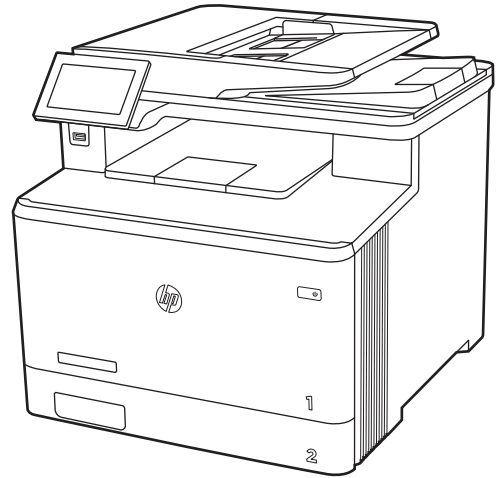
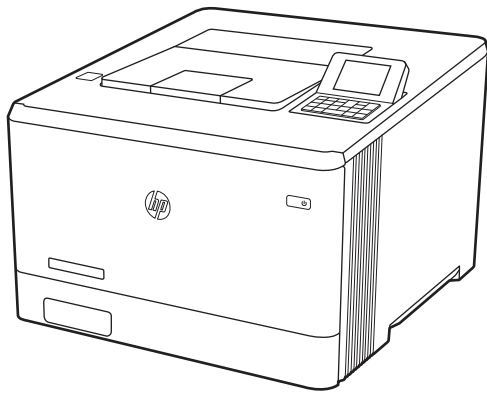




HP Color LaserJet Enterprise M455  
HP Color LaserJet Managed E45028  
HP Color LaserJet Enterprise MFP M480  
HP Color LaserJet Managed MFP E47528

## Service Manual



[www.hp.com/videos/LaserJet](http://www.hp.com/videos/LaserJet)  
[www.hp.com/support/colorljM455](http://www.hp.com/support/colorljM455)  
[www.hp.com/support/colorljM480MFP](http://www.hp.com/support/colorljM480MFP)

[www.hp.com/support/colorljE45028](http://www.hp.com/support/colorljE45028)  
[www.hp.com/support/colorljE47528MFP](http://www.hp.com/support/colorljE47528MFP)





# HP LaserJet Enterprise M455, HP LaserJet Managed E45028, HP LaserJet Enterprise MFP M480, and HP LaserJet Managed MFP E47528 Service Manual

## SUMMARY

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

# Legal information

## Copyright and License

© Copyright 2021 HP Development Company, L.P.

Reproduction, adaptation, or translation without prior written permission is prohibited, except as allowed under the copyright laws.

The information contained herein is subject to change without notice.

The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

Edition 1, 02/2021

## Revision history

View a list of document revisions.

The information contained herein is subject to change without notice. The only warranties for HP products and services are set forth in the express warranty statements accompanying such products and services. Nothing herein should be construed as constituting an additional warranty. HP shall not be liable for technical or editorial errors or omissions contained herein.

**Table** Revision history


Revision number	Revision date	Revision notes
1	02/2021	HP Color LaserJet Enterprise M455, HP Color LaserJet Managed E45028, HP Color LaserJet Enterprise MFP M480, HP Color LaserJet Managed MFP E47528 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 HP access to additional service and support information.

### Additional service and support for channel partners

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

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

Access WISE for Channel partners

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

Find information about the following topics

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

### Additional service and support for HP internal personnel

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

[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\).](#)



---

# Table of contents

<b>1 Printer information, configurations, and specifications</b> .....	<b>1</b>
Information (document feeder and scanner) .....	1
Document feeder and scanner front view.....	1
Specifications (document feeder and scanner).....	2
Technical specifications .....	2
Information (base printer).....	2
Printer front view (SFP) .....	2
Printer back view (SFP).....	3
Printer front view (MFP).....	4
Printer back view (MFP) .....	4
Configuration (base printer).....	5
Configuration (base printer SFP) .....	5
Configuration (base printer MFP) .....	6
Specifications (base printer) .....	8
Technical specifications (M455) .....	8
Technical specifications (E45028) .....	9
Technical specifications (M480) .....	10
Technical specifications (E47528) .....	11
Printer dimensions (SFP).....	12
Printer dimensions (MFP).....	14
Printer space requirements .....	15
Power consumption, electrical specifications, and acoustic emissions.....	15
Operating-environment range .....	15
Information (input devices).....	16
550-sheet paper feeder front view.....	16
<b>2 Printer installation and maintenance</b> .....	<b>17</b>
Document feeder / scanner.....	17
Clean the pickup rollers and separation pad in the document feeder (MFP).....	17
Check the scanner glass for dirt and smudges .....	18
Base printer.....	20
Remove and replace the toner cartridges.....	20
Print a cleaning page .....	24
Automatic cleaning page.....	25
Clean the Tray 1 roller and separation pad .....	25

Clean the Tray 2 rollers.....	29
Input devices .....	39
Clean the Tray 3 rollers.....	40
<b>3 Theory of operation.....</b>	<b>47</b>
Document feeder / scanner.....	47
Document feeder simplex operation .....	47
Scanning and image capture system.....	48
Base printer .....	48
Basic operation .....	48
Formatter-control system .....	50
Engine-control unit .....	54
Engine laser/scanner system .....	58
Engine pickup, feed, and delivery system .....	73
Input devices .....	81
Tray 3 .....	81
<b>4 Solve problems.....</b>	<b>85</b>
HP service and support .....	85
Determine the problem source.....	86
Pre-troubleshooting checklist.....	86
Troubleshooting flowchart .....	88
Firmware upgrades .....	89
Comprehensive list of troubleshooting tools .....	94
Engine test.....	94
Pre-boot menu options.....	94
Advanced configuration with the HP Embedded Web Server (EWS).....	111
Print menu (SFP) and Copy/Print menu (MFP).....	121
Defeating interlocks.....	139
LED Diagnostics (formatter) .....	140
Disable cartridge check .....	141
Print/stop test.....	141
Individual component diagnostics.....	142
Diagrams: Block diagrams .....	144
Diagrams: External plug and port locations.....	149
Diagrams: Major component locations.....	149
Diagrams: General timing chart .....	154
Diagrams: General circuit diagrams .....	155
Internal test and information pages.....	156
Reports menu .....	161
Settings menu.....	162
Supplies menu .....	191
Trays menu .....	192
Support Tools menu .....	192
Service menu .....	199
Printer resets .....	203
Format Disk and Partial Clean functions .....	205

Troubleshooting power-on or blank control panel problems .....	208
Troubleshooting an unresponsive printer .....	210
Engine diagnostics .....	211
Engine test.....	211
Defeating interlocks .....	212
Control panel troubleshooting .....	213
Control panel system diagnostics (MFP) .....	213
Control panel messages document (CPMD) .....	225
How to search for printer documentation.....	225
Error-code and control-panel-message troubleshooting overview .....	228
Solve paper handling problems .....	230
Clear paper jams (SFP).....	230
Clear paper jams (MFP).....	247
Printer feeds incorrect page size .....	270
Printer pulls from incorrect tray.....	270
Printer will not duplex or duplexes incorrectly (duplex models) .....	271
Paper does not feed from Tray Z-X.....	271
Output is curled or wrinkled.....	271
The printer does not pick up paper .....	272
The printer picks up multiple sheets of paper .....	272
The document feeder jams, skews, or picks up multiple sheets of paper (MFP).....	273
Paper does not feed automatically .....	273
Image-quality troubleshooting .....	274
Print-quality troubleshooting.....	275
Copy-quality troubleshooting .....	291
Performance and connectivity troubleshooting.....	300
Solve fax or email problems.....	300
Solve performance problems .....	300
Solve connectivity problems.....	303
<b>5 Removal and replacement .....</b>	<b>307</b>
HP service and support .....	307
Order parts, accessories, and supplies .....	308
Ordering .....	308
Orderable parts.....	309
Supplies and accessories .....	309
Customer self-repair parts.....	311
HP service and support .....	313
Assembly locations .....	314
Printer front view (SFP) .....	314
Printer back view (SFP).....	315
Printer front view (MFP).....	316
Printer back view (MFP) .....	317
Customer self-repair (CSR) A parts and accessories .....	318
Removal and replacement: Toner cartridges.....	318
Removal and replacement: Tray 2 cassette .....	322

Removal and replacement: Tray 3 cassette .....	324
Removal and replacement: Document feeder / scanner .....	326
Removal and replacement: Document feeder top cover assembly with rollers .....	326
Removal and replacement: ISA lift assembly and slider pin (MFP) .....	329
Removal and replacement: Integrated scanner assembly (MFP) .....	334
Removal and replacement: External panels, covers, and doors (base printer) .....	347
Removal and replacement: Right cover (SFP).....	347
Removal and replacement: Right cover (MFP).....	354
Removal and replacement: Left cover (SFP) .....	364
Removal and replacement: Left cover (MFP) .....	371
Removal and replacement: Front door assembly.....	380
Removal and replacement: Duplexing door assembly .....	398
Removal and replacement: Top cover (SFP) .....	421
Removal and replacement: Top cover (MFP).....	433
Removal and replacement: Internal parts and assemblies (base printer) .....	464
Removal and replacement: Control panel mount top cover (MFP) .....	464
Removal and replacement: Control panel assembly (MFP).....	467
Removal and replacement: Control panel interconnect board (MFP) .....	473
Removal and replacement: Control panel mount base and interconnect board chassis (MFP) .....	478
Removal and replacement: Control panel cable (MFP) .....	486
Removal and replacement: Power switch assembly .....	516
Removal and replacement: Toner cartridge tray.....	530
Removal and replacement: Cartridge fan.....	546
Removal and replacement: Power supply fan.....	562
Removal and replacement: Low-voltage power supply (LVPS) .....	578
Removal and replacement: Pickup motor .....	606
Removal and replacement: Driver PCA .....	635
Removal and replacement: Drum motor.....	650
Removal and replacement: Developer motor.....	681
Removal and replacement: Secondary transfer roller .....	713
Removal and replacement: Intermediate transfer belt (ITB).....	717
Removal and replacement: Density detect sensor assembly.....	746
Removal and replacement: Re-pickup assembly.....	786
Removal and replacement: DC controller .....	812
Removal and replacement: Lifter drive assembly.....	825
Removal and replacement: Pickup assembly .....	860
Removal and replacement: Front feed guide assembly .....	906
Removal and replacement: Rear feed guide assembly.....	957
Removal and replacement: Registration assembly .....	1009
Removal and replacement: Memory PCA .....	1063
Removal and replacement: Laser scanner assembly (SFP) .....	1102
Removal and replacement: Laser scanner assembly (MFP).....	1127
Removal and replacement: Fuser .....	1167
Removal and replacement: Fuser motor .....	1210
Removal and replacement: Reverse drive assembly.....	1227
Removal and replacement: Island of Data (IOD) .....	1272
Removal and replacement: embedded Multi-Media Card (eMMC) .....	1284
Removal and replacement: Formatter PCA.....	1295

Removal and replacement: Environmental sensor .....	1309
Removal and replacement: Fax PCA (MFP) .....	1320
Removal and replacement: Fax cable (MFP) .....	1341
Removal and replacement: Walk-up USB port (SFP) .....	1360
Removal and replacement: Walk-up USB port (MFP) .....	1374
Removal and replacement: Drawer connector (550-sheet paper feeder).....	1404
Removal and replacement: Front door switch .....	1416
Removal and replacement: 550-sheet paper feeder .....	1428
Removal and replacement: Right cover (550-sheet paper feeder) .....	1428
Removal and replacement: Left cover (550-sheet paper feeder).....	1433
Removal and replacement: Rear cover (550-sheet paper feeder).....	1437
Removal and replacement: Switch cable assembly (550-sheet paper feeder) .....	1445
Removal and replacement: Lifter drive assembly (550-sheet paper feeder) .....	1462
Removal and replacement: Pickup assembly (550-sheet paper feeder).....	1482
Removal and replacement: Front feed guide assembly (550-sheet paper feeder) .....	1506
Removal and replacement: Rear feed guide assembly (550-sheet paper feeder) .....	1533
Removal and replacement: Paper feed assembly (550-sheet paper feeder).....	1561
Removal and replacement: Pickup motor (550-sheet paper feeder).....	1592
Removal and replacement: Drawer connector (550-sheet paper feeder).....	1596
Removal and replacement: Driver PCA (550-sheet paper feeder).....	1604
<b>6 Parts and diagrams .....</b>	<b>1614</b>
HP service and support .....	1614
Order parts by authorized service providers .....	1615
Ordering .....	1615
Orderable parts.....	1615
Supplies and accessories .....	1616
Customer self-repair parts.....	1618
How to use parts lists and diagrams.....	1620
Document feeder and image scanner .....	1621
Parts and diagrams: Covers (M455/E45028) .....	1622
Parts and diagrams: Covers (M480/E47528) .....	1624
Parts and diagrams: Internal assemblies (1 of 5) .....	1626
Parts and diagrams: Internal assemblies (2 of 5) .....	1628
Parts and diagrams: Internal assemblies (3 of 5) .....	1630
Parts and diagrams: Internal assemblies (4 of 5) .....	1632
Parts and diagrams: Internal assemblies (5 of 5) .....	1634
Parts and diagrams: 550-sheet paper feeder covers .....	1636
Parts and diagrams: 550-sheet paper feeder main body (1 of 2) .....	1637
Parts and diagrams: 550-sheet paper feeder main body (2 of 2) .....	1639
Alphabetical parts list .....	1641
Numerical parts list .....	1646
<b>Appendix A Certificate of Volatility.....</b>	<b>1651</b>

Certificate of Volatility..... 1651

Appendix B Glossary of terms..... 1657

Index..... 1667

# 1 Printer information, configurations, and specifications

Learn about printer configuration and specifications.

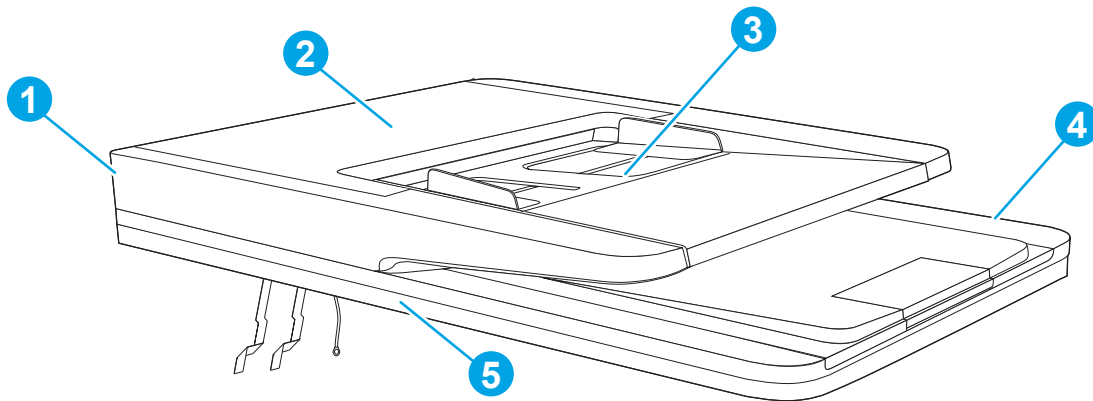
## Information (document feeder and scanner)

Learn about the document feeder and scanner.

### Document feeder and scanner front view

Learn about the document feeder and scanner components.

Figure 1-1 Document feeder and scanner front view



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

# Specifications (document feeder and scanner)

Learn about the document feeder and scanner specifications.

## Technical specifications

Learn about the document feeder and scanner specifications.

Review the technical specifications for the document feeder and scanner.

See [www.hp.com/support/colorljM480MFP](http://www.hp.com/support/colorljM480MFP) or [www.hp.com/support/colorljE47528MFP](http://www.hp.com/support/colorljE47528MFP) for current information.

**Table 1-1 Copy and scan specifications (document feeder and scanner)**

Copy and scan features	M480	E47528
Copies and scans up to 26 pages per minute (ppm)	✓	✓
50-page document feeder with dual-head scanning for single-pass duplex copying and scanning	✓	✓
Scan to E-mail, Scan to USB, and Scan to Network Folder option	✓	✓

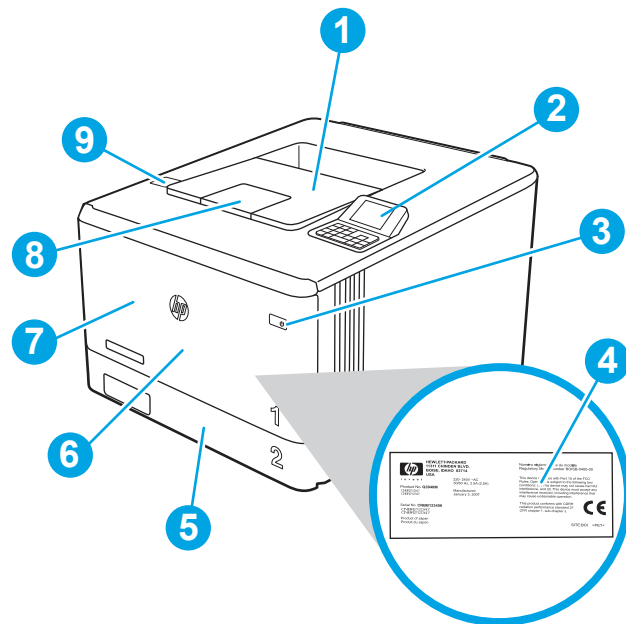
## Information (base printer)

Learn about the base printer.

### Printer front view (SFP)

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

**Figure 1-2 Printer front view (SFP)**



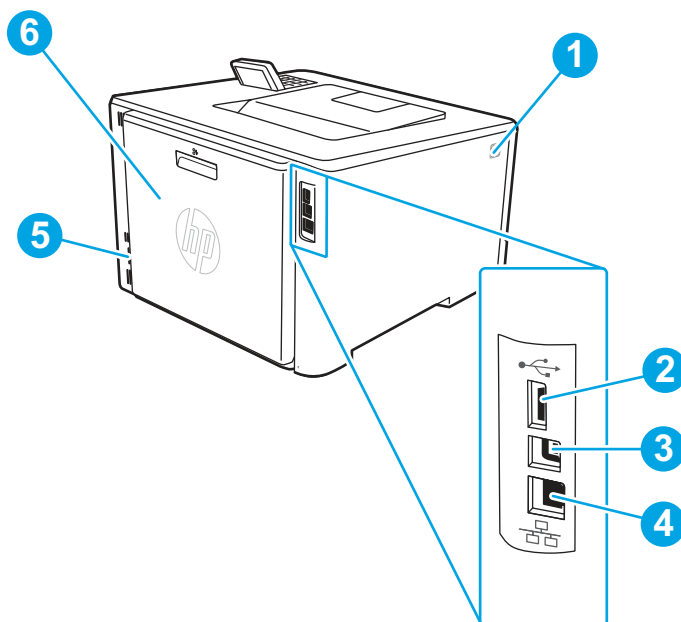


Number	Description
1	Output bin
2	Color non-touch control panel with 10-key keypad
3	Power on/off button
4	Regulatory label (inside the front door)
5	Tray 2
6	Tray 1
7	Front door (provides toner cartridge access)
8	Output bin extension
9	Easy-access USB port for printing without a computer

## Printer back view (SFP)

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

Figure 1-3 Printer rear view (SFP)

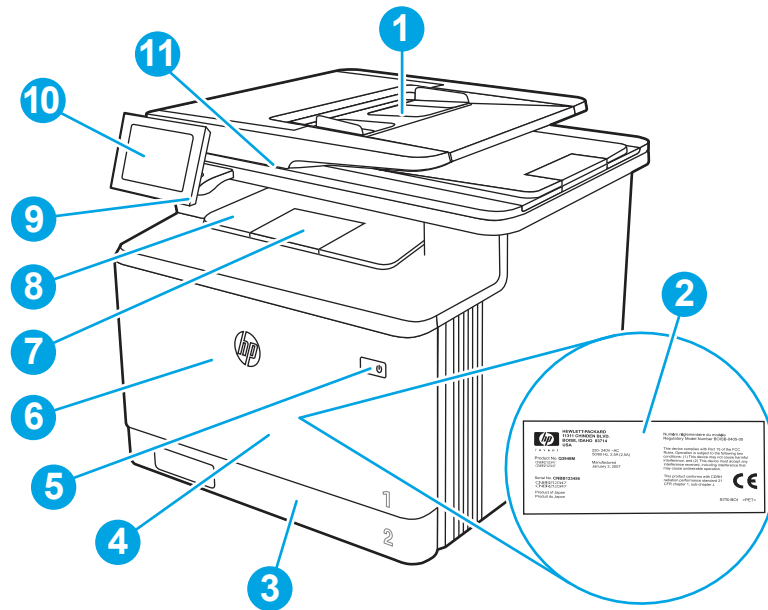


Number	Description
1	Front door release button
2	USB port for job storage or connecting accessories
3	USB port for direct connection to a computer
4	Ethernet port
5	Power connection
6	Duplexer rear access door

## Printer front view (MFP)

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

Figure 1-4 Printer front view (MFP)

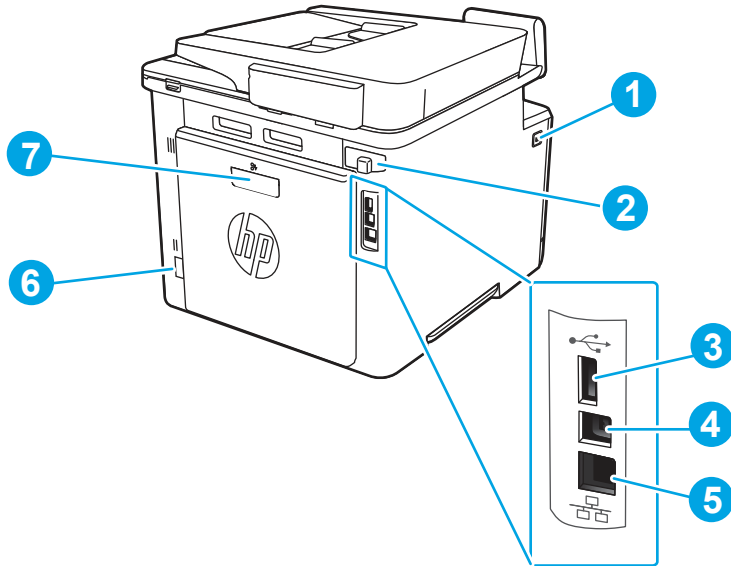


Number	Description
1	Document feeder
2	Regulatory label (inside the front door)
3	Tray 2
4	Tray 1
5	Power on/off button
6	Front door (provides toner cartridge access)
7	Output bin extension
8	Output bin
9	Easy-access USB port (for printing and scanning without a computer)
10	Touchscreen control panel (tilts up for easier viewing)
11	Scanner

## Printer back view (MFP)

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

Figure 1-5 Printer rear view (MFP)



Number	Description
1	Front door release button
2	Fax ports cover
	<b>NOTE:</b> The fax ports are behind the cover.
3	USB port for job storage or connecting accessories
4	USB port for direct connection to a computer
5	Ethernet port
6	Power connection
7	Rear door (provides access for clearing jams)

## Configuration (base printer)

Learn about the base printer configurations.

## Configuration (base printer SFP)

Learn about the base printer SFP configurations.

Figure 1-6 HP LaserJet Enterprise M455/E45028 printer



#### HP LaserJet Enterprise M455

- 29/27 pages per minute (letter/A4)
- FutureSmart 5 firmware
- Trusted platform module 2.0 (security)
- HP Web JetAdmin
- Automatic duplex printing
- 700-4,000 pages per month
- 300-sheet standard capacity
- 850-sheet maximum capacity
- 68.58 mm (2.7 in) color non-touchscreen control panel
- 1.25 GB RAM memory
- 4GB eMMC mass storage
- 550-sheet paper feeder (optional)
- 508 accessibility kit (optional)

#### HP LaserJet Managed E45028

- Same features as the HP LaserJet Enterprise M455
- Managed contractual cartridge with lowest possible cost per page
- Locking tray guides
- Smart device services (SDS) firmware features

## Configuration (base printer MFP)

Learn about the base printer MFP configurations.

Figure 1-7 HP LaserJet Enterprise M480/E47528 printer



#### HP LaserJet Enterprise M480

- 29/27 pages per minute (letter/A4)
- FutureSmart 5 firmware
- Trusted platform module 2.0 (security)
- HP Web JetAdmin
- Automatic duplex printing
- 50-sheet document feeder (duplex scanning)
- Single pass double sided scan/copy
- Fax
- 700-4,000 pages per month
- 850-sheet maximum capacity
- 109.22 mm (4.3 in) color touchscreen control panel
- 1.5 GB RAM memory
- 16GB eMMC mass storage
- 550-sheet paper feeder (optional)
- 508 accessibility kit (optional)

#### HP LaserJet Managed E47528

- Same features as the HP LaserJet Enterprise M480
- Managed contractual cartridge with lowest possible cost per page
- Locking tray guides
- Smart device services (SDS) firmware features

# Specifications (base printer)

Learn about the base printer specifications.

## Technical specifications (M455)

Review the technical specifications for the M455 printer.

See [www.hp.com/support/colorljM455](http://www.hp.com/support/colorljM455) or [www.hp.com/support/color/ljM480MFP](http://www.hp.com/support/color/ljM480MFP) or [www.hp.com/support/colorljE45028](http://www.hp.com/support/colorljE45028) or [www.hp.com/support/colorljE47528MFP](http://www.hp.com/support/colorljE47528MFP) for current information.

### Product numbers for each model

- M455dn - #3PZ95A

**Table 1-2 Paper handling specifications**

Paper handling features	M455dn
Tray 1 (50-sheet capacity)	✓
Tray 2 (250-sheet capacity)	✓
Optional 550-sheet accessory tray	Optional
Automatic duplex printing	✓

**Table 1-3 Connectivity specifications**

Connectivity features	M455dn
10/100/1000 Ethernet LAN connection with IPv4 and IPv6	✓
Hi-Speed USB 2.0	✓
Walk-up USB port	✓
HP Jetdirect LAN Accessory	Optional
HP Jetdirect 3100w accessory for Wi-Fi, BLE, NFC, and proximity badge reading	Optional

**Table 1-4 Print specifications**

Print features	M455dn
Prints 27 pages per minute (ppm) on A4 and 29 ppm on letter-size paper	✓
Job storage and private printing	✓

**Table 1-5 Other specifications**

Other features	M455dn
1.25 GB base memory	✓
4 GB embedded Multi-Media Controller (eMMC)	✓
68.58 mm (2.7 in) color non-touch control panel with 10-key keypad	✓

**Table 1-5 Other specifications (continued)**

Other features	M455dn
HP Trusted Platform Module for encrypting all data that passes through the printer	✓
HP USB Universal Card Reader	Optional
HP LEGIC Card Reader	Optional

## Technical specifications (E45028)

Review the technical specifications for the E45028 printer.

See [www.hp.com/supplort/colorljM455](http://www.hp.com/supplort/colorljM455) or [www.hp.com/support/color/ljM480MFP](http://www.hp.com/support/color/ljM480MFP) or [www.hp.com/support/colorljE45028](http://www.hp.com/support/colorljE45028) or [www.hp.com/support/colorljE47528MFP](http://www.hp.com/support/colorljE47528MFP) for current information.

### Product numbers for each model

- E45028dn - #3QA35A

**Table 1-6 Paper handling specifications**

Paper handling features	E45028dn
Tray 1 (50-sheet capacity)	✓
Tray 2 (250-sheet capacity)	✓
Optional 550-sheet accessory tray	Optional
Automatic duplex printing	✓

**Table 1-7 Connectivity specifications**

Connectivity features	E45028dn
10/100/1000 Ethernet LAN connection with IPv4 and IPv6	✓
Hi-Speed USB 2.0	✓
Walk-up USB port	✓
HP Jetdirect LAN Accessory	Optional
HP Jetdirect 3100w accessory for Wi-Fi, BLE, NFC, and proximity badge reading	Optional

**Table 1-8 Print specifications**

Print features	E45028dn
Prints 27 pages per minute (ppm) on A4 and 29 ppm on letter-size paper	✓
Job storage and private printing	✓

**Table 1-9 Other specifications**

Other features	E45028dn
1.5 GB base memory	✓
4 GB embedded Multi-Media Controller (eMMC)	✓
68.58 mm (2.7 in) color non-touch control panel with 10-key keypad	✓
HP Trusted Platform Module for encrypting all data that passes through the printer	✓
HP USB Universal Card Reader	Optional
HP LEGIC Card Reader	Optional

## Technical specifications (M480)

Review the technical specifications for the M480 printer.

See [www.hp.com/supplort/colorljM455](http://www.hp.com/supplort/colorljM455) or [www.hp.com/support/color/ljM480MFP](http://www.hp.com/support/color/ljM480MFP) or [www.hp.com/support/colorljE45028](http://www.hp.com/support/colorljE45028) or [www.hp.com/support/colorljE47528MFP](http://www.hp.com/support/colorljE47528MFP) for current information.

### Product numbers for each model

- M480f - #3QA55A

**Table 1-10 Paper handling specifications**

Paper handling features	M480f
Tray 1 (50-sheet capacity)	✓
Tray 2 (250-sheet capacity)	✓
Optional 550-sheet accessory tray	Optional
Automatic duplex printing	✓

**Table 1-11 Connectivity specifications**

Connectivity features	M480f
10/100/1000 Ethernet LAN connection with IPv4 and IPv6	✓
Hi-Speed USB 2.0	✓
Walk-up USB port	✓
HP Jetdirect LAN accessory	Optional
HP Jetdirect 3100w accessory for Wi-Fi, BLE, NFC, and proximity badge reading	Optional

**Table 1-12 Print specifications**

Print features	M480f
Prints 27 pages per minute (ppm) on A4 and 29 ppm on letter-size paper	✓
Job storage and private printing	✓



**Table 1-13 Copy and scan specifications**

Copy and scan features	M480f
Copies 19 pages per minute (ppm) and scans up to 26 ppm.	✓
<b>NOTE:</b> Copy and scan speeds are subject to change.	
50-page document feeder with dual-head scanning for single-pass duplex copying and scanning	✓
Scan to E-mail, Scan to USB, and Scan to Network Folder options	✓

**Table 1-14 Other specifications**

Other features	M480f
1.5 GB base memory	✓
embedded Multi-Media Card (16 GB eMMC)	✓
Color touchscreen control panel	✓
Fax features	✓
HP Trusted Platform Module for encrypting all data that passes through the printer	✓
HP Accessibility Kit	Optional
HP Accessibility Assistant	Optional
HP USB Universal Card Reader	Optional
HP LEGIC Card Reader	Optional

## Technical specifications (E47528)

Review the technical specifications for the E47528 printer.

See [www.hp.com/supplort/colorljM455](http://www.hp.com/supplort/colorljM455) or [www.hp.com/support/color/ljM480MFP](http://www.hp.com/support/color/ljM480MFP) or [www.hp.com/support/colorljE45028](http://www.hp.com/support/colorljE45028) or [www.hp.com/support/colorljE47528MFP](http://www.hp.com/support/colorljE47528MFP) for current information.

### Product numbers for each model

- E47528f - #3QA75A

**Table 1-15 Paper handling specifications**

Paper handling features	E47528f
Tray 1 (50-sheet capacity)	✓
Tray 2 (250-sheet capacity)	✓
Optional 550-sheet accessory tray	Optional
Automatic duplex printing	✓

**Table 1-16 Connectivity specifications**

Connectivity features	E47528f
10/100/1000 Ethernet LAN connection with IPv4 and IPv6	✓
Hi-Speed USB 2.0	✓
Walk-up USB port	✓
HP Jetdirect LAN accessory	Optional
HP Jetdirect 3100w accessory for Wi-Fi, BLE, NFC, and proximity badge reading	Optional

**Table 1-17 Print specifications**

Print features	E47528f
Prints 27 pages per minute (ppm) on A4 and 29 ppm on letter-size paper	✓
Job storage and private printing	✓

**Table 1-18 Copy and scan specifications**

Copy and scan features	E47528f
Copies 19 pages per minute (ppm) and scans up to 26 ppm.	✓
<b>NOTE:</b> Copy and scan speeds are subject to change.	
50-page document feeder with dual-head scanning for single-pass duplex copying and scanning	✓
Scan to E-mail, Scan to USB, and Scan to Network Folder options	✓

**Table 1-19 Other specifications**

Other features	E47528f
1.5 GB base memory	✓
eMMC 16GB	✓
Color touchscreen control panel	✓
Fax features	✓
HP Trusted Platform Module for encrypting all data that passes through the printer	✓
HP Accessibility Kit	Optional
HP Accessibility Assistant	Optional
HP USB Universal Card Reader	Optional
HP LEGIC Card Reader	Optional

## Printer dimensions (SFP)

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

Figure 1-8 Dimensions for the SFP printer

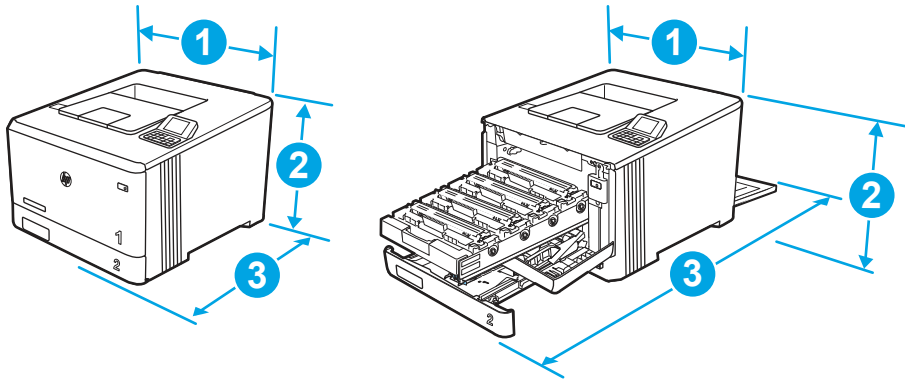


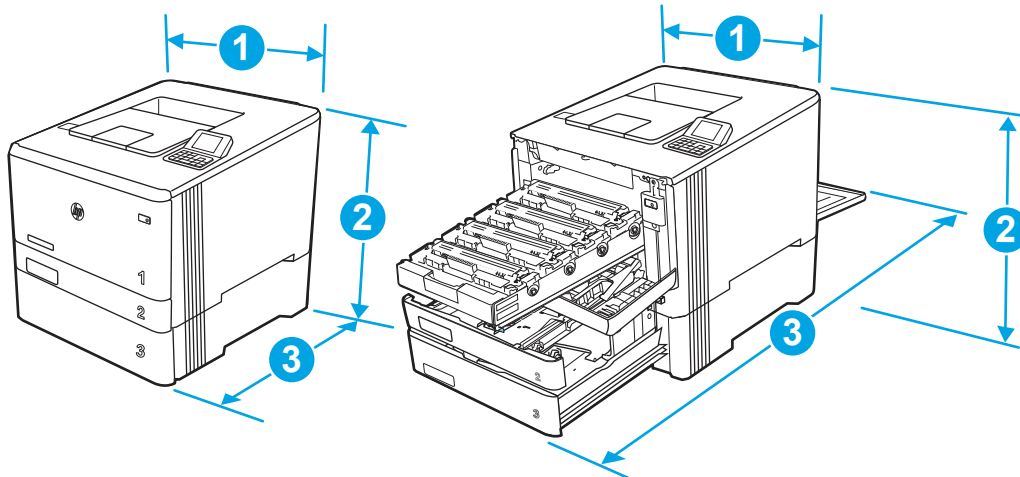
Table 1-20 Dimensions for the SFP printer

Measurement	Printer fully closed	Printer fully opened
1. Width	413.6 mm (16.28 in)	413.6 mm (16.28 in)
2. Height	304.4 mm (11.98 in)	330 mm (12.99 in)
3. Depth	472 mm (18.59 in)	1038 mm (40.9 in)
Weight (with cartridges)	18.9 kg (41.67 lb)	18.9 kg (41.67 lb)

Table 1-21 Dimensions for the optional 550-sheet tray

Measurement	Tray fully closed	Tray fully opened
1. Width	412 mm (16.2 in)	412 mm (16.2 in)
2. Height	132 mm (5.2 in)	132 mm (5.2 in)
3. Depth	453 mm (17.8 in)	655 mm (25.8 in)
Weight	5.2 kg (11.5 lb)	5.2 kg (11.5 lb)

Figure 1-9 Dimensions for the printer with the optional 550-sheet tray (SFP)



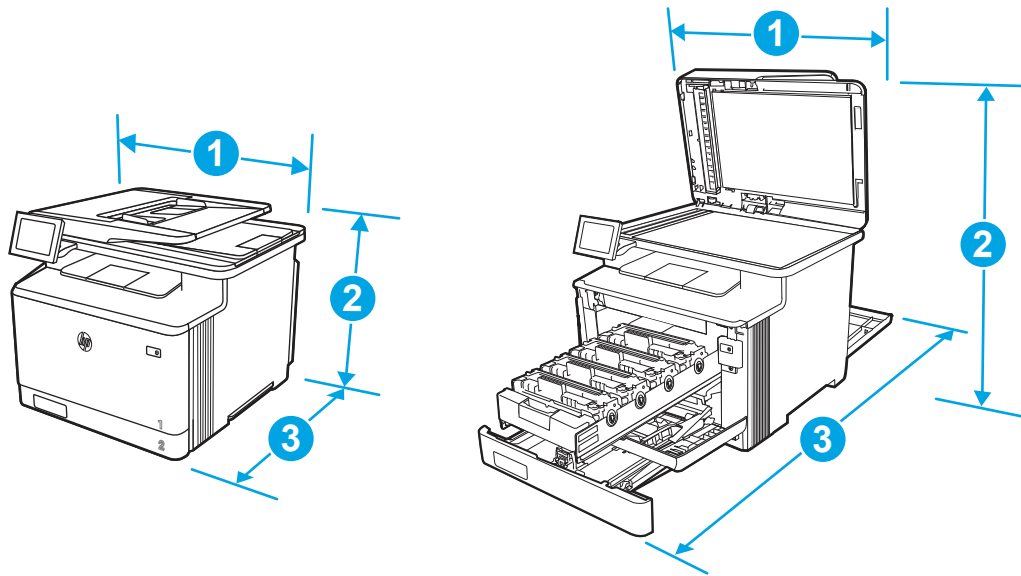
**Table 1-22** Dimensions for the printer with the optional 550-sheet tray (SFP)

Measurement	Printer fully closed	Printer fully opened
1. Width	413.6 mm (16.28 in)	413.6 mm (16.28 in)
2. Height	436.4 mm (17.18 in)	462 mm (18.19 in)
3. Depth	472.3 mm (18.59 in)	1038 mm (40.9 in)
Weight (with cartridges)	24.1 kg (53.13 lb)	24.1 kg (53.13 lb)

## Printer dimensions (MFP)

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

**Figure 1-10** Dimensions for the MFP printer



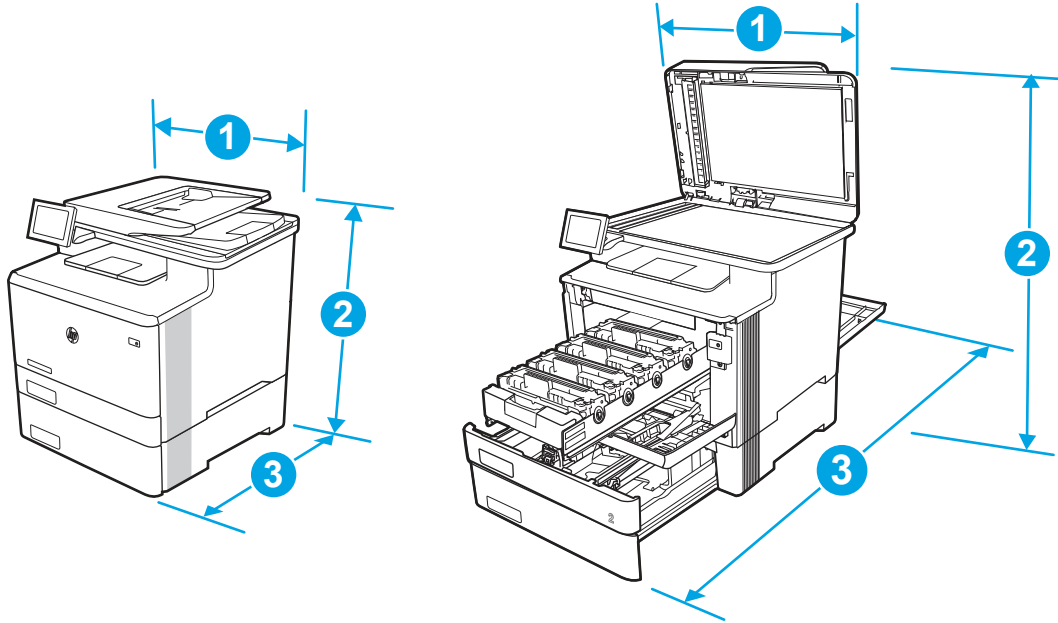
**Table 1-23** Dimensions for the MFP printer

Measurement	Printer fully closed	Printer fully opened
1. Width	415.4 mm (16.35 in)	415.4 mm (16.35 in)
2. Height	399.8 mm (15.74 in)	656 mm (25.83 in)
3. Depth	472 mm (18.59 in)	1038 mm (40.9 in)
Weight (with cartridges)	23.3 kg (51.37 lb)	23.3 kg (51.37 lb)

**Table 1-24** Dimensions for the optional 550-sheet tray

Measurement	Tray fully closed	Tray fully opened
1. Width	412 mm (16.2 in)	412 mm (16.2 in)
2. Height	132 mm (5.2 in)	132 mm (5.2 in)
3. Depth	453 mm (17.8 in)	655 mm (25.8 in)
Weight	5.2 kg (11.5 lb)	5.2 kg (11.5 lb)

**Figure 1-11** Dimensions for the printer with the optional 550-sheet tray (MFP)



**Table 1-25** Dimensions for the printer with the optional 550-sheet tray

Measurement	Printer fully closed	Printer fully opened
1. Width	415.4 mm (16.35 in)	415.4 mm (16.35 in)
2. Height	531.8 mm (20.93 in)	788 mm (31.02 in)
3. Depth	472.3 mm (18.59 in)	1038 mm (40.9 in)
Weight (with cartridges)	28.5 kg (62.83 lb)	28.5 kg (62.83 lb)

## Printer space requirements

Learn about the printer space requirements

HP recommends that 30 mm (1.81 in) be added to the printer dimensions to make sure there is sufficient space to open doors and covers, and to provide proper ventilation. See [Printer dimensions \(SFP\) on page 12](#) and/or [Printer dimensions \(MFP\) on page 14](#).

## Power consumption, electrical specifications, and acoustic emissions

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

See [www.hp.com/supplort/colorljM455](http://www.hp.com/supplort/colorljM455) or [www.hp.com/support/color/ljM480MFP](http://www.hp.com/support/color/ljM480MFP) or [www.hp.com/support/colorljE45028](http://www.hp.com/support/colorljE45028) or [www.hp.com/support/colorljE47528MFP](http://www.hp.com/support/colorljE47528MFP) for current information.

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

## Operating-environment range

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

Table 1-26 Operating-environment specifications

Environment	Recommended	Allowed
Temperature	15° to 27°C (59° to 80.6°F)	10° to 32.5°C (50° to 90.5°F)
Relative humidity	30% to 70% relative humidity (RH)	10% to 80% RH

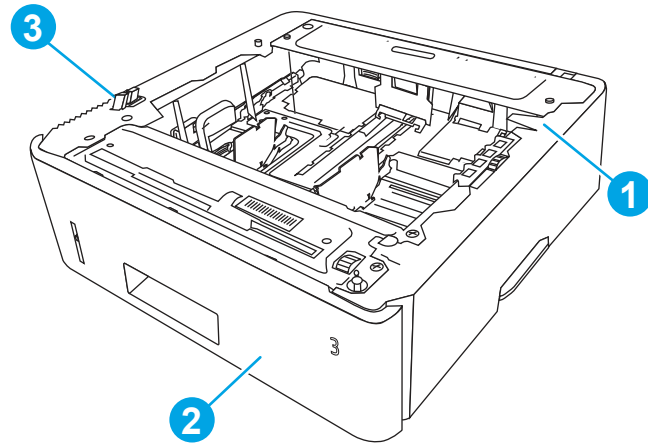
## Information (input devices)

Learn about the printer input devices.

### 550-sheet paper feeder front view

Identify the parts on the 550-sheet paper feeder.

Figure 1-12 550-sheet paper feeder front view



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

---

## 2 Printer installation and maintenance

Learn about printer installation and maintenance.

### Document feeder / scanner

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

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

Learn about cleaning the document feeder rollers and pads.

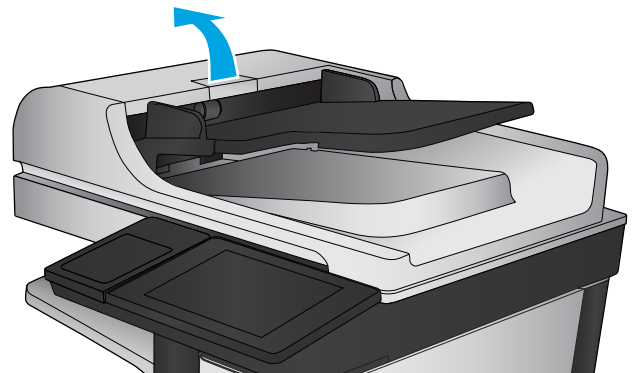
Over time, specks of debris might collect on the document feeder rollers and pads which can affect performance.

---

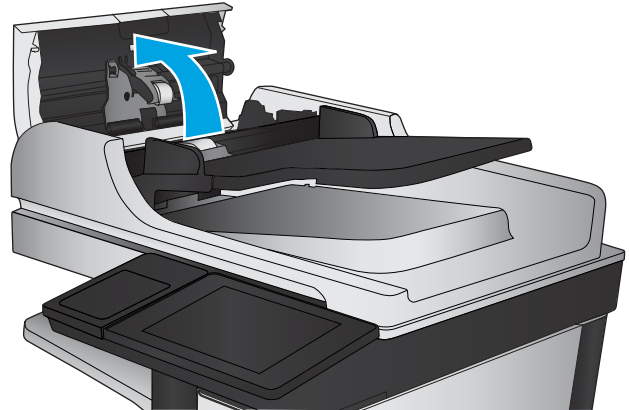
 **NOTE:** The figures in this topic show a typical MFP printer. However, the procedure is correct for all MFP printers.

---

1. Lift the document-feeder latch.

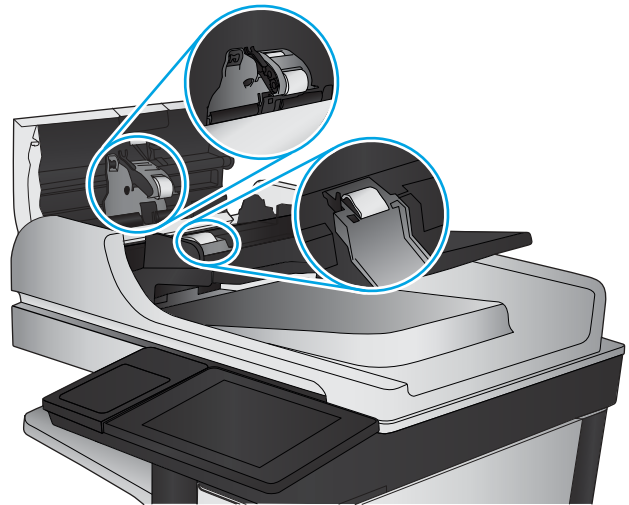


2. Open the document-feeder cover.



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

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



4. Close the document-feeder cover.

## Check the scanner glass for dirt and smudges

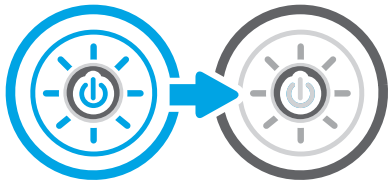
Learn about solving copy-quality debris problems.

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

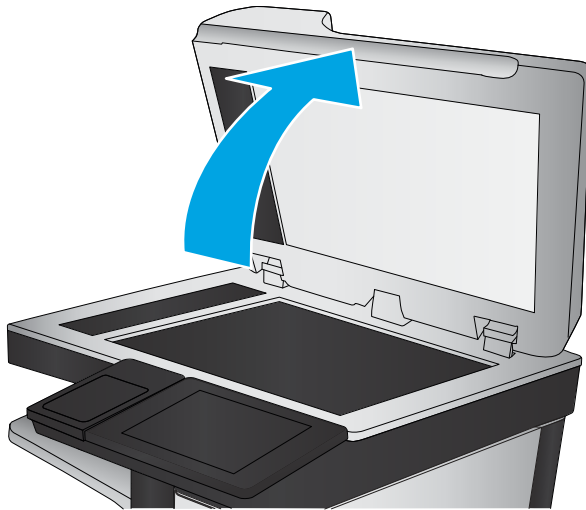
[View a video of cleaning the document feeder glass and flatbed glass.](#)



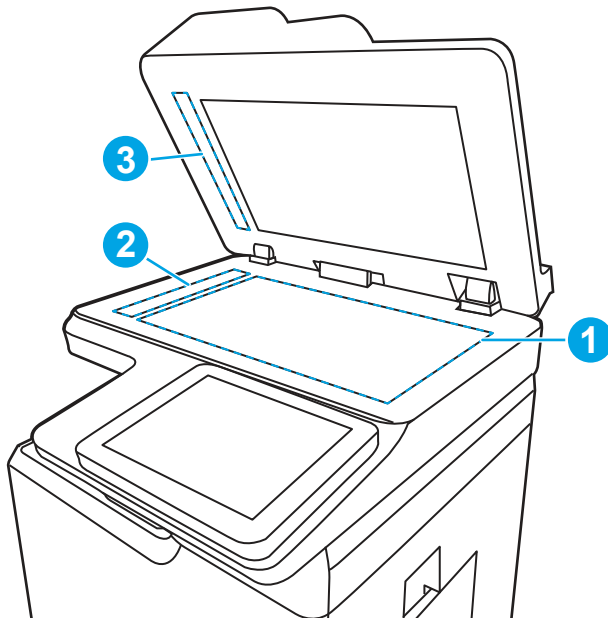
1. Press the power button to turn the printer off, and then disconnect the power cable from the electrical outlet.




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.

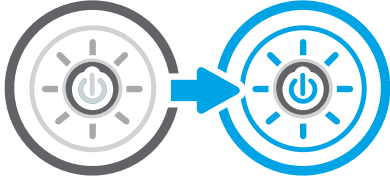


**⚠ CAUTION:** Do not use abrasives, acetone, benzene, ammonia, ethyl alcohol, or carbon tetrachloride on any part of the printer; these can damage the printer. Do not place liquids directly on the glass or platen. They might seep and damage the printer.

 **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.



## Base printer

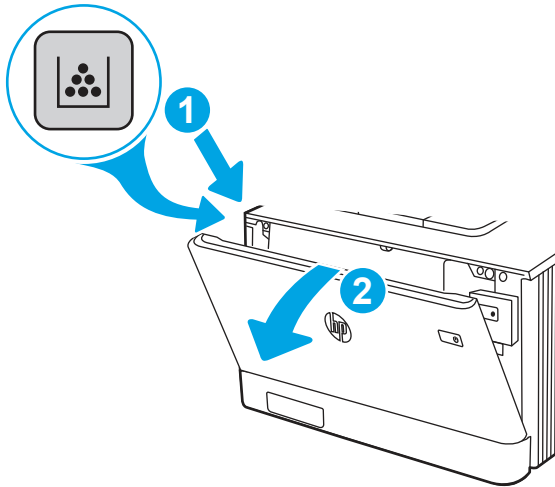
Learn about the base printer installation and maintenance.

### Remove and replace the toner cartridges

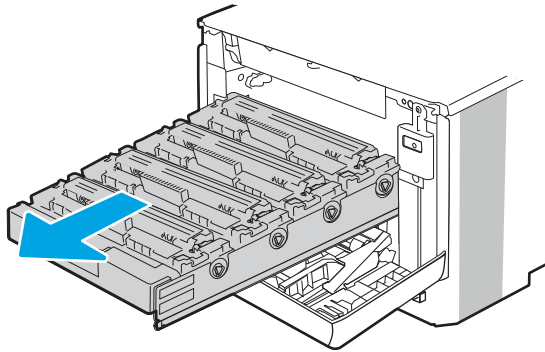
Follow these steps to replace the toner cartridge.

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

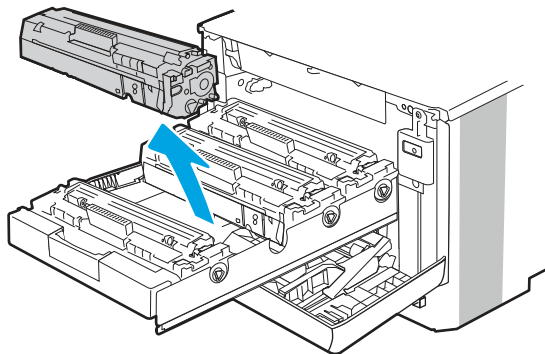
1. Open the front door by pressing the button on the left panel.



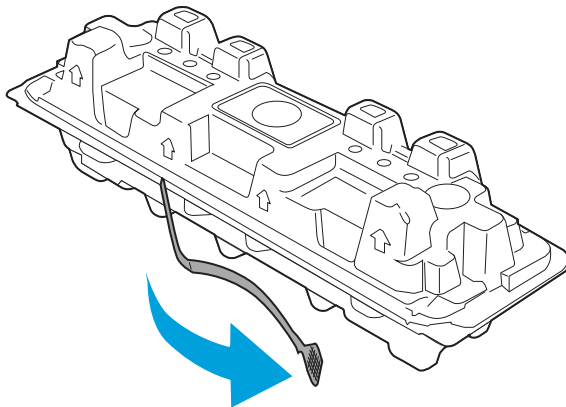
2. Grasp the blue handle on the toner cartridge drawer, and then pull out the drawer.



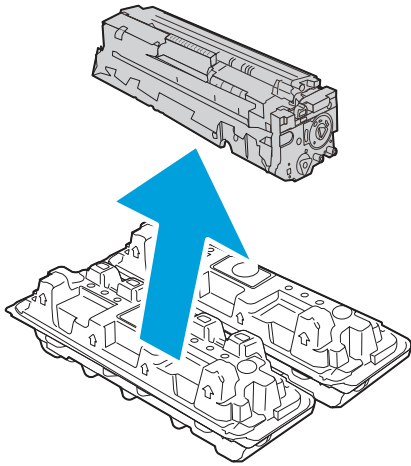
3. Grasp the handle on the toner cartridge, and then pull the toner cartridge straight up to remove it.



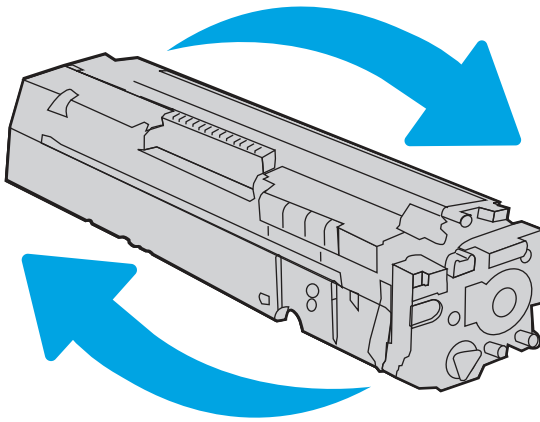
4. Remove the new toner cartridge package from the box, and then pull the release tab on the packaging.



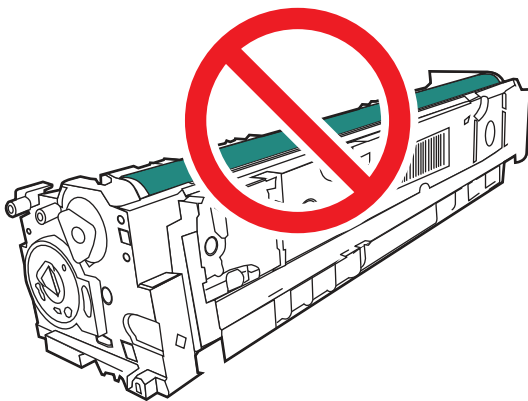
5. Remove the toner cartridge from the opened packaging shell. Place the used toner cartridge in the shell for recycling.



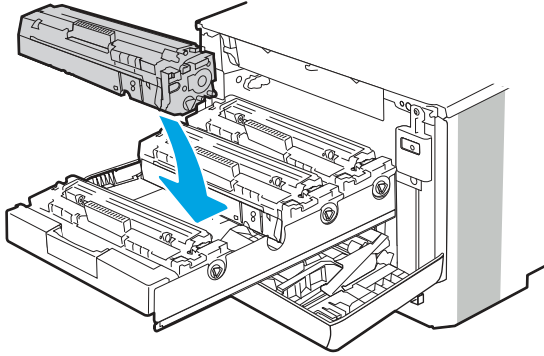
6. Holding the toner cartridge on both ends, gently rock the cartridge end to end to distribute the toner evenly inside the cartridge.



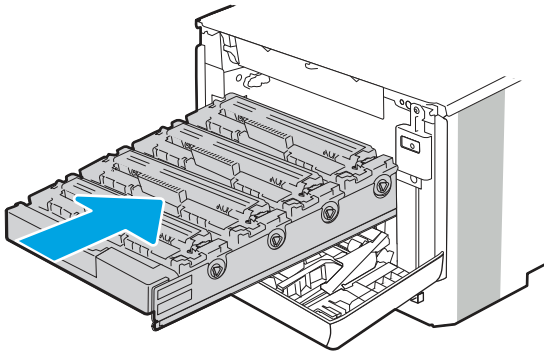
7. Do not touch the imaging drum on the bottom of the toner cartridge. Fingerprints on the imaging drum can cause print-quality problems. Also, do not expose the cartridge to light unnecessarily.



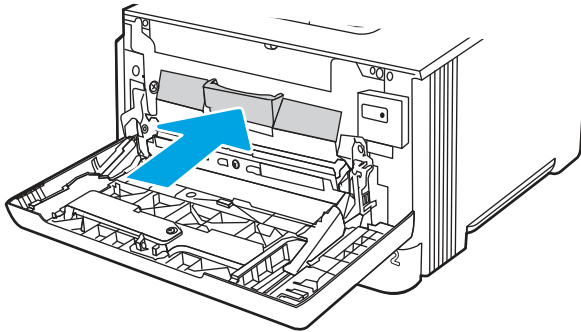
8. Insert the new toner cartridge into the drawer. Make sure that the color chip on the cartridge matches the color chip on the drawer.



9. Close the toner cartridge drawer.



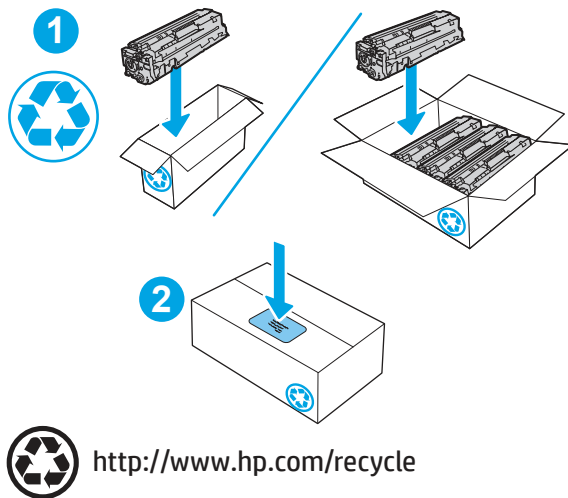
10. Close the front door.



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](http://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.



## Print a cleaning page

Learn how to print a cleaning page.

### Print a cleaning page from a non-touchscreen control panel

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


---

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

---

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

---


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

---


### Print a cleaning page from a touchscreen control panel

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

---

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

---

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

---

## Automatic cleaning page

Learn how to set up automatic cleaning page intervals.

Enable and configure auto cleaning from a non-touchscreen control panel

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

Enable and configure auto cleaning from an touchscreen control panel

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

## Clean the Tray 1 roller and separation pad

Learn about cleaning the Tray 1 roller and separation pad.

### 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](http://www.hp.com/buy/parts).

**Table 2-1** Part information

Part number	Part description
RL1-2593-000CN	Roller, paper pickup
RM2-6406-000CN	Separation pad assembly

## Required tools

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

## After performing service

### Turn the printer power on

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

## Post service test

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

## Remove the Tray 1 roller and separation pad

Learn about removing the Tray 1 roller and separation pad.

1. Open the front door.
  - a. Press the button (callout 1) on the left side of the printer to release the front door.

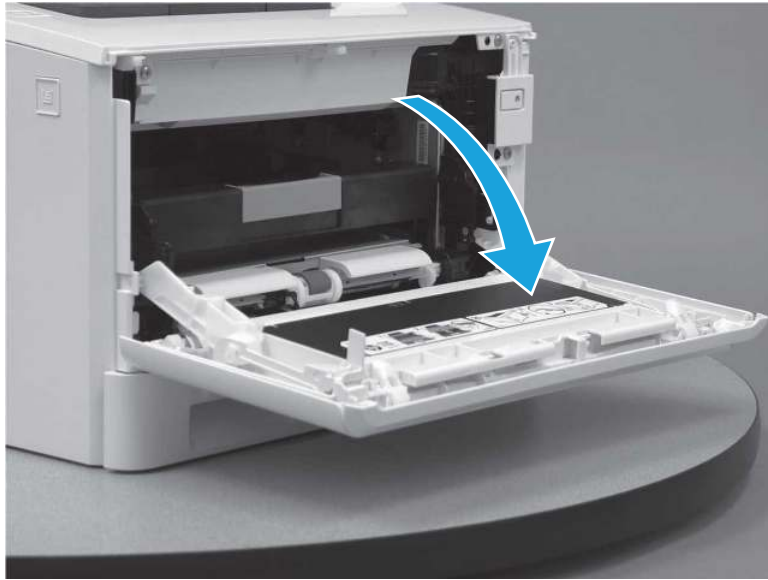
**Figure 2-1** Release the front door





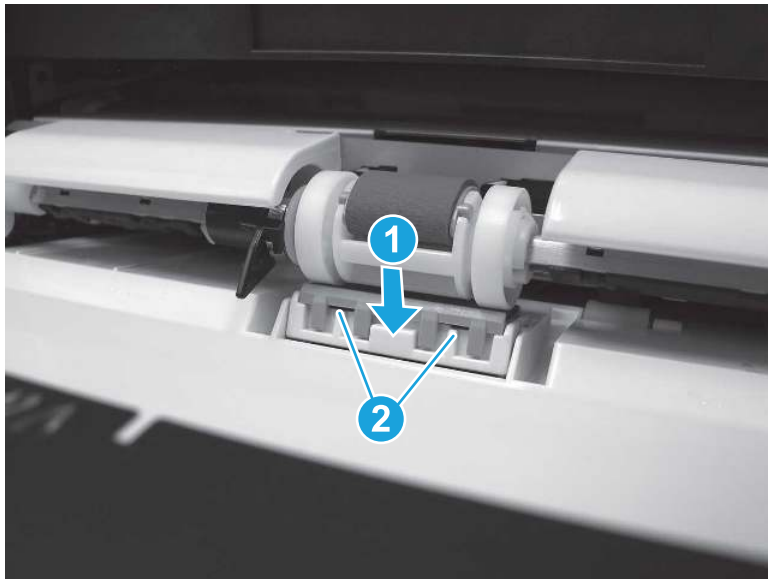
- b. Open the front door.

**Figure 2-2** Open the front door



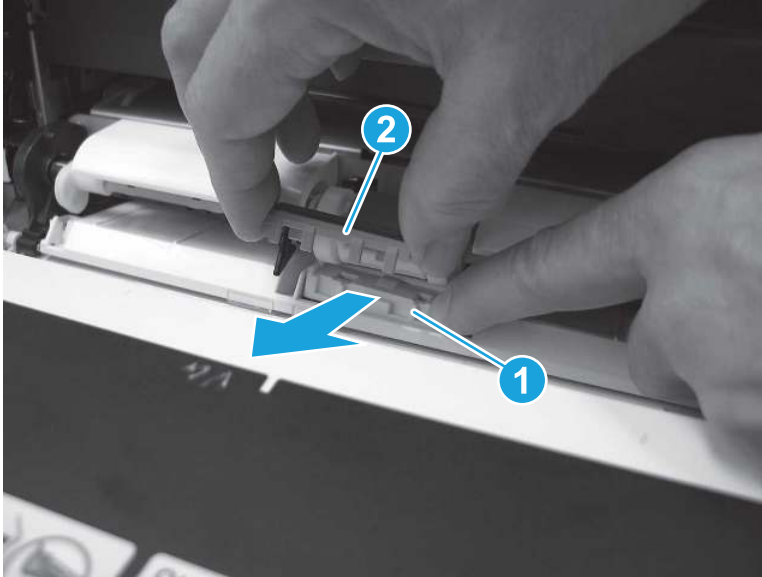
2. Remove the Tray 1 separation pad.
  - a. Press down on the separation pad holder (callout 1) and release two tabs (callout 2).

**Figure 2-3** Press down and release tabs



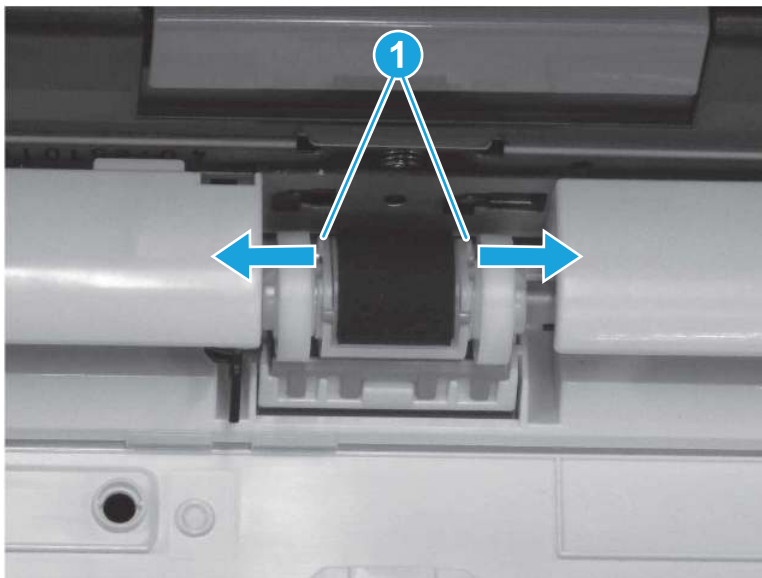
- b. Continue to press down on the separation pad holder (callout 1), and the slide the separation pad (callout 2) away from the printer to remove it.

Figure 2-4 Remove the separation pad



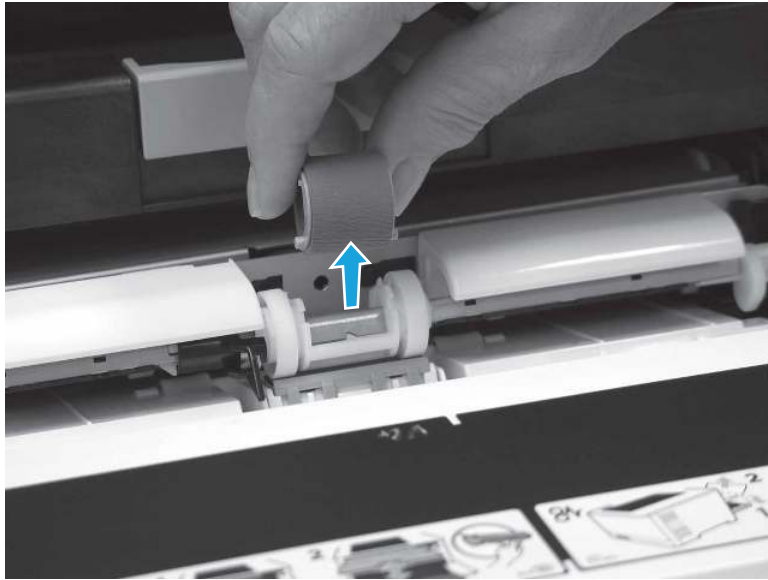
3. Remove the Tray 1 pickup roller.
  - a. Release two tabs (callout 1).

Figure 2-5 Release two tabs



- b. Remove the pickup roller.

Figure 2-6 Remove the pickup roller



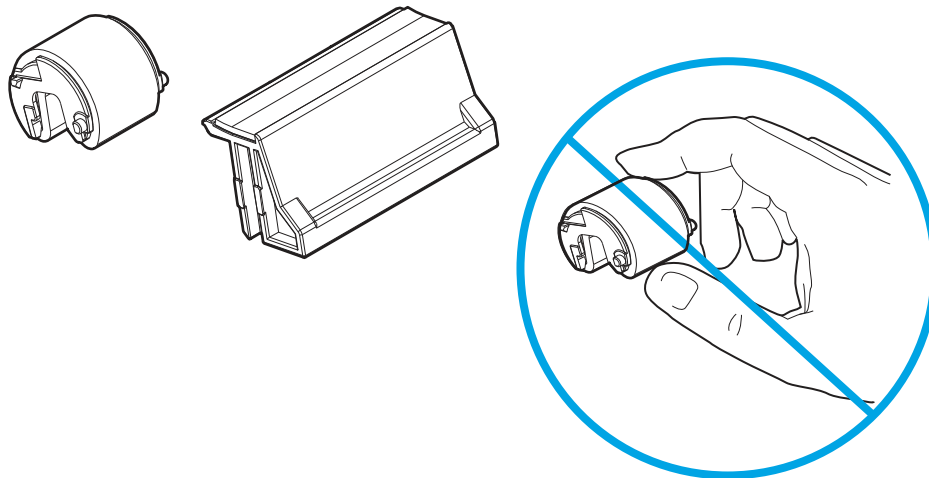
## Clean the Tray 1 roller and separation pad

Learn about cleaning the Tray 1 roller and separation pad.

- ▲ Clean the Tray 1 roller and separation pad, and then reverse the removal steps to reinstall them.
- ▲ Use a damp, lint-free cloth to gently clean the roller and pad.

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

Figure 2-7 Clean the roller and pad



## Clean the Tray 2 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](http://www.hp.com/buy/parts).

**Table 2-2** Part information

Part number	Part description
RM2-6372-000CN	Paper pickup assembly
RM2-5577-000CN	Roller, feed assembly
RM2-5881-000CN	Roller, separation assembly

## Required tools

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

## After performing service

### Turn the printer power on

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

## Post service test


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

## Clean the Tray 2 rollers

Learn about removing the Tray 2 rollers.

---

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

 **TIP:** The roller in the tray (cassette) can be cleaned without removing it from the tray.

---

1. Open the front door.

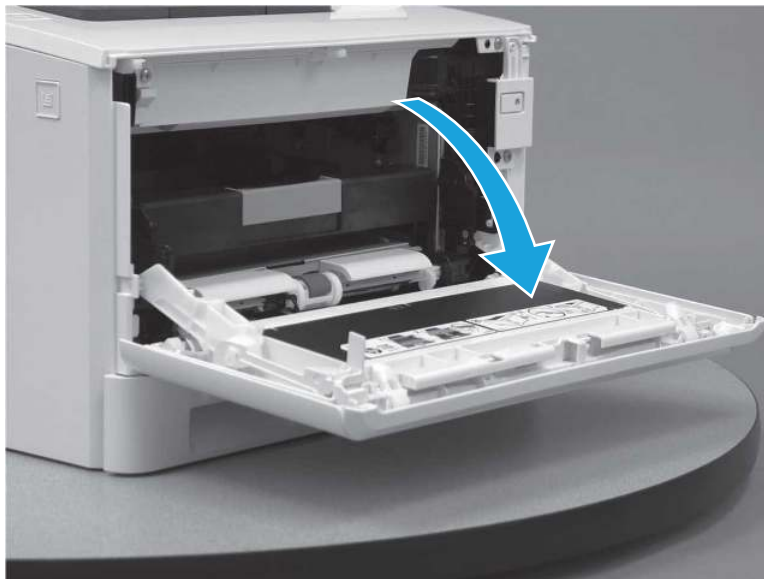
- a. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 2-8** Release the front door



- b. Open the front door.

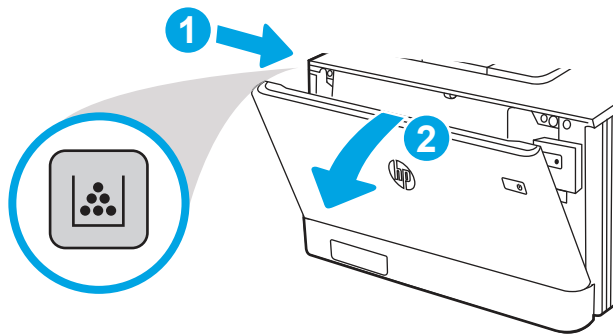
**Figure 2-9** Open the front door



2. Remove the toner cartridges.

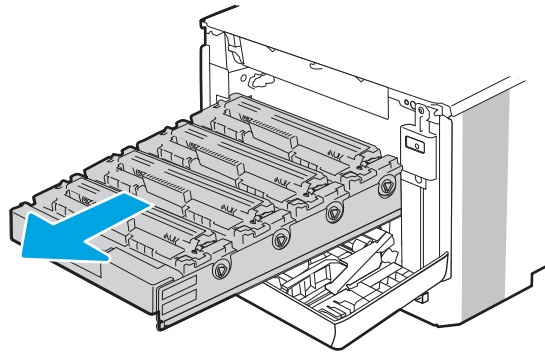
- a. Open the front door by pressing the button on the left cover.

Figure 2-10 Open the front door



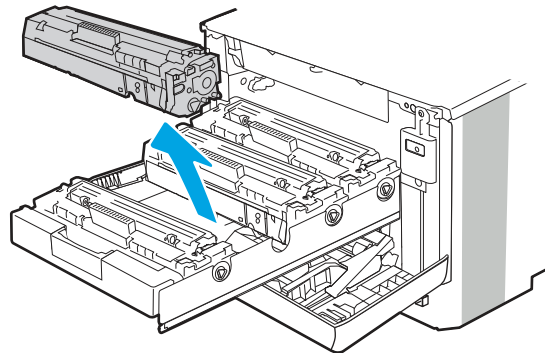
- b. Grasp the blue handle on the toner cartridge tray, and then pull out the tray.

Figure 2-11 Open the cartridge drawer



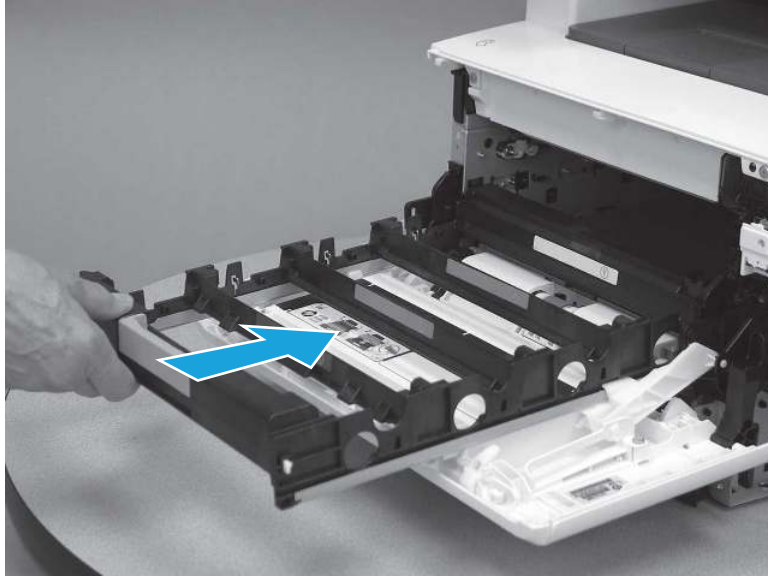
- c. Grasp the handle on the toner cartridge, and then pull the toner cartridge straight up to remove it. Repeat this step for each toner cartridge.

Figure 2-12 Remove the toner cartridges



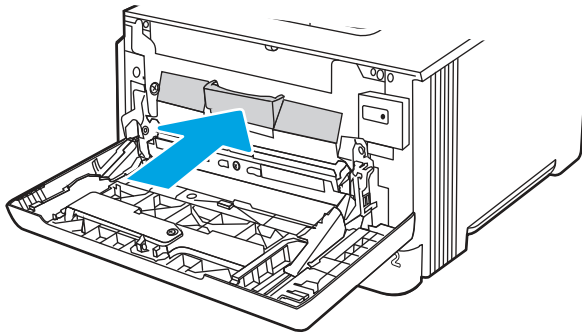
- d. Slide the cartridge tray into the printer.

**Figure 2-13** Slide the cartridge tray into the printer



- e. Close the front door.

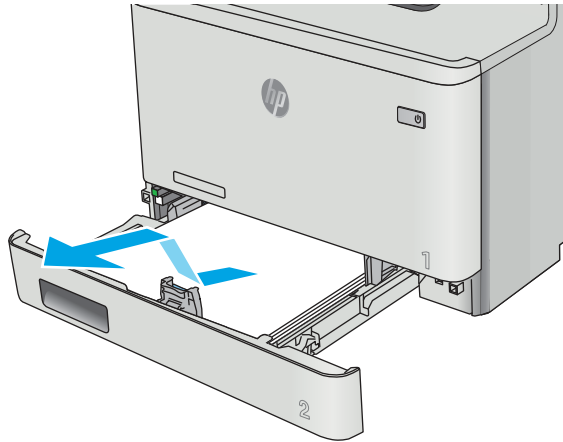
**Figure 2-14** Close the front door



- 3. Remove Tray 2.

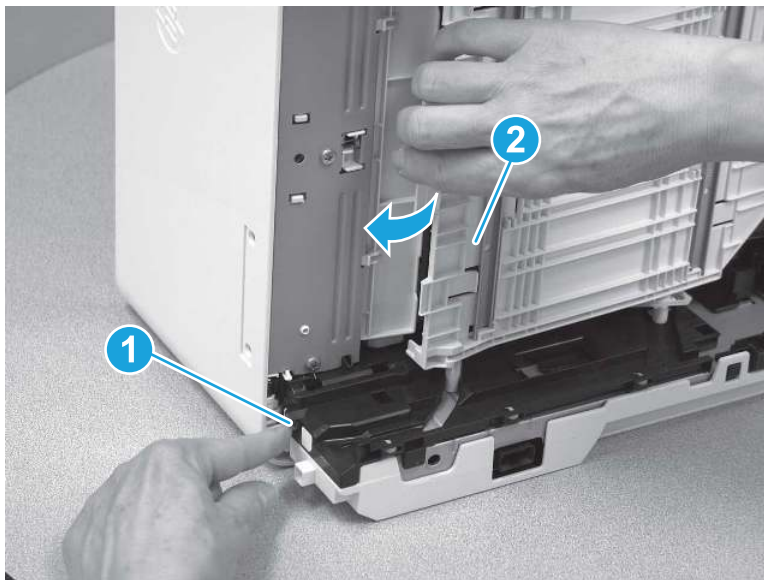
- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

Figure 2-15 Remove the tray



4. Remove the Tray 2 pickup or feed roller.
  - a. Turn the printer right side up, so that it is resting on the left side. Press the release button (callout 1), and then release the Tray 1 feed guide (callout 2) toward the front of the printer.

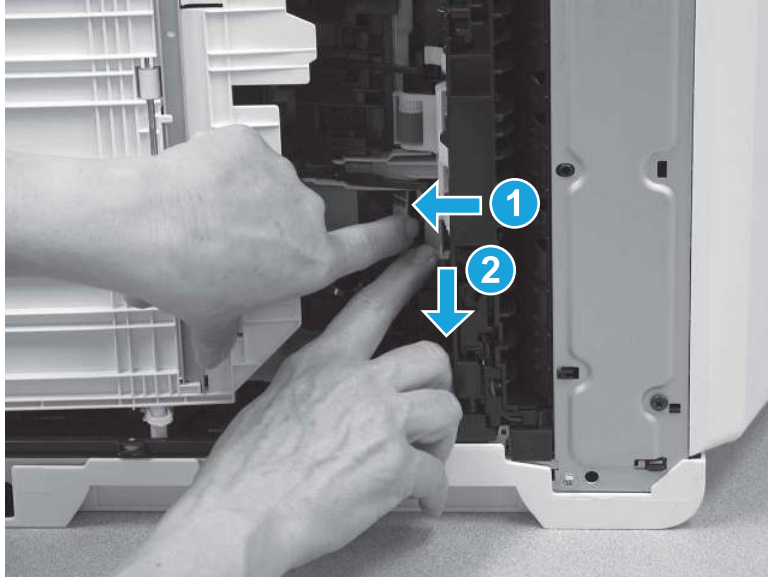
Figure 2-16 Release the feed guide





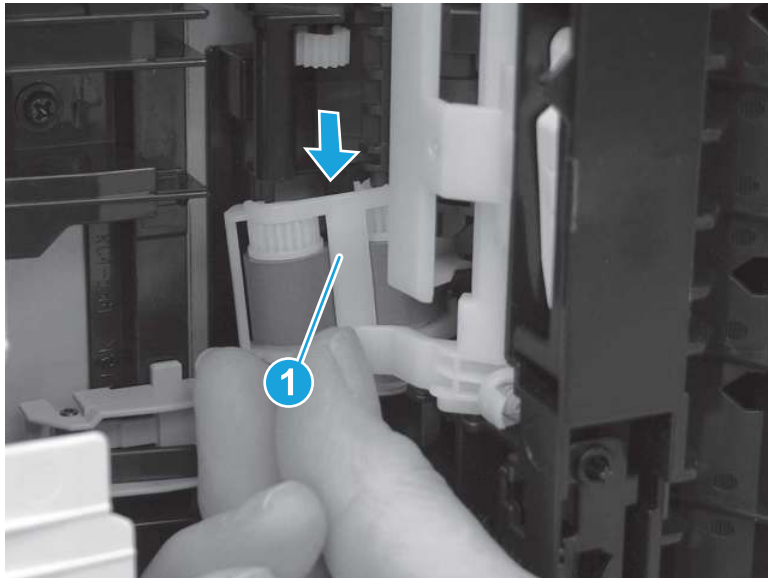
- b. On the underside of the printer, press the tab (callout 1) toward the front of the printer, and then slide the roller holder down (callout 2).

Figure 2-17 Release the roller holder



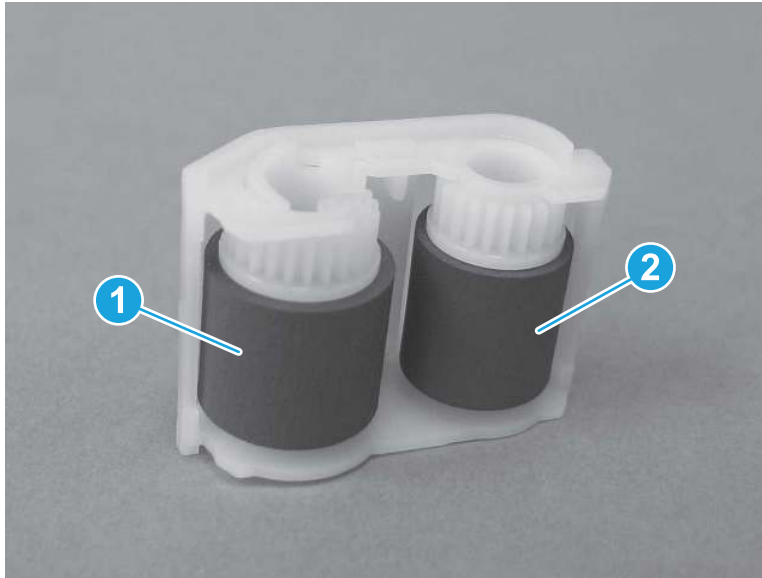
- c. Remove the pickup and feed roller case (callout 1).

Figure 2-18 Remove the roller case



- d. Locate the feed roller (callout 1) and the pickup roller (callout 2).

Figure 2-19 Locate the rollers



- e. Release the top of the roller and remove it from the case.

---

 **NOTE:** The feed roller is shown in the figure below. The procedure is the same for the pickup roller.

---

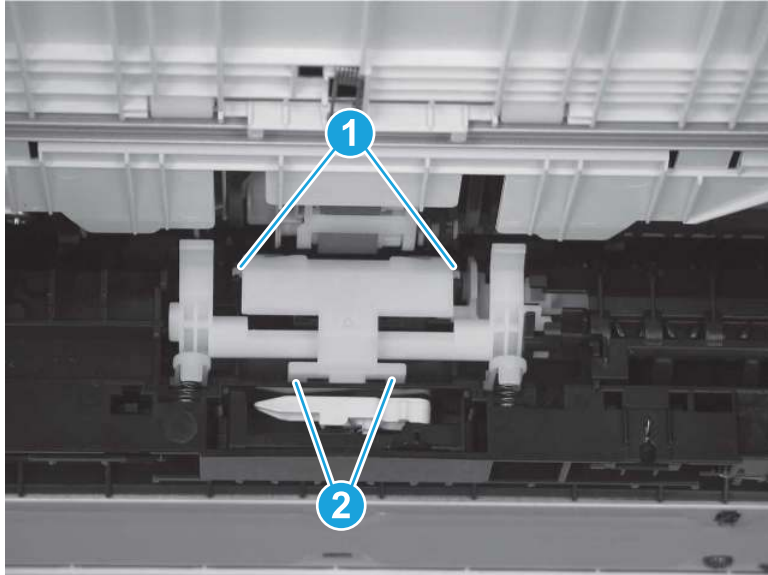
Figure 2-20 Remove the roller



5. Remove the Tray 2 separation roller.

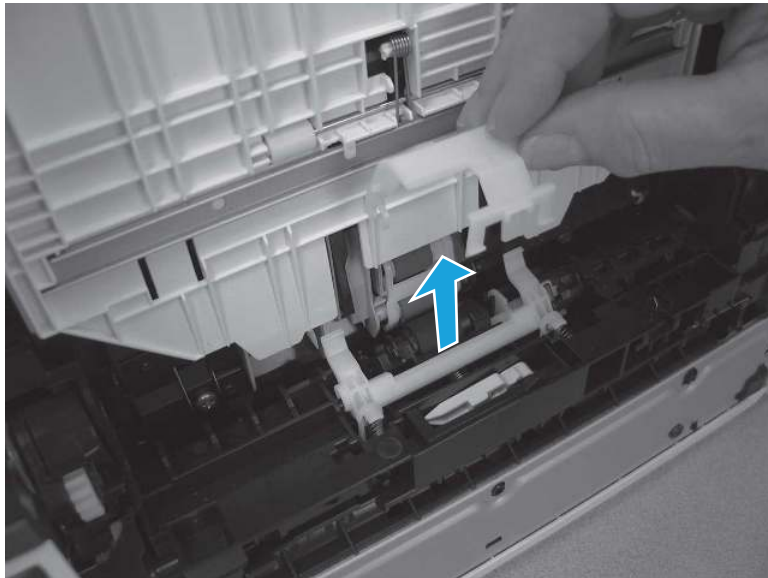
- a. Turn the printer front side up, so that it is resting on the rear door or duplexer door. On the underside of the printer, release two hinge tabs (callout 1), and then release two tabs (callout 2).

**Figure 2-21** Release the tabs



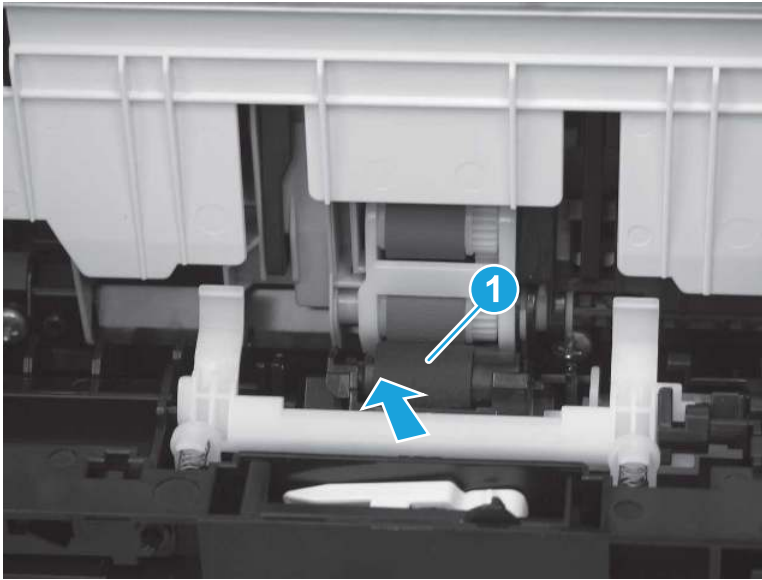
- b. Lift up to remove the separation roller cover.

**Figure 2-22** Remove the cover



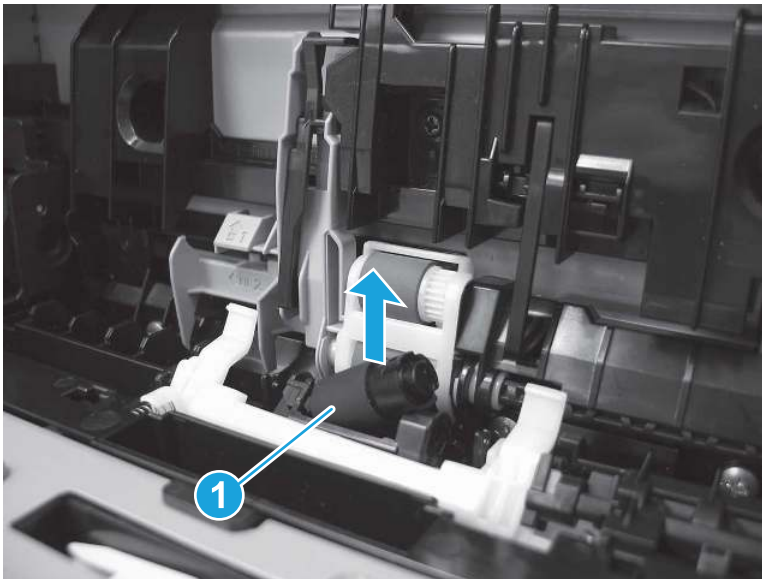
- c. Press on the left side of the separation roller (callout 1) to release it.

**Figure 2-23** Release the separation roller



- d. Remove the separation roller (callout 1).

**Figure 2-24** Remove the separation roller




## Clean the Tray 2 rollers

Learn about cleaning the Tray 2 rollers.

---

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

 **TIP:** The roller in the tray (cassette) can be cleaned without removing it from the tray.

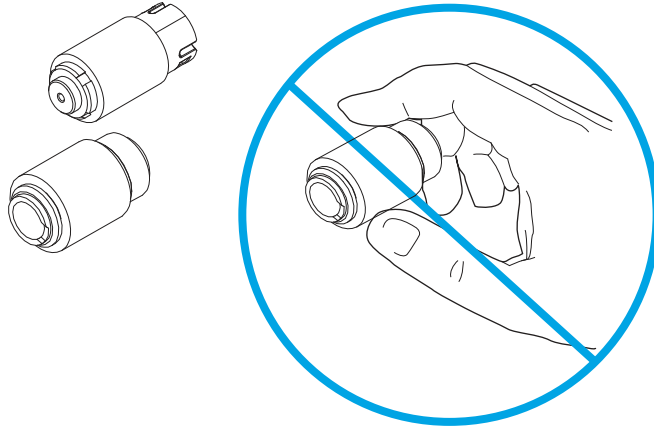
---

1. Clean the Tray 2 rollers.

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

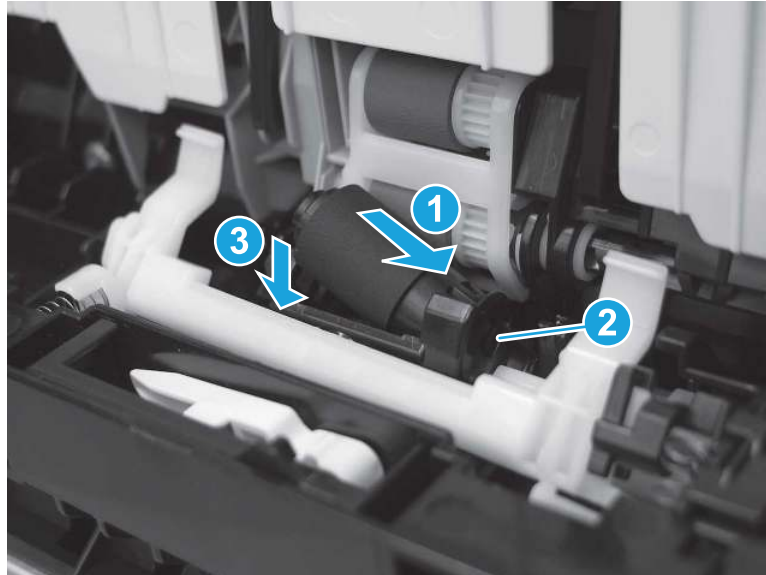
⚠ **CAUTION:** Do not touch the spongy portion of the roller. Skin oils on the roller can cause paper handling problems. HP recommends washing your hands before handling the assembly.

Figure 2-25 Clean the rollers



2. Reverse the removal steps to install the assemblies. Also, use the following **special installation instructions**.
  - ▲ **Tray 2 separation roller:** Make sure that the printer is positioned front side up, so that it is resting on the rear door or duplexer. On the underside of the printer, position the end of the roller into the slot in the printer (callout 1). It might be necessary to rotate the roller until it fits correctly into the slot (callout 2). Press down on the left side of the roller (callout 3) until it snaps into place.

Figure 2-26 Install the separation roller



## Input devices

Learn about input device installation and maintenance.

## Clean the Tray 3 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](http://www.hp.com/buy/parts).

**Table 2-3** Part information

Part number	Part description
RM2-6372-000CN	Paper pickup assembly
RM2-5577-000CN	Roller, feed assembly
RM2-5881-000CN	Roller, separation assembly

### Required tools

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

### After performing service

#### Turn the printer power on

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

### Post service test

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

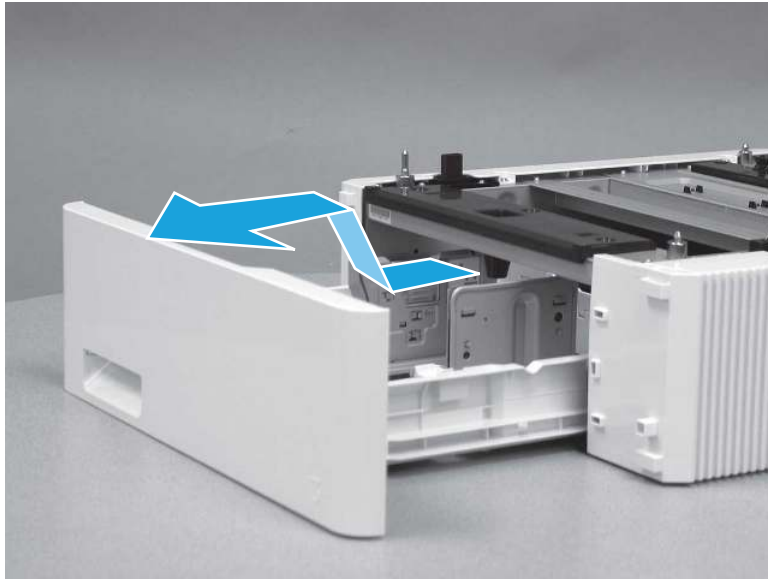
## Remove the 550-sheet paper feeder (Tray 3) rollers

Learn about removing the Tray 3 rollers.

1. Remove Tray 3.

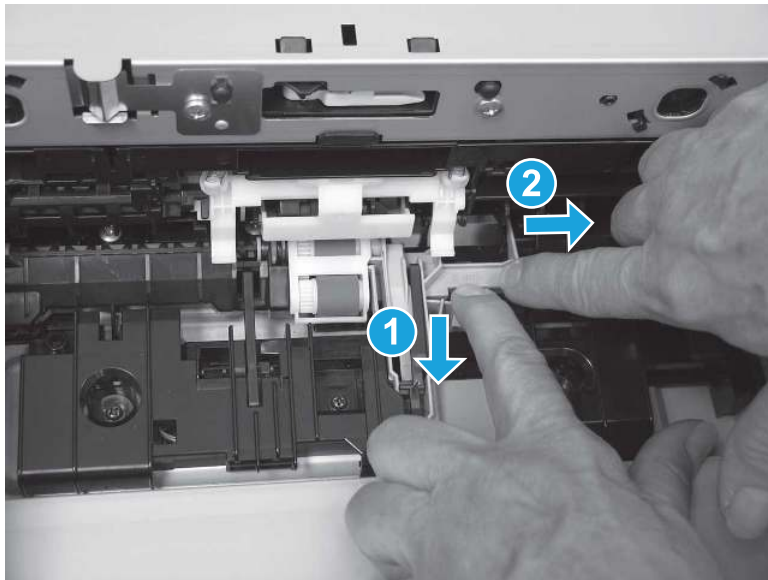
- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

Figure 2-27 Remove the tray



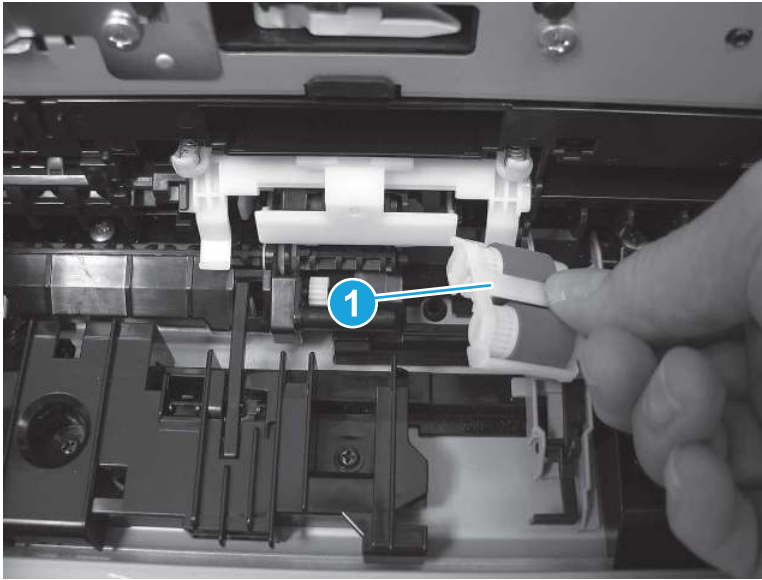
- 2. Remove the Tray 3 pickup or feed roller.
  - a. Press the tab (callout 1) toward the front of the feeder, and then slide the roller holder to the right (callout 2).

Figure 2-28 Release the roller holder



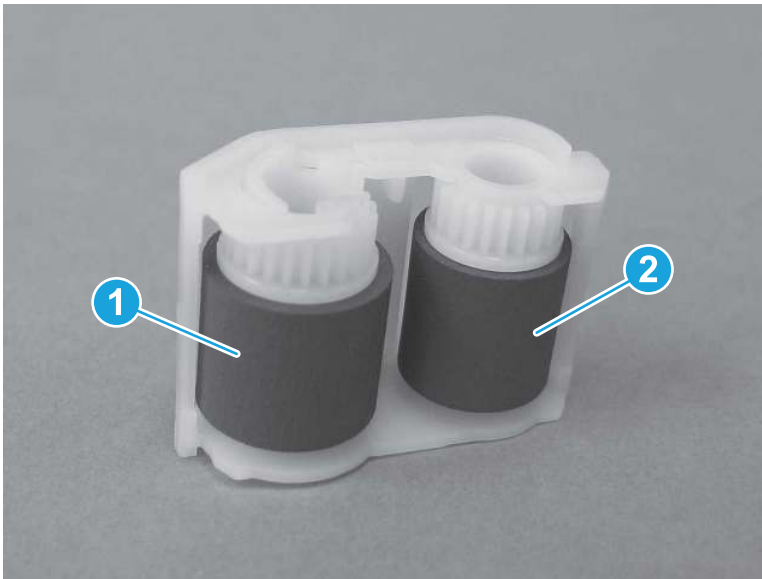
- b. Remove the pickup and feed roller case (callout 1).

Figure 2-29 Remove the roller case



- c. Locate the feed roller (callout 1) and the pickup roller (callout 2).

Figure 2-30 Locate the rollers



- d. Release the top of the roller and remove it from the case.



**NOTE:** The feed roller is shown in the figure below. The procedure is the same for the pickup roller.

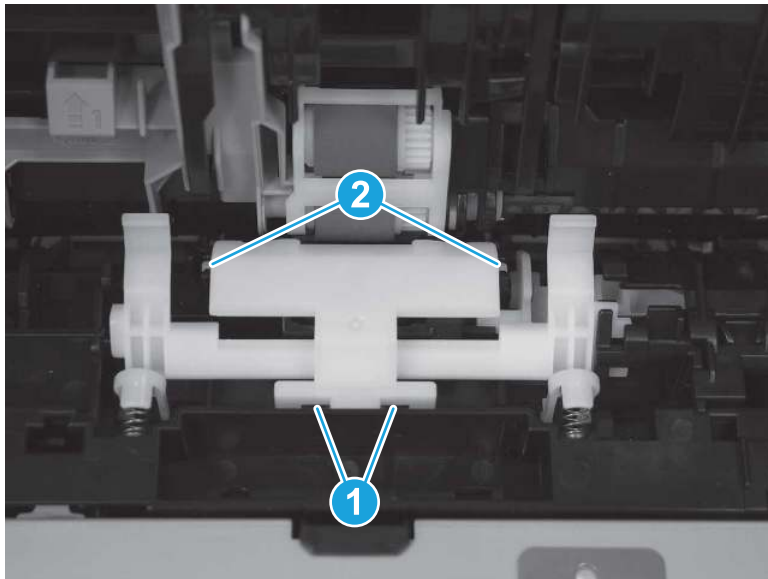


Figure 2-31 Remove the roller



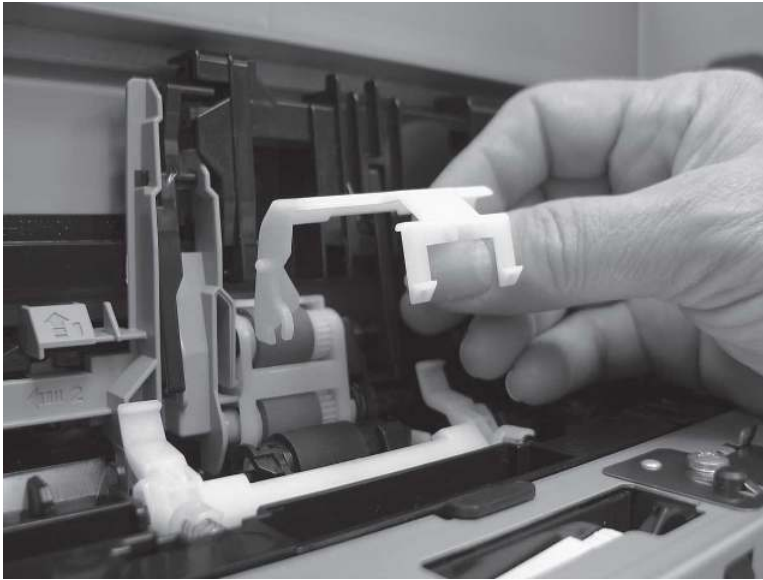
3. Remove the Tray 3 separation roller.
  - a. Release two tabs (callout 1), and then release two hinge tabs (callout 2).

Figure 2-32 Release the tabs



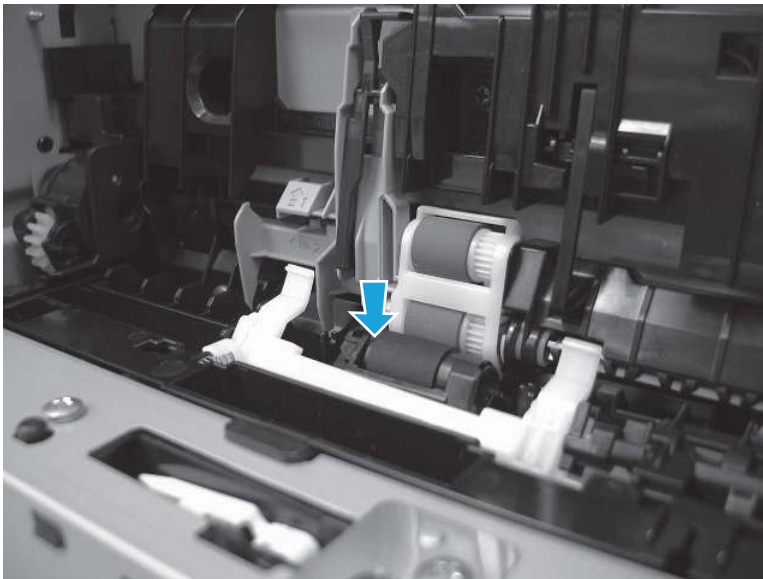
- b. Lift up to remove the separation roller cover.

Figure 2-33 Remove the cover



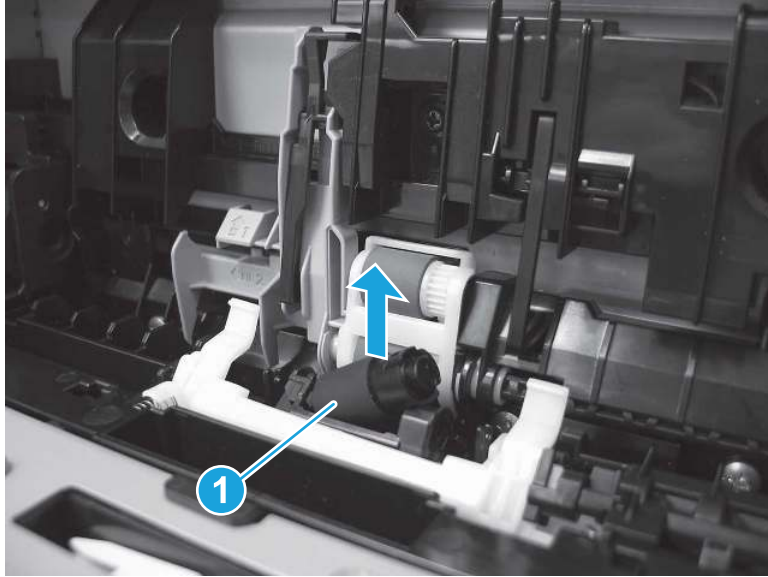
- c. Press on the left side of the separation roller to release it.

Figure 2-34 Release the separation roller



- d. Remove the separation roller (callout 1).

**Figure 2-35** Remove the separation roller



## Clean the 550-sheet paper feeder (Tray 3) rollers

Learn about cleaning the Tray 3 rollers.

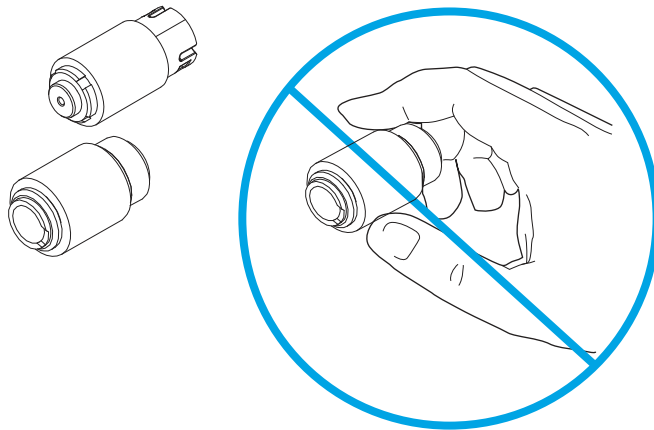
1. Clean the 550-sheet paper feeder (Tray 3) rollers.
  - ▲ Use a damp, lint-free cloth to gently clean the rollers.

---

⚠ **CAUTION:** Do not touch the spongy portion of the roller. Skin oils on the roller can cause paper handling problems. HP recommends washing your hands before handling the assembly.

---

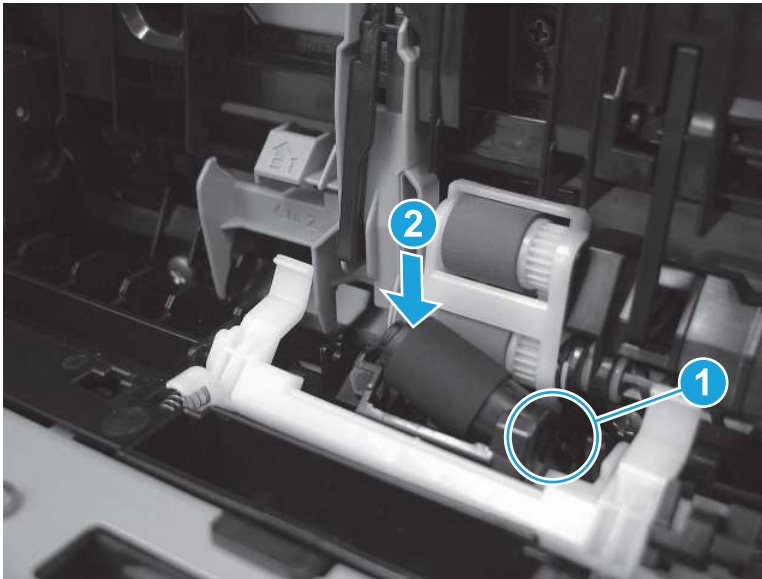
**Figure 2-36** Clean the rollers



2. Reverse the removal steps to install the assemblies. Also, use the following **special installation instructions**.

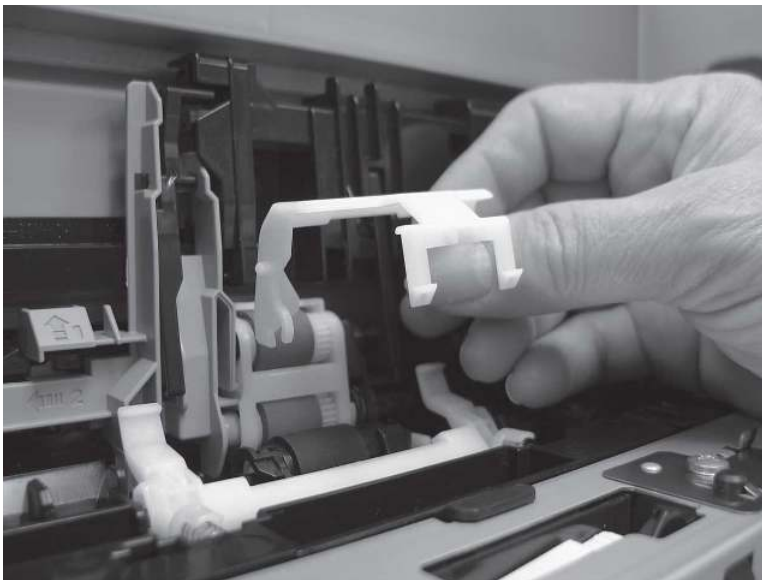
- a. **Tray 3 rollers:** Position the end of the roller into the slot in the printer (callout 1). It might be necessary to rotate the roller until it fits correctly into the slot. Press down on the left side of the roller (callout 2) until it snaps into place.

**Figure 2-37** Install the separation roller



- b. Position the roller cover over the separation roller.

**Figure 2-38** Position the roller cover



---


# 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.

---

## 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.

## 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).

## Base printer

Learn about the base printer components.

## Basic operation

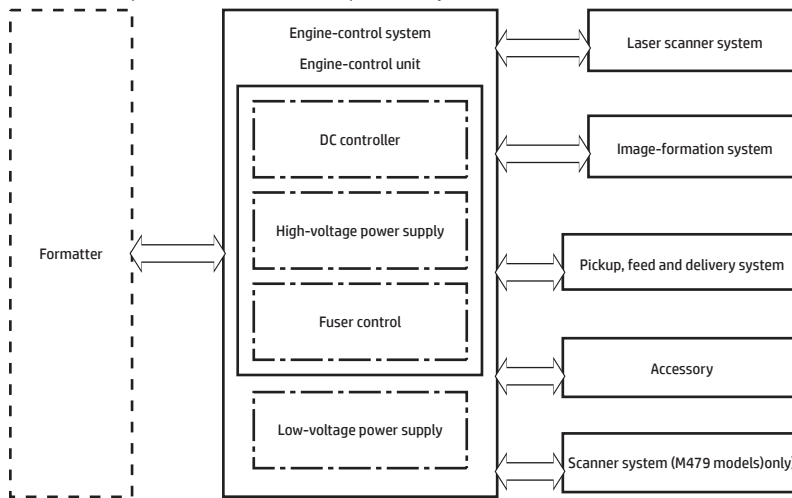
Learn about the basic operation of the printer.

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

The basic printer operation comprises the following systems:

- Engine-control system
- Laser/scanner system
- Image-formation system
- Pickup, feed and delivery system
- Accessory (optional paper feeders)
- Integrated scanner assembly (document feeder and sub-scanner assembly)

**Figure 3-1** Relationship between the main printer systems



## Sequence of operation

Learn about the printer sequence of operation.

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

**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.	<ul style="list-style-type: none"> <li>• Heats the fuser roller in the fuser</li> <li>• Pressurizes the fuser film</li> <li>• Detects the toner cartridges</li> <li>• Separates all of the developing rollers from the photosensitive drums in the toner cartridges</li> <li>• Rotates and stops each motor</li> <li>• Cleans the intermediate transfer belt (ITB) and secondary transfer roller</li> <li>• Detects cable breakage on the thermistor</li> <li>• Rotates and stops each fan</li> </ul>

**Table 3-1 Sequence of operation (continued)**

Period	Duration	Description
Standby	From the end of the waiting sequence, the last rotation until the formatter receives a print command, or until the printer is turned off.	<ul style="list-style-type: none"> <li>● Detects any residual paper in the engine</li> </ul>
		<ul style="list-style-type: none"> <li>● Is in the Ready state</li> <li>● Enters Sleep mode if the formatter sends the sleep command</li> </ul>
		<ul style="list-style-type: none"> <li>● The printer calibrates if it is time for an automatic calibration</li> </ul>
Initial rotation	From the time the formatter receives a print command until the paper enters the paper path.	<ul style="list-style-type: none"> <li>● Rotates each motor</li> </ul>
		<ul style="list-style-type: none"> <li>● Rotates each fan</li> </ul>
		<ul style="list-style-type: none"> <li>● Activates the high-voltage power supply</li> </ul>
		<ul style="list-style-type: none"> <li>● Prepares the laser/scanner unit</li> </ul>
		<ul style="list-style-type: none"> <li>● Warms the fuser to the correct temperature</li> </ul>
Printing	From the time the first sheet of paper enters the paper path until the last sheet has passed through the fuser.	<ul style="list-style-type: none"> <li>● Forms the image on the photosensitive drums</li> </ul>
		<ul style="list-style-type: none"> <li>● Transfers the toner to the paper</li> </ul>
		<ul style="list-style-type: none"> <li>● Fuses the toner image onto the paper</li> </ul>
Last rotation	From the time the last sheet of paper exits the fuser until the motors stop rotating.	<ul style="list-style-type: none"> <li>● Moves the last printed sheet into the output bin</li> </ul>
		<ul style="list-style-type: none"> <li>● Stops each motor</li> </ul>
		<ul style="list-style-type: none"> <li>● Stops the high-voltage power supply</li> </ul>
		<ul style="list-style-type: none"> <li>● Stops the laser/scanner unit</li> </ul>
		<ul style="list-style-type: none"> <li>● Turns the fuser heater off</li> </ul>
		<ul style="list-style-type: none"> <li>● Cleans the ITB and secondary transfer roller</li> </ul>
		<ul style="list-style-type: none"> <li>● If another print command is received, the printer enters the initial rotation period when the last rotation is complete.</li> </ul>

## Formatter-control system

Learn about how the formatter operates.

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

Issues that can occur from swapping a formatter include:

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

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



The formatter performs the following functions:

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

## Power management

Learn about printer power management.


Power management conserves power after the printer has been idle for an adjustable length of time. When the printer is in sleep mode, the control-panel backlight is turned off, but the printer retains all printer settings, downloaded fonts, and macros. The default setting is a 1-minute idle time. The setting can be changed or turned off from the control-panel menus.

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

- A print job, valid data, or a PML or PDL command is received at the serial port.
- A print job or fax (fax models) is received.
- The control panel is touched (button press or touchscreen touch depending on model).
- Inserting paper into the document feeder (MFP only). Opening the scanner lid does not wake up the printer (there is no sensor for the scanner lid open).
- 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 front (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.

---

2-line control panels

1. At the control panel, press the **OK** button to access the **Setup** menu.
2. Open the following menus:

- [Power Management](#)
  - [Sleep Delay](#)
3. Use the arrow keys to select the time for the [Sleep Delay](#), and then press the [OK](#) button.

Touchscreen control panels

1. From the printer control panel, swipe down and then select the [Setup](#) icon.
2. Open the following menus:
  - [Power Management](#)
  - [Sleep Mode](#)
3. Set the time for the [Sleep Mode](#) function.

## Printer job language (PJM)

Learn about printer job language (PJM).

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

## 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.

## Low end data model (LEDM) overview

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

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

## CPU

Learn about the printer microprocessor.

The formatter incorporates a 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 or near the control panel.

## Memory

Learn about printer memory functionality.



---

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

---

## Firmware

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



---

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

---

## Nonvolatile random access memory (NVRAM)

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

## Flash memory

**NAND:** Stores fax memory.

## Random access memory

The printer uses the following RAM:

- SFP: 1.25 GB
- MFP: 1.5 GB

## HP Memory Enhancement technology (MEt)

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



---

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

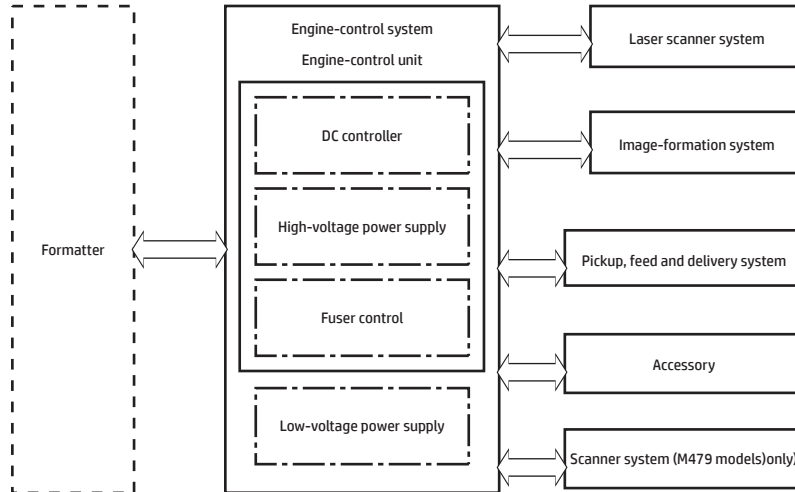
---

## Engine-control unit

Learn about the engine control unit.

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

Figure 3-2 Engine-control unit



## DC controller

Learn about the DC controller.

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

Table 3-2 Printer electrical components

Component type	Abbreviation	Component name
Motor	M1	Pickup motor
Motor	M2	Drum motor
Motor	M3	Developer motor
Motor	M4	Fuser motor
Motor	M10	Scanner motor
Fan	FM1	Power supply fan
Fan	FM2	Cartridge fan
Clutch	CL1	Duplex re-pickup clutch
Solenoid	SL1	Tray 1 (MP) pickup solenoid
Solenoid	SL2	Developer alienation solenoid (K)
Solenoid	SL3	Cassette (Tray 2) pickup solenoid
Solenoid	SL4	Developer alienation solenoid (YMC)
Solenoid	SL5	Lifter solenoid
Solenoid	SL10	Duplex switchback solenoid
Solenoid	SL30	T1 brush alienation solenoid
Switch	SW1	Front door switch
Switch	SW2	Developer alienation detection switch (YMC)

**Table 3-2 Printer electrical components (continued)**

Component type	Abbreviation	Component name
Switch	SW3	Developer alienation detection switch (K)
Switch	SW4	T1 brush alienation detection switch
Switch	SW5	Fuser pressure release detection switch
Switch	SW6	Cassette detection switch
Switch	SW7	Front door switch 2
Switch	SW601	Power switch
Photo interrupter	SR1	Registration sensor
Photo interrupter	SR2	Loop sensor
Photo interrupter	SR3	Fuser output sensor
Photo interrupter	SR4	Output bin media-full sensor
Photo interrupter	SR5	Cassette (Tray 2) media out sensor
Photo interrupter	SR6	Tray 1 (MP) media out sensor
Photo interrupter	SR7	Cassette (Tray 2) media surface sensor
Photo interrupter	SR8	Lifter sensor
Photo interrupter	SR21	Duplex switchback sensor
Photo interrupter	SR22	Duplex re-pickup sensor
Sensor		Registration density sensor
Sensor		Environment sensor

## Motors

Learn about the printer motors.

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



**NOTE:** The DC controller determines the following motor failures.

- Drum motor (ITB motor start-up failure)
- Drum motor (ITB motor rotation failure)
- Fuser motor (fuser motor start-up failure)
- Fuser motor (fuser motor rotation failure)
- Developer motor (developer alienation motor failure)



**NOTE:** Because the MFP integrated scanner assembly (ISA) is a whole unit replacement assembly, those motors are not included in the following table.

**Table 3-3 Motors**

Component name		Components driven
M1	Pickup motor	<ul style="list-style-type: none"> <li>● Tray 1 (MP) tray pickup roller</li> <li>● Tray 1 (MP) tray feed roller</li> <li>● Cassette (Tray 2) pickup roller</li> <li>● Cassette (Tray 2) feed roller</li> <li>● Registration roller</li> <li>● Duplex feed roller</li> <li>● Duplex re-pickup roller</li> <li>● Lift up of cassette (Tray 2)</li> </ul>
M2	Drum motor	<ul style="list-style-type: none"> <li>● Photosensitive drum</li> <li>● Intermediate transfer belt (ITB)</li> </ul>
M3	Developer motor	<ul style="list-style-type: none"> <li>● Developer roller</li> <li>● Contact/alienation of developer roller</li> </ul>
M4	Fuser motor	<ul style="list-style-type: none"> <li>● Fuser roller</li> <li>● Output roller</li> <li>● Duplex switchback roller</li> <li>● Pressure/release of pressure film</li> <li>● Fuser film</li> </ul>
M10	Laser/scanner motor	Laser/scanner mirror

## Fans

Learn about the printer fans.

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

 **NOTE:** The DC controller determines the following fan failures.

- Power supply fan (fan motor 1 failure)
- Cartridge fan (fan motor 2 failure)

**Table 3-4 Fans**

Component name	Cooling area	Type	Speed	
FM1	Power supply fan	Around the low-voltage power supply unit	Intake	Variable (full/middle/half)
FM2	Cartridge fan	Around the toner cartridges and fuser	Intake	Variable (full/half)

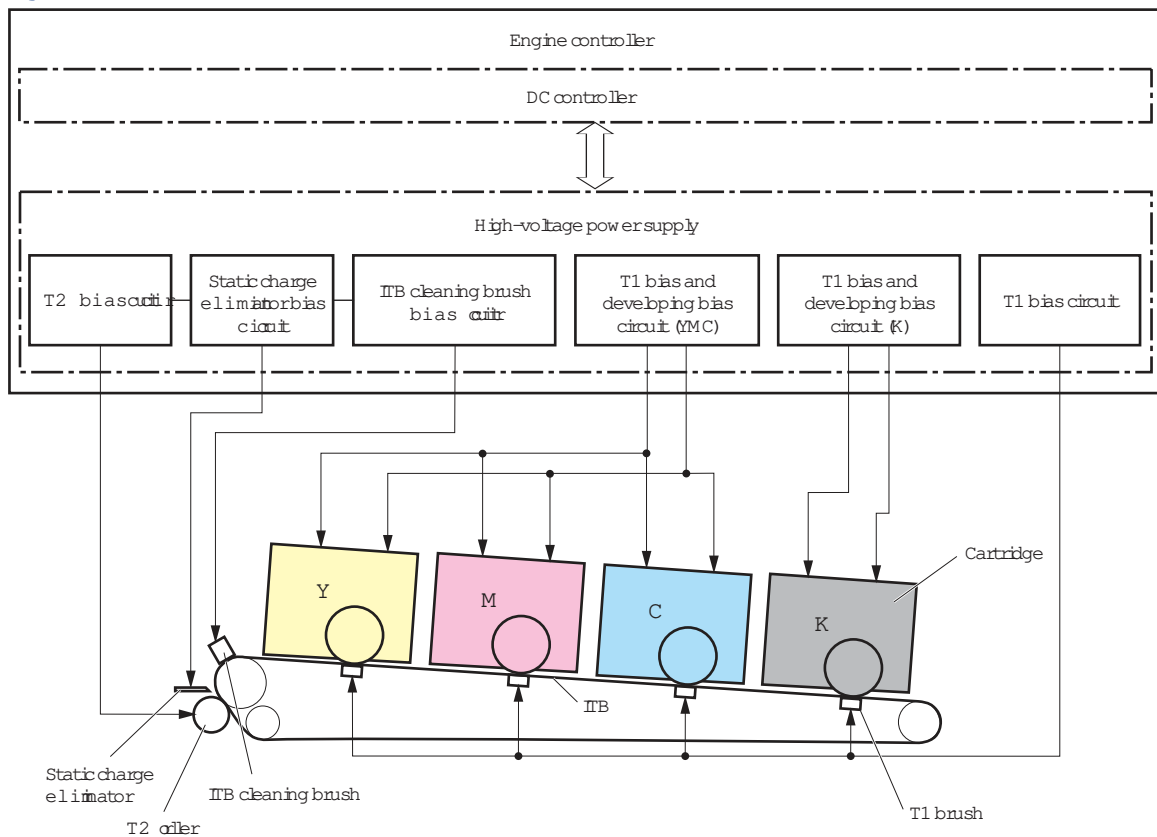
## High-voltage power supply

Learn about the high-voltage power supply.

The DC controller controls the high-voltage power supply to generate high-voltage biases. The high-voltage power supply generates the high-voltage biases that are applied to the following components:

- Primary charging roller (in the toner cartridges)
- Developer roller (in the toner cartridges)
- Primary transfer brush
- Secondary transfer roller
- ITB cleaning brush
- Static charge eliminator

Figure 3-3 High-voltage power supply



## Engine laser/scanner system

Learn about the engine laser/scanner system.


The laser/scanner system forms the latent electrostatic image on the photosensitive drum(s) inside the toner cartridge(s).

**NOTE:** The laser/scanner assembly of this printer has the laser shutter mechanism. For personal safety, the laser shutter interrupts the laser optical path of the laser scanner assembly when the front door is opened.



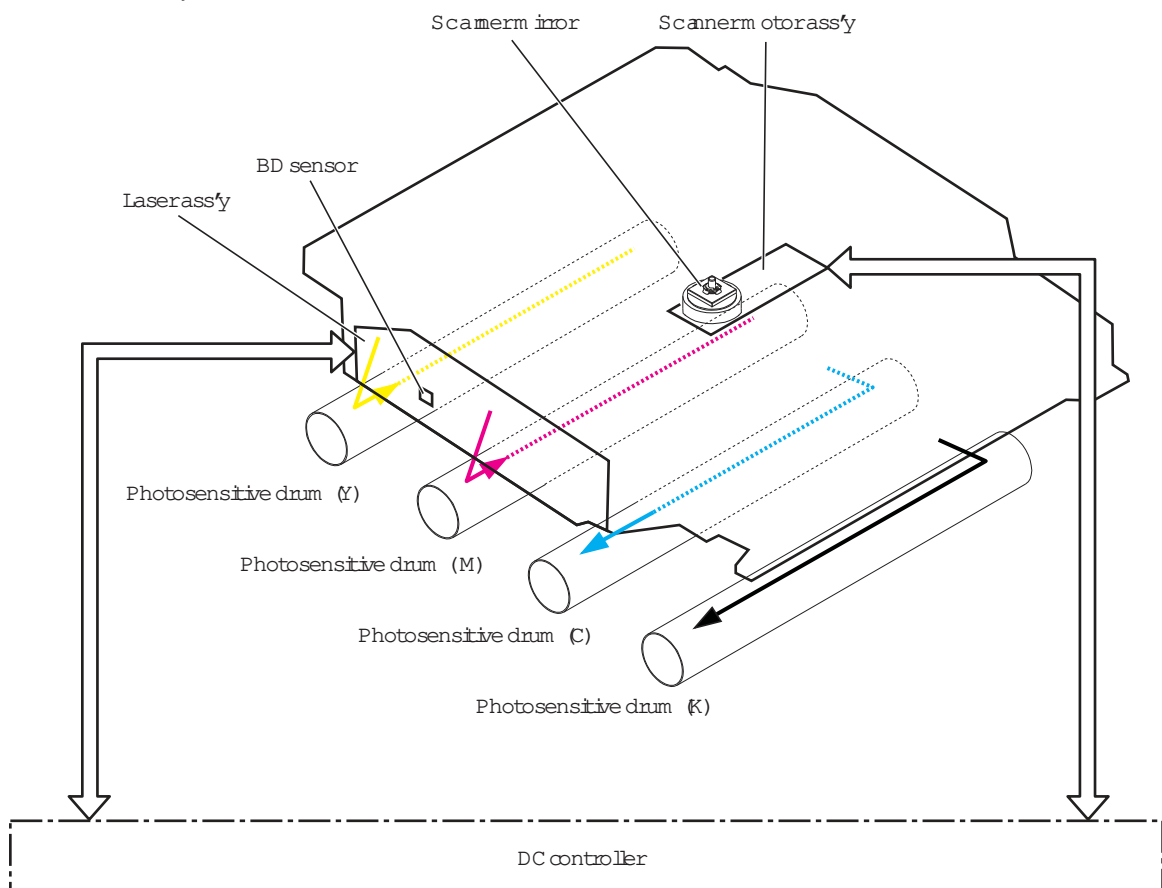
The formatter sends video signals to the DC controller, which controls the laser scanner. When the laser scanner system receives those signals, it converts them to latent images on the photosensitive drums.

The main components of the laser/scanner system, which are controlled by signals sent from the DC controller, are:

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

- Laser assembly
- Scanner motor assembly
- Beam detect (BD) sensor
- Scanner mirror

**Figure 3-4** Laser/scanner system



### Laser/scanner failure detection

Learn about laser scanner failure detection.

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

- Laser scanner failure detection

### Image-formation process

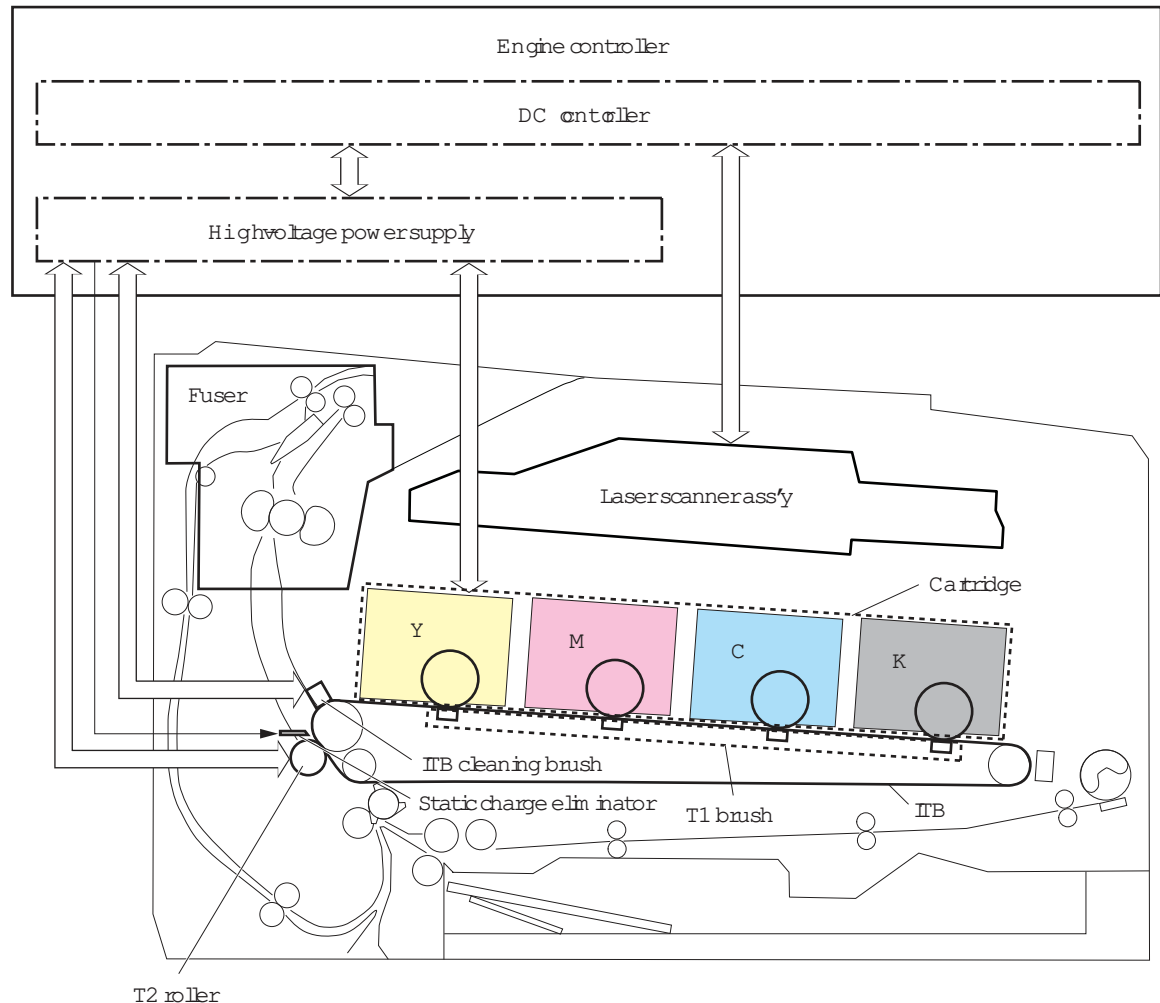
Learn about the image-formation process.

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

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

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

Figure 3-5 Image-formation system



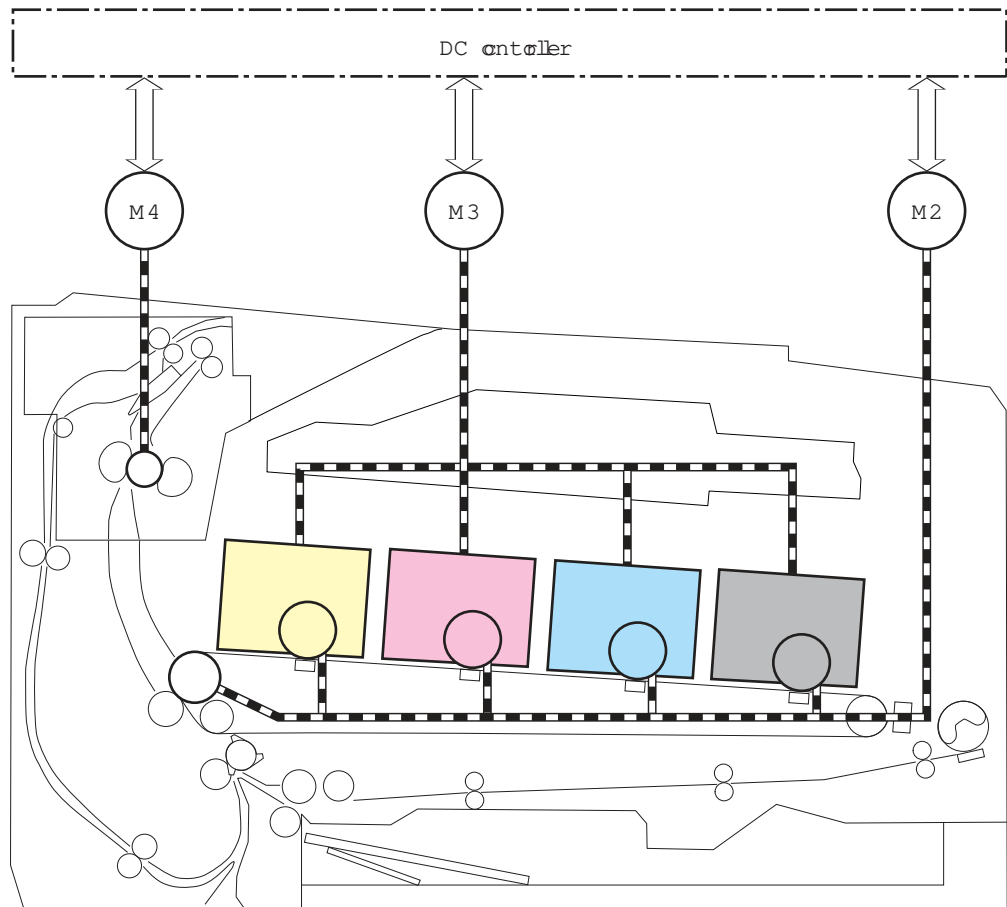
The DC controller rotates the following motors to drive each component.

- Drum motor

- Photosensitive drum (inside the toner cartridge)
- Primary charging roller (follows the photosensitive drum inside the toner cartridge)
- ITB drive roller
- ITB (follows the ITB drive roller)
- T2 roller (follows the ITB)
- **Developer motor**
  - Developer roller<sup>1</sup>
  - Contact/alienation of developing roller
- **Fuser motor**
  - Fuser roller
  - Fuser film (follows the fuser roller)
  - Pressure film (follows the fuser roller)

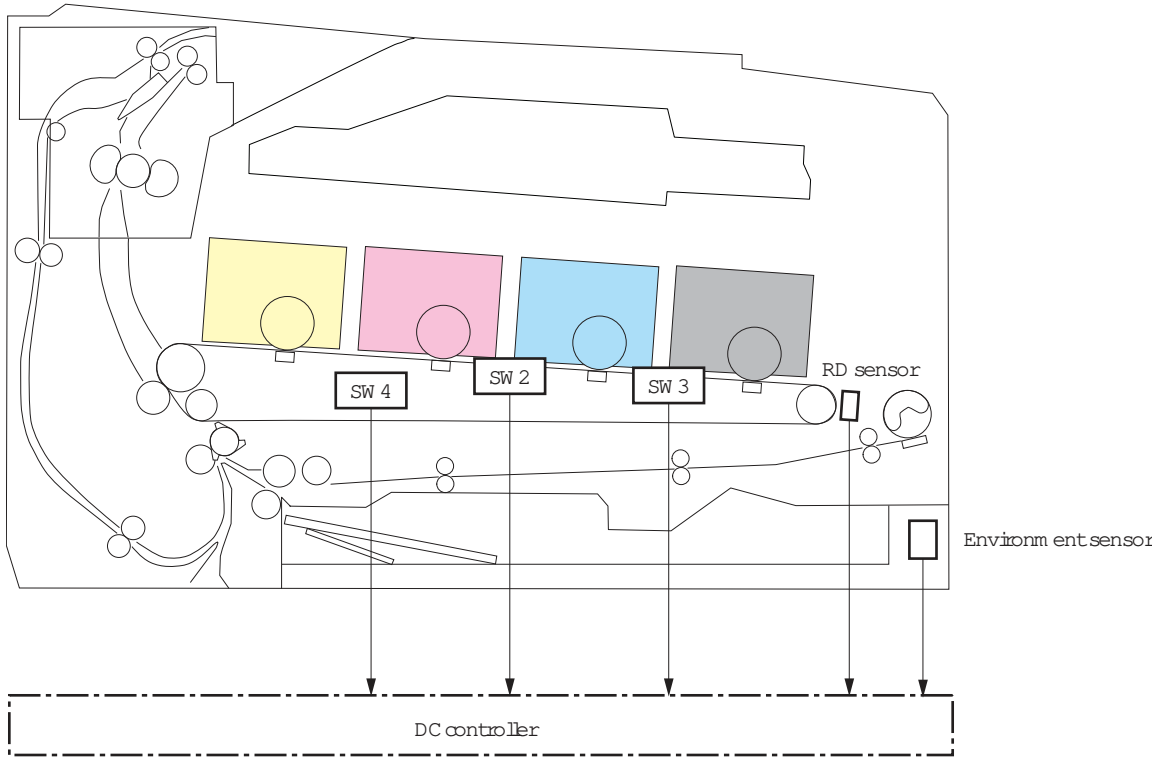
<sup>1</sup>The primary charging roller and developer roller are in the toner cartridges.

**Figure 3-6** Image-formation drive system



Abbreviation	Component name
M2	Drum motor
M3	Developer motor
M4	Fuser motor

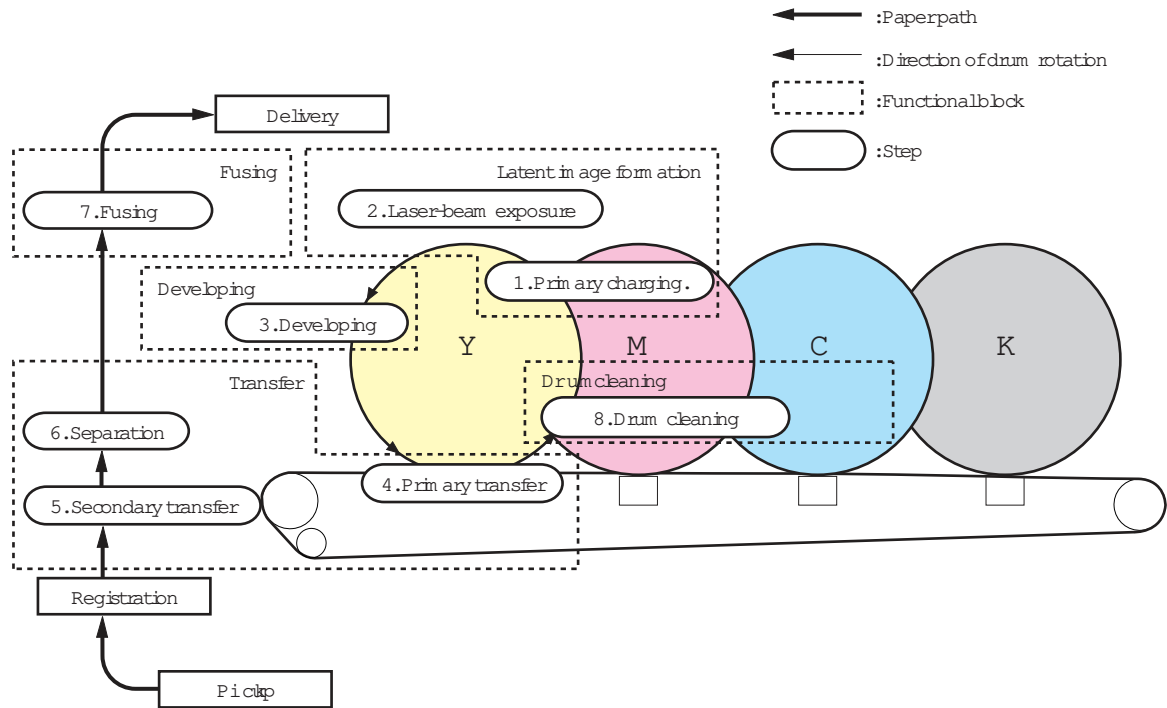
Figure 3-7 Image-formation switch and sensor system



Abbreviation	Component name
SW2	Developer alienation detection switch (YMC)
SW3	Developer alienation detection switch (K)
SW4	T1 brush alienation detection switch
	Registration density (RD) sensor
	Environment sensor

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

Figure 3-8 Image-formation process



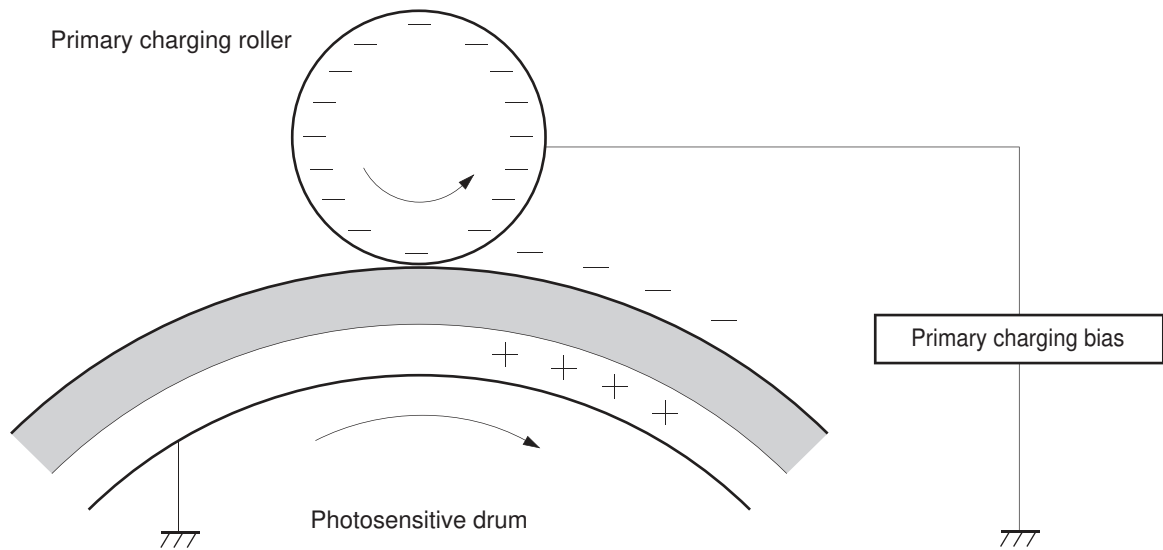
Functional block	Steps	Description
Latent image formation	1. Primary charging	An invisible latent image forms on the surface of the photosensitive drums.
Latent image formation	2. Laser-beam exposure	An invisible latent image forms on the surface of the photosensitive drums.
Development	3. Development	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.
Drum cleaning	8. Drum cleaning	Residual toner is removed from the photosensitive drums.

### 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 3-9 Primary charging

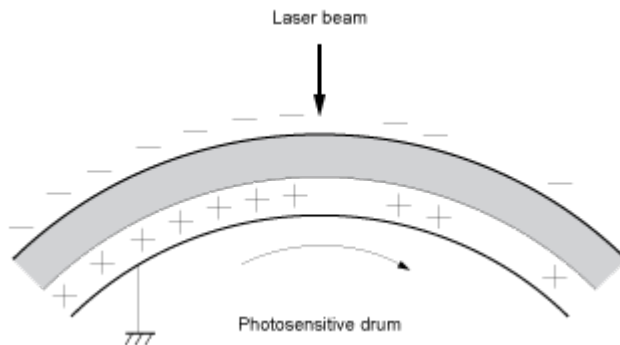


### Step 2: Laser-beam exposure

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 3-10 Laser-beam exposure

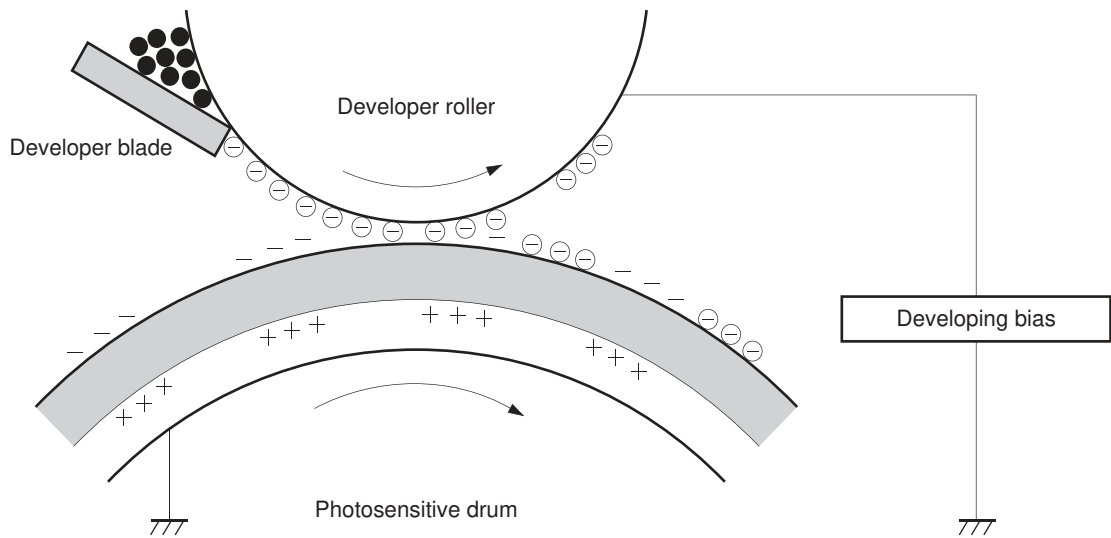


### Step 3: Development

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 3-11 Development

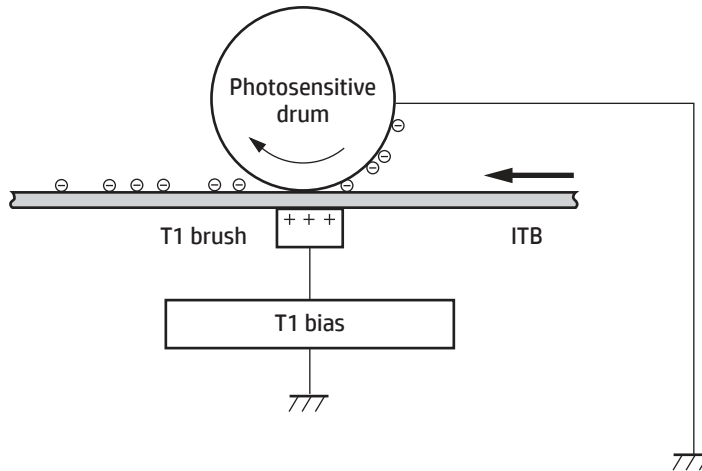


#### Step 4: Primary transfer

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 3-12 Primary transfer

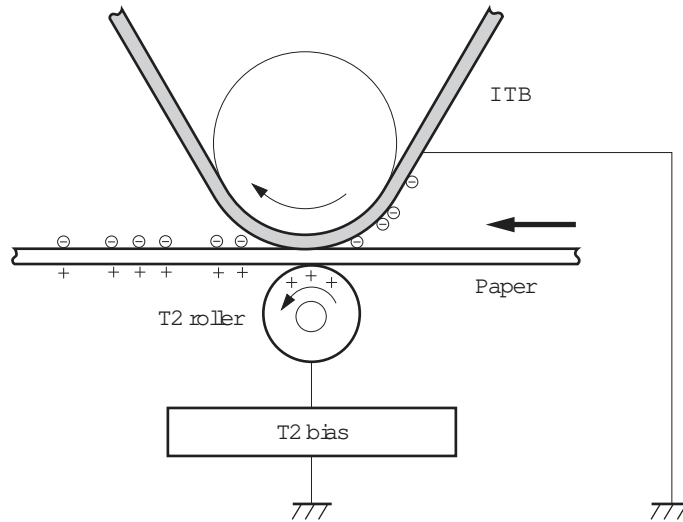


#### Step 5: Secondary transfer

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 3-13** Secondary transfer

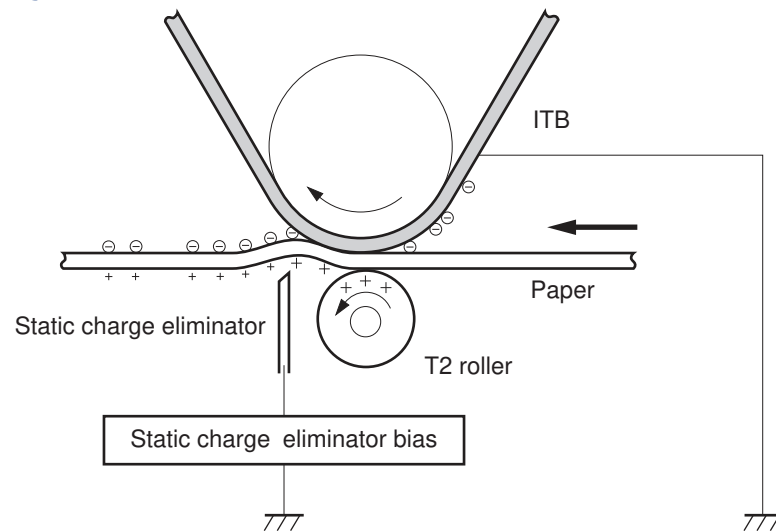


### Step 6: Separation

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 3-14** Separation



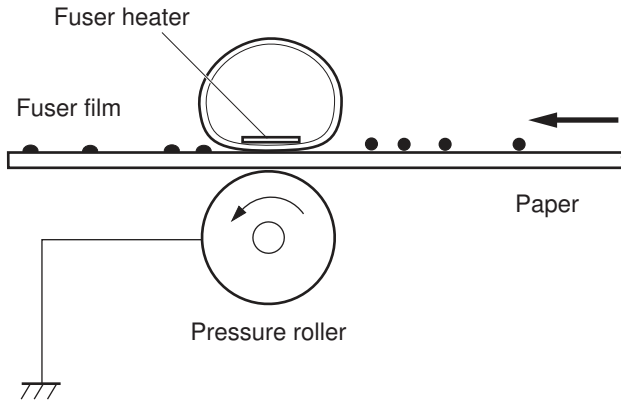
### Step 7: Fusing

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 3-15 Fusing

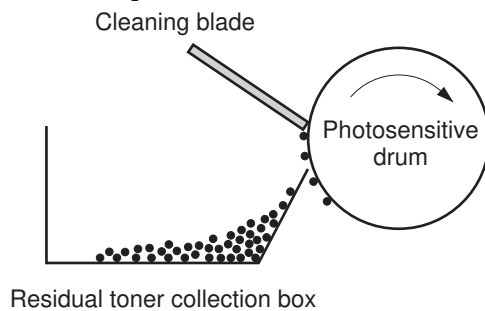


### Step 8: Drum cleaning

Learn about the image formation drum cleaning step.

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

Figure 3-16 Drum cleaning



### Toner cartridges

Learn about the toner cartridges.

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

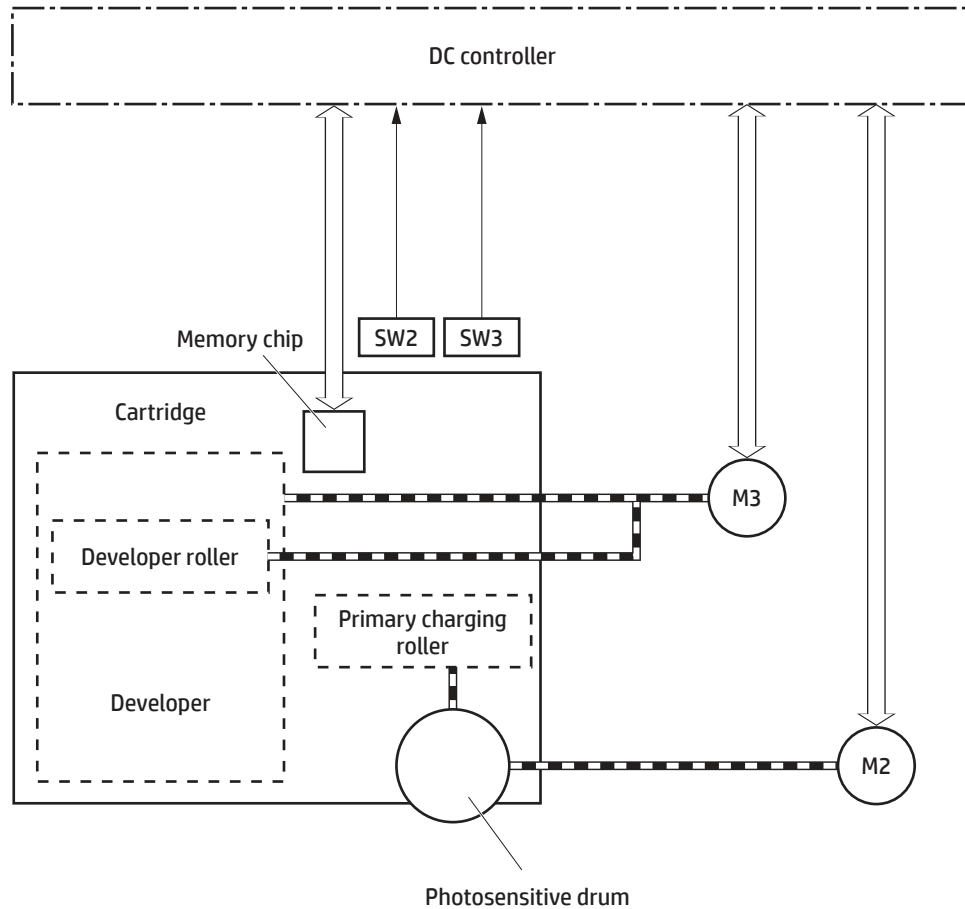
### Design

Learn about toner cartridge design.

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

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

Figure 3-17 Toner cartridge block diagram



The printer has the following toner cartridge control functions.

Table 3-5 Toner cartridge control functions

Function	Supported feature
Toner cartridge presence detection	Yes
Toner level detection	Yes
Toner cartridge life detection	Yes
Toner cartridge mis-installation detection	No
Developer alienation control	Yes
Developer alienation motor failure detection	Yes
Drum discharge mechanism	No

### Toner cartridge seal

Learn about the toner cartridge seal.

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

## Memory chip

Learn about the toner cartridge memory chip.

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

## Toner cartridge life detection

Learn about the toner life detection function.

The DC controller detects the cartridge life by monitoring the total rotations and remaining toner level of the toner cartridge. The DC controller determines a cartridge end of life and notifies the formatter when total rotations of the cartridge reaches a specified time or the cartridge runs out of toner.

## HP Cartridges with JetIntelligence

Learn about toner cartridge JetIntelligence.

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

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

## HP Cartridge Policy

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

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

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



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

---

## Anti-theft or cartridge protection

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

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



---

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

---

## Dynamic security

Learn about dynamic-security-enabled printers.



---

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

---

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

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

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

## Developing unit engagement and disengagement control

Learn about developer unit operation.

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

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

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

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

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

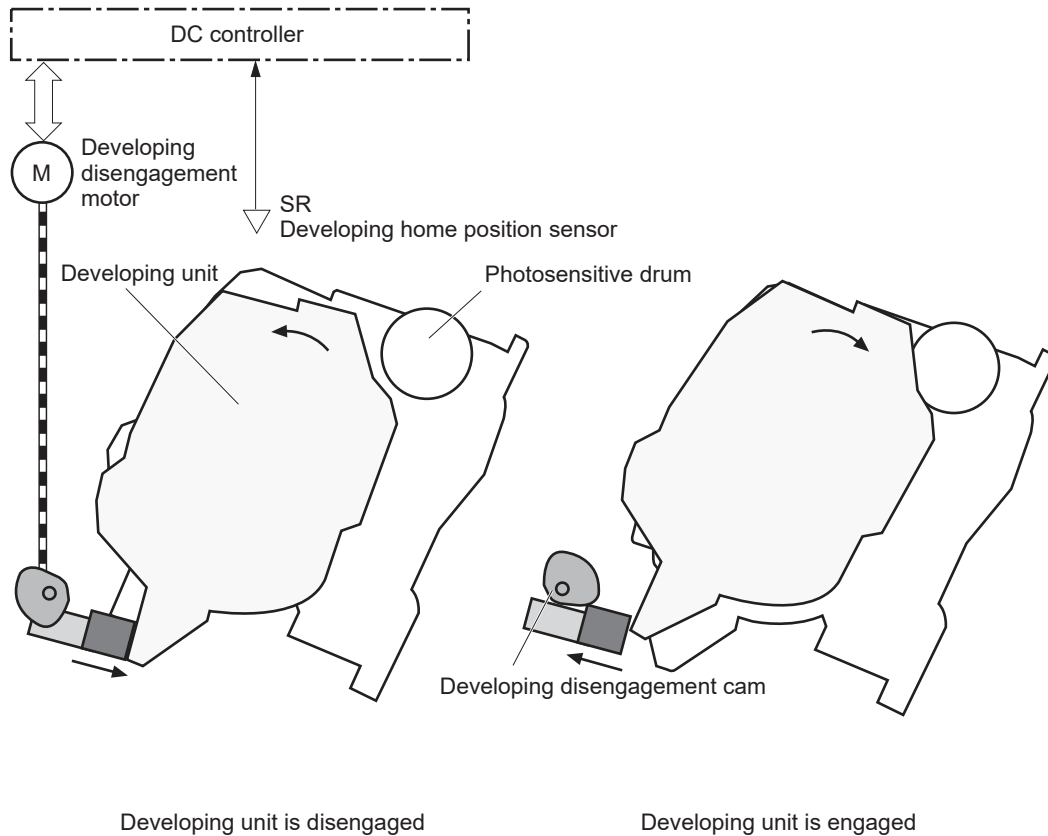


---

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

---

Figure 3-18 Toner cartridge block diagram



### Intermediate transfer belt assembly

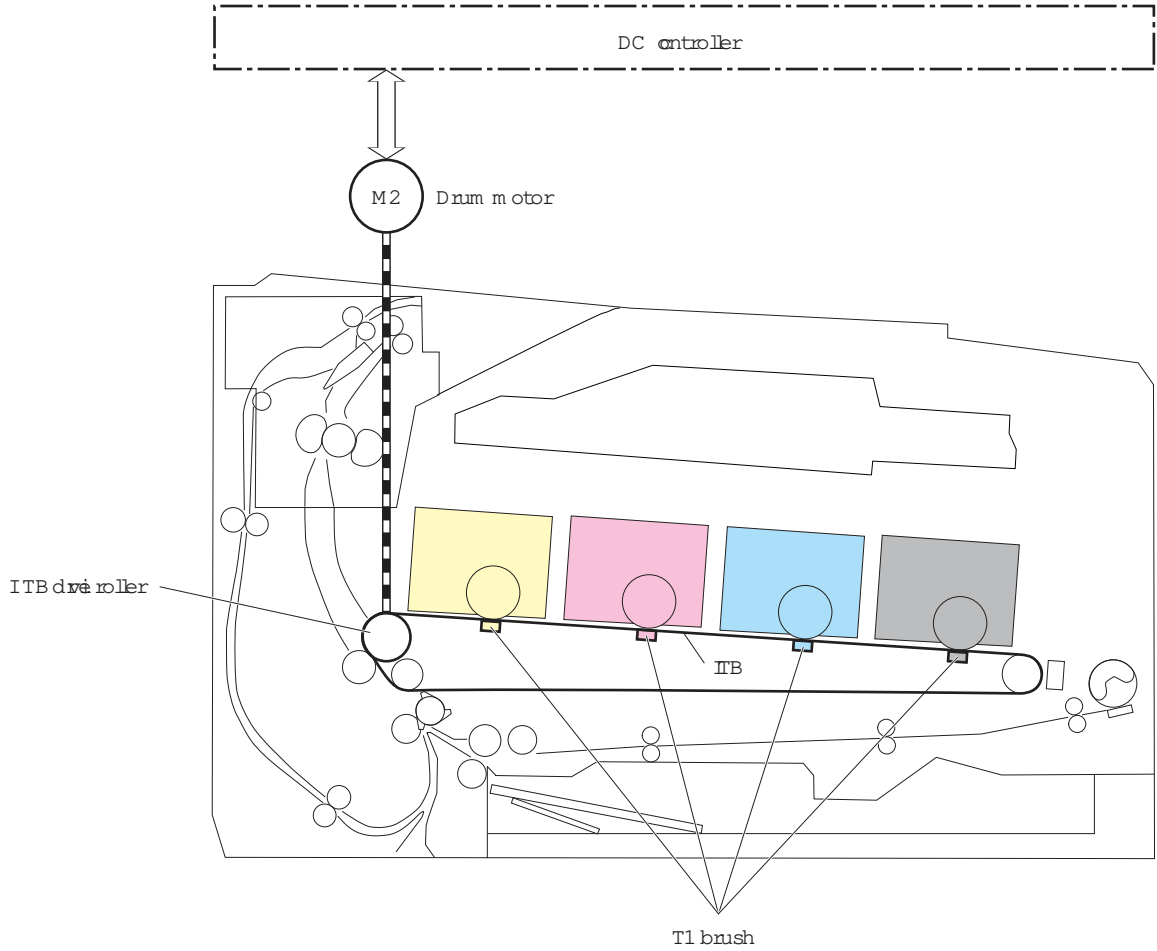
Learn about the Intermediate transfer belt (ITB) assembly.

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

- Intermediate transfer belt (ITB)
- ITB-drive roller
- T1 brushes

The drum motor (M2) drives the ITB drive roller, which rotates the ITB.

Figure 3-19 ITB unit



### Secondary transfer roller functions

Learn about secondary transfer roller functions.

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

The printer has the following secondary transfer roller functions.

**Table 3-6** Secondary transfer roller functions

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

### Color self calibration

Learn about printer color self calibration.

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

The printer has the following calibration functions.

**Table 3-7 Calibration functions**

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

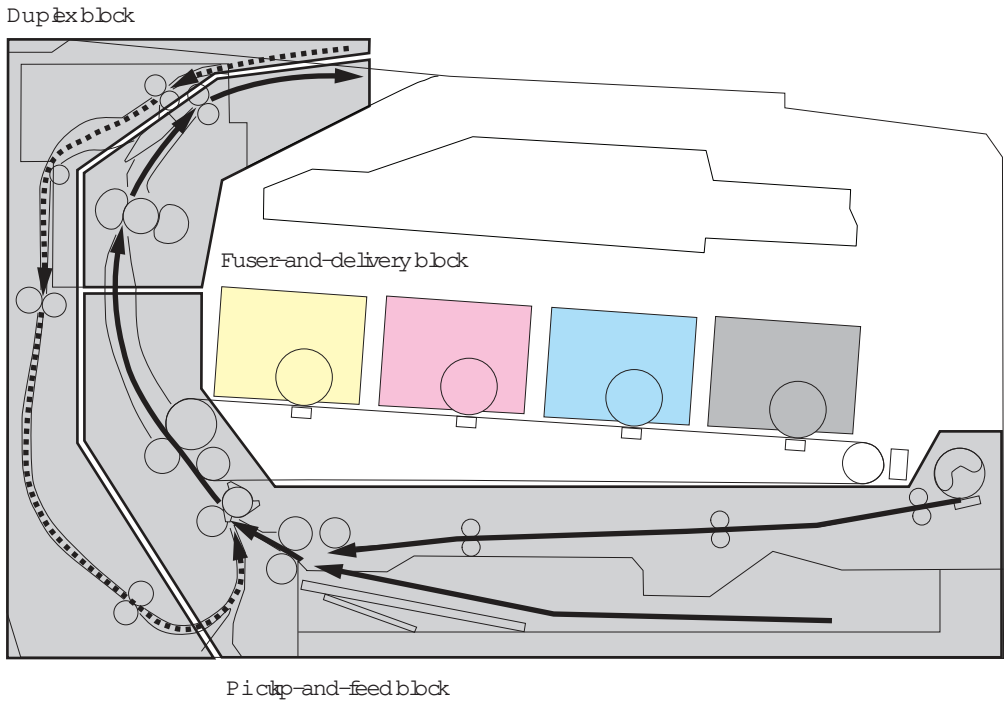
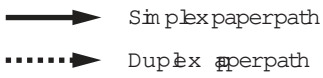
## Engine pickup, feed, and delivery system

Learn about the printer pickup, feed and delivery system.

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

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

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

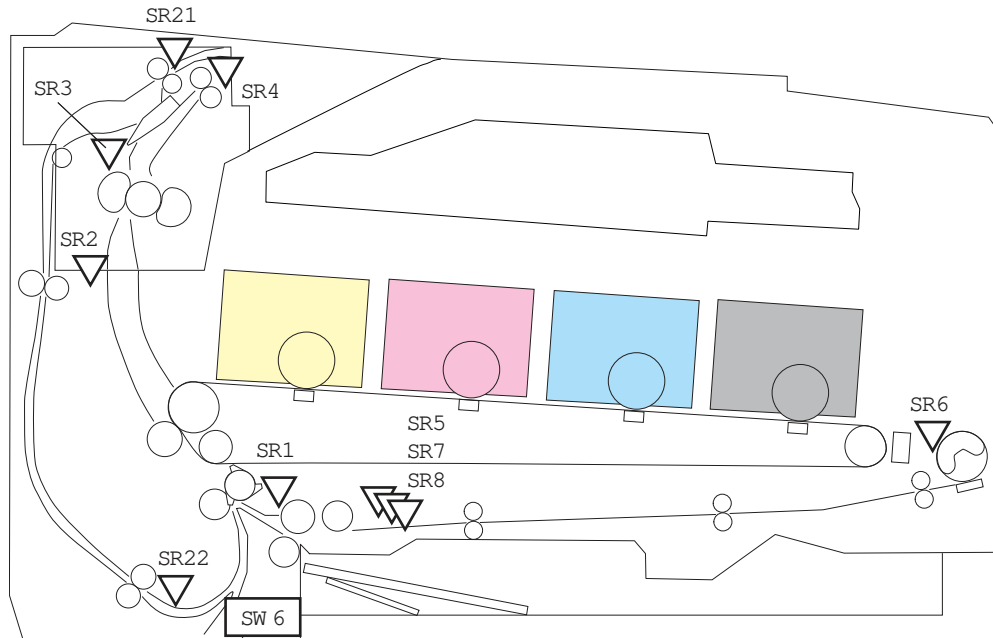


## Photo sensors and switches

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

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

**Figure 3-20** Photo sensors and switches





**Table 3-8** Photo sensors and switches

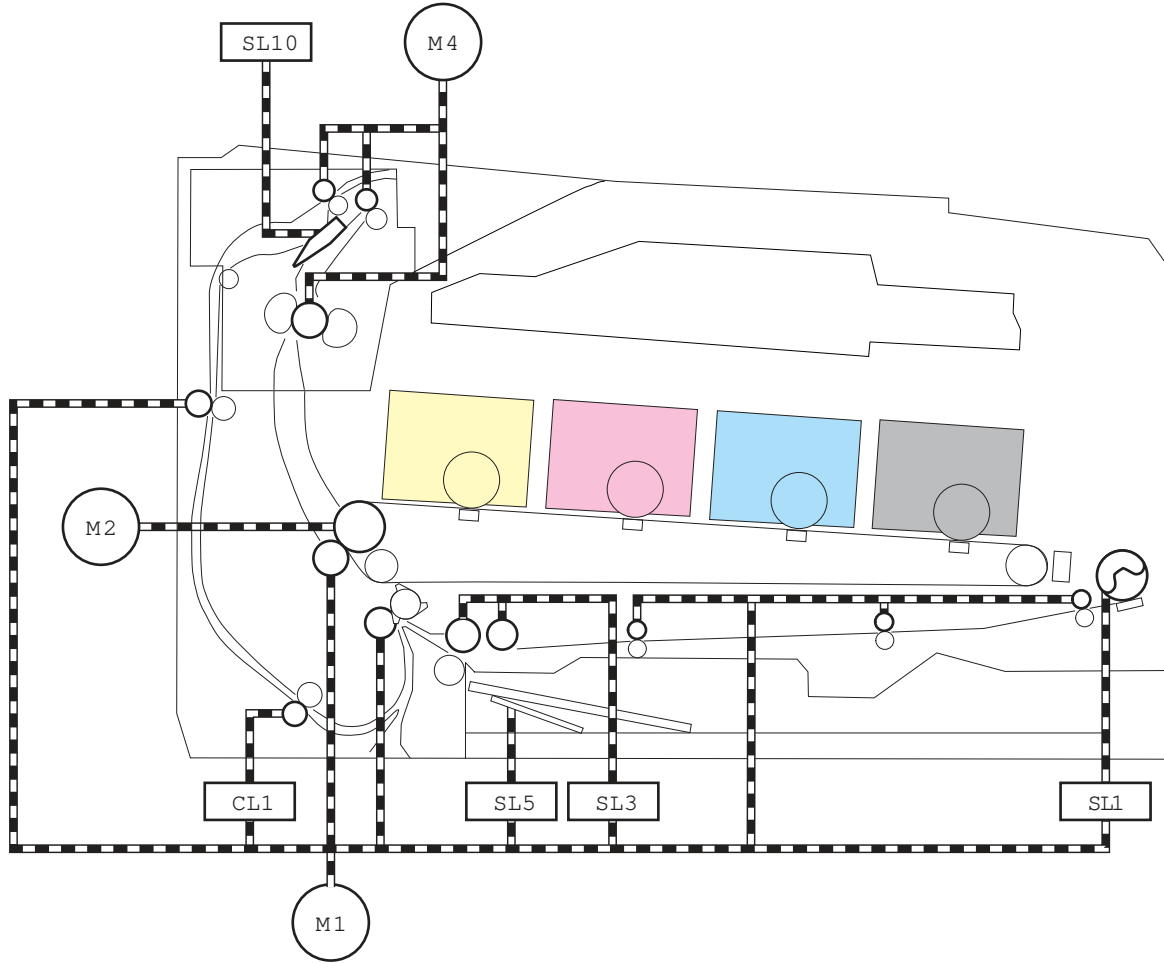
Abbreviation	Component
SR1	Registration sensor
SR2	Loop sensor
SR3	Fuser output sensor
SR4	Output bin media-full sensor
SR5	Cassette (Tray 2) media out sensor
SR6	Tray 1 (MP) tray media out sensor
SR7	Cassette (Tray 2) media surface sensor
SR8	Lifter sensor
SR21	Duplex switchback sensor
SR22	Duplex re-pickup sensor
SW6	Cassette (Tray 2) detection switch

## Motors, clutches, and solenoids

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

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

Figure 3-21 Motors, clutches, and solenoids



Abbreviation	Component	Replacement part number
M1	Pickup motor assembly	RM2-7350-000CN
M2	Drum motor assembly	RM2-7342-000CN
M4	Fuser motor assembly	RM2-7344-000CN
CL1	Duplex re-pickup clutch	n/a
SL1	Tray 1 (MP) tray pickup solenoid	n/a
SL3	Cassette (Tray 2) pickup solenoid	n/a
SL5	Lifter solenoid	n/a
SL10	Duplex switchback solenoid	n/a

## Feed speed control

Learn about pickup, feed, and delivery 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 3-9 Print mode and feed speed**

Print mode	Feed speed, full color	Feed speed, monochrome
Auto	Not applicable	Not applicable
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 applicable	Not applicable
Photo media 3	Not applicable	Not applicable
Envelope 1	1/2	1/2
Envelope 2	1/3	1/3
Envelope 3	Not applicable	Not applicable
Label	1/2	1/2
Designated media 1	Not applicable	Not applicable
Designated media 2	Not applicable	Not applicable
Designated media 3	Not applicable	Not applicable

## Pickup and feed delivery features

Learn about pickup, feed, and delivery print mode and feed speed features.

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

**Table 3-10 Print mode and feed speed**

Function	Supported feature
Cassette (Tray 2) media size detection	No
Cassette (Tray 2) presence detection	Yes
Cassette (Tray 2) media overfill detection	Yes
Cassette (Tray 2) media surface detection	Yes

**Table 3-10 Print mode and feed speed (continued)**

Function	Supported feature
Cassette (Tray 2) media presence detection	Yes
Cassette (Tray 2) media level detection	No
Cassette (Tray 2) lift-up control	Yes
Cassette (Tray 2) lift-down control	No
Cassette (Tray 2) multiple-feed prevention mechanism	Yes
Tray 1 (MP) tray media presence detection	Yes
Tray 1 (MP) tray media width detection	No
Tray 1 (MP) tray last-media detection	No
Skew-feed prevention mechanism	Yes
Feed speed control	Yes
Loop control	Yes
Media detection	No
Image leading edge positioning	Yes
Media length detection	Yes
Media width detection	No
Pressure roller pressure release control	Yes
Output bin media-full detection	Yes
Automatic delivery	Yes
Duplex switchback control <sup>1</sup>	Yes
Duplex feed control <sup>1</sup>	Yes

1

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

Learn about Tray 1 and Tray 2 pickup, feed, and delivery operation.

Following is sequence of steps for Tray 1 and Tray 2 pickup and feed operation after the DC controller receives a command from the formatter.

- Pickup motor rotates
- Lift mechanism raises the paper stack until it contacts the pick roller
- The pickup, feed, and separation rollers rotate to feed the sheet into the printer

## Duplexing unit

Learn about pickup, feed, and delivery duplex operation.

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

## Duplexing reverse and duplex feed control

Learn about pickup, feed, and delivery duplex reverse and feed control.

The duplexing reverse procedure pulls the paper into the duplexing unit after it exits the fuser. The duplexing feed procedure moves the paper through the duplexer so it can enter the printer paper path to print the second side of the page.

1. After the first side has printed, the duplexing flapper solenoid opens, which creates a paper path into the duplexing-reverse unit.
2. After the paper has fully entered the duplexing-reverse unit, the duplexing-reverse motor reverses and directs the paper into the duplexing-feed unit.
3. The duplexing re-pickup motor and duplexing feed motor move the paper into the duplexing re-pickup unit.
4. To align the paper with the toner image on the ITB, the duplexing re-pickup motor stops and the paper pauses.
5. The paper re-enters the paper path, and the second side prints.

## Duplex pickup operation

Learn about pickup, feed, and delivery duplex pickup operation.

The printer has the following two duplex-media-feed modes depending on the paper sizes.

- **One-sheet mode:** Prints one sheet that is printed on two sides in one duplex print operation.
- **Two-sheet mode:** Prints two sheets that are printed on two sides in one duplex print operation.

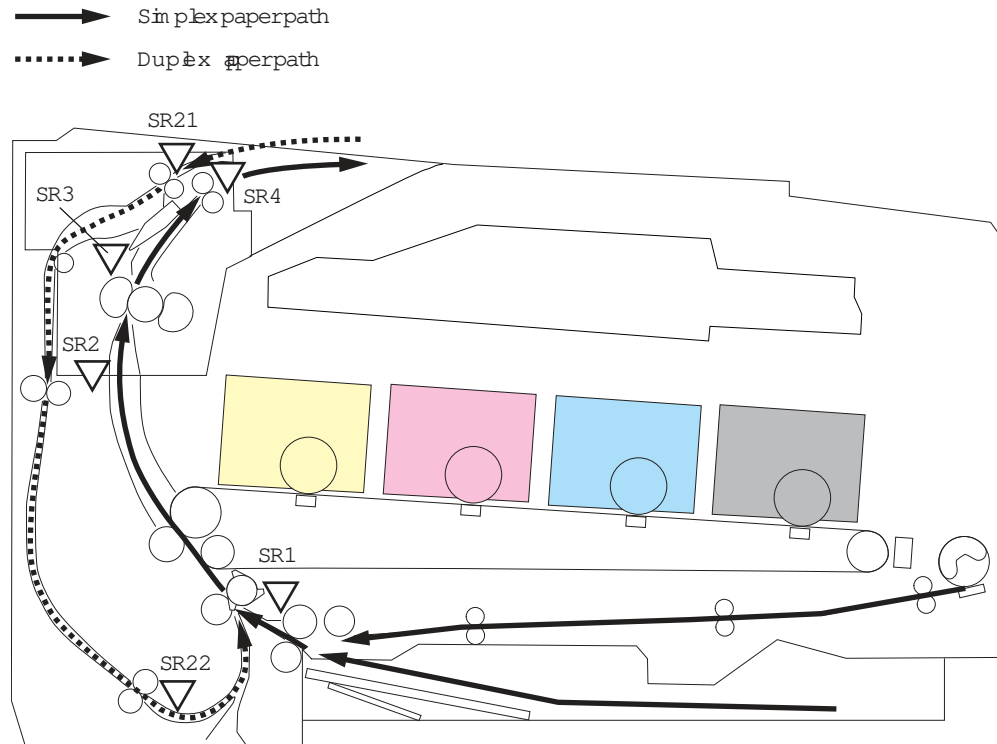
## Jam detection/prevention

Learn about pickup, feed, and delivery jam detection.

The printer uses the following sensors to detect the presence of paper and to check whether paper is being fed correctly or has jammed.

- Registration sensor (SR1)
- Loop sensor (SR2)
- Fuser output sensor (SR3)
- Loop sensor (PS1)
- Output bin media-full sensor (SR4)
- Duplex switchback sensor (SR21)
- Duplex re-pickup sensor (SR22)

Figure 3-22 Jam detection sensors



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

The printer detects the following jams:

- No pick jam 1
- No pick jam 2
- Pickup stay jam 1
- Fuser delivery delay jam 1
- Fuser delivery stay jam 1
- Residual paper jam 1
- Residual paper jam 2
- Door open jam 1
- Fuser wrap jam 1
- Fuser wrap jam 2
- Duplex switchback delay jam
- Duplex switchback stay jam
- Duplex feed delay jam
- Duplex re-pickup delay jam

- Delivery delay jam 1
- Delivery stay jam 1 (MFP)

## Input devices

Learn about the input devices.

### Tray 3

Learn about the paper feeder (optional Tray 3).

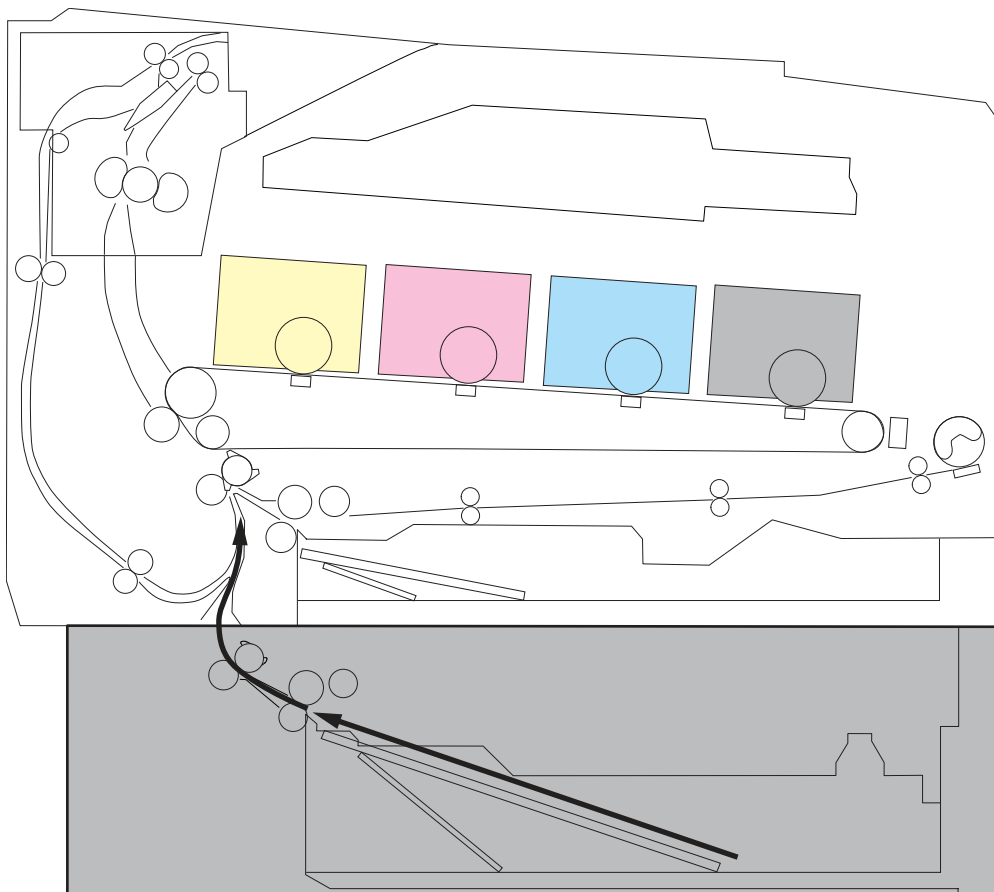
The 550-sheet paper feeder is optionally installed at bottom of the printer. It picks up the print media and feeds it to the printer. The paper DC controller controls the operational sequence of the paper feeder.

### Paper path

Learn about the Tray 3 paper path.

The figure below shows the optional Tray 3 paper path.

**Figure 3-23** Optional Tray 3 paper path

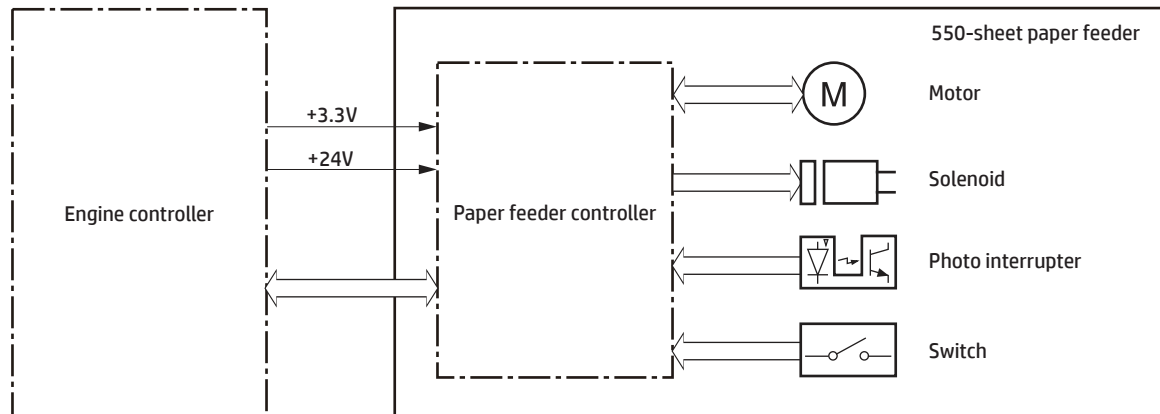


### Tray 3 paper feeder controller

Learn about the paper feeder controller.

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

**Figure 3-24** Paper feeder controller



**Table 3-11** Electrical component list, paper feeder

Component type	Abbreviation	Component name
Motor	M9	Pickup motor
Clutch	SL20	Cassette (Tray 3) pickup solenoid
Clutch	SL21	Lifter solenoid
Switch	SW31	Cassette (Tray 3) detection switch
Photo interrupter	SR31	Feed sensor
Photo interrupter	SR32	Cassette (Tray 3) media surface sensor
Photo interrupter	SR33	Lifter sensor
Photo interrupter	SR34	Cassette (Tray 3) media out sensor

## Tray 3 motor control

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

**Table 3-12** Tray 3 motor control

Abbreviation	Component	Drives	Failure detection
M9	Pickup motor	Cassette (Tray 3) pickup roller Cassette (Tray 3) feed roller Feed roller (550-sheet paper feeder) Lifter drive assembly	No

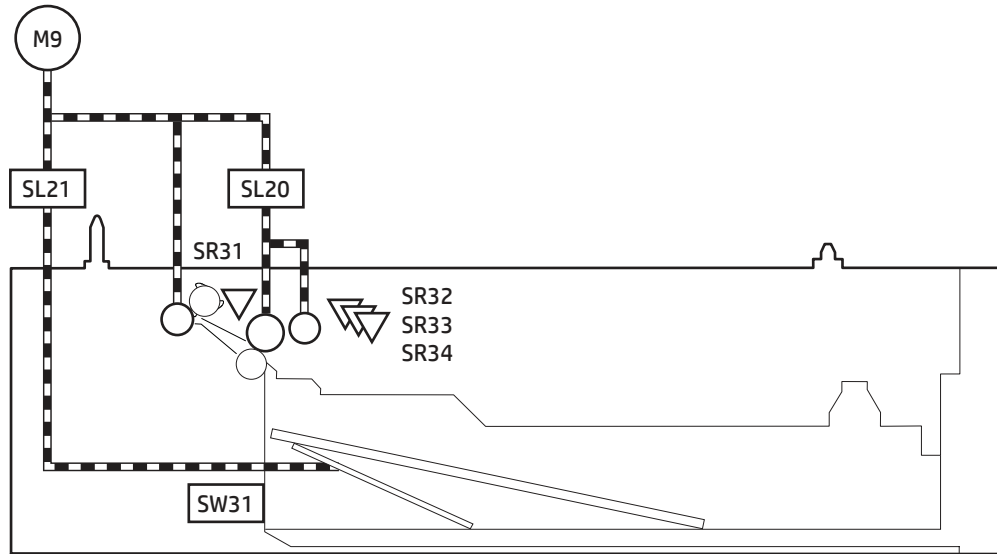
## Electrical components, pickup and feed

Learn about the Tray 3 electrical components.

The figure below shows the paper feeder electrical components. The table in this section describes the electrical components.



**Figure 3-25** Electrical components, pickup and feed



**Table 3-13** Electrical components, pickup and feed (Tray 3)

Abbreviation	Component name
M9	Pickup motor
SL20	Cassette (Tray 3) pickup solenoid
SL21	Lifter solenoid SL21
SR31	Feed sensor
SR32	Cassette (Tray 3) media surface sensor
SR33	Lifter sensor
SR34	Cassette (Tray 3) media output sensor
SW31	Cassette (Tray 3) detection switch

## Other functions

Learn about the Tray 3 functions.

The paper feeder has the following pickup and feed functions.

- Cassette (Tray 3) lift-up control
- Cassette (Tray 3) presence detection
- Cassette (Tray 3) media stack surface detection
- Cassette (Tray 3) media out detection
- Multiple-feed prevention
- Automatic delivery

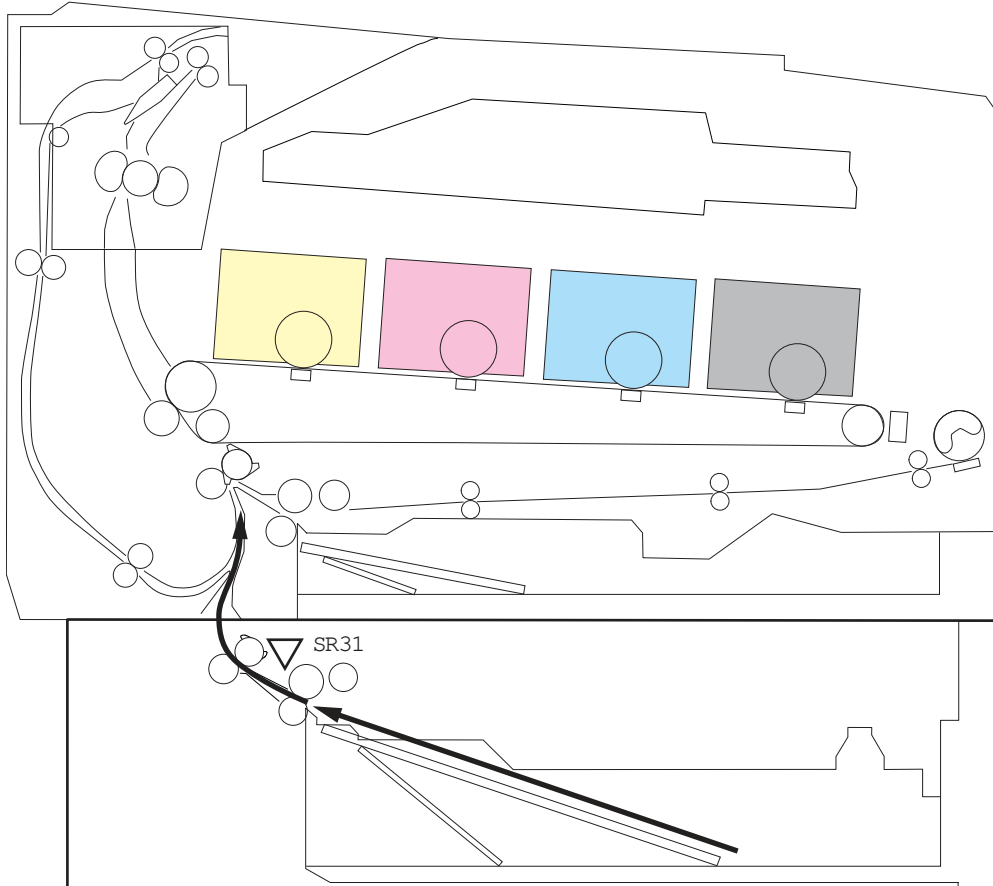
## Tray 3 jam detection

Learn about Tray 3 jam detection.

The paper feeder uses the following sensors to detect the presence of paper and to check whether paper is being fed correctly or has jammed.

- Feed sensor (SR31)

**Figure 3-26** Jam detection sensors (Tray 3)



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

The printer detects the following paper feeder jams:

- No pick jam 1
- No pick jam 2
- Pickup stay jam 1
- Fuser delivery delay jam 1
- Fuser delivery stay jam 1
- Residual paper jam 1

---

# 4 Solve problems

Learn about solving printer problems.

## HP service and support

Learn about HP access to additional service and support information.

### Additional service and support for channel partners

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

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

Access WISE for Channel partners

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

Find information about the following topics

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

### Additional service and support for HP internal personnel

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

[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 how to use WISE to find technical support videos \(Product detail page \[PDP\] search\).](#)

## Determine the problem source

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

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

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

Before beginning any troubleshooting procedure, check the following issues:

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




---

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

---

### Pre-troubleshooting checklist

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

**Table 4-1 Pre-troubleshooting checklist**

General topic	Questions
Environment	<ul style="list-style-type: none"> <li>● Is the printer installed on a solid, level surface (+/- 1°)?</li> <li>● Is the power-supply voltage within ± 10 volts of the specified power source?</li> <li>● Is the power-supply plug inserted in the printer and the wall outlet (not a surge protector)?</li> <li>● Is the operating environment within the specified parameters?</li> <li>● Is the printer exposed to ammonia gas, such as that produced by diazo copiers or office cleaning materials?</li> </ul> <p><b>NOTE:</b> Diazo copiers produce ammonia gas as part of the copying processes. Ammonia gas (from cleaning supplies or a diazo copier) can have an adverse effect on some printer components (for example, the toner cartridge or cartridges OPC).</p> <ul style="list-style-type: none"> <li>● Is the printer exposed to direct sunlight?</li> <li>● Is the printer exposed to an air conditioning or heating vent that can cause temperature fluctuations?</li> </ul>
Media	<ul style="list-style-type: none"> <li>● Does the customer use only supported media?</li> <li>● Is the media in good condition (no curls, folds, or distortion)?</li> <li>● Is the media stored correctly and within environmental limits?</li> </ul>
Input trays	<ul style="list-style-type: none"> <li>● Is the amount of media in the tray within specifications?</li> <li>● Is the media correctly placed in the tray?</li> <li>● Are the paper guides aligned with the stack (no gaps in the stack or excessive pressure causing the stack to bow)?</li> <li>● Is the tray (or trays) correctly installed in the printer?</li> </ul>
Toner cartridge	<ul style="list-style-type: none"> <li>● Is the toner cartridge (or cartridges) installed correctly?</li> </ul> <p><b>NOTE:</b> If country/region specific toner cartridges are available for the printer, make sure the correct cartridge is installed.</p>
Transfer unit and fuser	<ul style="list-style-type: none"> <li>● Are the transfer unit and fuser installed correctly?</li> </ul> <p><b>NOTE:</b> 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"> <li>● Is the toner cartridge door closed?</li> </ul>
Condensation	<ul style="list-style-type: none"> <li>● Does condensation occur following a temperature change (particularly in winter following cold storage)? If so, wipe affected parts dry or leave the printer on for 10 to 20 minutes.</li> <li>● 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.</li> </ul>
Miscellaneous	<ul style="list-style-type: none"> <li>● Check for and remove any non-HP components (toner cartridges, memory modules, and EIO cards) from the printer.</li> <li>● Remove the printer from the network and ensure that the failure is associated with the printer before beginning troubleshooting.</li> <li>● For any color print-quality issues (color printers only), calibrate the printer, and then print a diagnostics page to verify print quality.</li> </ul>

## Troubleshooting flowchart

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

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

**Table 4-2** Troubleshooting flowchart

Step	Question	Action
1 Power on	Is the printer on and does a readable message display?	<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>For more information, see <a href="#">Troubleshooting power-on or blank control panel problems on page 208</a></p> <p>After the control panel display is functional, see step 2.</p>
	Yes ↓	
2 Control panel messages	Does the message <b>Ready</b> display on the control panel?	<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>
	Yes ↓	
3 Event log	Open the <a href="#">Troubleshooting</a> menu and print an event log to see the history of errors with this printer.	<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>
	Does the event log print?	

Table 4-2 Troubleshooting flowchart (continued)

Step	Question	Action
4 Information pages	Open the <a href="#">Reports</a> menu and print the configuration pages to verify that all the accessories are installed.  Are all the accessories installed?	<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>
	Yes ↓	
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 ↓	
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>For more information on troubleshooting these issues, see <a href="#">Performance and connectivity troubleshooting on page 300</a>.</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.	

## Firmware upgrades

Learn about printer firmware upgrades.

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

- In the US, go to [www.hp.com/supplort/colorljM455](http://www.hp.com/supplort/colorljM455) or [www.hp.com/support/color/ljM480MFP](http://www.hp.com/support/color/ljM480MFP) or [www.hp.com/support/colorljE45028](http://www.hp.com/support/colorljE45028) or [www.hp.com/support/colorljE47528MFP](http://www.hp.com/support/colorljE47528MFP).

- 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](http://www.hp.com/support).
  - a. Select your country/region.
  - b. Select **Drivers & Downloads**.
  - c. Enter the product name in the **Find my product** dialogue box, and then select **Go**.

---

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

---

- d. Select the appropriate product by name.

---

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

---


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

## Determine the installed revision of firmware

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

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

### Print the configuration page from an MFP control panel

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

### Print the configuration page from a SFP control panel


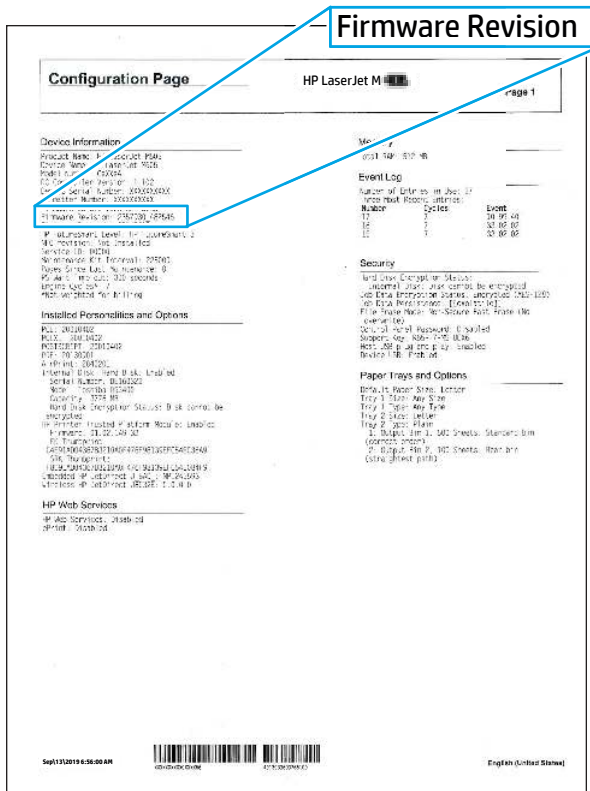
1. From the **Home** screen on the printer control panel, use the arrow keys to navigate to **Reports**, and then press the **OK** button.
2. Use the arrow buttons to scroll to **Configuration/Status Pages**, and then press the **OK** button.
3. Use the arrow buttons to scroll to **Configuration Page**,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




Figure 4-1 Configuration page firmware version



## HP Embedded Web Server

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

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

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

1. Open an Internet browser window.
2. Enter the printer IP address in the URL line.
3. Select the **Firmware Upgrade** link from the **General** tab or from the **Troubleshooting** tab.
4. Browse to the location that the firmware upgrade file was downloaded to, and then select the firmware file. The file has a .bdl file extension. Select the **Install** button to perform the upgrade.

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

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

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

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

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

2. Use the arrow buttons to highlight +3 Administrator, and then press the OK button.
3. Use the arrow buttons to highlight +1 Download, and then press the OK button.
4. Insert the USB flash drive with the .bdl file on it into the USB port on the printer.


---

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


---

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

---

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

---

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

---

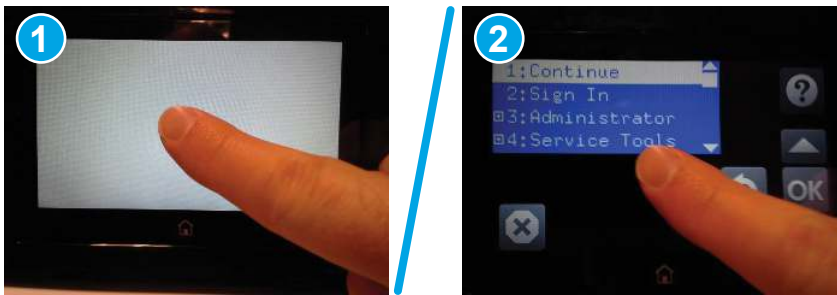
7. When the message **Complete** displays on the control panel display, turn the printer power off, and then on again.
8. When the upgrade process is complete, print a configuration page and verify that the upgrade firmware version was installed.

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

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

1. Copy the .bdl file to a portable USB flash drive.
2. Touch the middle of the control panel display when you see the 1/8 under the logo.

**Figure 4-2** Open the Pre-boot menu



3. Use the arrow buttons to highlight +3 Administrator, and then touch the OK button.
4. Use the arrow buttons to highlight +1 Download, and then touch the OK button.
5. Insert the USB flash drive with the .bdl file on it into the USB port on the printer.

---

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


---

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

---

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

---

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

---

8. When the message **Complete** displays on the control panel display, touch the down arrow ▼ button several times until the message **Continue** displays.
9. Touch the **OK** button to begin the upgrade. When the upgrade is complete, the printer will initialize to the **Ready** state.
10. When the upgrade process is complete, print a configuration page and verify that the upgrade firmware version was installed.

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

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

1. From the **Home** screen on the printer control panel, use the arrow buttons to scroll to **Support Tools**, and then press the **OK** button.
2. Open the following menus:
  - **Maintenance**
  - **USB Firmware Upgrade**
3. Insert the USB flash drive with the .bdl file on it into the USB port on the printer.
4. Use the arrow buttons to scroll to the appropriate .bdl file, and then press the **OK** button.
5. When the upgrade process is complete, print a configuration page and verify that the upgrade firmware version was installed.

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

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

1. Copy the .bdl file to a portable USB flash drive.
2. Turn the printer on, and then wait until it reaches the **Ready** state.
3. From the **Home** screen on the printer control panel, scroll to and touch the **Support Tools** button.
4. Open the **Maintenance** menu.
5. Touch the **USB Firmware Upgrade** button.
6. Insert the USB flash drive with the .bdl file on it into the USB port on the printer.
7. Touch the .bdl file, and then touch the **Upgrade** button.

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

---

8. Select one of the following options:

- **Upgrade**

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

---

- Re-install
  - Downgrade
9. When the upgrade is complete, the printer will initialize to the **Ready** state.
  10. When the upgrade process is complete, print a configuration page and verify that the upgrade firmware version was installed.

## Comprehensive list of troubleshooting tools

Learn about the printer troubleshooting tools.

### Engine test

Learn about troubleshooting the printer using the engine test diagnostic.


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


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

Depress and hold the cartridge door release button, and then open and close the cartridge door four times within a three second time period to print a simplex engine test page. Open and close the door five times within a three second period to print a duplex engine test page.

### Pre-boot menu options

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

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

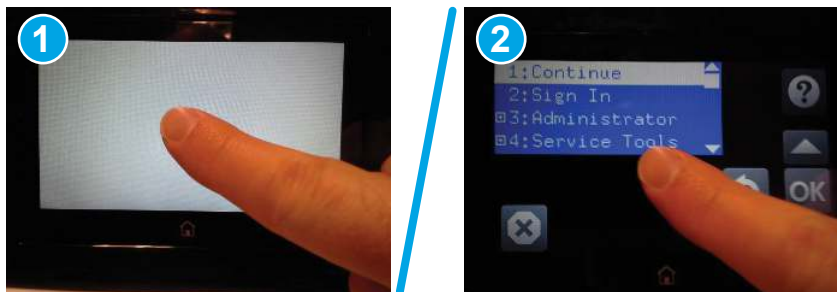
 **TIP:** The *Pre-boot* menu is also remotely accessible by using a telnet network protocol (Remote Admin) to establish an administration connection to the printer.

### Open the Pre-boot menu from a touchscreen control panel

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

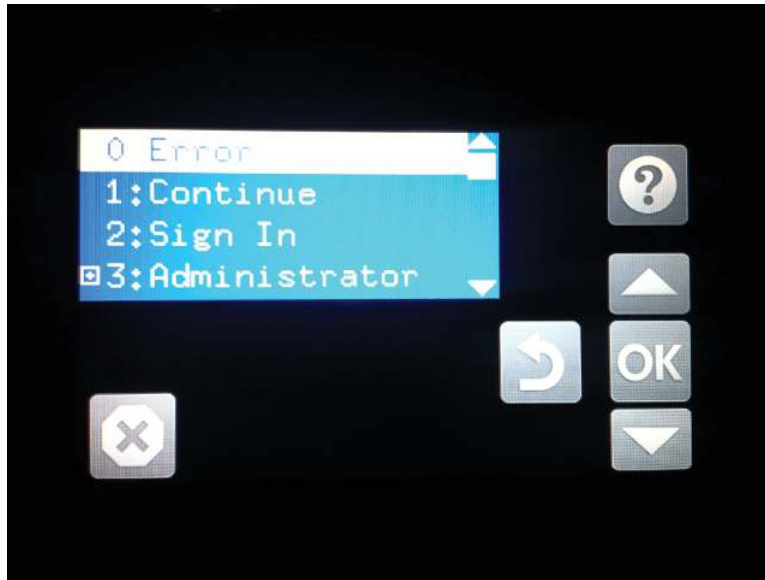
1. Turn the printer on.
2. Touch the middle of the control-panel display when you see the 1/8 under the logo.








**Figure 4-3** Open the *Pre-boot* menu



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

Figure 4-4 Pre-boot menu




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

4. Use the arrow buttons on the touchscreen to navigate the **Pre-boot** menu.
5. Touch the **OK** button to select a menu item.

### Open the Pre-Boot menu from a LCD control panel

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

1. Turn the printer on.
2. Press the **Cancel**  button when you see the 1/8 under the logo.
3. Use the arrow buttons on the control panel to navigate the **Pre-Boot** menu.
4. Press the **OK** button to select a menu item.

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

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

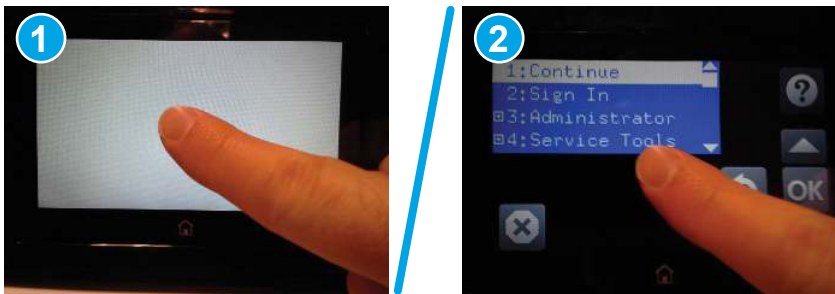
---

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

---

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

**Figure 4-5** Open the **Pre-boot** menu



2. Use the down arrow ▼ button to highlight the +3:Administrator item, and then touch the **OK** button.
3. Use the down arrow ▼ button to highlight the +8:Startup Options item, and then touch the **OK** button.
4. Use the down arrow ▼ button to highlight the 2 Cold Reset item, and then touch the **OK** button to select it.
5. Touch the Home button to return to the main **Pre-boot** menu and highlight the 1:Continue item, and then touch the **OK** button.

---

 **NOTE:** The printer will initialize.

---


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

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

---


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

---

1. Press the **Cancel**  button when you see the 1/8 under the logo.
2. Use the down arrow ▼ button to highlight the +3:Administrator item, and then press the **OK** button.

3. Use the down arrow ▼ button to highlight the +8:Startup Options item, and then press the OK button.
4. Use the down arrow ▼ button to highlight the 2 Cold Reset item, and then press the OK button to select it.
5. Touch the Home button to return to the main Pre-boot menu and highlight the 1:Continue item, and then touch the OK button.

 **NOTE:** The printer will initialize.

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

**Table 4-3 Pre-boot menu options (1 of 7)**

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

Table 4-3 Pre-boot menu options (1 of 7) (continued)

Menu option	First level	Second level	Third level	Description
				This allows a user to reformat the disk by removing the firmware image from the active directory without having to download new firmware code (printer remains bootable).
Administrator	Change Password			Select this item to set or change the administrator password.
Administrator	Clear Password			Select the <b>Clear Password</b> item to remove a password from the <b>Administrator</b> menu. Before the password is actually cleared, a message will be shown asking to confirm that the password should be cleared. Press the OK button to confirm the action.  When the confirmation prompt displays, press the OK button to clear the password.

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

Menu option	First level	Second level	Third level	Description
Administrator (continued)	Manage Disk	Clear disk		Select the <b>Clear disk</b> item to enable using an external device for job storage. Job storage is normally enabled only for the Boot device. This will be grayed out unless the <b>99.09.68</b> error is displayed.
Administrator	Manage Disk	Lock Disk		Select the <b>Lock Disk</b> item to lock (mate) a new secure disk to this printer.  The secure disk already locked to this printer will remain accessible to this printer. Use this function to have more than one encrypted disk accessible by the printer when using them interchangeably.  The data stored on the secure disk locked to this printer always remains accessible to this printer.
Administrator	Manage Disk	Leave Unlocked		Select the <b>Leave Unlocked</b> item to use a new secure disk in an unlocked mode for a single service event. The secure disk that is already locked to this printer will remain accessible to this printer and uses the old disk's encryption password with the new disk.  The secure disk that is already locked to this printer remains accessible to this printer.
Administrator	Manage Disk	Clear Disk Pwd		Select the <b>Clear Disk Pwd</b> item to continue using the non-secure disk and clear the password associated with the yet-to-be installed secure disk.  <b>CAUTION:</b> Data on the missing secure disk will be permanently inaccessible.
Administrator	Manage Disk	Retain Password		Select the <b>Retain Password</b> item to use the non-secure disk for this session only, and then search for the missing secure disk in future sessions.
Administrator	Manage Disk	Boot Device	Secure Erase	Select the <b>Secure Erase</b> item to erase all of the data on the disk and unlock it if required.  This might take a long time.  <b>NOTE:</b> The system will be unusable until the system files are reinstalled. The ATA secure-erase command is a



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

Menu option	First level	Second level	Third level	Description
				one-pass overwrite, which erases the entire disk including firmware. The disk remains an encrypted disk.
Administrator	Manage Disk	Boot Device	Erase/Unlock	Select the <b>Erase/Unlock</b> item to cryptographically erase all data on the disk and unlock the disk to allow a user to gain access to it from any printer.  <b>NOTE:</b> The system will be unusable until the system files are reinstalled. It erases the encryption key. The encryption key is erased, so the disk becomes a non-encrypted disk.
Administrator	Manage Disk	Boot Device	Get Status	This item provides disk status information if any is available.

Table 4-5 Pre-boot menu options (3 of 7)

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

**Table 4-5 Pre-boot menu options (3 of 7) (continued)**

Menu option	First level	Second level	Third level	Description
Administrator	Manage Disk	External Device	Erase/Unlock	Select the <b>Erase/Unlock</b> item to cryptographically erase all of the data on disk and unlock the disk to allow a user to gain access to it from any printer.  <b>NOTE:</b> The system will be unusable until the system files are reinstalled. The encryption key is erased, so the disk becomes a non-encrypted disk.
Administrator	Manage Disk	External Device	Get Status	This item provides disk status information if any is available.

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

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

Table 4-7 Pre-boot menu options (5 of 7)

Menu option	First level	Second level	Third level	Description
Administrator (continued)	Startup Options			Select the <a href="#">Startup Options</a> item to specify options that can be set for the next time the printer is turned on and initializes to the <b>Ready</b> state.
Administrator	Startup Options	Show Revision		<p><b>Not currently functional:</b> Select the <a href="#">Show Revision</a> item to allow the printer to initialize and show the firmware version when the printer reaches the <b>Ready</b> state.</p> <p>Once the printer power is turned on the next time, the <a href="#">Show Revision</a> item is unchecked so that the firmware revision is not shown.</p>
Administrator	Startup Options	Cold Reset		<p>Select the <a href="#">Cold Reset</a> item to clear the IP address and all customer settings. (This item also returns all settings to factory defaults.)</p> <p><b>NOTE:</b> Items in the <a href="#">Service</a> menu are not reset.</p>
Administrator	Startup Options	Skip Disk Load		Select the <a href="#">Skip Disk Load</a> item to disable installed third-party applications.
Administrator	Startup Options	Skip Cal		Select the <a href="#">Skip Cal</a> item to skip the printer calibration for the very next power-initialization cycle only.
Administrator	Startup Options	Lock Service		<p><b>CAUTION:</b> Select the <a href="#">Lock Service</a> item to lock the <a href="#">Service</a> menu access (both in the <a href="#">Pre-boot</a> menu and the <a href="#">Device Maintenance</a> menu).</p> <p>Service personnel must have the administrator remove the <a href="#">Lock Service</a> setting before they can open the <a href="#">Service</a> menu.</p>
Administrator	Startup Options	Skip FSCK		Select the <a href="#">Skip FSCK</a> item to disable Chkdisk/ScanVolume during startup.
Administrator	Startup Options	First Power		<p><b>Not currently functional:</b> This item allows the printer to initialize as if it is the first time it has been turned on.</p> <p>For example, the user is prompted to configure first-time settings like date/time, language, and other settings.</p> <p>Select this item so that it is enabled for the next time the printer power is turned on.</p> <p>When the printer power is turned on the next time, this item is unchecked so that the pre-configured settings are used during configuration, and the first-time setting prompt is not used.</p>
Administrator	Startup Options	Embedded Jetdirect Off		<p>Select the <a href="#">Embedded Jetdirect Off</a> item to disable the embedded HP Jetdirect.</p> <p>By default this item is unchecked so that HP Jetdirect is always enabled.</p>
Administrator	Startup Options	WiFi Accessory		Select the <a href="#">WiFi Accessory</a> item to enable the wireless accessory.

Table 4-8 Pre-boot menu options (6 of 7)

Menu option	First level	Second level	Third level	Description
Administrator (continued)	Diagnostics			Diagnostic items are useful to diagnose hardware components and their interface connections. Use these items to troubleshoot specific hardware components, and the interface between them and other components.
Administrator	Diagnostics	Memory	Do Not Run	Use the <b>Do Not Run</b> item to exclude the <b>Memory</b> diagnostic when executing multiple diagnostics.
Administrator	Diagnostics		Short	Use the <b>Short</b> item to select a brief memory test.  <b>NOTE:</b> This test requires about four minutes to execute.
Administrator	Diagnostics		Long	Use the <b>Long</b> item to select an extended memory test.  <b>NOTE:</b> This test requires about twenty minutes to execute.
Administrator	Diagnostics	Disk	Do Not Run	Use the <b>Do Not Run</b> item to exclude the <b>Disk</b> diagnostic when executing multiple diagnostics.
Administrator	Diagnostics		Short	Use the <b>Short</b> item to select a brief firmware self-test.  <b>NOTE:</b> This test requires about two or three minutes to execute.
Administrator	Diagnostics		Long	Use the <b>Long</b> item to select an extended firmware self-test.  <b>NOTE:</b> This test requires about sixty minutes to execute.
Administrator	Diagnostics		Optimized	Use the <b>Optimized</b> item to select a test that checks the active sectors on the disk.  <b>NOTE:</b> This test requires about thirty minutes to execute.
Administrator	Diagnostics		Raw	Use the <b>Raw</b> item to select a test that checks every sector on the disk.  <b>NOTE:</b> This test requires about fifty minutes to execute.
Administrator	Diagnostics		Smart	Use the <b>Smart</b> item to select a very brief test that checks the drive self-monitoring analysis and reporting technology (SMART) status—the drive detects and reports reliability indicators to help anticipate disk failures (SMART status).
Administrator	Diagnostics	CPB		Use the <b>CPB</b> item to verify the integrity of the copy processor board (CPB) and the formatter PCA connections.
Administrator	Diagnostics	Interconnect		Use the <b>Interconnect</b> item to verify the integrity of the interconnect PCA (ICB) and its connections.
Administrator	Diagnostics	Run Selected		Select the <b>Run Selected</b> item to execute a selected test.  <b>NOTE:</b> If more than one test is selected, they are executed in sequence.


**Table 4-9 Pre-boot menu options (7 of 7)**

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

## Remote Admin

Learn about the printer Remote Admin function.

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

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

### Required software and network connection

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

---

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


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

---

## Enable the Windows telnet client

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

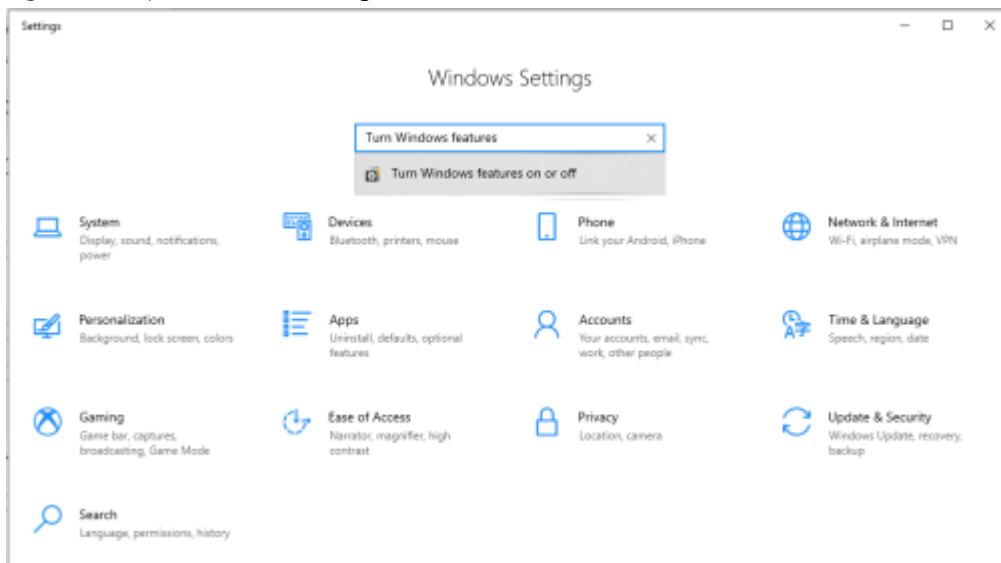
---

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

---

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

**Figure 4-6** Open Windows Settings



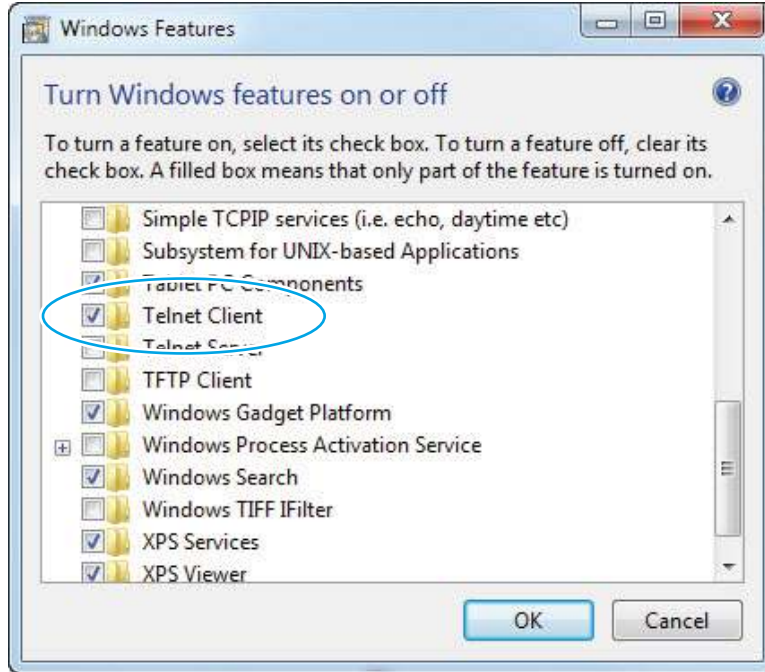
2. In the **Windows Features** box, scroll down to **Telnet Client**. If the check box is not checked, click the box to select it, and then click the **OK** button.

---

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

---

Figure 4-7 Enable the telnet client feature



## Network connection

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

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

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

## Connect a remote connection

Use the following procedures to connect a remote connection.

## Start the telnet server function at the printer

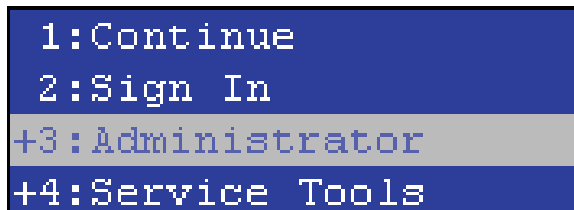
For security reasons the Remote Admin feature must be initiated by a person that is physically present at the printer. The following steps must be performed by a person that is physically present at the printer.

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

1. Turn the printer on.
2. The HP logo displays on the printer control panel. When a  $1/8$  with an underscore displays, touch the middle of the screen to open the [Pre-boot](#) menu.

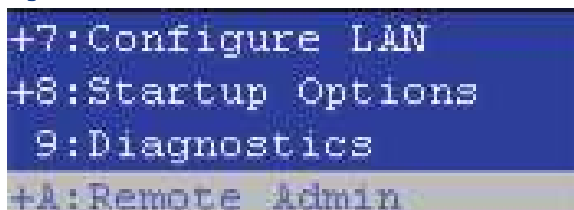
- Use the arrow buttons on the touchscreen to scroll down and highlight the +3:Administrator item, and then touch the OK button to select it.

Figure 4-8 Select the +3:Administrator item



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

Figure 4-9 Select the +A:Remote Admin item



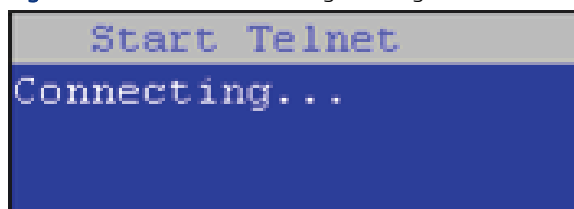
- Use the arrow buttons on the touchscreen to scroll down and highlight the 1:Start Telnet item, and then touch the OK button to select it.

Figure 4-10 Select the 1:Start Telnet item



- Do one of the following
  - If a connecting message displays briefly, go to 7..

Figure 4-11 Telnet connecting message



- If an error message displays, use the steps below to identify the problem.



Figure 4-12 Telnet error message

```
Start Telnet
Unable to connect
Contact network
administrator.
```

- a. The printer network cable is not correctly connected.
  - b. The BIOS LAN settings are incorrect.
    - The printer should be configured to use a static IP address, but is configured to use DHCP instead.
    - The printer is configured to use a static IP address, but the IP address is incorrect.
  - c. The printer is correctly configured to use DHCP, but the DHCP server is not turned on or is malfunctioning.
7. When the printer telnet server function is initialized, the following screen appears. Use the information on this screen to connect the remote telnet client computer to the printer.



---

**NOTE:** The printer is now ready to receive remote telnet client commands.

---

- **IP:** The static or dynamically allocated IP address for the printer.
- **Port:** The standard telnet port (23).
- **Pin:** A randomly generated 4-digit personal identification number (PIN).

Figure 4-13 Telnet server function initialized

```
Start Telnet
IP: 16.88.109.66
Port: 23
Pin : 4031
```

## Start the telnet client function at the remote computer

The following steps establish a Remote Admin connection from a remote computer to the printer.

1. From the **Start** menu open the **Command Prompt** desktop application.



---

**TIP:** Type `cmd` in the application search dialogue box to find the application.

---

- From any displayed directory, type `telnet` at the prompt, and then press the **Enter** key.

Figure 4-14 Start a telnet session



- Type `<IP ADDRESS>` at the telnet prompt, and then press the **Enter** key.

 **NOTE:** For `<IP ADDRESS>`, substitute the IP address that was displayed in step 7 of the "Start the telnet server function at the printer" topic.


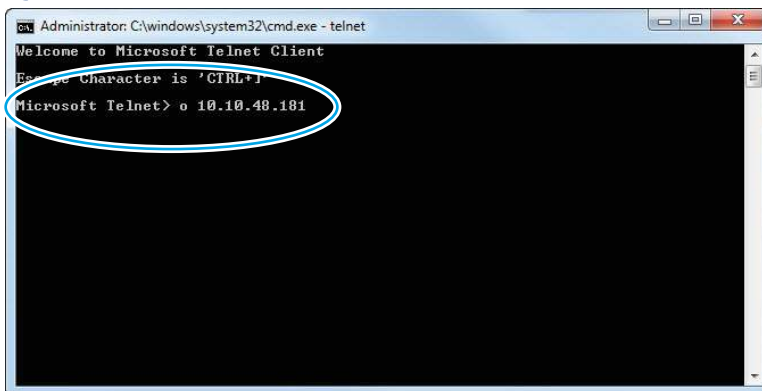
 **TIP:** If the telnet connection fails to establish a connection, the printer is probably behind a firewall or on a different network than the remote telnet client computer.

Figure 4-15 Establish a telnet connection



- Type the PIN that was displayed in step 7 of the "Start the telnet server function at the printer" topic at the prompt, and then press the **Enter** key.


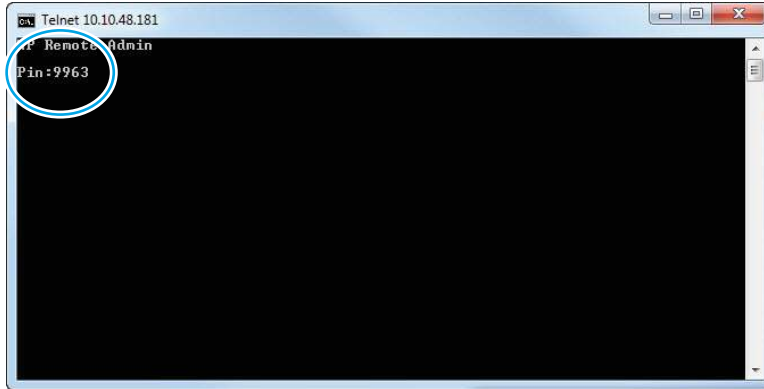

 **IMPORTANT:** Make sure to type the PIN correctly. After five incorrect PIN entries, the printer terminates the Remote Admin connection. The Remote Admin feature must be re-initiated at the printer. See the "Start the telnet server function at the printer" topic.

Figure 4-16 Enter the PIN

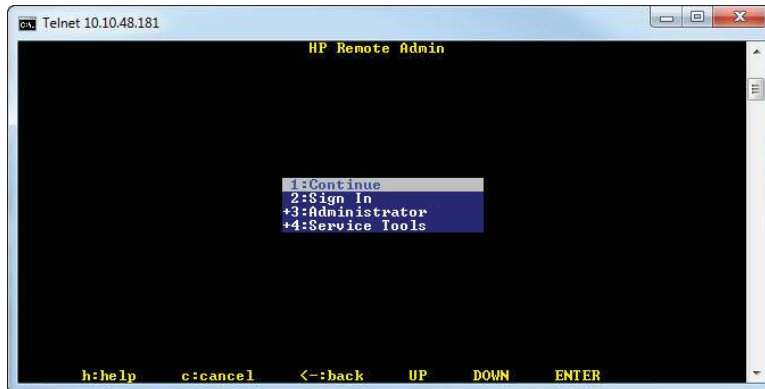


5. The following screen displays when the correct PIN is entered and the Remote Admin connection is successful. For information about the Pre-boot menu and options, see "Pre-boot menu options" in the printer *Service Manual*.

 **NOTE:** Because a Remote Admin connection is an unsecured telnet network protocol connection, the following Pre-boot menu items are disabled for the remote telnet client computer.

- The **+3:Administrator** menu **4:Change Password** item.
- The **+3:Administrator** menu **5:Clear Password** item.
- The **+3:Administrator** menu **6:Disk Manage** item.

Figure 4-17 Remote Admin window



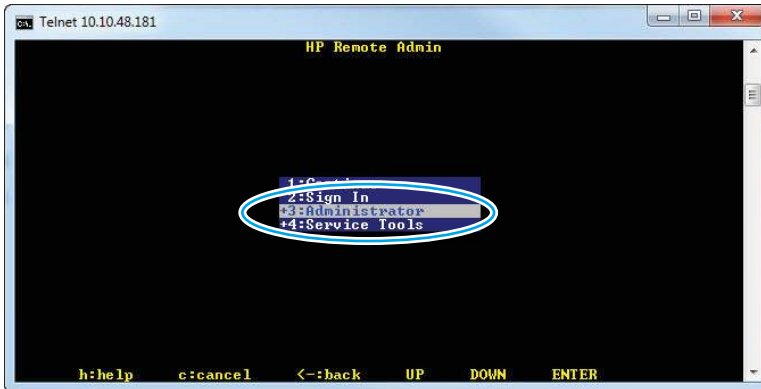
### Disconnect a remote connection

The Remote Admin connection can be terminated from the printer control panel or the remote telnet client computer.

 **NOTE:** The following procedure describes terminating a Remote Admin connection from the remote telnet client computer.

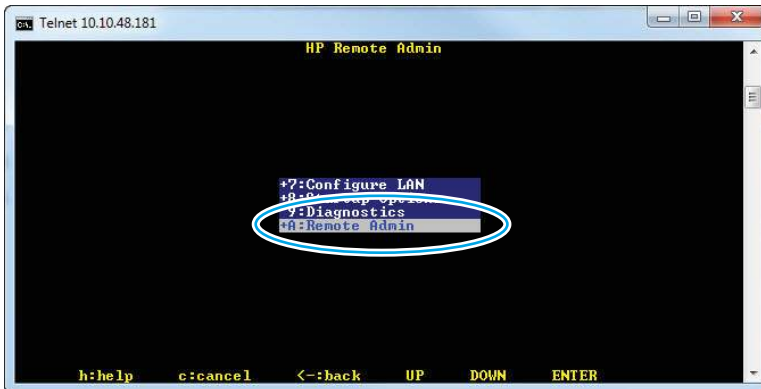
1. From the Pre-boot main menu, use the arrow buttons on the keyboard to scroll down to the **+3:Administrator** item, and then press the **Enter** key.

Figure 4-18 Access the administrator menu



2. Use the arrow buttons on the keyboard to scroll down to the **+A:Remote Admin** item, and then press the **Enter** key.

Figure 4-19 Access the remote admin menu

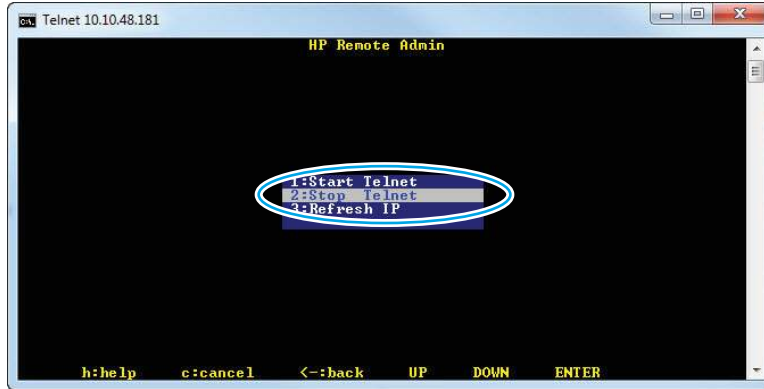


3. Use the arrow buttons on the keyboard to scroll down to the **2:Stop Telnet** item, and then press the **Enter** key. The Remote Admin connection between the printer and the remote telnet client computer terminates.

 **IMPORTANT:** The printer remains in the Pre-boot menu. Have the person that is physically present at the printer do the following:

- Touch the **Home** button to return to the main Pre-boot menu and highlight the **1:Continue** item, and then touch the **OK** button. The printer will continue to initialize.

Figure 4-20 Terminate the telnet connection



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

Use the HP Embedded Web Server to manage advanced printing functions.

### Introduction

Use the HP Embedded Web Server to manage printing functions from a computer instead of the printer control panel.

- View printer status information
- Determine the remaining life for all supplies and order new ones
- View and change tray configurations
- View and change the printer control-panel menu configuration
- View and print internal pages
- Receive notification of printer and supplies events
- View and change network configuration

The HP Embedded Web Server works when the printer is connected to an IP-based network. The HP Embedded Web Server does not support IPX-based printer connections. Internet access is not needed to open and use the HP Embedded Web Server.



When the printer is connected to the network, the HP Embedded Web Server is automatically available.



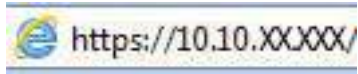
**NOTE:** The HP Embedded Web Server is not accessible beyond the network firewall.

### How to access the HP Embedded Web Server (EWS)


Use the following steps to open the EWS.

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

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



---

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

---

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

Windows® 7

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

Windows® 8 or greater

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

macOS

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

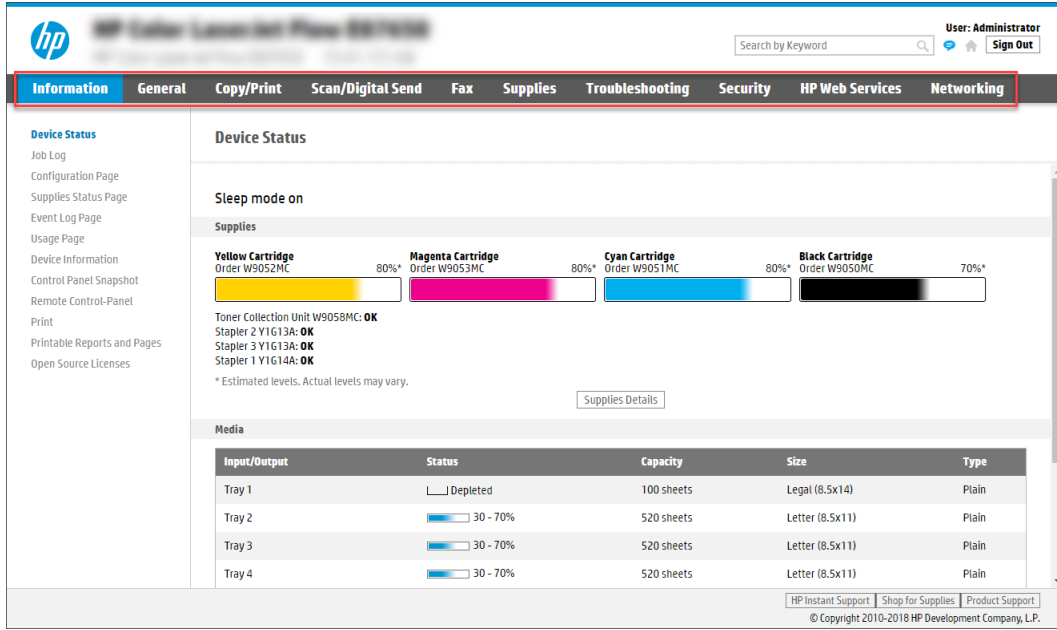
Linux

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

## HP Embedded Web Server features

Learn about the HP Embedded Web Server (EWS) features available on each tab.

Figure 4-21 EWS Tabs



**NOTE:** Copy/Print, Scan/Digital Send, and Fax tabs only appear for multi-function printers (MFPs). A Print tab appears for single-function printers (SFPs).

## Information tab

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

Table 4-10 HP Embedded Web Server Information tab

Menu	Description
Device Status	Shows the printer status and shows the estimated life remaining of HP supplies. The page also shows the type and size of paper set for each tray. To change the default settings, click the <b>Change Settings</b> link.
Job Log	Provides a list of the jobs that have been processed.
Configuration Page	Shows the information found on the configuration page.
Supplies Status Page	Shows the status of the supplies for the printer.
Event Log Page	Shows a list of all printer events and errors. Use the <b>HP Instant Support</b> link (in the <b>Other Links</b> area on all HP Embedded Web Server pages) to connect to a set of dynamic web pages that help solve problems. These pages also show additional services available for the printer.
Usage Page	Shows a summary of the number of pages the printer has printed, grouped by size, type, and paper print path.
Device Information	Shows the printer network name, address, and model information. To customize these entries, click the <b>Device Information</b> menu on the <b>General</b> tab.
Control Panel Snapshot	Shows an image of the current screen on the control panel display.
Remote Control-Panel	Provides a way to troubleshoot or manage the printer from a browser window on a desktop or laptop.
Print	Allows the user to send a print-ready file to the printer to be printed.
Printable Reports and Pages	Lists the internal reports and pages for the printer. Select one or more items to print.

**Table 4-10 HP Embedded Web Server Information tab (continued)**

Menu	Description
Open Source Licenses	Shows a summary of the licenses for open source software programs that can be used with the printer.

## General tab

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

**Table 4-11 HP Embedded Web Server General tab**

Menu	Description
Control Panel Customization	Reorder, show, or hide features on the control-panel display.  Change the default display language and keyboard layouts.
Quick Sets	Configure jobs that are available in the <b>Quick Sets</b> area of the Home screen on the printer control panel.
Alerts	Set up email alerts for various printer and supplies events.
Control Panel Settings App	Shows the Settings app options that are available on the printer control panel.
General Settings	Configure how the printer recovers from jams and other general printer settings.
AutoSend	Configure the printer to send automated emails regarding printer configuration and supplies to specific email addresses.
Edit Other Links	Add or customize a link to another website. This link displays in the footer area on all HP Embedded Web Server pages.
Ordering Information	Enter information about ordering replacement toner cartridges. This information displays on the supplies status page.
Device Information	Name the printer and assign an asset number to it. Enter the name of the primary contact who will receive information about the printer.
Language	Set the language in which to display the HP Embedded Web Server information.
Firmware Upgrade	Download and install printer firmware upgrade files.
Date/Time Settings	Set the date and time or synchronize with a network time server.
Energy Settings	Set or edit a wake time, sleep time, and sleep delay for the printer. Set a different schedule for each day of the week and for holidays.  Set which interactions with the printer cause it to wake from sleep mode.
Back up and Restore	Create a backup file that contains printer and user data. If necessary, use this file to restore data to the printer.
Reset Factory Settings	Restore printer settings to the factory defaults.
Solution Installer	Install or remove third-party software packages that extend or modify the functionality of the printer.
Job Statistics Settings	Provides connection information about third-party job-statistics services, or enables local serverless device job accounting.
Quota Settings	Provides connection information about third-party job-quota services, or enables local device quota service.



## Other Links list

Configure which links display in the footer of the HP Embedded Web Server by using the **Edit Other Links** menu on the **General** tab.



**NOTE:** The following are the default links.

**Table 4-12** HP Embedded Web Server Other Links list

Menu	Description
HP Instant Support	Connect to the HP website to find solutions to printer problems.
Shop for Supplies	Connect to the HP website for information on purchasing original HP supplies, such as cartridges and paper.
Product Support	Connect to the support site for the printer to search for help on various topics.

## Copy/Print tab

Refer to the table for settings in the **Copy/Print** tab.

**Table 4-13** HP Embedded Web Server Copy/Print tab

Menu	Description
Print from USB Drive Settings	Enable or disable the <a href="#">Print from USB Drive</a> menu on the control panel.
Manage Stored Jobs	Enable or disable the ability to store jobs in the printer memory. Configure job-storage options.
Default Print Options	Configure the default options for print jobs.
Restrict Color (Color printers only)	Permit or restrict color printing and copying. Specify permissions for individual users or for jobs that are sent from specific software programs.
PCL and PostScript Settings	Adjust the PCL and PostScript settings for all print jobs, including copy jobs and received faxes.
Print Quality	Configure the print quality settings, including color adjustment, image registration, and allowed paper types.
Copy Settings	Configure the default options and Quick Sets for copy jobs. <b>NOTE:</b> If job-specific copy setting options are not set from the control panel at the start of a job, the default settings will be used for the job.
Expert Copy	Enable or disable Expert Copy and set the initial copy view. The Expert Copy feature is available only on some HP MFPs with larger control panels, and is available in FutureSmart 4 firmware 24.7.3 release or later.
Manage Trays	Configure settings for paper trays.
Manage Stapler/Stacker	Configure settings for the stapler/stacker for printers that have this feature.

## Scan/Digital Send tab

Refer to the table for settings in the **Scan/Digital Send** tab.

**Table 4-14 HP Embedded Web Server Scan/Digital Send tab**

Menu	Description
<b>Email Setup</b>	Configure the default email settings for digital sending, including the following: <ul style="list-style-type: none"> <li>● Settings for the outgoing mail (SMTP) server</li> <li>● Settings for Email Quick Sets jobs</li> <li>● Default message settings, such as the "From" address and the subject line</li> <li>● Settings for digital signatures and encryption</li> <li>● Settings for email notifications</li> <li>● Default scan settings for email jobs</li> <li>● Default file settings for email jobs</li> </ul>
<b>Scan to Network Folder</b>	Configure the network folder settings for digital sending, including the following: <ul style="list-style-type: none"> <li>● Settings for Quick Sets jobs saved in a network folder</li> <li>● Settings for notifications</li> <li>● Default scan settings for jobs saved in a network folder</li> <li>● Default file settings for jobs saved in a network folder</li> </ul>
<b>Scan to SharePoint®</b>	Configure the SharePoint settings for digital sending, including the following: <ul style="list-style-type: none"> <li>● Settings for Quick Sets jobs saved in a document library on the SharePoint site</li> <li>● Default settings for jobs saved in a document library on the SharePoint site</li> </ul>
<b>Scan to USB Drive</b>	Configure the USB settings for digital sending, including the following: <ul style="list-style-type: none"> <li>● Settings for Quick Sets jobs saved on a USB flash drive</li> <li>● Settings for notifications</li> <li>● Default scan settings for jobs saved on a USB flash drive</li> <li>● Default file settings for jobs saved on a USB flash drive</li> </ul>
<b>Contacts</b>	Manage contacts, including the following: <ul style="list-style-type: none"> <li>● Add email addresses into the printer one at a time.</li> <li>● Import a large list of frequently-used email addresses on to the printer all at once, rather than adding them one at a time.</li> <li>● Export contacts from the printer into a .CSV file on the computer to use as a data backup, or import the records onto another HP printer.</li> <li>● Edit email addresses that have already been saved in the printer.</li> </ul>
<b>Preferences</b>	Manage general scanning settings.
<b>Email and Scan to Network Folder Quick Setup Wizards</b>	Configure the printer to send scanned images as email attachments.  Configure the printer to save scanned images to network-folder Quick Sets. Quick Sets provide easy access to files saved on the network.
<b>Digital Sending Software Setup</b>	Configure settings related to using optional Digital Sending software.

## Fax tab

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

**Table 4-15** HP Embedded Web Server Fax tab

Menu	Description
<b>Fax Send Setup</b>	Configure settings for sending faxes, including the following: <ul style="list-style-type: none"><li>● Default settings for outgoing faxes</li><li>● Settings for fax Quick Sets jobs</li><li>● Settings for notifications</li><li>● Default setting for sending faxes using the internal fax modem</li><li>● Settings for using a LAN fax service</li><li>● Settings for using an Internet fax service</li></ul>
<b>Fax Speed Dials</b>	Manage speed dials, including the following: <ul style="list-style-type: none"><li>● Import .CSV files containing email addresses, fax numbers, or user records, so that they can be accessed on this printer.</li><li>● Export email, fax, or user records from the printer into a file on the computer to use as a data backup, or import the records onto another HP printer.</li></ul>
<b>Fax Receive Setup</b>	Configure default print options for incoming faxes, and set up a fax printing schedule.
<b>Fax Archive and Forwarding</b>	Enable or disable fax archiving and fax forwarding, and configure basic settings for each: <ul style="list-style-type: none"><li>● Fax archiving is a method to send a copy of all incoming and outgoing faxes to an email address, a network folder, or an FTP server.</li><li>● Fax forwarding is a method to forward incoming faxes to a different fax device.</li></ul>
<b>Fax Activity Log</b>	Contains a list of the faxes that have been sent from or received by this printer.

## Supplies tab

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

**Table 4-16** HP Embedded Web Server Supplies tab

Menu	Description
<b>Manage Supplies</b>	Configure how the printer reacts when supplies reach a Very Low state.

## Troubleshooting tab

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

**Table 4-17** HP Embedded Web Server Troubleshooting tab

Menu	Description
<b>General Troubleshooting</b>	Use the following options as appropriate: <ul style="list-style-type: none"><li>● <b>Reports and Tests</b> area: Select and print several types of reports and tests. Some reports can be viewed in the EWS by clicking the <b>View</b> button.</li></ul>

**Table 4-17 HP Embedded Web Server Troubleshooting tab (continued)**

Menu	Description
	<ul style="list-style-type: none"> <li>● <b>Fax Tools</b> area: Configure settings for fax troubleshooting. (MFP and Digital Sender products with HP analog fax accessory only)</li> <li>● <b>OXPd Troubleshooting</b> area: Enable or disable the <b>Allow a Non-Secure Connection for Web Services</b> option</li> <li>● <b>Auto Recovery</b> area: Enable or disable the <b>Enable Auto Recovery</b> option, which allows the printer to auto recover from errors that might require the power to be turned off and on (for example, a 49 error).</li> </ul>
<b>Online Help</b>	Link to HP cloud-based online help to assist in troubleshooting printing issues.
<b>Diagnostic Data</b>	Export printer information to a file that can be useful for HP technical support to use for detailed problem analysis.
<b>NOTE:</b> This item is available only if an administrator password is set from the <b>Security</b> tab.	
<b>Calibration/Cleaning</b> (Color LaserJet printers only)	Enable the automatic cleaning feature, create and print the cleaning page, and select an option to calibrate the printer immediately.
<b>Reset Factory Settings</b>	Restore printer settings to factory defaults.
<b>Firmware Upgrade</b>	Download and install printer firmware upgrade files.

## Security tab

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

**Table 4-18 HP Embedded Web Server Security tab**

Menu	Description
<b>General Security</b>	Settings for general security, including the following: <ul style="list-style-type: none"> <li>● Configure an administrator password to restrict access to certain features on the printer.</li> <li>● Set a custom device Service Access Code.</li> <li>● Set PJI password for processing PJI commands.</li> <li>● Set file system access and firmware upgrade security.</li> <li>● Enable or disable the Host USB port on the control panel or the USB connectivity port on the formatter for printing directly from a computer.</li> <li>● View the status of all security settings.</li> </ul>
<b>Account Policy</b>	Enable administrator account settings.
<b>Access Control</b>	Configure access to printer functions for specific individuals or groups, and select the method individuals use to sign in to the printer.
<b>Protect Stored Data</b>	Configure and manage the internal storage for the printer.  Configure settings for jobs that are stored on the printer internal storage.
<b>Manage Remote Apps</b>	Manage or whitelist remote apps by importing or deleting certificates that allow devices to use this product.
<b>Certificate Management</b>	Install and manage security certificates for access to the printer and the network.

**Table 4-18 HP Embedded Web Server Security tab (continued)**

Menu	Description
Email Domain Restriction	If email functionality is enabled, administrators can limit the email addresses to which the printer can send messages.
Web Service Security	Allow resources on this printer to be accessed by web pages from different domains. If no sites are added to the list, then all sites are trusted.
Self Test	Verify that the security functions are running according to expected system parameters.

## HP Web Services tab

Use the **HP Web Services** tab to configure and enable HP Web Services for this printer. It is necessary to Enable HP Web Services to use the HP ePrint feature.

**Table 4-19 HP Embedded Web Server HP Web Services tab**

Menu	Description
Web Services Setup	Connect this printer to HP Connected on the web by enabling HP Web Services.
Web Proxy	Configure a proxy server if there are issues enabling HP Web Services or connecting the printer to the Internet.
HP JetAdvantage	Access solutions that extend the capabilities of the printer
Smart Cloud Print	Enable Smart Cloud Print, which allows access to web-based apps that extend the capabilities of the printer.

## Networking tab

Use the **Networking** tab to configure and secure network settings for the printer when it is connected to an IP-based network. This tab does not display if the printer is connected to other types of networks.

**Table 4-20 HP Embedded Web Server Networking tab > Configuration settings**

Menu	Description
Wireless Station	Configure the initial wireless settings.  <b>NOTE:</b> The configuration options available depend on the print server model.
Wi-Fi Direct	Configure Wi-Fi Direct settings for printers that include embedded Wi-Fi Direct Print and NFC printing or that have a wireless accessory installed.  <b>NOTE:</b> The configuration options available depend on the print server model.
TCP/IP Settings	Configure TCP/IP settings for IPv4 and IPv6 networks.  <b>NOTE:</b> The configuration options available depend on the print server model.
Network Settings	Configure IPX/SPX, AppleTalk, DLC/LLC, and SNMP settings, depending on the print server model.
Other Settings	Configure general printing protocols and services supported by the print server. The available options depend on the print server model, but can include firmware update, LPD queues, USB settings, support information, and refresh rate.
AirPrint	Enable, set up, or disable network printing from Apple-supported printers.

**Table 4-20 HP Embedded Web Server Networking tab > Configuration settings (continued)**

Menu	Description
Select Language	Change the language displayed by the HP Embedded Web Server. This page displays if the web pages support multiple languages. Optionally, select supported languages through language-preference settings in the browser.
Select Location	Select a country/region for the printer.

**Table 4-21 HP Embedded Web Server Networking tab > Google Cloud Print settings**

Menu	Description
Setup	Set up Google Cloud Print options.
Web Proxy	Configure proxy settings.

**Table 4-22 HP Embedded Web Server Networking tab > Security settings**

Menu	Description
Settings	View and restore current security settings to factory-default values.  Configure security settings using the Security Configuration Wizard.  <b>NOTE:</b> Do not use the Security Configuration Wizard to configure security settings if using network-management applications, such as HP Web Jetadmin.
Authorization	Control configuration management and use of this printer, including limiting host access to this printer through an Access Control List (ACL) (for selected print servers on IPv4 networks only).
Secure Communication	Configure Transport Layer Security (TLS) protocol and encryption options.
Mgmt. Protocols	Configure and manage security protocols for this printer, including the following: <ul style="list-style-type: none"> <li>● Set the security management level for the HP Embedded Web Server, and control traffic over HTTP and HTTPS.</li> <li>● Configure the SNMP (Simple Network Management Protocol) operation. Enable or disable the SNMP v1/v2c or SNMP v3 agents on the print server.</li> <li>● Control access through protocols that may not be secure, such as printing protocols, print services, discovery protocols, name resolution services, and configuration-management protocols.</li> </ul>
802.1X Authentication	Configure 802.1X authentication settings on the Jetdirect print server as required for client authentication on the network, and reset the 802.1X authentication settings to factory-default values.  <b>CAUTION:</b> When changing the 802.1X authentication settings; the printer might lose its connection. To reconnect, it might be necessary to reset the print server to a factory-default state and reinstall the printer.
IPsec/Firewall	View or configure a Firewall policy or an IPsec/Firewall policy.
Announcement Agent	Enable or disable the HP Device Announcement Agent, set the configuration server, and configure mutual authentication using certificates.


**Table 4-23 HP Embedded Web Server Networking tab > Diagnostics settings**

Menu	Description
<b>Network Statistics</b>	Display network statistics that are collected and stored on the HP Jetdirect print server.
<b>Protocol Info</b>	View a list of network-configuration settings on the HP Jetdirect print server for each protocol.
<b>Configuration Page</b>	View the HP Jetdirect configuration page, which contains status and configuration information.

## Print menu (SFP) and Copy/Print menu (MFP)

Learn about the control-panel [Print](#) menu (SFP) and the [Copy/Print](#) menu (MFP).

**To display:** At the printer control panel, select the [Settings](#) menu, and then select the [Print](#) menu (SFP) or the [Copy/Print](#) menu (MFP).

**To print:** At the printer control panel, touch (MFP) or use the arrow buttons (SFP) to select the printer icon . For the SFP, press the [OK](#) button to print the pages.

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

**Table 4-24 Print menu (SFP) or Copy/Print menu (MFP)**

First level	Second level	Third level	Fourth Level	Values	Description
Copy Settings MFP	Image preview			Make optional	Use this menu to configure how <a href="#">Copy</a> behaves.
				Require preview	
				Disable preview	
Copy Settings MFP	Copies			1-9999	Configure the default options for copy jobs. If the user does not specify the job options when creating the job, the default options are used.
				Default = 1	
Copy Settings MFP	Sides	Original Sides		1-sided	Use to indicate whether the original document is printed on one or both sides. For example, select <a href="#">Original Sides 1-sided</a> and <a href="#">Output Sides 2-sided</a> when the original is printed on one side, but you want to make two-sided copies.
				2-sided	
				Flip pages up	
Copy Settings	Sides	Output Sides		1-sided	Use to indicate whether the copies

Table 4-24 Print menu (SFP) or Copy/Print menu (MFP) (continued)

First level	Second level	Third level	Fourth Level	Values	Description
MFP				2-sided Flip pages up	should be printed on one or both sides. For example, select <a href="#">Original Sides 1-sided</a> and <a href="#">Output Sides 2-sided</a> when the original is printed on one side, but you want to make two-sided copies.  Select <a href="#">Flip pages up</a> to print the pages with long edge of the in the landscape orientation.
Copy Settings MFP	Watermark	Watermark Type		None* Text	Use to set a text watermark.
Copy Settings MFP	Watermark	Watermark Text		Draft Confidential Secret Top Secret Urgent	Select a predefined text watermark.
Copy Settings MFP	Watermark	Text Font		Letter Gothic* Antique Olive New Century Schoolbook Roman Garamond Antiqua	Select the font of the text watermark.
Copy Settings MFP	Watermark	Text Size		30 point 40 point* 60 point	Select the font point size of the text watermark.
Copy Settings MFP	Watermark	Darkness		1 - (Lighter) 2 3* 4 5 - (Darker)	Select the darkness of the text watermark.
Copy Settings MFP	Stamps	Stamp Content		User-defined value None* IP address User name Product information Page number	Use to set a stamp in any or all the following locations in the document: <ul style="list-style-type: none"><li>● Top Left</li><li>● Top Center</li><li>● Top Right</li></ul>



Table 4-24 Print menu (SFP) or Copy/Print menu (MFP) (continued)

First level	Second level	Third level	Fourth Level	Values	Description
				Date and time	<ul style="list-style-type: none"> <li>● Bottom Left</li> <li>● Bottom Center</li> <li>● Bottom Right</li> </ul>
Copy Settings MFP	Stamps	Text Font		Letter Gothic* Antique Olive New Century Schoolbook Roman Garamond Antiqua	Select the font of the stamp.
Copy Settings MFP	Stamps	Text Size		8 point 12 point* 20 point	Select the font point size of the stamp.
Copy Settings MFP	Stamps	White background		Disabled* Enabled	Select the check box to enable a white background for the stamp.
Copy Settings MFP	Scan Mode			Standard document* Prompt for additional pages Book 2-sided ID	Use to indicate the type of original document to be scanned.  Select <a href="#">Prompt for additional pages</a> to copy or scan an original document that has more pages than the document feeder can accommodate at one time, or to scan originals of different sizes that cannot be scanned together, and then combine these separate scan jobs into a single job.
Copy Settings MFP	Reduce/Enlarge			Automatic* Include margins Manual Default=100	Scale the size of the document up or down.  To reduce the image, select a scaling percentage that is less than 100. To enlarge the image, select a scaling percentage that is greater than 100.  When <a href="#">Include margins</a> is enabled, the printer reduces the image slightly to fit the entire scanned image within the

Table 4-24 Print menu (SFP) or Copy/Print menu (MFP) (continued)

First level	Second level	Third level	Fourth Level	Values	Description
					printable area on the page.
Copy Settings	Original Size			Automatically detect*	Specify the size of the original document.
MFP				Letter (8.5x11)	
				Mixed Letter/Legal	
				Legal (8.5x14)	
				Executive (7.25x10.5)	
				Statement (5.5x8.5)	
				Oficio (8.5x13)	
				4x6	
				5x7	
				5x8	
				A4 (210x297 mm)	
				A5 (148x210 mm)	
				A6 (105x148 mm)	
				RA4 (215x305 mm)	
				B5 (182x257 mm)	
				B6 (128x182 mm)	
				10x15cm	
				16K (195x270 mm)	
				16K (184x260 mm)	
				16K (197x273 mm)	
				DPostcard JIS (148x200 mm)	
				Oficio (216x340 mm)	
Copy Settings	Paper Selection		Paper Size	Match original size*	Select the size of paper to use when printing or making copies.
MFP				Letter (8.5x11)	
				Legal (8.5x14)	
				Executive (7.25x10.5)	
				Statement (5.5x8.5)	
				Oficio (8.5x13)	
				3x5	
				4x6	
				5x7	
				5x8	

Table 4-24 Print menu (SFP) or Copy/Print menu (MFP) (continued)

First level	Second level	Third level	Fourth Level	Values	Description
				A4 (210x297 mm)	
				A5 (148x210 mm)	
				A6 (105x148 mm)	
				RA4 (215x305 mm)	
				B5 (182x257 mm)	
				B6 (128x182 mm)	
				10x15cm	
				16K (195x270 mm)	
				16K (184x260 mm)	
				16K (197x273 mm)	
				Postcard JIS (100x148 mm)	
				DPostcard JIS (148x200 mm)	
				Envelope #9	
				Envelope #10	
				Envelope Monarch	
				Envelope #10	
				Envelope B5	
				Envelope C5	
				Envelope C6	
				Envelope DL	
				Custom	
				Oficio (216x340 mm)	
Copy Settings	Paper Selection		Paper Type	Any Type	Select the type of paper to use when printing or making copies.
MFP				Plain*	
				Light 60-74g	
				Intermediate 85-95g	
				Mid-Weight 96-110g	
				Heavy 111-130g	
				Extra Heavy 131-175g	
				Cardstock 176-220g	
				Mono Transparency	
				Labels	
				Letterhead	

Table 4-24 Print menu (SFP) or Copy/Print menu (MFP) (continued)

First level	Second level	Third level	Fourth Level	Values	Description
				Envelope	
				Preprinted	
				Prepunched	
				Colored	
				Bond	
				Recycled	
				Rough	
				HP EcoFFICIENT	
				Light Bond	
Copy Settings MFP	Paper Selection		Paper Tray	Automatically detect* Manually Feed Tray 1 Tray 2	Select which tray to use when printing or making copies.
Copy Settings MFP	Booklet	Booklet Format		Enabled Disabled*	Select to have Booklet Format off or on.
Copy Settings MFP	Booklet	Booklet Format	Borders on each page	Enabled Disabled*	Select to have borders printed on the page.
Copy Settings MFP	Content Orientation			Portrait* Landscape	Specify the way the content of the original document is placed on the page.
Copy Settings MFP	Pages per Sheet			One* Two Four	Select how many pages to print on one sheet.
Copy Settings MFP	Page Order			Right, then down Down, then right	Select to print the pages in rows or columns.
Copy Settings MFP	Add page borders			Enabled Disabled*	Select the <a href="#">Add page borders</a> checkbox to add borders to the pages.
Copy Settings MFP	Image Adjustment	Darkness		1 - (Lighter) 2 3 4 5* 6 7	Adjust to increase or decrease the amount of white and black in the colors.

Table 4-24 Print menu (SFP) or Copy/Print menu (MFP) (continued)

First level	Second level	Third level	Fourth Level	Values	Description
				8	
				9 - (Darker)	
Copy Settings	Image Adjustment	Contrast		1 - (Less)	Adjust to increase or decrease the difference between the lightest and darkest color on the page.
MFP				2	
				3	
				4	
				5*	
				6	
				7	
				8	
				9 - (More)	
Copy Settings	Image Adjustment	Background Cleanup		1 - (Normal)	Adjust if you are having trouble copying a faint image.
MFP				2	
				3*	
				4	
				5*	
				6	
				7	
				8	
				9 - (Cleaner)	
Copy Settings	Image Adjustment	Sharpness		1 - (Less)	Adjust to sharpen or soften the image.
MFP				2	
				3*	
				4	
				5 - (More)	
Copy Settings	Optimize Text/Picture			Text	Select to optimize for the output of a particular type of content.
MFP				Mixed*	
				Printed picture	
				Photograph	
Copy Settings	Edge-to-Edge			Normal (recommended)	When the Edge-to-Edge feature is enabled, the product minimizes margins and prints as close to the edge of the paper as possible.
MFP				Edge-to-Edge output	

Table 4-24 Print menu (SFP) or Copy/Print menu (MFP) (continued)

First level	Second level	Third level	Fourth Level	Values	Description
Copy Settings MFP	Erase Edges	Use inches		Enabled*	Use the Erase Edges feature to remove blemishes, such as dark borders or staple marks, by cleaning the edges of the scanned image.  Disabling Use inches changes the measurements to millimeters.
				Disabled	
Copy Settings MFP	Erase Edges	Front Side		Specify a different width for each edge	Sets the width of the edge to clean.
				Apply same width to all edges*	
				All edges value	
				Default = 0.00	
Copy Settings MFP	Erase Edges	Back Side		Specify a different width for each edge	Sets the width of the edge to clean.
				Apply same width to all edges	
				Mirror front side*	
Copy Settings MFP	Collate			Collate on*	When Collate on is selected, each set of copied pages are assembled in the same order as the original document.
				Collate off	
Copy Settings MFP	Multi-feed Detection			Disabled	Use this feature to detect when multiple pages are fed simultaneously into the ADF (automatic document feeder) or sheet-feed scanner.
				Enabled*	
Copy Settings MFP					
Enable Print from USB Drive				Enabled Disabled*	Enables the printer to open a file from a USB drive.
Manage Stored Jobs	Job Sort Order			Job Name* Date*	This option allows you list the jobs either alphabetically or chronologically.
Manage Stored Jobs	Retain Temporary Jobs			Do not retain Personal jobs only	Sets which temporary jobs will be retained in the event of a printer reboot.

Table 4-24 Print menu (SFP) or Copy/Print menu (MFP) (continued)

First level	Second level	Third level	Fourth Level	Values	Description
				All temporary jobs	
Manage Stored Jobs	Temporary Job Storage Limit			1-300 Default = 32	Configure global settings for jobs that are stored in the printer memory.  The <a href="#">Temporary Job Storage Limit</a> feature specifies the number of temporary jobs that can be stored on the printer. The maximum allowed value is 300.
Manage Stored Jobs	Temporary Job Storage Retention			Off 30 minutes 1 hour 4 hours 1 day 1 week 4 weeks 3 days	Configure global settings for temporary jobs that are stored in the printer memory.  The <a href="#">Temporary Stored Job Retention</a> feature specifies the amount of time temporary jobs can be stored on the printer.
Manage Stored Jobs	Standard Stored Job Retention			Off 30 minutes 1 hour 4 hours 1 day 1 week 4 weeks 3 days	Configure global settings for jobs that are stored in the printer memory.  The <a href="#">Standard Stored Job Retention</a> feature specifies the amount of time jobs can be stored on the printer.
Default Print Options	Number of Copies			Range: 1-32000 Default = 1	Sets the default number of copies for a copy job. This default applies when the <a href="#">Copy</a> function or the <a href="#">Quick Copy</a> function is initiated from the printer Home screen.
Default Print Options	Paper Selection	Paper size Paper type Paper tray		Select from a list of sizes that the printer supports.	Configures the default paper size, type and tray used for print jobs.
Default Print Options	Default Custom Paper Size	X Dimension		Range: 3.00-8.50 inches	Configures the default paper size

Table 4-24 Print menu (SFP) or Copy/Print menu (MFP) (continued)

First level	Second level	Third level	Fourth Level	Values	Description
				Default = 8.5 inches	that is used when the user selects <b>Custom</b> as the paper size for a print job.
Default Print Options	Default Custom Paper Size	Y Dimension		Range: 5.00-14.00 inches Default = 14 inches	Configures the default paper size that is used when the user selects <b>Custom</b> as the paper size for a print job.
Default Print Options	Default Custom Paper Size	Use Inches		Enabled* Disabled	
Default Print Options	Output Sides			1-sided* 2-sided	Use to indicate whether the original document is printed on one or both sides.
Default Print Options	Edge-to-Edge			Normal (recommended)* Edge-to-Edge output	Use to avoid shadows that can appear along the edges of copies when the original document is printed close to the edges.
Default Print Options	Resolution			FastRes 1200* ProRes 1200	Use to select the level of desired print quality.
Default Print Options	Resolution	Economode		Enabled Disabled*	Text is printed using less toner. This setting is useful when you are printing drafts. You can turn on this option independently of other print quality settings.
PCL and Postscript Settings	Courier Font			Regular* Dark	Select which version of the Courier font you want to use. The factory default setting is <b>Regular</b> , which uses an average stroke width. The <b>Dark</b> setting can be used if a heavier Courier font is needed.
PCL and Postscript Settings	Wide A4			Enabled Disabled*	Changes the printable area of A4-size paper. If you enable this option, eighty 10-pitch characters can be printed on a single line of A4 paper.



Table 4-24 Print menu (SFP) or Copy/Print menu (MFP) (continued)

First level	Second level	Third level	Fourth Level	Values	Description
PCL and Postscript Settings	Print PS Errors			Enabled	Use this feature to select whether a PostScript (PS) error page is printed when the printer encounters a PS error.
				Disabled*	
PCL and Postscript Settings	Print PDF Errors			Enabled	Selects whether a PDF error page is printed when the printer encounters a PDF error.
				Disabled*	
PCL and Postscript Settings	Personality			Automatic*	Configures the default print language or personality for the printer. Normally you should not change the printer language. If you change the setting to a specific printer language, the printer does not automatically switch from one language to another unless specific software commands are sent to it.
				PCL	
				PS	
				PDF	
PCL and Postscript Settings	PCL	Font Settings	Font Source	Internal	Selects the font source for the user-soft default font. The list of available options varies depending on the installed printer options.
				Disk resident*	
PCL and Postscript Settings	PCL	Font Settings	Font Number	Range: 0-110	Specifies the font number for the user-soft default font using the source that is specified in the <a href="#">Font Source</a> menu. The printer assigns a number to each font and lists it on the PCL font list. The font number displays in the Font # column of the printout.
				Default = 0	
PCL and Postscript Settings	PCL	Font Settings	Font Pitch	Range: 0.44-99.99	If the <a href="#">Font Source</a> option and the <a href="#">Font Number</a> setting indicate a contour font, then use this feature to select a default pitch (for a fixed-spaced font).
				Default = 10	

Table 4-24 Print menu (SFP) or Copy/Print menu (MFP) (continued)

First level	Second level	Third level	Fourth Level	Values	Description
PCL and Postscript Settings	PCL	PCL Settings	Form Length	Range: 5-128 lines Default = 60	Controls the PCL print-command options. PCL is a set of printer commands that HP developed to provide access to printer features.  Use the <a href="#">Form Length</a> feature to select the user soft -default vertical form length.
PCL and Postscript Settings	PCL	PCL Settings	Orientation	Portrait* Landscape	Select the orientation that is most often used for copy or scan originals. Select the <a href="#">Portrait</a> option if the short edge is at the top or select the <a href="#">Landscape</a> option if the long edge is at the top.
PCL and Postscript Settings	PCL	PCL Settings	Symbol Set	Select from a list of symbol sets.	Select any one of several available symbol sets from the control panel. A symbol set is a unique grouping of all the characters in a font. The factory default value for this option is PC-8. Either PC-8 or PC-850 are recommended for line-draw characters.
PCL and Postscript Settings	PCL	PCL Settings	Append CR to LF	Enabled Disabled*	When enabled, this option appends a carriage return to each line feed encountered in backwards-compatible PCL jobs.
PCL and Postscript Settings	PCL	PCL Settings	Suppress Blank Pages	Enabled Disabled*	This option is for users who are generating their own PCL, which could include extra form feeds that would cause blank pages to be printed. When the <a href="#">On</a> option is selected, form feeds are ignored if the page is blank.
PCL and Postscript Settings	PCL	PCL Settings	Media Source Mapping	Standard* Classic	Use to select and maintain input trays by number when you are not using the printer

Table 4-24 Print menu (SFP) or Copy/Print menu (MFP) (continued)

First level	Second level	Third level	Fourth Level	Values	Description
					<p>driver, or when the software program has no option for tray selection. The following options are available:</p> <p><b>Standard:</b> Tray numbering is based on newer HP LaserJet models.</p> <p><b>Classic:</b> Tray numbering is based on HP LaserJet 4 and older models.</p>
Print Quality	General	Toner Density		A sliding bar appears with the indicator set in the middle between <a href="#">Less</a> and <a href="#">More</a> .	Lighten or darken the print on the page by changing the toner density setting.
Print Quality	General	REt		Disabled Enabled*	Use this setting to enable or disable Resolution Enhancement technology (REt), which produces smoother angles, curves, and edges.
Print Quality	Image Registration	Tray	Tray 1 Tray 2 Tray 3 Tray 4 Tray 5  Depends upon the number of trays installed		Specify tray to be adjusted
Print Quality	Image Registration	Front-side Horizontal Shift Front-side Vertical Shift Back-side Horizontal Shift Back-side Vertical Shift		-5.00 mm to 5.00 mm	<p>Shift the margin alignment to center the image on the page from top to bottom and from left to right. You can also align the image on the front with the image printed on the back.</p> <p>The direction that is perpendicular to the way the paper passes through the printer is referred to as X. This is also known as the scan direction. X1 is the scan direction for</p>

Table 4-24 Print menu (SFP) or Copy/Print menu (MFP) (continued)

First level	Second level	Third level	Fourth Level	Values	Description
					a single-sided page or for the second side of a two-sided page. X2 is the scan direction for the first side of a two-sided page.
					The direction that the paper feeds through the printer is referred to as Y. Y1 is the feed direction for a single-sided page or for the second side of a two-sided page. Y2 is the feed direction for the first side of a two-sided page.
					Use the <a href="#">Adjust Tray &lt;X&gt;</a> menu to adjust the registration settings for each tray. Before adjusting these values, print a registration test page. It provides alignment guides in the X and Y directions so you can determine which adjustments are necessary. You can adjust values for X1 Shift, X2 Shift, Y1 Shift, and Y2 Shift.
Print Quality	Image Registration	Print Test Page			Use the <a href="#">Print Test Page</a> option to print a page to test the image registration. It provides alignment guides in the X and Y directions so you can determine which adjustments are necessary.
Print Quality	Auto Sense Behavior	Tray 1		Sense every page Sense first page Sense transparency only	
Print Quality	Auto Sense Behavior	All Other Trays		Sense first page Sense transparency only	
Print Quality	Adjust Paper types	Select from a list of paper types	Print mode	Select from a list of paper types	Changing the <a href="#">Print mode</a> setting is

Table 4-24 Print menu (SFP) or Copy/Print menu (MFP) (continued)

First level	Second level	Third level	Fourth Level	Values	Description
		that the printer supports. The available options are the same for each paper type.		Reset Paper Types	usually the first thing to try to resolve print-quality problems. Problems can include toner not sticking well to the page, a faint image of the page repeated on the same or following page, incorrect gloss level, and so on.
Print Quality	Adjust Paper types	Select from a list of paper types that the printer supports. The available options are the same for each paper type.	Resistance mode	Normal* Up 1 Up 2	Use this setting to correct print quality problems in low-humidity environments and highly resistive paper.  Use the Up options to solve print quality problems that are related to faded images or scattered toner on certain paper types.  The Up options raise the secondary transfer bias.
Print Quality	Adjust Paper types	Select from a list of paper types that the printer supports. The available options are the same for each paper type.	Paper curl mode	Normal* Reduced	Use this setting to reduce paper curl in print jobs.
Print Quality	Optimize	Line Detail		Normal* Off Alternate	Use this setting if you have scattered lines in printed pages.
Print Quality	Optimize	Moisture Control		Normal* Alternate	
Print Quality	Optimize	Envelope control		Normal Reduced Temp	
Print Quality	Optimize	Tray 1		Normal Alternate	
Print Quality	Optimize	Background		Normal Alternate	
Print Quality	Optimize	Uniformity Control		Normal Alternate 1	

Table 4-24 Print menu (SFP) or Copy/Print menu (MFP) (continued)

First level	Second level	Third level	Fourth Level	Values	Description
				Alternate 2	
				Alternate 3	
Print Quality	Optimize	Cac03		Off	
				On	
Print Quality	Optimize	Best Normal		Off	
				On	
Print Quality	Optimize	Tracking Control		Off	
				On	
Print Quality	Optimize	Registration		Normal	
				Alternate	
Print Quality	Optimize	Transfer Control		Normal	
				Alternate 1	
Print Quality	Optimize	Moisture Control		Normal	
				Alternate	
Print Quality	Optimize	Reset Optimize		Reset	
Print Quality	Edge Control			Off	
				Light	
				Normal*	
				Maximum	
Manage Trays	Use Requested Tray			Exclusively*	Controls how the printer handles jobs that have specified a specific input tray. Two options are available:  <b>Exclusively:</b> The printer never selects a different tray when the user has indicated that a specific tray should be used, even if that tray is empty.  <b>When available:</b> The printer pulls from another tray if the specified tray is empty, even though the specific tray was indicated for the job.
				When available	
Manage Trays	Manually Feed Prompt			Always prompt*	Indicate whether a prompt should appear when the type or size for
				Prompt on mismatch	

Table 4-24 Print menu (SFP) or Copy/Print menu (MFP) (continued)

First level	Second level	Third level	Fourth Level	Values	Description
					<p>a job does not match the specified tray and the printer pulls from the multipurpose tray instead. Two options are available:</p> <p><b>Always:</b> A prompt always displays before using the multipurpose tray.</p> <p><b>Prompt on mismatch:</b> A prompt displays only if the size or type do not match or the tray is empty.</p>
Manage Trays	Size/Type Prompt			<p>Display*</p> <p>Do not display</p>	<p>Controls whether the tray configuration message displays whenever a tray is closed. Two options are available:</p> <p><b>Display:</b> Shows the tray configuration message when a tray is closed. The user is able to configure the tray settings directly from this message.</p> <p><b>Do not display:</b> Prevents the tray configuration message from automatically appearing.</p>
Manage Trays	Use Another Tray			<p>Allow*</p> <p>Do not allow</p>	<p>Use to turn on or off the control panel prompt to select another tray when the specified tray is empty. Two options are available:</p> <p><b>Allow:</b> When this option is selected the user is prompted to either add paper to the selected tray or to choose a different tray. This is the factory default.</p> <p><b>Do not allow:</b> When this option is selected, the user is not given the option of selecting</p>

Table 4-24 Print menu (SFP) or Copy/Print menu (MFP) (continued)

First level	Second level	Third level	Fourth Level	Values	Description
					a different tray. The printer prompts the user to add paper to the tray that was initially selected.
Manage Trays	Alternative Letterhead Mode			Off* On	Use to load letterhead or preprinted paper into the tray the same way for all print jobs, whether you are printing to one side of the sheet or to both sides of the sheet. When this option is selected, load the paper as you would for printing on both sides. See the user documentation that came with the printer for instructions about loading letterhead for printing on both sides. When this option is selected, the printer speed slows to the speed required for printing on both sides.
Manage Trays	Duplex Blank Pages			Automatic* Always	Controls how the printer handles two-sided jobs (duplexing). Two options are available:  <i>Automatic:</i> Choose this option to skip printing blank sides during a two-sided print job. The printer can print jobs faster when blank sides are skipped.  <i>Always:</i> Choose this option to print all sides of a two-sided job, even if one side is blank. This might be preferable for certain jobs that use paper types such as letterhead or prepunched paper.
Manage Trays	Override A4/Letter			Yes* No	Prints on letter-size paper when an A4 job is sent but no A4-size paper is loaded in the



Table 4-24 Print menu (SFP) or Copy/Print menu (MFP) (continued)

First level	Second level	Third level	Fourth Level	Values	Description
					printer (or to print on A4 paper when a letter-size job is sent but no letter-size paper is loaded). This option will also override A3 with ledger-size paper and ledger with A3-size paper.

## Defeating interlocks

Learn about defeating printer interlocks.

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

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

### Defeat the front (cartridge) door interlock

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

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

Figure 4-22 Defeat the front (cartridge) door interlock



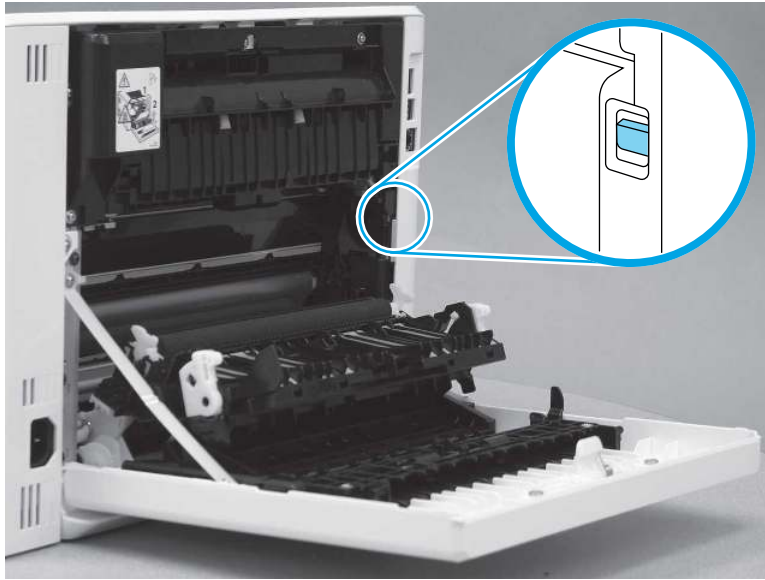
### Defeat the rear door interlock

1. Open the rear door.

2. Insert a folded piece of paper into the slot.

 **TIP:** It might be easier to use a small flat-blade screwdriver to defeat the rear door interlock.

**Figure 4-23** Defeat the rear door interlock



## LED Diagnostics (formatter)

Learn about troubleshooting the printer using formatter LEDs.

### Network LEDs

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.

Configure link speed setting from a SFP control panel

1. From the [Home](#) screen on the printer control panel, use the arrow keys to navigate to [Settings](#), and then press the [OK](#) button.
2. Use the arrow buttons to scroll to [Networking](#), and then press the [OK](#) button.
3. Use the arrow buttons to scroll to [Ethernet](#), and then press the [OK](#) button.
4. Use the arrow buttons to scroll to [Link Speed](#), and then press the [OK](#) button.
5. Use the arrow buttons to scroll to the desired link speed setting, and then press the [OK](#) button.
6. Use the arrow buttons to scroll to [Done](#) (at the bottom of the control-panel display), and then press the [OK](#) button.

Configure link speed setting from an MFP control panel

1. From the [Home](#) screen on the printer control panel, scroll to and touch the [Settings](#) button.
2. Open the following menus:

- [Networking](#)
- [Ethernet](#)
- [Link Speed](#)

3. Touch and then touch the desired link speed setting, and then touch the [Done](#) button.

## Disable cartridge check

Learn about the disable cartridge check troubleshooting diagnostic.



**NOTE:** This item appears in the control-panel menus. However, the function is not available for this printer.

## Print/stop test

Learn about the print/stop test troubleshooting diagnostic.

Use this diagnostic test to isolate the cause of problems such as image-formation defects and jams within the engine.

During this test, stop the paper anywhere along the printer paper path. The test can be programmed to stop printing internal pages or an external print job when the paper reaches a certain position. The test can also be programmed to stop from 0 to 60,000 ms. If the timer is set to a value that is greater than the job-print time, the printer can recover in one of two ways.

Printer recovery (print/stop test)

- After the print job is completed press the [OK](#) button to return to the [Troubleshooting](#) menu before the timer times out.
- After the timer times out, touch the [Stop](#) button. Activate the door switch to restart the engine and return it to a normal state.

Common print/stop test timing millisecond (ms) stops

- **600 ms:** The page has passed the registration area and the leading edge is just short of entering the fuser. The image can be seen on the paper but has not fused. If the defect is visible then the cause might be the drum, transfer roller, or a roller prior to, or in, the registration area.
- **1200 ms:** The leading edge is about 18mm (0.71 in) into the top output bin. The image has gone through the fuser. If the defect was not visible prior to the fuser, and is visible after the fuser, then the fuser it is the likely cause of the print quality defect. Inspect the fuser for damage, debris, or labels stuck to the fuser. Replace the fuser. Discuss media specifications and proper care of the fuser with the customer.

### Print/stop test from a non-touchscreen control panel

1. From the [Home](#) screen on the printer control panel, use the arrow buttons to navigate to [Support Tools](#), and then press the [OK](#) button.
2. Use the arrow buttons to scroll to [Troubleshooting](#), and then press the [OK](#) button.
3. Use the arrow buttons to scroll to [Diagnostic Tests](#), and then press the [OK](#) button.
4. Select [Continue](#) to enter **Maintenance mode**.
5. Use the arrow buttons to scroll to [Print/Stop Test](#), and then press the [OK](#) button.

### Print/stop test from a touchscreen control panel

1. From the [Home](#) screen on the printer control panel, scroll to and touch the [Support Tools](#) button.
2. Open the following menus:
  - [Troubleshooting](#)
  - [Diagnostic Tests](#)
  - [Print/Stop Test](#)
3. Enter a range, and then touch the [OK](#) button.

## Individual component diagnostics

Learn about printer individual component diagnostics.

### Paper path test

Learn about the paper path test troubleshooting diagnostic.

This diagnostic test generates one or more test pages. Use these pages to isolate the cause of jams.

To isolate a problem, specify which input tray to use, and specify the number of copies to print. Print multiple copies to help isolate intermittent problems. The following options become available after beginning the diagnostic feature:

- [Print Test Page](#): Run the paper-path test from the default settings: Tray 2, no duplex, and one copy. To specify other settings, scroll down the menu, and select the setting, and then scroll back up and select [Print Test Page](#) to start the test.
- [Source Tray](#): Select Tray 1, Tray 2, or the optional tray.
- [Number of Copies](#): Set the numbers of copies to be printed; the choices are 1, 10, 50, 100, or 500.

### Paper path test from a SFP control panel

1. From the [Home](#) screen on the printer control panel, use the arrow buttons to navigate to [Support Tools](#), and then press the [OK](#) button.
2. Use the arrow buttons to scroll to [Troubleshooting](#), and then press the [OK](#) button.
3. Use the arrow buttons to scroll to [Diagnostic Tests](#), and then press the [OK](#) button.
4. Select [Continue](#) to enter **Maintenance mode**.
5. Use the arrow buttons to scroll to [Paper Path Test](#), and then press the [OK](#) button.

### Paper path test from an MFP control panel

1. From the [Home](#) screen on the printer control panel, scroll to and touch the [Support Tools](#) button.
2. Open the following menus:
  - [Troubleshooting](#)
  - [Diagnostic Tests](#)
  - [Paper Path Test](#)
3. Select the paper path test options for the test.

## Print/stop test

Learn about the print/stop test troubleshooting diagnostic.

Use this diagnostic test to isolate the cause of problems such as image-formation defects and jams within the engine.

During this test, stop the paper anywhere along the printer paper path. The test can be programmed to stop printing internal pages or an external print job when the paper reaches a certain position. The test can also be programmed to stop from 0 to 60,000 ms. If the timer is set to a value that is greater than the job-print time, the printer can recover in one of two ways.

Printer recovery (print/stop test)

- After the print job is completed press the **OK** button to return to the **Troubleshooting** menu before the timer times out.
- After the timer times out, touch the **Stop** button. Activate the door switch to restart the engine and return it to a normal state.

Common print/stop test timing millisecond (ms) stops

- **600 ms:** The page has passed the registration area and the leading edge is just short of entering the fuser. The image can be seen on the paper but has not fused. If the defect is visible then the cause might be the drum, transfer roller, or a roller prior to, or in, the registration area.
- **1200 ms:** The leading edge is about 18mm (0.71 in) into the top output bin. The image has gone through the fuser. If the defect was not visible prior to the fuser, and is visible after the fuser, then the fuser is the likely cause of the print quality defect. Inspect the fuser for damage, debris, or labels stuck to the fuser. Replace the fuser. Discuss media specifications and proper care of the fuser with the customer.

### Print/stop test from a non-touchscreen control panel


1. From the **Home** screen on the printer control panel, use the arrow buttons to navigate to **Support Tools**, and then press the **OK** button.
2. Use the arrow buttons to scroll to **Troubleshooting**, and then press the **OK** button.
3. Use the arrow buttons to scroll to **Diagnostic Tests**, and then press the **OK** button.
4. Select **Continue** to enter **Maintenance mode**.
5. Use the arrow buttons to scroll to **Print/Stop Test**, and then press the **OK** button.

### Print/stop test from a touchscreen control panel

1. From the **Home** screen on the printer control panel, scroll to and touch the **Support Tools** button.
2. Open the following menus:
  - **Troubleshooting**
  - **Diagnostic Tests**
  - **Print/Stop Test**
3. Enter a range, and then touch the **OK** button.


## Paper path sensors test

Learn about the paper path sensors test troubleshooting diagnostic.

 **NOTE:** This item appears in the control-panel menus. However, the function is not available for this printer.


## Individual component test

Learn about the individual component test troubleshooting diagnostic.

 **NOTE:** This item appears in the control-panel menus. However, the function is not available for this printer.


## Manual sensor test

Learn about the manual sensor test troubleshooting diagnostic.

 **NOTE:** This item appears in the control-panel menus. However, the function is not available for this printer.

## Tray/bin manual sensor test

Learn about the tray/bin manual sensor test troubleshooting diagnostic.

 **NOTE:** This item appears in the control-panel menus. However, the function is not available for this printer.

## Diagrams: Block diagrams

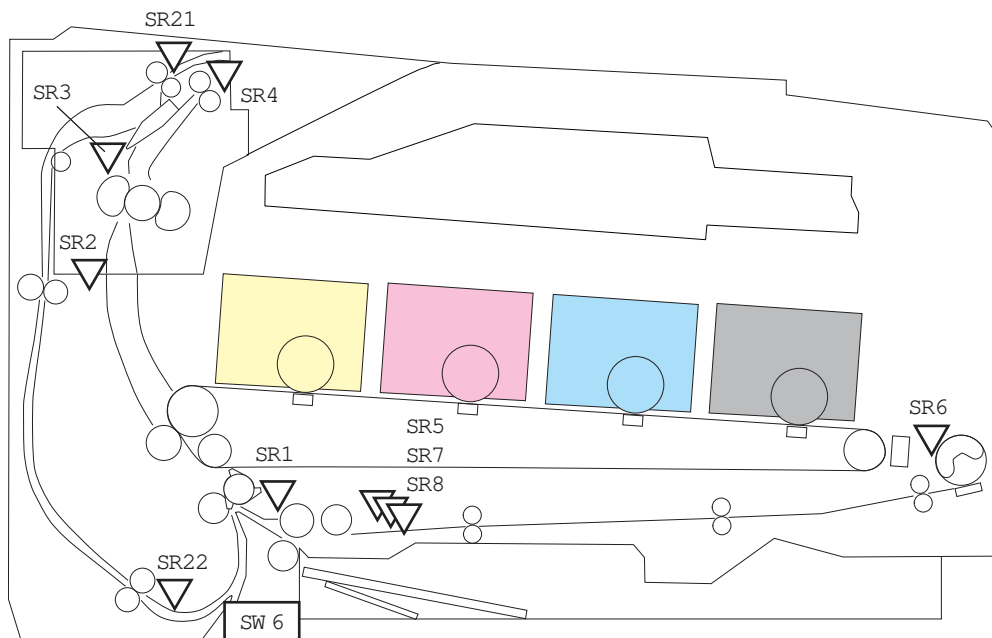
View block diagrams for the printer.

## Sensors and switches

View printer and paper feeder sensor and switch diagrams.

### Sensors and switches (printer base)

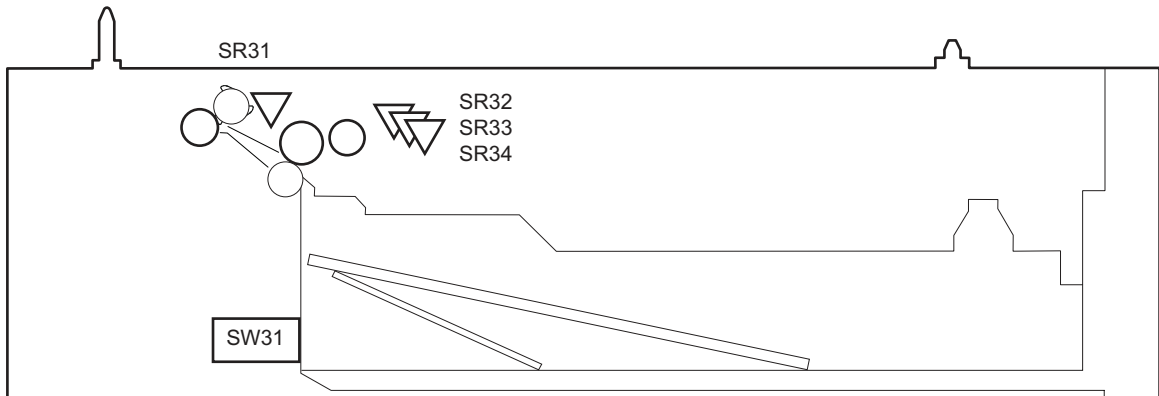
**Figure 4-24** Sensors and switches (printer base)



Item	Description	Item	Description
SR1	Registration sensor	SR7	Tray media surface sensor
SR2	Loop sensor	SR8	Lifter sensor
SR3	Fuser output sensor	SR21	Duplex switchback sensor
SR4	Output bin media-full sensor	SR22	Duplex re-pickup sensor
SR5	Tray media out sensor	SW6	Tray detection switch
SR6	Tray 1 media out sensor		

### Sensors and switches (550-sheet paper feeder)

Figure 4-25 Sensors and switches (550-sheet paper feeder)



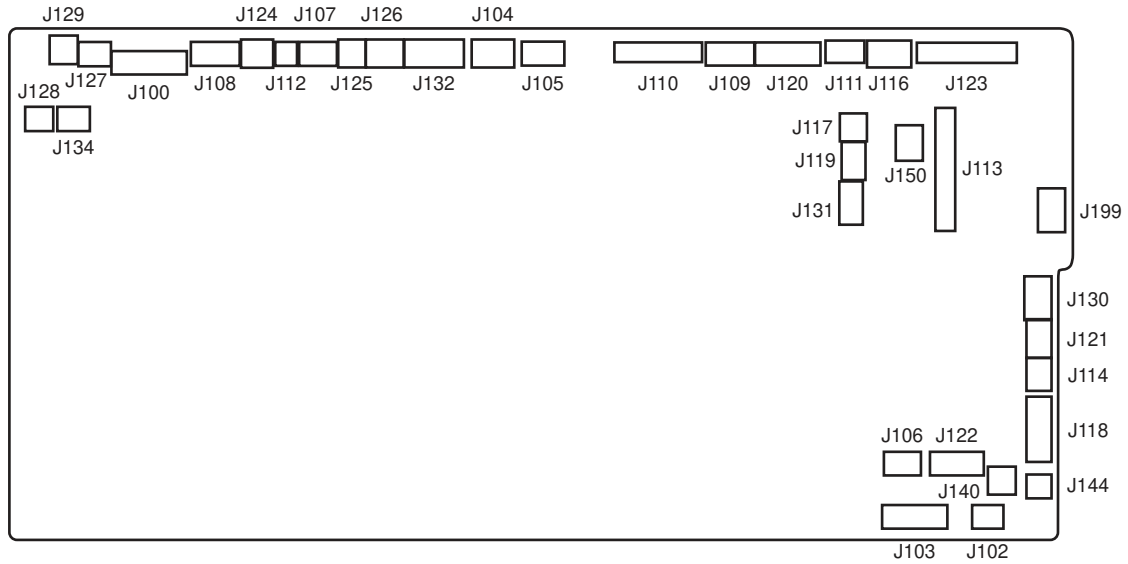
Item	Description
SR31	Feed sensor
SR32	Tray media surface sensor
SR33	Lifter sensor
SR34	Tray media output sensor
SW31	Tray detection switch

### Printed circuit assembly (PCA) connector locations

View printed circuit assembly (PCA) diagrams.

#### DC controller PCA connections

**Figure 4-26** DC controller PCA connections



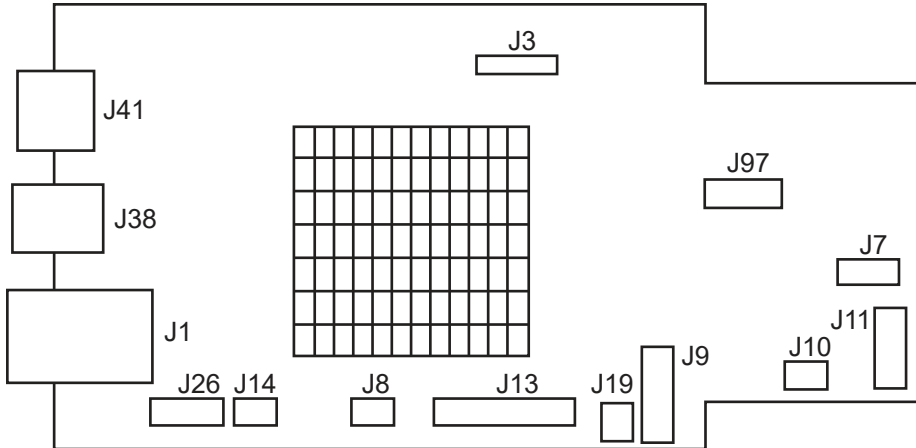
Item	Description	Item	Description
J100	Formatter	J120	Memory chip
J102	Registration sensor	J121	Environment sensor
J103	Tray media out sensor Lifter sensor Tray media surface sensor	J122	Paper feeder
J104	DC Controller	J123	Cyan/black laser assembly
J105	Low-voltage power supply	J124	Fuser
J106	Intermediate transfer belt (ITB)	J125	Fuser
J107	Output bin media-full sensor	J126	Fuser
J108	Loop sensor Fuser output sensor	J127	Fuser
J109	Fuser power supply	J128	Duplex re-pickup clutch
J110	Yellow/magenta laser assembly	J129	Fuser
J111	Scanner motor	J130	Not used
J112	Fuser pressure release detection switch	J131	Not used
J113	Driver PCA	J132	Formatter
J114	Tray 1 media out sensor	J134	Duplex re-pickup sensor
J116	Low-voltage power supply	J140	Lifter solenoid
J117	Front door switch	J144	Tray detection switch
J118	Registration density sensor	J150	Front door switch 1



Item	Description	Item	Description
J119	Power supply switch	J199	DC Controller

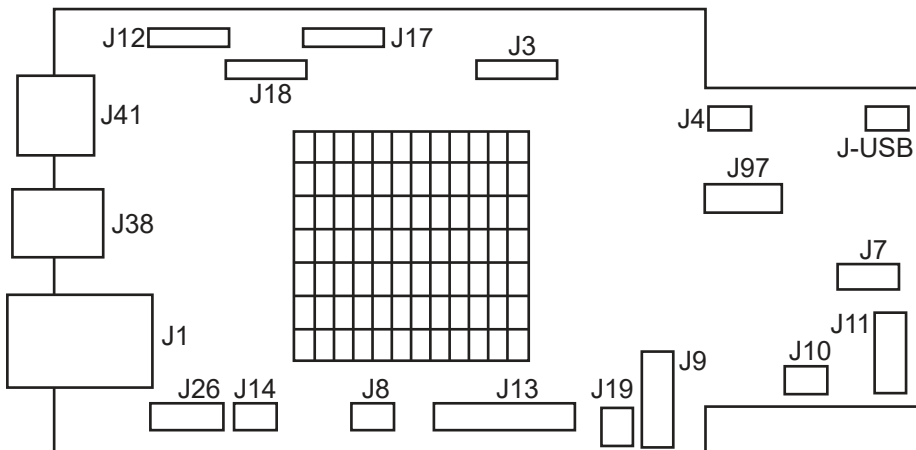
### Formatter PCA connections

Figure 4-27 Formatter PCA connections (SFP)



Item	Description	Item	Description
J1	Ethernet port	J3	Control-panel FFC
J7	Trusted platform module (TPM)	J8	DC controller
J9	Low-voltage power supply (LVPS)	J10	Empty
J11	Island of Data (IOD)	J13	Empty
J14	Empty	J19	Empty
J26	Empty	J38	USB port (direct computer connection)
J41	USB port (job storage or accessory connection)	J97	embedded Multi-Media Card (eMMC)

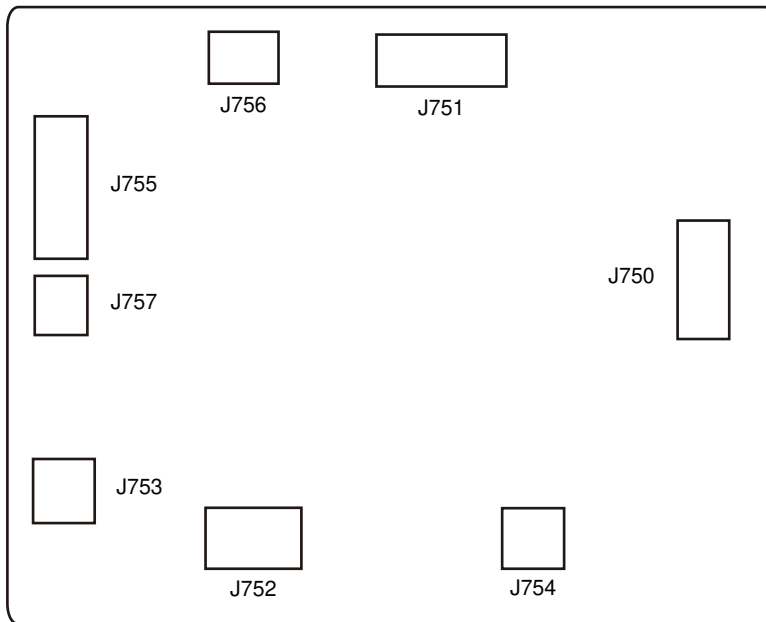
Figure 4-28 Formatter PCA connections (MFP)



Item	Description	Item	Description
J1	Ethernet port	J3	Control-panel FFC
J4	Fax FFC	J7	Trusted platform module (TPM)
J8	DC controller	J9	Low-voltage power supply (LVPS)
J10	Empty	J11	Empty
J12	Document feeder	J13	Empty
J14	Empty	J17	Sub scanner assembly
J18	Sub scanner assembly	J19	Empty
J26	Empty	J38	USB port (direct computer connection)
J41	USB port (job storage or accessory connection)	J97	embedded Multi-Media Card (eMMC)
J-USB	Walk-up USB port		

### 550-sheet paper feeder PCA connectors

Figure 4-29 550-sheet paper feeder PCA connectors



Item	Description	Item	Description
J750	DC controller	J754	Tray pickup solenoid
J751	Not used	J755	Tray media surface sensor Lifter sensor Tray media out sensor
J752	Pickup motor	J756	Feed sensor

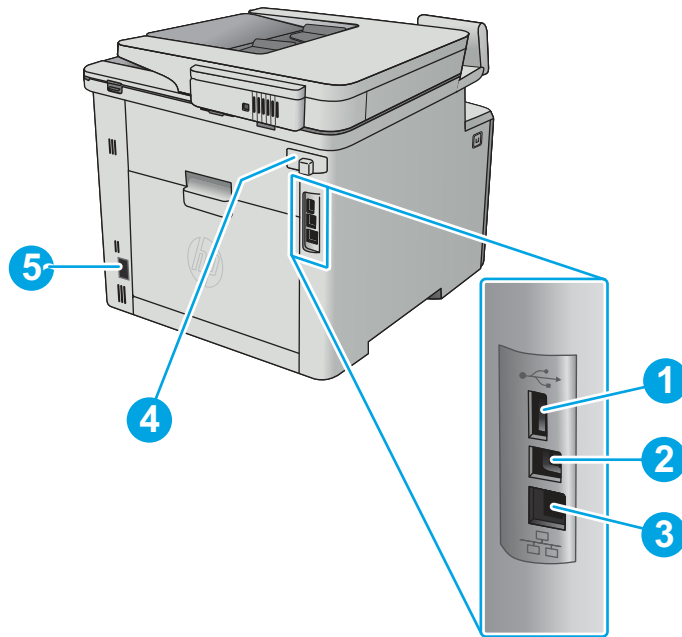
Item	Description	Item	Description
J753	Lifter solenoid	J757	Tray detection switch

## Diagrams: External plug and port locations

View printer external plugs and ports diagrams.

### External plug and port locations

Figure 4-30 External plug and port locations



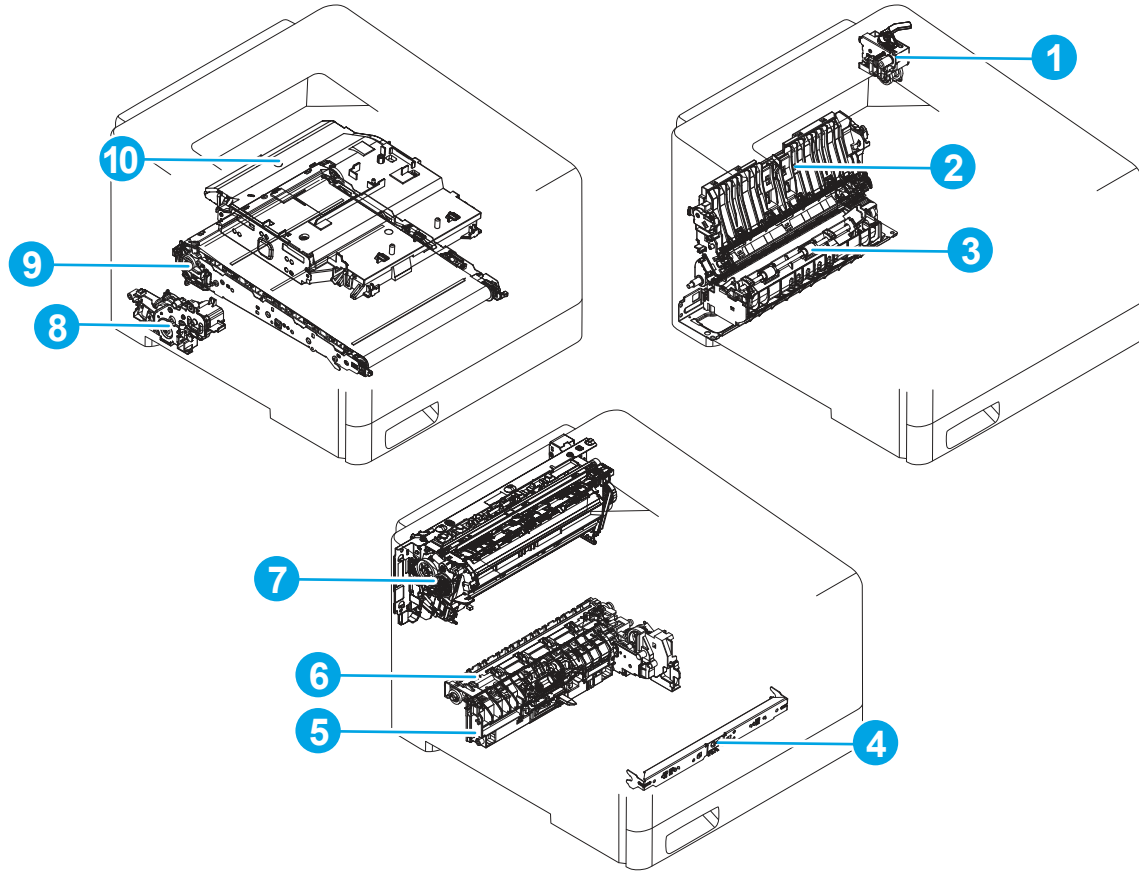
Item	Description
1	USB port (for job storage and private printing)
2	USB port for direct connection to a computer
3	Ethernet port
4	Fax "line in" port (for attaching the fax phone line to the printer) Telephone "line out" port (this port is covered by a plug and is inactive)
5	Power connection

## Diagrams: Major component locations

View printer major component locations diagrams.

### Major components (printer base)

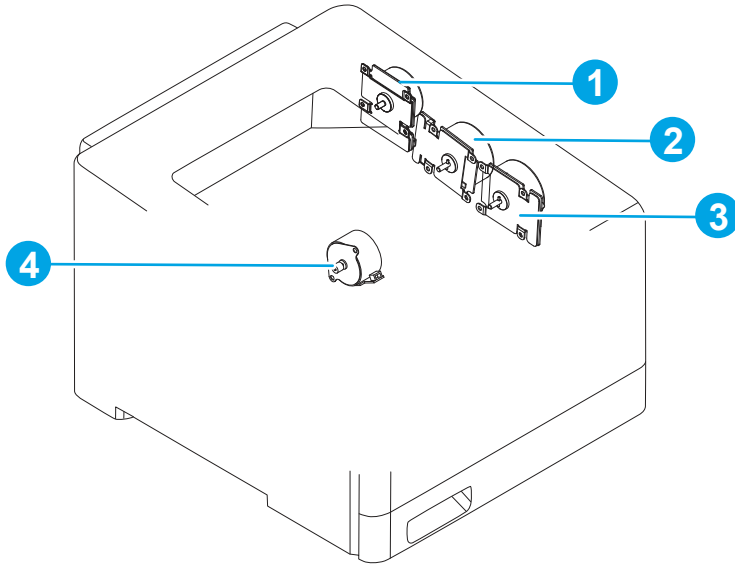
Figure 4-31 Major components (printer base)



Item	Description	Item	Description
1	Duplex drive assembly	6	Registration assembly
2	Secondary transfer assembly	7	Fuser
3	Re-pickup assembly	8	Lifter drive assembly
4	Registration density sensor	9	Intermediate transfer belt (ITB)
5	Tray pickup assembly	10	Laser scanner

### Motors (printer base)

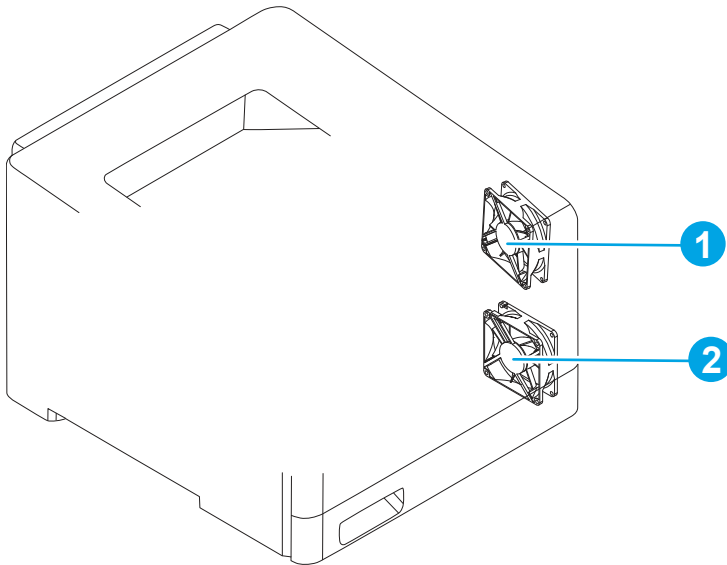
Figure 4-32 Motors (printer base)



Item	Description	Item	Description
1	Fuser motor	3	Developer motor
2	Drum motor	4	Pickup motor

Fans (printer base)

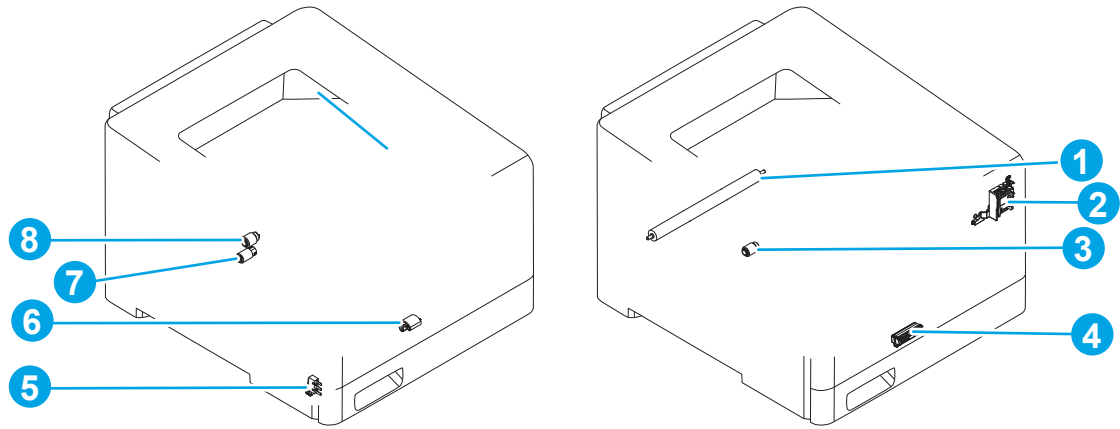
Figure 4-33 Fans (printer base)



Item	Description	Item	Description
1	Cartridge fan	2	Power supply fan

Rollers and power switch (printer base)

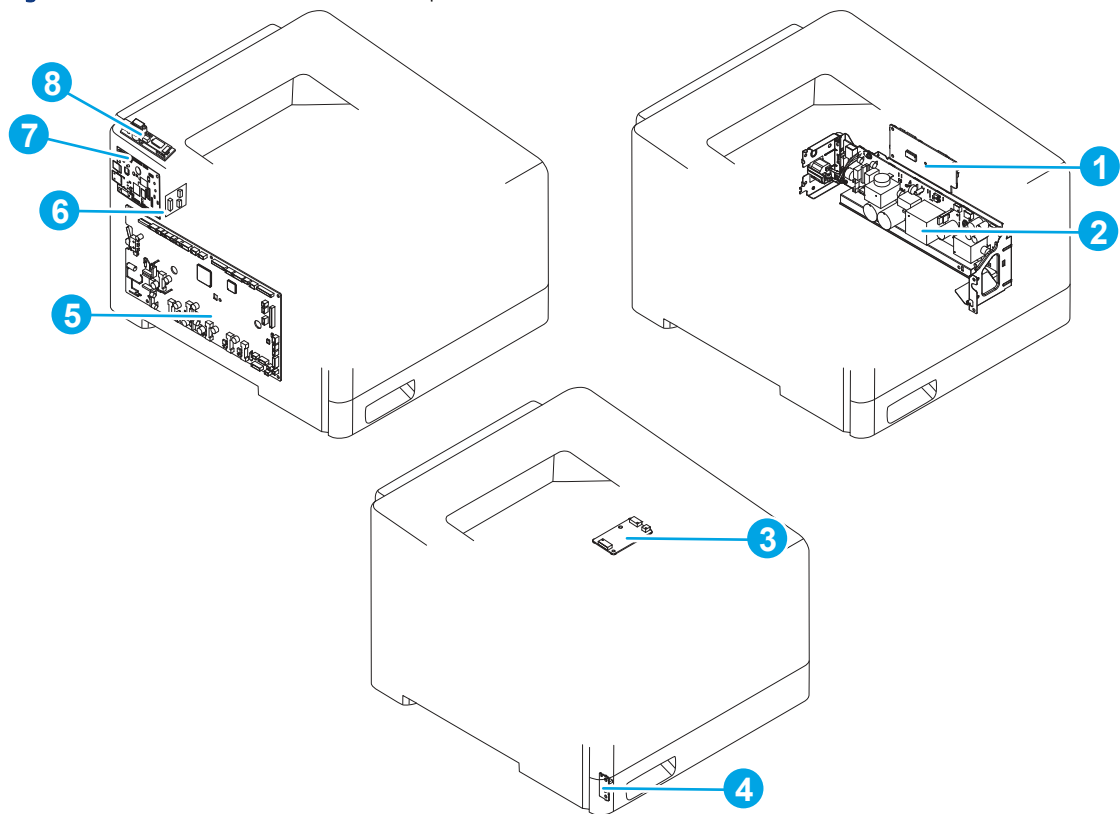
Figure 4-34 Rollers and power switch (printer base)



Item	Description	Item	Description
1	Secondary transfer roller	5	Front door switch 2
2	Power supply switch	6	Tray 1 pickup roller
3	Pickup roller	7	Separation roller
4	Tray 1 separation pad	8	Feed roller

Printed circuit assemblies (printer base)

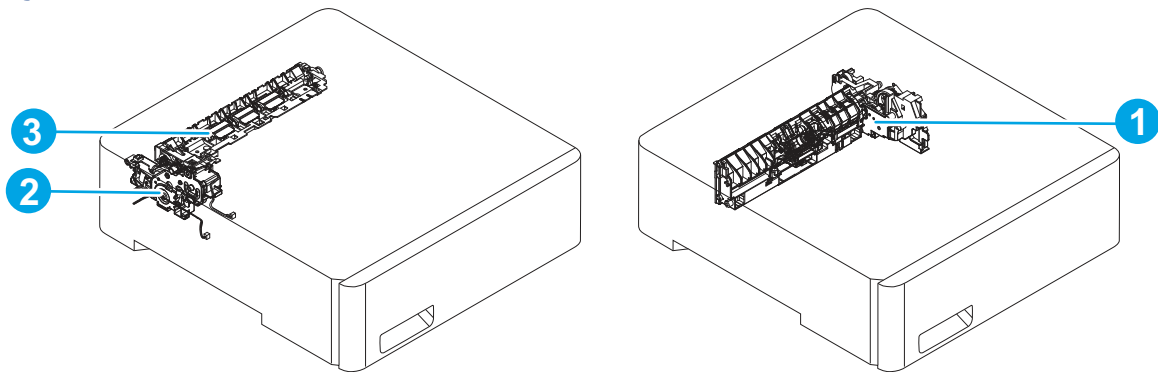
Figure 4-35 Printed circuit assemblies (printer base)



Item	Description	Item	Description
1	Driver PCA	5	DC controller
2	Low-voltage power supply	6	Island of Data (IOD)
3	Memory PCA	7	Formatter
			<b>NOTE:</b> Includes the embedded multi-media card (eMMC) and the trusted platform module (TPM).
4	Environmental sensor	8	Fax PCA

### Major components (550-sheet paper feeder)

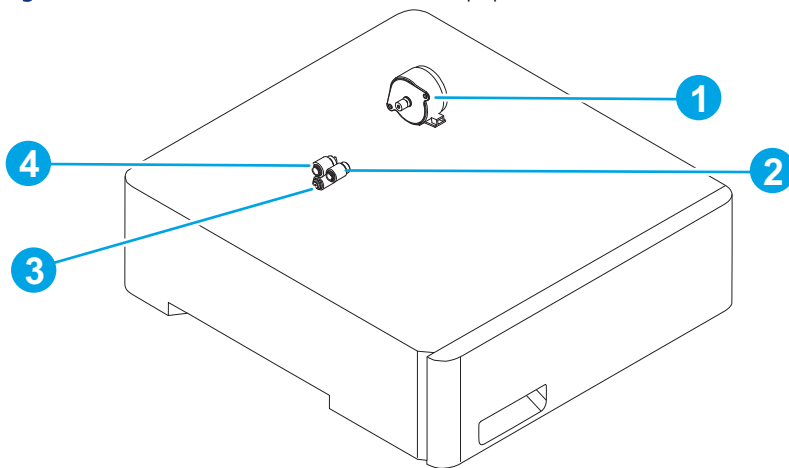
Figure 4-36 Major components (550-sheet paper feeder)



Item	Description
1	Tray pickup assembly
2	Lifter drive assembly
3	Paper feed assembly

### Motors and rollers (550-sheet paper feeder)

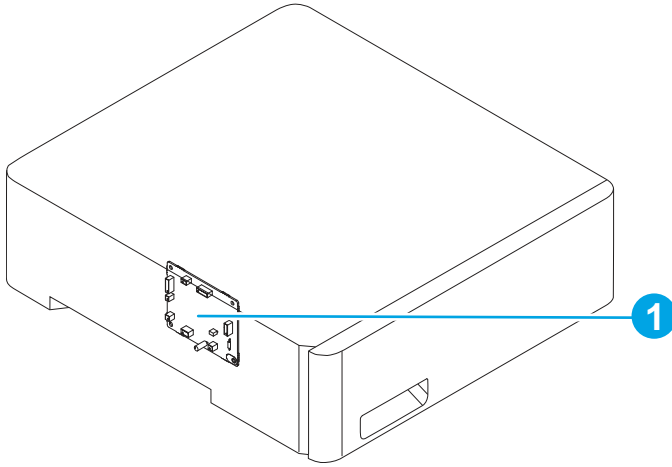
Figure 4-37 Motors and rollers (550-sheet paper feeder)



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

### Printed circuit assemblies (550-sheet paper feeder)

**Figure 4-38** Printed circuit assemblies (550-sheet paper feeder)



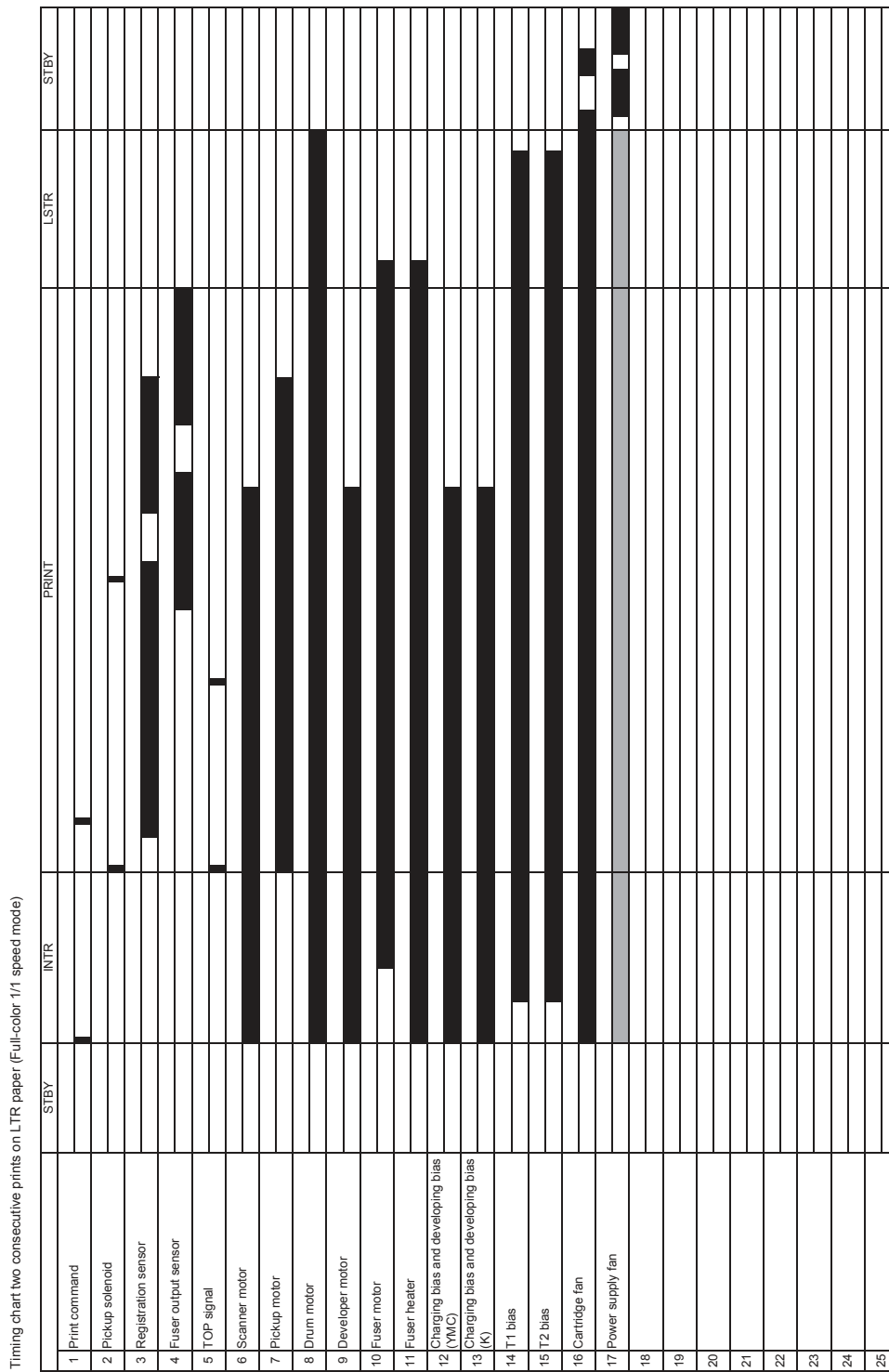
Item	Description
1	Paper feeder controller PCA

### Diagrams: General timing chart

View the printer timing chart diagram.



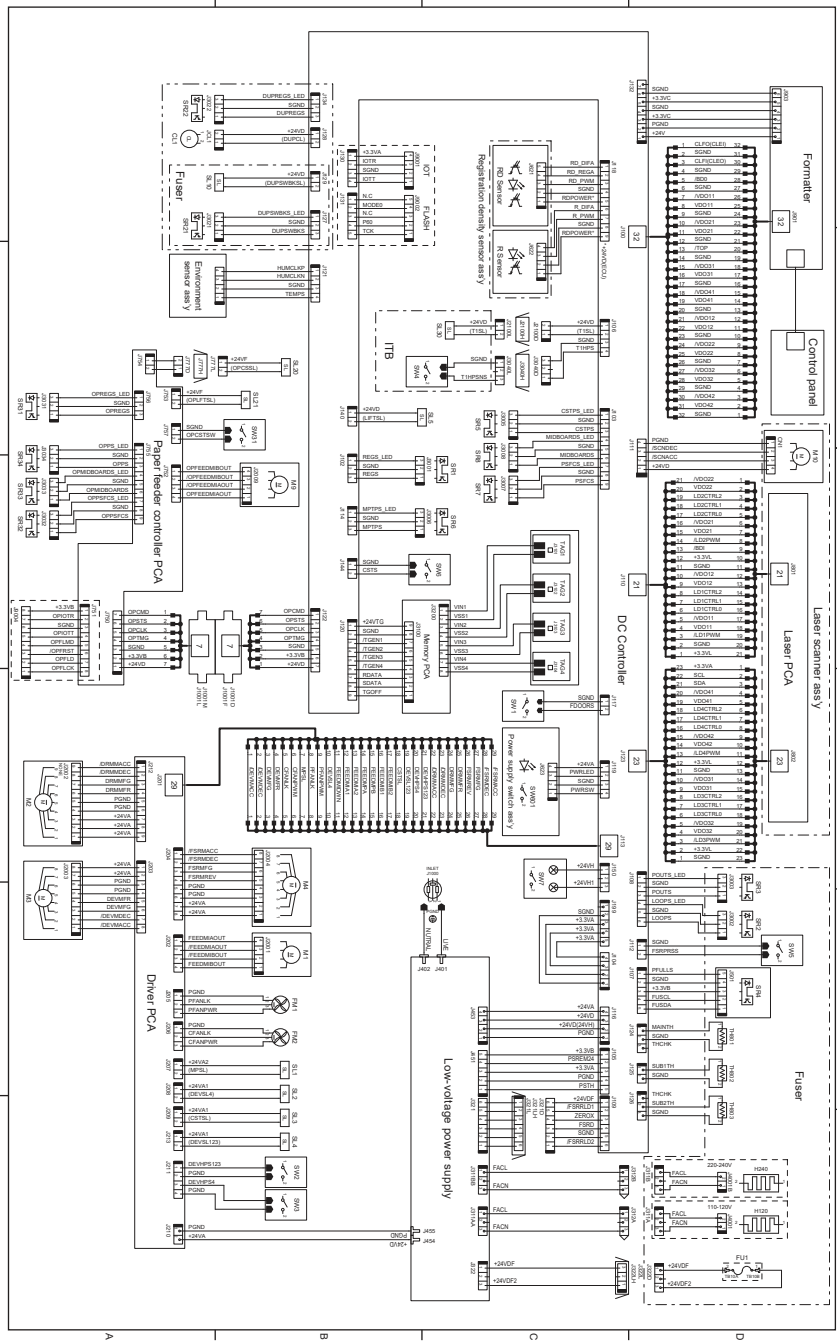
Figure 4-39 Timing chart



## Diagrams: General circuit diagrams

View the printer circuit diagram.

Figure 4-40 General circuit diagram (base printer)



### Internal test and information pages


Learn about printer test and information pages.

### Configuration and Jetdirect page

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

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

Print the configuration page from a non-touchscreen control panel

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

Print the configuration page from a touchscreen control panel


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

Figure 4-41 Configuration page

**Configuration Page**
HP LaserJet M404
Page 1

**1 Device Information**

Product Name: HP LaserJet M505  
 Device Name: HP LaserJet M505  
 Model Number: C8833A  
 CC Controller Version: 1.102  
 Device Serial Number: XXXXXXXXXX  
 Formatter Number: XXXXXXXXXX  
 Firmware Bundle Version: 303a  
 Firmware Revision: 235730\_482546  
 Firmware Datecode: 20140617  
 HP FutureSmart Level: HP FutureSmart 3  
 NFC revision: Not Installed  
 Service ID: 00000  
 Maintenance Kit Interval: 225000  
 Pages Since Last Maintenance: 0  
 PS Job Time-out: 300 seconds  
 Engine Cycles\*: 7  
 \*%: weighted for billing

**2 Installed Personalities and Options**

PCL: 20110402  
 PCLXL: 20110402  
 PDS/SCRIPT: 20110402  
 PDF: 20130501  
 AirPrint: 2040201  
 Internal Disk - Hard Disk: Enabled  
 Serial Number: DC160322  
 Model: Toshiba 99G40C  
 Capacity: 3275 MB  
 Hard Disk Encryption Status: Disk cannot be encrypted  
 HP Printer Trusted Platform Module: Enabled  
 Firmware: 01.02.149.32  
 iK: Imuprint:  
 C4E3140435/93210A0F476798139EFC54E335A9  
 Sdk\_Thumbprint:  
 78D9140435763210A0F476798139EFC54E335A9  
 Encoded HP JetDirect JAS: NP:245593  
 Wireless HP JetDirect J8032E: 0.0.0.0

**3 HP Web Services**

HP Web Services: Disabled  
 ePrint: Disabled

**4 Memory**

Total RAM: 512 MB

**5 Event Log**


Number of Entries in Use: 17		
Three Most Recent Entries:		
Number	Cycles	Event
17	7	13.09.40
16	7	33.02.02
15	7	33.02.02

**6 Security**

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

**7 Paper Trays and Options**

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

Sep13/2019 6:56:00 AM

English (United States)

Item	Description	Item	Description
1	Device information	5	Event log
2	Installed personalities and options	6	Security
3	HP Web services	7	Paper trays and options
4	Memory		

Certain information, such as the firmware date codes, the IP address, and the email gateways, is especially helpful while servicing the printer. This information is on the various configuration pages.

Table 4-25 Important information on the configuration pages

Type of information	Specific information	Configuration page
Firmware Bundle Version	Firmware information	Main configuration page (Device information)

**Table 4-25 Important information on the configuration pages (continued)**

Type of information	Specific information	Configuration page
Firmware Revision	Firmware information	Main configuration page (Device information)
Firmware Datecode	Firmware information	Main configuration page (Device information)
<p>Accessories and internal storage</p> <p>All optional devices that are installed on the printer should be listed on the main configuration page.</p> <p>Separate pages print for the optional paper handling devices and the fax accessory. These pages list more-detailed information for those devices.</p>	Optional installed formatter devices and accessories information	Main configuration page (Installed Personalities and Options)
Memory	Total RAM information	Main configuration page (Memory)
Tray and bin information	Size and type by tray (including installed optional paper feeders) information	Main configuration page (Paper Trays and Options)
Engine cycles, service ID, and cartridge information	Engine information	Main configuration page (Device Information)
Event-log information	Error information	Main configuration page (Event Log)

The second configuration page is the HP embedded Jetdirect page, which contains the following information:

Figure 4-42 HP embedded Jetdirect page

**Embedded Jetdirect Page**
HP LaserJet M406
Page 1

**1** ----- General Information -----  
Status: I/O Card Initializing

Model Number: J8032E  
Firmware Address: ECC2:7265593  
Firmware Version: J6724503215  
Port Config: unknown  
Auto Negotiation: On  
Manufacturing ID: 5107510700\*\*\*\*M  
Build Date: 06/16/2014 05:00:50  
MS Registration: Not Registered

ePrint: Not Applicable  
Email: Not Applicable

**2** ----- Security Settings -----  
IPsec: Disabled  
Secure Web: HTTPS Required  
Cert. Expires: 2005-01-17 02:14 UTC  
SNMP Versions: 1.2  
SNMP Set Only Name: Not Specified  
SNMP Get Only Name: Not Specified/Default  
Access List: Not Specified  
Admin Password: Not Specified  
Announcement Agent: Success  
FIPS: Disabled

**3** ----- Network Statistics -----  
Total Packets Received: 0  
Unicast Packets Received: 0  
Bad Packets Received: 0  
Framing Errors Received: 0  
Total Packets Transmitted: 0  
Unsendable Packets: 0  
Transmit Collisions: 0  
Transmit Late Collisions: 0  
Last Wake: 0000CF00000000000000000000000000  
00000000000000000000000000000000  
00000000000000000000000000000000

**4** ----- TCP/IP -----  
IPv4: Enabled  
IPv6: Loaded  
Host Name: NP1246E93  
IPv4 Domain Name: Not Specified  
IPv6 Domain Name: Not Specified  
Primary DNS Server: Not Specified  
Secondary DNS Server: Not Specified  
DNS(IPv4): Not Specified  
DNS(IPv6): Not Specified  
NTPS Server: Not Specified  
TCP Idle Timeout: 90 sec

**5** ----- IPv4 -----  
Status: Initializing  
IP Address: 0.0.0.0  
Subnet Mask: 0.0.0.0  
Default Gateway: 0.0.0.0  
Config By: Not Configured  
BOOTP/DHCP Server: 0.0.0.0  
TFTP Server: 0.0.0.0  
Bonjour Service Name: Not Specified

**6** ----- IPv6 -----  
Status: Ready  
Link Local: Not Configured  
Stableless: Not Configured  
DHCPv6: Not Configured  
Manual: Not Configured


Sep/13/2019 6:56:00 AM
English (United States)

Item	Description
1	General Information indicates the printer status, model number, hardware firmware version, port select, port configuration, auto negotiation, manufacturing identification, and manufactured date.
2	Security Settings information
3	Network Statistics indicates the total packets received, unicast packets received, bad packets received, framing errors received, total packets transmitted, unsendable packets, transmit collisions, and transmit late collisions.
4	TCP/IP information, including the IP address
5	IPv4 information
6	IPv6 information

## Reports menu

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

**To display:** At the printer control panel, select the [Reports](#) menu.

**To print:** At the printer control panel, touch (MFP) or use the arrow buttons (SFP) to select the printer icon . For the SFP, press the [OK](#) button to print the pages.

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



**NOTE:** The [View](#) option is control-panel type dependent (might not be available).

**Table 4-26 Reports menu**

First level	Second level	Values	Description
Configuration/Status Pages	Settings Menu Map	Cancel	Shows a map of the entire control panel system and the selected values for each setting.
		View	
		Print	
Configuration/Status Pages	Current Settings Page	Cancel	Shows a summary of the current settings for the printer. This might be helpful if you plan to make changes and need a record of the present configuration.
		View	
		Print	
Configuration/Status Pages	Configuration Page	Cancel	Shows the printer settings and installed accessories.
		View	
		Print	
Configuration/Status Pages	How to Connect Page	Cancel	Shows the network information typically needed to connect the printer to a network.
		View	
		Print	
Configuration/Status Pages	Supplies Status Page	Cancel	Shows the approximate remaining life for the supplies; reports statistics on total number of pages and jobs processed, serial number, page counts, and maintenance information.  HP provides approximations of the remaining life for the supplies as a customer convenience. The actual remaining supply levels might be different than the approximations provided.
		View	
		Print	
Configuration/Status Pages	Usage Page	Cancel	Shows a count of all paper sizes that have passed through the printer; lists whether they were simplex or duplex, and reports the page count.
		View	
		Print	

Table 4-26 Reports menu (continued)

First level	Second level	Values	Description
Configuration/Status Pages	File Directory Page	Cancel	Shows the file name and folder name for files that are stored in the printer memory.
		View	
		Print	
Configuration/Status Pages	Web Services Status Page	Cancel	Shows the detected Web Services for the printer.
		View	
		Print	
Fax Reports Fax models only	Fax Activity Log	Cancel	Contains a list of the faxes that have been sent from or received by this printer.
		View	
		Print	
Fax Reports Fax models only	Billing Codes Report	Cancel	Provides a list of billing codes that have been used for outgoing faxes. This report shows how many sent faxes were billed to each code.
		View	
		Print	
Fax Reports Fax models only	Blocked Fax List	Cancel	A list of phone numbers that are blocked from sending faxes to this printer.
		View	
		Print	
Fax Reports Fax models only	Speed Dial List	Cancel	Shows the speed dials that have been set up for this printer.
		View	
		Print	
Fax Reports Fax models only	Fax Call Report	Cancel	A detailed report of the last fax operation, either sent or received.
		View	
		Print	
Other Pages	PCL Font List	Cancel	Prints the available PCL fonts.
		Print	
Other Pages	PS Font List	Cancel	Prints the available PS fonts.
		Print	

## Settings menu

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




**NOTE:** You can perform basic printer setup by using the [Settings](#) menu. Use the HP Embedded Web Server for more advanced printer setup. To open the HP Embedded Web Server, enter the printer IP address or host name in the address bar of a Web browser.

## General menu

Learn about the control-panel [General \(Settings\)](#) menu.



**To display:** At the printer control panel, select the [Settings](#) menu, and then select the [General](#) menu.

**To print:** At the printer control panel, touch (MFP) or use the arrow buttons (SFP) to select the printer icon . For the SFP, press the [OK](#) button to print the pages.

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

**Table 4-27 General menu**

First level	Second level	Third level	Fourth level	Values	Description
Date/Time Settings	Date/Time Format	Date Format		DD/MMM/YYYY MMM/DD/YYYY YYYY/MMM/DD	Use the <a href="#">Date/Time Settings</a> menu to specify the date and time and to configure date/time settings.
Date/Time Settings	Date/Time Format	Time Format		12 hour (AM/PM) 24 hours	Select the format that the printer uses to show the date and time, for example 12-hour format or 24-hour format.
Date/Time Settings	Date/Time	Time Zone		Select the time zone from a list.	
Date/Time Settings	Date/Time	Date		Select the date from a pop-up calendar.	
Date/Time Settings	Date/Time	Time		Select the time from a pop-up keypad.	
Date/Time Settings	Date/Time	Adjust for Daylight Savings		Checkbox	If you are in an area that uses daylight savings time, select the <a href="#">Adjust for Daylight Savings</a> box.
Energy Settings MFP	Sleep Schedule	A list of scheduled events displays.		+ (Add) Edit Delete	Use to configure the printer to automatically wake up or go to sleep at specific times on specific days. Using this feature saves energy.  <b>NOTE:</b> You must configure the date and time settings before you can use this feature.
Energy Settings MFP	Sleep Schedule	A list of scheduled events displays.	Event Type	Wake Sleep	Select whether to add or edit a <a href="#">Wake</a> event or a <a href="#">Sleep</a> event, and then select the time and the days for the wake or sleep event.
Energy Settings MFP	Sleep Schedule	A list of scheduled events displays.	Event Time		

Table 4-27 General menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Energy Settings MFP	Sleep Schedule	A list of scheduled events displays.	Event Days	Select days of the week from a list.	
Energy Settings MFP	Sleep Timer Settings	Sleep Mode/Auto Off After		Range: 1 to 120 minutes Default = 60 minutes	Set the number of minutes after which the printer enters Sleep or Auto Off mode. Use the arrow buttons on the control panel to increase or decrease the number of minutes.
Energy Settings MFP	Wake/Auto On to These Events			All Events* Network port Power button only	
Energy Settings SFP	Sleep Timer Settings	Sleep/Auto Off Timer		Enabled* Disabled	Enable or disable the printer sleep or auto off function.
Energy Settings SFP	Sleep Timer Settings	Sleep Mode/Auto Off After		Range: 1 to 120 minutes Default = 60 minutes	Set the number of minutes after which the printer enters Sleep or Auto Off mode. Use the arrow buttons on the control panel to increase or decrease the number of minutes.
Display Settings	Display Brightness	A sliding bar displays with the indicator set in the middle. Use the arrow keys to select the desired brightness and then select Done.			Use to specify the intensity of the LCD control panel display.
Display Settings	System Sound			On* Off	Use to enable or disable sounds on the printer.
Display Settings	Language Settings	Language		Select from a list of languages that the printer supports.	Use to select a different language for control panel messages and specify the default keyboard layout. When you select a new language, the keyboard layout automatically changes to match the factory default for the selected language.

Table 4-27 General menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Display Settings		Keyboard Layout		Each language has a default keyboard layout. To change it, select from a list of layouts.	Select the default keyboard layout that matches the language you want to use.
Display Settings	Information Screen			Show connection information* Hide connection information	Use this menu item to display or hide connection information on the Home screen.
Display Settings	Inactivity Timeout			Range: 10-300 seconds Default = 60 seconds	Specifies the amount of time that elapses between any activity on the control panel and when the printer resets to the default settings. When the timeout expires, the control panel display returns to the Home menu, and any user signed in to the printer is signed out.
Display Settings	Clearable Warnings			Display during job* Display until cleared	Use this feature to set the period that a clearable warning displays on the control panel. If the <a href="#">On</a> setting is selected, clearable warnings appear until the <a href="#">Clearable Warnings</a> button is pressed. If the <a href="#">Job</a> setting is selected, clearable warnings stay on the display during the job that generated the warning and disappear from the display when the next job starts.
Display Settings	Continuable Events			Auto-continue (10 seconds)* Touch OK to continue	Use this option to configure the printer behavior when the printer encounters certain errors. If the <a href="#">Auto-continue (10 seconds)</a> option is selected, the job will continue after 10 seconds. If the <a href="#">Touch OK to continue</a> option is selected, the job will stop and require the user to touch the <a href="#">OK</a> button before continuing.

Table 4-27 General menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Enable Device USB				Enabled Disabled*	Enables the printer to open a file from a USB drive.
Quiet Mode				Off* On Automatic transition Range: 10-300 pages Default = 10 pages	<p>Quiet Mode slows the printer down to reduce the noise the printer makes when printing.</p> <p>Automatic transition allows you to set a predetermined job size of 10 to 999 pages, and print jobs will print in Quiet Mode for all print jobs up to the predetermined page size.</p>
Jam Recovery				Automatic* Off On	<p>This printer provides a jam recovery feature that reprints jammed pages. Select one of the following options:</p> <p><b>Automatic:</b> The printer attempts to reprint jammed pages when sufficient memory is available. This is the default setting.</p> <p><b>Off:</b> The printer does not attempt to reprint jammed pages. Because no memory is used to store the most recent pages, performance is optimal.</p> <p><b>NOTE:</b> When using this option, if the printer runs out of paper and the job is being printed on both sides, some pages can be lost.</p> <p><b>On:</b> The printer always reprints jammed pages. Additional memory is allocated to store the last few pages printed. This might cause overall performance to suffer.</p>

Table 4-27 General menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Auto Recovery				Enabled Disabled*	If <a href="#">Auto Recovery</a> is enabled and an unrecoverable error occurs in the device firmware, the device automatically turns off and turns back on to recover from the error.
Enable Auto Send				Disabled* Enabled	<p>Browse to the HP Embedded Web Server AutoSend configuration page for advanced set up and the HP online Privacy Statement Information.</p> <p>Use the <a href="#">Enable Auto Send</a> menu to enable or disable the AutoSend feature. The AutoSend feature enables your product to periodically send product configuration information including serial number, event logs, page usage counts and supplies status information to HP web addresses (URLs), or email addresses. Information sent to HP is used to improve products and services, and to monitor the product if you have a relationship with HP that provides you services such as proactive cartridge replacement, pay-per-page contracts, support agreements, or usage tracking.</p>
Hold Off Print Job				Enabled* Disabled	Enable this feature if you want to prevent print jobs from starting while a user is initiating a copy job from the control panel. Held print jobs start printing after the copy job is finished, provided that no


Table 4-27 General menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
					other copy job is in the print queue.
Reset Factory Settings				Address Book (MFP) Copy (MFP) Digital Send (MFP) E-mail (MFP) Fax (MFP) General (MFP) Print (MFP) Security (MFP) Cancel (SFP) Reset (SFP)	Use to restore all printer settings to their factory defaults.

### Scan/Digital Send Settings menu (MFP)

Learn about the control-panel [Scan/Digital Send Settings](#) (MFP) menu.

**To display:** At the printer control panel, select the [Settings](#) menu, and then select the [Scan/Digital Send Settings](#) menu.

**To print:** At the printer control panel, touch (MFP) or use the arrow buttons (SFP) to select the printer icon . For the SFP, press the [OK](#) button to print the pages.

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

Table 4-28 Scan/Digital Send Settings menu (MFP)

First level	Second level	Third level	Fourth level	Values	Description
Scan to Email Settings	E-mail Setup	E-mail Setup Wizard			Use to configure settings that apply to sending documents through email or saving documents to a folder on the network or on a USB multi-drive.
Scan to Network Folder Settings	<b>NOTE:</b> Email Settings only				
Scan to USB Drive Settings					
<b>NOTE:</b> The same options are available for each of these features, except where noted.					The <a href="#">E-mail Setup Wizard</a> feature configures the printer to send scanned images as email attachments. To open the printer HP Embedded Web Server and set up the email notification server, enter the printer IP

Table 4-28 Scan/Digital Send Settings menu (MFP) (continued)

First level	Second level	Third level	Fourth level	Values	Description
					address into a Web browser.
	Default Job Options	Image Preview		Make optional* Require preview Disable preview	<p>Defines the default job options for each function. If you do not specify the job options when creating the job, the default options are used. For complete setup, go to the HP Embedded Web Server by typing the IP address of the printer into a Web browser.</p> <p>Use the <a href="#">Image Preview</a> feature to scan a document and display a preview before completing the job. Select whether this feature is available on the printer.</p> <p><b>Make optional:</b> The feature is optional, depending on the user who is signed in.</p> <p><b>Require preview</b> Previews are required for all users.</p> <p><b>Disable preview:</b> Previews are disabled for all users.</p>
		Default File Name		[Untitled]*	The printer is shipped with a factory default file name of [Untitled] for any scanned files that are sent or saved. Use this feature to specify a different default file name. If you are saving a file to a network folder or USB storage device and a file with the default file name already exists, a number is appended to the file name, for example, [Untitled]001.

Table 4-28 Scan/Digital Send Settings menu (MFP) (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Document File Type		Select from a list of file types.	<p>PDF provides the best overall image and text quality.</p> <p>JPEG is a good choice for most graphics. Most computers have a browser that can view JPEG files. This file type produces one file per page.</p> <p>TIFF is a standard file format that many graphics programs support. This file type produces one file per page.</p> <p>MTIFF: stands for multi-page TIFF. This file type saves multiple scanned pages in a single file.</p> <p>XPS (XML Paper Specification) creates an XAML file that preserves the original formatting of the document and supports color graphics and embedded fonts.</p> <p>PDF/A (Archivable): provides archivable text and image quality.</p> <p><b>NOTE:</b> OCR file types are not supported on this printer unless attached to DSS.</p>
		Optimize Text/Picture		Mixed* Text Printed picture Photograph	<p>Use to optimize the output for a particular type of content. You can optimize the output for text, printed pictures, or a mixture.</p> <p>Mixed: Use to optimize the setting for text and for pictures.</p> <p>Text: Use to optimize the text portion of the copy when text</p>



Table 4-28 Scan/Digital Send Settings menu (MFP) (continued)

First level	Second level	Third level	Fourth level	Values	Description
					and/or pictures are on the original.  <a href="#">Printed picture</a> : Use for line drawings and preprinted images, such as magazine clippings or pages from books.  <a href="#">Photograph</a> : Best suited for making copies of printed pictures.
		Quality and File Size		High (large file) Medium* Low (small file)	Use to select the quality for the output. Higher-quality images require a larger file size than lower-quality images. Larger files take more time to send, and some recipients might have trouble receiving larger files.
		Original Sides		1-sided 2-sided	Use to describe the layout for each side of the original document. First select whether the original document is printed on one side or both sides. Then touch the <a href="#">Orientation</a> setting to indicate whether the original has portrait or landscape orientation. If it is printed on both sides, also select the 2-sided format that matches the original document.
			Orientation	Automatically detect Portrait* Landscape	For some features to work correctly, you must specify the way the content of the original document is placed on the page. Portrait orientation means the short edge of the page is along the top. Landscape orientation means the long edge of the page is along the top. In the <a href="#">Orientation</a> area,

Table 4-28 Scan/Digital Send Settings menu (MFP) (continued)

First level	Second level	Third level	Fourth level	Values	Description
					select whether the original document has a portrait or landscape orientation.
		Resolution		600 dpi 400 dpi 300 dpi 200 dpi 150 dpi* 75 dpi	Sets the resolution for sent documents. Higher resolution images have more dots per inch (dpi), so they show more detail. Lower resolution images have fewer dots per inch and show less detail, but the file size is smaller. Some file types, for example a file that will be processed with OCR, require a specific resolution. When these file types are selected, the <a href="#">Resolution</a> setting might automatically change to a valid value.
		Content Orientation	Orientation	Auto Detect Portrait* Landscape	For some features to work correctly, you must specify the way the content of the original document is placed on the page. Portrait orientation means the short edge of the page is along the top. Landscape orientation means the long edge of the page is along the top. In the Orientation area, select whether the original document has a portrait or landscape orientation.
		Color/Black		Automatically detect color or black* Automatically detect color or gray Color Black Black/Gray	Use to enable or disable color scanning. <a href="#">Automatically detect color or black</a> : When pages without color are detected, the printer creates an image of the page in 1-bit black if other settings allow. If the

Table 4-28 Scan/Digital Send Settings menu (MFP) (continued)

First level	Second level	Third level	Fourth level	Values	Description
					<p>other settings don't allow (File Type, for example), the image is in grayscale.</p> <p>Automatically detect color or gray: When pages without color are detected, the printer creates an image of the page in grayscale. Select this option for the best image quality for non-color pages.</p> <p>Color: Scans documents in color.</p> <p>Black/Gray: Scans documents in grayscale.</p> <p>Black: Scans documents in black and white with a compressed file size.</p>
		Original Size		Select from a list of supported sizes.	Use to describe the page size of the original document.
		Notification		<p>Do not notify*</p> <p>Notify when job completes</p> <p>Notify only if job fails</p>	<p>Configure to receive notification about the status of a sent document.</p> <p>Do not notify: Turns off this feature.</p> <p>Notify when job completes: Select to receive notification for this job only.</p>
				<p>Print</p> <p>E-mail</p>	<p>Notify only if job fails: Select to receive notification only if the job is not sent successfully.</p> <p>Print: Select to print the notification at this printer.</p>
			Include Thumbnail		<p><b>NOTE:</b> When sending an analog fax, select <b>Include Thumbnail</b> to receive a thumbnail image of the first page of the fax in your notification.</p>

Table 4-28 Scan/Digital Send Settings menu (MFP) (continued)

First level	Second level	Third level	Fourth level	Values	Description
			Notification E-mail address		E-mail: Select to receive the notification in an email. Touch the text box following <a href="#">Email Address</a> , and then type the email address for the notification.
		Image Adjustment	Darkness		Use to improve the overall quality of the copy.  Adjust the <a href="#">Darkness</a> setting to increase or decrease the amount of white and black in the colors.
			Contrast		Adjust the <a href="#">Contrast</a> setting to increase or decrease the difference between the lightest and darkest color on the page.
			Background Cleanup		Adjust the <a href="#">Background Cleanup</a> setting if you are having trouble copying a faint image.
			Sharpness		Adjust the <a href="#">Sharpness</a> setting to clarify or soften the image. For example, increasing the sharpness could make text appear crisper, but decreasing it could make photographs appear smoother.
			Automatic Tone		
			Default		Select this to make the selected <a href="#">Image Adjustment</a> setting the default value.
		Cropping Options		Do not crop* Crop to content Crop to paper	Use this menu item to automatically crop the scan for digital sending. Use the <a href="#">Crop to content</a> option to scan the smallest possible area that has detectable content.


Table 4-28 Scan/Digital Send Settings menu (MFP) (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Erase Edges		Use Inches Back side erase Front side erase	Use this menu item to remove blemishes, such as dark borders or staple marks, by cleaning the specified edges of the scanned image. In each of the text boxes enter the measurements, in millimeters or inches, for how much of the top edge, bottom edge, left edge, and right edge to clean.
		Multi-feed Detection		On* Off	This setting stops the scanning process if it detects multiple-page feeds through the document feeder.
		Blank Page Suppression		Disabled* Enabled	Use to prevent blank pages in the original document from being included in the output document.
Digital Send Service Setup	Allow Usage of Digital Sending Software (DSS) Server			Enabled* Disabled	Configure how the printer interacts with the HP Digital Sending Software (DSS) server. HP DSS handles digital sending tasks, such as faxing, emailing, and sending scanned documents to a network folder or USB storage device.  Use the <a href="#">Allow Usage of Digital Sending Software (DSS) Server</a> option to configure the printer to use HP DSS.
	Allow Transfer to New Digital Sending Software (DSS) Server			Enabled* Disabled	Use the <a href="#">Allow Transfer to New Digital Sending Software (DSS) Server</a> option to specify whether DSS management of a printer is transferable to a different DSS.

## Fax menu (MFP)

Learn about the control-panel [Fax menu \(MFP\)](#).

**To display:** At the printer control panel, select the [Settings](#) menu, and then select the [Fax](#) menu.

**To print:** At the printer control panel, touch (MFP) or use the arrow buttons (SFP) to select the printer icon . For the SFP, press the **OK** button to print the pages.

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

**Table 4-29 Fax menu (MFP)**

First level	Second level	Third level	Fourth level	Values	Description
Internal Fax Modem Setup					Configure settings for sending faxes from the printer.  Use the <a href="#">Internal Fax Modem Setup</a> feature to set up options for faxing.  <b>NOTE:</b> To set up LAN fax or Internet fax, use the HP Embedded Web Server. To open the HP Embedded Web Server, type the printer network address into a Web browser. To configure the fax features, select the <b>Fax</b> tab.
Fax Send Settings	Fax Send Setup	Fax Dialing Settings	Fax Dial Volume	Off Low* High	These settings control how the fax modem dials the outgoing fax number when faxes are sent.
Fax Send Settings	Fax Send Setup	Fax Dialing Settings	Dialing Mode	Tone* Pulse	
Fax Send Settings	Fax Send Setup	Fax Dialing Settings	Redial Interval	1 – 5 Minutes Default = 5 minutes	
Fax Send Settings	Fax Send Setup	Fax Dialing Settings	Fax Send Speed	Fast* Medium Slow	
Fax Send Settings	Fax Send Setup	Fax Dialing Settings	Dialing Prefix		
Fax Send Settings	Fax Send Setup	Fax Dialing Settings	Detect Dial Tone		
Fax Send Settings	Fax Send Setup	Fax Dialing Settings	Redial on Error	Range: 0 – 9 Default = 2	

Table 4-29 Fax menu (MFP) (continued)

First level	Second level	Third level	Fourth level	Values	Description
Fax Send Settings	Fax Send Setup	Fax Dialing Settings	Redial on No Answer	Range: 0 – 2 Default = 0	
Fax Send Settings	Fax Send Setup	Fax Dialing Settings	Redial on Busy	Range: 0 – 9 Default = 3	
Fax Send Settings	Fax Send Setup	General Fax Send Settings	Fax Number Confirmation	Enabled Disabled*	If this feature is enabled, you must enter the fax number twice.
Fax Send Settings	Fax Send Setup	General Fax Send Settings	PC Fax Send	Enabled* Disabled	Enables users who have the correct driver installed to send faxes through the printer from their computers.
Fax Send Settings	Fax Send Setup	General Fax Send Settings	JBIG Compression	Enabled* Disabled	The JBIG compression reduces fax-transmission time, which can result in lower phone charges. However, using JBIG compression sometimes causes compatibility problems with older fax machines. If this occurs, turn off the JBIG compression.
Fax Send Settings	Fax Send Setup	General Fax Send Settings	Error Correction Mode	Enabled* Disabled	When error-correction mode is enabled and an error occurs during fax transmission, the printer sends or receives the error portion again.
Fax Send Settings	Fax Send Setup	General Fax Send Settings	Fax Header	Prepend* Overlay	Use to prepend or overlay the fax header page.
Fax Send Settings	Fax Send Setup	Billing Codes	Enable Billing Codes	Off On*	When billing codes are enabled, a prompt displays that asks the user to enter the billing code for an outgoing fax. This prompt does not appear if the <a href="#">Allow users to edit billing codes</a> check box is not checked.  You can also use the billing codes report in the <a href="#">Reports</a>

Table 4-29 Fax menu (MFP) (continued)

First level	Second level	Third level	Fourth level	Values	Description
					menu to view the list of the billing codes that have been used for faxes that have been sent from the printer. The list is grouped by billing code and also shows fax details. This feature can be used for billing or usage tracking.
Fax Send Settings	Fax Send Setup	Billing Codes	Default Billing Code		Specify a default billing code for faxing. If you specify a default billing code, this code displays in the <a href="#">Billing Code</a> field when the user sends an outgoing fax. If this field is blank, no default billing code is provided for the user.
Fax Send Settings	Fax Send Setup	Billing Codes	Minimum Length	Range: 1 – 16 Default = 1	Specify the required length of the billing code. Billing codes can be between 1 and 16 characters long.
Fax Send Settings	Fax Send Setup	Billing Codes	Allow users to edit billing codes	Off On*	
Fax Send Settings	Default Job Options	Image Preview		Make optional* Require preview Disable preview	Use the <a href="#">Image Preview</a> feature to scan a document and display a preview before completing the job. Select whether this feature is available on the printer.  <a href="#">Make optional</a> : The feature is optional, depending on the user who is signed in.  <a href="#">Require preview</a> Previews are required for all users.  <a href="#">Disable preview</a> : Previews are disabled for all users.



Table 4-29 Fax menu (MFP) (continued)

First level	Second level	Third level	Fourth level	Values	Description
Fax Send Settings	Default Job Options	Resolution		Standard (100 x 200dpi)*	Select the resolution for outgoing faxes. If you increase the resolution, faxes might be clearer but they could transmit more slowly. Some file types, for example a file that will be processed with OCR, require a specific resolution. When these file types are selected, the <a href="#">Resolution</a> setting might be automatically changed to a valid value.
				Fine (200 x 200dpi)	
				Superfine (300 x 300dpi)	
Fax Send Settings	Default Job Options	Original Sides		1-sided*	Use to describe the layout for each side of the original document. First select whether the original document is printed on one side or both sides. Then touch the <a href="#">Orientation</a> setting to indicate whether the original has portrait or landscape orientation. If it is printed on both sides, also select the 2-sided format that matches the original document.  If the <a href="#">Pages flip up</a> option is selected, the back side of the page is printed upside-down. This option is for print jobs that are bound along the top edge.
				2-sided	
				Pages flip up	
Fax Send Settings	Default Job Options	Original Sides	Orientation	Portrait*	For some features to work correctly, you must specify the way the content of the original document is placed on the page.  <a href="#">Portrait</a> : This setting means the short edge of the page is along the top.  <a href="#">Landscape</a> : This setting means the long edge of the
				Landscape	

Table 4-29 Fax menu (MFP) (continued)

First level	Second level	Third level	Fourth level	Values	Description
					page is along the top.
Fax Send Settings	Default Job Options	Notification		Do not notify* Notify when job completes Notify only if job fails	Use to receive notification about the status of a sent document.  Do not notify: Turns off this feature.  Notify when job completes: Select to receive notification for this job only.  Notify only if job fails: Select to receive notification only if the job is not sent successfully.
Fax Send Settings	Default Job Options	Notification		Print E-mail	Print: Select to print the notification at this printer.  E-mail: Select to receive the notification in an email. Touch the text box following Email Address, and then enter the email address for the notification.
Fax Send Settings	Default Job Options	Notification	Include Thumbnail		When sending an analog fax, select Include Thumbnail to receive a thumbnail image of the first page of the fax in your notification.
Fax Send Settings	Default Job Options	Notification	Notification E-mail address		Provide the email address that will receive notifications.
Fax Send Settings	Default Job Options	Content Orientation	Orientation	Portrait* Landscape	For some features to work correctly, you must specify the way the content of the original document is placed on the page.  Portrait: This setting means the short edge of the page is along the top.  Landscape: This setting means the long edge of the

Table 4-29 Fax menu (MFP) (continued)

First level	Second level	Third level	Fourth level	Values	Description
					page is along the top.
Fax Send Settings	Default Job Options	Original Size		Select from a list of sizes that the printer supports.	Use to describe the page size of the original document.
Fax Send Settings	Default Job Options	Image Adjustment	Darkness		Use to improve the overall quality of the copy.  Adjust the <a href="#">Darkness</a> setting to increase or decrease the amount of white and black in the colors.
Fax Send Settings	Default Job Options	Image Adjustment	Contrast		Adjust the <a href="#">Contrast</a> setting to increase or decrease the difference between the lightest and darkest color on the page.
Fax Send Settings	Default Job Options	Image Adjustment	Background Cleanup		Adjust the <a href="#">Background Cleanup</a> setting if you are having trouble copying a faint image.
Fax Send Settings	Default Job Options	Image Adjustment	Sharpness		Adjust the <a href="#">Sharpness</a> setting to clarify or soften the image. For example, increasing the sharpness could make text appear crisper, but decreasing it could make photographs appear smoother.
Fax Send Settings	Default Job Options	Image Adjustment	Automatic Tone		The printer automatically adjusts the <a href="#">Darkness</a> , <a href="#">Contrast</a> , and <a href="#">Background Cleanup</a> settings to the most appropriate for the scanned document.
Fax Send Settings	Default Job Options	Optimize Text/Picture	Manually adjust*	Optimize For Text Printed picture Photograph	Optimizes the output for a particular type of content. You can optimize the output for text, printed pictures, or a mixture.  <a href="#">Manually adjust</a> : Use to manually optimize the setting

Table 4-29 Fax menu (MFP) (continued)

First level	Second level	Third level	Fourth level	Values	Description
					for text or for pictures.  Text: Use to optimize the text portion of the copy where text and/or pictures are on the original.  Printed picture: Use for line drawings and preprinted images, such as magazine clippings or pages from books.  Photograph: Best suited for making copies of printed pictures.
Fax Send Settings	Default Job Options	Multi-feed Detection		Disabled Enabled*	This setting stops the scanning process if it detects multiple-page feeds through the document feeder.
Fax Send Settings	Default Job Options	Blank Page Suppression		Disabled* Enabled	Prevents blank pages in the original document from being included in the output document.
Fax Receive Settings	Fax Receive Setup	Ringer Volume		Off Low* High	Use to configure settings for receiving faxes.
Fax Receive Settings	Fax Receive Setup	Rings To Answer		Range: 1–6 Default = 1	
Fax Receive Settings	Fax Receive Setup	Fax Send Speed		Fast* Medium Slow	
Fax Receive Settings	Fax Receive Setup	Ring Interval		Range: 220–600 ms Default = 600 ms	
Fax Receive Settings	Fax Receive Setup	Ring Frequency		Range: 1–200 Default = 68hz	
Fax Receive Settings	Fax Printing Schedule			Always store faxes Always print faxes* Use schedule	If you have concerns about the security of private faxes, use this feature to store faxes rather than having them

Table 4-29 Fax menu (MFP) (continued)

First level	Second level	Third level	Fourth level	Values	Description
					automatically print. Select Incoming Fax Options, and then you can choose to always store faxes, always print them, or you can set up a schedule for each day of the week.
Fax Receive Settings	Fax Printing Schedule	Schedule	Add	Print incoming faxes	If you are using a fax printing schedule, use this menu to configure when to print faxes.
		Touch this to set up a fax printing schedule if you selected the Use Fax Printing Schedule option.	Edit	Store incoming faxes	
			Delete	Time	
				Event Days	
Fax Receive Settings	Blocked Fax Numbers	Fax Number to Block			<p>The blocked fax list can contain up to 30 numbers. When the printer receives a call from one of the blocked fax numbers, it deletes the incoming fax. It also logs the blocked fax in the activity log along with job-accounting information.</p> <p>Add blocked numbers: Enter a fax number into the <b>Fax Number to Block</b> field, and then touch the arrow button to add a new number to the blocked fax list.</p> <p>To remove blocked numbers: Select a number and touch the <b>Delete</b> button to delete it from the blocked fax list.</p> <p>To clear all blocked numbers: Touch the <b>Delete All</b> button to clear all of the numbers from the blocked fax list.</p> <p>You can also use the <b>Blocked Fax List</b> report in the <b>Information</b> menu to view the list of the fax numbers that have been blocked on this printer.</p>

Table 4-29 Fax menu (MFP) (continued)

First level	Second level	Third level	Fourth level	Values	Description
Fax Receive Settings	Default Job Options	Notification		Do not notify* Notify when job completes Notify only if job fails	Configure to receive notification about the status of a sent document.  Do not notify: Turns off this feature.  Notify when job completes: Select to receive notification for this job only.  Notify only if job fails: Select to receive notification only if the job is not sent successfully.
Fax Receive Settings	Default Job Options			Print E-mail*	E-mail: Select to receive the notification in an email. Touch the text box following Email Address, and then enter the email address for the notification.
Fax Receive Settings	Default Job Options		Include Thumbnail		<b>NOTE:</b> When sending an analog fax, select Include Thumbnail to receive a thumbnail image of the first page of the fax in your notification.
Fax Receive Settings	Default Job Options		Notification E-mail address		
Fax Receive Settings	Default Job Options	Stamp Received Faxes		Enabled Disabled*	Use this option to add the date, time, sender's phone number, and page number to each page of the faxes that this printer receives.
Fax Receive Settings	Default Job Options	Fit to Page		Enabled* Disabled	Use to shrink faxes that are larger than Letter-size or A4-size so that they can fit onto a Letter-size or A4-size page. If this feature set to Disabled, faxes larger than Letter or A4 will flow across multiple pages.
Fax Receive Settings	Default Job Options	Paper Selection		Automatic*	


Table 4-29 Fax menu (MFP) (continued)

First level	Second level	Third level	Fourth level	Values	Description
					Select from a list of the trays.
Fax Receive Settings	Default Job Options	Output sides		1-sided* 2-sided Pages flip up	Use to describe the layout for each side of the original document. First select whether the original document is printed on one side or both sides. Then touch the <a href="#">Orientation</a> setting to indicate whether the original has portrait or landscape orientation. If it is printed on both sides, also select the <a href="#">2-sided</a> format that matches the original document.
Fax Forwarding	Enable Fax Forwarding			Disabled* Enabled	Use to forward received faxes to another fax machine.
Fax Forwarding	Type of Fax Job to Forward			All faxes Sent faxes Received faxes	
Fax Forwarding	Fax Forwarding Number				Enter the fax forwarding number.
Clear Fax Activity Log				Cancel Clear	Clears all events from the Fax Activity Log list.

## Manage Supplies menu

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

**To display:** At the printer control panel, select the [Settings](#) menu, and then select the [Manage Supplies](#) menu.

**To print:** At the printer control panel, touch (MFP) or use the arrow buttons (SFP) to select the printer icon . For the SFP, press the [OK](#) button to print the pages.

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

Table 4-30 [Manage Supplies](#) menu

First level	Second level	Third level	Fourth level	Values	Description
Low Warning Thresholds	Cyan Cartridge			1-100%	Set the estimated percentage at which the printer notifies you when a toner cartridge is very low.
	Magenta Cartridge			Default = 4%	
	Yellow Cartridge				

Table 4-30 Manage Supplies menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
	Black Cartridge				
Low Warning Thresholds	Document Feeder Kit			1-100%	Set the estimated percentage at which the printer notifies you when the document feeder kit is very low.
	MFP			Default = 10%	
Low Warning Thresholds	Maintenance Kit			1-100%	Set the estimated percentage at which the printer notifies you when the maintenance kit is very low.
	SFP			Default = 10%	
Low Warning Threshold Message				On*	Displays a message on the control panel when a cartridge is very low.
				Off	
Low Behavior				Continue*	Use one of these options to specify the action for the device to take when a supply reaches a low condition.  Stop: Stops the current print job.  Continue: Completes the current print job.
				Stop	
Very Low Behavior	Cyan Cartridge			Stop	Use one or more of these options to specify the action for the device to take when a supply reaches a very low condition.  Stop: Stops the current print job.  Continue: Completes the current print job.  Prompt to continue: Allows the user to decide whether or not to finish printing.
	Magenta Cartridge			Continue*	
	Yellow Cartridge			Prompt to continue	
	Black Cartridge				
Very Low Behavior	Document Feeder Kit			Stop	Use one or more of these options to specify the action for the device to take when a supply reaches a very low condition.  Stop: Stops the current print job.  Continue: Completes the current print job.
	MFP			Continue	
				Prompt to continue*	




Table 4-30 Manage Supplies menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
					Prompt to continue: Allows the user to decide whether or not to finish printing.
Very Low Behavior	Maintenance Kit			Stop	Use one or more of these options to specify the action for the device to take when a supply reaches a very low condition.  Stop: Stops the current print job.  Continue: Completes the current print job.  Prompt to continue: Allows the user to decide whether or not to finish printing.
				Continue	
				Prompt to continue*	
Store Usage Data				On supplies*	Store Usage Data provides a way to suppress the toner cartridges from storing most of the information gathered exclusively for the purpose of understanding the usage of the printer. Select the On supplies setting to store the data on the toner cartridge memory chip. Select the Not on supplies setting to suppress the information from being stored on the memory chip.
				Not on supplies	
Cartridge Protection				Off*	Select to permanently protect cartridges so that they can be used only in this product or fleet of products.
				Protect cartridges	
Cartridge Policy				Off*	Set Authorized HP to allow only genuine HP cartridges to be used in this printer.
				Authorized HP	
Reset Supplies	Document Feeder Kit			Reset	Select this option if you have installed a new document feeder kit or maintenance kit.
	MFP			Cancel	
	Maintenance Kit				
	SFP				

## Networking menu

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

**To display:** At the printer control panel, select the [Settings](#) menu, and then select the [Networking](#) menu.

**To print:** At the printer control panel, touch (MFP) or use the arrow buttons (SFP) to select the printer icon . For the SFP, press the **OK** button to print the pages.

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

**Table 4-31** Networking menu

First level	Second level	Third level	Fourth level	Values	Description
Ethernet	Information	Print Security Report		Yes	Yes: Prints a page that contains the current security settings on the HP Jetdirect print server.  No: A security settings page is not printed.
				No*	
Ethernet	TCP/IP	Host Name		Use the arrow buttons to edit the host name.  NPIXXXXXX*	An alphanumeric string, up to 32 characters, used to identify the printer. This name is listed on the HP Jetdirect configuration page. The default host name is NPIxxxxxx, where xxxxxx is the last six digits of the LAN hardware (MAC) address.
Ethernet	TCP/IP	IPv4 Settings	Config Method	Bootp	Specifies the method that TCP/IPv4 parameters will be configured on the HP Jetdirect print server.  Bootp (Bootstrap Protocol): Use for automatic configuration from a BootP server.  DHCP (Dynamic Host Configuration Protocol): Use for automatic configuration from a DHCPv4 server. If selected and a DHCP lease exists, the DHCP Release menu and the DHCP Renew menu are available to set DHCP lease options.
				DHCP*	
				Auto IP	
				Manual	

Table 4-31 Networking menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
					<p><b>Auto IP:</b> Use for automatic link-local IPv4 addressing. An address in the form 169.254.x.x is assigned automatically.</p> <p>If you set this option to the <b>Manual</b> setting, use the <b>Manual Settings</b> menu to configure TCP/IPv4 parameters.</p>
Ethernet	TCP/IP	IPv4 Settings	Default IP	Auto IP* Legacy	<p>Specify the IP address to default to when the print server is unable to obtain an IP address from the network during a forced TCP/IP reconfiguration (for example, when manually configured to use BootP or DHCP).</p> <p><b>NOTE:</b> This feature assigns a static IP address that might interfere with a managed network.</p> <p><b>Auto IP:</b> A link-local IP address 169.254.x.x is set.</p> <p><b>Legacy:</b> The address 192.0.0.192 is set, consistent with older HP Jetdirect printers.</p>
Ethernet	TCP/IP	IPv4 Settings	DHCP Release	Yes No*	
Ethernet	TCP/IP	IPv4 Settings	DHCP Renew	Yes No*	
Ethernet	TCP/IP	IPv4 Settings	Primary DNS	Range: 0-255 Default = xxx.xxx.xx.xx	Specify the IP address (n.n.n.n) of a Primary Domain Name System (DNS) Server.
Ethernet	TCP/IP	IPv4 Settings	Secondary DNS	Range: 0-255 Default = 0.0.0.0	Specify the IP address (n.n.n.n) of a Secondary DNS Server.
Ethernet	TCP/IP	IPv6 Settings	Enable	Off	Use this item to enable or disable

Table 4-31 Networking menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
				On*	IPv6 operation on the print server.  Off: IPv6 is disabled.  On: IPv6 is enabled.
Ethernet	TCP/IP	IPv6 Settings	Address	Manual Settings  Enable  Address	Use this item to enable and manually configure a TCP/IPv6 address.
Ethernet	TCP/IP	IPv6 Settings	DHCPv6 Policy	Router Specified  Router Unavailable*  Always	<p><b>Router Specified:</b> The stateful auto-configuration method to be used by the print server is determined by a router. The router specifies whether the print server obtains its address, its configuration information, or both from a DHCPv6 server.</p> <p><b>Router Unavailable:</b> If a router is not available, the print server should attempt to obtain its stateful configuration from a DHCPv6 server.</p> <p><b>Always:</b> Whether a router is available, the print server always attempts to obtain its stateful configuration from a DHCPv6 server.</p>
Ethernet	TCP/IP	IPv6 Settings	Primary DNS	Range: 0-255  Default = xxx.xxx.xx.xx	Specify the IP address (n.n.n.n) of a Primary Domain Name System (DNS) Server.
Ethernet	TCP/IP	IPv6 Settings	Secondary DNS	Range: 0-255  Default = 0.0.0.0	Specify the IP address (n.n.n.n) of a Secondary DNS Server.
Ethernet	TCP/IP	Proxy Server		Select from a provided list.	Specifies the proxy server to be used by embedded applications in the printer. A proxy server is typically used by network clients for Internet access. It caches Web pages, and


Table 4-31 Networking menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
					provides a degree of Internet security for those clients.
					To specify a proxy server, enter its IPv4 address or fully-qualified domain name. The name can be up to 255 octets.
					For some networks, you might need to contact your Internet Service Provider (ISP) for the proxy server address.
Ethernet	TCP/IP	Proxy Port		Range: 1-65535 Default = 00080	Enter the port number used by the proxy server for client support. The port number identifies the port reserved for proxy activity on your network, and can be a value from 0 to 65535.
Ethernet	TCP/IP	Idle Timeout		Range: 1-3600 Default = 0270	The time period, in seconds, after which an idle TCP print data connection is closed (default is 270 seconds, 0 disables the timeout).
		I/O Timeout		Range: 5 – 300 sec Default = 10	Use to set the I/O timeout period in seconds. I/O timeout refers to the elapsed time before a print job fails. If the stream of data that the printer receives for a print job gets interrupted, this setting indicates how long the printer will wait before it reports that the job has failed.

## Supplies menu

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

**To display:** At the printer control panel, select the [Supplies](#) menu.

**To print:** At the printer control panel, touch (MFP) or use the arrow buttons (SFP) to select the printer icon . For the SFP, press the **OK** button to print the pages.

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

 **NOTE:** The **View** option is control-panel type dependent (might not be available).


**Table 4-32 Supplies menu**

First level	Values	Description
Cyan Cartridge		View a summary of the status of the printer supplies.
Magenta Cartridge		
Yellow Cartridge		
Black Cartridge		


## Trays menu

Learn about the control-panel **Trays** menu.

**To display:** At the printer control panel, select the **Trays** menu.

**To print:** At the printer control panel, touch (MFP) or use the arrow buttons (SFP) to select the printer icon . For the SFP, press the **OK** button to print the pages.

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

 **NOTE:** The **View** option is control-panel type dependent (might not be available).

**Table 4-33 Trays menu**

First level	Second level	Values	Description
Tray 1	Size	Select paper size from a list of supported sizes.	Choose the paper size for the tray
Tray 2-x			
Tray 1	Type	Select paper type from a list of supported types.	Choose the paper type for the tray.
Tray 2-x			

## Support Tools menu

Learn about the control-panel **Support Tools** menu.

 **NOTE:** The **Support Tools** sub-menu contains the options for maintaining the printer and troubleshooting printer problems.


## Maintenance menu

Learn about the control-panel **Maintenance** menu.

## Backup/Restore menu

Learn about the control-panel [Backup/Restore](#) menu.

**To display:** At the printer control panel, select the [Support Tools](#) menu, select the [Maintenance](#) menu, and then select the [Backup/Restore](#) menu.

**To print:** At the printer control panel, touch (MFP) or use the arrow buttons (SFP) to select the printer icon . For the SFP, press the [OK](#) button to print the pages.

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


**Table 4-34 Backup/Restore menu**

First level	Second level	Third level	Values
Back up Data	Enable Scheduled Backups	Backup Time	Enter a time
Back up Data	Enable Scheduled Backups	Days Between Backups	Enter the number of days
Back up Data	Back up Now		
Back up Data	Export Last Backup		
Restore Data			Insert a USB drive that contains the backup file.

## Calibration/Cleaning menu

Learn about the control-panel [Calibration/Cleaning](#) menu .

**To display:** At the printer control panel, select the [Support Tools](#) menu, select the [Maintenance](#) menu, and then select the [Calibration/Cleaning](#) menu.

**To print:** At the printer control panel, touch (MFP) or use the arrow buttons (SFP) to select the printer icon . For the SFP, press the [OK](#) button to print the pages.

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

**Table 4-35 Calibration/Cleaning menu**

First level	Values	Description
Cleaning Page	Automatic Cleaning Interval	Use this menu to configure the settings for the product to automatically print a cleaning page.
	Off*	
	1000 pages	
	2000 pages	
	5000 pages	
	10000 pages	
20000 pages		
		Touch <a href="#">Print</a> to manually print a cleaning page.
		<b>NOTE:</b> Cleaning pages print on the default paper size configured for the printer.

