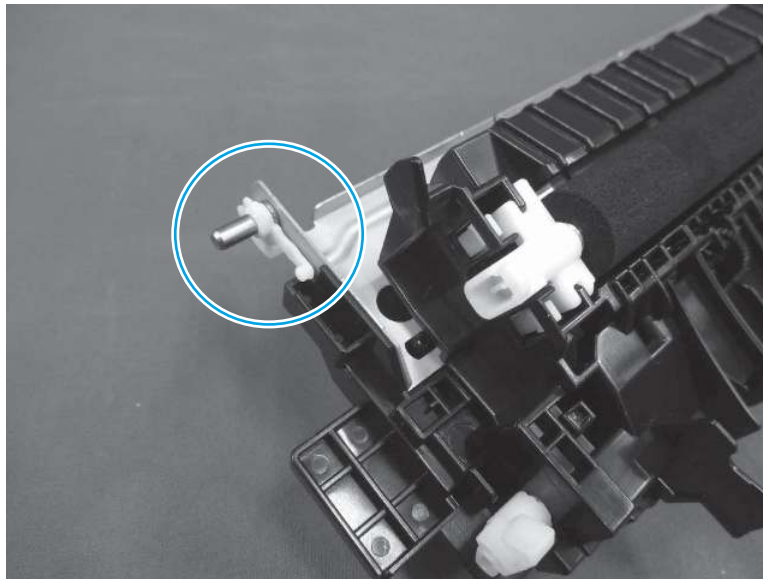
3. Slide the T2 assembly (callout 1) in the direction shown below to remove it.

Figure 5-1042 Remove the T2 assembly



4. The bushing shown in the figure below is supplied with the replacement assembly.

Figure 5-1043 T2 assembly bushing

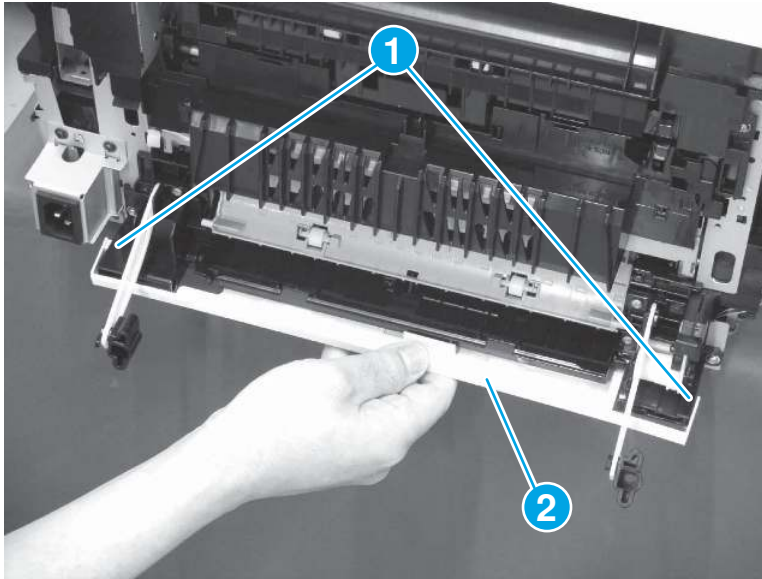


9. Remove the duplexing bottom cover

Follow the procedure below to remove and replace the duplexing bottom cover.

- Release two tabs (callout 1), and then remove the duplexing bottom cover (callout 2).

Figure 5-1044 Remove the duplexing bottom cover



10. Remove the MP paper feed assembly

Follow the procedure below to remove the MP paper feed assembly.

1. Position the printer with the rear-door side down.

Figure 5-1045 Position the printer



2. Press the green button to release the assembly.

Figure 5-1046 Release the assembly



3. Slide the assembly up (callout 1), and then toward the right-side of the printer (callout 2) to remove it.


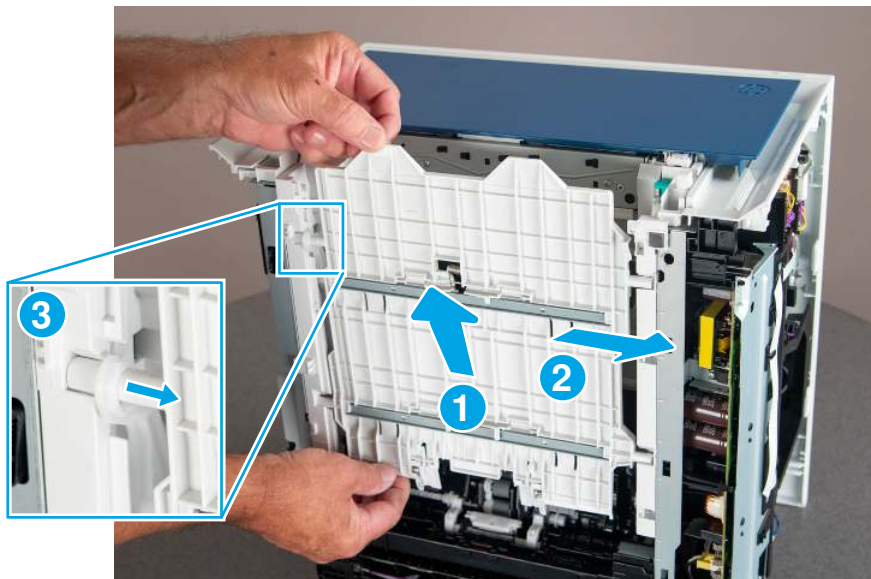
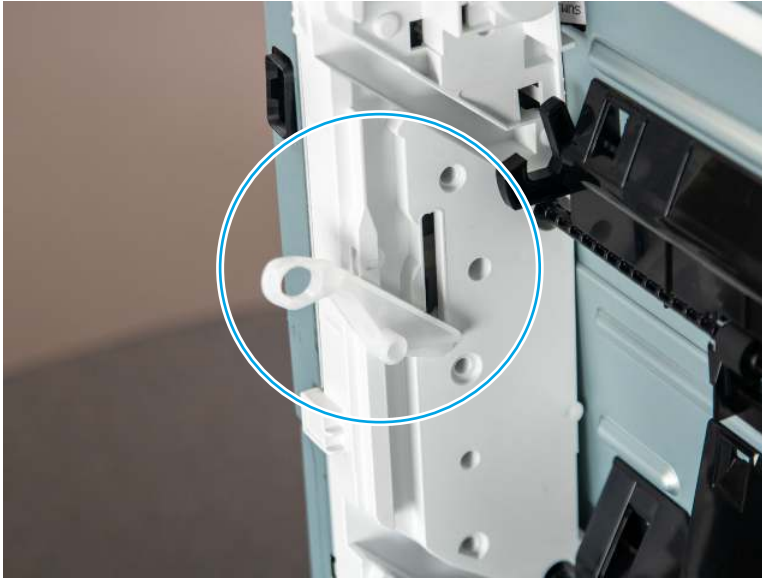
 **NOTE:** There is a retainer arm (callout 3) on one of the assembly legs. Carefully disengage the retainer arm and leg when removing the assembly.

Figure 5-1047 Remove the assembly



4. If the retainer arm becomes dislodged, reinstall it as shown below.

Figure 5-1048 Install the retainer arm



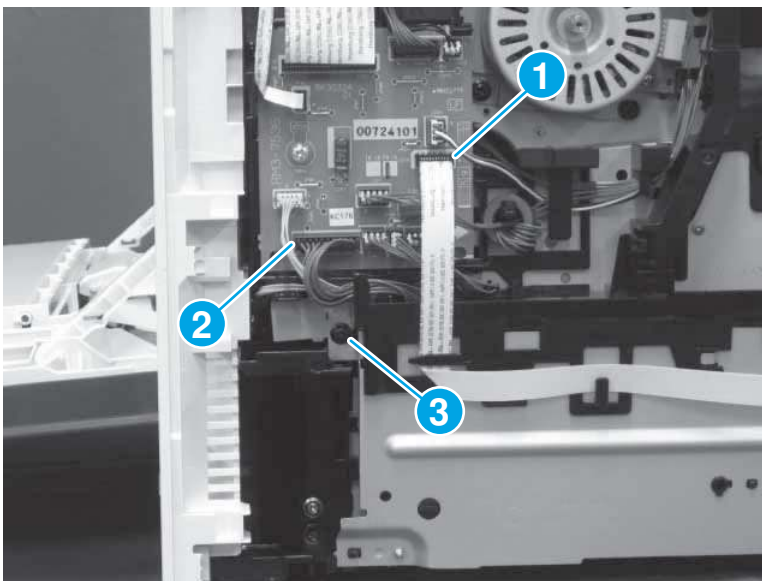
11. Remove the low-voltage power supply (LVPS)

Follow the procedure below to remove and replace the LVPS.

CAUTION:  ESD sensitive part.

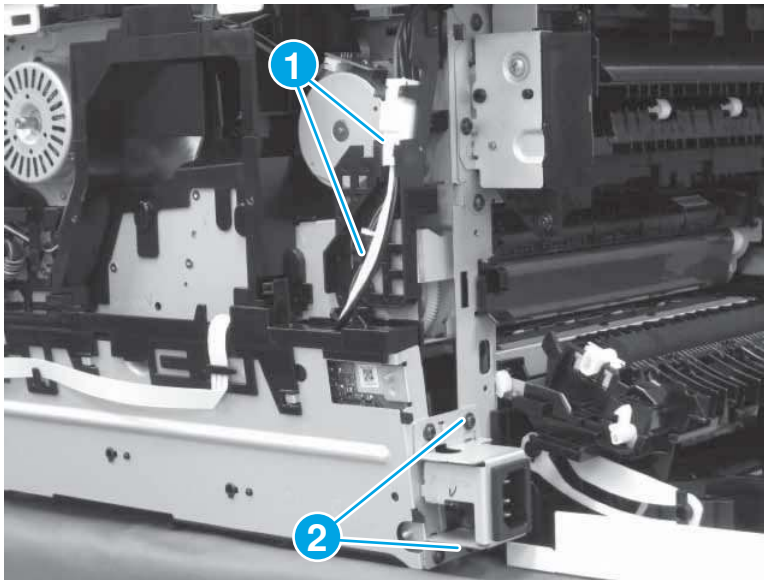
1. Disconnect one flat-flexible cable (FFC; callout 1) and one connector (callout 2), and then remove one screw (callout 3).

Figure 5-1049 Disconnect FFC, connector, and remove one screw



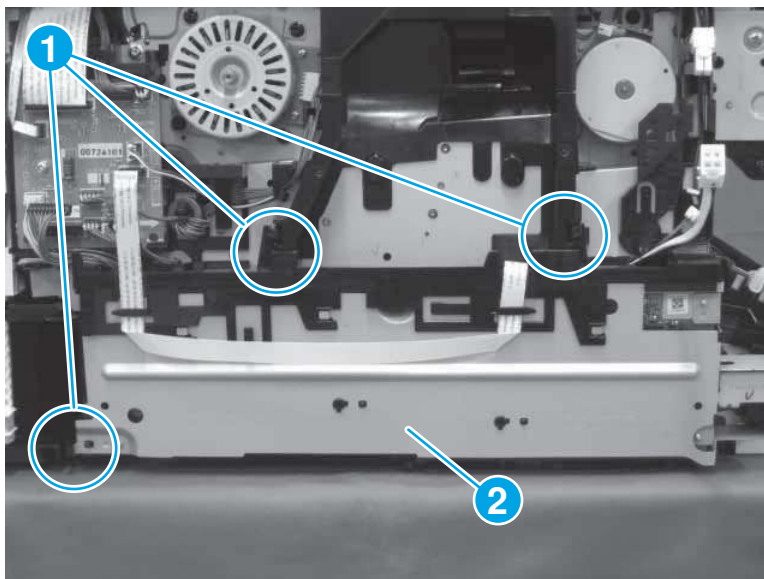
2. Disconnect two connectors (callout 1), and then remove two screws (callout 2).

Figure 5-1050 Disconnect connectors and remove screws



3. Release three tabs (callout 1), and then remove the LVPS (callout 2).

Figure 5-1051 Remove the LVPS



12. Remove the duplex guide assembly

Follow the procedure below to remove and replace the duplex guide assembly.

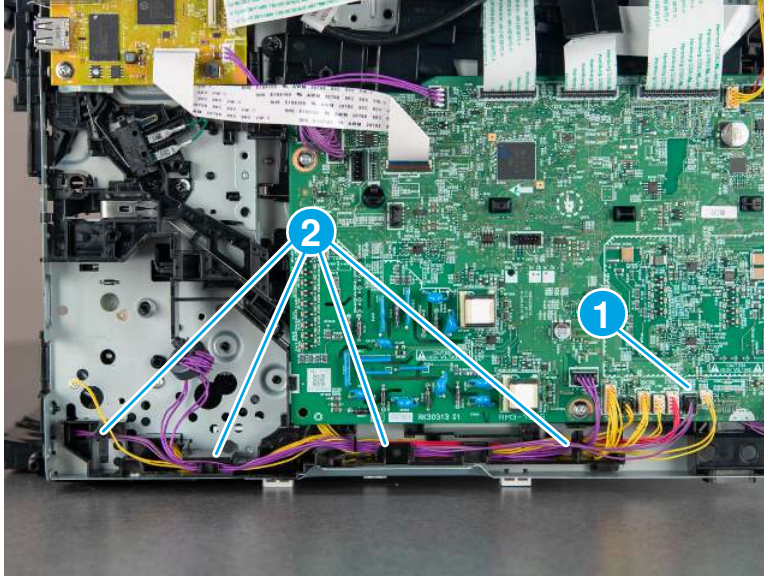
1. Disconnect one connector (callout 1), and then release the wire harness from the retainer (callout 2).



NOTE: The correct cable to release is the purple three-wire harness.

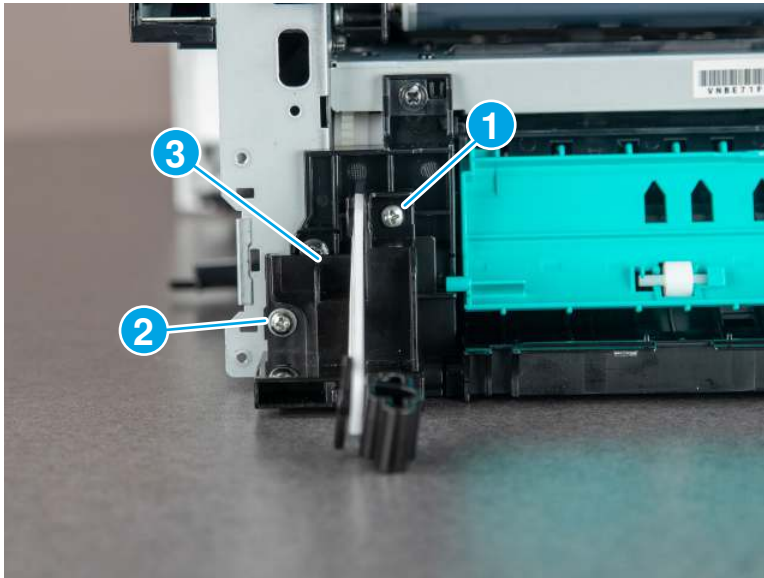
Disconnect other connectors and release other wire harnesses as necessary.

Figure 5-1052 Disconnect one connector



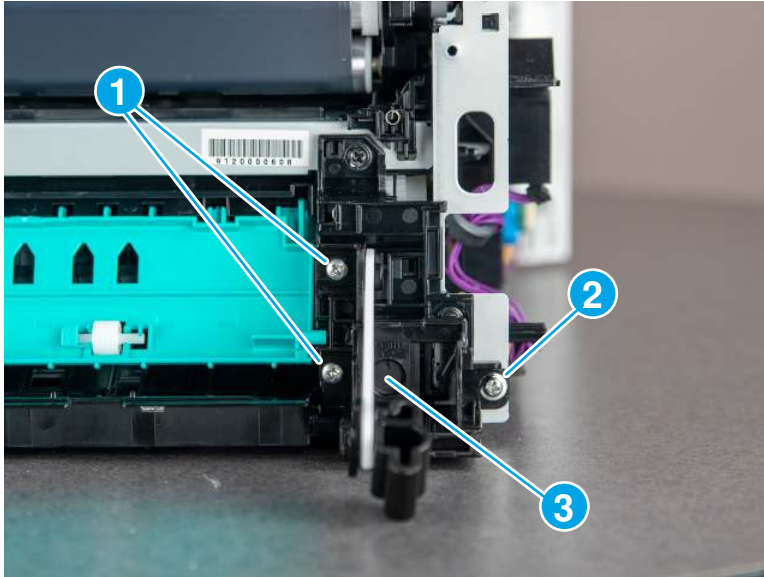
2. Do the following:
 - a. Remove one (tapping) screw (callout 1).
 - b. Remove one (TP) screw (callout 2)
 - c. Remove the holder (callout 3).

Figure 5-1053 Remove two screws and the holder



3. Do the following:
 - a. Remove two (tapping) screws (callout 1).
 - b. Remove one (TP) screw (callout 2)
 - c. Remove the holder (callout 3).

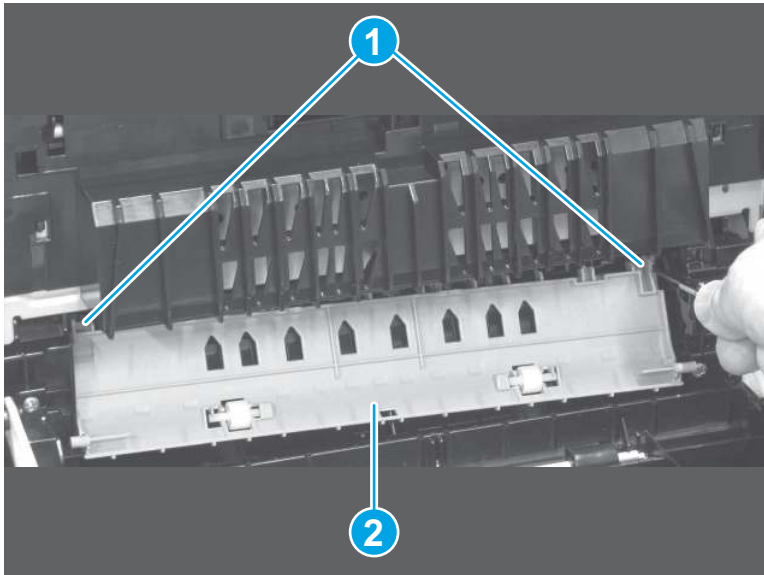
Figure 5-1054 Remove three screws and the holder



4. Use a small flat-blade screwdriver to release one boss at each end of the duplex guide (callout 1), and then remove the guide (callout 2).

⚠ CAUTION: Parts of this assembly are fragile and can easily be damaged during removal.

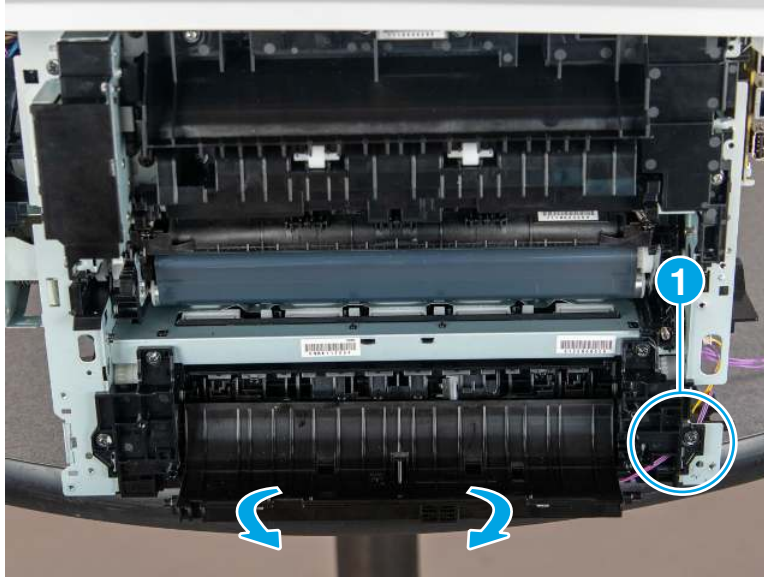
Figure 5-1055 Remove the duplex upper guide



5. Carefully position the printer at the edge of the work surface. Slightly pull the duplex guide assembly down to release it, and then remove the assembly.

📝 NOTE: Pass the wire harness through the opening in the chassis as the assembly is removed (callout 1).

Figure 5-1056 Remove the duplex guide assembly

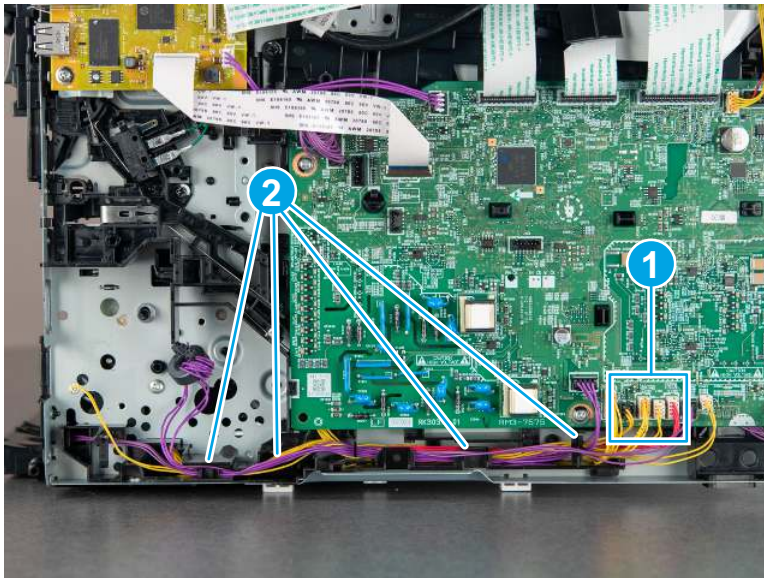


13. Remove the feed lower guide assembly

Follow the procedure below to remove and replace the feed lower guide assembly.

1. Disconnect four connectors (callout 1), and then release the wire harnesses from the guide (callout 2).

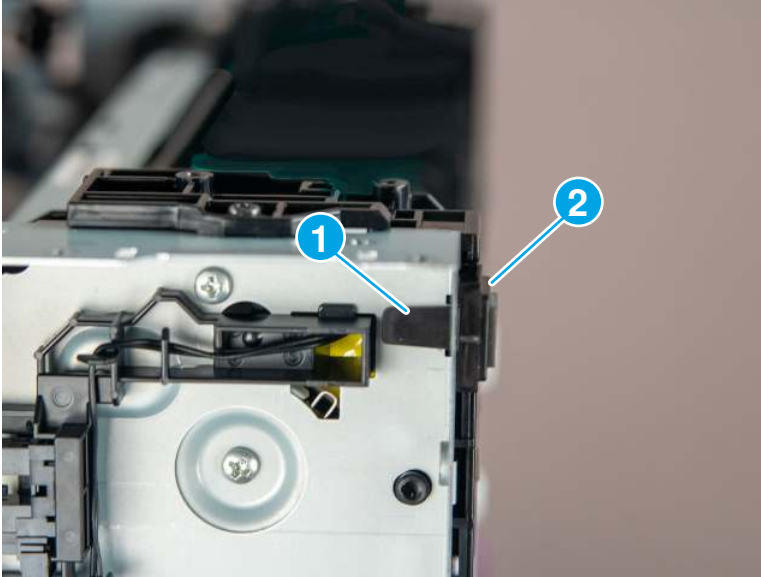
Figure 5-1057 Disconnect connectors and release the wire harnesses



2. Position the printer with the front-side down, release one tab (callout 1), and then remove the rubber pad (callout 2). Repeat this step for the rubber pad on the opposite side.

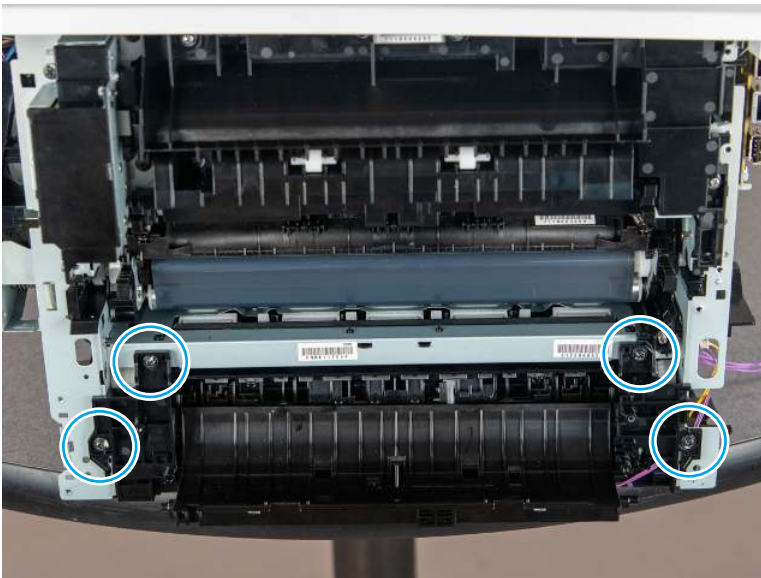
⚠ CAUTION: **MFP only:** The integrated scanner assembly (ISA) can suddenly open when the printer is placed in any position other than top-side up. Secure the ISA when repositioning the printer.

Figure 5-1058 Remove the pad



3. Position the printer with the top-side up (normal position), and then remove four screws.

Figure 5-1059 Remove four screws



4. Use a small flat-blade screwdriver to release two bosses (callout 1).

Figure 5-1060 Release two bosses



5. Carefully position the printer at the edge of the work surface. Slightly pull down on the assembly to release it, and then remove the feed lower guide assembly (callout 1).


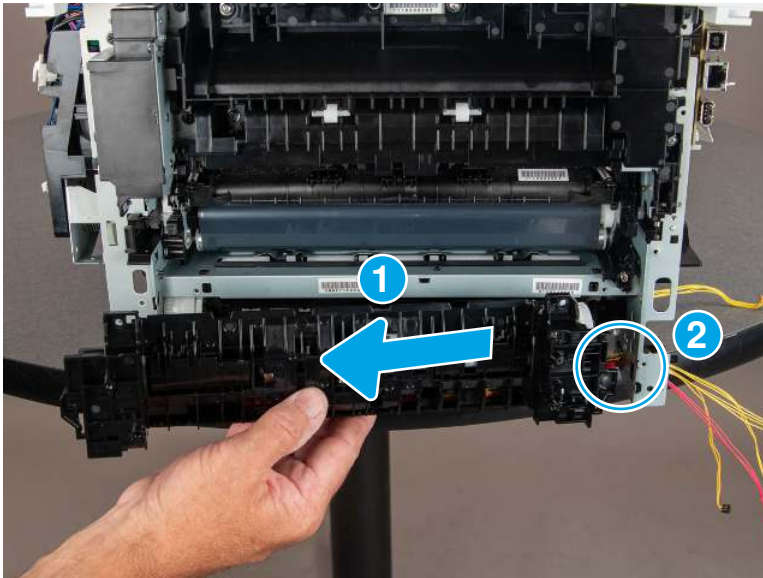
 **NOTE:** Carefully pull the wire harness through the opening in the chassis (callout 2) while removing the assembly.

Figure 5-1061 Remove the feed lower guide assembly

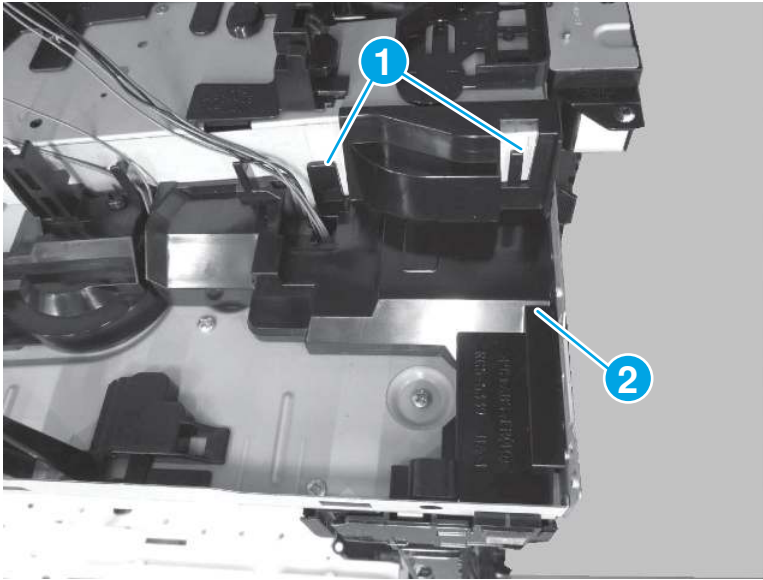


14. Remove the lifter drive assembly

Follow the procedure below to remove and replace the lifter drive assembly.

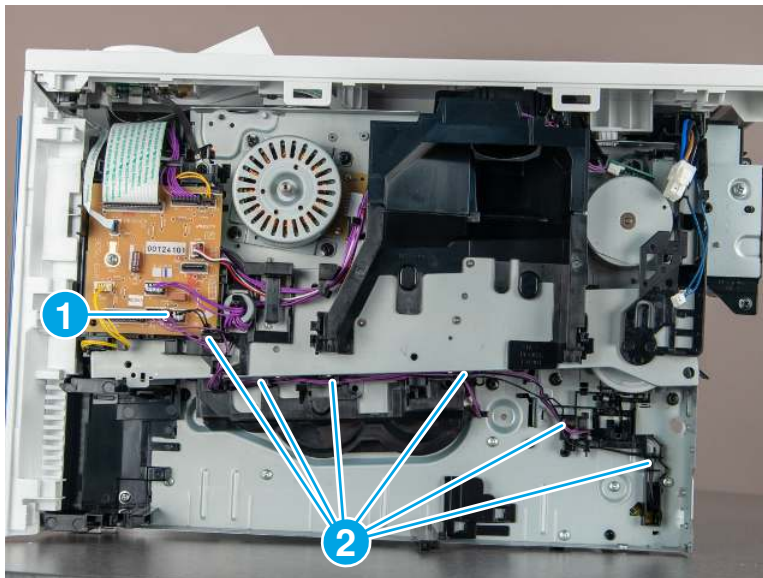
1. Release two tabs (callout 1), and then remove the cover (callout 2).

Figure 5-1062 Remove the cover



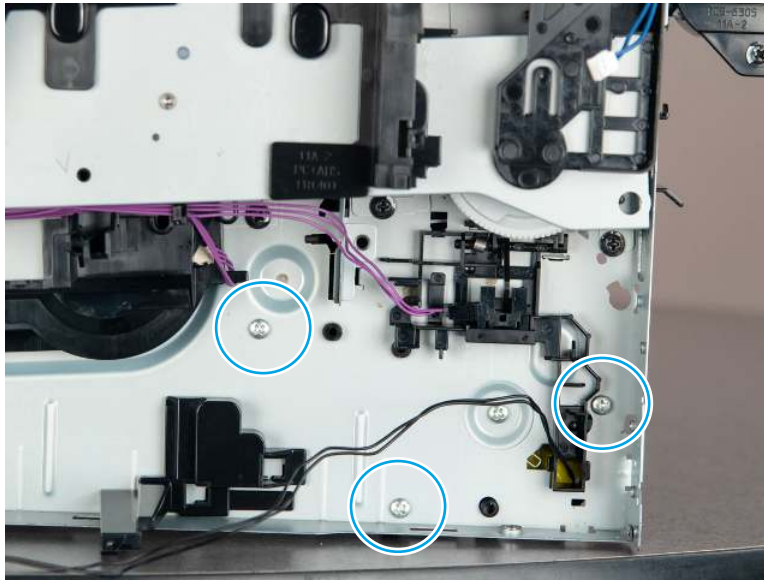
2. Disconnect one connector (callout 1), and then release the wire harness from the retainers (callout 2).

Figure 5-1063 Disconnect one connector



3. Remove three screws.

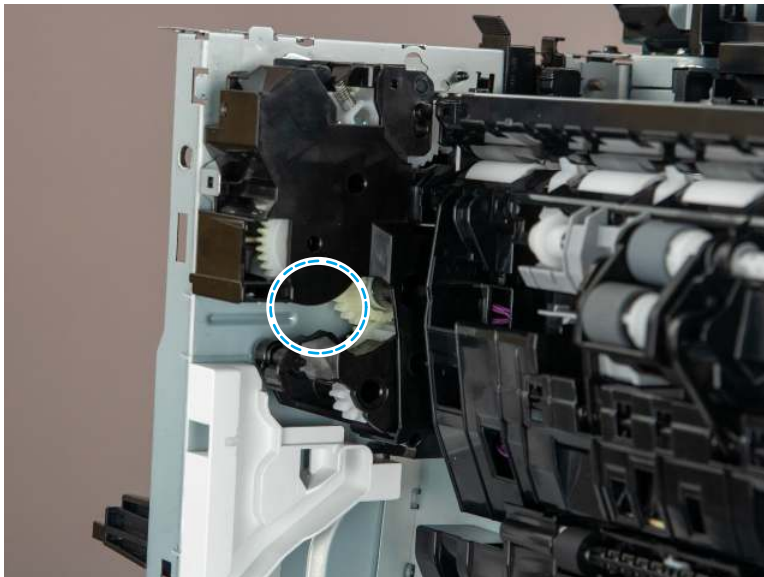
Figure 5-1064 Remove three screws



4. Position the printer with the front-side down, and then release one tab.

⚠ CAUTION: **MFP only:** The integrated scanner assembly (ISA) can suddenly open when the printer is placed in any position other than top-side up. Secure the ISA when repositioning the printer.

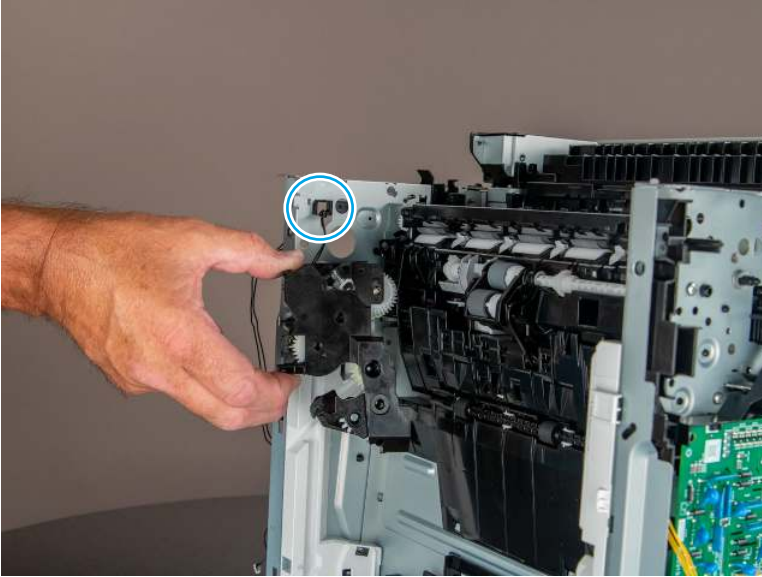
Figure 5-1065 Release one tab



5. Remove the lifter drive assembly.

📝 NOTE: Carefully pull the wire harness through the opening in the chassis while removing the assembly.

Figure 5-1066 Remove the lifter drive assembly



15. Remove the feed upper guide assembly

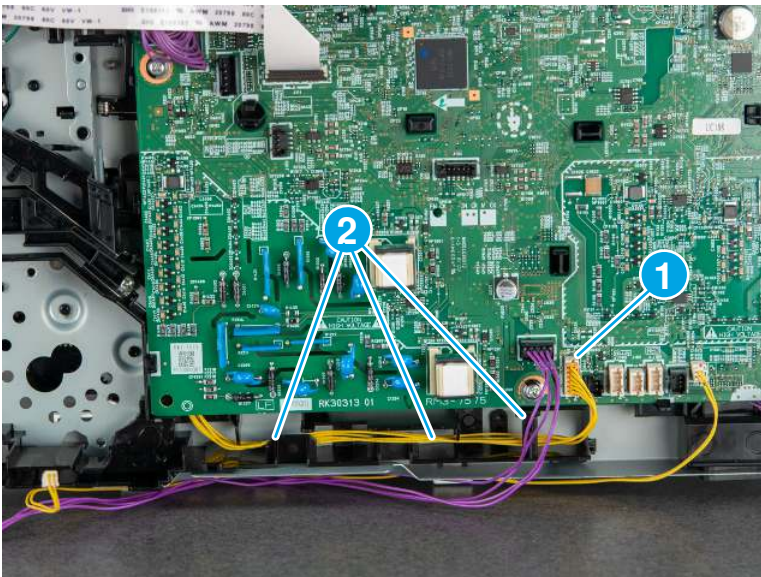
Follow the procedure below to remove and replace the feed upper guide assembly.

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



NOTE: The wire harness will not be removed with the assembly. However, it does need to be disconnected and released to provide sufficient slack to separate the assembly from the printer.

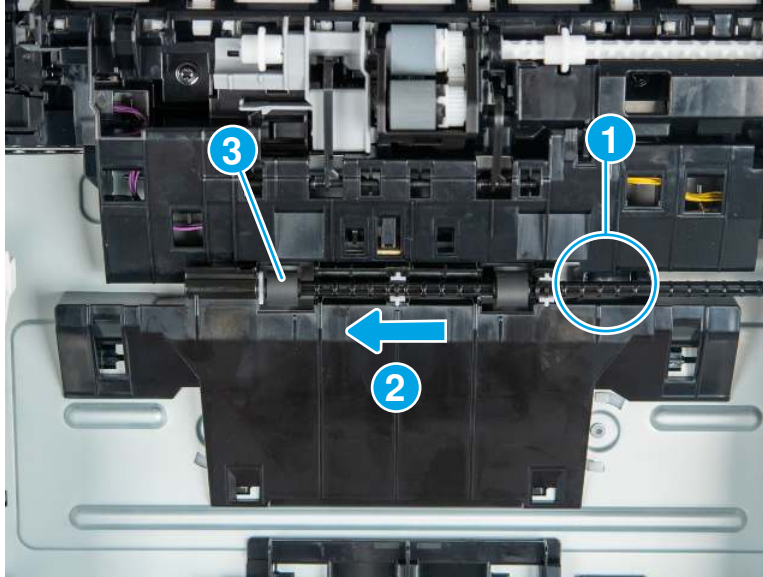
Figure 5-1067 Disconnect one connector



2. Position the printer with the front-side down. Release one tab (callout 1), and then slide the guide (callout 2) and the roller (callout 3) together as shown below to release them.

⚠ CAUTION: **MFP only:** The integrated scanner assembly (ISA) can suddenly open when the printer is placed in any position other than top-side up. Secure the ISA when repositioning the printer.

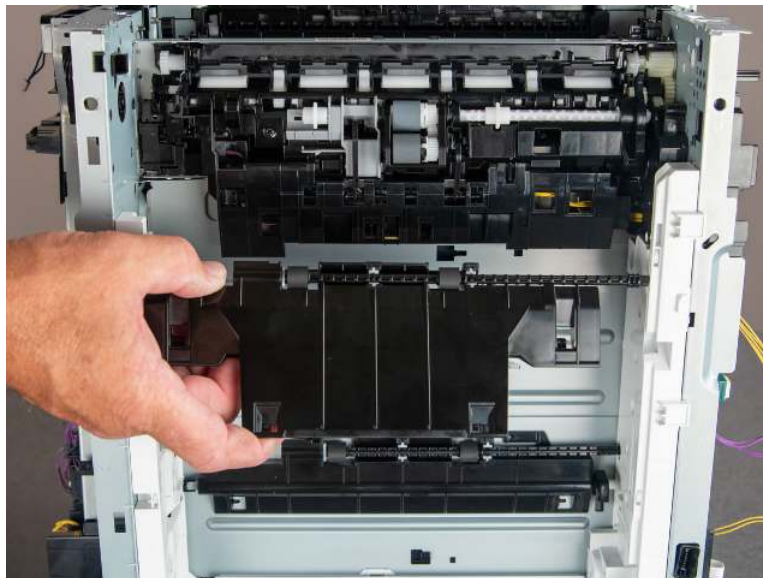
Figure 5-1068 Release the guide and roller



3. Remove the guide and roller assembly.

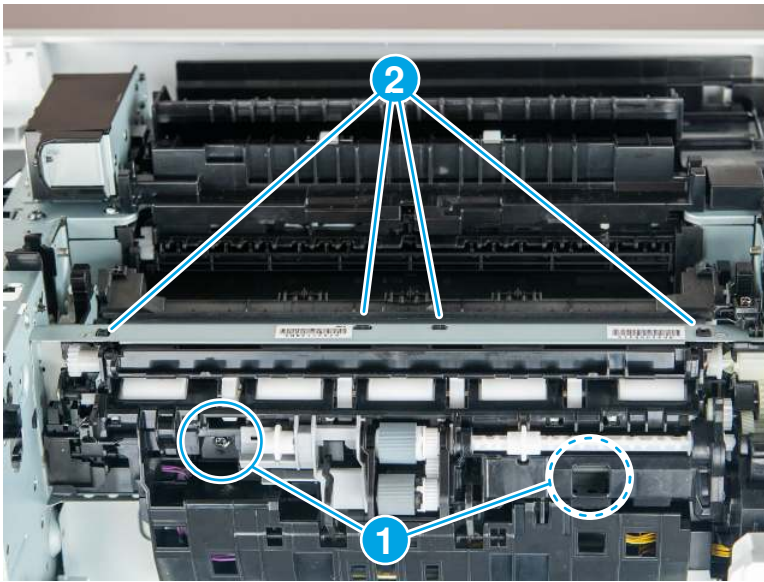
📝 NOTE: The roller and shaft are not captive on the guide and can easily be dislodged.

Figure 5-1069 Remove the guide and roller



4. Remove two screws (callout 1), and then release four bosses (callout 2).

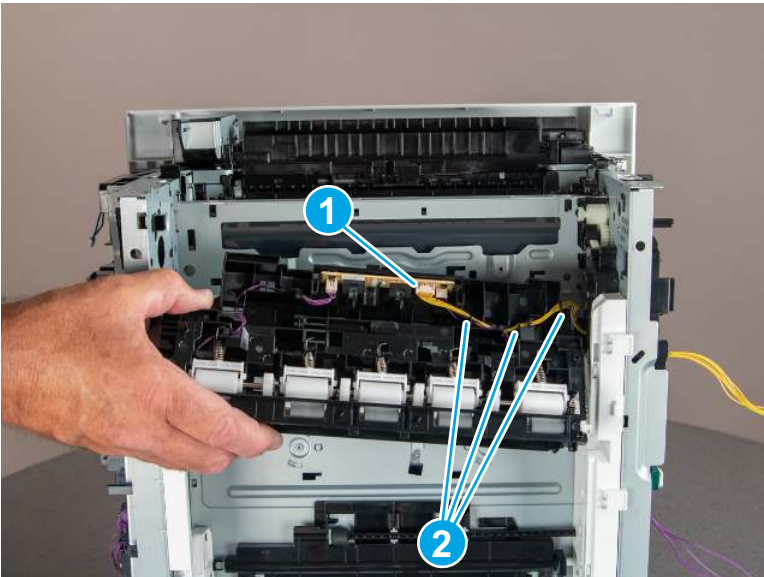
Figure 5-1070 Remove screws and release bosses



5. Separate the assembly from the printer, disconnect one connector (callout 1), and then release the wire harness from the retainers (callout 2).

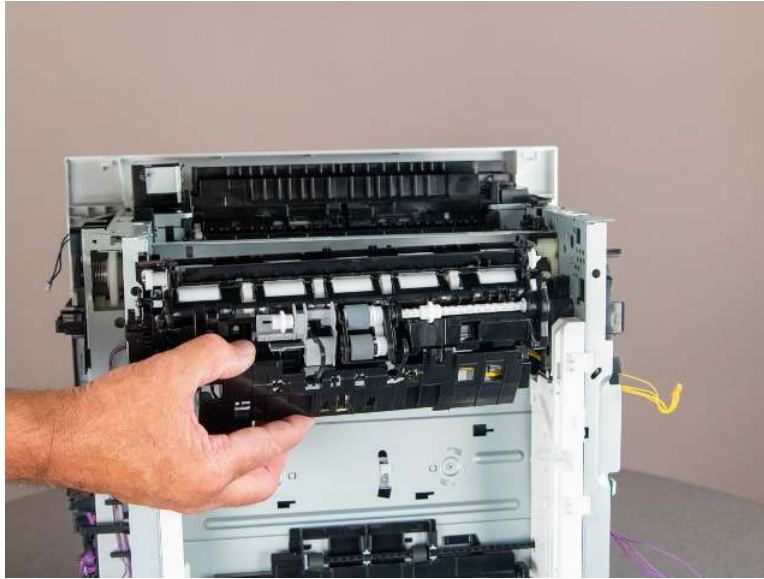
⚠ CAUTION: Do not attempt to completely remove the assembly. It is still attached to the printer by a wire harness.

Figure 5-1071 Disconnect one connector



6. Remove the feed upper guide assembly.

Figure 5-1072 Remove the feed upper guide assembly



16. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.


3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

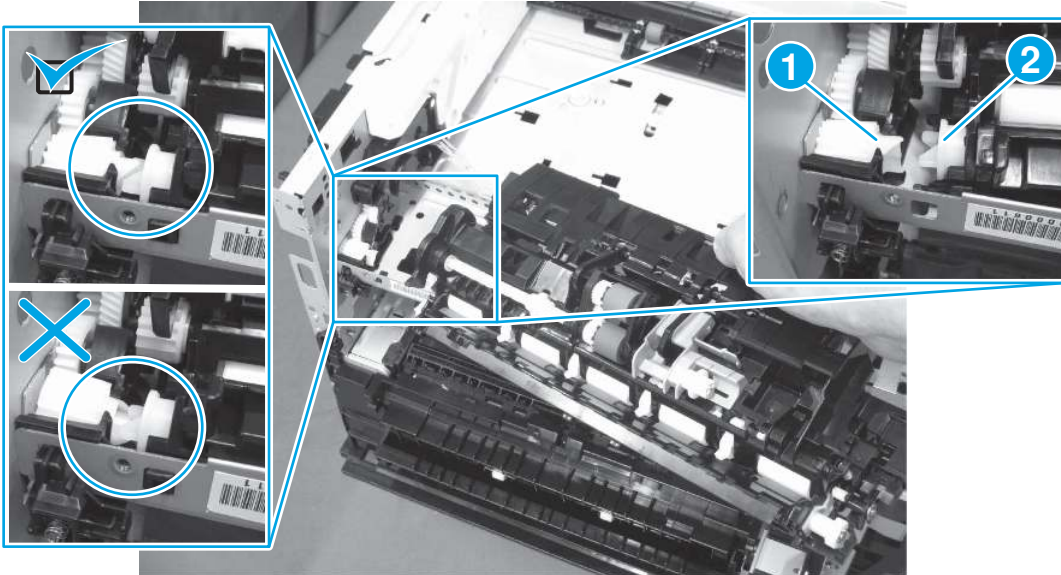
17. Special installation instructions - Feed upper guide assembly

Follow the special instructions below to install the feed upper guide assembly.

 **NOTE:** The printer is shown upside down in the figure below for clarity.


- When the assembly is installed, make sure to match the engagement portion of the gear (callout 1) on the printer with the gear (callout 2) of the feed upper guide assembly.

Figure 5-1073 Install the feed upper guide assembly



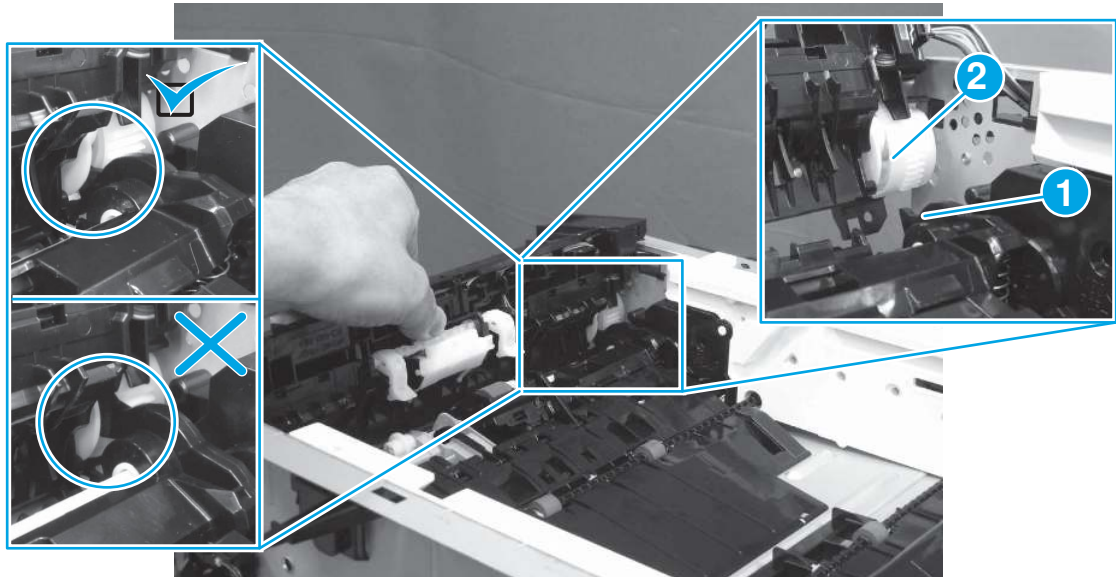
18. Special installation instructions - Feed lower guide assembly

Follow the special instructions below to install the feed lower guide assembly.

 **NOTE:** The printer is shown upside down in the figure below for clarity.

- When the assembly is installed, make sure that the link arm (callout 1) on the printer is correctly inserted in the gear (callout 2) of the feed lower guide assembly.

Figure 5-1074 Install the feed lower guide assembly



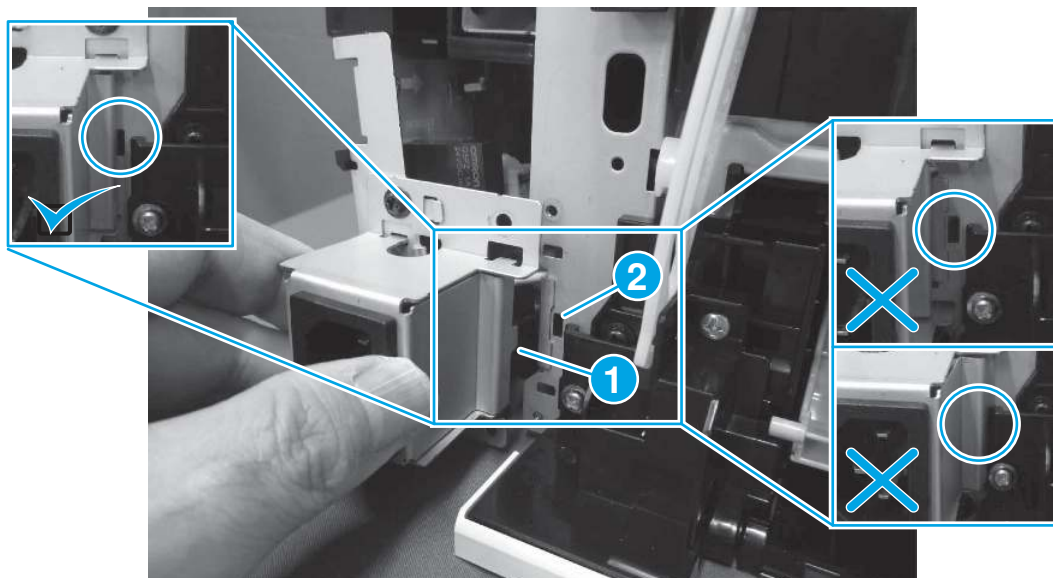
19. Special installation instructions - Low-voltage power supply (LVPS)

Follow the special instructions below to install a replacement LVPS.

CAUTION:  ESD sensitive part.

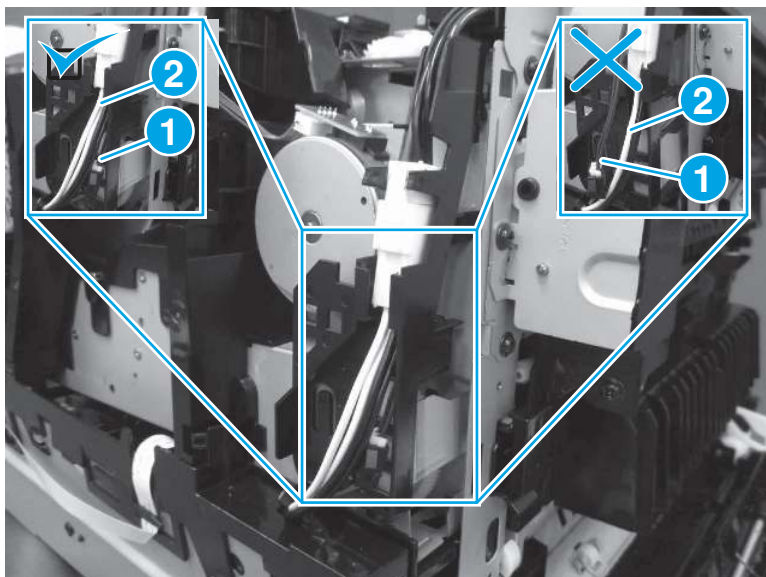
1. When the LVPS is installed, make sure that the sheet-metal tab (callout 1) near the power receptacle is inserted in the slot (callout 2) in the chassis.

Figure 5-1075 Install the LVPS tab



2. Make sure that the fuser temperature fuse cable (callout 1) is positioned behind the thick cable (callout 2). This prevents the fuser cable from unnecessary movement.

Figure 5-1076 Check the fuser temperature fuse cable



Removal and replacement: Pickup drive assembly

Learn about pickup drive assembly removal.

 [View a video of removing and replacing the pickup drive assembly.](#)

Mean time to repair: 60 minutes

Service level: Difficult

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-51 Part information

Part number	Part description
RM2-2763-000CN	Paper pickup drive assembly

Required tools

- #1 Phillips screwdriver with a magnetic tip
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

- Small flat-blade screwdriver
- Needle-nose pliers

After performing service

Turn the printer power on


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


Post service test

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

1. Remove the left cover (SFP)

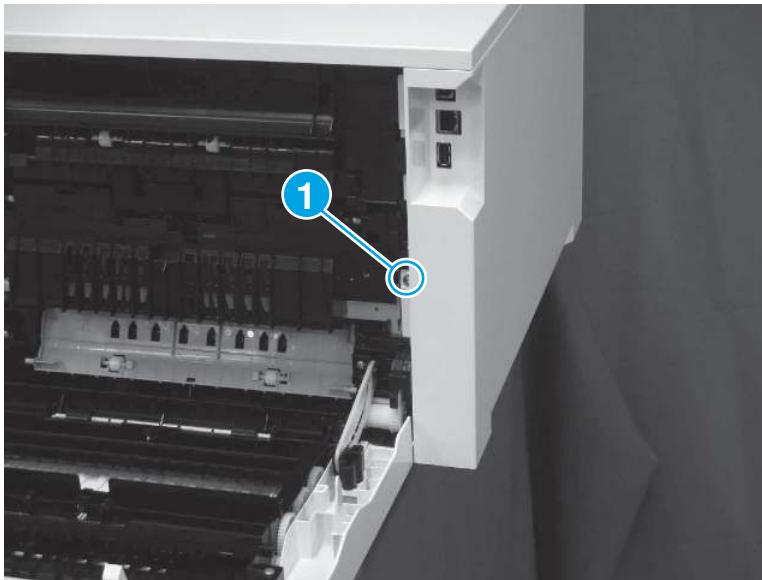
Follow the procedure below to remove and replace the left cover (SFP).

 **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port located at the back of the printer. If installed, remove this cover now.

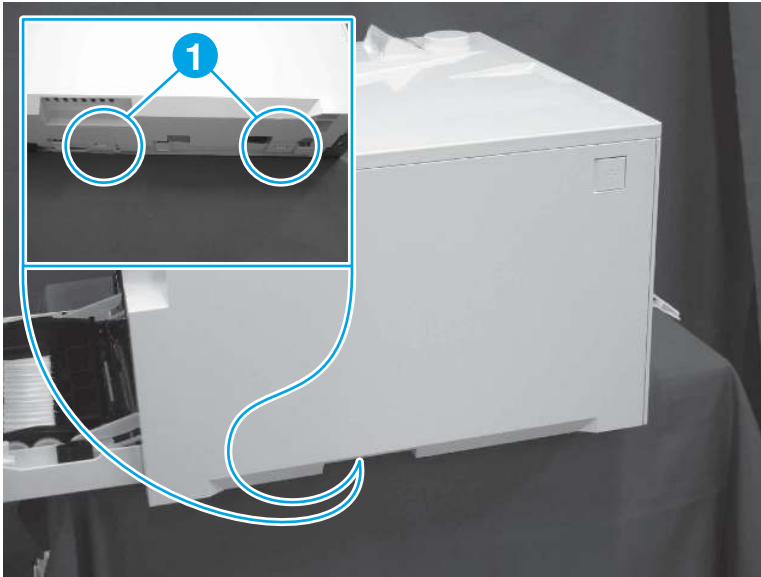
1. Remove one screw (callout 1).

Figure 5-1077 Remove one screw



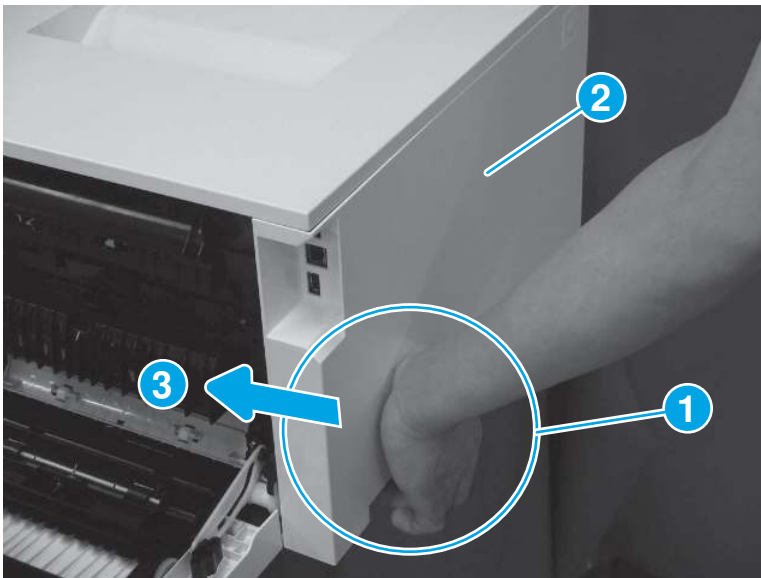
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-1078 Release two tabs



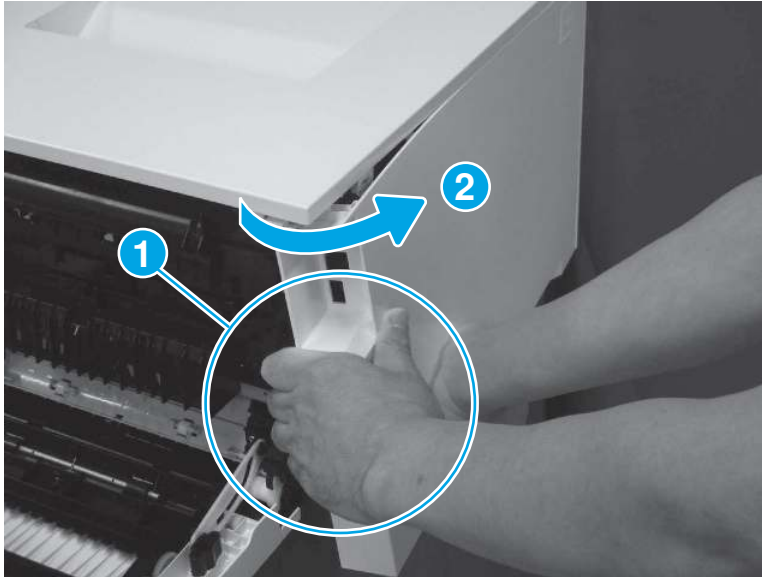
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-1079 Release the rear cover corner



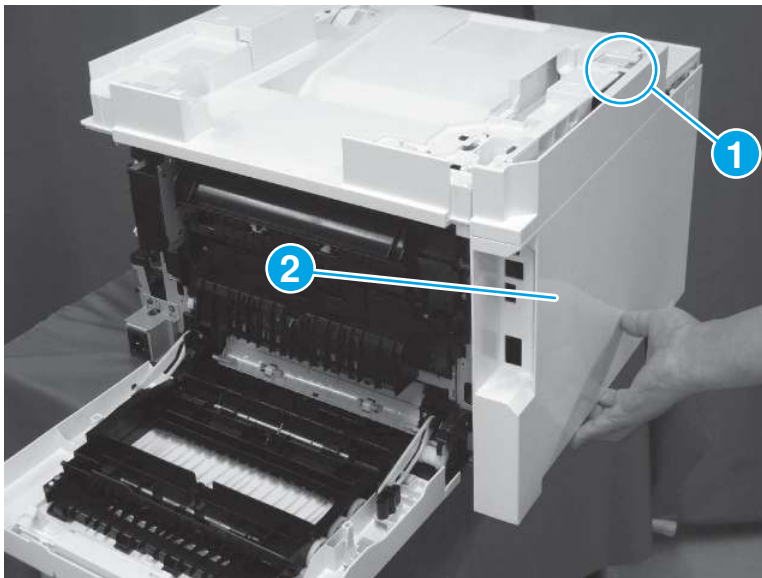
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-1080 Disengage the cover corner




5. Remove the left cover (callout 1).


Figure 5-1081 Remove the cover



2. Remove the left cover (MFP)

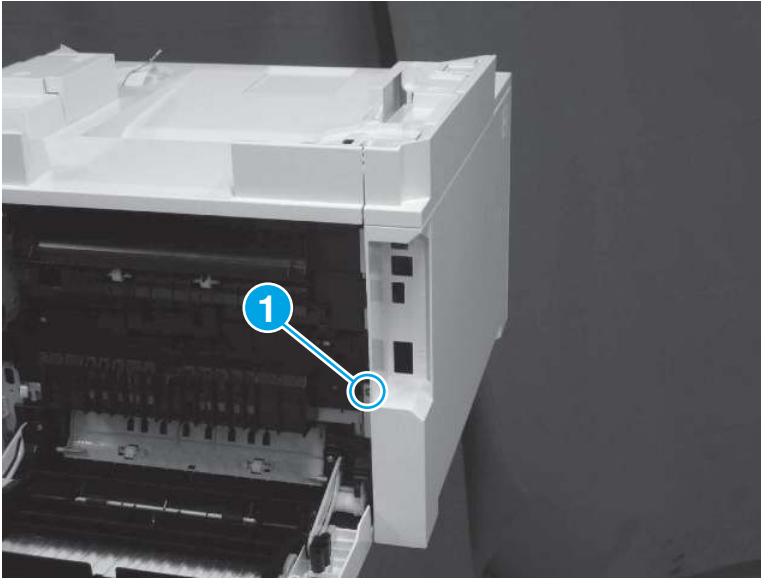
Follow the procedure below to remove and replace the left cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

 **TIP:** There might be a small cover installed on the USB port and/or the fax port located at the back of the printer. If installed, remove these covers now.