Table 4-35 Calibration/Cleaning menu (continued)

First level	Values	Description
Quick Calibration	Start	<p>The printer automatically calibrates itself at various times. However, the user can calibrate the printer immediately if the printer experiences problems with print quality. Use this feature to perform a partial calibration. Use this calibration if color density or tone seem incorrect.</p> <p>Before calibrating, make sure that the <b>Ready</b> indicator displays on the control panel display. If a job is in progress, the calibration occurs when that job is complete.</p>
Full Calibration	Start	<p>The printer automatically calibrates itself at various times. However, the user can calibrate the printer immediately if the printer experiences problems with print quality. Use this feature to perform a full calibration, which can take up to three minutes. Use this calibration if the color layers seem to be shifted on the page.</p> <p>Before calibrating, make sure that the <b>Ready</b> indicator displays on the control panel display. If a job is in progress, the calibration occurs when that job is complete.</p>
Power on Calibration	No delay Delay 15 minutes	This feature controls the timing of calibration when the printer wakes up or is turned on.
Calibrate Scanner MFP	Done Start	Touch <b>Start</b> to calibrate the device scanner. Messages on the control panel display will lead you through the calibration process.
Reset Calibration	Reset Cancel	<p>Use this feature to return the product to the factory-set default values for color calibration.</p> <p>Select <b>Reset</b> to reset the color calibration. The printer will restart with the factory-set defaults.</p> <p>Select <b>Cancel</b> to close the menu without resetting the color calibration.</p>



## USB Firmware Upgrade menu

Learn about the control-panel [USB Firmware Upgrade](#) menu.

**To display:** At the printer control panel, select the [Support Tools](#) menu, select the [Maintenance](#) menu, and then select the [USB Firmware Upgrade](#) menu.

Insert a USB storage device with a firmware upgrade bundle into the USB port, and follow the on-screen instructions.

## Service menu

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

**To display:** At the printer control panel, select the [Support Tools](#) menu, and then select the [Service](#) menu.

The [Service](#) menu is locked and requires a personal identification number (PIN) for access. This menu is intended for use by authorized service personnel. See the [Service menu](#) section of this manual.

## Troubleshooting menu

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

**To display:** At the printer control panel, select the [Support Tools](#) menu, and then select the [Troubleshooting](#) menu.

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

**Table 4-36 Troubleshooting menu**


First level	Second level	Third level	Fourth level	Values	Description
Reports	Configuration/Status Pages			Settings Menu Map	Select the desired report and then select the print icon  to print the page.
				Current Settings Page	
				Configuration Page	
				Supplies Status Page	
				Usage Page	
				Paper Path Page	
				File Directory Page	
				Web Services Status Page	
				PCL Font List	
				PS Font List	
				Event Log	
				Warning Log Page	
				T.30 Protocol Trace	
		PQ Troubleshooting Pages			
		Paper Path Test			

Table 4-36 Troubleshooting menu (continued)



First level	Second level	Third level	Fourth level	Values	Description
Reports	Fax Reports			Fax Activity Log	Select the desired report and then select the print icon  to print the page.
				Billing Codes Report	
				Blocked Fax List	
				Fax Call Report	
Reports	Other Pages			PCL Font List	Select the desired report and then select the print icon  to print the page.
				PS Font List	
Fax Tools Fax models only	Fax T.30 Trace Report			Never automatically print* Print after every fax Print only after fax send jobs Print only after received faxes Print only after fax send errors Print only after fax receive errors Print after any fax error	Use to print or configure the fax T.30 trace report. T.30 is the standard that specifies handshaking, protocols, and error correction between fax machines.
Fax Tools Fax models only	Fax V.34			Enable* Disable	Use to disable V.34 modulations if several fax failures have occurred or if phone line conditions require it.
Fax Tools Fax models only	JBIG Compression			On Off*	
Fax Tools Fax models only	Fax Speaker Mode			Normal* Diagnostic	Used by a technician to evaluate and diagnose fax issues by listening to the sounds of fax modulations
Fax Tools Fax models only	Fax Service Log			Print	The standard fax log includes basic information such as the time and whether the fax was successful. The detailed fax log shows the intermediate results of the redial process not shown in the standard fax log.

Table 4-36 Troubleshooting menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Print Quality Pages	PQ Troubleshooting Pages			Print	Use to print pages that help you resolve problems with print quality.
Event Log					Prints the 50 most recent events in the Event Log. For each event, the printed log shows the error number, page count, error code, and description or personality.
Paper Path Page				Print	Shows how many pages were printed from each tray.
Diagnostic Tests	Disable Cartridge Check			Continue	Use this diagnostic test to print internal pages or send an external job to the printer when the toner cartridge is removed or exchanged. Supply errors are ignored while the printer is in this mode.
Diagnostic Tests	Paper Path Test	Source Tray		Select from a list of the available trays.	Generates a test page for testing paper handling features. You can define the path that is used for the test in order to test specific paper paths
Diagnostic Tests	Paper Path Test	Number of Copies		Range: 1–500 Default = 1	Sets the default number of copies for a copy job. This default applies when the Copy or Quick Copy function is initiated from the printer Home screen. The factory default setting is 1.
Diagnostic Tests	Paper Path Test	Test Duplex Path		Enable Disable*	Prints on both sides of the paper.
Diagnostic Tests	Print/Stop Test				Specify the length of time in milliseconds (0–60,000).
Diagnostic Tests	Paper Path Sensor Test			Select from a list of the printer sensors.	Initiates a test of the paper path sensors.

Table 4-36 Troubleshooting menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Diagnostic Tests	Manual Sensor Test  <b>NOTE:</b> This item appears in the control-panel menus. However, the function is not available for this printer			Select from a list of available components  Reset	Test the printer sensors and switches for correct operation. Each sensor is displayed on the control-panel screen, along with its status. Manually trip each sensor and watch for it to change on the screen. Press the <b>Stop</b> button to abort the test.
Diagnostic Tests	Tray/Bin Manual Sensor Test  <b>NOTE:</b> This item appears in the control-panel menus. However, the function is not available for this printer			Select from a list of available components  Reset	Test the printer sensors and switches for correct operation. Each sensor is displayed on the control-panel screen, along with its status. Manually trip each sensor and watch for it to change on the screen. Press the <b>Stop</b> button to abort the test.
Diagnostic Tests	Component Test  <b>NOTE:</b> This item appears in the control-panel menus. However, the function is not available for this printer			Select from a list of available components.	Use to exercise individual parts independently to isolate noise, leaking, or other issues. To start the test, select one of the components. The test will run the number of times specified by the <b>Repeat</b> option. You might be prompted to remove parts from the printer during the test. Press the <b>Stop</b> button to abort the test.
Diagnostic Tests	Continuous Scan  MFP				2-sided
Diagnostic Tests	Scanner Tests  MFP				Sensors
Generate Debug Data					Start
Retrieve Diagnostic Data				Create device data file	Create files that contain information about the printer that can help

Table 4-36 Troubleshooting menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
				Create zipped debug information file	identify the cause of problems.
				Include crash dump files	
				Clean up debug information	
				Send to E-mail	
				Export to USB	
Retrieve Fax Diagnostic Data				Create device data file	Create files that contain information about the printer that can help identify the cause of problems.
				Create zipped debug information file	
				Include crash dump files	
				Clean up debug information	
				Send to E-mail	
				Export to USB	

## Service menu


Learn about the printer [Service](#) menu.

[Service](#) menu access is restricted by using a personal identification number (PIN). Only authorized service people should access the [Service](#) menu. When selecting [Service](#) from the list of menus, the printer prompts the user to enter an eight-digit PIN.

 **NOTE:** The printer automatically exits the [Service](#) menu after about one minute if no items are selected or changed.

### Open the [Service](#) menu from a SFP control panel

1. From the [Home](#) screen on the printer control panel, use the arrow buttons to navigate to [Support Tools](#), and then press the [OK](#) button.
2. Use the arrow buttons to scroll to [Service](#), and then press the [OK](#) button.
3. Make sure that [Service Access Code](#) is selected for the [Access Type](#) item.

 **NOTE:** Use the arrow buttons to select and change the [Access Type](#) item if necessary.

4. Enter the following service access PIN for the printer:
  - 12045520 (SFP)
  - 12048020 (MFP)

### Open the [Service](#) menu from an MFP control panel

1. From the [Home](#) screen on the printer control panel, scroll to and touch the [Support Tools](#) button.
2. Open the following menus:
  - [Service](#)
3. Make sure that [Service Access Code](#) is selected for the [Access Type](#) item.
4. Enter the following service access PIN for the printer:
  - 12045520 (SFP)
  - 12048020 (MFP)

### Service menu table

The following menu items appear in the [Service](#) menu.

**Table 4-37 Service menu**

First level	Second level	Value	Description
Event Log	Print		Print or view the event log.
Clear Event Log	Clear		Use this item to clear the printer event log.
Cycle Counts	Total Engine Cycles		Set the page count that was stored in NVRAM prior to installing a new formatter.
Cycle Counts	Refurbish Cycle Count		Use this item to record the page count when the printer was refurbished.
Cycle Counts	Document Feeder MFP		Total number of pages since the document feeder kit was replaced.
Cycle Counts	Document Feeder Kit Interval MFP		Use this item to set the interval that causes the printer to prompt the customer to replace document feeder maintenance kit.
Cycle Counts	Clean Rollers Count MFP		Total number of pages since the document feeder rollers were cleaned.
Cycle Counts	Clean Rollers Interval MFP		Use this item to set the interval that causes the printer to prompt the customer to clean the document feeder rollers and separation pad.
Cycle Counts	ADF Count MFP		Set the total pages fed through the document feeder.
Cycle Counts	Flatbed Count MFP		Set the total pages scanned from the flatbed.
Cycle Counts	ADF Simplex Count		Set the total single-sided pages fed through the document feeder.

Table 4-37 Service menu (continued)

First level	Second level	Value	Description
	MFP		
Cycle Counts	ADF Duplex Count		Set the total two-sided pages fed through the document feeder.
	MFP		
Cycle Counts	Copy Scan Count		Set the total copy pages that have been scanned.
	MFP		
Cycle Counts	Send Scan Count		Set the number of scanned pages sent to email.
	MFP		
Cycle Counts	Fax Scan Count		Set the number of scanned pages that have been faxed.
	Fax models only		
Cycle Counts	Copy Pages Count		Set the number of scanned pages that have been printed.
	MFP		
Scanner Settings	ADF Settings	Leading edge front	Set the calibration values.
MFP		Leading edge back	<b>WARNING!</b> Do not change these values unless instructed to do so.
		Trailing edge front	
		Trailing edge back	
		Left side front	
		Left side back	
Scanner Settings	Glass Settings	Leading edge glass	
MFP		Left Side Glass	
Serial Number			Set the serial number.
Service ID			Use this item to show the date that the printer was first used on the control panel. This eliminates the need for users to keep paper receipts for proof of warranty.
Cold Reset Paper			When you perform a cold reset, the paper size that is stored in NVRAM is reset to the default factory setting. If you replace a formatter board in a country/region that uses A4 as the standard paper size, use this menu to reset the default paper size to A4. LETTER and A4 are the only available values.
Low Alerts		Enable	Turn on (or off) low alerts (for supplies).
		Disable	
Reset Low Alerts	<ul style="list-style-type: none"> <li>● Reset to level 1</li> <li>● Reset to level 2</li> </ul>		

Table 4-37 Service menu (continued)

First level	Second level	Value	Description
	<ul style="list-style-type: none"> <li>● Reset to level 3</li> <li>● Set to non-HP managed mode</li> </ul>		
PTT Test Mode			Test the internal modem for the analog fax accessory.
Fax models only			
PTT Test Mode	Hook Operations	Off Hook	
Fax models only		On Hook	
PTT Test Mode	Generate Random Data	Select a value from the list.	
Fax models only			
PTT Test Mode	Generate DTMF Tone Burst	Select a value from the list.	
Fax models only			
PTT Test Mode	Generate DTMF Continuous Tone	Select a value from the list.	
Fax models only			
PTT Test Mode	Generate Pulse Burst	Select a value from the list.	
Fax models only			
PTT Test Mode	Generate Tone Dial Number	Enter dial number.	
Fax models only			
PTT Test Mode	Generate Pulse Dial Number	Enter dial number.	
Fax models only			
PTT Test Mode	Generate Single Modem Tone	Range: 1100–2100 Hz	
Fax models only		Default = 2100 Hz	
PTT Test Mode	Line Measurements		
Fax models only			
PTT Test Mode	Fax Transmit Signal Loss		
Fax models only			
Test Support	Continuous Scan	2-sided	
	MFP	Save to Disk	
Test Support	Continuous Copy	2-sided	
	MFP	Save to Disk	
Test Support	Raw Scan	2-sided	
	MFP	Mechanical Calibration	
Test Support	Continuous Print from USB		
Test Support	Automatic Calibrations	Disabled	



Table 4-37 Service menu (continued)

First level	Second level	Value	Description
	MFP	Enabled*	
Test Support	Runtime Configuration	Standard	
	MFP	StandardEIC	
		Workflow	
		WorkflowEIC	
		Reconfigure	

## Printer resets

Learn about the printer resets.

### Restore factory-set defaults from a non-touchscreen control panel

1. From the [Home](#) screen on the printer control panel, use the arrow buttons to navigate to [Settings](#), and then press the [OK](#) button.
2. Use the arrow buttons to scroll to [General](#), and then press the [OK](#) button.
3. Use the arrow buttons to scroll to [Restore Factory Settings](#), and then press the [OK](#) button.
4. A verification message advises that completing the reset function might result in loss of data. Select the [Reset](#) button to complete the process.

### Restore factory-set defaults from a touchscreen control panel

1. From the [Home](#) screen on the printer control panel, scroll to and touch the [Settings](#) button.
2. Open the following menus:
  - [General Settings](#)
  - [Reset Factory Settings](#)
3. A verification message advises that completing the reset function might result in loss of data. Touch the [Reset](#) button to complete the process.

### Restore the Service ID

When replacing the formatter, the Service ID date is lost. Use this menu item to reset the date to the original date that the printer was first used. The date format is YYDDD. Use the following formula to calculate the Service ID.

Calculate the service ID

For the calculation below, the placed-in-service date is 17OCT2002.

1. To calculate YY, subtract 1990 from the calendar year. If the printer was first used in 2002, calculate YY as follows:  $2002 - 1990 = 12$ . YY = 12.
2. Subtract 1 from 10 (October is the tenth month of the year):  $10 - 1 = 9$ .
  - Multiply 9 by 30:  $9 \times 30 = 270$  and add 17 to 270:  $270 + 17 = 287$ . Thus, DDD = 287.

3. In this example the Service ID is 12287.

Convert the Service ID to an actual date

Use the printer Service ID number to determine whether the printer is still under warranty. Use the following formula to convert the Service ID into the actual date the printer was placed-in-service. For the example below, use the Service ID previously calculated (12287).

1. Add 1990 to YY to get the actual year that the printer was installed.
2. Divide DDD by 30. If there is a remainder, add 1 to the result. This is the month.
3. The remainder from the calculation in step 2 is the date.
  - a.  $12 + 1990 = 2002$ , so the year is 2002.
  - b.  $287 \text{ divided by } 30 = 9 \text{ with a remainder of } 17$ . Because there is a remainder, add 1 to 9 to get 10, which represents October.
  - c. The remainder in step 2 is 17, so that is the date. The complete date is 17-October-2002.


---

 **NOTE:** A six-day grace period is built into the date system.

---

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

---

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

---

1. Press the **Cancel** button when you see the 1/8 under the logo
2. Use the arrow buttons to highlight **+3:Administrator** item, and then press the **OK** button.
3. Use the arrow buttons to highlight **+8:Startup Options** item, and then press the **OK** button.
4. Use the arrow buttons to highlight **2 Cold Reset** item, and then press the **OK** button.
5. Press the Home button to return to the main Pre-boot menu and highlight the **1:Continue** item, and then press the **OK** button.

---

 **NOTE:** The printer initializes.

---

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

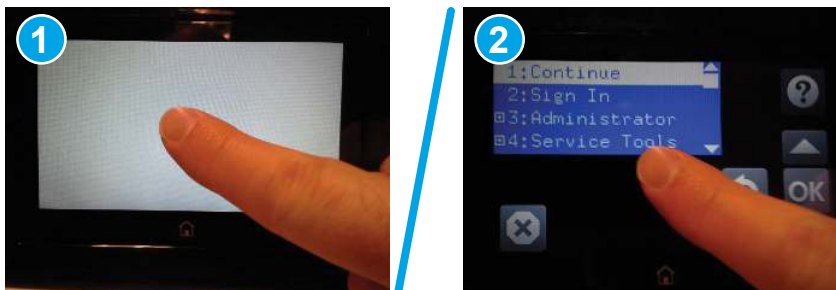
---

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

---

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

**Figure 4-43** Open the Pre-boot menu (MFP)



2. Use the arrow buttons to highlight **+3:Administrator** item, and then press the **OK** button.
3. Use the arrow buttons to highlight **+8:Startup Options** item, and then press the **OK** button.
4. Use the arrow buttons to highlight **2 Cold Reset** item, and then press the **OK** button.
5. Touch the Home button to return to the main Pre-boot menu and highlight the **1:Continue** item, and then press the **OK** button.



**NOTE:** The printer initializes.

---

## Format Disk and Partial Clean functions

Learn about the printer [Format Disk](#) and [Partial Clean](#) functions.

### Active and repository firmware locations

The firmware bundle consists of multiple parts. The main components are the Windows CE Operating System and the printer/peripheral firmware files.

There are two locations/partitions on the hard drive where the firmware components are stored:

- The Active, where the operating system and firmware currently are executing.
- The Repository, the recovery location.

If the Active location is damaged, or a [Partial Clean](#) was performed, the printer automatically copies over the OS and firmware files from the Repository location and the printer recovers.

If both the Active and Repository locations are damaged, or a [Format Disk](#) was performed, then both locations are gone and the error message **99.09.67** displays on the control-panel display. The user must upload the firmware to the printer in order for it to function again.

---

**CAUTION:** The [Format Disk](#) option performs a disk initialization for the entire disk. The operating system, firmware files, and third party files (among other files) are completely lost. HP does not recommend this action.

---

### Partial Clean

The [Partial Clean](#) option erases all partitions and data on the disk drive, except for the firmware repository where a backup copy of the firmware file is stored. This allows the disk drive to be reformatted without having to download a firmware upgrade file to return the printer to a bootable state.

Characteristics of a [Partial Clean](#)

- Customer-defined settings, third-party solutions, firmware files, and the operating system are deleted.
- Rebooting the printer restores the firmware files from the Repository location, but does not restore any customer-defined settings.
- For previous HP printers, a Hard Disk Initialization is similar to executing the [Partial Clean](#) function for this printer.

---

**CAUTION:** HP recommends backing-up printer configuration data before executing a [Partial Clean](#) to retain customer-defined settings (if needed). See the [Backup/Restore](#) item in the [Device Maintenance](#) menu.

---

Reasons for performing [Partial Clean](#)

- The printer continually boots up in an error state.

---

 **NOTE:** Try clearing the error prior to executing a [Partial Clean](#).

---

- The printer will not respond to commands from the control panel.
- Executing the [Partial Clean](#) function is helpful for troubleshooting hard disk problems.
- To reset the printer by deleting all solutions and customer-defined settings.
- The printer default settings are not properly working.

Execute a [Partial Clean](#) from a non-touchscreen control panel

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

1. Press the [Cancel](#) button when you see the [1/8](#) under the logo
2. Use the arrow buttons to highlight [+3:Administrator](#) item, and then press the [OK](#) button.
3. Use the arrow buttons to highlight [Partial Clean](#) item, and then press the [OK](#) button.
4. Press the [OK](#) button again.
5. Press the Home button to return to the main Pre-boot menu and highlight the [Continue](#) item, and then press the [OK](#) button.

---

 **NOTE:** The printer initializes.

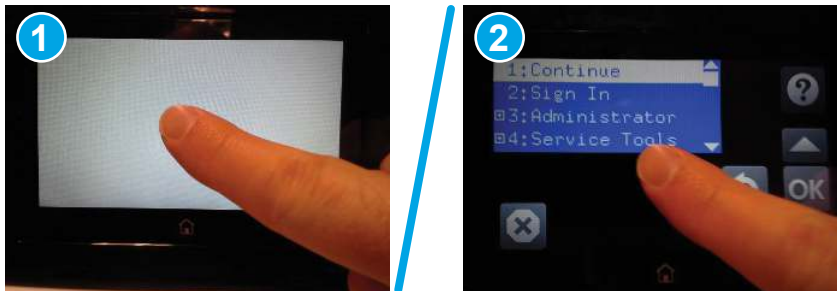
---

Execute a [Partial Clean](#) from a touchscreen control panel

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

1. Touch the middle of the control-panel display when you see the [1/8](#) under the logo

**Figure 4-44** Open the Pre-boot menu (MFP)



2. Use the arrow buttons to highlight [+3:Administrator](#) item, and then press the [OK](#) button.
3. Use the arrow buttons to highlight [Partial Clean](#) item, and then press the [OK](#) button.
4. Press the [OK](#) button again.
5. Touch the Home button to return to the main Pre-boot menu and highlight the [Continue](#) item, and then press the [OK](#) button.

---

 **NOTE:** The printer initializes.

---

## Format Disk

The [Format Disk](#) option erases the entire disk drive.

---


 **CAUTION:** After executing a [Format Disk](#) option, the printer is not bootable.

---

Characteristics of a [Format Disk](#)

- Customer-defined settings, third-party solutions, firmware files, and the operating system are deleted.


---

 **NOTE:** Rebooting the printer *does not* restore the firmware files

---

- Rebooting the printer restores the firmware files from the Repository location, but does not restore any customer-defined settings.
- After executing the [Format Disk](#) function, the message **99.09.67** displays on the control panel.
- After executing the [Format Disk](#) function, the printer firmware must be reloaded.

---

 **CAUTION:** HP recommends not using the [Format Disk](#) option unless an error occurs and the solution in the printer service manual recommends this solution. After executing the [Format Disk](#) function, the printer is unusable.


HP recommends backing-up printer configuration data before executing a [Format Disk](#) to retain customer-defined settings (if needed). See the [Backup/Restore](#) item in the [Device Maintenance](#) menu.

---

Reasons for performing [Format Disk](#)

- The printer continually boots up in an error state.

---

 **NOTE:** Try clearing the error prior to executing a [Format Disk](#).

---

- The printer will not respond to commands from the control panel.
- Executing the [Format Disk](#) function is helpful for troubleshooting hard disk problems.
- To reset the printer by deleting all solutions and customer-defined settings.

Execute a [Format Disk](#) from a non-touchscreen control panel

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

1. Press the [Cancel](#) button when you see the [1/8](#) under the logo
2. Use the arrow buttons to highlight [+3:Administrator](#) item, and then press the [OK](#) button.
3. Use the arrow buttons to highlight [Format Disk](#) item, and then press the [OK](#) button.
4. Press the [OK](#) button again.

---

 **NOTE:** When the [Format Disk](#) operation is complete, reload the printer firmware.

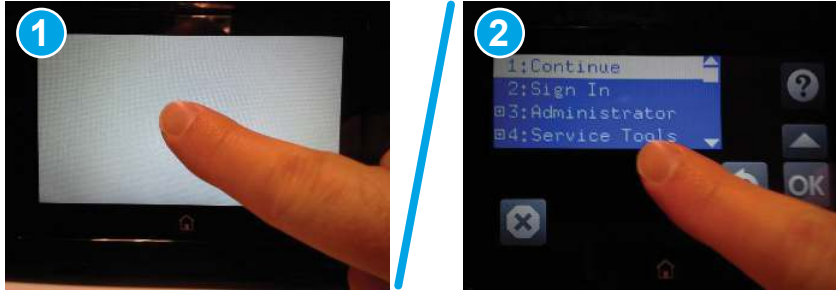
---

Execute a [Format Disk](#) from a touchscreen control panel

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

1. Touch the middle of the control-panel display when you see the [1/8](#) under the logo

Figure 4-45 Open the Pre-boot menu (MFP)



2. Use the arrow buttons to highlight +3:Administrator item, and then press the OK button.
3. Use the arrow buttons to highlight Format Disk item, and then press the OK button.
4. Press the OK button again.

---

 **NOTE:** When the Format Disk operation is complete, reload the printer firmware.


---

## Troubleshooting power-on or blank control panel problems

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

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

---

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

---

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

---

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

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

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

---

 **NOTE:** The following conditions indicate that the printer has frozen while in Sleep mode or Sleep delay. Opening a door or pressing a control-panel button should cause the printer to wake up from Sleep mode or Sleep delay.


- The control panel home button LED is illuminated

- The power-switch LED flashes once every three to five seconds
- 

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

- a. Turn the printer power off, and then on again.
  - b. Verify that the system is correctly functioning by printing a test page. Does the test page print correctly?  
  
Is the printer HP Embedded Web Server (EWS) accessible?
  - c. Verify that the control panel is correctly functioning. If it is not, turn the printer off and 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 (for example, envelope feeders, paper feeders, or output accessories).
  7. Turn the printer on, and then listen for start-up noises. If normal start-up noises are heard, the problem might be with an accessory.
  8. Perform an engine test. The engine test procedure varies by printer, so refer to the printer Service Manual to get instructions.
  9. If the engine test page prints, the print engine is operating normally. Replace the formatter.

---

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

Issues that can occur from swapping a formatter include:


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

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

For more information, see the following topic (c06360930):

- HP internal link: [33.02.01 error or printer name and/or product number changes after replacing the formatter](#)
- HP external partner link: [33.02.01 error or printer name and/or product number changes after replacing the formatter](#)

To access the HP partner link, you must first log in to the HP Partner First Portal and then connect to WISE.

 **NOTE:** If the engine test page does not print, turn the printer off, reconnect the formatter power connector, remove the embedded MultiMedia Card (eMMC), and then try the engine test again. If the page prints, the problem might be the eMMC.

---

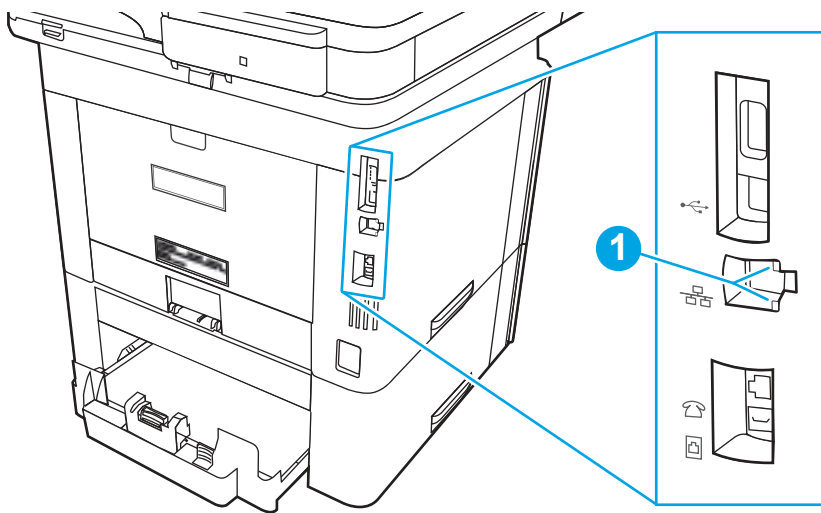
10. If after replacing the formatter or eMMC normal start-up noises are still not heard, replace the DC controller.
11. If the print engine appears to be correctly operating (the engine test page successfully printed) and the control panel is still blank, replace the power supply.

## Troubleshooting an unresponsive printer



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

1. The control panel should indicate a **Ready**, **Paused**, **Sleep mode on** or **Sleep delay on** status. If an error message displays, resolve the error. Resolve any supply issues.
2. For network connection errors, verify that the network port is active and that the cables are securely seated.
  - a. Check the network cable connections between the printer and the computer or network port. Make sure that the connections are secure.
  - b. Make sure that the cables are not faulty by trying different cables, if possible.
3. Check the network LEDs (callout 1) to see if they indicate any issues.

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




**Table 4-38** Network LEDs

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




4. Use one of the following options to print a configuration page. If the printer is connected to a network, an HP Jetdirect page also prints.

Print the configuration page from a SFP control panel

- a. From the [Home](#) screen on the printer control panel, use the arrow buttons to navigate to [Reports](#), and then press the [OK](#) button.
- b. Use the arrow buttons to scroll to [Configuration/Status Pages](#), and then press the [OK](#) button.
- c. Use the arrow buttons to scroll to [Configuration Page](#), and then press the [OK](#) button.
- d. Use the arrow buttons to scroll to the print icon . Press the [OK](#) button to print the pages.

Print the configuration page from an MFP control panel

- a. From the [Home](#) screen on the printer control panel, scroll to and touch the [Reports](#) button.
  - b. Open the following menus:
    - [Configuration/Status pages](#)
  - c. Touch [Configuration Page](#) to select it.
  - d. Touch the print icon  to print the pages.
5. Check to see if there is a newer version of the firmware available. If there is, update the firmware.
  6. Verify that the correct print driver for this printer is installed. Check the program to make sure that the print driver for this printer is used. The print driver can be downloaded from [support.hp.com](http://support.hp.com).
  7. Print a short document from a different program that has worked in the past. If this solution works, the problem is with the program. If this solution does not work (the document does not print), complete these steps:
    - a. Try printing the job from another computer that has the printer software installed.
    - b. If the printer is connected to the network, connect the printer directly to a host computer with a USB cable. Redirect the printer to the correct port, or reinstall the software (make sure to select the new connection type).



**NOTE:** The host USB port may be disabled from the factory. If so, this port needs to be activated first before connecting the printer to the USB port.

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

## Engine diagnostics


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

### Engine test

Learn about troubleshooting the printer using the engine test diagnostic.

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

---

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

---

Depress and hold the cartridge door release button, and then open and close the cartridge door four times within a three second time period to print a simplex engine test page. Open and close the door five times within a three second period to print a duplex engine test page.

## Defeating interlocks

Learn about defeating printer interlocks.

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

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

### Defeat the front (cartridge) door interlock

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

---

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

---

**Figure 4-46** Defeat the front (cartridge) door interlock



### Defeat the rear door interlock

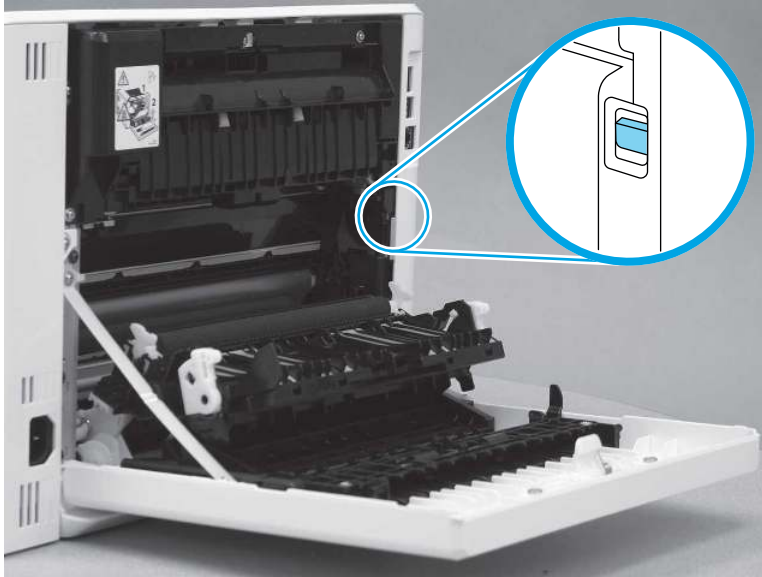
1. Open the rear door.
2. Insert a folded piece of paper into the slot.

---

 **TIP:** It might be easier to use a small flat-blade screwdriver to defeat the rear door interlock.

---

**Figure 4-47** Defeat the rear door interlock



## Control panel troubleshooting

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

### Control panel system diagnostics (MFP)

Learn about MFP printer firmware control panel troubleshooting.

Use the diagnostics in this section to test the control panel hardware and display using the printer firmware system diagnostics.

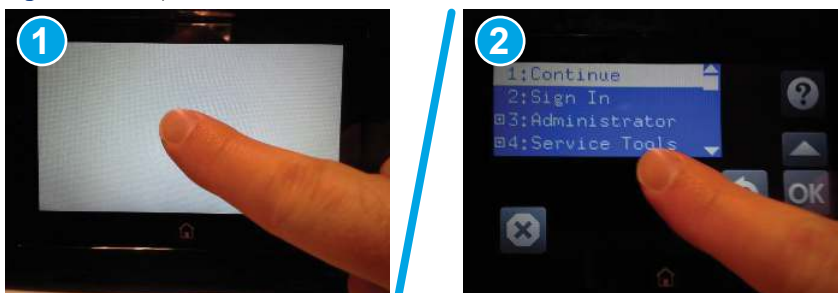
### Open the control panel system diagnostic tests

Learn about accessing the control panel system diagnostics tests from a touchscreen control panel.

Use the following procedure to open the control panel system diagnostics tests (MFP).

1. Turn the printer power off, and then on again.
2. Touch the middle of the control panel display when you see the 1/8 under the logo.

**Figure 4-48** Open the Pre-boot menu



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

Figure 4-49 Pre-boot menu

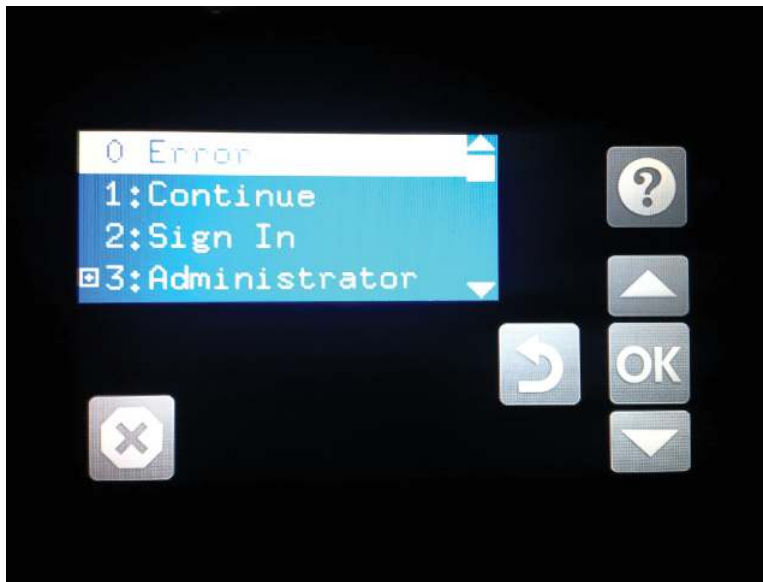







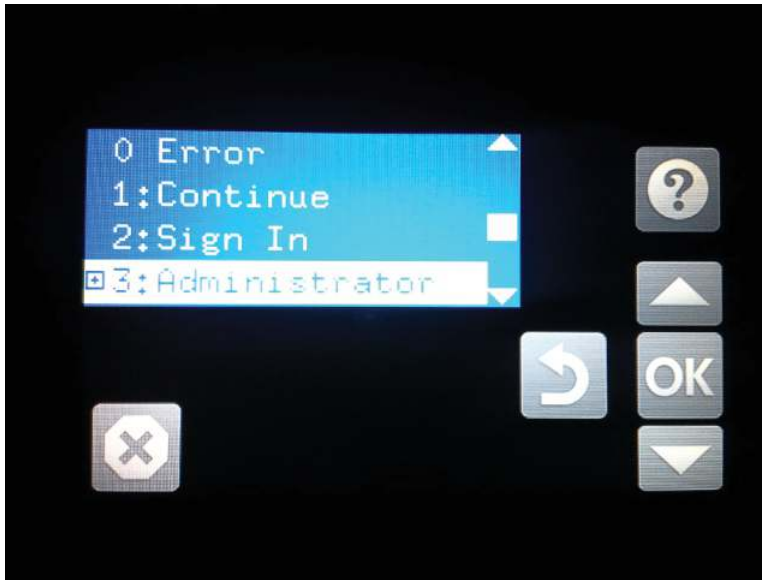


Table 4-39 Pre-boot menu button descriptions

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

4. Use the **down arrow ▼** button to scroll to **+3 Administration**, and then press the **OK** button to select it.

**Figure 4-50** Access the administration menu



5. Use the **down arrow ▼** button to scroll to **+E CP Diagnostics**, and then press the **OK** button to select it.

---

 **NOTE:** An administrator password might be required to continue.

---

**Figure 4-51** Access the diagnostics menu



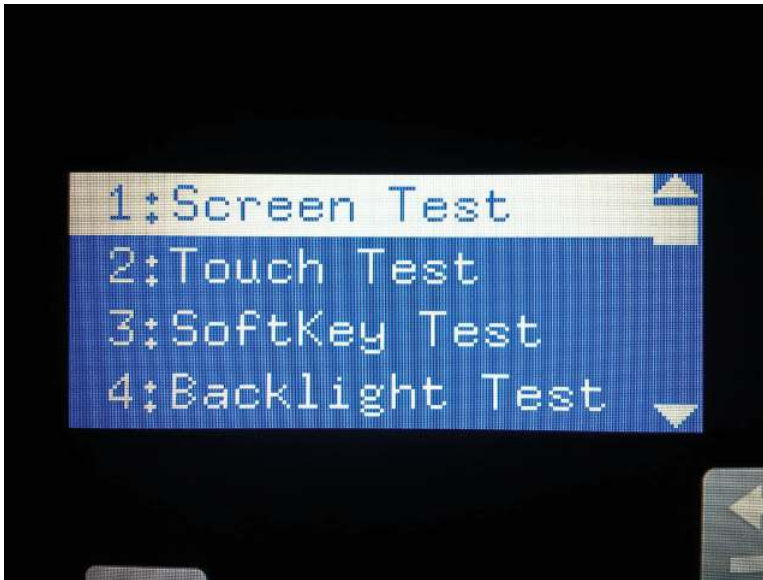
## Screen test

Learn about the control panel system diagnostic screen test.

1. Open the control panel system diagnostic tests. See [Open the control panel system diagnostic tests on page 213](#).

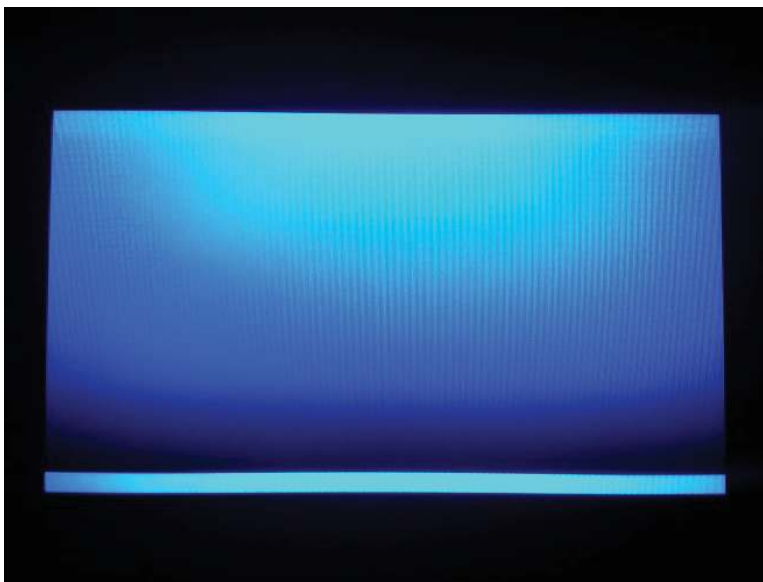
2. With 1 Screen Test highlighted, press the OK button to select it.

Figure 4-52 Open the screen test



The blue vertical gradient screen appears.

Figure 4-53 Blue vertical gradient screen



3. Touch the touchscreen to scroll through the remaining touchscreen test screens.

---

 **NOTE:** Touch the Home button to exit the test.

---

Table 4-40 Touchscreen test screens



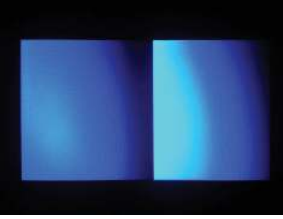
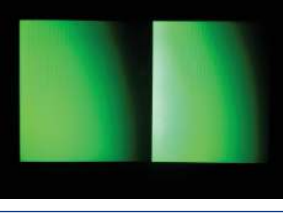


Screen	Description
	Green vertical gradient
	Red vertical gradient
	Blue horizontal gradient
	Green horizontal gradient
	Red horizontal gradient
	Blue with black horizontal interlaced

Table 4-40 Touchscreen test screens (continued)


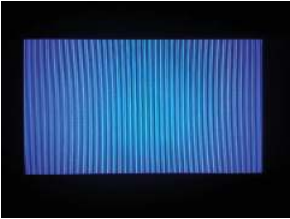
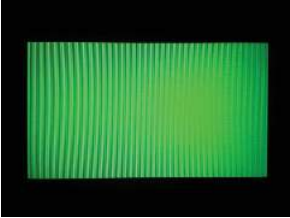
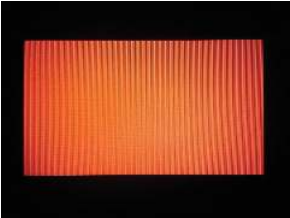


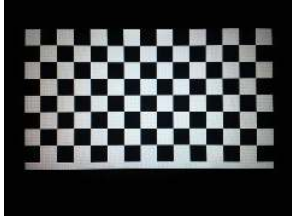

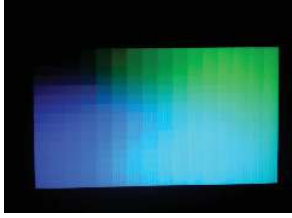
Screen	Description
	Green with black horizontal interlaced
	Red with black horizontal interlaced
	Blue with black vertical interlaced
	Green with black vertical interlaced
	Red with black vertical interlaced
	Black with white center



Table 4-40 Touchscreen test screens (continued)

Screen	Description
 A white rectangular area with a black square centered in the middle.	White with black center
 A grid of alternating black and white squares.	Checkerboard
 A series of vertical stripes in various colors: yellow, cyan, green, magenta, red, and blue.	Multicolor stripes
 A grid of blue and green squares, appearing as a mesh.	Blue green grid meshing

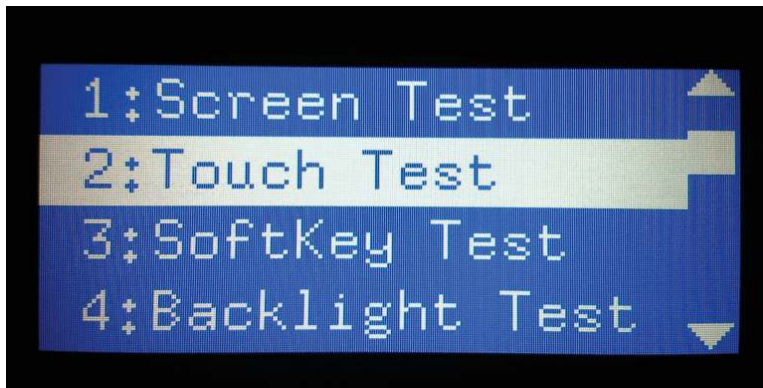
## Touch test

Learn about the control panel system diagnostic touch test.

1. Open the control panel system diagnostic tests. See [Open the control panel system diagnostic tests on page 213](#).

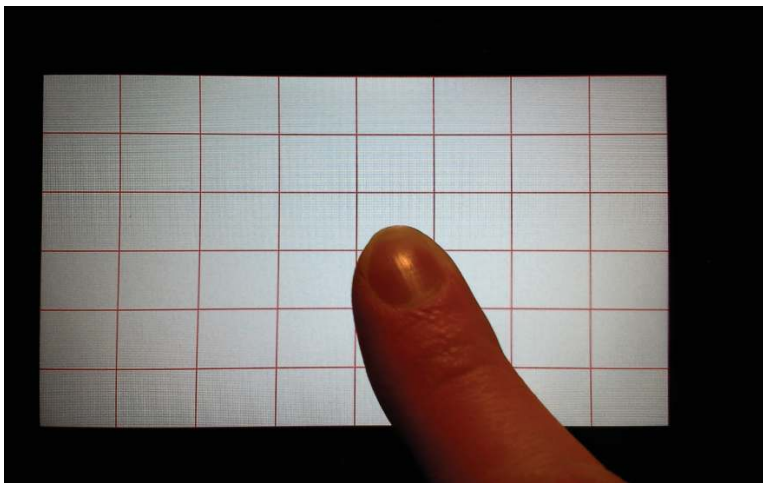
2. Use the **down arrow ▼** button to scroll to **2 Touch Test**, and then press the **OK** button to select it.

**Figure 4-54** Open the touch test



3. Use your finger to touch the white grid on the display.

**Figure 4-55** Touch the white grid



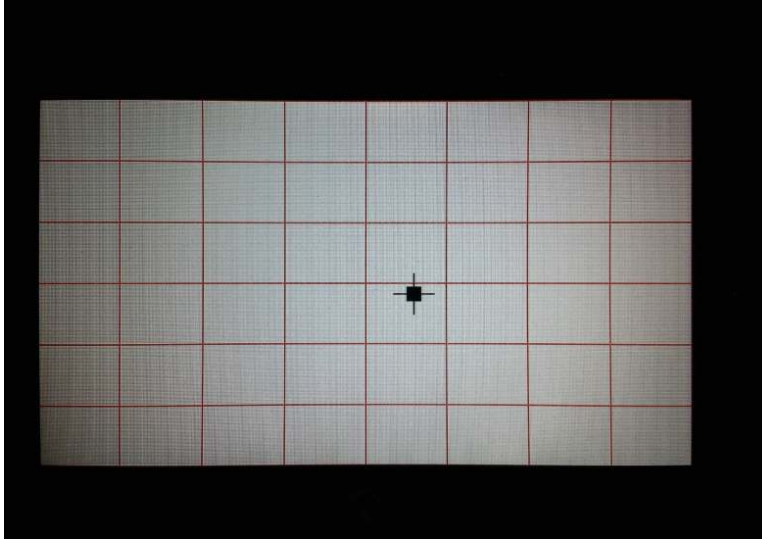
A mark appears on the grid where it was touched.

---

 **NOTE:** Touch the **Home** button to exit the test.

---

Figure 4-56 Verify the mark



## SoftKey test

Learn about the control panel system diagnostic SoftKey test.

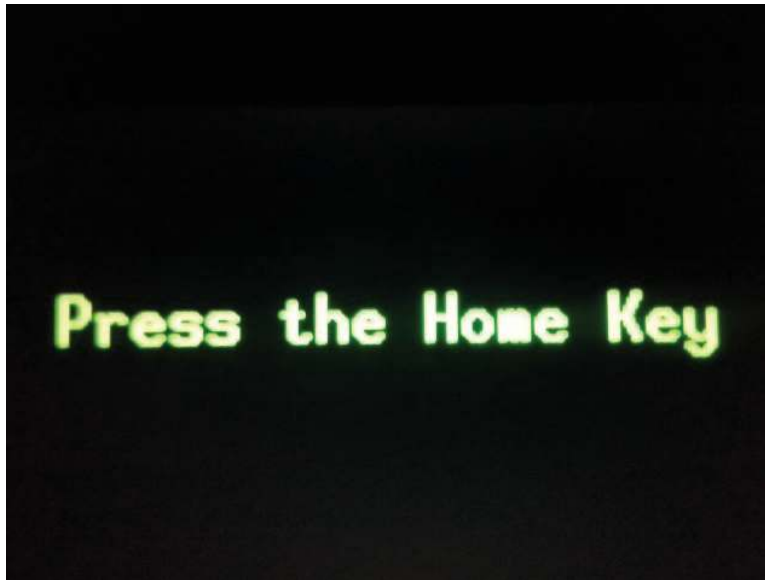
1. Open the control panel system diagnostic tests. See [Open the control panel system diagnostic tests on page 213](#).
2. Use the down arrow ▼ button to scroll to 3 SoftKey Test, and then press the OK button to select it.

Figure 4-57 Open the softkey test



3. When prompted, touch the [Home](#) button.

**Figure 4-58** Touch the [Home](#) button



If the test is successful, the following screen appears on the display.

---

 **NOTE:** Touch the screen to exit the test.

---

**Figure 4-59** Successful test




## Backlight test

Learn about the control panel system diagnostic backlight test.

1. Open the control panel system diagnostic tests. See [Open the control panel system diagnostic tests on page 213](#).

2. Use the **down arrow ▼** button to scroll to **4 Backlight Test**, and then press the **OK** button to select it.  
After selecting the **4 Backlight Test**, the screen automatically dims, and then returns to full brightness.

---

 **NOTE:** Touch any key to exit the test.

---

**Figure 4-60** Open the backlight test



## Sound test

Learn about the control panel system diagnostic sound test.

1. Open the control panel system diagnostic tests. See [Open the control panel system diagnostic tests on page 213](#).
2. Use the **down arrow ▼** button to scroll to **5 Sound Test**, and then press the **OK** button to select it.  
After selecting the **5 Sound Test**, the printer emits a series of audible tones.

---

 **NOTE:** Touch any key to exit the test.

---

Figure 4-61 Open the sound test




## Version

Learn about the control panel system diagnostic version information.

1. Open the control panel system diagnostic tests. See [Open the control panel system diagnostic tests on page 213](#).
2. Use the **down arrow ▼** button to scroll to **7 Version**, and then press the **OK** button to select it.

---

 **NOTE:** Touch any key to exit the test.

---

Select **7 Version** to view the following types of information:

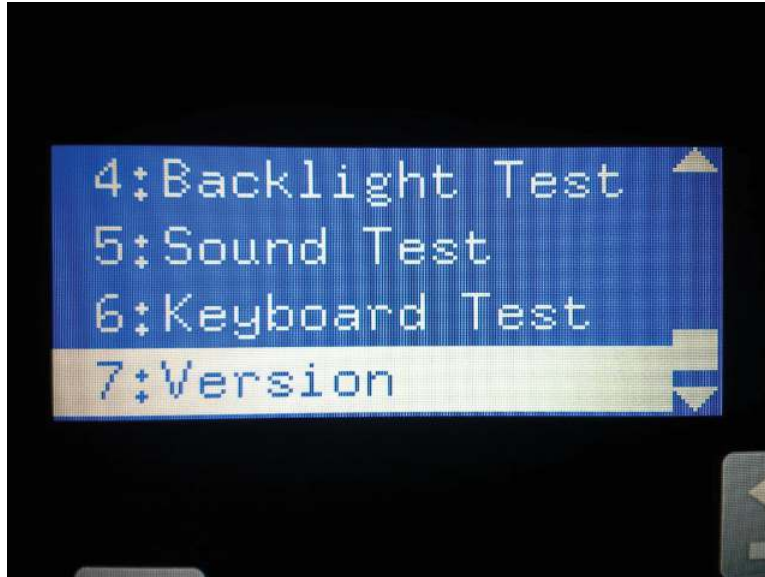
---

 **NOTE:** The following types of information are for the control panel only, not the printer.

---


- Panel ID
- Hardware (version)
- Firmware (version)
- KB Hw (version)
- KB Firm (version)
- LCD Vendor
- Touch Controller Version

Figure 4-62 Open the version information



## Control panel messages document (CPMD)

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

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

[Click here to access the complete CPMD for this printer.](#)

## How to search for printer documentation

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

These are [Wise for Channel](#) and [WISE](#) (formerly SAW). Wise for channel is available to HP channel partners and WISE is available to call agents, service technicians, and other HP internal users. The level of detail available will depend on your access credentials. To learn how to find support content in WISE, [watch the video here](#).

To view a list of control panel message documents per printer in **WISE**, go to the following topic (c06912836):

- HP internal link: [Control panel message document \(CPMD\) list](#)
- HP external partner link: [Control panel message document \(CPMD\) list](#)

 **NOTE:** To access the HP partner link, you must first log in to the HP Partner First Portal and then connect to WISE.

## How to search WISE for printer documentation

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

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

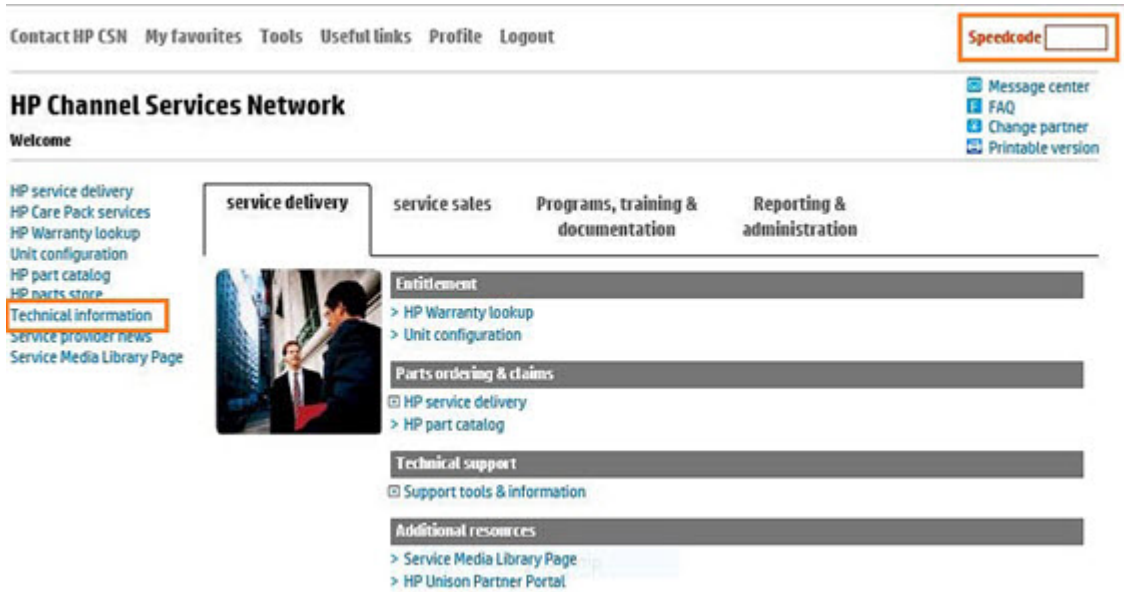
To view a list of control panel message documents per printer in **WISE**, go to [HP LaserJet, OfficeJet, PageWide, ScanJet Enterprise - Control panel message document \(CPMD\) list](#) (HP internal only).

## How to search GCSN for printer documentation

These instructions are for internal use by HP Channel Partners.

To learn how to find support content in GCSN, [watch the video here: Finding Error Code and Control Panel Message Documents in GCSN](#) or follow these steps:

1. On the Home screen in GCSN, open **Technical information** using one of the following two methods:
  - Type **TINF** in the **Speedcode** field found in the upper right corner and press **Enter**.
  - On the Home page, click **Technical information** in the left pane.



2. Under **Product Search**, select the **Type**, **Category**, **Family**, and **Series** that match your product model (leave the **Model** field as blank or the default).


 **NOTE:** Make sure to log in to GCSN using your service-qualified credentials to access the most comprehensive content list available. To find out how to become service-qualified, contact your HP representative.

Figure 4-63 Sample product search criteria

**Product Search** [Add Favorites](#)

**Type**  
Printers and Multifunction

**Category**  
Multifunction and All-in-One

**Family**  
HP LaserJet MFP and All-in-One Products

**Series**  
HP Color LaserJet Enterprise MFP M682 series

**Model**  
Select a Model



- Click **Add Favorites** and then click **Add** to add the printer to your Favorites list and allow you to bypass the **Product Search** fields next time for that particular model (optional).

**Product Search** **Add Favorites**

**Type**

**Category**

**Family**

- Clear all of the high-level check boxes.

Select the appropriate check boxes for the document types you wish to review.

<input type="checkbox"/> <b>Support Communications</b>	<input type="checkbox"/> <b>Manuals and Guides</b>	<input type="checkbox"/> <b>Support Information</b>
<input type="checkbox"/> Customer Advisory	<input type="checkbox"/> Illustrated Parts Map	<input type="checkbox"/> ActionProcedureMap
<input type="checkbox"/> Customer Bulletin	<input type="checkbox"/> Install Guide	<input type="checkbox"/> CPMDMap
<input type="checkbox"/> Customer Notice	<input type="checkbox"/> Maintenance/Service Guide	<input type="checkbox"/> Support Information
<input type="checkbox"/> Customer Work Instruction (CSR)	<input type="checkbox"/> Parts Guide	<input type="checkbox"/> Top Issue (Note: If you are selecting top issue it will return only top issue documents)
<input type="checkbox"/> Product Change Notification	<input type="checkbox"/> QuickSpec	<input type="checkbox"/> Software Support & Drivers Information
<input type="checkbox"/> Security Bulletin	<input type="checkbox"/> Reference Manual	<input type="checkbox"/> Product Bulletin/QuickSpec
<input type="checkbox"/> Service Action Advisory	<input type="checkbox"/> Service Guide/Manual	<input type="checkbox"/> Buy Care Packs
<input type="checkbox"/> Service Advisory	<input type="checkbox"/> Technical Reference Guide	
<input type="checkbox"/> Service Bulletin	<input type="checkbox"/> Training Material	

- Select the check boxes for the document types for which you want to search.

 **NOTE:** Select only the high-level **Manuals and Guides** search option if you are not sure in which type of manual or guide the content might be listed.

Select the appropriate check boxes for the document types you wish to review.

<input type="checkbox"/> <b>Support Communications</b>	<input type="checkbox"/> <b>Manuals and Guides</b>	<input type="checkbox"/> <b>Support Information</b>
<input type="checkbox"/> Customer Advisory	<input type="checkbox"/> Illustrated Parts Map	<input type="checkbox"/> ActionProcedureMap
<input type="checkbox"/> Customer Bulletin	<input type="checkbox"/> Install Guide	<input checked="" type="checkbox"/> CPMDMap
<input type="checkbox"/> Customer Notice	<input checked="" type="checkbox"/> Maintenance/Service Guide	<input checked="" type="checkbox"/> Support Information
<input type="checkbox"/> Customer Work Instruction (CSR)	<input type="checkbox"/> Parts Guide	<input type="checkbox"/> Top Issue (Note: If you are selecting top issue it will return only top issue documents)
<input type="checkbox"/> Product Change Notification	<input type="checkbox"/> QuickSpec	<input type="checkbox"/> Software Support & Drivers Information
<input type="checkbox"/> Security Bulletin	<input type="checkbox"/> Reference Manual	<input type="checkbox"/> Product Bulletin/QuickSpec
<input type="checkbox"/> Service Action Advisory	<input checked="" type="checkbox"/> Service Guide/Manual	<input type="checkbox"/> Buy Care Packs
<input type="checkbox"/> Service Advisory	<input type="checkbox"/> Technical Reference Guide	
<input type="checkbox"/> Service Bulletin	<input type="checkbox"/> Training Material	
<input type="checkbox"/> Service Notice	<input type="checkbox"/> Troubleshooting Guide	
<input type="checkbox"/> Service Product Announcement	<input type="checkbox"/> Upgrade Manual	
<input type="checkbox"/> Service Program Announcement	<input checked="" type="checkbox"/> User Guide	
<input type="checkbox"/> Technical Work Instruction (TWI)	<input type="checkbox"/> Warranty Statement	
	<input type="checkbox"/> White Papers	

- Select **Submit**.

- If needed, click **Back To selection Criteria** and narrow your search (the maximum allowed search result is 100 documents).



**NOTE:** Do not select the **Top Issue** option unless you only want to view top issues for that model. All other available content will be filtered out.

Technical information type	Select this checkbox
CPMD	CPMD-Map
List of all CPMDs per product	Support Information
Installation Guide or Hardware Install Guide	Maintenance/Service Guide or Install Guide
Service cost document	Install Guide or Service Guide/Manual
Service guide or Service manual	Service Guide/Manual
Self-solve or troubleshooting document	Support Information
User manual or User guide	User Guide
Warranty and Legal Guide	Warranty Statement

## Error-code and control-panel-message troubleshooting overview

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

### Error codes

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

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

HP LaserJet and HP PageWide Enterprise error codes are documented in the control panel message document (CPMD) for each printer.

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

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

**Table 4-41 ERROR CODES: The first two characters**

Error code	System Component	System Error Description
10.WX.YZ	Supplies (LaserJet)	Supply error or supply memory error.
11.WX.YZ	Real-time clock	Internal error with the clock on the formatter.
13.WX.YZ	Jam (LaserJet)	Paper jam or open door jam error.
15.WX.YZ	Jam (PageWide)	Paper jam or open door jam error.
17.WX.YZ	Supplies (PageWide)	Supply error or supply memory error.

**Table 4-41 ERROR CODES: The first two characters (continued)**

Error code	System Component	System Error Description
20.WX.YZ	Printer memory	Insufficient memory or buffering error.
21.WX.YZ	Page	Page complexity causing a decompression error when trying to process job.
30.WX.YZ	Scanner	Flatbed scanner error occurring inside the unit.
31.WX.YZ	Document feeder	Document feeder, scanner, or jam error.
32.WX.YZ	Backup, restore, or reset	Backup, restore, or reset notification or error.
33.WX.YZ	Security	Backup, Disk, EFI BIOS, Firmware integrity (SureStart), or Trusted Platform Module (TPM) notification or error.
40.WX.YZ	Input/Output (I/O)	Partition manager, secure erase, or USB accessory error.
41.WX.YZ	Fuser, Laser scanner, or Paper path	Miscellaneous error including general and misprint or mismatch errors typically involving (but not limited to) the fuser, the laser scanner, or the paper path.
42.WX.YZ	Firmware	Firmware failure involving the Event Log, Shell, System Manager, or other component.
44.WX.YZ	Firmware	Firmware failure involving a digital sending component.
45.WX.YZ	OXPd/Web Kit (PageWide)	Informational notifications involving the OXPd Web Kit (communications log).
46.WX.YZ	Engine (LaserJet)	Engine communication error.
47.WX.YZ	Firmware	Job parser or printer calibration error.
48.WX.YZ	Firmware	PJA job accounting, job management, or job pipeline error.
49.WX.YZ	Firmware	Firmware communication error.
50.WX.YZ	Fuser (LaserJet)	Fuser error.
51.WX.YZ	Laser scanner (LaserJet)	Laser scanner beam error.
52.WX.YZ	Laser scanner (LaserJet)	Laser scanner startup error.
54.WX.YZ	Sensor	Sensor error (not jam related).
55.WX.YZ	DC controller (LaserJet)	DC controller communication error.
56.WX.YZ	Paper handling (LaserJet)	Paper input/output or accessory error.
57.WX.YZ	Fan	Fan error.
58.WX.YZ	Sensor	Engine sensor failure.
59.WX.YZ	Motor (LaserJet)	Motor error.
60.WX.YZ	Tray motor error (LaserJet)	Tray lifting or pick up error.
61.WX.YZ	Engine (PageWide)	Print engine error with the 8-bit data package.
62.WX.YZ	System (LaserJet)	LaserJet internal system error.

Table 4-41 ERROR CODES: The first two characters (continued)

Error code	System Component	System Error Description
	Print bar (PageWide)	PageWide print system error.
63.WX.YZ	Engine (LaserJet)	General engine error (electrical, communication, etc.).
65.WX.YZ	Connector	Output accessory connection error.
66.WX.YZ	Output accessory	Output accessory error.
67.WX.YZ	Input accessory	Input accessory connection error
69.WX.YZ	Duplexer	Duplexer error.
70.WX.YZ	DC controller (LaserJet)	DC controller firmware error.
80.WX.YZ	Managed device	Embedded Jetdirect error.
81.WX.YZ	Near Field Communication (NFC)	Wireless, Bluetooth or internal EIO error.
82.WX.YZ	Memory (hard disk, EMMC, etc.)	Disk hardware error.
90.WX.YZ	Internal diagnostics	Internal test of systems (i.e. disk, CPB, display) or interconnection error.
98.WX.YZ	Hard disk	Hard disk partition error.
99.WX.YZ	Firmware installer	Remote Firmware Upgrade (RFU), firmware install (engine or accessory), or disk error.

## Solve paper handling problems

Review the following information to solve paper handling problems.

### Clear paper jams (SFP)

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



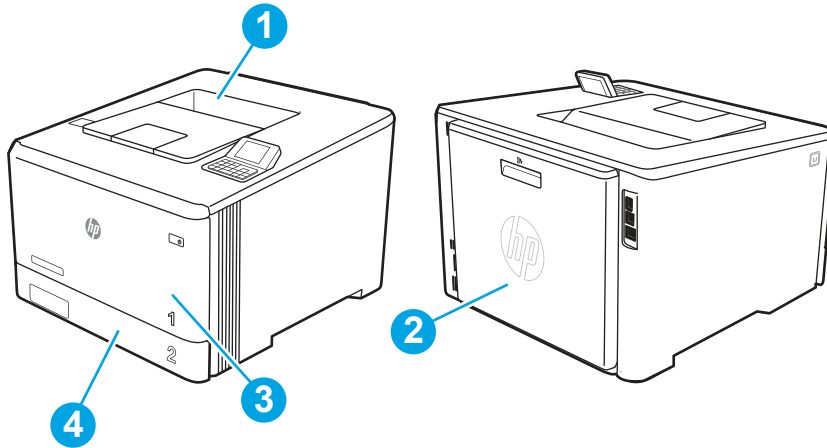
**NOTE:** To avoid tearing the paper, pull the jammed paper out slowly and gently.

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

### Paper jam locations

Jams can occur in these locations.

Figure 4-64 Paper jam locations



Number	Description
1	Output bin
2	Duplexer
3	Tray 1
4	Tray 2

## Auto-navigation for clearing paper jams

Learn about printer jam clearing auto-navigation.

The auto-navigation feature assists in clearing jams by providing step-by-step instructions on the control panel.

When you complete a step, the printer displays instructions for the next step until you have completed all steps in the procedure.

## Experiencing frequent or recurring paper jams?

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

[View a video that demonstrates how to load paper in a way that reduces the number of paper jams](#)

1. Use only paper that meets HP specifications for this printer.
2. Use paper that is not wrinkled, folded, or damaged. If necessary, use paper from a different package.
3. Use paper that has not previously been printed or copied on.
4. Make sure the tray is not overfilled. If it is, remove the entire stack of paper from the tray, straighten the stack, and then return some of the paper to the tray.
5. Make sure the paper guides in the tray are adjusted correctly for the size of paper. Adjust the guides so they are touching the paper stack without bending it.
6. Make sure that the tray is fully inserted in the printer.
7. If you are printing on heavy, embossed, or perforated paper, use the manual feed feature and feed sheets one at a time.

8. Open the [Trays](#) menu on the printer control panel. Verify that the tray is configured correctly for the paper type and size.
9. Make sure the printing environment is within recommended specifications.

### 13.A3 jam error in tray 3

Use the following procedure to check for a paper jam in tray 3.

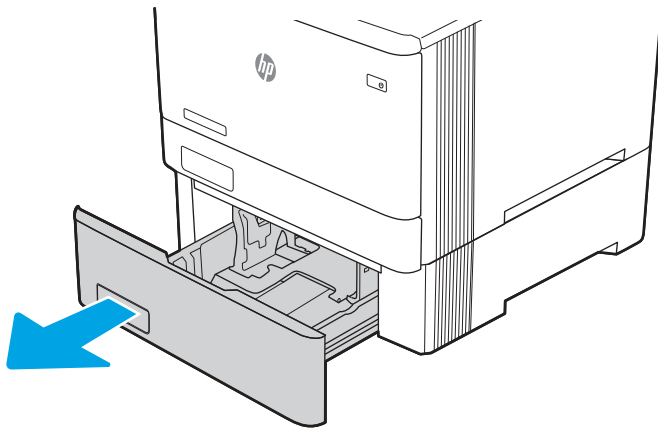
#### Recommended action for customers

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

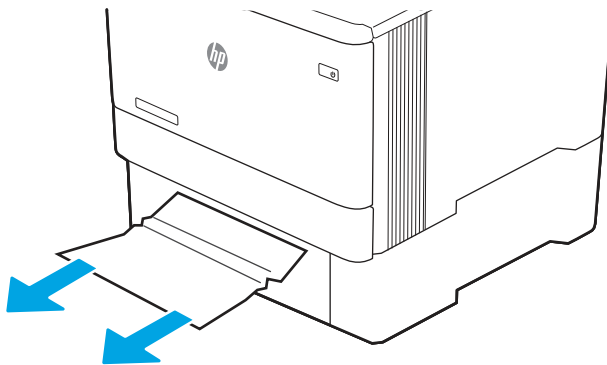
- 13.A3.D3 - Jam in tray 3

[View a video of how to clear a jam in tray 3](#)

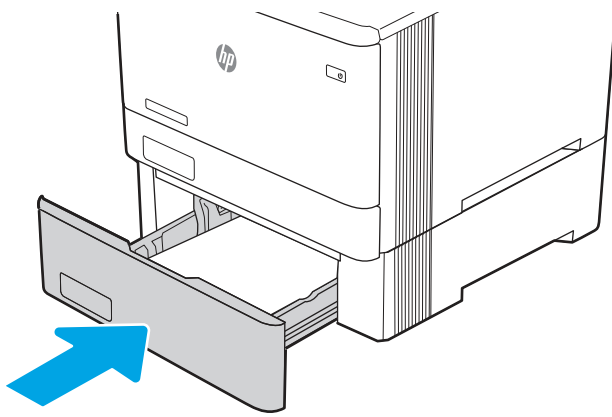
1. Pull the tray completely out of the printer.



2. Remove any jammed or damaged sheets of paper.



3. Reinsert and close Tray 3.

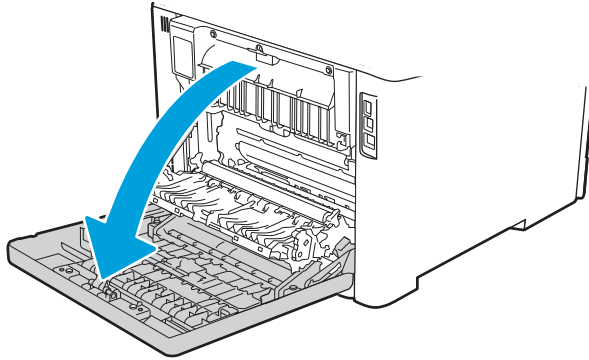


---

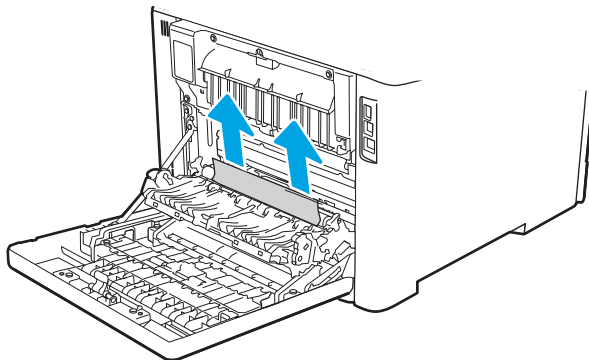
 **NOTE:** When reinserting the paper, make sure the paper guides are adjusted properly for the paper size.

---

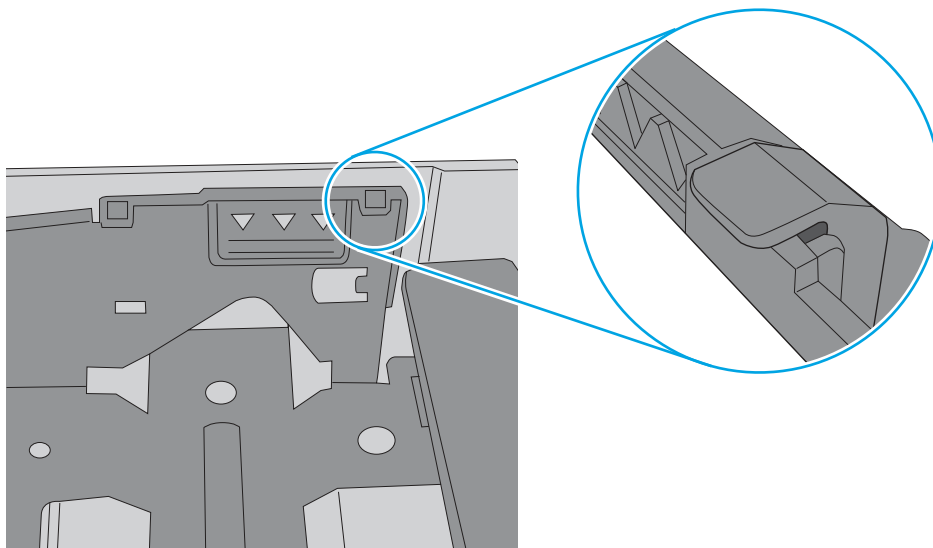
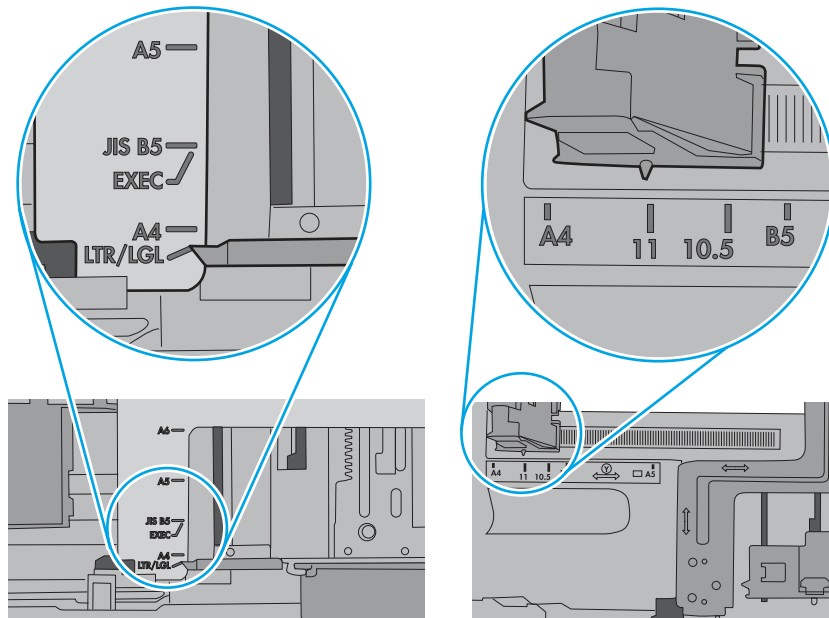
4. Open the rear door and look for and clear any paper present or obstructions in the paper path.



5. Check the following are for paper. Remove paper by gently pulling paper out.



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 or over the tab (line below 3 triangles). See following images.



7. Ensure the type and quality of the paper being used meets the HP specifications for the printer.
8. If the error persists, contact customer support at [www.hp.com/go/contactHP](http://www.hp.com/go/contactHP), or contact an HP-authorized service or support provider.

### 13.B2.D1 jam error in tray 1

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

#### Recommended action for customers

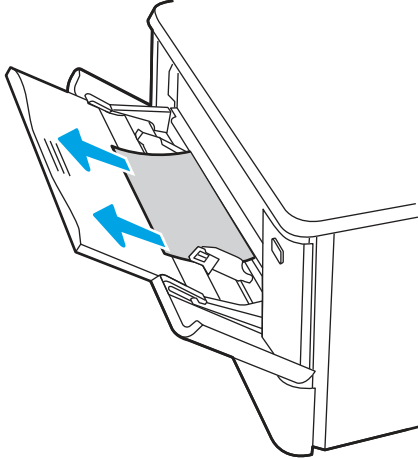


When a jam occurs, the control panel displays a message and an animation that assists in clearing the jam.

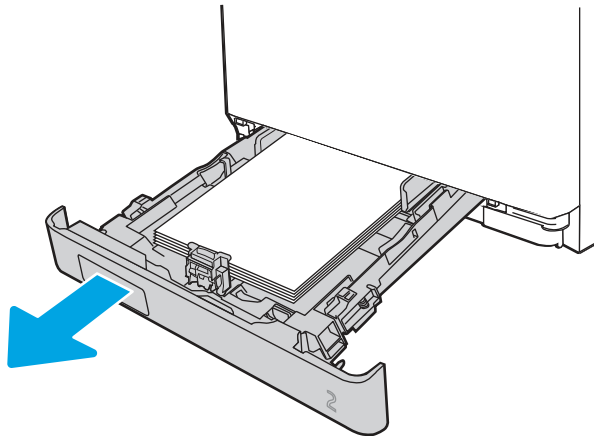
- 13.B2.D1 Jam in tray 1

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

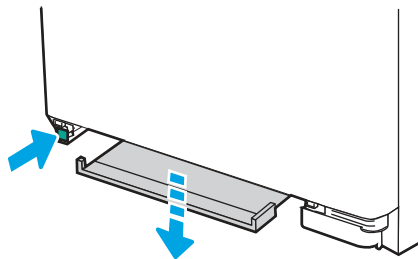
1. If you can see the jammed sheet in Tray 1, remove the jammed sheet by pulling it straight out.



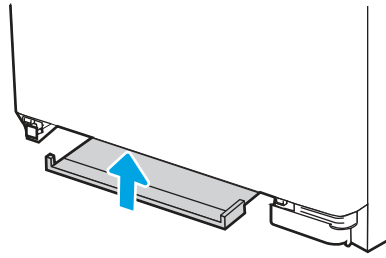
2. If you cannot see the jammed sheet, close Tray 1, and then remove Tray 2.



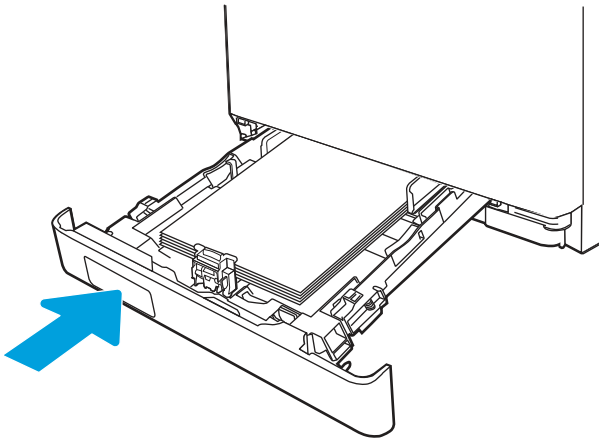
3. At the left side of the Tray 2 cavity, press the tab to lower the tray plate, and then remove any paper. Remove the jammed sheet by gently pulling it straight out.



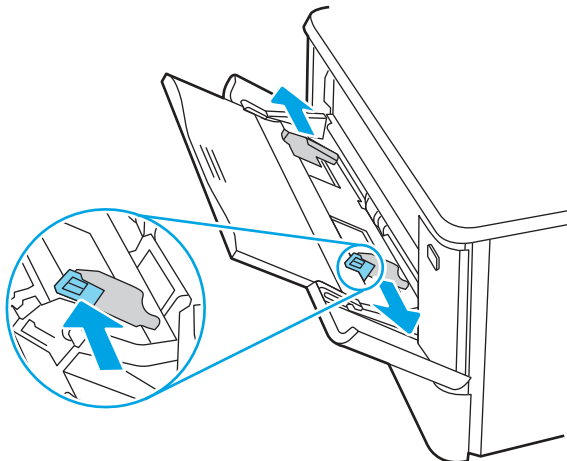
4. Push the tray plate back up into place.



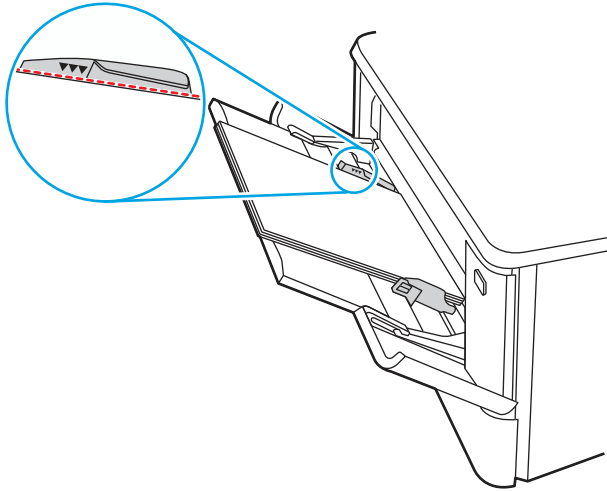
5. Reinstall Tray 2.



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



8. Ensure the tray is not overfilled. Paper should be below the 3 triangles in the following image.



9. If the error persists, contact your HP-authorized service or support provider, or contact customer support at [www.hp.com/go/contactHP](http://www.hp.com/go/contactHP).

### 13.B2.D2 jam error in tray 2

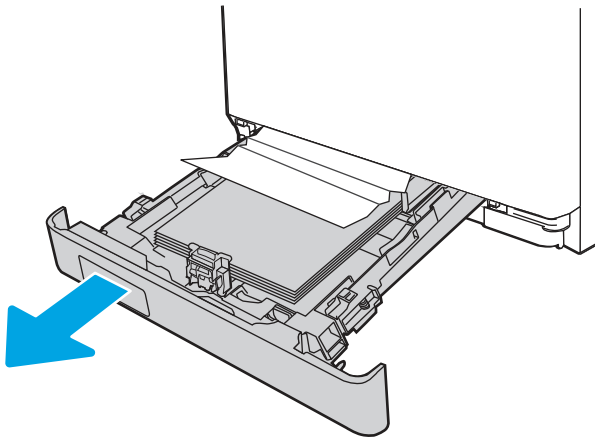
Use the following procedure to check for a paper jam in tray 2.

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

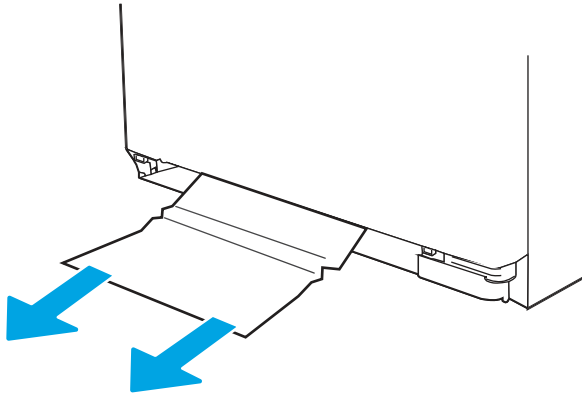
- 13.B2.D2 Paper jam in tray 2

[View a video of how to clear a jam in tray 2](#)

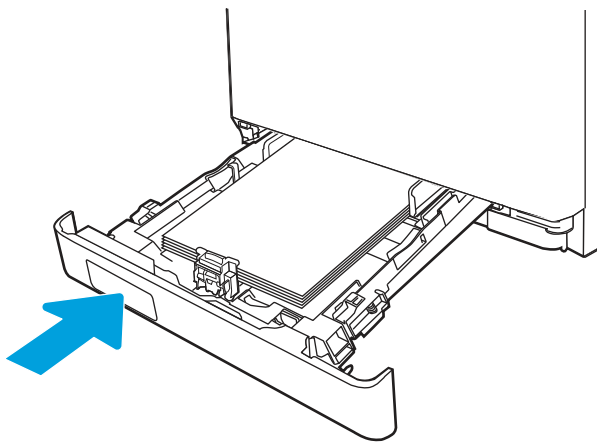
1. Pull the tray completely out of the printer.



2. Remove any jammed or damaged sheets of paper.



3. Reinsert and close Tray 2.

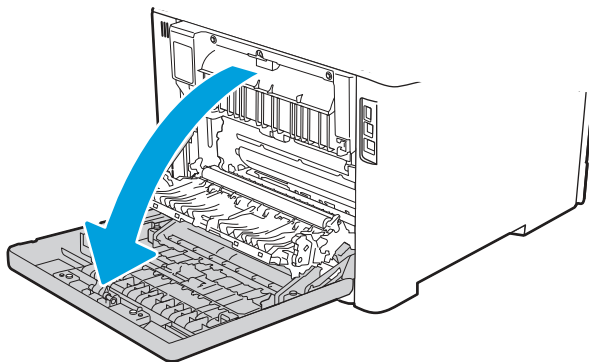


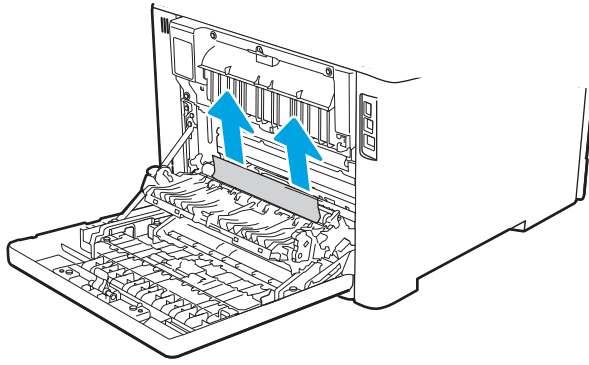
---

 **NOTE:** When reinserting the paper, make sure the paper guides are adjusted properly for the paper size.

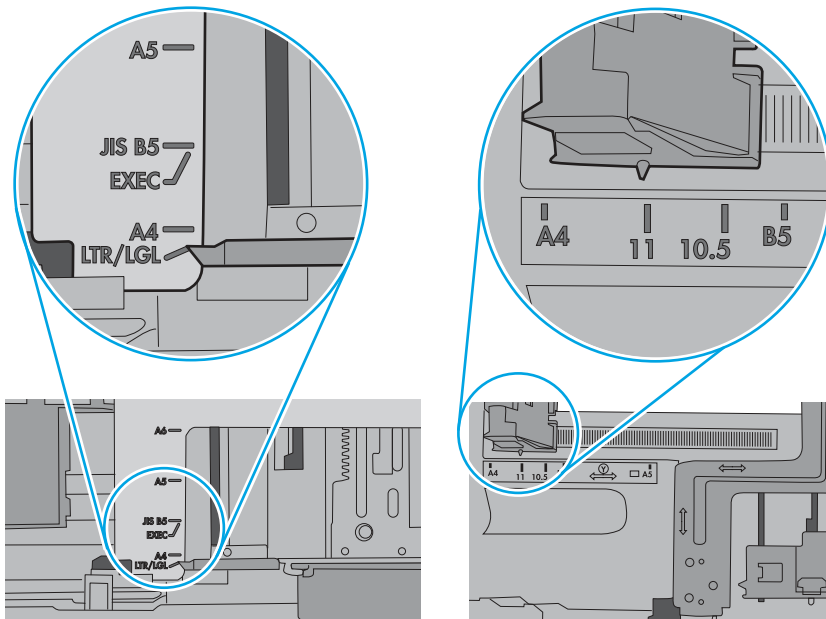
---

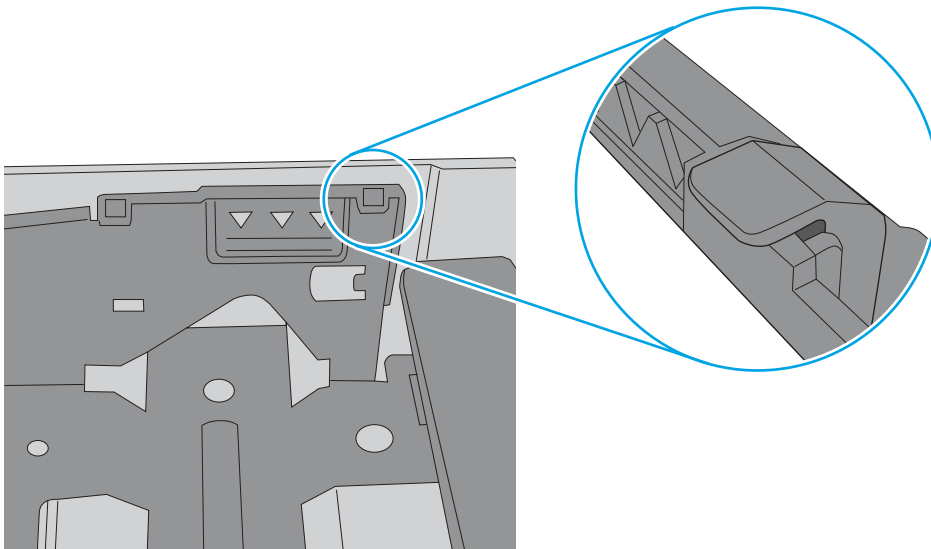
4. Open the rear door and look for and clear any paper present or obstructions in the paper path.





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 or over the tab (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](http://www.hp.com/go/contactHP).

### 13.B2 jam error in rear door

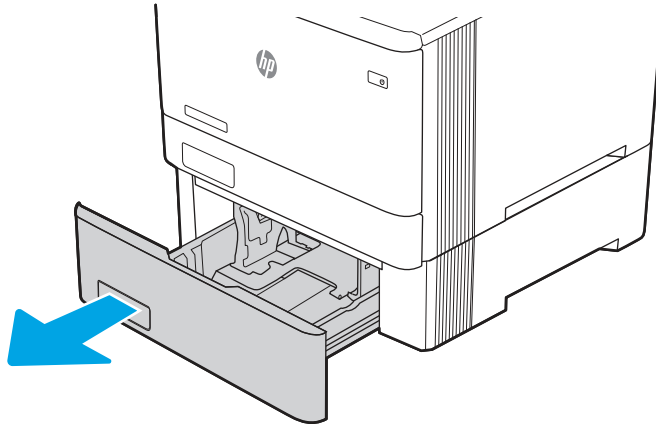
Use the following procedure to check for a paper jam in the rear door.

#### Recommended action for customers

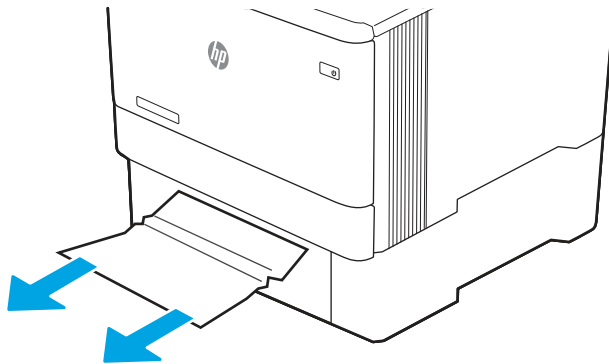
When a jam occurs, the control panel displays a message and an animation that assists in clearing the jam.

- 13.B2.A1 - Jam in rear door
- 13.B2.D1 - Jam in rear door
- 13.B2.A2 - Jam in rear door
- 13.B2.D2 - Jam in rear door
- 13.B2.A3 - Jam in rear door
- 13.B2.D3 - Jam in rear door
- 13.B2.AD - Jam in rear door
- 13.B2.DD - Jam in rear door

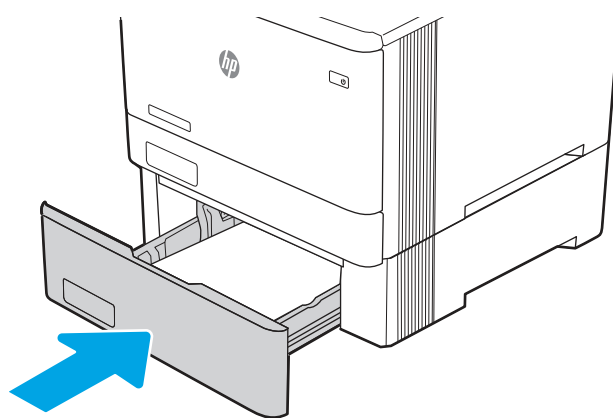
1. Pull the tray completely out of the printer.



2. Remove any jammed or damaged sheets of paper.



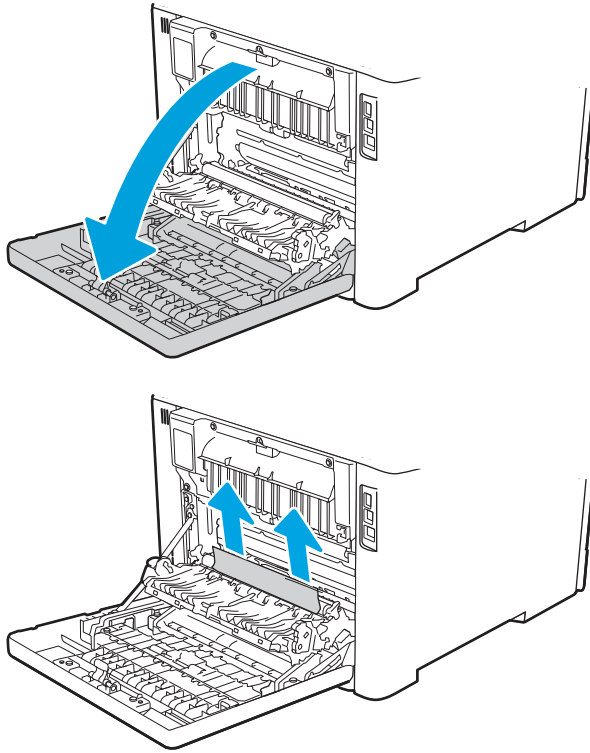
3. Reinsert and close Tray 3.



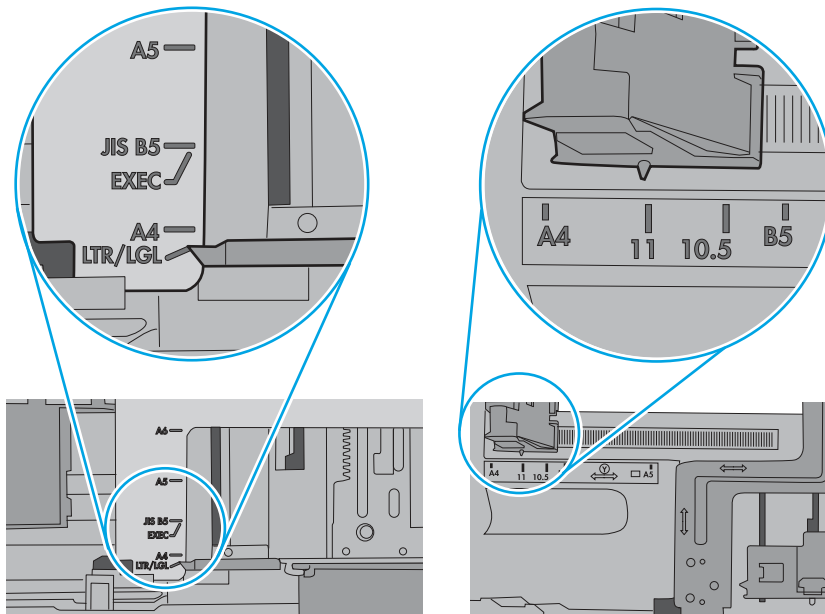
---

 **NOTE:** When reinserting the paper, make sure the paper guides are adjusted properly for the paper size.

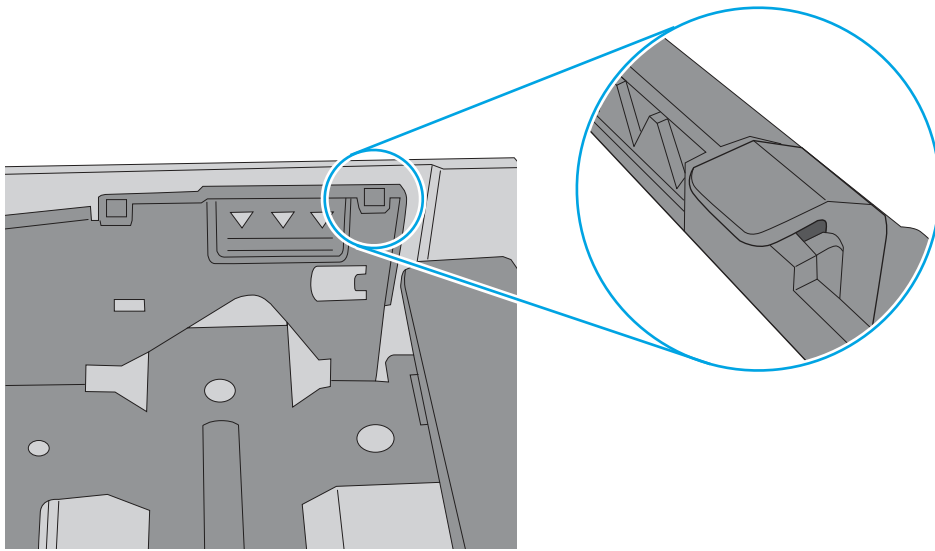
4. Open the rear door and look for and clear any paper present or obstructions in the paper path.



5. 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 or over the tab (line below 3 triangles). See following images.







6. Ensure the type and quality of the paper being used meets the HP specifications for the printer.
7. If the error persists, contact customer support at [www.hp.com/go/contactHP](http://www.hp.com/go/contactHP), or contact an HP-authorized service or support provider.

### 13.B9 jam error in 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 and an animation that assists in clearing the jam.

- 13.B9.yz Jam in rear door

y = jam type (A, C, or D)

z = paper type that is being printed on. This can be 0-9 or A-F.

[View a video of how to clear a jam in the fuser area](#)

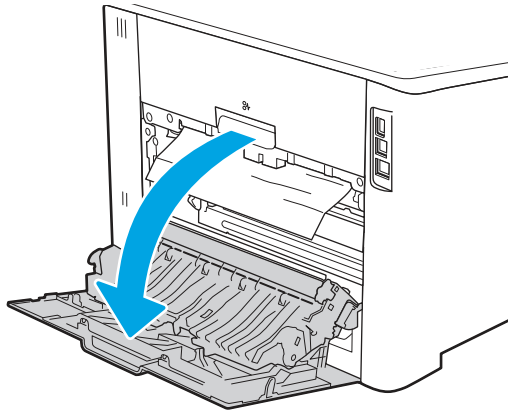


**CAUTION:**

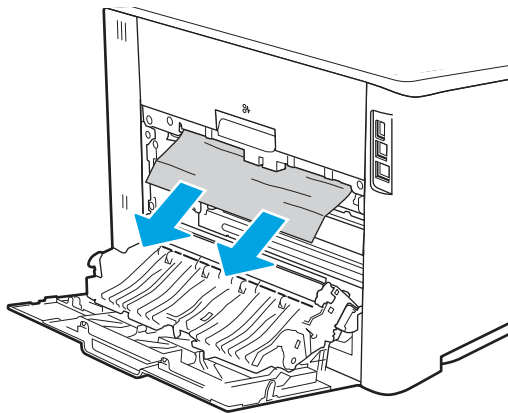


The fuser can be hot while the printer is in use. Wait for the fuser to cool before handling it.

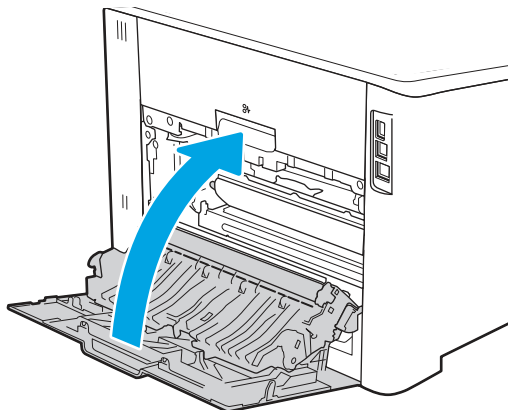
1. Open the rear door.



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](http://www.hp.com/go/contactHP).

## 13.D1, 13.D3 jam error in the duplexer

Use the following procedure to check for paper in all possible jam locations in the automatic duplexer.

### Recommended action for customers

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

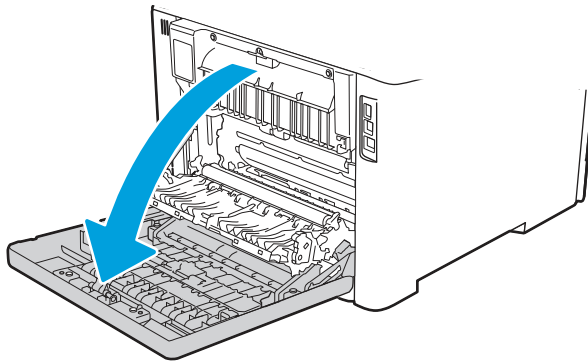
- 13.D1.yz Paper jam in duplexer (upper area of duplexer)
- 13.D3.yz Paper jam in duplexer (lower area of duplexer)

y = A or D

x = 0-9 or A-F

[View a video of how to clear a jam in the duplexer](#)

1. Check the out 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 duplexer.



3. Remove any jammed or damaged sheets of paper from the rear door of the printer.



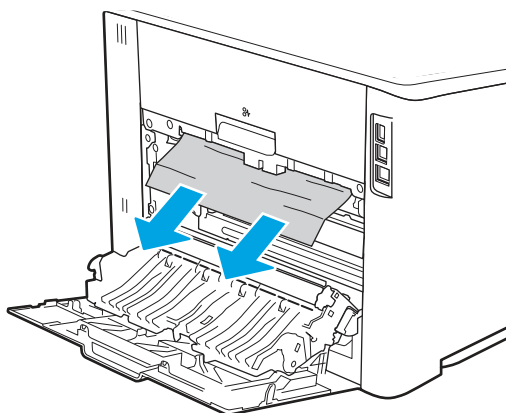
#### CAUTION:

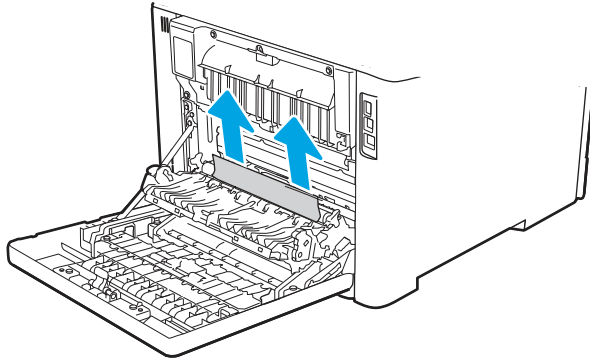
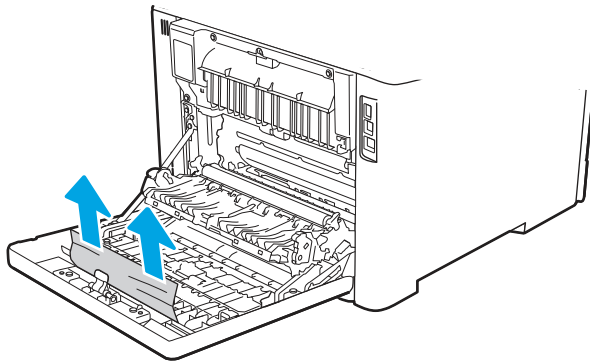


The fuser is located above the rear door, and it is hot. Do not attempt to reach into the area above the rear door until the fuser is cool.

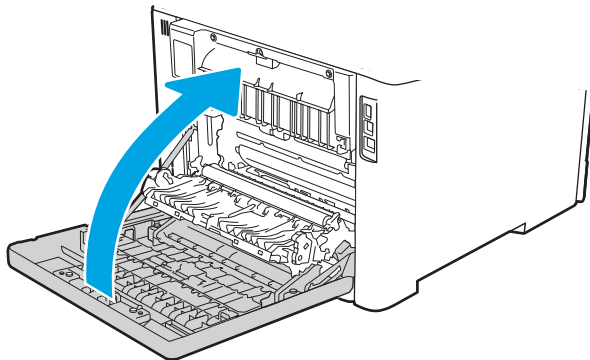


**NOTE:** There are 3 areas to check for paper, above the fuser, entering in the duplexer and the exit of the duplexer.





4. Close the duplexer.



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](http://www.hp.com/go/contactHP).

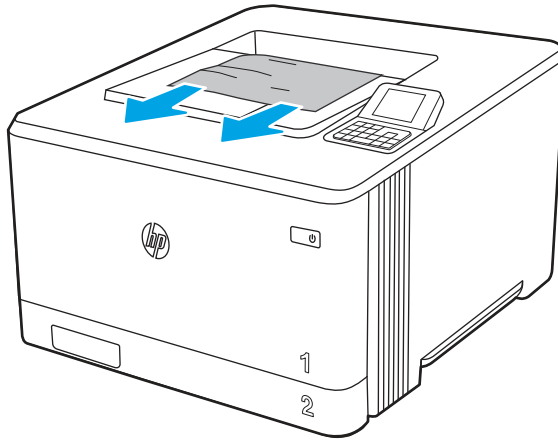
### 13.E1 jam error in the output bin

Use the following procedure to check for paper in all possible jam locations related to the output bin.

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

[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.



## Change jam recovery (non-touchscreen)

Use the following procedure to change jam recovery from a non-touchscreen control panel (FutureSmart 4 firmware or later).

1. From the [Home](#) screen on the printer control panel, use the arrow buttons to navigate to [Settings](#), and then press the [OK](#) button.
2. Use the buttons to scroll to [General](#), and then press the [OK](#) button.
3. Use the arrow buttons to scroll to [Jam Recovery](#), and then press the [OK](#) button.
4. Use the arrow buttons to scroll to an option, and then press the [OK](#) button to select it.
  - [Auto](#) — The printer attempts to reprint jammed pages when sufficient memory is available. This is the default setting.
  - [Off](#) — The printer does not attempt to reprint jammed pages. Because no memory is used to store the most recent pages, performance is optimal.



---

**NOTE:** Some pages can be lost if the printer runs out of paper while printing a duplex job with [Jam Recovery](#) set to [Off](#).

---

- [On](#) — The printer always reprints jammed pages. Additional memory is allocated to store the last few pages printed.

## Clear paper jams (MFP)

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



---

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

---

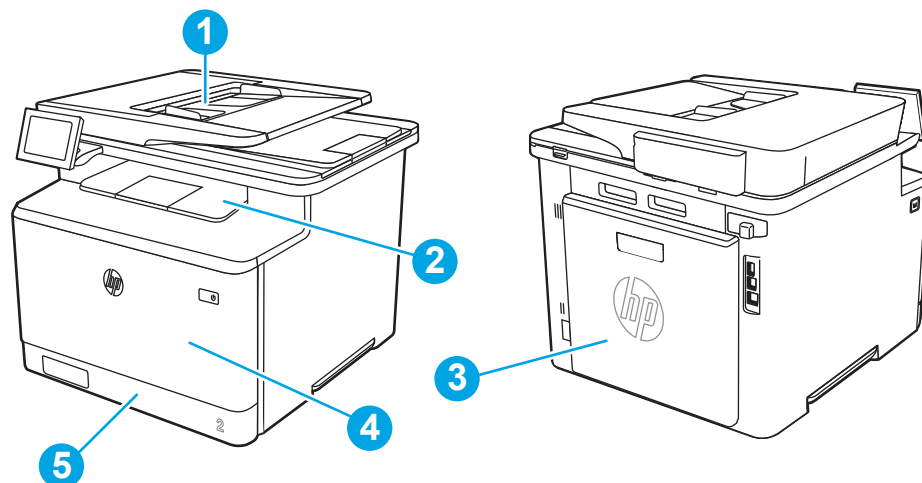
Figures in this section are representational only. The actual printer being serviced might look slightly different depending on the model and installed accessories.

---

## Paper jam locations

Jams can occur in these locations.

Figure 4-65 Jam locations



Number	Description
1	Document feeder
2	Output bin
3	Rear door, fuser, and duplexer area
4	Tray 1
5	Tray 2

## Auto-navigation for clearing paper jams

Learn about printer jam clearing auto-navigation.

The auto-navigation feature assists in clearing jams by providing step-by-step instructions on the control panel.

When you complete a step, the printer displays instructions for the next step until you have completed all steps in the procedure.

## Experiencing frequent or recurring paper jams?

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

[View a video that demonstrates how to load paper in a way that reduces the number of paper jams](#)

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

7. If you are printing on heavy, embossed, or perforated paper, use the manual feed feature and feed sheets one at a time.
8. Open the [Trays](#) menu on the printer control panel. Verify that the tray is configured correctly for the paper type and size.
9. Make sure the printing environment is within recommended specifications.

### 31.13 jam error in the document feeder

Use the following procedure to check for paper in all possible jam locations related to the document feeder.

#### Recommended action for customers

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

- 31.13.01 Jam in document feeder
- 31.13.02 Jam in document feeder
- 31.13.13 Jam in document feeder

In addition to the instructions provided below

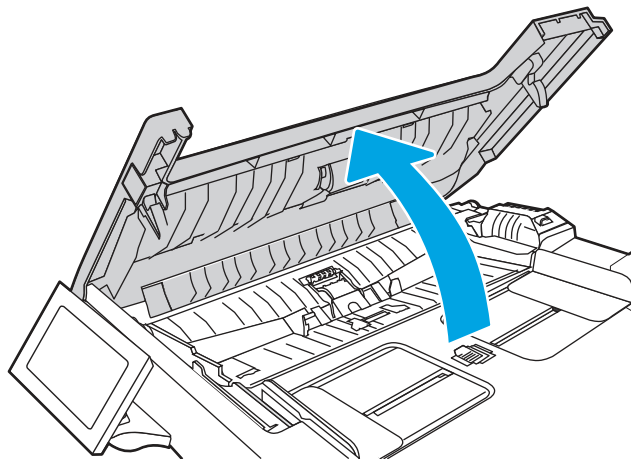
---

 **NOTE:** The printer model referenced in this video might be different from your printer model, but the steps to clear the jam are the same.

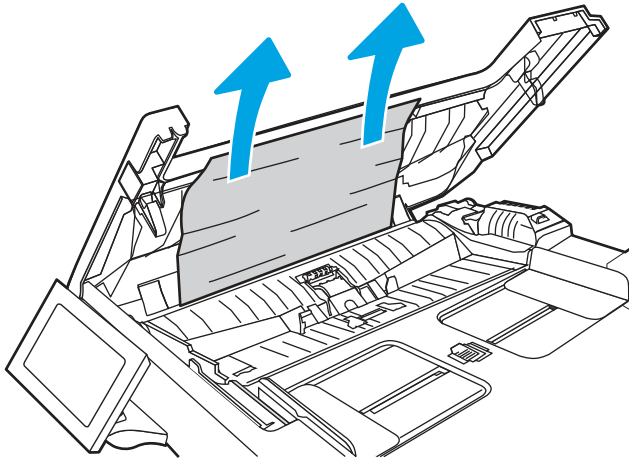
---

[View a video of how to clear a jam in the document feeder](#)

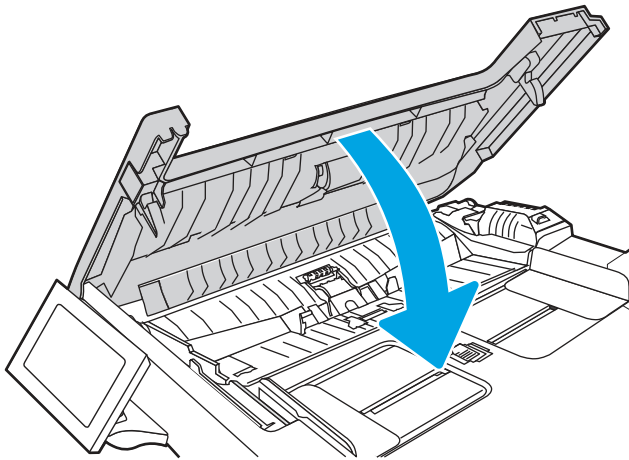
1. Open the document feeder cover.



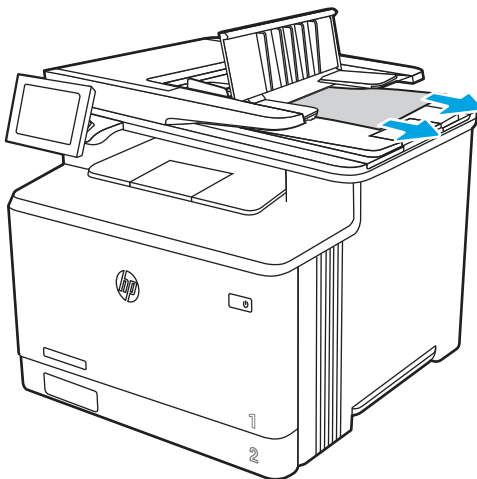
2. Remove any jammed paper.



3. Close the document feeder cover.

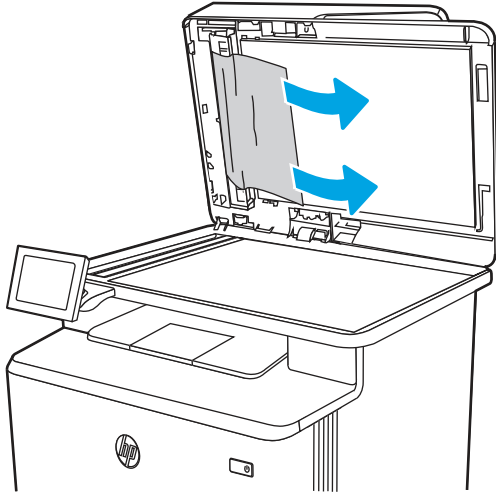


4. Lift the document feeder input tray to provide better access to the document feeder output bin, and then remove any jammed paper from the output area.

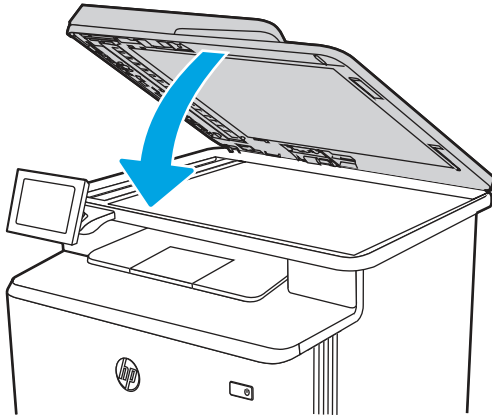




5. Open the scanner lid. If paper is jammed behind the white plastic backing, gently pull it out.



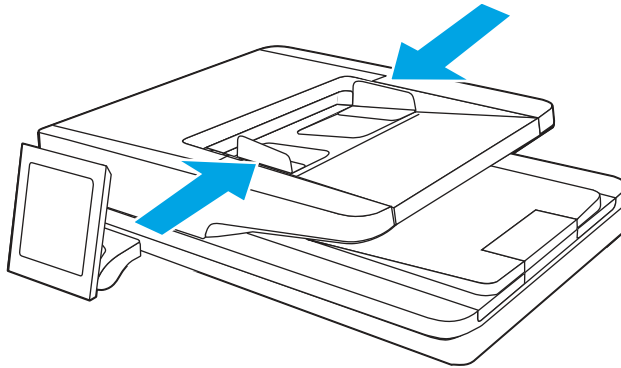
6. Lower the scanner lid.



7. If the error persists, ensure that the paper meets the document feeder (ADF) specifications for the printer.
8. Ensure that the input tray is not overloaded and that the tray guides are set to the correct size. Make sure that the paper stack is correctly aligned at the center of the input tray when paper is loaded in the tray. The


correct position of the loaded paper is parallel with the direction of travel into the document feeder paper path.

**Figure 4-66** Set the ADF guides



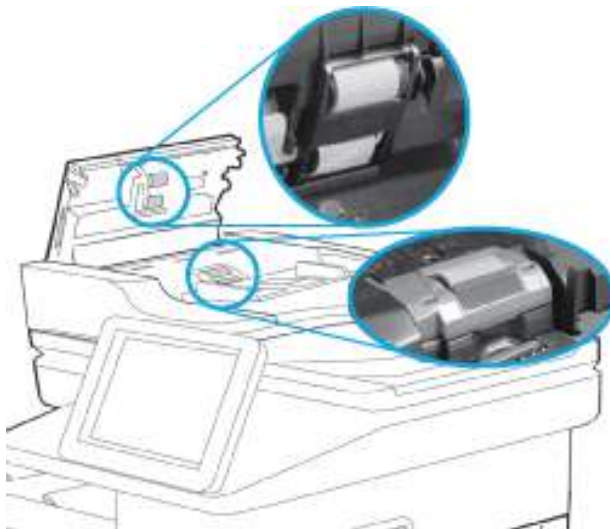
---

 **NOTE:** To avoid jams, make sure the guides in the document feeder input tray are adjusted correctly. Remove all staples, paper clips, or tape from original documents.


 **NOTE:** Original documents that are printed on heavy, glossy paper can jam more frequently than originals that are printed on plain paper.

---

9. Open the document feeder and check and clean the Document Feeder Kit rollers and separation pad by removing any visible lint or dust from each of the feed rollers and the separation pad using a clean lint-free cloth moistened with warm water. View the [How to Clean the Pick Rollers in HP LaserJet and PageWide Printers](#) for detailed instructions.




---


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

---

10. If the error persists, contact your HP-authorized service or support provider, or contact customer support at [www.hp.com/go/contactHP](http://www.hp.com/go/contactHP).

---

 **NOTE:** To avoid jams, make sure the guides in the document feeder input tray are adjusted tightly against the document. Remove all staples and paper clips from original documents.

 **NOTE:** Original documents that are printed on heavy, glossy paper can jam more frequently than originals that are printed on plain paper.

---

### 13.A3 jam error in tray 3

Use the following procedure to check for a paper jam in tray 3.

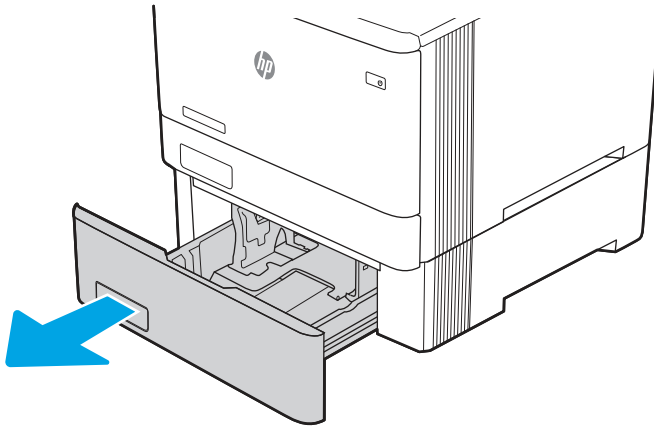
#### Recommended action for customers

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

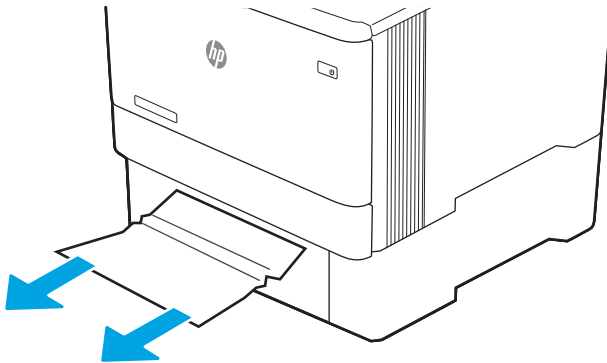
- 13.A3.D3 - Jam in tray 3

[View a video of how to clear a jam in tray 3](#)

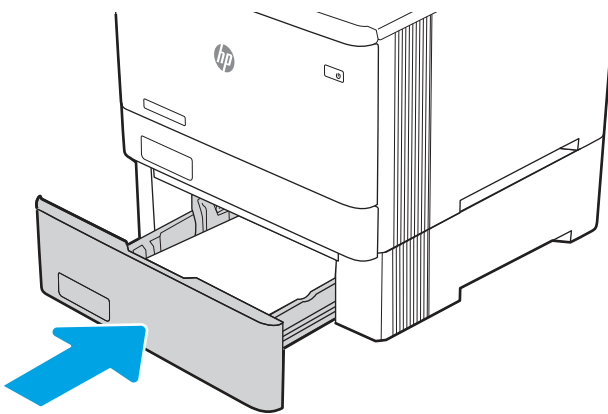
1. Pull the tray completely out of the printer.



2. Remove any jammed or damaged sheets of paper.



3. Reinsert and close Tray 3.

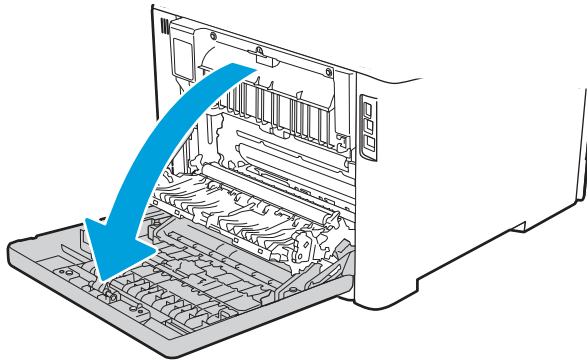


---

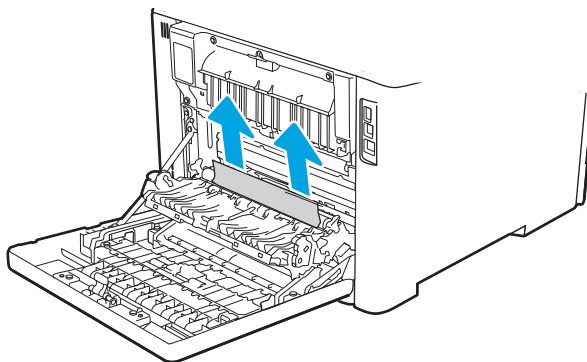
 **NOTE:** When reinserting the paper, make sure the paper guides are adjusted properly for the paper size.

---

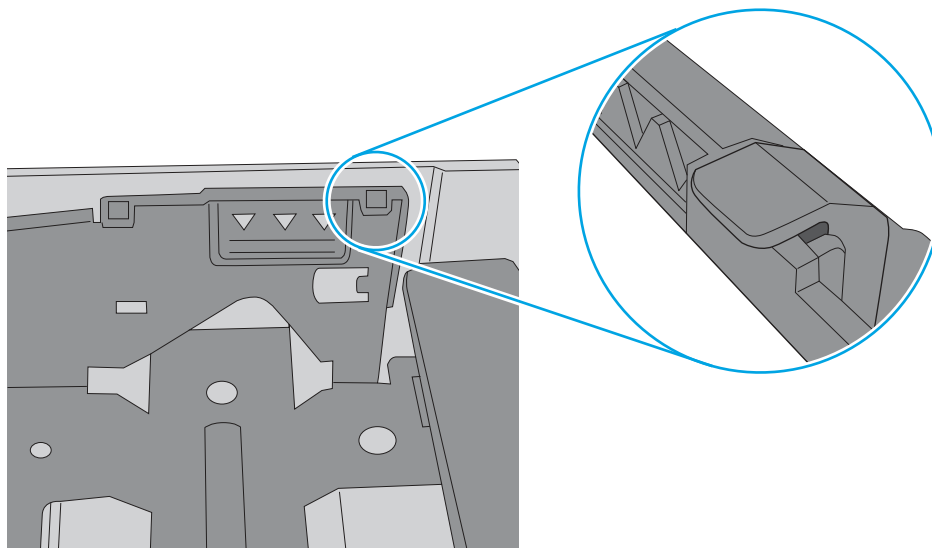
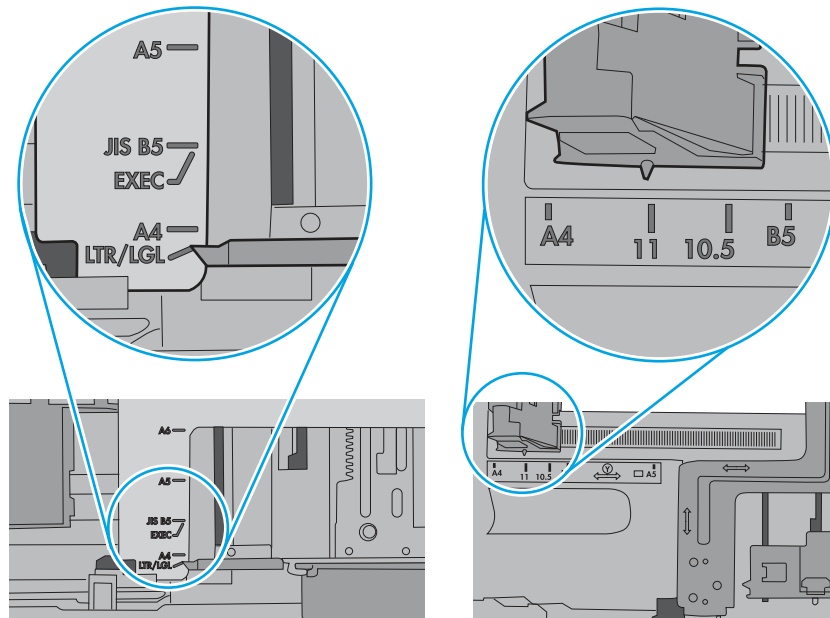
4. Open the rear door and look for and clear any paper present or obstructions in the paper path.



5. Check the following are for paper. Remove paper by gently pulling paper out.



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 or over the tab (line below 3 triangles). See following images.



7. Ensure the type and quality of the paper being used meets the HP specifications for the printer.
8. If the error persists, contact customer support at [www.hp.com/go/contactHP](http://www.hp.com/go/contactHP), or contact an HP-authorized service or support provider.

### 13.B2.D1 jam error in tray 1

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

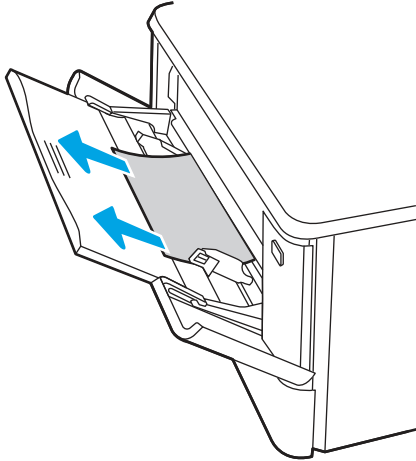
#### Recommended action for customers

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

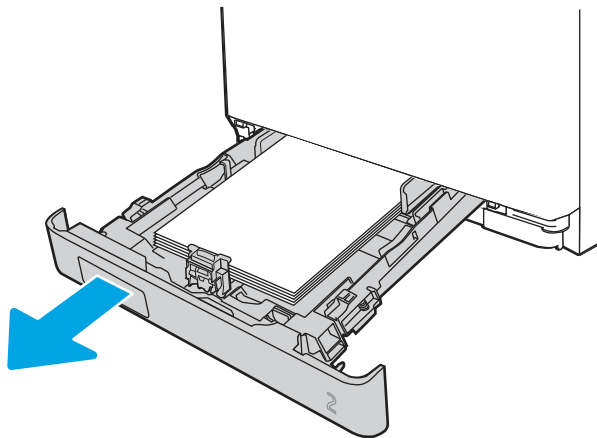
- **13.B2.D1 Jam in tray 1**

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

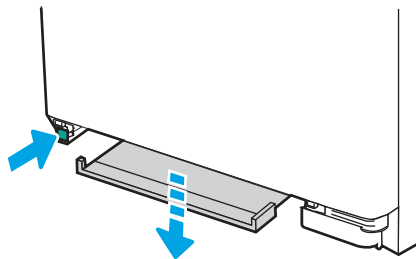
1. If you can see the jammed sheet in Tray 1, remove the jammed sheet by pulling it straight out.



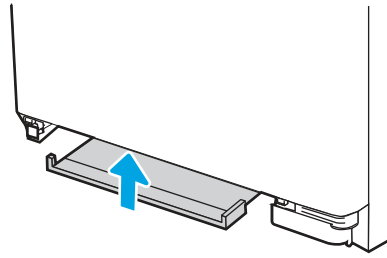
2. If you cannot see the jammed sheet, close Tray 1, and then remove Tray 2.



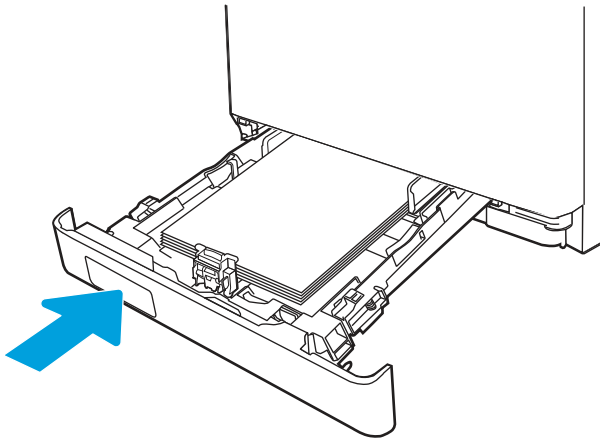
3. At the left side of the Tray 2 cavity, press the tab to lower the tray plate, and then remove any paper. Remove the jammed sheet by gently pulling it straight out.



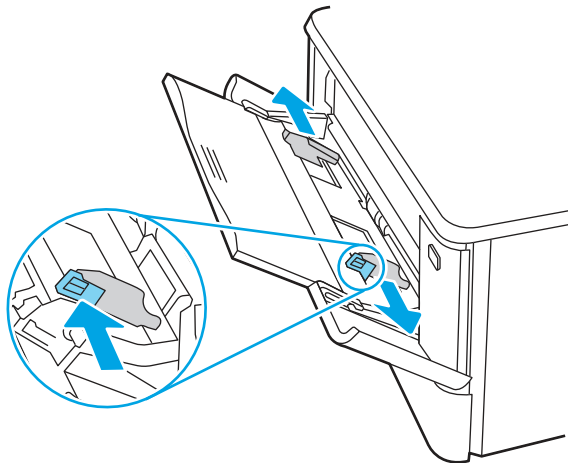
4. Push the tray plate back up into place.



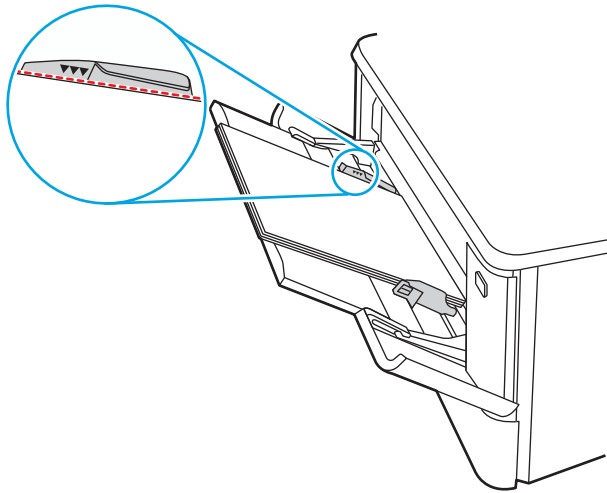
5. Reinstall Tray 2.



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



8. Ensure the tray is not overfilled. Paper should be below the 3 triangles in the following image.



9. If the error persists, contact your HP-authorized service or support provider, or contact customer support at [www.hp.com/go/contactHP](http://www.hp.com/go/contactHP).

### 13.B2.D2 jam error in tray 2

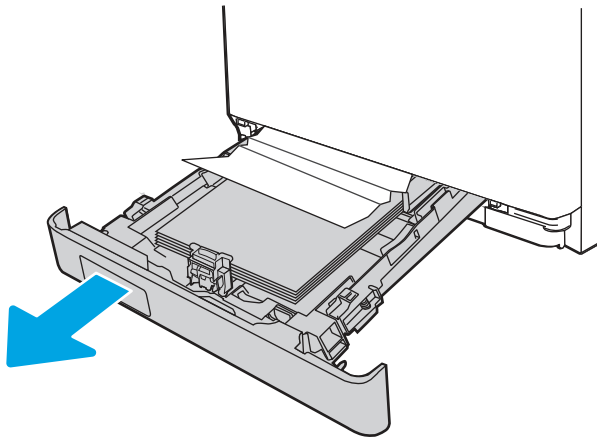
Use the following procedure to check for a paper jam in tray 2.

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

- 13.B2.D2 Paper jam in tray 2

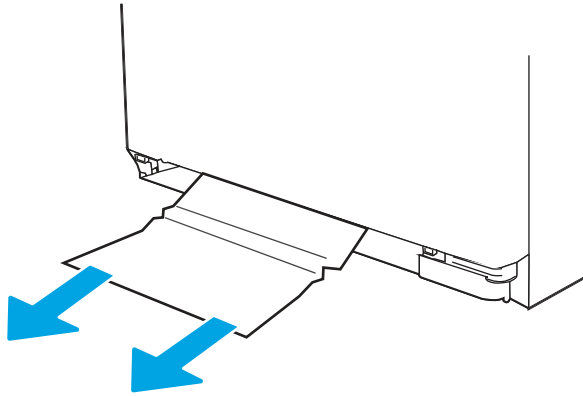
[View a video of how to clear a jam in tray 2](#)

1. Pull the tray completely out of the printer.

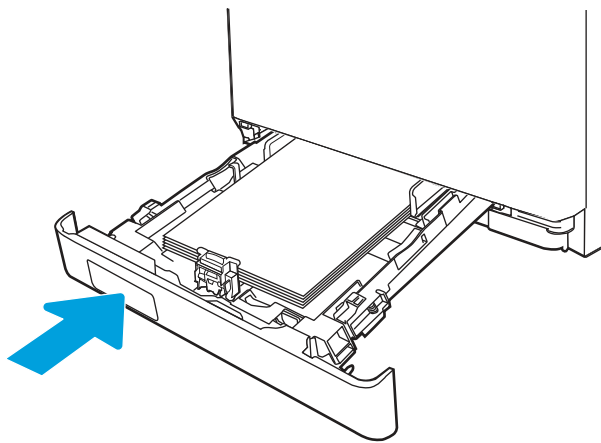




2. Remove any jammed or damaged sheets of paper.



3. Reinsert and close Tray 2.

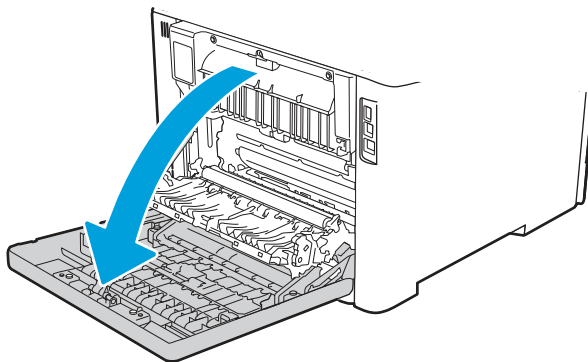


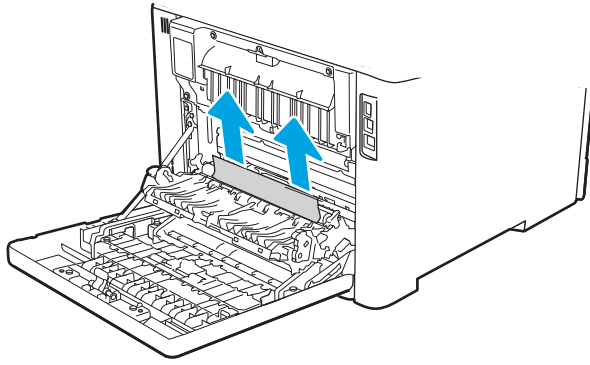
---

 **NOTE:** When reinserting the paper, make sure the paper guides are adjusted properly for the paper size.

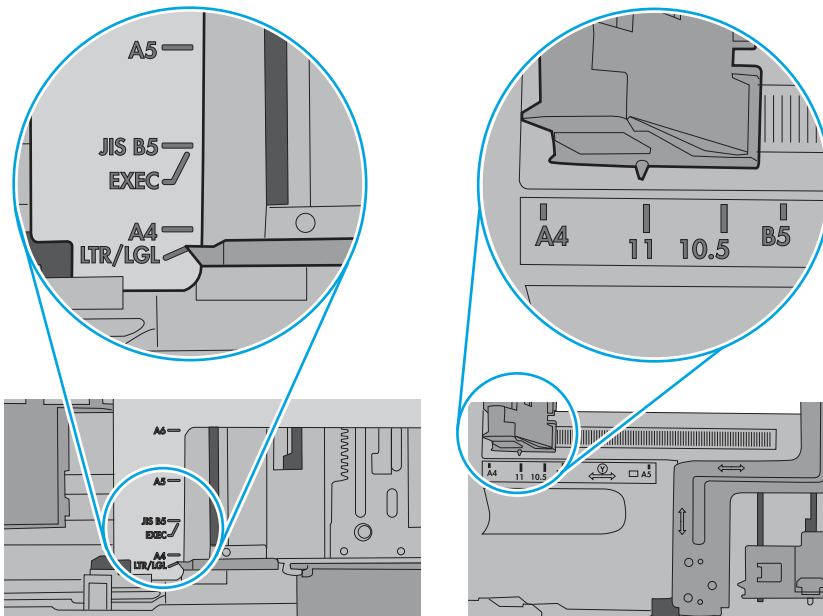
---

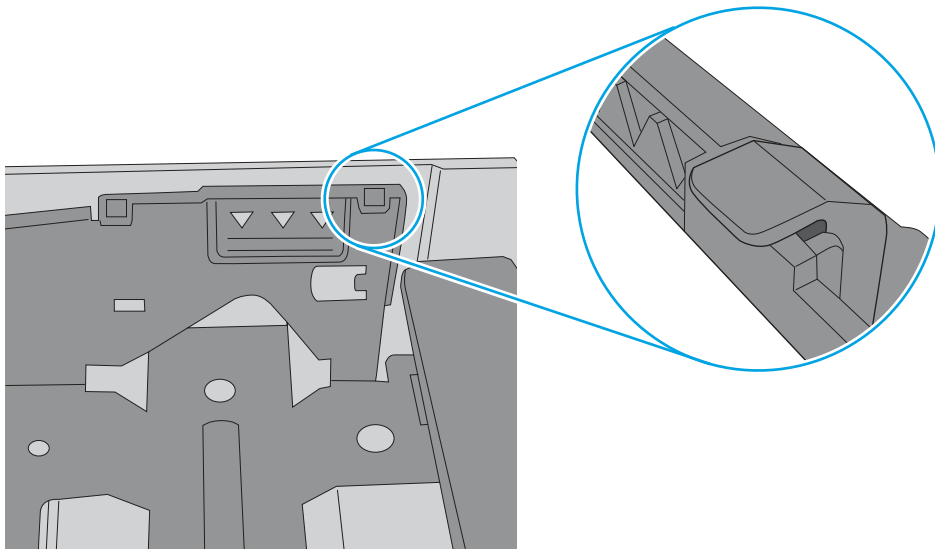
4. Open the rear door and look for and clear any paper present or obstructions in the paper path.





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 or over the tab (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](http://www.hp.com/go/contactHP).

### 13.B2 jam error in rear door

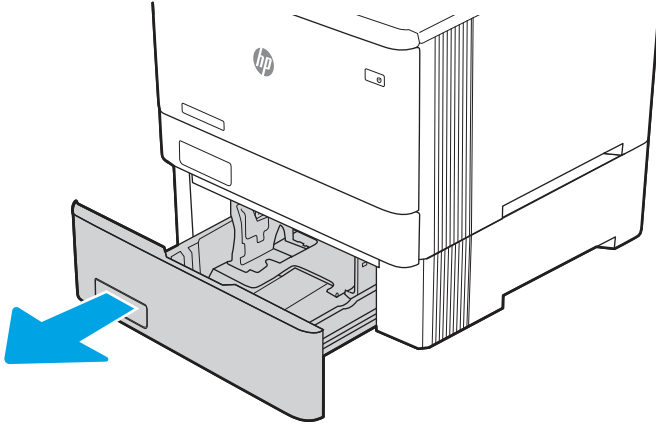
Use the following procedure to check for a paper jam in the rear door.

#### Recommended action for customers

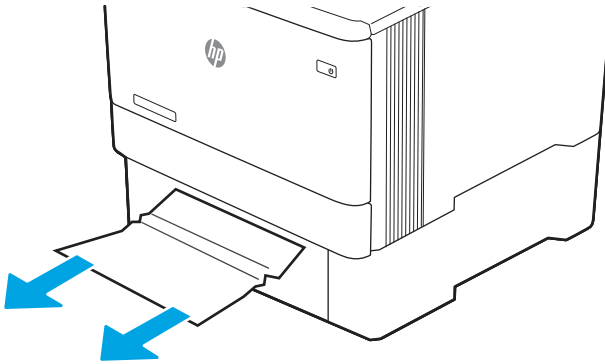
When a jam occurs, the control panel displays a message and an animation that assists in clearing the jam.

- 13.B2.A1 - Jam in rear door
- 13.B2.D1 - Jam in rear door
- 13.B2.A2 - Jam in rear door
- 13.B2.D2 - Jam in rear door
- 13.B2.A3 - Jam in rear door
- 13.B2.D3 - Jam in rear door
- 13.B2.AD - Jam in rear door
- 13.B2.DD - Jam in rear door

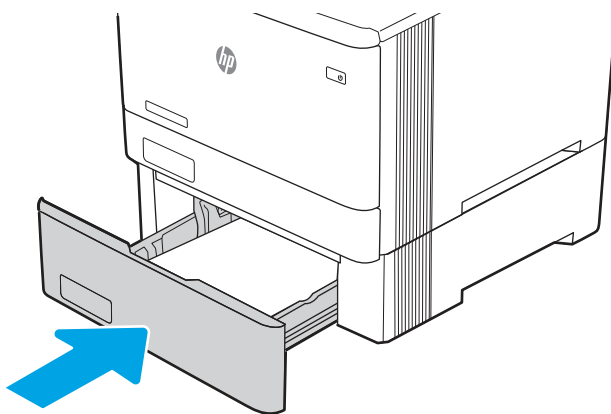
1. Pull the tray completely out of the printer.



2. Remove any jammed or damaged sheets of paper.

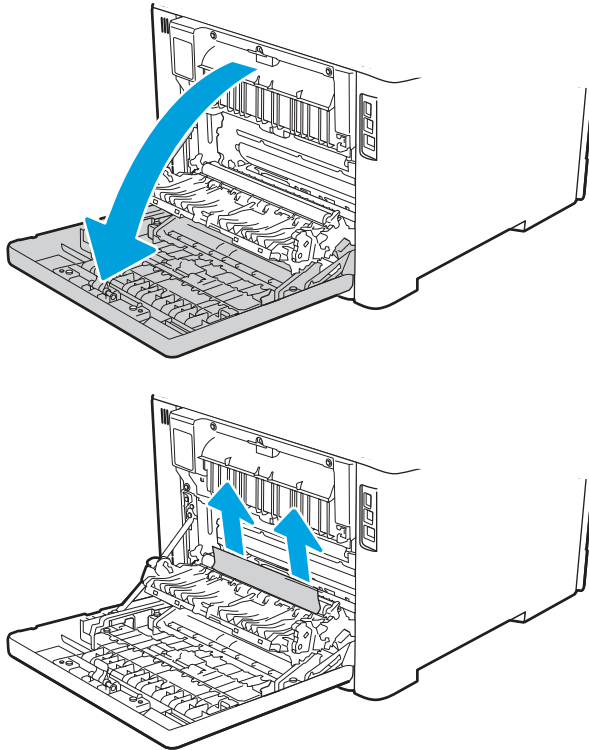


3. Reinsert and close Tray 3.

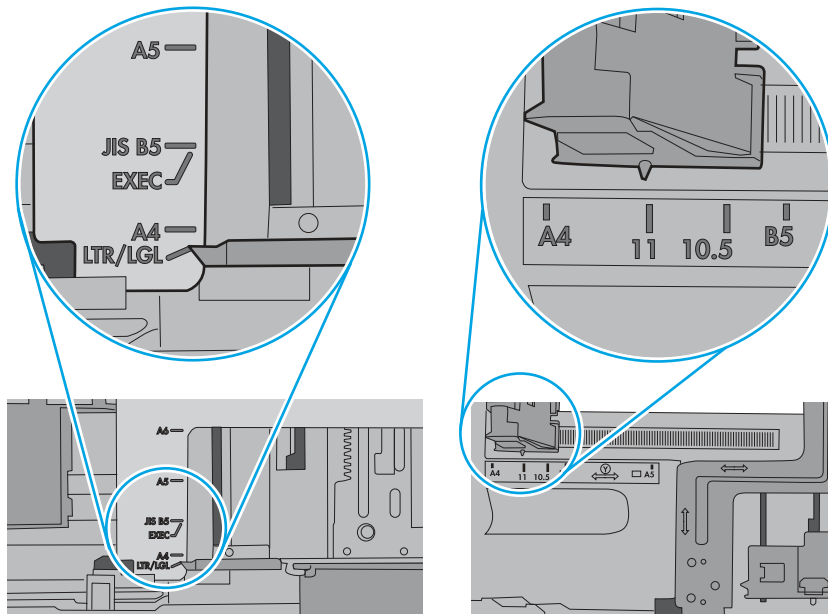


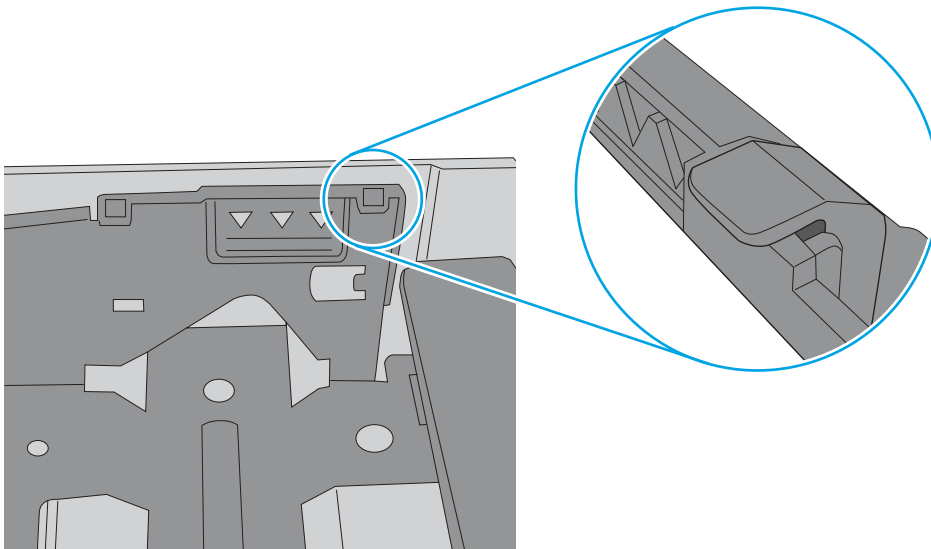
**NOTE:** When reinserting the paper, make sure the paper guides are adjusted properly for the paper size.

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



5. 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 or over the tab (line below 3 triangles). See following images.





6. Ensure the type and quality of the paper being used meets the HP specifications for the printer.
7. If the error persists, contact customer support at [www.hp.com/go/contactHP](http://www.hp.com/go/contactHP), or contact an HP-authorized service or support provider.

### 13.B4, 13.B5 jam error in fuser input

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 and an animation that assists in clearing the jam.

- 13.B4.yz Jam in rear door
- 13.B5.yz Jam in rear door

y = jam type (A or D)

z = paper type that is being printed on. This can be 0-9 or A-F.

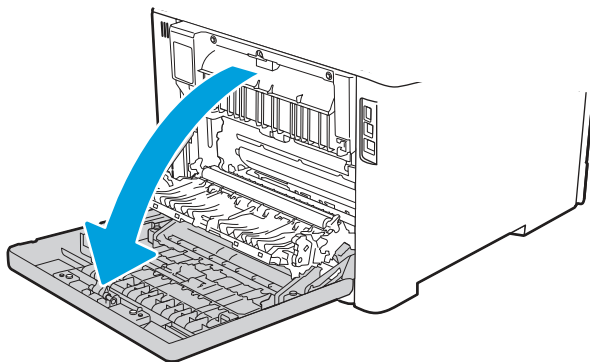


#### CAUTION:

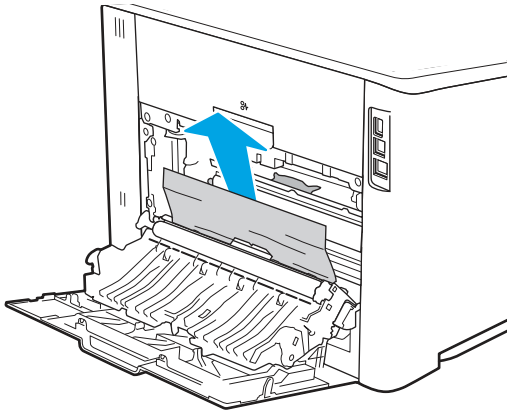


The fuser can be hot while the printer is in use. Wait for the fuser to cool before handling it.

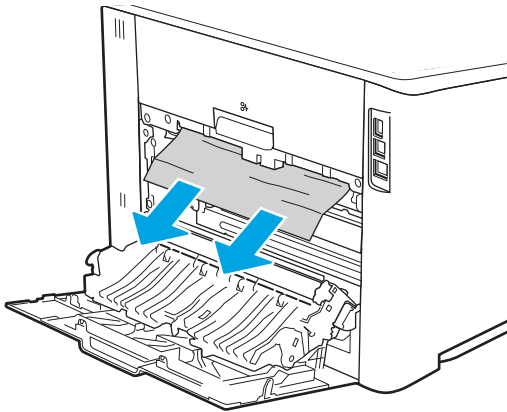
1. Open the rear door.



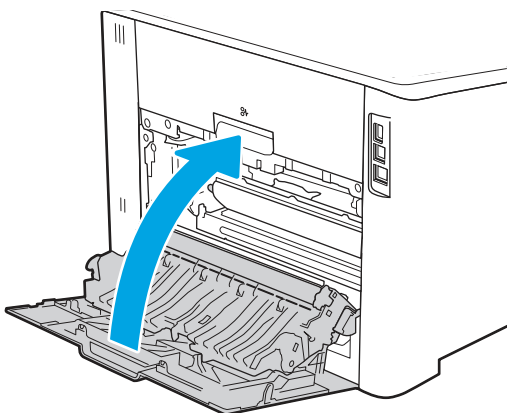
2. Gently pull out any jammed paper from the rollers in the rear door area.



3. If paper is present in the upper rollers, gently pull out any jammed paper from the rollers in the rear door area.



4. Close the rear door.



5. Ensure the type and quality of the paper being used meets the HP specifications for the printer.
6. Ensure the paper tray guides are set to the correct size for the paper loaded.

7. If the error persists, contact your HP-authorized service or support provider, or contact customer support at [www.hp.com/go/contactHP](http://www.hp.com/go/contactHP).

### 13.B9 jam error in 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 and an animation that assists in clearing the jam.

- 13.B9.yz Jam in rear door

y = jam type (A, C, or D)

z = paper type that is being printed on. This can be 0-9 or A-F.

[View a video of how to clear a jam in the fuser area](#)

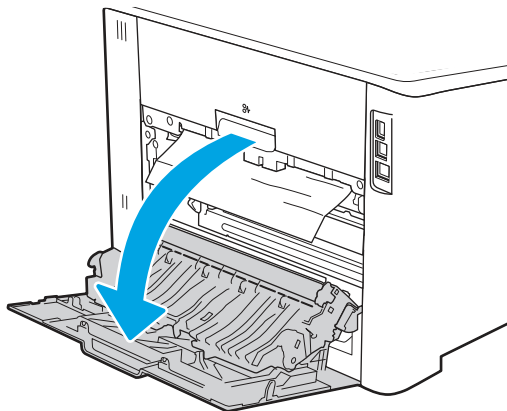


#### CAUTION:

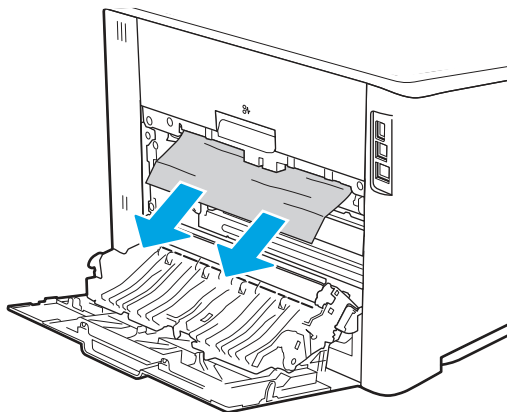


The fuser can be hot while the printer is in use. Wait for the fuser to cool before handling it.

1. Open the rear door.

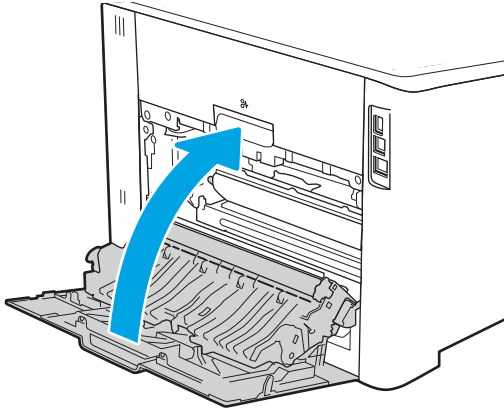


2. Gently pull out any jammed paper from the rollers in the rear door area.





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](http://www.hp.com/go/contactHP).

### 13.D1, 13.D3 jam error in the duplexer

Use the following procedure to check for paper in all possible jam locations in the automatic duplexer.

#### Recommended action for customers

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

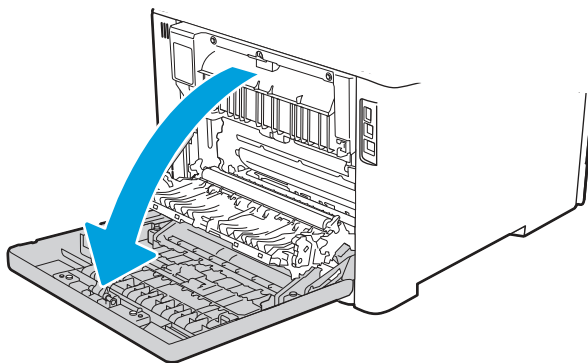
- 13.D1.yz Paper jam in duplexer (upper area of duplexer)
- 13.D3.yz Paper jam in duplexer (lower area of duplexer)

y = A or D

x = 0-9 or A-F

[View a video of how to clear a jam in the duplexer](#)

1. Check the out 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 duplexer.



3. Remove any jammed or damaged sheets of paper from the rear door of the printer.



**CAUTION:**

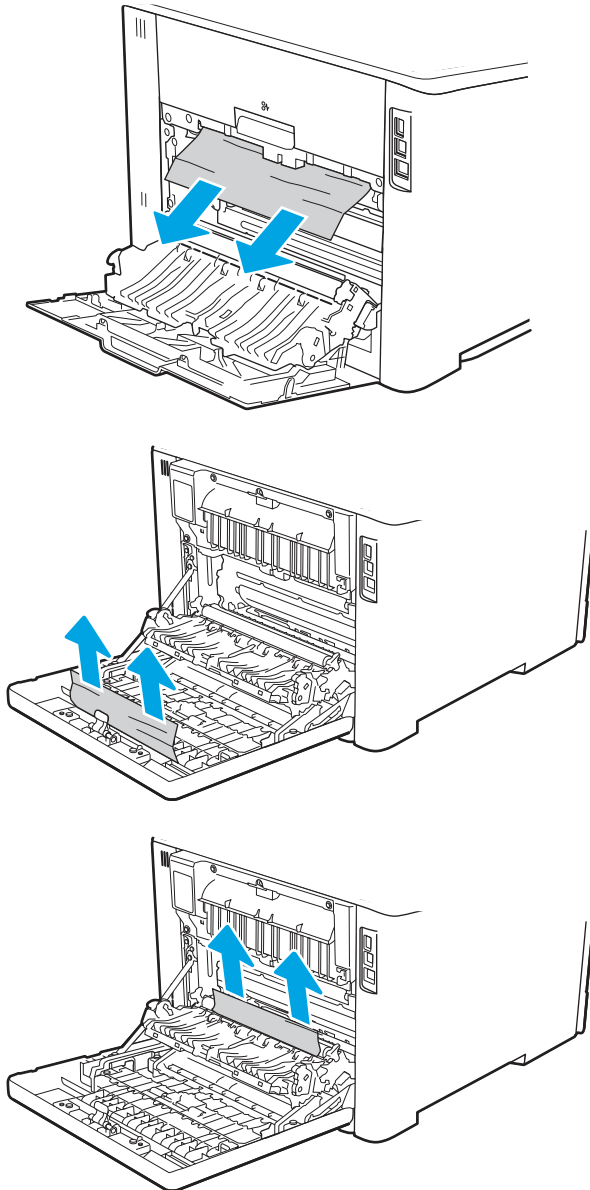


The fuser is located above the rear door, and it is hot. Do not attempt to reach into the area above the rear door until the fuser is cool.

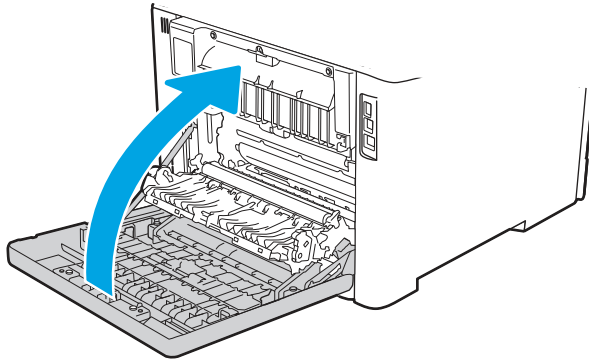


**NOTE:**

There are 3 areas to check for paper, above the fuser, entering in the duplexer and the exit of the duplexer.



4. Close the duplexer.



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](http://www.hp.com/go/contactHP).

### 13.E1 jam error in the output bin

Use the following procedure to check for paper in all possible jam locations related to the output bin.

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

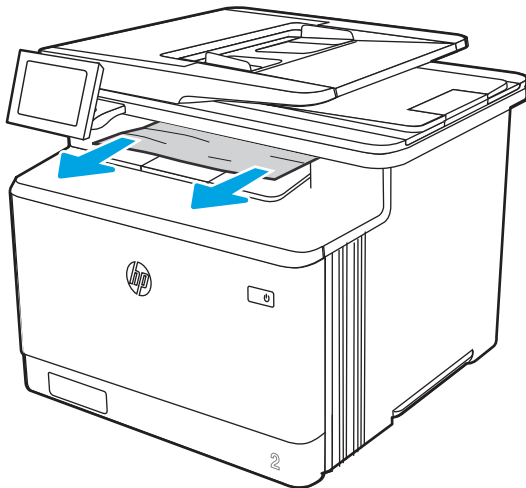
- 13.E1.yz - jam in output bin

y = A or D

z = 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.



### Change jam recovery (touchscreen)

Use the following procedure to change jam recovery from a touchscreen control panel.

1. From the Home screen on the printer control panel, scroll to and touch the [Settings](#) button.
  2. Open the [General](#) menu, and then open the [Jam recovery](#) menu.
  3. Select one of the following options:
    - **Auto** — The printer attempts to reprint jammed pages when sufficient memory is available. This is the default setting.
    - **Off** — The printer does not attempt to reprint jammed pages. Because no memory is used to store the most recent pages, performance is optimal.
- 
-  **NOTE:** Some pages can be lost if the printer runs out of paper while printing a duplex job with [Jam Recovery](#) set to [Off](#).
- 
- **On** — The printer always reprints jammed pages. Additional memory is allocated to store the last few pages printed.

## Printer feeds incorrect page size

Review the following information when the printer feeds an incorrect page size.

**Table 4-42 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.

**Table 4-43 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 4-44 Printer will not duplex (print 2-sided jobs) or duplexes incorrectly**

Cause	Solution
The duplex job is trying to use unsupported paper.	Verify that the paper is supported for duplex printing.
The printer driver is not set up for duplex printing.	Set up the printer driver to enable duplex printing.
The first page is printing on the back of preprinted forms or letterhead.	Load preprinted forms and letterhead in Tray 1 with the letterhead or printed side down, with the top of the page leading into the printer. For Tray 2-X, load the paper printed side up with the top of the page toward the right of the printer.
The printer model does not support automatic 2-sided printing.	The printer model does not support automatic 2-sided printing.

## Paper does not feed from Tray 2-X

Review the following information when the paper does not feed from Tray 2-X.

**Table 4-45 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 4-46 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 <sup>2</sup> (20 lb) paper is optimal for office use.

**Table 4-46 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.

## The document feeder jams, skews, or picks up multiple sheets of paper (MFP)

Learn about MFP document feeder paper handling problems.

Review the following information when the document feeder jams, skews, or picks up multiple sheets of paper.

- Check to see if there are areas on the page that might have had staples removed. This can cause jams and/or mispicks.
- The original might have something on it, such as staples or self-adhesive notes that must be removed.
- Check that all rollers are in place and correctly installed.
- Make sure that the top document-feeder cover is closed.
- The pages might not be placed correctly. Straighten the pages and adjust the paper guides to center the stack.
- The paper guides must be touching the sides of the paper stack to work correctly. Make sure that the paper stack is straight and the guides are against the paper stack.
- The document feeder input tray or output bin might contain more than the maximum number of pages. Make sure the paper stack fits below the guides in the input tray, and remove pages from the output bin.
- Verify that there are no pieces of paper, staples, paper clips, or other debris in the paper path.
- Clean the document-feeder rollers and the separation pad. Use compressed air or a clean, lint-free cloth moistened with warm water. If misfeeds still occur, replace the rollers.

## Paper does not feed automatically

Review the following information when the paper does not feed automatically.

**Table 4-47 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.

Table 4-47 Paper does not feed automatically (continued)

Cause	Solution
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 275](#).
- **Copy-quality (CQ) problems:** See [Copy-quality troubleshooting on page 291](#).

### 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 275](#).
- **No:** If defects does not appear on the printed demonstration page the issue is CQ related. See [Copy-quality troubleshooting on page 291](#).

## 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 4-48 Repetitive defects**

Assembly	Distance between defects	Notes
Developer roller	22.6 mm (0.89 in)	Appears as dropouts.
Primary charging roller	23.6 mm (0.93 in)	Appears as dropouts.
RS roller	29.6 mm (1.17 in)	
Intermediate transfer belt (ITB) assist roller	35.0 mm (1.38 in)	
Secondary transfer roller	50.0 mm (1.97 in)	Appears as dropouts or dirt on the back of the page.
Large assist roller	50.0 mm (1.97 in)	
Fuser rollers (3)	57.0 mm (2.24 in)	Appears as dropouts or dirt on the back of the page.
Photosensitive drum	63.0 mm (2.48 in)	Appears as dropouts.

Table 4-48 Repetitive defects (continued)


Assembly	Distance between defects	Notes
Tension roller	63.0 mm (2.48 in)	
Scale	75.0 mm (2.95 in)	
Cartridge station	78.0 mm (3.07 in)	
Intermediate transfer belt (ITB) drive roller	78.0 mm (3.07 in)	
Intermediate transfer belt (ITB) length	712.0 mm (28.03 in)	


### 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.

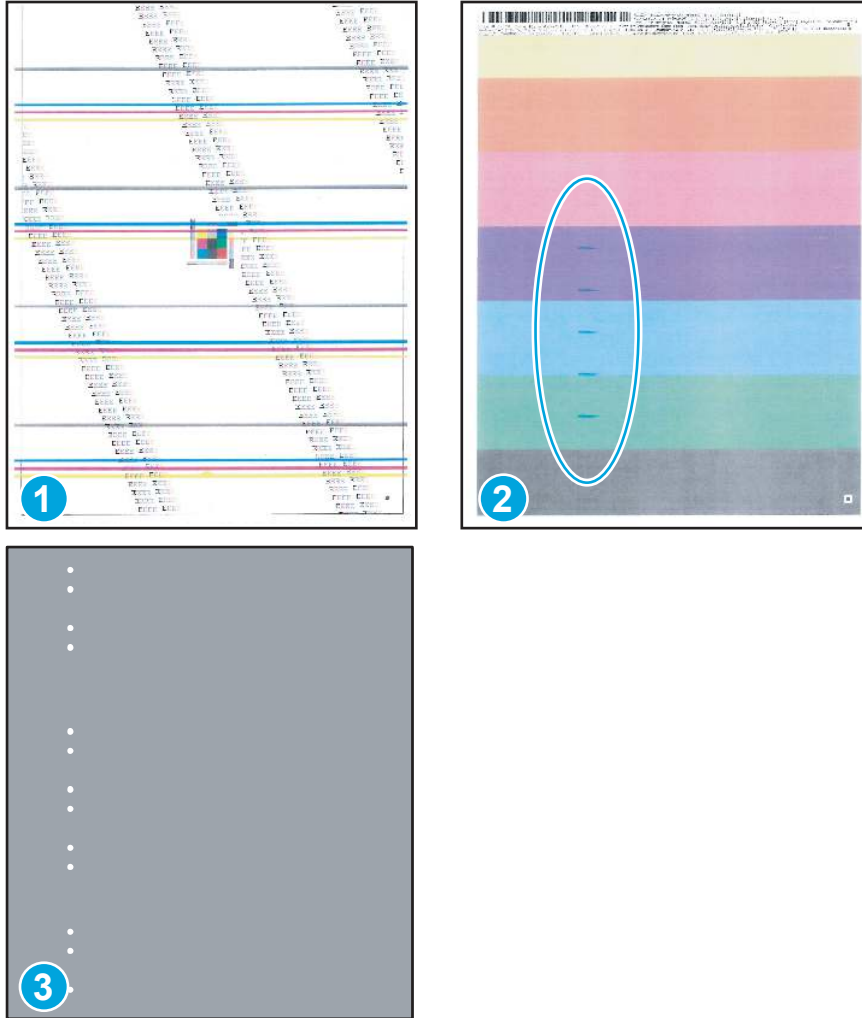
 **NOTE:** Some printers allow loading Letter and A4 media in short-edge-first or long-edge-first orientation in the paper trays. When measuring repetitive defects, make sure to place the ruler at the leading edge of the page. This is the edge of the page that feeds into the printer first.

---

The example pages below show the following types of repetitive defects.

- Lines (callout 1)
- Smudges (callout 2)
- Dots or spots (callout 3)

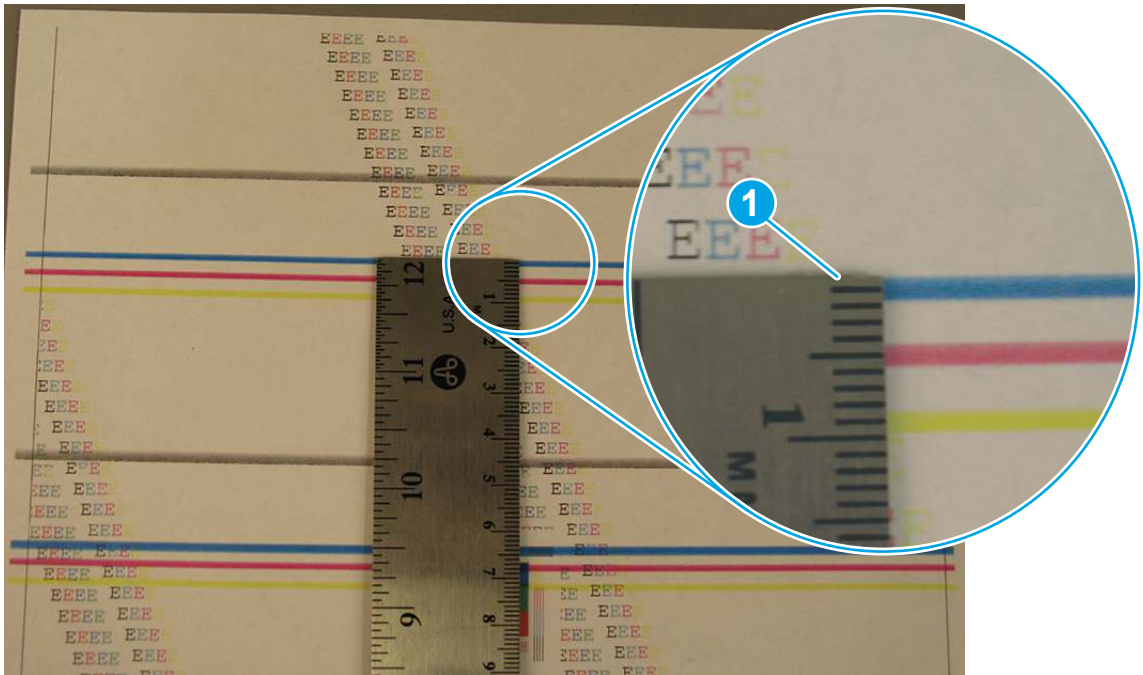
Figure 4-67 Examples of repetitive defects



 **NOTE:** These are examples only, other types of repetitive defects might appear on a page.

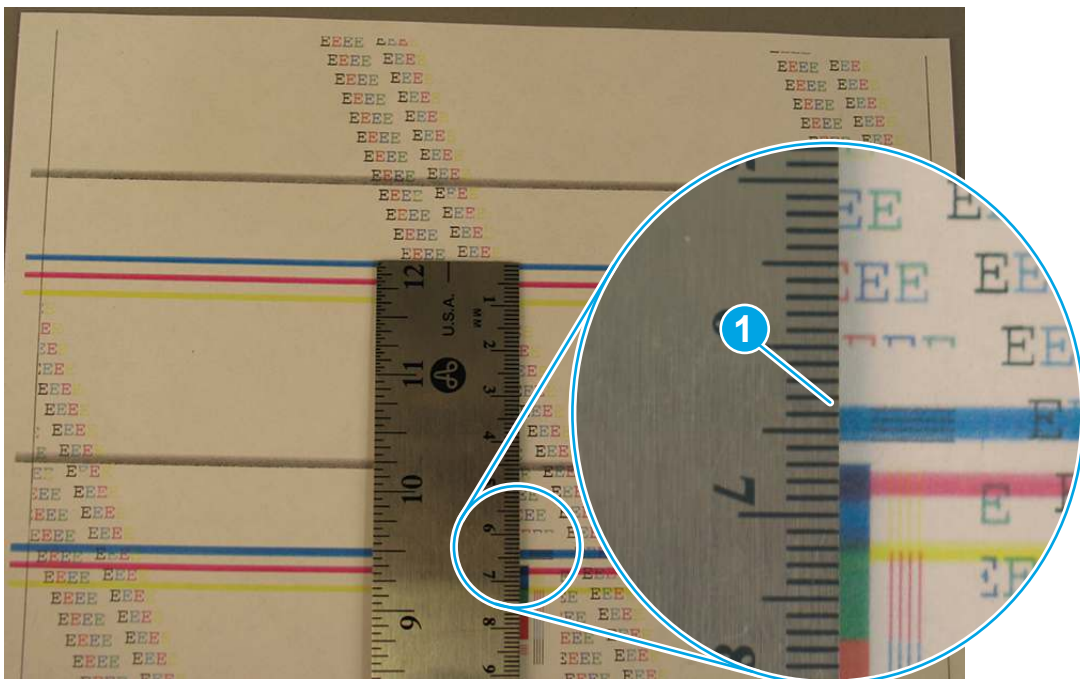
2. Position a metric ruler on the page with the “zero” ruler mark at one occurrence of the defect (callout 1).

Figure 4-68 Place the ruler on the page



3. Locate the next occurrence of the defect (callout 1).

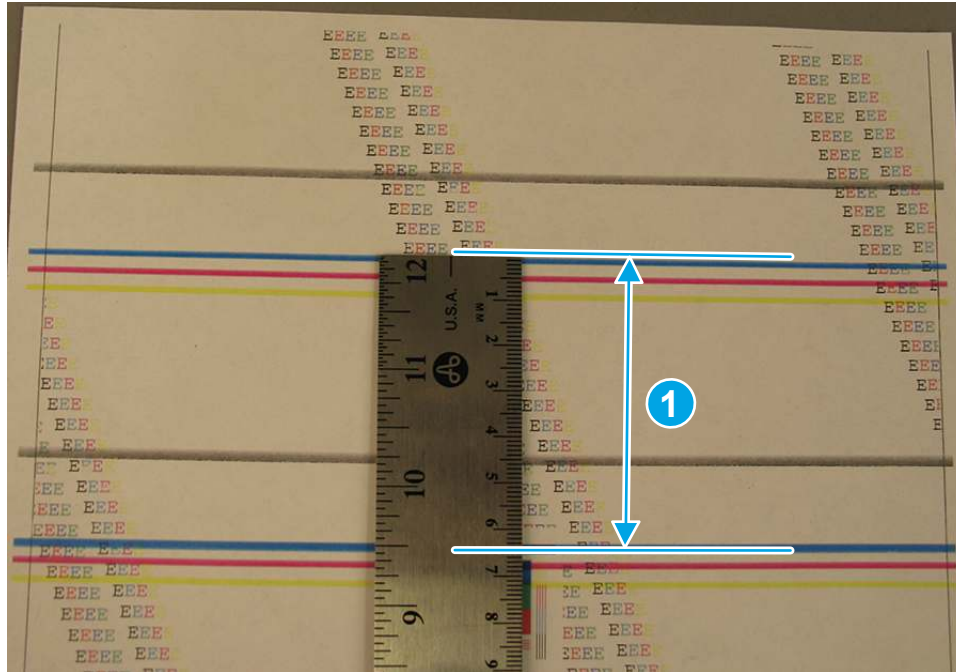
Figure 4-69 Locate the next repetitive defect



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 4-70** 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 and close the paper tray.
2. Follow the control panel prompts to confirm or modify the paper type and size settings for the tray.
3. Make sure the paper loaded meets specifications.
4. Adjust the humidity and resistance setting on the control panel to match the environment.
  - a. Open the following menus:
    - i. [Settings](#)
    - ii. [Copy/Print](#)

- iii. [Print quality](#)
    - iv. [Adjust paper type](#)
  - b. Select the paper type that matches the type loaded in the tray.
  - c. Use the arrows to increase or decrease the humidity and resistance setting.
5. Make sure the driver settings match the control panel settings.

---

 **NOTE:** The print driver settings will override any control panel settings.

---

### Check the paper type setting (Windows)

Check the paper type setting for Windows, and change the setting as needed.

---

 **NOTE:** The print driver settings will override any control panel settings.

---

1. From the software program, select the **Print** option.
2. Select the printer, and then click the **Properties** or **Preferences** button.
3. Click the **Paper/Quality** tab.
4. From the **Paper Type** drop-down list, click the **More...** option.
5. Expand the list of **Type is:** options.
6. Expand the category of paper types that best describes your paper.
7. Select the option for the type of paper you are using, and click the **OK** button.
8. Click the **OK** button to close the **Document Properties** dialog box. In the **Print** dialog box, click the **OK** button to print the job.

### Check the paper type setting (macOS)

Check the paper type setting for macOS, and change the setting as needed.

1. Click the **File** menu, and then click the **Print** option.
2. In the **Printer** menu, select the printer.
3. Click **Show Details** or **Copies & Pages**.
4. Open the menus drop-down list, and then click the **Paper/Quality** menu.
5. Select a type from the **Media Type** drop-down list.
6. Click the **Print** button.

### Check toner-cartridge status

Follow these steps to check the estimated life remaining in the toner cartridges and if applicable, the status of other replaceable maintenance parts.

#### Step one: Print the Supplies Status Page

The supplies status page indicates the cartridge status.

1. From the Home screen on the printer control panel, select the [Reports](#) menu.
2. Select the [Configuration/Status Pages](#) menu.
3. Select [Supplies Status Page](#), and then select [Print](#) to print the page.

### Step two: Check supplies status

Check the supplies status report as follows.

1. Look at the supplies status report to check the percent of life remaining for the toner cartridges and, if applicable, the status of other replaceable maintenance parts.

Print quality problems can occur when using a toner cartridge that is at its estimated end of life. The supplies status page indicates when a supply level is very low. After an HP supply has reached the very low threshold, HP's premium protection warranty on that supply has ended.

The toner cartridge does not need to be replaced now unless the print quality is no longer acceptable. Consider having a replacement available to install when print quality is no longer acceptable.

If you determine that you need to replace a toner cartridge or other replaceable maintenance parts, the supplies status page lists the genuine HP part numbers.

2. Check to see if you are using a genuine HP cartridge.

A genuine HP toner cartridge has the word "HP" on it, or has the HP logo on it. For more information on identifying HP cartridges go to [www.hp.com/go/learnaboutesupplies](http://www.hp.com/go/learnaboutesupplies).


### Print a cleaning page

Learn how to print a cleaning page.

#### Print a cleaning page from a non-touchscreen control panel

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


---

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

---

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

---

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

---

#### Print a cleaning page from a touchscreen control panel

1. From the [Home](#) screen on the printer control panel, scroll to and touch the [Support Tools](#) button.
2. Open the following menus:
  - [Maintenance](#)
  - [Calibration/Cleaning](#)

3. Touch [Cleaning Page](#), and then touch the [Print](#) button to print the cleaning page.



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



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

## Check paper and the printing environment

Use the following information to check the paper selection and the printing environment.

### Step one: Use paper that meets HP specifications

Some print-quality problems arise from using paper that does not meet HP specifications.

- Always use a paper type and weight that this printer supports.
- Use paper that is of good quality and free of cuts, nicks, tears, spots, loose particles, dust, wrinkles, voids, staples, and curled or bent edges.
- Use paper that has not been previously printed on.
- Use paper that does not contain metallic material, such as glitter.
- Use paper that is designed for use in laser printers. Do not use paper that is designed only for use in Inkjet printers.
- Use paper that is not too rough. Using smoother paper generally results in better print quality.

### Step two: Check the environment

The environment can directly affect print quality and is a common cause of print-quality or paper-feeding issues. Try the following solutions:

- Move the printer away from drafty locations, such as open windows or doors, or air-conditioning vents.
- Make sure the printer is not exposed to temperatures or humidity outside of printer specifications.
- Do not place the printer in a confined space, such as a cabinet.
- Place the printer on a sturdy, level surface.
- Remove anything that is blocking the vents on the printer. The printer requires good air flow on all sides, including the top.
- Protect the printer from airborne debris, dust, steam, grease, or other elements that can leave residue inside the printer.

### Step three: Set the individual tray alignment

Follow these steps when text or images are not centered or aligned correctly on the printed page when printing from specific trays.

1. From the Home screen on the printer control panel, select the [Settings](#) menu.
2. Select the following menus:
  - a. [Copy/Print](#) or [Print](#)
  - b. [Print Quality](#)



- c. Image Registration
3. Select **Tray**, and then select the tray to adjust.
4. Select **Print Test Page**, and then follow the instructions on the printed pages.
5. Select **Print Test Page** again to verify the results, and then make further adjustments if necessary.
6. Select **Done** to save the new settings.

## Try a different print driver

Try a different print driver when printing from a software program and the printed pages have unexpected lines in graphics, missing text, missing graphics, incorrect formatting, or substituted fonts.

Download any of the following drivers from the HP Web site: [www.hp.com/supplort/colorljM455](http://www.hp.com/supplort/colorljM455) or [www.hp.com/support/color/ljM480MFP](http://www.hp.com/support/color/ljM480MFP) or [www.hp.com/support/colorljE45028](http://www.hp.com/support/colorljE45028) or [www.hp.com/support/colorljE47528MFP](http://www.hp.com/support/colorljE47528MFP).

**Table 4-49 Print drivers**

Driver	Description
HP PCL.6 driver	If available, this printer-specific print driver supports older operating systems like Windows XP and Windows Vista. For a list of supported operating systems, go to <a href="http://www.hp.com/go/support">www.hp.com/go/support</a> .
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 <a href="http://www.hp.com/go/support">www.hp.com/go/support</a> .
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 <a href="http://www.hp.com/go/support">www.hp.com/go/support</a> .
HP UPD PS driver	<ul style="list-style-type: none"> <li>● Recommended for printing with Adobe software programs or with other highly graphics-intensive software programs</li> <li>● Provides support for printing from Postscript emulation needs, or for Postscript flash font support</li> </ul>
HP UPD PCL 6	<ul style="list-style-type: none"> <li>● Recommended for printing in all Windows environments</li> <li>● Provides the overall best speed, print quality, and printer feature support for most users</li> <li>● Developed to align with Windows Graphic Device Interface (GDI) for best speed in Windows environments</li> <li>● Might not be fully compatible with third-party and custom software programs that are based on PCL 5</li> </ul>



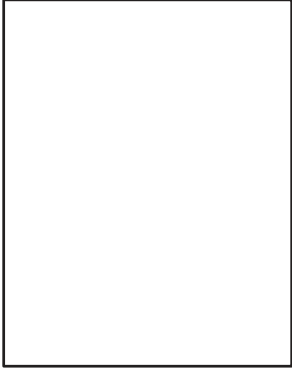
## Troubleshoot image defects

Review examples of image defects and steps to resolve these defects.

**Table 4-50 Image defects table quick reference**

Defect	Defect	Defect
<a href="#">Table 4-58 Light print on page 289</a>	<a href="#">Table 4-56 Gray background or dark print on page 288</a>	<a href="#">Table 4-53 Blank page — No print on page 286</a>

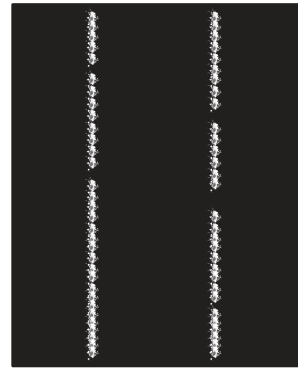
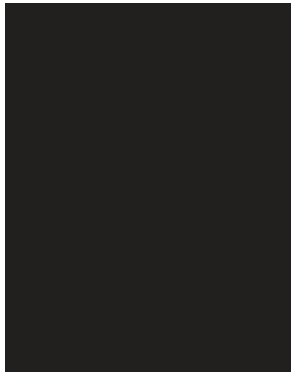
Table 4-50 Image defects table quick reference (continued)

Defect	Defect	Defect
		

[Table 4-52 Black page on page 286](#)

[Table 4-51 Banding defects on page 285](#)

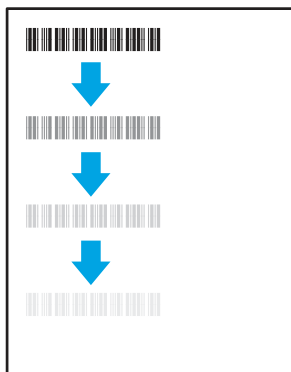
[Table 4-60 Streak defects on page 290](#)



[Table 4-55 Fixing/fuser defects on page 287](#)

[Table 4-57 Image placement defects on page 288](#)

[Table 4-54 Color plane registrations defects \(color models only\) on page 287](#)



[Table 4-59 Output defects on page 289](#)

Table 4-50 Image defects table quick reference (continued)



Defect	Defect	Defect
		

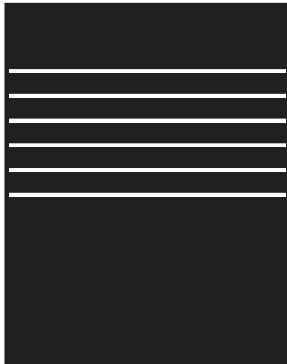
Image defects, no matter the cause, can often be resolved using the same steps. Use the following steps as a starting point for solving image defect issues.

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](http://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 4-51 Banding defects

Sample	Description	Possible solutions
	Dark or light lines which repeat down the length of the page, and are wide-pitch and/or impulse bands. They might be sharp or soft in nature. The defect displays only in areas of fill, not in text or sections with no printed content.	<ol style="list-style-type: none"> <li>1. Reprint the document.</li> <li>2. Try printing from another tray.</li> <li>3. Replace the cartridge.</li> <li>4. Use a different paper type.</li> <li>5. <b>Enterprise models only:</b> From the Home screen on the printer control panel, go to the <a href="#">Adjust Paper Types</a> 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.</li> </ol>

**Table 4-51 Banding defects**

Sample	Description	Possible solutions
		6. If the issue persists, go to <a href="http://support.hp.com">support.hp.com</a> .

**Table 4-52 Black page**

Sample	Description	Possible solutions
	The entire printed page is black.	<ol style="list-style-type: none"> <li>1. Visually inspect the cartridge to check for damage.</li> <li>2. Make sure that the cartridge is installed correctly.</li> <li>3. Replace the cartridge.</li> <li>4. If the issue persists, go to <a href="http://support.hp.com">support.hp.com</a>.</li> </ol>

**Table 4-53 Blank page — No print**

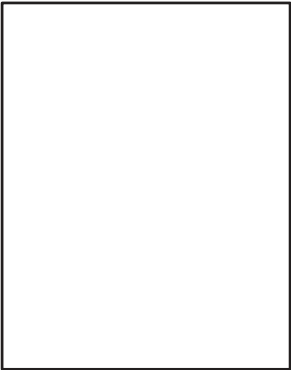
Sample	Description	Possible solutions
	The page is completely blank and contains no printed content.	<ol style="list-style-type: none"> <li>1. Make sure that the cartridges are genuine HP cartridges.</li> <li>2. Make sure that the cartridge is installed correctly.</li> <li>3. Print with a different cartridge.</li> <li>4. Check the paper type in the paper tray and adjust the printer settings to match. If necessary, select a lighter paper type.</li> <li>5. If the issue persists, go to <a href="http://support.hp.com">support.hp.com</a>.</li> </ol>

Table 4-54 Color plane registrations defects (color models only)


Sample	Description	Possible solutions
	<p>One or more color plane(s) is not aligned with the other color planes. This registration error will typically occur with yellow.</p>	<ol style="list-style-type: none"> <li>1. Reprint the document.</li> <li>2. From the printer control panel, calibrate the printer.</li> <li>3. If a cartridge has reached a <b>Very Low</b> state, or the printed output is severely faded, replace the cartridge.</li> <li>4. From the printer control panel use the <b>Restore Calibration</b> feature to reset the printer's calibration settings to the factory defaults.</li> <li>5. If the issue persists, go to <a href="http://support.hp.com">support.hp.com</a>.</li> </ol>

Table 4-55 Fixing/fuser defects

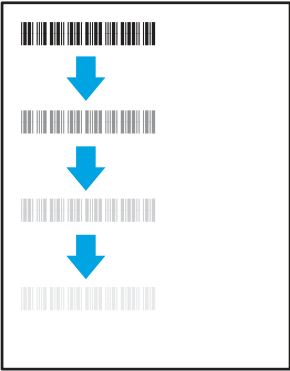
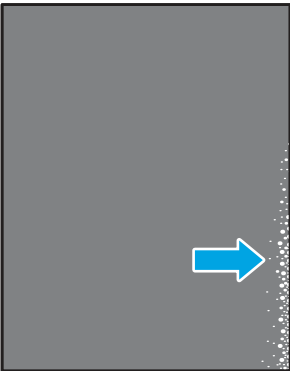
Sample	Description	Possible solutions
	<p>Slight shadows or offsets of the image are repeated down the page. The repeated image might fade with each recurrence.</p>	<ol style="list-style-type: none"> <li>1. Reprint the document.</li> <li>2. Check the paper type in the paper tray and adjust the printer settings to match. If necessary, select a lighter paper type.</li> <li>3. If the issue persists, go to <a href="http://support.hp.com">support.hp.com</a>.</li> </ol>
	<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"> <li>1. Reprint the document.</li> <li>2. Check the paper type in the paper tray and adjust the printer settings to match. If necessary, select a heavier paper type.</li> <li>3. <b>Enterprise models only:</b> From the printer control panel, go to the <b>Edge-to-Edge</b> menu and then select <b>Normal</b>. Reprint the document.</li> <li>4. <b>Enterprise models only:</b> From the printer control panel, select <b>Auto Include Margins</b> and then reprint the document.</li> <li>5. If the issue persists, go to <a href="http://support.hp.com">support.hp.com</a>.</li> </ol>

Table 4-56 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"> <li>1. Make sure that the paper in the trays has not already been run through the printer.</li> <li>2. Use a different paper type.</li> <li>3. Reprint the document.</li> <li>4. <b>Mono models only:</b> From the Home screen on the printer control panel, go to the <a href="#">Adjust Toner Density</a> menu, and then adjust the toner density to a lower level.</li> <li>5. Make sure that the printer is within the supported operating temperature and humidity range.</li> <li>6. Replace the cartridge.</li> <li>7. If the issue persists, go to <a href="http://support.hp.com">support.hp.com</a>.</li> </ol>

Table 4-57 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"> <li>1. Reprint the document.</li> <li>2. Remove the paper and then reload the tray. Make sure that all the paper edges are even on all sides.</li> <li>3. Make sure that the top of the paper stack is below the tray-full indicator. Do not overfill the tray.</li> <li>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.</li> <li>5. If the issue persists, go to <a href="http://support.hp.com">support.hp.com</a>.</li> </ol>

Table 4-58 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"> <li>1. Reprint the document.</li> <li>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>.</li> <li>3. <b>Mono models only:</b> Make sure that the EconoMode setting is disabled, both at the printer control panel and in the print driver.</li> <li>4. Make sure that the cartridge is installed correctly.</li> <li>5. Print a Supplies Status Page and check the life and usage of the cartridge.</li> <li>6. Replace the cartridge.</li> <li>7. If the issue persists, go to <a href="http://support.hp.com">support.hp.com</a>.</li> </ol>

Table 4-59 Output defects

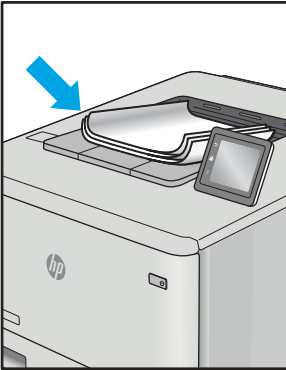
Sample	Description	Possible solutions
	<p>Printed pages have curled edges. The curled edge can be along the short or long side of the paper. Two types of curl are possible:</p> <ul style="list-style-type: none"> <li>● <b>Positive curl:</b> The paper curls toward the printed side. The defect occurs in dry environments or when printing high-coverage pages.</li> <li>● <b>Negative curl:</b> The paper curls away from the printed side. The defect occurs in high-humidity environments or when printing low-coverage pages.</li> </ul>	<ol style="list-style-type: none"> <li>1. Reprint the document.</li> <li>2. <b>Positive curl:</b> From the printer control panel, select a heavier paper type. The heavier paper type creates a higher temperature for printing.  <b>Negative curl:</b> 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.</li> <li>3. Print in duplex mode.</li> <li>4. If the issue persists, go to <a href="http://support.hp.com">support.hp.com</a>.</li> </ol>

Table 4-59 Output defects (continued)

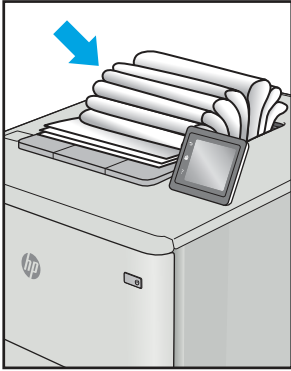
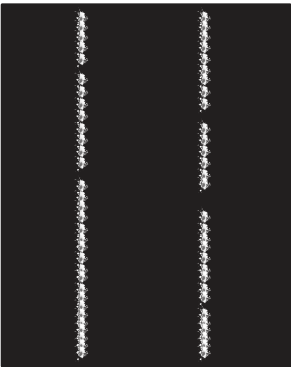
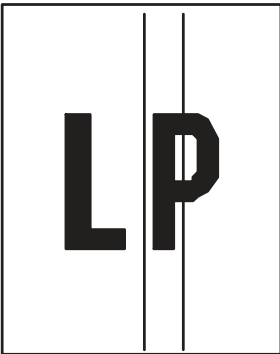
Sample	Description	Possible solutions
	<p>The paper does not stack well in the output tray. The stack might be uneven, skewed, or the pages might be pushed out of the tray and onto the floor. Any of the following conditions can cause this defect:</p> <ul style="list-style-type: none"> <li>• Extreme paper curl</li> <li>• The paper in the tray is wrinkled or deformed</li> <li>• The paper is a non-standard paper type, such as envelopes</li> <li>• The output tray is too full</li> </ul>	<ol style="list-style-type: none"> <li>1. Reprint the document.</li> <li>2. Extend the output bin extension.</li> <li>3. If the defect is caused by extreme paper curl, refer to the troubleshooting steps for "Output curl."</li> <li>4. Use a different paper type.</li> <li>5. Use freshly opened paper.</li> <li>6. Remove the paper from the output tray before the tray gets too full.</li> <li>7. If the issue persists, go to <a href="http://support.hp.com">support.hp.com</a>.</li> </ol>


Table 4-60 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"> <li>1. Reprint the document.</li> <li>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>.</li> <li>3. If the issue persists, go to <a href="http://support.hp.com">support.hp.com</a>.</li> </ol> <p><b>NOTE:</b> 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>
	<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"> <li>1. Reprint the document.</li> <li>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>.</li> <li>3. Print a cleaning page.</li> <li>4. Check the toner level in the cartridge.</li> <li>5. If the issue persists, go to <a href="http://support.hp.com">support.hp.com</a>.</li> </ol>




## 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.

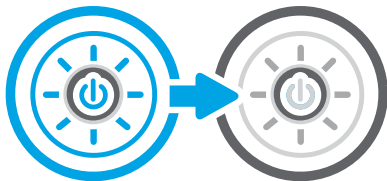
### Check the scanner glass for dirt and smudges

Learn about solving copy-quality debris problems.

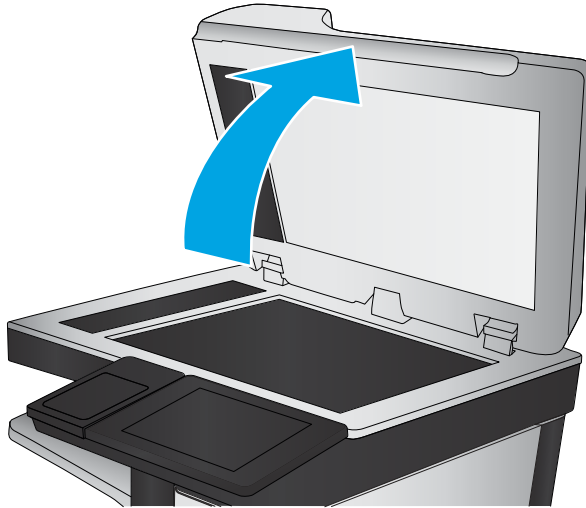
Over time, specks of debris might collect on the scanner glass and document feeder white plastic backing, which might cause print defects. Use the following procedure to clean the scanner if the printed pages have streaks, unwanted lines, black dots, poor print quality, or unclear text.

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

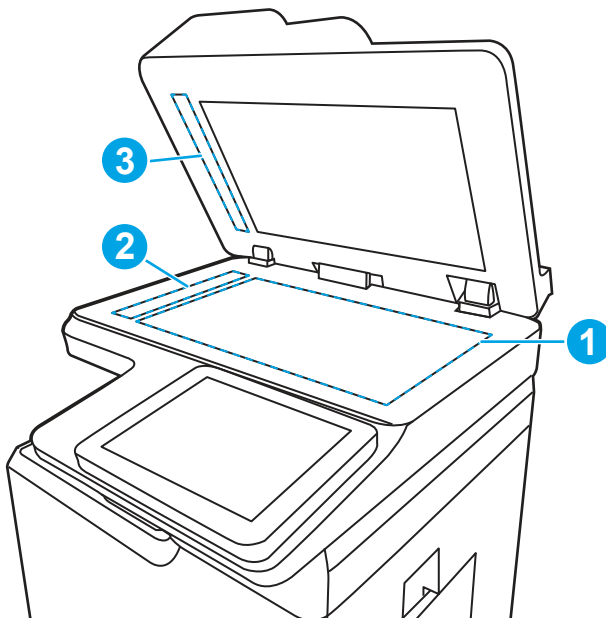
1. Press the power button to turn the printer off, and then disconnect the power cable from the electrical outlet.



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.



---

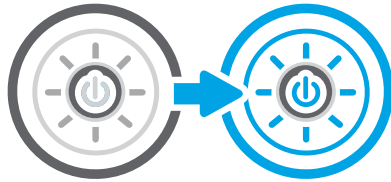
**⚠ CAUTION:** Do not use abrasives, acetone, benzene, ammonia, ethyl alcohol, or carbon tetrachloride on any part of the printer; these can damage the printer. Do not place liquids directly on the glass or platen. They might seep and damage the printer.

**📝 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 4-71** Load the document feeder



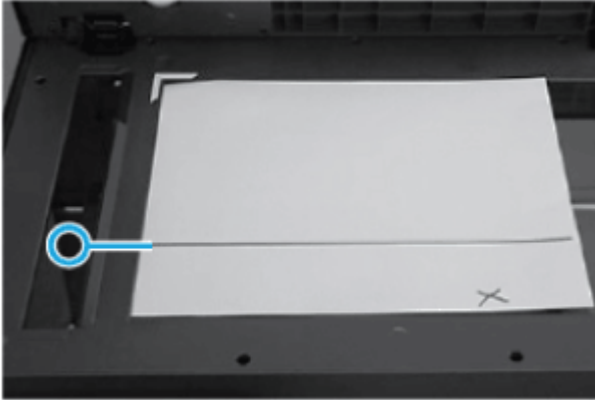
2. Press the [Start](#) button to make a copy of the blank page.
3. Place the copied paper face-up on the flatbed glass with the **X** located as shown.

---

 **NOTE:** Make sure the upper left corner of the copy is aligned with the upper left corner of the flatbed glass.

---

**Figure 4-72** 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 4-73** 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 4-74** Clean the glass



6. Make another copy or scan to determine if the defect is gone.

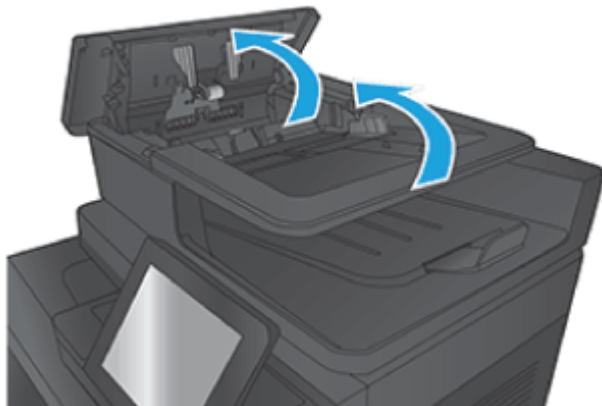
## Clean the duplex scanner glass (model specific)

 **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.

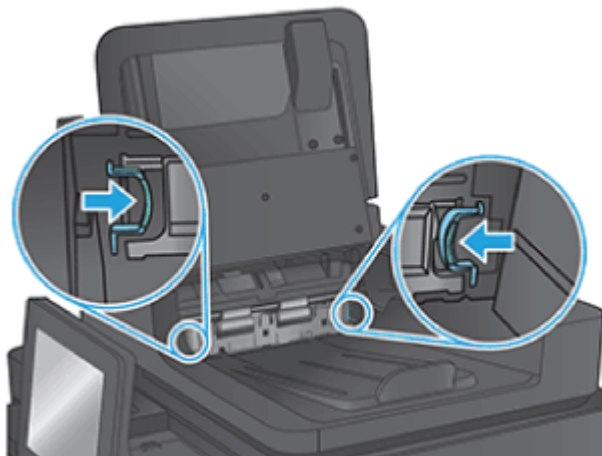
1. Release the latch and open the document feeder jam-access door.

**Figure 4-75** Open the jam-access door



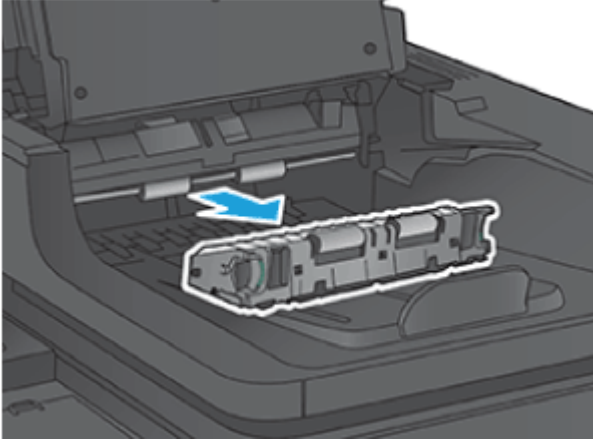
2. Unlock the Side 2 Background Selector by pressing and holding both green tabs inward towards each other.

**Figure 4-76** Release the Side 2 Background Selector



3. While holding the green tabs, pull out and remove the Side 2 Background Selector.

**Figure 4-77** Remove the Side 2 Background Selector

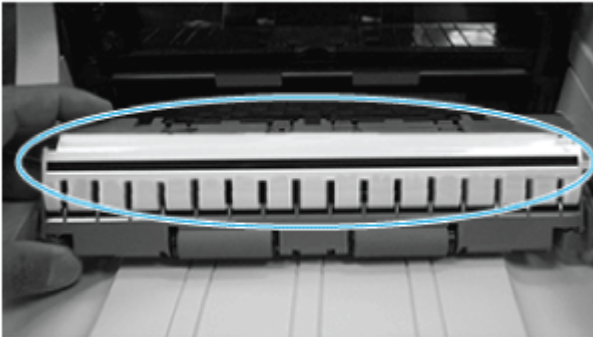


4. Rotate the top to reveal the white and black backside reflector (circled in blue).



**NOTE:** If the white and black areas do not come clean, try again using isopropyl alcohol, and then wipe the surface thoroughly with a damp cloth to remove any residual alcohol. Dry the area with a soft, dry cloth to prevent spotting.

**Figure 4-78** Locate the backside reflector



5. With the background selector removed from the document feeder, clean the inside of the scan module.
6. In the back area from where the background selector was removed, locate the Side 2 Scan Module glass found under the top area.



**NOTE:** The glass surface of the Side 2 Scan module sits horizontally flat and might not be easily viewable.

7. Use a soft, lint-free cloth moistened with water and apply pressure upwards behind the rollers to clean the Side 2 Scan Module Glass, making sure to that the entire width of the glass is cleaned from left to right.



**NOTE:** If needed, lens cleaner or non-abrasive glass cleaner can be applied to the cloth before cleaning the glass. Spray only onto the cloth and not directly onto the glass or device. Do not spray water or glass cleaner on the glass as it can seep under it and possibly damage the printer. Do not use abrasives, acetone, benzene, ethyl alcohol, or carbon tetrachloride on the glass; these can damage it and/or leave residue on the glass resulting in degraded copy/scan quality.

8. Reverse the removal steps to reinstall the Side 2 Background Selector.


9. Make another copy or scan to determine if the defect is gone.

## Modify printer settings to improve scan or copy quality

Learn about printer settings to improve scan or copy quality.

Optimize printer settings to potentially improve scan or copy quality.


---

 **IMPORTANT:** The printer settings described in this section are firmware dependent and might not be available for a specific printer (for example, color adjustment settings do not apply to mono printers).

---

### Image Adjustment settings

---

 **NOTE:** Settings > Print (SFP) or Copy/Print (MFP) > Image Adjustment > Background Cleanup.

---

Use the sliders to perform a [Background Cleanup](#), adjust the image [Darkness](#) as well as changing the [Sharpness](#) and [Contrast](#).

Use this feature to improve the overall quality of the copy (for example, adjusting the [Darkness](#) and [Sharpness](#). Use the [Background Cleanup](#) setting to remove faint images from the background or to remove a light background color.

- [Darkness](#): Adjust this setting to increase or decrease the amount of white and black in the colors.
- [Contrast](#): Adjust this setting to increase or decrease the difference between the lightest and darkest color on the page.
- [Background Cleanup](#): Adjust this setting if copying a faint image is a problem.
- [Sharpness](#): Adjust this setting to clarify or soften the image. Increasing the sharpness might make text appear crisper, but decreasing it would make photographs appear smoother.

### Optimize Text/Picture settings

---

 **NOTE:** Settings > Scan/Digital Send Settings > Optimize Text/Picture.

---

Use to optimize the output for a particular type of content. You can optimize the output for text, printed pictures, or a mixture.

Use this setting to optimize the output for a particular type of content.

- [Mixed](#): Use to optimize the setting for text and for pictures.
- [Text](#): Use to optimize the text portion of the copy when text and/or pictures are on the original.
- [Printed picture](#): Use to optimize line drawing and preprinted images such as magazine clippings or pages from a book. If you see bands of irregular intensity on copies, try selecting [Printed picture](#) to improve quality.
- [Photographs](#): Use to optimize photographic prints.

### Color/Black settings

---

 **NOTE:** Settings > Scan/Digital Send Settings > Color/Black.

---

Use to enable or disable color scanning.(some highlighters will not auto detect as color).

- [Automatically detect color or black](#): When pages without color are detected, the printer creates an image of the page in 1-bit black if other settings allow. If the other settings don't allow (File Type, for example), the image is in grayscale.


- **Automatically detect color or gray:** When pages without color are detected, the printer creates an image of the page in grayscale. Select this option for the best image quality for non-color pages.
- **Color:** Scans the documents in color.
- **Black:** Scans documents in black and white with a compressed file size.
- **Black/Gray:** Scans or prints documents in grayscale.

## Light or faint copies (color models)

Learn how to resolve light or faint copy-quality problems.

### Are you attempting to copy or scan highlighted text?

---

 **NOTE:** When digitally sending or copying highlighted images or text objects, the image might appear lighter than expected or does not show up at all with certain brands/types of highlighter pens.

---

Highlighters come in bright, often fluorescent colors. Fluorescent highlighter inks tend to reflect more light than that which is absorbed by the paper source. This reflection might cause the image to not show up as well as non-fluorescent colors depending upon the scanner/MFP being used.

The most common color for highlighters is yellow, but many other colors are also found such as pink, blue, green, orange, and purples. Yellow is often the preferred color to use when making a photocopy as it tends to not produce as much of a shadow on copies or scans.

There are different color and ink properties depending upon the brand of highlighters used. Due to these differences, scanning of the images might vary greatly from not being seen at all to changing colors (for example, orange highlighter might appear brown in the copy or scan or yellow highlighter might appear green).

### Automatic color detect

HP has a feature in all FutureSmart (LaserJet Enterprise Series only) printers which automatically detects color on each page. Depending upon the amount of color information on a page, the scanner might determine the page to be black and white due to a very, very small amount of color which might be considered background artifacts. This helps to reduce the file size of sent files as well as toner usage on a copied page. You might see small highlighted marks on pages print out in black and white or even disappear.

The black and white effect is due to the printer not seeing enough color on the page, in which case the whole image is rendered as a black and white page. The highlighted mark disappearing might be due to the marker characteristics not being detected by the scanner.

### Does the printer have the latest firmware version installed?

A Firmware enhancement has been introduced for certain LaserJets to help with the reproduction of highlighted images.

---

 **NOTE:** Some Multifunction Printers (MFPs) using FutureSmart firmware v3.5.3 or later have improved color reproduction of fluorescent highlighters when scanning or copying.

---

No or I don't know

Use the following steps to identify the installed firmware version, and then upgrade the firmware if needed.

1. Print a configuration page (from the printer control panel).
2. On the printed configuration page look in the section marked **Device Information**, and then identify the **Firmware Datecode** and **Firmware Revision**.




This is the current version of firmware installed on this printer.

3. In the US, go to [www.hp.com/supplort/colorljM455](http://www.hp.com/supplort/colorljM455) or [www.hp.com/support/color/ljM480MFP](http://www.hp.com/support/color/ljM480MFP) or [www.hp.com/support/colorljE45028](http://www.hp.com/support/colorljE45028) or [www.hp.com/support/colorljE47528MFP](http://www.hp.com/support/colorljE47528MFP).

- 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. If the firmware version is more recent than the one shown on the printed configuration page, select **Download**.


4. Outside the U.S., go to [www.hp.com/support](http://www.hp.com/support).

- a. Select your country/region.

- b. Select **Drivers & Downloads**.

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

---

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

---

- d. Select the appropriate product by name.

---

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

---

- e. Select the driver language and operating system.

- f. Locate the firmware download. If the firmware version is more recent than the one shown on the printed configuration page, select **Download**.

5. Perform a firmware upgrade. See the *Firmware upgrades* topic in the product service manual.

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

Yes

These procedures help provide settings which affect the way highlighters are scanned or copied. A firmware enhancement is available for certain printers that helps with the reproduction of highlighted images.

- **Enable Firmware Enhancement**

1. From the Home screen, select the desired scanning application (for example, [Copy](#), [E-Mail](#), [Save to Network Folder](#)).
2. Select [More Options](#) > [Optimize Text/Picture](#) > [Text](#) button (not slider). This enables the improved color reproduction of fluorescent highlighters.

---

 **TIP:** Administrators can set [Text](#) as the default setting on the device.

---

- **Alternative Settings**

See [Modify printer settings to improve scan or copy quality on page 297](#) for more information.

# Performance and connectivity troubleshooting

Learn about performance and connectivity troubleshooting.

## Solve fax or email problems

Learn about solving fax and email problems.

Fax or email troubleshooting information is not provided in this service manual. The most current information is available in WISE or HP Channel Services Network (CSN). Search using model number then use "fax troubleshooting" as the search term.

Channel partners, go to HP Channel Services Network (CSN) at <http://www.hp.com/partners/csn>.

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

Americas (AMS)

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

Asia Pacific / Japan (APJ)

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

Europe / Middle East / Africa (EMEA)

- [WISE - English](#)

## Solve performance problems

Review the following information and procedures to solve performance problems.



**NOTE:** Tray 1 and Tray 2 are optimal for paper pickup when using special paper or media other than 75-80gsm (20lb) plain paper. For Tray 1 and Tray 2 the printer increases the number of attempts to pick up a page, which increases the reliability of successfully picking the page from the tray and decreases the possibility of a mis-pick jam.

HP recommends using Tray 1 or Tray 2 if the printer is experiencing excessive or reoccurring jams from trays other than Tray 1 and Tray 2, or for print jobs that require media other than 75-80gsm (20lb) plain paper.

## Factors affecting print performance

Review the following information about factors affecting print performance.

**Table 4-61** 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 <a href="http://www.hp.com/support/colorljM455">www.hp.com/support/colorljM455</a> or <a href="http://www.hp.com/support/color/ljM480MFP">www.hp.com/support/color/ljM480MFP</a> or <a href="http://www.hp.com/support/colorljE45028">www.hp.com/support/colorljE45028</a> , or <a href="http://www.hp.com/support/colorljE47528MFP">www.hp.com/support/colorljE47528MFP</a> .
Pages print very slowly.  <b>NOTE:</b> 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.  <b>NOTE:</b> 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.  <b>NOTE:</b> 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"> <li>● Disconnect the USB cable at both ends and reconnect it.</li> <li>● Try printing a job that has printed in the past.</li> <li>● Try using a different USB cable.</li> </ul>
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 <b>Printing</b> message should appear on the control panel display.

## Print speeds

Print speed is the number of pages that print in one minute. Print speed depends on different engine-process speeds or operational pauses between printed pages during normal printer operation. Factors that determine the print speed of the printer include the following:

- Page formatting time

The printer must pause for each page to be formatted before it prints. Complex pages take more time to format, resulting in reduced print speed. However, most jobs print at full engine speed.

- Media size

Legal-size media reduces print speed because it is longer than the standard Letter- or A4-size media. A reduce print speed is used when printing on narrow media to prevent the edges of the fuser from overheating.

- Media mode

Some media types require a reduced print speed to achieve maximum print quality on that media. For example, glossy, heavy, and specialty media (for example, envelopes or photos) require a reduced print speed. To maximize the print speed for special media types, make sure that the correct media type in the print driver is selected.

- Printer temperature

To prevent printer damage, print speed is reduced if the printer reaches a specific internal temperature (thermal slow down). The starting temperature of the printer, ambient environment temperature, and the print job size effect the number of pages that can be printed before the printer reduces the print speed. Thermal slow down reduces print speed by printing four pages and then pausing for an amount of time before printing continues.

- Other print speed reduction factors

Other factors (especially during large print jobs) that can cause reduced print speeds include:

- Density control sequence; occurs every 150 pages and takes about 120 seconds

## The printer does not print

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

1. Make sure the printer is turned on and that the control panel indicates it is ready.
  - If the control panel does not indicate the printer is ready, turn the printer off and then on again.
  - If the control panel indicates the printer is ready, try sending the job again.
2. If the control panel indicates the printer has an error, resolve the error and then try sending the job again.
3. Make sure the cables are all connected correctly. If the printer is connected to a network, check the following items:
  - Check the bottom LED next to the network connection on the printer. If the network is active, the light is green.
  - Make sure that a network cable and not a phone cord is used to connect to the network.
  - Make sure the network router, hub, or switch is turned on and that it is working correctly.

4. Install the HP software for the printer. Using generic printer drivers can cause delays clearing jobs from the print queue.
5. From the list of printers on your computer, right-click the name of this product, click **Properties**, and open the **Ports** tab.
  - If a network cable is used to connect to the network, make sure the printer name listed on the **Ports** tab matches the one on the printer configuration page.
  - If a USB cable is used, and the printer is connected to a wireless network, make sure the box is checked next to **Virtual printer port for USB**.
6. If a personal firewall system on the computer is used, it might be blocking communication with the printer. Try temporarily disabling the firewall to see if it is the source of the problem.
7. If the host computer or the printer is connected to a wireless network, low signal quality or interference might be delaying print jobs.

## The printer prints slowly

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

1. Make sure the computer meets the minimum specifications for this printer. For a list of specifications, go to this Web site: [www.hp.com/supplort/colorljM455](http://www.hp.com/supplort/colorljM455) or [www.hp.com/support/color/ljM480MFP](http://www.hp.com/support/color/ljM480MFP) or [www.hp.com/support/colorljE45028](http://www.hp.com/support/colorljE45028) or [www.hp.com/support/colorljE47528MFP](http://www.hp.com/support/colorljE47528MFP).
2. When the printer is configured to print on some paper types, such as heavy paper, the printer prints more slowly so it can correctly fuse the toner to the paper. If the paper type setting is not correct for the type of paper you are using, change the setting to the correct paper type.
3. If the host computer or the printer is connected to a wireless network, low signal quality or interference might be delaying print jobs.

## Solve connectivity problems

Review the following information and procedures to solve connectivity problems.

### Solve USB connection problems

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

- Verify that the cable is connected to the computer and to the product.
- Verify that the cable is not longer than 2 m (6.65 ft). Try using a shorter cable.
- Verify that the cable is working correctly by connecting it to another product. Replace the cable if necessary.

### Solve wired network problems

Review the following information and procedures to solve wired network problems.

### Introduction

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

### Poor physical connection

Use the following procedure when the printer has a poor physical connection.

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

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

Use the following procedure when the computer is using the incorrect IP address for the printer.

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

### The computer is unable to communicate with the printer

Use the following procedure when the computer is unable to communicate with the printer.

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

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

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

### New software programs might be causing compatibility problems

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

### The computer or workstation might be set up incorrectly

Use the following procedure when the computer or workstation might be set up incorrectly.

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

#### **The printer is disabled, or other network settings are incorrect**

Use the following procedure when the printer is disabled, or other network settings are incorrect.

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





---

# 5 Removal and replacement

When servicing the printer, several items must be taken into account to ensure a successful repair and to avoid damage to the printer or injury. Learn about these considerations and find detailed instructions for removing and replacing printer parts.

## HP service and support

Learn about HP access to additional service and support information.

### Additional service and support for channel partners

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

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

Access WISE for Channel partners

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

Find information about the following topics

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

### Additional service and support for HP internal personnel

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

[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 how to use WISE to find technical support videos \(Product detail page \[PDP\] search\).](#)

## Order parts, accessories, and supplies

Find information about ordering parts and supplies for the printer.

### Ordering

Order parts by authorized service providers.

**Table 5-1 Ordering**

Item or provider	Description
Order supplies and paper	<a href="http://www.hp.com/go/suresupply">www.hp.com/go/suresupply</a>
Order parts from authorized service providers	<a href="http://www.hp.com/buy/parts">www.hp.com/buy/parts</a> or <a href="http://partsurfer.hp.com">partsurfer.hp.com</a>
Order through service or support providers	Contact an HP-authorized service or support provider.
Order using the HP Embedded Web Server (EWS)	To access, in a supported web browser on your computer, enter the printer IP address or host name in the address/URL field. The EWS contains a link to the HP SureSupply web site, which provides options for purchasing Original HP supplies.

## Orderable parts

Not all of the parts shown in the exploded assembly diagrams are orderable parts.

Refer to the tables following the diagrams or the alphabetical/numerical parts lists to determine if a part is orderable.

## Supplies and accessories

Learn about the supplies and accessories that are available for the printer.

To order cartridges, visit <http://www.hp.com> (some portions of the HP Web site are available in English only). Ordering cartridges online is not supported in all countries/regions. However, many countries/regions have information about ordering by telephone, locating a local store, and printing a shopping list. In addition, go to [hp.com/supplies](http://hp.com/supplies) to obtain information about purchasing HP products in your country/region.

Use only the replacement cartridges that have the same cartridge number as the cartridge that is being replaced. Find the cartridge number in the following places:

- On the label of the cartridge that is being replaced.
- On a sticker inside the printer. Open the cartridge door to locate the sticker.
- Open the printer software (**HP Printer Assistant**), and then click **Shop > Shop For Supplies Online**.
- Open the HP Embedded Web Server (EWS), and then click **Tools > Supply Status** (under the **Product Information** item).

**Table 5-2 Supplies part numbers**

Item	Description	Part number (service)	Product number (new)
Toner cartridge	HP 414A Black Original LaserJet Toner Cartridge	W2020-67901	W2020A
Toner cartridge	HP 414X High Yield Black Original LaserJet Toner Cartridge	W2020-67902	W2020X
Toner cartridge	HP 414X High Yield (Contract) Black Original LaserJet Toner Cartridge	W2020-67903	W2020XC
Toner cartridge	HP 414A Cyan Original LaserJet Toner Cartridge	W2021-67901	W2021A
Toner cartridge	HP 414X High Yield Cyan Original LaserJet Toner Cartridge	W2021-67902	W2021X
Toner cartridge	HP 414X High Yield (Contract) Cyan Original LaserJet Toner Cartridge	W2021-67903	W2021XC
Toner cartridge	HP 414A Yellow Original LaserJet Toner Cartridge	W2022-67901	W2022A
Toner cartridge	HP 414X High Yield Yellow Original LaserJet Toner Cartridge	W2022-67902	W2022X
Toner cartridge	HP 414X High Yield (Contract) Yellow Original LaserJet Toner Cartridge	W2022-67903	W2022XC
Toner cartridge	HP 414A Magenta Original LaserJet Toner Cartridge	W2023-67901	W2023A
Toner cartridge	HP 414X High Yield Magenta Original LaserJet Toner Cartridge	W2023-67902	W2023X

**Table 5-2 Supplies part numbers (continued)**

<b>Item</b>	<b>Description</b>	<b>Part number (service)</b>	<b>Product number (new)</b>
Toner cartridge	HP 414X High Yield (Contract) Magenta Original LaserJet Toner Cartridge	W2023-67903	W2023XC
Toner cartridge	HP 415A Black Original LaserJet Toner Cartridge	W2030-67901	W2030A
Toner cartridge	HP 415X High Yield Black Original LaserJet Toner Cartridge	W2030-67902	W2030X
Toner cartridge	HP 415X High Yield (Contract) Black Original LaserJet Toner Cartridge	W2030-67903	W2030XC
Toner cartridge	HP 415A Cyan Original LaserJet Toner Cartridge	W2031-67901	W2031A
Toner cartridge	HP 415X High Yield Cyan Original LaserJet Toner Cartridge	W2031-67902	W2031X
Toner cartridge	HP 415X High Yield (Contract) Cyan Original LaserJet Toner Cartridge	W2031-67903	W2031XC
Toner cartridge	HP 415A Yellow Original LaserJet Toner Cartridge	W2032-67901	W2032A
Toner cartridge	HP 415X High Yield Yellow Original LaserJet Toner Cartridge	W2032-67902	W2032X
Toner cartridge	HP 415X High Yield (Contract) Yellow Original LaserJet Toner Cartridge	W2032-67903	W2032XC
Toner cartridge	HP 415A Magenta Original LaserJet Toner Cartridge	W2033-67901	W2033A
Toner cartridge	HP 415X High Yield Magenta Original LaserJet Toner Cartridge	W2033-67902	W2033X
Toner cartridge	HP 415X High Yield (Contract) Magenta Original LaserJet Toner Cartridge	W2033-67903	W2033XC
Toner cartridge	HP 416A Black Original LaserJet Toner Cartridge	W2040-67901	W2040A
Toner cartridge	HP 416X High Yield Black Original LaserJet Toner Cartridge	W2040-67902	W2040X
Toner cartridge	HP 416X High Yield (Contract) Black Original LaserJet Toner Cartridge	W2040-67903	W2040XC
Toner cartridge	HP 416A Cyan Original LaserJet Toner Cartridge	W2041-67901	W2041A
Toner cartridge	HP 416X High Yield Cyan Original LaserJet Toner Cartridge	W2041-67902	W2041X
Toner cartridge	HP 416X High Yield (Contract) Cyan Original LaserJet Toner Cartridge	W2041-67903	W2041XC
Toner cartridge	HP 416A Yellow Original LaserJet Toner Cartridge	W2042-67901	W2042A
Toner cartridge	HP 416X High Yield Yellow Original LaserJet Toner Cartridge	W2042-67902	W2042X

**Table 5-2 Supplies part numbers (continued)**

Item	Description	Part number (service)	Product number (new)
Toner cartridge	HP 416X High Yield (Contract) Yellow Original LaserJet Toner Cartridge	W2042-67903	W2042XC
Toner cartridge	HP 416A Magenta Original LaserJet Toner Cartridge	W2043-67901	W2043A
Toner cartridge	HP 416X High Yield Magenta Original LaserJet Toner Cartridge	W2043-67902	W2043X
Toner cartridge	HP 416X High Yield (Contract) Magenta Original LaserJet Toner Cartridge	W2043-67903	W2043XC

**Table 5-3 Accessories**

Description	Part number (service)	Product number
550-sheet paper feeder	CF404-67901	CF404A
HP JetDirect 3100w BLE/NFC/Wireless accessory	3JN69-61001	3JN69A
HP Accessibility Kit	2TD64-61001	2TD64A
HP Accessibility Assistant	2MU47-61001	2MU47A
Locking Tray Guides (managed printers only)	3PZ95-67906	NA
HP Jetdirect LAN Accessory Module	5851-8004	8FP31A

## Customer self-repair parts

Learn about printer customer self-repair parts.

Customer self-repair (CSR) parts are available for many HP LaserJet printers to reduce repair time.



**NOTE:** More information about the CSR program and benefits can be found at [www.hp.com/go/csr-support](http://www.hp.com/go/csr-support) and [www.hp.com/go/csr-faq](http://www.hp.com/go/csr-faq).

Genuine HP replacement parts can be ordered at [www.hp.com/buy/parts](http://www.hp.com/buy/parts) or by contacting an HP-authorized service or support provider. When ordering, one of the following will be needed: part number, serial number (found on back of printer), product number, or printer name.

- Parts listed as **A**: Easy
- Parts listed as **B**: Difficult and/or require tools
- Parts listed as **Mandatory**: Customer installed self-replacement parts (unless the customer is willing to pay for HP service personnel to perform the repair). For these parts, on-site or return-to-depot support is not provided under the HP printer warranty.
- Parts listed as **Optional**: HP service personnel installed self-replacement parts by customer request for no additional charge during the printer warranty period.

**Table 5-4 Customer self-repair (CSR) parts**

Kit name	Description	CSR level	Self-replacement options	Part number
Tray 2	Cassette (Tray 2) assembly	A	Mandatory	RM2-6377-000CN
Tray 3	Cassette assembly, Tray 3 (550-sheet paper feeder)	A	Mandatory	RM2-6486-000CN
Tray 3 assembly (whole unit)	550-sheet paper feeder	A	Mandatory	CF404-67901
Toner cartridge	HP 414A Black Original LaserJet Toner CartridgeHP 414X High Yield Black Original LaserJet Toner CartridgeHP 414X High Yield (Contract) Black Original LaserJet Toner Cartridge	A	Mandatory	W2020A/W2020X/ W2020XC
Toner cartridge	HP 414A Cyan Original LaserJet Toner CartridgeHP 414X High Yield Cyan Original LaserJet Toner CartridgeHP 414X High Yield (Contract) Cyan Original LaserJet Toner Cartridge	A	Mandatory	W2021A/W2021X/ W2021XC
Toner cartridge	HP 414A Yellow Original LaserJet Toner CartridgeHP 414X High Yield Yellow Original LaserJet Toner CartridgeHP 414X High Yield (Contract) Yellow Original LaserJet Toner Cartridge	A	Mandatory	W2022A/W2022X/ W2022XC
Toner cartridge	HP 414A Magenta Original LaserJet Toner CartridgeHP 414X High Yield Magenta Original LaserJet Toner CartridgeHP 414X High Yield (Contract) Magenta Original LaserJet Toner Cartridge	A	Mandatory	W2023A/W2023X/ W2023XC
Toner cartridge	HP 415A Black Original LaserJet Toner CartridgeHP 415X High Yield Black Original LaserJet Toner CartridgeHP 415X High Yield (Contract) Black Original LaserJet Toner Cartridge	A	Mandatory	W2030A/W2030X/ W2030XC
Toner cartridge	HP 415A Cyan Original LaserJet Toner CartridgeHP 415X High Yield Cyan Original LaserJet Toner CartridgeHP 415X High Yield (Contract) Cyan Original LaserJet Toner Cartridge	A	Mandatory	W2031A/W2031X/ W2031XC
Toner cartridge	HP 415A Yellow Original LaserJet Toner CartridgeHP 415X High Yield Yellow Original LaserJet Toner CartridgeHP 415X High Yield (Contract) Yellow Original LaserJet Toner Cartridge	A	Mandatory	W2032A/W2032X/ W2032XC
Toner cartridge	HP 415A Magenta Original LaserJet Toner CartridgeHP 415X High Yield Magenta Original LaserJet Toner CartridgeHP 415X High Yield	A	Mandatory	W2033A/W2033X/ W2033XC

**Table 5-4 Customer self-repair (CSR) parts (continued)**

Kit name	Description	CSR level	Self-replacement options	Part number
	(Contract) Magenta Original LaserJet Toner Cartridge			
Toner cartridge	HP 416A Black Original LaserJet Toner Cartridge HP 416X High Yield Black Original LaserJet Toner Cartridge HP 416X High Yield (Contract) Black Original LaserJet Toner Cartridge	A	Mandatory	W2040A/W2040X/ W2040XC
Toner cartridge	HP 416A Cyan Original LaserJet Toner Cartridge HP 416X High Yield Cyan Original LaserJet Toner Cartridge HP 416X High Yield (Contract) Cyan Original LaserJet Toner Cartridge	A	Mandatory	W2041A/W2041X/ W2041XC
Toner cartridge	HP 416A Yellow Original LaserJet Toner Cartridge HP 416X High Yield Yellow Original LaserJet Toner Cartridge HP 416X High Yield (Contract) Yellow Original LaserJet Toner Cartridge	A	Mandatory	W2042A/W2042X/ W2042XC
Toner cartridge	HP 416A Magenta Original LaserJet Toner Cartridge HP 416X High Yield Magenta Original LaserJet Toner Cartridge HP 416X High Yield (Contract) Magenta Original LaserJet Toner Cartridge	A	Mandatory	W2043A/W2043X/ W2043XC

## HP service and support

Learn about HP access to additional service and support information.

### Additional service and support for channel partners

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

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

Access WISE for Channel partners

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

Find information about the following topics

- Service manuals
- Service advisories
- Up-to-date control panel message (CPMD) troubleshooting

- Solutions for printer issues and emerging issues
- Remove and replace part instructions and videos
- Install and configure
- Printer specifications
- Warranty and regulatory information

### Additional service and support for HP internal personnel

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

[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\).](#)

## Assembly locations

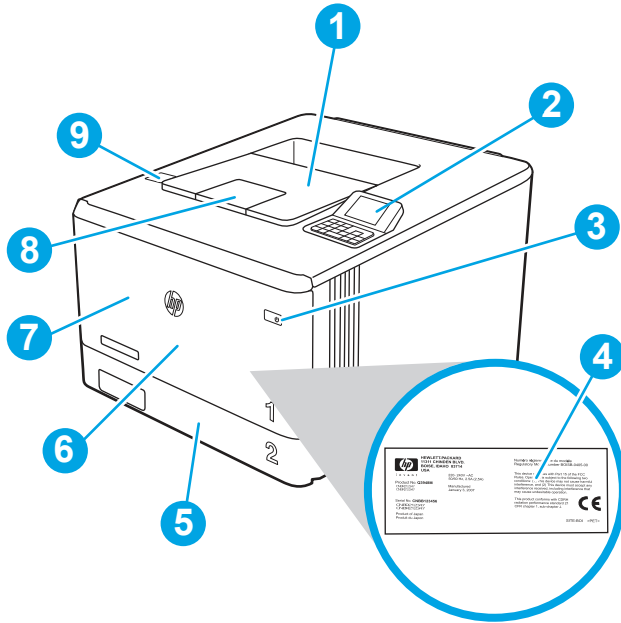
Learn about major printer assembly locations.

### Printer front view (SFP)

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



Figure 5-1 Printer front view (SFP)

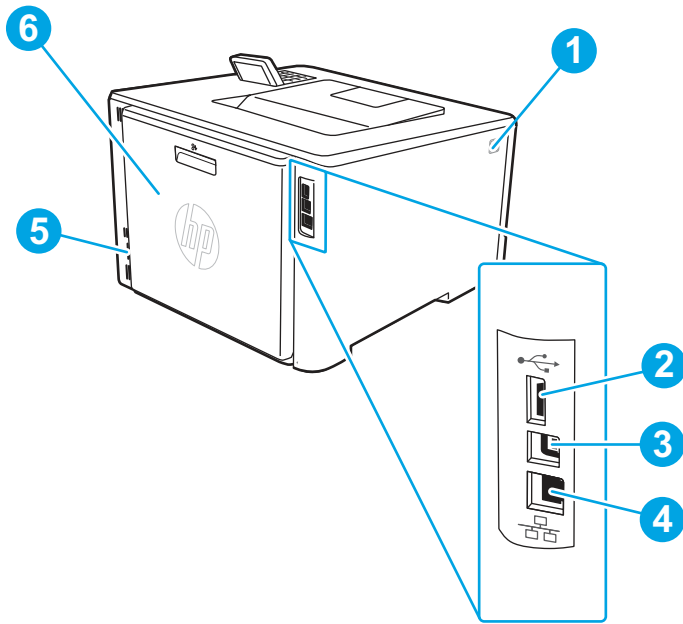


Number	Description
1	Output bin
2	Color non-touch control panel with 10-key keypad
3	Power on/off button
4	Regulatory label (inside the front door)
5	Tray 2
6	Tray 1
7	Front door (provides toner cartridge access)
8	Output bin extension
9	Easy-access USB port for printing without a computer

## Printer back view (SFP)

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

Figure 5-2 Printer rear view (SFP)

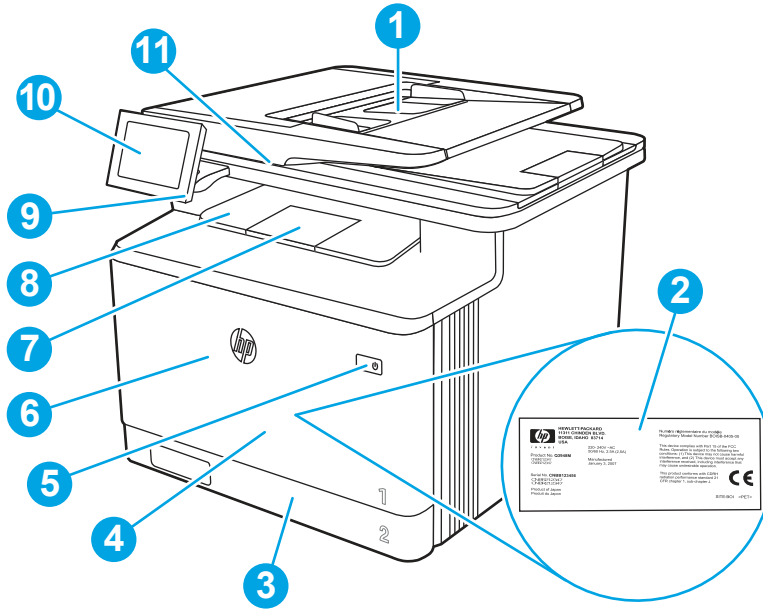


Number	Description
1	Front door release button
2	USB port for job storage or connecting accessories
3	USB port for direct connection to a computer
4	Ethernet port
5	Power connection
6	Duplexer rear access door

## Printer front view (MFP)

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

Figure 5-3 Printer front view (MFP)

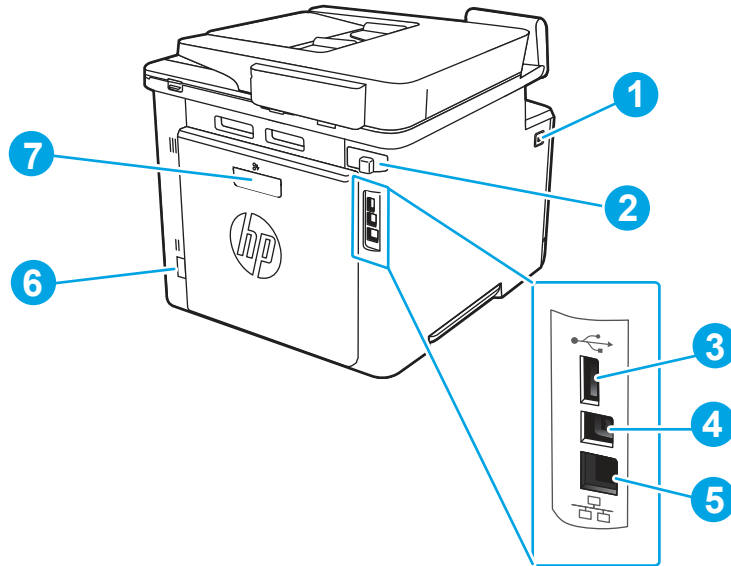


Number	Description
1	Document feeder
2	Regulatory label (inside the front door)
3	Tray 2
4	Tray 1
5	Power on/off button
6	Front door (provides toner cartridge access)
7	Output bin extension
8	Output bin
9	Easy-access USB port (for printing and scanning without a computer)
10	Touchscreen control panel (tilts up for easier viewing)
11	Scanner

## Printer back view (MFP)

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

Figure 5-4 Printer rear view (MFP)



Number	Description
1	Front door release button
2	Fax ports cover <b>NOTE:</b> The fax ports are behind the cover.
3	USB port for job storage or connecting accessories
4	USB port for direct connection to a computer
5	Ethernet port
6	Power connection
7	Rear door (provides access for clearing jams)

## Customer self-repair (CSR) A parts and accessories

Customer self-repair (CSR) A parts are parts that a customer replaces without assistance from a field technician. These parts can be replaced without the use of any tools.

### Removal and replacement: Toner cartridges

Learn how to remove and replace the toner cartridges.

[View a video of removing and replacing the toner cartridges.](#)

Mean time to repair: 2 minutes

Service level: CSR A

#### Before performing service

**CAUTION:** To prevent damage to a toner cartridge, do not expose it to light for more than a few minutes. Cover the green imaging drum if the toner cartridge must be removed from the printer for an extended period of time.

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

Use the table below to identify the correct part number for your printer. To order the part, go to [www.hp.com/buy/parts](http://www.hp.com/buy/parts).

**Table 5-5 Toner cartridge part numbers**

Part number	Description
W2020-67901	HP 414A Black Original LaserJet Toner Cartridge
W2020-67902	HP 414X High Yield Black Original LaserJet Toner Cartridge
W2020-67903	HP 414X High Yield (Contract) Black Original LaserJet Toner Cartridge
W2021-67901	HP 414A Cyan Original LaserJet Toner Cartridge
W2021-67902	HP 414X High Yield Cyan Original LaserJet Toner Cartridge
W2021-67903	HP 414X High Yield (Contract) Cyan Original LaserJet Toner Cartridge
W2022-67901	HP 414A Yellow Original LaserJet Toner Cartridge
W2022-67902	HP 414X High Yield Yellow Original LaserJet Toner Cartridge
W2022-67903	HP 414X High Yield (Contract) Yellow Original LaserJet Toner Cartridge
W2023-67901	HP 414A Magenta Original LaserJet Toner Cartridge
W2023-67902	HP 414X High Yield Magenta Original LaserJet Toner Cartridge
W2023-67903	HP 414X High Yield (Contract) Magenta Original LaserJet Toner Cartridge
W2030-67901	HP 415A Black Original LaserJet Toner Cartridge
W2030-67902	HP 415X High Yield Black Original LaserJet Toner Cartridge
W2030-67903	HP 415X High Yield (Contract) Black Original LaserJet Toner Cartridge
W2031-67901	HP 415A Cyan Original LaserJet Toner Cartridge
W2031-67902	HP 415X High Yield Cyan Original LaserJet Toner Cartridge
W2031-67903	HP 415X High Yield (Contract) Cyan Original LaserJet Toner Cartridge
W2032-67901	HP 415A Yellow Original LaserJet Toner Cartridge
W2032-67902	HP 415X High Yield Yellow Original LaserJet Toner Cartridge
W2032-67903	HP 415X High Yield (Contract) Yellow Original LaserJet Toner Cartridge
W2033-67901	HP 415A Magenta Original LaserJet Toner Cartridge
W2033-67902	HP 415X High Yield Magenta Original LaserJet Toner Cartridge
W2033-67903	HP 415X High Yield (Contract) Magenta Original LaserJet Toner Cartridge
W2040-67901	HP 416A Black Original LaserJet Toner Cartridge
W2040-67902	HP 416X High Yield Black Original LaserJet Toner Cartridge
W2040-67903	HP 416X High Yield (Contract) Black Original LaserJet Toner Cartridge
W2041-67901	HP 416A Cyan Original LaserJet Toner Cartridge
W2041-67902	HP 416X High Yield Cyan Original LaserJet Toner Cartridge
W2041-67903	HP 416X High Yield (Contract) Cyan Original LaserJet Toner Cartridge

**Table 5-5** Toner cartridge part numbers (continued)

Part number	Description
W2042-67901	HP 416A Yellow Original LaserJet Toner Cartridge
W2042-67902	HP 416X High Yield Yellow Original LaserJet Toner Cartridge
W2042-67903	HP 416X High Yield (Contract) Yellow Original LaserJet Toner Cartridge
W2043-67901	HP 416A Magenta Original LaserJet Toner Cartridge
W2043-67902	HP 416X High Yield Magenta Original LaserJet Toner Cartridge
W2043-67903	HP 416X High Yield (Contract) Magenta Original LaserJet Toner Cartridge

### Required tools

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

### After performing service

Make sure that the cartridge tray and front door are fully closed after replacing a toner cartridge.

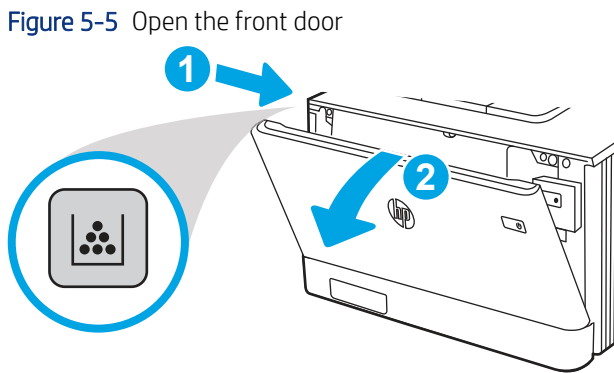
### Post service test

Print a print quality page, which shows bands of colors that can indicate whether the printer is producing colors correctly.

## 1. Remove the toner cartridge

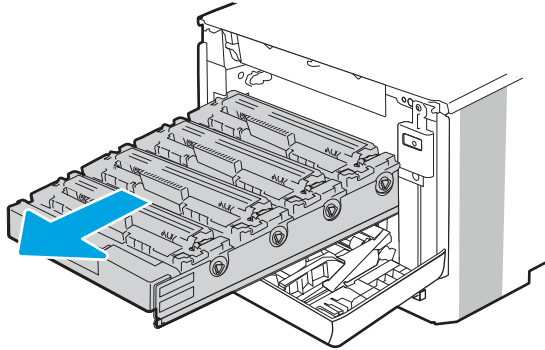
Follow these steps to remove the toner cartridge.

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



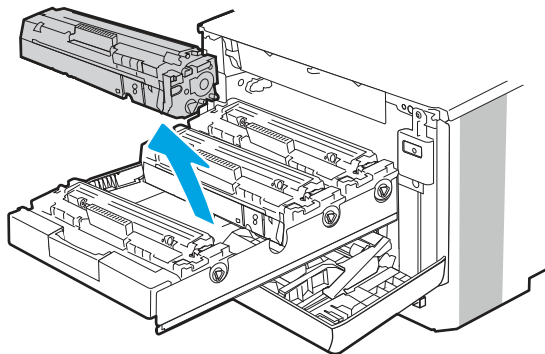
2. Grasp the blue handle on the toner cartridge tray, and then pull out the tray.

**Figure 5-6** Open the cartridge drawer



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

**Figure 5-7** Remove the toner cartridge



## 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.

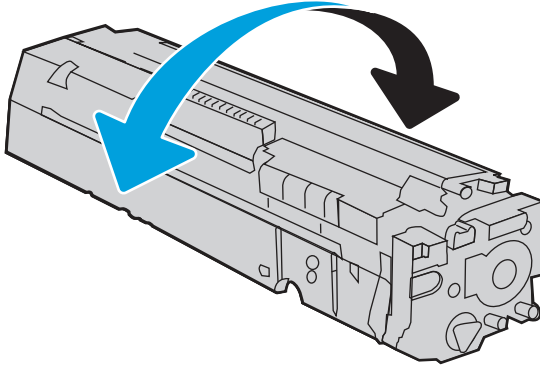
---

### 3. Install a toner cartridge

Follow these steps to install a toner cartridge.

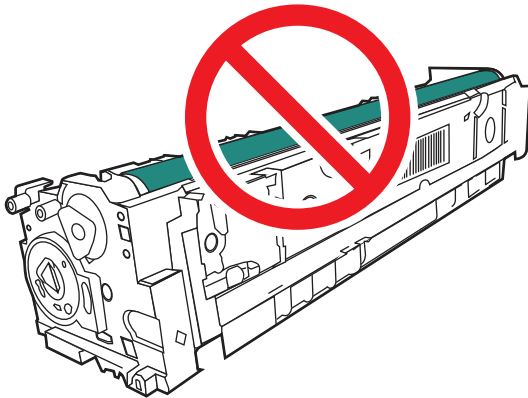
1. Hold both ends of the toner cartridge and rock it 5-6 times.

**Figure 5-8** Rock the toner cartridge




2. Do not touch the imaging drum on the bottom of the toner cartridge. Fingerprints on the imaging drum can cause print-quality problems.

**Figure 5-9** Do not touch imaging drum



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 cassette

Learn how to remove and replace the Tray 2 cassette.

[View a video of removing and replacing the Tray 2 cassette.](#)

Mean time to repair: 2 minutes



Service level: CSR A

## Before performing service

Use the table below to identify the correct part number for your printer. To order the part, go to [www.hp.com/buy/parts](http://www.hp.com/buy/parts).

**Table 5-6 Part information**

Part number	Part description
RM2-6377-000CN	Cassette (Tray 2) assembly

## Required tools

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

## After performing service

Make sure that Tray 2 is fully closed after replacing it.

## Post service test

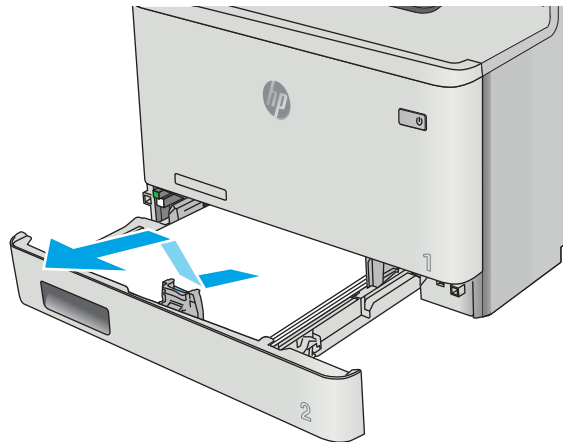
Print any pages necessary to make sure the printer is functioning correctly.

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

**Figure 5-10** Remove the tray




## 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.

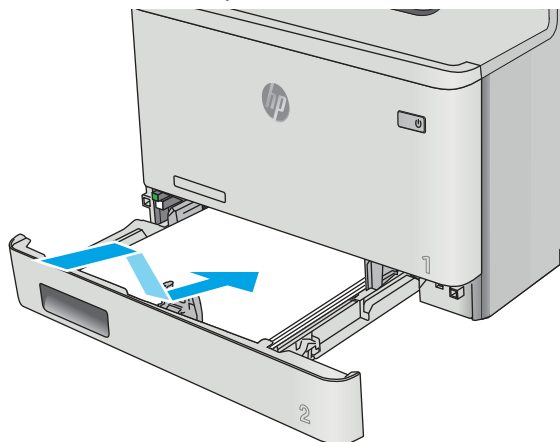
---

### 3. Install Tray 2

Follow these steps to install Tray 2.

- ▲ With the front of the tray slightly lifted, align the sides of the tray with the rails in the printer, and then carefully slide the tray into the printer. As the tray slides into the printer, lower the front of the tray, and then close it.

**Figure 5-11** Install the tray



### Removal and replacement: Tray 3 cassette

Learn how to remove and replace the Tray 3 cassette.

[View a video of removing and replacing the Tray 3 cassette.](#)

Mean time to repair: 2 minutes

Service level: CSR A

## Before performing service

Use the table below to identify the correct part number for your printer. To order the part, go to [www.hp.com/buy/parts](http://www.hp.com/buy/parts).

**Table 5-7 Part information**

Part number	Part description
RM2-6486-000CN	Cassette assembly, Tray 3 (550-sheet paper feeder)

## Required tools

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

## After performing service

Make sure that Tray 3 is fully closed after replacing it.

## Post service test

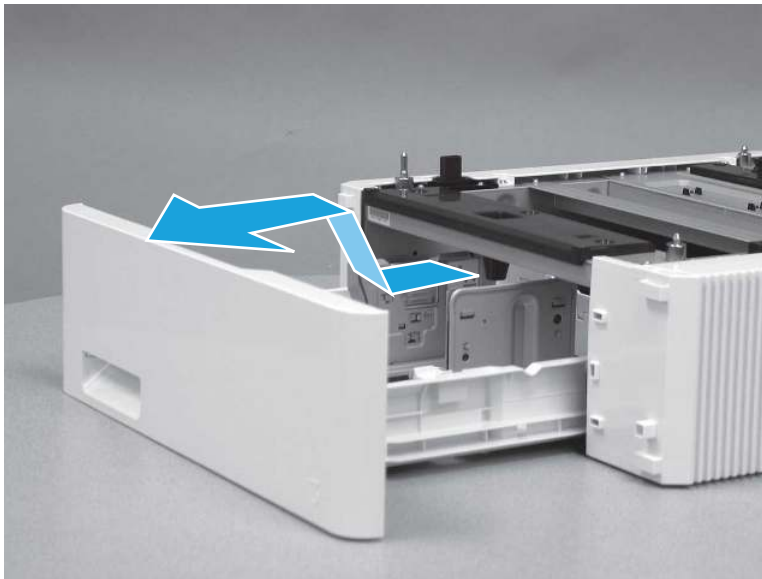
Print any pages necessary to make sure the printer is functioning correctly.

## 1. Remove Tray 3

Follow these steps to remove Tray 3.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

**Figure 5-12** Remove the tray



## 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. Install Tray 3

Follow these steps to install Tray 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: Document feeder / scanner

Learn about document feeder and scanner parts removal and replacement.

### Removal and replacement: Document feeder top cover assembly with rollers

Learn how to remove and replace the document feeder top cover assembly with rollers.

[View a video of how to remove and replace the document feeder top cover assembly with rollers.](#)

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](http://www.hp.com/buy/parts).

**Table 5-8** Part information

Part number	Part description
W1A77-67903	Document feeder top cover assembly with 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

Make sure that toner toner-cartridge door correctly opens and closes.

Make sure that the printer initializes to a **Ready** state.

## 1. Remove the document feeder top cover assembly

Follow these steps to remove the document feeder top cover assembly.

1. Open the document feeder top cover.

**Figure 5-13** Open the document feeder top cover



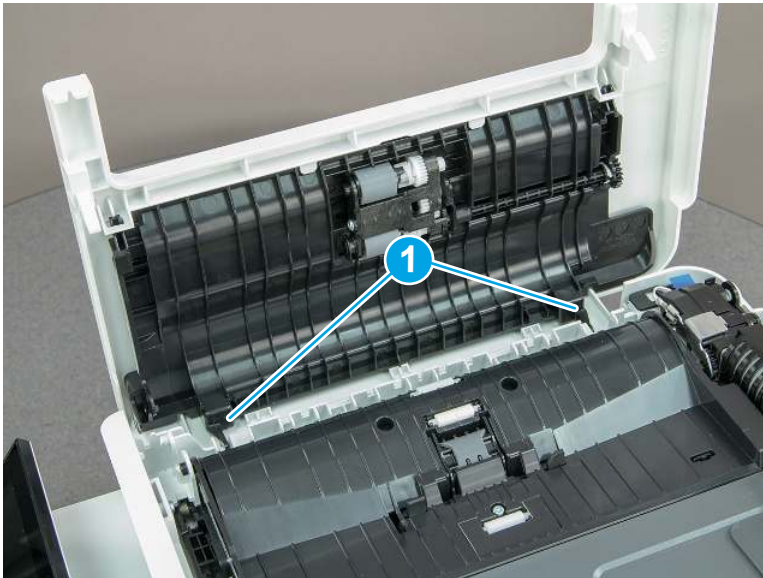
2. Release one hinge pin (callout 1).

**Figure 5-14** Release one hinge pin



3. Use a small, flat blade screwdriver to lift up and release two hinge pins (callout 1), and then remove the cover.

**Figure 5-15** Release two hinge pins



## 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: ISA lift assembly and slider pin (MFP)

Learn how to remove and replace the integrated scanner assembly (ISA) lift assembly and slider pin.

[View a video of how to remove and replace the ISA lift assembly and slider pin.](#)

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](http://www.hp.com/buy/parts).

**Table 5-9** Part information

Part number	Part description
B3Q10-60128	ISA lift assembly
B3Q10-40041	ISA lift slider pin

### 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

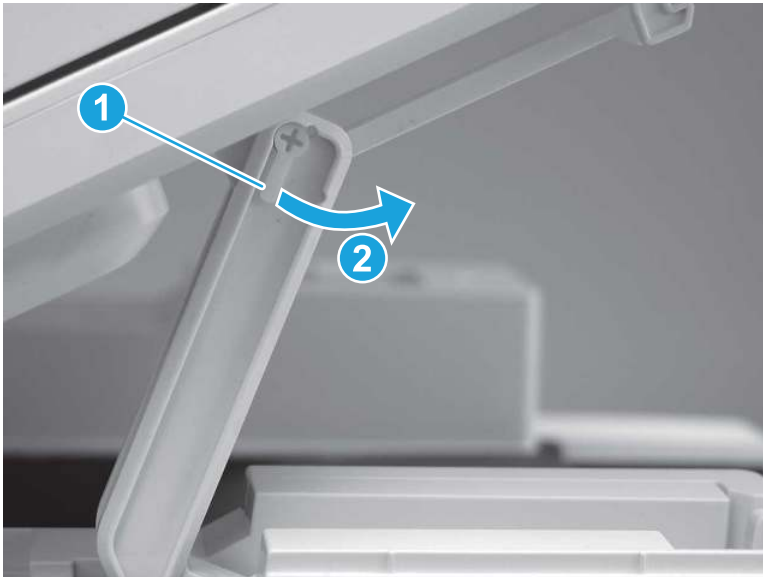
Make sure that toner ISA correctly opens and closes.

## 1. Remove the slider pin and ISA lift assembly (MFP only)

Follow these steps to remove the slider pin and ISA lift assembly (MFP only).

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 5-16** Release one tab and rotate the slider pin



2. Remove the slider pin.

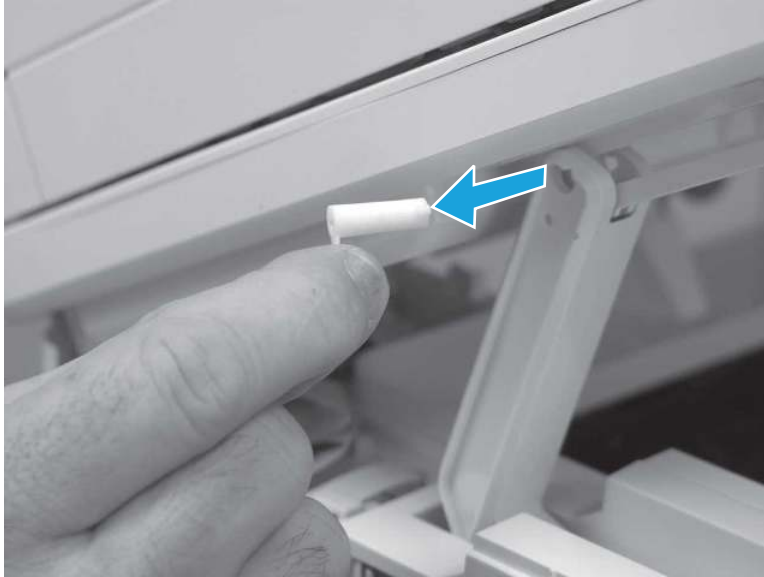
---

 **Reinstallation tip:** Align the keyed portion of the locking pin with the slot and hole in the support arm.

---



Figure 5-17 Remove the slider pin



3. Move the ISA out of the way, and then lower the support arm to the closed position.

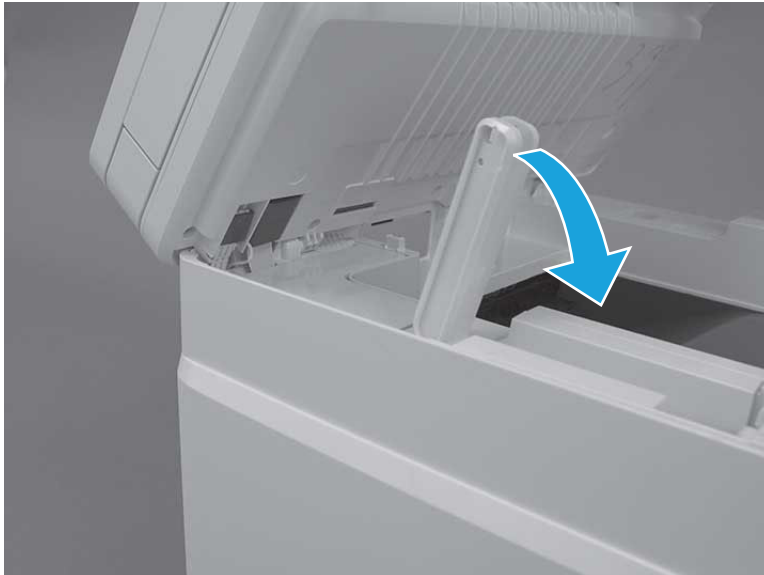
---

**⚠ 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.

**💡 Reinstallation tip:** If the replacement lift assembly is in the closed position, place it in the open position.

---

Figure 5-18 Lower the support arm



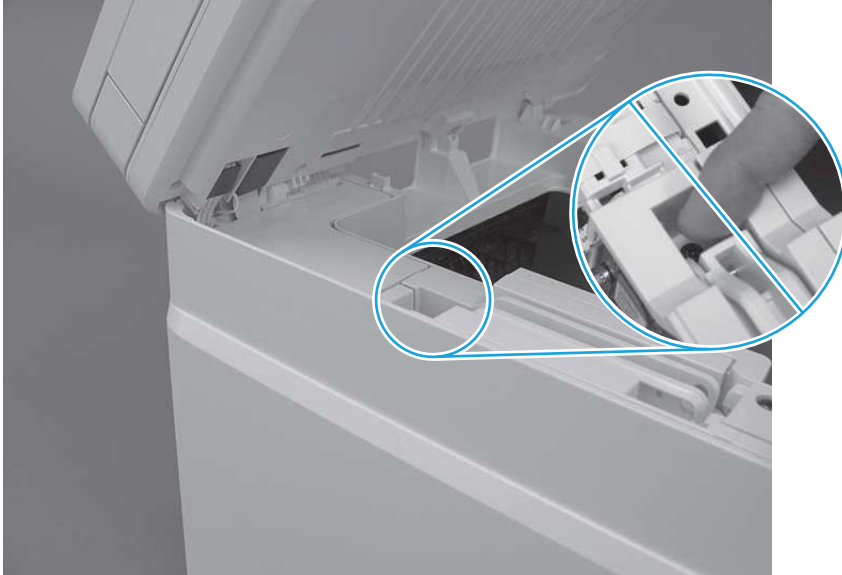
4. Before proceeding take note of the following.

---

**⚠ 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 5-19** Before proceeding take note



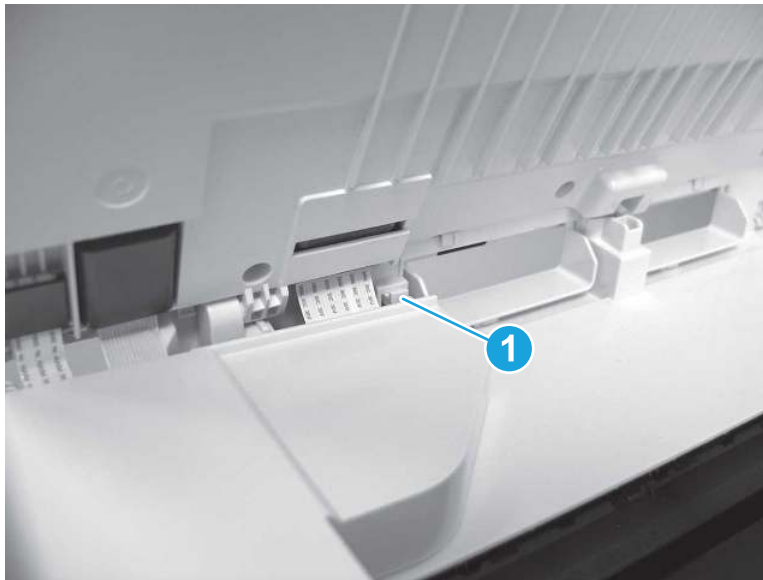
5. Remove one screw (callout 1).

**Figure 5-20** Remove one screw



6. Use a flat-blade screwdriver to release one tab (callout 1).

**Figure 5-21** Release one tab

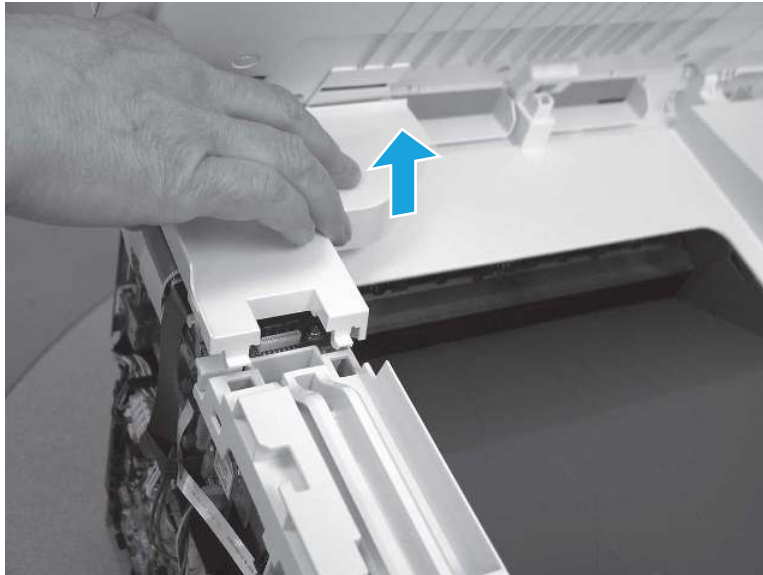


7. Remove the scanner cable cover.



**NOTE:** The left cover is shown removed in the figure below. However, removing that cover is not necessary to remove the scanner cable cover.

**Figure 5-22** Remove the scanner cable cover



8. Remove the support arm.

**Figure 5-23** Remove the support arm



## 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: Integrated scanner assembly (MFP)

Learn how to remove and replace the integrated scanner assembly (ISA).

[View a video of how to remove and replace the ISA.](#)

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](http://www.hp.com/buy/parts).

 **NOTE:** The integrated scanner assembly (ISA) includes the sub-scanner assembly (SSA) and the automatic document feeder (ADF).

---

**Table 5-10** Part information

Part number	Part description
W1A73-60110	ISA assembly scanner/ADF duplex

## Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

## After performing service

### Turn the printer power on

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

## Post service test

Make sure that toner toner-cartridge door correctly opens and closes.

Make sure that the printer initializes to a **Ready** state.


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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-24** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

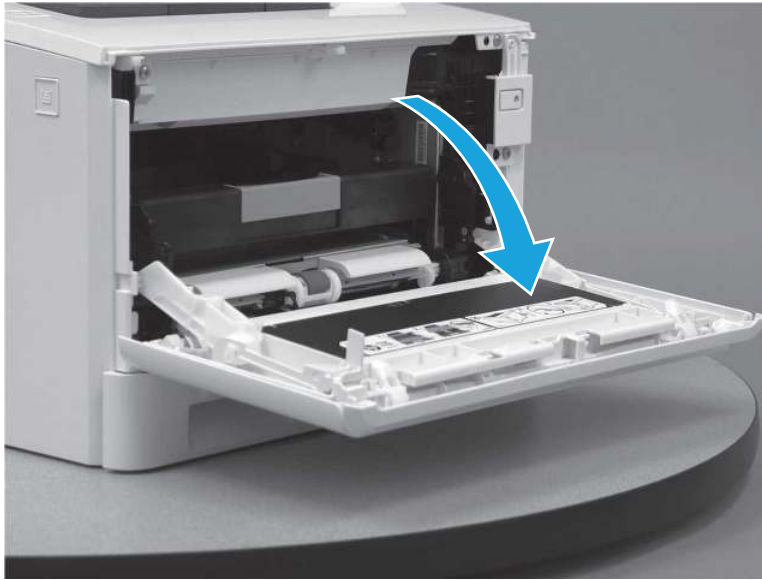
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-25** Release the front door



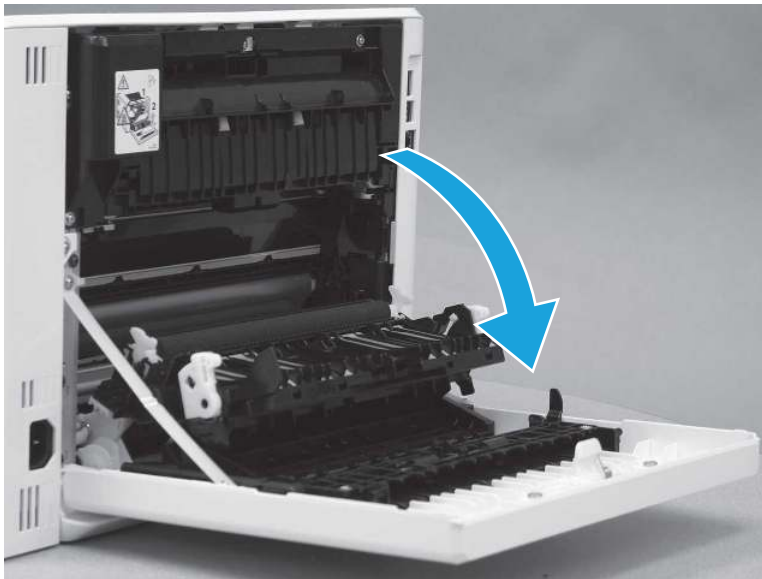
2. Open the front door.

**Figure 5-26** Open the front door



3. Open the duplexing door.

**Figure 5-27** Open the duplexer door



### 3. Remove the left cover (MFP )

Follow these steps to remove the left cover (MFP ).

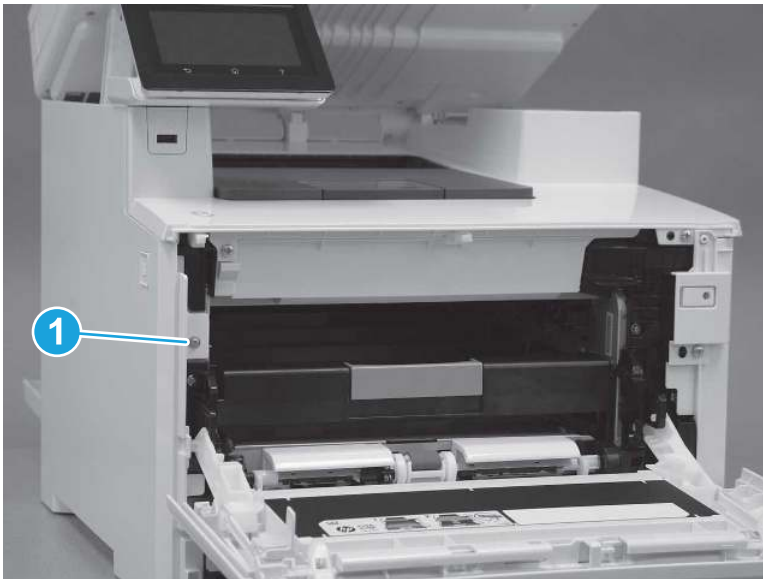
1. Raise the scanner.

Figure 5-28 Raise the scanner



2. At the front of the printer, remove one screw (callout 1).

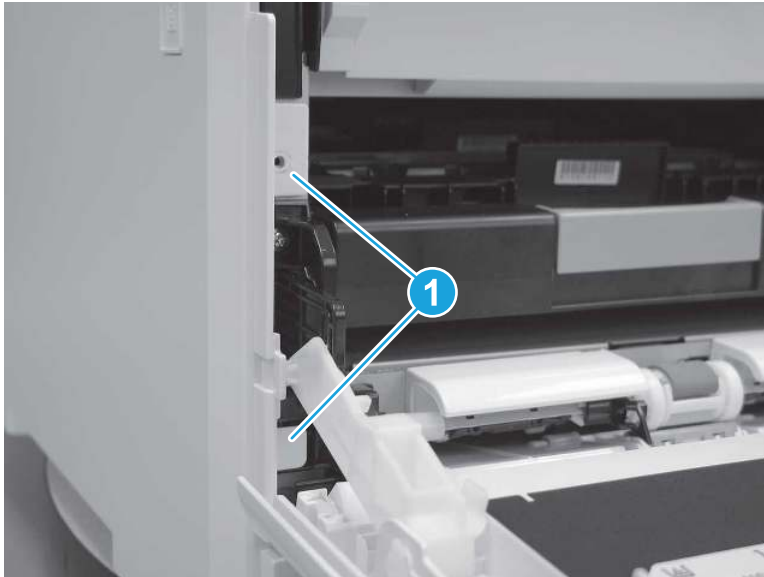
Figure 5-29 Remove one screw





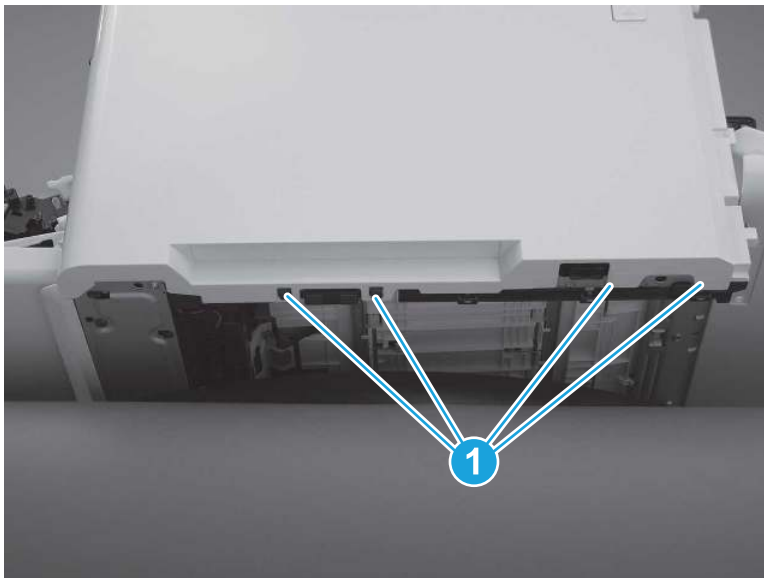
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-30** Release two tabs



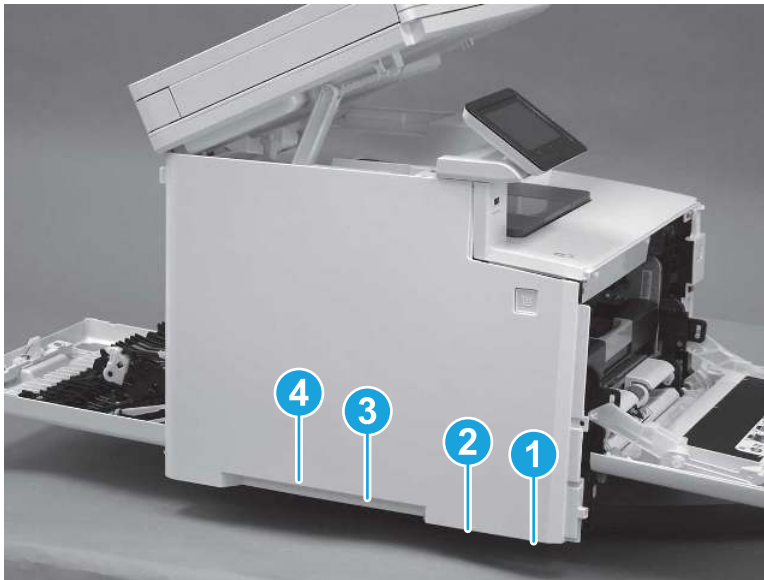
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-31** Locate the tabs



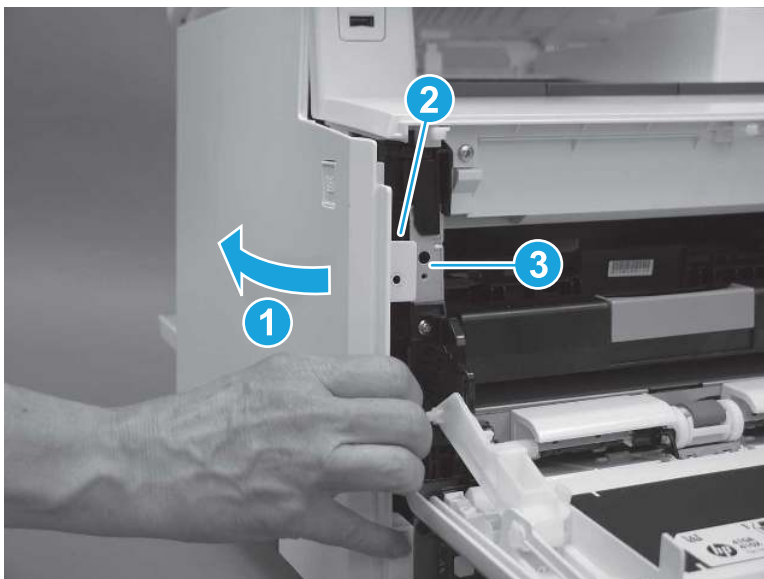
- Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-32** Release four tabs



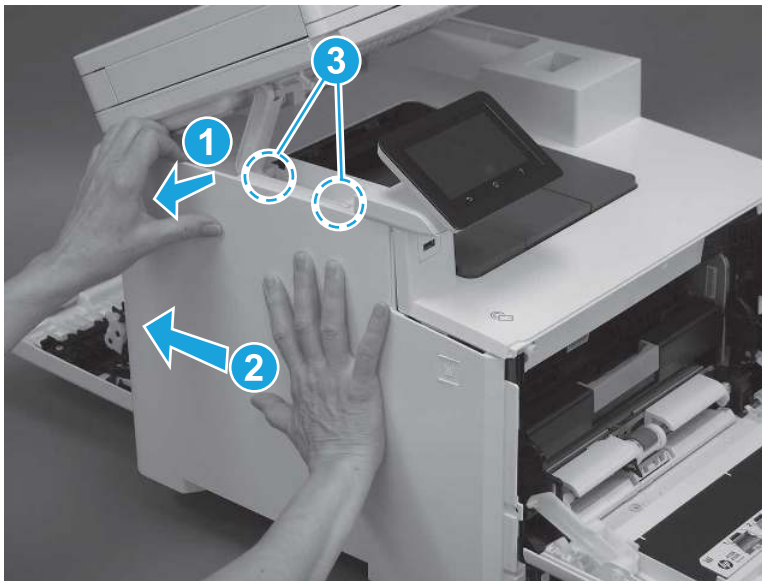
- Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

**Figure 5-33** Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-34** Release one tab and two hooks



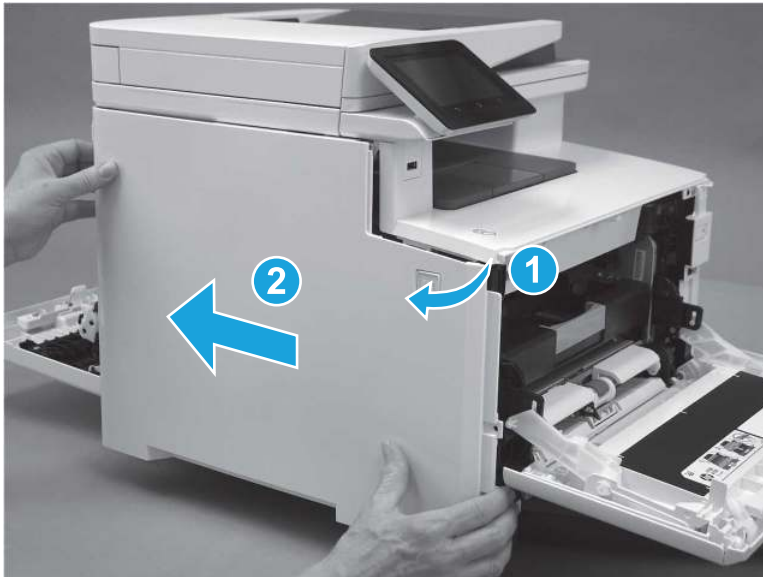
8. Lower the scanner.

**Figure 5-35** Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

Figure 5-36 Remove the left cover

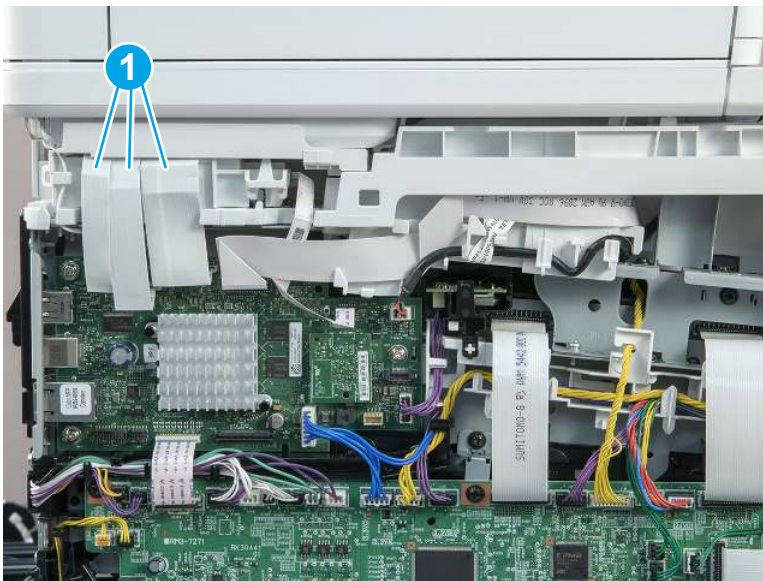


#### 4. Remove the integrated scanner assembly

(MFP)

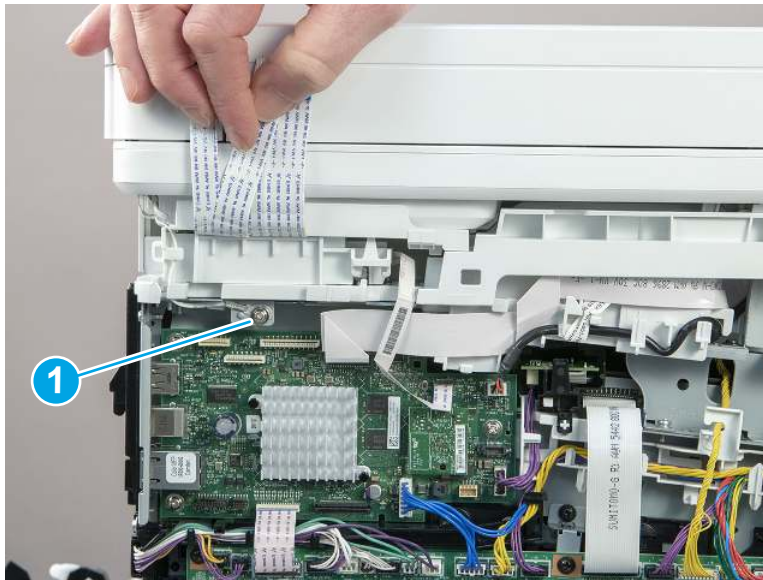
1. On the left side of the printer, disconnect three connectors (callout 1).

Figure 5-37 Disconnect three connectors



2. Raise the scanner cables up, and then remove one screw (callout 1) to release the ground wire.

**Figure 5-38** Remove one screw and release the ground wire



3. Raise the scanner.

**Figure 5-39** Raise the scanner



4. With the scanner lifted, release the tab (callout 1) on the scanner support arm pin from the slot and rotate the pin in the direction indicated.

**Figure 5-40** Release scanner support arm pin



5. Remove the scanner arm pin.

---

**⚠ CAUTION:** Once the scanner arm pin is removed, support the scanner with one hand at all times so that it does not fall backwards off of the printer.

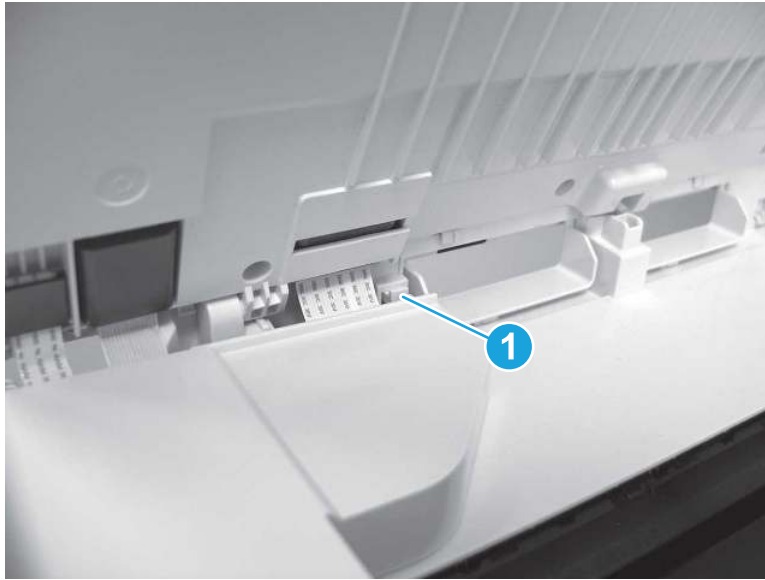
---

**Figure 5-41** Remove the pin



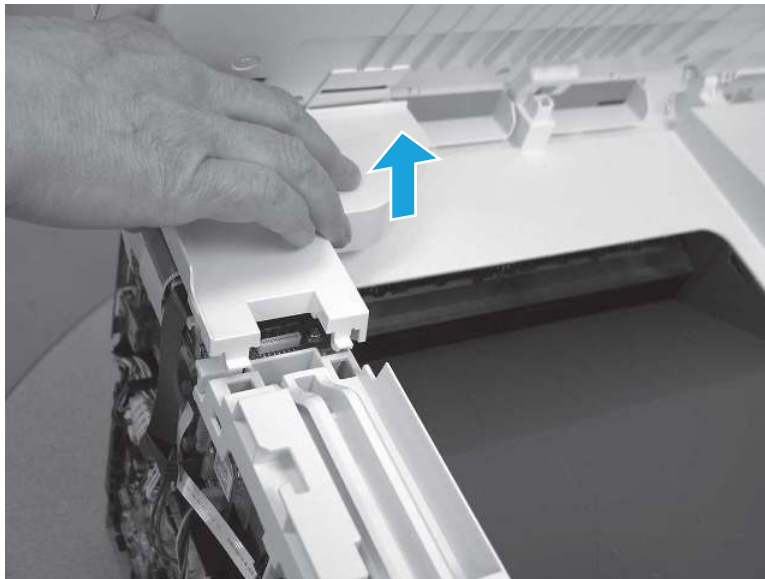
6. On the top of the printer, use a flat-blade screwdriver to release one tab (callout 1).

**Figure 5-42** Release one tab



7. Remove the scanner cable cover.

**Figure 5-43** Remove the scanner cable cover



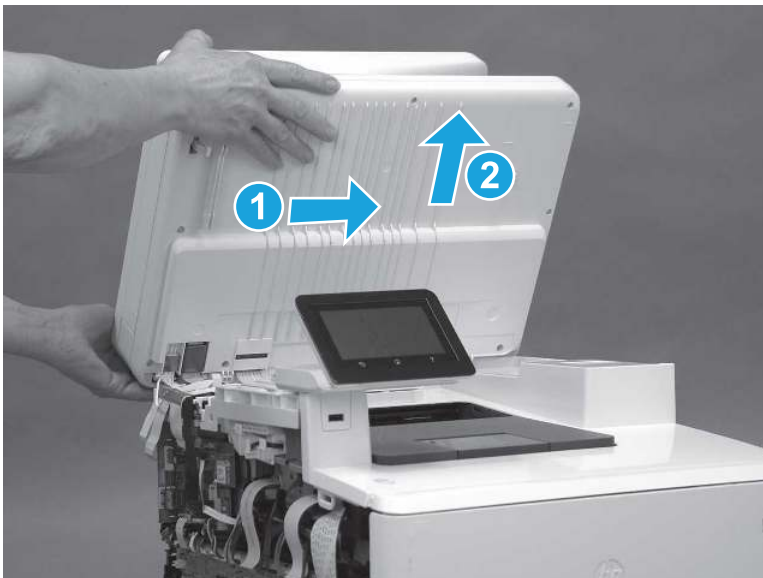
8. The scanner cables (callout 1) are held in place on the top cover with double-sided tape. Carefully release the cables from the top cover.

**Figure 5-44** Release the cables



9. Open the scanner assembly fully, slide the assembly toward the right side of the printer, and then lift the assembly off of the printer.

**Figure 5-45** Remove the scanner 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.


<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: External panels, covers, and doors (base printer)

Learn how to remove and replace the printer external panels, covers, and doors.

### Removal and replacement: Right cover (SFP)

Learn how to remove and replace the right cover (SFP).

[View a video of removing and replacing the right cover \(SFP\).](#)

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](http://www.hp.com/buy/parts).

**Table 5-11** Part information

Part number	Part description
RC4-4853-000CN	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

Make sure that front door correctly opens and closes.


Make sure that the printer initializes to a **Ready** state.

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-46** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

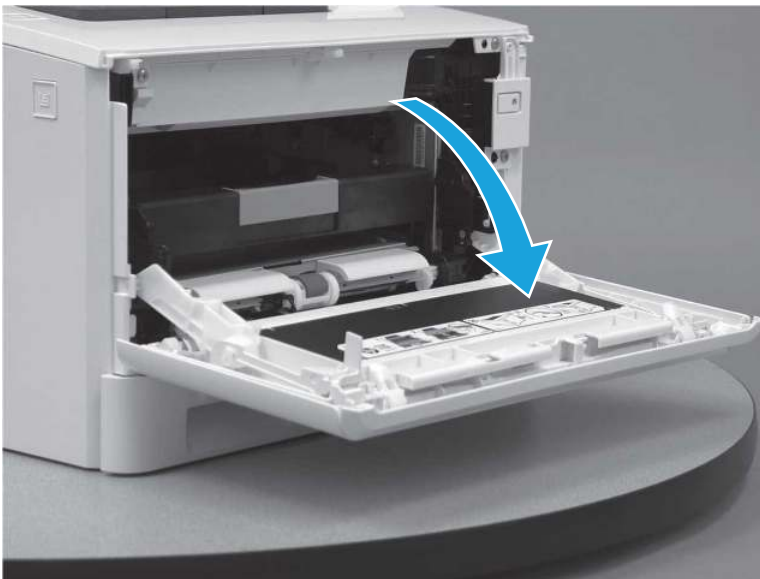
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-47** Release the front door



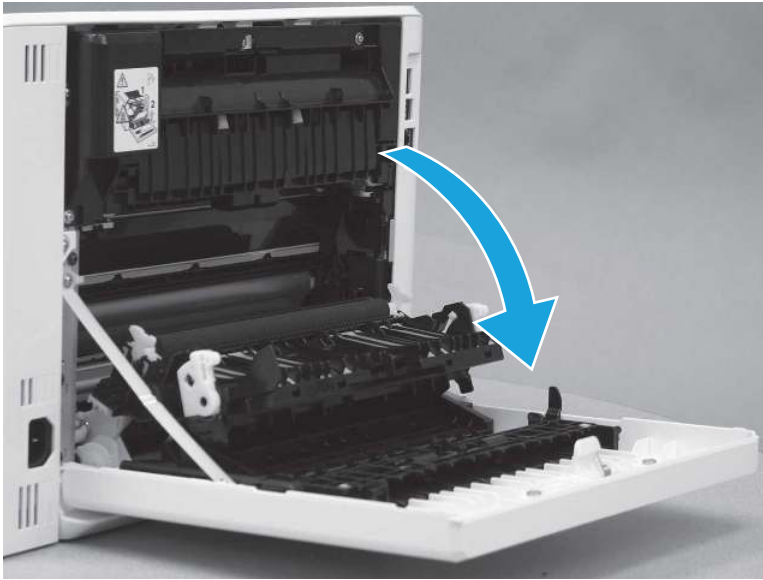
2. Open the front door.

**Figure 5-48** Open the front door



3. Open the duplexing door.

**Figure 5-49** Open the duplexer door

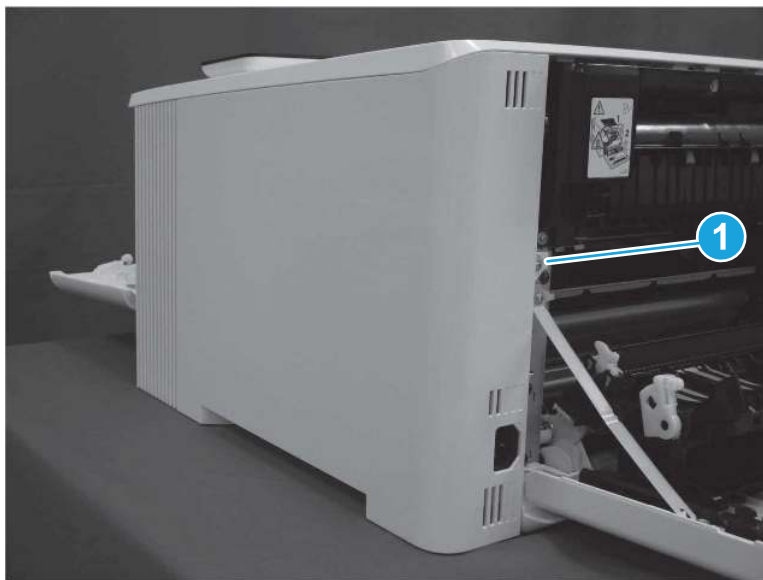


### 3. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

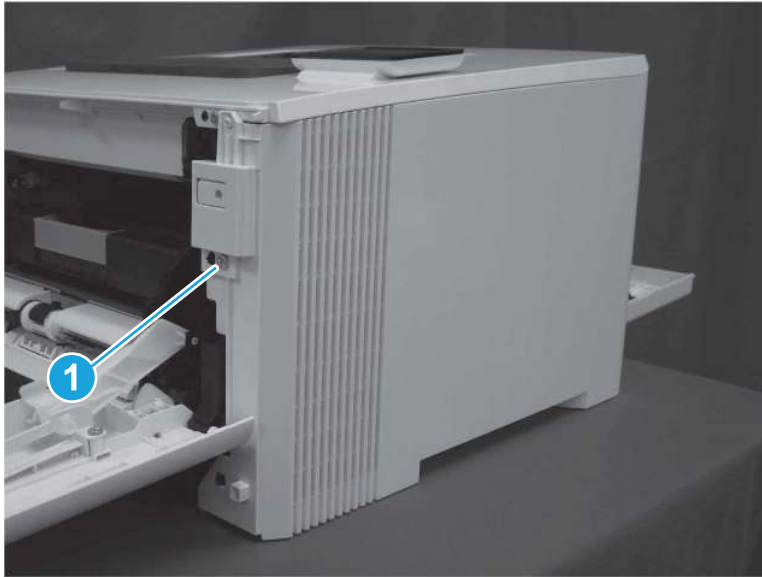
1. At the back of the printer, remove one screw (callout 1).

**Figure 5-50** Remove one screw



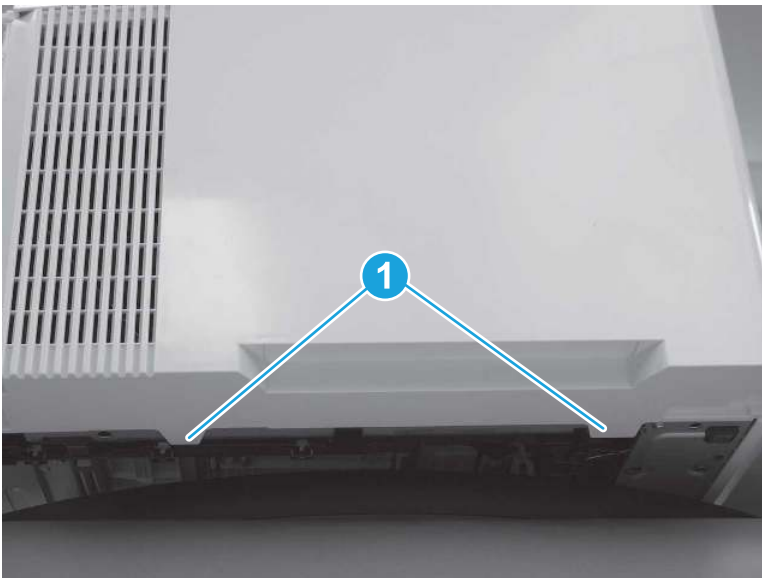
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-51** Remove one screw



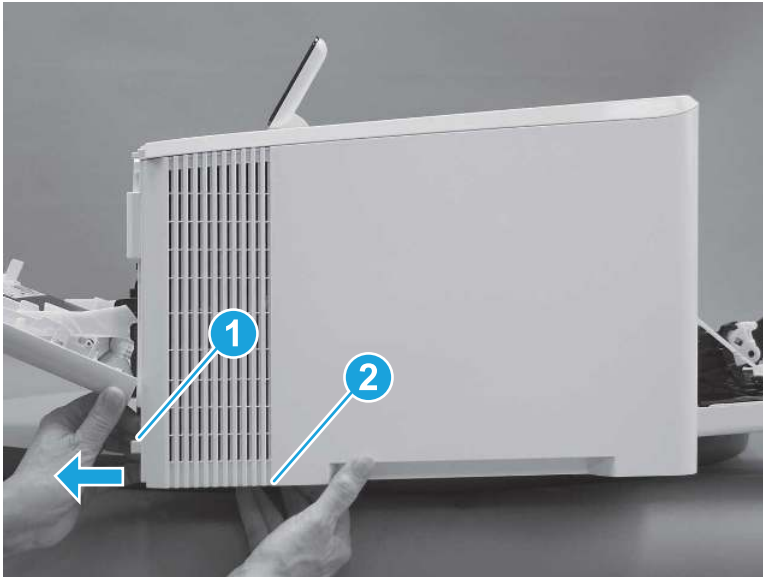
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-52** Locate the tabs



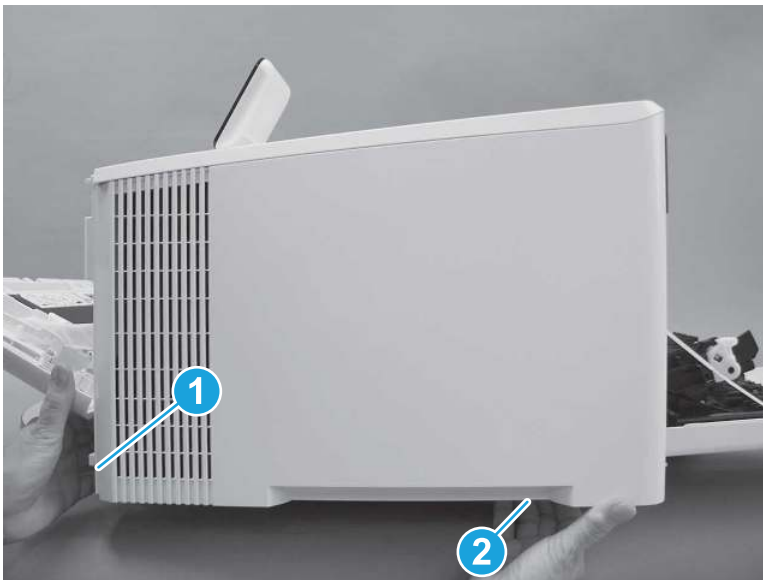
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-53** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

**Figure 5-54** Release lower rear tab



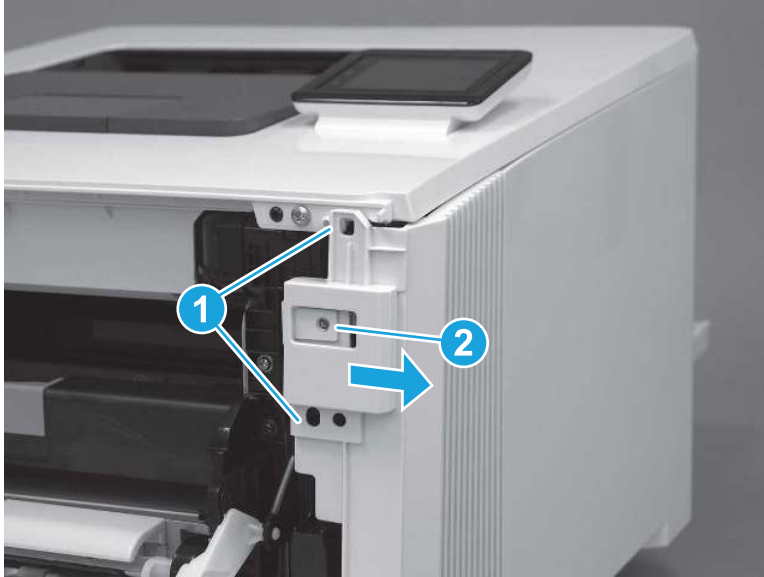
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

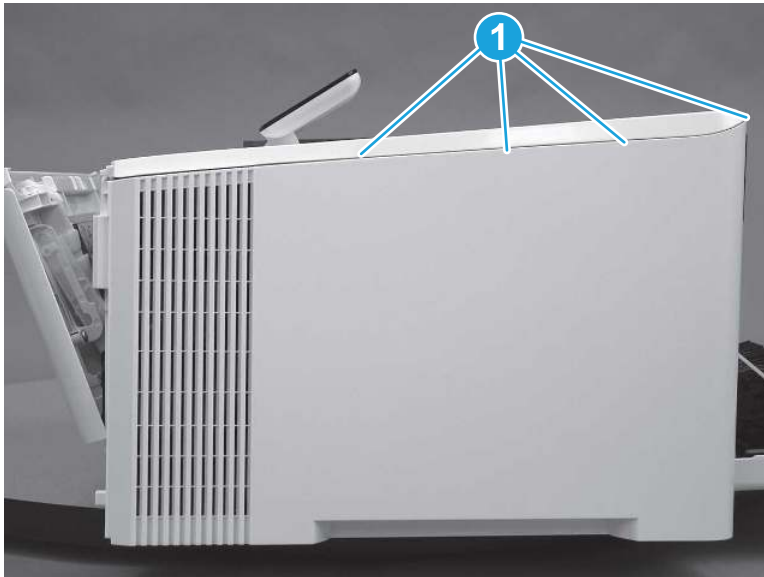
---

Figure 5-55 Release two front tabs



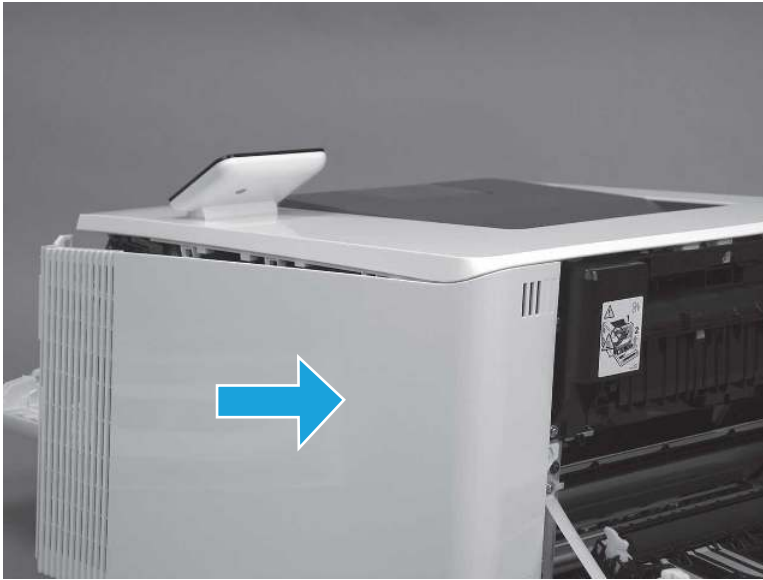
7. Release four tabs on the top of the printer (callout 1).

Figure 5-56 Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-57** Remove the right 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.

## Removal and replacement: Right cover (MFP)

Learn how to remove and replace the right cover (MFP).



[View a video of removing and replacing the right cover \(MFP\).](#)

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](http://www.hp.com/buy/parts).

**Table 5-12** Part information

Part number	Part description
RC4-6044-000CN	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

Make sure that front door correctly opens and closes.


Make sure that the printer initializes to a **Ready** state.

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-58** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

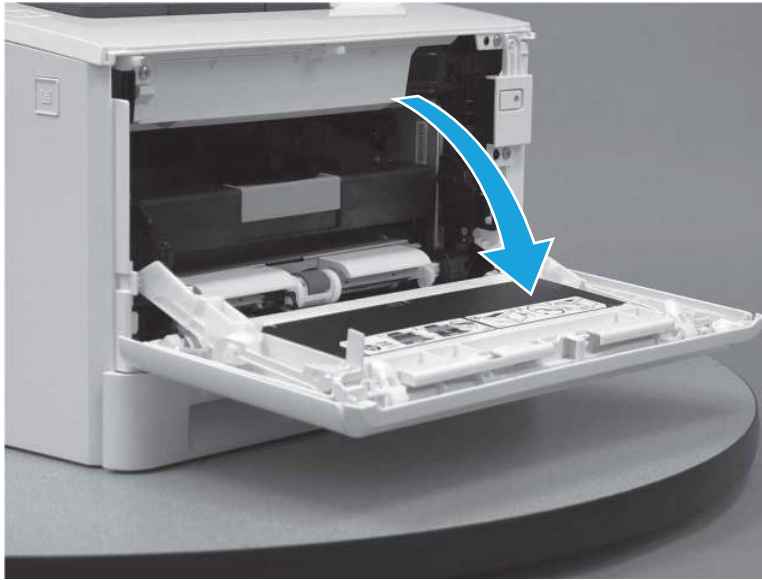
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-59** Release the front door



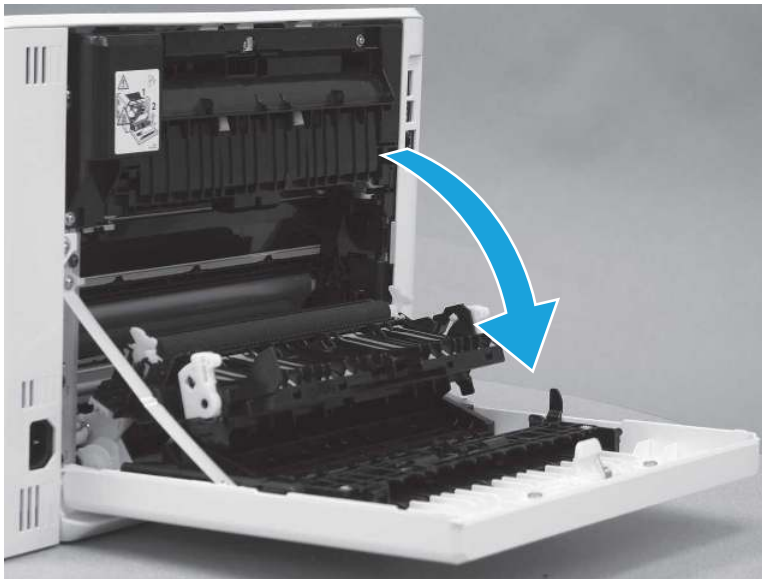
2. Open the front door.

**Figure 5-60** Open the front door



3. Open the duplexing door.

**Figure 5-61** Open the duplexer door



### 3. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

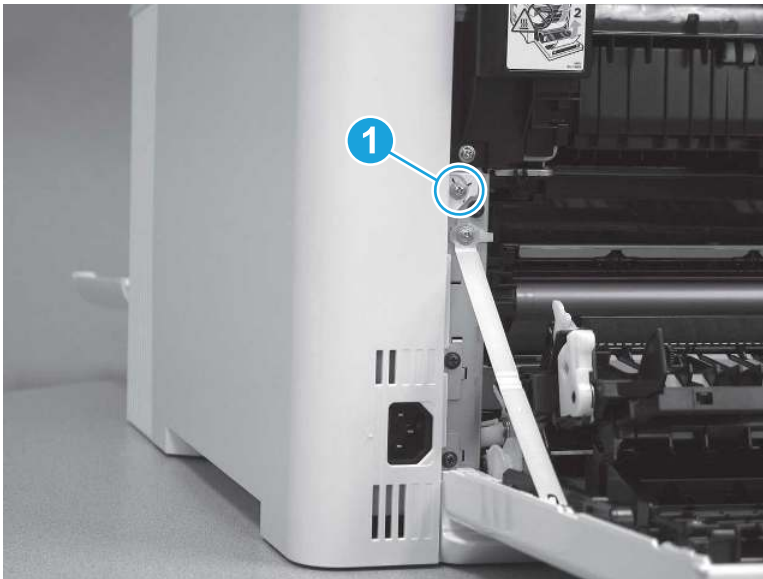
1. Raise the scanner.

**Figure 5-62** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-63** Remove one screw



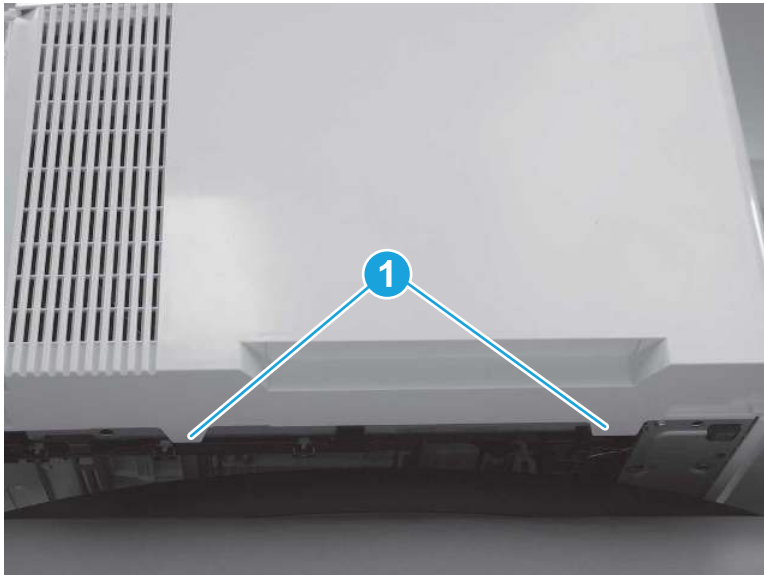
3. At the front of the printer, remove one screw (callout 1).

**Figure 5-64** Remove one screw



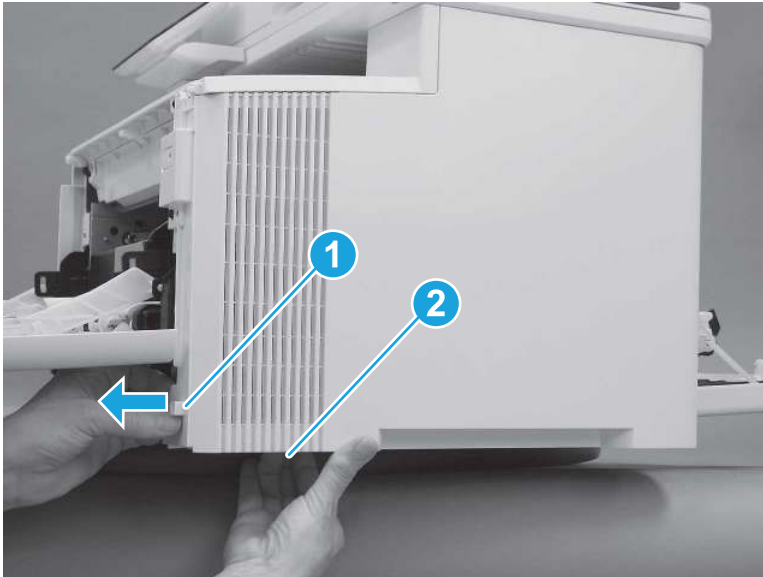
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-65** Locate the tabs



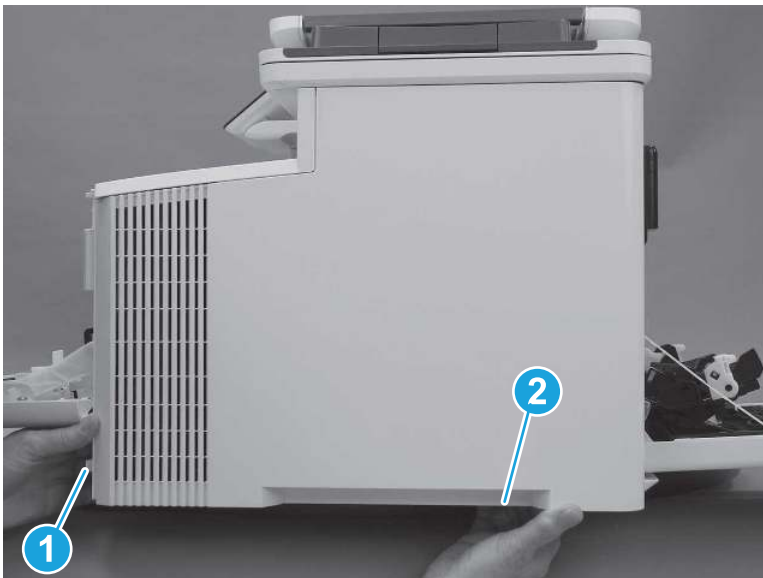
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-66** Release front lower tabs



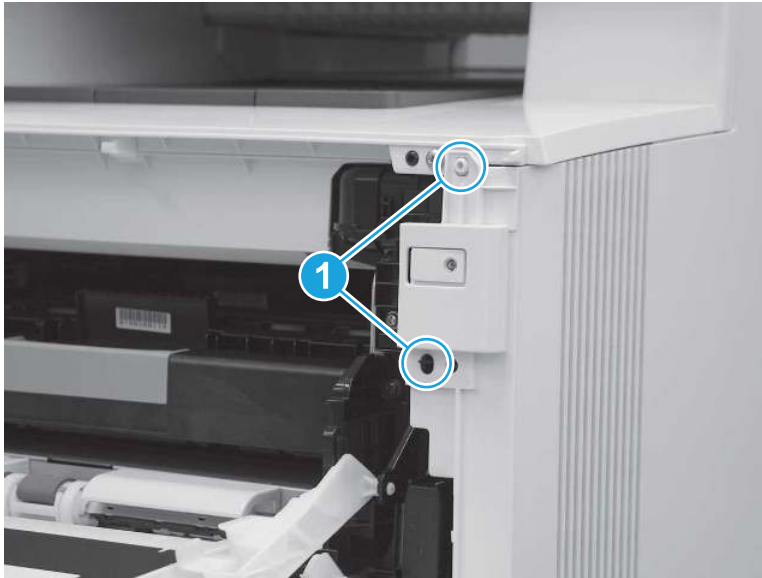
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-67** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-68** Release front upper tabs



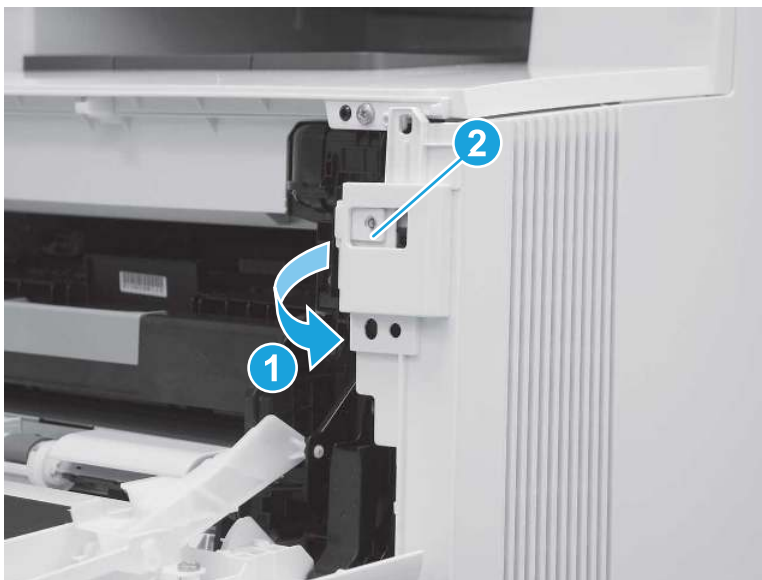
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

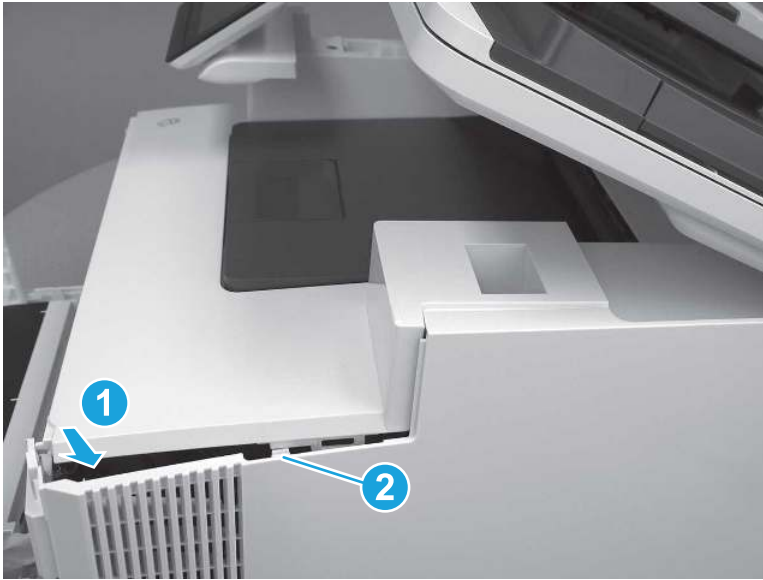
---

**Figure 5-69** Rotate the front of the cover



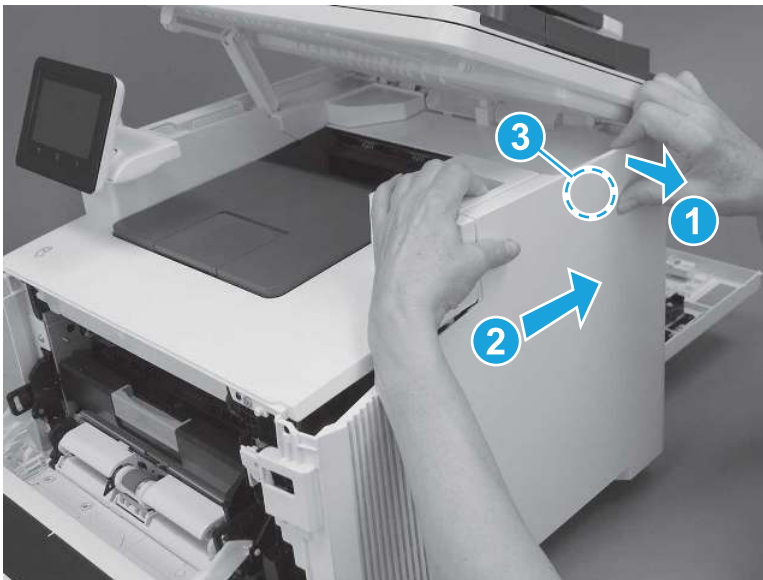
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

Figure 5-70 Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

Figure 5-71 Release one tab and one hook





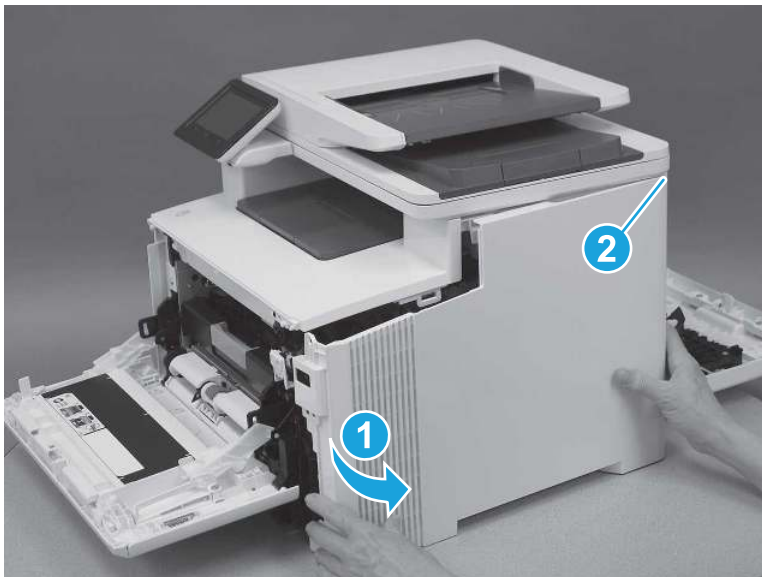
11. Lower the scanner.

**Figure 5-72** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-73** Remove the right 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.

---

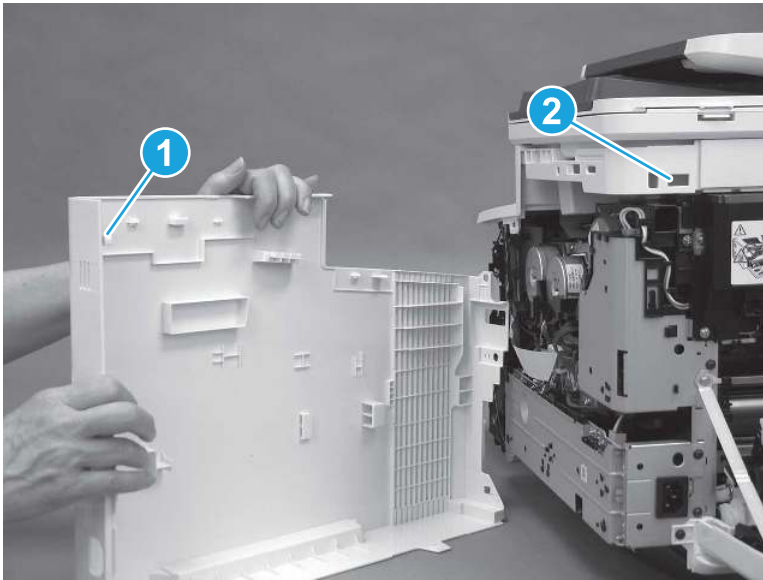
## 5. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Right cover

- ▲ At the back of the printer, install the tab (callout 1) on the cover into the slot (callout 2) on the printer.

**Figure 5-74** Install rear tab



## Removal and replacement: Left cover (SFP)

Learn how to remove and replace the left cover (SFP).

[View a video of removing and replacing the right cover \(SFP\).](#)

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](http://www.hp.com/buy/parts).

**Table 5-13** Part information

Part number	Part description
RC4-4854-000CN	Cover, left (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

Make sure that front door correctly opens and closes.


Make sure that the printer initializes to a **Ready** state.

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-75** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

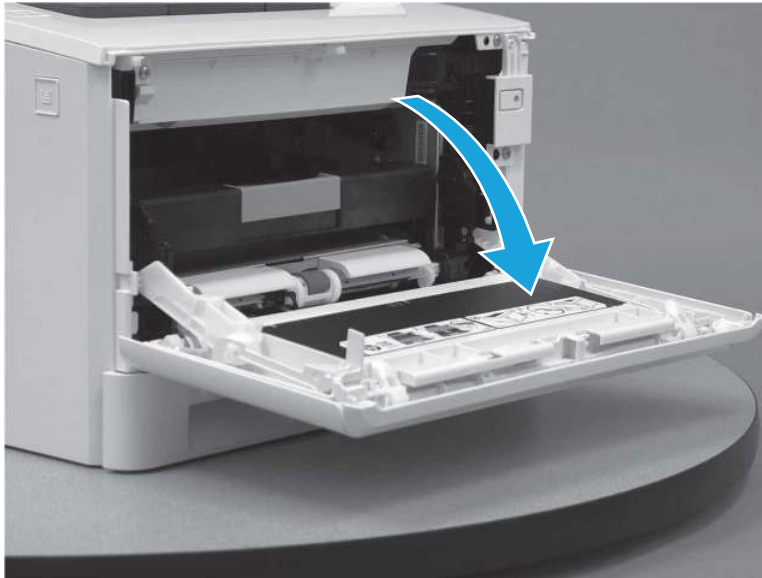
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-76** Release the front door



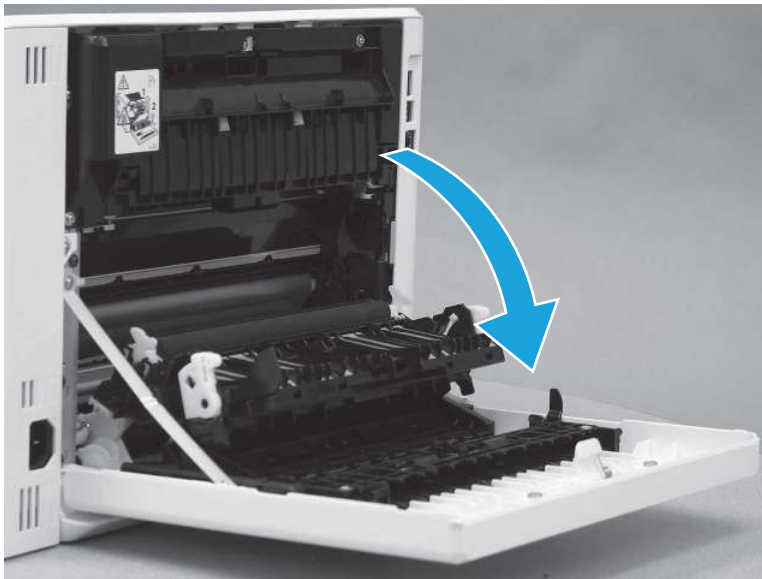
2. Open the front door.

**Figure 5-77** Open the front door



3. Open the duplexing door.

**Figure 5-78** Open the duplexer door

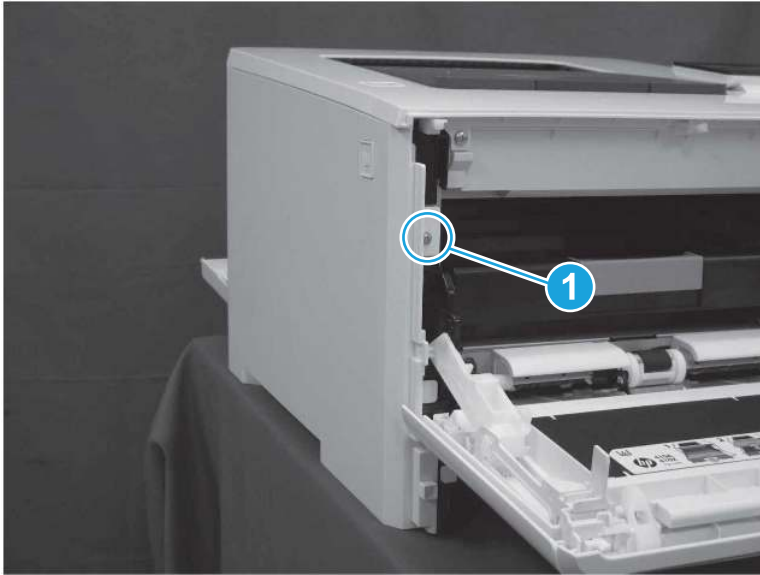


### 3. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

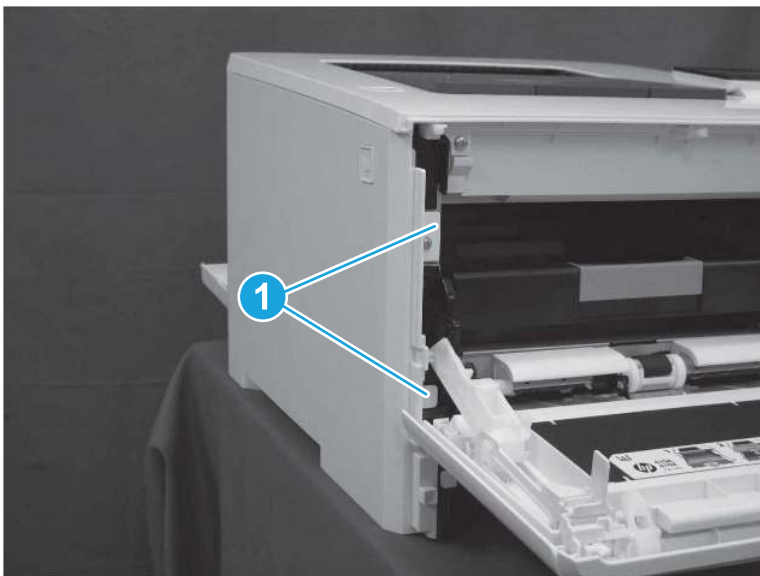
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-79** Remove one screw



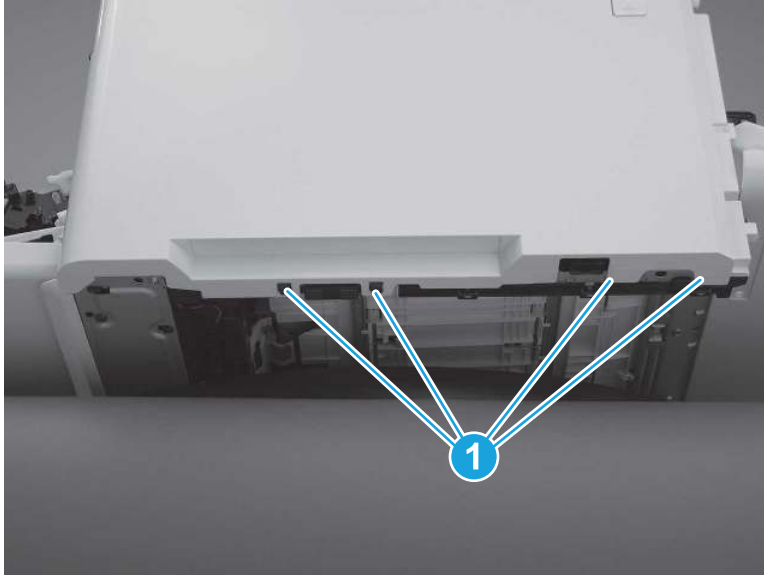
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-80** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-81** Locate the tabs



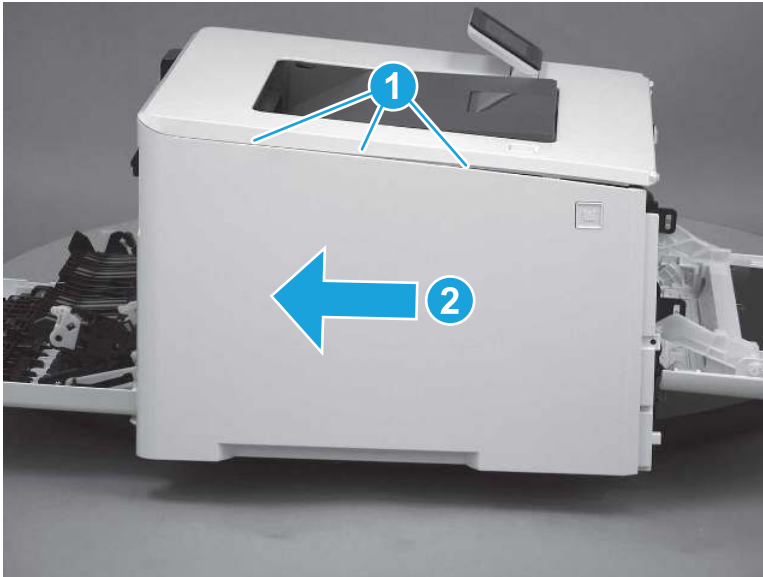
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-82** Release bottom tabs



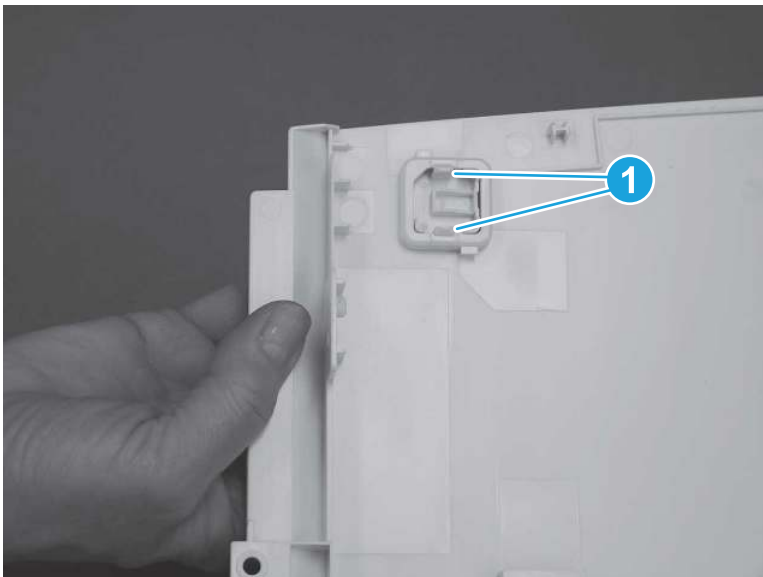
5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

**Figure 5-83** Release three tabs



6. On the inside of the left cover, release two tabs (callout 1).

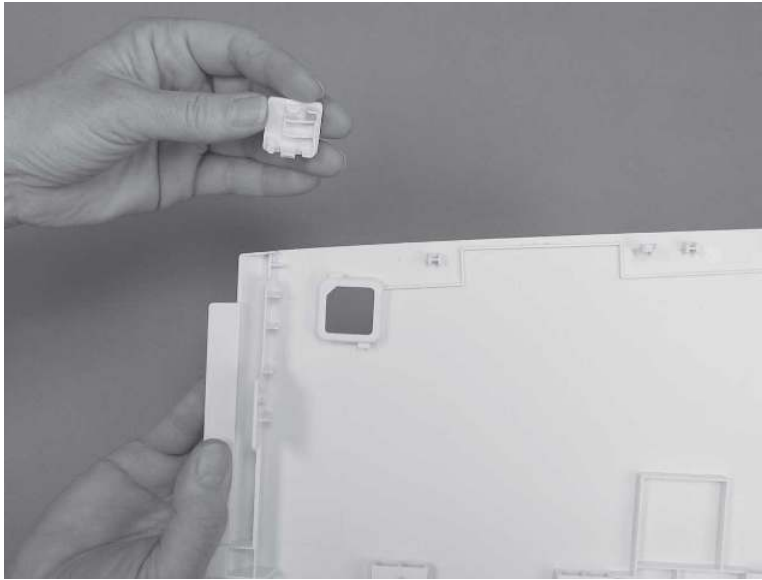
**Figure 5-84** Release two tabs





7. Remove the door-release button. Save this button for installation on the replacement left cover.

**Figure 5-85** Remove the button



#### 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: Left cover (MFP)

Learn how to remove and replace the left cover (MFP).

[View a video of removing and replacing the right cover \(MFP\).](#)

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](http://www.hp.com/buy/parts).

Table 5-14 Part information

Part number	Part description
RC4-6045-000CN	Cover, left (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

Make sure that front door correctly opens and closes.

Make sure that the printer initializes to a **Ready** state.

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.



**NOTE:** Removing the tray is the same for SFP and MFP printers.

---

Figure 5-86 Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

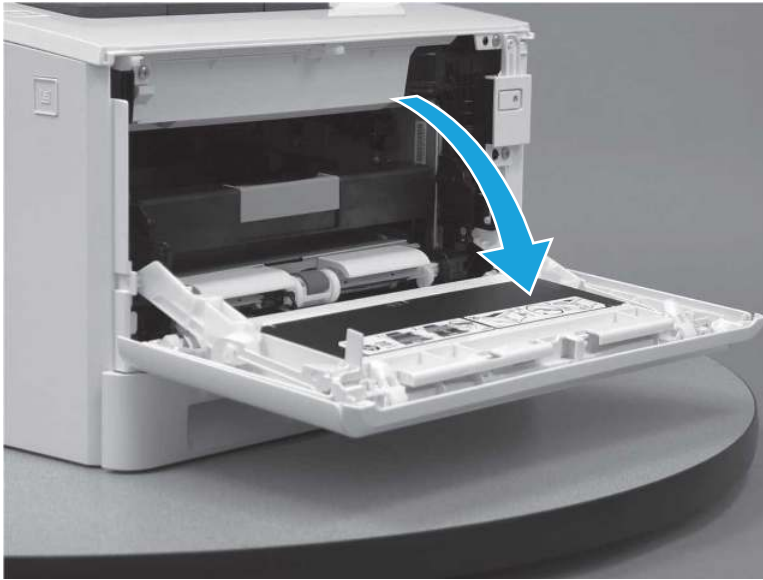
1. Press the button (callout 1) on the left side of the printer to release the front door.

Figure 5-87 Release the front door



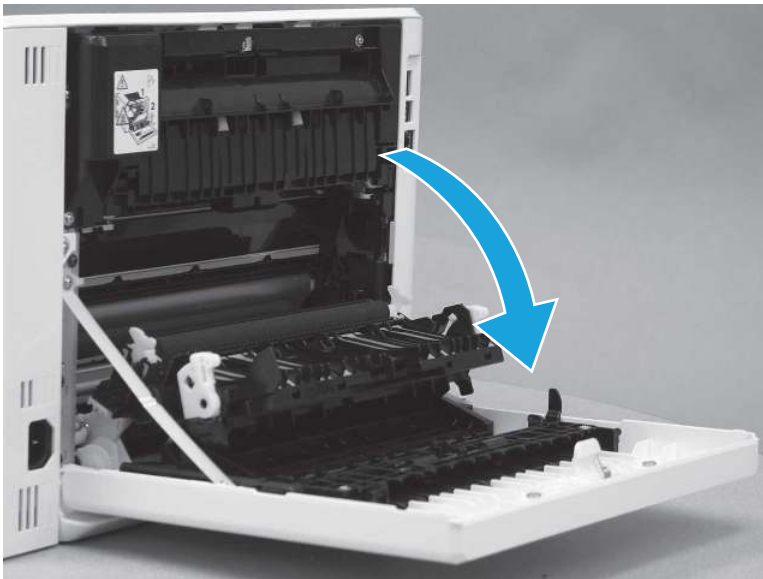
2. Open the front door.

**Figure 5-88** Open the front door



3. Open the duplexing door.

**Figure 5-89** Open the duplexer door



### 3. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

1. Raise the scanner.

**Figure 5-90** Raise the scanner



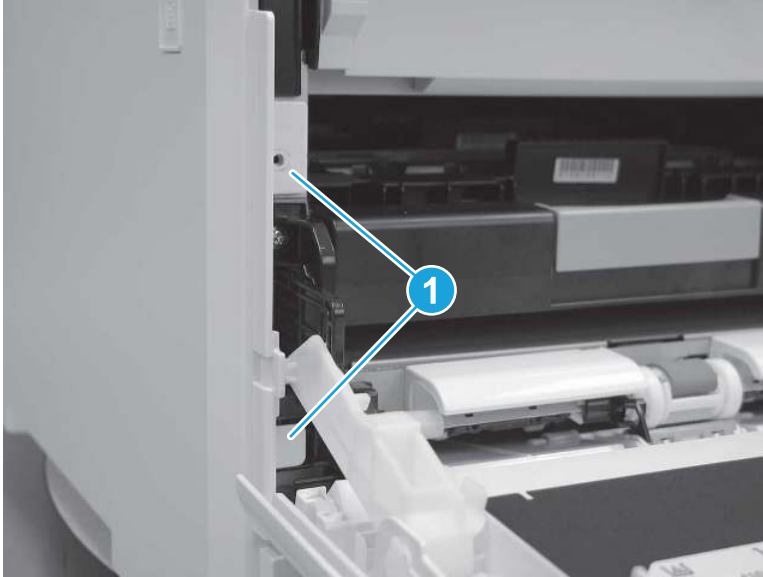
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-91** Remove one screw



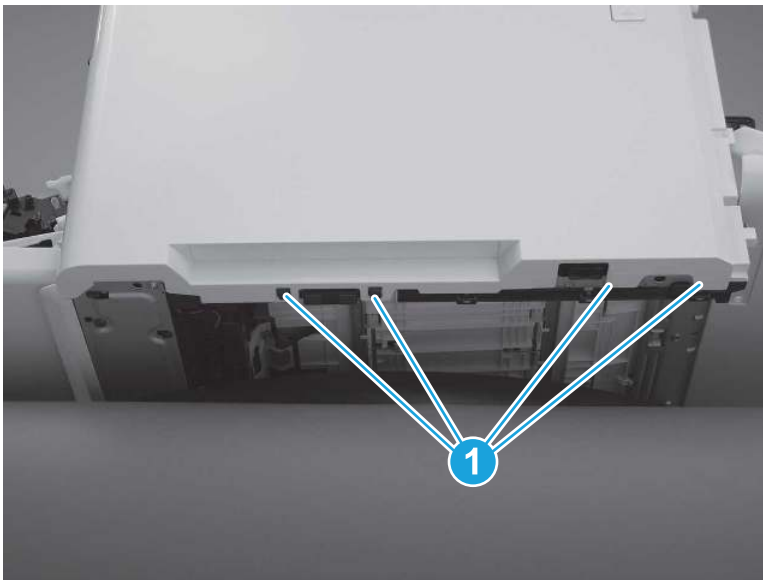
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-92** Release two tabs



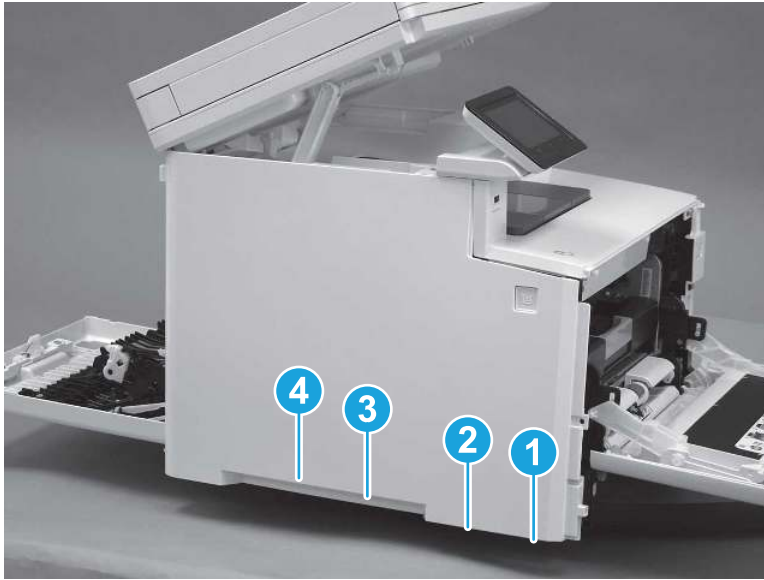
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-93** Locate the tabs



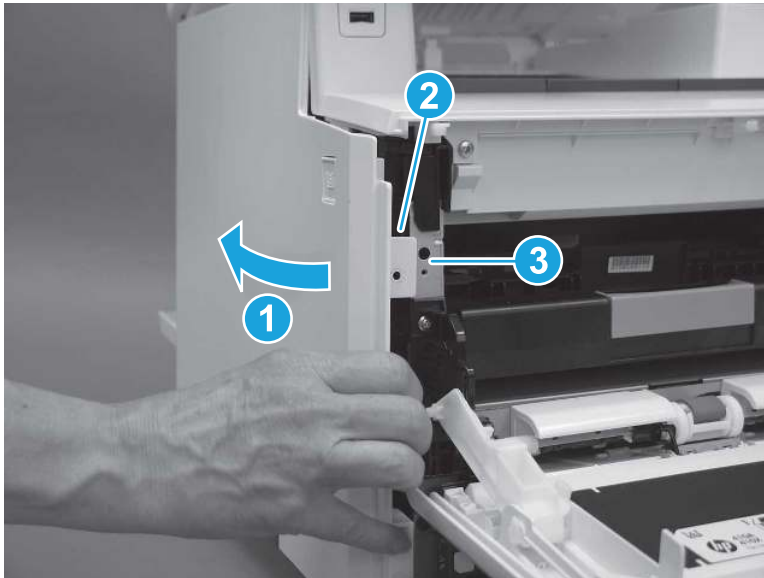
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-94 Release four tabs



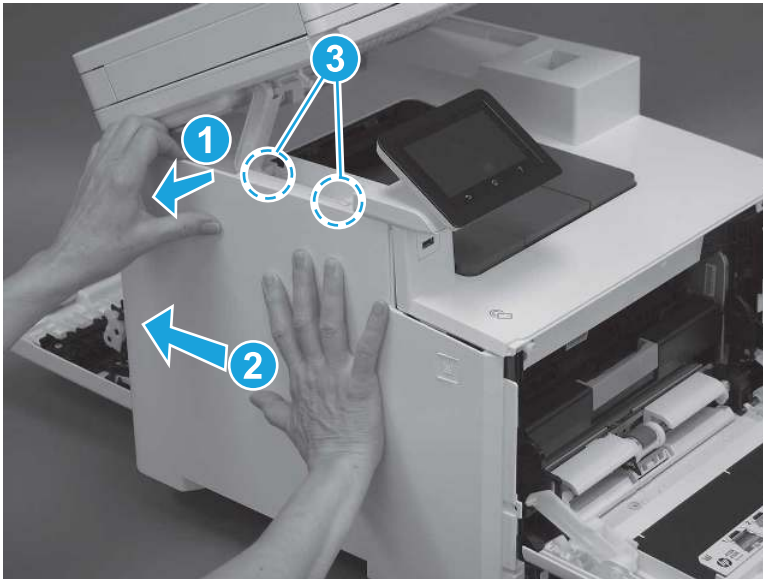
6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

Figure 5-95 Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-96** Release one tab and two hooks



8. Lower the scanner.

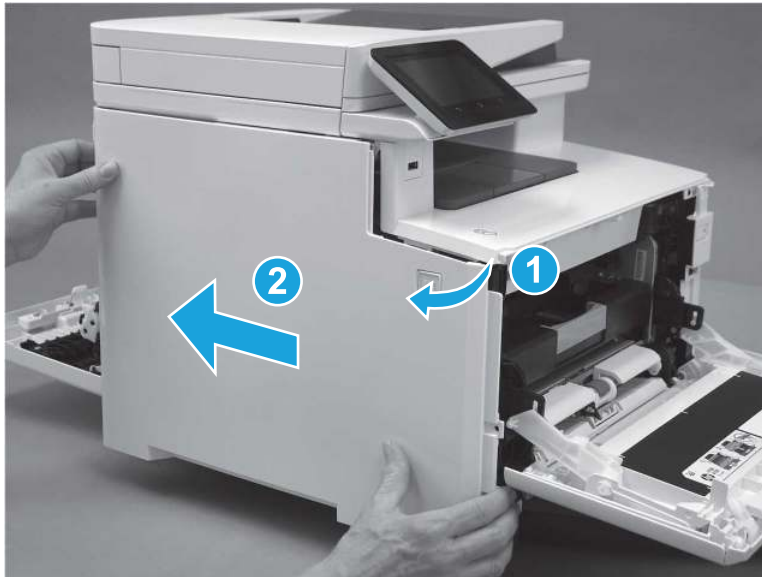
**Figure 5-97** Lower the scanner





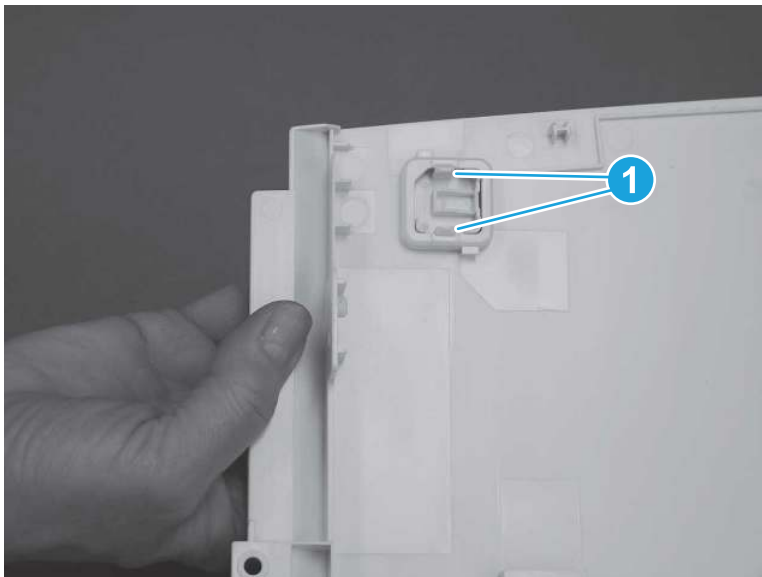
9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

**Figure 5-98** Remove the left cover



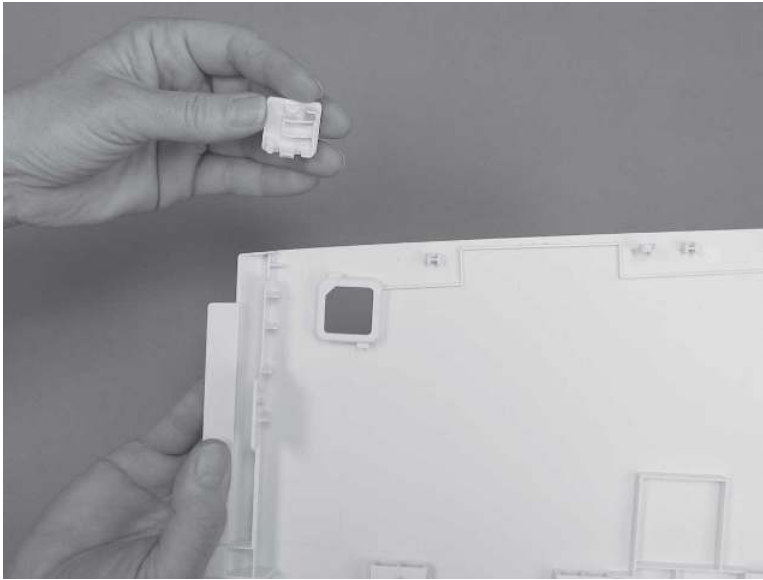
10. On the inside of the left cover, release two tabs (callout 1).

**Figure 5-99** Release two tabs



11. Remove the door-release button. Save this button for installation on the replacement left cover.

**Figure 5-100** Remove the button



#### 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: Front door assembly

Learn how to remove and replace the front door assembly.

[View a video of removing and replacing the front door.](#)

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](http://www.hp.com/buy/parts).

**Table 5-15** Part information

Part number	Part description
RM2-1823-000CN	Front (cartridge) door assembly (SFP)
RM2-1824-000CN	Front (cartridge) door assembly (MFP)
7121-8684	HP logo jewel

## Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

## After performing service

### Turn the printer power on

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

## Post service test

Make sure that the door correctly opens and closes.


Make sure that the printer initializes to a **Ready** state.

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-101** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

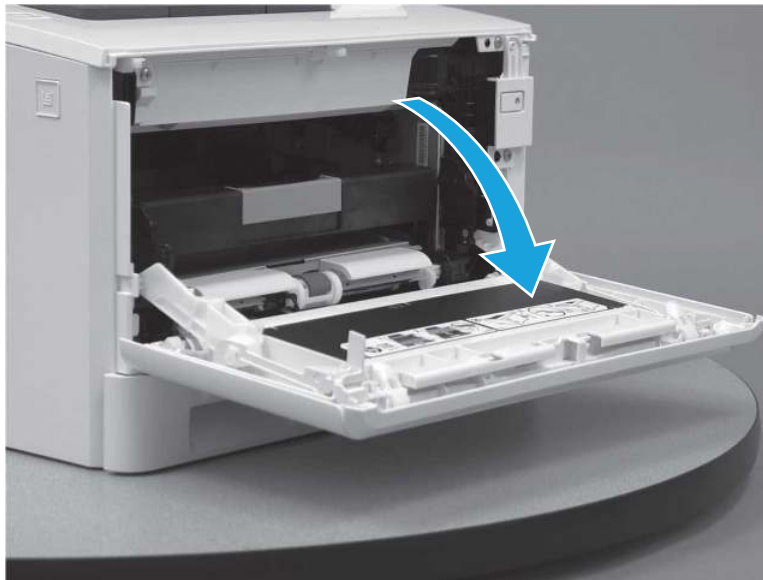
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-102** Release the front door



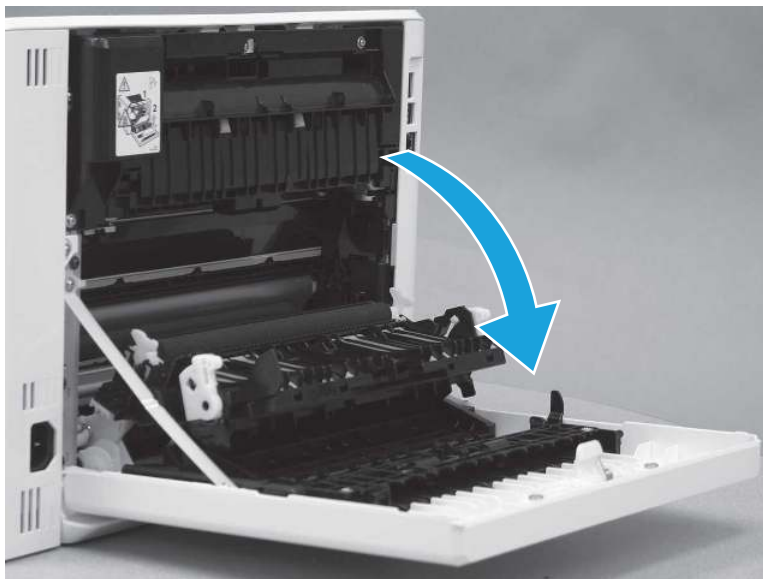
2. Open the front door.

**Figure 5-103** Open the front door



3. Open the duplexing door.

**Figure 5-104** Open the duplexer door



### 3. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

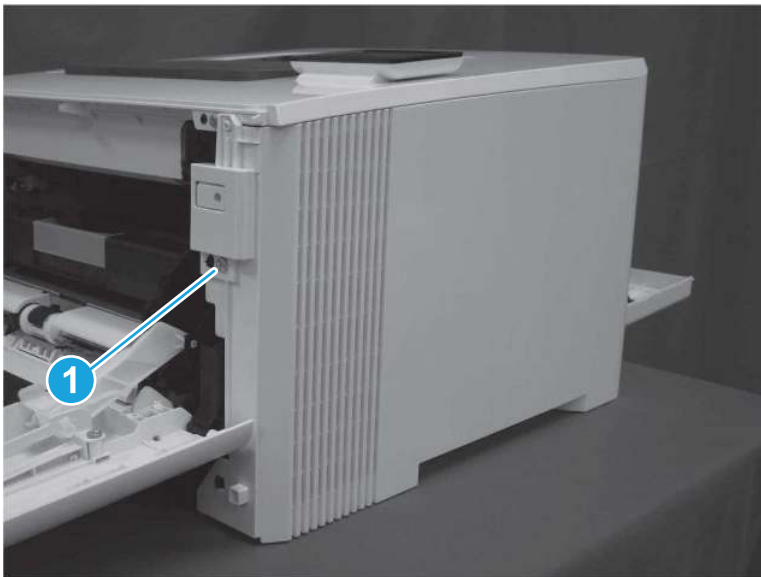
1. At the back of the printer, remove one screw (callout 1).

Figure 5-105 Remove one screw



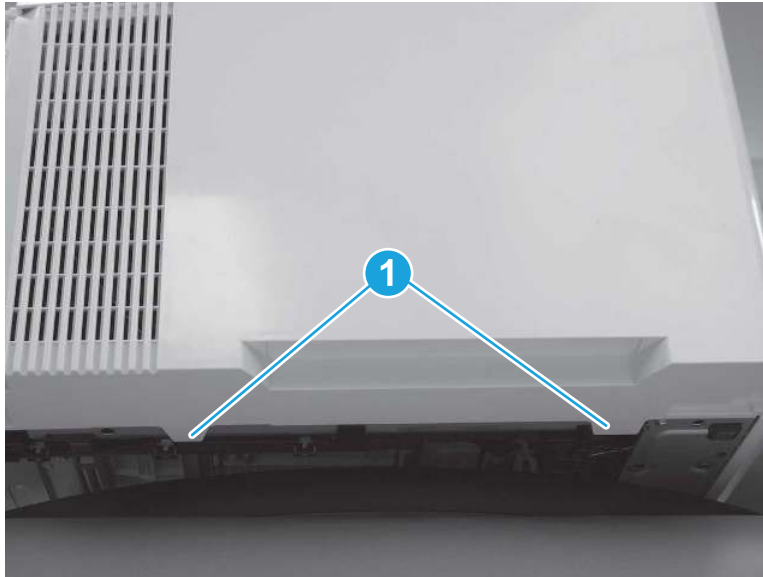
2. At the front of the printer, remove one screw (callout 1).

Figure 5-106 Remove one screw



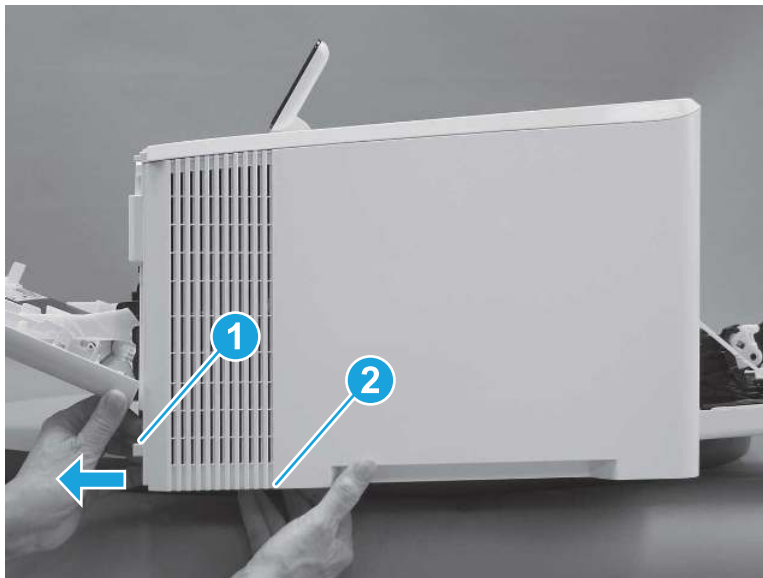
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-107** Locate the tabs



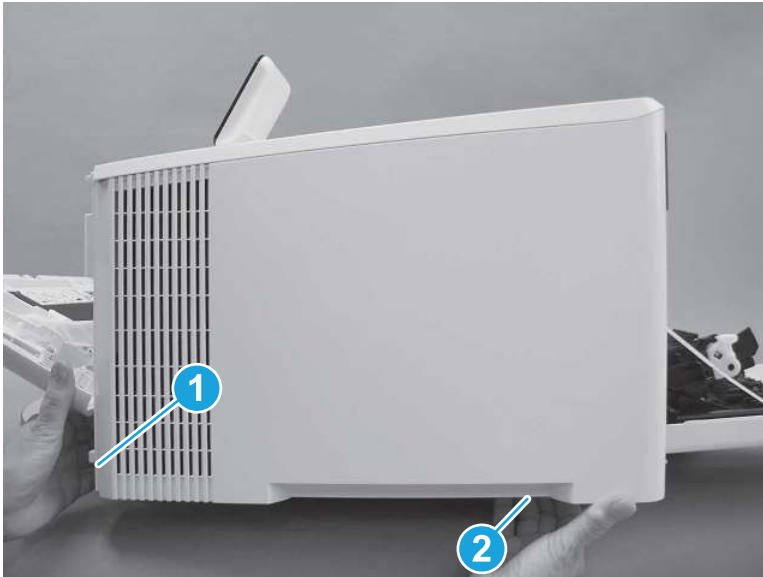
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-108** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

**Figure 5-109** Release lower rear tab



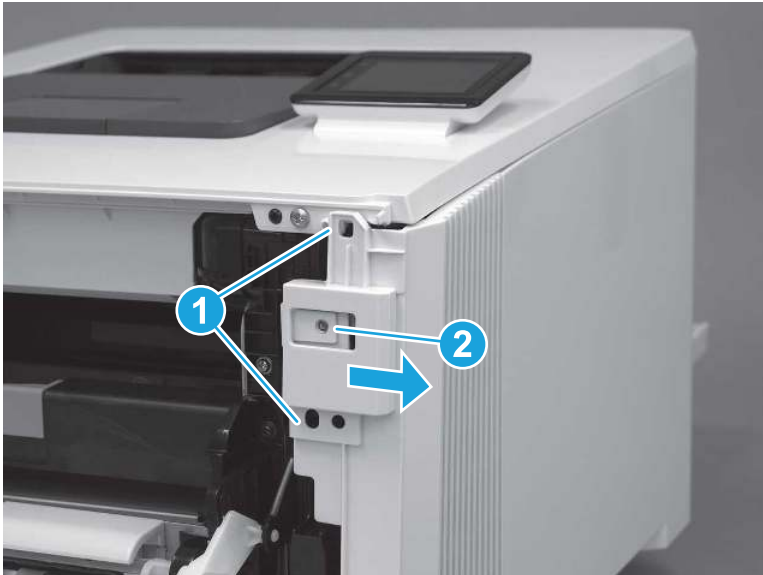
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

---

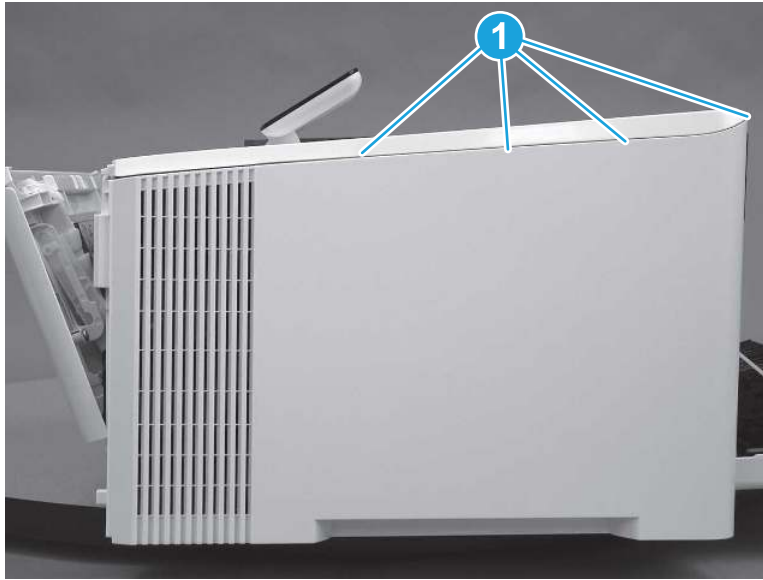
**Figure 5-110** Release two front tabs





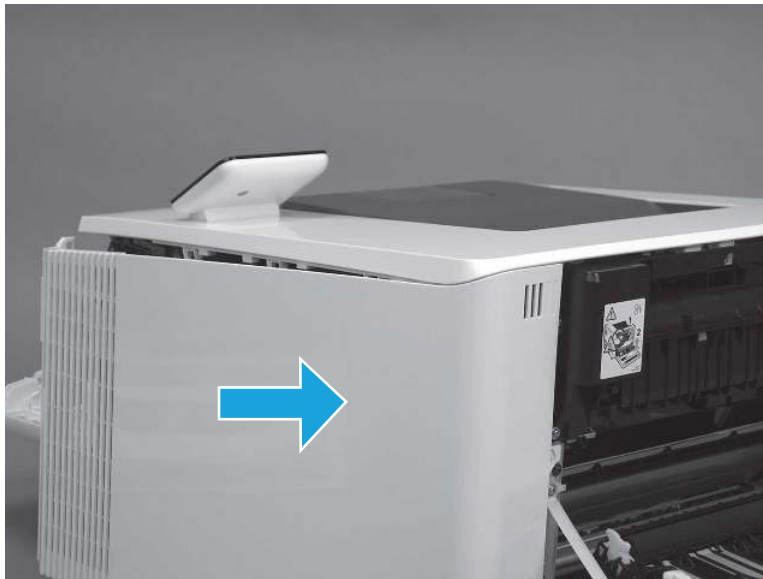
7. Release four tabs on the top of the printer (callout 1).

**Figure 5-111** Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-112** Remove the right cover



#### 4. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

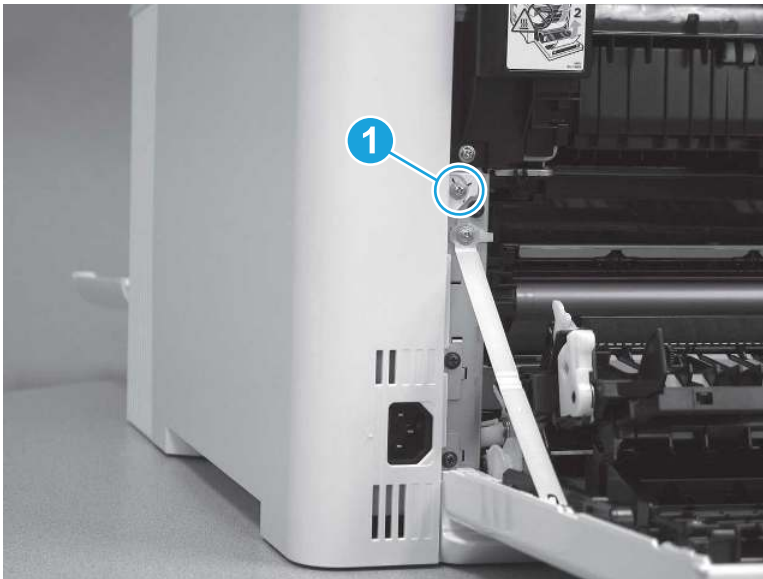
1. Raise the scanner.

**Figure 5-113** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-114** Remove one screw



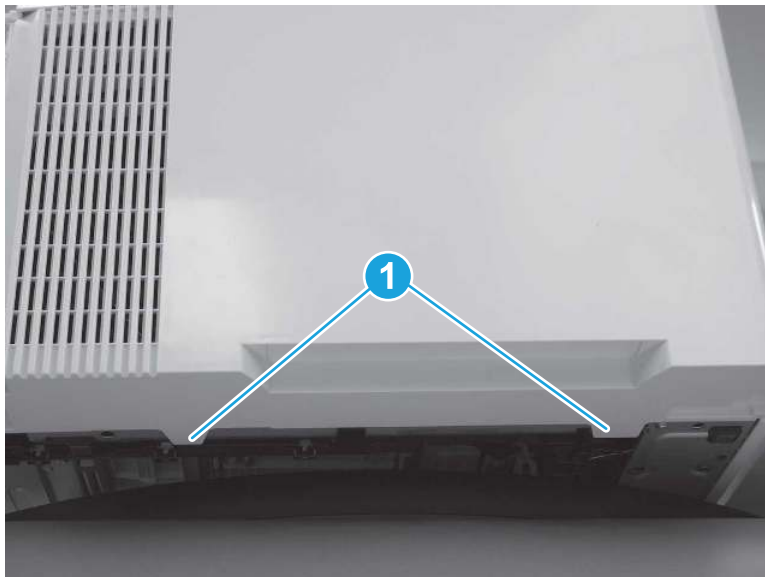
3. At the front of the printer, remove one screw (callout 1).

**Figure 5-115** Remove one screw



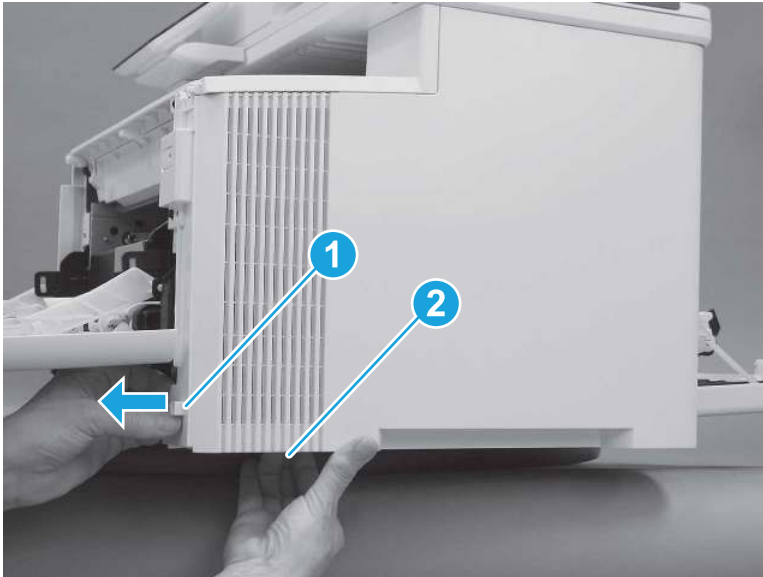
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-116** Locate the tabs



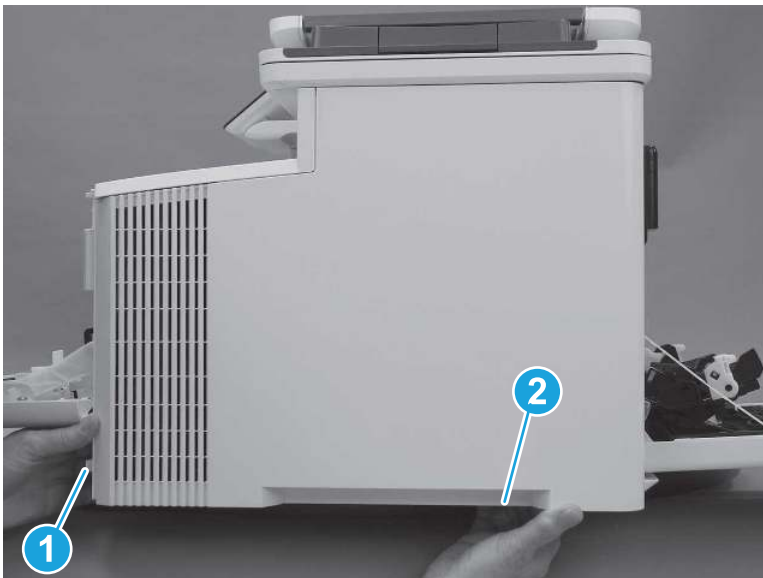
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-117** Release front lower tabs



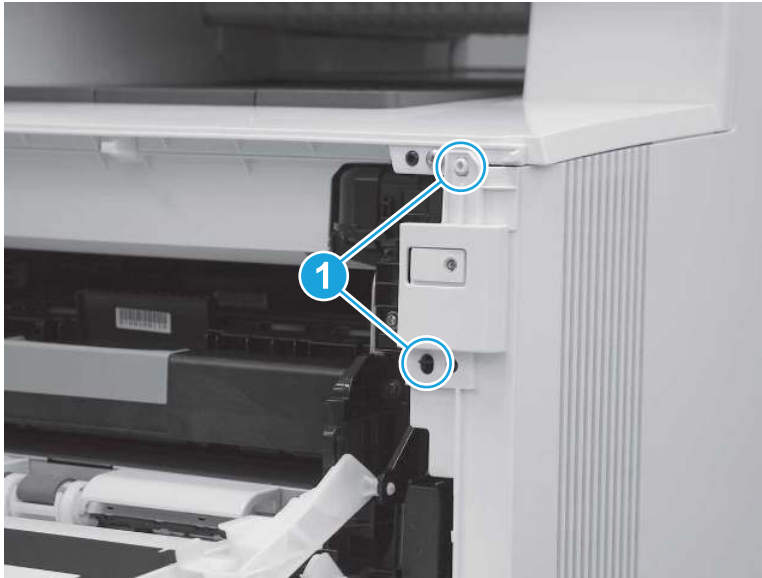
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-118** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-119** Release front upper tabs



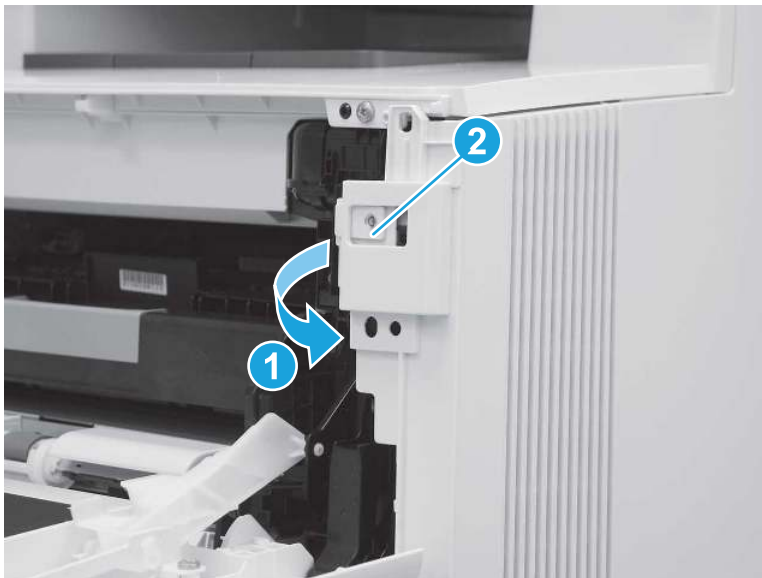
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

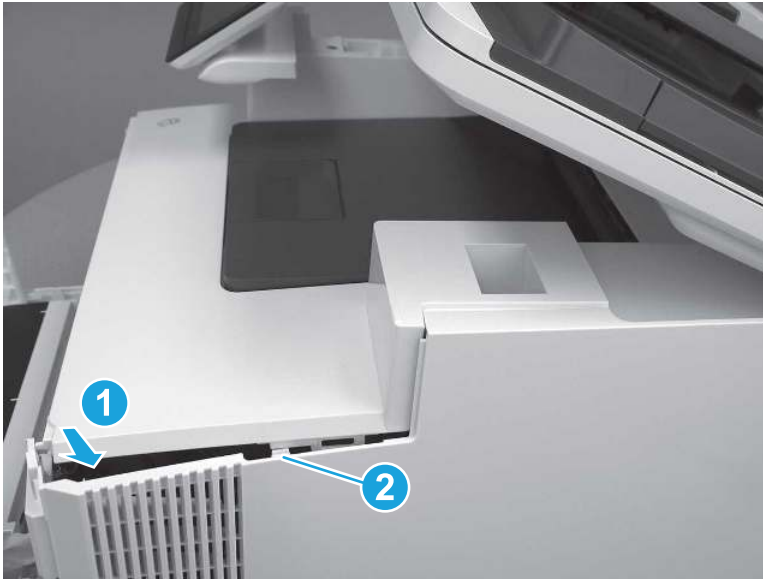
---

**Figure 5-120** Rotate the front of the cover



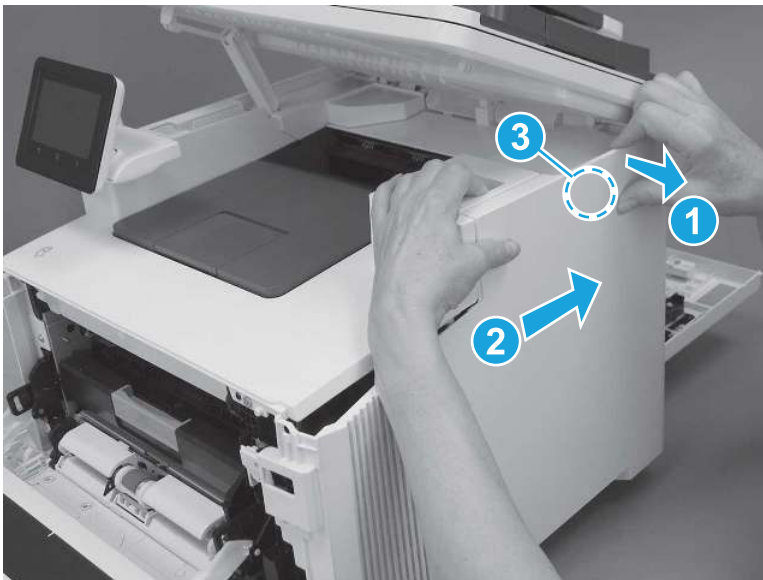
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

**Figure 5-121** Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-122** Release one tab and one hook



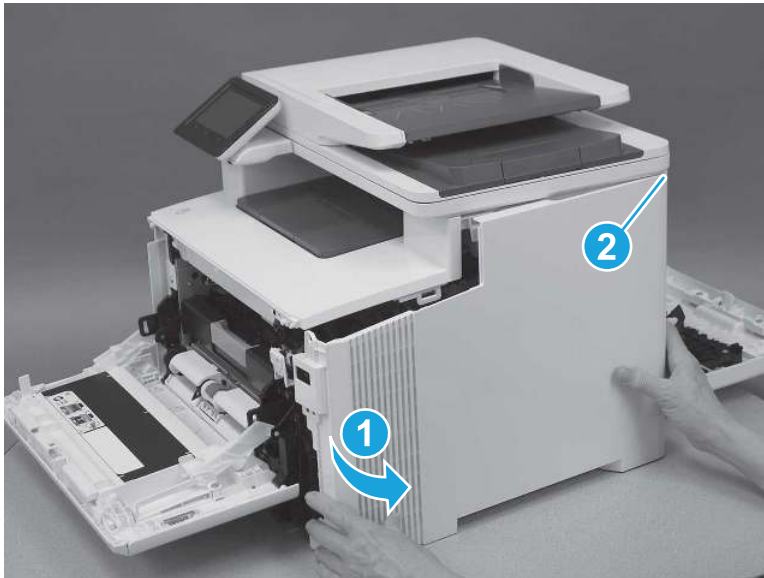
11. Lower the scanner.

**Figure 5-123** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-124** Remove the right cover

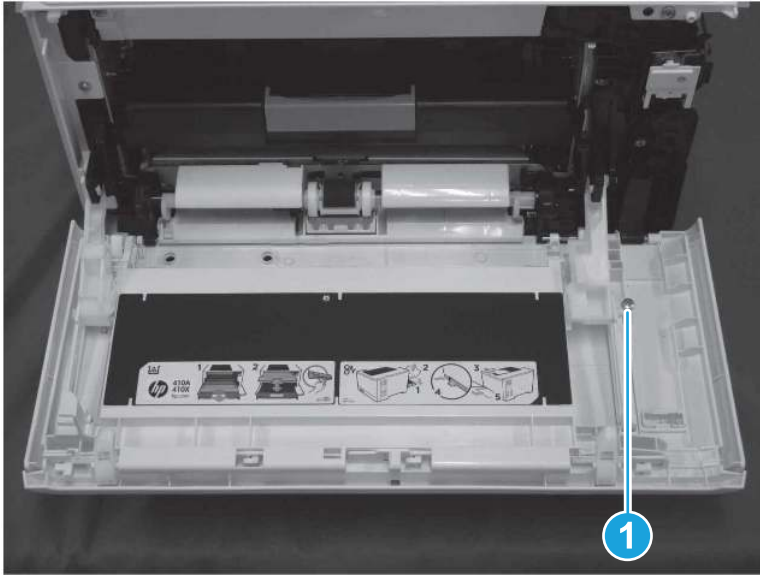


## 5. Remove the front door assembly

Follow these steps to remove the front door assembly.

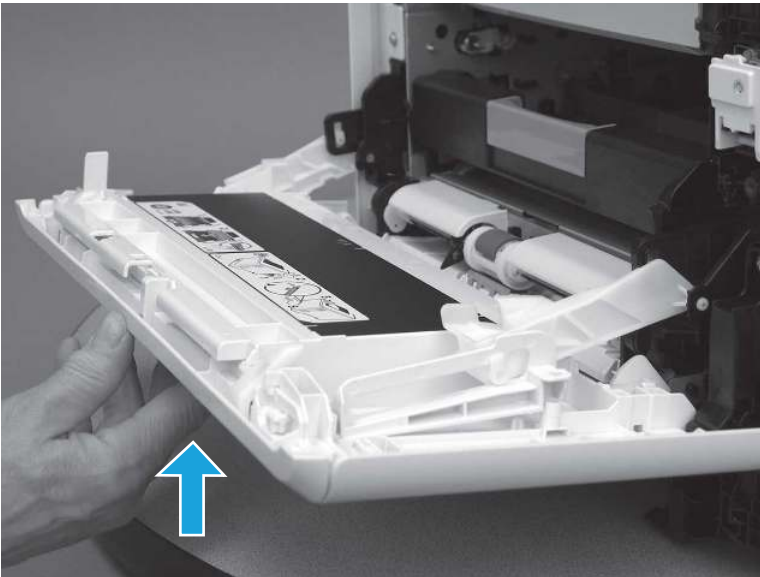
1. Remove one screw (callout 1).