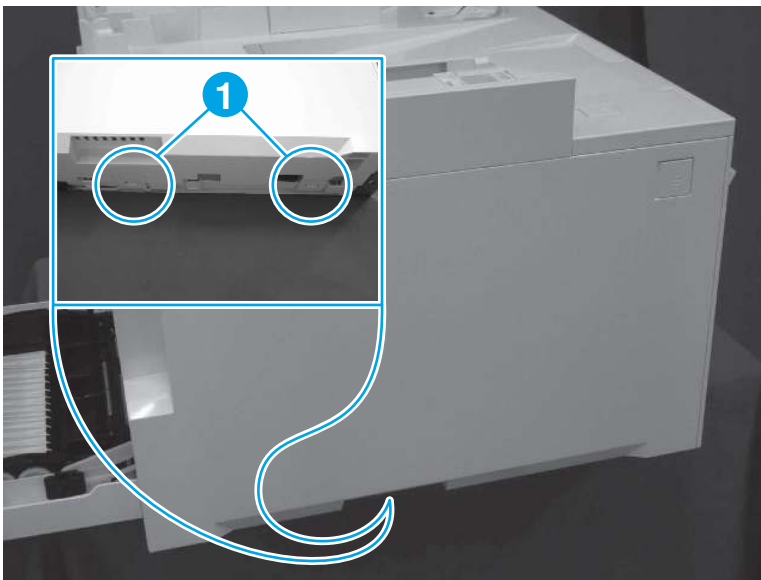
1. Remove one screw (callout 1).

Figure 5-1082 Remove one screw



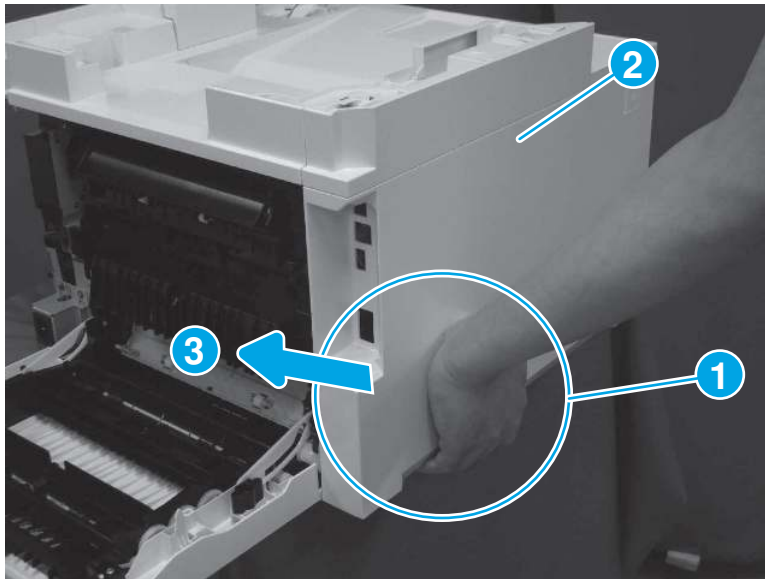
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to two tabs (callout 1). Release two tabs.

Figure 5-1083 Release two tabs



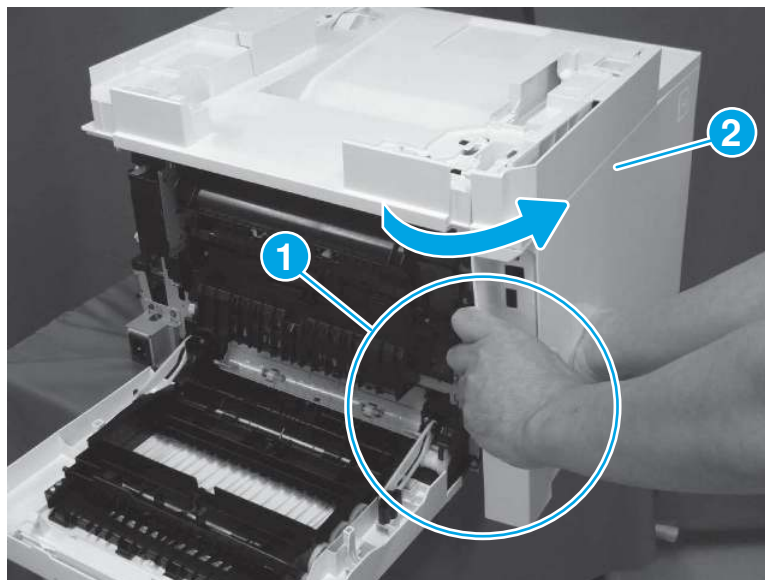
3. Press in on the side (callout 1) of the left cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-1084 Release the rear cover corner



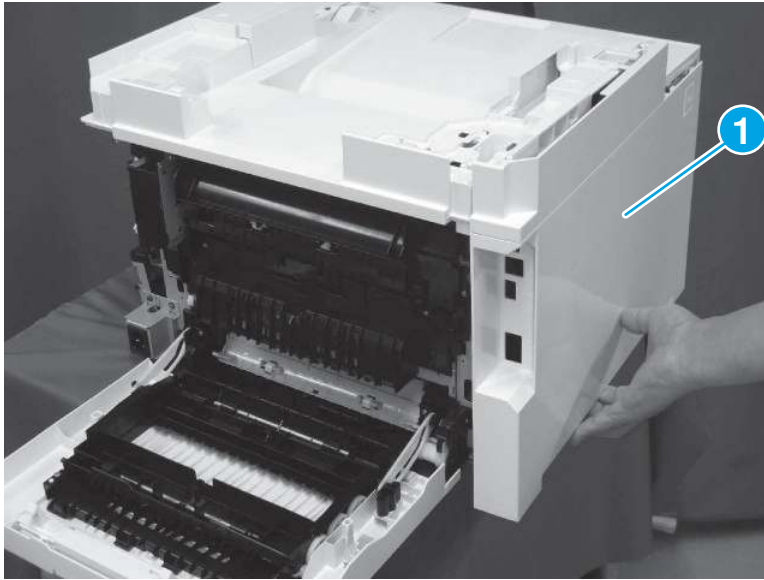
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-1085 Disengage the cover corner



5. Remove the left cover (callout 1).

Figure 5-1086 Remove the cover

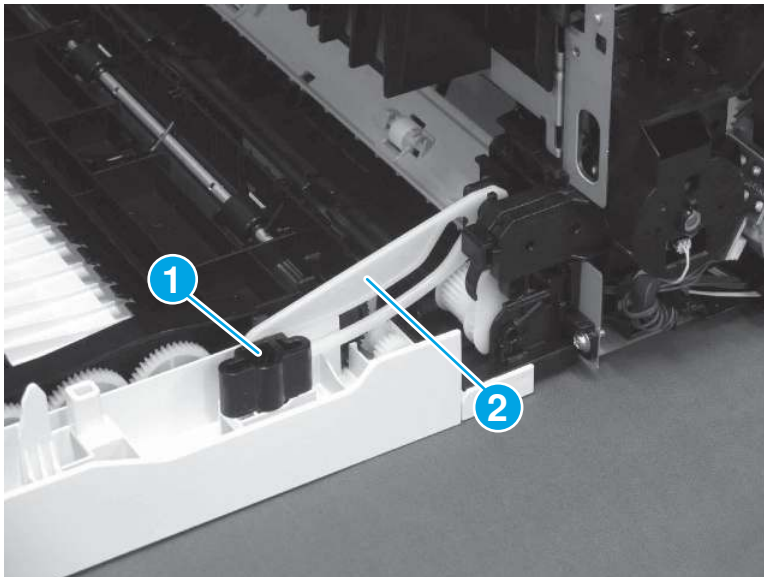


3. Remove the duplex re-pick clutch

Follow the procedure below to remove and replace the duplex re-pick clutch.

1. Remove one screw (callout 1), and then remove the hinge (callout 2).

Figure 5-1087 Remove the hinge



2. Release the retainer (callout 1), rotate the shaft as shown below (callout 2) to remove it, and then remove the gear (callout 3).


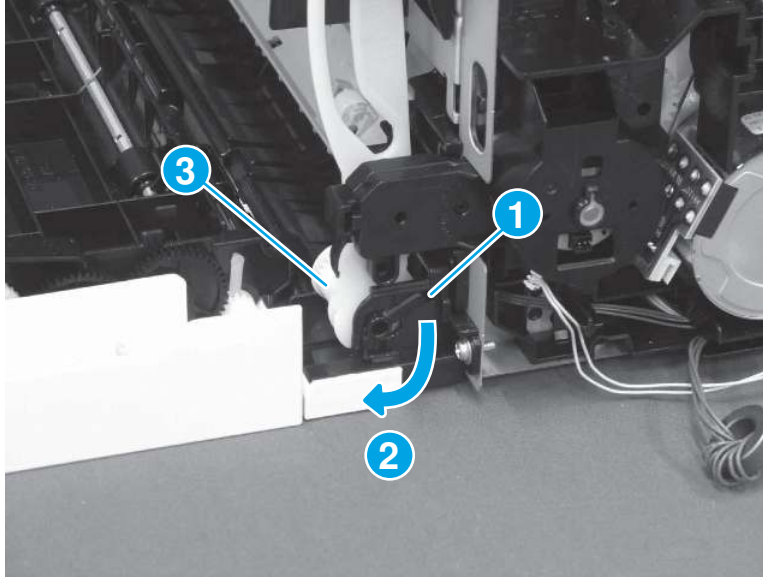
 **Reinstallation tip:** Take note of how the gear is installed before removing it. The shaft cannot be reinstalled if the gear is incorrectly installed.

Figure 5-1088 Remove the gear



3. Disconnect one connector (callout 1), remove one screw (callout 2), and then release one tab (callout 3).


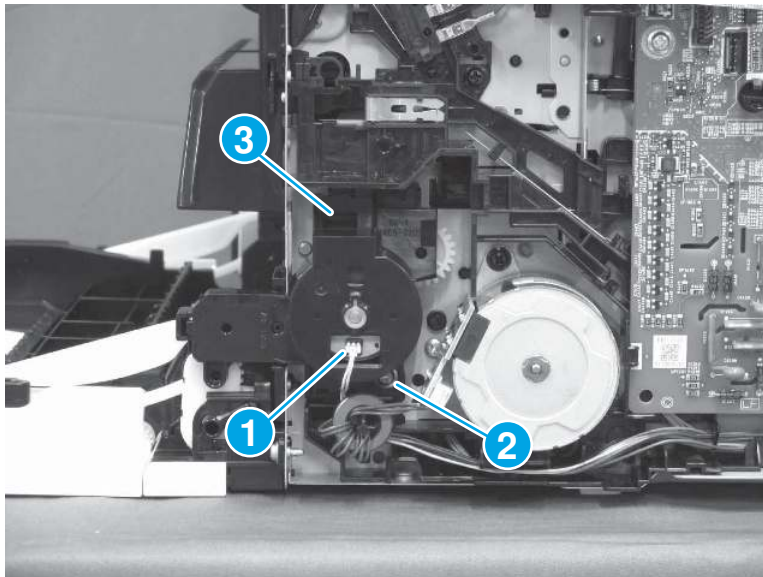

 **NOTE:** The connector (callout 1) has a tab that must be released to disconnect it. It can be difficult to disconnect when the duplex re-pick clutch is installed. It might be easier to remove the duplex re-pick clutch (see the following step), and then disconnect the connector.

Figure 5-1089 Disconnect one connector, remove one screw, and release one tab

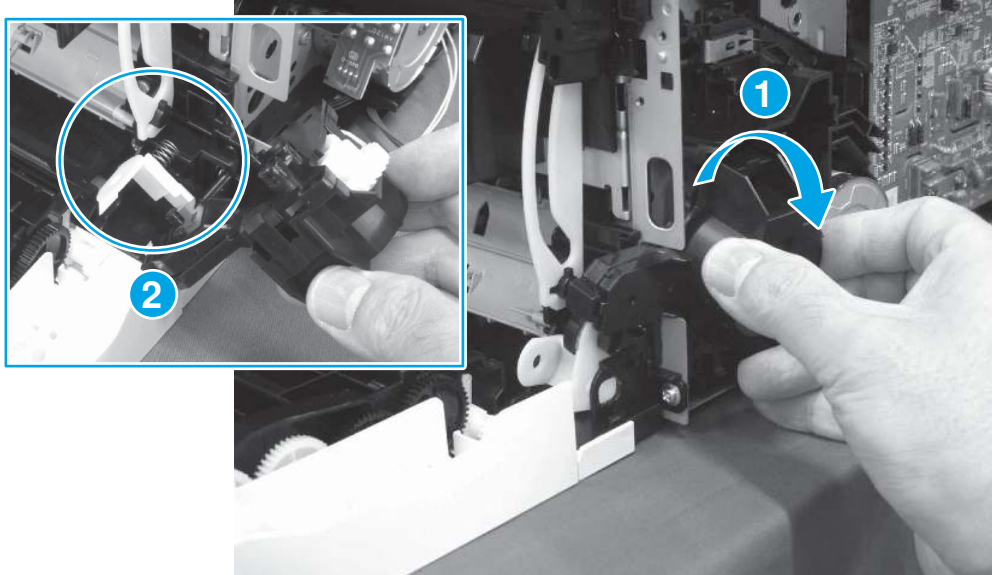


4. Remove the duplex re-pick clutch (callout 1).

 **CAUTION:** When handling the assembly, do not lose the spring that is inside the left gear holder (callout 2).

 **Reinstallation tip:** For a replacement duplex re-pick clutch only: Remove the spring from the assembly (callout 2), and then install it on the replacement duplex re-pick clutch.

Figure 5-1090 Remove the duplex re-pick clutch

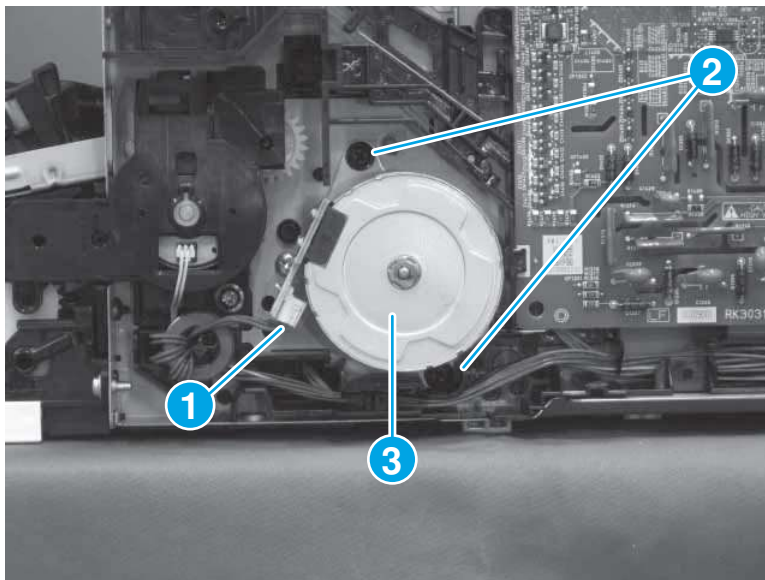


4. Remove the feed motor

Follow the procedure below to remove and replace the feed motor.


- Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).

Figure 5-1091 Remove the feed motor



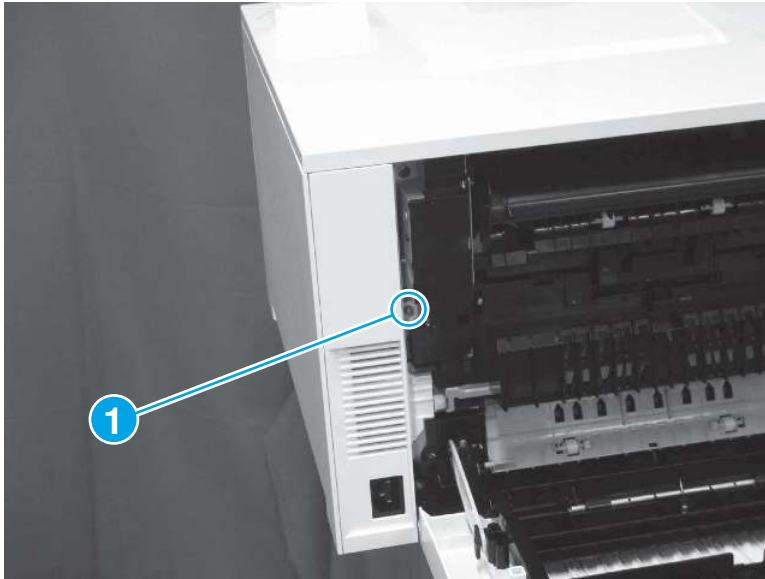
5. Remove the right cover (SFP)

Follow the procedure below to remove and replace the right cover (SFP).

-
-  **NOTE:** The following procedure is for a SFP printer only. If this assembly is being removed to gain access to dependency parts for an MFP printer, skip this step.
-

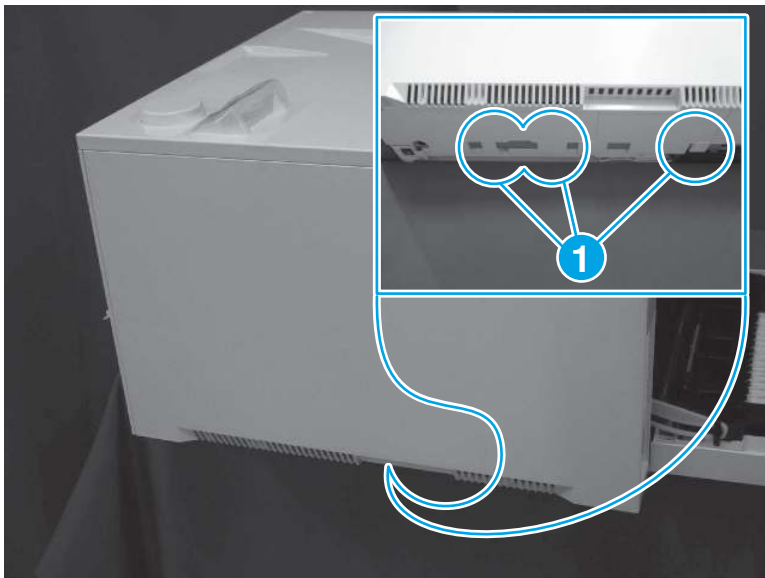
1. Remove one screw (callout 1).

Figure 5-1092 Remove one screw



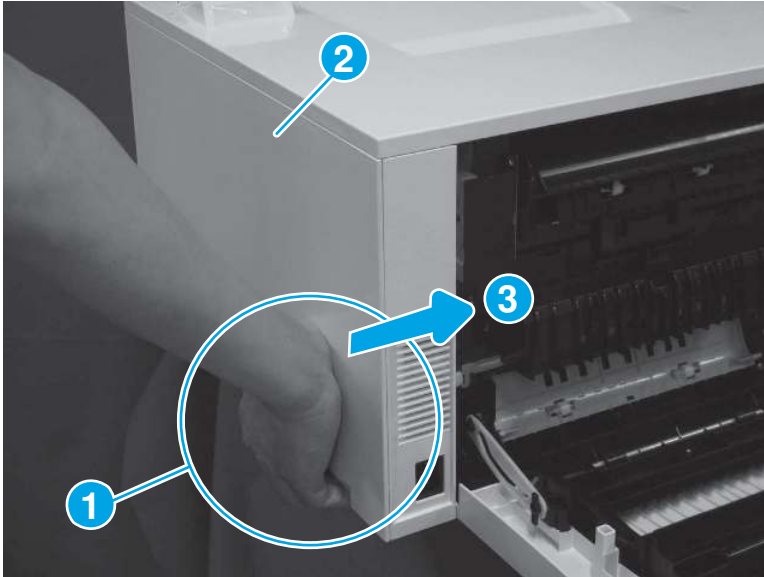
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-1093 Release three tabs



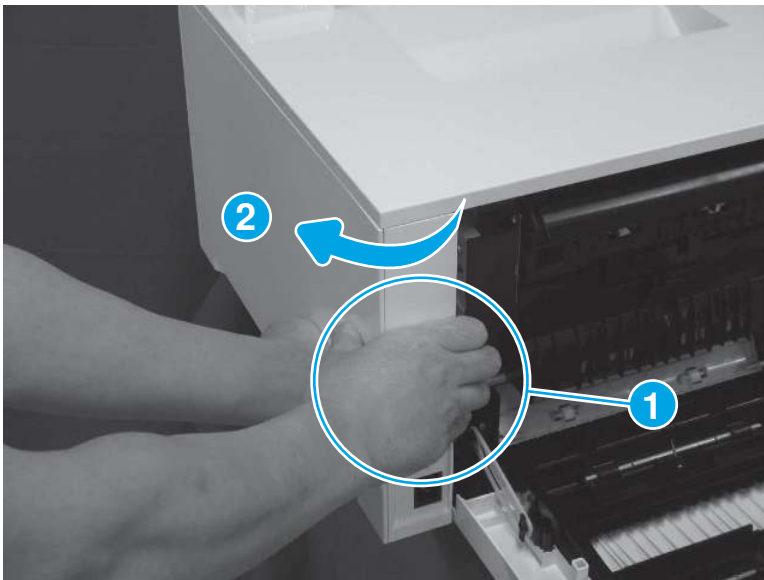
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-1094 Release the rear cover corner



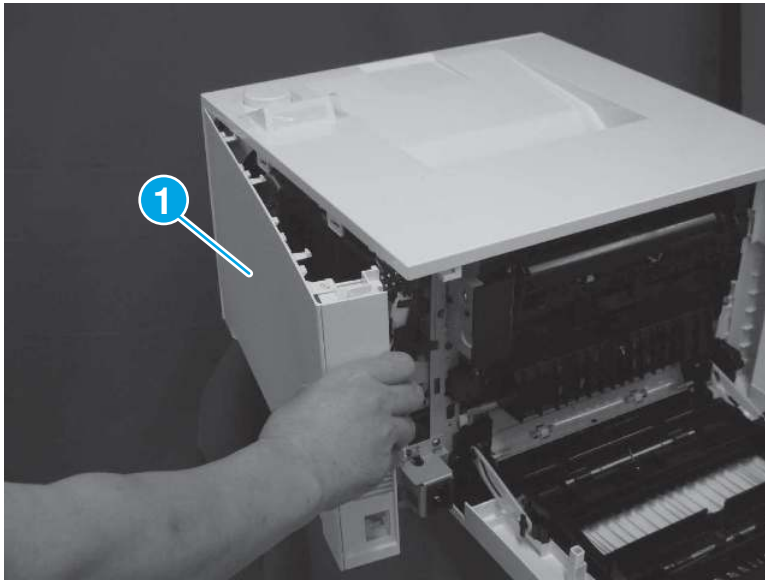
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-1095 Disengage the cover corner




5. Remove the right cover (callout 1).

Figure 5-1096 Remove the cover



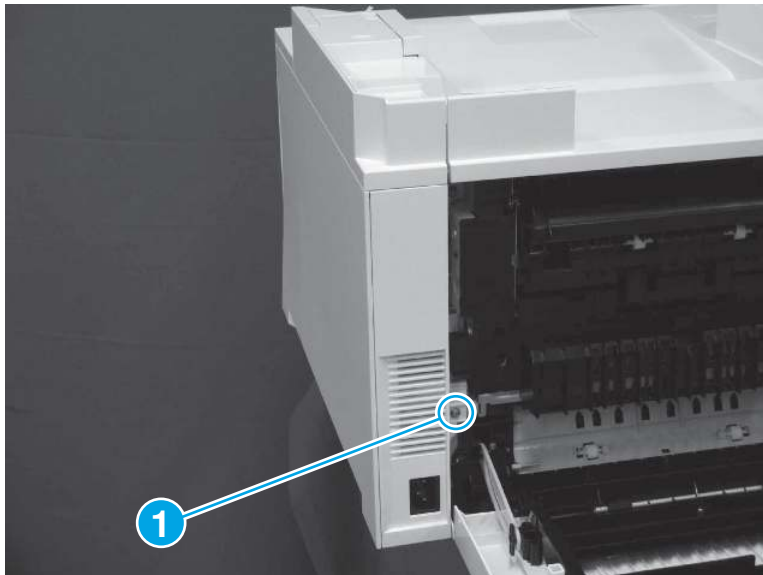
6. Remove the right cover (MFP)

Follow the procedure below to remove and replace the right cover (MFP).

 **NOTE:** The following procedure is for an MFP printer only. If this assembly is being removed to gain access to dependency parts for a SFP printer, skip this step.

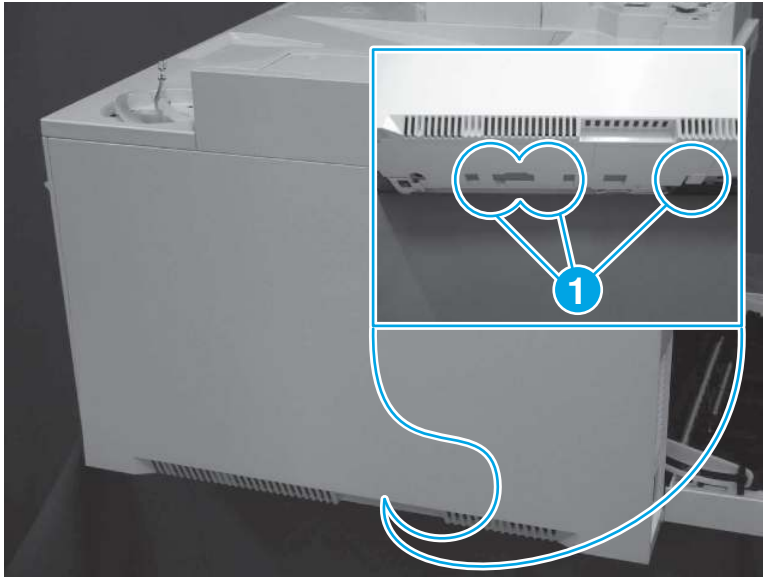
1. Remove one screw (callout 1).

Figure 5-1097 Remove one screw



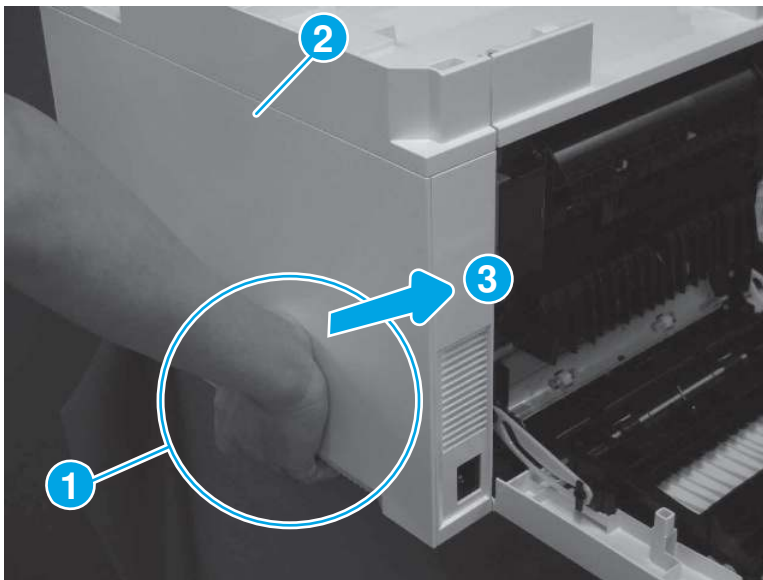
2. Open the cartridge and rear doors, and then set the printer on the edge of the work surface to gain access to three tabs (callout 1). Release three tabs.

Figure 5-1098 Release three tabs



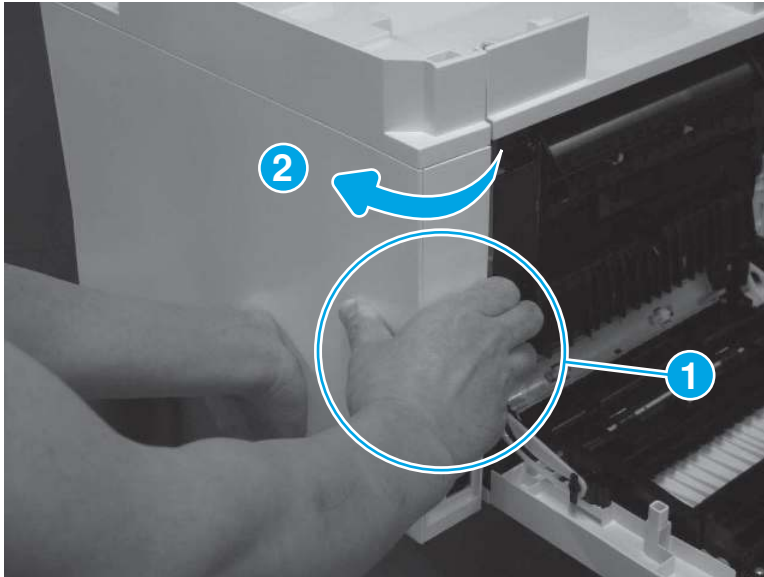
3. Press in on the side (callout 1) of the right cover (callout 2), and then slide the cover as shown (callout 3) to release the rear corner.

Figure 5-1099 Release the rear cover corner



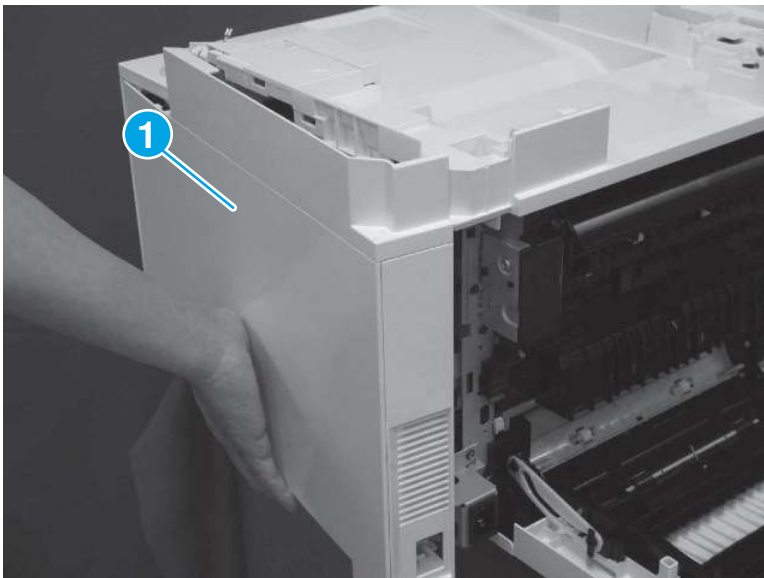
4. Pull out on the rear corner (callout 1) of the cover, and then slide the cover as shown (callout 2) to disengage it.

Figure 5-1100 Disengage the cover corner



5. Remove the right cover (callout 1).

Figure 5-1101 Remove the cover

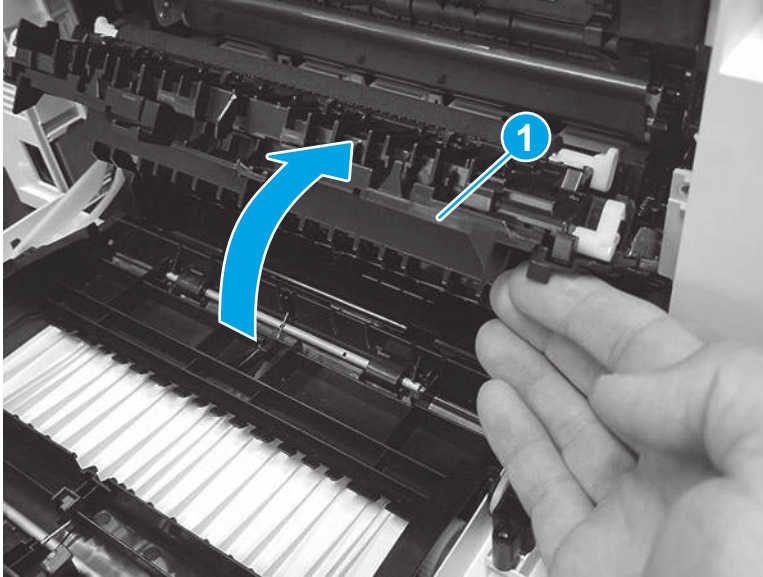


7. Remove the rear door

Follow the procedure below to remove and replace the rear door.

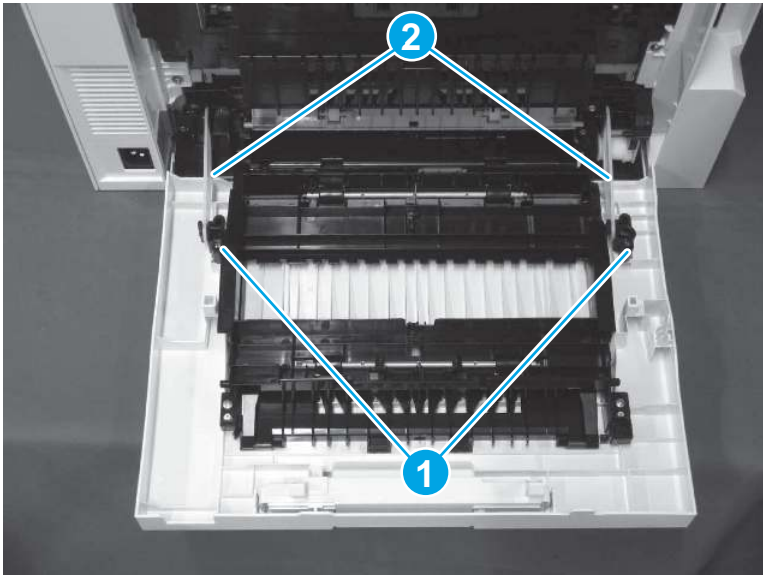
1. Open the rear door, and then raise the secondary transfer feed assembly (callout 1) up and into the locked position.

Figure 5-1102 Place the T2 feed assembly in the locked position



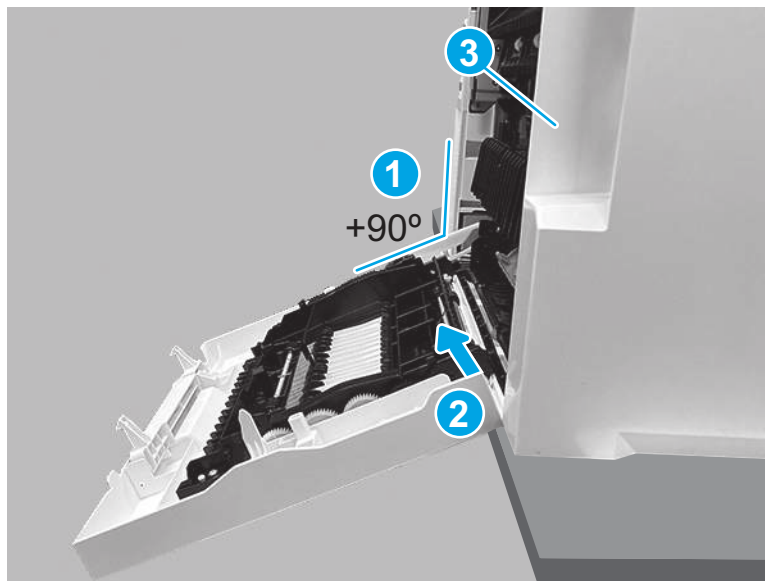
2. Remove two screws (callout 1), and then release the left- and right-side retainer arms (callout 2)

Figure 5-1103 Release the retainer arms



3. Carefully position the printer at the edge of the work surface and allow the rear door to open to an angle greater than 90 degrees (callout 1). Slide the door away (callout 2) from the formatter side of the printer (callout 3) to release it, and then remove the rear door.

Figure 5-1104 Remove the door

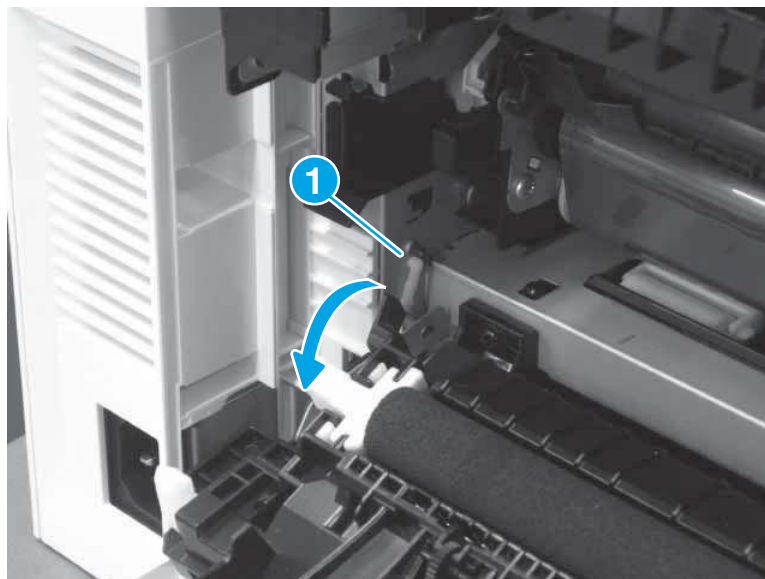


8. Remove the secondary transfer roller (T2) assembly

Follow the procedure below to remove and replace the T2 roller assembly.

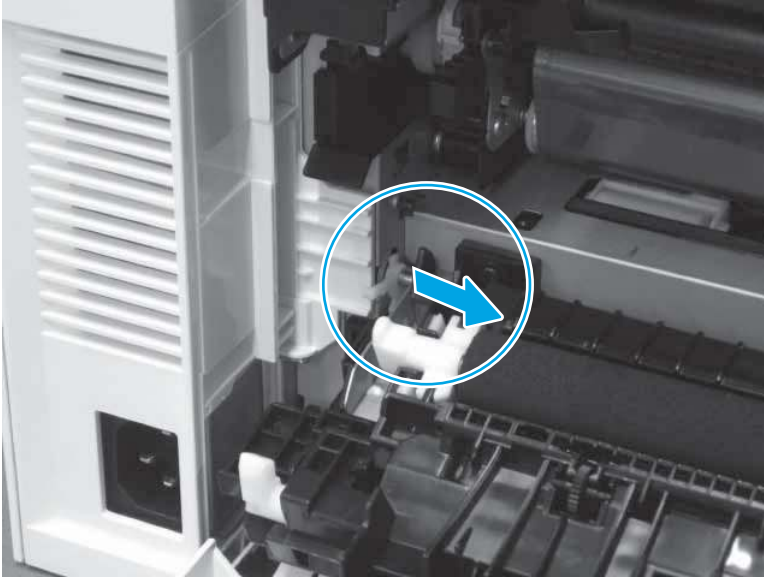
1. Open the rear door, and then rotate the bushing (callout 1) in the direction shown below.

Figure 5-1105 Rotate the bushing



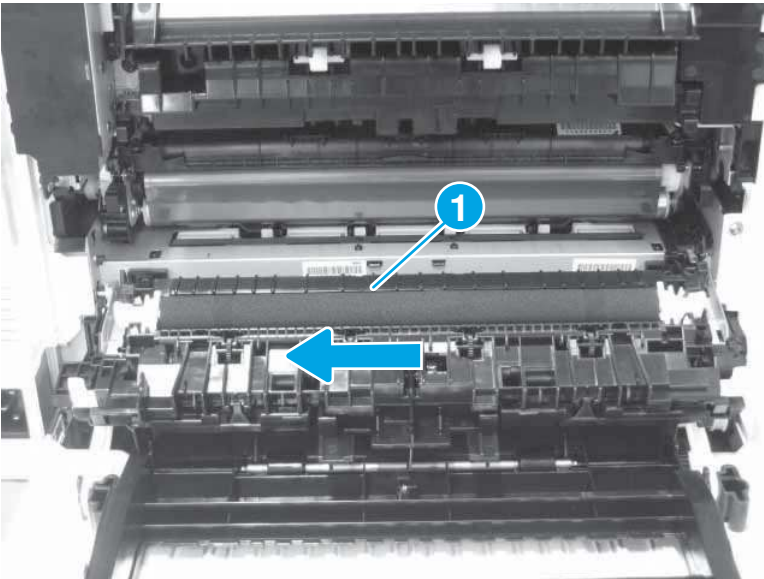
2. Slide the bushing in the direction shown below.

Figure 5-1106 Slide the bushing



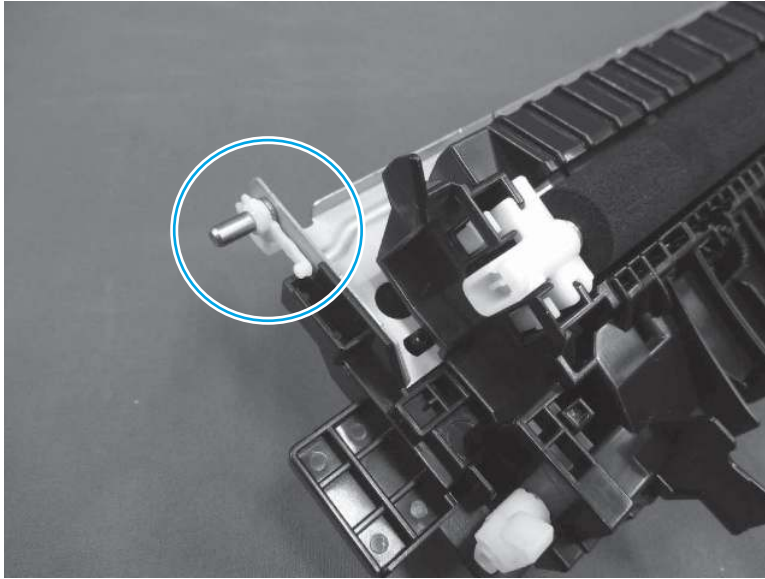
3. Slide the T2 assembly (callout 1) in the direction shown below to remove it.

Figure 5-1107 Remove the T2 assembly



4. The bushing shown in the figure below is supplied with the replacement assembly.

Figure 5-1108 T2 assembly bushing

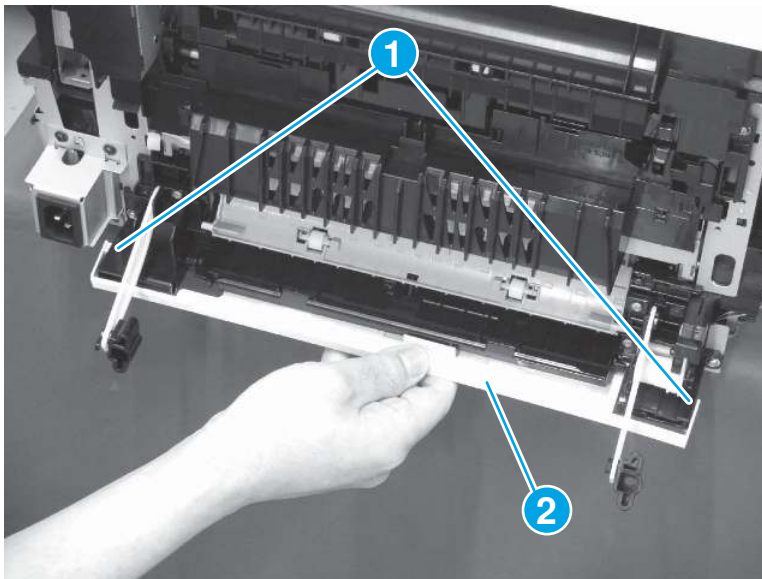


9. Remove the duplexing bottom cover

Follow the procedure below to remove and replace the duplexing bottom cover.

- Release two tabs (callout 1), and then remove the duplexing bottom cover (callout 2).

Figure 5-1109 Remove the duplexing bottom cover



10. Remove the MP paper feed assembly

Follow the procedure below to remove the MP paper feed assembly.

1. Position the printer with the rear-door side down.

Figure 5-1110 Position the printer



2. Press the green button to release the assembly.

Figure 5-1111 Release the assembly

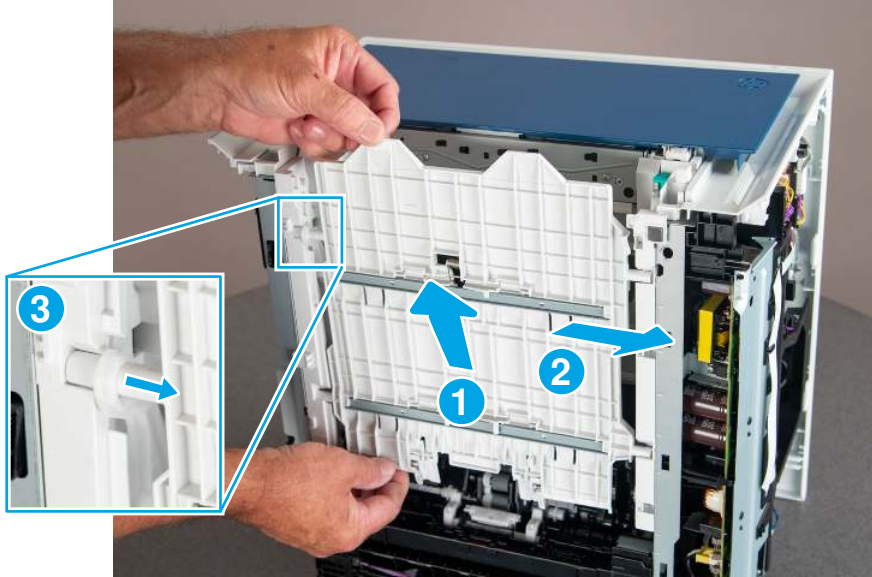


3. Slide the assembly up (callout 1), and then toward the right-side of the printer (callout 2) to remove it.



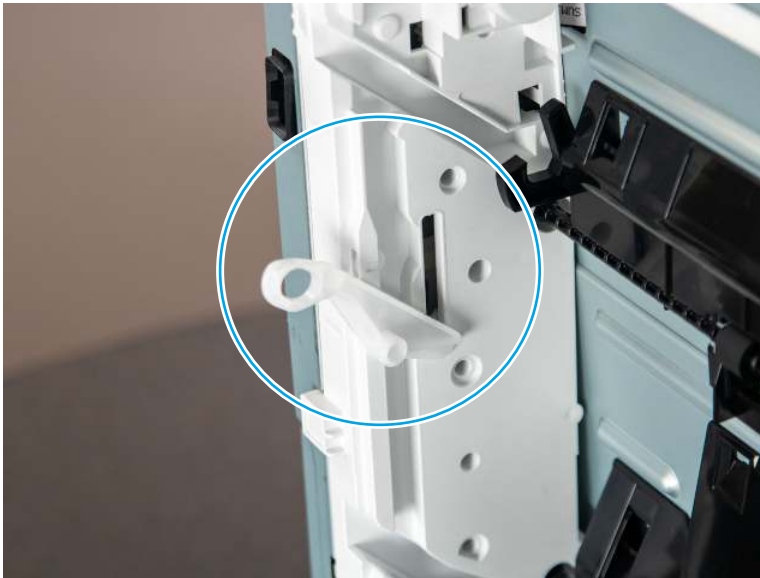
NOTE: There is a retainer arm (callout 3) on one of the assembly legs. Carefully disengage the retainer arm and leg when removing the assembly.

Figure 5-1112 Remove the assembly



4. If the retainer arm becomes dislodged, reinstall it as shown below.

Figure 5-1113 Install the retainer arm



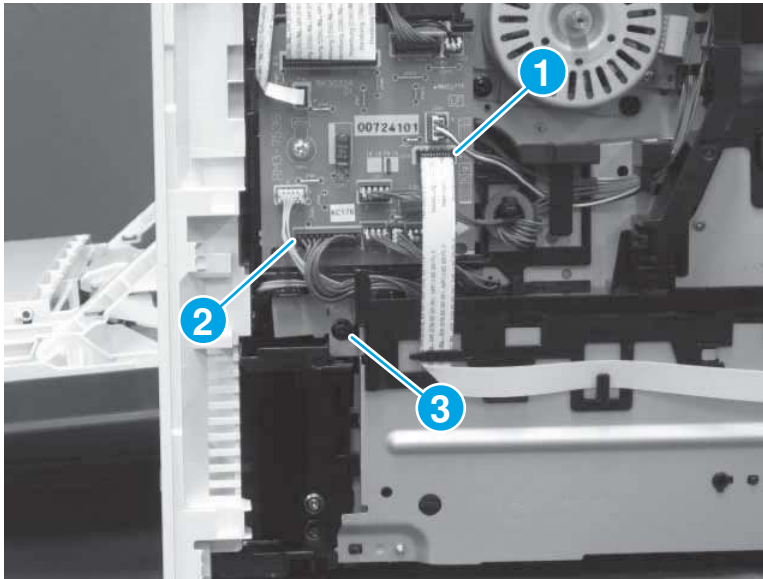
11. Remove the low-voltage power supply (LVPS)

Follow the procedure below to remove and replace the LVPS.

 **CAUTION:**  ESD sensitive part.

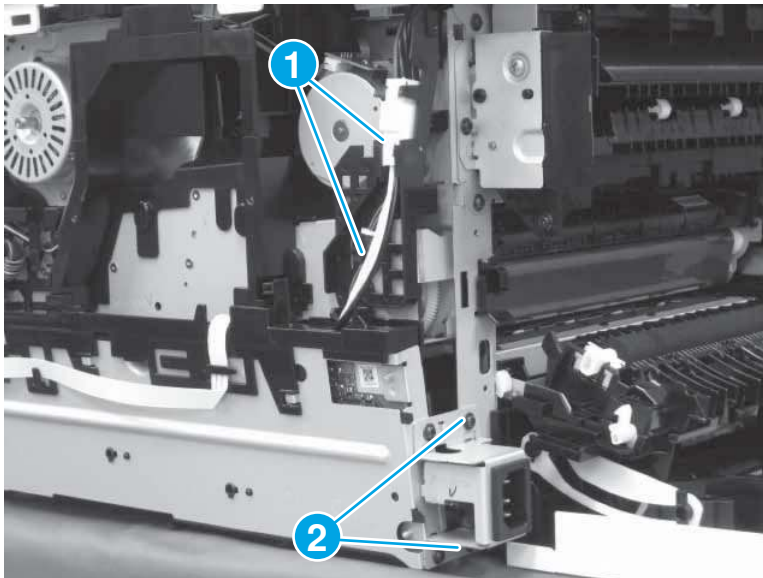
1. Disconnect one flat-flexible cable (FFC; callout 1) and one connector (callout 2), and then remove one screw (callout 3).

Figure 5-1114 Disconnect FFC, connector, and remove one screw



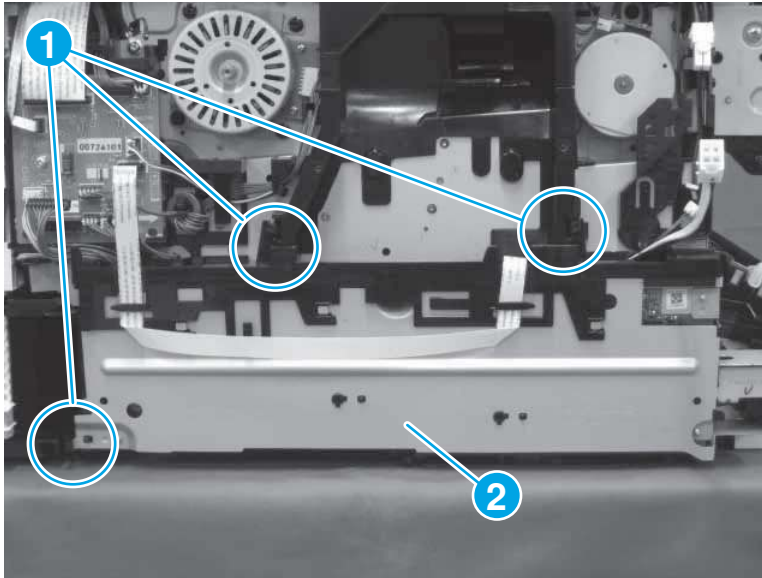
2. Disconnect two connectors (callout 1), and then remove two screws (callout 2).

Figure 5-1115 Disconnect connectors and remove screws



3. Release three tabs (callout 1), and then remove the LVPS (callout 2).

Figure 5-1116 Remove the LVPS



12. Remove the duplex guide assembly

Follow the procedure below to remove and replace the duplex guide assembly.

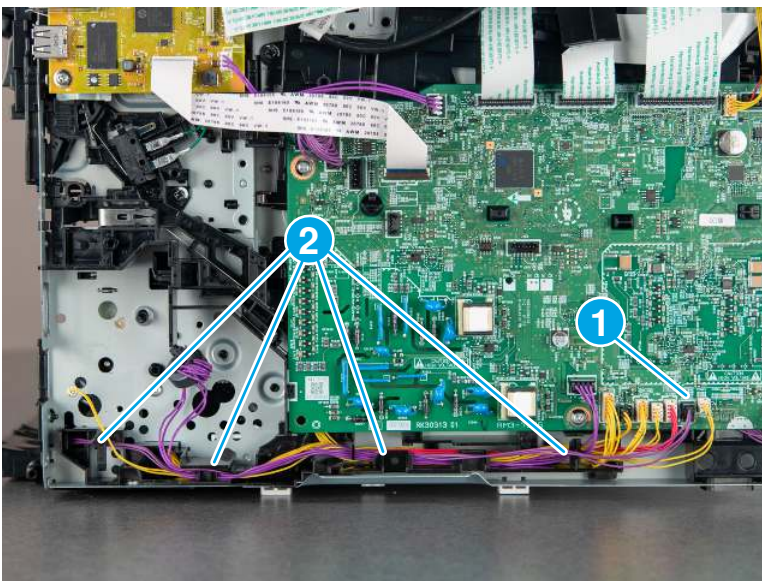
1. Disconnect one connector (callout 1), and then release the wire harness from the retainer (callout 2).



NOTE: The correct cable to release is the purple three-wire harness.

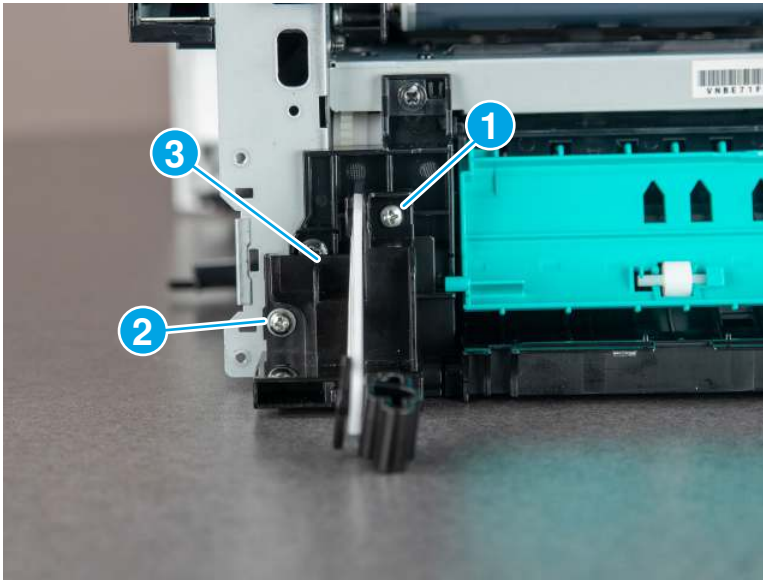
Disconnect other connectors and release other wire harnesses as necessary.

Figure 5-1117 Disconnect one connector



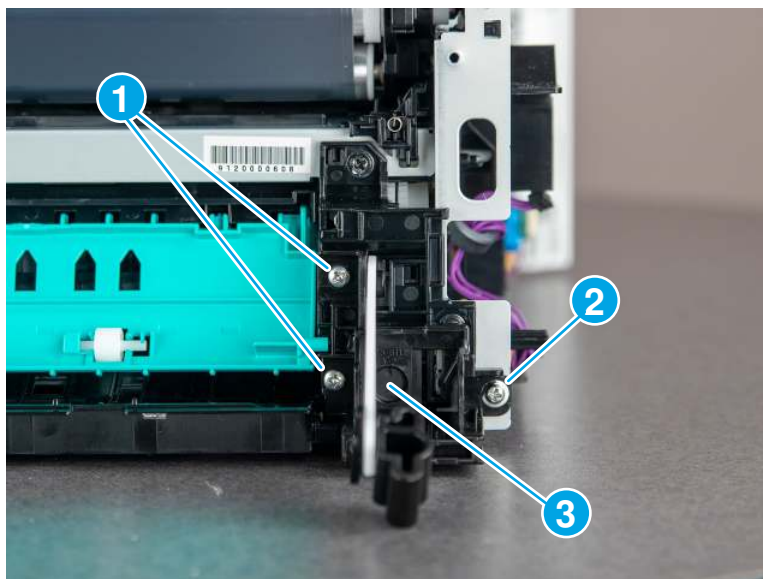
2. Do the following:
 - a. Remove one (tapping) screw (callout 1).
 - b. Remove one (TP) screw (callout 2)
 - c. Remove the holder (callout 3).

Figure 5-1118 Remove two screws and the holder



3. Do the following:
 - a. Remove two (tapping) screws (callout 1).
 - b. Remove one (TP) screw (callout 2)
 - c. Remove the holder (callout 3).