Figure 5-125 Remove one screw



2. Tilt the front door up to about a 45-degree angle.

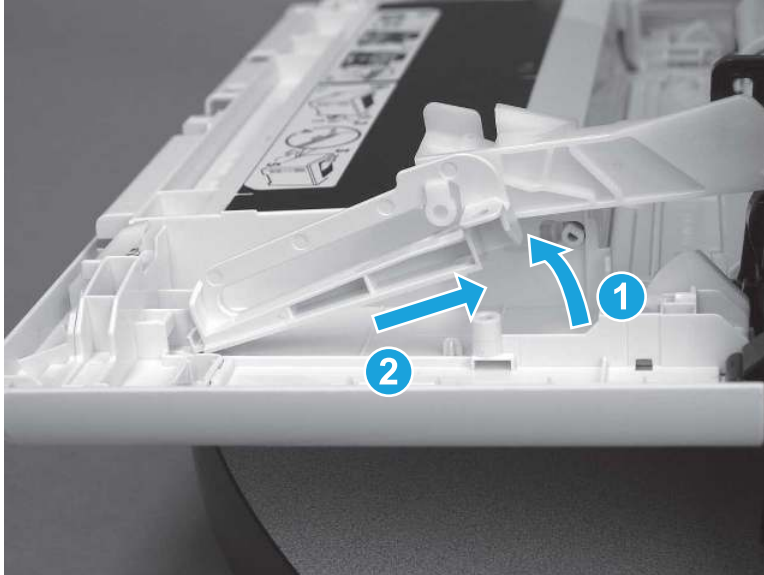
Figure 5-126 Tilt the door up





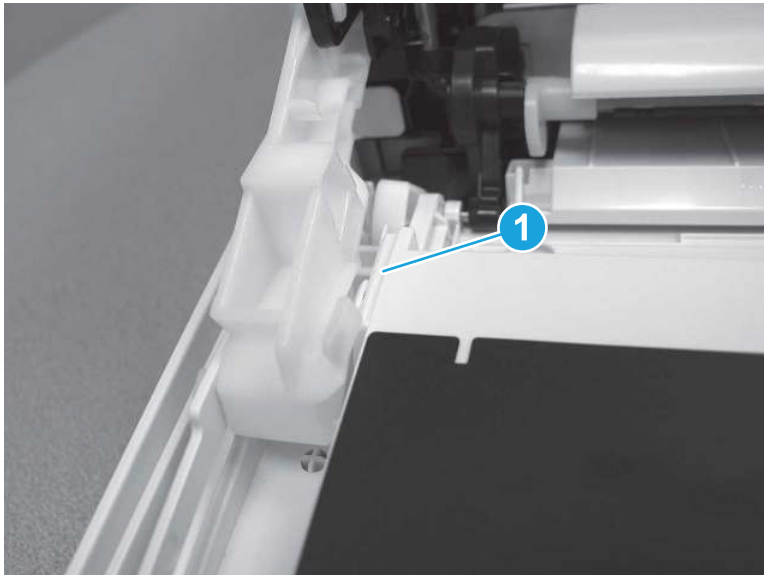
3. Lift the end of the right hinge cover up (callout 1), and then slide it away from the door (callout 2) to disconnect it.

**Figure 5-127** Release the right hinge cover



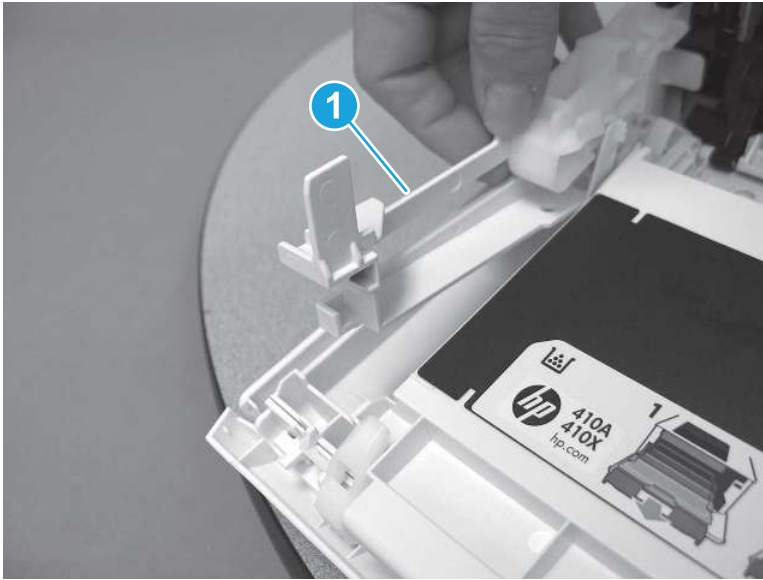
4. On the left side of the door, release one tab (callout 1).

**Figure 5-128** Release one tab



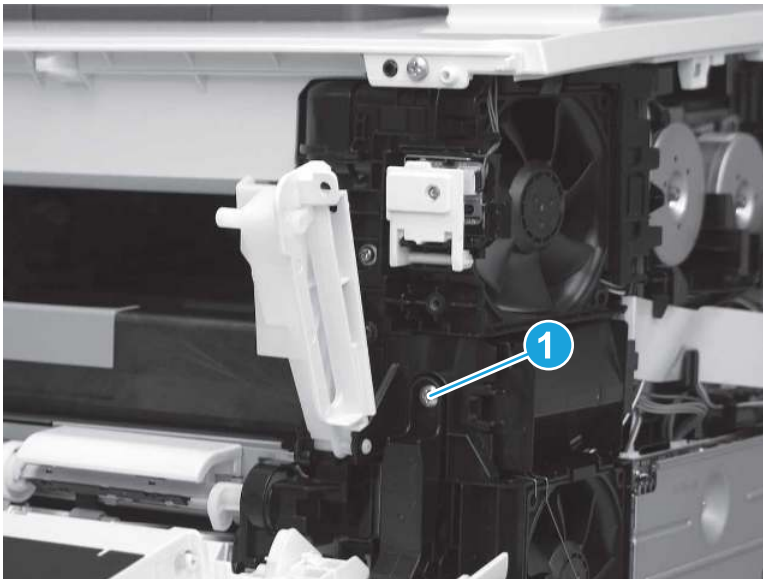
5. Release the left hinge cover (callout 1).

**Figure 5-129** Release the left hinge cover



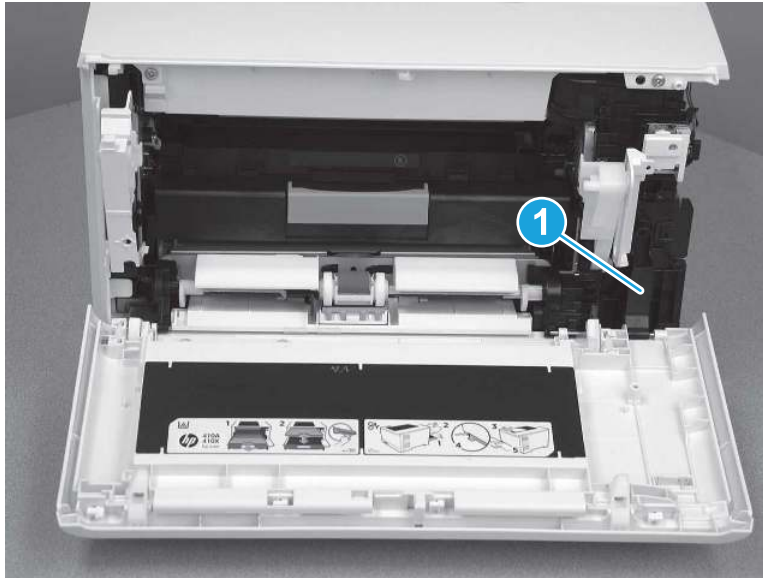
6. Remove one screw (callout 1).

**Figure 5-130** Remove one screw



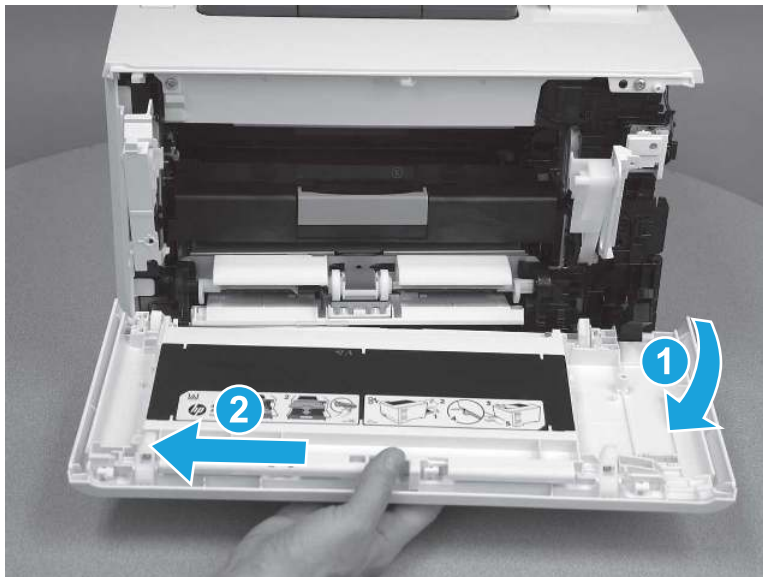
7. Release one arm (callout 1).

**Figure 5-131** Release one arm



8. Lift the front door up slightly, swing the right side of the door away from the printer (callout 1), and then slide the door left (callout 2) to remove it.

**Figure 5-132** Remove the front door



## 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: Duplexing door assembly

Learn how to remove and replace the duplexing door.

[View a video of removing and replacing the duplexing door.](#)

Mean time to repair: 13 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](http://www.hp.com/buy/parts).

**Table 5-16** Part information

Part number	Part description
RM2-6383-000CN	Duplexing door assembly

### Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

### After performing service

### Turn the printer power on

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

### Post service test

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


Make sure that the printer initializes to a **Ready** state.

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-133** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

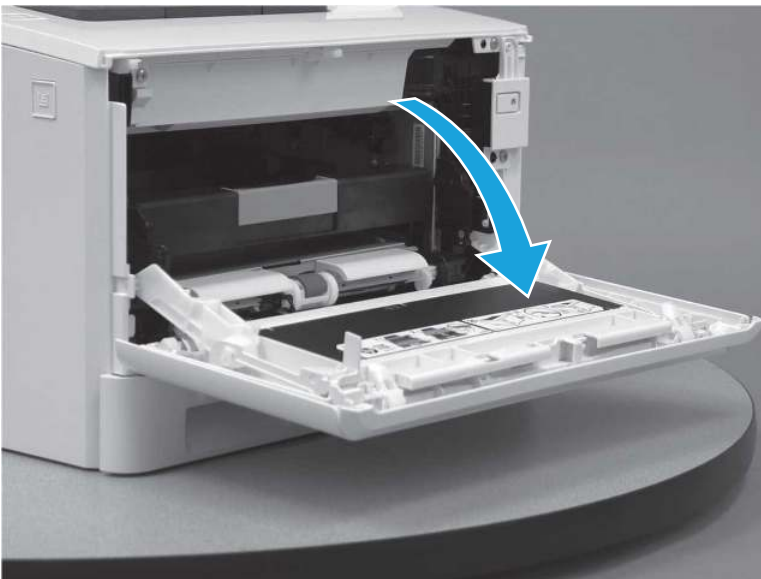
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-134** Release the front door



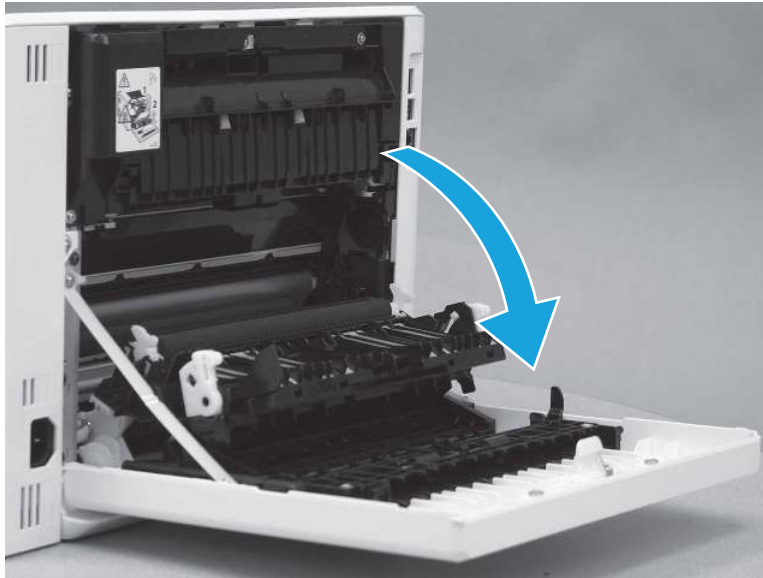
2. Open the front door.

**Figure 5-135** Open the front door



3. Open the duplexing door.

**Figure 5-136** Open the duplexer door



### 3. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

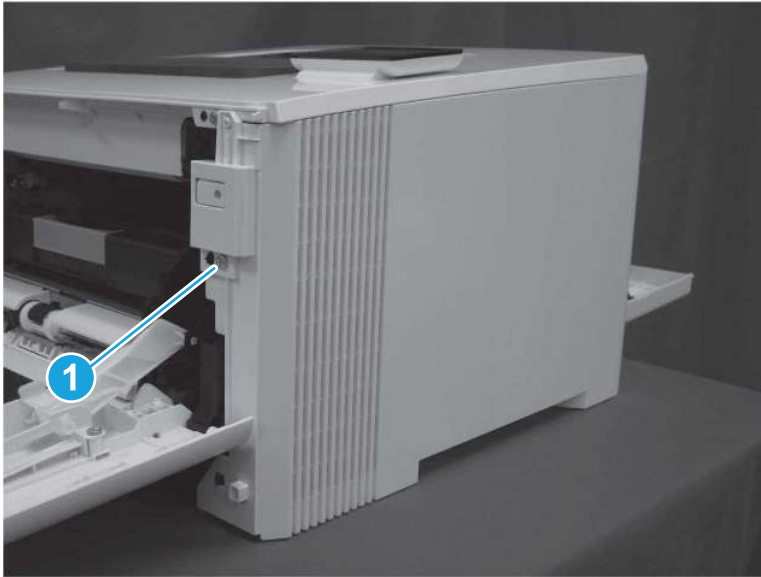
1. At the back of the printer, remove one screw (callout 1).

**Figure 5-137** Remove one screw



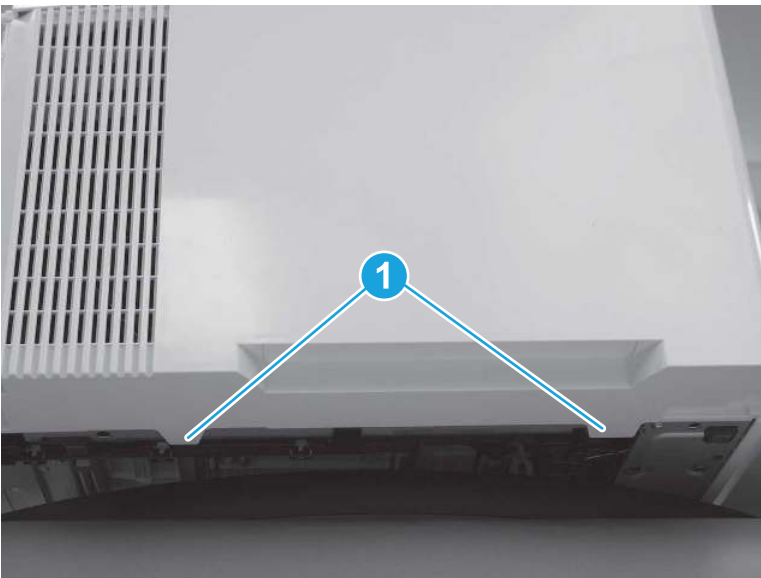
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-138** Remove one screw



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

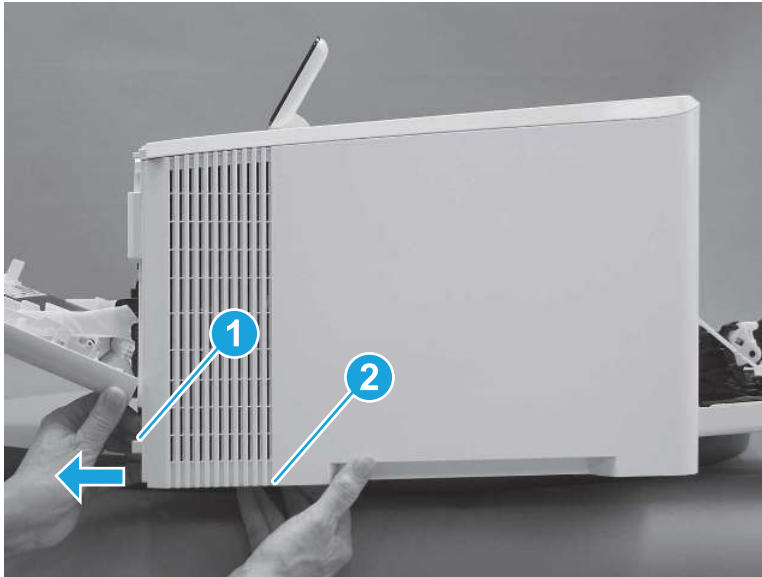
**Figure 5-139** Locate the tabs





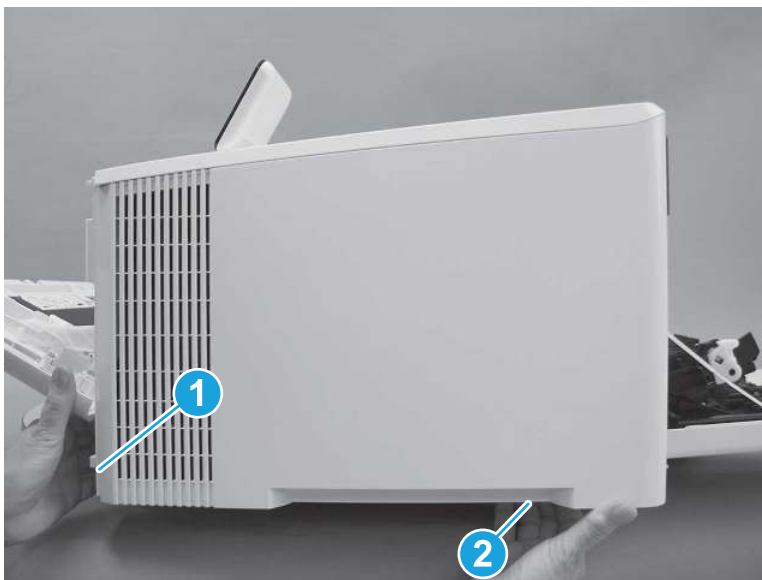
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-140** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

**Figure 5-141** Release lower rear tab



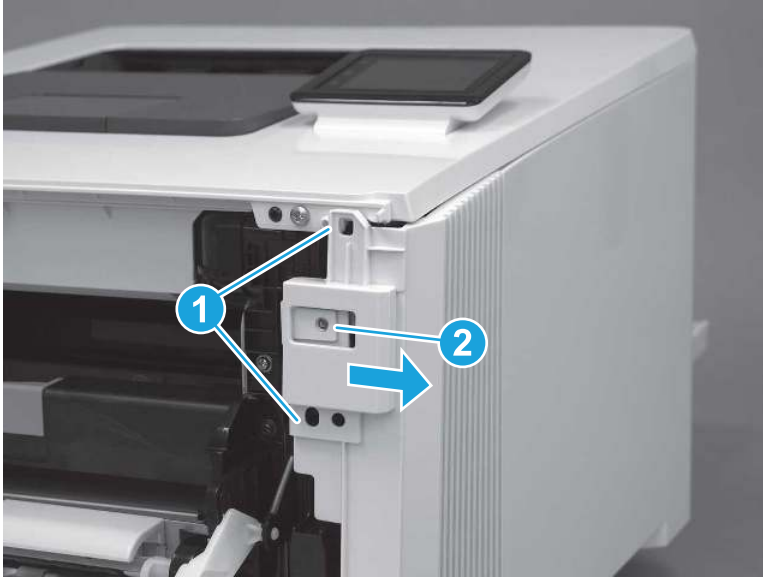
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

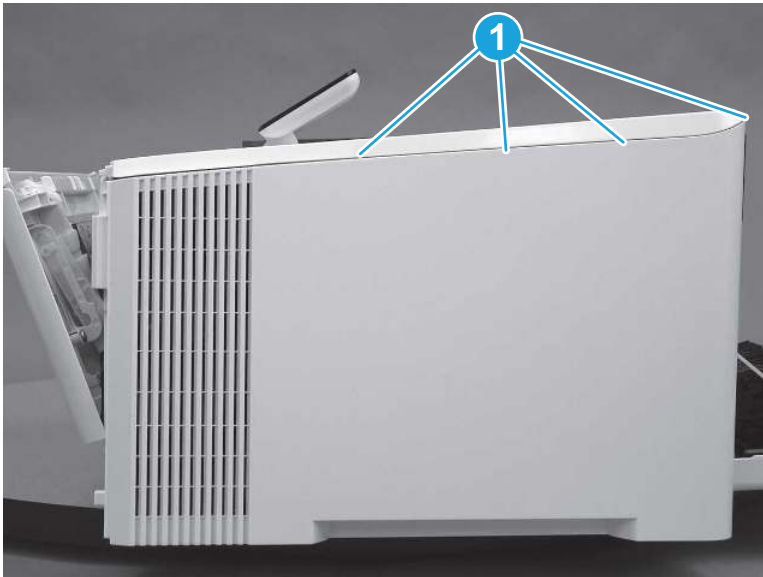
---

**Figure 5-142** Release two front tabs



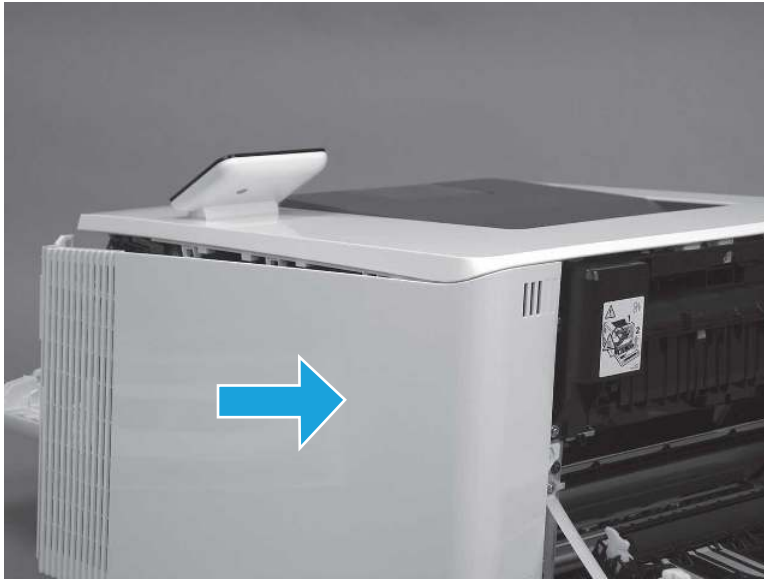
7. Release four tabs on the top of the printer (callout 1).

**Figure 5-143** Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-144** Remove the right cover



#### 4. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

**Figure 5-145** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-146** Remove one screw



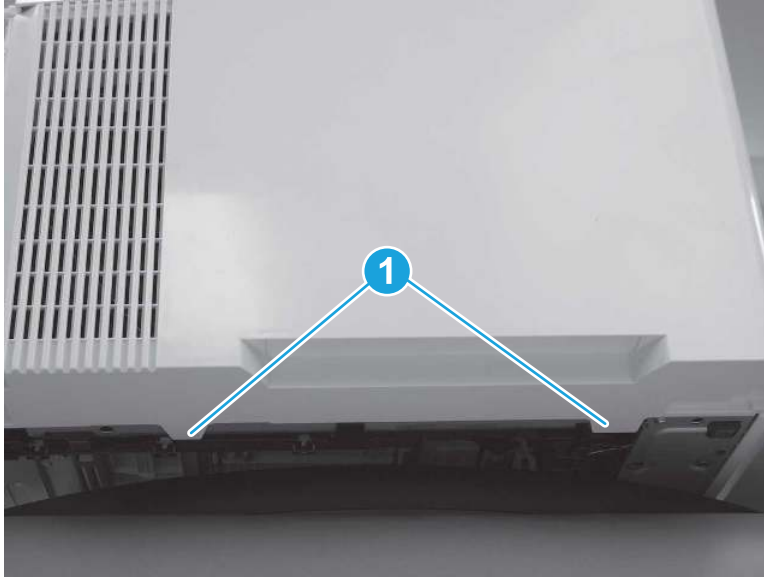
3. At the front of the printer, remove one screw (callout 1).

**Figure 5-147** Remove one screw



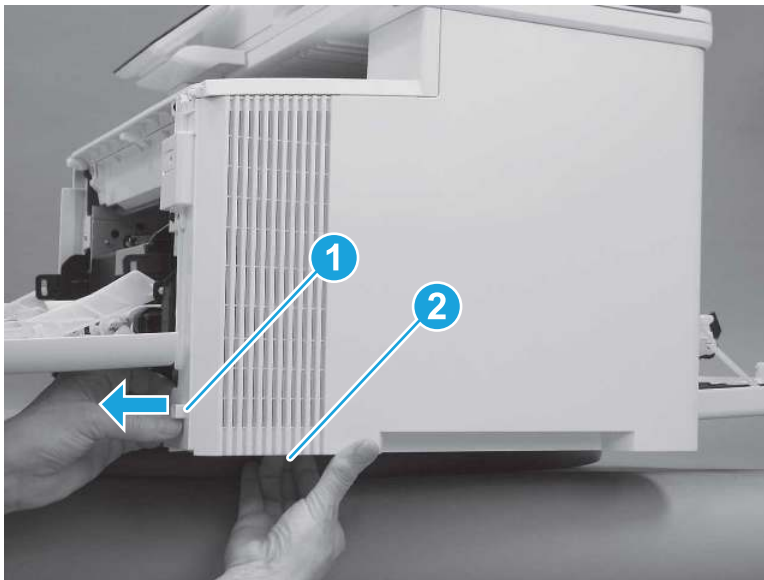
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-148** Locate the tabs



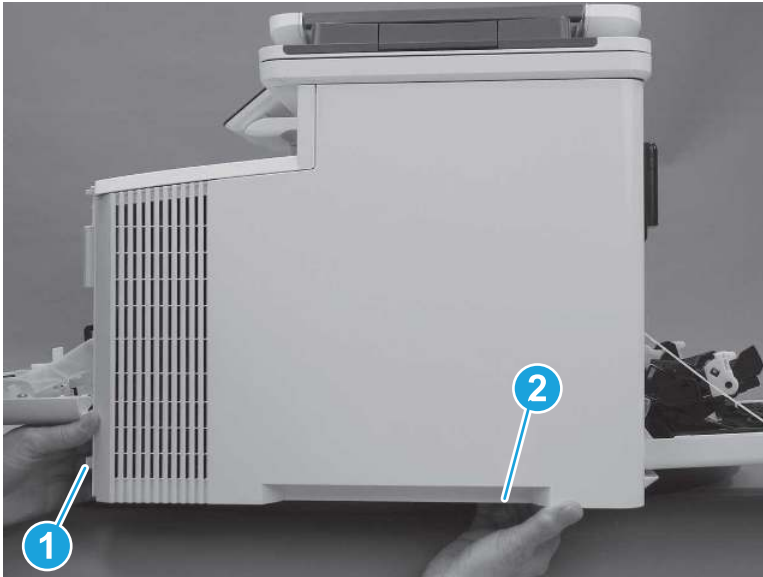
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-149** Release front lower tabs



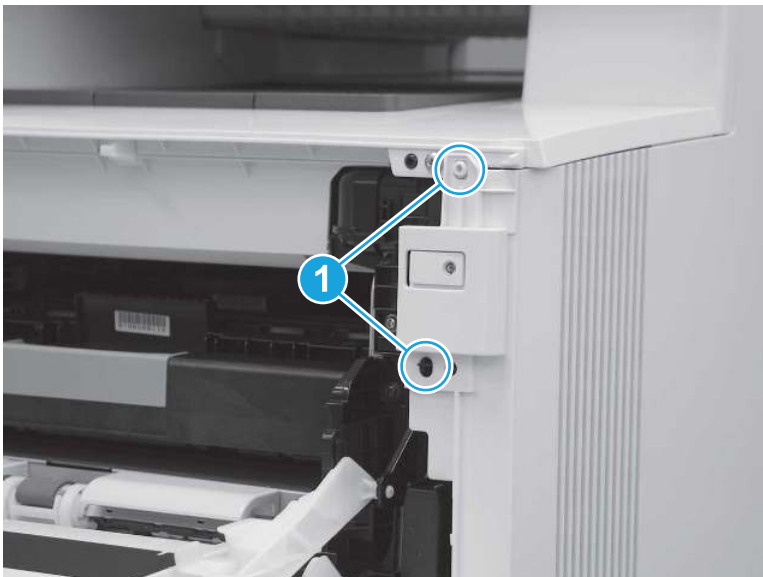
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-150** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-151** Release front upper tabs



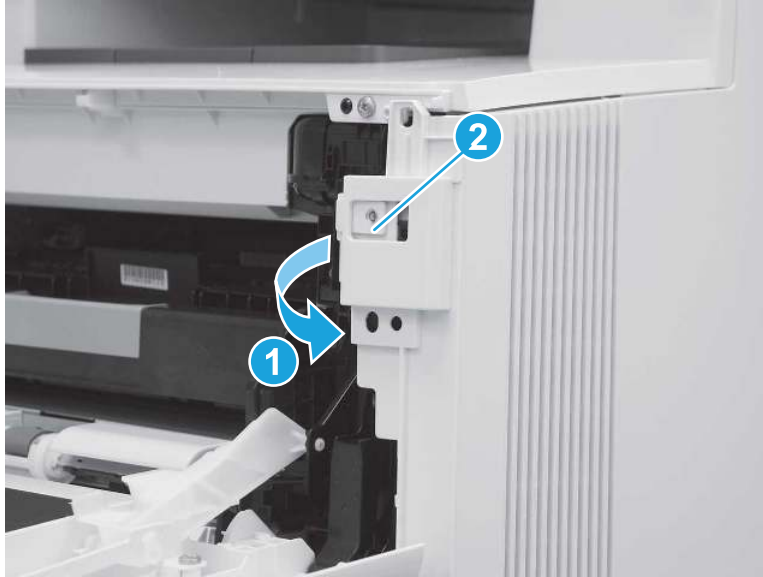
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

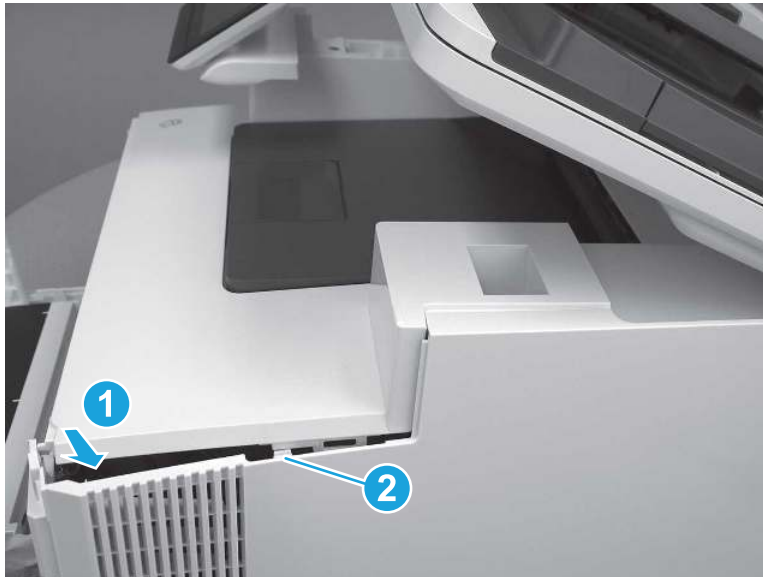
---

Figure 5-152 Rotate the front of the cover



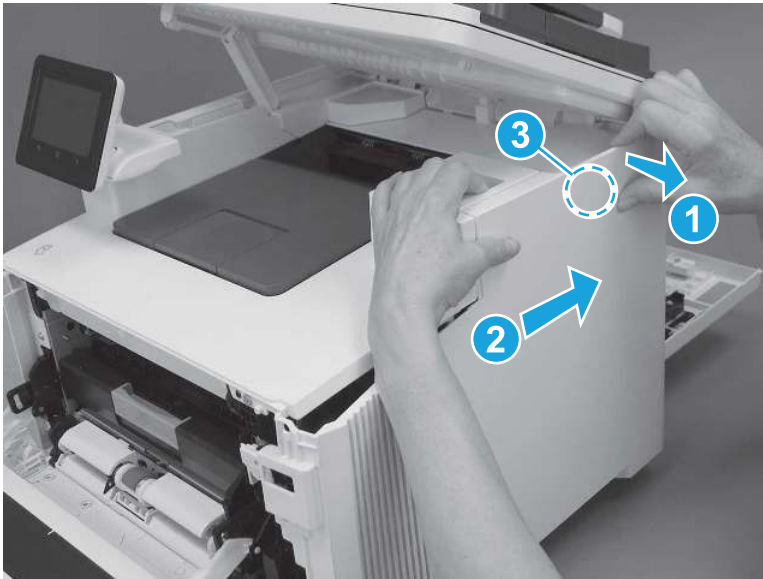
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

Figure 5-153 Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-154** Release one tab and one hook



11. Lower the scanner.

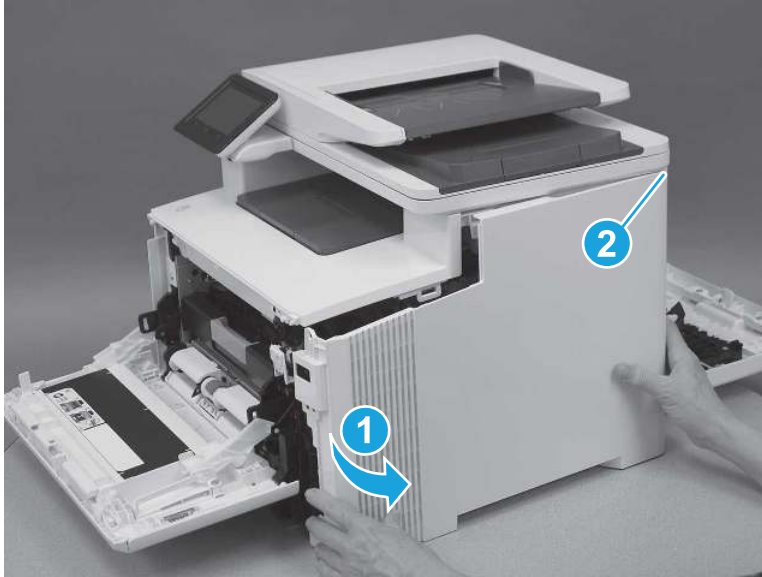
**Figure 5-155** Lower the scanner





12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-156** Remove the right cover

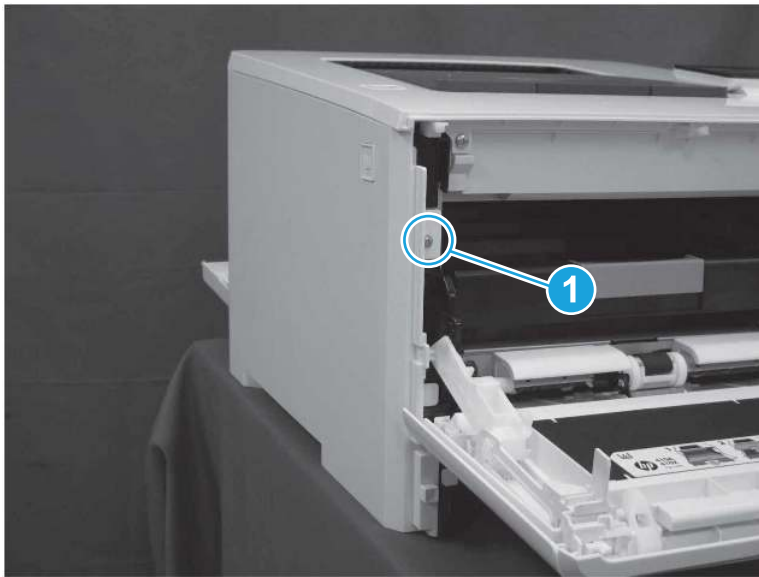


## 5. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

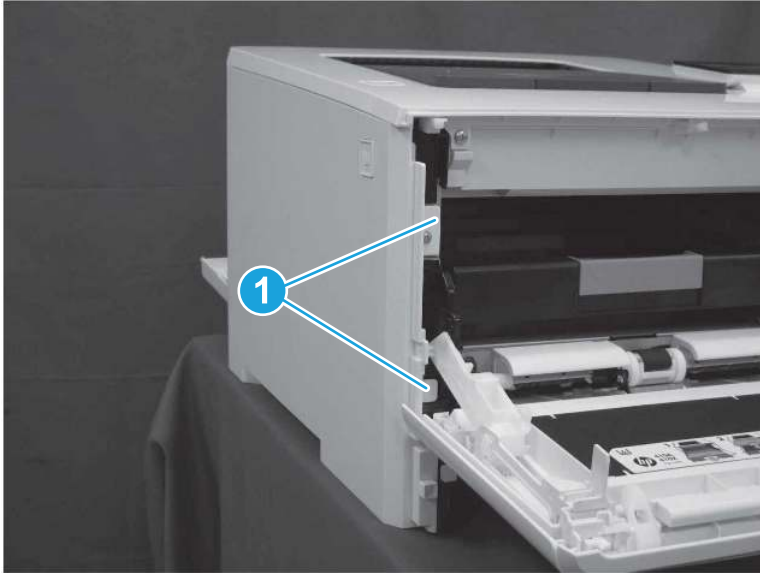
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-157** Remove one screw



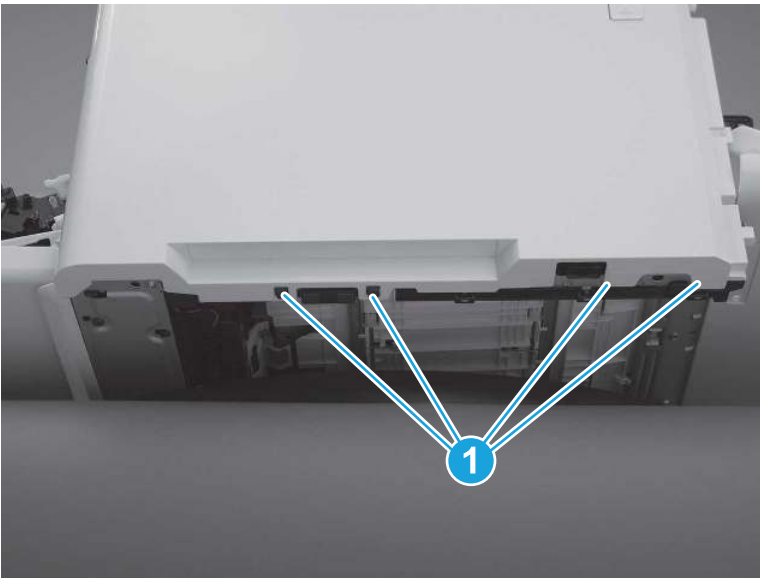
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-158** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-159** Locate the tabs



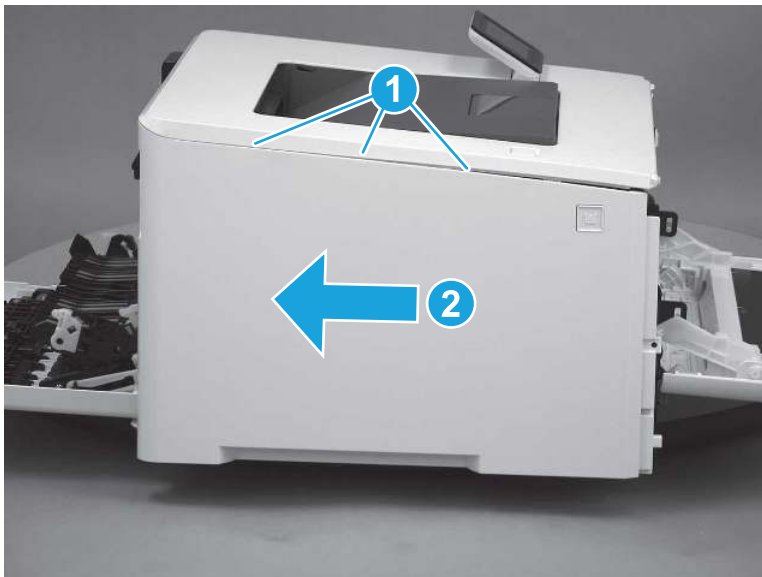
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-160 Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

Figure 5-161 Release three tabs



## 6. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

1. Raise the scanner.

Figure 5-162 Raise the scanner



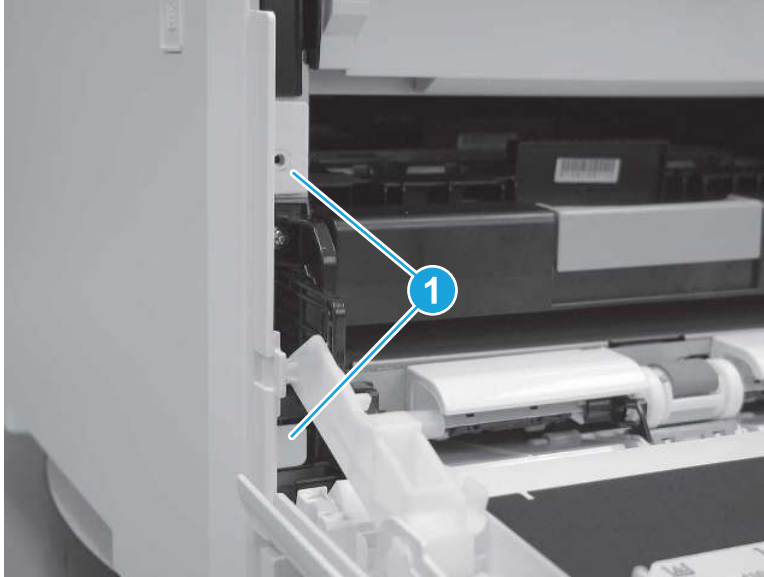
2. At the front of the printer, remove one screw (callout 1).

Figure 5-163 Remove one screw



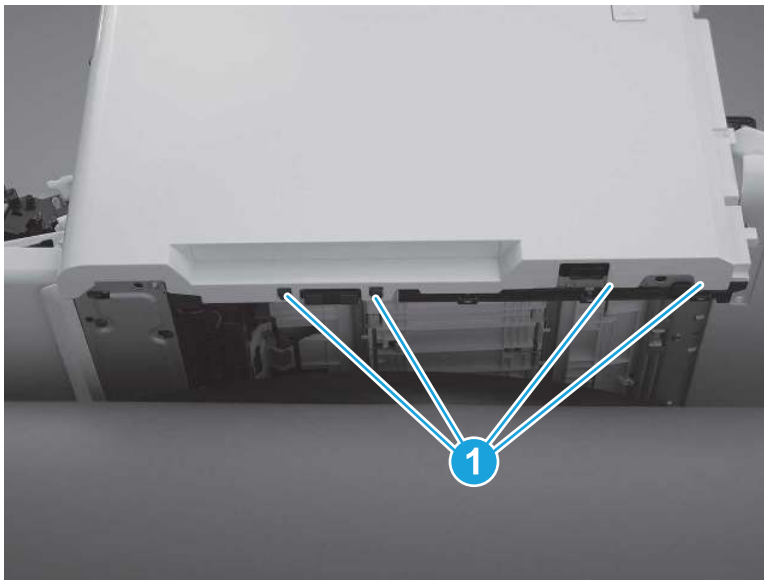
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-164** Release two tabs



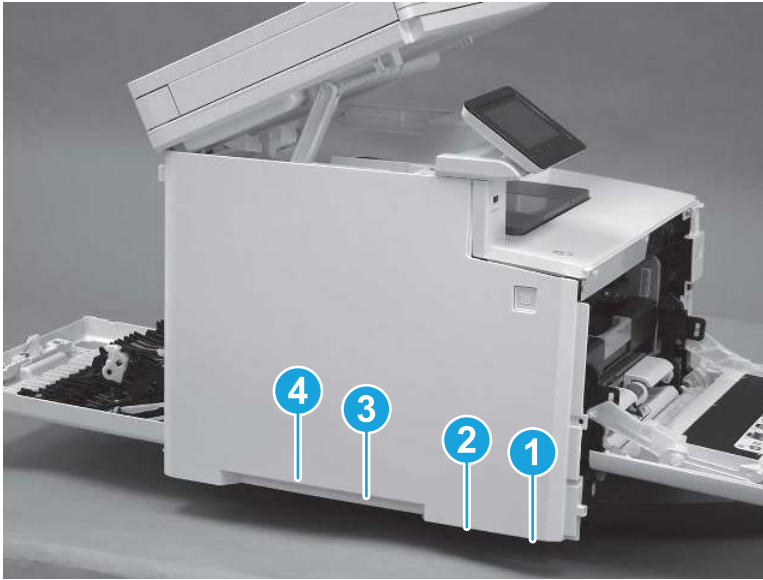
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-165** Locate the tabs



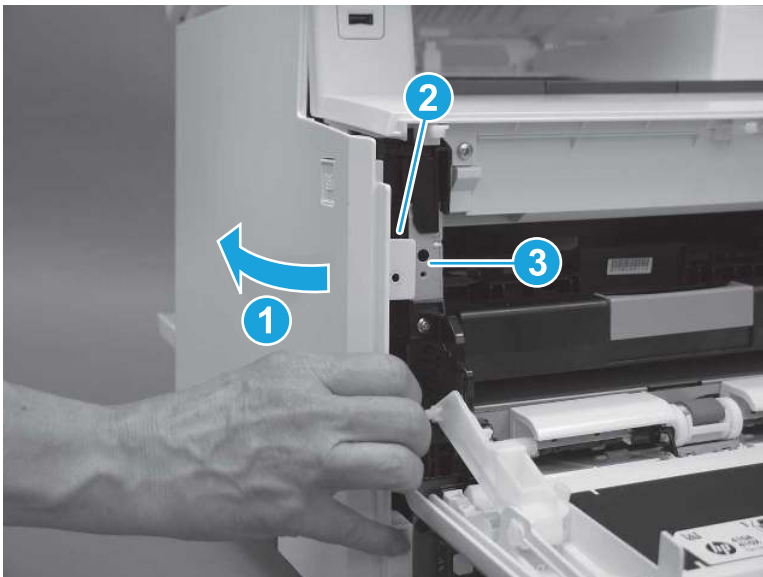
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-166** Release four tabs



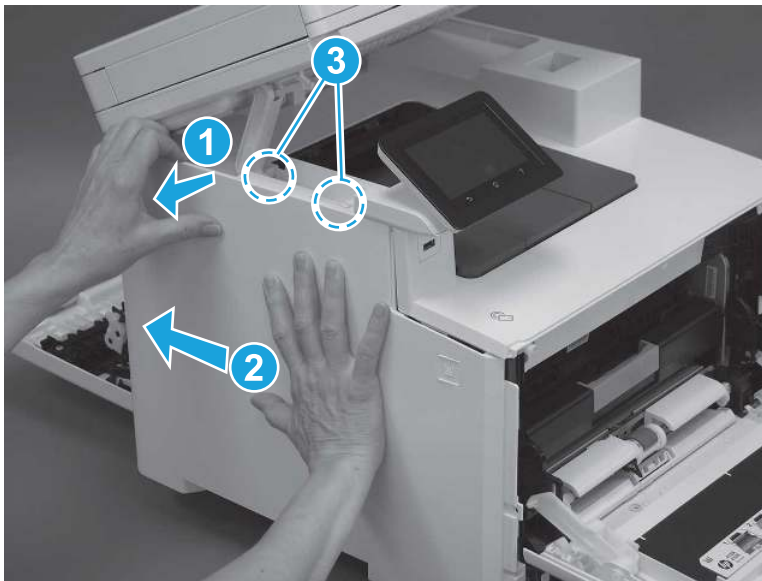
6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

**Figure 5-167** Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-168** Release one tab and two hooks



8. Lower the scanner.

**Figure 5-169** Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

**Figure 5-170** Remove the left cover

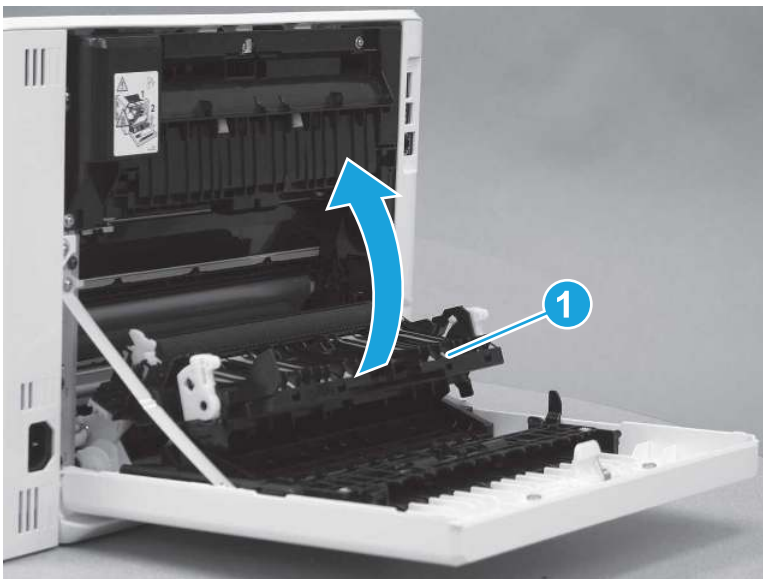


## 7. Remove the duplexing door assembly

Follow these steps to remove the duplexing door assembly.

1. Rotate the secondary transfer assembly (callout 1) toward the printer to close it.

**Figure 5-171** Close the secondary transfer assembly



2. At the back of the printer, remove two screws (callout 1), and then remove one screw (callout 2) that holds the retention arm.

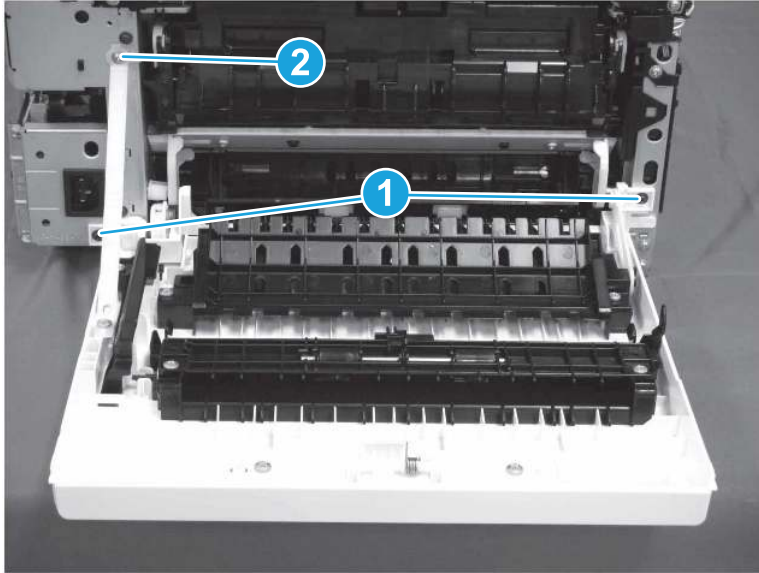
---

 **TIP:** Note that the screw (callout 2) that holds the retention arm is longer than the other two. Make sure this screw is installed in the correct position.

---

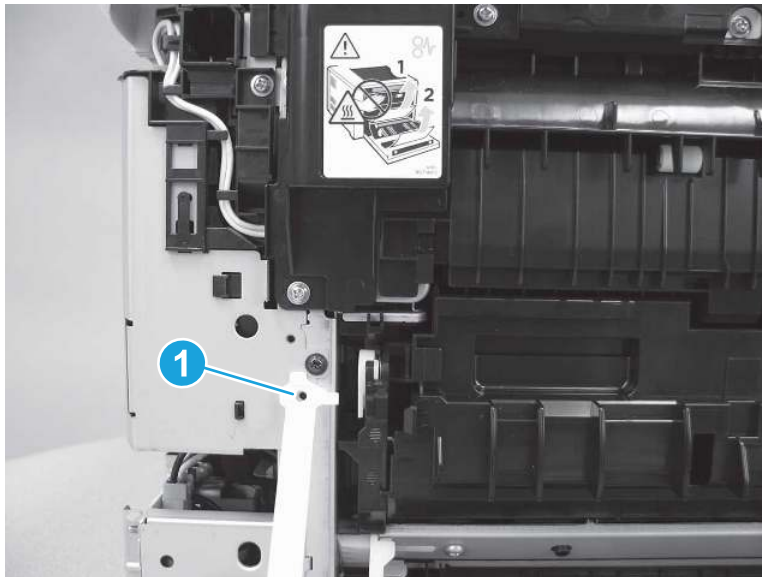


Figure 5-172 Remove three screws



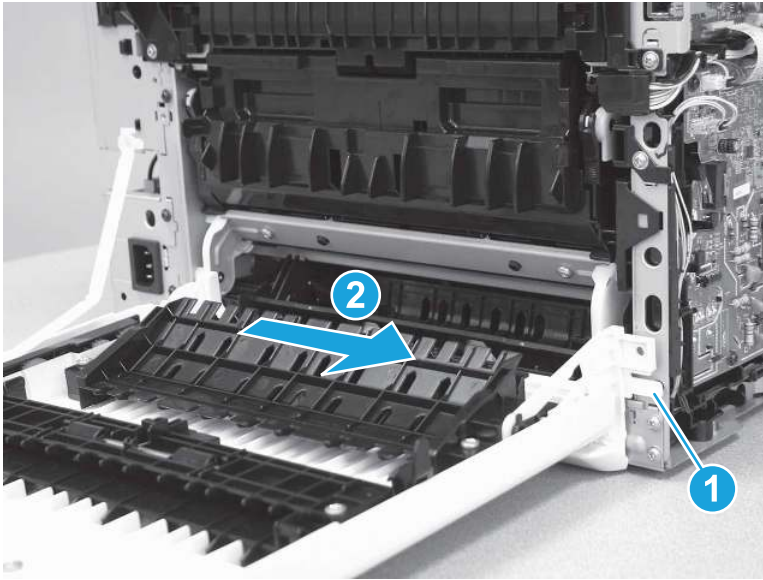
3. Release the retention arm (callout 1).

Figure 5-173 Release the retention arm



4. Release one tab (callout 1), and then slide the duplexer door (callout 2) to the right to remove it.

Figure 5-174 Remove the duplexing door



## 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.

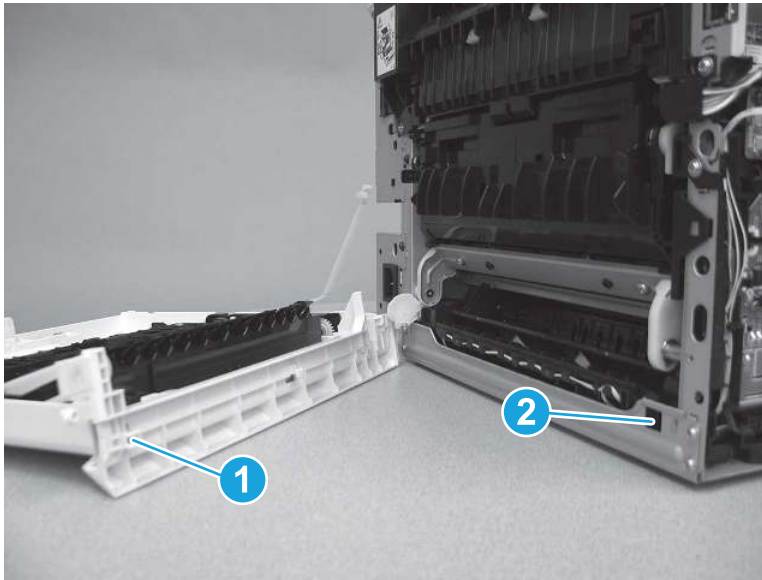
## 9. Reverse the removal steps to install the assembly

Also use the following special installation instructions.

Duplexing door assembly

- ▲ Position the tab (callout 1) on the door into the slot (callout 2) on the printer.

**Figure 5-175** Position the tab in the slot



## Removal and replacement: Top cover (SFP)

Learn how to remove and replace the top cover (SFP).

[View a video of removing and replacing the top cover \(SFP\).](#)

Mean time to repair: 14 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](http://www.hp.com/buy/parts).

**Table 5-17** Part information

Part number	Part description
RM2-3088-000CN	Cover, top assembly (SFP) (includes control panel and FFC)

### Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

## After performing service

### Turn the printer power on

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

## Post service test

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


Make sure that the printer initializes to a **Ready** state.

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-176** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

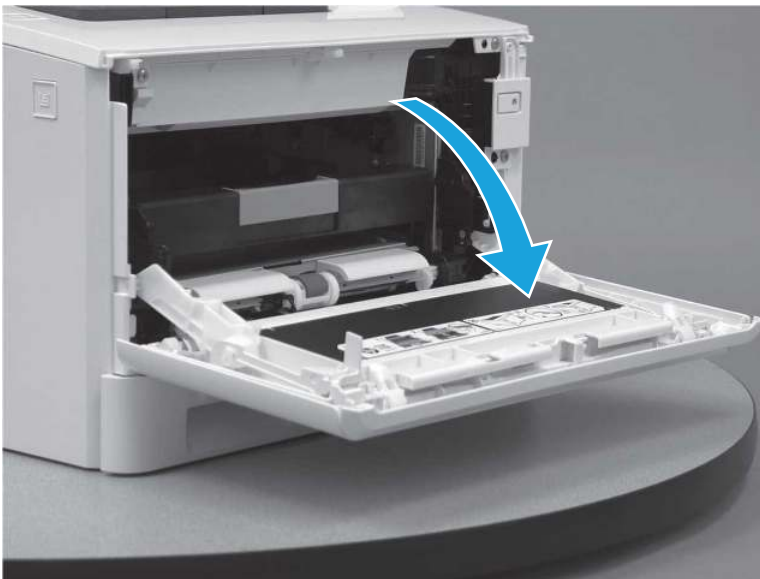
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-177** Release the front door



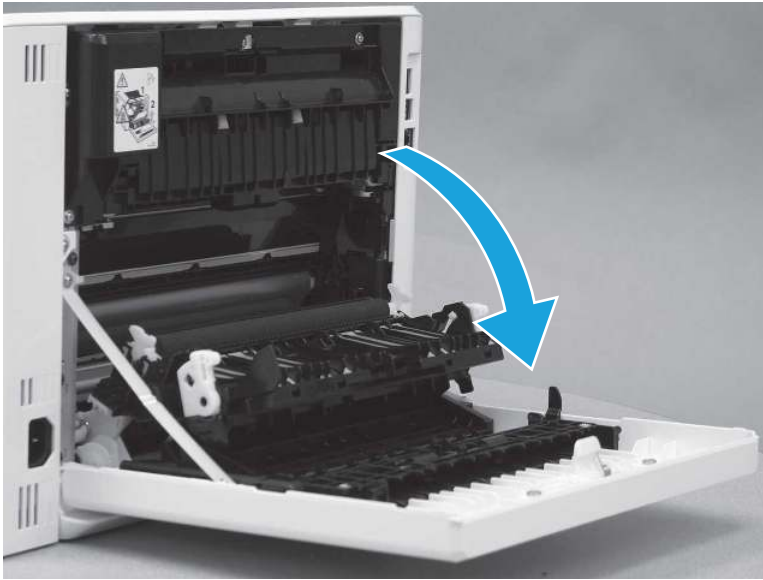
2. Open the front door.

**Figure 5-178** Open the front door



3. Open the duplexing door.

**Figure 5-179** Open the duplexer door

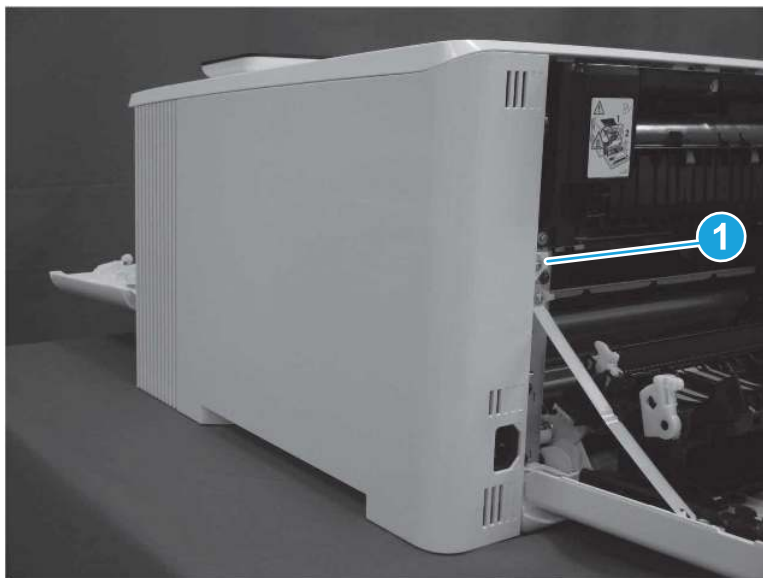


### 3. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

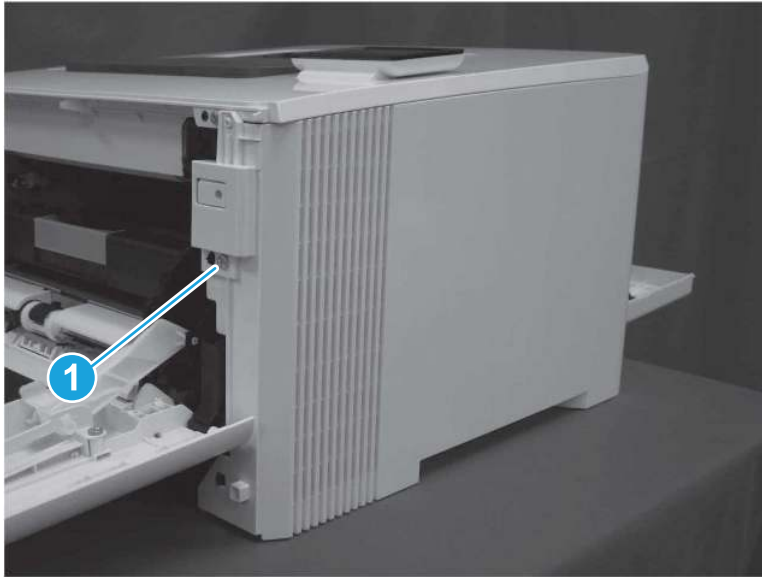
1. At the back of the printer, remove one screw (callout 1).

**Figure 5-180** Remove one screw



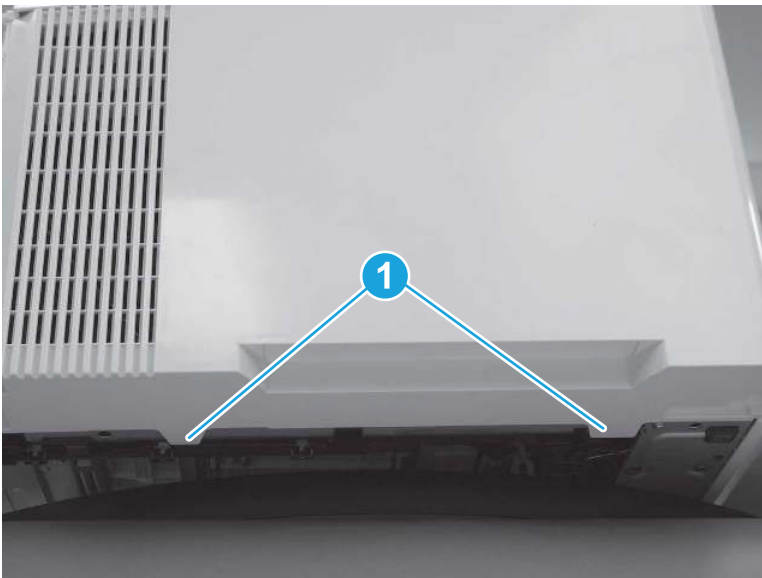
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-181** Remove one screw



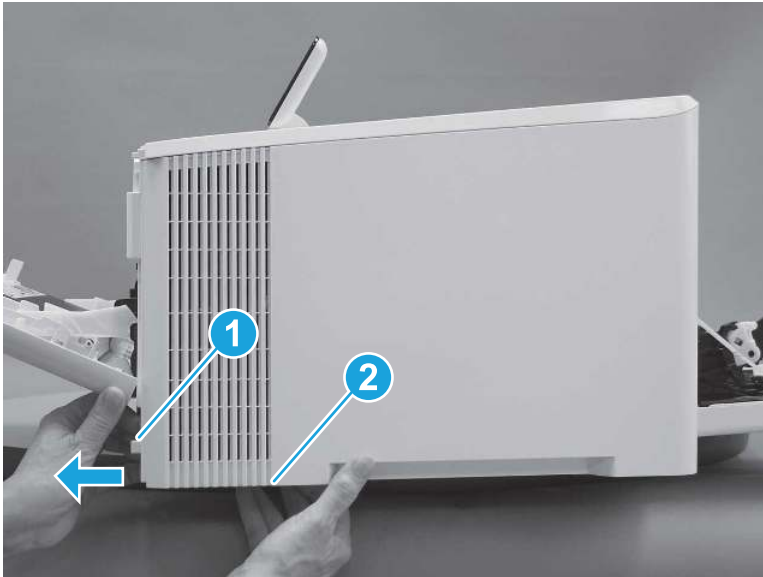
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-182** Locate the tabs



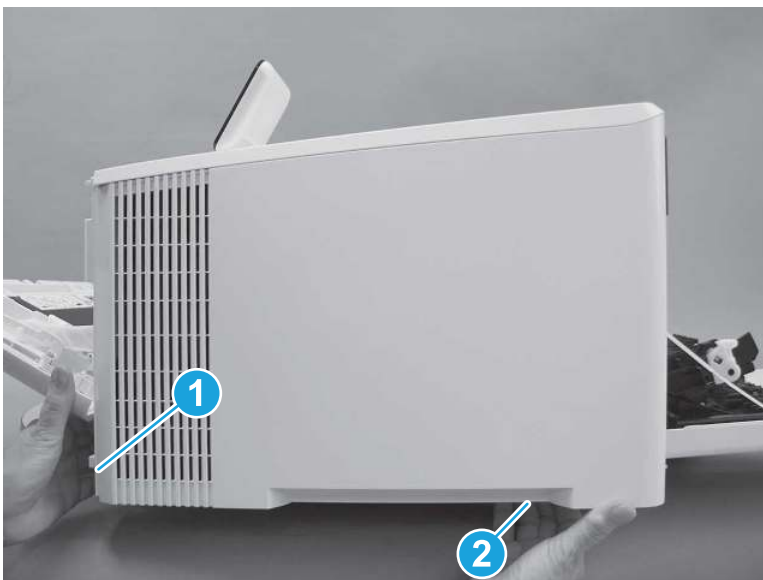
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-183** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

**Figure 5-184** Release lower rear tab



6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

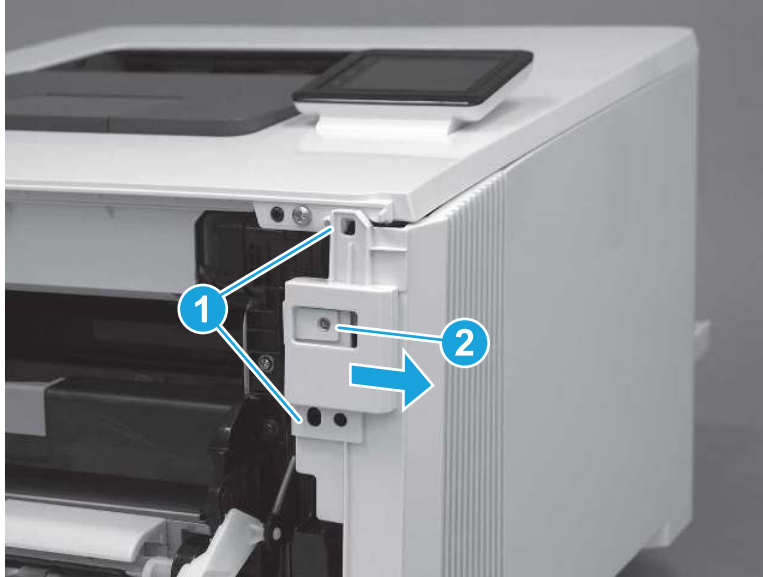
---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

---

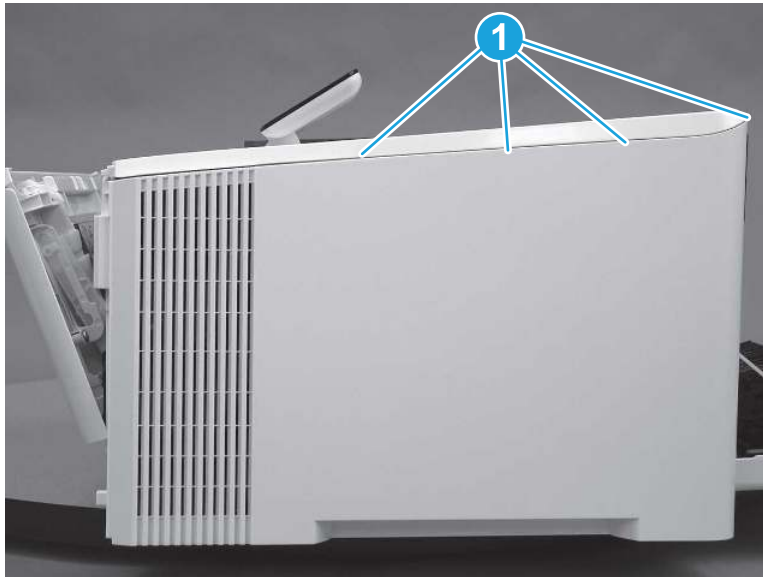


Figure 5-185 Release two front tabs



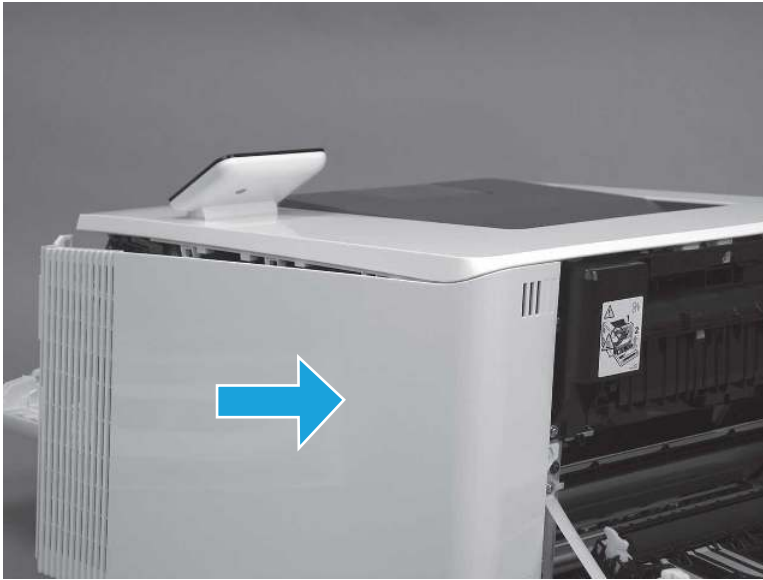
7. Release four tabs on the top of the printer (callout 1).

Figure 5-186 Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-187** Remove the right cover

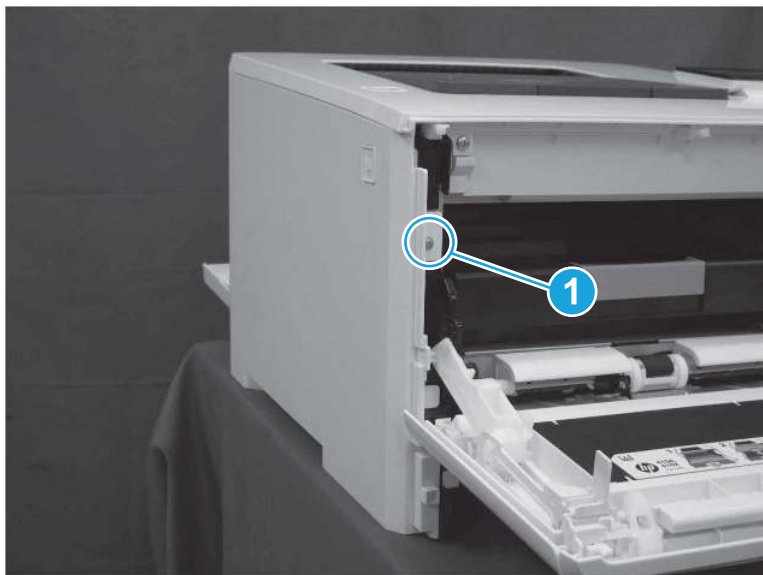


#### 4. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

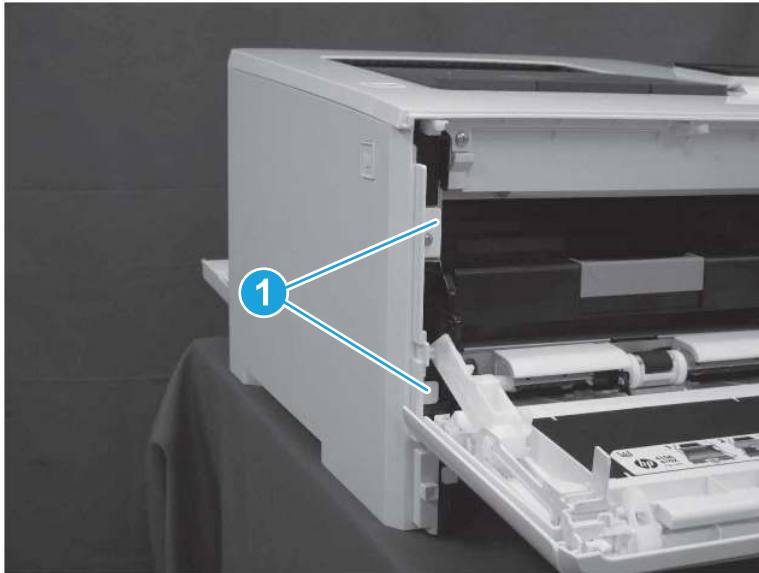
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-188** Remove one screw



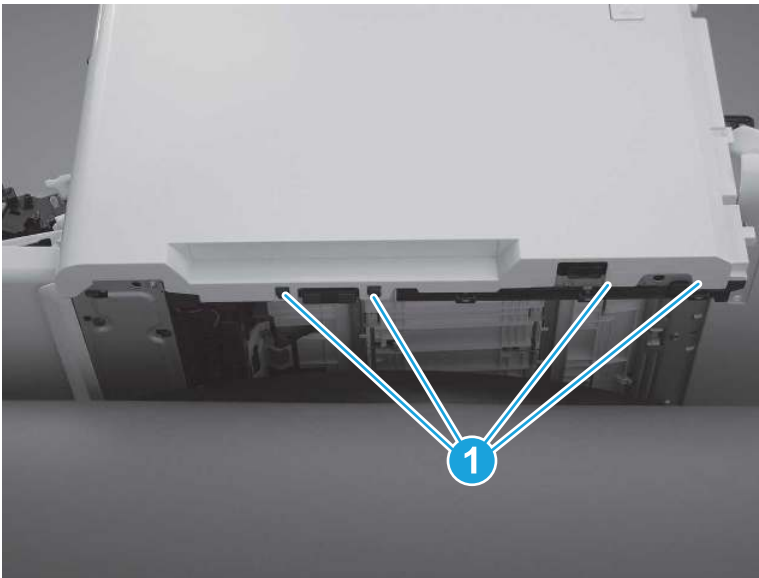
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-189** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-190** Locate the tabs



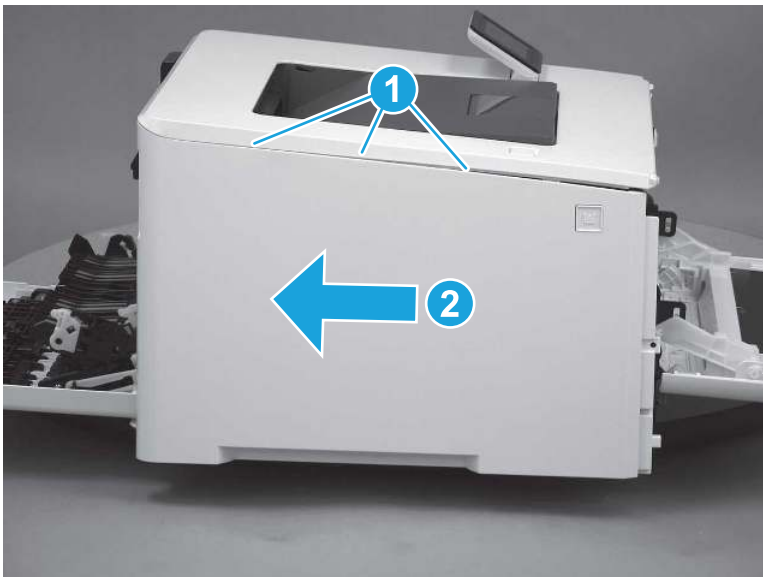
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-191** Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

**Figure 5-192** Release three tabs



## 5. Remove the top cover (SFP)

Follow these steps to remove the top cover (SFP).

1. On the left side of the printer, on the formatter, disconnect one connector (callout 1).

---

 **NOTE:** The formatter may look slightly different than what is shown below, however the removal procedures are the same.

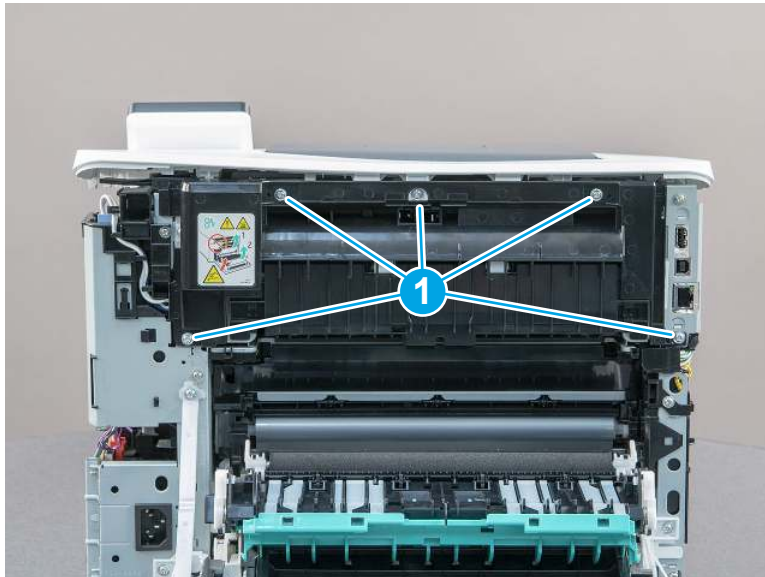
---

Figure 5-193 Disconnect one connector



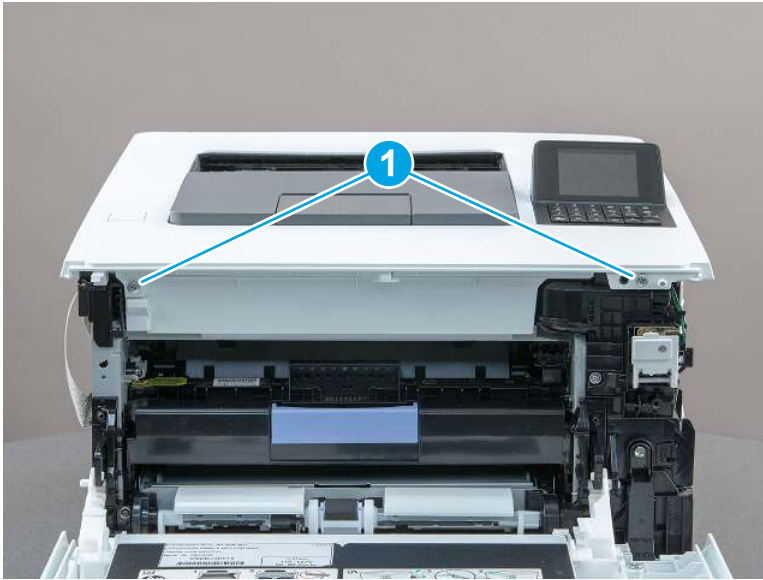
2. At the back of the printer, remove five screws (callout 1), and then remove the fuser cover.

Figure 5-194 Remove five screws



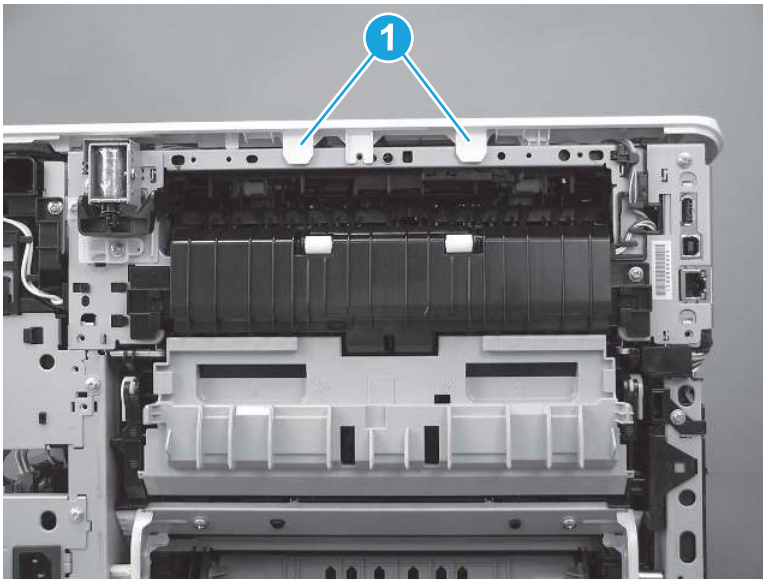
3. At the front of the printer, remove two screws (callout 1).

**Figure 5-195** Remove two screws



4. Lift the front of the top cover up and release two tabs at the back of the printer (callout 1).

**Figure 5-196** Lift the top cover and release two tabs



5. Remove the top cover.

---

 **NOTE:** For a replacement cover install, remove the control panel from the discarded cover and install it on the replacement cover.

---

Figure 5-197 Remove the top 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.


<http://www8.hp.com/us/en/hp-information/environment/product-recycling.html>

---

2. Unpack the replacement part from the packaging.


 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

---

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

---

## Removal and replacement: Top cover (MFP)

Learn how to remove and replace the top cover (MFP).

[View a video of removing and replacing the top cover \(MFP\).](#)

Mean time to repair: 37 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](http://www.hp.com/buy/parts).

**Table 5-18** Part information

Part number	Part description
RM2-3091-000CN	Cover, top assembly (MFP)

## Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

## After performing service

### Turn the printer power on

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

## Post service test

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

Make sure that the printer initializes to a **Ready** state.

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---



Figure 5-198 Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

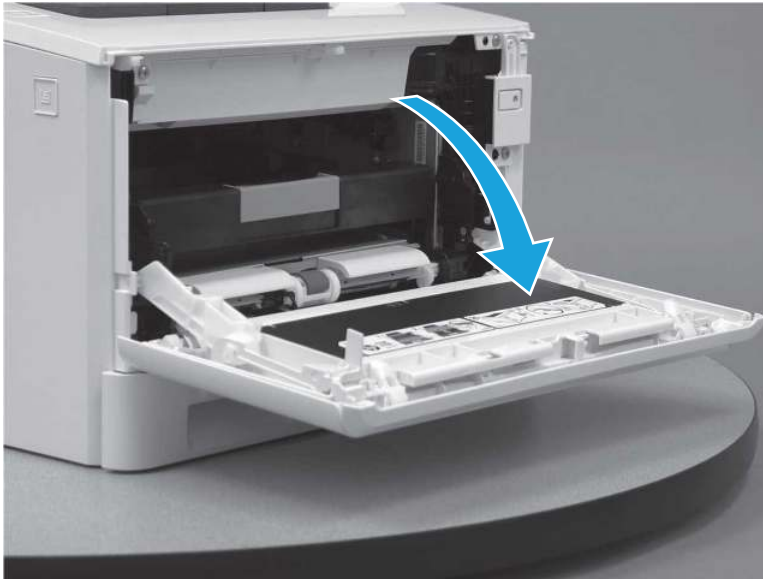
1. Press the button (callout 1) on the left side of the printer to release the front door.

Figure 5-199 Release the front door



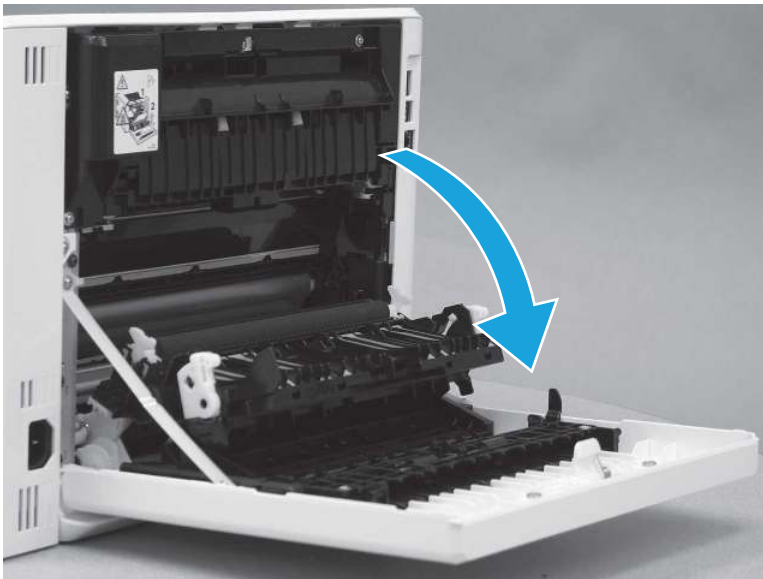
2. Open the front door.

**Figure 5-200** Open the front door



3. Open the duplexing door.

**Figure 5-201** Open the duplexer door



### 3. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

**Figure 5-202** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-203** Remove one screw



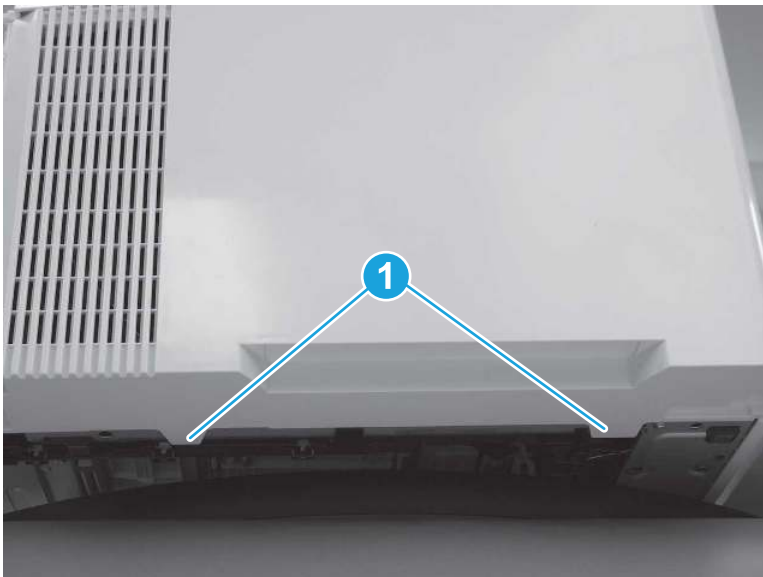
3. At the front of the printer, remove one screw (callout 1).

**Figure 5-204** Remove one screw



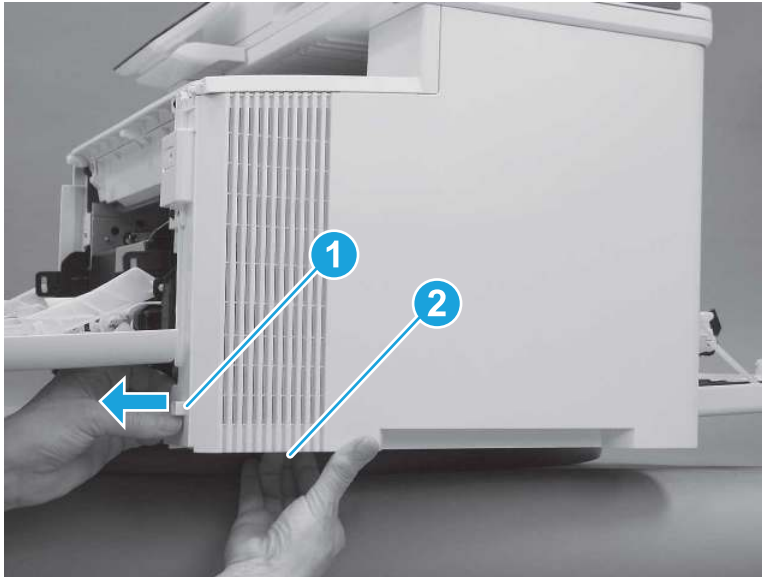
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-205** Locate the tabs



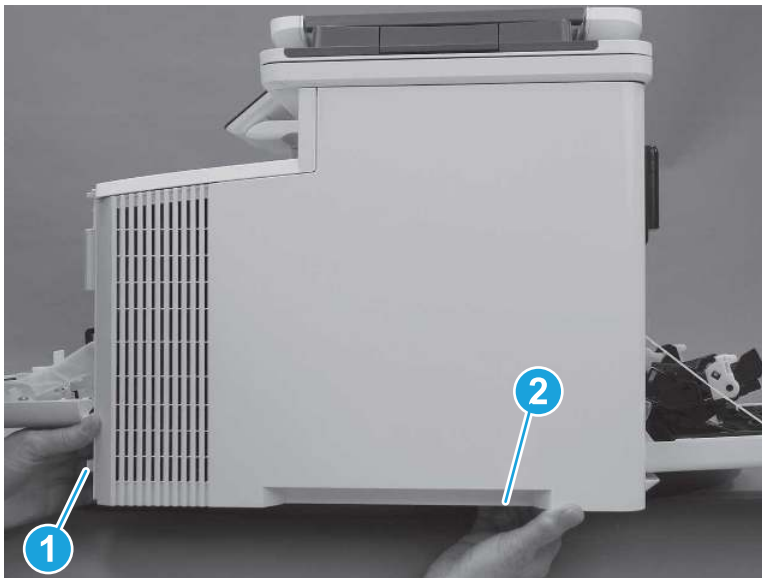
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-206** Release front lower tabs



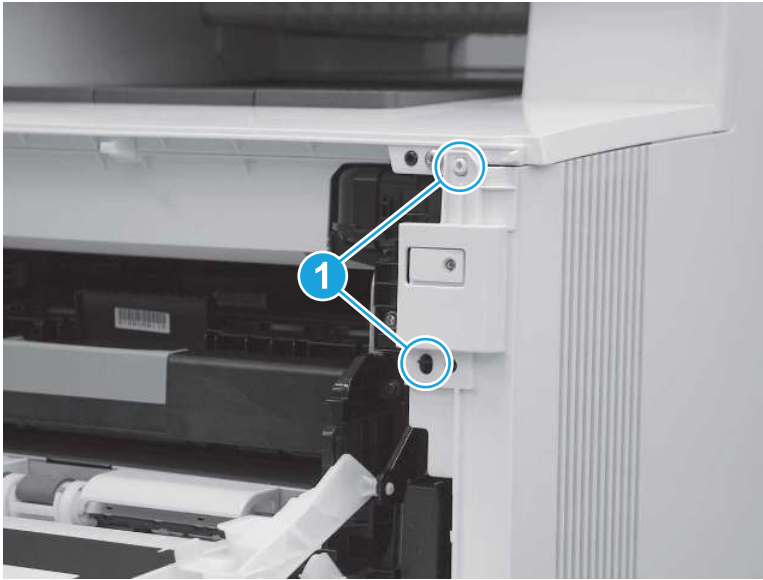
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-207** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-208** Release front upper tabs



8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

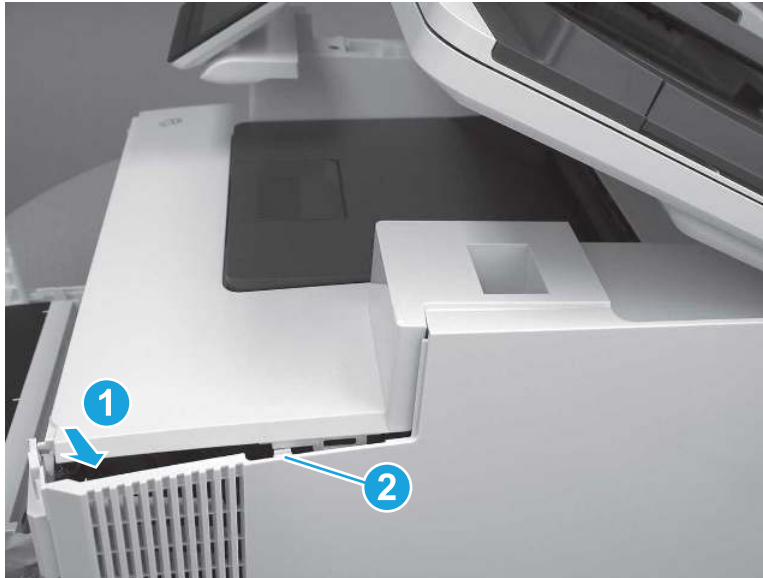
---

**Figure 5-209** Rotate the front of the cover



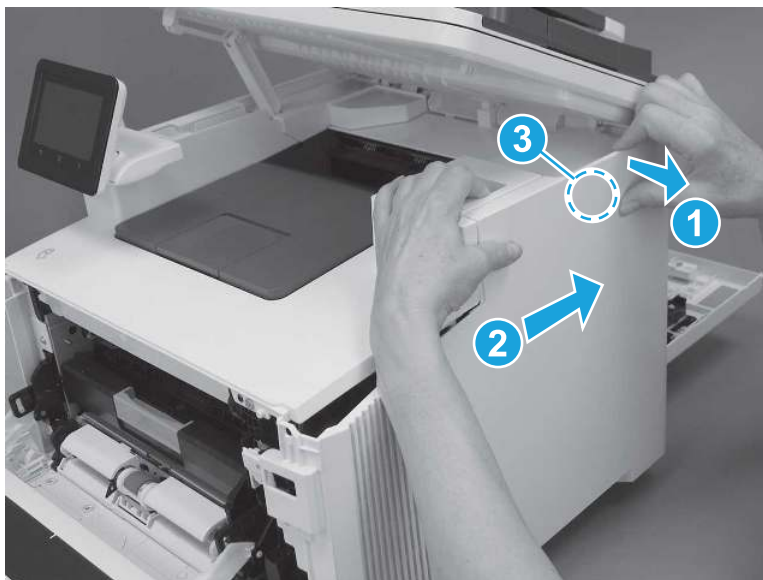
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

**Figure 5-210** Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-211** Release one tab and one hook



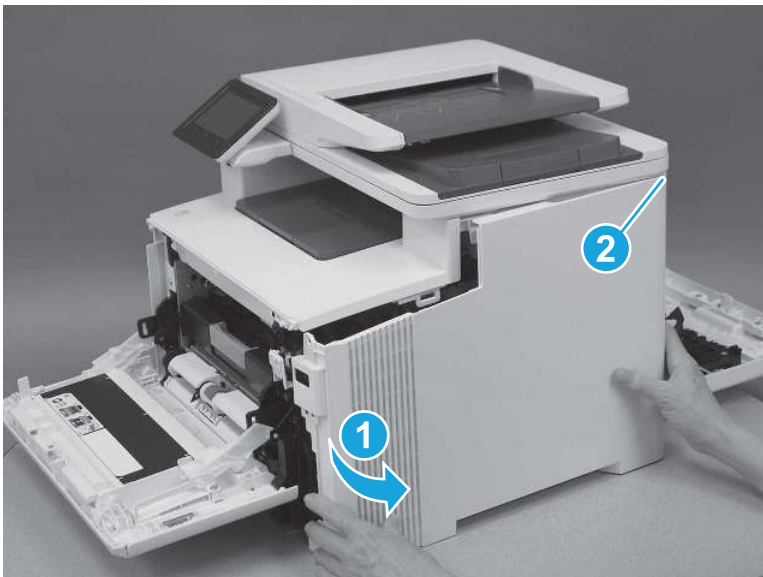
11. Lower the scanner.

**Figure 5-212** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-213** Remove the right cover



#### 4. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).



1. Raise the scanner.

Figure 5-214 Raise the scanner



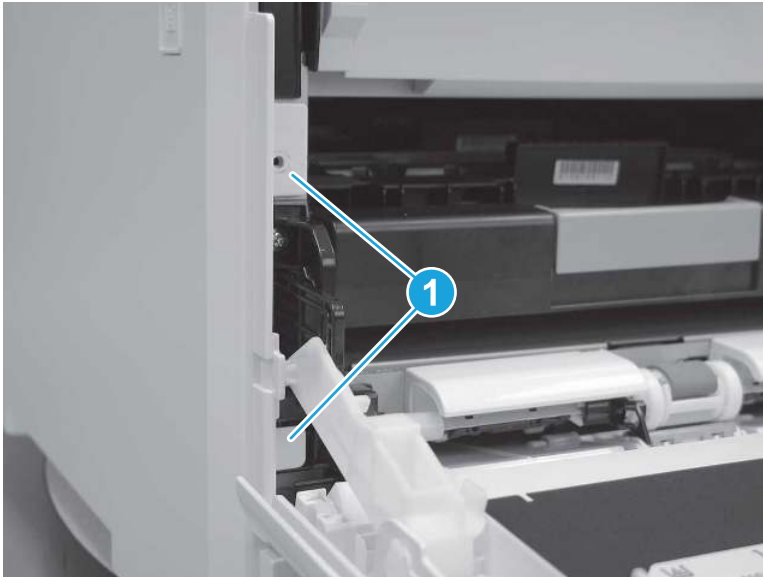
2. At the front of the printer, remove one screw (callout 1).

Figure 5-215 Remove one screw



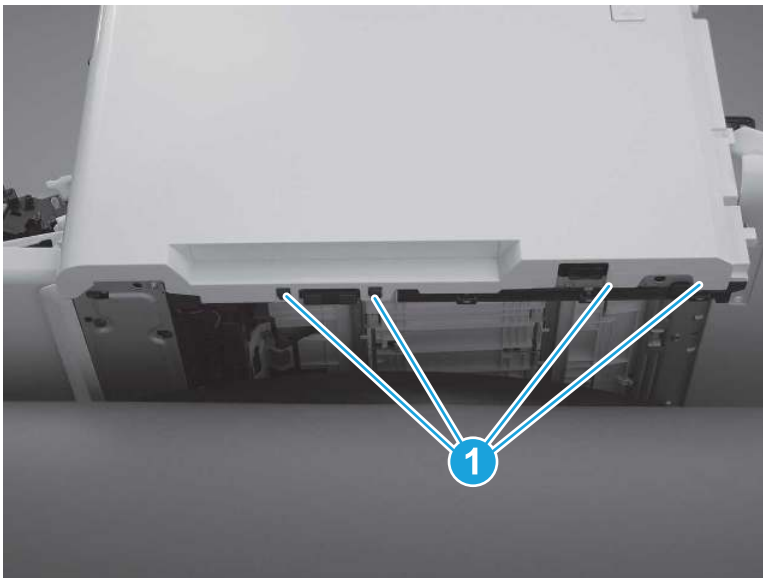
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-216** Release two tabs



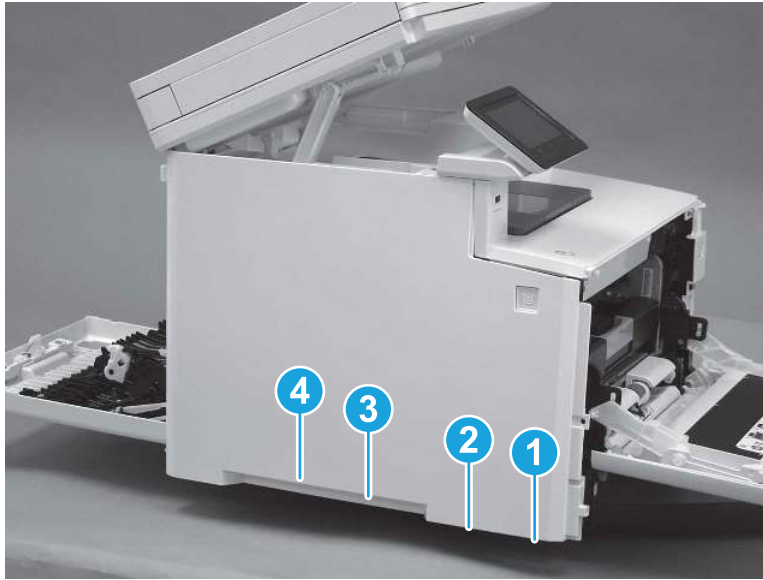
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-217** Locate the tabs



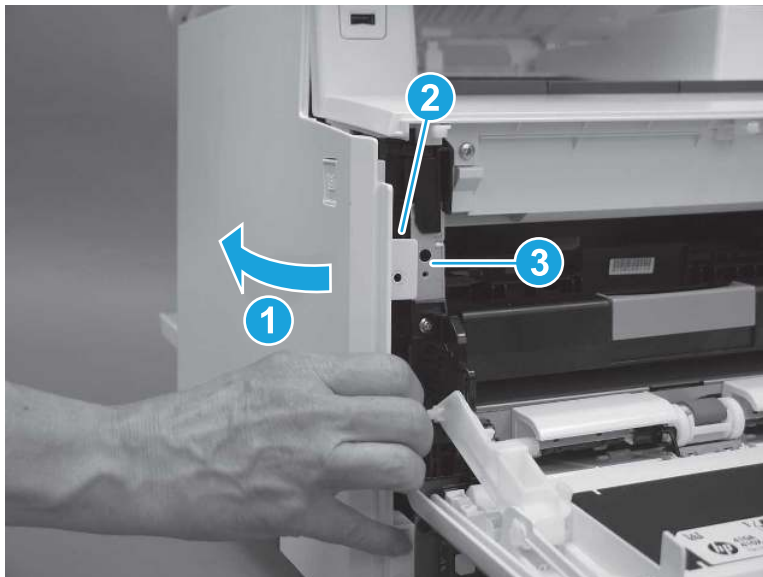
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-218** Release four tabs



6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

**Figure 5-219** Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-220** Release one tab and two hooks



8. Lower the scanner.

**Figure 5-221** Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

Figure 5-222 Remove the left cover

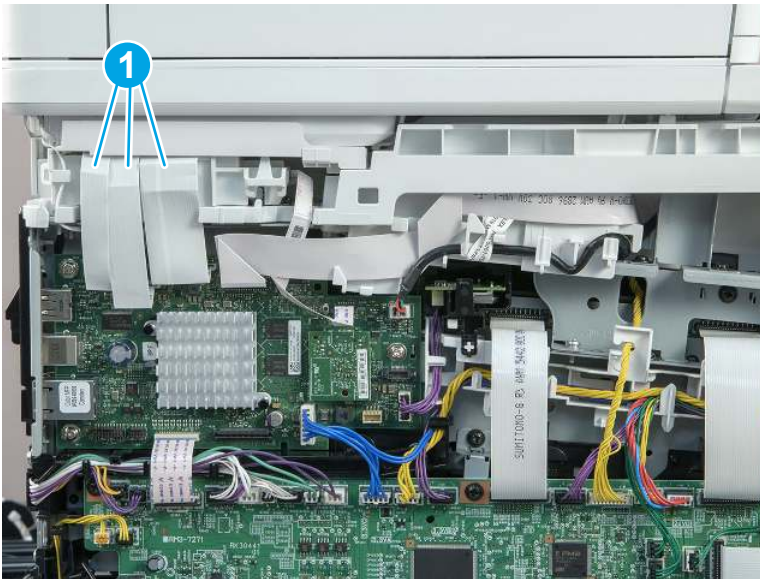


## 5. Remove the integrated scanner assembly

(MFP)

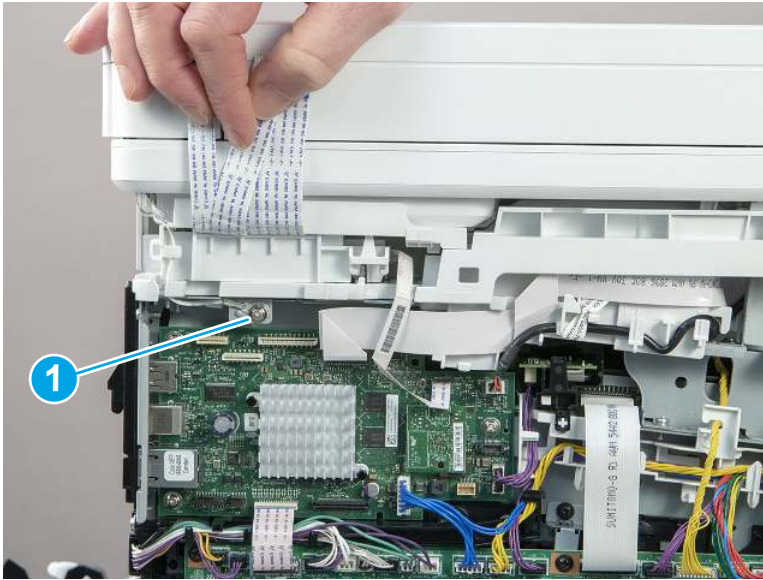
1. On the left side of the printer, disconnect three connectors (callout 1).

Figure 5-223 Disconnect three connectors



2. Raise the scanner cables up, and then remove one screw (callout 1) to release the ground wire.

**Figure 5-224** Remove one screw and release the ground wire



3. Raise the scanner.

**Figure 5-225** Raise the scanner



4. With the scanner lifted, release the tab (callout 1) on the scanner support arm pin from the slot and rotate the pin in the direction indicated.

**Figure 5-226** Release scanner support arm pin



5. Remove the scanner arm pin.

---

**⚠ CAUTION:** Once the scanner arm pin is removed, support the scanner with one hand at all times so that it does not fall backwards off of the printer.

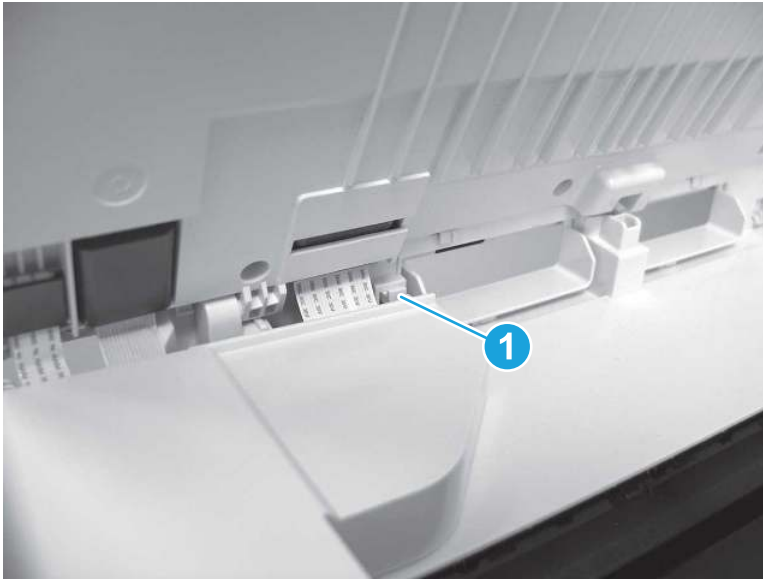
---

**Figure 5-227** Remove the pin



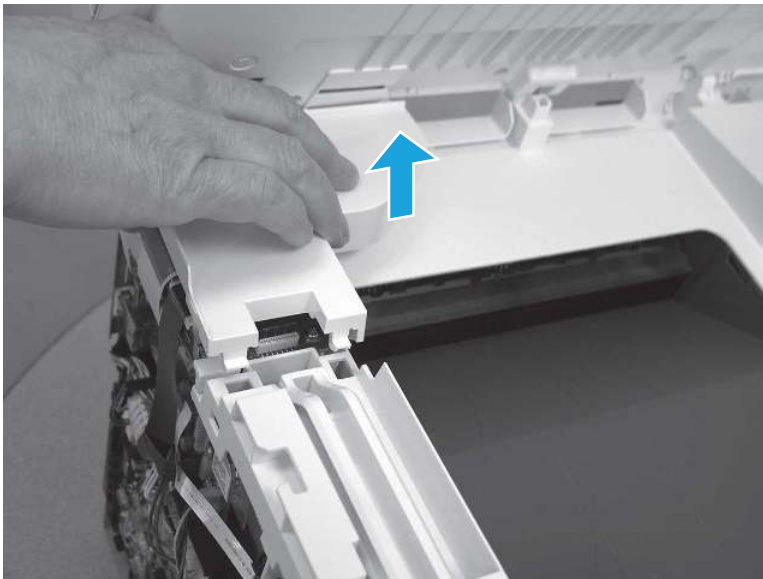
6. On the top of the printer, use a flat-blade screwdriver to release one tab (callout 1).

**Figure 5-228** Release one tab



7. Remove the scanner cable cover.

**Figure 5-229** Remove the scanner cable cover





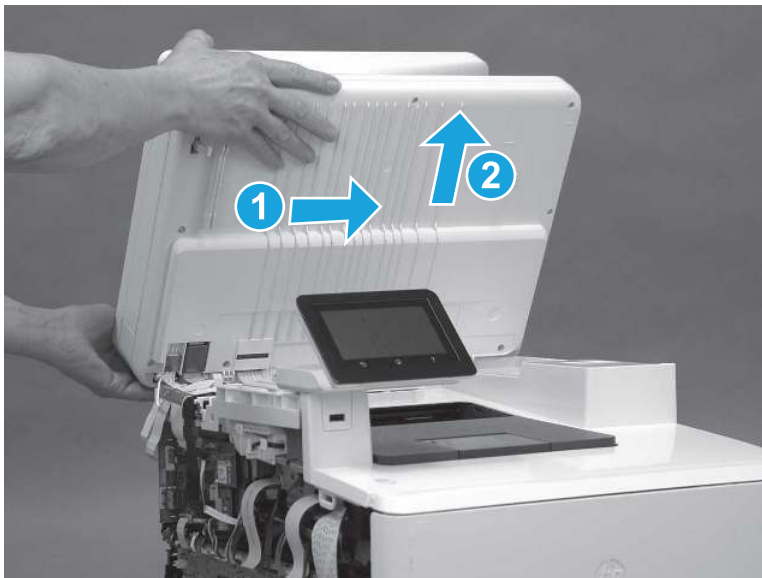
8. The scanner cables (callout 1) are held in place on the top cover with double-sided tape. Carefully release the cables from the top cover.

Figure 5-230 Release the cables



9. Open the scanner assembly fully, slide the assembly toward the right side of the printer, and then lift the assembly off of the printer.

Figure 5-231 Remove the scanner assembly




## 6. Remove the control panel display and mount base (MFP only)

Follow these steps to remove the control panel display and mount base (MFP only).

1. Open the integrated scanner assembly (ISA).

---

 **NOTE:** The ISA might already have been removed. If so, skip ISA related steps.

If the control panel is not fully tilted forward, tilt it forward now until it stops.

---

Figure 5-232 Open the ISA



2. Remove one screw (callout 1).

Figure 5-233 Remove one screw



3. Use a small flat-blade screwdriver to release two tabs (callout 1) on the control-panel mount cover.

Figure 5-234 Release two tabs



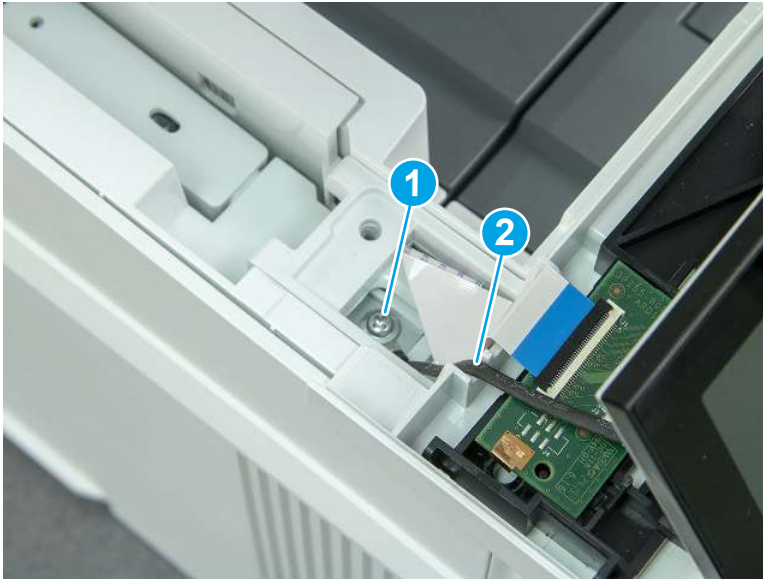
4. Rotate the control-panel mount cover up towards the control panel to release it, and then remove the cover.

Figure 5-235 Remove the cover



5. Remove one grounding screw (callout 1), and then move the ground cable (callout 2) out of the way.

**Figure 5-236** Remove one screw



6. Disconnect two FFC (callout 1).

**Figure 5-237** Disconnect two FFC



7. Release one tab (callout 1), and then remove the interconnect board (ICB).

**Figure 5-238** Remove the ICB



8. Remove two screws (callout 1), and then lift the control panel display and mount base together to remove them.

---

**CAUTION:** Carefully unfold the FFC and release it through the opening in the mount base.

---

**Figure 5-239** Remove two screws and remove the control panel assembly

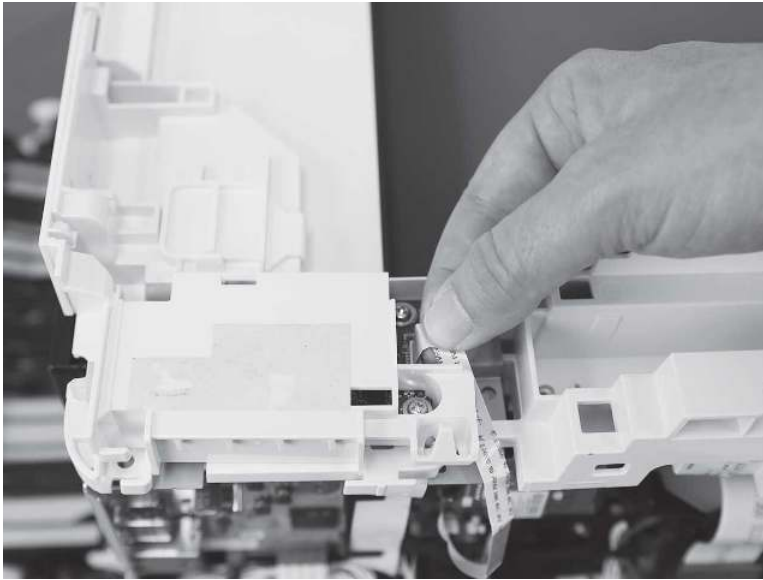


## 7. Remove the fax PCA (MFP)

Follow these steps to remove the fax PCA (MFP).

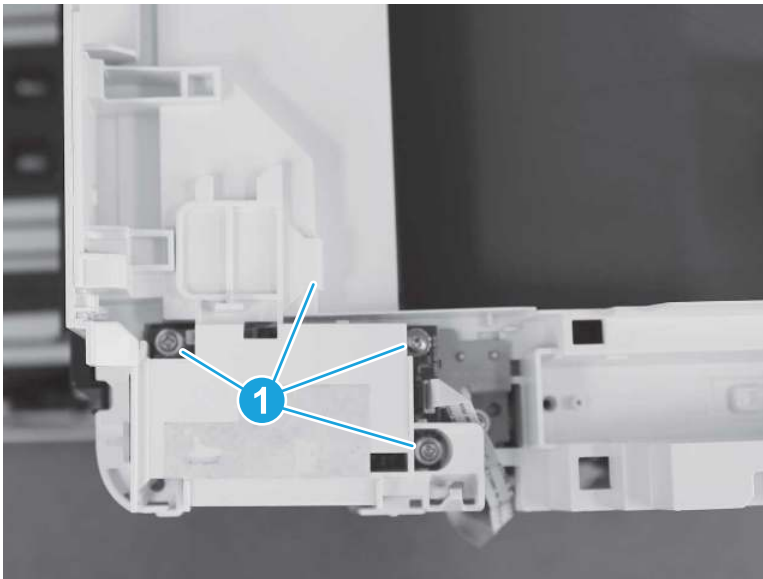
1. Disconnect one FFC cable from fax PCA.

**Figure 5-240** Disconnect one connector



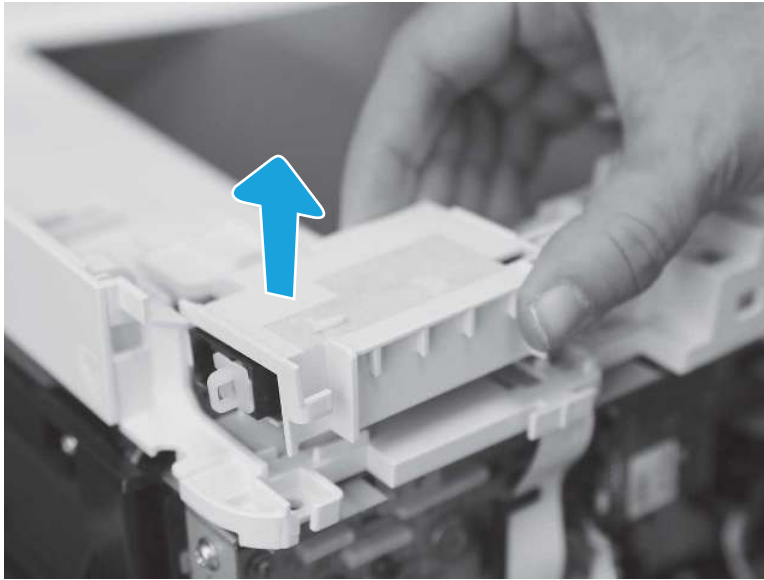
2. Remove three screws and release one tab (callout 1).

**Figure 5-241** Remove three screws and release one tab



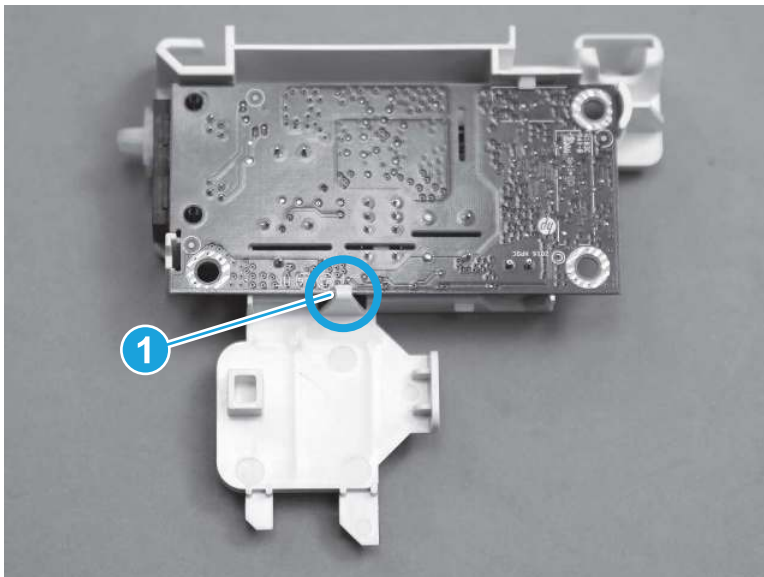
3. Lift up to remove the fax PCA.

Figure 5-242 Lift up to remove the fax PCA



4. **Optional step:** Release the tab (callout 1) on the back of the fax PCA to remove the PCA from the plastic holder.

Figure 5-243 Release one tab on the back of the fax PCA

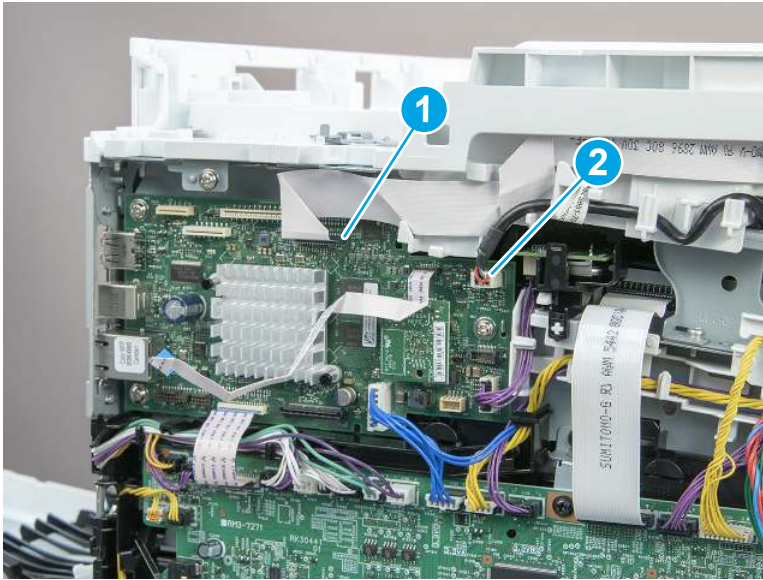


## 8. Remove the top cover (MFP)

Follow these steps to remove the top cover (MFP).

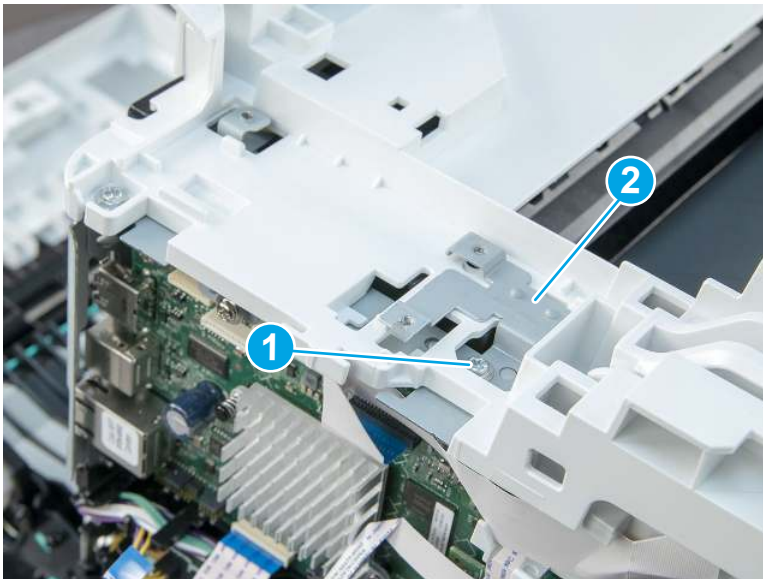
1. Disconnect one FFC (callout 1) and one connector (callout 2).

**Figure 5-244** Disconnect one FFC and one connector



2. On the top cover, remove one screw (callout 1) and the sheet metal plate (callout 2).

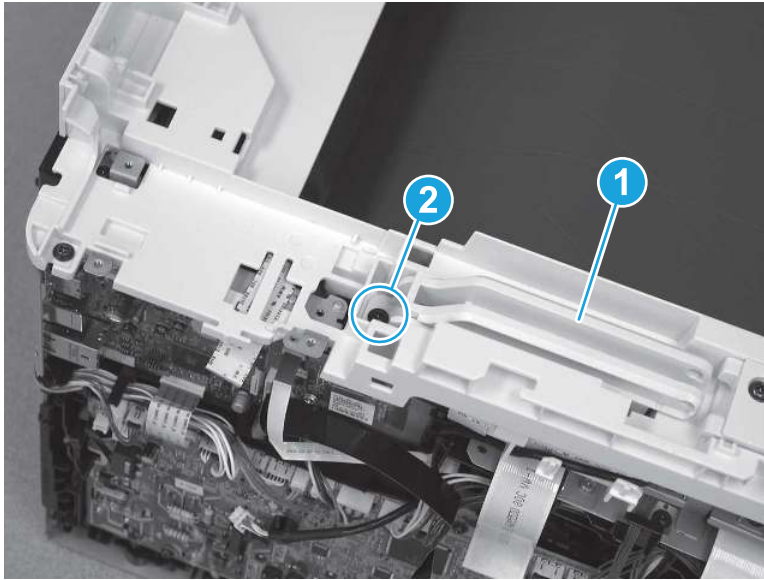
**Figure 5-245** Remove one screw and the sheet metal plate





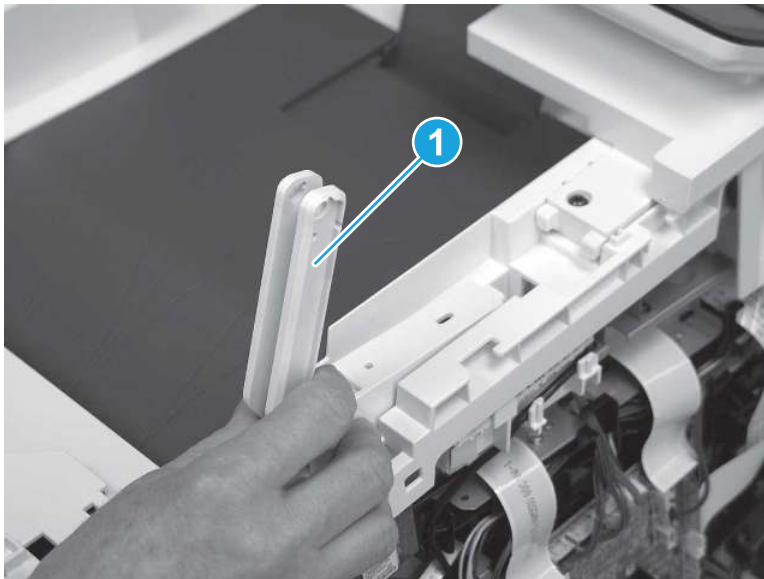
3. At the top of the printer, lower the scanner support arm (callout 1), and then remove one screw (callout 2).

**Figure 5-246** Lower the support arm and remove one screw



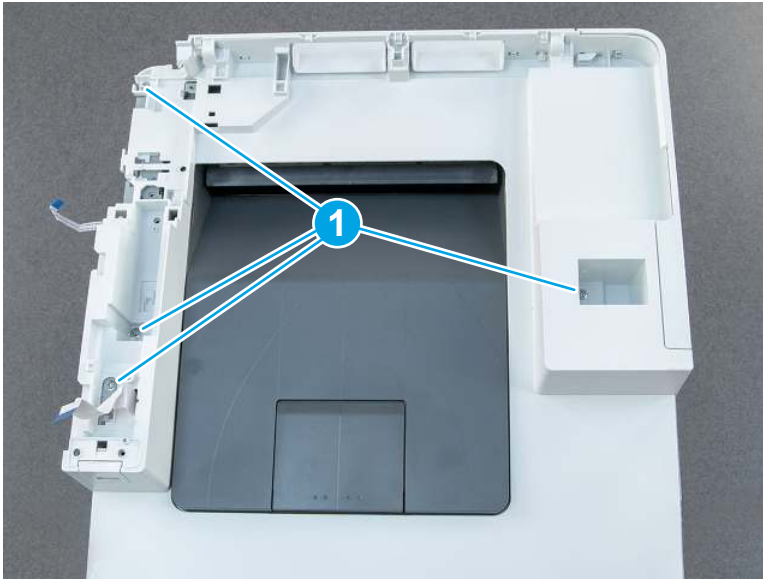
4. Remove the scanner support arm (callout 1).

**Figure 5-247** Remove the scanner support arm



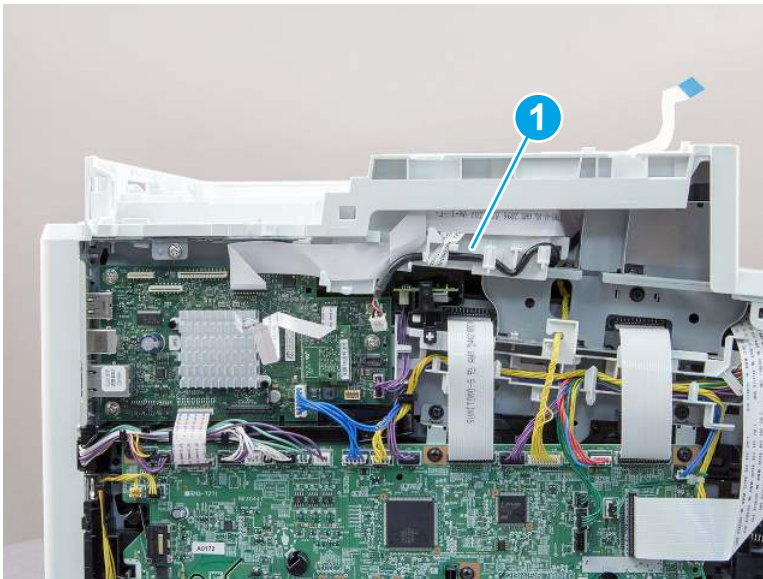
5. At the top of the printer, remove four screws (callout 1).

**Figure 5-248** Remove four screws



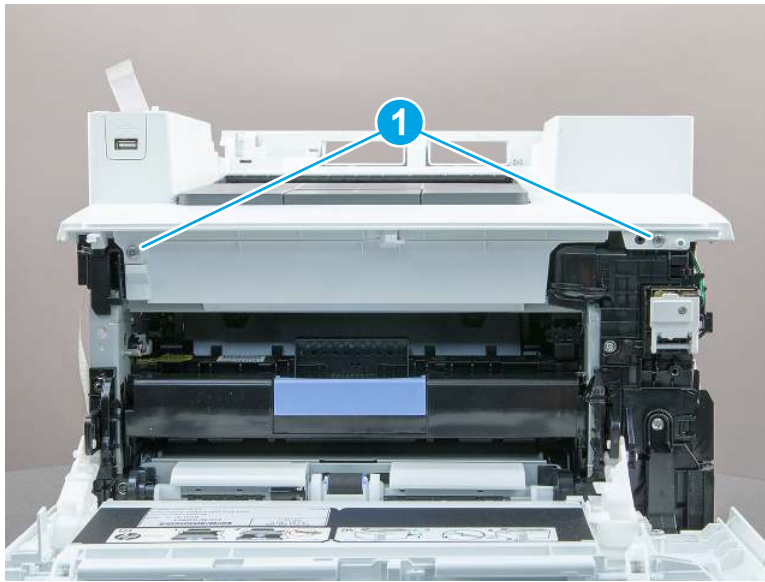
6. Remove the USB cable (callout 1) from the cable guides.

**Figure 5-249** Release the USB cable



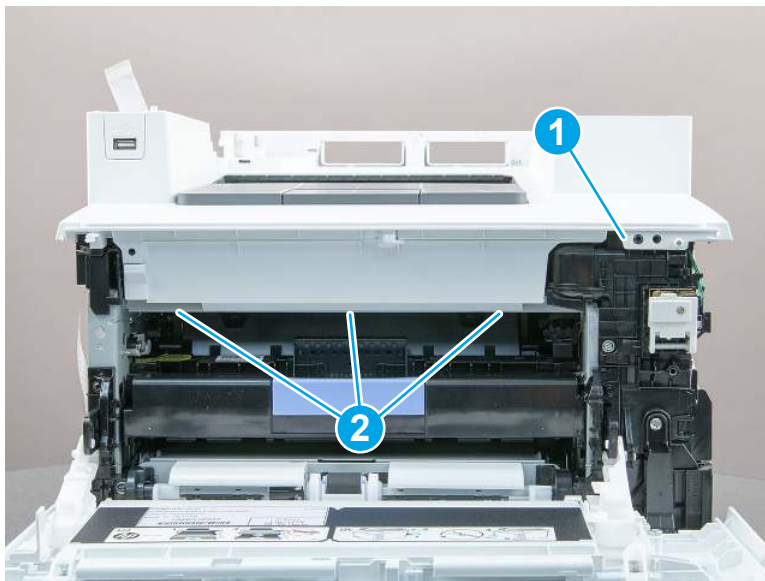
7. At the front of the printer, remove two screws (callout 1).

**Figure 5-250** Remove two screws



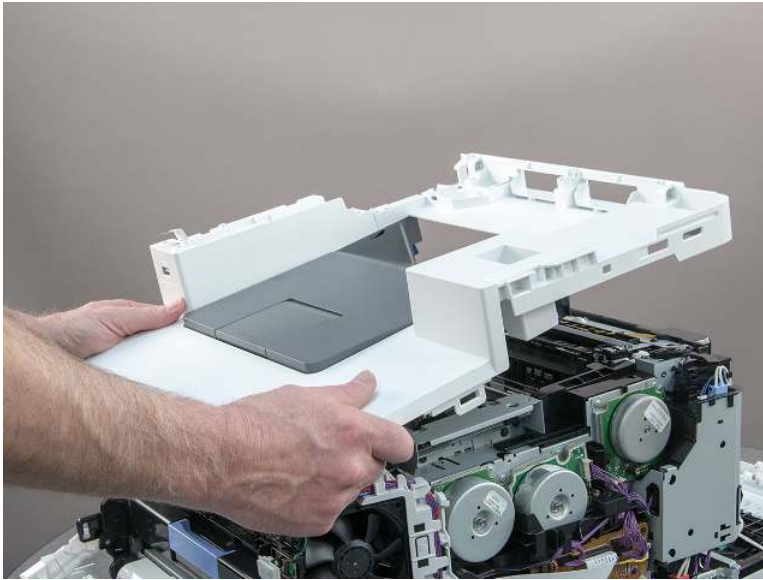
8. Release one retainer (callout 1), and then release three tabs (callout 2).

**Figure 5-251** Release one retainer and three tabs



9. Remove the top cover.

**Figure 5-252** Remove the top cover



## 9. Remove the walk-up USB port (MFP)

Follow these steps to remove the walk-up USB port (MFP).

1. Turn the top cover over, release the metal tab, and then lift up on the metal bracket to remove the USB port.

**Figure 5-253** Release the metal tab and lift to remove the USB



2. Remove one screw (callout 1), and then separate the USB connector from the bracket.

**Figure 5-254** Remove one screw and remove the USB connector



## 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.

---

# Removal and replacement: Internal parts and assemblies (base printer)

Learn how to remove and replace the base printer internal parts and assemblies.

## Removal and replacement: Control panel mount top cover (MFP)

Learn how to remove and replace the MFP control panel mount cover.

[View a video of how to remove and replace the control panel mount top cover \(MFP\).](#)

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](http://www.hp.com/buy/parts).

Table 5-19 Part information

Part number	Part description
3PZ55-67902	Cover, top control panel mount

### Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

### After performing service

#### Turn the printer power on

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

### Post service test

Make sure that toner toner-cartridge door correctly opens and closes.

Make sure that the printer initializes to a **Ready** state.

## 1. Remove the control panel mount cover (MFP only)

Follow these steps to remove the control panel mount cover (MFP only).

1. Open the integrated scanner assembly (ISA).

 **NOTE:** If the control panel is not fully tilted forward, tilt it forward now until it stops.

**Figure 5-255** Open the ISA



2. Remove one screw (callout 1).

**Figure 5-256** Remove one screw



3. Use a small flat-blade screwdriver to release two tabs (callout 1) on the control-panel mount cover.

Figure 5-257 Release two tabs



4. Rotate the control-panel mount cover up towards the control panel to release it, and then remove the cover.

Figure 5-258 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: Control panel assembly (MFP)

Learn how to remove and replace the control panel assembly (MFP).

[View a video of how to remove and replace the control panel \(MFP\).](#)

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](http://www.hp.com/buy/parts).

**Table 5-20** Part information

Part number	Part description
3PZ55-67901	Control panel assembly

### Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

### After performing service

### Turn the printer power on

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

### Post service test

Make sure that toner toner-cartridge door correctly opens and closes.

Make sure that the printer initializes to a **Ready** state.

## 1. Remove the control panel mount cover (MFP only)

Follow these steps to remove the control panel mount cover (MFP only).

1. Open the integrated scanner assembly (ISA).

---

 **NOTE:** If the control panel is not fully tilted forward, tilt it forward now until it stops.

---

**Figure 5-259** Open the ISA



2. Remove one screw (callout 1).

**Figure 5-260** Remove one screw



3. Use a small flat-blade screwdriver to release two tabs (callout 1) on the control-panel mount cover.

**Figure 5-261** Release two tabs



4. Rotate the control-panel mount cover up towards the control panel to release it, and then remove the cover.

**Figure 5-262** Remove the cover

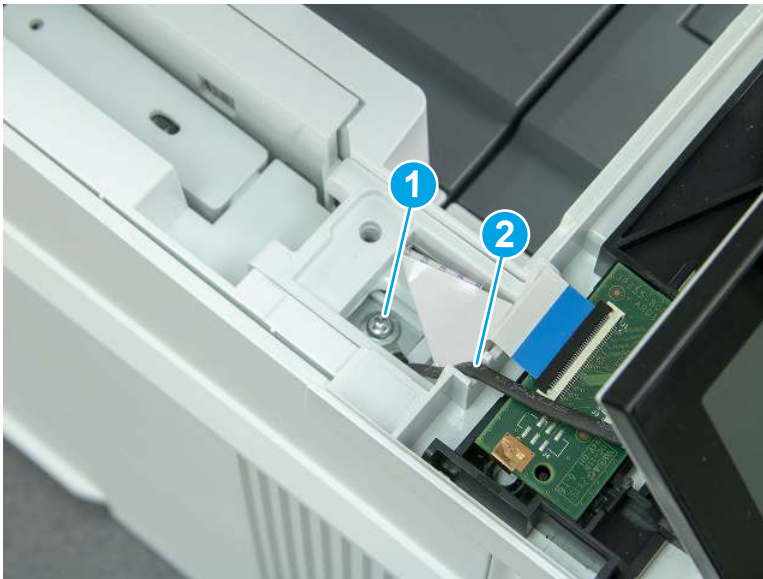


## 2. Remove the control panel (MFP only)

Follow these steps to remove the control panel (MFP only).

1. Remove one grounding screw (callout 1), and then move the ground cable (callout 2) out of the way.

**Figure 5-263** Remove one screw



2. Lift the latch to disconnect one FFC (callout 1).

**Figure 5-264** Disconnect one flat cable



3. Slide the control panel assembly to the right.

**Figure 5-265** Slide the control panel display



4. Rotate the assembly toward the front of the printer, and then remove the assembly.

**Figure 5-266** Remove the control-panel assembly



### 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.

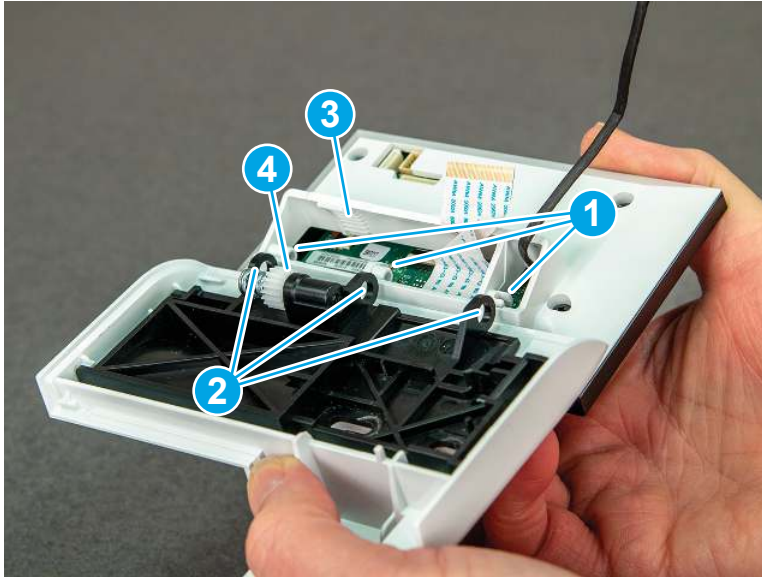
### 4. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Install the control panel assembly.

- ▲ When installing the MFP control panel assembly, align the hinge pins (callout 1) on the assembly with the hinge guides (callout 2) on the control panel base, and then align the grooves (callout 3) on the control panel assembly with the teeth (callout 4) on the gear on the control panel base.

**Figure 5-267** Install the control panel assembly



## Removal and replacement: Control panel interconnect board (MFP)

Learn how to remove and replace the MFP control panel interconnect board (ICB).

[View a video of how to remove and replace the control panel ICB \(MFP\).](#)

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](http://www.hp.com/buy/parts).

**Table 5-21** Part information

Part number	Part description
3PZ55-67903	CP interconnect board and ground clip kit

### Required tools

- Small flat-blade screwdriver
- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

#### After performing service

##### Turn the printer power on

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

#### Post service test

Make sure that toner toner-cartridge door correctly opens and closes.

Make sure that the printer initializes to a **Ready** state.

### 1. Remove the control panel mount cover (MFP only)

Follow these steps to remove the control panel mount cover (MFP only).

1. Open the integrated scanner assembly (ISA).

---

 **NOTE:** If the control panel is not fully tilted forward, tilt it forward now until it stops.

---

**Figure 5-268** Open the ISA





2. Remove one screw (callout 1).

**Figure 5-269** Remove one screw



3. Use a small flat-blade screwdriver to release two tabs (callout 1) on the control-panel mount cover.

**Figure 5-270** Release two tabs



4. Rotate the control-panel mount cover up towards the control panel to release it, and then remove the cover.

**Figure 5-271** Remove the cover

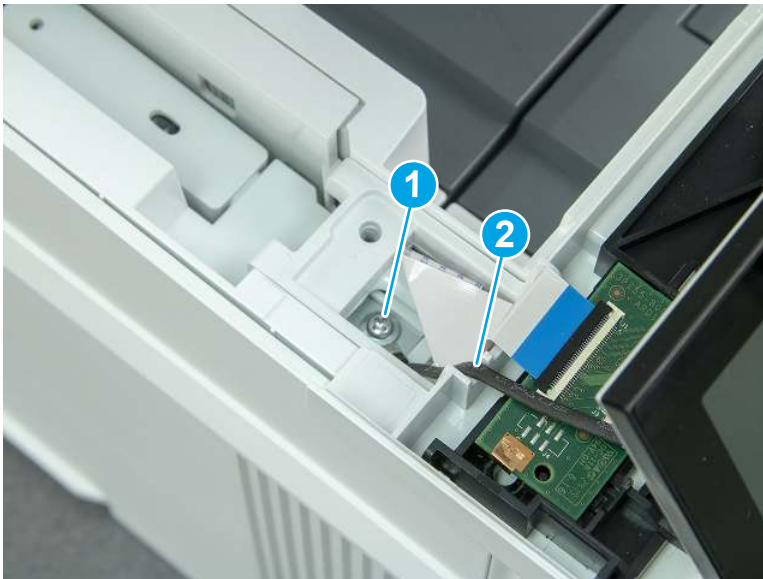


## 2. Remove the control panel interconnect board (ICB)

Follow these steps to remove the control panel interconnect board (ICB).

1. Remove one grounding screw (callout 1), and then move the ground cable (callout 2) out of the way.

**Figure 5-272** Remove one screw



2. Disconnect two FFC (callout 1).

**Figure 5-273** Disconnect two FFC



3. Release one tab (callout 1), and then remove the ICB.

**Figure 5-274** Remove the ICB



### 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: Control panel mount base and interconnect board chassis (MFP)

Learn how to remove and replace the MFP control panel mount base and the interconnect board (ICB) chassis mount.

[View a video of how to remove and replace the control panel mount base and the ICB chassis mount.](#)

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](http://www.hp.com/buy/parts).

**Table 5-22** Part information

Part number	Part description
3PZ55-67904	Control panel ICB chassis mount
3PZ55-67984	Control panel mount base

### Required tools

- Small flat-blade screwdriver

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

#### After performing service

##### Turn the printer power on

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

#### Post service test

Make sure that toner toner-cartridge door correctly opens and closes.

Make sure that the printer initializes to a **Ready** state.

### 1. Remove the control panel mount cover (MFP only)

Follow these steps to remove the control panel mount cover (MFP only).

1. Open the integrated scanner assembly (ISA).

---

 **NOTE:** If the control panel is not fully tilted forward, tilt it forward now until it stops.

---

**Figure 5-275** Open the ISA



2. Remove one screw (callout 1).

Figure 5-276 Remove one screw



3. Use a small flat-blade screwdriver to release two tabs (callout 1) on the control-panel mount cover.

Figure 5-277 Release two tabs



4. Rotate the control-panel mount cover up towards the control panel to release it, and then remove the cover.

**Figure 5-278** Remove the cover

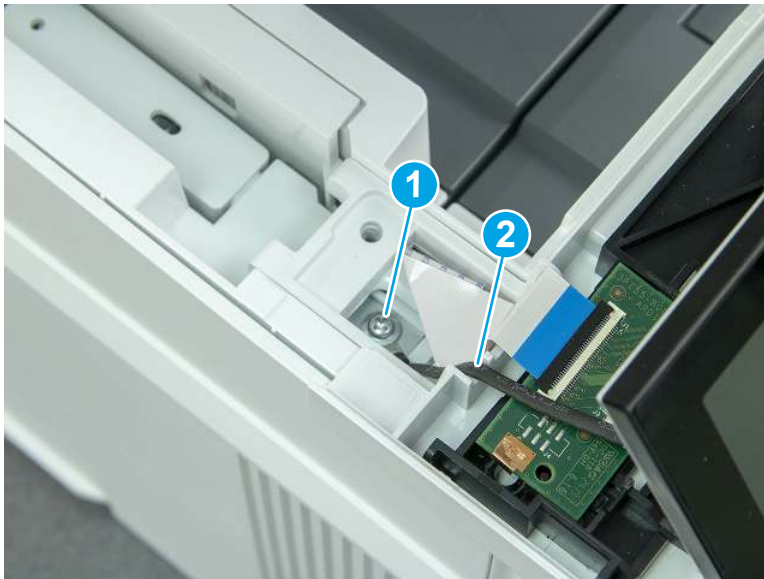


## 2. Remove the control panel (MFP only)

Follow these steps to remove the control panel (MFP only).

1. Remove one grounding screw (callout 1), and then move the ground cable (callout 2) out of the way.

**Figure 5-279** Remove one screw



2. Lift the latch to disconnect one FFC (callout 1).

**Figure 5-280** Disconnect one flat cable



3. Slide the control panel assembly to the right.

**Figure 5-281** Slide the control panel display





4. Rotate the assembly toward the front of the printer, and then remove the assembly.

**Figure 5-282** Remove the control-panel assembly

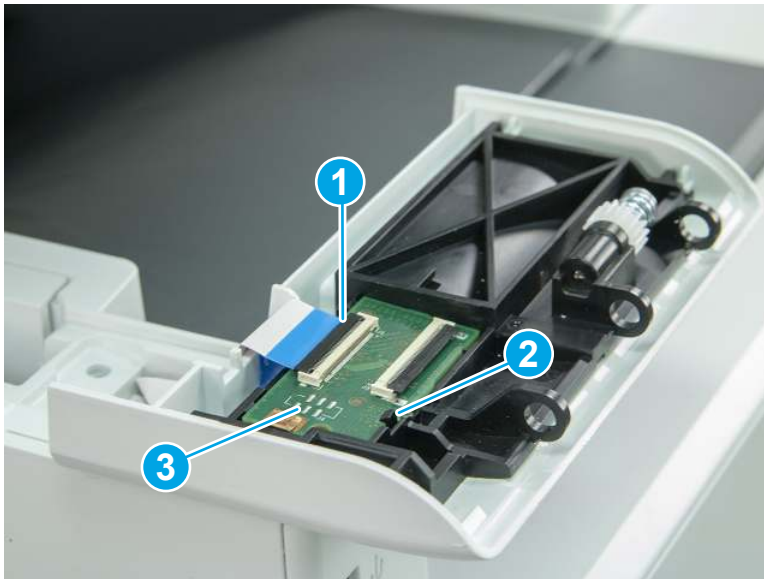


### 3. Remove the control panel mount base (MFP only)

Follow these steps to remove the control panel mount base (MFP only).

1. Release one connector (callout 1), release one tab (callout 2), and then remove the interconnect board (ICB) (callout 3).

**Figure 5-283** Remove the ICB



2. Remove two screws (callout 1).

**Figure 5-284** Remove two screws



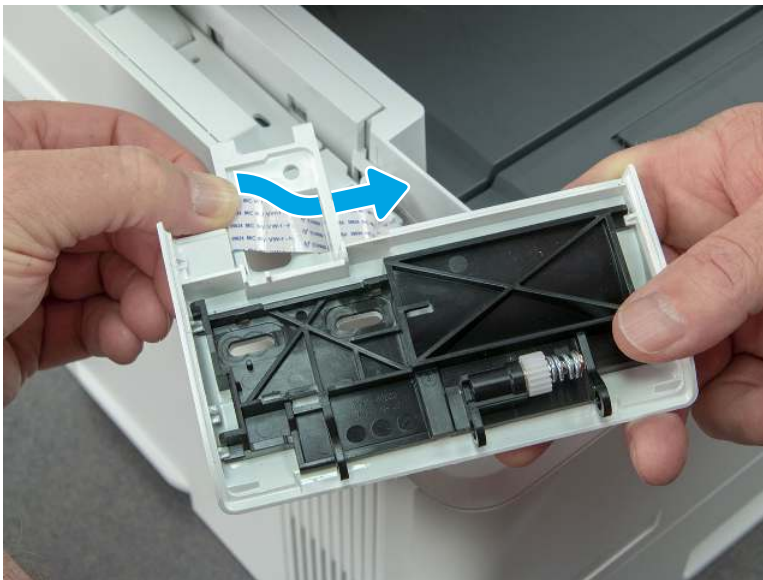
3. Lift the control panel mount base to remove it.

---

**⚠ CAUTION:** Carefully unfold the flat cables and release them through the opening in the mount base.

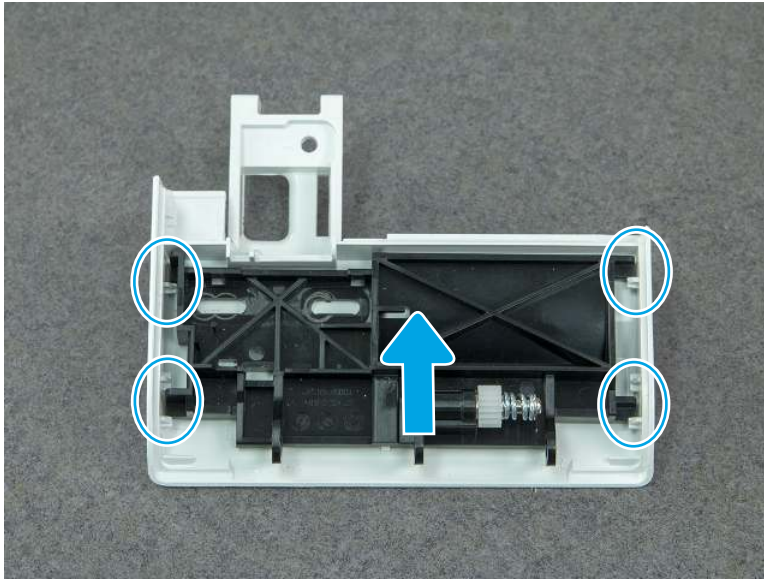
---

**Figure 5-285** Remove control panel mount base



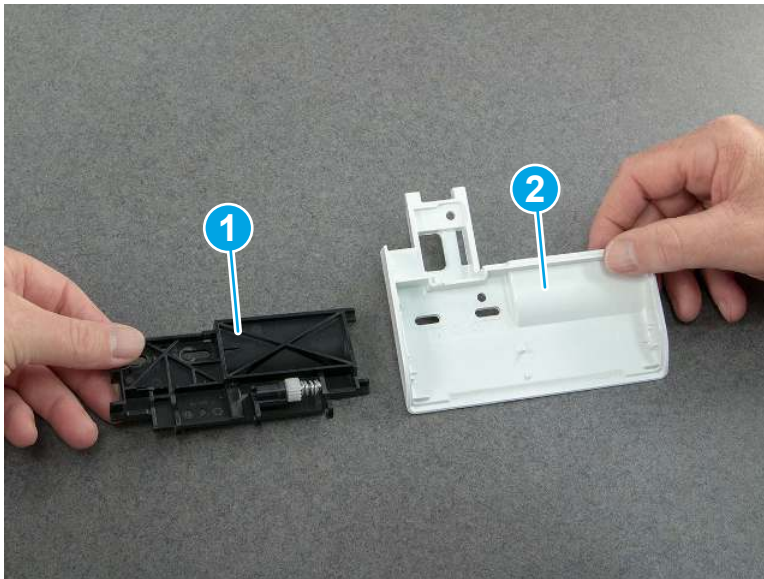
4. Slide the chassis mount assembly toward the back of the control panel base to release it from four bosses.

**Figure 5-286** Release the chassis mount assembly



5. Separate the chassis mount assembly (callout 1) from the mount base (callout 2).

**Figure 5-287** Remove the chassis mount assembly



#### 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.

---

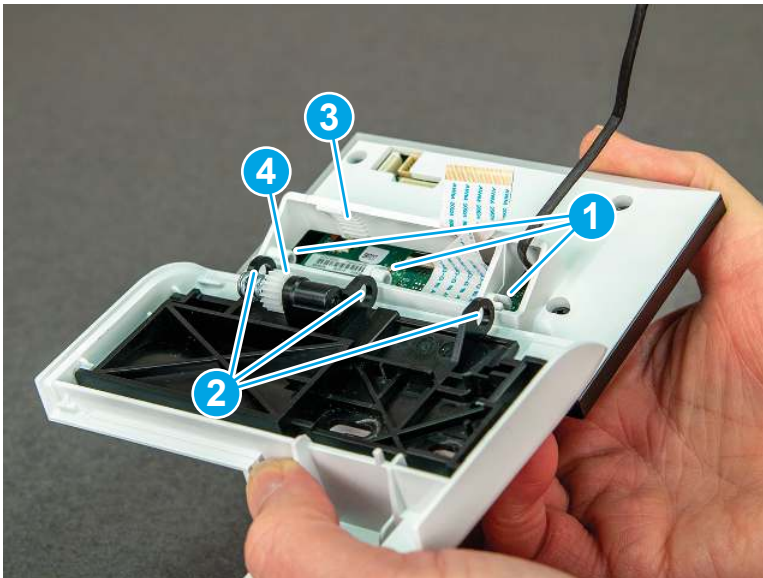
## 5. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Install the control panel assembly.

- ▲ When installing the MFP control panel assembly, align the hinge pins (callout 1) on the assembly with the hinge guides (callout 2) on the control panel base, and then align the grooves (callout 3) on the control panel assembly with the teeth (callout 4) on the gear on the control panel base.

**Figure 5-288** Install the control panel assembly



## Removal and replacement: Control panel cable (MFP)

Learn how to remove and replace the control panel cable (MFP).

[View a video of how to remove and replace the control panel cable \(MFP\).](#)

Mean time to repair: 39 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](http://www.hp.com/buy/parts).

**Table 5-23** Part information

Part number	Part description
3QA55-67903	Cable, flexible flat control panel to frmtr

## 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 Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-289** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

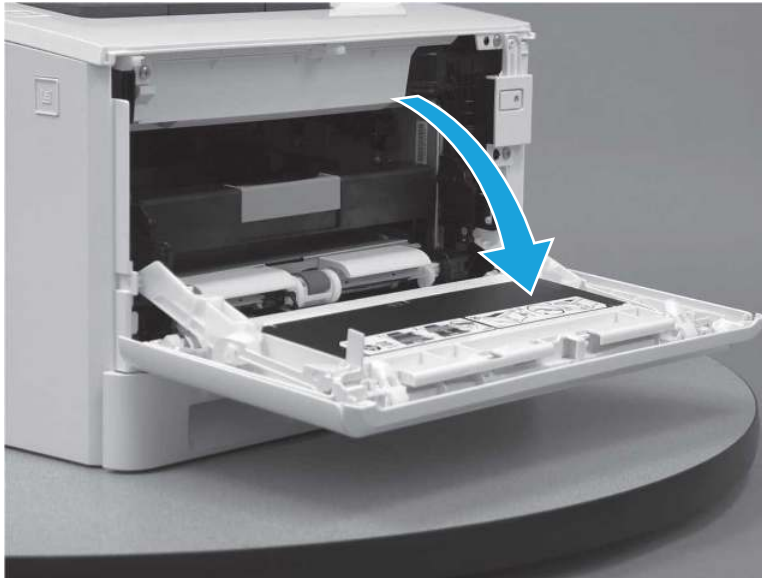
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-290** Release the front door



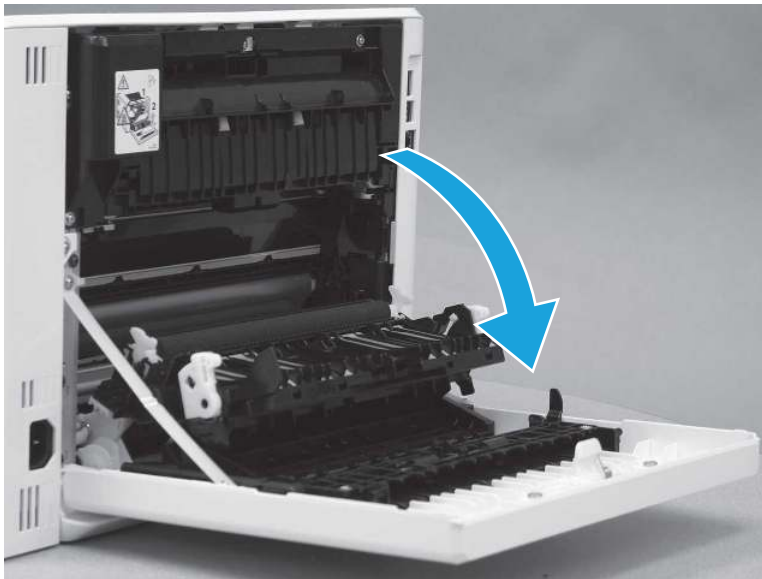
2. Open the front door.

**Figure 5-291** Open the front door



3. Open the duplexing door.

**Figure 5-292** Open the duplexer door



### 3. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

**Figure 5-293** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-294** Remove one screw





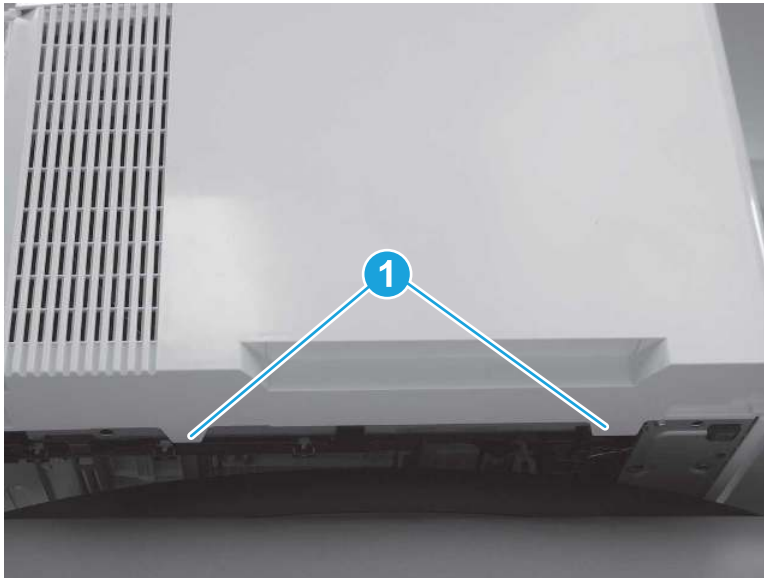
3. At the front of the printer, remove one screw (callout 1).

Figure 5-295 Remove one screw



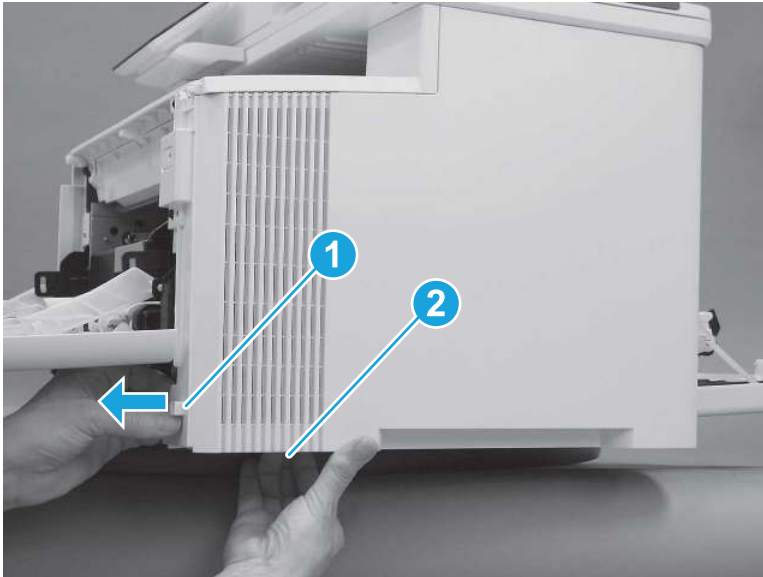
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

Figure 5-296 Locate the tabs



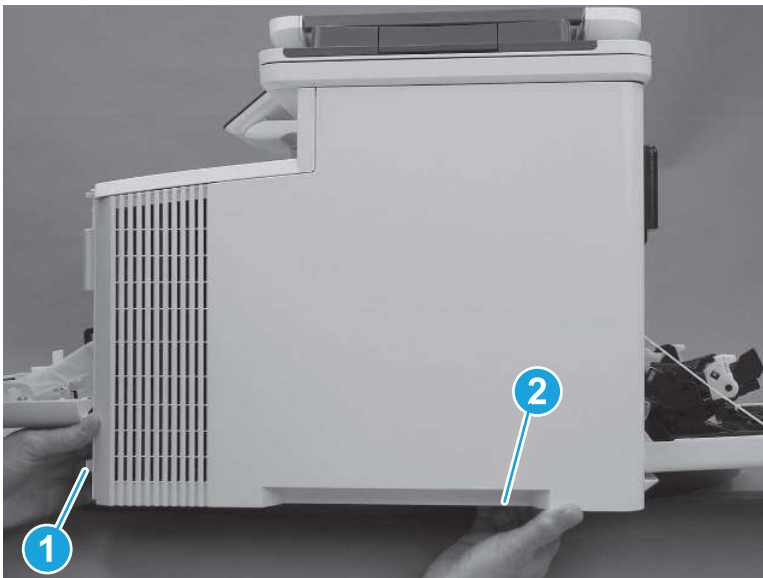
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-297** Release front lower tabs



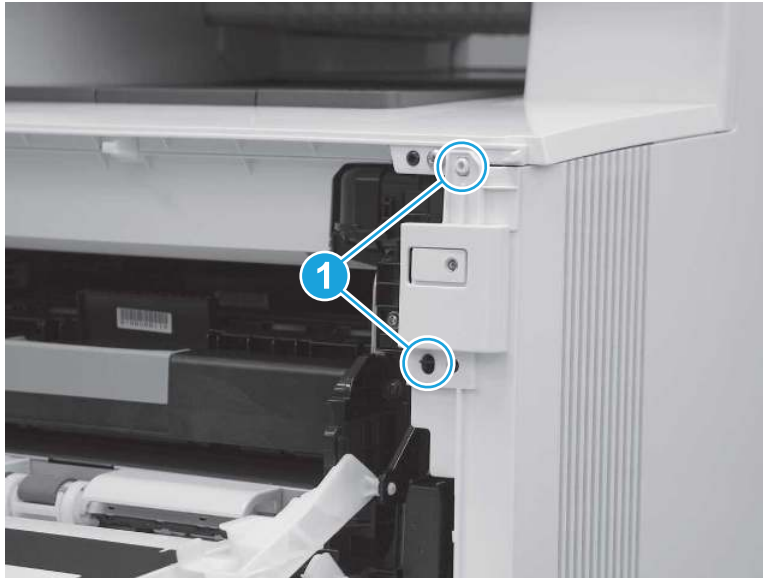
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-298** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-299** Release front upper tabs



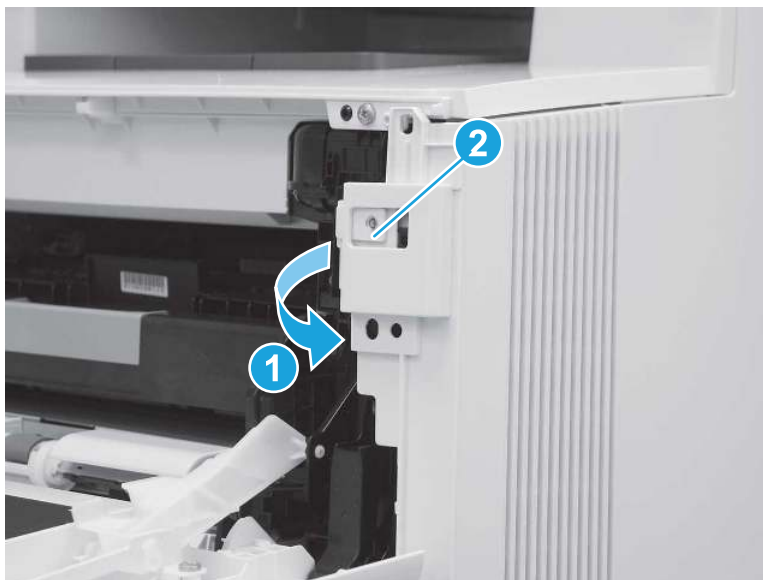
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

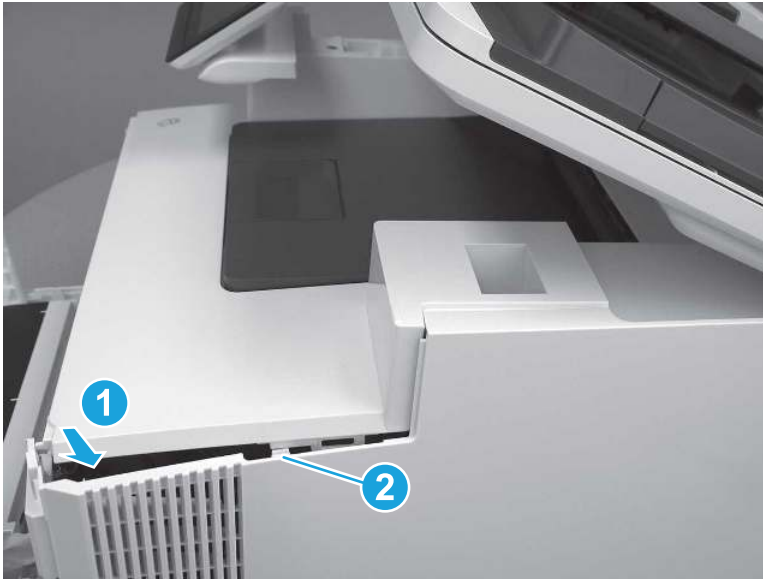
---

**Figure 5-300** Rotate the front of the cover



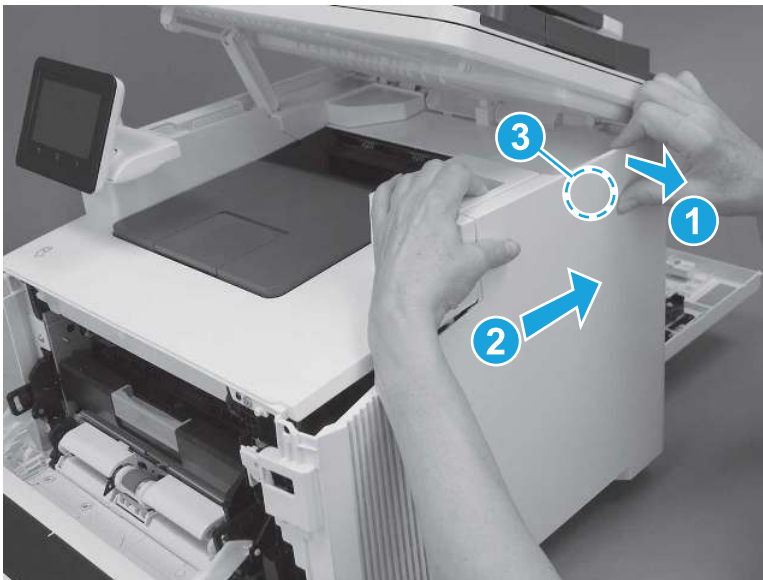
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

**Figure 5-301** Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-302** Release one tab and one hook



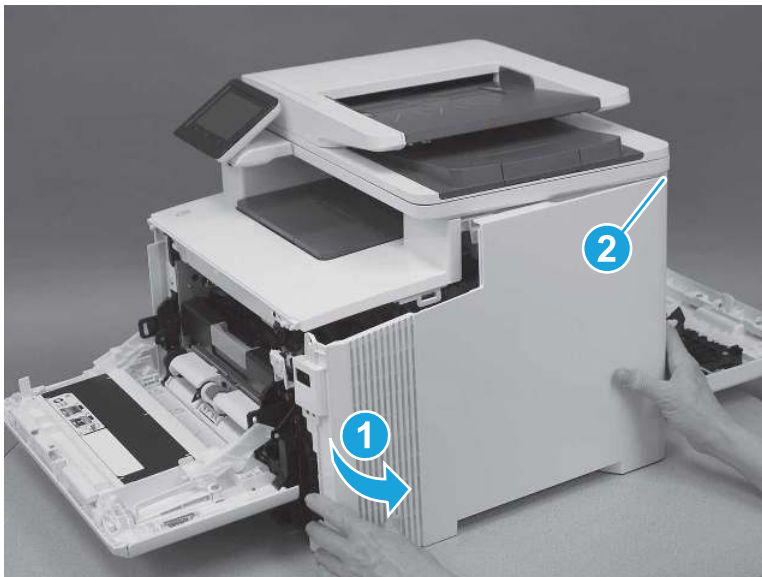
11. Lower the scanner.

**Figure 5-303** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-304** Remove the right cover



#### 4. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

1. Raise the scanner.

**Figure 5-305** Raise the scanner



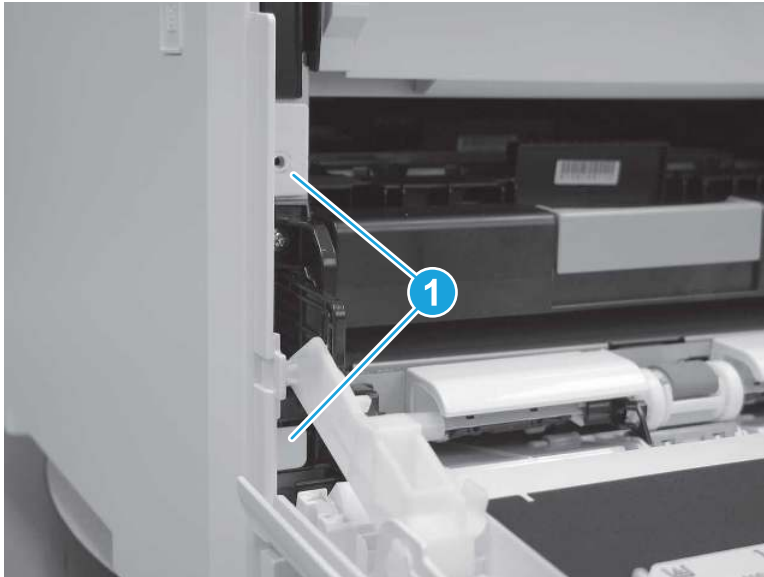
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-306** Remove one screw



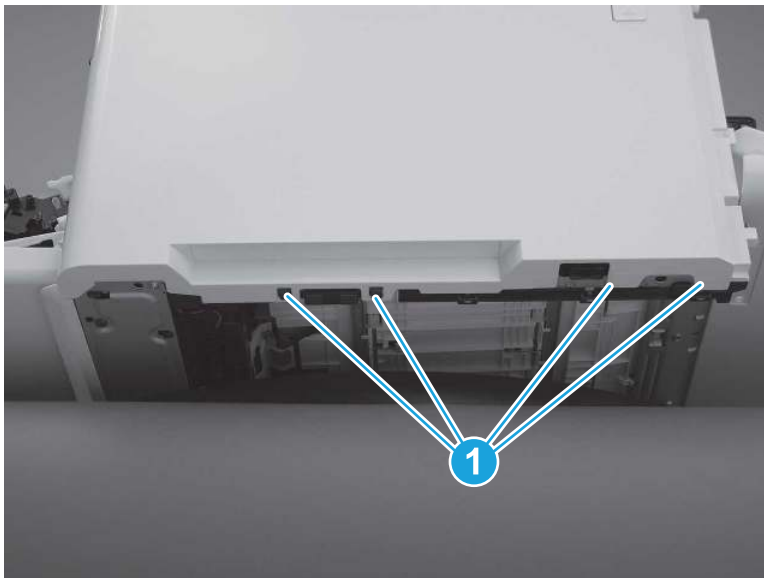
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-307** Release two tabs



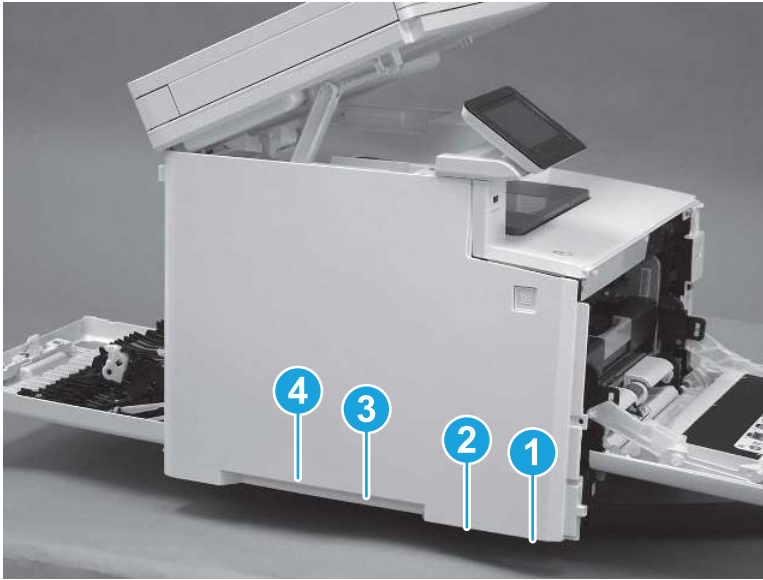
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-308** Locate the tabs



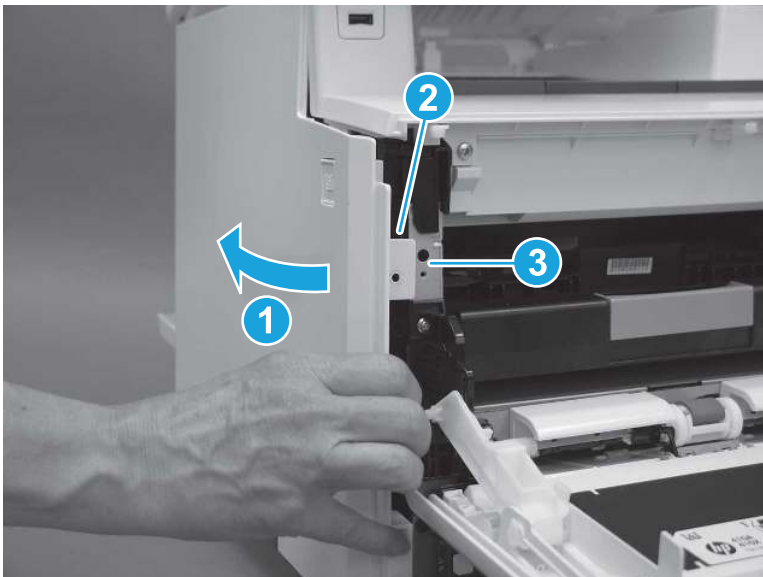
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-309** Release four tabs



6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

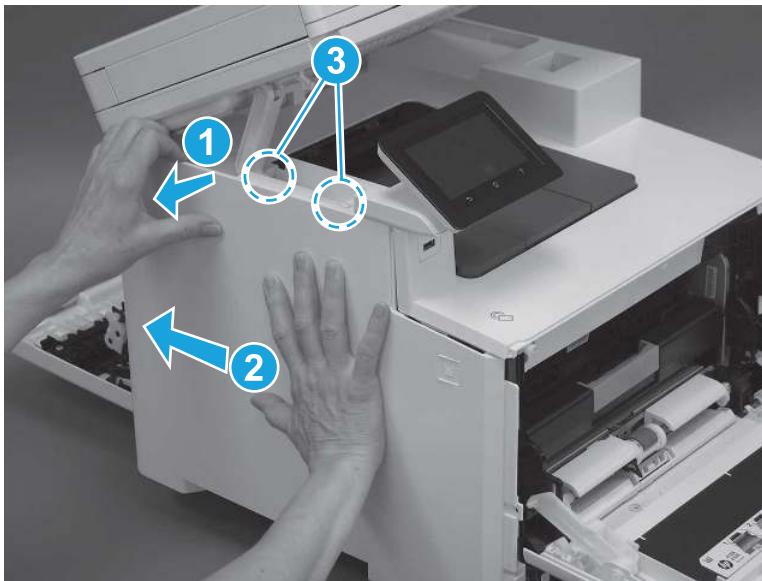
**Figure 5-310** Rotate the cover





7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-311** Release one tab and two hooks



8. Lower the scanner.

**Figure 5-312** Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

**Figure 5-313** Remove the left cover

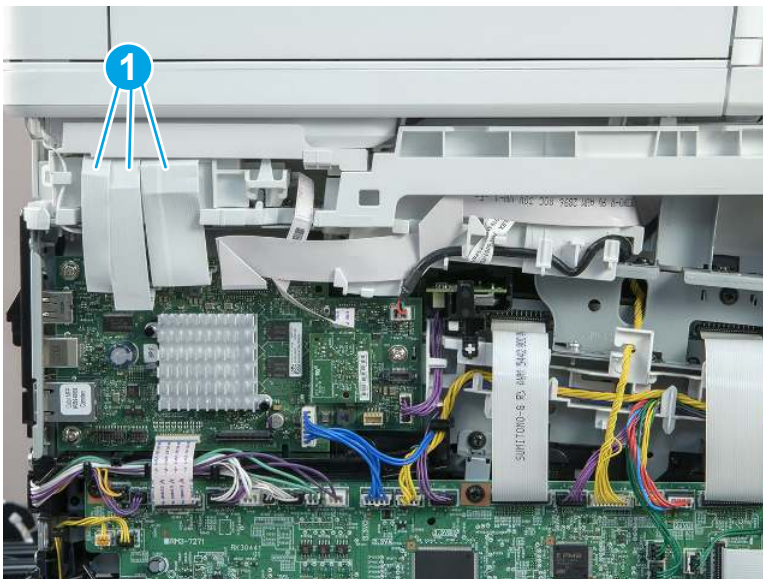


## 5. Remove the integrated scanner assembly

(MFP)

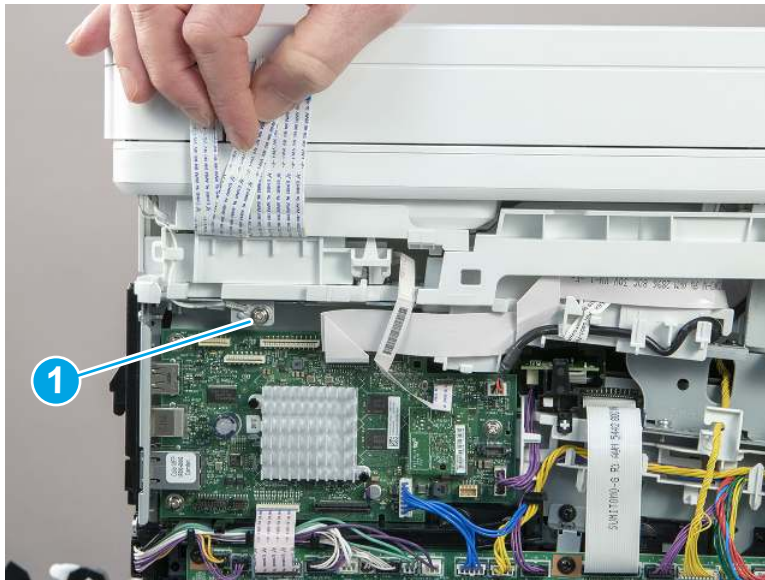
1. On the left side of the printer, disconnect three connectors (callout 1).

**Figure 5-314** Disconnect three connectors



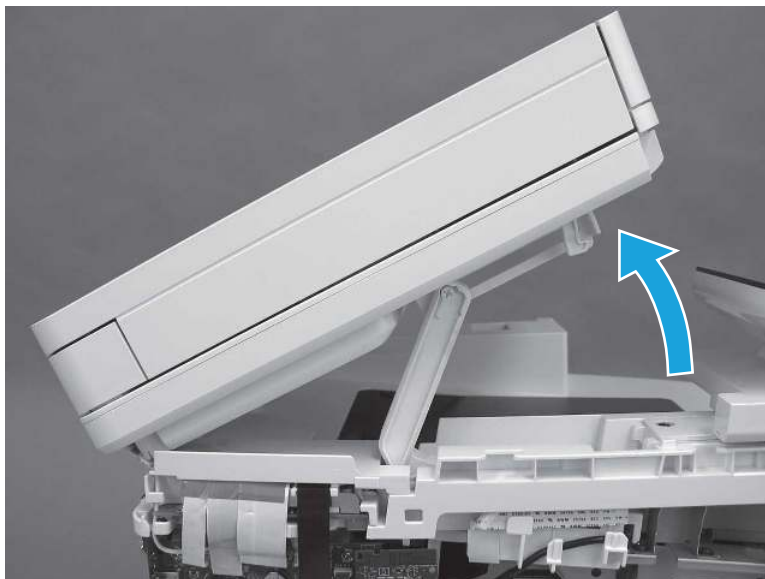
2. Raise the scanner cables up, and then remove one screw (callout 1) to release the ground wire.

**Figure 5-315** Remove one screw and release the ground wire



3. Raise the scanner.

**Figure 5-316** Raise the scanner



4. With the scanner lifted, release the tab (callout 1) on the scanner support arm pin from the slot and rotate the pin in the direction indicated.

**Figure 5-317** Release scanner support arm pin



5. Remove the scanner arm pin.

---

**⚠ CAUTION:** Once the scanner arm pin is removed, support the scanner with one hand at all times so that it does not fall backwards off of the printer.

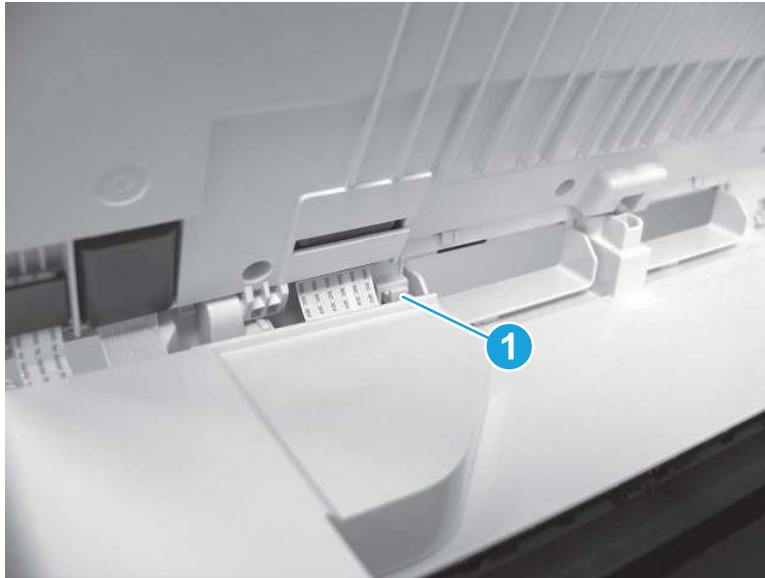
---

**Figure 5-318** Remove the pin



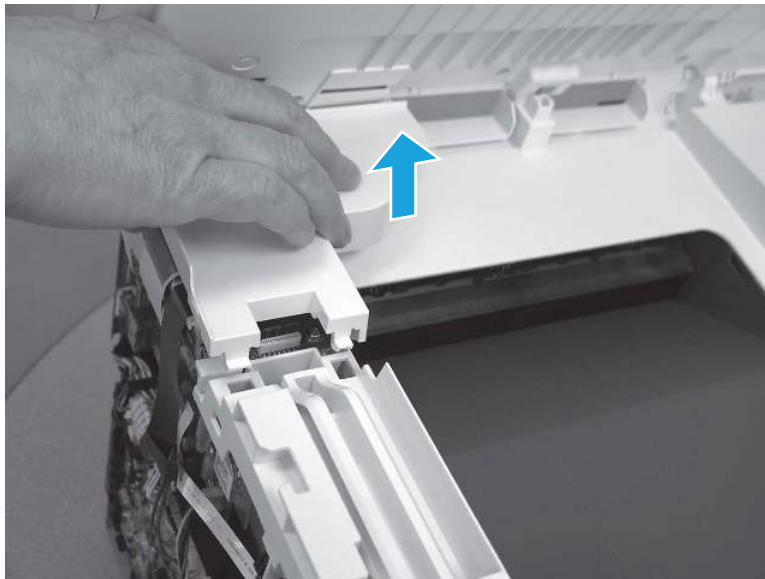
6. On the top of the printer, use a flat-blade screwdriver to release one tab (callout 1).

**Figure 5-319** Release one tab



7. Remove the scanner cable cover.

**Figure 5-320** Remove the scanner cable cover



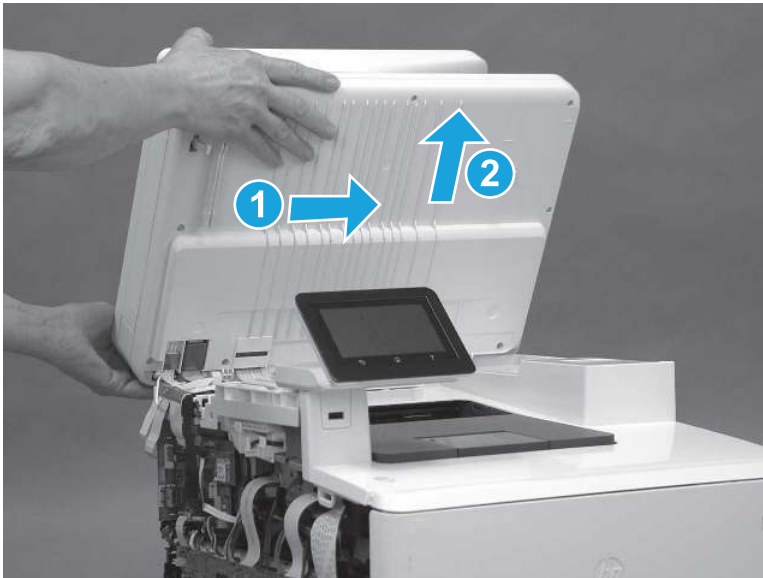
8. The scanner cables (callout 1) are held in place on the top cover with double-sided tape. Carefully release the cables from the top cover.

**Figure 5-321** Release the cables



9. Open the scanner assembly fully, slide the assembly toward the right side of the printer, and then lift the assembly off of the printer.

**Figure 5-322** Remove the scanner assembly




## 6. Remove the control panel display and mount base (MFP only)

Follow these steps to remove the control panel display and mount base (MFP only).

1. Open the integrated scanner assembly (ISA).

---

 **NOTE:** The ISA might already have been removed. If so, skip ISA related steps.

If the control panel is not fully tilted forward, tilt it forward now until it stops.

---

Figure 5-323 Open the ISA



2. Remove one screw (callout 1).

Figure 5-324 Remove one screw



3. Use a small flat-blade screwdriver to release two tabs (callout 1) on the control-panel mount cover.

**Figure 5-325** Release two tabs



4. Rotate the control-panel mount cover up towards the control panel to release it, and then remove the cover.

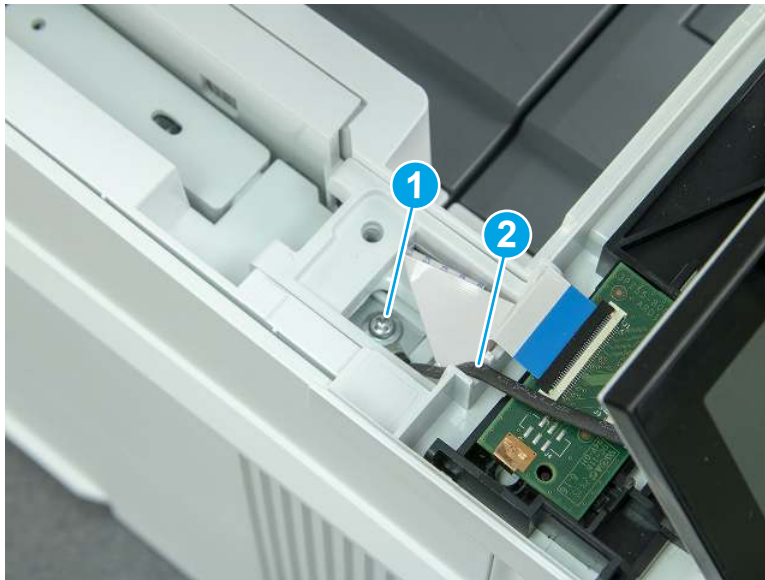
**Figure 5-326** Remove the cover





5. Remove one grounding screw (callout 1), and then move the ground cable (callout 2) out of the way.

**Figure 5-327** Remove one screw



6. Disconnect two FFC (callout 1).

**Figure 5-328** Disconnect two FFC



7. Release one tab (callout 1), and then remove the interconnect board (ICB).

**Figure 5-329** Remove the ICB



8. Remove two screws (callout 1), and then lift the control panel display and mount base together to remove them.

---

**CAUTION:** Carefully unfold the FFC and release it through the opening in the mount base.

---

**Figure 5-330** Remove two screws and remove the control panel assembly

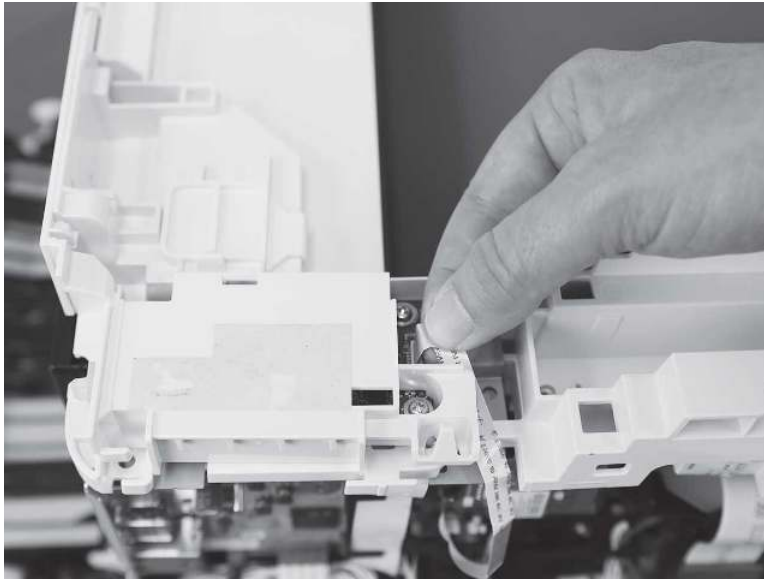


## 7. Remove the fax PCA (MFP)

Follow these steps to remove the fax PCA (MFP).

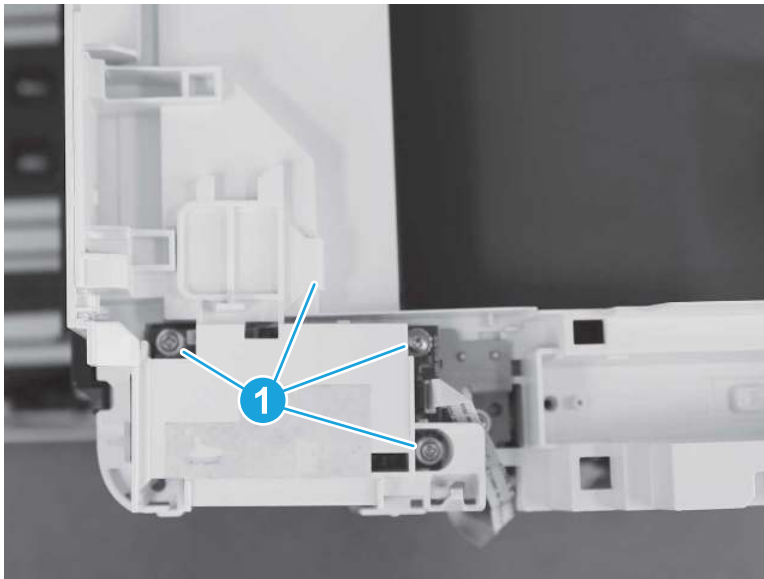
1. Disconnect one FFC cable from fax PCA.

**Figure 5-331** Disconnect one connector



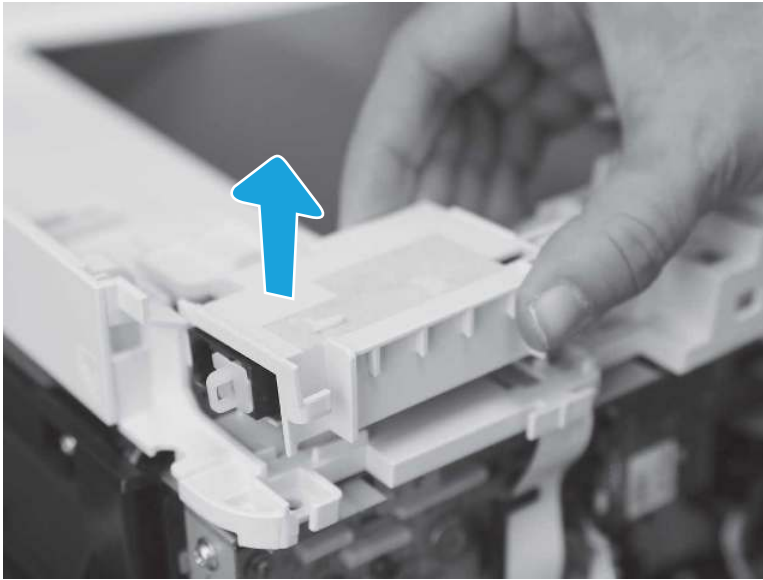
2. Remove three screws and release one tab (callout 1).

**Figure 5-332** Remove three screws and release one tab



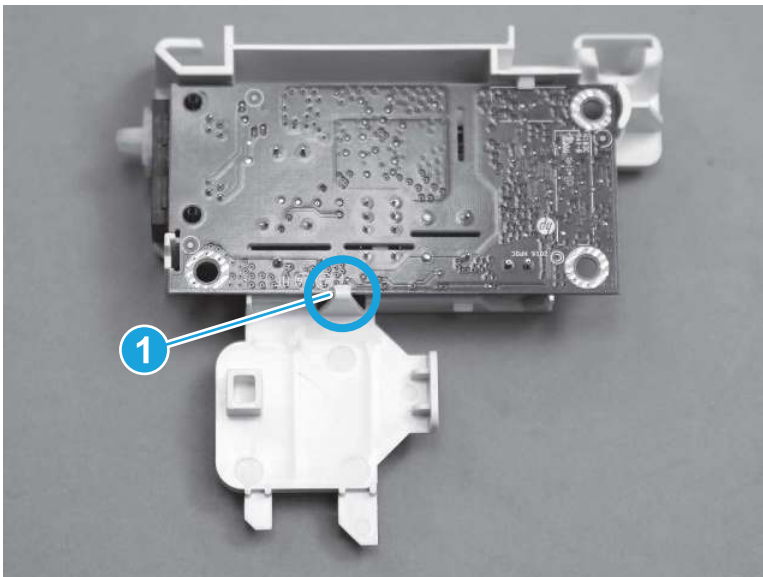
3. Lift up to remove the fax PCA.

**Figure 5-333** Lift up to remove the fax PCA



4. **Optional step:** Release the tab (callout 1) on the back of the fax PCA to remove the PCA from the plastic holder.

**Figure 5-334** Release one tab on the back of the fax PCA

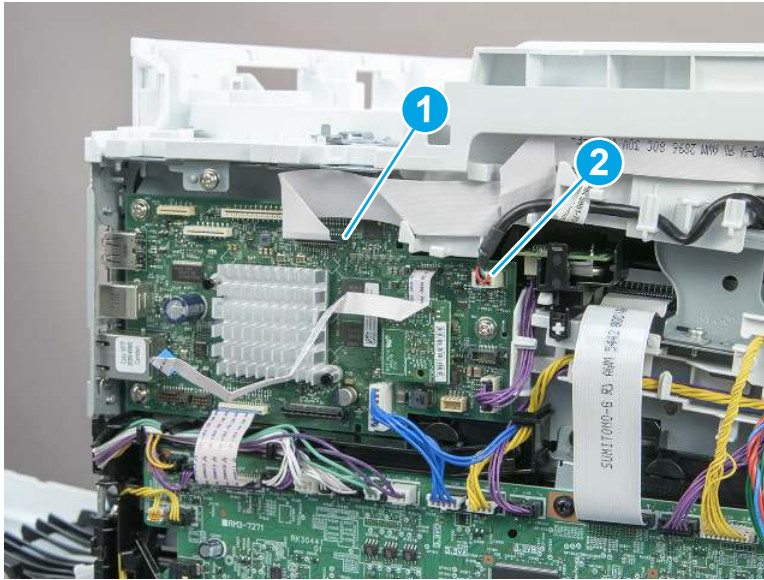


## 8. Remove the top cover (MFP)

Follow these steps to remove the top cover (MFP).

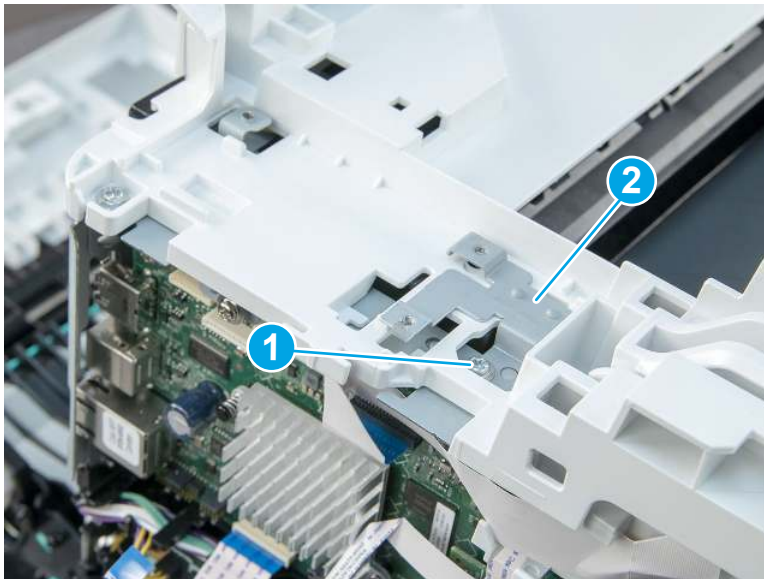
1. Disconnect one FFC (callout 1) and one connector (callout 2).

**Figure 5-335** Disconnect one FFC and one connector



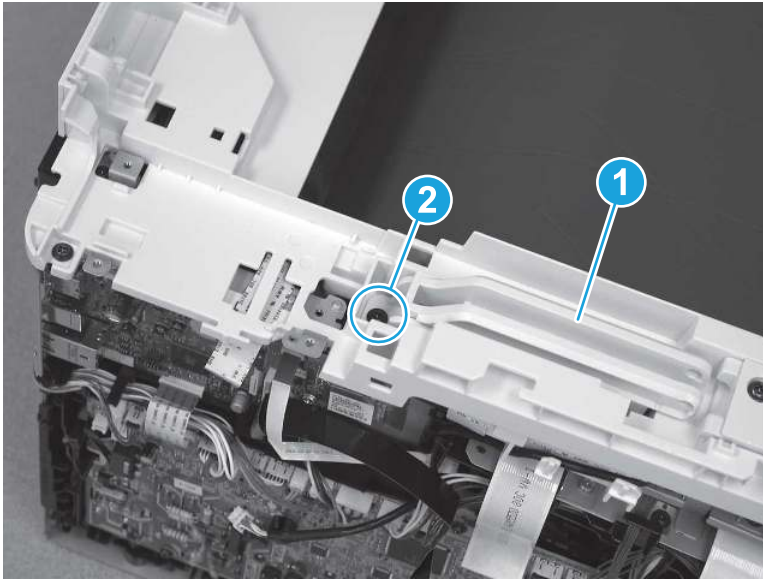
2. On the top cover, remove one screw (callout 1) and the sheet metal plate (callout 2).

**Figure 5-336** Remove one screw and the sheet metal plate



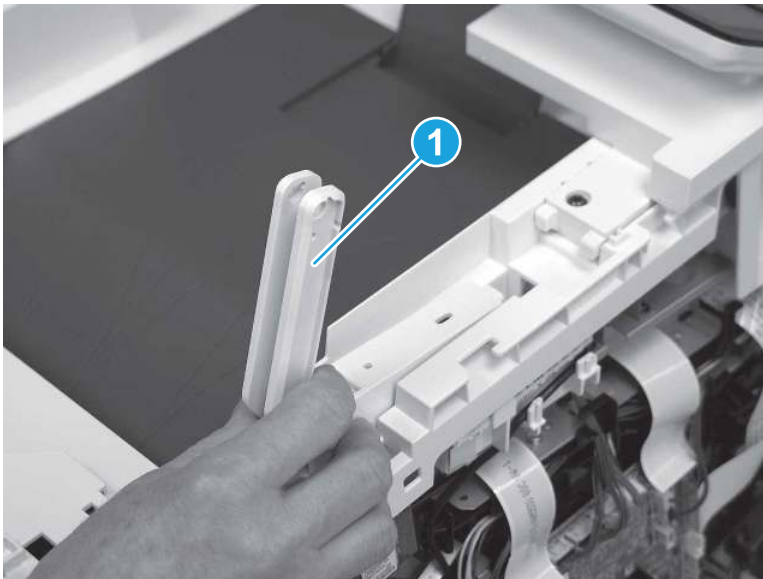
3. At the top of the printer, lower the scanner support arm (callout 1), and then remove one screw (callout 2).

**Figure 5-337** Lower the support arm and remove one screw



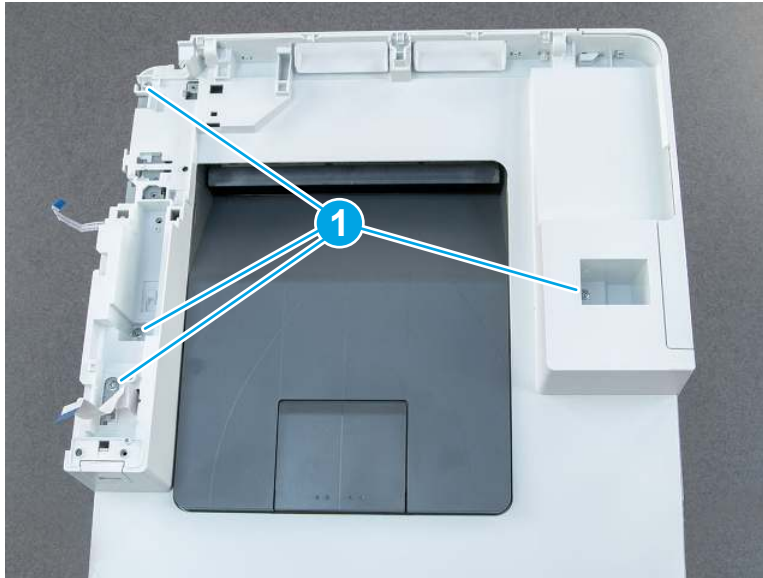
4. Remove the scanner support arm (callout 1).

**Figure 5-338** Remove the scanner support arm



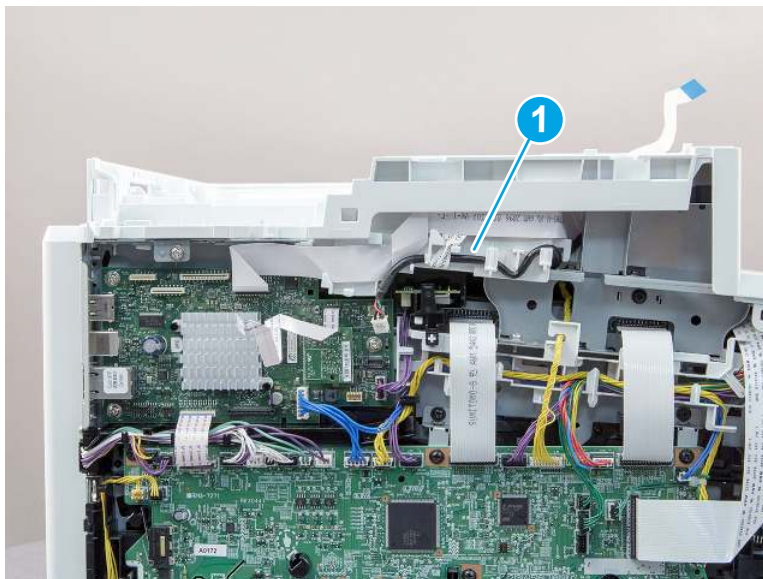
5. At the top of the printer, remove four screws (callout 1).

**Figure 5-339** Remove four screws



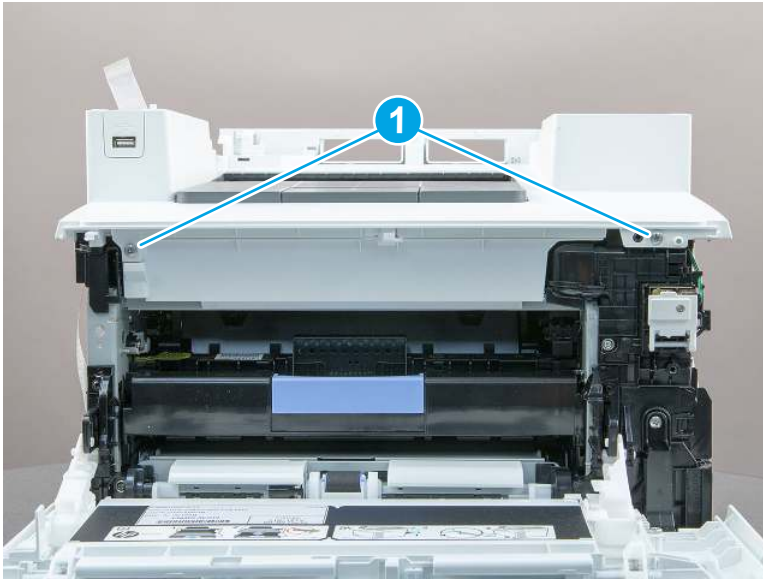
6. Remove the USB cable (callout 1) from the cable guides.

**Figure 5-340** Release the USB cable



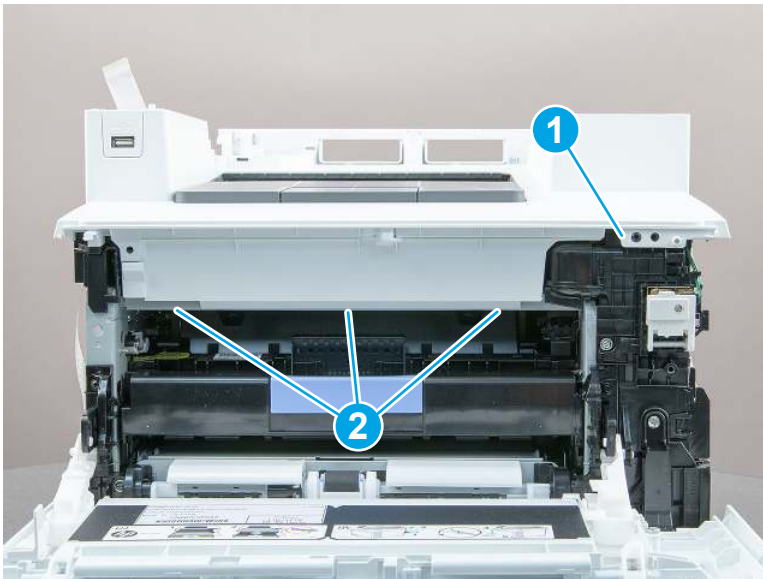
7. At the front of the printer, remove two screws (callout 1).

**Figure 5-341** Remove two screws



8. Release one retainer (callout 1), and then release three tabs (callout 2).

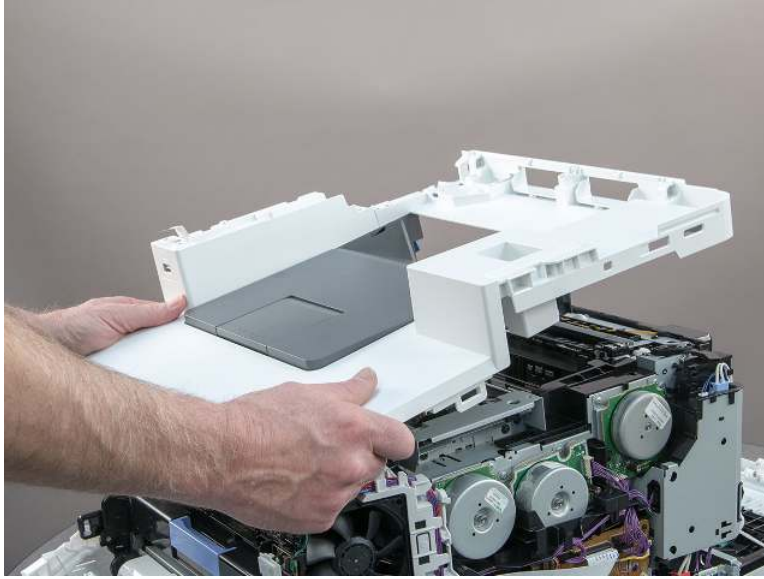
**Figure 5-342** Release one retainer and three tabs





9. Remove the top cover.

**Figure 5-343** Remove the top cover

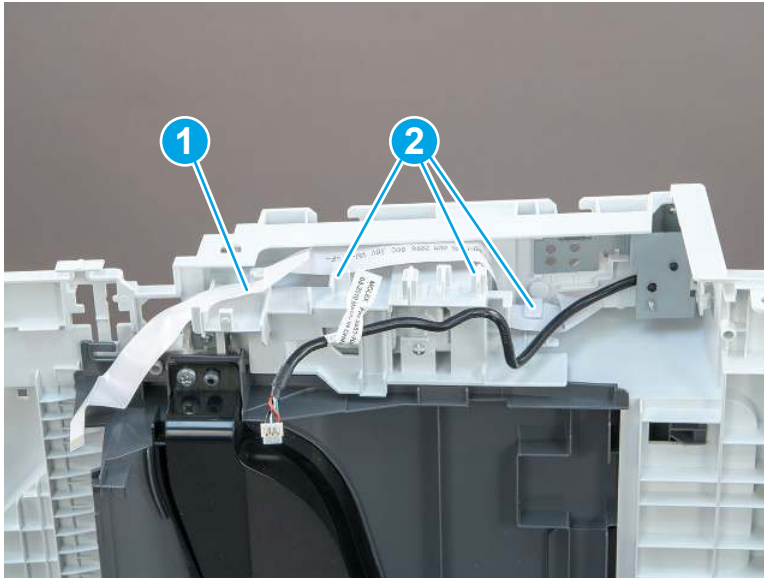


## 9. Remove the control panel FFC (MFP)

Follow these steps to remove the control panel FFC (MFP).

- ▲ Turn the top cover over, and then remove the flat cable (callout 1) from the guide (callout 2).

**Figure 5-344** Remove the FFC



## 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.

2. Unpack the replacement part from the packaging.


 **CAUTION:**  Some parts are sensitive to electrostatic discharge (ESD). Always perform service work at an ESD-protected workstation or mat. If an ESD workstation or mat is not available, touch the sheet-metal chassis to provide a static ground before touching an ESD-sensitive assembly. Protect the ESD-sensitive assemblies by placing them in ESD pouches when they are out of the printer.

 **IMPORTANT:** Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

 **NOTE:** If the replacement part is a roller or pad, avoid touching the spongy part of it. Skin oils on the roller or pad can cause paper pickup and/or print-quality problems. HP recommends using disposable gloves when handling rollers or pads or washing your hands before touching rollers or pads.

---

3. To install an assembly, reverse the removal steps.

 **NOTE:** When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

---

## Removal and replacement: Power switch assembly

Learn how to remove and replace the power switch.

[View a video of removing and replacing the power switch.](#)


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](http://www.hp.com/buy/parts).

Table 5-24 Part information

Part number	Part description
RM2-6373-000CN	Power switch (SW601) 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


Make sure that the printer initializes to a **Ready** state.

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-345** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

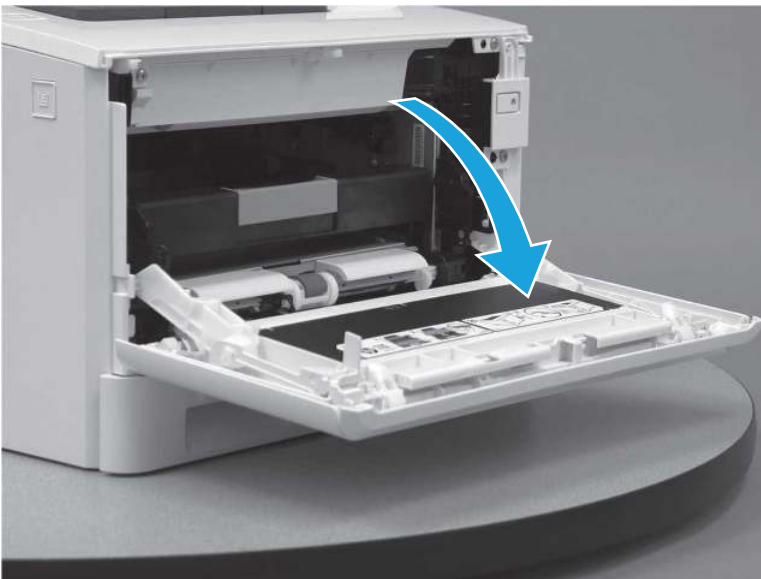
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-346** Release the front door



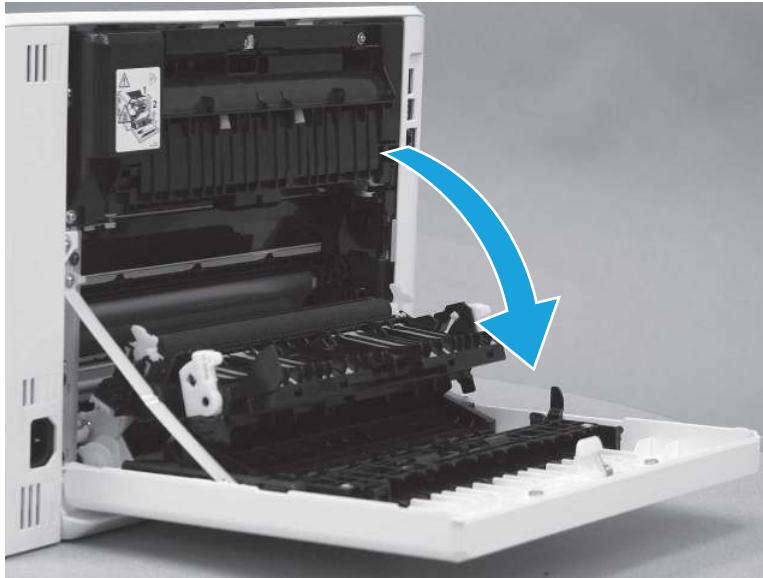
2. Open the front door.

**Figure 5-347** Open the front door



3. Open the duplexing door.

**Figure 5-348** Open the duplexer door



### 3. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

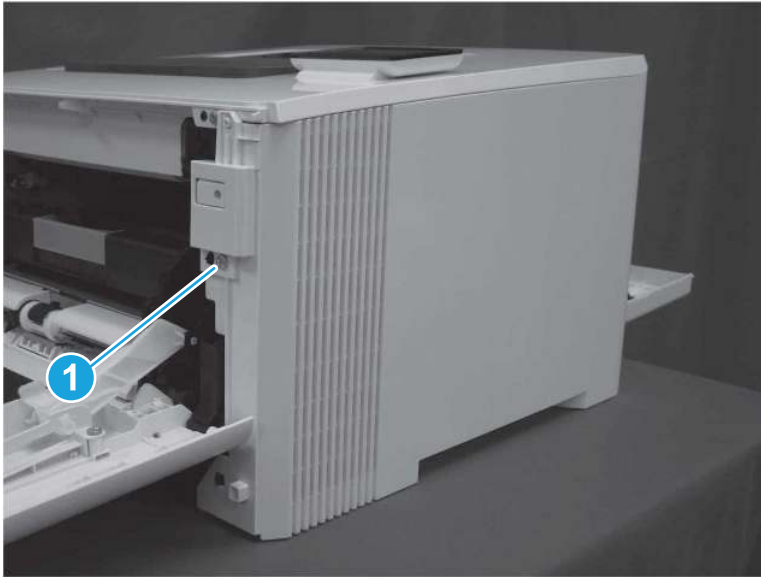
1. At the back of the printer, remove one screw (callout 1).

**Figure 5-349** Remove one screw



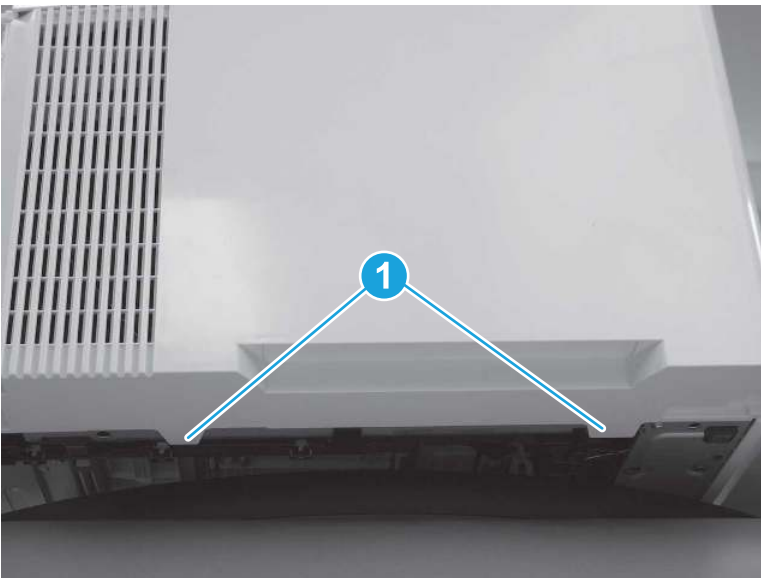
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-350** Remove one screw



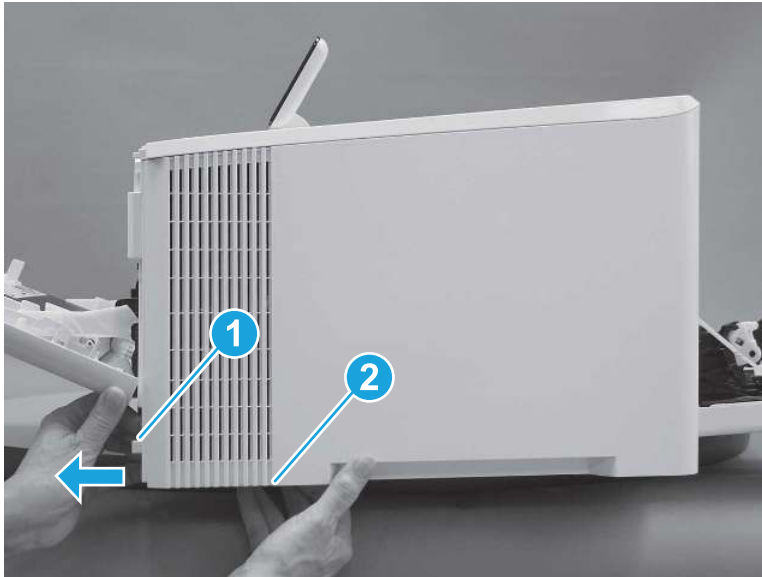
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-351** Locate the tabs



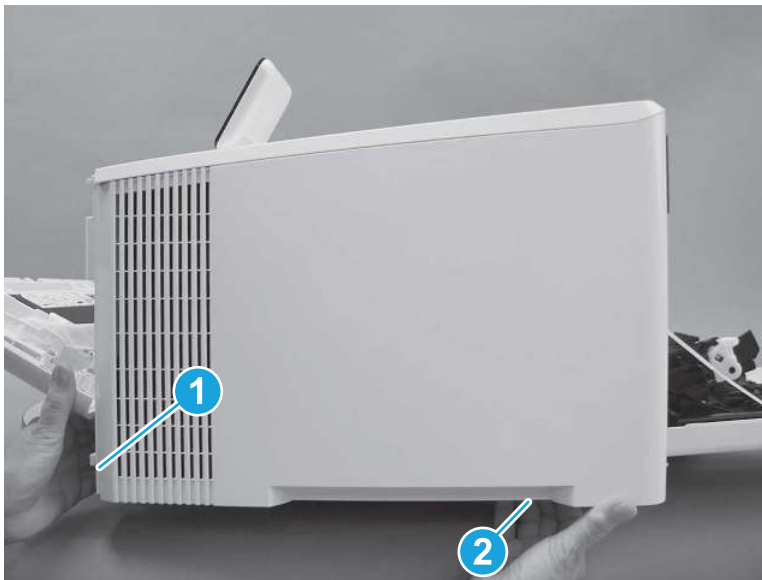
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-352** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

**Figure 5-353** Release lower rear tab



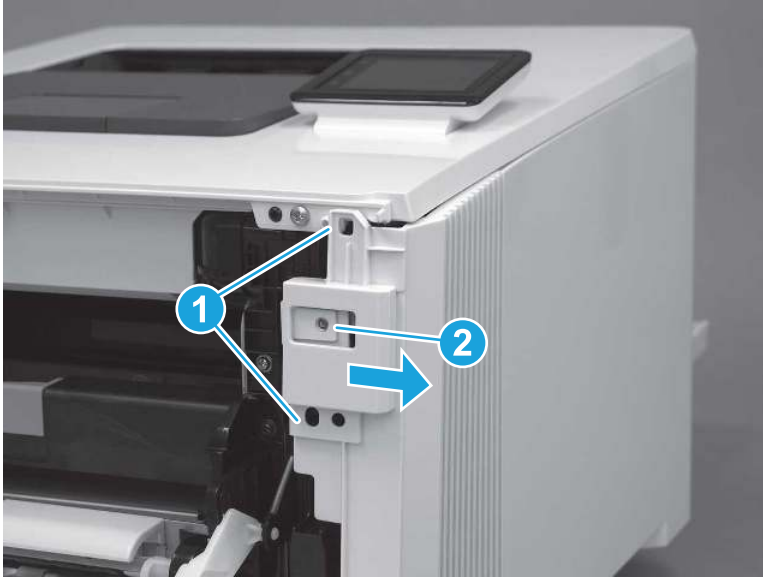
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

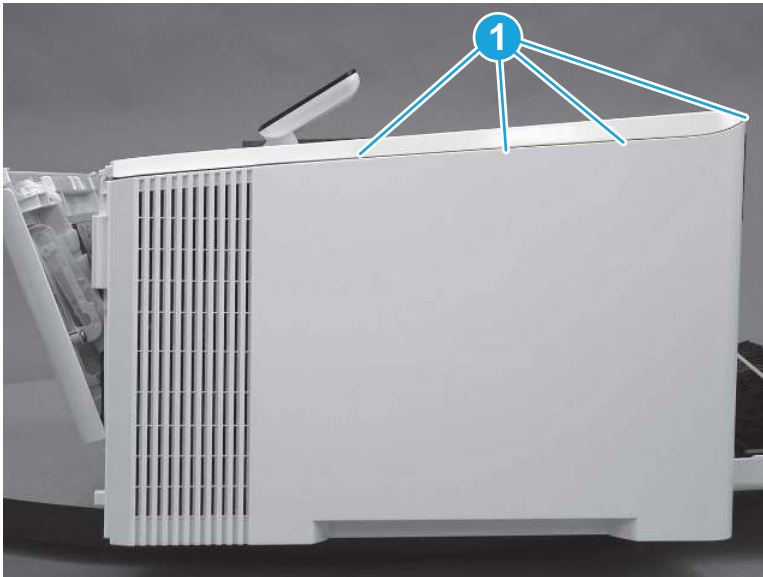
---

**Figure 5-354** Release two front tabs



7. Release four tabs on the top of the printer (callout 1).

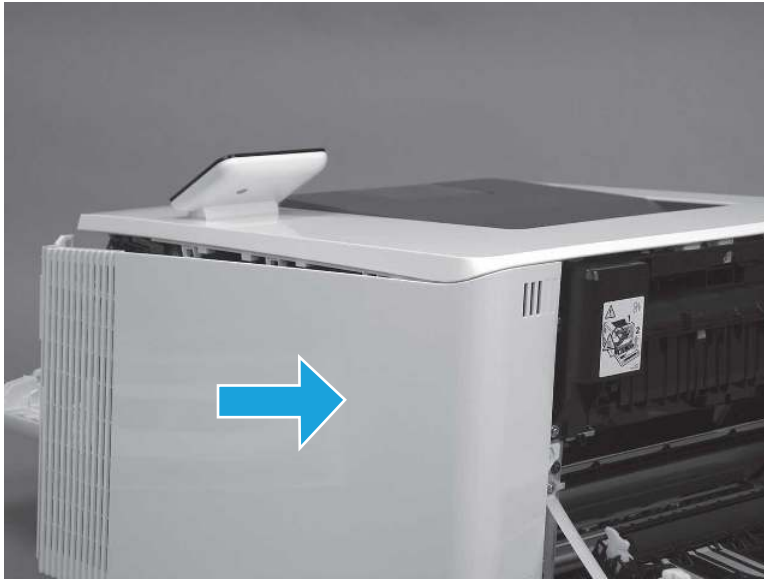
**Figure 5-355** Release upper tabs





8. Slide the cover toward the back of the printer to remove it.

**Figure 5-356** Remove the right cover



#### 4. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

**Figure 5-357** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-358** Remove one screw



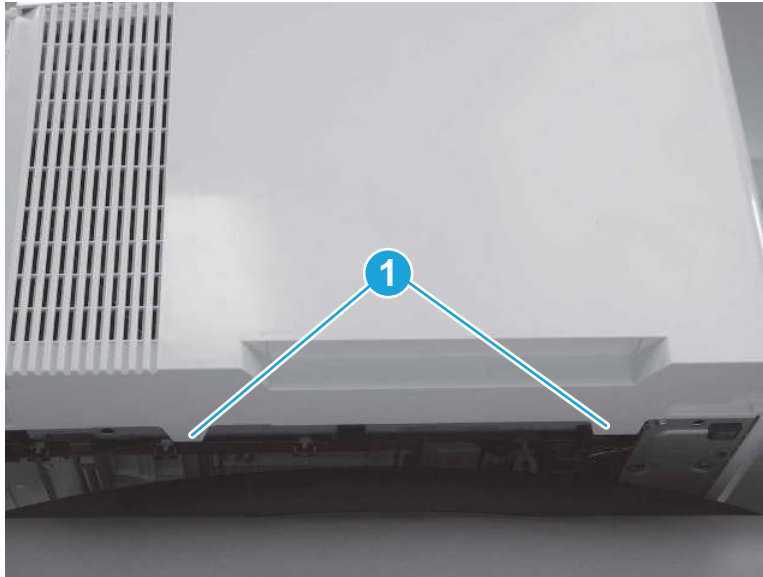
3. At the front of the printer, remove one screw (callout 1).

**Figure 5-359** Remove one screw



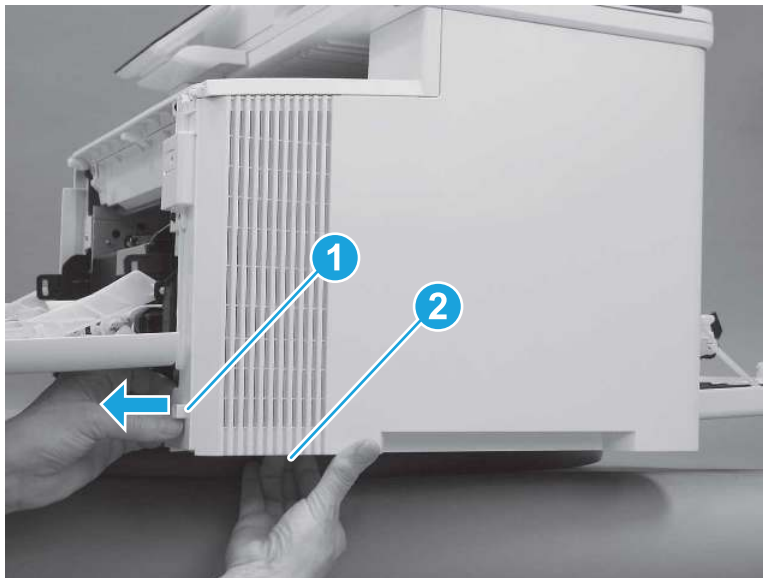
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-360** Locate the tabs



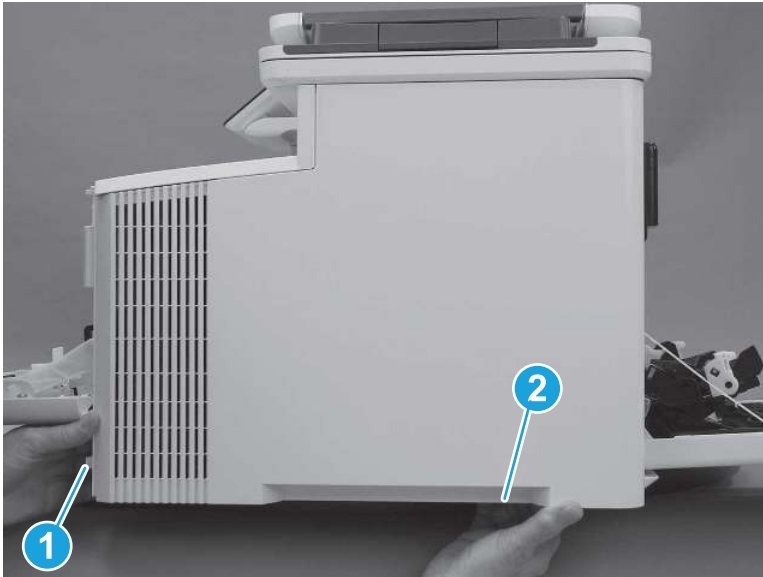
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-361** Release front lower tabs



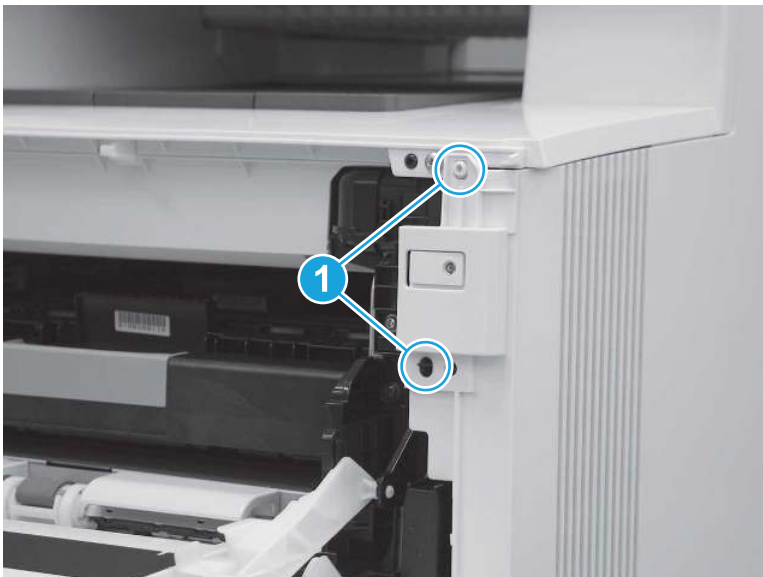
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

Figure 5-362 Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

Figure 5-363 Release front upper tabs



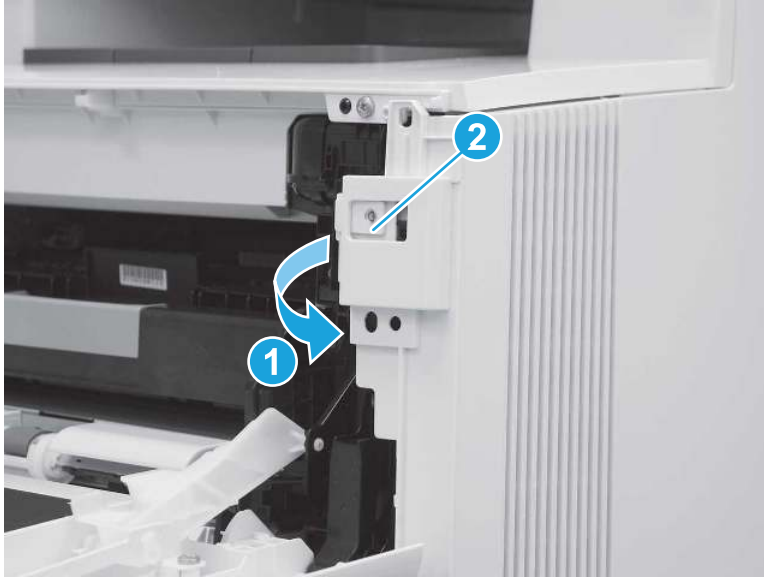
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

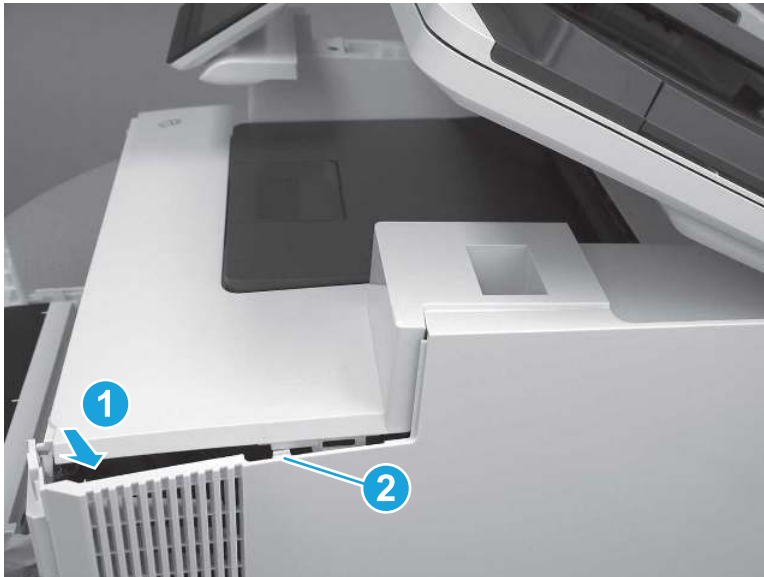
---

Figure 5-364 Rotate the front of the cover



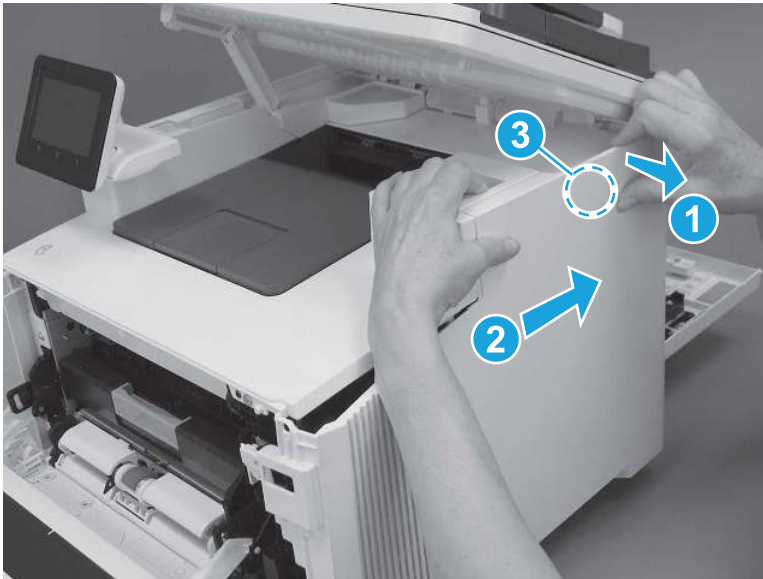
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

Figure 5-365 Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-366** Release one tab and one hook



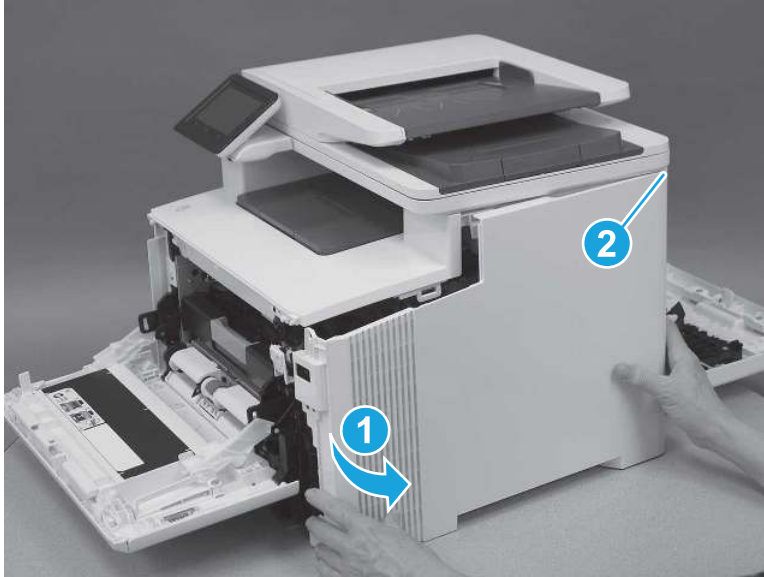
11. Lower the scanner.

**Figure 5-367** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-368** Remove the right cover

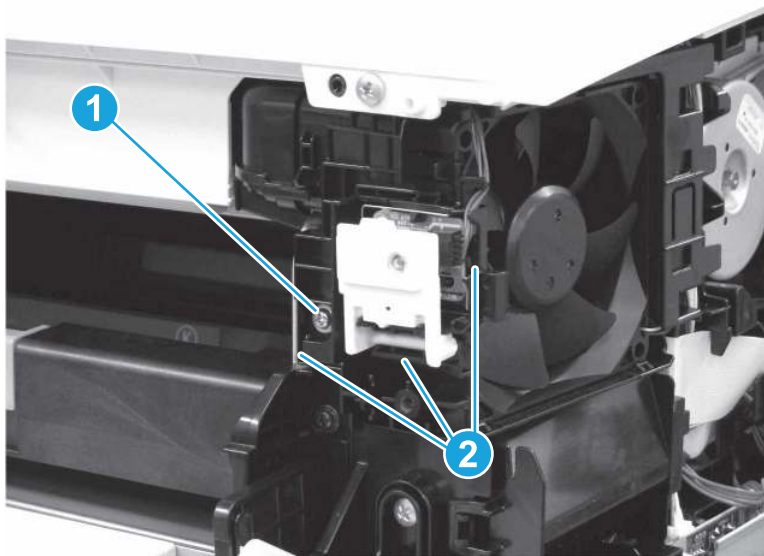


## 5. Remove the power switch

Follow these steps to remove the power switch.

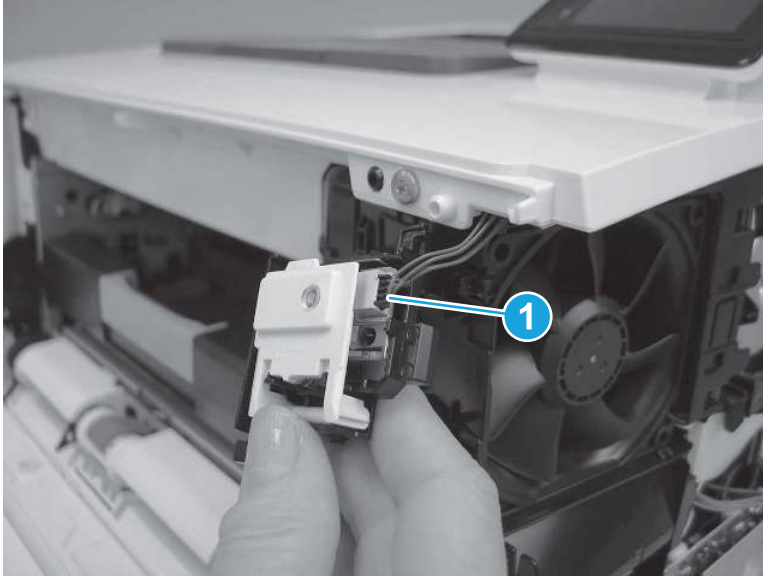
1. On the front of the printer, remove one screw (callout 1), and then release three tabs (callout 2).

**Figure 5-369** Remove one screw and release three tabs



2. Disconnect one connector (callout 1), and then remove the power switch.

**Figure 5-370** Remove the switch



## 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: Toner cartridge tray

Learn how to remove and replace the toner cartridge tray.



[View a video of removing and replacing the toner cartridge tray.](#)

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](http://www.hp.com/buy/parts).

**Table 5-25** Part information

Part number	Part description
RM2-1807-000CN	Cartridge (toner) tray 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


Make sure that the toner cartridge tray slides freely in and out of the printer, and that the cartridge door correctly closes.

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

Figure 5-371 Remove the tray

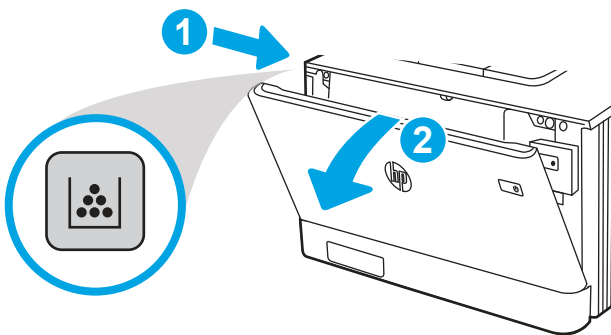


## 2. Remove the toner cartridges

Follow these steps to remove the toner cartridges.

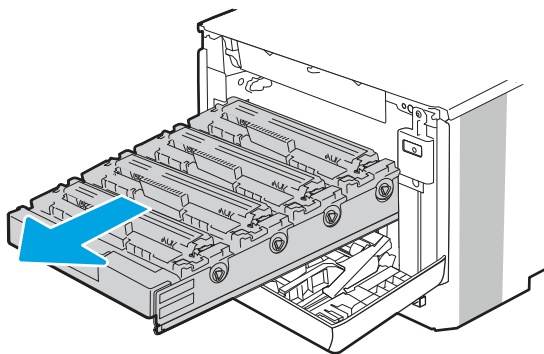
1. Open the front door by pressing the button on the left cover.

Figure 5-372 Open the front door



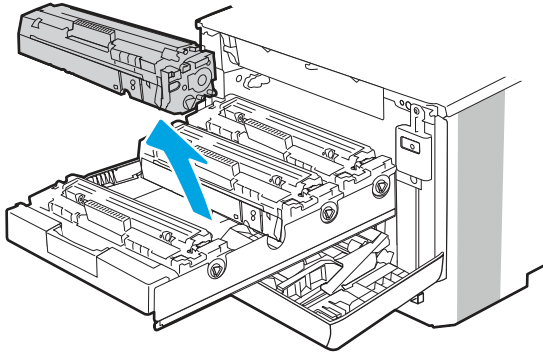
2. Grasp the blue handle on the toner cartridge tray, and then pull out the tray.

Figure 5-373 Open the cartridge drawer



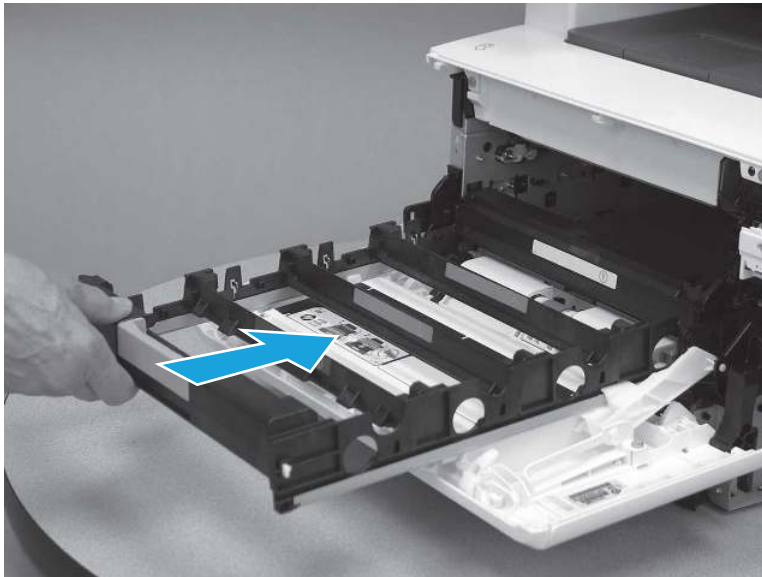
3. Grasp the handle on the toner cartridge, and then pull the toner cartridge straight up to remove it. Repeat this step for each toner cartridge.

**Figure 5-374** Remove the toner cartridges



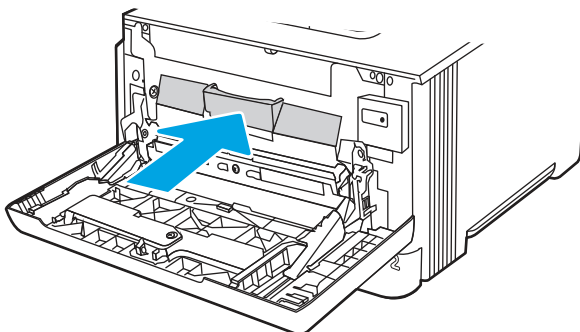
4. Slide the cartridge tray into the printer.

**Figure 5-375** Slide the cartridge tray into the printer



5. Close the front door.

**Figure 5-376** Close the front door



### 3. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

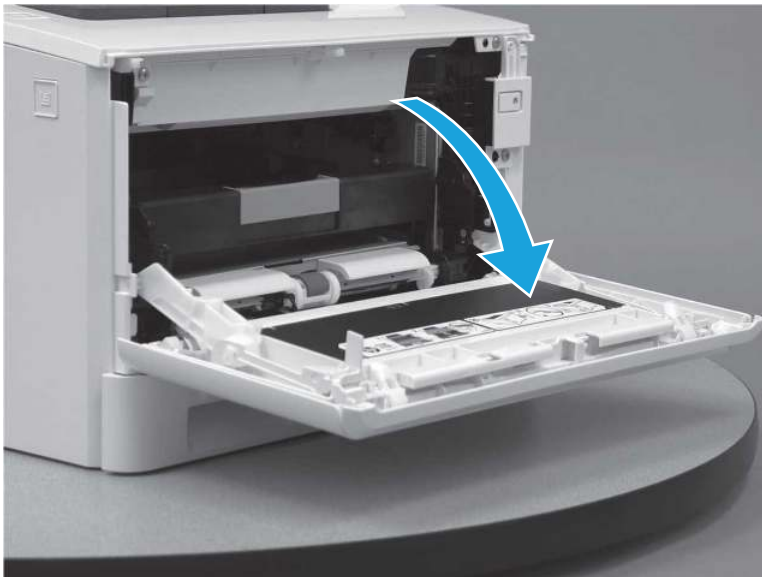
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-377** Release the front door



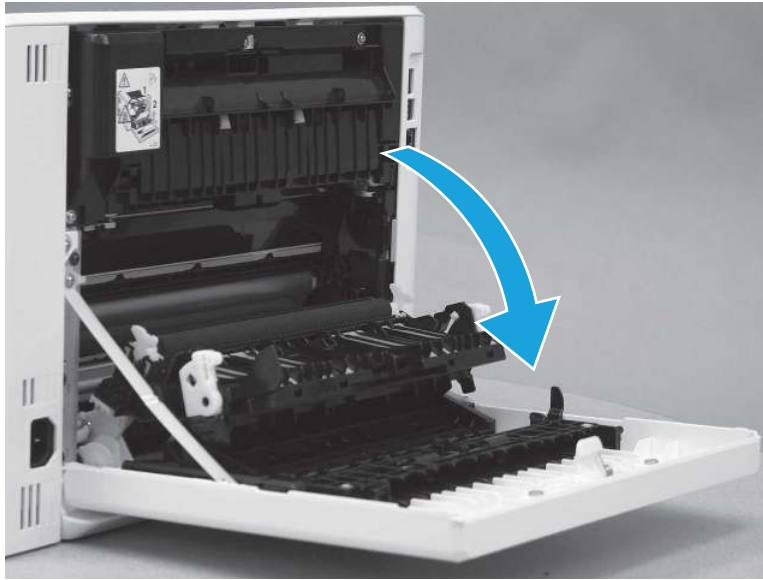
2. Open the front door.

**Figure 5-378** Open the front door



3. Open the duplexing door.

**Figure 5-379** Open the duplexer door

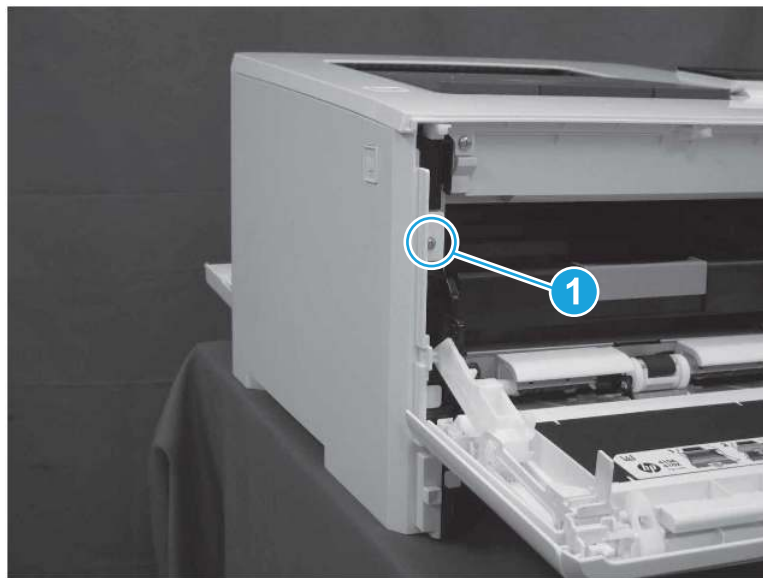


#### 4. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

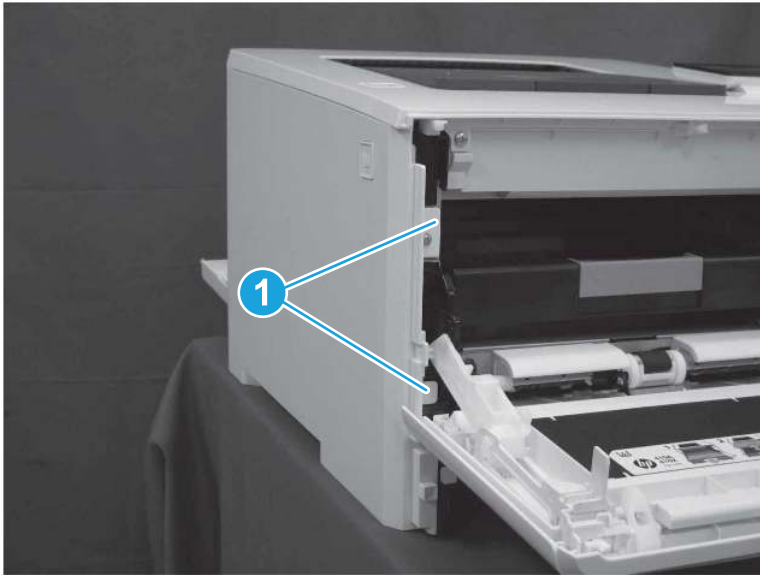
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-380** Remove one screw



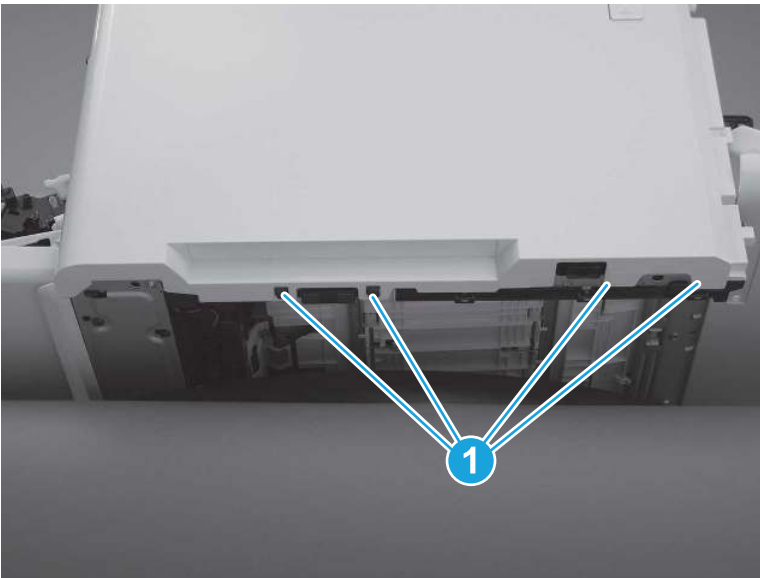
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-381** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-382** Locate the tabs



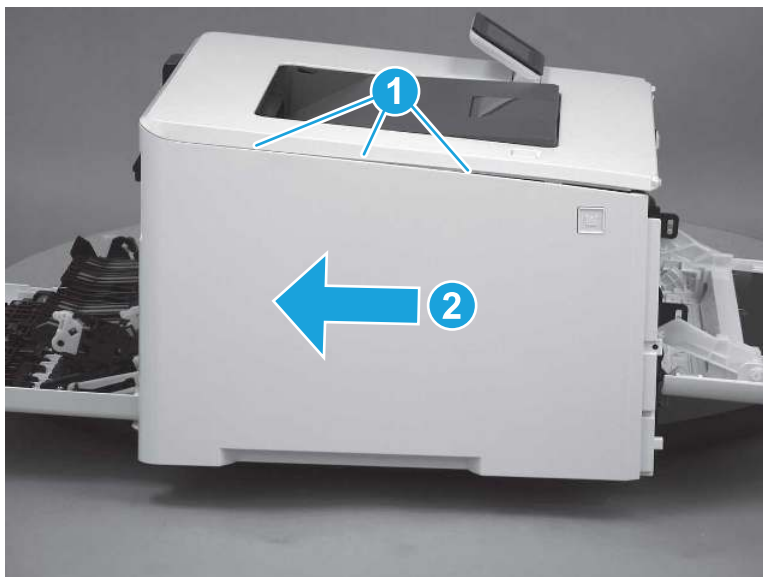
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-383 Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

Figure 5-384 Release three tabs



## 5. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

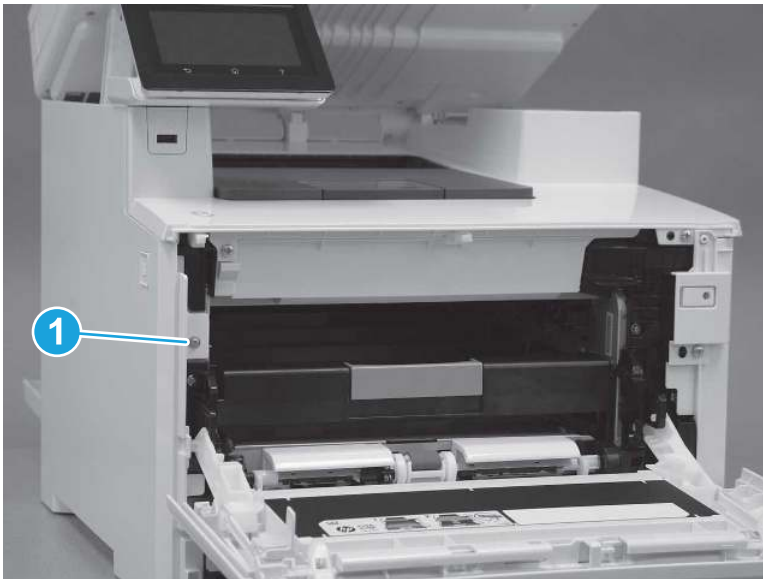
1. Raise the scanner.

Figure 5-385 Raise the scanner



2. At the front of the printer, remove one screw (callout 1).

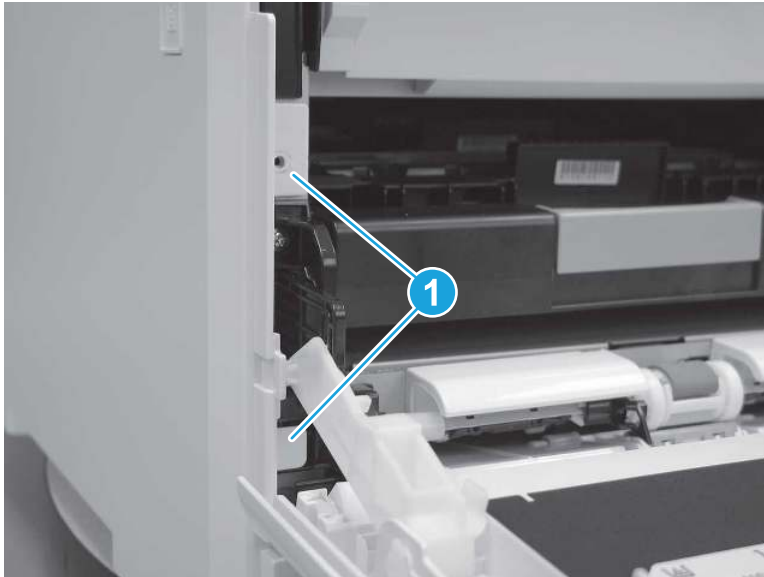
Figure 5-386 Remove one screw





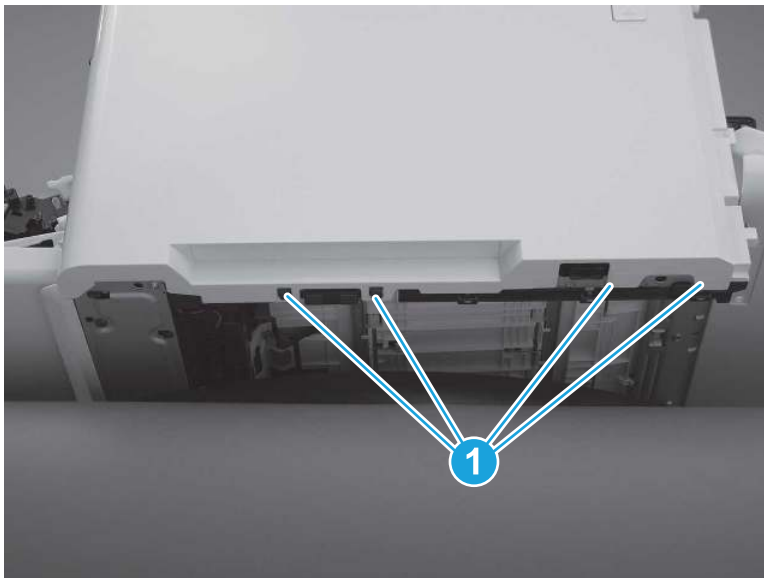
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-387** Release two tabs



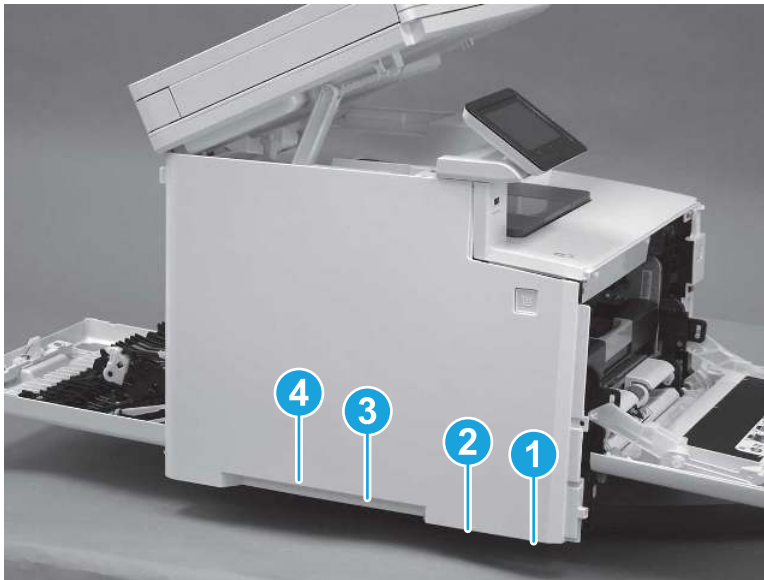
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-388** Locate the tabs



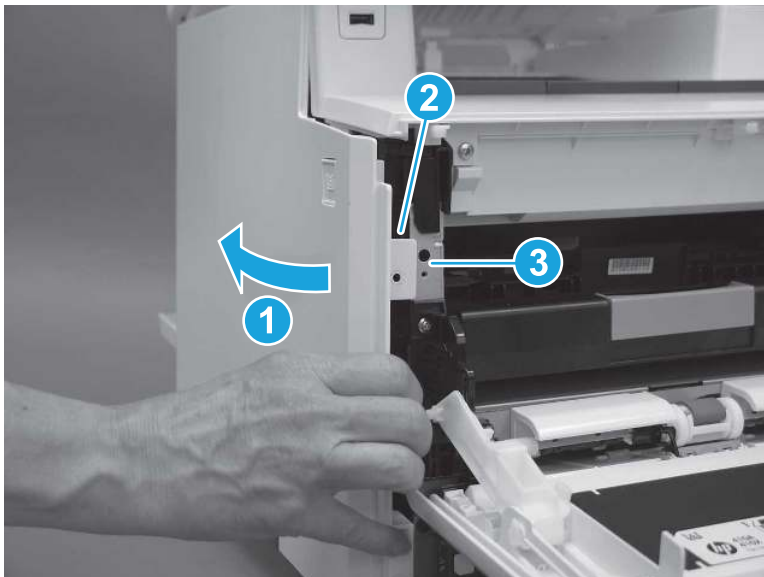
- Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-389** Release four tabs



- Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

**Figure 5-390** Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-391** Release one tab and two hooks



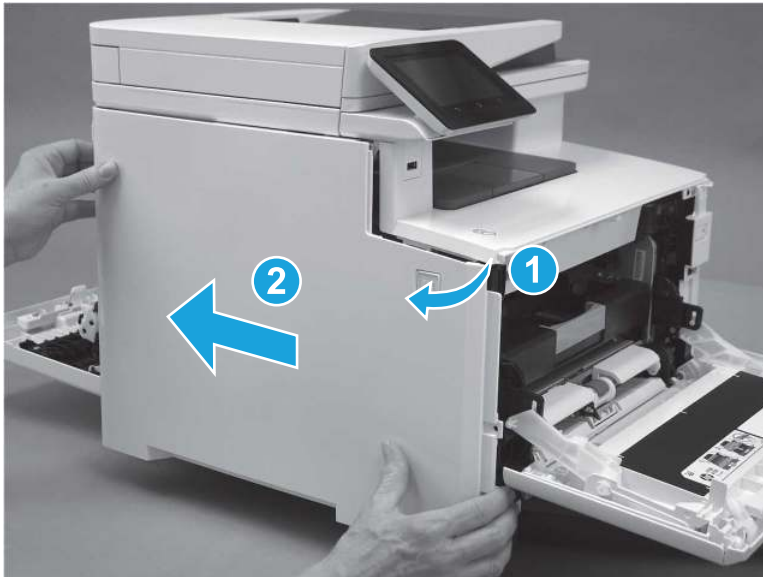
8. Lower the scanner.

**Figure 5-392** Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

**Figure 5-393** Remove the left cover

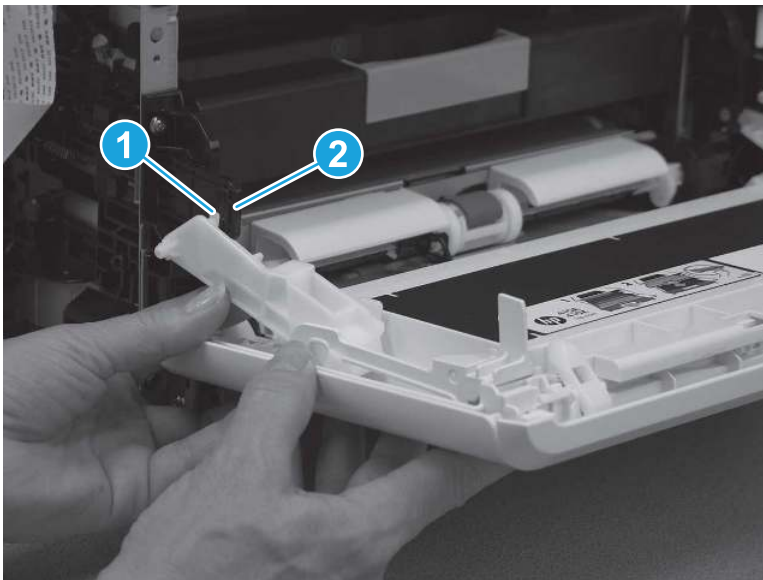


## 6. Remove the toner cartridge tray

Follow these steps to remove the toner cartridge tray.

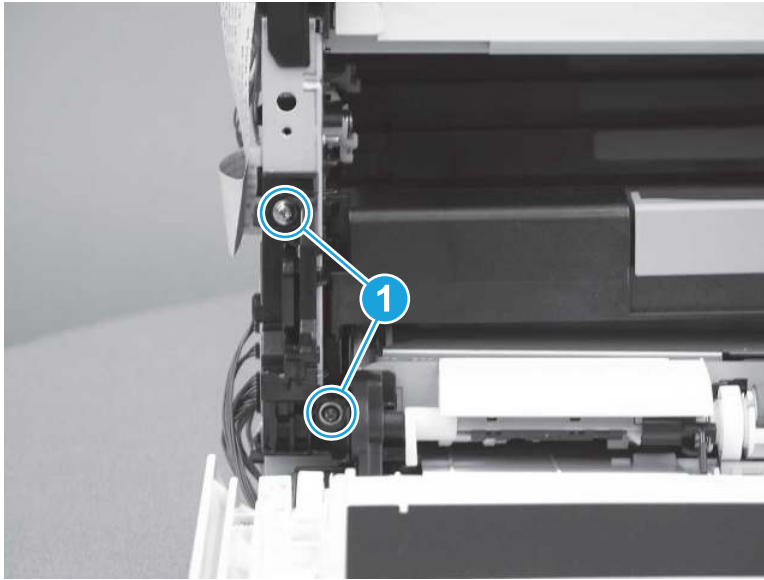
1. Release the tab (callout 1) on the front door hinge arm from the slot (callout 2) on the tray slide mechanism.

**Figure 5-394** Release the hinge arm



2. Remove two screws (callout 1).

**Figure 5-395** Remove two screws



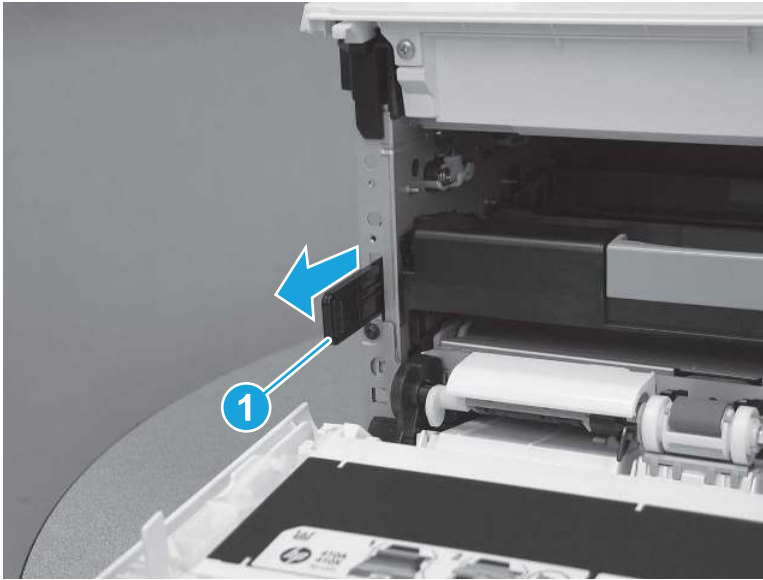
3. Remove the cover (callout 1).

**Figure 5-396** Remove the cover



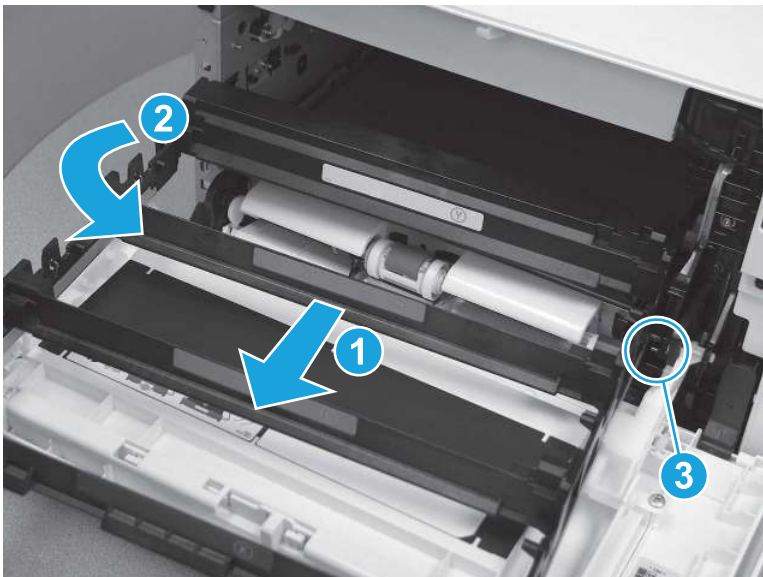
4. Pull the tray slide mechanism (callout 1) out.

**Figure 5-397** Pull the tray slide mechanism out



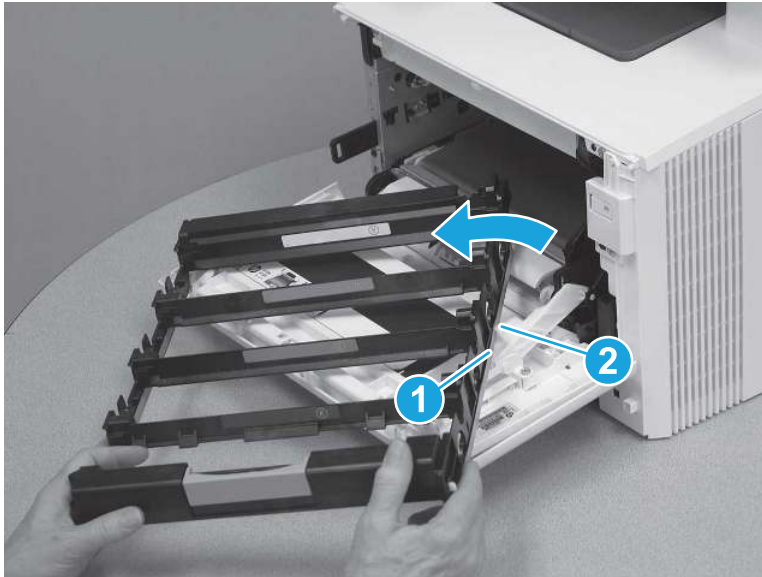
5. Slide the cartridge tray out of the printer (callout 1). Rotate the tray counterclockwise (callout 2) to release one silver shaft (callout 3).

**Figure 5-398** Rotate the cartridge tray to release one shaft



6. Continue to rotate the tray to release the edge of the tray (callout 1) from the white clip (callout 2). Remove the toner cartridge tray.

**Figure 5-399** 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.

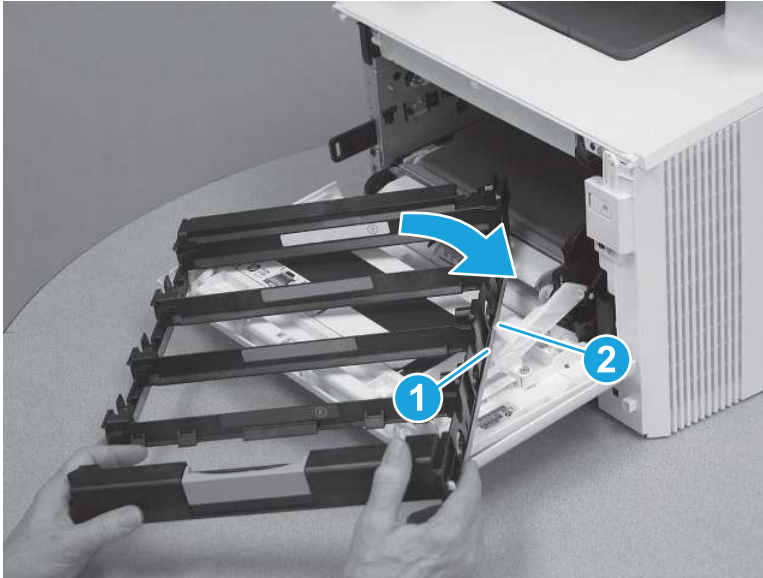
## 8. Reverse the removal steps to install the assembly

Also use the following special installation instructions.

Toner cartridge tray

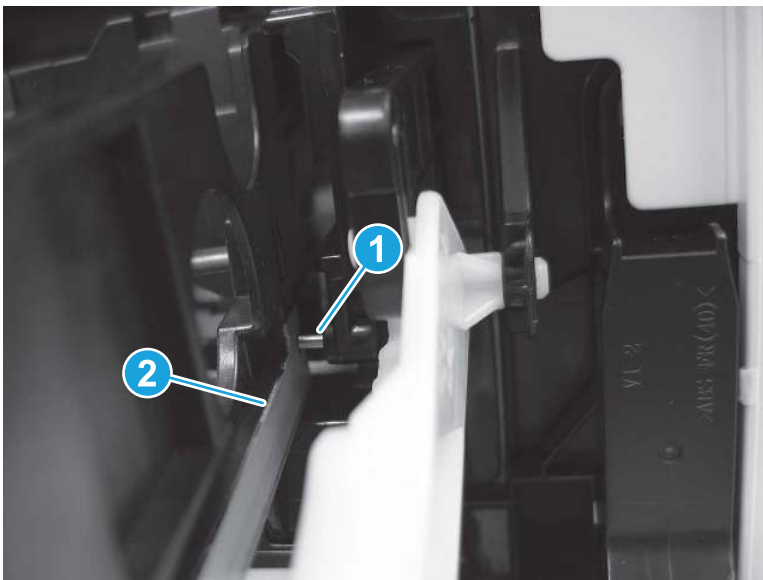
1. Install the edge of the tray (callout 1) into the white clip (callout 2), and then rotate the tray clockwise.

**Figure 5-400** Install the white clip



2. Install the silver shaft (callout 1) over the edge of the sheet metal (callout 2) on the cartridge tray.

**Figure 5-401** Install the silver shaft



## Removal and replacement: Cartridge fan

Learn how to remove and replace the cartridge fan (FM2).

[View a video of removing and replacing the cartridge fan.](#)



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](http://www.hp.com/buy/parts).

**Table 5-26** Part information

Part number	Part description
RK2-6270-000CN	Fan 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 Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-402** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

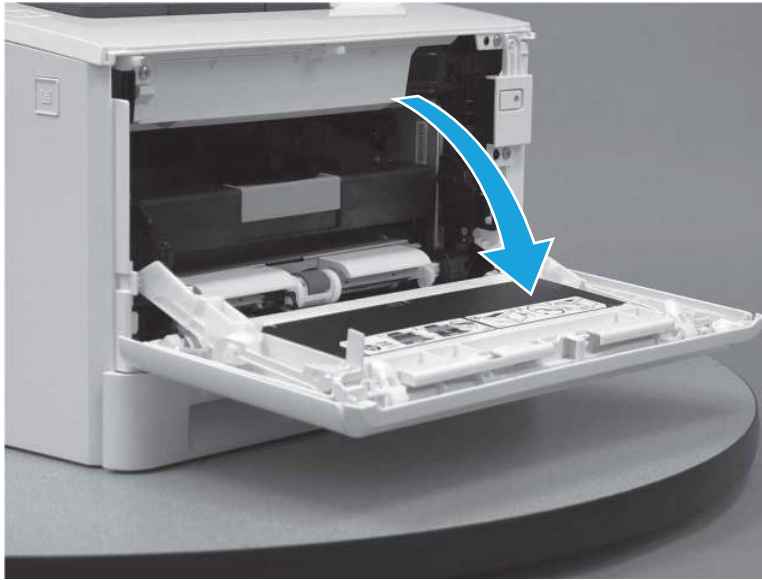
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-403** Release the front door



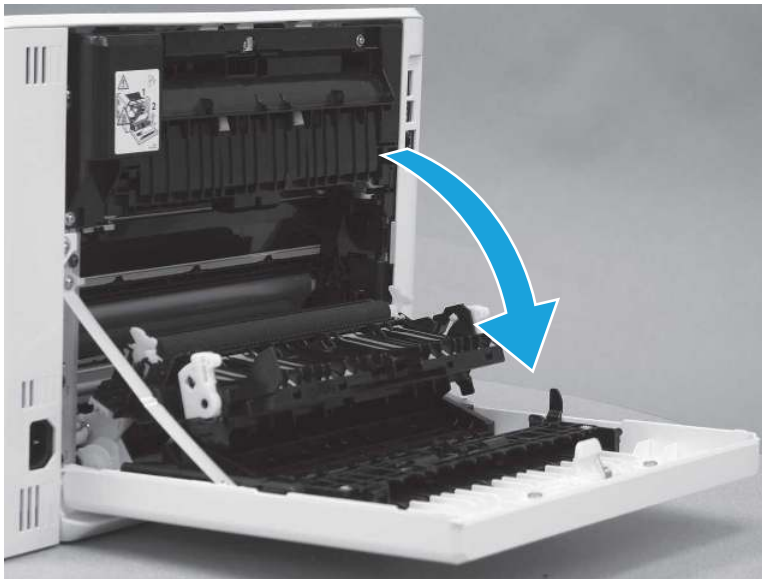
2. Open the front door.

**Figure 5-404** Open the front door



3. Open the duplexing door.

**Figure 5-405** Open the duplexer door



### 3. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

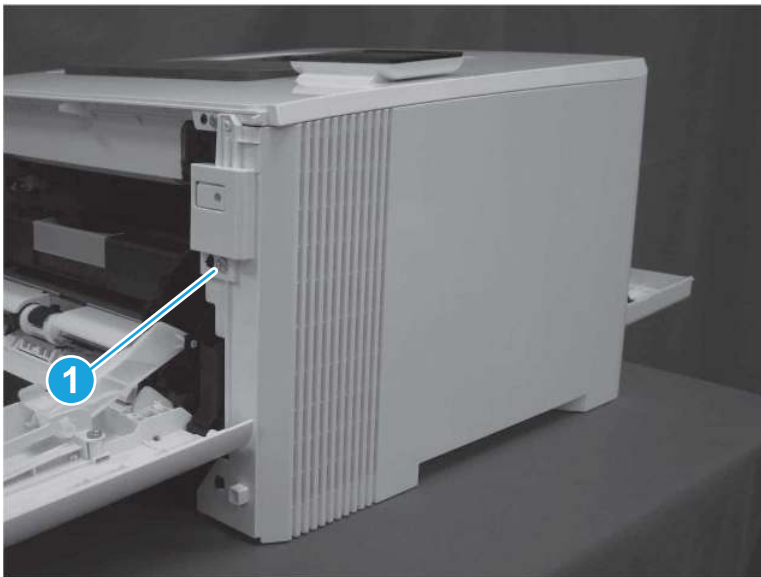
1. At the back of the printer, remove one screw (callout 1).

**Figure 5-406** Remove one screw



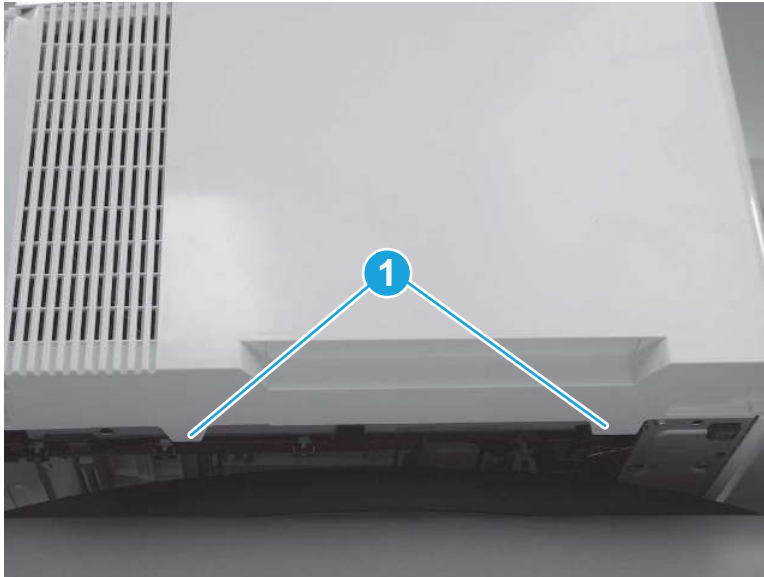
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-407** Remove one screw



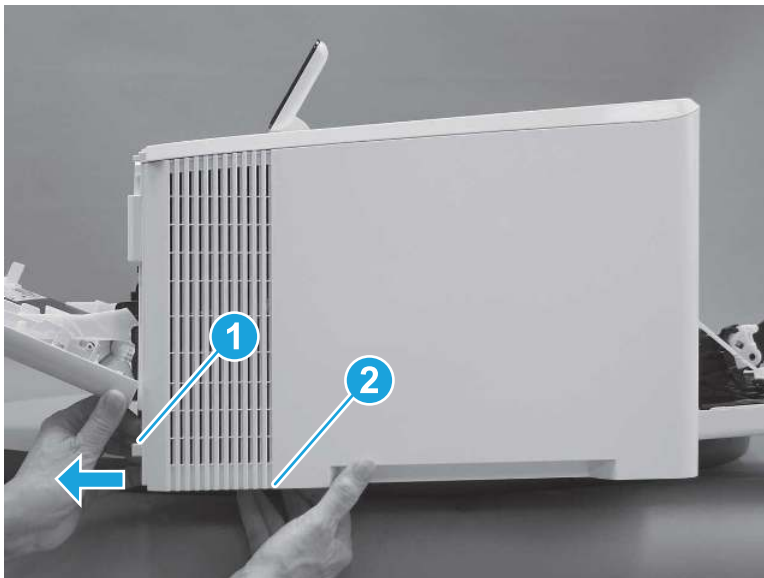
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-408** Locate the tabs



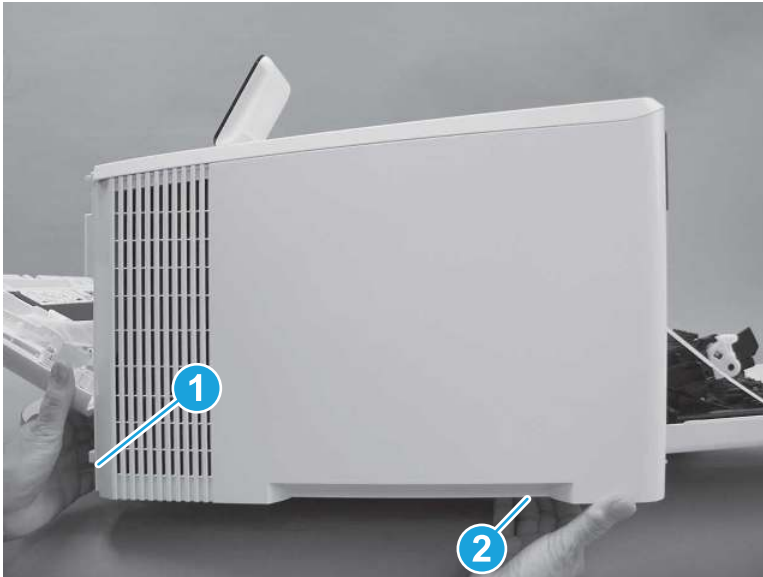
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-409** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

**Figure 5-410** Release lower rear tab



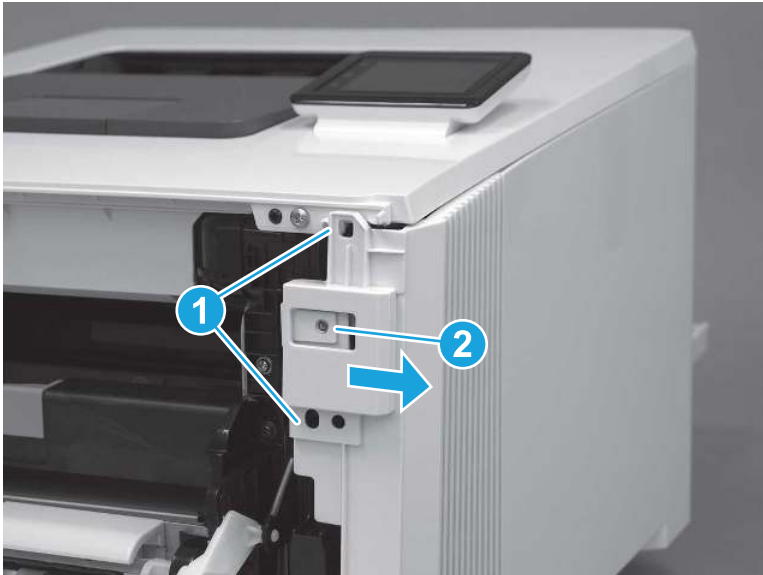
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

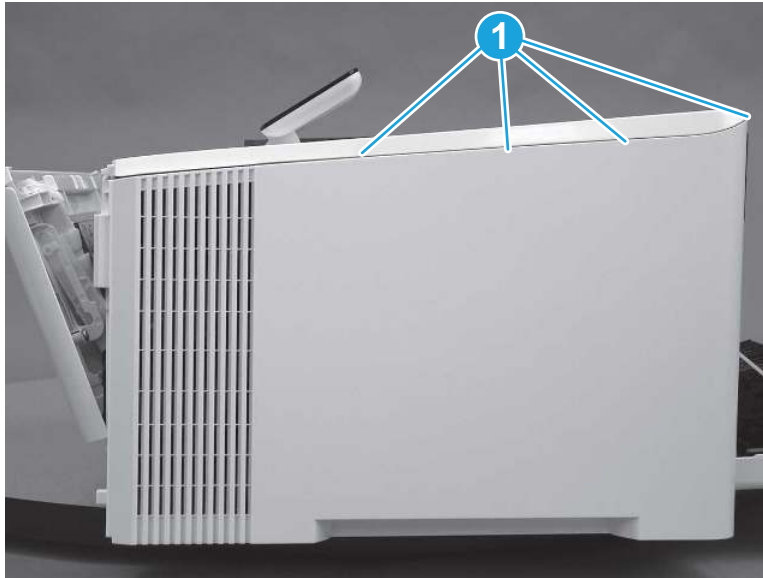
---

**Figure 5-411** Release two front tabs



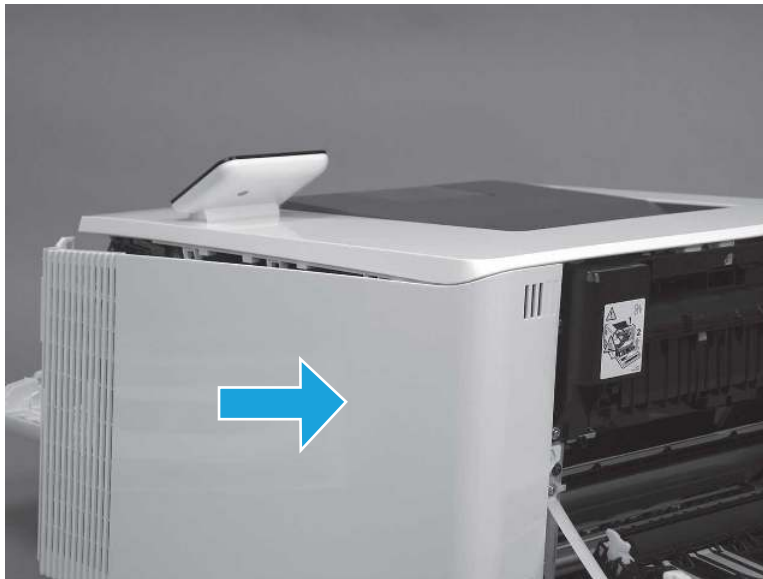
7. Release four tabs on the top of the printer (callout 1).

**Figure 5-412** Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-413** Remove the right cover



#### 4. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

**Figure 5-414** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-415** Remove one screw





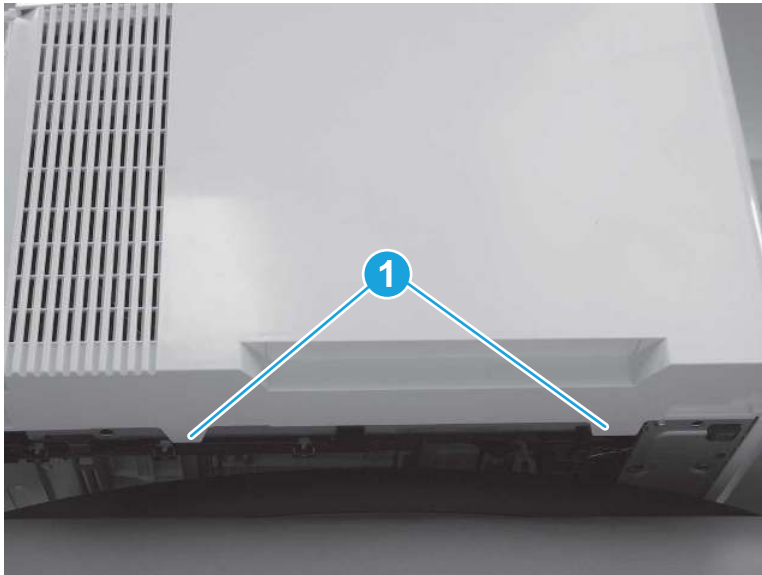
3. At the front of the printer, remove one screw (callout 1).

**Figure 5-416** Remove one screw



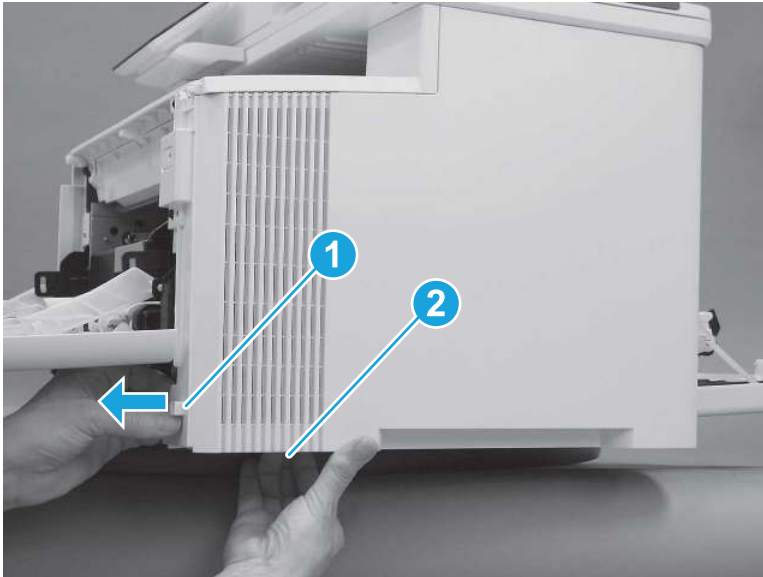
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-417** Locate the tabs



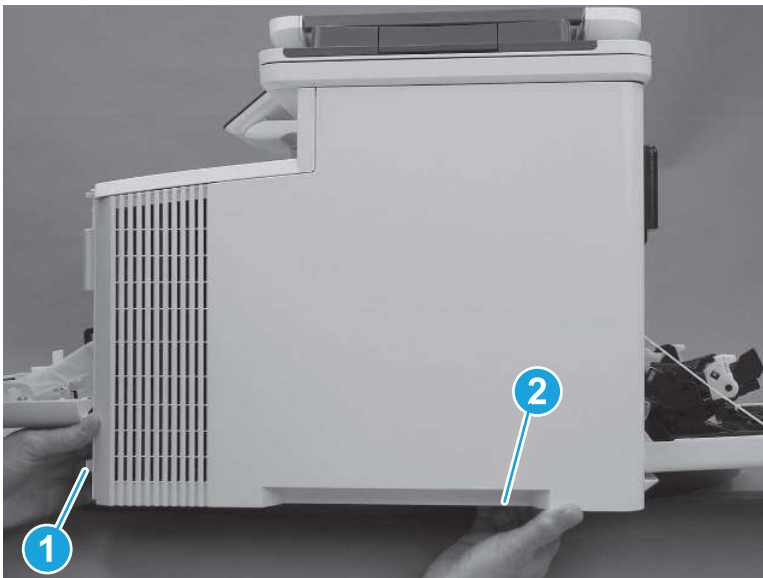
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-418** Release front lower tabs



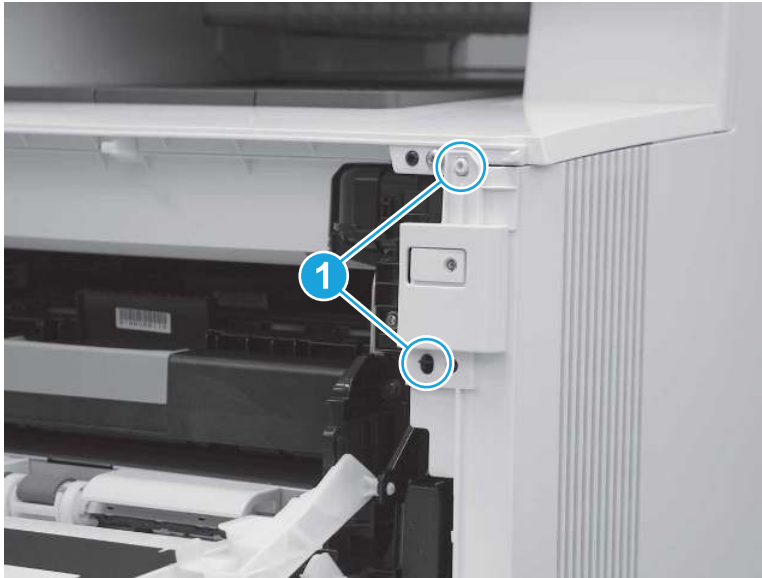
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-419** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-420** Release front upper tabs



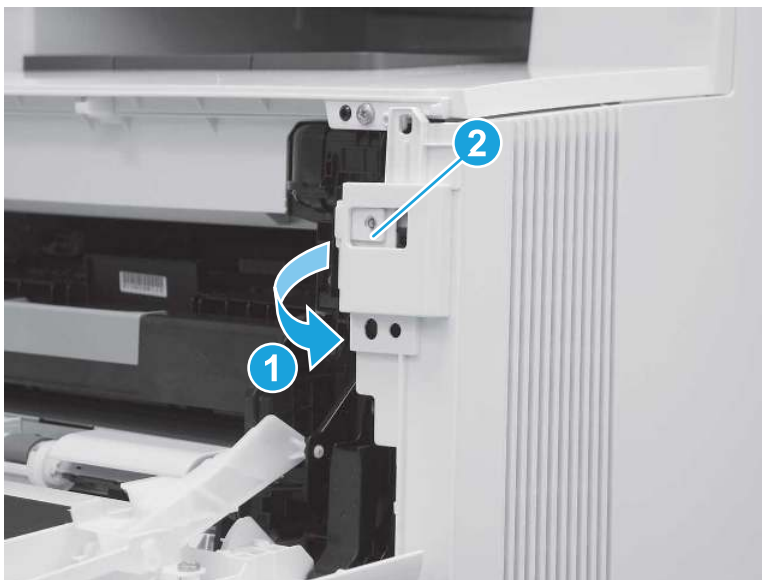
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

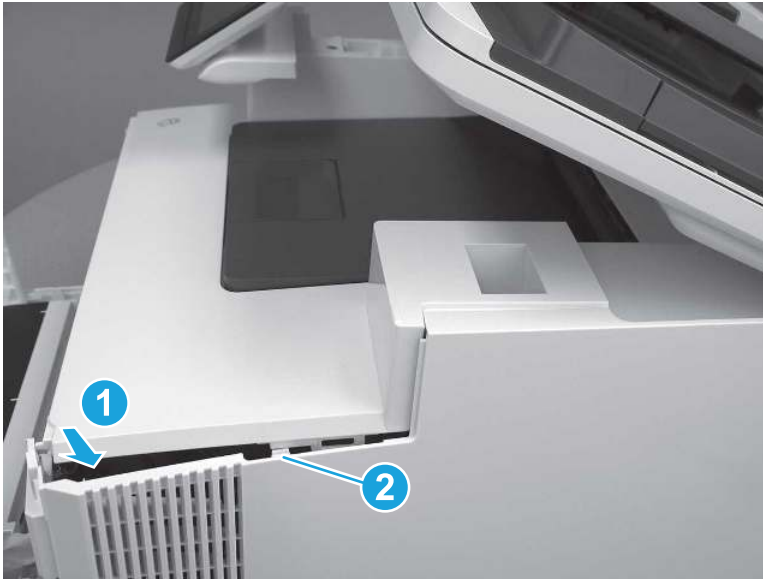
---

**Figure 5-421** Rotate the front of the cover



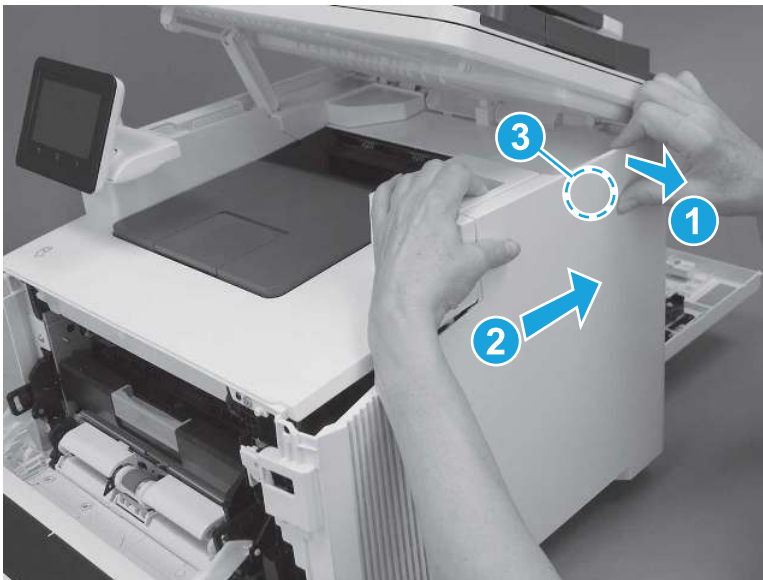
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

Figure 5-422 Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

Figure 5-423 Release one tab and one hook



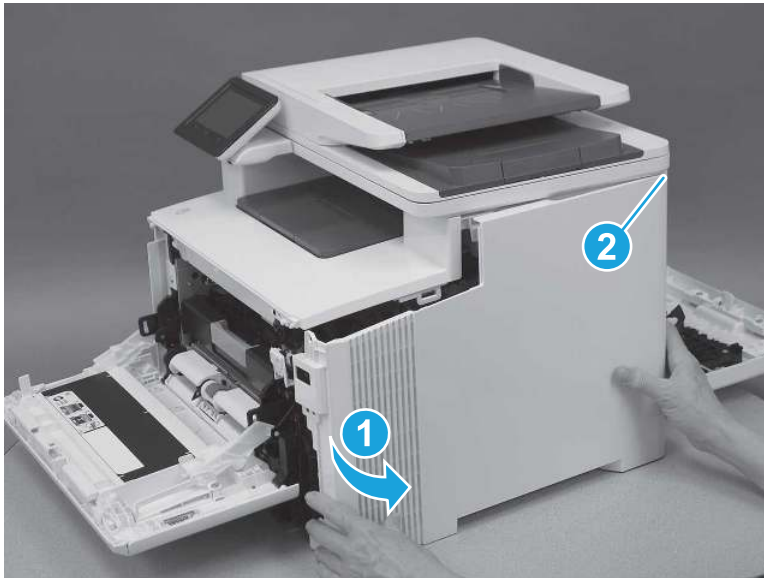
11. Lower the scanner.

Figure 5-424 Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

Figure 5-425 Remove the right cover

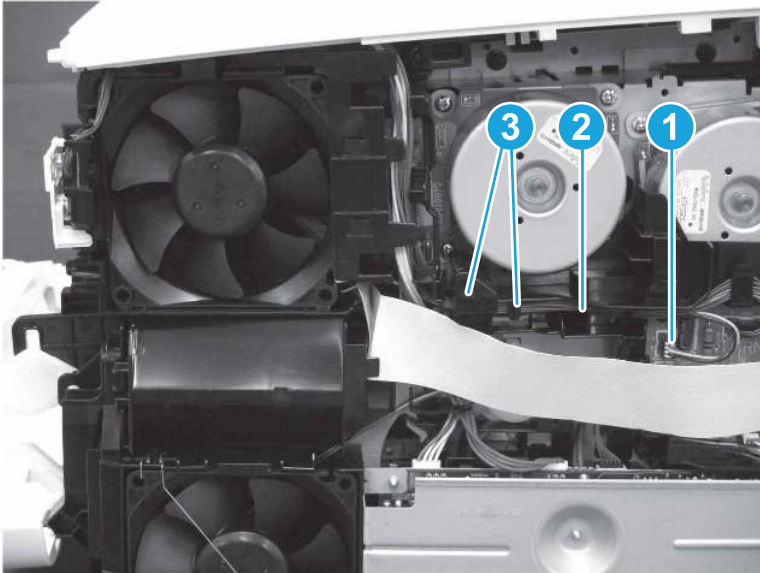


## 5. Remove the cartridge fan

Follow these steps to remove the cartridge fan.

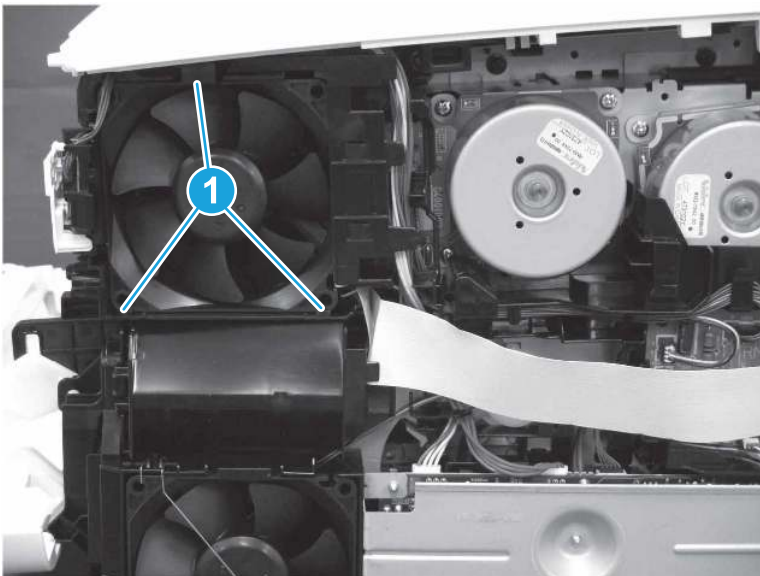
1. Disconnect one connector (callout 1), and then remove the cables (callout 2) from the wire guides (callout 3).

**Figure 5-426** Disconnect one connector and release cables from guides



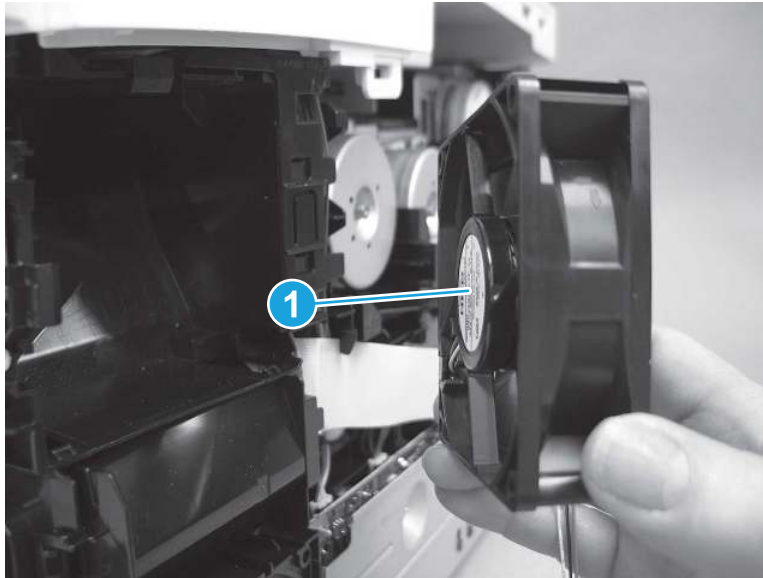
2. Release three tabs (callout 1).

**Figure 5-427** Release three tabs



3. Remove the cartridge fan (callout 1).

**Figure 5-428** 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.

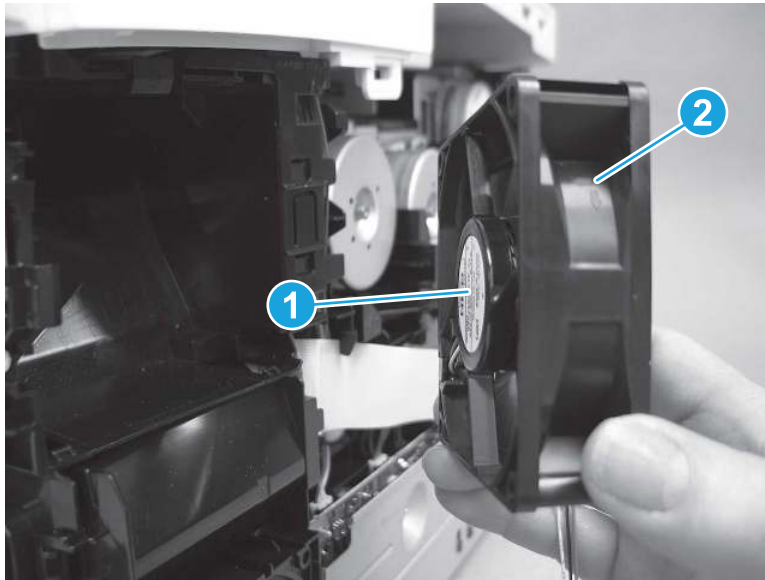
## 7. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

## Cartridge fan

- ▲ Position the cartridge fan so that the white label (callout 1) is facing the printer and the top embossed arrow (callout 2) is pointing into the printer.

**Figure 5-429** Install the cartridge fan



## Removal and replacement: Power supply fan

Learn how to remove and replace the power supply fan (FM1).

[View a video of removing and replacing the power supply fan.](#)

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](http://www.hp.com/buy/parts).

**Table 5-27** Part information

Part number	Part description
RK2-6270-000CN	Fan 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 Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-430** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

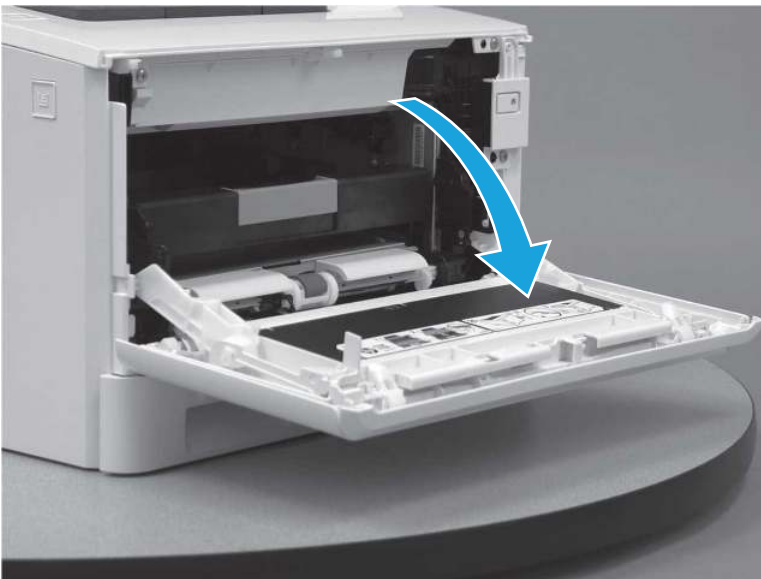
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-431** Release the front door



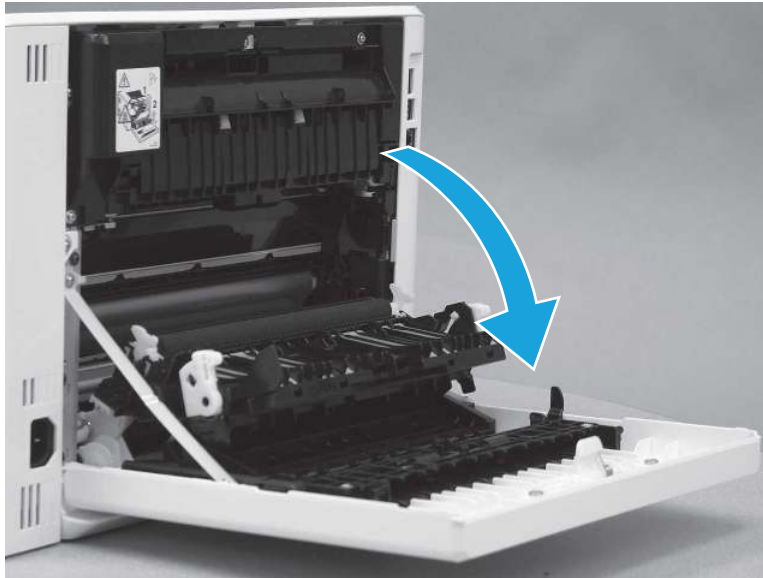
2. Open the front door.

**Figure 5-432** Open the front door



3. Open the duplexing door.

**Figure 5-433** Open the duplexer door



### 3. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

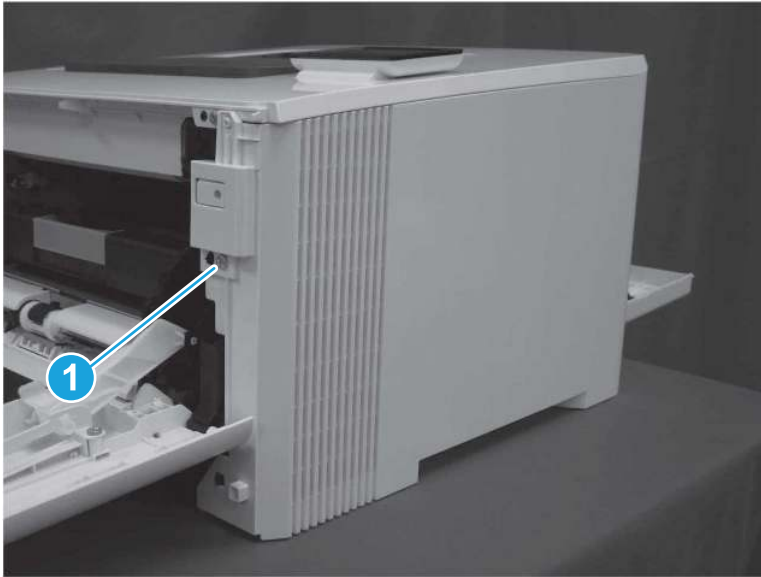
1. At the back of the printer, remove one screw (callout 1).

**Figure 5-434** Remove one screw



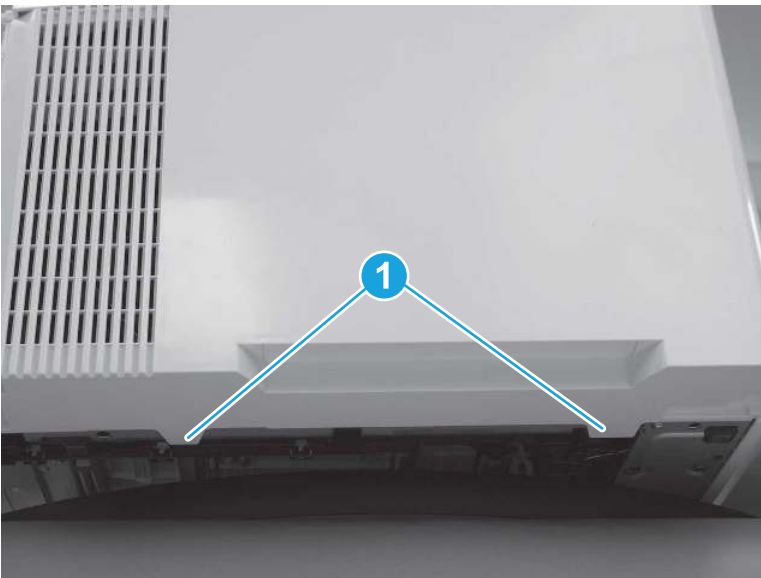
2. At the front of the printer, remove one screw (callout 1).

Figure 5-435 Remove one screw



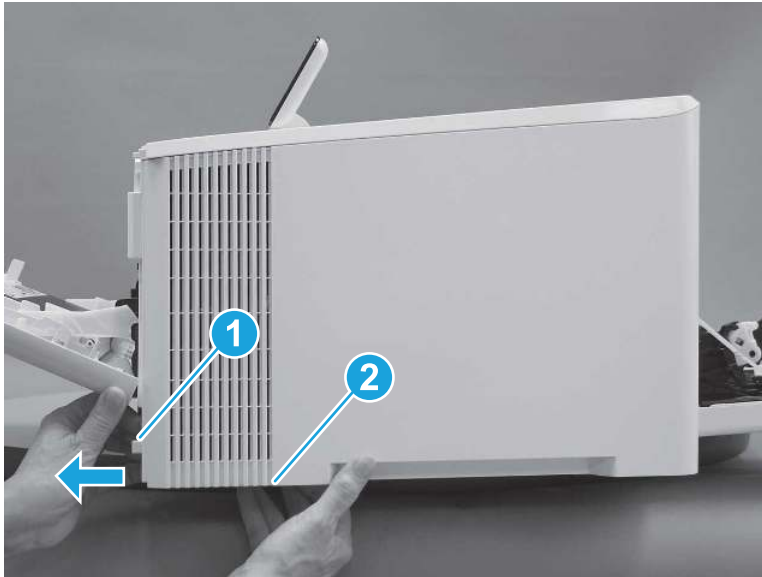
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

Figure 5-436 Locate the tabs



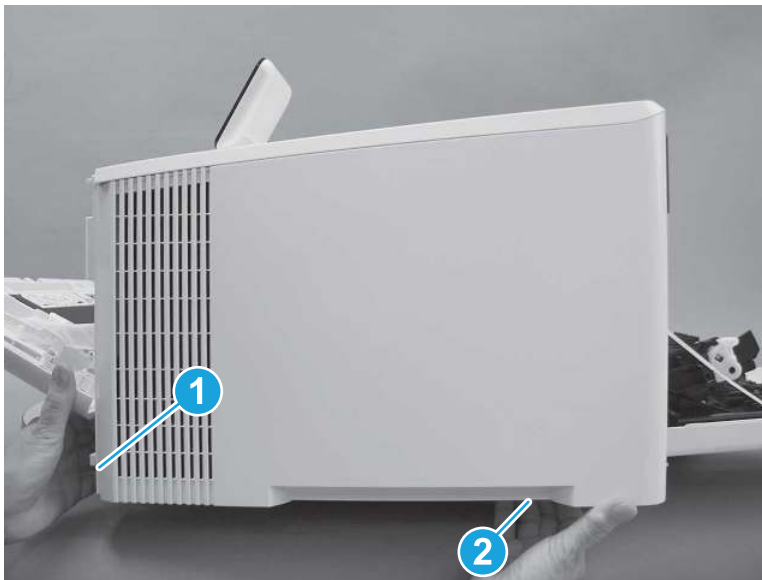
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-437** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

**Figure 5-438** Release lower rear tab



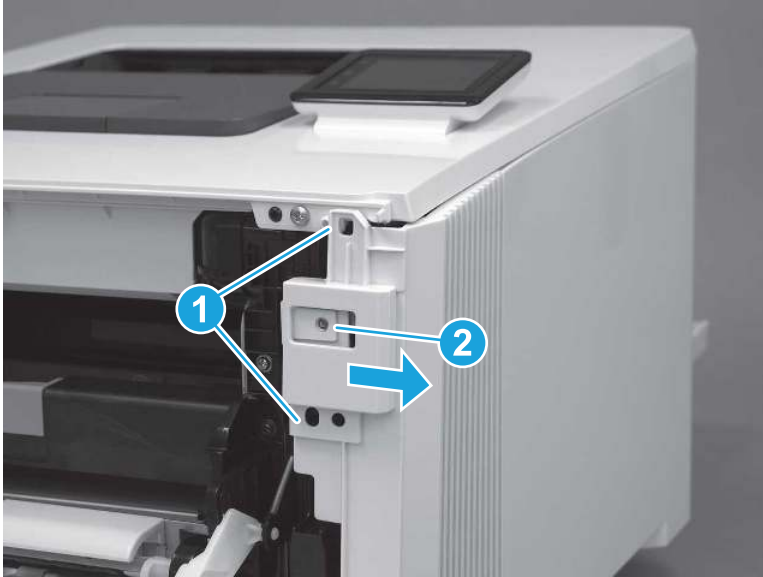
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

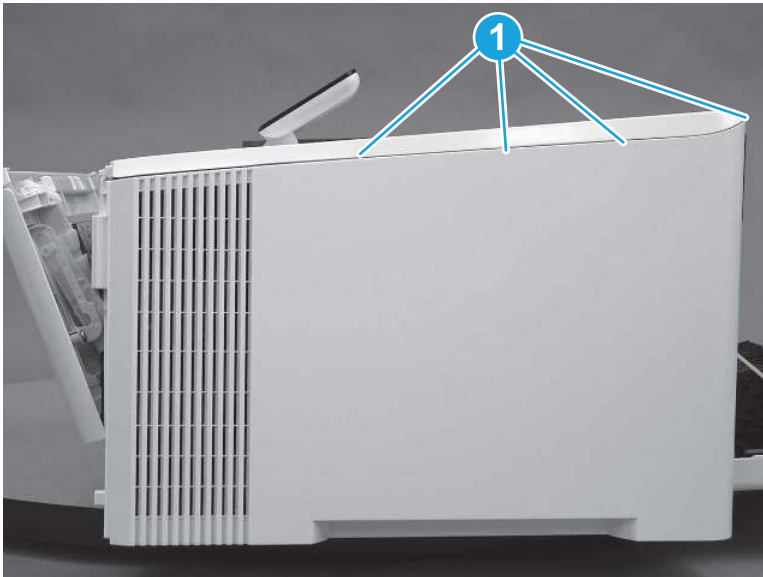
---

**Figure 5-439** Release two front tabs



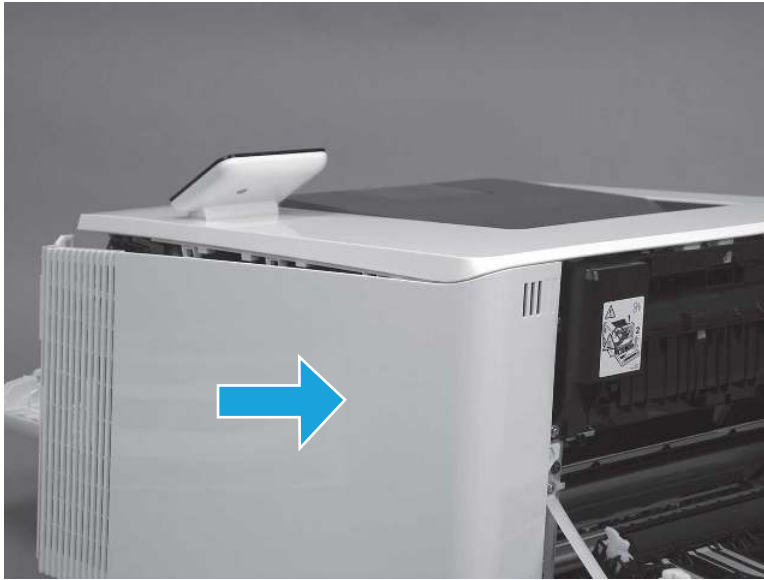
7. Release four tabs on the top of the printer (callout 1).

**Figure 5-440** Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-441** Remove the right cover



#### 4. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

**Figure 5-442** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-443** Remove one screw



3. At the front of the printer, remove one screw (callout 1).

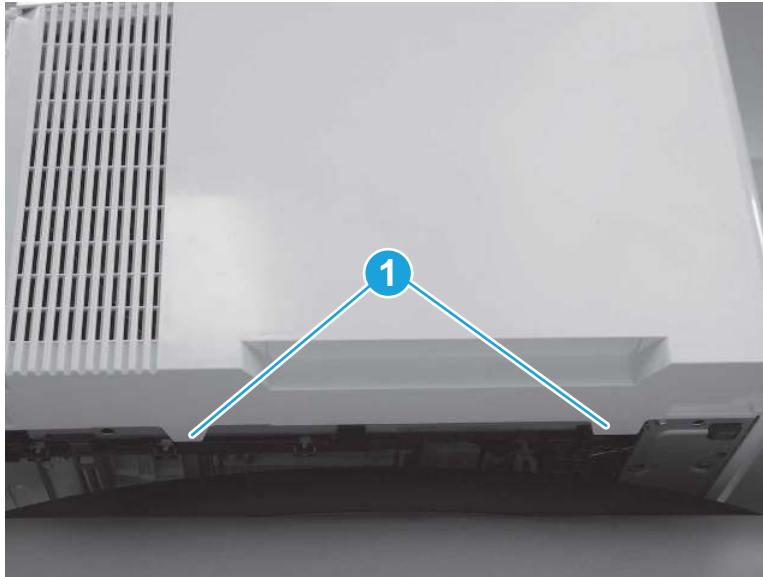
**Figure 5-444** Remove one screw





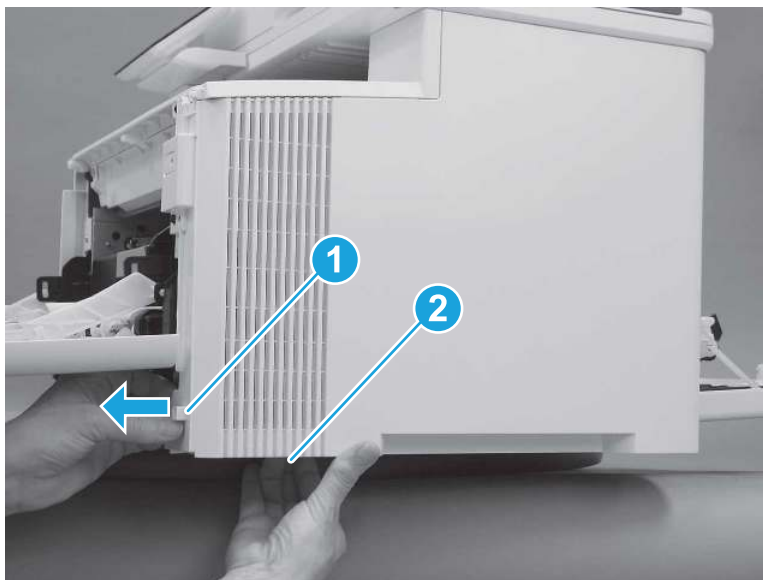
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-445** Locate the tabs



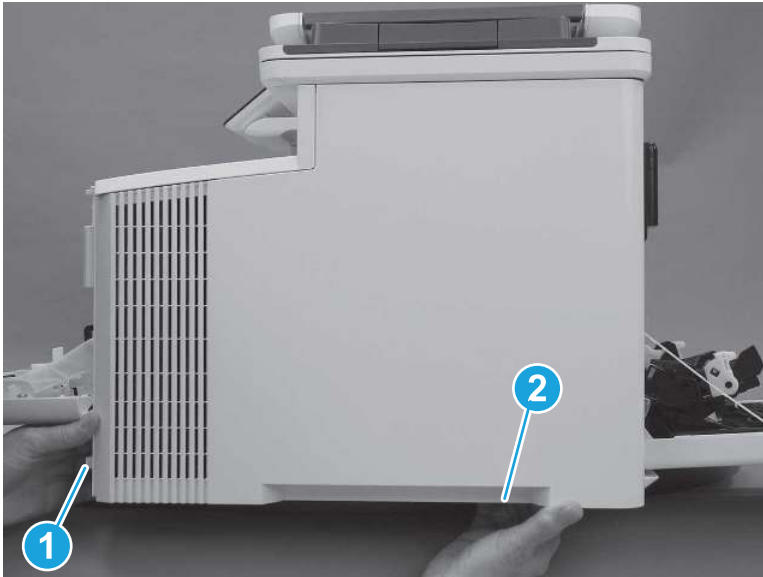
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-446** Release front lower tabs



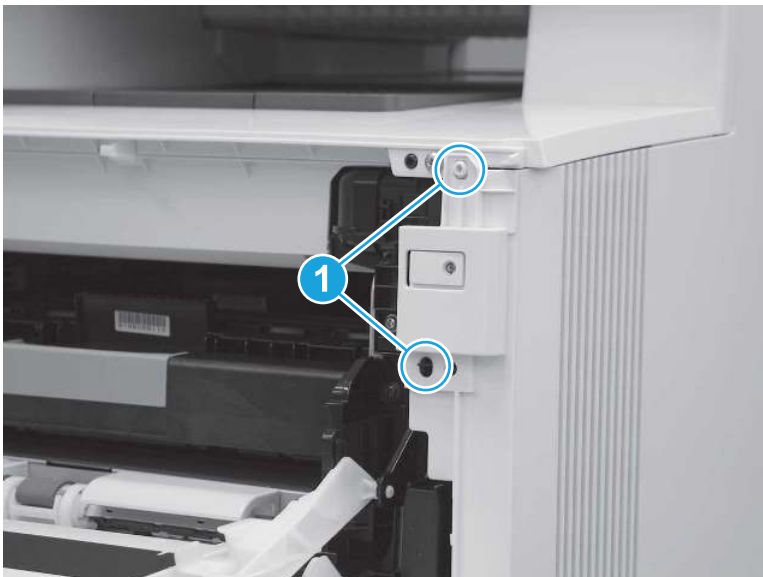
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-447** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-448** Release front upper tabs



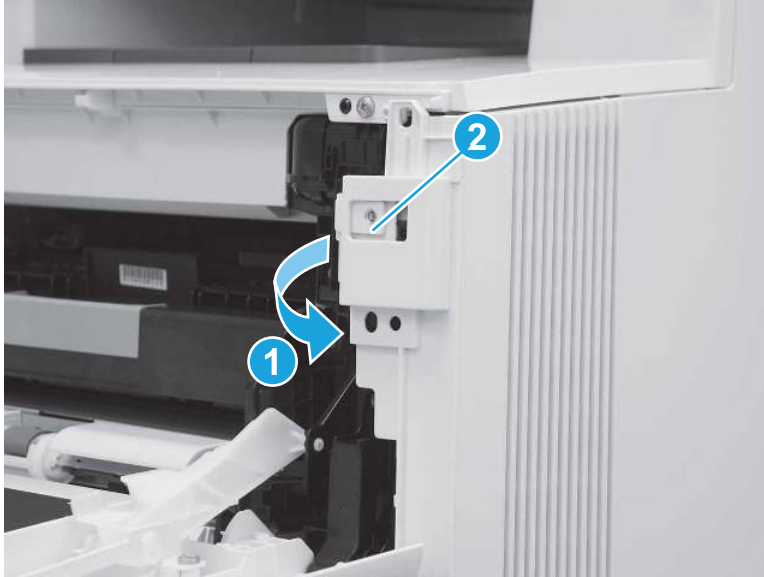
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

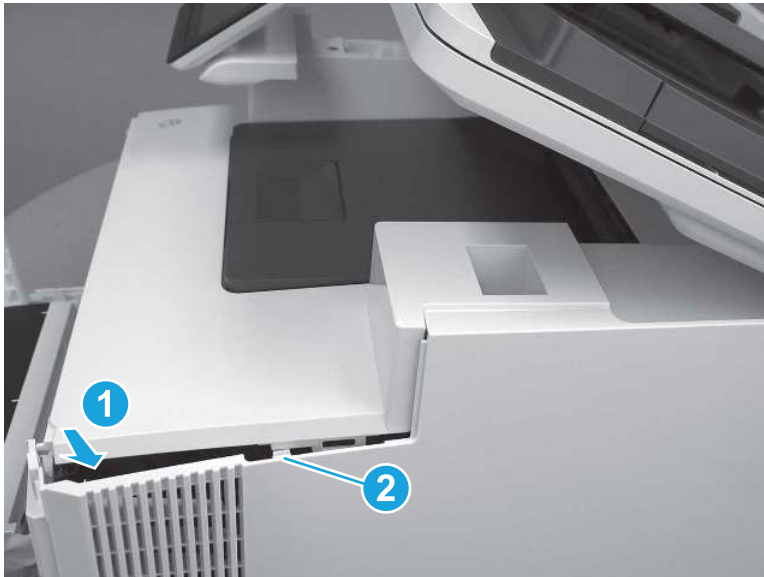
---

Figure 5-449 Rotate the front of the cover



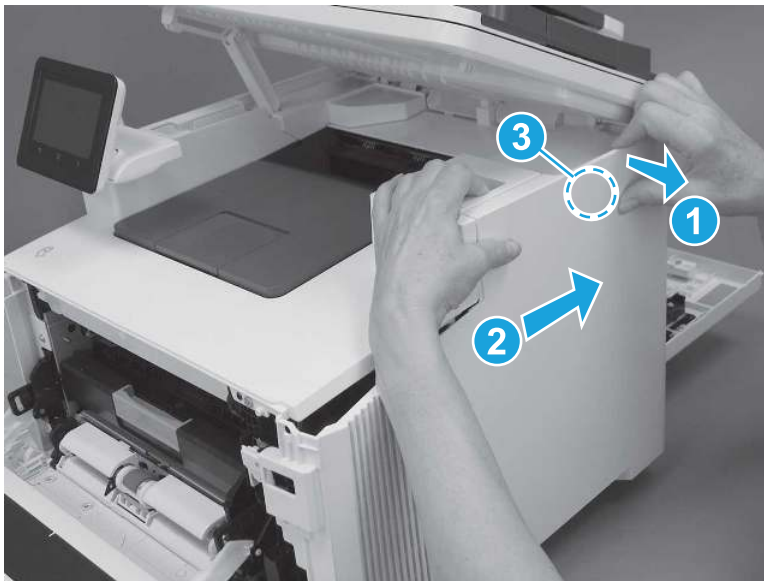
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

Figure 5-450 Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-451** Release one tab and one hook



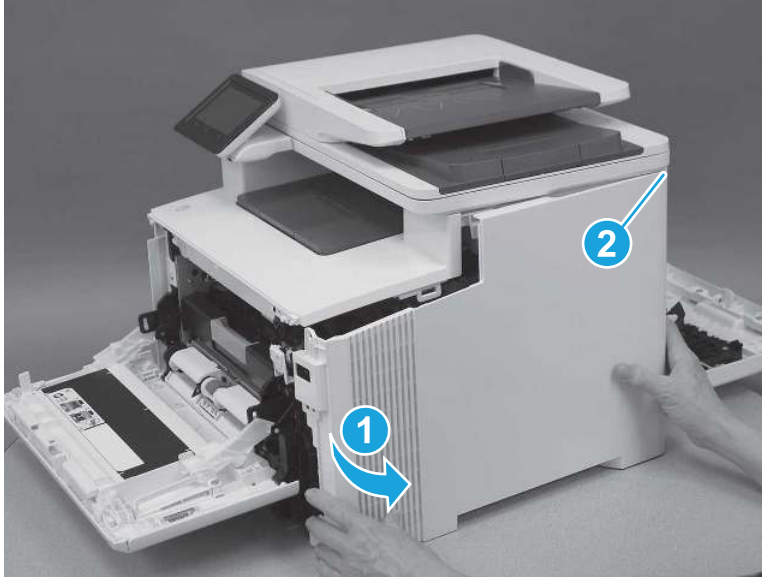
11. Lower the scanner.

**Figure 5-452** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-453** Remove the right cover

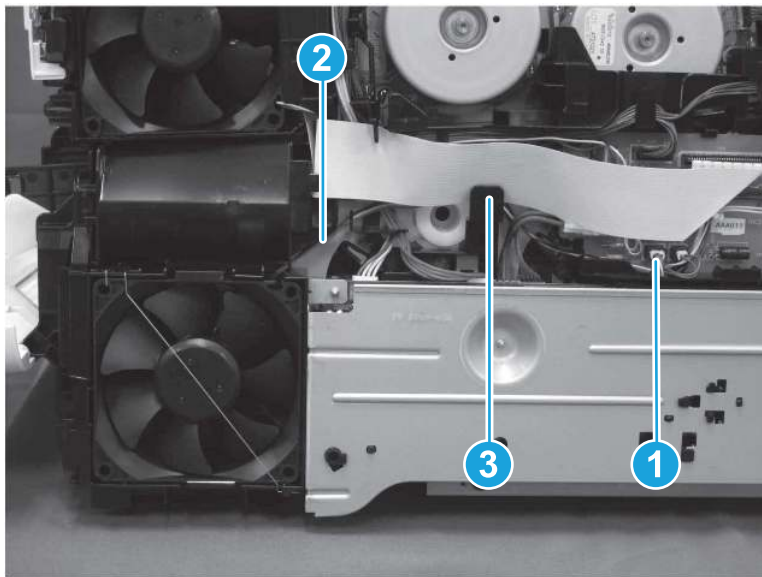


## 5. Remove the power supply fan

Follow these steps to remove the power supply fan.

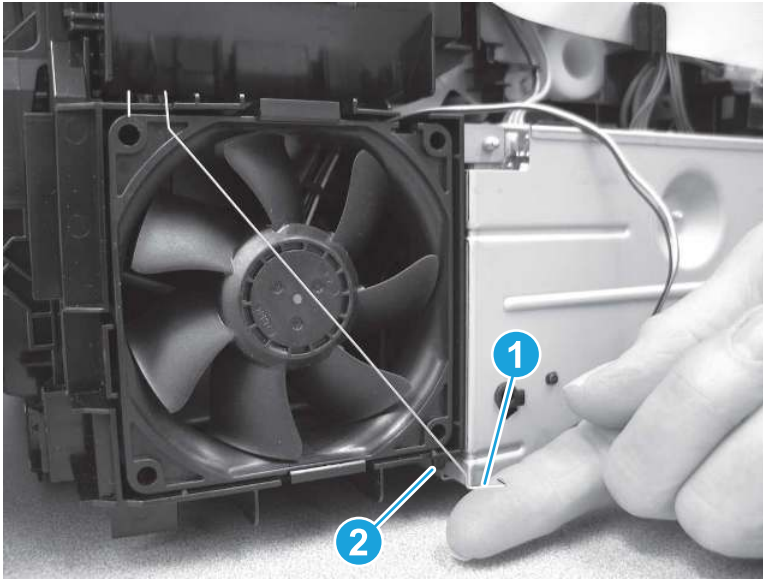
1. Disconnect one connector (callout 1), and then remove the cable (callout 2) from the wire guide (callout 3).

**Figure 5-454** Disconnect one connector and release cables from guides



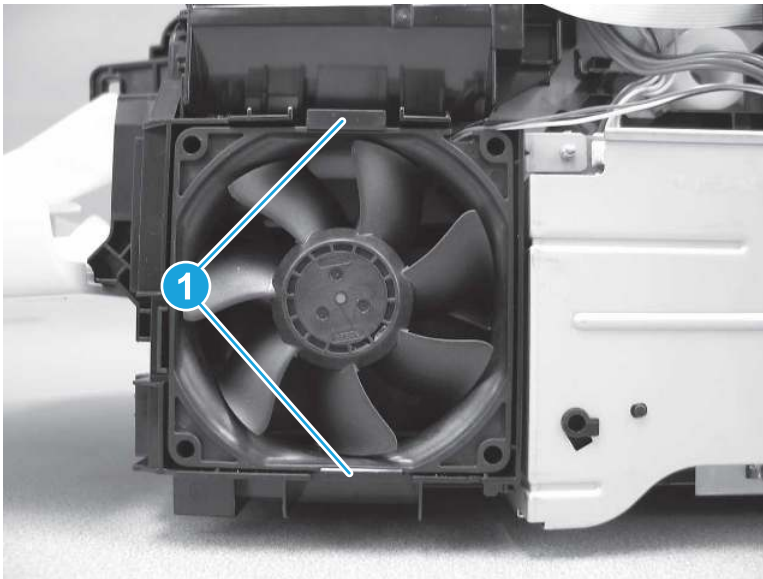
2. Release the spring (callout 1) from the tab (callout 2).

**Figure 5-455** Release the spring



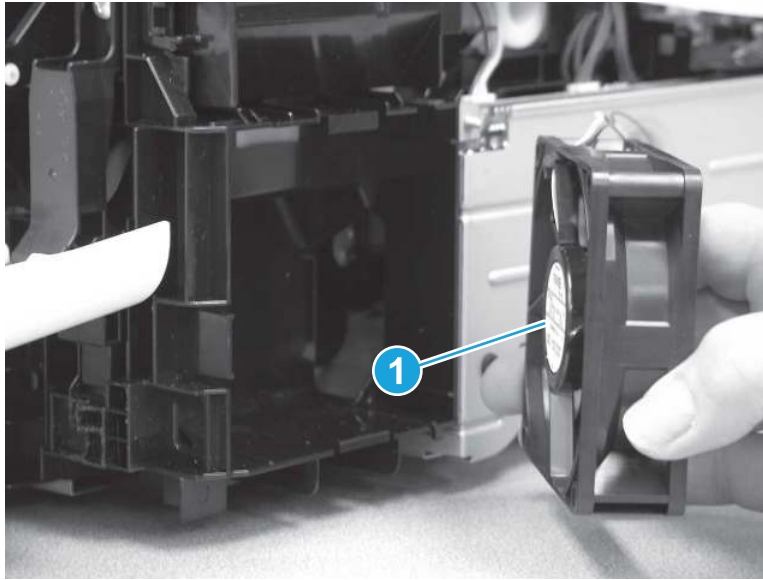
3. Release two tabs (callout 1).

**Figure 5-456** Release two tabs



4. Remove the power supply fan (callout 1).

**Figure 5-457** 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.

---

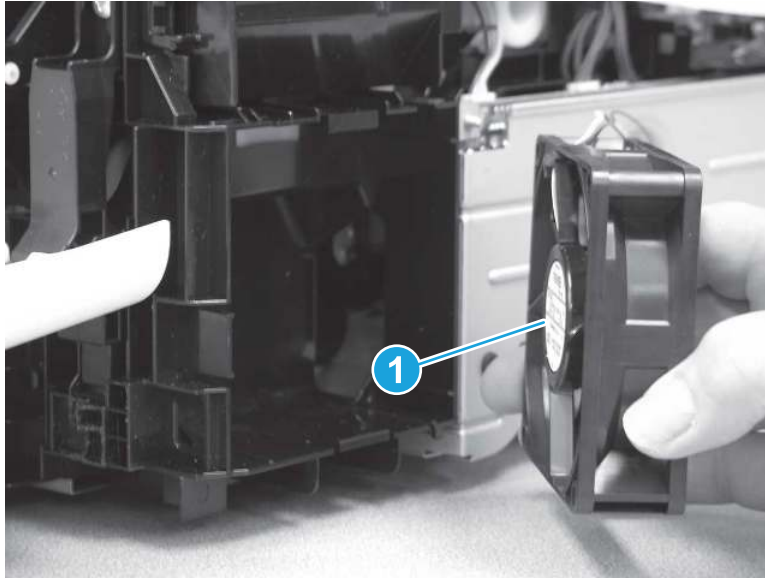
## 7. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Power supply fan

- ▲ Position the power supply fan so that the white label (callout 1) is facing the printer.

**Figure 5-458** Install the power supply fan



## Removal and replacement: Low-voltage power supply (LVPS)

Learn how to remove and replace the low-voltage power supply (LVPS).

[View a video of removing and replacing the LVPS.](#)

Mean time to repair: 26 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](http://www.hp.com/buy/parts).

**Table 5-28** Part information

Part number	Part description
RM3-7278-000CN	LV power supply PCA (110-127V)
RM3-7279-000CN	LV power supply PCA (220-240V)

### Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length



- #2 Phillips short-shaft or right-angle screwdriver with a magnetic tip
- Small flat-blade screwdriver

### After performing service

#### Turn the printer power on

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

### Post service test

Make sure that the printer initializes to a **Ready** state.


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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-459** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

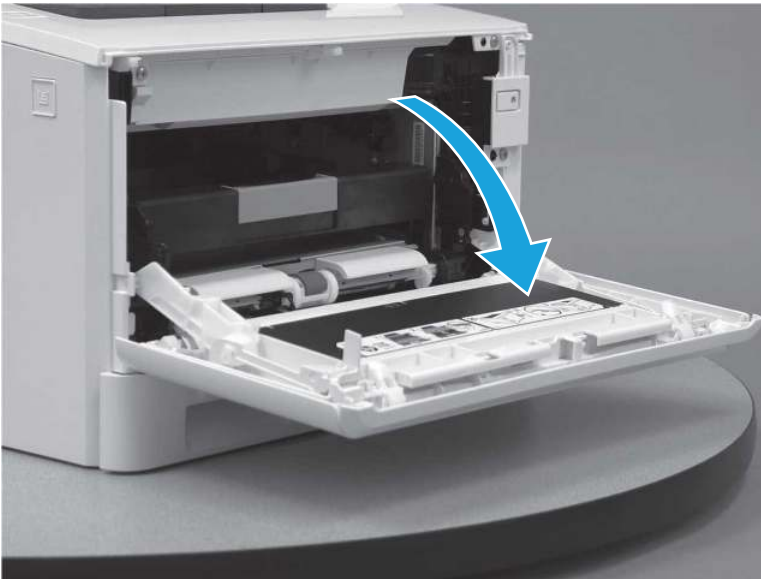
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-460** Release the front door



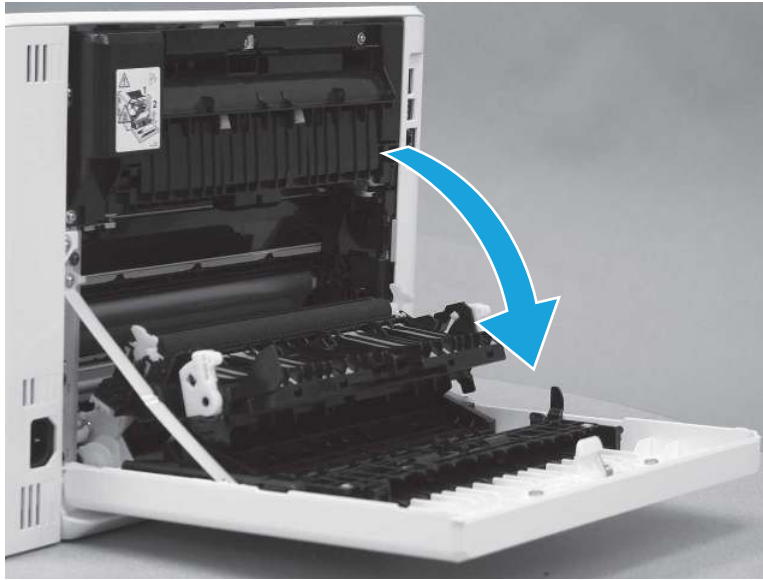
2. Open the front door.

**Figure 5-461** Open the front door



3. Open the duplexing door.

Figure 5-462 Open the duplexer door

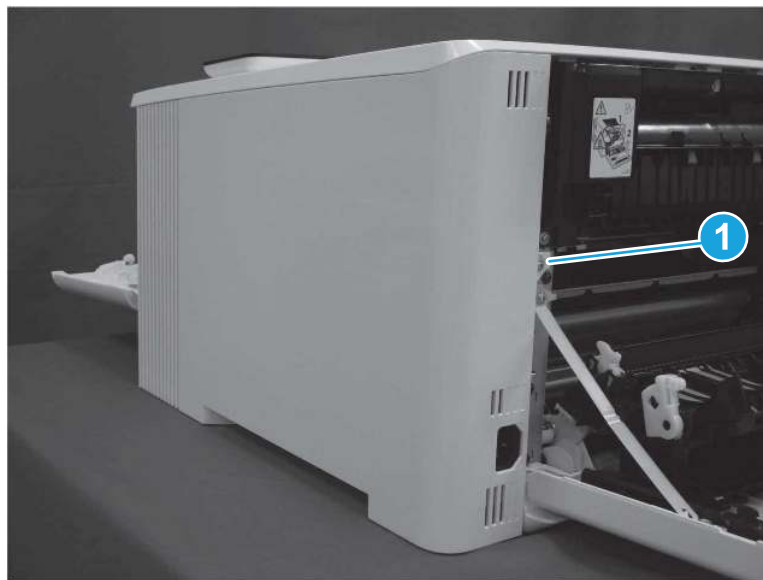


### 3. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

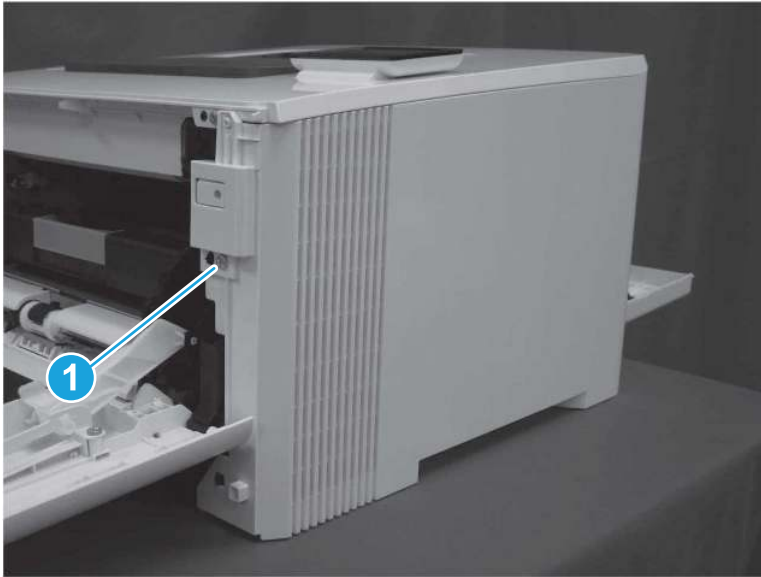
1. At the back of the printer, remove one screw (callout 1).

Figure 5-463 Remove one screw



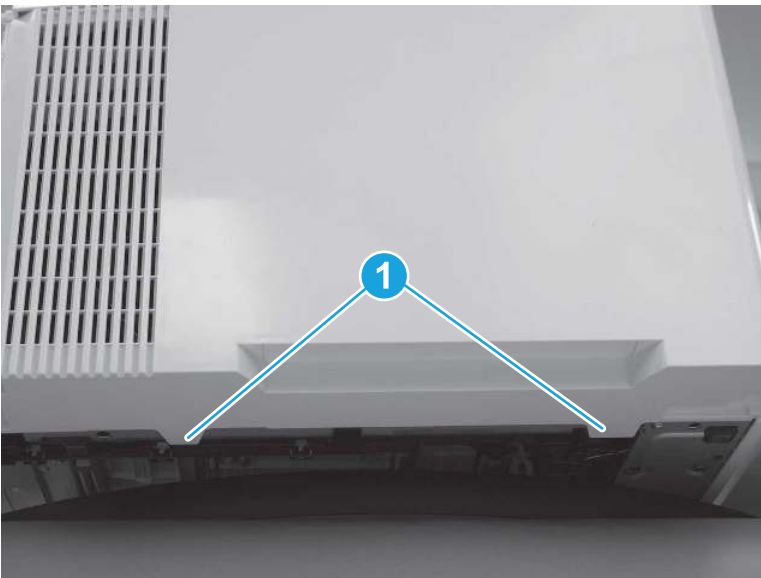
2. At the front of the printer, remove one screw (callout 1).

Figure 5-464 Remove one screw



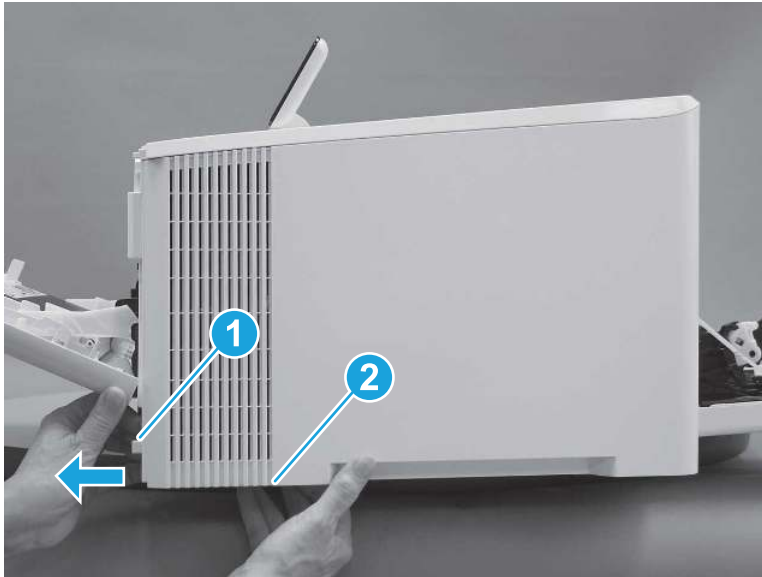
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

Figure 5-465 Locate the tabs



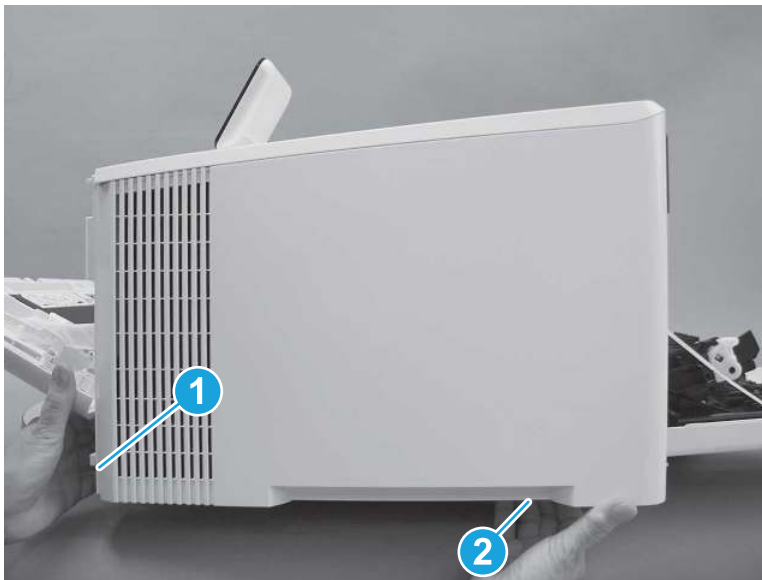
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-466** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

**Figure 5-467** Release lower rear tab



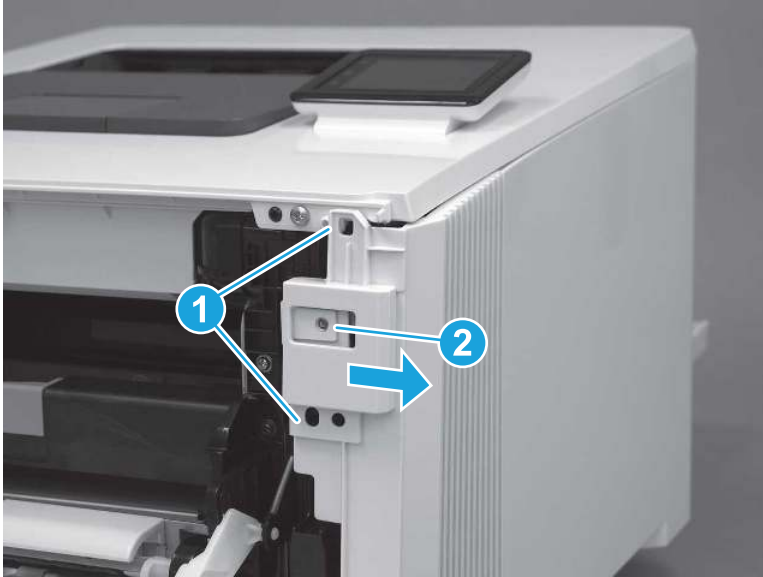
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

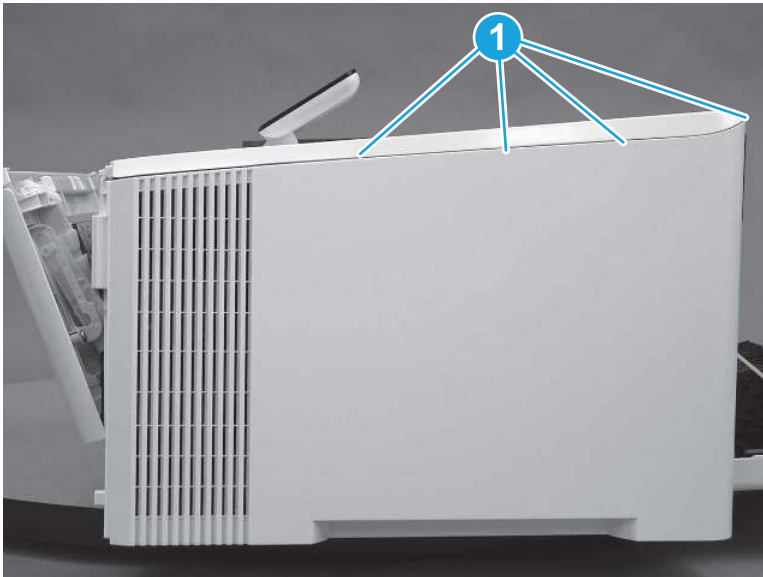
---

**Figure 5-468** Release two front tabs



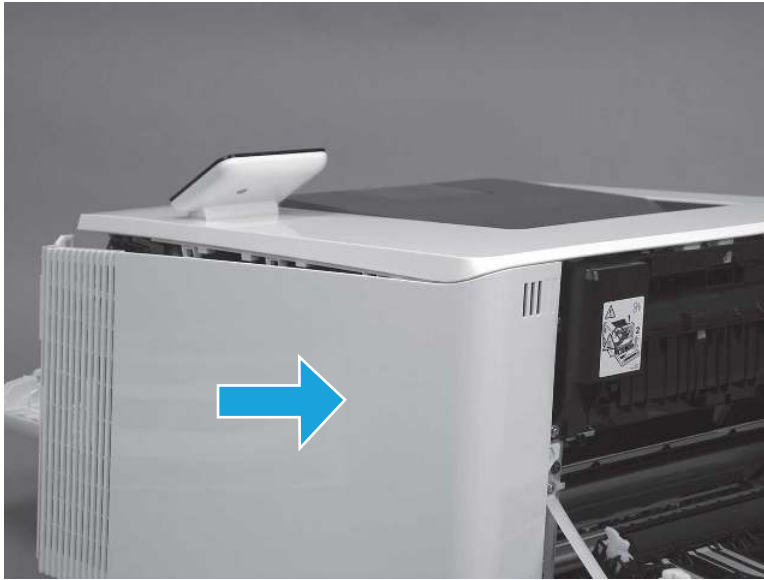
7. Release four tabs on the top of the printer (callout 1).

**Figure 5-469** Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-470** Remove the right cover



#### 4. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

**Figure 5-471** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-472** Remove one screw



3. At the front of the printer, remove one screw (callout 1).

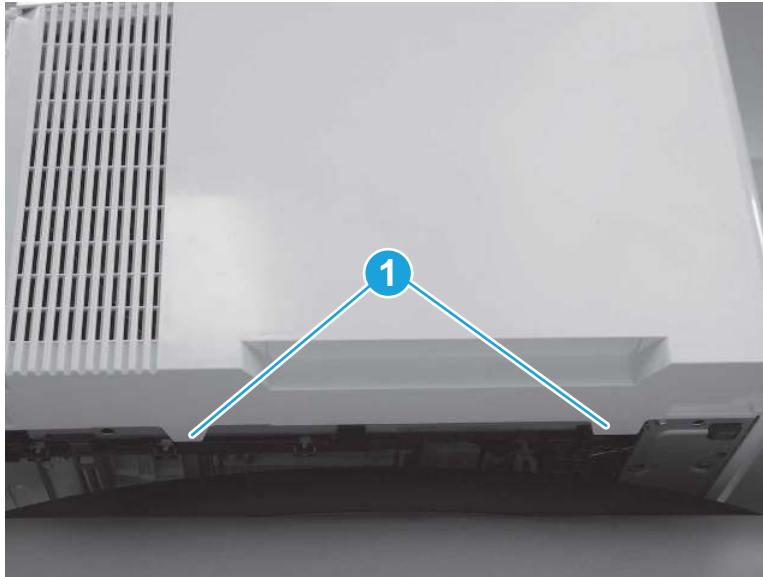
**Figure 5-473** Remove one screw





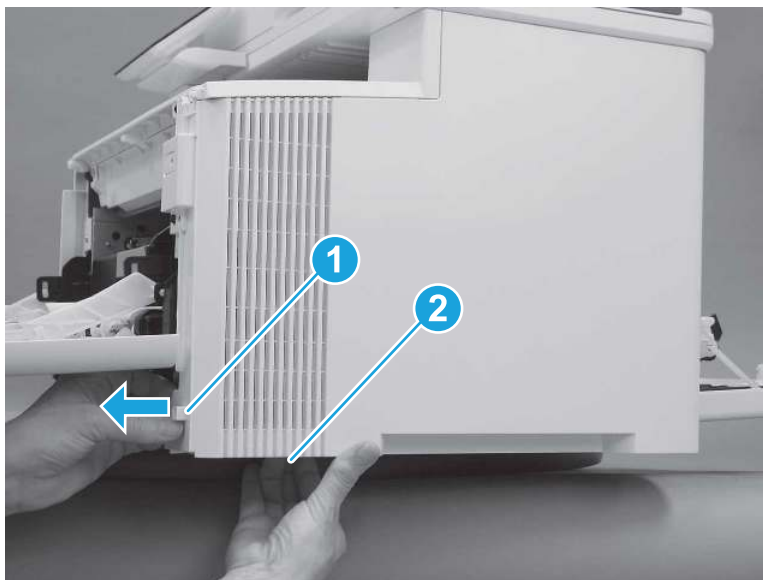
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-474** Locate the tabs



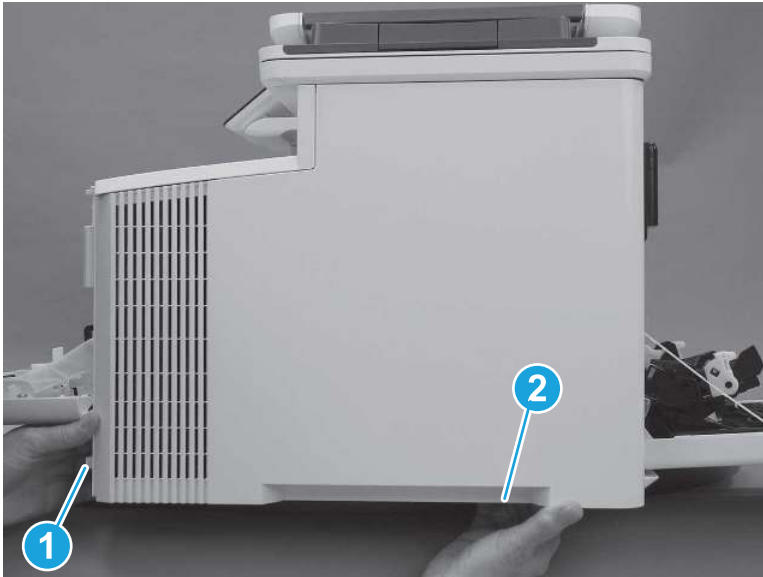
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-475** Release front lower tabs



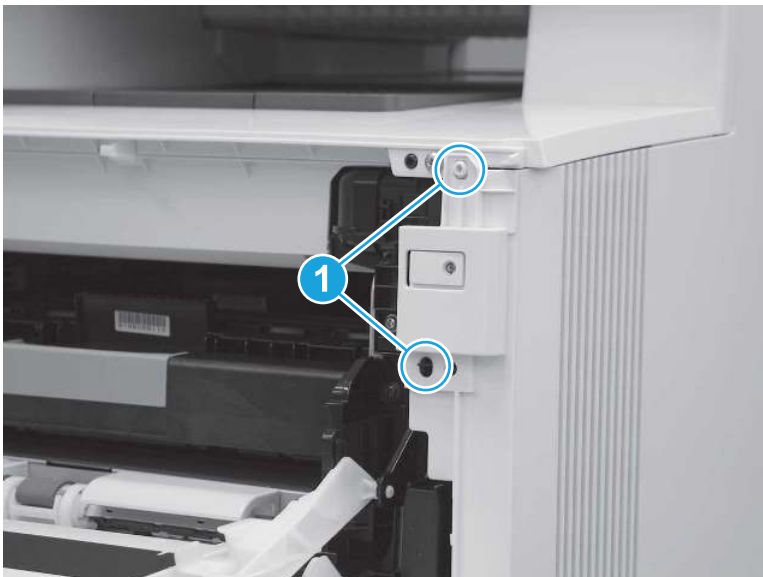
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

Figure 5-476 Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

Figure 5-477 Release front upper tabs



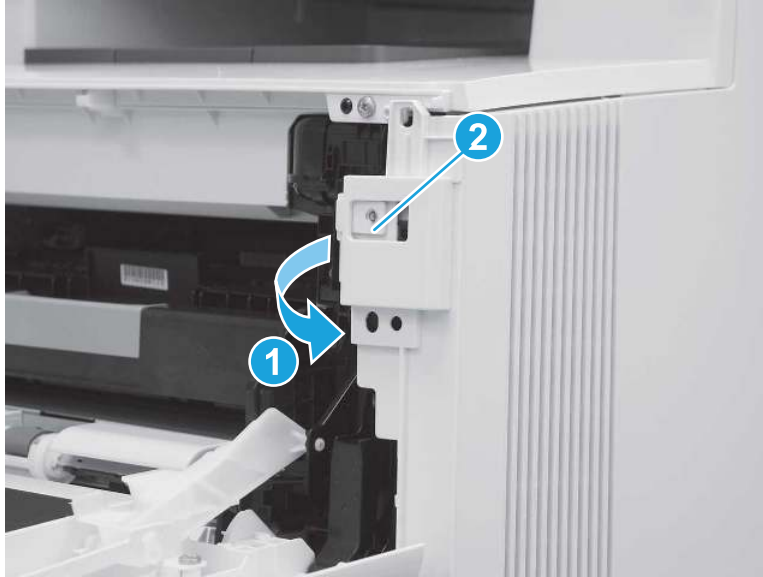
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

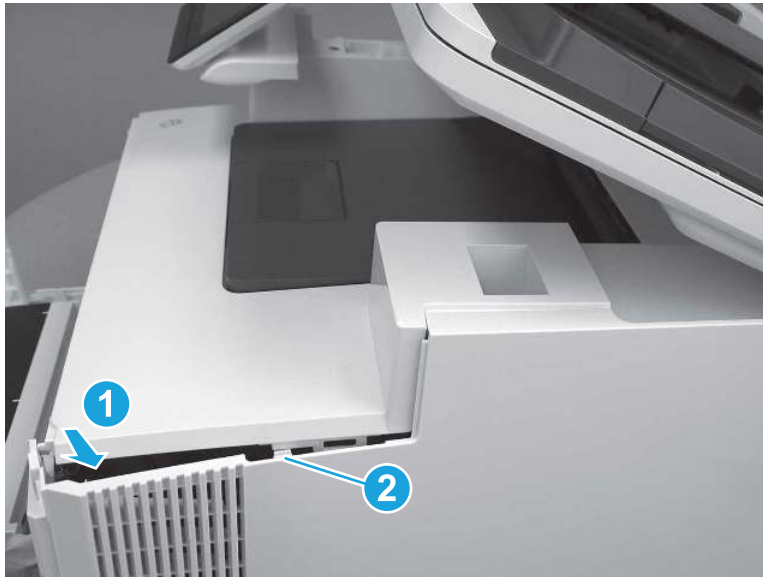
---

Figure 5-478 Rotate the front of the cover



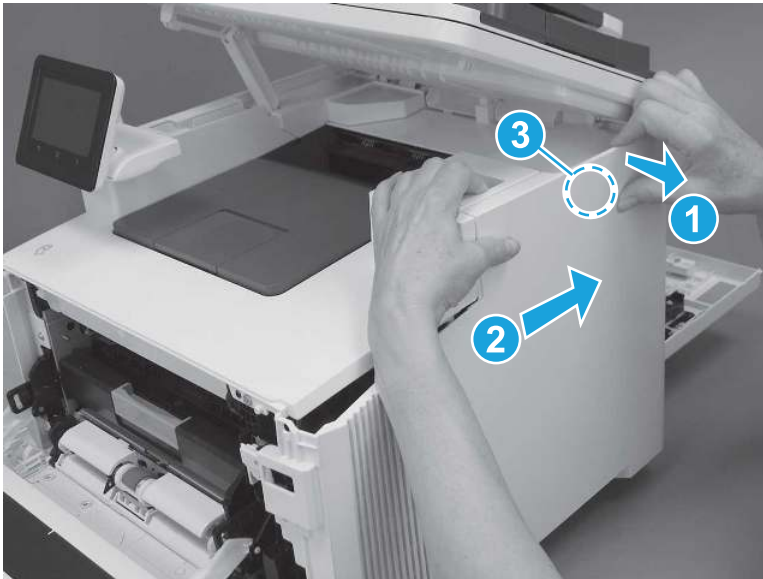
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

Figure 5-479 Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-480** Release one tab and one hook



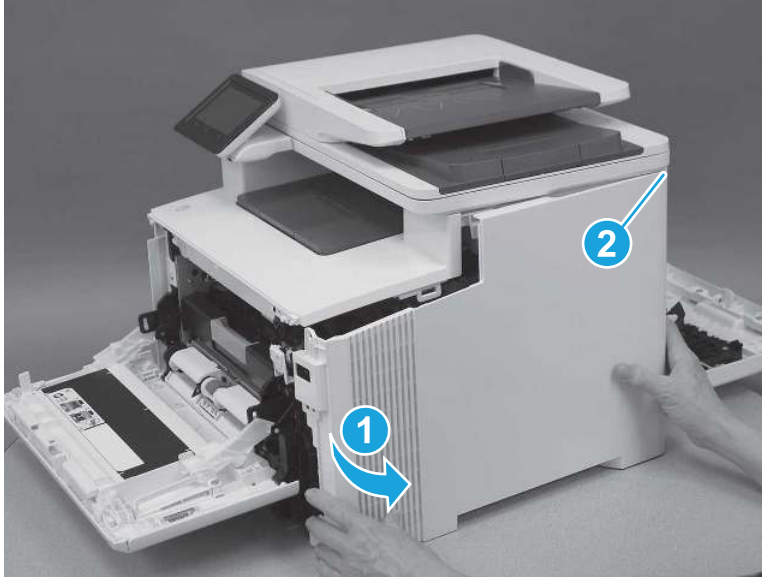
11. Lower the scanner.

**Figure 5-481** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-482** Remove the right cover

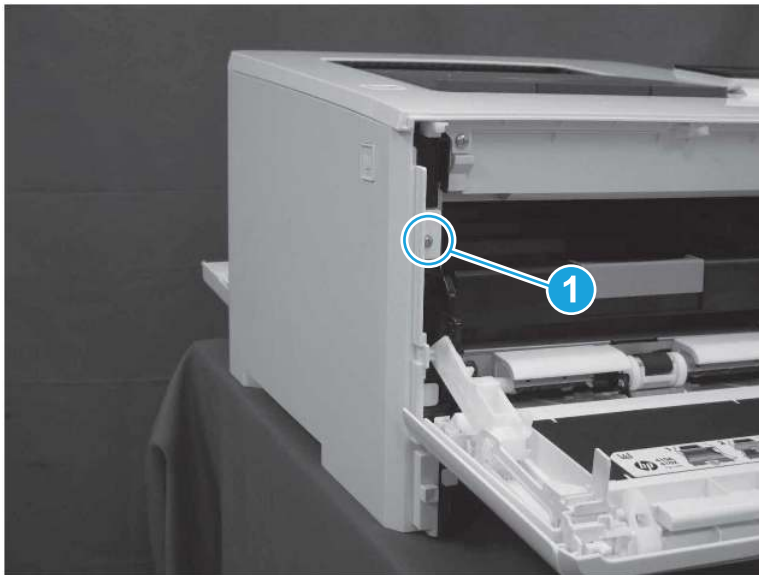


## 5. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

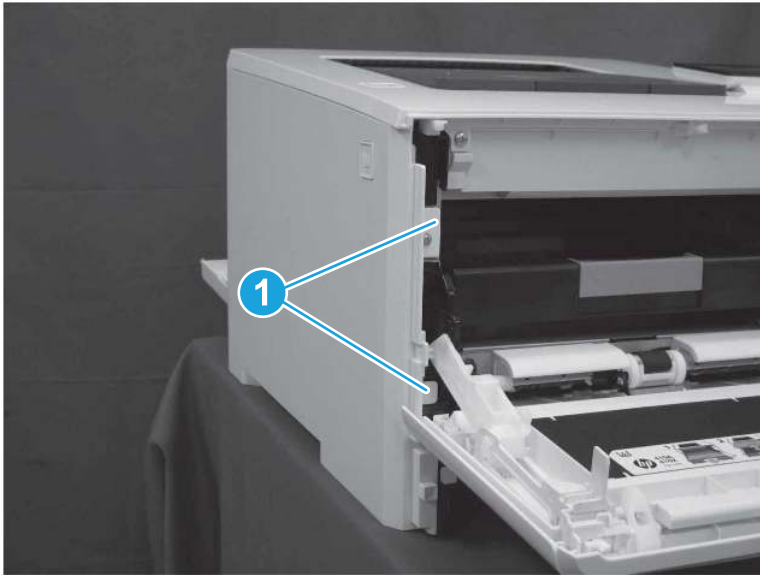
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-483** Remove one screw



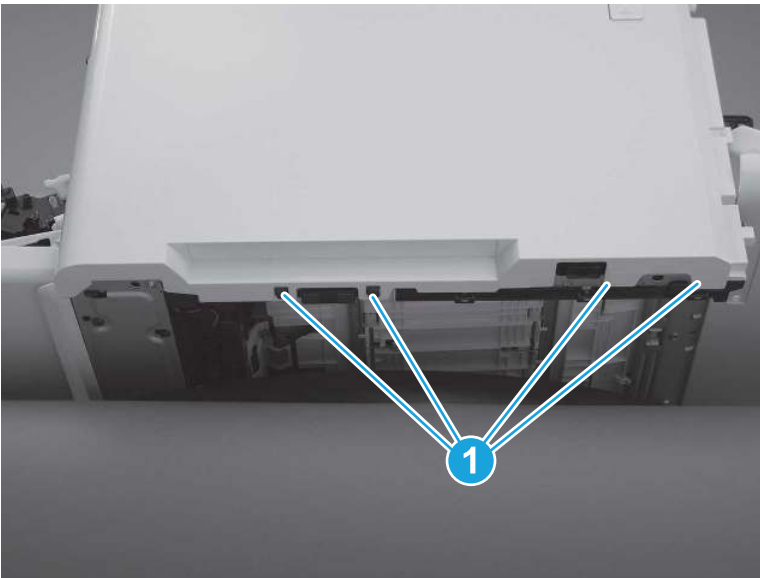
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-484** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-485** Locate the tabs



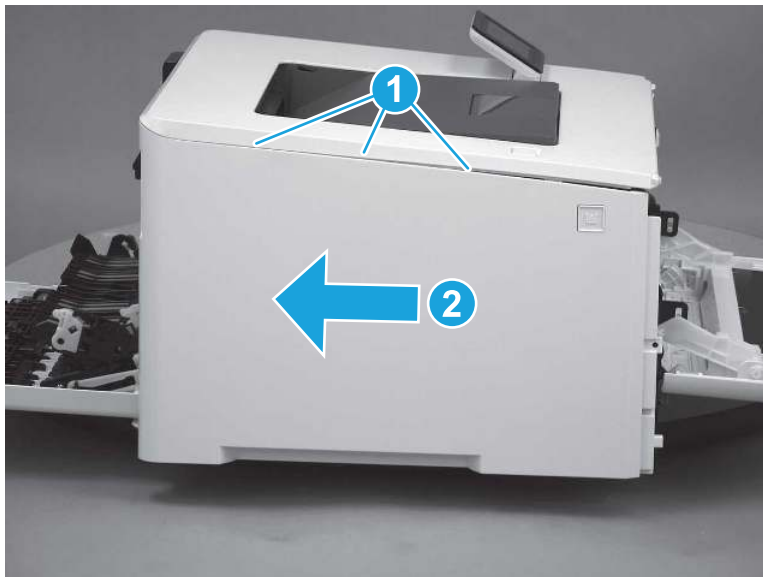
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-486 Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

Figure 5-487 Release three tabs



## 6. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

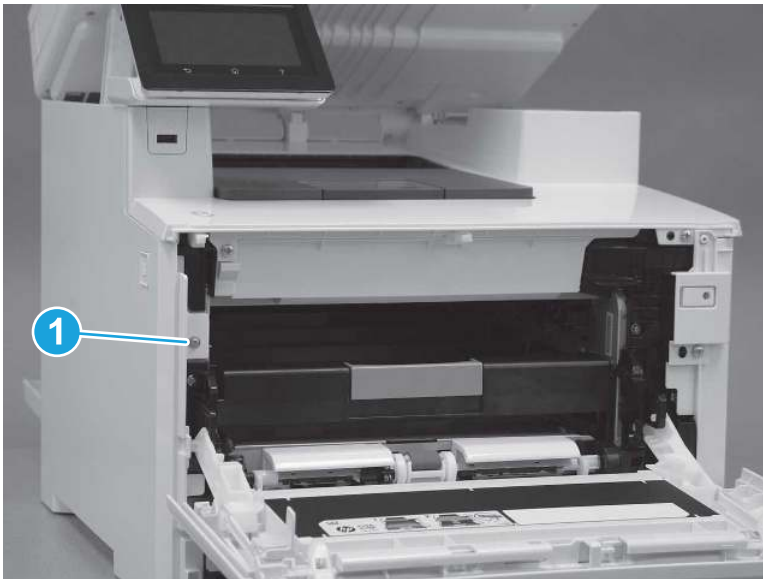
1. Raise the scanner.

**Figure 5-488** Raise the scanner



2. At the front of the printer, remove one screw (callout 1).

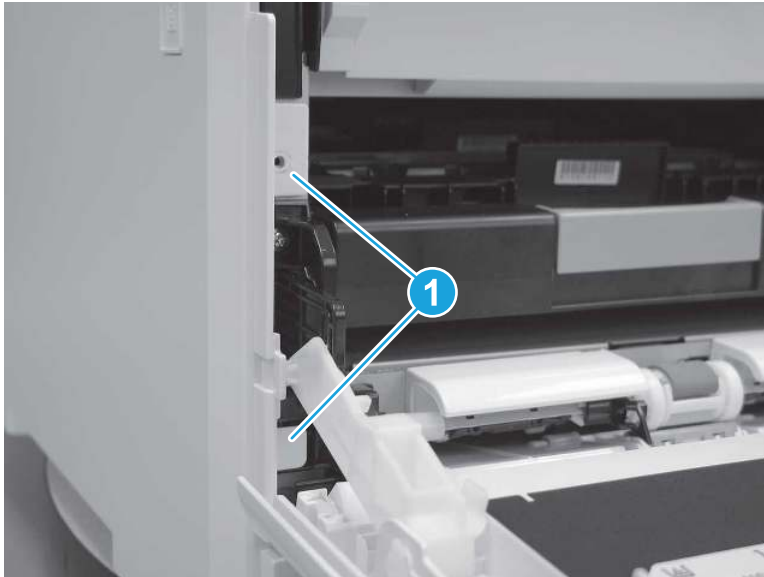
**Figure 5-489** Remove one screw





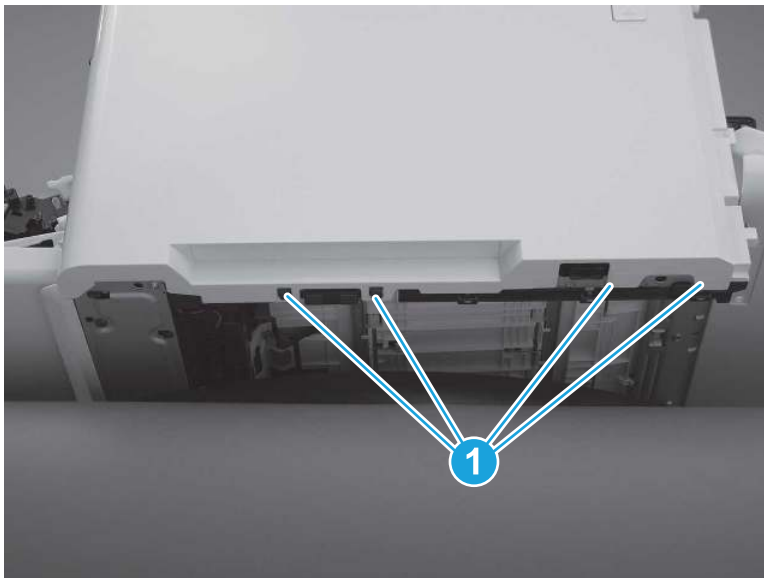
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-490** Release two tabs



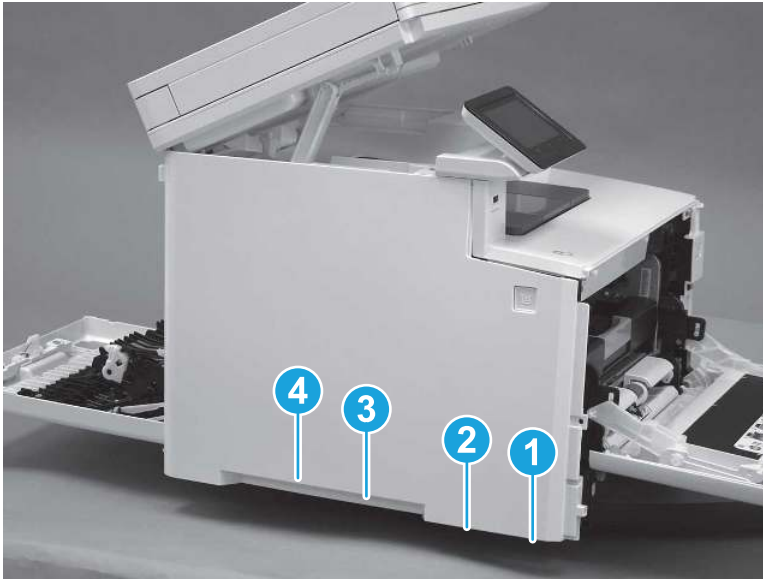
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-491** Locate the tabs



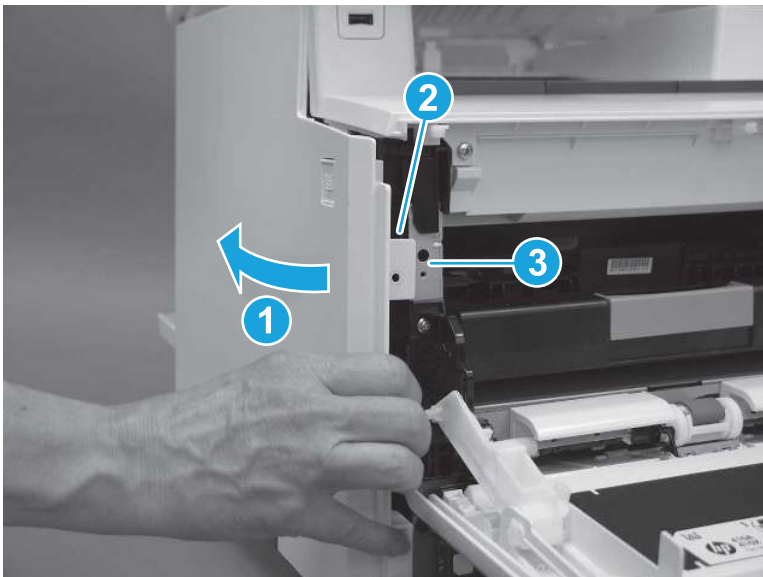
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-492** Release four tabs



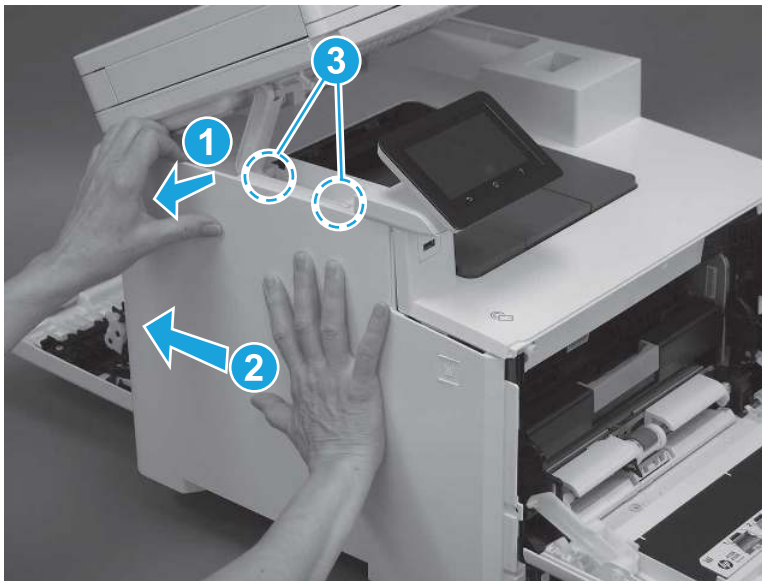
6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

**Figure 5-493** Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-494** Release one tab and two hooks



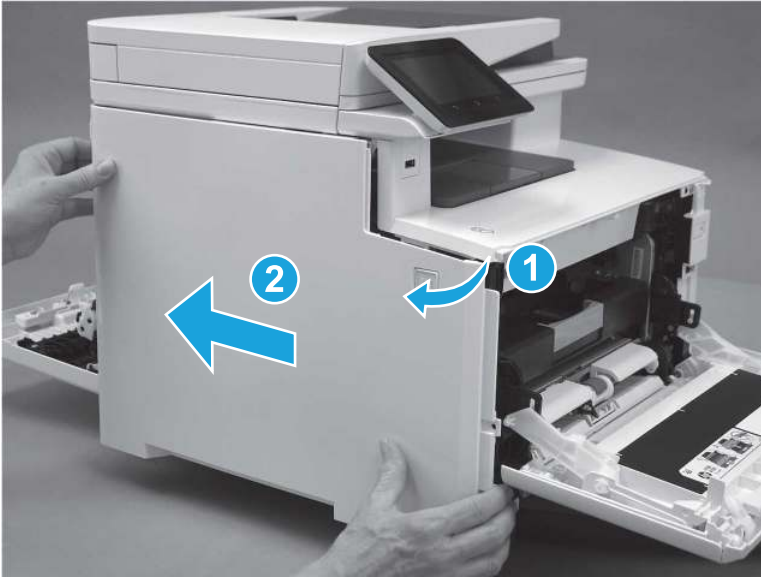
8. Lower the scanner.

**Figure 5-495** Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

Figure 5-496 Remove the left cover

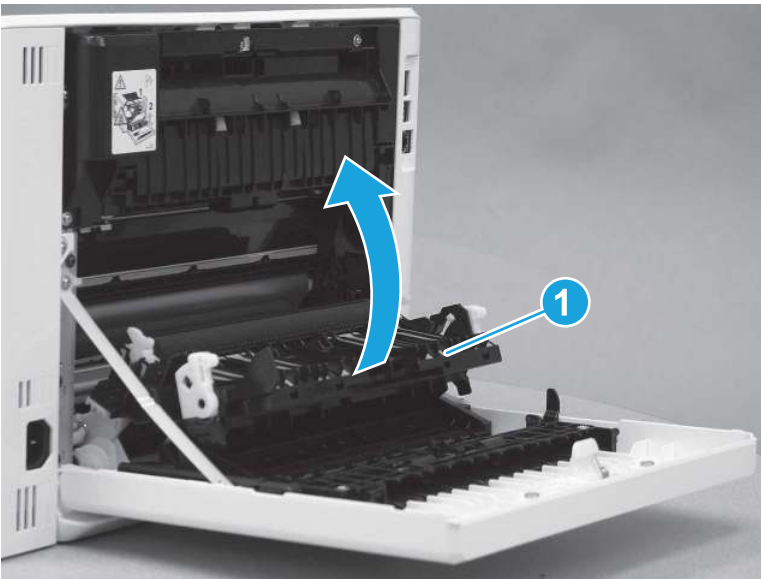


## 7. Remove the duplexing door assembly

Follow these steps to remove the duplexing door assembly.

1. Rotate the secondary transfer assembly (callout 1) toward the printer to close it.

Figure 5-497 Close the secondary transfer assembly



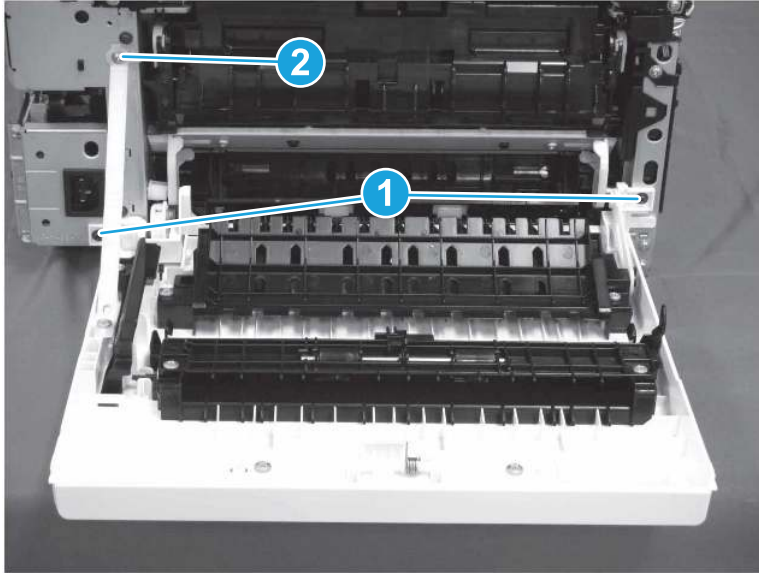
2. At the back of the printer, remove two screws (callout 1), and then remove one screw (callout 2) that holds the retention arm.

---

 **TIP:** Note that the screw (callout 2) that holds the retention arm is longer than the other two. Make sure this screw is installed in the correct position.

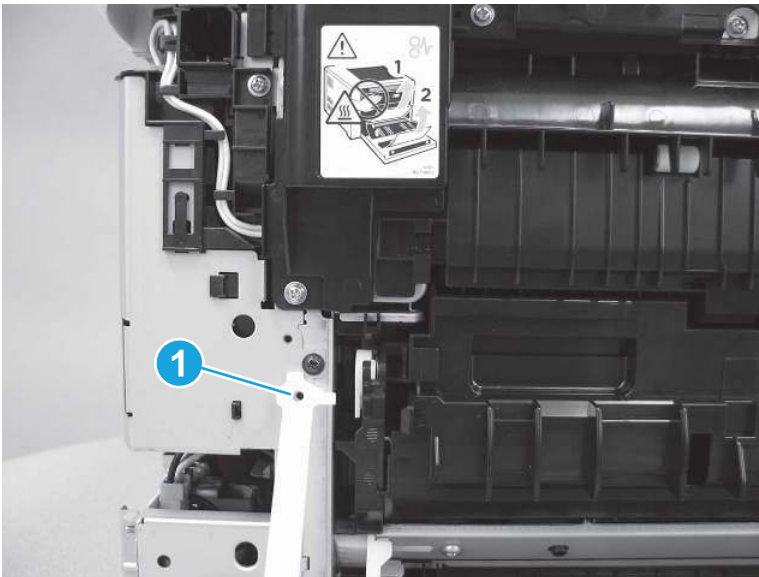
---

Figure 5-498 Remove three screws



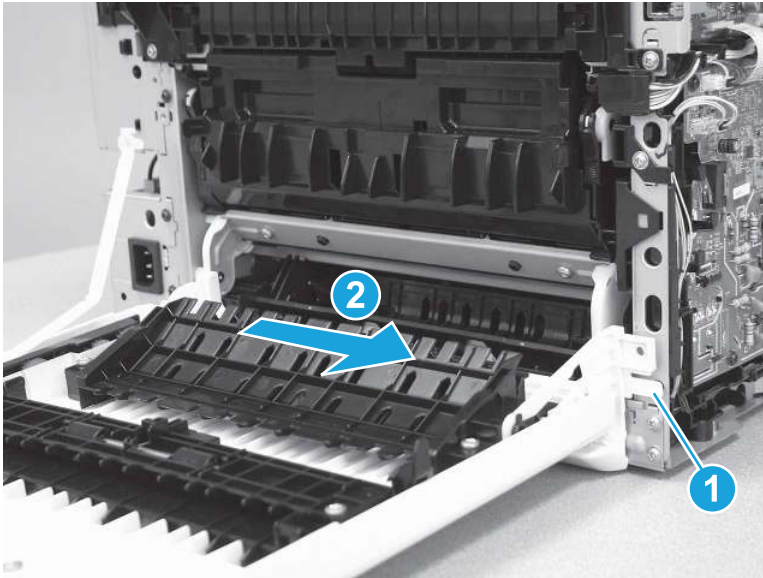
3. Release the retention arm (callout 1).

Figure 5-499 Release the retention arm



4. Release one tab (callout 1), and then slide the duplexer door (callout 2) to the right to remove it.

**Figure 5-500** Remove the duplexing door

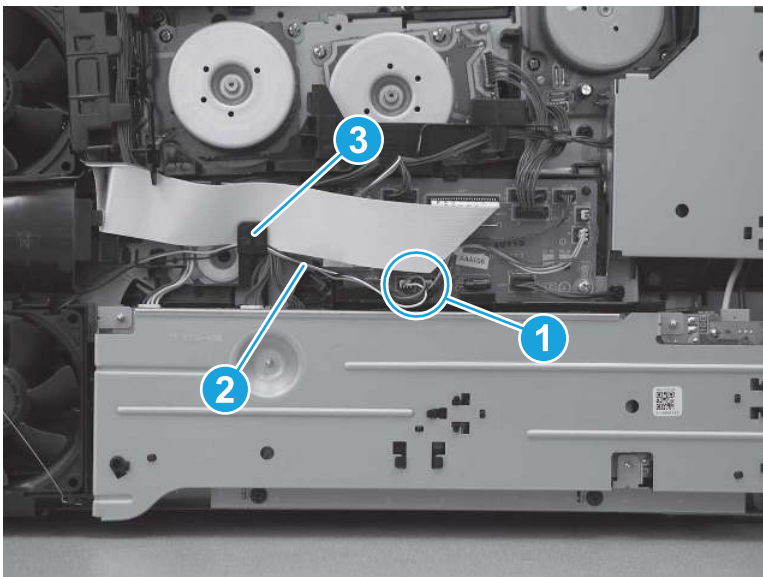


## 8. Remove the LVPS

Follow these steps to remove the LVPS.

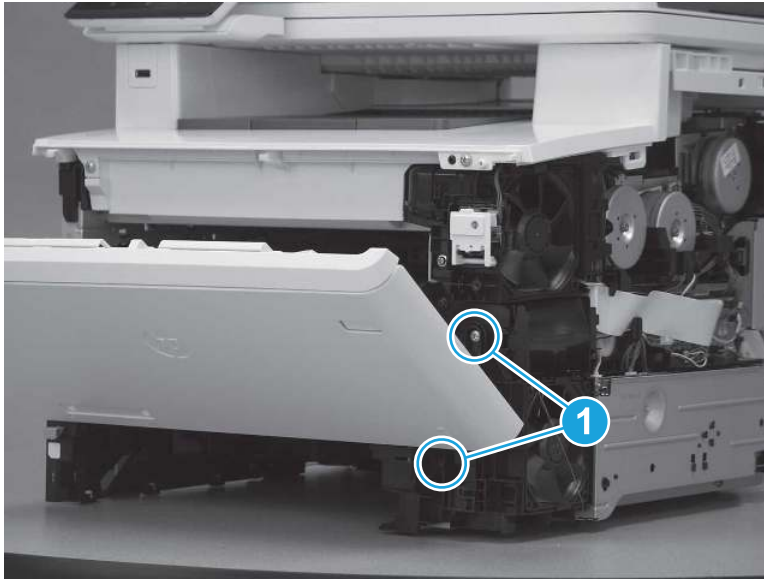
1. Disconnect one connector (callout 1), and then remove the cable (callout 2) from the wire guide (callout 3).

**Figure 5-501** Disconnect one connector and release cables from guides



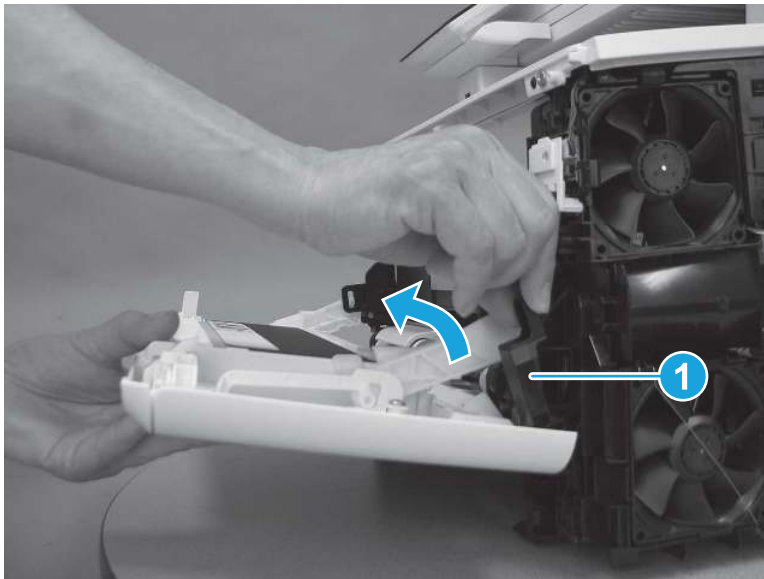
2. Remove two screws (callout 1).

**Figure 5-502** Remove two screws



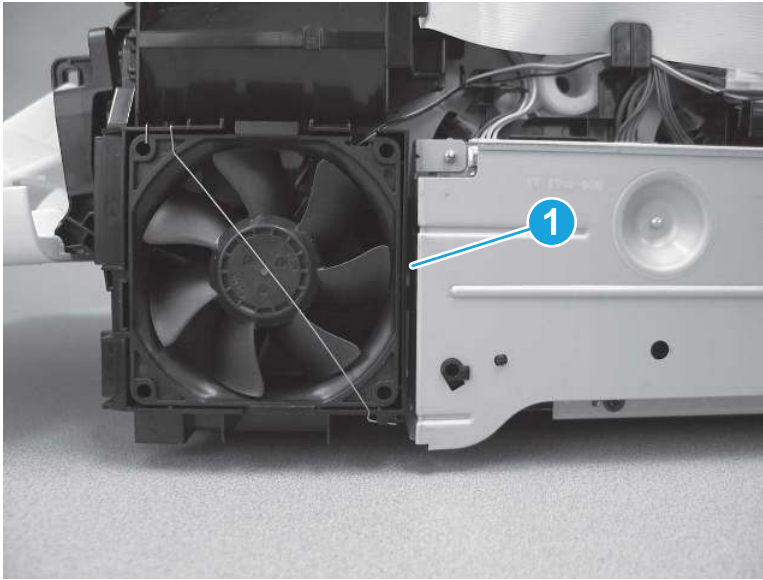
3. Release the hinge arm (callout 1).

**Figure 5-503** Release the hinge arm



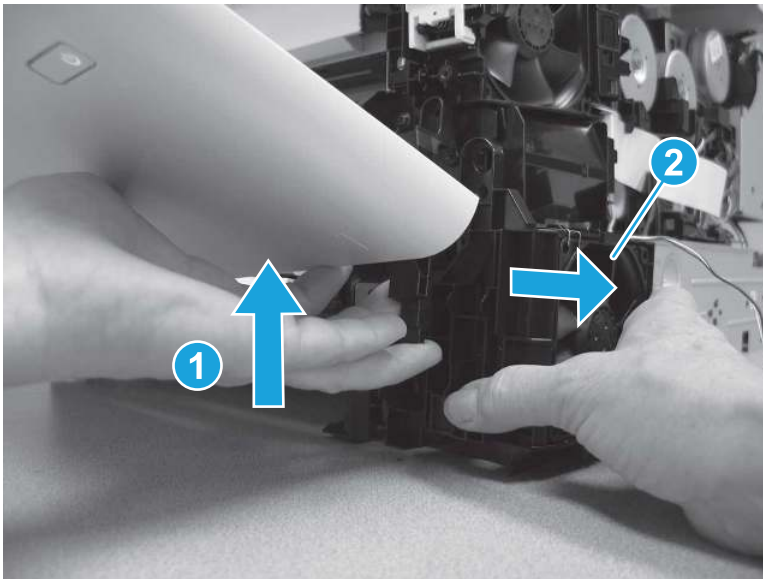
4. Release one tab (callout 1) on the right side of the power supply fan.

**Figure 5-504** Release one tab




5. Lift the front door up slightly (callout 1), and then remove the power supply fan and holder (callout 2).

**Figure 5-505** Remove the power supply fan and holder



6. Before proceeding, take note of the position of two cables (callout 1).

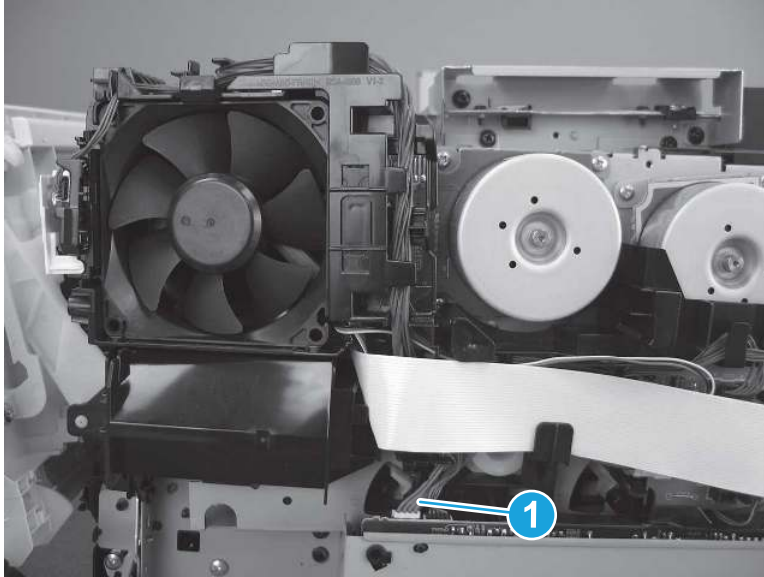
---

 **IMPORTANT:** These cables can be mistakenly switched when reinstalled. The connectors on the cables fit in either connector on the LVPS. Make sure that these cables are installed in the correct connectors. *If the cables are switched, the printer will not power on when reassembled.*

---



Figure 5-506 Check the connectors



7. Disconnect five connectors (callout 1). One connector (callout 2) has a latch that must be released before disconnecting it. Remove three screws (callout 3).


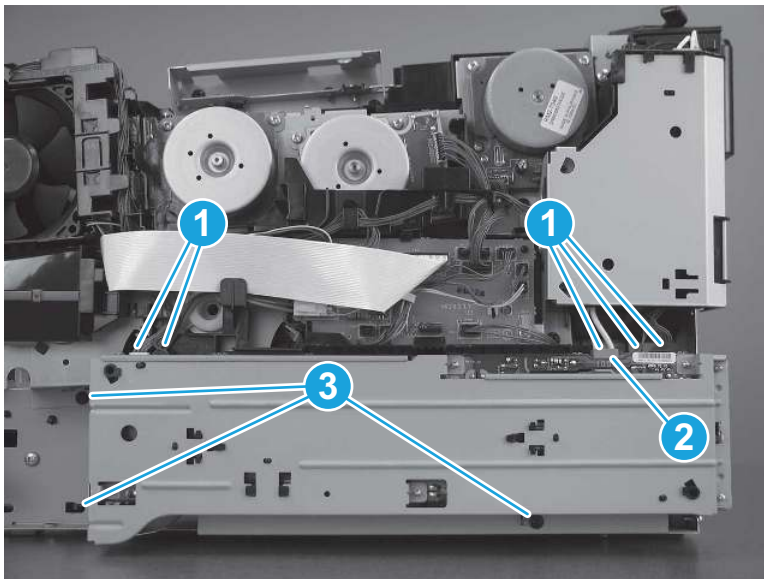
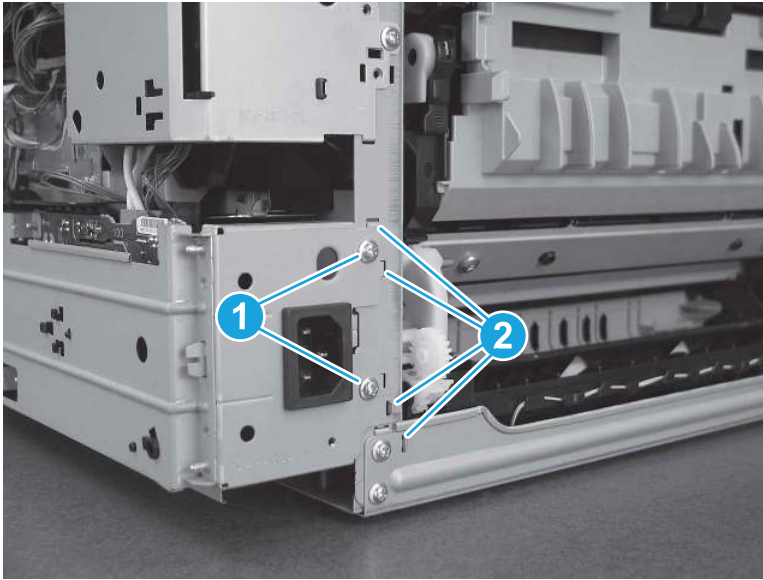
 **NOTE:** The latch for one connector (callout 2) is located on the backside of the connector body, and not easily seen.

Figure 5-507 Disconnect five connectors and remove three screws



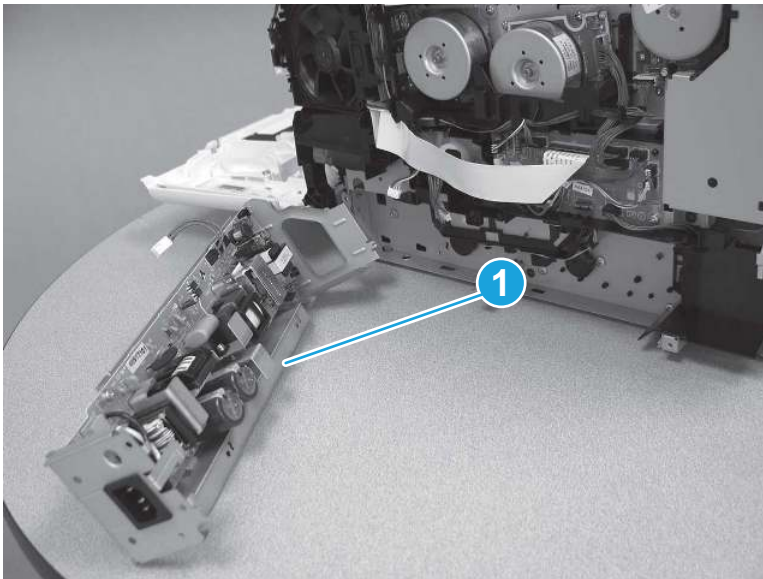
8. Remove two screws from the back (callout 1), and then release four tabs (callout 2).

**Figure 5-508** Remove two screws and release three tabs



9. Remove the LVPS (callout 1).

**Figure 5-509** Remove the assembly



## 9. 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.

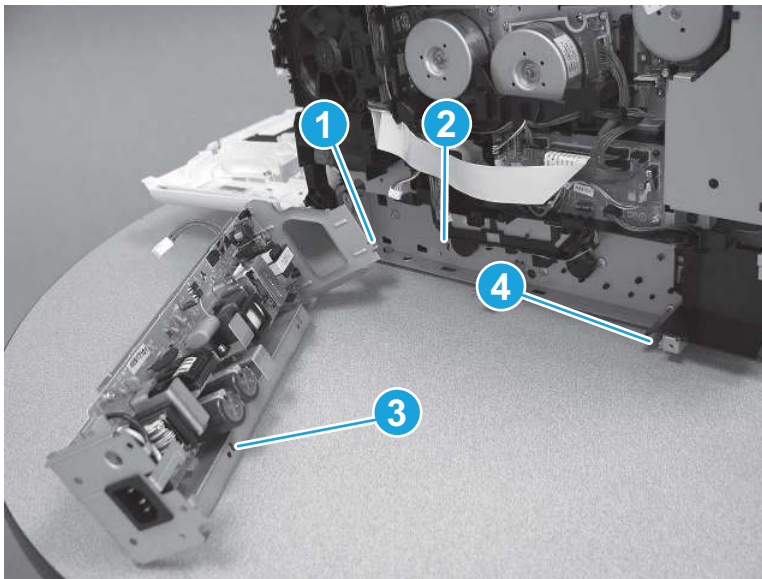
## 10. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Low-voltage power supply

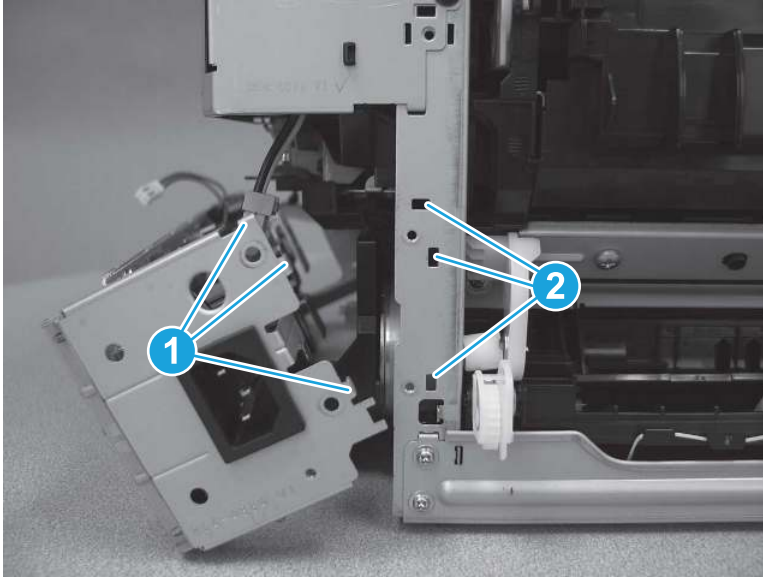
1. Install the tab (callout 1) on the LVPS into the slot (callout 2) in the printer. Install the slot (callout 3) in the LVPS over the tab (callout 4) on the printer.

**Figure 5-510** Install the side tabs of the LVPS



2. At the back of the printer, install the tabs on the LVPS (callout 1) into the slots (callout 2) in the printer.

**Figure 5-511** Install the back tabs of the LVPS



## Removal and replacement: Pickup motor

Learn how to remove and replace the pickup motor.

[View a video of removing and replacing the pickup motor.](#)

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](http://www.hp.com/buy/parts).

**Table 5-29** Part information

Part number	Part description
RM2-7350-000CN	Pickup motor assembly

### Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- #2 Phillips short-shaft or right-angle screwdriver with a magnetic tip
- Small flat-blade screwdriver

## After performing service

### Turn the printer power on

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

## Post service test

Make sure that the printer initializes to a **Ready** state.


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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-512** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

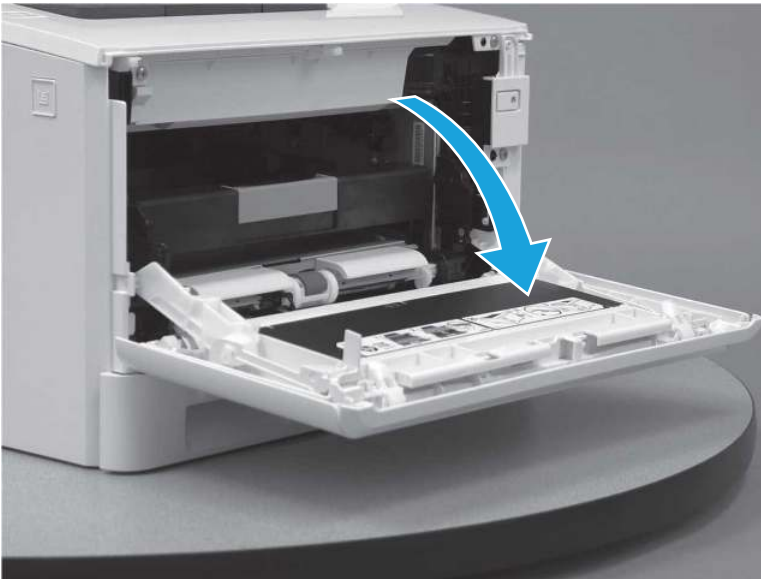
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-513** Release the front door



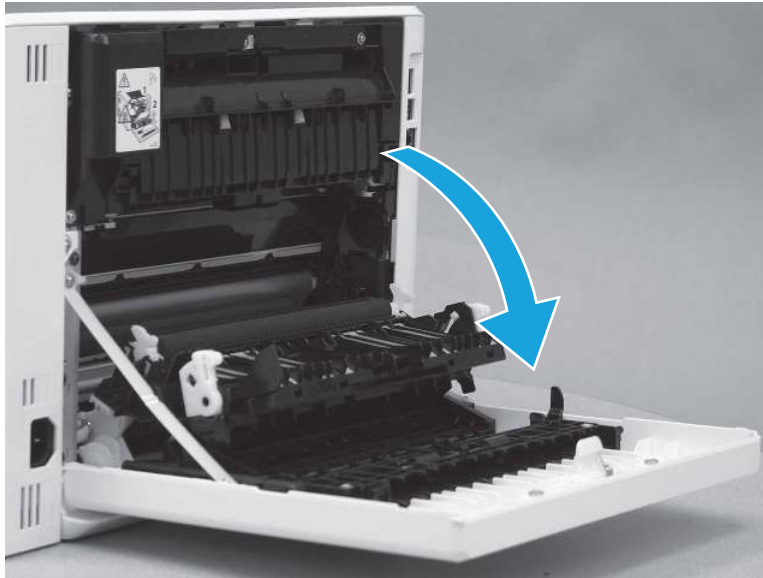
2. Open the front door.

**Figure 5-514** Open the front door



3. Open the duplexing door.

**Figure 5-515** Open the duplexer door



### 3. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

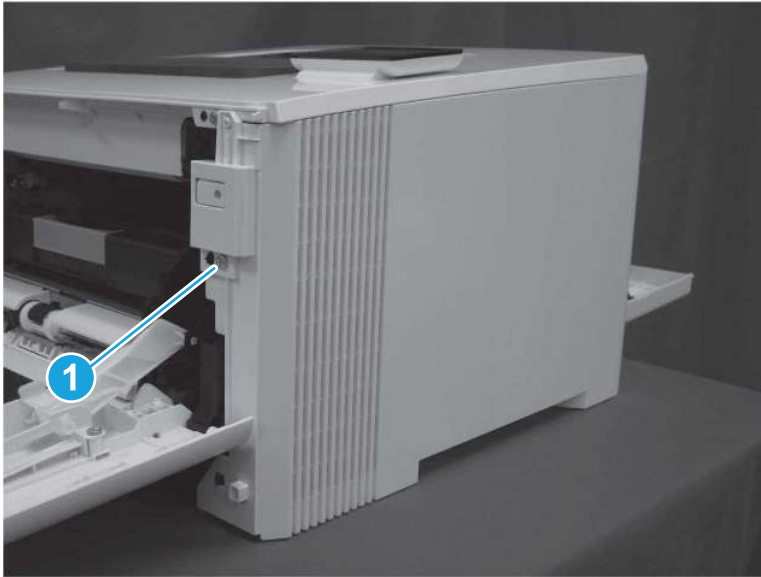
1. At the back of the printer, remove one screw (callout 1).

**Figure 5-516** Remove one screw



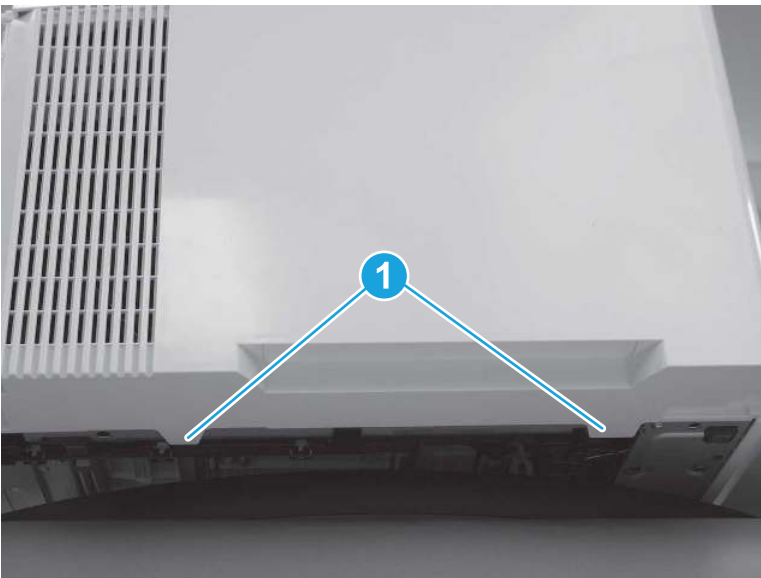
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-517** Remove one screw



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

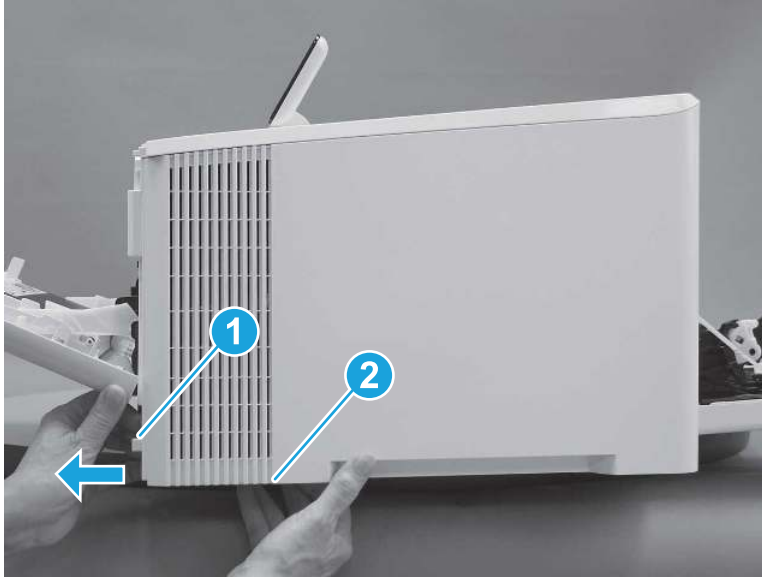
**Figure 5-518** Locate the tabs





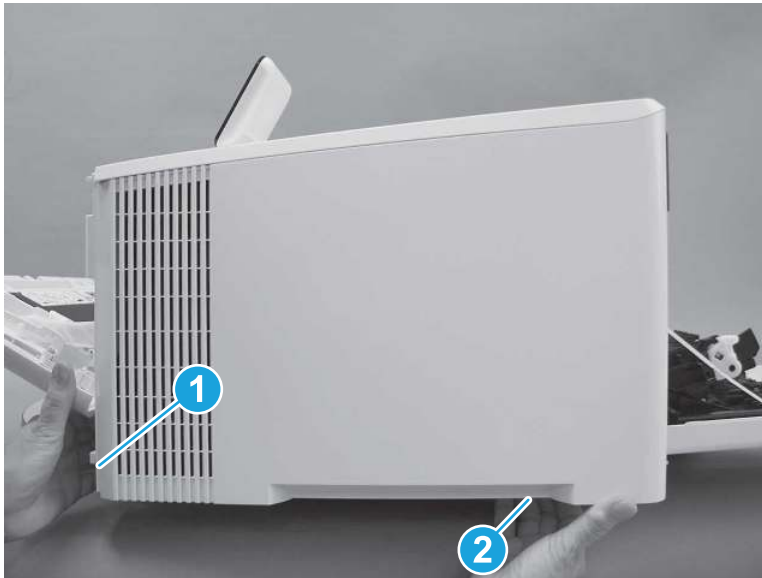
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-519** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

**Figure 5-520** Release lower rear tab



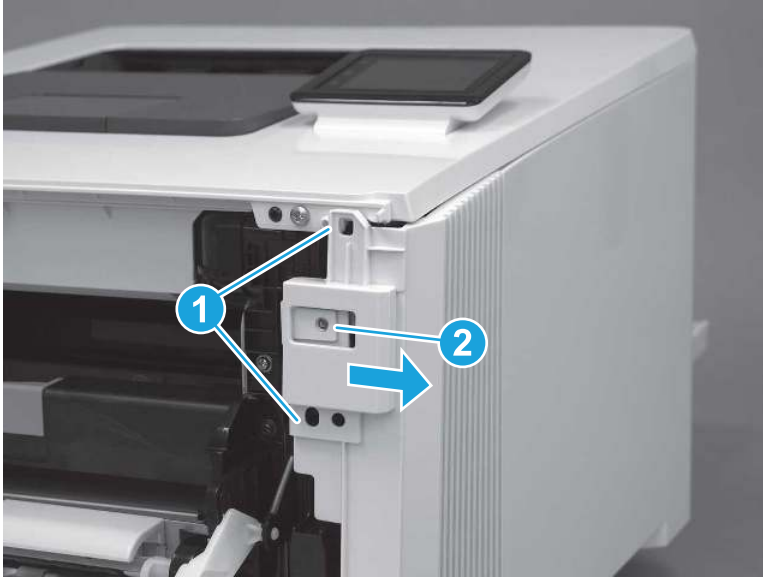
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

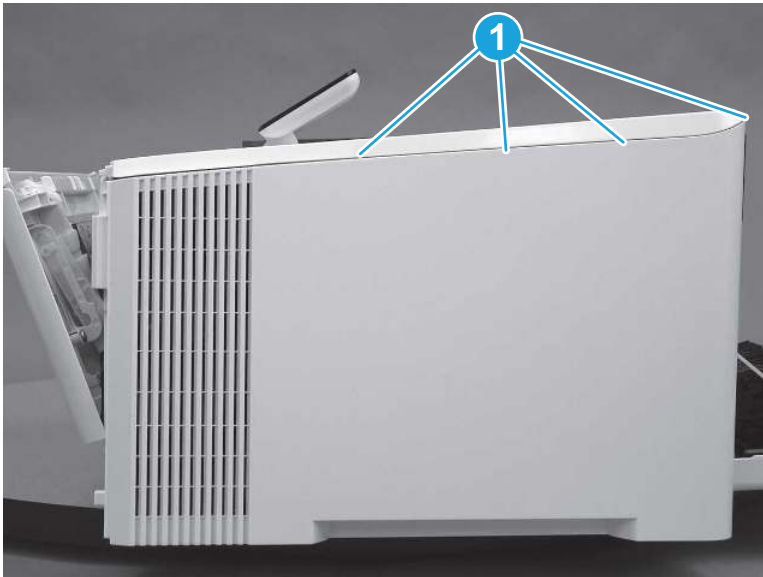
---

**Figure 5-521** Release two front tabs



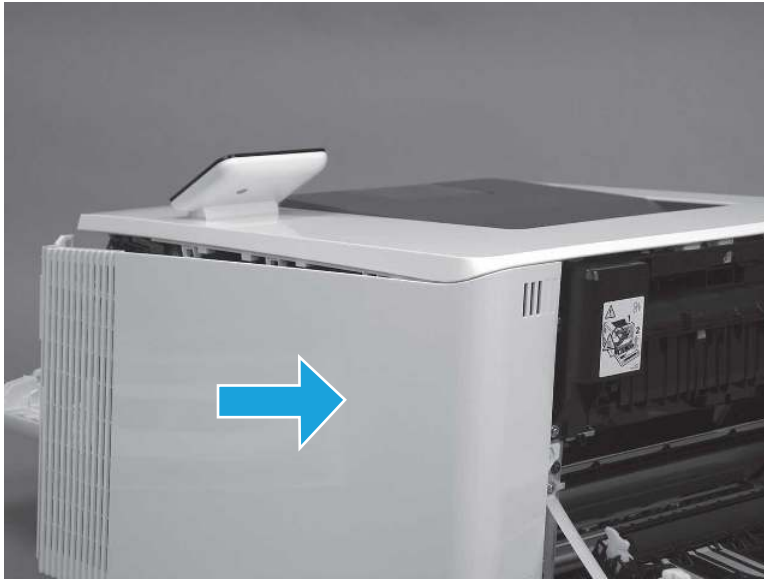
7. Release four tabs on the top of the printer (callout 1).

**Figure 5-522** Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-523** Remove the right cover



#### 4. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

**Figure 5-524** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-525** Remove one screw



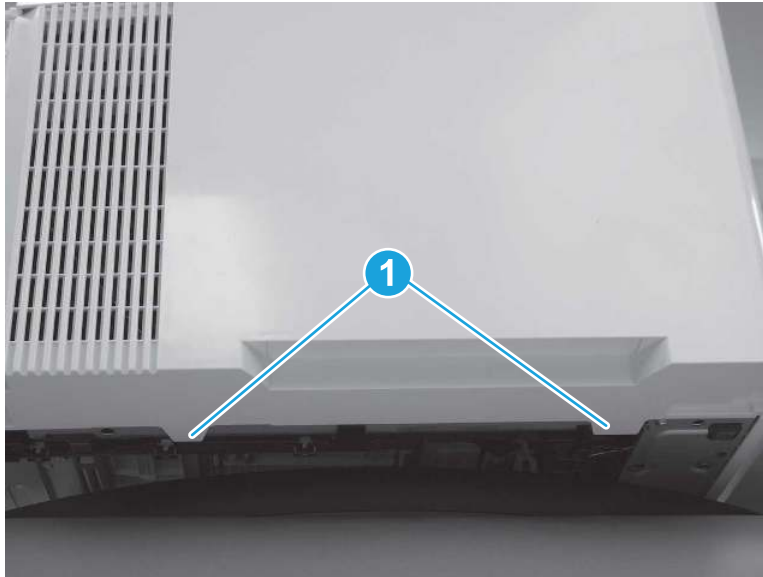
3. At the front of the printer, remove one screw (callout 1).

**Figure 5-526** Remove one screw



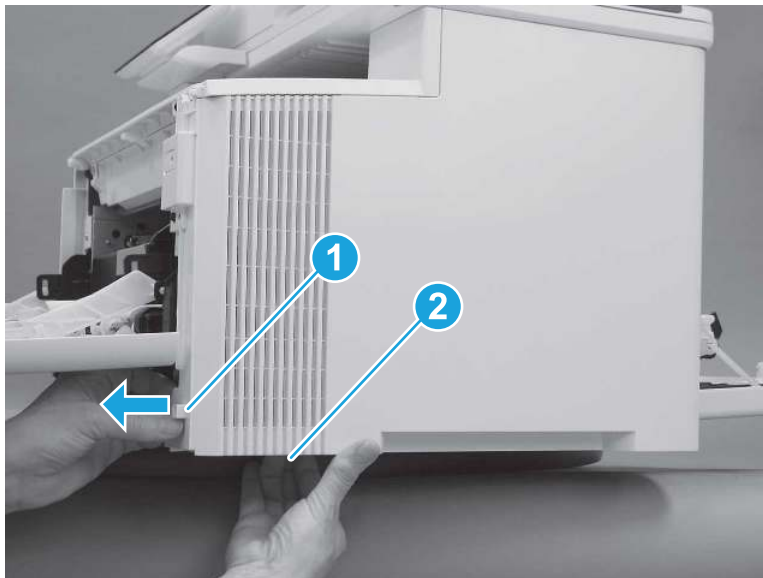
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-527** Locate the tabs



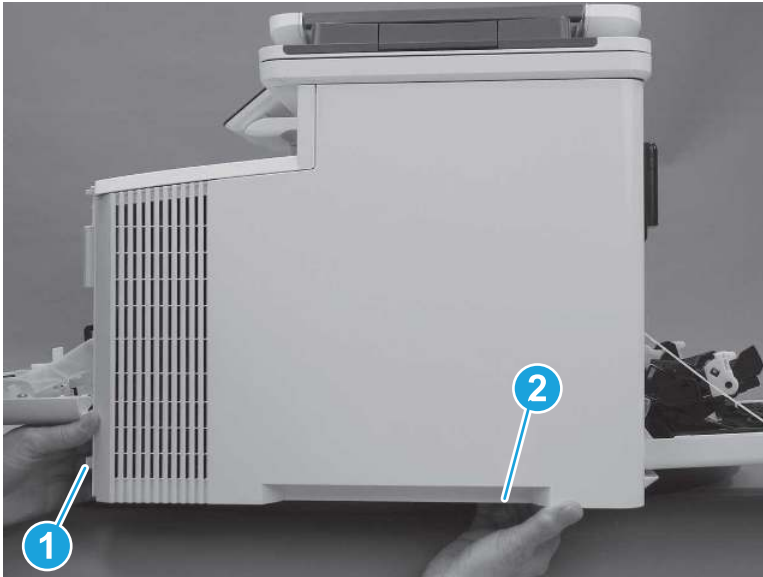
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-528** Release front lower tabs



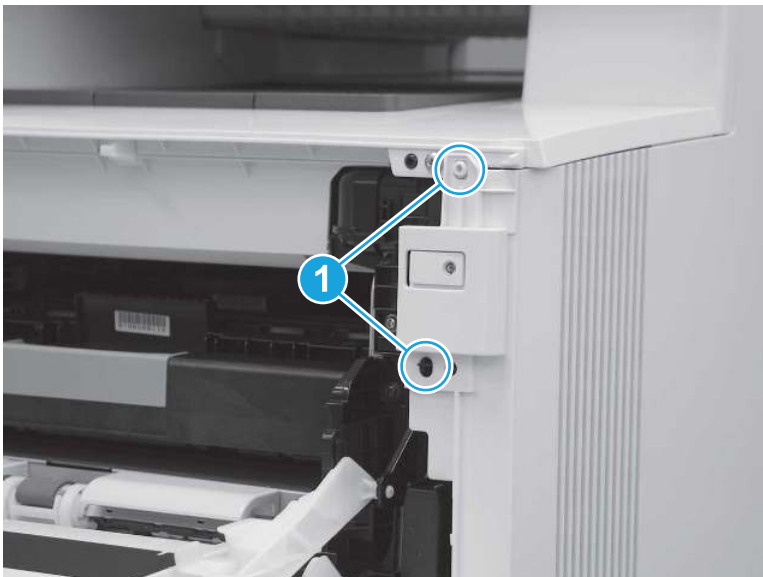
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

Figure 5-529 Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

Figure 5-530 Release front upper tabs



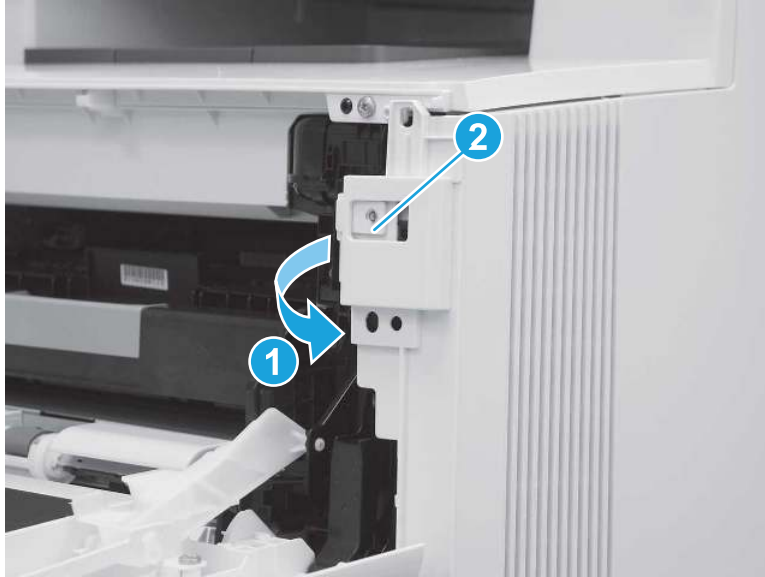
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

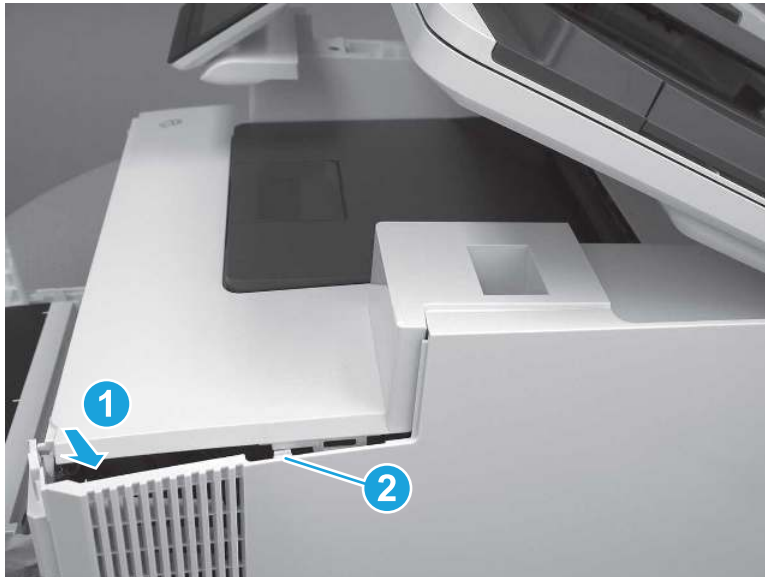
---

Figure 5-531 Rotate the front of the cover



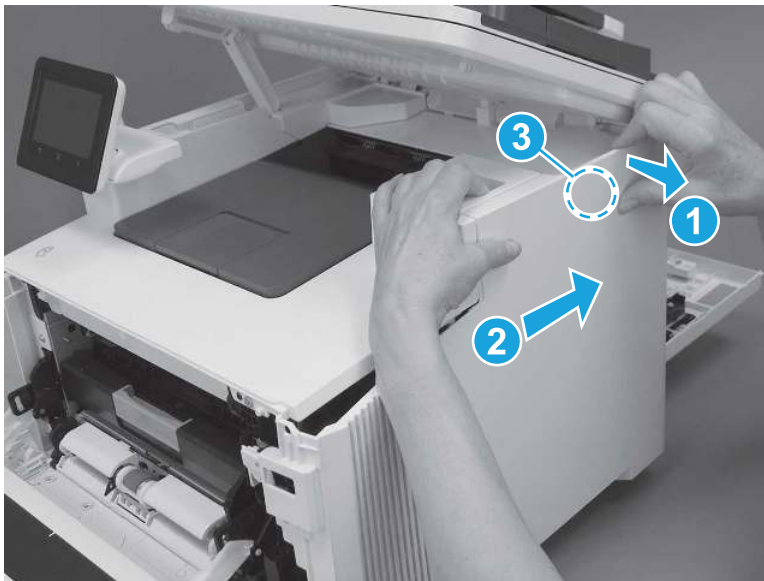
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

Figure 5-532 Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-533** Release one tab and one hook



11. Lower the scanner.

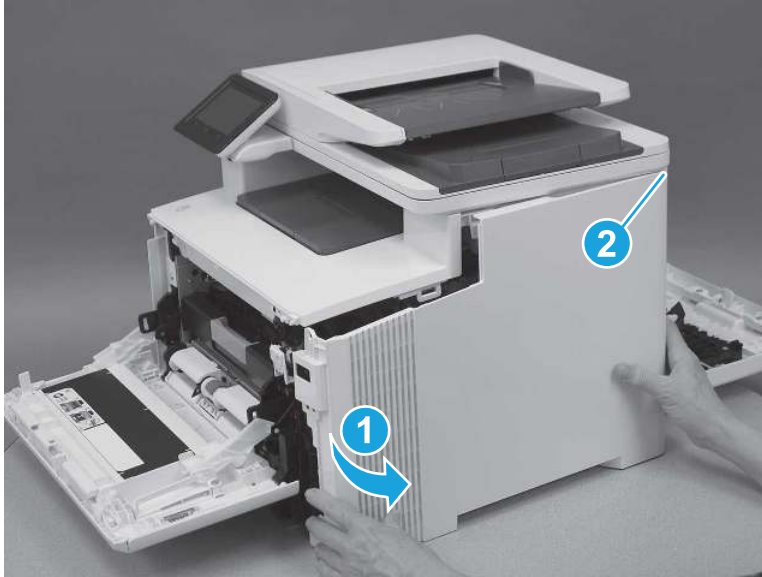
**Figure 5-534** Lower the scanner





12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-535** Remove the right cover

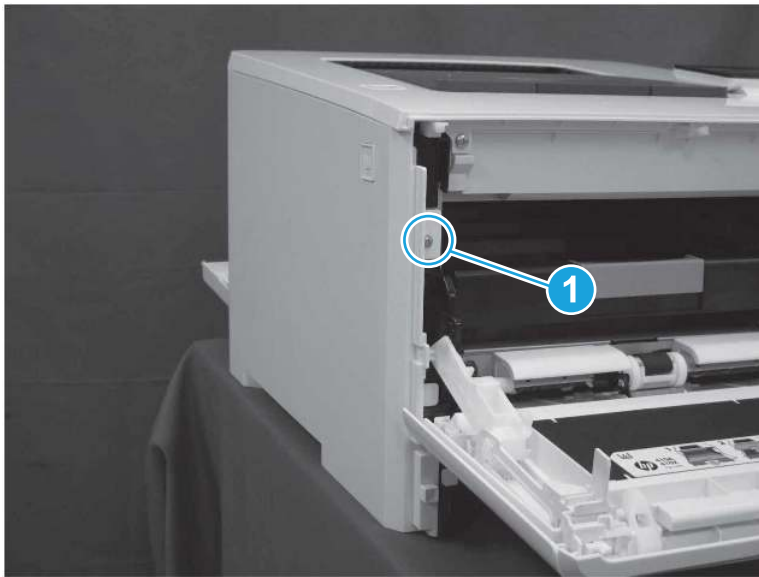


## 5. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

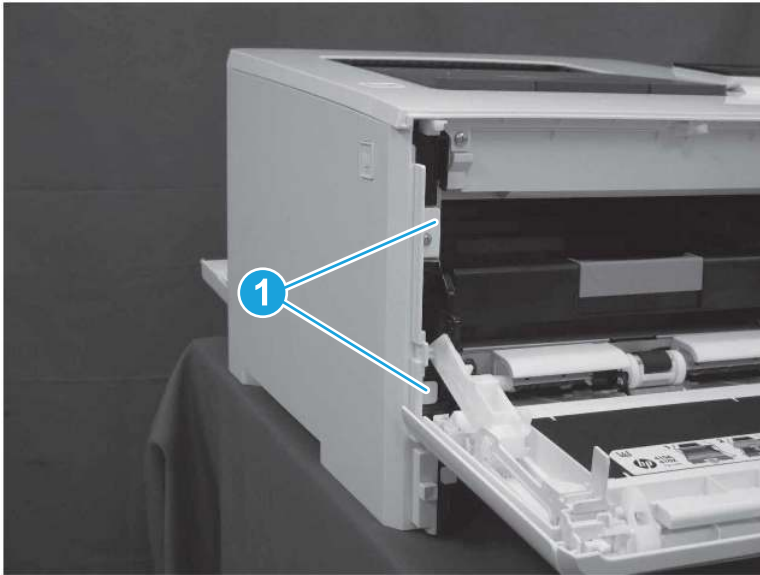
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-536** Remove one screw



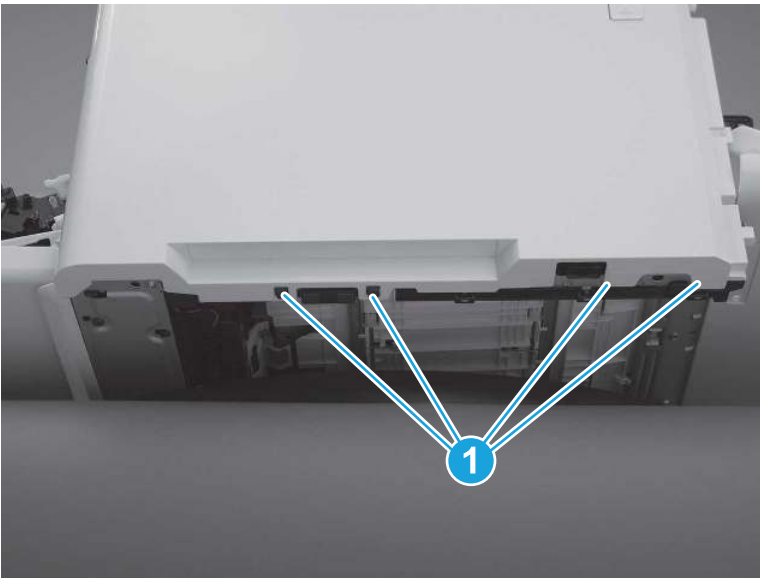
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-537** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-538** Locate the tabs



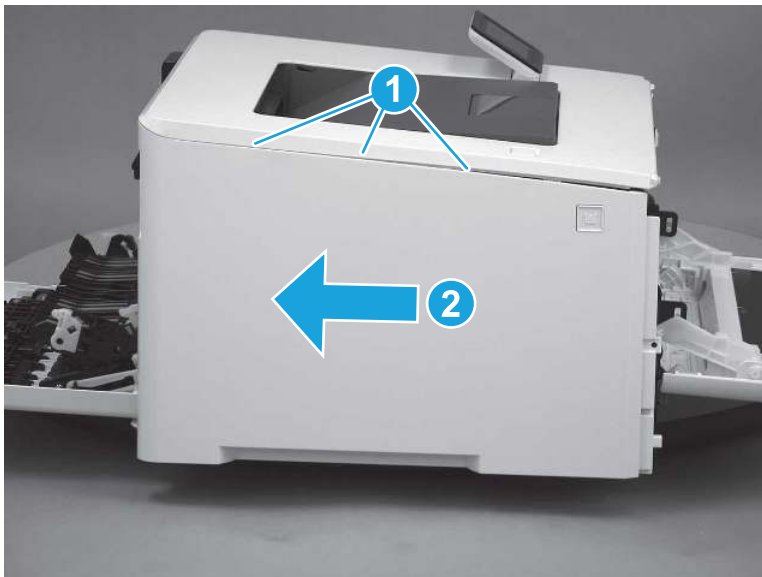
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-539 Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

Figure 5-540 Release three tabs



## 6. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

1. Raise the scanner.

**Figure 5-541** Raise the scanner



2. At the front of the printer, remove one screw (callout 1).

**Figure 5-542** Remove one screw



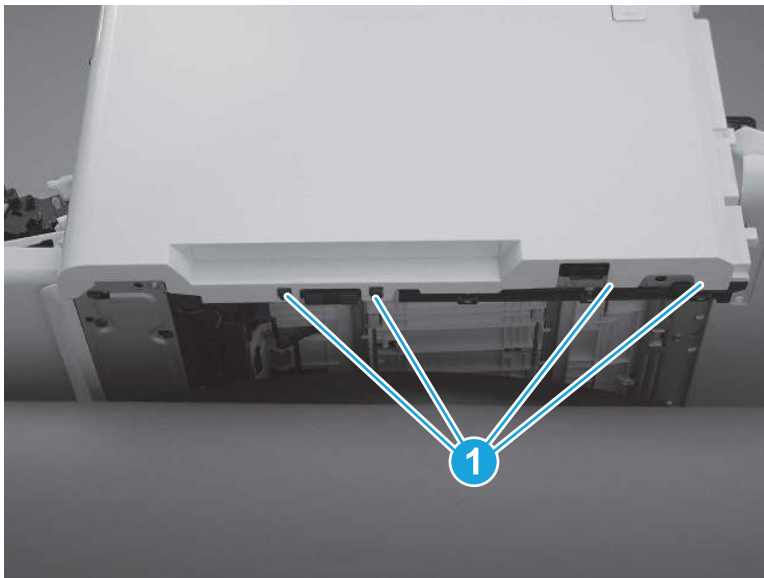
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-543** Release two tabs



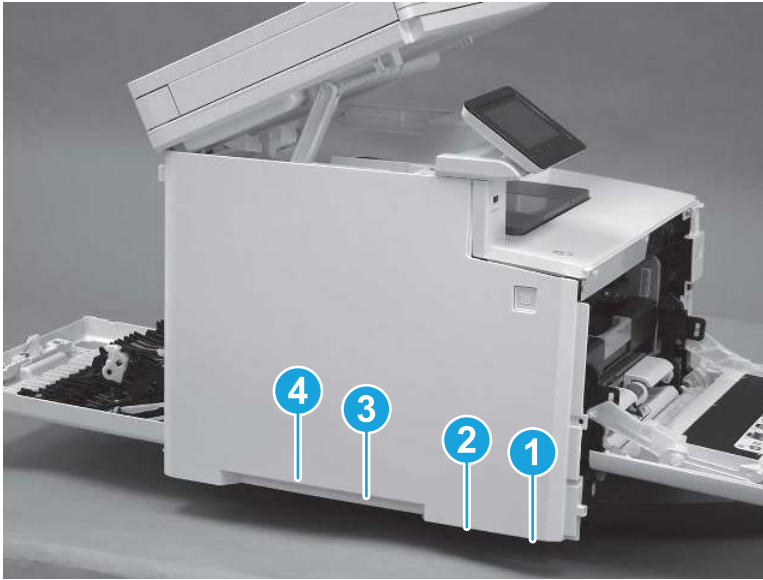
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-544** Locate the tabs



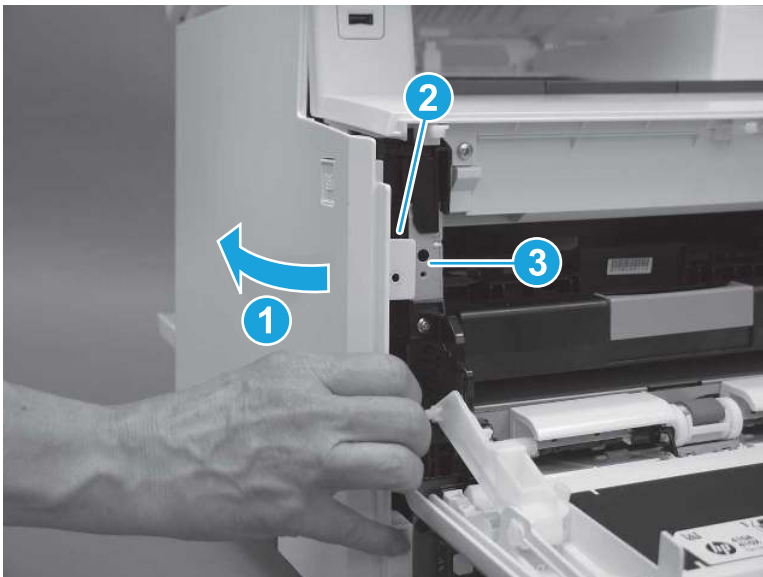
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-545** Release four tabs



6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

**Figure 5-546** Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-547** Release one tab and two hooks



8. Lower the scanner.

**Figure 5-548** Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

**Figure 5-549** Remove the left cover

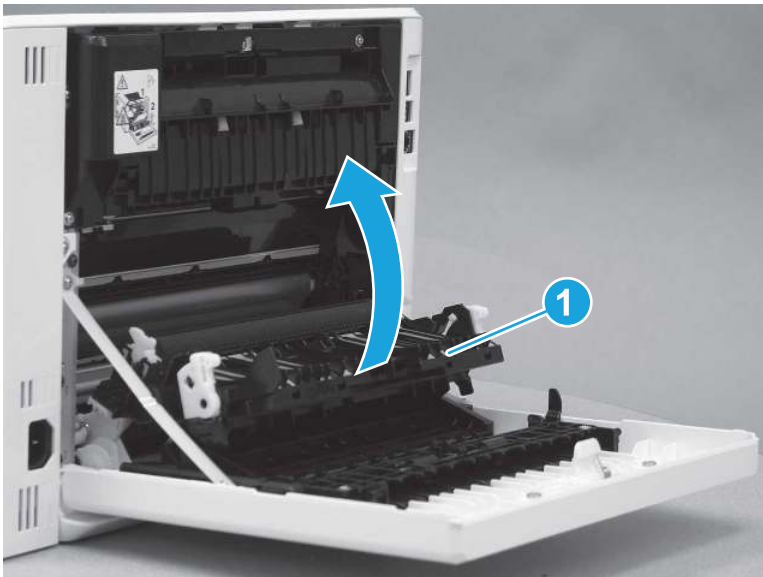


## 7. Remove the duplexing door assembly

Follow these steps to remove the duplexing door assembly.

1. Rotate the secondary transfer assembly (callout 1) toward the printer to close it.

**Figure 5-550** Close the secondary transfer assembly



2. At the back of the printer, remove two screws (callout 1), and then remove one screw (callout 2) that holds the retention arm.

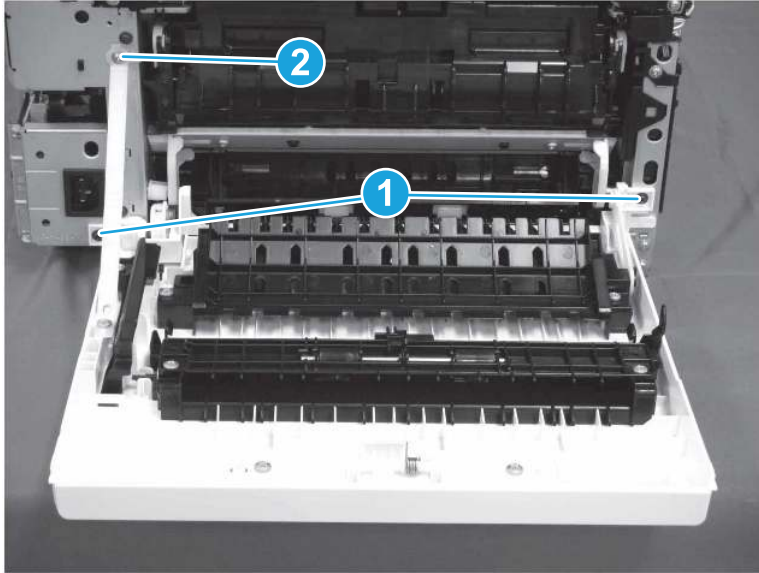
---

 **TIP:** Note that the screw (callout 2) that holds the retention arm is longer than the other two. Make sure this screw is installed in the correct position.

---

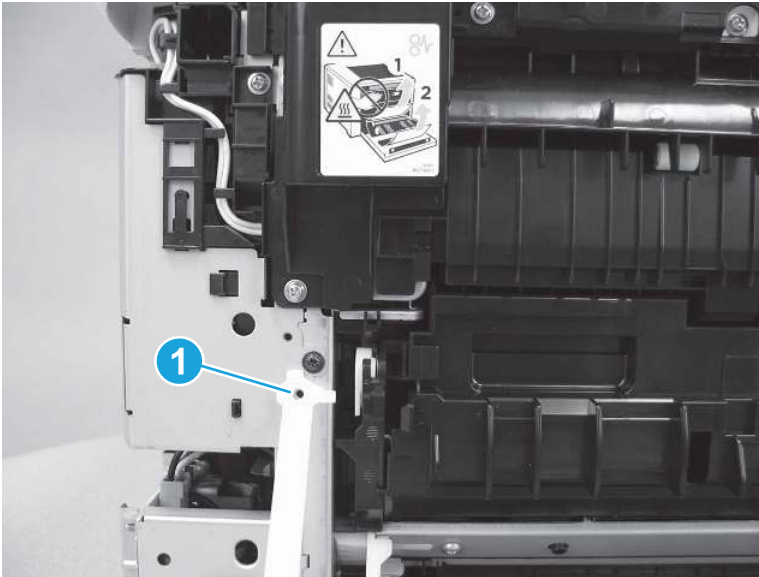


Figure 5-551 Remove three screws



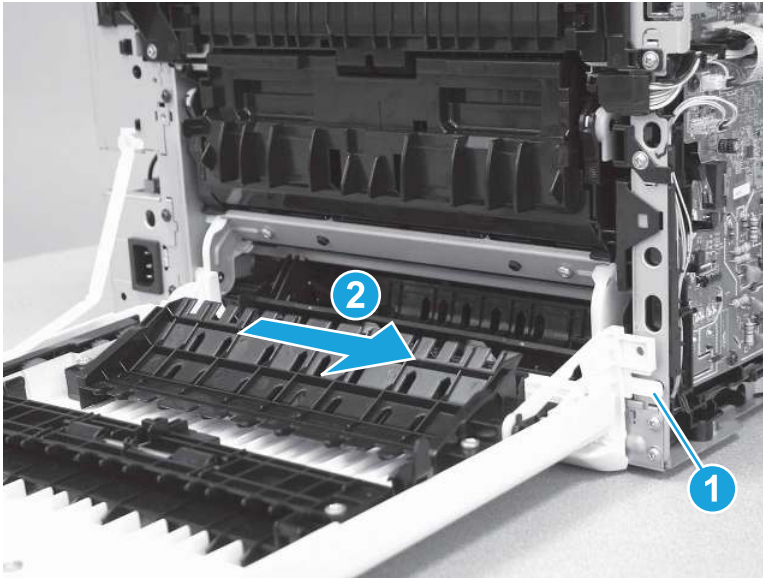
3. Release the retention arm (callout 1).

Figure 5-552 Release the retention arm



4. Release one tab (callout 1), and then slide the duplexer door (callout 2) to the right to remove it.

**Figure 5-553** Remove the duplexing door

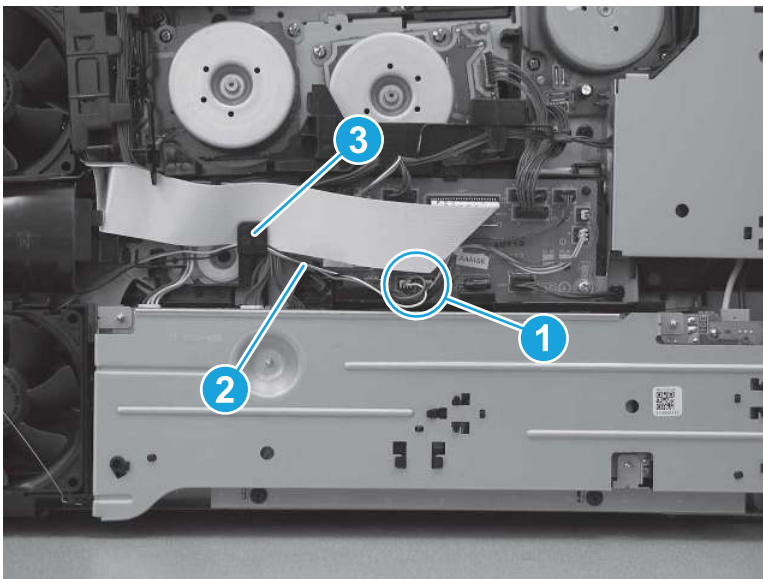


## 8. Remove the LVPS

Follow these steps to remove the LVPS.

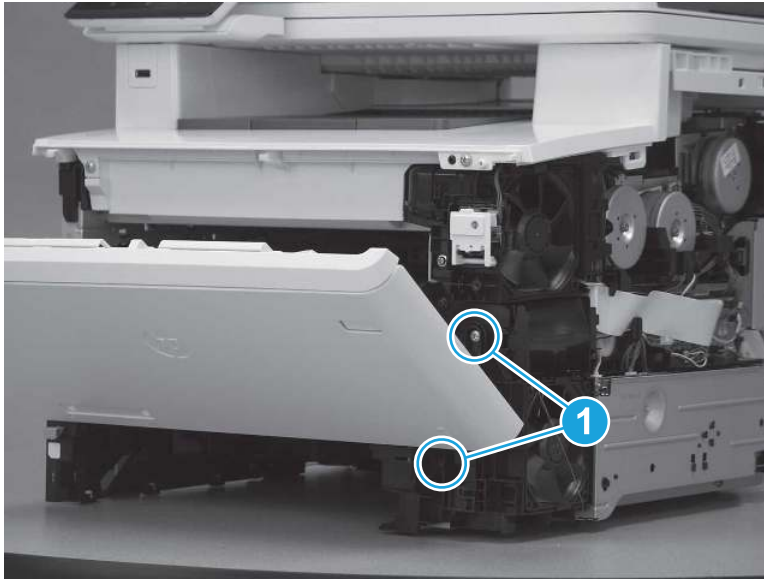
1. Disconnect one connector (callout 1), and then remove the cable (callout 2) from the wire guide (callout 3).

**Figure 5-554** Disconnect one connector and release cables from guides



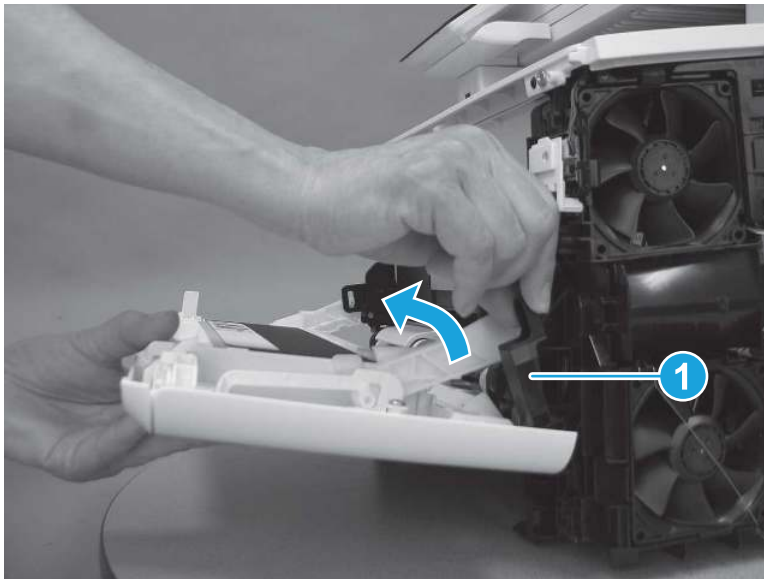
2. Remove two screws (callout 1).

**Figure 5-555** Remove two screws



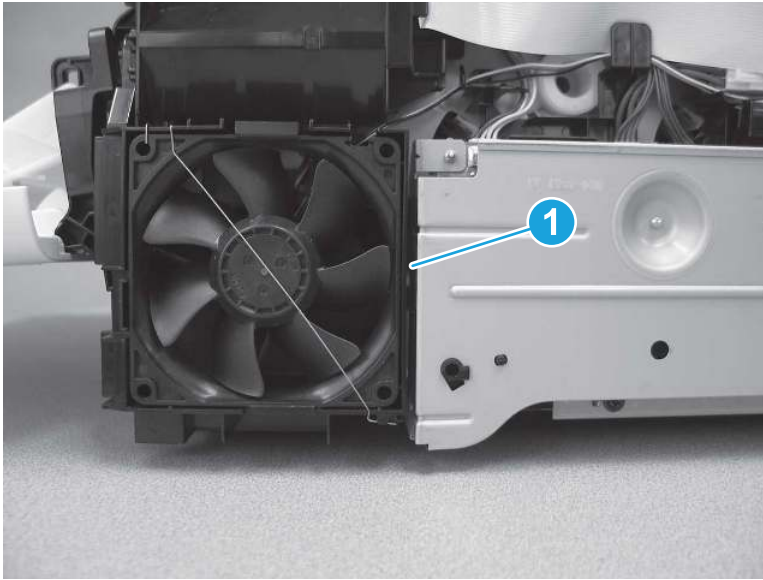
3. Release the hinge arm (callout 1).

**Figure 5-556** Release the hinge arm



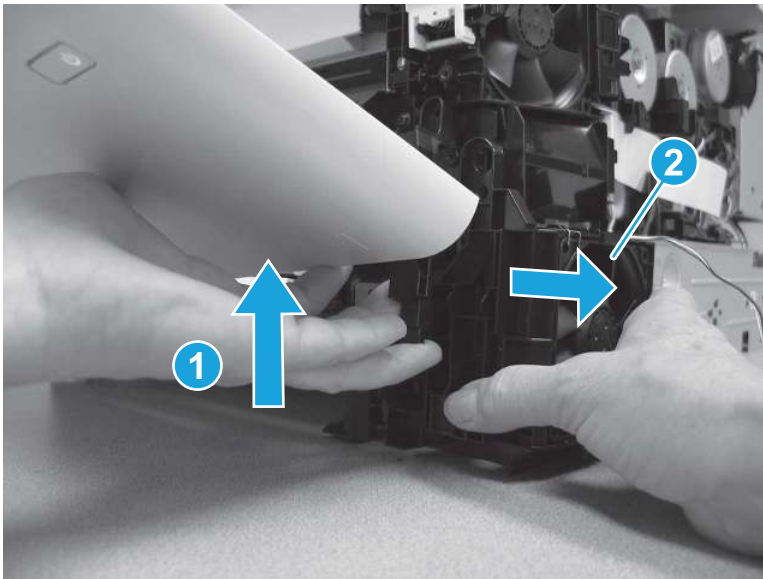
4. Release one tab (callout 1) on the right side of the power supply fan.

Figure 5-557 Release one tab




5. Lift the front door up slightly (callout 1), and then remove the power supply fan and holder (callout 2).

Figure 5-558 Remove the power supply fan and holder



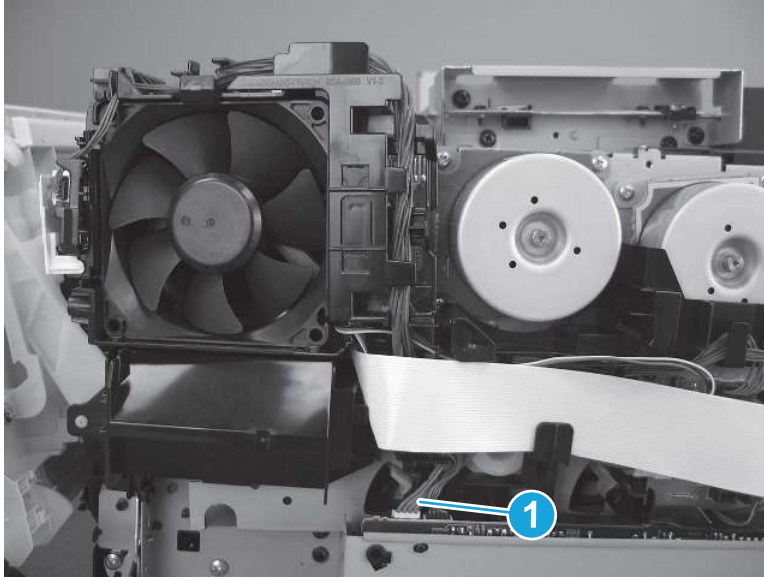
6. Before proceeding, take note of the position of two cables (callout 1).

---

 **IMPORTANT:** These cables can be mistakenly switched when reinstalled. The connectors on the cables fit in either connector on the LVPS. Make sure that these cables are installed in the correct connectors. *If the cables are switched, the printer will not power on when reassembled.*

---

Figure 5-559 Check the connectors



7. Disconnect five connectors (callout 1). One connector (callout 2) has a latch that must be released before disconnecting it. Remove three screws (callout 3).


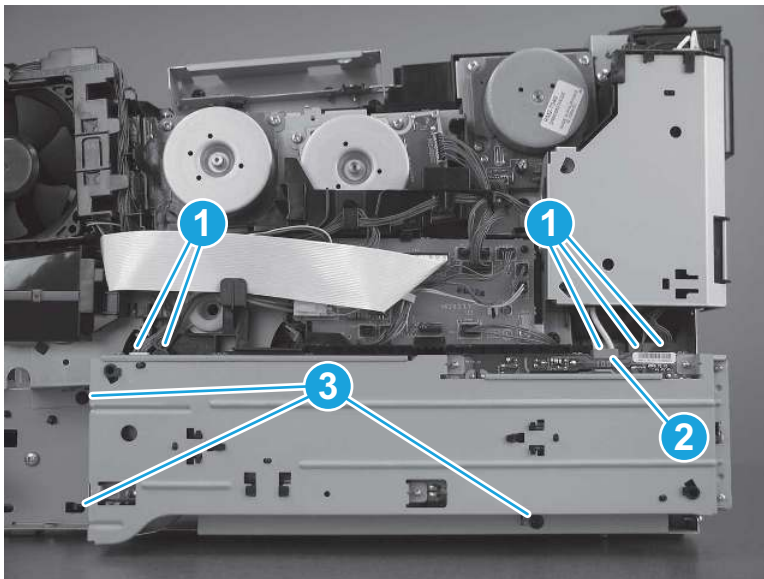
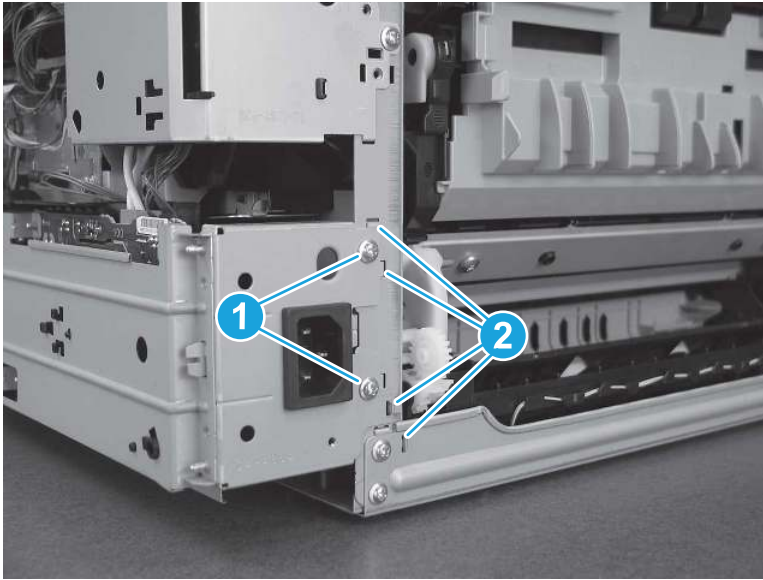
 **NOTE:** The latch for one connector (callout 2) is located on the backside of the connector body, and not easily seen.

Figure 5-560 Disconnect five connectors and remove three screws



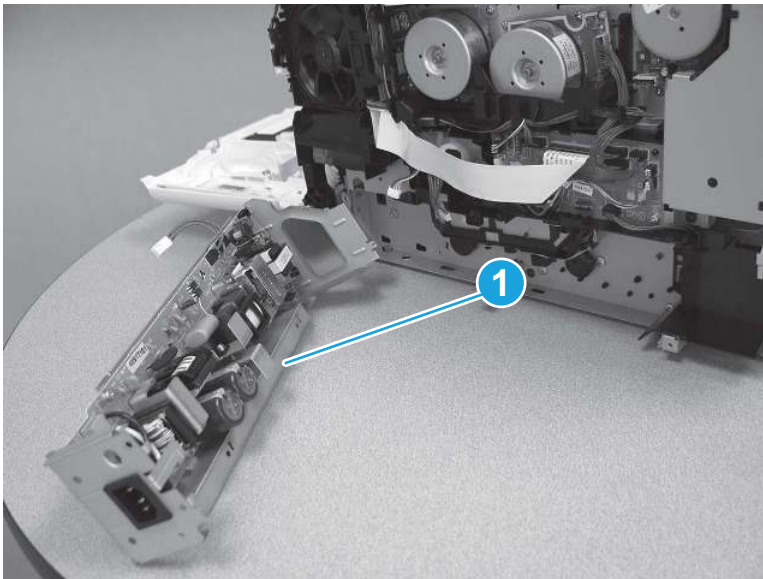
8. Remove two screws from the back (callout 1), and then release four tabs (callout 2).

**Figure 5-561** Remove two screws and release three tabs



9. Remove the LVPS (callout 1).

**Figure 5-562** Remove the assembly

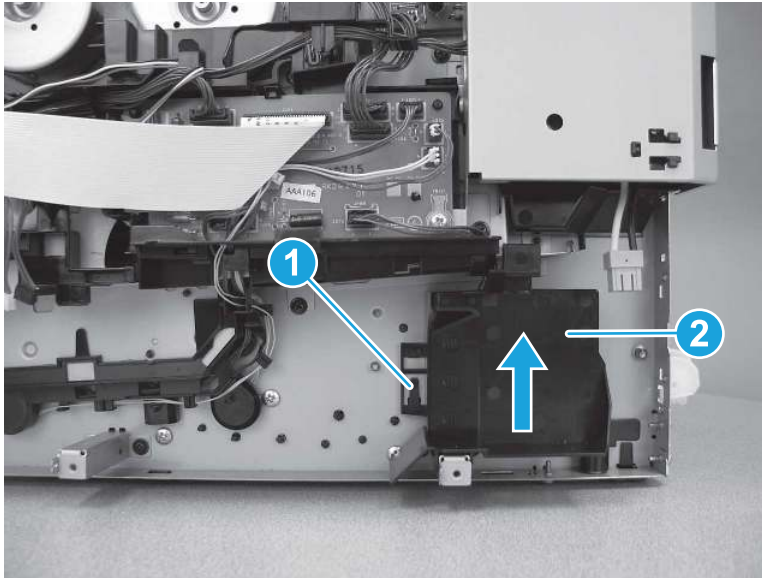


## 9. Remove the pickup motor

Follow these steps to remove the pickup motor.

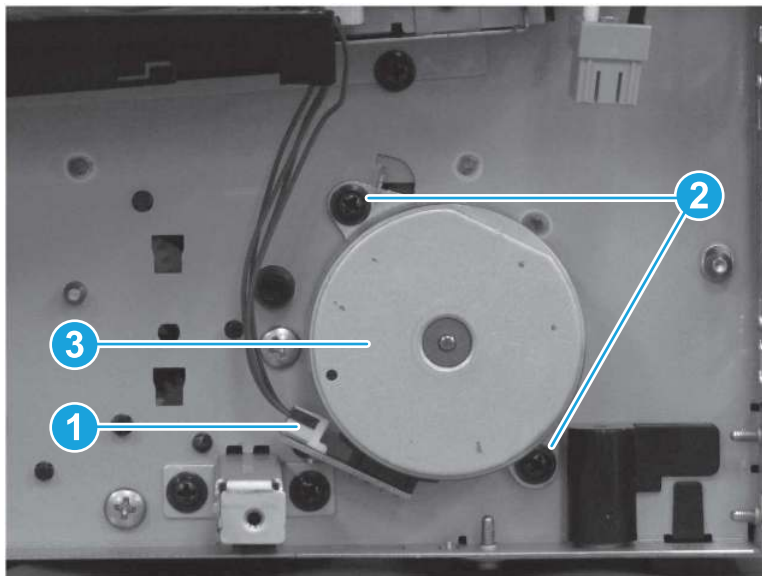
1. Release one tab (callout 1), and then slide the fan duct (callout 2) up to remove it.

**Figure 5-563** Remove the fan duct



2. Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the pickup motor (callout 3).

**Figure 5-564** Remove the 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.

---

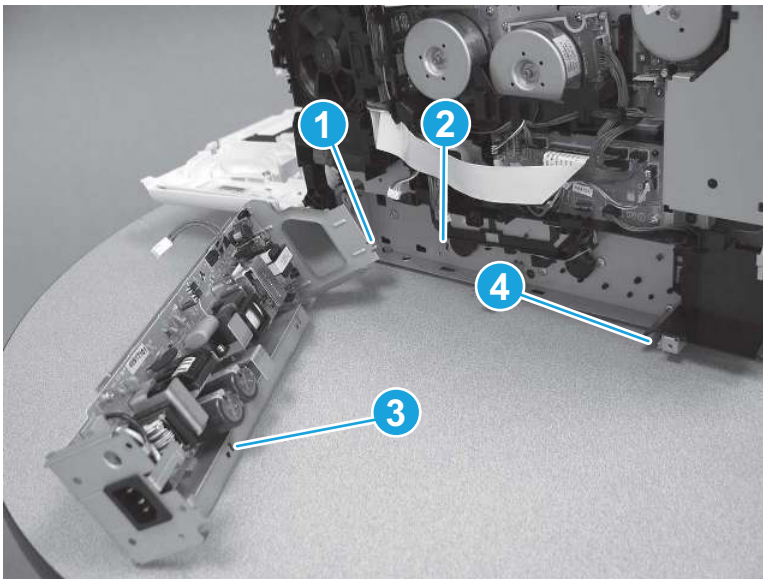
## 11. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Low-voltage power supply

1. Install the tab (callout 1) on the LVPS into the slot (callout 2) in the printer. Install the slot (callout 3) in the LVPS over the tab (callout 4) on the printer.

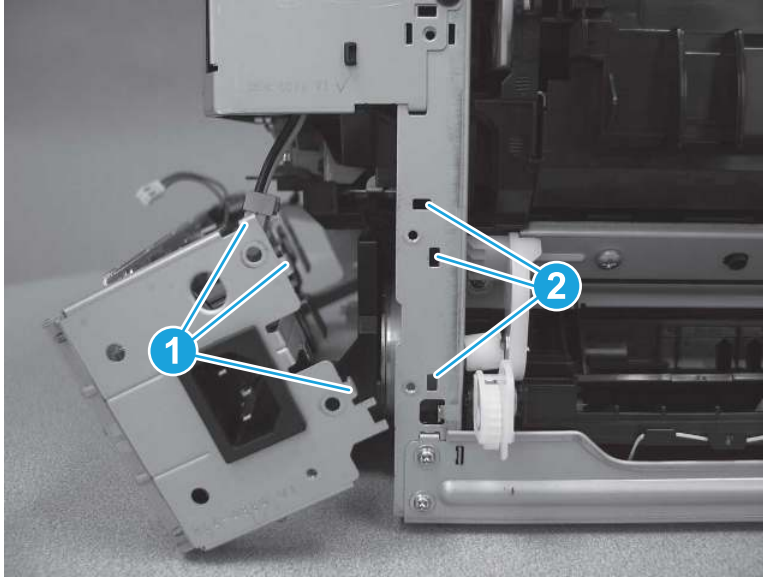
**Figure 5-565** Install the side tabs of the LVPS



2. At the back of the printer, install the tabs on the LVPS (callout 1) into the slots (callout 2) in the printer.



Figure 5-566 Install the back tabs of the LVPS



## Removal and replacement: Driver PCA

Learn how to remove and replace the driver printed-circuit assembly (PCA).

[View a video of removing and replacing the driver printed-circuit assembly \(PCA\).](#)

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](http://www.hp.com/buy/parts).

Table 5-30 Part information

Part number	Part description
RM2-7369-000CN	Driver PCA 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

Make sure that the printer initializes to a **Ready** state.


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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-567** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

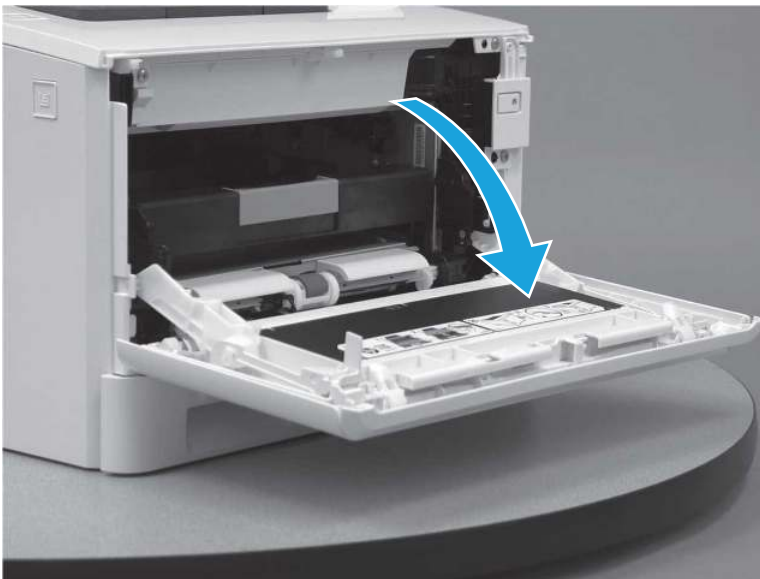
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-568** Release the front door



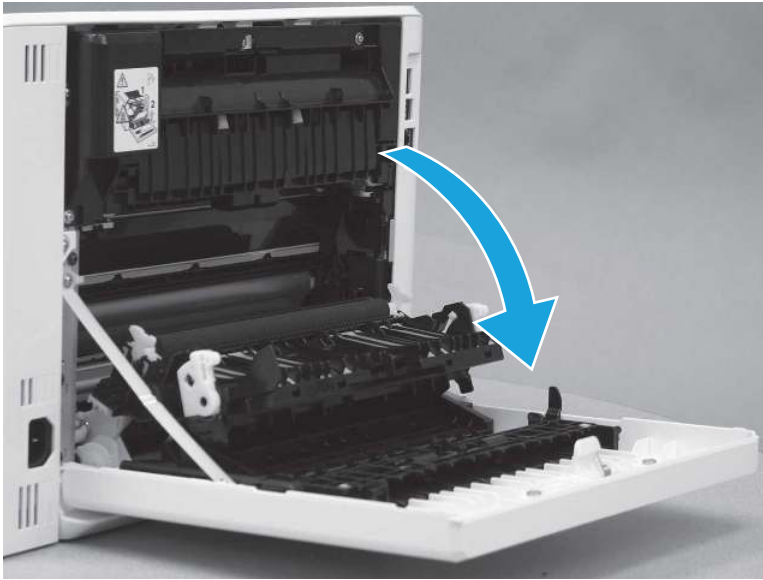
2. Open the front door.

**Figure 5-569** Open the front door



3. Open the duplexing door.

**Figure 5-570** Open the duplexer door

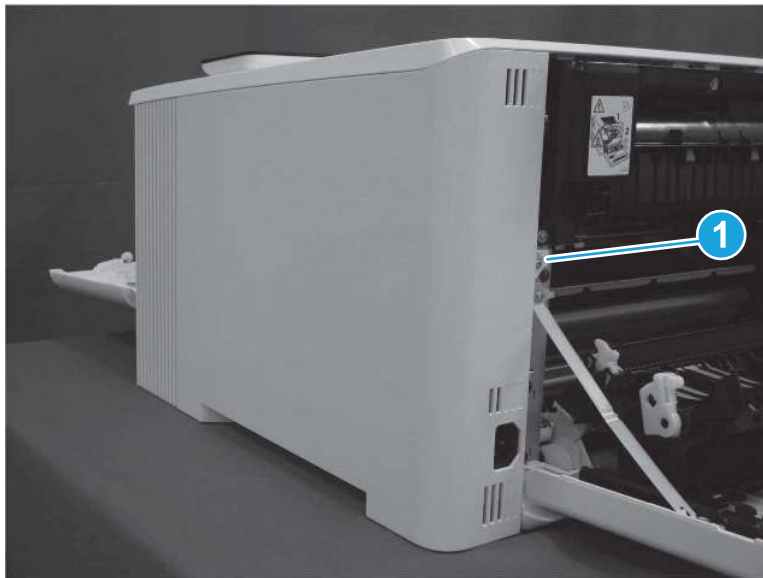


### 3. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

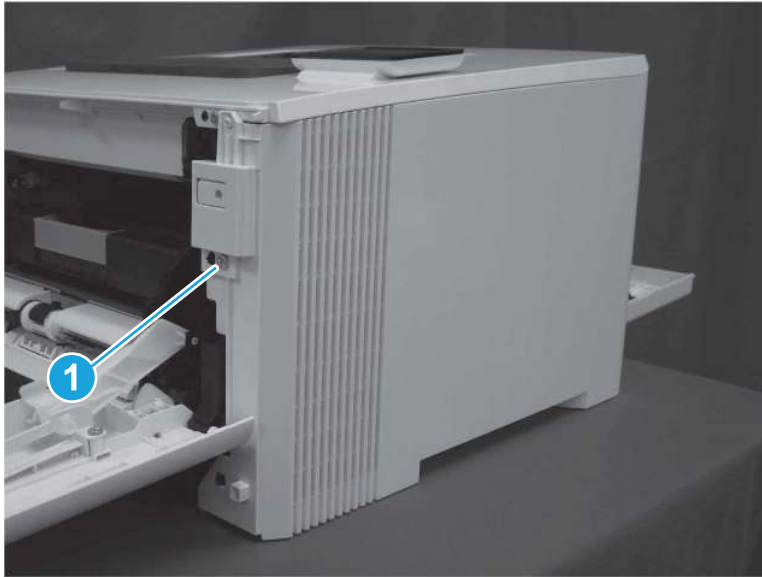
1. At the back of the printer, remove one screw (callout 1).

**Figure 5-571** Remove one screw



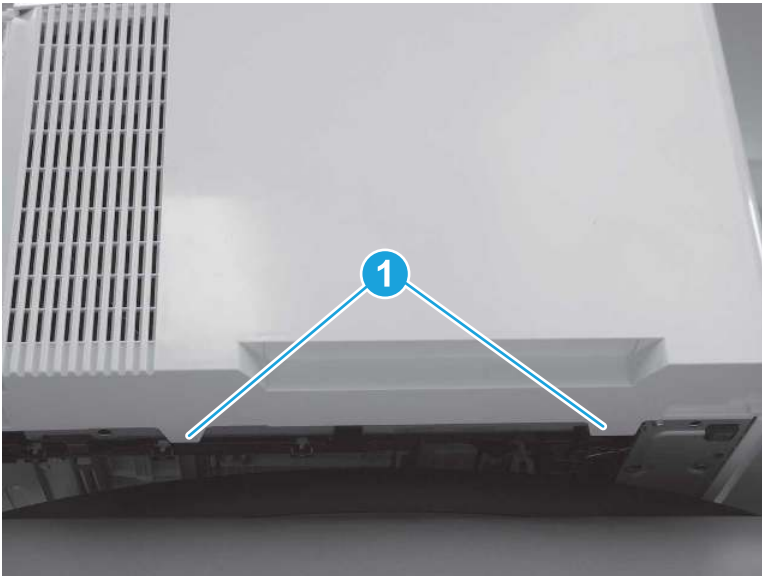
2. At the front of the printer, remove one screw (callout 1).

Figure 5-572 Remove one screw



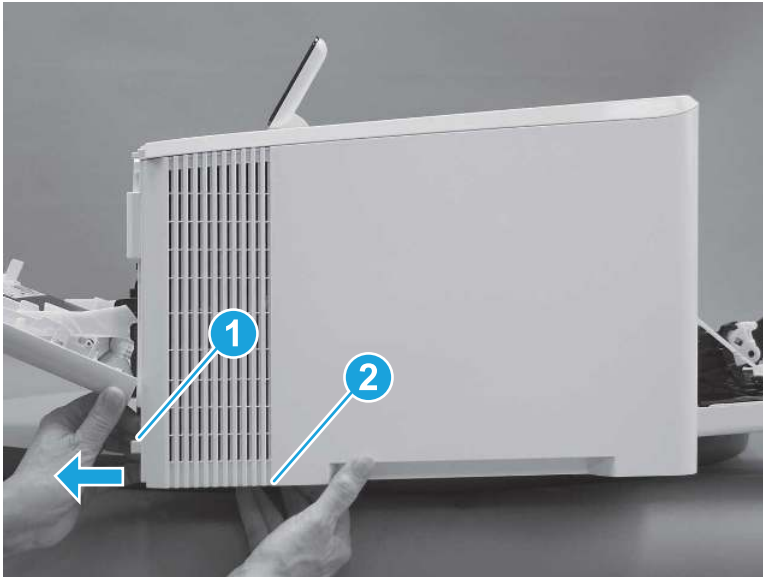
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

Figure 5-573 Locate the tabs



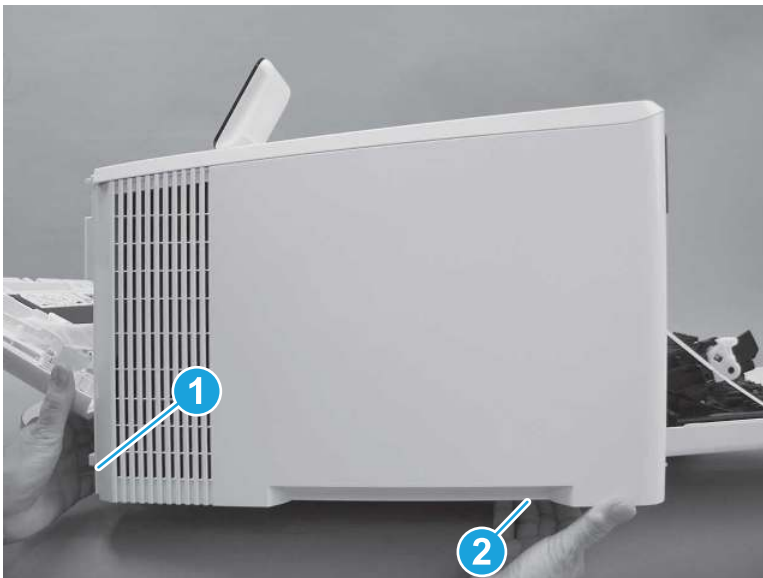
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-574** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

**Figure 5-575** Release lower rear tab



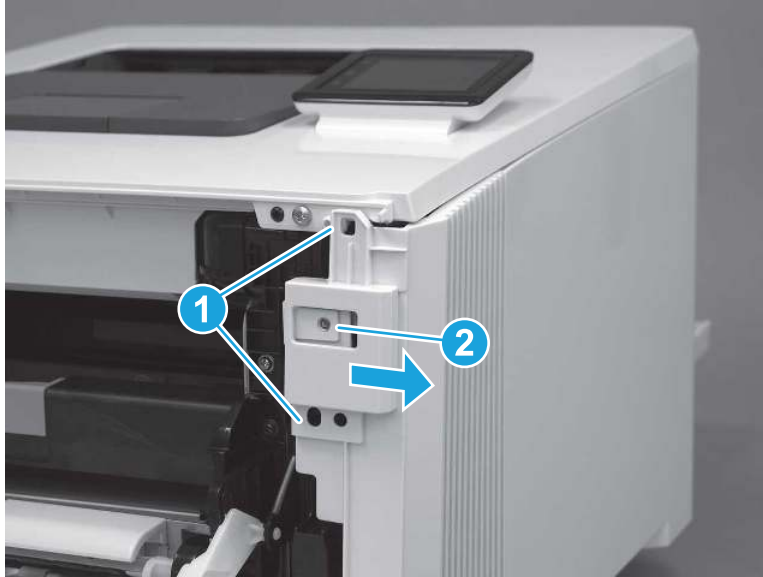
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

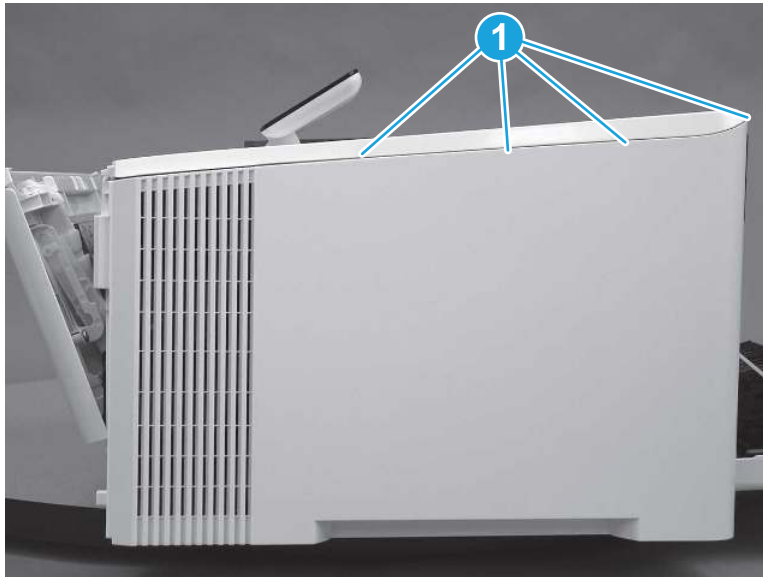
---

Figure 5-576 Release two front tabs



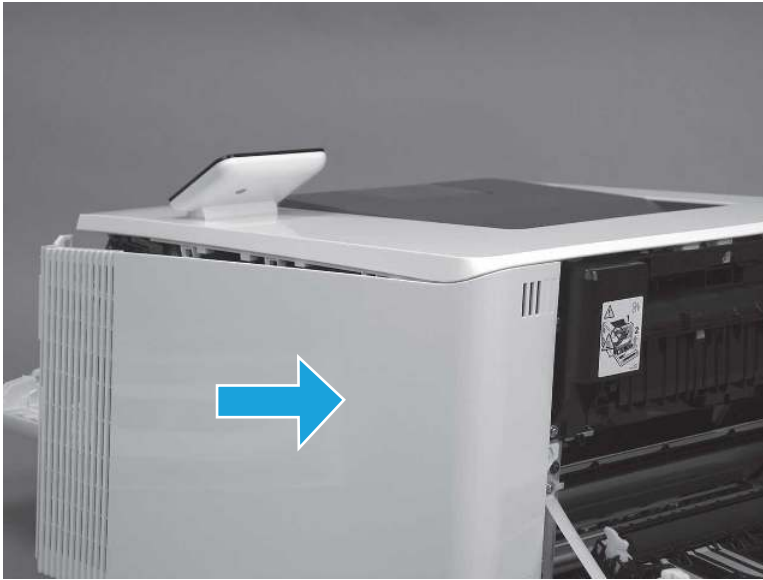
7. Release four tabs on the top of the printer (callout 1).

Figure 5-577 Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-578** Remove the right cover



#### 4. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

**Figure 5-579** Raise the scanner





2. At the back of the printer, remove one screw (callout 1).

**Figure 5-580** Remove one screw



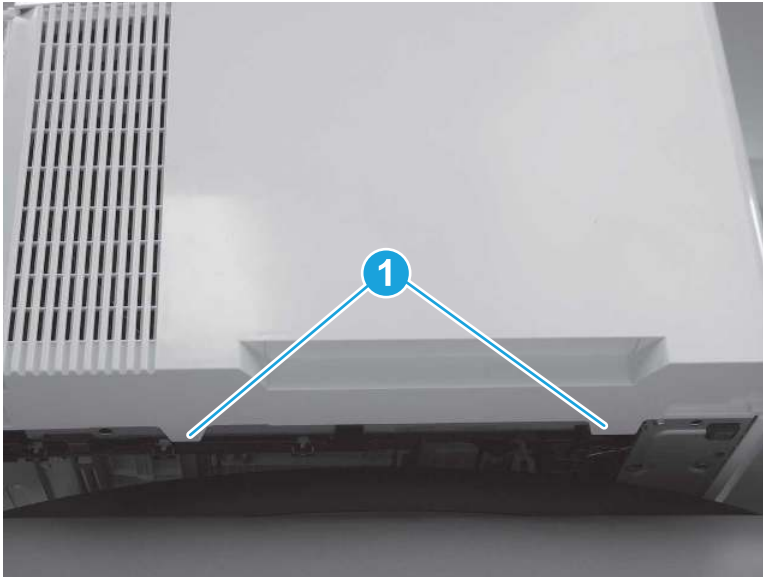
3. At the front of the printer, remove one screw (callout 1).

**Figure 5-581** Remove one screw



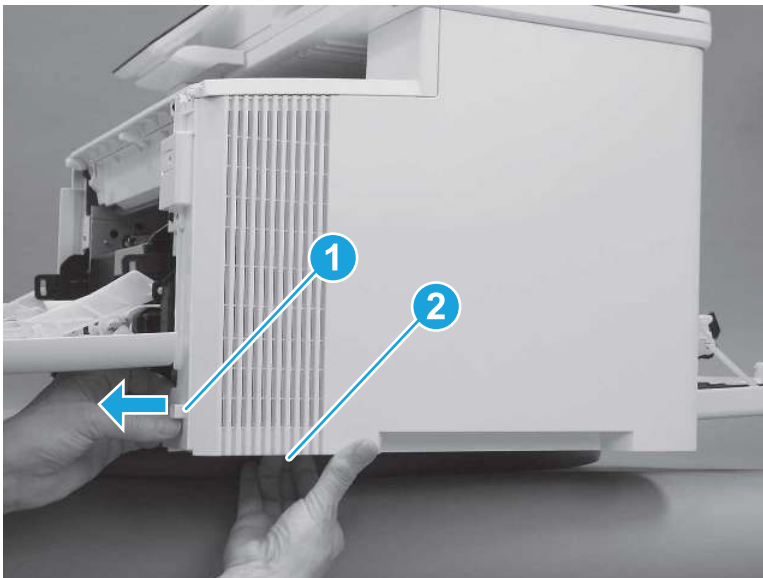
- Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-582** Locate the tabs



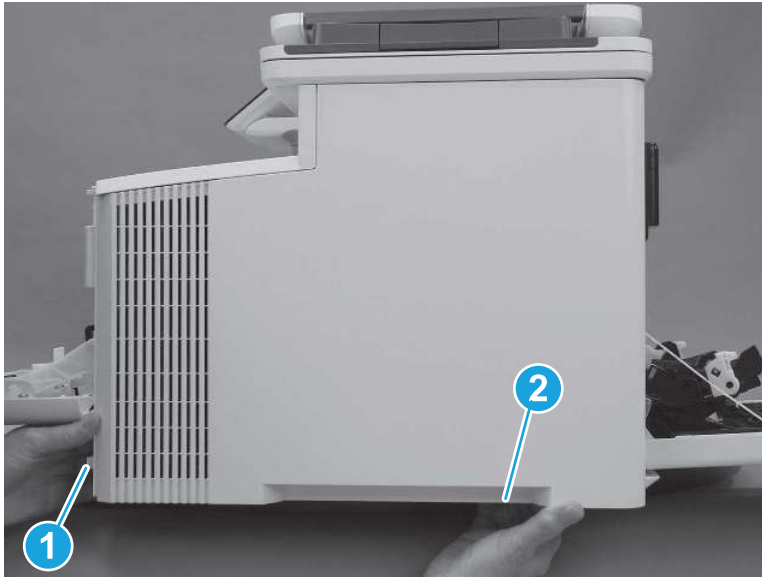
- Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-583** Release front lower tabs



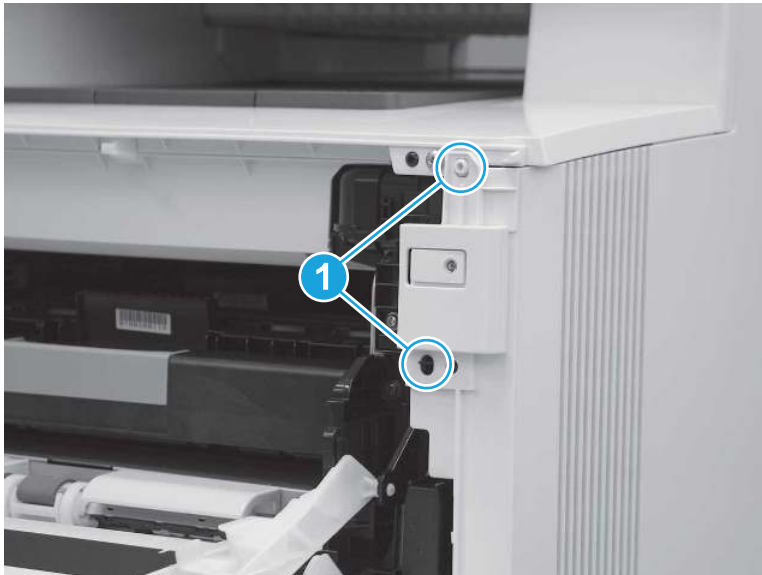
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-584** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-585** Release front upper tabs



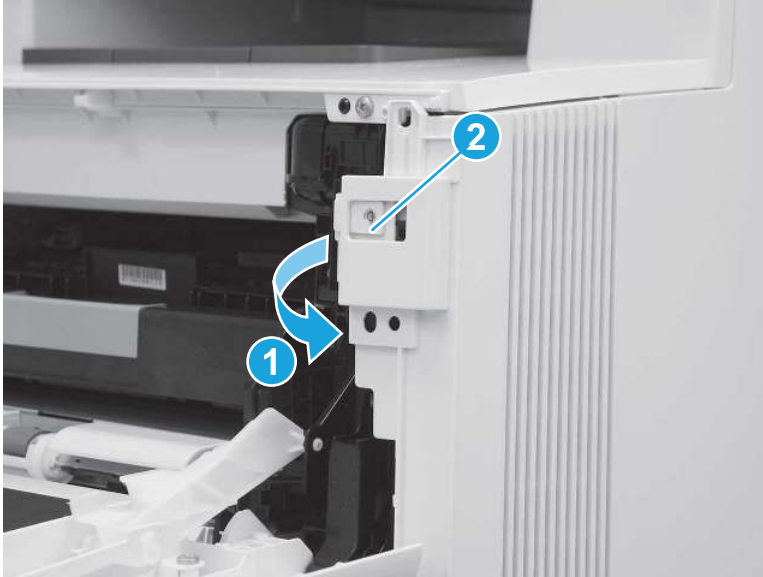
8. Rotate the front of the cover away from the printer (callout 1).

---

**CAUTION:** Be careful not to dislodge the power switch (callout 2).

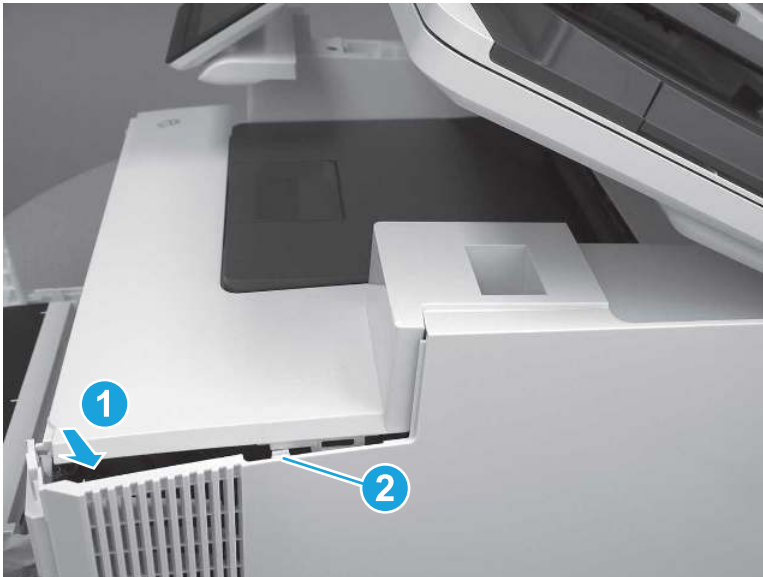
---

**Figure 5-586** Rotate the front of the cover



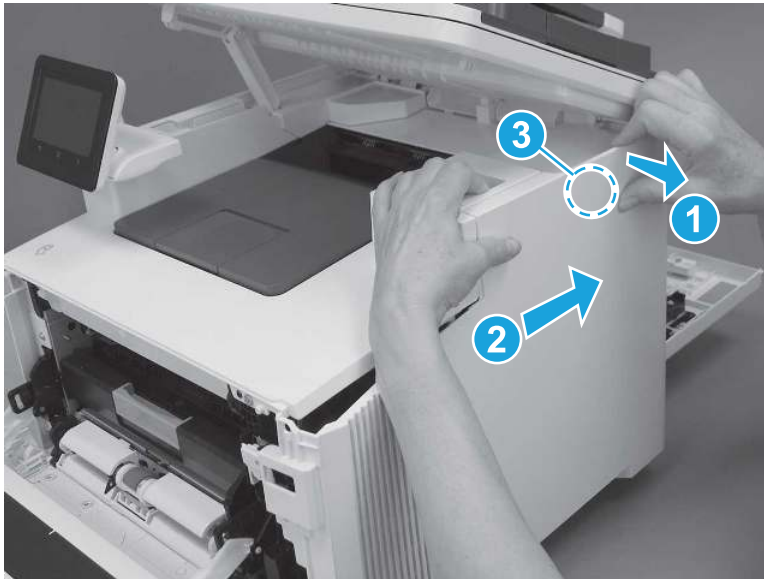
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

**Figure 5-587** Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-588** Release one tab and one hook



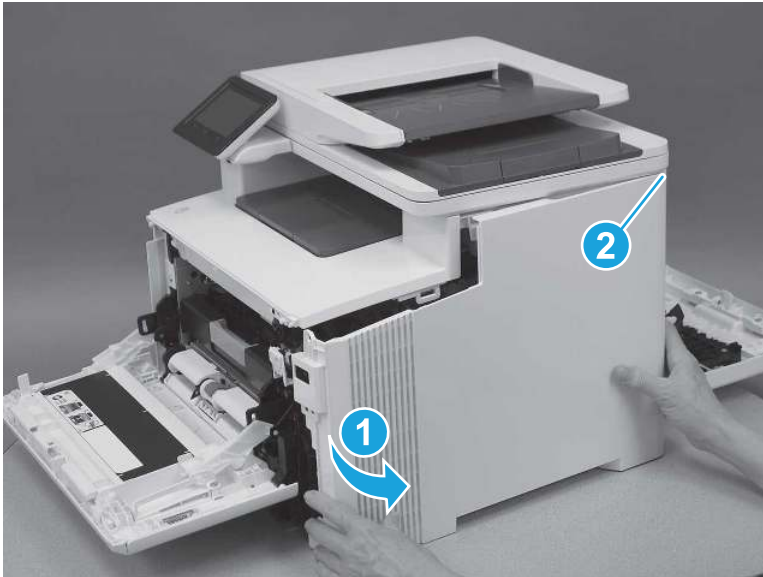
11. Lower the scanner.

**Figure 5-589** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-590** Remove the right cover

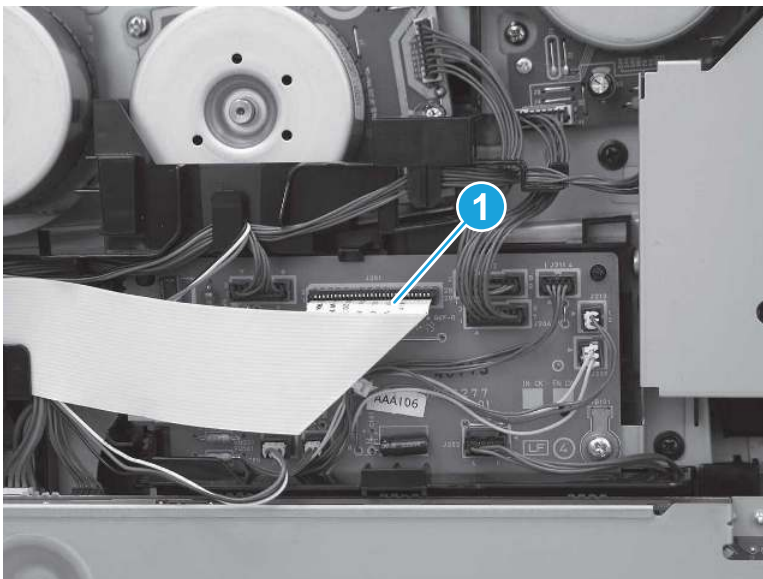


## 5. Remove the driver PCA

Follow these steps to remove the driver PCA.

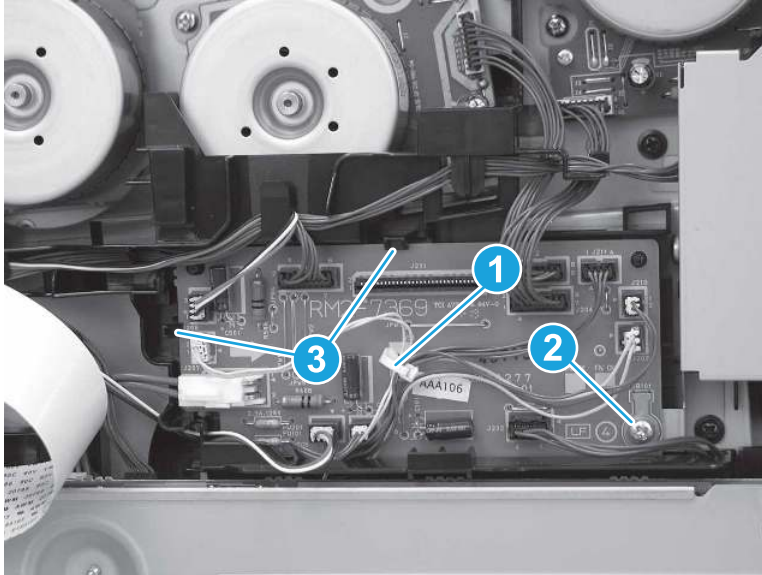
1. Disconnect one connector (callout 1).

**Figure 5-591** Disconnect one connector



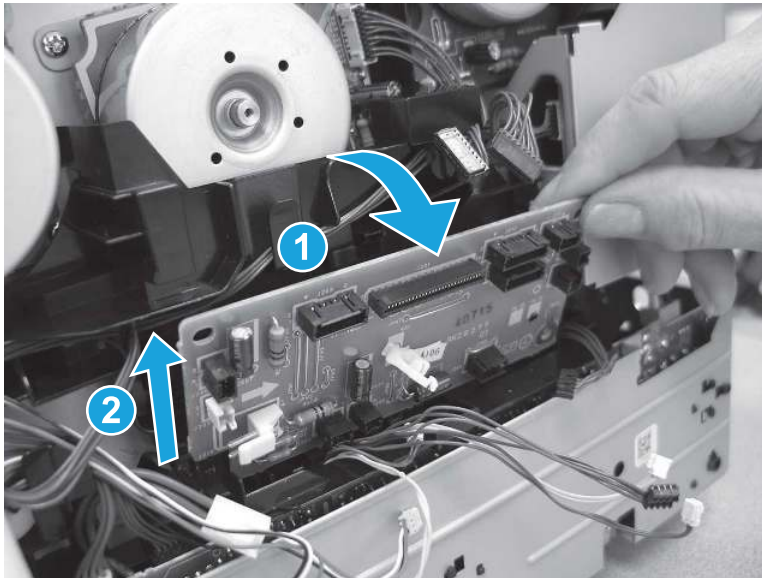
2. Release one retainer (callout 1), disconnect all of the connectors on the driver PCA, remove one screw (callout 2), and then release two tabs (callout 3).

**Figure 5-592** Disconnect all connectors and remove one screw



3. Rotate the top of the driver PCA away from the printer (callout 1), and then lift up (callout 2) to remove it.

**Figure 5-593** Remove the PCA



## 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: Drum motor

Learn how to remove and replace the drum motor.

[View a video of removing and replacing the drum motor.](#)

Mean time to repair: 37 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](http://www.hp.com/buy/parts).

**Table 5-31** Part information

Part number	Part description
RM2-7342-000CN	Drum motor (M2)

### Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- #2 Phillips short-shaft or right-angle screwdriver with a magnetic tip
- Small flat-blade screwdriver



## After performing service

### Turn the printer power on

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

## Post service test

Make sure that the printer initializes to a **Ready** state.

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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-594** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

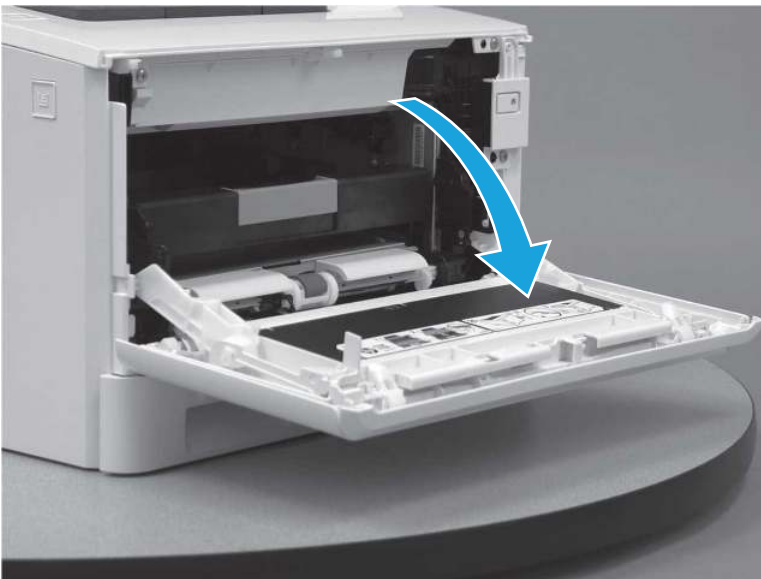
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-595** Release the front door



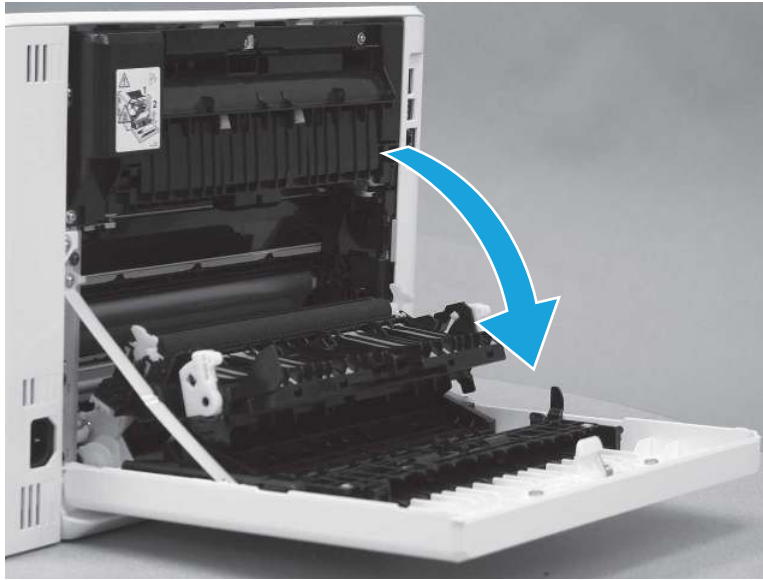
2. Open the front door.

**Figure 5-596** Open the front door



3. Open the duplexing door.

**Figure 5-597** Open the duplexer door



### 3. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

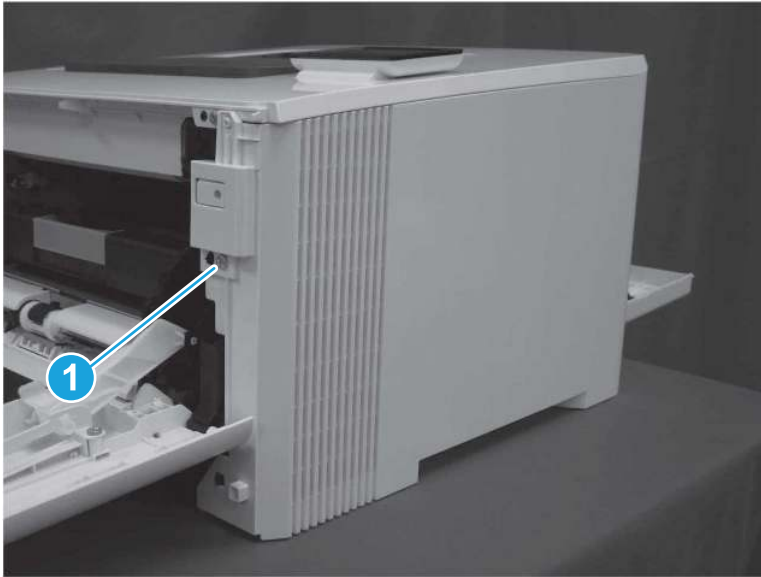
1. At the back of the printer, remove one screw (callout 1).

**Figure 5-598** Remove one screw



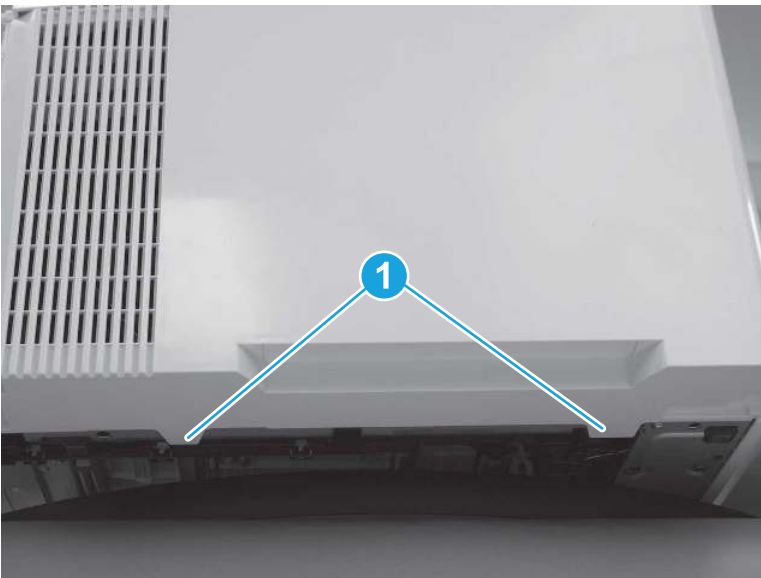
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-599** Remove one screw



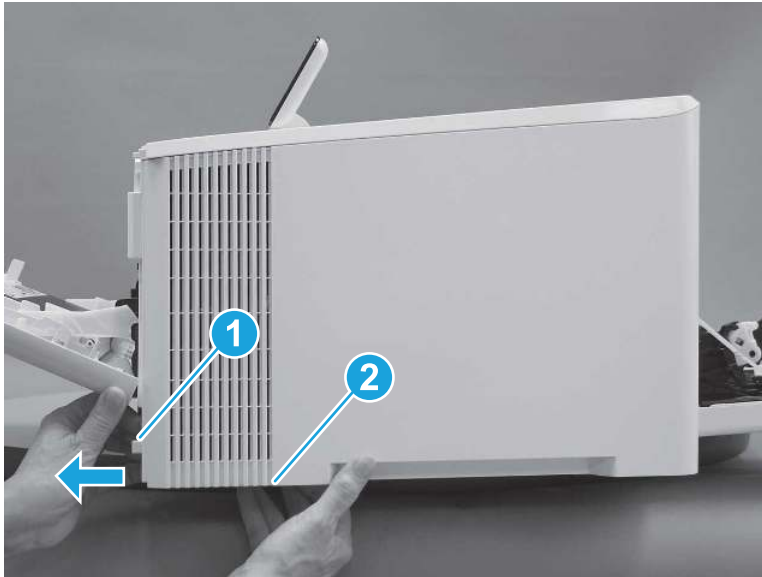
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-600** Locate the tabs



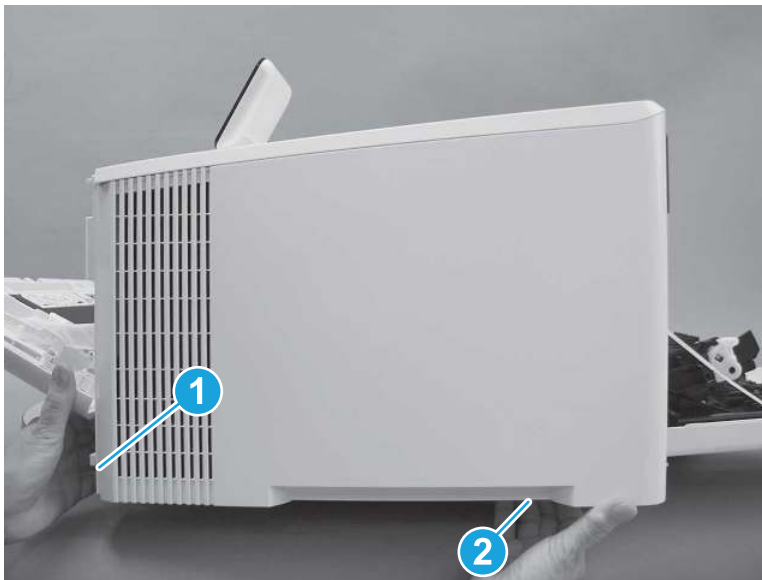
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-601** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

**Figure 5-602** Release lower rear tab



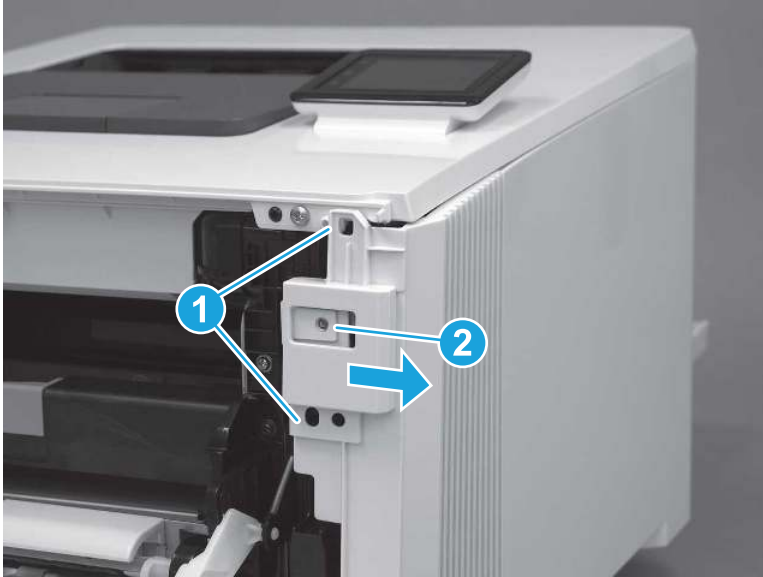
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

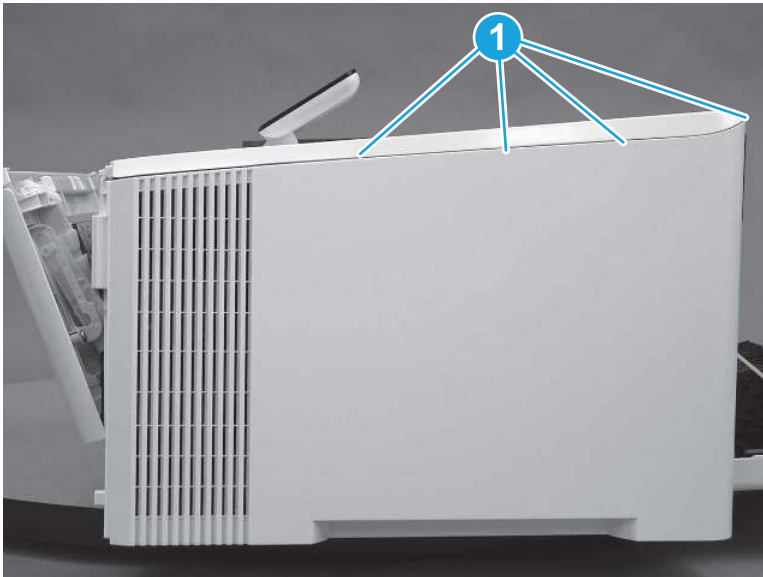
---

**Figure 5-603** Release two front tabs



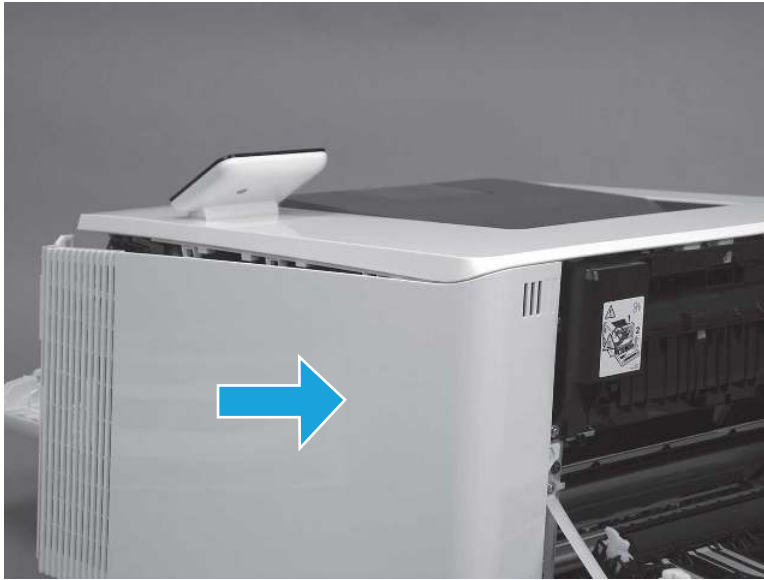
7. Release four tabs on the top of the printer (callout 1).

**Figure 5-604** Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-605** Remove the right cover



#### 4. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

**Figure 5-606** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-607** Remove one screw



3. At the front of the printer, remove one screw (callout 1).

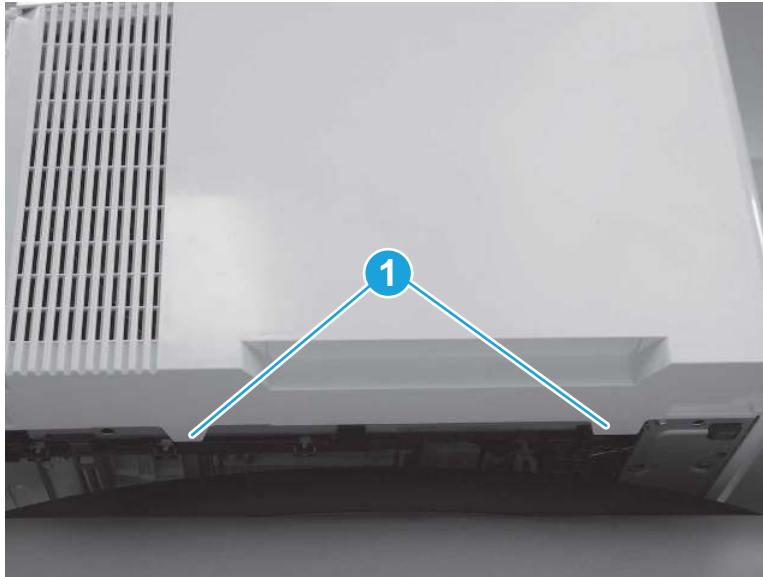
**Figure 5-608** Remove one screw





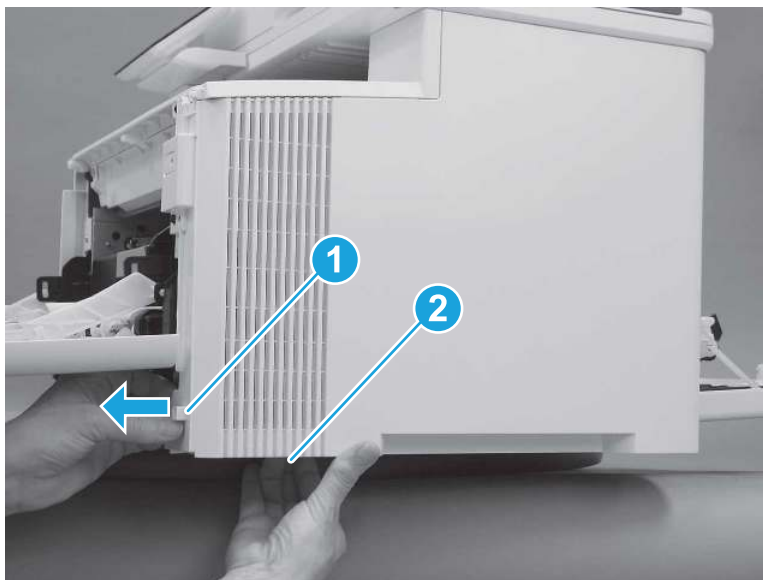
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-609** Locate the tabs



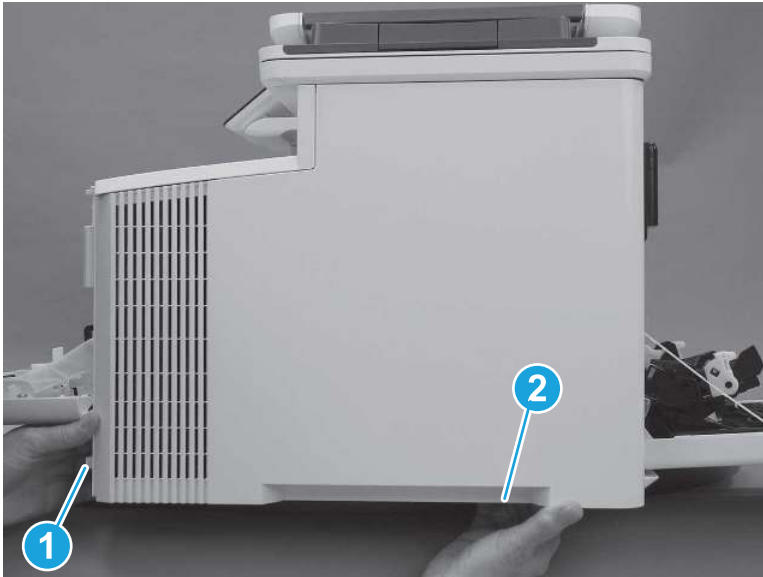
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-610** Release front lower tabs



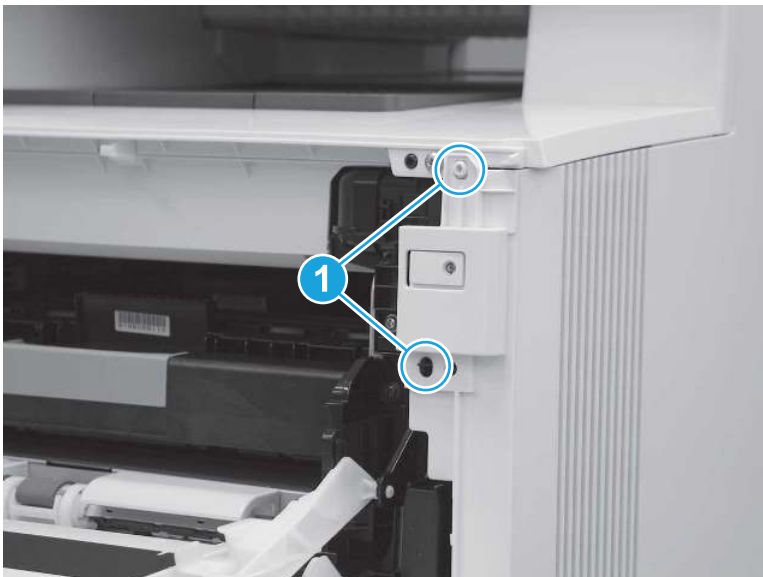
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-611** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-612** Release front upper tabs



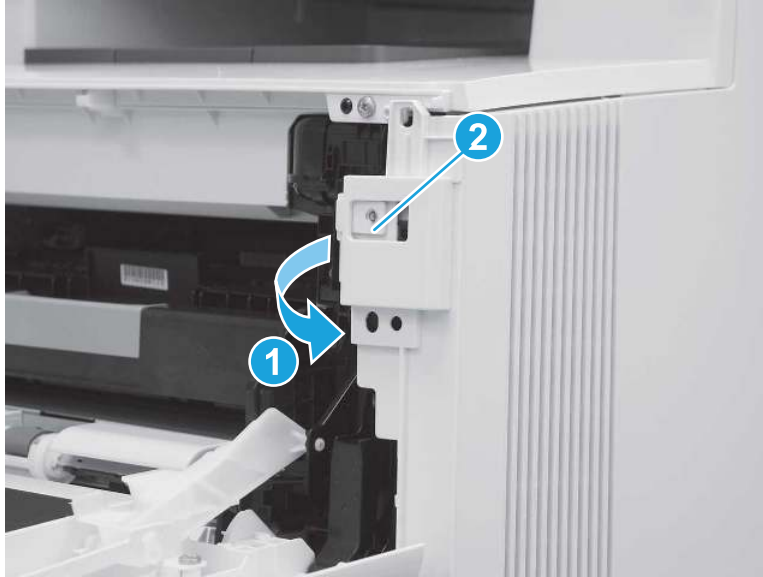
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

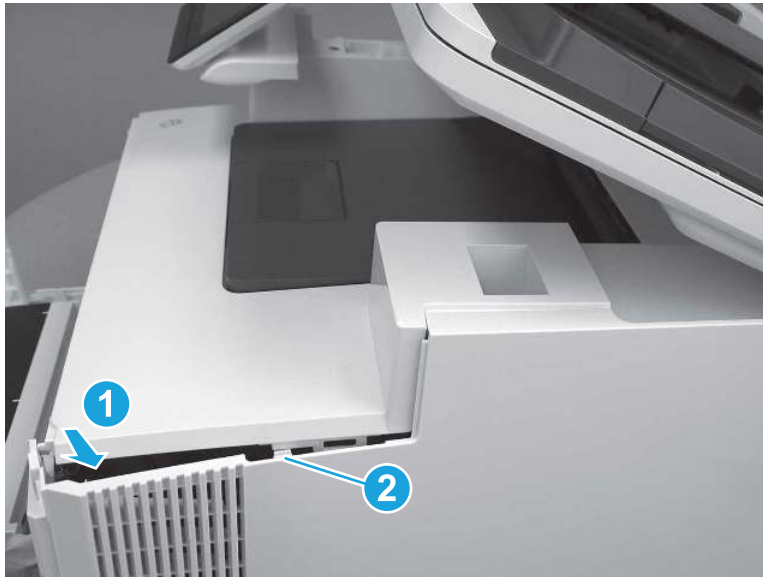
---

Figure 5-613 Rotate the front of the cover



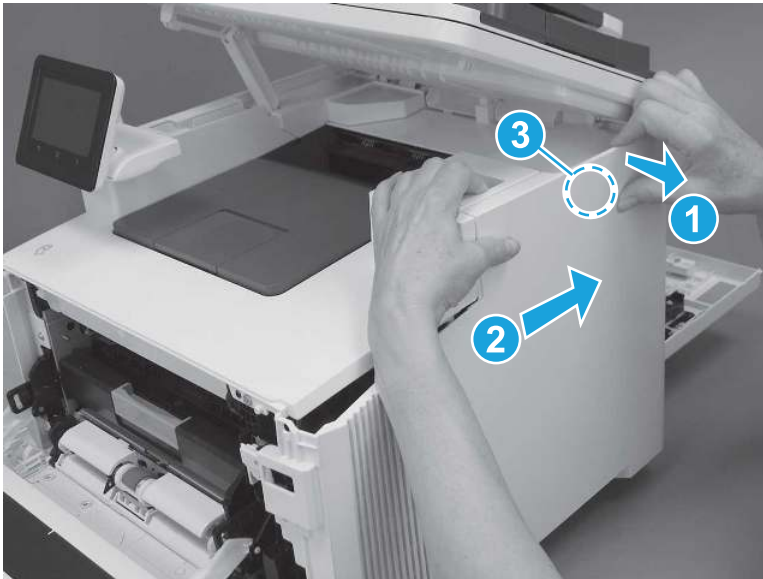
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

Figure 5-614 Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-615** Release one tab and one hook



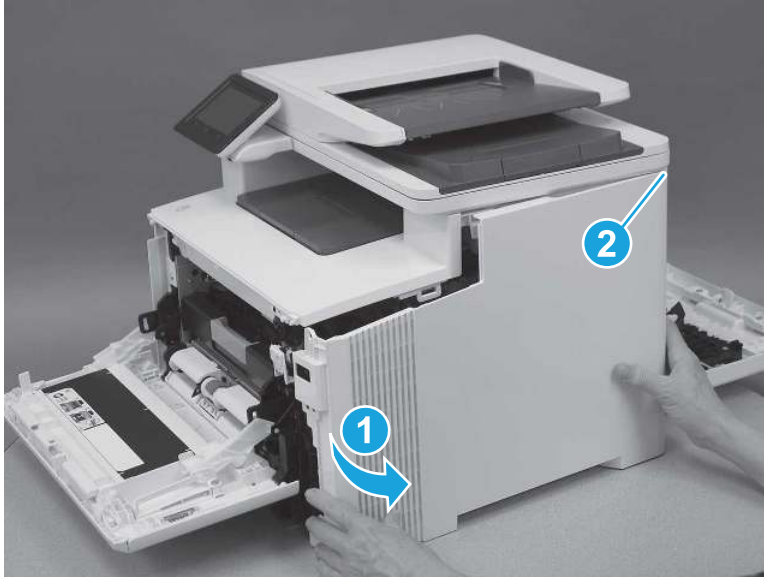
11. Lower the scanner.

**Figure 5-616** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-617** Remove the right cover

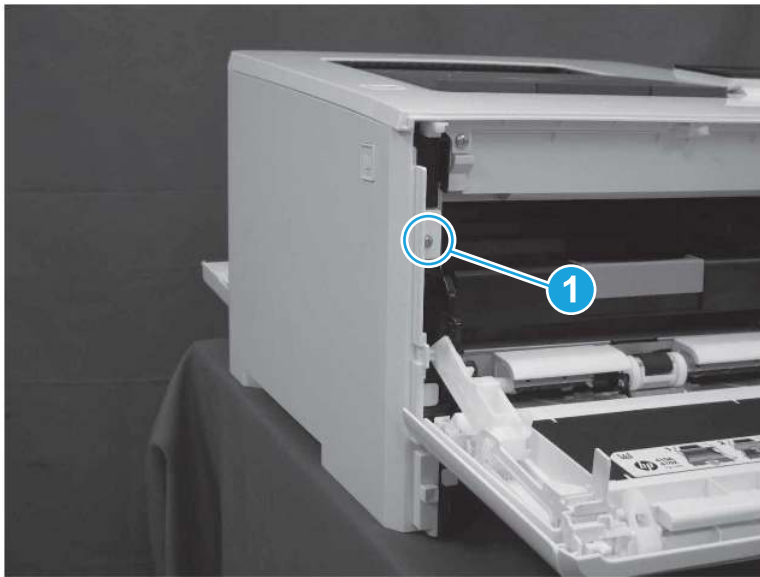


## 5. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

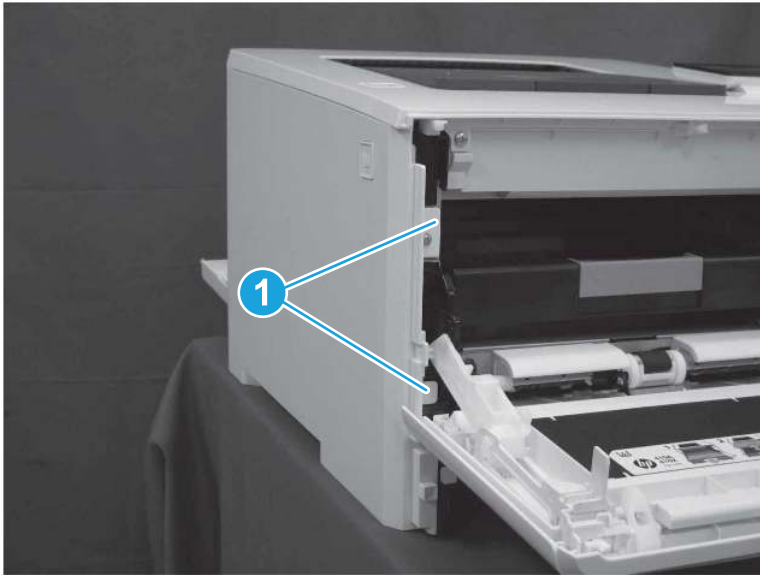
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-618** Remove one screw



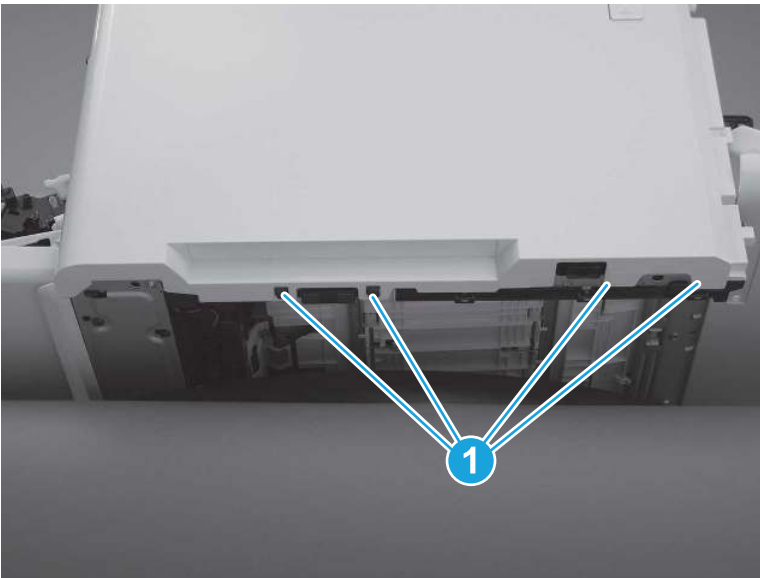
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-619** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-620** Locate the tabs



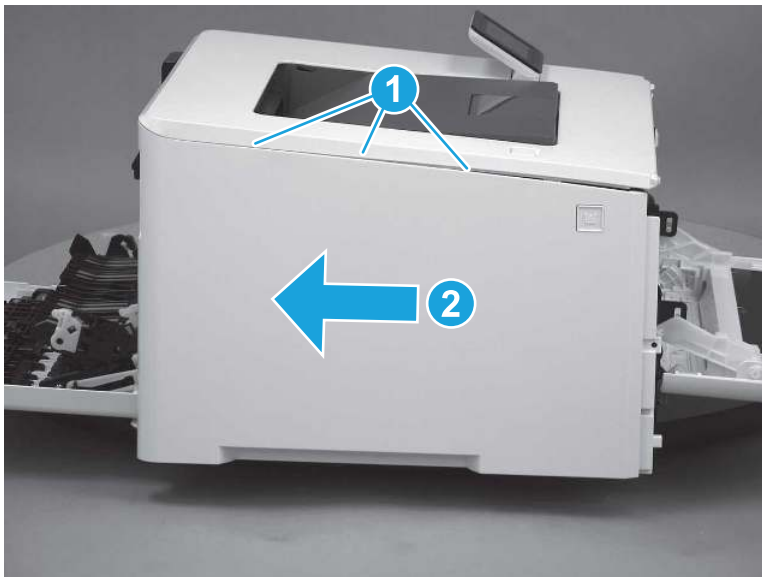
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-621 Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

Figure 5-622 Release three tabs



## 6. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

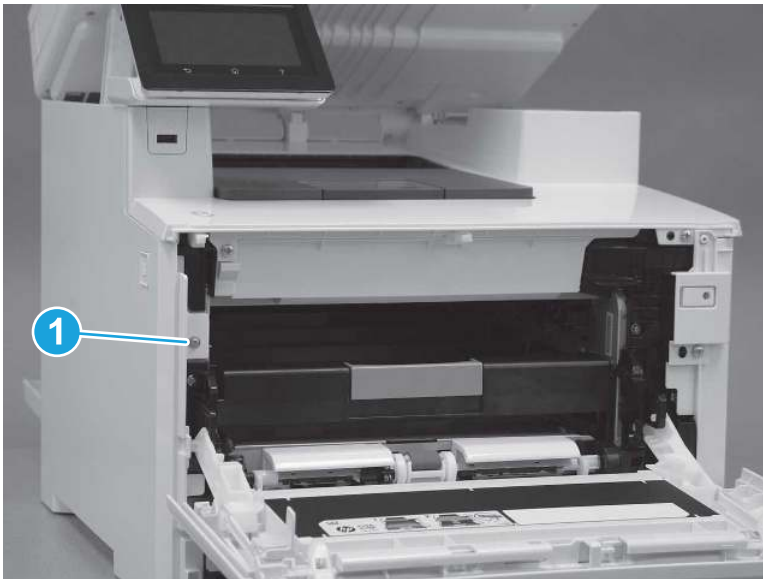
1. Raise the scanner.

Figure 5-623 Raise the scanner



2. At the front of the printer, remove one screw (callout 1).

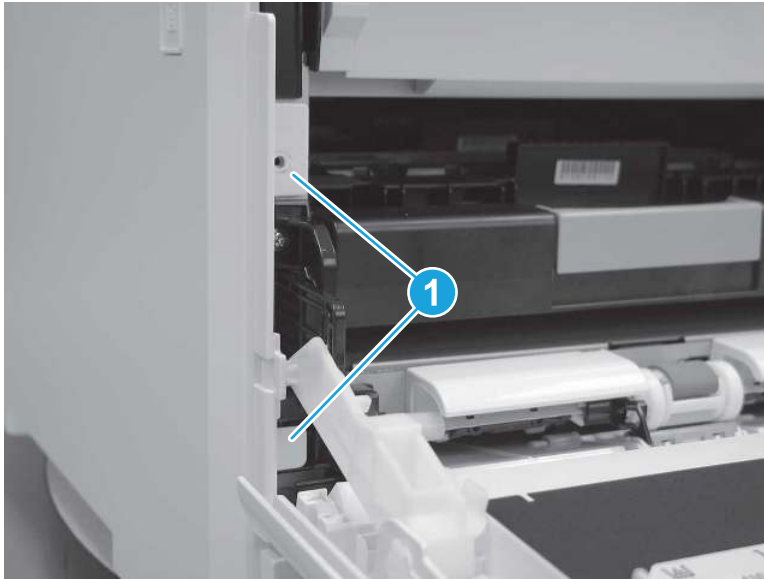
Figure 5-624 Remove one screw





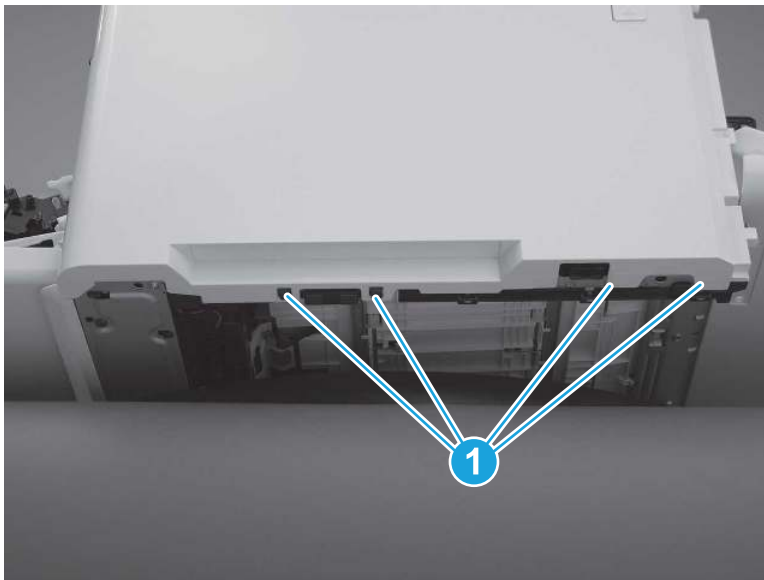
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-625** Release two tabs



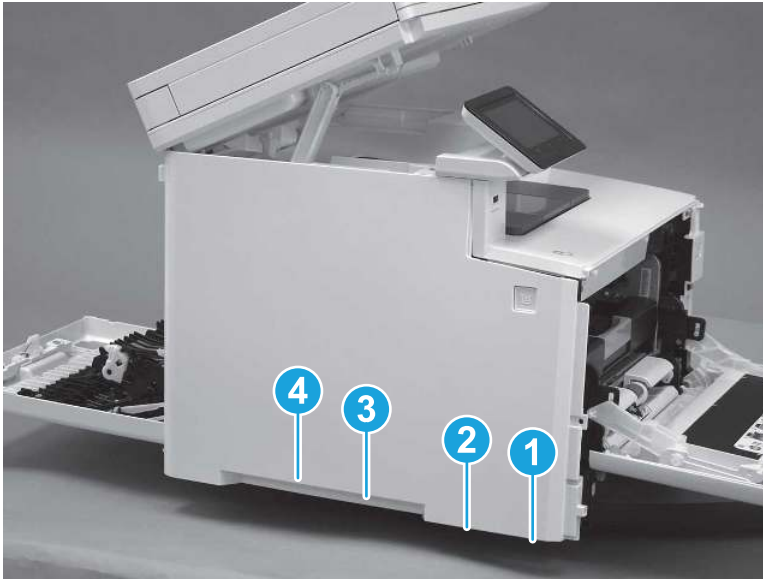
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-626** Locate the tabs



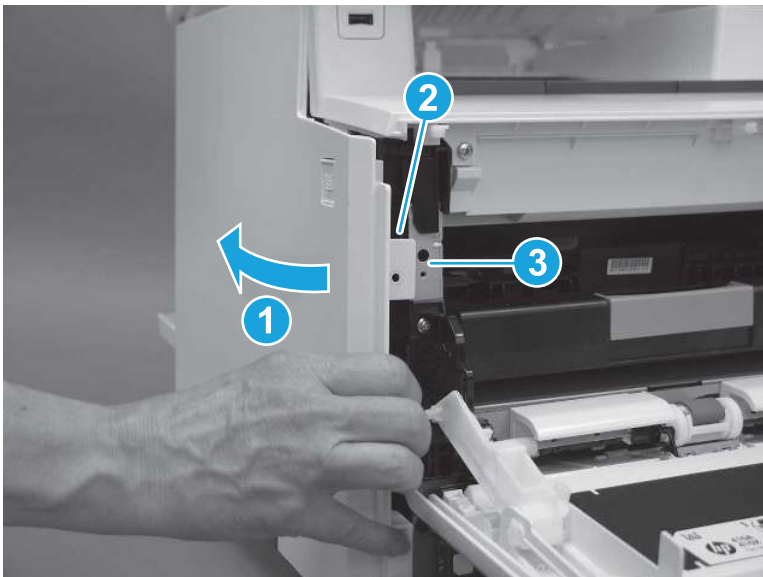
- Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-627** Release four tabs



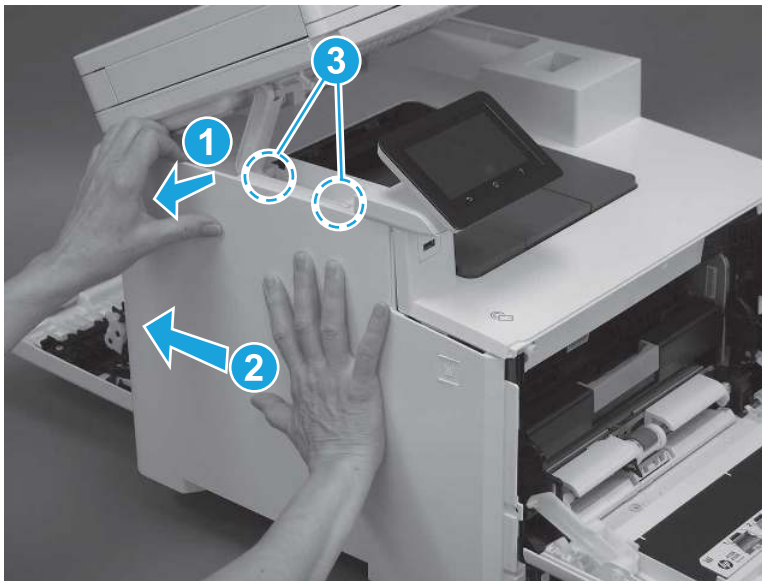
- Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

**Figure 5-628** Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-629** Release one tab and two hooks



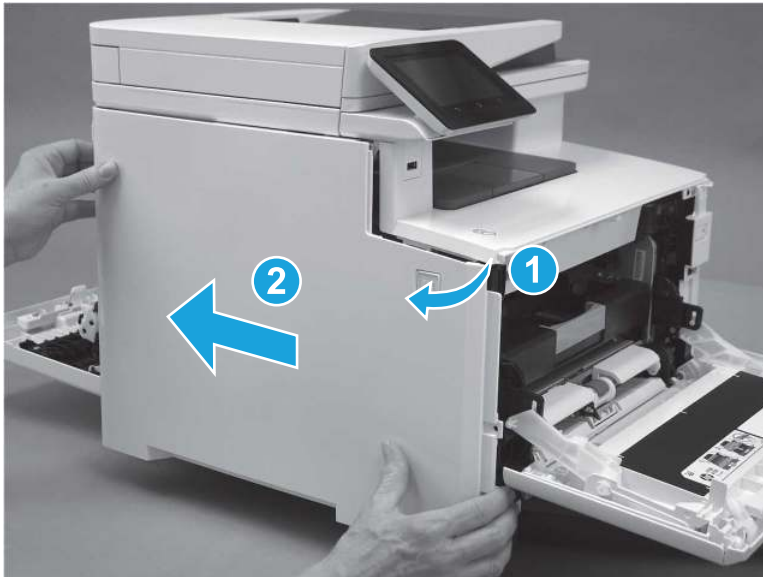
8. Lower the scanner.

**Figure 5-630** Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

**Figure 5-631** Remove the left cover

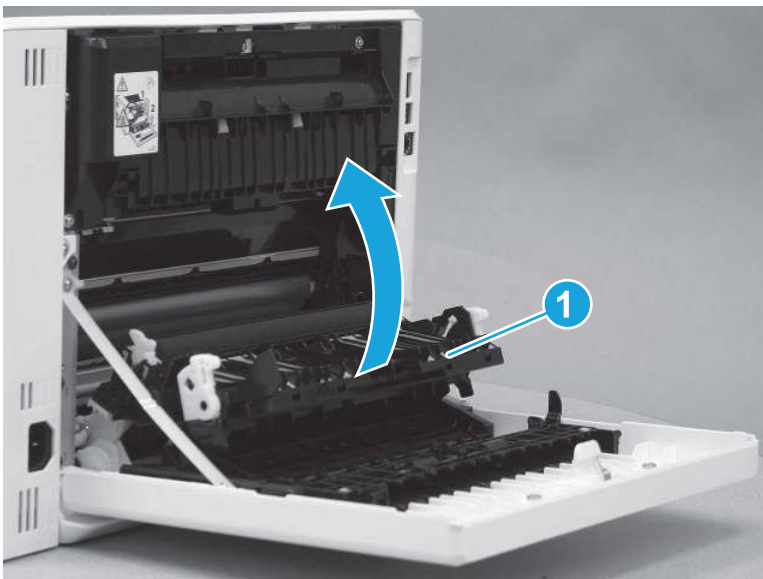


## 7. Remove the duplexing door assembly

Follow these steps to remove the duplexing door assembly.

1. Rotate the secondary transfer assembly (callout 1) toward the printer to close it.

**Figure 5-632** Close the secondary transfer assembly



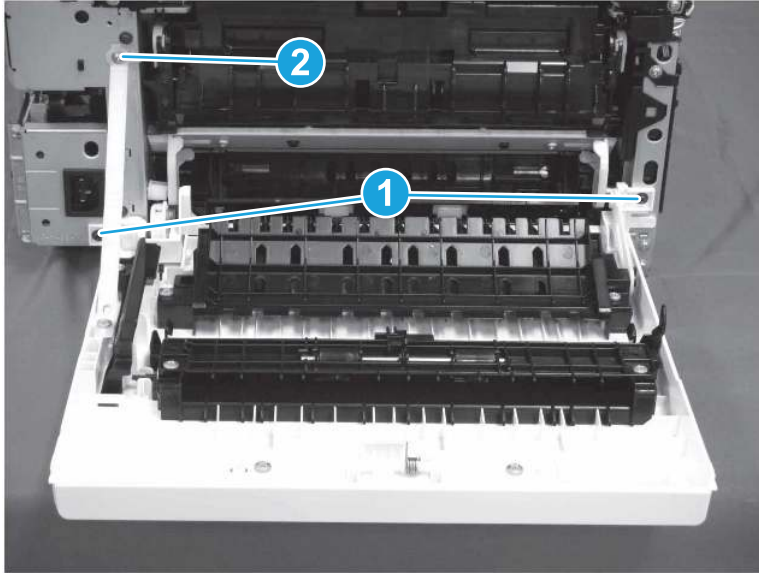
2. At the back of the printer, remove two screws (callout 1), and then remove one screw (callout 2) that holds the retention arm.

---

**TIP:** Note that the screw (callout 2) that holds the retention arm is longer than the other two. Make sure this screw is installed in the correct position.

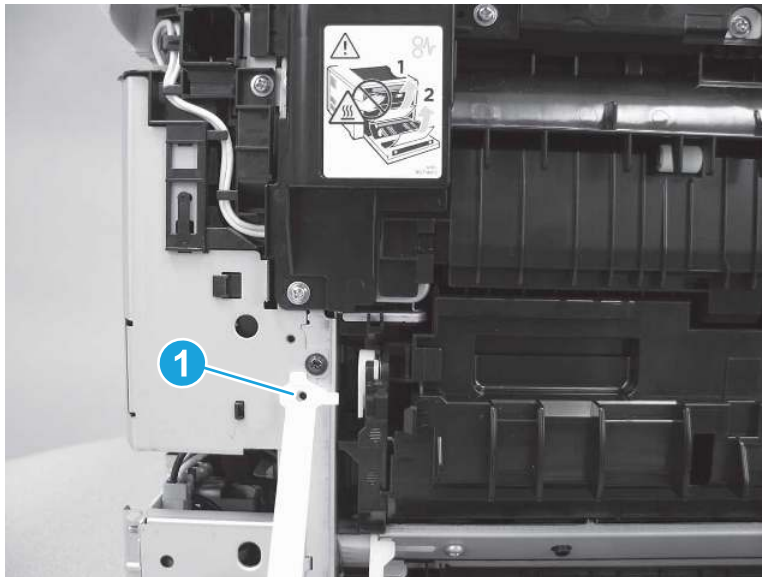
---

Figure 5-633 Remove three screws



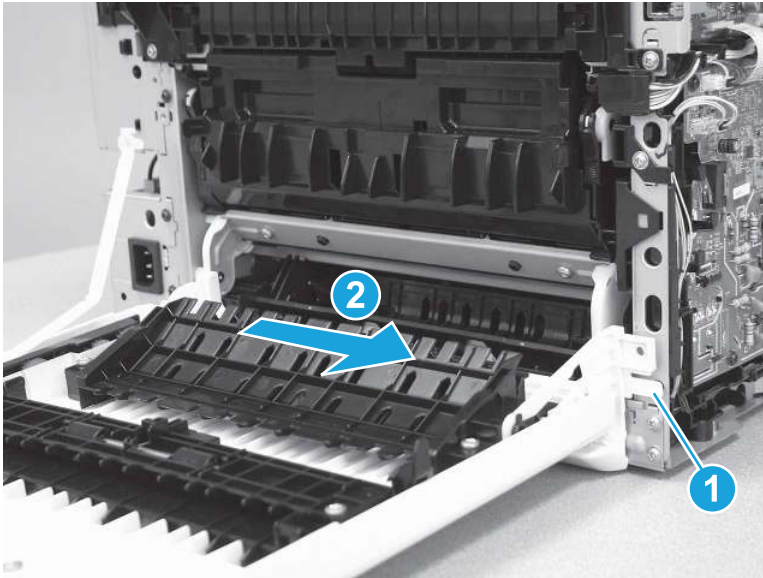
3. Release the retention arm (callout 1).

Figure 5-634 Release the retention arm



4. Release one tab (callout 1), and then slide the duplexer door (callout 2) to the right to remove it.

**Figure 5-635** Remove the duplexing door

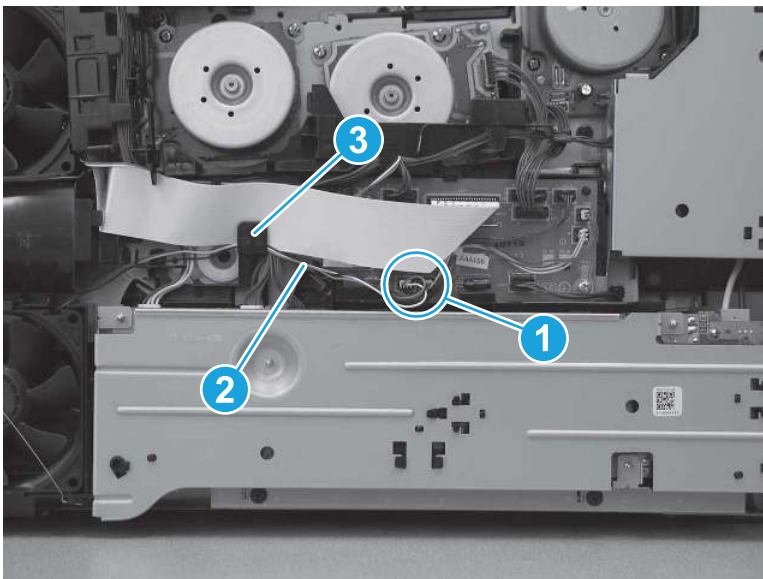


## 8. Remove the LVPS

Follow these steps to remove the LVPS.

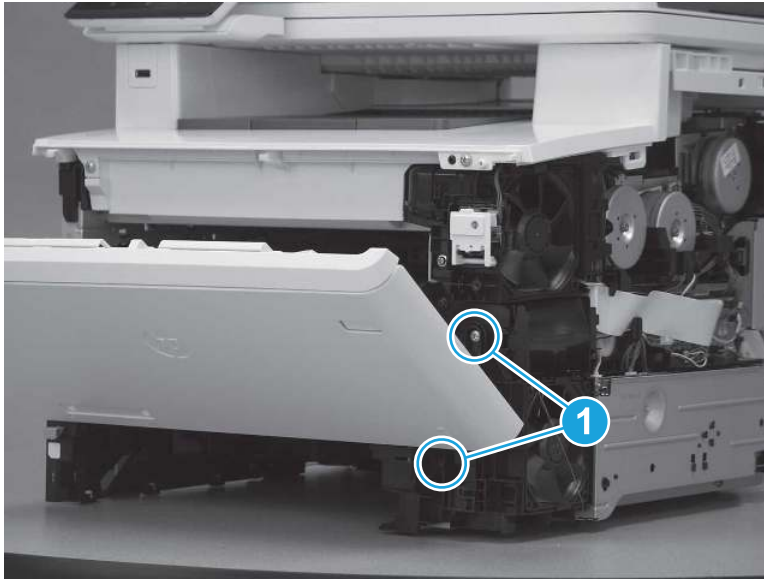
1. Disconnect one connector (callout 1), and then remove the cable (callout 2) from the wire guide (callout 3).

**Figure 5-636** Disconnect one connector and release cables from guides



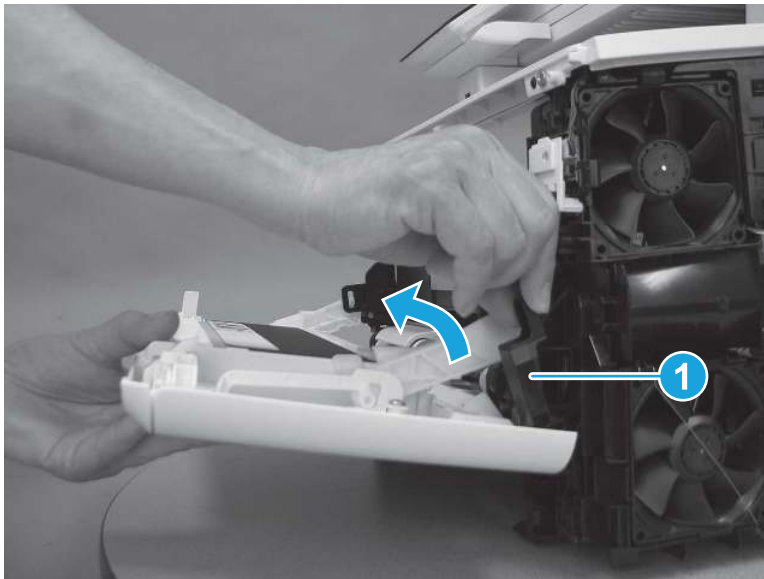
2. Remove two screws (callout 1).

**Figure 5-637** Remove two screws



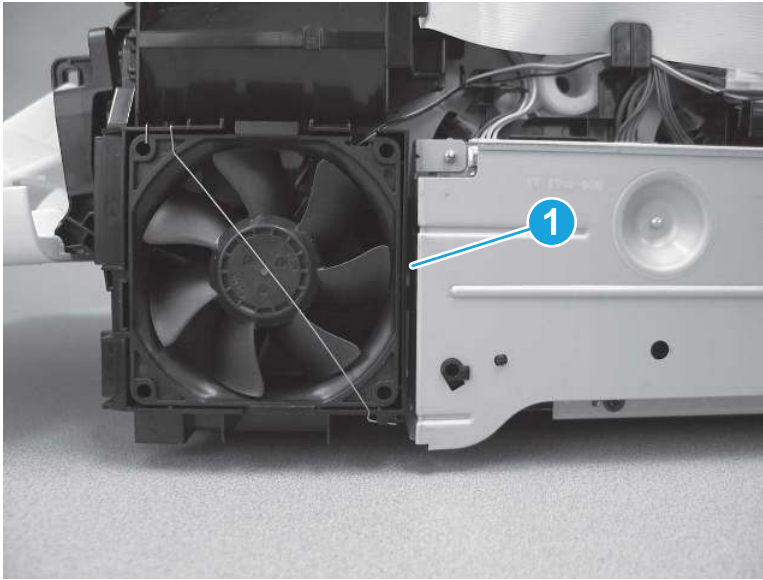
3. Release the hinge arm (callout 1).

**Figure 5-638** Release the hinge arm



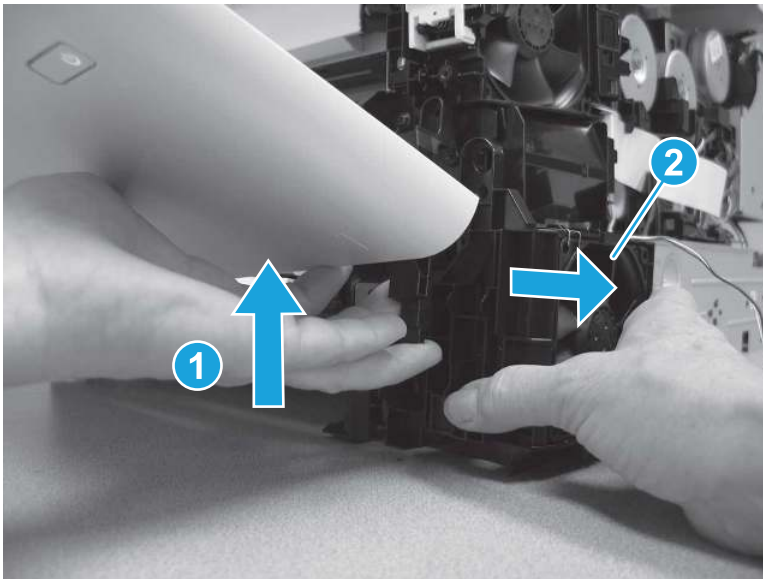
4. Release one tab (callout 1) on the right side of the power supply fan.

Figure 5-639 Release one tab




5. Lift the front door up slightly (callout 1), and then remove the power supply fan and holder (callout 2).

Figure 5-640 Remove the power supply fan and holder



6. Before proceeding, take note of the position of two cables (callout 1).

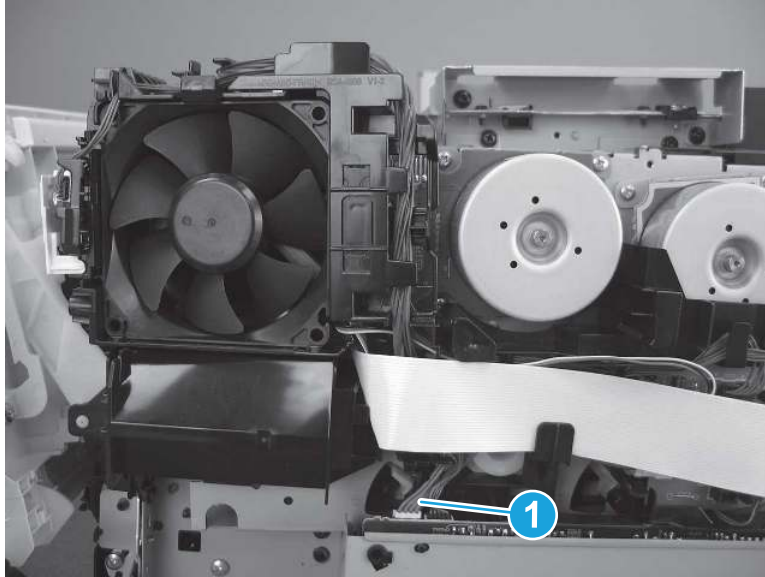
---

 **IMPORTANT:** These cables can be mistakenly switched when reinstalled. The connectors on the cables fit in either connector on the LVPS. Make sure that these cables are installed in the correct connectors. *If the cables are switched, the printer will not power on when reassembled.*

---



Figure 5-641 Check the connectors



7. Disconnect five connectors (callout 1). One connector (callout 2) has a latch that must be released before disconnecting it. Remove three screws (callout 3).


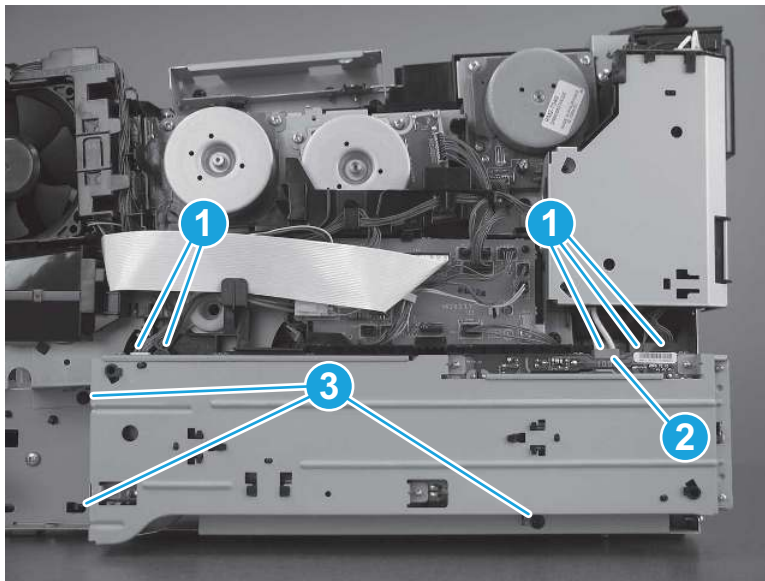
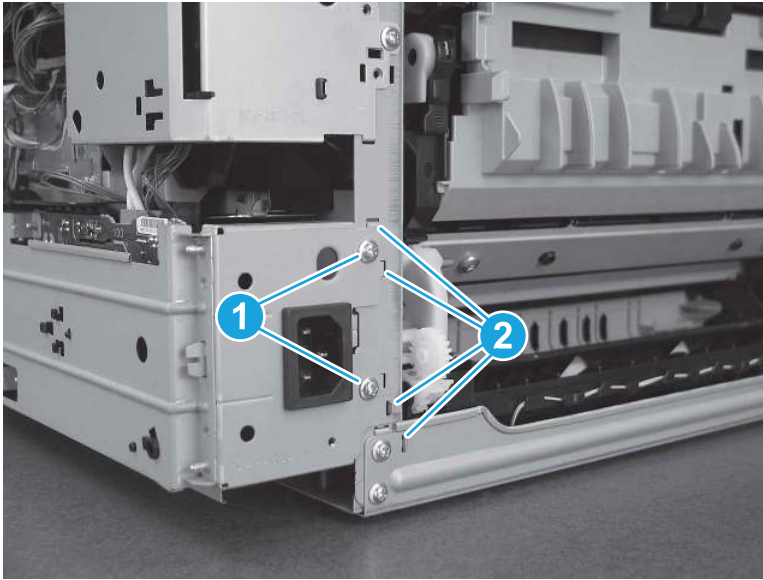
 **NOTE:** The latch for one connector (callout 2) is located on the backside of the connector body, and not easily seen.

Figure 5-642 Disconnect five connectors and remove three screws



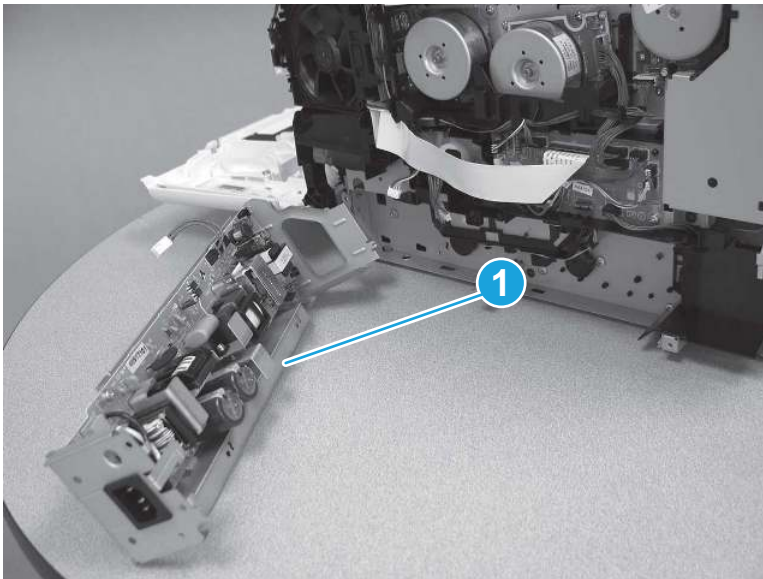
8. Remove two screws from the back (callout 1), and then release four tabs (callout 2).

**Figure 5-643** Remove two screws and release three tabs



9. Remove the LVPS (callout 1).

**Figure 5-644** Remove the assembly

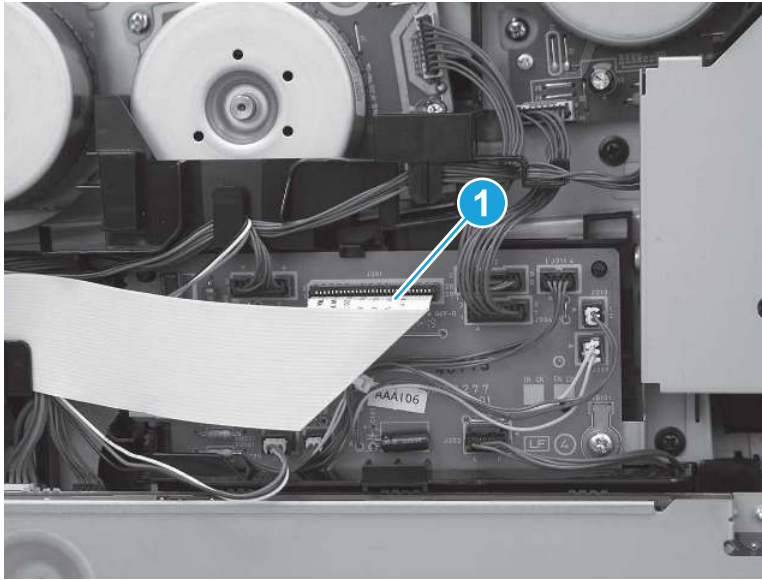


## 9. Remove the driver PCA

Follow these steps to remove the driver PCA.

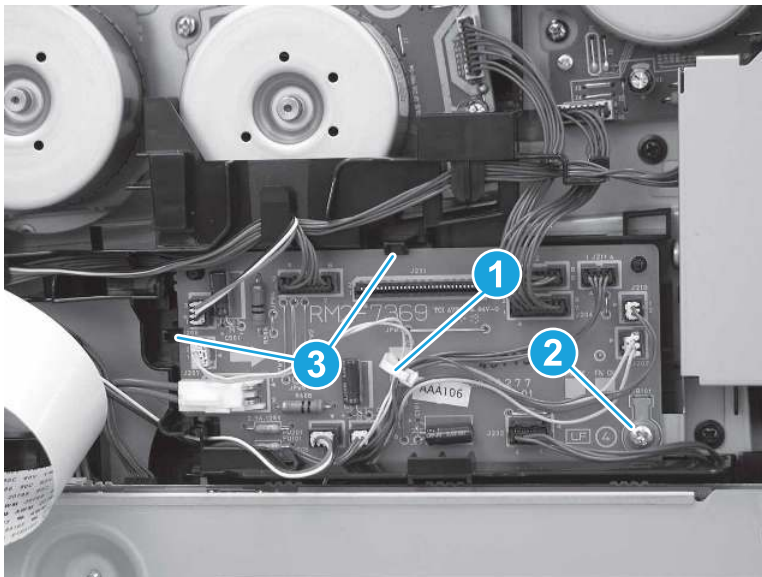
1. Disconnect one connector (callout 1).

**Figure 5-645** Disconnect one connector



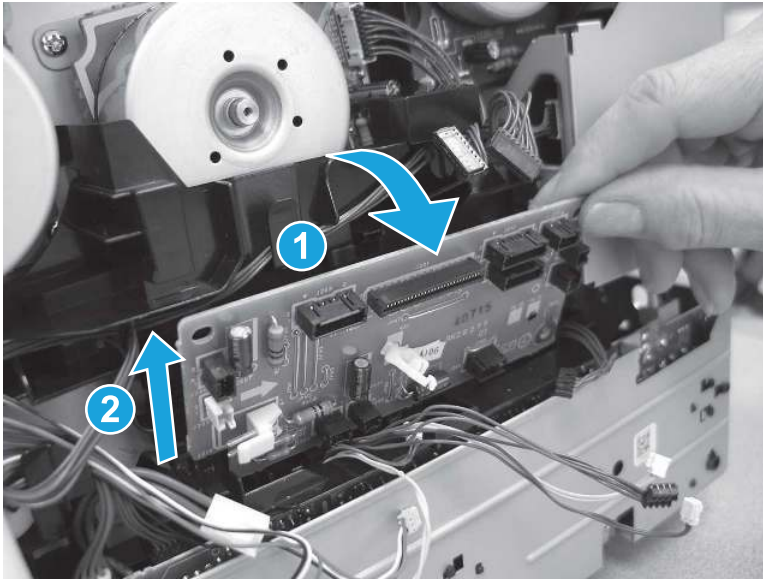
2. Release one retainer (callout 1), disconnect all of the connectors on the driver PCA, remove one screw (callout 2), and then release two tabs (callout 3).

**Figure 5-646** Disconnect all connectors and remove one screw



3. Rotate the top of the driver PCA away from the printer (callout 1), and then lift up (callout 2) to remove it.

**Figure 5-647** Remove the PCA

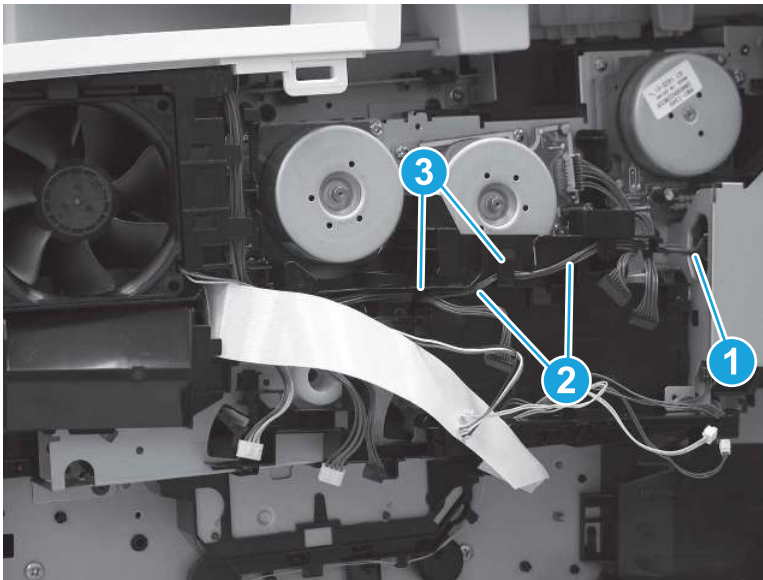


## 10. Remove the driver PCA holder

Follow these steps to remove the driver PCA holder.

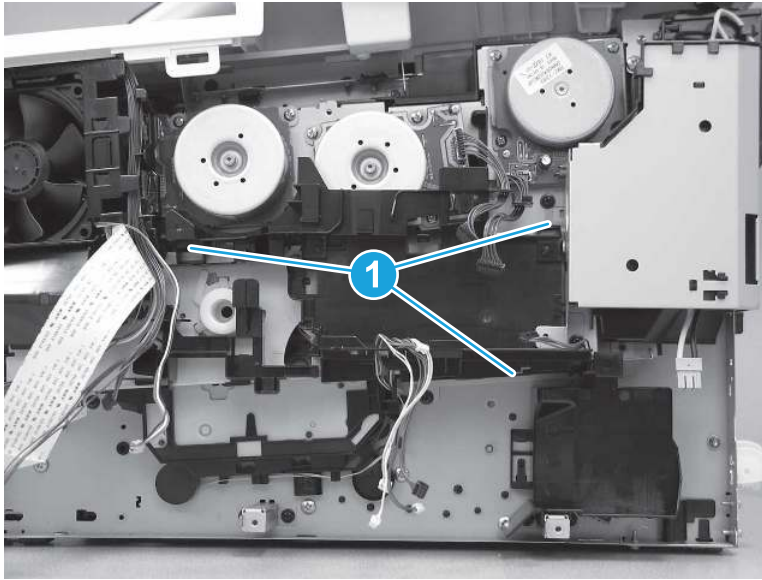
1. Disconnect one connector (callout 1), and then release the cables (callout 2) from the guides (callout 3).

**Figure 5-648** Disconnect one connector and release cables from guides



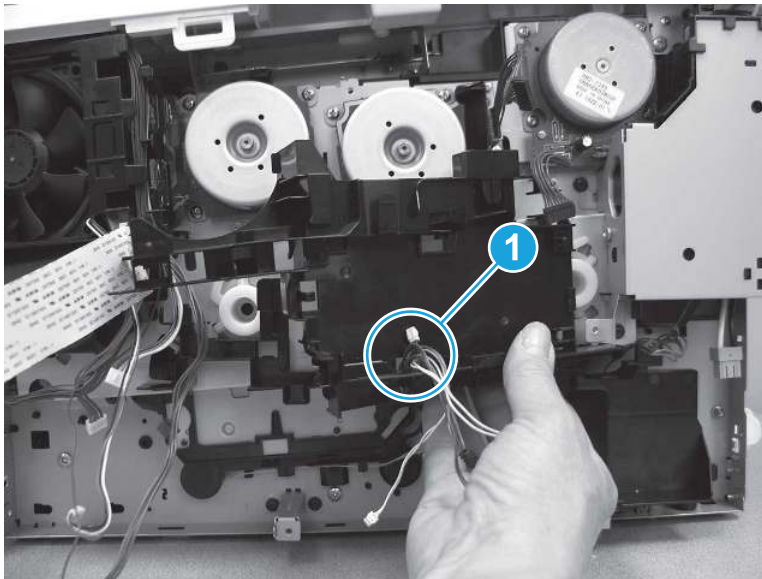
2. Release three tabs (callout 1).

**Figure 5-649** Release three tabs



3. Release the cables from the driver PCA holder (callout 1), and then remove the driver PCA holder.

**Figure 5-650** Remove the PCA holder

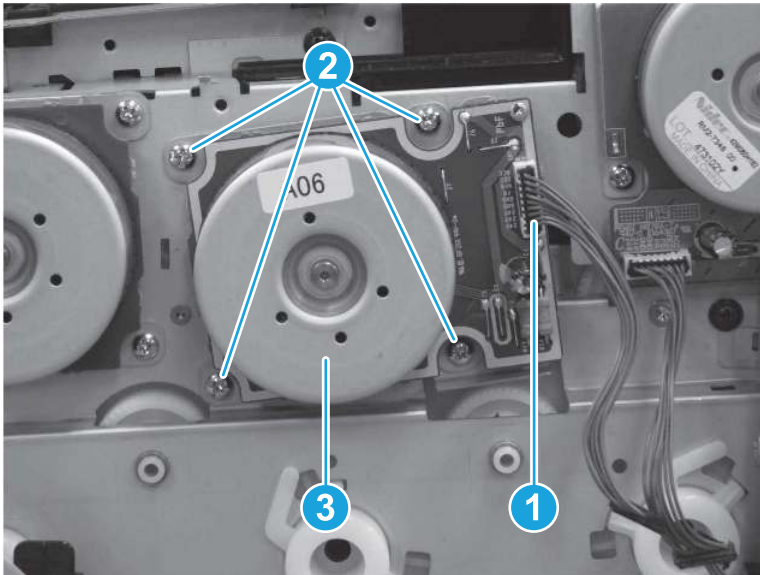


## 11. Remove the drum motor

Follow these steps to remove the drum motor.

- ▲ Disconnect one connector (callout 1), remove four screws (callout 2), and then remove the drum motor (callout 3).

Figure 5-651 Remove the assembly



## 12. 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.

---

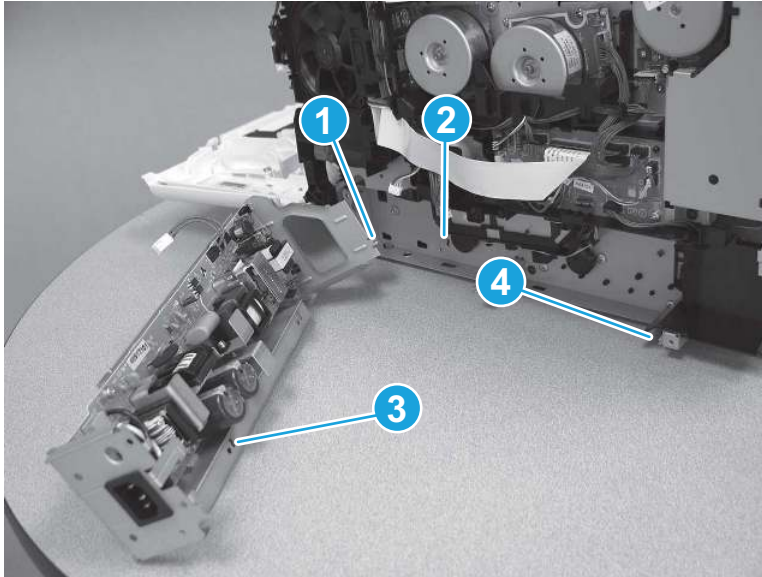
### 13. Reverse the removal steps to install the assembly

Also use the following special installation instructions.

Low-voltage power supply

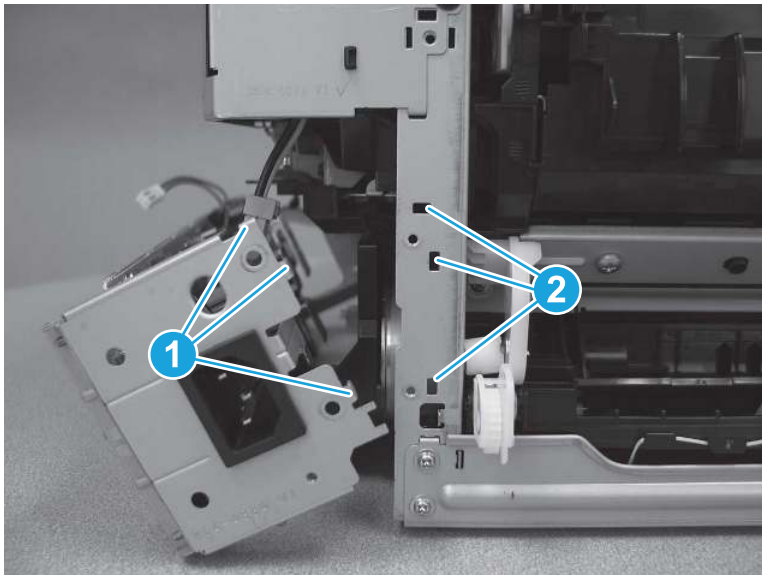
1. Install the tab (callout 1) on the LVPS into the slot (callout 2) in the printer. Install the slot (callout 3) in the LVPS over the tab (callout 4) on the printer.

**Figure 5-652** Install the side tabs of the LVPS



2. At the back of the printer, install the tabs on the LVPS (callout 1) into the slots (callout 2) in the printer.

**Figure 5-653** Install the back tabs of the LVPS



### Removal and replacement: Developer motor

Learn how to remove and replace the developer motor (M3).

[View a video of removing and replacing the developer motor.](#)

Mean time to repair: 37 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](http://www.hp.com/buy/parts).

**Table 5-32** Part information

Part number	Part description
RM2-7344-000CN	Developing motor (M3)

## Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- #2 Phillips short-shaft or right-angle screwdriver with a magnetic tip
- Small flat-blade screwdriver

## After performing service

### Turn the printer power on

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

## Post service test

Make sure that the printer initializes to a **Ready** state.


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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---



Figure 5-654 Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

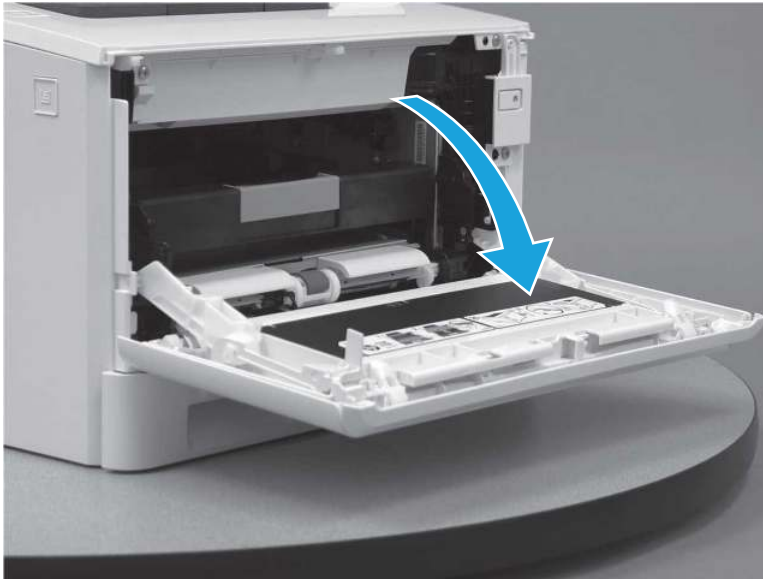
1. Press the button (callout 1) on the left side of the printer to release the front door.

Figure 5-655 Release the front door



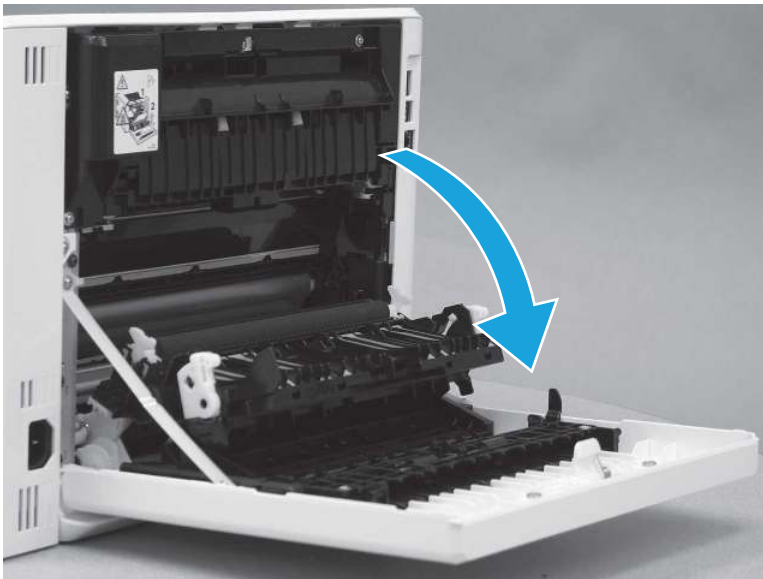
2. Open the front door.

**Figure 5-656** Open the front door



3. Open the duplexing door.

**Figure 5-657** Open the duplexer door



### 3. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

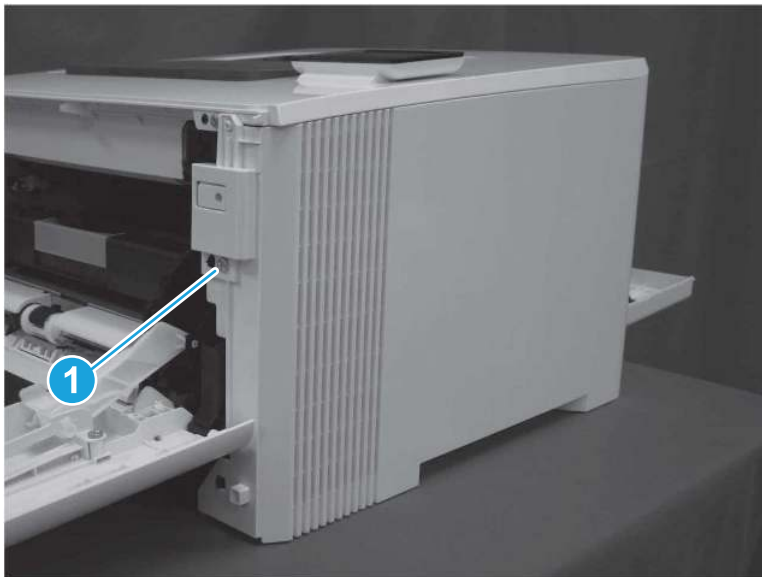
1. At the back of the printer, remove one screw (callout 1).

**Figure 5-658** Remove one screw



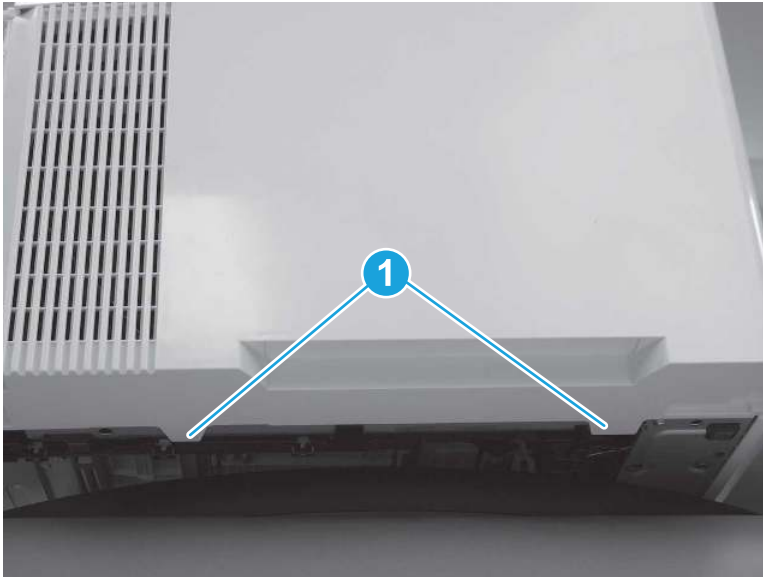
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-659** Remove one screw



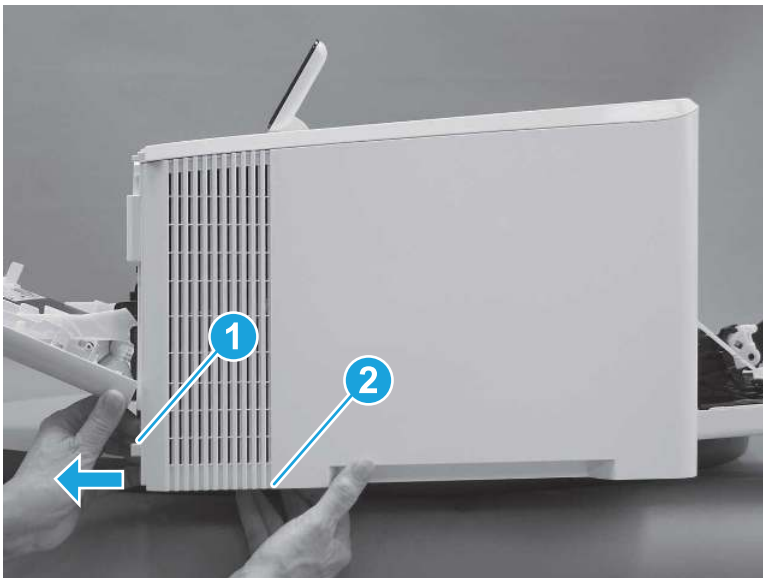
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-660** Locate the tabs



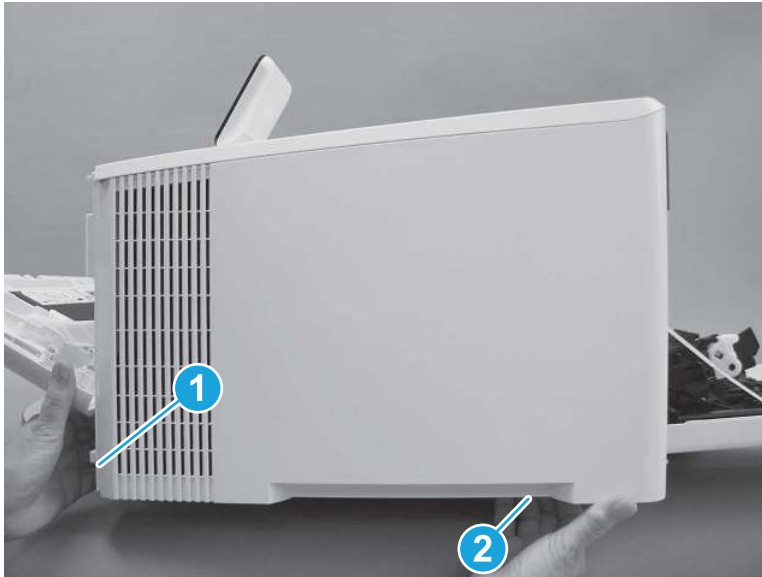
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-661** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

Figure 5-662 Release lower rear tab



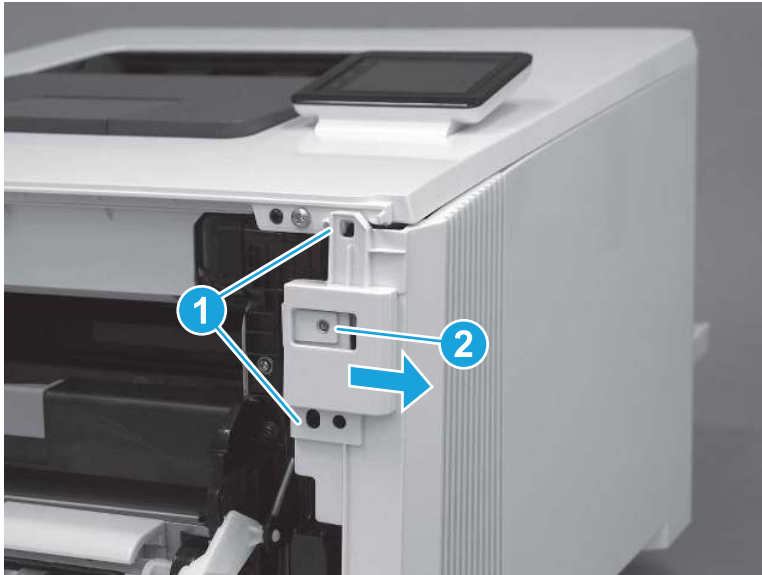
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

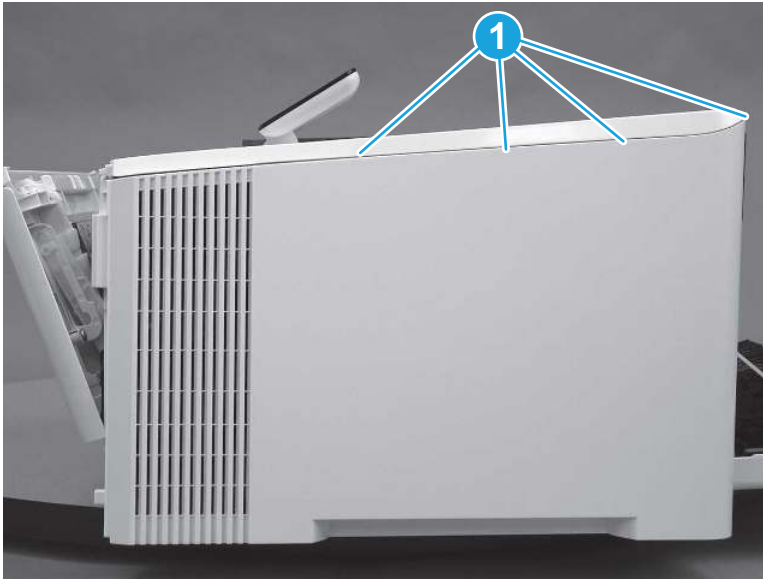
---

Figure 5-663 Release two front tabs



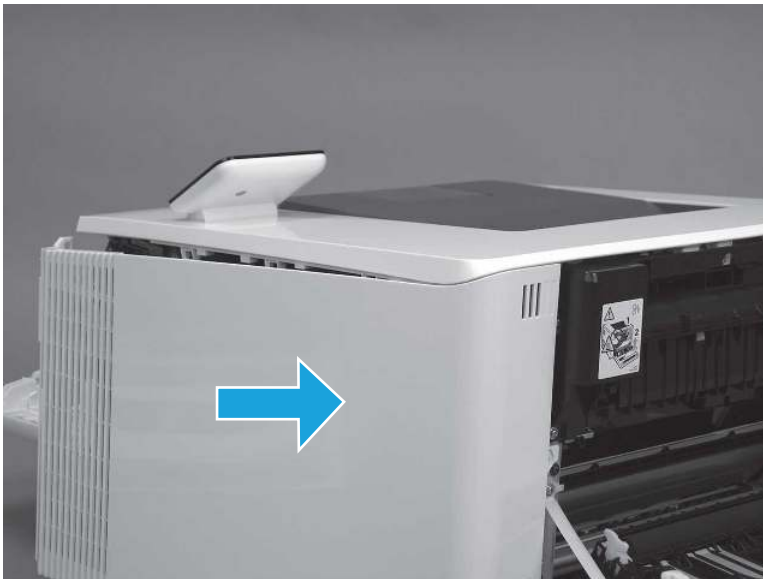
7. Release four tabs on the top of the printer (callout 1).

**Figure 5-664** Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-665** Remove the right cover



#### 4. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

**Figure 5-666** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-667** Remove one screw



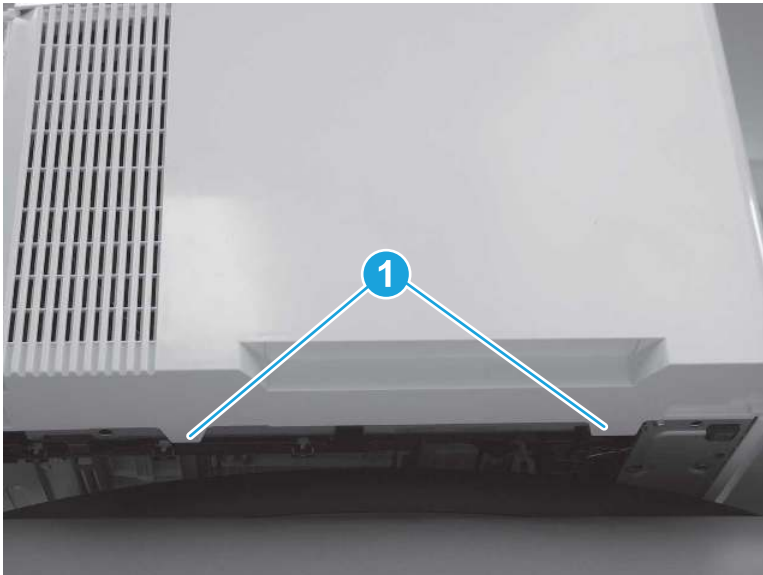
3. At the front of the printer, remove one screw (callout 1).

**Figure 5-668** Remove one screw



4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

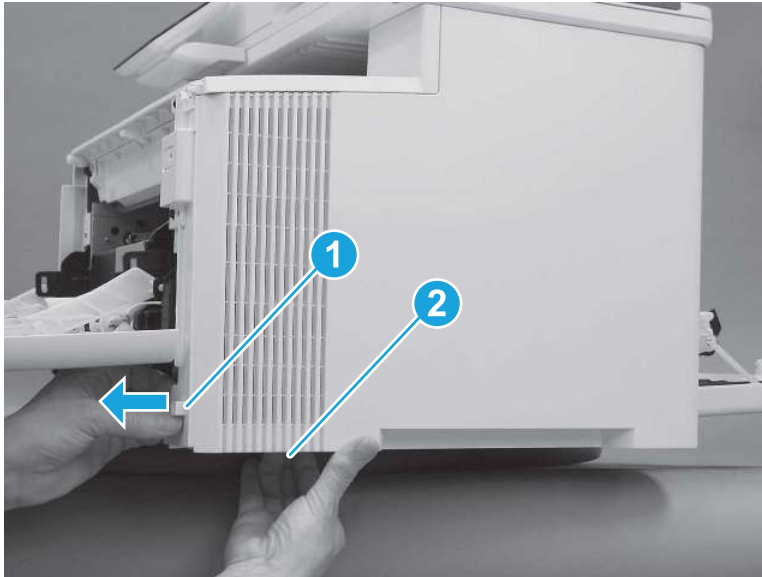
**Figure 5-669** Locate the tabs





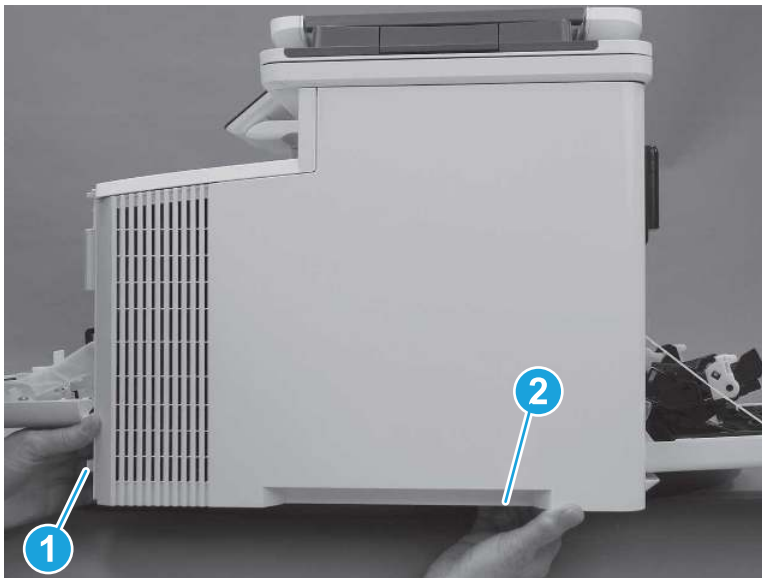
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-670** Release front lower tabs



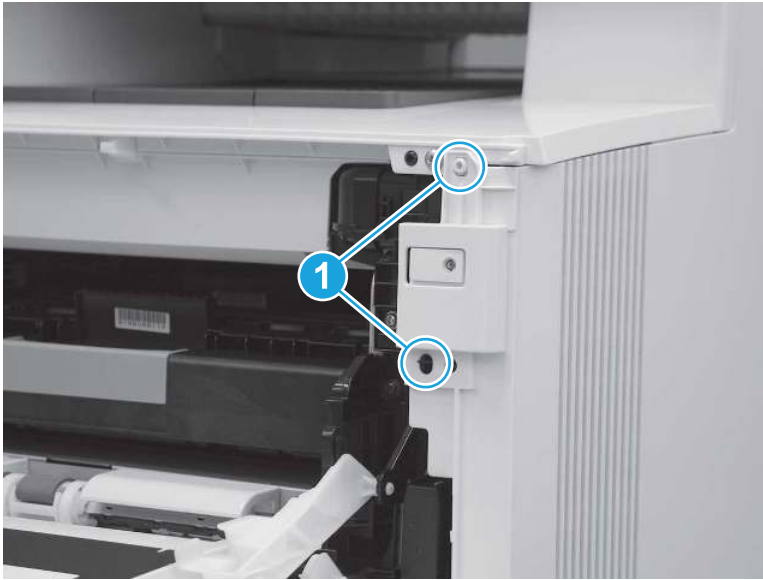
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-671** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-672** Release front upper tabs



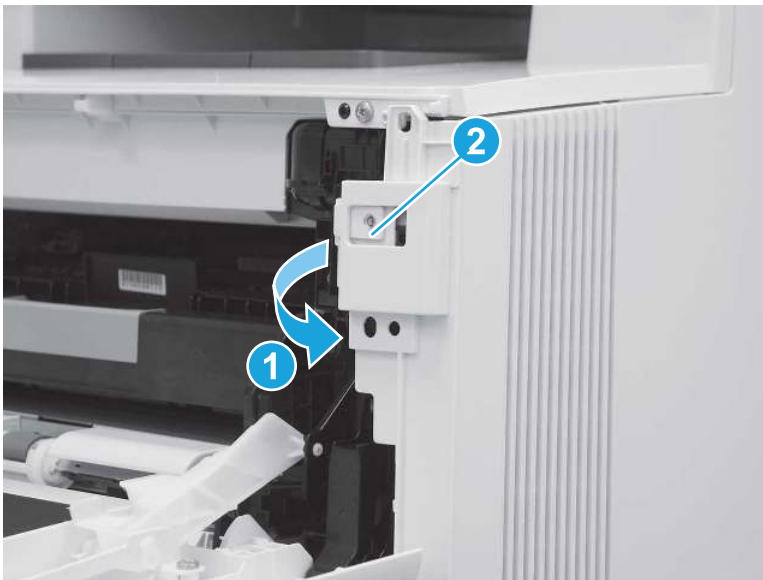
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

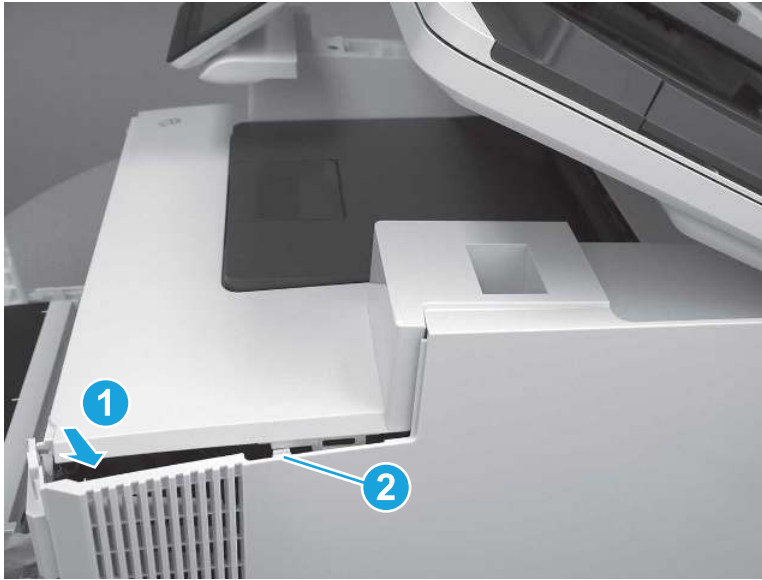
---

**Figure 5-673** Rotate the front of the cover



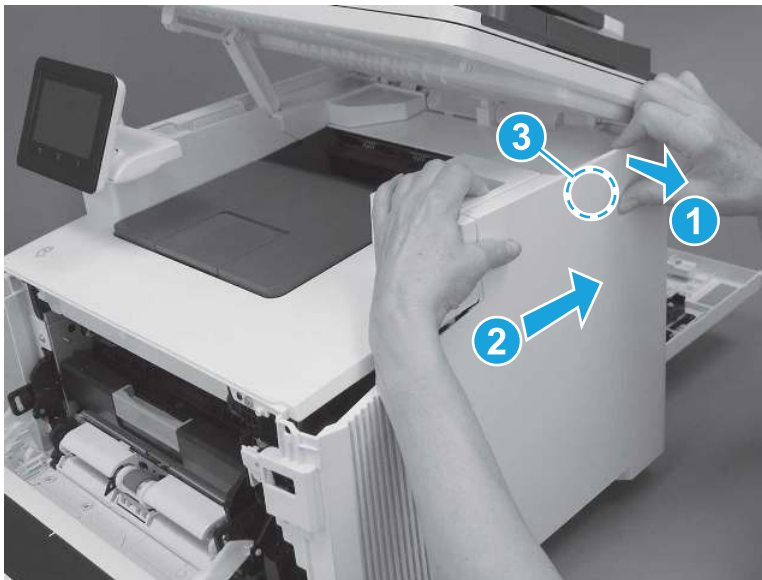
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

**Figure 5-674** Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-675** Release one tab and one hook



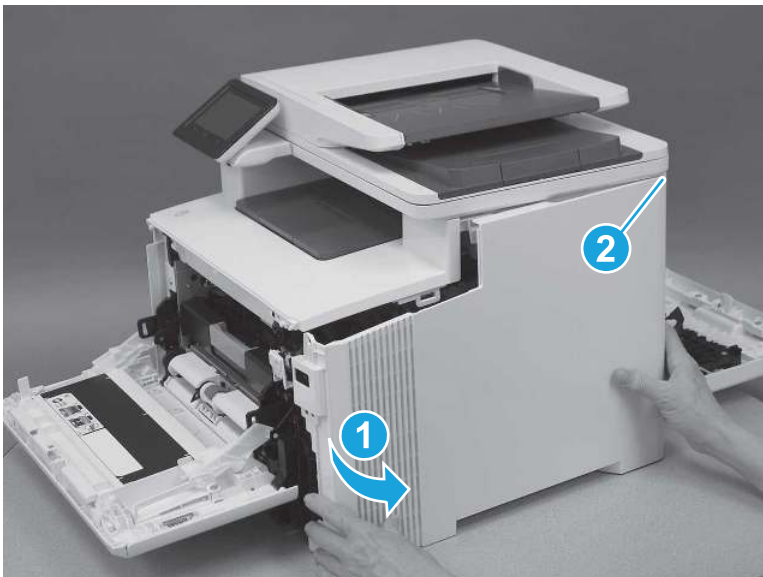
11. Lower the scanner.

**Figure 5-676** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-677** Remove the right cover

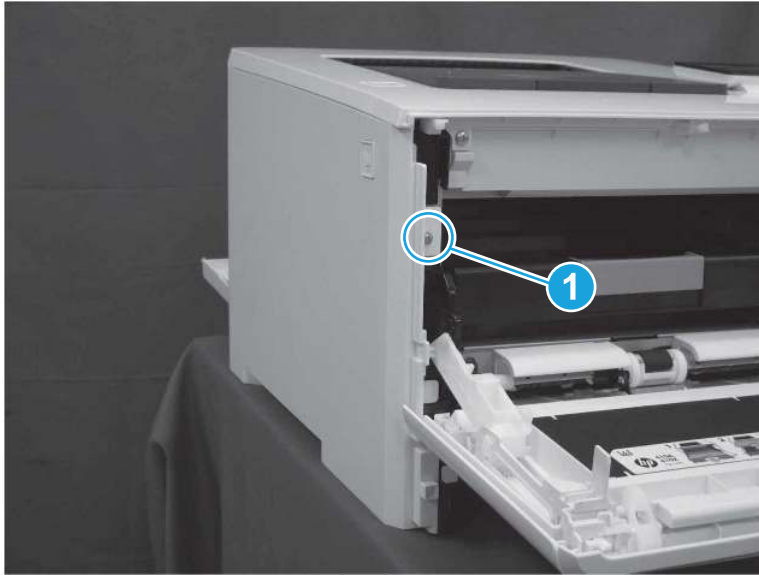


## 5. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

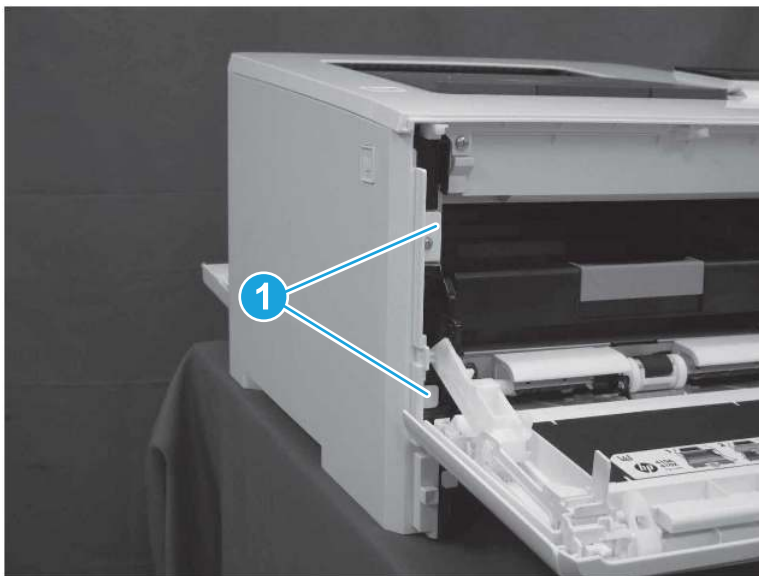
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-678** Remove one screw



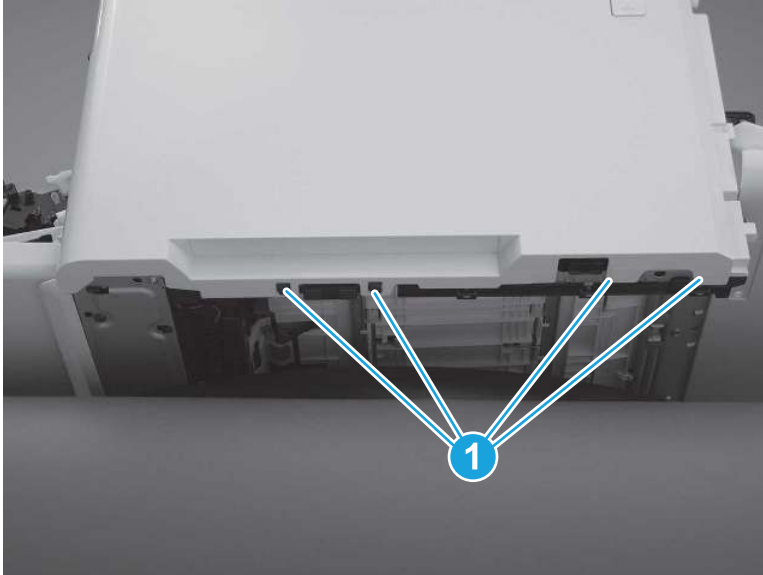
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-679** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-680** Locate the tabs



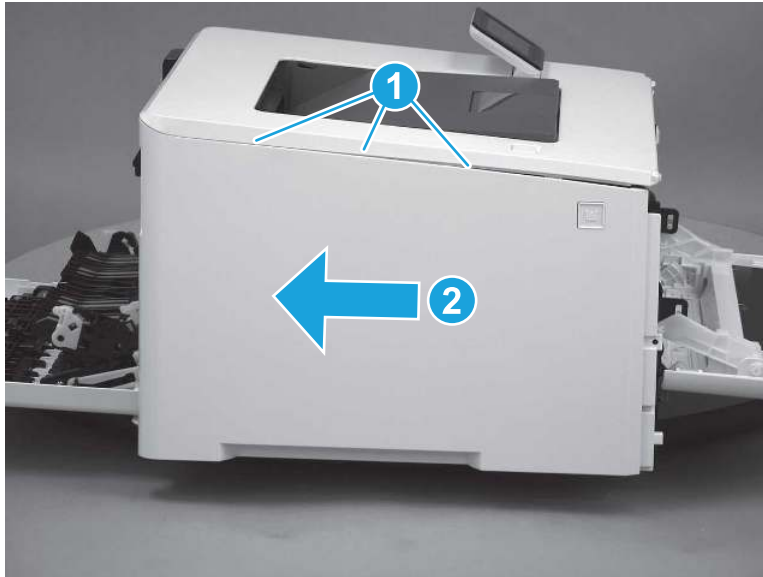
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-681** Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

**Figure 5-682** Release three tabs



## 6. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

1. Raise the scanner.

**Figure 5-683** Raise the scanner



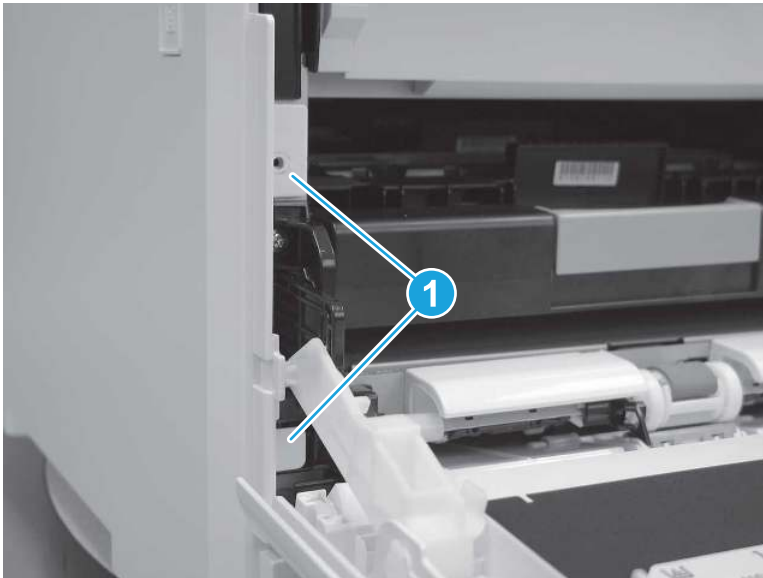
2. At the front of the printer, remove one screw (callout 1).

Figure 5-684 Remove one screw



3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

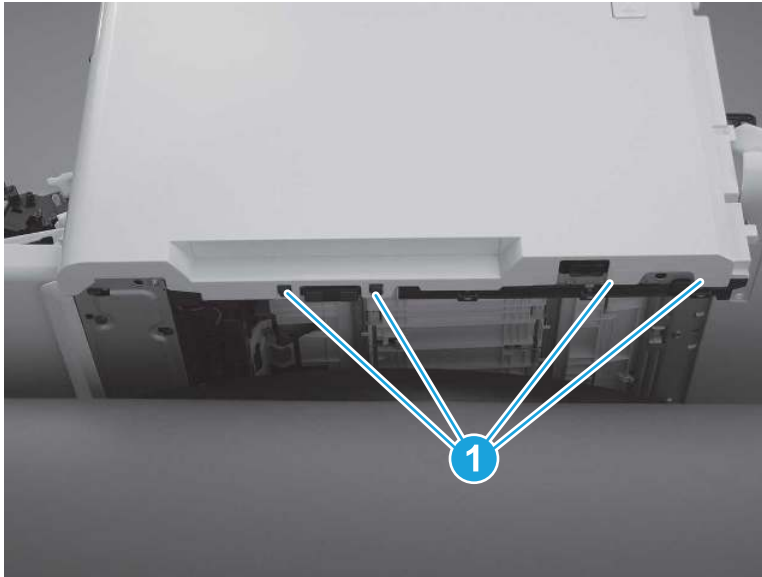
Figure 5-685 Release two tabs





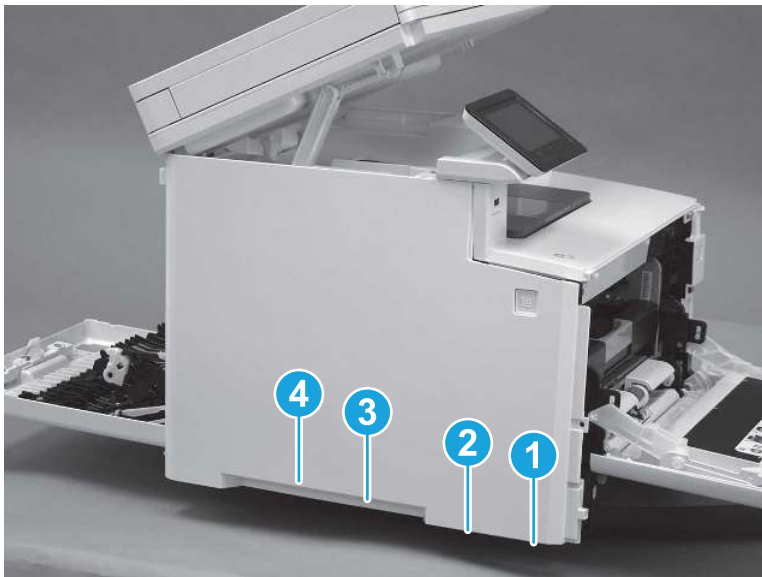
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-686** Locate the tabs



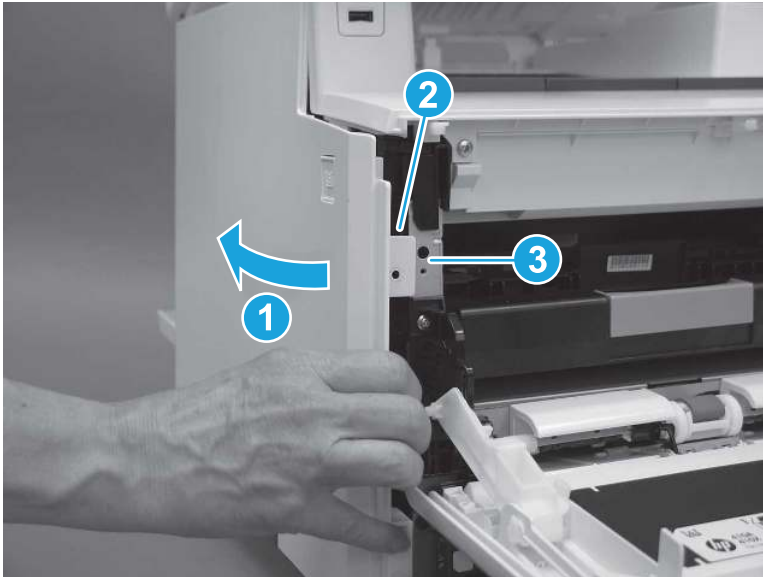
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-687** Release four tabs



6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

**Figure 5-688** Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-689** Release one tab and two hooks



8. Lower the scanner.

**Figure 5-690** Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

**Figure 5-691** Remove the left cover

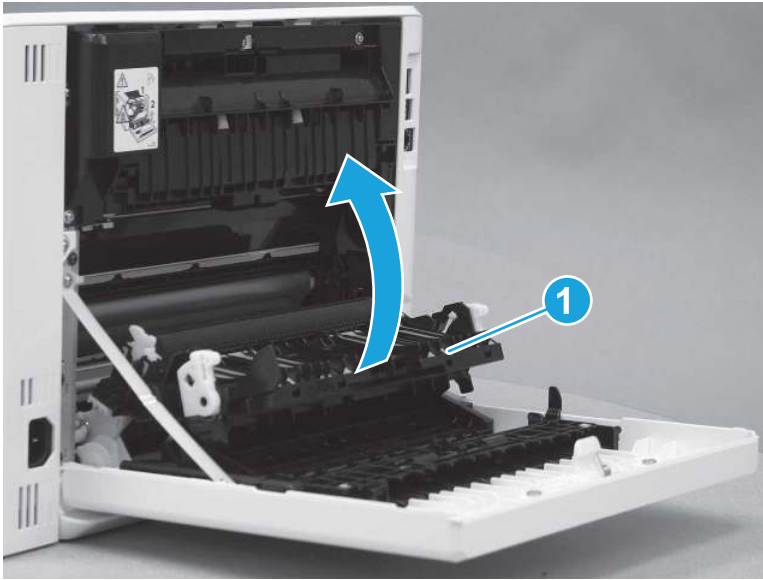


## 7. Remove the duplexing door assembly

Follow these steps to remove the duplexing door assembly.

1. Rotate the secondary transfer assembly (callout 1) toward the printer to close it.

**Figure 5-692** Close the secondary transfer assembly



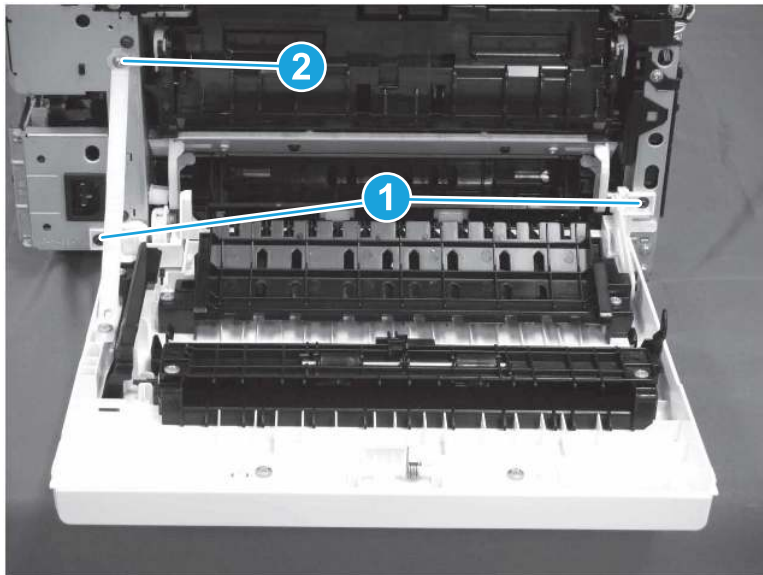
2. At the back of the printer, remove two screws (callout 1), and then remove one screw (callout 2) that holds the retention arm.

---

 **TIP:** Note that the screw (callout 2) that holds the retention arm is longer than the other two. Make sure this screw is installed in the correct position.

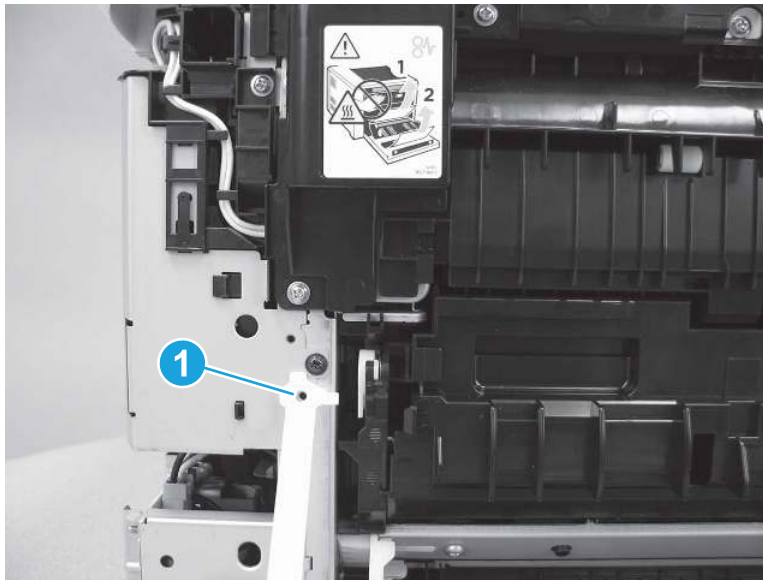
---

**Figure 5-693** Remove three screws



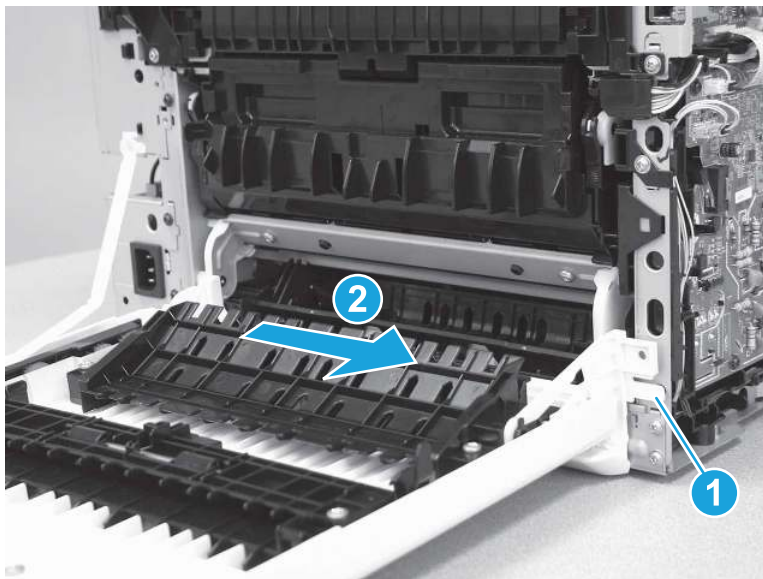
3. Release the retention arm (callout 1).

**Figure 5-694** Release the retention arm



4. Release one tab (callout 1), and then slide the duplexer door (callout 2) to the right to remove it.

**Figure 5-695** Remove the duplexing door

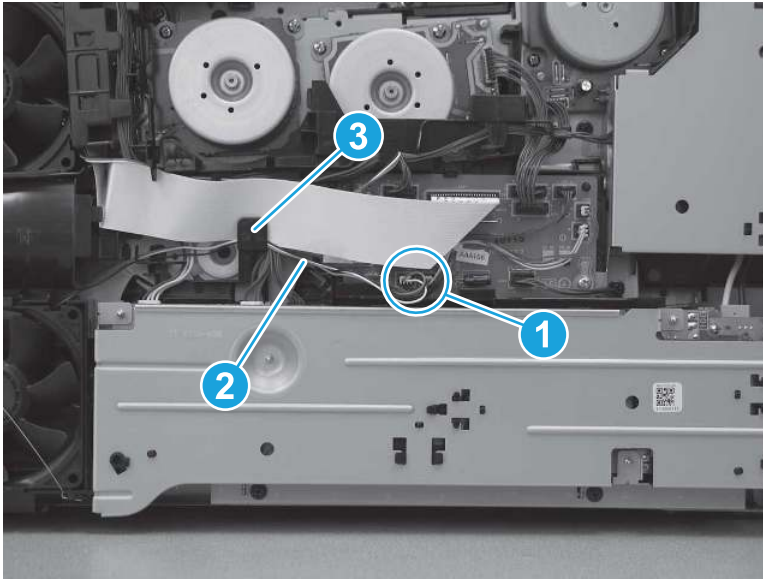


## 8. Remove the LVPS

Follow these steps to remove the LVPS.

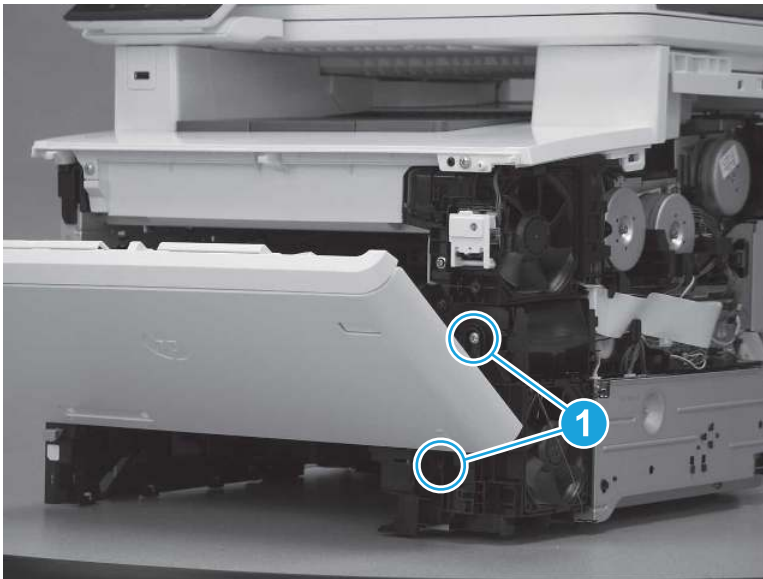
1. Disconnect one connector (callout 1), and then remove the cable (callout 2) from the wire guide (callout 3).

**Figure 5-696** Disconnect one connector and release cables from guides



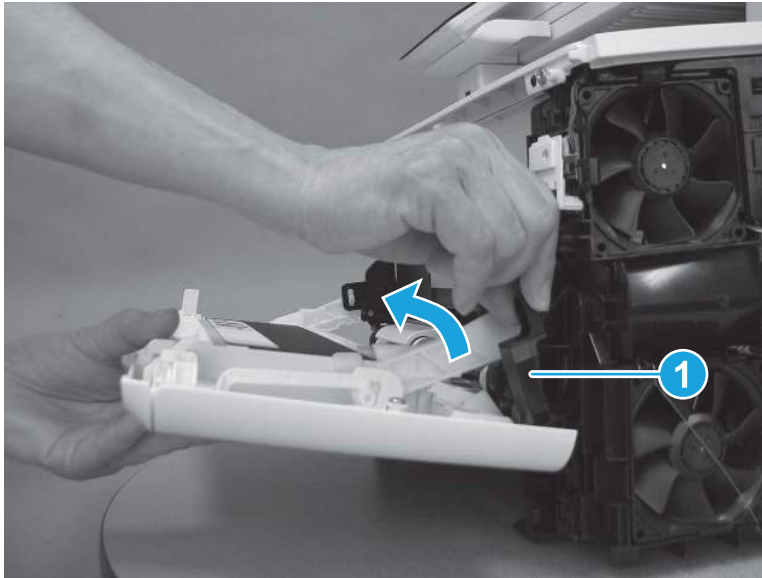
2. Remove two screws (callout 1).

**Figure 5-697** Remove two screws



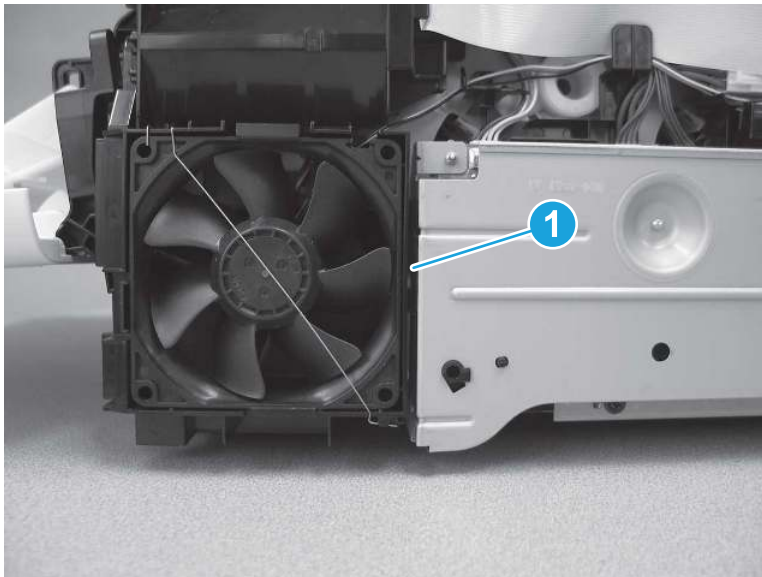
3. Release the hinge arm (callout 1).

**Figure 5-698** Release the hinge arm



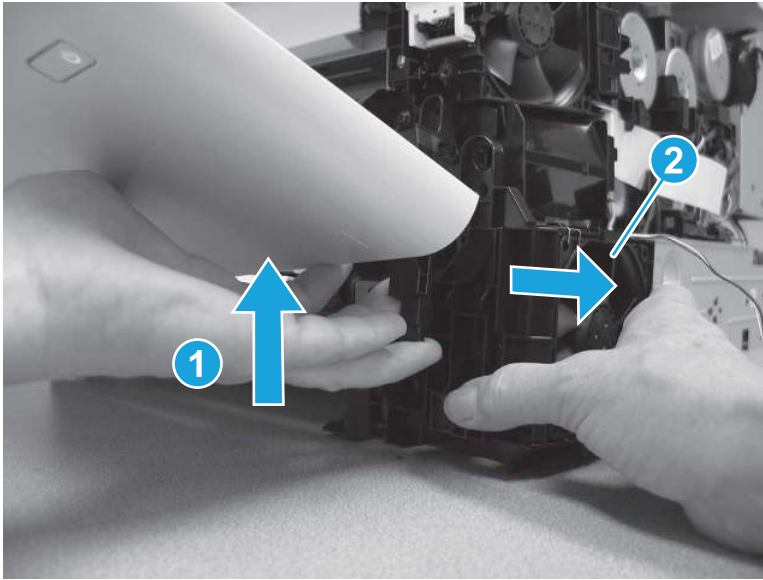
4. Release one tab (callout 1) on the right side of the power supply fan.

**Figure 5-699** Release one tab




5. Lift the front door up slightly (callout 1), and then remove the power supply fan and holder (callout 2).

**Figure 5-700** Remove the power supply fan and holder



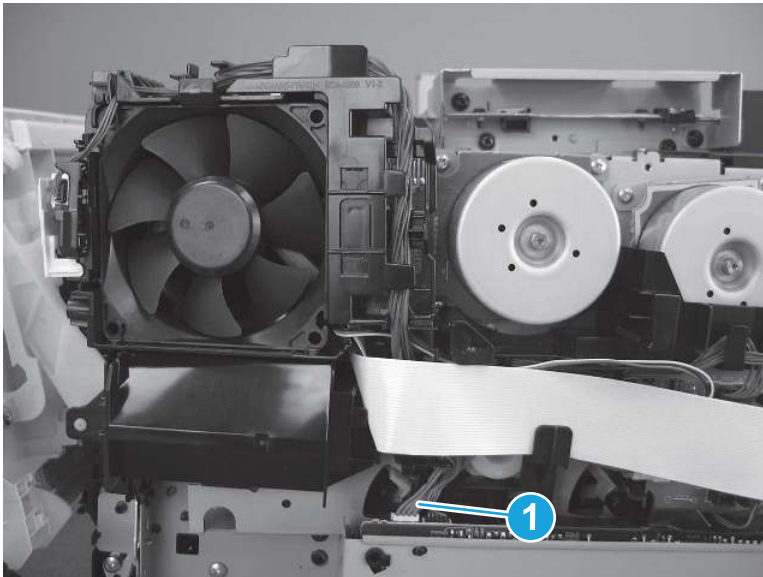
6. Before proceeding, take note of the position of two cables (callout 1).

---

 **IMPORTANT:** These cables can be mistakenly switched when reinstalled. The connectors on the cables fit in either connector on the LVPS. Make sure that these cables are installed in the correct connectors. *If the cables are switched, the printer will not power on when reassembled.*

---

**Figure 5-701** Check the connectors



7. Disconnect five connectors (callout 1). One connector (callout 2) has a latch that must be released before disconnecting it. Remove three screws (callout 3).

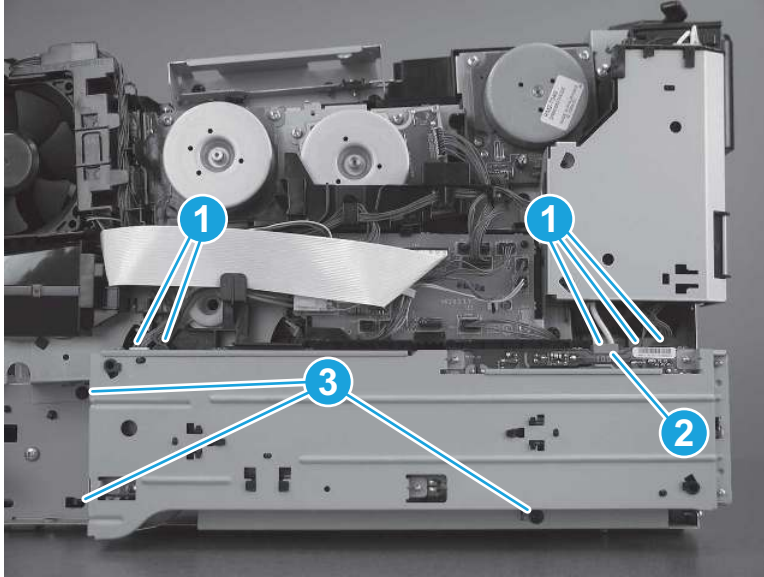
---

 **NOTE:** The latch for one connector (callout 2) is located on the backside of the connector body, and not easily seen.

---

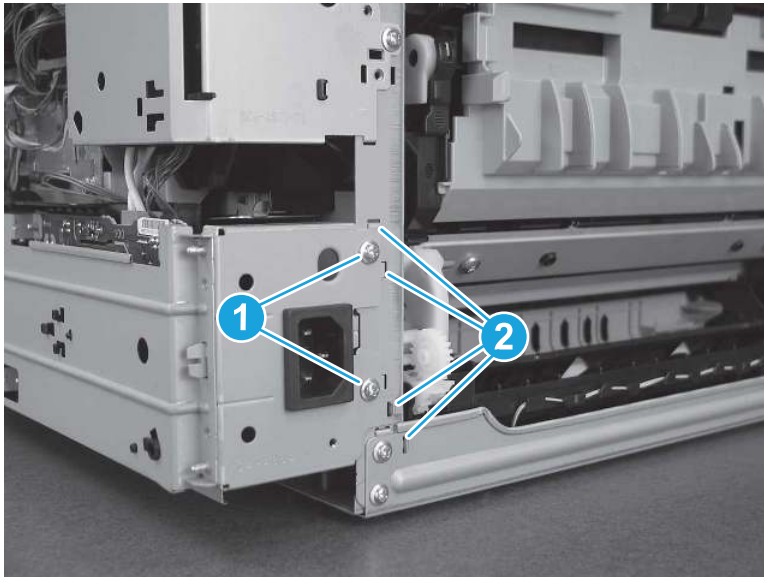


Figure 5-702 Disconnect five connectors and remove three screws



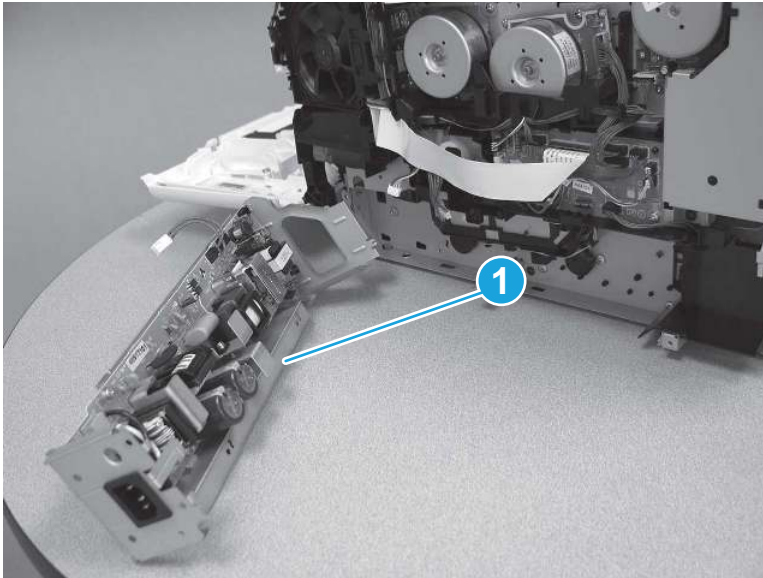
8. Remove two screws from the back (callout 1), and then release four tabs (callout 2).

Figure 5-703 Remove two screws and release three tabs



9. Remove the LVPS (callout 1).

**Figure 5-704** Remove the assembly

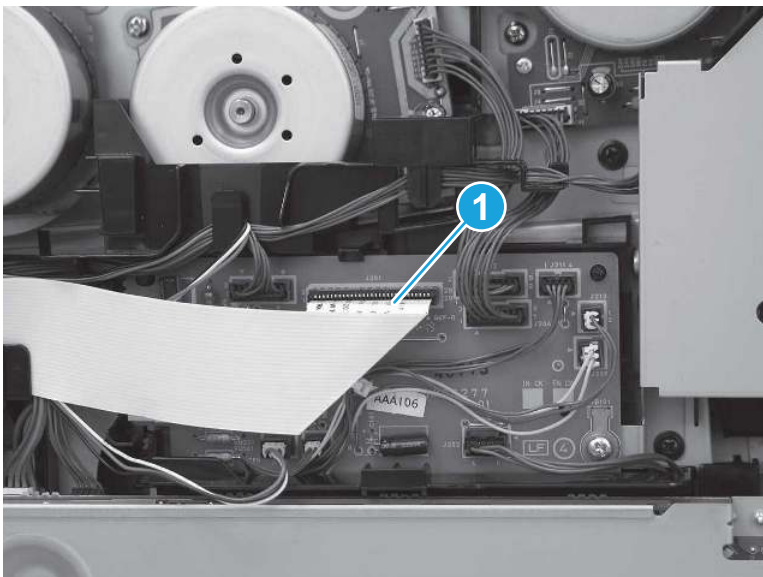


## 9. Remove the driver PCA

Follow these steps to remove the driver PCA.

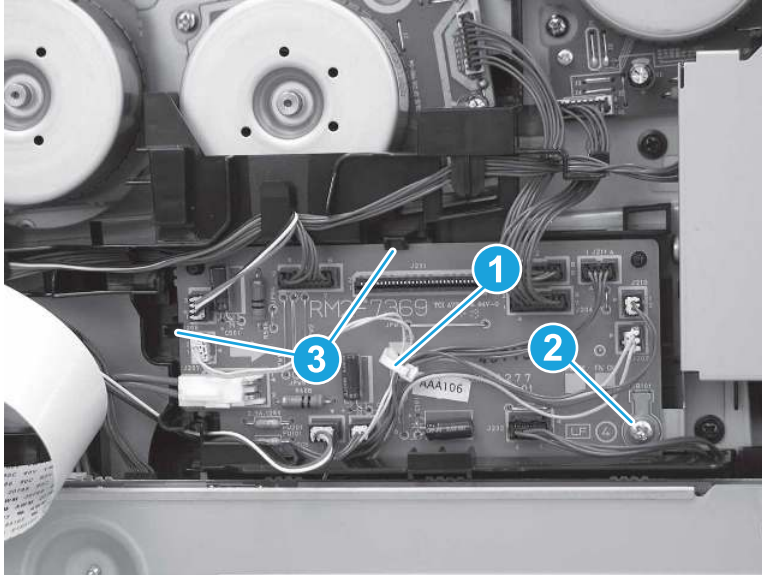
1. Disconnect one connector (callout 1).

**Figure 5-705** Disconnect one connector



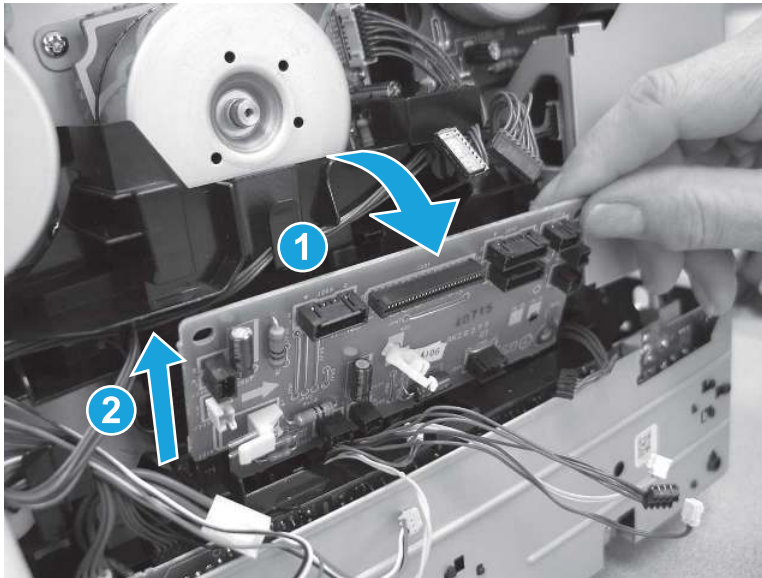
2. Release one retainer (callout 1), disconnect all of the connectors on the driver PCA, remove one screw (callout 2), and then release two tabs (callout 3).

**Figure 5-706** Disconnect all connectors and remove one screw



3. Rotate the top of the driver PCA away from the printer (callout 1), and then lift up (callout 2) to remove it.

**Figure 5-707** Remove the PCA

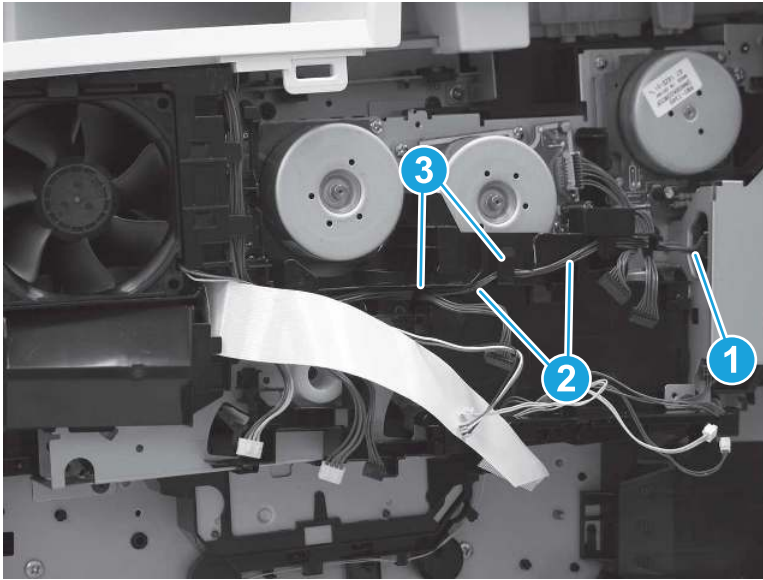


## 10. Remove the driver PCA holder

Follow these steps to remove the driver PCA holder.

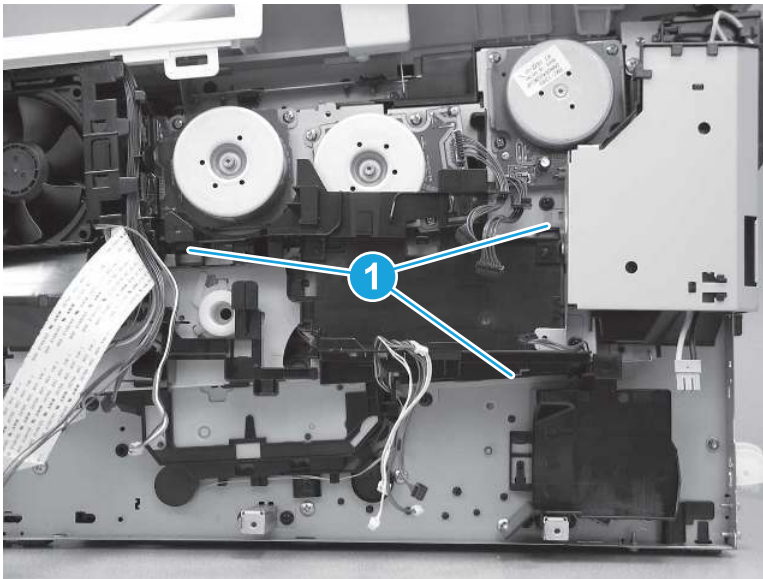
1. Disconnect one connector (callout 1), and then release the cables (callout 2) from the guides (callout 3).

**Figure 5-708** Disconnect one connector and release cables from guides



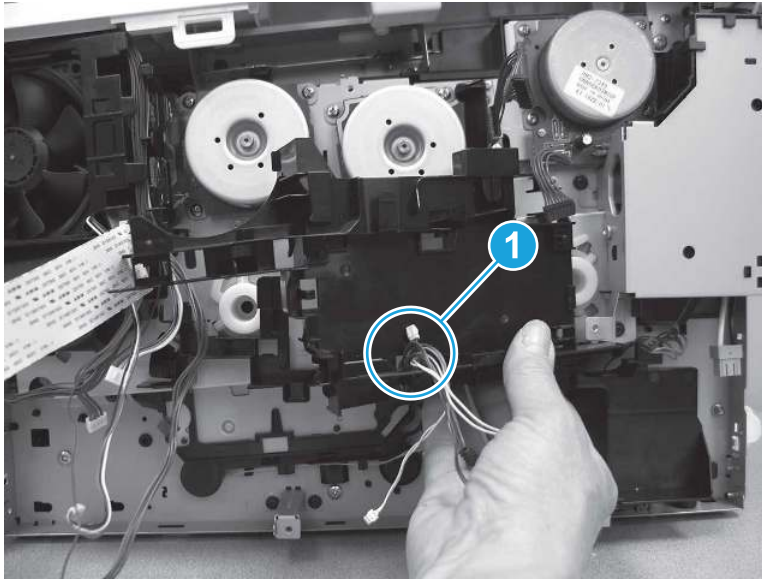
2. Release three tabs (callout 1).

**Figure 5-709** Release three tabs



3. Release the cables from the driver PCA holder (callout 1), and then remove the driver PCA holder.

**Figure 5-710** Remove the PCA holder

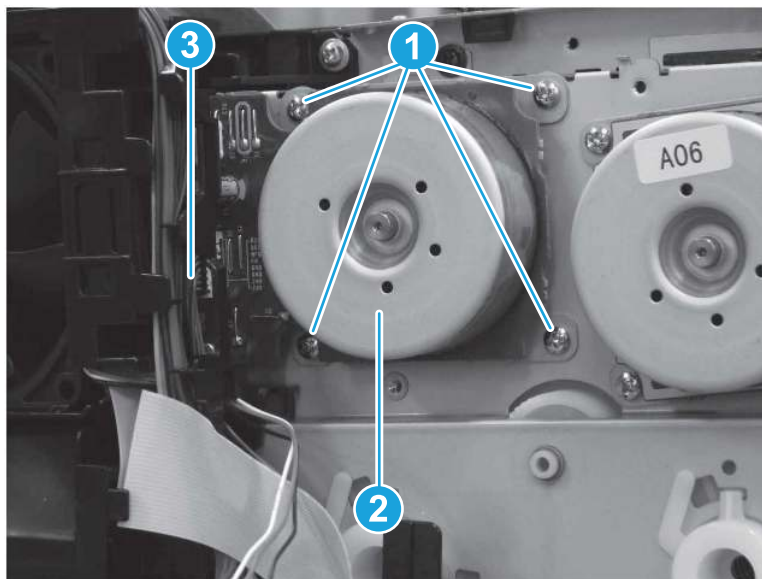


## 11. Remove the developer motor

Follow these steps to remove the developer motor.

- ▲ Remove four screws (callout 1), lift the developer motor away from the printer slightly (callout 2), and then disconnect one connector (callout 3).

**Figure 5-711** Remove the assembly




## 12. 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.

---

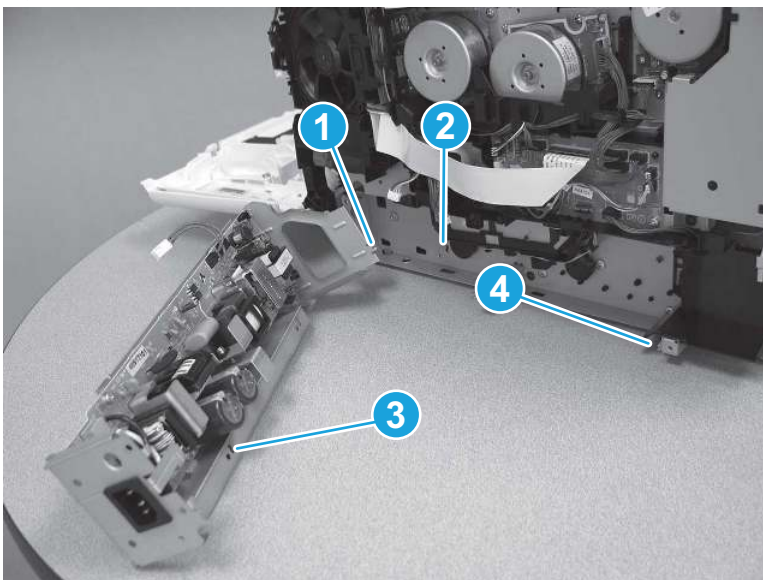
### 13. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Low-voltage power supply

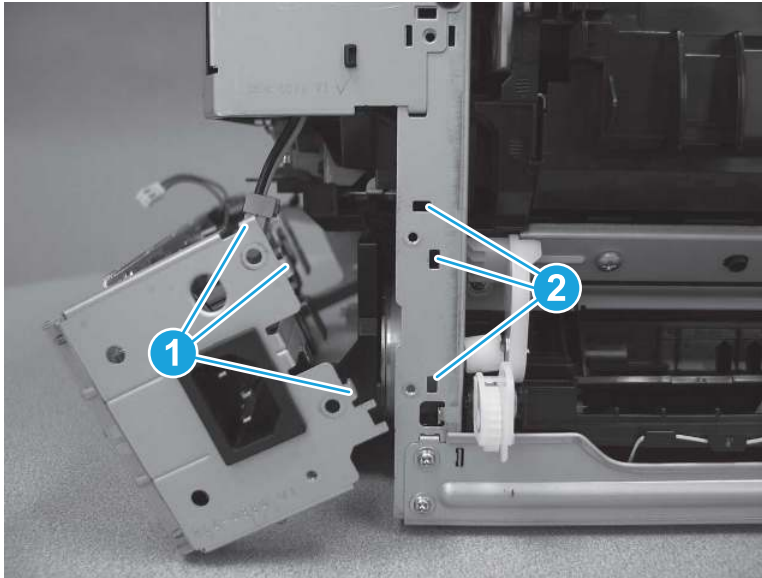
1. Install the tab (callout 1) on the LVPS into the slot (callout 2) in the printer. Install the slot (callout 3) in the LVPS over the tab (callout 4) on the printer.

**Figure 5-712** Install the side tabs of the LVPS



2. At the back of the printer, install the tabs on the LVPS (callout 1) into the slots (callout 2) in the printer.

**Figure 5-713** Install the back tabs of the LVPS



## Removal and replacement: Secondary transfer roller

Learn how to remove and replace the secondary transfer roller (duplex).

[View a video of removing and replacing the secondary transfer roller \(duplex\).](#)

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](http://www.hp.com/buy/parts).

**Table 5-33** Part information

Part number	Part description
RM2-6397-000CN	Secondary transfer 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

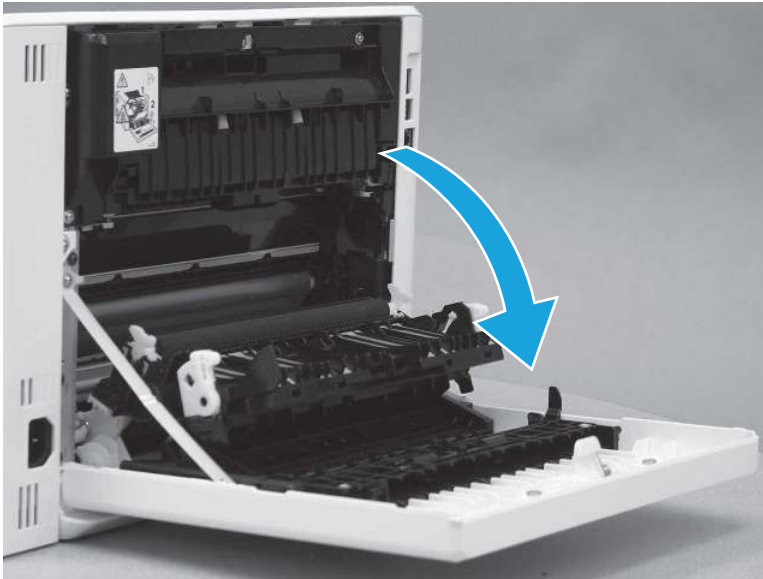
Print any pages necessary to make sure the printer is functioning correctly.

## 1. Remove the secondary transfer assembly

Follow these steps to remove the secondary transfer assembly.

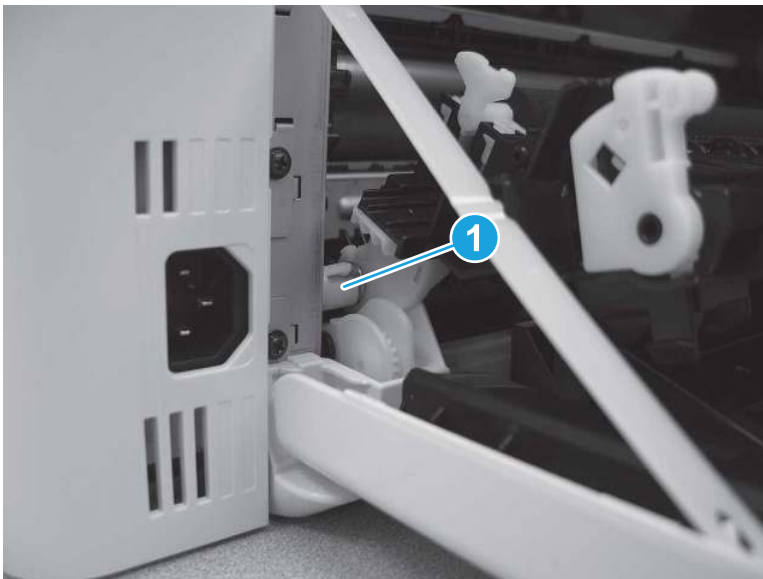
1. Open the duplexing door.

**Figure 5-714** Open the duplexing door



2. Remove one retainer collar (callout 1).

**Figure 5-715** Remove one retainer collar





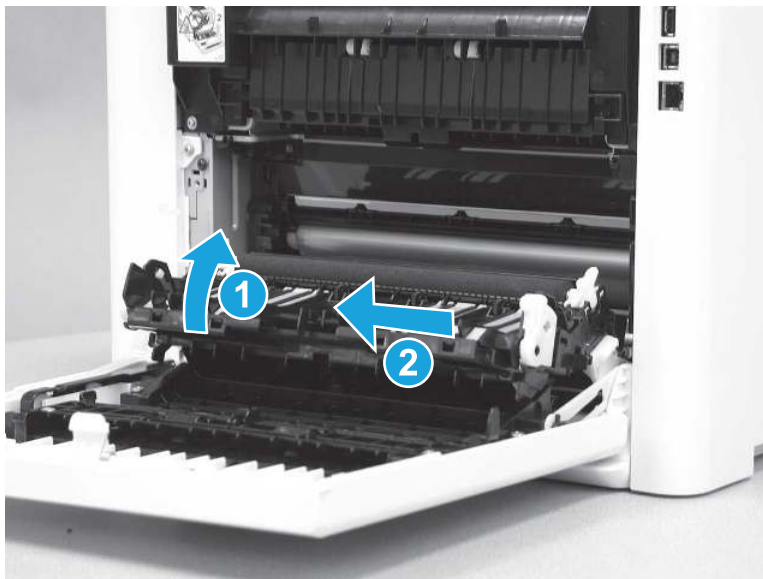
3. Remove one screw (callout 1), and then release the retaining arm (callout 2).

**Figure 5-716** Remove one screw and release the arm



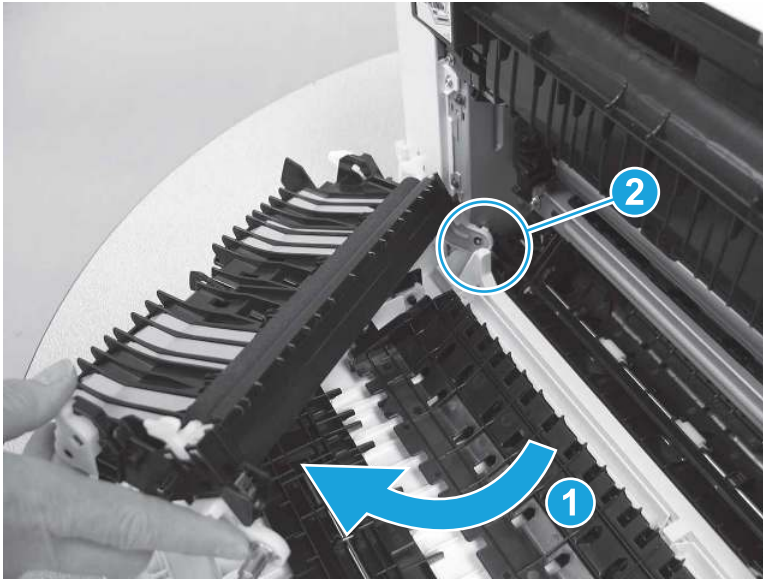
4. Lift the assembly up slightly (callout 1), and then slide it to the left (callout 2).

**Figure 5-717** Slide the assembly left



5. Rotate the right side of the assembly away from the printer (callout 1) so that the left side of the assembly rotates free of the plastic tab (callout 2). Remove the assembly.

**Figure 5-718** 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.

### 3. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Secondary transfer roller (duplex)

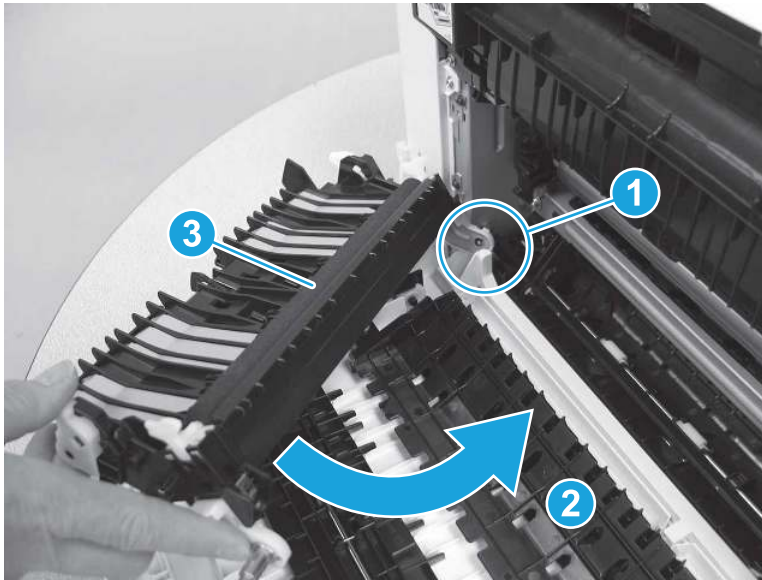
- ▲ Install the left edge of the secondary transfer assembly behind the plastic tab (callout 1), and then rotate the right side of the assembly toward the printer to install it (callout 2).

---

⚠ **CAUTION:** Do not touch or damage the secondary transfer roller (callout 3).

---

**Figure 5-719** Position the secondary transfer assembly



### Removal and replacement: Intermediate transfer belt (ITB)

Learn how to remove and replace the intermediate transfer belt (ITB).

[View a video of removing and replacing the ITB.](#)

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](http://www.hp.com/buy/parts).

Table 5-34 Part information

Part number	Part description
RM2-6454-000CN	Intermediate transfer belt (ITB) 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

Make sure that the printer initializes to a **Ready** state.

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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.


 **NOTE:** Removing the tray is the same for SFP and MFP printers.

Figure 5-720 Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

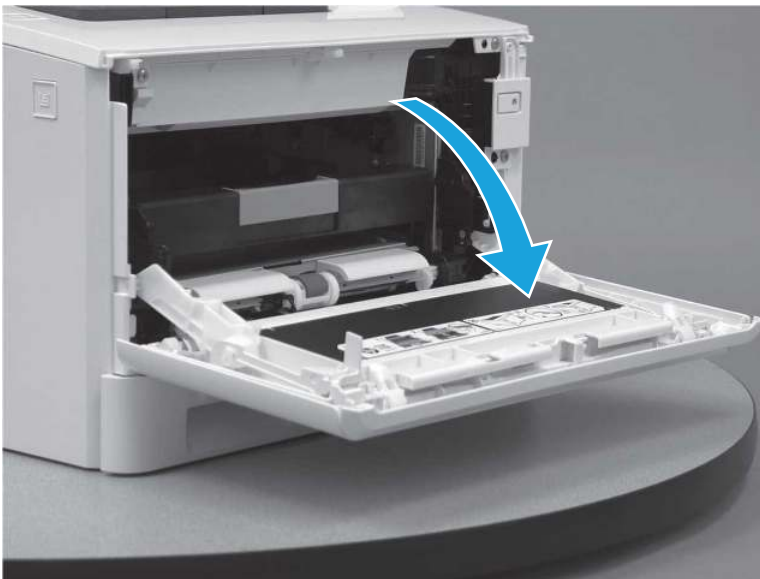
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-721** Release the front door



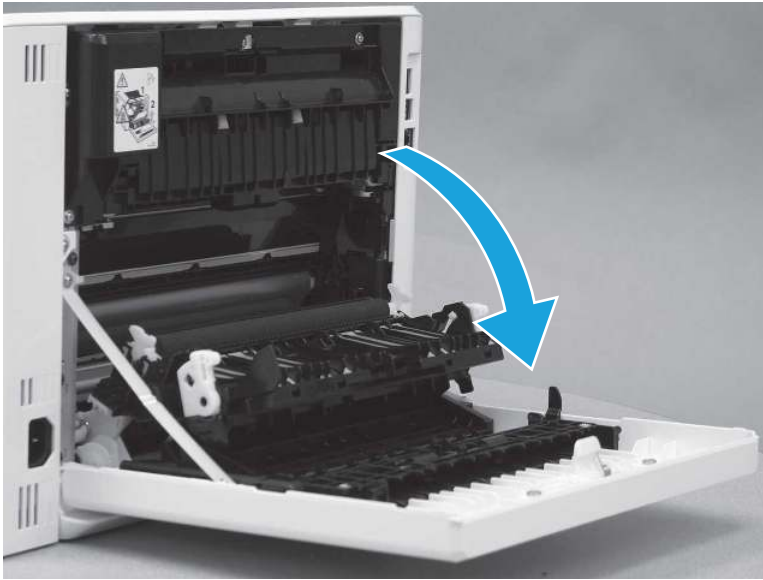
2. Open the front door.

**Figure 5-722** Open the front door



3. Open the duplexing door.

**Figure 5-723** Open the duplexer door

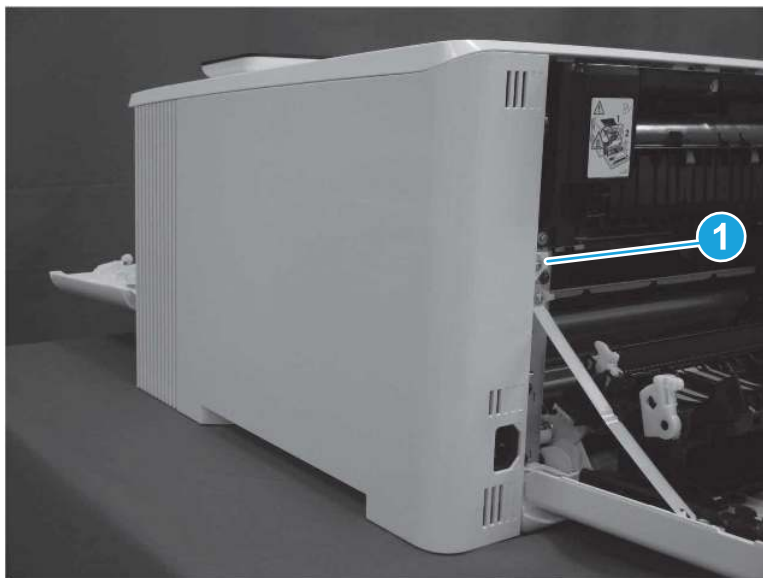


### 3. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

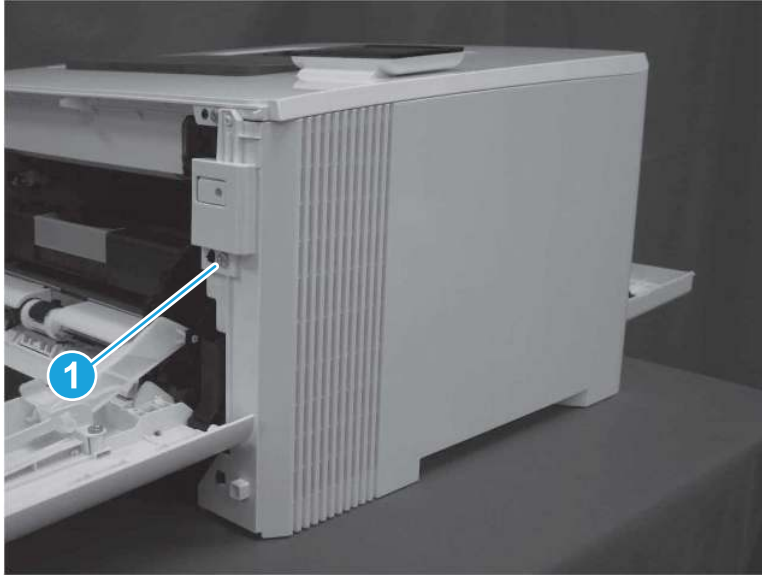
1. At the back of the printer, remove one screw (callout 1).

**Figure 5-724** Remove one screw



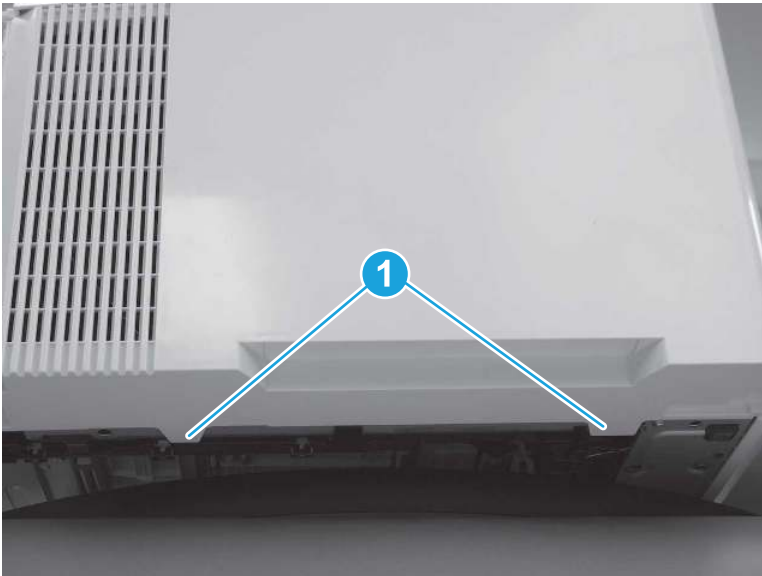
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-725** Remove one screw



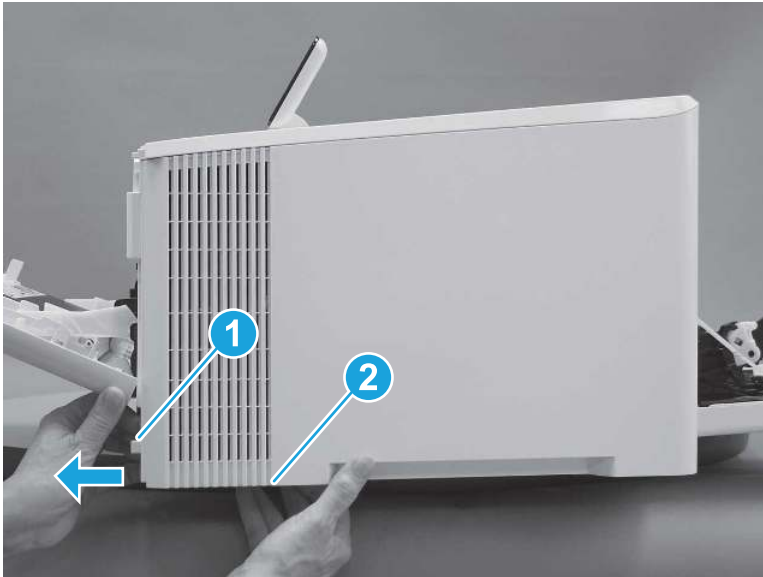
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-726** Locate the tabs



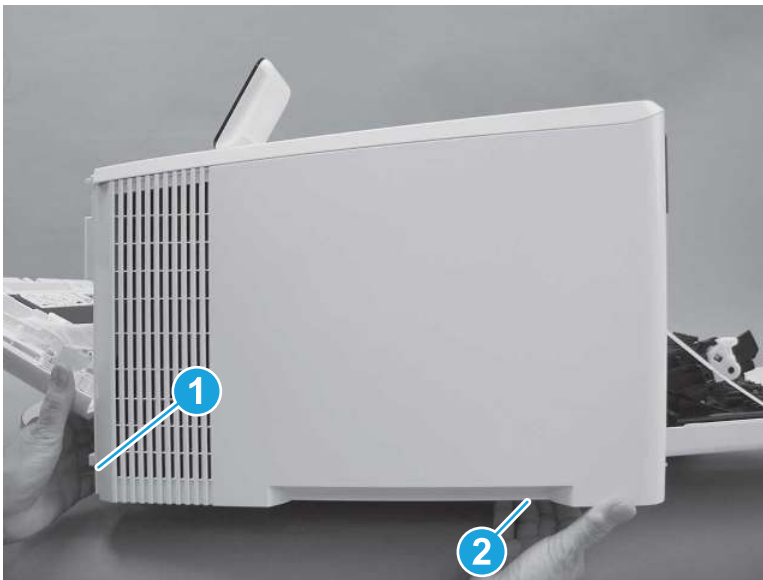
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-727** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

**Figure 5-728** Release lower rear tab



6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

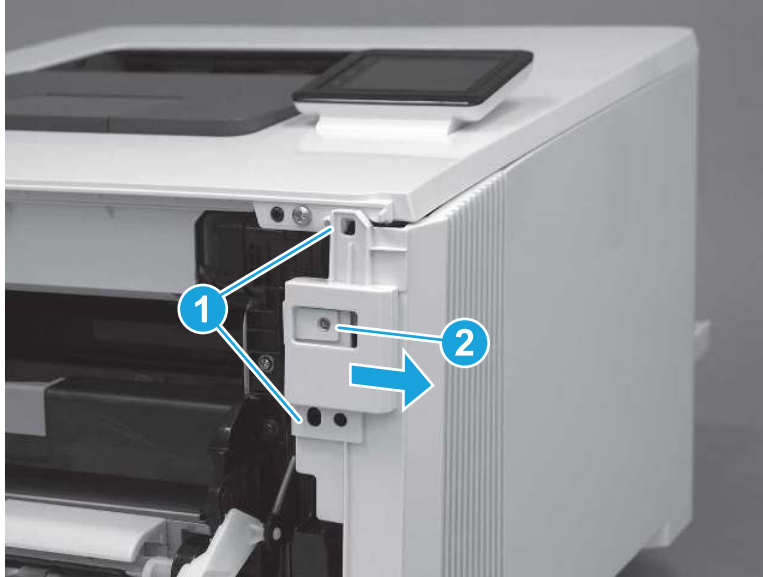
---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

---

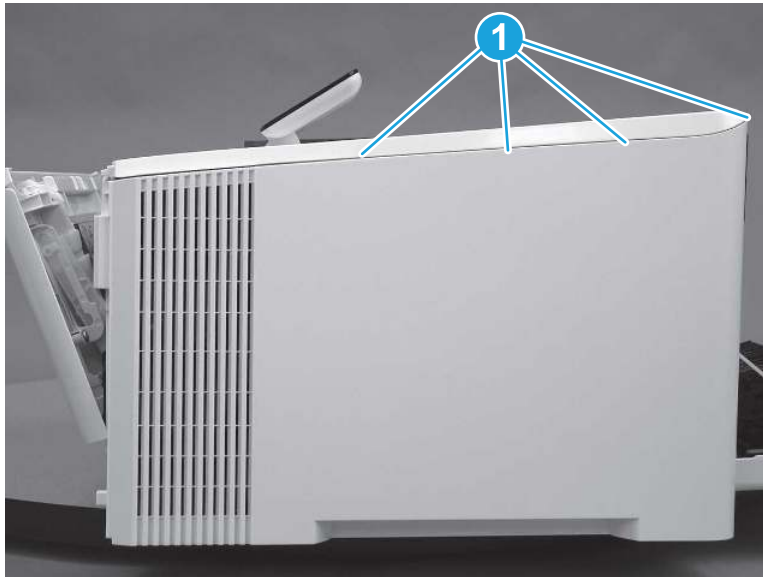


Figure 5-729 Release two front tabs



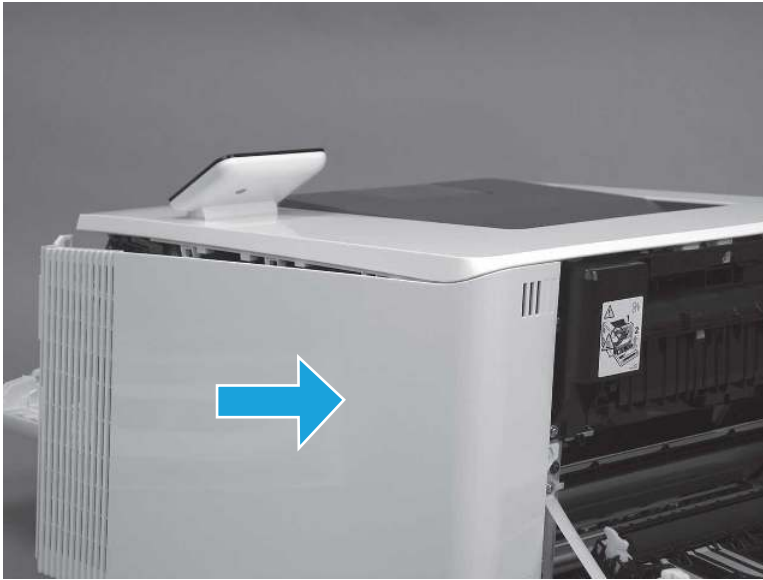
7. Release four tabs on the top of the printer (callout 1).

Figure 5-730 Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-731** Remove the right cover



#### 4. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

**Figure 5-732** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-733** Remove one screw



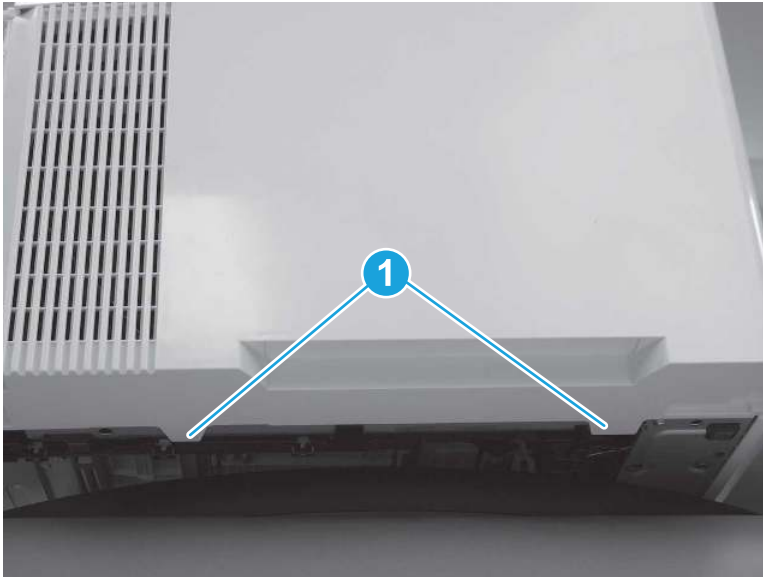
3. At the front of the printer, remove one screw (callout 1).

**Figure 5-734** Remove one screw



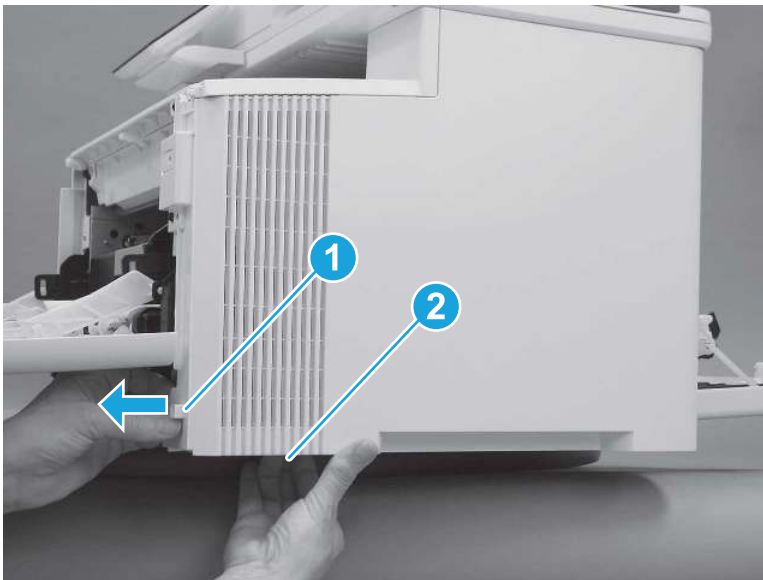
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-735** Locate the tabs



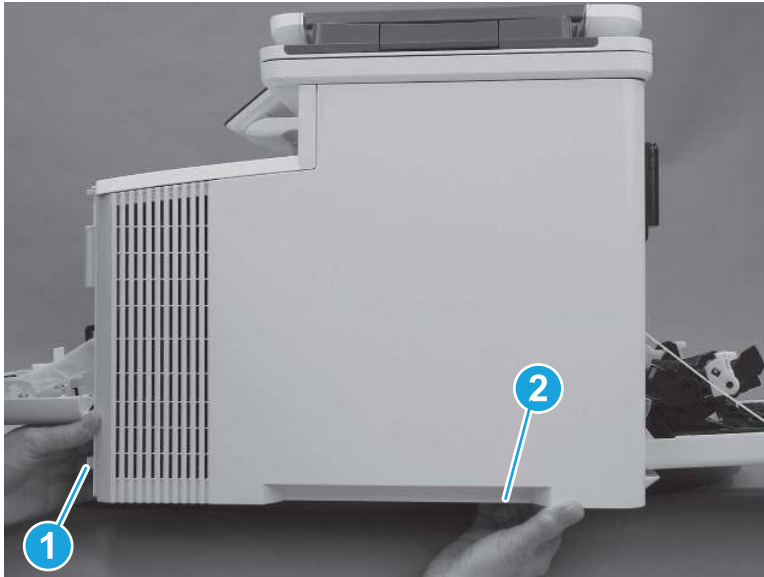
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-736** Release front lower tabs



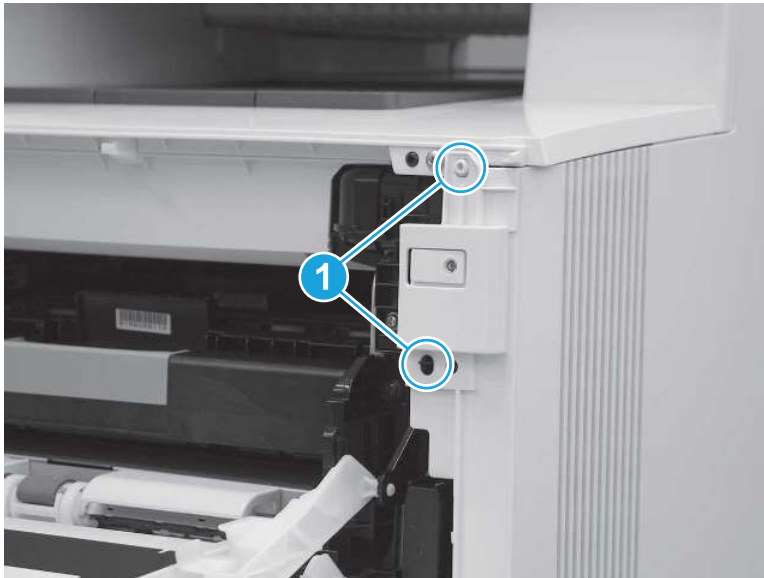
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-737** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-738** Release front upper tabs



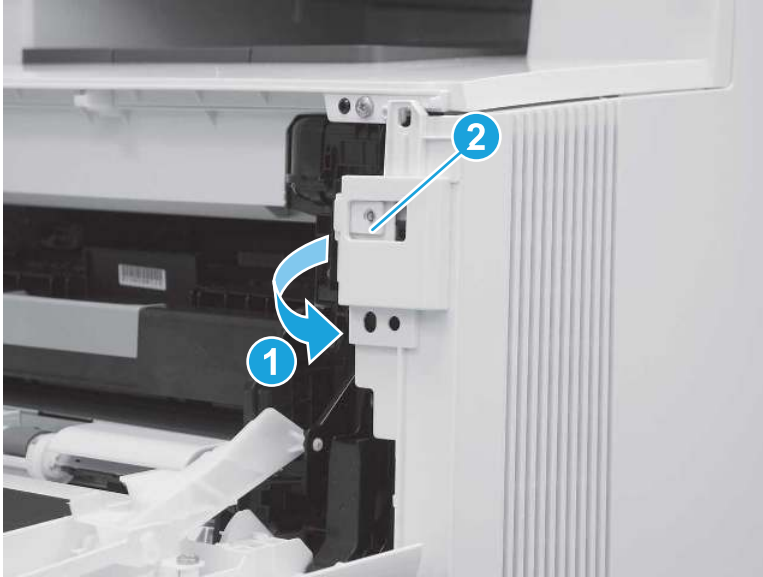
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

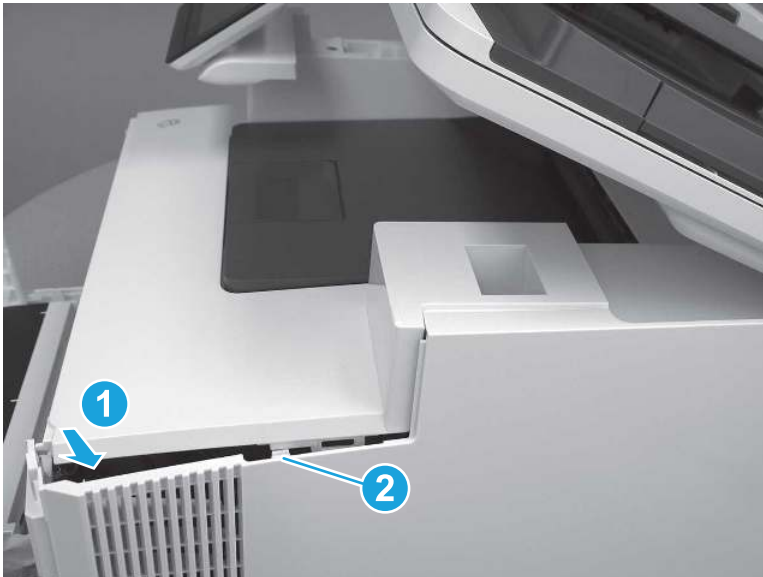
---

**Figure 5-739** Rotate the front of the cover



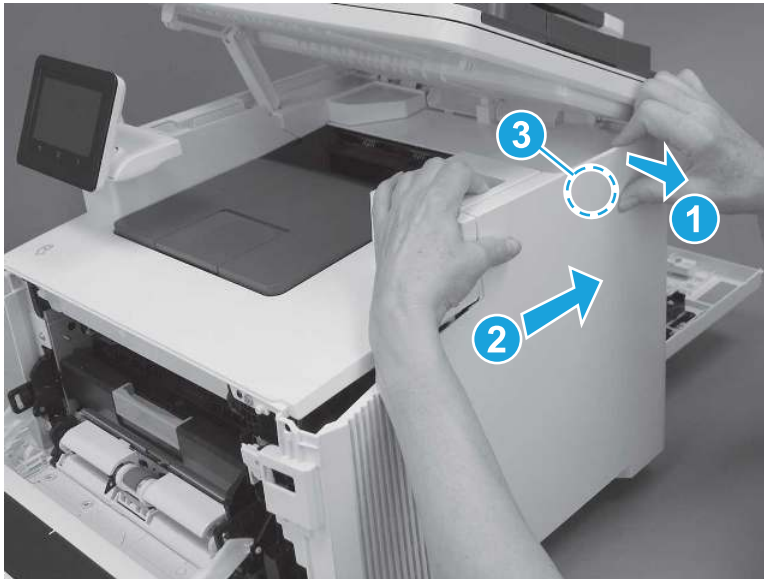
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

**Figure 5-740** Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-741** Release one tab and one hook



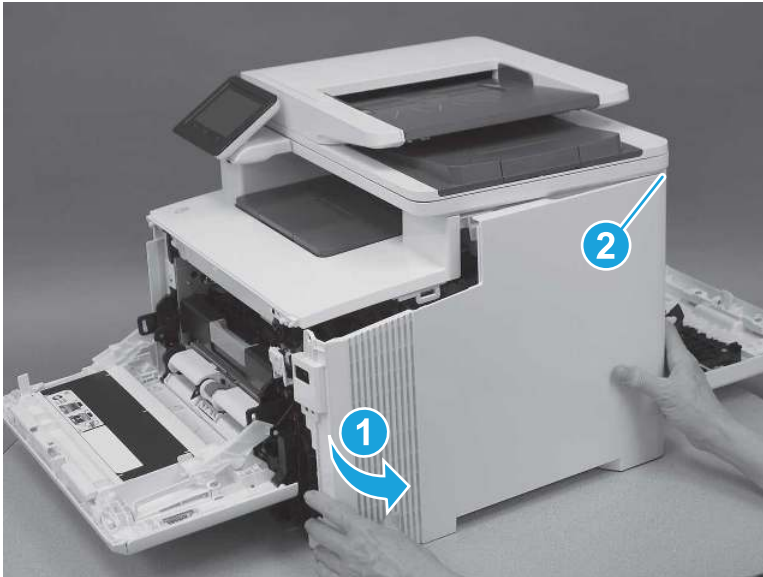
11. Lower the scanner.

**Figure 5-742** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-743** Remove the right cover

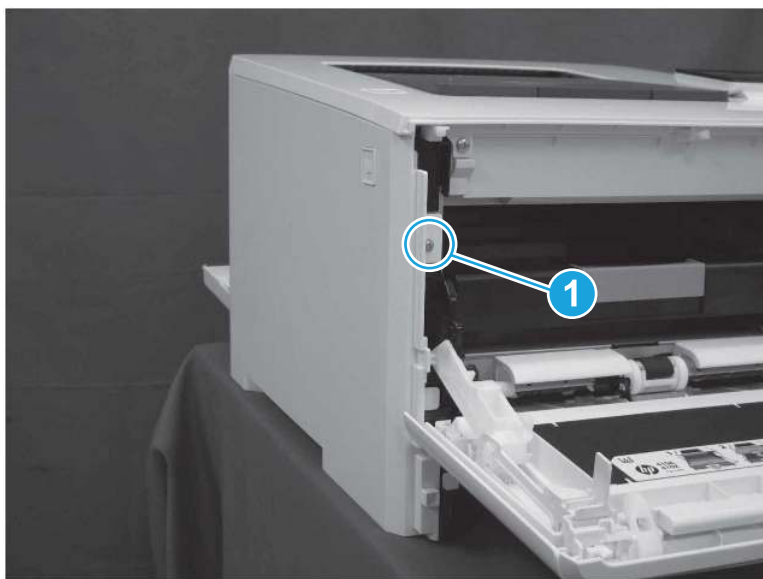


## 5. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

1. At the front of the printer, remove one screw (callout 1).

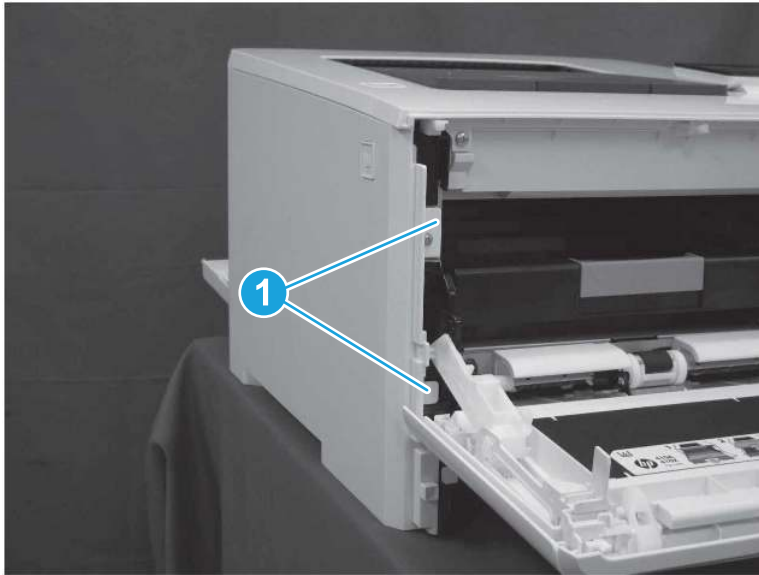
**Figure 5-744** Remove one screw





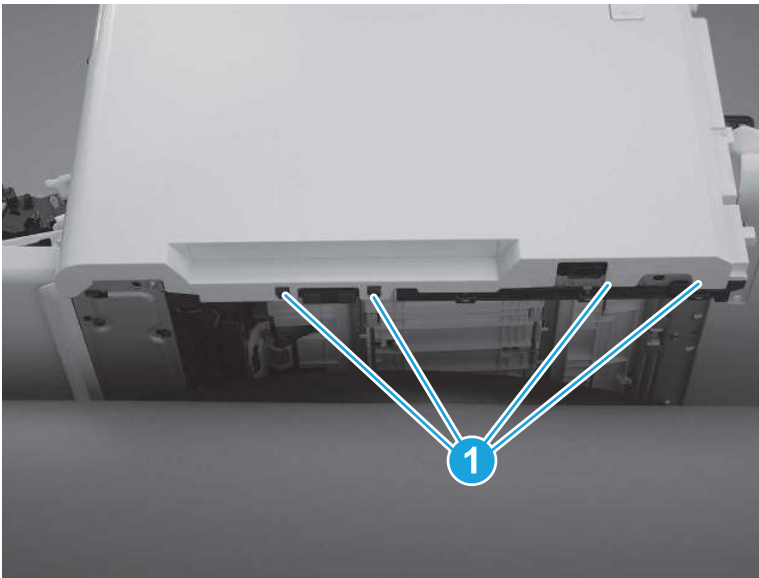
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-745** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-746** Locate the tabs



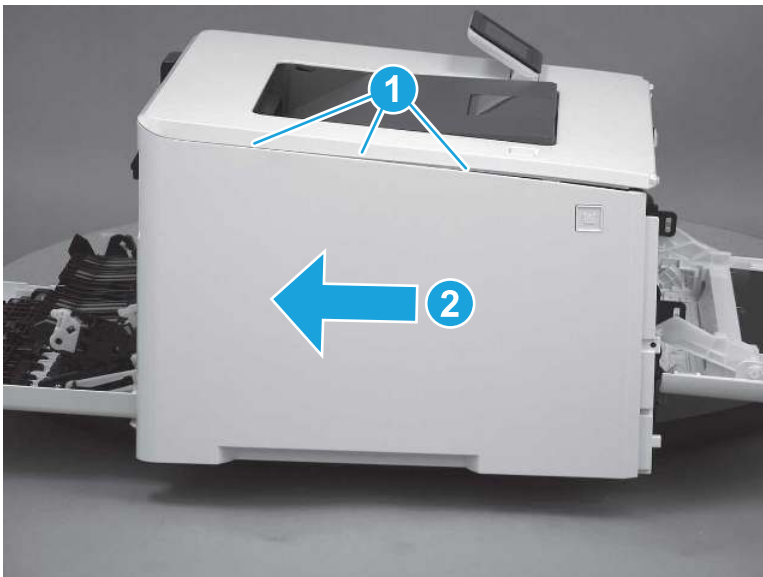
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-747** Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

**Figure 5-748** Release three tabs



## 6. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

1. Raise the scanner.

**Figure 5-749** Raise the scanner



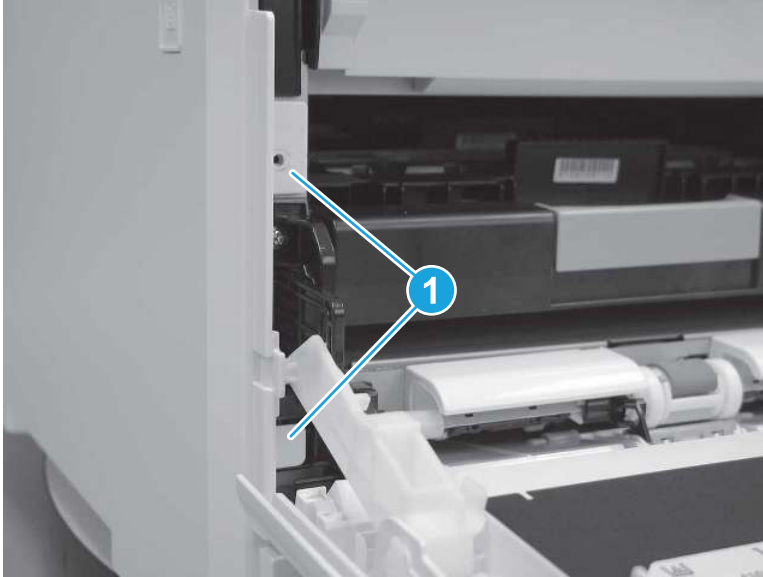
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-750** Remove one screw



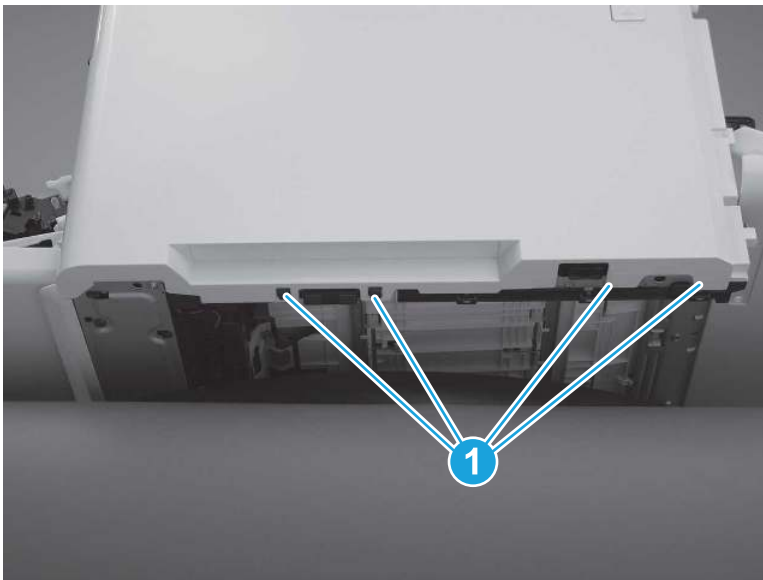
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-751** Release two tabs



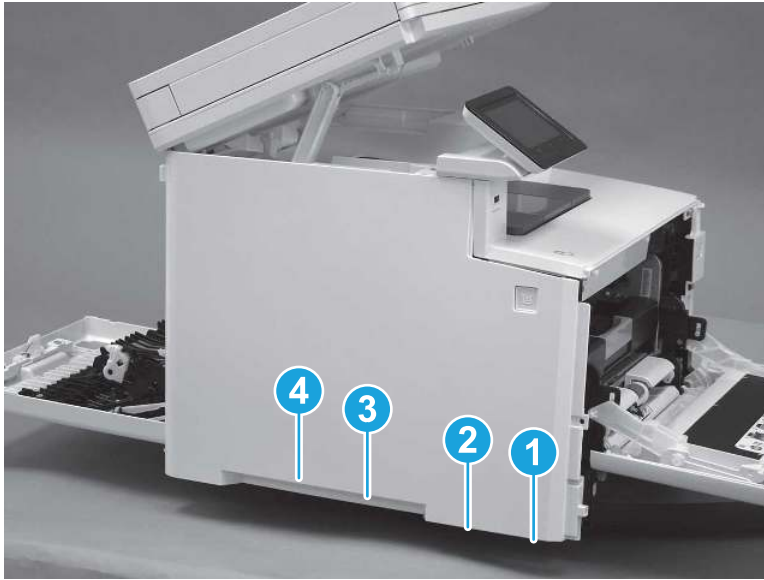
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-752** Locate the tabs



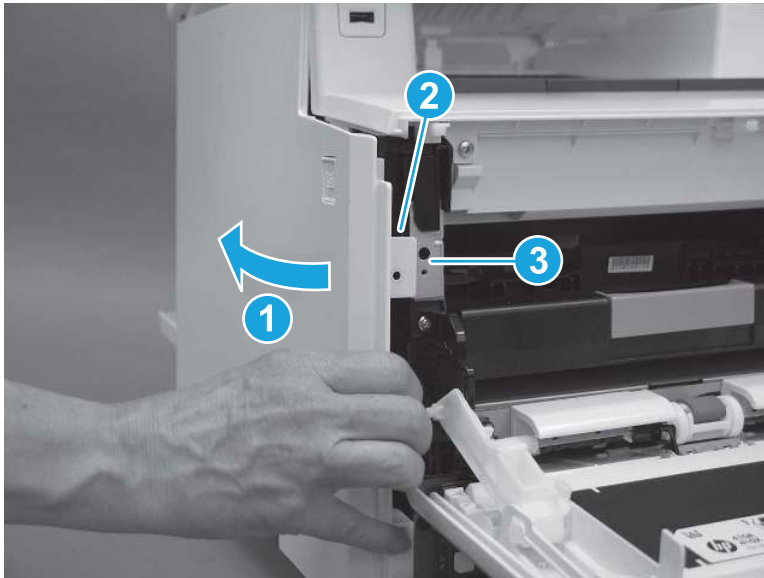
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-753 Release four tabs



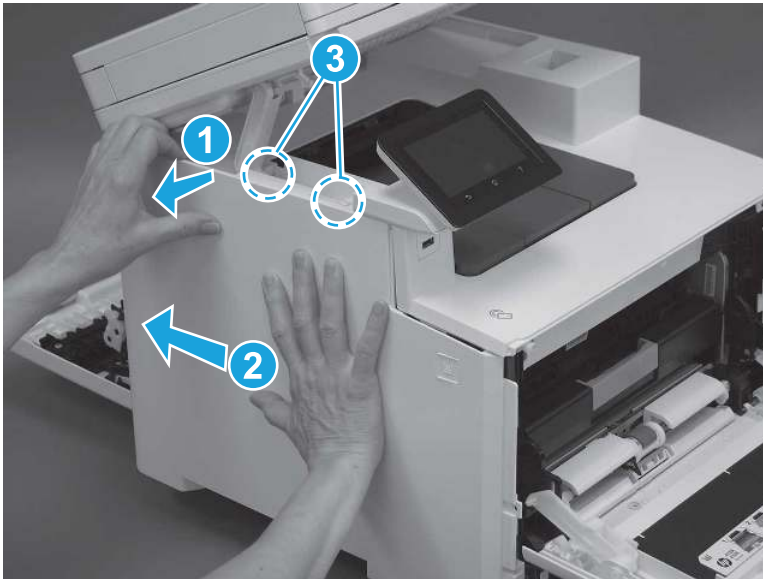
6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

Figure 5-754 Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-755** Release one tab and two hooks



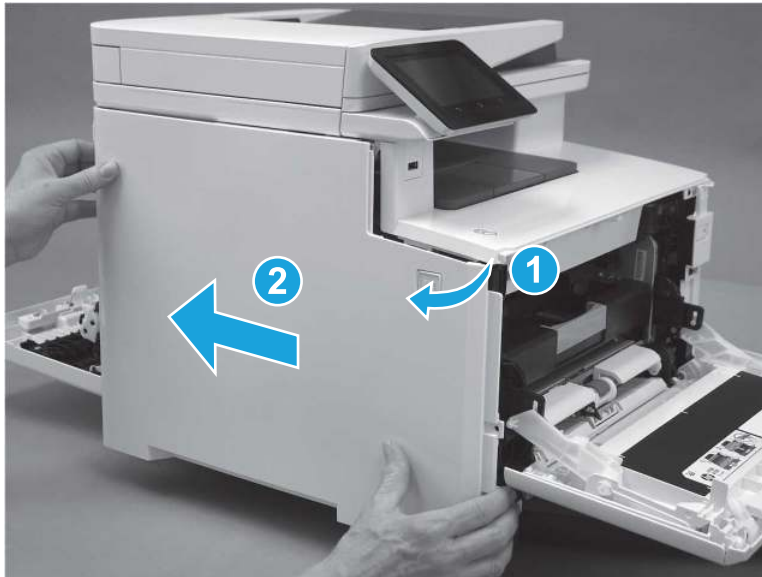
8. Lower the scanner.

**Figure 5-756** Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

**Figure 5-757** Remove the left cover

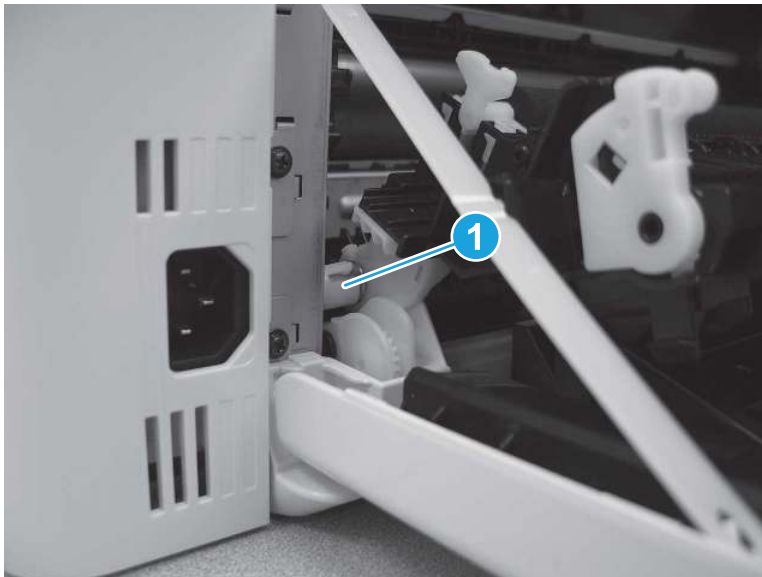


## 7. Remove the secondary transfer assembly

Follow these steps to remove the secondary transfer assembly.

1. Remove one retainer collar (callout 1).

**Figure 5-758** Remove one retainer collar



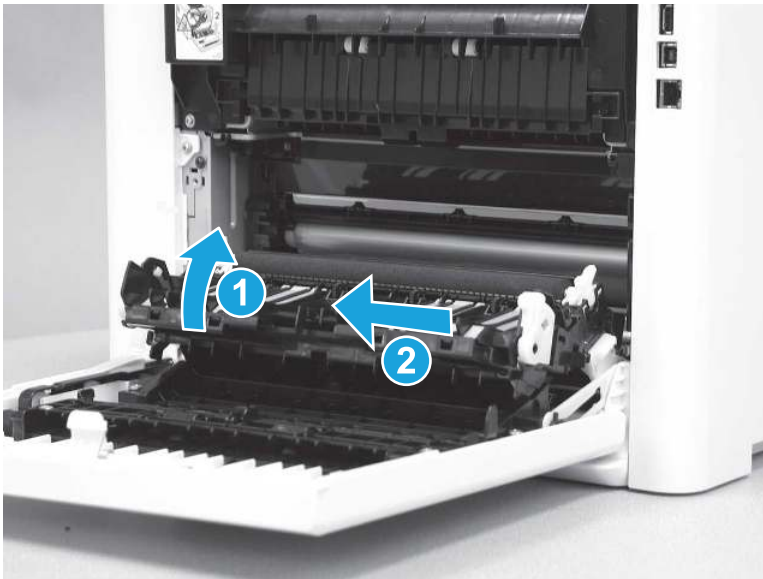
2. Remove one screw (callout 1), and then release the retaining arm (callout 2).

**Figure 5-759** Remove one screw and release the arm



3. Lift the assembly up slightly (callout 1), and then slide it to the left (callout 2).

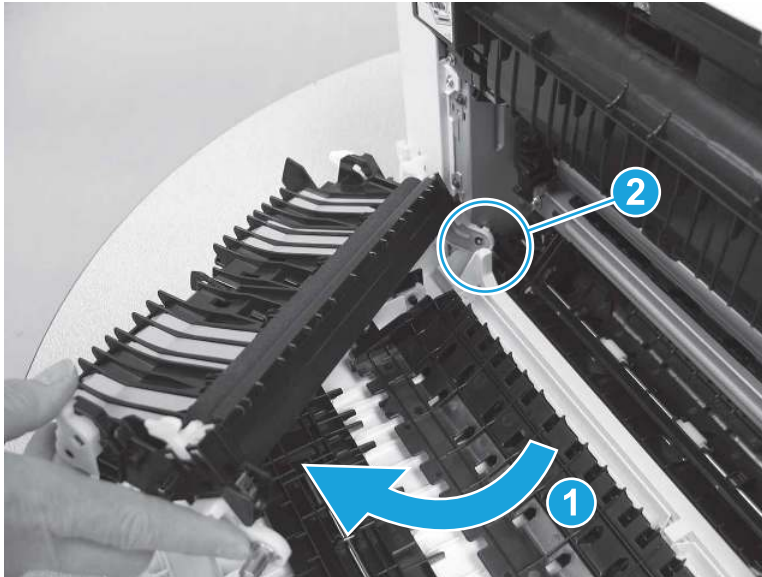
**Figure 5-760** Slide the assembly left





4. Rotate the right side of the assembly away from the printer (callout 1) so that the left side of the assembly rotates free of the plastic tab (callout 2). Remove the assembly.

**Figure 5-761** Remove the assembly

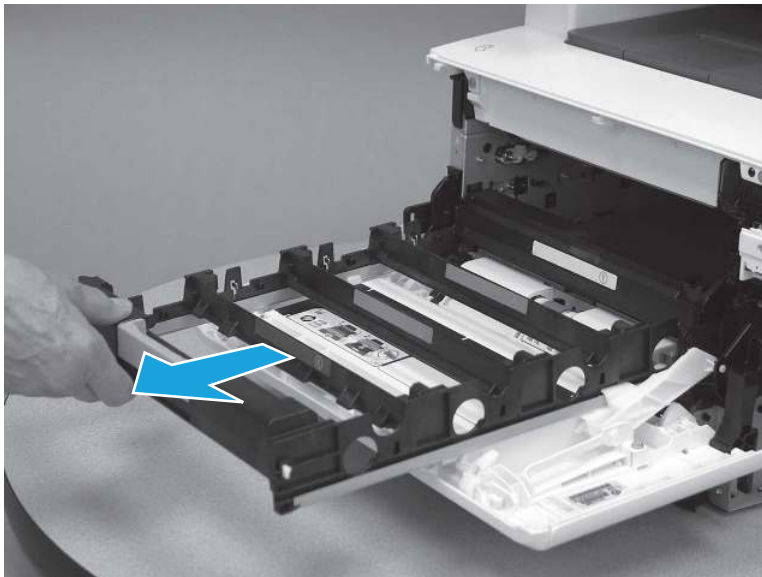


## 8. Remove the ITB

Follow these steps to remove the ITB.

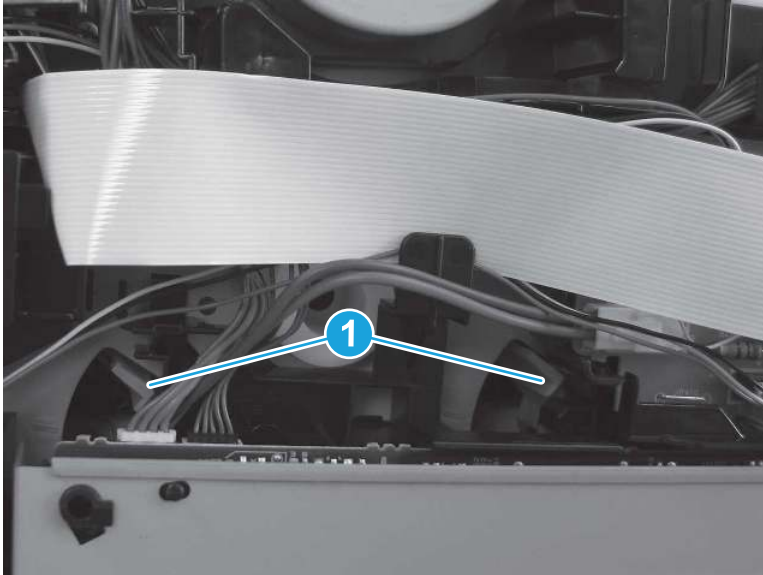
1. Slide the cartridge tray out of the printer.

**Figure 5-762** Slide the cartridge tray out of the printer



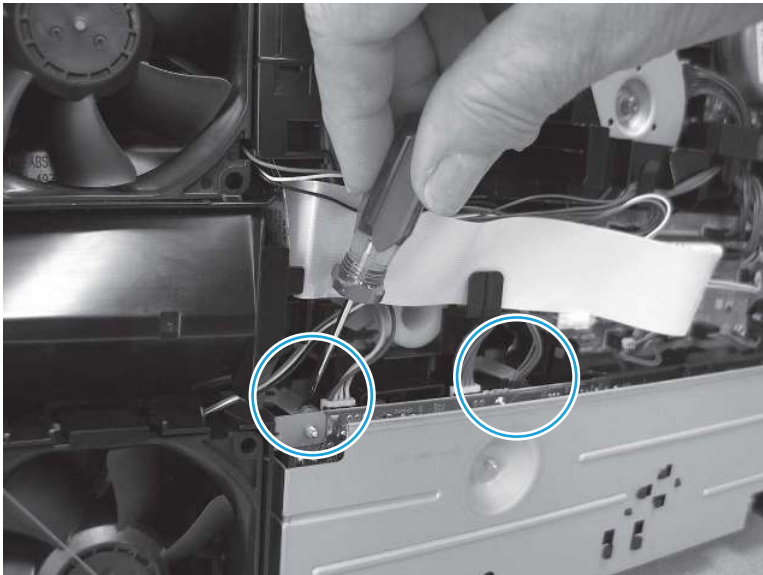
2. Locate two levers (callout 1) above the low-voltage power supply, and then rotate them down to release them.

**Figure 5-763** Release two levers



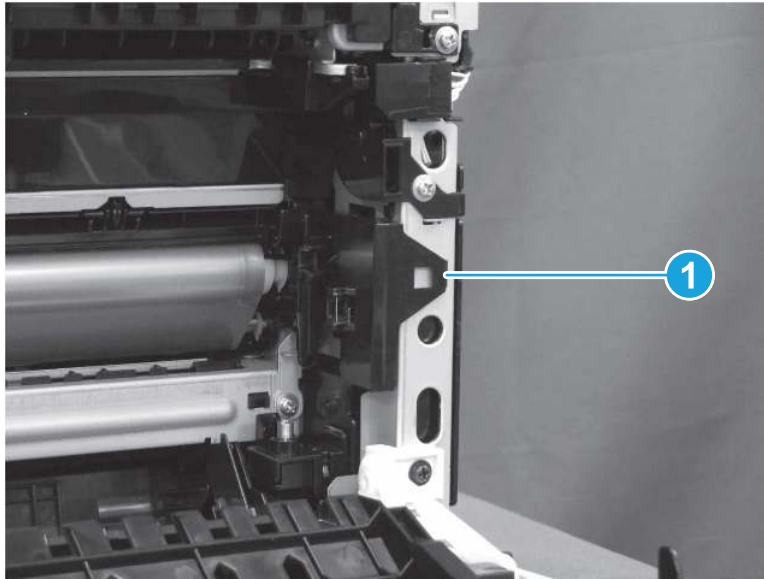
3. Use a small flat-blade screwdriver to pull the levers away from the printer until they stop.

**Figure 5-764** Pull two levers out



4. At the rear of the printer, release one tab (callout 1).

**Figure 5-765** Release one tab



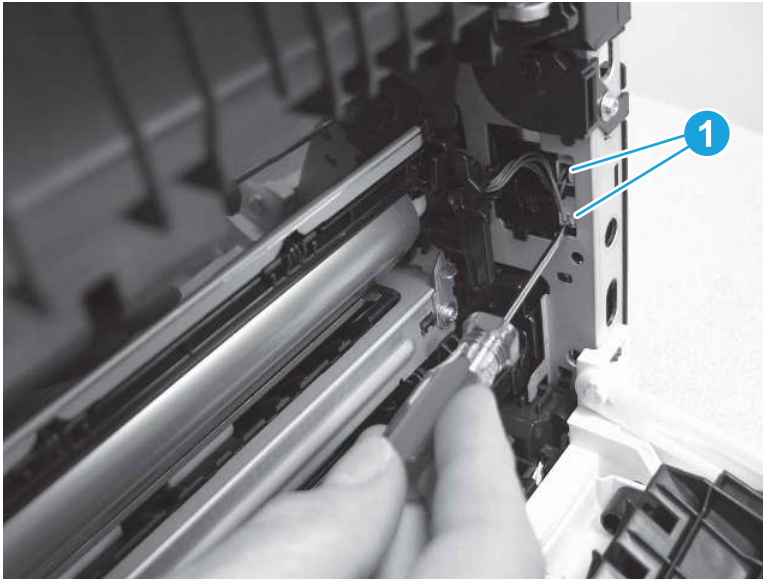
5. Remove the cover.

**Figure 5-766** Remove the cover



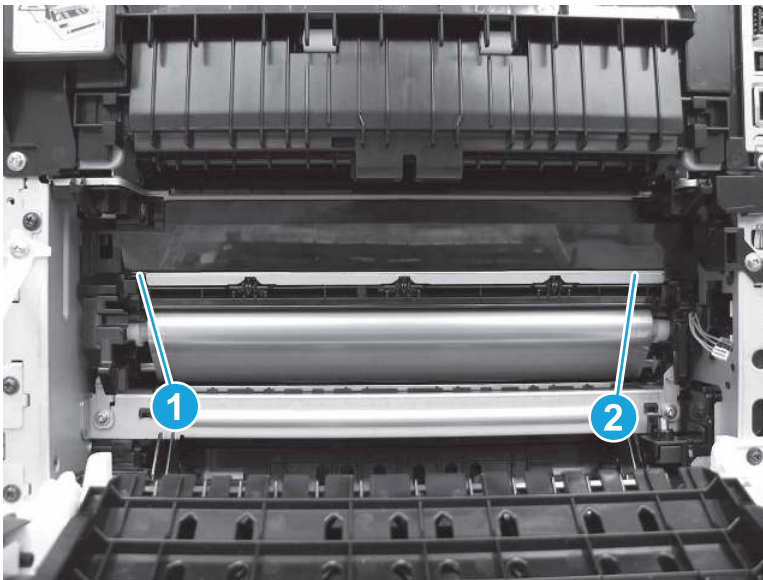
6. Use a small flat-blade screwdriver to release the retainers and disconnect two connectors (callout 1).

**Figure 5-767** Disconnect two connectors



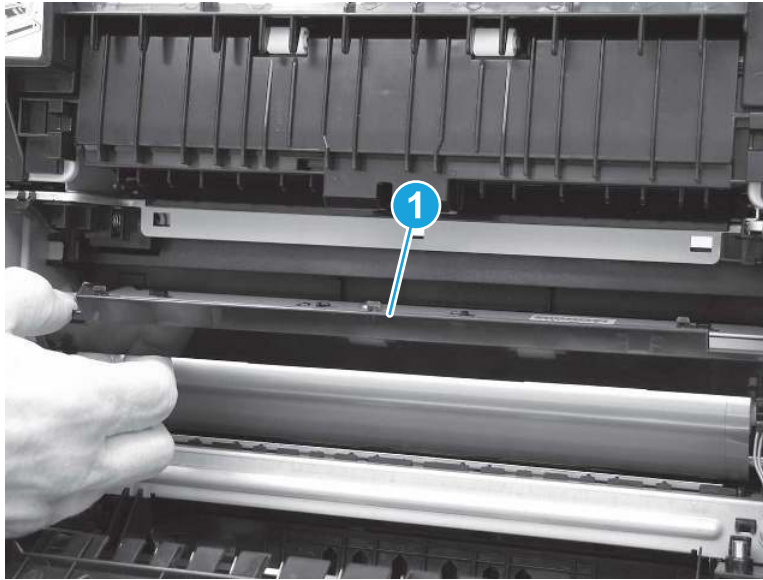
7. Release one tab (callout 1) on the left side of the fuser cover, and then release one tab (callout 2) on the right side.

**Figure 5-768** Release two tabs



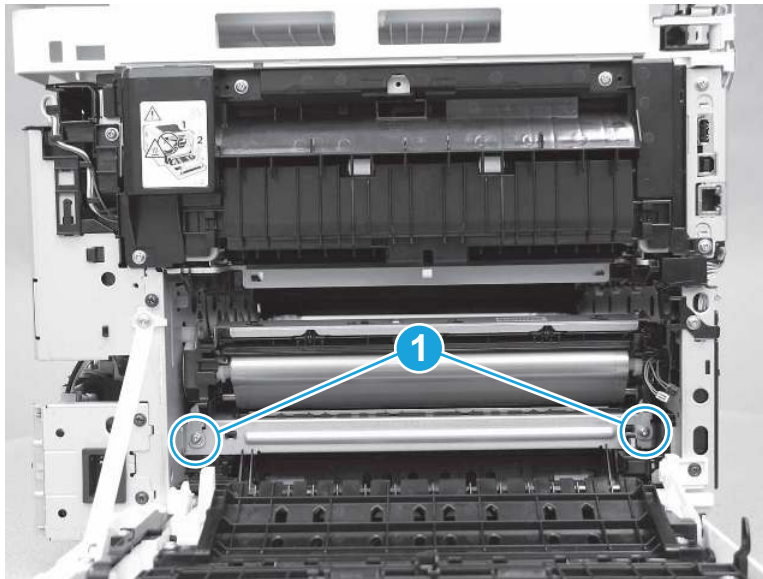
8. Remove the fuser cover (callout 1).

Figure 5-769 Remove the fuser cover



9. Remove two screws (callout 1).

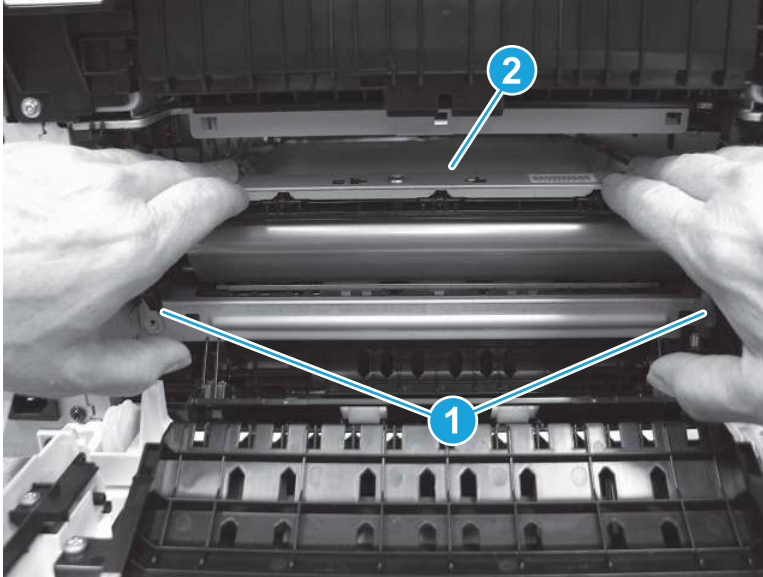
Figure 5-770 Remove two screws



10. Press up on two tabs with thumbs (callout 1) and position fingers on the sheet metal on the top of the ITB (callout 2).

**⚠ CAUTION:** Do not touch the silver surface of the ITB. Skin oils on the ITB will cause print-quality problems.

Figure 5-771 Release two tabs



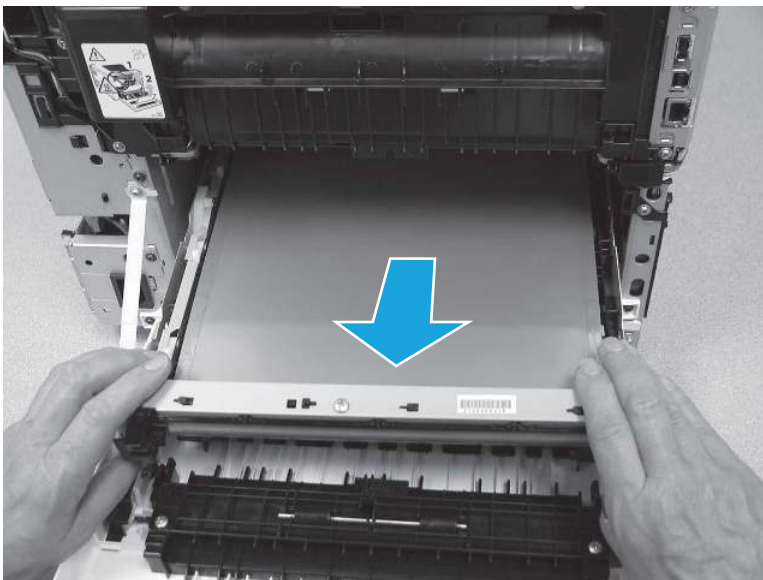
11. Slide the ITB out of the printer to remove it.

---

**⚠ CAUTION:** Do not tamper with any of the white fittings on the side of the ITB.

---

Figure 5-772 Remove the assembly



## 9. 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.

---

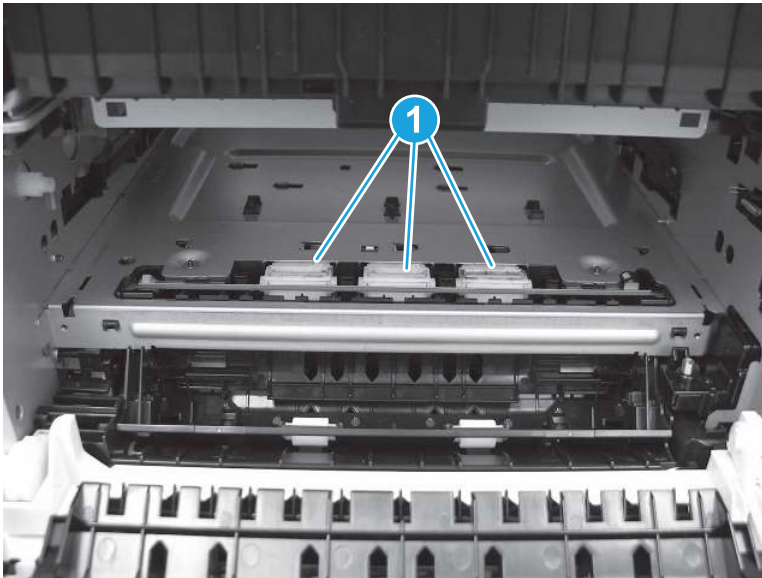
## 10. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

ITB

1. Use a soft, lint-free cloth to remove any paper dust from the Mylar strips (callout 1) under the ITB.

**Figure 5-773** Clean the Mylar strips



2. Verify that the tabs on the end of the ITB are in the position shown.

**NOTE:**  Lower both tabs on each side of the ITB to the down position.

---

**Figure 5-774** Check tabs on the end of the ITB



## Removal and replacement: Density detect sensor assembly

Learn how to remove and replace the density detect sensor assembly.

[View a video of removing and replacing the density detect sensor assembly.](#)

Mean time to repair: 46 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](http://www.hp.com/buy/parts).

**Table 5-35** Part information

Part number	Part description
RM2-7399-000CN	Density detect sensor

### 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

Make sure that the printer initializes to a **Ready** state.


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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

Figure 5-775 Remove the tray

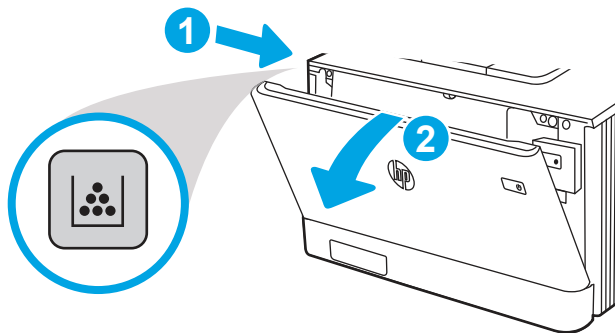


## 2. Remove the toner cartridges

Follow these steps to remove the toner cartridges.

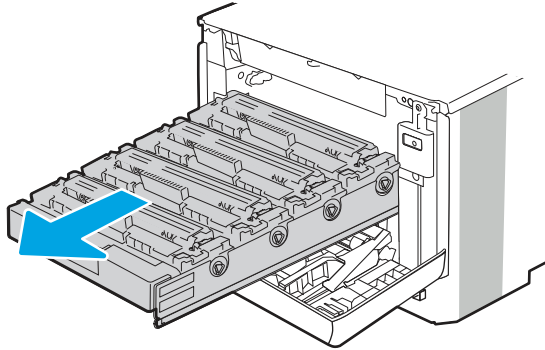
1. Open the front door by pressing the button on the left cover.

Figure 5-776 Open the front door



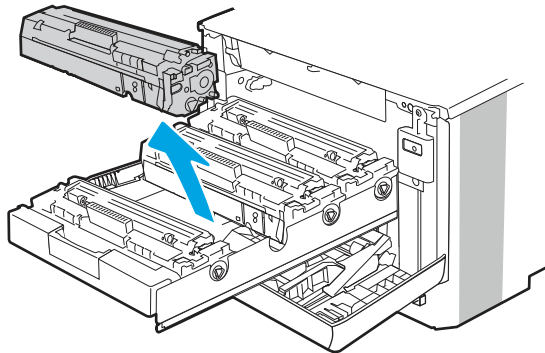
2. Grasp the blue handle on the toner cartridge tray, and then pull out the tray.

**Figure 5-777** Open the cartridge drawer



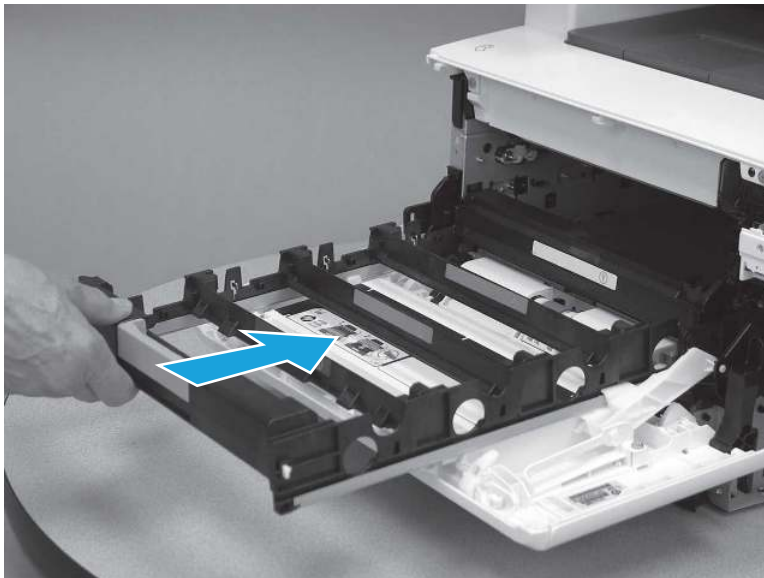
3. Grasp the handle on the toner cartridge, and then pull the toner cartridge straight up to remove it. Repeat this step for each toner cartridge.

**Figure 5-778** Remove the toner cartridges



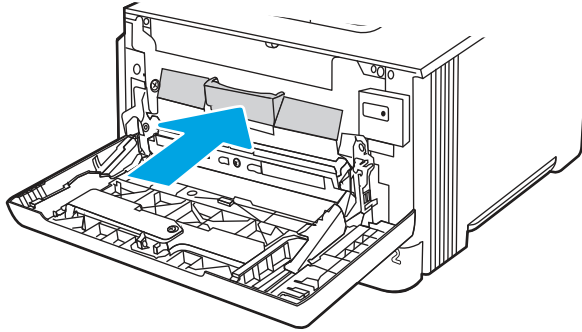
4. Slide the cartridge tray into the printer.

**Figure 5-779** Slide the cartridge tray into the printer



5. Close the front door.

**Figure 5-780** Close the front door



### 3. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

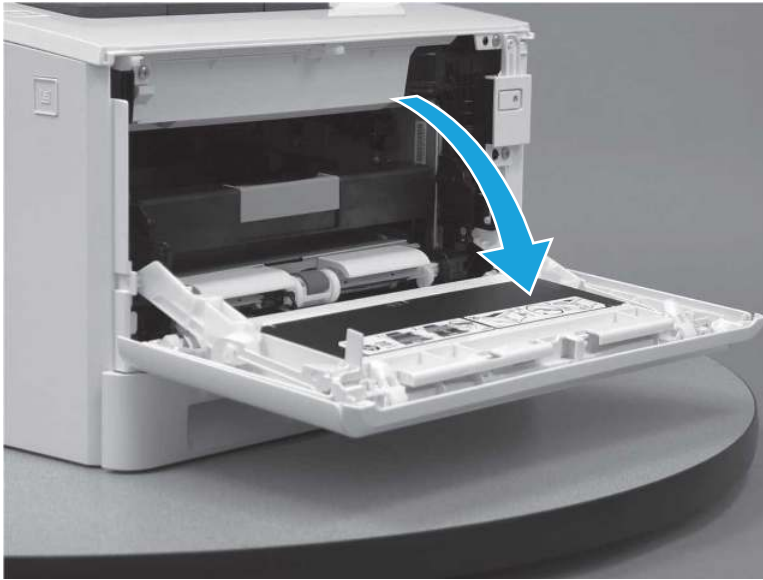
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-781** Release the front door



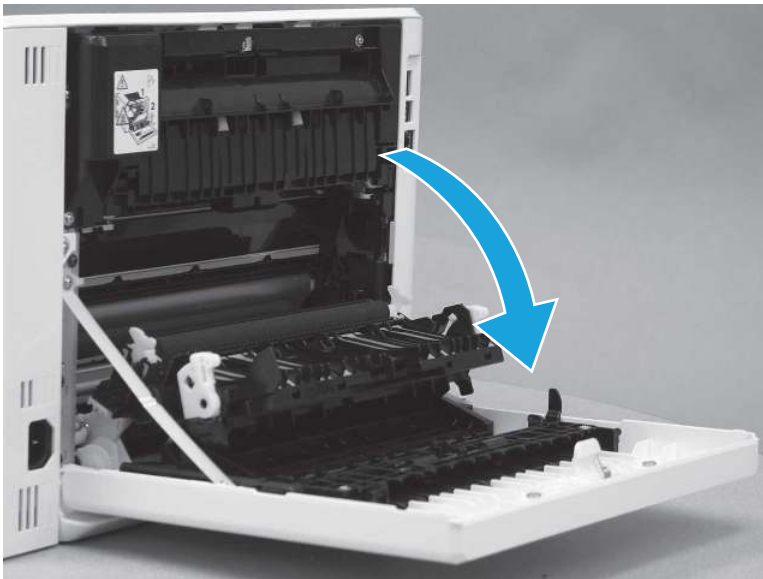
2. Open the front door.

**Figure 5-782** Open the front door



3. Open the duplexing door.

**Figure 5-783** Open the duplexer door



#### 4. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

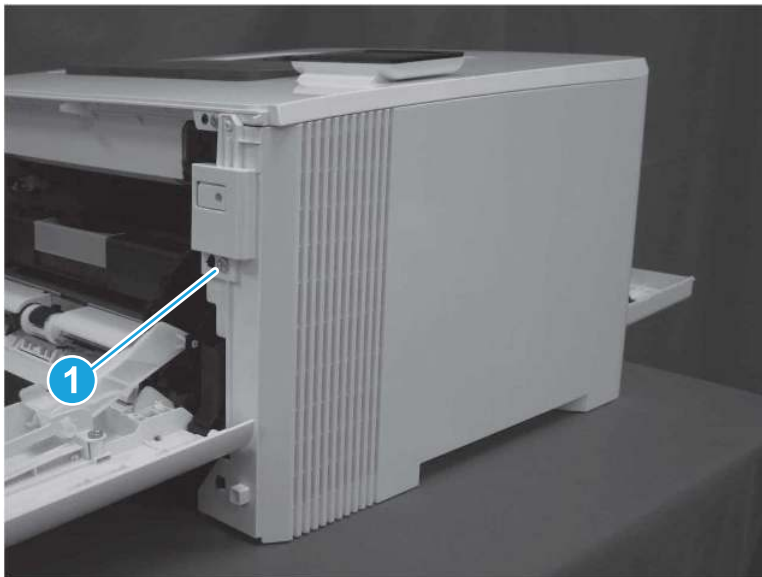
1. At the back of the printer, remove one screw (callout 1).

**Figure 5-784** Remove one screw



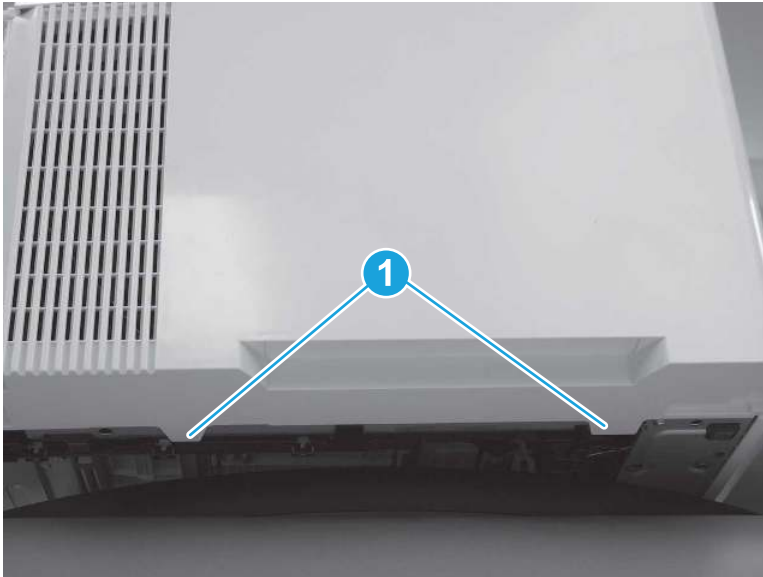
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-785** Remove one screw



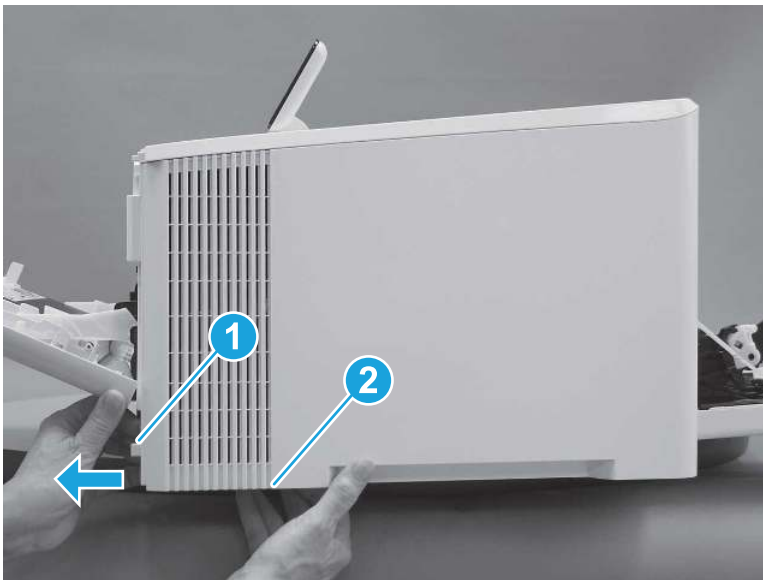
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-786** Locate the tabs



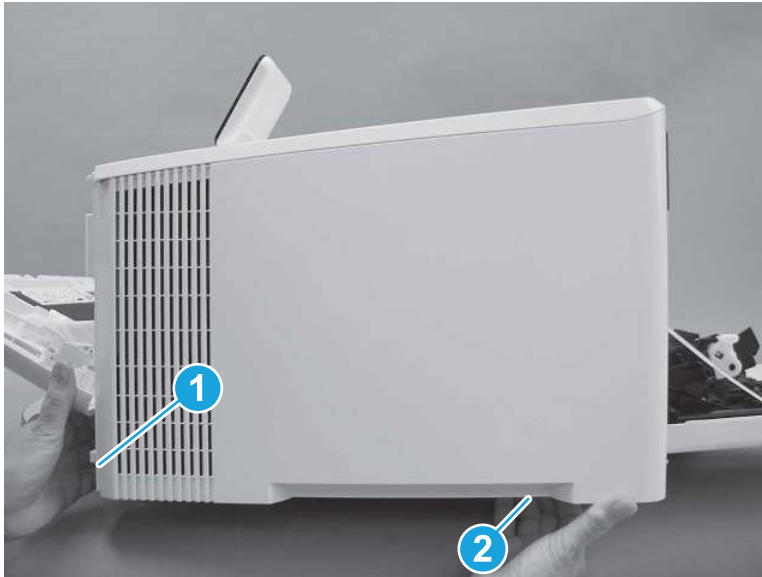
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-787** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

**Figure 5-788** Release lower rear tab



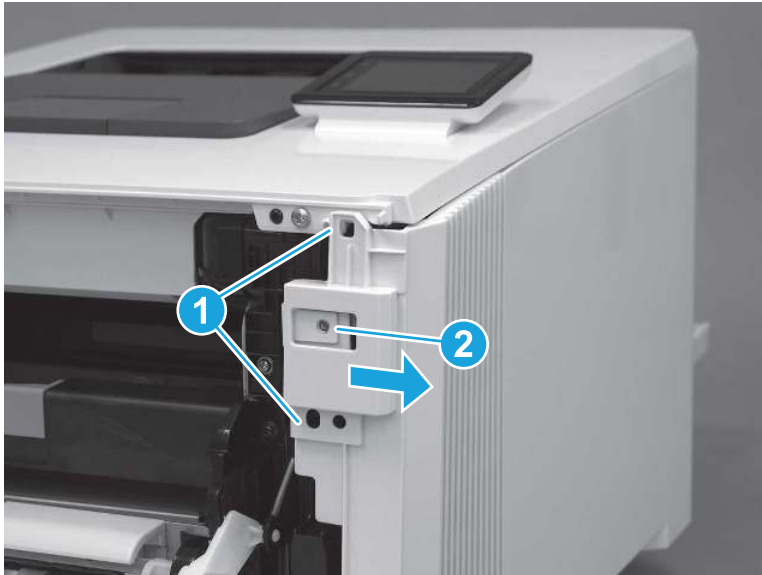
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

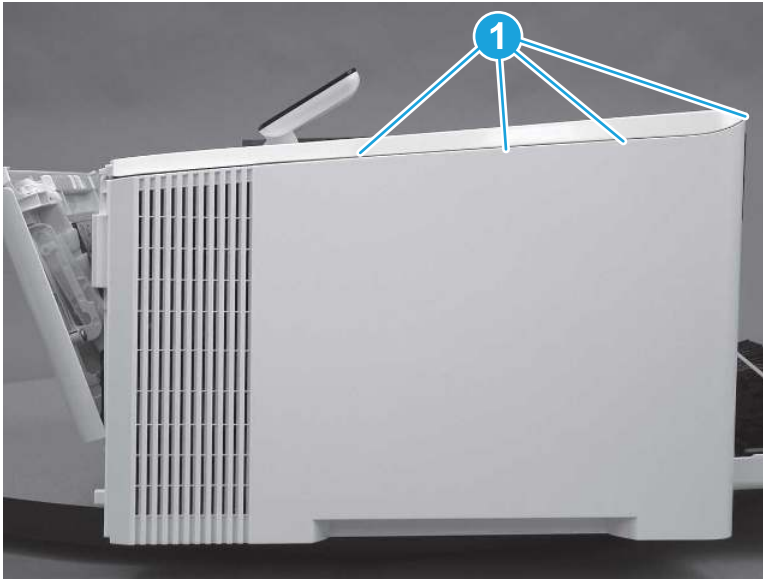
---

**Figure 5-789** Release two front tabs



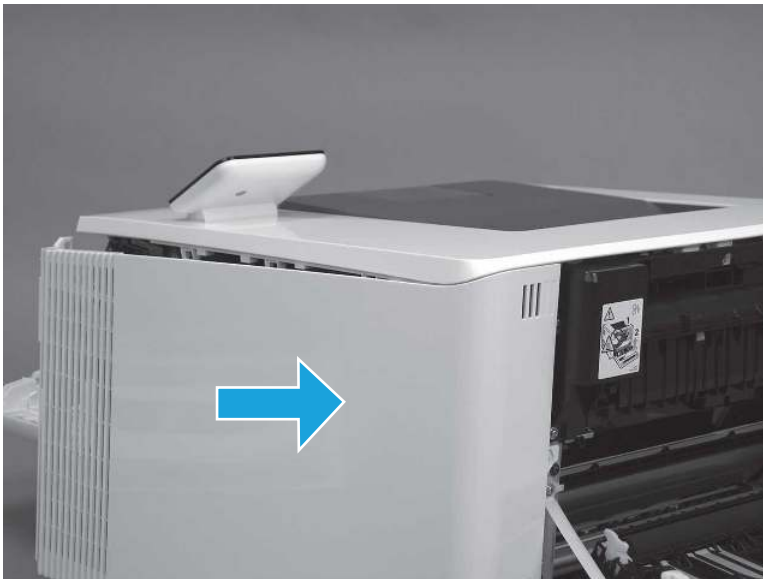
7. Release four tabs on the top of the printer (callout 1).

**Figure 5-790** Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-791** Remove the right cover



## 5. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).



1. Raise the scanner.

**Figure 5-792** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-793** Remove one screw



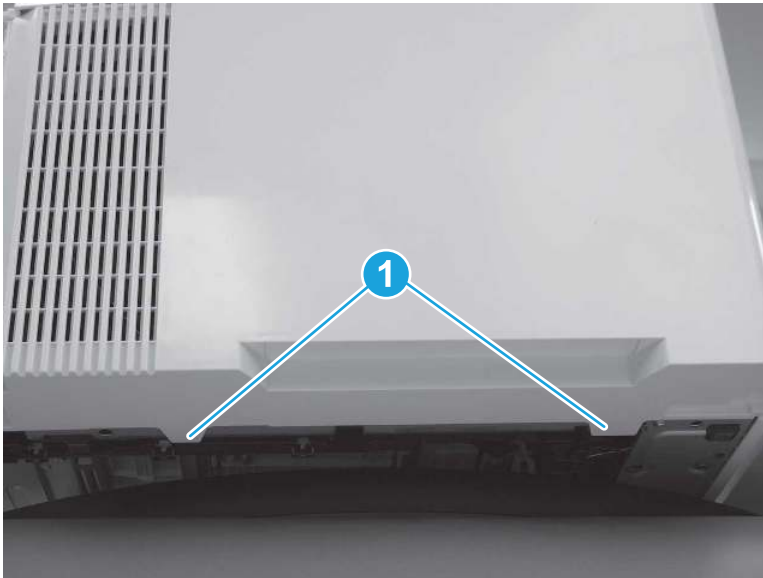
3. At the front of the printer, remove one screw (callout 1).