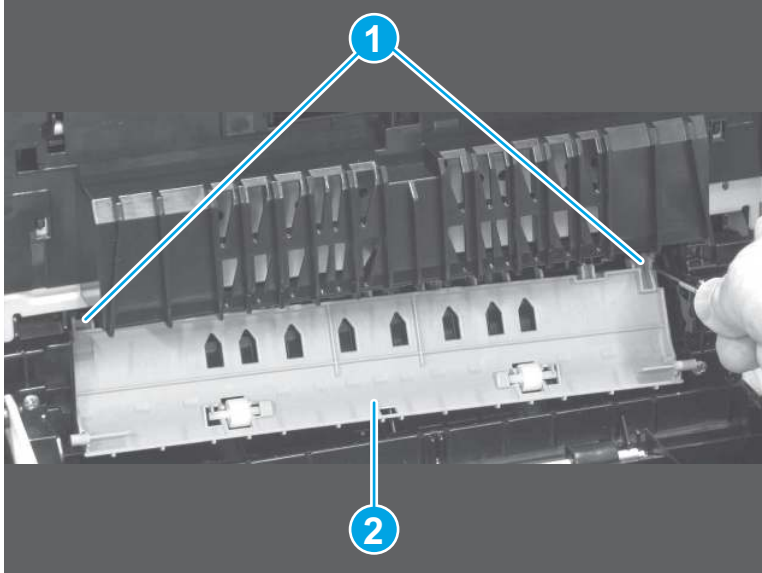
Figure 5-1119 Remove three screws and the holder



4. Use a small flat-blade screwdriver to release one boss at each end of the duplex guide (callout 1), and then remove the guide (callout 2).

CAUTION: Parts of this assembly are fragile and can easily be damaged during removal.

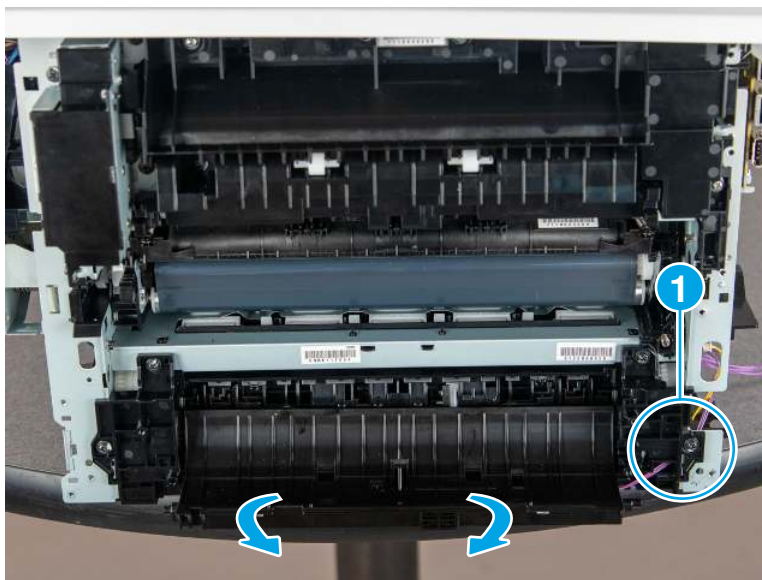
Figure 5-1120 Remove the duplex upper guide



5. Carefully position the printer at the edge of the work surface. Slightly pull the duplex guide assembly down to release it, and then remove the assembly.

NOTE: Pass the wire harness through the opening in the chassis as the assembly is removed (callout 1).

Figure 5-1121 Remove the duplex guide assembly

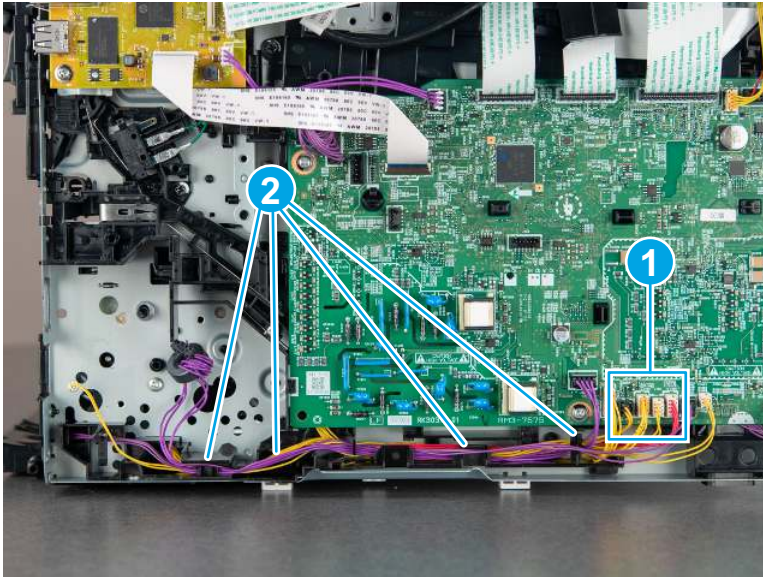


13. Remove the feed lower guide assembly

Follow the procedure below to remove and replace the feed lower guide assembly.

1. Disconnect four connectors (callout 1), and then release the wire harnesses from the guide (callout 2).

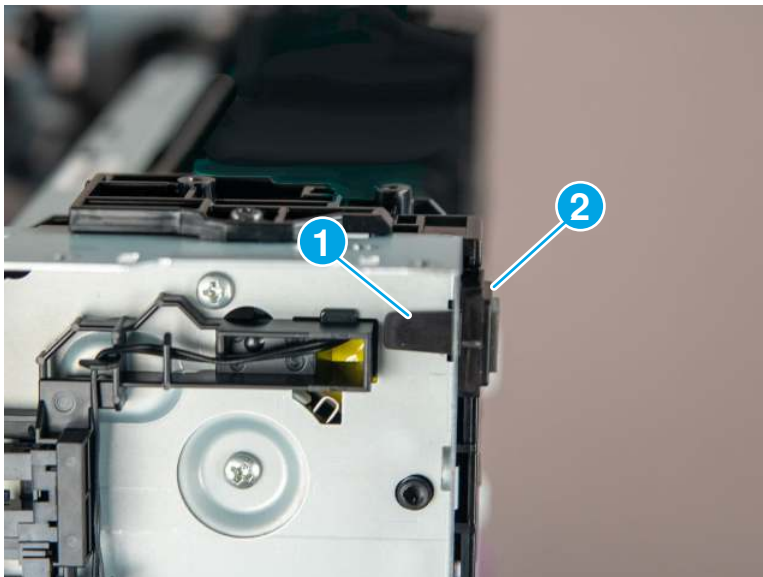
Figure 5-1122 Disconnect connectors and release the wire harnesses



2. Position the printer with the front-side down, release one tab (callout 1), and then remove the rubber pad (callout 2). Repeat this step for the rubber pad on the opposite side.

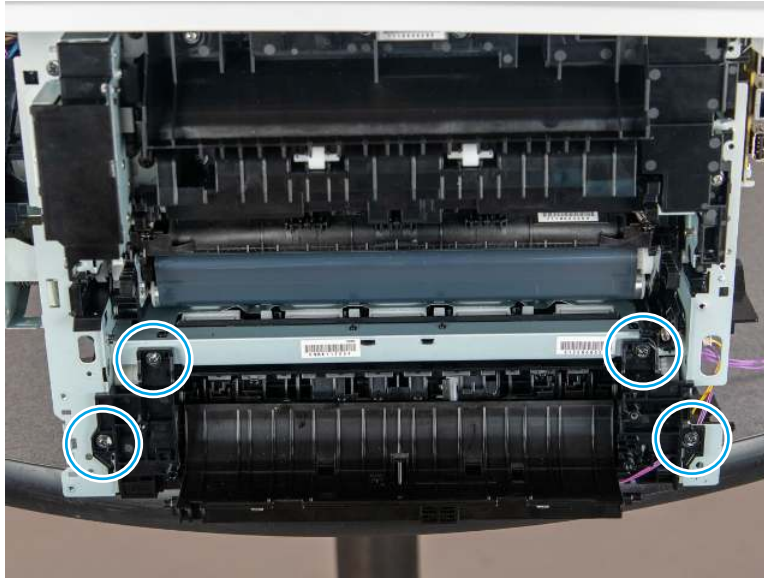
⚠ CAUTION: MFP only: The integrated scanner assembly (ISA) can suddenly open when the printer is placed in any position other than top-side up. Secure the ISA when repositioning the printer.

Figure 5-1123 Remove the pad



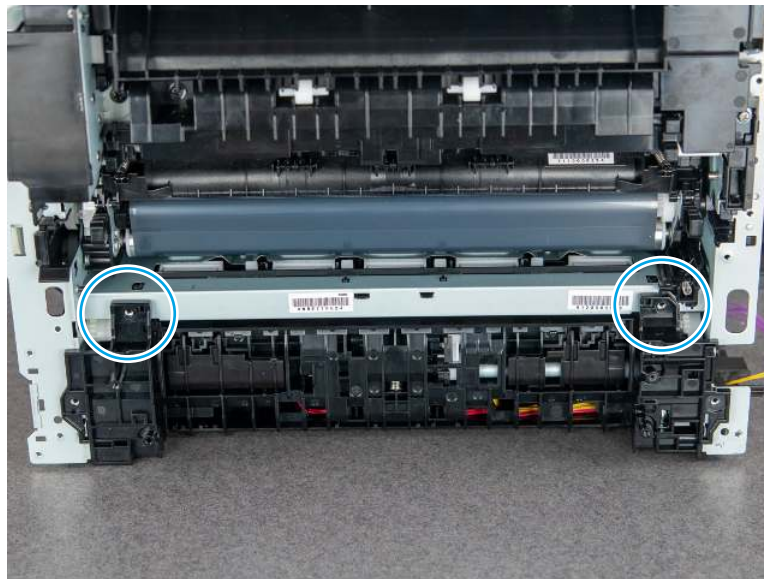
3. Position the printer with the top-side up (normal position), and then remove four screws.

Figure 5-1124 Remove four screws



4. Use a small flat-blade screwdriver to release two bosses (callout 1).

Figure 5-1125 Release two bosses



5. Carefully position the printer at the edge of the work surface. Slightly pull down on the assembly to release it, and then remove the feed lower guide assembly (callout 1).


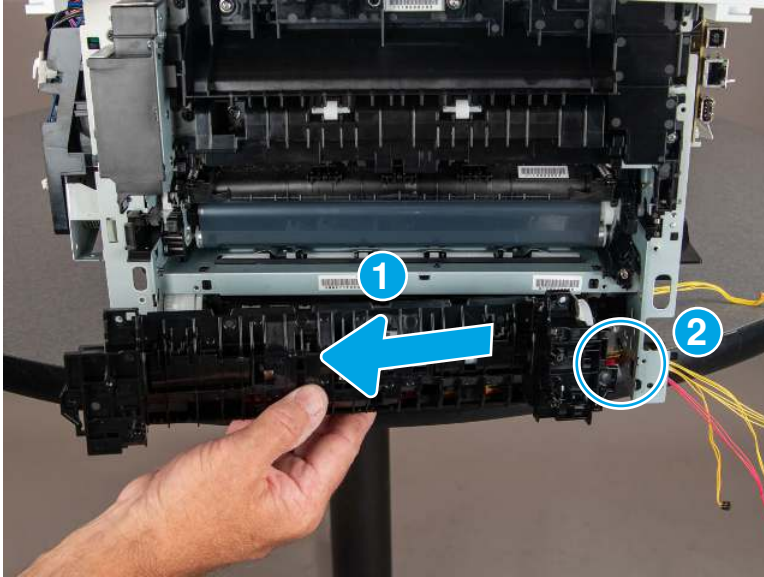
 **NOTE:** Carefully pull the wire harness through the opening in the chassis (callout 2) while removing the assembly.

Figure 5-1126 Remove the feed lower guide assembly

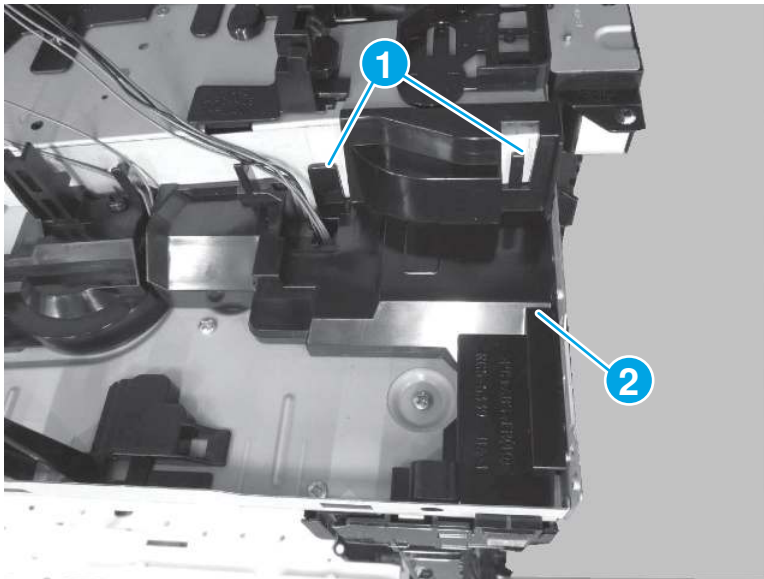


14. Remove the lifter drive assembly

Follow the procedure below to remove and replace the lifter drive assembly.

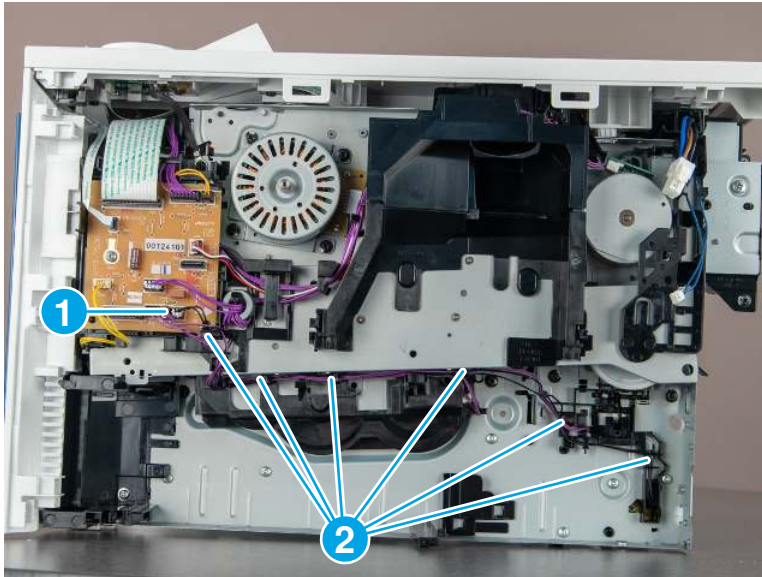
1. Release two tabs (callout 1), and then remove the cover (callout 2).

Figure 5-1127 Remove the cover



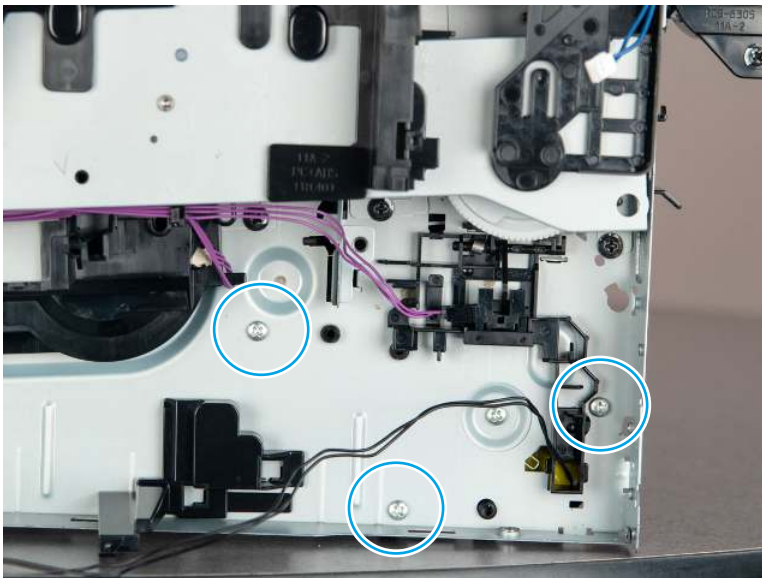
2. Disconnect one connector (callout 1), and then release the wire harness from the retainers (callout 2).

Figure 5-1128 Disconnect one connector



3. Remove three screws.

Figure 5-1129 Remove three screws



4. Position the printer with the front-side down, and then release one tab.

⚠ CAUTION: MFP only: The integrated scanner assembly (ISA) can suddenly open when the printer is placed in any position other than top-side up. Secure the ISA when repositioning the printer.

Figure 5-1130 Release one tab



5. Remove the lifter drive assembly.


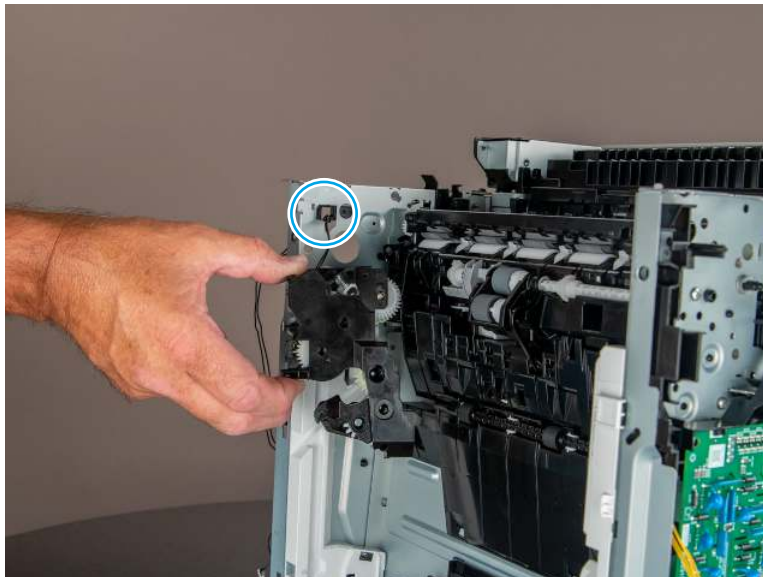
 **NOTE:** Carefully pull the wire harness through the opening in the chassis while removing the assembly.

Figure 5-1131 Remove the lifter drive assembly



15. Remove the feed upper guide assembly

Follow the procedure below to remove and replace the feed upper guide assembly.

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


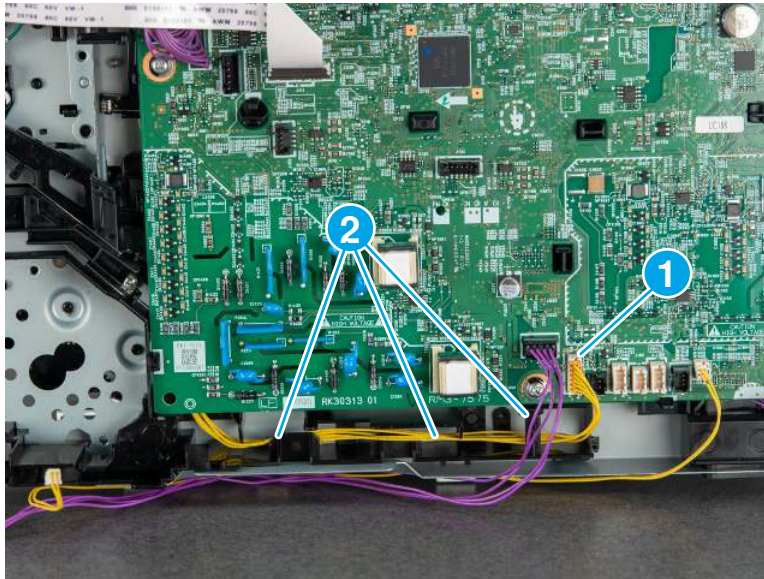
 **NOTE:** The wire harness will not be removed with the assembly. However, it does need to be disconnected and released to provide sufficient slack to separate the assembly from the printer.

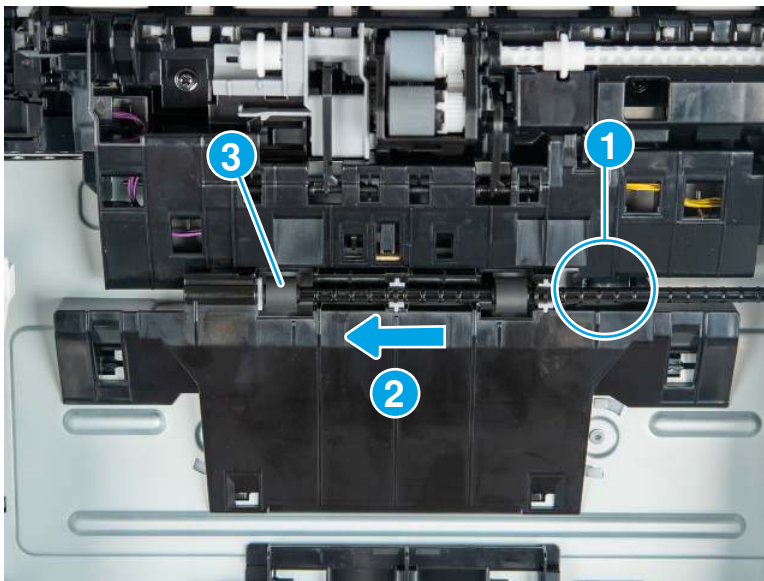
Figure 5-1132 Disconnect one connector



2. Position the printer with the front-side down. Release one tab (callout 1), and then slide the guide (callout 2) and the roller (callout 3) together as shown below to release them.

CAUTION: MFP only: The integrated scanner assembly (ISA) can suddenly open when the printer is placed in any position other than top-side up. Secure the ISA when repositioning the printer.

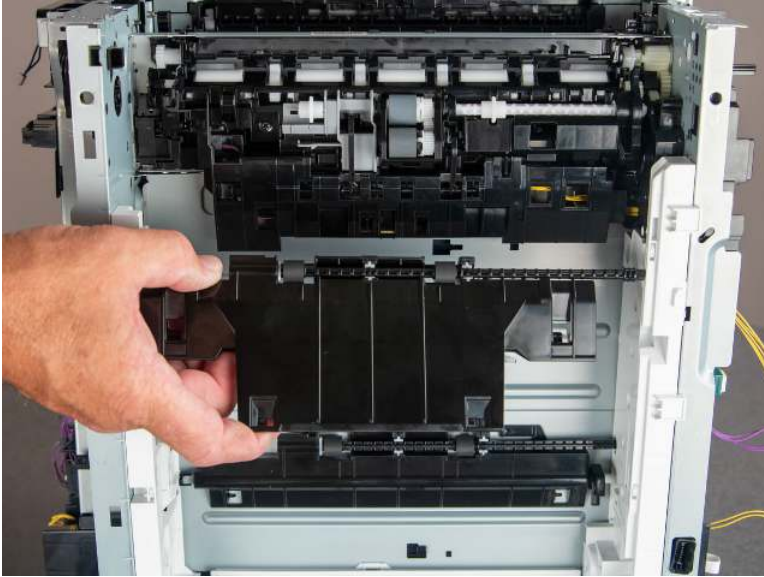
Figure 5-1133 Release the guide and roller



3. Remove the guide and roller assembly.

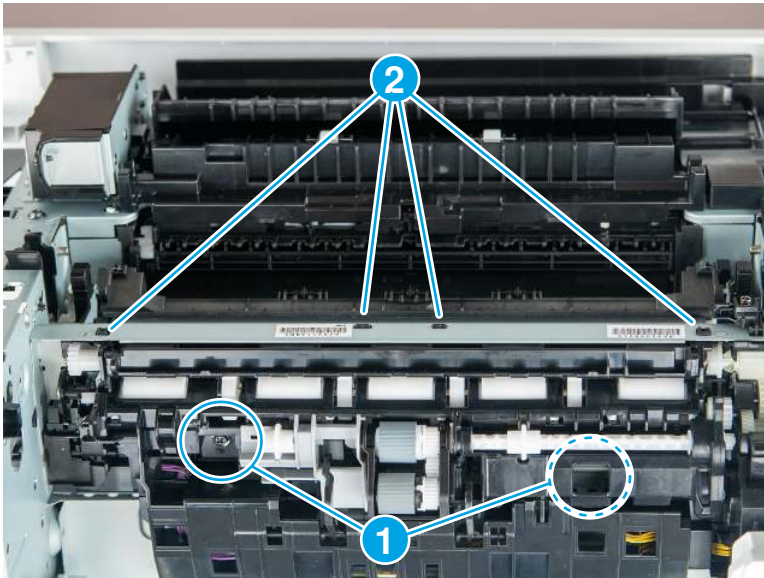
NOTE: The roller and shaft are not captive on the guide and can easily be dislodged.

Figure 5-1134 Remove the guide and roller



4. Remove two screws (callout 1), and then release four bosses (callout 2).

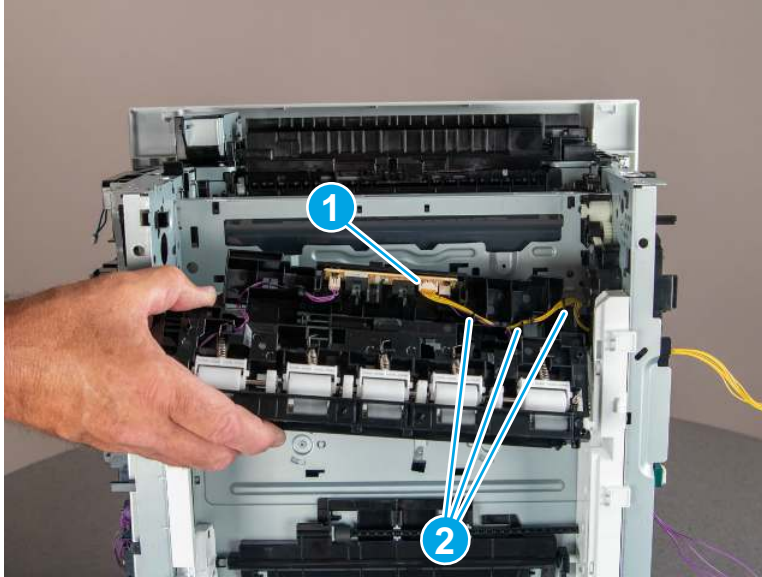
Figure 5-1135 Remove screws and release bosses



5. Separate the assembly from the printer, disconnect one connector (callout 1), and then release the wire harness from the retainers (callout 2).

⚠ CAUTION: Do not attempt to completely remove the assembly. It is still attached to the printer by a wire harness.

Figure 5-1136 Disconnect one connector



6. Remove the feed upper guide assembly.

Figure 5-1137 Remove the feed upper guide assembly



16. Remove the pickup drive assembly

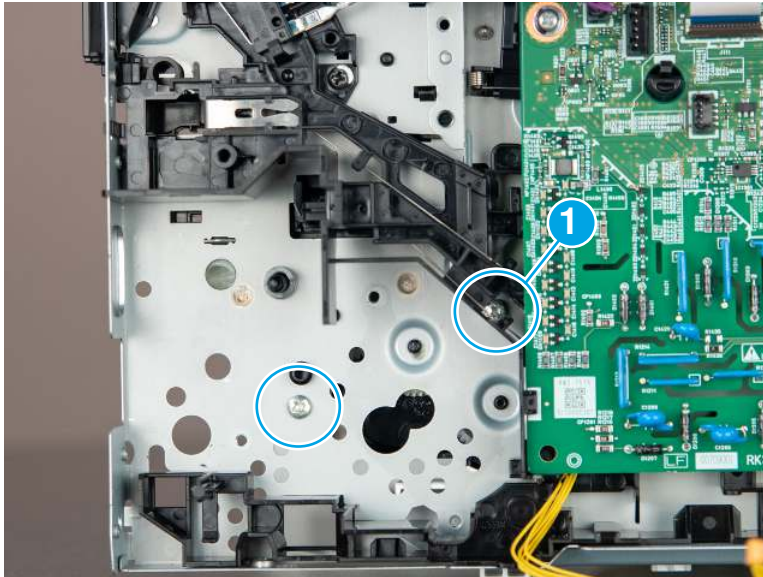
Follow the procedure below to remove and replace the pickup drive assembly.

1. Remove two screws.



NOTE: Use a #1 Phillips screwdriver with a magnetic tip to remove one screw (callout 1). Use a pair of needle-nose pliers to remove this screw from behind the guide.

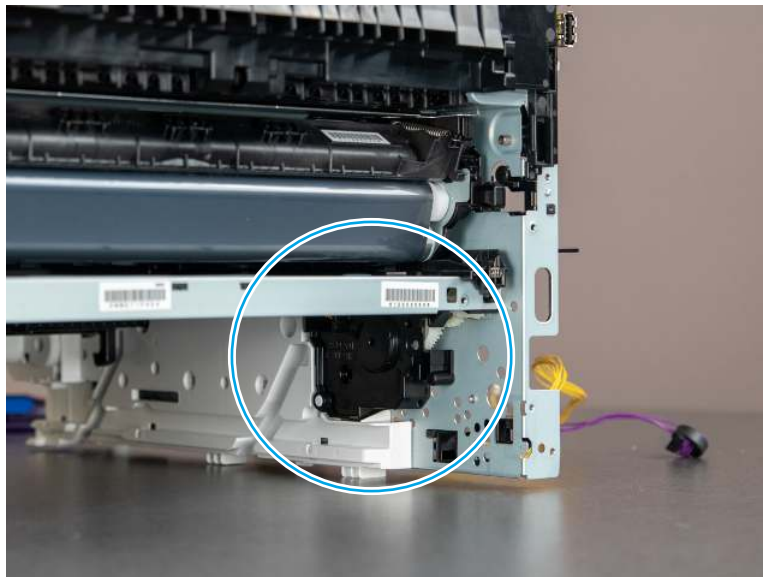
Figure 5-1138 Remove two screws



2. Remove the pickup drive assembly.

⚠ CAUTION: The gears on the back-side of the assembly are not captive and can be easily dislodged.

Figure 5-1139 Remove the pickup drive assembly



17. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.


📄 NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

IMPORTANT:  Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.


NOTE:  If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

NOTE:  When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

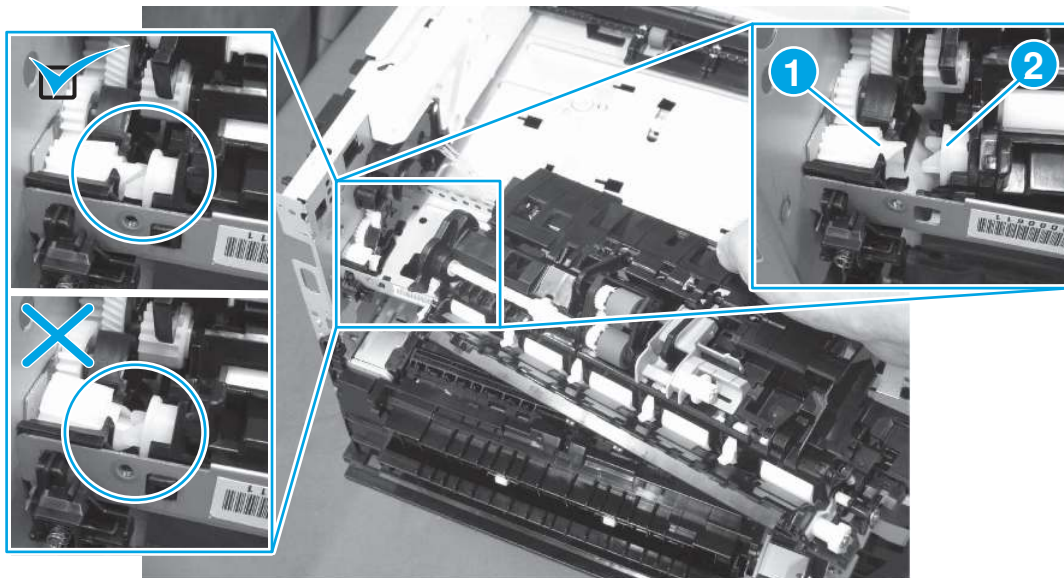
18. Special installation instructions - Feed upper guide assembly

Follow the special instructions below to install the feed upper guide assembly.

NOTE:  The printer is shown upside down in the figure below for clarity.


- When the assembly is installed, make sure to match the engagement portion of the gear (callout 1) on the printer with the gear (callout 2) of the feed upper guide assembly.

Figure 5-1140 Install the feed upper guide assembly



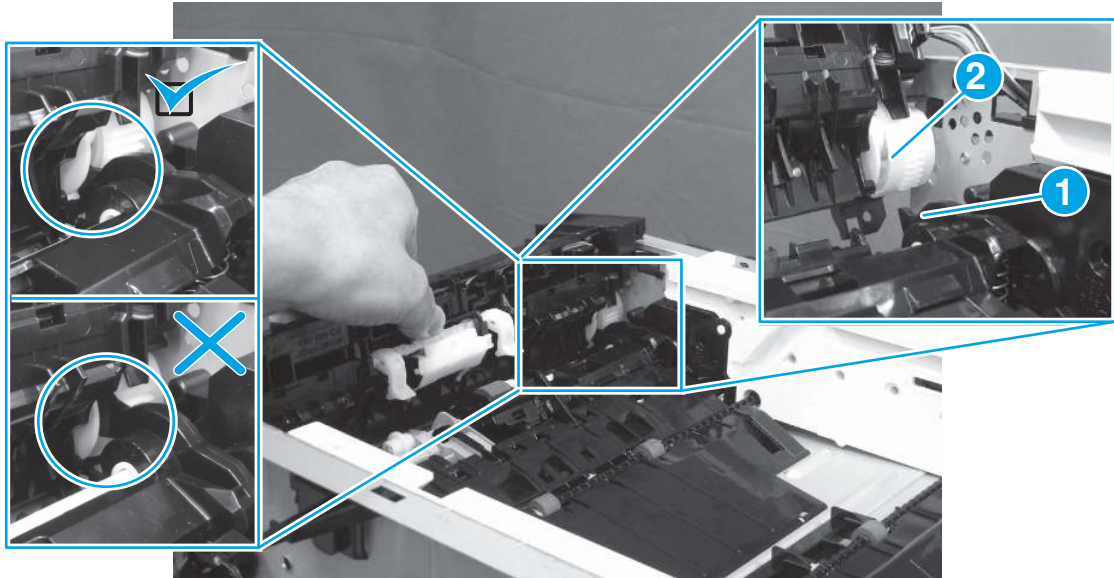
19. Special installation instructions - Feed lower guide assembly

Follow the special instructions below to install the feed lower guide assembly.

 **NOTE:** The printer is shown upside down in the figure below for clarity.

- When the assembly is installed, make sure that the link arm (callout 1) on the printer is correctly inserted in the gear (callout 2) of the feed lower guide assembly.

Figure 5-1141 Install the feed lower guide assembly



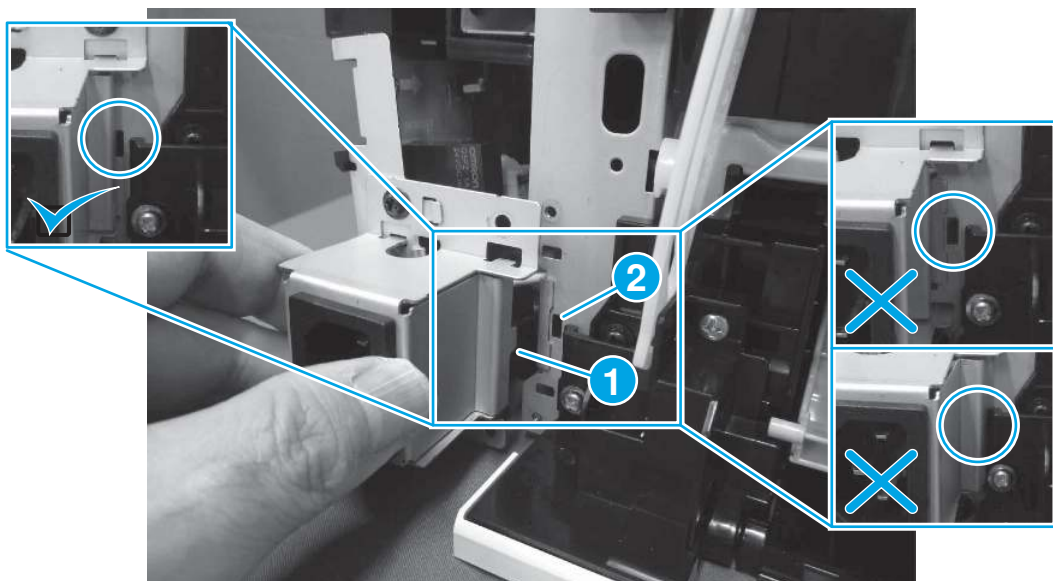
20. Special installation instructions - Low-voltage power supply (LVPS)

Follow the special instructions below to install a replacement LVPS.

 **CAUTION:**  ESD sensitive part.

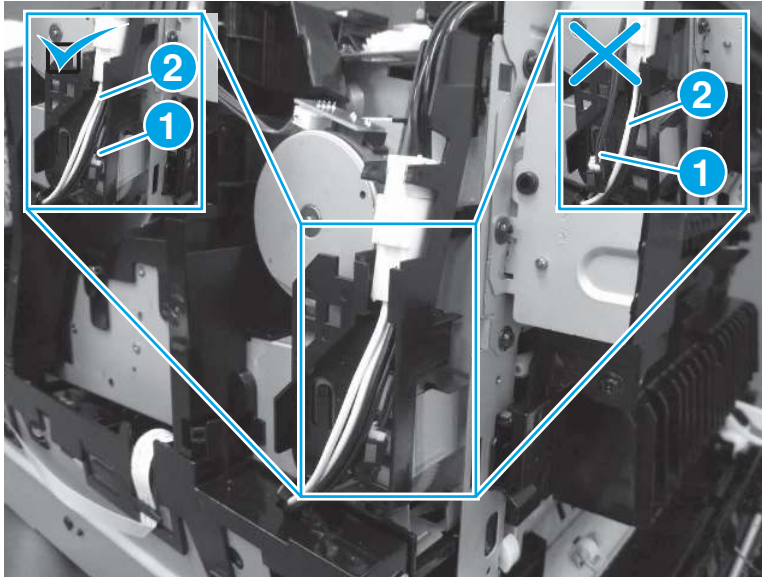
1. When the LVPS is installed, make sure that the sheet-metal tab (callout 1) near the power receptacle is inserted in the slot (callout 2) in the chassis.

Figure 5-1142 Install the LVPS tab



2. Make sure that the fuser temperature fuse cable (callout 1) is positioned behind the thick cable (callout 2). This prevents the fuser cable from unnecessary movement.

Figure 5-1143 Check the fuser temperature fuse cable



Input device - 550-sheet paper feeder

Learn how to remove and replace the 550-sheet paper feeder parts and assemblies.

Field-replaceable units (FRUs)

Learn about FRU parts removal and replacement.

Covers, panels, and doors

Learn about covers, panels, and doors removal and replacement.

Removal and replacement: Right cover (550-sheet paper feeder)

Learn about right cover removal (550-sheet paper feeder).

Mean time to repair: 3 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-52 Part information

Part number	Part description
RM2-2771-000CN	Right cover assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

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

Post service test

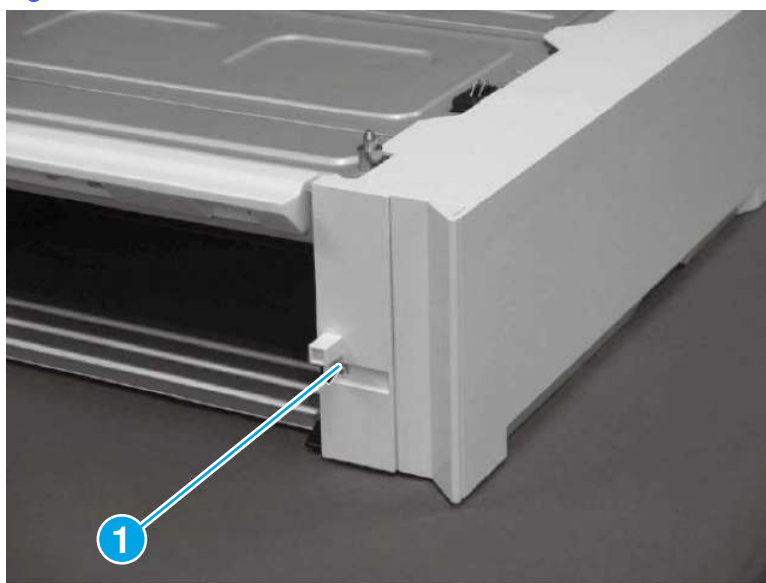
No post service test is available for this assembly.

1. Remove the right cover (550-sheet paper feeder)

Follow the procedure below to remove and replace the right cover (550-sheet paper feeder).

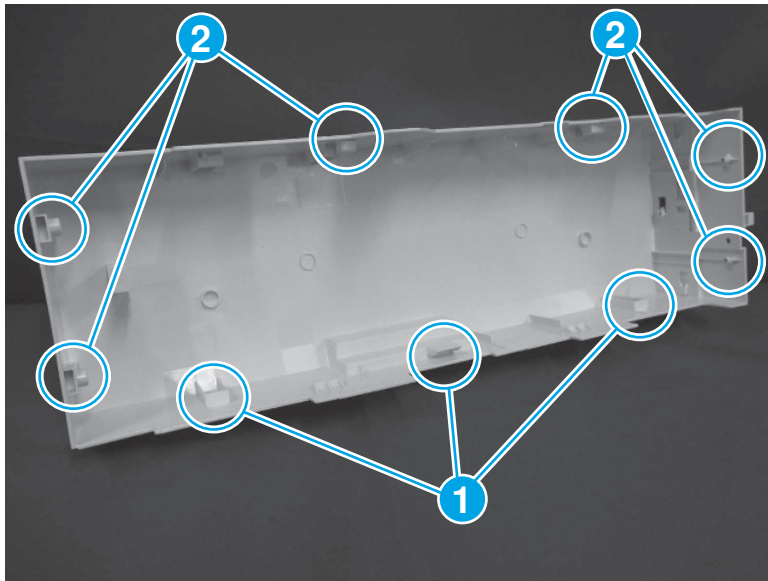
1. Remove one screw (callout 1).

Figure 5-1144 Remove one screw



2. Before proceeding, take note of the location of the mounting tabs (callout 1) and bosses (callout 2) on the inside of the cover.

Figure 5-1145 Location of the mounting tabs and bosses



3. Release three tabs (callout 1), release six bosses (callout 2), and then remove the right cover (callout 3).


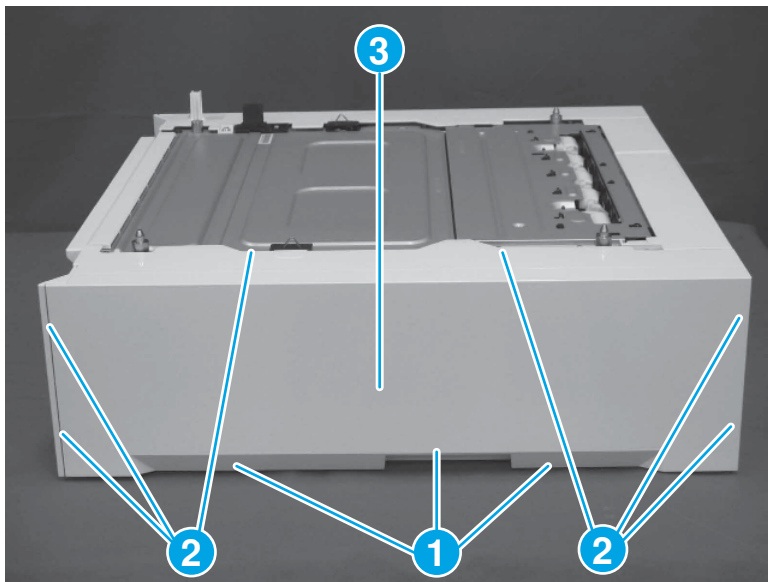
 **TIP:** It might be easier to remove the cover if the top front boss is released first.


Figure 5-1146 Remove the right cover





2. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.

 **NOTE:** HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Left cover (550-sheet paper feeder)

Learn about left cover removal (550-sheet paper feeder).


Mean time to repair: 3 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-53 Part information

Part number	Part description
RM2-2770-000CN	Left cover assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

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

Post service test

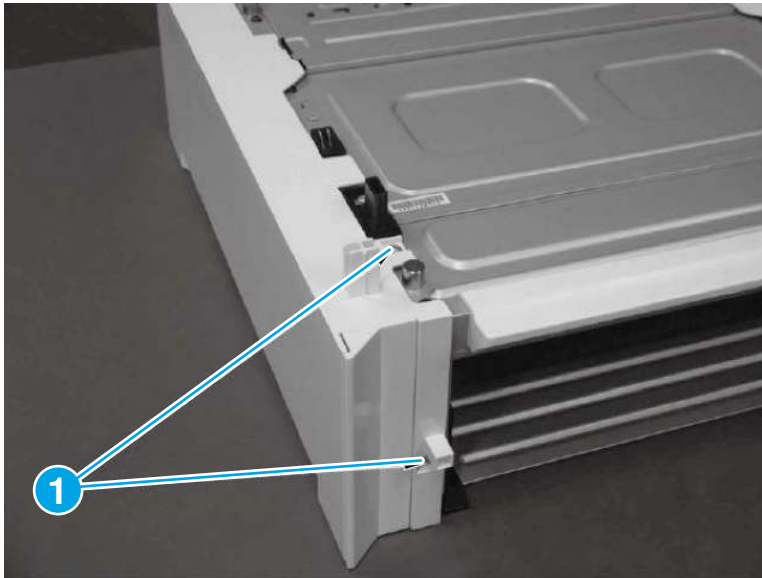
No post service test is available for this assembly.

1. Remove the left cover (550-sheet paper feeder)

Follow the procedure below to remove and replace the left cover (550-sheet paper feeder).

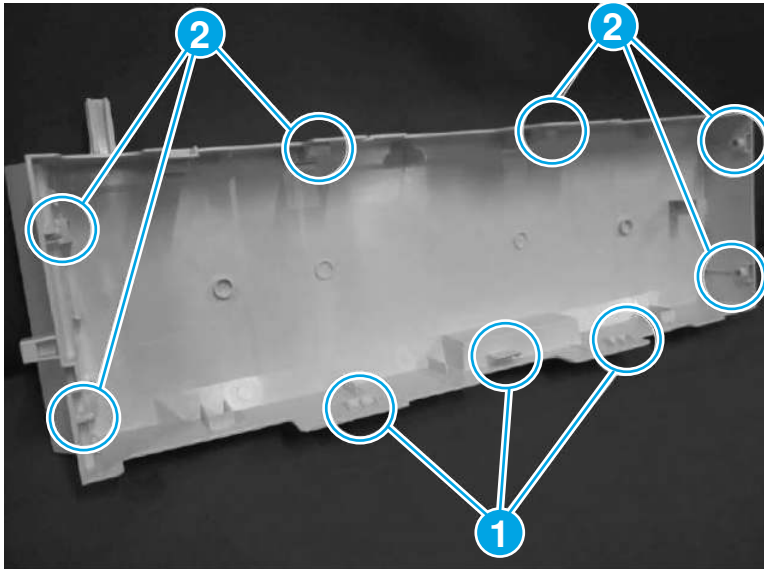
1. Remove two screws (callout 1).

Figure 5-1147 Remove two screws



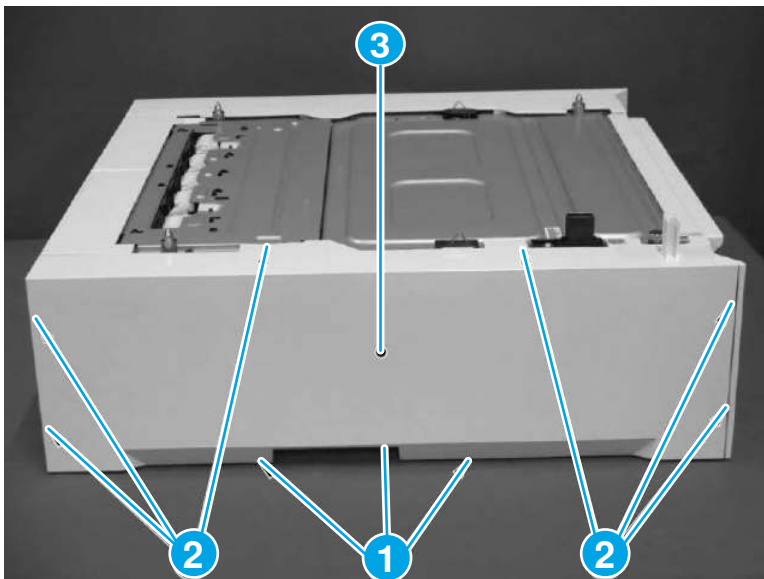
2. Before proceeding, take note of the location of the mounting tabs (callout 1) and bosses (callout 2) on the inside of the cover.

Figure 5-1148 Location of the mounting tabs and bosses



3. Release three tabs (callout 1), release six bosses (callout 2), and then remove the left cover (callout 3).

Figure 5-1149 Remove the left cover



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.



1. Dispose of the defective part.





NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Rear cover (550-sheet paper feeder)

Learn about rear cover removal (550-sheet paper feeder).


Mean time to repair: 7 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-54 Part information

Part number	Part description
RC5-6741-000CN	Cover, rear

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

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

Post service test

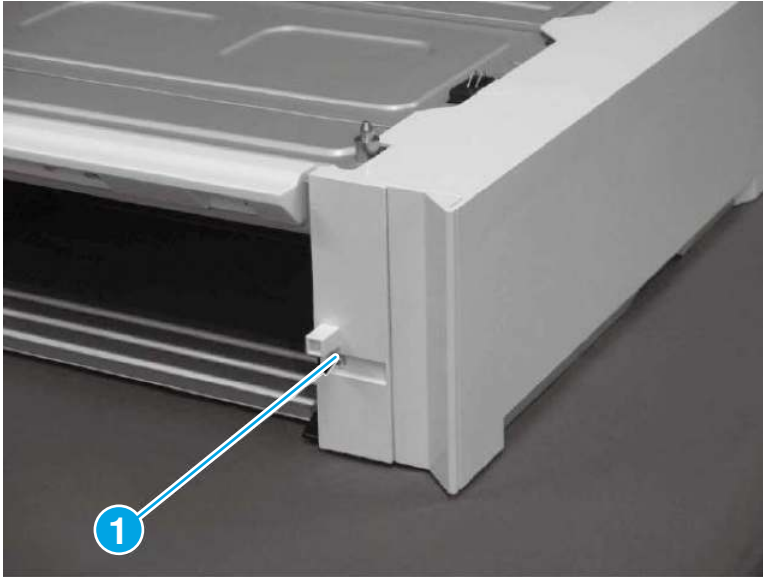
No post service test is available for this assembly.

1. Remove the right cover (550-sheet paper feeder)

Follow the procedure below to remove and replace the right cover (550-sheet paper feeder).

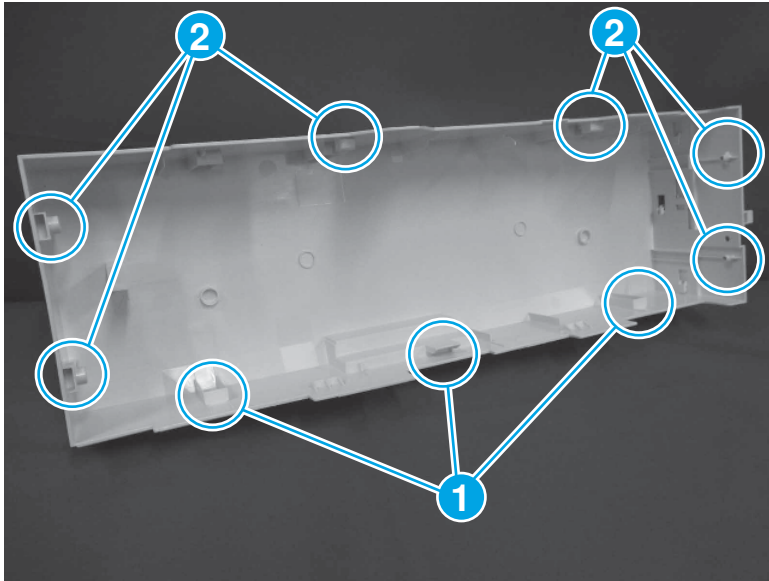
1. Remove one screw (callout 1).

Figure 5-1150 Remove one screw



2. Before proceeding, take note of the location of the mounting tabs (callout 1) and bosses (callout 2) on the inside of the cover.

Figure 5-1151 Location of the mounting tabs and bosses



3. Release three tabs (callout 1), release six bosses (callout 2), and then remove the right cover (callout 3).


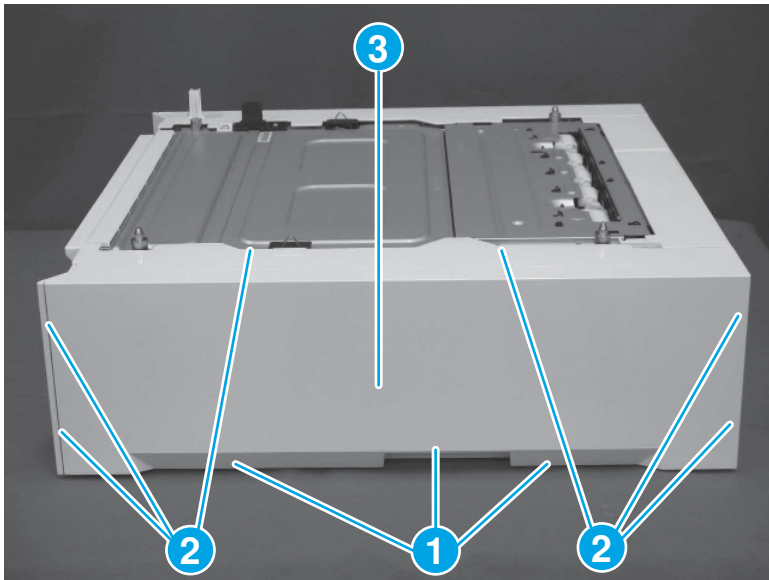
 **TIP:** It might be easier to remove the cover if the top front boss is released first.

Figure 5-1152 Remove the right cover

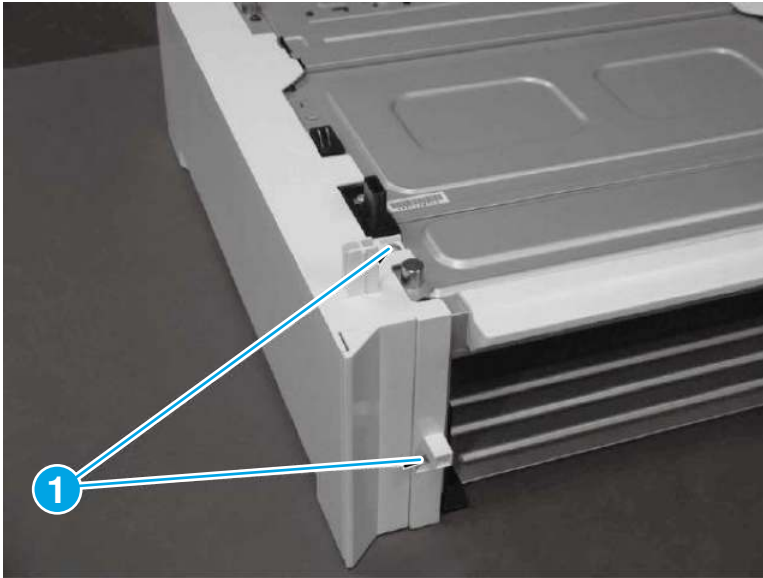


2. Remove the left cover (550-sheet paper feeder)

Follow the procedure below to remove and replace the left cover (550-sheet paper feeder).

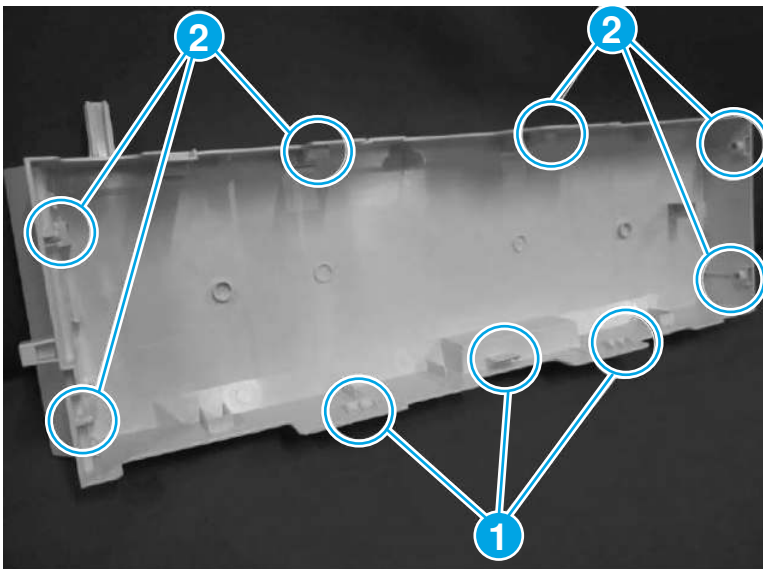
1. Remove two screws (callout 1).

Figure 5-1153 Remove two screws



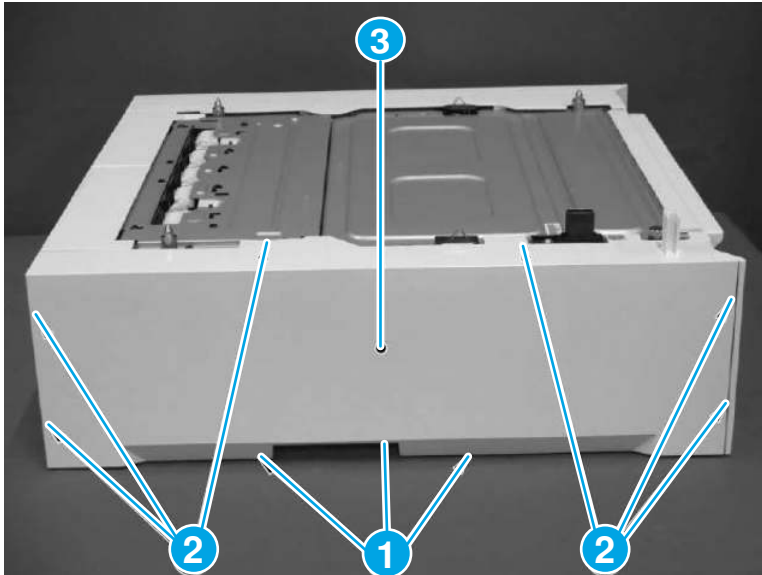
2. Before proceeding, take note of the location of the mounting tabs (callout 1) and bosses (callout 2) on the inside of the cover.

Figure 5-1154 Location of the mounting tabs and bosses



3. Release three tabs (callout 1), release six bosses (callout 2), and then remove the left cover (callout 3).

Figure 5-1155 Remove the left cover

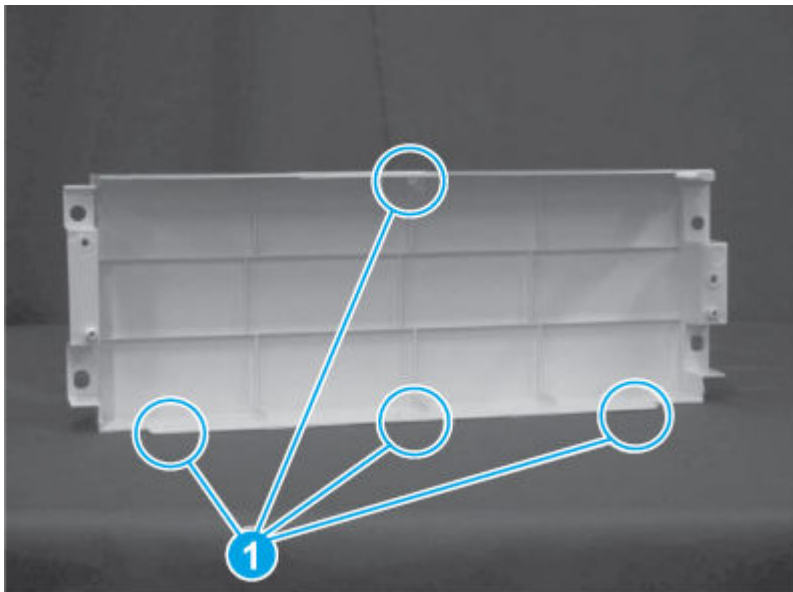


3. Remove the rear cover (550-sheet paper feeder)

Follow the procedure below to remove and replace the rear cover (550-sheet paper feeder).

1. Before proceeding, take note of the location of the mounting tabs (callout 1) on the inside of the cover.

Figure 5-1156 Location of the mounting tabs



2. Remove two screws (callout 1), release four tabs (callout 2), and then remove the rear cover (callout 3).


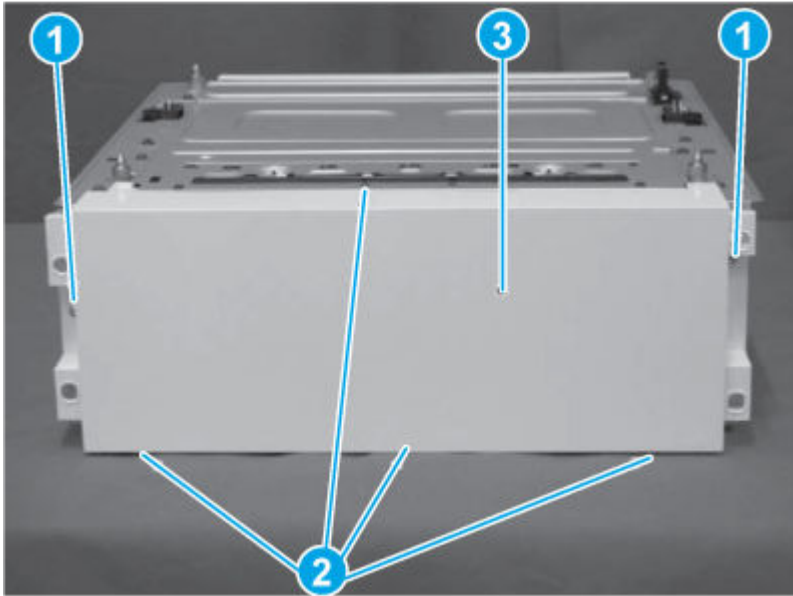
 **TIP:** It might be easier to remove the cover if the bottom tabs are released first.

Figure 5-1157 Remove the rear cover



4. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Internal parts and assemblies

Learn how to remove and replace the printer internal parts and assemblies.

Removal and replacement: Tray 3 pickup and feed rollers (550-sheet paper feeder)

Learn about Tray 3 pickup and feed rollers assembly removal.

Mean time to repair: 2 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-55 Part information

Part number	Part description
RM2-2695-000CN	Paper pickup roller assembly

NOTE: The pickup and feed rollers are identical parts. To replace both rollers, order a quantity of two using the part number in this table.

Required tools

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

After performing service

Turn the printer power on

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

Post service test

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

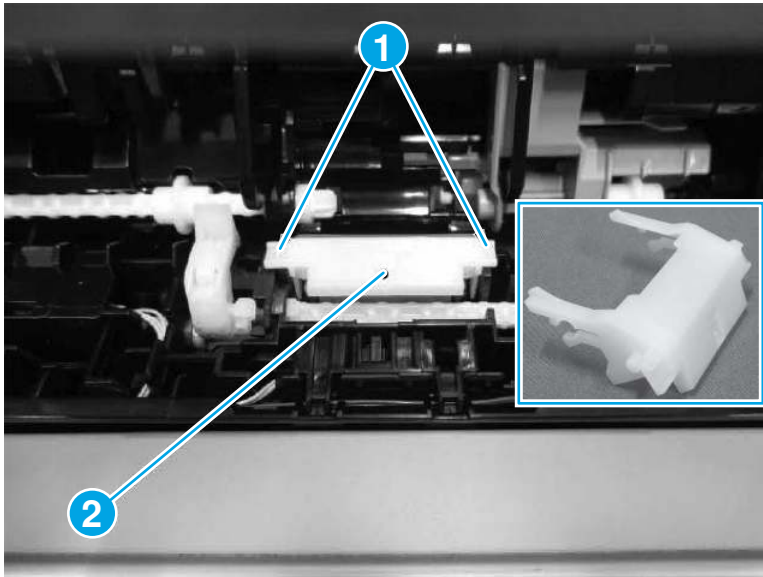
1. Remove the Tray 3 pickup and feed rollers

Follow the procedure below to remove and replace the Tray 3 pickup and feed rollers.

1. Turn the paper feeder over to gain access to the roller assembly.

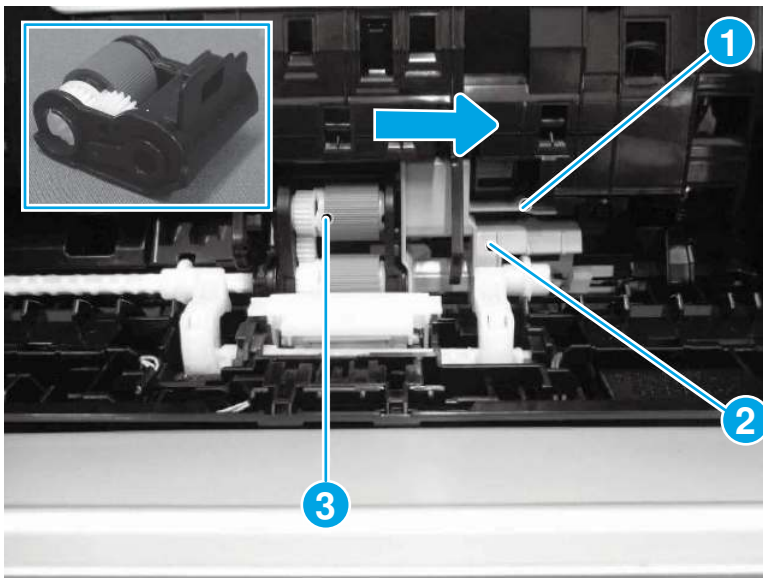
2. Use a small flat-blade screwdriver to release two tabs (callout 1), and then remove the cover (callout 2).

Figure 5-1158 Remove the cover



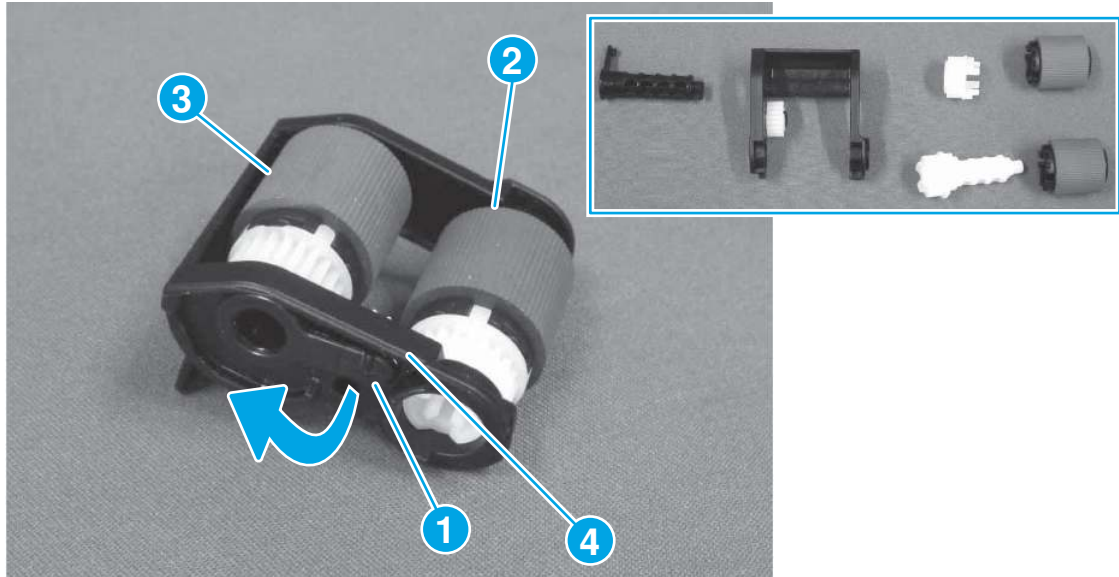
3. Push the lever (callout 1) and move the holder (callout 2) as shown below, and then remove the pickup/feed roller assembly (callout 3).

Figure 5-1159 Remove the roller assembly



4. Do the following:
 - a. Rotate the retainer (callout 1) as shown below to remove it.
 - b. Remove the pickup roller (callout 2) and the feed roller (callout 3) from the holder (callout 4).

Figure 5-1160 Remove the rollers



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Tray 3 separation roller (550-sheet paper feeder)

Learn about Tray 3 separation roller assembly removal.

Mean time to repair: 2 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-56 Part information

Part number	Part description
RM2-2692-000CN	Separation roller assembly (Tray1/2/3)

Required tools

- No special tools are required to remove or install this assembly.
- Small flat-blade screwdriver

After performing service

Turn the printer power on

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

Post service test

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

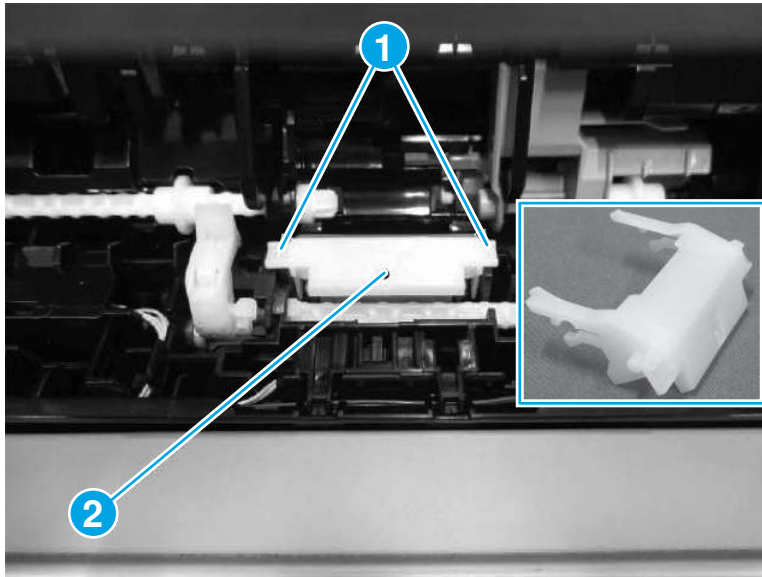
1. Remove the Tray 3 separation roller

Follow the procedure below to remove and replace the Tray 3 separation roller.

1. Turn the paper feeder over to gain access to the roller assembly.

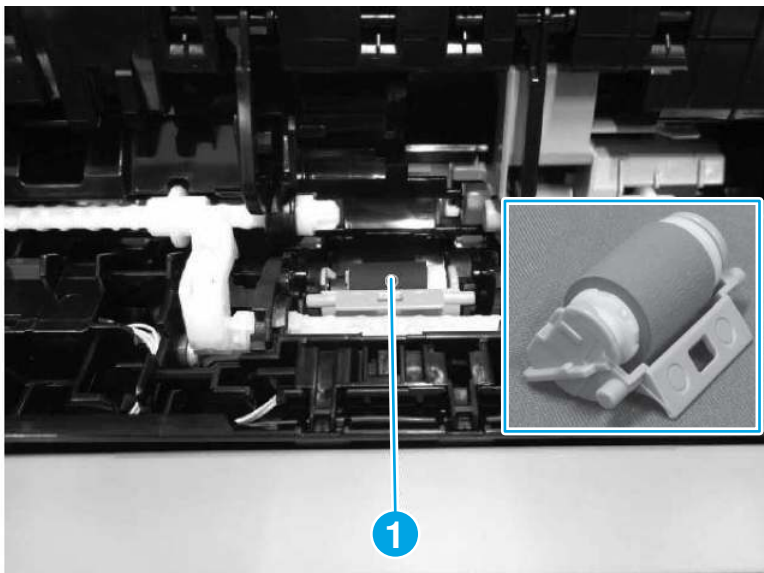
2. Use a small flat-blade screwdriver to release two tabs (callout 1), and then remove the cover (callout 2).

Figure 5-1161 Remove the cover



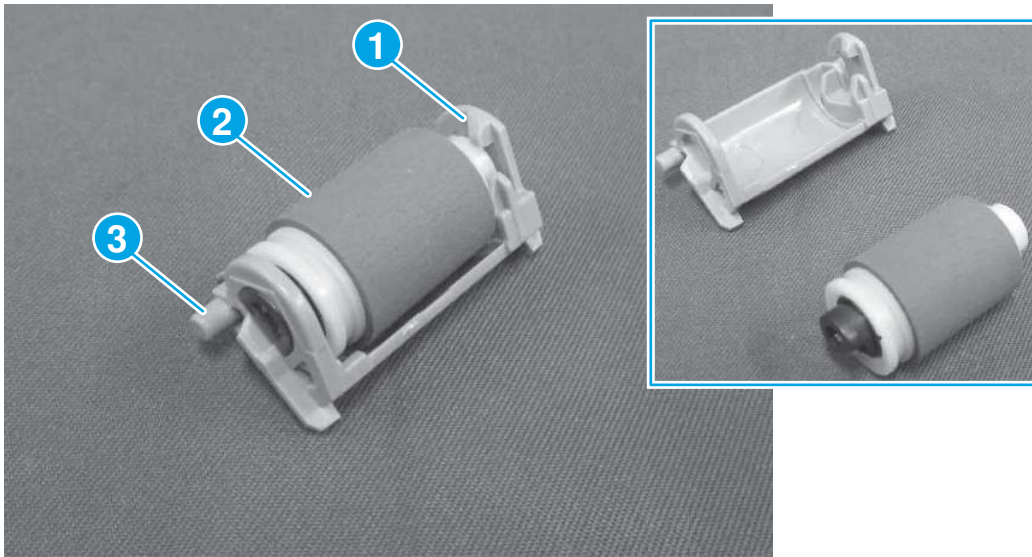
3. Remove the Tray 3 separation roller assembly (callout 1).

Figure 5-1162 Move the roller assembly



4. Release one tab (callout 1), and then remove the roller (callout 2) from the holder (callout 3).

Figure 5-1163 Disassemble the roller assembly



2. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Feed lower guide assembly (550-sheet paper feeder)

Learn about feed lower guide removal (550-sheet paper feeder).

Mean time to repair: 18 minutes

Service level: Medium

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-57 Part information

Part number	Part description
RM2-2774-000CN	Paper feed guide assembly, lower

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

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

Post service test

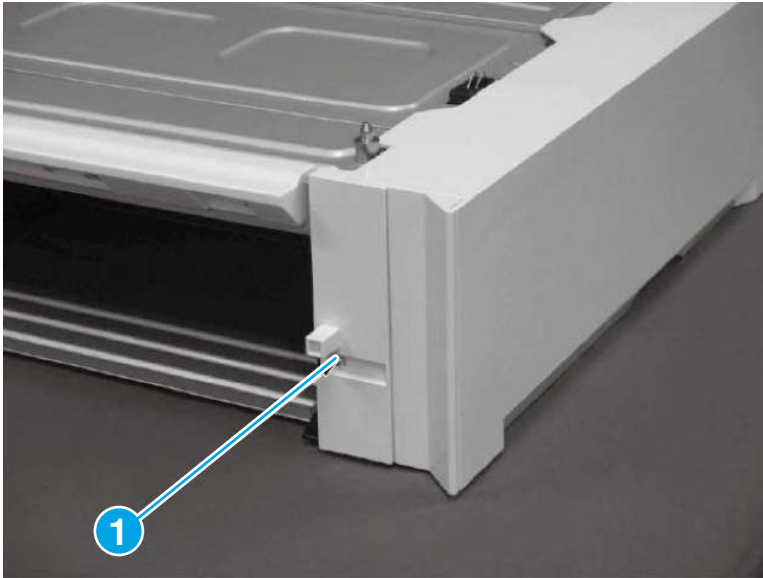
Print any pages necessary to make sure the printer is functioning correctly.

1. Remove the right cover (550-sheet paper feeder)

Follow the procedure below to remove and replace the right cover (550-sheet paper feeder).

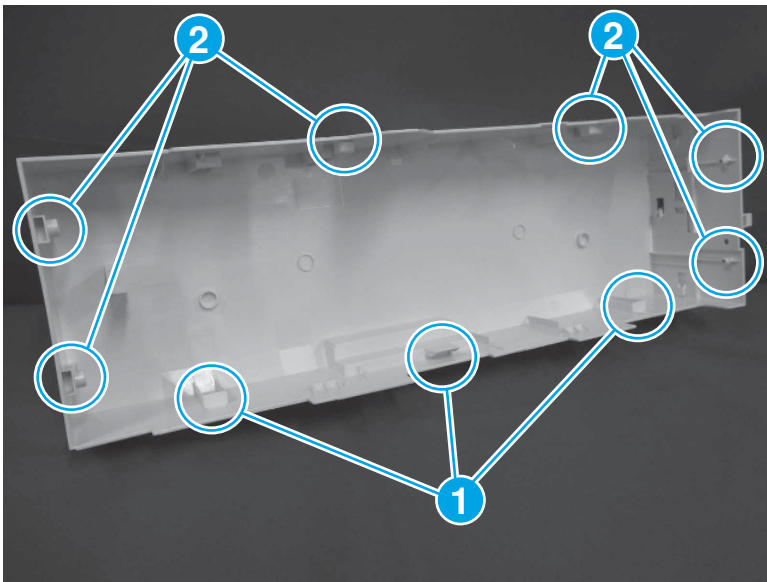
1. Remove one screw (callout 1).

Figure 5-1164 Remove one screw



2. Before proceeding, take note of the location of the mounting tabs (callout 1) and bosses (callout 2) on the inside of the cover.

Figure 5-1165 Location of the mounting tabs and bosses

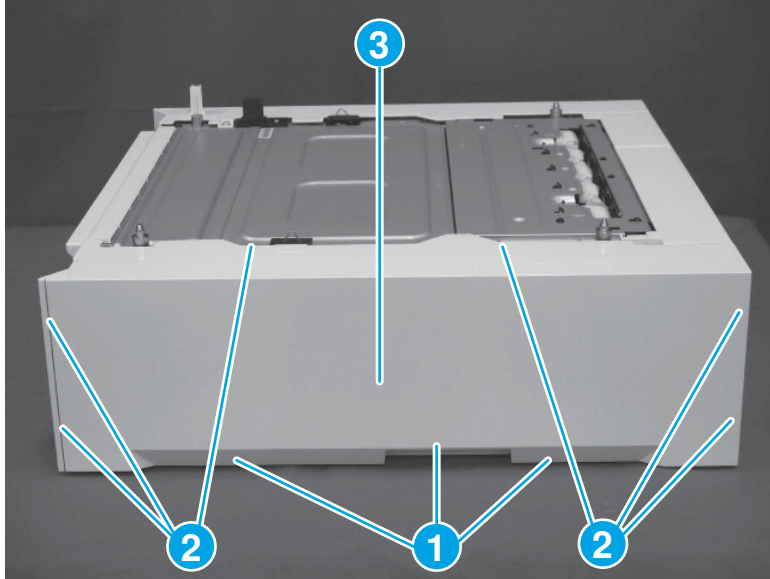


3. Release three tabs (callout 1), release six bosses (callout 2), and then remove the right cover (callout 3).



TIP: It might be easier to remove the cover if the top front boss is released first.

Figure 5-1166 Remove the right cover

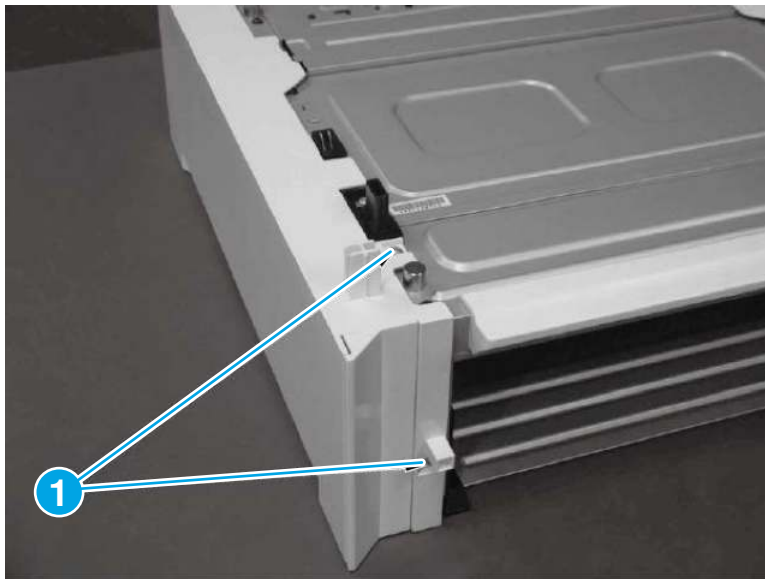


2. Remove the left cover (550-sheet paper feeder)

Follow the procedure below to remove and replace the left cover (550-sheet paper feeder).

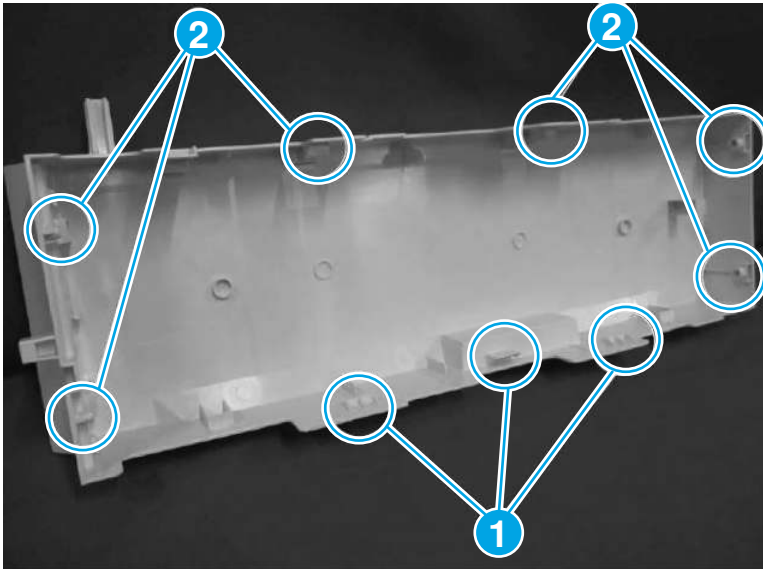
1. Remove two screws (callout 1).

Figure 5-1167 Remove two screws



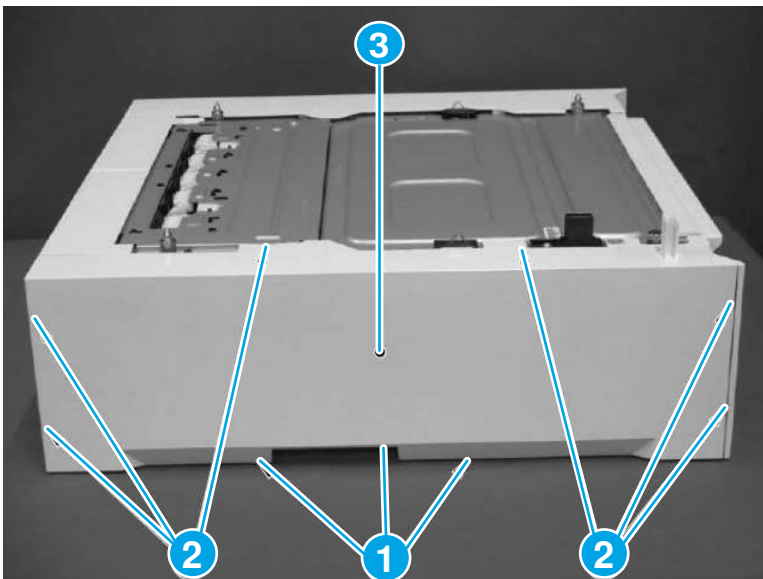
2. Before proceeding, take note of the location of the mounting tabs (callout 1) and bosses (callout 2) on the inside of the cover.

Figure 5-1168 Location of the mounting tabs and bosses



3. Release three tabs (callout 1), release six bosses (callout 2), and then remove the left cover (callout 3).

Figure 5-1169 Remove the left cover

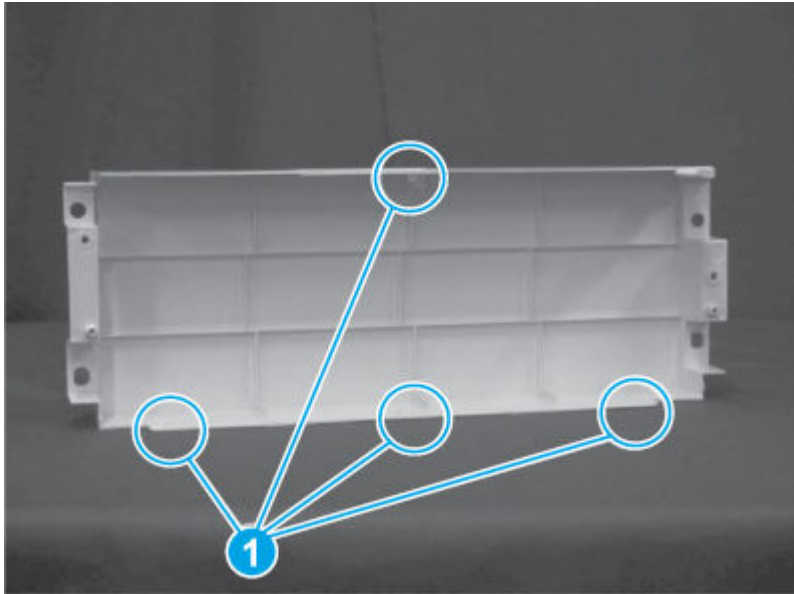


3. Remove the rear cover (550-sheet paper feeder)

Follow the procedure below to remove and replace the rear cover (550-sheet paper feeder).

1. Before proceeding, take note of the location of the mounting tabs (callout 1) on the inside of the cover.

Figure 5-1170 Location of the mounting tabs



2. Remove two screws (callout 1), release four tabs (callout 2), and then remove the rear cover (callout 3).


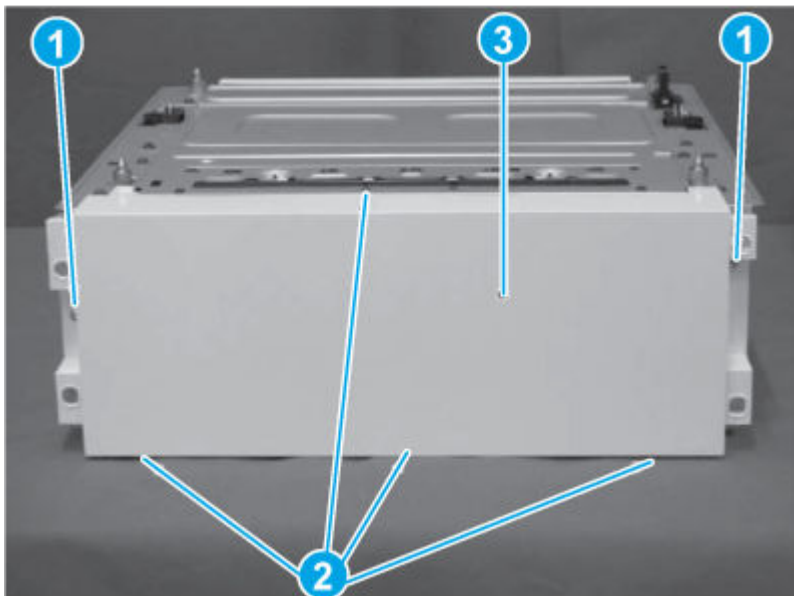
 **TIP:** It might be easier to remove the cover if the bottom tabs are released first.

Figure 5-1171 Remove the rear cover

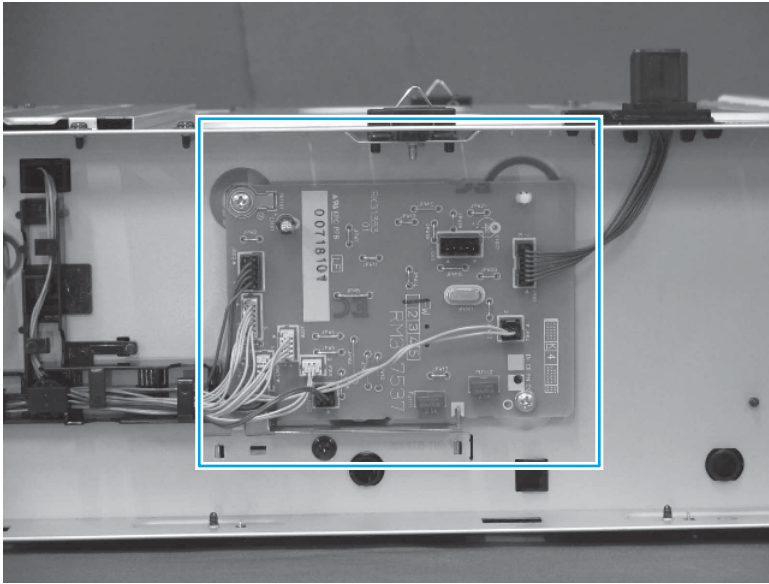


4. Remove the feed lower guide assembly (550-sheet paper feeder)

Follow the procedure below to remove and replace the feed lower guide.

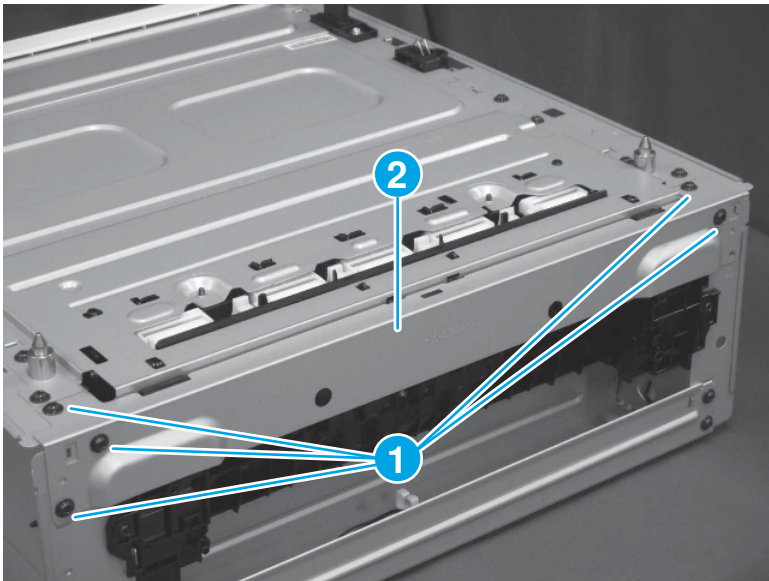
1. Disconnect all of the connectors on the controller PCA.

Figure 5-1172 Disconnect all connectors



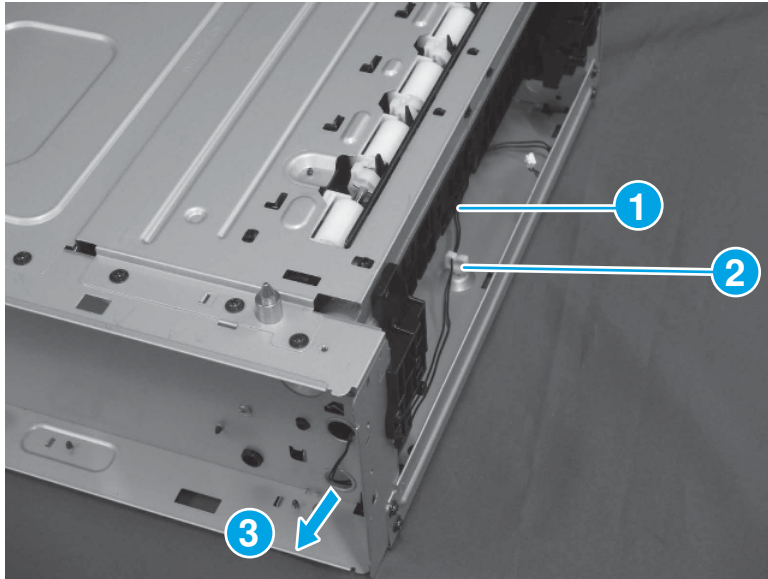
2. Remove five screws (callout 1), and then remove the sheet-metal plate (callout 2).

Figure 5-1173 Remove the plate



3. Release the wire harness (callout 1) from the retainer (callout 2), and then pass it through the opening in the chassis (callout 3).

Figure 5-1174 Release the wire harness



4. Turn the paper feeder over, and then do the following:
 - Remove one screw (callout 1), and then remove the holder (callout 2).
 - Release one tab (callout 3), and then remove the rubber foot pad (callout 4).


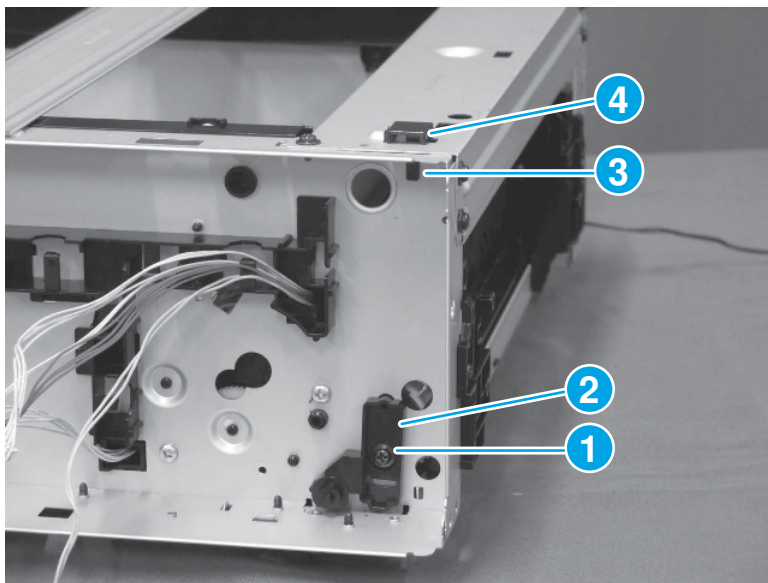
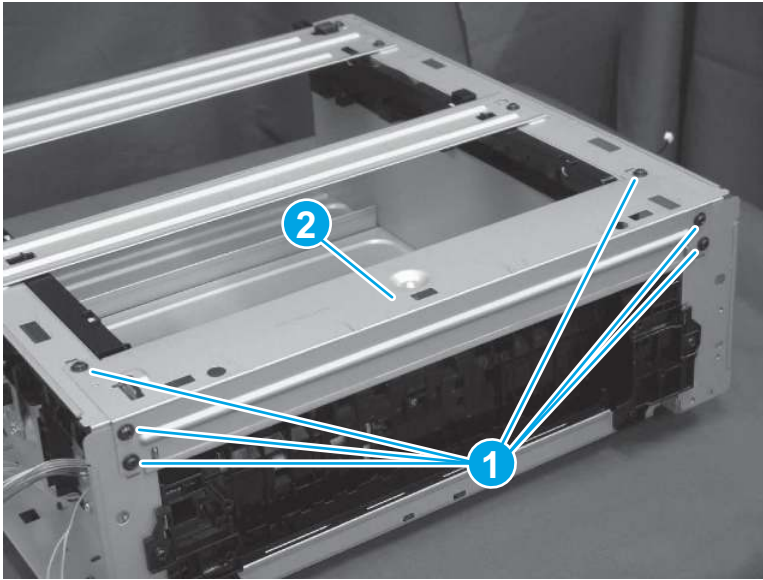
 **NOTE:** Repeat this step for a foot pad (not shown) located at the other end of the sheet-metal plate.

Figure 5-1175 Remove the holder and foot pads



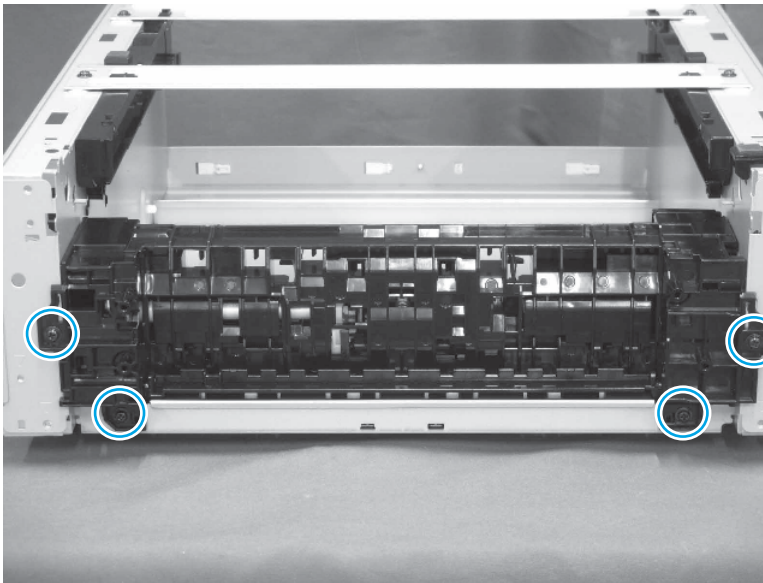
5. Remove six screws (callout 1), and then remove the sheet-metal plate (callout 2).

Figure 5-1176 Remove the plate



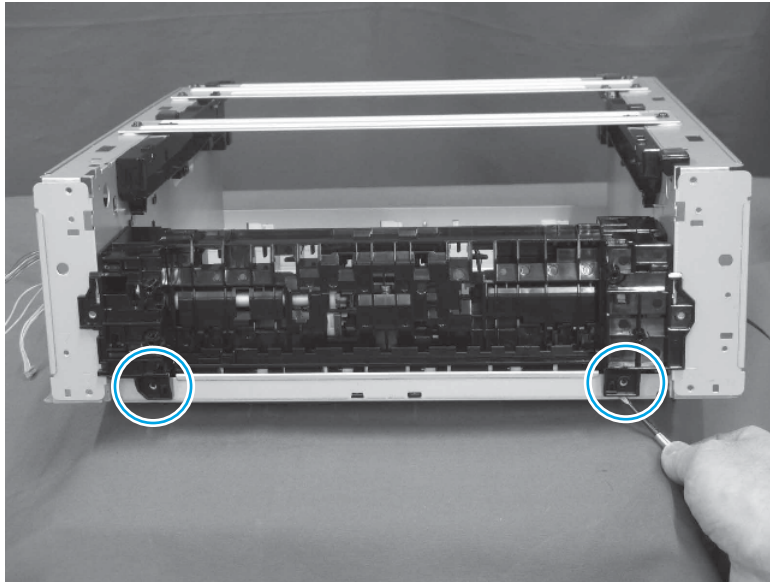
6. Remove four screws.

Figure 5-1177 Remove four screws



7. Use a small flat-blade screwdriver to release two bosses.

Figure 5-1178 Release two bosses



8. Remove the feed lower guide assembly.


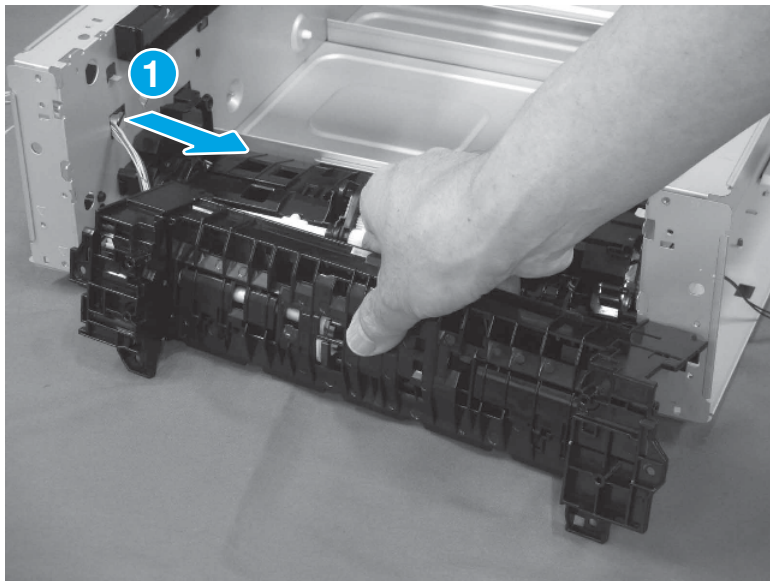
 **NOTE:** As the assembly is removed, pass the wire harness through the opening in the chassis (callout 1).


Figure 5-1179 Remove the assembly





5. Unpack the replacement assembly


Follow these steps to unpack the replacement assembly.


1. Dispose of the defective part.

 **NOTE:** HP recommends responsible disposal of the defective part.


2. Unpack the replacement part from the packaging.

 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Lifter drive assembly (550-sheet paper feeder)

Learn about lifter drive assembly removal (550-sheet paper feeder).


Mean time to repair: 22 minutes

Service level: Medium

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-58 Part information

Part number	Part description
RM2-2769-000CN	Lift drive assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

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

Post service test

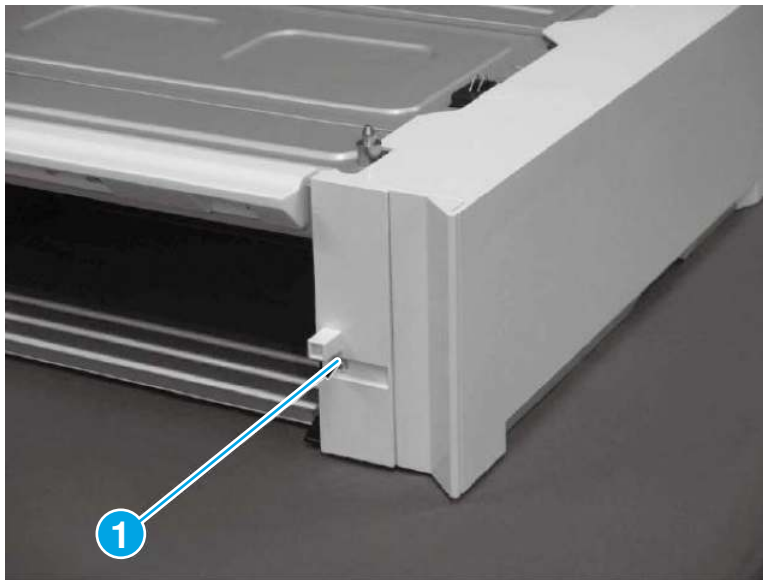
Print any pages necessary to make sure the printer is functioning correctly.

1. Remove the right cover (550-sheet paper feeder)

Follow the procedure below to remove and replace the right cover (550-sheet paper feeder).

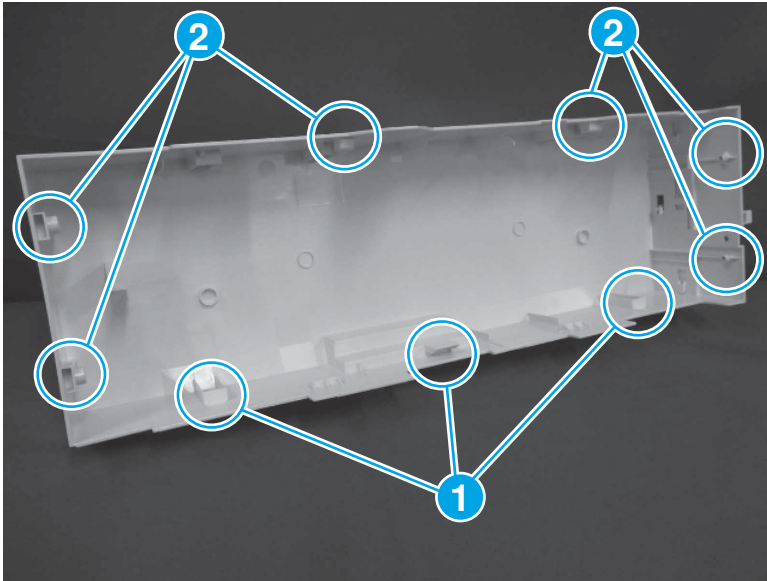
1. Remove one screw (callout 1).

Figure 5-1180 Remove one screw



2. Before proceeding, take note of the location of the mounting tabs (callout 1) and bosses (callout 2) on the inside of the cover.

Figure 5-1181 Location of the mounting tabs and bosses



3. Release three tabs (callout 1), release six bosses (callout 2), and then remove the right cover (callout 3).


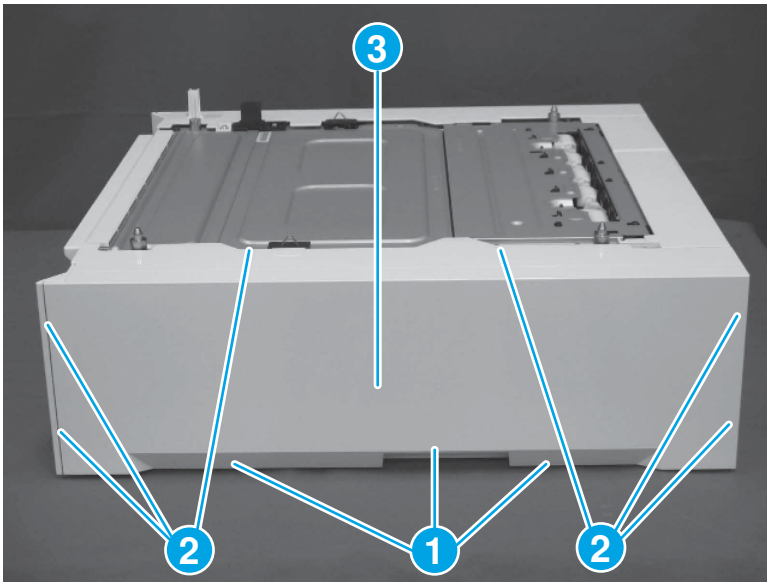
 **TIP:** It might be easier to remove the cover if the top front boss is released first.

Figure 5-1182 Remove the right cover

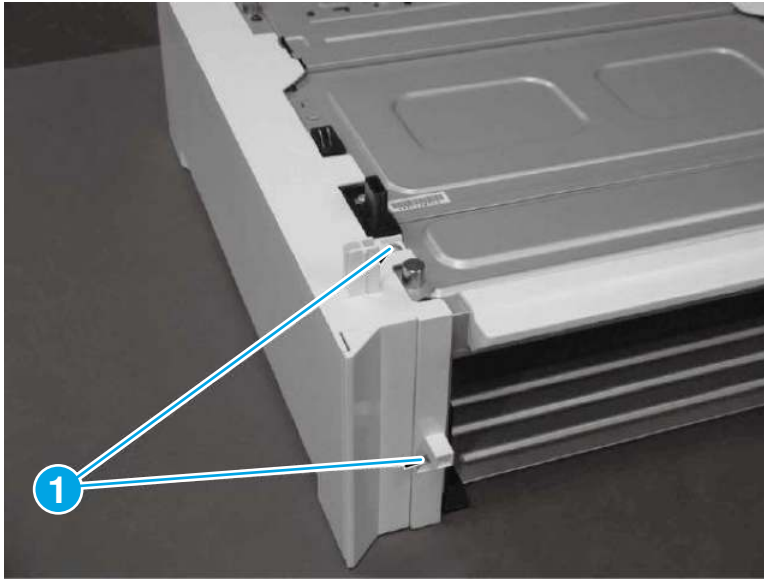


2. Remove the left cover (550-sheet paper feeder)

Follow the procedure below to remove and replace the left cover (550-sheet paper feeder).

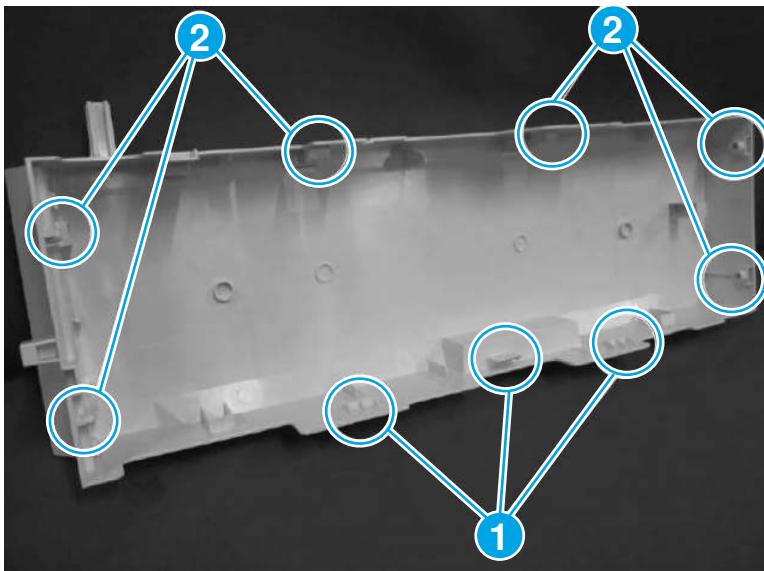
1. Remove two screws (callout 1).

Figure 5-1183 Remove two screws



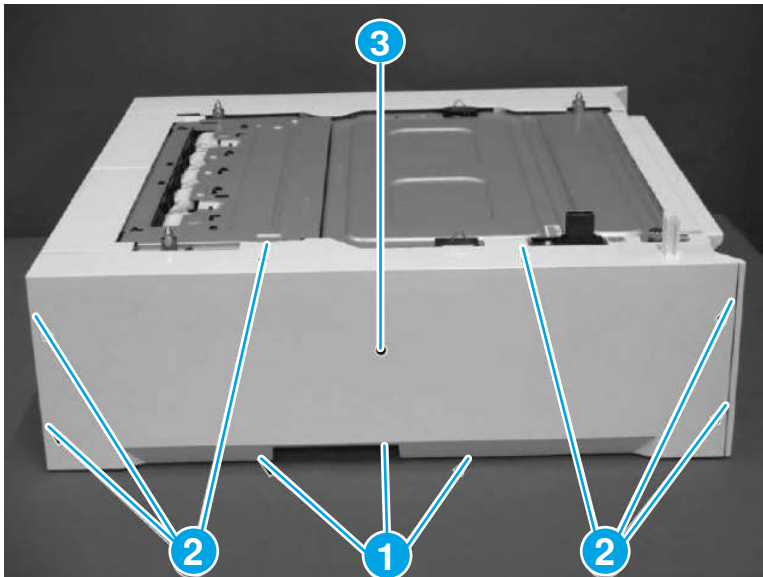
2. Before proceeding, take note of the location of the mounting tabs (callout 1) and bosses (callout 2) on the inside of the cover.

Figure 5-1184 Location of the mounting tabs and bosses



3. Release three tabs (callout 1), release six bosses (callout 2), and then remove the left cover (callout 3).

Figure 5-1185 Remove the left cover

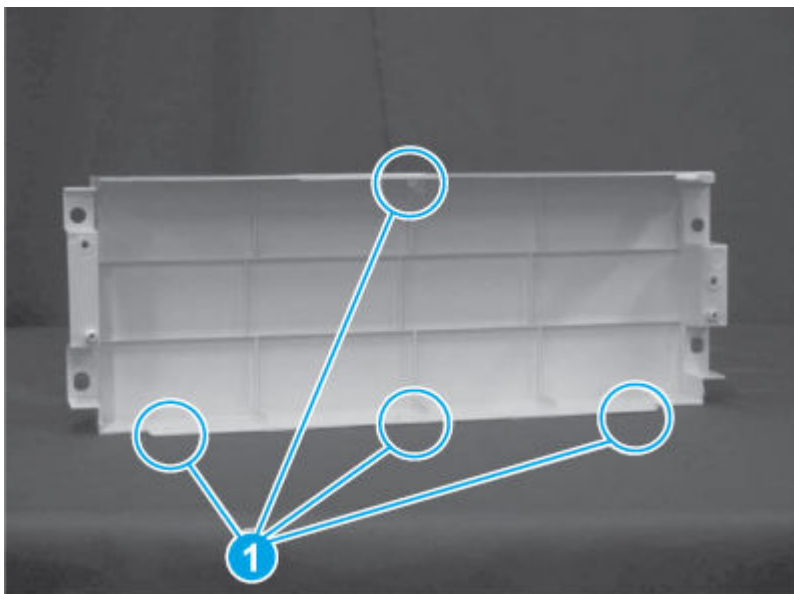


3. Remove the rear cover (550-sheet paper feeder)

Follow the procedure below to remove and replace the rear cover (550-sheet paper feeder).

1. Before proceeding, take note of the location of the mounting tabs (callout 1) on the inside of the cover.

Figure 5-1186 Location of the mounting tabs



2. Remove two screws (callout 1), release four tabs (callout 2), and then remove the rear cover (callout 3).


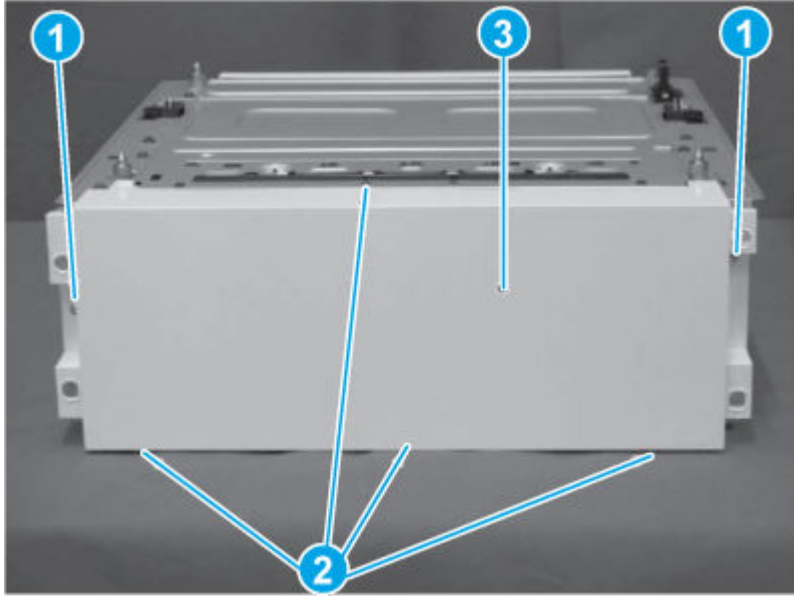
 **TIP:** It might be easier to remove the cover if the bottom tabs are released first.

Figure 5-1187 Remove the rear cover

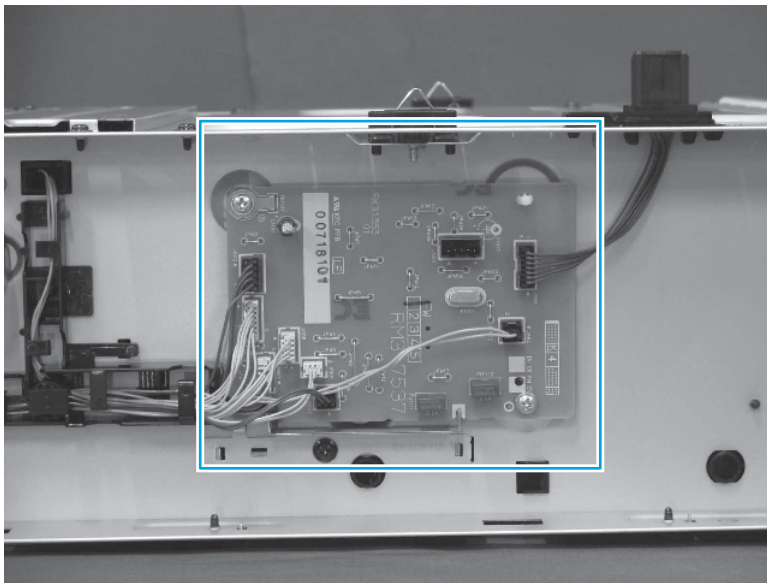


4. Remove the feed lower guide assembly (550-sheet paper feeder)

Follow the procedure below to remove and replace the feed lower guide.

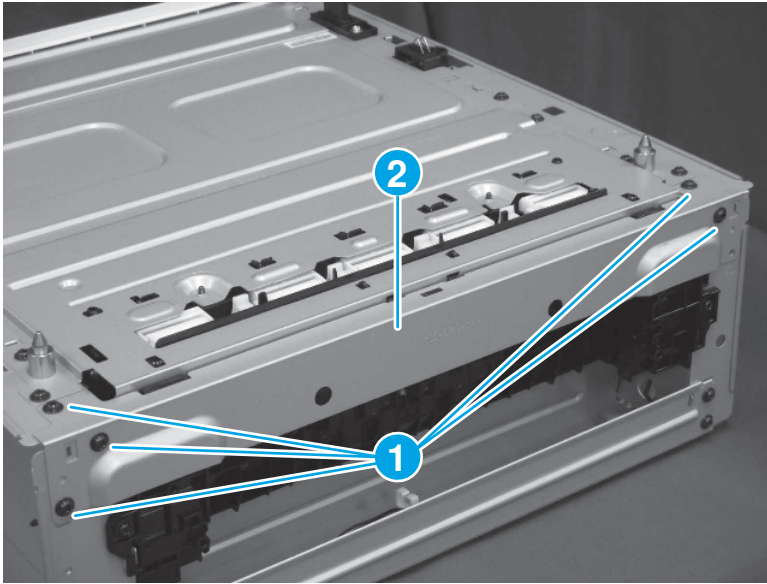
1. Disconnect all of the connectors on the controller PCA.

Figure 5-1188 Disconnect all connectors



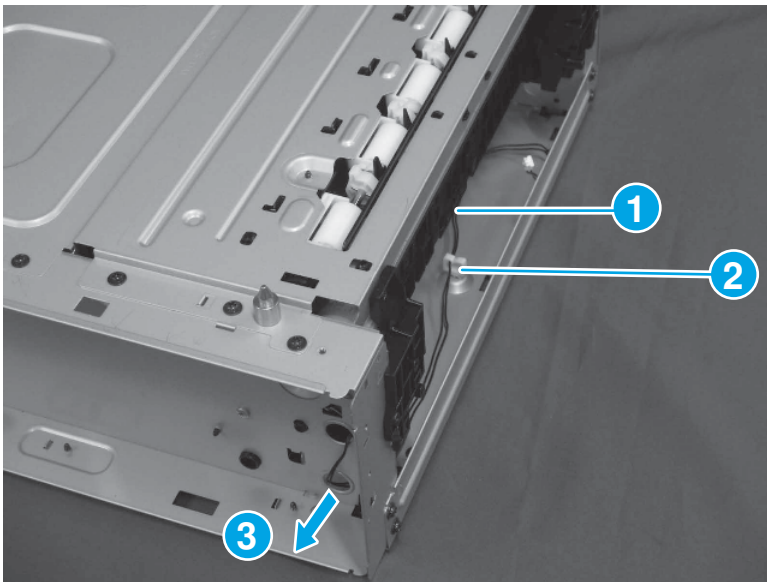
2. Remove five screws (callout 1), and then remove the sheet-metal plate (callout 2).

Figure 5-1189 Remove the plate



3. Release the wire harness (callout 1) from the retainer (callout 2), and then pass it through the opening in the chassis (callout 3).

Figure 5-1190 Release the wire harness

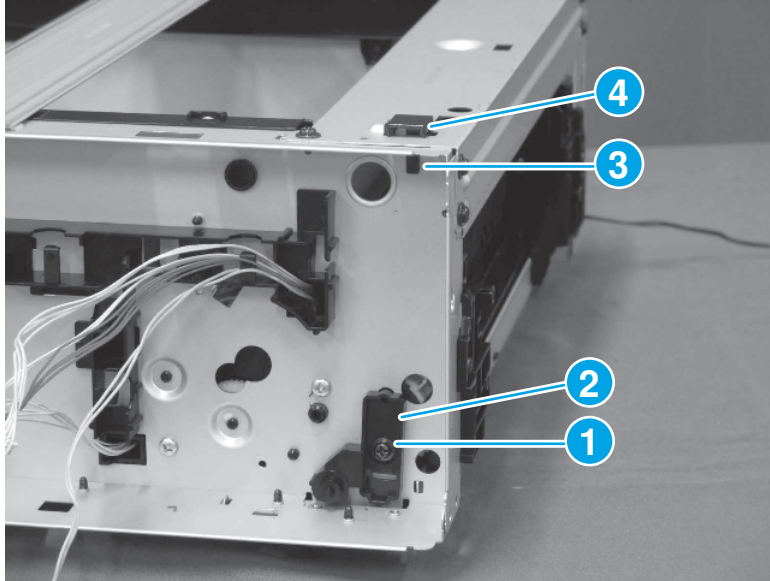


4. Turn the paper feeder over, and then do the following:
 - Remove one screw (callout 1), and then remove the holder (callout 2).
 - Release one tab (callout 3), and then remove the rubber foot pad (callout 4).