**Figure 5-794** Remove one screw



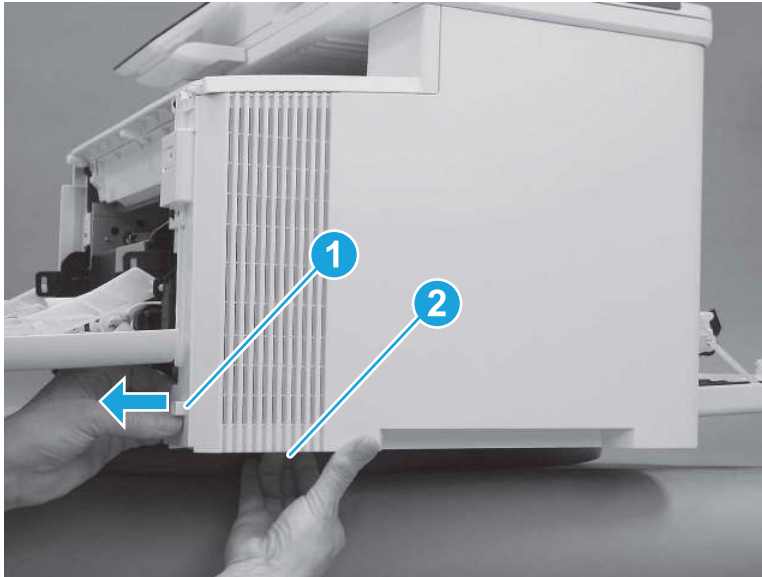
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-795** Locate the tabs



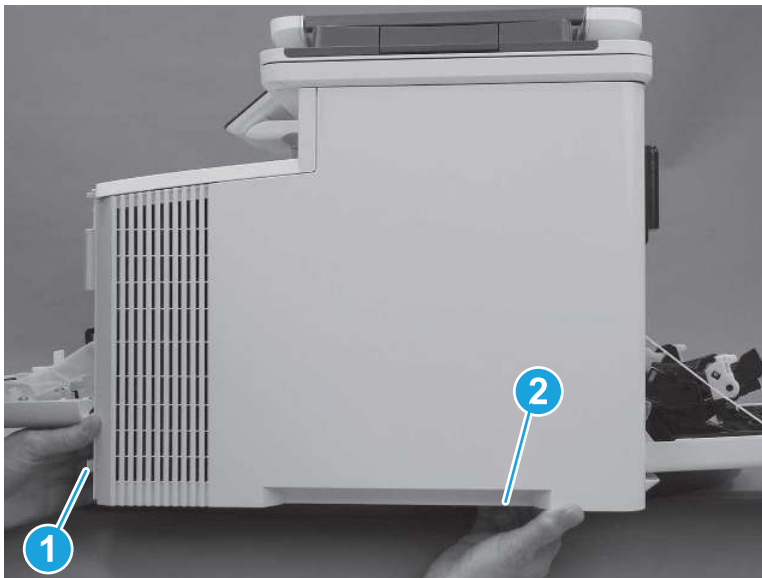
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-796** Release front lower tabs



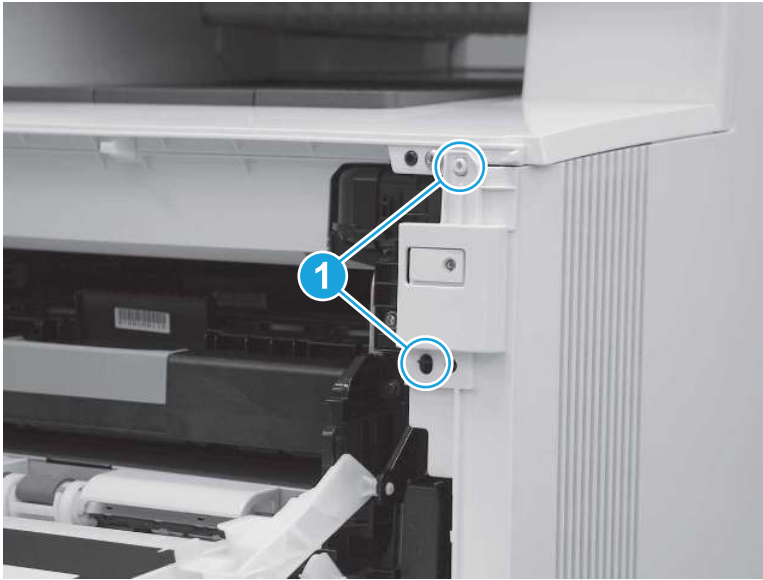
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-797** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-798** Release front upper tabs



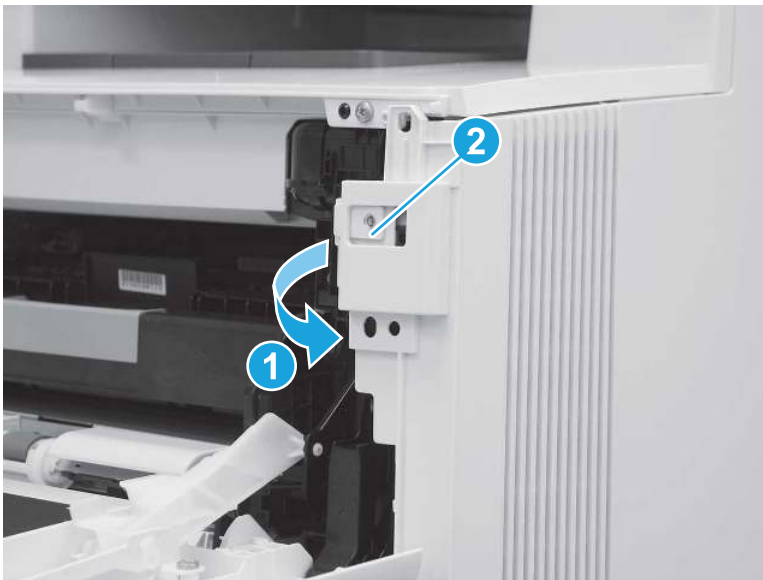
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

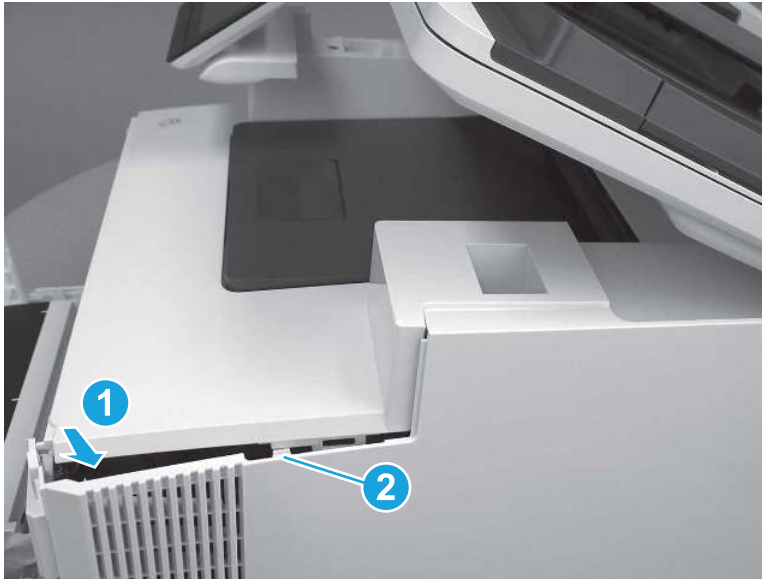
---

**Figure 5-799** Rotate the front of the cover



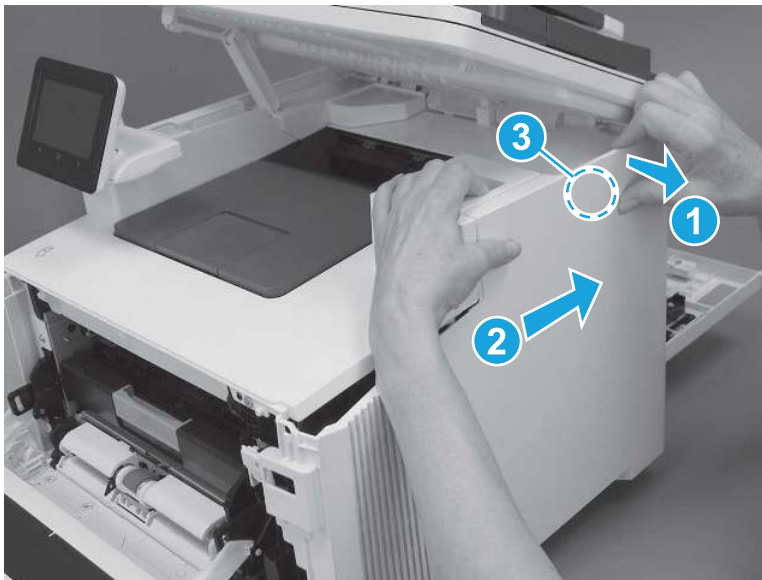
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

**Figure 5-800** Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-801** Release one tab and one hook



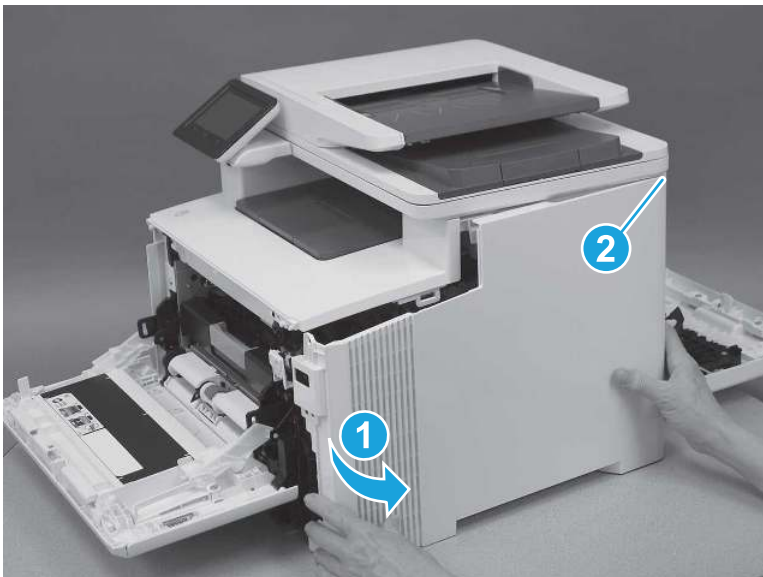
11. Lower the scanner.

**Figure 5-802** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-803** Remove the right cover

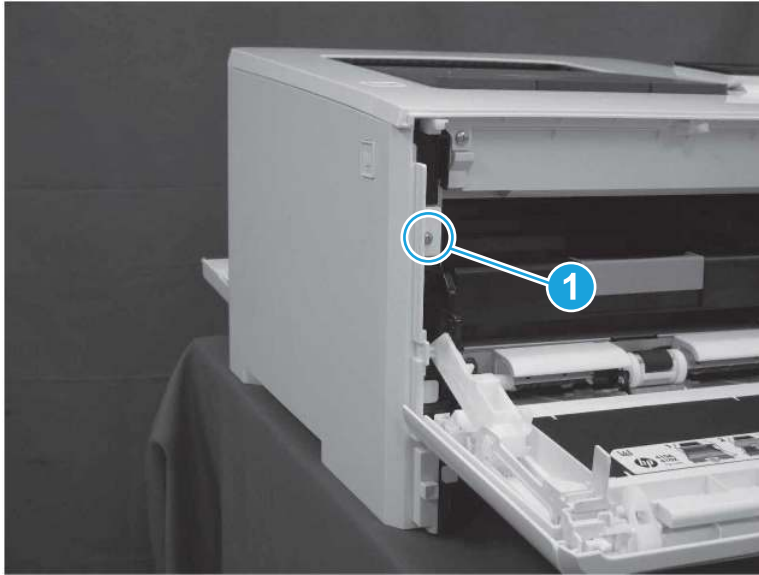


## 6. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

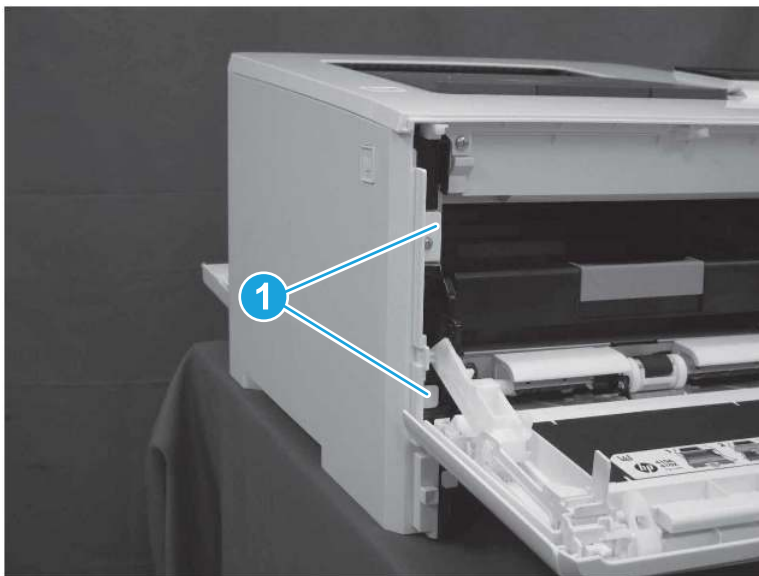
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-804** Remove one screw



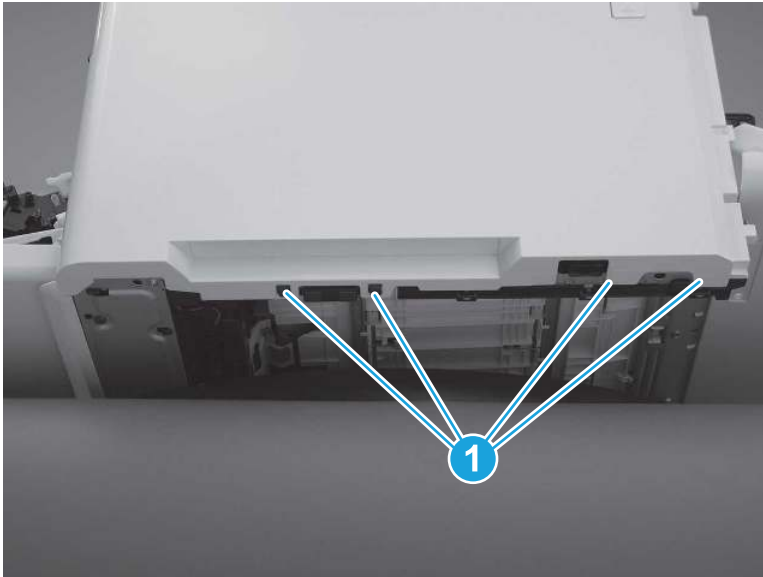
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-805** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-806** Locate the tabs



4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

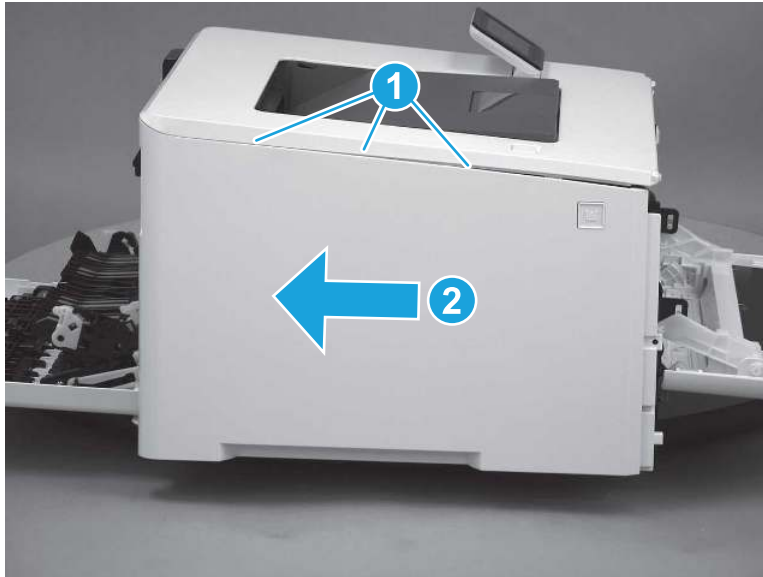
**Figure 5-807** Release bottom tabs





5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

**Figure 5-808** Release three tabs



## 7. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

1. Raise the scanner.

**Figure 5-809** Raise the scanner



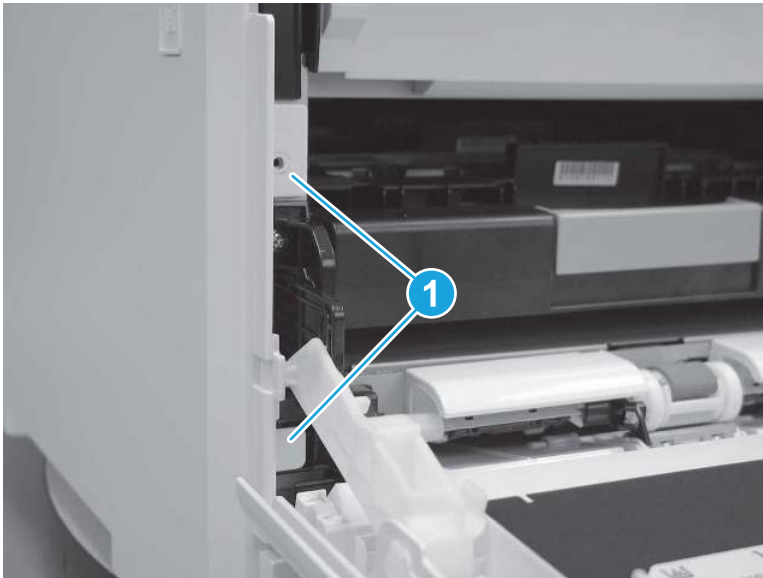
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-810** Remove one screw



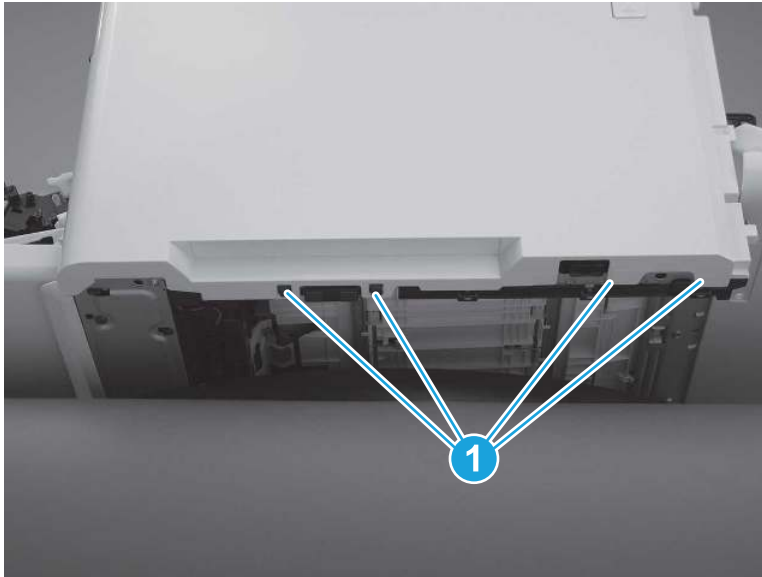
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-811** Release two tabs



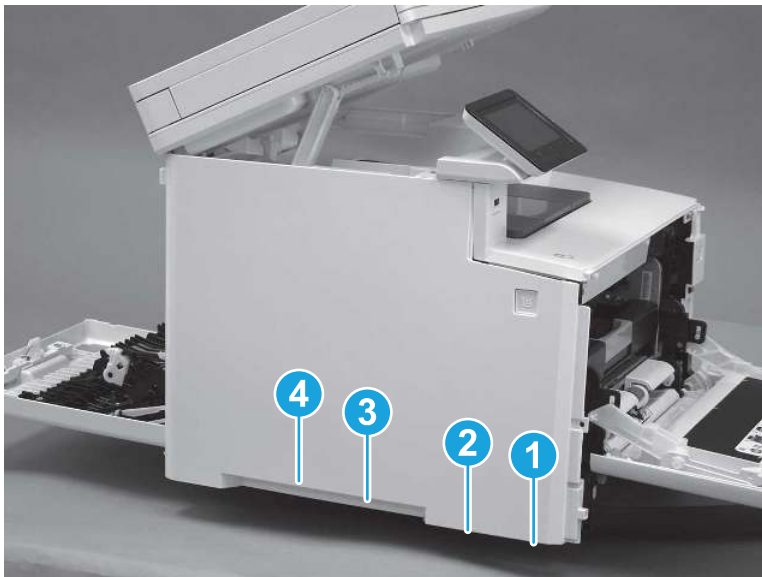
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-812** Locate the tabs



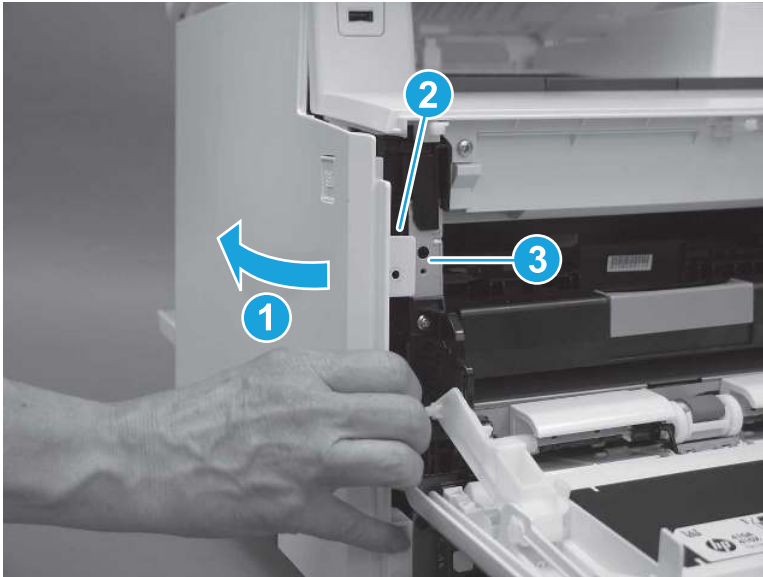
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-813** Release four tabs



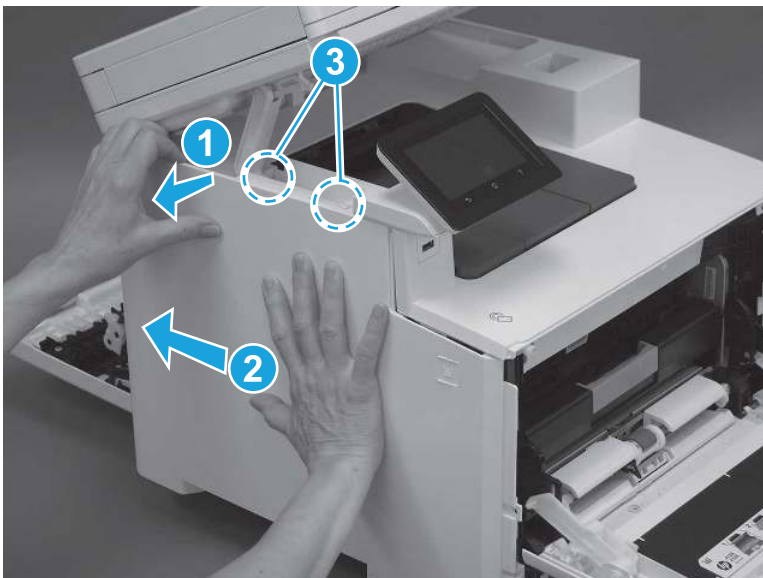
6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

**Figure 5-814** Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-815** Release one tab and two hooks



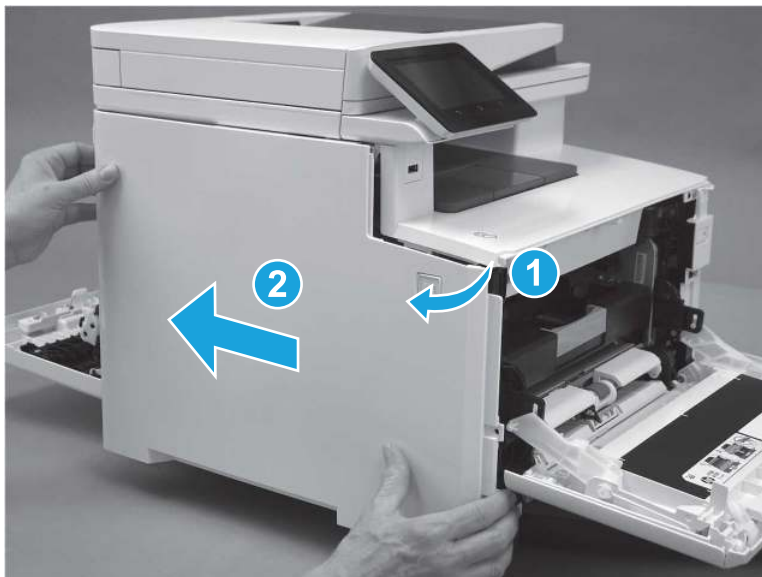
8. Lower the scanner.

**Figure 5-816** Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

**Figure 5-817** Remove the left cover

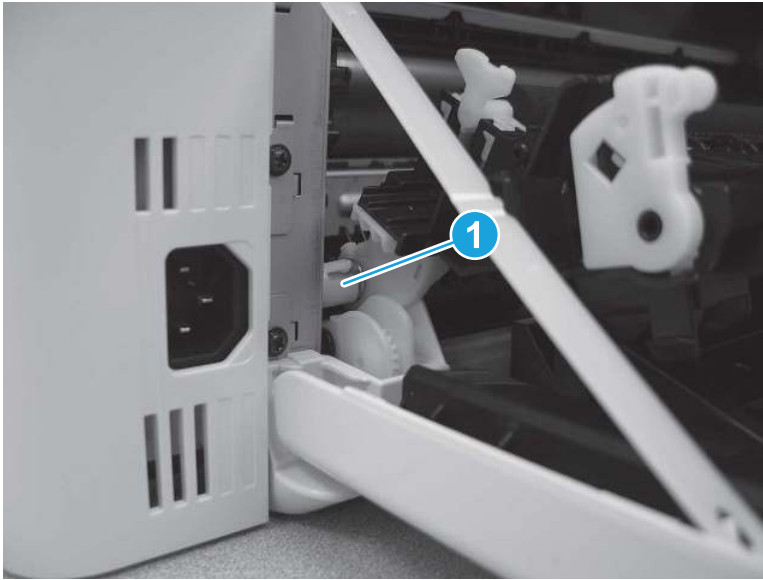


## 8. Remove the secondary transfer assembly

Follow these steps to remove the secondary transfer assembly.

1. Remove one retainer collar (callout 1).

**Figure 5-818** Remove one retainer collar



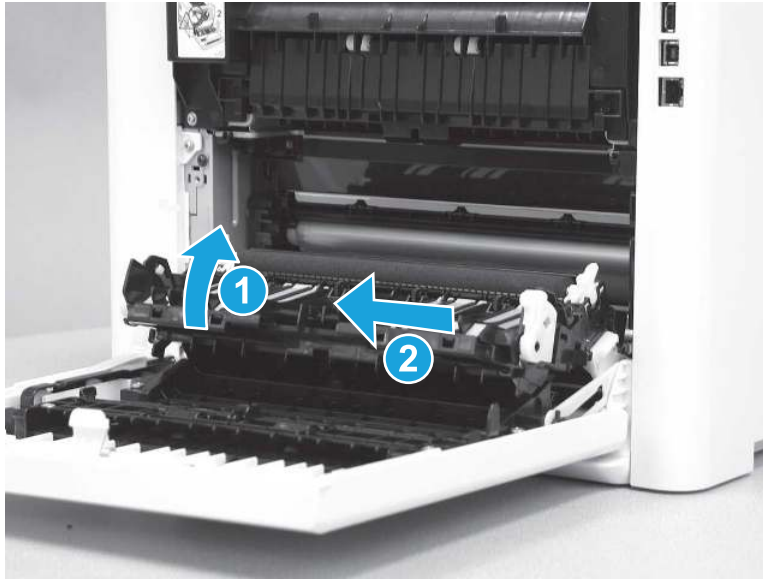
2. Remove one screw (callout 1), and then release the retaining arm (callout 2).

**Figure 5-819** Remove one screw and release the arm



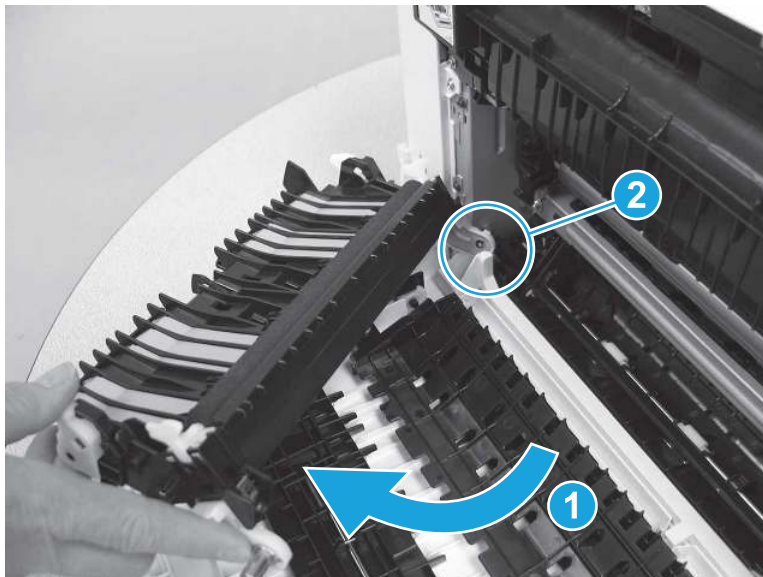
3. Lift the assembly up slightly (callout 1), and then slide it to the left (callout 2).

**Figure 5-820** Slide the assembly left



4. Rotate the right side of the assembly away from the printer (callout 1) so that the left side of the assembly rotates free of the plastic tab (callout 2). Remove the assembly.

**Figure 5-821** Remove the assembly

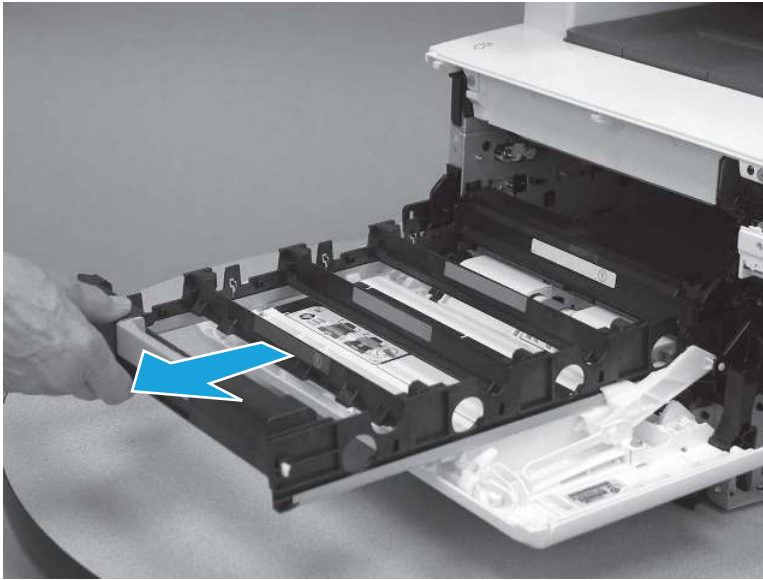


## 9. Remove the ITB

Follow these steps to remove the ITB.

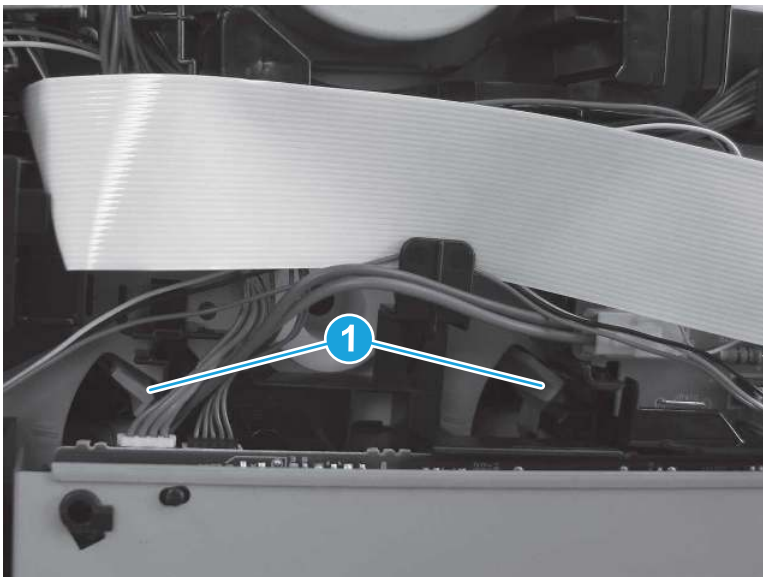
1. Slide the cartridge tray out of the printer.

**Figure 5-822** Slide the cartridge tray out of the printer



2. Locate two levers (callout 1) above the low-voltage power supply, and then rotate them down to release them.

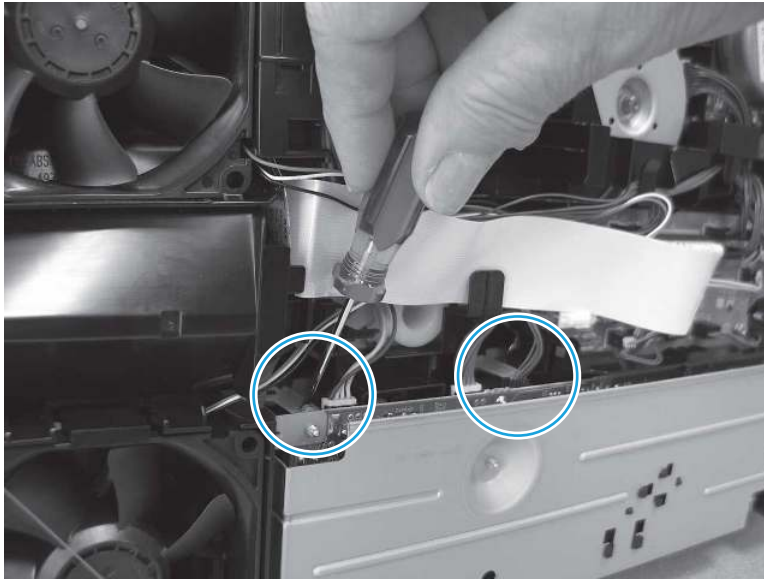
**Figure 5-823** Release two levers





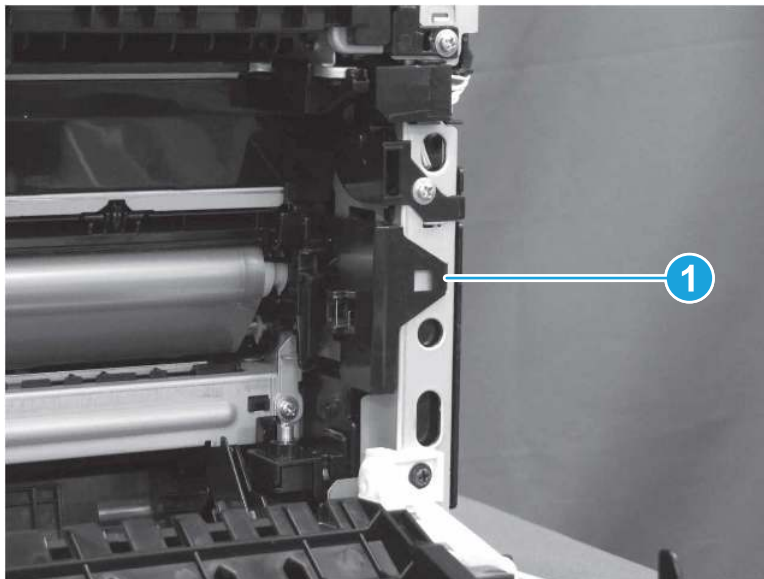
3. Use a small flat-blade screwdriver to pull the levers away from the printer until they stop.

Figure 5-824 Pull two levers out



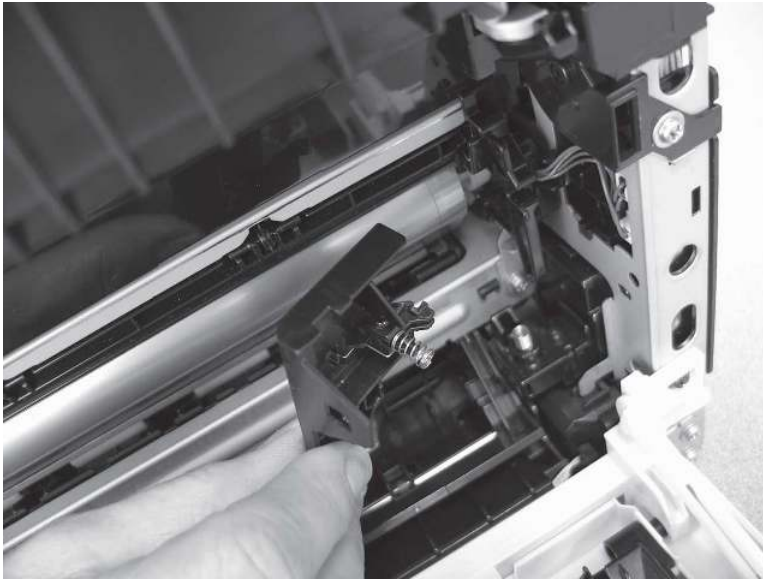
4. At the rear of the printer, release one tab (callout 1).

Figure 5-825 Release one tab



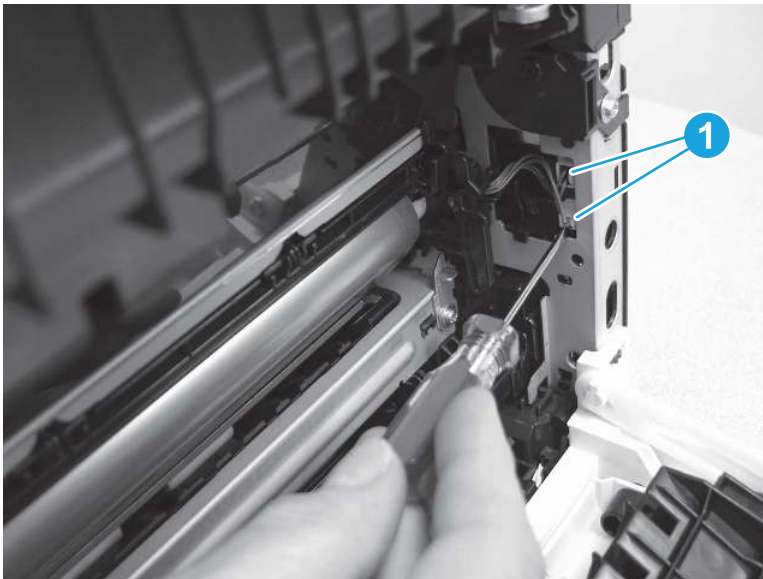
5. Remove the cover.

**Figure 5-826** Remove the cover



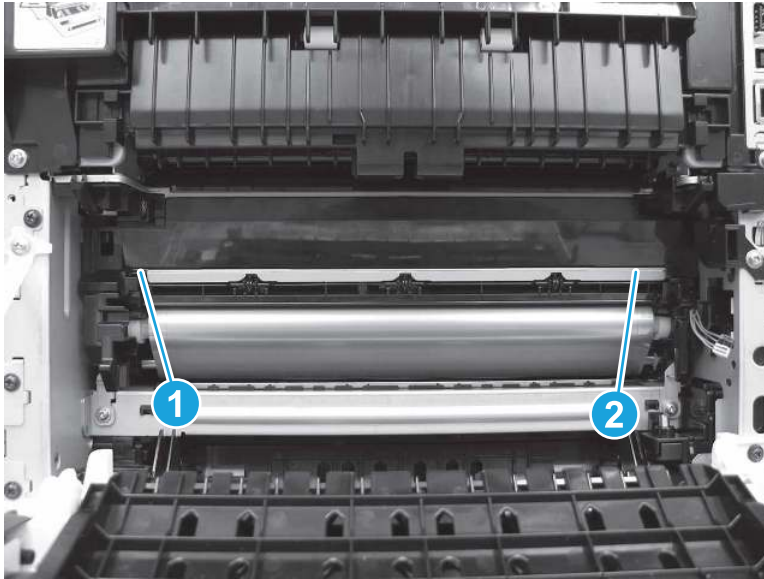
6. Use a small flat-blade screwdriver to release the retainers and disconnect two connectors (callout 1).

**Figure 5-827** Disconnect two connectors



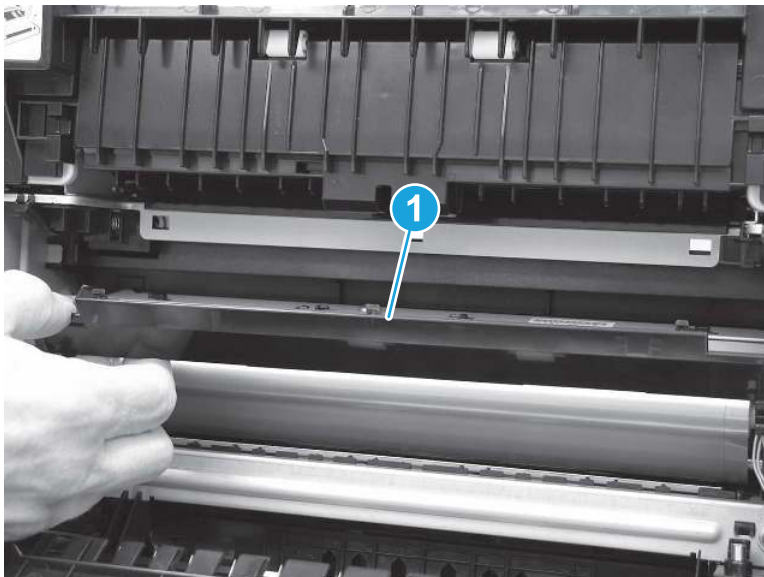
7. Release one tab (callout 1) on the left side of the fuser cover, and then release one tab (callout 2) on the right side.

**Figure 5-828** Release two tabs



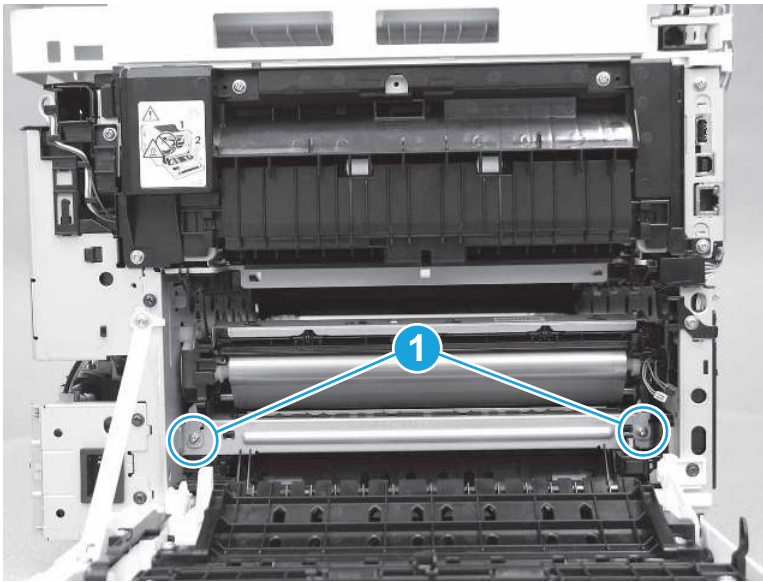
8. Remove the fuser cover (callout 1).

**Figure 5-829** Remove the fuser cover



9. Remove two screws (callout 1).

**Figure 5-830** Remove two screws



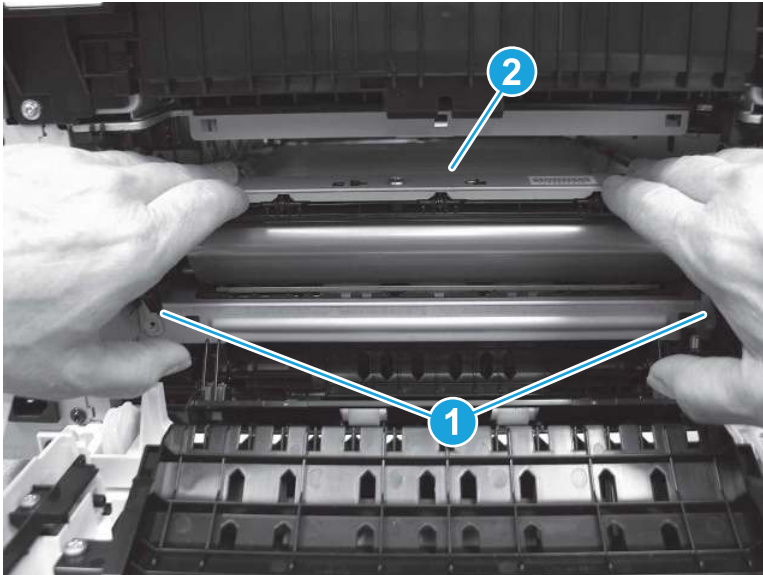
10. Press up on two tabs with thumbs (callout 1) and position fingers on the sheet metal on the top of the ITB (callout 2).

---

**⚠ CAUTION:** Do not touch the silver surface of the ITB. Skin oils on the ITB will cause print-quality problems.

---

**Figure 5-831** Release two tabs



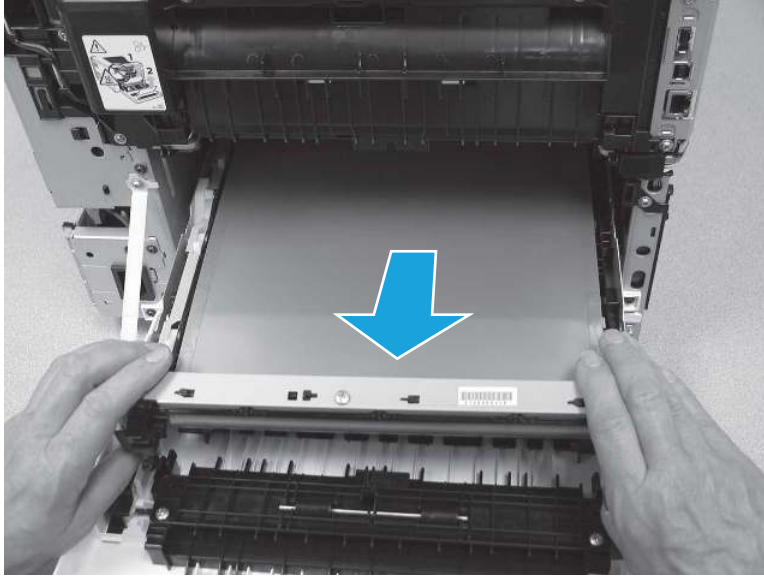
11. Slide the ITB out of the printer to remove it.

---

**⚠ CAUTION:** Do not tamper with any of the white fittings on the side of the ITB.

---

Figure 5-832 Remove the assembly

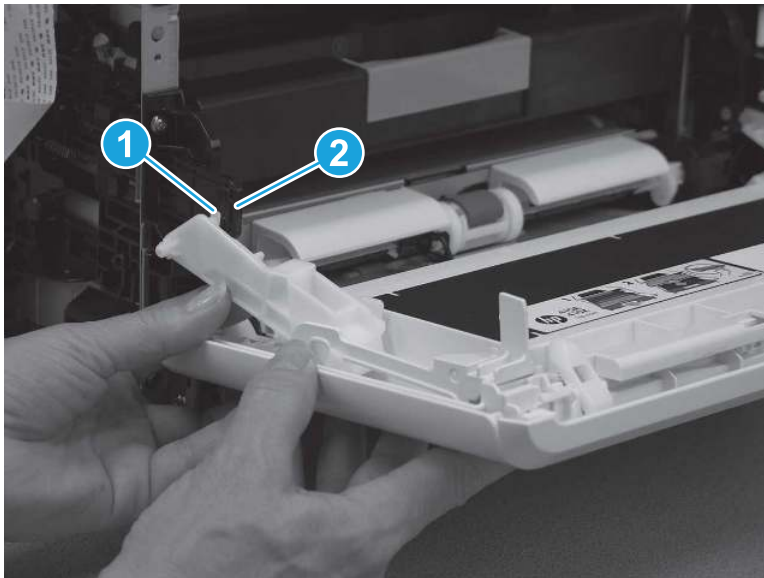


## 10. Remove the toner cartridge tray

Follow these steps to remove the toner cartridge tray.

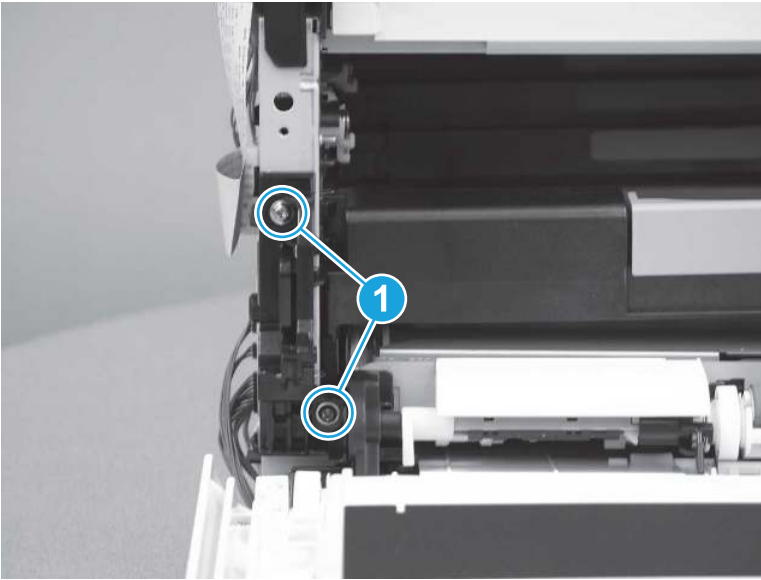
1. Release the tab (callout 1) on the front door hinge arm from the slot (callout 2) on the tray slide mechanism.

Figure 5-833 Release the hinge arm



2. Remove two screws (callout 1).

Figure 5-834 Remove two screws



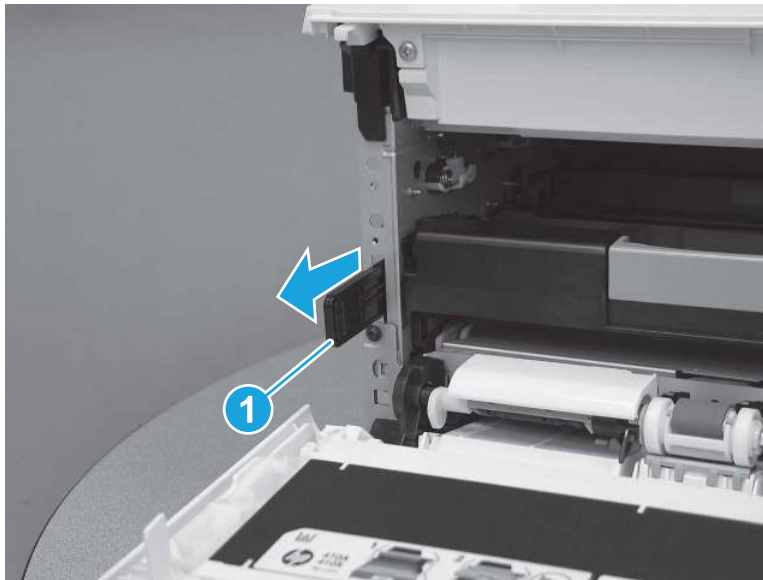
3. Remove the cover (callout 1).

Figure 5-835 Remove the cover



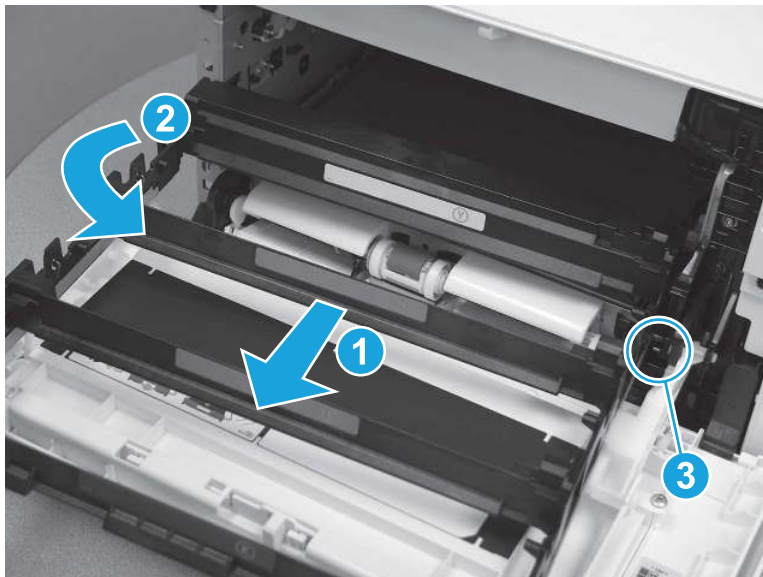
4. Pull the tray slide mechanism (callout 1) out.

**Figure 5-836** Pull the tray slide mechanism out



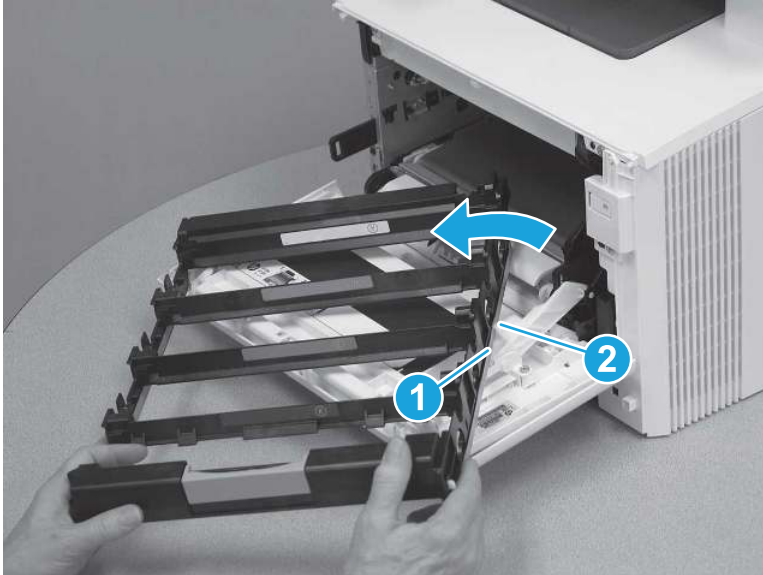
5. Slide the cartridge tray out of the printer (callout 1). Rotate the tray counterclockwise (callout 2) to release one silver shaft (callout 3).

**Figure 5-837** Rotate the cartridge tray to release one shaft



6. Continue to rotate the tray to release the edge of the tray (callout 1) from the white clip (callout 2). Remove the toner cartridge tray.

**Figure 5-838** Remove the assembly

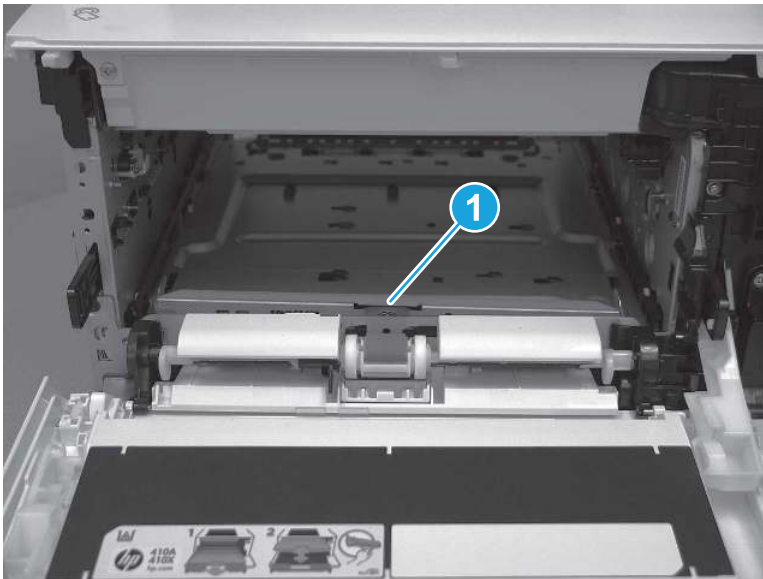


## 11. Remove the density detect sensor assembly

Follow these steps to remove the density detect sensor assembly.

1. The density detect sensor assembly (callout 1) is located behind the Tray 1 pickup and feed rollers.

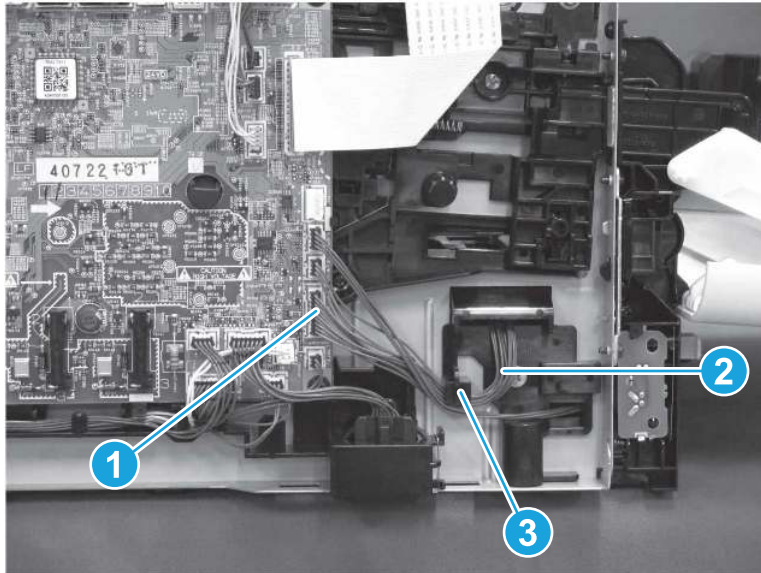
**Figure 5-839** Registration density sensor location





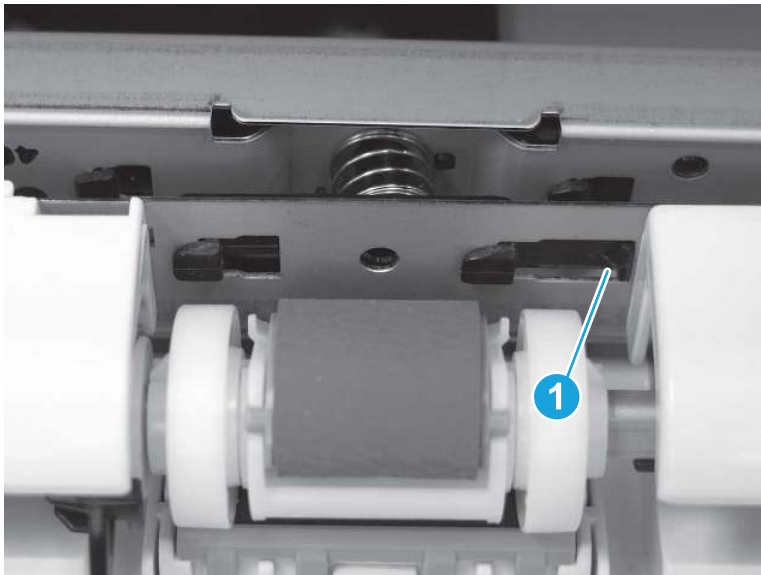
2. On the left side of the printer, disconnect one connector (callout 1), and then release the cables (callout 2) from the guide (callout 3).

**Figure 5-840** Disconnect one connector and release cables



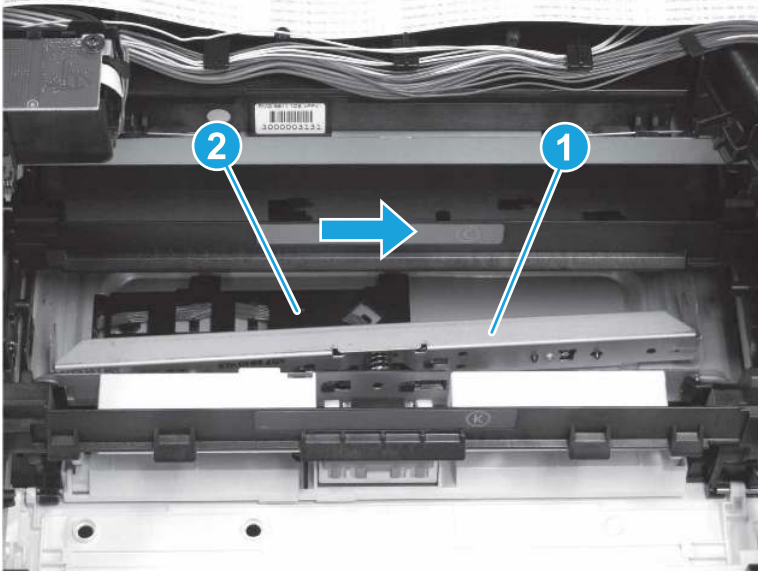
3. Release one tab (callout 1).

**Figure 5-841** Release one tab



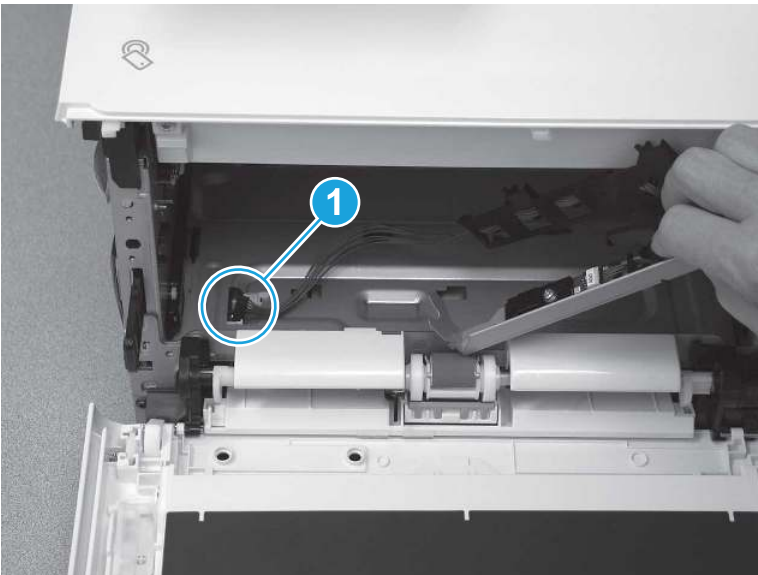
- Slide the density detect sensor assembly (callout 1) and the cable guide (callout 2) to the right to release them.

**Figure 5-842** Slide the sensor and cable guide right



- Pass the connector through the opening in the sheet metal (callout 1).

**Figure 5-843** Release the connector



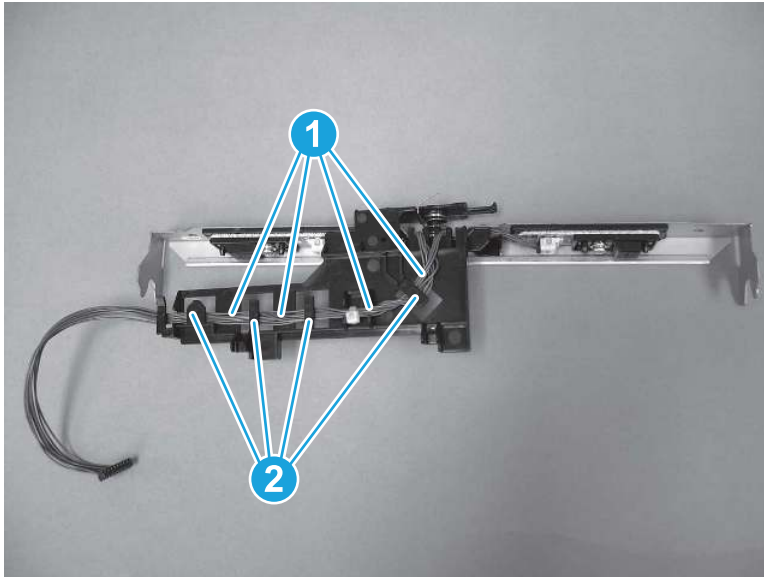
6. Remove the density detect sensor assembly and cable guide.

**Figure 5-844** Remove the registration density sensor and guide



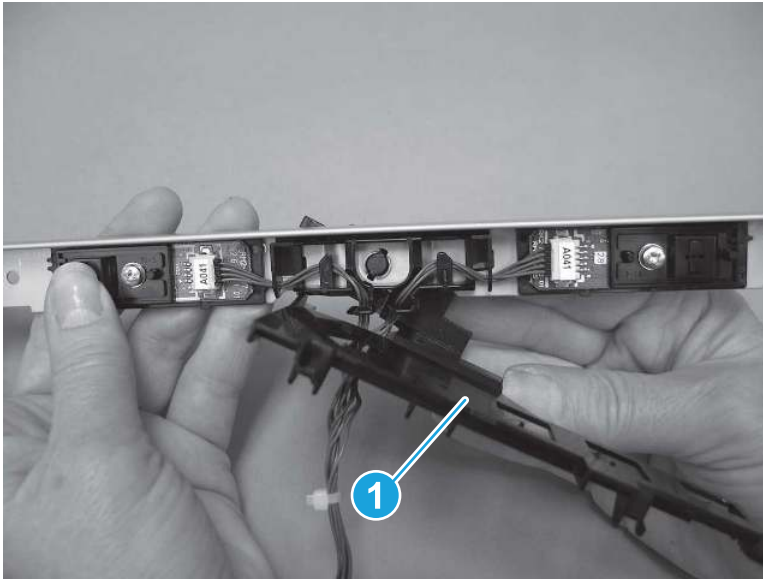
7. Release the cables (callout 1) from the guides (callout 2).

**Figure 5-845** Release the cables from the guides



8. Remove the cable guide (callout 1).

**Figure 5-846** Remove the cable guide



## 12. 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.

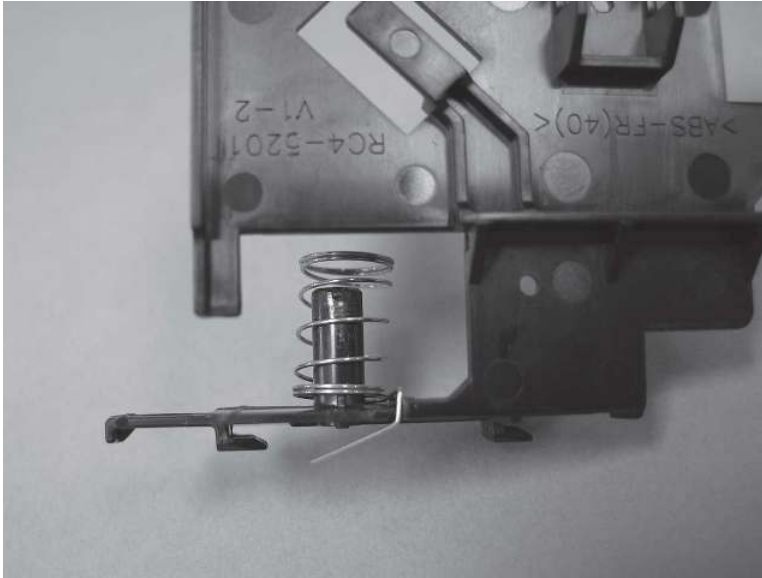
## 13. Reverse the removal steps to install the assembly

Also use the following special installation instructions.

Density detect sensor

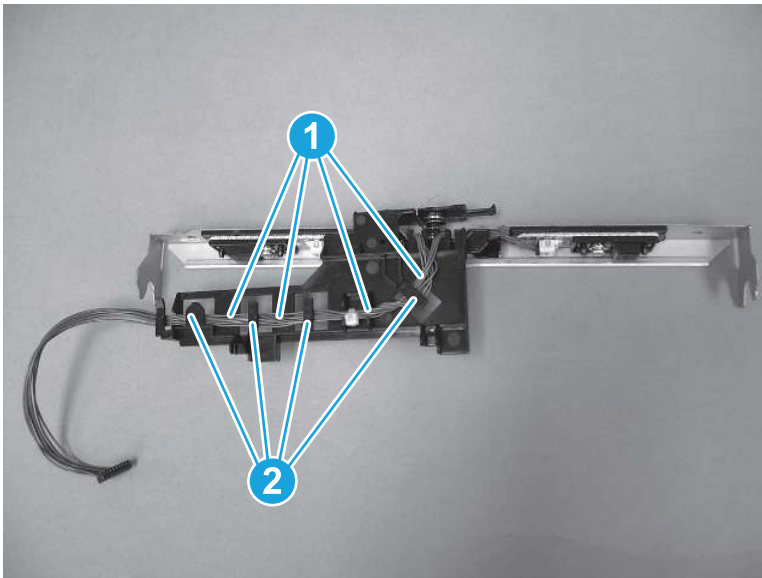
1. If the spring on the density detect sensor assembly becomes dislodged, reinstall it as shown below.

**Figure 5-847** Reinstall spring



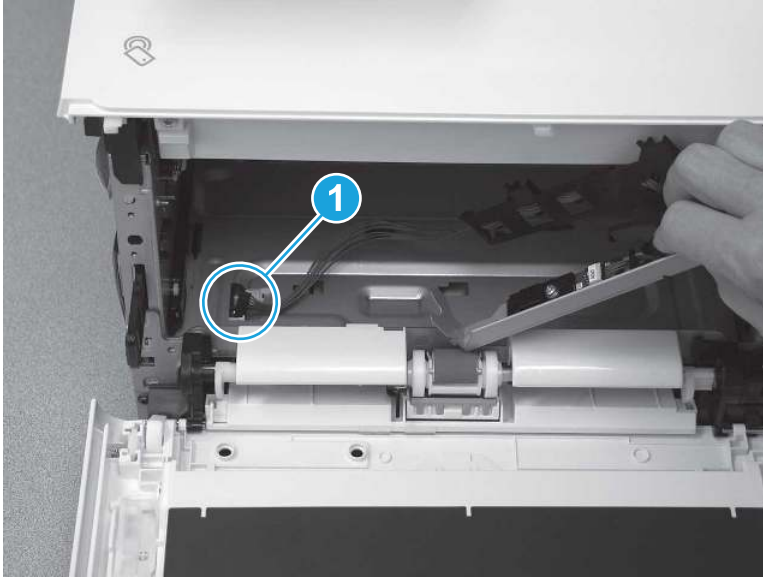
2. Position the cable guide on the replacement density detect sensor assembly, and then install the cables (callout 1) into the guides (callout 2).

**Figure 5-848** Install the cables in the guides



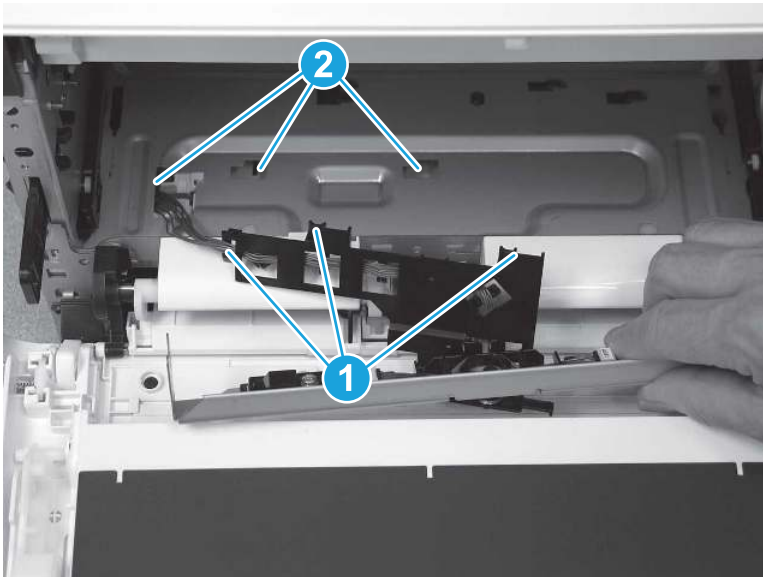
3. Pass the connector through the opening in the sheet metal (callout 1).

**Figure 5-849** Install the connector



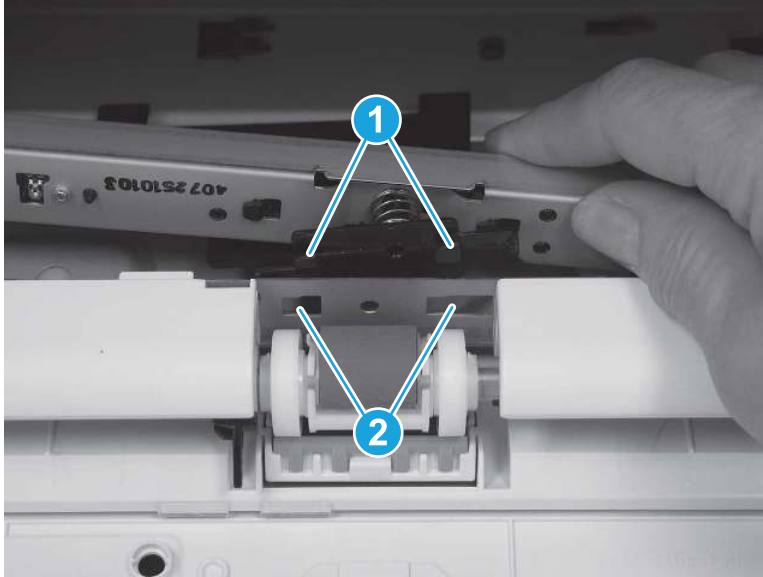
4. Install the tabs (callout 1) on the cable guide into the slots (callout 2) in the printer.

**Figure 5-850** Install the cable guide tabs



5. Install the tabs (callout 1) on the density detect sensor assembly into the slots (callout 2) in the printer.

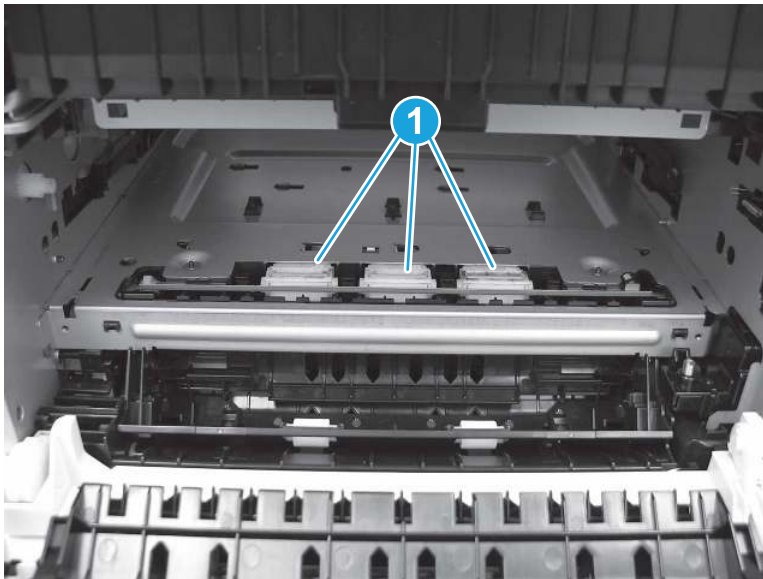
Figure 5-851 Install two tabs



Intermediate transfer belt

1. Use a soft, lint-free cloth to remove any paper dust from the Mylar strips (callout 1) under the ITB.

Figure 5-852 Clean the Mylar strips



2. Verify that the tabs on the end of the ITB are in the position shown.

 **NOTE:** Lower both tabs on each side of the ITB to the down position.

**Figure 5-853** Check tabs on the end of the ITB



## Removal and replacement: Re-pickup assembly

Learn how to remove and replace the re-pickup assembly.

[View a video of removing and replacing the re-pickup assembly \(duplex printers\).](#)

Mean time to repair: 24 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](http://www.hp.com/buy/parts).

**Table 5-36** Part information

Part number	Part description
RM2-6387-000CN	Paper re-pickup assembly

### Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- Small flat-blade screwdriver

### After performing service

#### Turn the printer power on



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

### Post service test

Make sure that the printer initializes to a **Ready** state.

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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.


 **NOTE:** Removing the tray is the same for SFP and MFP printers.

Figure 5-854 Remove the tray

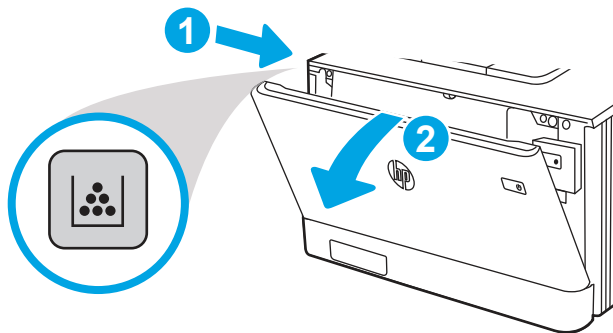


## 2. Remove the toner cartridges

Follow these steps to remove the toner cartridges.

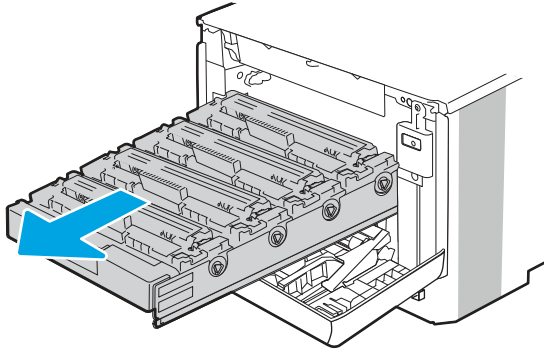
1. Open the front door by pressing the button on the left cover.

Figure 5-855 Open the front door



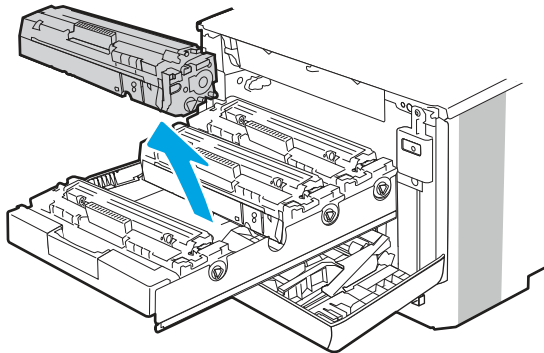
2. Grasp the blue handle on the toner cartridge tray, and then pull out the tray.

**Figure 5-856** Open the cartridge drawer



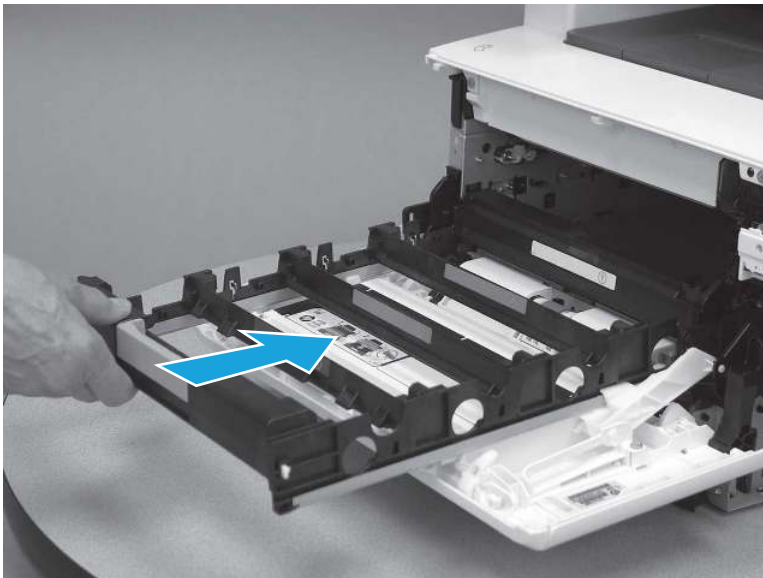
3. Grasp the handle on the toner cartridge, and then pull the toner cartridge straight up to remove it. Repeat this step for each toner cartridge.

**Figure 5-857** Remove the toner cartridges



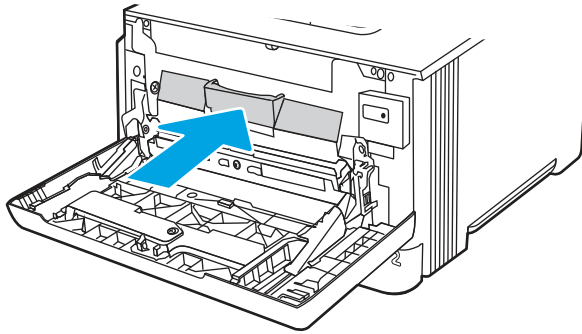
4. Slide the cartridge tray into the printer.

**Figure 5-858** Slide the cartridge tray into the printer



5. Close the front door.

**Figure 5-859** Close the front door



### 3. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

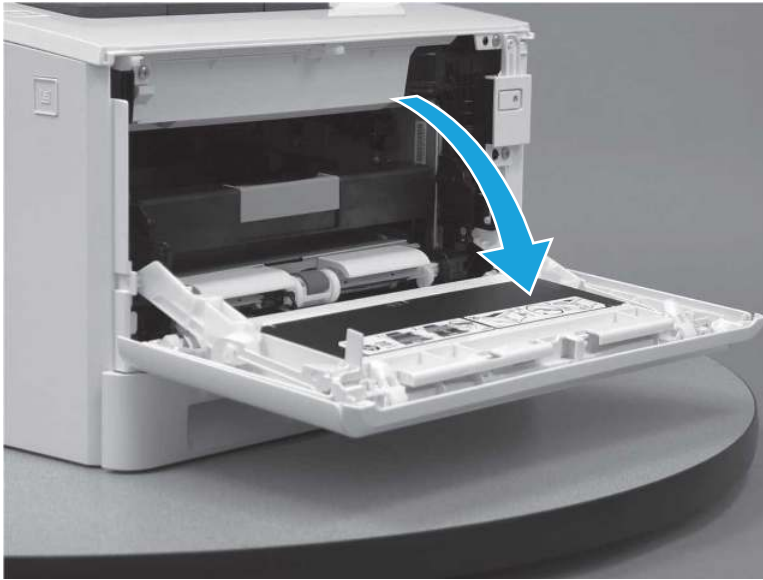
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-860** Release the front door



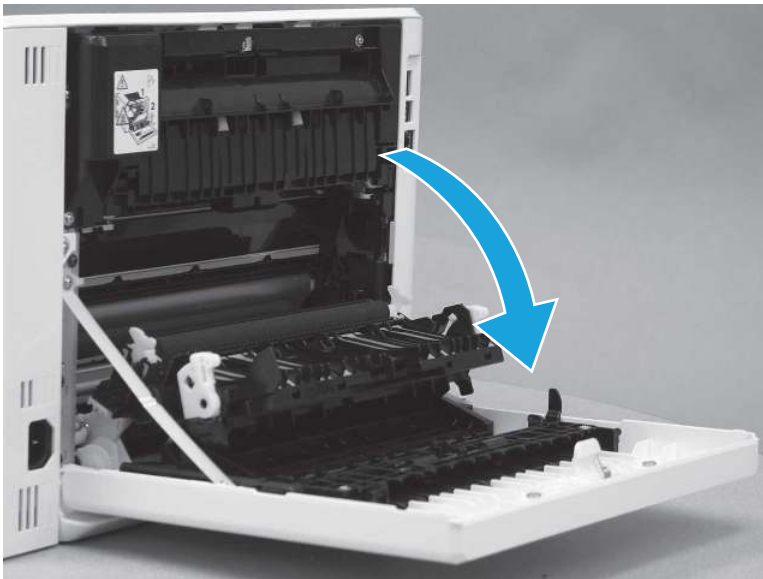
2. Open the front door.

**Figure 5-861** Open the front door



3. Open the duplexing door.

**Figure 5-862** Open the duplexer door



#### 4. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

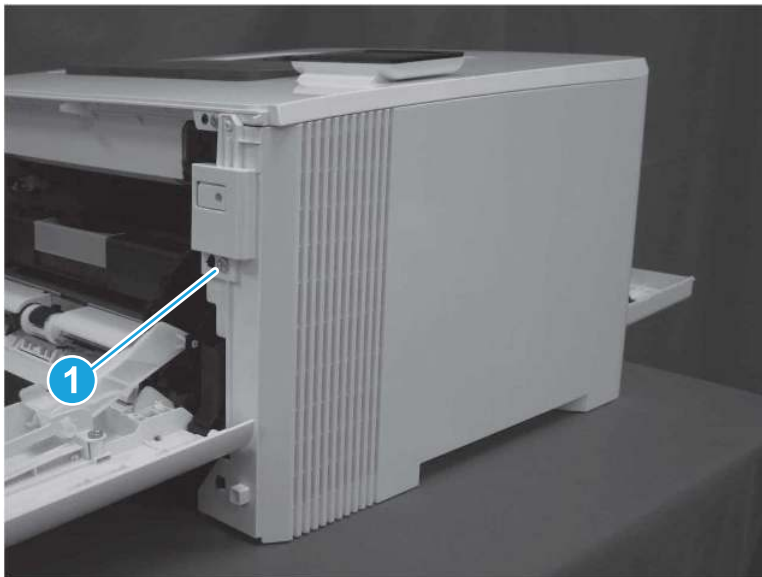
1. At the back of the printer, remove one screw (callout 1).

Figure 5-863 Remove one screw



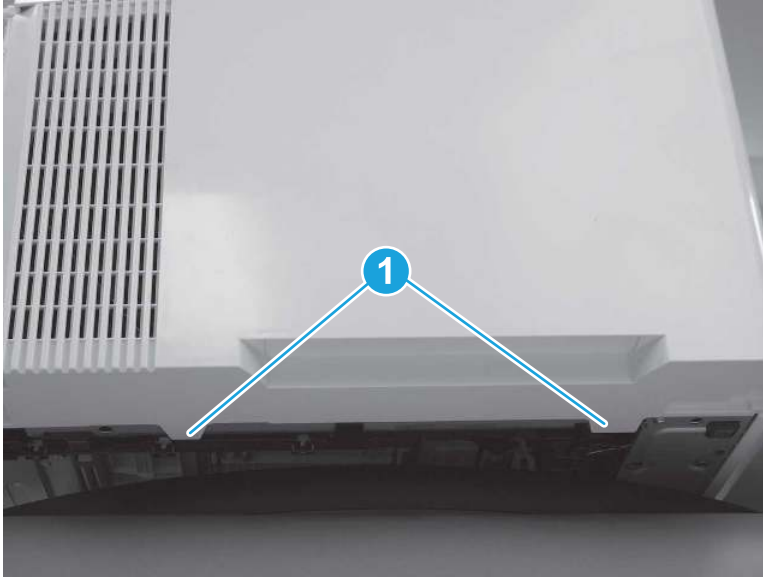
2. At the front of the printer, remove one screw (callout 1).

Figure 5-864 Remove one screw



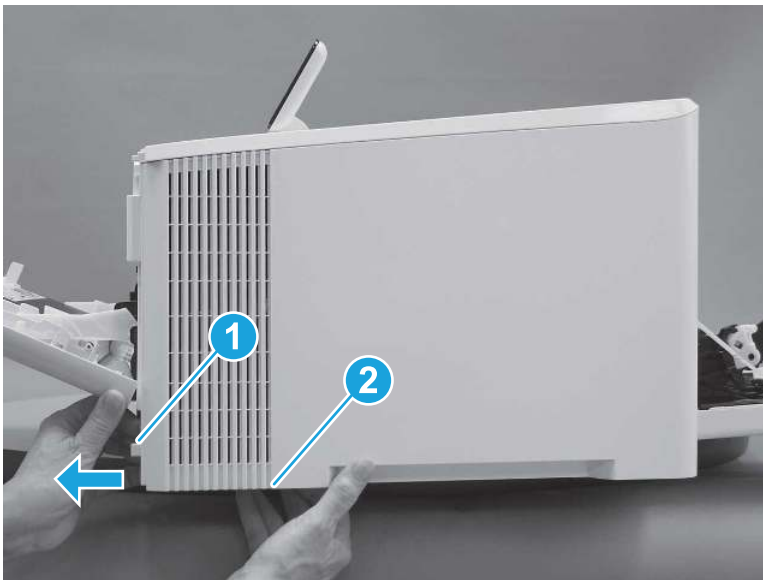
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-865** Locate the tabs



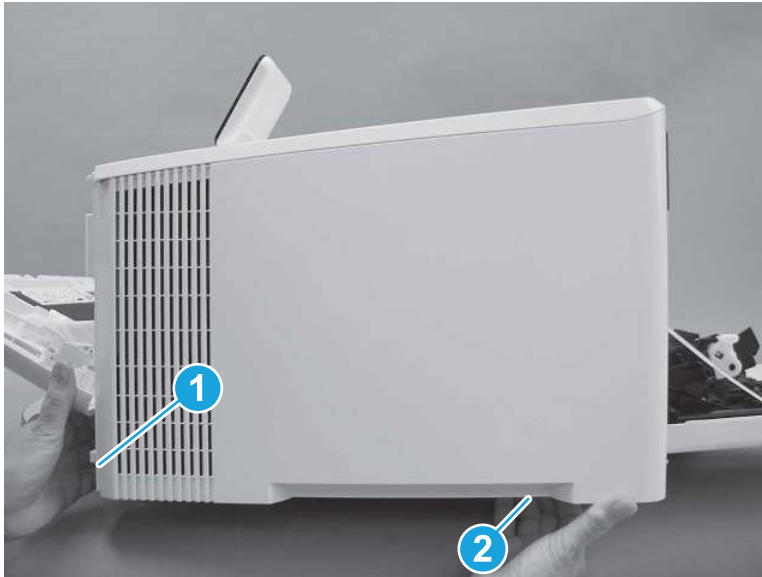
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-866** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

Figure 5-867 Release lower rear tab



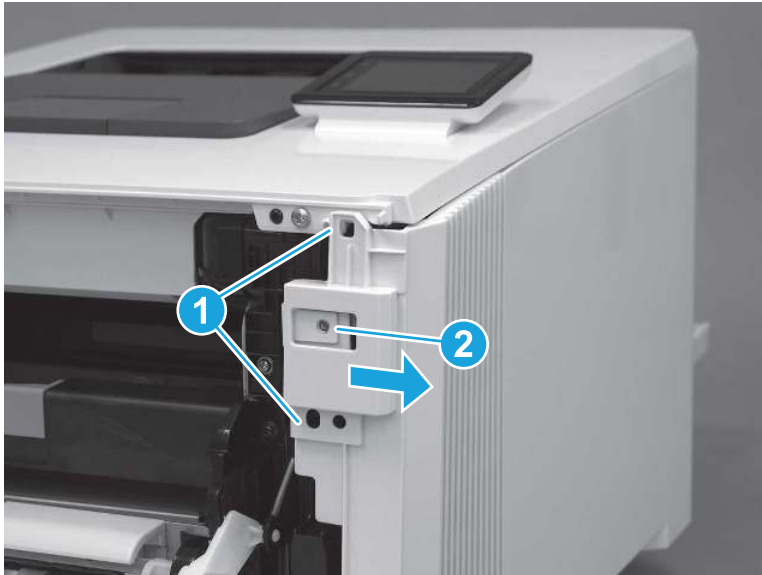
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

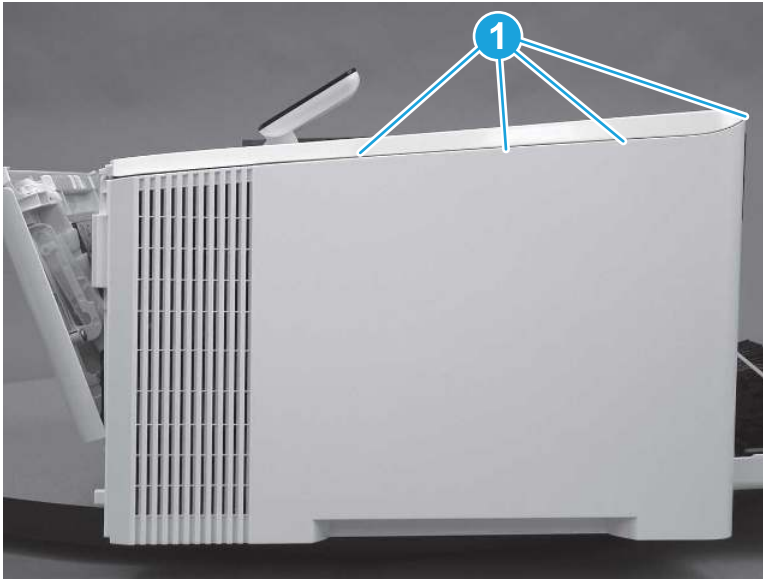
---

Figure 5-868 Release two front tabs



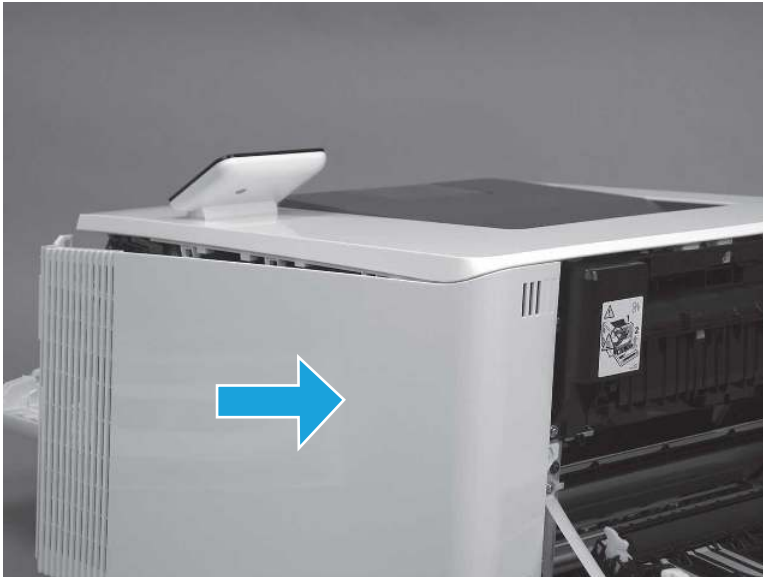
7. Release four tabs on the top of the printer (callout 1).

**Figure 5-869** Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-870** Remove the right cover



## 5. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).



1. Raise the scanner.

**Figure 5-871** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-872** Remove one screw



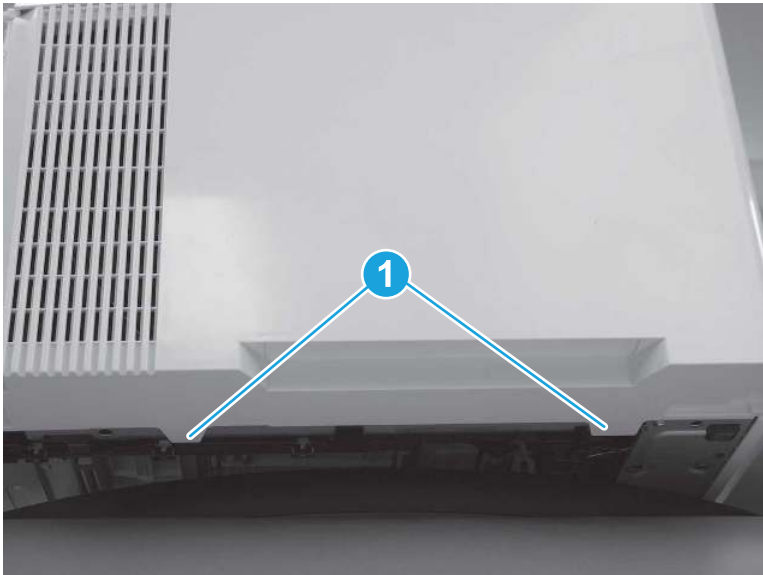
3. At the front of the printer, remove one screw (callout 1).

Figure 5-873 Remove one screw



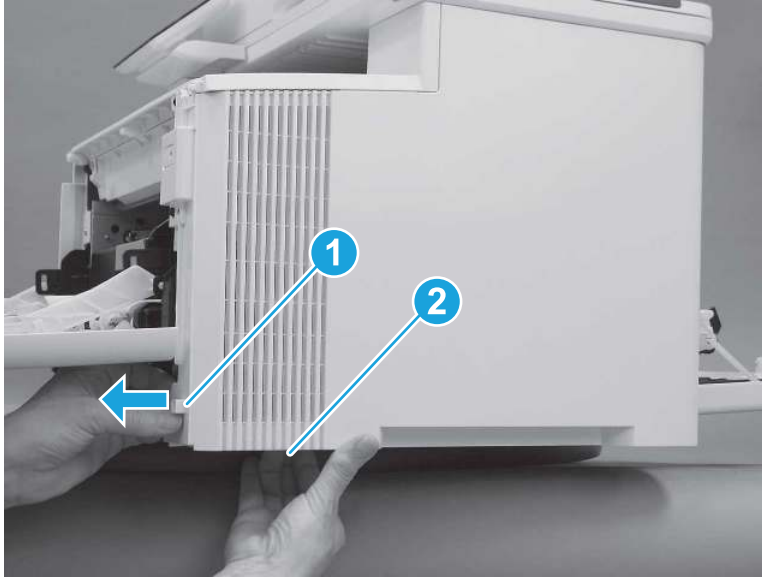
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

Figure 5-874 Locate the tabs



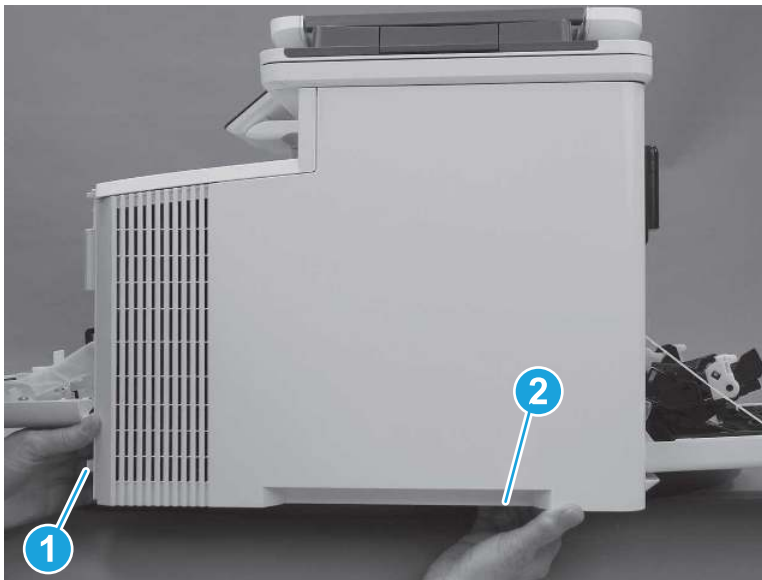
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-875** Release front lower tabs



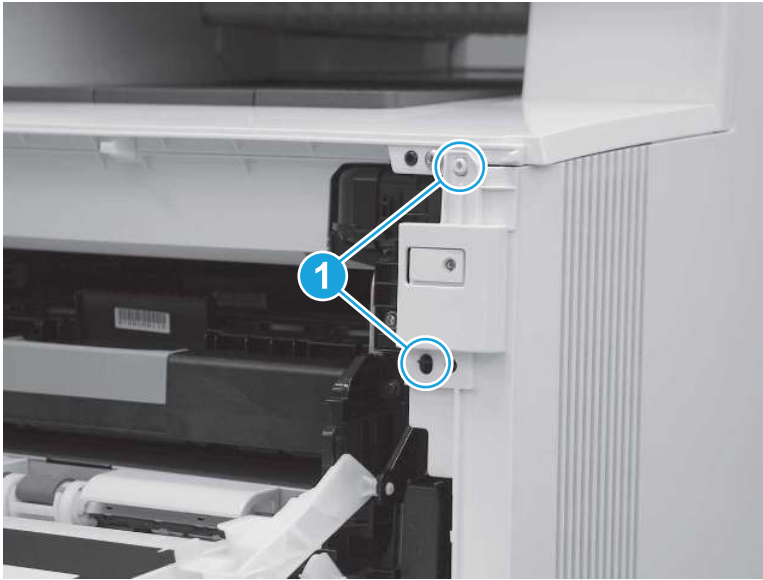
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-876** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-877** Release front upper tabs



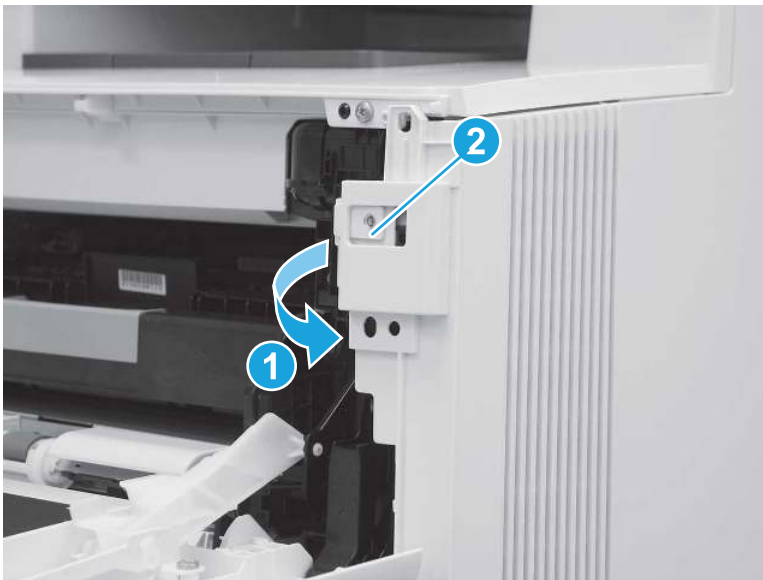
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

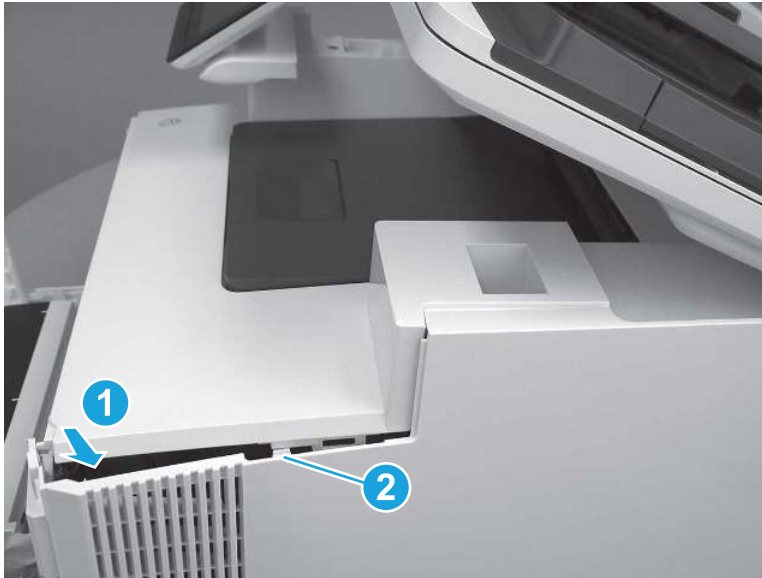
---

**Figure 5-878** Rotate the front of the cover



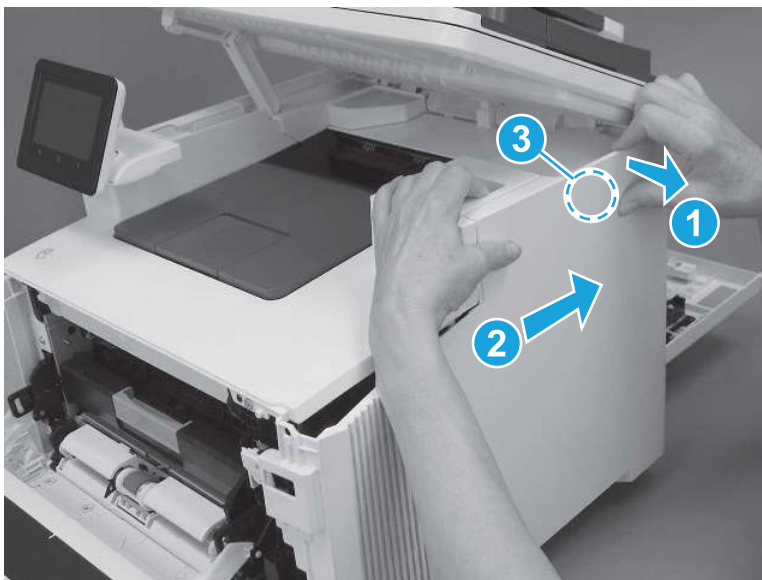
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

**Figure 5-879** Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-880** Release one tab and one hook



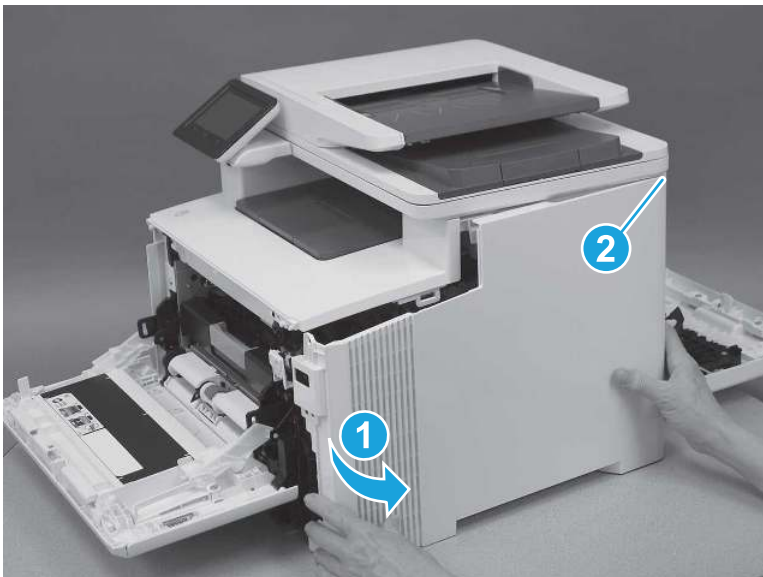
11. Lower the scanner.

**Figure 5-881** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-882** Remove the right cover

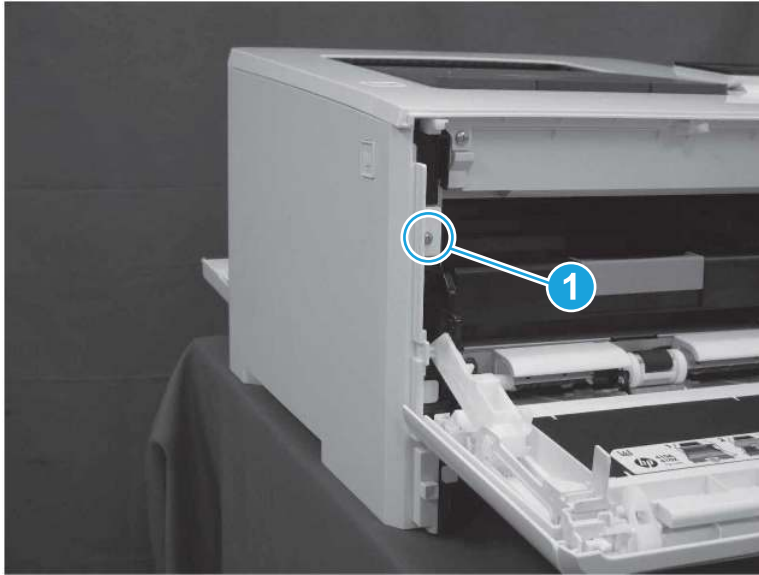


## 6. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

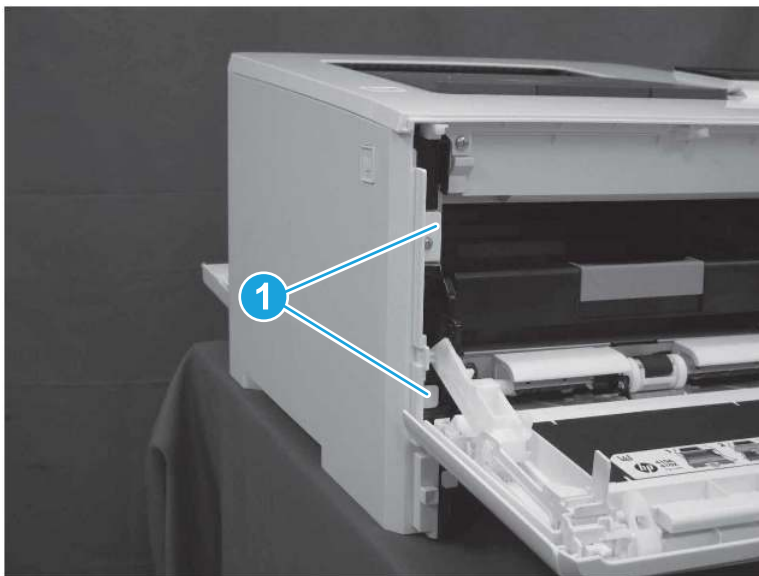
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-883** Remove one screw



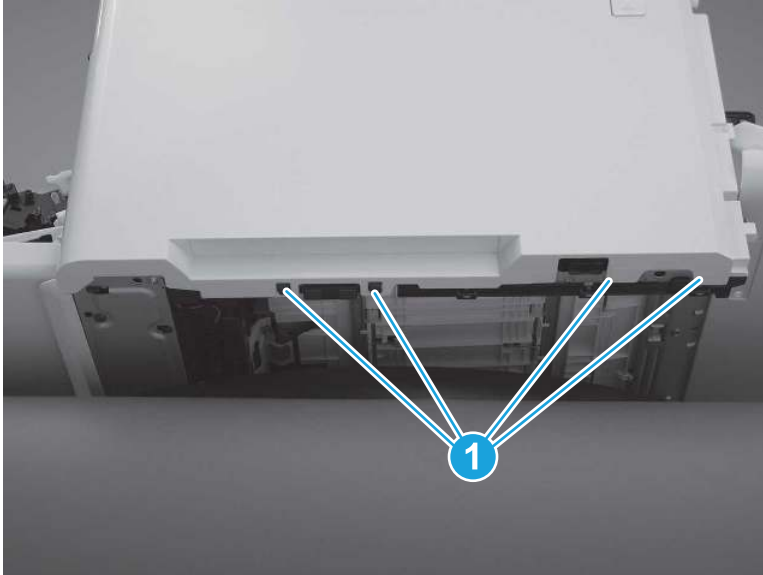
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-884** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-885** Locate the tabs



4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

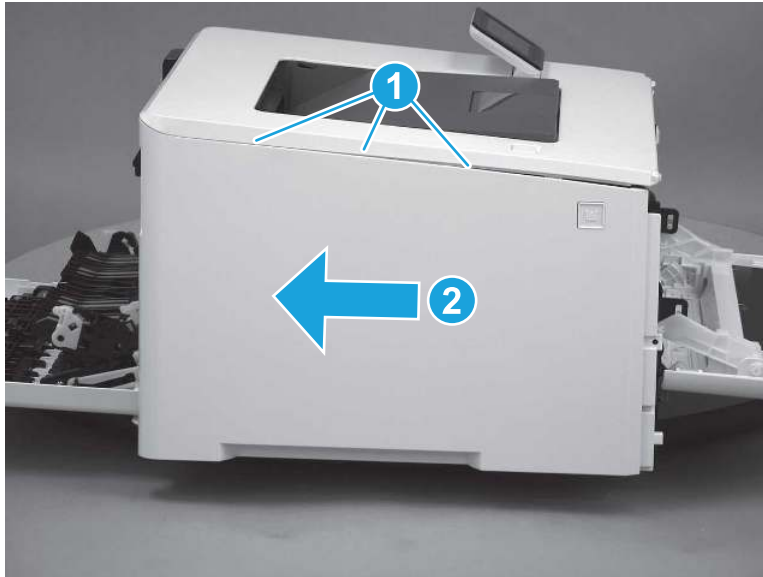
**Figure 5-886** Release bottom tabs





5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

**Figure 5-887** Release three tabs



## 7. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

1. Raise the scanner.

**Figure 5-888** Raise the scanner



2. At the front of the printer, remove one screw (callout 1).

**Figure 5-889** Remove one screw



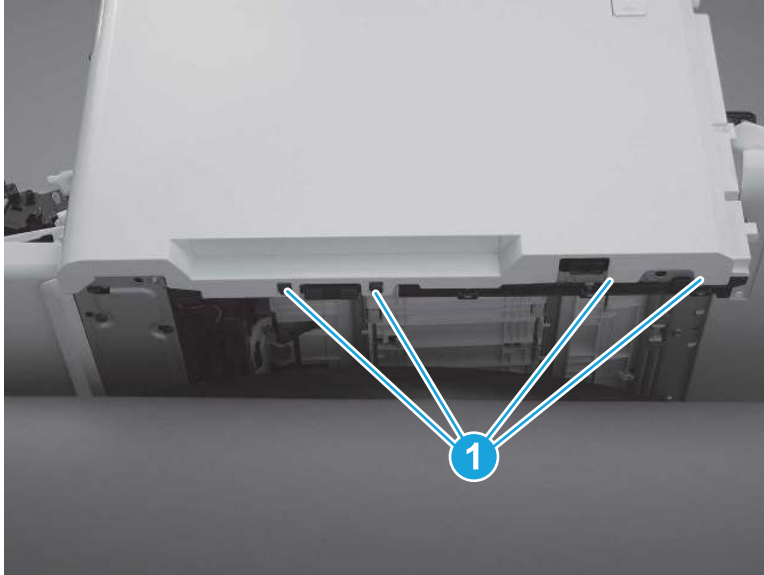
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-890** Release two tabs



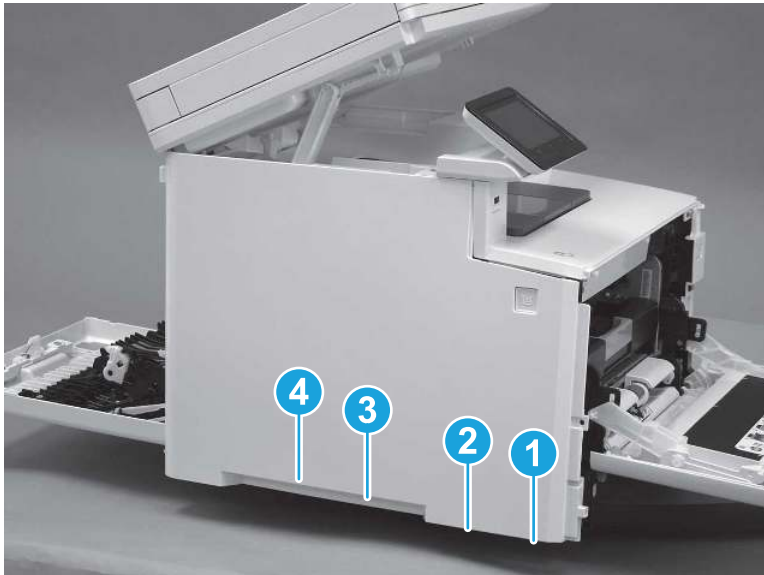
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-891** Locate the tabs



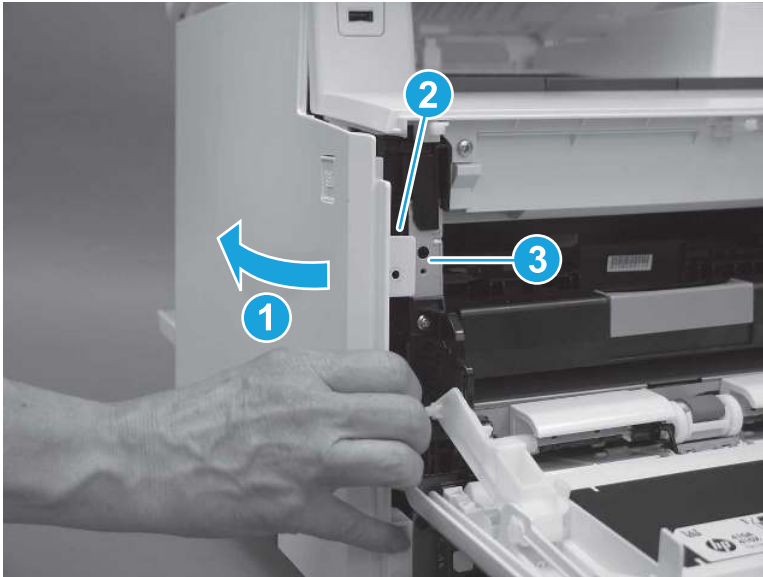
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-892** Release four tabs



6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

**Figure 5-893** Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-894** Release one tab and two hooks



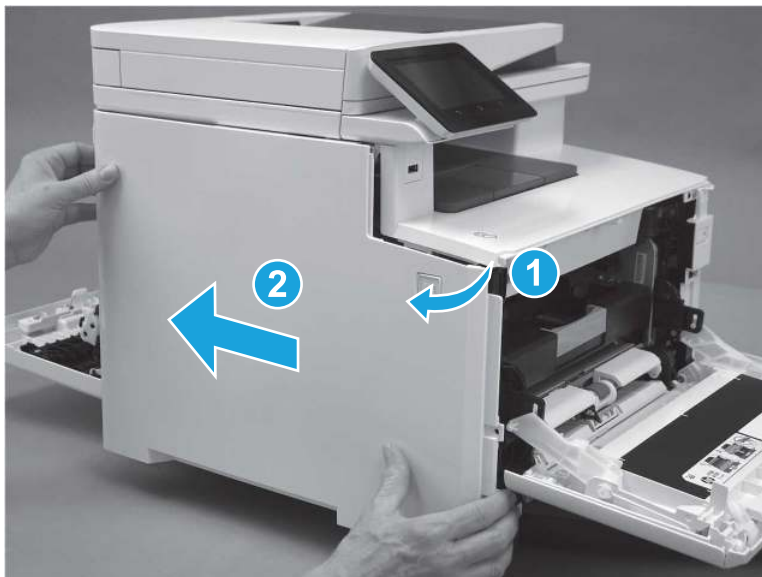
8. Lower the scanner.

Figure 5-895 Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

Figure 5-896 Remove the left cover

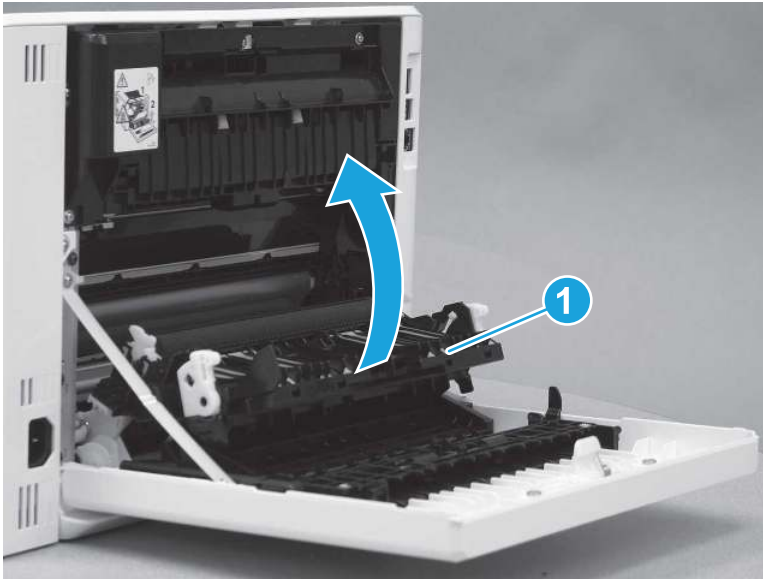


## 8. Remove the duplexing door assembly

Follow these steps to remove the duplexing door assembly.

1. Rotate the secondary transfer assembly (callout 1) toward the printer to close it.

**Figure 5-897** Close the secondary transfer assembly



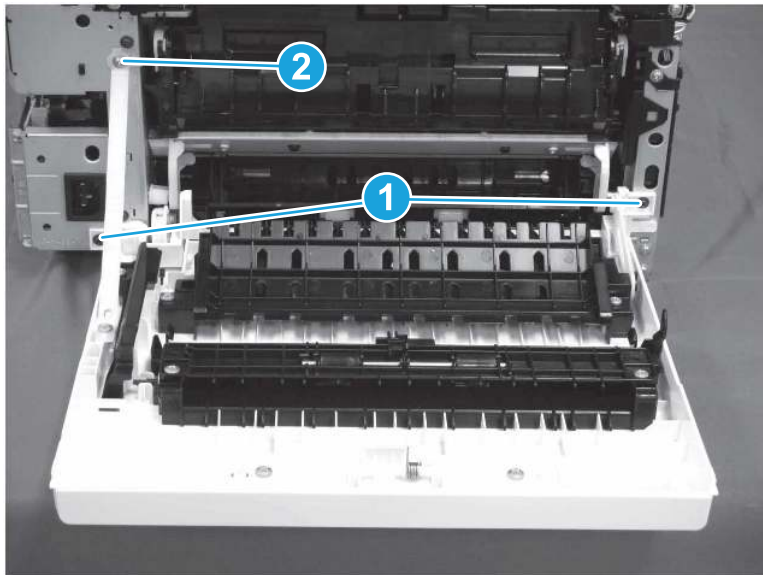
2. At the back of the printer, remove two screws (callout 1), and then remove one screw (callout 2) that holds the retention arm.

---

 **TIP:** Note that the screw (callout 2) that holds the retention arm is longer than the other two. Make sure this screw is installed in the correct position.

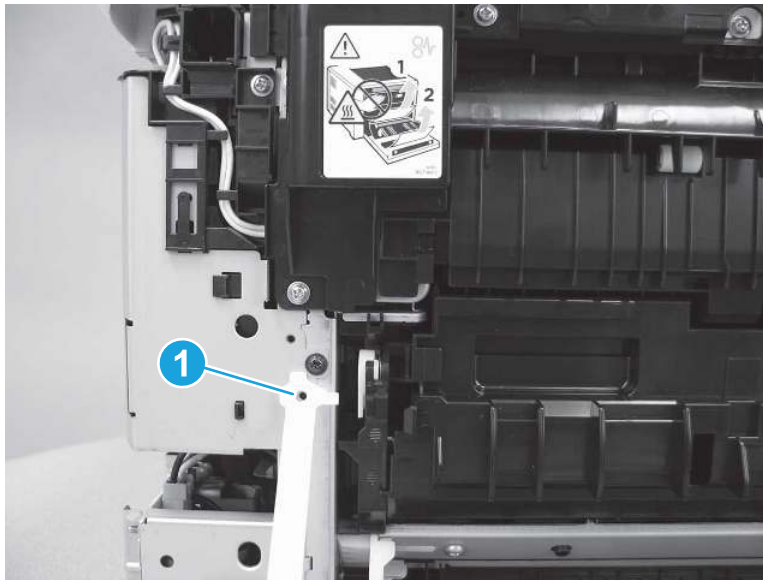
---

**Figure 5-898** Remove three screws



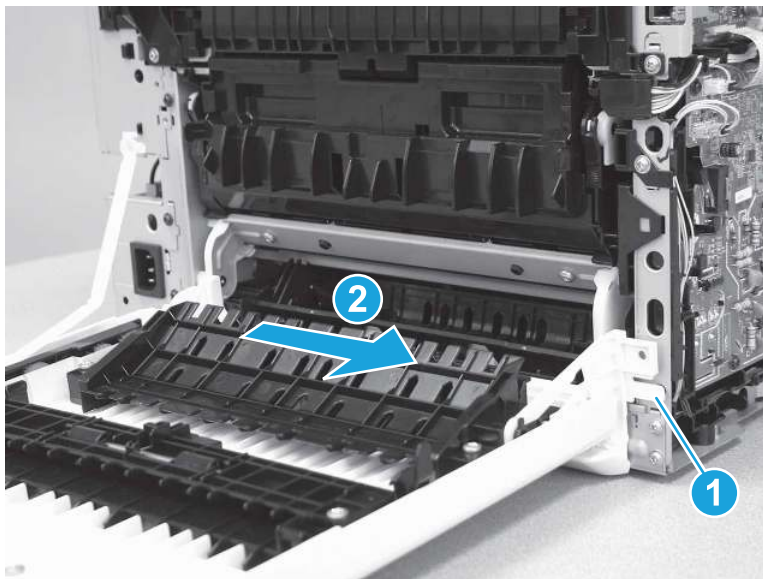
3. Release the retention arm (callout 1).

**Figure 5-899** Release the retention arm



4. Release one tab (callout 1), and then slide the duplexer door (callout 2) to the right to remove it.

**Figure 5-900** Remove the duplexer door

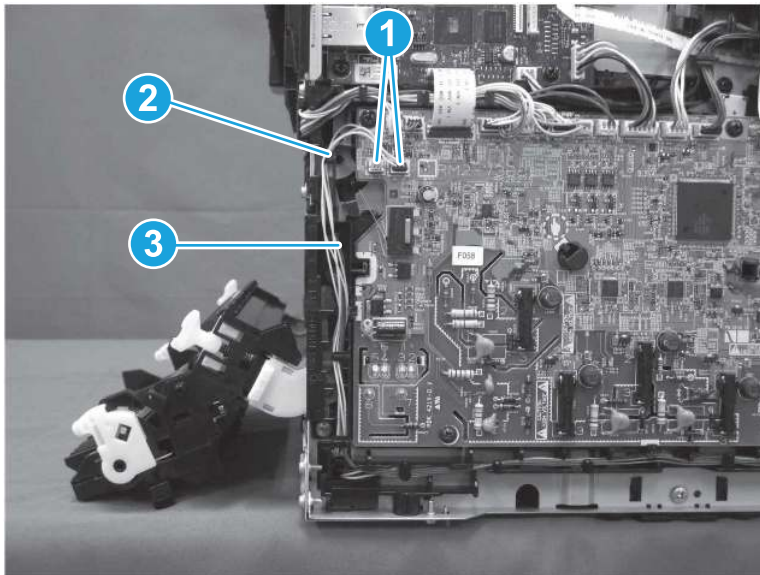


## 9. Remove the re-pickup assembly

Follow these steps to remove the re-pickup assembly.

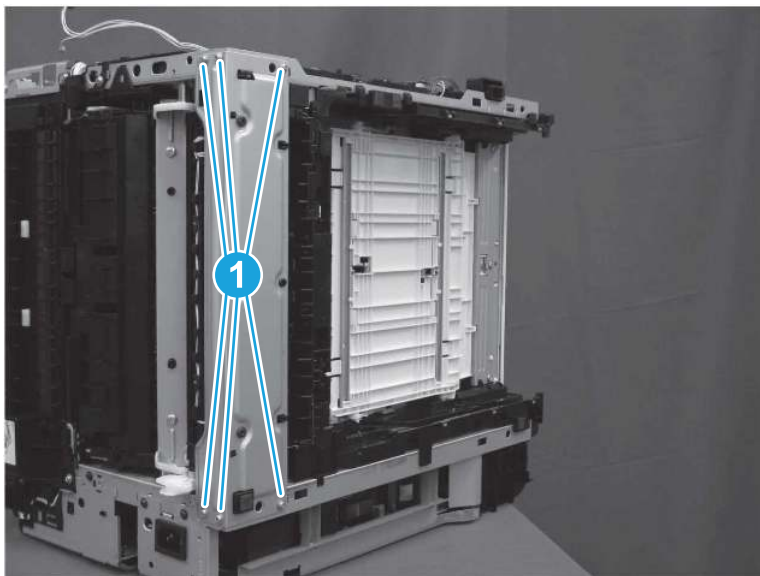
1. On the left side of the printer, disconnect two connectors (callout 1), and then remove the cables (callout 2) from the guides (callout 3).

**Figure 5-901** Disconnect two connectors and remove cables from guides



2. Lay the printer on the right side so that the left side is facing up. Remove six screws (callout 1).

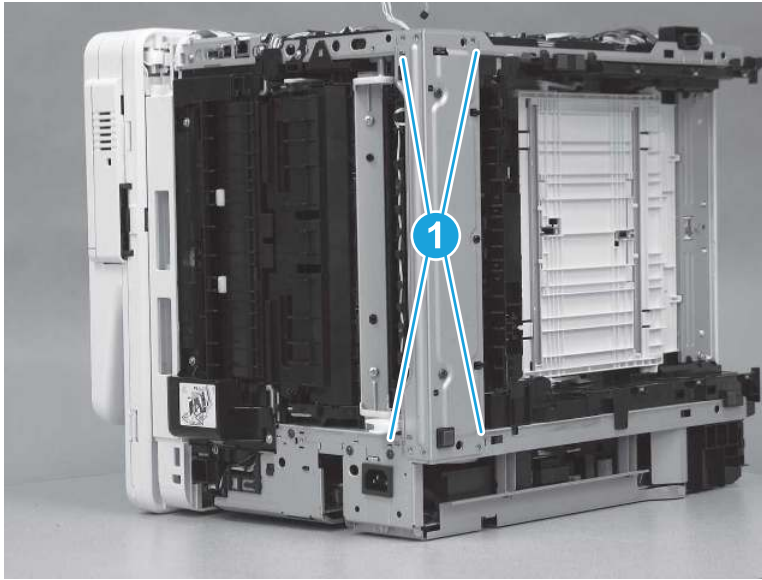
**Figure 5-902** Remove six screws





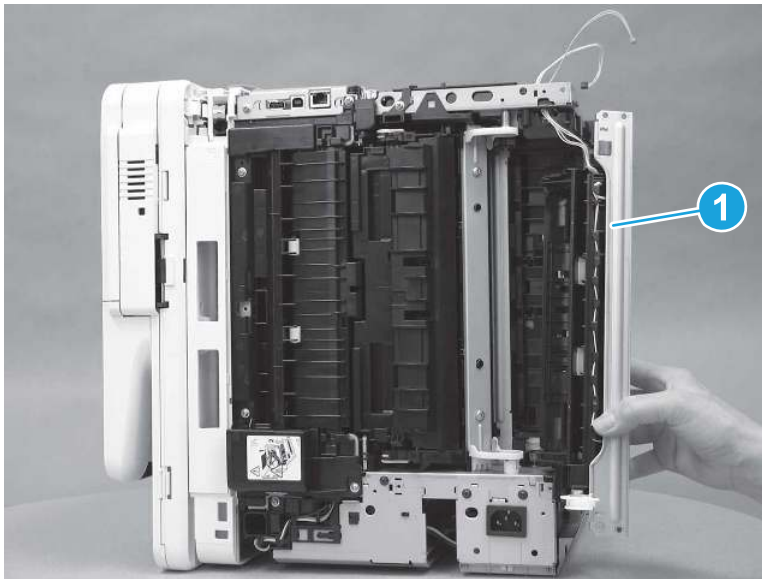
3. Release four tabs (callout 1).

**Figure 5-903** Release four tabs



4. Remove the re-pickup assembly (callout 1).

**Figure 5-904** Remove the 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.

---

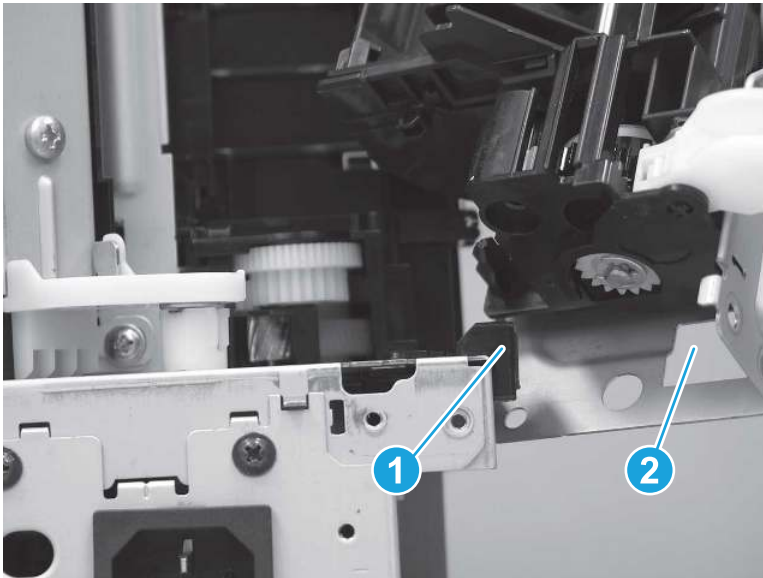
## 11. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Re-pickup assembly

- ▲ Position the foot on the printer (callout 1) through the opening (callout 2) on the re-pickup drive assembly.

**Figure 5-905** Position the foot through the opening



## Removal and replacement: DC controller

Learn how to remove and replace the DC controller.

[View a video of removing and replacing the DC controller.](#)


Mean time to repair: 23 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](http://www.hp.com/buy/parts).

**Table 5-37** Part information

Part number	Part description
RM3-7272-000CN	DC controller

## 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


Make sure that the printer initializes to a **Ready** state.

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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

**Figure 5-906** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

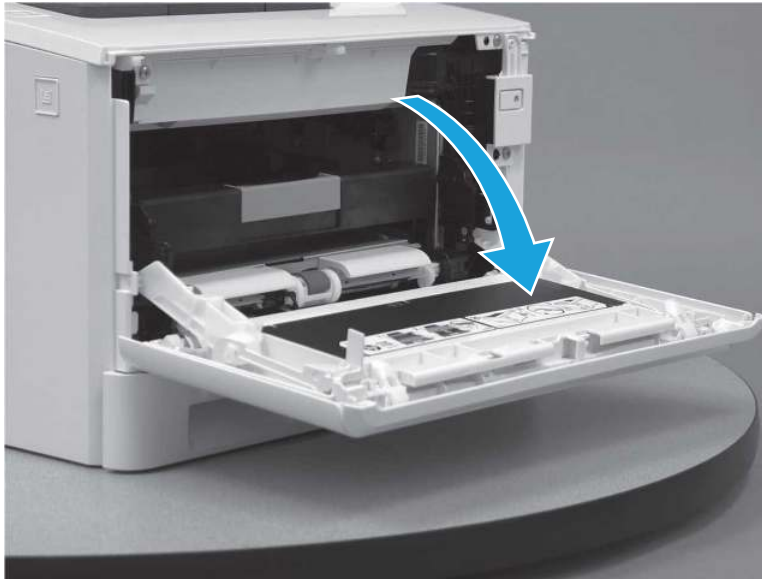
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-907** Release the front door



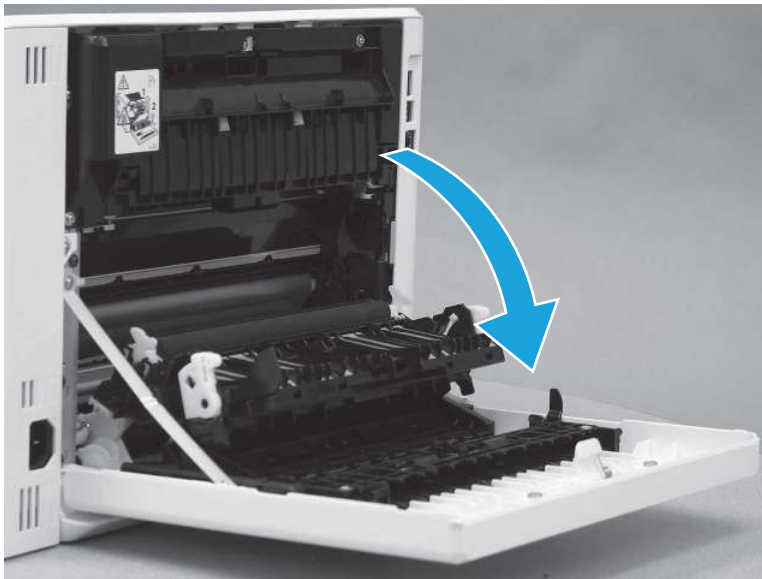
2. Open the front door.

**Figure 5-908** Open the front door



3. Open the duplexing door.

**Figure 5-909** Open the duplexer door

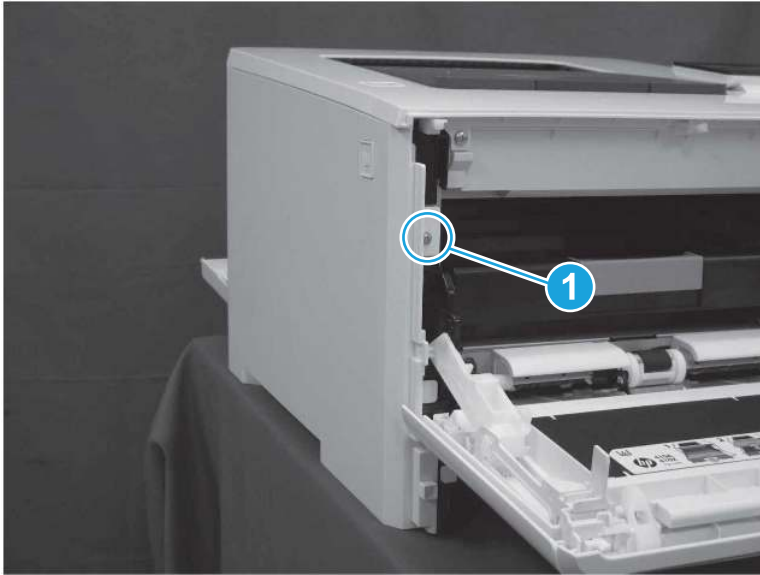


### 3. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

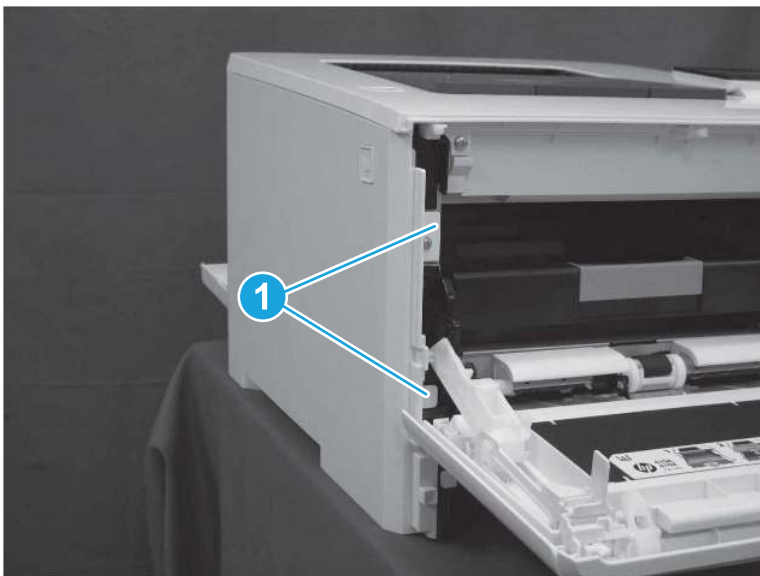
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-910** Remove one screw



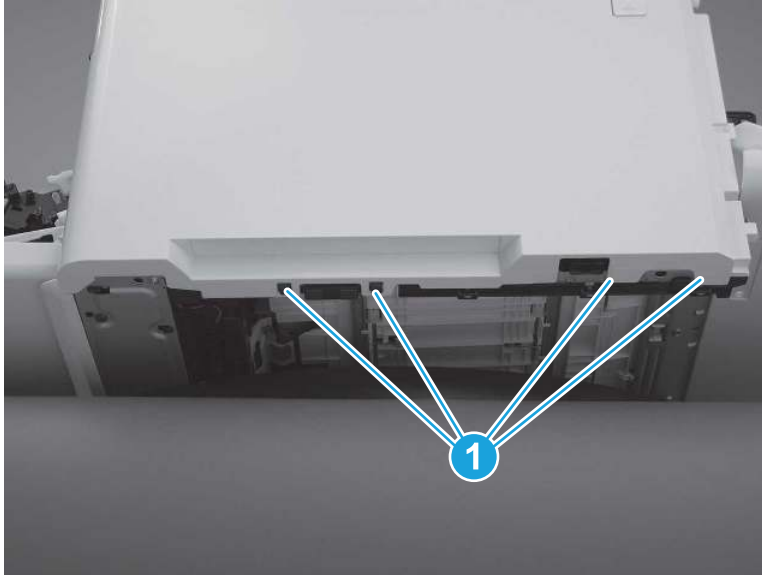
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-911** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-912** Locate the tabs



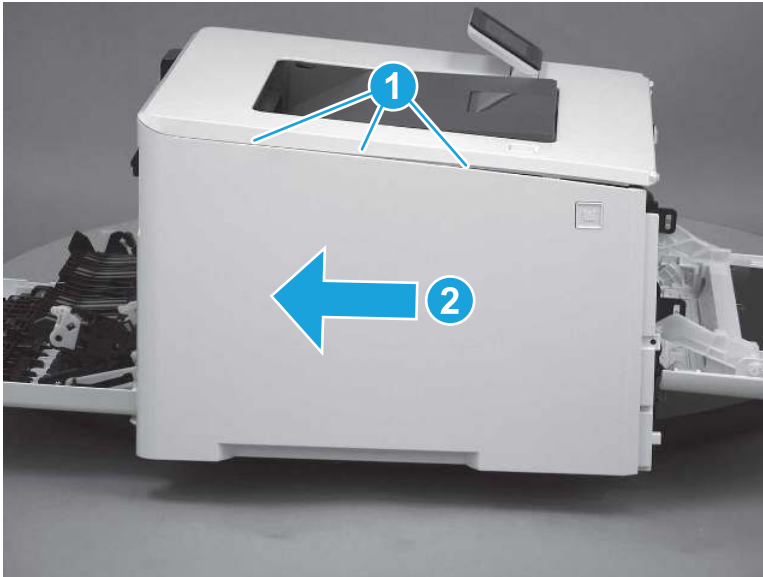
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-913** Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

**Figure 5-914** Release three tabs



#### 4. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

1. Raise the scanner.

**Figure 5-915** Raise the scanner





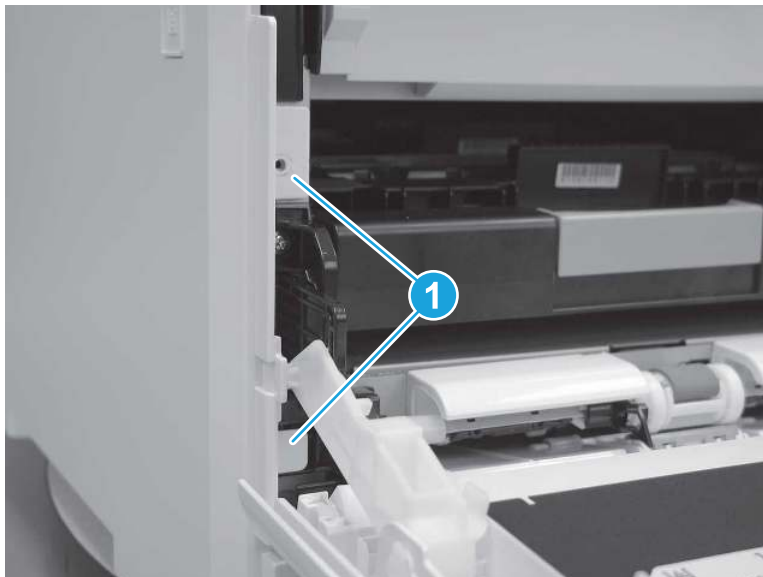
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-916** Remove one screw



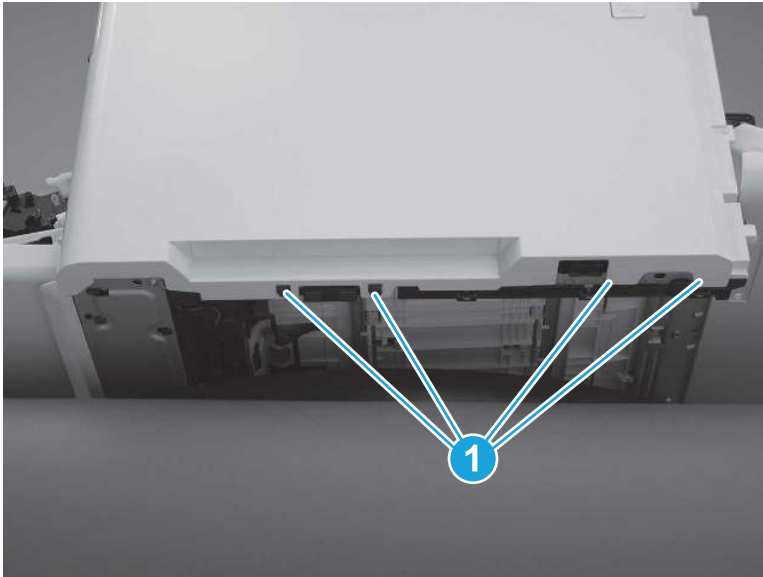
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-917** Release two tabs



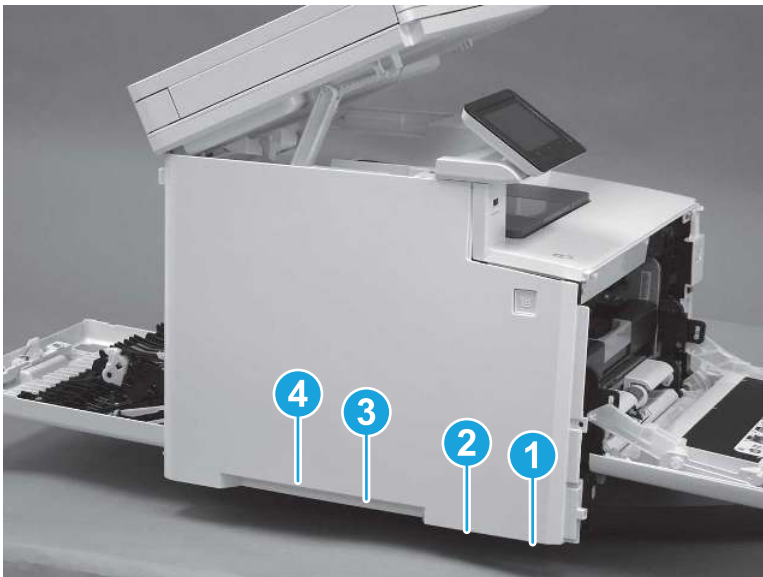
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-918** Locate the tabs



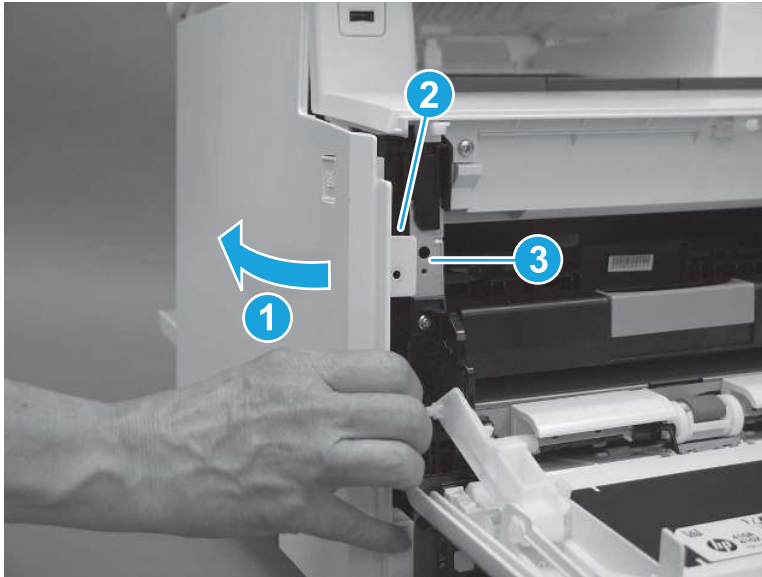
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-919** Release four tabs



6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

**Figure 5-920** Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-921** Release one tab and two hooks



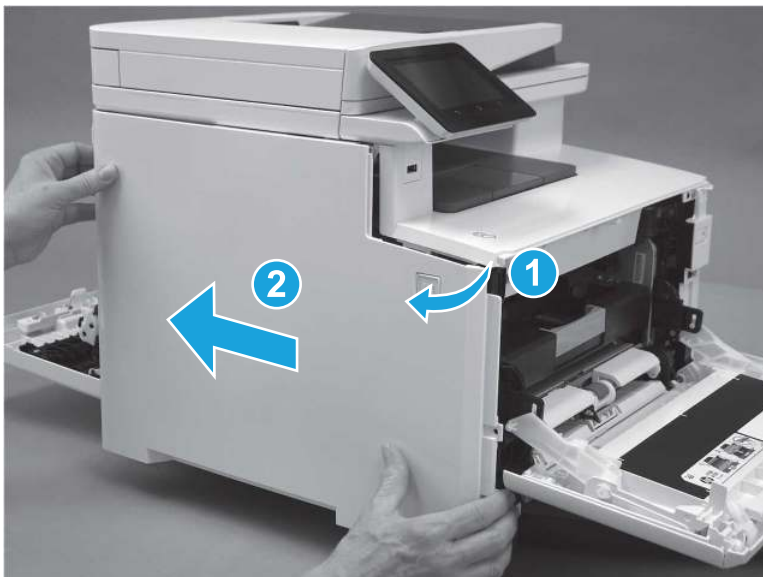
8. Lower the scanner.

Figure 5-922 Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.


Figure 5-923 Remove the left cover



## 5. Remove the DC controller

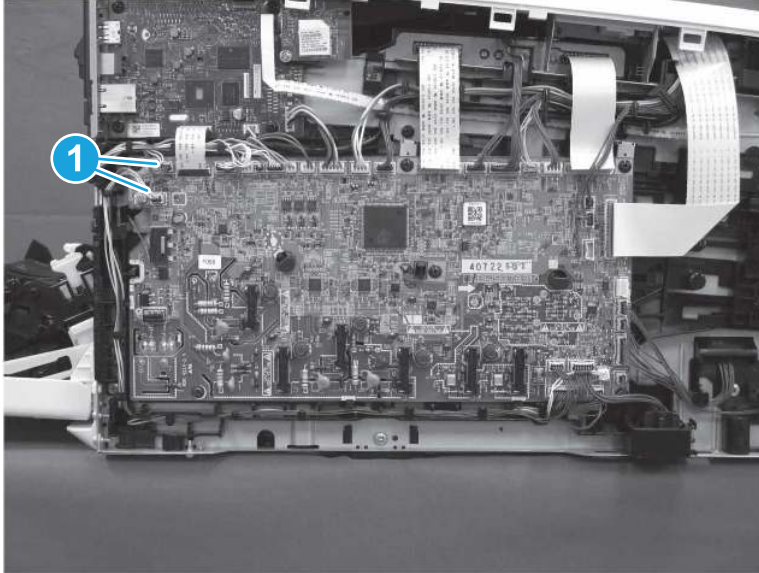
Follow these steps to remove the DC controller.

1. Before disconnecting the connectors in the next step, take note of the position of two of the cables (callout 1).

 **IMPORTANT:** These cables can be mistakenly switched when reinstalled. The connectors on the cables fit in either connector on the DC controller. Make sure that these cables are installed in the correct connectors.

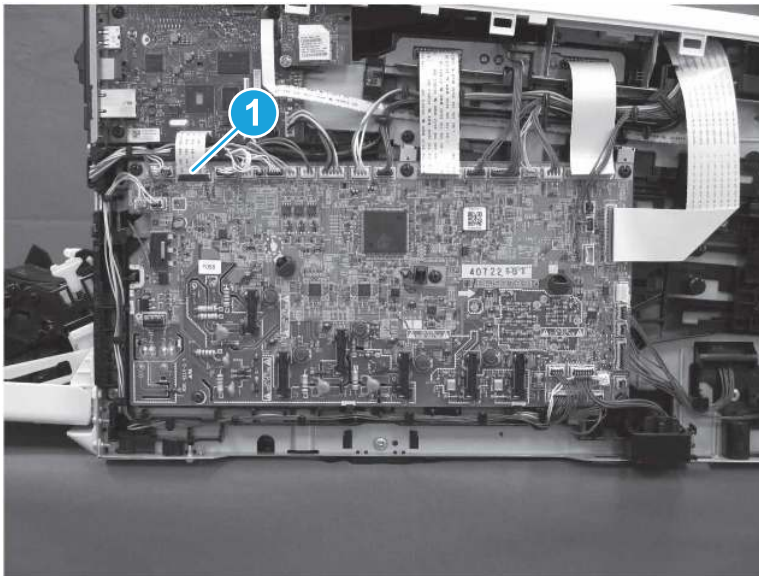
The upper cable is purple and the lower cable is yellow. *If the cables are switched, the printer jams repeatedly when duplex printing.*

**Figure 5-924** Check the cables



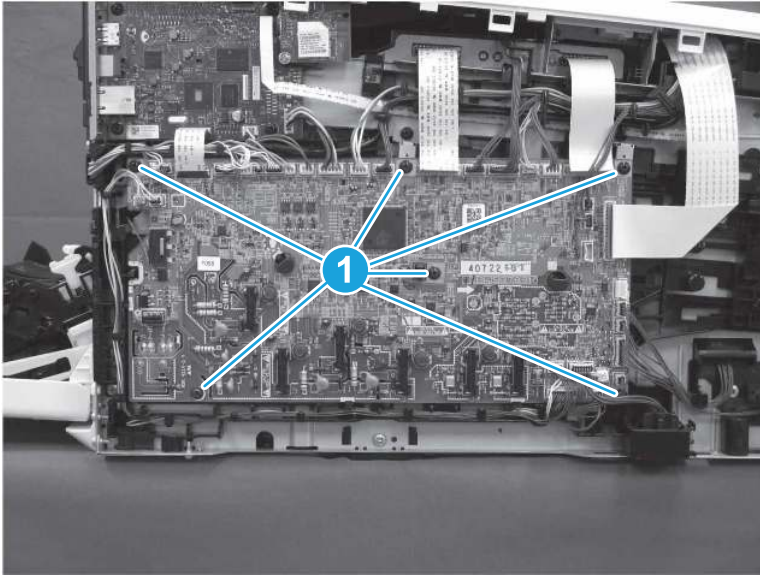
2. Disconnect all of the connectors on the DC controller. Note that one connector (callout 1) is a zero insertion force (ZIF) connector. Lift the latch on the connector before removing the flat cable.

**Figure 5-925** Disconnect all of the connectors



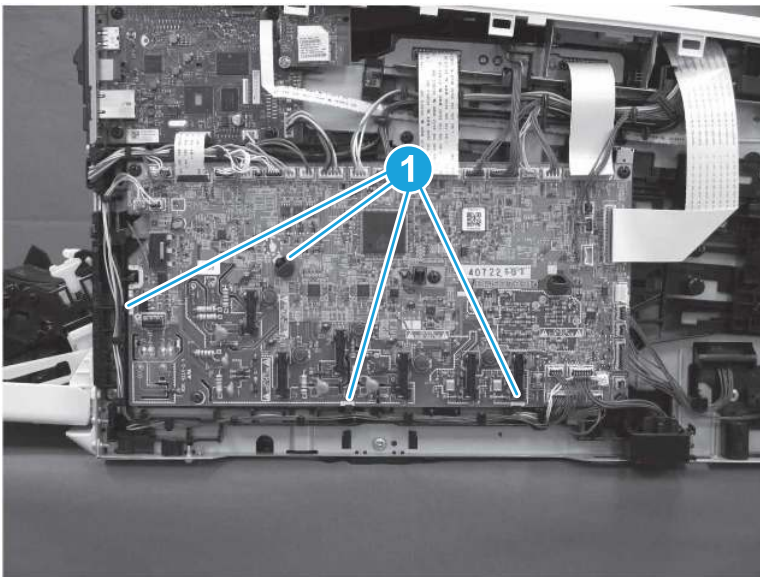
3. Remove six screws (callout 1).

Figure 5-926 Remove six screws



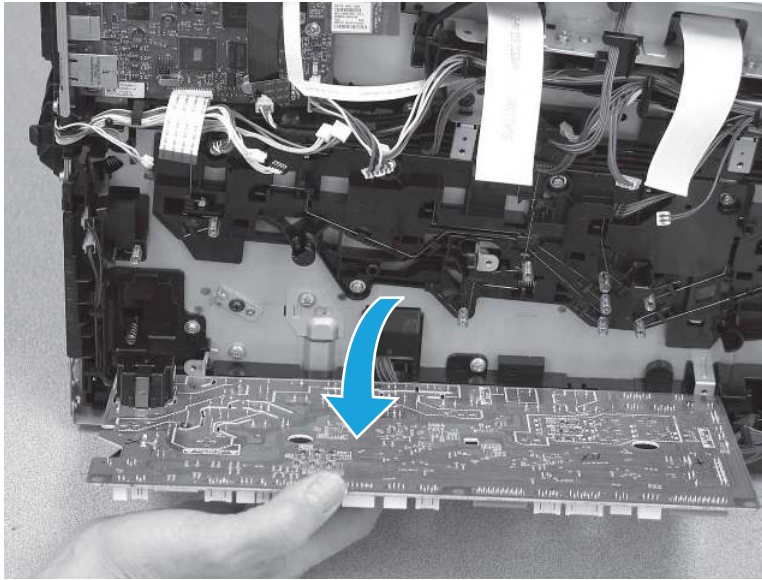
4. Release four tabs (callout 1).

Figure 5-927 Release four tabs



5. Remove the DC controller.

**Figure 5-928** 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: Lifter drive assembly

Learn how to remove and replace the lifter drive assembly.

[View a video of removing and replacing the lifter drive assembly.](#)

Mean time to repair: 56 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](http://www.hp.com/buy/parts).

**Table 5-38** Part information

Part number	Part description
RM2-6370-000CN	Lifter drive 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

Make sure that the printer initializes to a **Ready** state.


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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---



Figure 5-929 Remove the tray

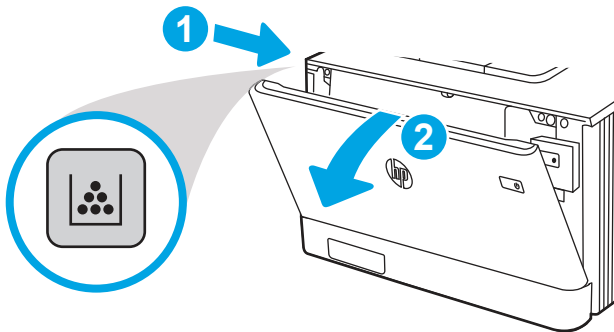


## 2. Remove the toner cartridges

Follow these steps to remove the toner cartridges.

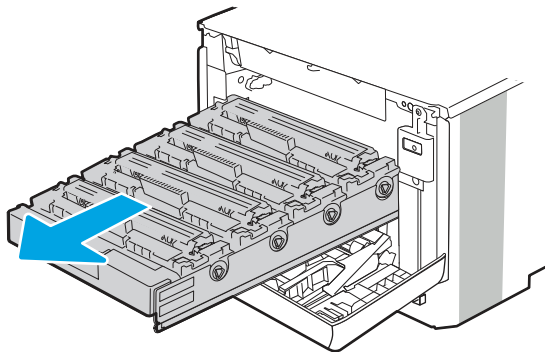
1. Open the front door by pressing the button on the left cover.

Figure 5-930 Open the front door



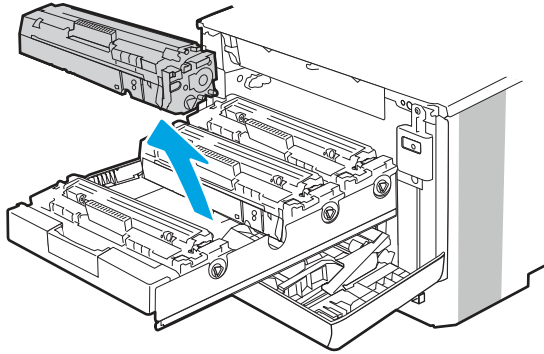
2. Grasp the blue handle on the toner cartridge tray, and then pull out the tray.

Figure 5-931 Open the cartridge drawer



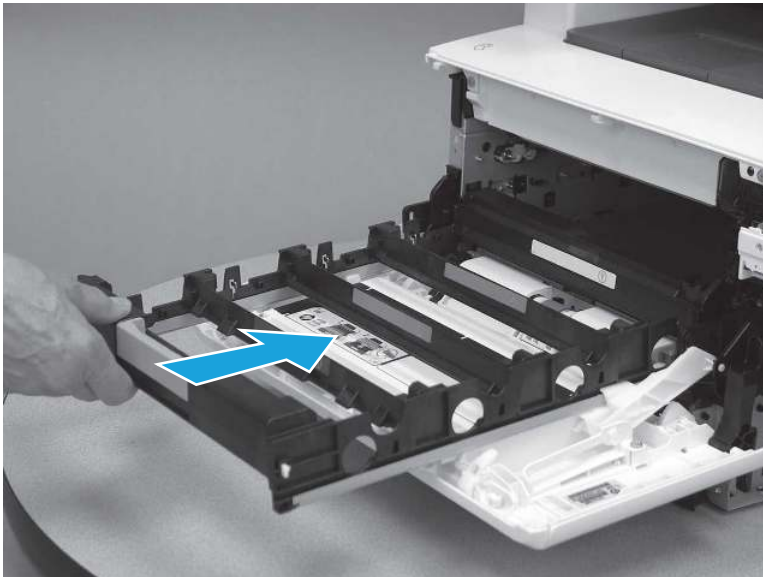
3. Grasp the handle on the toner cartridge, and then pull the toner cartridge straight up to remove it. Repeat this step for each toner cartridge.

**Figure 5-932** Remove the toner cartridges



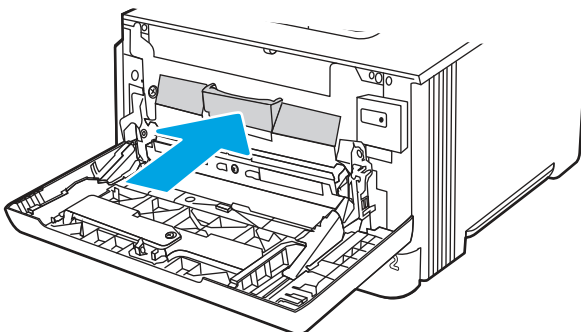
4. Slide the cartridge tray into the printer.

**Figure 5-933** Slide the cartridge tray into the printer



5. Close the front door.

**Figure 5-934** Close the front door



### 3. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

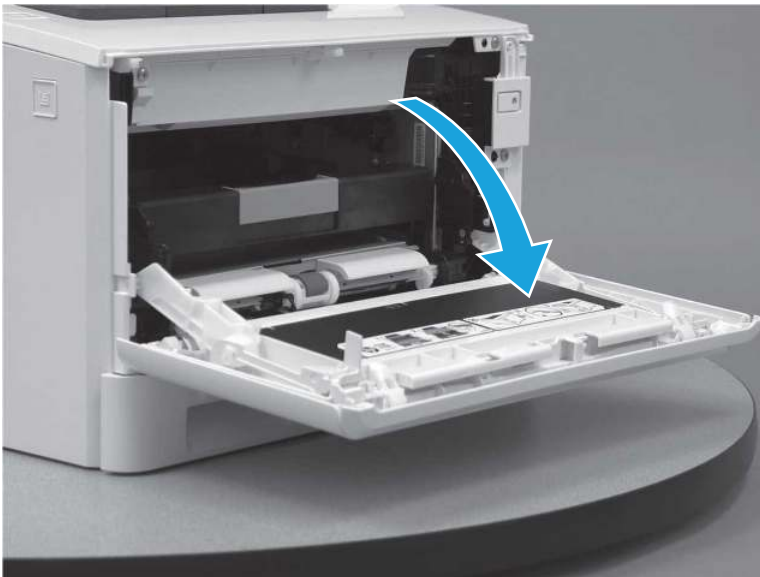
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-935** Release the front door



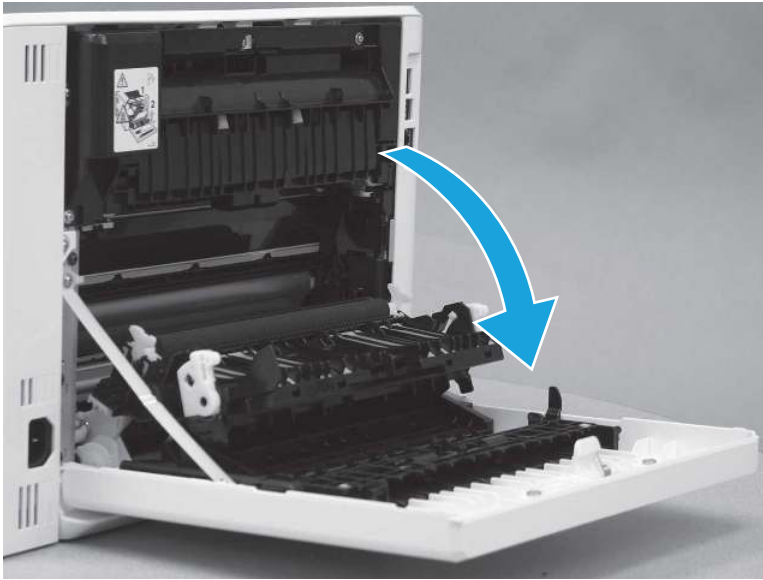
2. Open the front door.

**Figure 5-936** Open the front door



3. Open the duplexing door.

**Figure 5-937** Open the duplexer door

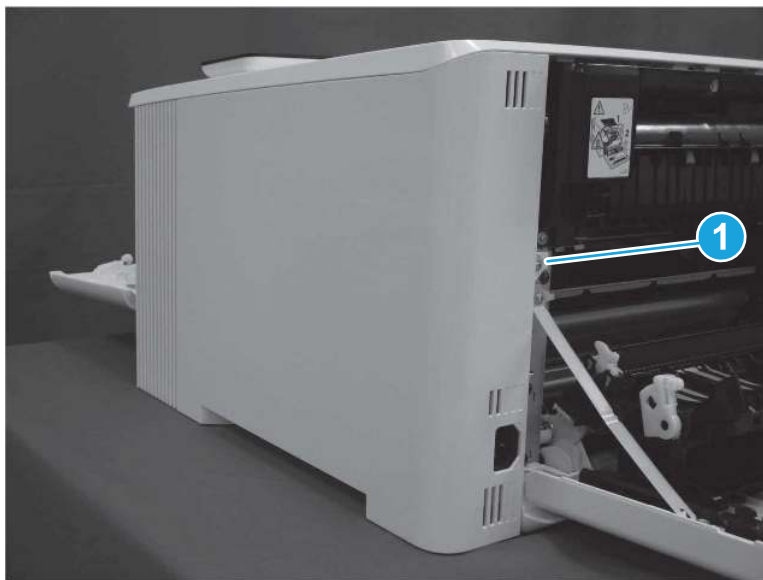


#### 4. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

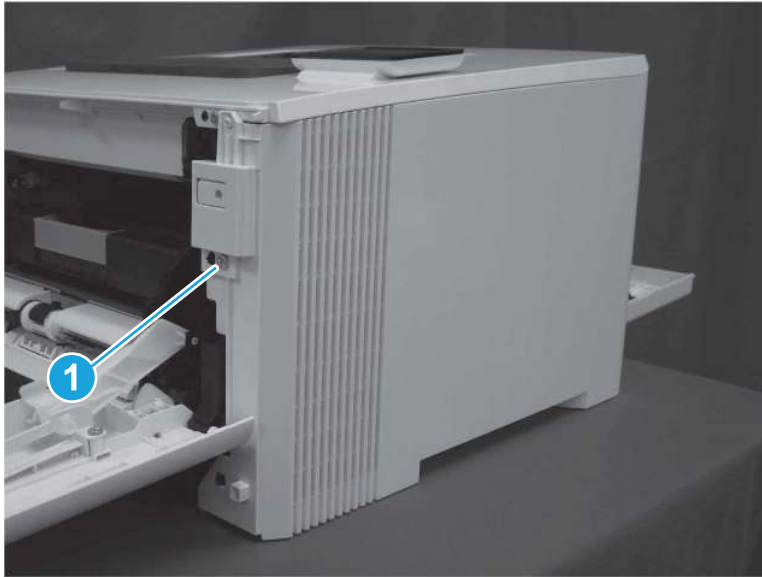
1. At the back of the printer, remove one screw (callout 1).

**Figure 5-938** Remove one screw



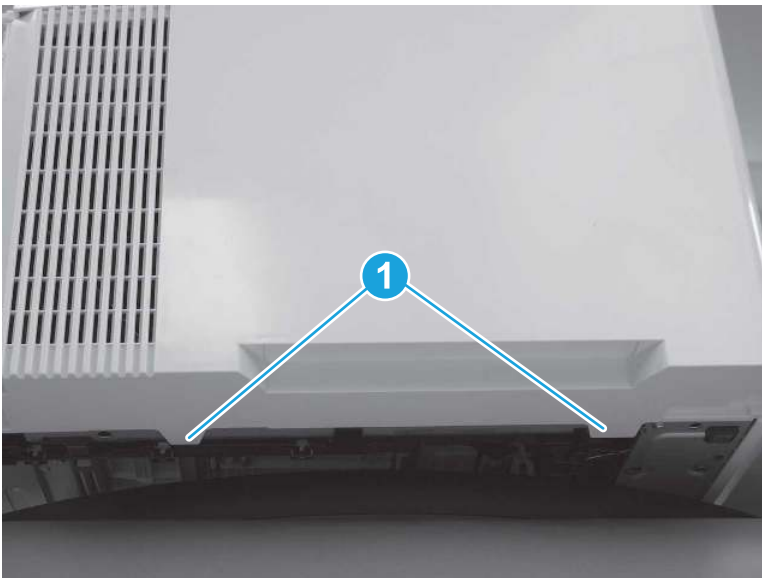
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-939** Remove one screw



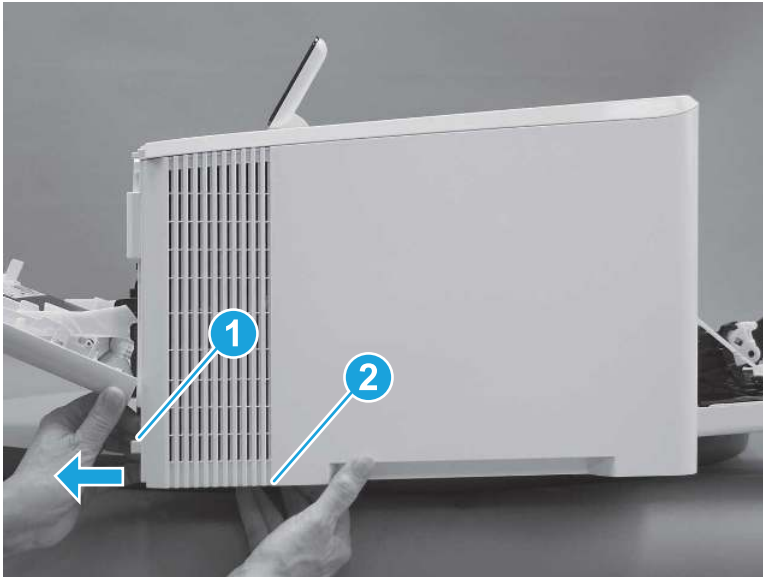
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-940** Locate the tabs



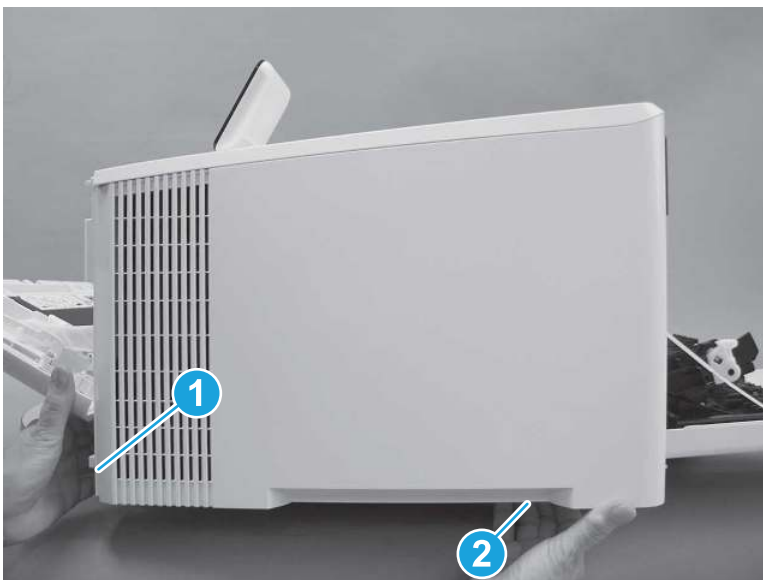
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-941** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

**Figure 5-942** Release lower rear tab



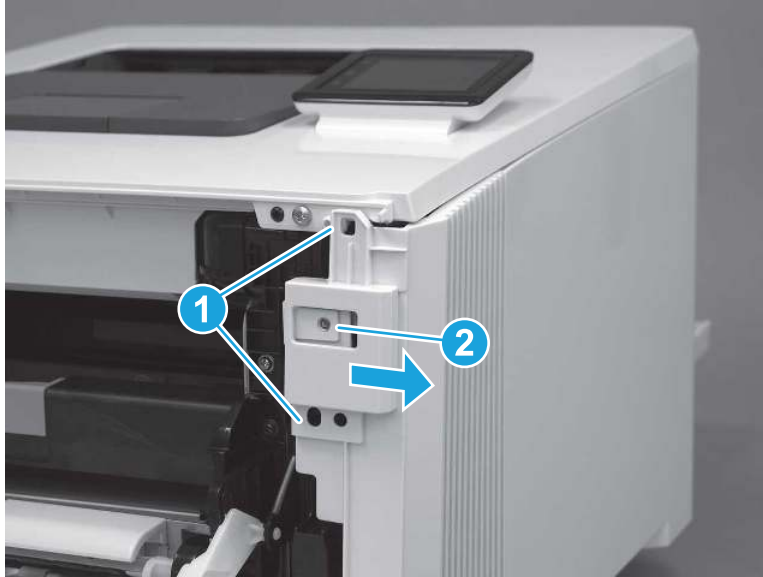
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

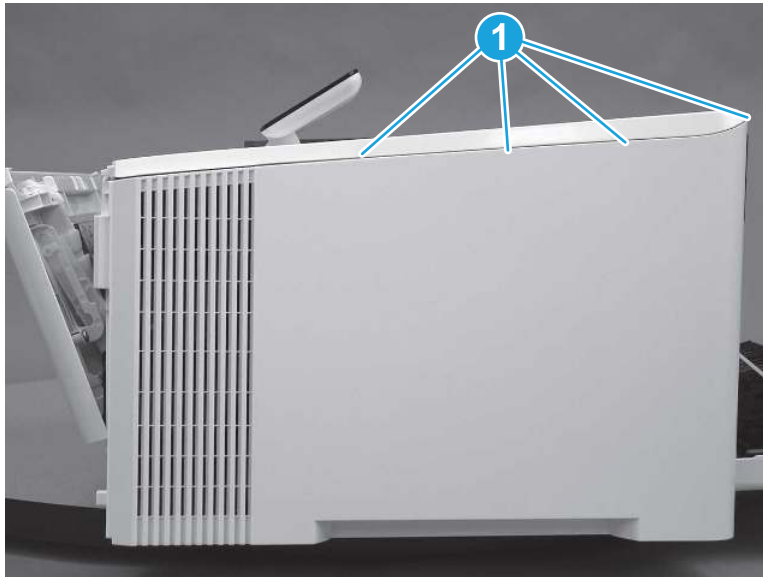
---

Figure 5-943 Release two front tabs



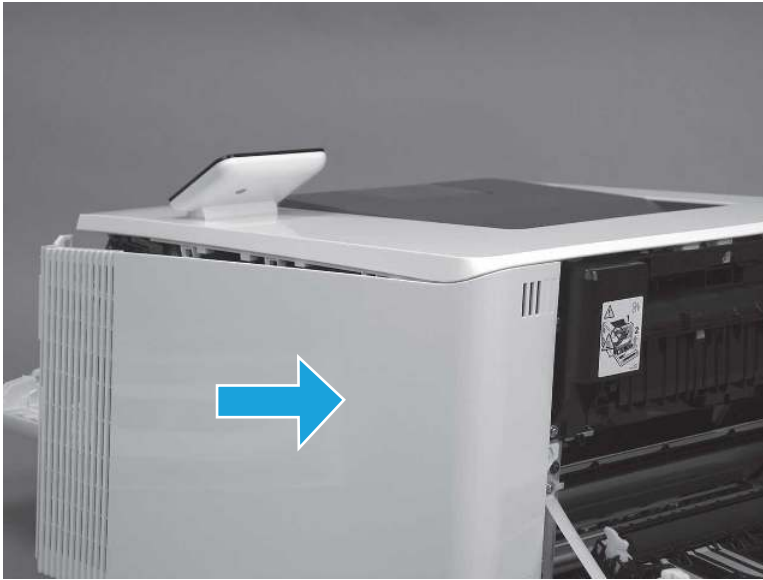
7. Release four tabs on the top of the printer (callout 1).

Figure 5-944 Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-945** Remove the right cover



## 5. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

**Figure 5-946** Raise the scanner





2. At the back of the printer, remove one screw (callout 1).

**Figure 5-947** Remove one screw



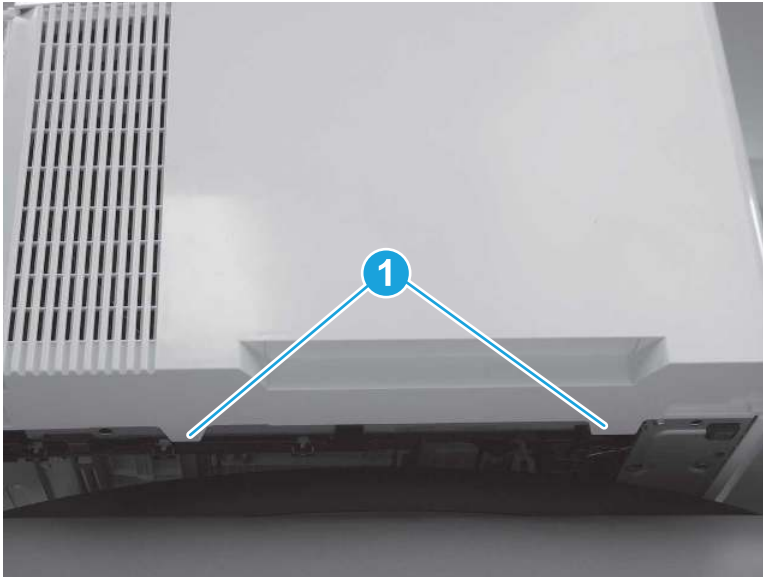
3. At the front of the printer, remove one screw (callout 1).

**Figure 5-948** Remove one screw



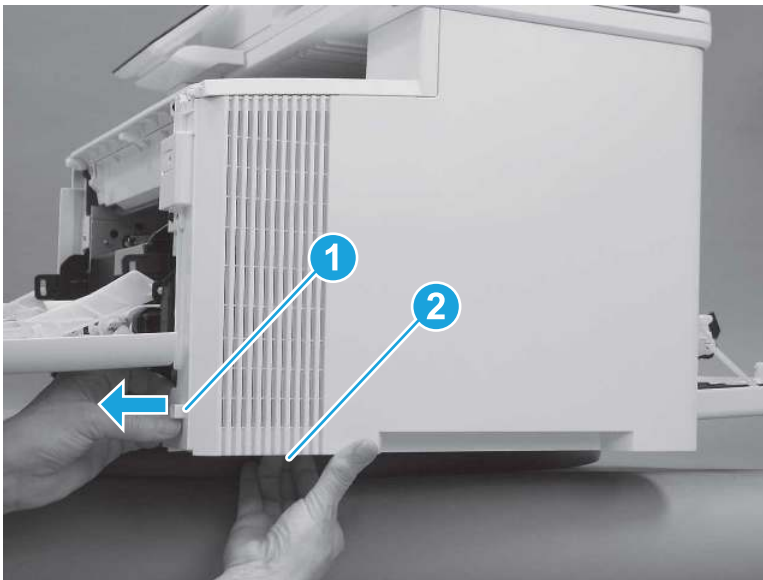
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-949** Locate the tabs



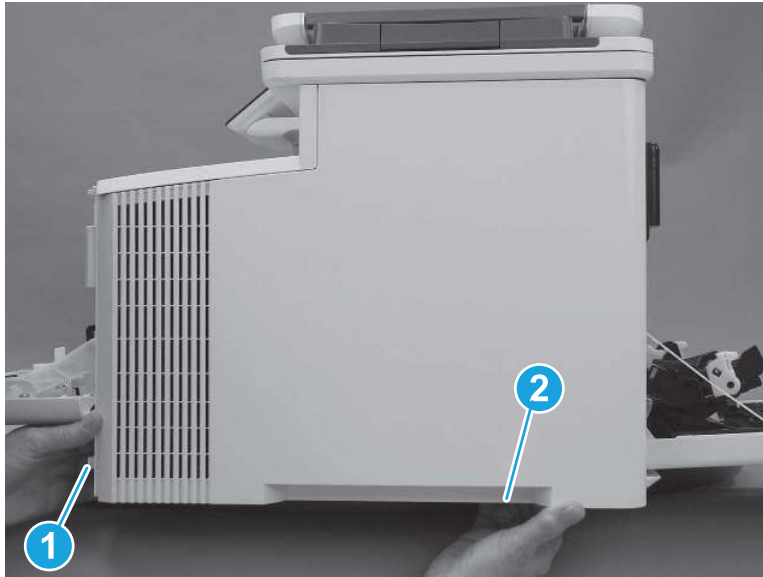
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-950** Release front lower tabs



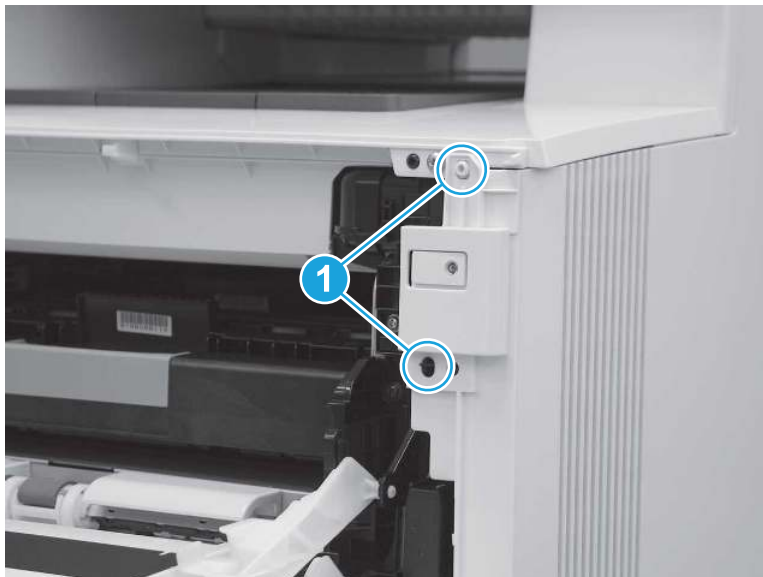
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-951** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-952** Release front upper tabs



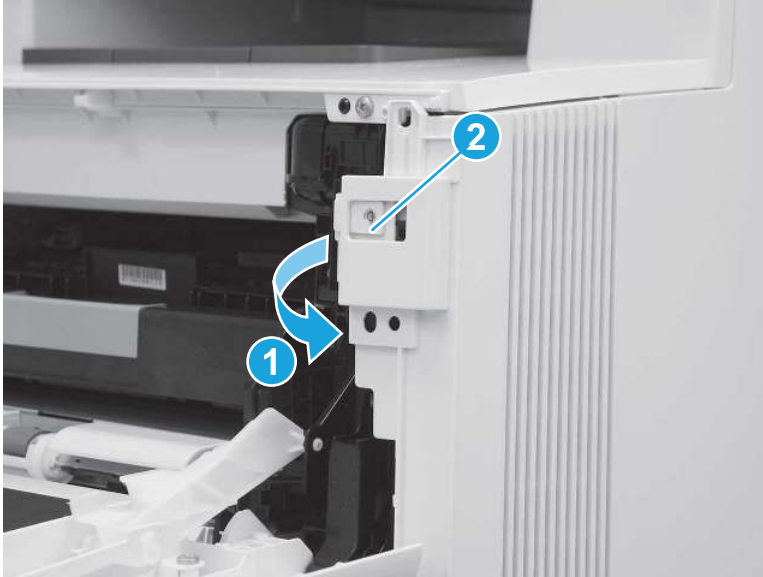
8. Rotate the front of the cover away from the printer (callout 1).

---

**CAUTION:** Be careful not to dislodge the power switch (callout 2).

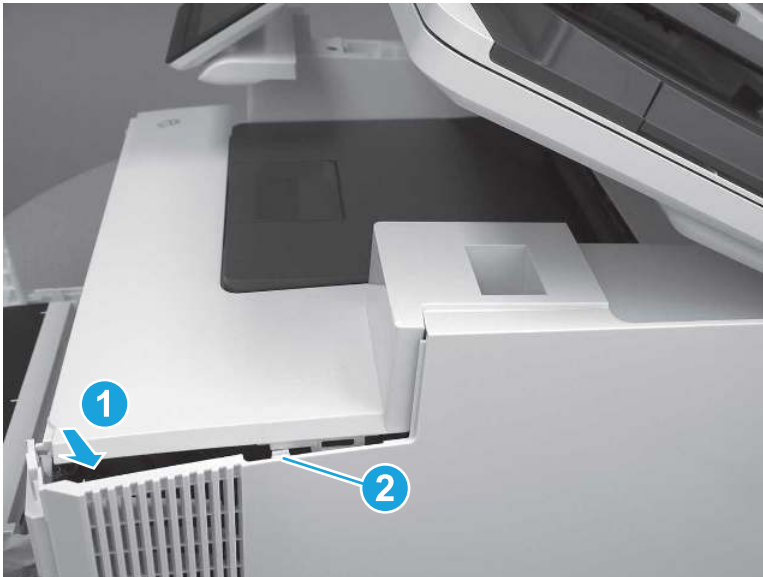
---

**Figure 5-953** Rotate the front of the cover



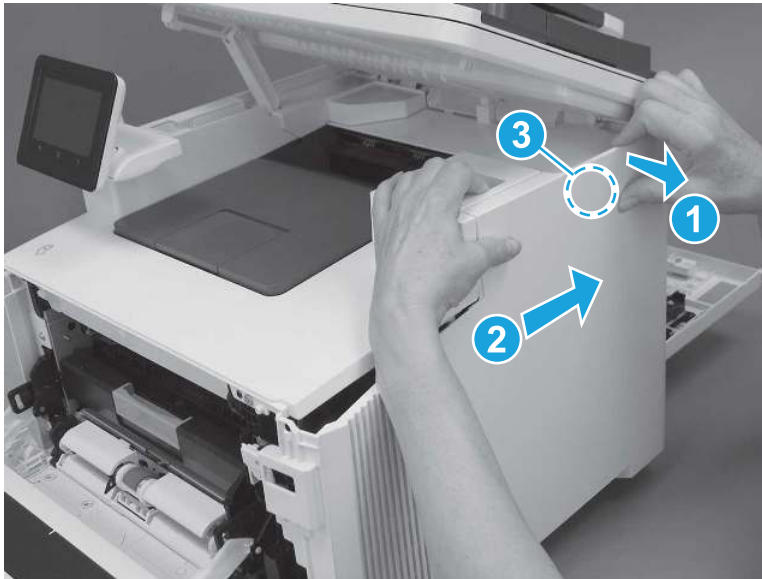
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

**Figure 5-954** Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-955** Release one tab and one hook



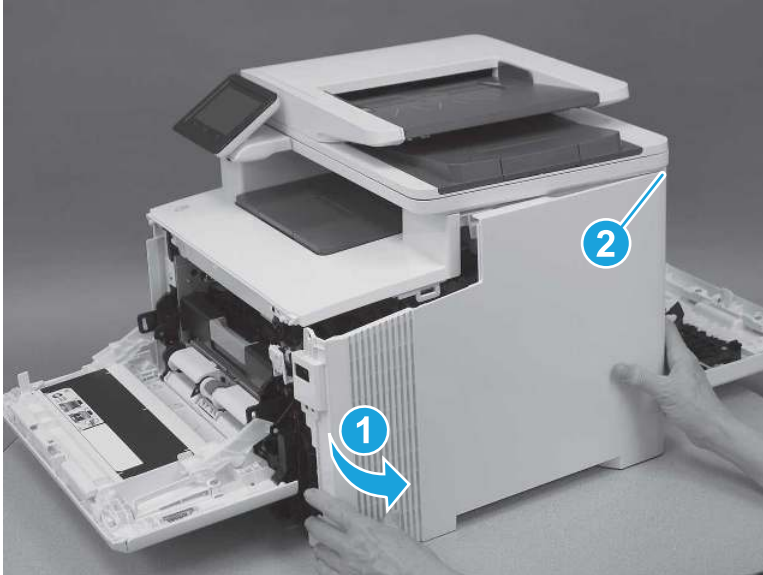
11. Lower the scanner.

**Figure 5-956** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-957** Remove the right cover

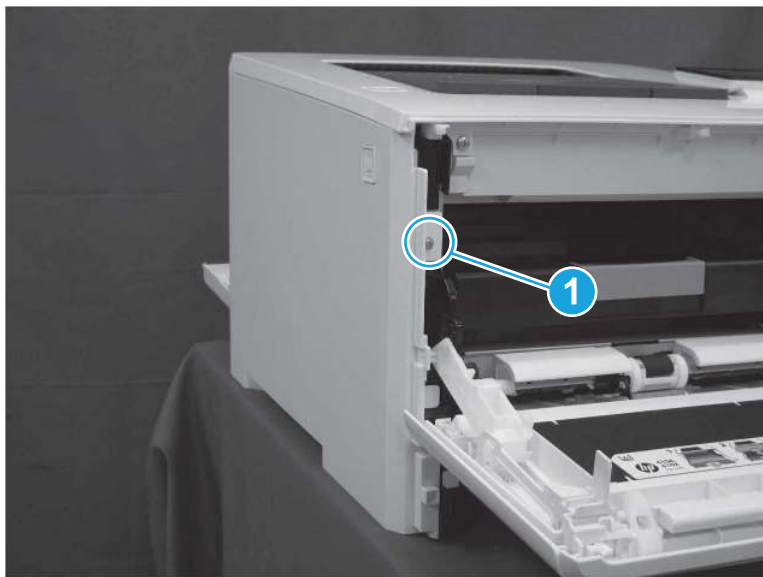


## 6. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

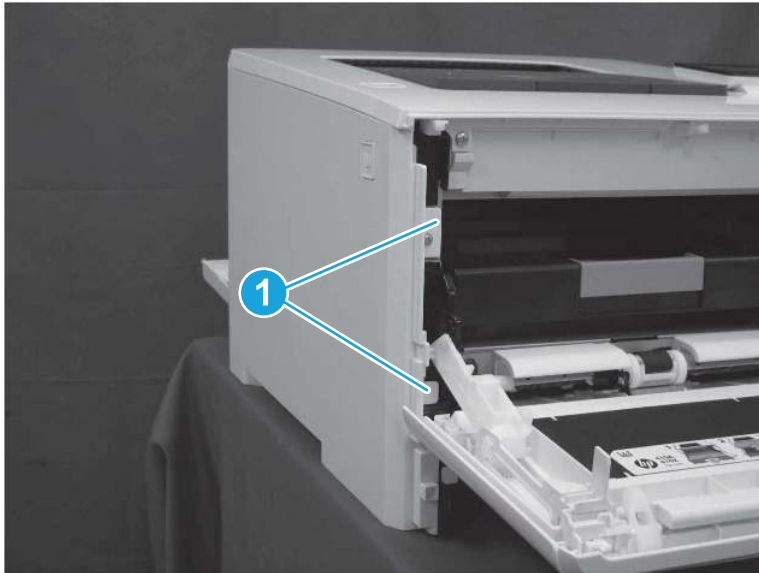
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-958** Remove one screw



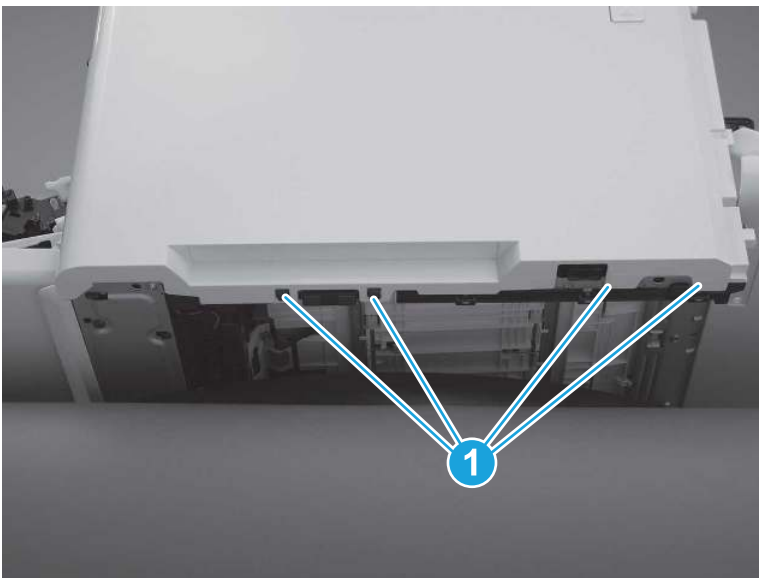
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-959** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-960** Locate the tabs



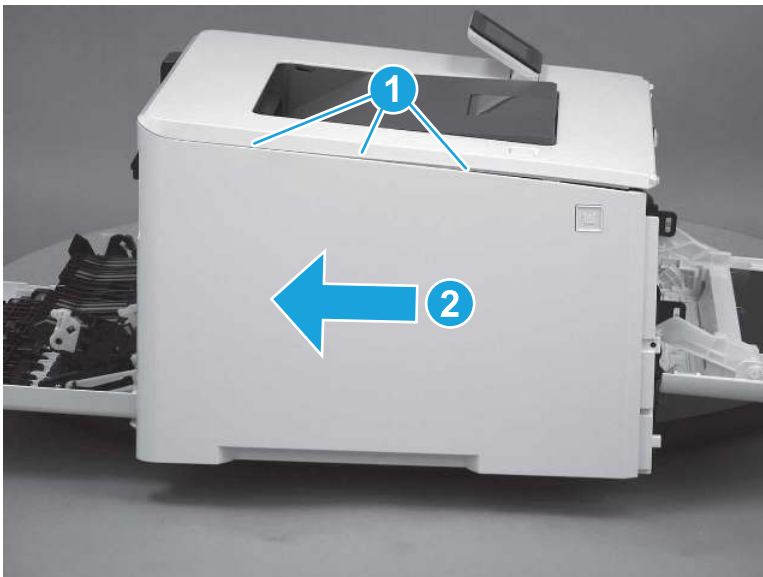
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-961** Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

**Figure 5-962** Release three tabs



## 7. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).



1. Raise the scanner.

**Figure 5-963** Raise the scanner



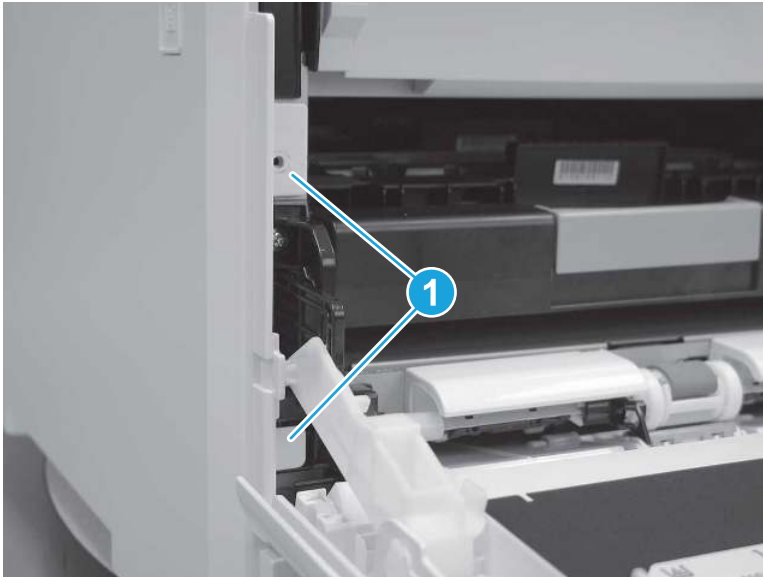
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-964** Remove one screw



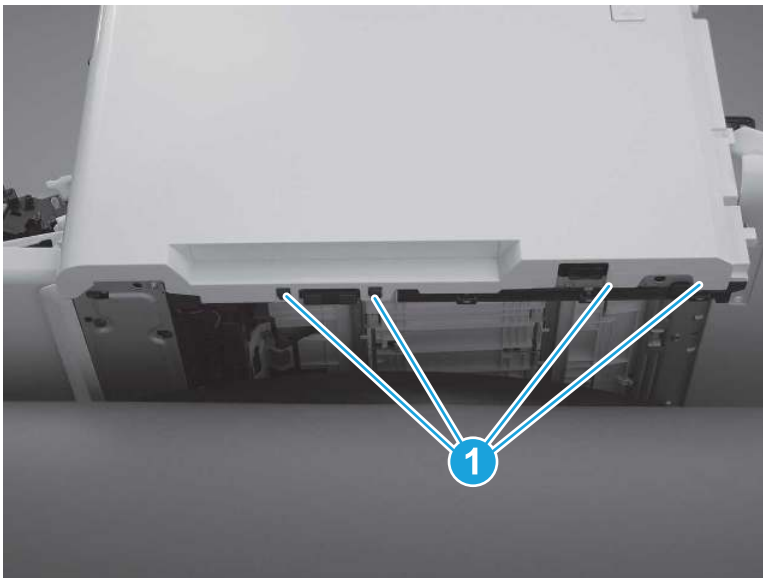
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-965** Release two tabs



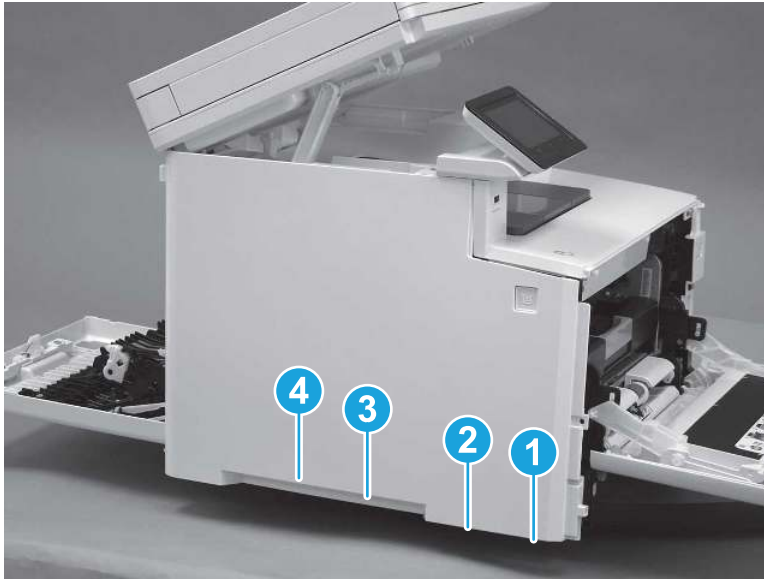
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-966** Locate the tabs



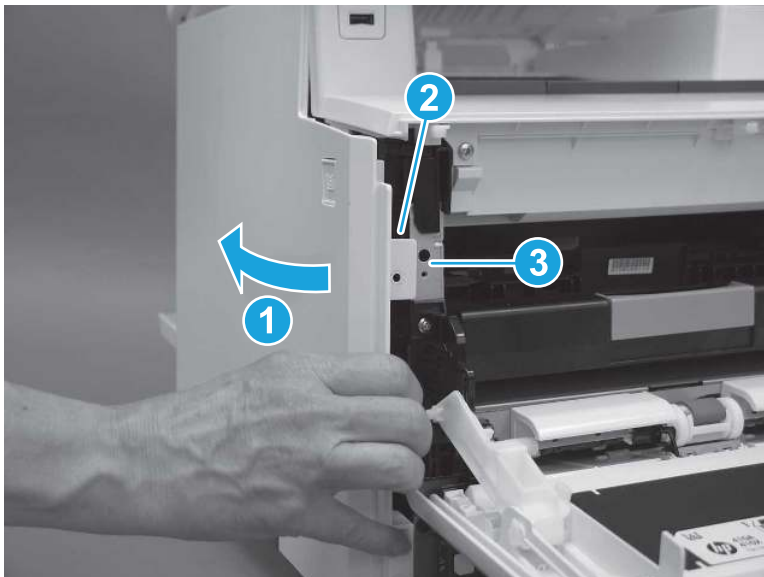
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-967 Release four tabs



6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

Figure 5-968 Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-969** Release one tab and two hooks



8. Lower the scanner.

**Figure 5-970** Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

**Figure 5-971** Remove the left cover

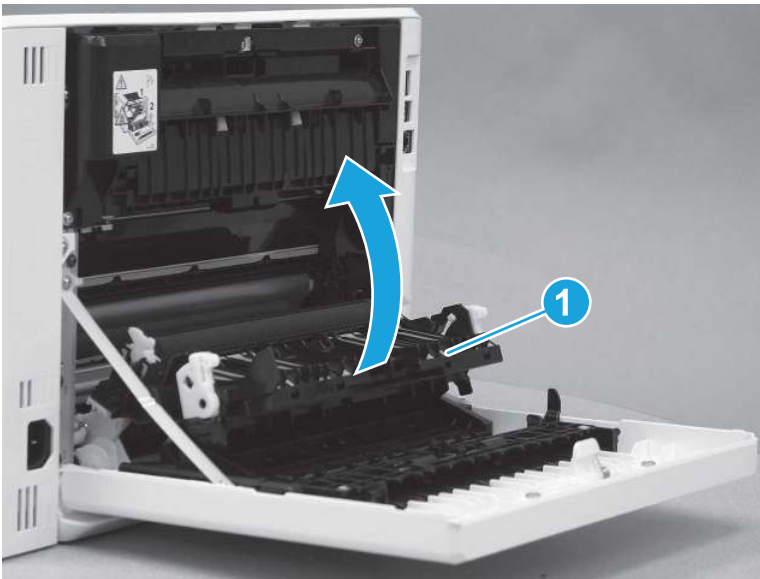


## 8. Remove the duplexing door assembly

Follow these steps to remove the duplexing door assembly.

1. Rotate the secondary transfer assembly (callout 1) toward the printer to close it.

**Figure 5-972** Close the secondary transfer assembly



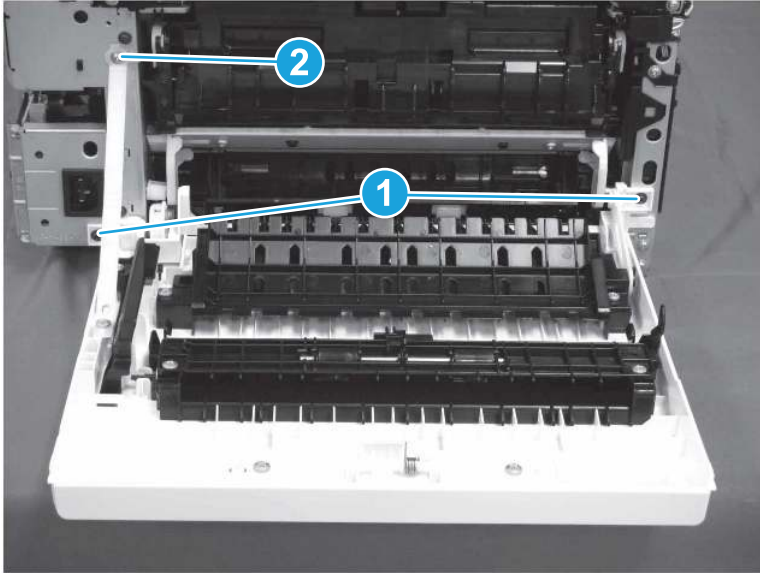
2. At the back of the printer, remove two screws (callout 1), and then remove one screw (callout 2) that holds the retention arm.

---

 **TIP:** Note that the screw (callout 2) that holds the retention arm is longer than the other two. Make sure this screw is installed in the correct position.

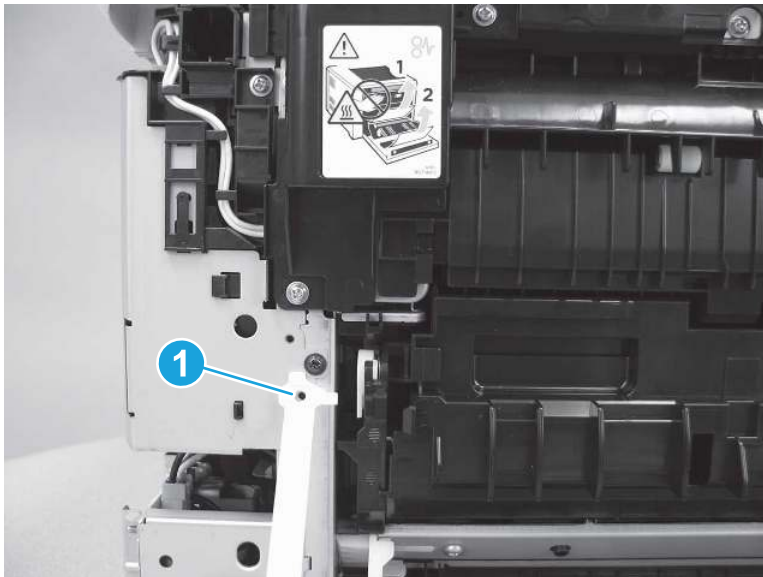
---

Figure 5-973 Remove three screws



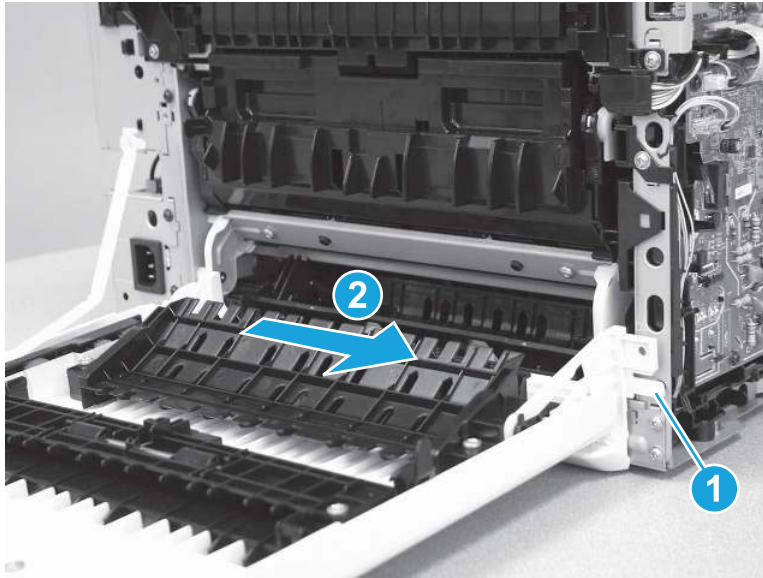
3. Release the retention arm (callout 1).

Figure 5-974 Release the retention arm



4. Release one tab (callout 1), and then slide the duplexer door (callout 2) to the right to remove it.

**Figure 5-975** Remove the duplexing door

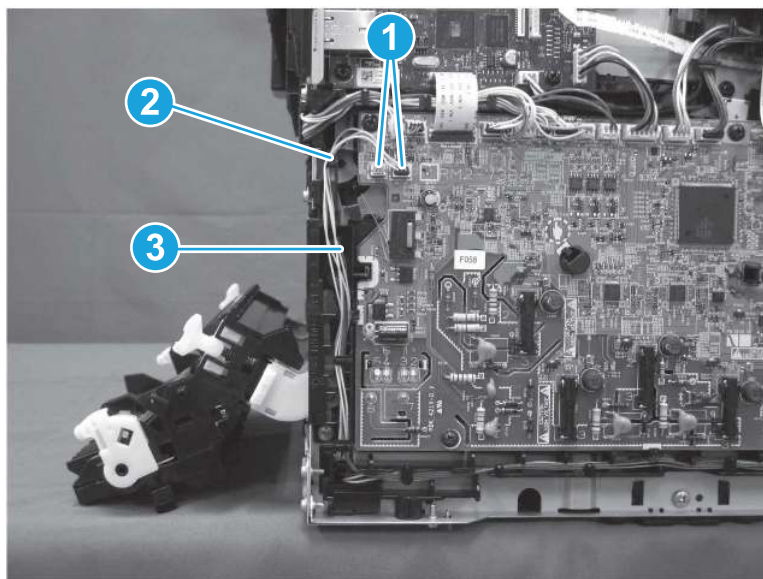


## 9. Remove the re-pickup assembly

Follow these steps to remove the re-pickup assembly.

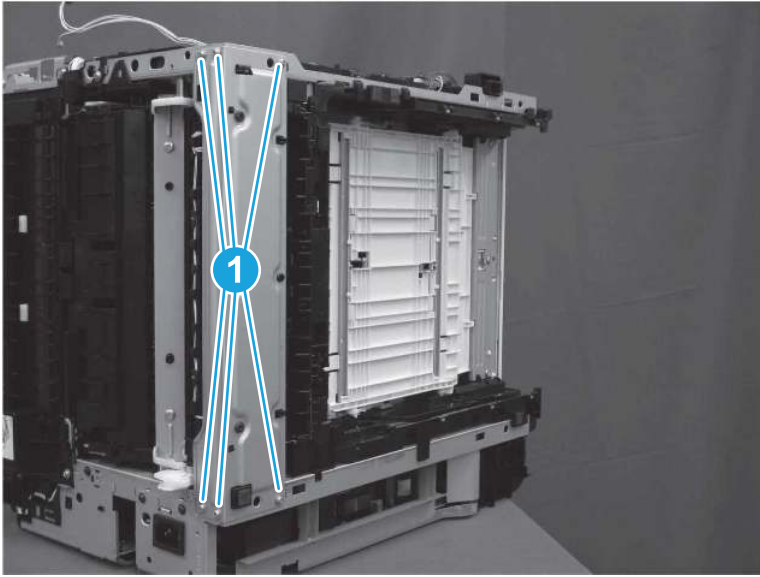
1. On the left side of the printer, disconnect two connectors (callout 1), and then remove the cables (callout 2) from the guides (callout 3).

**Figure 5-976** Disconnect two connectors and remove cables from guides



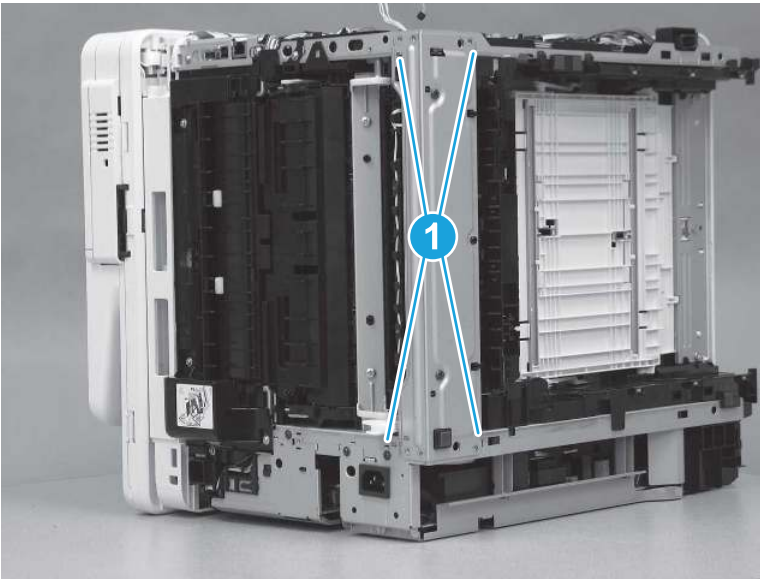
2. Lay the printer on the right side so that the left side is facing up. Remove six screws (callout 1).

**Figure 5-977** Remove six screws



3. Release four tabs (callout 1).

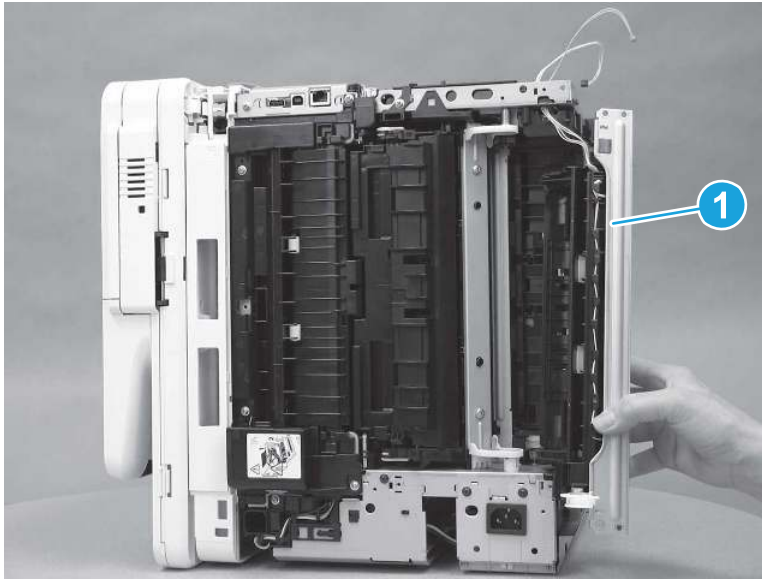
**Figure 5-978** Release four tabs





4. Remove the re-pickup assembly (callout 1).


**Figure 5-979** Remove the assembly



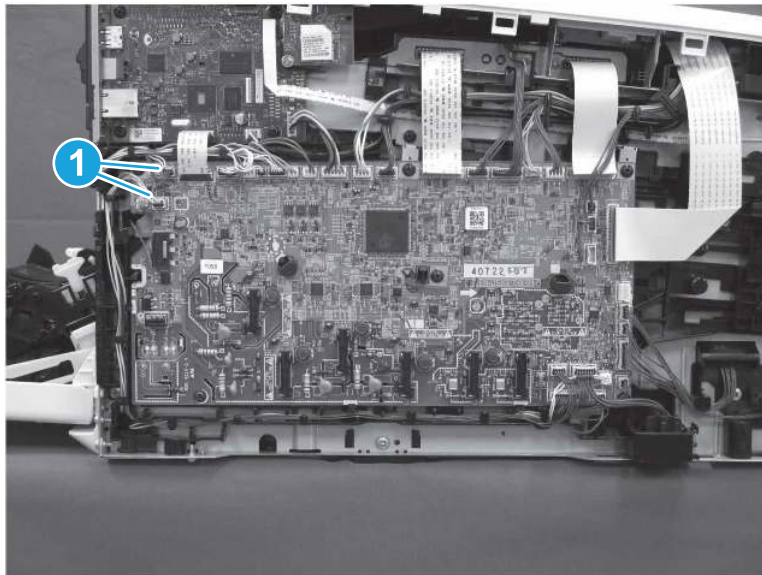
## 10. Remove the DC controller

Follow these steps to remove the DC controller.

1. Before disconnecting the connectors in the next step, take note of the position of two of the cables (callout 1).

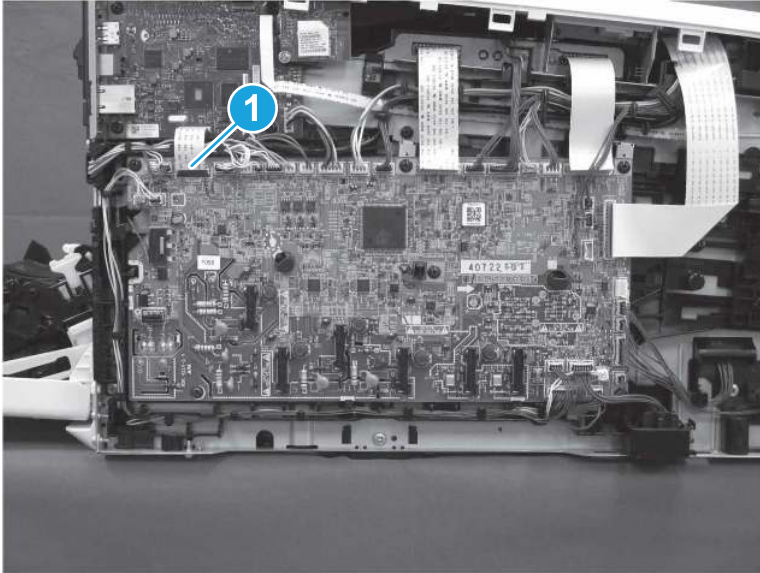
 **IMPORTANT:** These cables can be mistakenly switched when reinstalled. The connectors on the cables fit in either connector on the DC controller. Make sure that these cables are installed in the correct connectors. The upper cable is purple and the lower cable is yellow. *If the cables are switched, the printer jams repeatedly when duplex printing.*

**Figure 5-980** Check the cables



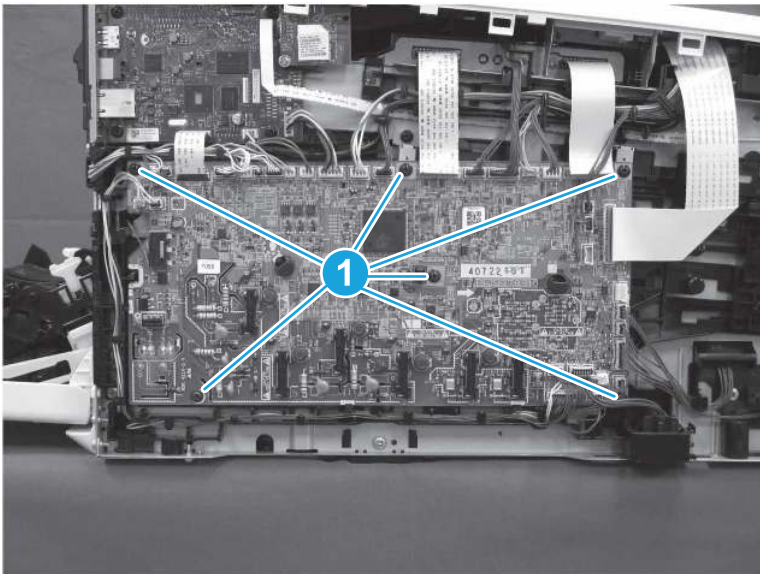
2. Disconnect all of the connectors on the DC controller. Note that one connector (callout 1) is a zero insertion force (ZIF) connector. Lift the latch on the connector before removing the flat cable.

**Figure 5-981** Disconnect all of the connectors



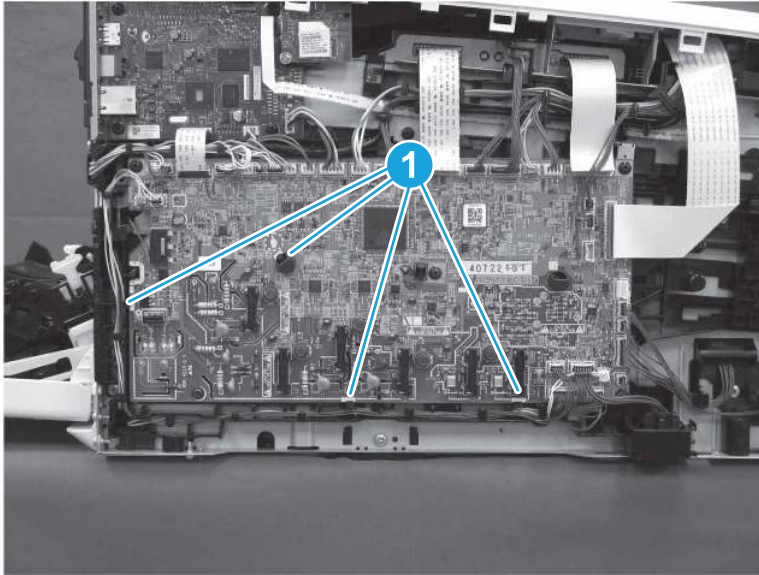
3. Remove six screws (callout 1).

**Figure 5-982** Remove six screws



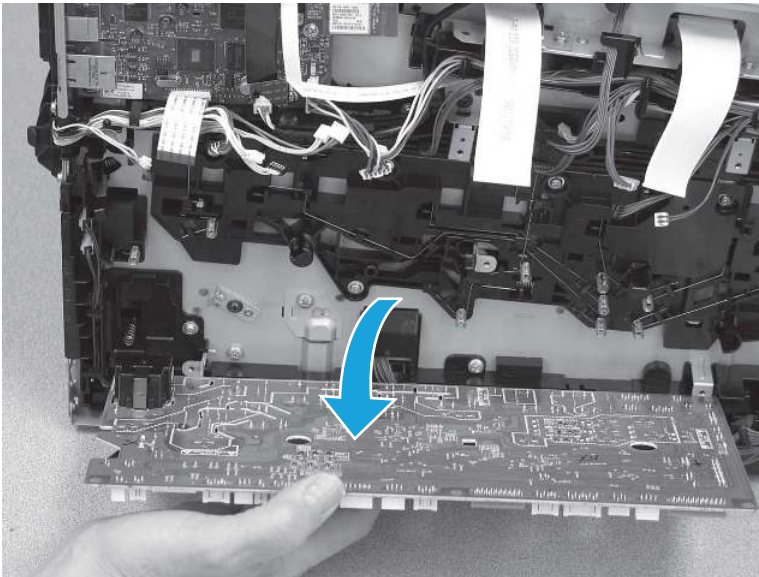
4. Release four tabs (callout 1).

**Figure 5-983** Release four tabs



5. Remove the DC controller.

**Figure 5-984** Remove the assembly

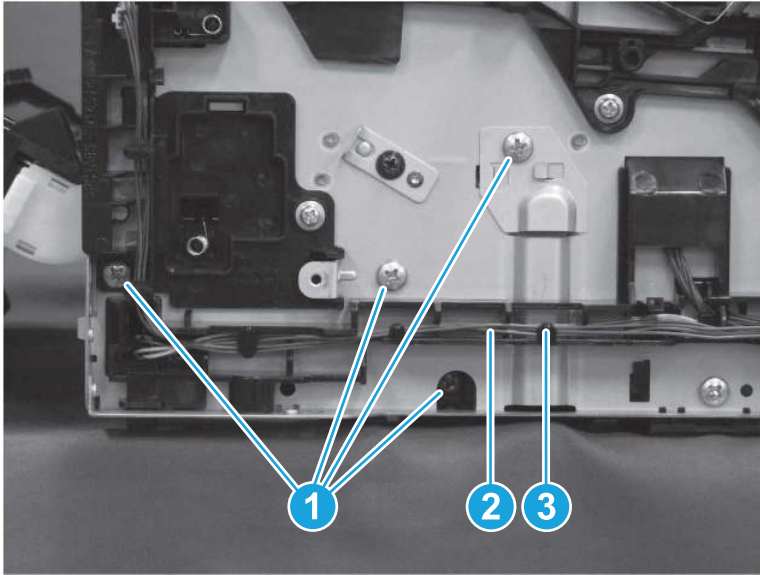


## 11. Remove the lifter drive assembly

Follow these steps to remove the lifter drive assembly.

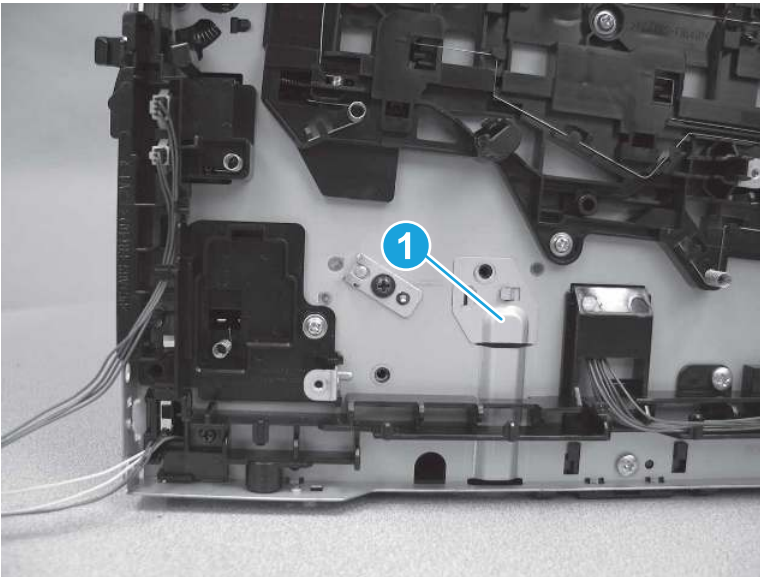
1. Remove four screws (callout 1), and then release the cables (callout 2) from the guides (callout 3).

**Figure 5-985** Remove four screws and release cables



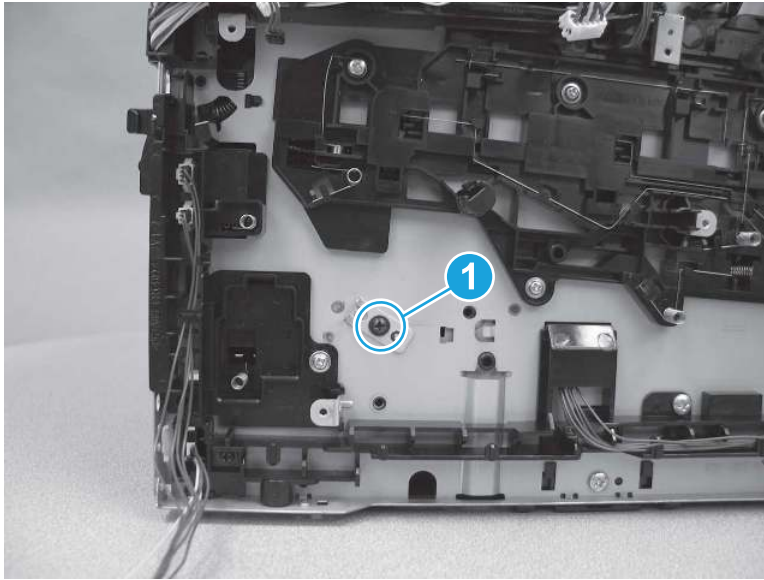
2. Remove one cover (callout 1).

**Figure 5-986** Remove one cover



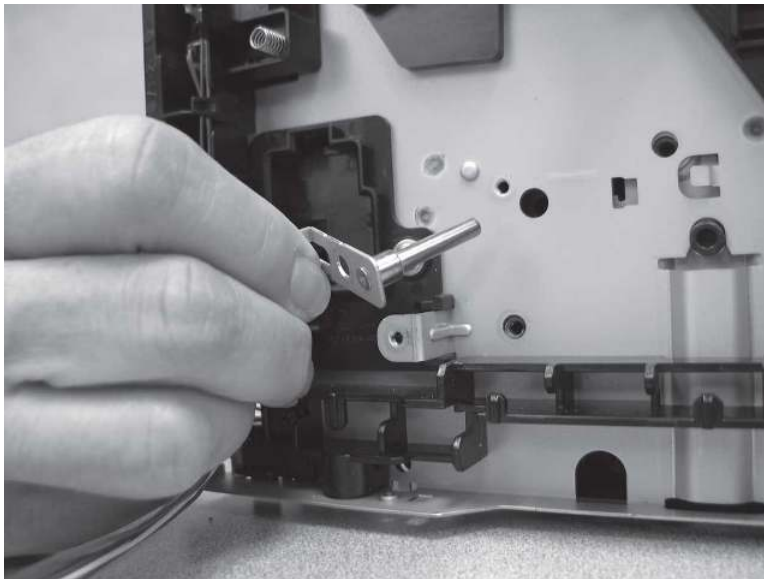
3. Remove one screw (callout 1).

**Figure 5-987** Remove one screw



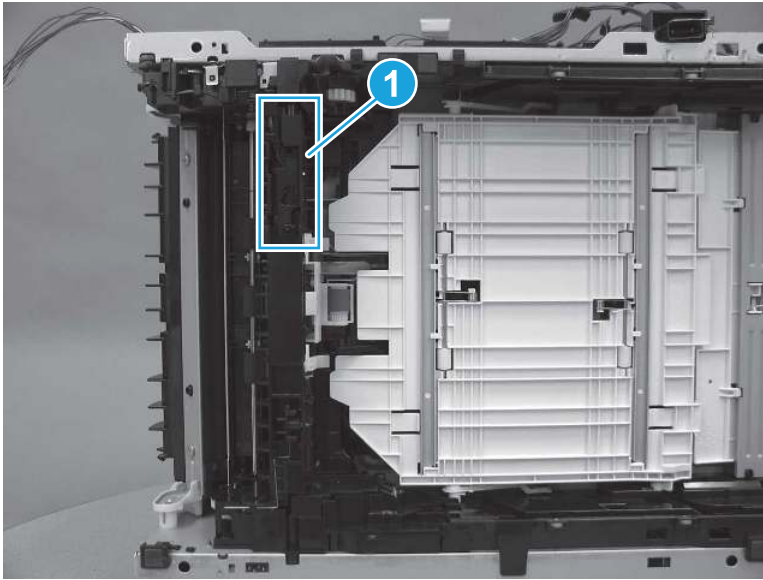
4. Remove the shaft.

**Figure 5-988** Remove the shaft



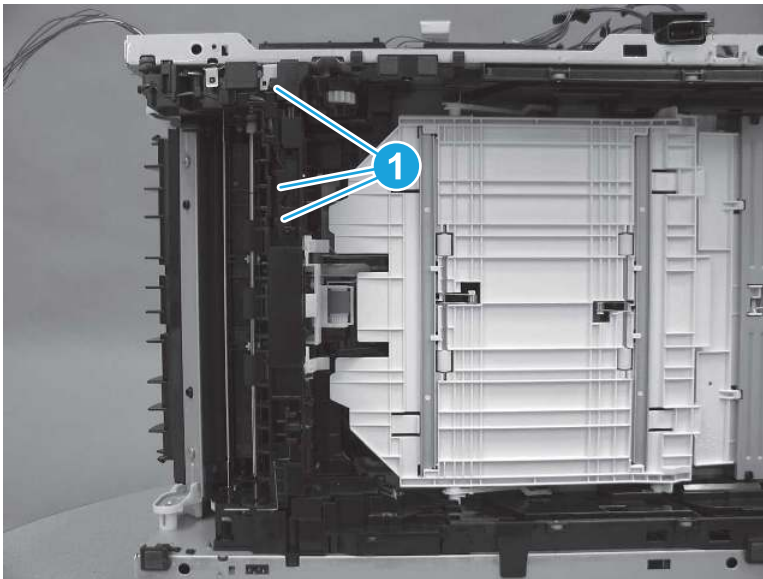
5. Lay the printer on the right side so that the left side is facing up. Locate the tray sensor switch (callout 1).

**Figure 5-989** Locate the tray sensor switch



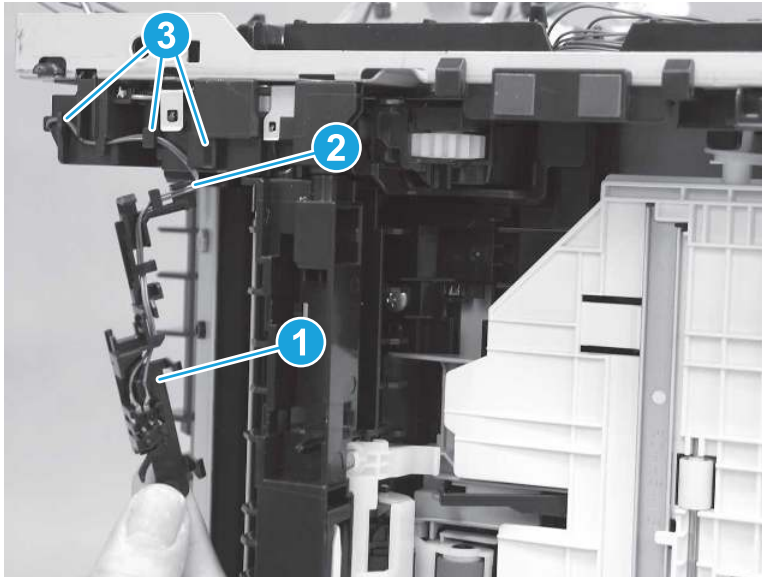
6. Release three tabs (callout 1).

**Figure 5-990** Release three tabs



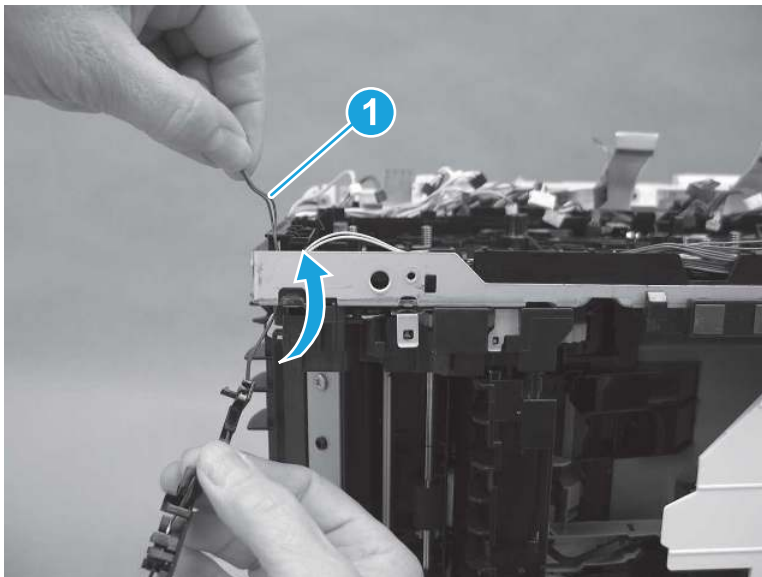
7. Release the tray sensor switch (callout 1), and then remove the cables (callout 2) from the guides (callout 3).

**Figure 5-991** Release the tray sensor switch



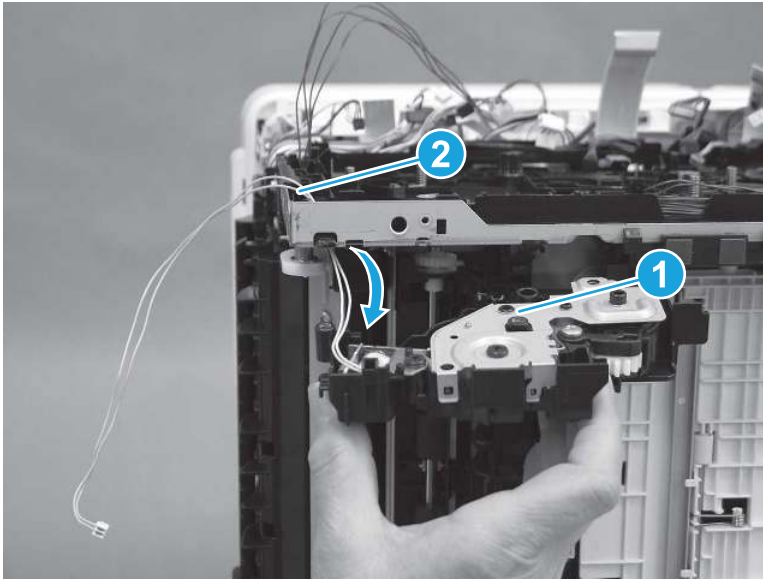
8. Remove the tray sensor switch by releasing the cables (callout 1) through the printer frame.

**Figure 5-992** Remove the tray sensor switch



9. Remove the lifter drive assembly (callout 1), and then pass the cables (callout 2) through the printer frame.

**Figure 5-993** Remove the assembly



## 12. 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.

## 13. Reverse the removal steps to install the assembly

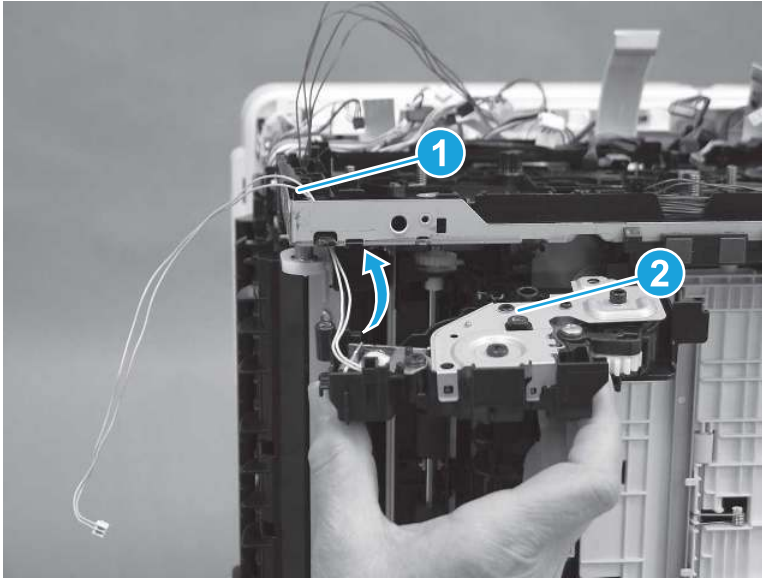
Also use the following **special installation instructions**.



## Lifter drive assembly

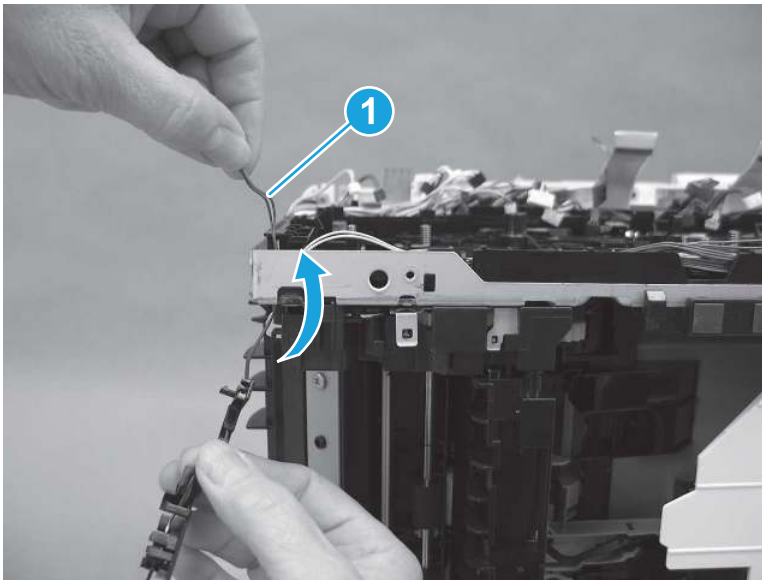
1. Pass the cables (callout 1) on the lifter drive assembly up through the printer frame, and then install the lifter drive assembly (callout 2).

**Figure 5-994** Install the lifter drive assembly



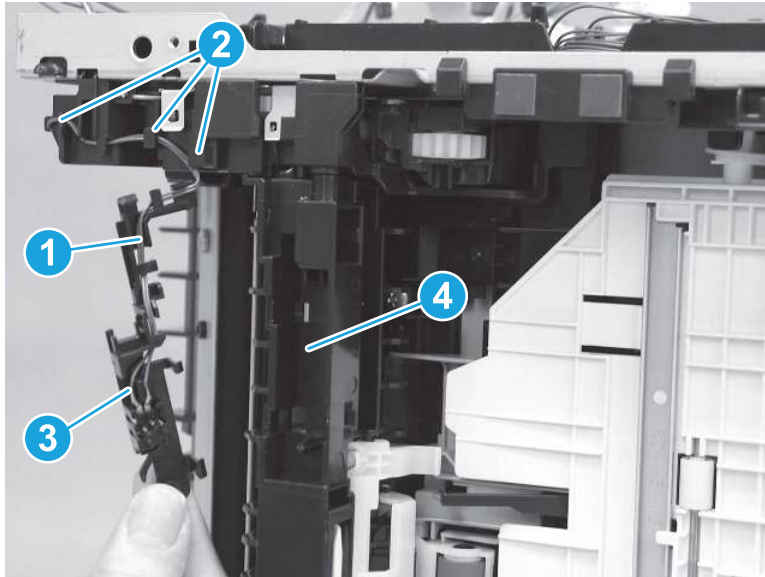
2. Pass the cables (callout 1) on the tray sensor switch up through the printer frame.

**Figure 5-995** Install the tray sensor switch cable



3. Install the cables (callout 1) in the cable guide (callout 2), and then install the tray sensor switch (callout 3) on the lifter drive assembly (callout 4).

Figure 5-996 Install the tray sensor switch



## Removal and replacement: Pickup assembly

Learn how to remove and replace the pickup assembly.

[View a video of removing and replacing the pickup 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](http://www.hp.com/buy/parts).

Table 5-39 Part information

Part number	Part description
RM2-6372-000CN	Paper pickup assembly

### Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- #2 Phillips short-shaft or right-angle screwdriver with a magnetic tip
- Small flat-blade screwdriver

## After performing service

### Turn the printer power on

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

## Post service test

Make sure that the printer initializes to a **Ready** state.


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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-997** Remove the tray

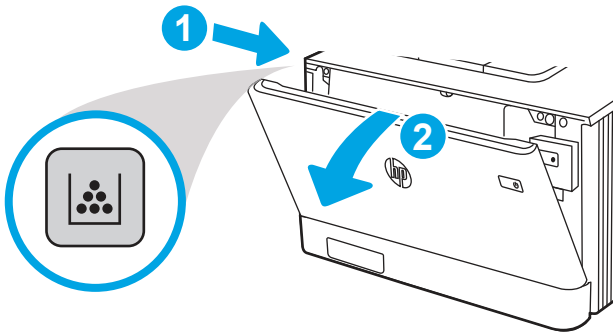


## 2. Remove the toner cartridges

Follow these steps to remove the toner cartridges.

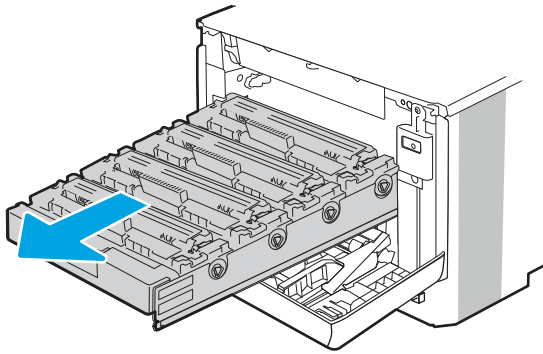
1. Open the front door by pressing the button on the left cover.

**Figure 5-998** Open the front door



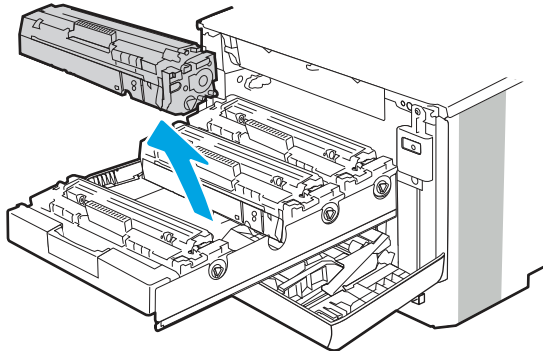
2. Grasp the blue handle on the toner cartridge tray, and then pull out the tray.

**Figure 5-999** Open the cartridge drawer



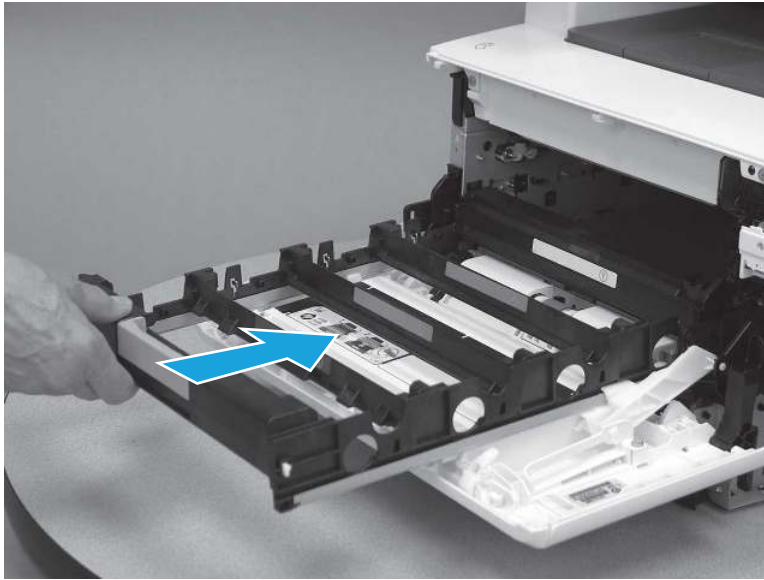
3. Grasp the handle on the toner cartridge, and then pull the toner cartridge straight up to remove it. Repeat this step for each toner cartridge.

**Figure 5-1000** Remove the toner cartridges



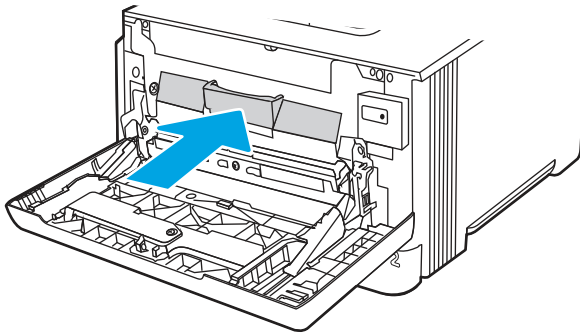
4. Slide the cartridge tray into the printer.

**Figure 5-1001** Slide the cartridge tray into the printer



5. Close the front door.

**Figure 5-1002** Close the front door



### 3. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

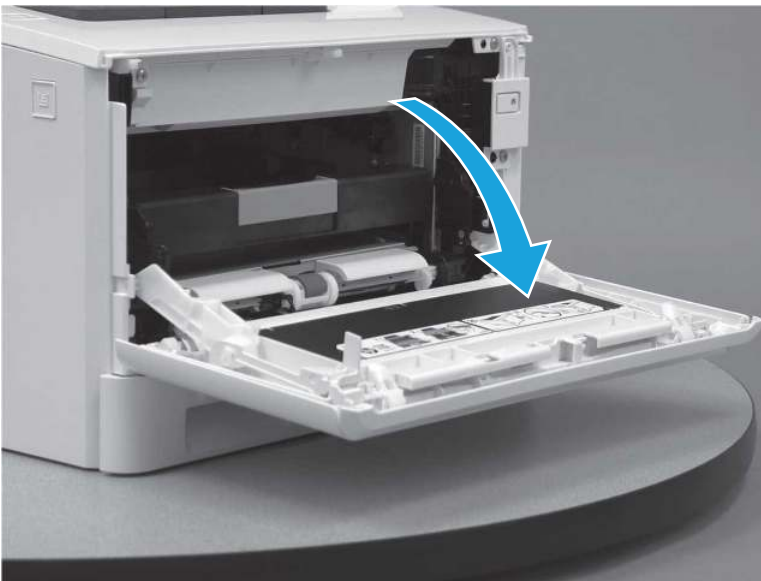
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-1003** Release the front door



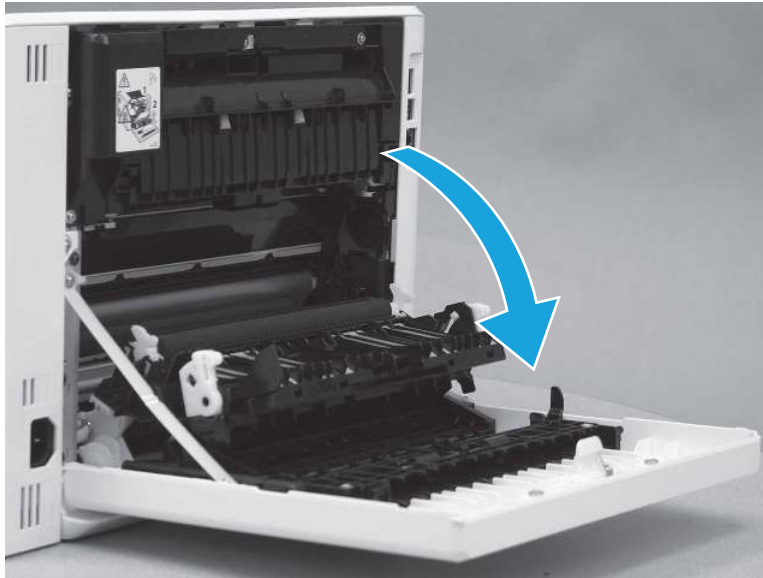
2. Open the front door.

**Figure 5-1004** Open the front door



3. Open the duplexing door.

**Figure 5-1005** Open the duplexer door



#### 4. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

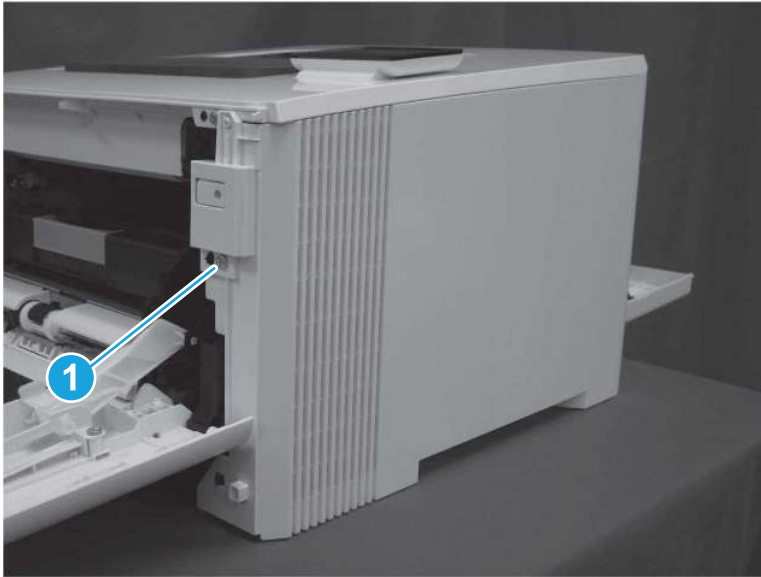
1. At the back of the printer, remove one screw (callout 1).

**Figure 5-1006** Remove one screw



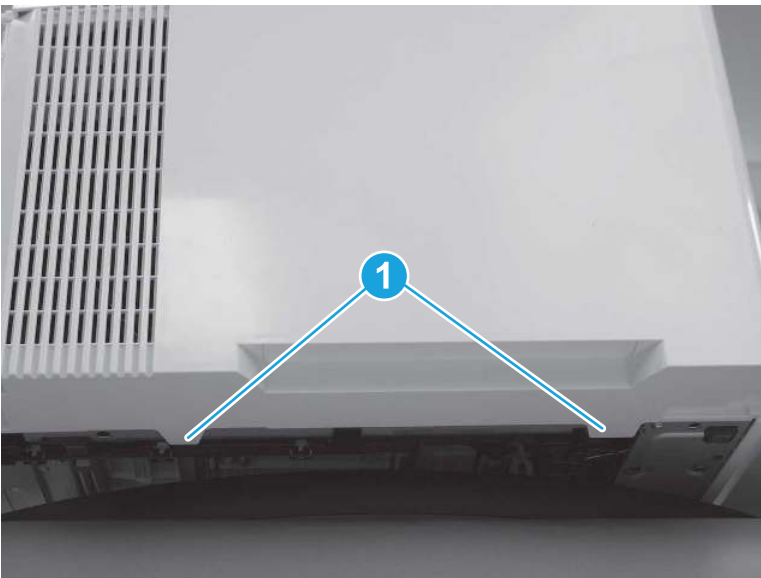
2. At the front of the printer, remove one screw (callout 1).

Figure 5-1007 Remove one screw



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

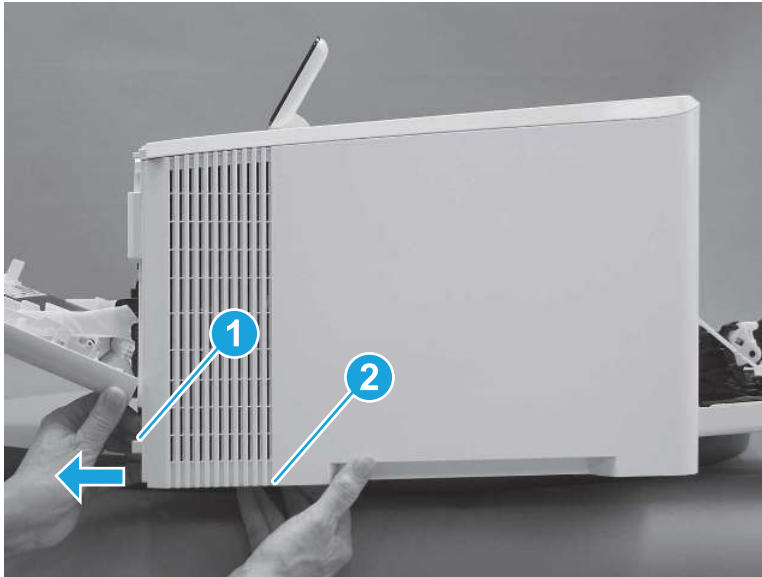
Figure 5-1008 Locate the tabs





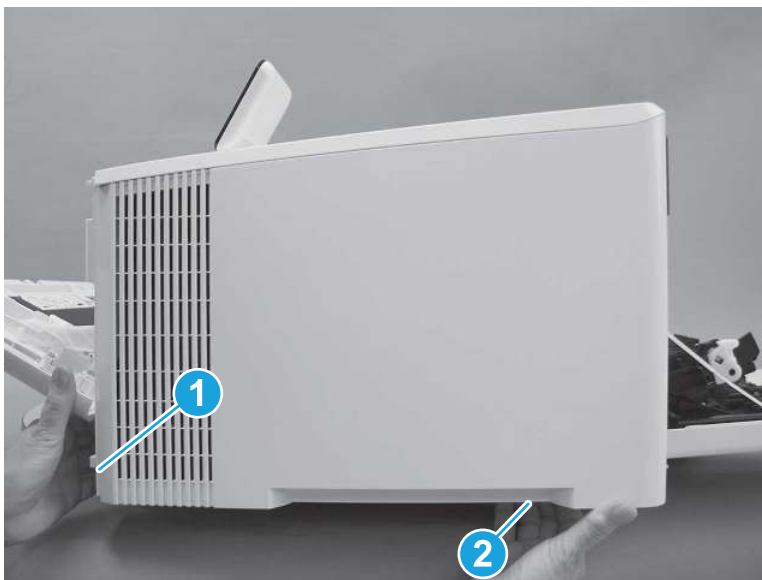
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-1009** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

**Figure 5-1010** Release lower rear tab



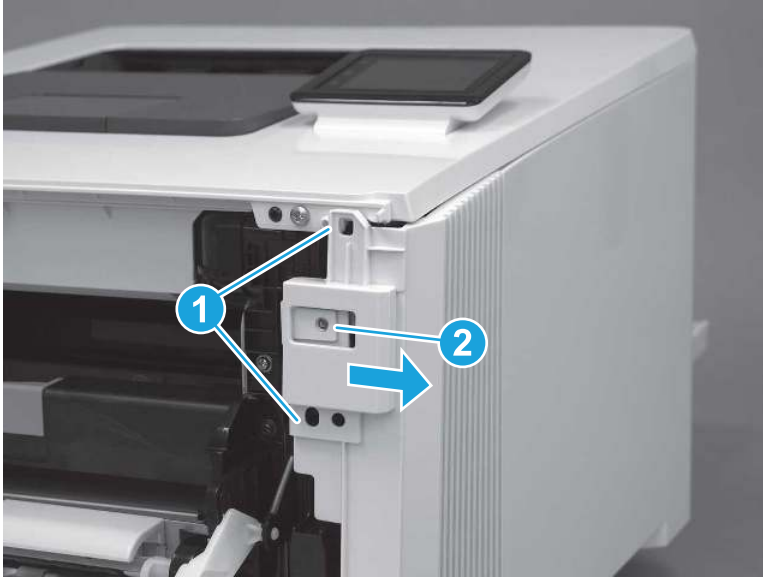
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

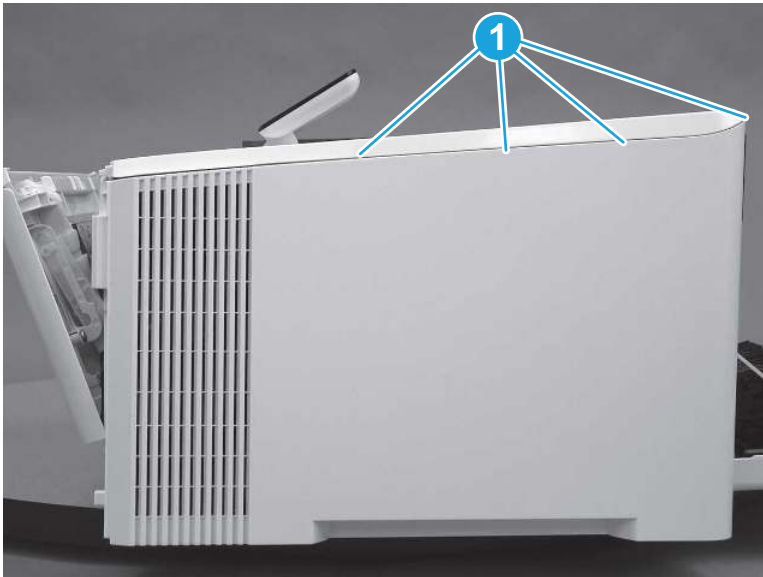
---

**Figure 5-1011** Release two front tabs



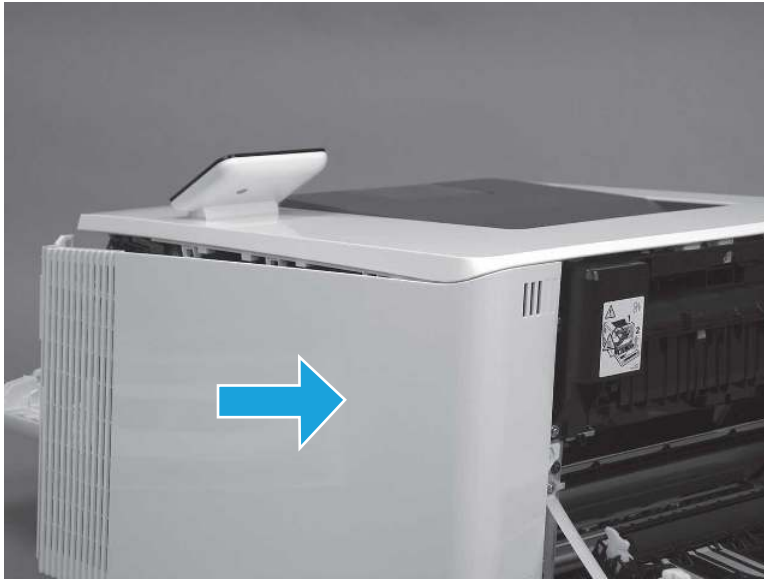
7. Release four tabs on the top of the printer (callout 1).

**Figure 5-1012** Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-1013** Remove the right cover



## 5. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

**Figure 5-1014** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-1015** Remove one screw



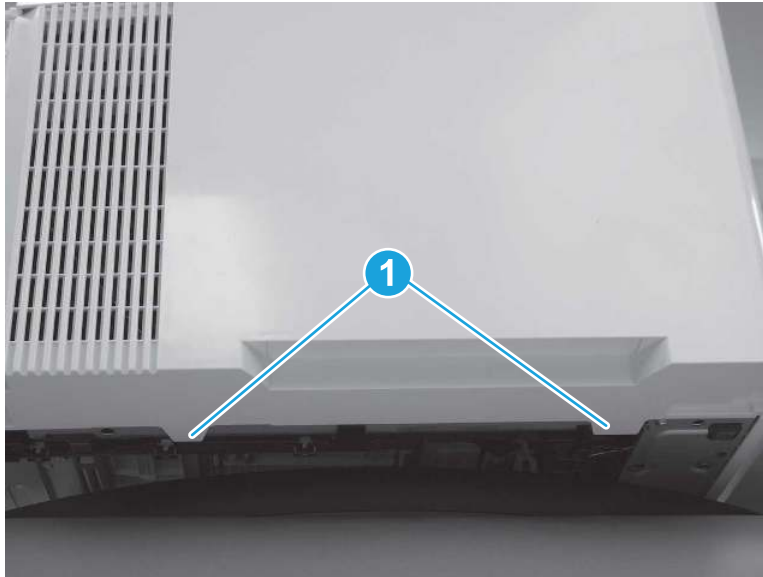
3. At the front of the printer, remove one screw (callout 1).

**Figure 5-1016** Remove one screw



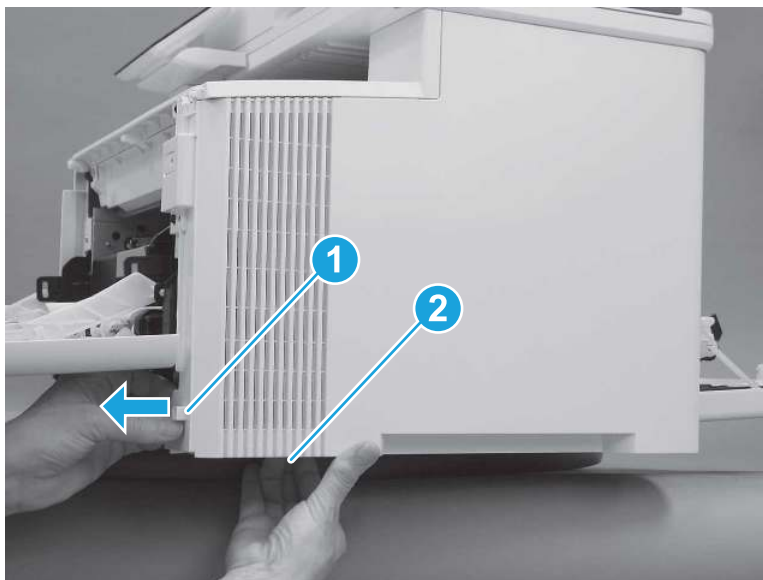
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1017** Locate the tabs



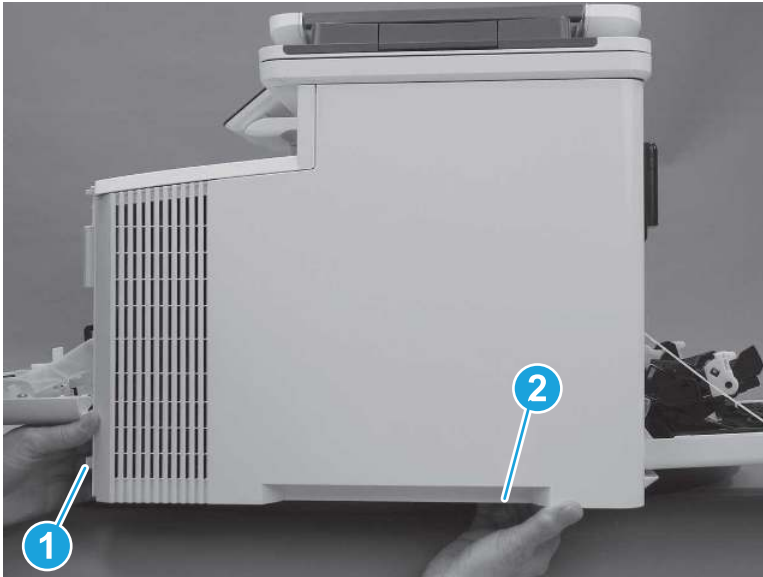
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-1018** Release front lower tabs



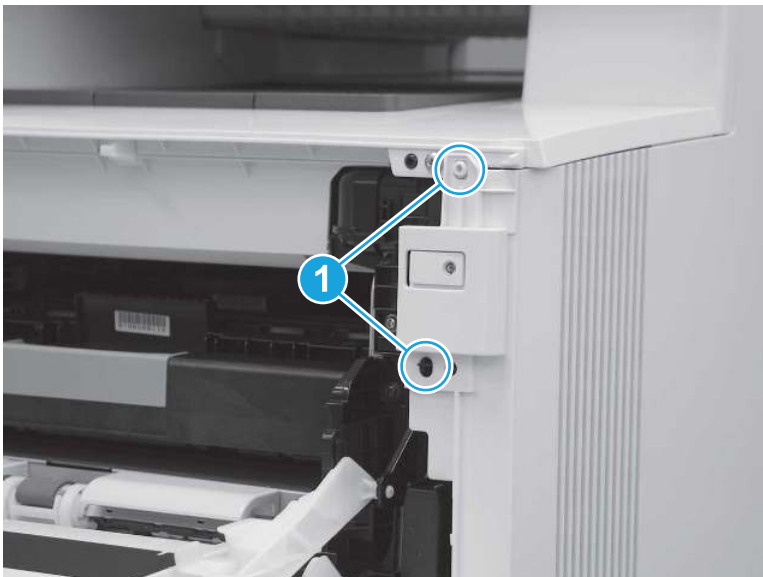
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

Figure 5-1019 Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

Figure 5-1020 Release front upper tabs



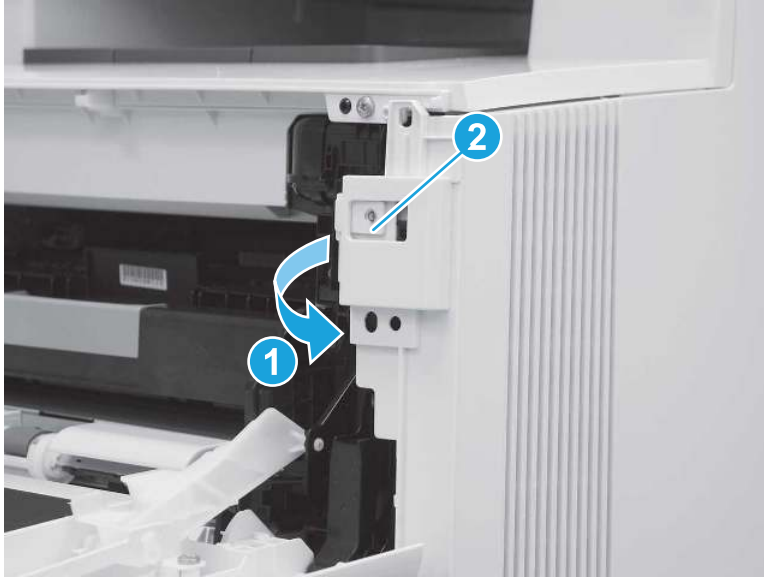
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

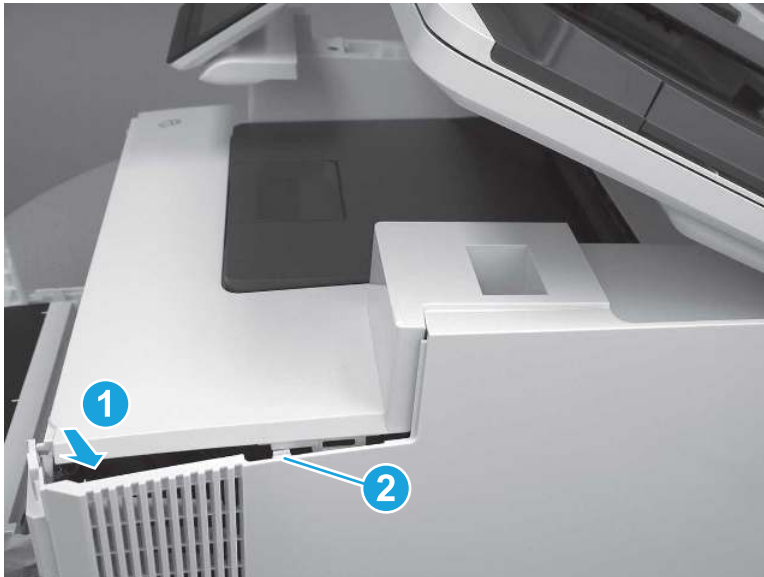
---

Figure 5-1021 Rotate the front of the cover



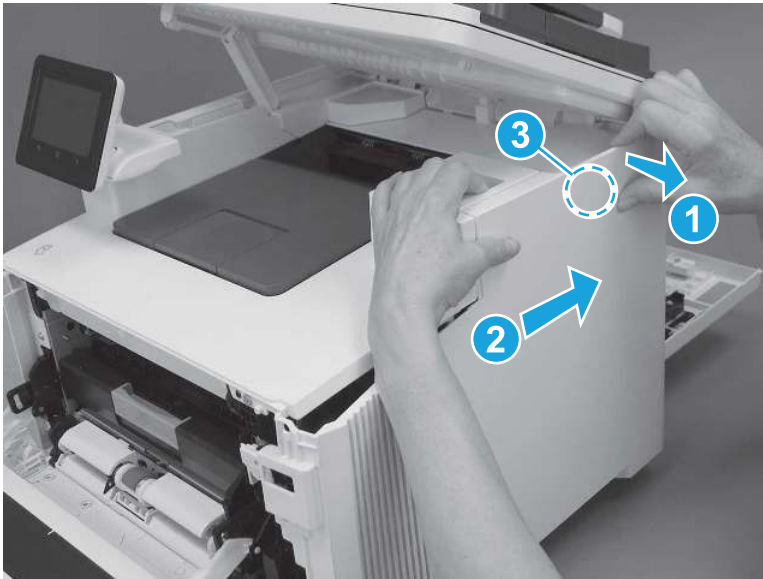
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

Figure 5-1022 Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-1023** Release one tab and one hook



11. Lower the scanner.

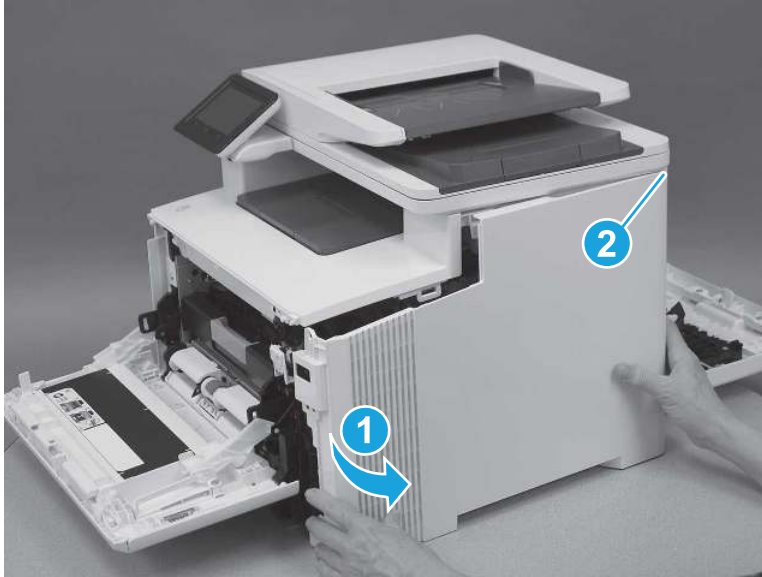
**Figure 5-1024** Lower the scanner





12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-1025** Remove the right cover

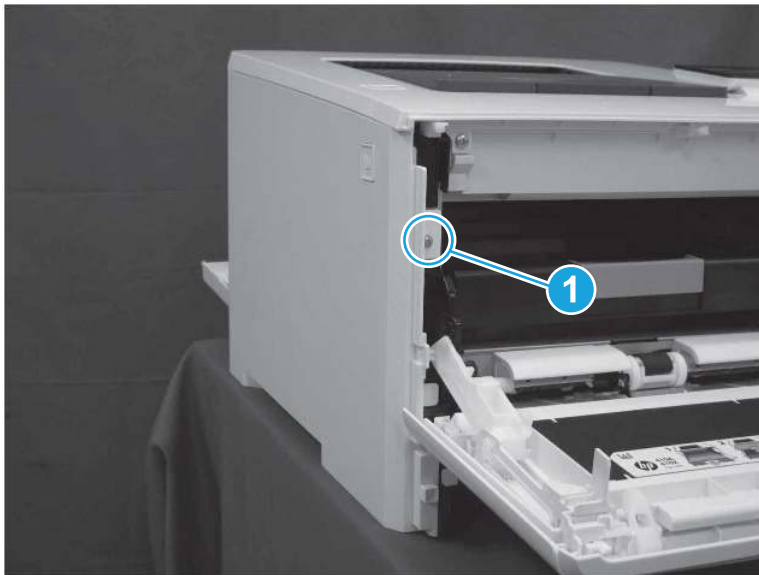


## 6. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

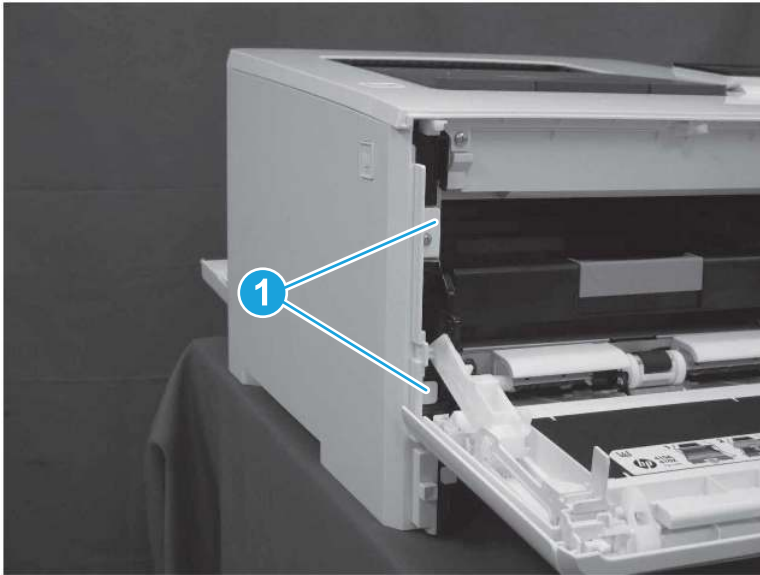
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-1026** Remove one screw



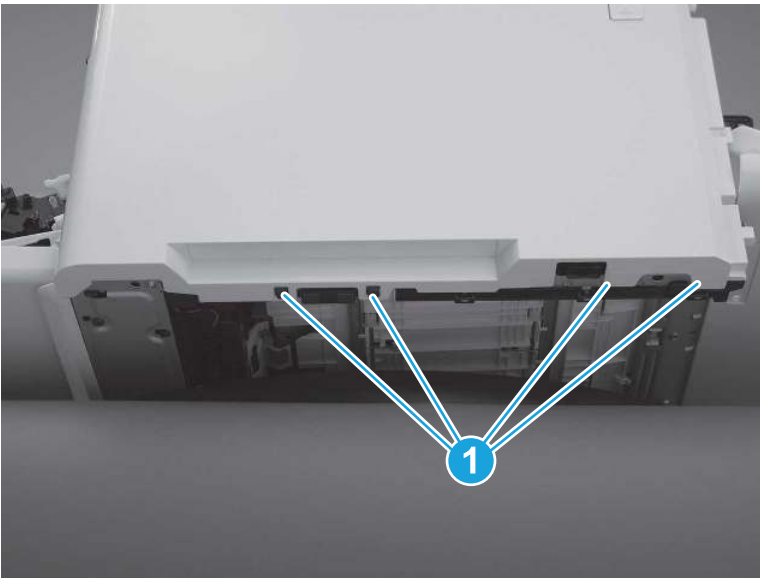
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-1027** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1028** Locate the tabs



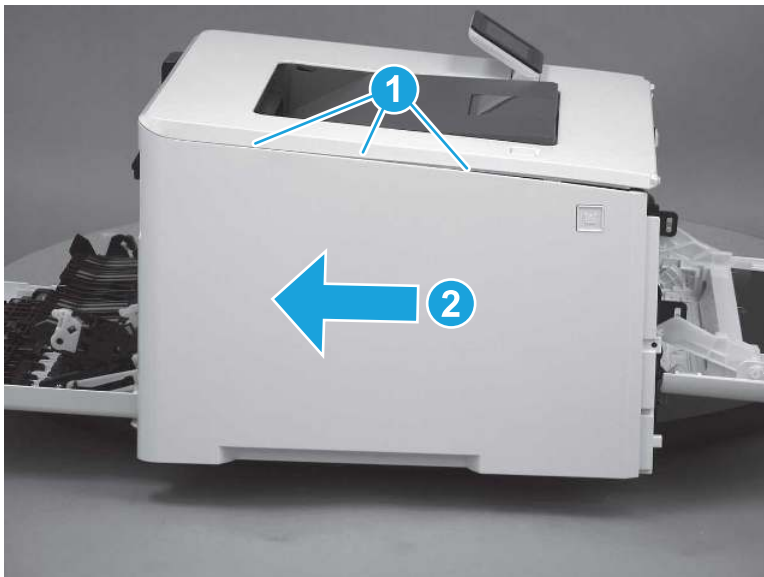
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-1029 Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

Figure 5-1030 Release three tabs



## 7. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

1. Raise the scanner.

Figure 5-1031 Raise the scanner



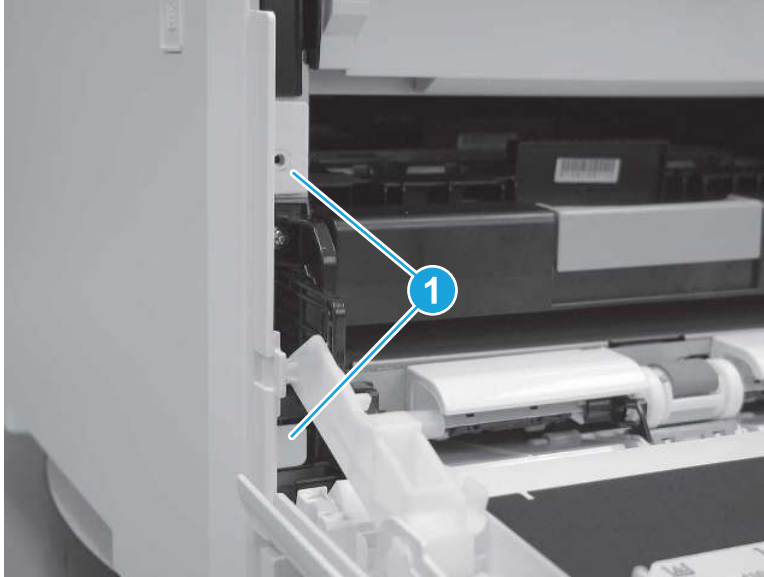
2. At the front of the printer, remove one screw (callout 1).

Figure 5-1032 Remove one screw



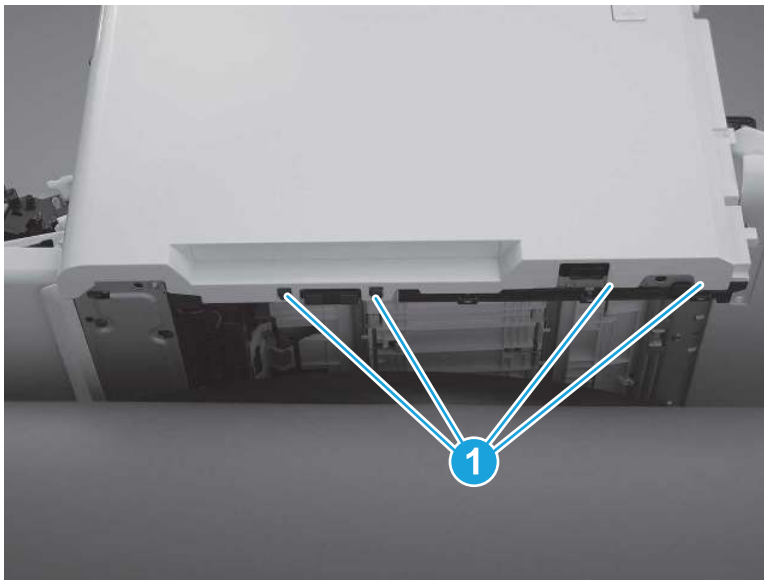
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-1033** Release two tabs



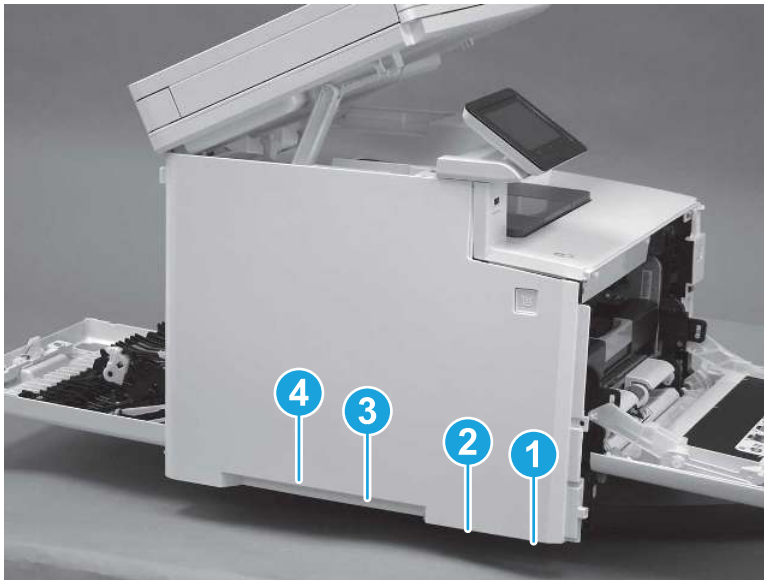
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1034** Locate the tabs



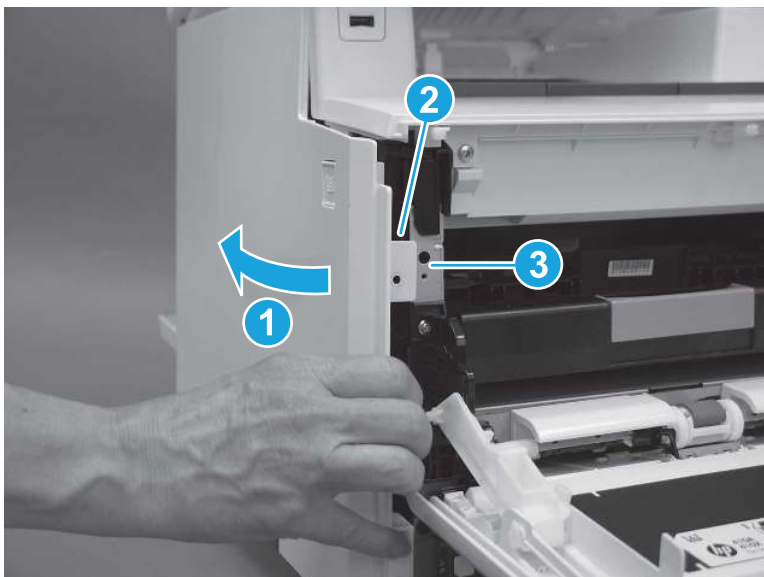
- Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-1035** Release four tabs



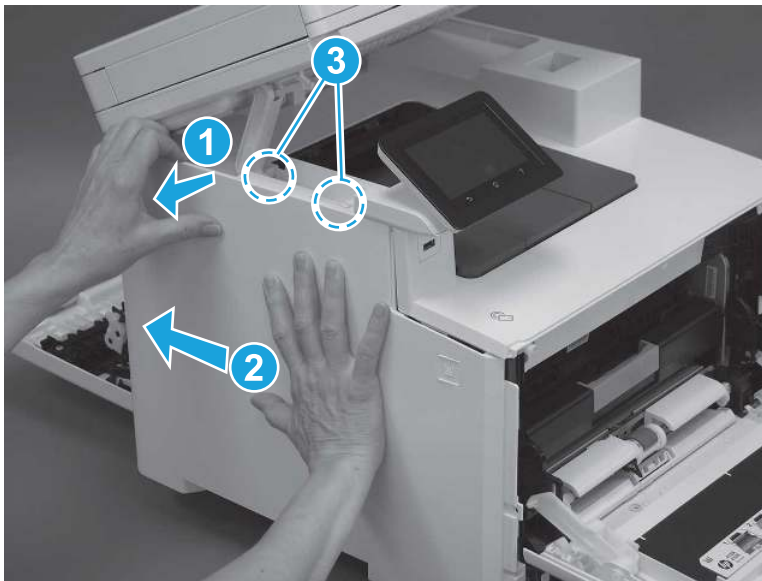
- Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

**Figure 5-1036** Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-1037** Release one tab and two hooks



8. Lower the scanner.

**Figure 5-1038** Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

Figure 5-1039 Remove the left cover

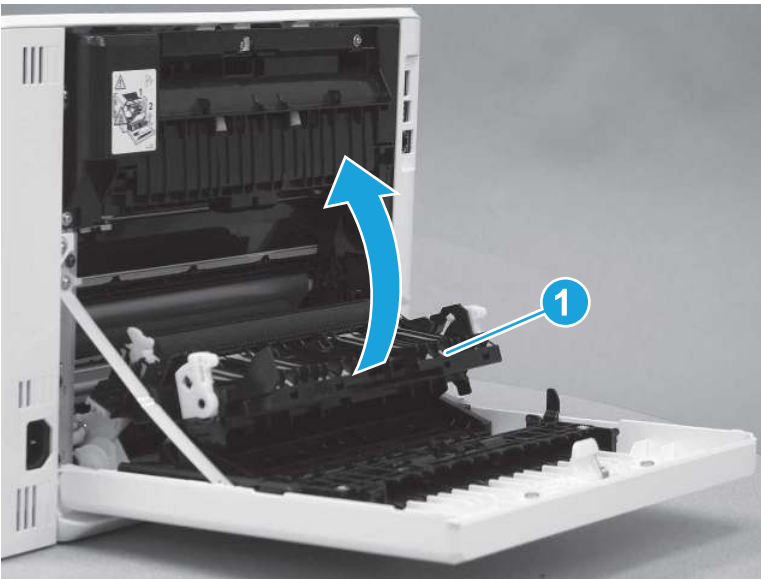


## 8. Remove the duplexing door assembly

Follow these steps to remove the duplexing door assembly.

1. Rotate the secondary transfer assembly (callout 1) toward the printer to close it.

Figure 5-1040 Close the secondary transfer assembly



2. At the back of the printer, remove two screws (callout 1), and then remove one screw (callout 2) that holds the retention arm.

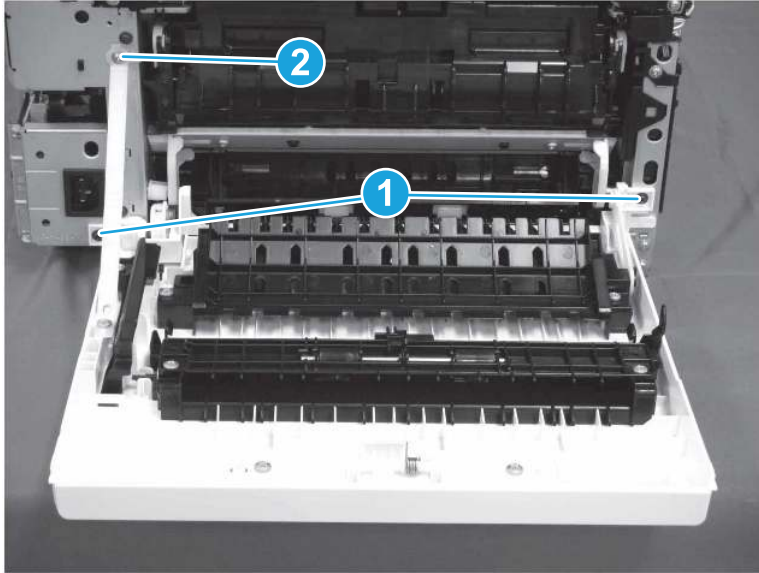
---

 **TIP:** Note that the screw (callout 2) that holds the retention arm is longer than the other two. Make sure this screw is installed in the correct position.

---

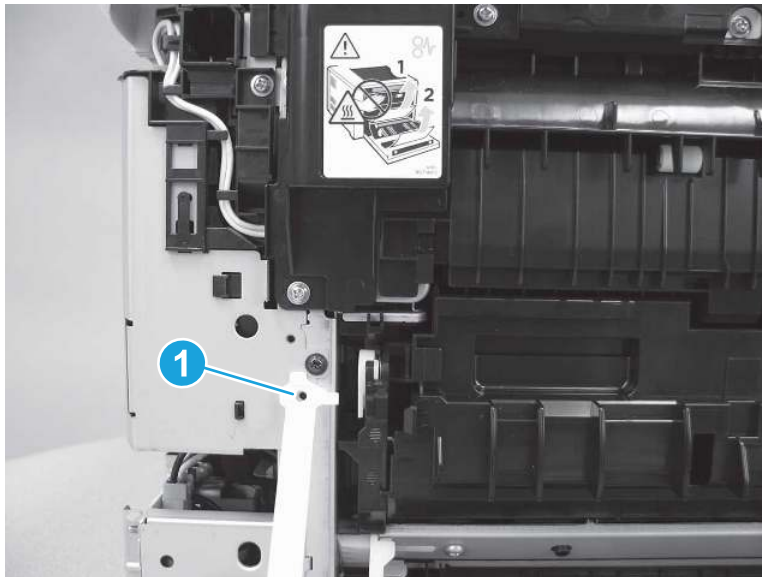


Figure 5-1041 Remove three screws



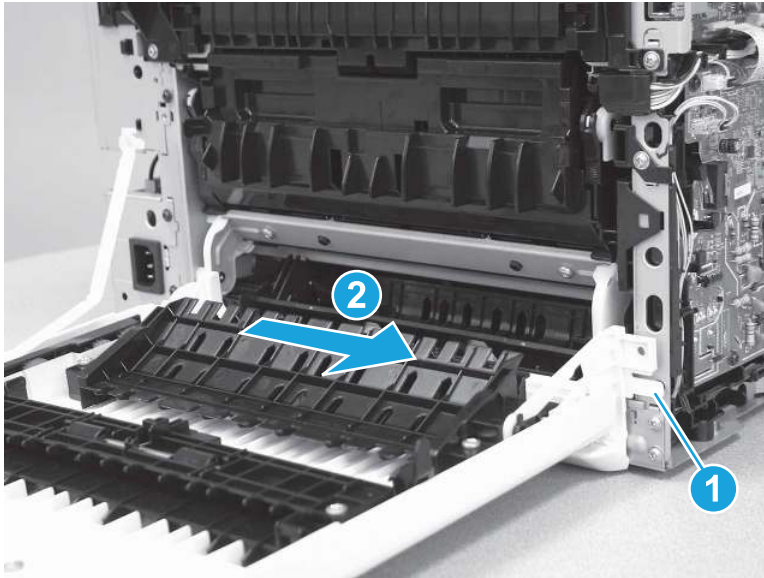
3. Release the retention arm (callout 1).

Figure 5-1042 Release the retention arm



4. Release one tab (callout 1), and then slide the duplexer door (callout 2) to the right to remove it.

**Figure 5-1043** Remove the duplexing door

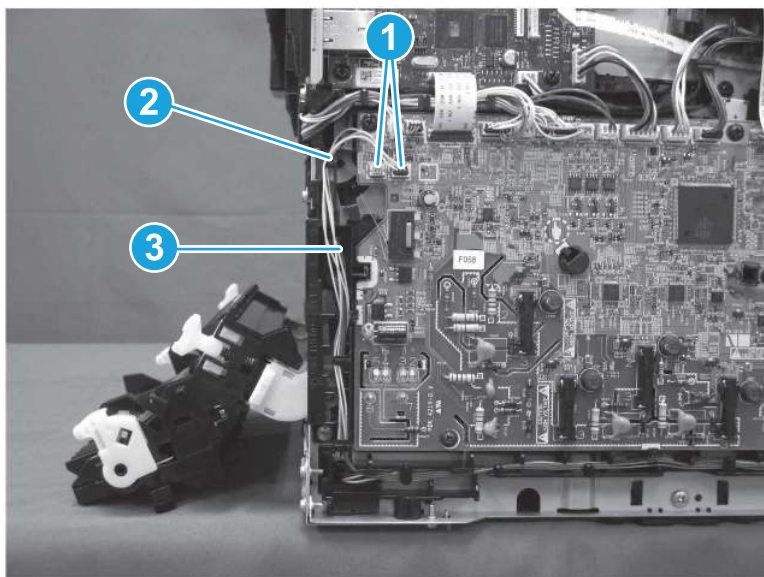


## 9. Remove the re-pickup assembly

Follow these steps to remove the re-pickup assembly.

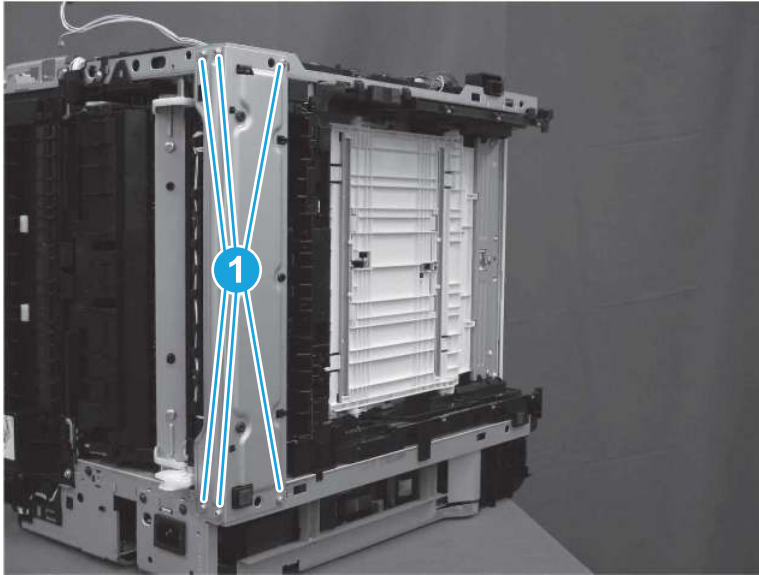
1. On the left side of the printer, disconnect two connectors (callout 1), and then remove the cables (callout 2) from the guides (callout 3).

**Figure 5-1044** Disconnect two connectors and remove cables from guides



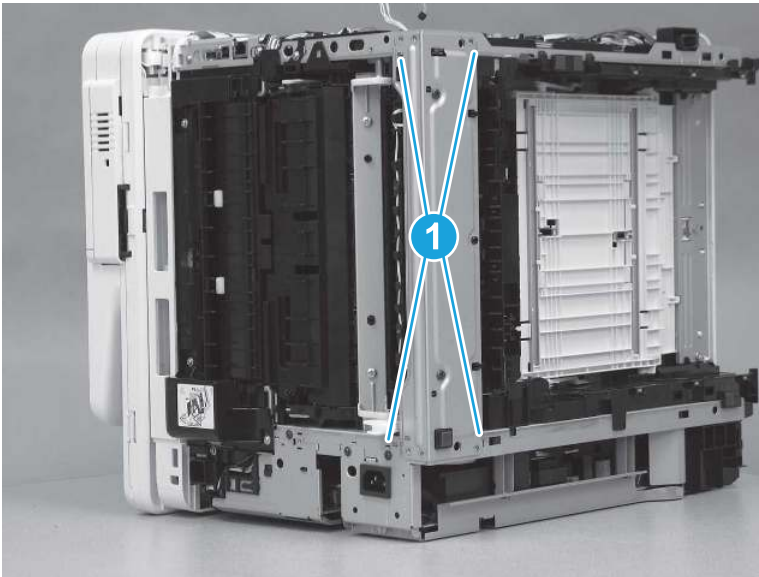
2. Lay the printer on the right side so that the left side is facing up. Remove six screws (callout 1).

**Figure 5-1045** Remove six screws



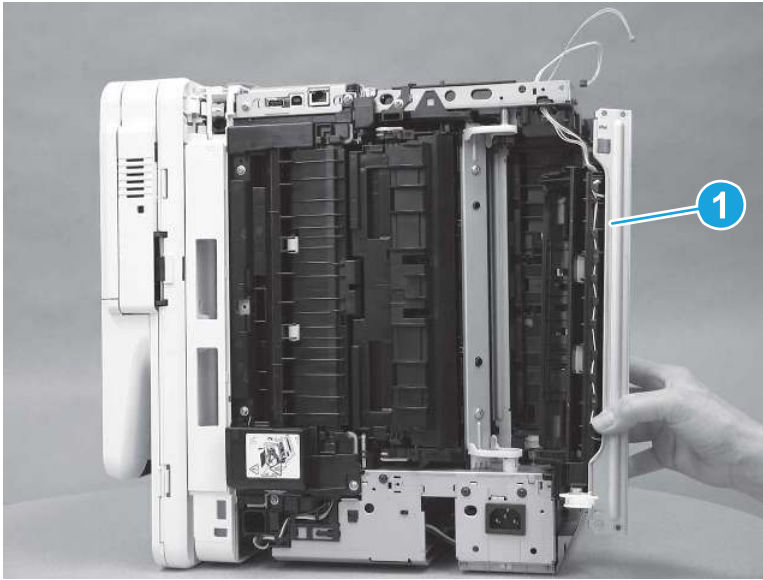
3. Release four tabs (callout 1).

**Figure 5-1046** Release four tabs



4. Remove the re-pickup assembly (callout 1).

Figure 5-1047 Remove the assembly



## 10. Remove the DC controller

Follow these steps to remove the DC controller.

1. Before disconnecting the connectors in the next step, take note of the position of two of the cables (callout 1).


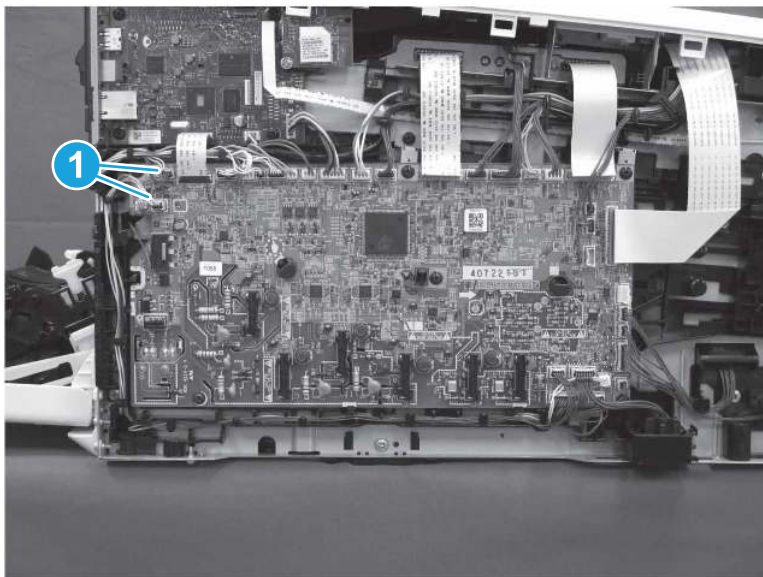
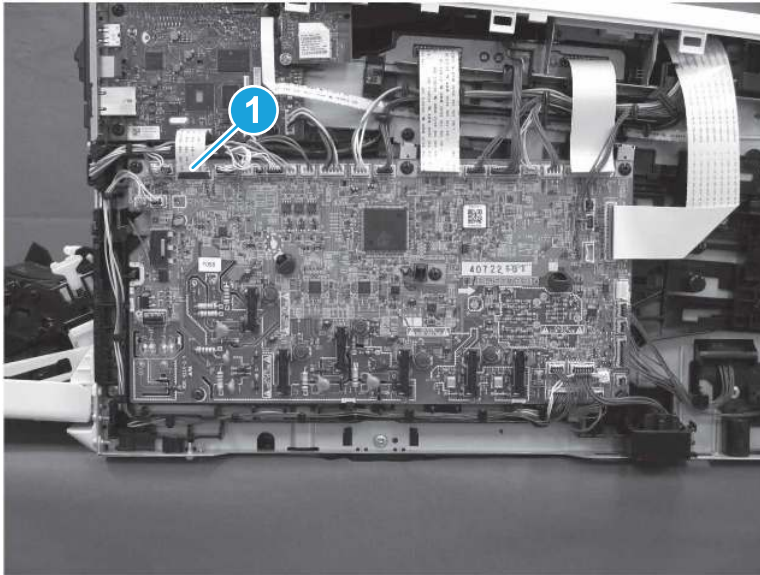
 **IMPORTANT:** These cables can be mistakenly switched when reinstalled. The connectors on the cables fit in either connector on the DC controller. Make sure that these cables are installed in the correct connectors. The upper cable is purple and the lower cable is yellow. *If the cables are switched, the printer jams repeatedly when duplex printing.*

Figure 5-1048 Check the cables



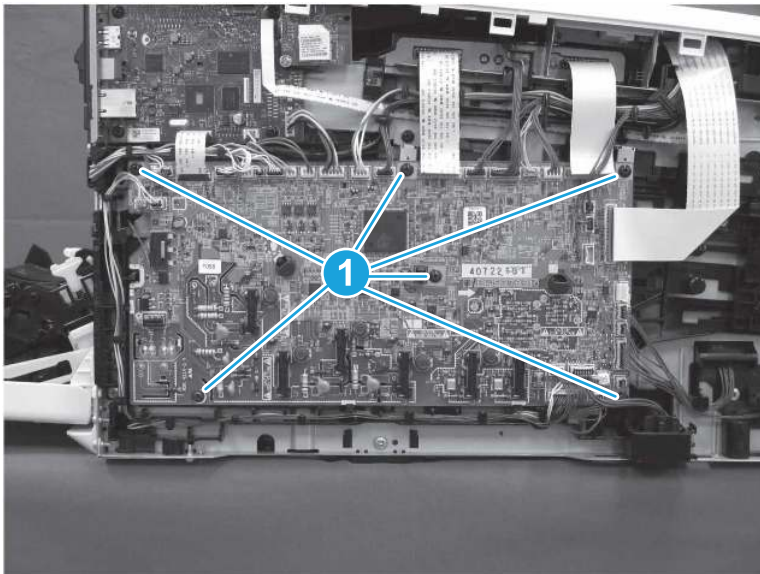
2. Disconnect all of the connectors on the DC controller. Note that one connector (callout 1) is a zero insertion force (ZIF) connector. Lift the latch on the connector before removing the flat cable.

**Figure 5-1049** Disconnect all of the connectors



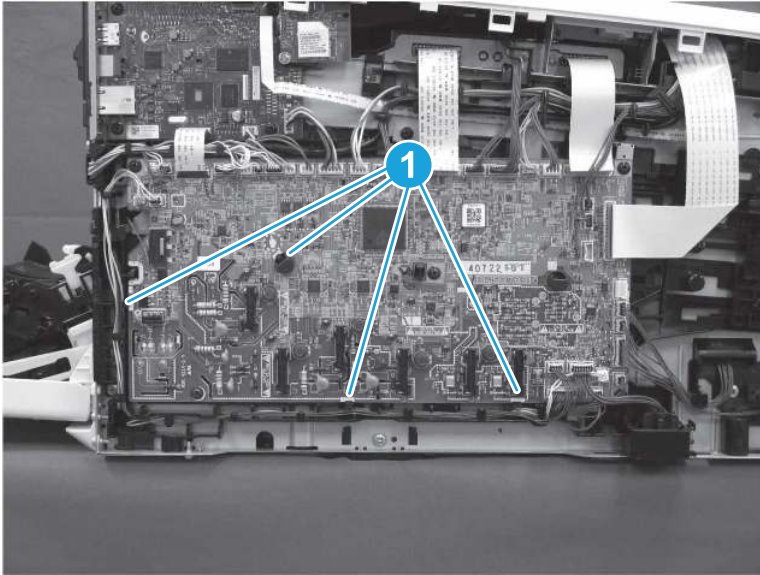
3. Remove six screws (callout 1).

**Figure 5-1050** Remove six screws



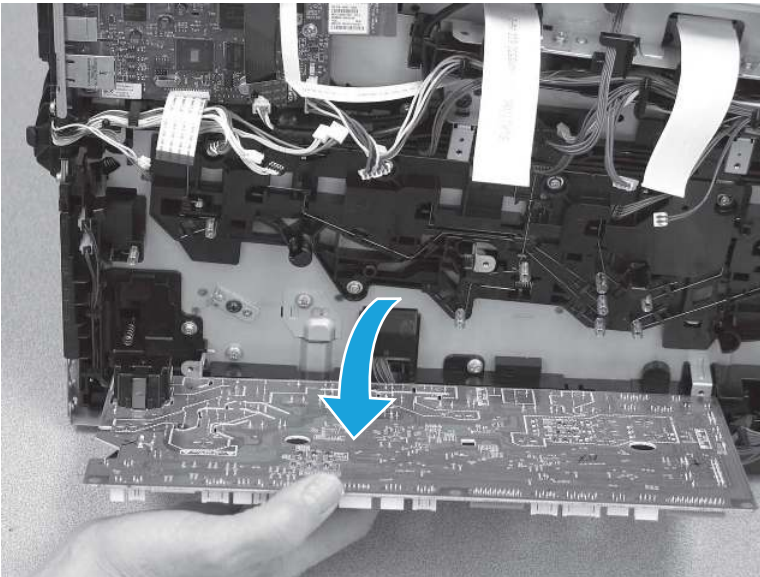
4. Release four tabs (callout 1).

Figure 5-1051 Release four tabs



5. Remove the DC controller.

Figure 5-1052 Remove the assembly

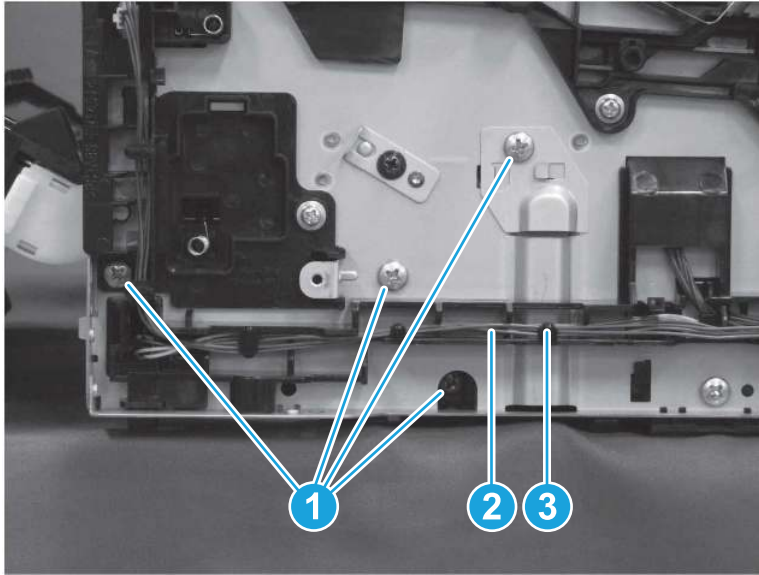


## 11. Remove the lifter drive assembly

Follow these steps to remove the lifter drive assembly.

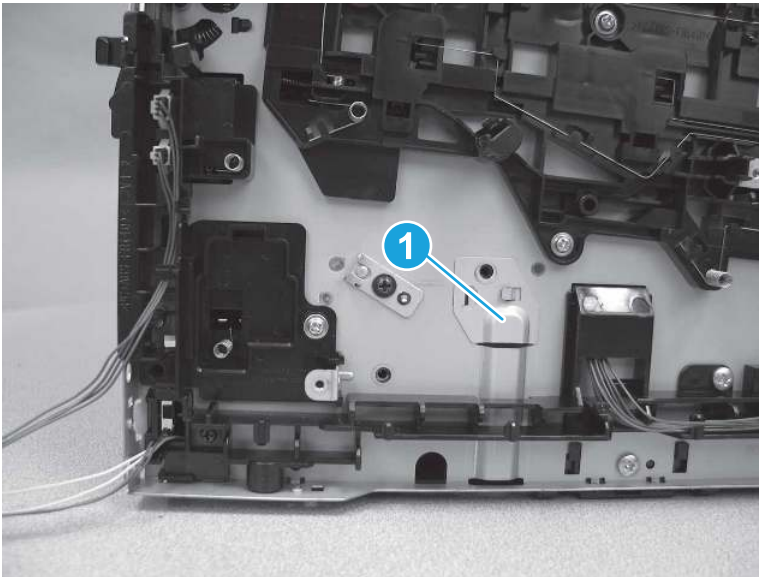
1. Remove four screws (callout 1), and then release the cables (callout 2) from the guides (callout 3).

**Figure 5-1053** Remove four screws and release cables



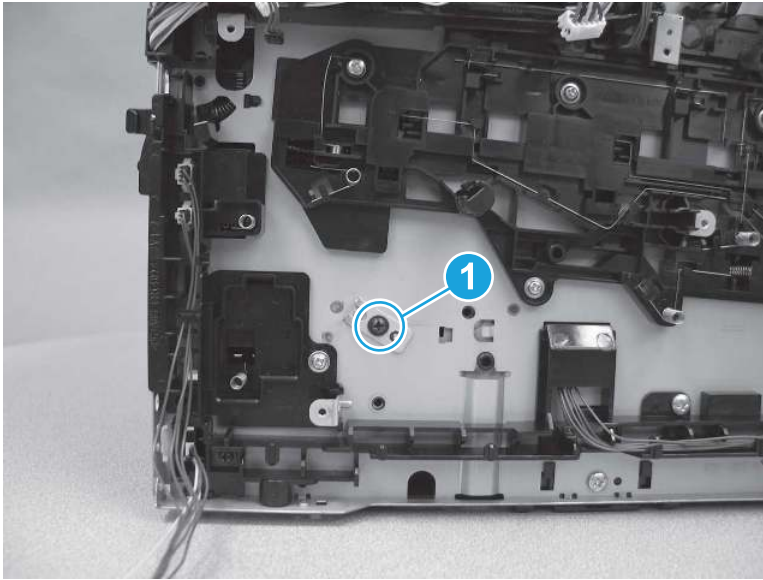
2. Remove one cover (callout 1).

**Figure 5-1054** Remove one cover



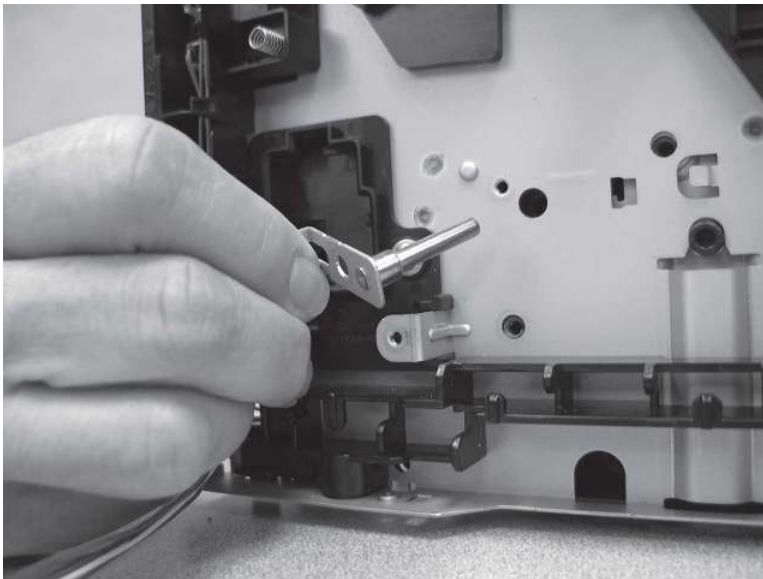
3. Remove one screw (callout 1).

Figure 5-1055 Remove one screw



4. Remove the shaft.

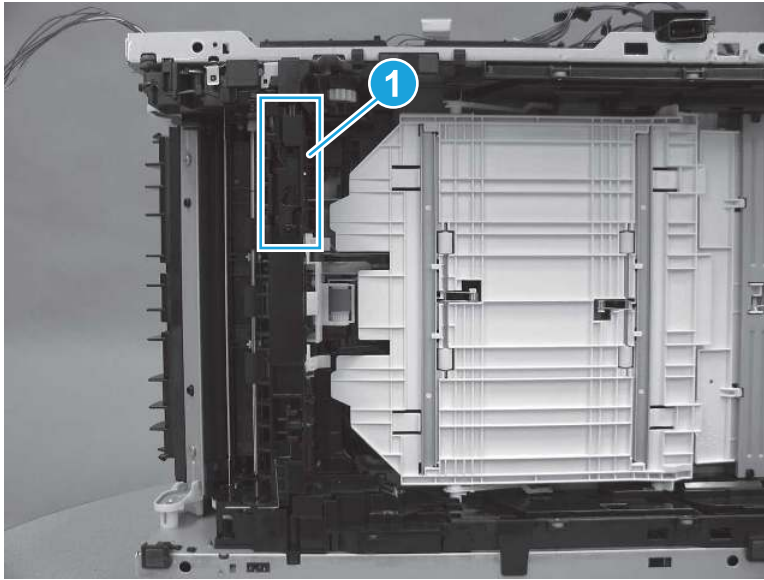
Figure 5-1056 Remove the shaft





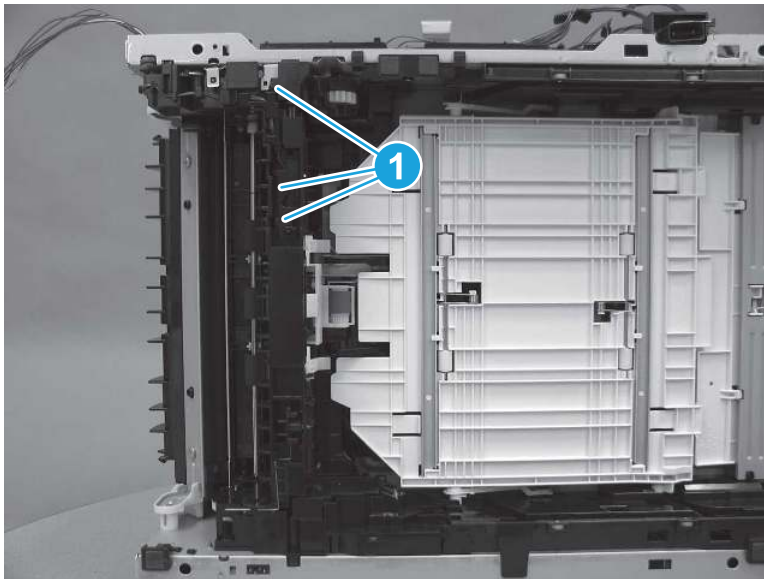
5. Lay the printer on the right side so that the left side is facing up. Locate the tray sensor switch (callout 1).

**Figure 5-1057** Locate the tray sensor switch



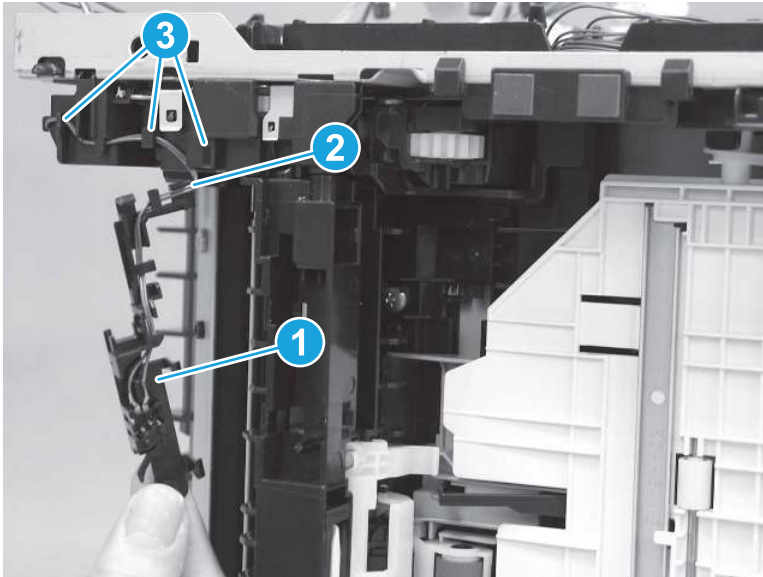
6. Release three tabs (callout 1).

**Figure 5-1058** Release three tabs



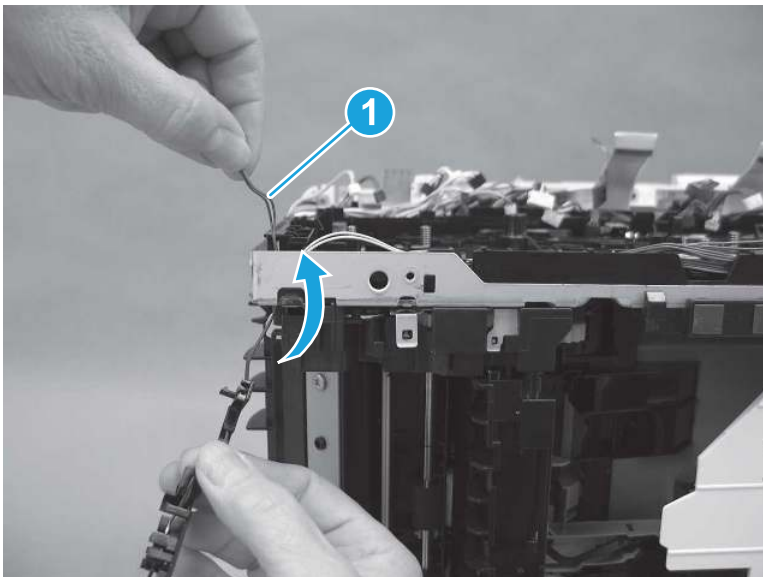
7. Release the tray sensor switch (callout 1), and then remove the cables (callout 2) from the guides (callout 3).

**Figure 5-1059** Release the tray sensor switch



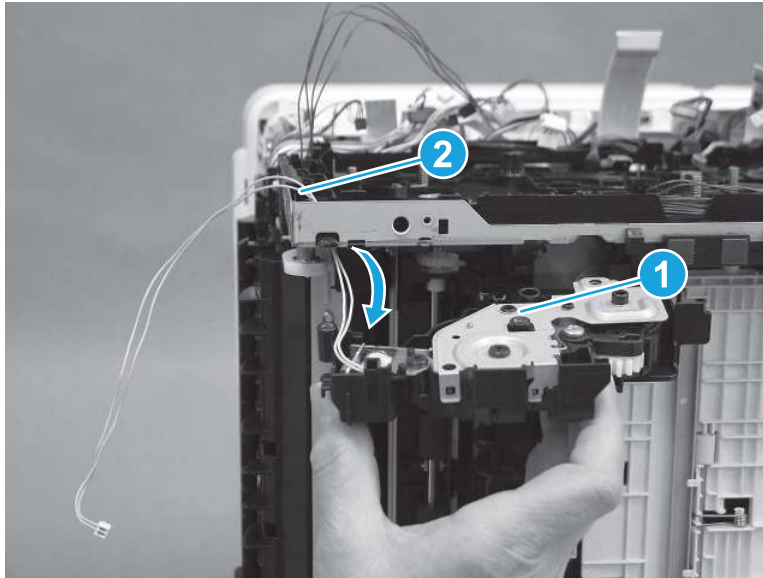
8. Remove the tray sensor switch by releasing the cables (callout 1) through the printer frame.

**Figure 5-1060** Remove the tray sensor switch



9. Remove the lifter drive assembly (callout 1), and then pass the cables (callout 2) through the printer frame.

Figure 5-1061 Remove the assembly

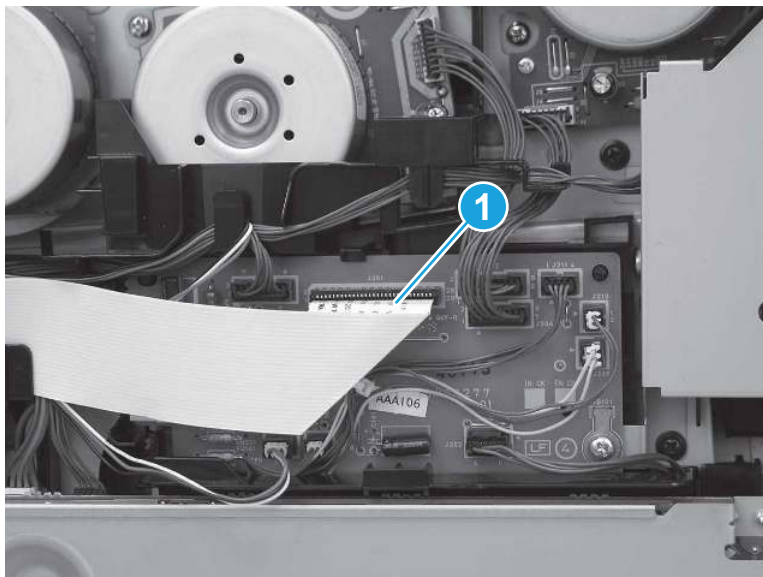


## 12. Remove the driver PCA

Follow these steps to remove the driver PCA.

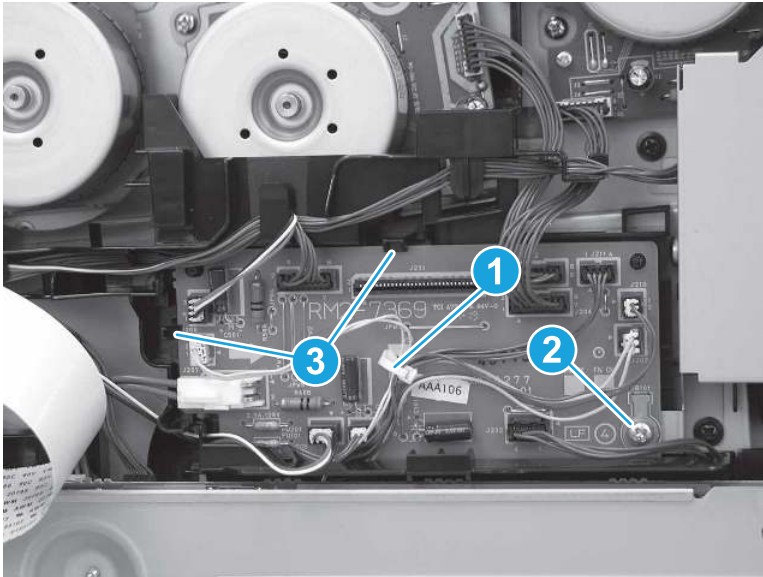
1. Disconnect one connector (callout 1).

Figure 5-1062 Disconnect one connector



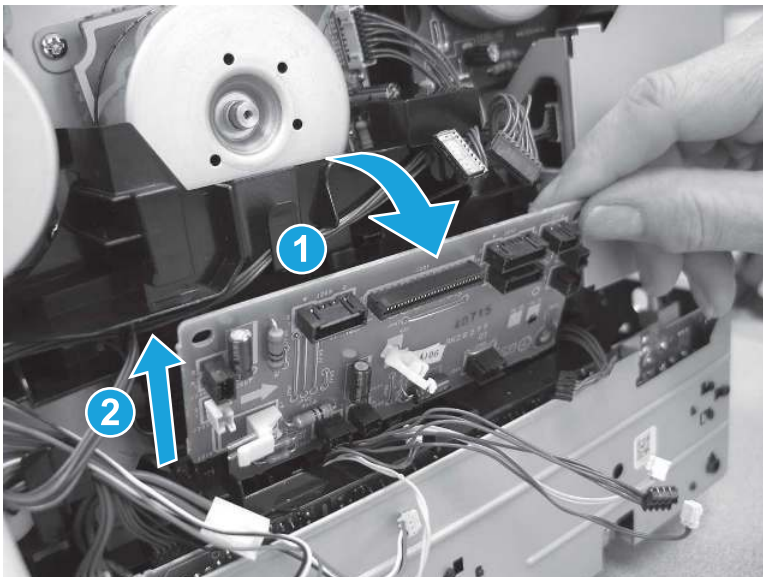
2. Release one retainer (callout 1), disconnect all of the connectors on the driver PCA, remove one screw (callout 2), and then release two tabs (callout 3).

**Figure 5-1063** Disconnect all connectors and remove one screw



3. Rotate the top of the driver PCA away from the printer (callout 1), and then lift up (callout 2) to remove it.

**Figure 5-1064** Remove the PCA

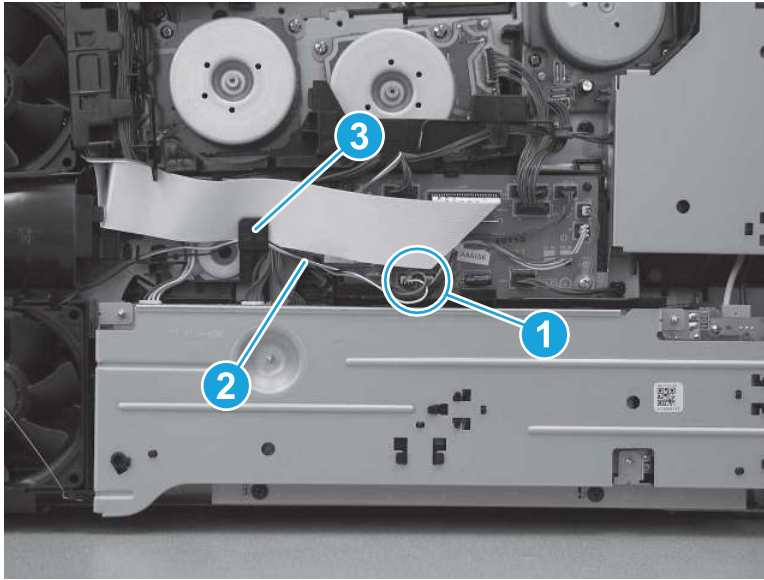


### 13. Remove the LVPS

Follow these steps to remove the LVPS.

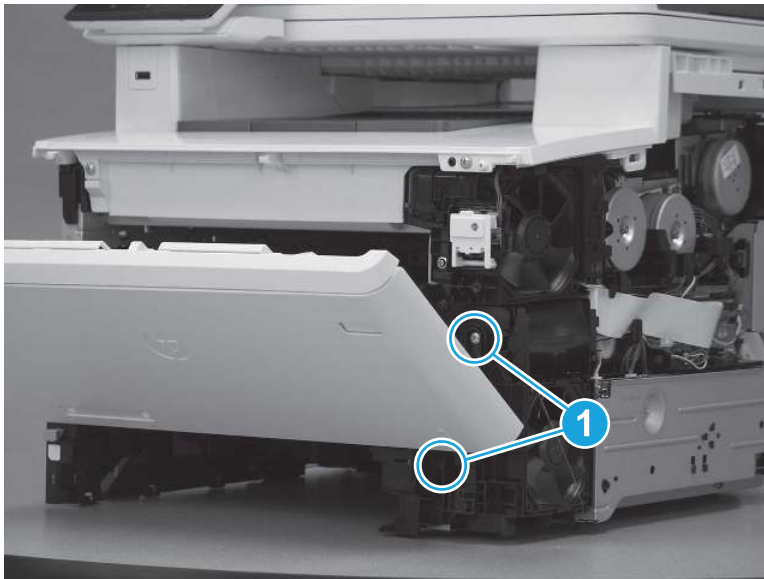
1. Disconnect one connector (callout 1), and then remove the cable (callout 2) from the wire guide (callout 3).

**Figure 5-1065** Disconnect one connector and release cables from guides



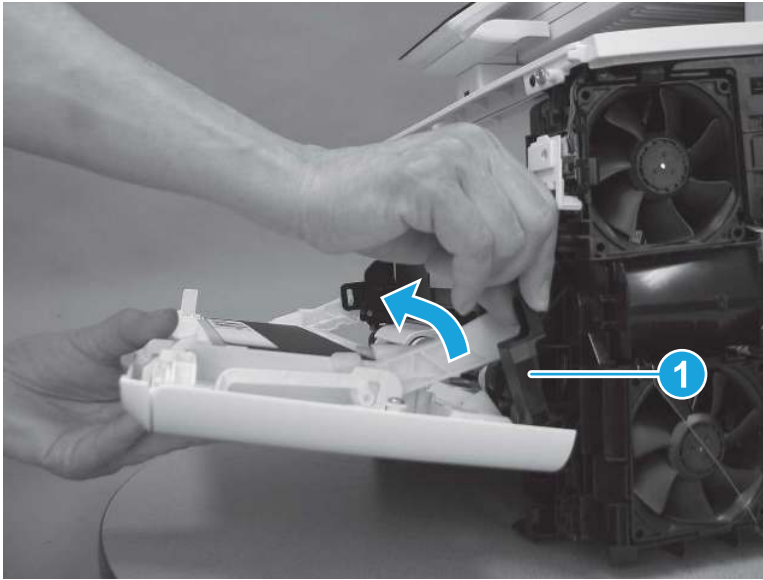
2. Remove two screws (callout 1).

**Figure 5-1066** Remove two screws



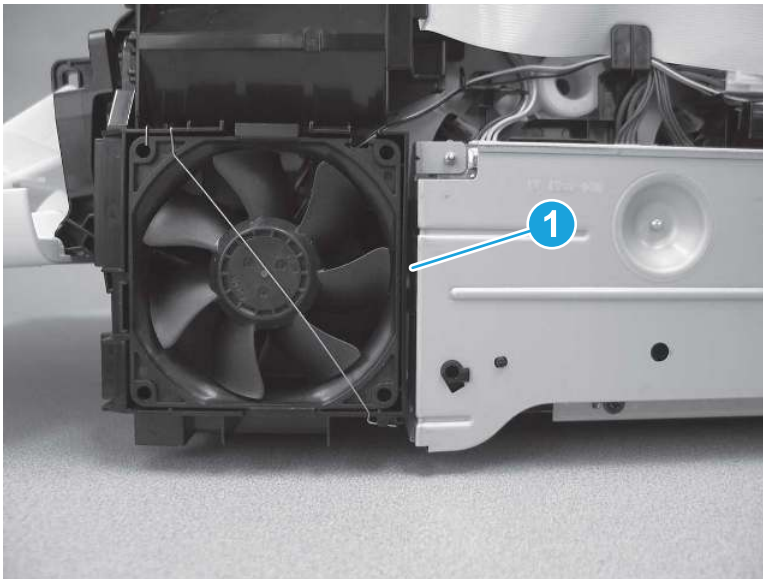
3. Release the hinge arm (callout 1).

**Figure 5-1067** Release the hinge arm



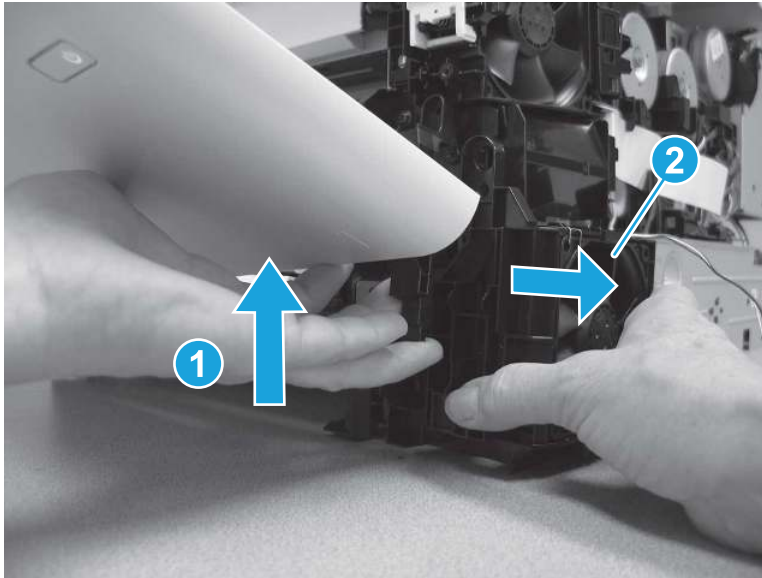
4. Release one tab (callout 1) on the right side of the power supply fan.

**Figure 5-1068** Release one tab




- Lift the front door up slightly (callout 1), and then remove the power supply fan and holder (callout 2).

**Figure 5-1069** Remove the power supply fan and holder



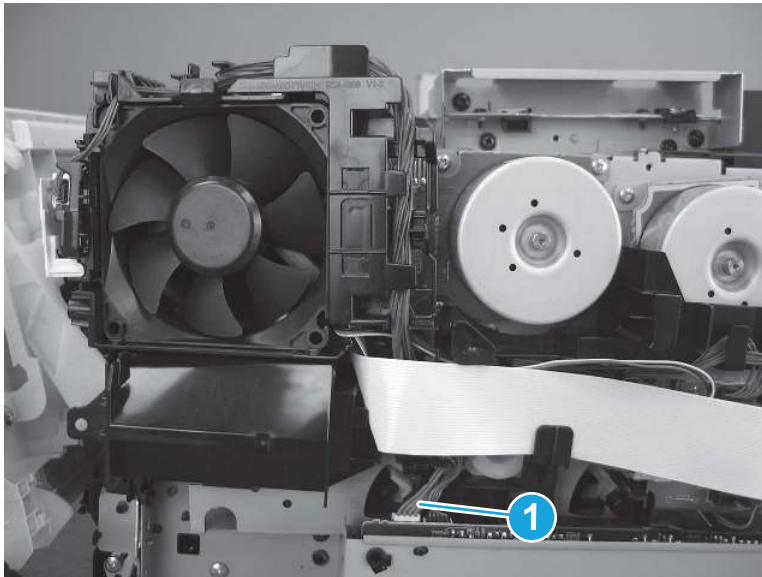
- Before proceeding, take note of the position of two cables (callout 1).

---

 **IMPORTANT:** These cables can be mistakenly switched when reinstalled. The connectors on the cables fit in either connector on the LVPS. Make sure that these cables are installed in the correct connectors. *If the cables are switched, the printer will not power on when reassembled.*

---

**Figure 5-1070** Check the connectors



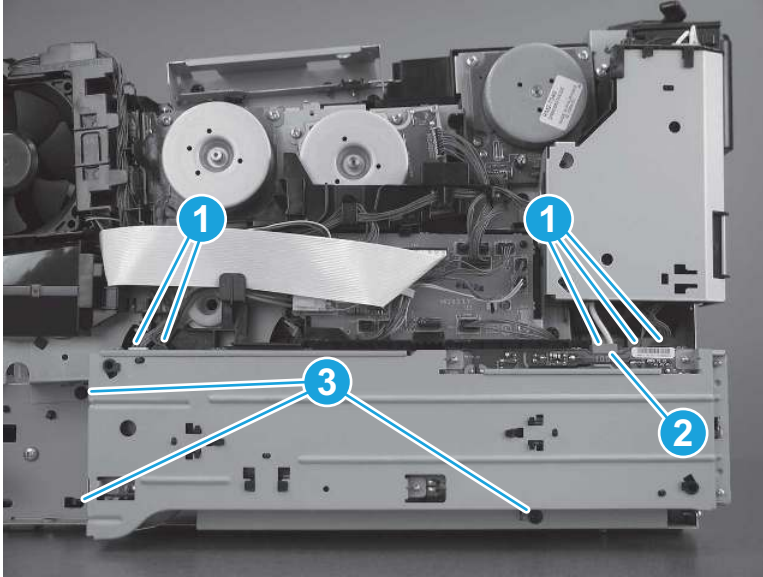
- Disconnect five connectors (callout 1). One connector (callout 2) has a latch that must be released before disconnecting it. Remove three screws (callout 3).

---

 **NOTE:** The latch for one connector (callout 2) is located on the backside of the connector body, and not easily seen.

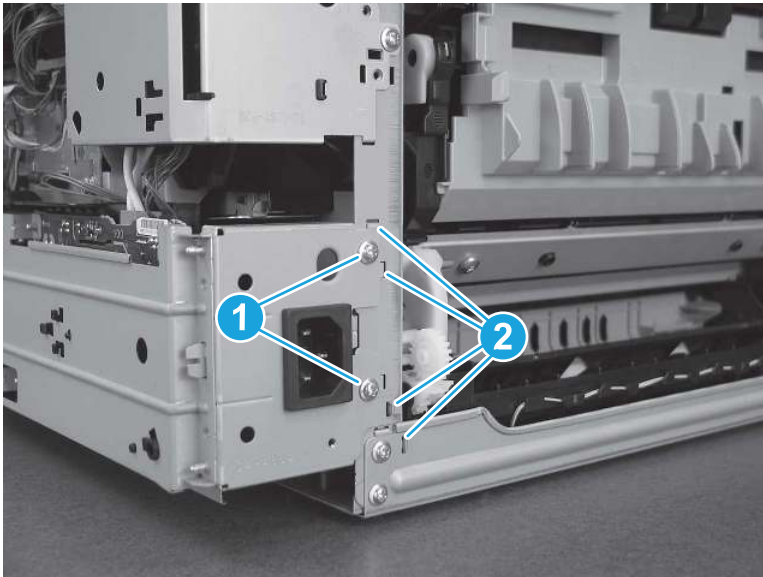
---

**Figure 5-1071** Disconnect five connectors and remove three screws



8. Remove two screws from the back (callout 1), and then release four tabs (callout 2).

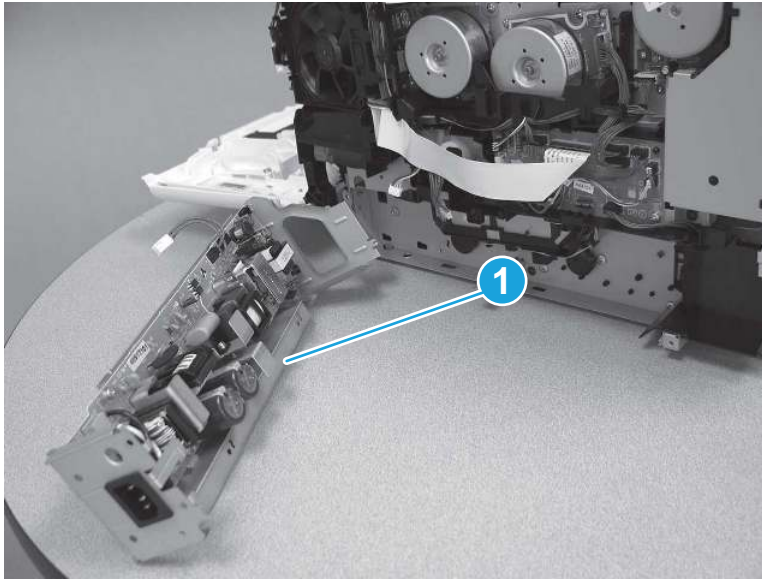
**Figure 5-1072** Remove two screws and release three tabs





9. Remove the LVPS (callout 1).

**Figure 5-1073** Remove the assembly

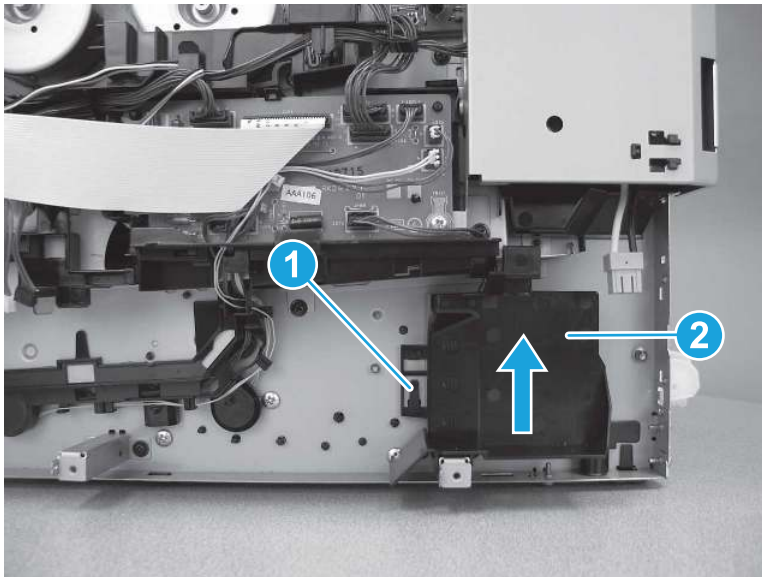


## 14. Remove the pickup motor

Follow these steps to remove the pickup motor.

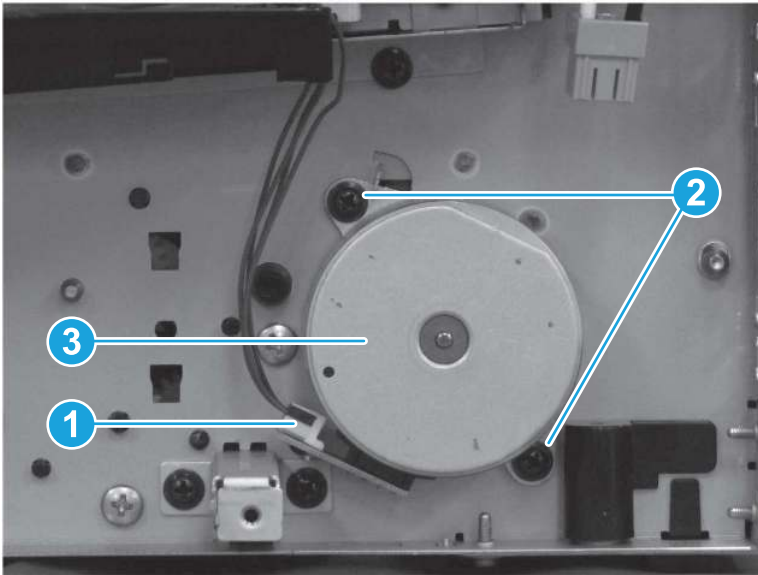
1. Release one tab (callout 1), and then slide the fan duct (callout 2) up to remove it.

**Figure 5-1074** Remove the fan duct



2. Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the pickup motor (callout 3).

Figure 5-1075 Remove the assembly

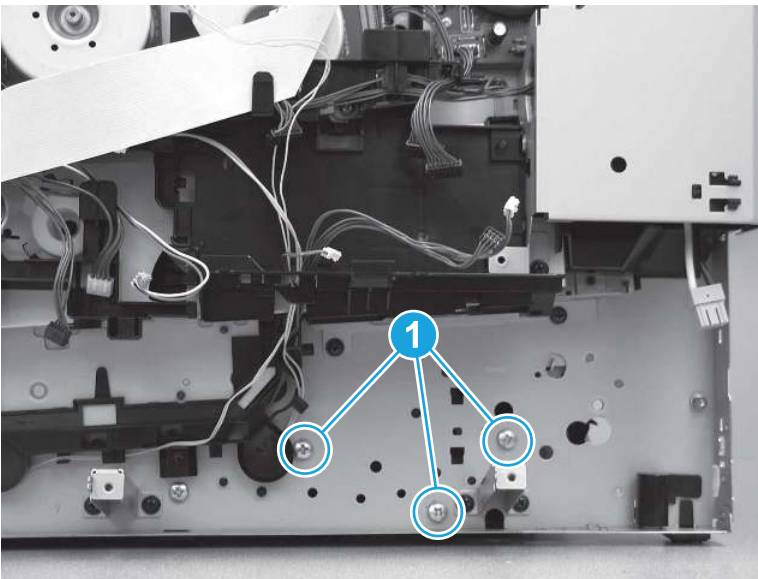


## 15. Remove the pickup assembly

Follow these steps to remove the pickup assembly.

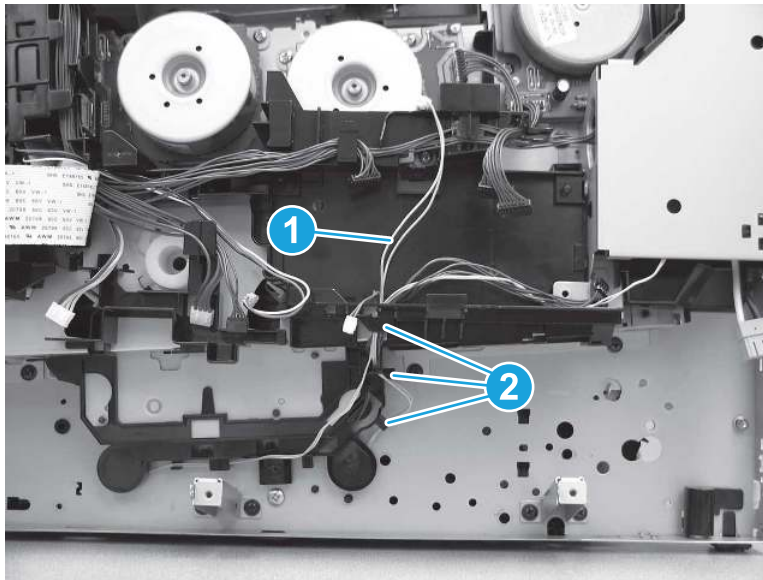
1. Remove three screws (callout 1).

Figure 5-1076 Remove three screws



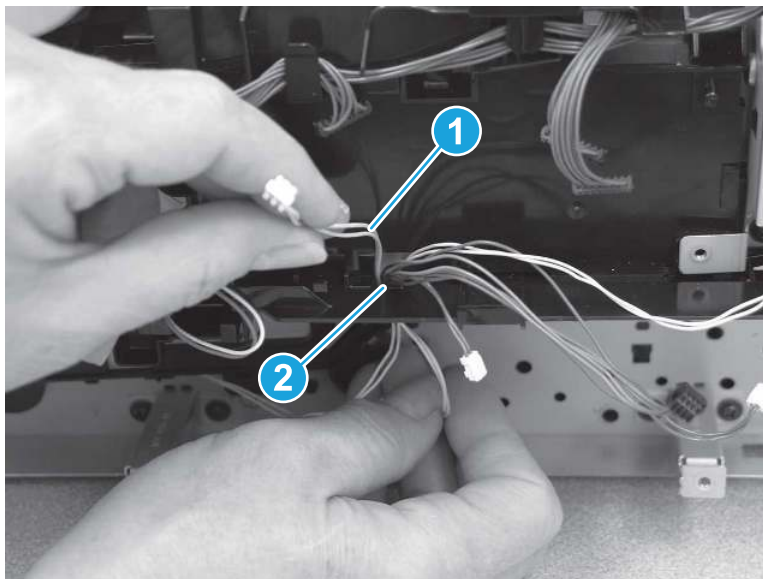
2. Release the cables (callout 1) from the cable guides (callout 2).

**Figure 5-1077** Release the cables from the cable guides



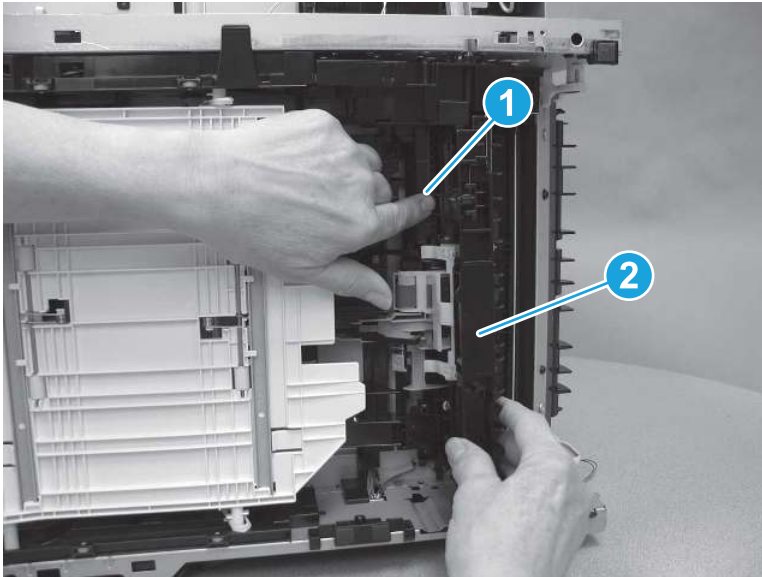
3. Thread the cables (callout 1) through the opening in the driver PCA holder (callout 2).

**Figure 5-1078** Release the cables



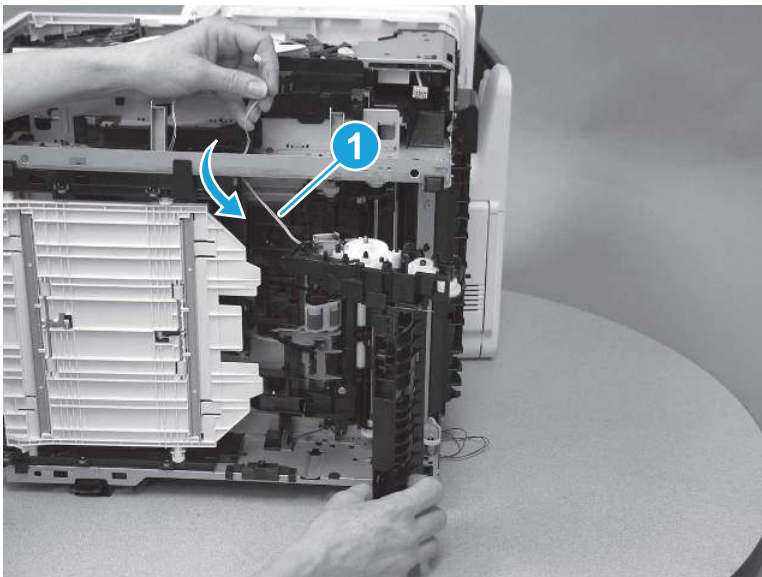
4. Lay the printer on the right side so that the left side is facing up. Press the pickup and feed roller holder (callout 1) toward the printer, and then remove the pickup assembly (callout 2).

**Figure 5-1079** Remove the pickup assembly



5. Pass the cables (callout 1) through the printer frame.

**Figure 5-1080** Release the cables



## 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.

---

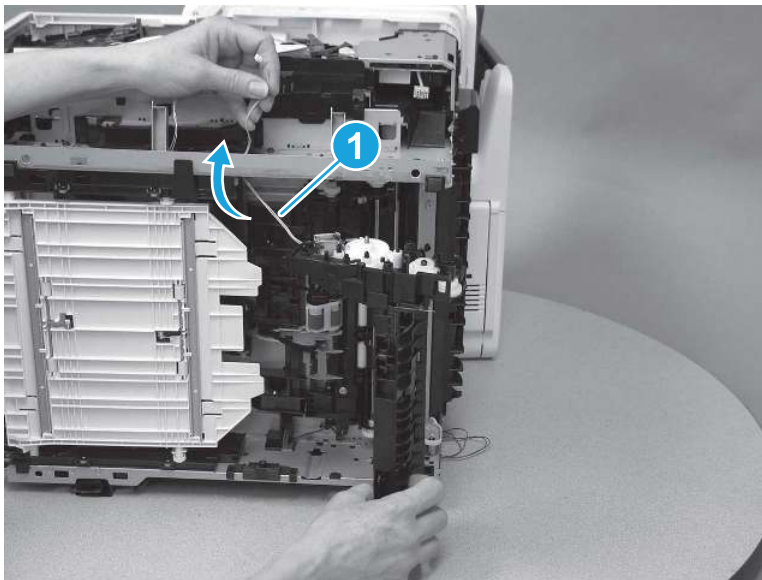
## 17. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Pickup assembly

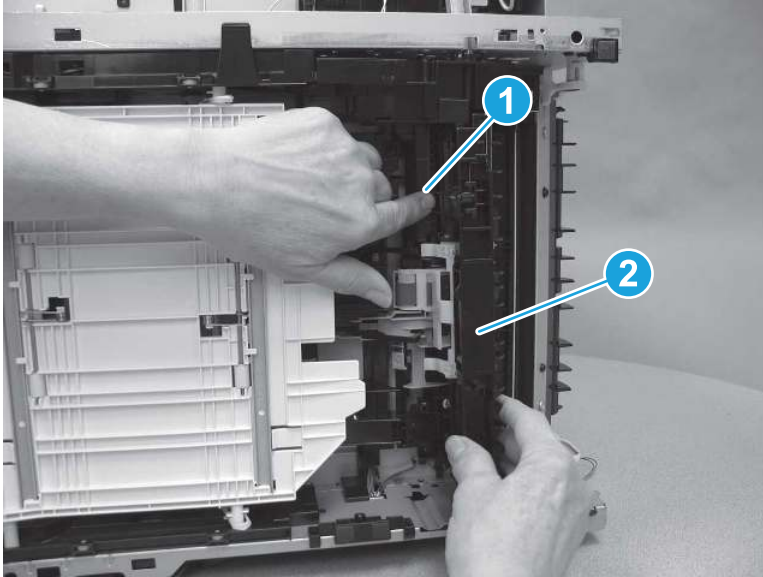
1. Pass the cables (callout 1) through the printer frame.

**Figure 5-1081** Pass the cables through the printer frame



2. Press the pickup and feed roller holder (callout 1) toward the printer, and then install the pickup assembly (callout 2).

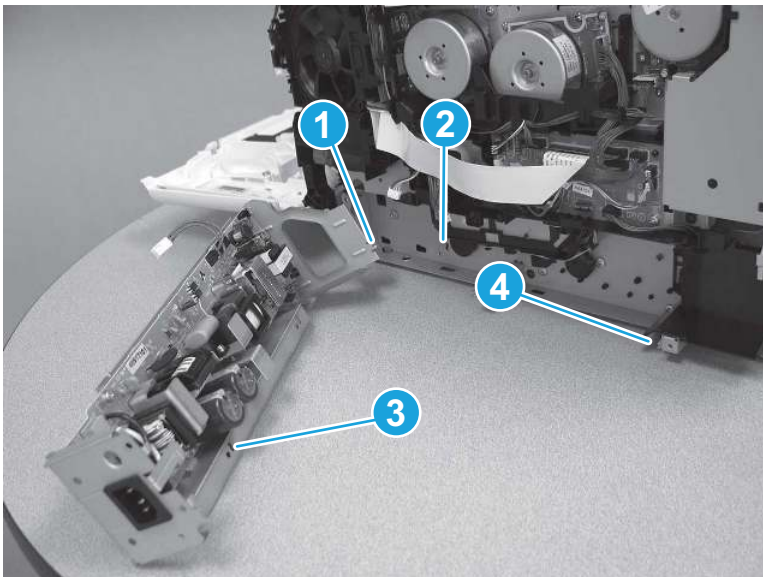
**Figure 5-1082** Install the pickup assembly



Low-voltage power supply

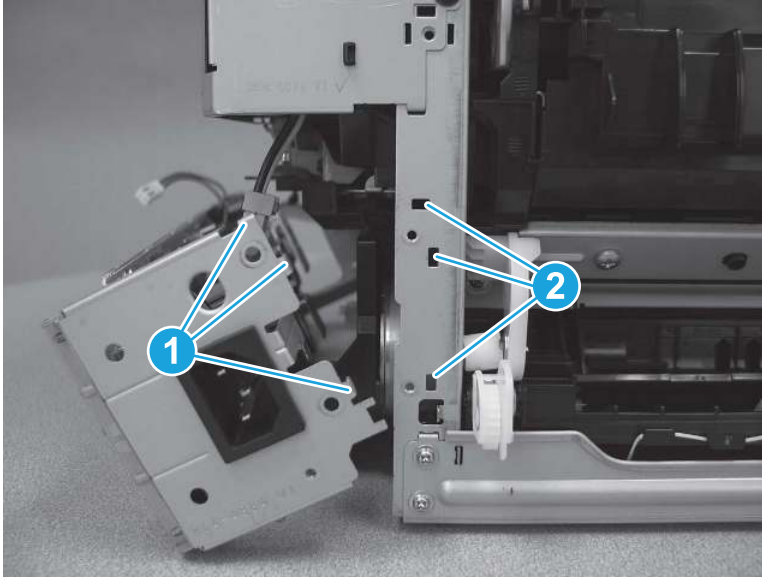
1. Install the tab (callout 1) on the LVPS into the slot (callout 2) in the printer. Install the slot (callout 3) in the LVPS over the tab (callout 4) on the printer.

**Figure 5-1083** Install the side tabs of the LVPS



2. At the back of the printer, install the tabs on the LVPS (callout 1) into the slots (callout 2) in the printer.

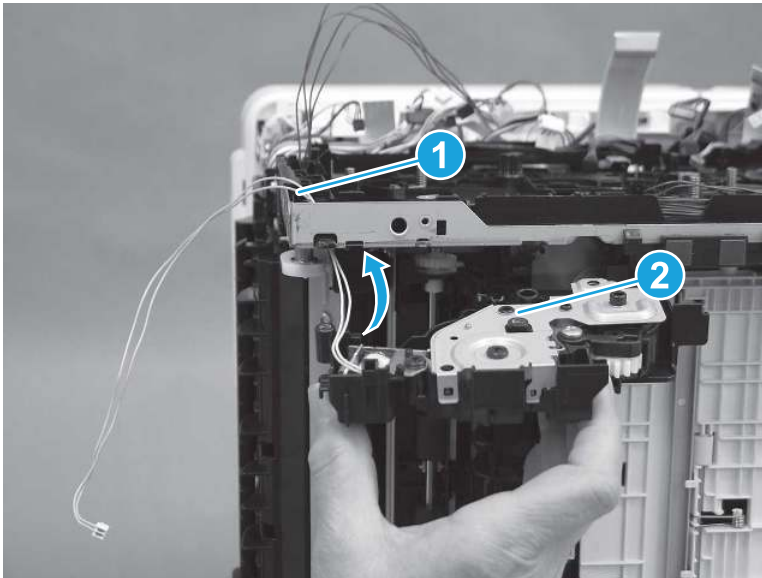
**Figure 5-1084** Install the back tabs of the LVPS



Lifter drive assembly

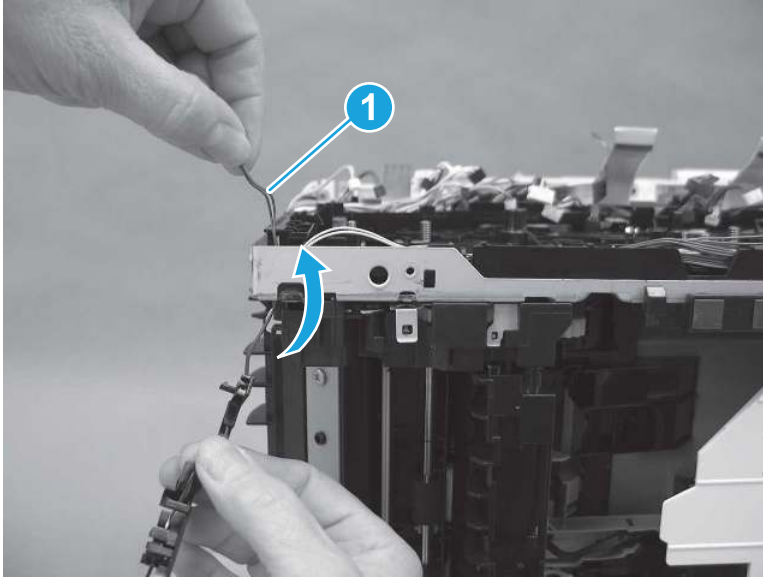
1. Pass the cables (callout 1) on the lifter drive assembly up through the printer frame, and then install the lifter drive assembly (callout 2).

**Figure 5-1085** Install the lifter drive assembly



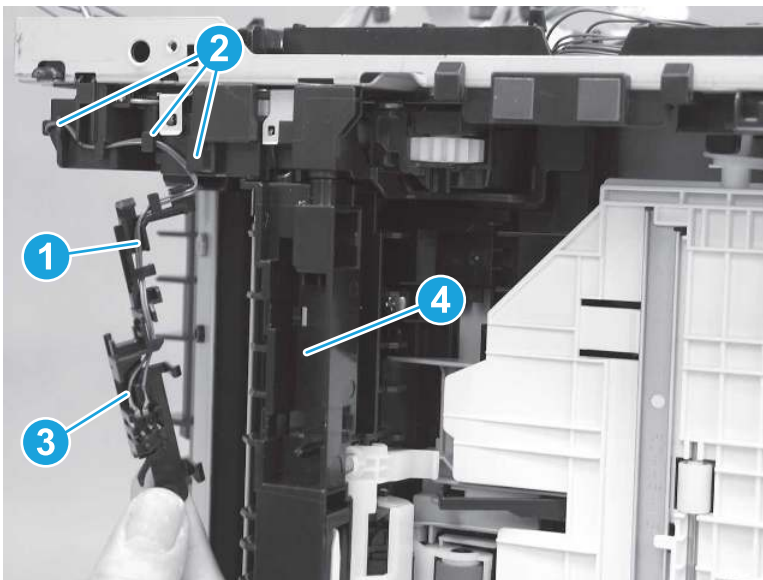
2. Pass the cables (callout 1) on the tray sensor switch up through the printer frame.

**Figure 5-1086** Install the tray sensor switch cable



3. Install the cables (callout 1) in the cable guide (callout 2), and then install the tray sensor switch (callout 3) on the lifter drive assembly (callout 4).

**Figure 5-1087** Install the tray sensor switch



## Removal and replacement: Front feed guide assembly

Learn how to remove and replace the front feed guide assembly.

[View a video of removing and replacing the front feed guide assembly.](#)

Mean time to repair: 96 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](http://www.hp.com/buy/parts).

**Table 5-40** Part information

Part number	Part description
RM2-6368-000CN	Feed guide assembly (front)

### Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- #2 Phillips short-shaft or right-angle screwdriver with a magnetic tip
- Small flat-blade screwdriver

### After performing service

#### Turn the printer power on

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

### Post service test

Make sure that the printer initializes to a **Ready** state.


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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

Figure 5-1088 Remove the tray

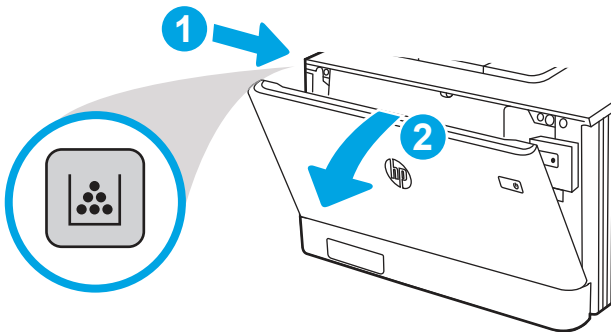


## 2. Remove the toner cartridges

Follow these steps to remove the toner cartridges.

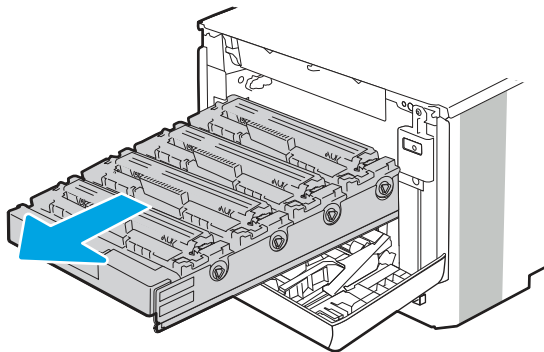
1. Open the front door by pressing the button on the left cover.

Figure 5-1089 Open the front door



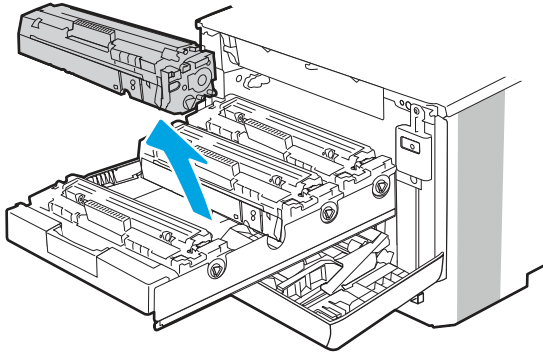
2. Grasp the blue handle on the toner cartridge tray, and then pull out the tray.

Figure 5-1090 Open the cartridge drawer



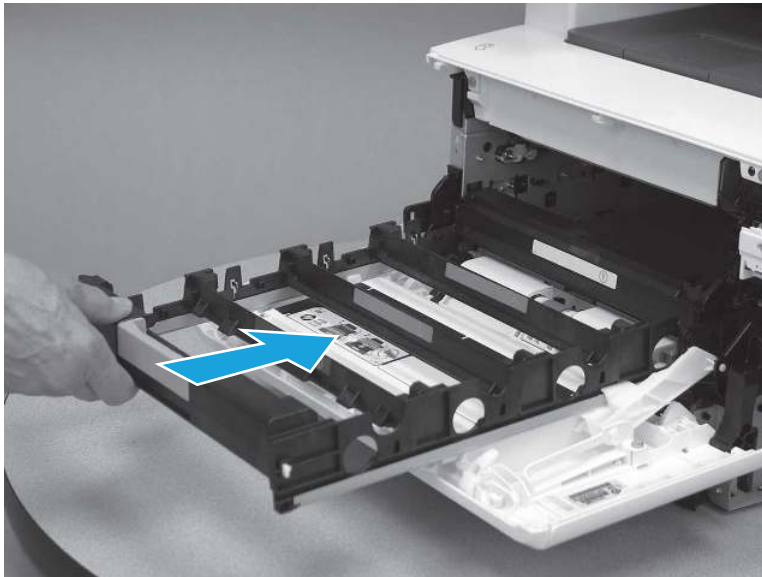
3. Grasp the handle on the toner cartridge, and then pull the toner cartridge straight up to remove it. Repeat this step for each toner cartridge.

**Figure 5-1091** Remove the toner cartridges



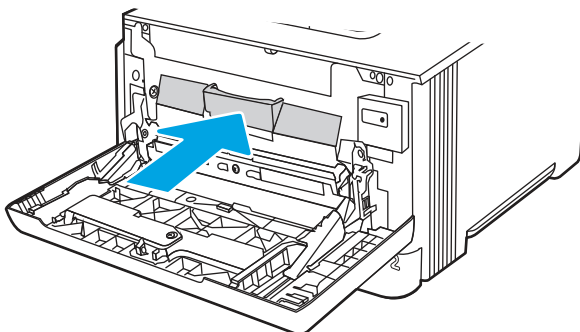
4. Slide the cartridge tray into the printer.

**Figure 5-1092** Slide the cartridge tray into the printer



5. Close the front door.

**Figure 5-1093** Close the front door



### 3. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

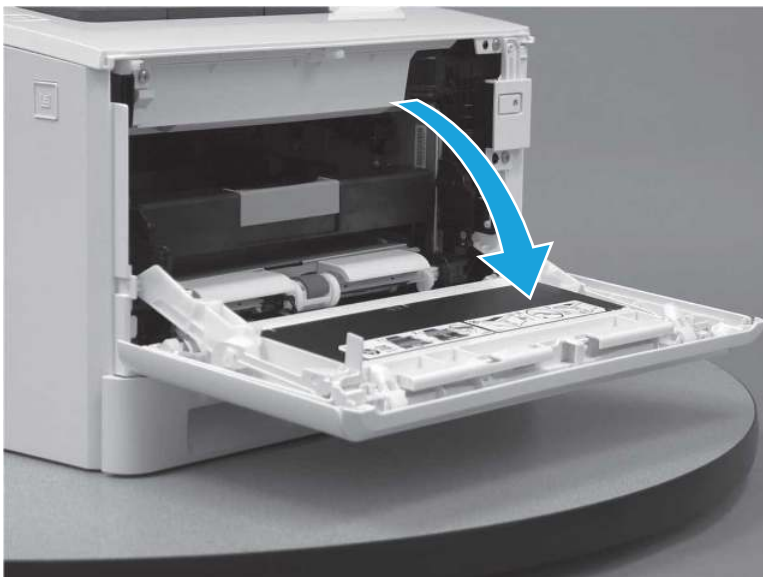
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-1094** Release the front door



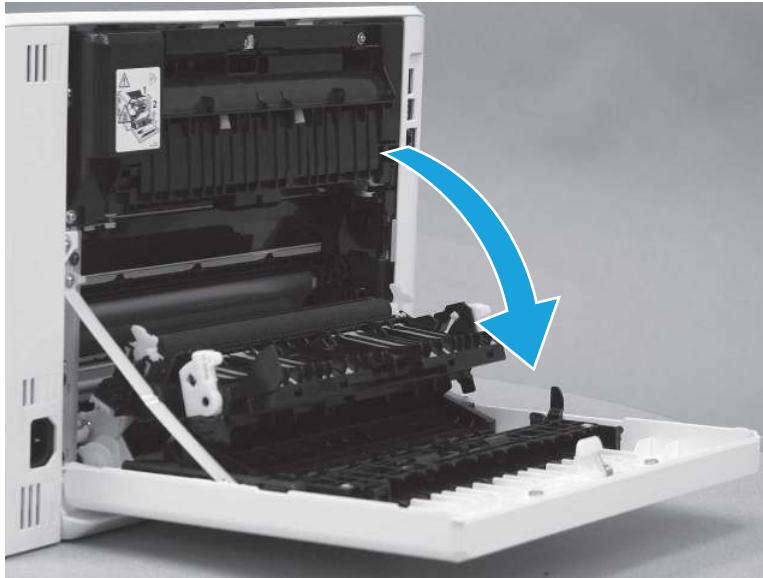
2. Open the front door.

**Figure 5-1095** Open the front door



3. Open the duplexing door.

**Figure 5-1096** Open the duplexer door



#### 4. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

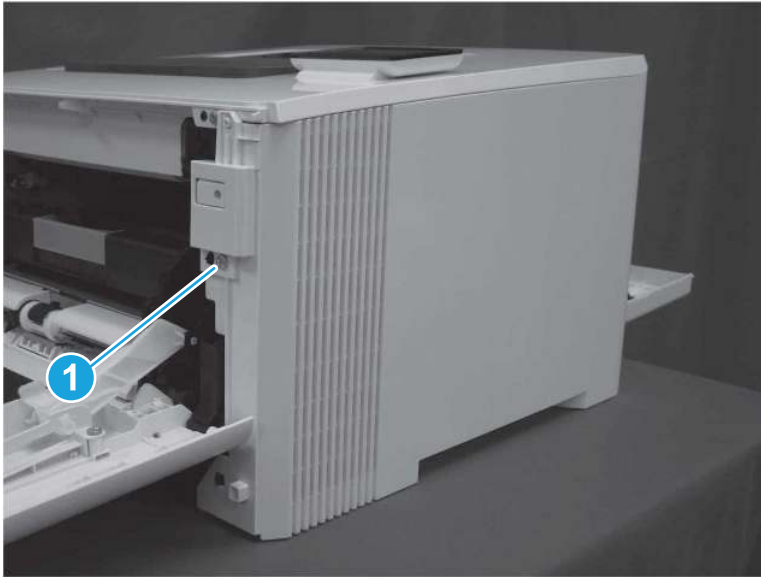
1. At the back of the printer, remove one screw (callout 1).

**Figure 5-1097** Remove one screw



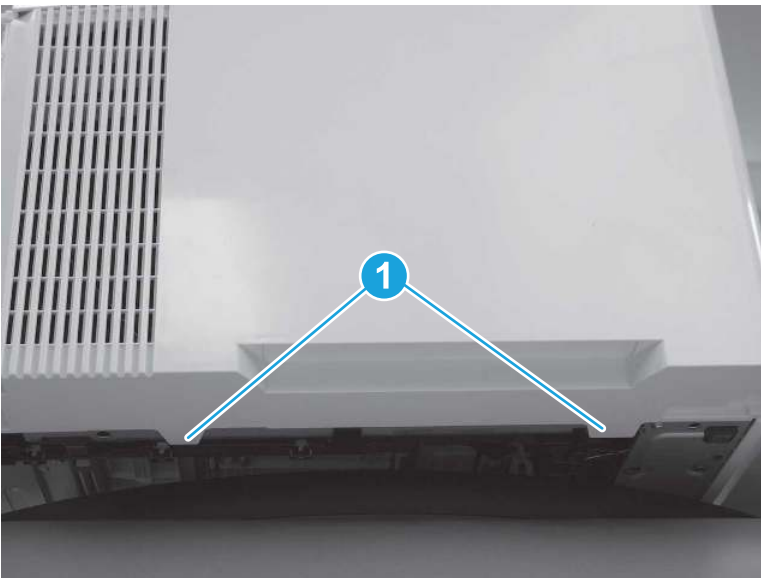
2. At the front of the printer, remove one screw (callout 1).

Figure 5-1098 Remove one screw



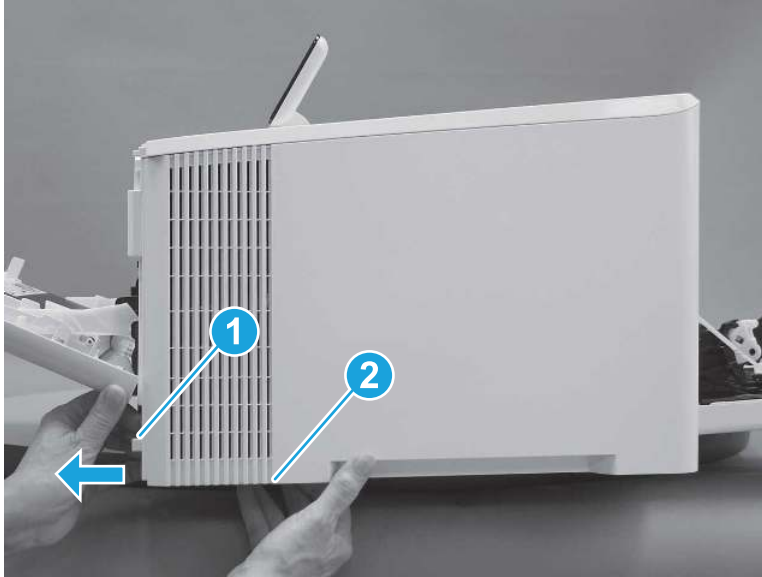
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

Figure 5-1099 Locate the tabs



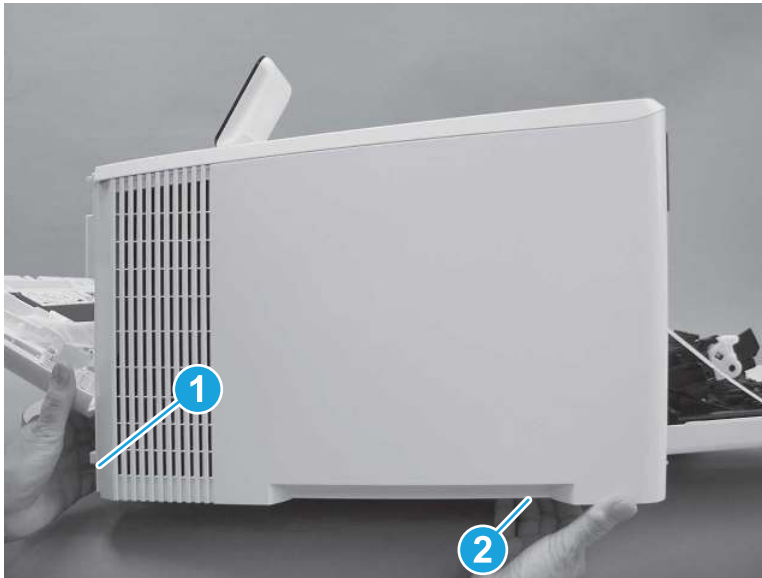
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-1100** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

**Figure 5-1101** Release lower rear tab



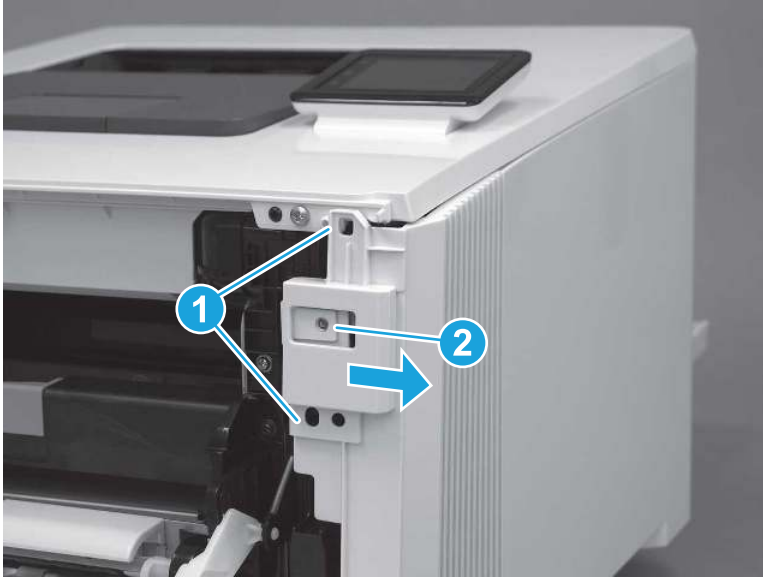
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

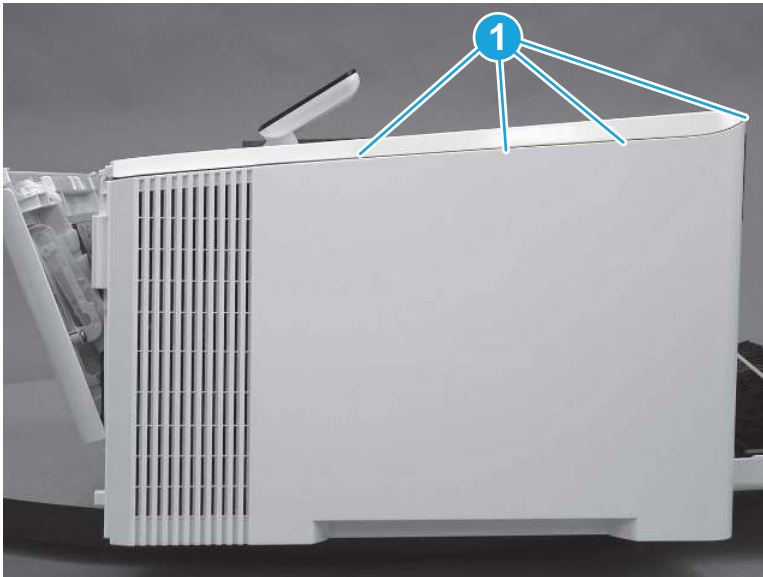
---

**Figure 5-1102** Release two front tabs



7. Release four tabs on the top of the printer (callout 1).

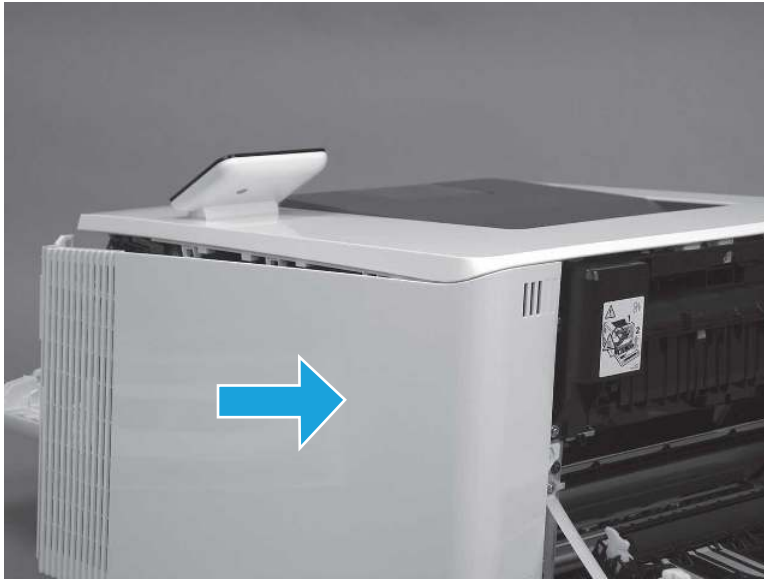
**Figure 5-1103** Release upper tabs





8. Slide the cover toward the back of the printer to remove it.

**Figure 5-1104** Remove the right cover



## 5. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

**Figure 5-1105** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

Figure 5-1106 Remove one screw



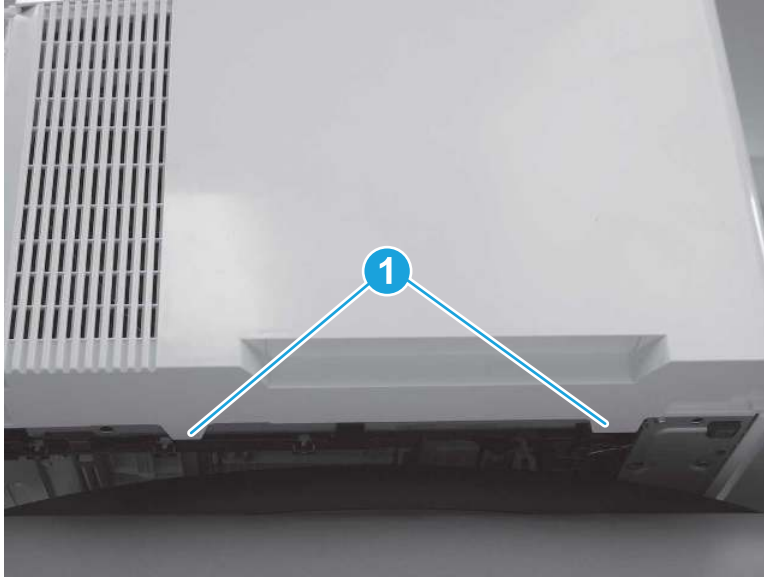
3. At the front of the printer, remove one screw (callout 1).