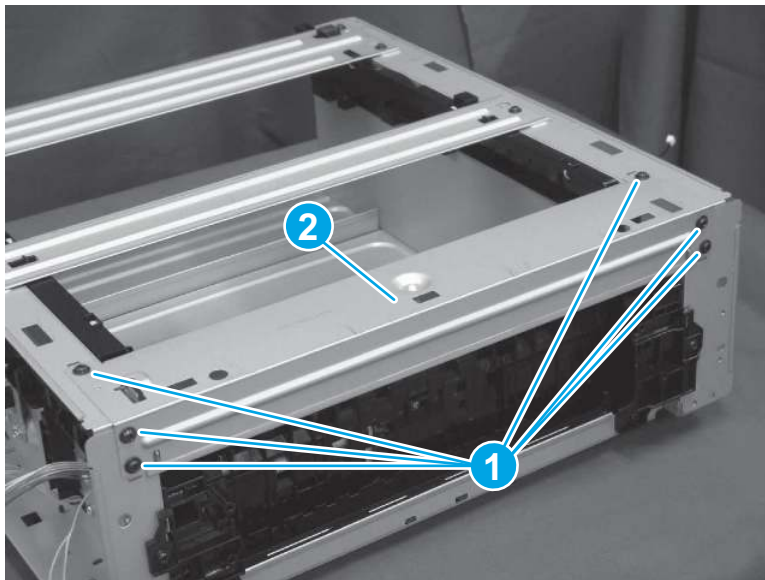
NOTE: Repeat this step for a foot pad (not shown) located at the other end of the sheet-metal plate.

Figure 5-1191 Remove the holder and foot pads



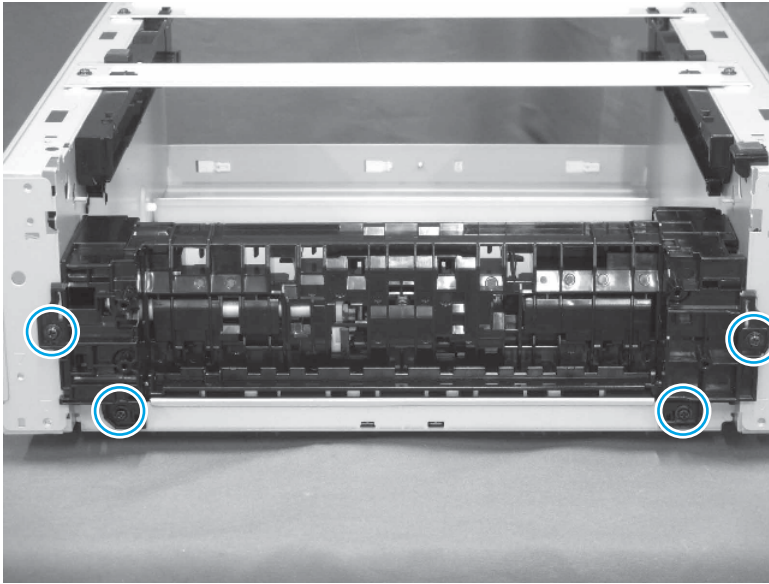
5. Remove six screws (callout 1), and then remove the sheet-metal plate (callout 2).

Figure 5-1192 Remove the plate



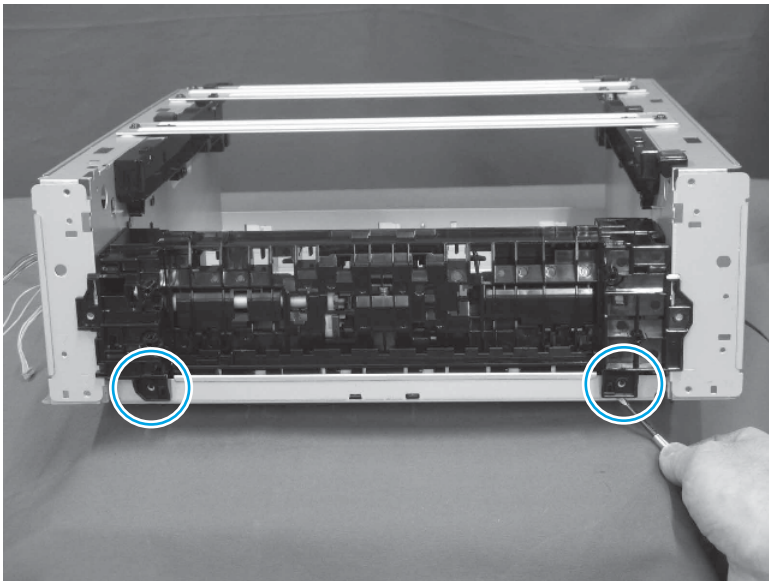
6. Remove four screws.

Figure 5-1193 Remove four screws



7. Use a small flat-blade screwdriver to release two bosses.

Figure 5-1194 Release two bosses

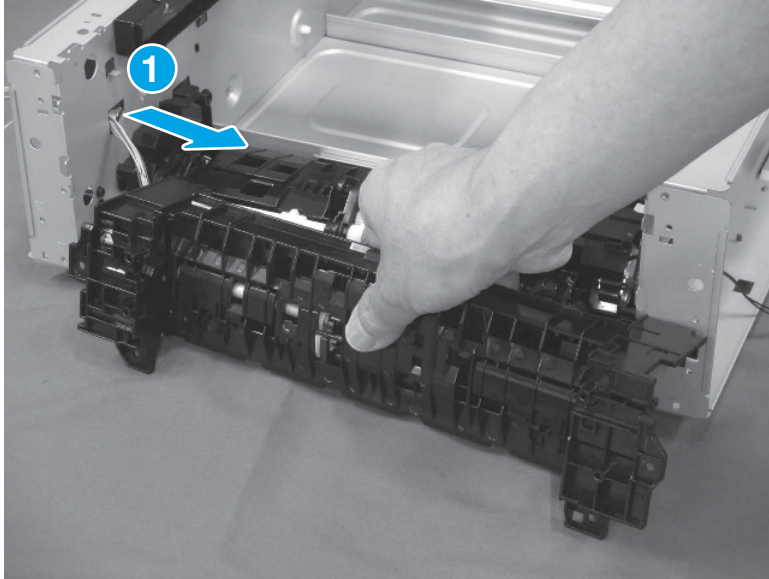


8. Remove the feed lower guide assembly.



NOTE: As the assembly is removed, pass the wire harness through the opening in the chassis (callout 1).

Figure 5-1195 Remove the assembly

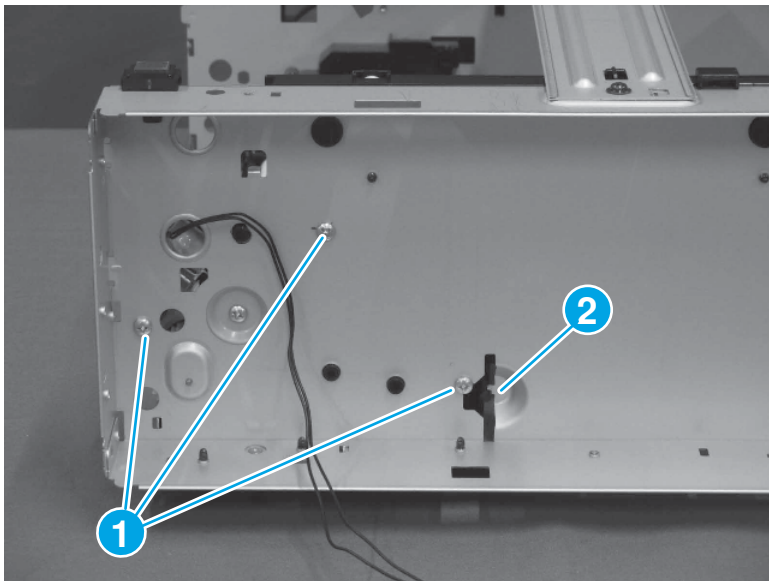


5. Remove the lifter drive assembly (550-sheet paper feeder)

Follow the procedure below to remove and replace the lifter drive assembly.

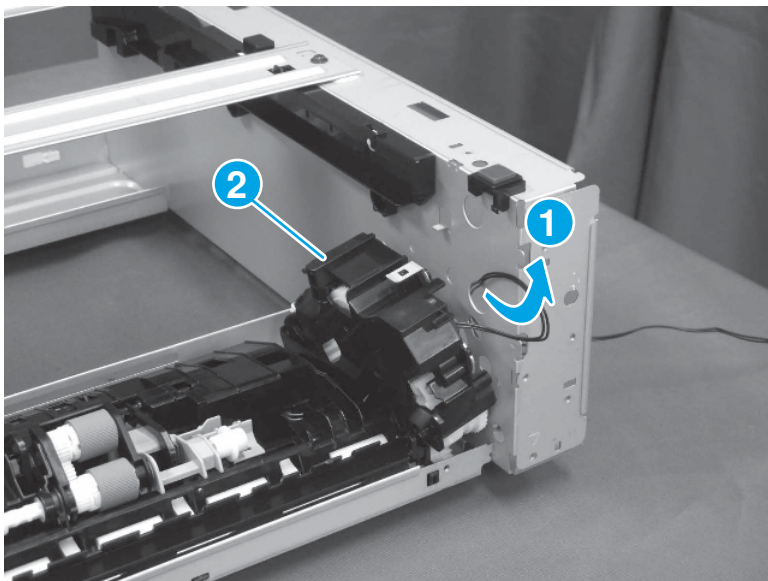
1. Remove three screws (callout 1), and then release one tab (callout 2).

Figure 5-1196 Remove the screws and release the tab



2. Pass the wire harness through the opening in the chassis (callout 1), and then remove the lifter drive assembly (callout 2).

Figure 5-1197 Remove the assembly



6. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Feed upper guide assembly (550-sheet paper feeder)

Learn about feed upper guide removal (550-sheet paper feeder).

Mean time to repair: 27 minutes

Service level: Medium

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-59 Part information

Part number	Part description
RM2-2775-000CN	Paper feed guide assembly, upper

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

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

Post service test

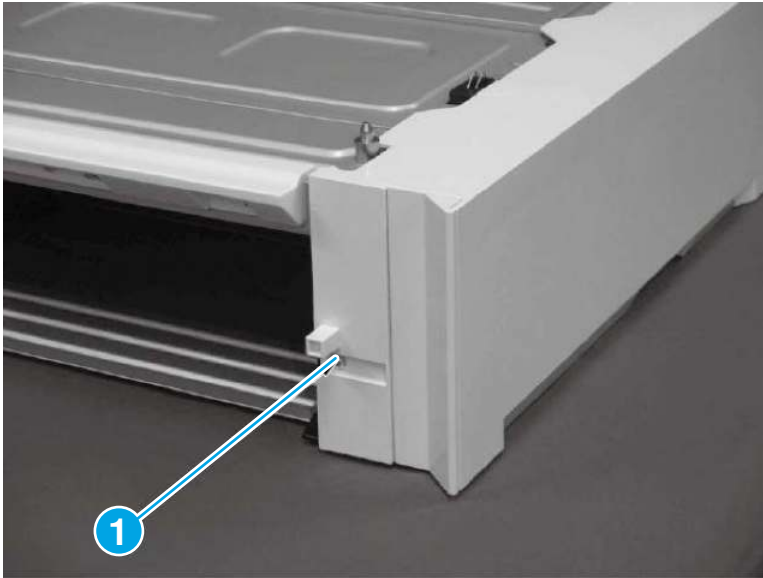
Print any pages necessary to make sure the printer is functioning correctly.

1. Remove the right cover (550-sheet paper feeder)

Follow the procedure below to remove and replace the right cover (550-sheet paper feeder).

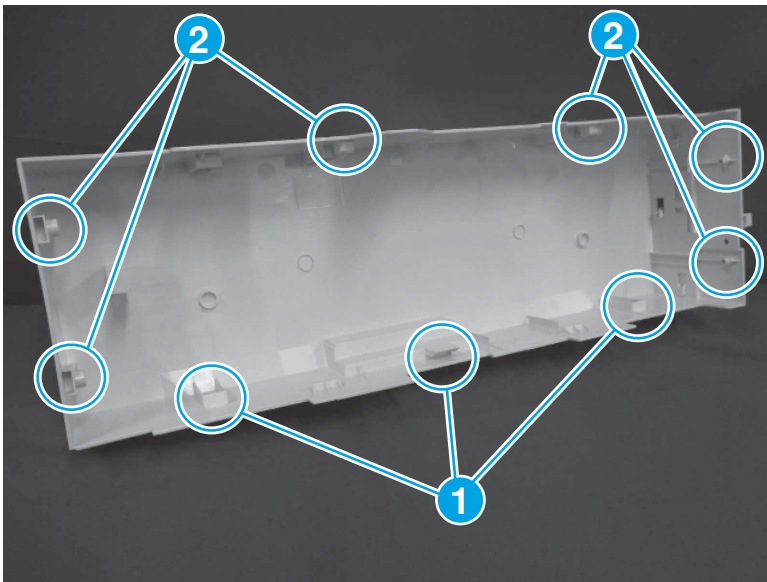
1. Remove one screw (callout 1).

Figure 5-1198 Remove one screw



2. Before proceeding, take note of the location of the mounting tabs (callout 1) and bosses (callout 2) on the inside of the cover.

Figure 5-1199 Location of the mounting tabs and bosses

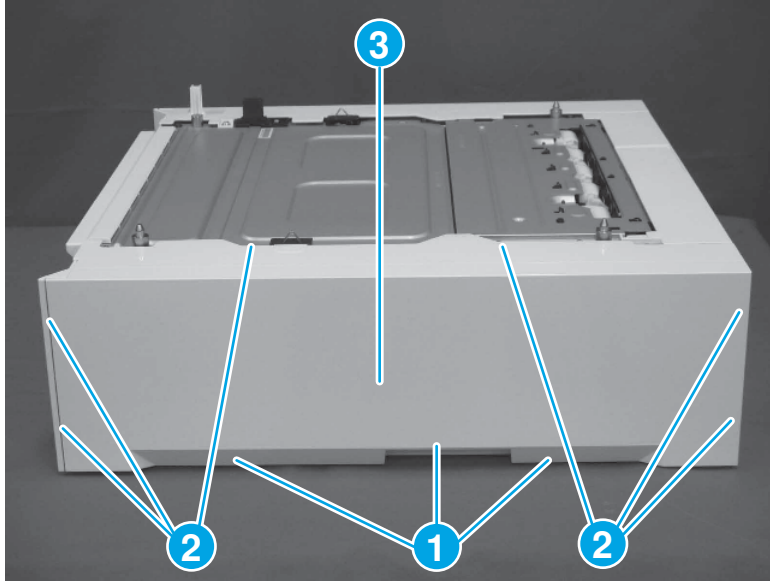


3. Release three tabs (callout 1), release six bosses (callout 2), and then remove the right cover (callout 3).



TIP: It might be easier to remove the cover if the top front boss is released first.

Figure 5-1200 Remove the right cover

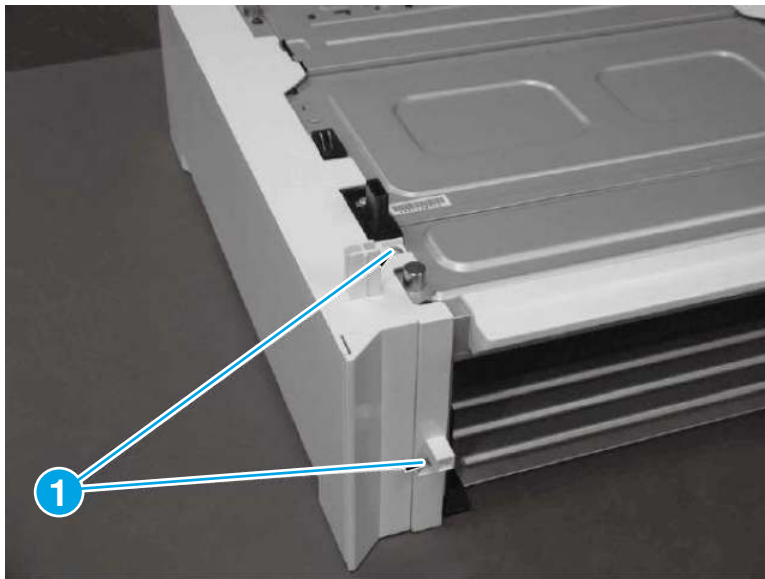


2. Remove the left cover (550-sheet paper feeder)

Follow the procedure below to remove and replace the left cover (550-sheet paper feeder).

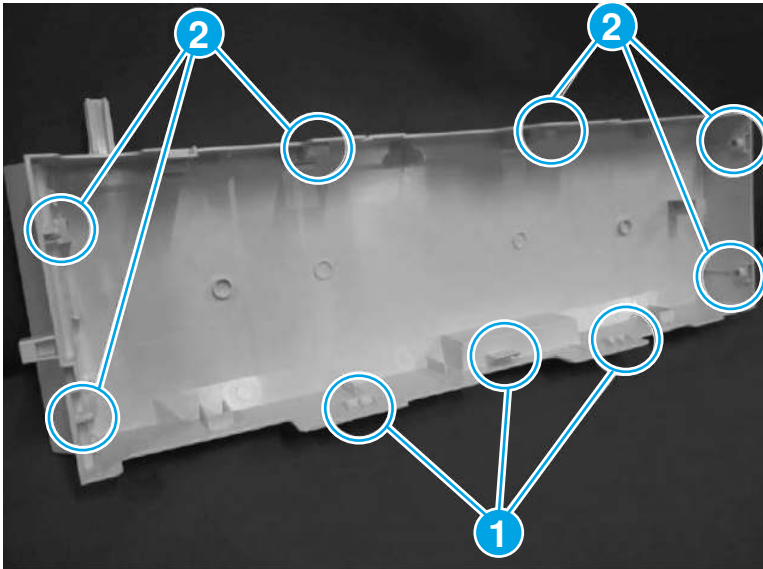
1. Remove two screws (callout 1).

Figure 5-1201 Remove two screws



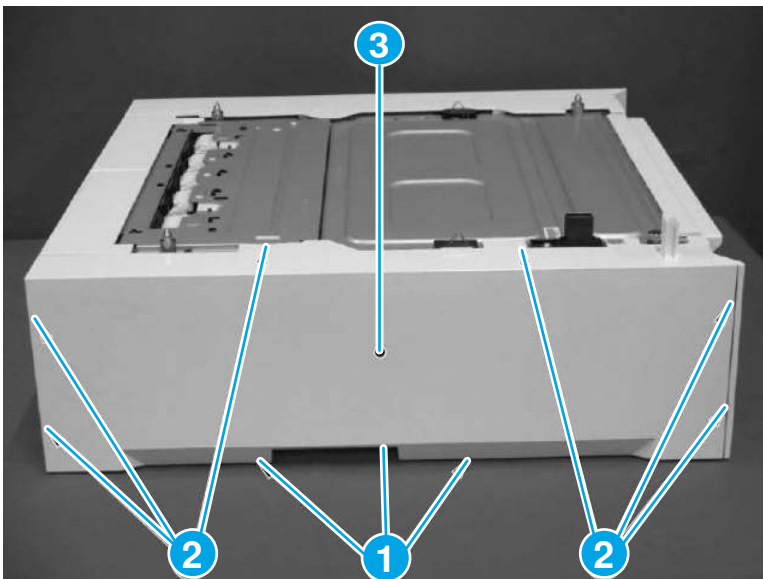
2. Before proceeding, take note of the location of the mounting tabs (callout 1) and bosses (callout 2) on the inside of the cover.

Figure 5-1202 Location of the mounting tabs and bosses



3. Release three tabs (callout 1), release six bosses (callout 2), and then remove the left cover (callout 3).

Figure 5-1203 Remove the left cover

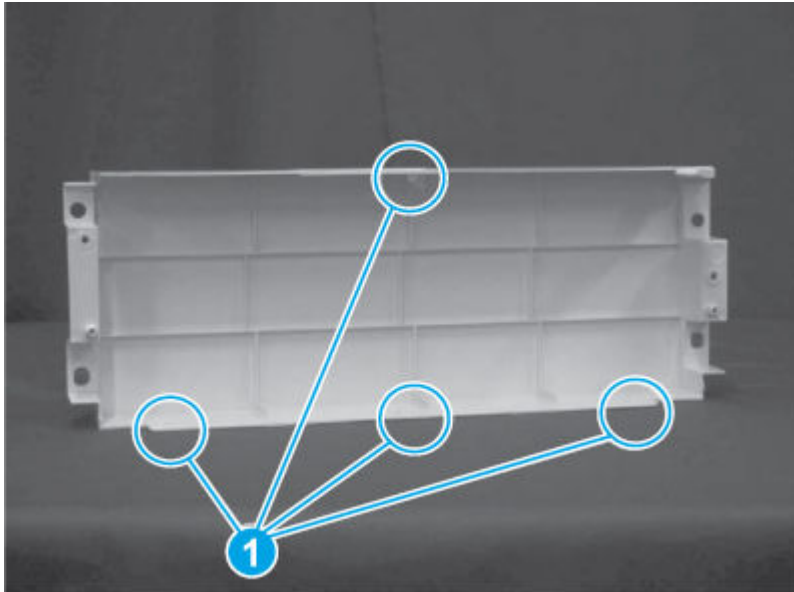


3. Remove the rear cover (550-sheet paper feeder)

Follow the procedure below to remove and replace the rear cover (550-sheet paper feeder).

1. Before proceeding, take note of the location of the mounting tabs (callout 1) on the inside of the cover.

Figure 5-1204 Location of the mounting tabs



2. Remove two screws (callout 1), release four tabs (callout 2), and then remove the rear cover (callout 3).


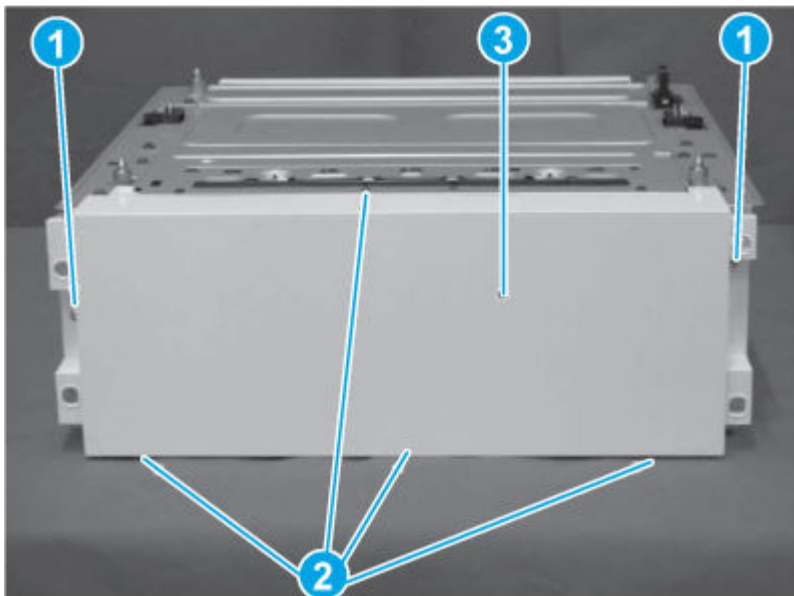
 **TIP:** It might be easier to remove the cover if the bottom tabs are released first.

Figure 5-1205 Remove the rear cover

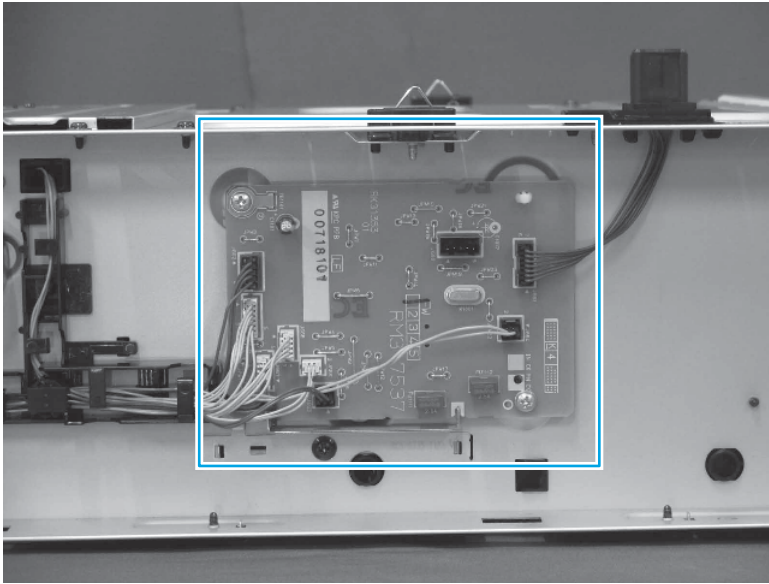


4. Remove the feed lower guide assembly (550-sheet paper feeder)

Follow the procedure below to remove and replace the feed lower guide.

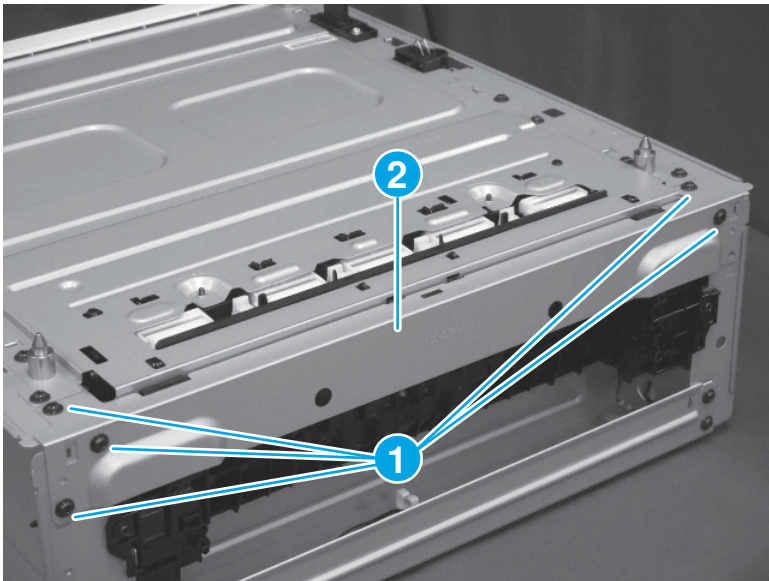
1. Disconnect all of the connectors on the controller PCA.

Figure 5-1206 Disconnect all connectors



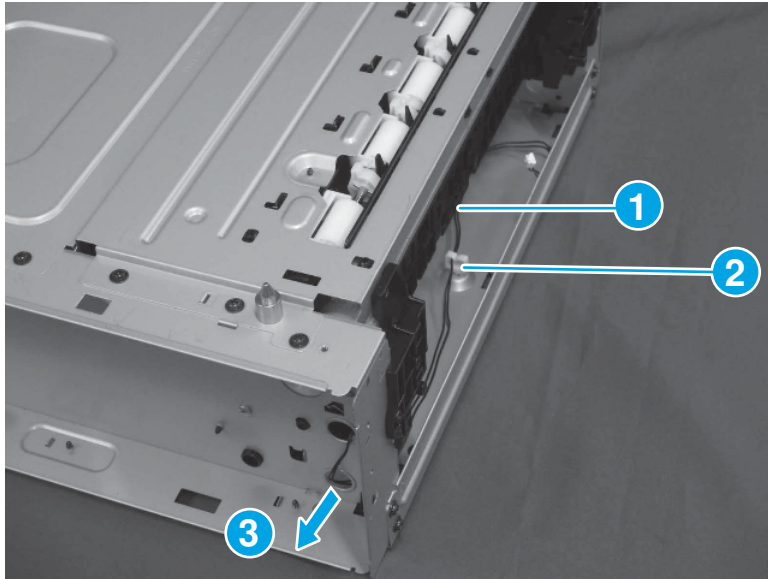
2. Remove five screws (callout 1), and then remove the sheet-metal plate (callout 2).

Figure 5-1207 Remove the plate



3. Release the wire harness (callout 1) from the retainer (callout 2), and then pass it through the opening in the chassis (callout 3).

Figure 5-1208 Release the wire harness



4. Turn the paper feeder over, and then do the following:
 - Remove one screw (callout 1), and then remove the holder (callout 2).
 - Release one tab (callout 3), and then remove the rubber foot pad (callout 4).


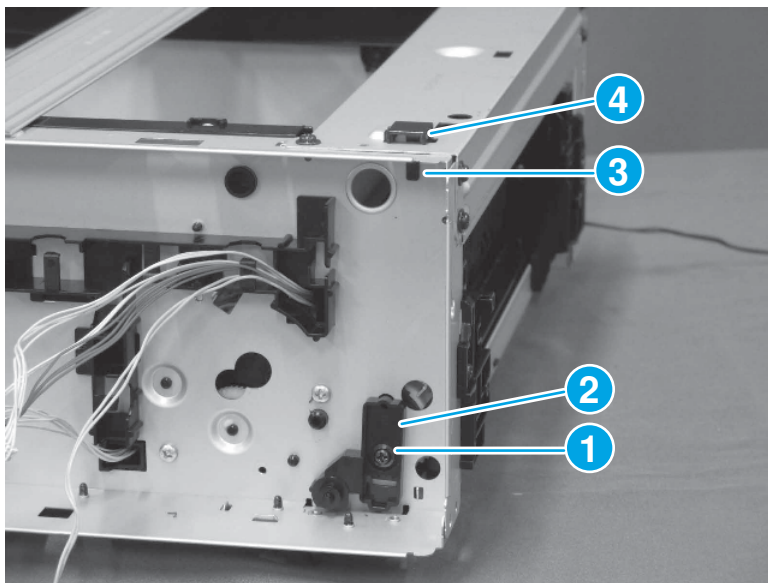
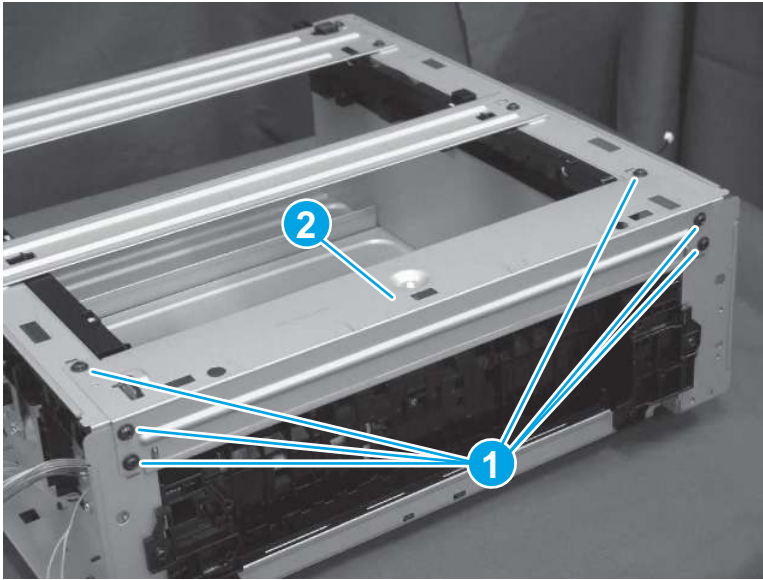
 **NOTE:** Repeat this step for a foot pad (not shown) located at the other end of the sheet-metal plate.

Figure 5-1209 Remove the holder and foot pads



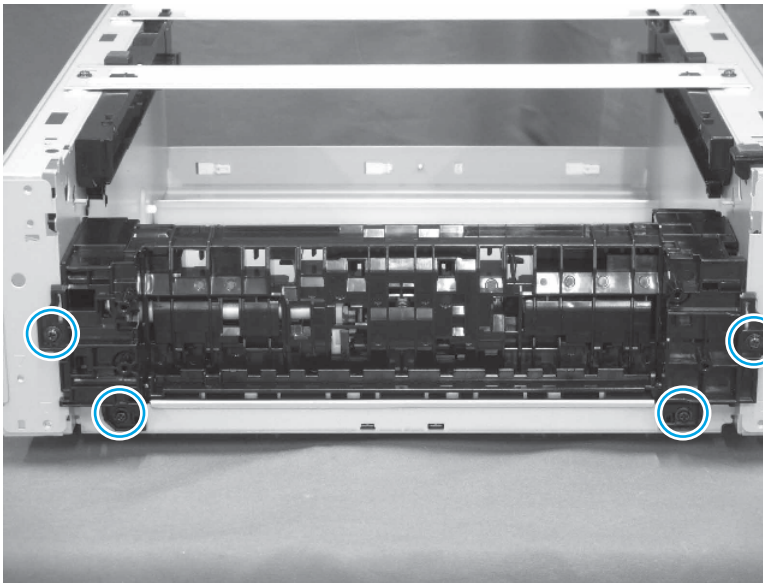
5. Remove six screws (callout 1), and then remove the sheet-metal plate (callout 2).

Figure 5-1210 Remove the plate



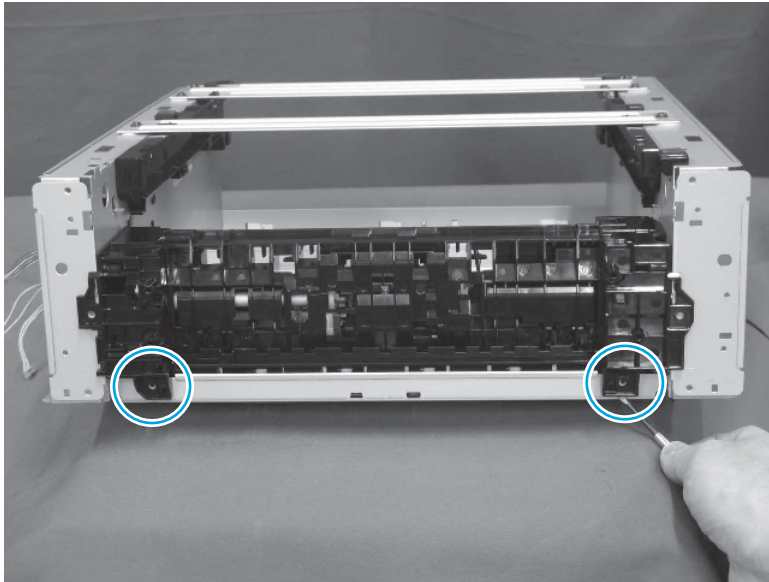
6. Remove four screws.

Figure 5-1211 Remove four screws



7. Use a small flat-blade screwdriver to release two bosses.

Figure 5-1212 Release two bosses



8. Remove the feed lower guide assembly.


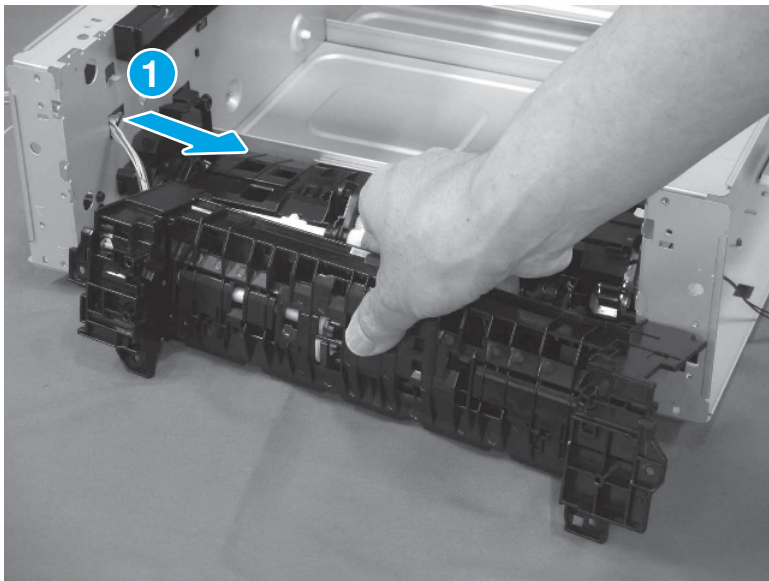
 **NOTE:** As the assembly is removed, pass the wire harness through the opening in the chassis (callout 1).

Figure 5-1213 Remove the assembly

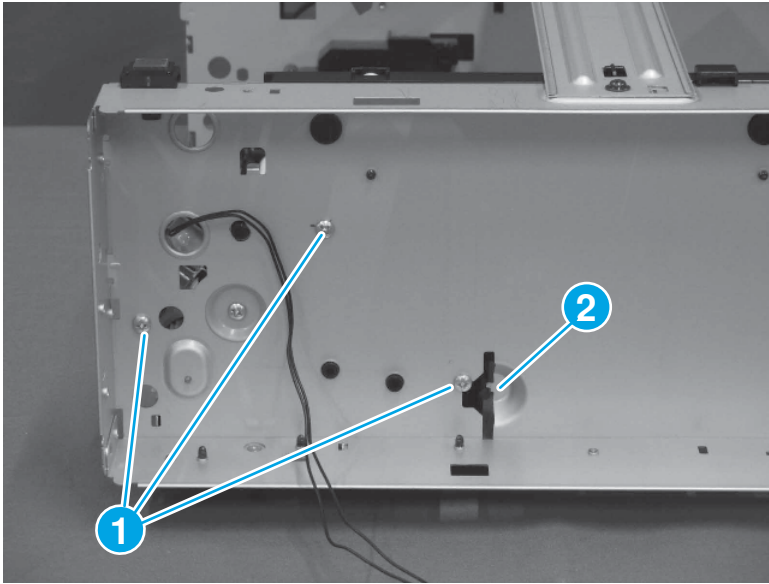


5. Remove the lifter drive assembly (550-sheet paper feeder)

Follow the procedure below to remove and replace the lifter drive assembly.

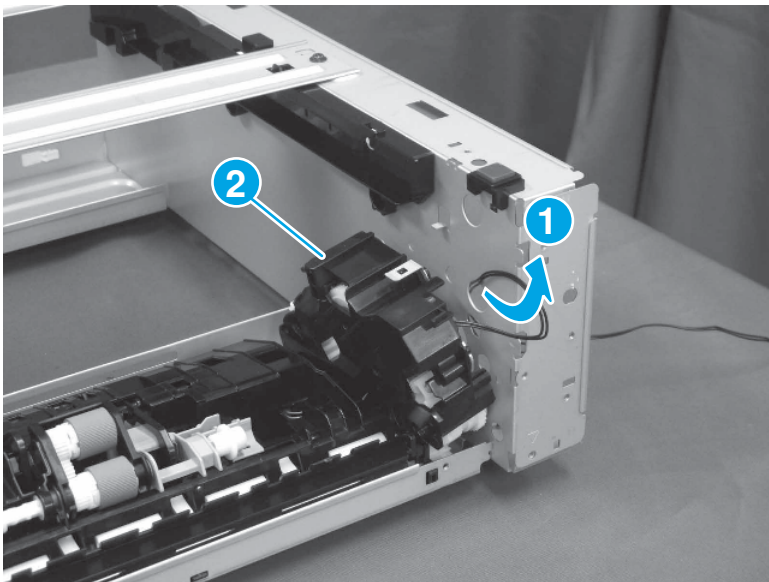
1. Remove three screws (callout 1), and then release one tab (callout 2).

Figure 5-1214 Remove the screws and release the tab



2. Pass the wire harness through the opening in the chassis (callout 1), and then remove the lifter drive assembly (callout 2).

Figure 5-1215 Remove the assembly

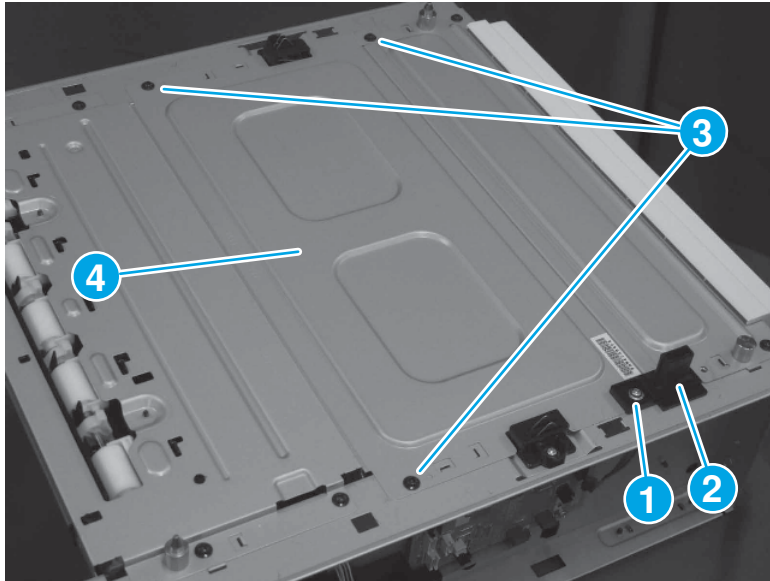


6. Remove the feed upper guide (550-sheet paper feeder)

Follow the procedure below to remove and replace the feed upper guide.

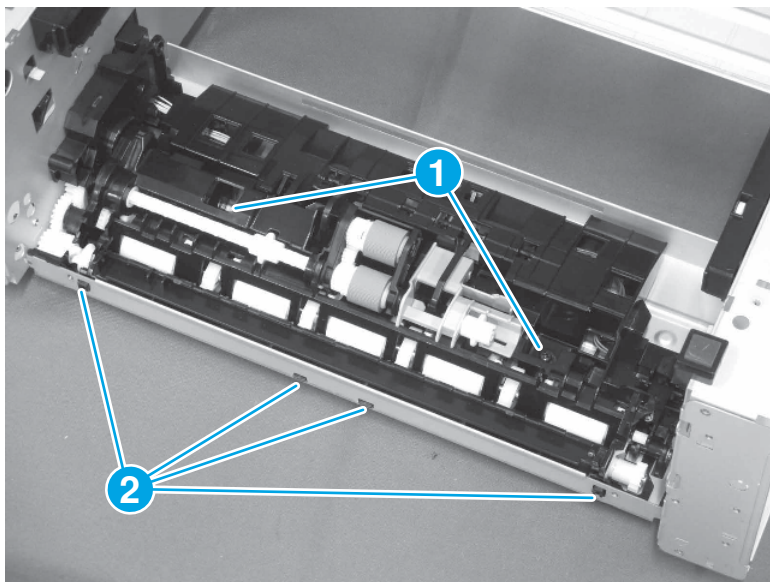
1. Do the following:
 - Remove one screw (callout 1), and then remove the holder (callout 2).
 - Remove three screws (callout 3), and then remove the sheet-metal plate (callout 4)

Figure 5-1216 Remove the holder and plate



2. Remove two screws (callout 1), and then release four bosses (callout 2).

Figure 5-1217 Remove the screws and release the bosses



3. Remove the feed upper guide assembly.


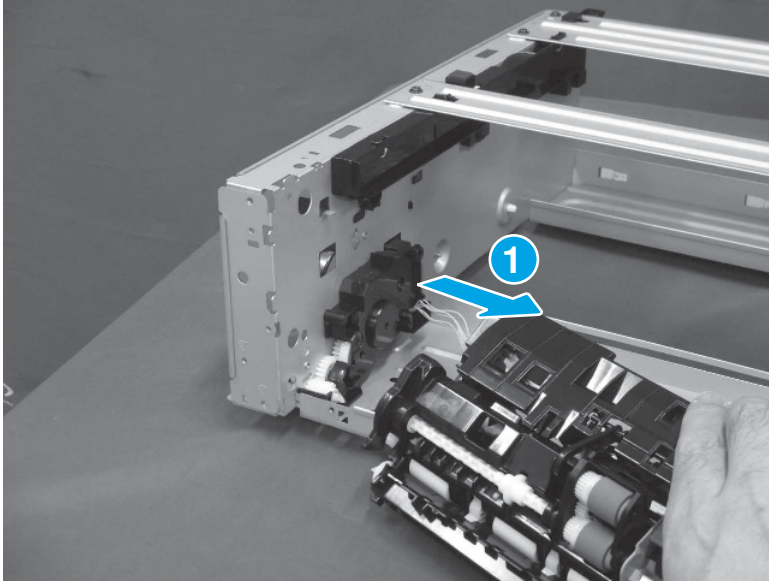
 **NOTE:** As the assembly is removed, pass the wire harness through the opening in the chassis (callout 1).

Figure 5-1218 Remove the assembly



7. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Pickup drive assembly (550-sheet paper feeder)

Learn about pickup drive assembly removal (550-sheet paper feeder).

Mean time to repair: 30 minutes

Service level: Medium

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-60 Part information

Part number	Part description
RM2-2776-000CN	Paper pickup drive assembly

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

After performing service

Turn the printer power on

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

Post service test

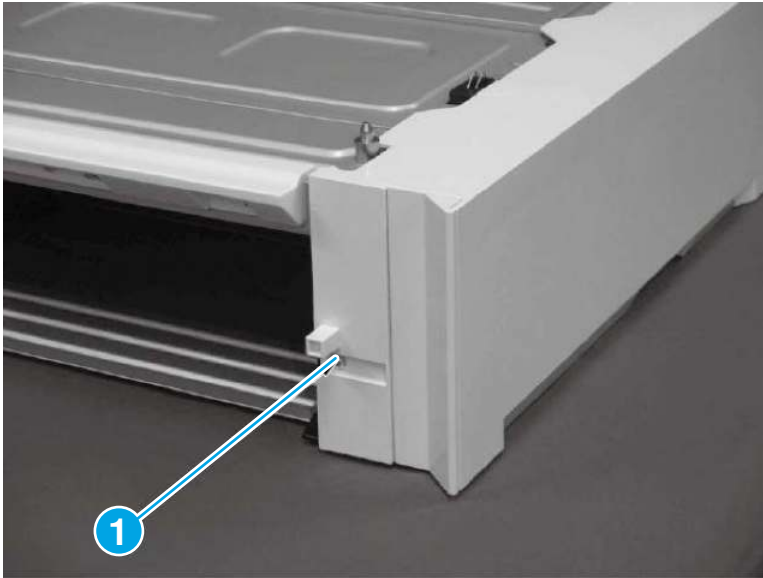
Print any pages necessary to make sure the printer is functioning correctly.

1. Remove the right cover (550-sheet paper feeder)

Follow the procedure below to remove and replace the right cover (550-sheet paper feeder).

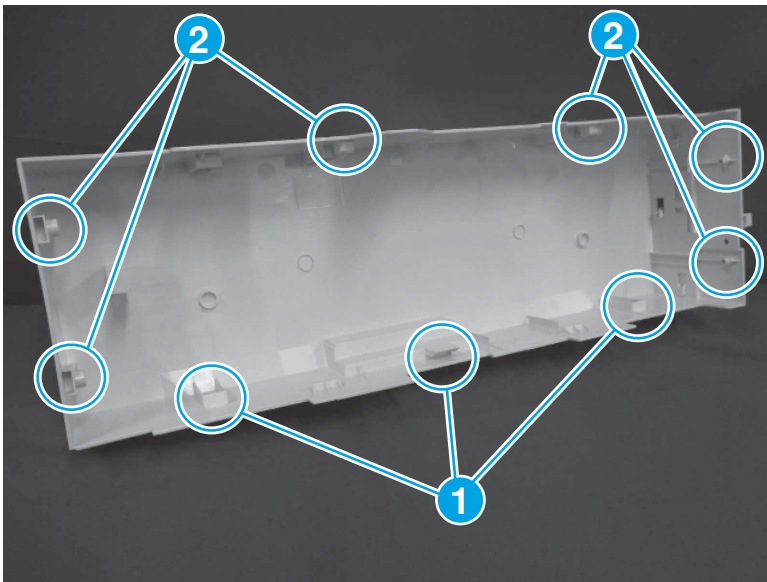
1. Remove one screw (callout 1).

Figure 5-1219 Remove one screw



2. Before proceeding, take note of the location of the mounting tabs (callout 1) and bosses (callout 2) on the inside of the cover.

Figure 5-1220 Location of the mounting tabs and bosses

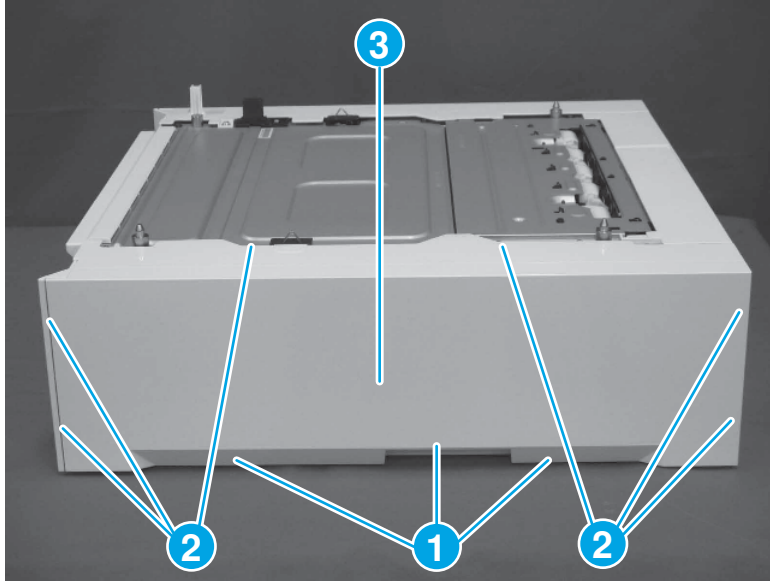


3. Release three tabs (callout 1), release six bosses (callout 2), and then remove the right cover (callout 3).



TIP: It might be easier to remove the cover if the top front boss is released first.

Figure 5-1221 Remove the right cover

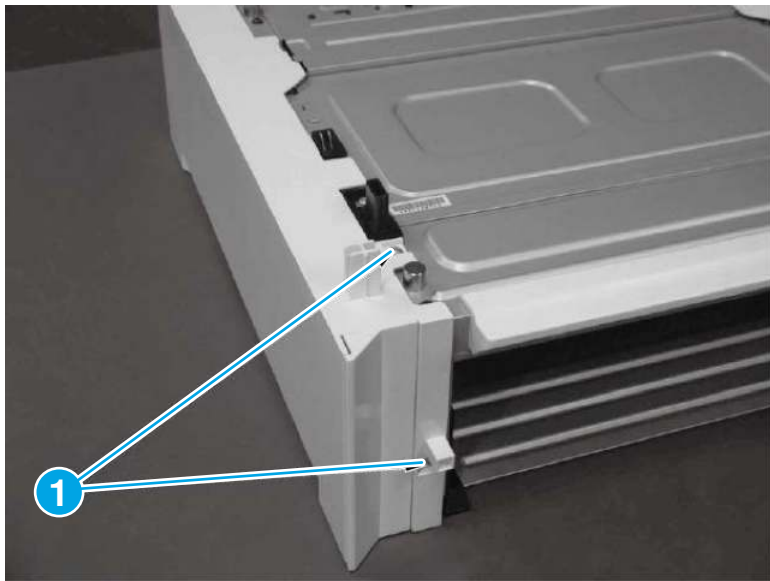


2. Remove the left cover (550-sheet paper feeder)

Follow the procedure below to remove and replace the left cover (550-sheet paper feeder).

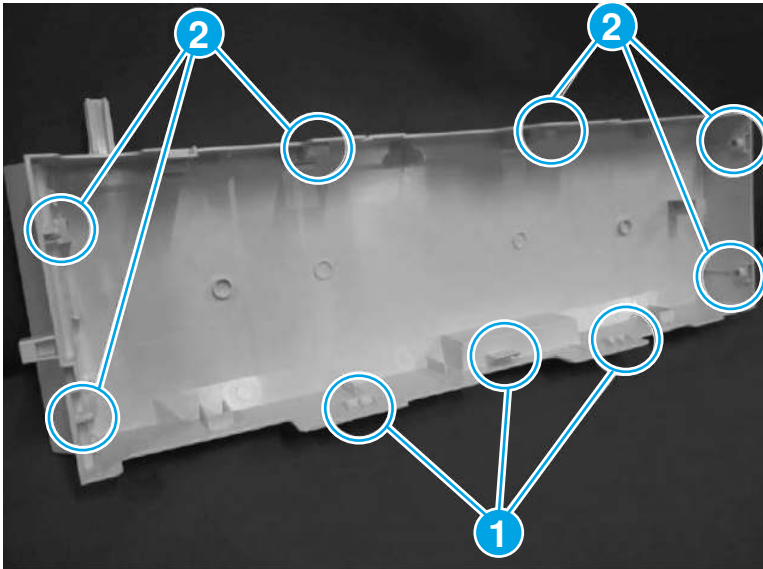
1. Remove two screws (callout 1).

Figure 5-1222 Remove two screws



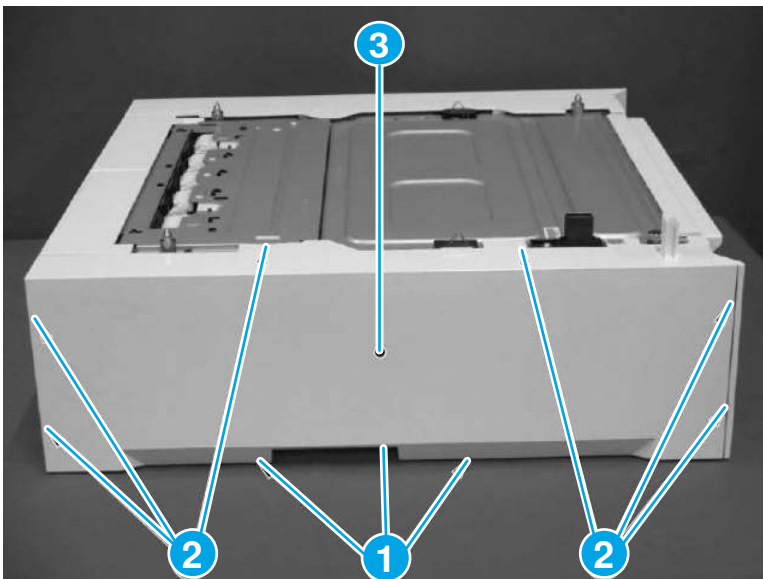
2. Before proceeding, take note of the location of the mounting tabs (callout 1) and bosses (callout 2) on the inside of the cover.

Figure 5-1223 Location of the mounting tabs and bosses



3. Release three tabs (callout 1), release six bosses (callout 2), and then remove the left cover (callout 3).

Figure 5-1224 Remove the left cover

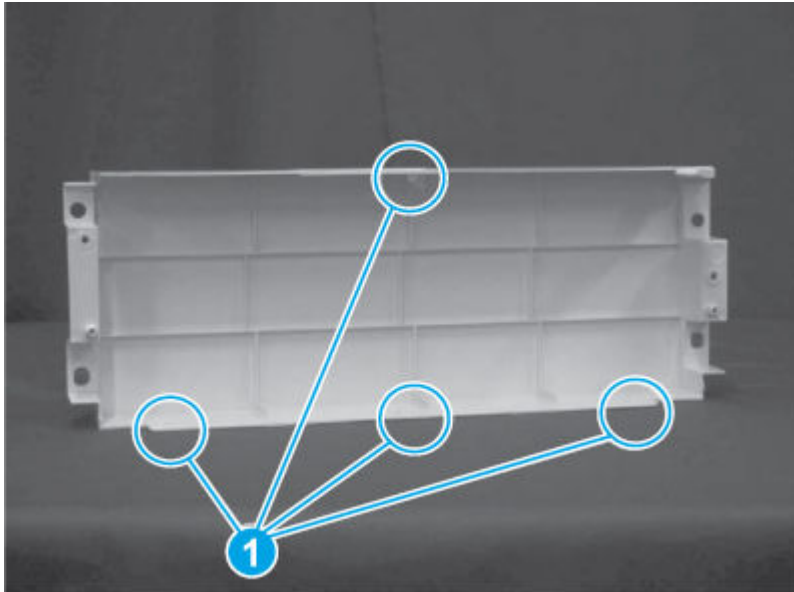


3. Remove the rear cover (550-sheet paper feeder)

Follow the procedure below to remove and replace the rear cover (550-sheet paper feeder).

1. Before proceeding, take note of the location of the mounting tabs (callout 1) on the inside of the cover.

Figure 5-1225 Location of the mounting tabs



2. Remove two screws (callout 1), release four tabs (callout 2), and then remove the rear cover (callout 3).


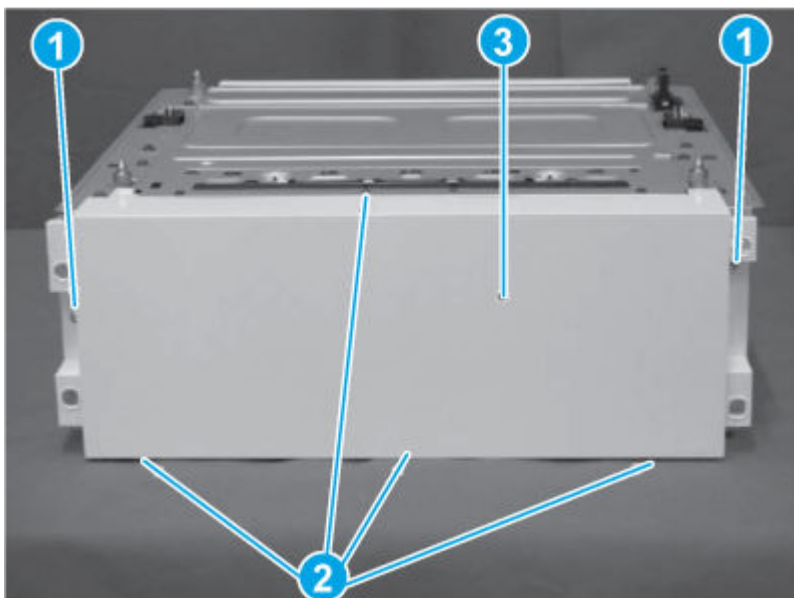
 **TIP:** It might be easier to remove the cover if the bottom tabs are released first.

Figure 5-1226 Remove the rear cover

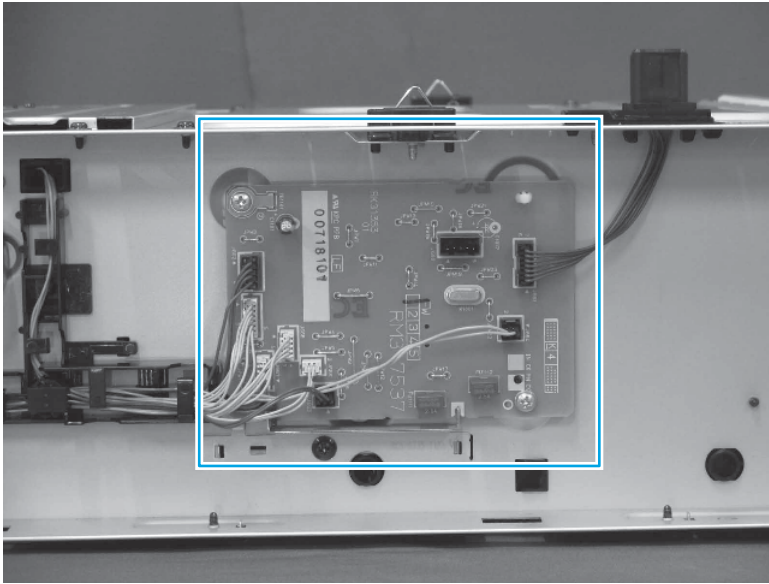


4. Remove the feed lower guide assembly (550-sheet paper feeder)

Follow the procedure below to remove and replace the feed lower guide.

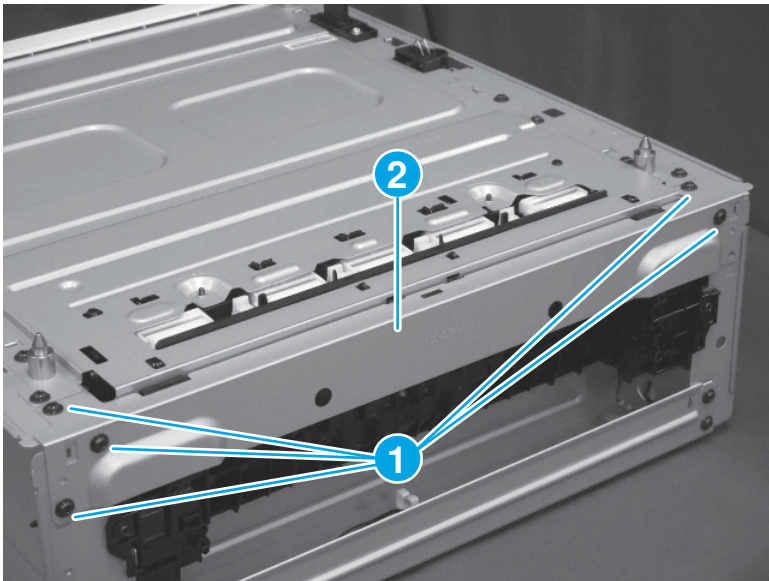
1. Disconnect all of the connectors on the controller PCA.