Figure 5-1107 Remove one screw



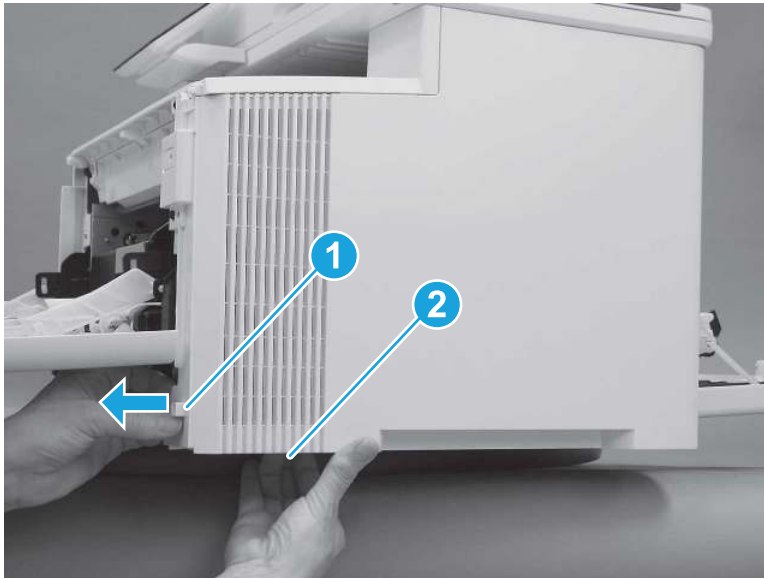
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1108** Locate the tabs



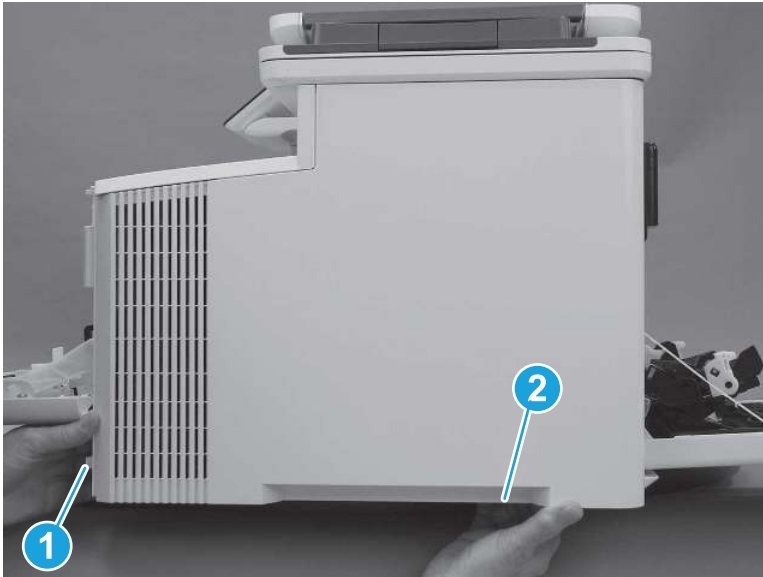
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-1109** Release front lower tabs



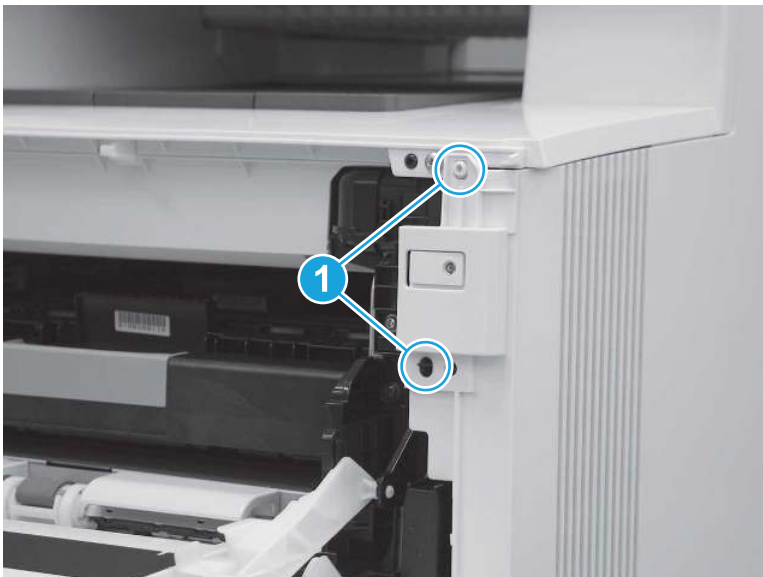
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

Figure 5-1110 Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

Figure 5-1111 Release front upper tabs



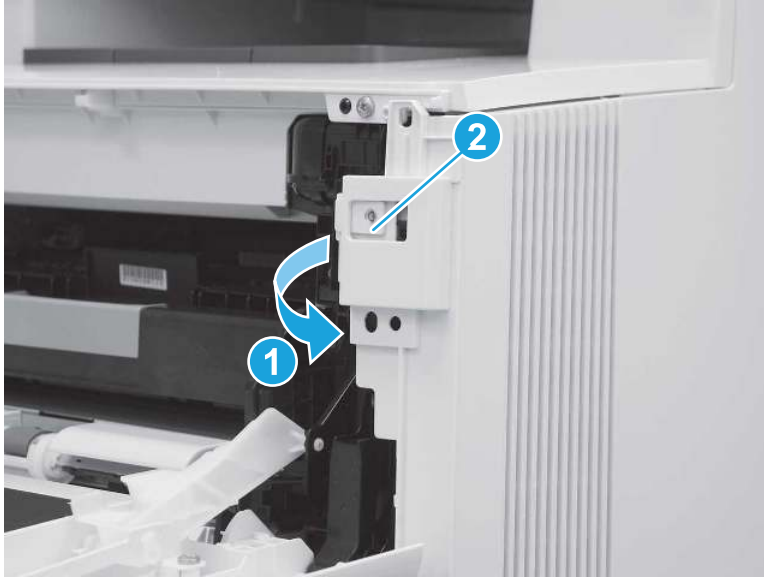
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

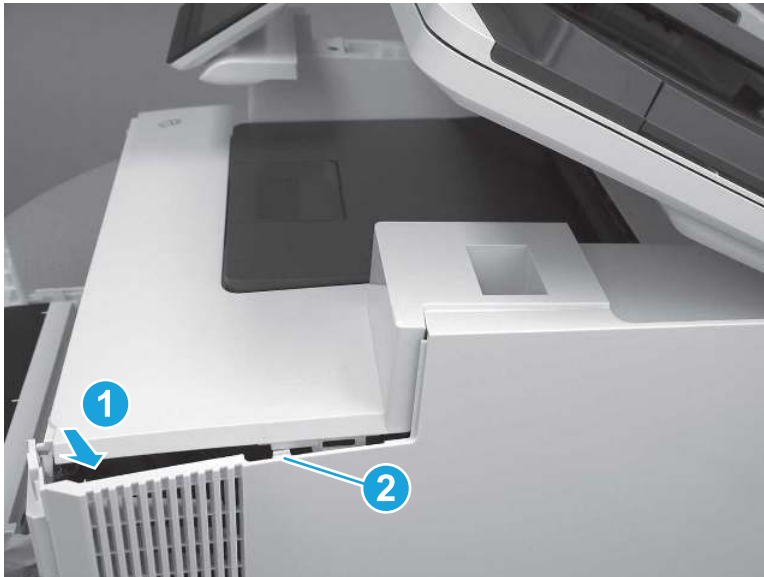
---

Figure 5-1112 Rotate the front of the cover



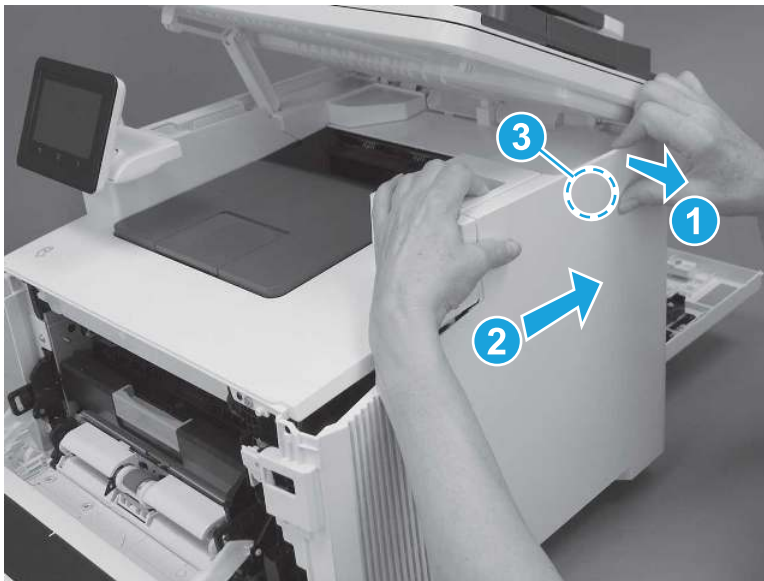
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

Figure 5-1113 Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-1114** Release one tab and one hook



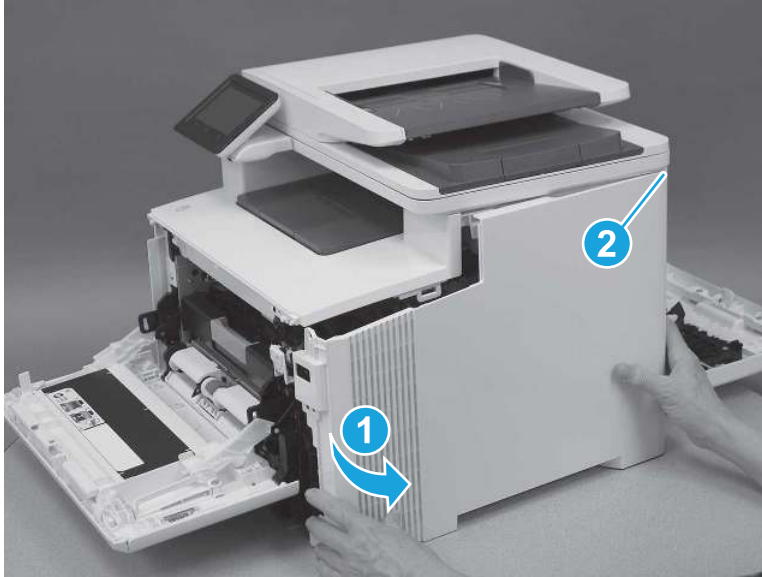
11. Lower the scanner.

**Figure 5-1115** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-1116** Remove the right cover

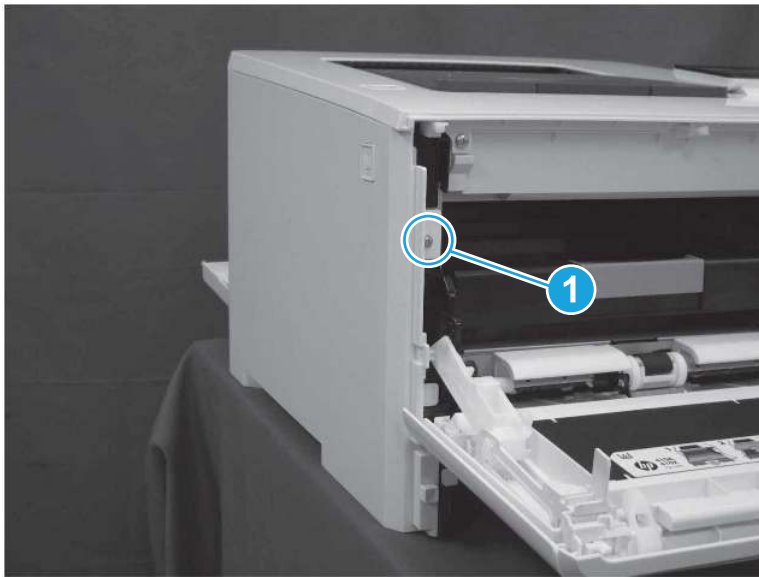


## 6. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

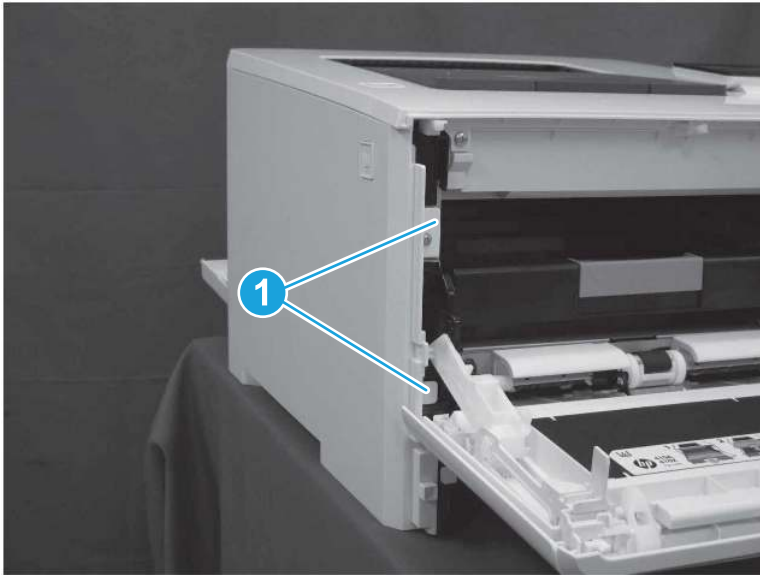
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-1117** Remove one screw



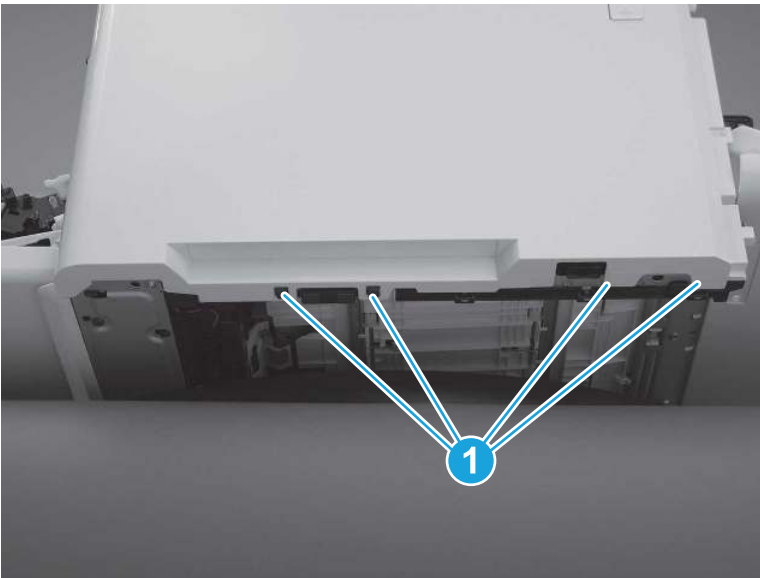
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-1118** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1119** Locate the tabs





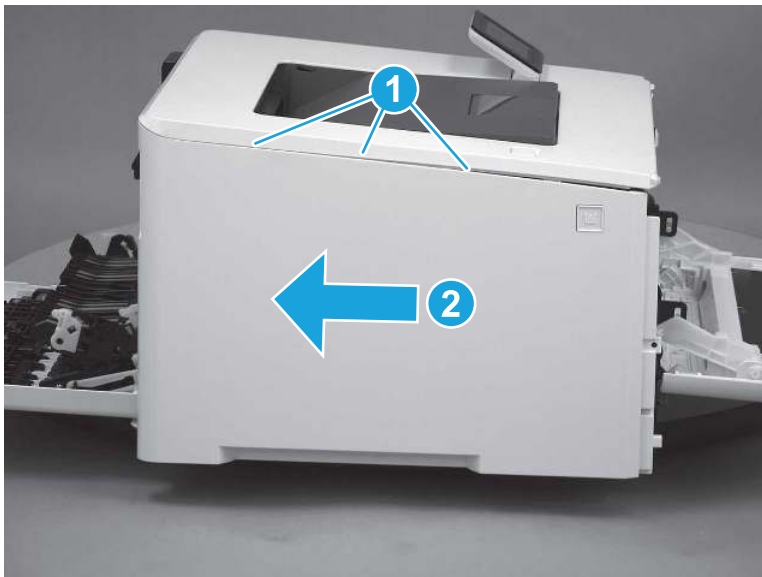
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-1120 Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

Figure 5-1121 Release three tabs



## 7. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

1. Raise the scanner.

Figure 5-1122 Raise the scanner



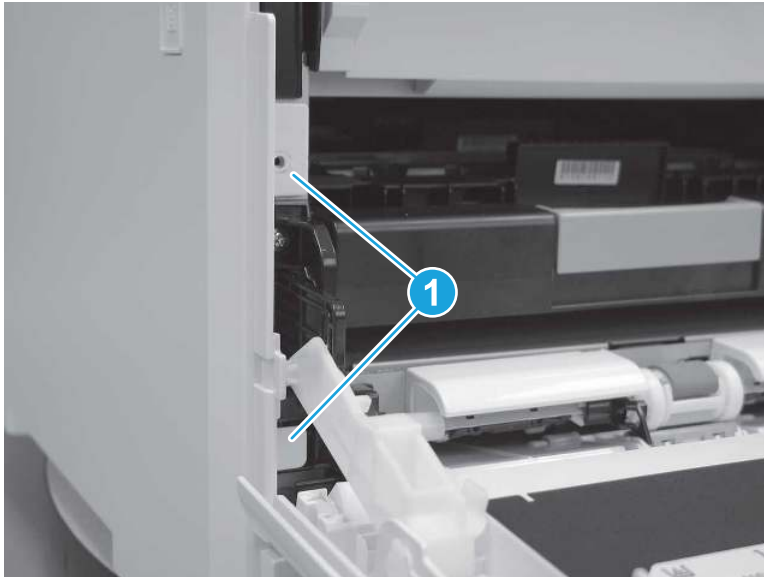
2. At the front of the printer, remove one screw (callout 1).

Figure 5-1123 Remove one screw



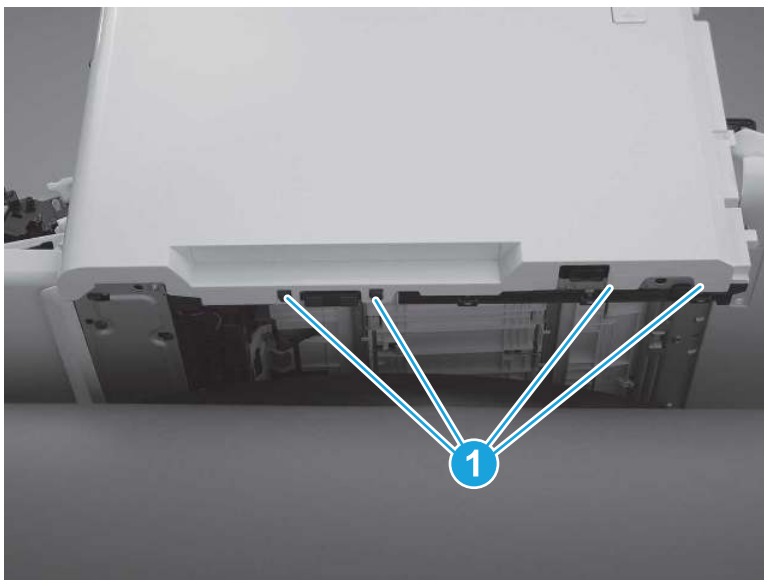
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-1124** Release two tabs



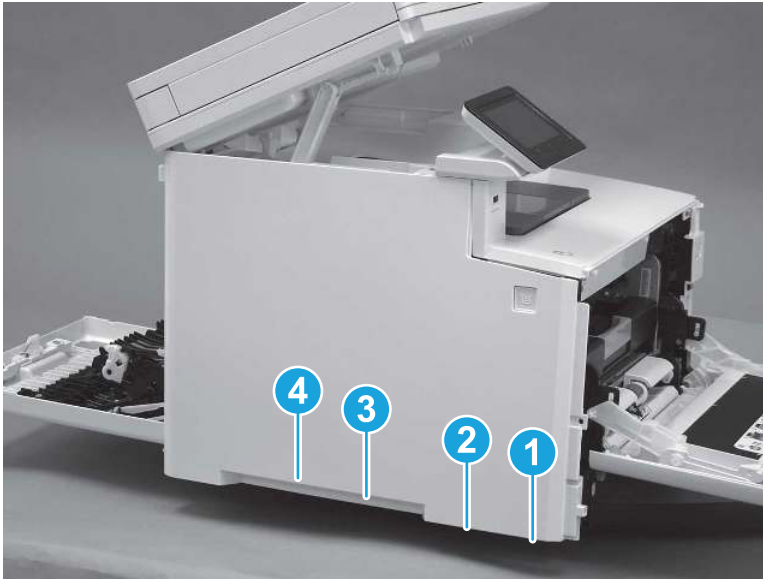
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1125** Locate the tabs



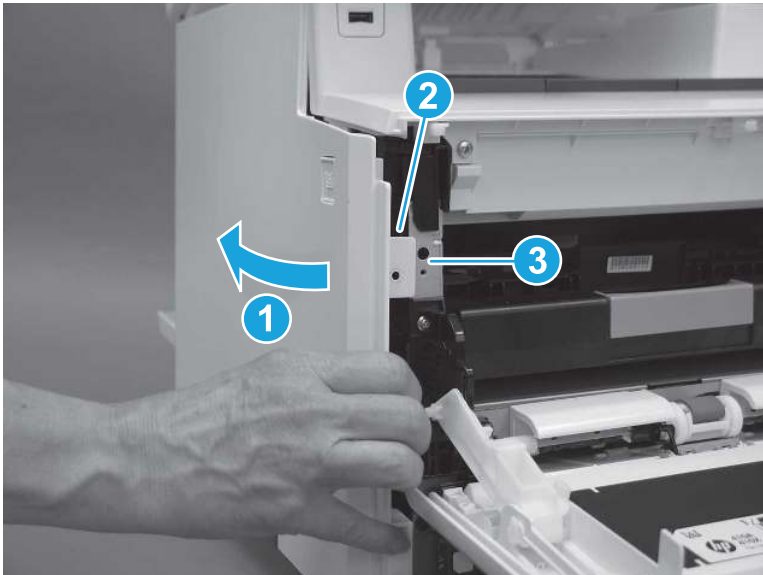
- Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-1126** Release four tabs



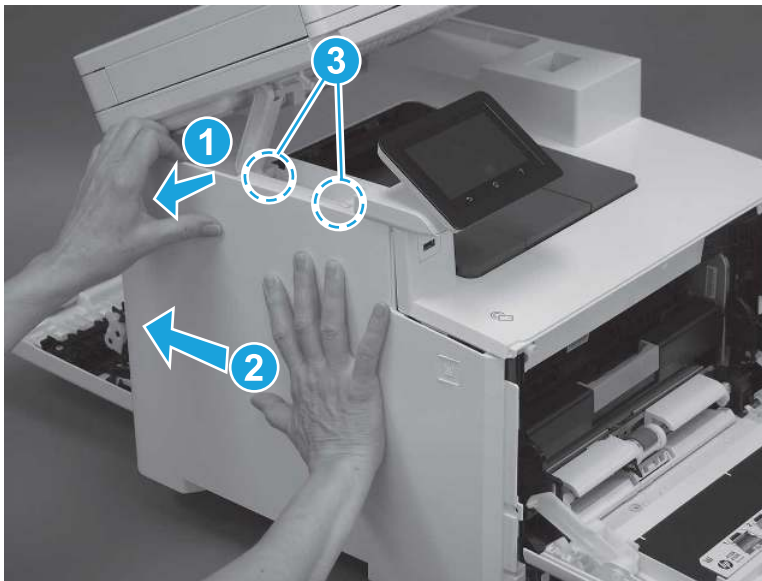
- Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

**Figure 5-1127** Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-1128** Release one tab and two hooks



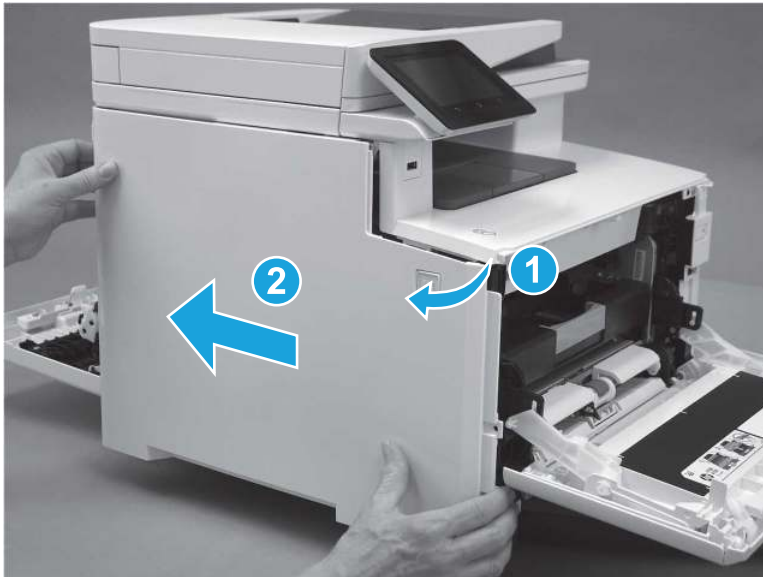
8. Lower the scanner.

**Figure 5-1129** Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

**Figure 5-1130** Remove the left cover

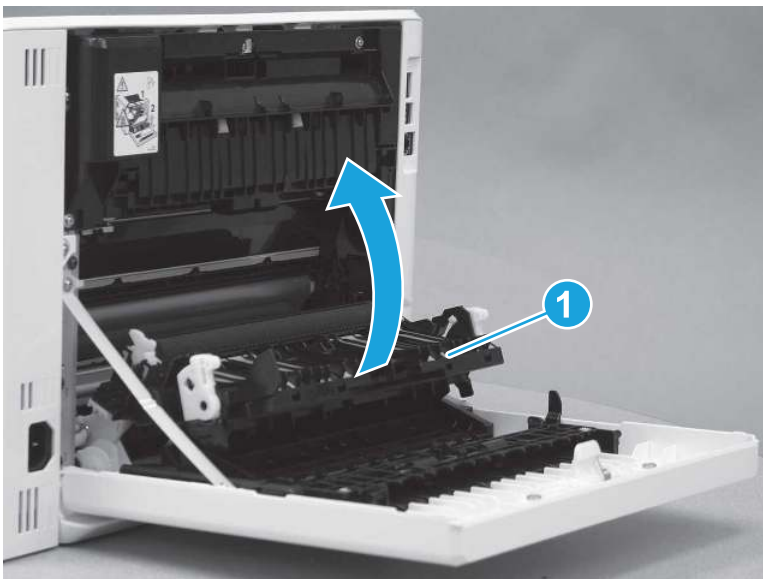


## 8. Remove the duplexing door assembly

Follow these steps to remove the duplexing door assembly.

1. Rotate the secondary transfer assembly (callout 1) toward the printer to close it.

**Figure 5-1131** Close the secondary transfer assembly



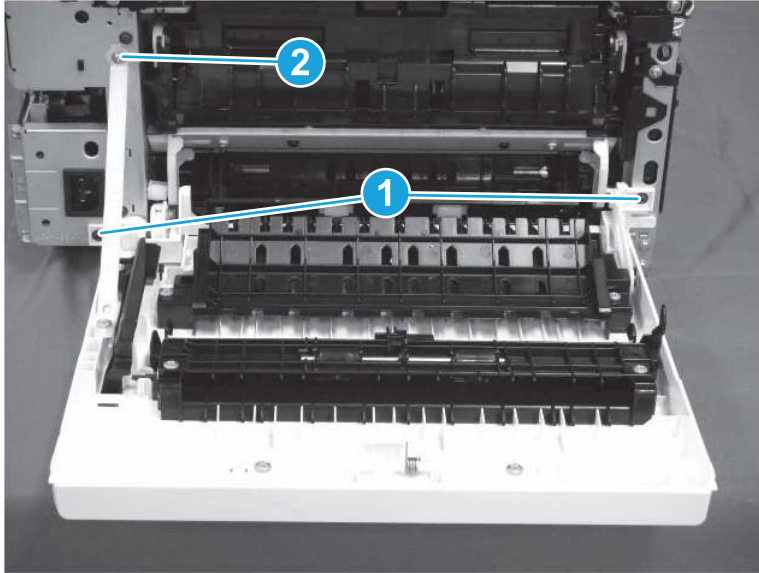
2. At the back of the printer, remove two screws (callout 1), and then remove one screw (callout 2) that holds the retention arm.

---

 **TIP:** Note that the screw (callout 2) that holds the retention arm is longer than the other two. Make sure this screw is installed in the correct position.

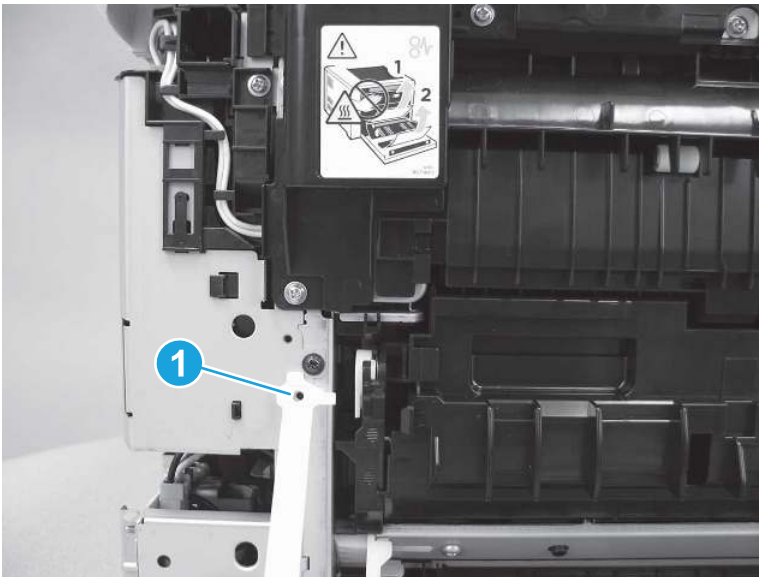
---

Figure 5-1132 Remove three screws



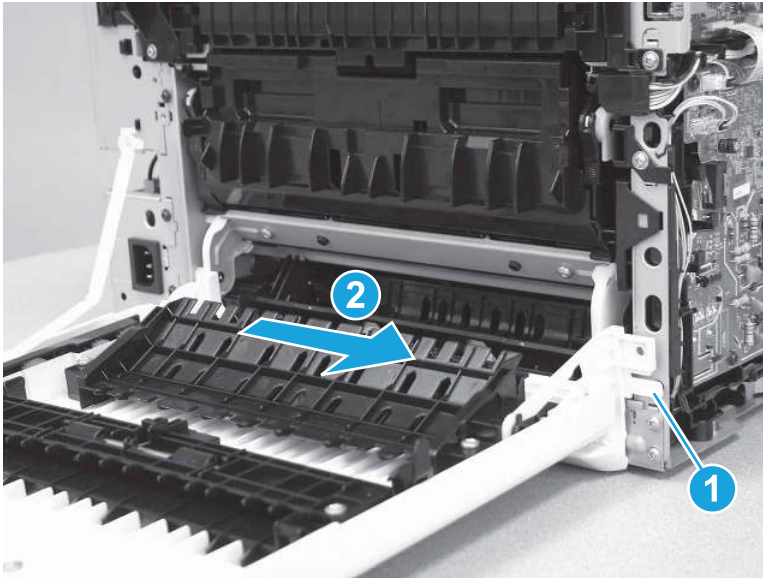
3. Release the retention arm (callout 1).

Figure 5-1133 Release the retention arm



4. Release one tab (callout 1), and then slide the duplexer door (callout 2) to the right to remove it.

**Figure 5-1134** Remove the duplexing door

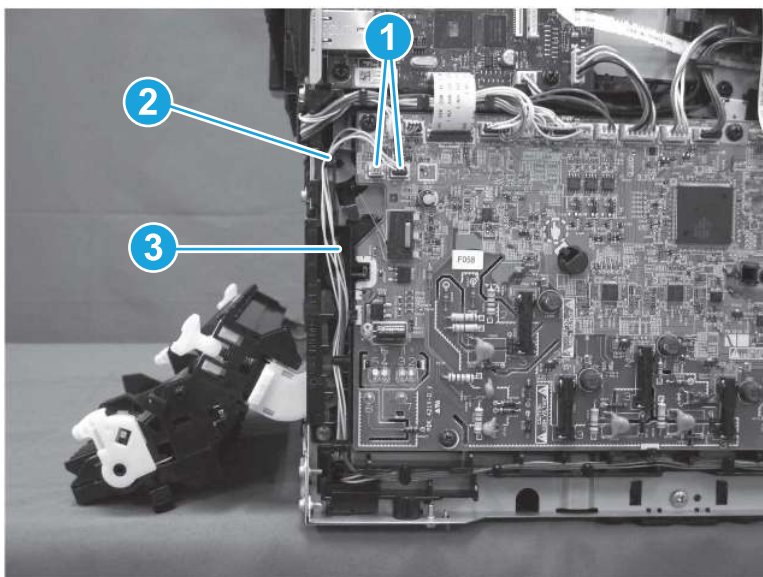


## 9. Remove the re-pickup assembly

Follow these steps to remove the re-pickup assembly.

1. On the left side of the printer, disconnect two connectors (callout 1), and then remove the cables (callout 2) from the guides (callout 3).

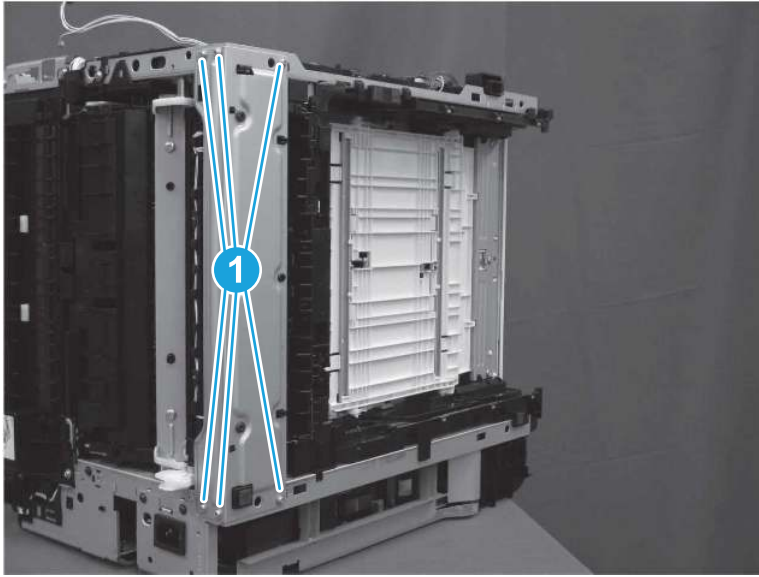
**Figure 5-1135** Disconnect two connectors and remove cables from guides





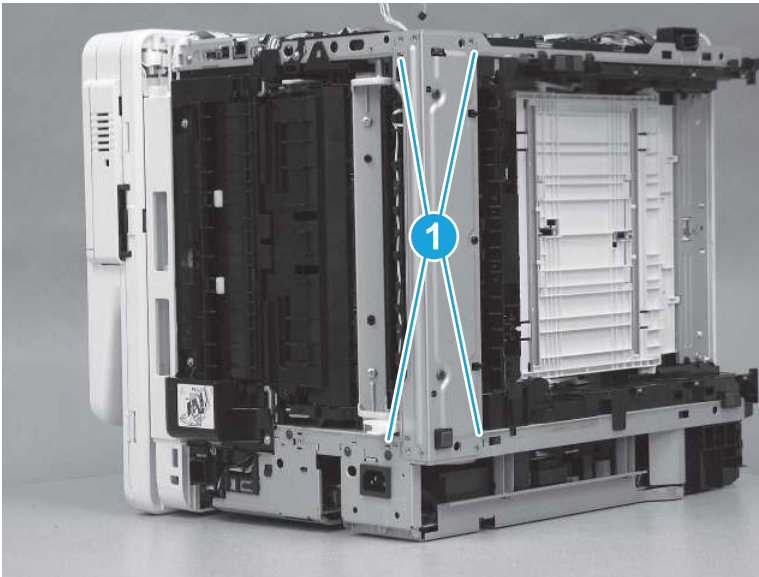
2. Lay the printer on the right side so that the left side is facing up. Remove six screws (callout 1).

Figure 5-1136 Remove six screws



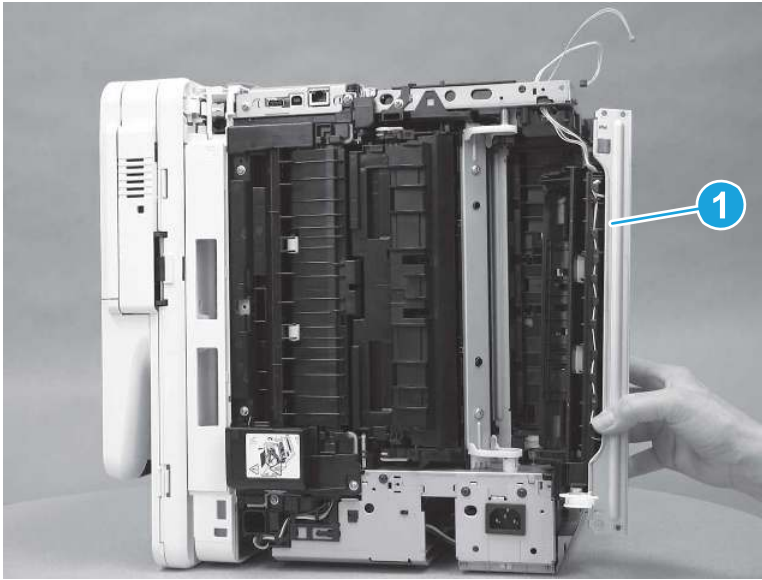
3. Release four tabs (callout 1).

Figure 5-1137 Release four tabs



4. Remove the re-pickup assembly (callout 1).

Figure 5-1138 Remove the assembly



## 10. Remove the DC controller

Follow these steps to remove the DC controller.

1. Before disconnecting the connectors in the next step, take note of the position of two of the cables (callout 1).


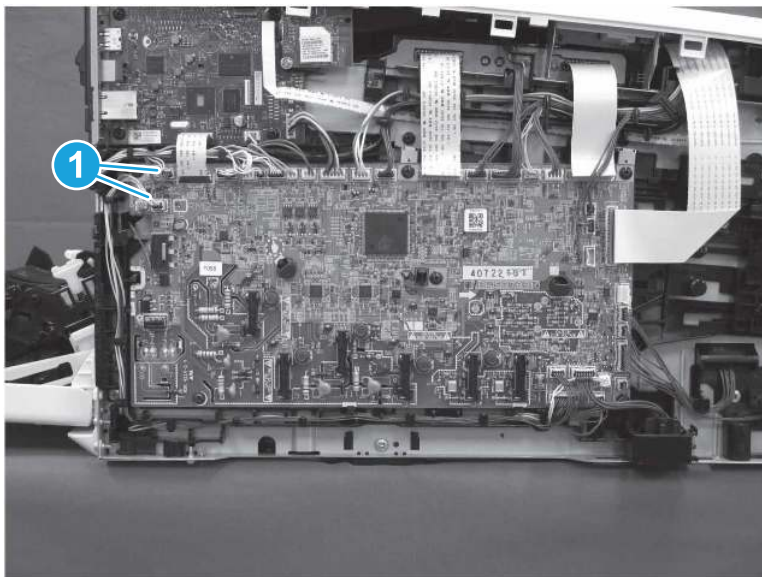
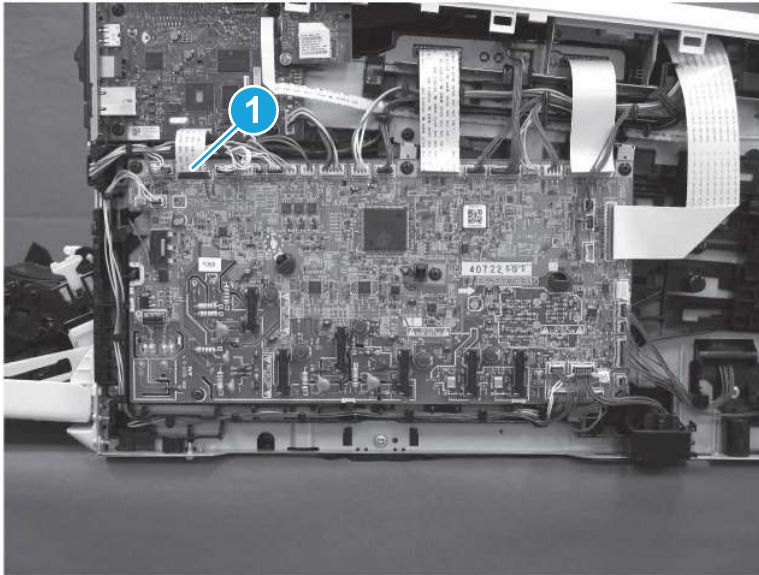
 **IMPORTANT:** These cables can be mistakenly switched when reinstalled. The connectors on the cables fit in either connector on the DC controller. Make sure that these cables are installed in the correct connectors. The upper cable is purple and the lower cable is yellow. *If the cables are switched, the printer jams repeatedly when duplex printing.*

Figure 5-1139 Check the cables



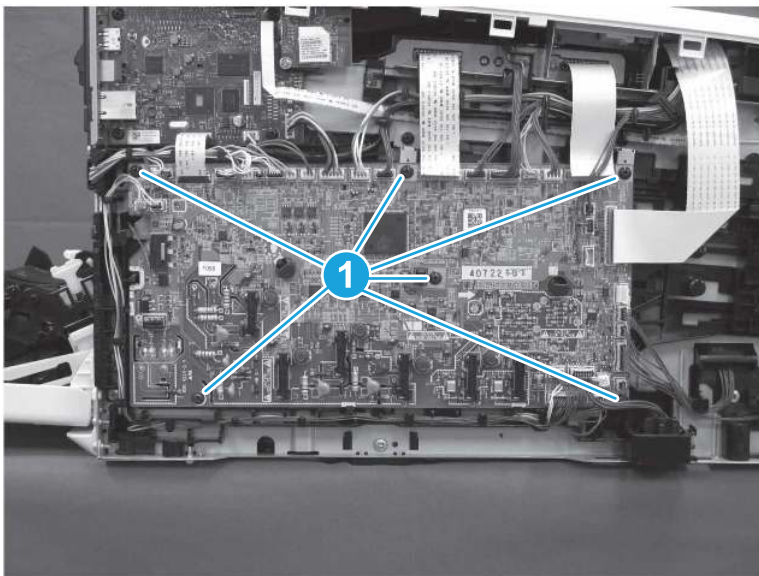
2. Disconnect all of the connectors on the DC controller. Note that one connector (callout 1) is a zero insertion force (ZIF) connector. Lift the latch on the connector before removing the flat cable.

**Figure 5-1140** Disconnect all of the connectors



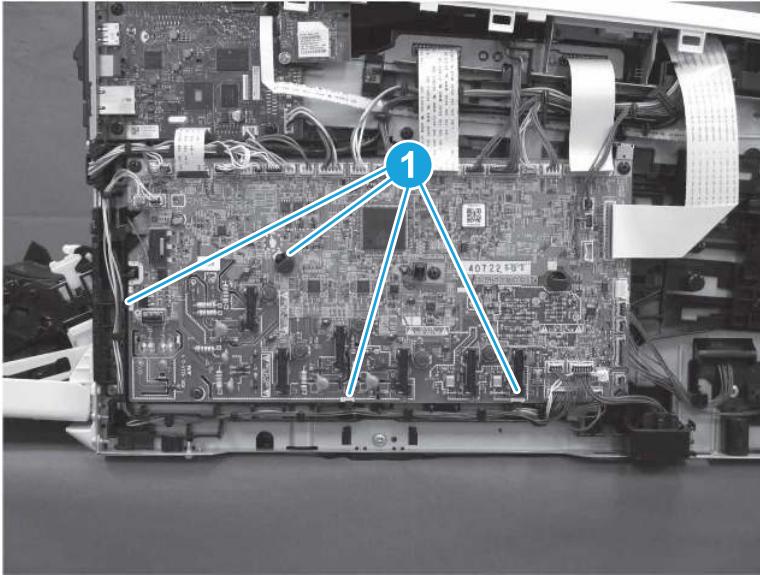
3. Remove six screws (callout 1).

**Figure 5-1141** Remove six screws



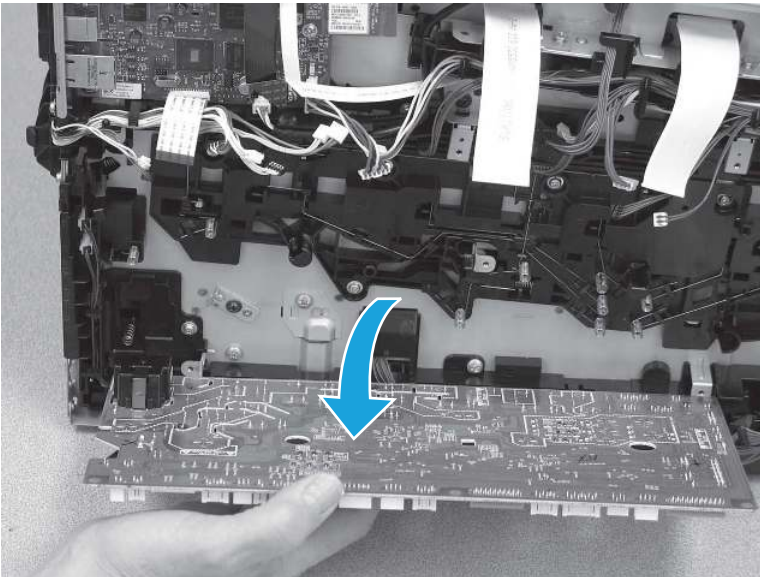
4. Release four tabs (callout 1).

Figure 5-1142 Release four tabs



5. Remove the DC controller.

Figure 5-1143 Remove the assembly

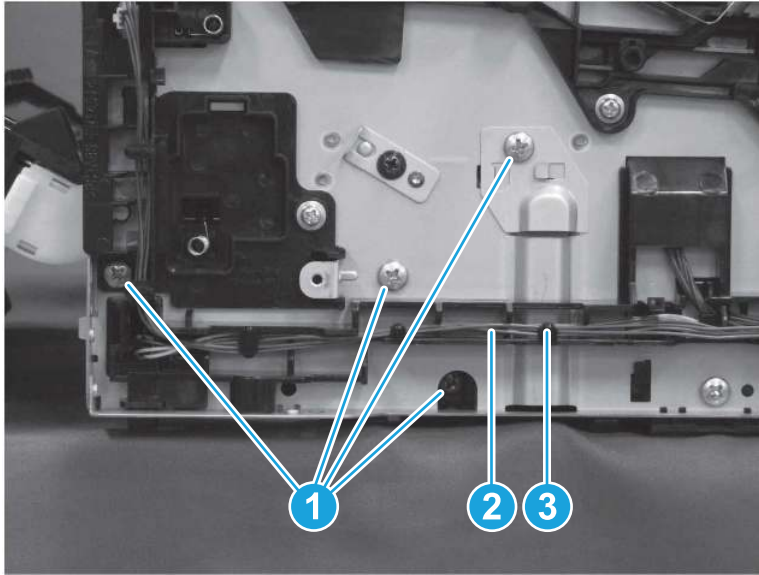


## 11. Remove the lifter drive assembly

Follow these steps to remove the lifter drive assembly.

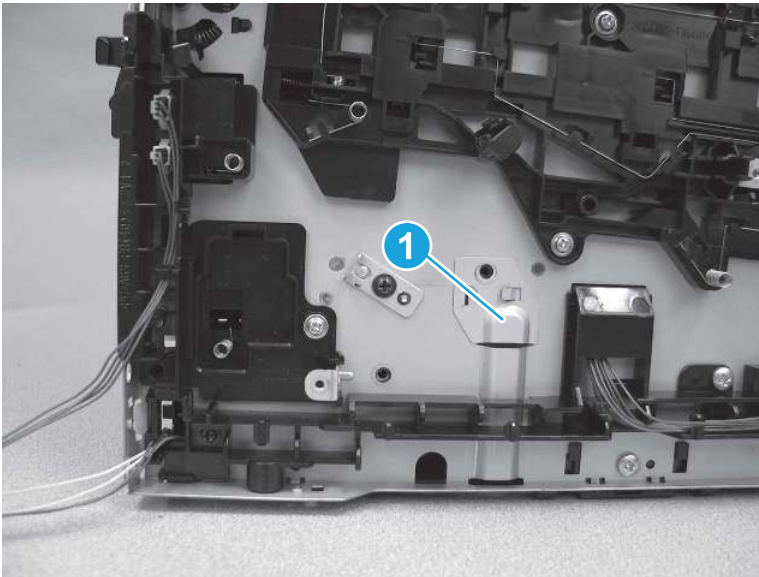
1. Remove four screws (callout 1), and then release the cables (callout 2) from the guides (callout 3).

**Figure 5-1144** Remove four screws and release cables



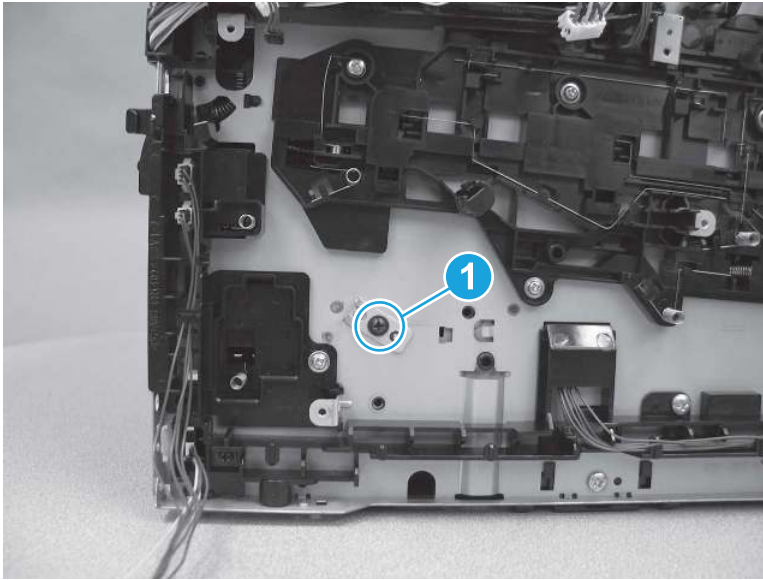
2. Remove one cover (callout 1).

**Figure 5-1145** Remove one cover



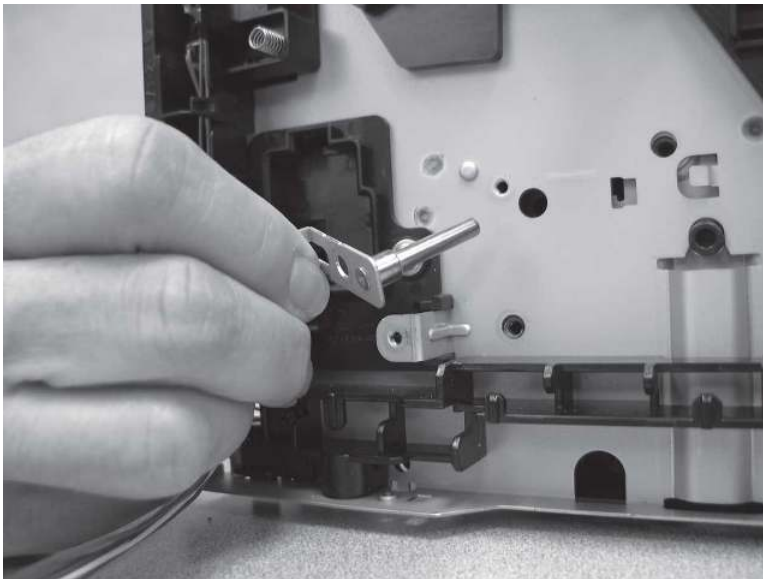
3. Remove one screw (callout 1).

Figure 5-1146 Remove one screw



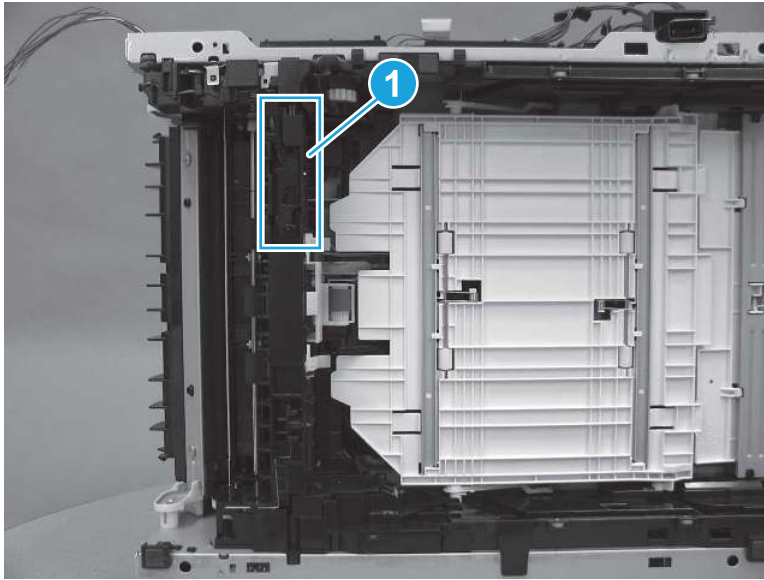
4. Remove the shaft.

Figure 5-1147 Remove the shaft



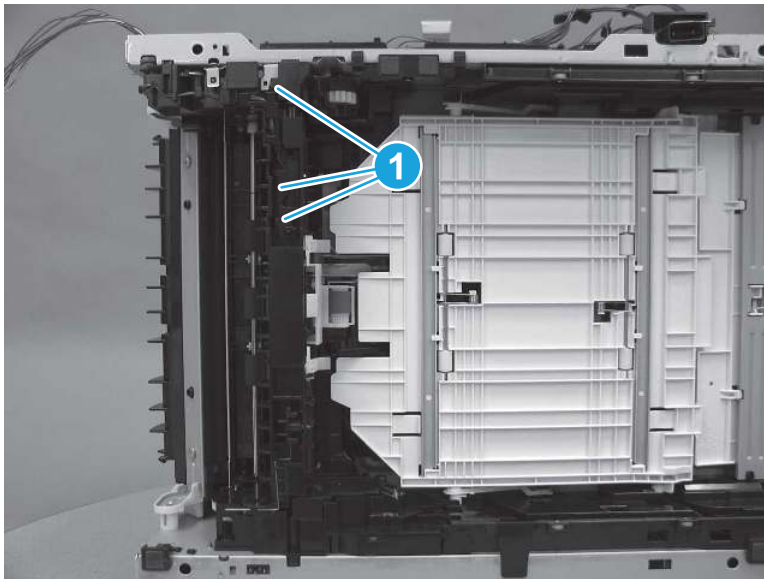
5. Lay the printer on the right side so that the left side is facing up. Locate the tray sensor switch (callout 1).

**Figure 5-1148** Locate the tray sensor switch



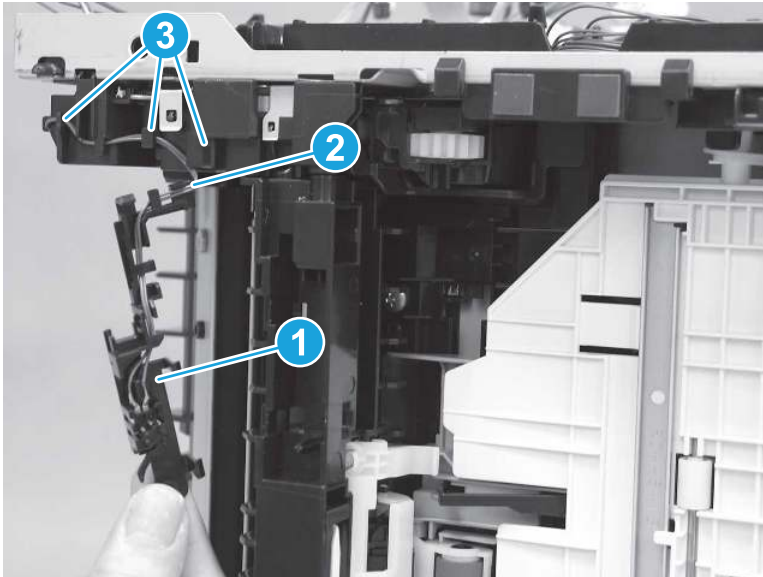
6. Release three tabs (callout 1).

**Figure 5-1149** Release three tabs



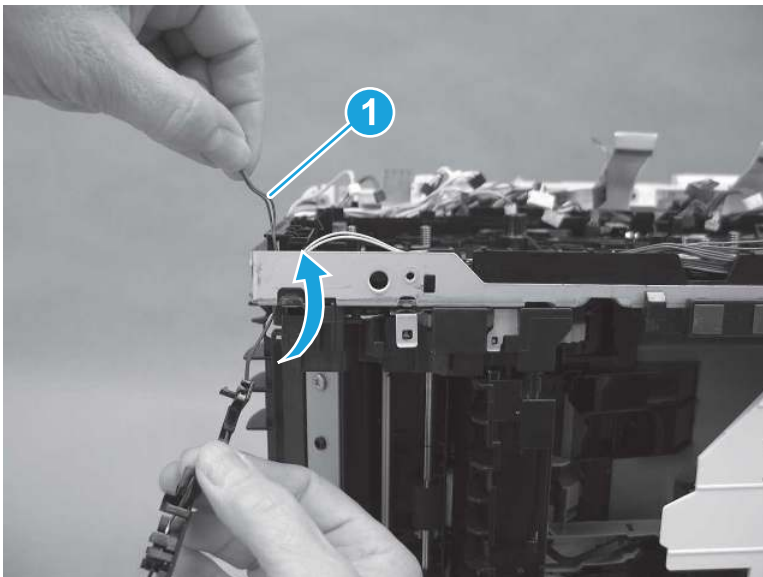
7. Release the tray sensor switch (callout 1), and then remove the cables (callout 2) from the guides (callout 3).

**Figure 5-1150** Release the tray sensor switch



8. Remove the tray sensor switch by releasing the cables (callout 1) through the printer frame.

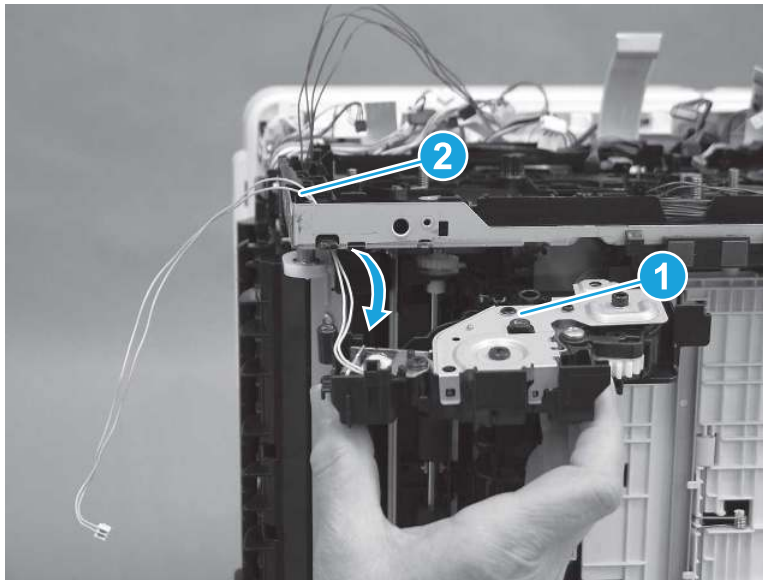
**Figure 5-1151** Remove the tray sensor switch





9. Remove the lifter drive assembly (callout 1), and then pass the cables (callout 2) through the printer frame.

Figure 5-1152 Remove the assembly

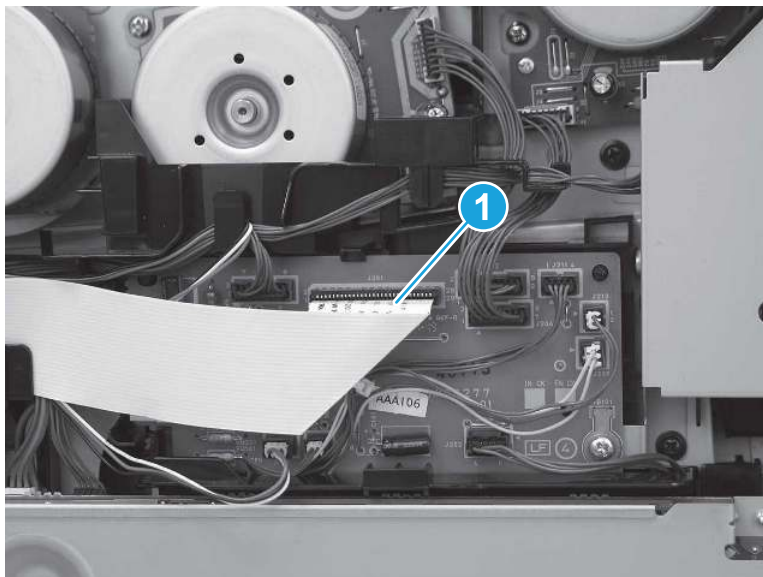


## 12. Remove the driver PCA

Follow these steps to remove the driver PCA.

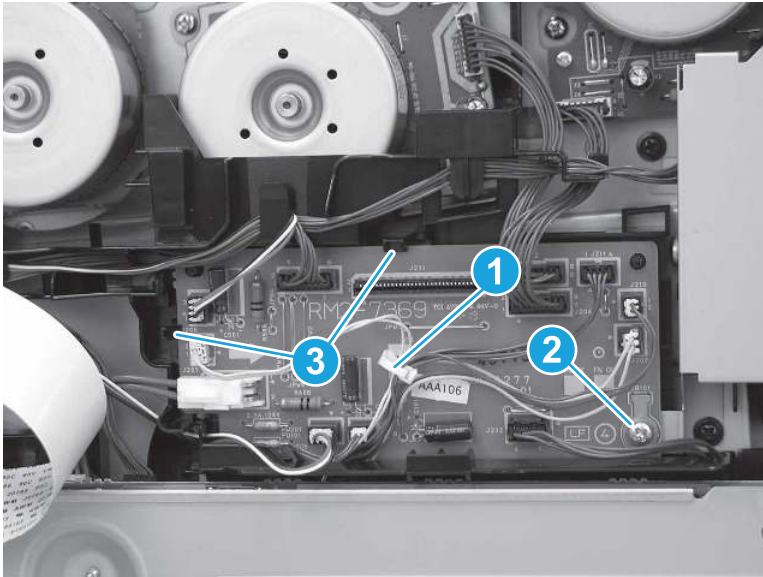
1. Disconnect one connector (callout 1).

Figure 5-1153 Disconnect one connector



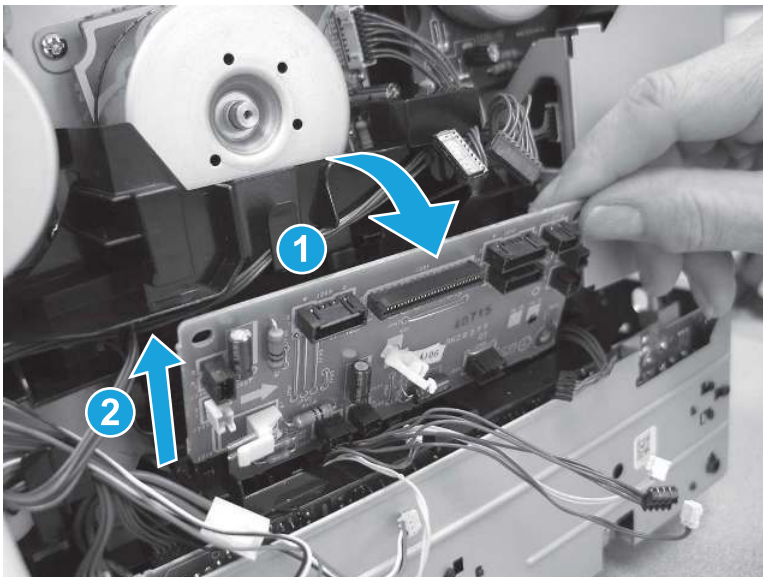
2. Release one retainer (callout 1), disconnect all of the connectors on the driver PCA, remove one screw (callout 2), and then release two tabs (callout 3).

**Figure 5-1154** Disconnect all connectors and remove one screw



3. Rotate the top of the driver PCA away from the printer (callout 1), and then lift up (callout 2) to remove it.

**Figure 5-1155** Remove the PCA

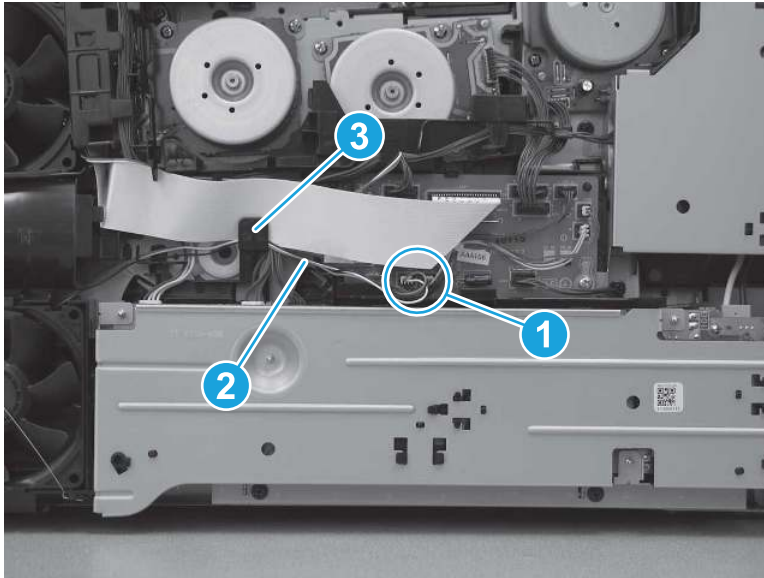


### 13. Remove the LVPS

Follow these steps to remove the LVPS.

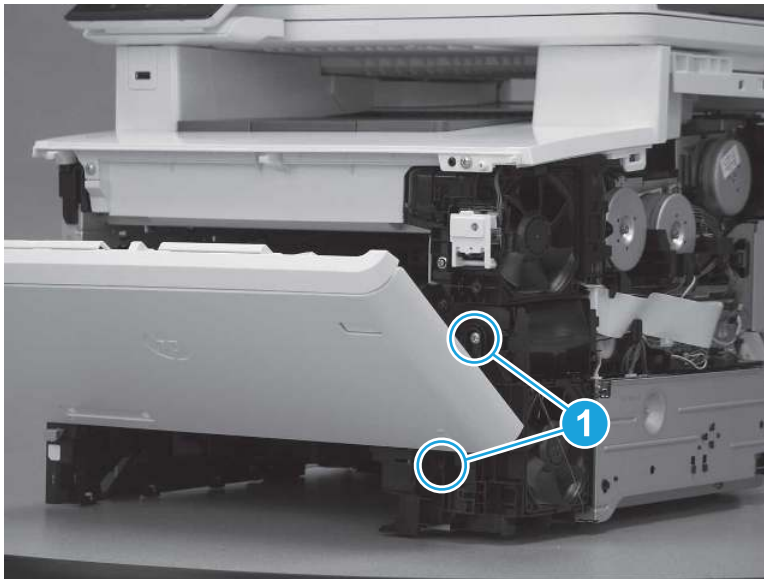
1. Disconnect one connector (callout 1), and then remove the cable (callout 2) from the wire guide (callout 3).

**Figure 5-1156** Disconnect one connector and release cables from guides



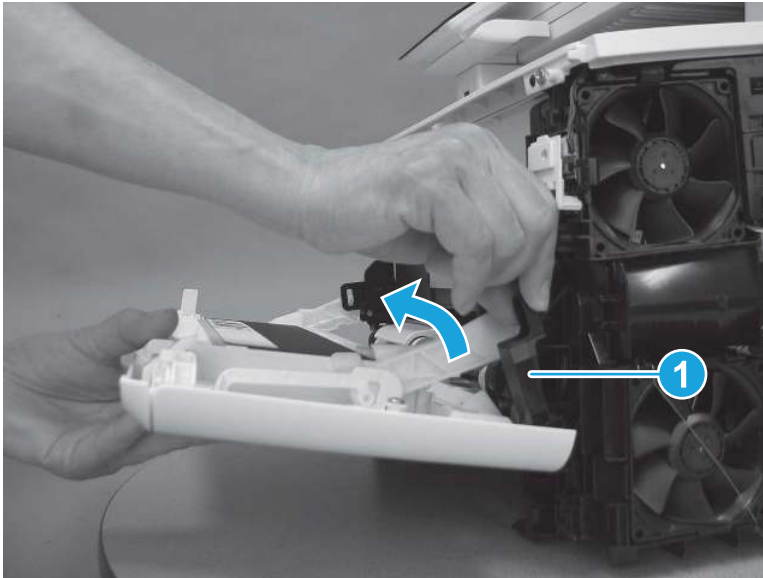
2. Remove two screws (callout 1).

**Figure 5-1157** Remove two screws



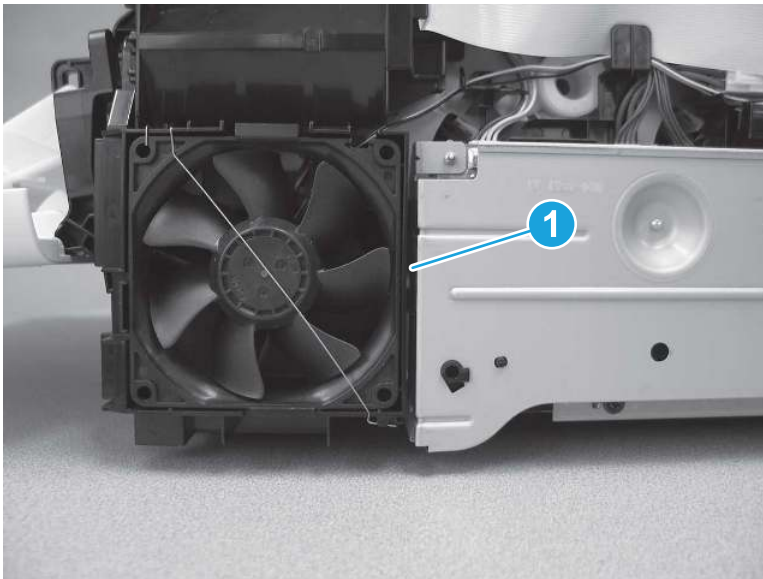
3. Release the hinge arm (callout 1).

**Figure 5-1158** Release the hinge arm



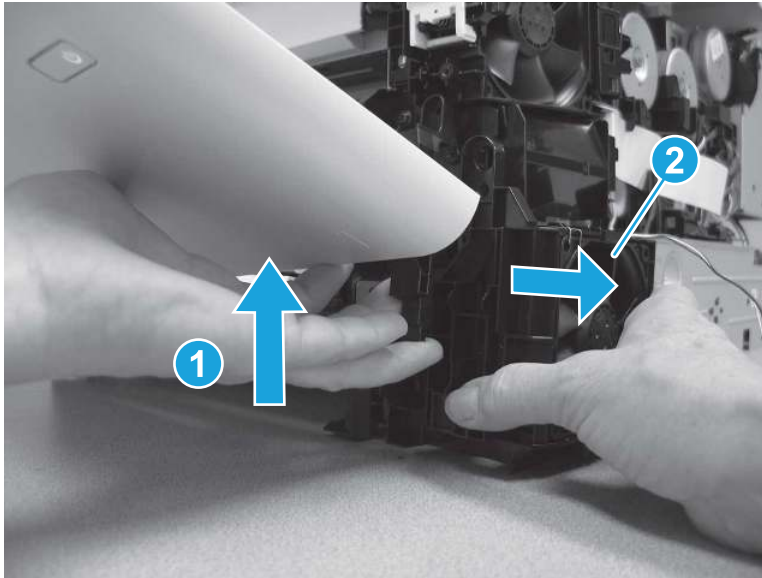
4. Release one tab (callout 1) on the right side of the power supply fan.

**Figure 5-1159** Release one tab




- Lift the front door up slightly (callout 1), and then remove the power supply fan and holder (callout 2).

**Figure 5-1160** Remove the power supply fan and holder



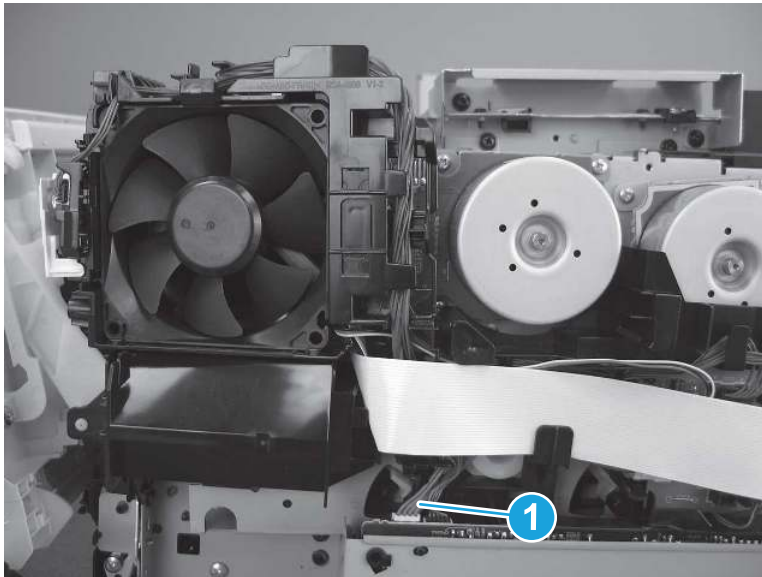
- Before proceeding, take note of the position of two cables (callout 1).

---

 **IMPORTANT:** These cables can be mistakenly switched when reinstalled. The connectors on the cables fit in either connector on the LVPS. Make sure that these cables are installed in the correct connectors. *If the cables are switched, the printer will not power on when reassembled.*

---

**Figure 5-1161** Check the connectors



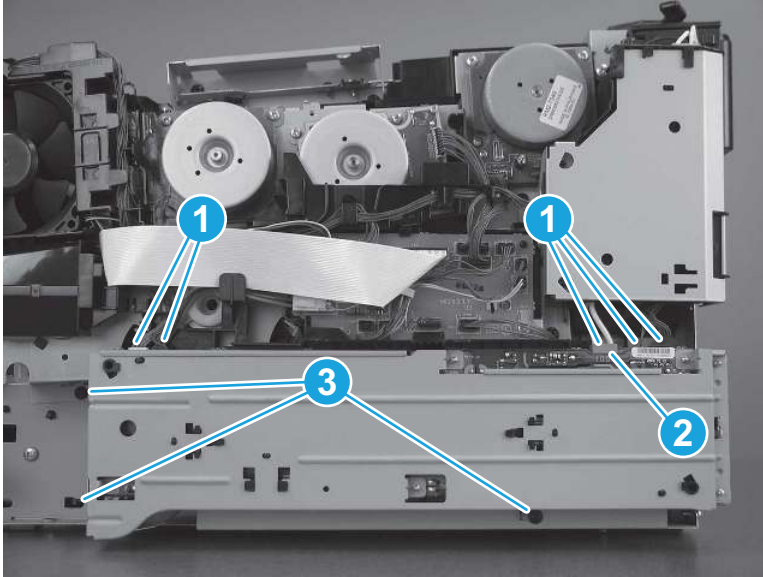
- Disconnect five connectors (callout 1). One connector (callout 2) has a latch that must be released before disconnecting it. Remove three screws (callout 3).

---

 **NOTE:** The latch for one connector (callout 2) is located on the backside of the connector body, and not easily seen.

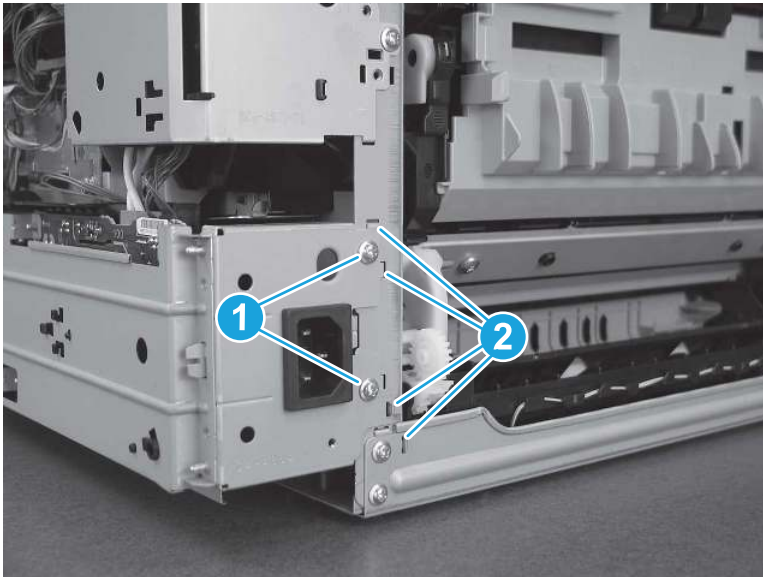
---

**Figure 5-1162** Disconnect five connectors and remove three screws



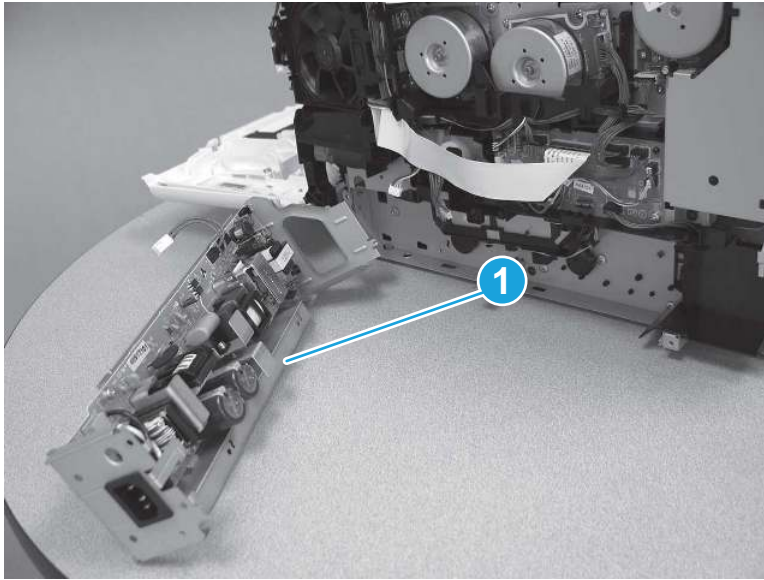
8. Remove two screws from the back (callout 1), and then release four tabs (callout 2).

**Figure 5-1163** Remove two screws and release three tabs



9. Remove the LVPS (callout 1).

**Figure 5-1164** Remove the assembly

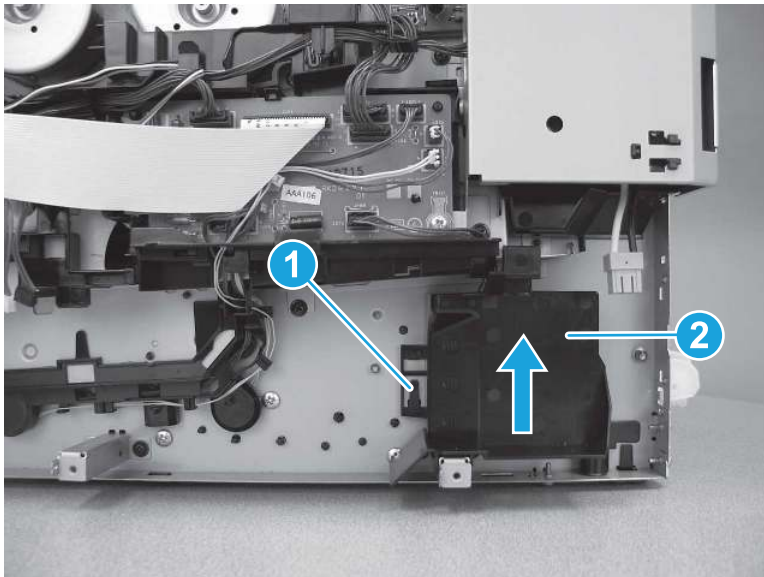


## 14. Remove the pickup motor

Follow these steps to remove the pickup motor.

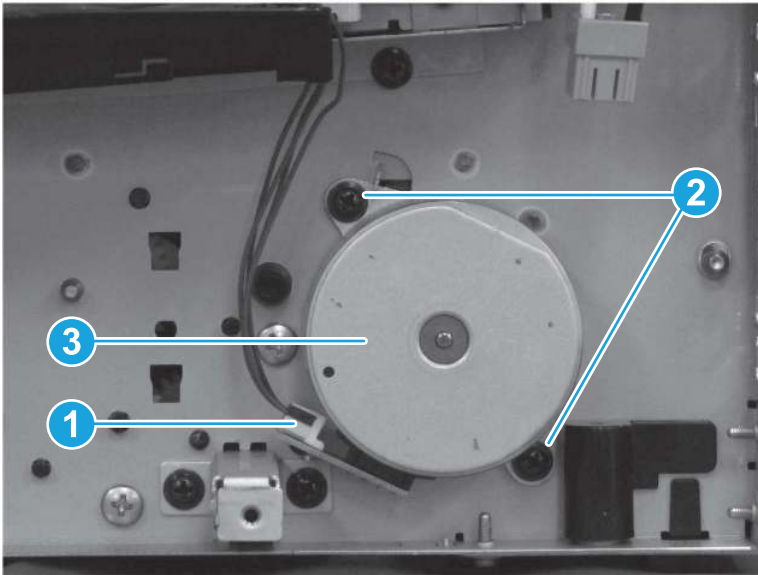
1. Release one tab (callout 1), and then slide the fan duct (callout 2) up to remove it.

**Figure 5-1165** Remove the fan duct



2. Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the pickup motor (callout 3).

**Figure 5-1166** Remove the assembly

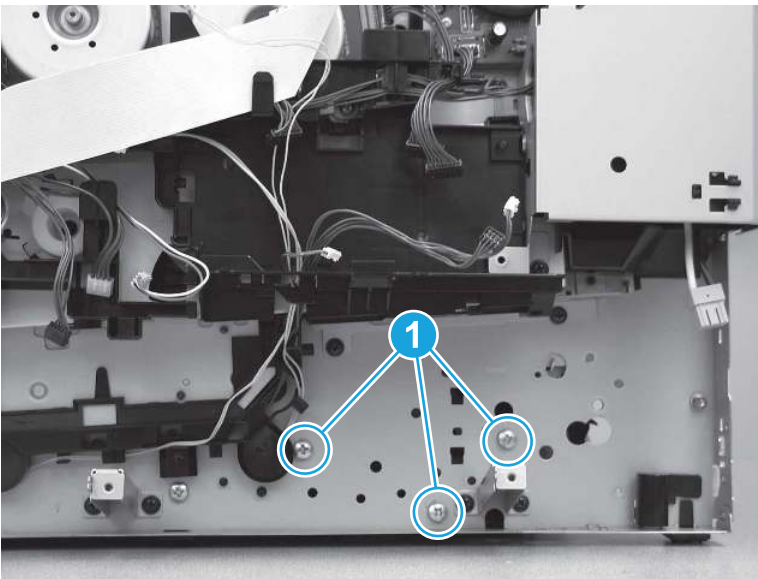


## 15. Remove the pickup assembly

Follow these steps to remove the pickup assembly.

1. Remove three screws (callout 1).

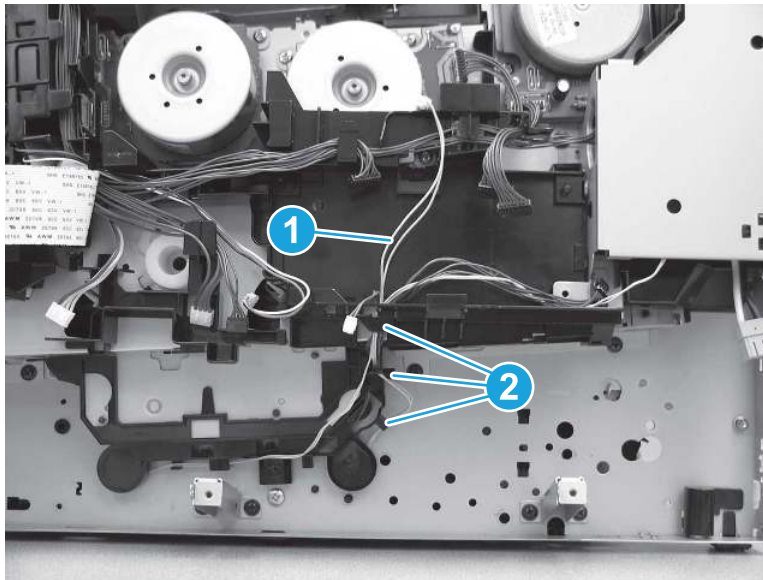
**Figure 5-1167** Remove three screws





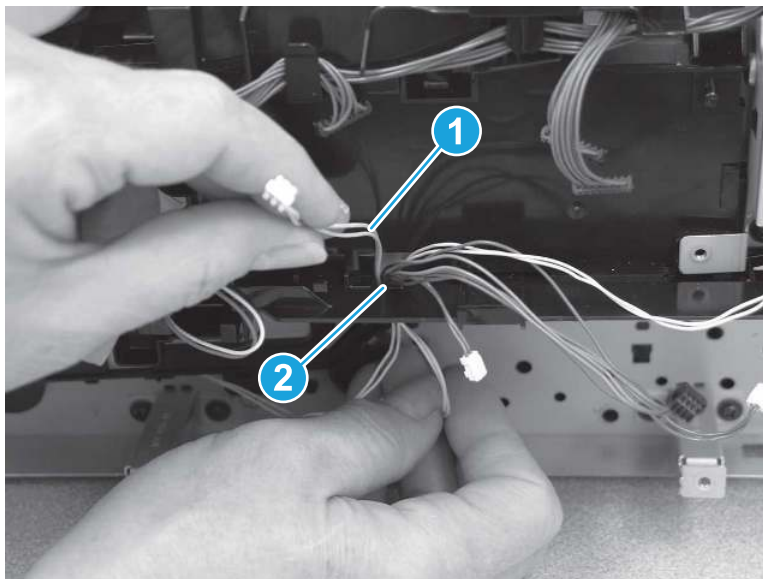
2. Release the cables (callout 1) from the cable guides (callout 2).

**Figure 5-1168** Release the cables from the cable guides



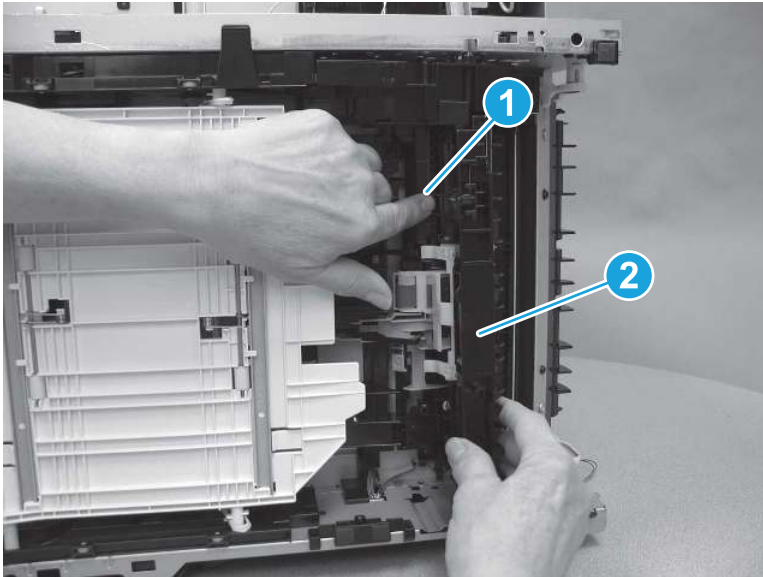
3. Thread the cables (callout 1) through the opening in the driver PCA holder (callout 2).

**Figure 5-1169** Release the cables



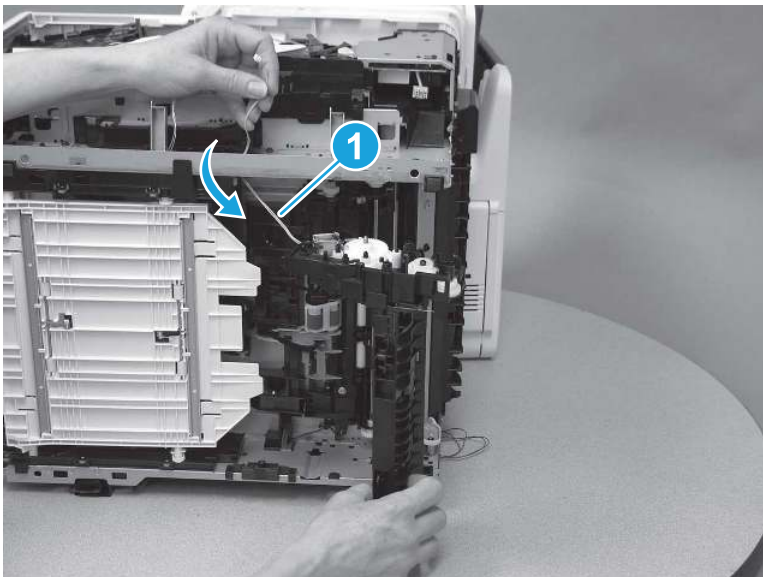
4. Lay the printer on the right side so that the left side is facing up. Press the pickup and feed roller holder (callout 1) toward the printer, and then remove the pickup assembly (callout 2).

**Figure 5-1170** Remove the pickup assembly



5. Pass the cables (callout 1) through the printer frame.

**Figure 5-1171** Release the cables

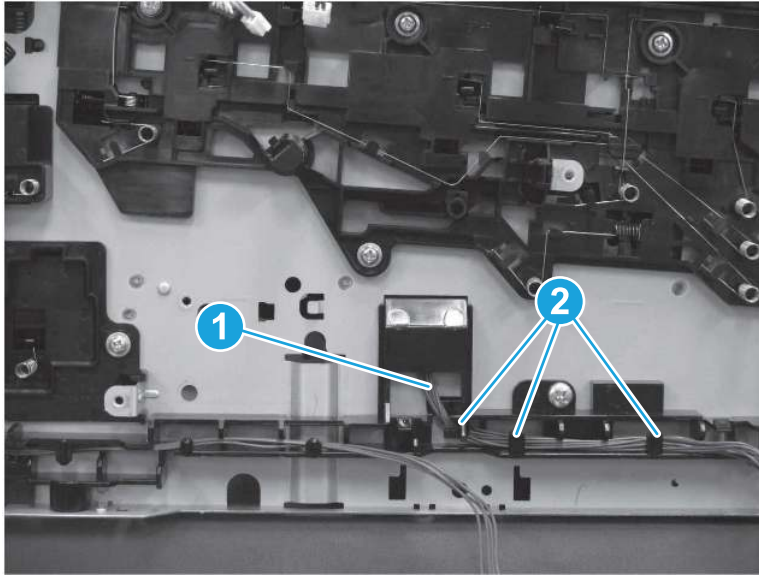


## 16. Remove the front feed guide assembly

Follow these steps to remove the front feed guide assembly.

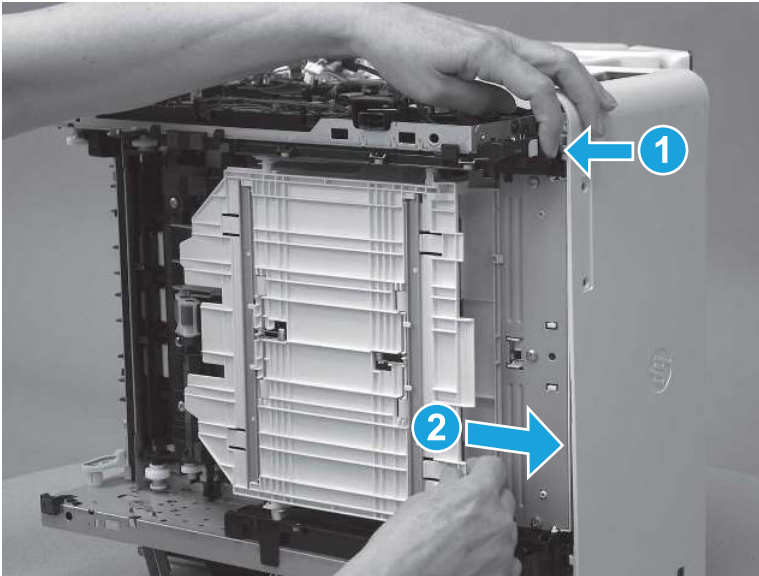
1. Release the cables (callout 1) from the cable guide (callout 2).

**Figure 5-1172** Release the cables



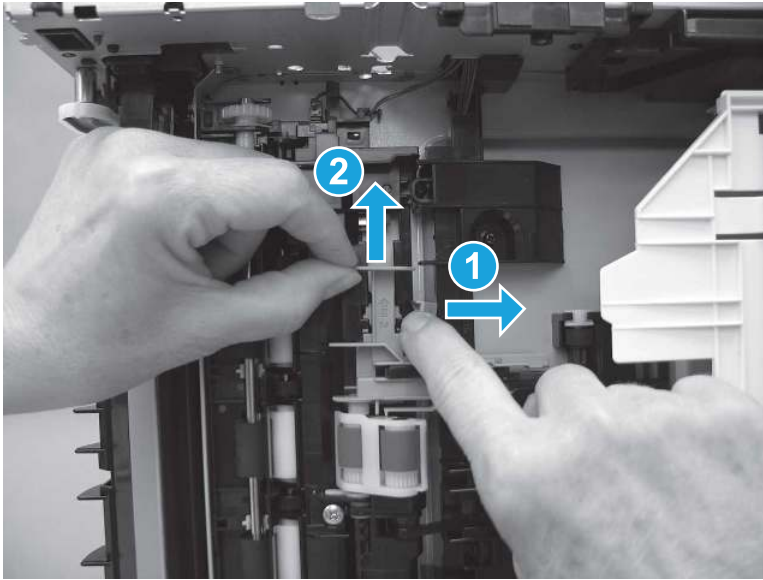
2. Lay the printer on the right side so that the left side is facing up. Press the tray 1 feed guide release button (callout 1), and then release the tray 1 feed guide toward the front of the printer (callout 2).

**Figure 5-1173** Release the tray 1 feed guide



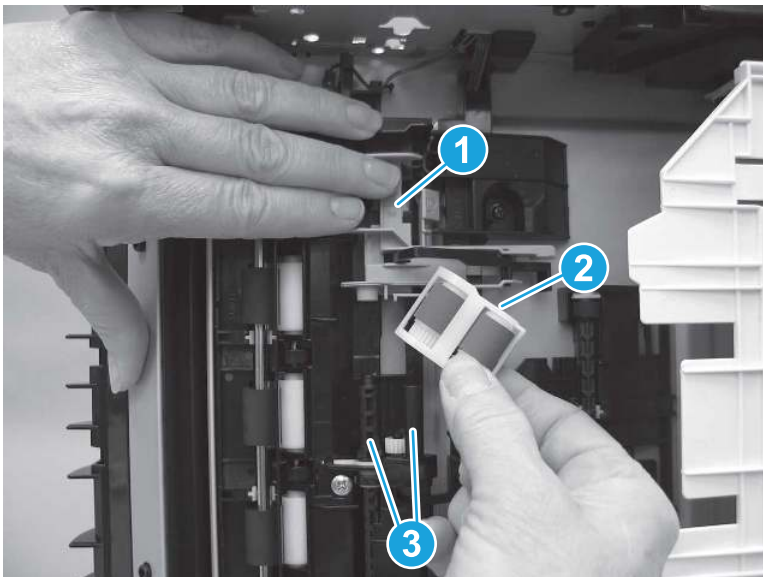
3. Press the lever (callout 1) on the roller holder, and then slide the roller holder up (callout 2).

**Figure 5-1174** Slide the roller holder



4. Hold the roller holder up (callout 1), and then lift the pickup and feed roller case (callout 2) up off of the shafts (callout 3).

**Figure 5-1175** Remove the pickup and feed rollers



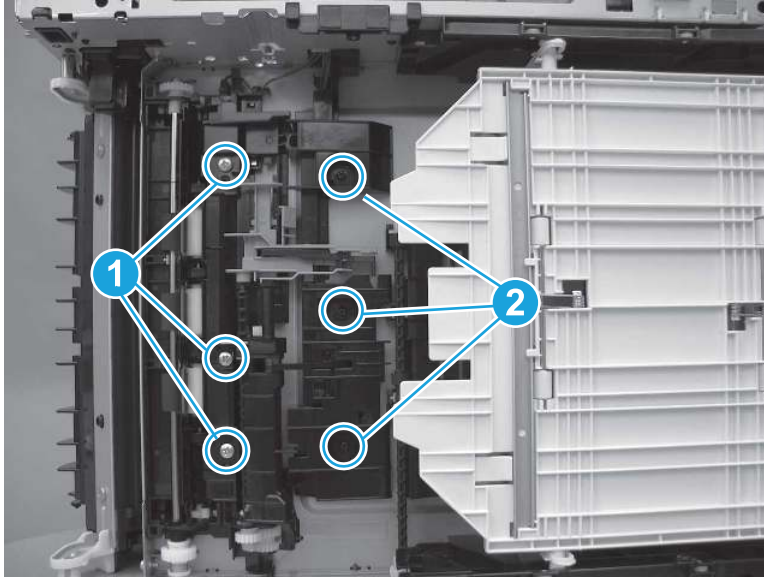
5. Remove three screws (callout 1) on the rear feed guide assembly, and then remove three screws (callout 2) on the front feed guide assembly.

---

 **Reinstallation tip:** The three screws (callout 1) on the rear feed guide assembly are larger than the screws on the front feed guide assembly.

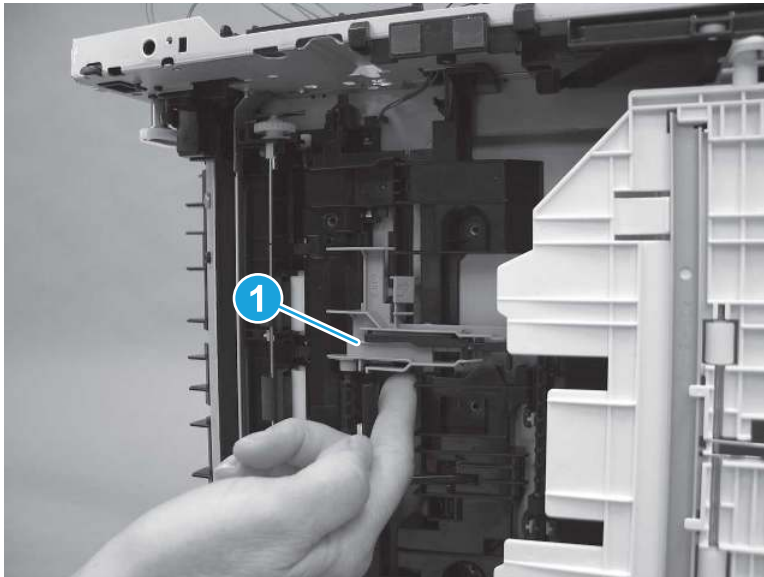
---

Figure 5-1176 Remove six screws



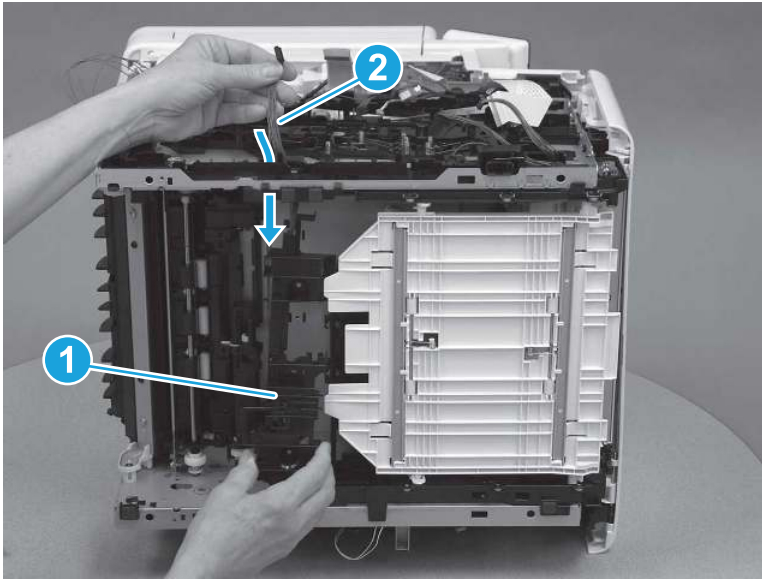
6. Remove the roller holder (callout 1).

Figure 5-1177 Remove the roller holder



7. Remove the front feed guide assembly (callout 1). Release the cables (callout 2) through the printer frame.

Figure 5-1178 Remove the 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.

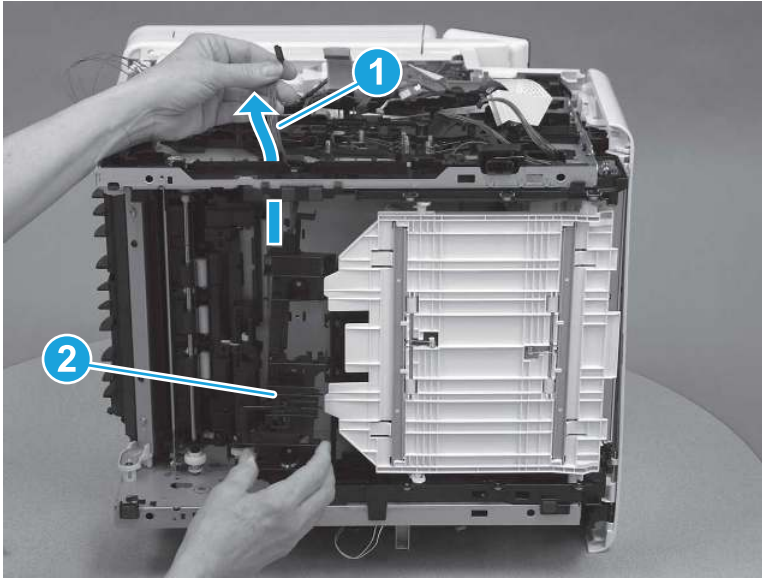
## 18. Reverse the removal steps to install the assembly

Also use the following special installation instructions.

## Front feed guide assembly

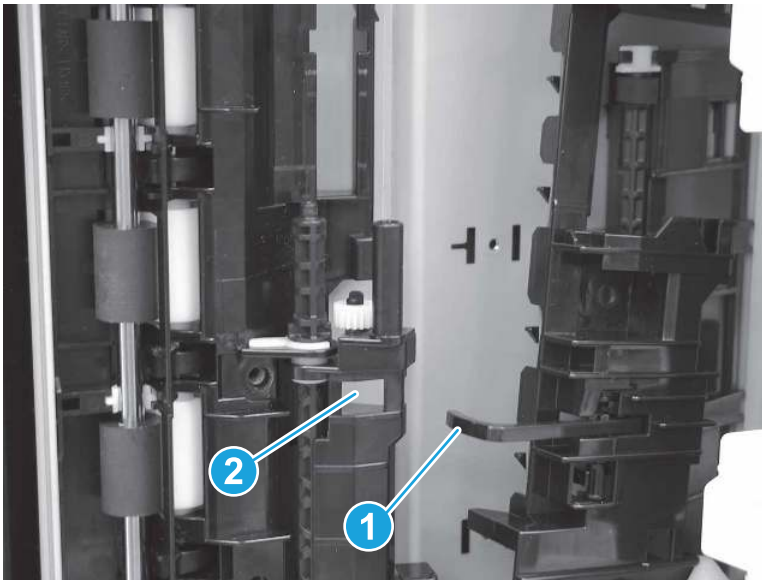
1. Thread the cables (callout 1) on the front feed guide assembly up through the printer frame, and then move the front feed guide assembly (callout 2) into position.

**Figure 5-1179** Position the front feed guide assembly



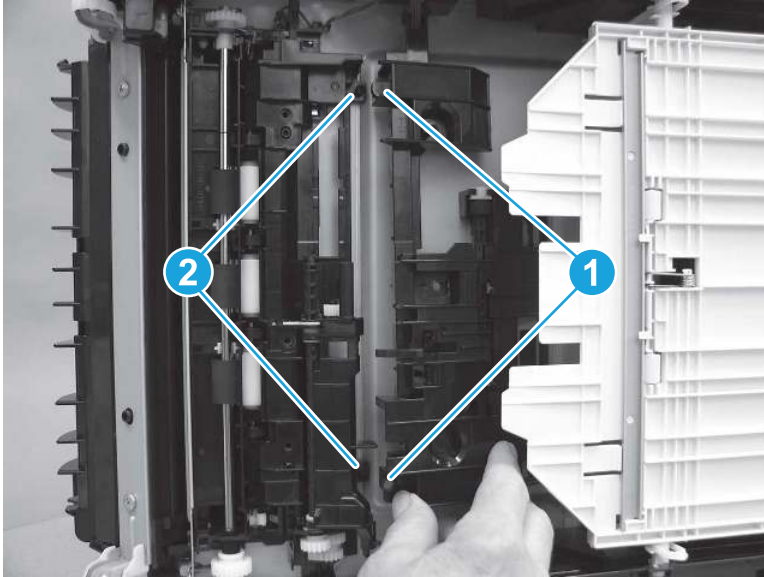
2. Make sure that the flag (callout 1) on the front feed guide assembly fits in the opening (callout 2) in the rear feed guide assembly.

**Figure 5-1180** Position the flag



3. Install the holes on the front feed guide assembly (callout 1) over the tabs (callout 2) on the rear feed guide assembly.

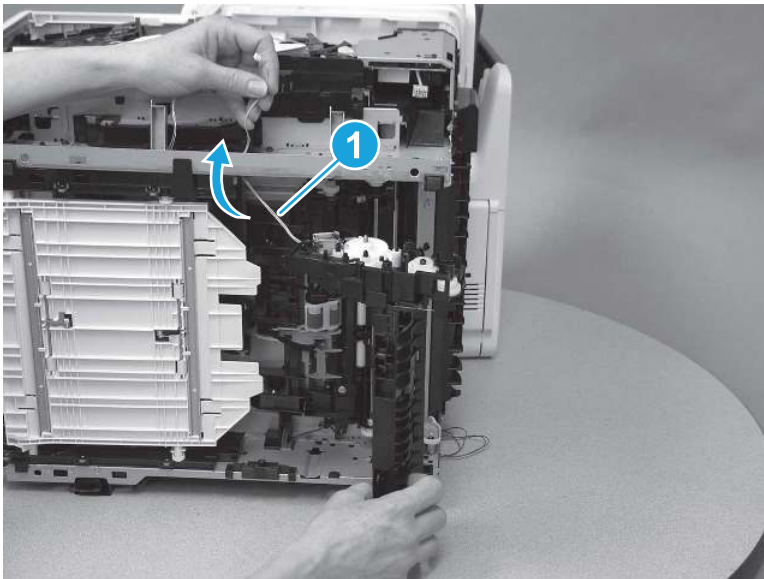
**Figure 5-1181** Install the front feed guide assembly



Pickup assembly

1. Pass the cables (callout 1) through the printer frame.

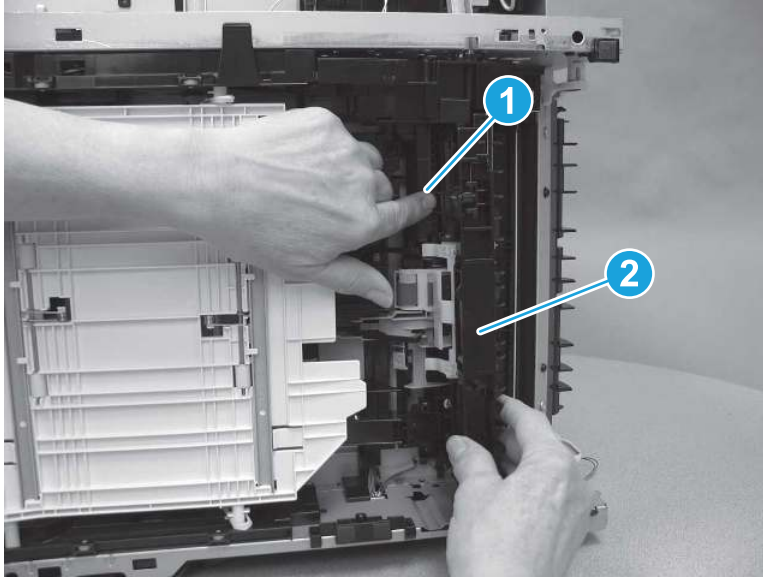
**Figure 5-1182** Pass the cables through the printer frame



2. Press the pickup and feed roller holder (callout 1) toward the printer, and then install the pickup assembly (callout 2).



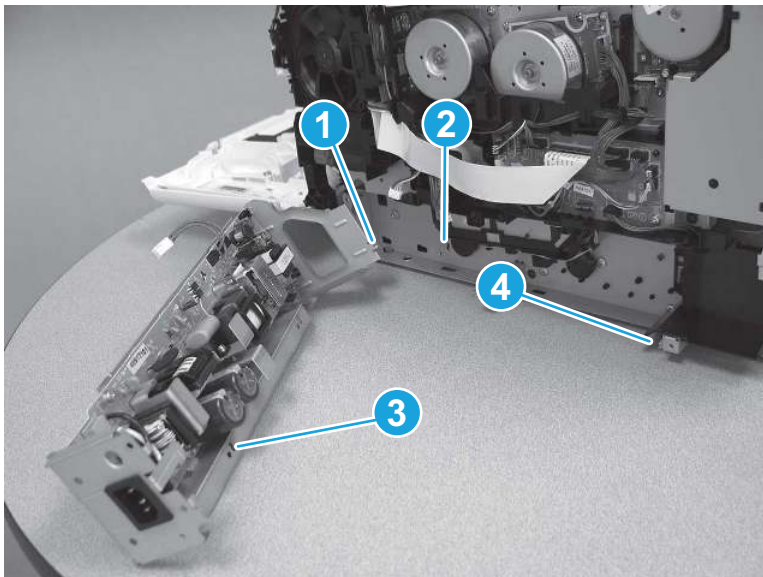
**Figure 5-1183** Install the pickup assembly



Low-voltage power supply

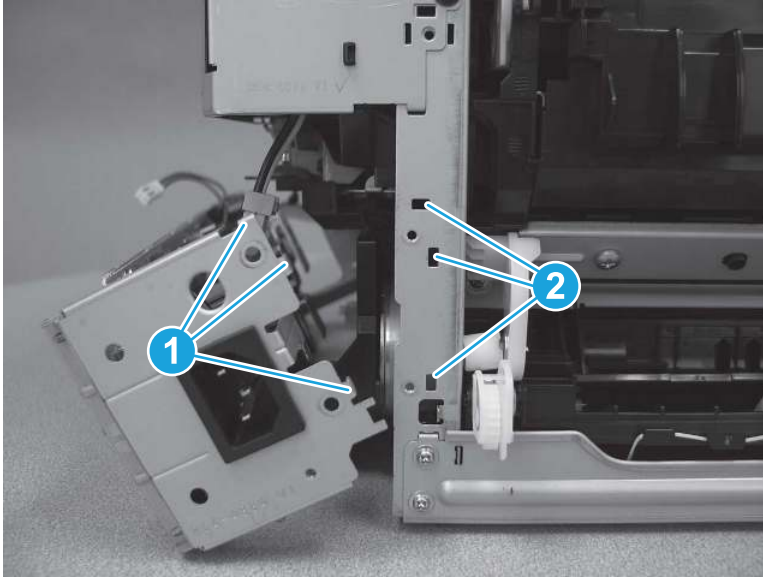
1. Install the tab (callout 1) on the LVPS into the slot (callout 2) in the printer. Install the slot (callout 3) in the LVPS over the tab (callout 4) on the printer.

**Figure 5-1184** Install the side tabs of the LVPS



2. At the back of the printer, install the tabs on the LVPS (callout 1) into the slots (callout 2) in the printer.

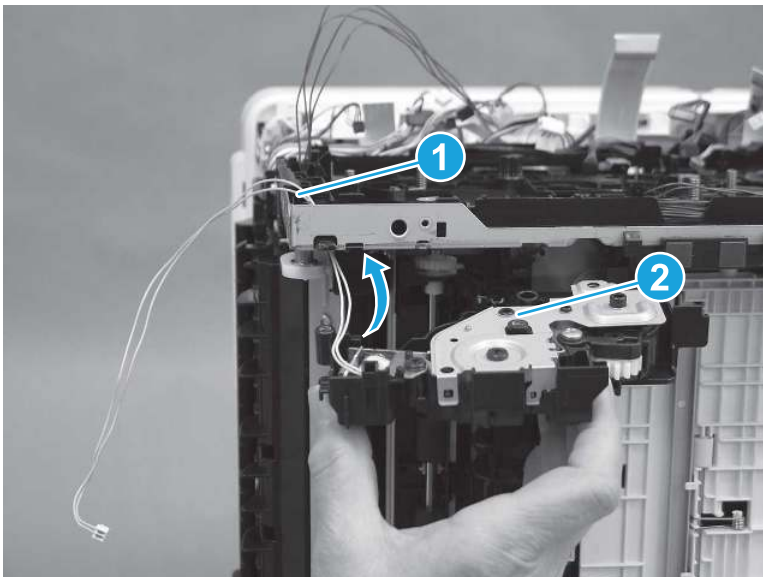
**Figure 5-1185** Install the back tabs of the LVPS



Lifter drive assembly

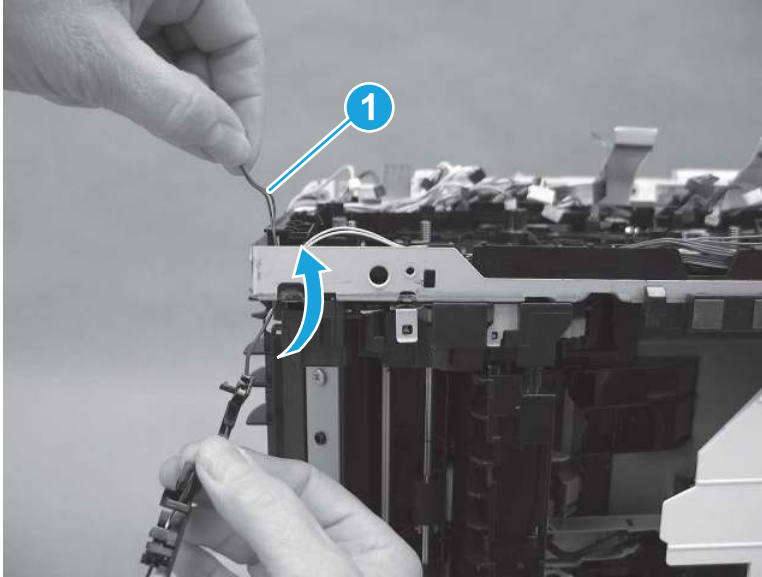
1. Pass the cables (callout 1) on the lifter drive assembly up through the printer frame, and then install the lifter drive assembly (callout 2).

**Figure 5-1186** Install the lifter drive assembly



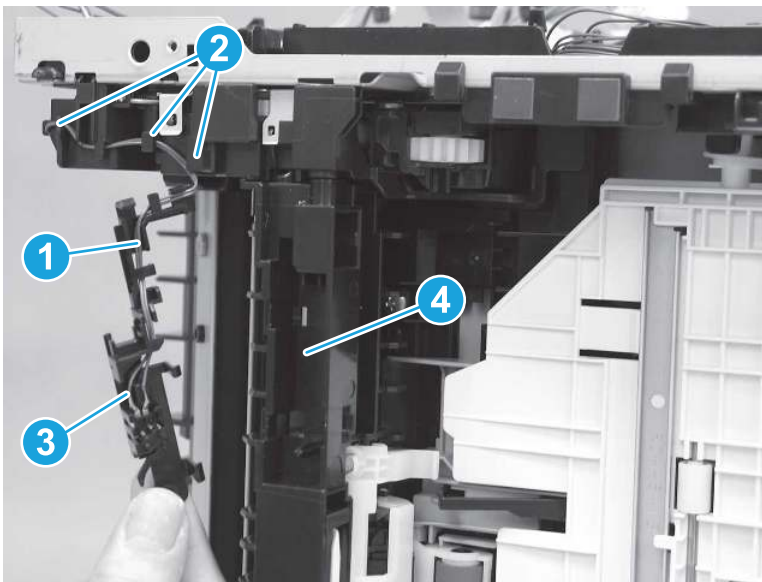
2. Pass the cables (callout 1) on the tray sensor switch up through the printer frame.

**Figure 5-1187** Install the tray sensor switch cable



3. Install the cables (callout 1) in the cable guide (callout 2), and then install the tray sensor switch (callout 3) on the lifter drive assembly (callout 4).

**Figure 5-1188** Install the tray sensor switch



## Removal and replacement: Rear feed guide assembly

Learn how to remove and replace the rear feed guide assembly.

[View a video of removing and replacing the rear feed guide assembly.](#)

Mean time to repair: 98 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](http://www.hp.com/buy/parts).

**Table 5-41** Part information

Part number	Part description
RM2-6366-000CN	Feed guide assembly (rear)

### Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- #2 Phillips short-shaft or right-angle screwdriver with a magnetic tip
- Small flat-blade screwdriver

### After performing service

#### Turn the printer power on

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

### Post service test

Make sure that the printer initializes to a **Ready** state.


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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

Figure 5-1189 Remove the tray

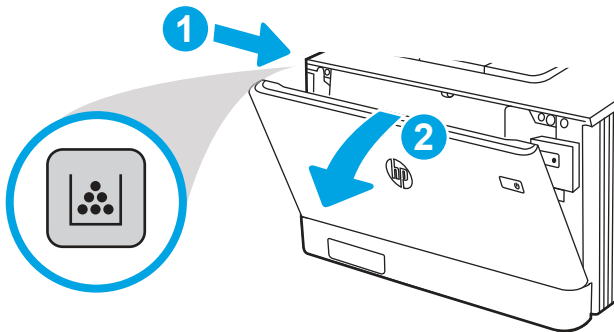


## 2. Remove the toner cartridges

Follow these steps to remove the toner cartridges.

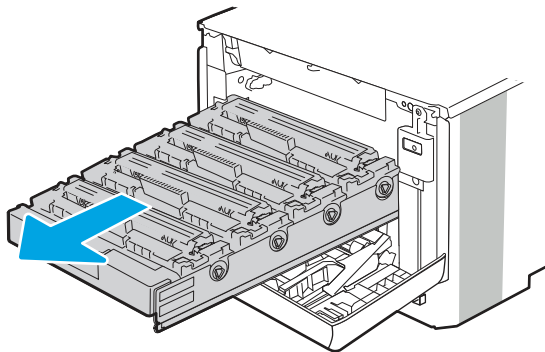
1. Open the front door by pressing the button on the left cover.

Figure 5-1190 Open the front door



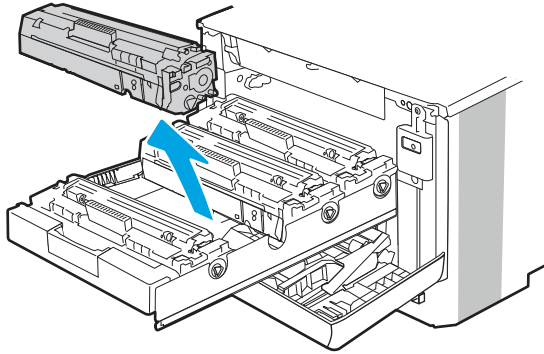
2. Grasp the blue handle on the toner cartridge tray, and then pull out the tray.

Figure 5-1191 Open the cartridge drawer



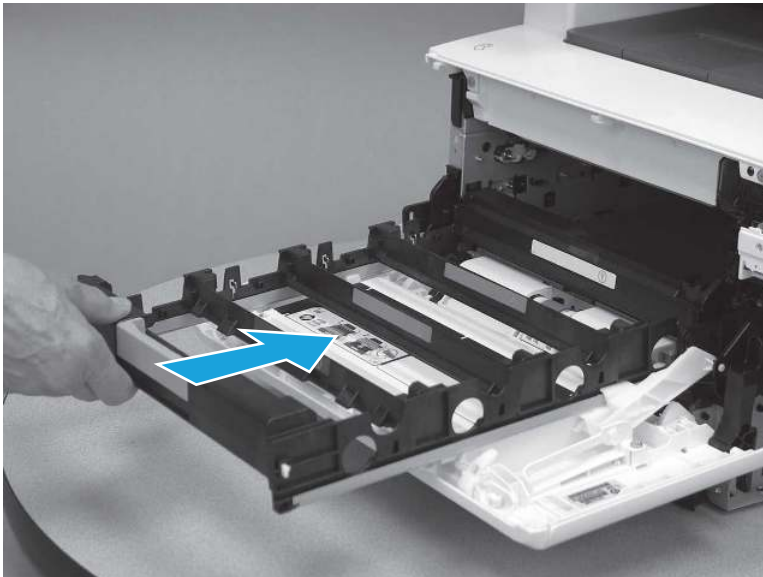
3. Grasp the handle on the toner cartridge, and then pull the toner cartridge straight up to remove it. Repeat this step for each toner cartridge.

**Figure 5-1192** Remove the toner cartridges



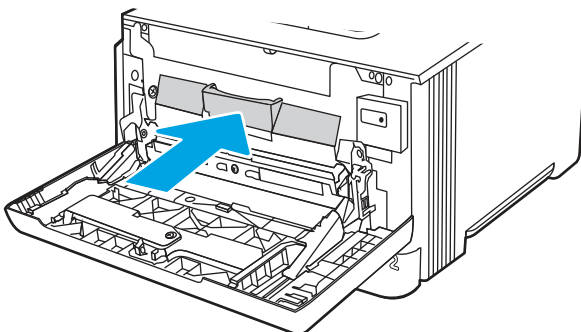
4. Slide the cartridge tray into the printer.

**Figure 5-1193** Slide the cartridge tray into the printer



5. Close the front door.

**Figure 5-1194** Close the front door



### 3. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

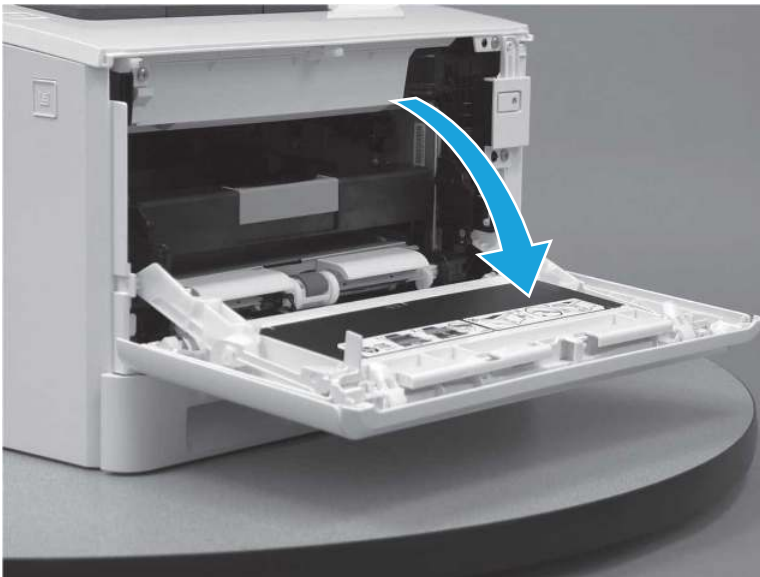
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-1195** Release the front door



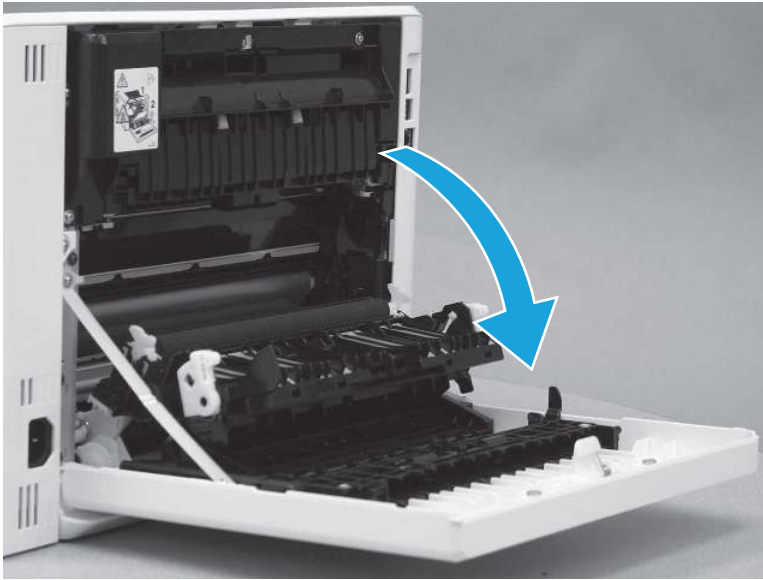
2. Open the front door.

**Figure 5-1196** Open the front door



3. Open the duplexing door.

**Figure 5-1197** Open the duplexer door

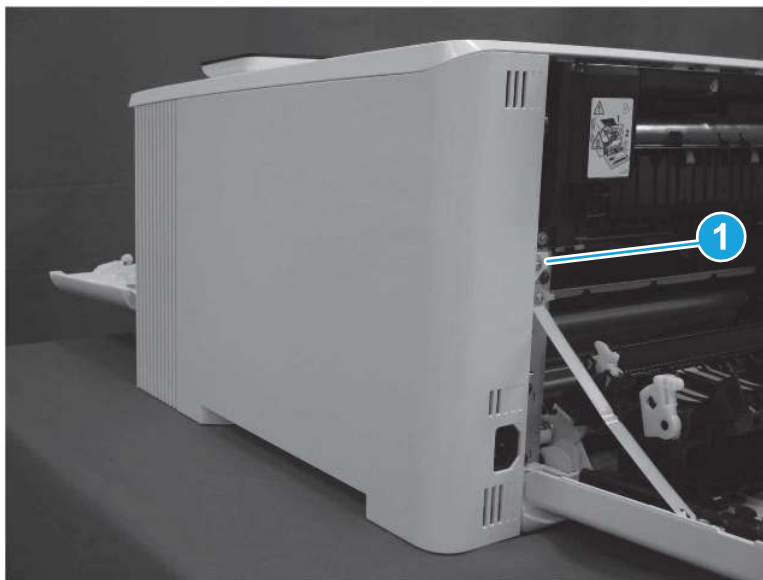


#### 4. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

1. At the back of the printer, remove one screw (callout 1).

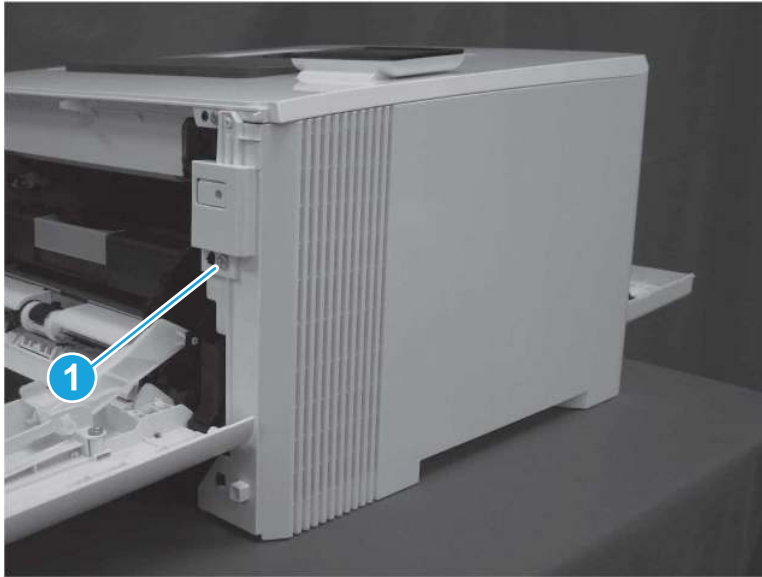
**Figure 5-1198** Remove one screw





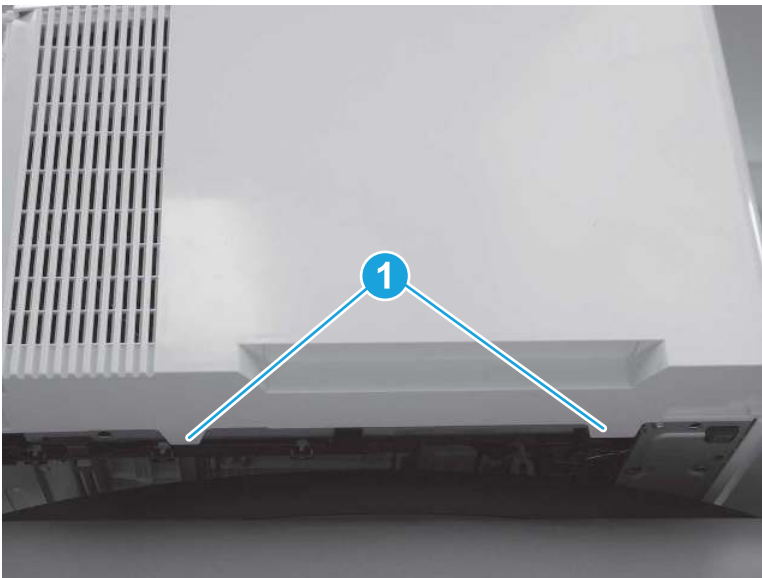
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-1199** Remove one screw



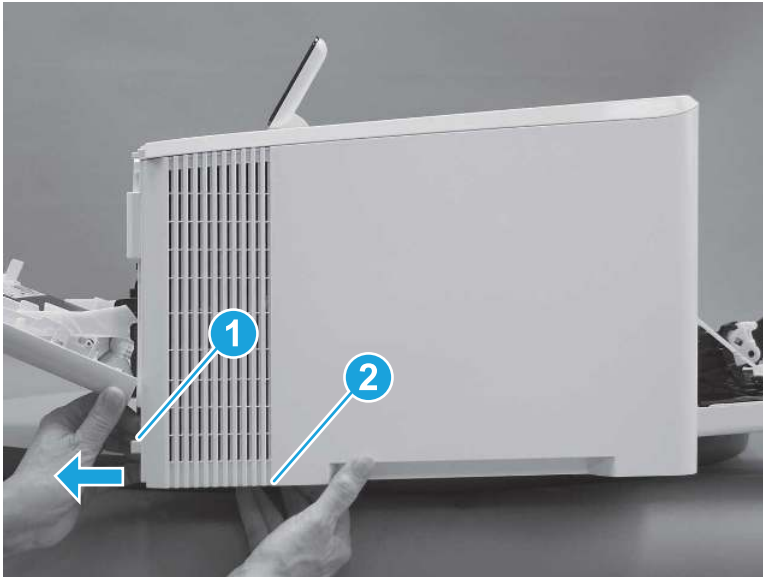
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1200** Locate the tabs



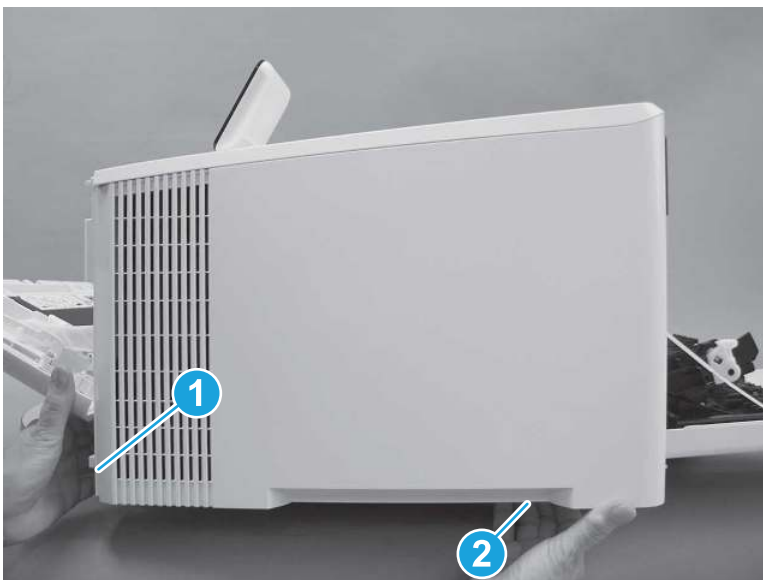
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-1201** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

**Figure 5-1202** Release lower rear tab



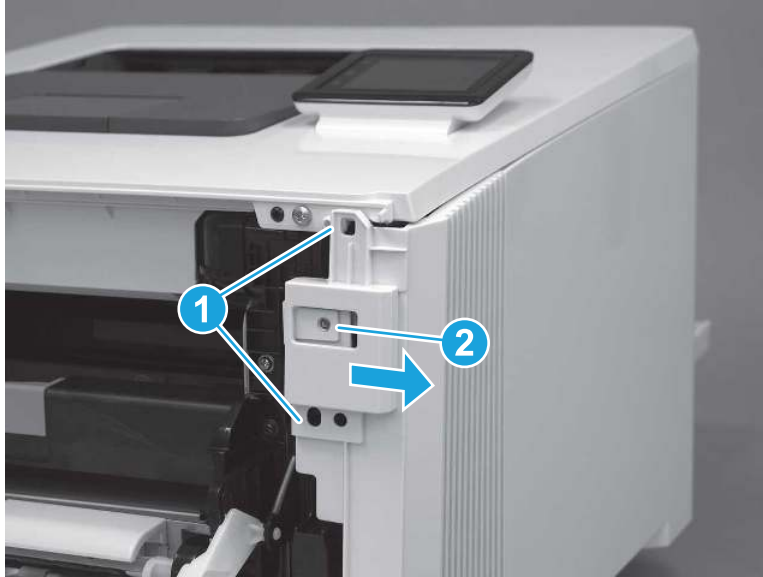
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

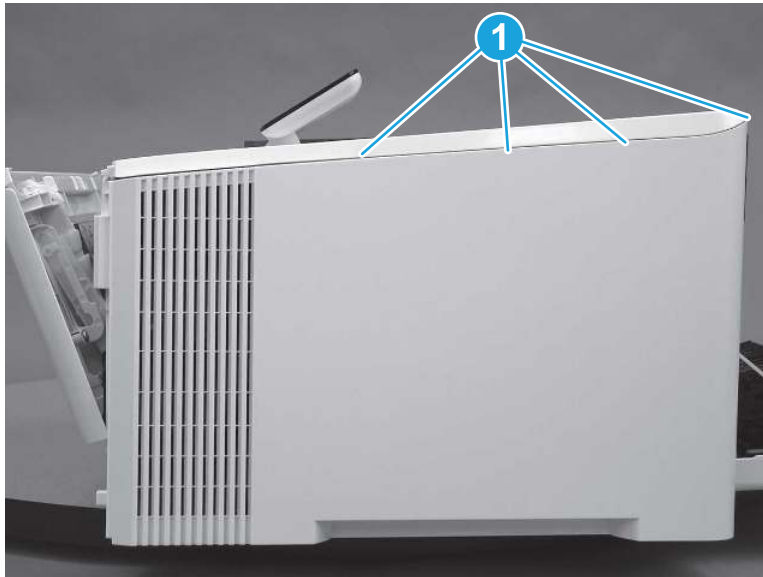
---

Figure 5-1203 Release two front tabs



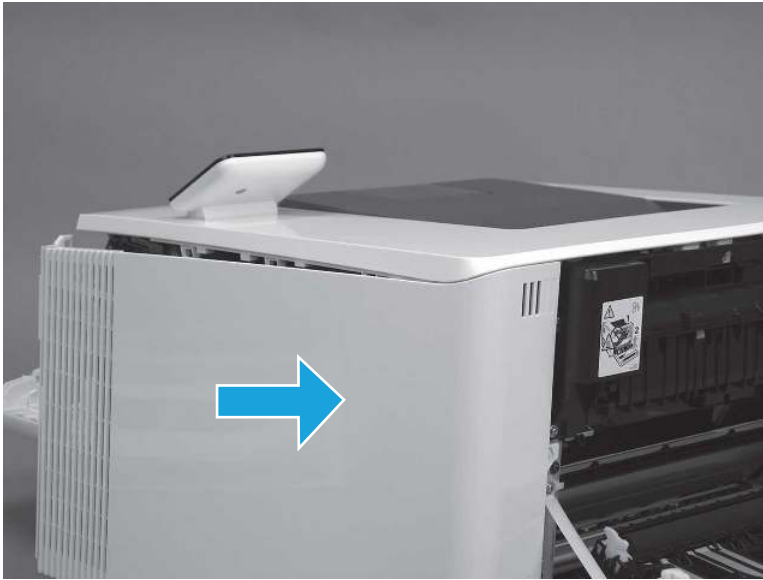
7. Release four tabs on the top of the printer (callout 1).

Figure 5-1204 Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-1205** Remove the right cover



## 5. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

**Figure 5-1206** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-1207** Remove one screw



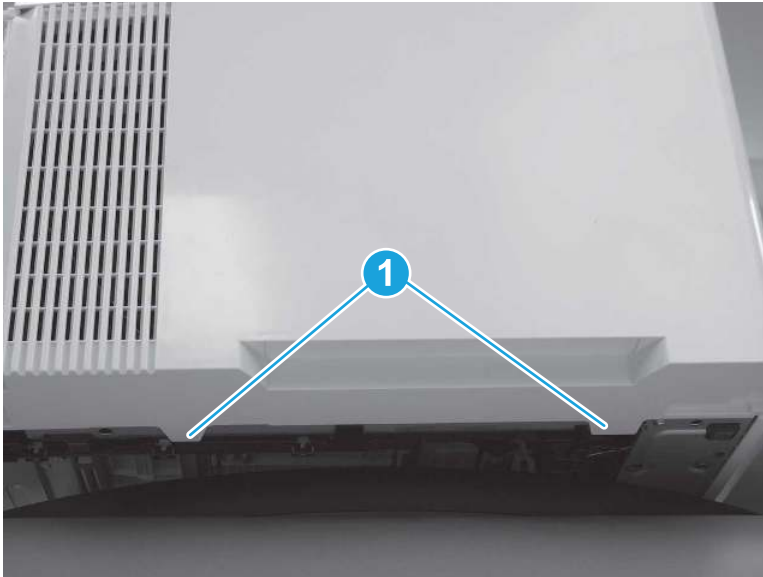
3. At the front of the printer, remove one screw (callout 1).

**Figure 5-1208** Remove one screw



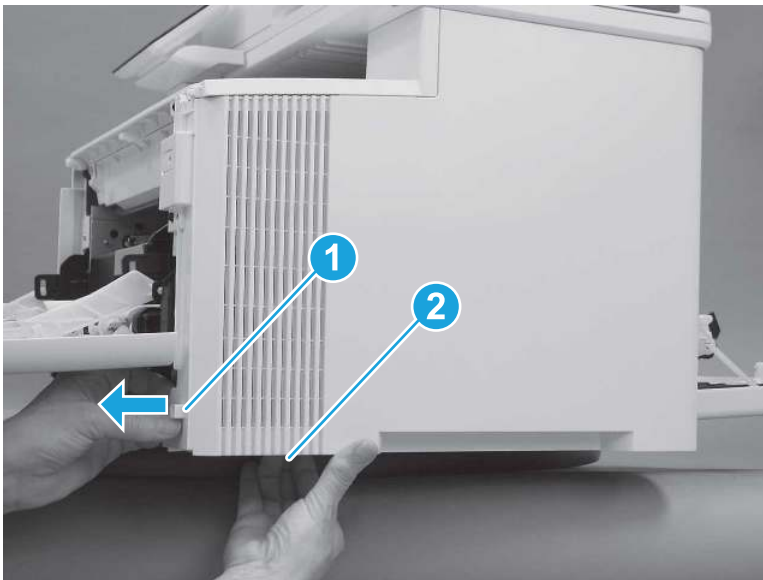
- Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1209** Locate the tabs



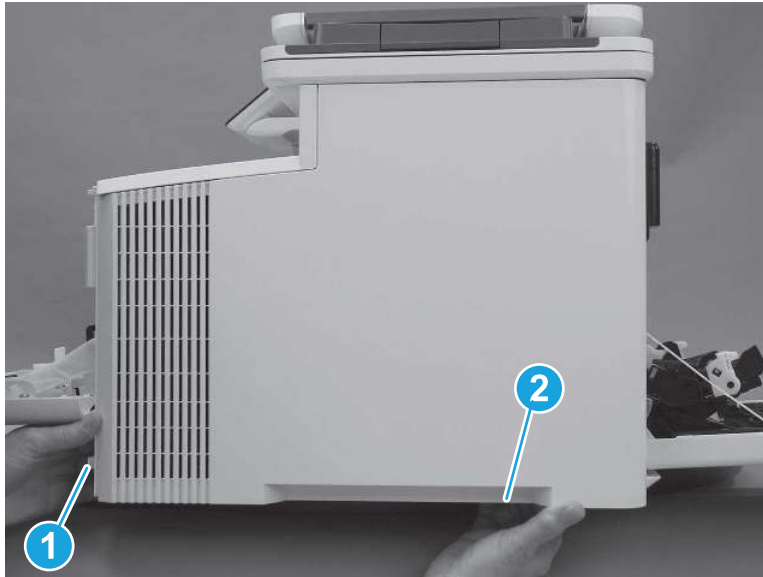
- Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-1210** Release front lower tabs



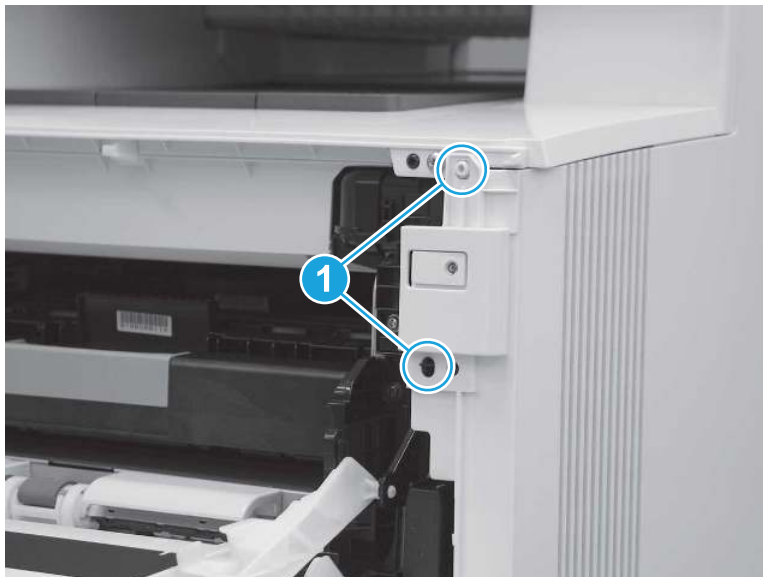
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-1211** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-1212** Release front upper tabs



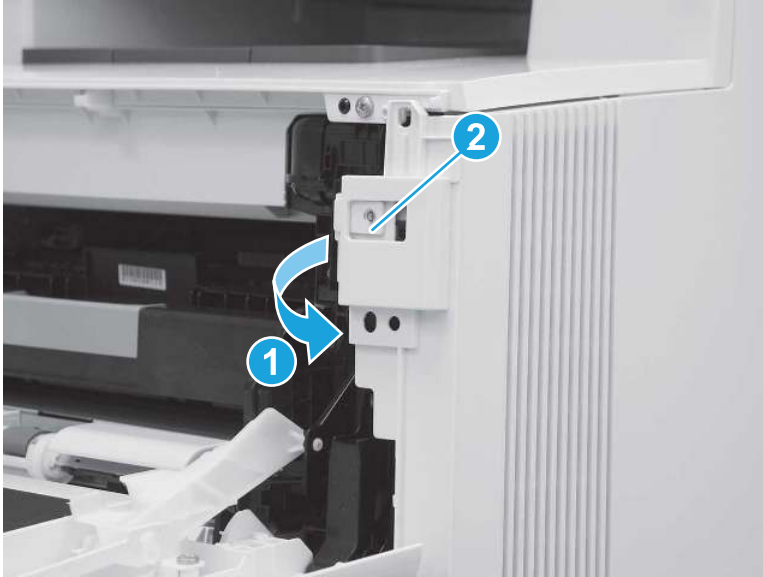
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

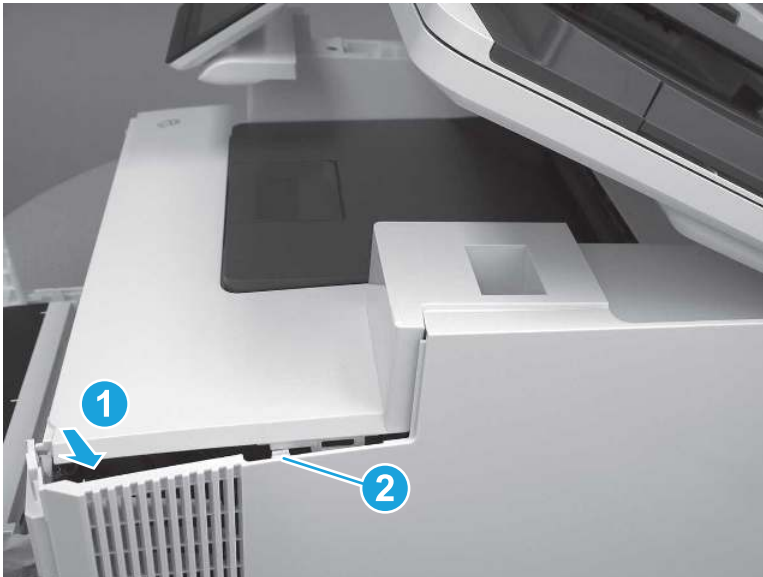
---

**Figure 5-1213** Rotate the front of the cover



9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

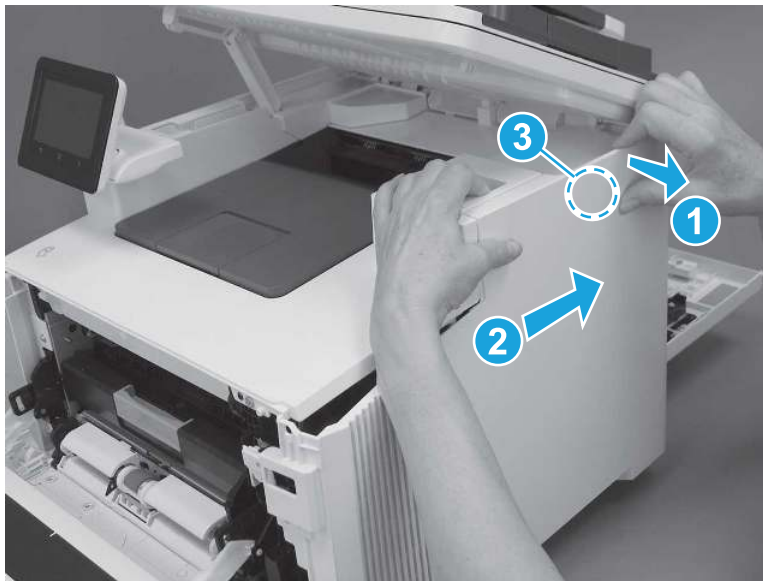
**Figure 5-1214** Release top tabs





10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-1215** Release one tab and one hook



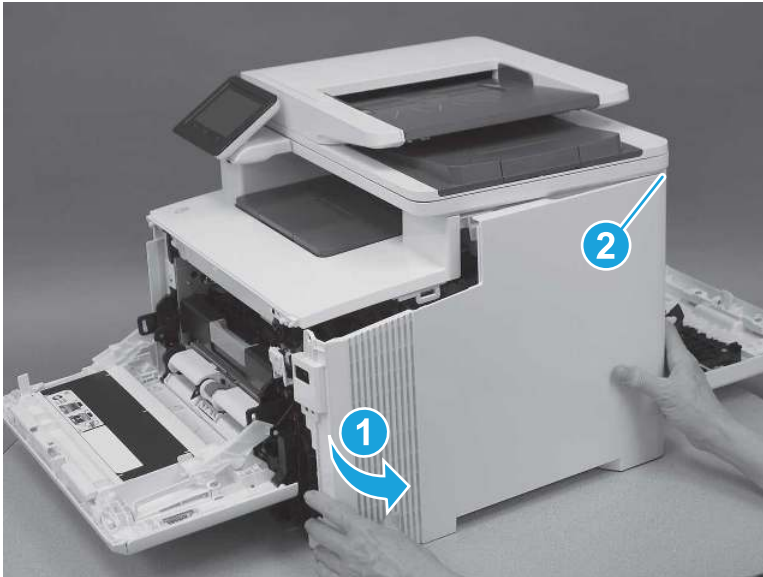
11. Lower the scanner.

**Figure 5-1216** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-1217** Remove the right cover

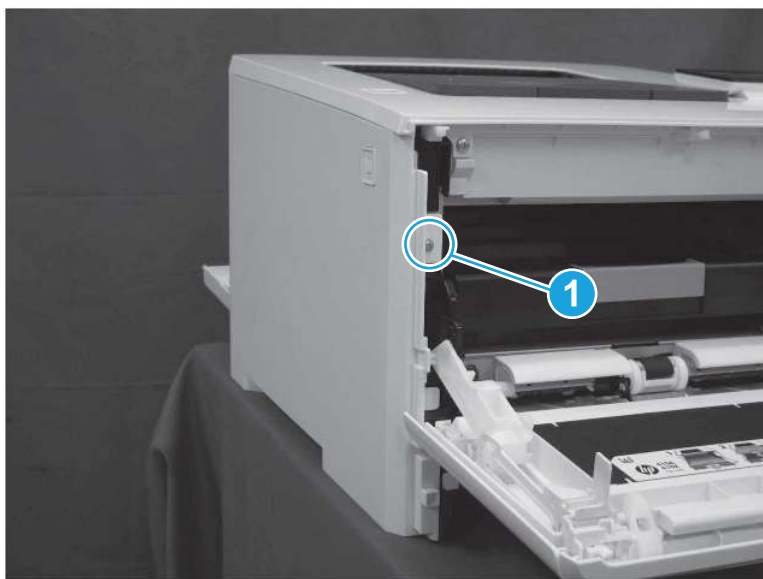


## 6. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

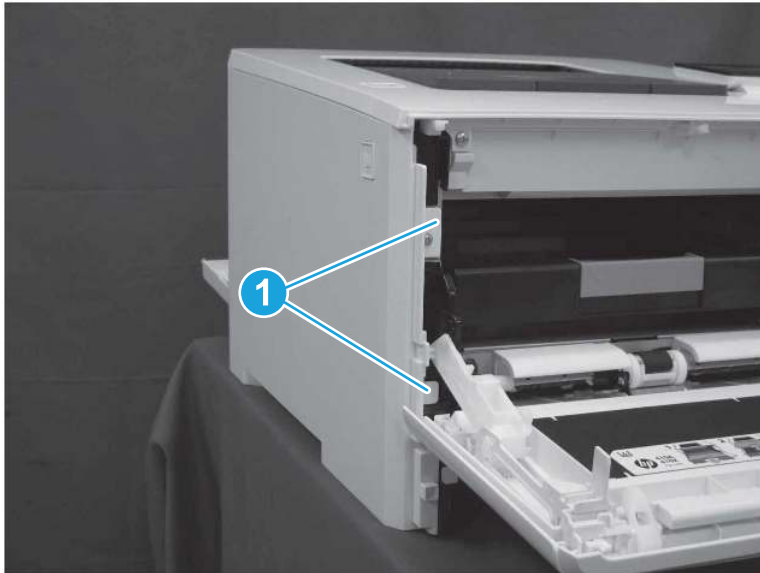
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-1218** Remove one screw



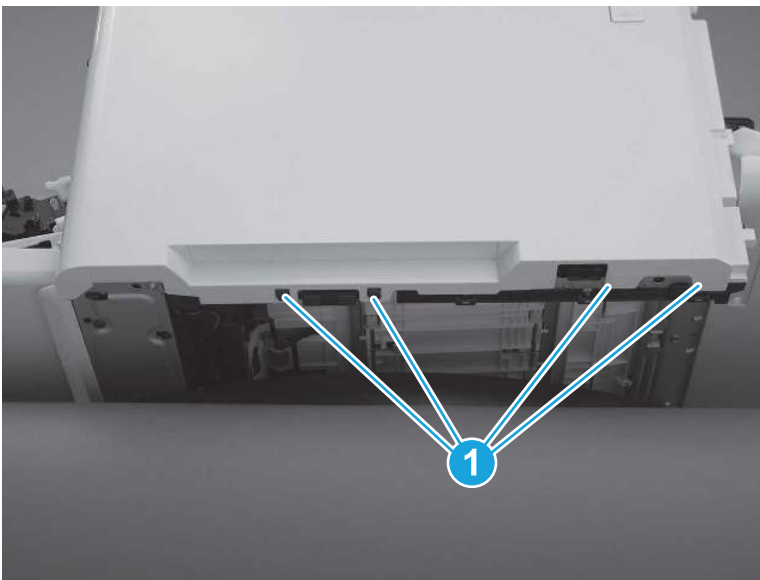
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-1219** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1220** Locate the tabs



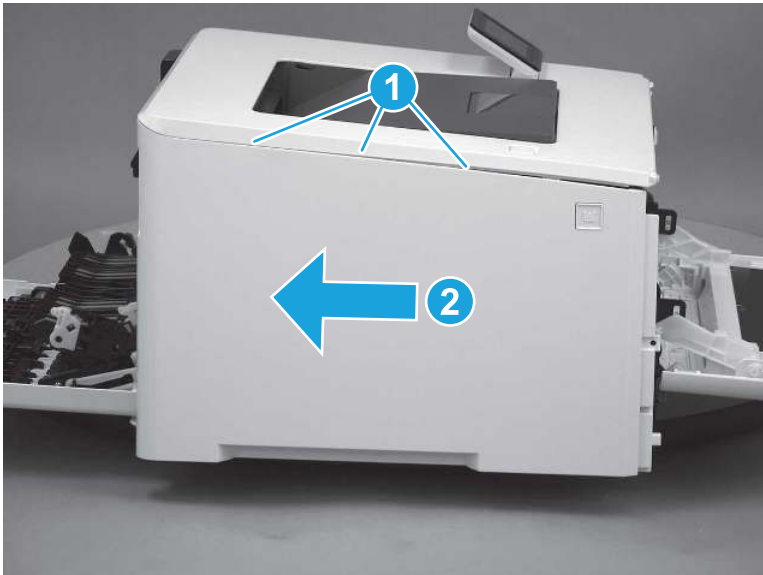
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-1221 Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

Figure 5-1222 Release three tabs



## 7. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

1. Raise the scanner.

**Figure 5-1223** Raise the scanner



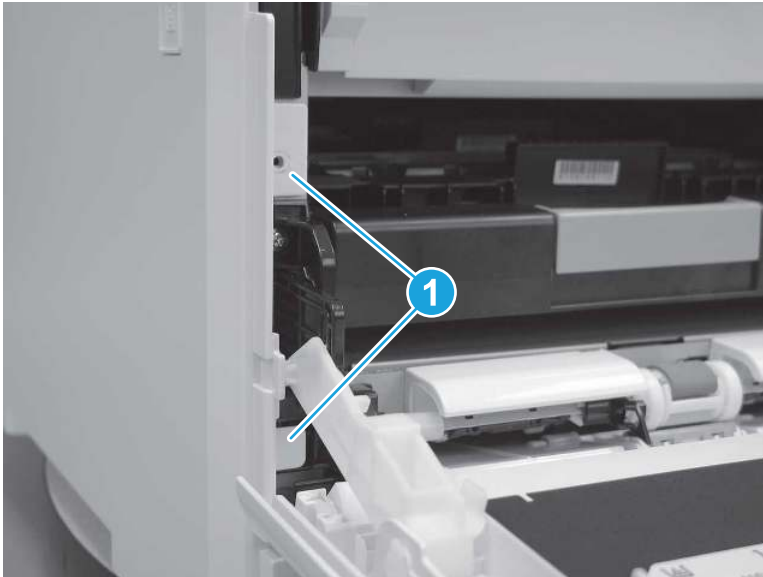
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-1224** Remove one screw



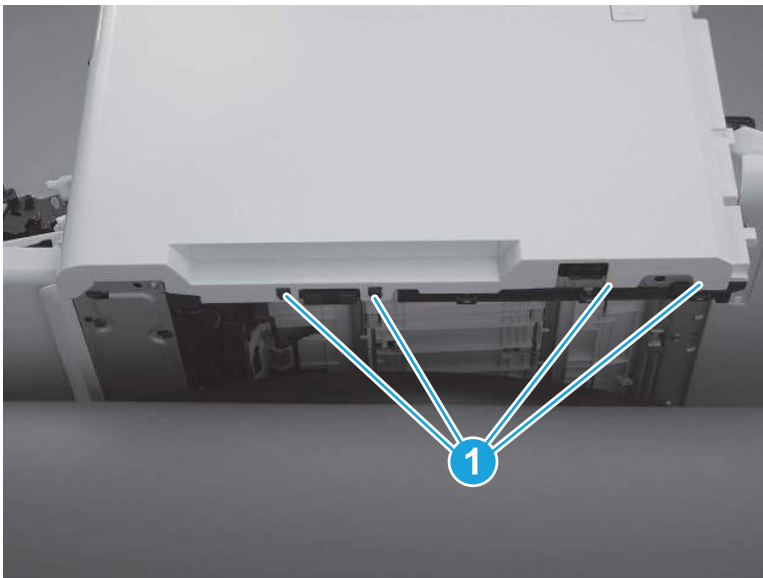
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-1225** Release two tabs



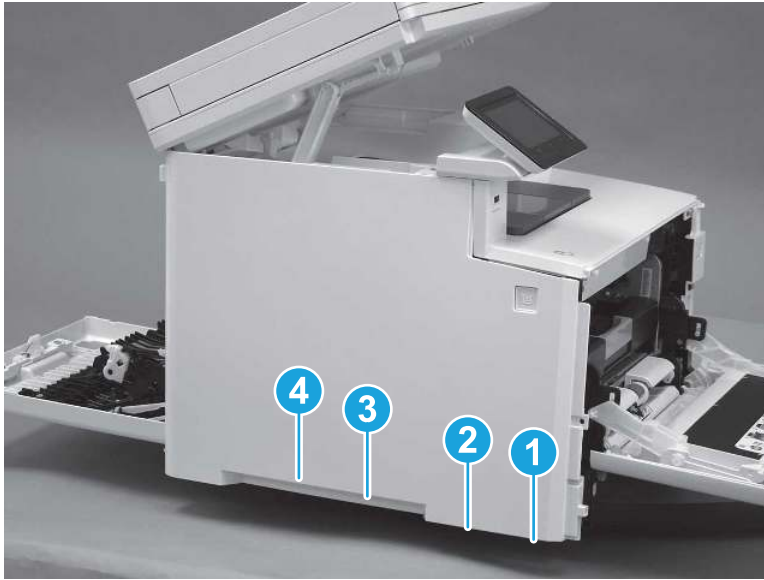
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1226** Locate the tabs



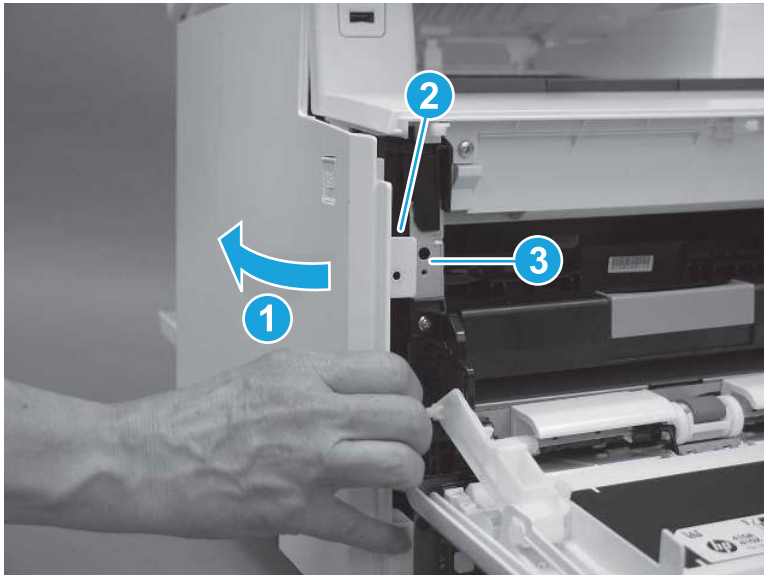
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-1227 Release four tabs



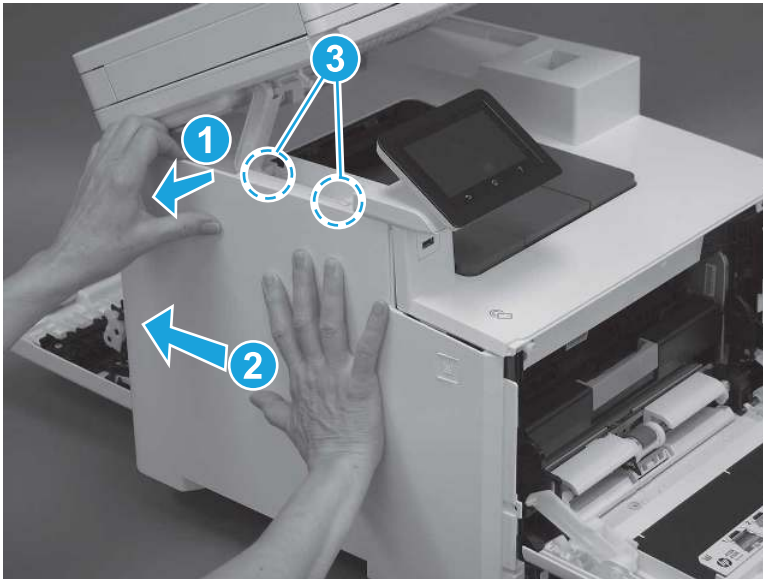
6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

Figure 5-1228 Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-1229** Release one tab and two hooks



8. Lower the scanner.

**Figure 5-1230** Lower the scanner





9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

Figure 5-1231 Remove the left cover

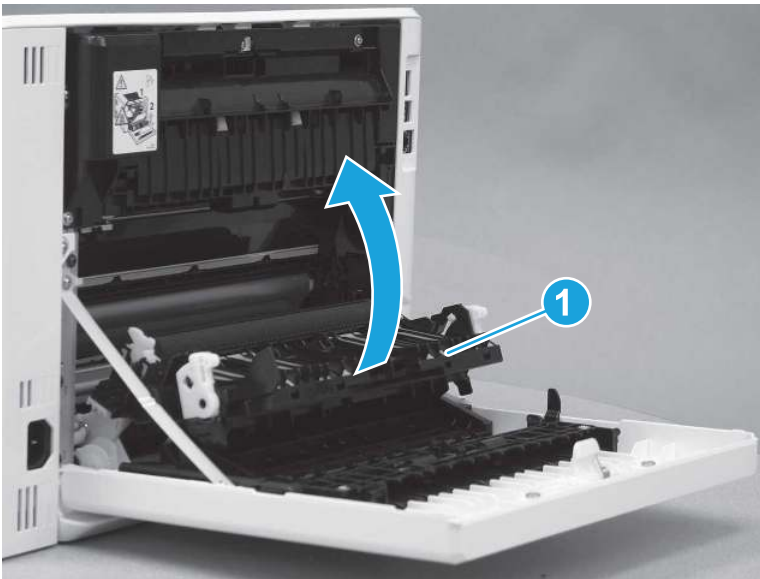


## 8. Remove the duplexing door assembly

Follow these steps to remove the duplexing door assembly.

1. Rotate the secondary transfer assembly (callout 1) toward the printer to close it.

Figure 5-1232 Close the secondary transfer assembly



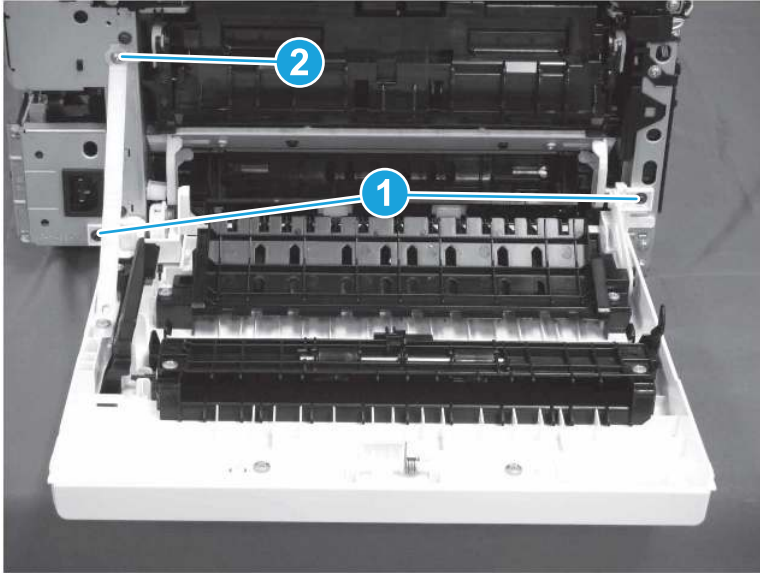
2. At the back of the printer, remove two screws (callout 1), and then remove one screw (callout 2) that holds the retention arm.

---

 **TIP:** Note that the screw (callout 2) that holds the retention arm is longer than the other two. Make sure this screw is installed in the correct position.

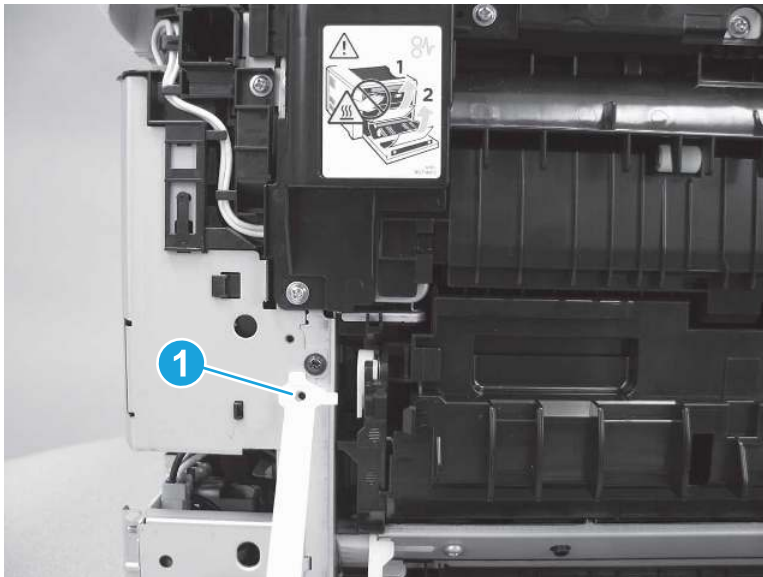
---

Figure 5-1233 Remove three screws



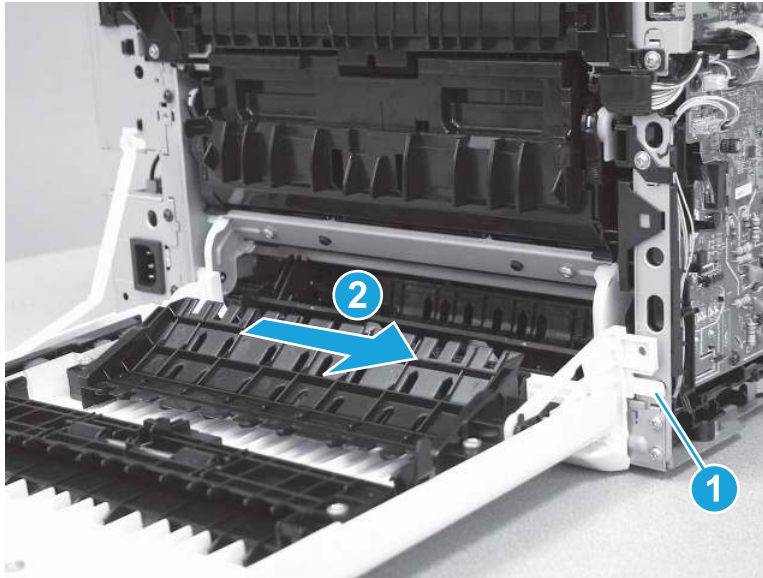
3. Release the retention arm (callout 1).

Figure 5-1234 Release the retention arm



4. Release one tab (callout 1), and then slide the duplexer door (callout 2) to the right to remove it.

**Figure 5-1235** Remove the duplexing door

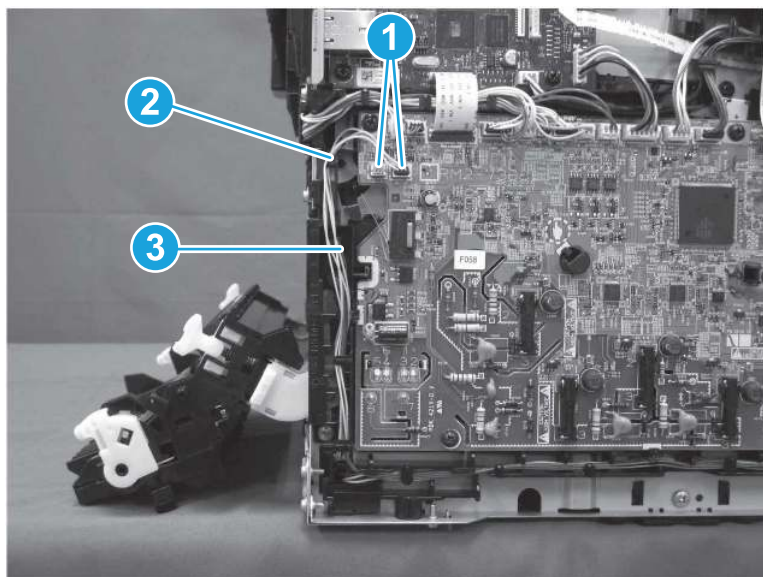


## 9. Remove the re-pickup assembly

Follow these steps to remove the re-pickup assembly.

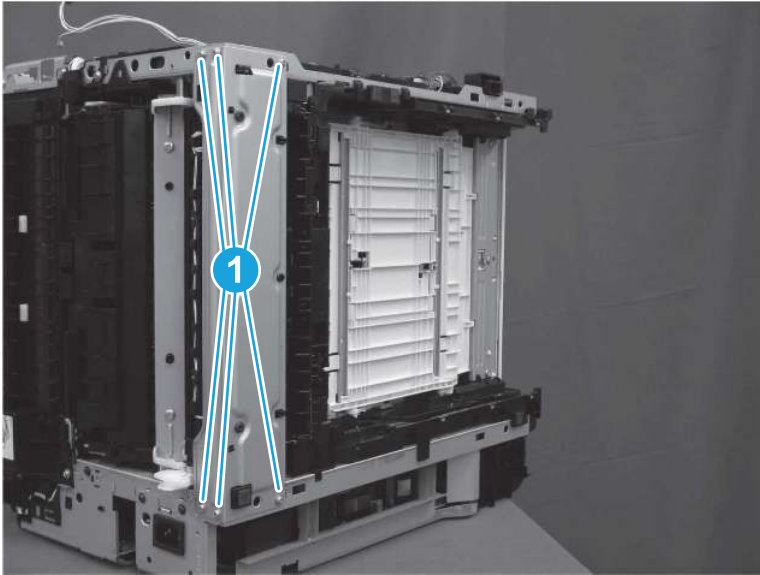
1. On the left side of the printer, disconnect two connectors (callout 1), and then remove the cables (callout 2) from the guides (callout 3).

**Figure 5-1236** Disconnect two connectors and remove cables from guides



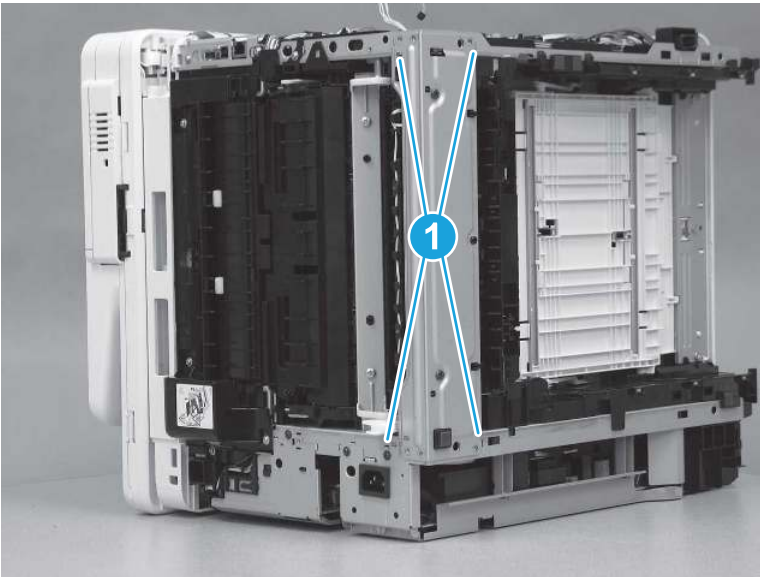
2. Lay the printer on the right side so that the left side is facing up. Remove six screws (callout 1).

Figure 5-1237 Remove six screws



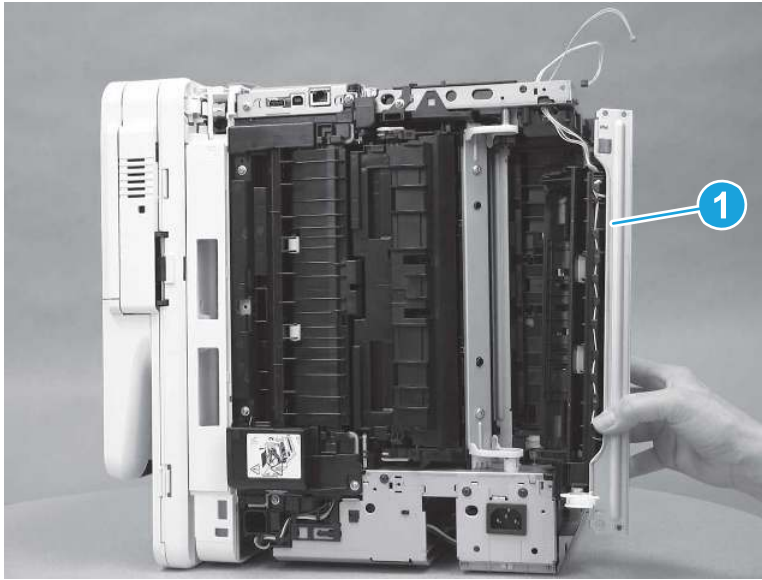
3. Release four tabs (callout 1).

Figure 5-1238 Release four tabs



4. Remove the re-pickup assembly (callout 1).

Figure 5-1239 Remove the assembly



## 10. Remove the DC controller

Follow these steps to remove the DC controller.

1. Before disconnecting the connectors in the next step, take note of the position of two of the cables (callout 1).


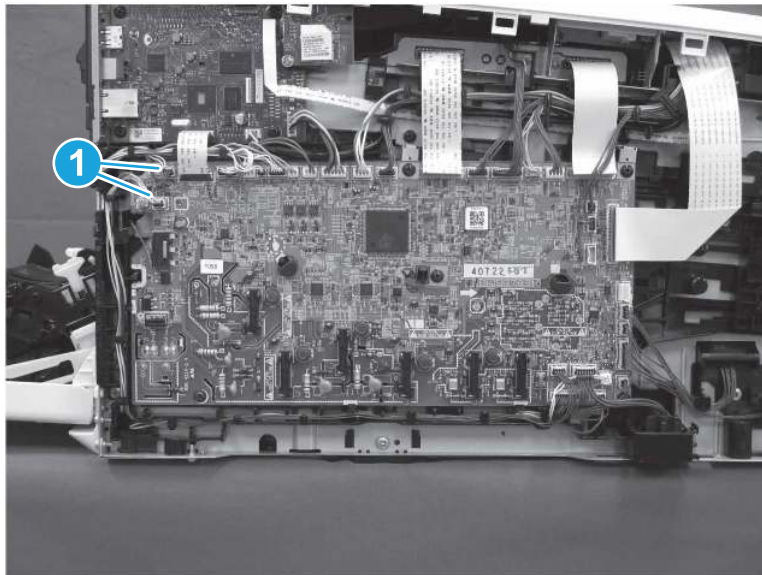
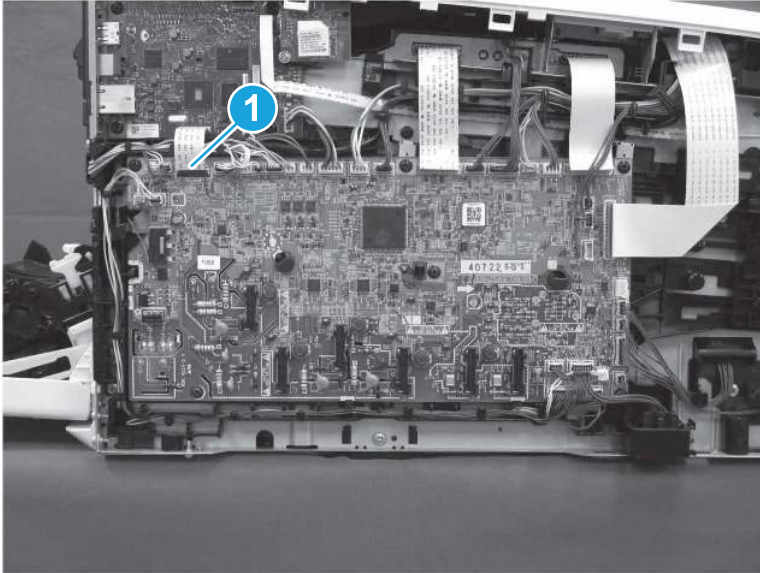
 **IMPORTANT:** These cables can be mistakenly switched when reinstalled. The connectors on the cables fit in either connector on the DC controller. Make sure that these cables are installed in the correct connectors. The upper cable is purple and the lower cable is yellow. *If the cables are switched, the printer jams repeatedly when duplex printing.*

Figure 5-1240 Check the cables



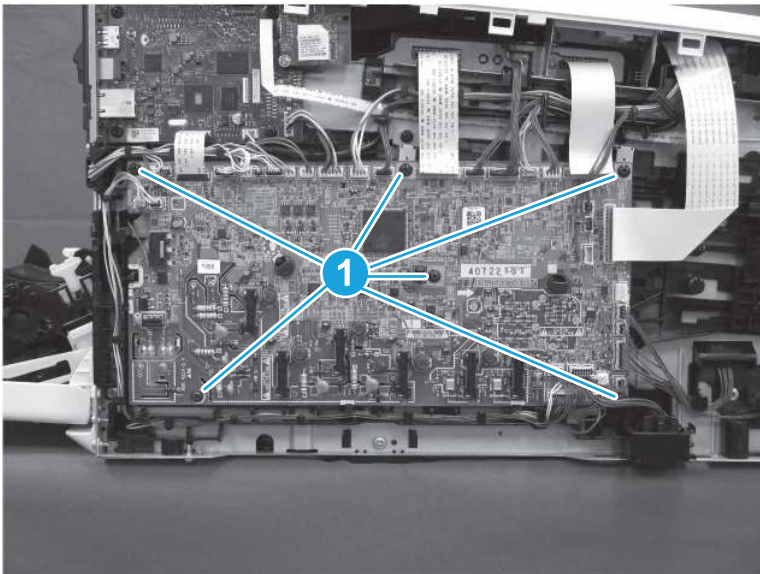
2. Disconnect all of the connectors on the DC controller. Note that one connector (callout 1) is a zero insertion force (ZIF) connector. Lift the latch on the connector before removing the flat cable.

**Figure 5-1241** Disconnect all of the connectors



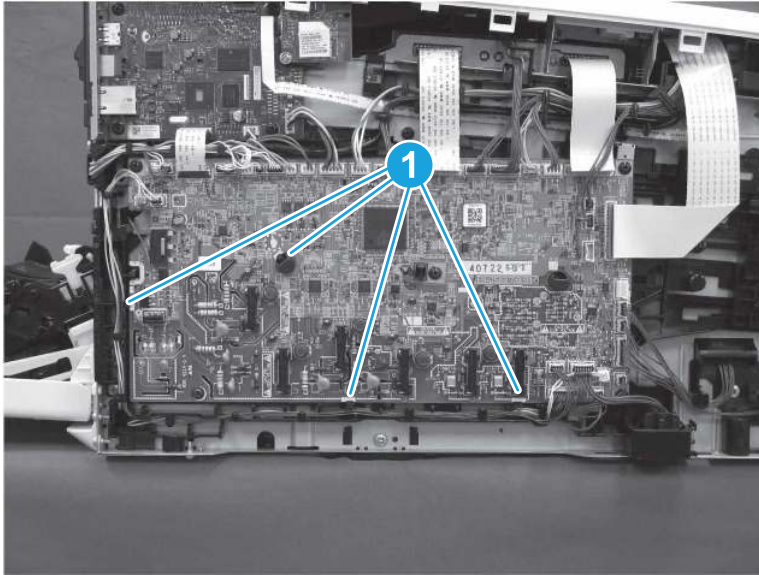
3. Remove six screws (callout 1).

**Figure 5-1242** Remove six screws



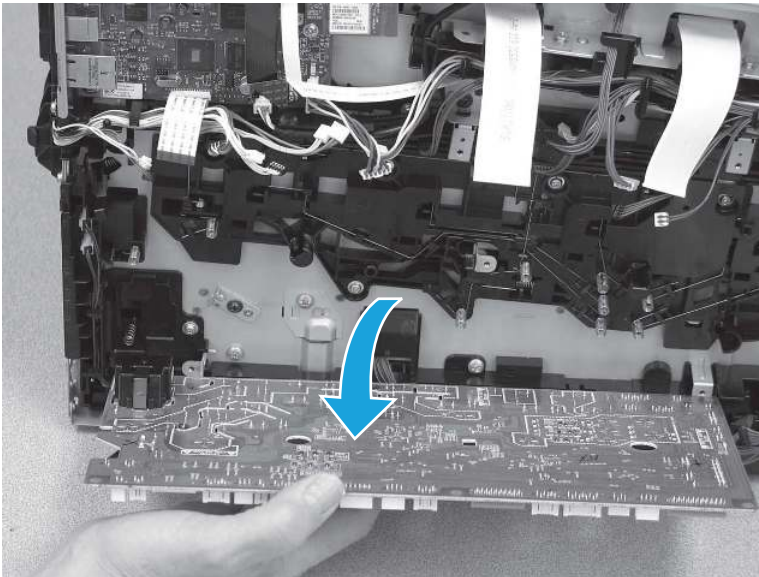
4. Release four tabs (callout 1).

Figure 5-1243 Release four tabs



5. Remove the DC controller.

Figure 5-1244 Remove the assembly

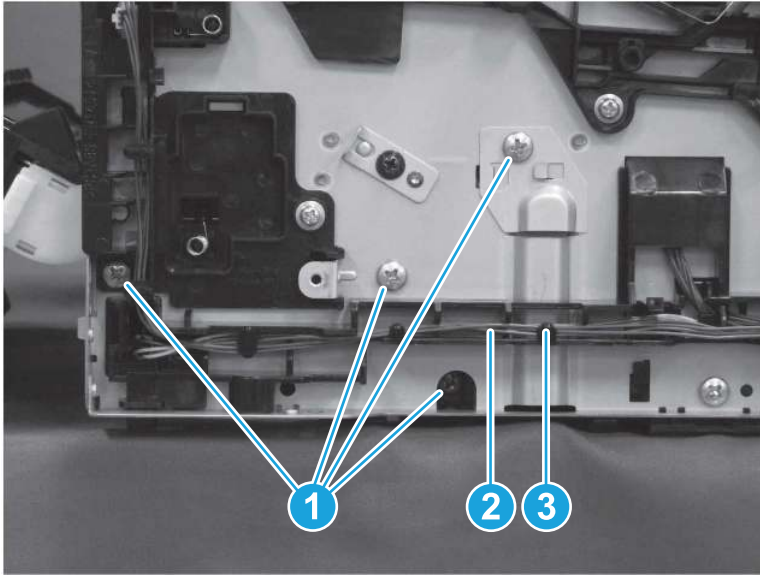


## 11. Remove the lifter drive assembly

Follow these steps to remove the lifter drive assembly.

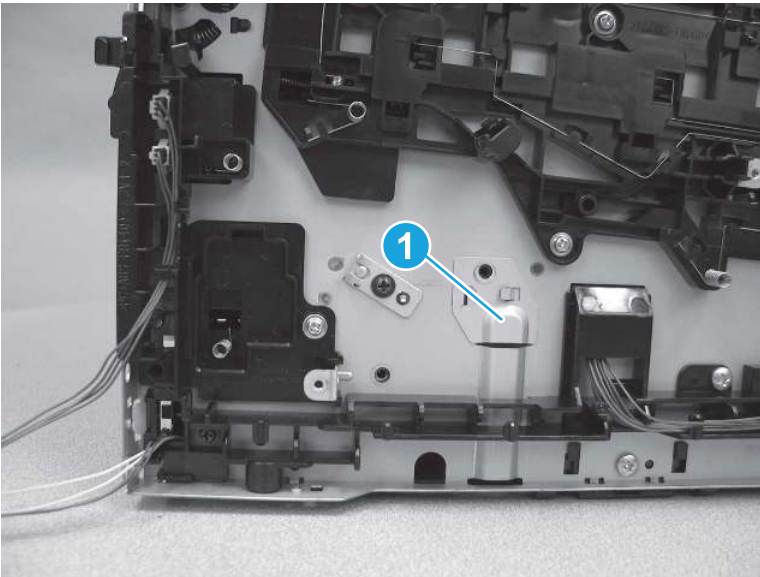
1. Remove four screws (callout 1), and then release the cables (callout 2) from the guides (callout 3).

**Figure 5-1245** Remove four screws and release cables



2. Remove one cover (callout 1).

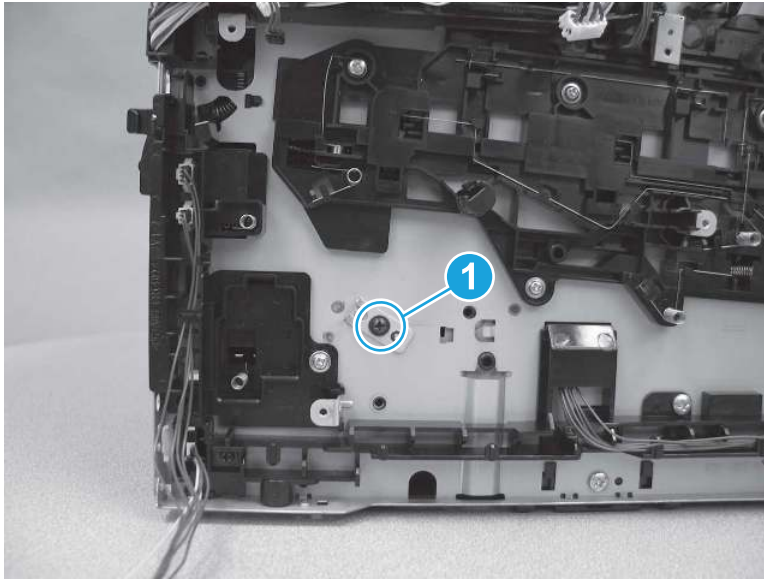
**Figure 5-1246** Remove one cover





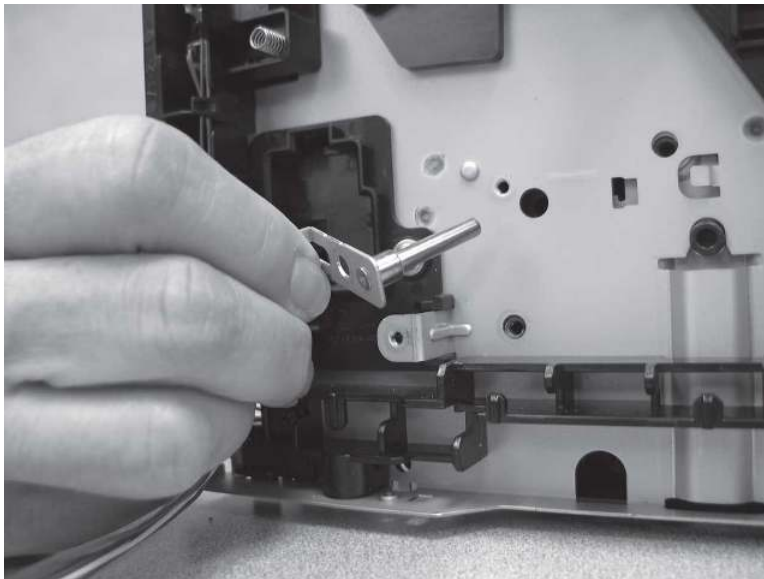
3. Remove one screw (callout 1).

Figure 5-1247 Remove one screw



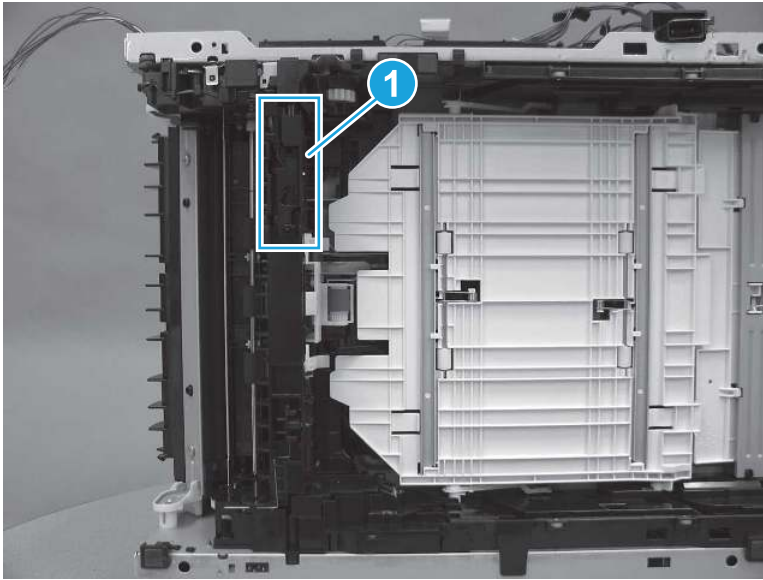
4. Remove the shaft.

Figure 5-1248 Remove the shaft



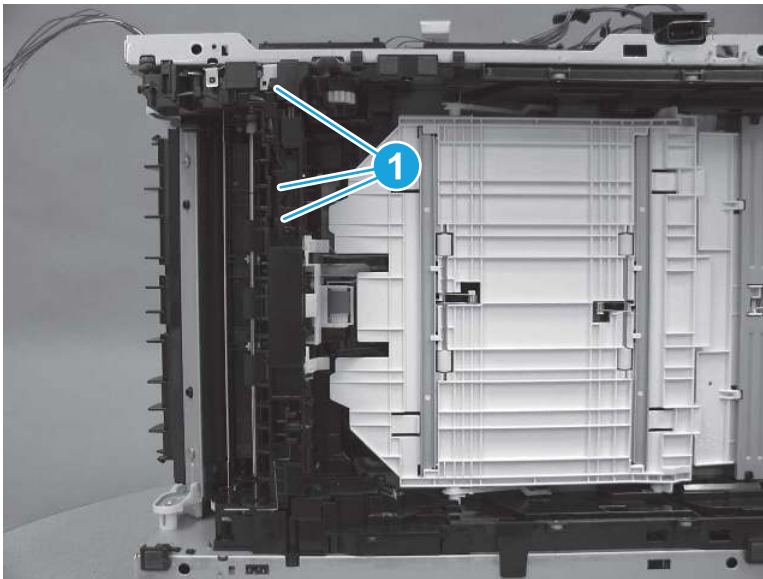
5. Lay the printer on the right side so that the left side is facing up. Locate the tray sensor switch (callout 1).

Figure 5-1249 Locate the tray sensor switch



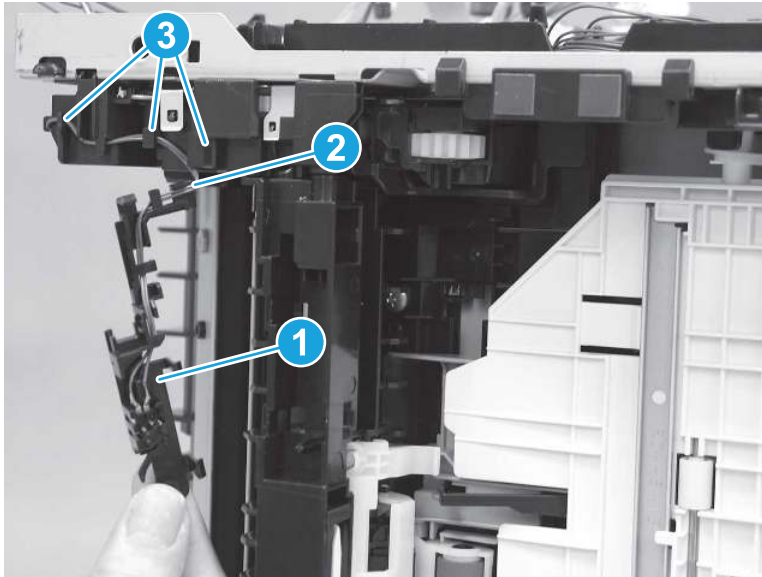
6. Release three tabs (callout 1).

Figure 5-1250 Release three tabs



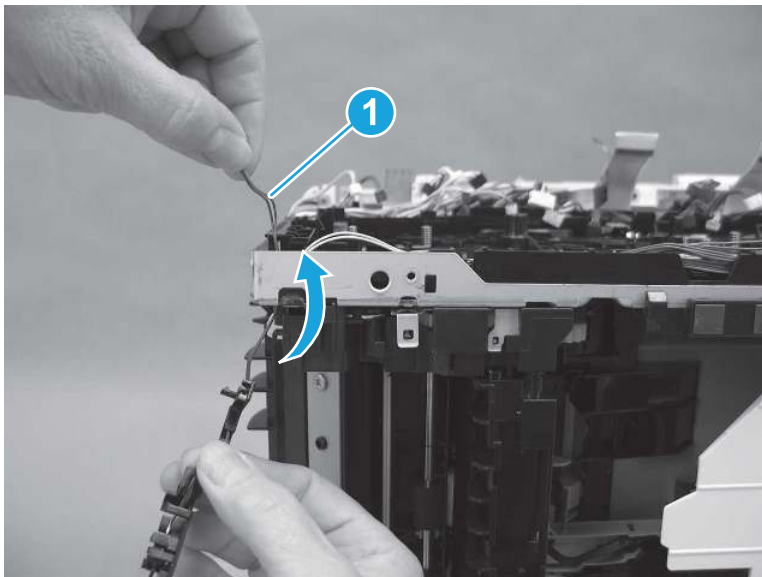
7. Release the tray sensor switch (callout 1), and then remove the cables (callout 2) from the guides (callout 3).

**Figure 5-1251** Release the tray sensor switch



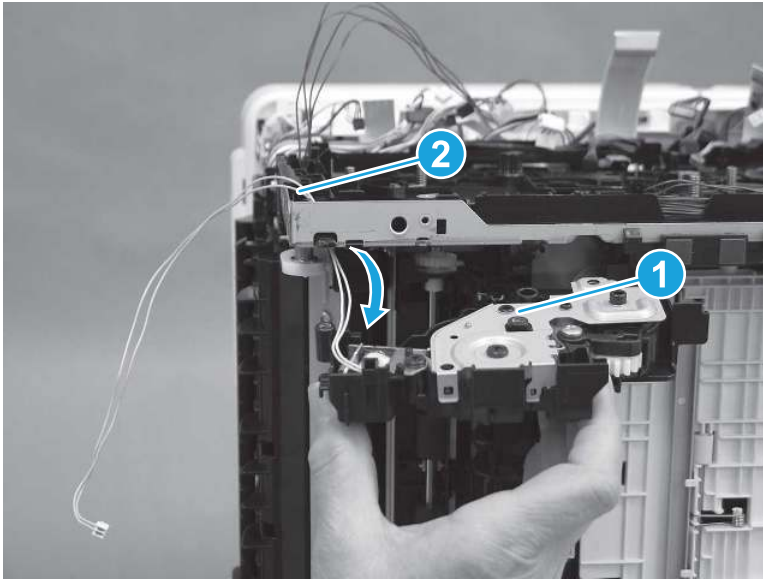
8. Remove the tray sensor switch by releasing the cables (callout 1) through the printer frame.

**Figure 5-1252** Remove the tray sensor switch



9. Remove the lifter drive assembly (callout 1), and then pass the cables (callout 2) through the printer frame.

Figure 5-1253 Remove the assembly

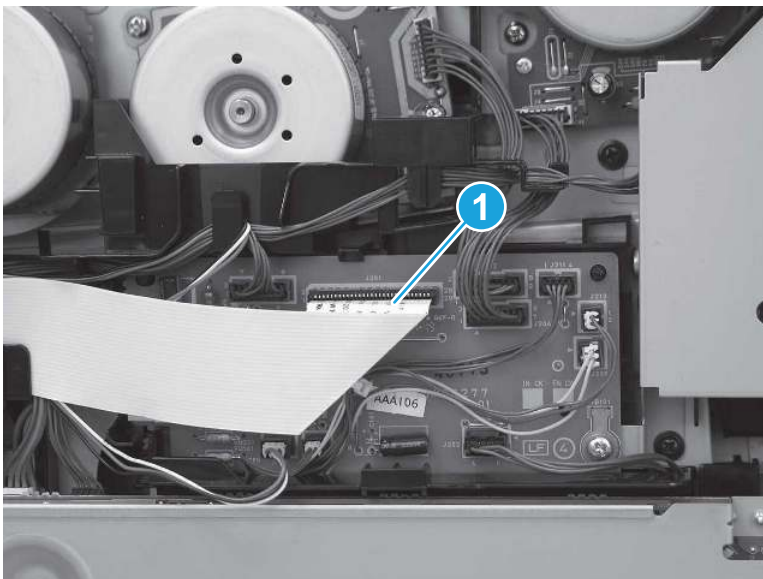


## 12. Remove the driver PCA

Follow these steps to remove the driver PCA.

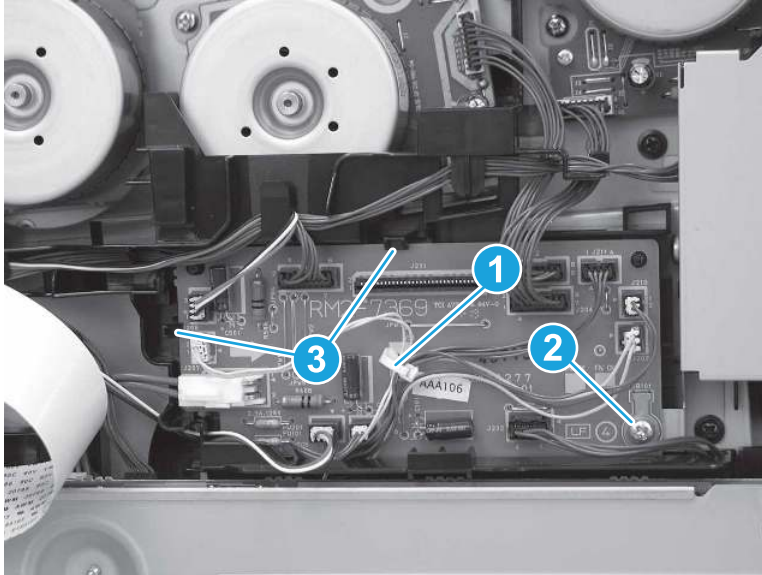
1. Disconnect one connector (callout 1).

Figure 5-1254 Disconnect one connector



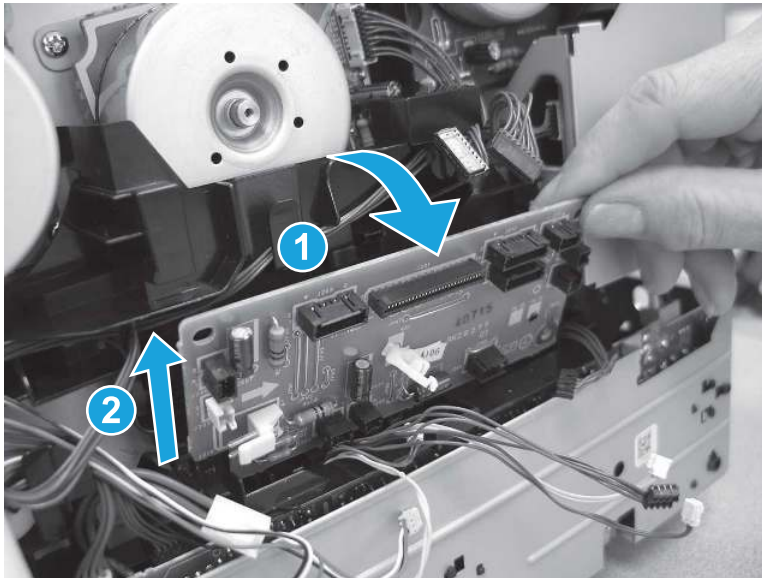
2. Release one retainer (callout 1), disconnect all of the connectors on the driver PCA, remove one screw (callout 2), and then release two tabs (callout 3).

**Figure 5-1255** Disconnect all connectors and remove one screw



3. Rotate the top of the driver PCA away from the printer (callout 1), and then lift up (callout 2) to remove it.

**Figure 5-1256** Remove the PCA

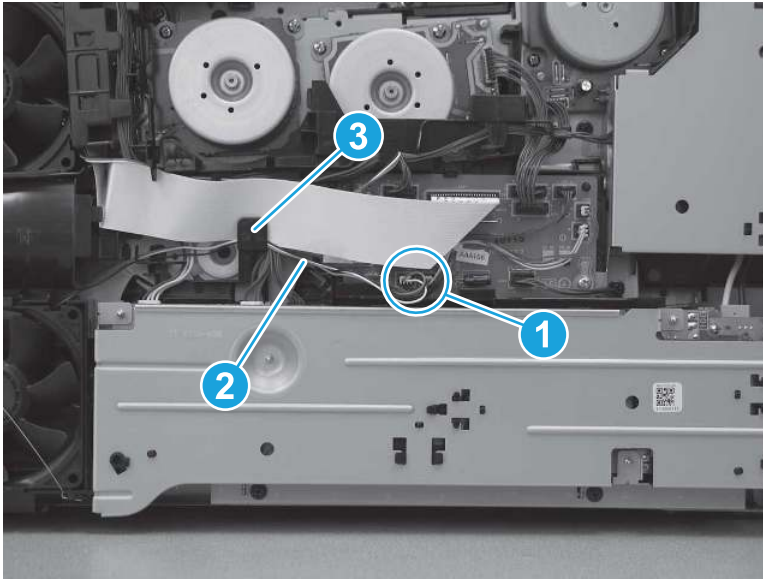


### 13. Remove the LVPS

Follow these steps to remove the LVPS.

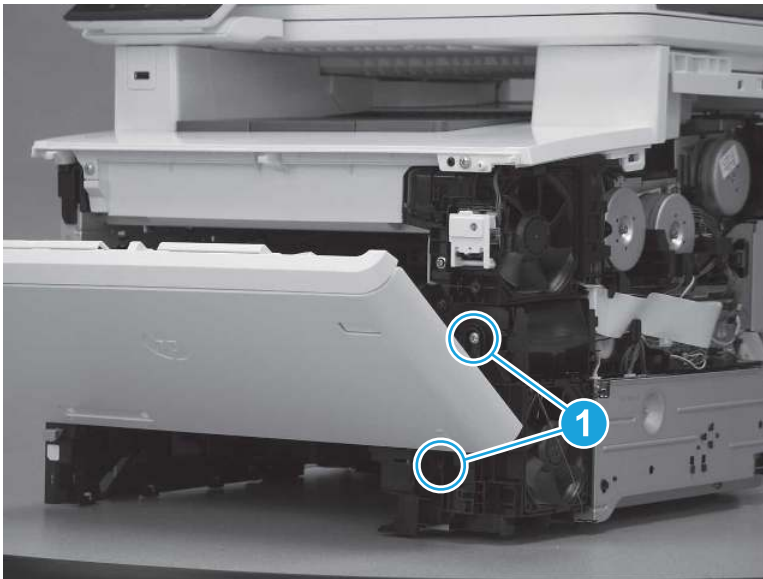
1. Disconnect one connector (callout 1), and then remove the cable (callout 2) from the wire guide (callout 3).

**Figure 5-1257** Disconnect one connector and release cables from guides



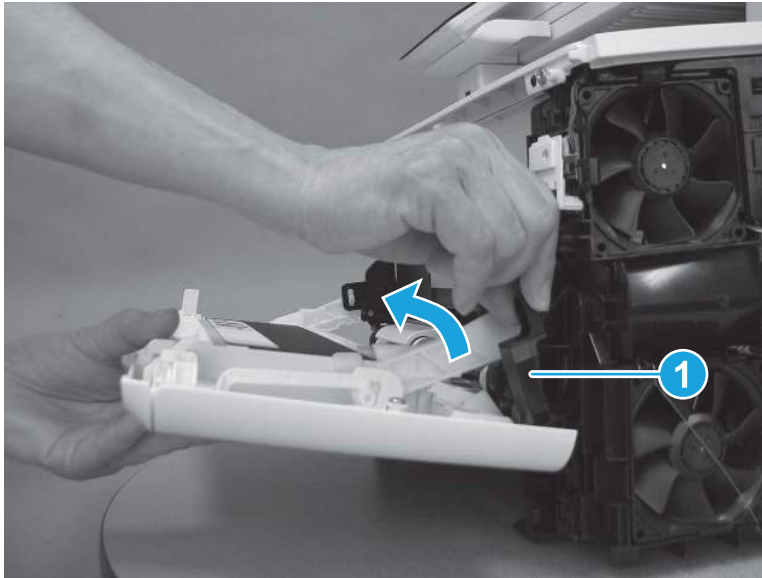
2. Remove two screws (callout 1).

**Figure 5-1258** Remove two screws



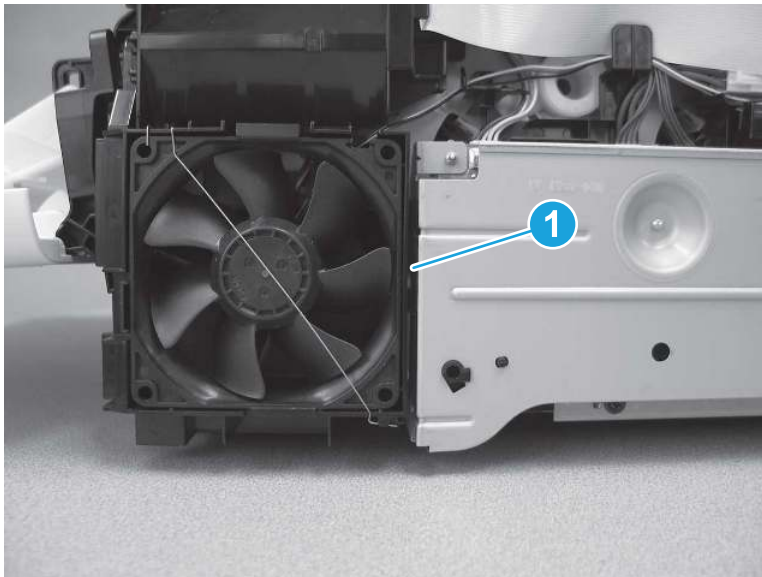
3. Release the hinge arm (callout 1).

**Figure 5-1259** Release the hinge arm



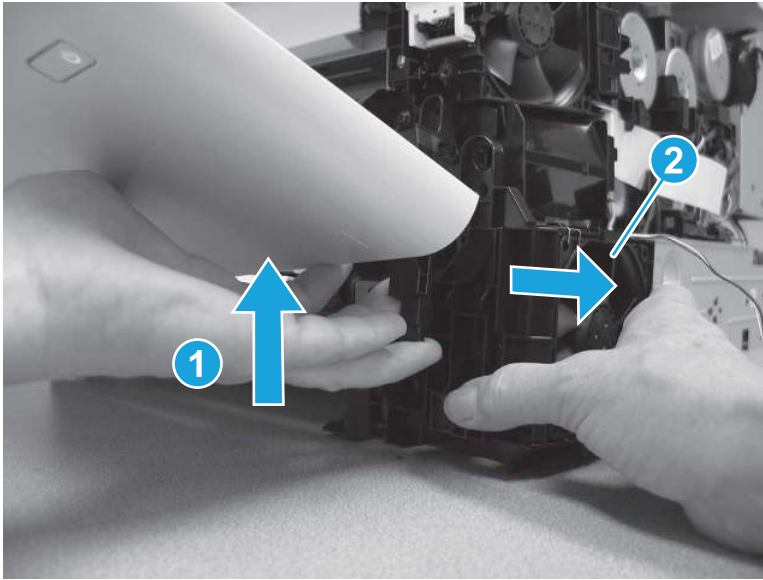
4. Release one tab (callout 1) on the right side of the power supply fan.

**Figure 5-1260** Release one tab




- Lift the front door up slightly (callout 1), and then remove the power supply fan and holder (callout 2).

**Figure 5-1261** Remove the power supply fan and holder



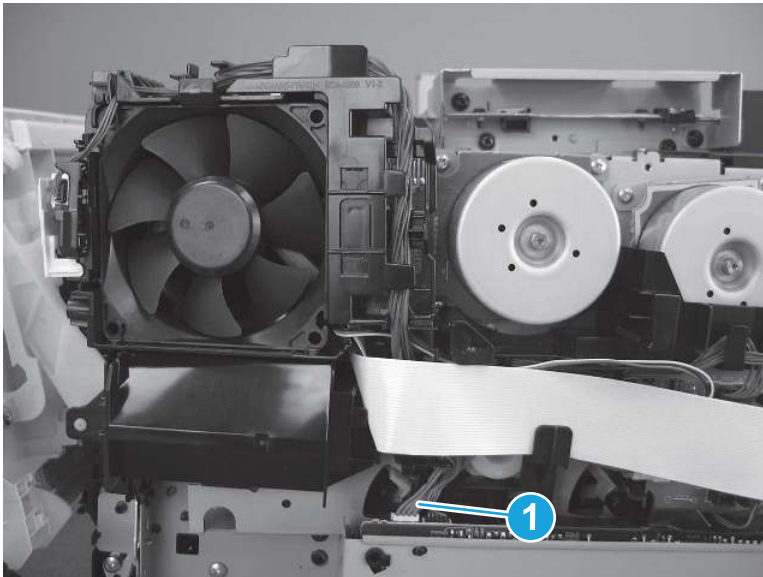
- Before proceeding, take note of the position of two cables (callout 1).

---

 **IMPORTANT:** These cables can be mistakenly switched when reinstalled. The connectors on the cables fit in either connector on the LVPS. Make sure that these cables are installed in the correct connectors. *If the cables are switched, the printer will not power on when reassembled.*

---

**Figure 5-1262** Check the connectors



- Disconnect five connectors (callout 1). One connector (callout 2) has a latch that must be released before disconnecting it. Remove three screws (callout 3).

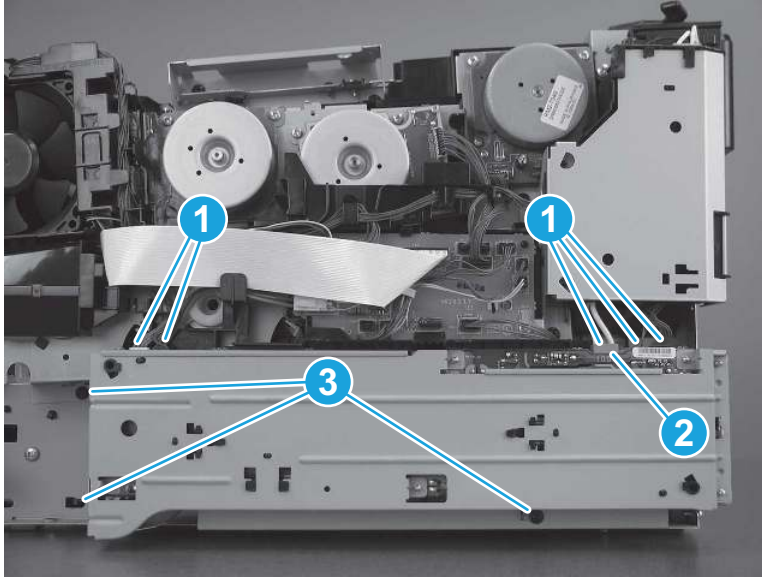
---

 **NOTE:** The latch for one connector (callout 2) is located on the backside of the connector body, and not easily seen.

---

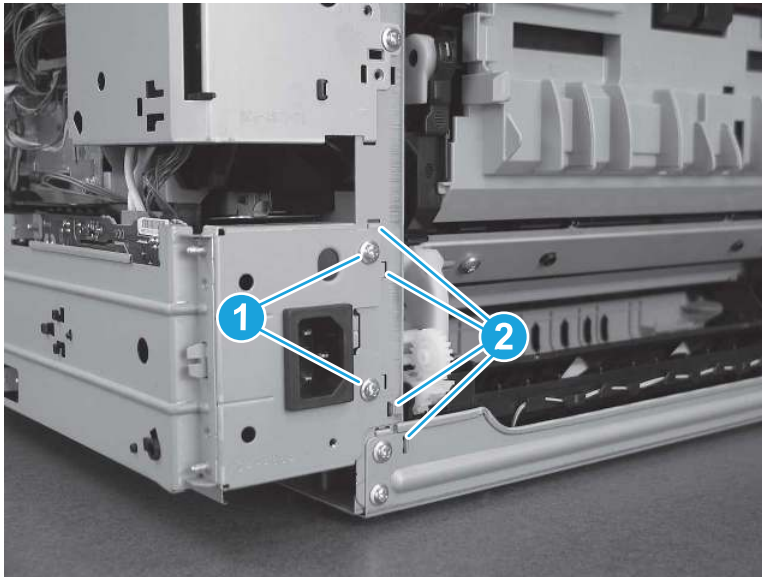


Figure 5-1263 Disconnect five connectors and remove three screws



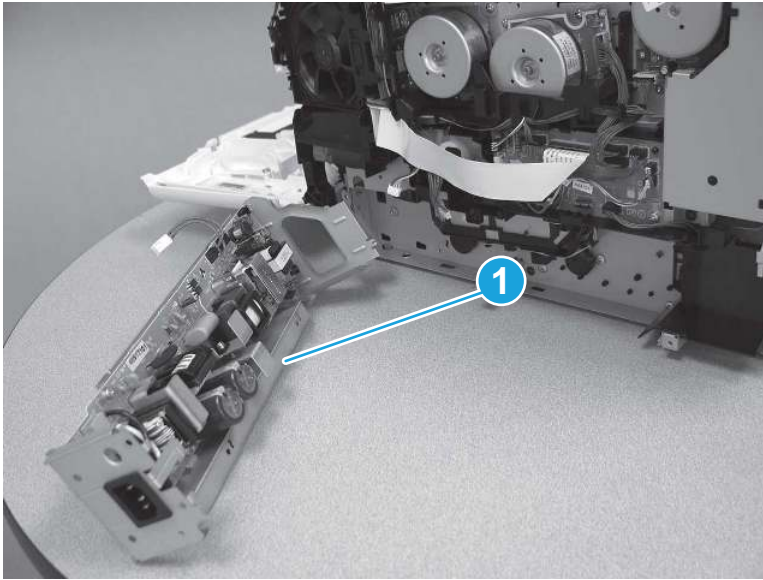
8. Remove two screws from the back (callout 1), and then release four tabs (callout 2).

Figure 5-1264 Remove two screws and release three tabs



9. Remove the LVPS (callout 1).

Figure 5-1265 Remove the assembly

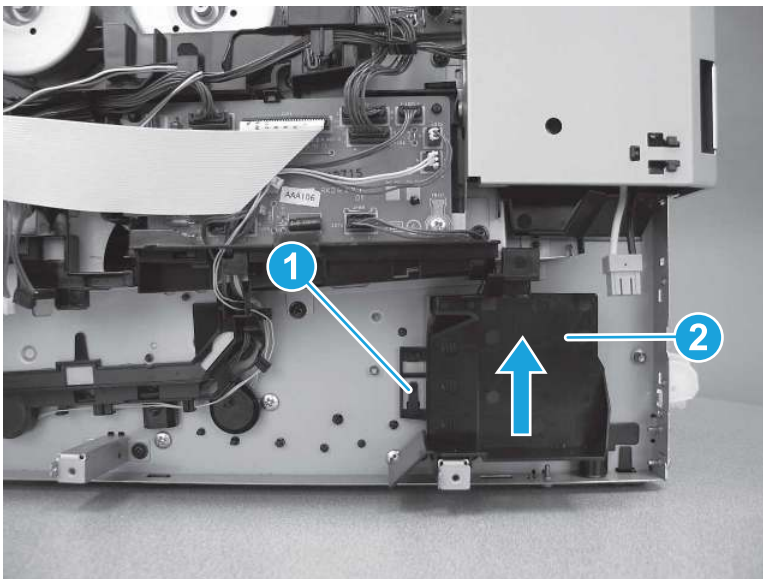


## 14. Remove the pickup motor

Follow these steps to remove the pickup motor.

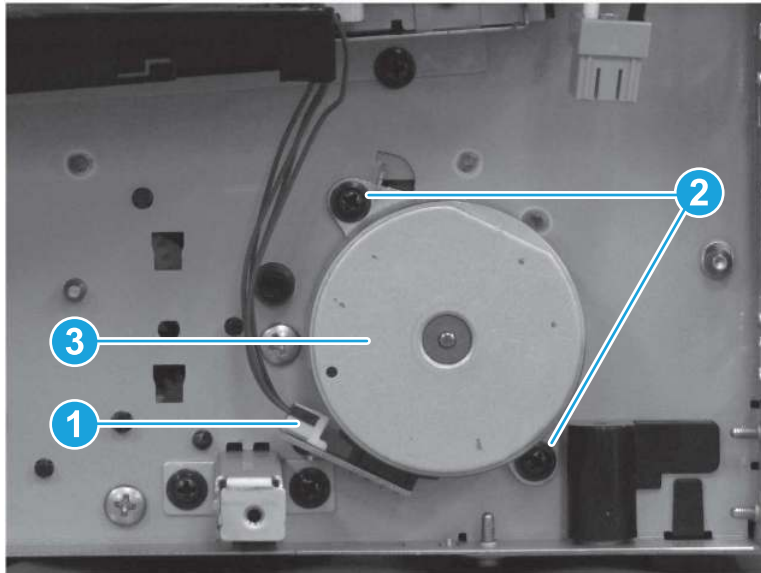
1. Release one tab (callout 1), and then slide the fan duct (callout 2) up to remove it.

Figure 5-1266 Remove the fan duct



2. Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the pickup motor (callout 3).

**Figure 5-1267** Remove the assembly

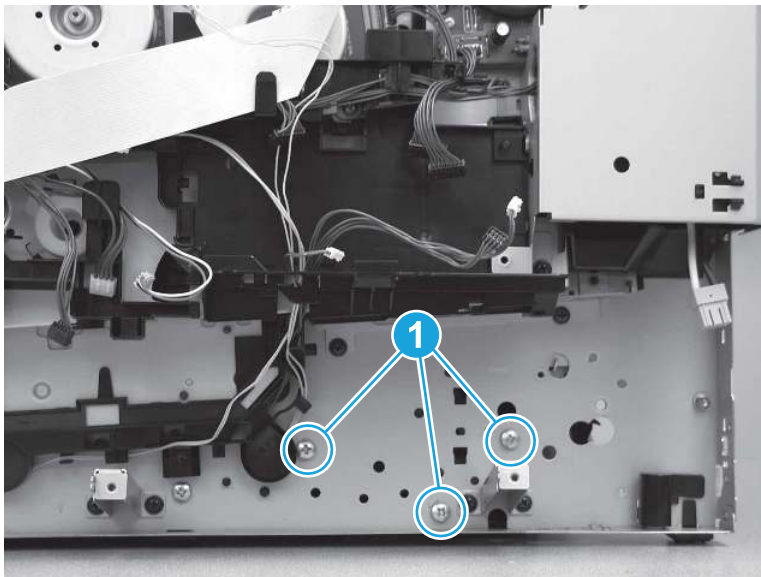


## 15. Remove the pickup assembly

Follow these steps to remove the pickup assembly.

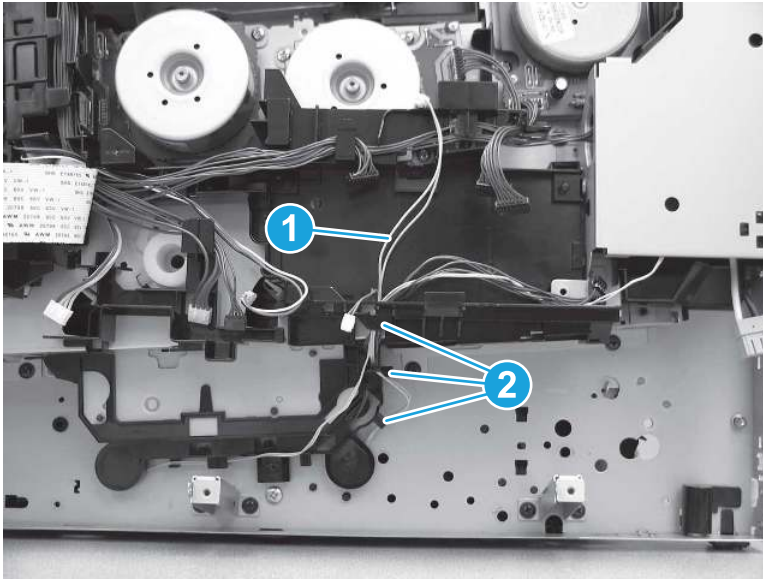
1. Remove three screws (callout 1).

**Figure 5-1268** Remove three screws



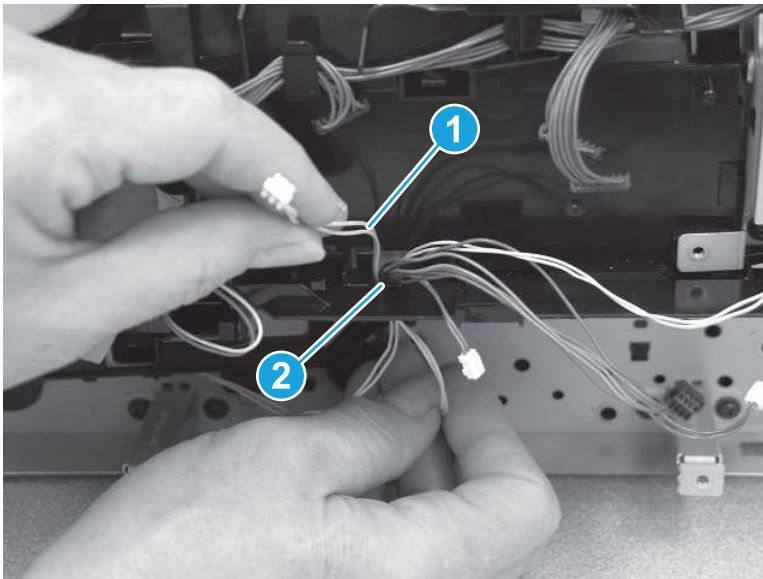
2. Release the cables (callout 1) from the cable guides (callout 2).

**Figure 5-1269** Release the cables from the cable guides



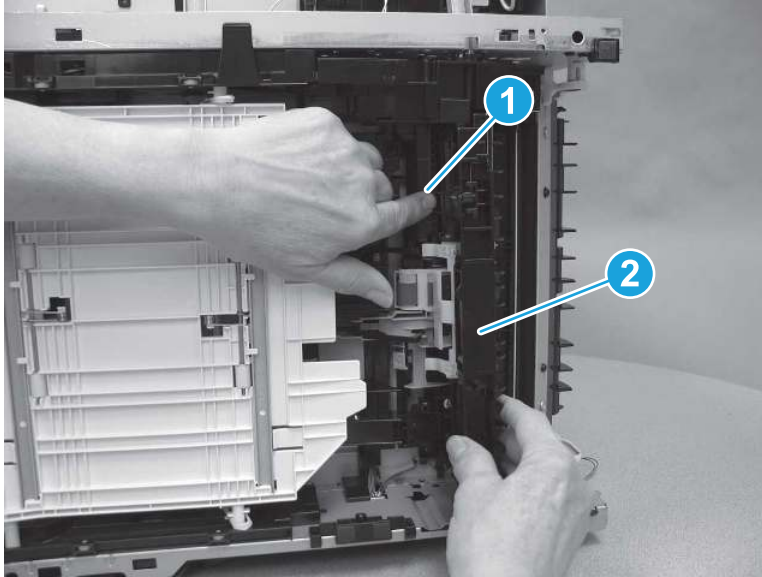
3. Thread the cables (callout 1) through the opening in the driver PCA holder (callout 2).

**Figure 5-1270** Release the cables



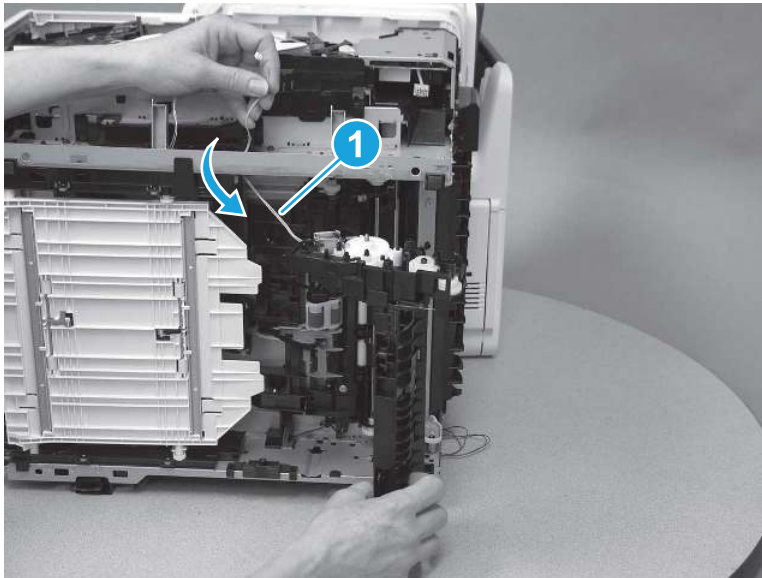
4. Lay the printer on the right side so that the left side is facing up. Press the pickup and feed roller holder (callout 1) toward the printer, and then remove the pickup assembly (callout 2).

**Figure 5-1271** Remove the pickup assembly



5. Pass the cables (callout 1) through the printer frame.

**Figure 5-1272** Release the cables

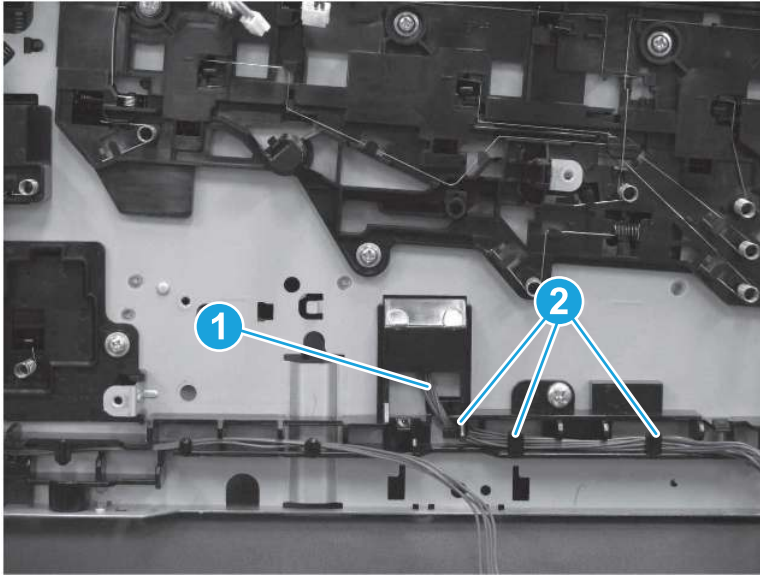


## 16. Remove the front feed guide assembly

Follow these steps to remove the front feed guide assembly.

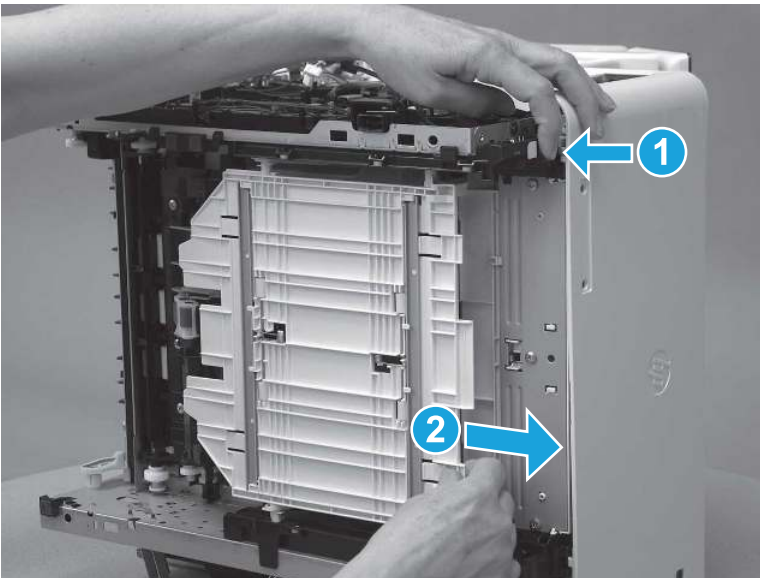
1. Release the cables (callout 1) from the cable guide (callout 2).

**Figure 5-1273** Release the cables



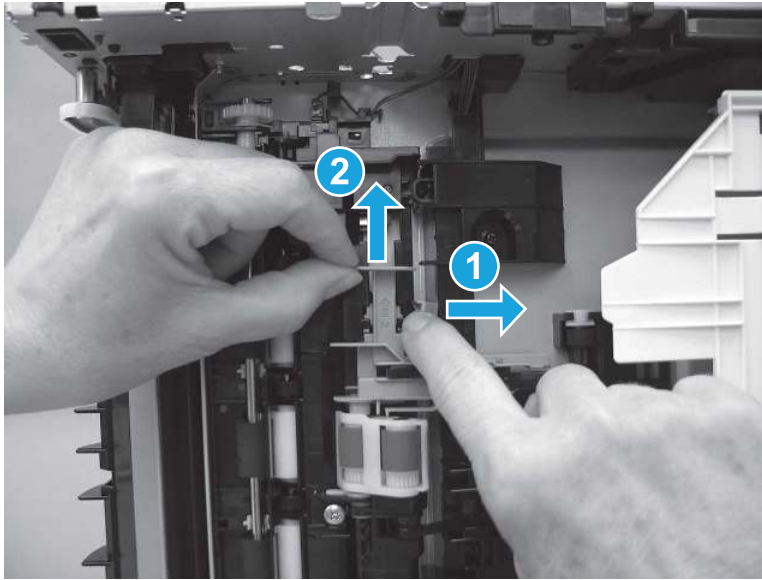
2. Lay the printer on the right side so that the left side is facing up. Press the tray 1 feed guide release button (callout 1), and then release the tray 1 feed guide toward the front of the printer (callout 2).

**Figure 5-1274** Release the tray 1 feed guide



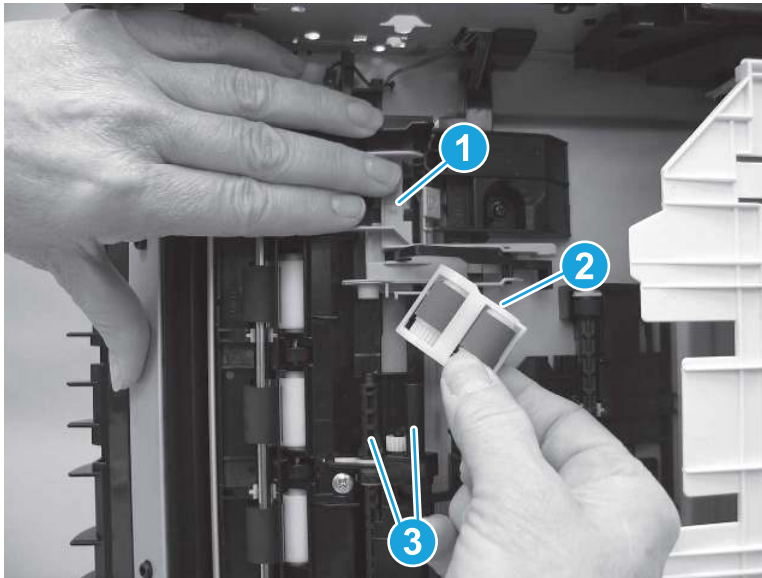
3. Press the lever (callout 1) on the roller holder, and then slide the roller holder up (callout 2).

**Figure 5-1275** Slide the roller holder



4. Hold the roller holder up (callout 1), and then lift the pickup and feed roller case (callout 2) up off of the shafts (callout 3).

**Figure 5-1276** Remove the pickup and feed rollers



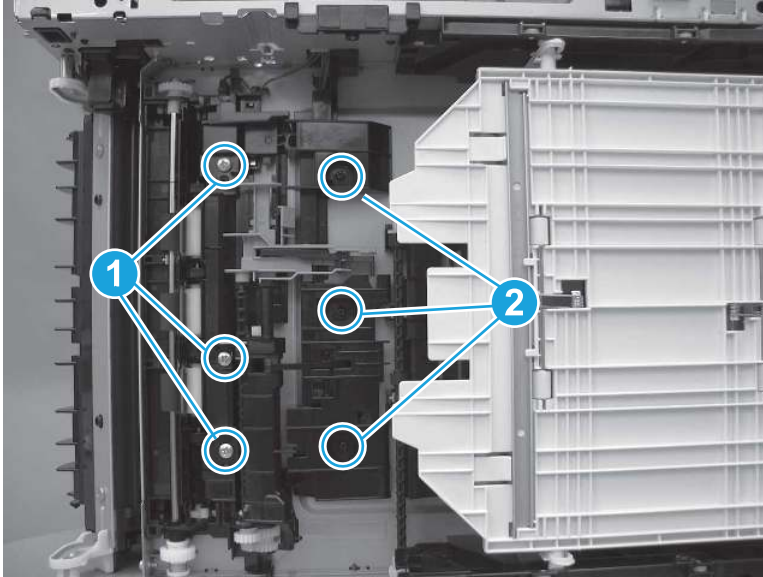
5. Remove three screws (callout 1) on the rear feed guide assembly, and then remove three screws (callout 2) on the front feed guide assembly.

---

 **Reinstallation tip:** The three screws (callout 1) on the rear feed guide assembly are larger than the screws (callout 2) on the front feed guide assembly.

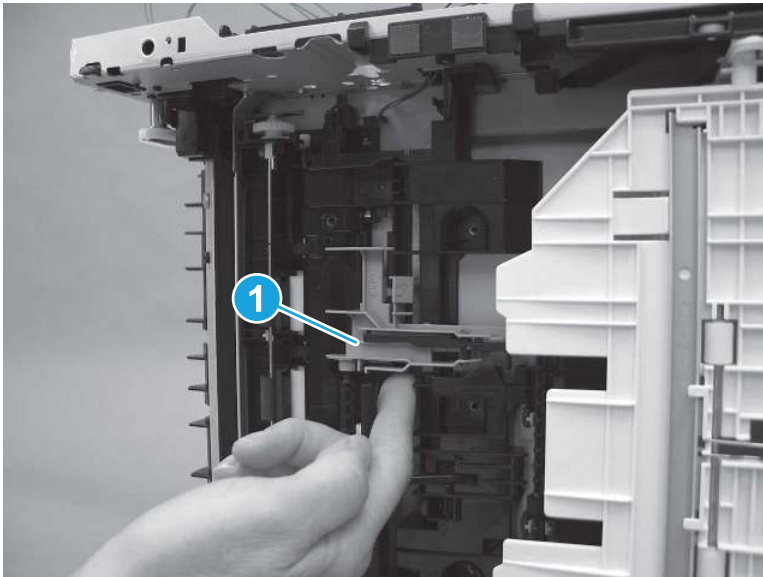
---

Figure 5-1277 Remove six screws



6. Remove the roller holder (callout 1).

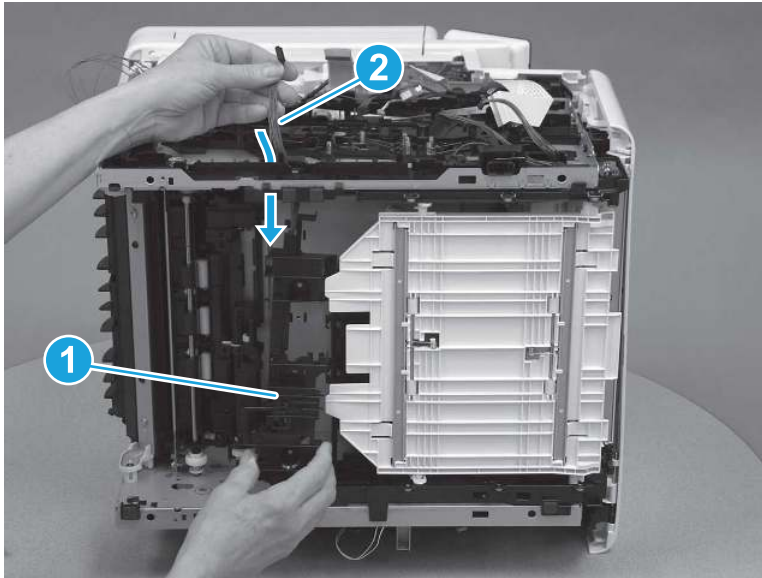
Figure 5-1278 Remove the roller holder





7. Remove the front feed guide assembly (callout 1). Release the cables (callout 2) through the printer frame.

Figure 5-1279 Remove the assembly

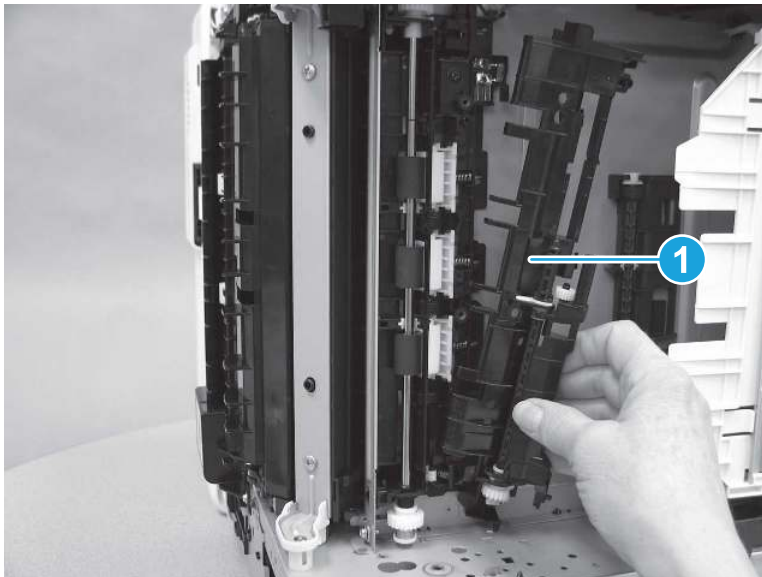


## 17. Remove the rear feed guide assembly

Follow these steps to remove the rear feed guide assembly.

- ▲ Remove the rear feed guide assembly (callout 1).

Figure 5-1280 Remove the rear feed guide assembly




## 18. 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.

---

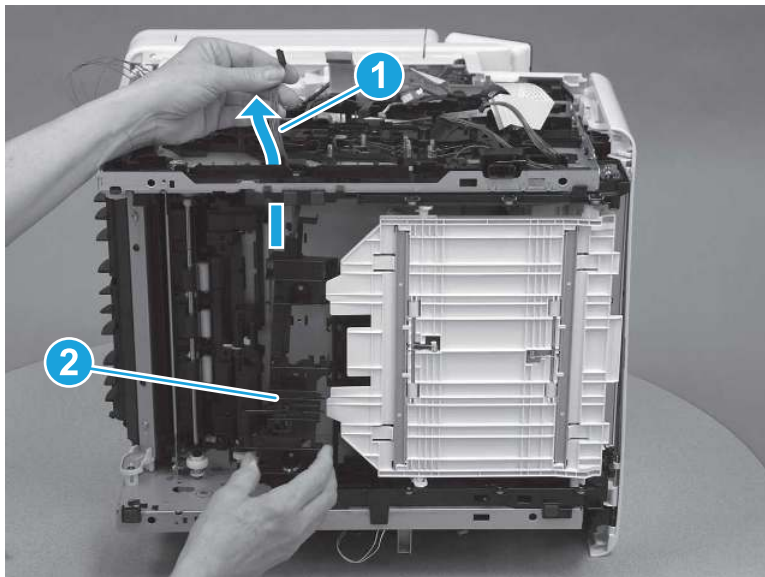
## 19. Reverse the removal steps to install the assembly

Also use the followingspecial installation instructions.

Front feed guide assembly

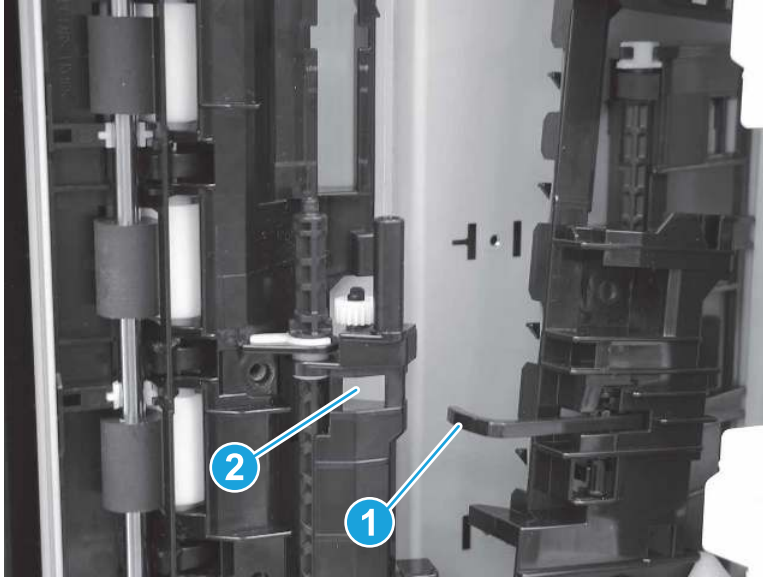
1. Thread the cables (callout 1) on the front feed guide assembly up through the printer frame, and then move the front feed guide assembly (callout 2) into position.

**Figure 5-1281** Position the front feed guide assembly



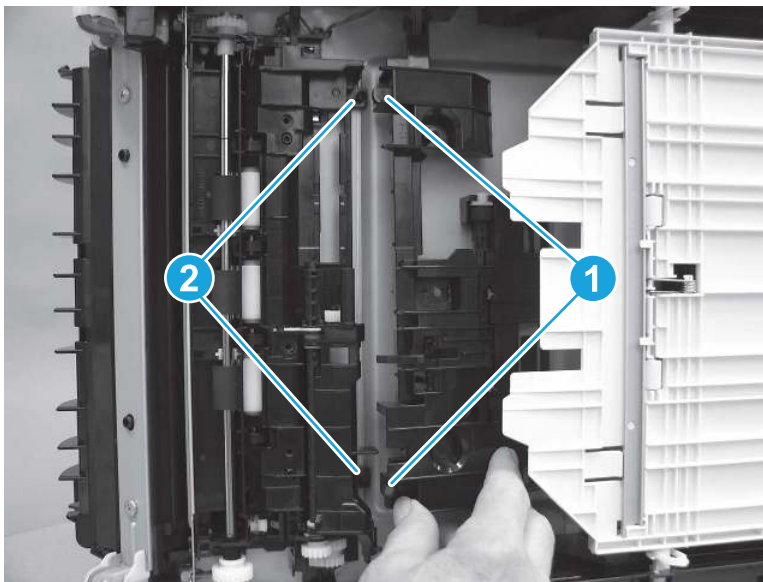
2. Make sure that the flag (callout 1) on the front feed guide assembly fits in the opening (callout 2) in the rear feed guide assembly.

Figure 5-1282 Position the flag



3. Install the holes on the front feed guide assembly (callout 1) over the tabs (callout 2) on the rear feed guide assembly.

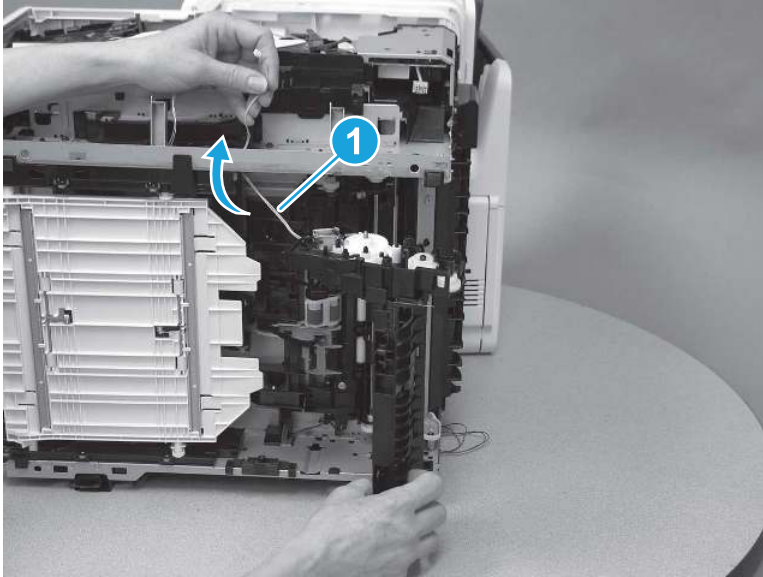
Figure 5-1283 Install the front feed guide assembly



Pickup assembly

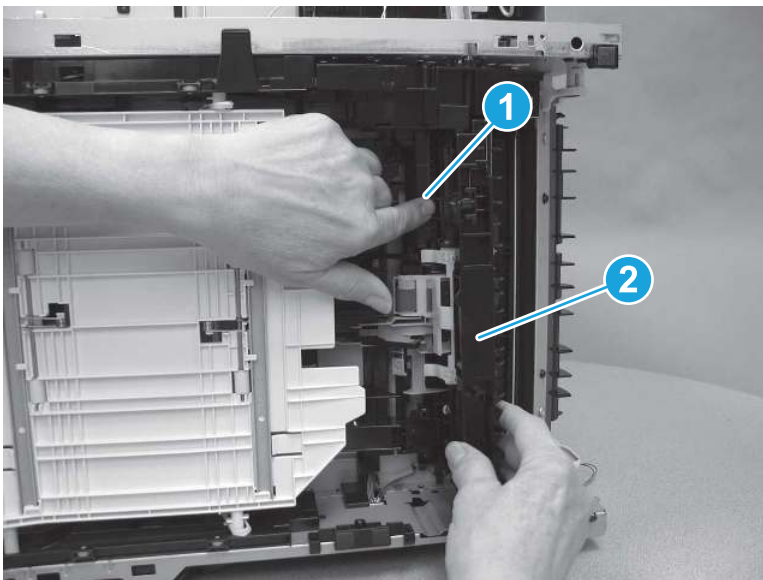
1. Pass the cables (callout 1) through the printer frame.

**Figure 5-1284** Pass the cables through the printer frame



2. Press the pickup and feed roller holder (callout 1) toward the printer, and then install the pickup assembly (callout 2).

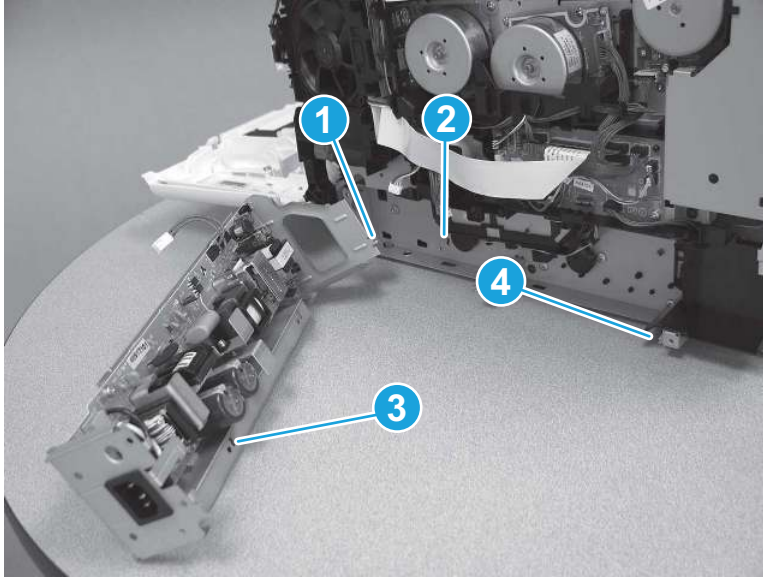
**Figure 5-1285** Install the pickup assembly



Low-voltage power supply

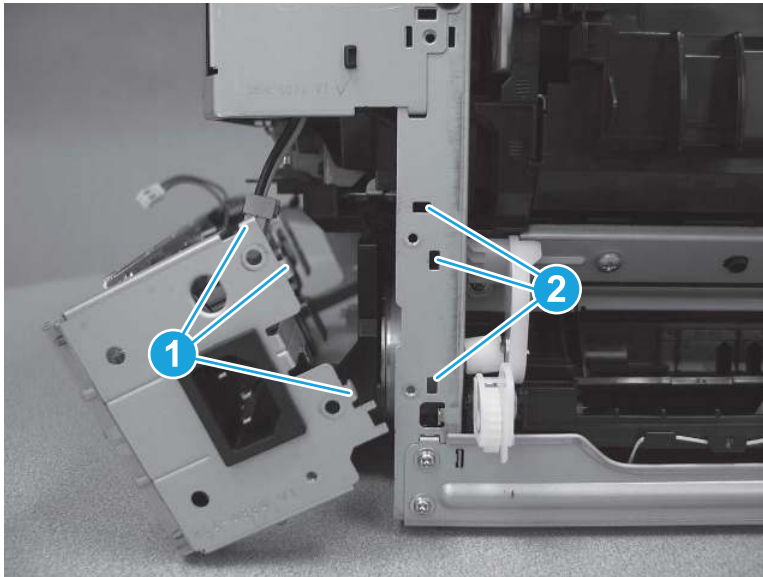
1. Install the tab (callout 1) on the LVPS into the slot (callout 2) in the printer. Install the slot (callout 3) in the LVPS over the tab (callout 4) on the printer.

**Figure 5-1286** Install the side tabs of the LVPS



2. At the back of the printer, install the tabs on the LVPS (callout 1) into the slots (callout 2) in the printer.

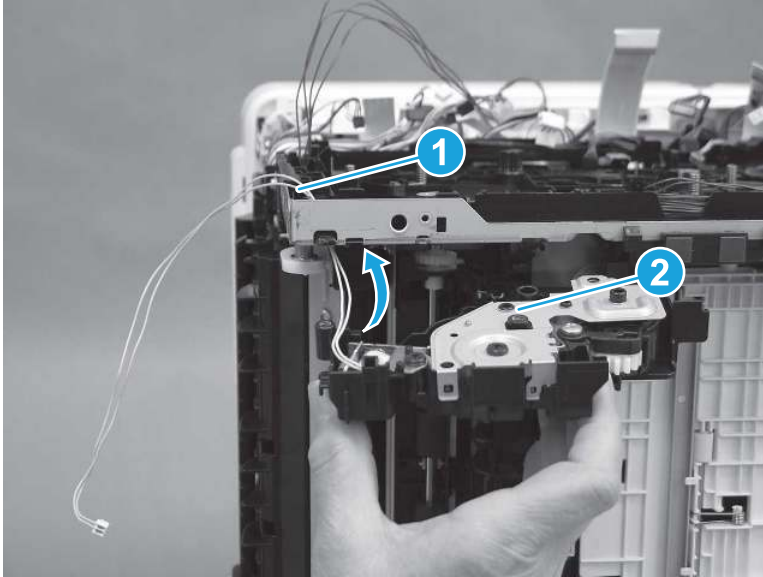
**Figure 5-1287** Install the back tabs of the LVPS



Lifter drive assembly

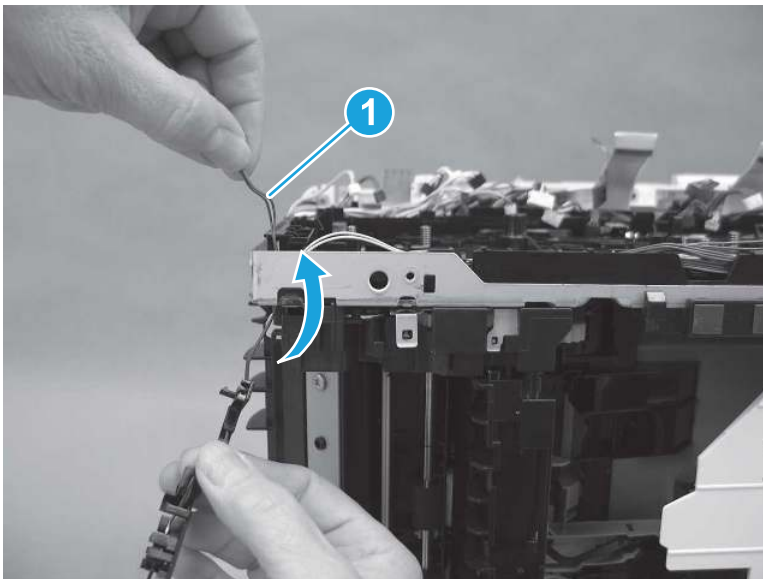
1. Pass the cables (callout 1) on the lifter drive assembly up through the printer frame, and then install the lifter drive assembly (callout 2).

**Figure 5-1288** Install the lifter drive assembly



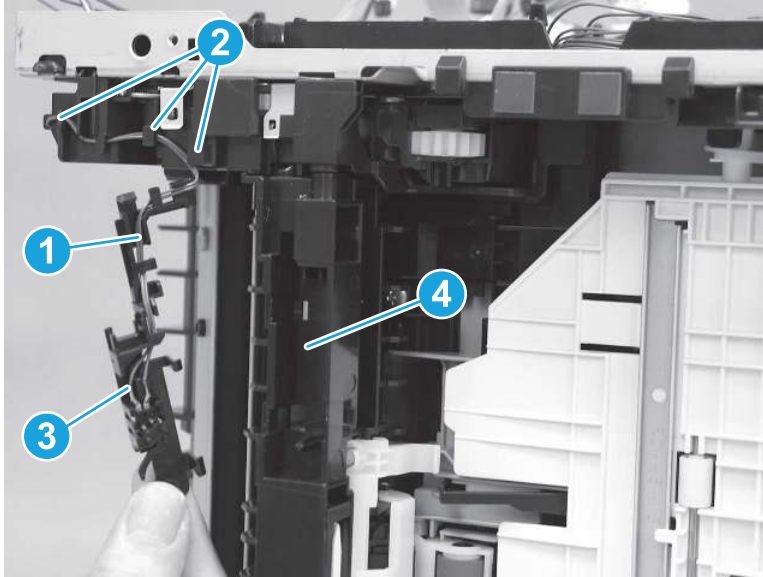
2. Pass the cables (callout 1) on the tray sensor switch up through the printer frame.

**Figure 5-1289** Install the tray sensor switch cable



3. Install the cables (callout 1) in the cable guide (callout 2), and then install the tray sensor switch (callout 3) on the lifter drive assembly (callout 4).

Figure 5-1290 Install the tray sensor switch



## Removal and replacement: Registration assembly

Learn how to remove and replace the registration assembly.

[View a video of removing and replacing the registration assembly.](#)

Mean time to repair: 100 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](http://www.hp.com/buy/parts).

Table 5-42 Part information

Part number	Part description
RM2-6374-000CN	Registration assembly

### Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- #2 Phillips short-shaft or right-angle screwdriver with a magnetic tip
- Small flat-blade screwdriver

## After performing service

### Turn the printer power on

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

## Post service test

Make sure that the printer initializes to a **Ready** state.


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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-1291** Remove the tray



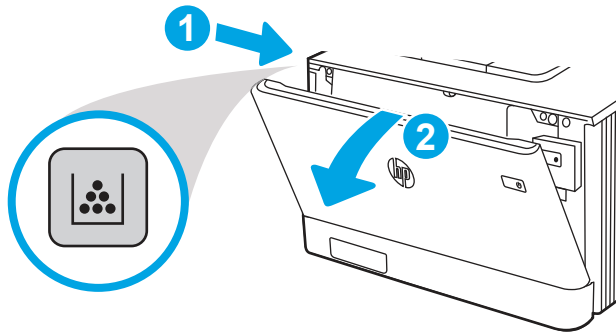
## 2. Remove the toner cartridges

Follow these steps to remove the toner cartridges.



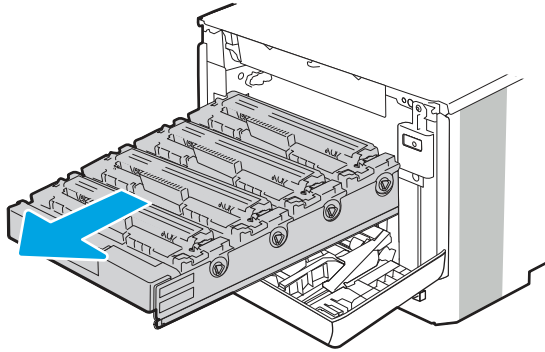
1. Open the front door by pressing the button on the left cover.

Figure 5-1292 Open the front door



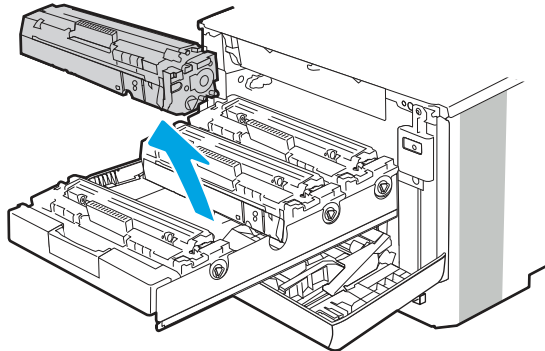
2. Grasp the blue handle on the toner cartridge tray, and then pull out the tray.

Figure 5-1293 Open the cartridge drawer



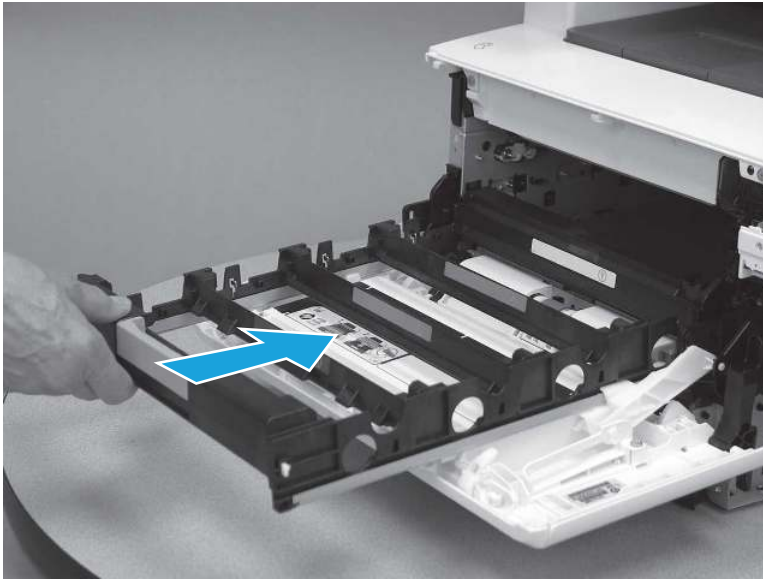
3. Grasp the handle on the toner cartridge, and then pull the toner cartridge straight up to remove it. Repeat this step for each toner cartridge.

Figure 5-1294 Remove the toner cartridges



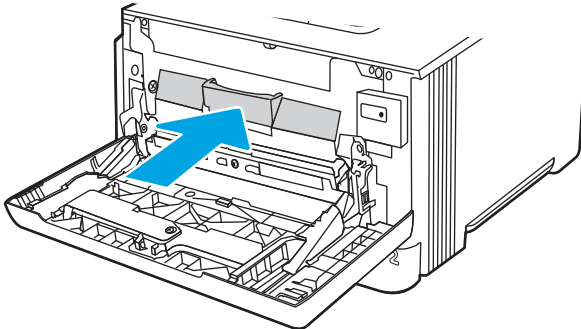
4. Slide the cartridge tray into the printer.

**Figure 5-1295** Slide the cartridge tray into the printer



5. Close the front door.

**Figure 5-1296** Close the front door



### 3. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

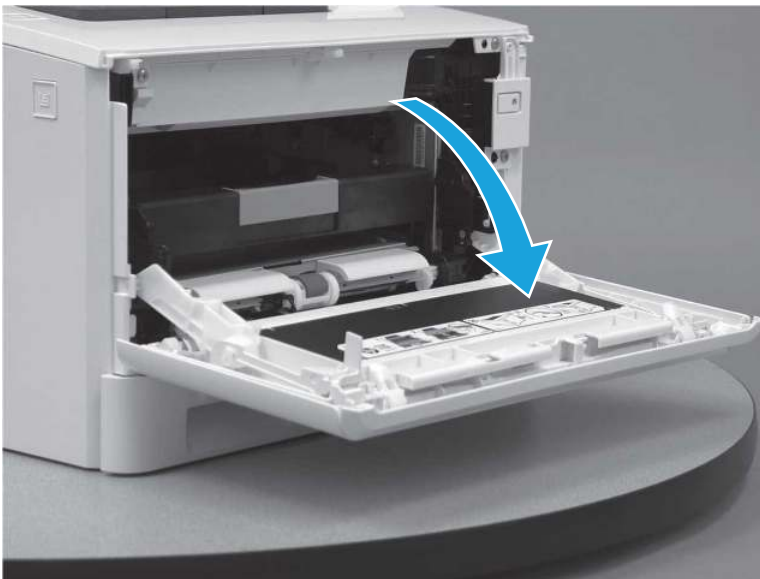
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-1297** Release the front door



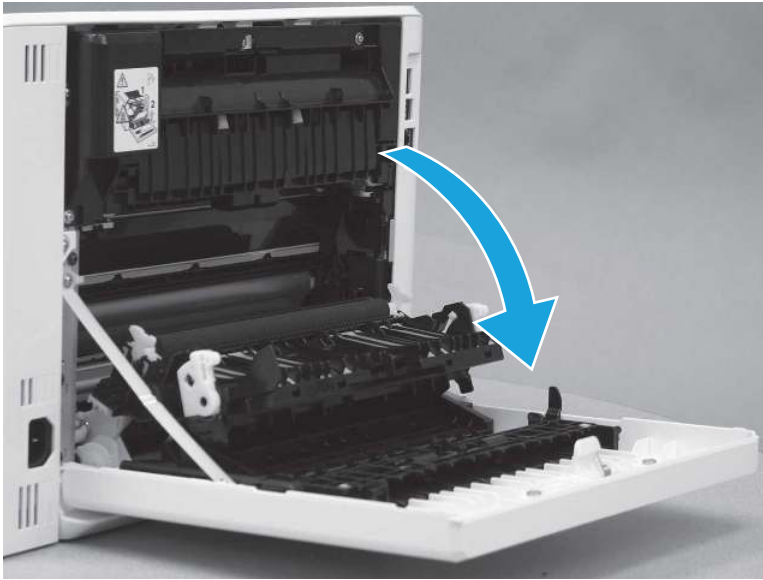
2. Open the front door.

**Figure 5-1298** Open the front door



3. Open the duplexing door.

**Figure 5-1299** Open the duplexer door



#### 4. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

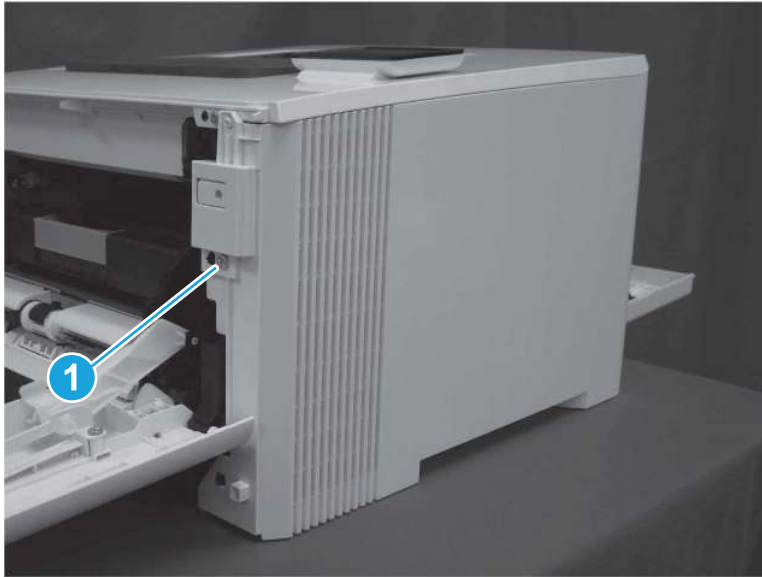
1. At the back of the printer, remove one screw (callout 1).

**Figure 5-1300** Remove one screw



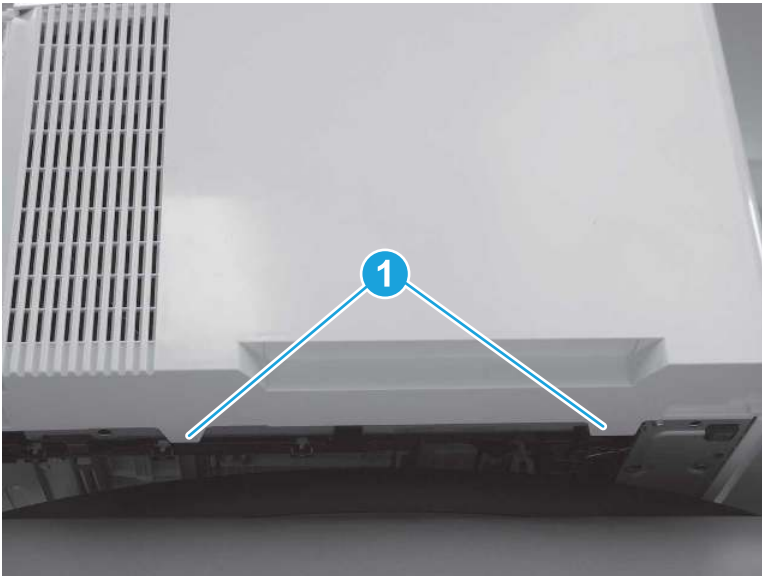
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-1301** Remove one screw



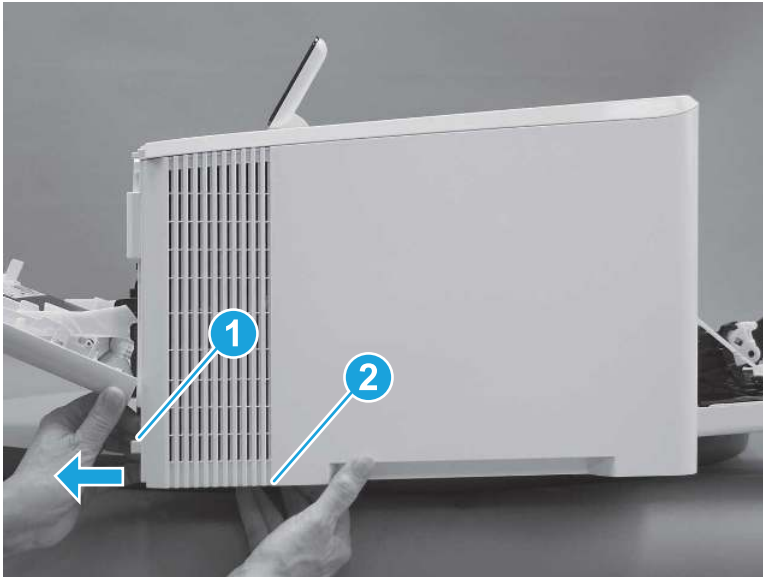
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1302** Locate the tabs



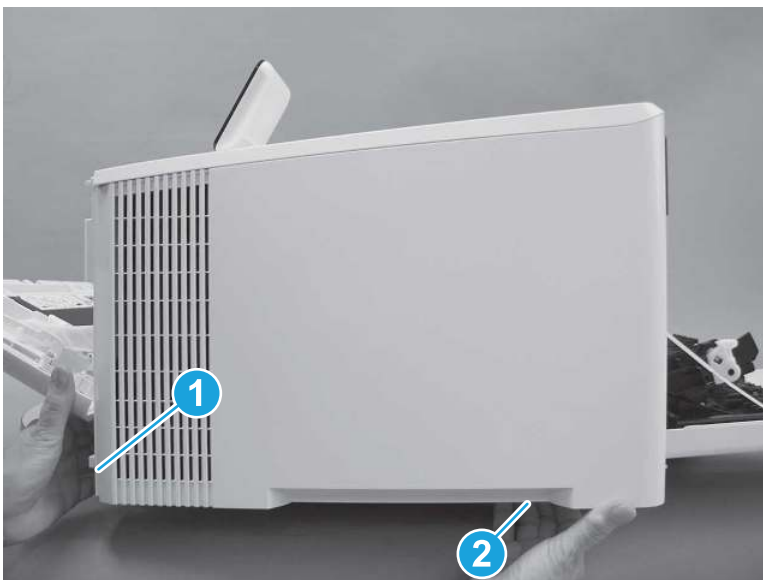
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-1303** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

**Figure 5-1304** Release lower rear tab



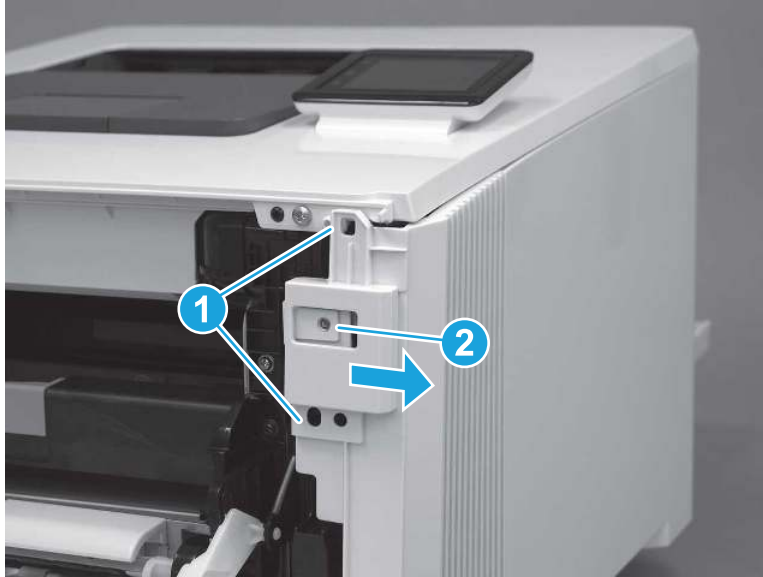
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

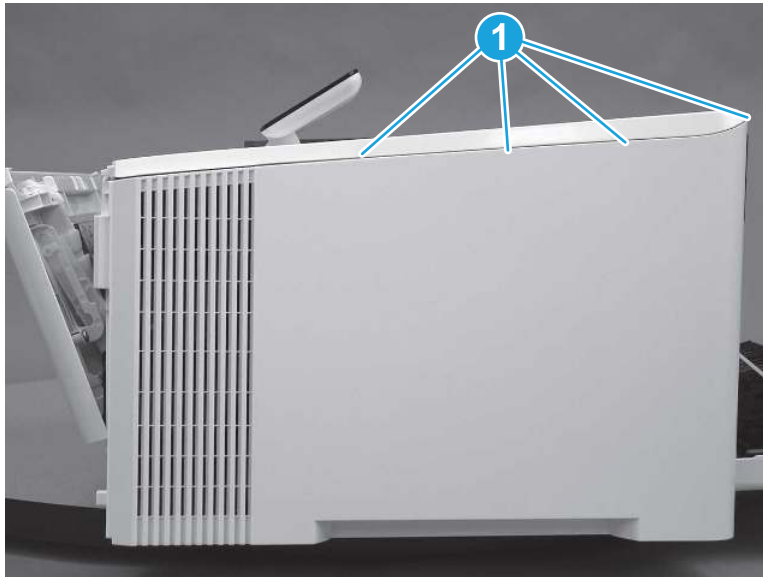
---

Figure 5-1305 Release two front tabs



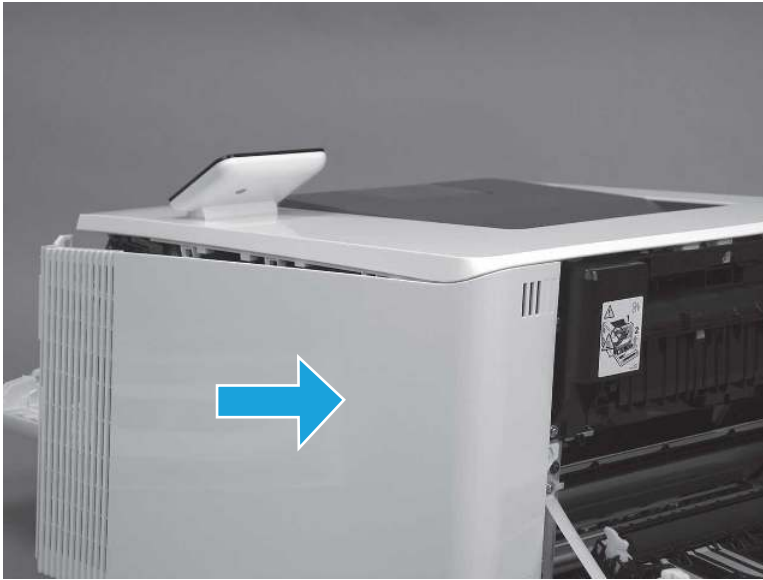
7. Release four tabs on the top of the printer (callout 1).

Figure 5-1306 Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-1307** Remove the right cover



## 5. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

**Figure 5-1308** Raise the scanner





2. At the back of the printer, remove one screw (callout 1).

**Figure 5-1309** Remove one screw



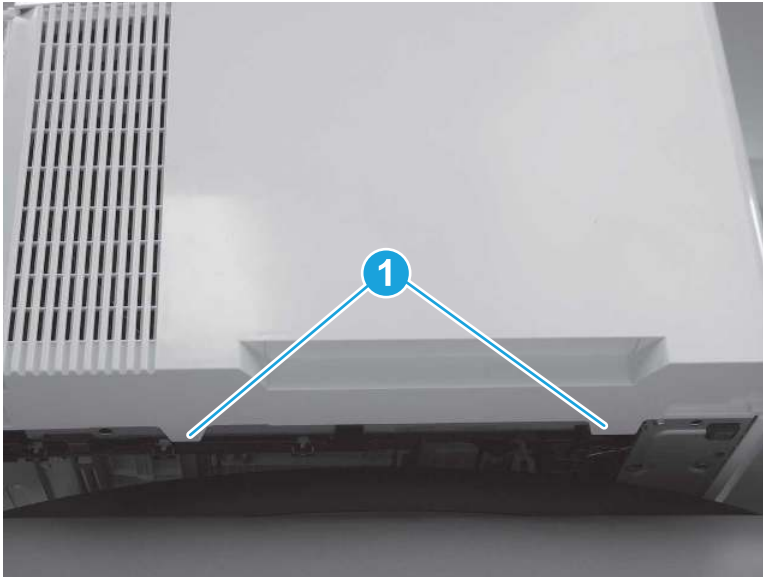
3. At the front of the printer, remove one screw (callout 1).

**Figure 5-1310** Remove one screw



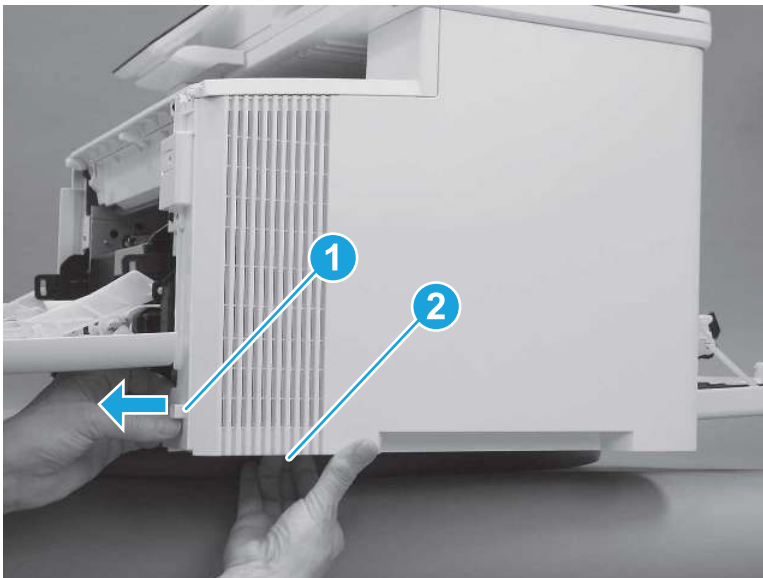
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1311** Locate the tabs



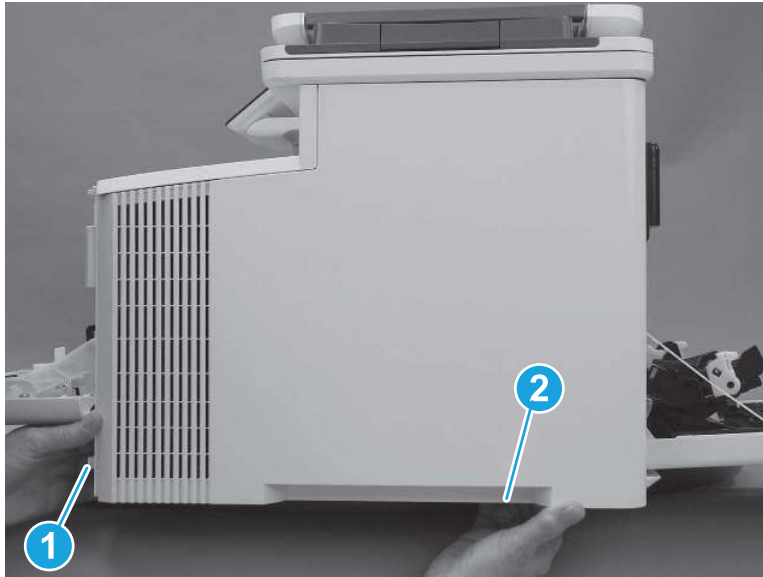
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-1312** Release front lower tabs



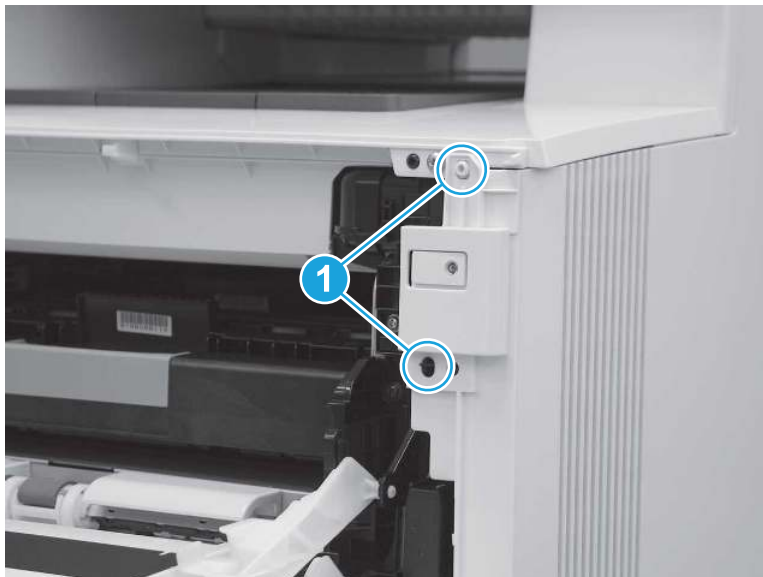
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-1313** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-1314** Release front upper tabs



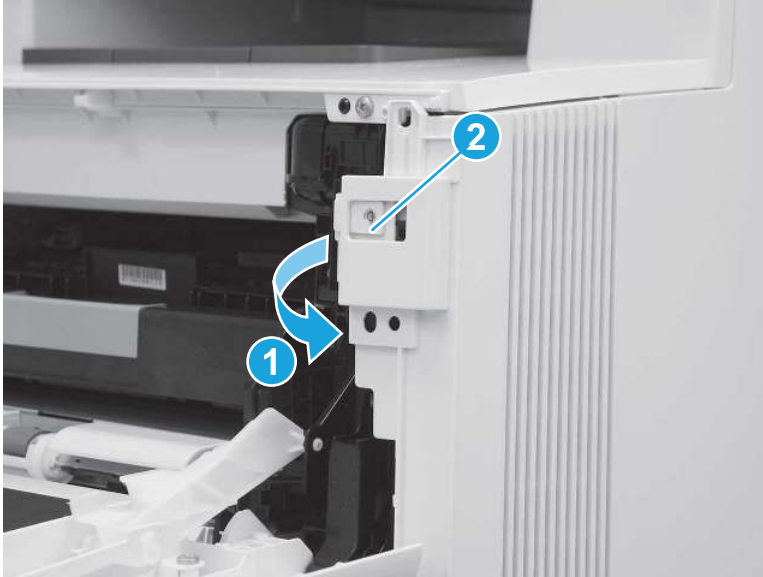
8. Rotate the front of the cover away from the printer (callout 1).

---

**CAUTION:** Be careful not to dislodge the power switch (callout 2).

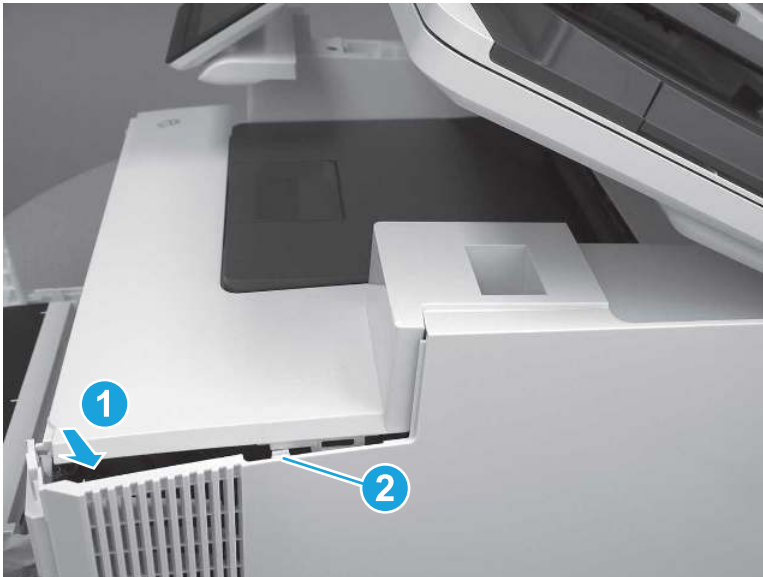
---

**Figure 5-1315** Rotate the front of the cover



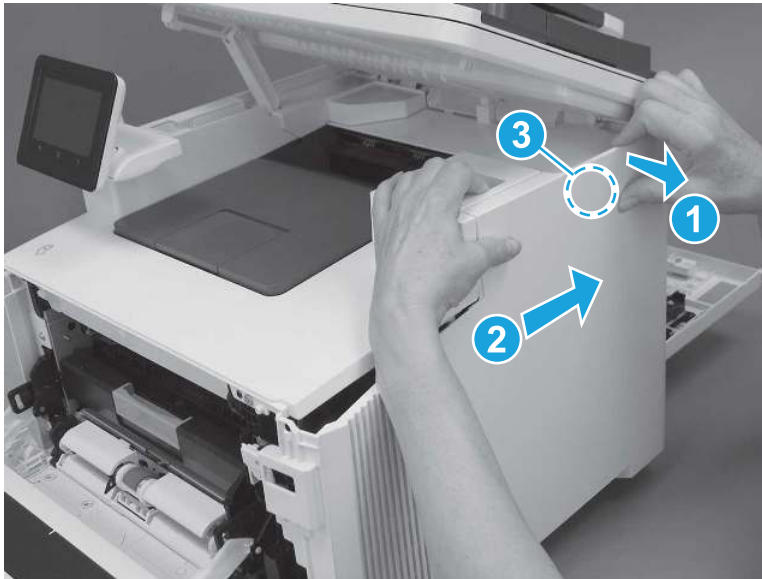
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

**Figure 5-1316** Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-1317** Release one tab and one hook



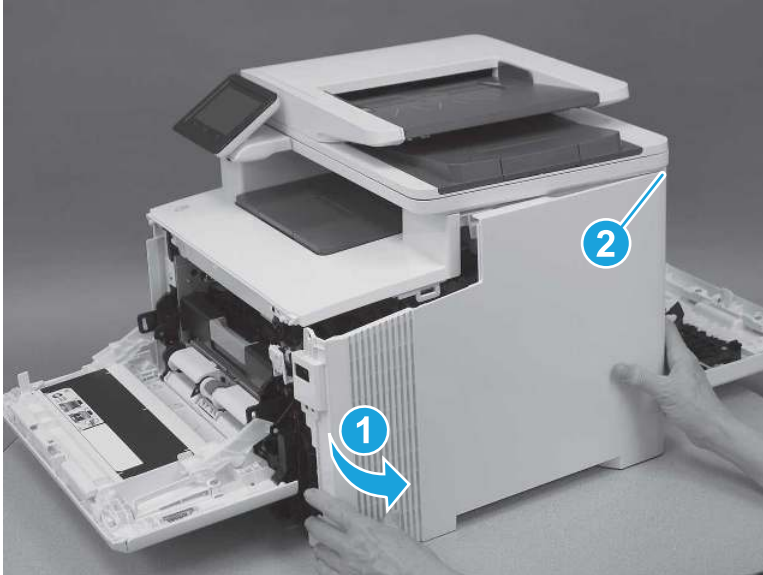
11. Lower the scanner.

**Figure 5-1318** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-1319** Remove the right cover

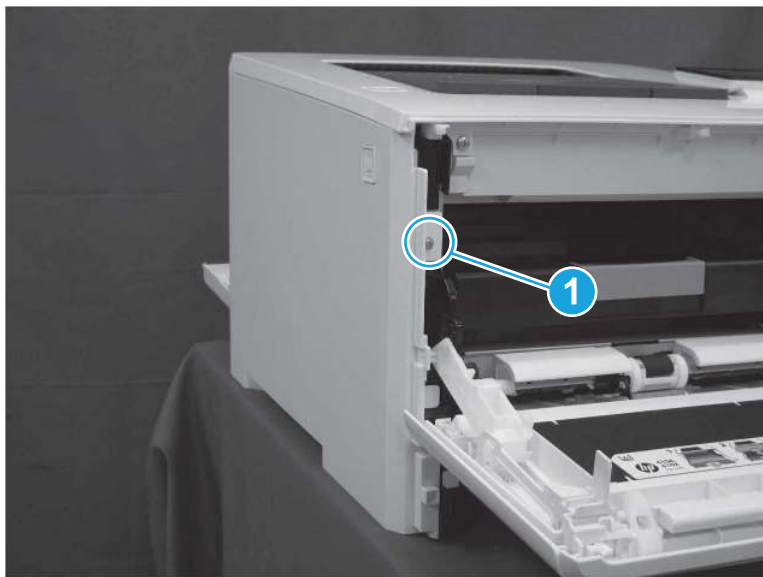


## 6. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

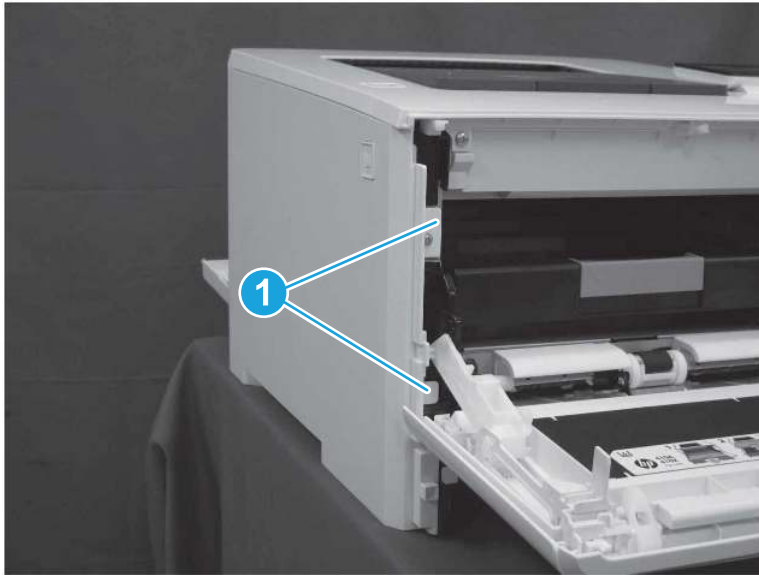
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-1320** Remove one screw



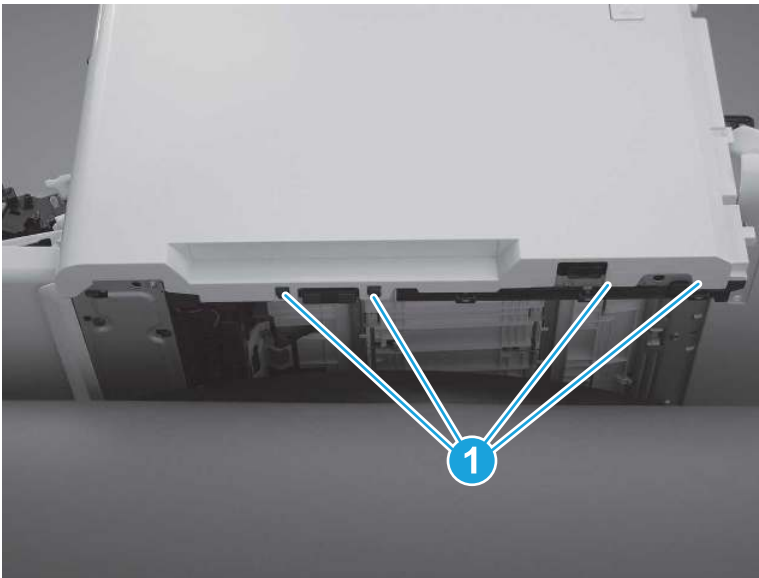
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-1321** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1322** Locate the tabs



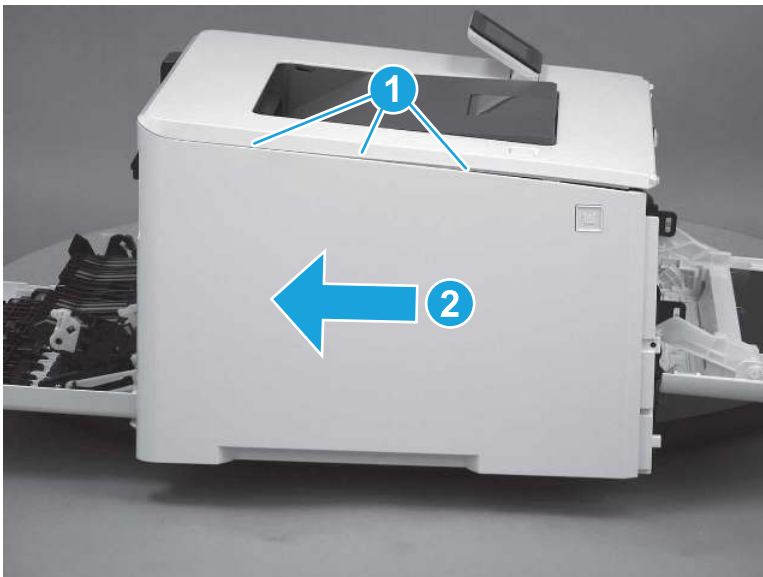
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-1323 Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

Figure 5-1324 Release three tabs



## 7. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).



1. Raise the scanner.

**Figure 5-1325** Raise the scanner



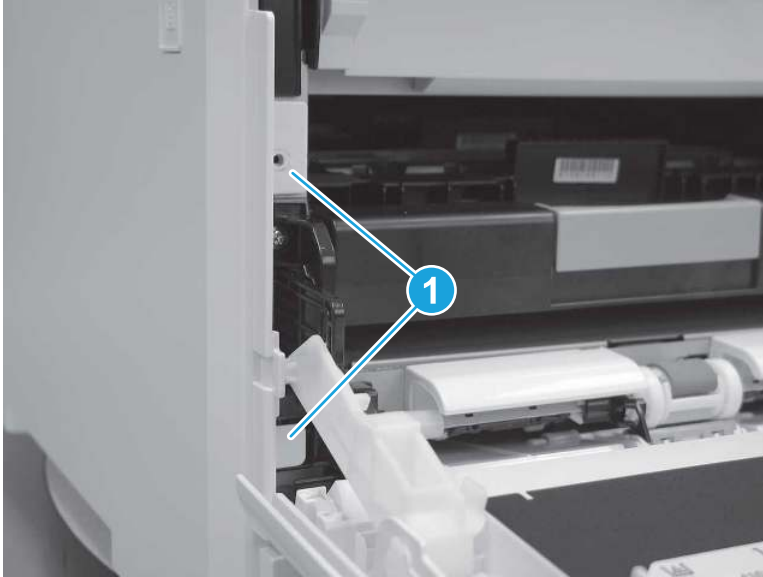
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-1326** Remove one screw



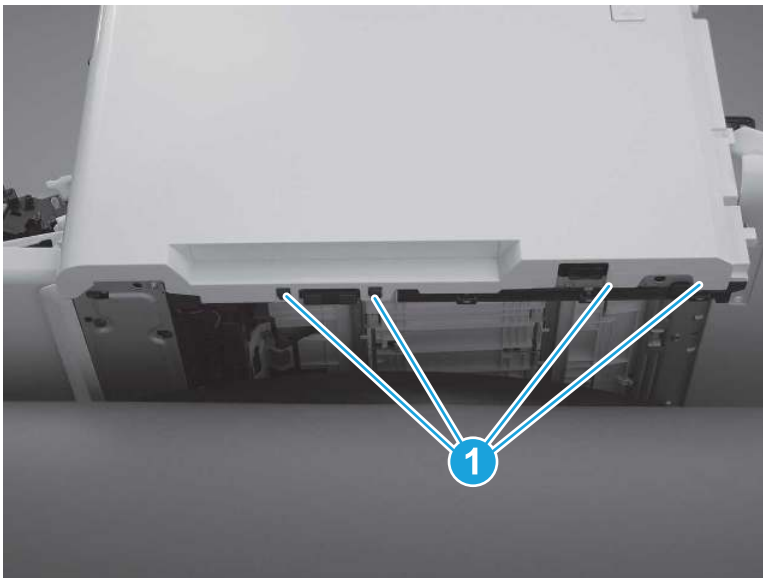
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-1327** Release two tabs



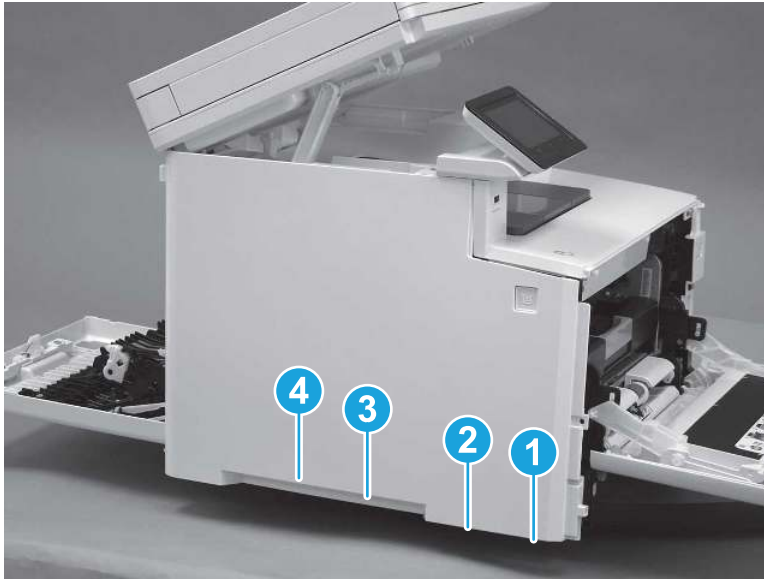
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1328** Locate the tabs



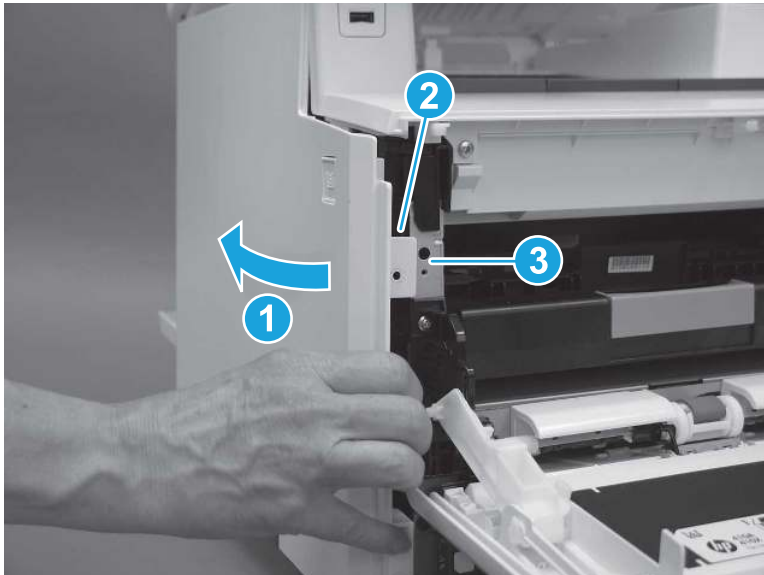
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-1329 Release four tabs



6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

Figure 5-1330 Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-1331** Release one tab and two hooks



8. Lower the scanner.

**Figure 5-1332** Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

**Figure 5-1333** Remove the left cover

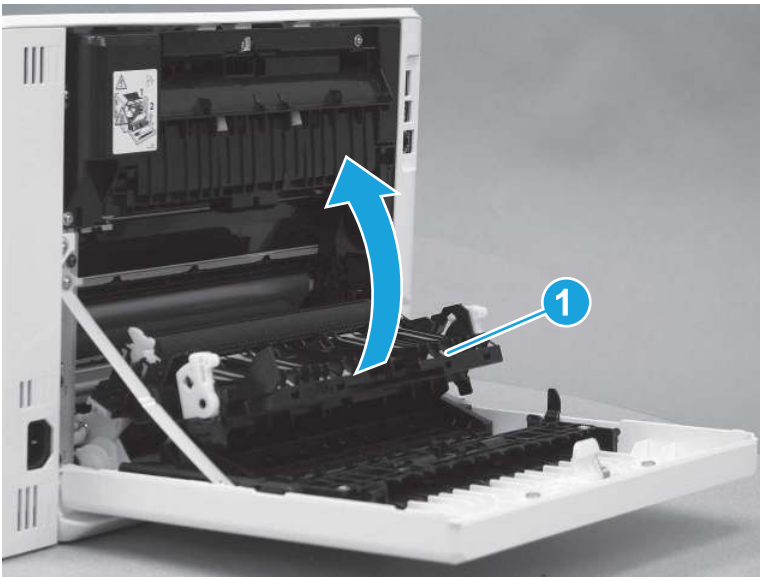


## 8. Remove the duplexing door assembly

Follow these steps to remove the duplexing door assembly.

1. Rotate the secondary transfer assembly (callout 1) toward the printer to close it.

**Figure 5-1334** Close the secondary transfer assembly



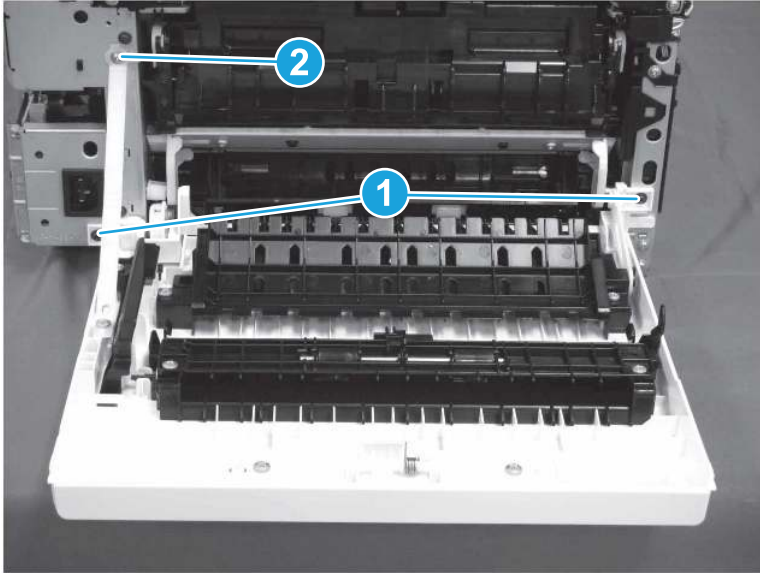
2. At the back of the printer, remove two screws (callout 1), and then remove one screw (callout 2) that holds the retention arm.

---

 **TIP:** Note that the screw (callout 2) that holds the retention arm is longer than the other two. Make sure this screw is installed in the correct position.

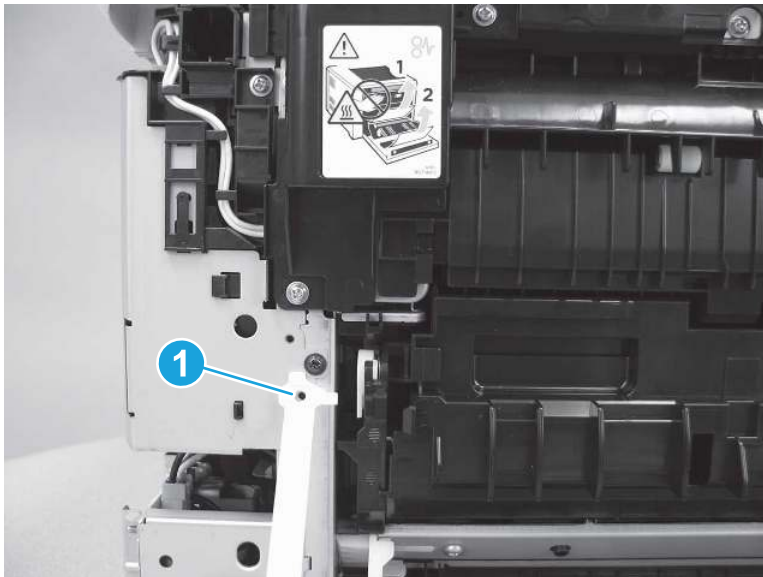
---

Figure 5-1335 Remove three screws



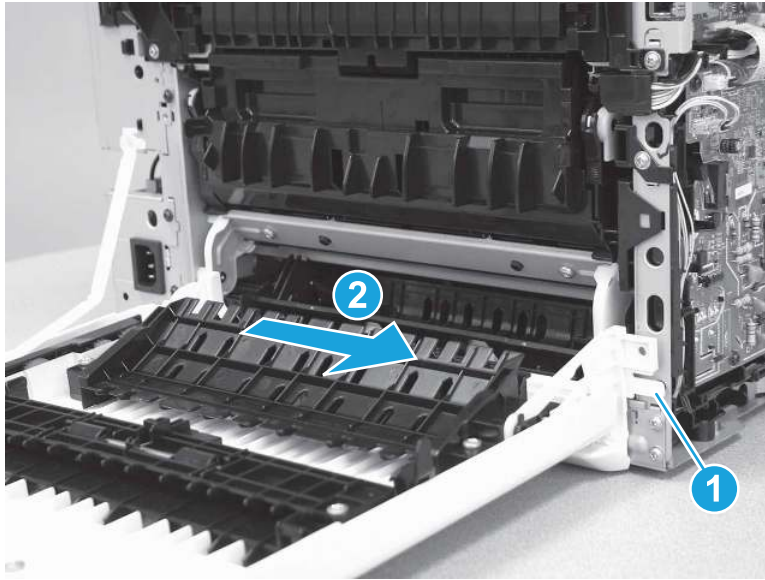
3. Release the retention arm (callout 1).

Figure 5-1336 Release the retention arm



4. Release one tab (callout 1), and then slide the duplexer door (callout 2) to the right to remove it.

**Figure 5-1337** Remove the duplexing door

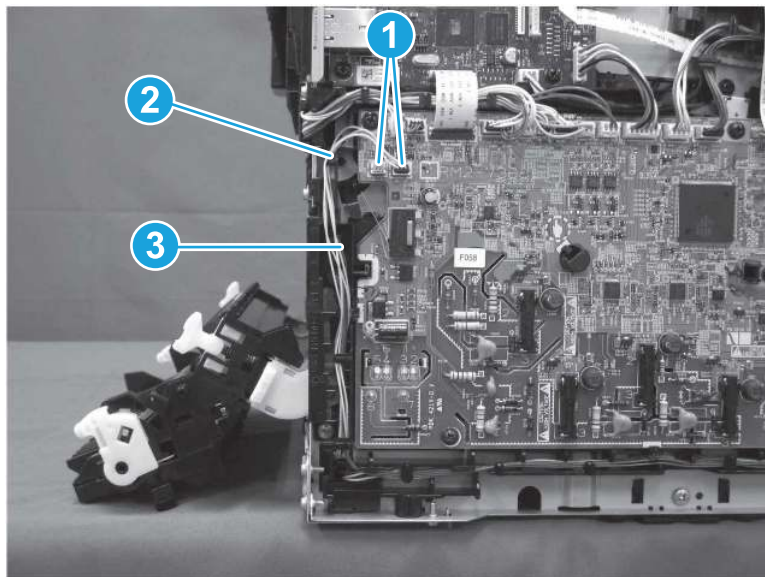


## 9. Remove the re-pickup assembly

Follow these steps to remove the re-pickup assembly.

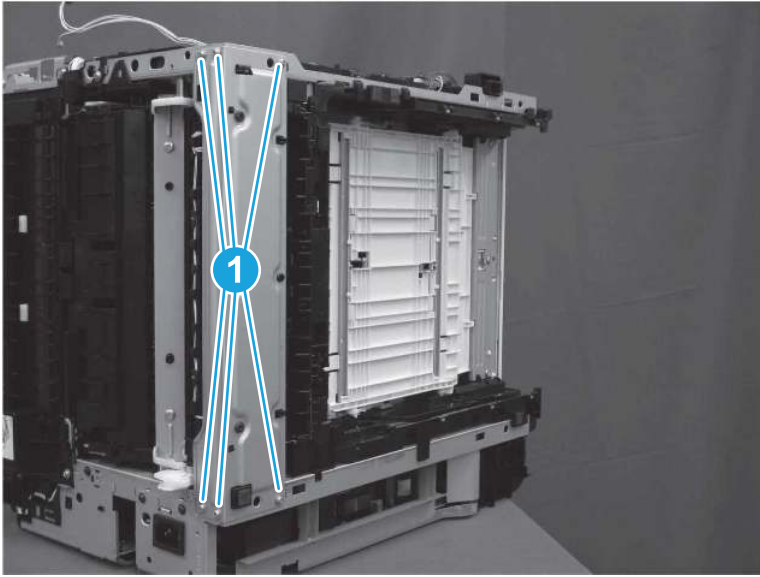
1. On the left side of the printer, disconnect two connectors (callout 1), and then remove the cables (callout 2) from the guides (callout 3).

**Figure 5-1338** Disconnect two connectors and remove cables from guides



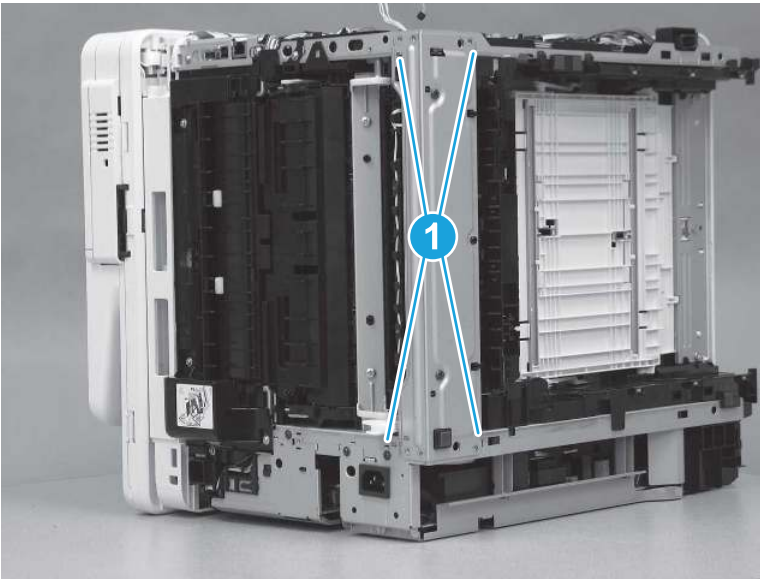
2. Lay the printer on the right side so that the left side is facing up. Remove six screws (callout 1).

Figure 5-1339 Remove six screws



3. Release four tabs (callout 1).

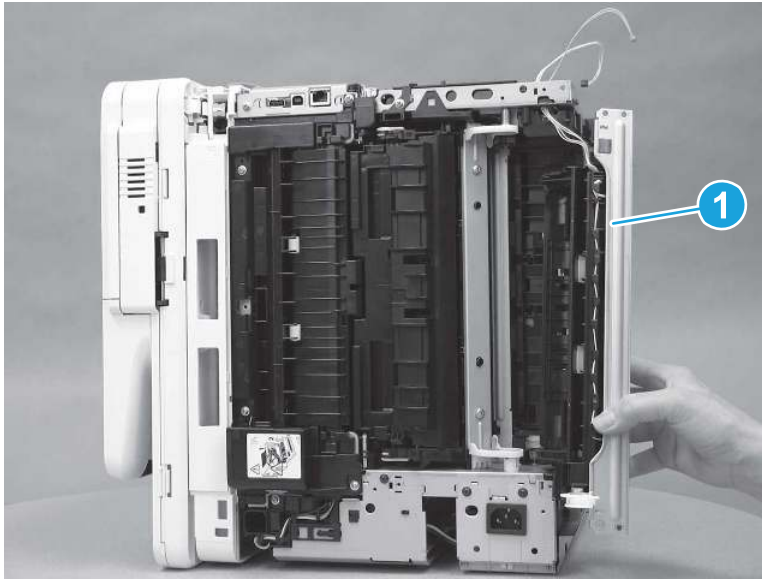
Figure 5-1340 Release four tabs





4. Remove the re-pickup assembly (callout 1).

Figure 5-1341 Remove the assembly



## 10. Remove the DC controller

Follow these steps to remove the DC controller.

1. Before disconnecting the connectors in the next step, take note of the position of two of the cables (callout 1).


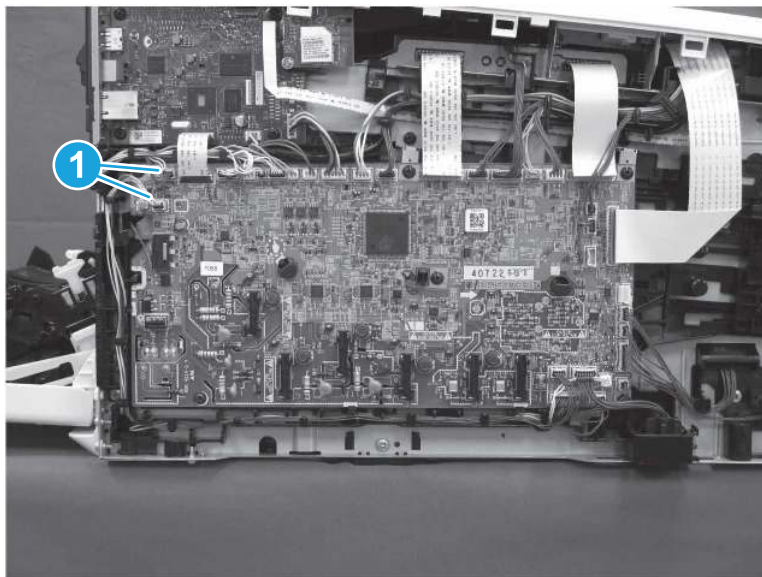
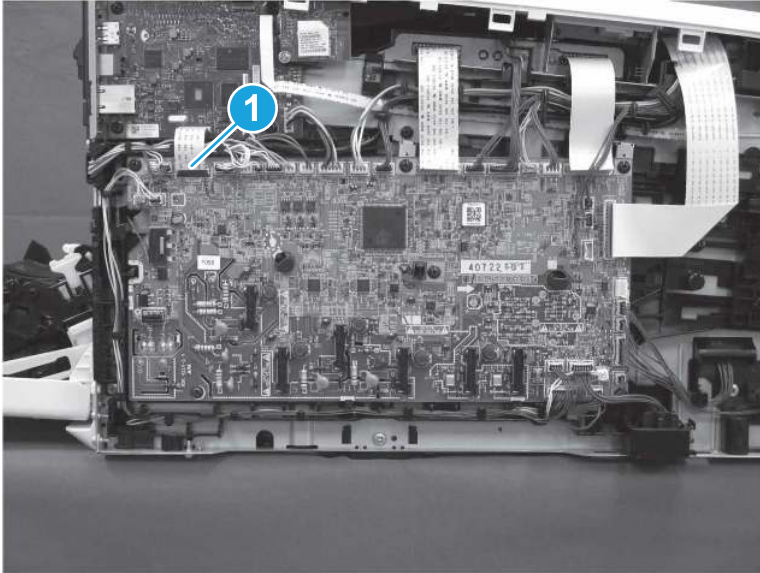
 **IMPORTANT:** These cables can be mistakenly switched when reinstalled. The connectors on the cables fit in either connector on the DC controller. Make sure that these cables are installed in the correct connectors. The upper cable is purple and the lower cable is yellow. *If the cables are switched, the printer jams repeatedly when duplex printing.*

Figure 5-1342 Check the cables



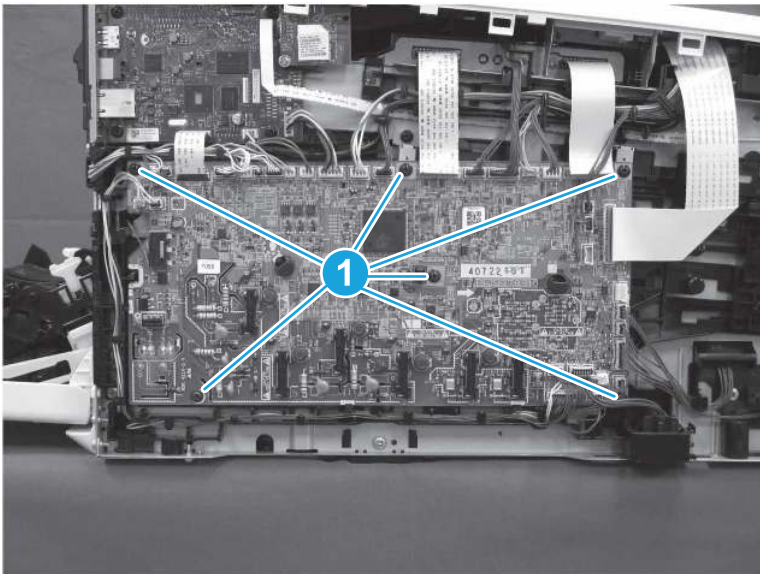
2. Disconnect all of the connectors on the DC controller. Note that one connector (callout 1) is a zero insertion force (ZIF) connector. Lift the latch on the connector before removing the flat cable.

**Figure 5-1343** Disconnect all of the connectors



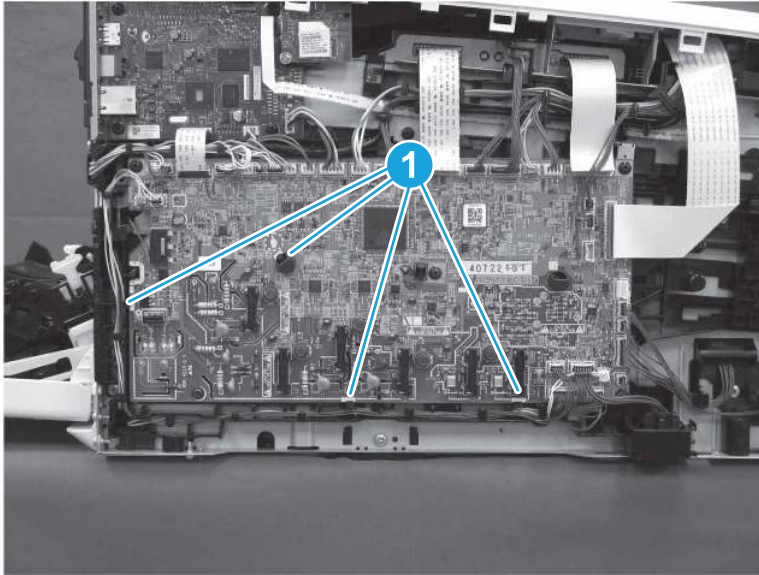
3. Remove six screws (callout 1).

**Figure 5-1344** Remove six screws



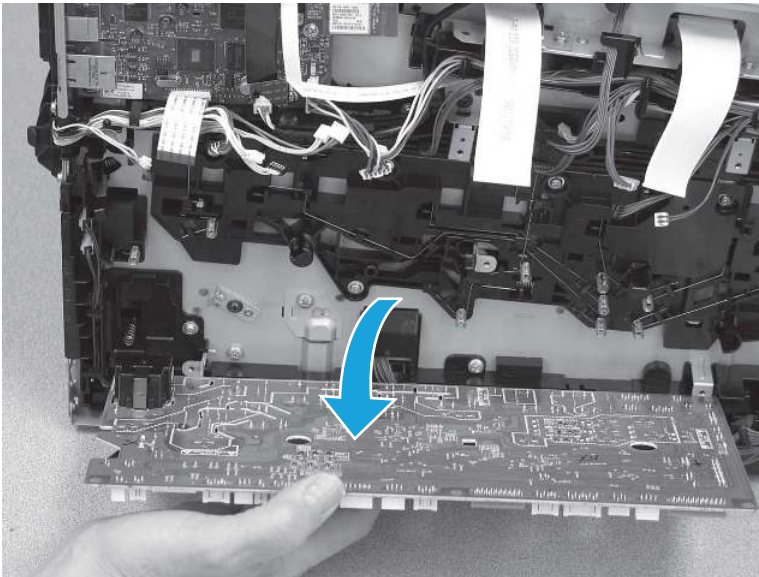
4. Release four tabs (callout 1).

Figure 5-1345 Release four tabs



5. Remove the DC controller.

Figure 5-1346 Remove the assembly

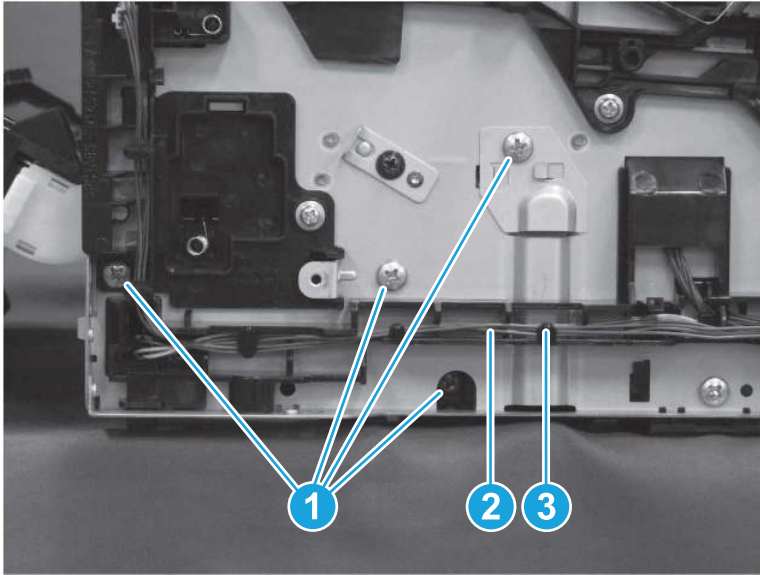


## 11. Remove the lifter drive assembly

Follow these steps to remove the lifter drive assembly.

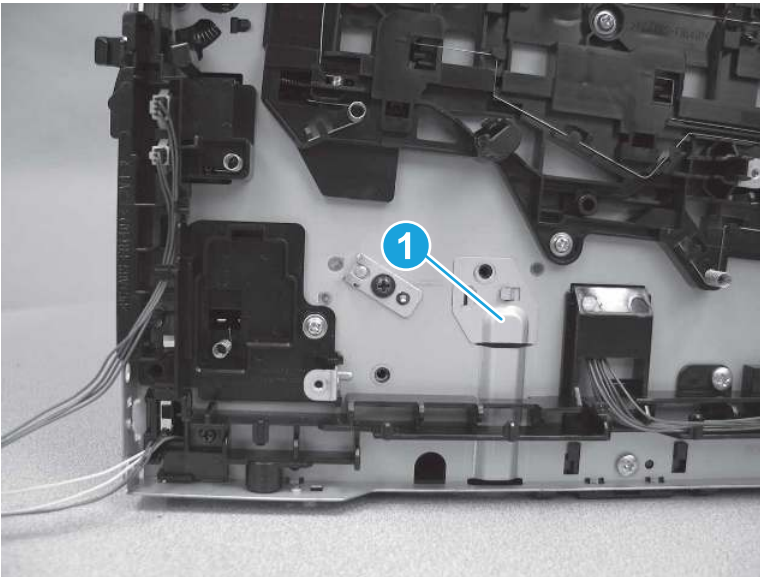
1. Remove four screws (callout 1), and then release the cables (callout 2) from the guides (callout 3).

**Figure 5-1347** Remove four screws and release cables



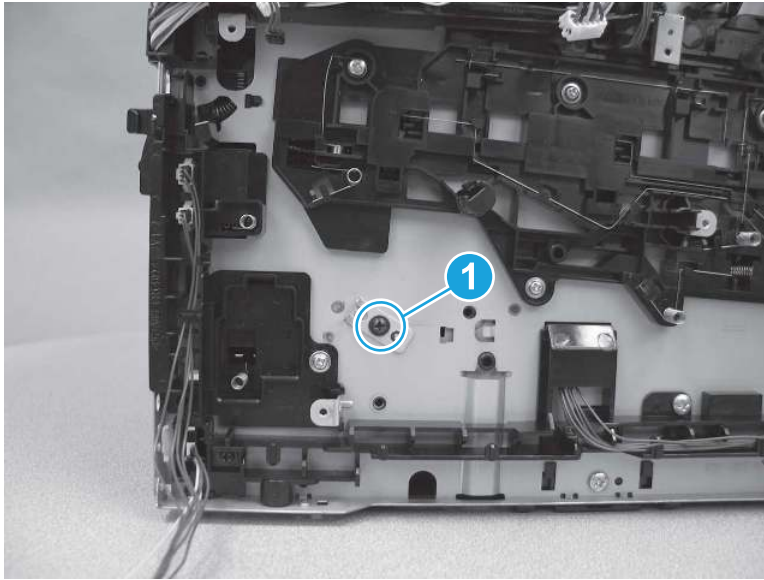
2. Remove one cover (callout 1).

**Figure 5-1348** Remove one cover



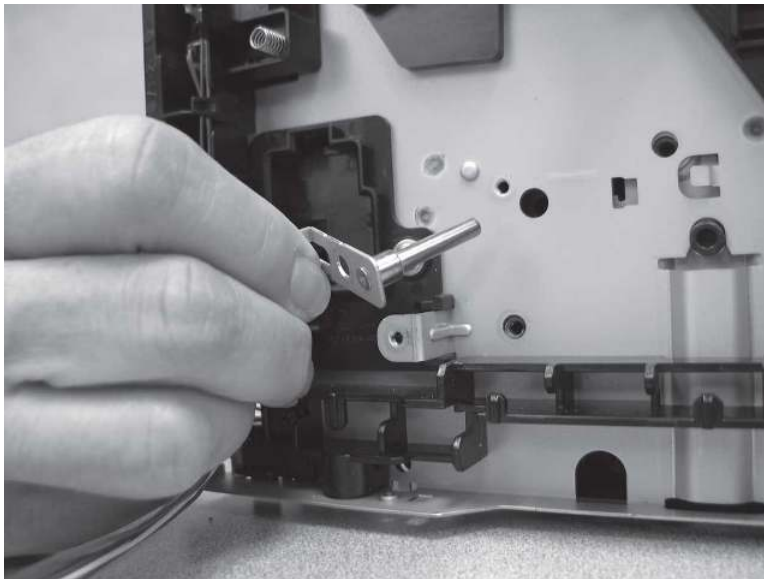
3. Remove one screw (callout 1).

**Figure 5-1349** Remove one screw



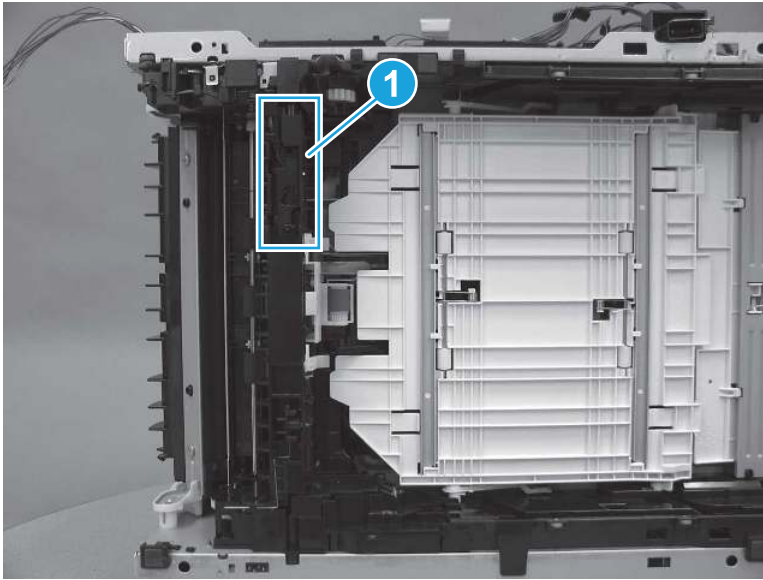
4. Remove the shaft.

**Figure 5-1350** Remove the shaft



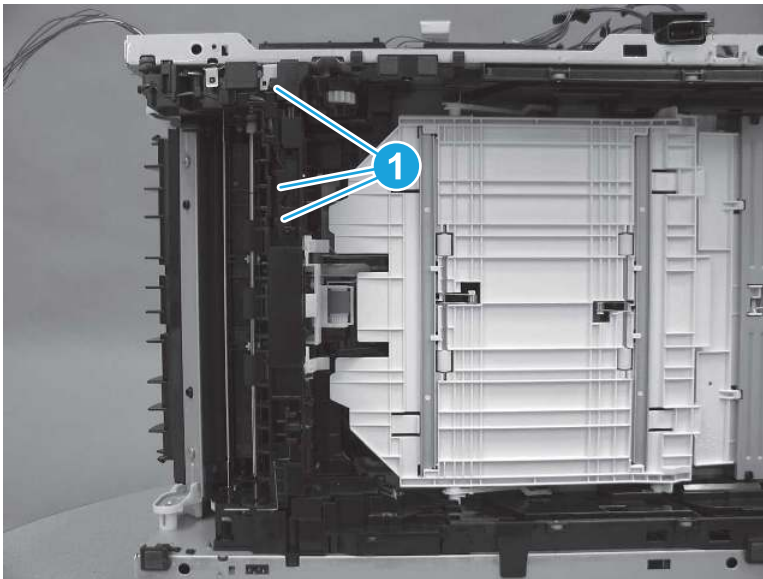
5. Lay the printer on the right side so that the left side is facing up. Locate the tray sensor switch (callout 1).

Figure 5-1351 Locate the tray sensor switch



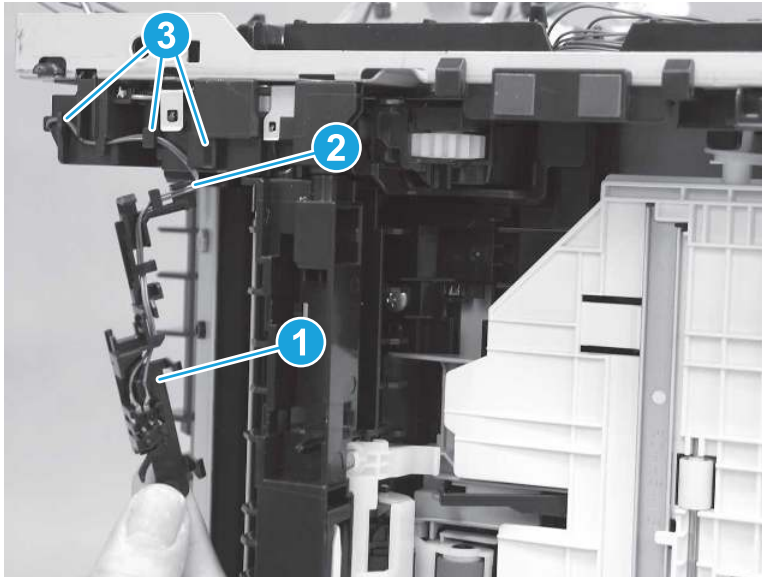
6. Release three tabs (callout 1).

Figure 5-1352 Release three tabs



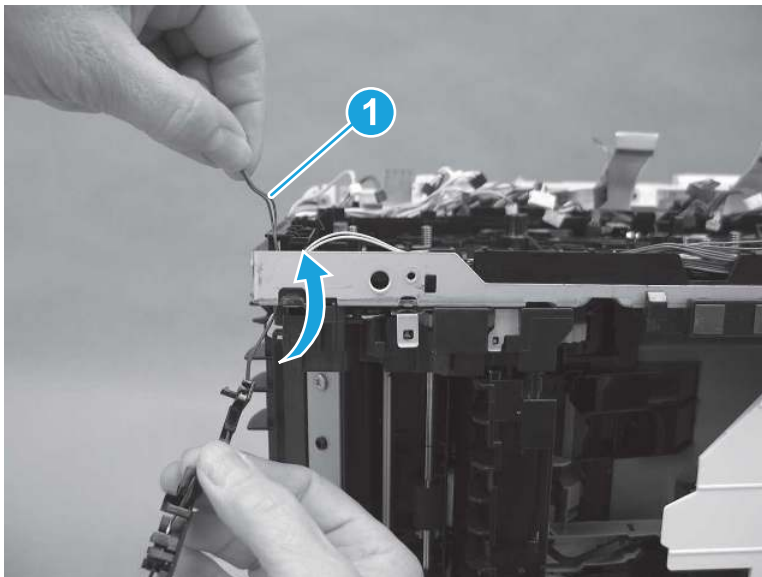
7. Release the tray sensor switch (callout 1), and then remove the cables (callout 2) from the guides (callout 3).

**Figure 5-1353** Release the tray sensor switch



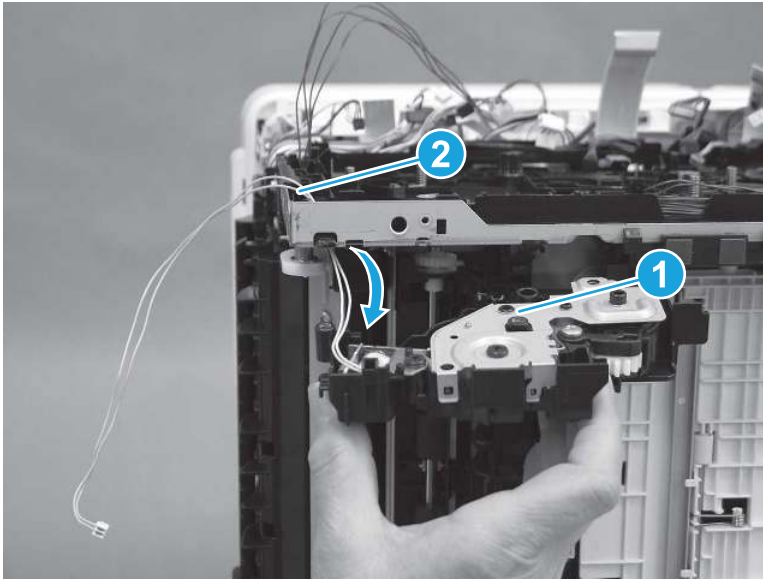
8. Remove the tray sensor switch by releasing the cables (callout 1) through the printer frame.

**Figure 5-1354** Remove the tray sensor switch



9. Remove the lifter drive assembly (callout 1), and then pass the cables (callout 2) through the printer frame.

Figure 5-1355 Remove the assembly

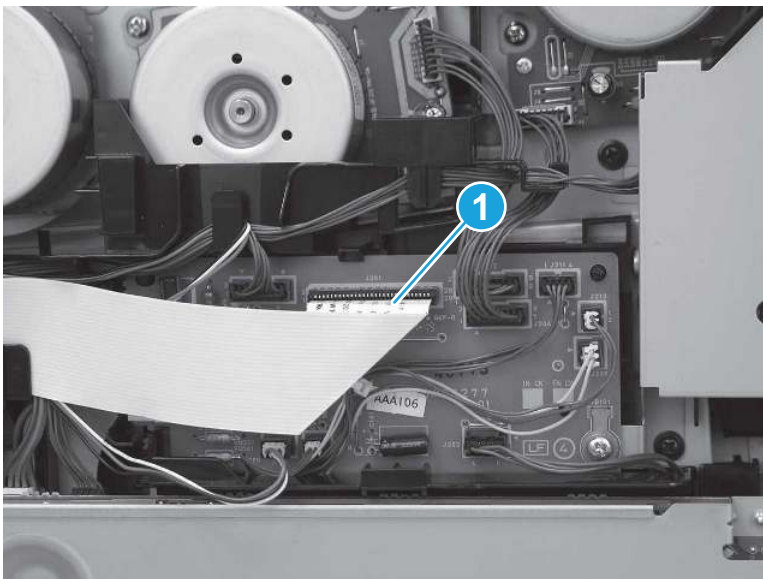


## 12. Remove the driver PCA

Follow these steps to remove the driver PCA.

1. Disconnect one connector (callout 1).

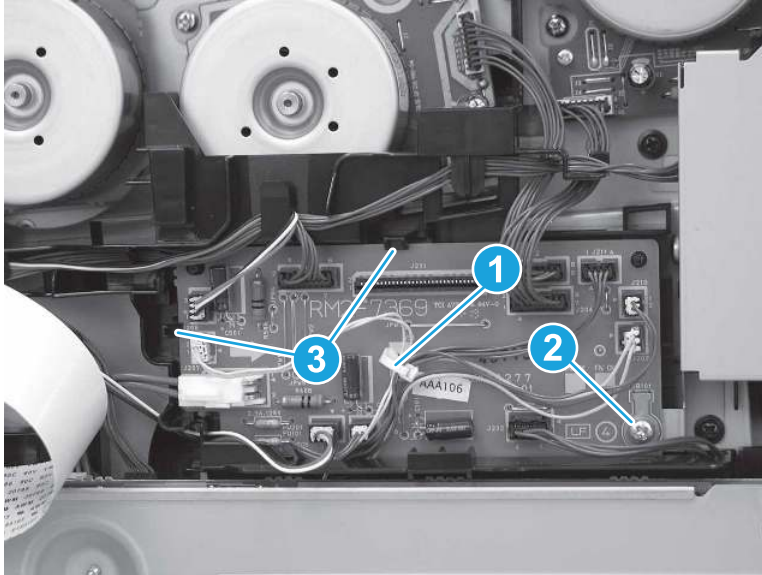
Figure 5-1356 Disconnect one connector





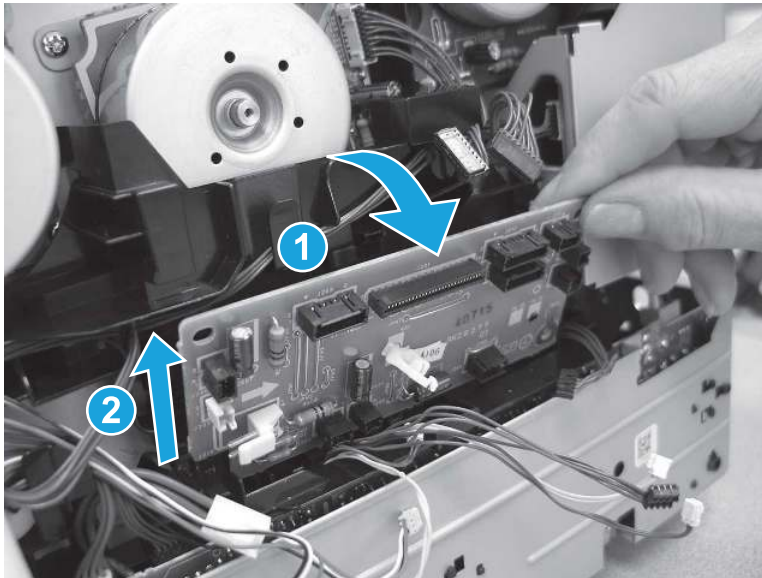
2. Release one retainer (callout 1), disconnect all of the connectors on the driver PCA, remove one screw (callout 2), and then release two tabs (callout 3).

**Figure 5-1357** Disconnect all connectors and remove one screw



3. Rotate the top of the driver PCA away from the printer (callout 1), and then lift up (callout 2) to remove it.

**Figure 5-1358** Remove the PCA

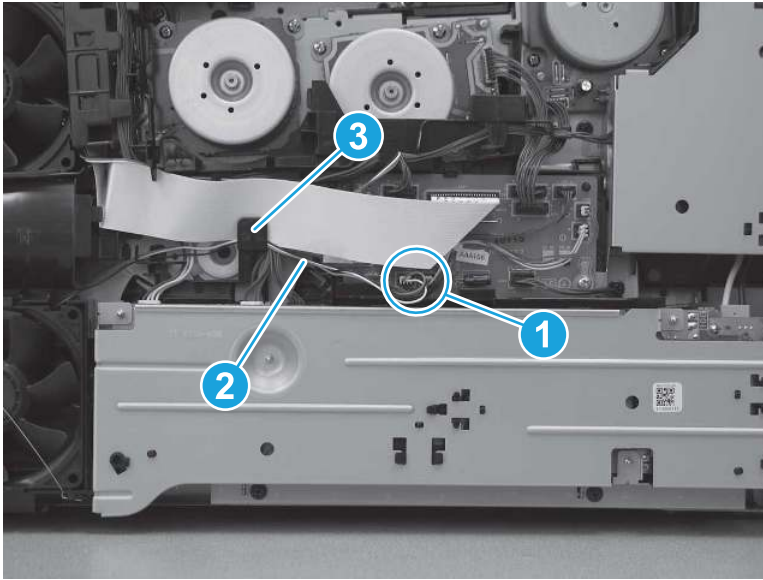


### 13. Remove the LVPS

Follow these steps to remove the LVPS.

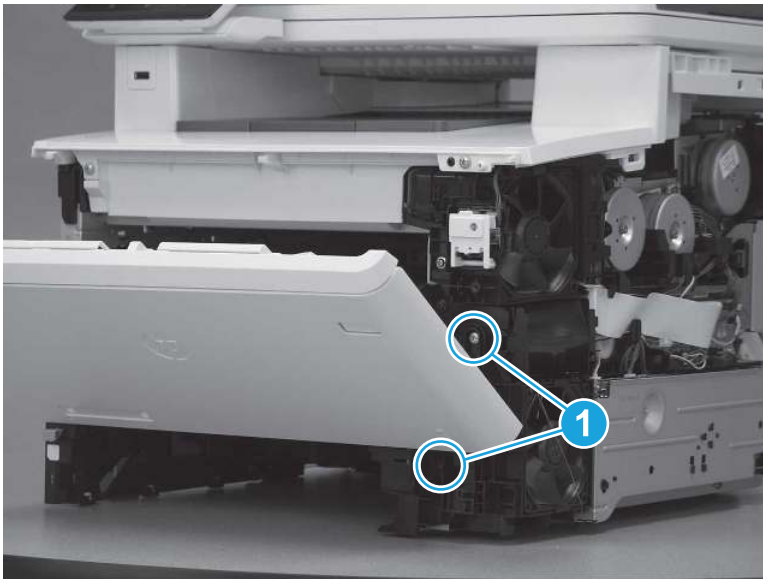
1. Disconnect one connector (callout 1), and then remove the cable (callout 2) from the wire guide (callout 3).

**Figure 5-1359** Disconnect one connector and release cables from guides



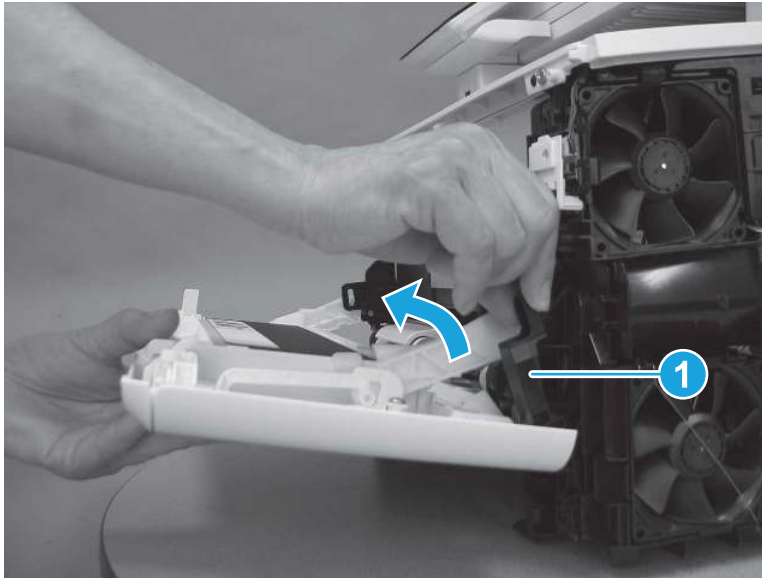
2. Remove two screws (callout 1).

**Figure 5-1360** Remove two screws



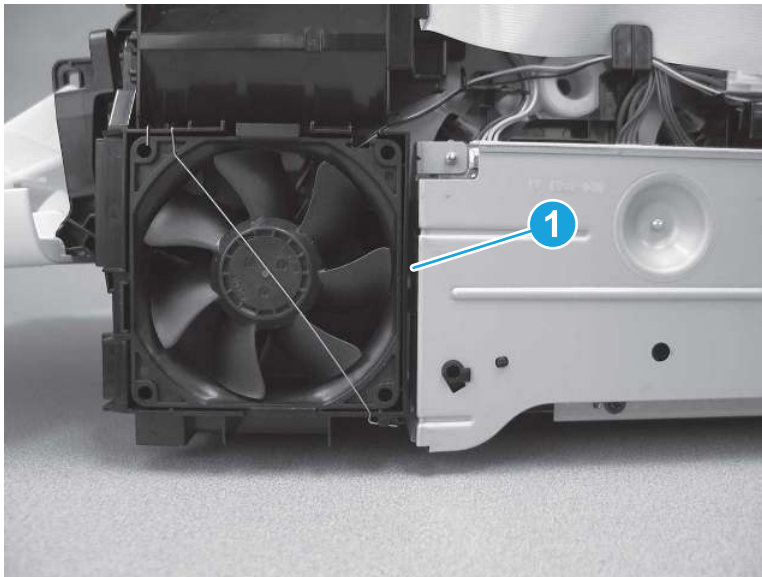
3. Release the hinge arm (callout 1).

**Figure 5-1361** Release the hinge arm



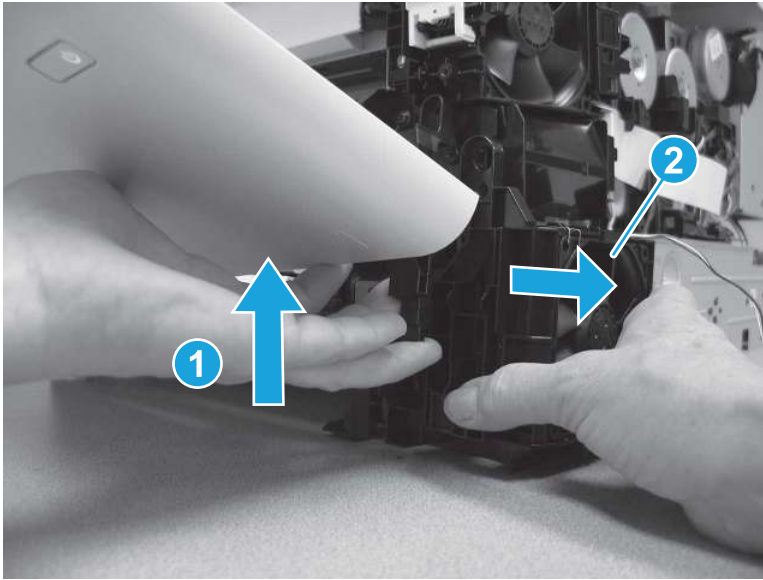
4. Release one tab (callout 1) on the right side of the power supply fan.

**Figure 5-1362** Release one tab




- Lift the front door up slightly (callout 1), and then remove the power supply fan and holder (callout 2).

**Figure 5-1363** Remove the power supply fan and holder



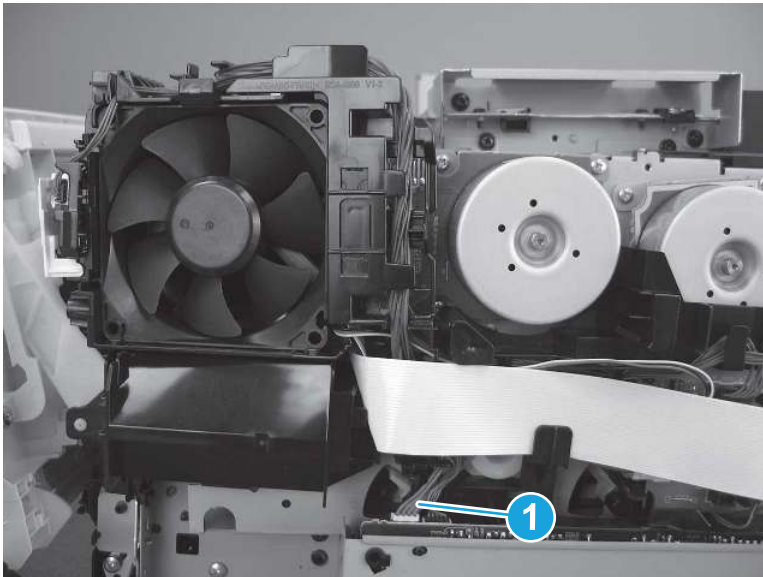
- Before proceeding, take note of the position of two cables (callout 1).

---

 **IMPORTANT:** These cables can be mistakenly switched when reinstalled. The connectors on the cables fit in either connector on the LVPS. Make sure that these cables are installed in the correct connectors. *If the cables are switched, the printer will not power on when reassembled.*

---

**Figure 5-1364** Check the connectors



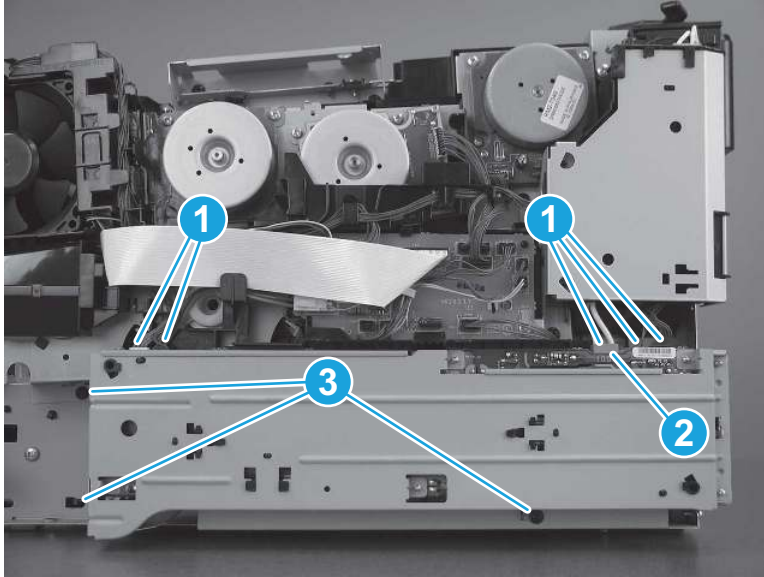
- Disconnect five connectors (callout 1). One connector (callout 2) has a latch that must be released before disconnecting it. Remove three screws (callout 3).

---

 **NOTE:** The latch for one connector (callout 2) is located on the backside of the connector body, and not easily seen.

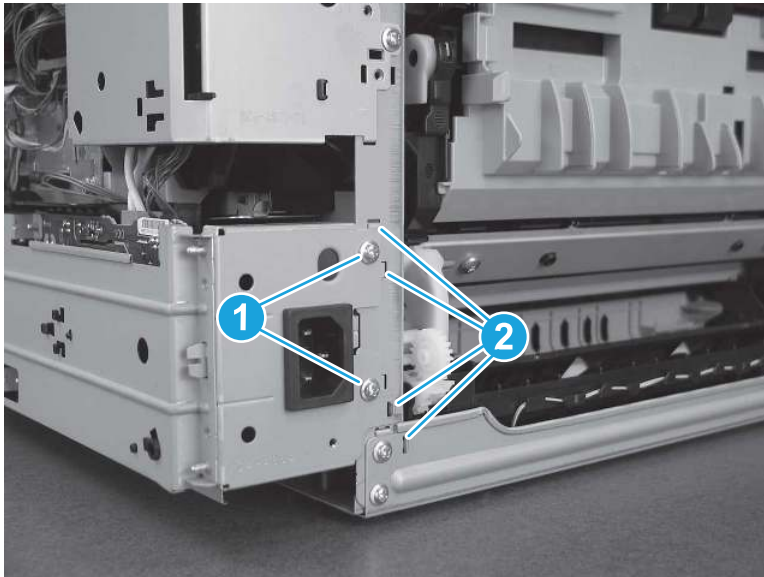
---

Figure 5-1365 Disconnect five connectors and remove three screws



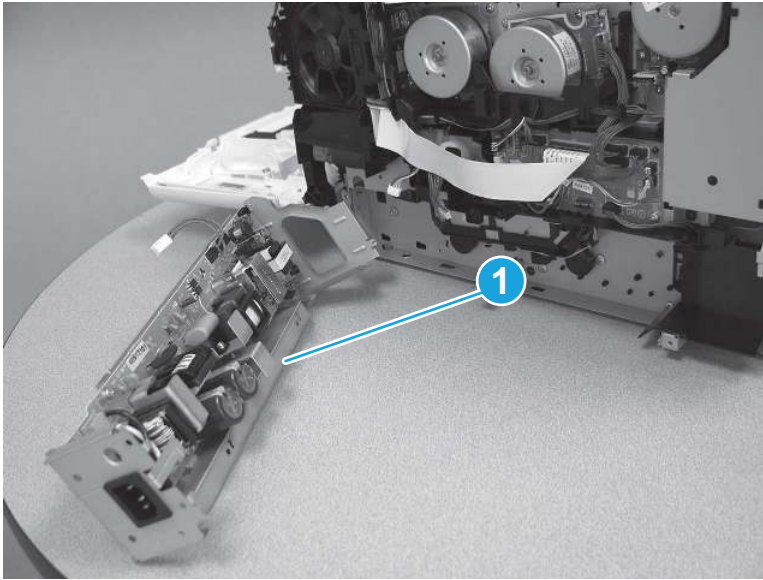
8. Remove two screws from the back (callout 1), and then release four tabs (callout 2).

Figure 5-1366 Remove two screws and release three tabs



9. Remove the LVPS (callout 1).

**Figure 5-1367** Remove the assembly

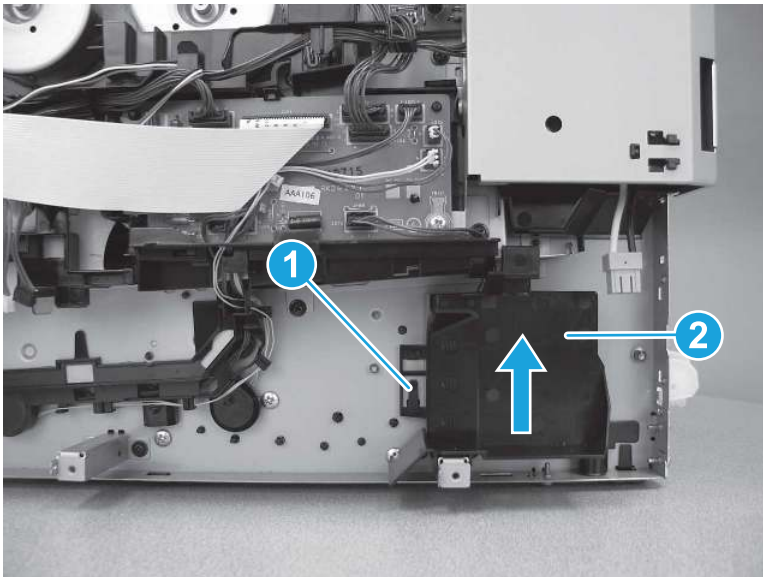


## 14. Remove the pickup motor

Follow these steps to remove the pickup motor.

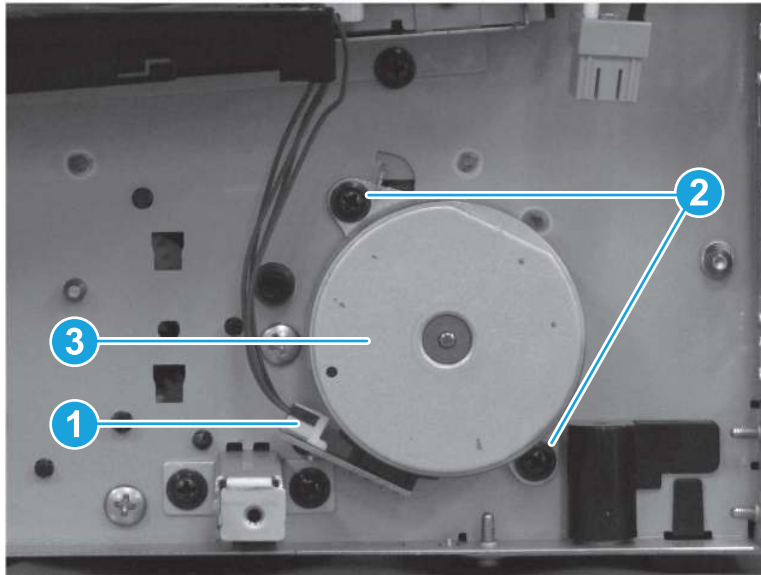
1. Release one tab (callout 1), and then slide the fan duct (callout 2) up to remove it.

**Figure 5-1368** Remove the fan duct



2. Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the pickup motor (callout 3).

**Figure 5-1369** Remove the assembly

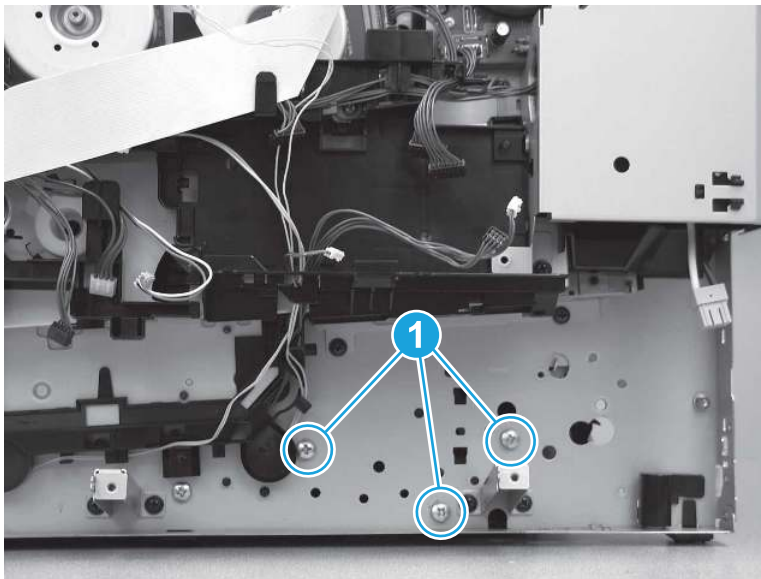


## 15. Remove the pickup assembly

Follow these steps to remove the pickup assembly.

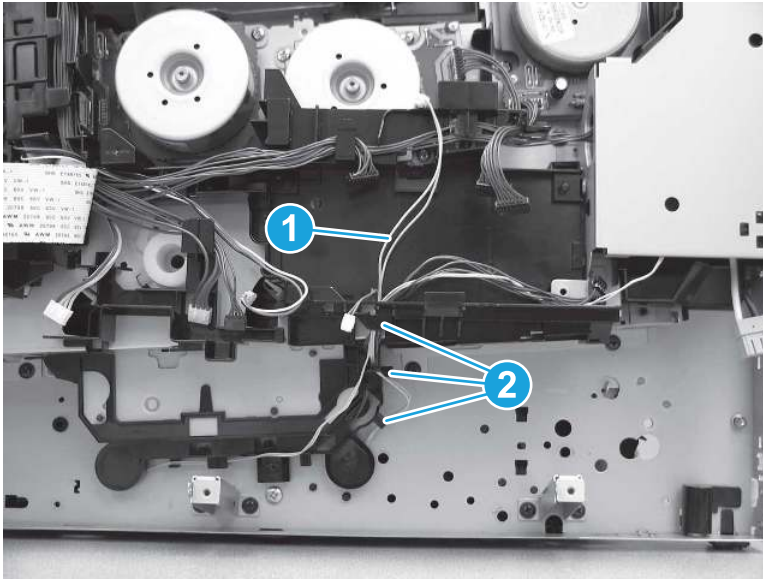
1. Remove three screws (callout 1).

**Figure 5-1370** Remove three screws



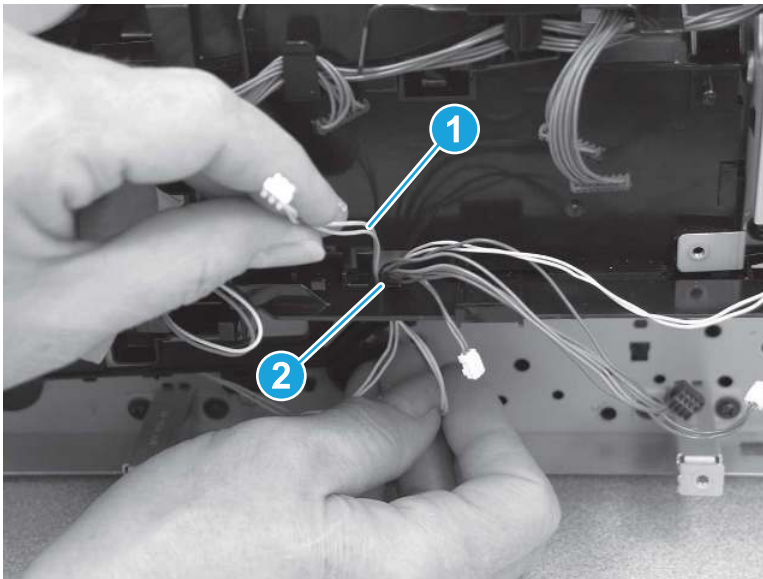
2. Release the cables (callout 1) from the cable guides (callout 2).

**Figure 5-1371** Release the cables from the cable guides



3. Thread the cables (callout 1) through the opening in the driver PCA holder (callout 2).

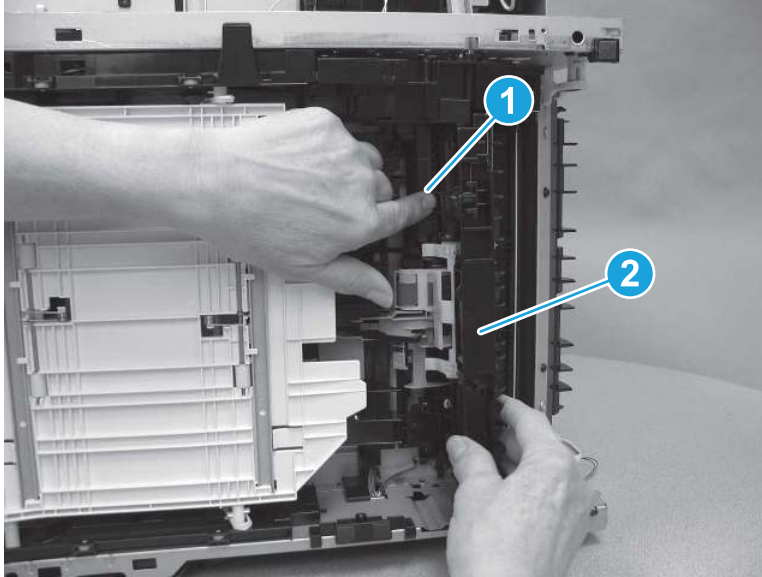
**Figure 5-1372** Release the cables





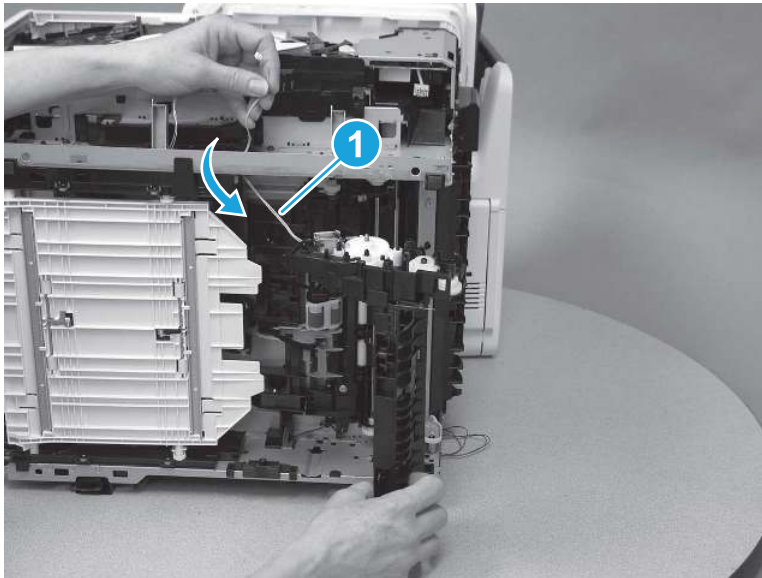
4. Lay the printer on the right side so that the left side is facing up. Press the pickup and feed roller holder (callout 1) toward the printer, and then remove the pickup assembly (callout 2).

**Figure 5-1373** Remove the pickup assembly



5. Pass the cables (callout 1) through the printer frame.

**Figure 5-1374** Release the cables

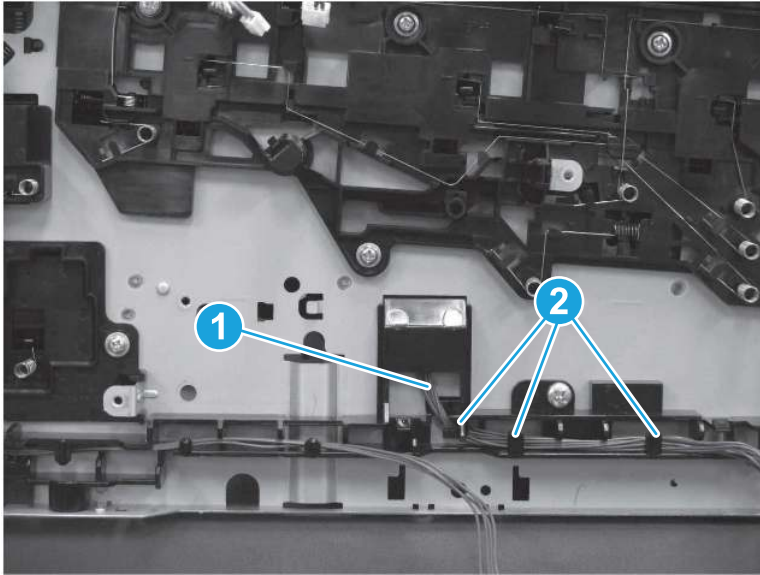


## 16. Remove the front feed guide assembly

Follow these steps to remove the front feed guide assembly.

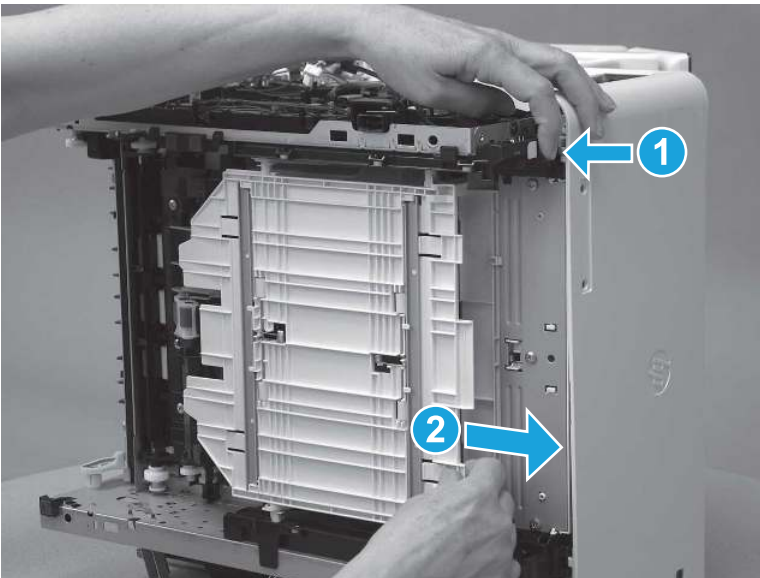
1. Release the cables (callout 1) from the cable guide (callout 2).

**Figure 5-1375** Release the cables



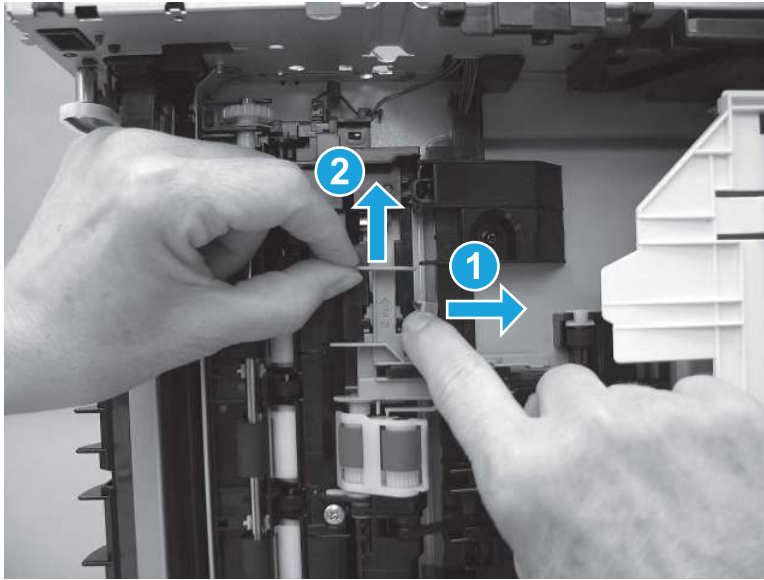
2. Lay the printer on the right side so that the left side is facing up. Press the tray 1 feed guide release button (callout 1), and then release the tray 1 feed guide toward the front of the printer (callout 2).

**Figure 5-1376** Release the tray 1 feed guide



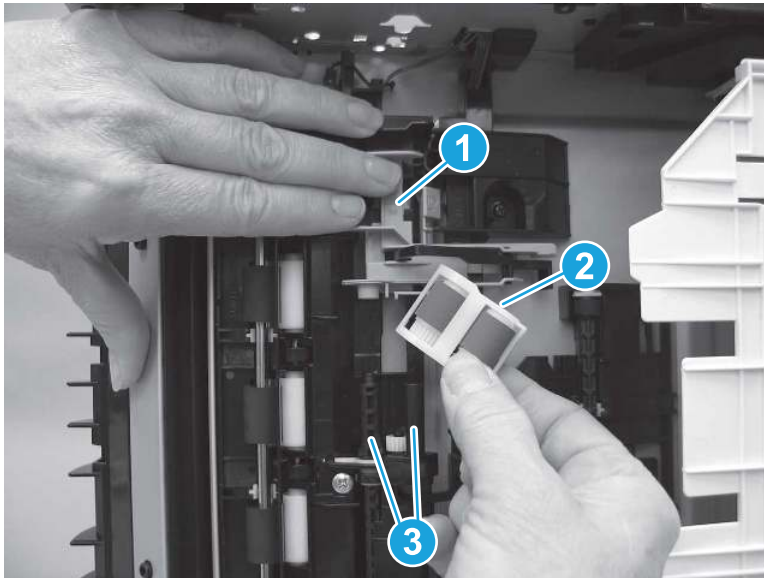
3. Press the lever (callout 1) on the roller holder, and then slide the roller holder up (callout 2).

**Figure 5-1377** Slide the roller holder



4. Hold the roller holder up (callout 1), and then lift the pickup and feed roller case (callout 2) up off of the shafts (callout 3).

**Figure 5-1378** Remove the pickup and feed rollers



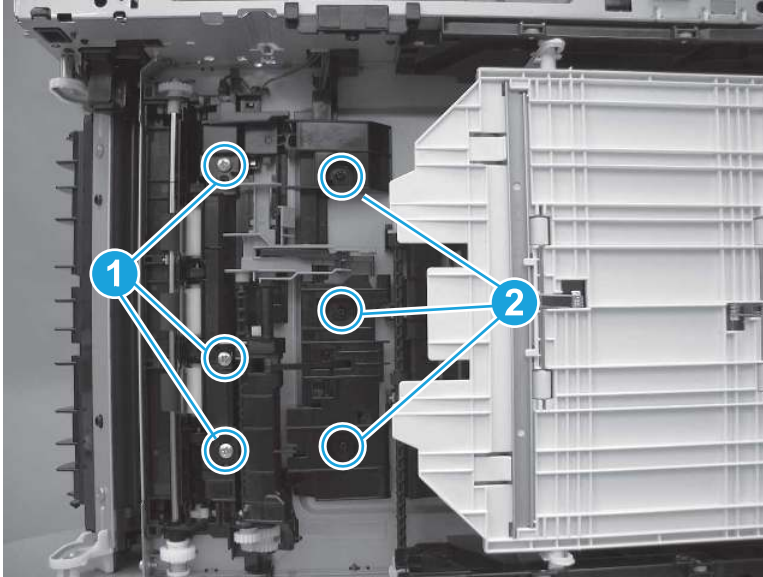
5. Remove three screws (callout 1) on the rear feed guide assembly, and then remove three screws (callout 2) on the front feed guide assembly.

---

 **Reinstallation tip:** The three screws (callout 1) on the rear feed guide assembly are larger than the screws on the front feed guide assembly.

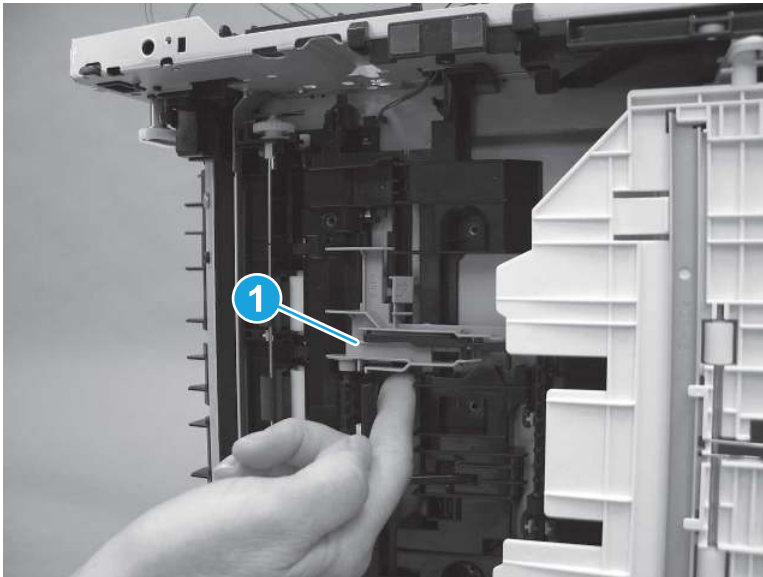
---

Figure 5-1379 Remove six screws



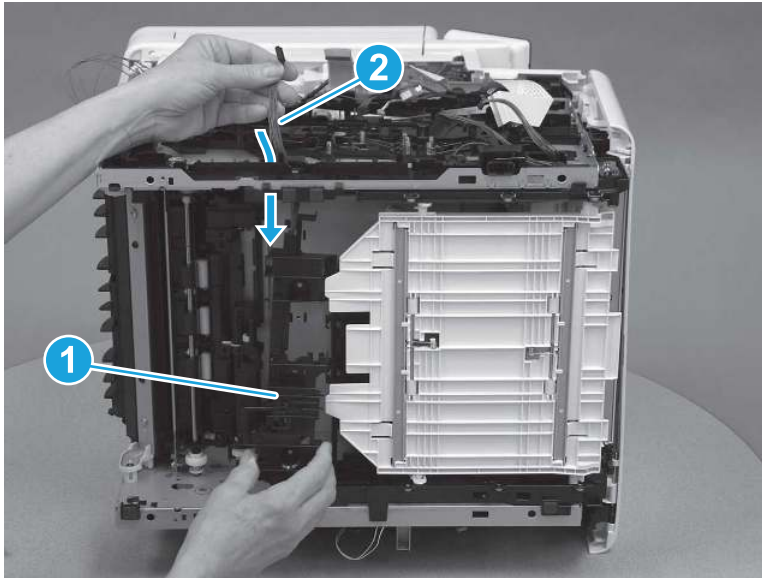
6. Remove the roller holder (callout 1).

Figure 5-1380 Remove the roller holder



7. Remove the front feed guide assembly (callout 1). Release the cables (callout 2) through the printer frame.

Figure 5-1381 Remove the assembly

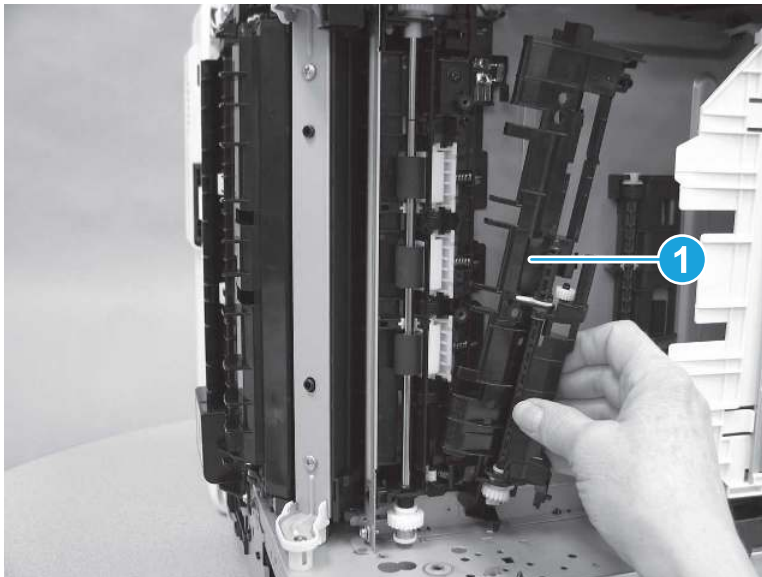


## 17. Remove the rear feed guide assembly

Follow these steps to remove the rear feed guide assembly.

- ▲ Remove the rear feed guide assembly (callout 1).

Figure 5-1382 Remove the rear feed guide assembly

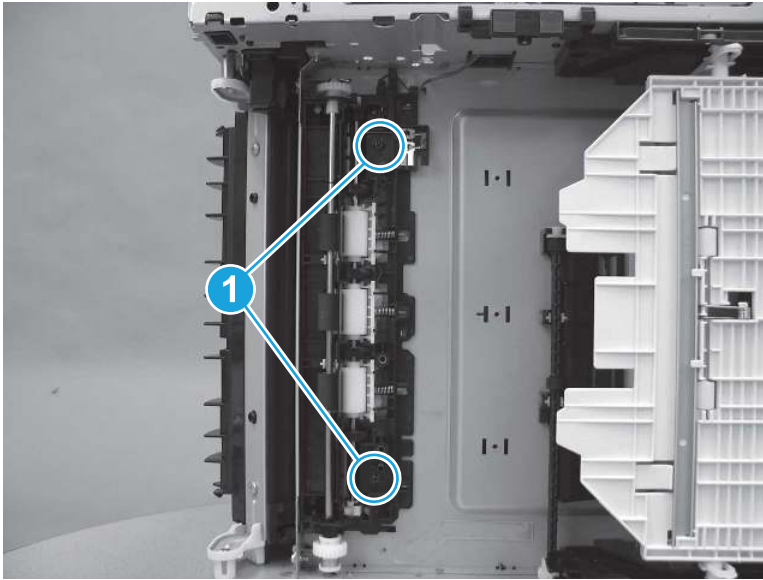


## 18. Remove the registration assembly

Follow these steps to remove the registration assembly.

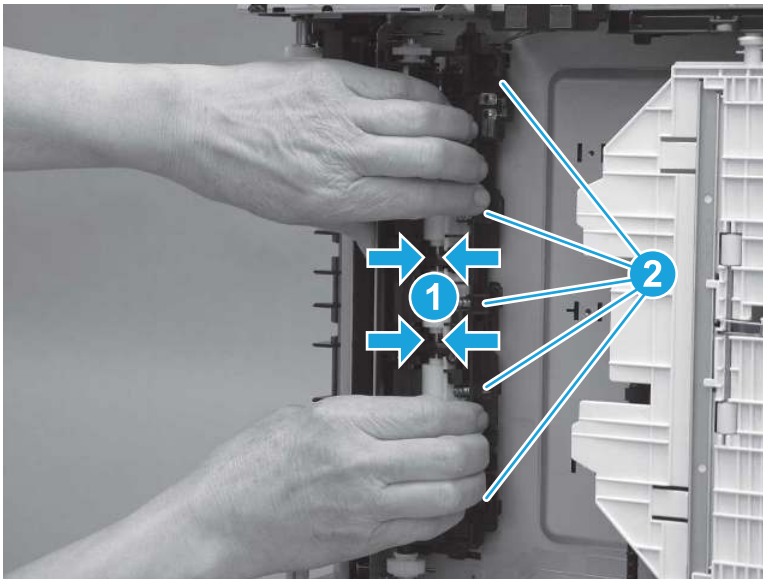
1. Remove two screws (callout 1).

Figure 5-1383 Remove two screws



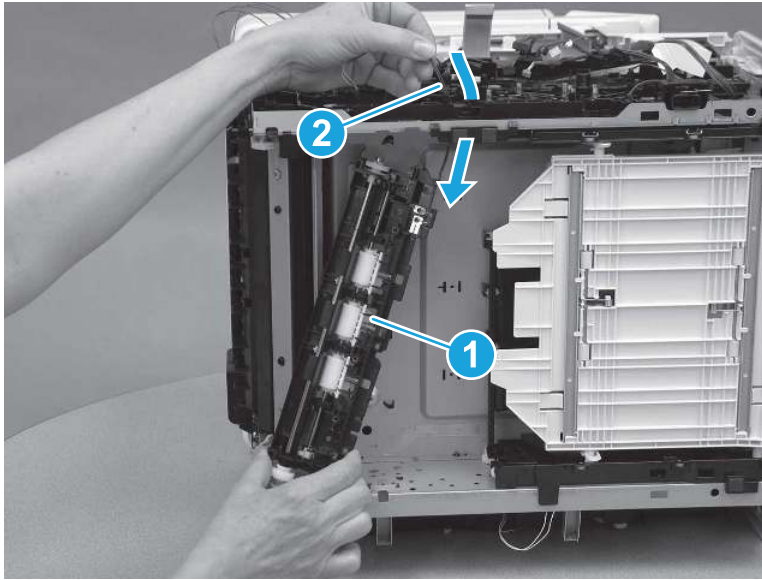
2. Squeeze the registration assembly (callout 1) to release five tabs (callout 2).

Figure 5-1384 Release five tabs



3. Remove the registration assembly (callout 1). Release the cables (callout 2) through the printer frame.

Figure 5-1385 Remove the assembly



## 19. 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.

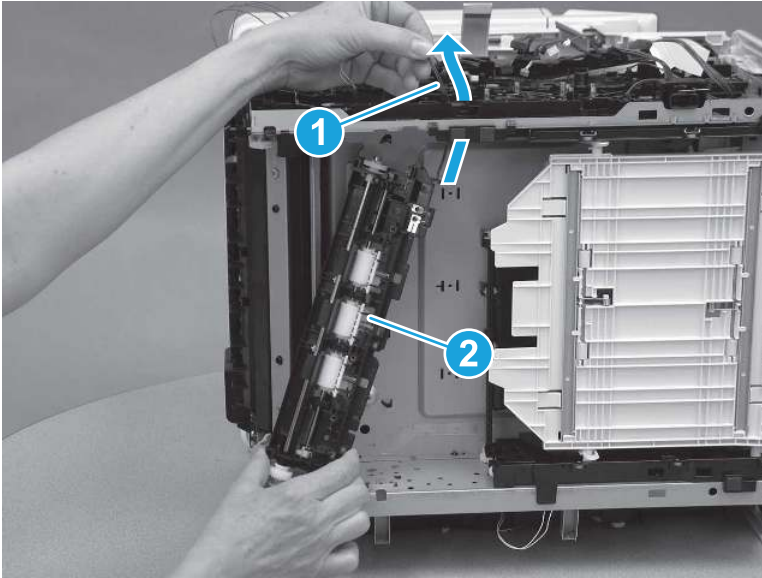
## 20. Reverse the removal steps to install the assembly

Also use the following special installation instructions.

## Registration assembly

- ▲ Thread the cables (callout 1) on the registration assembly up through the printer frame, and then move the registration assembly (callout 2) into position.

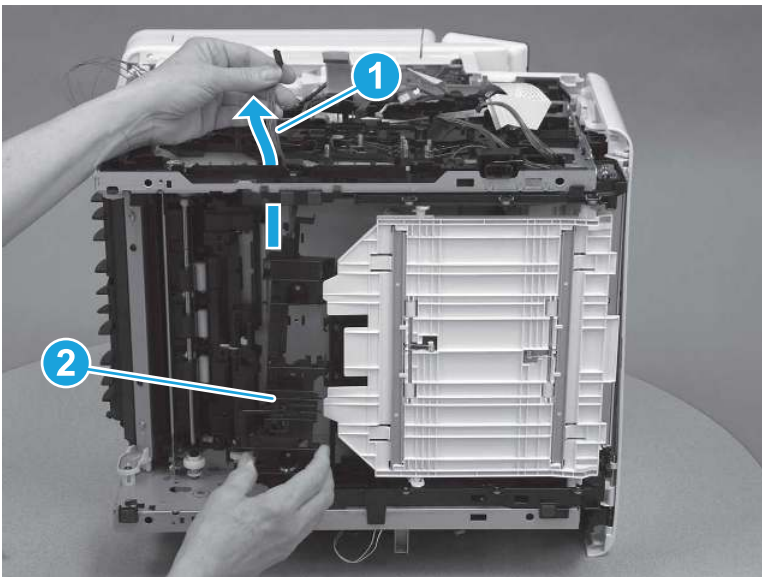
**Figure 5-1386** Install the registration assembly



## Front feed guide assembly

1. Thread the cables (callout 1) on the front feed guide assembly up through the printer frame, and then move the front feed guide assembly (callout 2) into position.

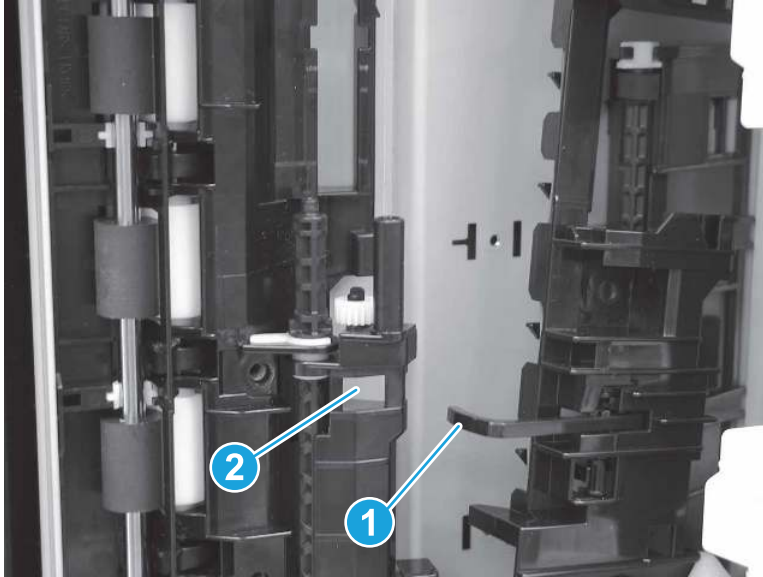
**Figure 5-1387** Position the front feed guide assembly



2. Make sure that the flag (callout 1) on the front feed guide assembly fits in the opening (callout 2) in the rear feed guide assembly.

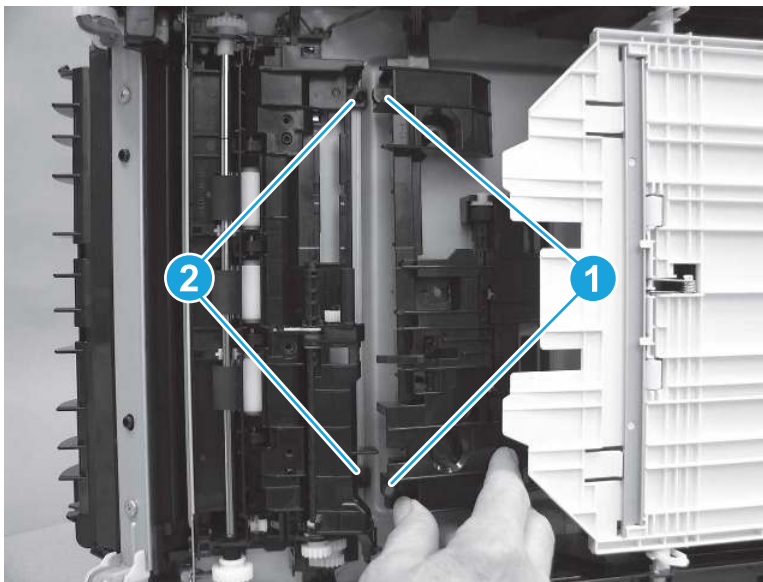


Figure 5-1388 Position the flag



3. Install the holes on the front feed guide assembly (callout 1) over the tabs (callout 2) on the rear feed guide assembly.

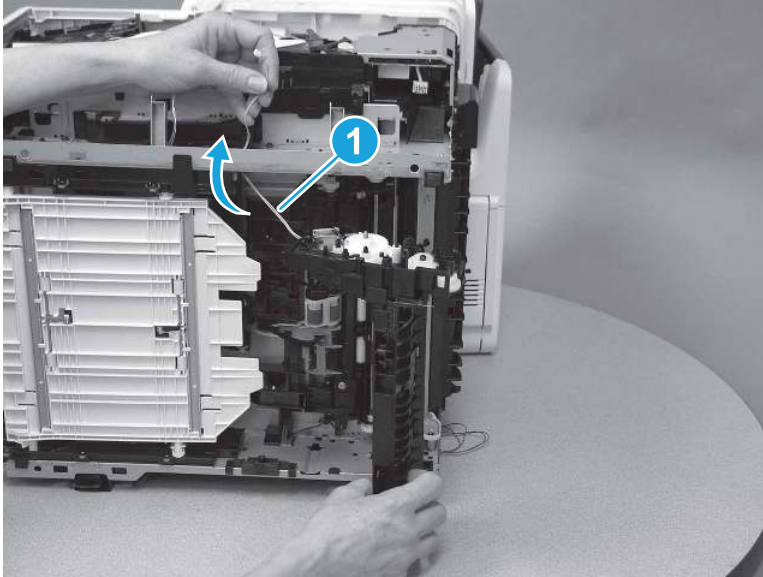
Figure 5-1389 Install the front feed guide assembly



Pickup assembly

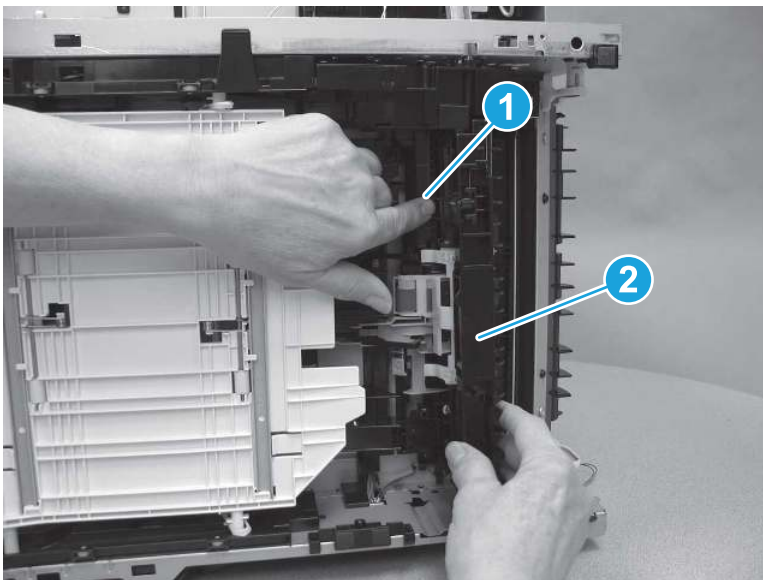
1. Pass the cables (callout 1) through the printer frame.

**Figure 5-1390** Pass the cables through the printer frame



2. Press the pickup and feed roller holder (callout 1) toward the printer, and then install the pickup assembly (callout 2).

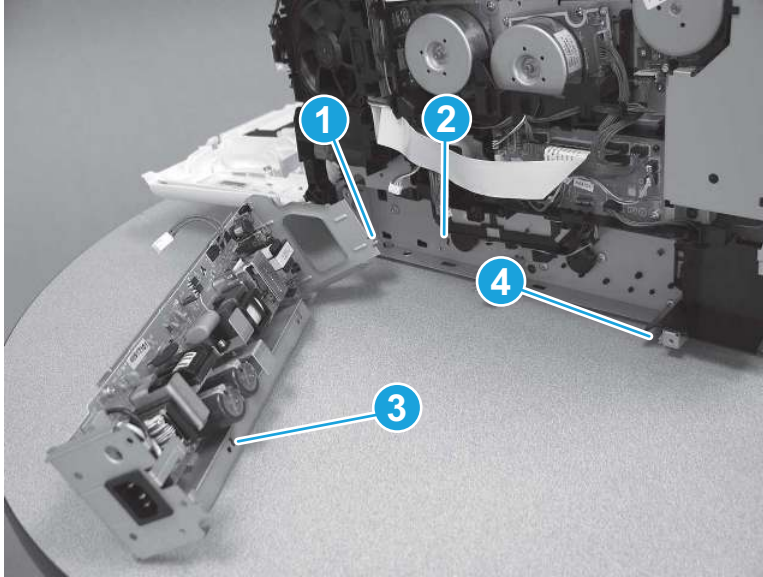
**Figure 5-1391** Install the pickup assembly



#### Low-voltage power supply

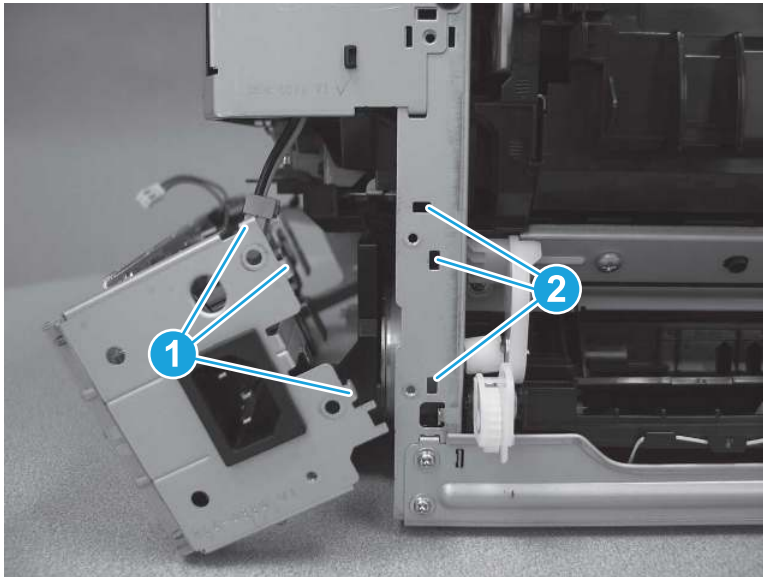
1. Install the tab (callout 1) on the LVPS into the slot (callout 2) in the printer. Install the slot (callout 3) in the LVPS over the tab (callout 4) on the printer.

**Figure 5-1392** Install the side tabs of the LVPS



2. At the back of the printer, install the tabs on the LVPS (callout 1) into the slots (callout 2) in the printer.

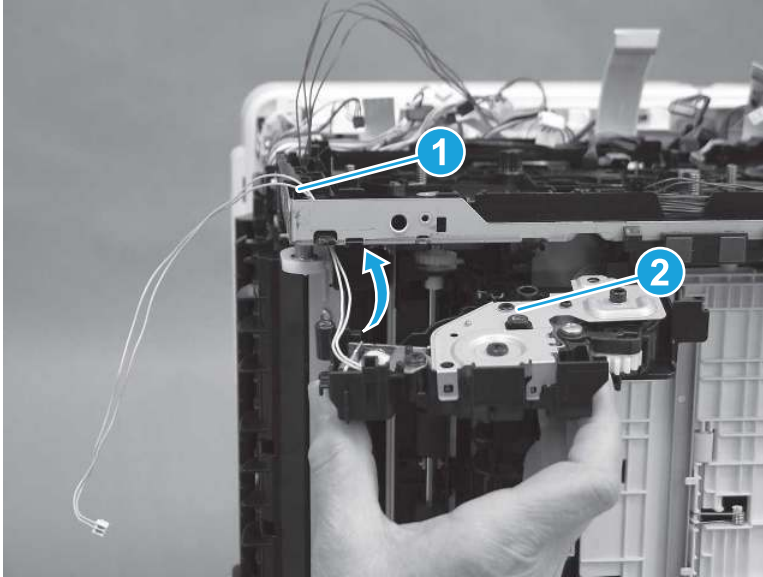
**Figure 5-1393** Install the back tabs of the LVPS



Lifter drive assembly

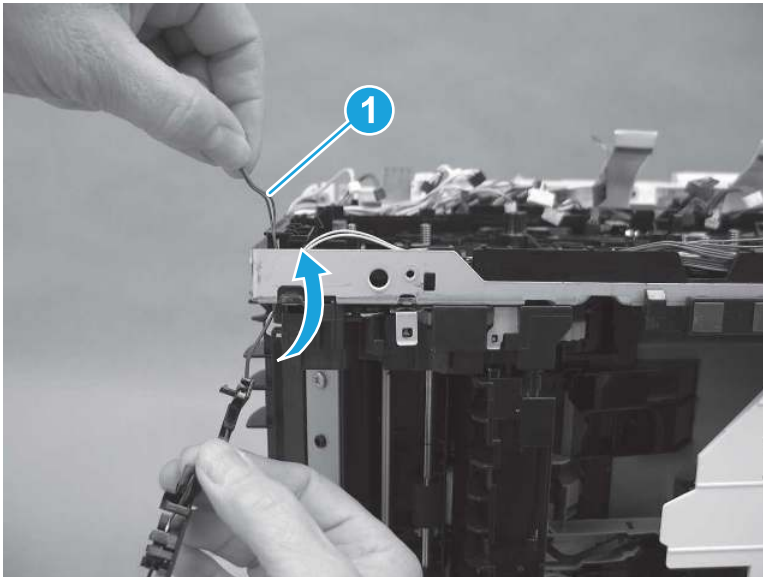
1. Pass the cables (callout 1) on the lifter drive assembly up through the printer frame, and then install the lifter drive assembly (callout 2).

**Figure 5-1394** Install the lifter drive assembly



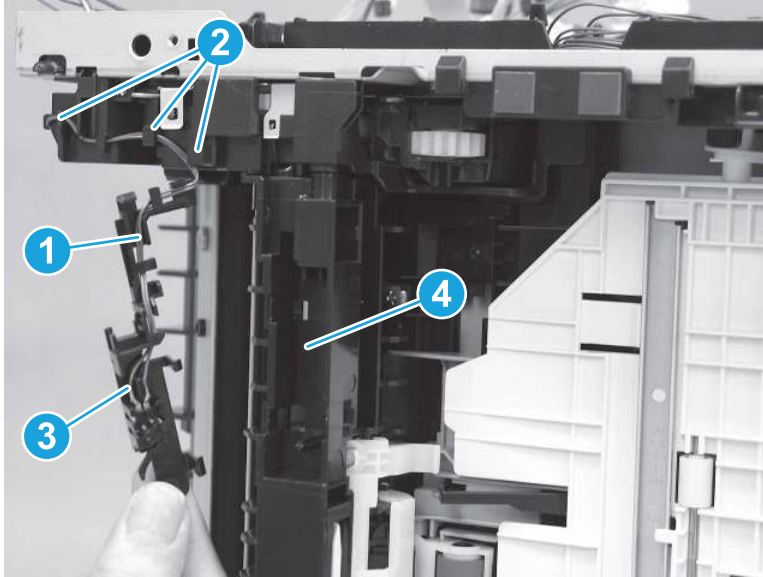
2. Pass the cables (callout 1) on the tray sensor switch up through the printer frame.

**Figure 5-1395** Install the tray sensor switch cable



3. Install the cables (callout 1) in the cable guide (callout 2), and then install the tray sensor switch (callout 3) on the lifter drive assembly (callout 4).

Figure 5-1396 Install the tray sensor switch



## Removal and replacement: Memory PCA

Learn how to remove and replace the memory printed-circuit assembly (PCA).

[View a video of removing and replacing the memory printed-circuit assembly \(PCA\).](#)

Mean time to repair: 18 minutes (SFP)

Service level: Easy (SFP)

Mean time to repair: 35 minutes (MFP)

Service level: Medium (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](http://www.hp.com/buy/parts).

Table 5-43 Part information

Part number	Part description
RM3-7245-000CN	Memory PCA

### 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

Make sure that the printer initializes to a **Ready** state.


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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-1397** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

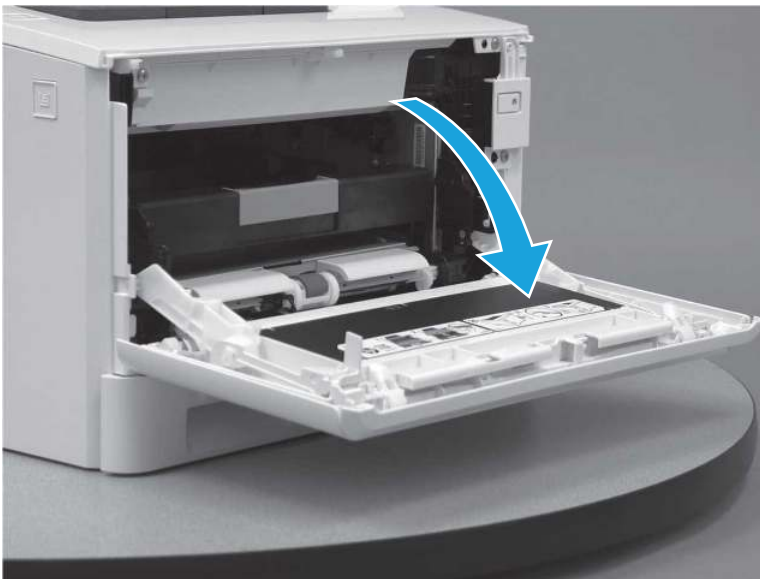
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-1398** Release the front door



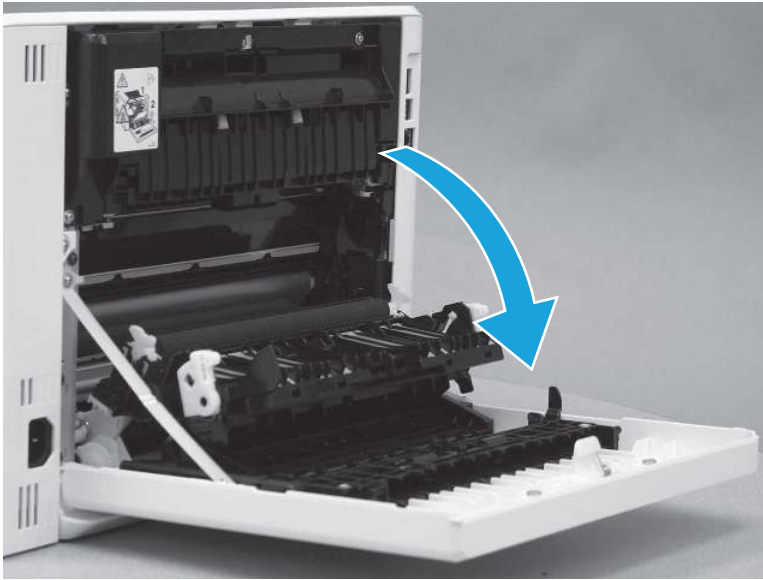
2. Open the front door.

**Figure 5-1399** Open the front door



3. Open the duplexing door.

**Figure 5-1400** Open the duplexer door

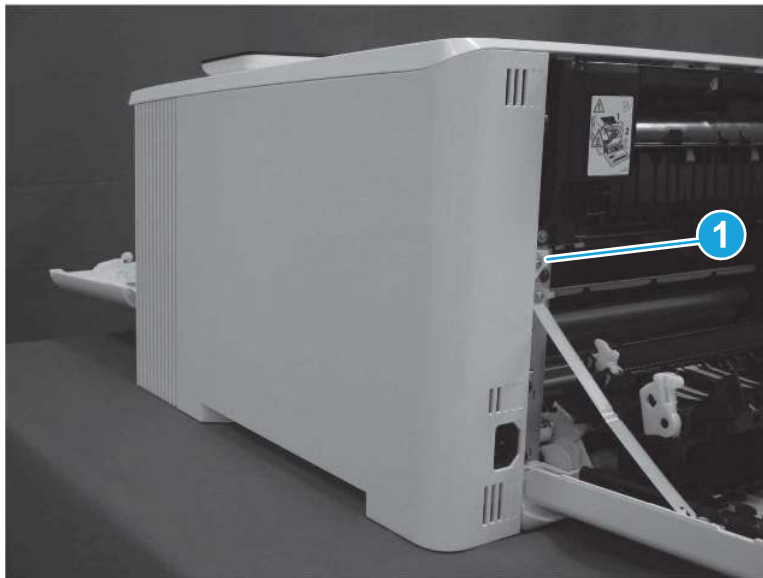


### 3. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

1. At the back of the printer, remove one screw (callout 1).

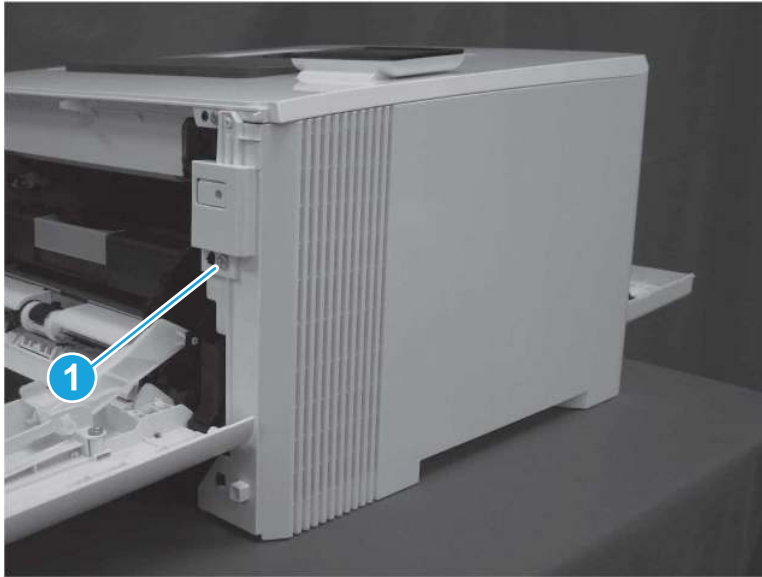
**Figure 5-1401** Remove one screw





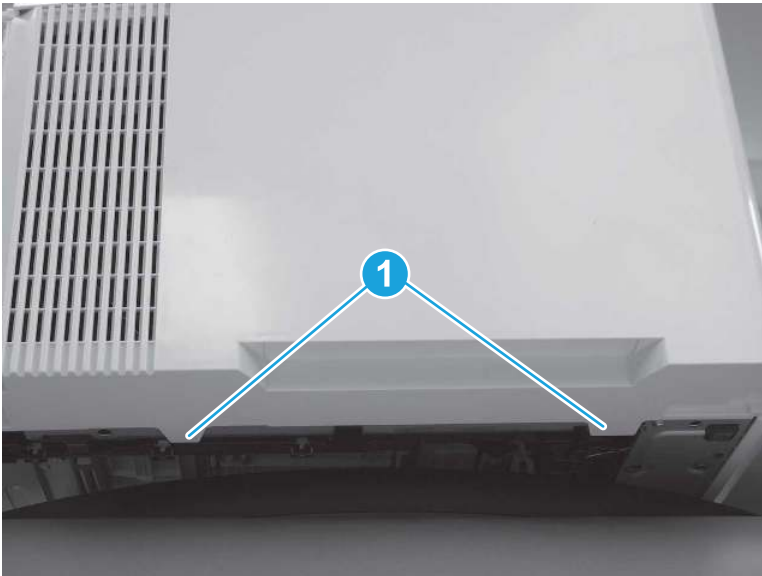
2. At the front of the printer, remove one screw (callout 1).

Figure 5-1402 Remove one screw



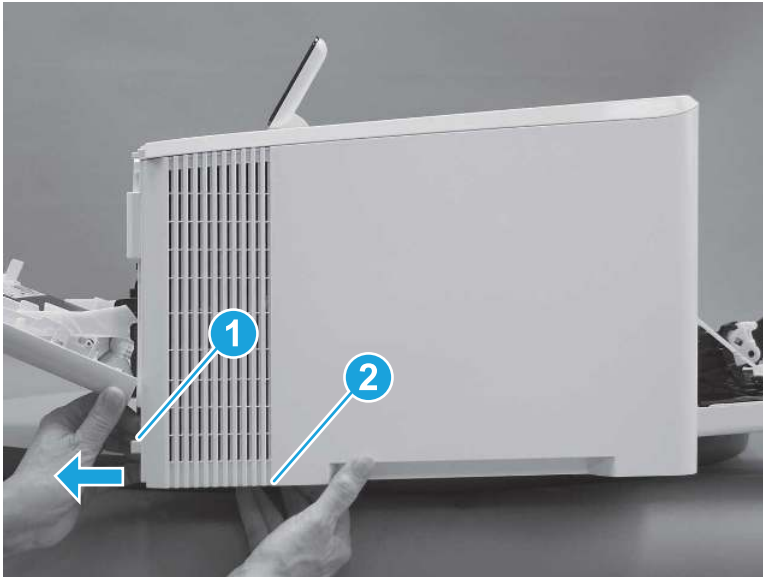
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

Figure 5-1403 Locate the tabs



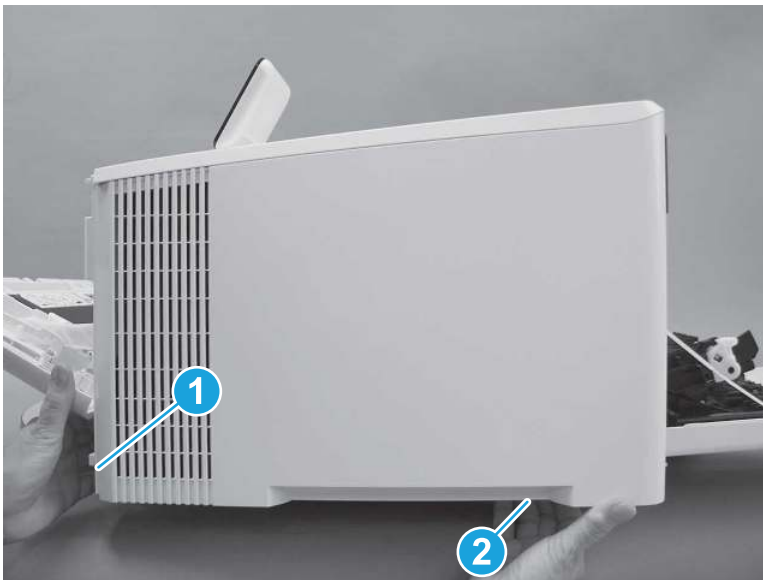
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

Figure 5-1404 Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

Figure 5-1405 Release lower rear tab



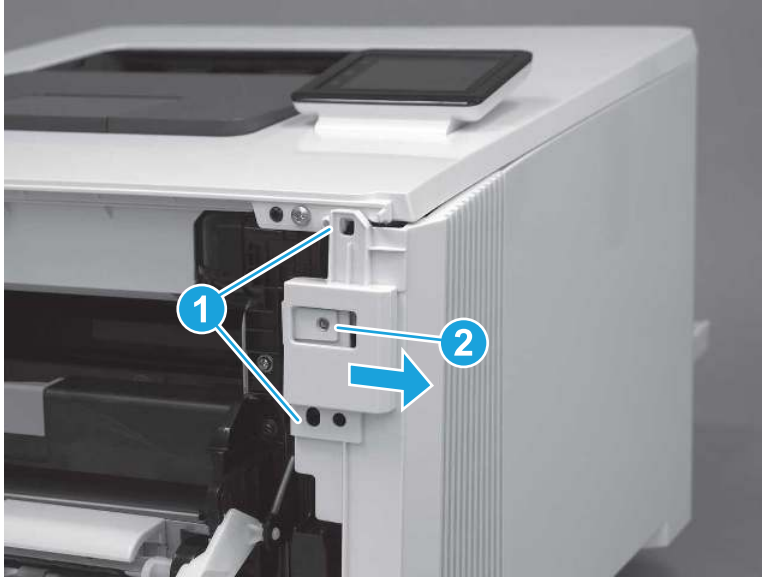
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

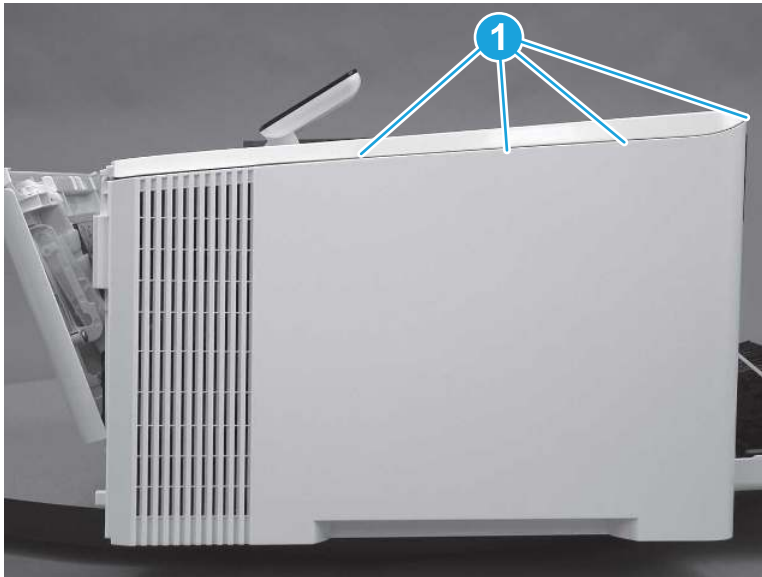
---

Figure 5-1406 Release two front tabs



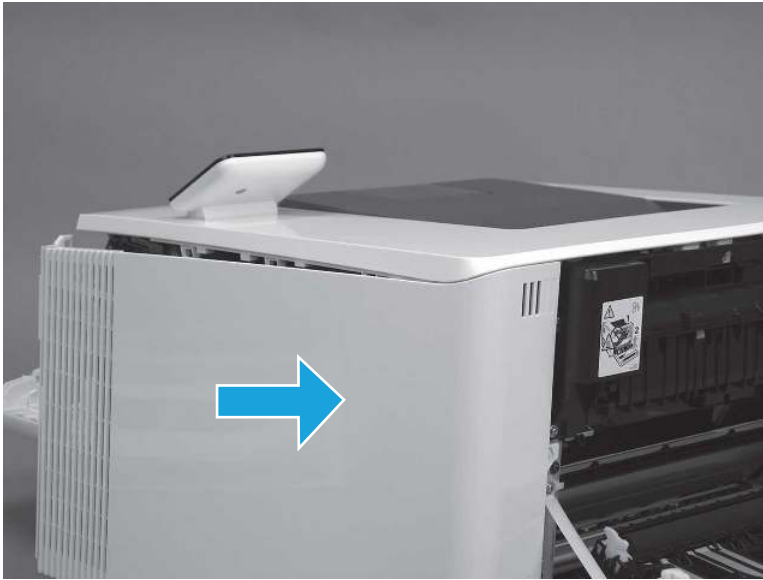
7. Release four tabs on the top of the printer (callout 1).

Figure 5-1407 Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-1408** Remove the right cover



#### 4. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

**Figure 5-1409** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-1410** Remove one screw



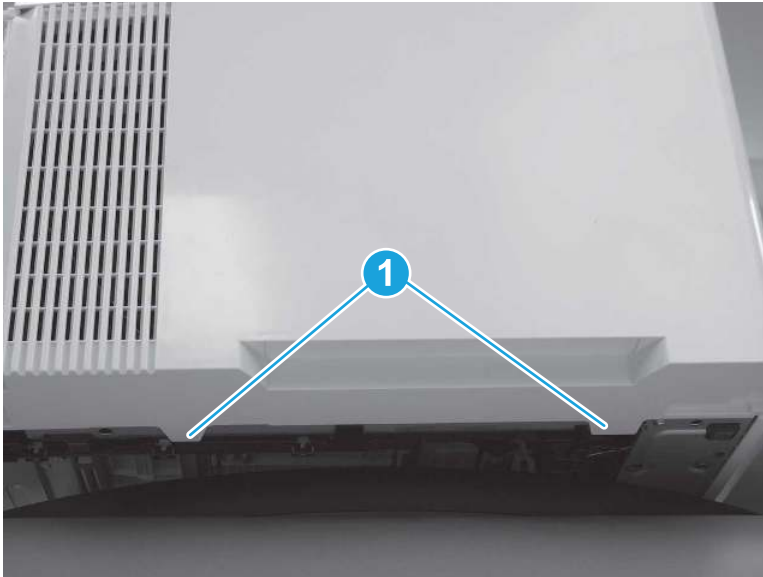
3. At the front of the printer, remove one screw (callout 1).

**Figure 5-1411** Remove one screw



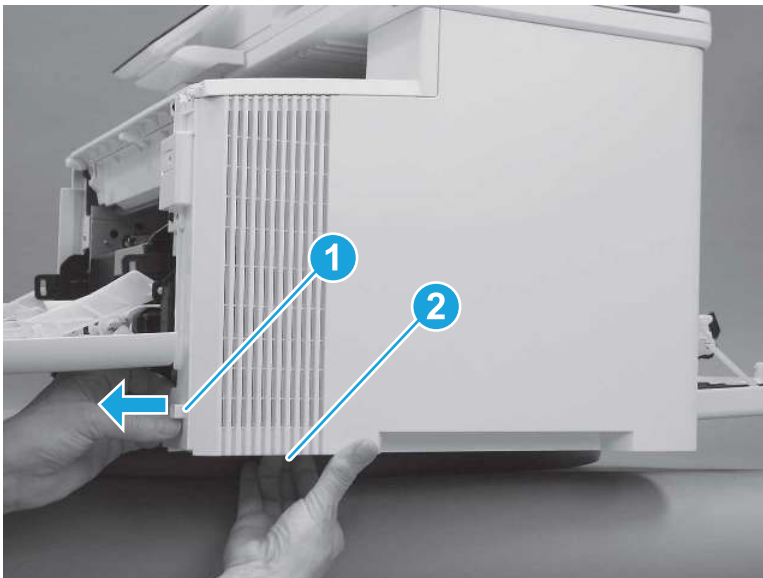
- Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1412** Locate the tabs



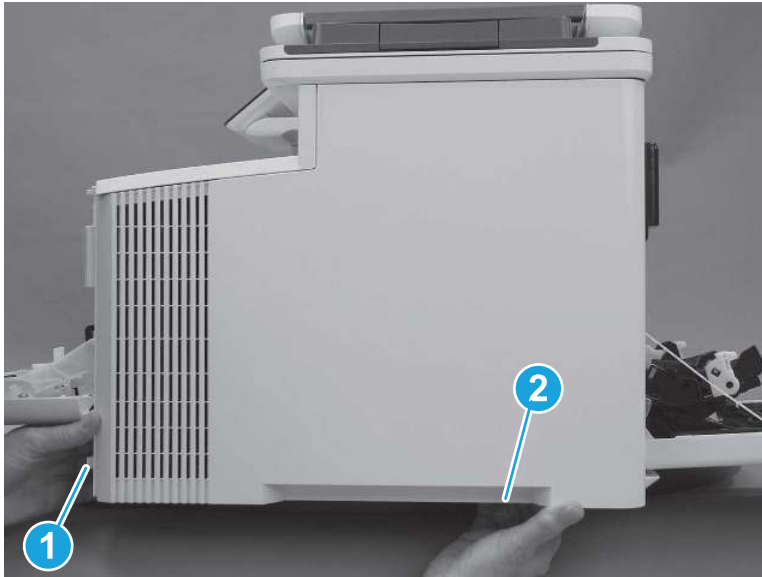
- Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-1413** Release front lower tabs



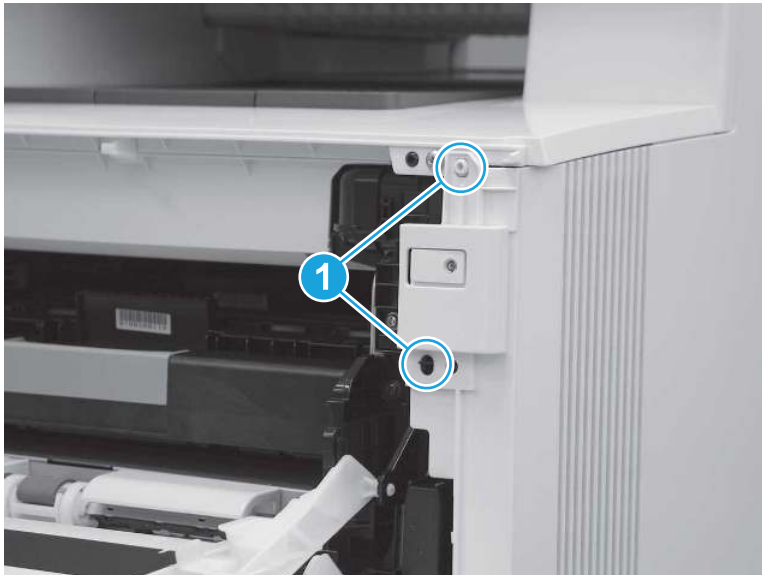
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-1414** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-1415** Release front upper tabs



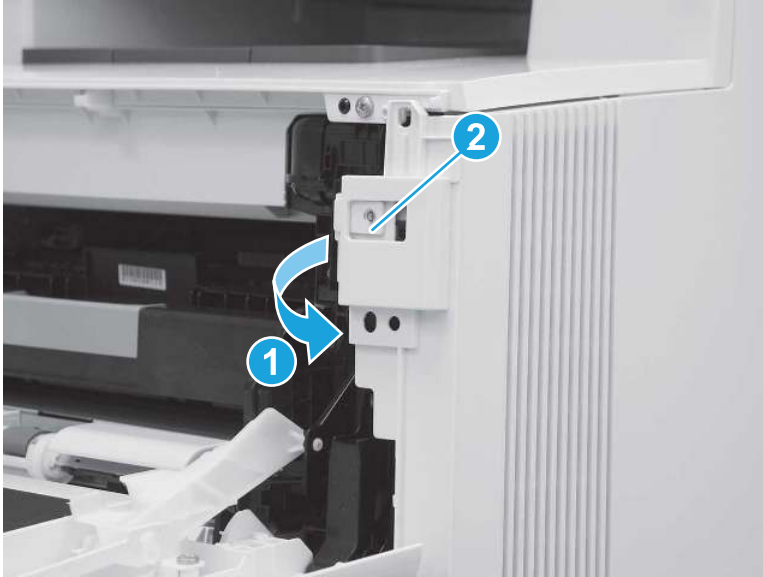
8. Rotate the front of the cover away from the printer (callout 1).

---

**CAUTION:** Be careful not to dislodge the power switch (callout 2).

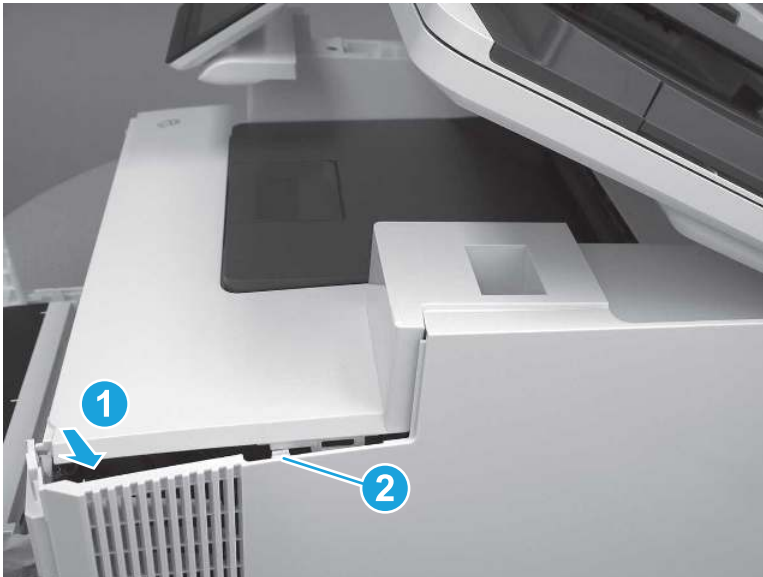
---

**Figure 5-1416** Rotate the front of the cover



9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

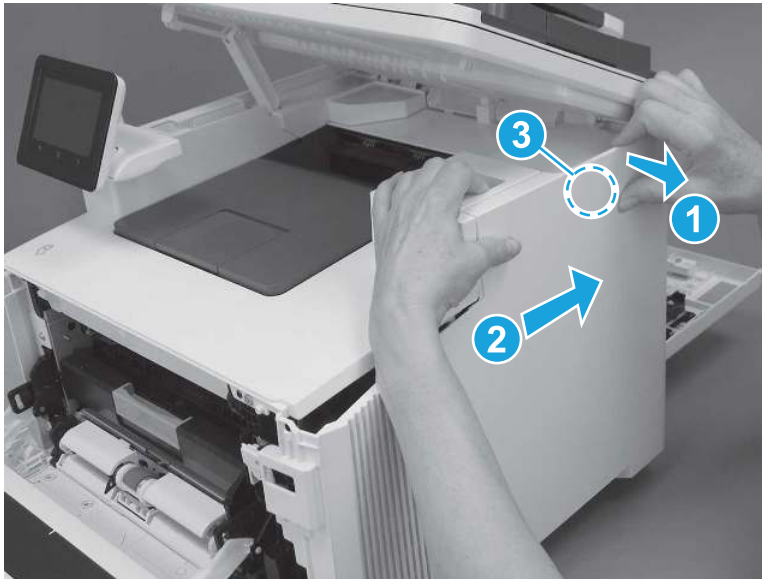
**Figure 5-1417** Release top tabs





10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-1418** Release one tab and one hook



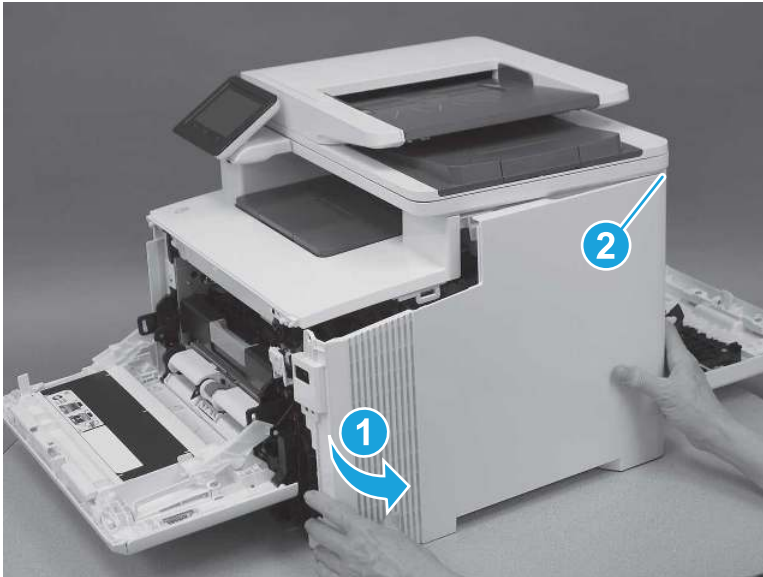
11. Lower the scanner.

**Figure 5-1419** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-1420** Remove the right cover

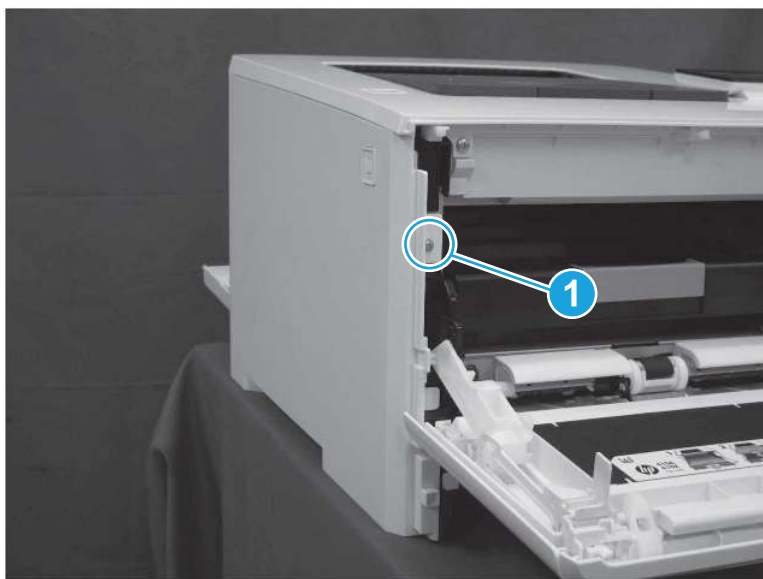


## 5. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

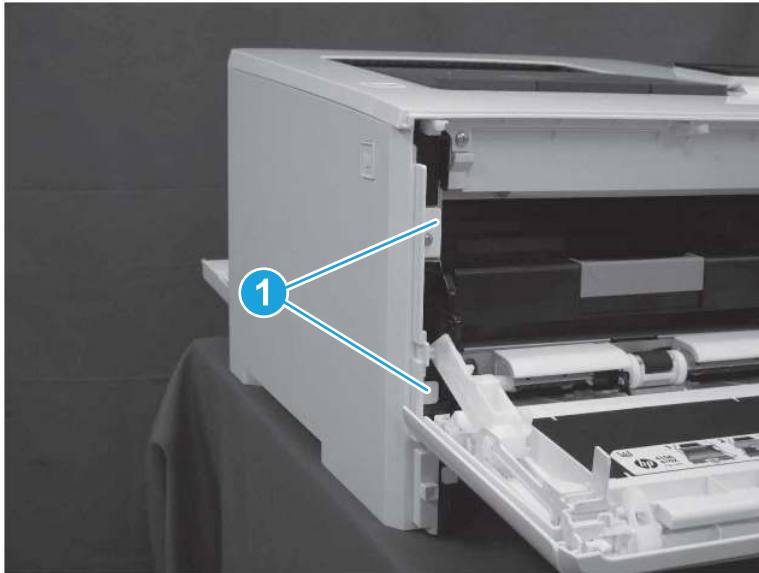
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-1421** Remove one screw



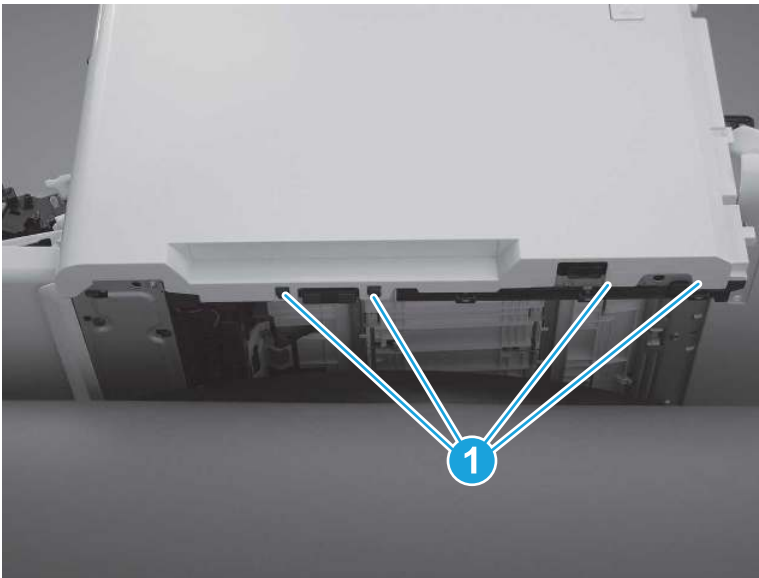
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-1422** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1423** Locate the tabs



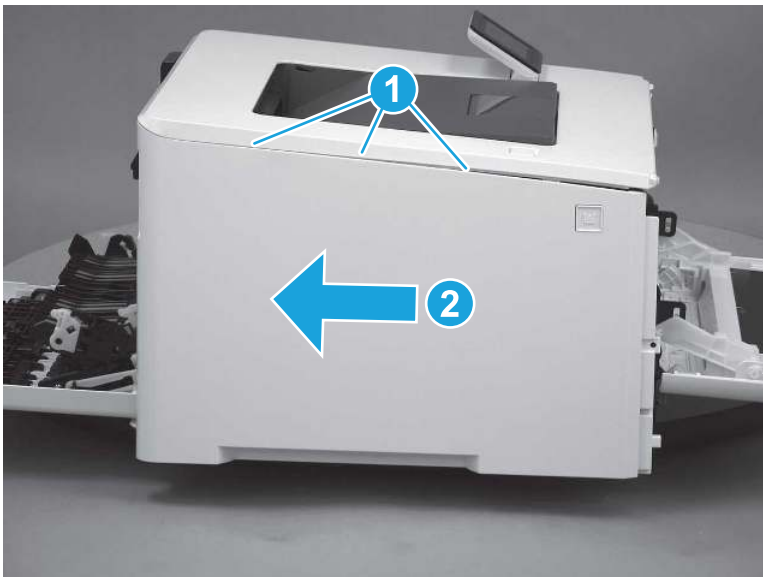
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-1424 Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

Figure 5-1425 Release three tabs



## 6. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

1. Raise the scanner.

Figure 5-1426 Raise the scanner



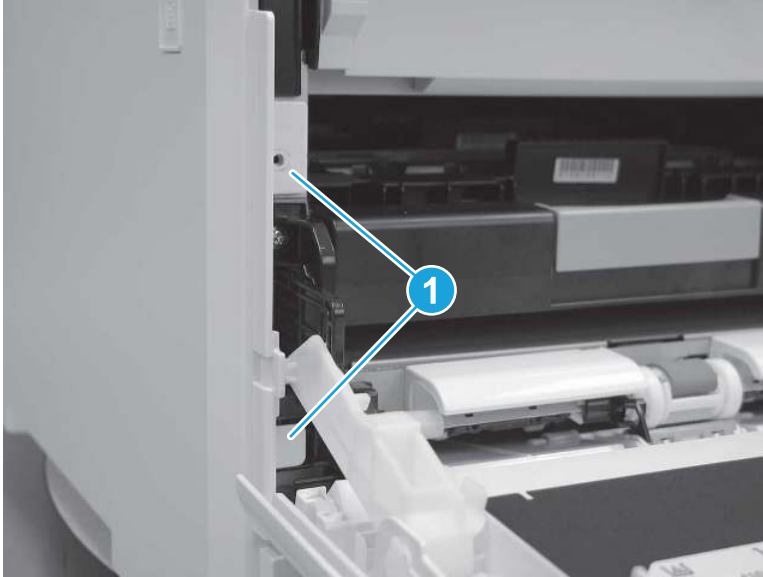
2. At the front of the printer, remove one screw (callout 1).

Figure 5-1427 Remove one screw



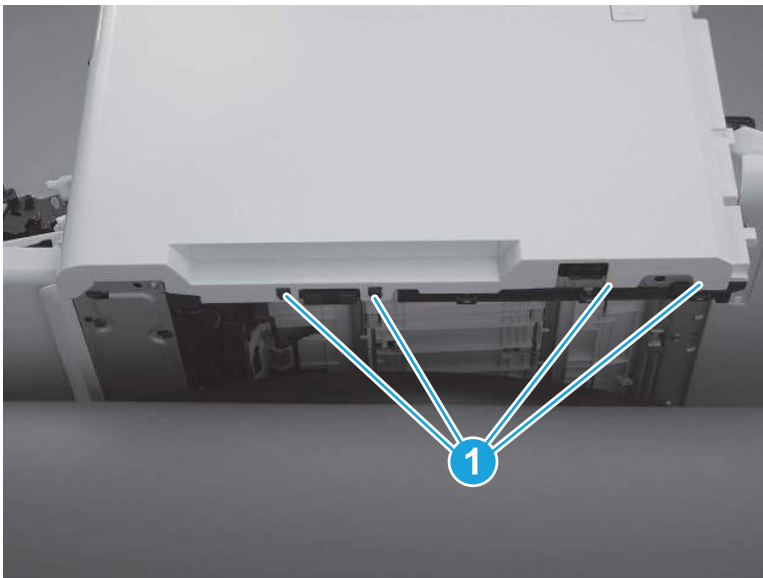
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-1428** Release two tabs



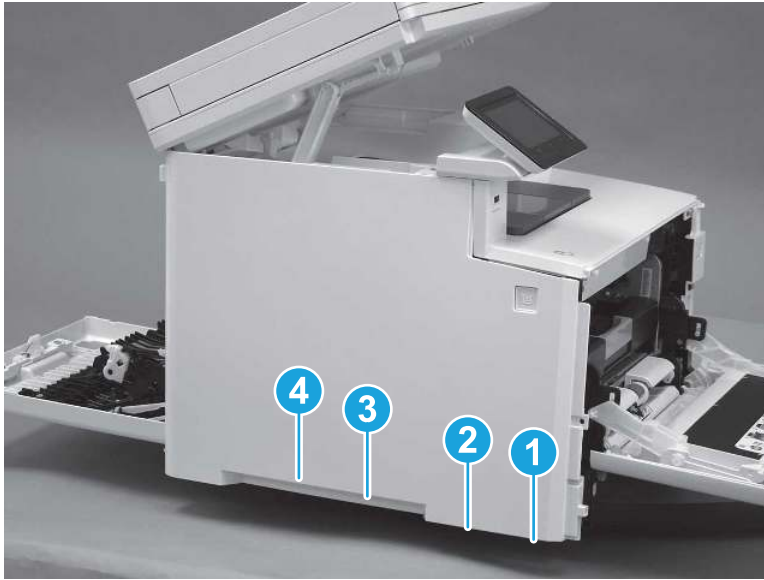
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1429** Locate the tabs



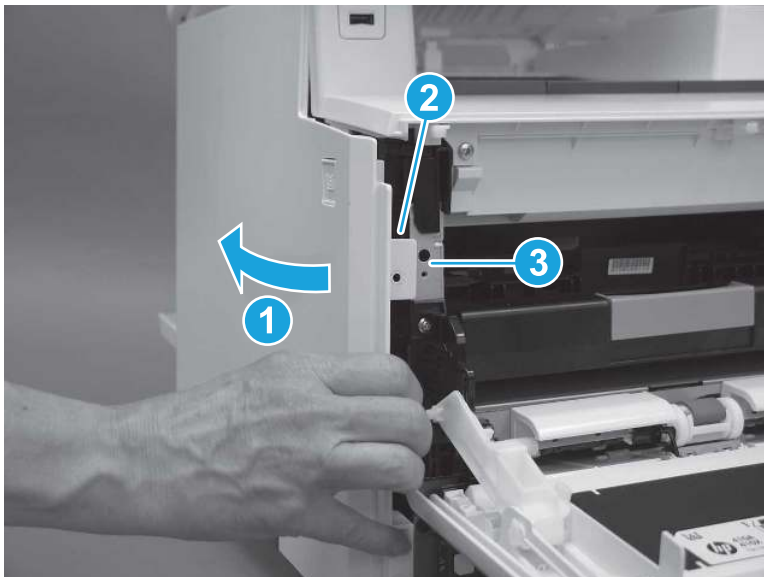
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-1430 Release four tabs



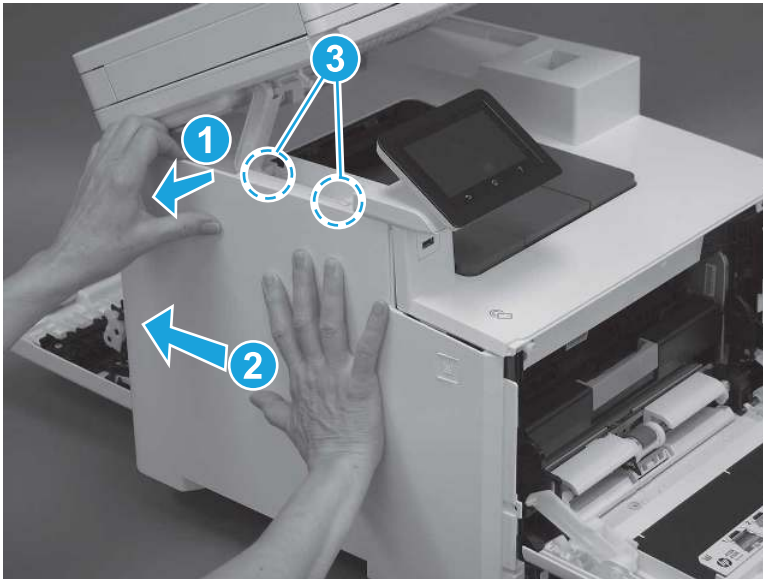
6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

Figure 5-1431 Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-1432** Release one tab and two hooks



8. Lower the scanner.

**Figure 5-1433** Lower the scanner





9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

**Figure 5-1434** Remove the left cover




## 7. Remove the control panel display and mount base (MFP only)

Follow these steps to remove the control panel display and mount base (MFP only).

1. Open the integrated scanner assembly (ISA).

---

 **NOTE:** The ISA might already have been removed. If so, skip ISA related steps.

If the control panel is not fully tilted forward, tilt it forward now until it stops.

---

**Figure 5-1435** Open the ISA



2. Remove one screw (callout 1).

**Figure 5-1436** Remove one screw



3. Use a small flat-blade screwdriver to release two tabs (callout 1) on the control-panel mount cover.

**Figure 5-1437** Release two tabs



4. Rotate the control-panel mount cover up towards the control panel to release it, and then remove the cover.

**Figure 5-1438** Remove the cover



5. Remove one grounding screw (callout 1), and then move the ground cable (callout 2) out of the way.

**Figure 5-1439** Remove one screw



6. Disconnect two FFC (callout 1).

Figure 5-1440 Disconnect two FFC



7. Release one tab (callout 1), and then remove the interconnect board (ICB).

Figure 5-1441 Remove the ICB



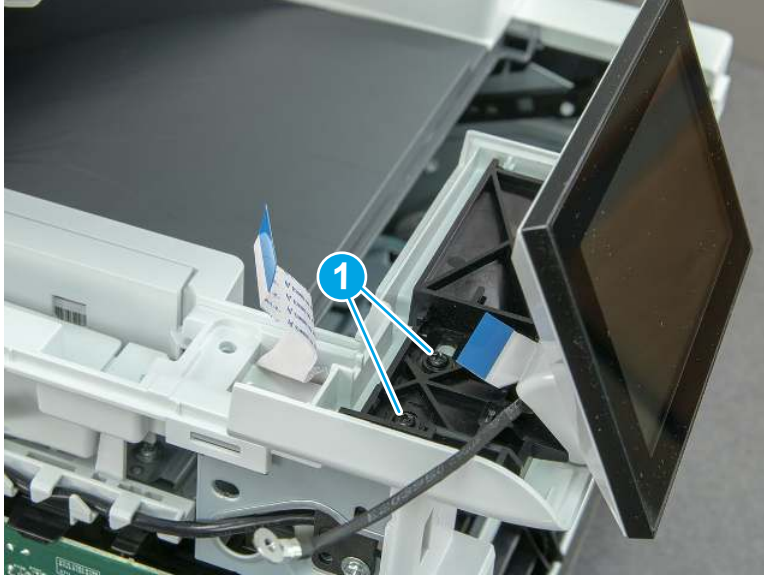
8. Remove two screws (callout 1), and then lift the control panel display and mount base together to remove them.

---

**⚠ CAUTION:** Carefully unfold the FFC and release it through the opening in the mount base.

---

Figure 5-1442 Remove two screws and remove the control panel assembly

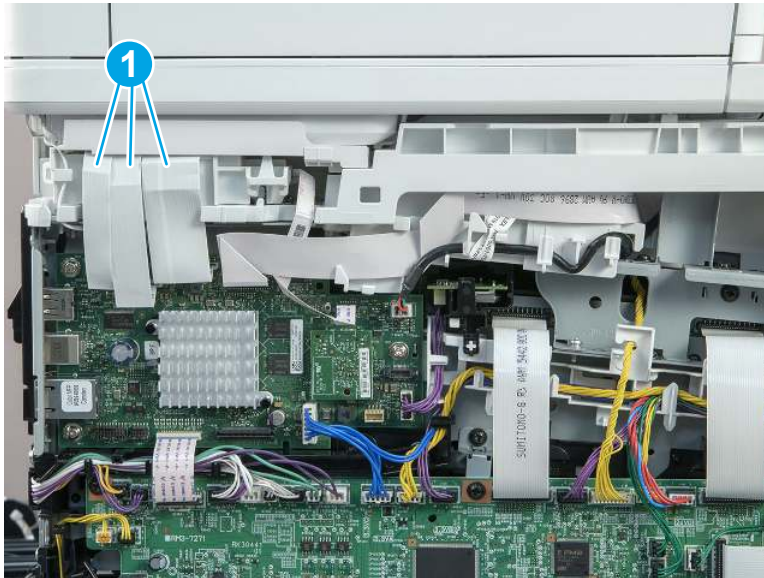


## 8. Remove the integrated scanner assembly

(MFP)

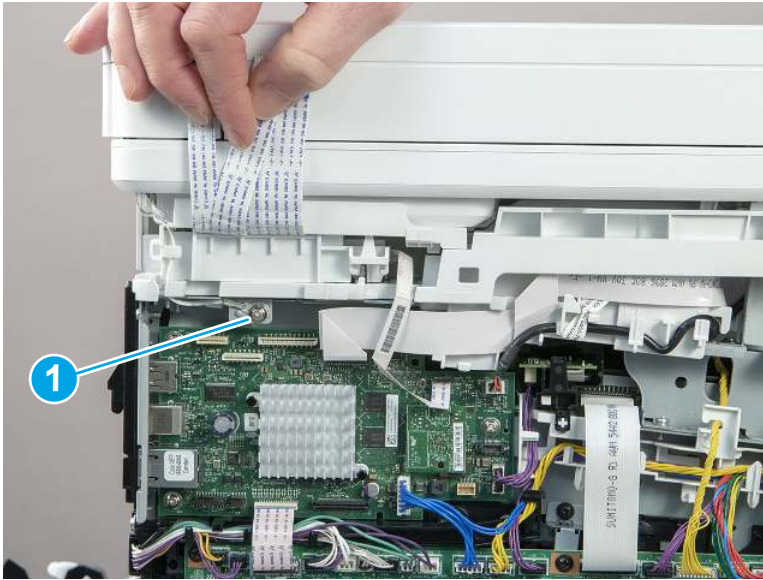
1. On the left side of the printer, disconnect three connectors (callout 1).

Figure 5-1443 Disconnect three connectors



2. Raise the scanner cables up, and then remove one screw (callout 1) to release the ground wire.

**Figure 5-1444** Remove one screw and release the ground wire



3. Raise the scanner.

**Figure 5-1445** Raise the scanner



4. With the scanner lifted, release the tab (callout 1) on the scanner support arm pin from the slot and rotate the pin in the direction indicated.

**Figure 5-1446** Release scanner support arm pin



5. Remove the scanner arm pin.

---

**⚠ CAUTION:** Once the scanner arm pin is removed, support the scanner with one hand at all times so that it does not fall backwards off of the printer.

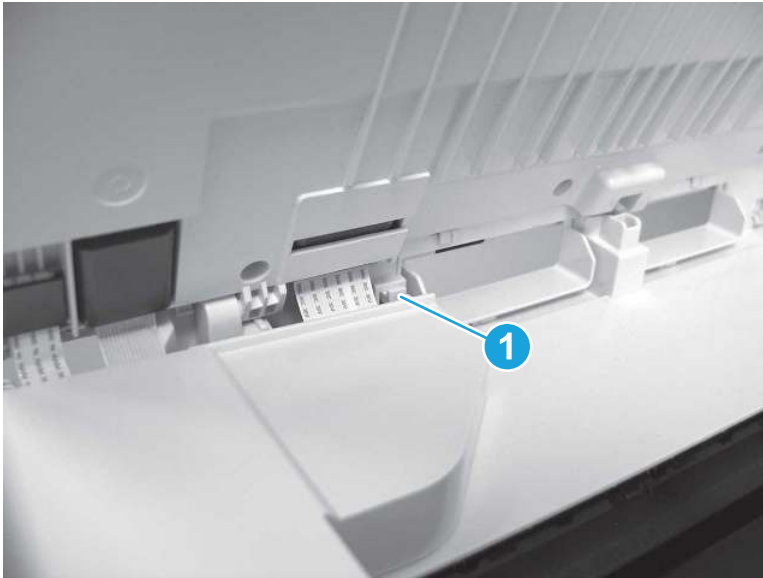
---

**Figure 5-1447** Remove the pin



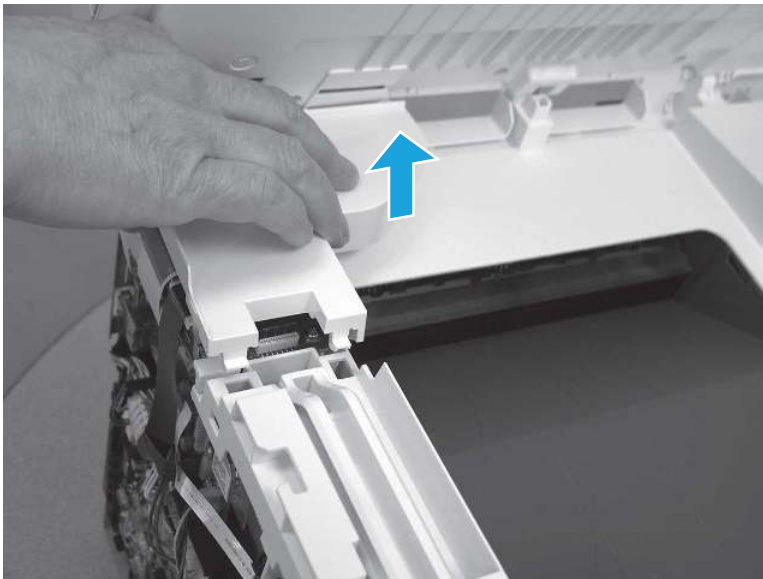
6. On the top of the printer, use a flat-blade screwdriver to release one tab (callout 1).

Figure 5-1448 Release one tab



7. Remove the scanner cable cover.

Figure 5-1449 Remove the scanner cable cover





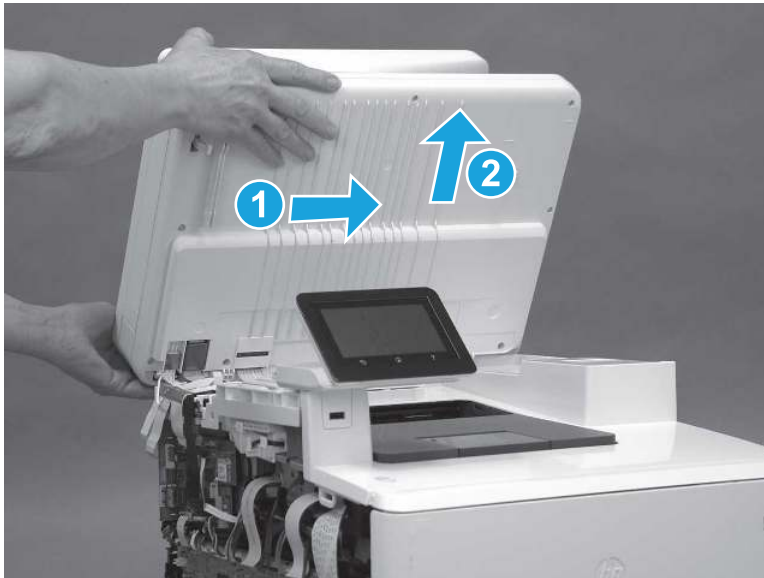
8. The scanner cables (callout 1) are held in place on the top cover with double-sided tape. Carefully release the cables from the top cover.

**Figure 5-1450** Release the cables



9. Open the scanner assembly fully, slide the assembly toward the right side of the printer, and then lift the assembly off of the printer.

**Figure 5-1451** Remove the scanner assembly

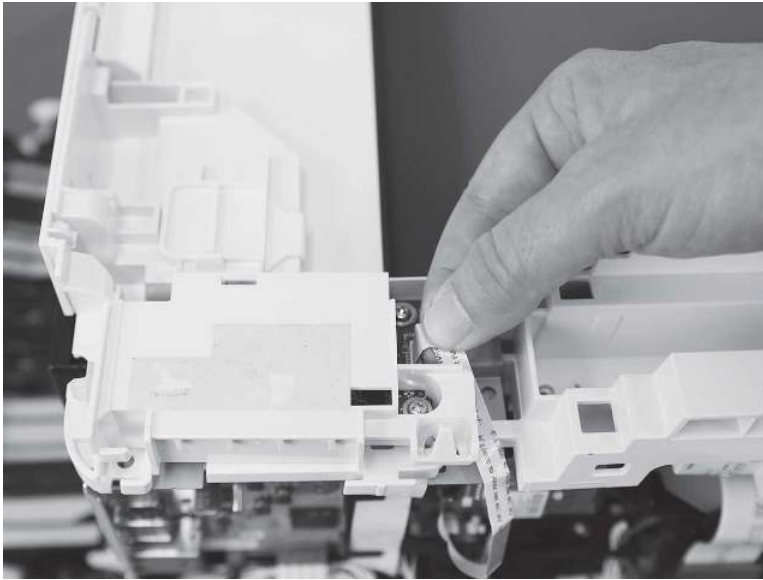


## 9. Remove the fax PCA (MFP)

Follow these steps to remove the fax PCA (MFP).

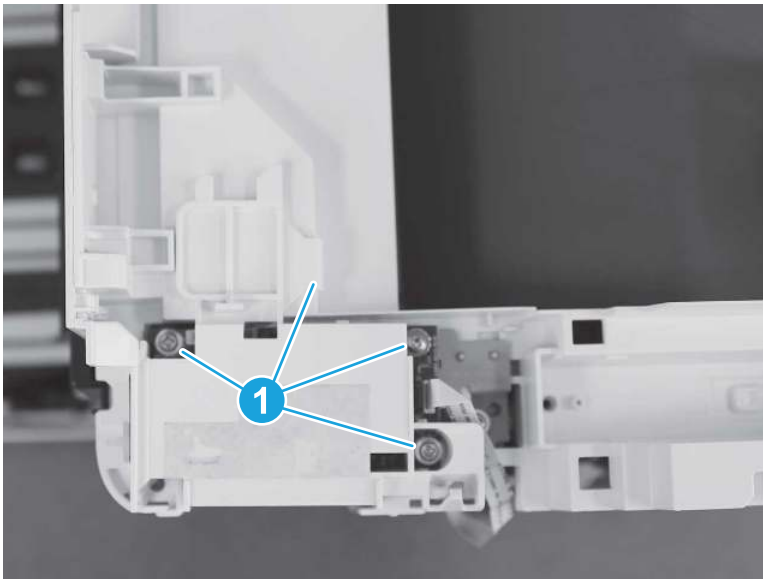
1. Disconnect one FFC cable from fax PCA.

**Figure 5-1452** Disconnect one connector



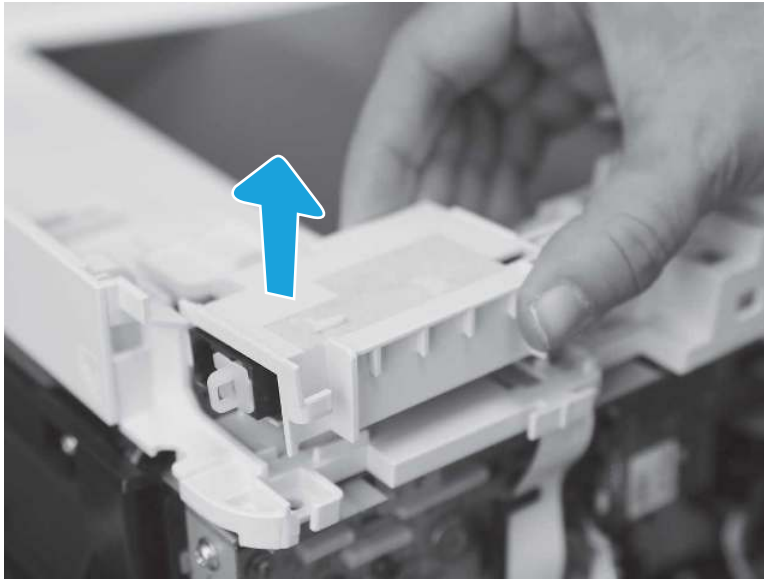
2. Remove three screws and release one tab (callout 1).

**Figure 5-1453** Remove three screws and release one tab



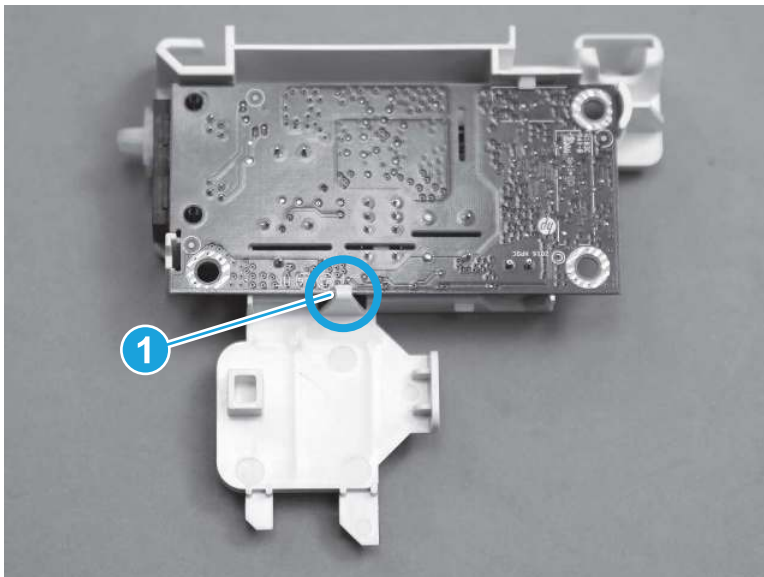
3. Lift up to remove the fax PCA.

**Figure 5-1454** Lift up to remove the fax PCA



4. **Optional step:** Release the tab (callout 1) on the back of the fax PCA to remove the PCA from the plastic holder.

**Figure 5-1455** Release one tab on the back of the fax PCA



## 10. Remove the top cover (SFP)

Follow these steps to remove the top cover (SFP).

1. On the left side of the printer, on the formatter, disconnect one connector (callout 1).

---

 **NOTE:** The formatter may look slightly different than what is shown below, however the removal procedures are the same.

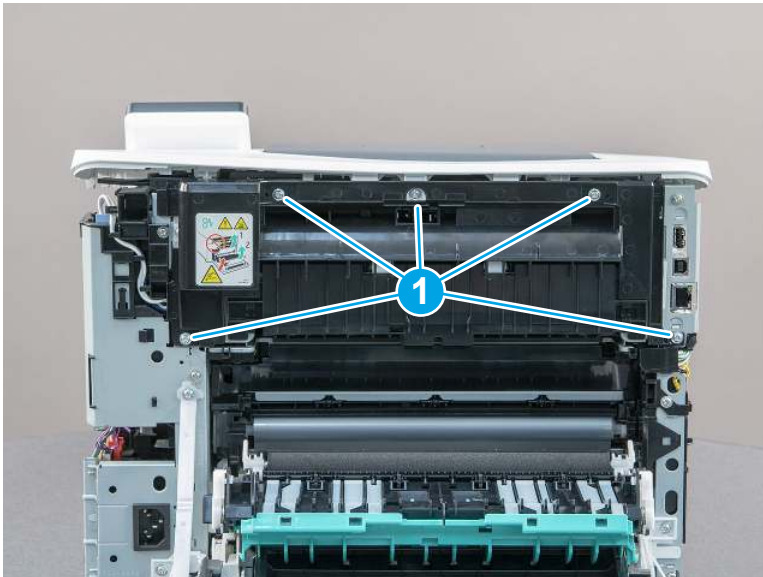
---

Figure 5-1456 Disconnect one connector



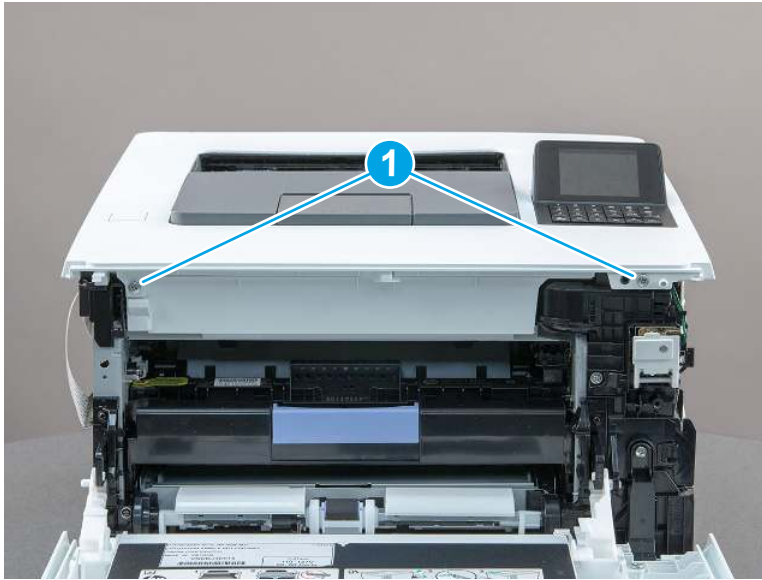
2. At the back of the printer, remove five screws (callout 1), and then remove the fuser cover.

Figure 5-1457 Remove five screws



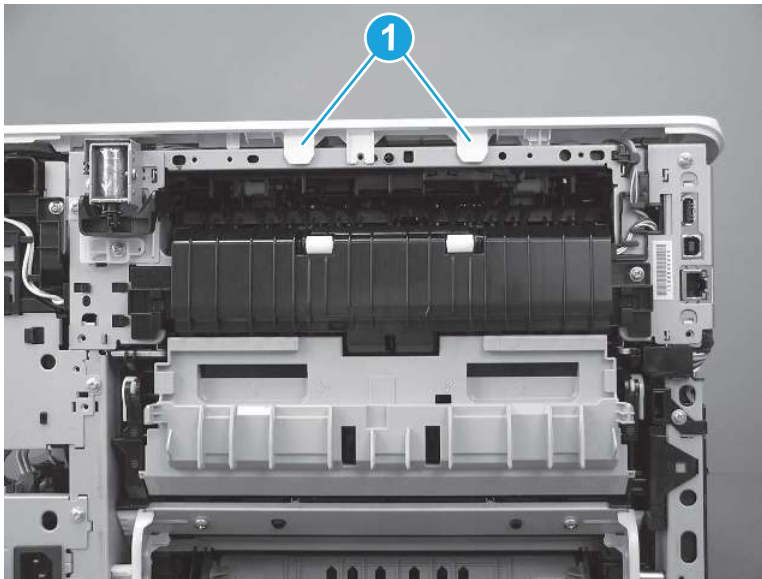
3. At the front of the printer, remove two screws (callout 1).

**Figure 5-1458** Remove two screws



4. Lift the front of the top cover up and release two tabs at the back of the printer (callout 1).

**Figure 5-1459** Lift the top cover and release two tabs



5. Remove the top cover.



**NOTE:** For a replacement cover install, remove the control panel from the discarded cover and install it on the replacement cover.

Figure 5-1460 Remove the top cover

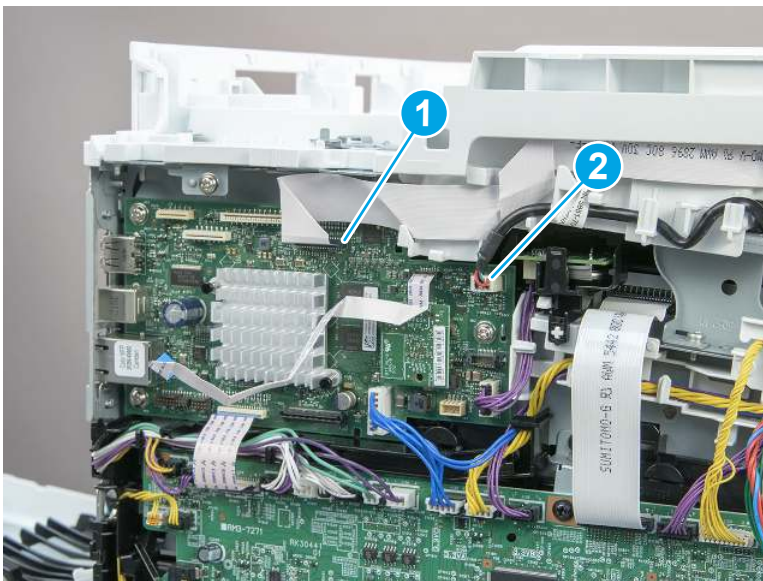


## 11. Remove the top cover (MFP)

Follow these steps to remove the top cover (MFP).

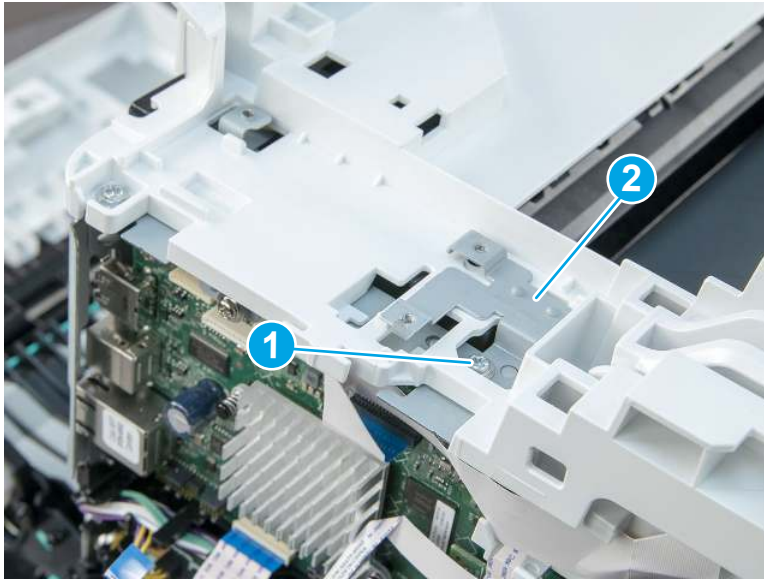
1. Disconnect one FFC (callout 1) and one connector (callout 2).

Figure 5-1461 Disconnect one FFC and one connector



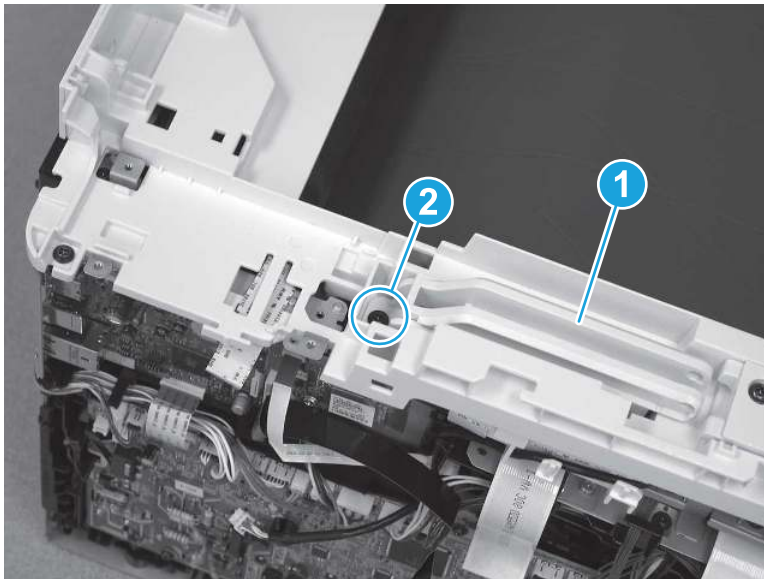
2. On the top cover, remove one screw (callout 1) and the sheet metal plate (callout 2).

**Figure 5-1462** Remove one screw and the sheet metal plate



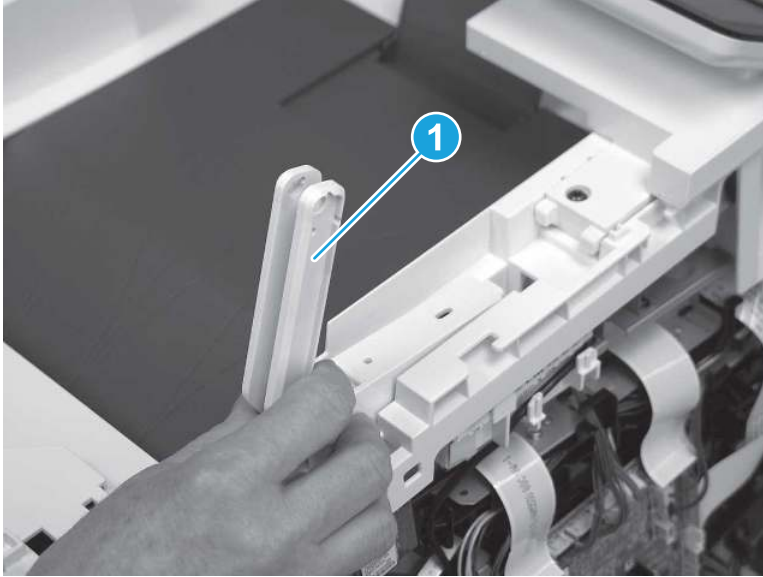
3. At the top of the printer, lower the scanner support arm (callout 1), and then remove one screw (callout 2).

**Figure 5-1463** Lower the support arm and remove one screw



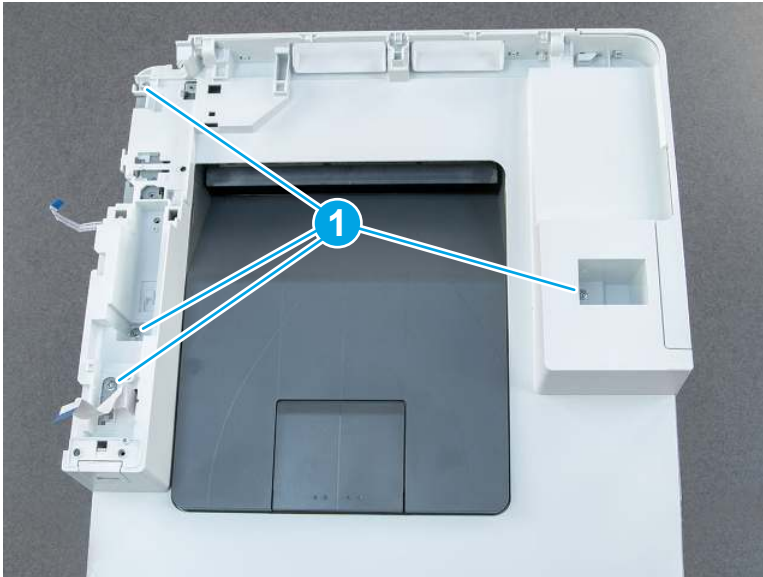
4. Remove the scanner support arm (callout 1).

Figure 5-1464 Remove the scanner support arm



5. At the top of the printer, remove four screws (callout 1).

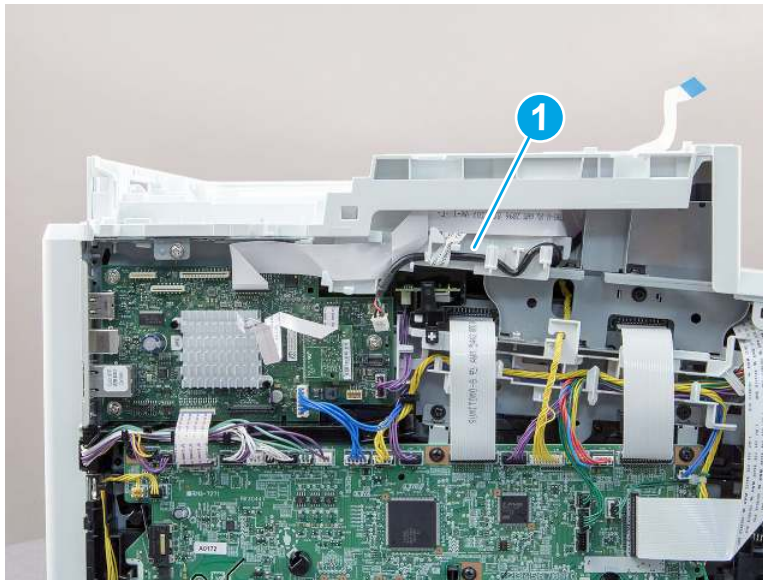
Figure 5-1465 Remove four screws





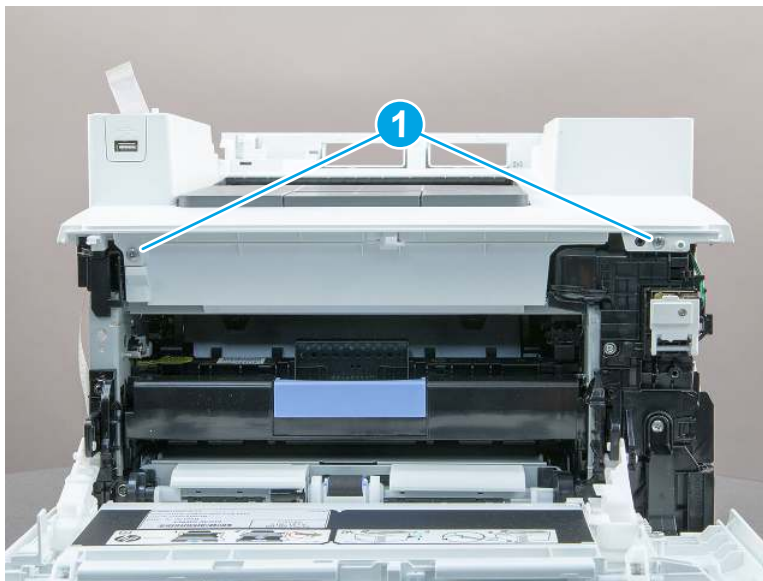
6. Remove the USB cable (callout 1) from the cable guides.

**Figure 5-1466** Release the USB cable



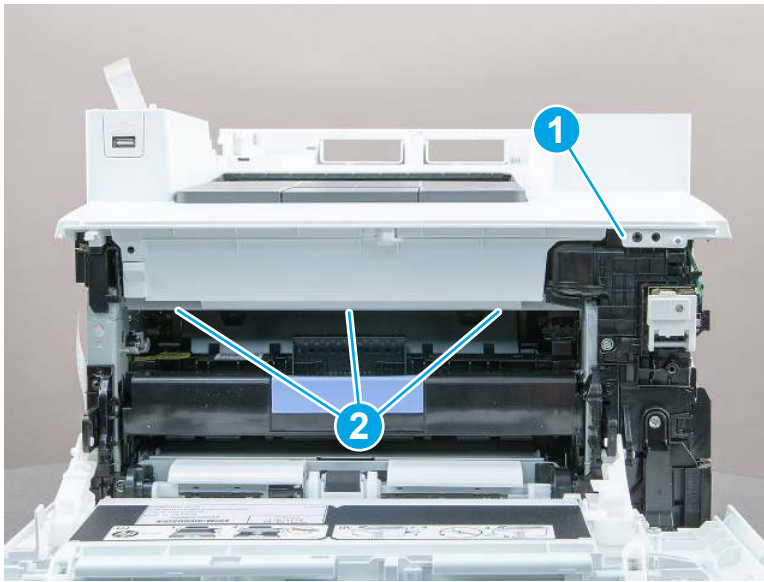
7. At the front of the printer, remove two screws (callout 1).

**Figure 5-1467** Remove two screws



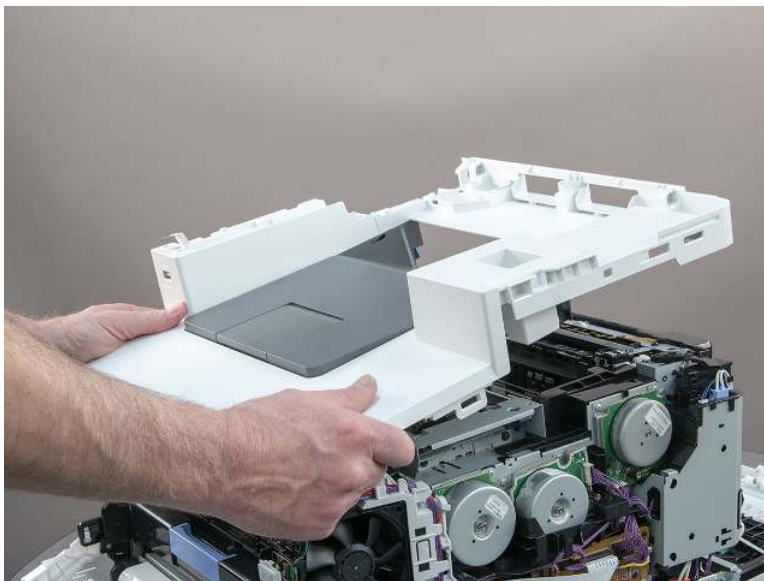
8. Release one retainer (callout 1), and then release three tabs (callout 2).

**Figure 5-1468** Release one retainer and three tabs



9. Remove the top cover.

**Figure 5-1469** Remove the top cover

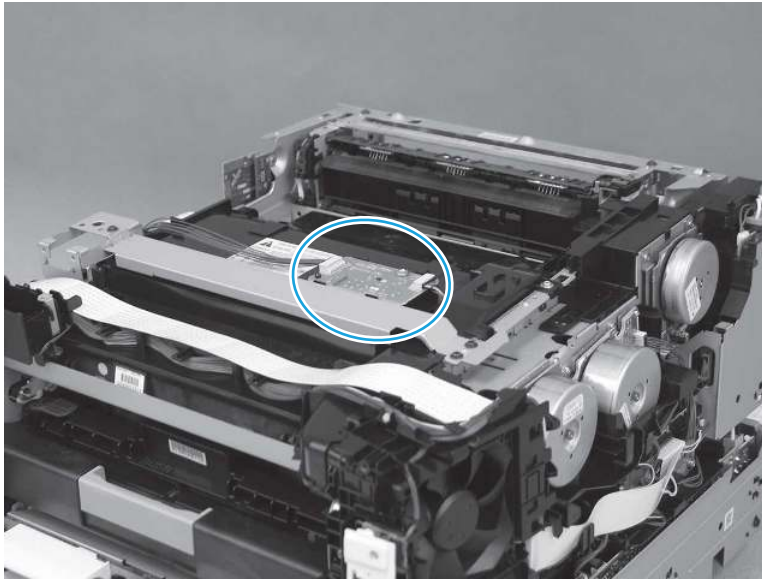


## 12. Remove the memory PCA

Follow these steps to remove the memory PCA.

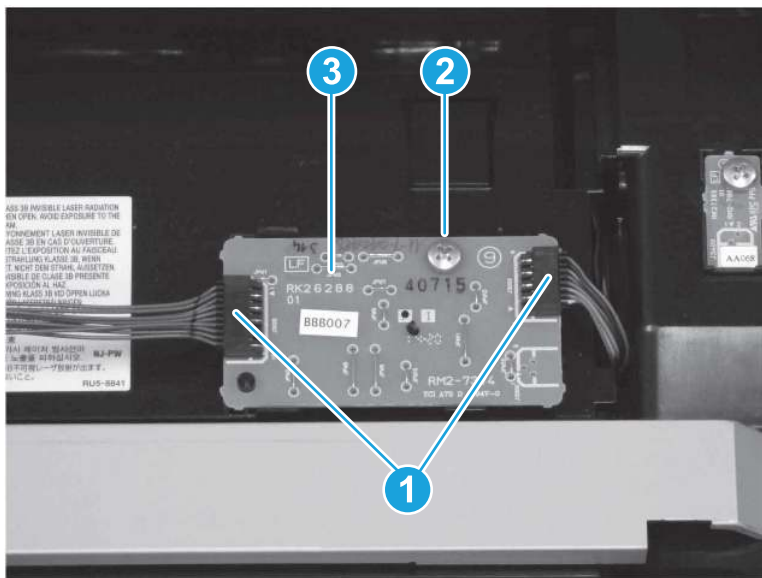
1. Locate the memory PCA on the top of the printer.

**Figure 5-1470** Locate the memory PCA



2. Disconnect two connectors (callout 1), remove one screw (callout 2), and then remove the memory PCA (callout 3).

**Figure 5-1471** Remove the PCA



### 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.

---

## Removal and replacement: Laser scanner assembly (SFP)

Learn how to remove and replace the laser scanner (SFP).

[View a video of removing and replacing the laser scanner \(SFP\).](#)

Mean time to repair: 32 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](http://www.hp.com/buy/parts).

**Table 5-44** Part information

Part number	Part description
RM2-5612-000CN	Laser scanner assembly

### Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- Small flat-blade screwdriver
- 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

Make sure that the printer initializes to a **Ready** state.


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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-1472** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

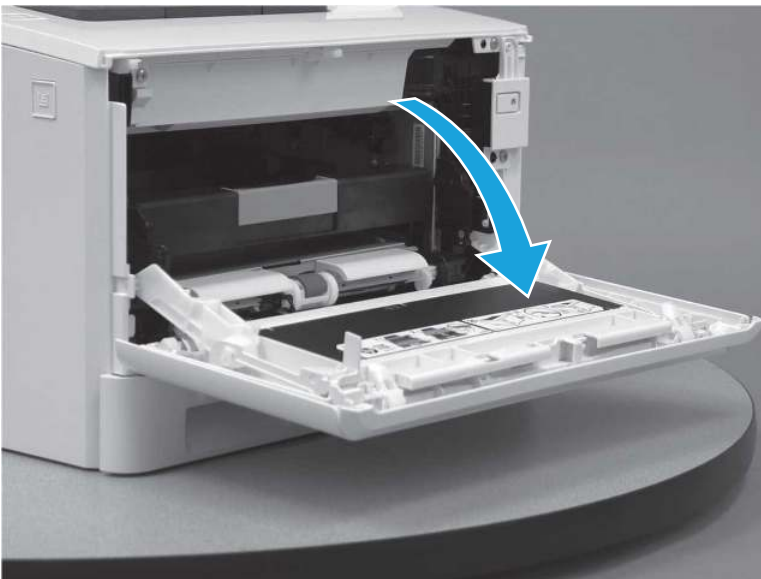
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-1473** Release the front door



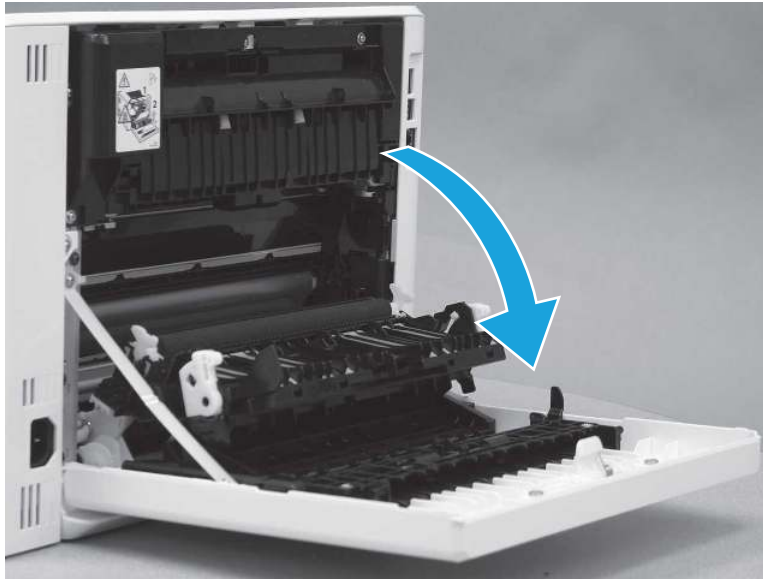
2. Open the front door.

**Figure 5-1474** Open the front door



3. Open the duplexing door.

**Figure 5-1475** Open the duplexer door



### 3. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

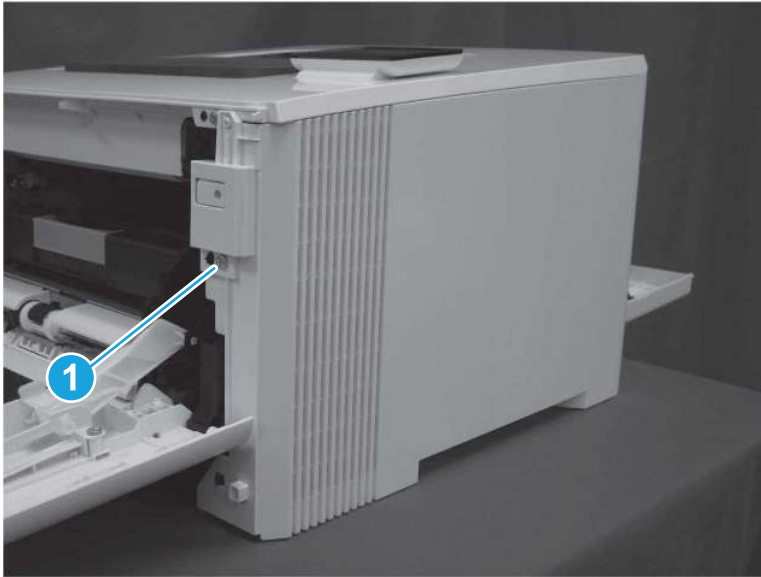
1. At the back of the printer, remove one screw (callout 1).

**Figure 5-1476** Remove one screw



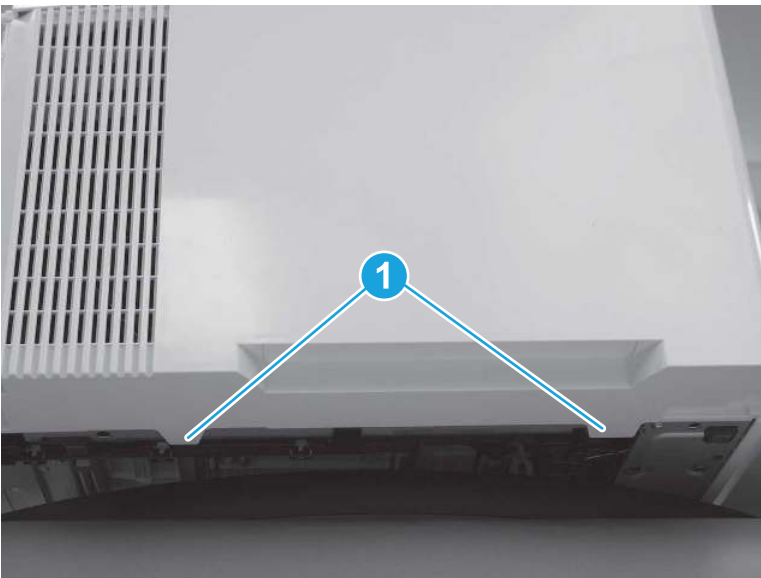
2. At the front of the printer, remove one screw (callout 1).

Figure 5-1477 Remove one screw



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

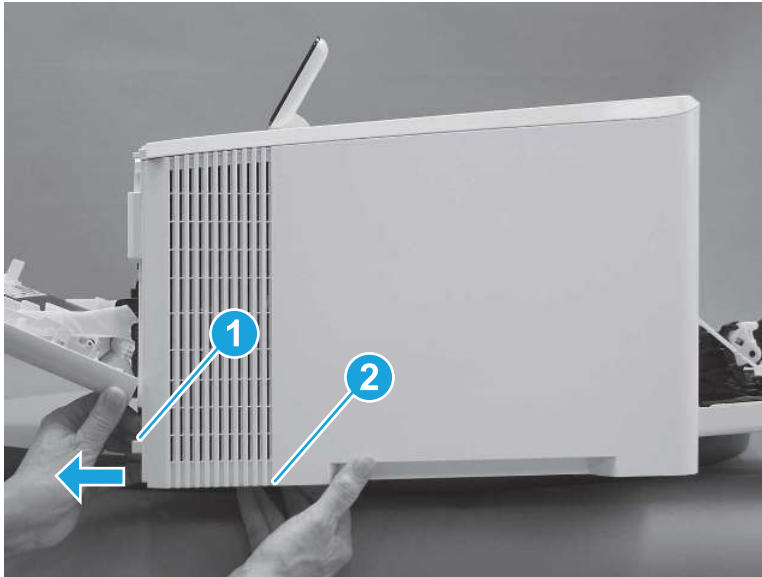
Figure 5-1478 Locate the tabs





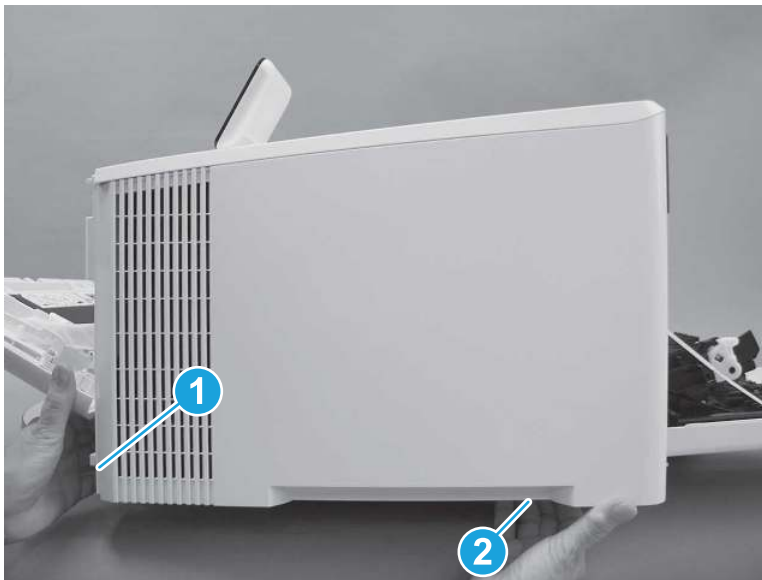
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-1479** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

**Figure 5-1480** Release lower rear tab



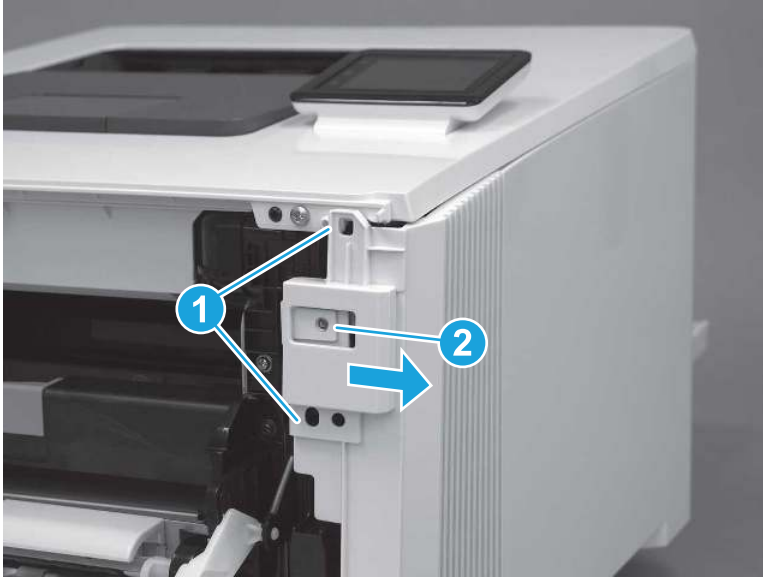
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

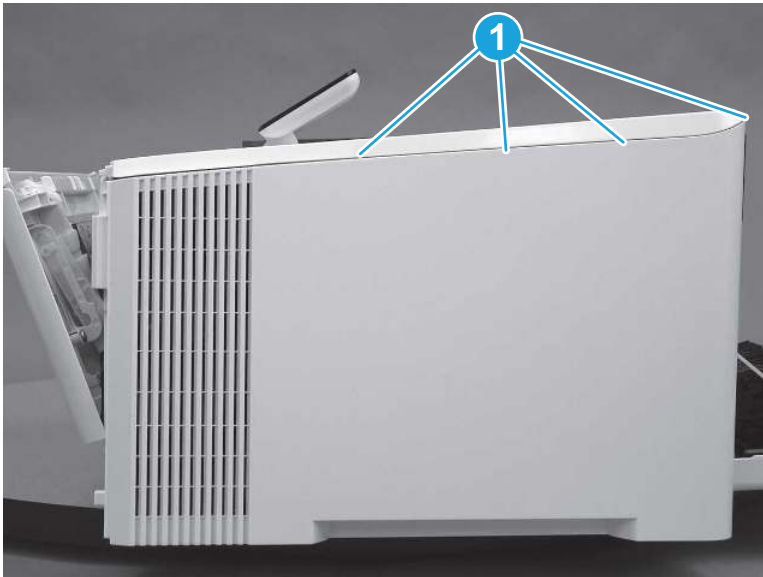
---

**Figure 5-1481** Release two front tabs



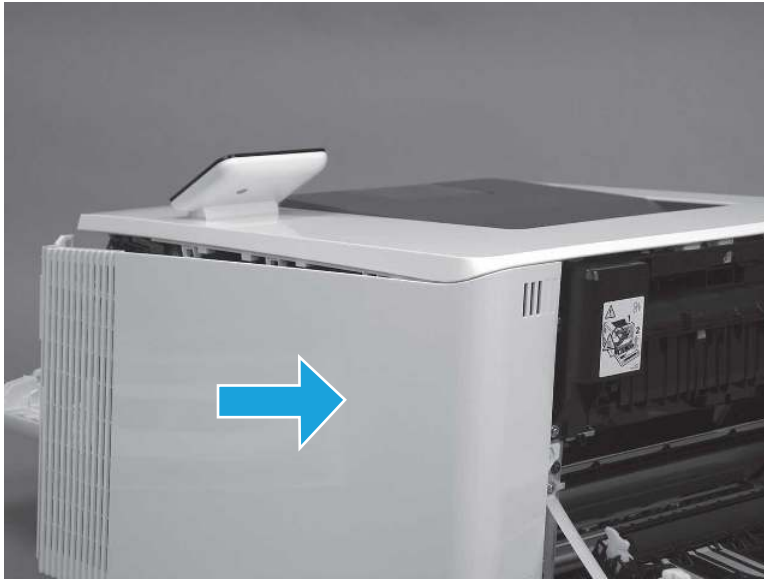
7. Release four tabs on the top of the printer (callout 1).

**Figure 5-1482** Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-1483** Remove the right cover

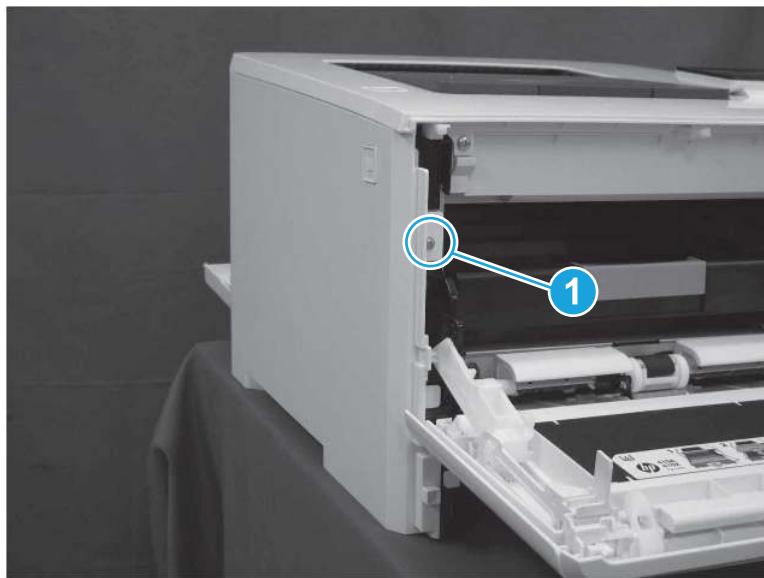


#### 4. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

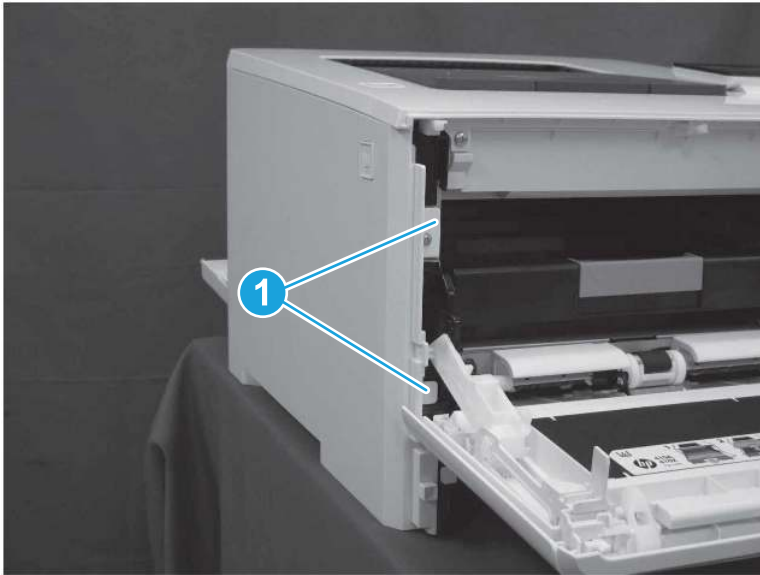
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-1484** Remove one screw



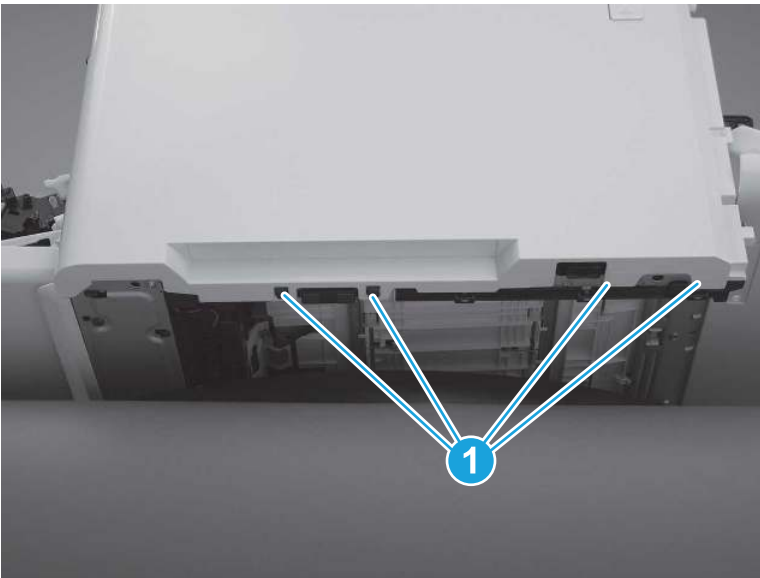
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-1485** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1486** Locate the tabs



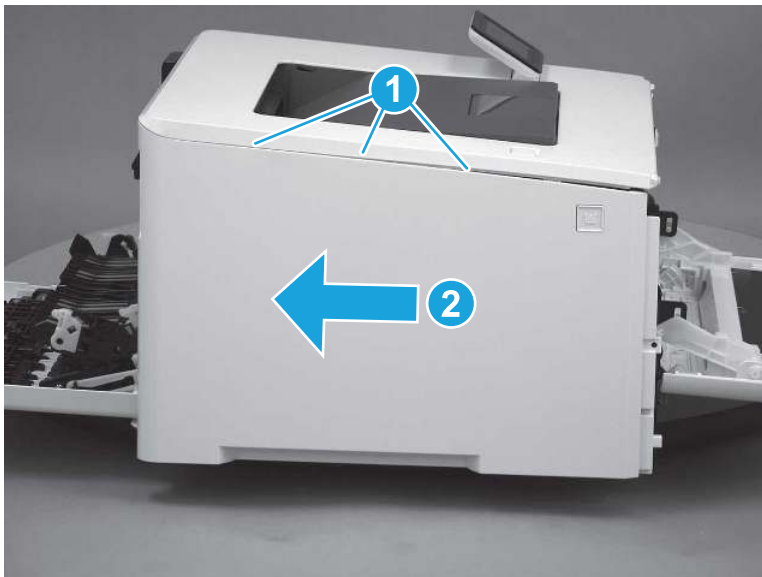
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-1487 Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

Figure 5-1488 Release three tabs



## 5. Remove the top cover (SFP)

Follow these steps to remove the top cover (SFP).

1. On the left side of the printer, on the formatter, disconnect one connector (callout 1).

---

 **NOTE:** The formatter may look slightly different than what is shown below, however the removal procedures are the same.

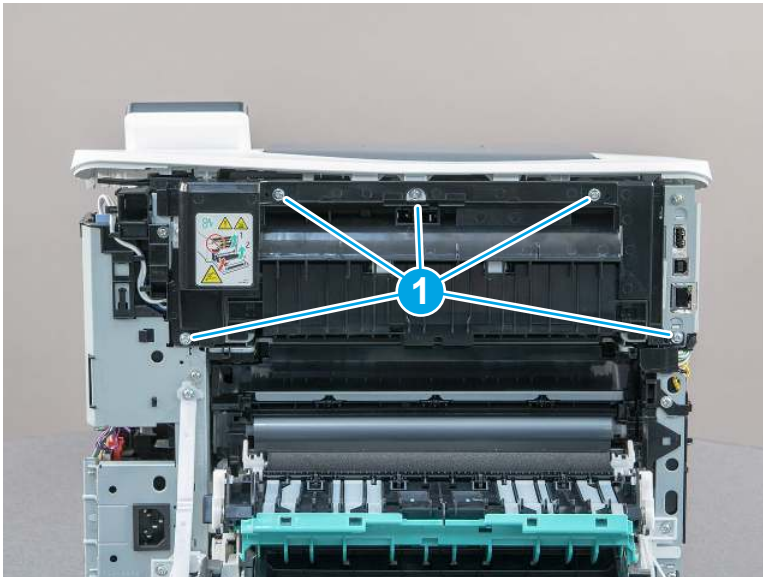
---

Figure 5-1489 Disconnect one connector



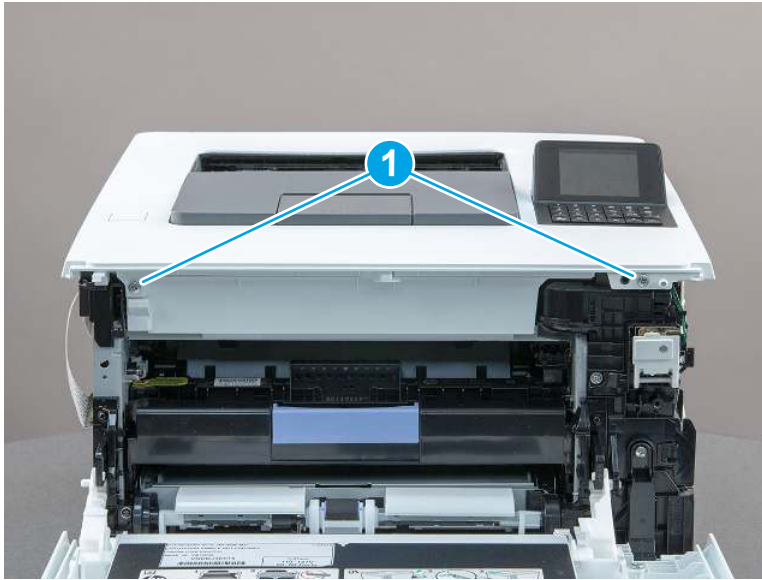
2. At the back of the printer, remove five screws (callout 1), and then remove the fuser cover.

Figure 5-1490 Remove five screws



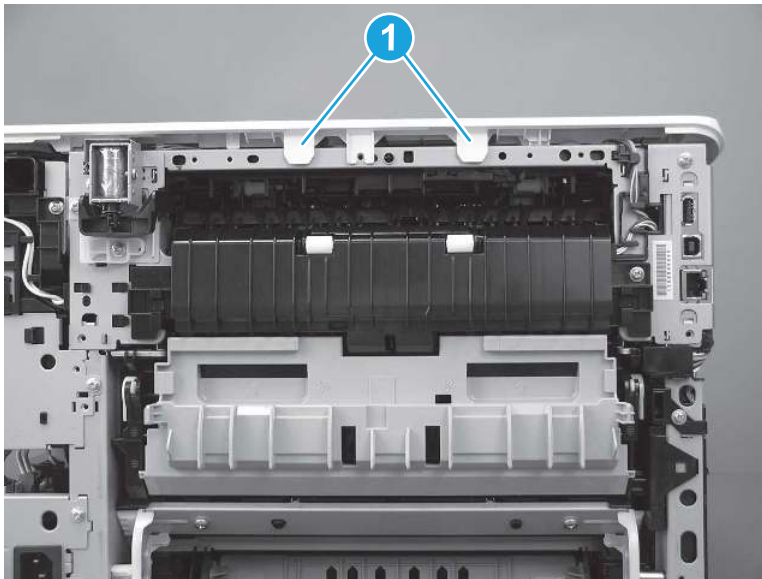
3. At the front of the printer, remove two screws (callout 1).

**Figure 5-1491** Remove two screws



4. Lift the front of the top cover up and release two tabs at the back of the printer (callout 1).

**Figure 5-1492** Lift the top cover and release two tabs



5. Remove the top cover.



**NOTE:** For a replacement cover install, remove the control panel from the discarded cover and install it on the replacement cover.

**Figure 5-1493** Remove the top cover

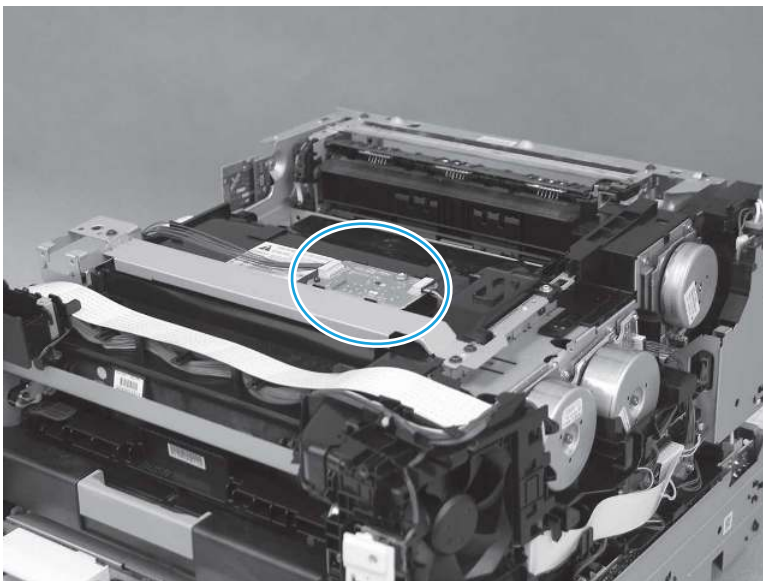


## 6. Remove the memory PCA

Follow these steps to remove the memory PCA.

1. Locate the memory PCA on the top of the printer.

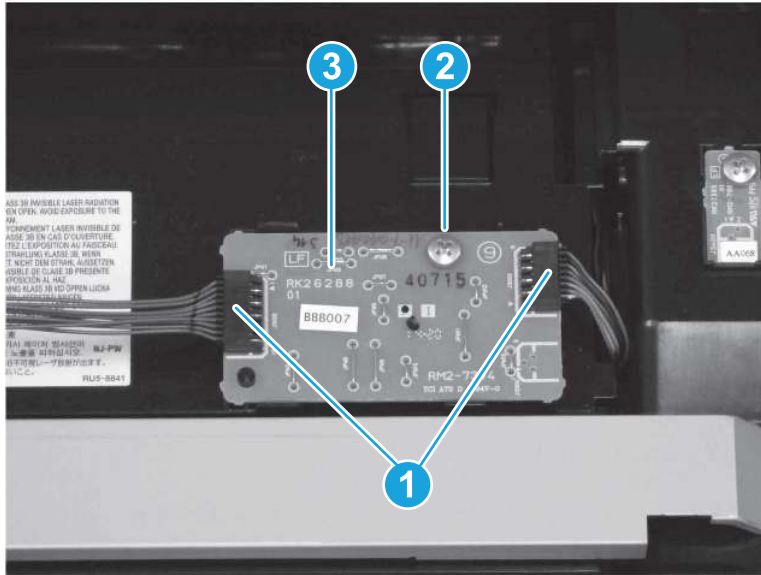
**Figure 5-1494** Locate the memory PCA






2. Disconnect two connectors (callout 1), remove one screw (callout 2), and then remove the memory PCA (callout 3).

Figure 5-1495 Remove the PCA



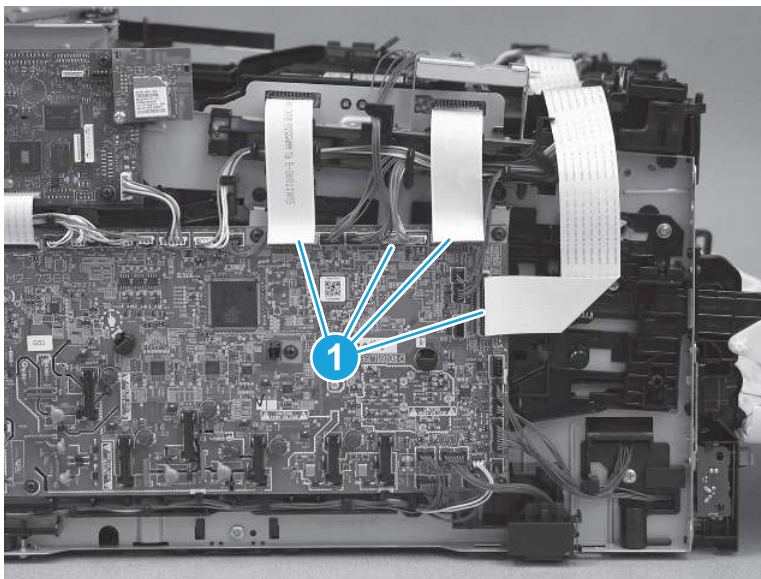
## 7. Remove the laser scanner (SFP)

Follow these steps to remove the laser scanner (SFP).

 **NOTE:** Formatter and main PCA boards might appear different than what is shown below. However, the procedure is correct for all printer models.

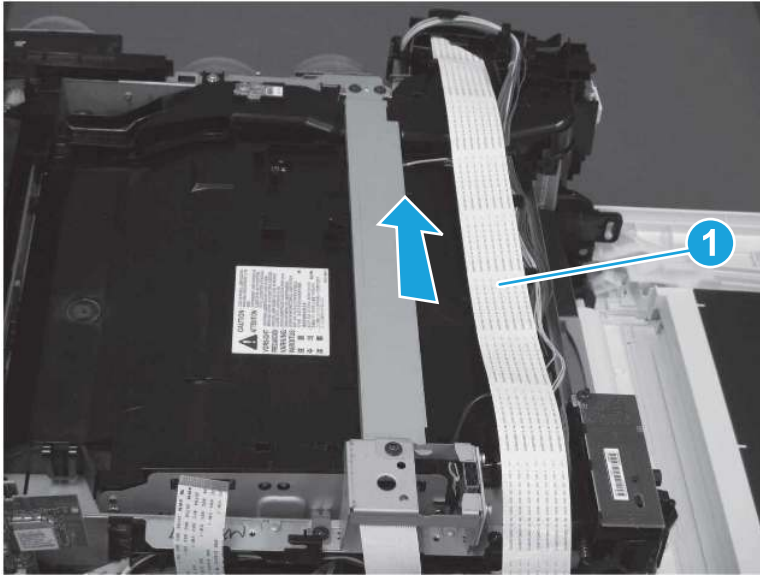
1. At the left side of the printer on the DC controller, disconnect four connectors (callout 1).

Figure 5-1496 Disconnect four connectors



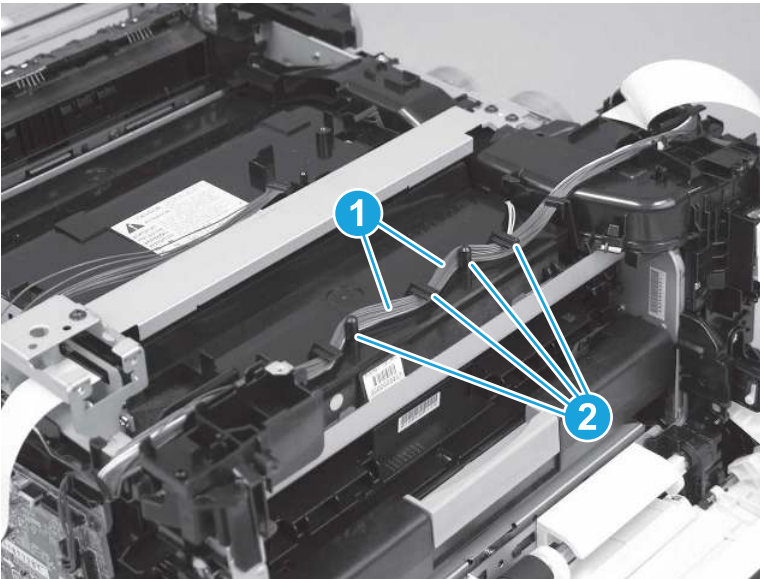
2. Lift the flat cable (callout 1) over to the right side of the printer to gain access to the cables under it.

**Figure 5-1497** Lift the flat cable



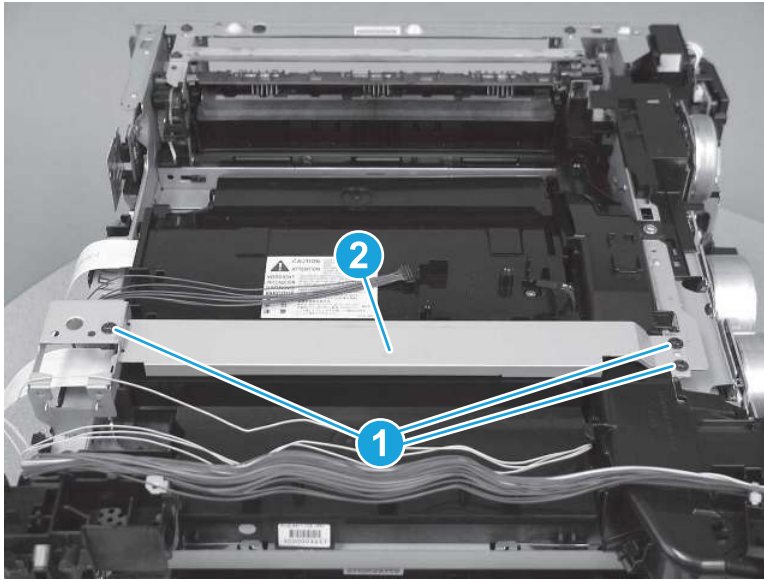
3. Release all of the cables (callout 1) from the cable guides (callout 2).

**Figure 5-1498** Release the cables from the guides



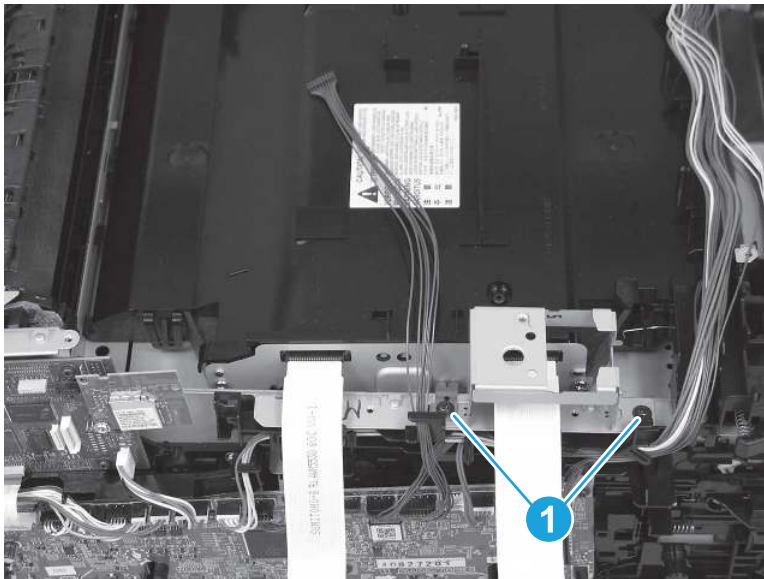
4. Remove three screws (callout 1), and then remove the metal bracket (callout 2).

Figure 5-1499 Remove the bracket



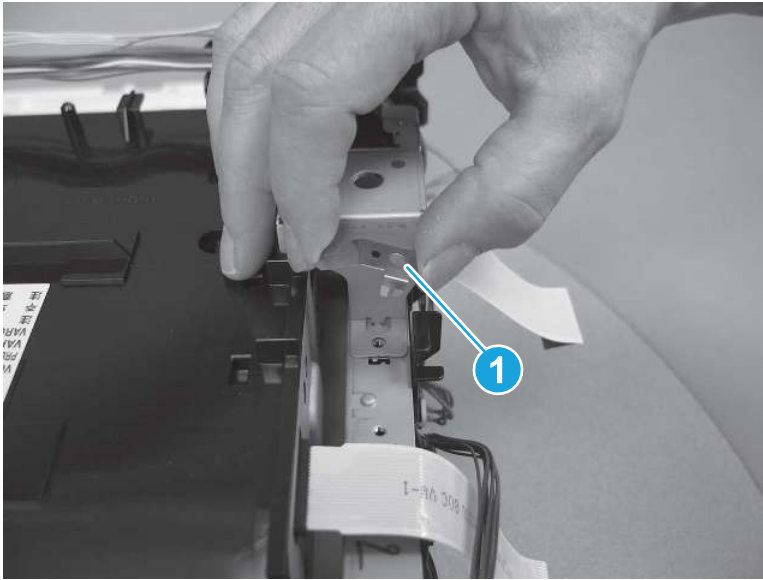
5. Remove two screws (callout 1).

Figure 5-1500 Remove two screws



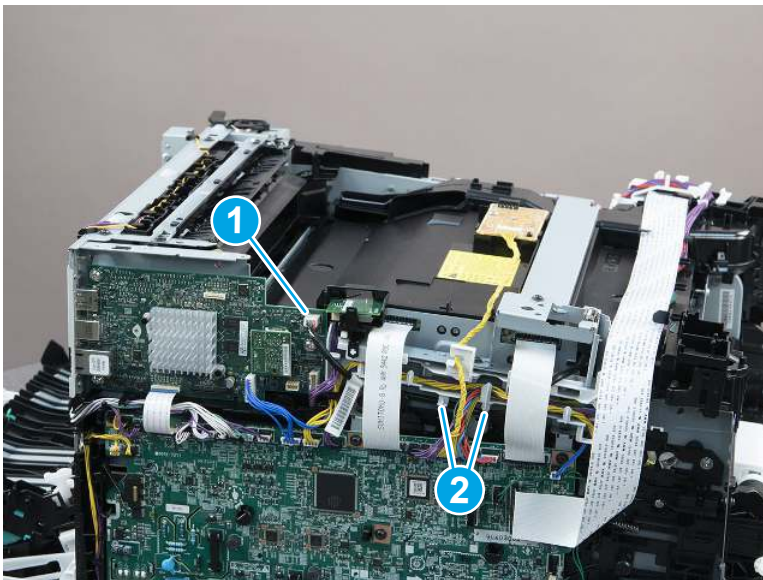
6. Remove the grounding plate (callout 1).

Figure 5-1501 Remove the grounding plate



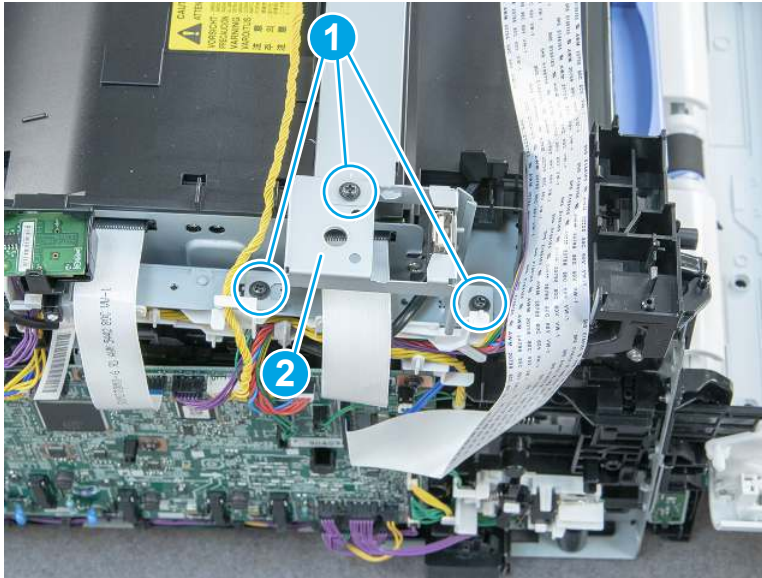
7. **SFP only:** Disconnect one USB cable from the formatter PCA (callout 1), and then remove the cable from the guide (callout 2).

Figure 5-1502 Disconnect cable from formatter PCA



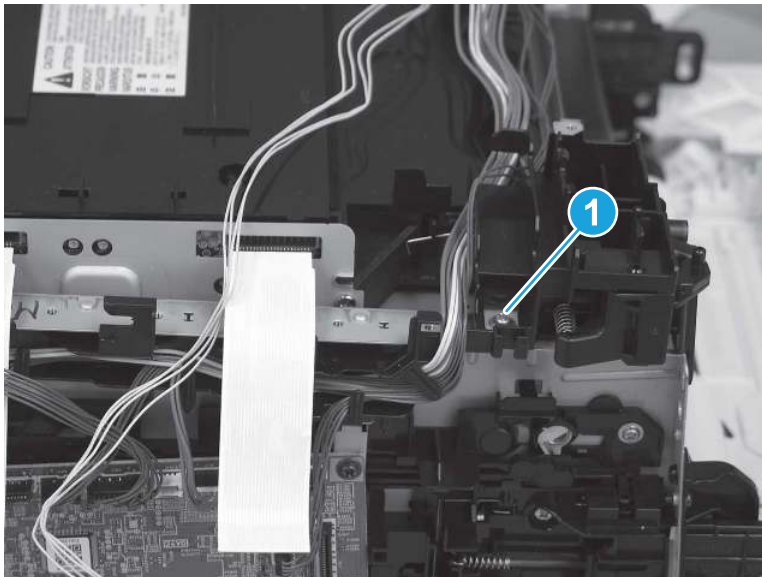
8. **SFP only:** Remove three screws (callout 1), and then remove the metal bracket (callout 2) from the printer .

Figure 5-1503 Remove three screws



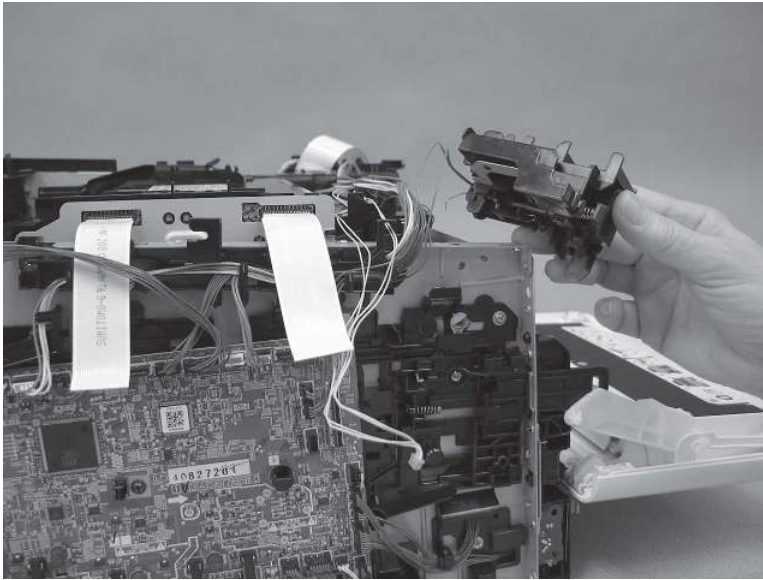
9. Remove one screw (callout 1).

Figure 5-1504 Remove one screw



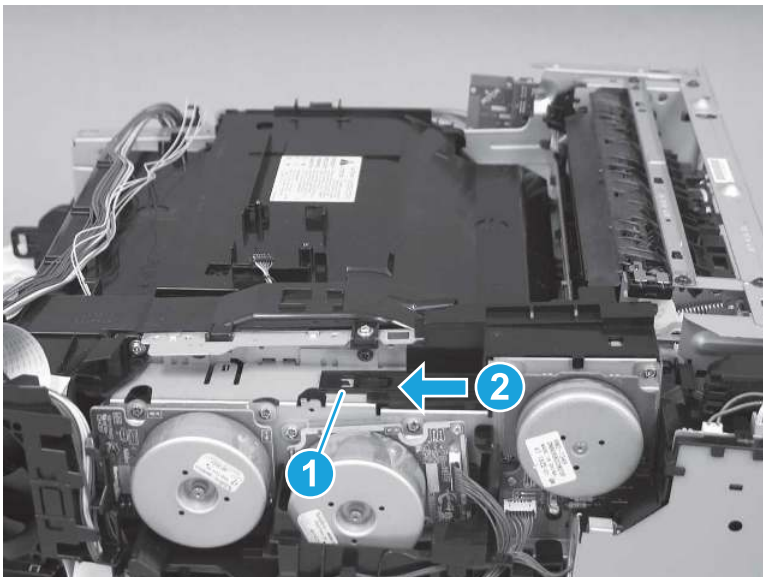
10. Remove the front door switch holder.

**Figure 5-1505** Remove the front door switch holder



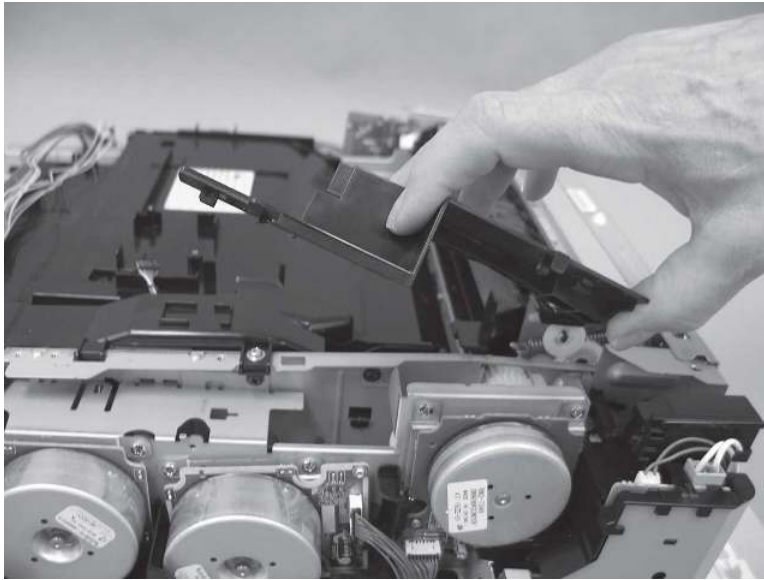
11. On the right side of the printer, toward the back, release one tab (callout 1) and then slide (callout 2) the black cover toward the front of the printer.

**Figure 5-1506** Release one tab on the cover



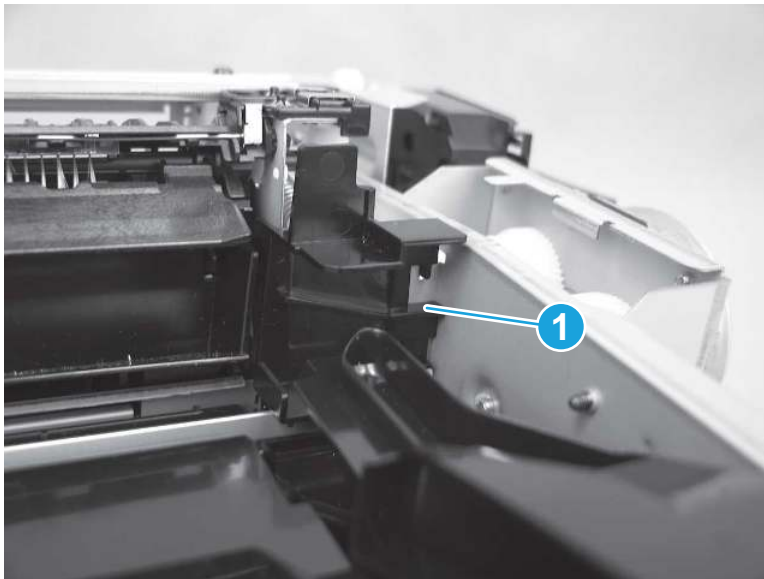
12. Remove the cover.

**Figure 5-1507** Remove the cover



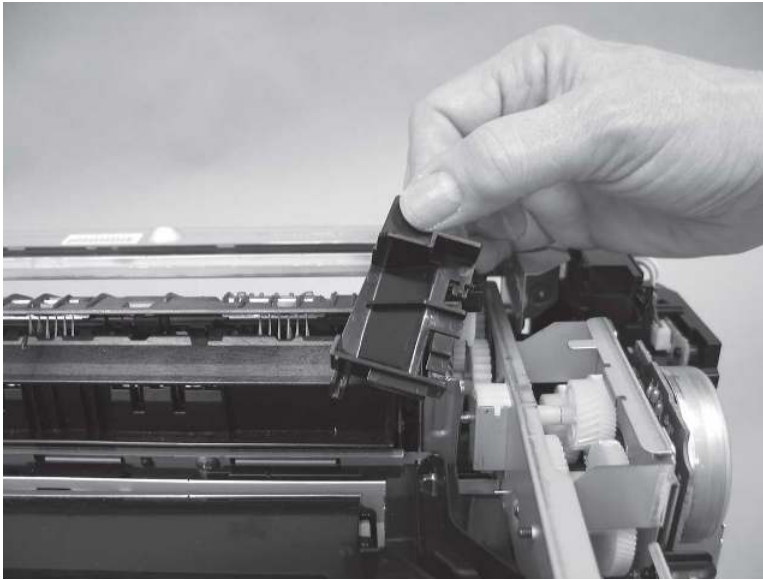
13. Use a pair of needle-nose pliers to release one tab (callout 1).

**Figure 5-1508** Release one tab



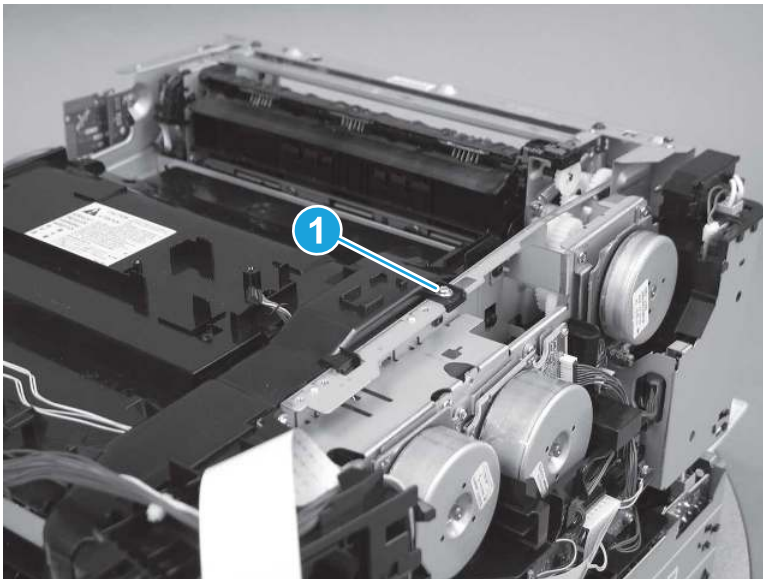
14. Remove the cover.

Figure 5-1509 Remove the cover



15. Remove one screw (callout 1).

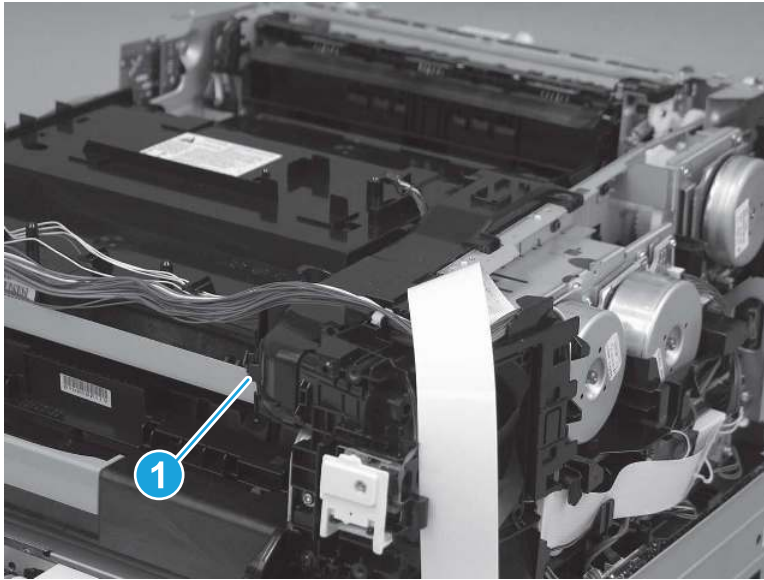
Figure 5-1510 Remove one screw





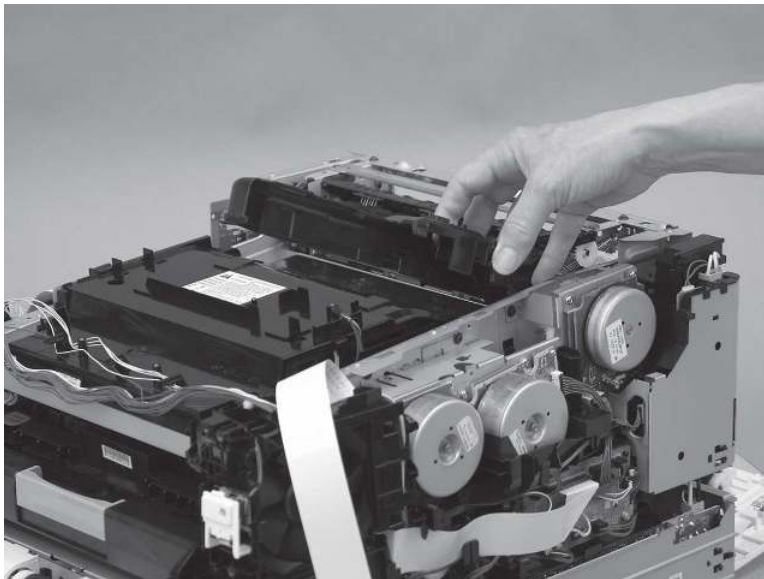
16. Release one tab (callout 1).

**Figure 5-1511** Release one tab



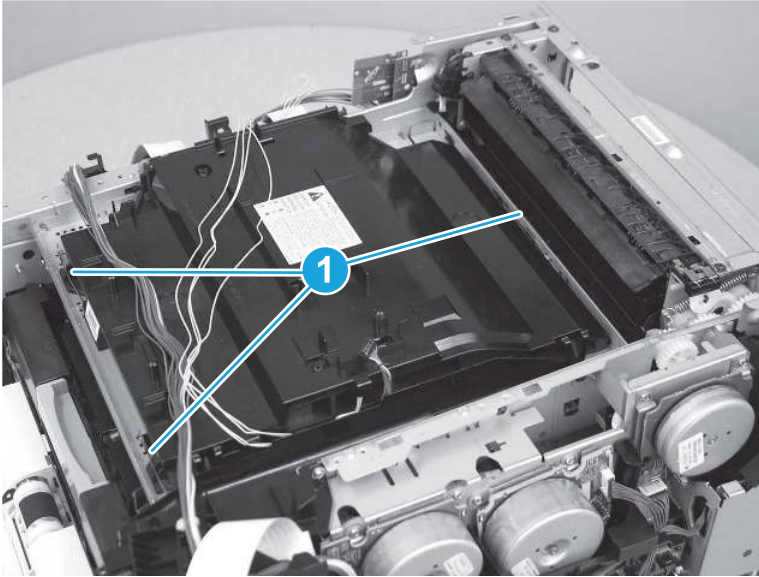
17. Remove the exhaust duct.

**Figure 5-1512** Remove the exhaust duct




18. Use needle-nose pliers to release three springs (callout 1).

**Figure 5-1513** Release three springs

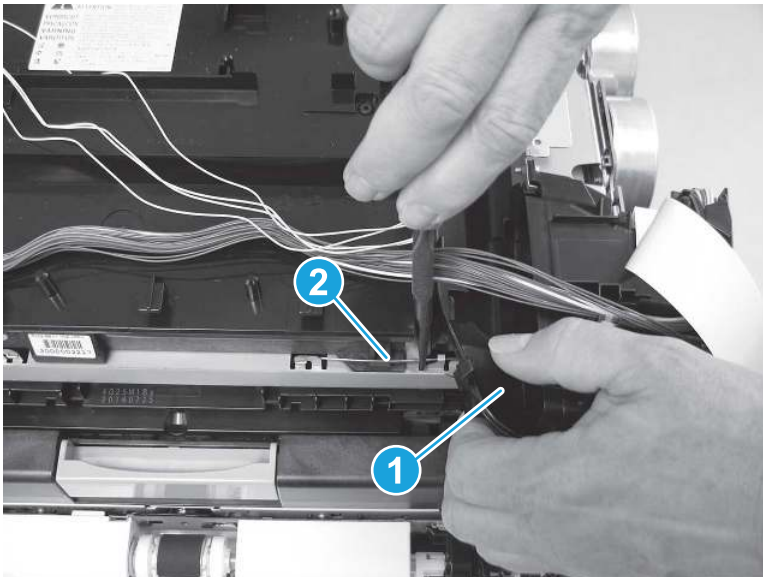


---

 **TIP:** Lift up the edge of the duct (callout 1) to release the right front spring (callout 2).

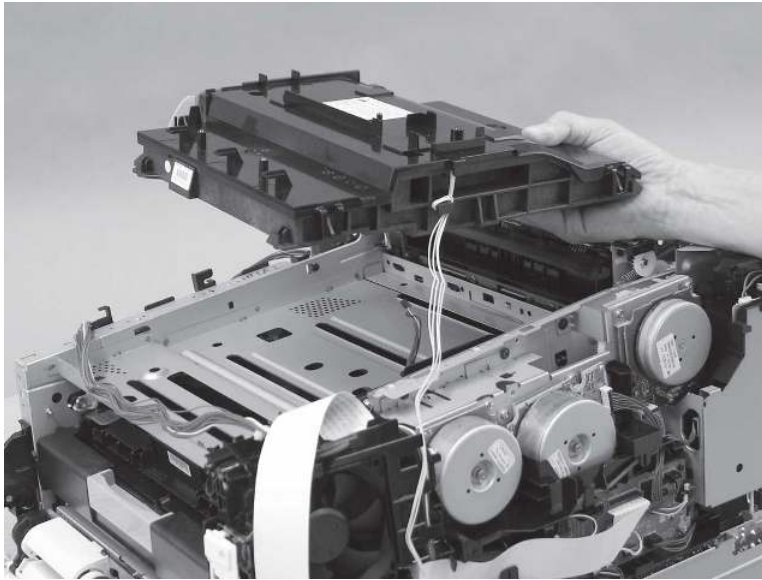
---

**Figure 5-1514** Lift the duct to release the spring



19. Remove the laser scanner.

**Figure 5-1515** 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.

---

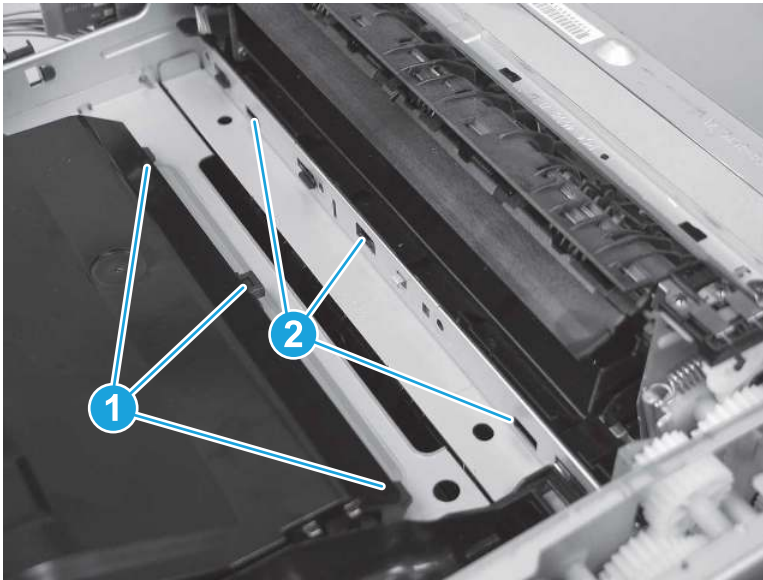
## 9. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

## Laser scanner

1. Install three tabs (callout 1) on back of the laser scanner into the slots (callout 2) in the printer frame.

**Figure 5-1516** Install three tabs



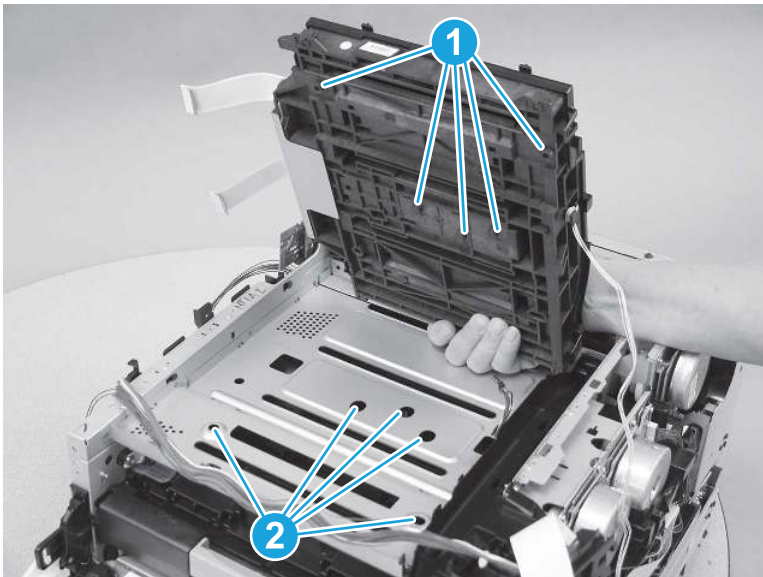
2. Install the five tabs (callout 1) on the bottom of the laser scanner into the holes (callout 2) in the top of the printer.

---

 **TIP:** Check the tabs by feeling along the underside of the sheet metal and verifying they are all fully installed.

---

**Figure 5-1517** Install five tabs



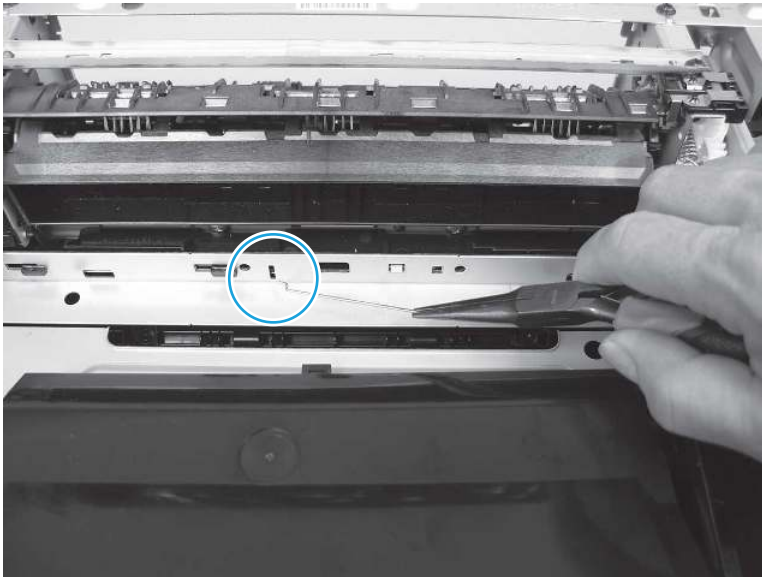
3. Before installing the springs in the next step, note the proper position of the springs when installed.

**Figure 5-1518** Spring position



4. If the rear spring becomes dislodged from the printer frame, reposition it as shown below.

**Figure 5-1519** Reposition the spring



## Removal and replacement: Laser scanner assembly (MFP)

Learn how to remove and replace the laser scanner (MFP).

[View a video of removing and replacing the laser scanner \(M479 models\).](#)

Mean time to repair: 49 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](http://www.hp.com/buy/parts).

**Table 5-45** Part information

Part number	Part description
RM2-5612-000CN	Laser scanner assembly

### Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- Small flat-blade screwdriver
- 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

Make sure that the printer initializes to a **Ready** state.


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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

Figure 5-1520 Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

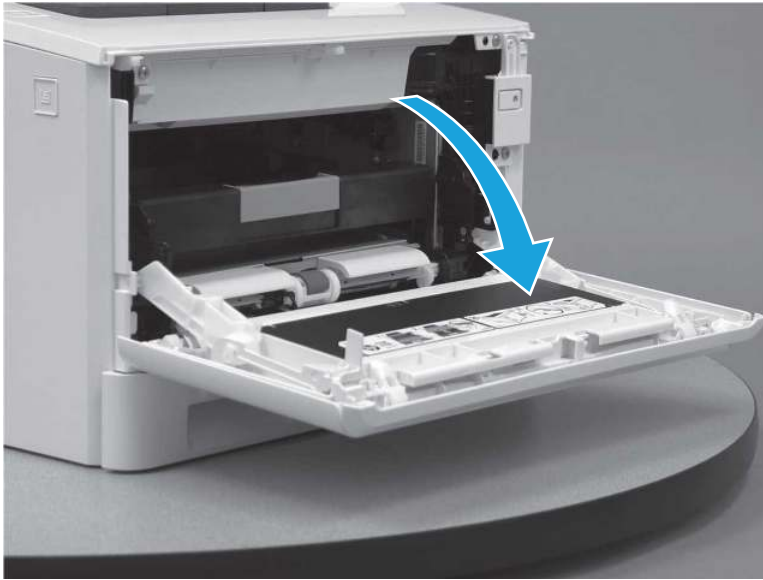
1. Press the button (callout 1) on the left side of the printer to release the front door.

Figure 5-1521 Release the front door



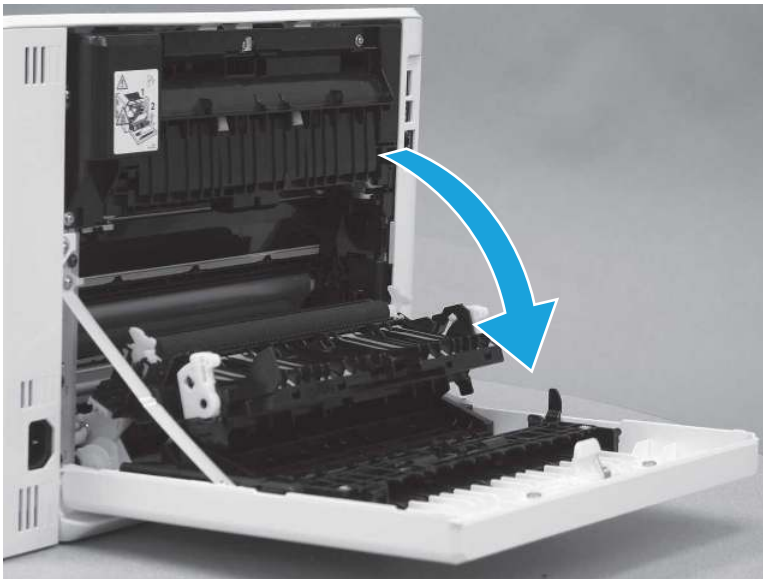
2. Open the front door.

**Figure 5-1522** Open the front door



3. Open the duplexing door.

**Figure 5-1523** Open the duplexer door



### 3. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).



1. Raise the scanner.

**Figure 5-1524** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-1525** Remove one screw



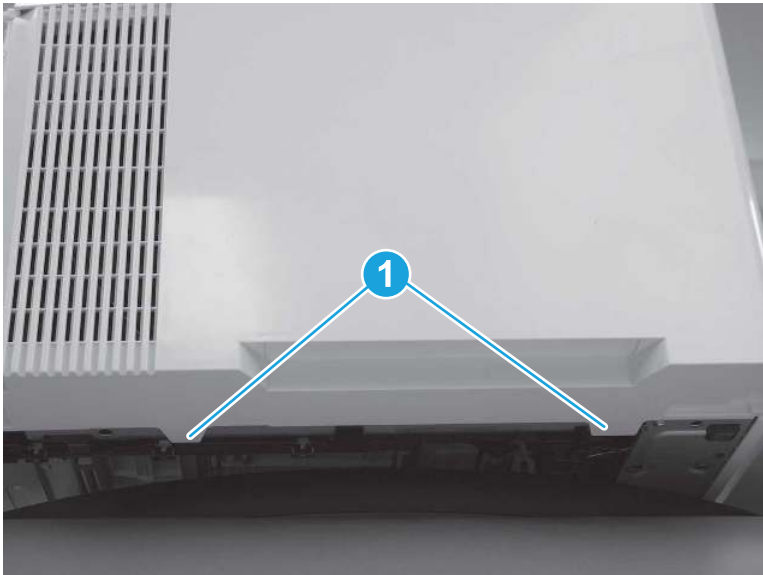
3. At the front of the printer, remove one screw (callout 1).

Figure 5-1526 Remove one screw



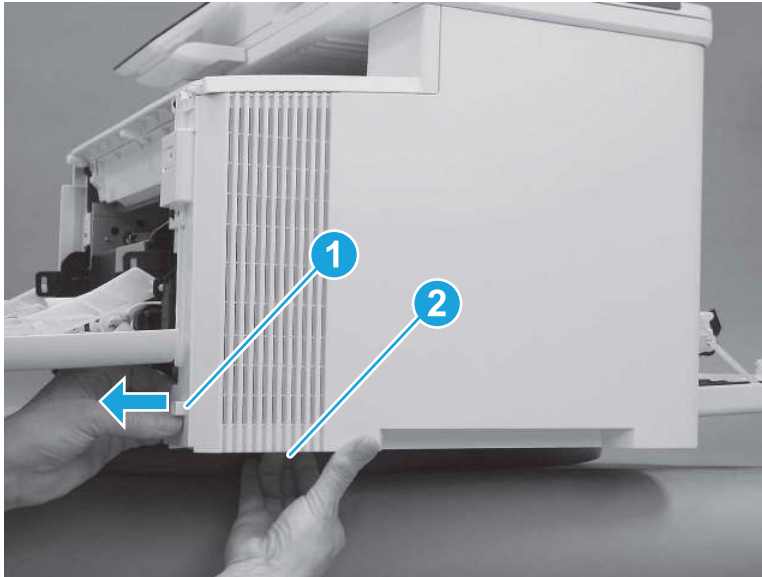
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

Figure 5-1527 Locate the tabs



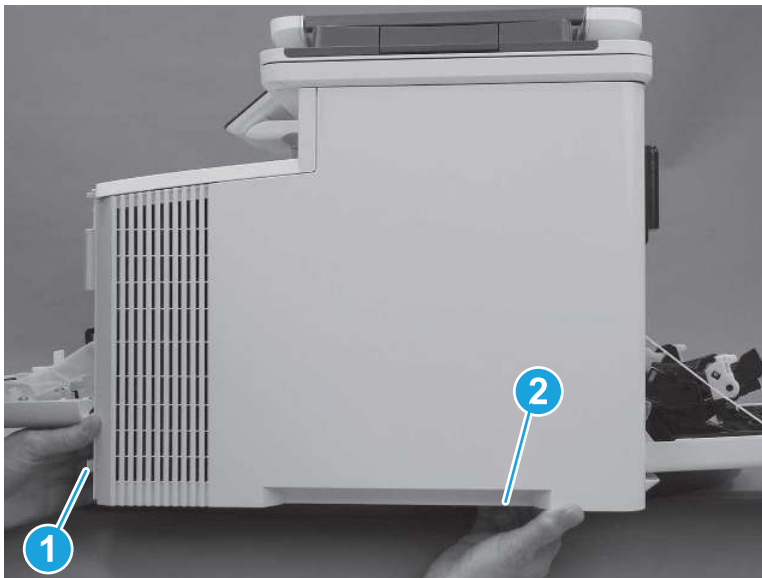
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-1528** Release front lower tabs



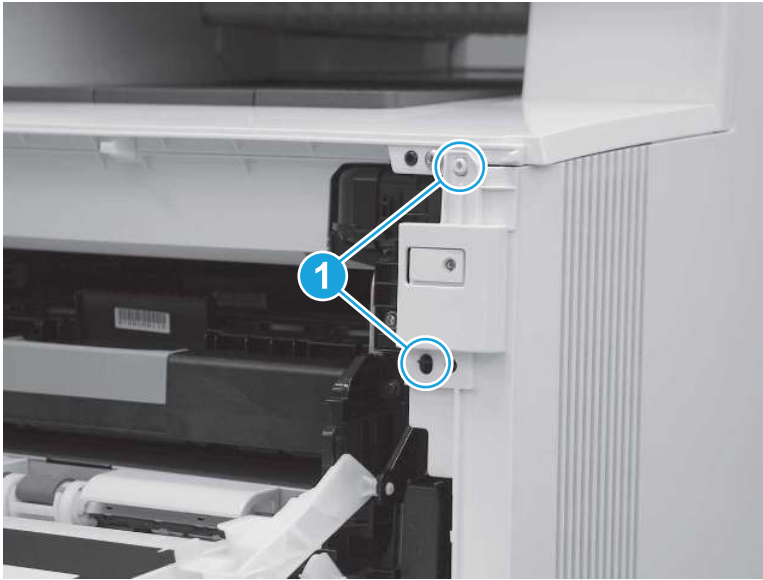
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-1529** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

Figure 5-1530 Release front upper tabs



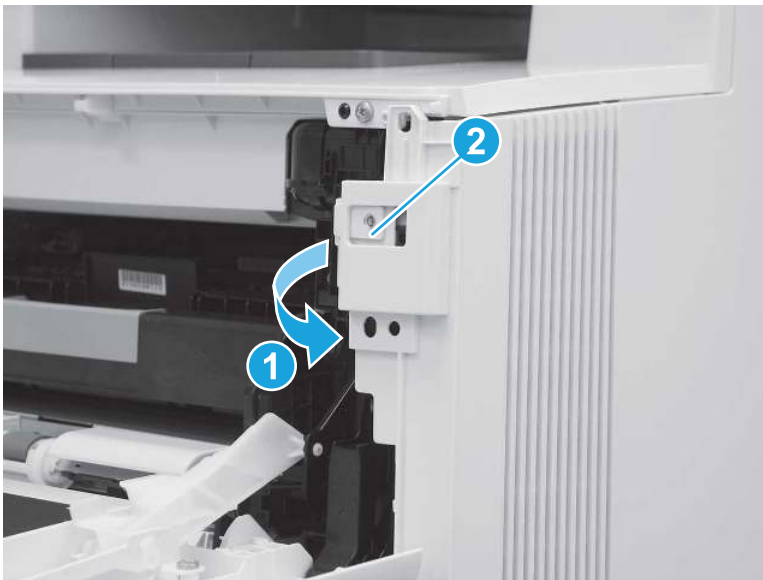
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

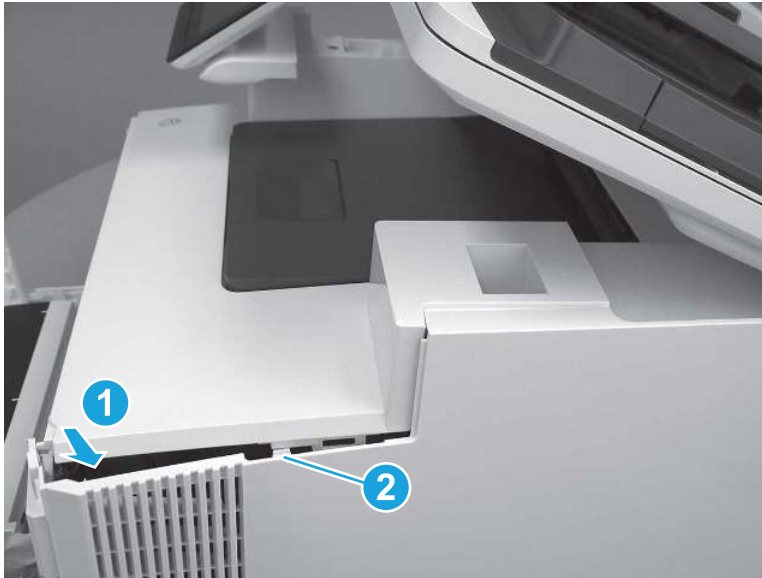
---

Figure 5-1531 Rotate the front of the cover



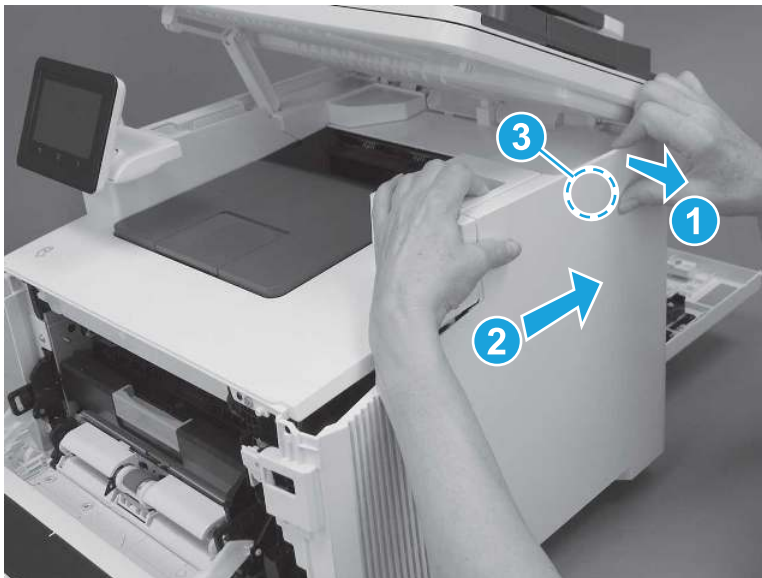
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

**Figure 5-1532** Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-1533** Release one tab and one hook



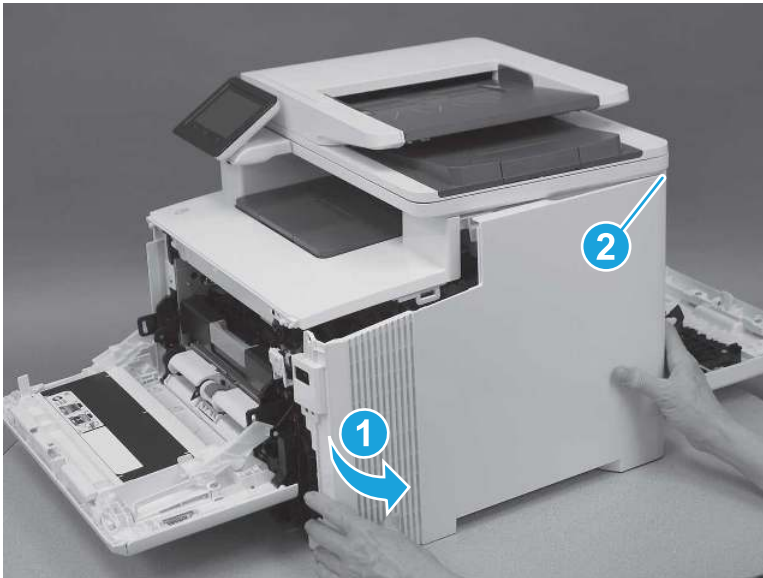
11. Lower the scanner.

Figure 5-1534 Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

Figure 5-1535 Remove the right cover

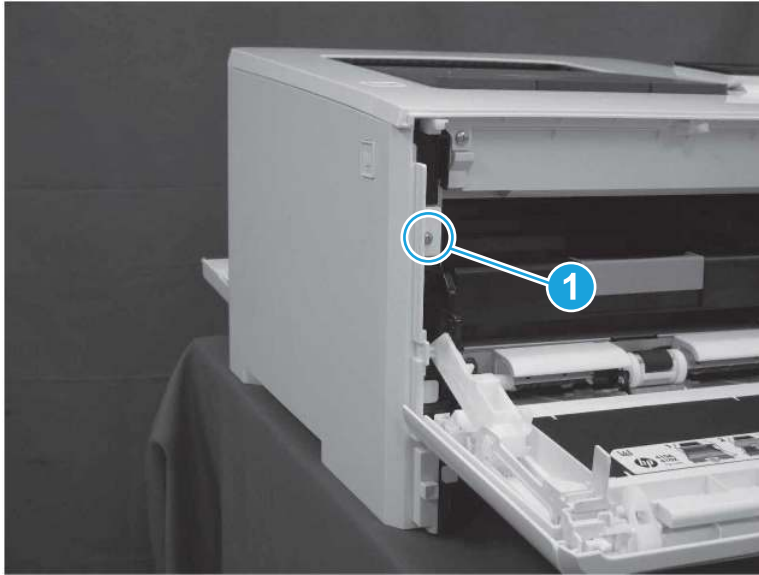


#### 4. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

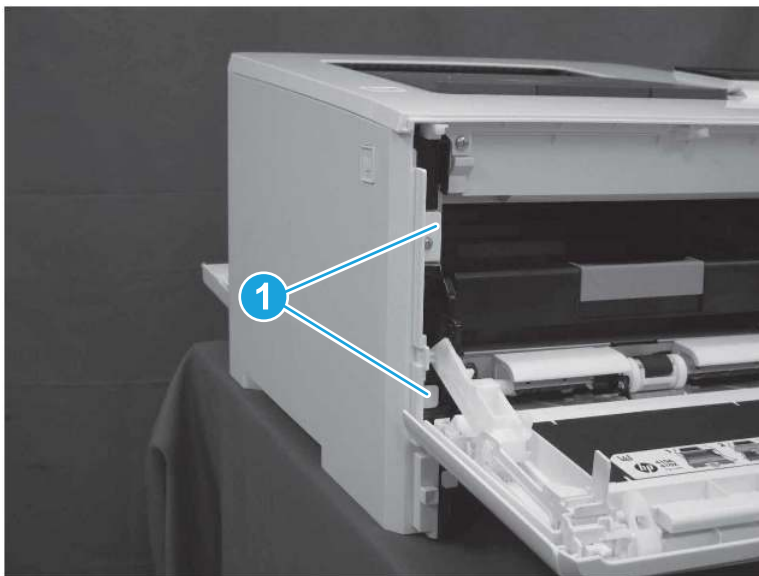
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-1536** Remove one screw



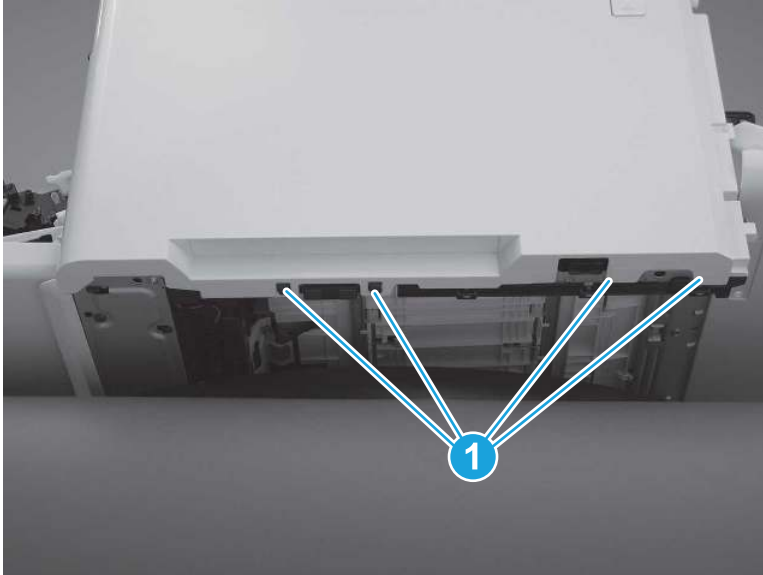
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-1537** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1538** Locate the tabs



4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

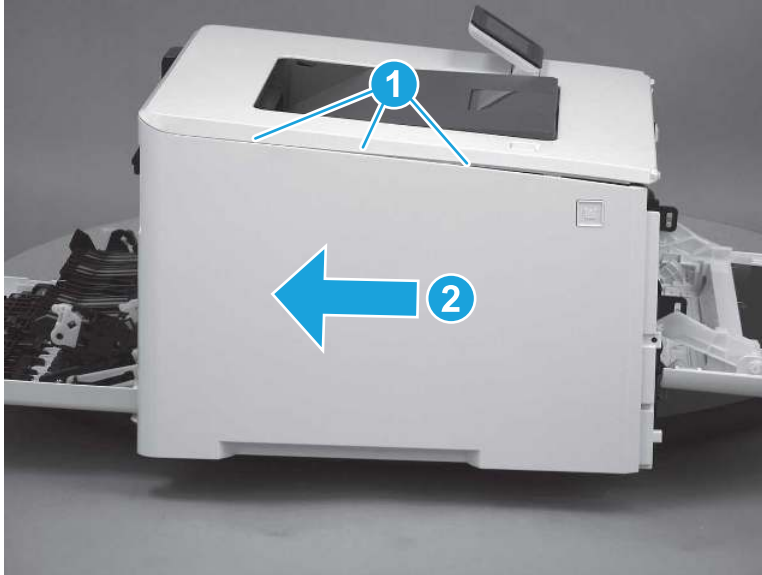
**Figure 5-1539** Release bottom tabs





5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

Figure 5-1540 Release three tabs




## 5. Remove the control panel display and mount base (MFP only)

Follow these steps to remove the control panel display and mount base (MFP only).

1. Open the integrated scanner assembly (ISA).

---

 **NOTE:** The ISA might already have been removed. If so, skip ISA related steps.

If the control panel is not fully tilted forward, tilt it forward now until it stops.

---

Figure 5-1541 Open the ISA



2. Remove one screw (callout 1).

**Figure 5-1542** Remove one screw



3. Use a small flat-blade screwdriver to release two tabs (callout 1) on the control-panel mount cover.

**Figure 5-1543** Release two tabs



4. Rotate the control-panel mount cover up towards the control panel to release it, and then remove the cover.

**Figure 5-1544** Remove the cover



5. Remove one grounding screw (callout 1), and then move the ground cable (callout 2) out of the way.

**Figure 5-1545** Remove one screw



6. Disconnect two FFC (callout 1).

Figure 5-1546 Disconnect two FFC



7. Release one tab (callout 1), and then remove the interconnect board (ICB).

Figure 5-1547 Remove the ICB



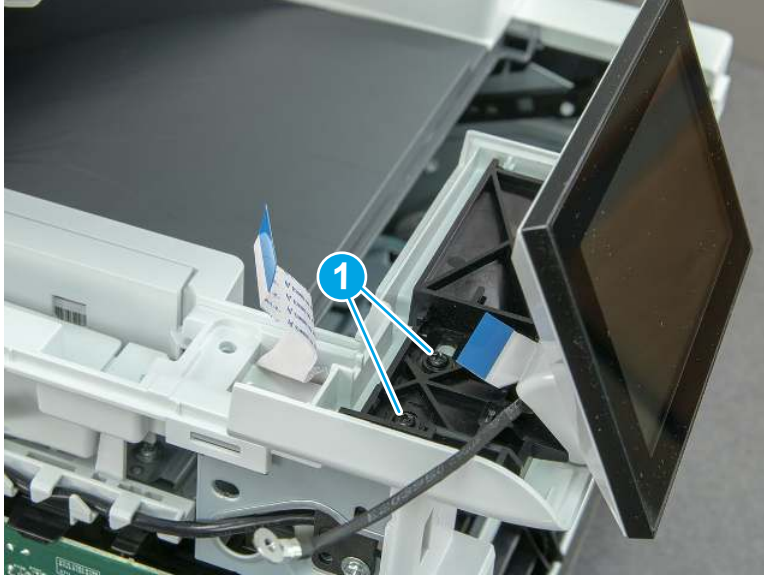
8. Remove two screws (callout 1), and then lift the control panel display and mount base together to remove them.

---

**⚠ CAUTION:** Carefully unfold the FFC and release it through the opening in the mount base.

---

Figure 5-1548 Remove two screws and remove the control panel assembly

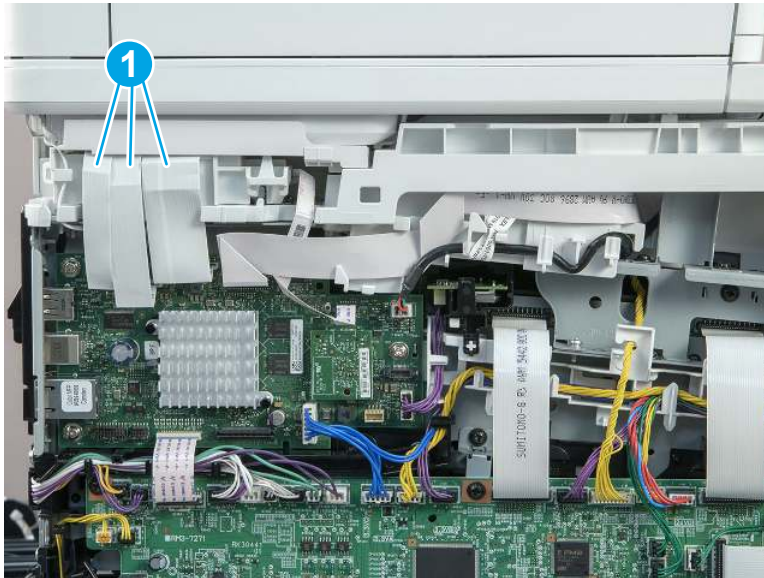


## 6. Remove the integrated scanner assembly

(MFP)

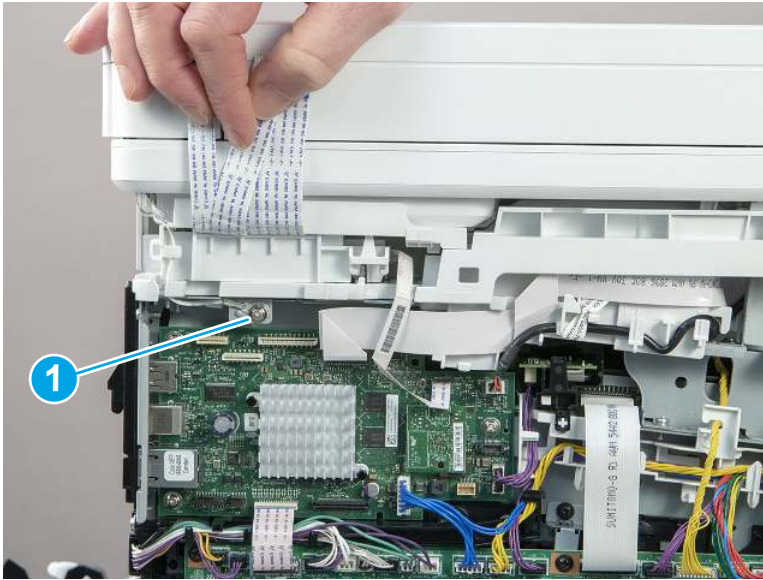
1. On the left side of the printer, disconnect three connectors (callout 1).

Figure 5-1549 Disconnect three connectors



2. Raise the scanner cables up, and then remove one screw (callout 1) to release the ground wire.

**Figure 5-1550** Remove one screw and release the ground wire



3. Raise the scanner.

**Figure 5-1551** Raise the scanner



4. With the scanner lifted, release the tab (callout 1) on the scanner support arm pin from the slot and rotate the pin in the direction indicated.

**Figure 5-1552** Release scanner support arm pin



5. Remove the scanner arm pin.

---

**⚠ CAUTION:** Once the scanner arm pin is removed, support the scanner with one hand at all times so that it does not fall backwards off of the printer.

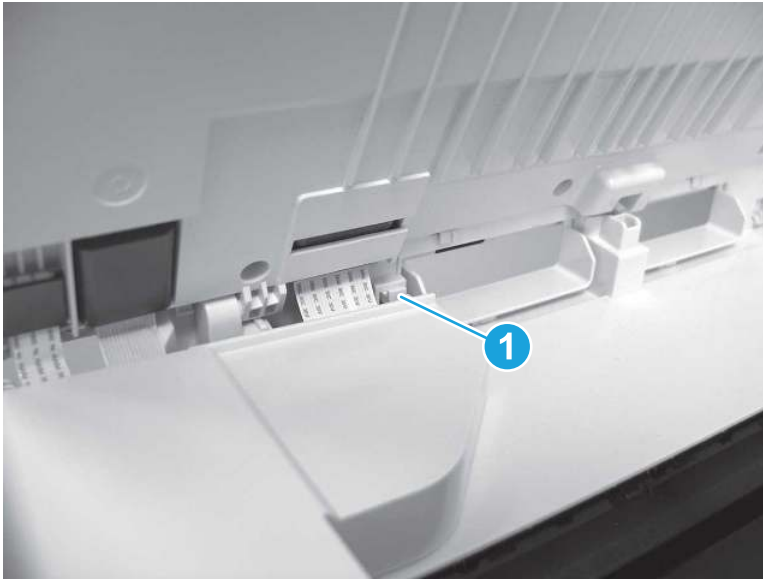
---

**Figure 5-1553** Remove the pin



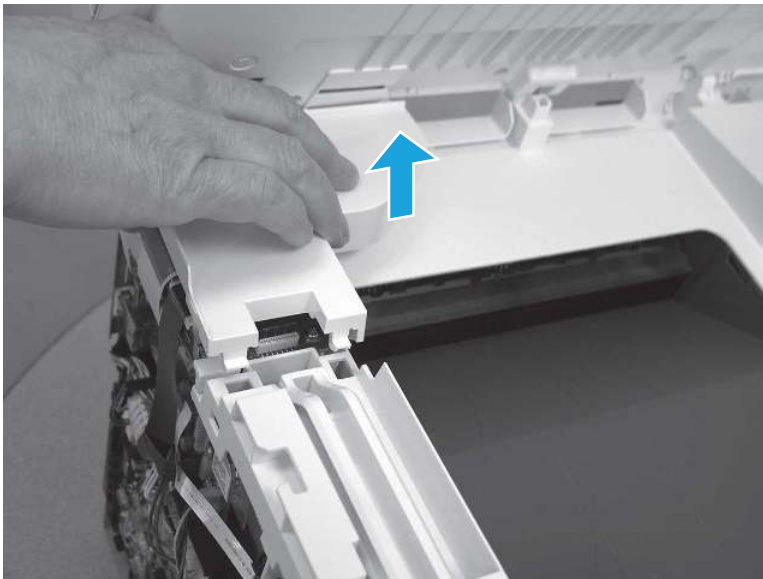
6. On the top of the printer, use a flat-blade screwdriver to release one tab (callout 1).

Figure 5-1554 Release one tab



7. Remove the scanner cable cover.

Figure 5-1555 Remove the scanner cable cover





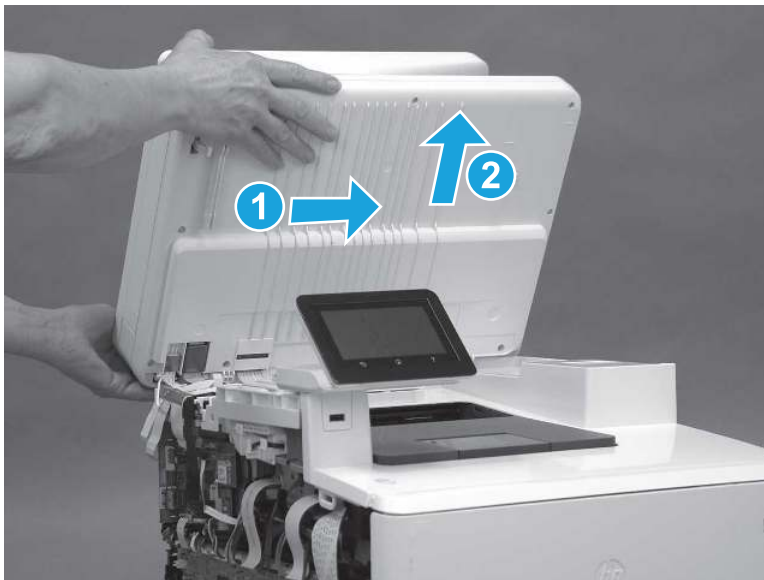
8. The scanner cables (callout 1) are held in place on the top cover with double-sided tape. Carefully release the cables from the top cover.

**Figure 5-1556** Release the cables



9. Open the scanner assembly fully, slide the assembly toward the right side of the printer, and then lift the assembly off of the printer.

**Figure 5-1557** Remove the scanner assembly

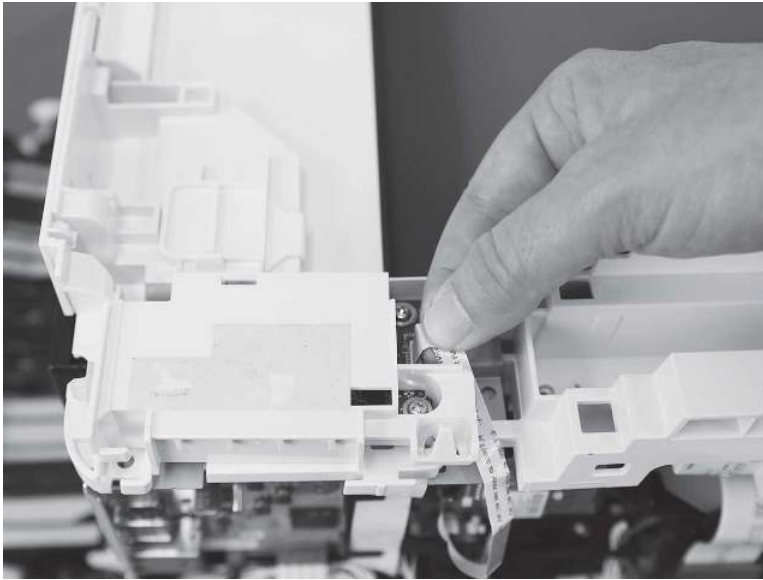


## 7. Remove the fax PCA (MFP)

Follow these steps to remove the fax PCA (MFP).

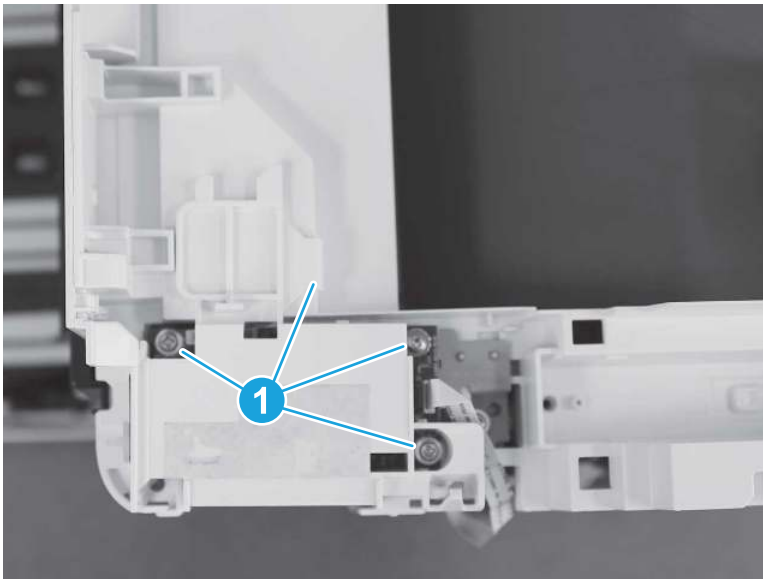
1. Disconnect one FFC cable from fax PCA.

**Figure 5-1558** Disconnect one connector



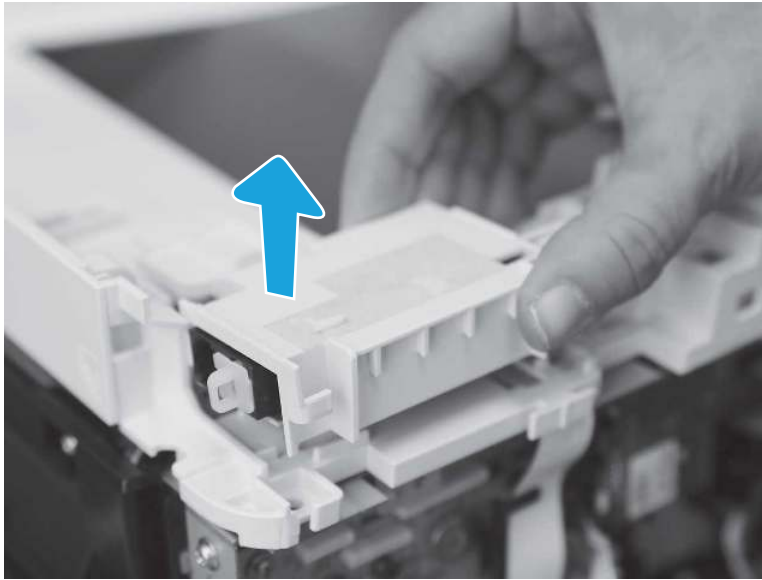
2. Remove three screws and release one tab (callout 1).

**Figure 5-1559** Remove three screws and release one tab



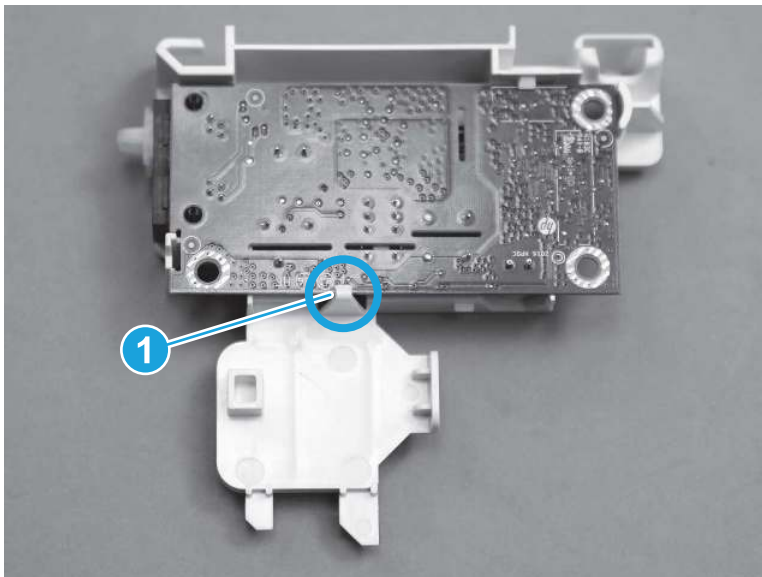
- Lift up to remove the fax PCA.

**Figure 5-1560** Lift up to remove the fax PCA



- Optional step:** Release the tab (callout 1) on the back of the fax PCA to remove the PCA from the plastic holder.

**Figure 5-1561** Release one tab on the back of the fax PCA

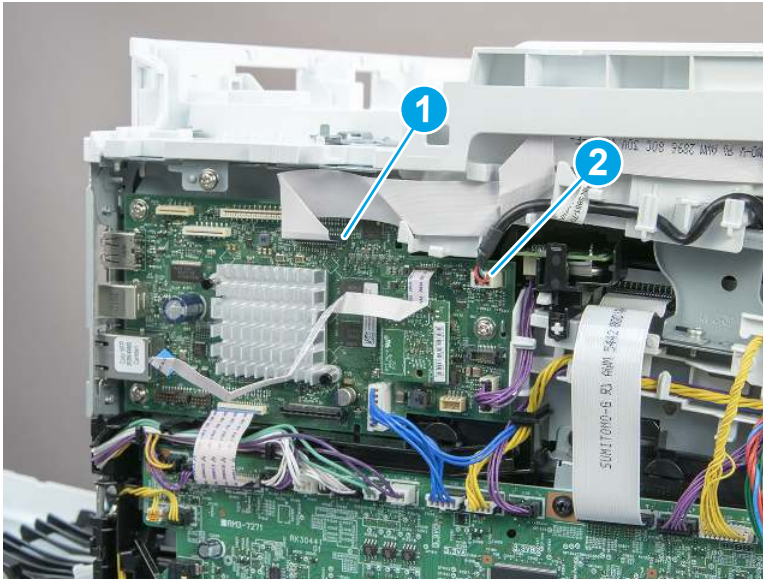


## 8. Remove the top cover (MFP)

Follow these steps to remove the top cover (MFP).

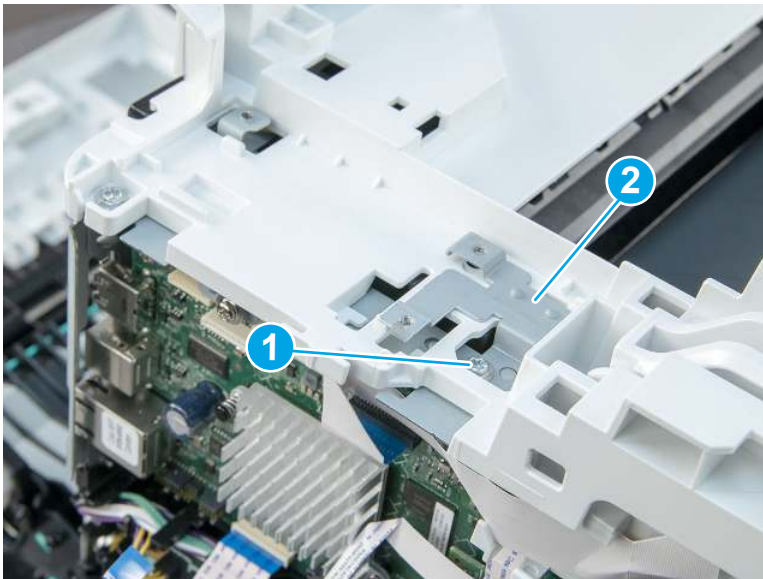
1. Disconnect one FFC (callout 1) and one connector (callout 2).

**Figure 5-1562** Disconnect one FFC and one connector



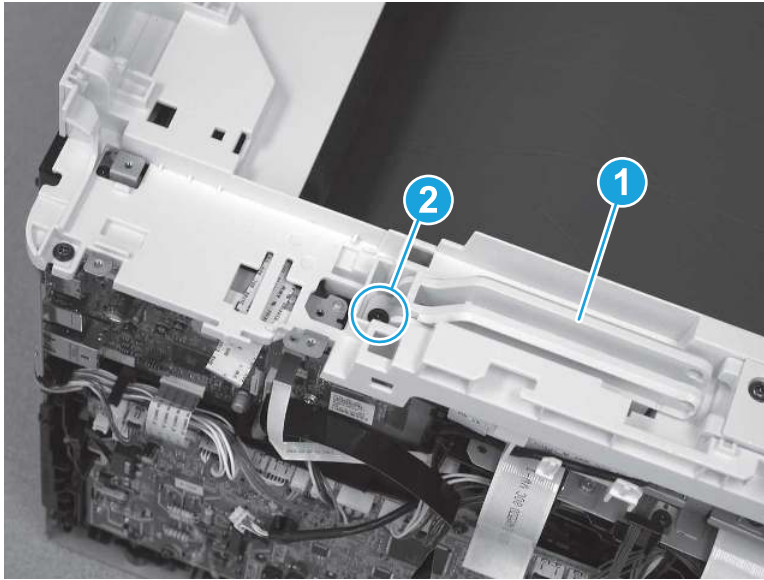
2. On the top cover, remove one screw (callout 1) and the sheet metal plate (callout 2).

**Figure 5-1563** Remove one screw and the sheet metal plate



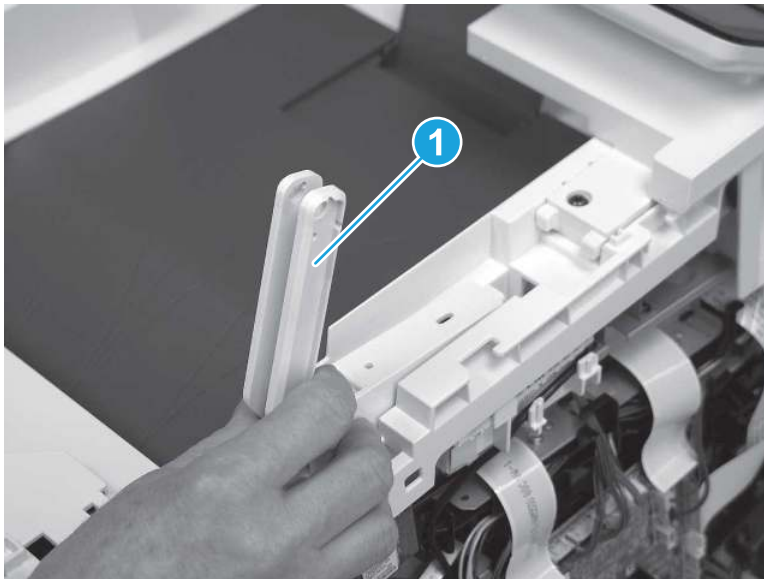
3. At the top of the printer, lower the scanner support arm (callout 1), and then remove one screw (callout 2).

**Figure 5-1564** Lower the support arm and remove one screw



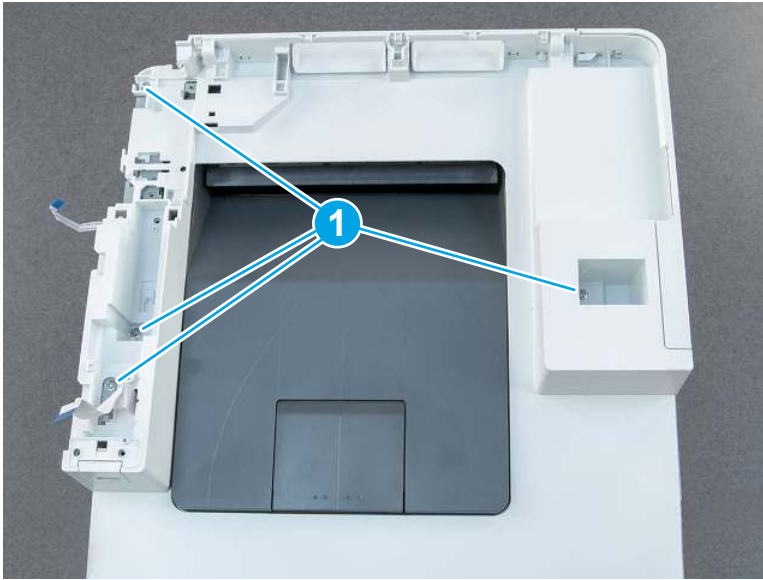
4. Remove the scanner support arm (callout 1).

**Figure 5-1565** Remove the scanner support arm



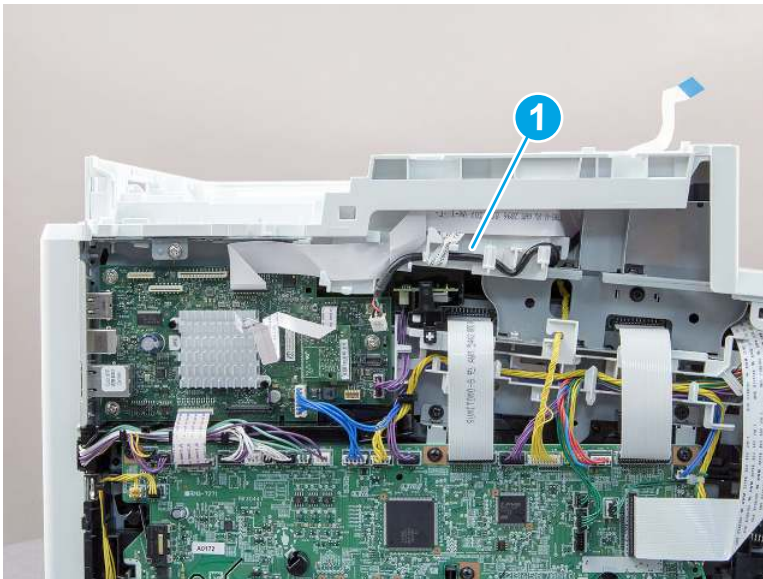
5. At the top of the printer, remove four screws (callout 1).

Figure 5-1566 Remove four screws



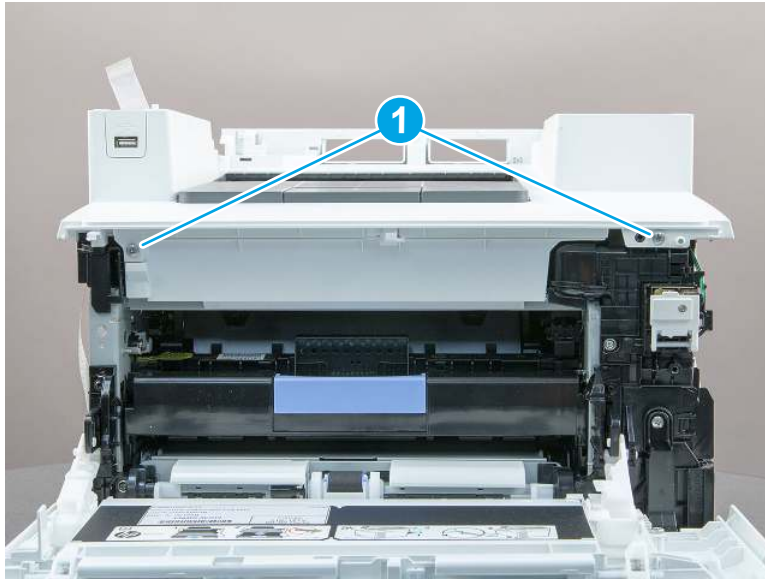
6. Remove the USB cable (callout 1) from the cable guides.

Figure 5-1567 Release the USB cable



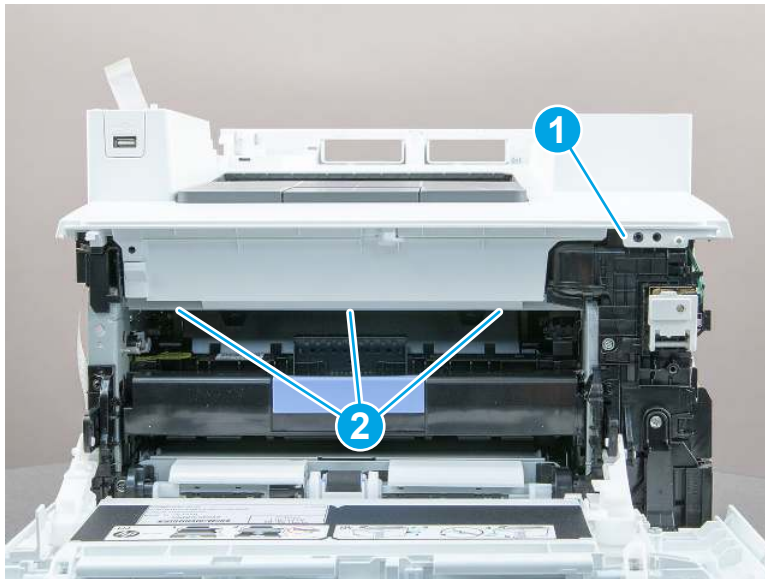
7. At the front of the printer, remove two screws (callout 1).

**Figure 5-1568** Remove two screws



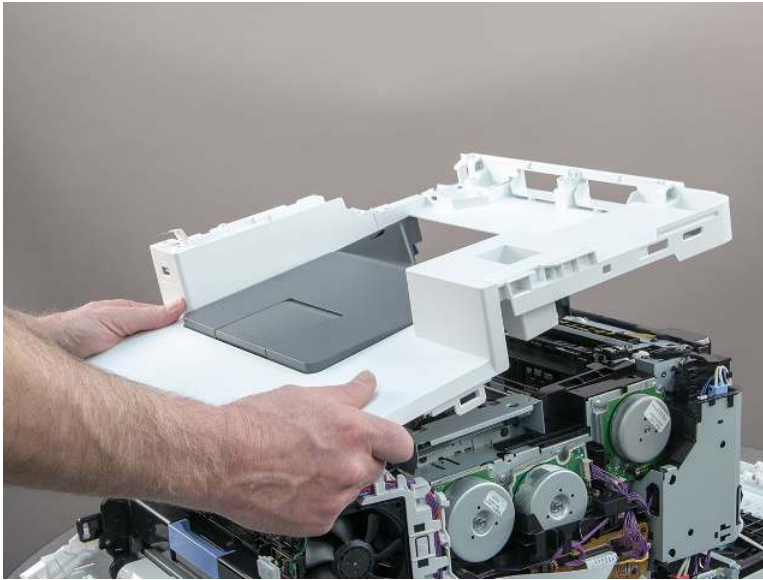
8. Release one retainer (callout 1), and then release three tabs (callout 2).

**Figure 5-1569** Release one retainer and three tabs



9. Remove the top cover.

**Figure 5-1570** Remove the top cover

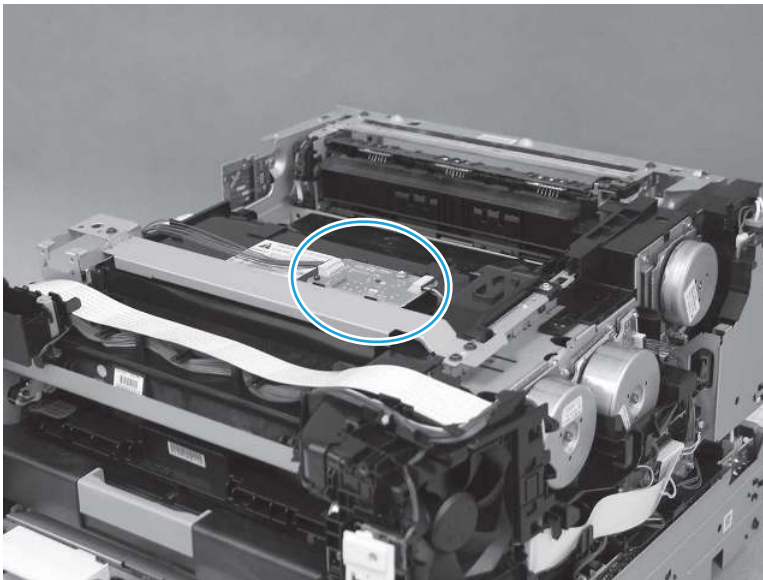


## 9. Remove the memory PCA

Follow these steps to remove the memory PCA.

1. Locate the memory PCA on the top of the printer.

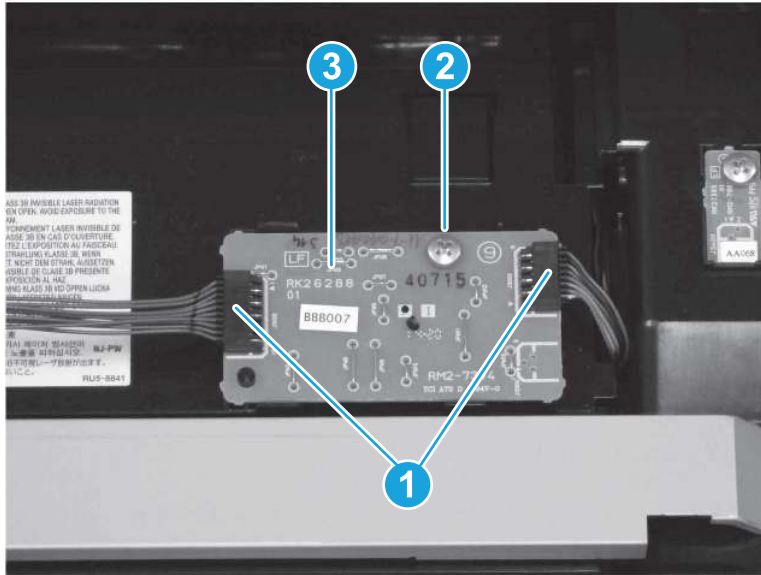
**Figure 5-1571** Locate the memory PCA





2. Disconnect two connectors (callout 1), remove one screw (callout 2), and then remove the memory PCA (callout 3).

Figure 5-1572 Remove the PCA



## 10. Remove the laser scanner (MFP)

Follow these steps to remove the laser scanner (MFP).

1. On the left side of the printer, on the DC controller PCA, disconnect four connectors (callout 1).


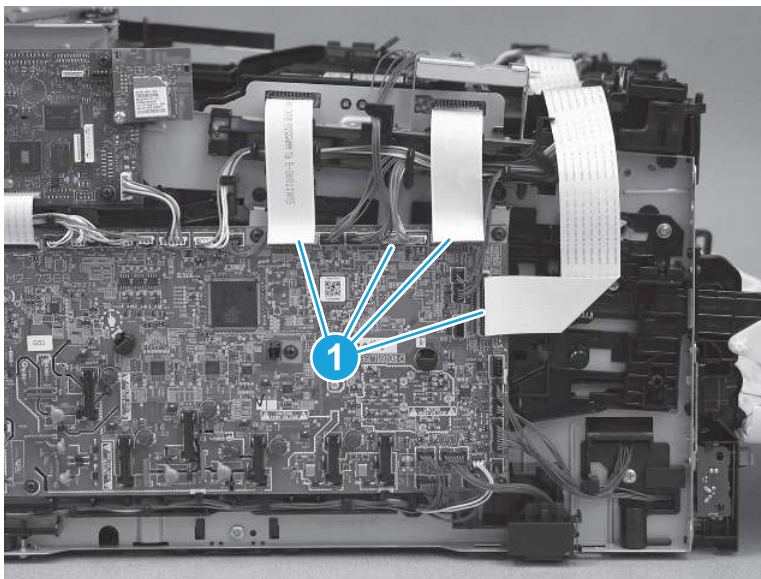
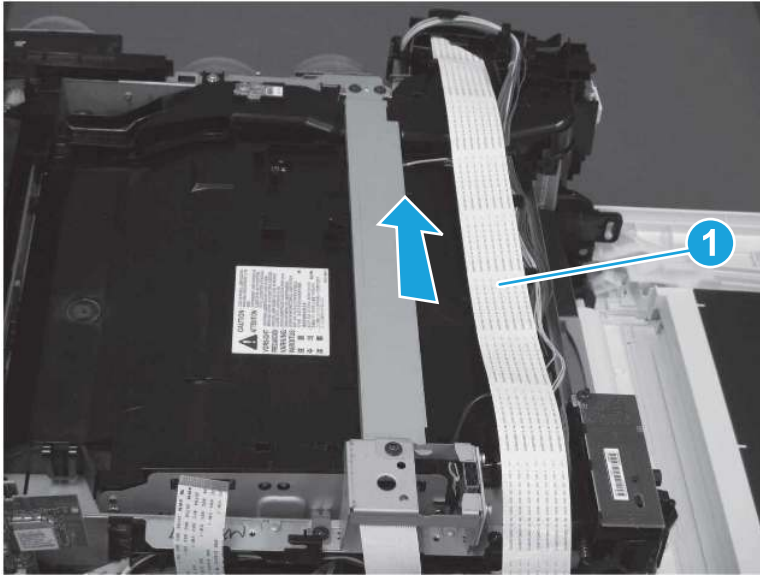
 **NOTE:** Formatter and main PCA appear different than shown below, however, the procedures are the same.

Figure 5-1573 Disconnect four connectors



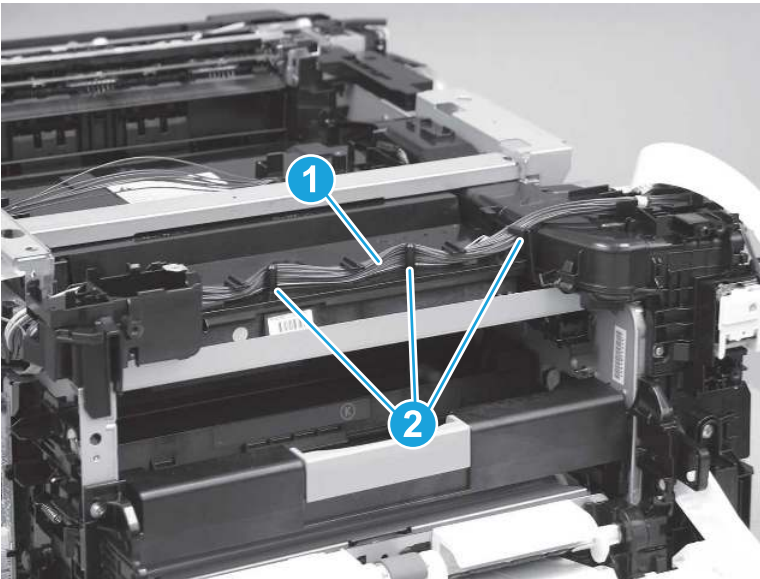
2. Lift the flat cable (callout 1) over to the right side of the printer to allow access to the cables under it.

**Figure 5-1574** Lift the flat cable



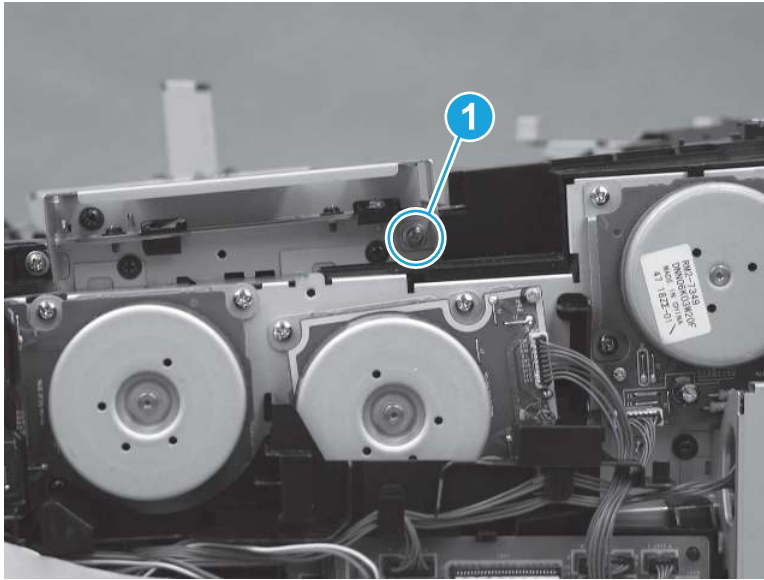
3. Release all of the cables (callout 1) from the cable guides (callout 2).

**Figure 5-1575** Release the cables from the guides




4. On the right side of the printer, remove one screw (callout 1).

Figure 5-1576 Remove one screw



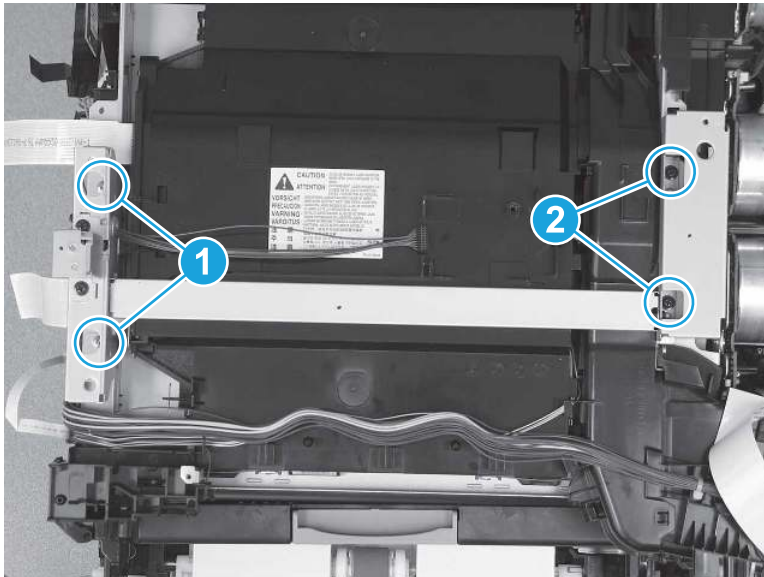
5. On the left side of the printer on top, remove two screws (callout 1). On the right side of the printer on top, remove two screws (callout 2).

---

 **TIP:** The screws on the left (callout 1) are a different type of screw than the screws on the right. When reinstalling the screws, make sure they are in the correct position.

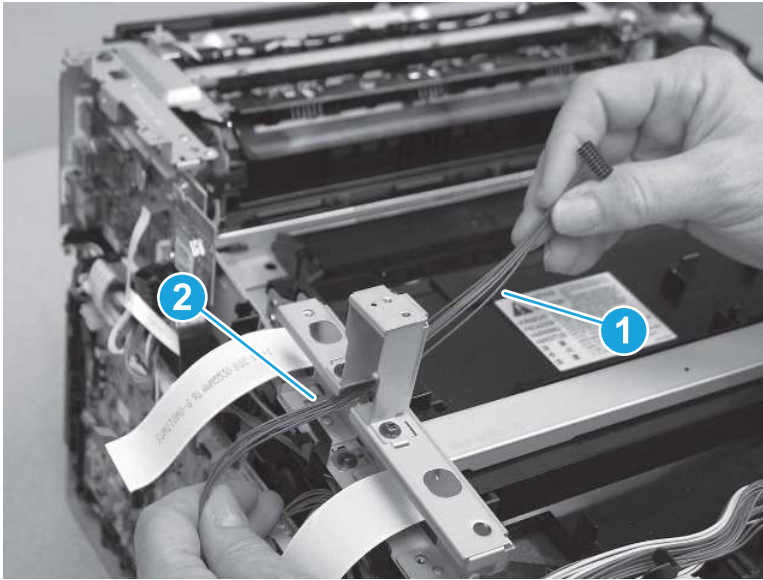
---

Figure 5-1577 Remove four screws



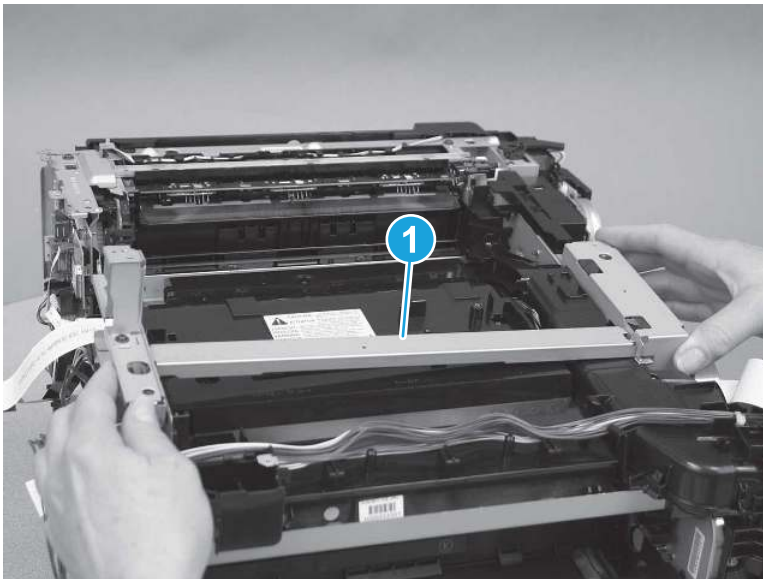
6. Release the cables (callout 1) through the opening in the bracket (callout 2).

**Figure 5-1578** Release the cables



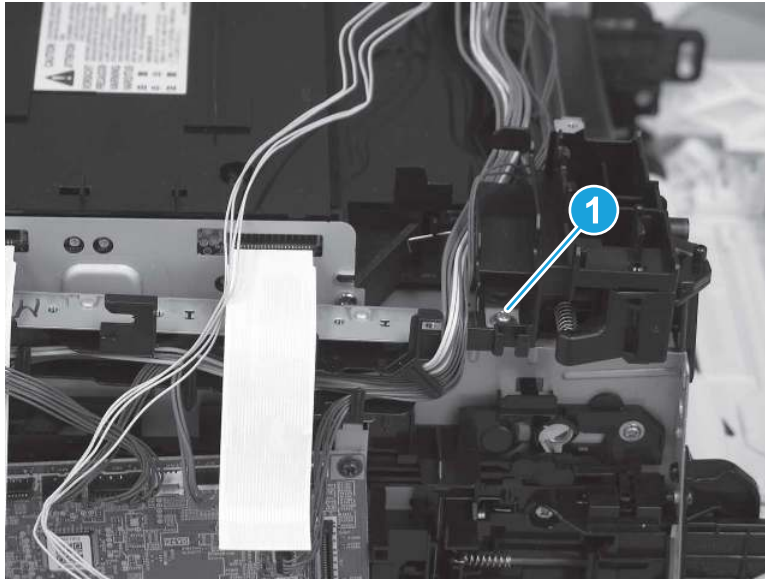
7. Remove the metal bracket (callout 1).

**Figure 5-1579** Remove the metal bracket



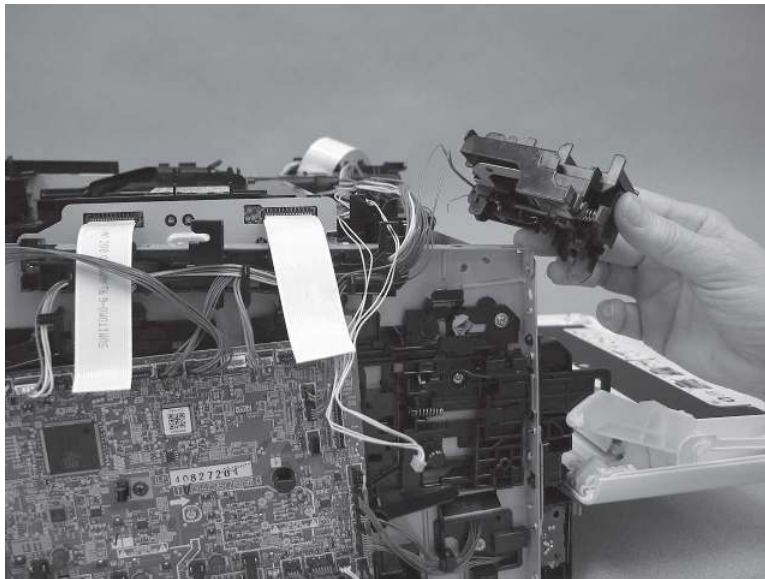
8. Remove one screw (callout 1).

**Figure 5-1580** Remove one screw



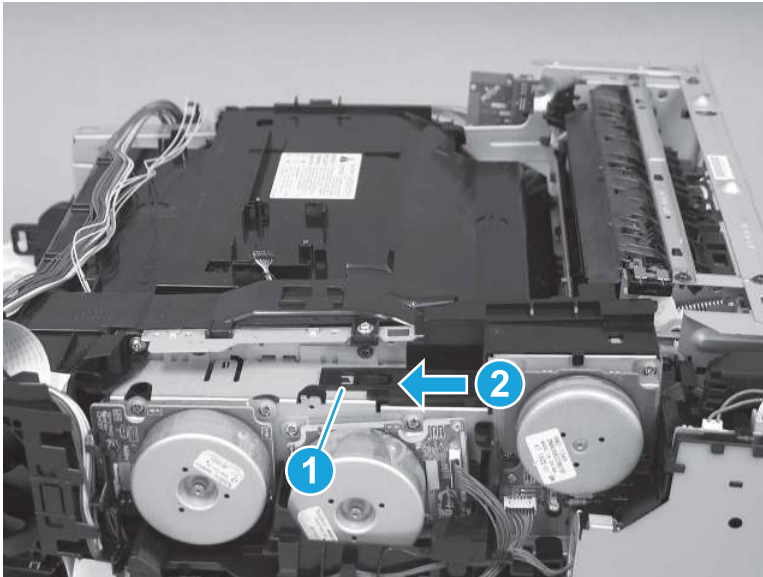
9. Remove the front door switch holder.

**Figure 5-1581** Remove the front door switch holder



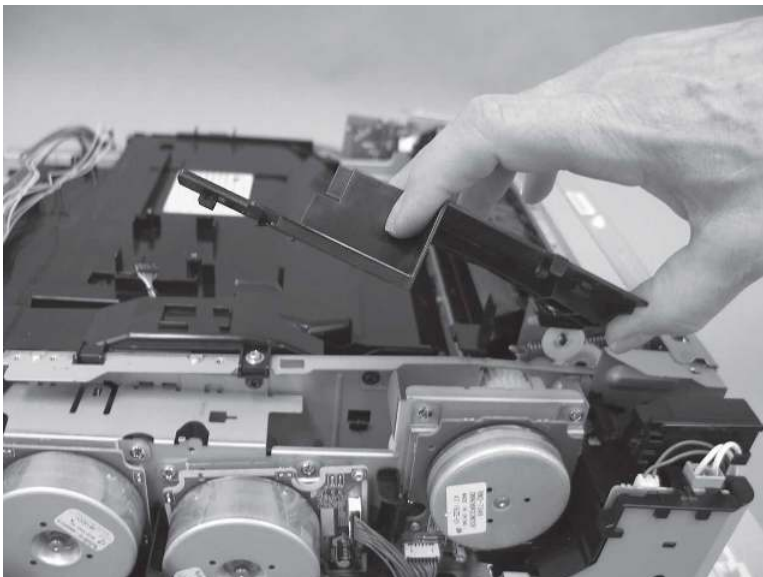
10. On the right side of the printer, toward the back, release one tab (callout 1) and then slide (callout 2) the black cover toward the front of the printer.

**Figure 5-1582** Release one tab on the cover



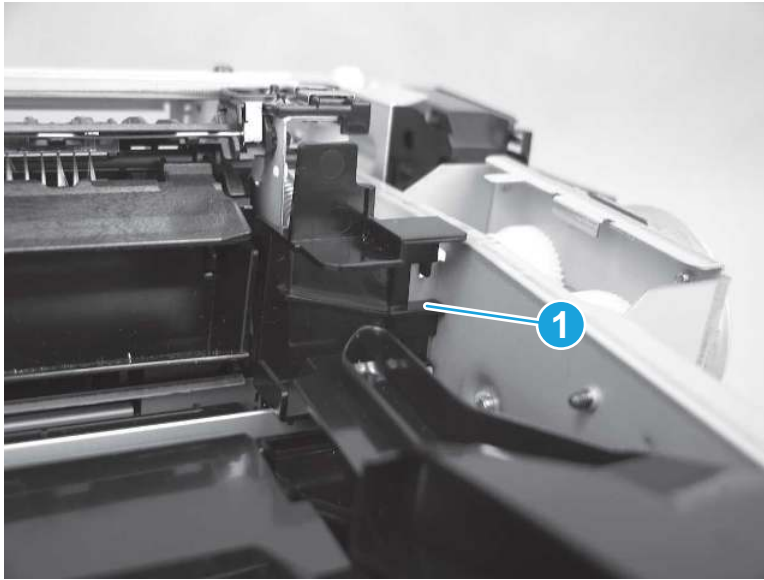
11. Remove the cover.

**Figure 5-1583** Remove the cover



12. Use a pair of needle-nose pliers to release one tab (callout 1).

**Figure 5-1584** Release one tab



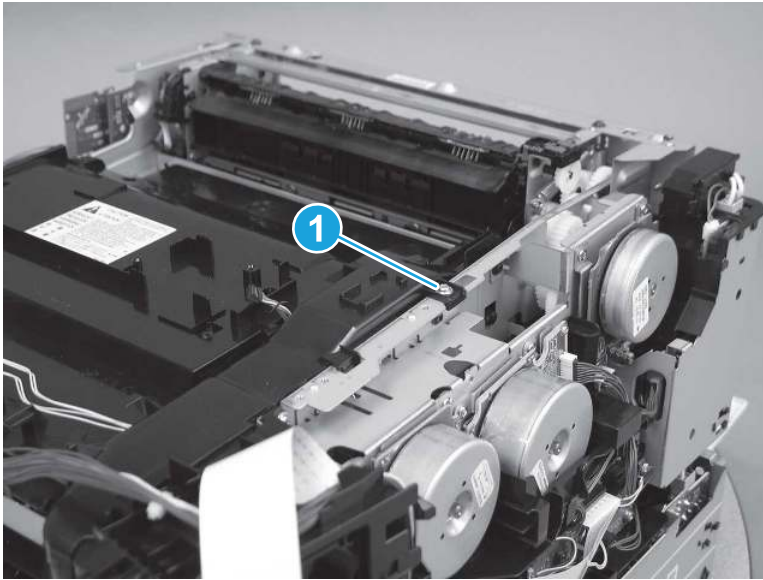
13. Remove the cover.

**Figure 5-1585** Remove the cover



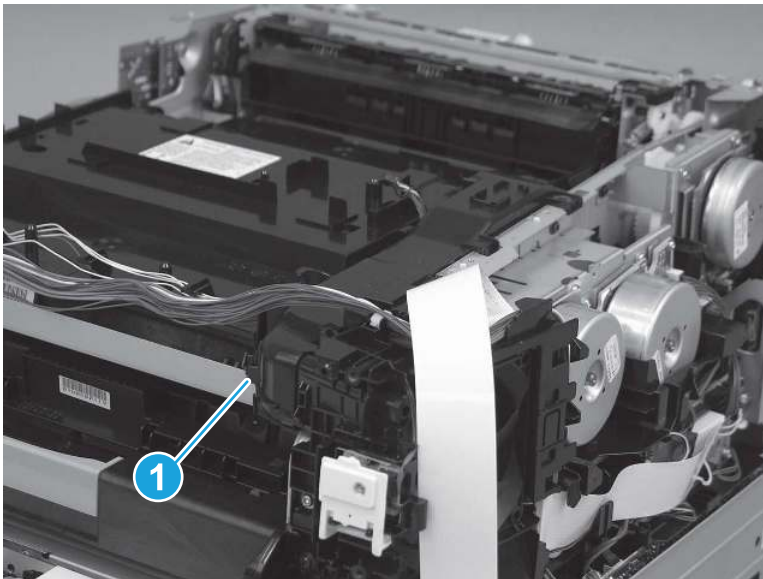
14. Remove one screw (callout 1).

Figure 5-1586 Remove one screw



15. Release one tab (callout 1).

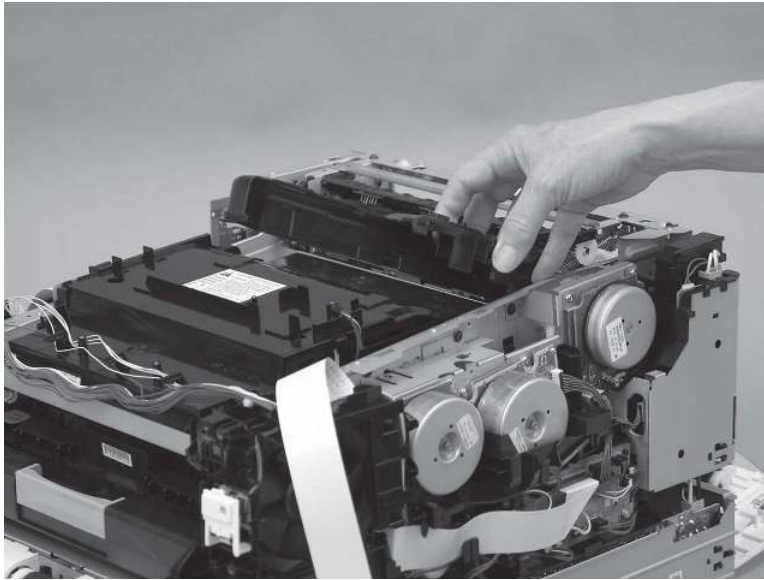
Figure 5-1587 Release one tab





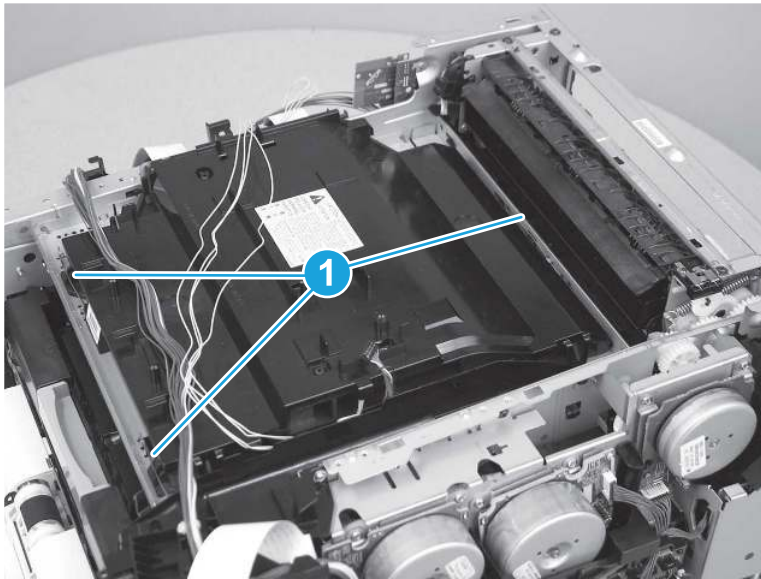
16. Remove the exhaust duct.

**Figure 5-1588** Remove the exhaust duct




17. Use needle-nose pliers to release three springs (callout 1).

**Figure 5-1589** Release three springs

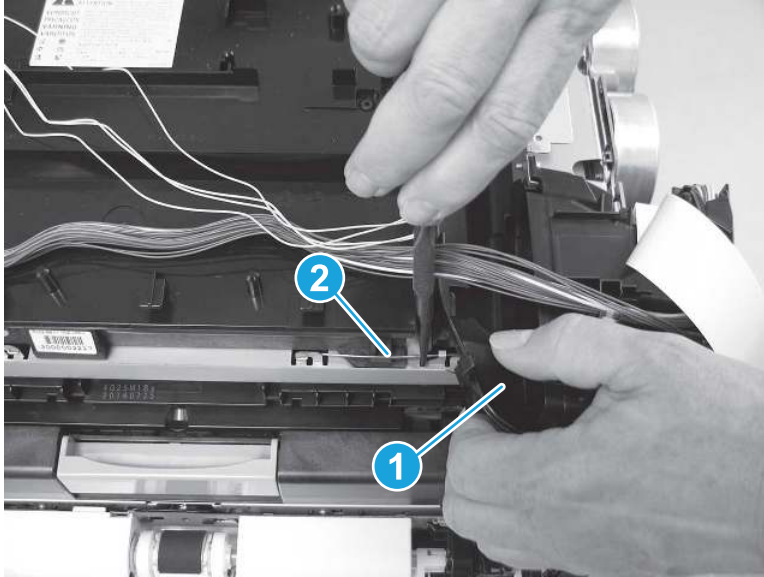


---

 **TIP:** Lift up the edge of the duct (callout 1) to release the right front spring (callout 2).

---

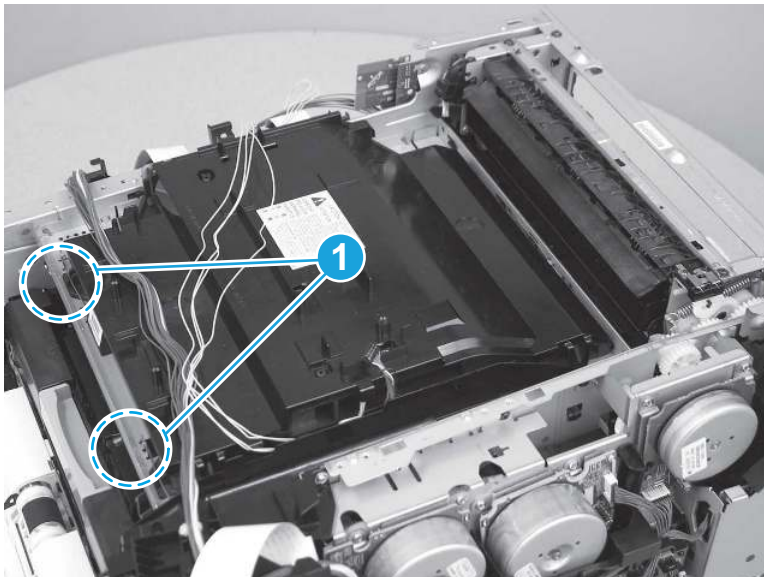
Figure 5-1590 Lift the duct to release the spring



18. Loosen, but do not remove, two screws (callout 1).

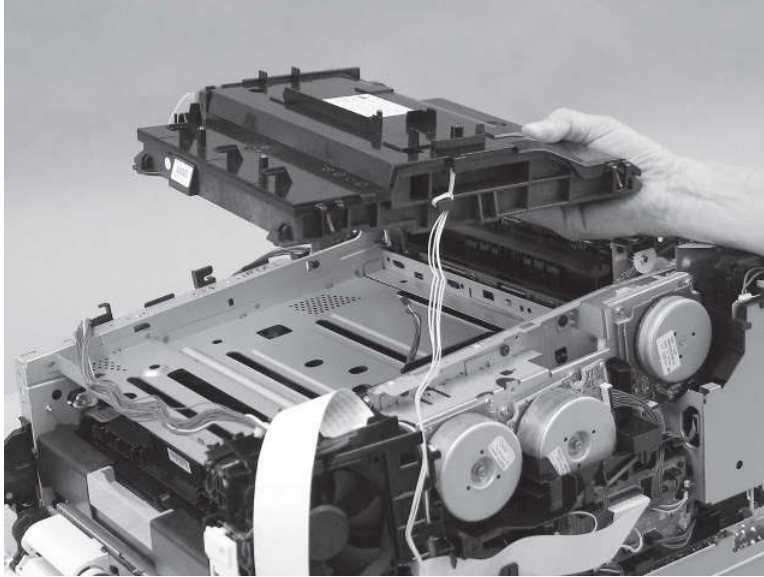
 **NOTE:** These screws must be backed out far enough to give the laser scanner clearance when it is removed.

Figure 5-1591 Loosen two screws



19. Remove the laser scanner.

**Figure 5-1592** Remove the laser scanner



## 11. 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.

---

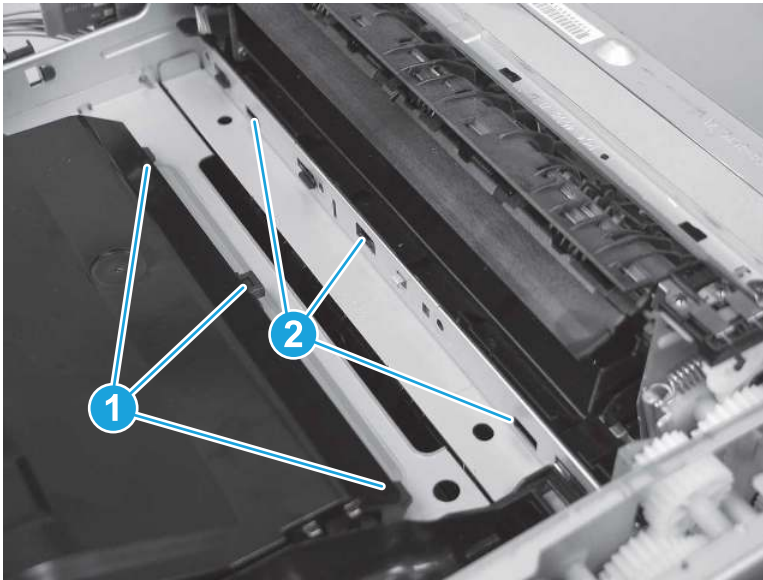
## 12. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

## Laser scanner

1. Install three tabs (callout 1) on back of the laser scanner into the slots (callout 2) in the printer frame.

**Figure 5-1593** Install three tabs



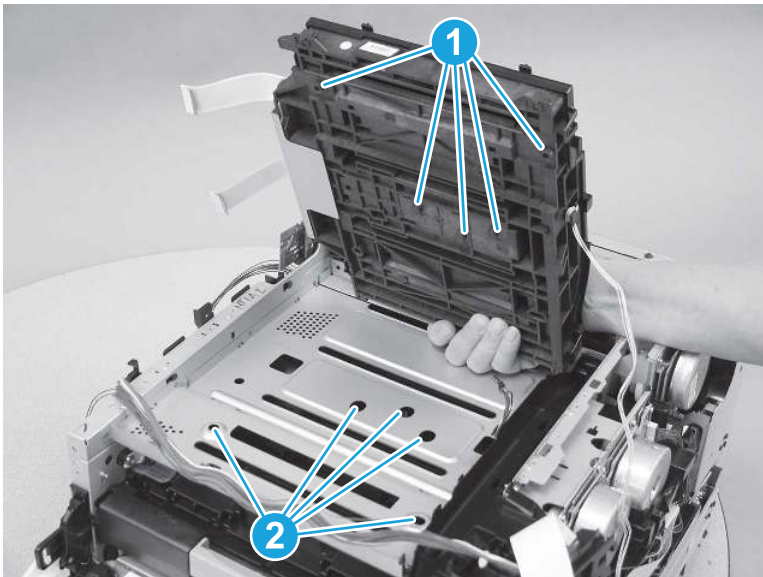
2. Install the five tabs (callout 1) on the bottom of the laser scanner into the holes (callout 2) in the top of the printer.

---

 **TIP:** Check the tabs by feeling along the underside of the sheet metal and verifying they are all fully installed.

---

**Figure 5-1594** Install five tabs



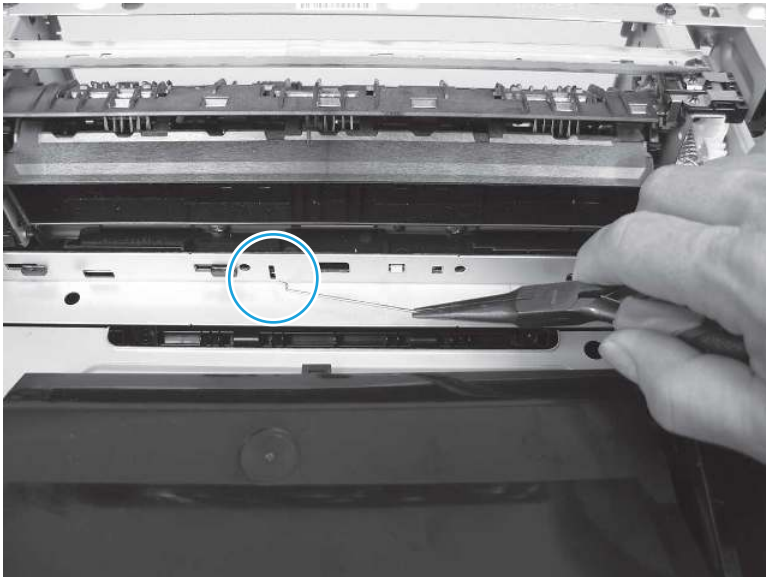
3. Before installing the springs in the next step, note the proper position of the springs when installed.

**Figure 5-1595** Spring position



4. If the rear spring becomes dislodged from the printer frame, reposition it as shown below.

**Figure 5-1596** Reposition the spring



## Removal and replacement: Fuser

Learn how to remove and replace the fuser.

[View a video of removing and replacing the fuser.](#)

Mean time to repair: 24 minutes (SFP)

Service level: Medium (SFP)

Mean time to repair: 41 minutes (MFP)


Service level: Medium (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](http://www.hp.com/buy/parts).

**Table 5-46** Part information

Part number	Part description
RM2-6460-000CN	Fuser assembly (110-127V)
RM2-6461-000CN	Fuser assembly (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

Make sure that the printer initializes to a **Ready** state.


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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

Figure 5-1597 Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

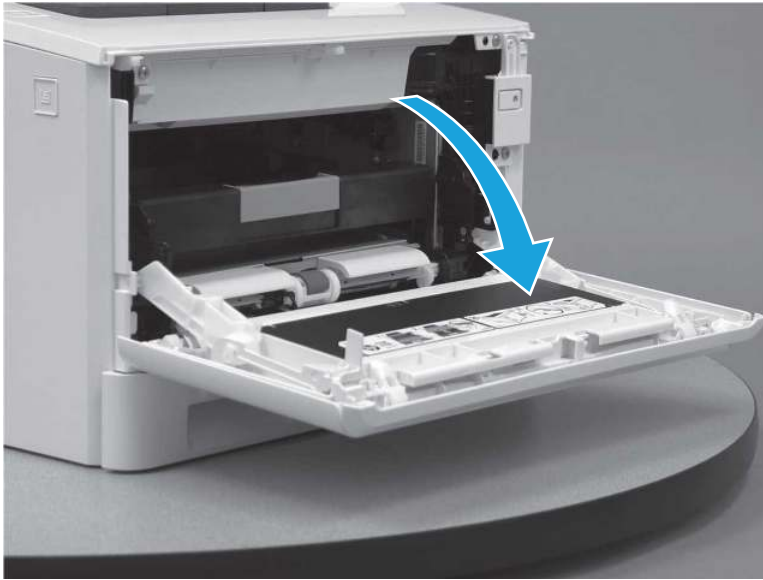
1. Press the button (callout 1) on the left side of the printer to release the front door.

Figure 5-1598 Release the front door



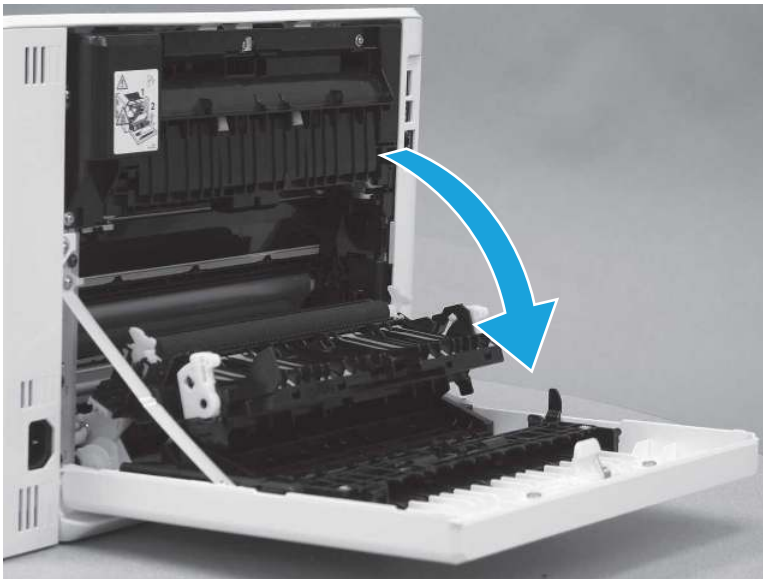
2. Open the front door.

**Figure 5-1599** Open the front door



3. Open the duplexing door.

**Figure 5-1600** Open the duplexer door



### 3. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).



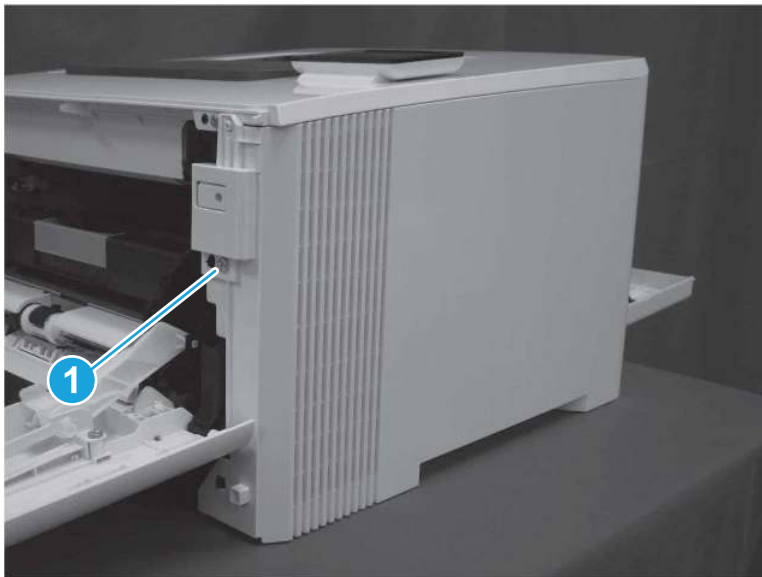
1. At the back of the printer, remove one screw (callout 1).

**Figure 5-1601** Remove one screw



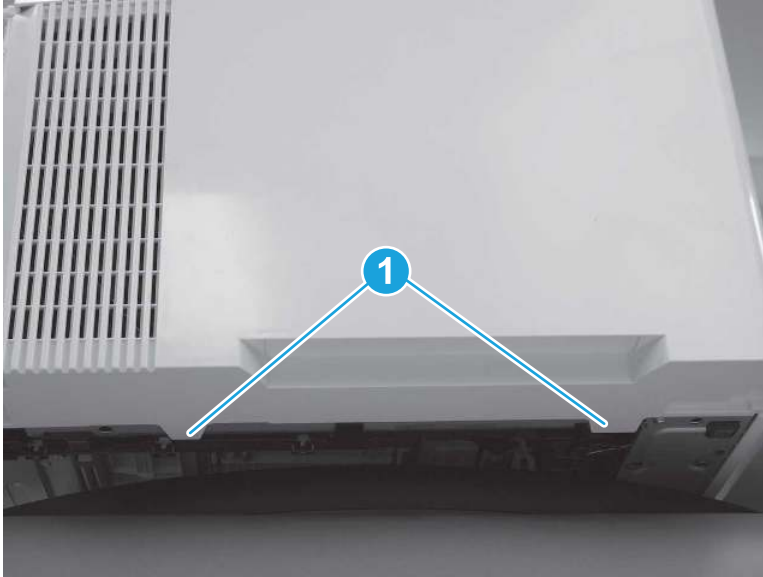
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-1602** Remove one screw



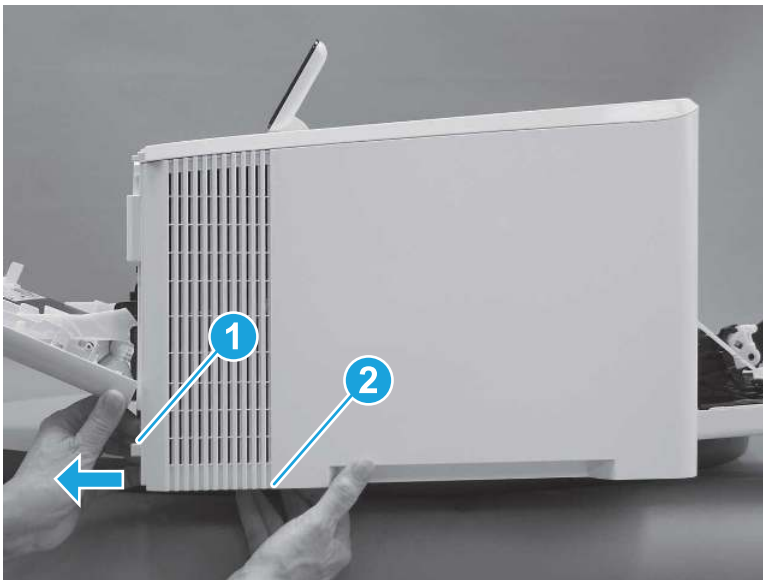
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1603** Locate the tabs



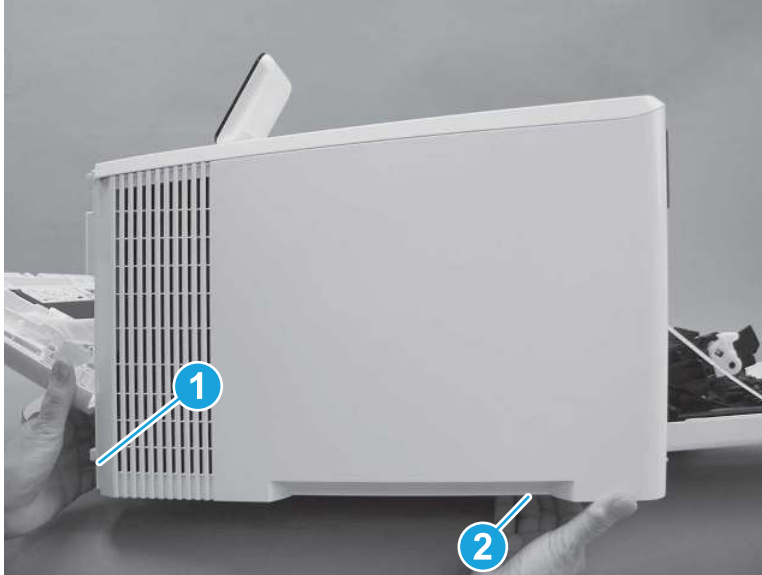
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-1604** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

**Figure 5-1605** Release lower rear tab



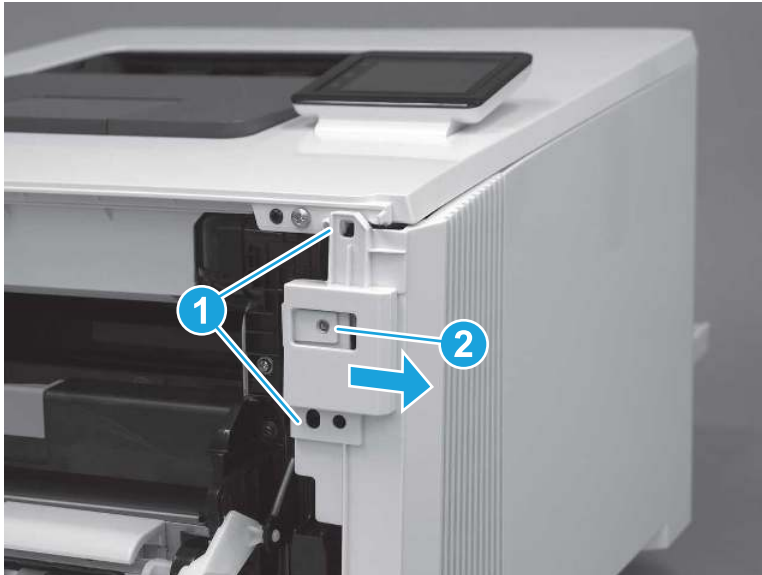
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

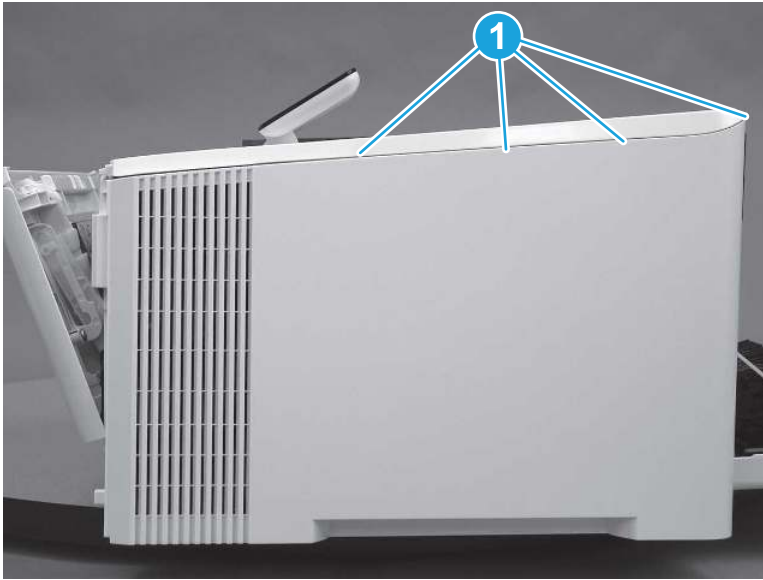
---

**Figure 5-1606** Release two front tabs



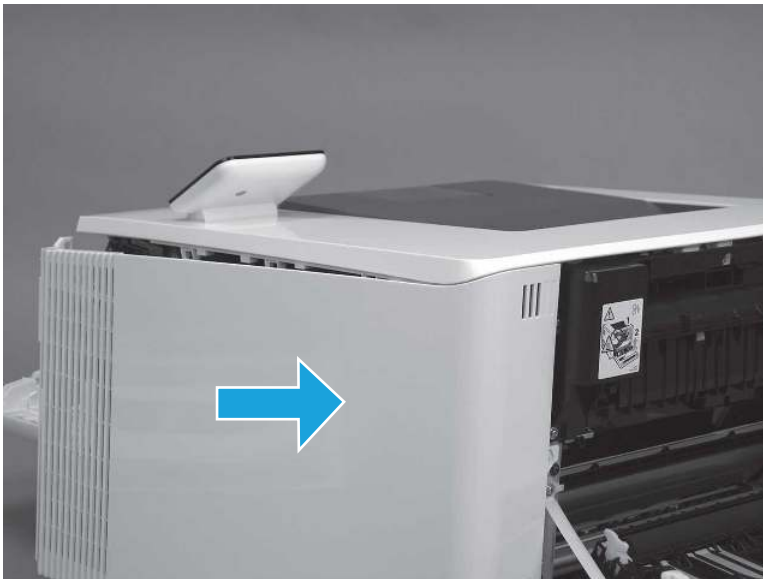
7. Release four tabs on the top of the printer (callout 1).

**Figure 5-1607** Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-1608** Remove the right cover



#### 4. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

**Figure 5-1609** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-1610** Remove one screw



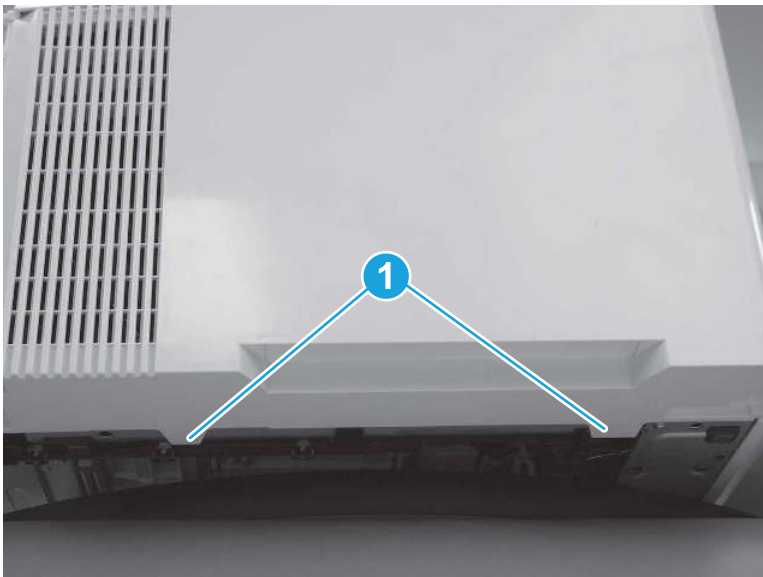
3. At the front of the printer, remove one screw (callout 1).

Figure 5-1611 Remove one screw



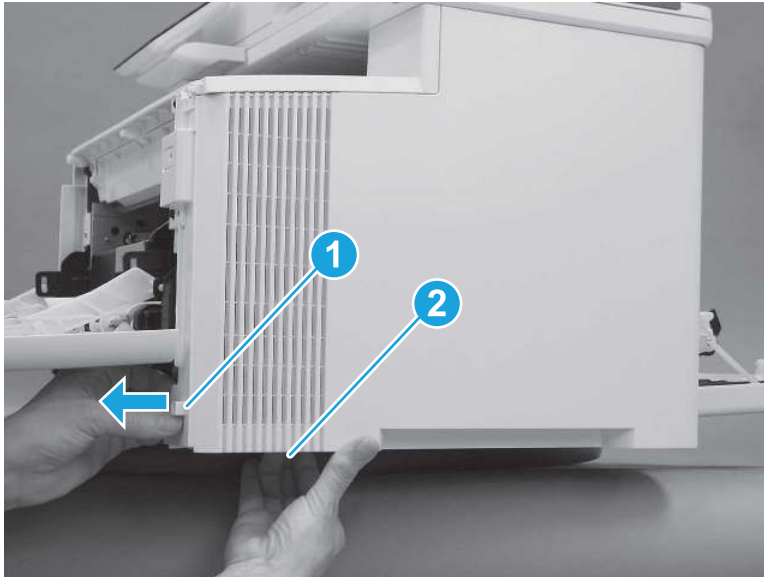
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

Figure 5-1612 Locate the tabs



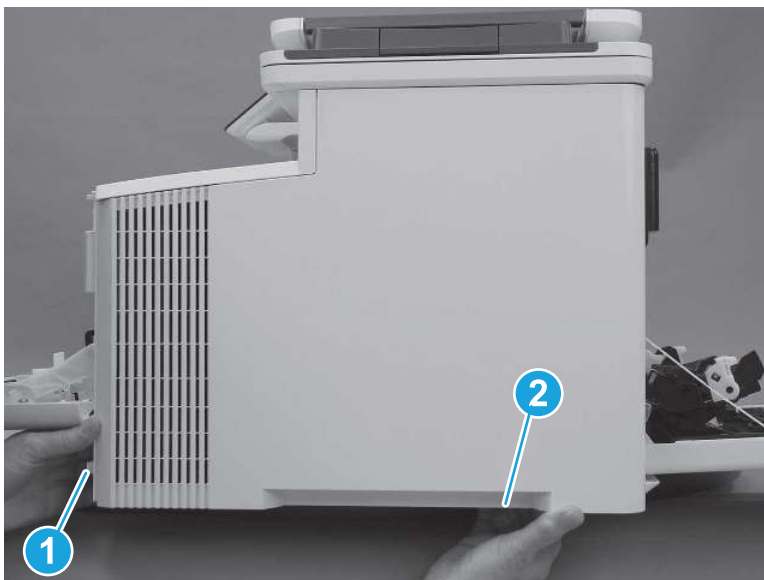
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-1613** Release front lower tabs



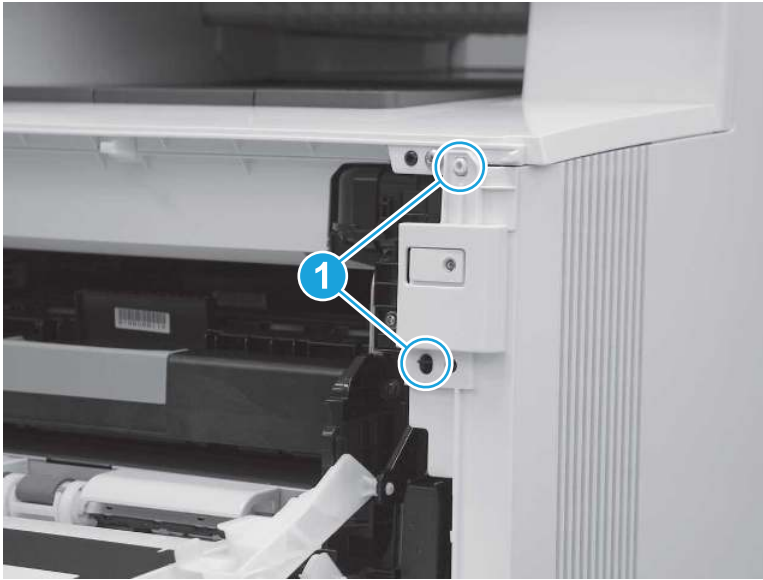
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-1614** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-1615** Release front upper tabs



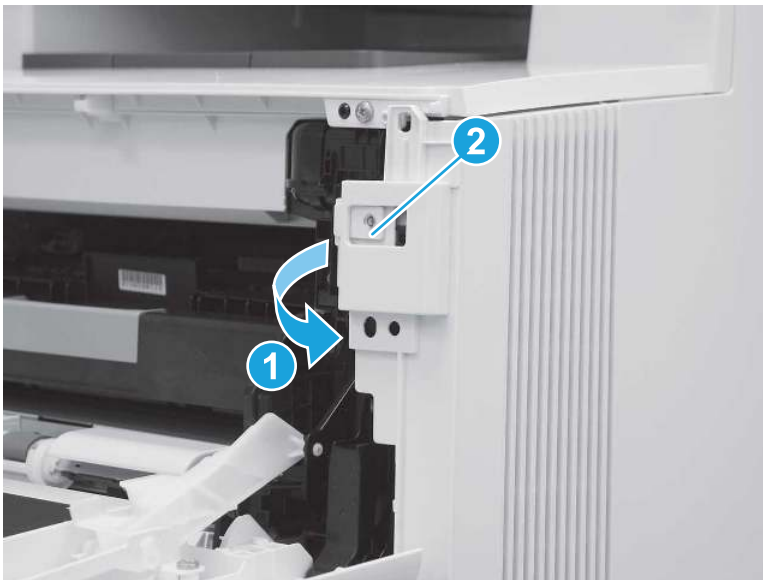
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

---

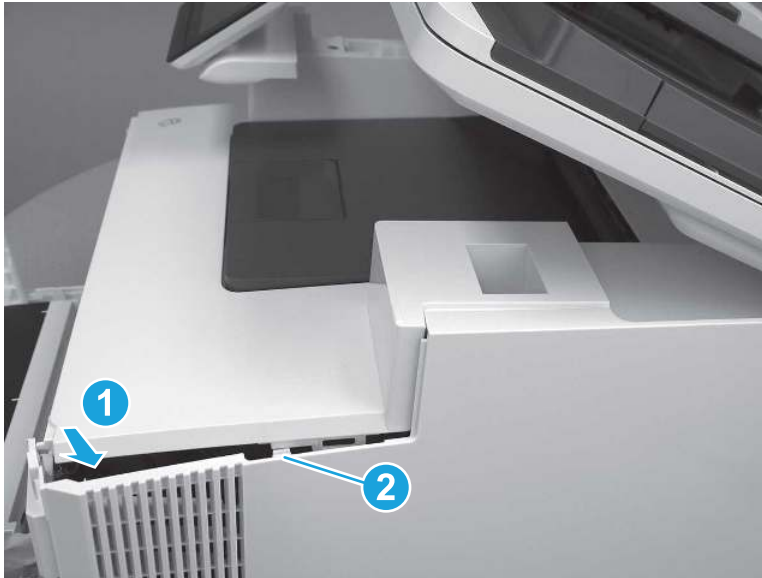
**Figure 5-1616** Rotate the front of the cover





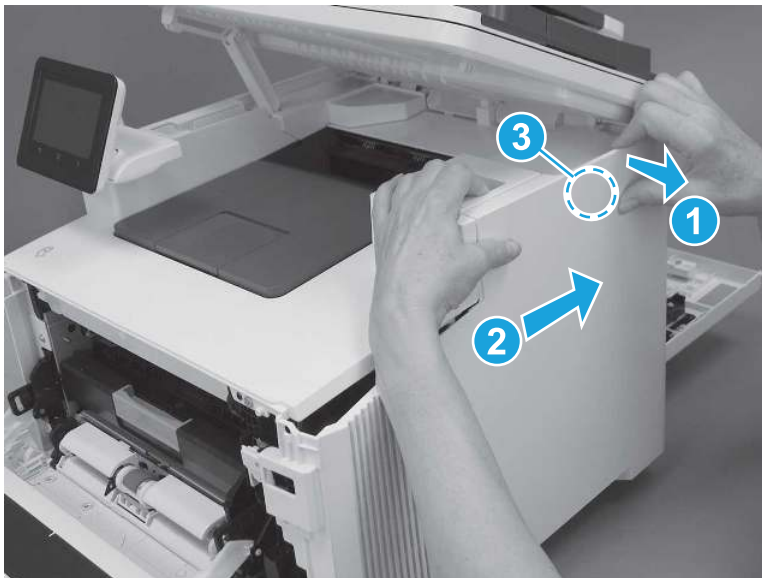
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

**Figure 5-1617** Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-1618** Release one tab and one hook



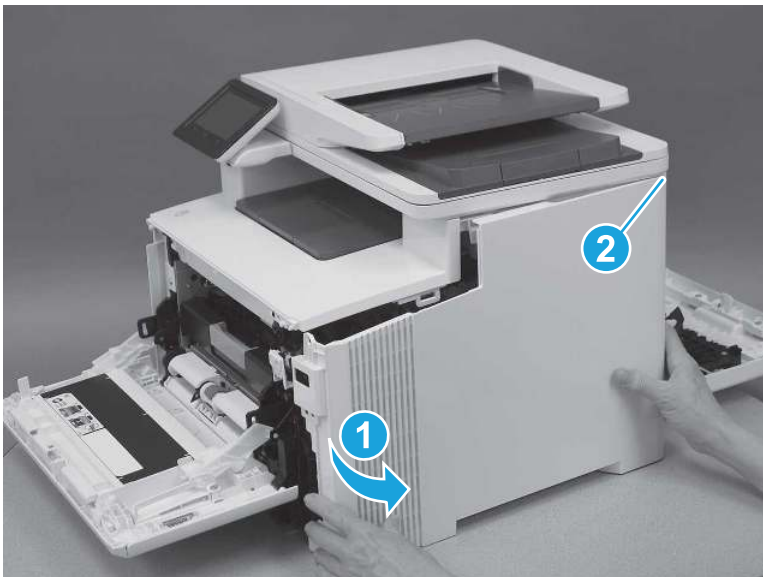
11. Lower the scanner.

Figure 5-1619 Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

Figure 5-1620 Remove the right cover

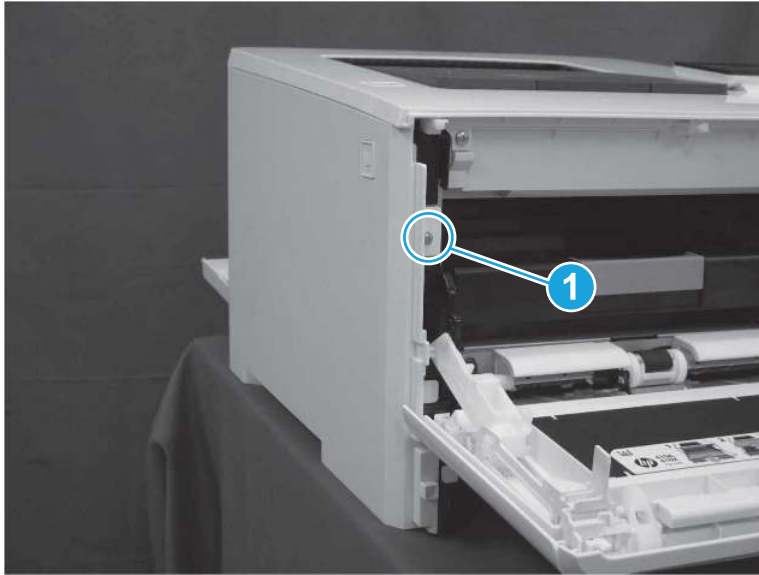


## 5. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

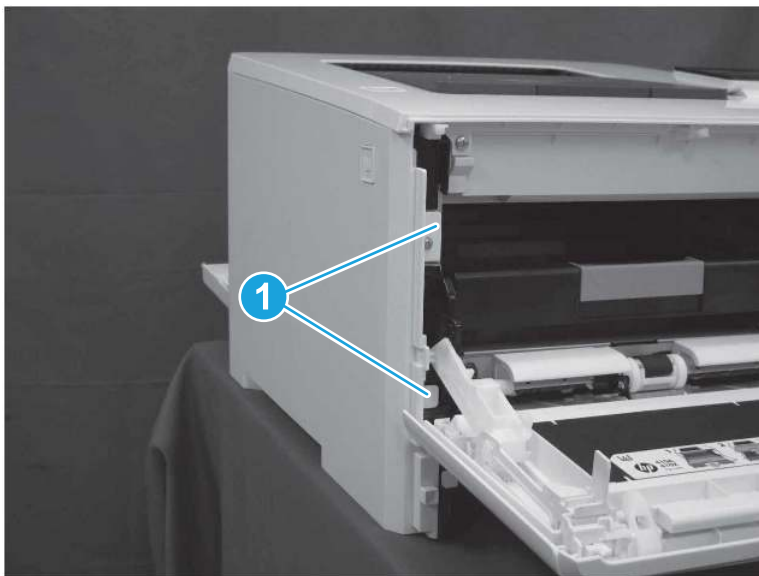
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-1621** Remove one screw



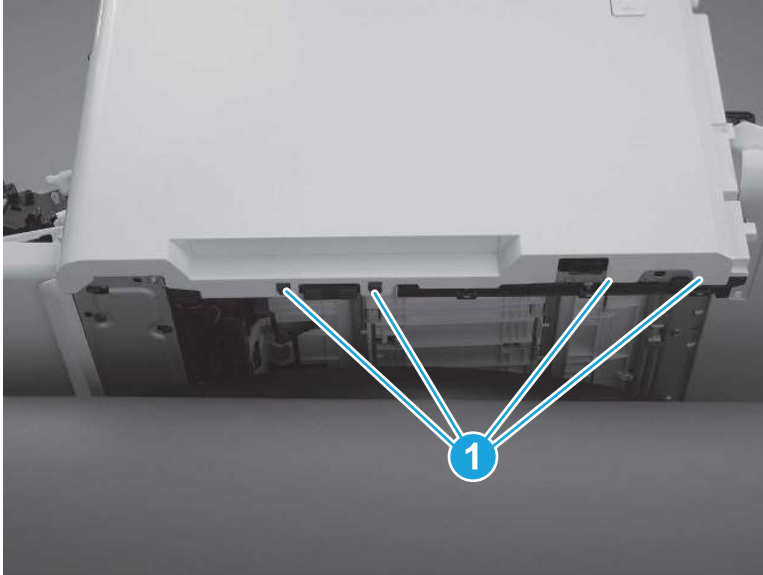
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-1622** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1623** Locate the tabs



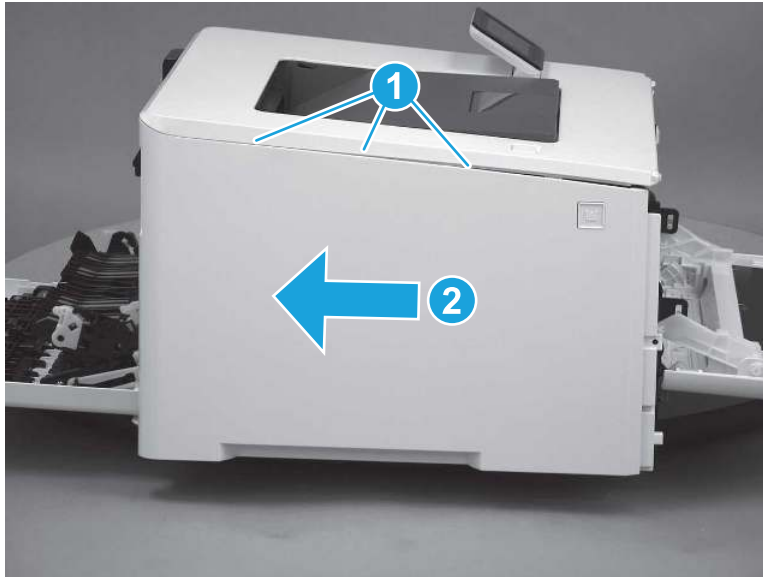
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-1624** Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

Figure 5-1625 Release three tabs



## 6. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

1. Raise the scanner.

Figure 5-1626 Raise the scanner



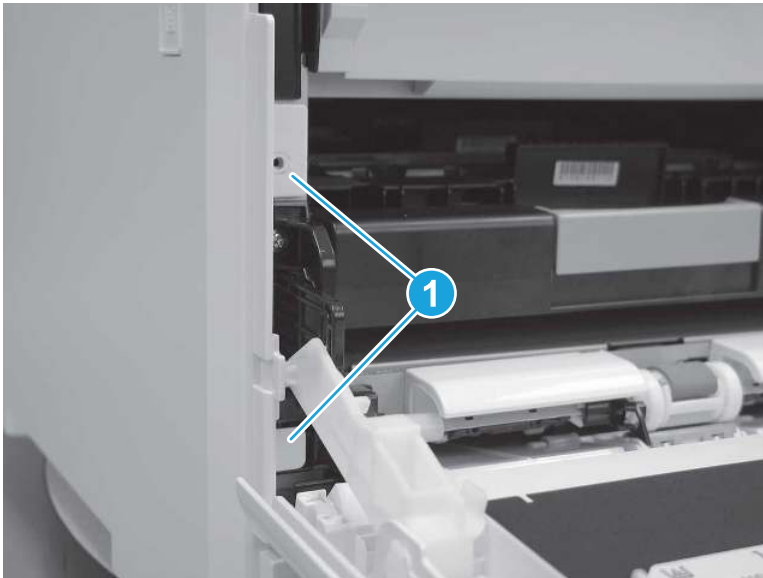
2. At the front of the printer, remove one screw (callout 1).

Figure 5-1627 Remove one screw



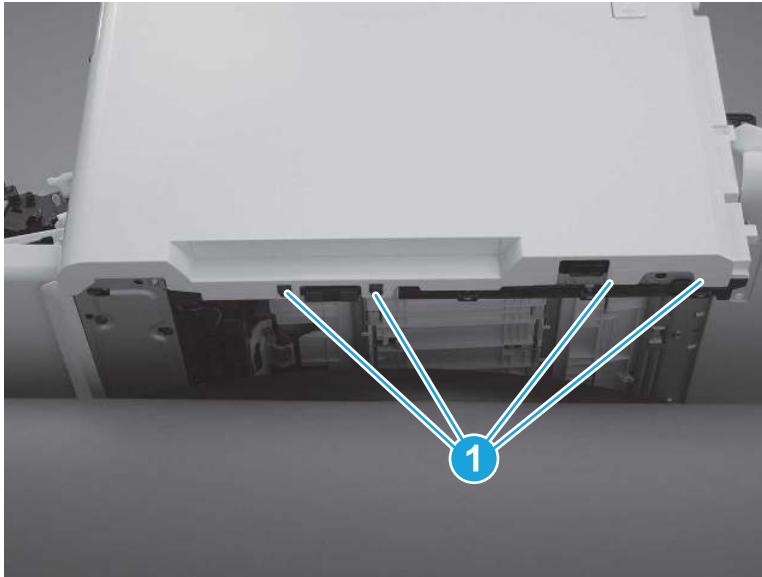
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

Figure 5-1628 Release two tabs



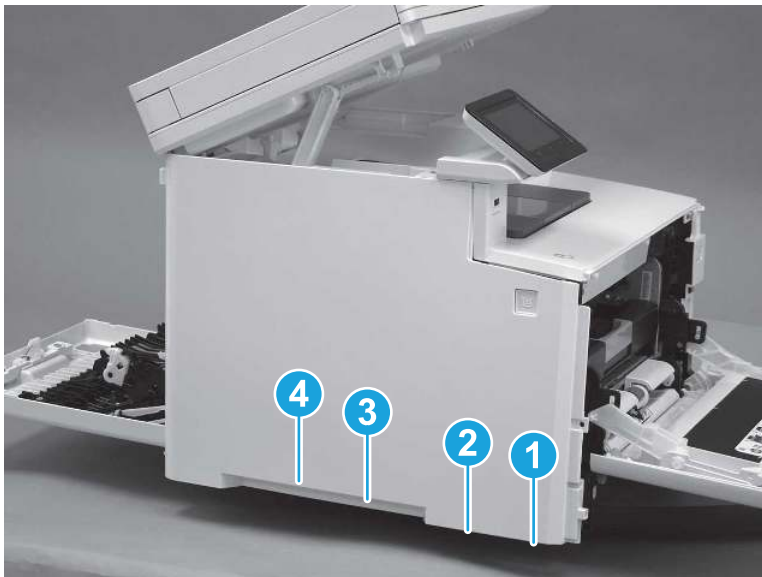
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1629** Locate the tabs



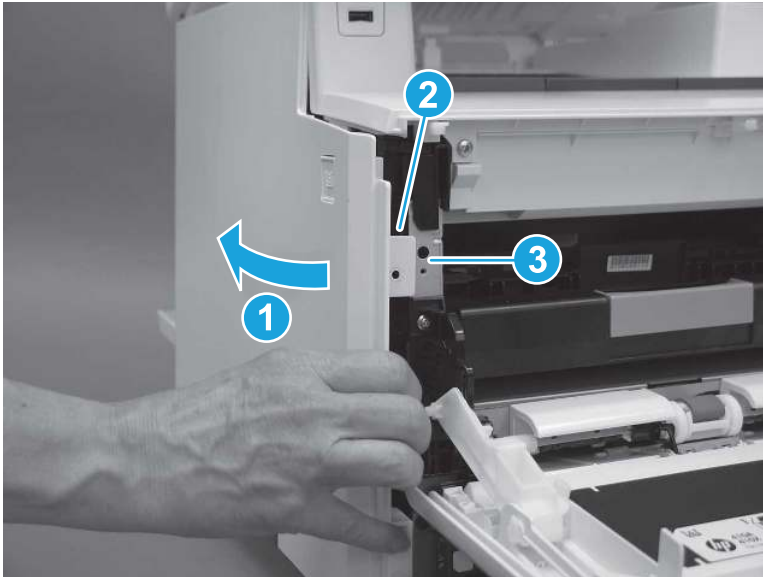
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-1630** Release four tabs



6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

Figure 5-1631 Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

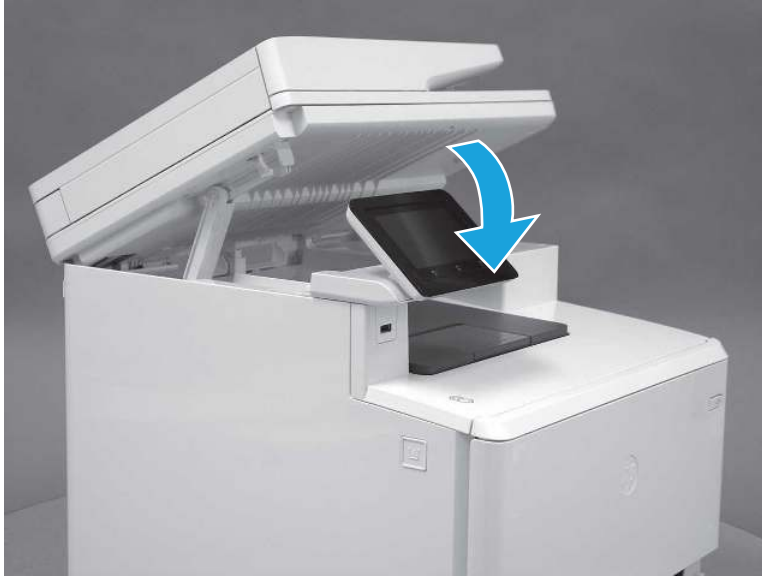
Figure 5-1632 Release one tab and two hooks





8. Lower the scanner.

Figure 5-1633 Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

Figure 5-1634 Remove the left cover



## 7. Remove the control panel display and mount base (MFP only)

Follow these steps to remove the control panel display and mount base (MFP only).

1. Open the integrated scanner assembly (ISA).

---

 **NOTE:** The ISA might already have been removed. If so, skip ISA related steps.

If the control panel is not fully tilted forward, tilt it forward now until it stops.

---

Figure 5-1635 Open the ISA



2. Remove one screw (callout 1).

Figure 5-1636 Remove one screw



3. Use a small flat-blade screwdriver to release two tabs (callout 1) on the control-panel mount cover.

**Figure 5-1637** Release two tabs



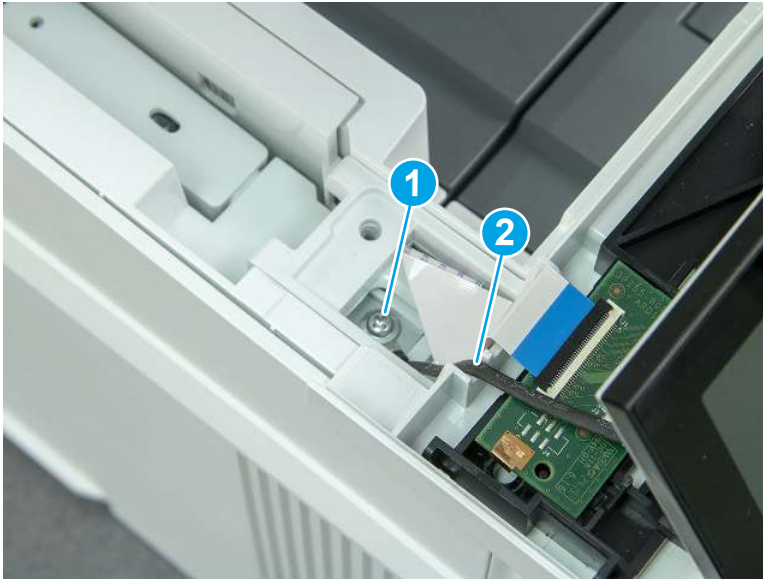
4. Rotate the control-panel mount cover up towards the control panel to release it, and then remove the cover.

**Figure 5-1638** Remove the cover



5. Remove one grounding screw (callout 1), and then move the ground cable (callout 2) out of the way.

Figure 5-1639 Remove one screw



6. Disconnect two FFC (callout 1).

Figure 5-1640 Disconnect two FFC



7. Release one tab (callout 1), and then remove the interconnect board (ICB).

Figure 5-1641 Remove the ICB



8. Remove two screws (callout 1), and then lift the control panel display and mount base together to remove them.

---

**⚠ CAUTION:** Carefully unfold the FFC and release it through the opening in the mount base.

---

Figure 5-1642 Remove two screws and remove the control panel assembly

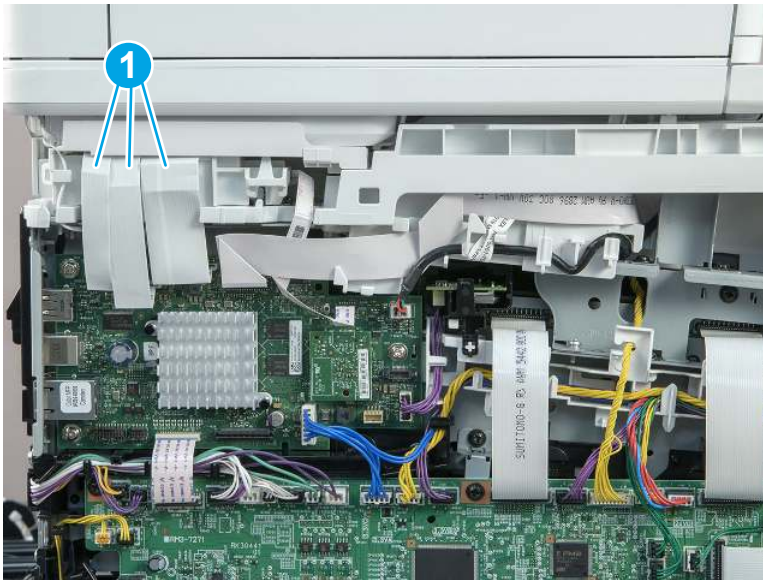


## 8. Remove the integrated scanner assembly

(MFP)

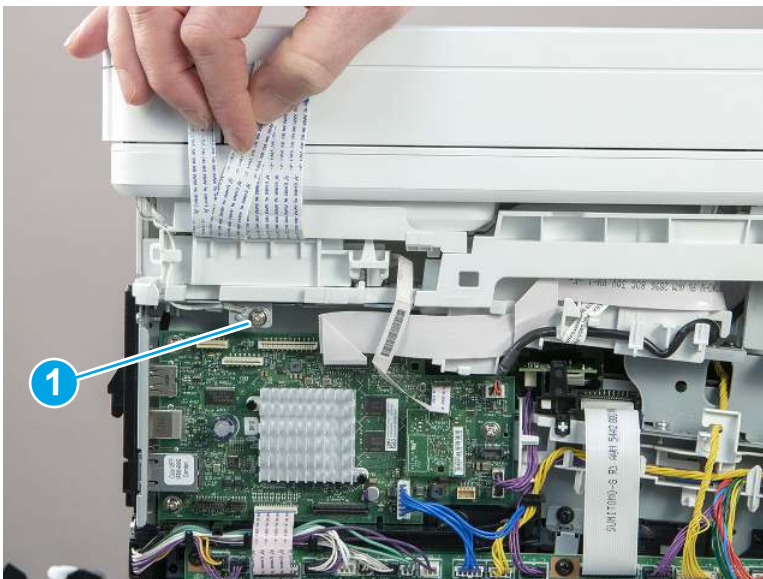
1. On the left side of the printer, disconnect three connectors (callout 1).

**Figure 5-1643** Disconnect three connectors



2. Raise the scanner cables up, and then remove one screw (callout 1) to release the ground wire.

**Figure 5-1644** Remove one screw and release the ground wire



3. Raise the scanner.

**Figure 5-1645** Raise the scanner



4. With the scanner lifted, release the tab (callout 1) on the scanner support arm pin from the slot and rotate the pin in the direction indicated.

**Figure 5-1646** Release scanner support arm pin



5. Remove the scanner arm pin.

---

**⚠ CAUTION:** Once the scanner arm pin is removed, support the scanner with one hand at all times so that it does not fall backwards off of the printer.

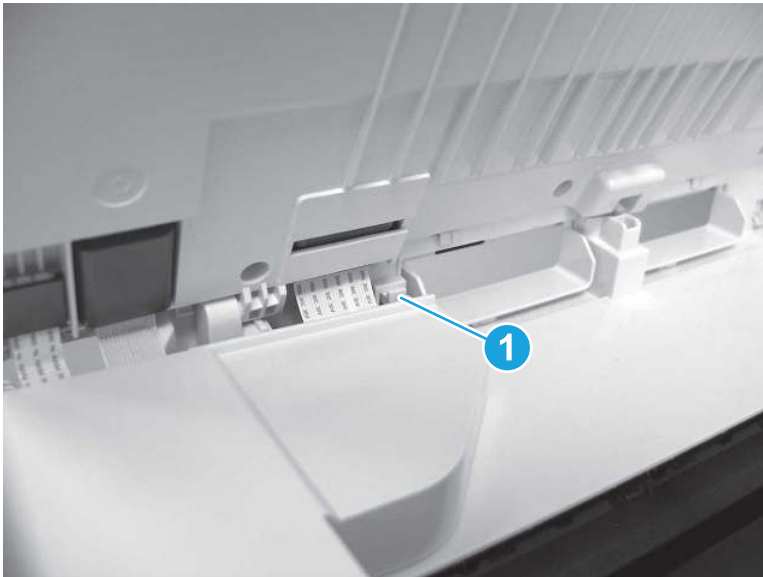
---

Figure 5-1647 Remove the pin



6. On the top of the printer, use a flat-blade screwdriver to release one tab (callout 1).

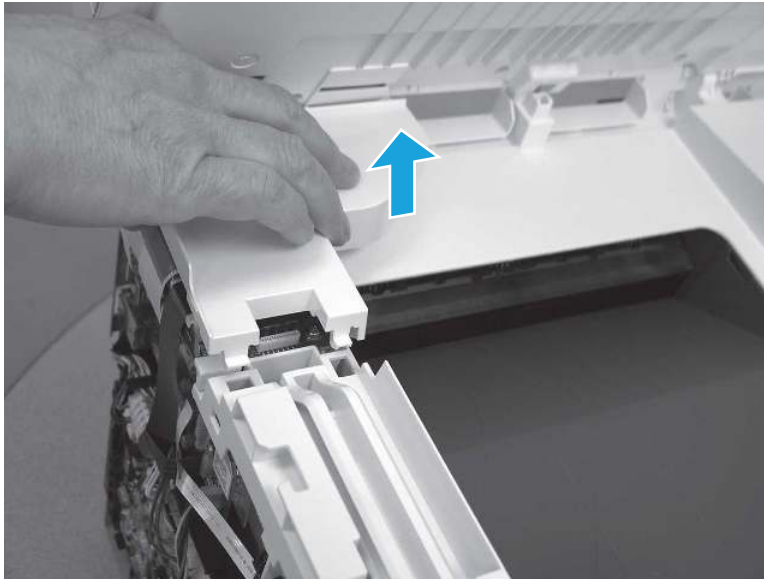
Figure 5-1648 Release one tab





7. Remove the scanner cable cover.

**Figure 5-1649** Remove the scanner cable cover



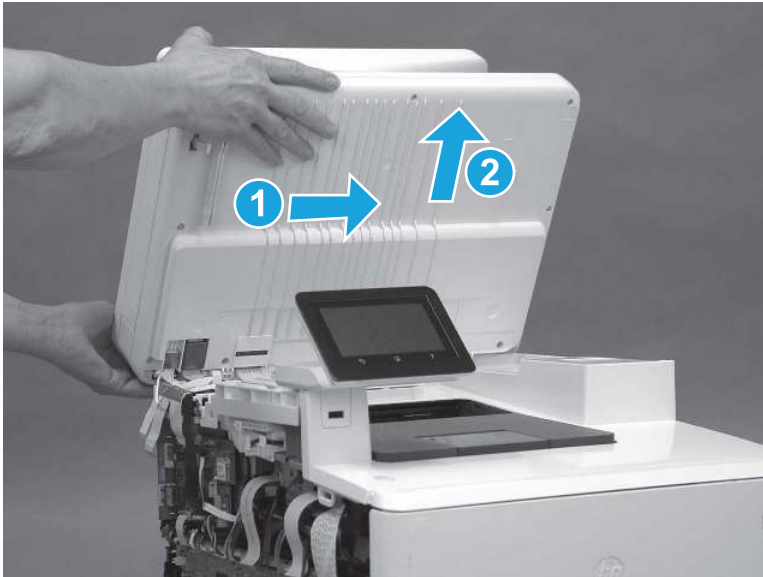
8. The scanner cables (callout 1) are held in place on the top cover with double-sided tape. Carefully release the cables from the top cover.

**Figure 5-1650** Release the cables



9. Open the scanner assembly fully, slide the assembly toward the right side of the printer, and then lift the assembly off of the printer.

**Figure 5-1651** Remove the scanner assembly

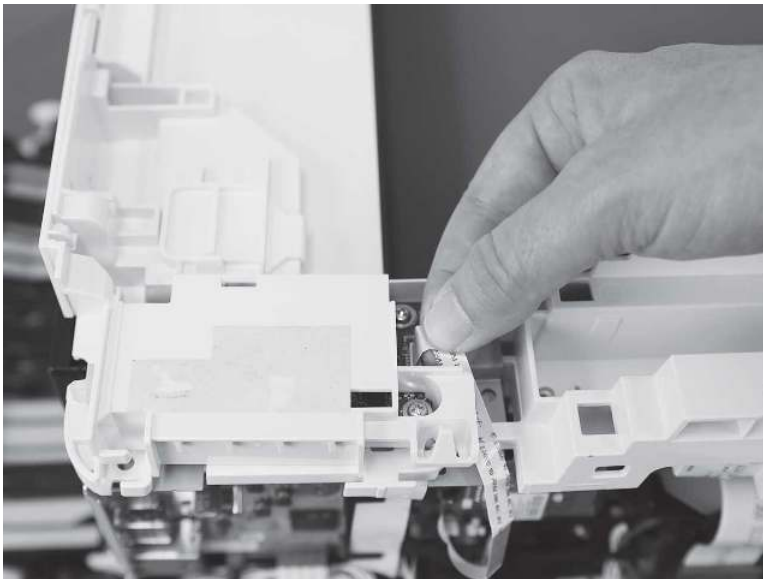


## 9. Remove the fax PCA (MFP)

Follow these steps to remove the fax PCA (MFP).

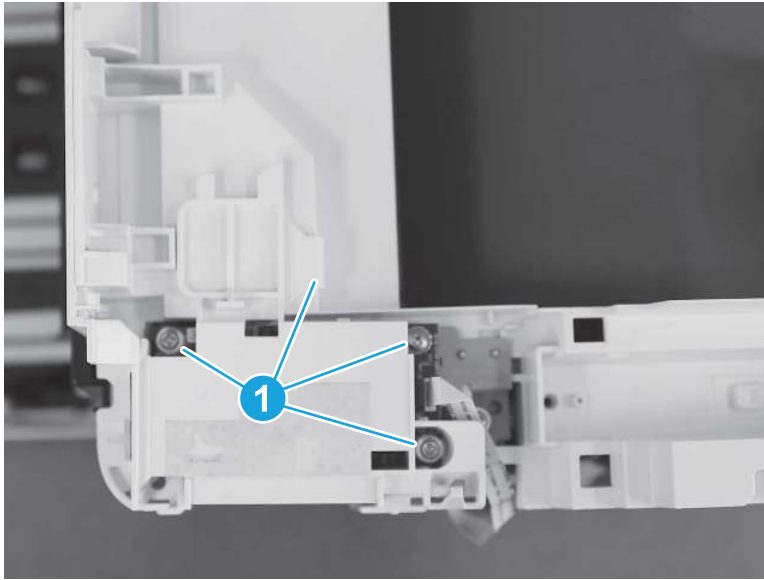
1. Disconnect one FFC cable from fax PCA.

**Figure 5-1652** Disconnect one connector



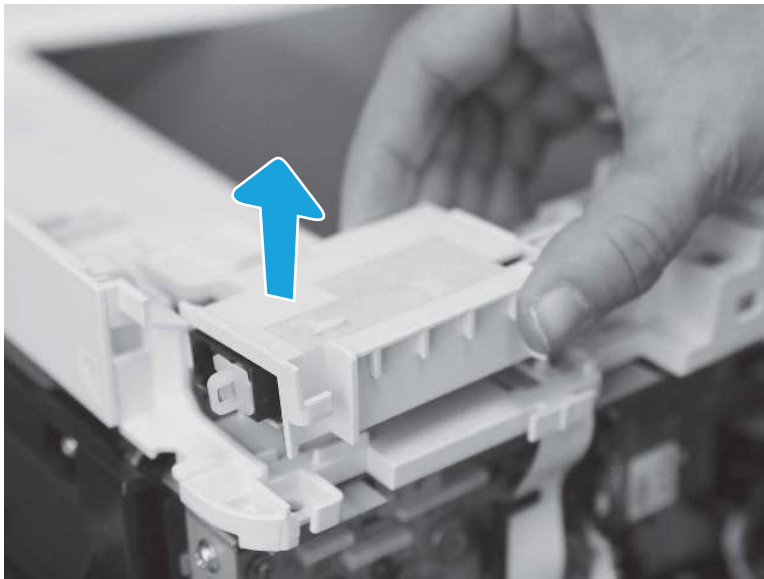
2. Remove three screws and release one tab (callout 1).

**Figure 5-1653** Remove three screws and release one tab



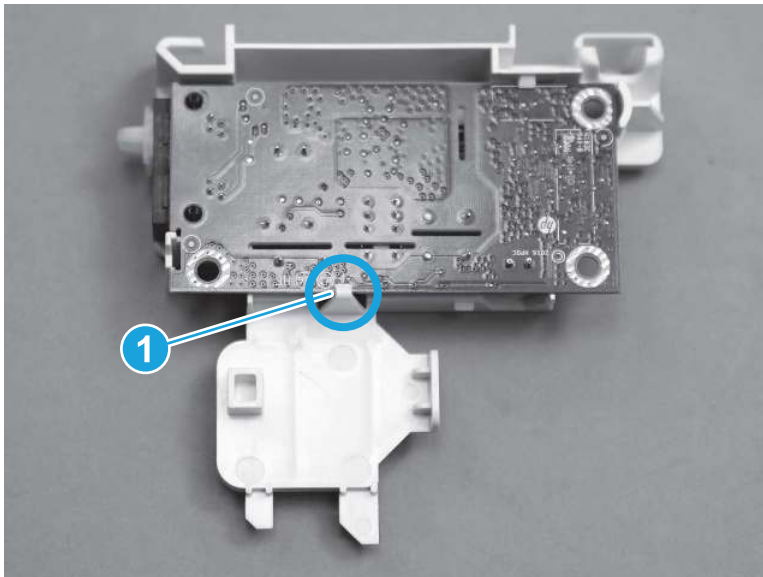
3. Lift up to remove the fax PCA.

**Figure 5-1654** Lift up to remove the fax PCA



4. **Optional step:** Release the tab (callout 1) on the back of the fax PCA to remove the PCA from the plastic holder.

**Figure 5-1655** Release one tab on the back of the fax PCA



## 10. Remove the top cover (SFP)

Follow these steps to remove the top cover (SFP).

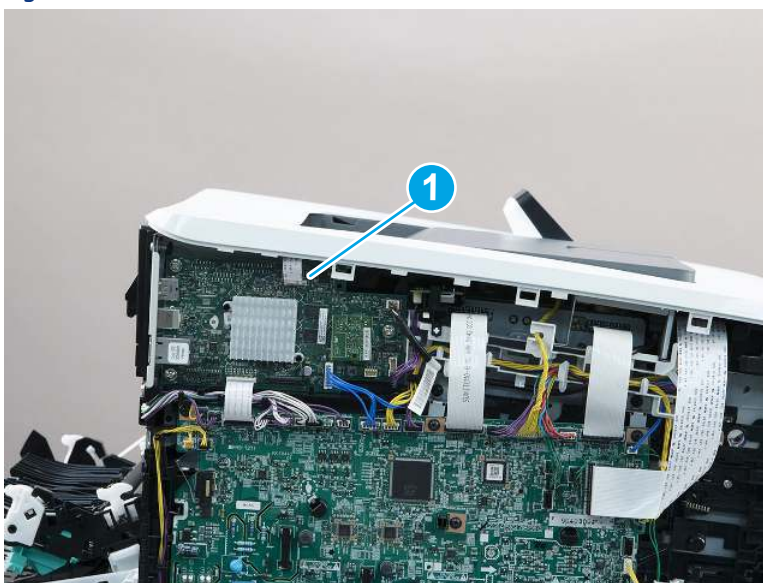
1. On the left side of the printer, on the formatter, disconnect one connector (callout 1).

---

 **NOTE:** The formatter may look slightly different than what is shown below, however the removal procedures are the same.

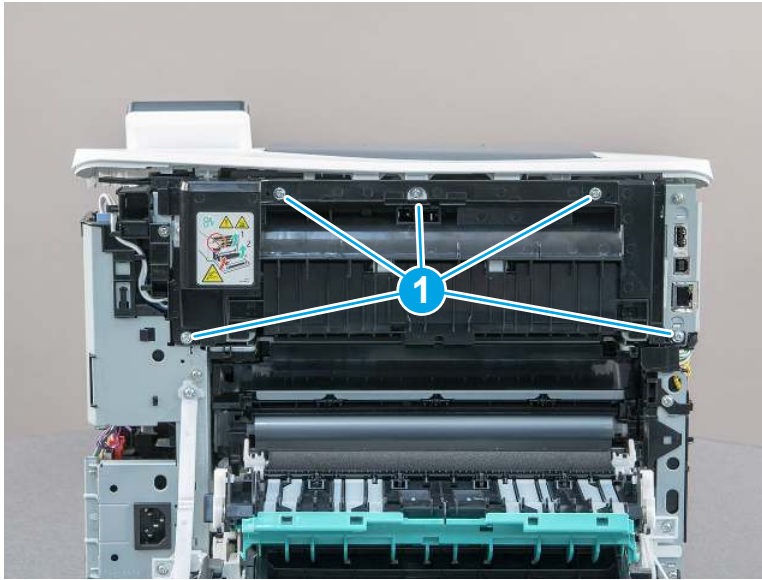
---

**Figure 5-1656** Disconnect one connector



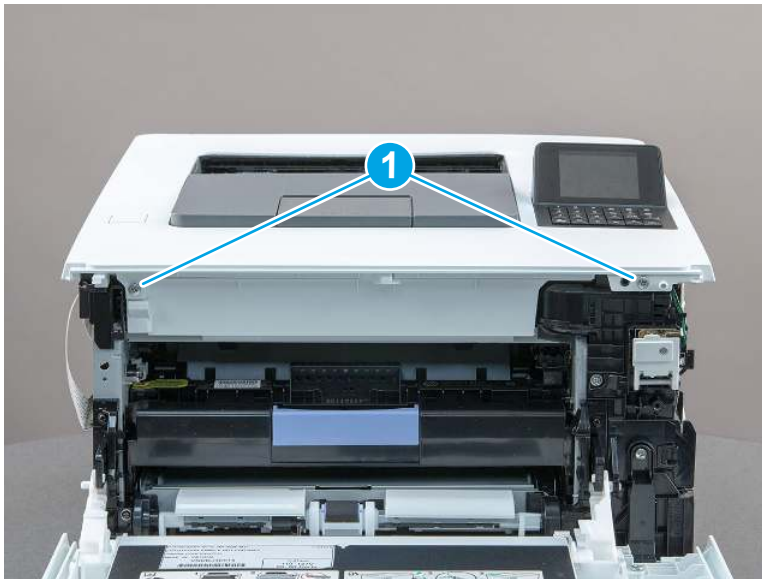
2. At the back of the printer, remove five screws (callout 1), and then remove the fuser cover.

**Figure 5-1657** Remove five screws



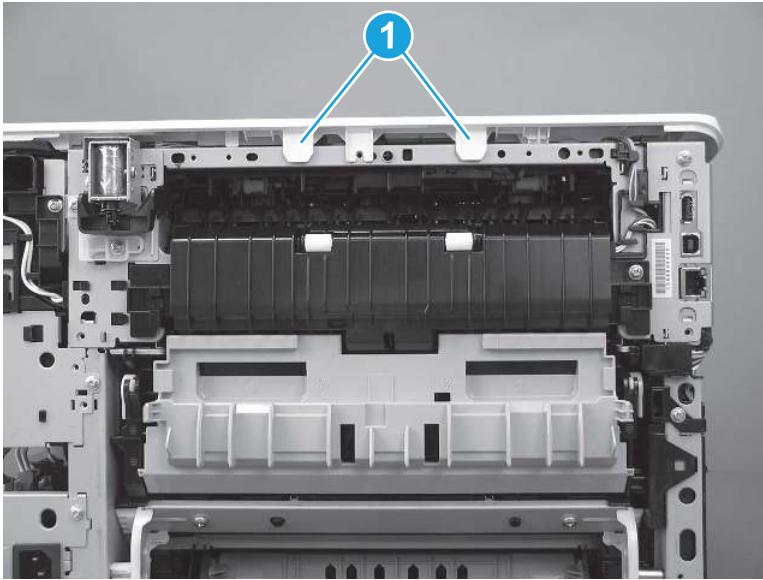
3. At the front of the printer, remove two screws (callout 1).

**Figure 5-1658** Remove two screws



4. Lift the front of the top cover up and release two tabs at the back of the printer (callout 1).

Figure 5-1659 Lift the top cover and release two tabs



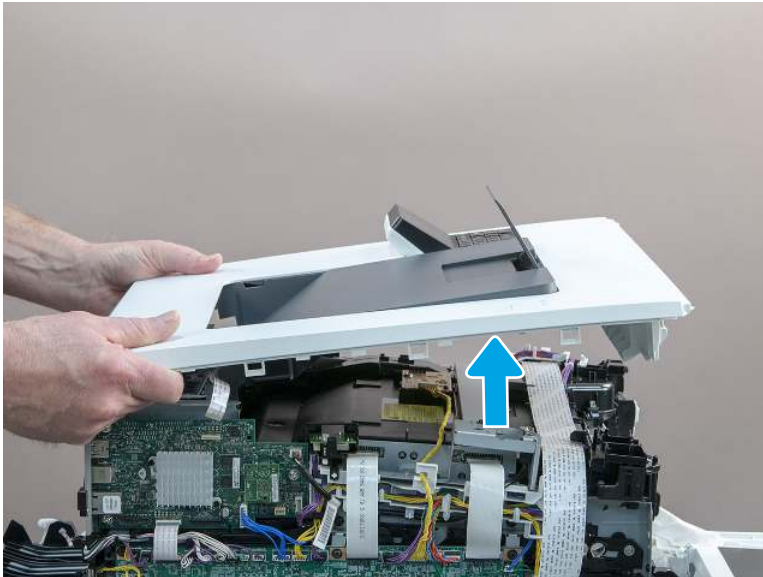
5. Remove the top cover.

---

 **NOTE:** For a replacement cover install, remove the control panel from the discarded cover and install it on the replacement cover.

---

Figure 5-1660 Remove the top cover

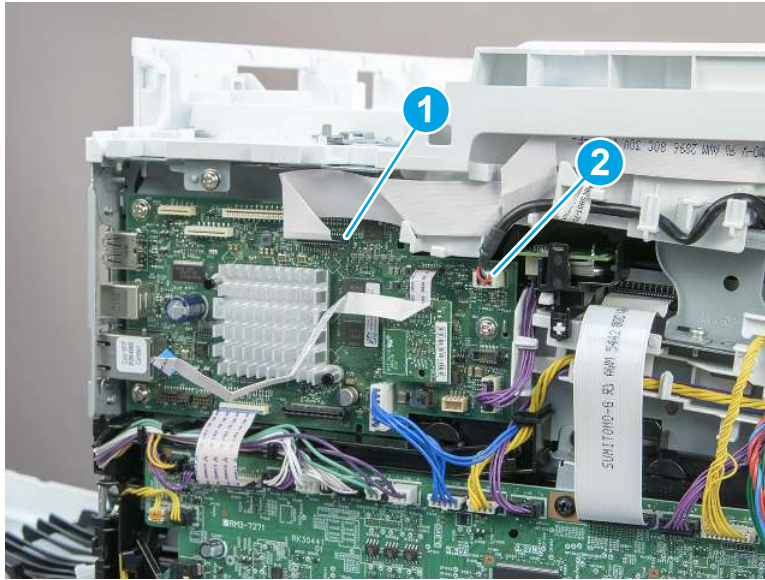


## 11. Remove the top cover (MFP)

Follow these steps to remove the top cover (MFP).

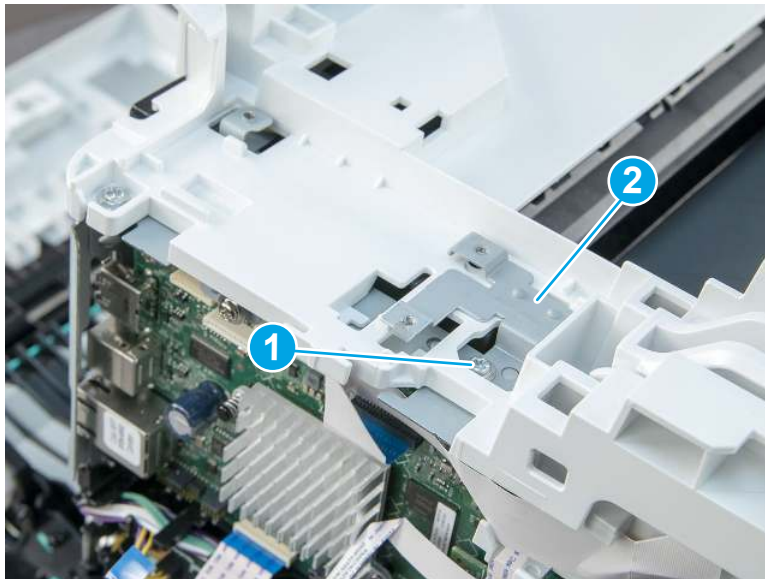
1. Disconnect one FFC (callout 1) and one connector (callout 2).

**Figure 5-1661** Disconnect one FFC and one connector



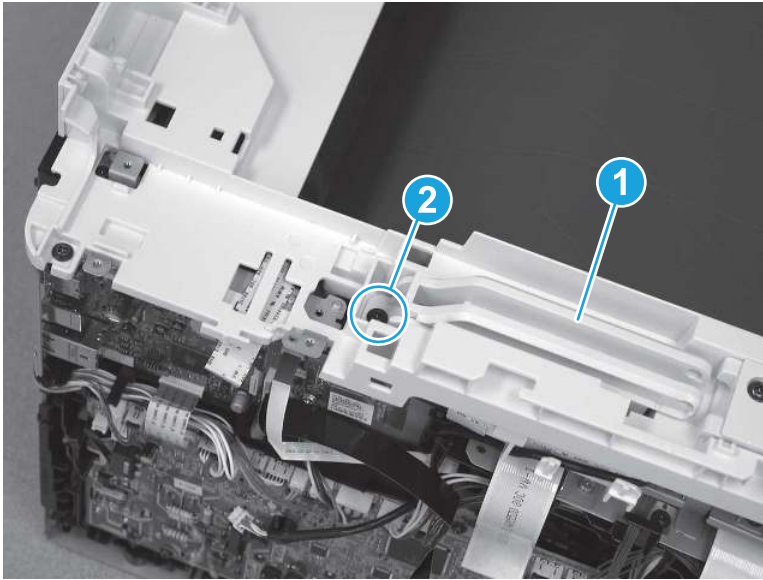
2. On the top cover, remove one screw (callout 1) and the sheet metal plate (callout 2).

**Figure 5-1662** Remove one screw and the sheet metal plate



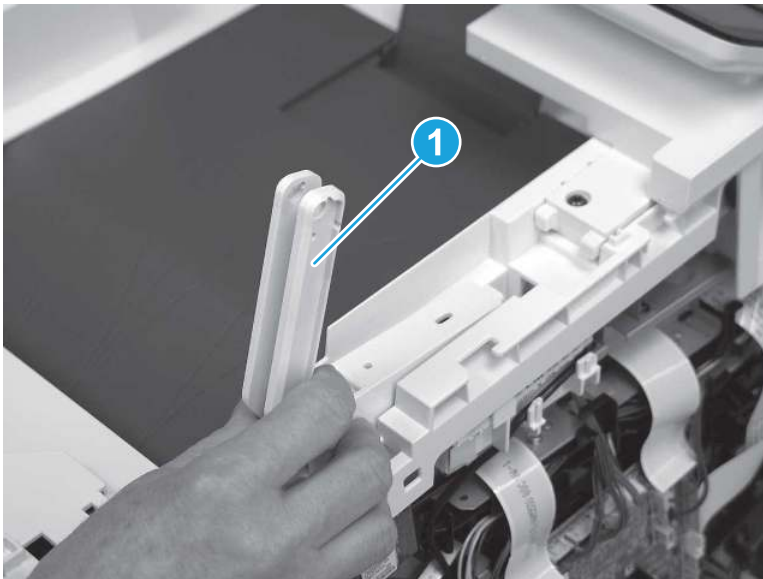
3. At the top of the printer, lower the scanner support arm (callout 1), and then remove one screw (callout 2).

**Figure 5-1663** Lower the support arm and remove one screw



4. Remove the scanner support arm (callout 1).

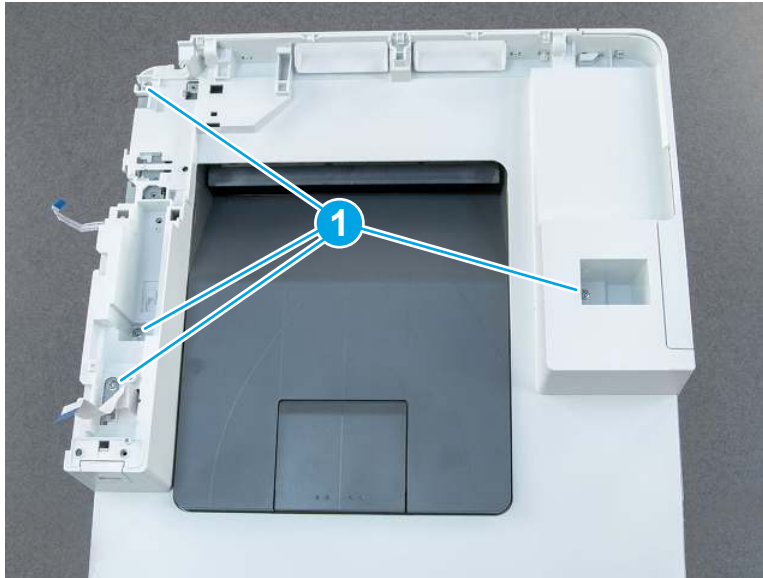
**Figure 5-1664** Remove the scanner support arm





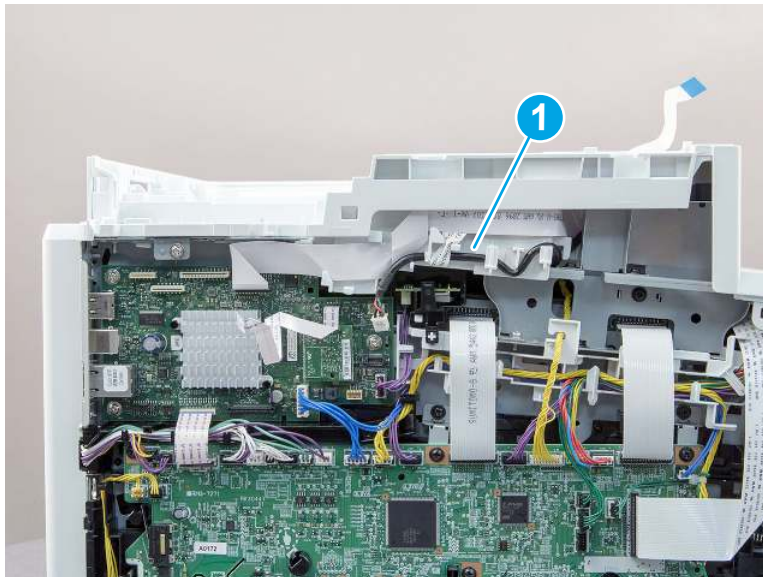
5. At the top of the printer, remove four screws (callout 1).

**Figure 5-1665** Remove four screws



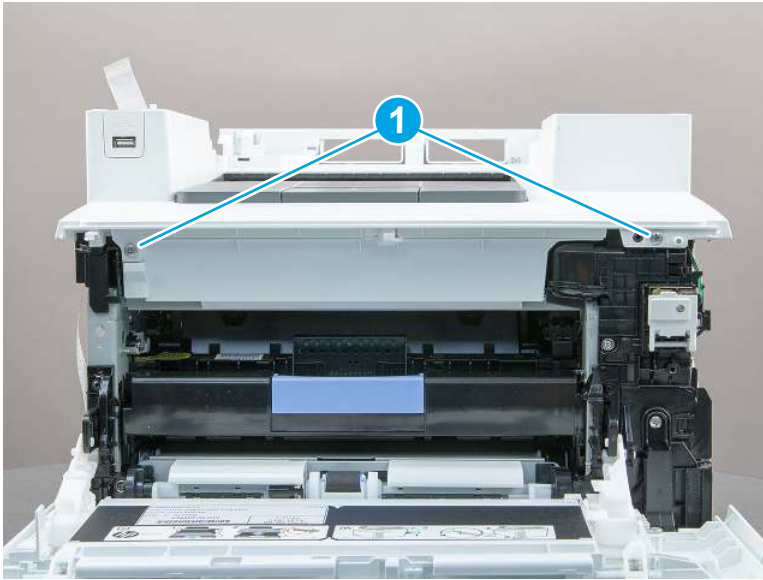
6. Remove the USB cable (callout 1) from the cable guides.

**Figure 5-1666** Release the USB cable



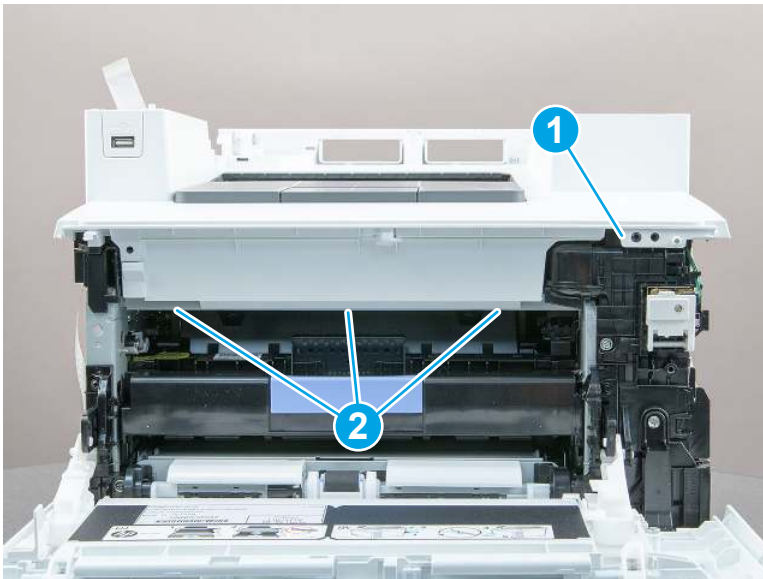
7. At the front of the printer, remove two screws (callout 1).

Figure 5-1667 Remove two screws



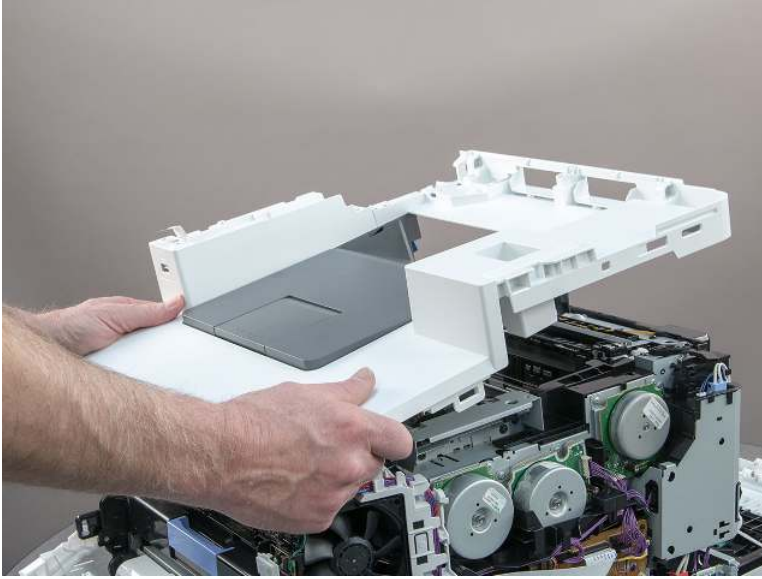
8. Release one retainer (callout 1), and then release three tabs (callout 2).

Figure 5-1668 Release one retainer and three tabs



9. Remove the top cover.

**Figure 5-1669** Remove the top cover



## 12. Remove the fuser

Follow these steps to remove the fuser.

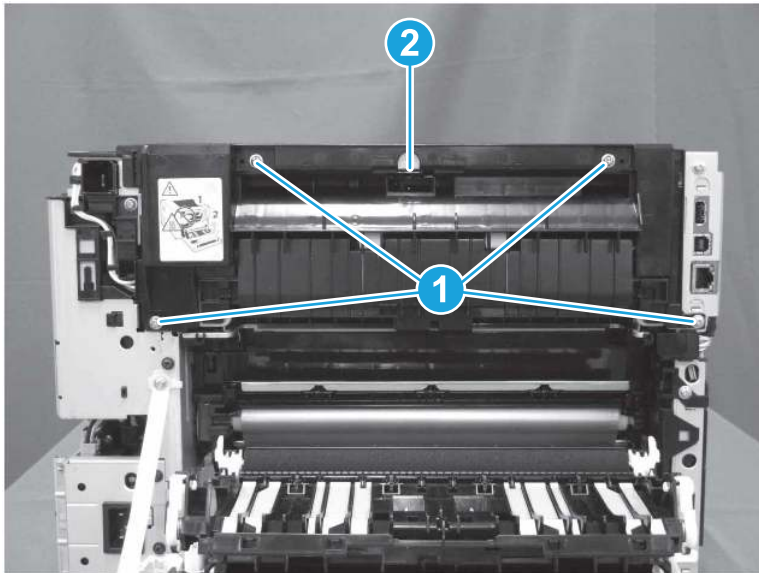
1. Remove four screws (callout 1), and then release one tab (callout 2).

---

 **NOTE:** For a SFP printer with the top cover removed, this cover is already off. Skip this step.

---

**Figure 5-1670** Remove four screws



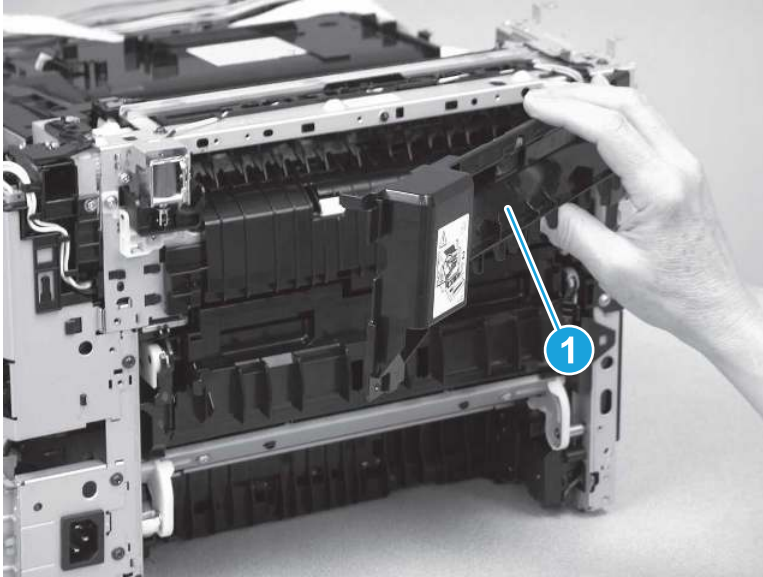
2. Remove the cover (callout 1).

---

 **NOTE:** For a SFP printer with the top cover removed, this cover is already off. Skip this step.

---

Figure 5-1671 Remove the guide



3. Disconnect one connector (callout 1) on the engine controller PCA.


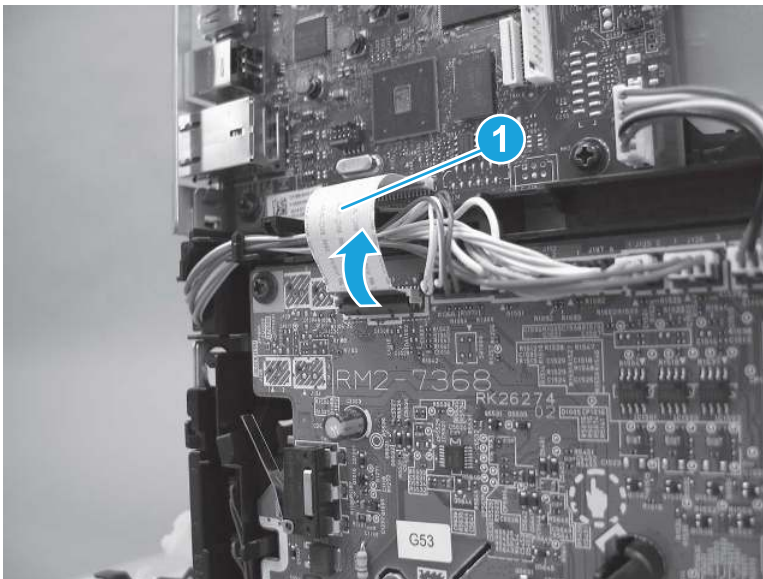
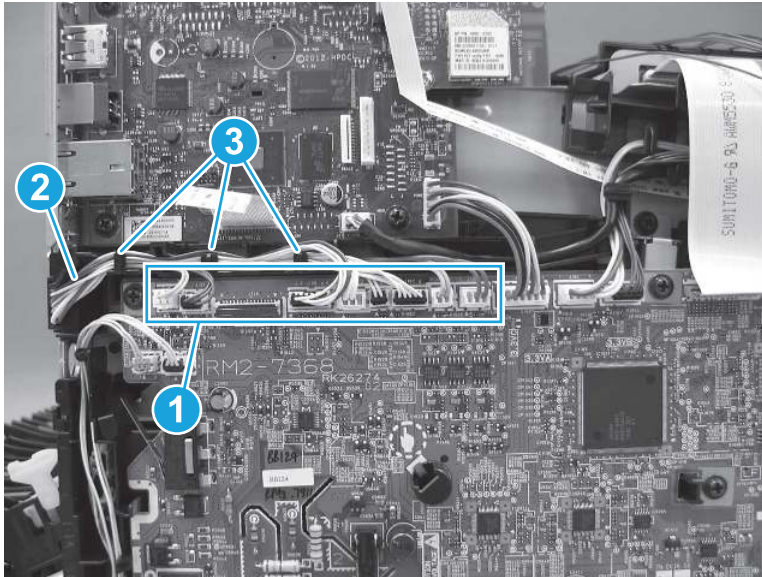
 **NOTE:** This connector is a zero-insertion force (ZIF) connector. Lift the latch on the connector before removing the flat cable. Formatter PCA may appear differently than what is shown below, however, the procedures are the same.

Figure 5-1672 Disconnect one connector



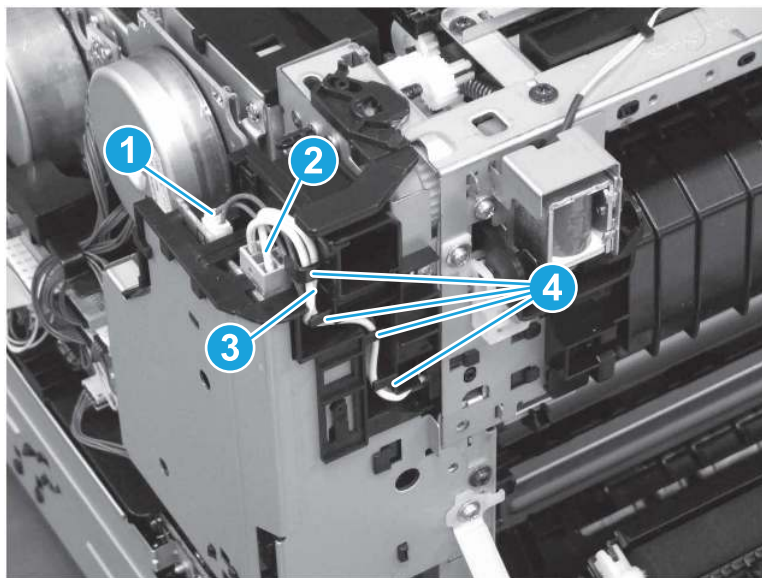
4. Disconnect eight connectors on the engine controller PCA (callout 1), and then remove the cables (callout 2) from the guides (callout 3).

**Figure 5-1673** Disconnect eight connectors



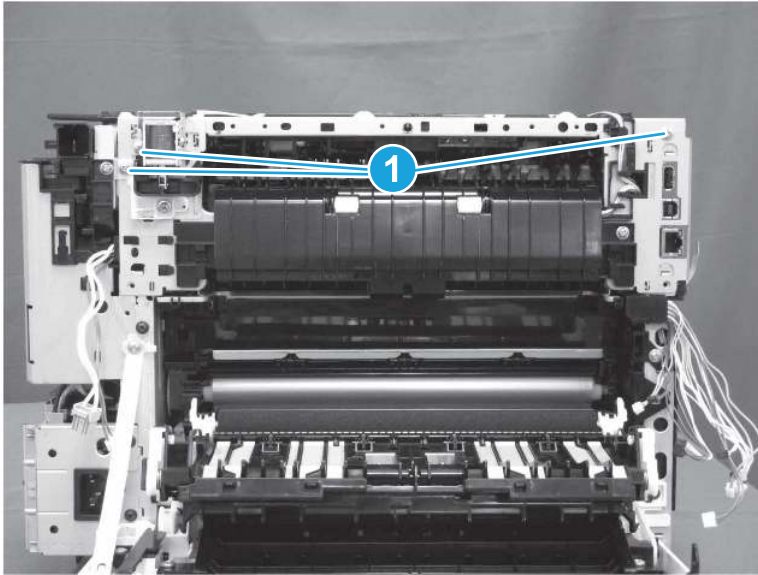
5. Disconnect one connector (callout 1). Release the connector latch, and then disconnect one connector (callout 2). Remove the cables (callout 3) from the guides (callout 4).

**Figure 5-1674** Disconnect two connectors



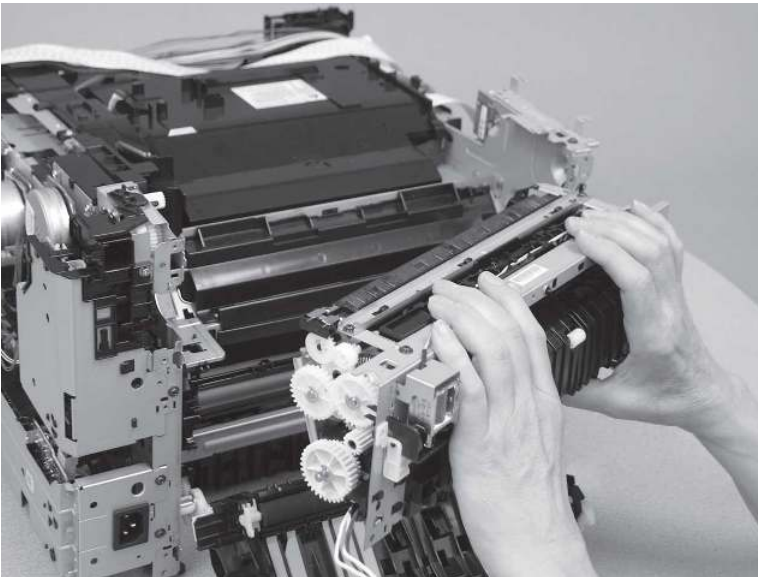
6. Remove three screws (callout 1).

Figure 5-1675 Remove three screws



7. Remove the fuser.

Figure 5-1676 Remove the fuser



### 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.

---

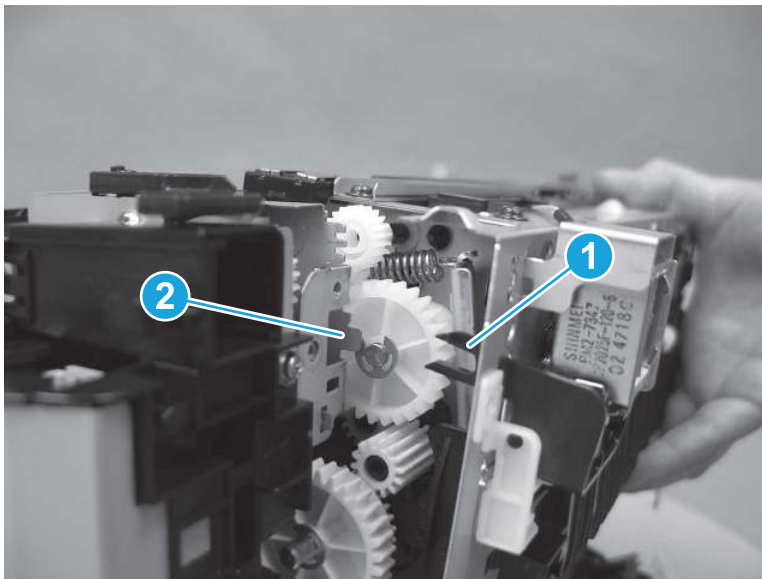
## 14. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Fuser

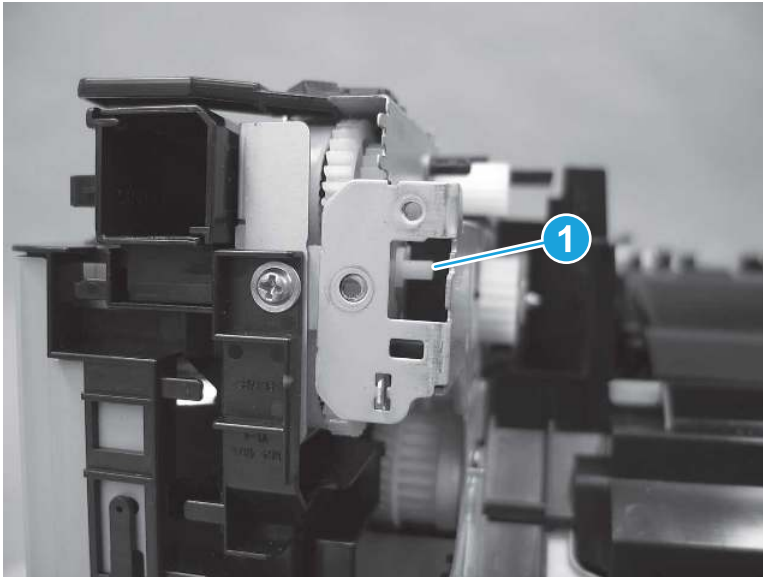
1. Position the fuser on the printer. When installing the fuser, make sure that the switchback lever (callout 1) is installed completely through the opening (callout 2) in the printer frame.

**Figure 5-1677** Install the lever through the opening



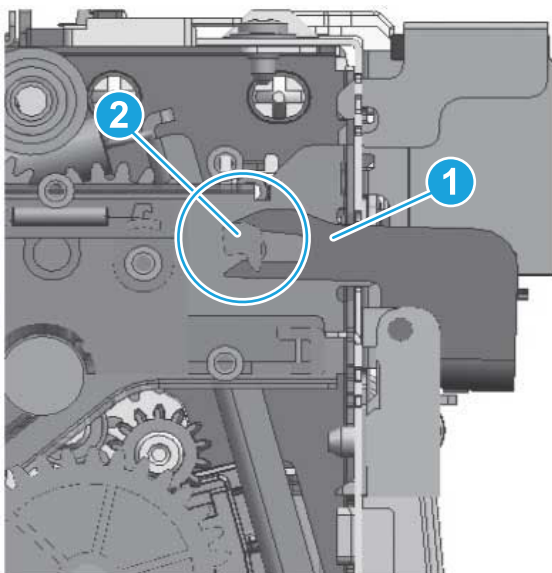
2. The fingers on the switchback lever will fit around the shaft (callout 1) inside the printer.

**Figure 5-1678** Switchback lever shaft



3. The figure below shows a cross section view of the proper position of the switchback lever (callout 1) around the shaft (callout 2).

**Figure 5-1679** Switchback lever position



## Removal and replacement: Fuser motor

Learn how to remove and replace the fuser motor (M4).

[View a video of removing and replacing the fuser motor.](#)

Mean time to repair: 19 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](http://www.hp.com/buy/parts).

**Table 5-47** Part information

Part number	Part description
RM2-7349-000CN	Assembly, fixing motor

### 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

Make sure that the printer initializes to a **Ready** state.


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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-1680** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

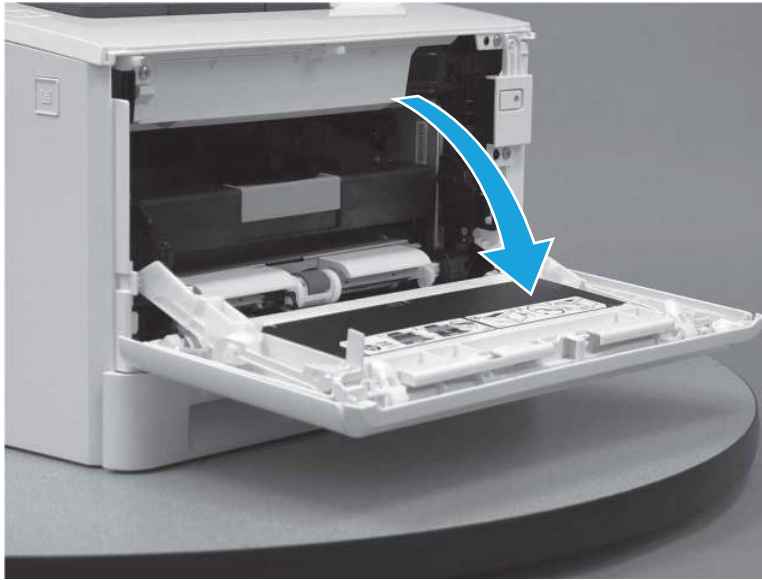
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-1681** Release the front door



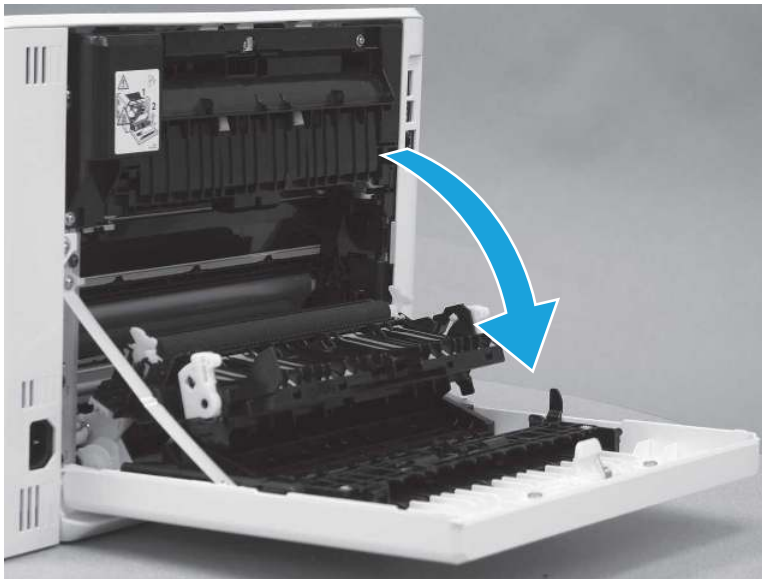
2. Open the front door.

**Figure 5-1682** Open the front door



3. Open the duplexing door.

**Figure 5-1683** Open the duplexer door



### 3. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

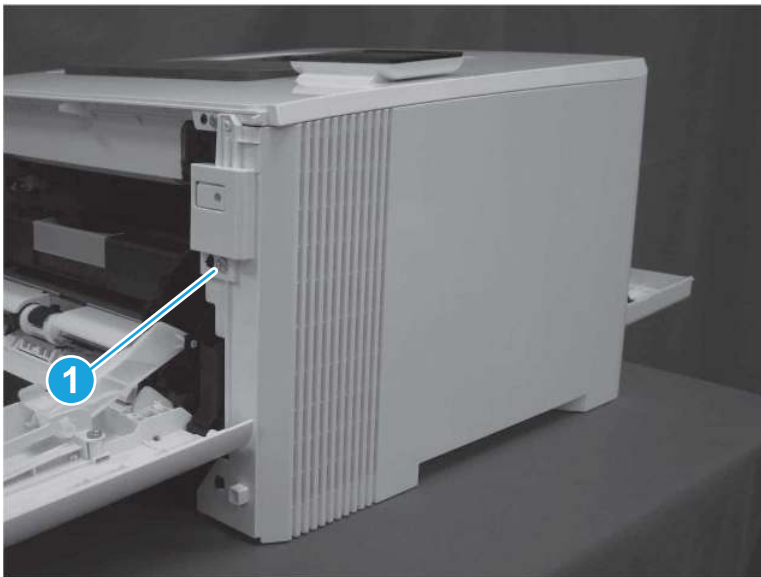
1. At the back of the printer, remove one screw (callout 1).

Figure 5-1684 Remove one screw



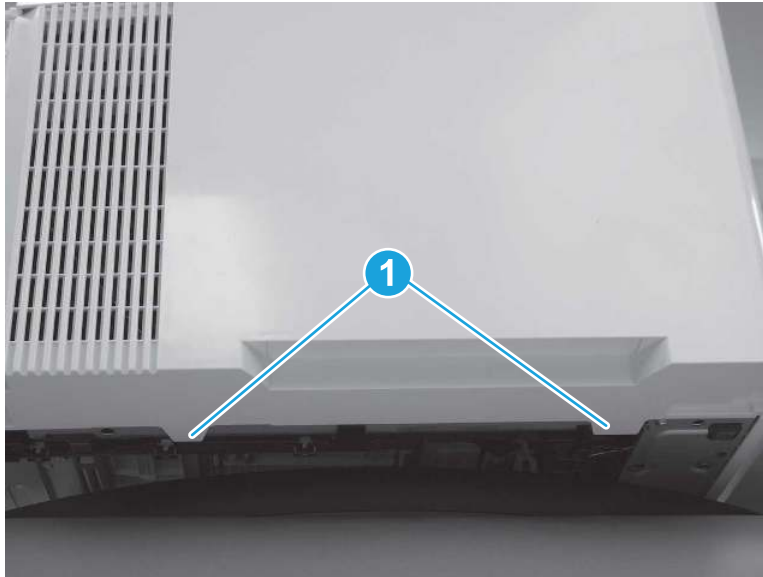
2. At the front of the printer, remove one screw (callout 1).

Figure 5-1685 Remove one screw



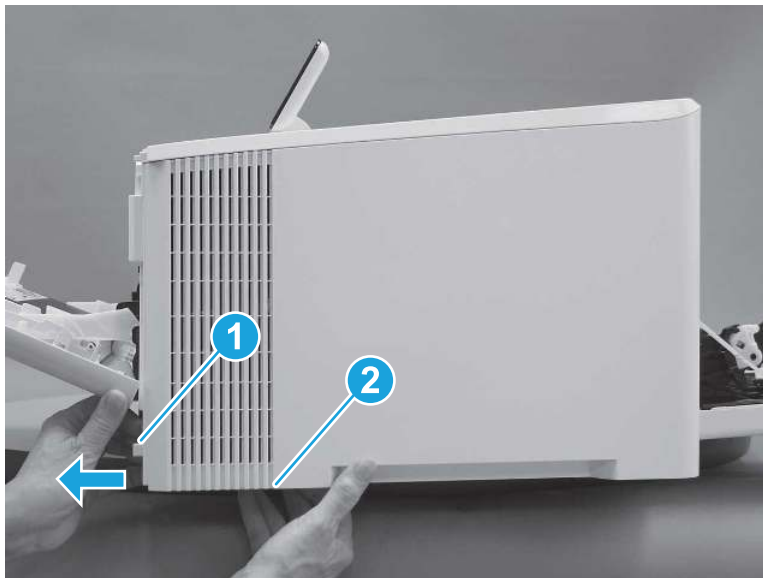
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1686** Locate the tabs



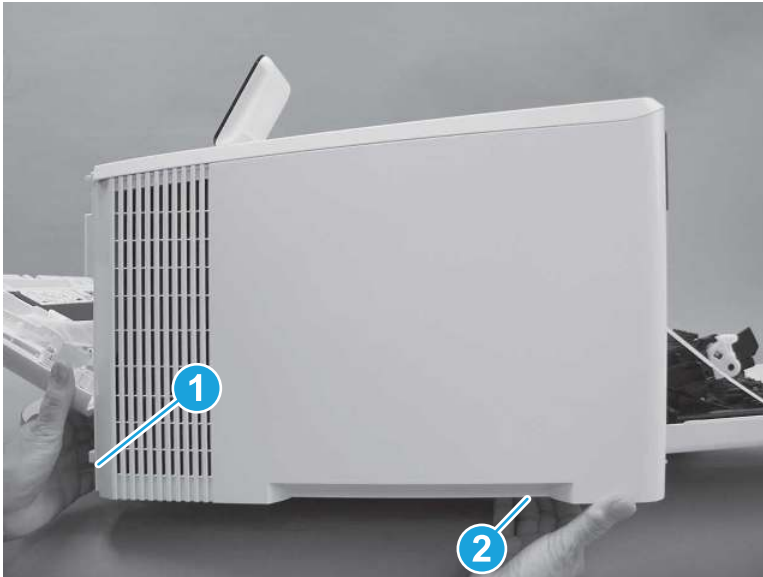
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-1687** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

Figure 5-1688 Release lower rear tab



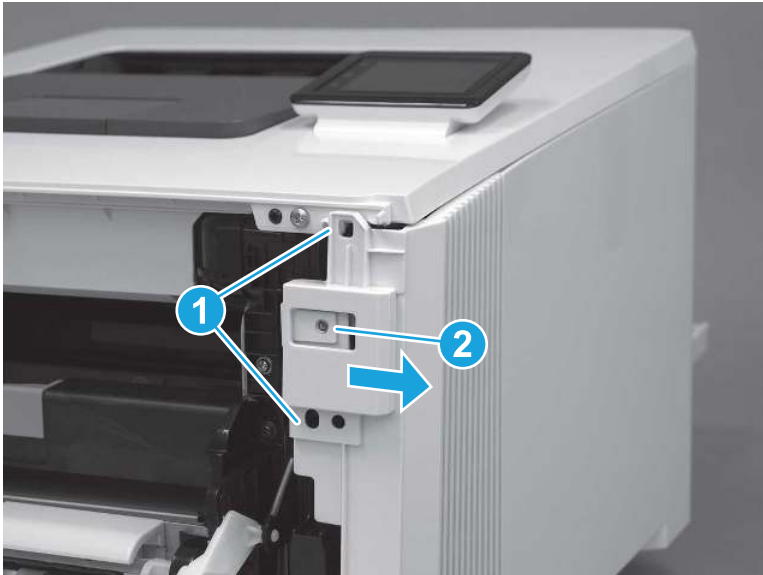
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

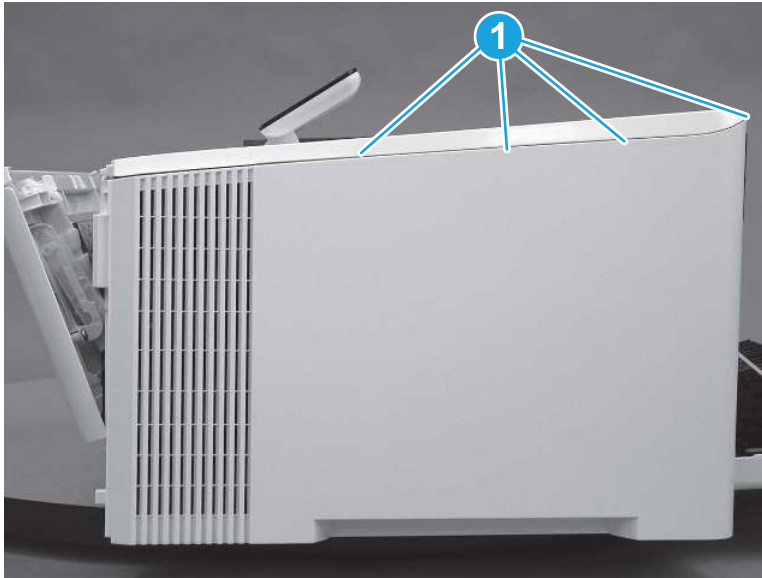
---

Figure 5-1689 Release two front tabs



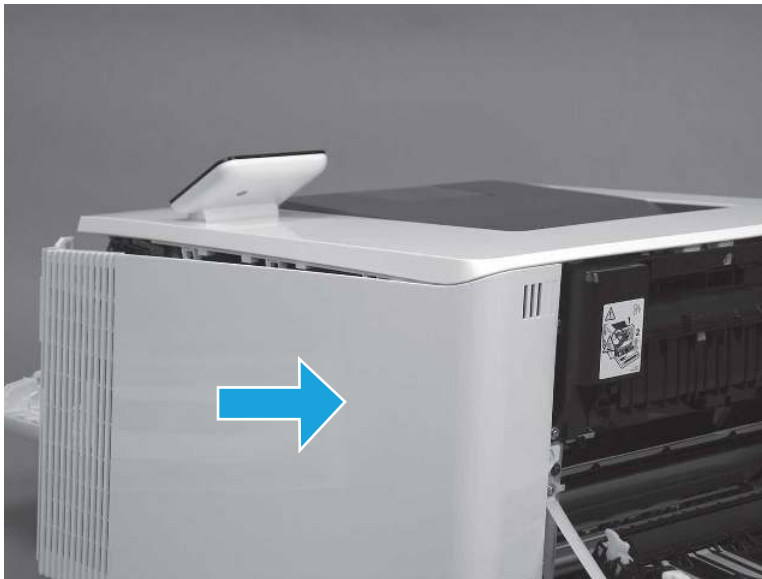
7. Release four tabs on the top of the printer (callout 1).

**Figure 5-1690** Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-1691** Remove the right cover



#### 4. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

Figure 5-1692 Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

Figure 5-1693 Remove one screw





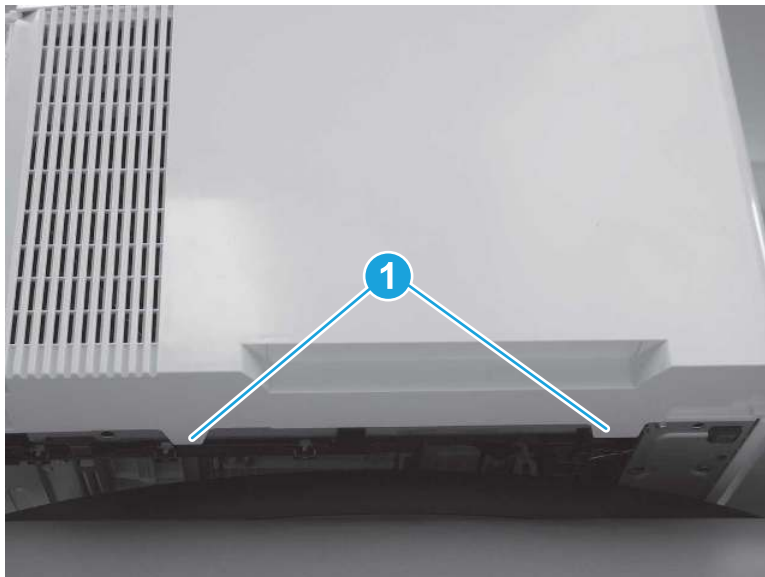
3. At the front of the printer, remove one screw (callout 1).