Figure 5-1227 Disconnect all connectors



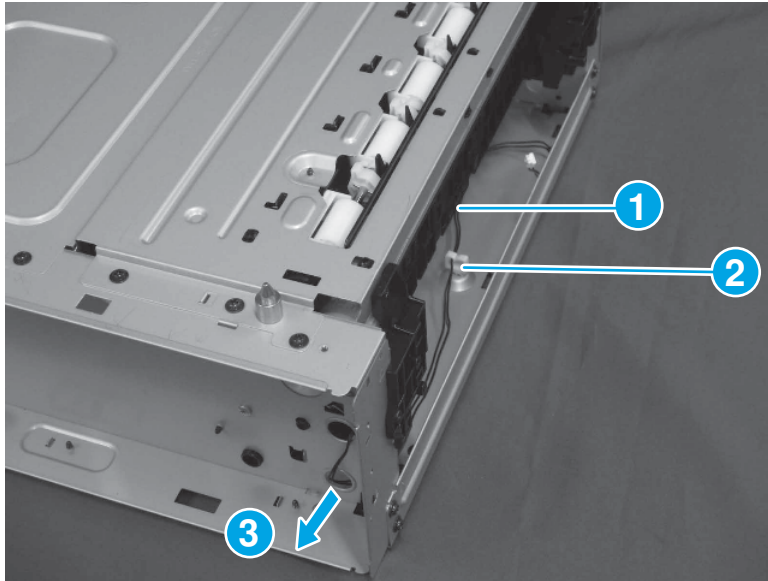
2. Remove five screws (callout 1), and then remove the sheet-metal plate (callout 2).

Figure 5-1228 Remove the plate



3. Release the wire harness (callout 1) from the retainer (callout 2), and then pass it through the opening in the chassis (callout 3).

Figure 5-1229 Release the wire harness



4. Turn the paper feeder over, and then do the following:
 - Remove one screw (callout 1), and then remove the holder (callout 2).
 - Release one tab (callout 3), and then remove the rubber foot pad (callout 4).


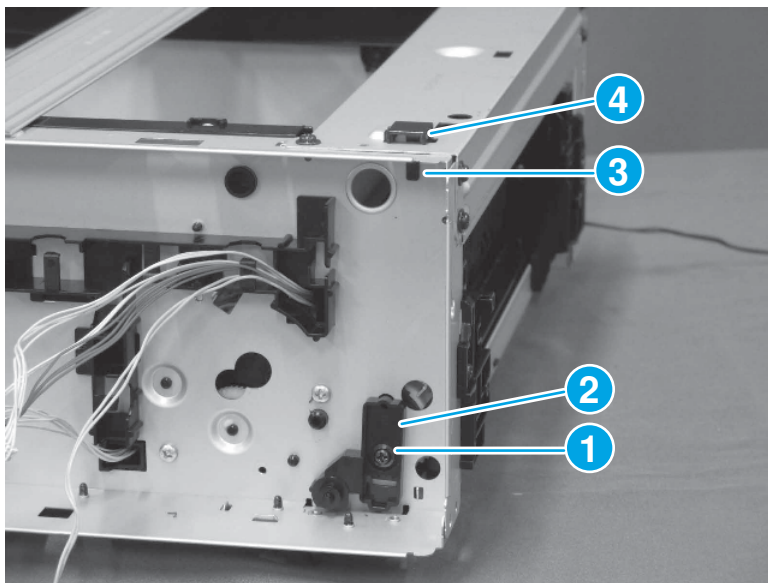
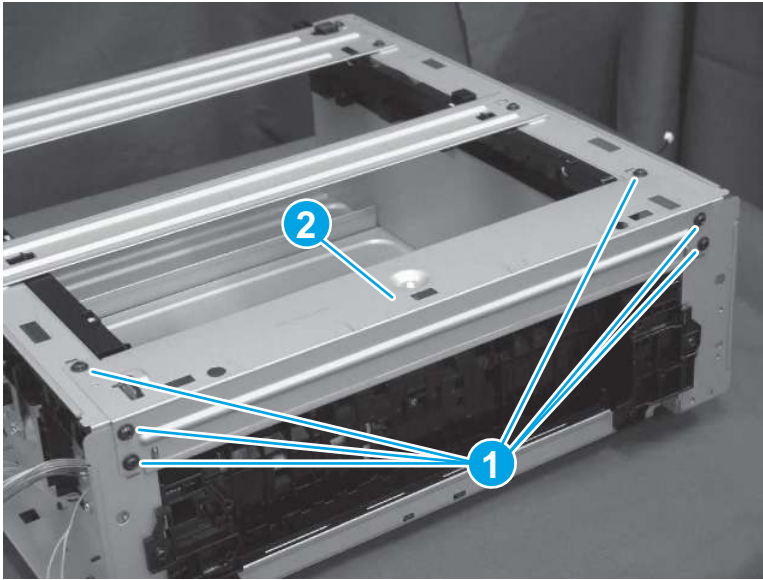
 **NOTE:** Repeat this step for a foot pad (not shown) located at the other end of the sheet-metal plate.

Figure 5-1230 Remove the holder and foot pads



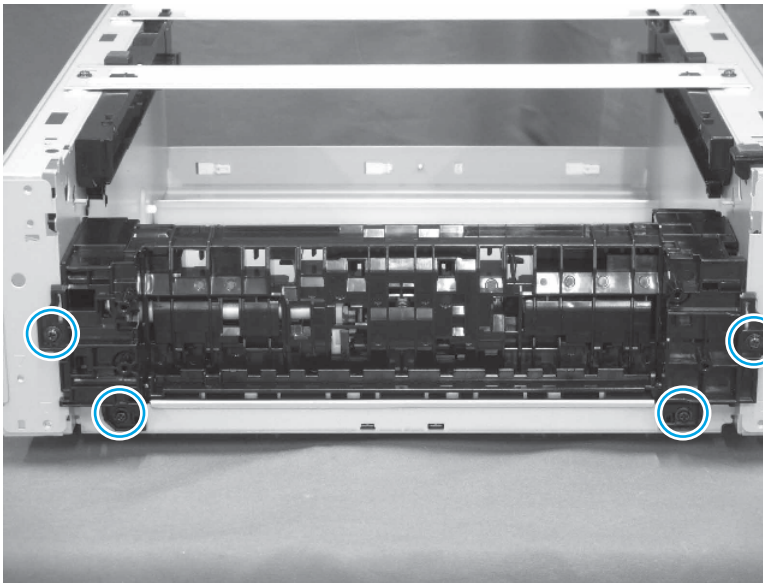
5. Remove six screws (callout 1), and then remove the sheet-metal plate (callout 2).

Figure 5-1231 Remove the plate



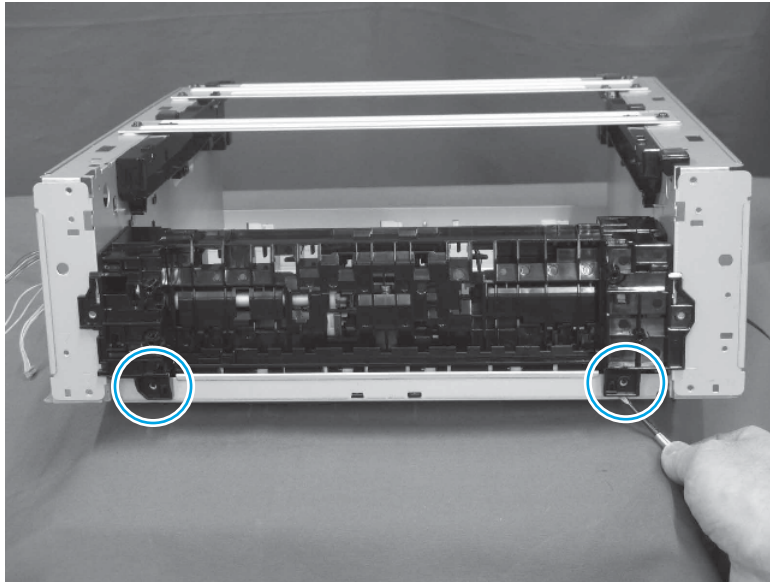
6. Remove four screws.

Figure 5-1232 Remove four screws



7. Use a small flat-blade screwdriver to release two bosses.

Figure 5-1233 Release two bosses



8. Remove the feed lower guide assembly.


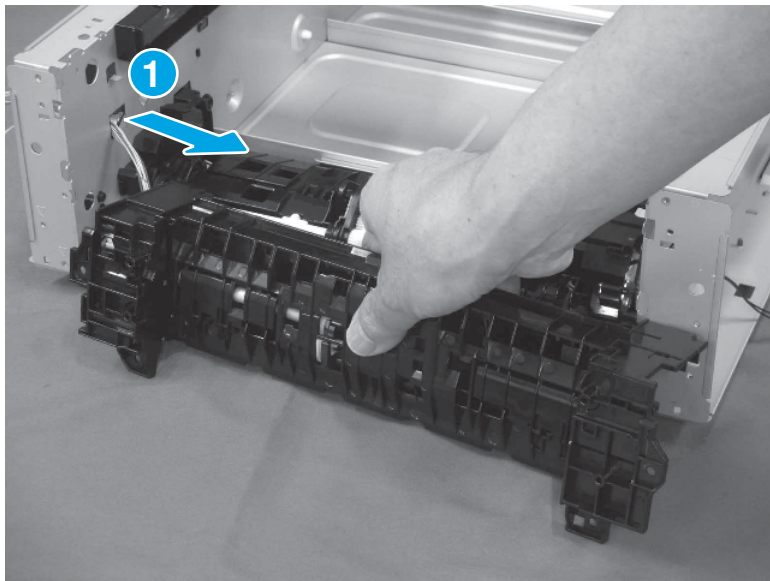
 **NOTE:** As the assembly is removed, pass the wire harness through the opening in the chassis (callout 1).

Figure 5-1234 Remove the assembly

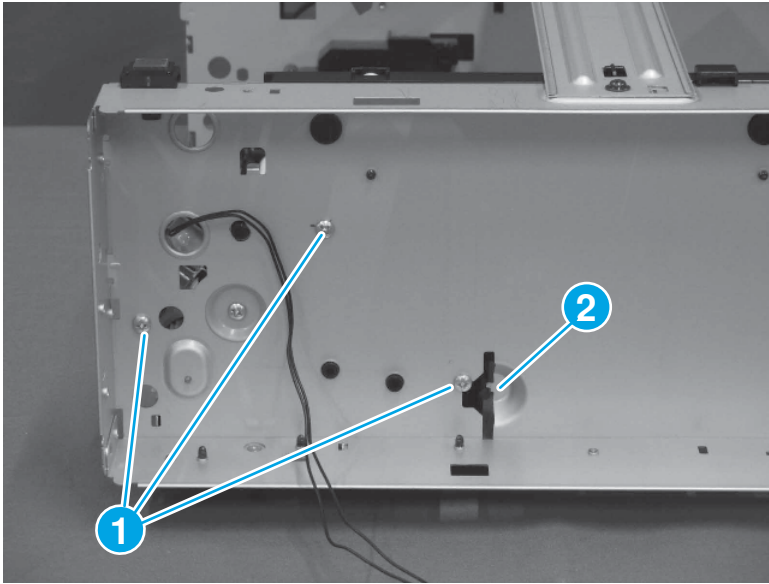


5. Remove the lifter drive assembly (550-sheet paper feeder)

Follow the procedure below to remove and replace the lifter drive assembly.

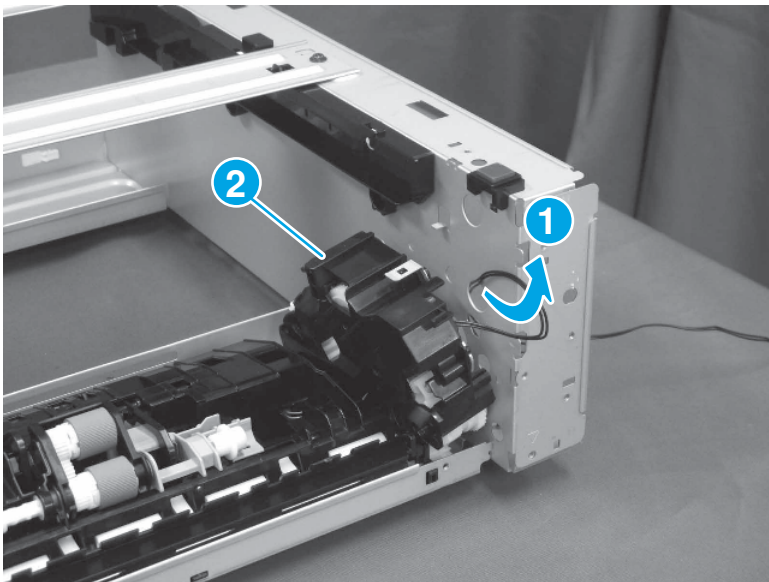
1. Remove three screws (callout 1), and then release one tab (callout 2).

Figure 5-1235 Remove the screws and release the tab



2. Pass the wire harness through the opening in the chassis (callout 1), and then remove the lifter drive assembly (callout 2).

Figure 5-1236 Remove the assembly

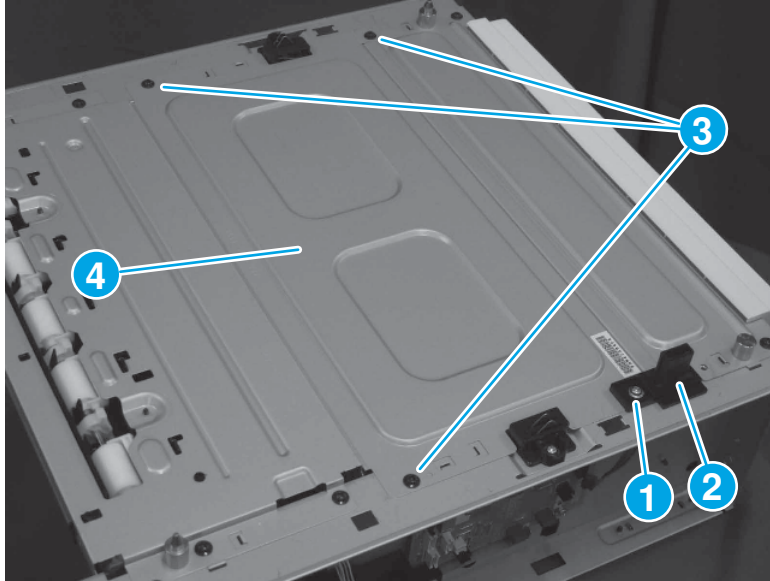


6. Remove the feed upper guide (550-sheet paper feeder)

Follow the procedure below to remove and replace the feed upper guide.

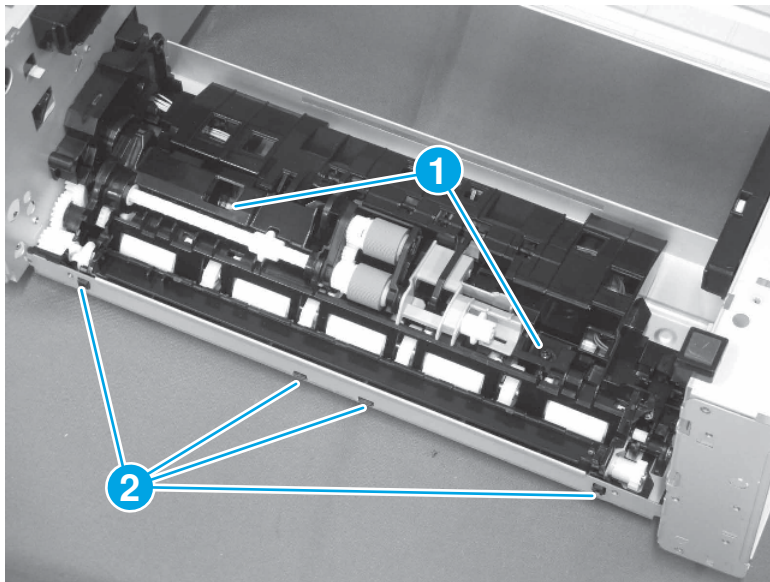
1. Do the following:
 - Remove one screw (callout 1), and then remove the holder (callout 2).
 - Remove three screws (callout 3), and then remove the sheet-metal plate (callout 4)

Figure 5-1237 Remove the holder and plate



2. Remove two screws (callout 1), and then release four bosses (callout 2).

Figure 5-1238 Remove the screws and release the bosses



3. Remove the feed upper guide assembly.


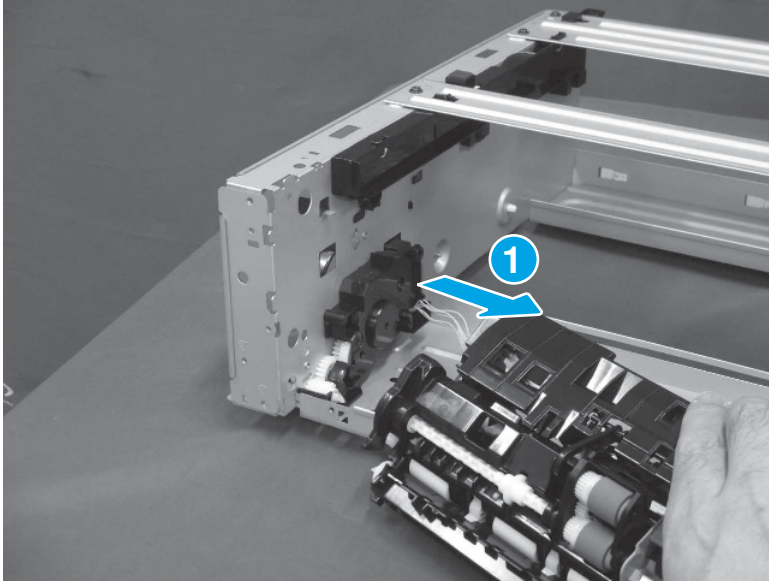
 **NOTE:** As the assembly is removed, pass the wire harness through the opening in the chassis (callout 1).

Figure 5-1239 Remove the assembly

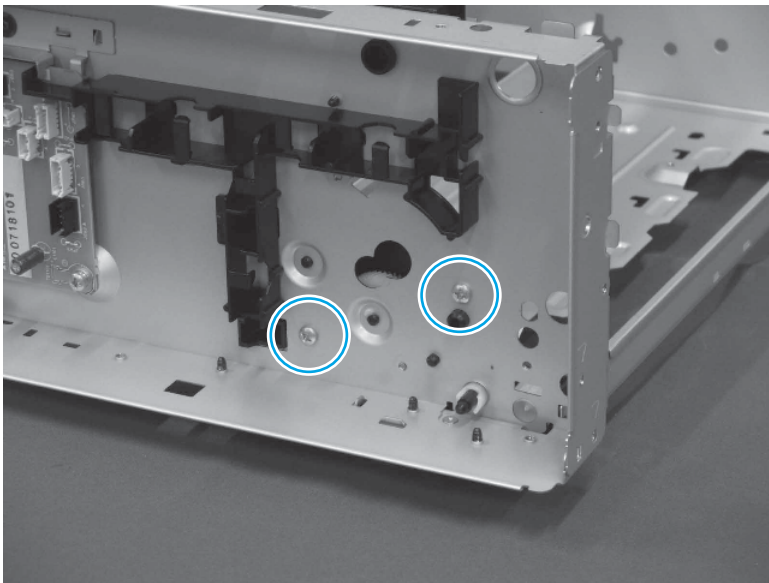


7. Remove the pickup drive assembly (550-sheet paper feeder)

Follow the procedure below to remove and replace the pickup drive assembly.

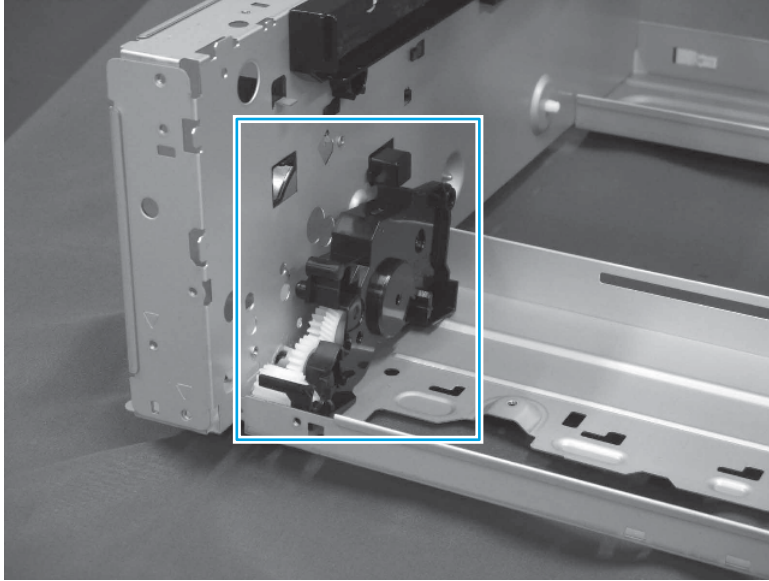
1. Remove two screws.

Figure 5-1240 Remove two screws



2. Remove the pickup drive assembly.

Figure 5-1241 Remove the assembly



8. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Controller PCA (550-sheet paper feeder)

Learn about controller PCA removal (550-sheet paper feeder).

Mean time to repair: 6 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.

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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-61 Part information

Part number	Part description
RM3-7537-000CN	Paper feeder driver PCA

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- Needle-nose pliers

After performing service

Turn the printer power on

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

Post service test

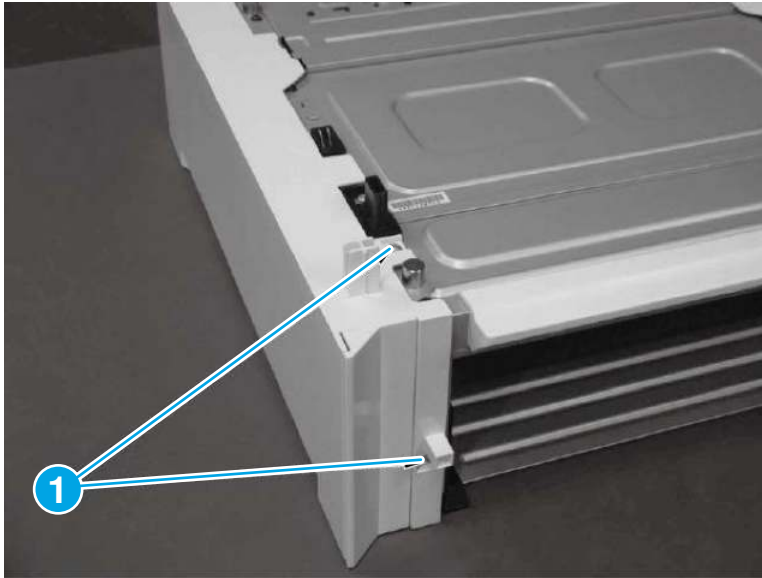
Print any pages necessary to make sure the printer is functioning correctly.

1. Remove the left cover (550-sheet paper feeder)

Follow the procedure below to remove and replace the left cover (550-sheet paper feeder).

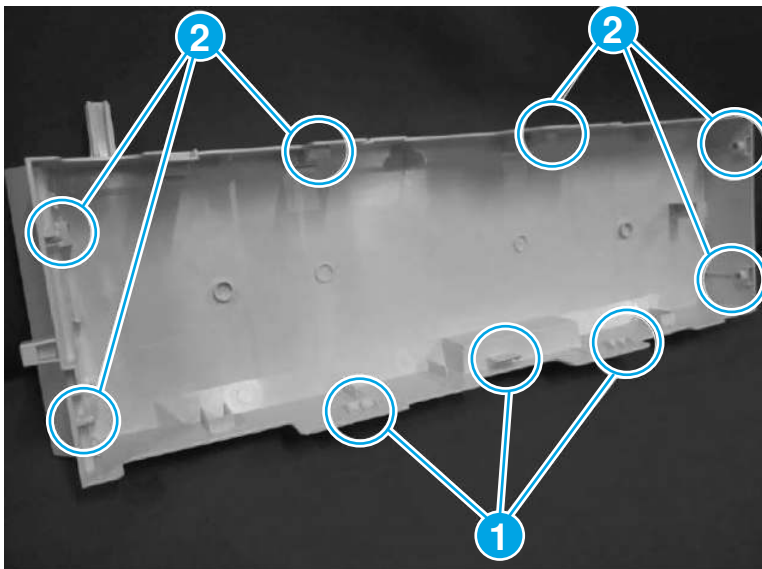
1. Remove two screws (callout 1).

Figure 5-1242 Remove two screws



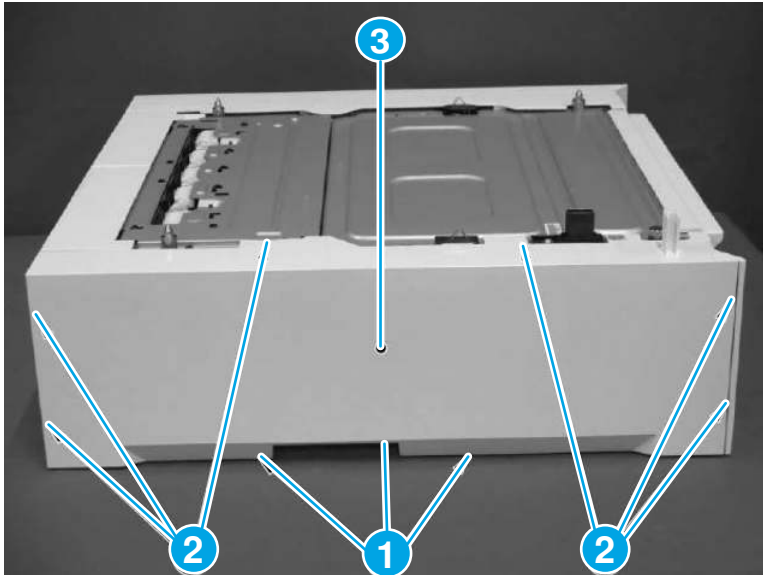
2. Before proceeding, take note of the location of the mounting tabs (callout 1) and bosses (callout 2) on the inside of the cover.

Figure 5-1243 Location of the mounting tabs and bosses



3. Release three tabs (callout 1), release six bosses (callout 2), and then remove the left cover (callout 3).

Figure 5-1244 Remove the left cover

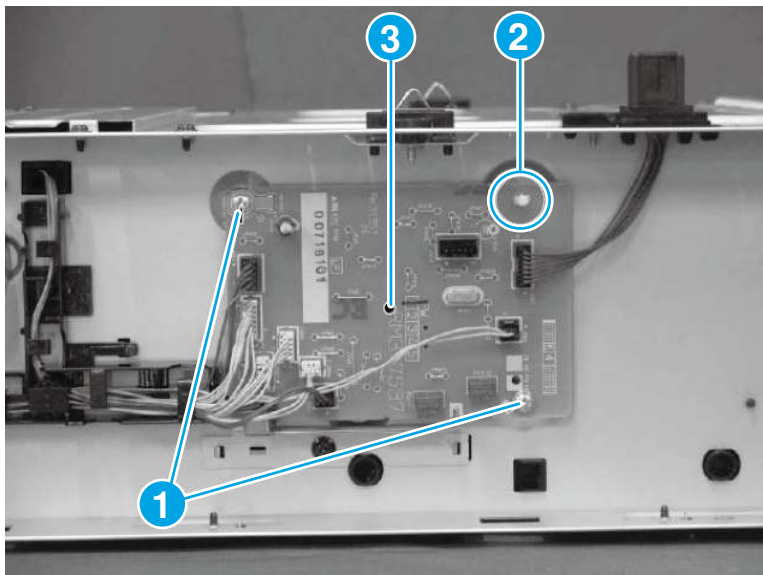


2. Remove the controller PCA (550-sheet paper feeder)

Follow the procedure below to remove and replace the controller PCA (550-sheet paper feeder).

- Do the following:
 - a. Disconnect all of the connectors on the controller PCA.
 - b. Remove two screws (callout 1).
 - c. Use a pair of needle-nose pliers to release on PCA support (callout 2).
 - d. Remove the controller PCA (callout 3).

Figure 5-1245 Remove the controller PCA



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.



NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Feed motor (550-sheet paper feeder)

Learn about feed motor removal (550-sheet paper feeder).

Mean time to repair: 6 minutes

Service level: Easy

Before performing service

Turn the printer power off

- Disconnect the power cable.



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

Use the table below to identify the correct part number for your printer. To order the part, go to www.hp.com/buy/parts.

Table 5-62 Part information

Part number	Part description
RK3-0335-000CN	Motor, stepping DC (feed; M5)

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- Needle-nose pliers

After performing service

Turn the printer power on

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

Post service test

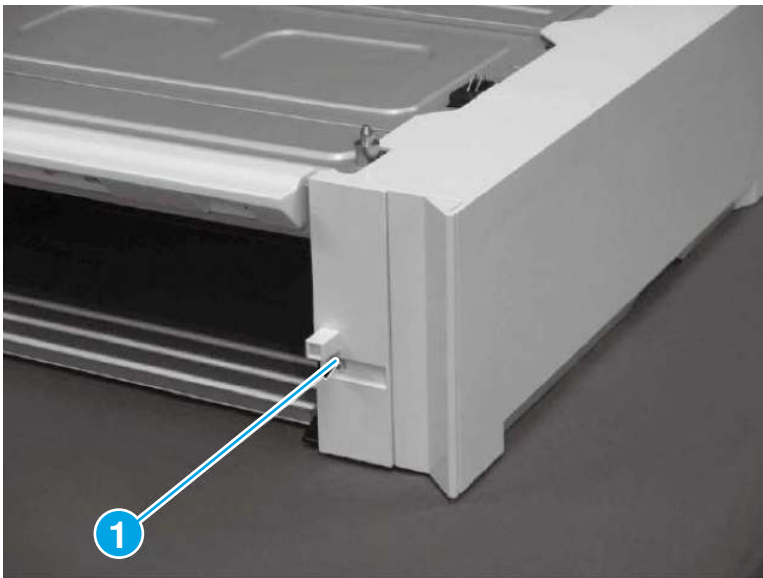
Print any pages necessary to make sure the printer is functioning correctly.

1. Remove the right cover (550-sheet paper feeder)

Follow the procedure below to remove and replace the right cover (550-sheet paper feeder).

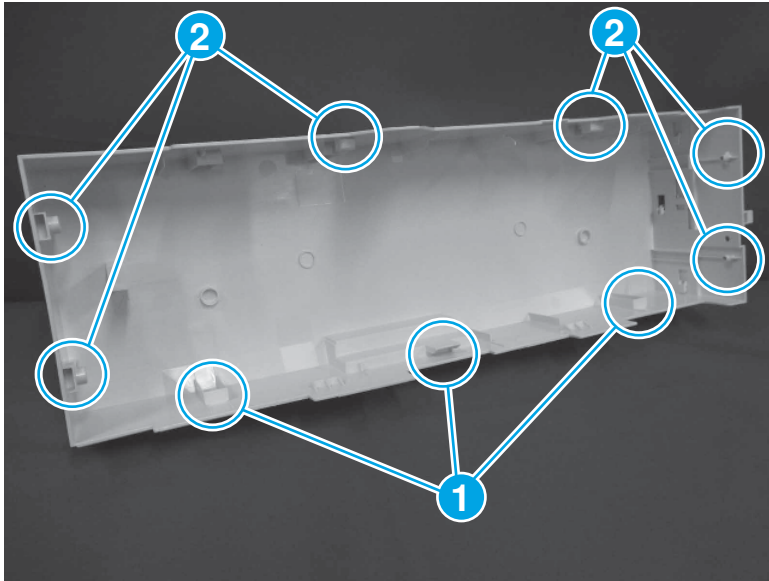
1. Remove one screw (callout 1).

Figure 5-1246 Remove one screw



2. Before proceeding, take note of the location of the mounting tabs (callout 1) and bosses (callout 2) on the inside of the cover.

Figure 5-1247 Location of the mounting tabs and bosses



3. Release three tabs (callout 1), release six bosses (callout 2), and then remove the right cover (callout 3).


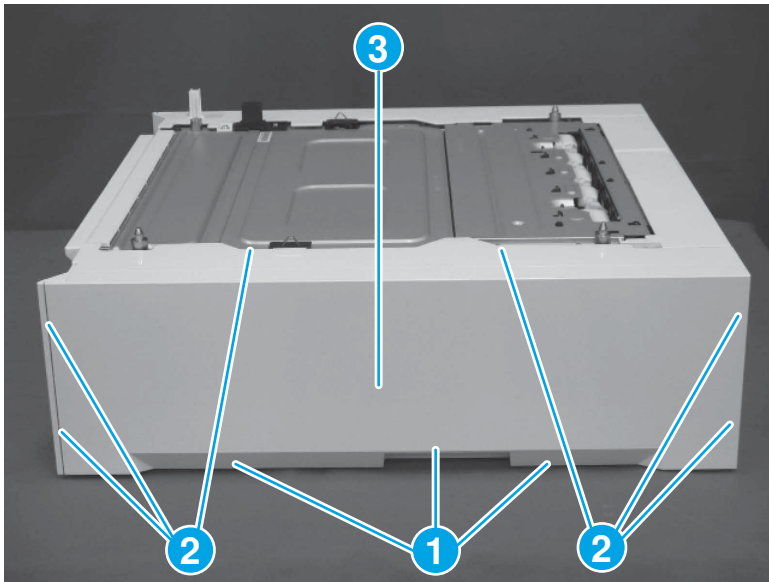
 **TIP:** It might be easier to remove the cover if the top front boss is released first.

Figure 5-1248 Remove the right cover

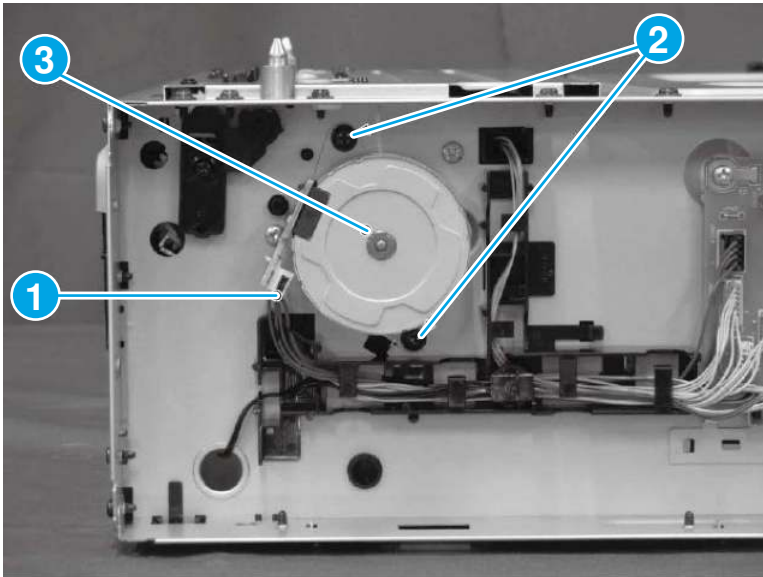


2. Remove the feed motor (550-sheet paper feeder)

Follow the procedure below to remove and replace the feed motor (550-sheet paper feeder).

- Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the feed motor (callout 3).

Figure 5-1249 Remove the feed motor



3. Unpack the replacement assembly

Follow these steps to unpack the replacement assembly.

1. Dispose of the defective part.




NOTE: HP recommends responsible disposal of the defective part.

<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

2. Unpack the replacement part from the packaging.



CAUTION:  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.



IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.



NOTE: If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

3. To install an assembly, reverse the removal steps.




NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

6 Parts and diagrams

Printer parts information including exploded assembly diagrams and part number lists.

Document feeder / scanner

Learn about the integrated scanner assembly (ISA) parts and assemblies.

 **NOTE:** This section is for MFP printers only.

Integrated scanner assembly

Parts diagram and part list for the integrated scanner assembly (ISA).

Figure 6-1 Integrated scanner assembly

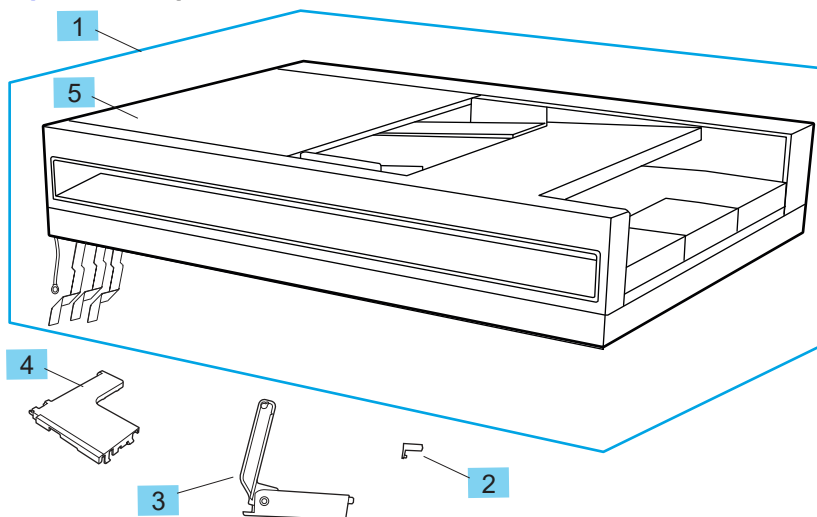


Table 6-1 Integrated scanner assembly

Ref No	Part number	Description	Qty
1	4RA80-67002	ISA assembly duplex blue and folded FFC	1
1	4RA80-67004	ISA assembly duplex gray and folded FFC	1
1	4RA80-67003	ISA assembly simplex blue and folded FFC	1

Table 6-1 Integrated scanner assembly (continued)

Ref No	Part number	Description	Qty
1	4RA80-67005	ISA assembly simplex gray and folded FFC	1
2	B3Q10-40041	ISA lift slider pin	1
3	B3Q10-60128	ISA lift assembly	1
4	4RA80-40045	Cover, FFC	1
5	4RA80-67006	ADF top cover assembly (includes rollers)	1

Base printer

Learn about the printer engine parts and assemblies.

Control panels

Parts diagrams and part lists for the control panels.

Control panel (SFP)

Parts diagrams and parts lists for the SFP printer control panels.

Figure 6-2 Control panel (4201/4202/4203)

See
Covers, panels,
and doors (SFP)

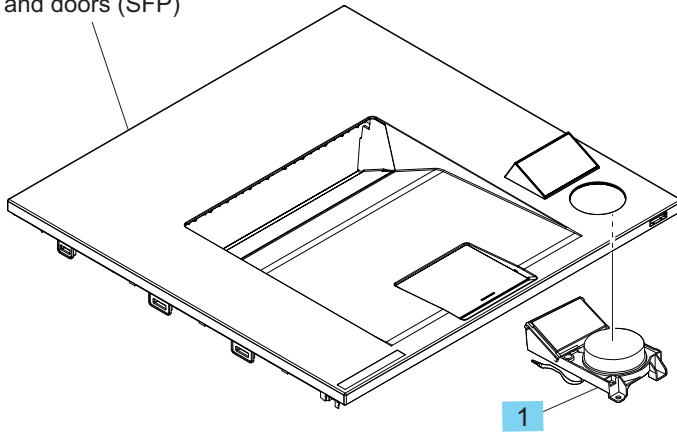


Table 6-2 Control panel (4201/4202/4203)

Ref No	Part number	Description	Qty
1	4RA89-60101	Dial control panel with display	1
Not shown	RK3-0383-000CN	Cable, flexible flat	1

Control panel (MFP)

Parts diagrams and parts lists for the MFP printer control panel.

Figure 6-3 Control panel (4301/4302/4303)

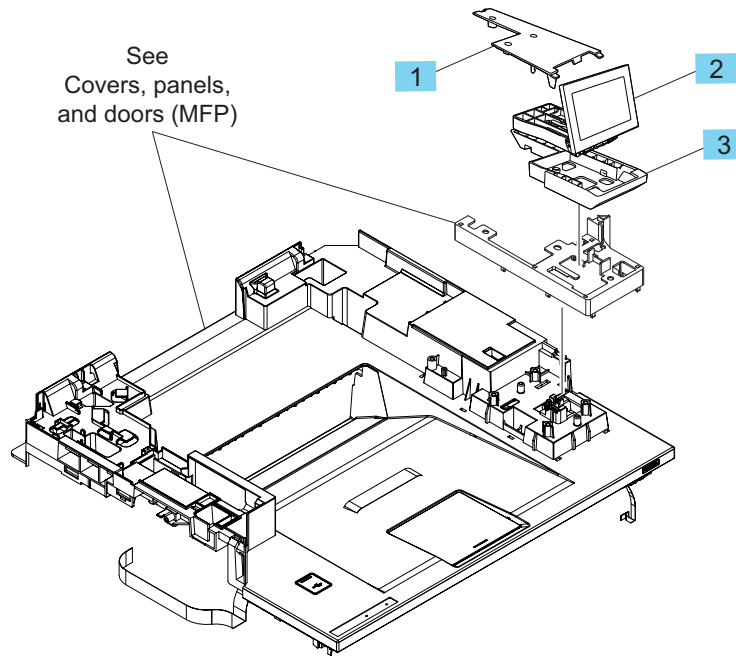


Table 6-3 Control panel (4301/4302/4303)

Ref No	Part number	Description	Qty
1	4RA83-40006	Control panel base cover	1
2	4RA83-60101	Control panel touchscreen assembly	1
3	4RA83-40005	Control panel base	1

Covers, panels, and doors

Parts diagrams and part lists for the covers, panels, and doors.

Parts and diagrams: Whole unit replacement and toner cartridges

Parts diagram and parts list for whole unit replacement (WUR) and the toner cartridges.

Figure 6-4 Whole unit replacement and toner cartridges

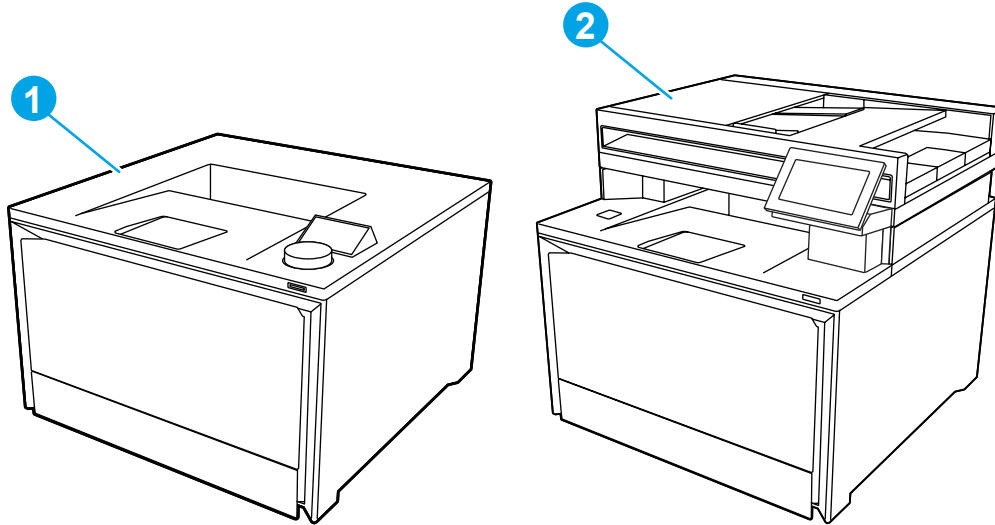


Table 6-4 Whole unit replacement and toner cartridges

Ref No	Part number	Description	Qty
1	4RA85-69001	Prod-Exchange 220V 4201dne WUR	1
1	4RA85-69002	Prod-Exchange 110V 4201dne WUR	1
1	4RA85-69003	Prod-Exchange 220V 4201dn WUR	1
1	4RA85-69004	Prod-Exchange 110V 4201dn WUR	1
1	4RA86-69001	Prod-Exchange 220V 4201dwe WUR	1
1	4RA86-69002	Prod-Exchange 110V 4201dwe WUR	1
1	4RA86-69003	Prod-Exchange 220V 4201dw WUR	1
1	4RA86-69004	Prod-Exchange 110V 4201dw WUR	1
1	4RA87-69002	Prod-Exchange 220V 4202dn WUR	1
1	4RA88-69001	Prod-Exchange 220V 4202dwe WUR	1
1	4RA88-69002	Prod-Exchange 220V 4202dw WUR	1
1	4RA89-69001	Prod-Exchange 220V 4203dn Blue WUR	1
1	4RA89-69002	Prod-Exchange 110V 4203dn WUR TW	1
1	4RA89-69003	Prod-Replace New 220V 4203dn China GV WUR	1
1	4RA89-69004	Prod-Replace New 220V 4203dn IN WUR	1

Table 6-4 Whole unit replacement and toner cartridges (continued)

Ref No	Part number	Description	Qty
1	4RA89-69005	Prod-Exchange 220V 4203dn Gray WUR RU	1
1	5HH48-69001	Prod-Exchange 220V 4203dw WUR	1
1	5HH48-69002	Prod-Exchange 110V 4203dw WUR TW	1
1	5HH48-69003	Prod-Replace New 220V 4203dw CN WUR	1
1	5HH48-69004	Prod-Exchange 110V 4203dw WUR LAR	1
1	5HH48-69005	Prod-Exchange 110V 4203dw WUR Brazil	1
1	5HH48-69006	Prod-Exchange 220V 4203dw WUR LAR	1
1	5HH48-69007	Prod-Exchange 220V 4203dw Gray WUR RU	1
1	5HH53-69001	Prod-Exchange 220V 4203cdn Gray CN WUR	1
2	4RA80-69001	Prod-Exchange 220V 4301dwe WUR	1
2	4RA80-69002	Prod-Exchange 110V 4301dwe WUR	1
2	4RA80-69003	Prod-Exchange 220V 4301dw WUR	1
2	4RA80-69004	Prod-Exchange 110V 4301dw WUR	1
2	4RA81-69001	Prod-Exchange 220V 4301fdne WUR	1
2	4RA81-69002	Prod-Exchange 110V 4301fdne WUR	1
1	4RA81-69003	Prod-Exchange 220V 4301fdn WUR	1
2	4RA81-69004	Prod-Exchange 110V 4301fdn WUR	
2	4RA82-69001	Prod-Exchange 220V 4301fdwe WUR	1
2	4RA82-69002	Prod-Exchange 110V 4301fdwe WUR	1
2	4RA82-69003	Prod-Exchange 220V 4301fdw WUR	1
2	4RA82-69004	Prod-Exchange 110V 4301fdw WUR	1
2	4RA83-69001	Prod-Exchange 220V 4302dwe WUR	1
2	4RA83-69002	Prod-Exchange 220V 4302dw WUR	1
2	4RA84-69002	Prod-Exchange 220V 4302fdn WUR	1
2	5HH64-69001	Prod-Exchange 220V 4302fdw WUR	1
2	5HH64-69002	Prod-Exchange 220V 4302fdwe WUR	1
2	5HH65-69001	Prod-Exchange 110V 4303dw WUR TW	1
2	5HH65-69002	Prod-Exchange 220V 4303dw WUR	1
2	5HH65-69003	Prod-Exchange 110V 4303dw WUR LAR	1
2	5HH65-69004	Prod-Exchange 220V 4303dw CN WUR	1
2	5HH65-69005	Prod-Replace New 220V 4303dw IN WUR	1
2	5HH65-69006	Prod-Replace New 220V 4303dw IN GOV WUR	1
2	5HH65-69007	Prod-Exchange 220V 4303dw Gray WUR RU	1

Table 6-4 Whole unit replacement and toner cartridges (continued)

Ref No	Part number	Description	Qty
2	5HH66-69001	Prod-Exchange 110V 4303fdn WUR TW	1
2	5HH66-69002	Prod-Exchange 220V 4303fdn WUR	1
2	5HH66-69003	Prod-Replace New 220V 4303fdn CN WUR	1
2	5HH66-69004	Prod-Replace New 220V 4303fdn IN WUR	1
2	5HH66-69005	Prod-Replace New 220V 4303fdn CN GOV WUR	1
2	5HH66-69006	Prod-Exchange 220V 4303fdn Gray WUR	1
2	5HH67-69001	Prod-Exchange 110V 4303fdw WUR TW	1
2	5HH67-69002	Prod-Exchange 220V 4303fdw WUR	1
2	5HH67-69003	Prod-Replace New 220V 4303fdw CN WUR	1
2	5HH67-69004	Prod-Replace New 220V 4303fdw IN WUR	1
2	5HH67-69005	Prod-Exchange 110V 4303fdw WUR LAR	1
2	5HH67-69006	Prod-Exchange 110V 4303fdw WUR	1
2	5HH67-69007	Prod-Exchange 220V 4303fdw WUR LAR	1
2	5HH67-69008	Prod-Exchange 220V 4303fdw Gray WUR RU	1
Not shown	W2100A	210A Black Toner Crtg; standard (4201/4301)	1
Not shown	W2101A	210A Cyan Toner Crtg; standard (4201/4301)	1
Not shown	W2102A	210A Yellow Toner Crtg; standard (4201/4301)	1
Not shown	W2103A	210A Magenta Toner Crtg; standard (4201/4301)	1
Not shown	W2100X	210X Black Toner Crtg; high capacity (4201/4301)	1
Not shown	W2101X	210X Cyan Toner Crtg; high capacity (4201/4301)	1
Not shown	W2102X	210X Yellow Toner Crtg; high capacity (4201/4301)	1
Not shown	W2103X	210X Magenta Toner Crtg; high capacity (4201/4301)	1
Not shown	W2200A	220A Black Toner Crtg EMEA; standard (4202/4302)	1
Not shown	W2201A	220A Cyan Toner Crtg EMEA; standard (4202/4302)	1
Not shown	W2202A	220A Yellow Toner Crtg EMEA; standard (4202/4302)	
Not shown	W2203A	220A Magenta Toner Crtg EMEA; standard (4202/4302)	
Not shown	W2200X	220X Black Toner Crtg EMEA; high capacity (4202/4302)	

Table 6-4 Whole unit replacement and toner cartridges (continued)

Ref No	Part number	Description	Qty
Not shown	W2201X	220X Cyan Toner Crtg EMEA; high capacity (4202/4302)	
Not shown	W2202X	220X Yellow Toner Crtg EMEA; high capacity (4202/4302)	
Not shown	W2203X	220X Magenta Toner Crtg EMEA; high capacity (4202/4302)	
Not shown	W2300A	230A Black Toner Crtg; standard (4203/4303)	
Not shown	W2301A	230A Cyan Toner Crtg; standard (4203/4303)	
Not shown	W2302A	230A Yellow Toner Crtg; standard (4203/4303)	
Not shown	W2303A	230A Magenta Toner Crtg; standard (4203/4303)	
Not shown	W2300X	230X Black Toner Crtg; high capacity (4203/4303)	
Not shown	W2301X	230X Cyan Toner Crtg; high capacity (4203/4303)	
Not shown	W2302X	230X Yellow Toner Crtg; high capacity (4203/4303)	
Not shown	W2303X	230X Magenta Toner Crtg; high capacity (4203/4303)	
Not shown	W2150XC	XC Black Contract Toner (all models)	
Not shown	W2151XC	XC Cyan Contract Toner (all models)	
Not shown	W2152XC	XC Yellow Contract Toner (all models)	
Not shown	W2153XC	XC Magenta Contract Toner (all models)	

Covers, panels, and doors (SFP)

Parts diagram and parts list for the SFP printer covers, panels, and doors.

Figure 6-5 Covers, panels, and doors (4201/4202/4203)

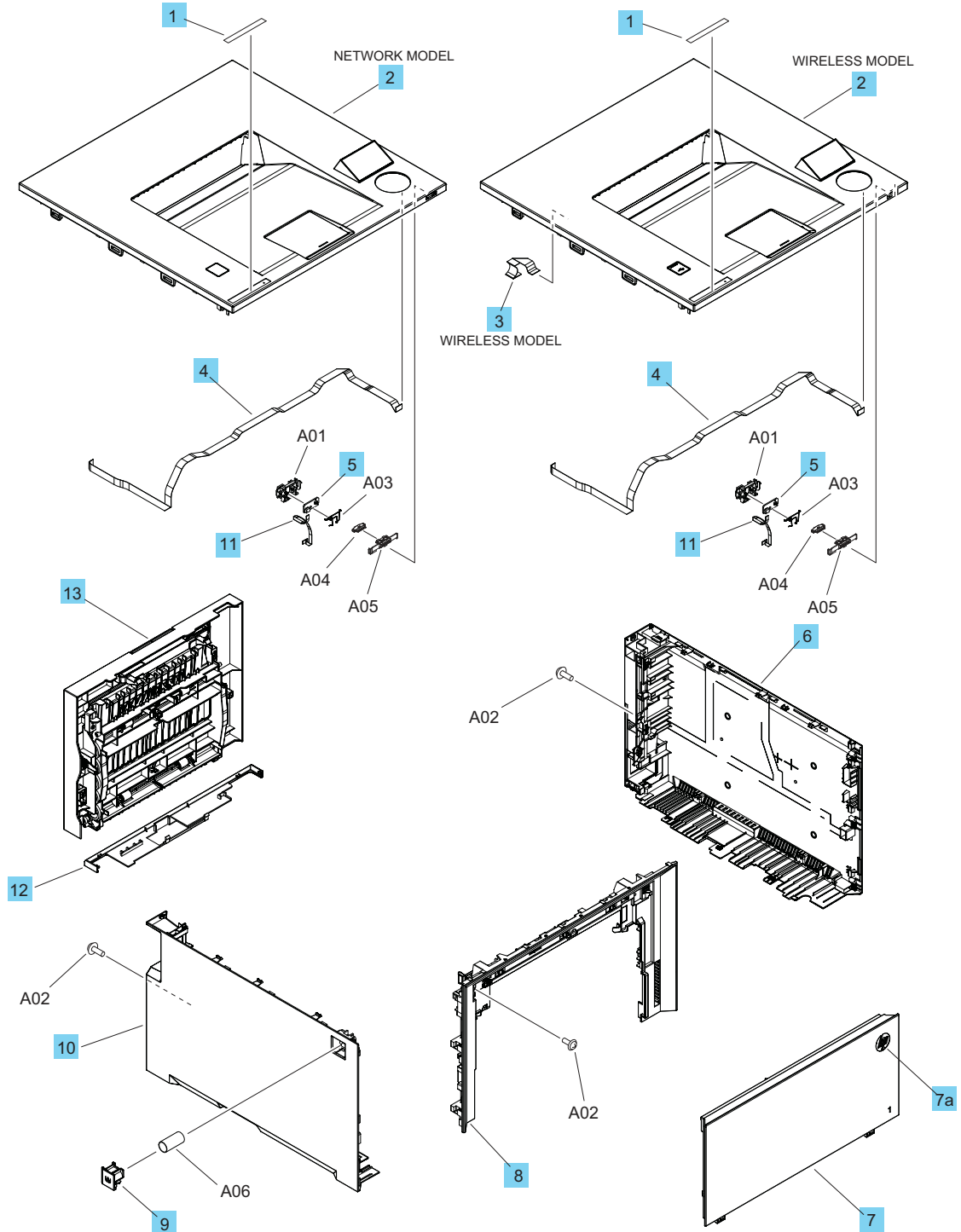


Table 6-5 Covers, panels, and doors (4201/4202/4203)

Ref No	Part number	Description	Qty
1	RC5-5464-000CN	Name plate 4201dwe	1
1	RC5-5465-000CN	Name plate 4201dne	1
1	RC5-5486-000CN	Name plate 4202dwe	1
1	RC5-5488-000CN	Name plate 4203dw	1
1	RC5-5489-000CN	Name plate 4203dn	1
1	RC5-5490-000CN	Name plate 4203cdn	1
1	RC5-5491-000CN	Name plate 4202dw	1
1	RC5-5492-000CN	Name plate 4202de	1
1	RC5-5496-000CN	Name plate 4201dw	1
1	RC5-5497-000CN	Name plate4201dn	1
2	RM2-2814-000CN	Cover, top assembly (SFP) (network model)	
2	RM2-2815-000CN	Cover, top assembly (SFP) (wireless model)	1
3	RK3-0392-000CN	Cable, flexible flat (SFP) (Wireless model)	1
4	RK3-0383-000CN	Cable, flexible flat	1
5	RM3-7568-000CN	Switch, power supply PCA	1
6	RM2-2812-000CN	Cover, right (SFP)	1
7	RM2-2843-000CN	Cartridge door assembly (blue) (SFP)	1
7	RM2-2847-000CN	Cartridge door assembly (gray) (SFP)	1
7a	7122-0718	HP logo gem	1
8	RM2-2824-000CN	Cover, front assembly	1
9	RC5-5411-000CN	Button, cartridge door	1
10	RC5-5450-000CN	Cover, left (SFP)	1
11	RK3-0377-000CN	Cable, flexible flat	1
12	RC5-6129-000CN	Cover, duplexing bottom	1
13	RM2-2754-000CN	Rear door assembly	1

Covers, panels, and doors (MFP)

Parts diagram and parts list for the MFP printer covers, panels, and doors.

Figure 6-6 Covers, panels, and doors (4301/4302/4303)

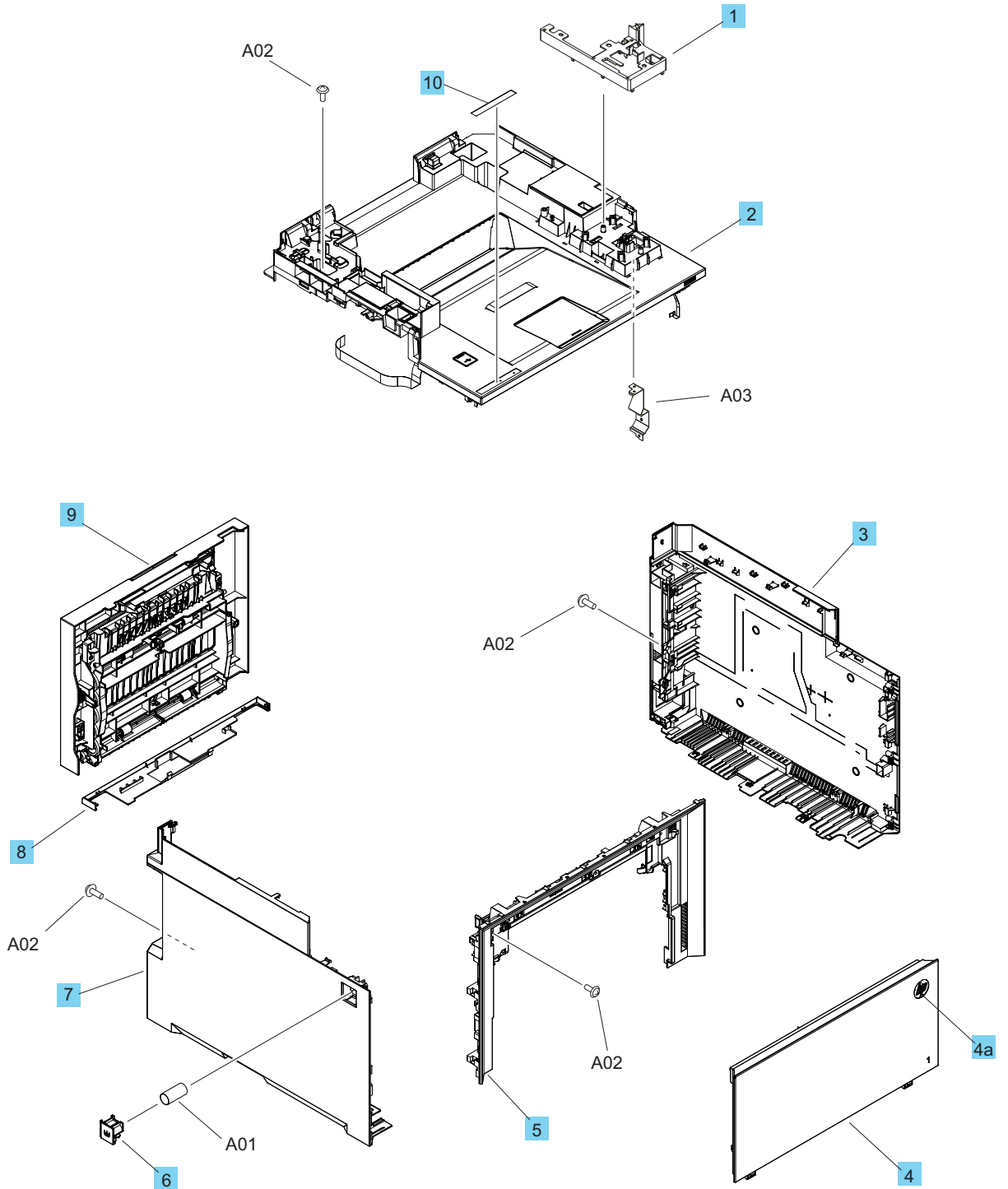


Table 6-6 Covers, panels, and doors (4301/4302/4303)

Ref No	Part number	Description	Qty
1	RC5-5444-000CN	Cover, pillar (MFP)	1
2	RM2-2762-000CN	Cover, top assembly (MFP)	1
3	RM2-2827-000CN	Cover, right (MFP)	1
4	RM2-2844-000CN	Cartridge door assembly (blue) (MFP)	1
4	RM2-2848-000CN	Cartridge door assembly (gray) (MFP)	1
4a	7122-0718	HP logo gem	1
5	RM2-2824-000CN	Cover, front assembly	1
6	RC5-5411-000CN	Button, cartridge door	1
7	RC5-5462-000CN	Cover, left (MFP)	1
8	RC5-6129-000CN	Cover, duplexing bottom	1
9	RM2-2754-000CN	Rear door assembly	1
10	4RA80-00012	Nameplate-Color LaserJet Pro MFP 4301dwe	1
10	4RA80-00008	Nameplate-Color LaserJet Pro MFP 4301fdne	1
10	4RA82-00012	Nameplate-Color LaserJet Pro MFP 4301fdwe	1
10	4RA83-00004	Nameplate-Color LaserJet Pro MFP 4302dwe	1
10	5HH64-00004	Nameplate-Color LaserJet Pro MFP 4302fdwe	1
10	5HH65-00004	Nameplate-Color LaserJet Pro MFP 4303dw	1
10	5HH66-00002	Nameplate-Color LaserJet Pro MFP 4302fdn	1
10	5HH67-00002	Nameplate-Color LaserJet Pro MFP 4302fdw	1
10	4RA80-40048	Nameplate-Color LaserJet Pro MFP 4301dw	1
10	4RA81-40002	Nameplate-Color LaserJet Pro MFP 4301fdn	1
10	4RA82-40004	Nameplate-Color LaserJet Pro MFP 4301fdw	1
10	4RA83-40002	Nameplate-Color LaserJet Pro MFP 4302dw	1
10	4RA84-40012	Nameplate-Color LaserJet Pro MFP 4302fdn	1
10	5HH64-40002	Nameplate-Color LaserJet Pro MFP 4302fdw	1

Internal parts and assemblies

Parts diagrams and part lists for the internal parts and assemblies.

Internal parts and assemblies (1 of 5)

Parts diagram and parts list for the internal printer assemblies.

Figure 6-7 Internal parts and assemblies (1 of 5)

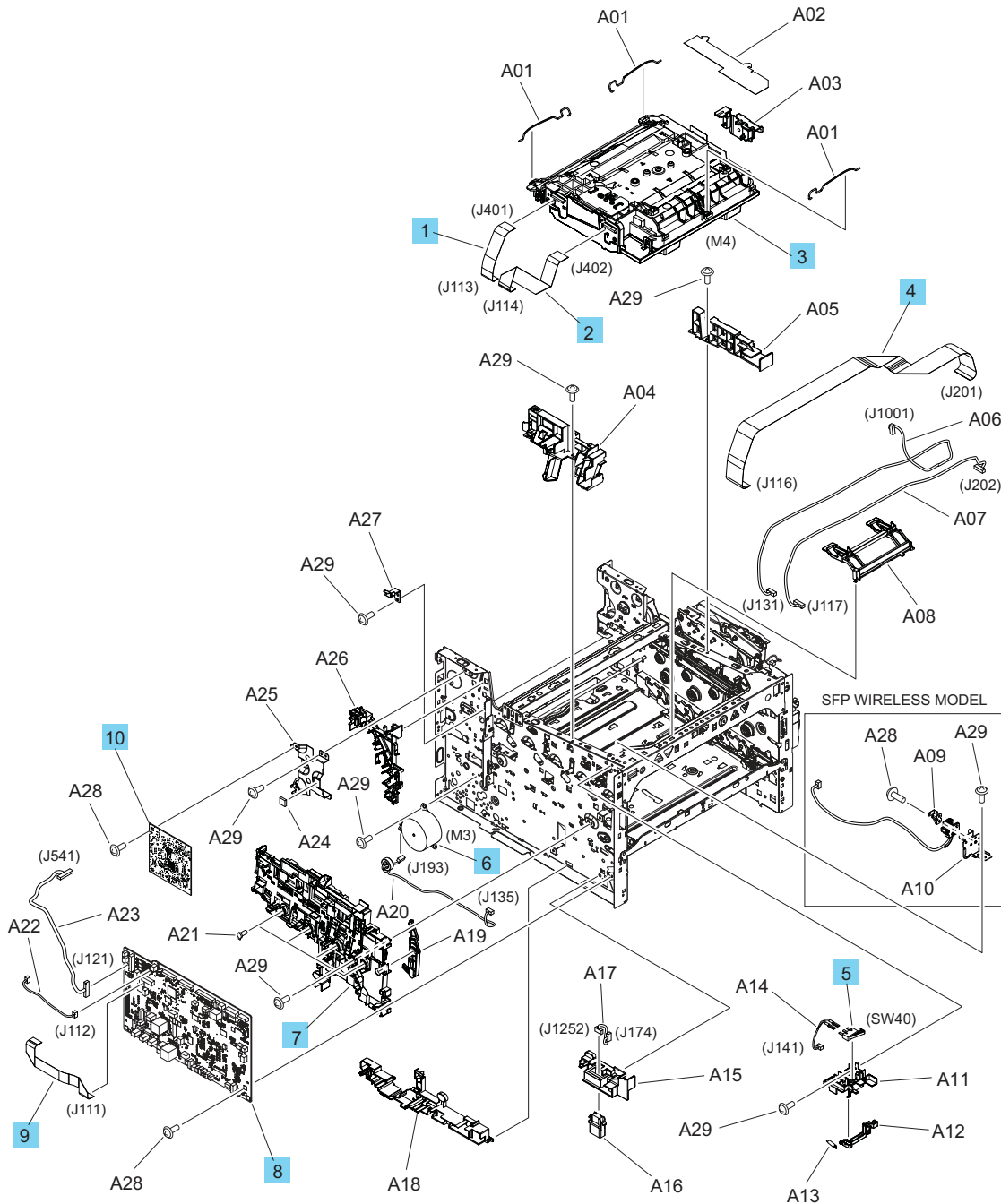


Table 6-7 Internal parts and assemblies (1 of 5)¹

Ref No	Part number	Description	Qty
1	RK3-0363-000CN	Cable, flexible flat	1
2	RK3-0367-000CN	Cable, flexible flat	1
3	RM2-2630-000CN	Laser scanner assembly	1
4	RK3-0373-000CN	Cable, flexible flat	1
5	RK2-0534-000CN	Microswitch	1
6	RK3-0335-000CN	Motor, stepping DC	1
7	RM2-2819-000CN	PCA holder assembly	1
8	RM3-7577-010CN	Engine controller PCA	1
9	RK3-0360-000CN	Cable, flexible flat	1
10	4RA85-67001	Formatter PCA 4201dn and 4201dne	1
10	4RA86-67001	Formatter PCA 4201dw and 4201dwe	1
10	4RA87-67001	Formatter PCA 4202dn and 4202dne	1
10	4RA88-67001	Formatter PCA 4202dw and 4202dwe	1
10	5HH48-67001	Formatter PCA 4203dw	1
10	5HH53-67001	Formatter PCA 4203cdn	1
10	4RA80-67001	Formatter PCA 4301dw and 4301dwe	1
10	4RA81-67001	Formatter PCA 4301fdn and 4301fdne	1
10	4RA82-67001	Formatter PCA 4301fdw and 4301fdwe	1
10	4RA83-67001	Formatter PCA 4302dw and 4302dwe	1
10	4RA84-67001	Formatter PCA 4302fdn and 4302fdne	1
10	5HH64-67001	Formatter PCA 4302fdw and 4302fdwe	1
10	5HH65-67001	Formatter PCA 4303dw	1
10	5HH66-67001	Formatter PCA 4303fdn	1
10	5HH67-67001	Formatter PCA 4303fdw	1
Not shown	0960-4630	WIFI PCA 802.11N Dual Band Radio	1
Not shown	W1A78-67906	Fax PCA kit (USA)	1
Not shown	W1A78-67907	Fax PCA kit (EURO)	1
Not shown	W1A78-67908	Fax PCA kit (Brazil)	1
Not shown	W1A78-67909	Fax PCA kit (Philippines)	1

¹A replacement DC controller must be paired to the printer formatter using a special HP Android application. For more information, use WISE to see the DC controller remove and replacement procedure in the printer service manual or service web topic.

Internal parts and assemblies (2 of 5)

Parts diagram and parts list for the internal printer assemblies.

Figure 6-8 Internal parts and assemblies (2 of 5)

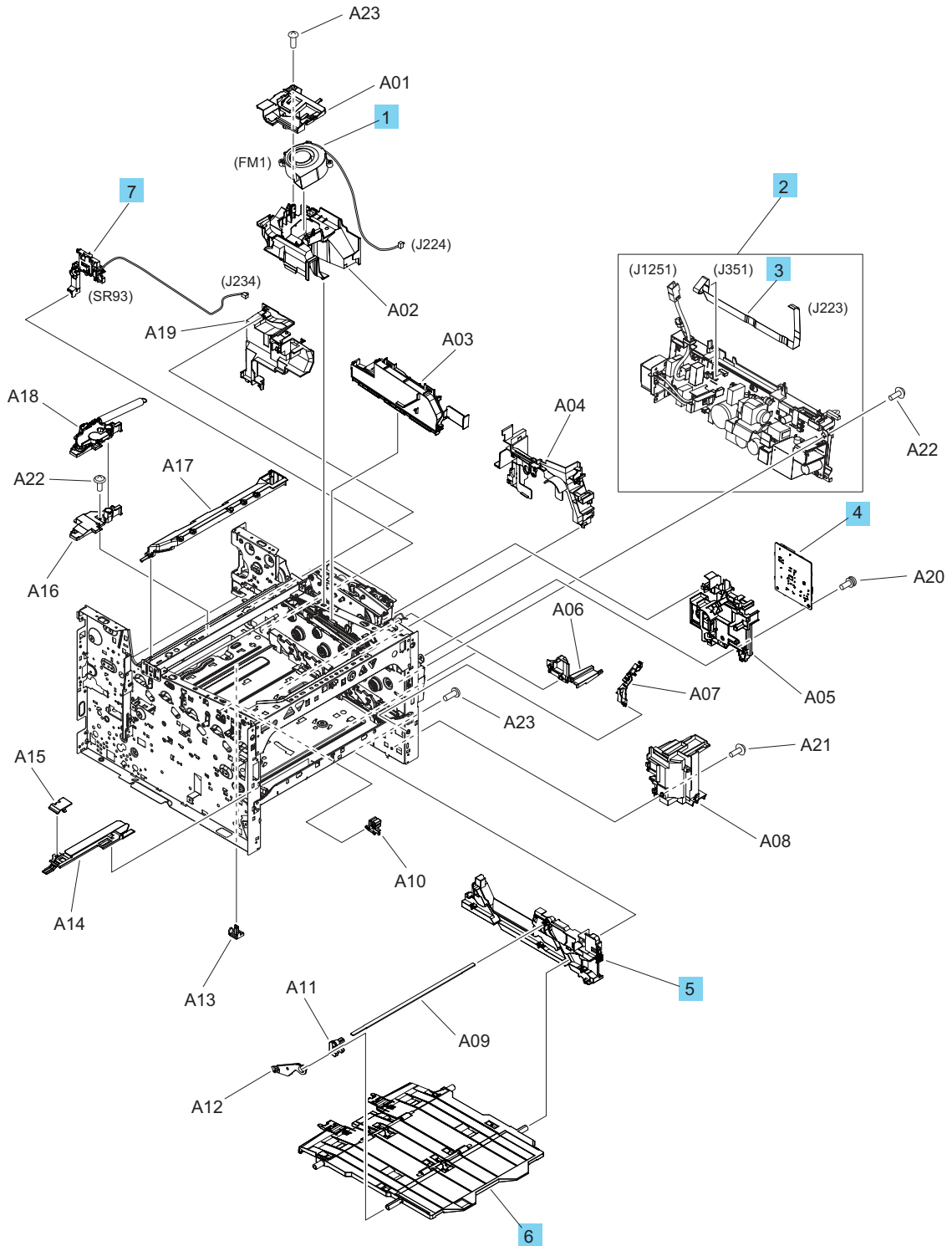


Table 6-8 Internal parts and assemblies (2 of 5)

Ref No	Part number	Description	Qty
1	RK3-0397-000CN	Fan	1
2	RM2-2834-000CN	Low-voltage power supply (110-127V)	1
2	RM2-2835-000CN	Low-voltage power supply (220-240V)	1
3	RK3-0380-000CN	Cable, flexible flat	1
4	RM3-7536-000CN	Fixing motor control PCA	1
5	RM2-2743-000CN	Cassette rail assembly, right	1
6	RM2-2741-000	MP paper feed assembly	1
7	RM2-2793-000	Sensor unit, waste toner	1

Internal parts and assemblies (3 of 5)

Parts diagram and parts list for the internal printer assemblies.

Figure 6-9 Internal parts and assemblies (3 of 5)

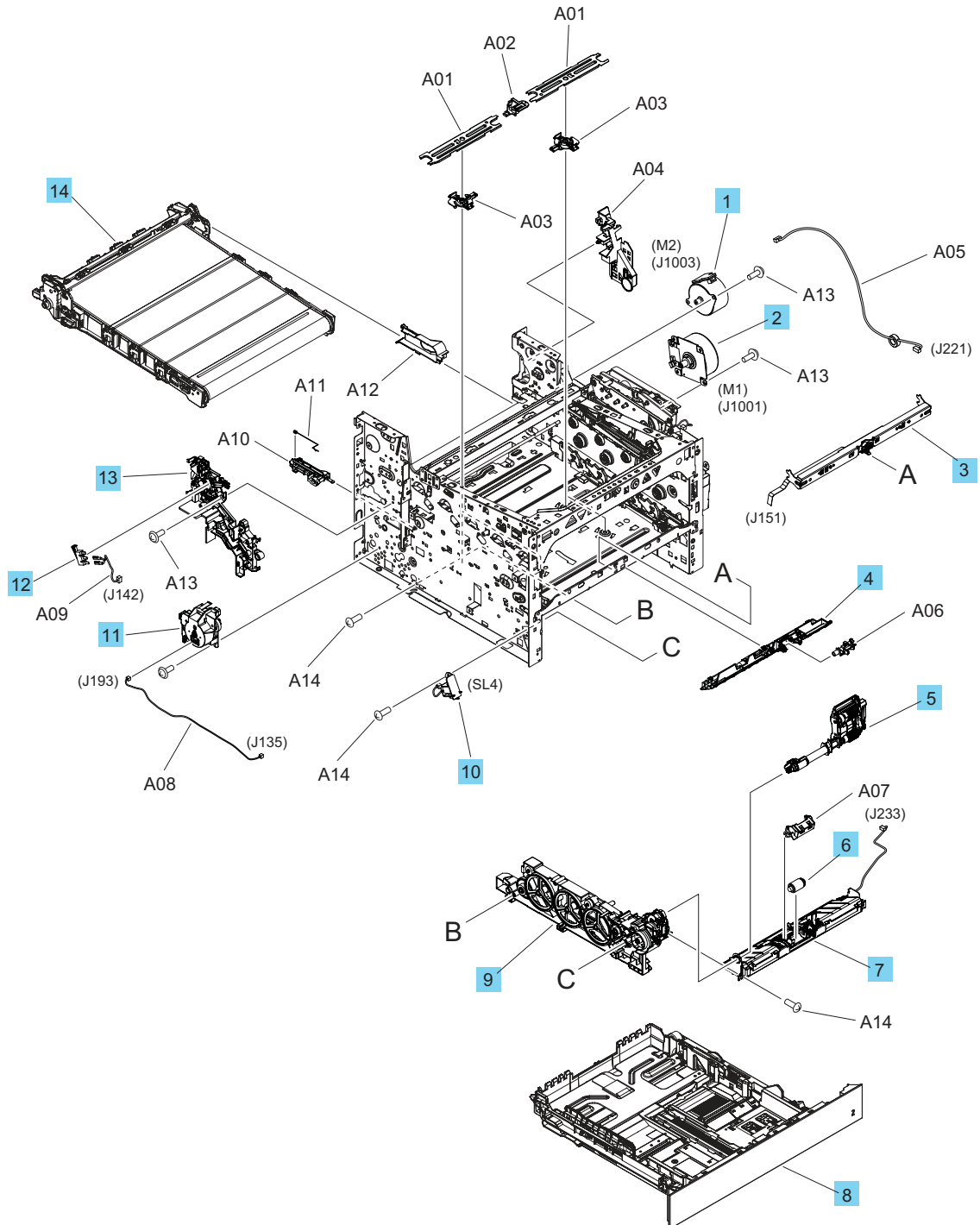


Table 6-9 Internal parts and assemblies (3 of 5)

Ref No	Part number	Description	Qty
1	RK3-0334-000CN	Motor, stepping DC	1
2	RM2-2779-000CN	Main motor assembly	1
3	RM2-2710-000CN	Density detect sensor assembly	1
4	RM2-2790-000CN	Multipurpose guide assembly, upper	1
5	RM2-2758-000CN	Multipurpose feed assembly	1
6	RM2-2692-000CN	Separation roller assembly (Tray1/2/3)	1
7	RM2-2749-000CN	Multipurpose guide assembly, lower	1
8	RM2-2737-000CN	Cassette assembly (Tray 2) (blue)	1
8	RM2-2849-000CN	Cassette assembly (Tray 2) (gray)	1
9	RM2-2742-000CN	Cassette rail assembly, left	1
10	RK3-0408-000CN	Solenoid	1
11	RM2-2714-000CN	Duplexing clutch assembly	1
12	RK2-0534-000CN	Microswitch	1
13	RM2-2759-000CN	Interlock holder assembly	1
14	RM2-2811-000CN	Intermediate transfer belt	1

Internal parts and assemblies (4 of 5)

Parts diagram and parts list for the internal printer assemblies.

Figure 6-10 Internal parts and assemblies (4 of 5)

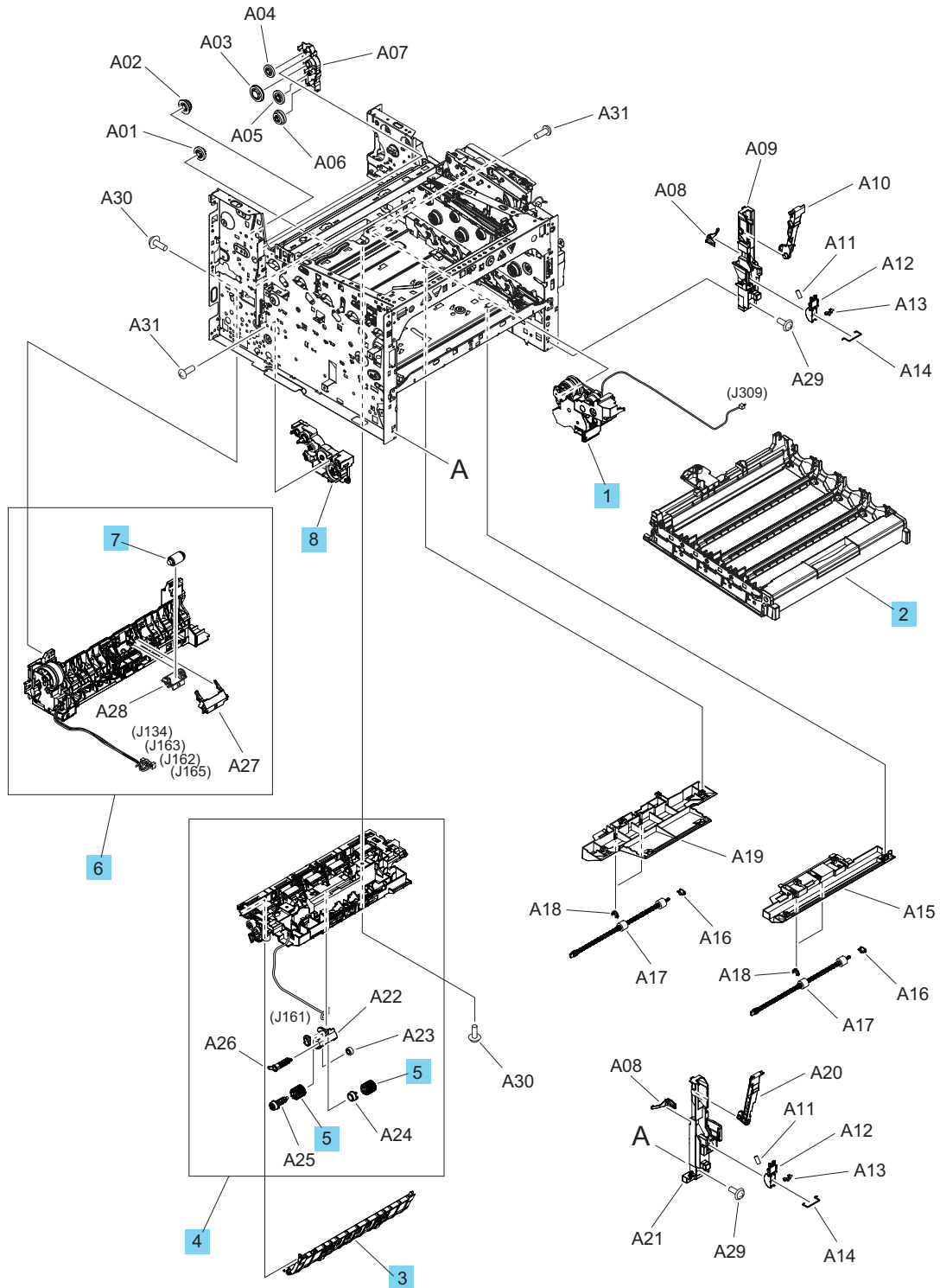


Table 6-10 Internal parts and assemblies (4 of 5)

Ref No	Part number	Description	Qty
1	RM2-2711-000CN	Lifter drive assembly	1
2	RM2-2750-000CN	Cartridge tray assembly	1
3	RM2-2716-000CN	Duplexing guide assembly, upper	1
4	RM2-2747-000CN	Paper feed guide assembly, upper	1
5	RM2-2695-000CN	Paper pickup roller assembly	2
6	RM2-2736-000CN	Paper feed guide assembly, lower	1
7	RM2-2692-000CN	Separation roller assembly (Tray1/2/3)	1
8	RM2-2763-000CN	Paper pickup drive assembly	1

Internal parts and assemblies (5 of 5)

Parts diagram and parts list for the internal printer assemblies.

Figure 6-11 Internal parts and assemblies (5 of 5)

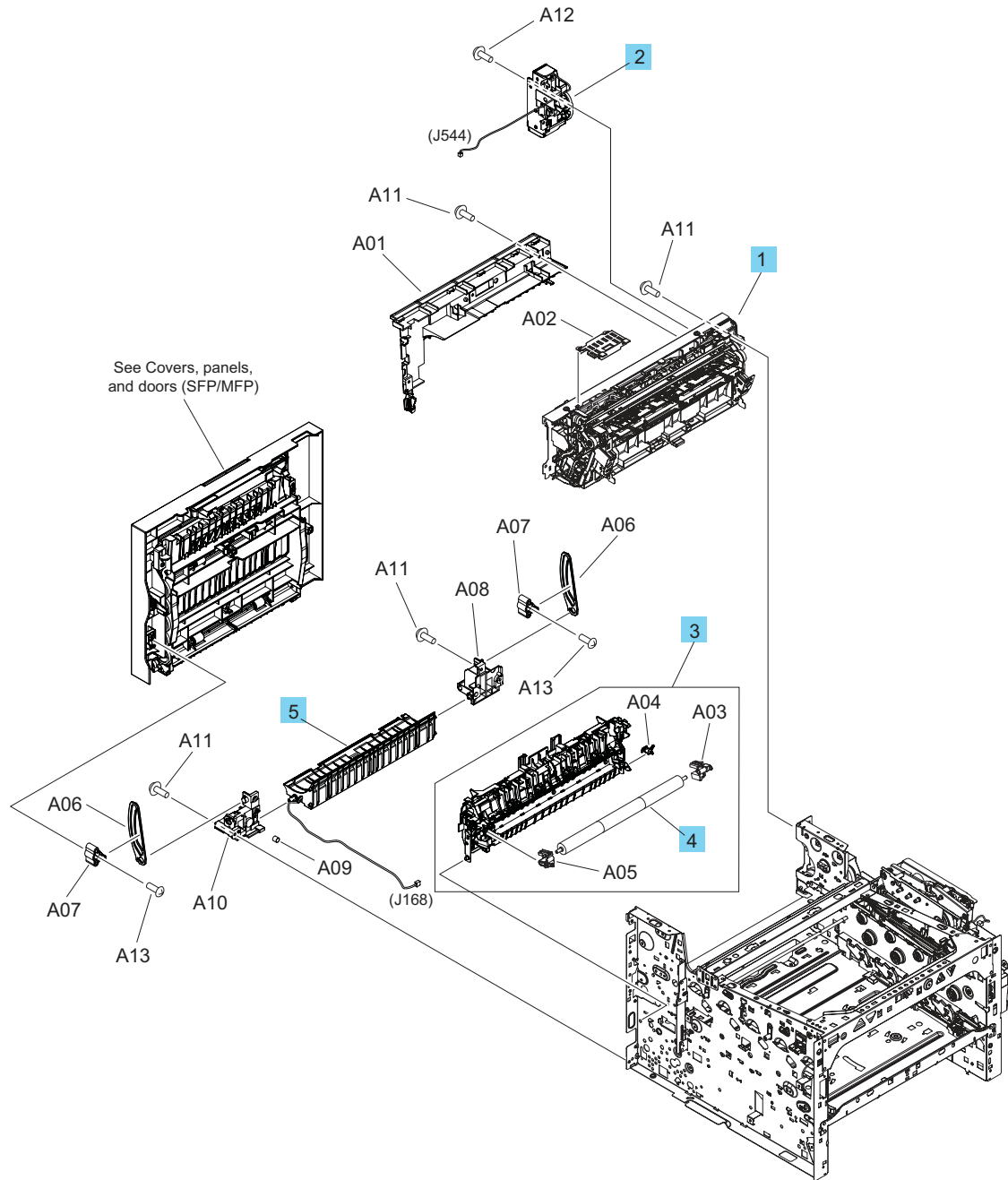


Table 6-11 Internal parts and assemblies (5 of 5)

Ref No	Part number	Description	Qty
1	RM2-2731-000CN	Fuser assembly (110-127V)	1
1	RM2-2732-000CN	Fuser assembly (220-240V)	1

Table 6-11 Internal parts and assemblies (5 of 5) (continued)

Ref No	Part number	Description	Qty
2	RM2-2841-000CN	Duplex drive assembly (SFP)	1
2	RM2-2842-000CN	Duplex drive assembly (MFP)	1
3	RM2-2755-000CN	Secondary transfer feed assembly	1
4	RM2-6455-000CN	Secondary transfer roller assembly	1
5	RM2-2760-000CN	Duplexing guide assembly	1

Input device - 550-sheet paper feeder

Learn about the 550-sheet paper feeder parts and assemblies.

Covers, panels, and doors

Parts diagrams and part lists for the covers, panels, and doors.

Covers, panels, and doors (550-sheet paper feeder)

Parts diagram and part list for the 550-sheet paper feeder covers, panels, and doors.

Figure 6-12 550-sheet paper feeder covers, panels, and doors

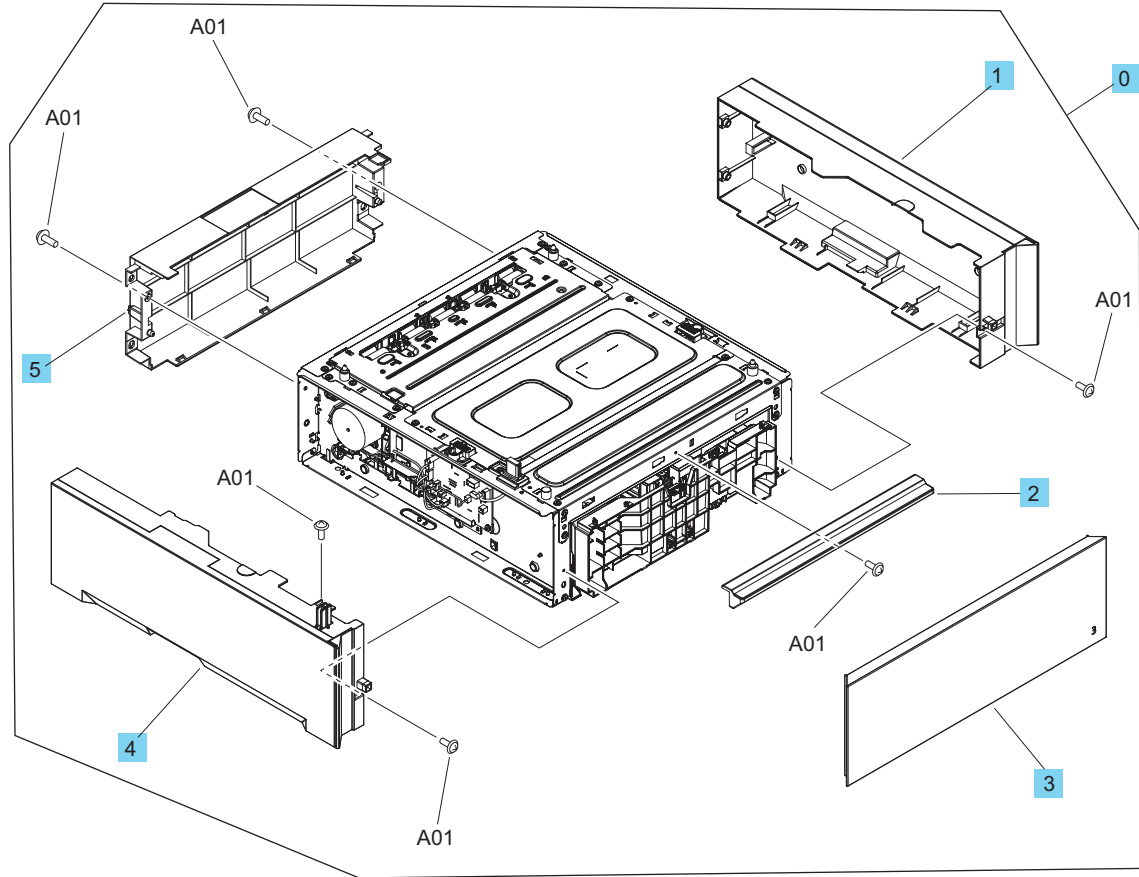


Table 6-12 550-sheet paper feeder covers, panels, and doors

Ref No	Part number	Description	Qty
0	28N93A	550-sheet paper feeder	1
1	RM2-2771-000CN	Right cover assembly	1
2	RC5-6742-000CN	Cover, inner front	1
3	RC5-6738-000CN	Cover, cassette	1
4	RM2-2770-000CN	Left cover assembly	1
5	RC5-6741-000CN	Cover, rear	1

Internal parts and assemblies

Parts diagrams and part lists for the internal parts and assemblies.

Internal parts and assemblies (550-sheet paper feeder)

Parts diagram and part list for the 550-sheet paper feeder main body.

Figure 6-13 550-sheet paper feeder internal parts and assemblies

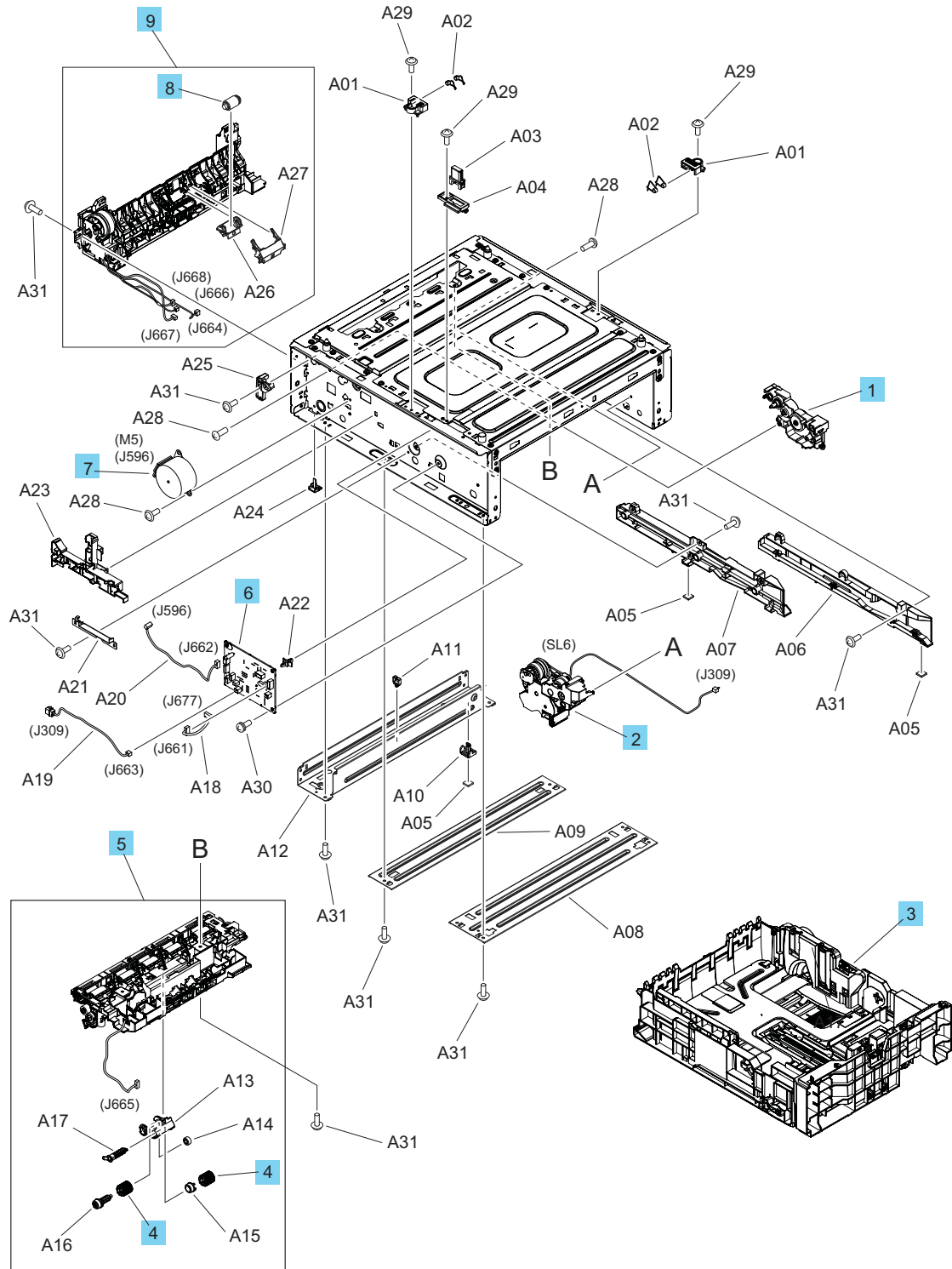


Table 6-13 550-sheet paper feeder internal parts and assemblies

Ref No	Part number	Description	Qty
1	RM2-2776-000CN	Paper pickup drive assembly	1

Table 6-13 550-sheet paper feeder internal parts and assemblies (continued)

Ref No	Part number	Description	Qty
2	RM2-2769-000CN	Lift drive assembly	1
3	RM2-2764-000CN	Cassette assembly	1
4	RM2-2695-000CN	Paper pickup roller assembly	2
5	RM2-2775-000CN	Paper feed guide assembly, upper	1
6	RM3-7537-000CN	Paper feeder driver PCA	1
7	RK3-0335-000CN	Motor, stepping DC	1
8	RM2-2692-000CN	Separation roller assembly (Tray1/2/3)	1
9	RM2-2774-000CN	Paper feed guide assembly, lower	1

Alphabetical parts list

Table 6-14 Alphabetical parts list

Description	Part number	Table and page
210A Black Toner Crtg; standard	W2100A	Whole unit replacement and toner cartridges on page 983
210A Cyan Toner Crtg; standard	W2101A	Whole unit replacement and toner cartridges on page 983
210A Magenta Toner Crtg; standard	W2103A	Whole unit replacement and toner cartridges on page 983
210A Yellow Toner Crtg; standard	W2102A	Whole unit replacement and toner cartridges on page 983
210X Black Toner Crtg; high capacity	W2100X	Whole unit replacement and toner cartridges on page 983
210X Cyan Toner Crtg; high capacity	W2101X	Whole unit replacement and toner cartridges on page 983
210X Magenta Toner Crtg; high capacity	W2103X	Whole unit replacement and toner cartridges on page 983
210X Yellow Toner Crtg; high capacity	W2102X	Whole unit replacement and toner cartridges on page 983
220A Black Toner Crtg EMEA; standard	W2200A	Whole unit replacement and toner cartridges on page 983
220A Cyan Toner Crtg EMEA; standard	W2201A	Whole unit replacement and toner cartridges on page 983
220A Magenta Toner Crtg EMEA; standard	W2203A	Whole unit replacement and toner cartridges on page 983
220A Yellow Toner Crtg EMEA; standard	W2202A	Whole unit replacement and toner cartridges on page 983
220X Black Toner Crtg EMEA; high capacity	W2200X	Whole unit replacement and toner cartridges on page 983
220X Cyan Toner Crtg EMEA; high capacity	W2201X	Whole unit replacement and toner cartridges on page 983
220X Magenta Toner Crtg EMEA; high capacity	W2203X	Whole unit replacement and toner cartridges on page 983
220X Yellow Toner Crtg EMEA; high capacity	W2202X	Whole unit replacement and toner cartridges on page 983
230A Black Toner Crtg; standard	W2300A	Whole unit replacement and toner cartridges on page 983
230A Cyan Toner Crtg; standard	W2301A	Whole unit replacement and toner cartridges on page 983
230A Magenta Toner Crtg; standard	W2303A	Whole unit replacement and toner cartridges on page 983
230A Yellow Toner Crtg; standard	W2302A	Whole unit replacement and toner cartridges on page 983
230X Black Toner Crtg; high capacity	W2300X	Whole unit replacement and toner cartridges on page 983

Table 6-14 Alphabetical parts list (continued)

Description	Part number	Table and page
230X Cyan Toner Crtg; high capacity	W2301X	Whole unit replacement and toner cartridges on page 983
230X Magenta Toner Crtg; high capacity	W2303X	Whole unit replacement and toner cartridges on page 983
230X Yellow Toner Crtg; high capacity	W2302X	Whole unit replacement and toner cartridges on page 983
550-sheet paper feeder	28N93A	550-sheet paper feeder covers, panels, and doors on page 1001
ADF top cover assembly (includes rollers)	4RA80-67006	Integrated scanner assembly on page 979
Button, cartridge door	RC5-5411-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
Button, cartridge door	RC5-5411-000CN	Covers, panels, and doors (4301/4302/4303) on page 990
Cable, flexible flat	RK3-0360-000CN	Internal parts and assemblies (1 of 5) on page 992
Cable, flexible flat	RK3-0363-000CN	Internal parts and assemblies (1 of 5) on page 992
Cable, flexible flat	RK3-0367-000CN	Internal parts and assemblies (1 of 5) on page 992
Cable, flexible flat	RK3-0373-000CN	Internal parts and assemblies (1 of 5) on page 992
Cable, flexible flat	RK3-0377-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
Cable, flexible flat	RK3-0380-000CN	Internal parts and assemblies (2 of 5) on page 994
Cable, flexible flat	RK3-0383-000CN	Control panel (4201/4202/4203) on page 981
Cable, flexible flat	RK3-0383-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
Cable, flexible flat (SFP) (Wireless model)	RK3-0392-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
Cartridge door assembly (blue) (MFP)	RM2-2844-000CN	Covers, panels, and doors (4301/4302/4303) on page 990
Cartridge door assembly (blue) (SFP)	RM2-2843-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
Cartridge door assembly (gray) (MFP)	RM2-2848-000CN	Covers, panels, and doors (4301/4302/4303) on page 990
Cartridge door assembly (gray) (SFP)	RM2-2847-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
Cartridge tray assembly	RM2-2750-000CN	Internal parts and assemblies (4 of 5) on page 998
Cassette assembly	RM2-2764-000CN	550-sheet paper feeder internal parts and assemblies on page 1002

Table 6-14 Alphabetical parts list (continued)

Description	Part number	Table and page
Cassette assembly (Tray 2) (blue)	RM2-2737-000CN	Internal parts and assemblies (3 of 5) on page 996
Cassette assembly (Tray 2) (gray)	RM2-2849-000CN	Internal parts and assemblies (3 of 5) on page 996
Cassette rail assembly, left	RM2-2742-000CN	Internal parts and assemblies (3 of 5) on page 996
Cassette rail assembly, right	RM2-2743-000CN	Internal parts and assemblies (2 of 5) on page 994
Control panel base	4RA83-40005	Control panel (4301/4302/4303) on page 982
Control panel base cover	4RA83-40006	Control panel (4301/4302/4303) on page 982
Control panel touchscreen assembly	4RA83-60101	Control panel (4301/4302/4303) on page 982
Cover, FFC	4RA80-40045	Integrated scanner assembly on page 979
Cover, cassette	RC5-6738-000CN	550-sheet paper feeder covers, panels, and doors on page 1001
Cover, duplexing bottom	RC5-6129-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
Cover, duplexing bottom	RC5-6129-000CN	Covers, panels, and doors (4301/4302/4303) on page 990
Cover, front assembly	RM2-2824-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
Cover, front assembly	RM2-2824-000CN	Covers, panels, and doors (4301/4302/4303) on page 990
Cover, inner front	RC5-6742-000CN	550-sheet paper feeder covers, panels, and doors on page 1001
Cover, left (MFP)	RC5-5462-000CN	Covers, panels, and doors (4301/4302/4303) on page 990
Cover, left (SFP)	RC5-5450-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
Cover, pillar (MFP)	RC5-5444-000CN	Covers, panels, and doors (4301/4302/4303) on page 990
Cover, rear	RC5-6741-000CN	550-sheet paper feeder covers, panels, and doors on page 1001
Cover, right (MFP)	RM2-2827-000CN	Covers, panels, and doors (4301/4302/4303) on page 990
Cover, right (SFP)	RM2-2812-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
Cover, top assembly (MFP)	RM2-2762-000CN	Covers, panels, and doors (4301/4302/4303) on page 990
Cover, top assembly (SFP) (network model)	RM2-2814-000CN	Covers, panels, and doors (4201/4202/4203) on page 988

Table 6-14 Alphabetical parts list (continued)

Description	Part number	Table and page
Cover, top assembly (SFP) (wireless model)	RM2-2815-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
Density detect sensor assembly	RM2-2710-000CN	Internal parts and assemblies (3 of 5) on page 996
Dial control panel with display	4RA89-60101	Control panel (4201/4202/4203) on page 981
Duplex drive assembly (MFP)	RM2-2842-000CN	Internal parts and assemblies (5 of 5) on page 999
Duplex drive assembly (SFP)	RM2-2841-000CN	Internal parts and assemblies (5 of 5) on page 999
Duplexing clutch assembly	RM2-2714-000CN	Internal parts and assemblies (3 of 5) on page 996
Duplexing guide assembly	RM2-2760-000CN	Internal parts and assemblies (5 of 5) on page 999
Duplexing guide assembly, upper	RM2-2716-000CN	Internal parts and assemblies (4 of 5) on page 998
Engine controller PCA	RM3-7577-010CN	Internal parts and assemblies (1 of 5) on page 992
Fan	RK3-0397-000CN	Internal parts and assemblies (2 of 5) on page 994
Fax PCA kit (Brazil)	W1A78-67908	Internal parts and assemblies (1 of 5) on page 992
Fax PCA kit (EURO)	W1A78-67907	Internal parts and assemblies (1 of 5) on page 992
Fax PCA kit (Philippines)	W1A78-67909	Internal parts and assemblies (1 of 5) on page 992
Fax PCA kit (USA)	W1A78-67906	Internal parts and assemblies (1 of 5) on page 992
Fixing motor control PCA	RM3-7536-000CN	Internal parts and assemblies (2 of 5) on page 994
Formatter PCA 4201dn and 4201dne	4RA85-67001	Internal parts and assemblies (1 of 5) on page 992
Formatter PCA 4201dw and 4201dwe	4RA86-67001	Internal parts and assemblies (1 of 5) on page 992
Formatter PCA 4202dn and 4202dne	4RA87-67001	Internal parts and assemblies (1 of 5) on page 992
Formatter PCA 4202dw and 4202dwe	4RA88-67001	Internal parts and assemblies (1 of 5) on page 992
Formatter PCA 4203cdn	5HH53-67001	Internal parts and assemblies (1 of 5) on page 992
Formatter PCA 4203dw	5HH48-67001	Internal parts and assemblies (1 of 5) on page 992
Formatter PCA 4301dw and 4301dwe	4RA80-67001	Internal parts and assemblies (1 of 5) on page 992

Table 6-14 Alphabetical parts list (continued)

Description	Part number	Table and page
Formatter PCA 4301fdn and 4301fdne	4RA81-67001	Internal parts and assemblies (1 of 5)1 on page 992
Formatter PCA 4301fdw and 4301fdwe	4RA82-67001	Internal parts and assemblies (1 of 5)1 on page 992
Formatter PCA 4302dw and 4302dwe	4RA83-67001	Internal parts and assemblies (1 of 5)1 on page 992
Formatter PCA 4302fdn and 4302fdne	4RA84-67001	Internal parts and assemblies (1 of 5)1 on page 992
Formatter PCA 4302fdw and 4302fdwe	5HH64-67001	Internal parts and assemblies (1 of 5)1 on page 992
Formatter PCA 4303dw	5HH65-67001	Internal parts and assemblies (1 of 5)1 on page 992
Formatter PCA 4303fdn	5HH66-67001	Internal parts and assemblies (1 of 5)1 on page 992
Formatter PCA 4303fdw	5HH67-67001	Internal parts and assemblies (1 of 5)1 on page 992
Fuser assembly (110-127V)	RM2-2731-000CN	Internal parts and assemblies (5 of 5) on page 999
Fuser assembly (220-240V)	RM2-2732-000CN	Internal parts and assemblies (5 of 5) on page 999
HP logo gem	7122-0718	Covers, panels, and doors (4201/4202/4203) on page 988
HP logo gem	7122-0718	Covers, panels, and doors (4301/4302/4303) on page 990
ISA assembly duplex blue and folded FFC	4RA80-67002	Integrated scanner assembly on page 979
ISA assembly duplex gray and folded FFC	4RA80-67004	Integrated scanner assembly on page 979
ISA assembly simplex blue and folded FFC	4RA80-67003	Integrated scanner assembly on page 979
ISA assembly simplex gray and folded FFC	4RA80-67005	Integrated scanner assembly on page 979
ISA lift assembly	B3Q10-60128	Integrated scanner assembly on page 979
ISA lift slider pin	B3Q10-40041	Integrated scanner assembly on page 979
Interlock holder assembly	RM2-2759-000CN	Internal parts and assemblies (3 of 5) on page 996
Intermediate transfer belt	RM2-2811-000CN	Internal parts and assemblies (3 of 5) on page 996
Laser scanner assembly	RM2-2630-000CN	Internal parts and assemblies (1 of 5)1 on page 992
Left cover assembly	RM2-2770-000CN	550-sheet paper feeder covers, panels, and doors on page 1001

Table 6-14 Alphabetical parts list (continued)

Description	Part number	Table and page
Lift drive assembly	RM2-2769-000CN	550-sheet paper feeder internal parts and assemblies on page 1002
Lifter drive assembly	RM2-2711-000CN	Internal parts and assemblies (4 of 5) on page 998
Low-voltage power supply (110-127V)	RM2-2834-000CN	Internal parts and assemblies (2 of 5) on page 994
Low-voltage power supply (220-240V)	RM2-2835-000CN	Internal parts and assemblies (2 of 5) on page 994
MP paper feed assembly	RM2-2741-000	Internal parts and assemblies (2 of 5) on page 994
Main motor assembly	RM2-2779-000CN	Internal parts and assemblies (3 of 5) on page 996
Microswitch	RK2-0534-000CN	Internal parts and assemblies (1 of 5) on page 992
Microswitch	RK2-0534-000CN	Internal parts and assemblies (3 of 5) on page 996
Motor, stepping DC	RK3-0334-000CN	Internal parts and assemblies (3 of 5) on page 996
Motor, stepping DC	RK3-0335-000CN	Internal parts and assemblies (1 of 5) on page 992
Motor, stepping DC	RK3-0335-000CN	550-sheet paper feeder internal parts and assemblies on page 1002
Multipurpose feed assembly	RM2-2758-000CN	Internal parts and assemblies (3 of 5) on page 996
Multipurpose guide assembly, lower	RM2-2749-000CN	Internal parts and assemblies (3 of 5) on page 996
Multipurpose guide assembly, upper	RM2-2790-000CN	Internal parts and assemblies (3 of 5) on page 996
Name plate 4201dne	RC5-5465-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
Name plate 4201dw	RC5-5496-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
Name plate 4201dwe	RC5-5464-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
Name plate 4202de	RC5-5492-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
Name plate 4202dw	RC5-5491-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
Name plate 4202dwe	RC5-5486-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
Name plate 4203cdn	RC5-5490-000CN	Covers, panels, and doors (4201/4202/4203) on page 988

Table 6-14 Alphabetical parts list (continued)

Description	Part number	Table and page
Name plate 4203dn	RC5-5489-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
Name plate 4203dw	RC5-5488-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
Name plate4201dn	RC5-5497-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
Nameplate-Color LaserJet Pro MFP 4301dw	4RA80-40048	Covers, panels, and doors (4301/4302/4303) on page 990
Nameplate-Color LaserJet Pro MFP 4301dwe	4RA80-00012	Covers, panels, and doors (4301/4302/4303) on page 990
Nameplate-Color LaserJet Pro MFP 4301fdn	4RA81-40002	Covers, panels, and doors (4301/4302/4303) on page 990
Nameplate-Color LaserJet Pro MFP 4301fdne	4RA80-00008	Covers, panels, and doors (4301/4302/4303) on page 990
Nameplate-Color LaserJet Pro MFP 4301fdw	4RA82-40004	Covers, panels, and doors (4301/4302/4303) on page 990
Nameplate-Color LaserJet Pro MFP 4301fdwe	4RA82-00012	Covers, panels, and doors (4301/4302/4303) on page 990
Nameplate-Color LaserJet Pro MFP 4302dw	4RA83-40002	Covers, panels, and doors (4301/4302/4303) on page 990
Nameplate-Color LaserJet Pro MFP 4302dwe	4RA83-00004	Covers, panels, and doors (4301/4302/4303) on page 990
Nameplate-Color LaserJet Pro MFP 4302fdn	4RA84-40012	Covers, panels, and doors (4301/4302/4303) on page 990
Nameplate-Color LaserJet Pro MFP 4302fdn	5HH66-00002	Covers, panels, and doors (4301/4302/4303) on page 990
Nameplate-Color LaserJet Pro MFP 4302fdw	5HH64-40002	Covers, panels, and doors (4301/4302/4303) on page 990
Nameplate-Color LaserJet Pro MFP 4302fdw	5HH67-00002	Covers, panels, and doors (4301/4302/4303) on page 990
Nameplate-Color LaserJet Pro MFP 4302fdwe	5HH64-00004	Covers, panels, and doors (4301/4302/4303) on page 990
Nameplate-Color LaserJet Pro MFP 4303dw	5HH65-00004	Covers, panels, and doors (4301/4302/4303) on page 990
PCA holder assembly	RM2-2819-000CN	Internal parts and assemblies (1 of 5)1 on page 992
Paper feed guide assembly, lower	RM2-2736-000CN	Internal parts and assemblies (4 of 5) on page 998
Paper feed guide assembly, lower	RM2-2774-000CN	550-sheet paper feeder internal parts and assemblies on page 1002
Paper feed guide assembly, upper	RM2-2747-000CN	Internal parts and assemblies (4 of 5) on page 998

Table 6-14 Alphabetical parts list (continued)

Description	Part number	Table and page
Paper feed guide assembly, upper	RM2-2775-000CN	550-sheet paper feeder internal parts and assemblies on page 1002
Paper feeder driver PCA	RM3-7537-000CN	550-sheet paper feeder internal parts and assemblies on page 1002
Paper pickup drive assembly	RM2-2763-000CN	Internal parts and assemblies (4 of 5) on page 998
Paper pickup drive assembly	RM2-2776-000CN	550-sheet paper feeder internal parts and assemblies on page 1002
Paper pickup roller assembly	RM2-2695-000CN	Internal parts and assemblies (4 of 5) on page 998
Paper pickup roller assembly	RM2-2695-000CN	550-sheet paper feeder internal parts and assemblies on page 1002
Prod-Exchange 110V 4201dn WUR	4RA85-69004	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 110V 4201dne WUR	4RA85-69002	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 110V 4201dw WUR	4RA86-69004	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 110V 4201dwe WUR	4RA86-69002	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 110V 4203dn WUR TW	4RA89-69002	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 110V 4203dw WUR Brazil	5HH48-69005	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 110V 4203dw WUR LAR	5HH48-69004	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 110V 4203dw WUR TW	5HH48-69002	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 110V 4301dw WUR	4RA80-69004	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 110V 4301dwe WUR	4RA80-69002	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 110V 4301fdn WUR	4RA81-69004	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 110V 4301fdne WUR	4RA81-69002	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 110V 4301fdw WUR	4RA82-69004	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 110V 4301fdwe WUR	4RA82-69002	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 110V 4303dw WUR LAR	5HH65-69003	Whole unit replacement and toner cartridges on page 983

Table 6-14 Alphabetical parts list (continued)

Description	Part number	Table and page
Prod-Exchange 110V 4303dw WUR TW	5HH65-69001	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 110V 4303fdn WUR TW	5HH66-69001	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 110V 4303fdw WUR	5HH67-69006	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 110V 4303fdw WUR LAR	5HH67-69005	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 110V 4303fdw WUR TW	5HH67-69001	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4201dn WUR	4RA85-69003	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4201dne WUR	4RA85-69001	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4201dw WUR	4RA86-69003	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4201dwe WUR	4RA86-69001	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4202dn WUR	4RA87-69002	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4202dw WUR	4RA88-69002	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4202dwe WUR	4RA88-69001	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4203cdn Gray CN WUR	5HH53-69001	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4203dn Blue WUR	4RA89-69001	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4203dn Gray WUR RU	4RA89-69005	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4203dw Gray WUR RU	5HH48-69007	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4203dw WUR	5HH48-69001	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4203dw WUR LAR	5HH48-69006	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4301dw WUR	4RA80-69003	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4301dwe WUR	4RA80-69001	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4301fdn WUR	4RA81-69003	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4301fdne WUR	4RA81-69001	Whole unit replacement and toner cartridges on page 983

Table 6-14 Alphabetical parts list (continued)

Description	Part number	Table and page
Prod-Exchange 220V 4301fdw WUR	4RA82-69003	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4301dwe WUR	4RA82-69001	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4302dw WUR	4RA83-69002	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4302dwe WUR	4RA83-69001	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4302fdn WUR	4RA84-69002	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4302fdw WUR	5HH64-69001	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4302dwe WUR	5HH64-69002	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4303dw CN WUR	5HH65-69004	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4303dw Gray WUR RU	5HH65-69007	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4303dw WUR	5HH65-69002	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4303fdn Gray WUR	5HH66-69006	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4303fdn WUR	5HH66-69002	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4303fdw Gray WUR RU	5HH67-69008	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4303fdw WUR	5HH67-69002	Whole unit replacement and toner cartridges on page 983
Prod-Exchange 220V 4303fdw WUR LAR	5HH67-69007	Whole unit replacement and toner cartridges on page 983
Prod-Replace New 220V 4203dn China GV WUR	4RA89-69003	Whole unit replacement and toner cartridges on page 983
Prod-Replace New 220V 4203dn IN WUR	4RA89-69004	Whole unit replacement and toner cartridges on page 983
Prod-Replace New 220V 4203dw CN WUR	5HH48-69003	Whole unit replacement and toner cartridges on page 983
Prod-Replace New 220V 4303dw IN GOV WUR	5HH65-69006	Whole unit replacement and toner cartridges on page 983
Prod-Replace New 220V 4303dw IN WUR	5HH65-69005	Whole unit replacement and toner cartridges on page 983
Prod-Replace New 220V 4303fdn CN GOV WUR	5HH66-69005	Whole unit replacement and toner cartridges on page 983
Prod-Replace New 220V 4303fdn CN WUR	5HH66-69003	Whole unit replacement and toner cartridges on page 983

Table 6-14 Alphabetical parts list (continued)

Description	Part number	Table and page
Prod-Replace New 220V 4303fdn IN WUR	5HH66-69004	Whole unit replacement and toner cartridges on page 983
Prod-Replace New 220V 4303fdw CN WUR	5HH67-69003	Whole unit replacement and toner cartridges on page 983
Prod-Replace New 220V 4303fdw IN WUR	5HH67-69004	Whole unit replacement and toner cartridges on page 983
Rear door assembly	RM2-2754-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
Rear door assembly	RM2-2754-000CN	Covers, panels, and doors (4301/4302/4303) on page 990
Right cover assembly	RM2-2771-000CN	550-sheet paper feeder covers, panels, and doors on page 1001
Secondary transfer feed assembly	RM2-2755-000CN	Internal parts and assemblies (5 of 5) on page 999
Secondary transfer roller assembly	RM2-6455-000CN	Internal parts and assemblies (5 of 5) on page 999
Sensor unit, waste toner	RM2-2793-000	Internal parts and assemblies (2 of 5) on page 994
Separation roller assembly (Tray1/2/3)	RM2-2692-000CN	Internal parts and assemblies (3 of 5) on page 996
Separation roller assembly (Tray1/2/3)	RM2-2692-000CN	Internal parts and assemblies (4 of 5) on page 998
Separation roller assembly (Tray1/2/3)	RM2-2692-000CN	550-sheet paper feeder internal parts and assemblies on page 1002
Solenoid	RK3-0408-000CN	Internal parts and assemblies (3 of 5) on page 996
Switch, power supply PCA	RM3-7568-000CN	Covers, panels, and doors (4201/4202/4203) on page 988
WIFI PCA 802.11N Dual Band Radio	0960-4630	Internal parts and assemblies (1 of 5)1 on page 992
XC Black Contract Toner	W2150XC	Whole unit replacement and toner cartridges on page 983
XC Cyan Contract Toner	W2151XC	Whole unit replacement and toner cartridges on page 983
XC Magenta Contract Toner	W2153XC	Whole unit replacement and toner cartridges on page 983
XC Yellow Contract Toner	W2152XC	Whole unit replacement and toner cartridges on page 983

Numerical parts list

Table 6-15 Numerical parts list

Part number	Description	Table and page
W2201A	220A Cyan Toner Crtg EMEA; standard	Whole unit replacement and toner cartridges on page 983
0960-4630	WIFI PCA 802.11N Dual Band Radio	Internal parts and assemblies (1 of 5) on page 992
28N93A	550-sheet paper feeder	550-sheet paper feeder covers, panels, and doors on page 1001
4RA80-00008	Nameplate-Color LaserJet Pro MFP 4301fdne	Covers, panels, and doors (4301/4302/4303) on page 990
4RA80-00012	Nameplate-Color LaserJet Pro MFP 4301dwe	Covers, panels, and doors (4301/4302/4303) on page 990
4RA80-40045	Cover, FFC	Integrated scanner assembly on page 979
4RA80-40048	Nameplate-Color LaserJet Pro MFP 4301dw	Covers, panels, and doors (4301/4302/4303) on page 990
4RA80-67001	Formatter PCA 4301dw and 4301dwe	Internal parts and assemblies (1 of 5) on page 992
4RA80-67002	ISA assembly duplex blue and folded FFC	Integrated scanner assembly on page 979
4RA80-67003	ISA assembly simplex blue and folded FFC	Integrated scanner assembly on page 979
4RA80-67004	ISA assembly duplex gray and folded FFC	Integrated scanner assembly on page 979
4RA80-67005	ISA assembly simplex gray and folded FFC	Integrated scanner assembly on page 979
4RA80-67006	ADF top cover assembly (includes rollers)	Integrated scanner assembly on page 979
4RA80-69001	Prod-Exchange 220V 4301dwe WUR	Whole unit replacement and toner cartridges on page 983
4RA80-69002	Prod-Exchange 110V 4301dwe WUR	Whole unit replacement and toner cartridges on page 983
4RA80-69003	Prod-Exchange 220V 4301dw WUR	Whole unit replacement and toner cartridges on page 983
4RA80-69004	Prod-Exchange 110V 4301dw WUR	Whole unit replacement and toner cartridges on page 983
4RA81-40002	Nameplate-Color LaserJet Pro MFP 4301fdn	Covers, panels, and doors (4301/4302/4303) on page 990
4RA81-67001	Formatter PCA 4301fdn and 4301fdne	Internal parts and assemblies (1 of 5) on page 992
4RA81-69001	Prod-Exchange 220V 4301fdne WUR	Whole unit replacement and toner cartridges on page 983
4RA81-69002	Prod-Exchange 110V 4301fdne WUR	Whole unit replacement and toner cartridges on page 983

Table 6-15 Numerical parts list (continued)

Part number	Description	Table and page
4RA81-69003	Prod-Exchange 220V 4301fdn WUR	Whole unit replacement and toner cartridges on page 983
4RA81-69004	Prod-Exchange 110V 4301fdn WUR	Whole unit replacement and toner cartridges on page 983
4RA82-00012	Nameplate-Color LaserJet Pro MFP 4301fdwe	Covers, panels, and doors (4301/4302/4303) on page 990
4RA82-40004	Nameplate-Color LaserJet Pro MFP 4301fdw	Covers, panels, and doors (4301/4302/4303) on page 990
4RA82-67001	Formatter PCA 4301fdw and 4301fdwe	Internal parts and assemblies (1 of 5)1 on page 992
4RA82-69001	Prod-Exchange 220V 4301fdwe WUR	Whole unit replacement and toner cartridges on page 983
4RA82-69002	Prod-Exchange 110V 4301fdwe WUR	Whole unit replacement and toner cartridges on page 983
4RA82-69003	Prod-Exchange 220V 4301fdw WUR	Whole unit replacement and toner cartridges on page 983
4RA82-69004	Prod-Exchange 110V 4301fdw WUR	Whole unit replacement and toner cartridges on page 983
4RA83-00004	Nameplate-Color LaserJet Pro MFP 4302dwe	Covers, panels, and doors (4301/4302/4303) on page 990
4RA83-40002	Nameplate-Color LaserJet Pro MFP 4302dw	Covers, panels, and doors (4301/4302/4303) on page 990
4RA83-40005	Control panel base	Control panel (4301/4302/4303) on page 982
4RA83-40006	Control panel base cover	Control panel (4301/4302/4303) on page 982
4RA83-60101	Control panel touchscreen assembly	Control panel (4301/4302/4303) on page 982
4RA83-67001	Formatter PCA 4302dw and 4302dwe	Internal parts and assemblies (1 of 5)1 on page 992
4RA83-69001	Prod-Exchange 220V 4302dwe WUR	Whole unit replacement and toner cartridges on page 983
4RA83-69002	Prod-Exchange 220V 4302dw WUR	Whole unit replacement and toner cartridges on page 983
4RA84-40012	Nameplate-Color LaserJet Pro MFP 4302fdn	Covers, panels, and doors (4301/4302/4303) on page 990
4RA84-67001	Formatter PCA 4302fdn and 4302fdne	Internal parts and assemblies (1 of 5)1 on page 992
4RA84-69002	Prod-Exchange 220V 4302fdn WUR	Whole unit replacement and toner cartridges on page 983
4RA85-67001	Formatter PCA 4201dn and 4201dne	Internal parts and assemblies (1 of 5)1 on page 992
4RA85-69001	Prod-Exchange 220V 4201dne WUR	Whole unit replacement and toner cartridges on page 983

Table 6-15 Numerical parts list (continued)

Part number	Description	Table and page
4RA85-69002	Prod-Exchange 110V 4201dne WUR	Whole unit replacement and toner cartridges on page 983
4RA85-69003	Prod-Exchange 220V 4201dn WUR	Whole unit replacement and toner cartridges on page 983
4RA85-69004	Prod-Exchange 110V 4201dn WUR	Whole unit replacement and toner cartridges on page 983
4RA86-67001	Formatter PCA 4201dw and 4201dwe	Internal parts and assemblies (1 of 5)1 on page 992
4RA86-69001	Prod-Exchange 220V 4201dwe WUR	Whole unit replacement and toner cartridges on page 983
4RA86-69002	Prod-Exchange 110V 4201dwe WUR	Whole unit replacement and toner cartridges on page 983
4RA86-69003	Prod-Exchange 220V 4201dw WUR	Whole unit replacement and toner cartridges on page 983
4RA86-69004	Prod-Exchange 110V 4201dw WUR	Whole unit replacement and toner cartridges on page 983
4RA87-67001	Formatter PCA 4202dn and 4202dne	Internal parts and assemblies (1 of 5)1 on page 992
4RA87-69002	Prod-Exchange 220V 4202dn WUR	Whole unit replacement and toner cartridges on page 983
4RA88-67001	Formatter PCA 4202dw and 4202dwe	Internal parts and assemblies (1 of 5)1 on page 992
4RA88-69001	Prod-Exchange 220V 4202dwe WUR	Whole unit replacement and toner cartridges on page 983
4RA88-69002	Prod-Exchange 220V 4202dw WUR	Whole unit replacement and toner cartridges on page 983
4RA89-60101	Dial control panel with display	Control panel (4201/4202/4203) on page 981
4RA89-69001	Prod-Exchange 220V 4203dn Blue WUR	Whole unit replacement and toner cartridges on page 983
4RA89-69002	Prod-Exchange 110V 4203dn WUR TW	Whole unit replacement and toner cartridges on page 983
4RA89-69003	Prod-Replace New 220V 4203dn China GV WUR	Whole unit replacement and toner cartridges on page 983
4RA89-69004	Prod-Replace New 220V 4203dn IN WUR	Whole unit replacement and toner cartridges on page 983
4RA89-69005	Prod-Exchange 220V 4203dn Gray WUR RU	Whole unit replacement and toner cartridges on page 983
5HH48-67001	Formatter PCA 4203dw	Internal parts and assemblies (1 of 5)1 on page 992
5HH48-69001	Prod-Exchange 220V 4203dw WUR	Whole unit replacement and toner cartridges on page 983
5HH48-69002	Prod-Exchange 110V 4203dw WUR TW	Whole unit replacement and toner cartridges on page 983

Table 6-15 Numerical parts list (continued)

Part number	Description	Table and page
5HH48-69003	Prod-Replace New 220V 4203dw CN WUR	Whole unit replacement and toner cartridges on page 983
5HH48-69004	Prod-Exchange 110V 4203dw WUR LAR	Whole unit replacement and toner cartridges on page 983
5HH48-69005	Prod-Exchange 110V 4203dw WUR Brazil	Whole unit replacement and toner cartridges on page 983
5HH48-69006	Prod-Exchange 220V 4203dw WUR LAR	Whole unit replacement and toner cartridges on page 983
5HH48-69007	Prod-Exchange 220V 4203dw Gray WUR RU	Whole unit replacement and toner cartridges on page 983
5HH53-67001	Formatter PCA 4203cdn	Internal parts and assemblies (1 of 5)1 on page 992
5HH53-69001	Prod-Exchange 220V 4203cdn Gray CN WUR	Whole unit replacement and toner cartridges on page 983
5HH64-00004	Nameplate-Color LaserJet Pro MFP 4302fdwe	Covers, panels, and doors (4301/4302/4303) on page 990
5HH64-40002	Nameplate-Color LaserJet Pro MFP 4302fdw	Covers, panels, and doors (4301/4302/4303) on page 990
5HH64-67001	Formatter PCA 4302fdw and 4302fdwe	Internal parts and assemblies (1 of 5)1 on page 992
5HH64-69001	Prod-Exchange 220V 4302fdw WUR	Whole unit replacement and toner cartridges on page 983
5HH64-69002	Prod-Exchange 220V 4302fdwe WUR	Whole unit replacement and toner cartridges on page 983
5HH65-00004	Nameplate-Color LaserJet Pro MFP 4303dw	Covers, panels, and doors (4301/4302/4303) on page 990
5HH65-67001	Formatter PCA 4303dw	Internal parts and assemblies (1 of 5)1 on page 992
5HH65-69001	Prod-Exchange 110V 4303dw WUR TW	Whole unit replacement and toner cartridges on page 983
5HH65-69002	Prod-Exchange 220V 4303dw WUR	Whole unit replacement and toner cartridges on page 983
5HH65-69003	Prod-Exchange 110V 4303dw WUR LAR	Whole unit replacement and toner cartridges on page 983
5HH65-69004	Prod-Exchange 220V 4303dw CN WUR	Whole unit replacement and toner cartridges on page 983
5HH65-69005	Prod-Replace New 220V 4303dw IN WUR	Whole unit replacement and toner cartridges on page 983
5HH65-69006	Prod-Replace New 220V 4303dw IN GOV WUR	Whole unit replacement and toner cartridges on page 983
5HH65-69007	Prod-Exchange 220V 4303dw Gray WUR RU	Whole unit replacement and toner cartridges on page 983
5HH66-00002	Nameplate-Color LaserJet Pro MFP 4302fdn	Covers, panels, and doors (4301/4302/4303) on page 990

Table 6-15 Numerical parts list (continued)

Part number	Description	Table and page
5HH66-67001	Formatter PCA 4303fdn	Internal parts and assemblies (1 of 5)1 on page 992
5HH66-69001	Prod-Exchange 110V 4303fdn WUR TW	Whole unit replacement and toner cartridges on page 983
5HH66-69002	Prod-Exchange 220V 4303fdn WUR	Whole unit replacement and toner cartridges on page 983
5HH66-69003	Prod-Replace New 220V 4303fdn CN WUR	Whole unit replacement and toner cartridges on page 983
5HH66-69004	Prod-Replace New 220V 4303fdn IN WUR	Whole unit replacement and toner cartridges on page 983
5HH66-69005	Prod-Replace New 220V 4303fdn CN GOV WUR	Whole unit replacement and toner cartridges on page 983
5HH66-69006	Prod-Exchange 220V 4303fdn Gray WUR	Whole unit replacement and toner cartridges on page 983
5HH67-00002	Nameplate-Color LaserJet Pro MFP 4302fdw	Covers, panels, and doors (4301/4302/4303) on page 990
5HH67-67001	Formatter PCA 4303fdw	Internal parts and assemblies (1 of 5)1 on page 992
5HH67-69001	Prod-Exchange 110V 4303fdw WUR TW	Whole unit replacement and toner cartridges on page 983
5HH67-69002	Prod-Exchange 220V 4303fdw WUR	Whole unit replacement and toner cartridges on page 983
5HH67-69003	Prod-Replace New 220V 4303fdw CN WUR	Whole unit replacement and toner cartridges on page 983
5HH67-69004	Prod-Replace New 220V 4303fdw IN WUR	Whole unit replacement and toner cartridges on page 983
5HH67-69005	Prod-Exchange 110V 4303fdw WUR LAR	Whole unit replacement and toner cartridges on page 983
5HH67-69006	Prod-Exchange 110V 4303fdw WUR	Whole unit replacement and toner cartridges on page 983
5HH67-69007	Prod-Exchange 220V 4303fdw WUR LAR	Whole unit replacement and toner cartridges on page 983
5HH67-69008	Prod-Exchange 220V 4303fdw Gray WUR RU	Whole unit replacement and toner cartridges on page 983
7122-0718	HP logo gem	Covers, panels, and doors (4201/4202/4203) on page 988
7122-0718	HP logo gem	Covers, panels, and doors (4301/4302/4303) on page 990
B3Q10-40041	ISA lift slider pin	Integrated scanner assembly on page 979
B3Q10-60128	ISA lift assembly	Integrated scanner assembly on page 979
RC5-5411-000CN	Button, cartridge door	Covers, panels, and doors (4201/4202/4203) on page 988

Table 6-15 Numerical parts list (continued)

Part number	Description	Table and page
RC5-5411-000CN	Button, cartridge door	Covers, panels, and doors (4301/4302/4303) on page 990
RC5-5444-000CN	Cover, pillar (MFP)	Covers, panels, and doors (4301/4302/4303) on page 990
RC5-5450-000CN	Cover, left (SFP)	Covers, panels, and doors (4201/4202/4203) on page 988
RC5-5462-000CN	Cover, left (MFP)	Covers, panels, and doors (4301/4302/4303) on page 990
RC5-5464-000CN	Name plate 4201dwe	Covers, panels, and doors (4201/4202/4203) on page 988
RC5-5465-000CN	Name plate 4201dne	Covers, panels, and doors (4201/4202/4203) on page 988
RC5-5486-000CN	Name plate 4202dwe	Covers, panels, and doors (4201/4202/4203) on page 988
RC5-5488-000CN	Name plate 4203dw	Covers, panels, and doors (4201/4202/4203) on page 988
RC5-5489-000CN	Name plate 4203dn	Covers, panels, and doors (4201/4202/4203) on page 988
RC5-5490-000CN	Name plate 4203cdn	Covers, panels, and doors (4201/4202/4203) on page 988
RC5-5491-000CN	Name plate 4202dw	Covers, panels, and doors (4201/4202/4203) on page 988
RC5-5492-000CN	Name plate 4202de	Covers, panels, and doors (4201/4202/4203) on page 988
RC5-5496-000CN	Name plate 4201dw	Covers, panels, and doors (4201/4202/4203) on page 988
RC5-5497-000CN	Name plate 4201dn	Covers, panels, and doors (4201/4202/4203) on page 988
RC5-6129-000CN	Cover, duplexing bottom	Covers, panels, and doors (4201/4202/4203) on page 988
RC5-6129-000CN	Cover, duplexing bottom	Covers, panels, and doors (4301/4302/4303) on page 990
RC5-6738-000CN	Cover, cassette	550-sheet paper feeder covers, panels, and doors on page 1001
RC5-6741-000CN	Cover, rear	550-sheet paper feeder covers, panels, and doors on page 1001
RC5-6742-000CN	Cover, inner front	550-sheet paper feeder covers, panels, and doors on page 1001
RK2-0534-000CN	Microswitch	Internal parts and assemblies (1 of 5)1 on page 992
RK2-0534-000CN	Microswitch	Internal parts and assemblies (3 of 5) on page 996
RK3-0334-000CN	Motor, stepping DC	Internal parts and assemblies (3 of 5) on page 996

Table 6-15 Numerical parts list (continued)

Part number	Description	Table and page
RK3-0335-000CN	Motor, stepping DC	Internal parts and assemblies (1 of 5) on page 992
RK3-0335-000CN	Motor, stepping DC	550-sheet paper feeder internal parts and assemblies on page 1002
RK3-0360-000CN	Cable, flexible flat	Internal parts and assemblies (1 of 5) on page 992
RK3-0363-000CN	Cable, flexible flat	Internal parts and assemblies (1 of 5) on page 992
RK3-0367-000CN	Cable, flexible flat	Internal parts and assemblies (1 of 5) on page 992
RK3-0373-000CN	Cable, flexible flat	Internal parts and assemblies (1 of 5) on page 992
RK3-0377-000CN	Cable, flexible flat	Covers, panels, and doors (4201/4202/4203) on page 988
RK3-0380-000CN	Cable, flexible flat	Internal parts and assemblies (2 of 5) on page 994
RK3-0383-000CN	Cable, flexible flat	Control panel (4201/4202/4203) on page 981
RK3-0383-000CN	Cable, flexible flat	Covers, panels, and doors (4201/4202/4203) on page 988
RK3-0392-000CN	Cable, flexible flat (SFP) (Wireless model)	Covers, panels, and doors (4201/4202/4203) on page 988
RK3-0397-000CN	Fan	Internal parts and assemblies (2 of 5) on page 994
RK3-0408-000CN	Solenoid	Internal parts and assemblies (3 of 5) on page 996
RM2-2630-000CN	Laser scanner assembly	Internal parts and assemblies (1 of 5) on page 992
RM2-2692-000CN	Separation roller assembly (Tray1/2/3)	Internal parts and assemblies (3 of 5) on page 996
RM2-2692-000CN	Separation roller assembly (Tray1/2/3)	Internal parts and assemblies (4 of 5) on page 998
RM2-2692-000CN	Separation roller assembly (Tray1/2/3)	550-sheet paper feeder internal parts and assemblies on page 1002
RM2-2695-000CN	Paper pickup roller assembly	Internal parts and assemblies (4 of 5) on page 998
RM2-2695-000CN	Paper pickup roller assembly	550-sheet paper feeder internal parts and assemblies on page 1002
RM2-2710-000CN	Density detect sensor assembly	Internal parts and assemblies (3 of 5) on page 996
RM2-2711-000CN	Lifter drive assembly	Internal parts and assemblies (4 of 5) on page 998

Table 6-15 Numerical parts list (continued)

Part number	Description	Table and page
RM2-2714-000CN	Duplexing clutch assembly	Internal parts and assemblies (3 of 5) on page 996
RM2-2716-000CN	Duplexing guide assembly, upper	Internal parts and assemblies (4 of 5) on page 998
RM2-2731-000CN	Fuser assembly (110-127V)	Internal parts and assemblies (5 of 5) on page 999
RM2-2732-000CN	Fuser assembly (220-240V)	Internal parts and assemblies (5 of 5) on page 999
RM2-2736-000CN	Paper feed guide assembly, lower	Internal parts and assemblies (4 of 5) on page 998
RM2-2737-000CN	Cassette assembly (Tray 2) (blue)	Internal parts and assemblies (3 of 5) on page 996
RM2-2741-000	MP paper feed assembly	Internal parts and assemblies (2 of 5) on page 994
RM2-2742-000CN	Cassette rail assembly, left	Internal parts and assemblies (3 of 5) on page 996
RM2-2743-000CN	Cassette rail assembly, right	Internal parts and assemblies (2 of 5) on page 994
RM2-2747-000CN	Paper feed guide assembly, upper	Internal parts and assemblies (4 of 5) on page 998
RM2-2749-000CN	Multipurpose guide assembly, lower	Internal parts and assemblies (3 of 5) on page 996
RM2-2750-000CN	Cartridge tray assembly	Internal parts and assemblies (4 of 5) on page 998
RM2-2754-000CN	Rear door assembly	Covers, panels, and doors (4201/4202/4203) on page 988
RM2-2754-000CN	Rear door assembly	Covers, panels, and doors (4301/4302/4303) on page 990
RM2-2755-000CN	Secondary transfer feed assembly	Internal parts and assemblies (5 of 5) on page 999
RM2-2758-000CN	Multipurpose feed assembly	Internal parts and assemblies (3 of 5) on page 996
RM2-2759-000CN	Interlock holder assembly	Internal parts and assemblies (3 of 5) on page 996
RM2-2760-000CN	Duplexing guide assembly	Internal parts and assemblies (5 of 5) on page 999
RM2-2762-000CN	Cover, top assembly (MFP)	Covers, panels, and doors (4301/4302/4303) on page 990
RM2-2763-000CN	Paper pickup drive assembly	Internal parts and assemblies (4 of 5) on page 998
RM2-2764-000CN	Cassette assembly	550-sheet paper feeder internal parts and assemblies on page 1002

Table 6-15 Numerical parts list (continued)

Part number	Description	Table and page
RM2-2769-000CN	Lift drive assembly	550-sheet paper feeder internal parts and assemblies on page 1002
RM2-2770-000CN	Left cover assembly	550-sheet paper feeder covers, panels, and doors on page 1001
RM2-2771-000CN	Right cover assembly	550-sheet paper feeder covers, panels, and doors on page 1001
RM2-2774-000CN	Paper feed guide assembly, lower	550-sheet paper feeder internal parts and assemblies on page 1002
RM2-2775-000CN	Paper feed guide assembly, upper	550-sheet paper feeder internal parts and assemblies on page 1002
RM2-2776-000CN	Paper pickup drive assembly	550-sheet paper feeder internal parts and assemblies on page 1002
RM2-2779-000CN	Main motor assembly	Internal parts and assemblies (3 of 5) on page 996
RM2-2790-000CN	Multipurpose guide assembly, upper	Internal parts and assemblies (3 of 5) on page 996
RM2-2793-000	Sensor unit, waste toner	Internal parts and assemblies (2 of 5) on page 994
RM2-2811-000CN	Intermediate transfer belt	Internal parts and assemblies (3 of 5) on page 996
RM2-2812-000CN	Cover, right (SFP)	Covers, panels, and doors (4201/4202/4203) on page 988
RM2-2814-000CN	Cover, top assembly (SFP) (network model)	Covers, panels, and doors (4201/4202/4203) on page 988
RM2-2815-000CN	Cover, top assembly (SFP) (wireless model)	Covers, panels, and doors (4201/4202/4203) on page 988
RM2-2819-000CN	PCA holder assembly	Internal parts and assemblies (1 of 5) on page 992
RM2-2824-000CN	Cover, front assembly	Covers, panels, and doors (4201/4202/4203) on page 988
RM2-2824-000CN	Cover, front assembly	Covers, panels, and doors (4301/4302/4303) on page 990
RM2-2827-000CN	Cover, right (MFP)	Covers, panels, and doors (4301/4302/4303) on page 990
RM2-2834-000CN	Low-voltage power supply (110-127V)	Internal parts and assemblies (2 of 5) on page 994
RM2-2835-000CN	Low-voltage power supply (220-240V)	Internal parts and assemblies (2 of 5) on page 994
RM2-2841-000CN	Duplex drive assembly (SFP)	Internal parts and assemblies (5 of 5) on page 999
RM2-2842-000CN	Duplex drive assembly (MFP)	Internal parts and assemblies (5 of 5) on page 999

Table 6-15 Numerical parts list (continued)

Part number	Description	Table and page
RM2-2843-000CN	Cartridge door assembly (blue) (SFP)	Covers, panels, and doors (4201/4202/4203) on page 988
RM2-2844-000CN	Cartridge door assembly (blue) (MFP)	Covers, panels, and doors (4301/4302/4303) on page 990
RM2-2847-000CN	Cartridge door assembly (gray) (SFP)	Covers, panels, and doors (4201/4202/4203) on page 988
RM2-2848-000CN	Cartridge door assembly (gray) (MFP)	Covers, panels, and doors (4301/4302/4303) on page 990
RM2-2849-000CN	Cassette assembly (Tray 2) (gray)	Internal parts and assemblies (3 of 5) on page 996
RM2-6455-000CN	Secondary transfer roller assembly	Internal parts and assemblies (5 of 5) on page 999
RM3-7536-000CN	Fixing motor control PCA	Internal parts and assemblies (2 of 5) on page 994
RM3-7537-000CN	Paper feeder driver PCA	550-sheet paper feeder internal parts and assemblies on page 1002
RM3-7568-000CN	Switch, power supply PCA	Covers, panels, and doors (4201/4202/4203) on page 988
RM3-7577-010CN	Engine controller PCA	Internal parts and assemblies (1 of 5)1 on page 992
W1A78-67906	Fax PCA kit (USA)	Internal parts and assemblies (1 of 5)1 on page 992
W1A78-67907	Fax PCA kit (EURO)	Internal parts and assemblies (1 of 5)1 on page 992
W1A78-67908	Fax PCA kit (Brazil)	Internal parts and assemblies (1 of 5)1 on page 992
W1A78-67909	Fax PCA kit (Philippines)	Internal parts and assemblies (1 of 5)1 on page 992
W2100A	210A Black Toner Crtg; standard	Whole unit replacement and toner cartridges on page 983
W2100X	210X Black Toner Crtg; high capacity	Whole unit replacement and toner cartridges on page 983
W2101A	210A Cyan Toner Crtg; standard	Whole unit replacement and toner cartridges on page 983
W2101X	210X Cyan Toner Crtg; high capacity	Whole unit replacement and toner cartridges on page 983
W2102A	210A Yellow Toner Crtg; standard	Whole unit replacement and toner cartridges on page 983
W2102X	210X Yellow Toner Crtg; high capacity	Whole unit replacement and toner cartridges on page 983
W2103A	210A Magenta Toner Crtg; standard	Whole unit replacement and toner cartridges on page 983
W2103X	210X Magenta Toner Crtg; high capacity	Whole unit replacement and toner cartridges on page 983

Table 6-15 Numerical parts list (continued)

Part number	Description	Table and page
W2150XC	XC Black Contract Toner	Whole unit replacement and toner cartridges on page 983
W2151XC	XC Cyan Contract Toner	Whole unit replacement and toner cartridges on page 983
W2152XC	XC Yellow Contract Toner	Whole unit replacement and toner cartridges on page 983
W2153XC	XC Magenta Contract Toner	Whole unit replacement and toner cartridges on page 983
W2200A	220A Black Toner Crtg EMEA; standard	Whole unit replacement and toner cartridges on page 983
W2200X	220X Black Toner Crtg EMEA; high capacity	Whole unit replacement and toner cartridges on page 983
W2201X	220X Cyan Toner Crtg EMEA; high capacity	Whole unit replacement and toner cartridges on page 983
W2202A	220A Yellow Toner Crtg EMEA; standard	Whole unit replacement and toner cartridges on page 983
W2202X	220X Yellow Toner Crtg EMEA; high capacity	Whole unit replacement and toner cartridges on page 983
W2203A	220A Magenta Toner Crtg EMEA; standard	Whole unit replacement and toner cartridges on page 983
W2203X	220X Magenta Toner Crtg EMEA; high capacity	Whole unit replacement and toner cartridges on page 983
W2300A	230A Black Toner Crtg; standard	Whole unit replacement and toner cartridges on page 983
W2300X	230X Black Toner Crtg; high capacity	Whole unit replacement and toner cartridges on page 983
W2301A	230A Cyan Toner Crtg; standard	Whole unit replacement and toner cartridges on page 983
W2301X	230X Cyan Toner Crtg; high capacity	Whole unit replacement and toner cartridges on page 983
W2302A	230A Yellow Toner Crtg; standard	Whole unit replacement and toner cartridges on page 983
W2302X	230X Yellow Toner Crtg; high capacity	Whole unit replacement and toner cartridges on page 983
W2303A	230A Magenta Toner Crtg; standard	Whole unit replacement and toner cartridges on page 983
W2303X	230X Magenta Toner Crtg; high capacity	Whole unit replacement and toner cartridges on page 983

A Certificate of Volatility

Review the certificates of volatility for the printer.

Certificate of Volatility

Review the certificates of volatility for the printers.

Figure A-1 Certificate of Volatility SFP non-wireless (1 of 2)

Hewlett-Packard Certificate of Volatility				
Model: HP Color LaserJet Pro 4201 HP Color LaserJet Pro 4202 HP Color LaserJet Pro 4203		Part Number: 4201dne= 4RA85E; 4201dn= 4RA85F; 4202dn= 4RA87F; 4203dn= 4RA89A		Address: Hewlett Packard Company 11311 Chinden Blvd Boise, ID 83714
Volatile Memory				
Does the device contain volatile memory (Memory whose contents are lost when power is removed)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (SRAM, DRAM, etc): DRAM	Size: 512MB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Used for temporary storage during the processing of jobs and for applications running on the OS.	Steps to clear memory: When the printer is powered off, the memory is erased
Type (SRAM, DRAM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
Type (SRAM, DRAM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
Non-Volatile Memory				
Does the device contain non-volatile memory (Memory whose contents are retained when power is removed)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (Flash, EEPROM, etc): Flash	Size: 512MB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Device FW	Steps to clear memory: NA
Type (Flash, EEPROM, etc): EEPROM	Size: 32KB	User Modifiable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Function: User setting parameters for printer	Steps to clear memory: Restore factory defaults from control panel or EWS
Type (Flash, EEPROM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
Mass Storage				
Does the device contain mass storage memory (Hard Disk Drive, Tape Backup)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (HDD, Tape, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
USB				
Does the item accept USB input and if so, for what purpose (i.e. Print Jobs, device firmware updates, scan upload)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below				
Rear USB host when configured will accept stored jobs, encrypted files stored and deleted by user.				
Can any data other than scan upload be sent to the USB device)?				
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below				
Rear USB host when configured will accept stored jobs, encrypted files stored and deleted by user.				

Figure A-2 Certificate of Volatility SFP non-wireless (2 of 2)

RF/RFID			
Does the item use RF or RFID for receive or transmit of any data including remote diagnostics. (e.g. Cellular phone, Bluetooth) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes please describe below:			
Purpose:			
Frequency:		Bandwidth:	
Modulation:		Effective Radiate Power (ERP):	
Specifications:			
Other Transmission Capabilities			
Does the device employ any other methods of non-wired access to transmit or receive any data whatsoever (e.g. anything other than standard hard wired TCP/IP, direct USB, or parallel connections)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes please describe below:			
Purpose:			
Frequency:		Bandwidth:	
Modulation:		Effective Radiate Power (ERP):	
Specifications:			
Other Capabilities			
Does the device employ any other method of communications such as a Modem to transmit or receive any data whatsoever? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes please describe below:			
Purpose:			
Specifications:			
Author Information			
Name	Title	Email	Business Unit
	Technical Marketing Engineer		LES Boise CA
	Electrical Engineer		LES Boise R&D
Date Prepared: 8,2022			

Figure A-3 Certificate of Volatility SFP wireless (1 of 2)

Hewlett-Packard Certificate of Volatility				
Model: HP Color LaserJet Pro 4201 HP Color LaserJet Pro 4202 HP Color LaserJet Pro 4203		Part Number: 4201dwe= 4RA86E; 4201dw= 4RA86F; 4202dwe= 4RA88E; 4202dw= 4RA88F; 4203dw= 5HH48A		Address: Hewlett Packard Company 11311 Chinden Blvd Boise, ID 83714
Volatile Memory				
Does the device contain volatile memory (Memory whose contents are lost when power is removed)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (SRAM, DRAM, etc):	Size: 512MB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Used for temporary storage during the processing of jobs and for applications running on the OS.	Steps to clear memory: When the printer is powered off, the memory is erased
Type (SRAM, DRAM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
Type (SRAM, DRAM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
Non-Volatile Memory				
Does the device contain non-volatile memory (Memory whose contents are retained when power is removed)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (Flash, EEPROM, etc): Flash	Size: 512MB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Device FW	Steps to clear memory: NA
Type (Flash, EEPROM, etc): EEPROM	Size: 32KB	User Modifiable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Function: User setting parameters for printer	Steps to clear memory: Restore factory defaults from control panel or EWS
Type (Flash, EEPROM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
Mass Storage				
Does the device contain mass storage memory (Hard Disk Drive, Tape Backup)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (HDD, Tape, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
USB				
Does the item accept USB input and if so, for what purpose (i.e. Print Jobs, device firmware updates, scan upload)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below				
Rear USB host when configured will accept stored jobs, encrypted files stored and deleted by user.				
Can any data other than scan upload be sent to the USB device)?				
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below				
Rear USB host when configured will accept stored jobs, encrypted files stored and deleted by user.				

Figure A-4 Certificate of Volatility SFP wireless (2 of 2)

RF/RFID			
Does the item use RF or RFID for receive or transmit of any data including remote diagnostics. (e.g. Cellular phone, Bluetooth) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below			
Purpose: BLE (Bluetooth Low Energy)			
Frequency: BLE 2.4 to 2.485 GHz band		Bandwidth: 0.27 Mbit/s	
Modulation: Gaussian frequency shift modulation		Effective Radiate Power (ERP): 10mW max	
Specifications:			
Other Transmission Capabilities			
Does the device employ any other methods of non-wired access to transmit or receive any data whatsoever (e.g. anything other than standard hard wired TCP/IP, direct USB, or parallel connections)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below:			
Purpose: Wireless Network Connectivity			
Frequency: 2.4GHz and 5GHz Bands		Bandwidth: 20/40 MHz	
Modulation: Multiple		Effective Radiate Power (ERP): 802.11n/g: 15+/- 1.5dbm 802.11b: 17+/- 1.5dbm	
Specifications: 802.11a/b/g/n			
Other Capabilities			
Does the device employ any other method of communications such as a Modem to transmit or receive any data whatsoever? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes please describe below:			
Purpose:			
Specifications:			
Author Information			
Name	Title	Email	Business Unit
	Technical Marketing Engineer		LES Boise CA
	Electrical Engineer		LES Boise R&D
Date Prepared: 8,2022			

Figure A-5 Certificate of Volatility MFP non-wireless fax (1 of 2)

Hewlett-Packard Certificate of Volatility				
Model: HP Color LaserJet Pro MFP 4301 HP Color LaserJet Pro MFP 4302 HP Color LaserJet Pro MFP 4303		Part Number: 4301fdne= 4RA81E; 4301fdn= 4RA81F; 4302fdn= 4RA84F; 4303fdn= 5HH66A		Address: Hewlett Packard Company 11311 Chinden Blvd Boise, ID 83714
Volatile Memory				
Does the device contain volatile memory (Memory whose contents are lost when power is removed)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (SRAM, DRAM, etc):	Size: 512MB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Used for temporary storage during the processing of jobs and for applications running on the OS.	Steps to clear memory: When the printer is powered off, the memory is erased
Type (SRAM, DRAM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
Type (SRAM, DRAM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
Non-Volatile Memory				
Does the device contain non-volatile memory (Memory whose contents are retained when power is removed)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (Flash, EEPROM, etc): Flash	Size: 512MB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Device FW	Steps to clear memory: NA
Type (Flash, EEPROM, etc): EEPROM	Size: 32KB	User Modifiable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Function: User setting parameters for printer	Steps to clear memory: Restore factory defaults from control panel or EWS
Type (Flash, EEPROM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
Mass Storage				
Does the device contain mass storage memory (Hard Disk Drive, Tape Backup)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (HDD, Tape, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
USB				
Does the item accept USB input and if so, for what purpose (i.e. Print Jobs, device firmware updates, scan upload)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below				
Rear USB host when configured will accept stored jobs, encrypted files stored and deleted by user.				
Can any data other than scan upload be sent to the USB device)?				
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below				
Rear USB host when configured will accept stored jobs, encrypted files stored and deleted by user.				

Figure A-6 Certificate of Volatility MFP non-wireless fax (2 of 2)

RF/RFID	
Does the item use RF or RFID for receive or transmit of any data including remote diagnostics. (e.g. Cellular phone, Bluetooth) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes please describe below	
Purpose:	
Frequency:	Bandwidth:
Modulation:	Effective Radiate Power (ERP):
Specifications:	

Other Transmission Capabilities	
Does the device employ any other methods of non-wired access to transmit or receive any data whatsoever (e.g. anything other than standard hard wired TCP/IP, direct USB, or parallel connections)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes please describe below:	
Purpose:	
Frequency:	Bandwidth:
Modulation:	Effective Radiate Power (ERP):
Specifications:	

Other Capabilities	
Does the device employ any other method of communications such as a Modem to transmit or receive any data whatsoever? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below:	
Purpose: Fax	
Specifications: V34, V32, V23, V21	

Author Information			
Name	Title	Email	Business Unit
	Technical Marketing Engineer		LES Boise CA
	Electrical Engineer		LES Boise R&D
Date Prepared: 8,2022			

Figure A-7 Certificate of Volatility MFP wireless fax (1 of 2)

Hewlett-Packard Certificate of Volatility				
Model: HP Color LaserJet Pro MFP 4301 HP Color LaserJet Pro MFP 4302 HP Color LaserJet Pro MFP 4303		Part Number: 4301fdwe= 4RA82E; 4301fdw= 4RA82F; 4302fdwe= 5HH64E; 4302fdw= 5HH64F; 4303fdw= 5HH67A		Address: Hewlett Packard Company 11311 Chinden Blvd Boise, ID 83714
Volatile Memory				
Does the device contain volatile memory (Memory whose contents are lost when power is removed)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (SRAM, DRAM, etc):	Size: 512MB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Used for temporary storage during the processing of jobs and for applications running on the OS.	Steps to clear memory: When the printer is powered off, the memory is erased
Type (SRAM, DRAM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
Type (SRAM, DRAM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
Non-Volatile Memory				
Does the device contain non-volatile memory (Memory whose contents are retained when power is removed)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (Flash, EEPROM, etc): Flash	Size: 512MB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Device FW	Steps to clear memory: NA
Type (Flash, EEPROM, etc): EEPROM	Size: 32KB	User Modifiable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Function: User setting parameters for printer	Steps to clear memory: Restore factory defaults from control panel or EWS
Type (Flash, EEPROM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
Mass Storage				
Does the device contain mass storage memory (Hard Disk Drive, Tape Backup)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (HDD, Tape, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
USB				
Does the item accept USB input and if so, for what purpose (i.e. Print Jobs, device firmware updates, scan upload)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below				
Rear USB host when configured will accept stored jobs, encrypted files stored and deleted by user.				
Can any data other than scan upload be sent to the USB device)?				
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below				
Rear USB host when configured will accept stored jobs, encrypted files stored and deleted by user.				

Figure A-8 Certificate of Volatility MFP wireless fax (2 of 2)

RF/RFID	
Does the item use RF or RFID for receive or transmit of any data including remote diagnostics. (e.g. Cellular phone, Bluetooth) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below	
Purpose: BLE (Bluetooth Low Energy)	
Frequency: BLE 2.4 to 2.485 GHz band	Bandwidth: 0.27 Mbit/s
Modulation: Gaussian frequency shift modulation	Effective Radiate Power (ERP): 10mW max
Specifications:	

Other Transmission Capabilities	
Does the device employ any other methods of non-wired access to transmit or receive any data whatsoever (e.g. anything other than standard hard wired TCP/IP, direct USB, or parallel connections)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below:	
Purpose: Wireless Network Connectivity	
Frequency: 2.4GHz and 5GHz Bands	Bandwidth: 20/40 MHz
Modulation: Multiple	Effective Radiate Power (ERP): 802.11n/g: 15+/- 1.5dbm 802.11b: 17+/- 1.5dbm
Specifications: 802.11a/b/g/n	

Other Capabilities	
Does the device employ any other method of communications such as a Modem to transmit or receive any data whatsoever? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below:	
Purpose: Fax	
Specifications: V34, V32, V23, V21	

Author Information			
Name	Title	Email	Business Unit
	Technical Marketing Engineer		LES Boise CA
	Electrical Engineer		LES Boise R&D
Date Prepared: 8,2022			

Figure A-9 Certificate of Volatility MFP wireless non-fax (1 of 2)

Hewlett-Packard Certificate of Volatility				
Model: HP Color LaserJet Pro MFP 4301 HP Color LaserJet Pro MFP 4302 HP Color LaserJet Pro MFP 4303		Part Number: 4301dwe= 4RA80E; 4301dw= 4RA80F; 4302dwe= 4RA83E; 4302dw= 4RA83F; 4303dw= 5HH65A.		Address: Hewlett Packard Company 11311 Chinden Blvd Boise, ID 83714
Volatile Memory				
Does the device contain volatile memory (Memory whose contents are lost when power is removed)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (SRAM, DRAM, etc):	Size: 512MB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Used for temporary storage during the processing of jobs and for applications running on the OS.	Steps to clear memory: When the printer is powered off, the memory is erased
Type (SRAM, DRAM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
Type (SRAM, DRAM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
Non-Volatile Memory				
Does the device contain non-volatile memory (Memory whose contents are retained when power is removed)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (Flash, EEPROM, etc): Flash	Size: 512MB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Device FW	Steps to clear memory: NA
Type (Flash, EEPROM, etc): EEPROM	Size: 32KB	User Modifiable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Function: User setting parameters for printer	Steps to clear memory: Restore factory defaults from control panel or EWS
Type (Flash, EEPROM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
Mass Storage				
Does the device contain mass storage memory (Hard Disk Drive, Tape Backup)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (HDD, Tape, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
USB				
Does the item accept USB input and if so, for what purpose (i.e. Print Jobs, device firmware updates, scan upload)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below				
Rear USB host when configured will accept stored jobs, encrypted files stored and deleted by user.				
Can any data other than scan upload be sent to the USB device?				
<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below				
Rear USB host when configured will accept stored jobs, encrypted files stored and deleted by user.				

Figure A-10 Certificate of Volatility MFP wireless non-fax (2 of 2)

RF/RFID			
Does the item use RF or RFID for receive or transmit of any data including remote diagnostics. (e.g. Cellular phone, Bluetooth) <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below			
Purpose: BLE (Bluetooth Low Energy)			
Frequency: BLE 2.4 to 2.485 GHz band		Bandwidth: 0.27 Mbit/s	
Modulation: Gaussian frequency shift modulation		Effective Radiate Power (ERP): 10mW max	
Specifications:			
Other Transmission Capabilities			
Does the device employ any other methods of non-wired access to transmit or receive any data whatsoever (e.g. anything other than standard hard wired TCP/IP, direct USB, or parallel connections)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below:			
Purpose: Wireless Network Connectivity			
Frequency: 2.4GHz and 5GHz Bands		Bandwidth: 20/40 MHz	
Modulation: Multiple		Effective Radiate Power (ERP): 802.11n/g: 15+/- 1.5dbm 802.11b: 17+/- 1.5dbm	
Specifications: 802.11a/b/g/n			
Other Capabilities			
Does the device employ any other method of communications such as a Modem to transmit or receive any data whatsoever) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes please describe below:			
Purpose:			
Specifications:			
Author Information			
Name	Title	Email	Business Unit
	Technical Marketing Engineer		LES Boise CA
	Electrical Engineer		LES Boise R&D
Date Prepared: 8,2022			

Glossary of terms

802.11

802.11 is a set of standards for wireless local area network (WLAN) communication, developed by the IEEE LAN/MAN Standards Committee (IEEE 802).

802.11b/g/n

802.11b/g/n can share the same hardware and use the 2.4 GHz band. 802.11b supports bandwidth up to 11 Mbps, 802.11n supports bandwidth up to 150 Mbps. 802.11b/g/n devices might occasionally suffer interferences from microwave ovens, cordless telephones, and Bluetooth devices.

AC

An electric current that reverses its direction many times a second at regular intervals. For example, the 110V line current found in a typical US electrical wall receptacle.

AC Control Module (PageWide)

The AC Control Module controls the heating elements in the airflow assembly. Functions include voltage monitoring (ensuring correct operation in a low-quality-power environment), isolation (low voltage heater control signals are isolated from the high voltage AC power for safety), AC switching (power is switched on/off to the heater), and heating element configuration (heating element configuration is changed between series and parallel for temperature predictability).

ADF

An Automatic Document Feeder (ADF) is a device that automatically feeds an original sheet (or multiple sheets) of paper into the image scanner. The document feeder is a component of the integrated scanner assembly (ADF and image scanner).

Airflow System (PageWide)

The airflow system conditions the printed pages to avoid page curling due to the ink on the page. The airflow system functionally consists of a fan and heating elements. The pressurized air is blown on the page through the nozzles that are placed on the paper path of the airflow system between print and eject zone.

BOOTP

Bootstrap Protocol. A network protocol used by a network client to obtain its IP address automatically. This is usually done in the bootstrap process of computers or operating systems running on them. The BOOTP servers assigns an IP address from a pool of addresses to each client. BOOTP enables "diskless workstation" computers to obtain an IP address prior to loading any advanced operating system.

CCD

A Charged Coupled Device (CCD) is the scanner module which enables a scan job. A CCD locking mechanism is used to hold the CCD module to prevent any damage when the printer is moved.

CIS

A Contact Image Sensor (CIS) scanner captures an image using the printer's optical path. Red, green, and blue LEDs sequentially illuminate a small strip of the document (often called a raster line), and the optical system captures each color in a single row of Charged Coupled Device (CCD) sensors that cover the entire page width.

Collation

Collation is a process of printing a multiple-copy job in sets. When collation is selected, the device prints an entire set before printing additional copies.

Control Panel

The control panel is a flat, typically vertical panel or screen where the user can control and/or monitor the printer. The control panel is found on the front of the printer.

Coverage

Coverage is the printing term used for a toner usage measurement on printing. For example, 5% coverage means that an A4 sided paper has about 5% image or text on it. If the paper or original has complicated images or a large amount of text, the coverage will be higher and at the same time, a toner usage will be as much as the coverage.

DC

An electric current flowing in one direction only. Typically, a low voltage load current supplied to an electrical assembly.

DCC

The DC controller (DCC) controls the operation of the printer sub-systems and electrical components. The DCC sends out various signals to operate motors, solenoids, and other printer components based on the print command and image data that the host computer sends the formatter.

Default

The value or setting that is in effect when a printer is unboxed, reset, or initialized.

DHCP

Dynamic Host Configuration Protocol (DHCP) is a client-server networking protocol. A DHCP server provides configuration parameters specific to the DHCP client host requesting, generally, information required by the client host to participate on an IP network. The DHCP also provides a mechanism for allocation of IP addresses to client hosts.

Digital Send Software

Digital send software allows a multi-function printer (MFP) to scan and send information quickly and securely to email, network folders, other printers, and fax services.

DIMM

A Dual Inline Memory Module (DIMM) is a small circuit board that holds memory. The DIMM stores all data within the printer, such as printing data and received fax data.

DPI

Dots Per Inch (DPI) is a measurement of resolution that is used for scanning and printing. Generally, higher DPI results in a higher resolution (more visible detail in the image and a larger file size).

Duplex

A mechanism that automatically turns over a sheet of paper so that the printer can print (or scan) on both sides of the paper. A printer equipped with a duplex unit can print on both sides of the paper during one print cycle.

Duty Cycle

Duty cycle is the page quantity which does not affect printer performance for a month. Generally, the printer has the lifespan limitation such as pages per year. The lifespan means the average capacity of print-outs, usually within the warranty period. For example, if the duty cycle is 48,000 pages per month the printer limit is 2,400 pages a day (assuming 20 working days/month).

Dynamic Security

Dynamic Security is a toner cartridge design and process for authenticating genuine HP supplies. HP printers use toner cartridges that have security chips or electronic circuitry. Cartridges using a non-HP chip, or modified chip, or non-HP circuitry might not work (now or in the future).

e-Duplex

Single-pass electronic duplex (e-Duplex) printer use two separate scan modules to scan the front-side and back-side of an e-duplex copy job page in a single pass through the document feeder.

EMC

EMC is a measure of a device's ability to operate as intended in its shared operating environment while, at the same time, not affecting the ability of other equipment within the same environment to operate as intended.

EMI

EMI is the electromagnetic energy which affects the functioning of an electronic device. Electronic devices (like printers) are a source of EMI. Because it is rare for electronics to operate in isolation, products are generally engineered to function in the presence of some amount of EMI.

eMMC

An embedded Multi-Media Card is a compact memory device consisting of NAND flash memory and a simple storage controller.

Emulation

Emulation is a technique of one machine obtaining the same results as another. An emulator duplicates the functions of one system with a different system, so that the second system behaves like the first system. Emulation focuses on exact reproduction of external behavior. This is different from simulation, which concerns an abstract model of the system being simulated, often considering its internal state.

EPS

Encapsulated PostScript (EPS) is a PostScript (PS) code file which is used for storing font and vector graphic image information.

ESD

An electrostatic discharge (ESD) is a sudden flow of electricity between two electrically charged objects caused by contact, an electrical short, or dielectric breakdown. Discharge of built up static electricity.

Ethernet

Ethernet is a frame-based computer networking technology for local area networks (LANs). It defines wiring and signaling for the physical layer, and frame formats and protocols for the media access control (MAC)/data link layer of the OSI model. Ethernet is mostly standardized as IEEE 802.3. Ethernet has become the most widespread LAN technology in use during the 1990s to present.

Ferrite

A ferrite is used to reduce the amount of radio frequency noise (or interference) in a wire or cable. A ferrite enables proper EMC/EMI performance for regulatory purposes.

FFC

Flat Flexible Cables (FFCs) are designed for Printed Circuit Assembly (PCA) to PCA connections (for example, connecting a fax PCA to the formatter).

FIH

A Foreign Interface Harness (FIH) is a port that enables HP multifunction printers (MFPs) to use third-party devices to extend the capabilities of the MFP.

Firmware

The formatter stores the printer firmware. A remote firmware upgrade process is used to overwrite and upgrade the firmware.

Flash memory

Flash memory is non-volatile, meaning it retains stored data even when the power is turned off.

Flow integrated scanner assembly

A printer scanner assembly that includes a slide-out external physical keyboard.

Formatter (LaserJet)

The formatter controls printer functions like receiving and processes print data, developing and coordinating data placement and timing with the DC controller PCA, storing font and customer configuration information, communicating with the host computer, and monitoring control panel functions and relaying printer status information through the control panel.

FTP

FTP stands for File Transfer Protocol. FTP is a protocol designed for transferring files over the Internet. Files stored on an FTP server can be accessed using an FTP client, such as a web browser, FTP software program, or a command line interface.

Fuser Unit

The fuser unit is part of a laser printer that adheres the toner onto the printed page. It consists of a heat roller and a pressure roller. After toner is transferred onto the paper, the fuser unit applies heat and pressure to make sure that the toner stays on the paper permanently (which is why paper is warm when it comes out of a laser printer).

Gateway

A connection between computer networks, or between a computer network and a telephone line. A gateway is used to connect two different computer networks, especially a connection to the Internet.

Grayscale

Shades of gray that represent light and dark portions of a color image printed in monochrome. Colors are represented by a range of gray shades from white to black.

Halftone

Halftone is a way of reproducing a photograph or other image in which the various tones of gray or color are produced by variously sized dots of ink or toner. Halftone simulates grayscale by varying the number of dots. Highly colored areas consist of a large number of dots, while lighter areas consist of a smaller number of dots.

HDD

A Hard-Disk Drive (HDD) (commonly referred to as a hard drive or hard disk) is a non-volatile storage device which stores digitally-encoded data on rapidly rotating platters with magnetic surfaces.

IEEE

The Institute of Electrical and Electronics Engineers (IEEE) is an international non-profit, professional organization for the advancement of technology related to electricity.

Image scanner

The image scanner (or Sub Scanner Assembly) contains the components to digitally scan an original source document. The image scanner is a component of the integrated scanner assembly (ADF and image scanner).

IP address

An Internet Protocol (IP) address is a unique number that a device uses in order to identify and communicate with other devices on a network utilizing the Internet Protocol standard.

IPM

The Images Per Minute (IPM) is a method of measuring the speed of a printer. An IPM rate indicates the number of single-sided sheets a printer can complete in one minute.

IPP

The Internet Printing Protocol (IPP) defines a standard protocol for printing and managing print jobs, media size, resolution, etc. IPP can be used locally, or over the internet to reach hundreds of printers. IPP also supports access control, authentication, and encryption, making it a capable and secure printing solution.

ISA

The Integrated Scanner Assembly (ISA) includes the document feeder and image scanner.

ISO

The International Organization for Standardization (ISO) is an international standard-setting body composed of representatives from national standards bodies. It produces world-wide industrial and commercial standards.

JBIG

Joint Bi-level Image Experts Group (JBIG) is an image compression standard with no loss of accuracy or quality. It was designed for compression of binary images, particularly for faxes, but can also be used for other images.

JPEG

Joint Photographic Experts Group (JPEG) is a commonly used standard method of loss compression for photographic images. It is the format used for storing and transmitting photographs on the World Wide Web.

LDAP

The Lightweight Directory Access Protocol (LDAP) is a networking protocol for querying and modifying directory services running over TCP/IP.

LED

A Light-Emitting Diode (LED) is a semiconductor device that can indicate the status of a printer (formatter LEDs) or a component in a contact image sensor (CIS) scanner that helps capture an image.

LEDM

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

LPDC

Late point differentiation configuration (LPDC) allows the channel partner to configure the speed to the printer depending on the customer's order. LPDC configuration is stored on the Trusted Platform Module (TPM).

LVPS - SMPS

Low Voltage Power Supplies (LVPS) and Switching Mode Power Supplies (SMPS) supply direct current (DC) voltages to various printer components and assemblies.

MAC address

Media Access Control (MAC) address is a unique identifier associated with a network adapter. MAC address is a unique 48-bit identifier usually written as 12 hexadecimal characters grouped in pairs (for example, 00-00-0c-34-11-4e). This address is usually hard-coded into a Network Interface Card (NIC) by the manufacturer and used as an aid for routers trying to locate machines on a large network.

MEt

HP Memory Enhancement technology (MEt) effectively doubles the standard memory through a variety of font- and data-compression methods. MEt is available only in Printer Command Language (PCL) mode; it is not functional when printing in PostScript (PS) mode.

MFP

A Multi Function Printer (MFP) is a printer that incorporates multiple functionalities in a single physical body. For example, an MFP printer can scan, digitally send, fax, copy, and print.

MHV

Miniature High Voltage (MHV) is designed for high voltage applications of BNC connectors (DC voltage between 500 V and 5 kV).

Modem

A device that modulates a carrier signal to encode digital information, and also demodulates such a carrier signal to decode transmitted information.

MPCA (PageWide)

The MPCA integrates both formatter (LaserJet) and engine control electronics (DC controller) into a single assembly. The Main PCA (MPCA) controls printer functions like receiving and processes print data, developing and coordinating data placement, storing font and customer configuration information, communicating with the host computer, and monitoring control panel functions and relaying printer status information through the control panel.

NAND

NAND is not an acronym (the term is short for **NOT AND** a Boolean operator and logic gate). NAND (flash) memory is non-volatile, meaning it retains stored data even when the power is turned off.

NVRAM

Nonvolatile random access memory (NVRAM) is used to store I/O and information about the print environment configuration (stored data even when the power is turned off).

OPC

Organic Photo Conductor (OPC) is a mechanism that makes a virtual image for print using a laser beam emitted from a laser printer. It is usually green or rust colored and has a cylinder shape. An imaging unit containing a drum slowly wears the drum surface during its usage in the printer, and it should be replaced appropriately due to wear from contact with the cartridge development brush, cleaning mechanism, and paper.

Originals

The first example of something, such as a document, photograph, or text which is copied, reproduced, or translated to produce additional copies. The original itself is not copied or derived from something else.

PCA

Printed Circuit Assembly (PCA). Once the printed circuit board (PCB) is complete, electronic components must be assembled to form a functional printed circuit assembly or PCA.

PCL

Printer Command Language (PCL) is a Page Description Language (PDL) developed by HP as a printer protocol. PCL has become an industry standard. Originally developed for early Inkjet printers, PCL has been released in varying levels for thermal, dot matrix printers and laser printers.

PDF

Portable Document Format (PDF) is a proprietary file format developed by Adobe Systems. A PDF represents two dimension documents in a device independent and resolution independent format.

PJL

Printer job language (PJL) is an integral part of printer configuration, in addition to the standard PCL and PostScript (PS). With standard cabling, the printer can use PJL to perform a variety of functions like dynamic I/O switching, context-sensitive switching, and isolation of print environment settings from one print job to the next.

PML

Printer management language (PML) allows remote configuration of the printer and status read-back from the printer through the I/O ports.

PostScript (PS)

PostScript (PS) is a Page Description Language (PDL) and programming language used primarily in electronic and desktop publishing. PostScript is run in an interpreter to generate an image.

PPM

Pages Per Minute (PPM) is a method of measurement for determining how fast a printer works, meaning the number of pages a printer can produce in one minute.

Print Media

Media like paper, envelopes, labels, and transparencies which can be used in a printer, scanner, fax, or copier.

Printer Driver

A program used to send commands and transfer data from the computer to the printer.

Printhead (PageWide)

The printhead converts the digital firing instructions from the printer electronics into properly formed and timed microscopic drops of the four ink colors.

Printhead Wiper (PageWide)

The printhead wiper system keeps the printhead nozzles firing correctly throughout the life of the printer as it performs the wiping and capping functions. The wiping function cleans the nozzles of ink residue and particulates. The capping function keeps the nozzles moist during storage and when the printer is idle.

Protocol

A convention or standard that controls or enables the connection, communication, and data transfer between two computing endpoints.

RAM

Random Access Memory (RAM) is the printer memory device where the data in current use is kept so it can be quickly retrieved by the device's processor. This memory is an important factor in avoiding errors and printing documents properly. Printer memory is used to store, and process print jobs as they are sent to the printer from a computer. After printing, the job is cleared from the memory to make room for more print jobs. Printer memory is directly linked to two print characteristics: speed and print quality. More memory allows you to print faster and print larger, high-quality graphics.

REDI sensor

An optical reflective edge detection interrupter (REDI) sensor. Usually used in conjunction with mirrors to sense the presence or absence of paper in the paper path. These sensors are carefully aligned and calibrated at the factory, so care must be taken when servicing these sensors.

Resolution

The sharpness of an image is measured in Dots Per Inch (DPI). The higher the DPI, the greater the resolution.

SCB

The Scanner Control Board (SCB) controls the functions of the image scanner components in the Sub Scanner Assembly (SSA).

Service fluid and aerosol management systems (PageWide)

There are two types of service fluid, shipping fluid and ink. The service fluid management system is contained entirely within the duplex module. Service fluid is discharged as droplets from the printhead, and then collected in a container inside the duplex module. Some of the droplets are called aerosol because they are lighter than air. Aerosol can float inside the printer and collect on the lens of optical sensors, producing false failures. The aerosol management system transports the aerosol and collects it in a safe place. Aerosol management consists of an aerosol fan, mounted on the rear wall of the air flow assembly, which creates air flow that pulls the aerosol through the holes in the platen and into the aerosol filter inside the duplex module.

SFP

A single-function printer only processes print jobs sent from a host computer or from an USB port on the printer.

SMB

Server Message Block (SMB) is a network protocol mainly applied to share files, printers, serial ports, and miscellaneous communications between nodes on a network. SMB also provides an authenticated inter-process communication mechanism.

SMTP

Simple Mail Transfer Protocol (SMTP) is the standard for email transmissions across the internet. SMTP is a relatively simple, text-based protocol, where one or more recipient of a message is specified, and the message text is transferred. It is a client server protocol where the client transmits an email message to the server.

SODIMM

Small outline dual in-line memory module (SODIMM) is a thin profile memory storage device (a smaller alternative to a standard DIMM device).

SSA

The Sub-Scanner Assembly is the image scanner component of the Integrated Scanner Assembly (ISA, which includes the document feeder and the image scanner).

Subnet Mask

The subnet mask is used in conjunction with the network address to determine which part of the address is the network address and which part is the host address.

TCP/IP

The Transmission Control Protocol (TCP) and the Internet Protocol (IP) are the set of communications protocols that implement the protocol stack on which the internet and most commercial networks run.

TIFF

Tagged Image File Format (TIFF) is a variable-resolution bit mapped image format. TIFF describes image data that typically come from scanners. TIFF images use tags, keywords defining the characteristics of the image that is included in the file. This flexible and platform-independent format can be used for pictures that have been made by various image processing applications.

Toner Cartridge

A bottle or container that holds toner, which is used in a machine like a printer. Toner is a powder used in laser printers and photocopiers. The toner forms the text and images on printed paper. Toner can be fused by a combination of heat/pressure from the fuser, causing it to bind the fibers in the paper.

TPM

The HP Trusted Platform Module (TPM) is a security accessory for printers. The TPM strengthens protection of encrypted credentials and data stored on your printer. Certificate private keys are both generated by and protected by the TPM. Once installed, the printer and the TPM are sealed, and the printer owns the TPM. The TPM may not be moved to another device without losing its ownership from the original printer. Installing a TPM accessory might necessitate a firmware upgrade. The TPM prevents the printer from starting if the TPM is missing. If the TPM is removed from the printer, a control-panel error message appears indicating that the TPM is missing.



NOTE: The TPM is not a service part for some printer models. Check the printer service manual to determine if the TPM is a replaceable service part.

TWAIN

An industry standard for scanners and software. By using a TWAIN compliant scanner with TWAIN-compliant software, a scan can be initiated from the program. TWAIN is an image capture API for Microsoft Windows and Apple Macintosh operating systems.

URL

Uniform Resource Locator (URL) is the global address of documents and resources on the internet. The first part of the address indicates what protocol to use. The second part specifies the IP address or the domain name where the resource is located.

USB

Universal Serial Bus (USB) is a standard that was developed by the USB Implementers Forum, Inc., to connect computers and peripherals. Unlike the parallel port, USB is designed to concurrently connect a single computer USB port to multiple peripherals.

Walk-up USB

Some printers support direct printing from a USB flash drive (the walk-up USB port is usually near the control panel).

Watermark

A watermark is a recognizable image or pattern in paper that appears lighter when viewed by transmitted light. Watermarks were first introduced in Bologna, Italy in 1282. Watermarks have been used by paper makers to identify their product, and also on postage stamps, currency, and other government documents to discourage counterfeiting.

XPS

XML Paper Specification (XPS) is a specification for a Page Description Language (PDL) and a new document format developed by Microsoft. This has benefits for portable document and electronic documents. It is an XML-based specification based on a new print path and vector-based, device-independent document format.

ZIF Connector

Zero insertion force (ZIF) connectors use a mechanical locking method to secure Flat Flexible Cables (FFCs) to a Printed Circuit Assembly (PCA).

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