**Figure 5-1694** Remove one screw



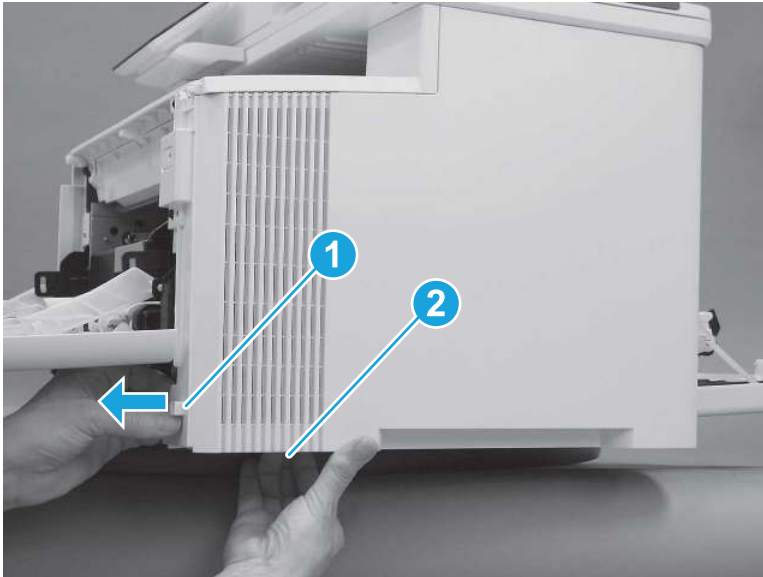
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1695** Locate the tabs



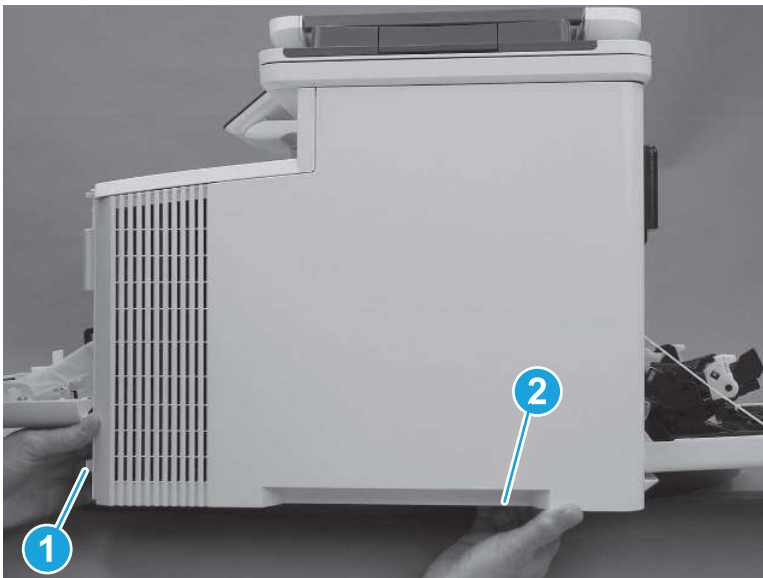
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-1696** Release front lower tabs



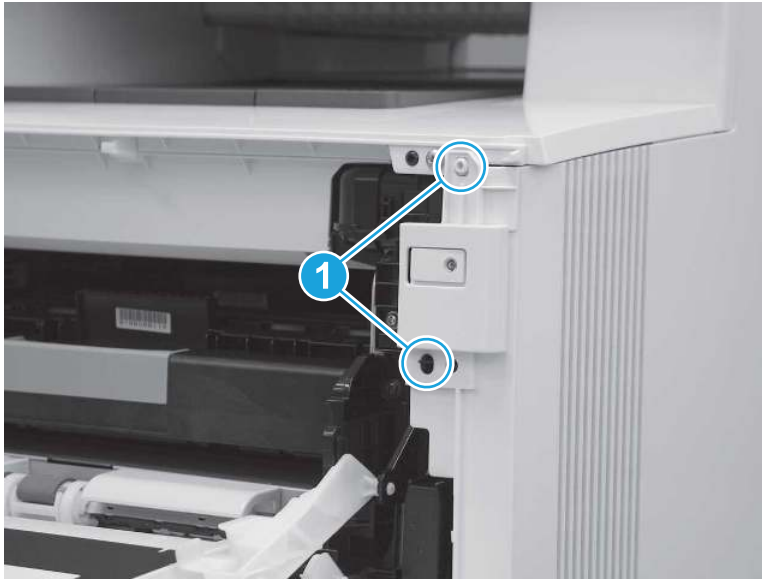
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-1697** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-1698** Release front upper tabs



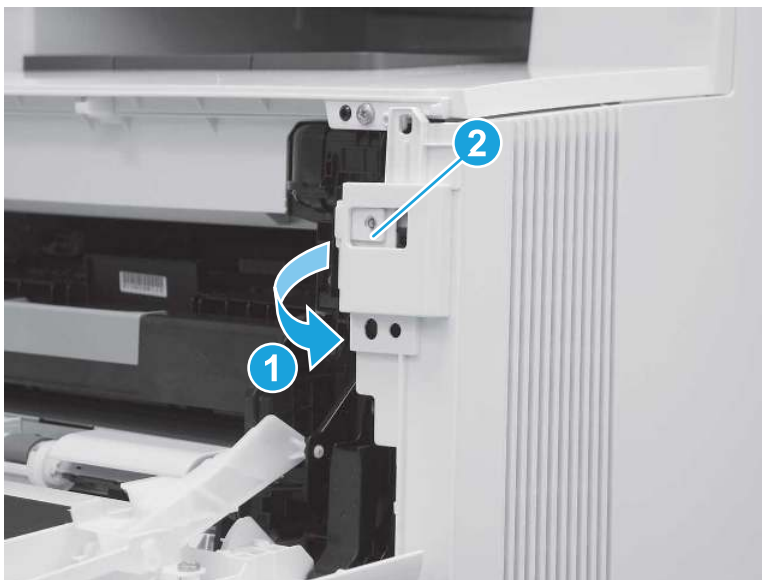
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

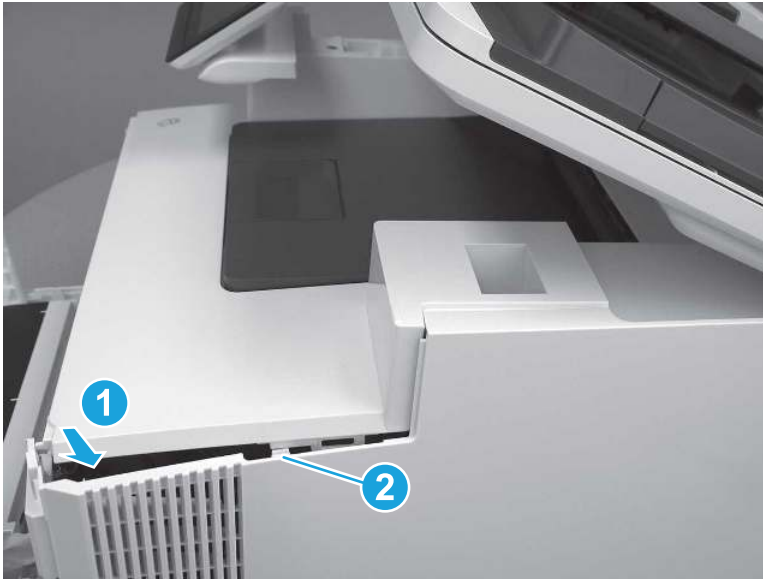
---

**Figure 5-1699** Rotate the front of the cover



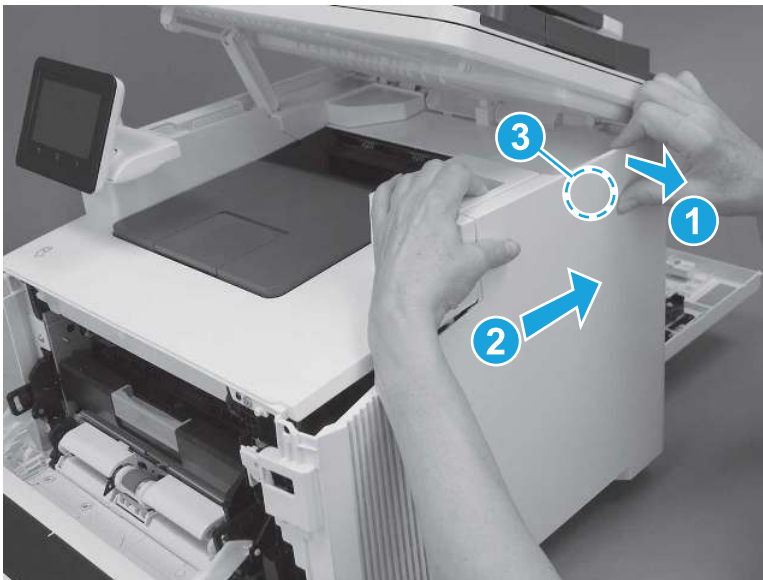
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

Figure 5-1700 Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

Figure 5-1701 Release one tab and one hook



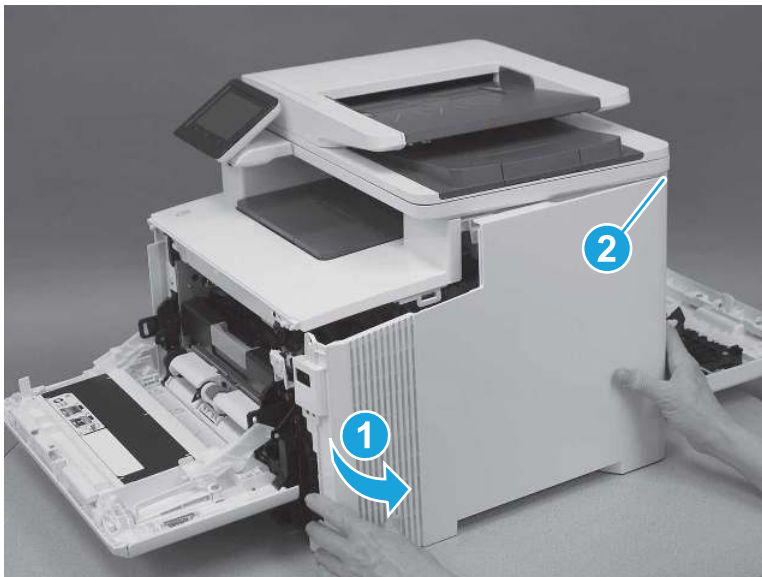
11. Lower the scanner.

**Figure 5-1702** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-1703** Remove the right cover

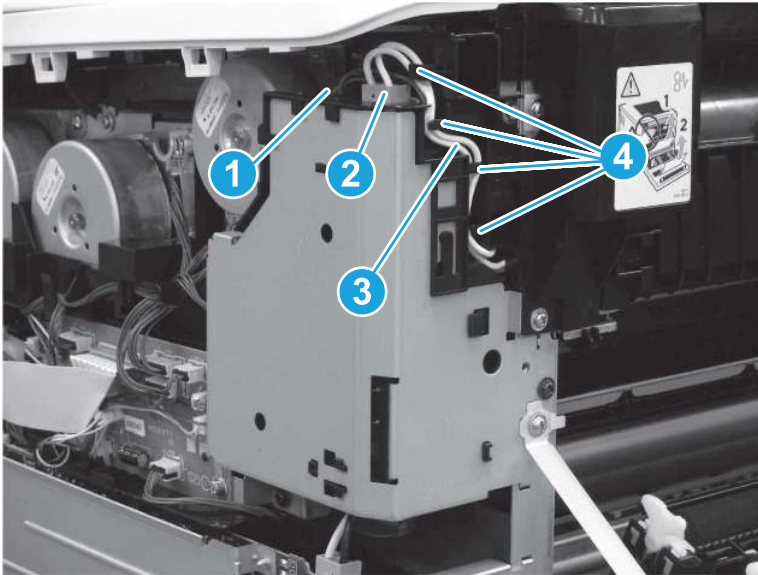


## 5. Remove the cable holder assembly

Follow these steps to remove the cable holder assembly.

1. Disconnect one connector (callout 1). Release the connector latch, and then disconnect one connector (callout 2). Remove the cables (callout 3) from the guides (callout 4).

Figure 5-1704 Disconnect two connectors



2. Remove two screws (callout 1).


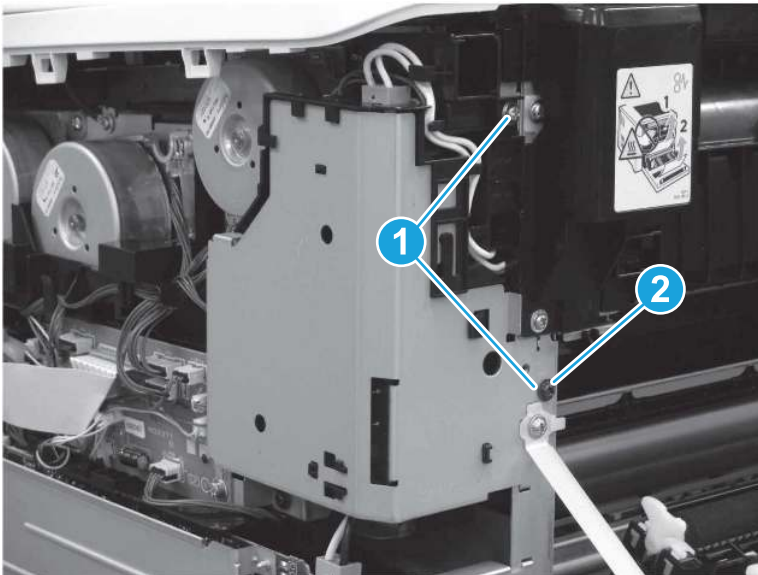
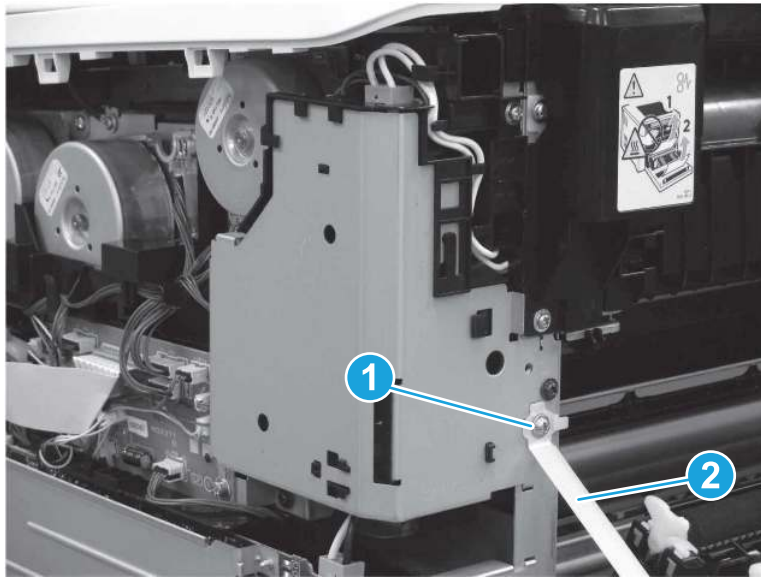
 **TIP:** The lower screw (callout 2) is shorter than the other screw. Make sure that this screw is reinstalled in the correct position.

Figure 5-1705 Remove two screws



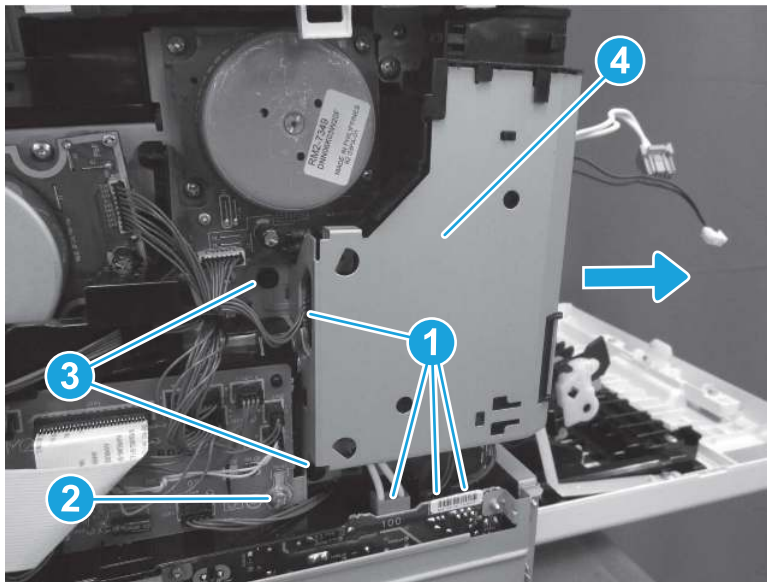
3. Remove one screw (callout 1), and then release the retainer arm (callout 2).

**Figure 5-1706** Release the retainer arm



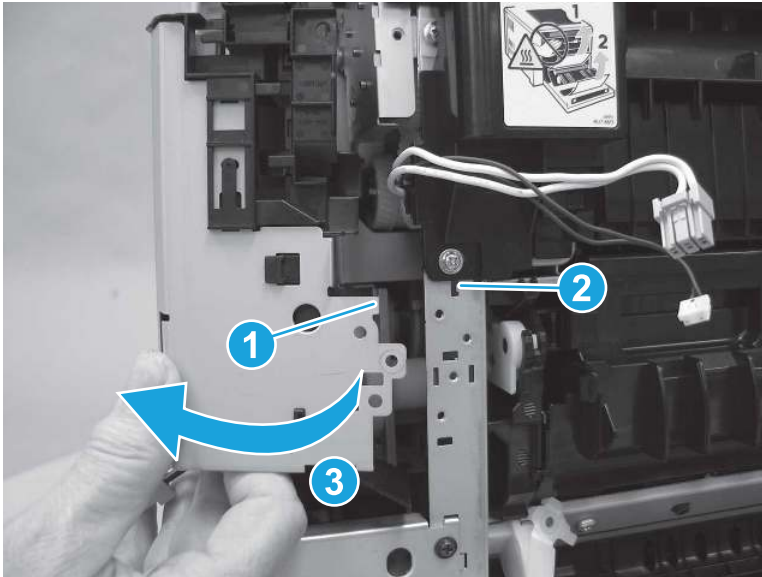
4. Disconnect four connectors (callout 1). Remove one screw (callout 2). Remove two screws (callout 3), and then remove cable holder assembly (callout 4).

**Figure 5-1707** Disconnect four connectors and remove three screws



5. Release one tab (callout 1) on the back of the cable holder assembly from the slot (callout 2) in the printer frame. Rotate the cable holder assembly away from the printer to remove it (callout 3).

**Figure 5-1708** Remove the cable holder assembly

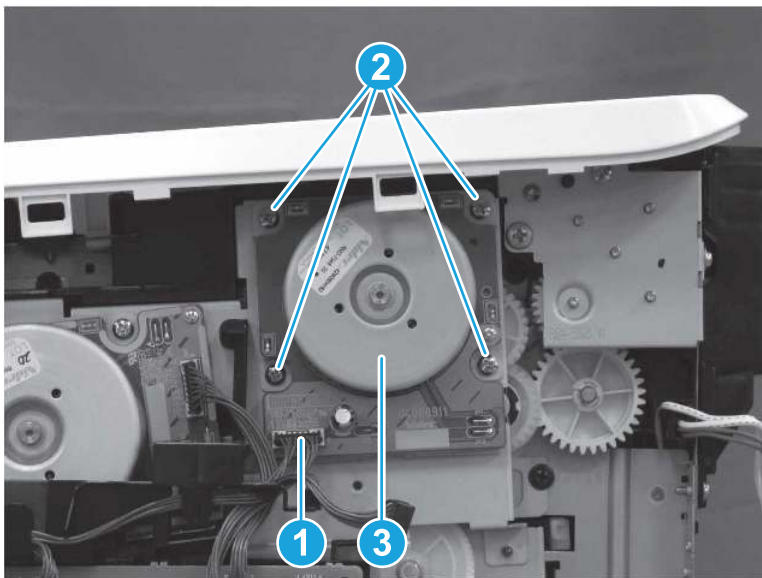


## 6. Remove the fuser motor

Follow these steps to remove the fuser motor.

- ▲ Disconnect one connector (callout 1), remove four screws (callout 2), and then remove the fuser motor (callout 3).

**Figure 5-1709** Remove the fuser motor




## 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: Reverse drive assembly

Learn how to remove and replace the reverse drive assembly.

[View a video of removing and replacing the reverse drive assembly.](#)

Mean time to repair: 38 minutes (SFP)

Service level: Medium (SFP)


Mean time to repair: 55 minutes (MFP)

Service level: Difficult (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](http://www.hp.com/buy/parts).

**Table 5-48** Part information

Part number	Part description
RM2-6389-000CN	Reverse drive 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

Make sure that the printer initializes to a **Ready** state.

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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-1710** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

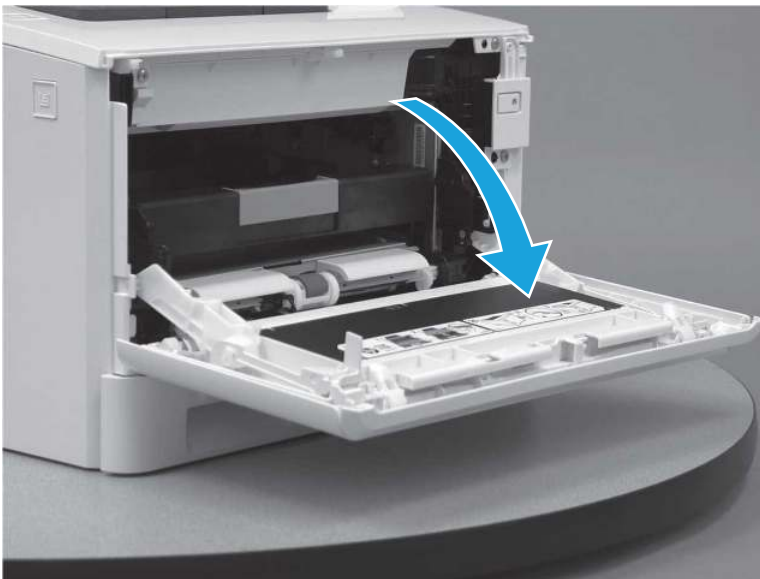
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-1711** Release the front door



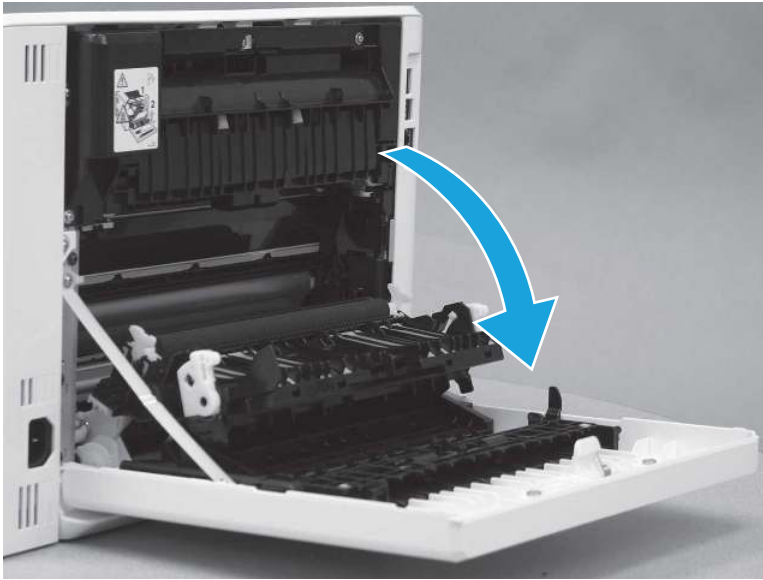
2. Open the front door.

**Figure 5-1712** Open the front door



3. Open the duplexing door.

**Figure 5-1713** Open the duplexer door

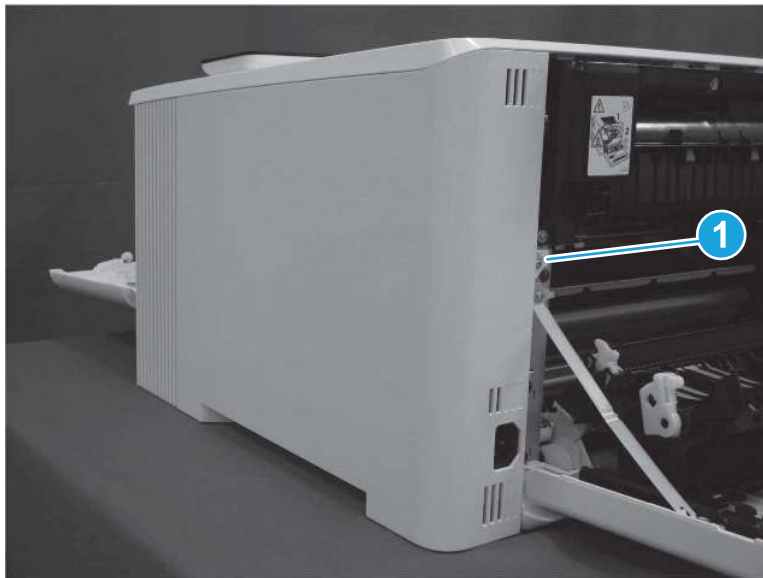


### 3. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

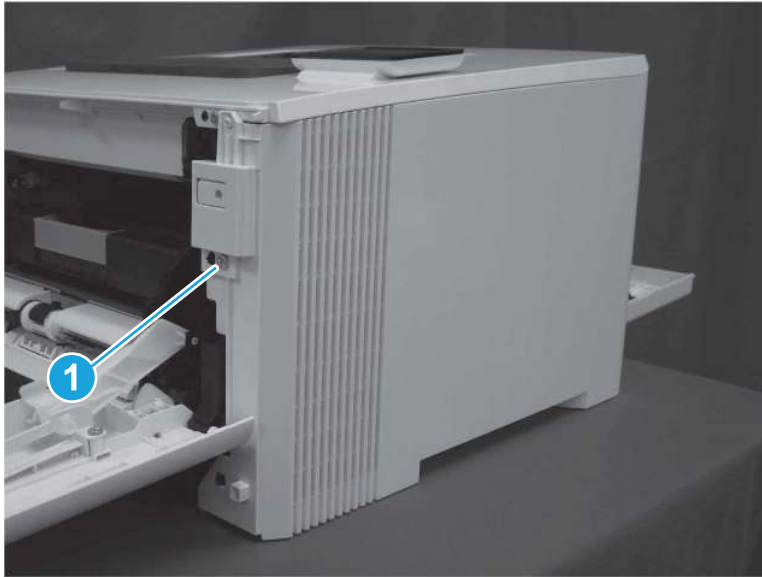
1. At the back of the printer, remove one screw (callout 1).

**Figure 5-1714** Remove one screw



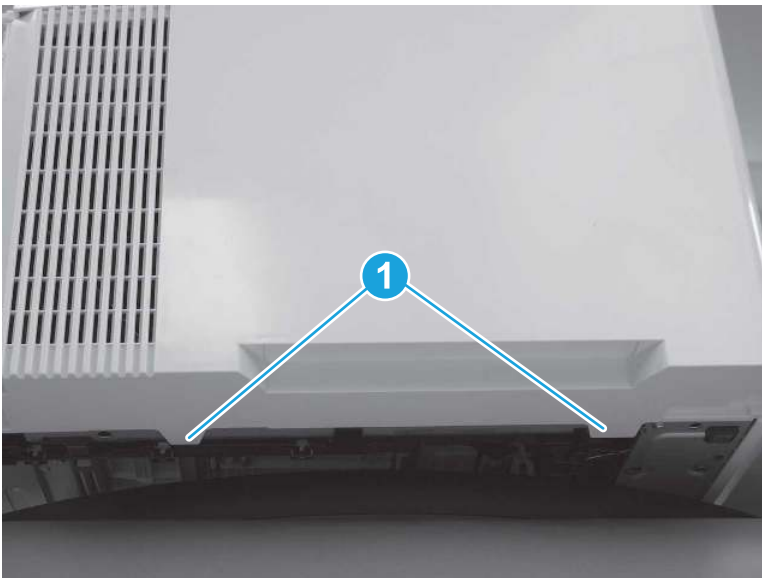
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-1715** Remove one screw



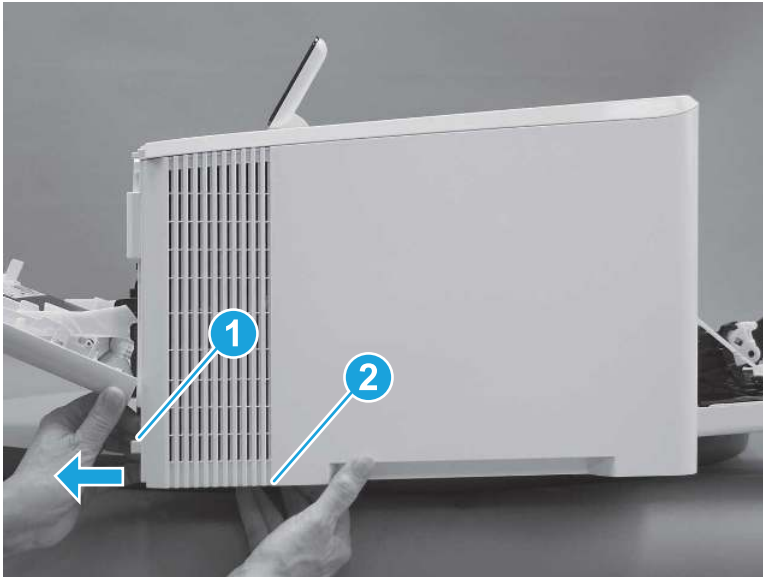
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1716** Locate the tabs



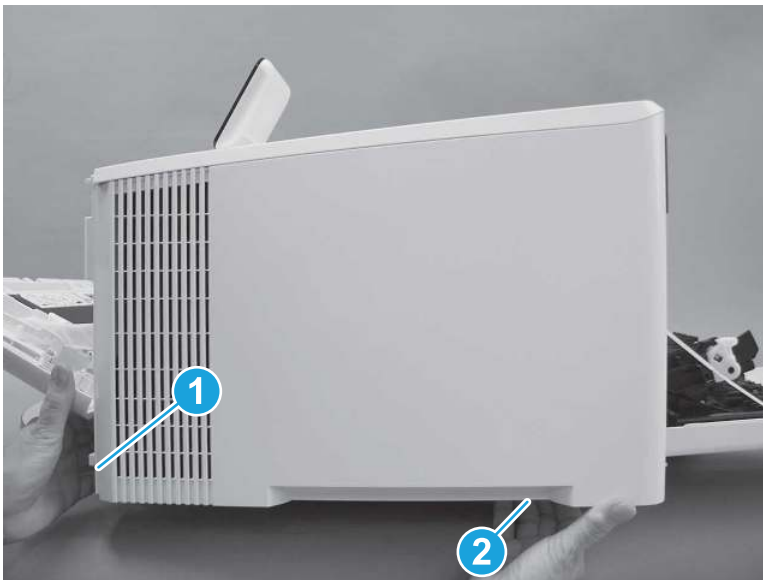
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-1717** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

**Figure 5-1718** Release lower rear tab



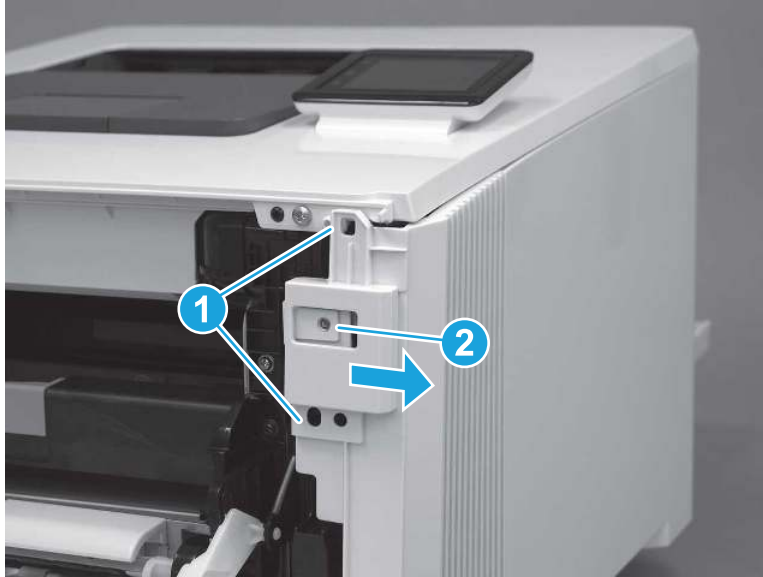
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

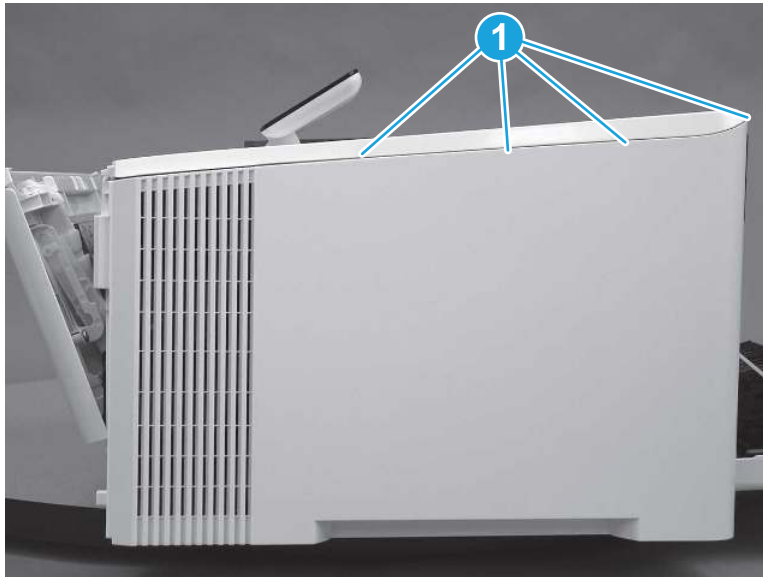
---

Figure 5-1719 Release two front tabs



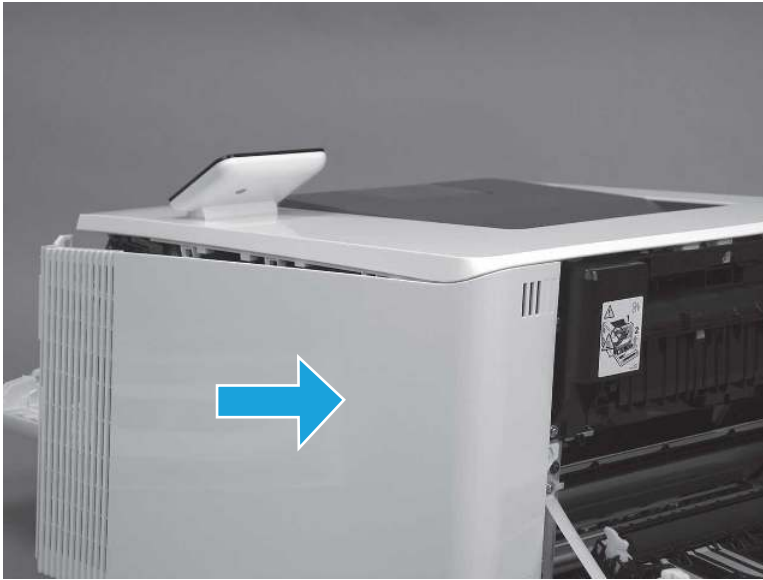
7. Release four tabs on the top of the printer (callout 1).

Figure 5-1720 Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-1721** Remove the right cover



#### 4. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

**Figure 5-1722** Raise the scanner





2. At the back of the printer, remove one screw (callout 1).

**Figure 5-1723** Remove one screw



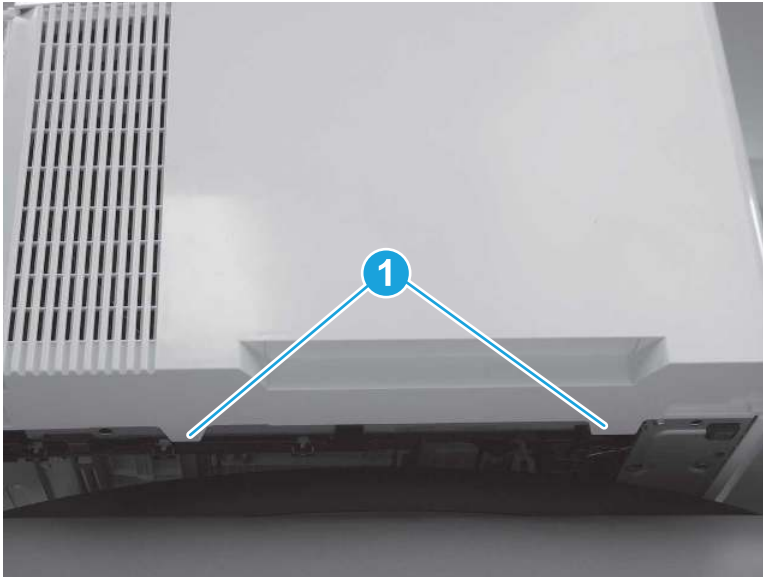
3. At the front of the printer, remove one screw (callout 1).

**Figure 5-1724** Remove one screw



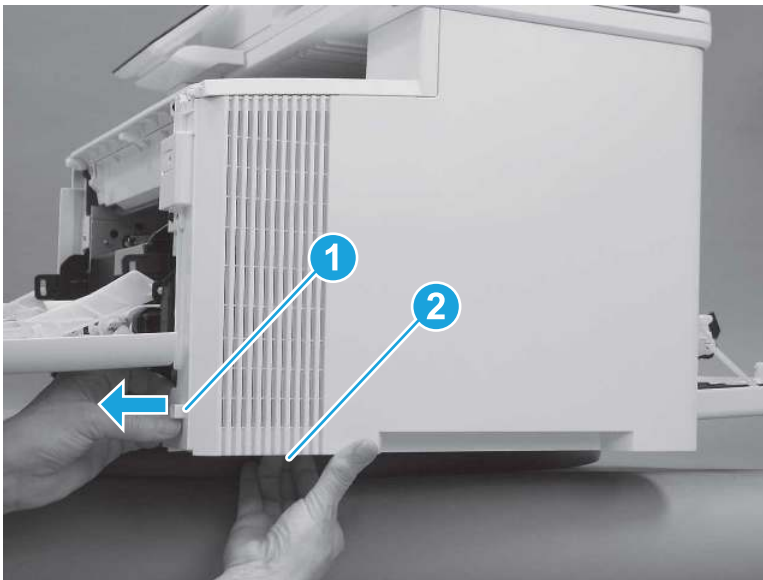
- Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1725** Locate the tabs



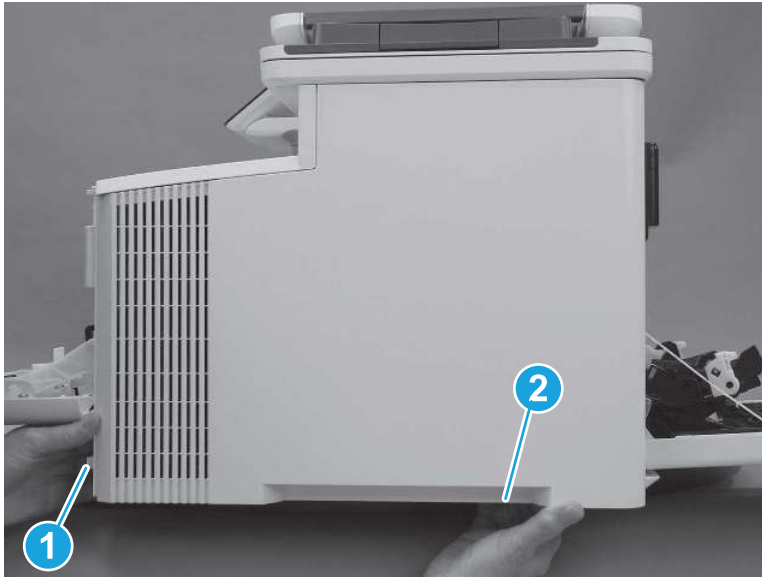
- Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-1726** Release front lower tabs



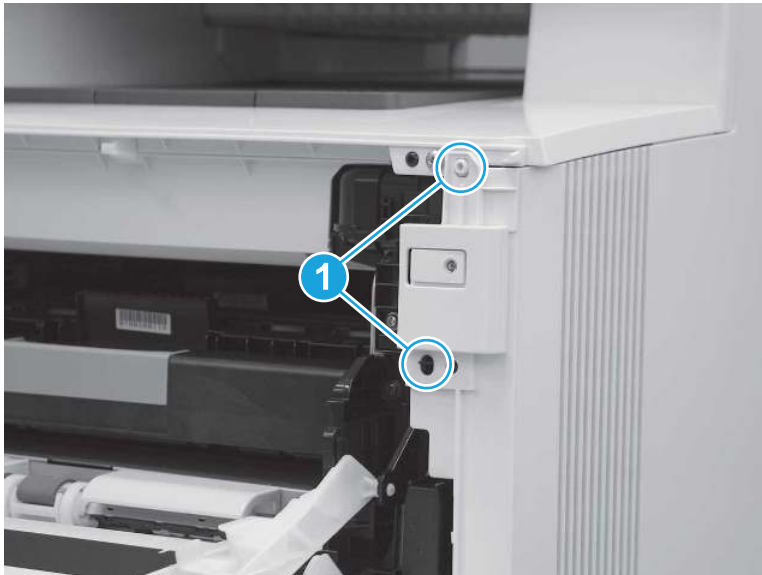
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-1727** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-1728** Release front upper tabs



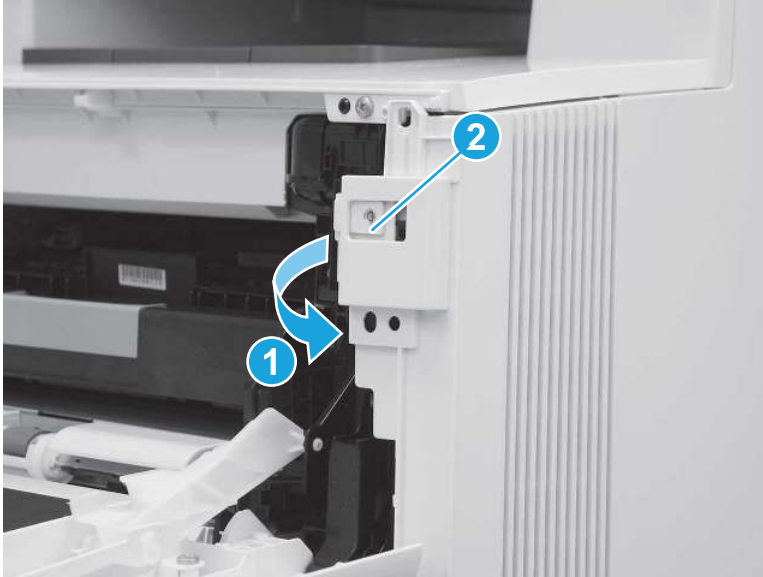
8. Rotate the front of the cover away from the printer (callout 1).

---

**CAUTION:** Be careful not to dislodge the power switch (callout 2).

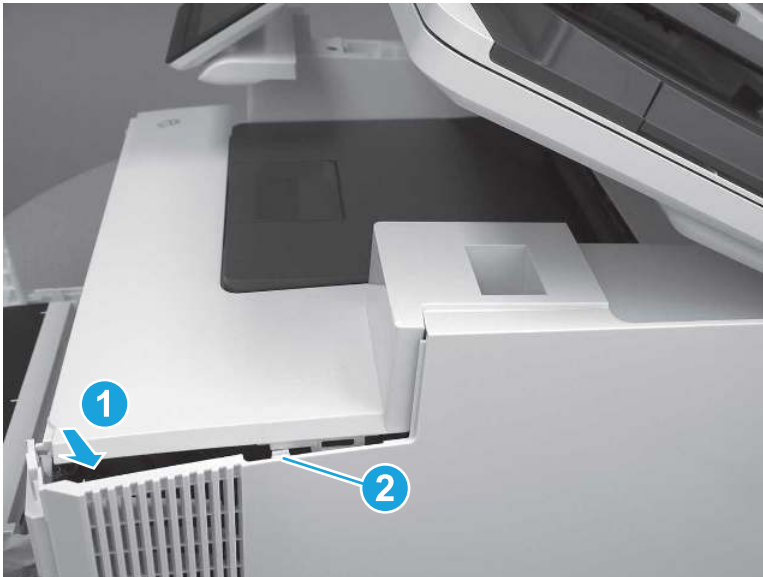
---

**Figure 5-1729** Rotate the front of the cover



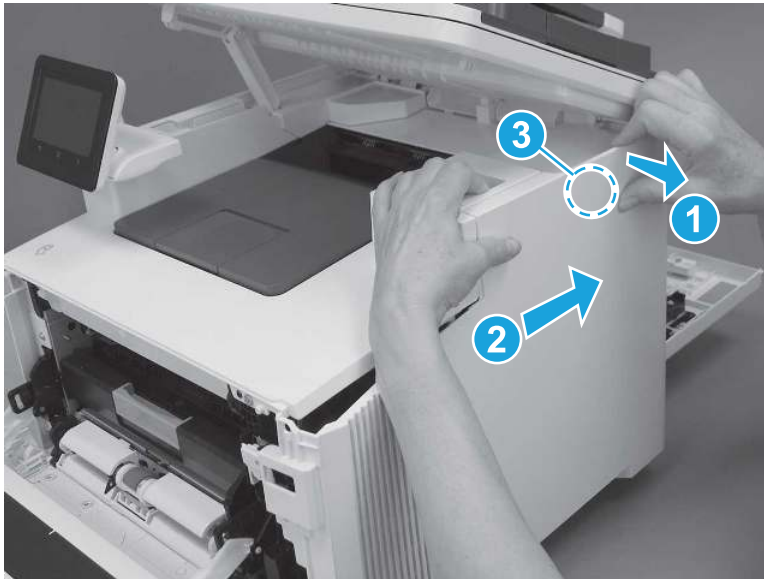
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

**Figure 5-1730** Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-1731** Release one tab and one hook



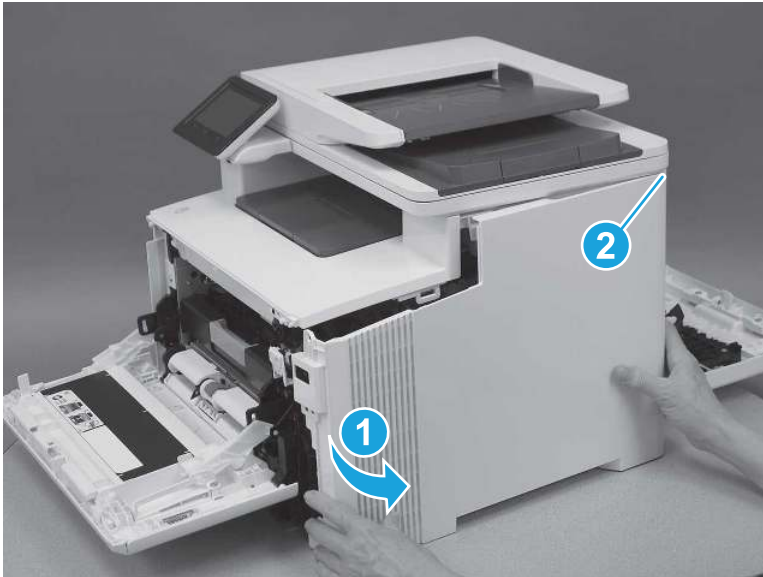
11. Lower the scanner.

**Figure 5-1732** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-1733** Remove the right cover

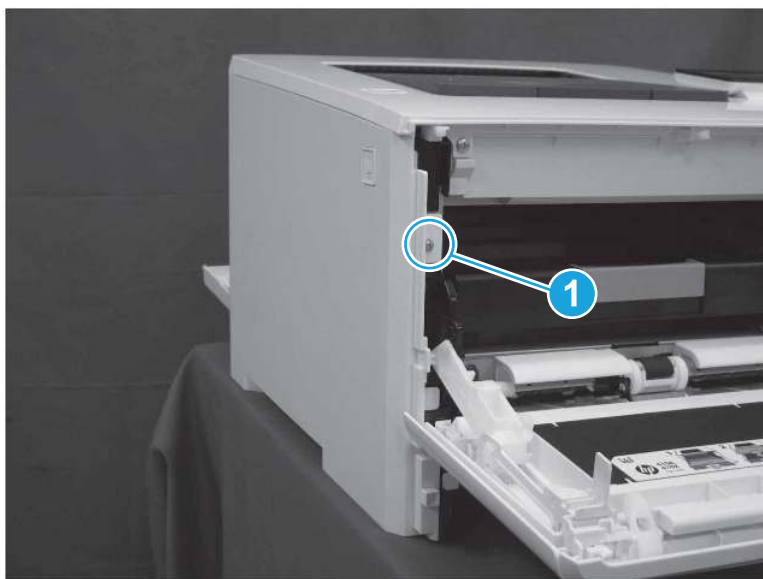


## 5. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

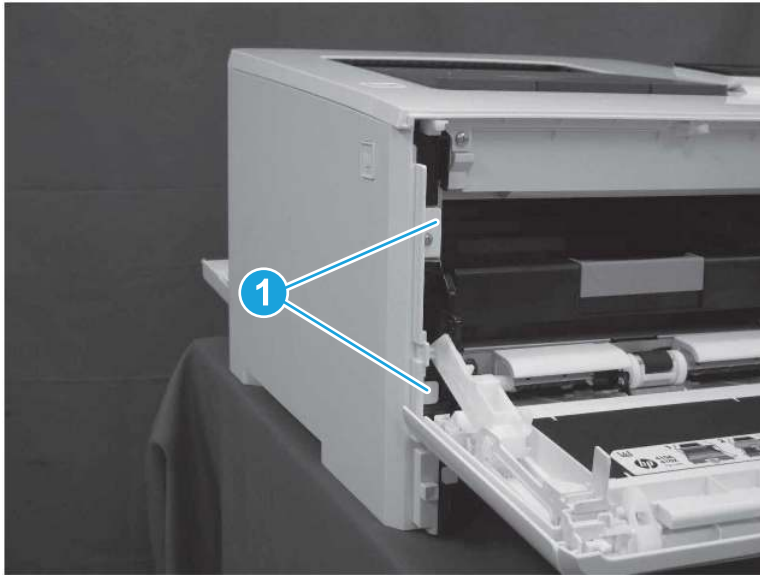
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-1734** Remove one screw



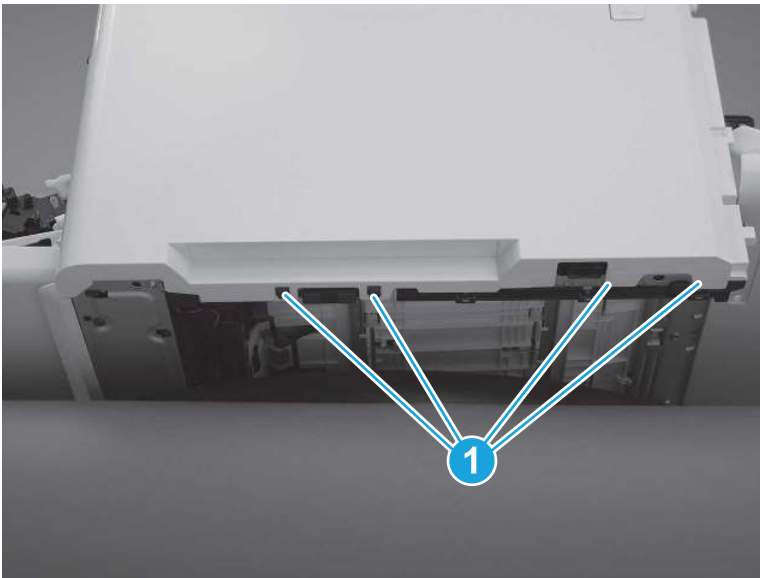
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-1735** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1736** Locate the tabs



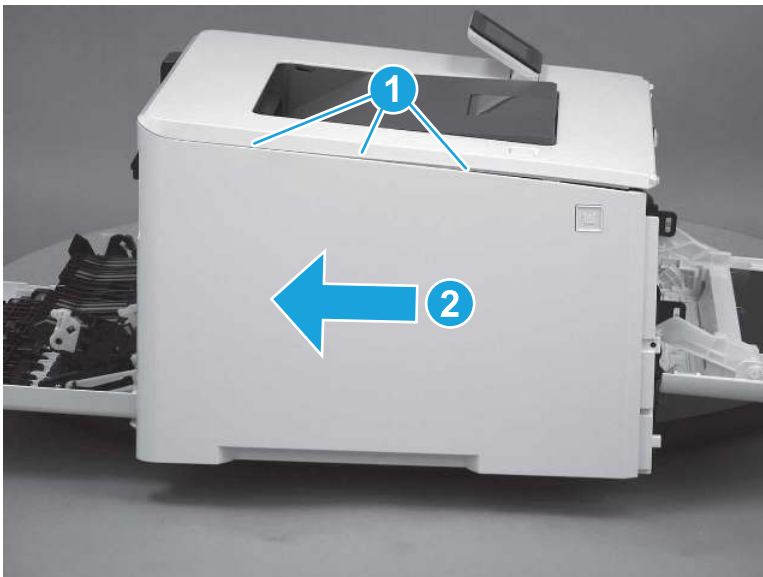
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-1737 Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

Figure 5-1738 Release three tabs



## 6. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).



1. Raise the scanner.

**Figure 5-1739** Raise the scanner



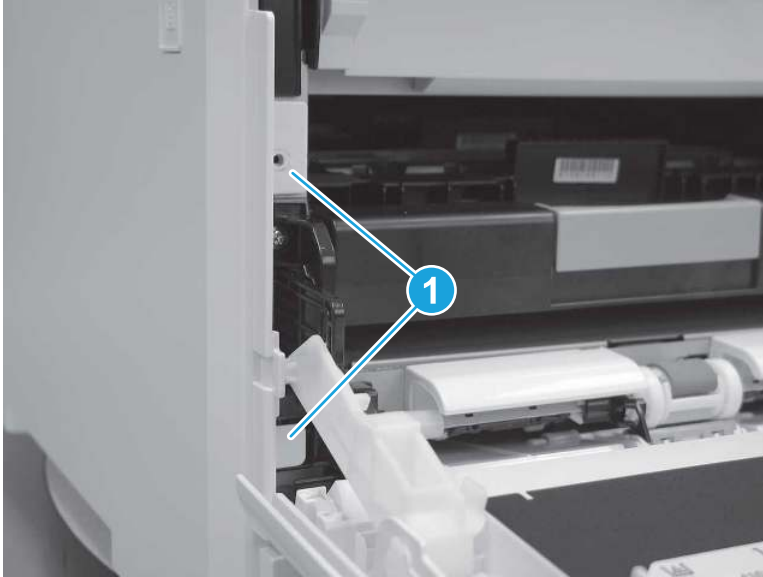
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-1740** Remove one screw



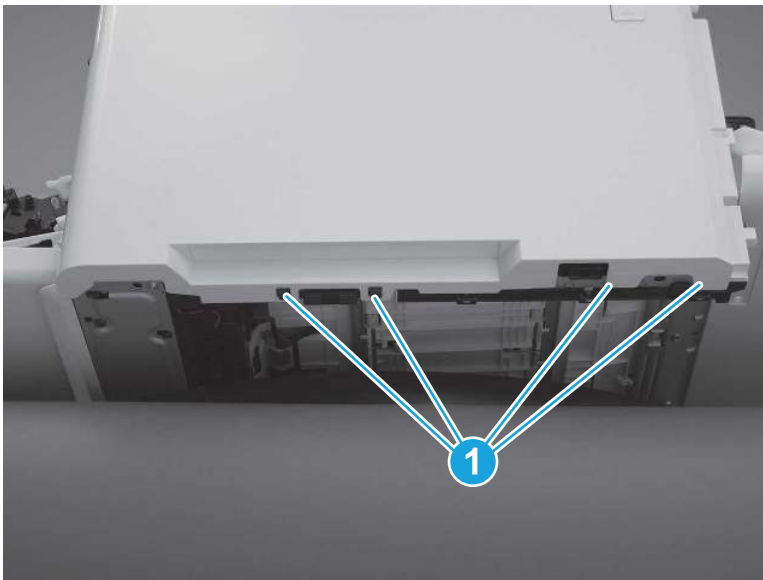
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

Figure 5-1741 Release two tabs



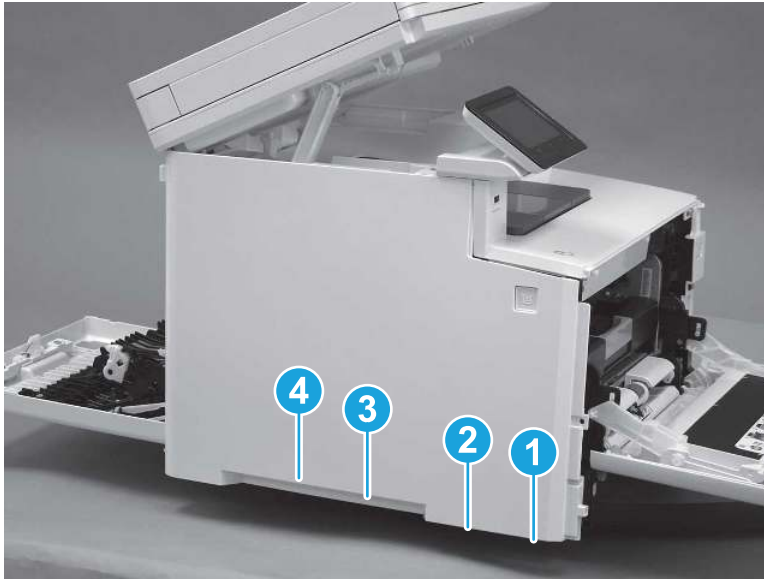
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

Figure 5-1742 Locate the tabs



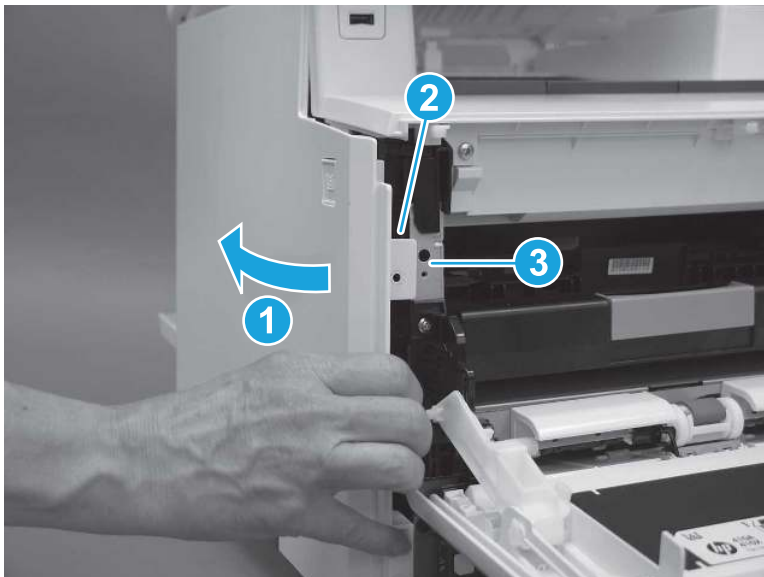
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-1743 Release four tabs



6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

Figure 5-1744 Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-1745** Release one tab and two hooks



8. Lower the scanner.

**Figure 5-1746** Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

**Figure 5-1747** Remove the left cover




## 7. Remove the control panel display and mount base (MFP only)

Follow these steps to remove the control panel display and mount base (MFP only).

1. Open the integrated scanner assembly (ISA).

---

 **NOTE:** The ISA might already have been removed. If so, skip ISA related steps.

If the control panel is not fully tilted forward, tilt it forward now until it stops.

---

**Figure 5-1748** Open the ISA



2. Remove one screw (callout 1).

**Figure 5-1749** Remove one screw



3. Use a small flat-blade screwdriver to release two tabs (callout 1) on the control-panel mount cover.

**Figure 5-1750** Release two tabs



4. Rotate the control-panel mount cover up towards the control panel to release it, and then remove the cover.

**Figure 5-1751** Remove the cover



5. Remove one grounding screw (callout 1), and then move the ground cable (callout 2) out of the way.

**Figure 5-1752** Remove one screw



6. Disconnect two FFC (callout 1).

**Figure 5-1753** Disconnect two FFC



7. Release one tab (callout 1), and then remove the interconnect board (ICB).

**Figure 5-1754** Remove the ICB



8. Remove two screws (callout 1), and then lift the control panel display and mount base together to remove them.

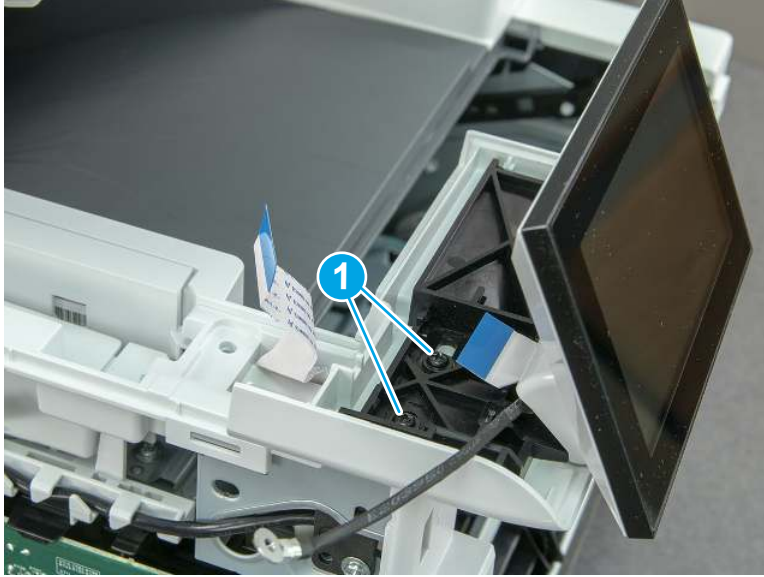
---

**⚠ CAUTION:** Carefully unfold the FFC and release it through the opening in the mount base.

---



Figure 5-1755 Remove two screws and remove the control panel assembly

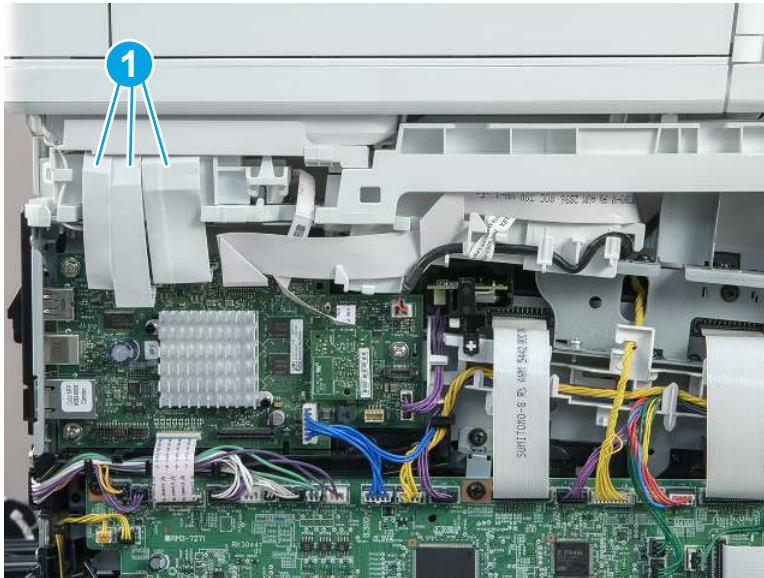


## 8. Remove the integrated scanner assembly

(MFP)

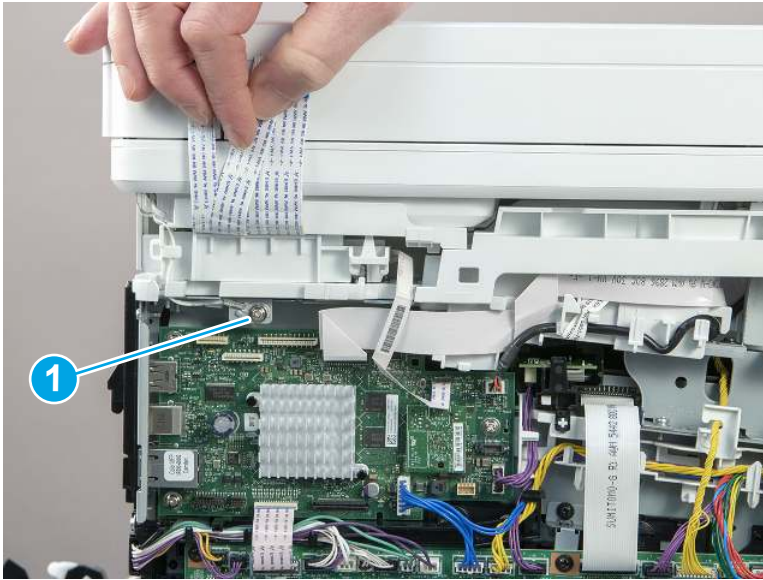
1. On the left side of the printer, disconnect three connectors (callout 1).

Figure 5-1756 Disconnect three connectors



2. Raise the scanner cables up, and then remove one screw (callout 1) to release the ground wire.

**Figure 5-1757** Remove one screw and release the ground wire



3. Raise the scanner.

**Figure 5-1758** Raise the scanner



4. With the scanner lifted, release the tab (callout 1) on the scanner support arm pin from the slot and rotate the pin in the direction indicated.

**Figure 5-1759** Release scanner support arm pin



5. Remove the scanner arm pin.

---

**⚠ CAUTION:** Once the scanner arm pin is removed, support the scanner with one hand at all times so that it does not fall backwards off of the printer.

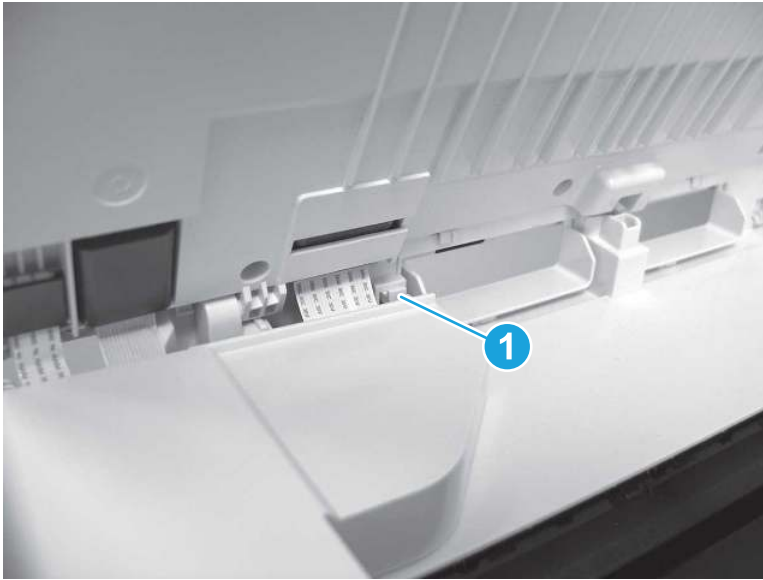
---

**Figure 5-1760** Remove the pin



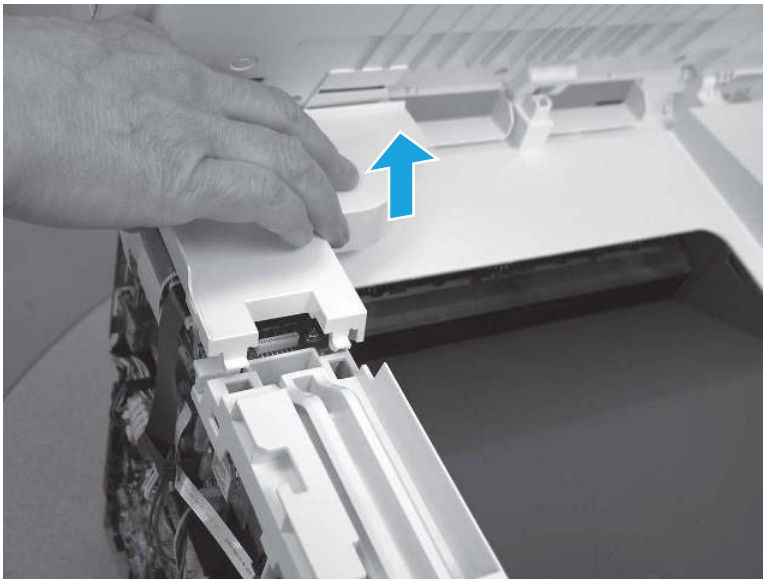
6. On the top of the printer, use a flat-blade screwdriver to release one tab (callout 1).

Figure 5-1761 Release one tab



7. Remove the scanner cable cover.

Figure 5-1762 Remove the scanner cable cover



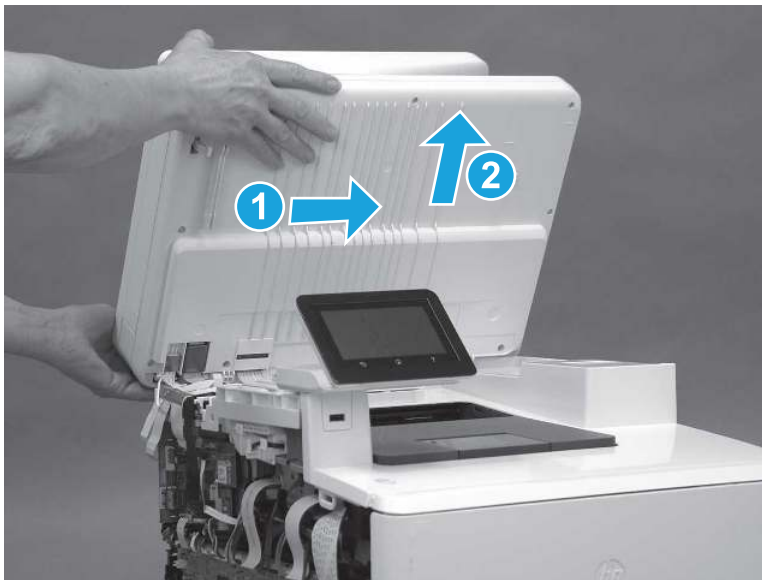
8. The scanner cables (callout 1) are held in place on the top cover with double-sided tape. Carefully release the cables from the top cover.

**Figure 5-1763** Release the cables



9. Open the scanner assembly fully, slide the assembly toward the right side of the printer, and then lift the assembly off of the printer.

**Figure 5-1764** Remove the scanner assembly

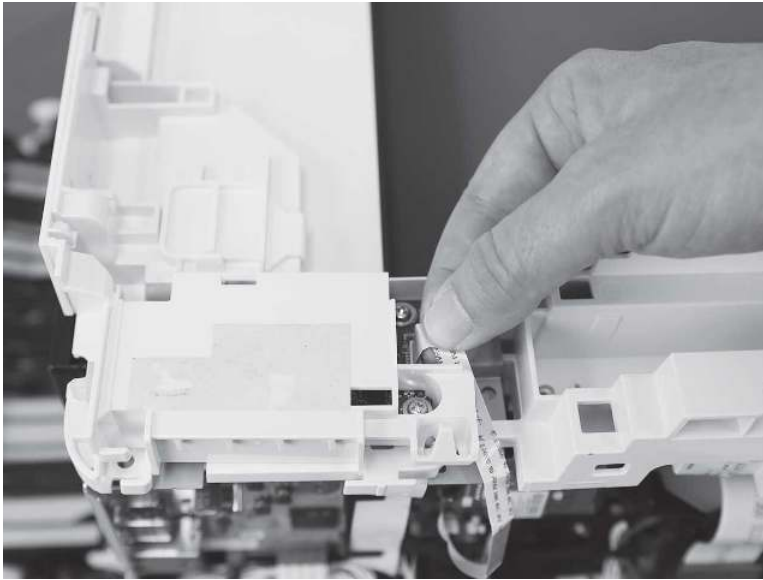


## 9. Remove the fax PCA (MFP)

Follow these steps to remove the fax PCA (MFP).

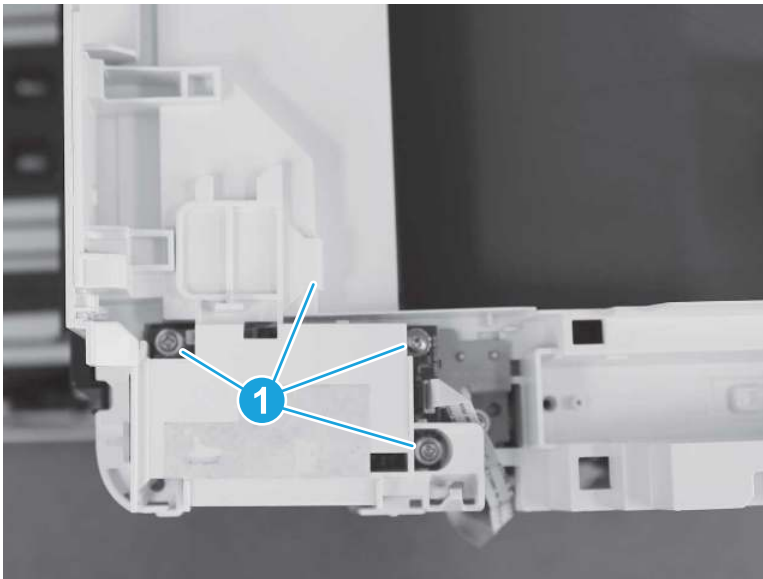
1. Disconnect one FFC cable from fax PCA.

**Figure 5-1765** Disconnect one connector



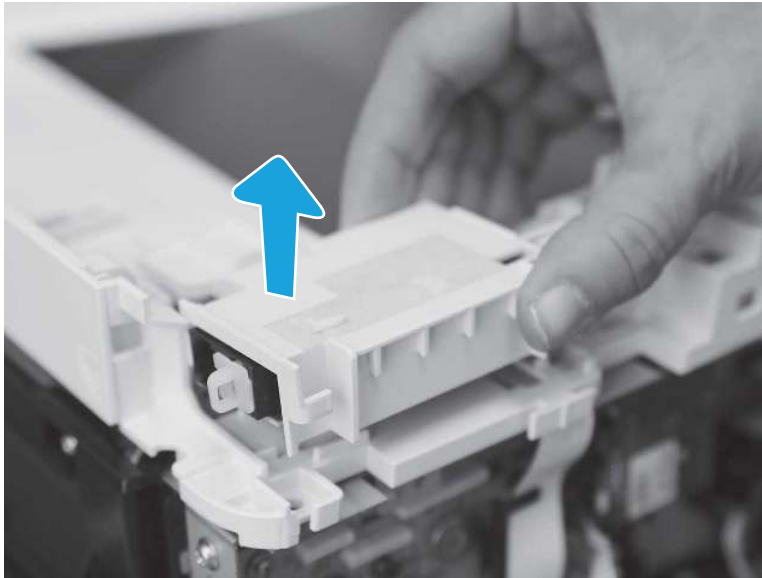
2. Remove three screws and release one tab (callout 1).

**Figure 5-1766** Remove three screws and release one tab



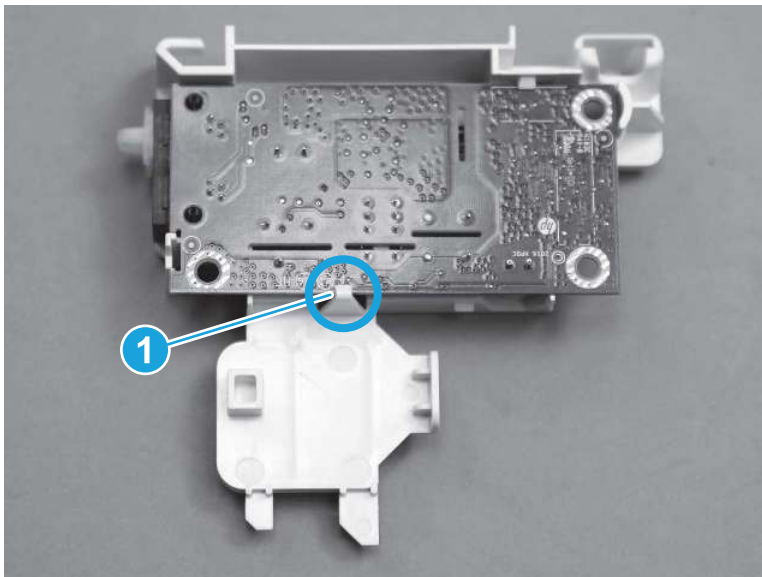
- Lift up to remove the fax PCA.

**Figure 5-1767** Lift up to remove the fax PCA



- Optional step:** Release the tab (callout 1) on the back of the fax PCA to remove the PCA from the plastic holder.

**Figure 5-1768** Release one tab on the back of the fax PCA



## 10. Remove the top cover (SFP)

Follow these steps to remove the top cover (SFP).

- On the left side of the printer, on the formatter, disconnect one connector (callout 1).

---

 **NOTE:** The formatter may look slightly different than what is shown below, however the removal procedures are the same.

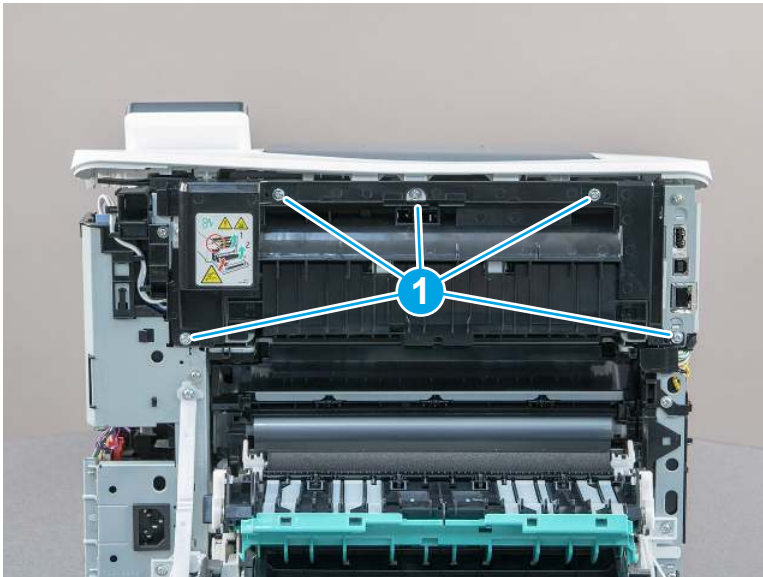
---

Figure 5-1769 Disconnect one connector



2. At the back of the printer, remove five screws (callout 1), and then remove the fuser cover.

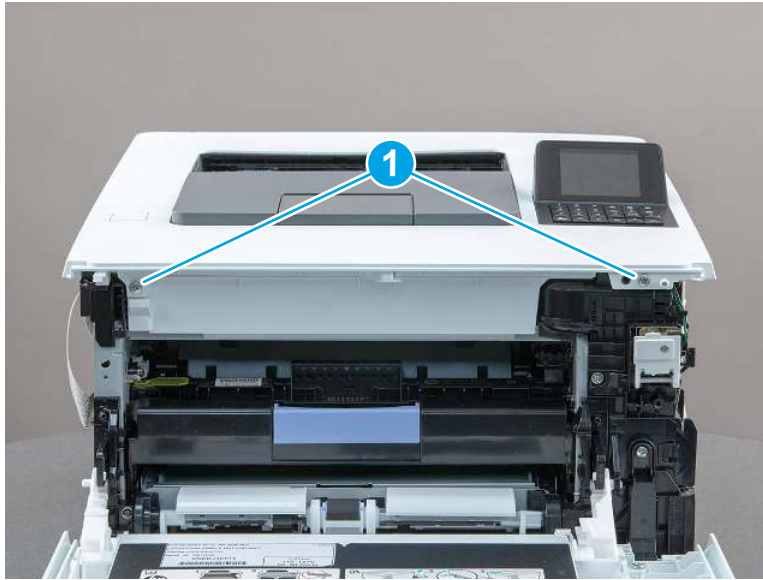
Figure 5-1770 Remove five screws





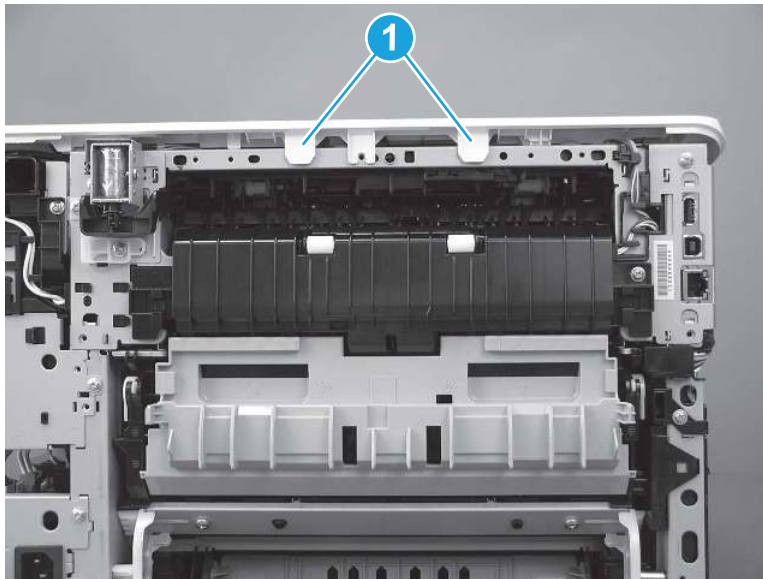
3. At the front of the printer, remove two screws (callout 1).

**Figure 5-1771** Remove two screws



4. Lift the front of the top cover up and release two tabs at the back of the printer (callout 1).

**Figure 5-1772** Lift the top cover and release two tabs



5. Remove the top cover.

---

 **NOTE:** For a replacement cover install, remove the control panel from the discarded cover and install it on the replacement cover.

---

Figure 5-1773 Remove the top cover

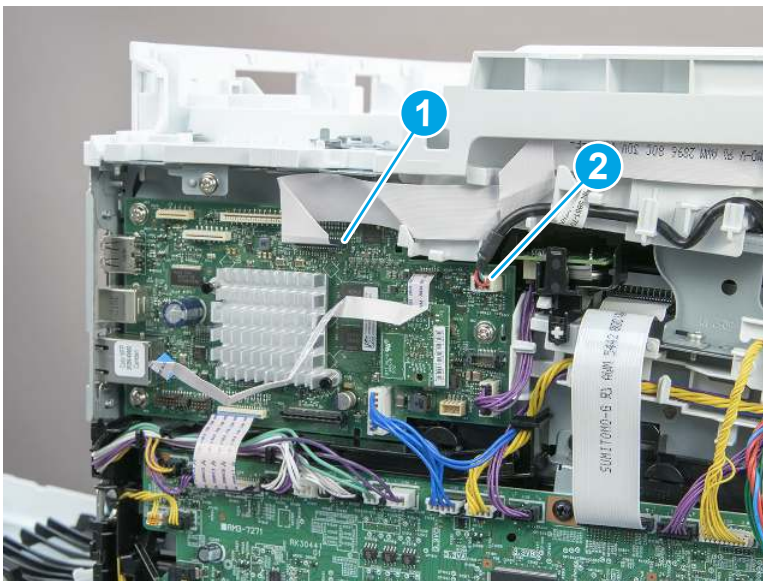


## 11. Remove the top cover (MFP)

Follow these steps to remove the top cover (MFP).

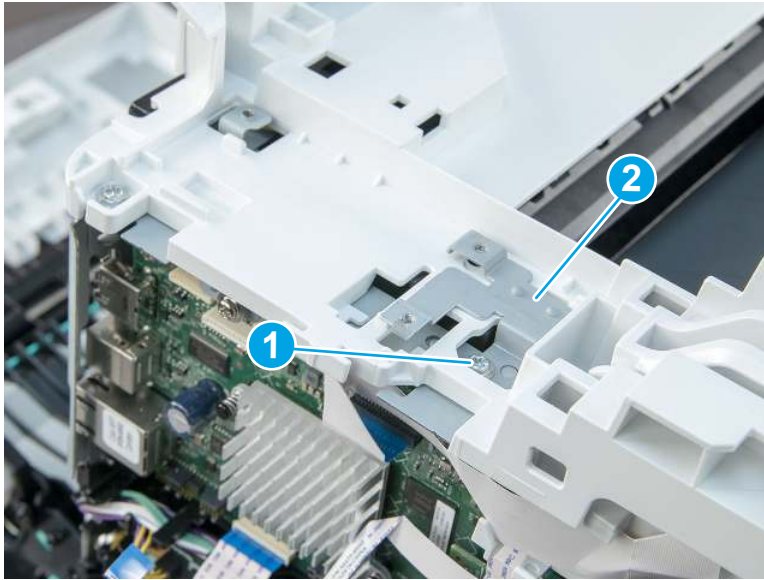
1. Disconnect one FFC (callout 1) and one connector (callout 2).

Figure 5-1774 Disconnect one FFC and one connector



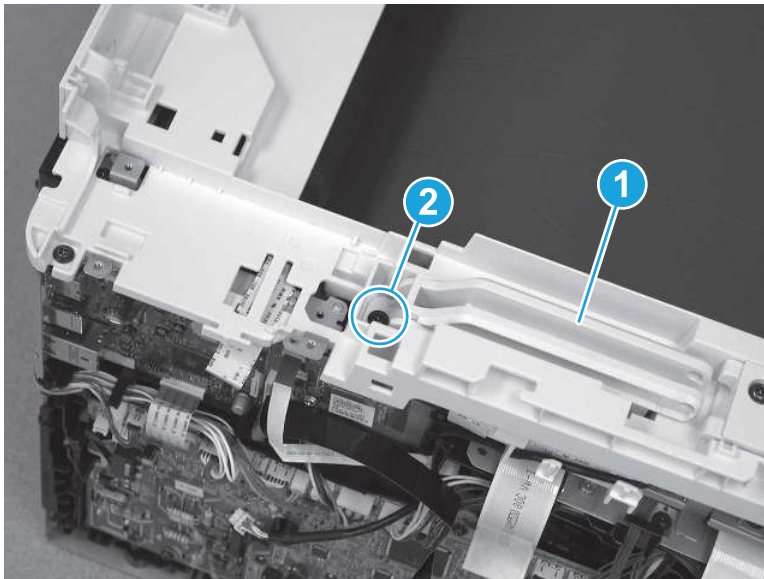
2. On the top cover, remove one screw (callout 1) and the sheet metal plate (callout 2).

**Figure 5-1775** Remove one screw and the sheet metal plate



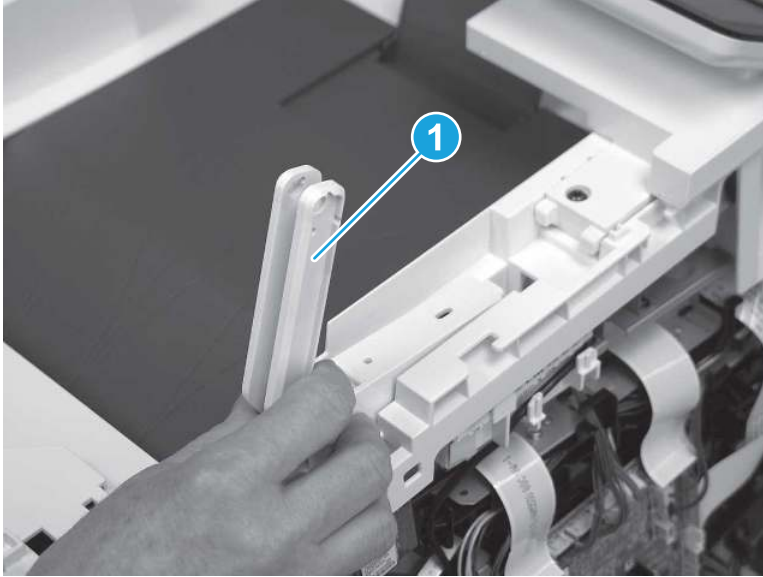
3. At the top of the printer, lower the scanner support arm (callout 1), and then remove one screw (callout 2).

**Figure 5-1776** Lower the support arm and remove one screw



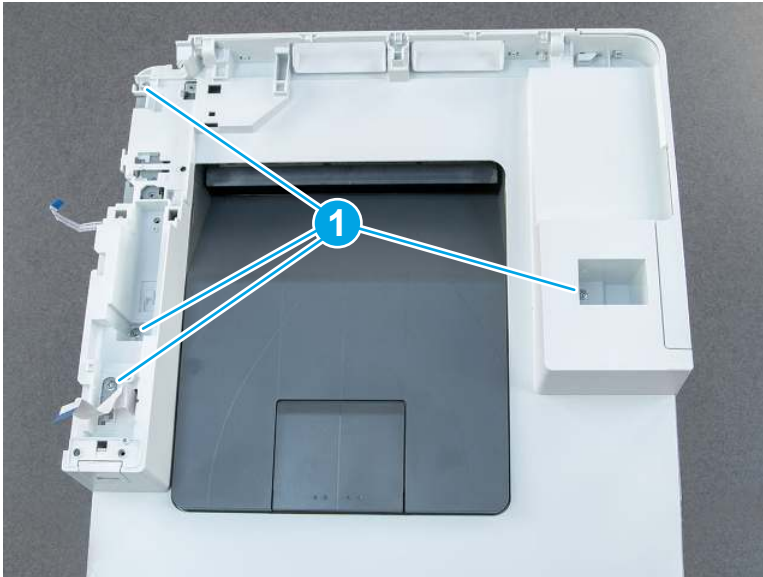
4. Remove the scanner support arm (callout 1).

Figure 5-1777 Remove the scanner support arm



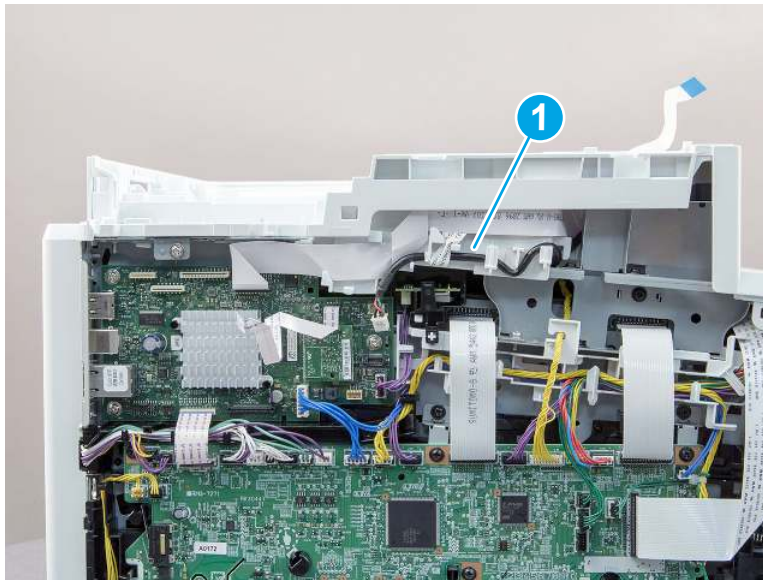
5. At the top of the printer, remove four screws (callout 1).

Figure 5-1778 Remove four screws



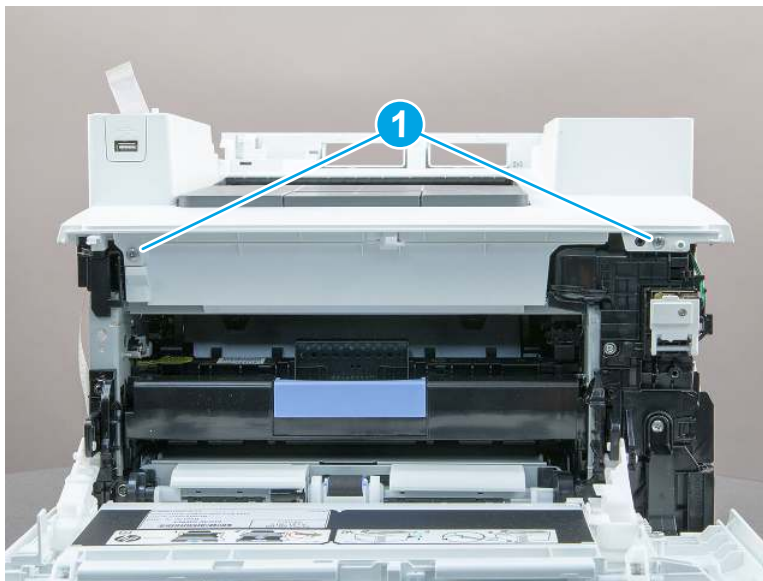
6. Remove the USB cable (callout 1) from the cable guides.

**Figure 5-1779** Release the USB cable



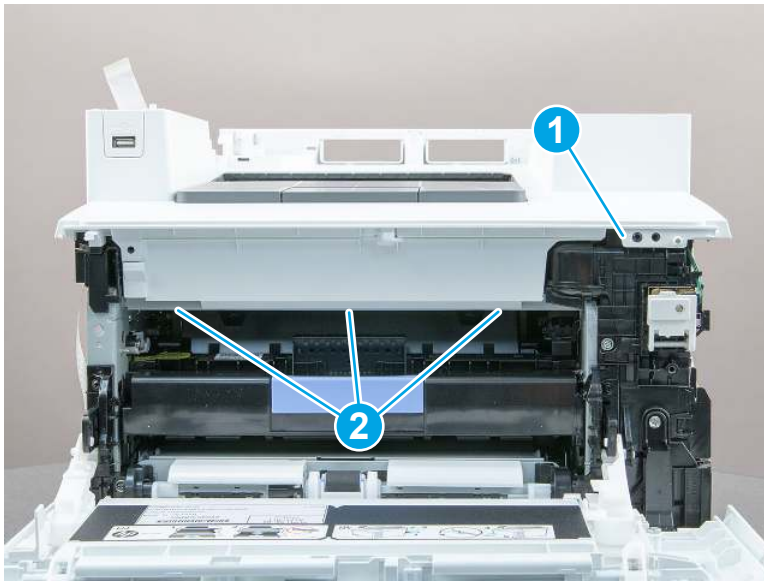
7. At the front of the printer, remove two screws (callout 1).

**Figure 5-1780** Remove two screws



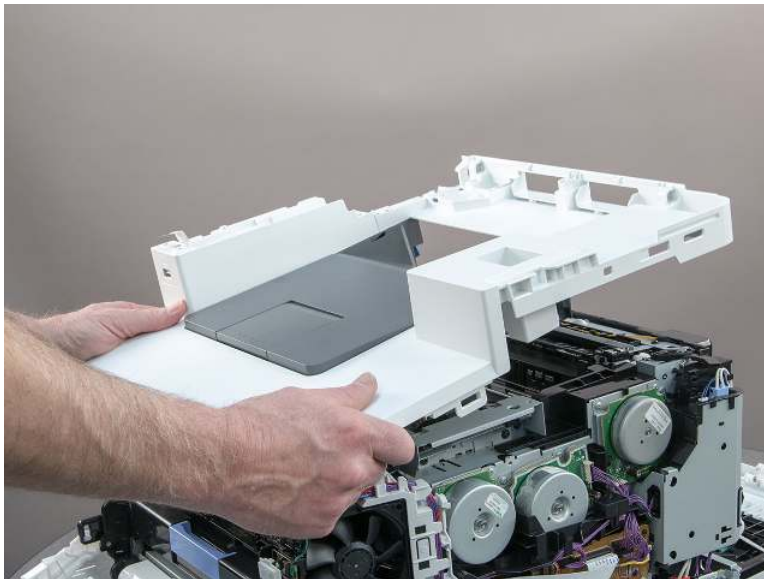
8. Release one retainer (callout 1), and then release three tabs (callout 2).

**Figure 5-1781** Release one retainer and three tabs



9. Remove the top cover.

**Figure 5-1782** Remove the top cover



## 12. Remove the fuser

Follow these steps to remove the fuser.

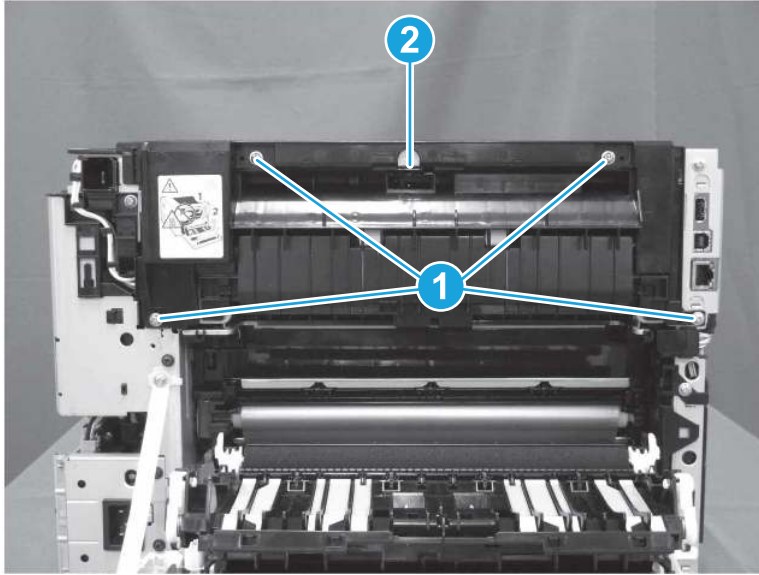
1. Remove four screws (callout 1), and then release one tab (callout 2).

---

 **NOTE:** For a SFP printer with the top cover removed, this cover is already off. Skip this step.

---

Figure 5-1783 Remove four screws



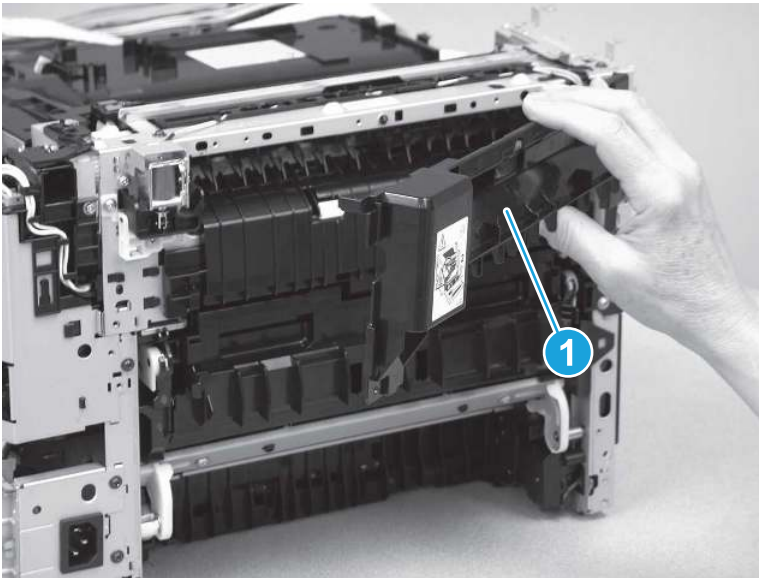
2. Remove the cover (callout 1).

---

 **NOTE:** For a SFP printer with the top cover removed, this cover is already off. Skip this step.


---

Figure 5-1784 Remove the guide



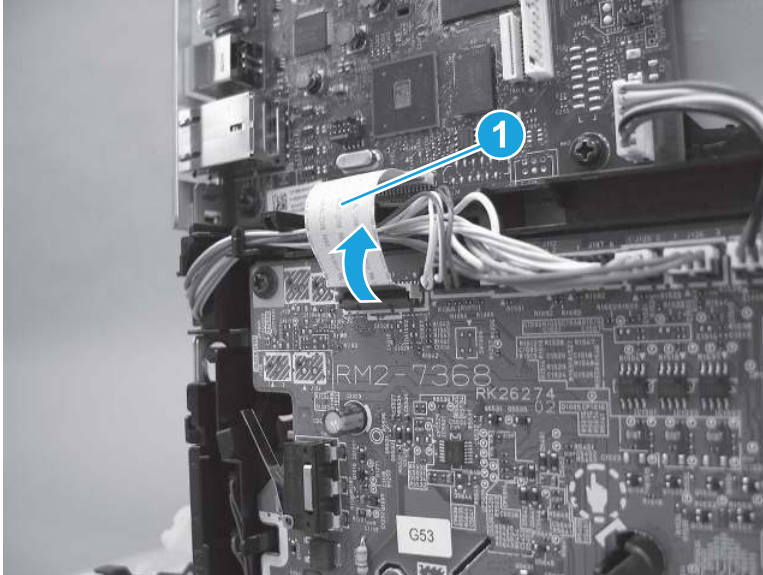
3. Disconnect one connector (callout 1) on the engine controller PCA.

---

 **NOTE:** This connector is a zero-insertion force (ZIF) connector. Lift the latch on the connector before removing the flat cable. Formatter PCA may appear differently than what is shown below, however, the procedures are the same.

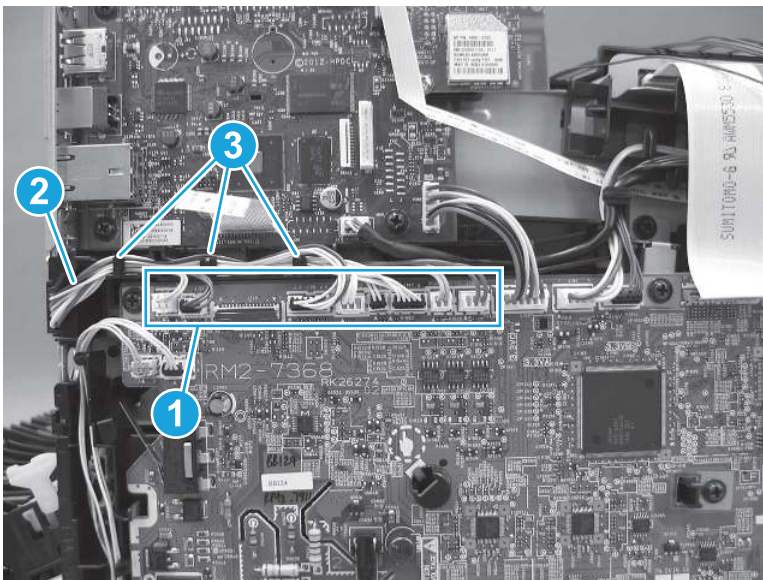
---

Figure 5-1785 Disconnect one connector



4. Disconnect eight connectors on the engine controller PCA (callout 1), and then remove the cables (callout 2) from the guides (callout 3).

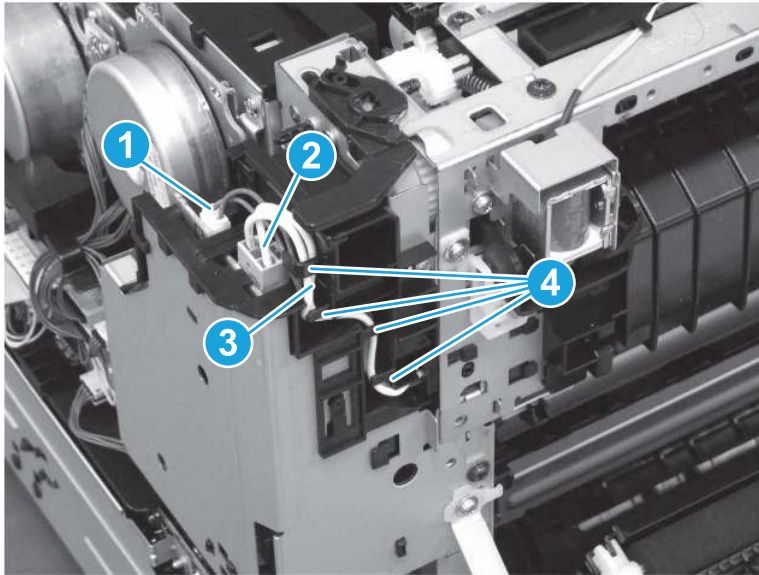
Figure 5-1786 Disconnect eight connectors





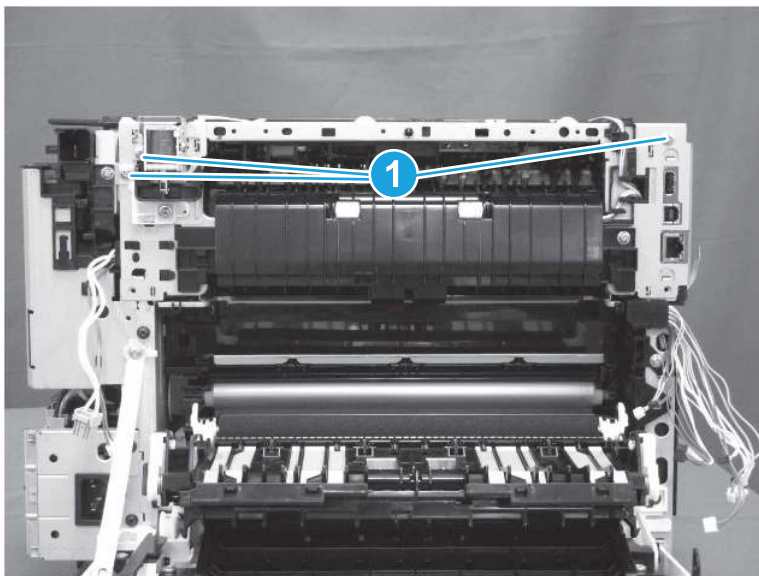
5. Disconnect one connector (callout 1). Release the connector latch, and then disconnect one connector (callout 2). Remove the cables (callout 3) from the guides (callout 4).

**Figure 5-1787** Disconnect two connectors



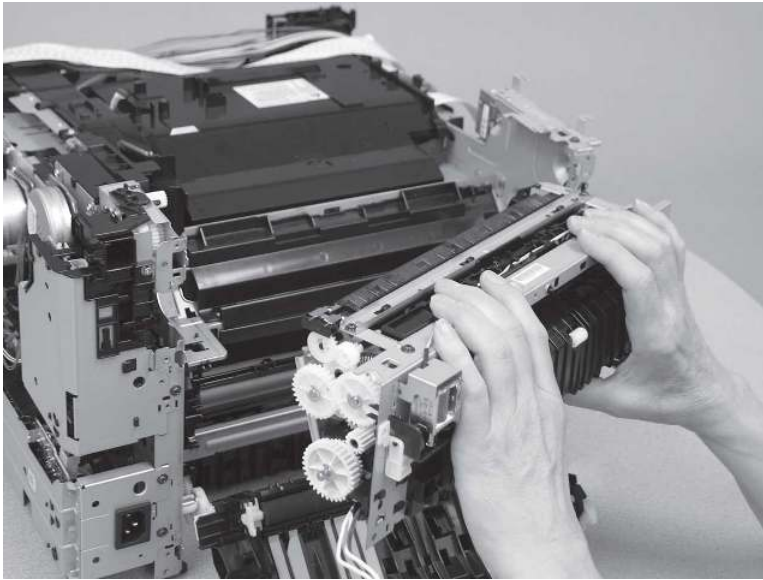
6. Remove three screws (callout 1).

**Figure 5-1788** Remove three screws



7. Remove the fuser.

**Figure 5-1789** Remove the fuser

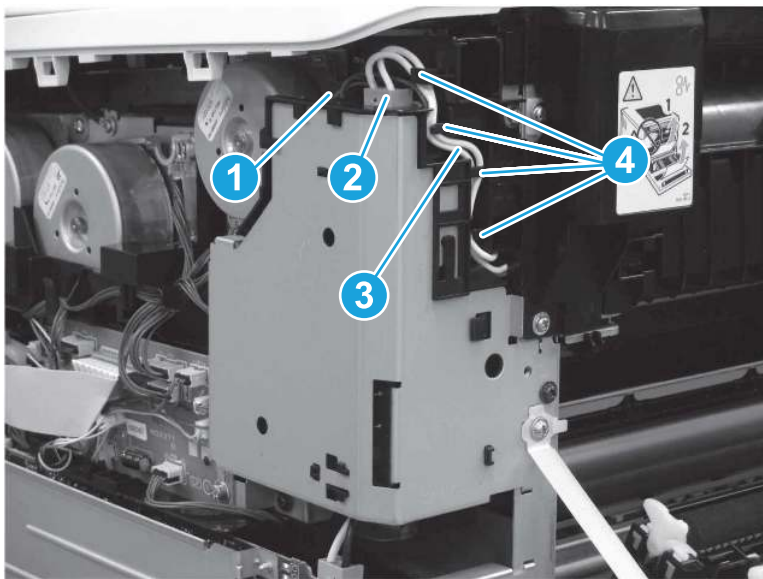


### 13. Remove the cable holder assembly

Follow these steps to remove the cable holder assembly.


1. Disconnect one connector (callout 1). Release the connector latch, and then disconnect one connector (callout 2). Remove the cables (callout 3) from the guides (callout 4).

**Figure 5-1790** Disconnect two connectors



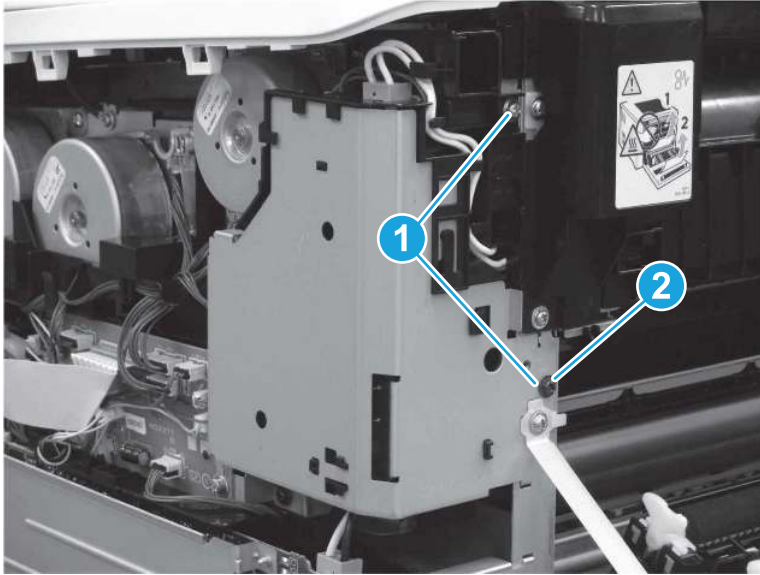
2. Remove two screws (callout 1).

---

 **TIP:** The lower screw (callout 2) is shorter than the other screw. Make sure that this screw is reinstalled in the correct position.

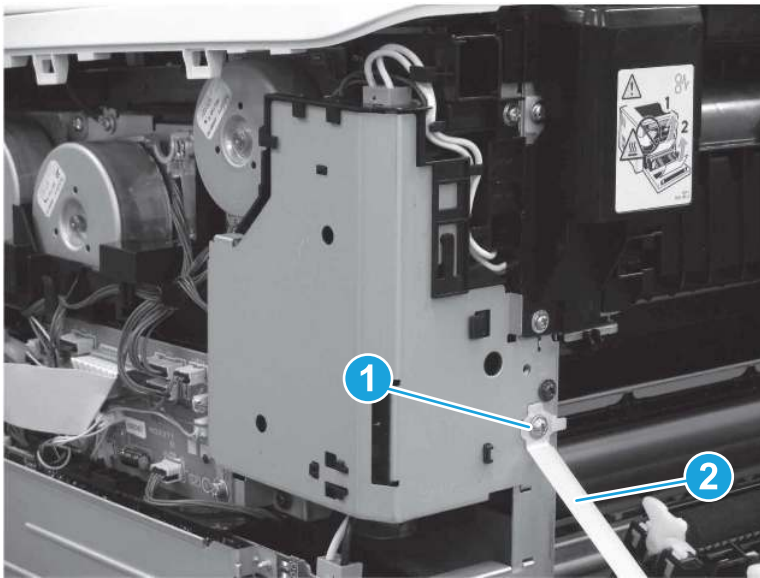
---

Figure 5-1791 Remove two screws



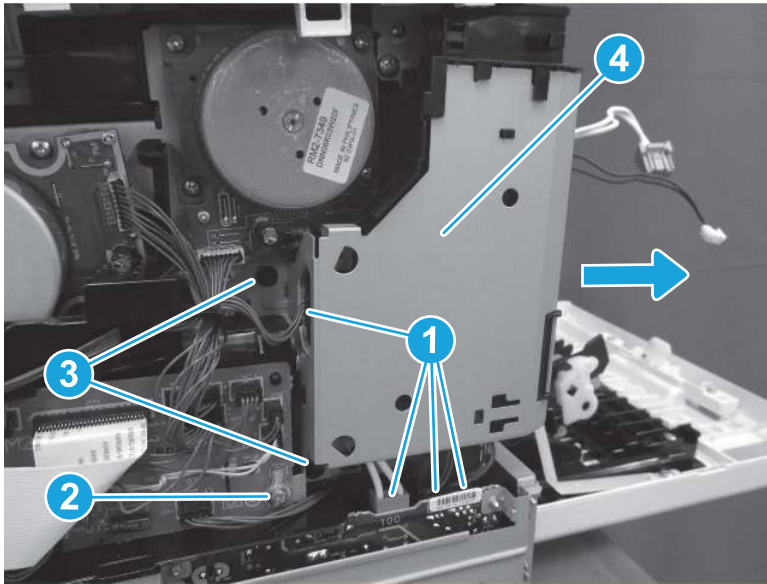
3. Remove one screw (callout 1), and then release the retainer arm (callout 2).

Figure 5-1792 Release the retainer arm



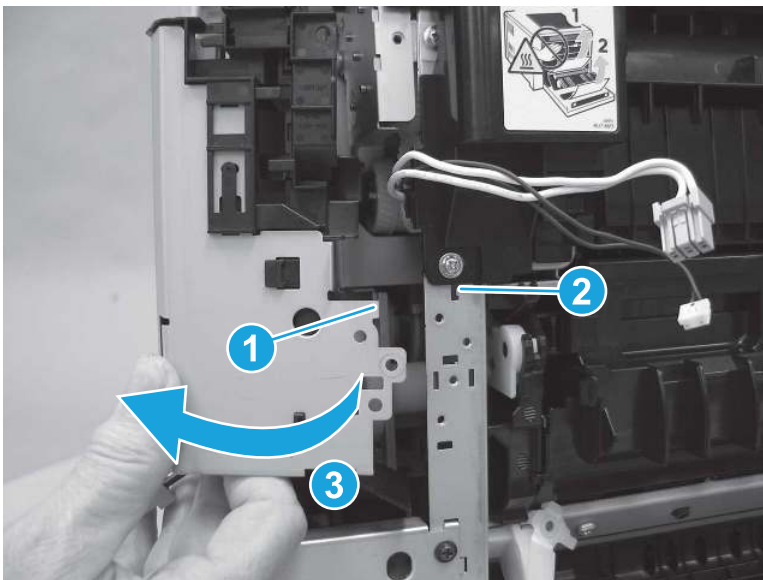
4. Disconnect four connectors (callout 1). Remove one screw (callout 2). Remove two screws (callout 3), and then remove cable holder assembly (callout 4).

**Figure 5-1793** Disconnect four connectors and remove three screws



5. Release one tab (callout 1) on the back of the cable holder assembly from the slot (callout 2) in the printer frame. Rotate the cable holder assembly away from the printer to remove it (callout 3).

**Figure 5-1794** Remove the cable holder assembly

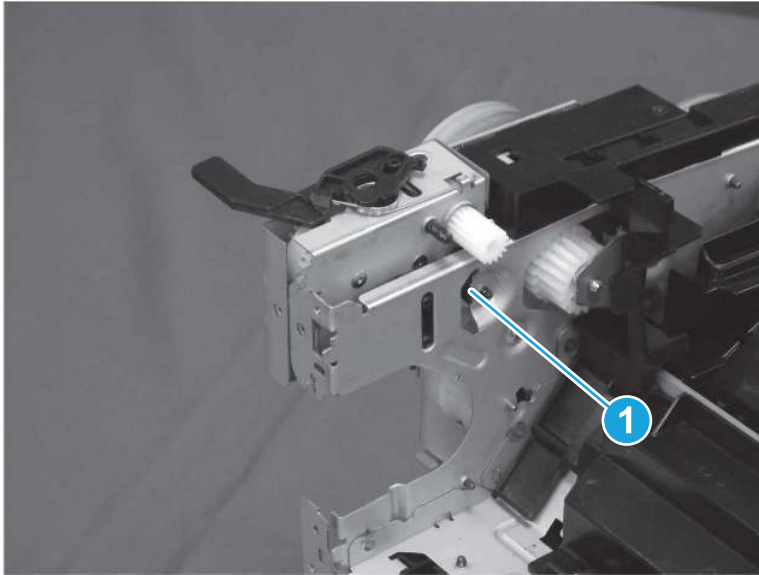


## 14. Remove the duplex drive assembly

Follow these steps to remove the duplex drive assembly.

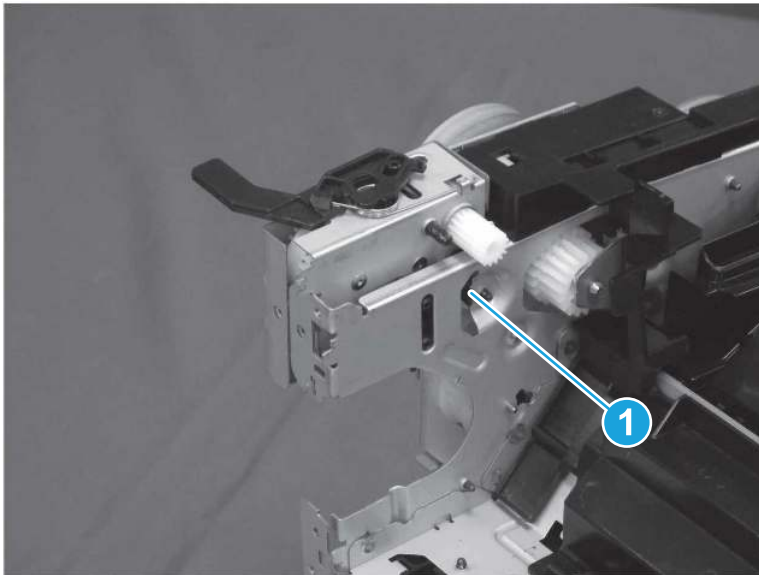
1. Release one tab (callout 1).

**Figure 5-1795** Release one tab



2. Rotate the duplex drive assembly (callout 1) away from the printer to remove it.

**Figure 5-1796** Remove the duplex 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.

---

## Removal and replacement: Island of Data (IOD)

Learn how to remove and replace the Island of Data (IOD).

[View a video of removing and replacing the IOD.](#)

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](http://www.hp.com/buy/parts).

**Table 5-49** Part information

Part number	Part description
3PZ15-67908	Island of Data (IOD)

### 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

Make sure that the printer initializes to a **Ready** state.


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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-1797** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

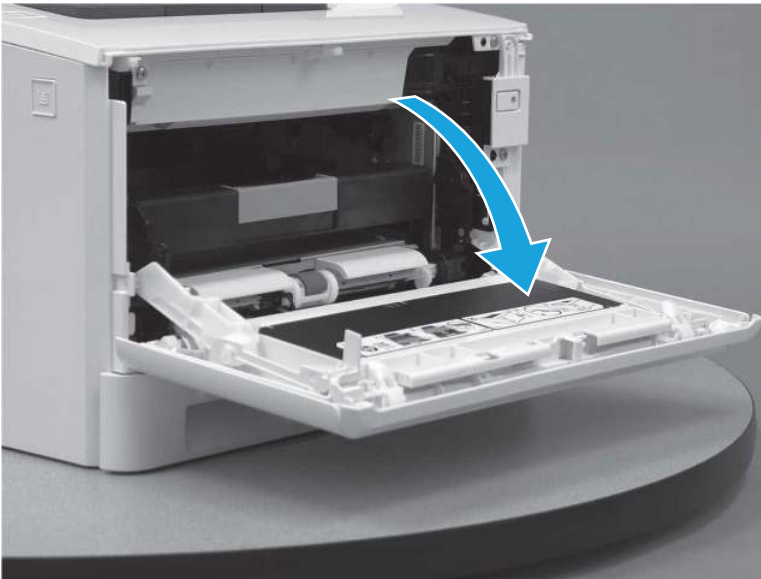
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-1798** Release the front door



2. Open the front door.

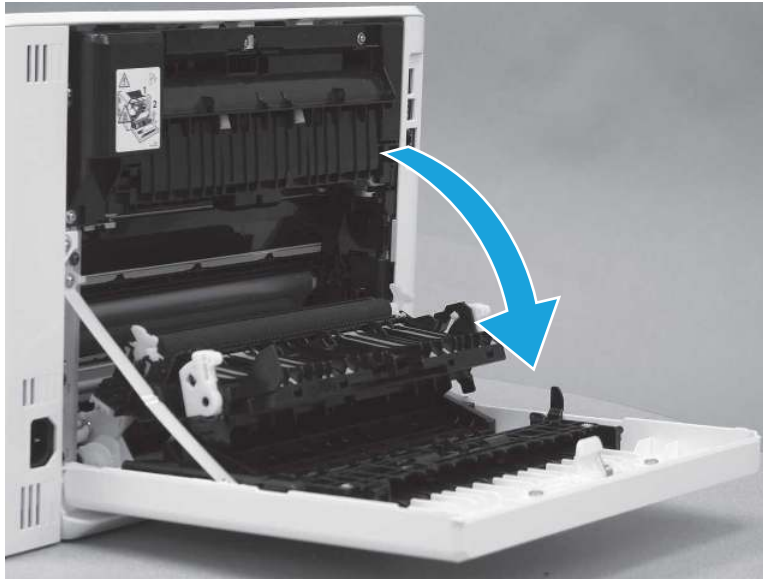
**Figure 5-1799** Open the front door





3. Open the duplexing door.

**Figure 5-1800** Open the duplexer door

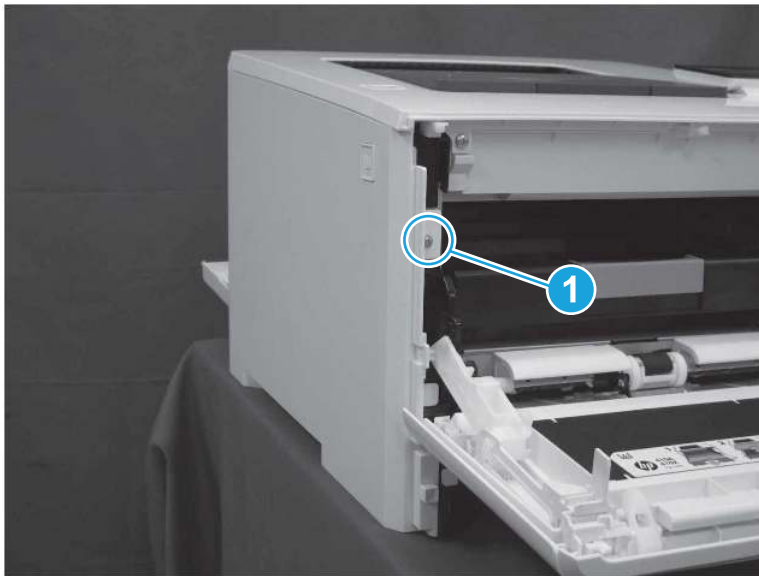


### 3. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

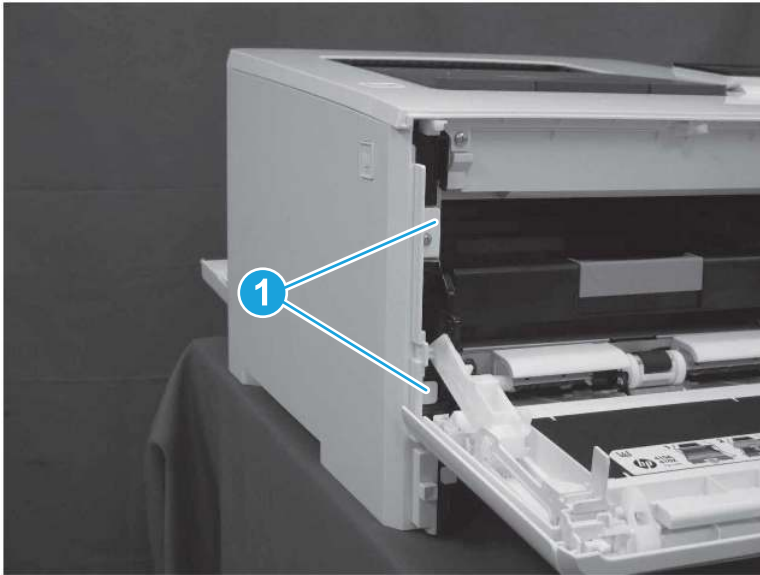
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-1801** Remove one screw



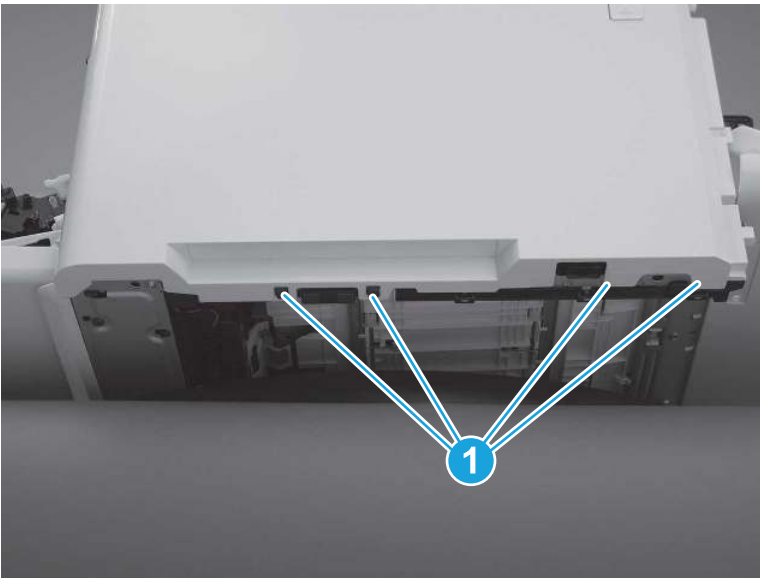
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-1802** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1803** Locate the tabs



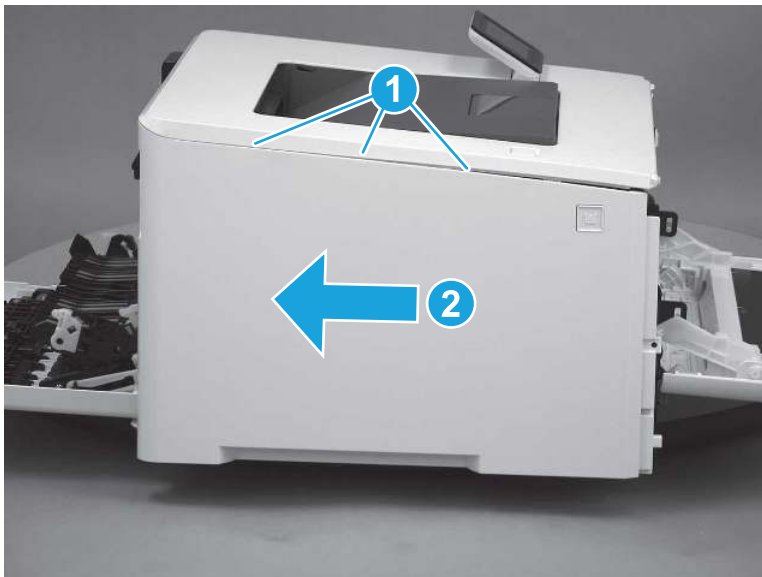
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-1804 Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

Figure 5-1805 Release three tabs



#### 4. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

1. Raise the scanner.

Figure 5-1806 Raise the scanner



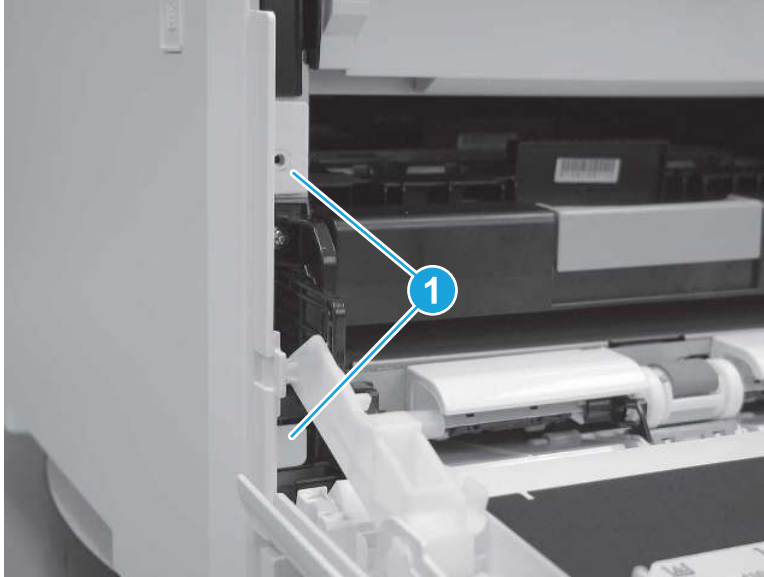
2. At the front of the printer, remove one screw (callout 1).

Figure 5-1807 Remove one screw



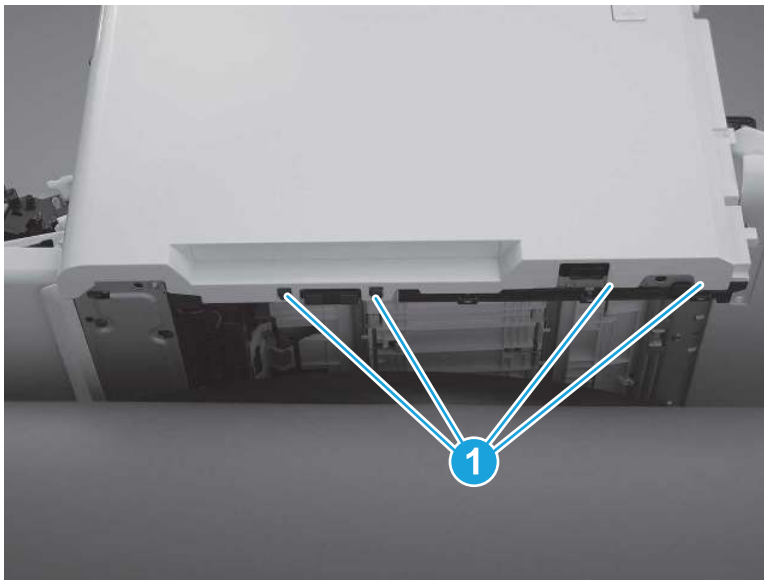
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-1808** Release two tabs



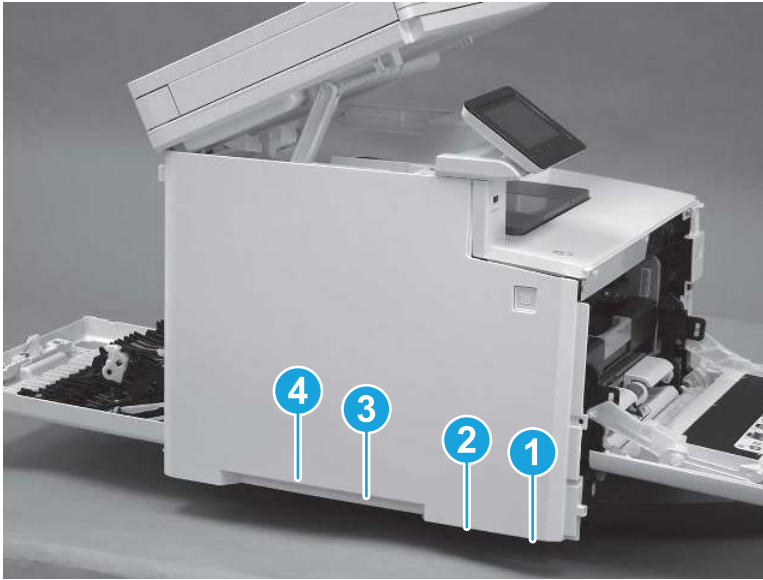
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1809** Locate the tabs



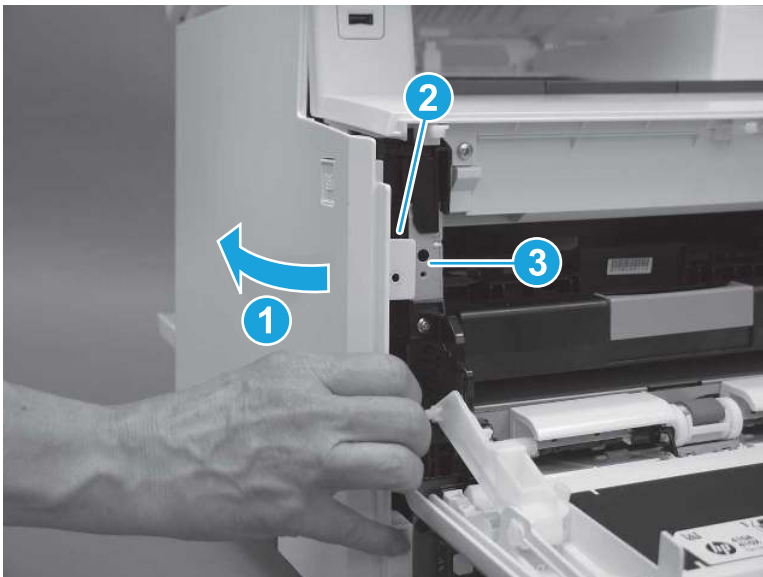
- Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-1810** Release four tabs



- Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

**Figure 5-1811** Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-1812** Release one tab and two hooks



8. Lower the scanner.

**Figure 5-1813** Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

**Figure 5-1814** Remove the left cover

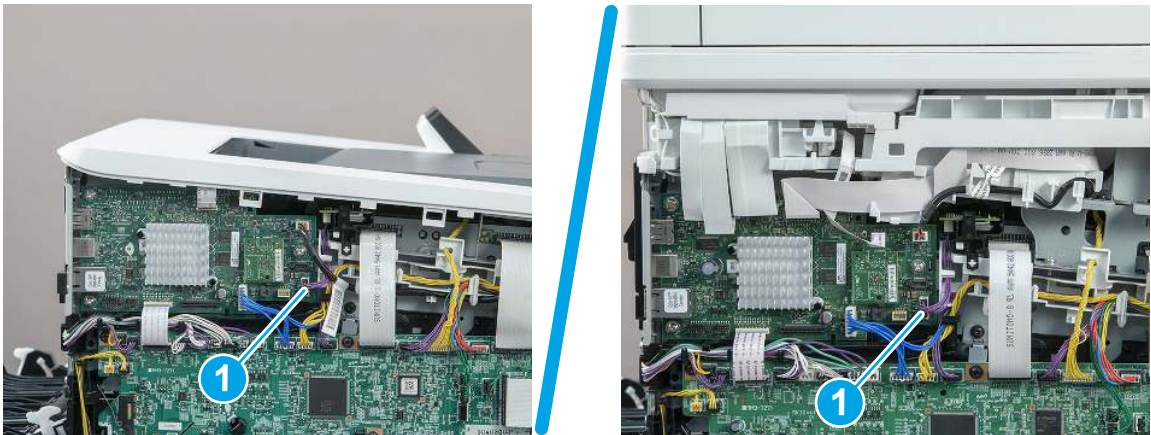


## 5. Remove the Island of Data (IOD)

Follow these steps to remove the Island of Data (IOD).

1. Disconnect one connector (callout 1).

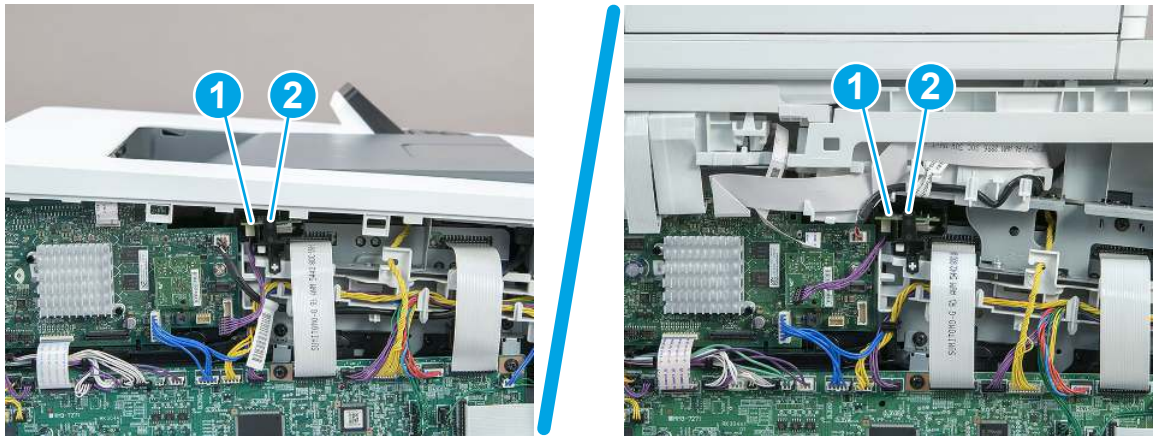
**Figure 5-1815** Disconnect one connector





2. Release one tab (callout 1), and then lift the IOD (callout 2) away from the printer to remove it.

**Figure 5-1816** Remove the IOD



3. Disconnect one connector (callout 1), and then connect the cable to the replacement part.

**Figure 5-1817** Connect the cable to the replacement IOD



## 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: embedded Multi-Media Card (eMMC)

Learn how to remove and replace the eMMC.

[View a video of removing and replacing the eMMC.](#)


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](http://www.hp.com/buy/parts).

**Table 5-50** Part information

Part number	Part description
3PZ15-67905	eMMC 4GB (SFP)
B5L32-60002	eMMC 16GB (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

Make sure that the printer initializes to a **Ready** state.

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

### 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-1818** Remove the tray



### 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

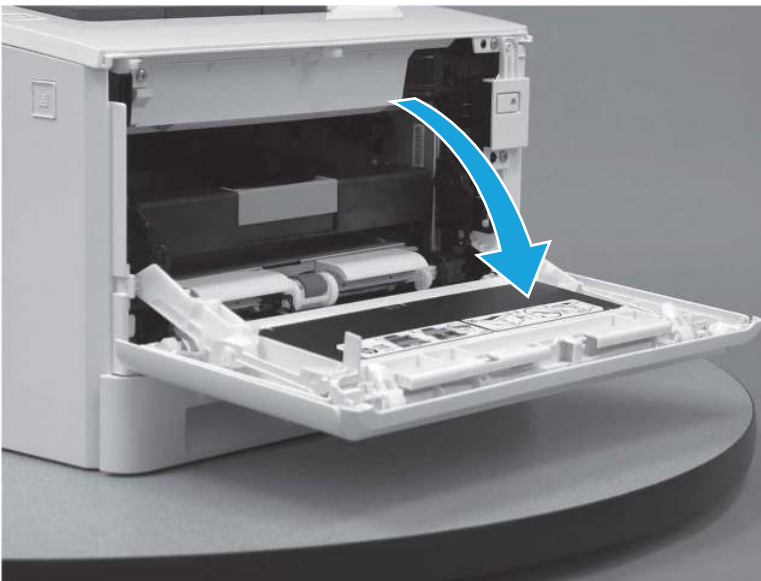
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-1819** Release the front door



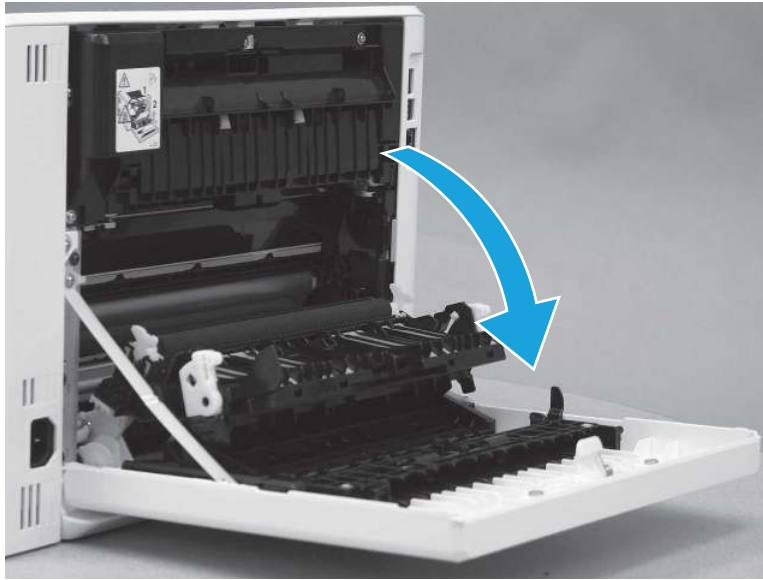
2. Open the front door.

**Figure 5-1820** Open the front door



3. Open the duplexing door.

**Figure 5-1821** Open the duplexer door

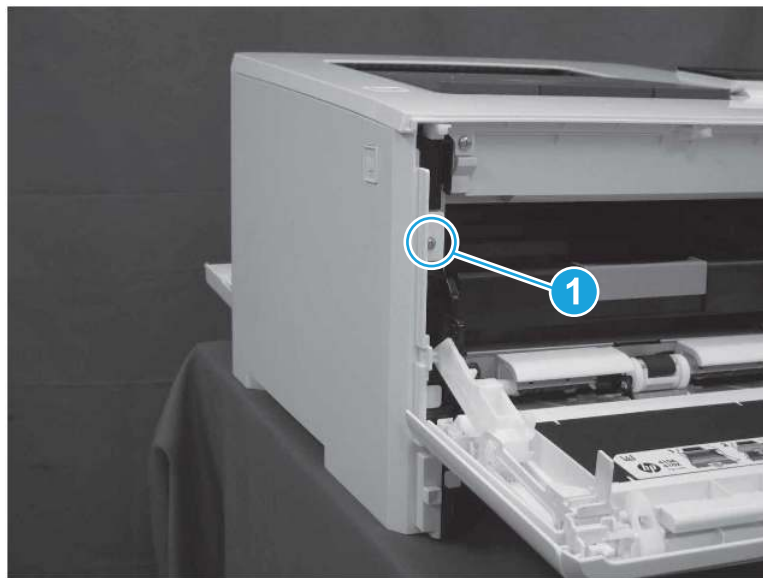


### 3. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

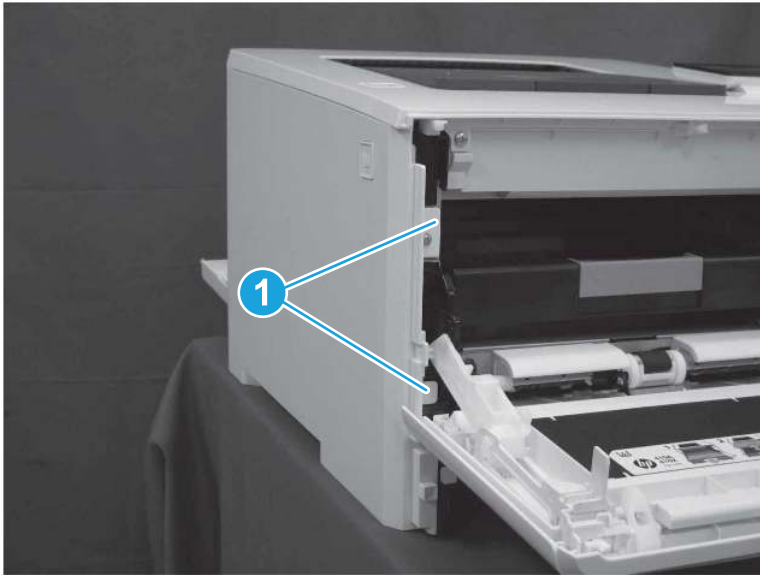
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-1822** Remove one screw



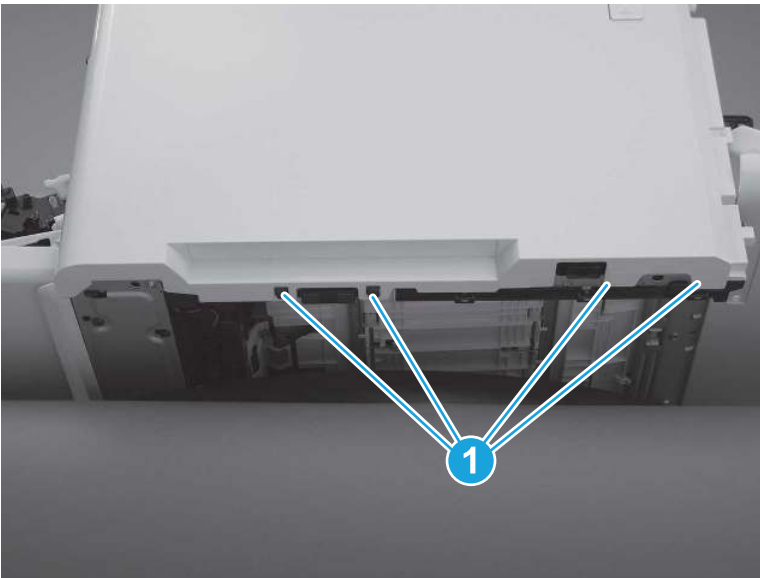
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-1823** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1824** Locate the tabs



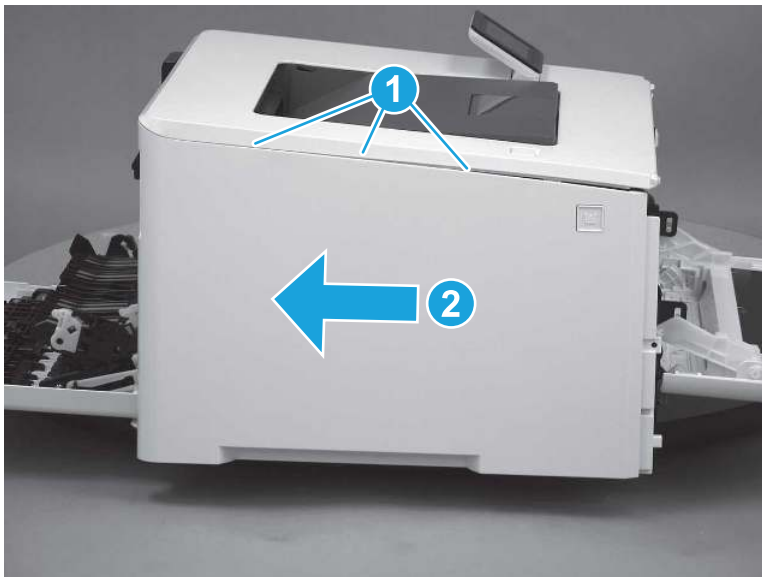
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-1825 Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

Figure 5-1826 Release three tabs



#### 4. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

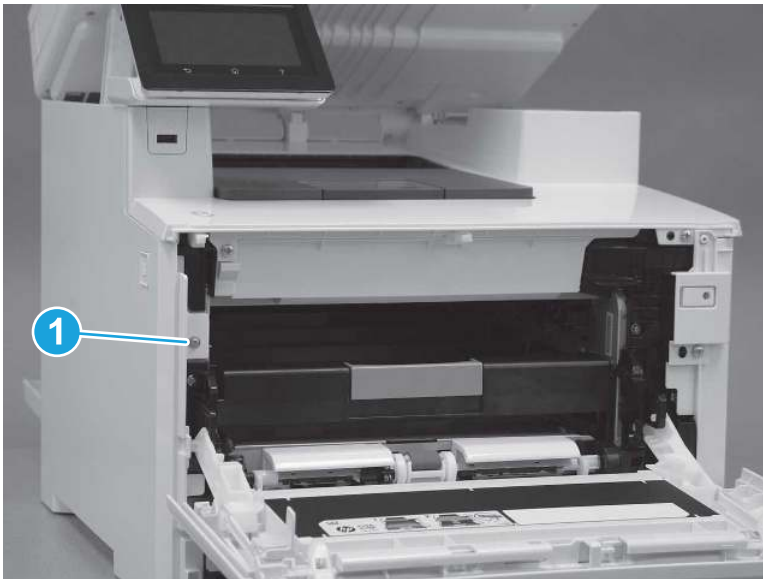
1. Raise the scanner.

Figure 5-1827 Raise the scanner



2. At the front of the printer, remove one screw (callout 1).

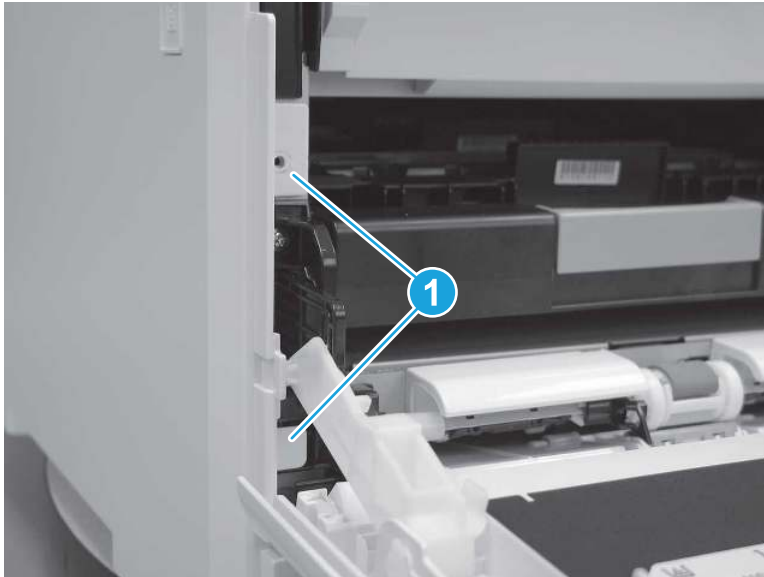
Figure 5-1828 Remove one screw





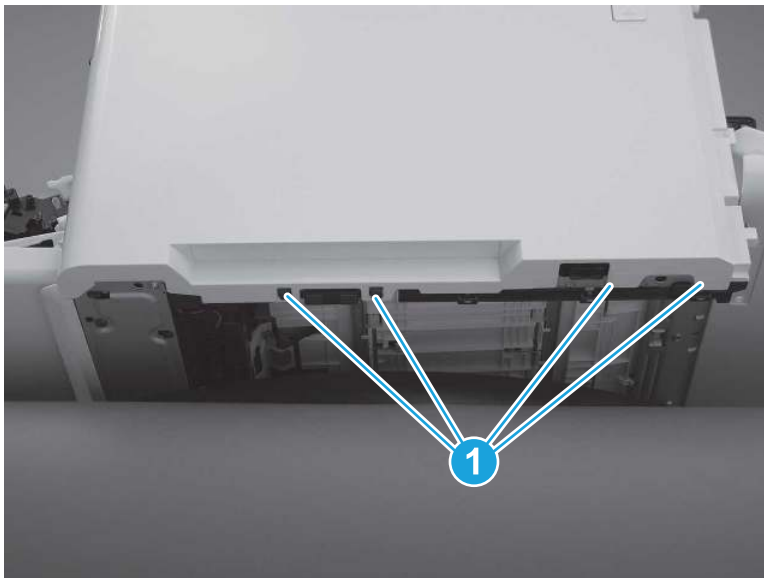
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-1829** Release two tabs



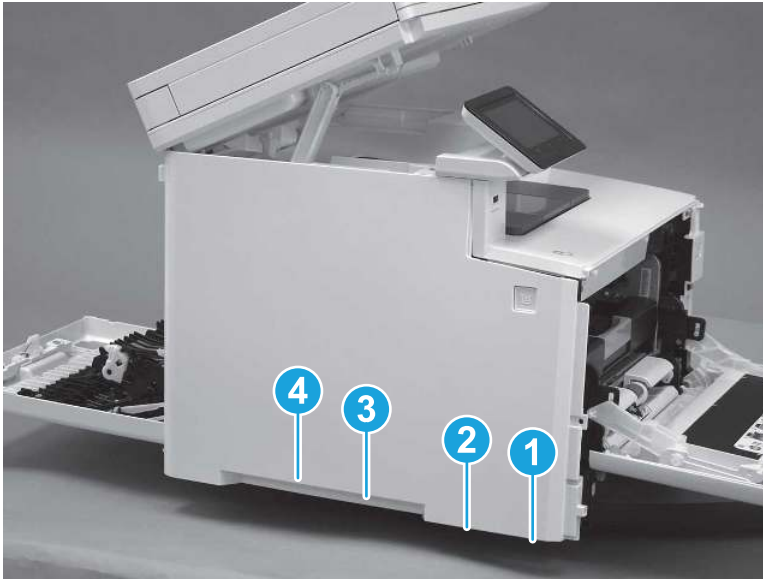
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1830** Locate the tabs



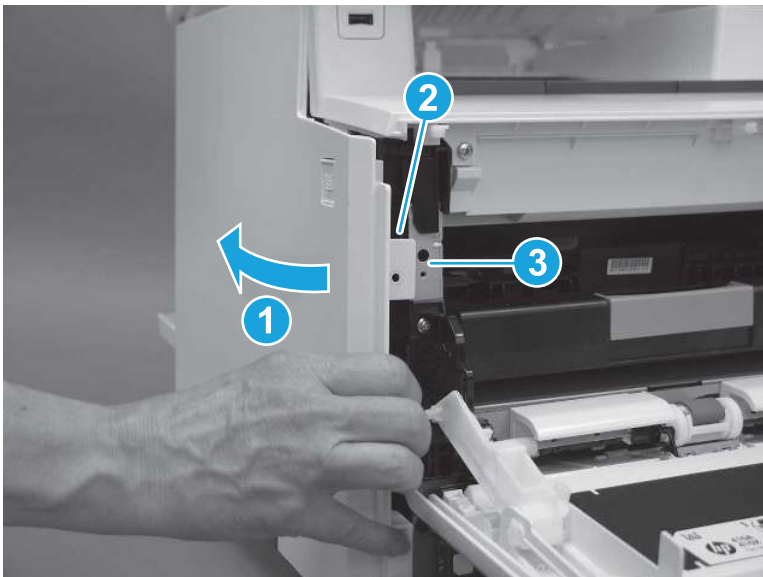
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-1831** Release four tabs



6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

**Figure 5-1832** Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-1833** Release one tab and two hooks



8. Lower the scanner.

**Figure 5-1834** Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

Figure 5-1835 Remove the left cover



## 5. Remove the embedded Multi-Media Card (eMMC)

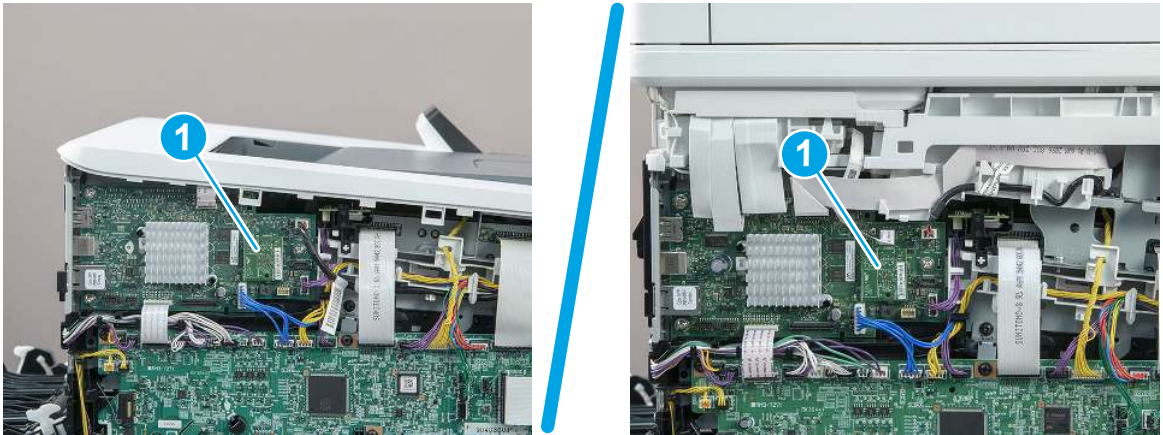
Follow these steps to remove the embedded Multi-Media Card (eMMC).

- ▲ Carefully pull the eMMC (callout 1) away from the formatter to remove it.



**NOTE:** If replacing the formatter, retain the eMMC for installation on the replacement formatter.

Figure 5-1836 Remove the eMMC



## 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: Formatter PCA

Learn how to remove and replace the formatter printed-circuit assembly (PCA).

[View a video of removing and replacing the formatter.](#)

Mean time to repair: 13 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.

---

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

Issues that can occur from swapping a formatter include:

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

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

For more information, see [HP LaserJet Enterprise, HP LaserJet Managed, HP PageWide Enterprise, HP PageWide Managed - 33.02.01 error or printer name and/or product number changes after replacing the formatter.](#)

---

Use the table below to identify the correct part number for your printer. To order the part, go to [www.hp.com/buy/parts](http://www.hp.com/buy/parts).

**Table 5-51 Part information**

Part number	Part description
3PZ95-67903	Formatter (SFP)
3PZ95-67904	Formatter (China/India; SFP)
3QA55-67901	Formatter (MFP)
3QA55-67902	Formatter (China/India; 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

Make sure that the printer initializes to a **Ready** state.

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

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.



**NOTE:** Removing the tray is the same for SFP and MFP printers.

Figure 5-1837 Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

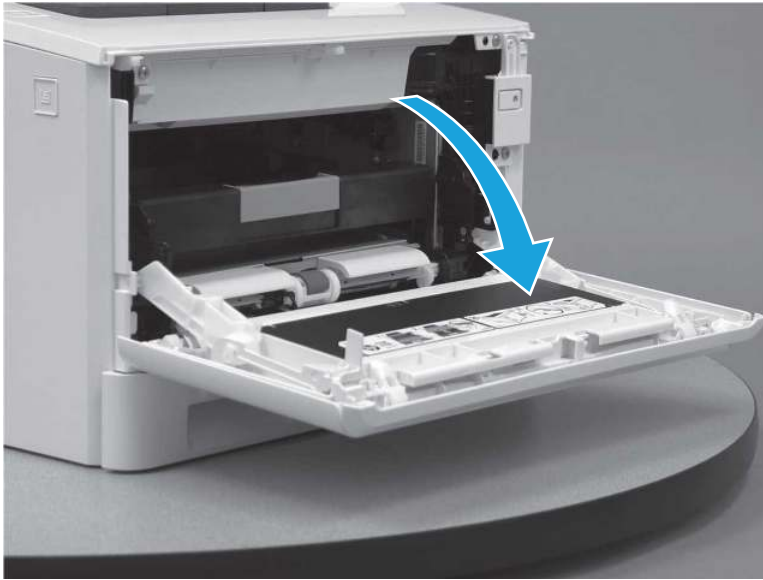
1. Press the button (callout 1) on the left side of the printer to release the front door.

Figure 5-1838 Release the front door



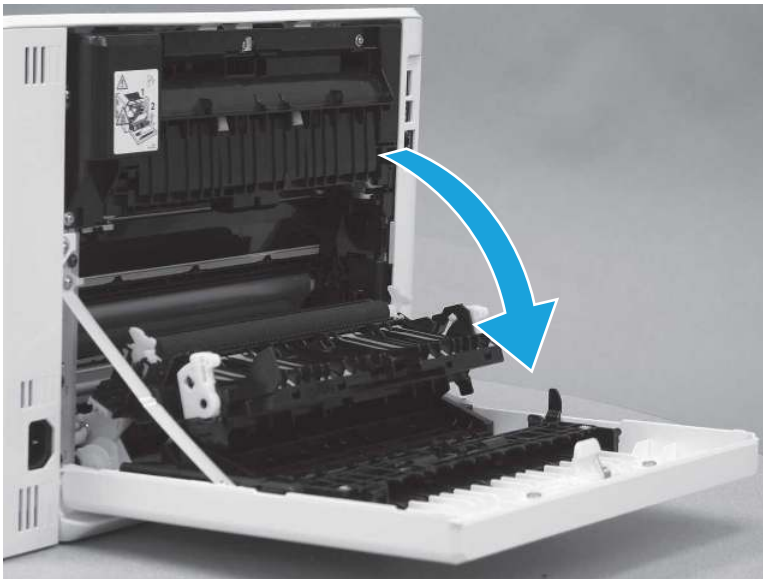
2. Open the front door.

**Figure 5-1839** Open the front door



3. Open the duplexing door.

**Figure 5-1840** Open the duplexer door



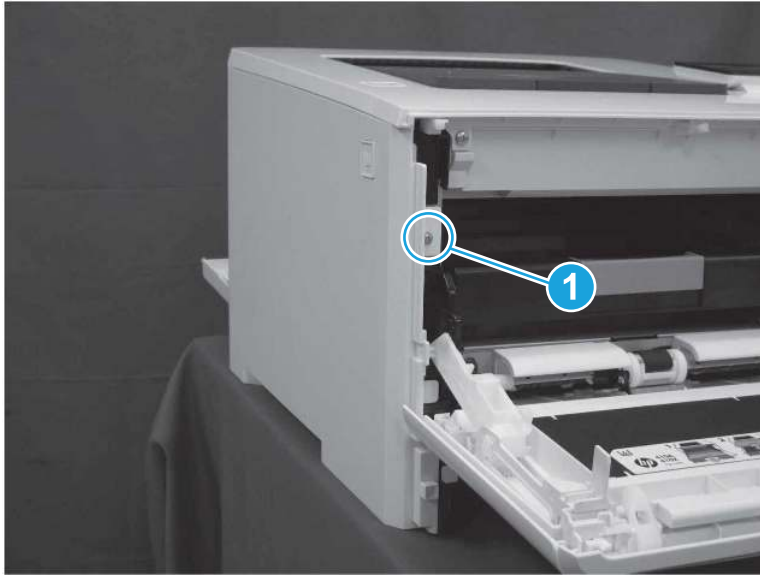
### 3. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).



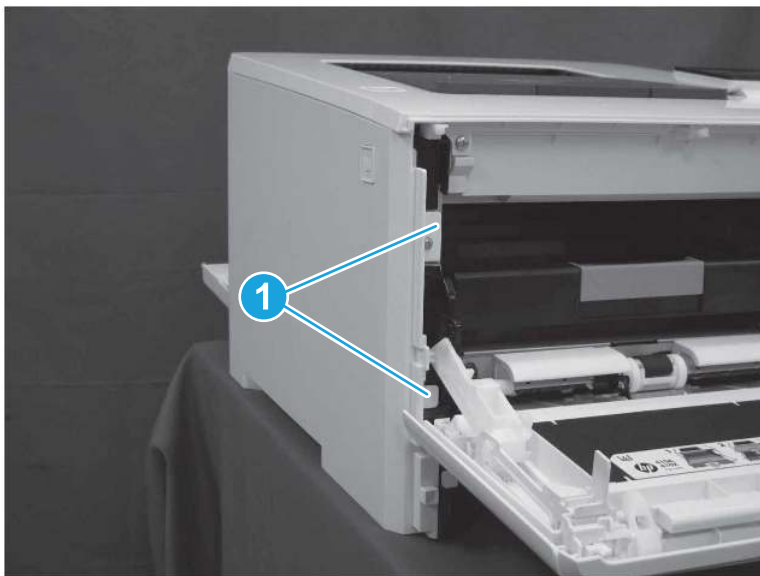
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-1841** Remove one screw



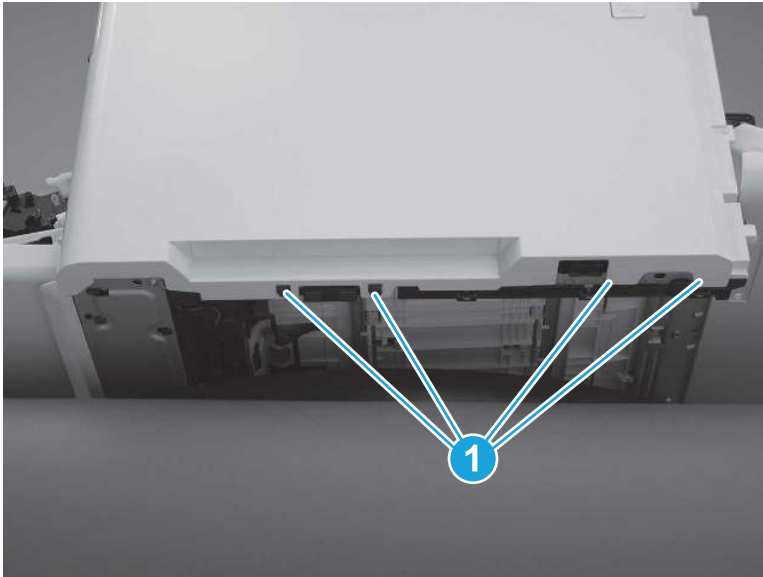
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-1842** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1843** Locate the tabs



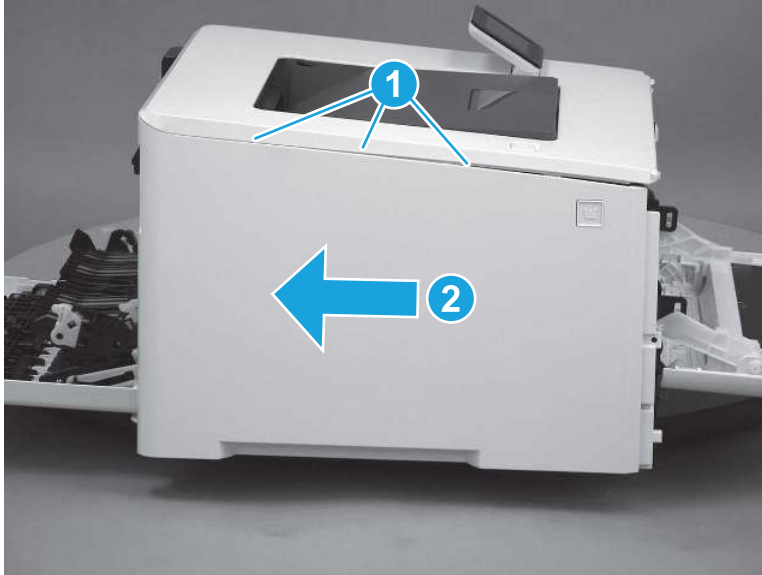
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-1844** Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

**Figure 5-1845** Release three tabs



#### 4. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

1. Raise the scanner.

**Figure 5-1846** Raise the scanner



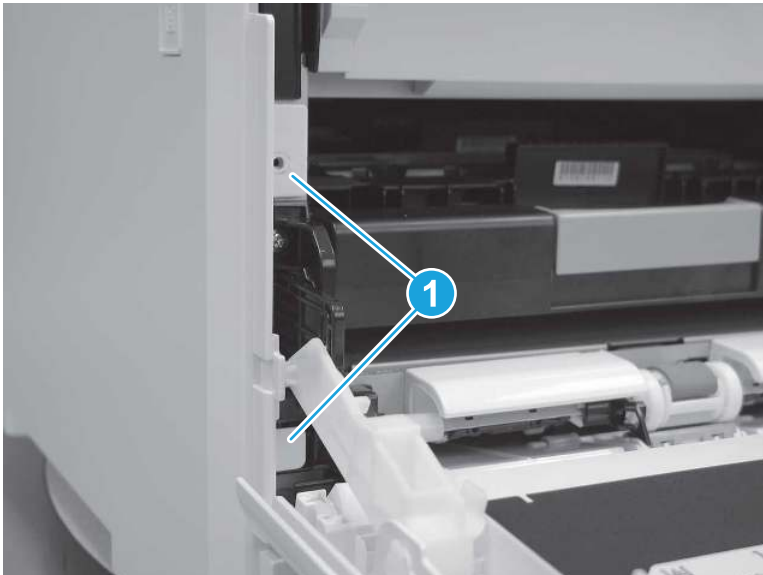
2. At the front of the printer, remove one screw (callout 1).

Figure 5-1847 Remove one screw



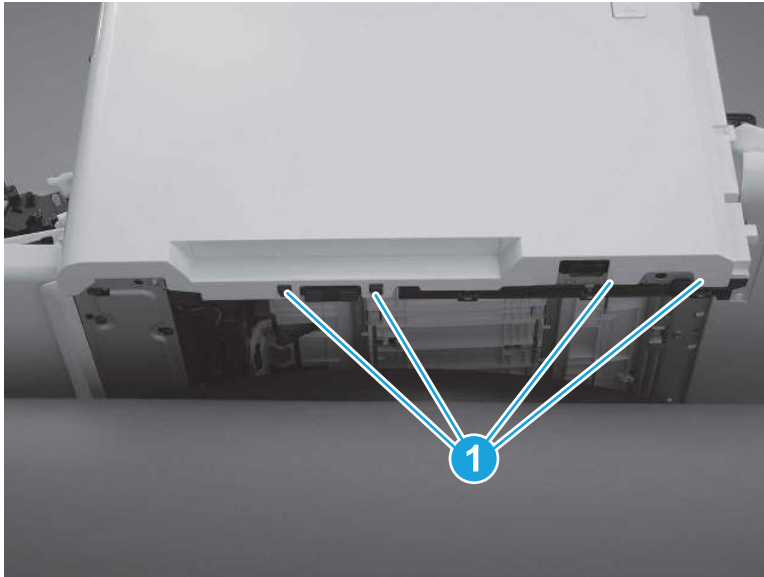
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

Figure 5-1848 Release two tabs



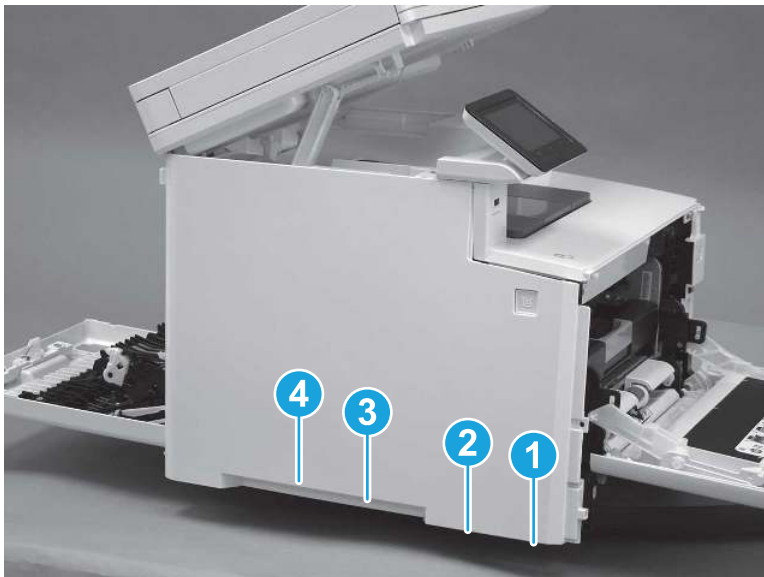
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1849** Locate the tabs



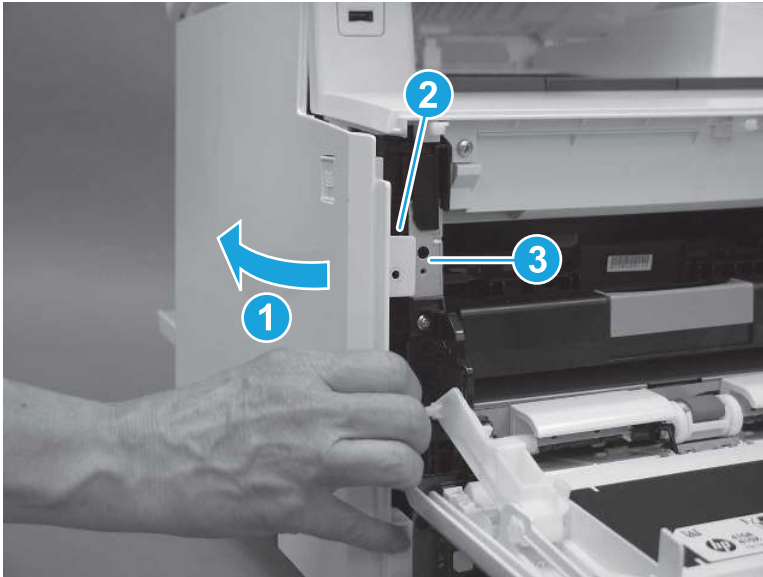
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-1850** Release four tabs



6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

Figure 5-1851 Rotate the cover



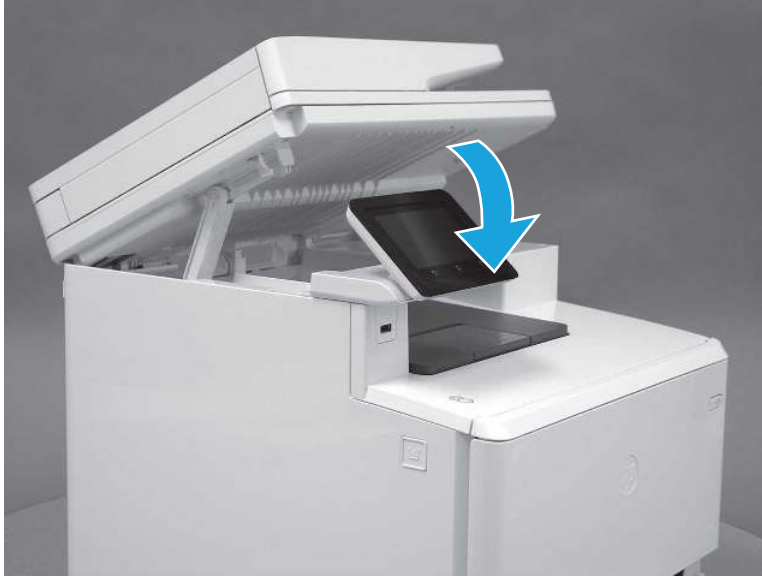
7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

Figure 5-1852 Release one tab and two hooks



8. Lower the scanner.

Figure 5-1853 Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

Figure 5-1854 Remove the left cover




## 5. Remove the formatter PCA

Follow these steps to remove the formatter PCA.

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

**IMPORTANT:** For replacement formatter installations: Make sure that the eMMC and TPM components are removed from the discarded formatter, and then installed on the replacement formatter.

A factory installed TPM **must** remain with the printer it is originally installed in. If the TPM is removed *the printer will not function* (reinstall the original TPM). If a TPM cannot be reinstalled or is damaged, a whole unit replacement printer is required (for security reasons there is no method for in-the-field recovery of the printer).

 **NOTE:** The formatter PCA on other models might look differently and have a different number of connections. However, the procedure is correct for all models.

---

1. Disconnect all of the connectors on the formatter PCA for MFP models.

**Figure 5-1855** Disconnect all of the connectors (MFP)



2. Disconnect all of the connectors on the formatter PCA for SFP models.

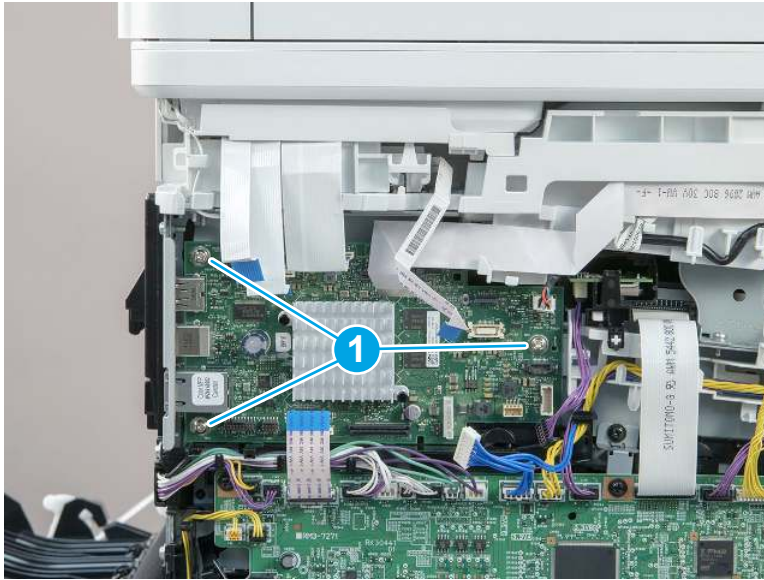
**Figure 5-1856** Disconnect all of the connectors (SFP)





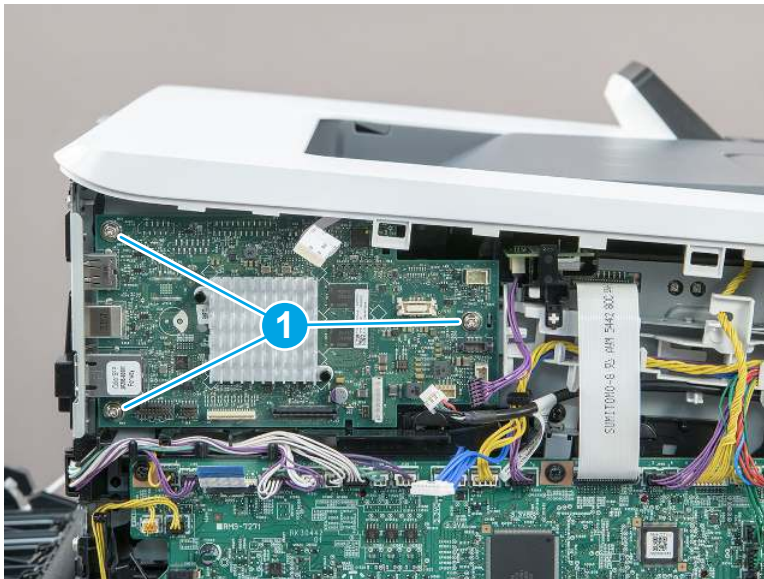
3. Remove three screws (callout 1) (MFP).

**Figure 5-1857** Remove three screws (MFP)



4. Remove three screws (callout 1) (SFP).


**Figure 5-1858** Remove three screws (SFP)



5. Slide the formatter PCA to the right to release the ports (callout 1) from the openings in the printer frame (callout 2), and then remove the formatter PCA.

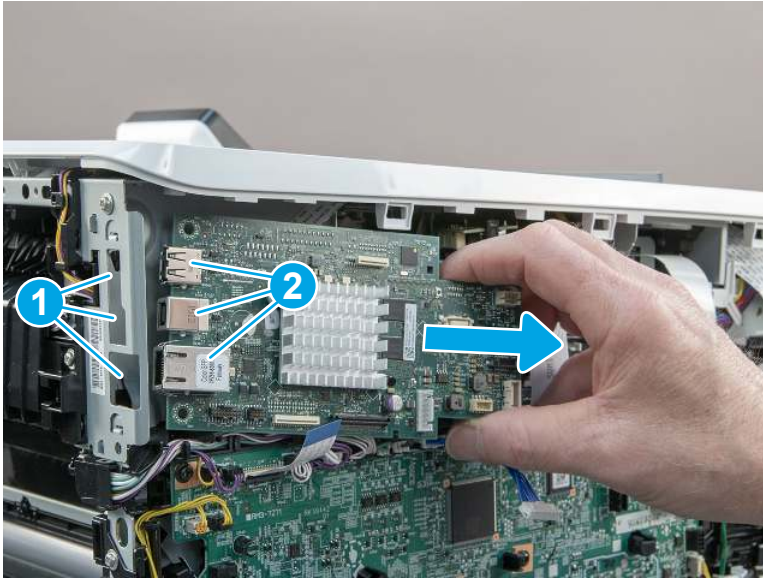
 **IMPORTANT:** For replacement formatter installations: Make sure that the eMMC and TPM components are removed from the discarded formatter, and then installed on the replacement formatter.

A factory installed TPM **must** remain with the printer it is originally installed in. If the TPM is removed *the printer will not function* (reinstall the original TPM). If a TPM cannot be reinstalled or is damaged, a whole unit replacement printer is required (for security reasons there is no method for in-the-field recovery of the printer).

 **NOTE:** The formatter PCA might look slightly different than what is shown below. However, the procedure is correct for all printer models.

---

**Figure 5-1859** 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: Environmental sensor

Learn how to remove and replace the environmental sensor.

[View a video of removing and replacing the environmental sensor.](#)

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](http://www.hp.com/buy/parts).

Table 5-52 Part information

Part number	Part description
RM3-7236-000CN	Environment sensor PCB 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


Make sure that the printer initializes to a **Ready** state.

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-1860** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

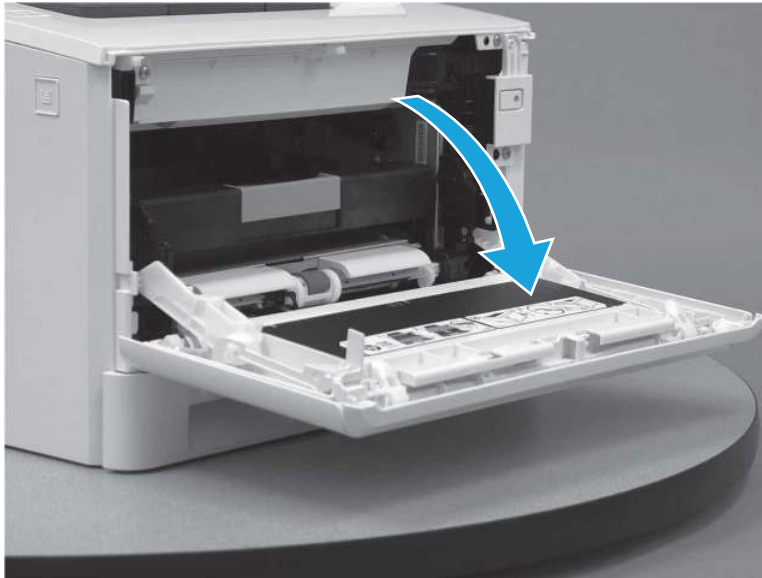
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-1861** Release the front door



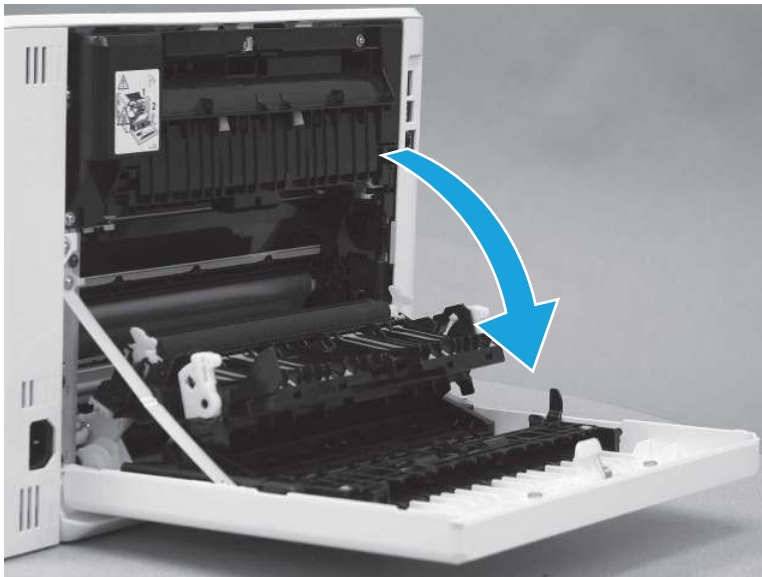
2. Open the front door.

**Figure 5-1862** Open the front door



3. Open the duplexing door.

**Figure 5-1863** Open the duplexer door

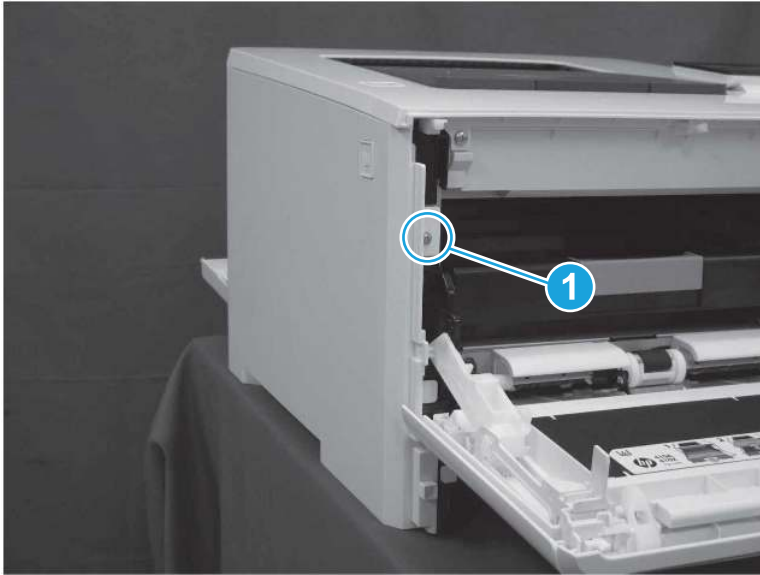


### 3. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

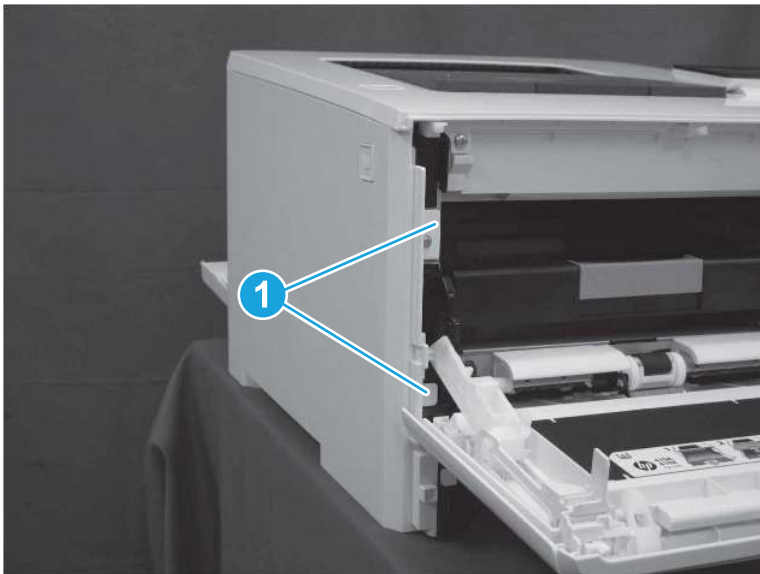
1. At the front of the printer, remove one screw (callout 1).

Figure 5-1864 Remove one screw



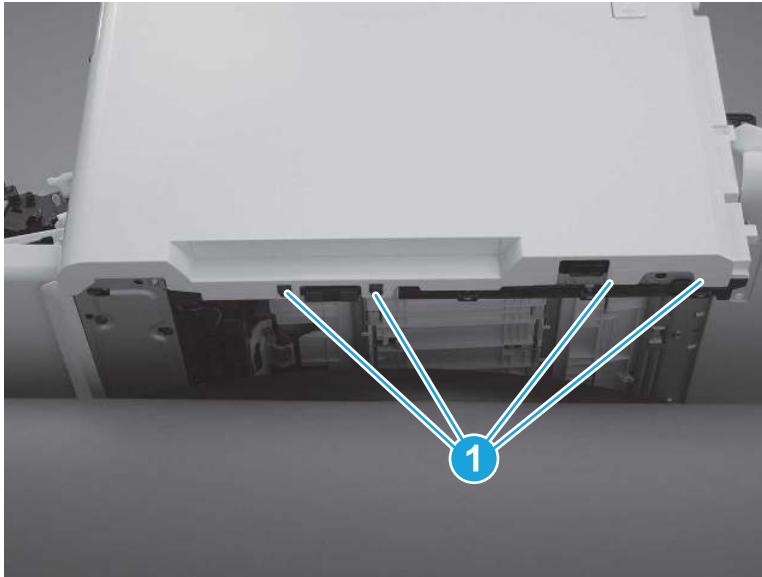
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

Figure 5-1865 Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1866** Locate the tabs



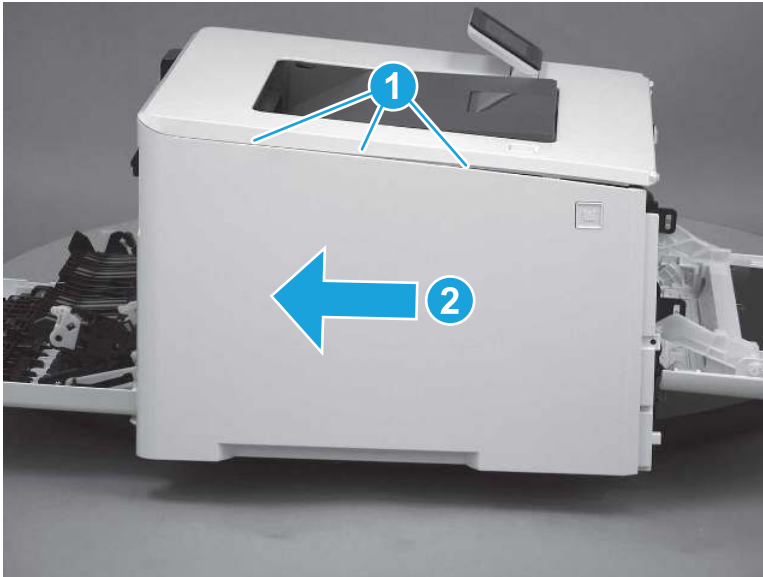
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-1867** Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

**Figure 5-1868** Release three tabs



#### 4. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

1. Raise the scanner.

**Figure 5-1869** Raise the scanner





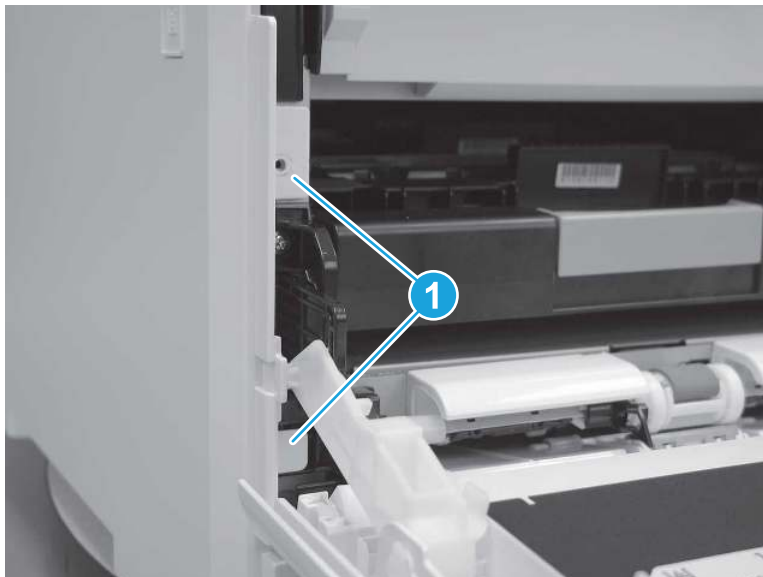
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-1870** Remove one screw



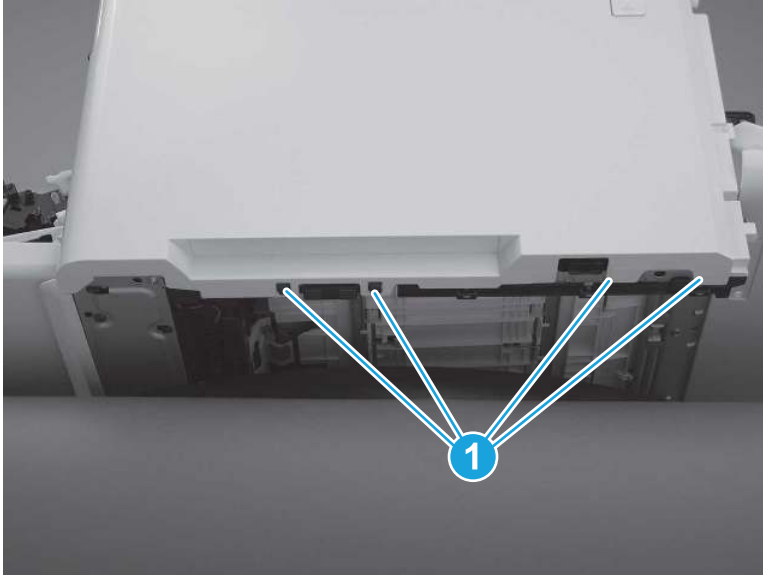
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-1871** Release two tabs



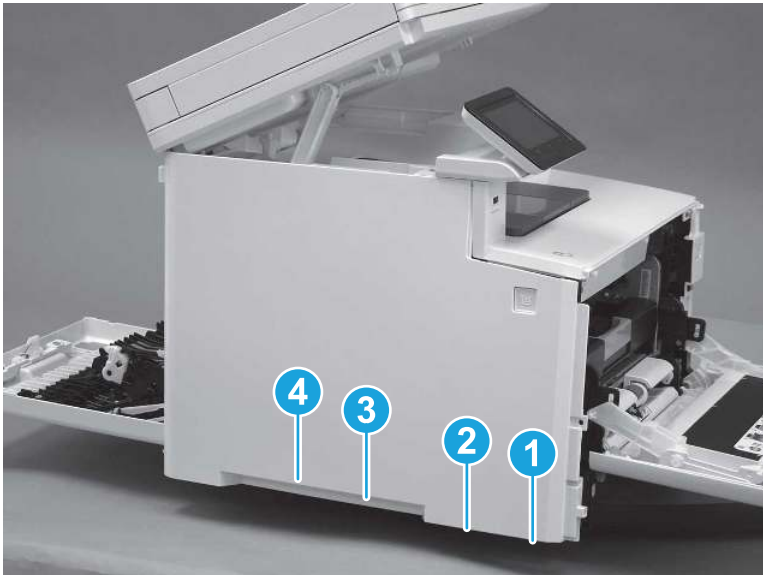
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1872** Locate the tabs



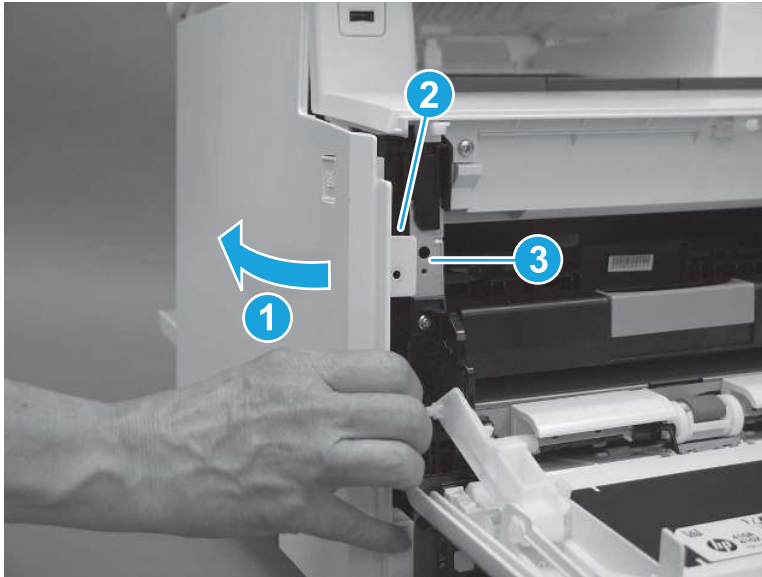
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-1873** Release four tabs



6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

**Figure 5-1874** Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-1875** Release one tab and two hooks



8. Lower the scanner.

Figure 5-1876 Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

Figure 5-1877 Remove the left cover

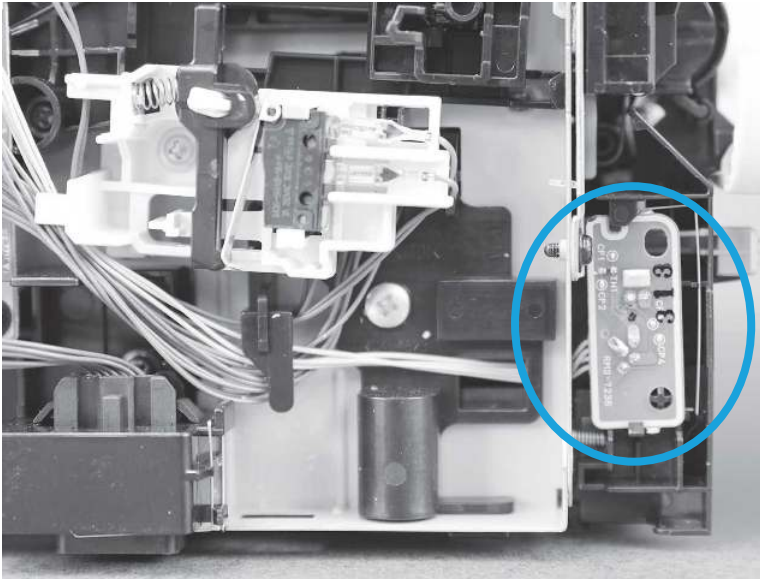


## 5. Remove the environmental sensor

Follow these steps to remove the environmental sensor.

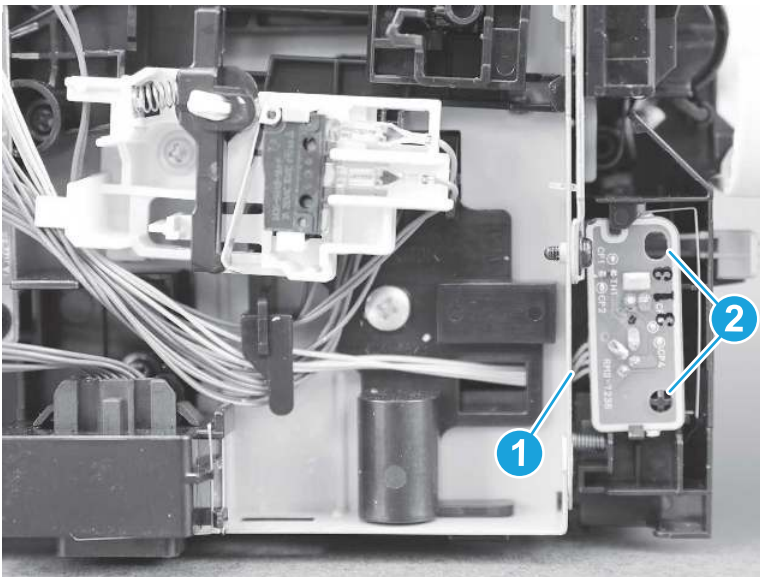
1. On the left side of the printer, disconnect one connector (callout 1), and then release two tabs (callout 2).

**Figure 5-1878** Disconnect one connector and release two tabs



2. Disconnect one connector (callout 1), release two tabs (callout 2), and then remove the environmental sensor.

**Figure 5-1879** 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.

---

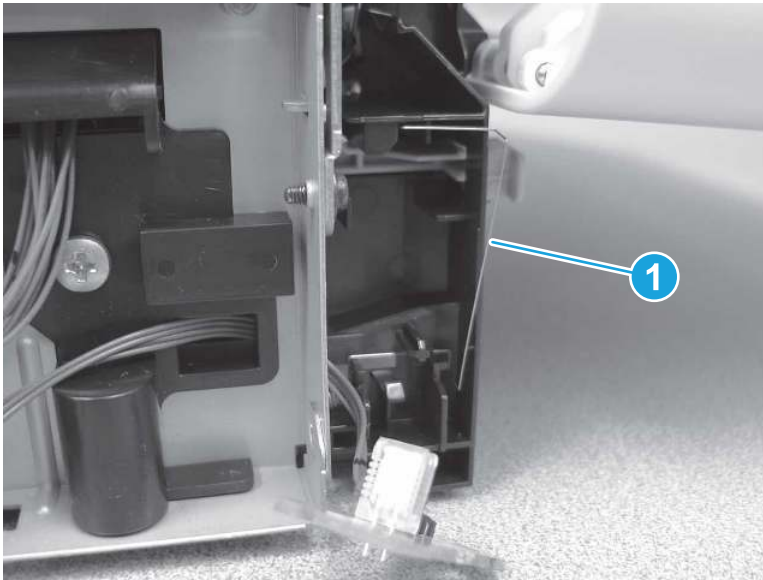
## 7. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Environmental sensor

- ▲ If the spring (callout 1) becomes dislodged, reposition it as shown in the figure.

**Figure 5-1880** Reposition the spring



## Removal and replacement: Fax PCA (MFP)

Learn how to remove and replace the fax PCA (MFP).

[View a video of removing and replacing the fax.](#)


Mean time to repair: 23 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](http://www.hp.com/buy/parts).

**Table 5-53** Part information

Part number	Part description
3PZ55-67980	Fax PCA with plug kit (USA)
3PZ55-67981	Fax PCA with plug kit (EURO)
3PZ55-67982	Fax PCA with plug kit (BRAZIL)
3PZ55-67983	Fax PCA with plug kit (AP)

## 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 Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

**Figure 5-1881** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

1. Press the button (callout 1) on the left side of the printer to release the front door.

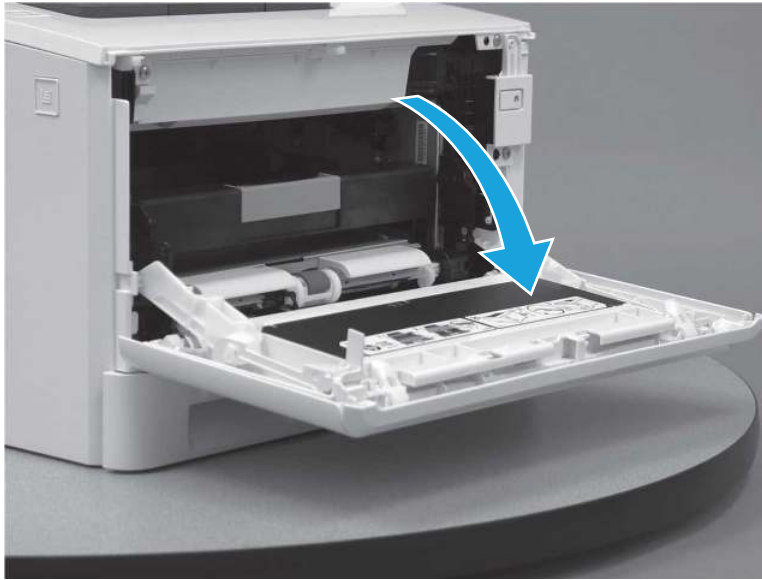
**Figure 5-1882** Release the front door





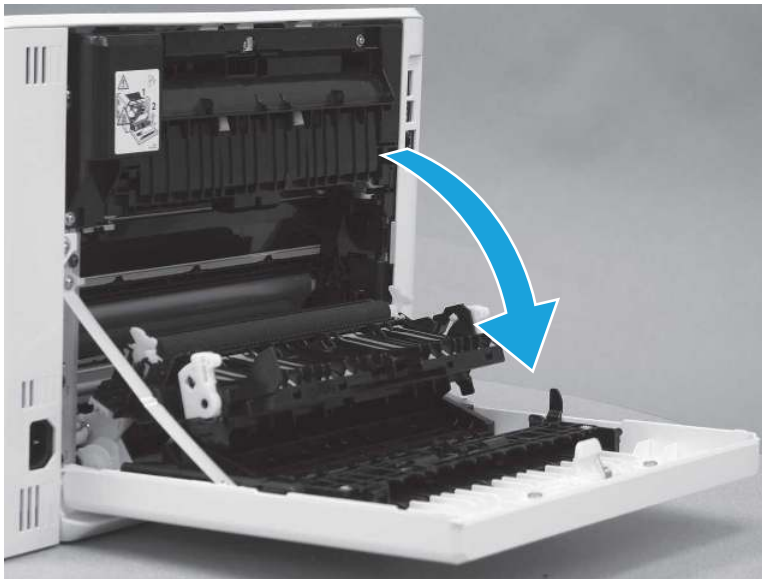
2. Open the front door.

**Figure 5-1883** Open the front door



3. Open the duplexing door.

**Figure 5-1884** Open the duplexer door



### 3. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

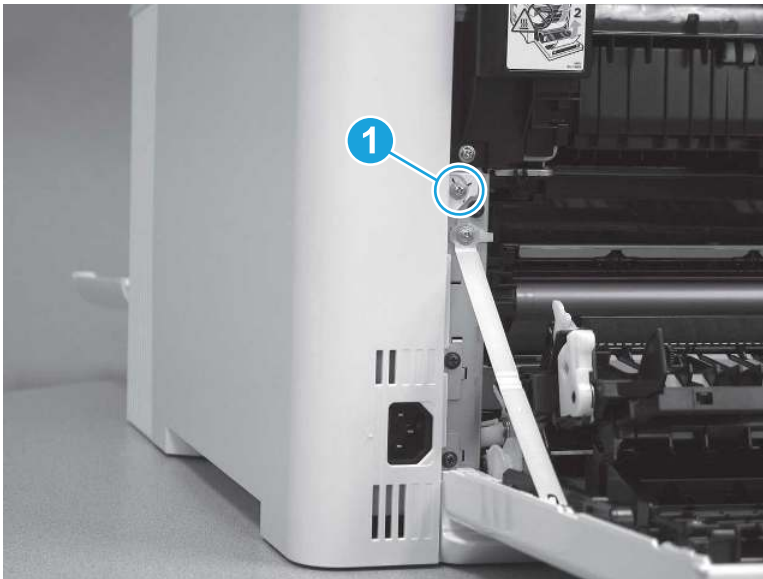
1. Raise the scanner.

**Figure 5-1885** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-1886** Remove one screw



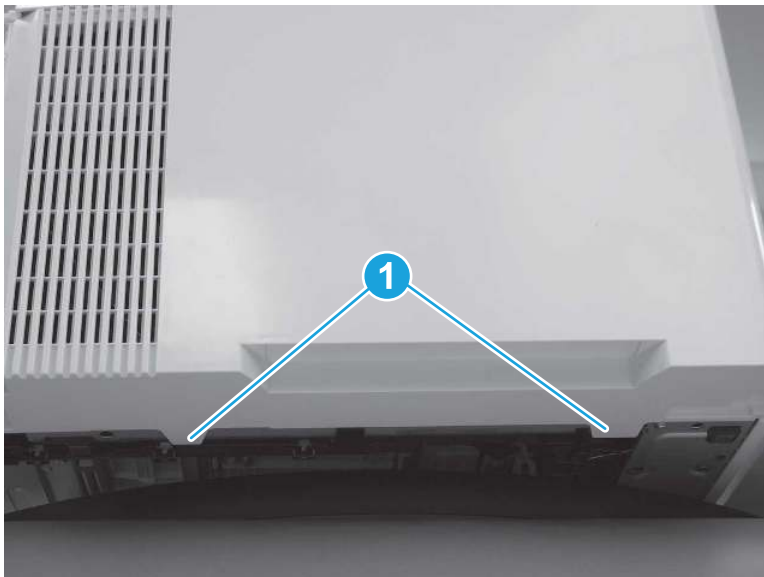
3. At the front of the printer, remove one screw (callout 1).

**Figure 5-1887** Remove one screw



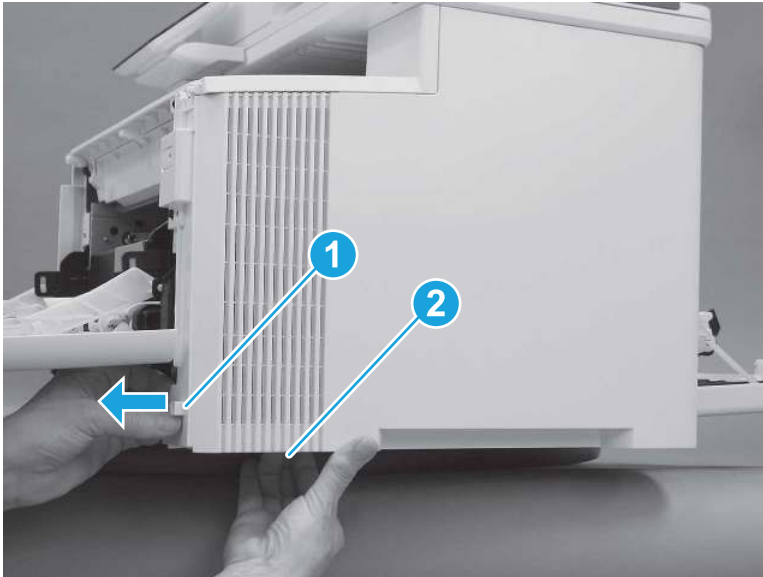
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1888** Locate the tabs



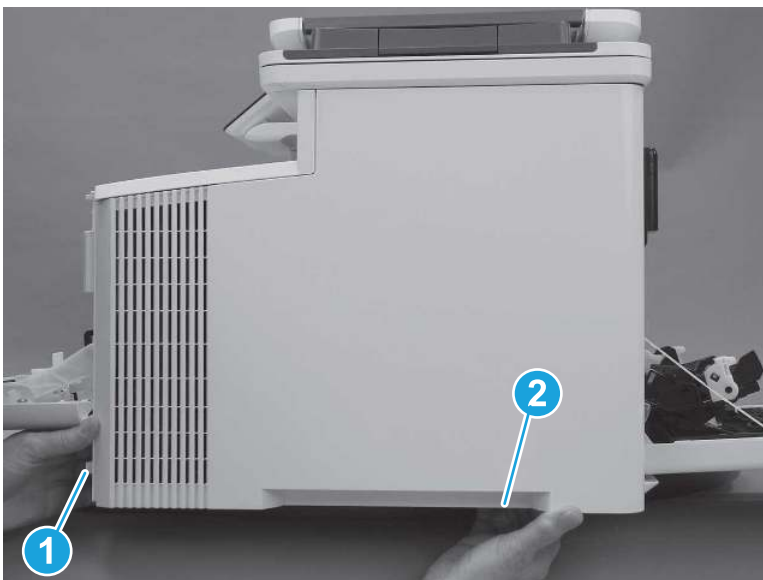
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-1889** Release front lower tabs



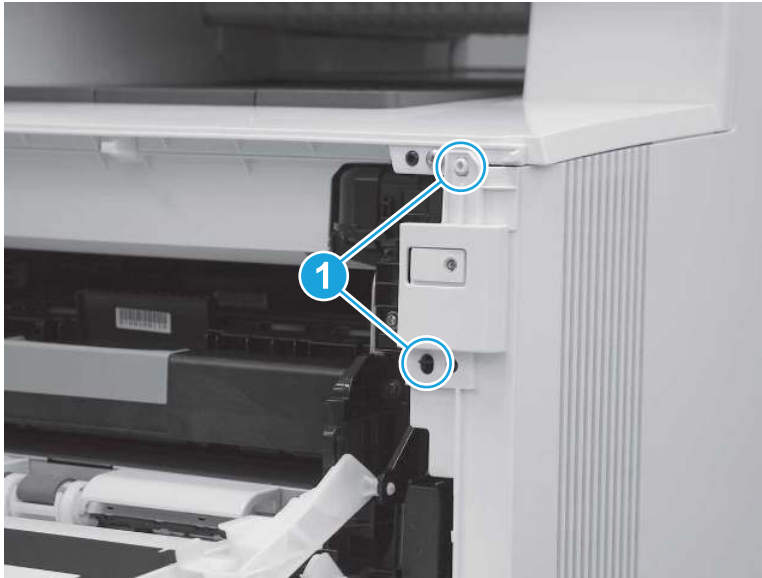
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-1890** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-1891** Release front upper tabs



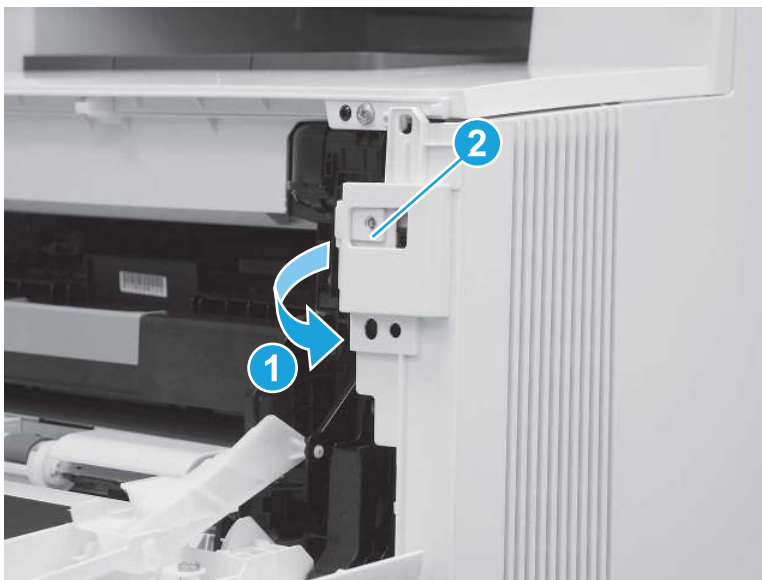
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

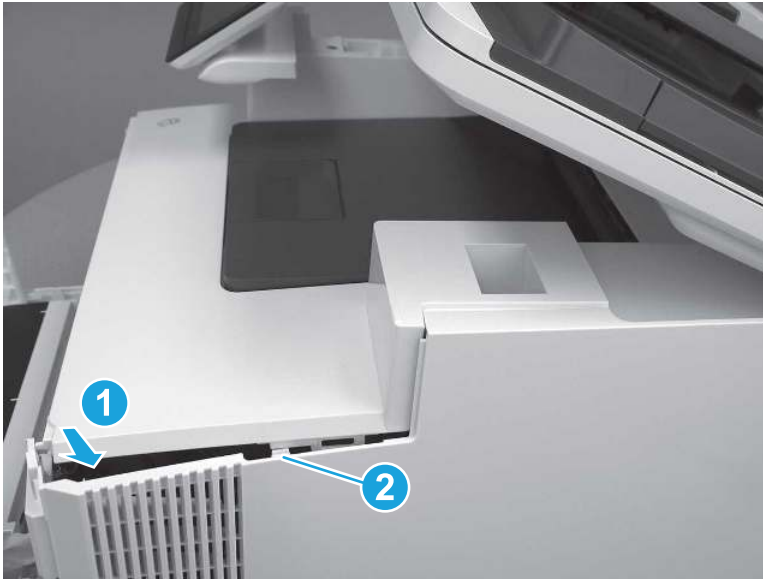
---

**Figure 5-1892** Rotate the front of the cover



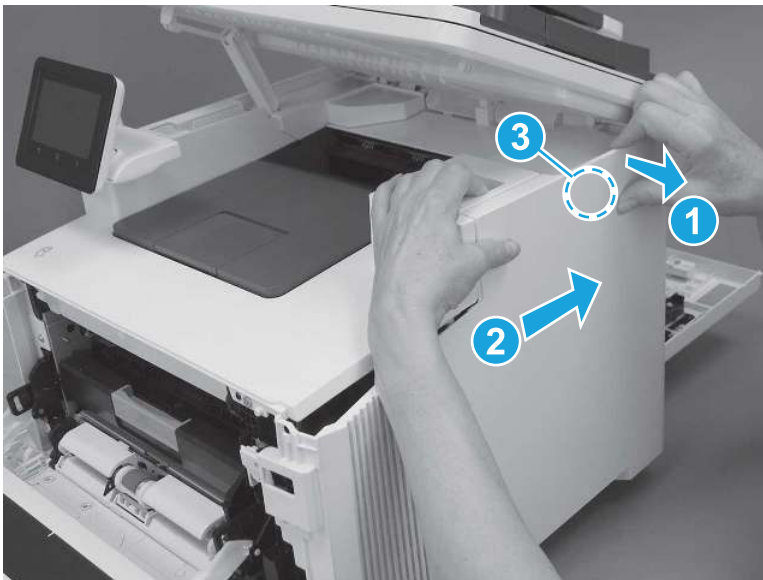
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

Figure 5-1893 Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

Figure 5-1894 Release one tab and one hook



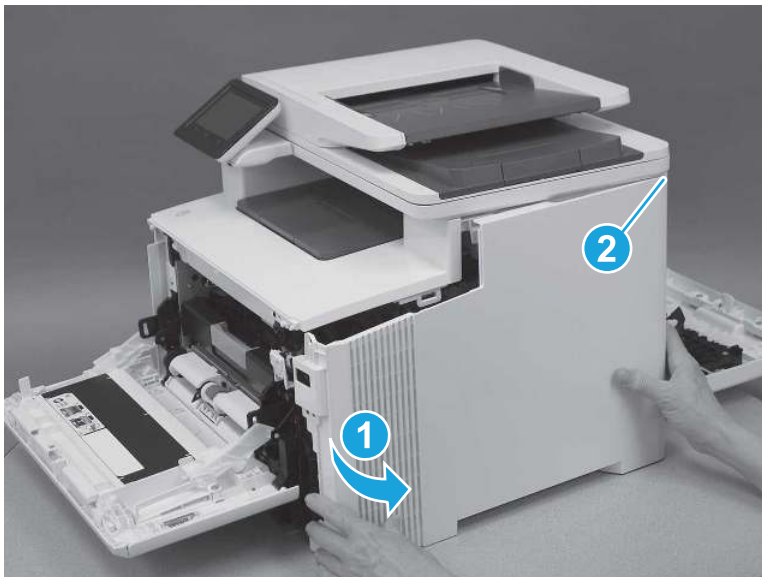
11. Lower the scanner.

**Figure 5-1895** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-1896** Remove the right cover



#### 4. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

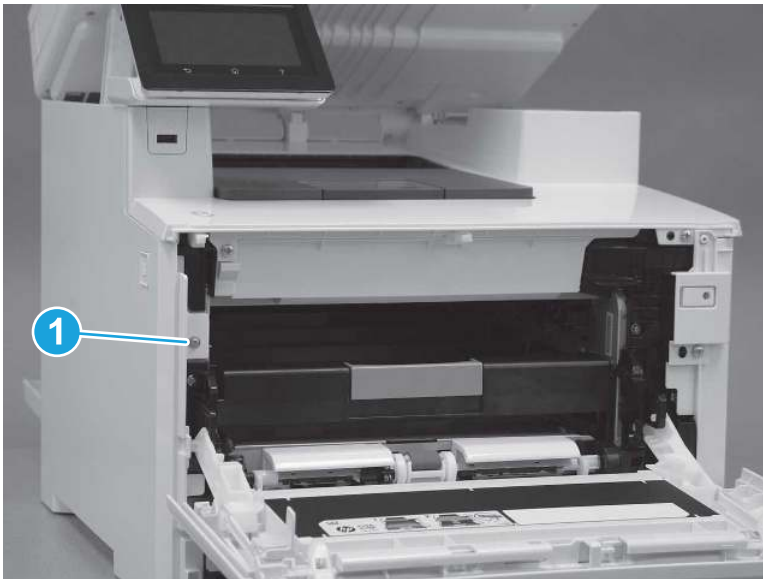
1. Raise the scanner.

Figure 5-1897 Raise the scanner



2. At the front of the printer, remove one screw (callout 1).

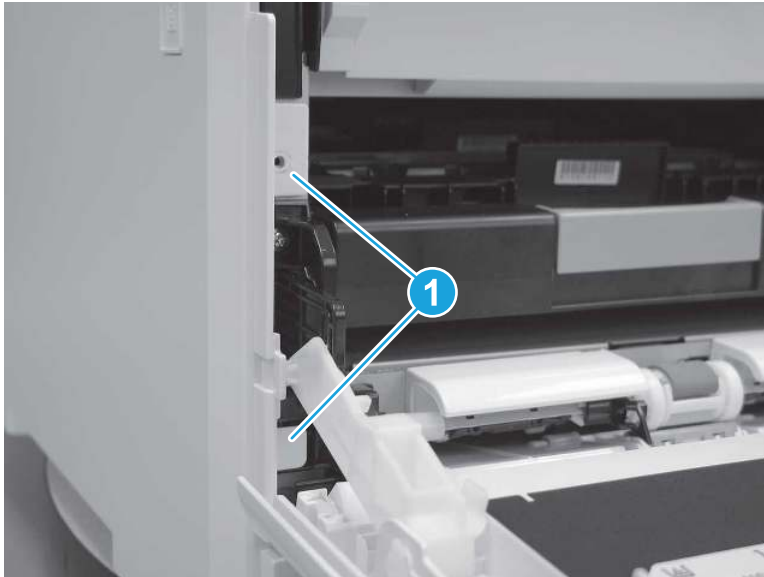
Figure 5-1898 Remove one screw





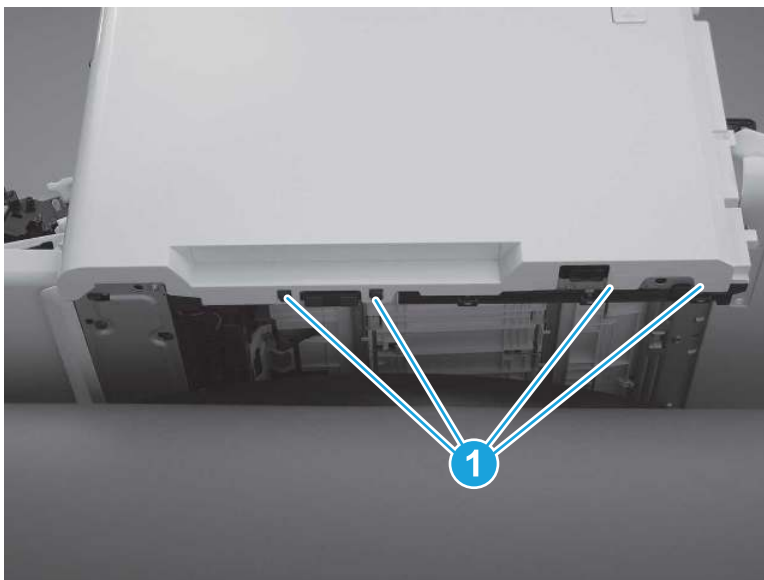
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-1899** Release two tabs



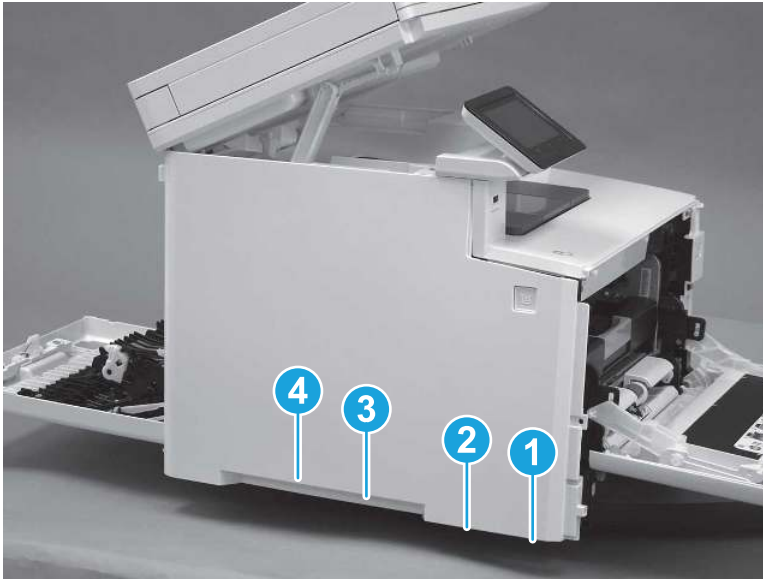
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1900** Locate the tabs



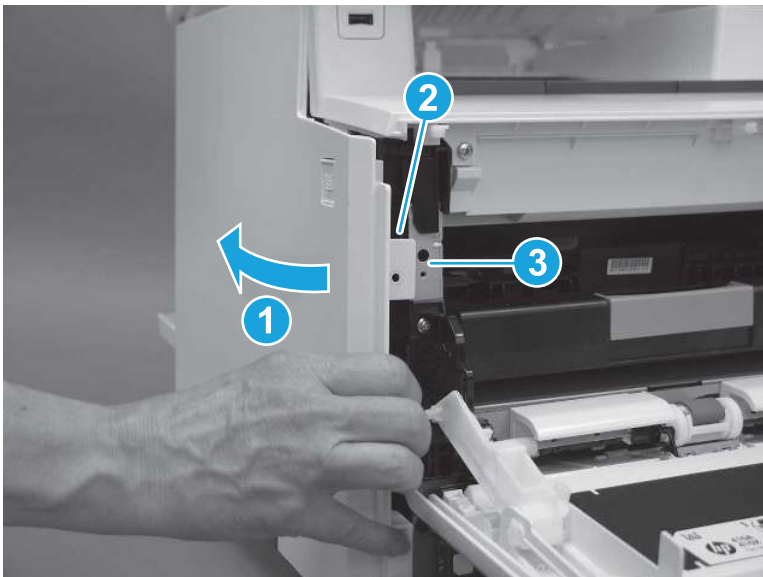
- Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-1901** Release four tabs



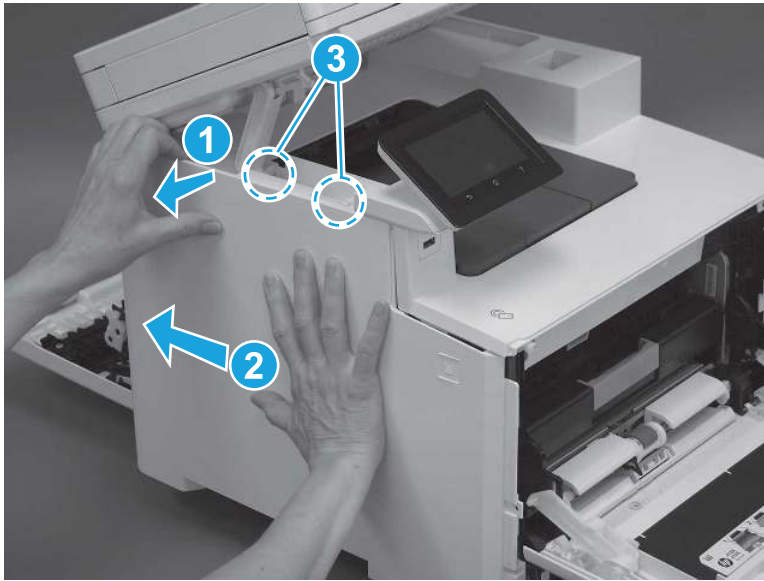
- Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

**Figure 5-1902** Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-1903** Release one tab and two hooks



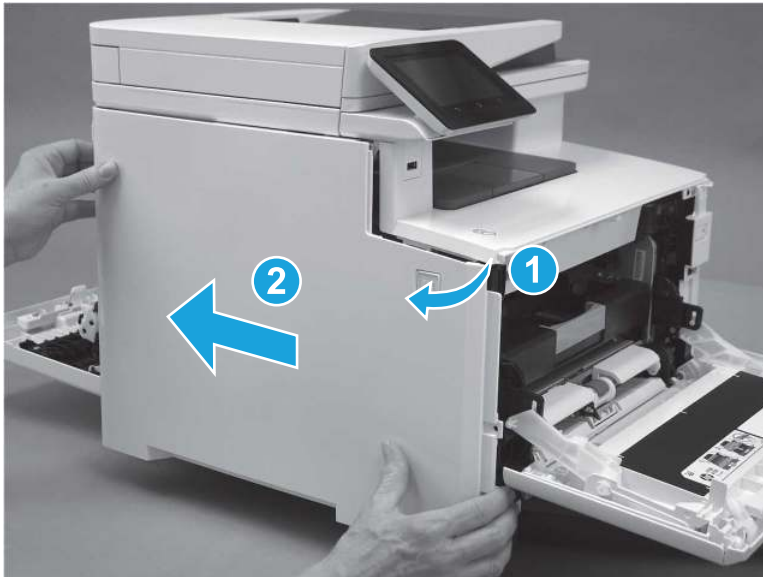
8. Lower the scanner.

**Figure 5-1904** Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

Figure 5-1905 Remove the left cover

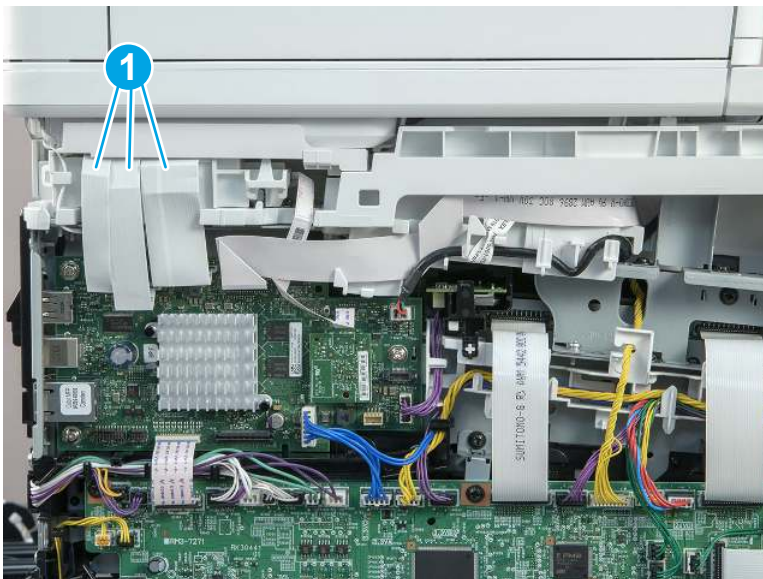


## 5. Remove the integrated scanner assembly

(MFP)

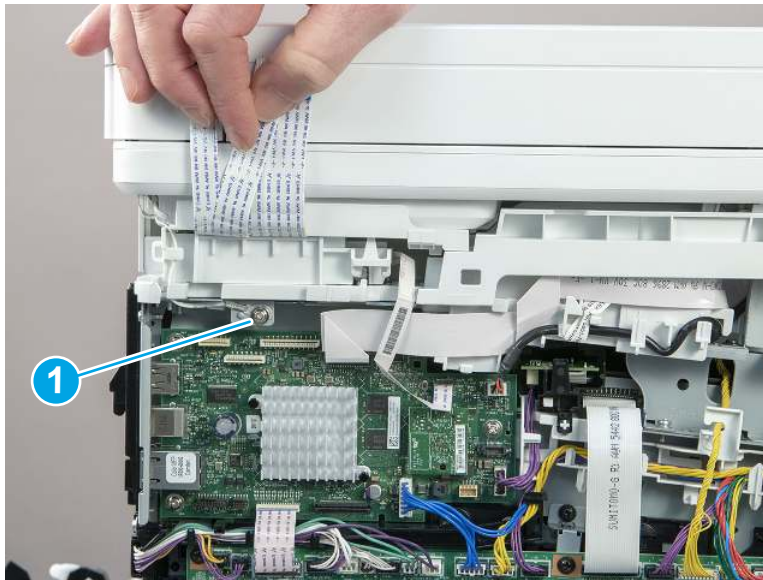
1. On the left side of the printer, disconnect three connectors (callout 1).

Figure 5-1906 Disconnect three connectors



2. Raise the scanner cables up, and then remove one screw (callout 1) to release the ground wire.

**Figure 5-1907** Remove one screw and release the ground wire



3. Raise the scanner.

**Figure 5-1908** Raise the scanner



4. With the scanner lifted, release the tab (callout 1) on the scanner support arm pin from the slot and rotate the pin in the direction indicated.

**Figure 5-1909** Release scanner support arm pin



5. Remove the scanner arm pin.

---

**⚠ CAUTION:** Once the scanner arm pin is removed, support the scanner with one hand at all times so that it does not fall backwards off of the printer.

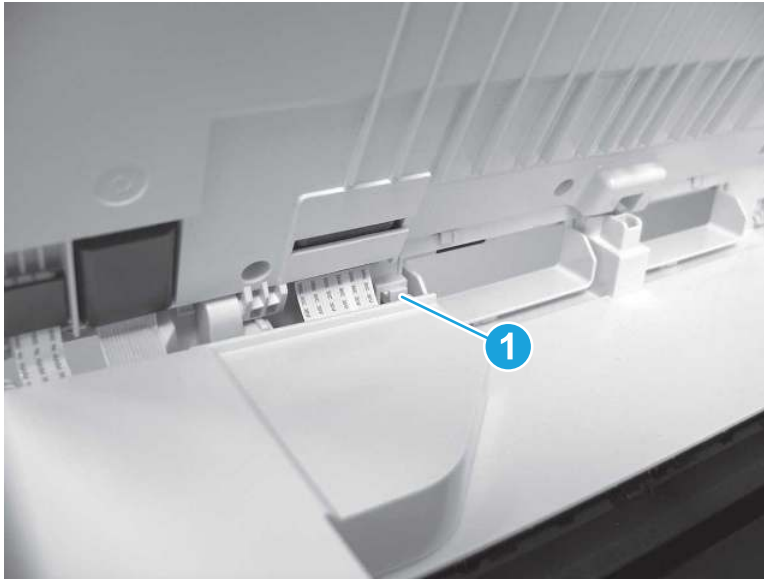
---

**Figure 5-1910** Remove the pin



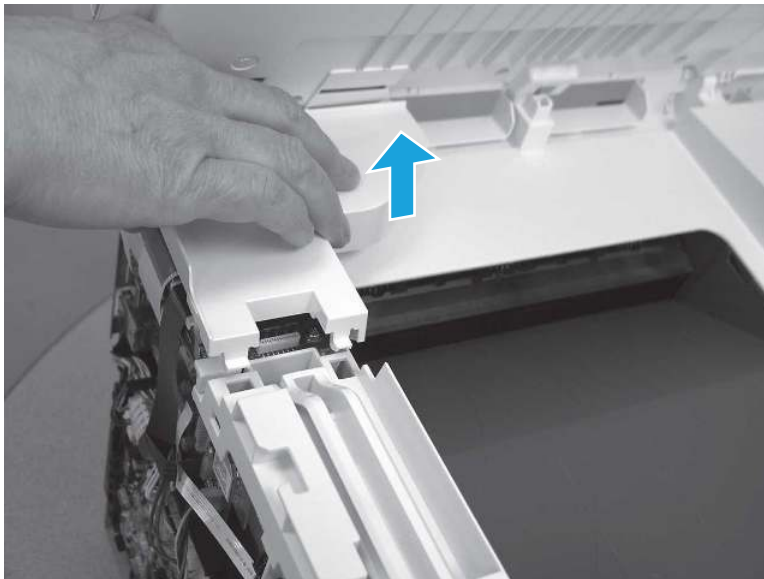
6. On the top of the printer, use a flat-blade screwdriver to release one tab (callout 1).

**Figure 5-1911** Release one tab



7. Remove the scanner cable cover.

**Figure 5-1912** Remove the scanner cable cover



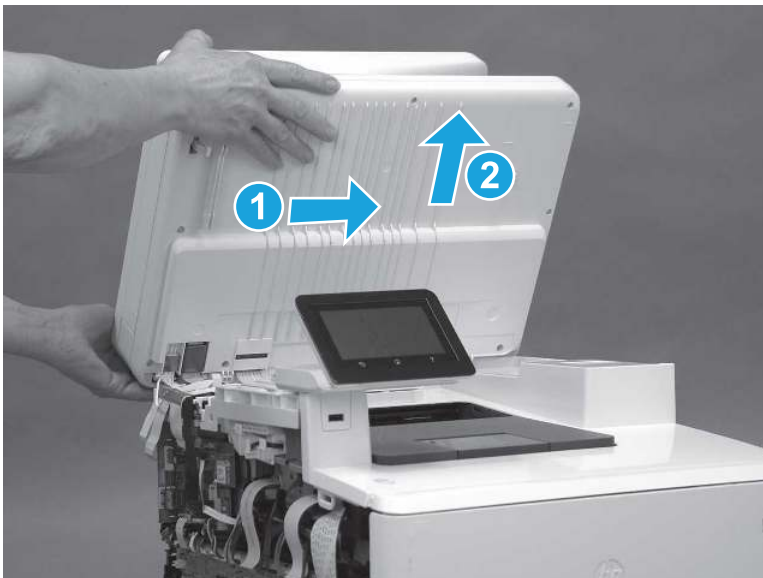
8. The scanner cables (callout 1) are held in place on the top cover with double-sided tape. Carefully release the cables from the top cover.

**Figure 5-1913** Release the cables



9. Open the scanner assembly fully, slide the assembly toward the right side of the printer, and then lift the assembly off of the printer.

**Figure 5-1914** Remove the scanner assembly



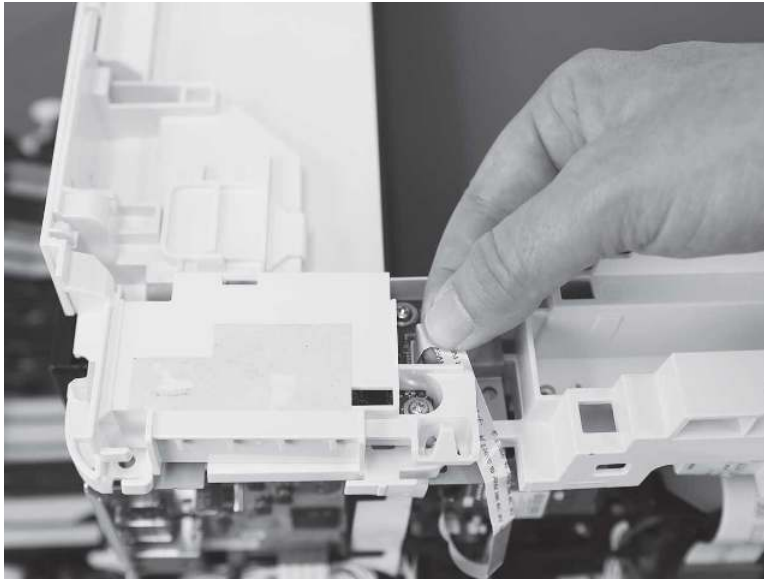
## 6. Remove the fax PCA (MFP)

Follow these steps to remove the fax PCA (MFP).



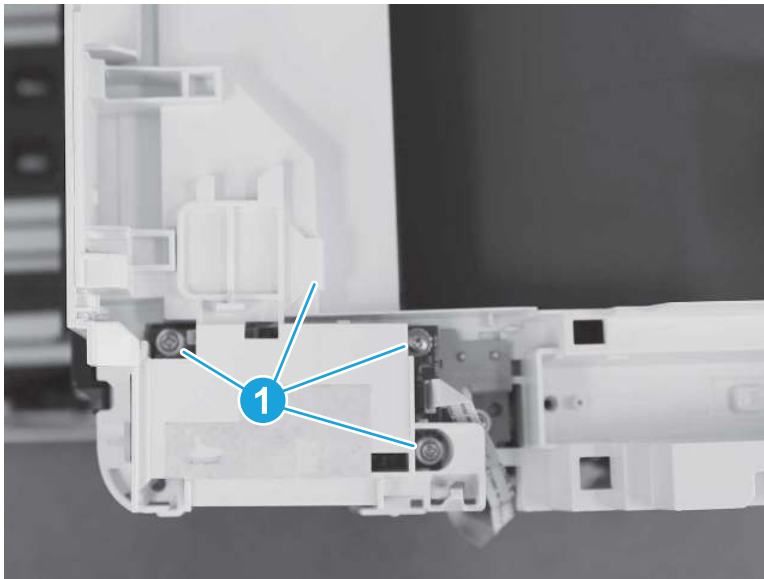
1. Disconnect one FFC cable from fax PCA.

**Figure 5-1915** Disconnect one connector



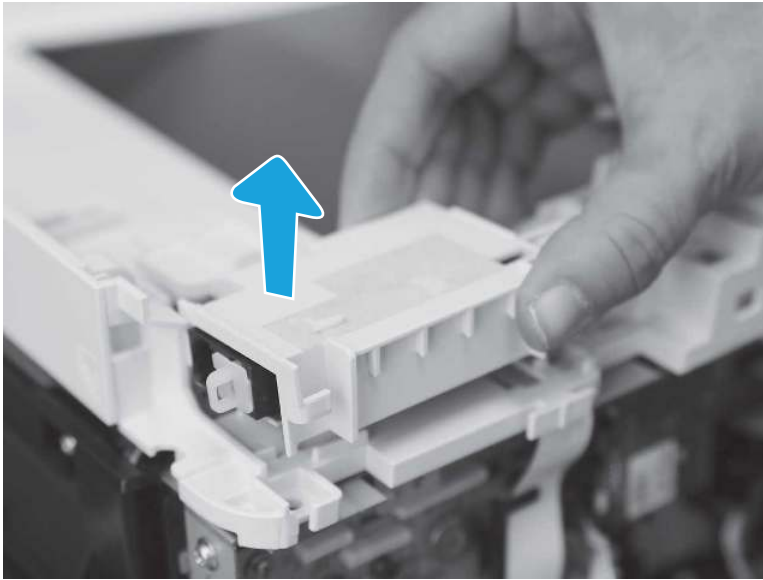
2. Remove three screws and release one tab (callout 1).

**Figure 5-1916** Remove three screws and release one tab



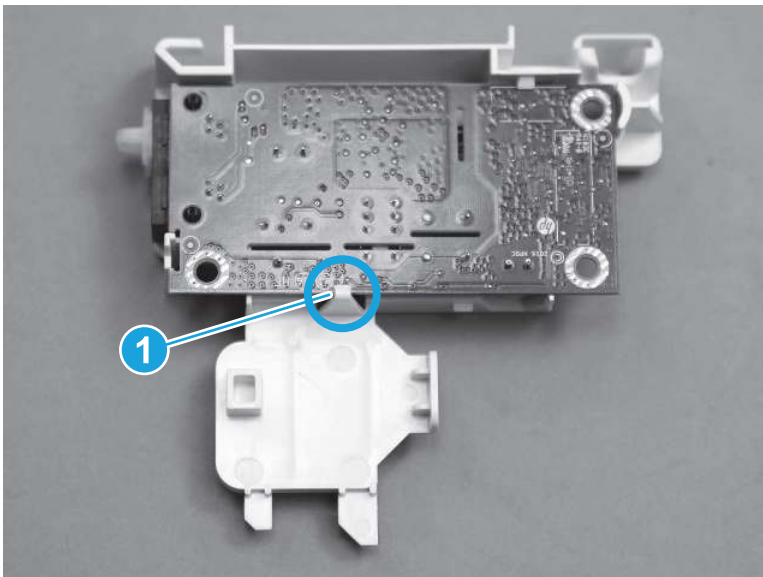
- Lift up to remove the fax PCA.

**Figure 5-1917** Lift up to remove the fax PCA



- Optional step:** Release the tab (callout 1) on the back of the fax PCA to remove the PCA from the plastic holder.

**Figure 5-1918** Release one tab on the back of the fax PCA



## 7. 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>

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 cable (MFP)

Learn how to remove and replace the fax cable. (MFP).

[View a video of removing and replacing the fax cable.](#)

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](http://www.hp.com/buy/parts).

**Table 5-54** Part information

Part number	Part description
3QA55-67904	Cable, FFC fax to formatter

### 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 Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-1919** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

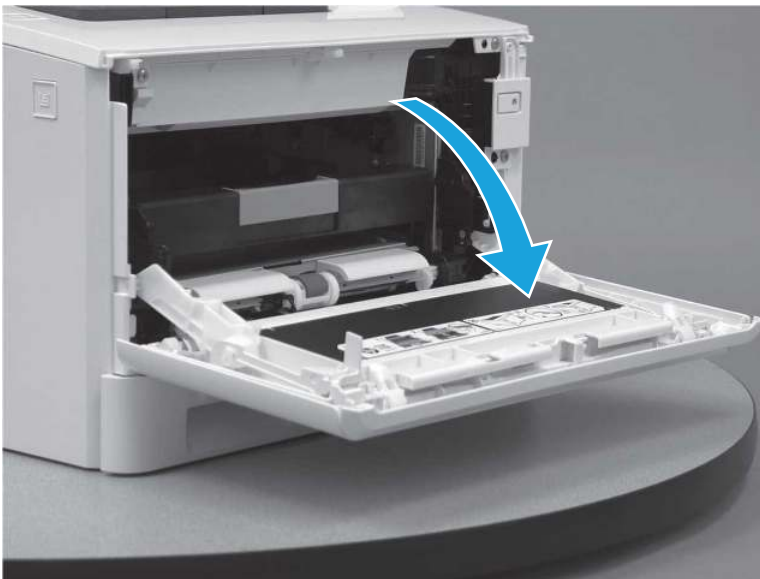
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-1920** Release the front door



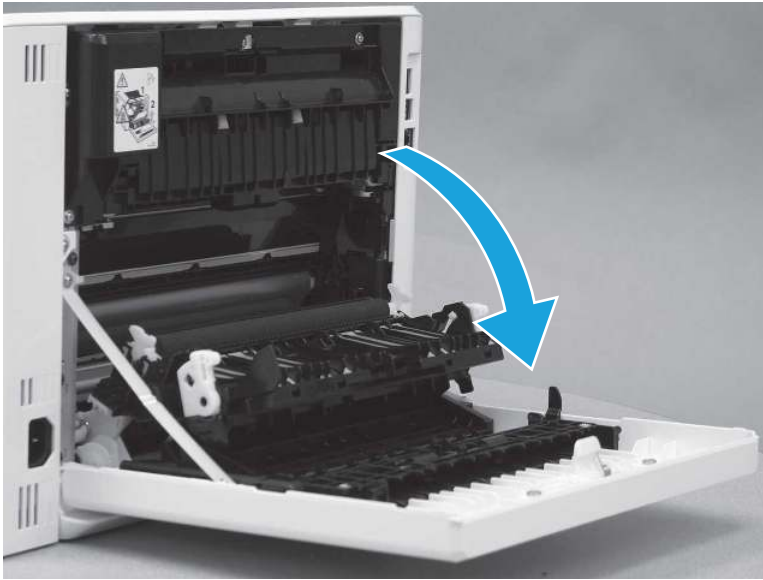
2. Open the front door.

**Figure 5-1921** Open the front door



3. Open the duplexing door.

**Figure 5-1922** Open the duplexer door



### 3. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

**Figure 5-1923** Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

**Figure 5-1924** Remove one screw



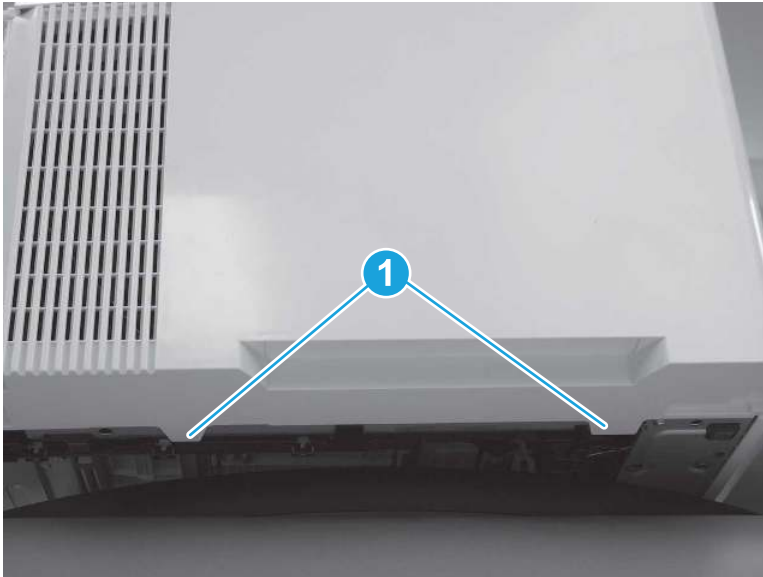
3. At the front of the printer, remove one screw (callout 1).

**Figure 5-1925** Remove one screw



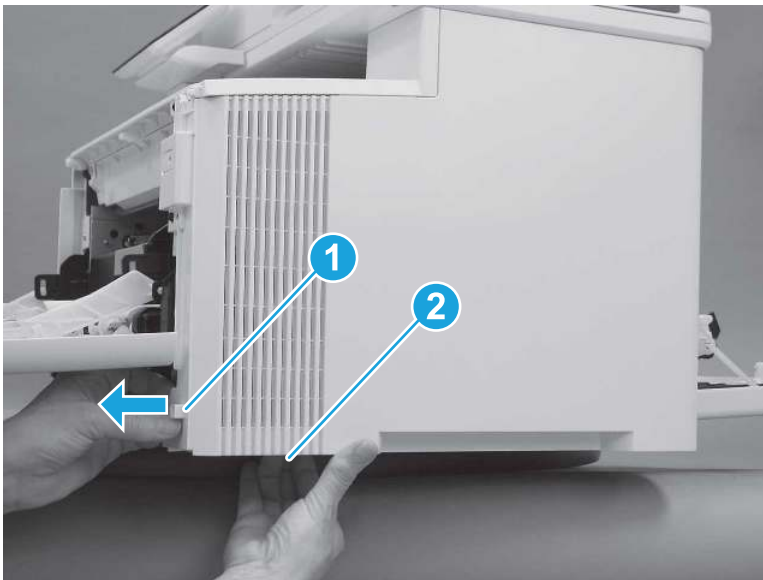
- Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1926** Locate the tabs



- Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

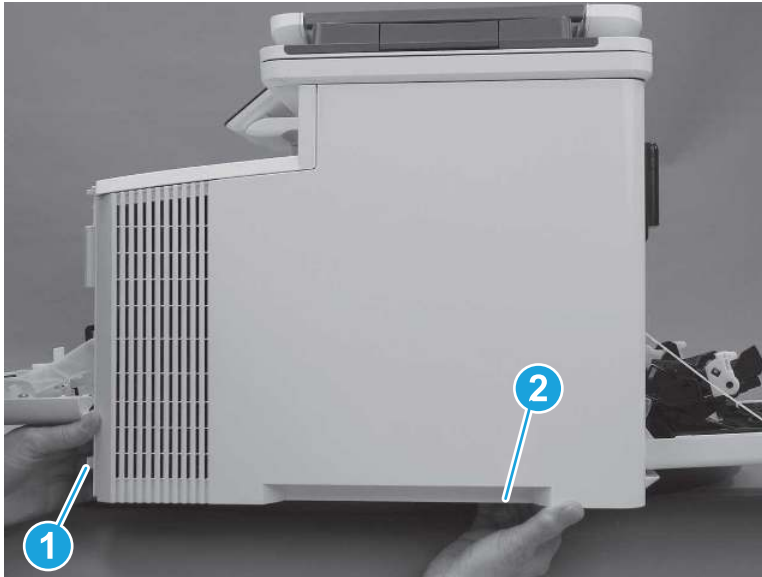
**Figure 5-1927** Release front lower tabs





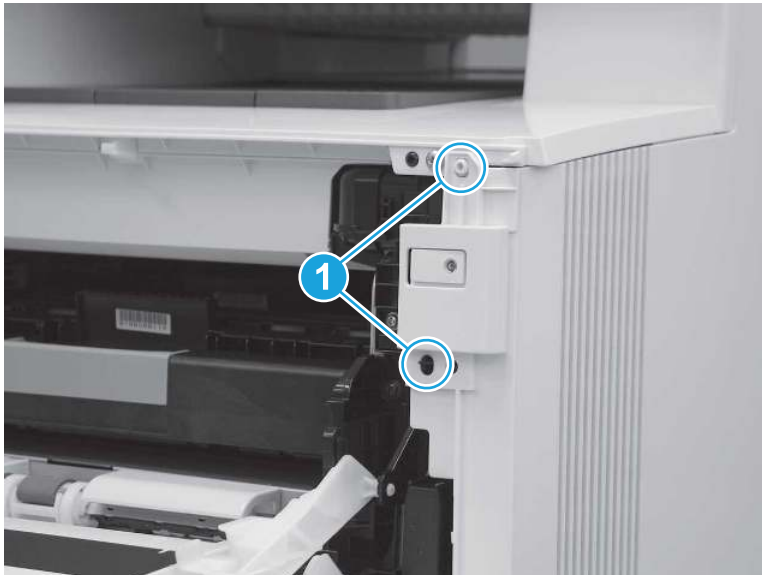
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-1928** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-1929** Release front upper tabs



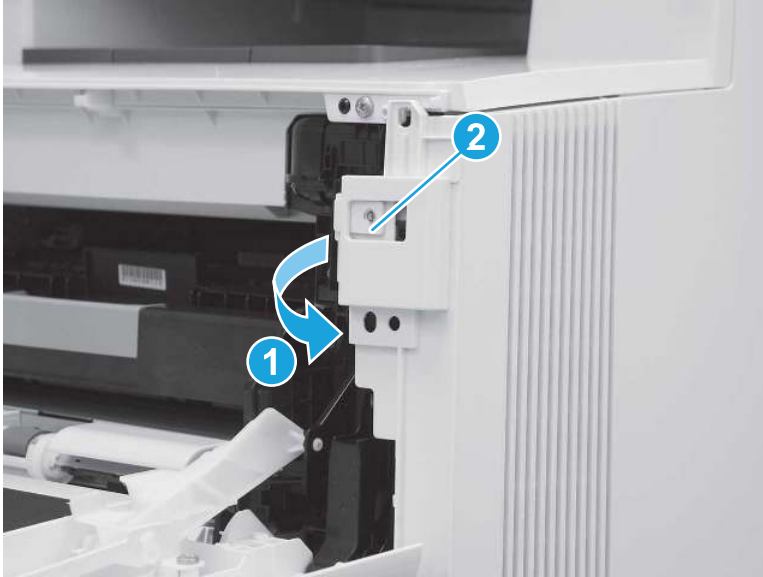
8. Rotate the front of the cover away from the printer (callout 1).

---

**CAUTION:** Be careful not to dislodge the power switch (callout 2).

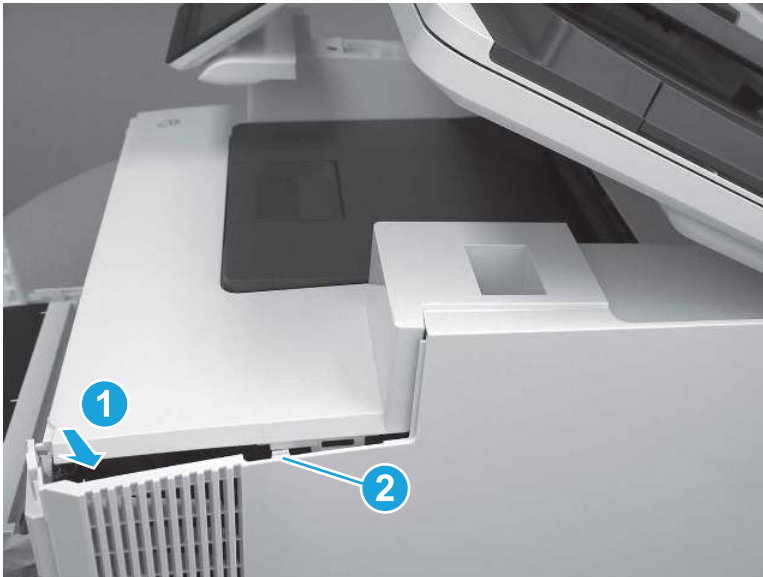
---

**Figure 5-1930** Rotate the front of the cover



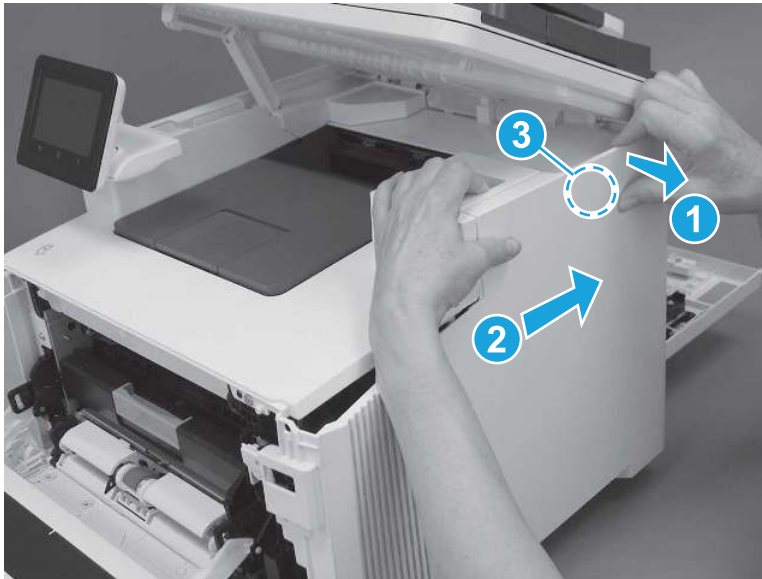
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

**Figure 5-1931** Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

**Figure 5-1932** Release one tab and one hook



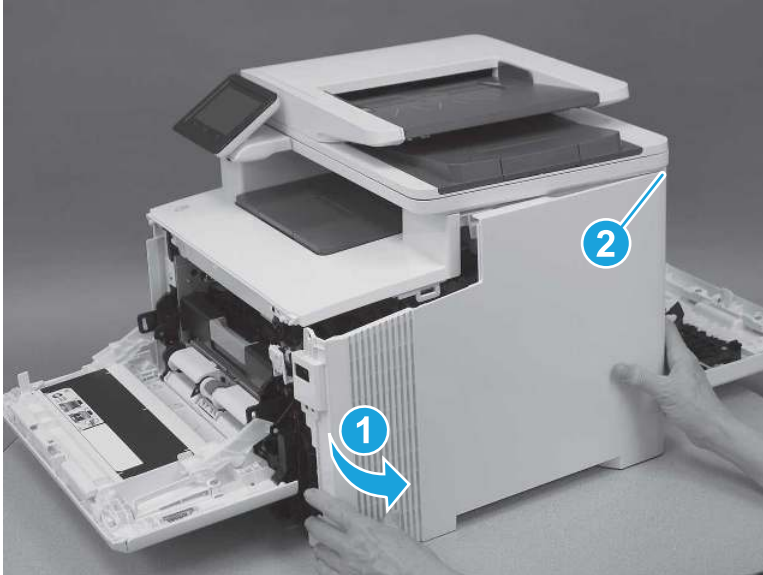
11. Lower the scanner.

**Figure 5-1933** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-1934** Remove the right cover



#### 4. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

1. Raise the scanner.

**Figure 5-1935** Raise the scanner



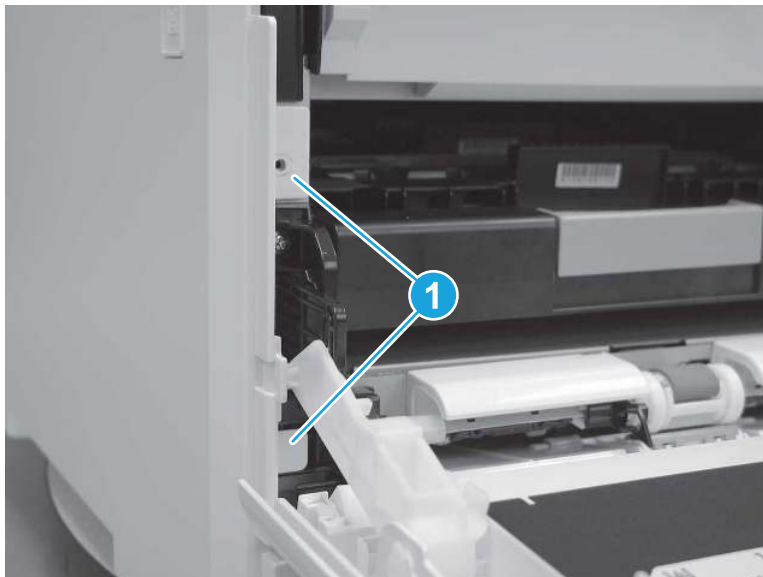
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-1936** Remove one screw



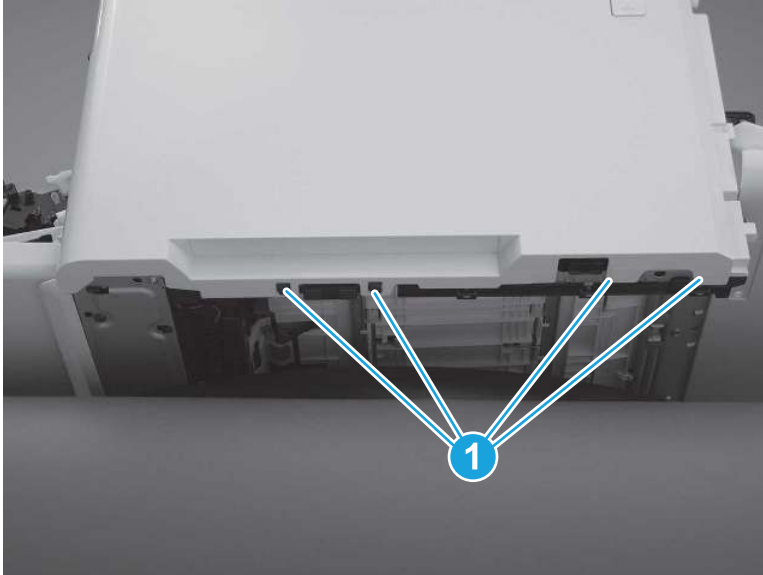
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-1937** Release two tabs



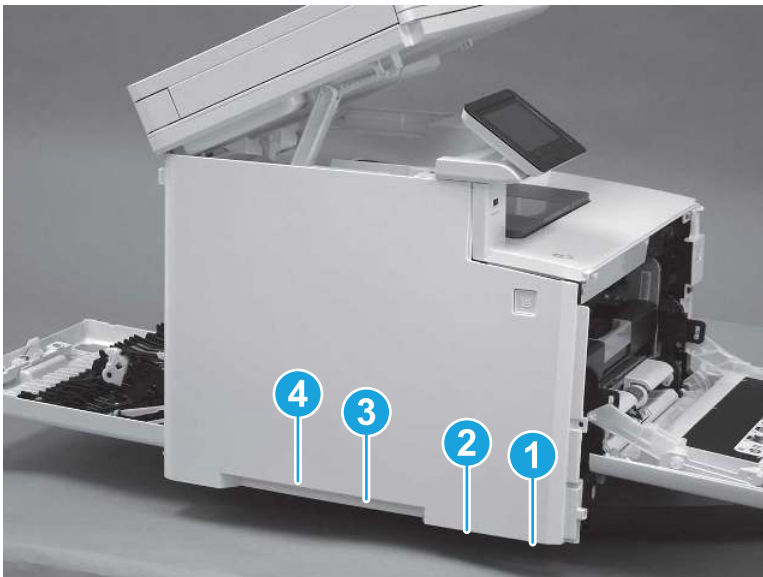
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1938** Locate the tabs



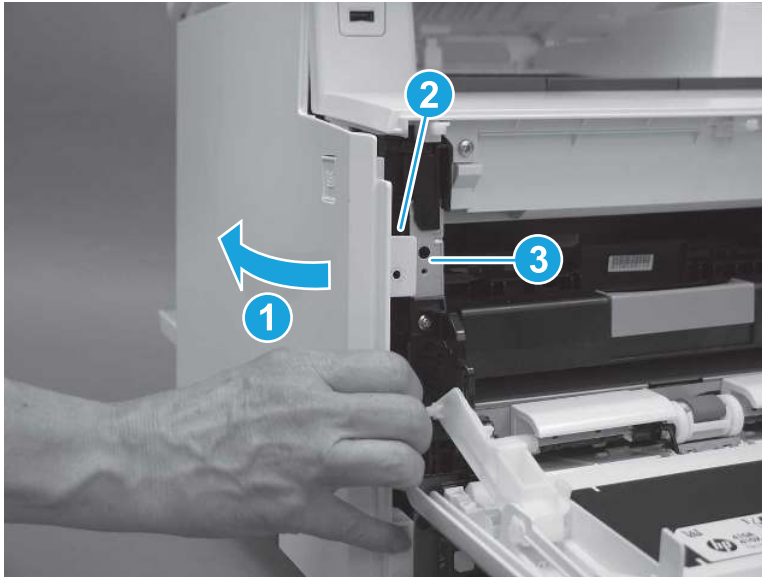
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-1939** Release four tabs



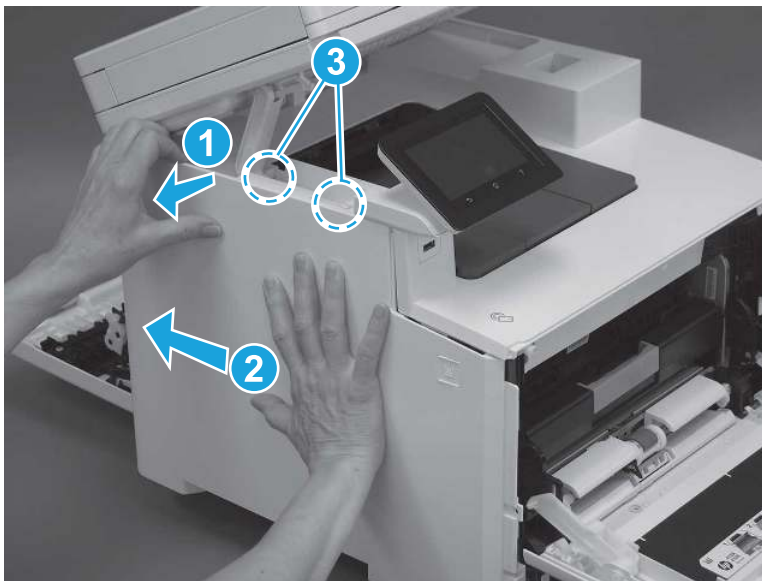
6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

**Figure 5-1940** Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-1941** Release one tab and two hooks



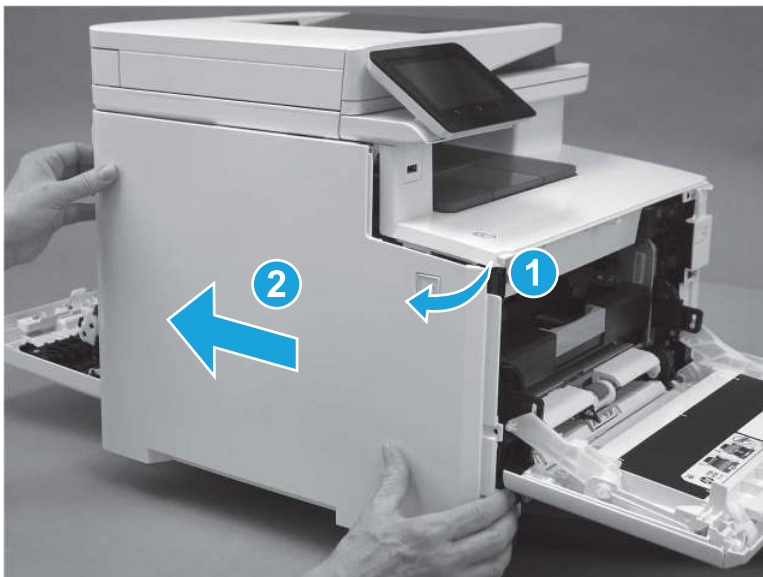
8. Lower the scanner.

Figure 5-1942 Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

Figure 5-1943 Remove the left cover



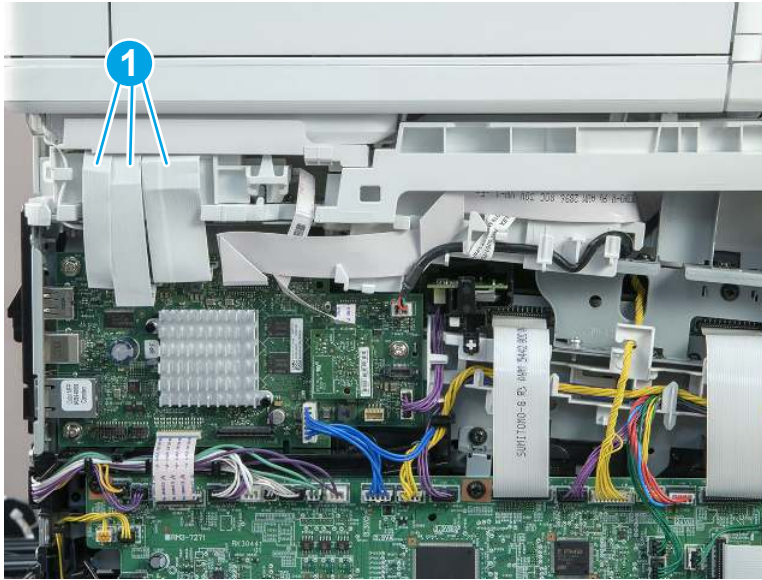
## 5. Remove the integrated scanner assembly

(MFP)



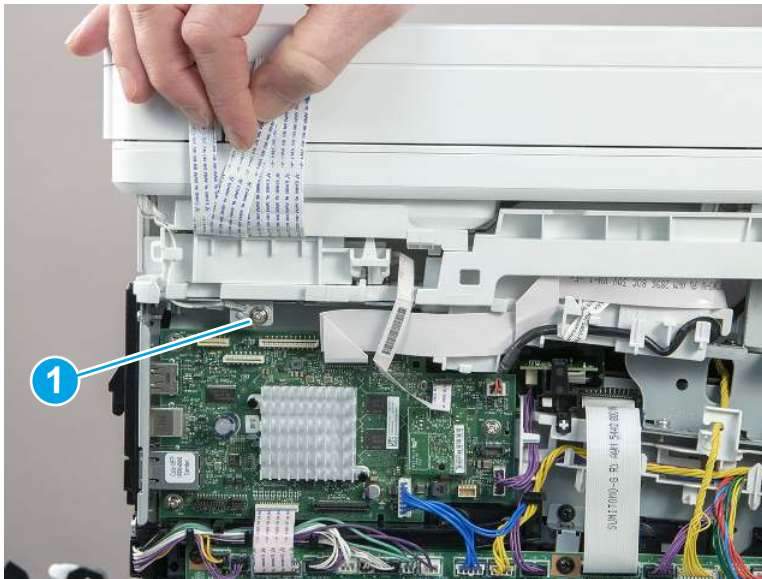
1. On the left side of the printer, disconnect three connectors (callout 1).

**Figure 5-1944** Disconnect three connectors



2. Raise the scanner cables up, and then remove one screw (callout 1) to release the ground wire.

**Figure 5-1945** Remove one screw and release the ground wire



3. Raise the scanner.

Figure 5-1946 Raise the scanner



4. With the scanner lifted, release the tab (callout 1) on the scanner support arm pin from the slot and rotate the pin in the direction indicated.

Figure 5-1947 Release scanner support arm pin



5. Remove the scanner arm pin.

---

**⚠ CAUTION:** Once the scanner arm pin is removed, support the scanner with one hand at all times so that it does not fall backwards off of the printer.

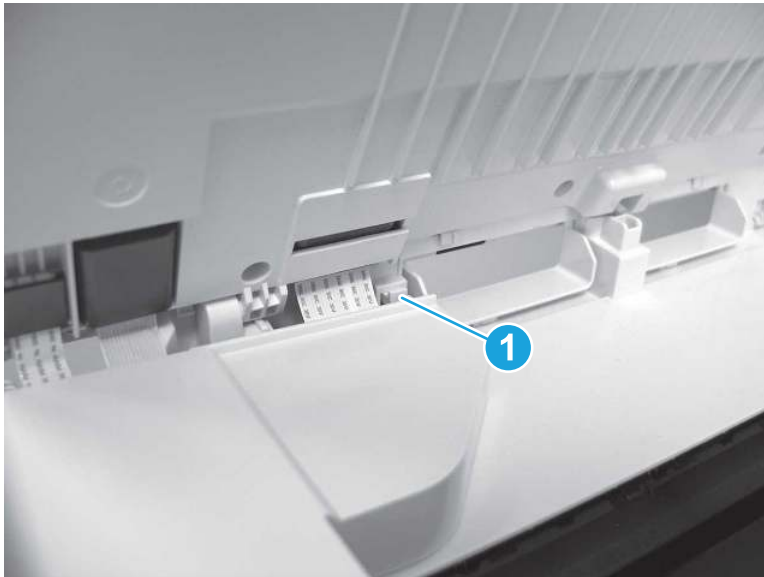
---

Figure 5-1948 Remove the pin



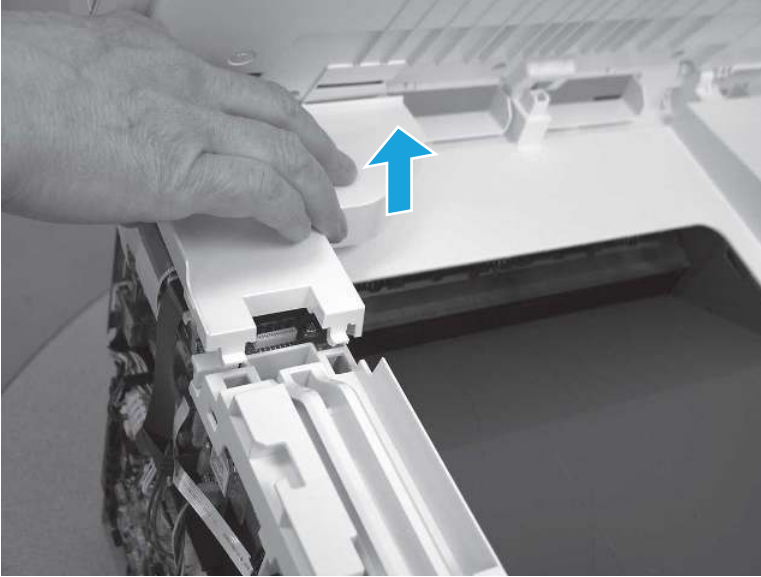
6. On the top of the printer, use a flat-blade screwdriver to release one tab (callout 1).

Figure 5-1949 Release one tab



7. Remove the scanner cable cover.

**Figure 5-1950** Remove the scanner cable cover



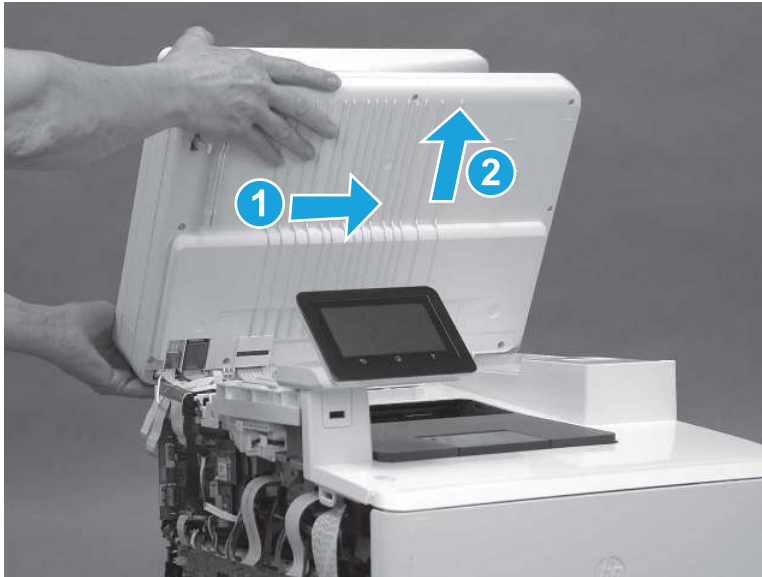
8. The scanner cables (callout 1) are held in place on the top cover with double-sided tape. Carefully release the cables from the top cover.

**Figure 5-1951** Release the cables



9. Open the scanner assembly fully, slide the assembly toward the right side of the printer, and then lift the assembly off of the printer.

**Figure 5-1952** Remove the scanner assembly

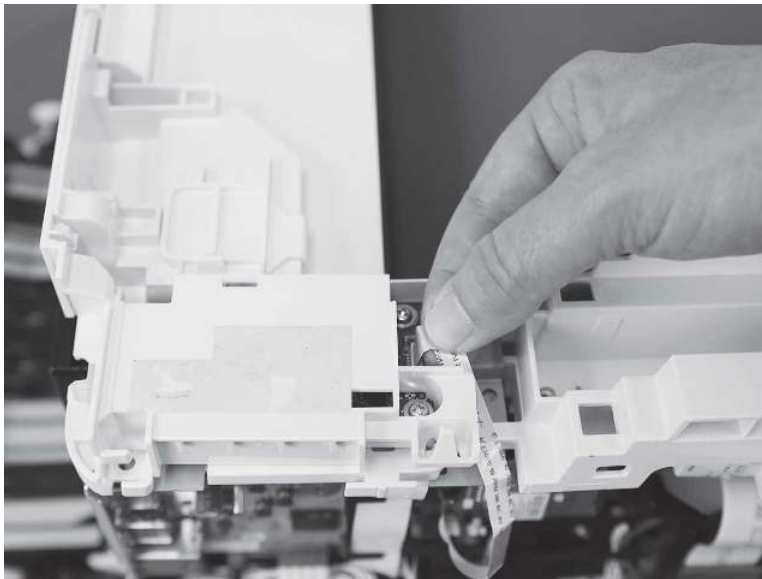


## 6. Remove the Fax FFC

Follow these steps to remove the Fax FFC.

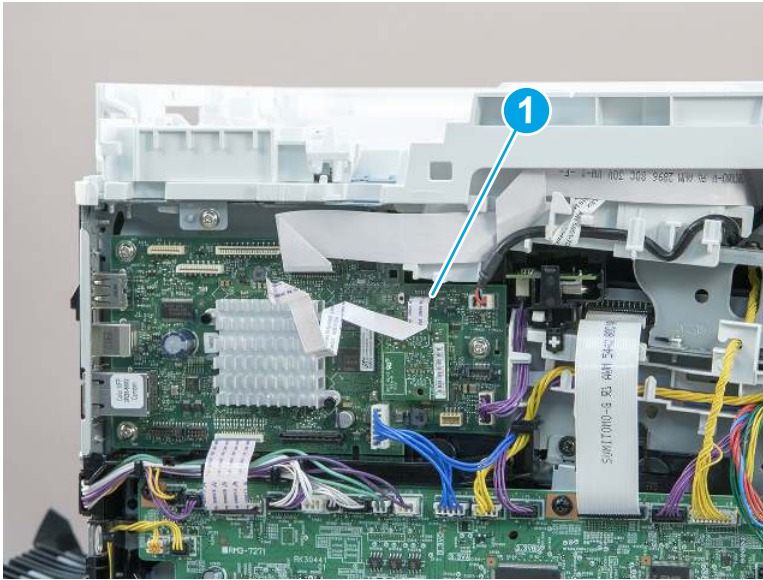
1. Disconnect one FFC cable from the fax PCA.

**Figure 5-1953** Disconnect one connector



2. Disconnect the other end of the FFC cable from the formatter PCA.

**Figure 5-1954** Remove the FFC



## 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: Walk-up USB port (SFP)

Learn how to remove and replace the walk-up USB port (SFP).

[View a video of removing and replacing the walk-up USB port \(SFP\).](#)

Mean time to repair: 19 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](http://www.hp.com/buy/parts).

**Table 5-55** Part information

Part number	Part description
5851-7008	USB connector (walk-up) and 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 Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-1955** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

1. Press the button (callout 1) on the left side of the printer to release the front door.

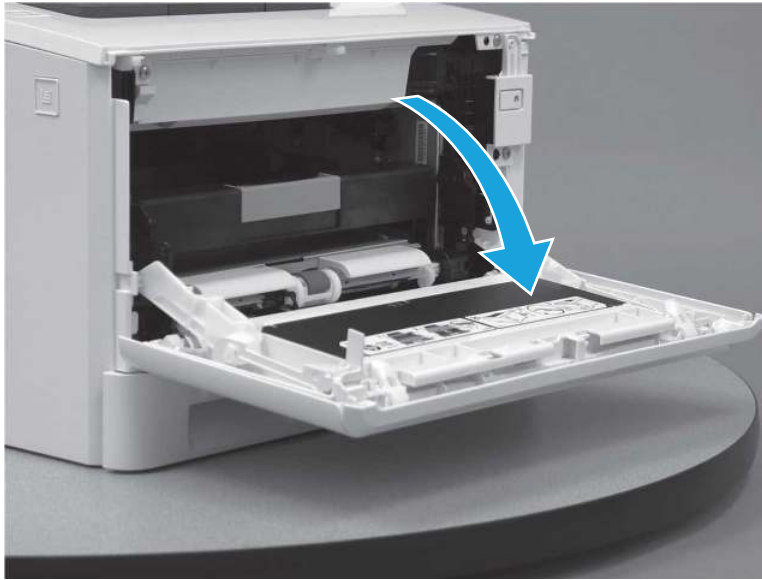
**Figure 5-1956** Release the front door





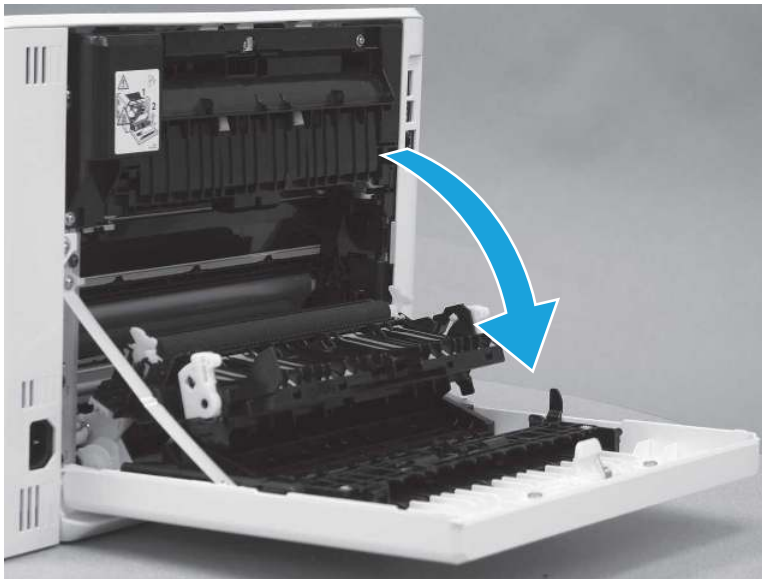
2. Open the front door.

**Figure 5-1957** Open the front door



3. Open the duplexing door.

**Figure 5-1958** Open the duplexer door

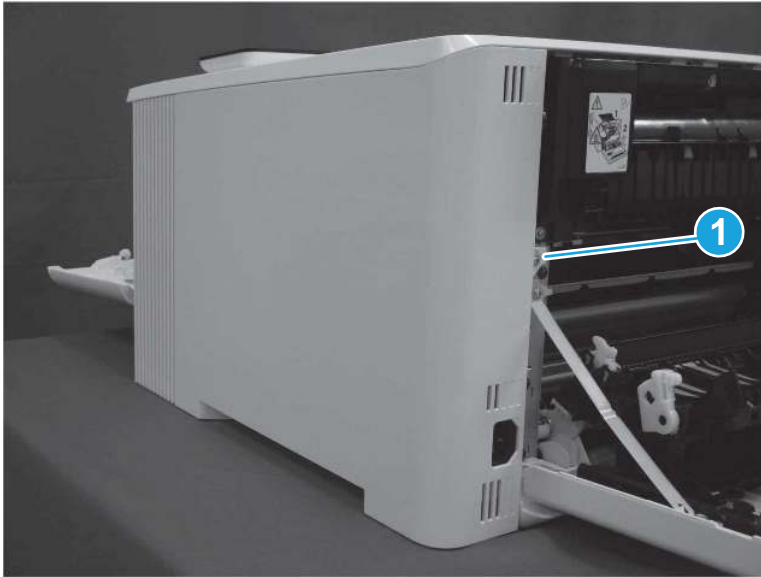


### 3. Remove the right cover (SFP)

Follow these steps to remove the right cover (SFP).

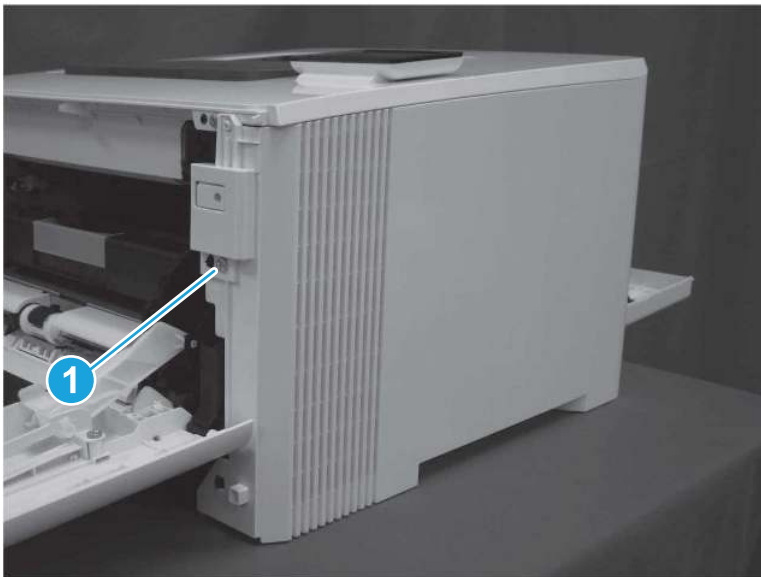
1. At the back of the printer, remove one screw (callout 1).

Figure 5-1959 Remove one screw



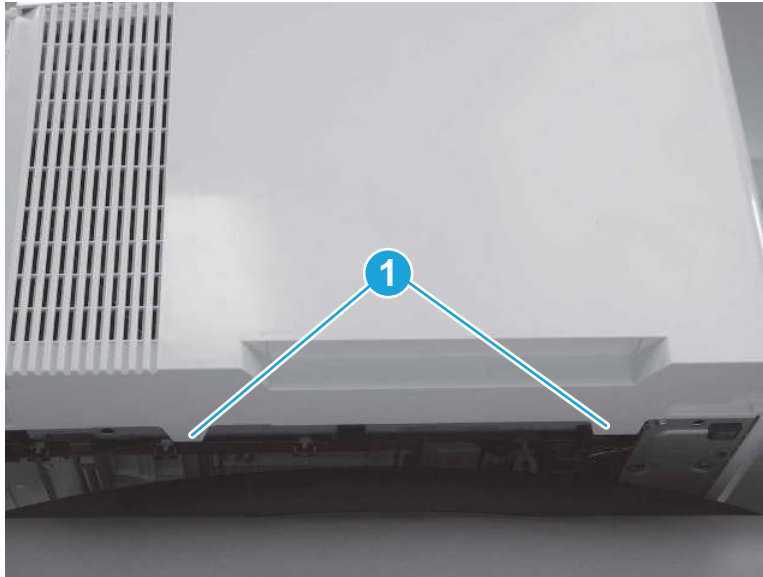
2. At the front of the printer, remove one screw (callout 1).

Figure 5-1960 Remove one screw



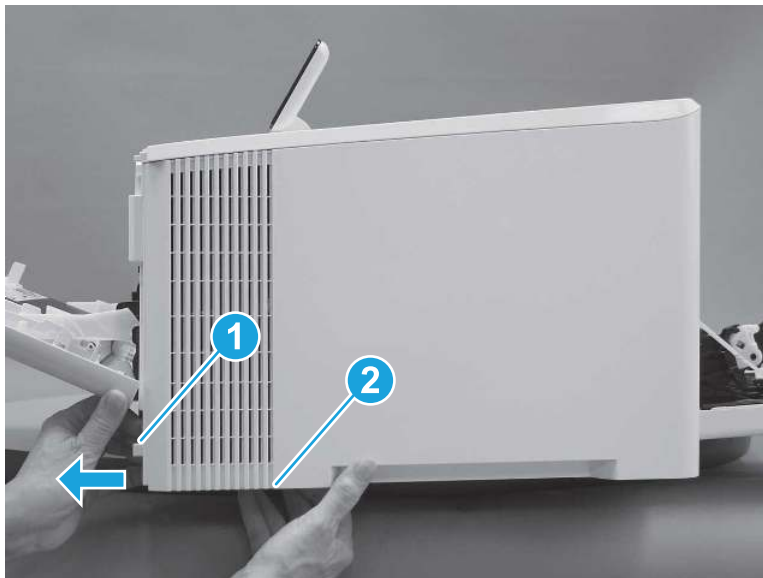
3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1961** Locate the tabs



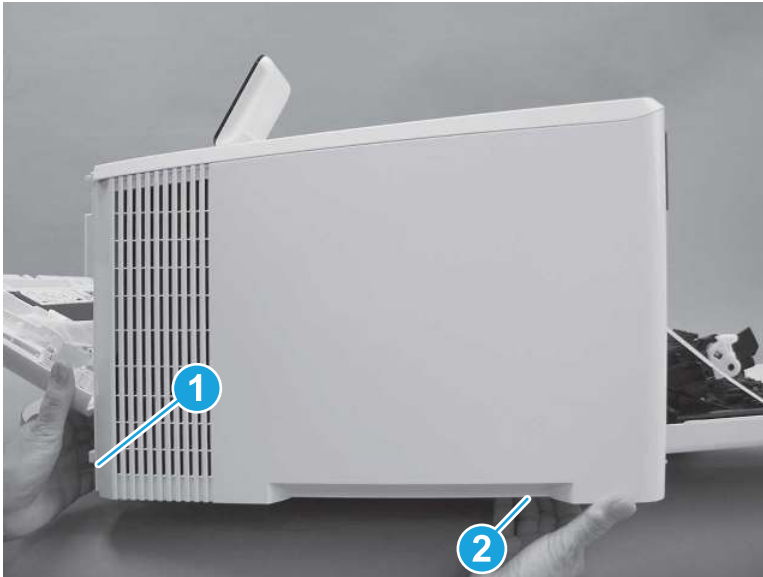
4. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the bottom of the cover.

**Figure 5-1962** Release front lower tabs



5. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the bottom of the cover, toward the back of the printer.

Figure 5-1963 Release lower rear tab



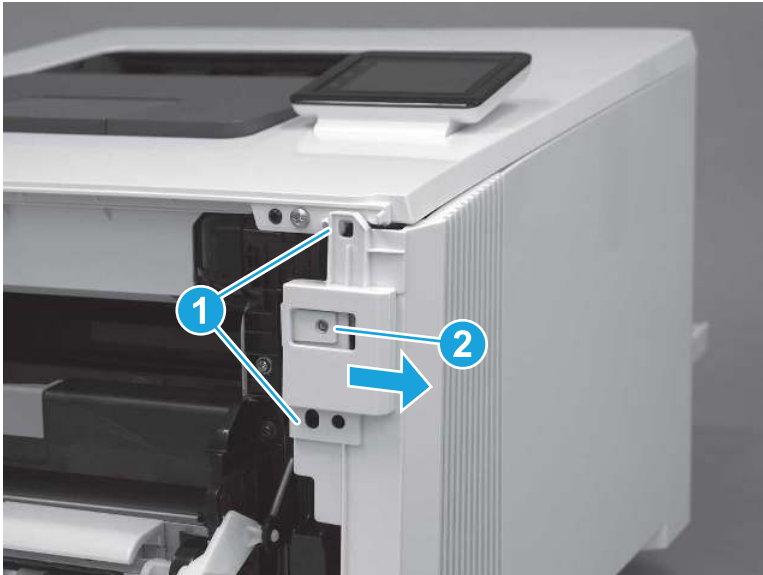
6. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

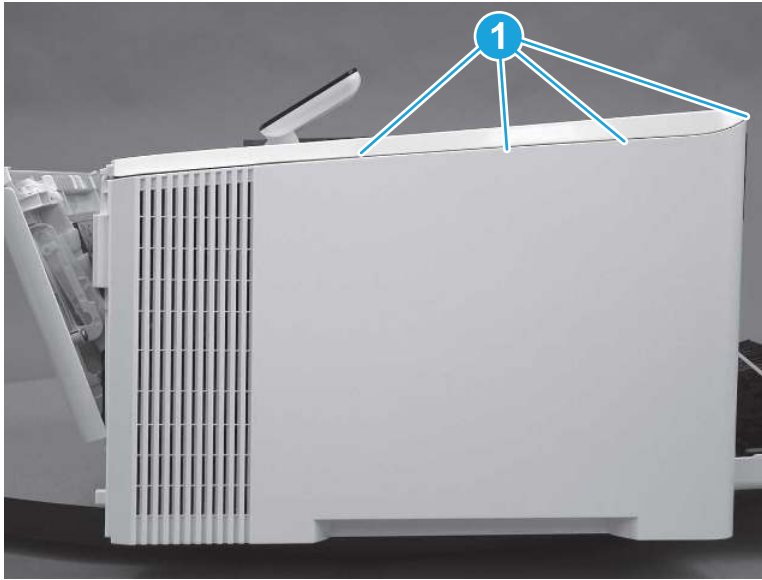
---

Figure 5-1964 Release two front tabs



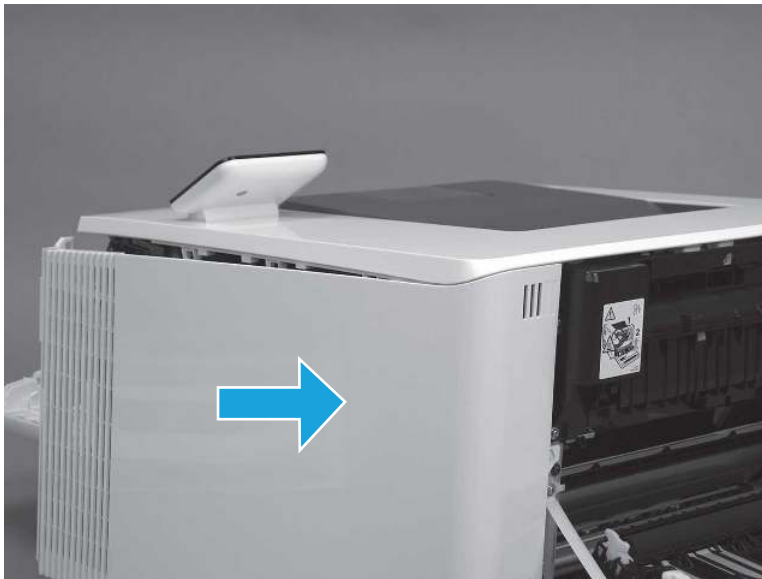
7. Release four tabs on the top of the printer (callout 1).

**Figure 5-1965** Release upper tabs



8. Slide the cover toward the back of the printer to remove it.

**Figure 5-1966** Remove the right cover

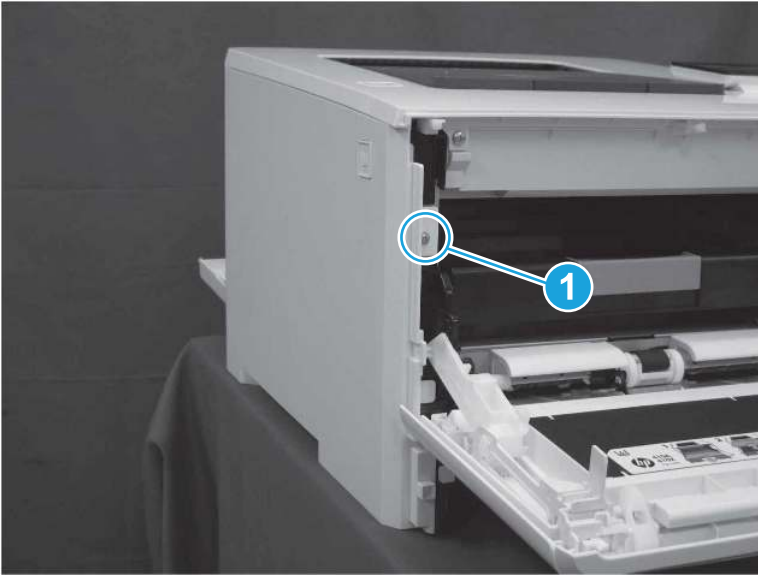


#### 4. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

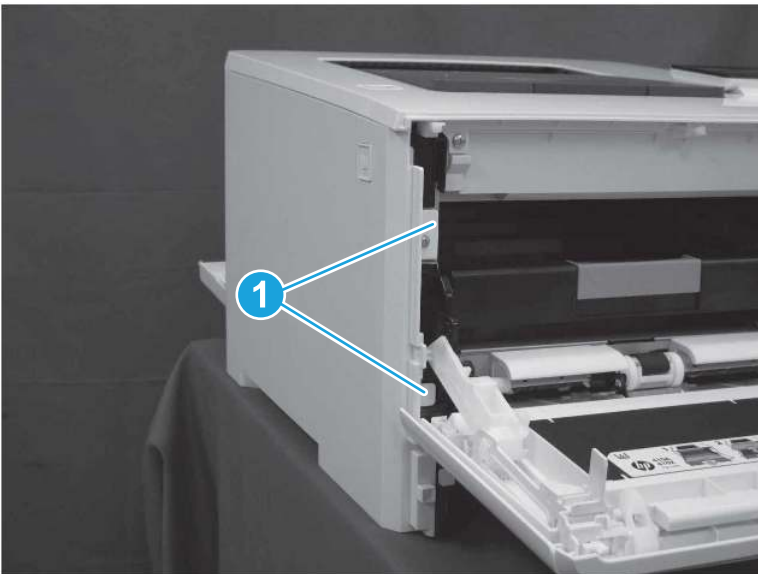
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-1967** Remove one screw



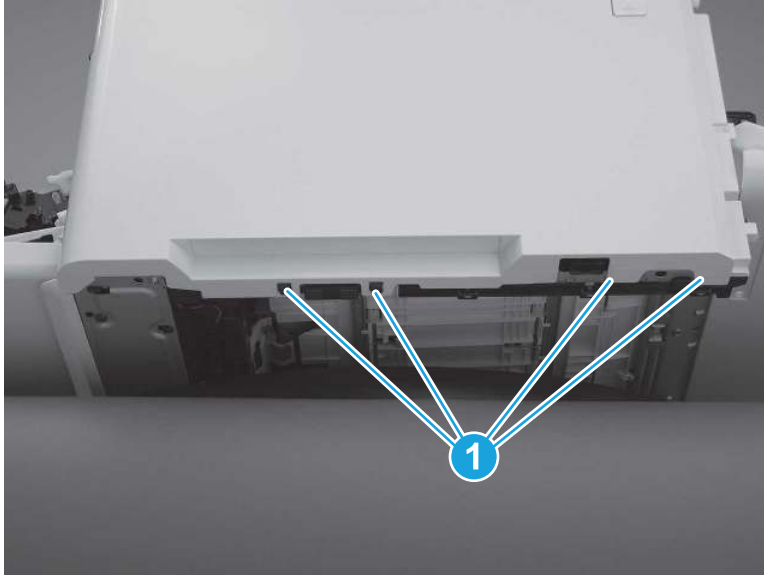
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-1968** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1969** Locate the tabs



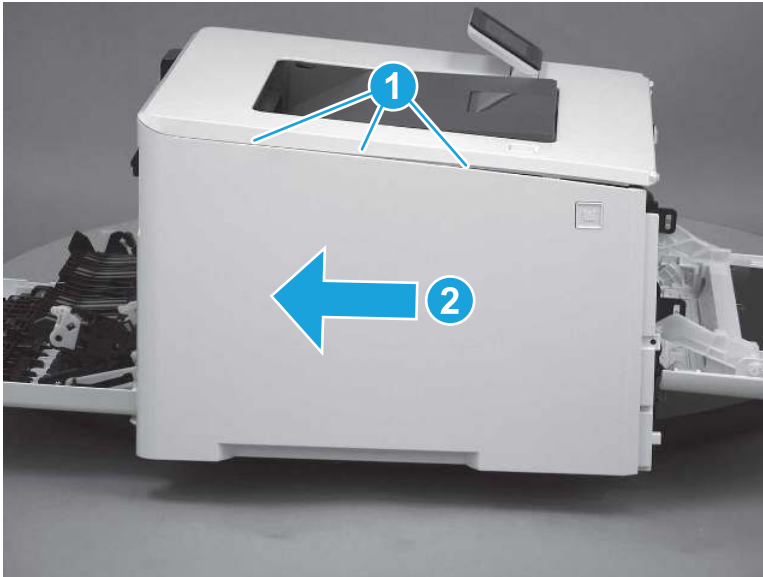
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-1970** Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

Figure 5-1971 Release three tabs



## 5. Remove the top cover (SFP)

Follow these steps to remove the top cover (SFP).

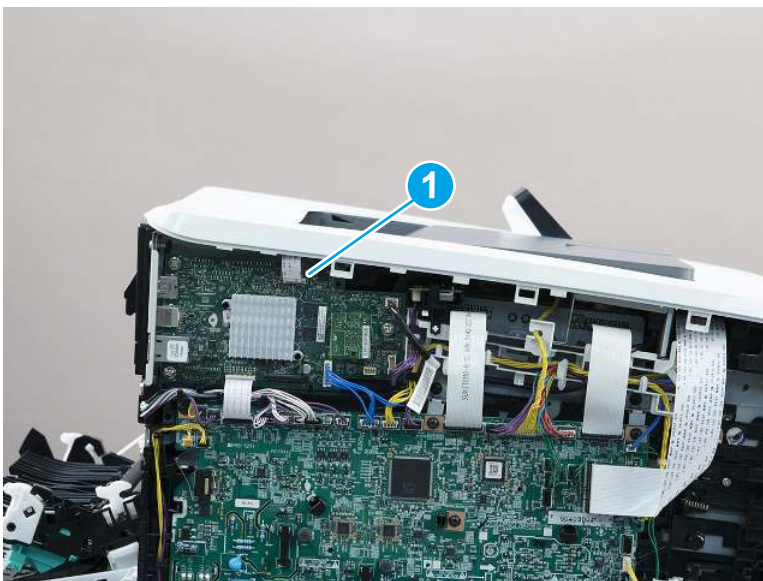
1. On the left side of the printer, on the formatter, disconnect one connector (callout 1).

---

 **NOTE:** The formatter may look slightly different than what is shown below, however the removal procedures are the same.

---

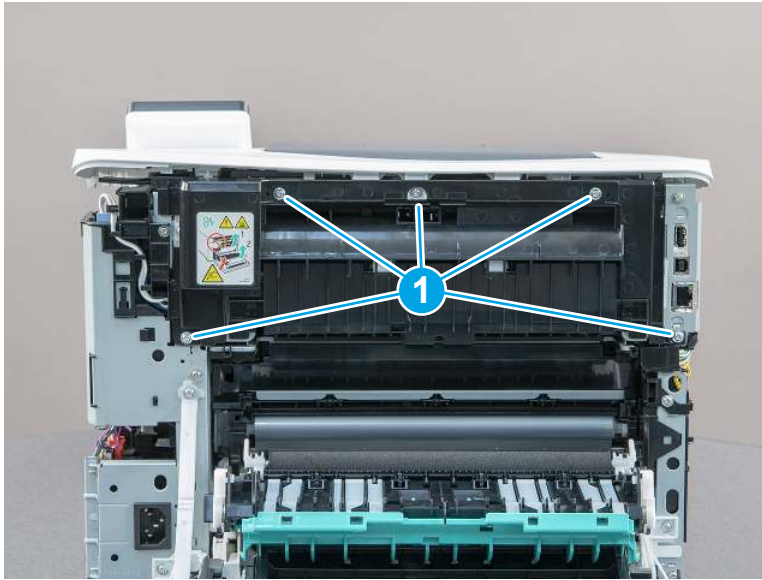
Figure 5-1972 Disconnect one connector





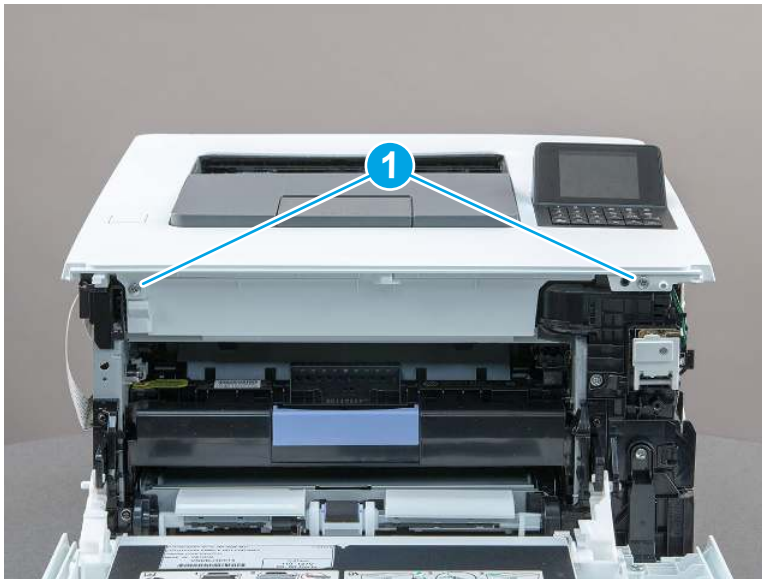
2. At the back of the printer, remove five screws (callout 1), and then remove the fuser cover.

**Figure 5-1973** Remove five screws



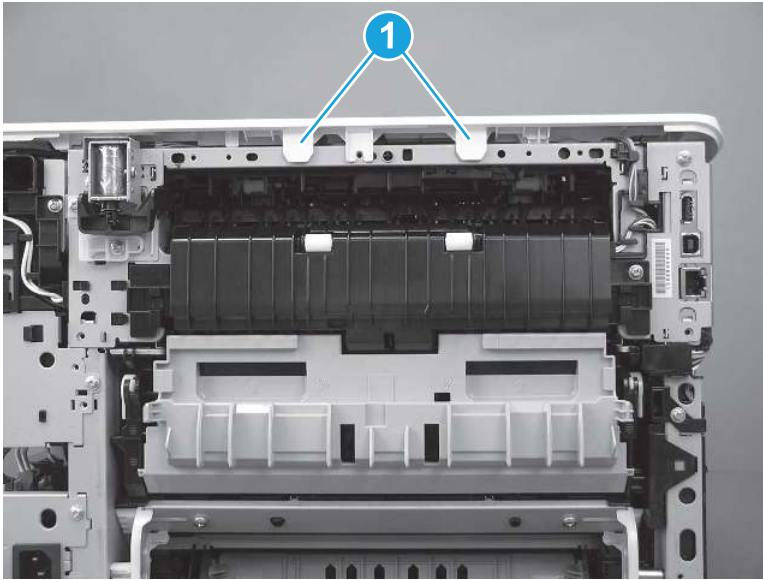
3. At the front of the printer, remove two screws (callout 1).

**Figure 5-1974** Remove two screws



4. Lift the front of the top cover up and release two tabs at the back of the printer (callout 1).

**Figure 5-1975** Lift the top cover and release two tabs



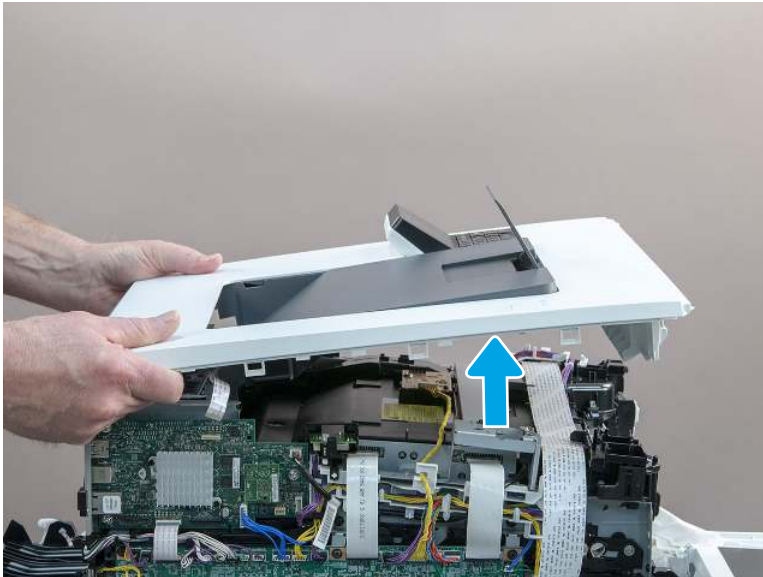
5. Remove the top cover.

---

 **NOTE:** For a replacement cover install, remove the control panel from the discarded cover and install it on the replacement cover.

---

**Figure 5-1976** Remove the top cover

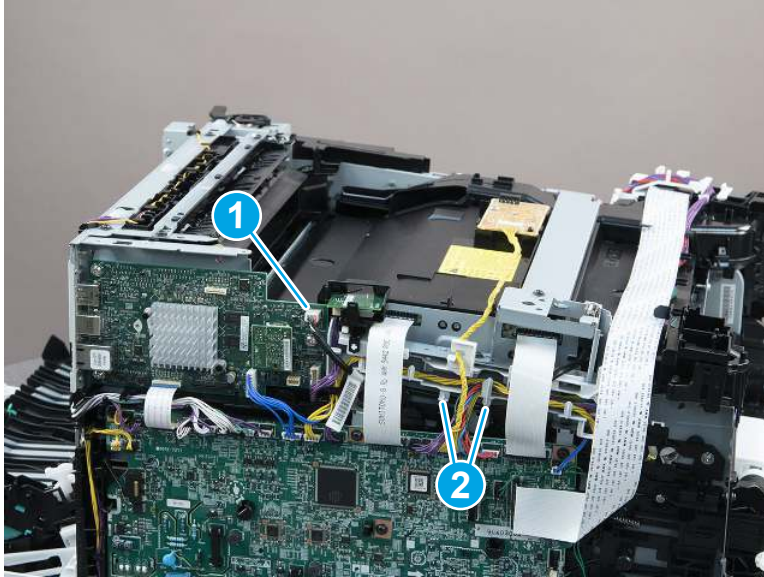


## 6. Remove the walk-up USB port (SFP)

Follow these steps to remove the walk-up USB port (SFP).

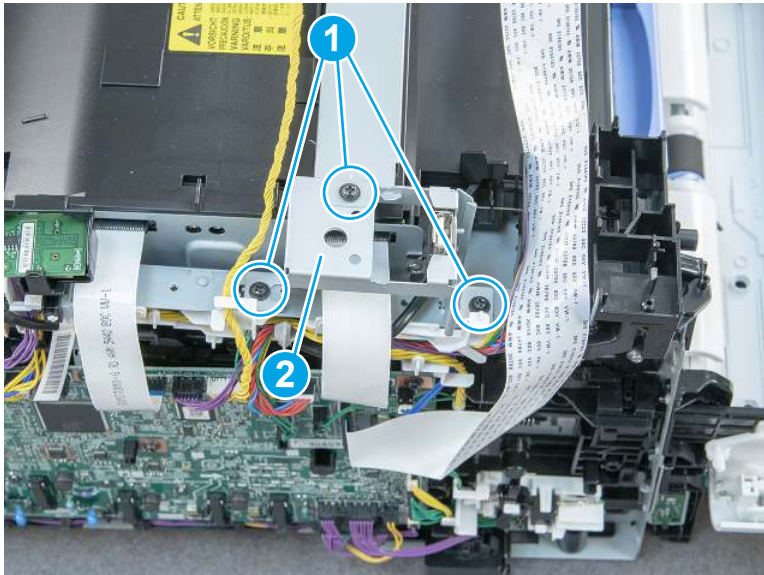
1. Disconnect one USB cable from the formatter PCA (callout 1), and then remove the cable from the guide (callout 2).

**Figure 5-1977** Disconnect cable from formatter PCA



2. Remove three screws (callout 1), and then remove the metal bracket (callout 2) from the printer .

**Figure 5-1978** Remove three screws



3. Remove one screw (callout 1), and then separate the USB connector from the bracket.

**Figure 5-1979** Remove one screw and remove the USB connector



## 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: Walk-up USB port (MFP)

Learn how to remove and replace the walk-up USB port (MFP).

[View a video of removing and replacing the walk-up USB port \(MFP\).](#)

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](http://www.hp.com/buy/parts).

**Table 5-56** Part information

Part number	Part description
5851-7008	USB connector (walk-up) and cable

## 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 Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-1980** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

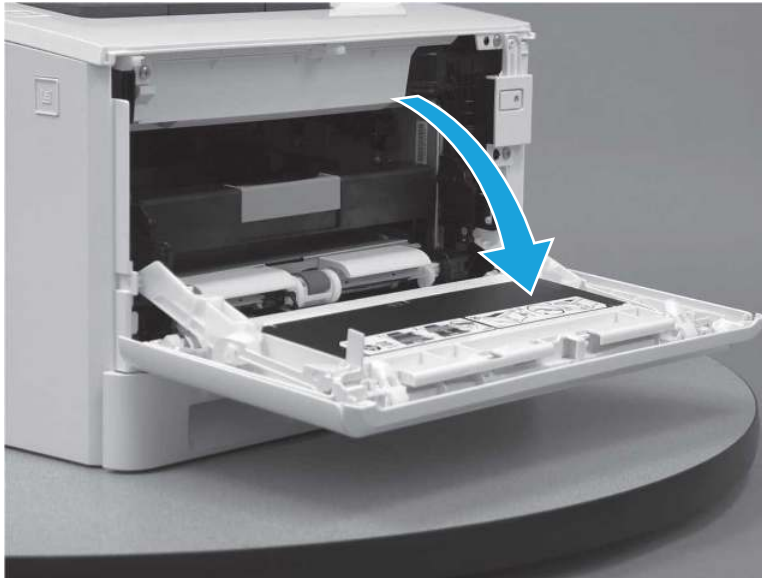
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-1981** Release the front door



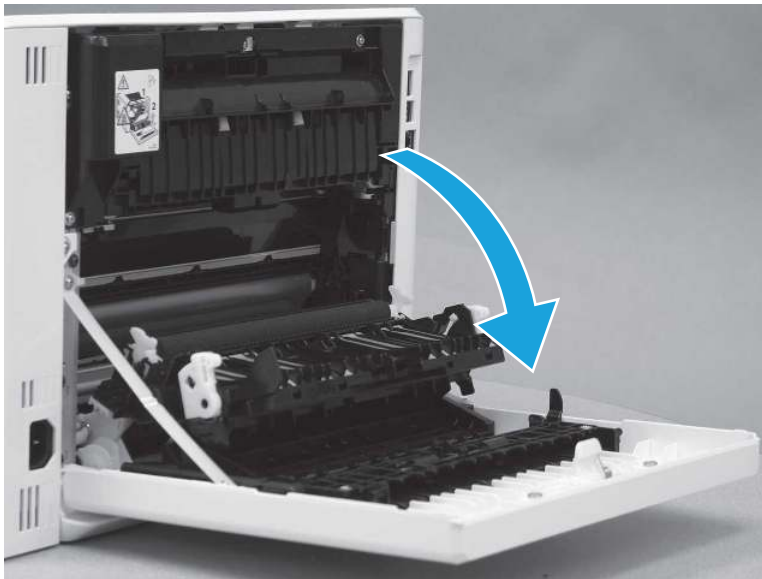
2. Open the front door.

**Figure 5-1982** Open the front door



3. Open the duplexing door.

**Figure 5-1983** Open the duplexer door



### 3. Remove the right cover (MFP)

Follow these steps to remove the right cover (MFP).

1. Raise the scanner.

Figure 5-1984 Raise the scanner



2. At the back of the printer, remove one screw (callout 1).

Figure 5-1985 Remove one screw





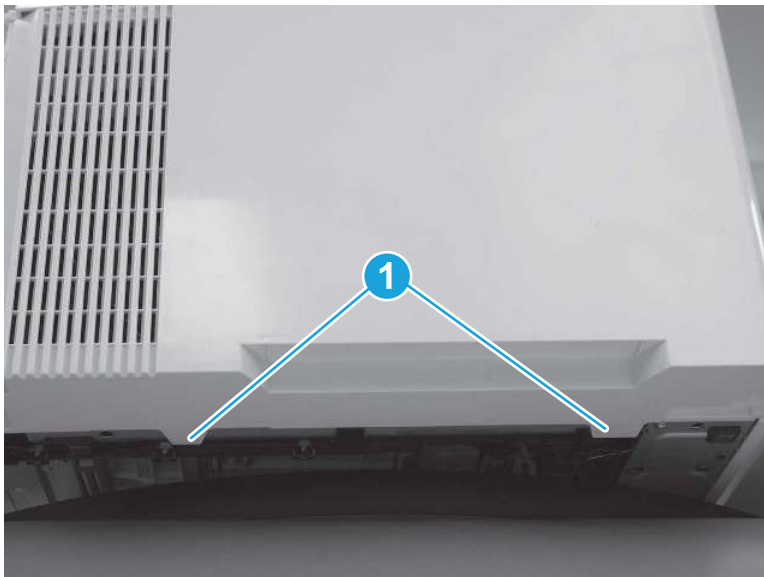
3. At the front of the printer, remove one screw (callout 1).

**Figure 5-1986** Remove one screw



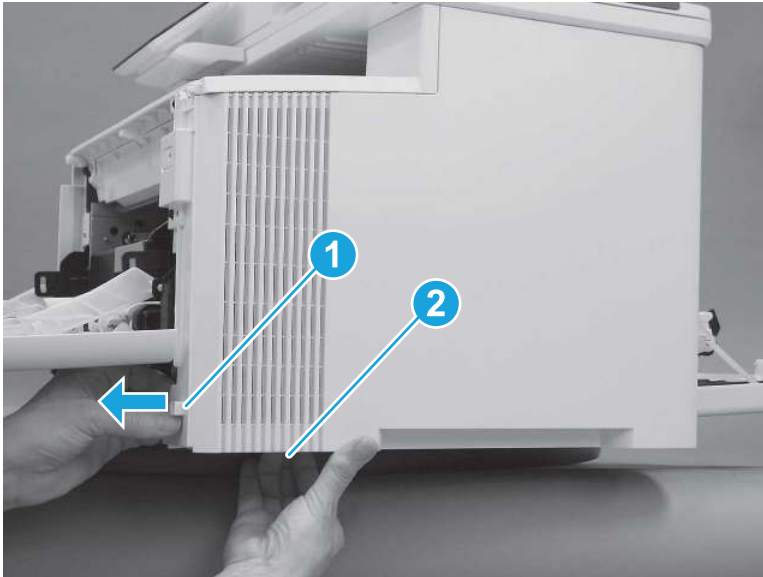
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1987** Locate the tabs



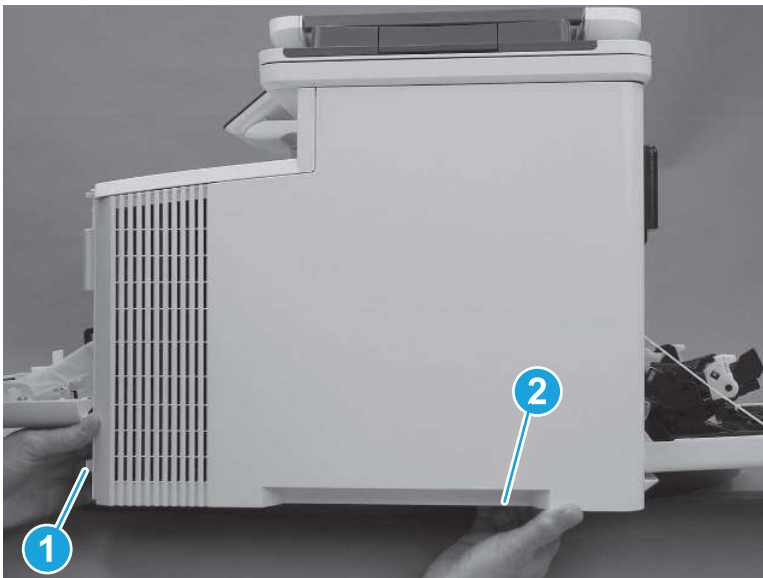
5. Release one tab (callout 1) on the front of the cover by slightly pulling the cover away from the printer. While holding the cover in the released position, release one tab (callout 2) on the lower edge of the cover.

**Figure 5-1988** Release front lower tabs



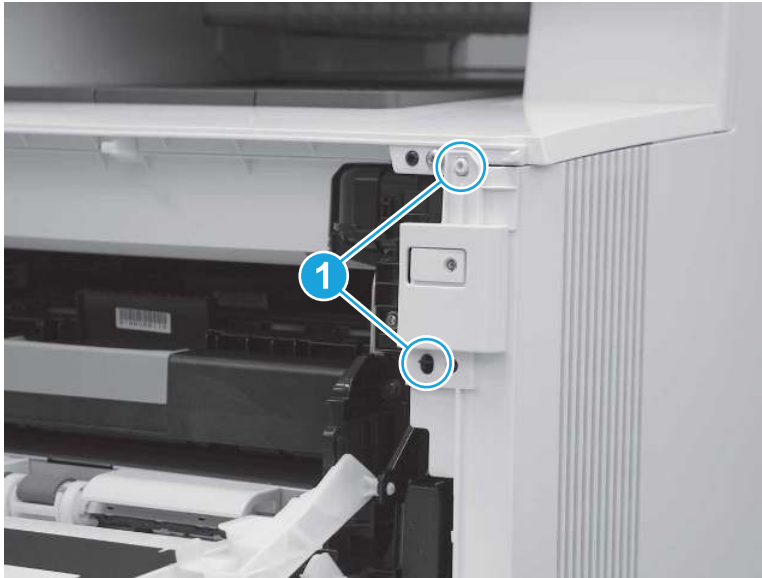
6. Hold the front tabs in the released position (callout 1), and then release one tab (callout 2) on the lower edge of the cover, toward the back of the printer.

**Figure 5-1989** Release lower rear tab



7. Release two tabs at the front of the printer (callout 1) by slightly pulling the cover away from the printer.

**Figure 5-1990** Release front upper tabs



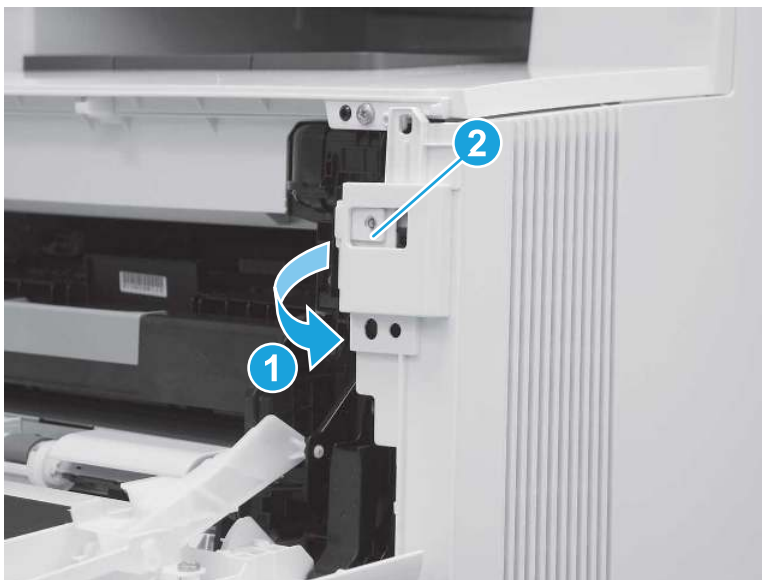
8. Rotate the front of the cover away from the printer (callout 1).

---

**⚠ CAUTION:** Be careful not to dislodge the power switch (callout 2).

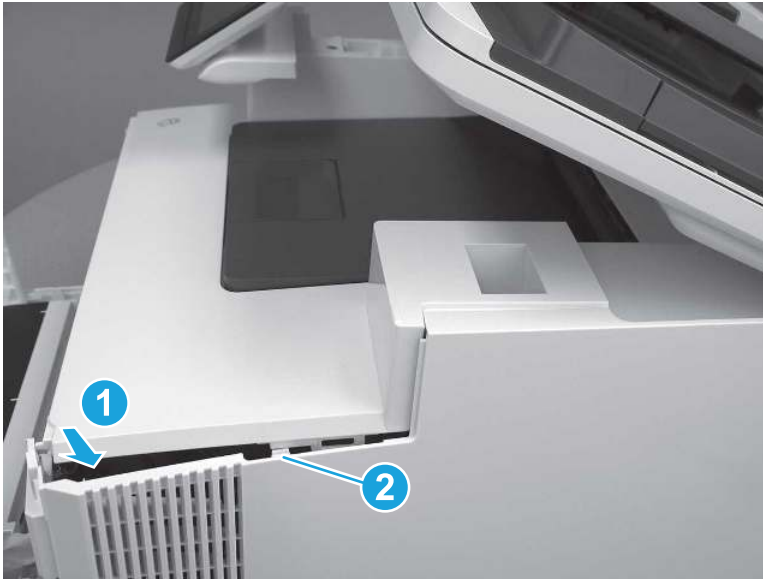
---

**Figure 5-1991** Rotate the front of the cover



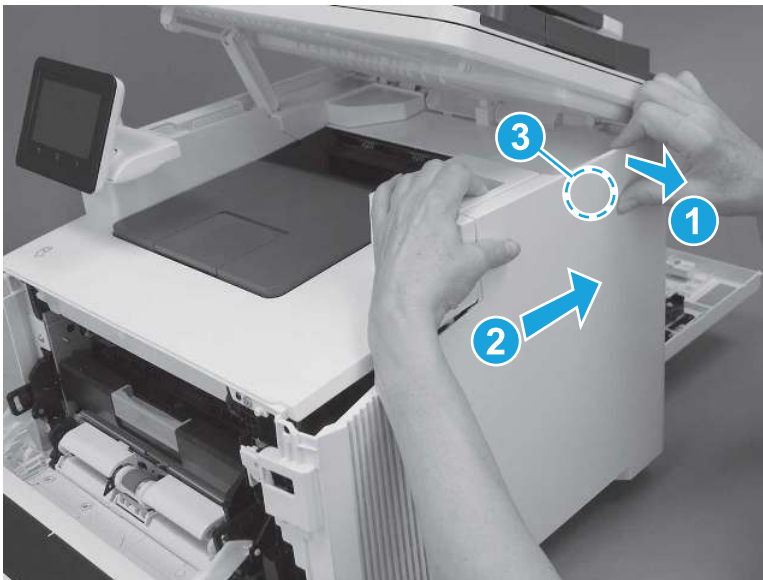
9. Slightly pull the front of the cover away from the printer (callout 1) to release one tab (callout 2).

Figure 5-1992 Release top tabs



10. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release one hook (callout 3) on the inside of the cover.

Figure 5-1993 Release one tab and one hook



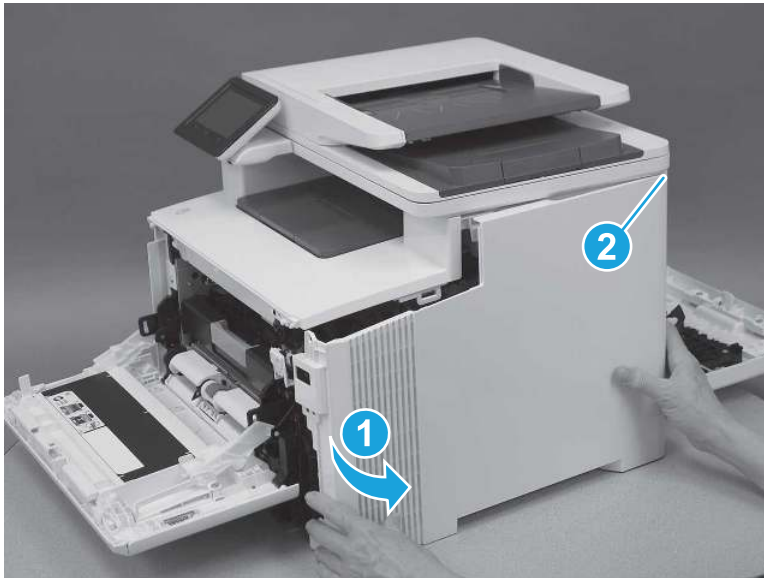
11. Lower the scanner.

**Figure 5-1994** Lower the scanner



12. Rotate the cover away from the printer (callout 1) to release one tab (callout 2) at the back of the printer, and then remove the cover.

**Figure 5-1995** Remove the right cover



#### 4. Remove the left cover (MFP )

Follow these steps to remove the left cover (MFP ).

1. Raise the scanner.

Figure 5-1996 Raise the scanner



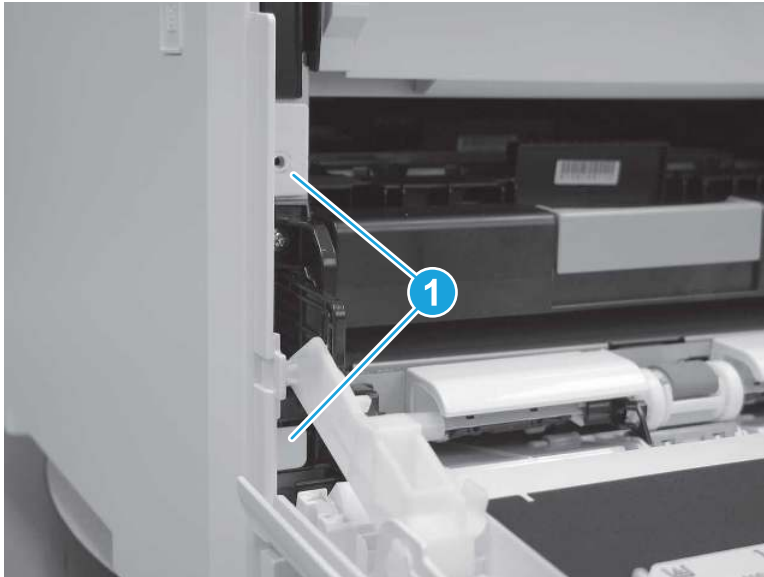
2. At the front of the printer, remove one screw (callout 1).

Figure 5-1997 Remove one screw



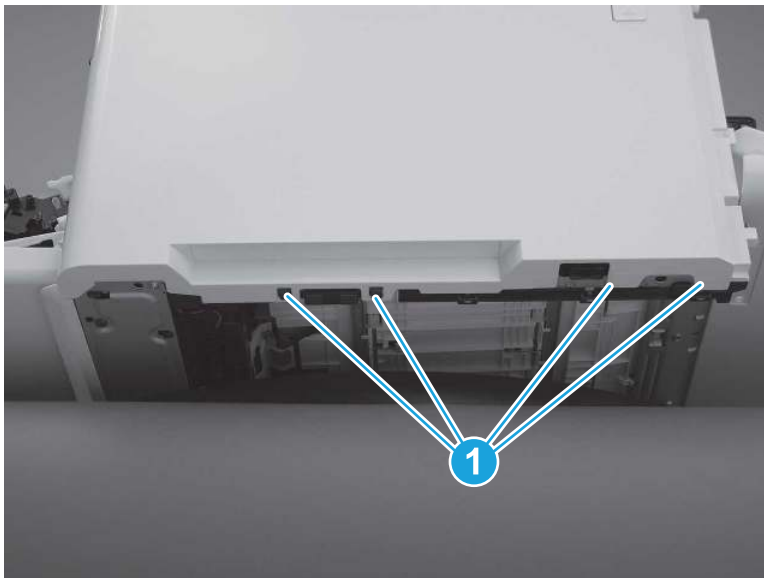
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-1998** Release two tabs



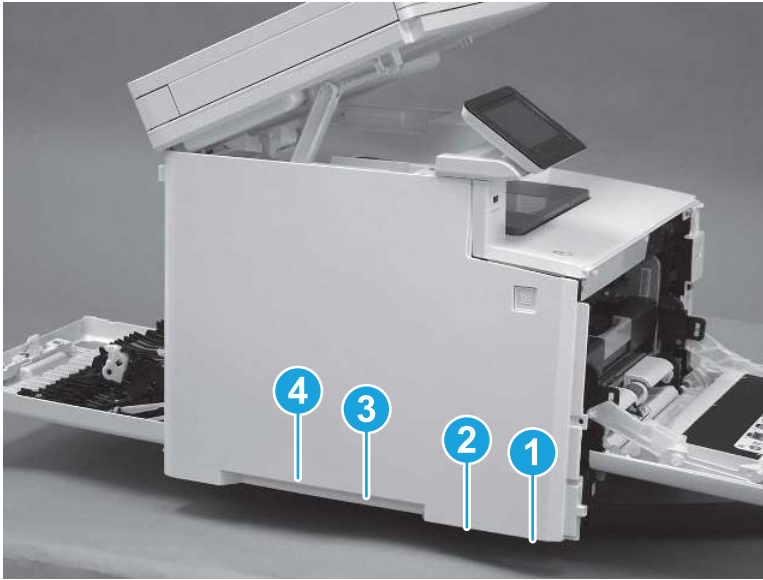
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-1999** Locate the tabs



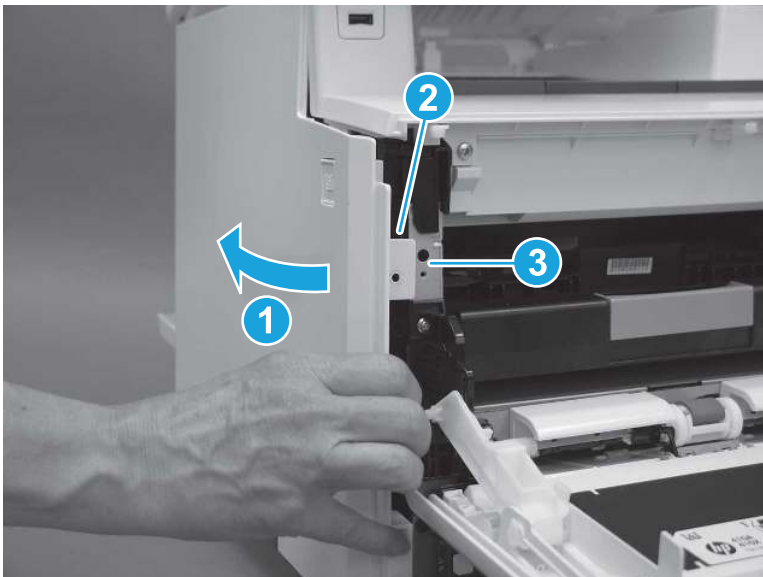
- Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-2000** Release four tabs



- Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

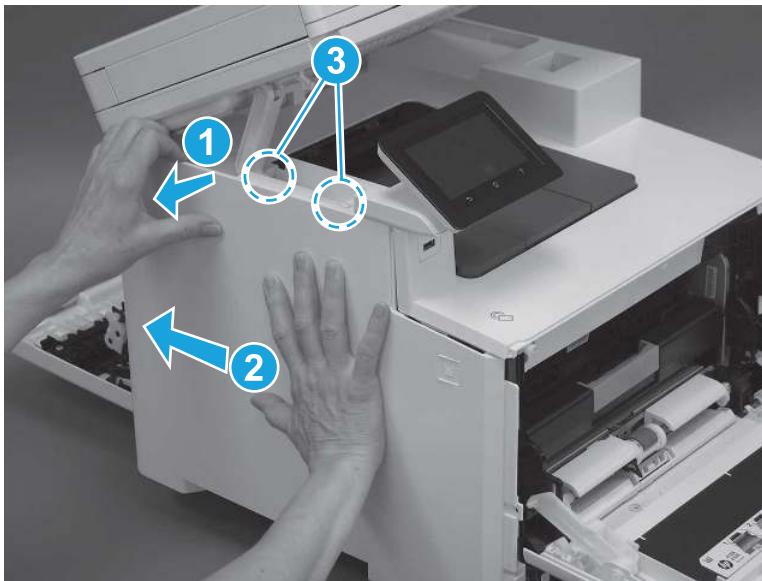
**Figure 5-2001** Rotate the cover





7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-2002** Release one tab and two hooks



8. Lower the scanner.

**Figure 5-2003** Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

**Figure 5-2004** Remove the left cover




## 5. Remove the control panel display and mount base (MFP only)

Follow these steps to remove the control panel display and mount base (MFP only).

1. Open the integrated scanner assembly (ISA).

---

 **NOTE:** The ISA might already have been removed. If so, skip ISA related steps.

If the control panel is not fully tilted forward, tilt it forward now until it stops.

---

**Figure 5-2005** Open the ISA



2. Remove one screw (callout 1).

**Figure 5-2006** Remove one screw



3. Use a small flat-blade screwdriver to release two tabs (callout 1) on the control-panel mount cover.

**Figure 5-2007** Release two tabs



4. Rotate the control-panel mount cover up towards the control panel to release it, and then remove the cover.

**Figure 5-2008** Remove the cover



5. Remove one grounding screw (callout 1), and then move the ground cable (callout 2) out of the way.

**Figure 5-2009** Remove one screw



6. Disconnect two FFC (callout 1).

**Figure 5-2010** Disconnect two FFC



7. Release one tab (callout 1), and then remove the interconnect board (ICB).

**Figure 5-2011** Remove the ICB



8. Remove two screws (callout 1), and then lift the control panel display and mount base together to remove them.

---

**CAUTION:** Carefully unfold the FFC and release it through the opening in the mount base.

---

Figure 5-2012 Remove two screws and remove the control panel assembly

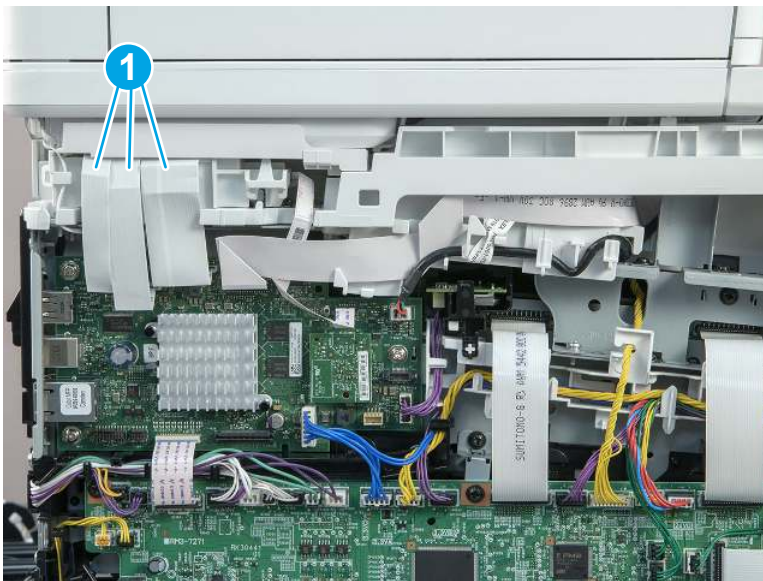


## 6. Remove the integrated scanner assembly

(MFP)

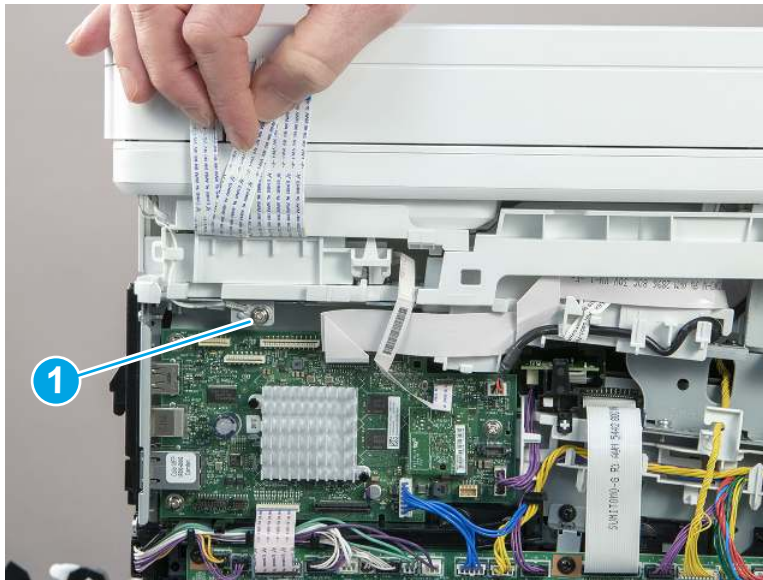
1. On the left side of the printer, disconnect three connectors (callout 1).

Figure 5-2013 Disconnect three connectors



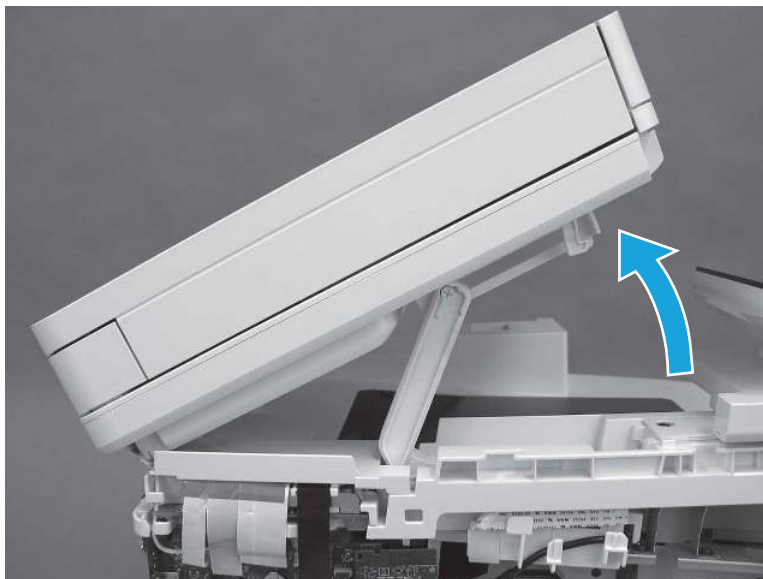
2. Raise the scanner cables up, and then remove one screw (callout 1) to release the ground wire.

**Figure 5-2014** Remove one screw and release the ground wire



3. Raise the scanner.

**Figure 5-2015** Raise the scanner



4. With the scanner lifted, release the tab (callout 1) on the scanner support arm pin from the slot and rotate the pin in the direction indicated.

**Figure 5-2016** Release scanner support arm pin



5. Remove the scanner arm pin.

---

**CAUTION:** Once the scanner arm pin is removed, support the scanner with one hand at all times so that it does not fall backwards off of the printer.

---

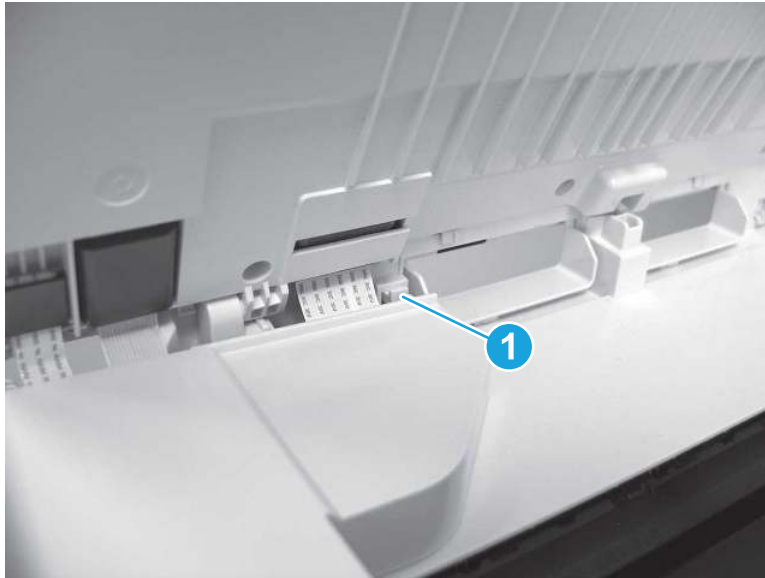
**Figure 5-2017** Remove the pin





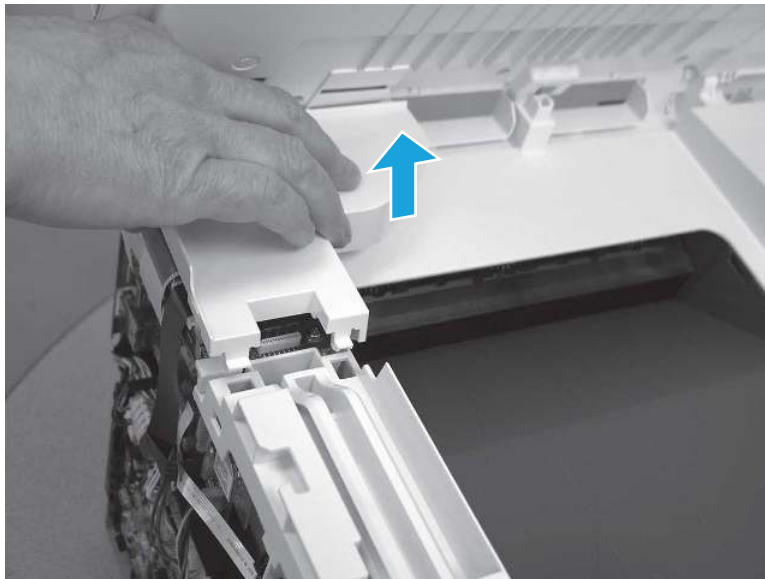
6. On the top of the printer, use a flat-blade screwdriver to release one tab (callout 1).

**Figure 5-2018** Release one tab



7. Remove the scanner cable cover.

**Figure 5-2019** Remove the scanner cable cover



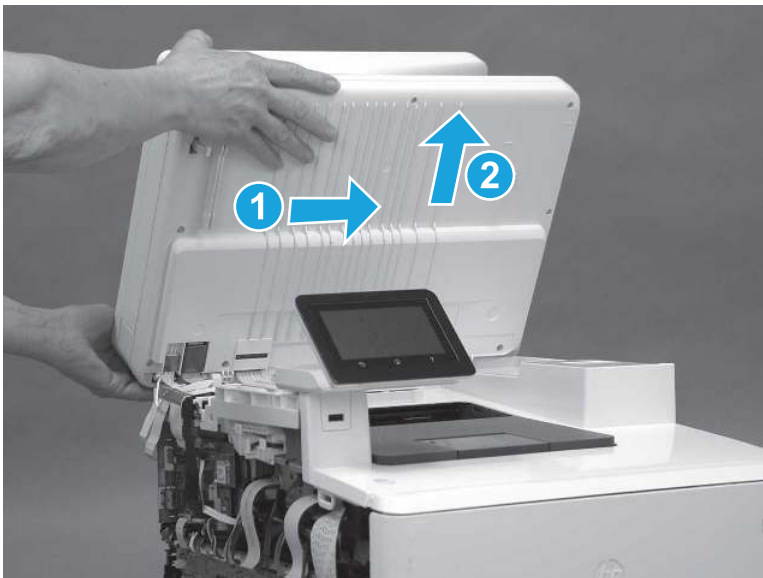
8. The scanner cables (callout 1) are held in place on the top cover with double-sided tape. Carefully release the cables from the top cover.

**Figure 5-2020** Release the cables



9. Open the scanner assembly fully, slide the assembly toward the right side of the printer, and then lift the assembly off of the printer.

**Figure 5-2021** Remove the scanner assembly

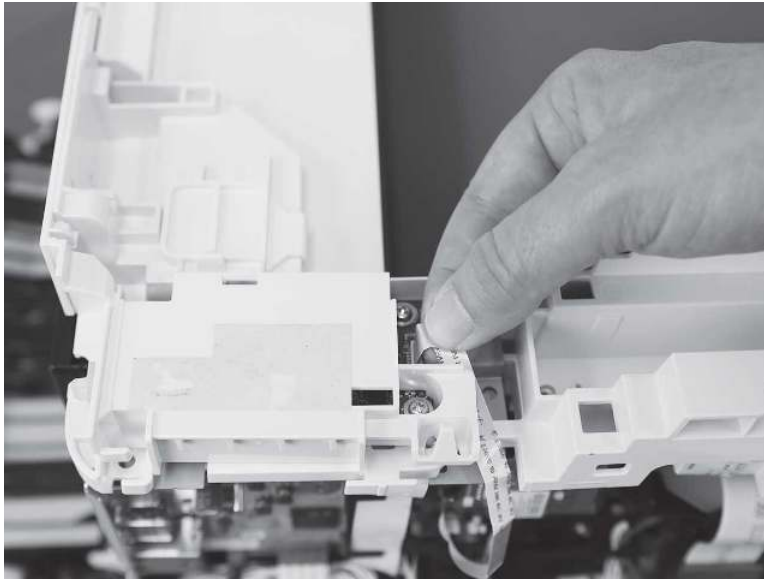


## 7. Remove the fax PCA (MFP)

Follow these steps to remove the fax PCA (MFP).

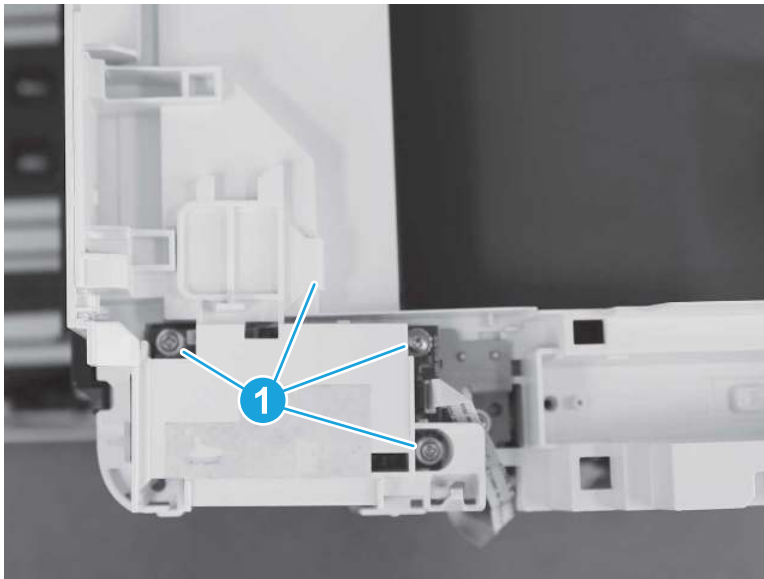
1. Disconnect one FFC cable from fax PCA.

**Figure 5-2022** Disconnect one connector



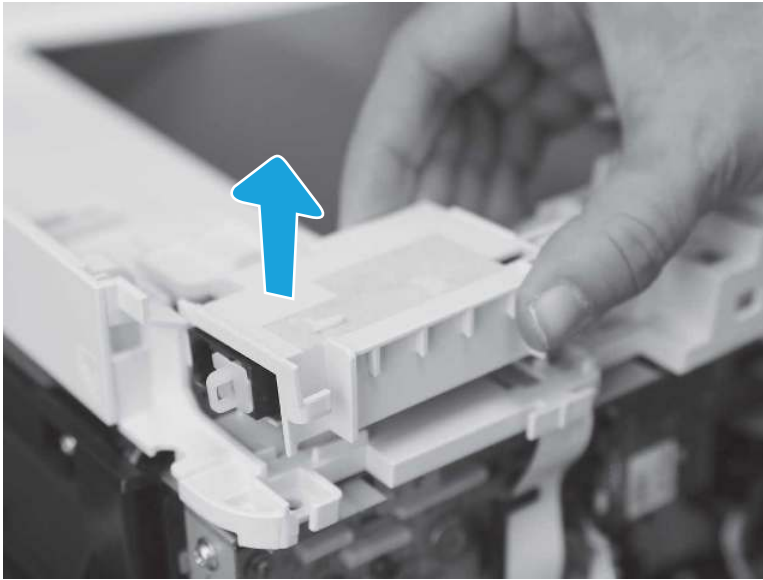
2. Remove three screws and release one tab (callout 1).

**Figure 5-2023** Remove three screws and release one tab



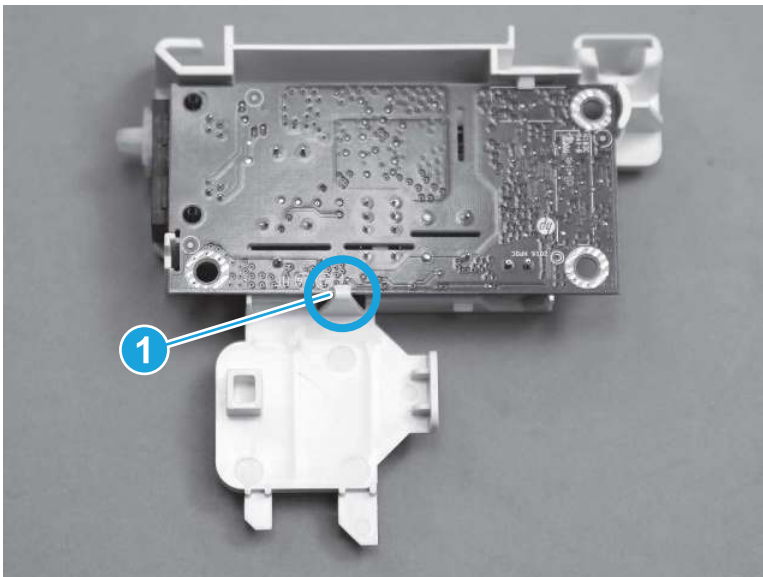
- Lift up to remove the fax PCA.

**Figure 5-2024** Lift up to remove the fax PCA



- Optional step:** Release the tab (callout 1) on the back of the fax PCA to remove the PCA from the plastic holder.

**Figure 5-2025** Release one tab on the back of the fax PCA

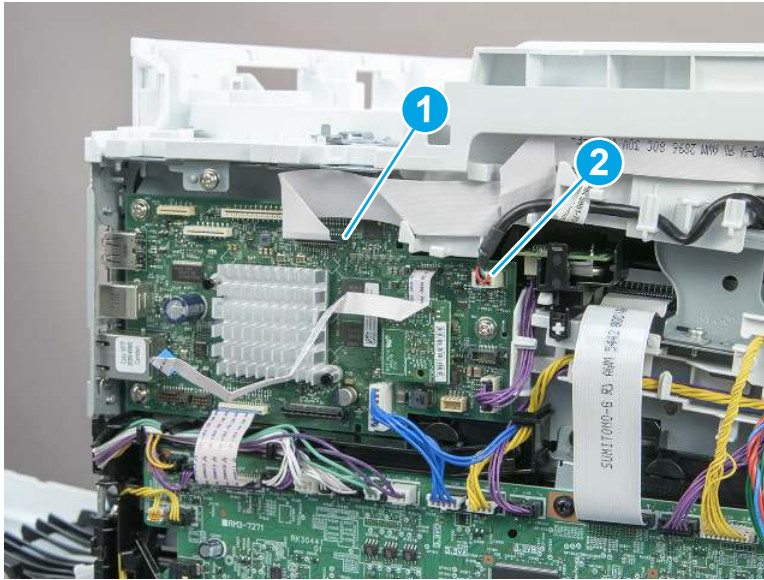


## 8. Remove the top cover (MFP)

Follow these steps to remove the top cover (MFP).

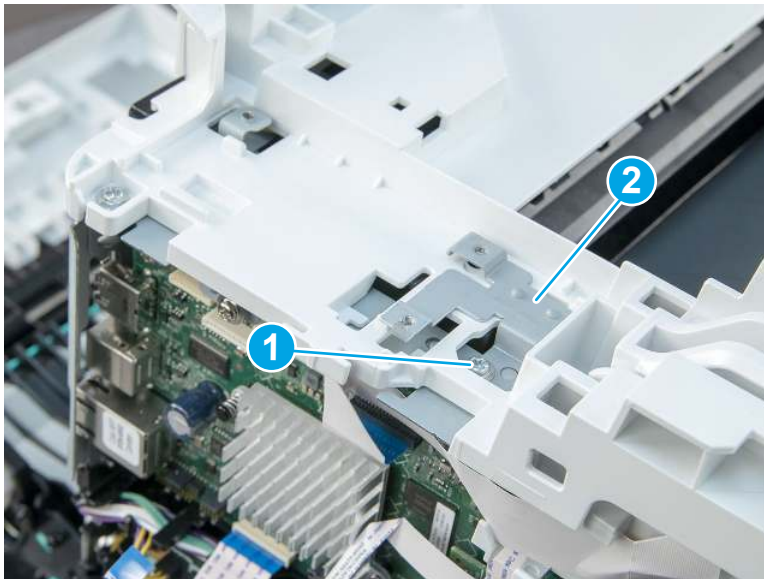
1. Disconnect one FFC (callout 1) and one connector (callout 2).

**Figure 5-2026** Disconnect one FFC and one connector



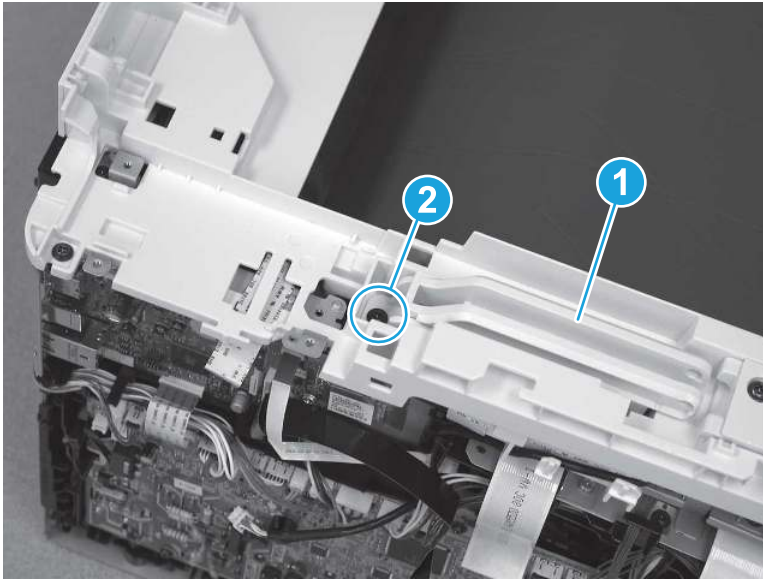
2. On the top cover, remove one screw (callout 1) and the sheet metal plate (callout 2).

**Figure 5-2027** Remove one screw and the sheet metal plate



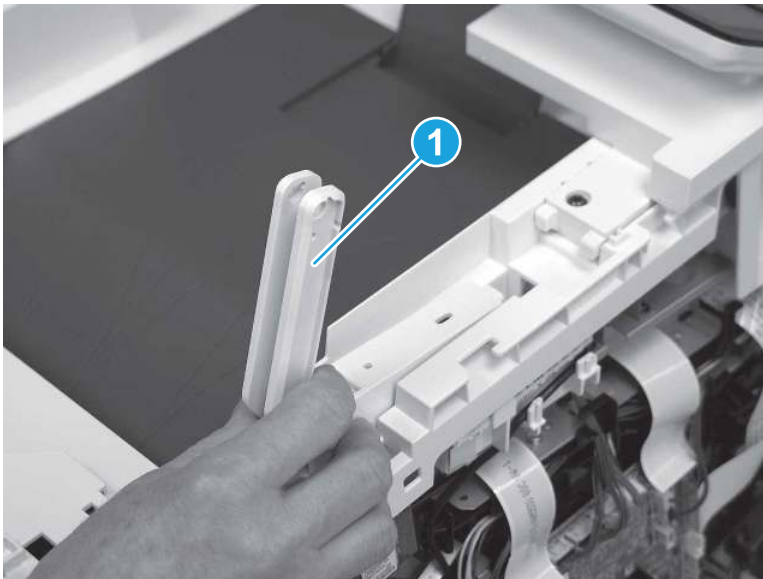
3. At the top of the printer, lower the scanner support arm (callout 1), and then remove one screw (callout 2).

**Figure 5-2028** Lower the support arm and remove one screw



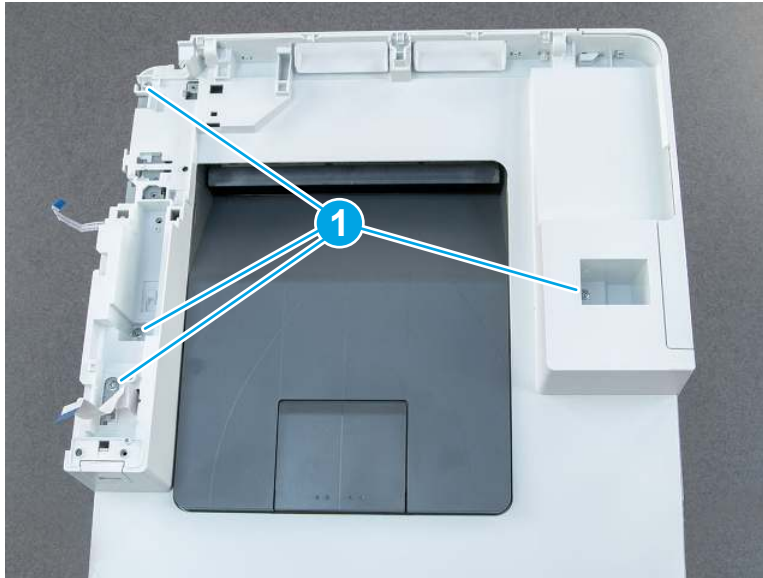
4. Remove the scanner support arm (callout 1).

**Figure 5-2029** Remove the scanner support arm



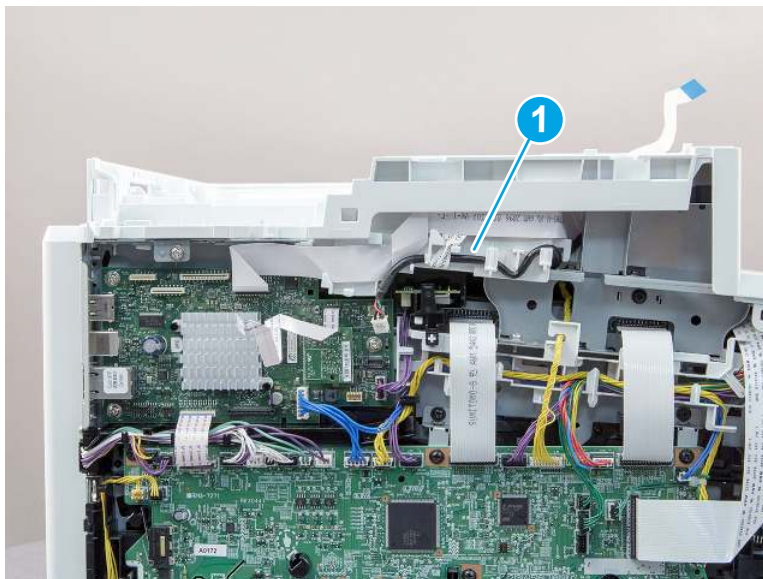
5. At the top of the printer, remove four screws (callout 1).

Figure 5-2030 Remove four screws



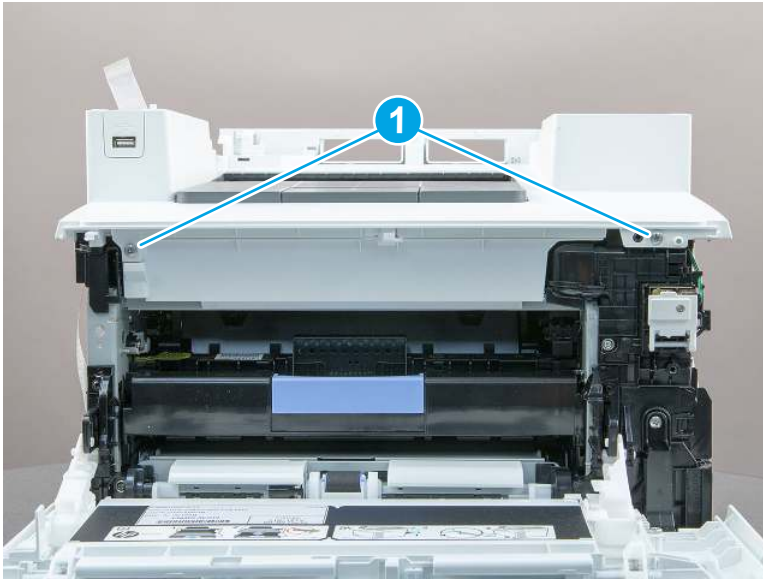
6. Remove the USB cable (callout 1) from the cable guides.

Figure 5-2031 Release the USB cable



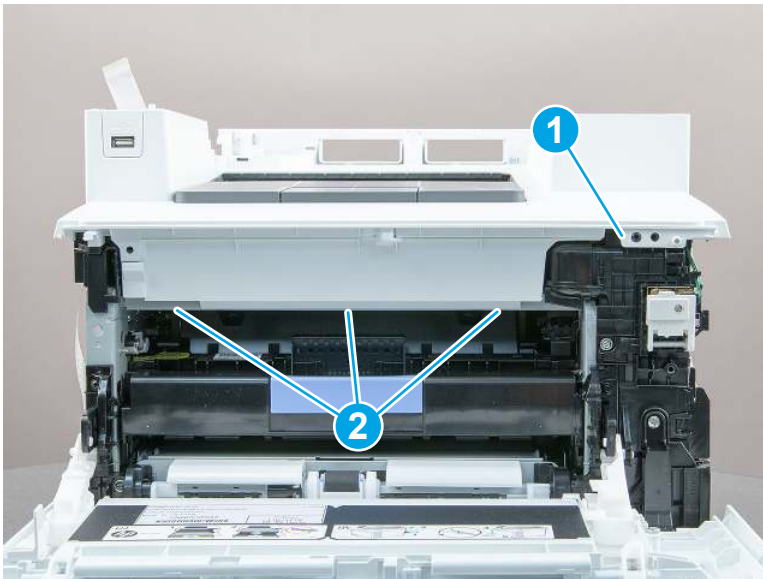
7. At the front of the printer, remove two screws (callout 1).

Figure 5-2032 Remove two screws



8. Release one retainer (callout 1), and then release three tabs (callout 2).

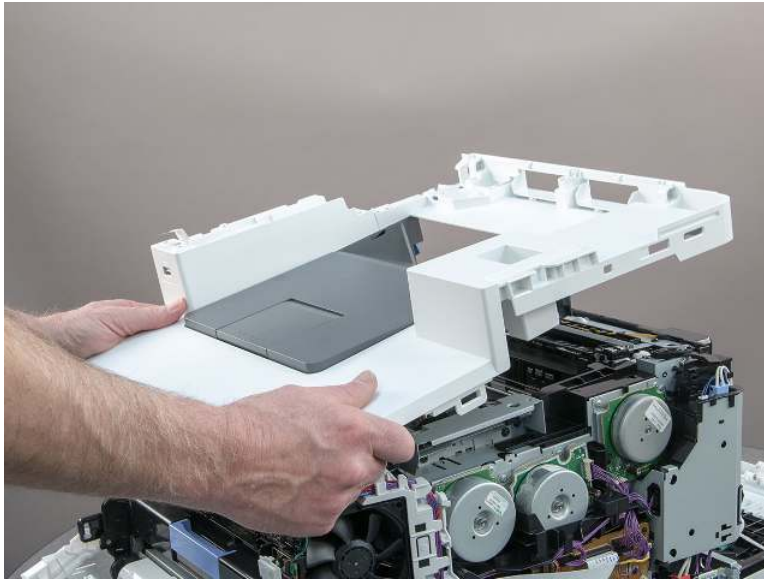
Figure 5-2033 Release one retainer and three tabs





9. Remove the top cover.

**Figure 5-2034** Remove the top cover



## 9. Remove the walk-up USB port (MFP)

Follow these steps to remove the walk-up USB port (MFP).

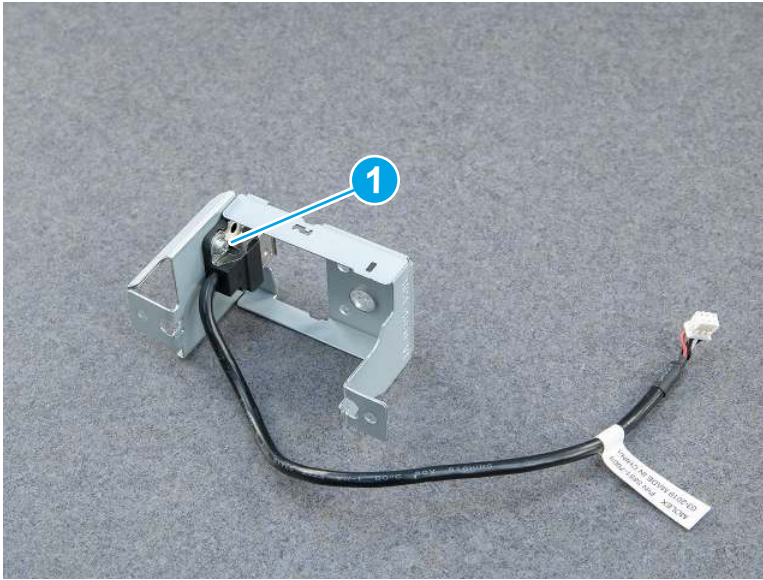
1. Turn the top cover over, release the metal tab, and then lift up on the metal bracket to remove the USB port.

**Figure 5-2035** Release the metal tab and lift to remove the USB



2. Remove one screw (callout 1), and then separate the USB connector from the bracket.

**Figure 5-2036** Remove one screw and remove the USB connector



## 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.

## Removal and replacement: Drawer connector (550-sheet paper feeder)

Learn how to remove and replace the drawer connector.

[View a video of removing and replacing the drawer connector.](#)

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](http://www.hp.com/buy/parts).

**Table 5-57** Part information

Part number	Part description
VS1-7258-007CN	Connector, drawer

## 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 Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-2037** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

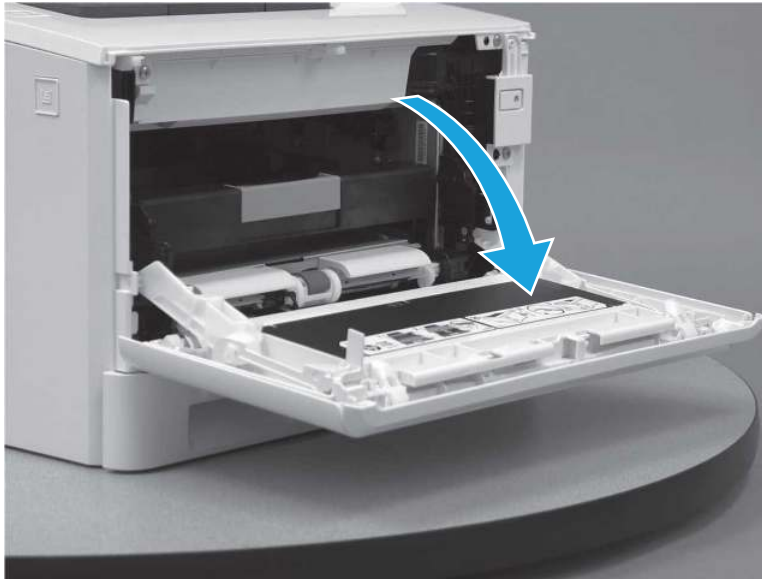
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-2038** Release the front door



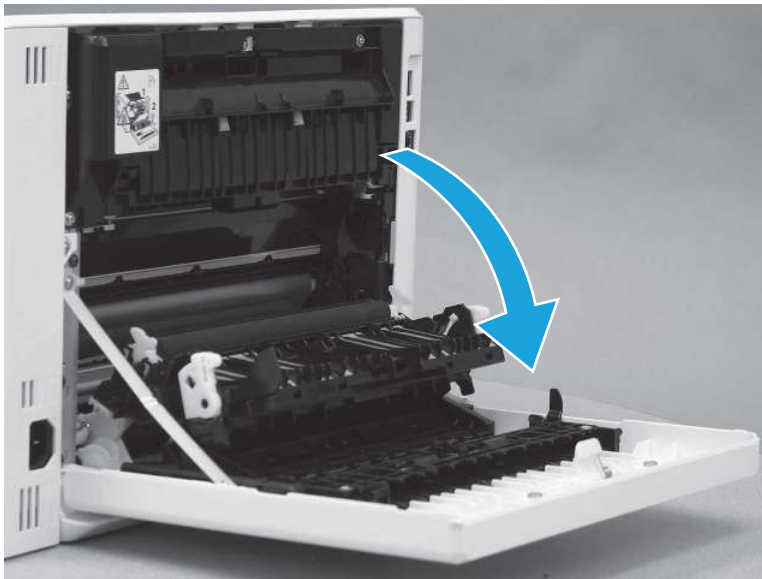
2. Open the front door.

**Figure 5-2039** Open the front door



3. Open the duplexing door.

**Figure 5-2040** Open the duplexer door

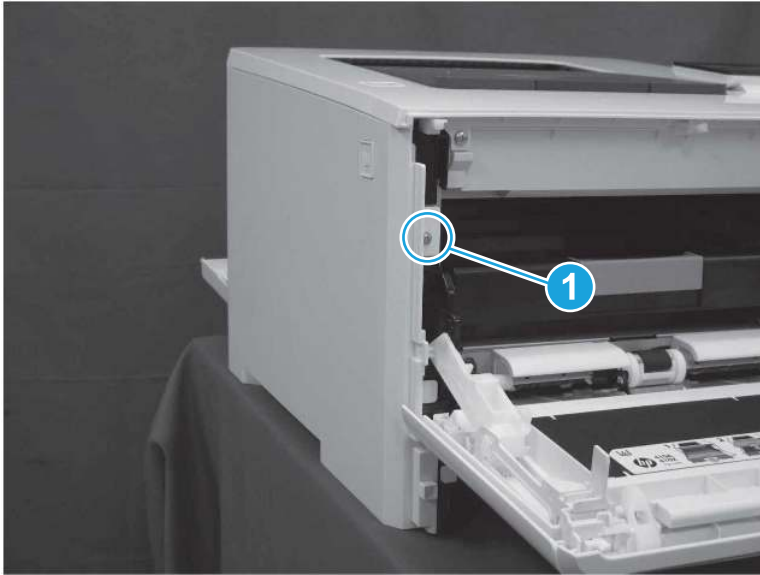


### 3. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

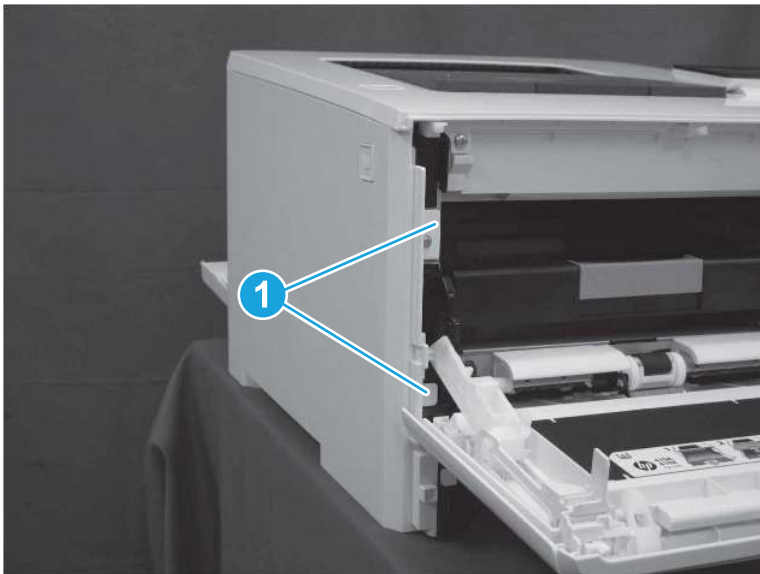
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-2041** Remove one screw



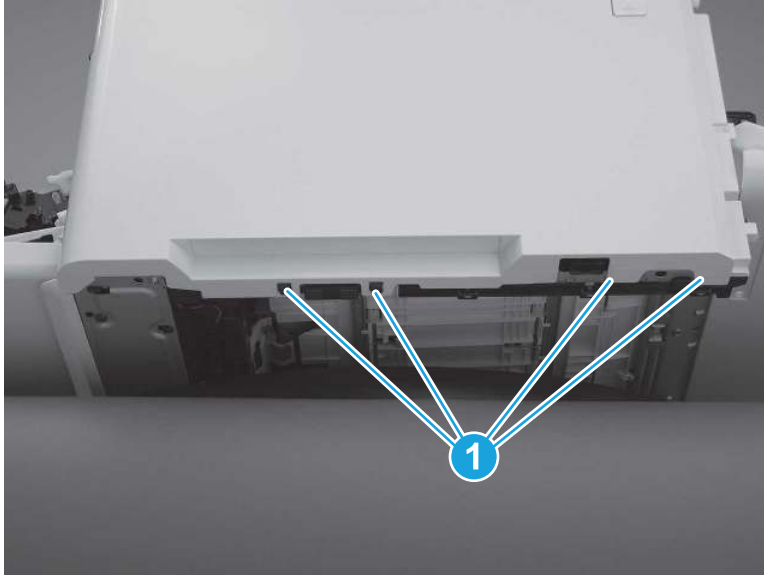
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-2042** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-2043** Locate the tabs



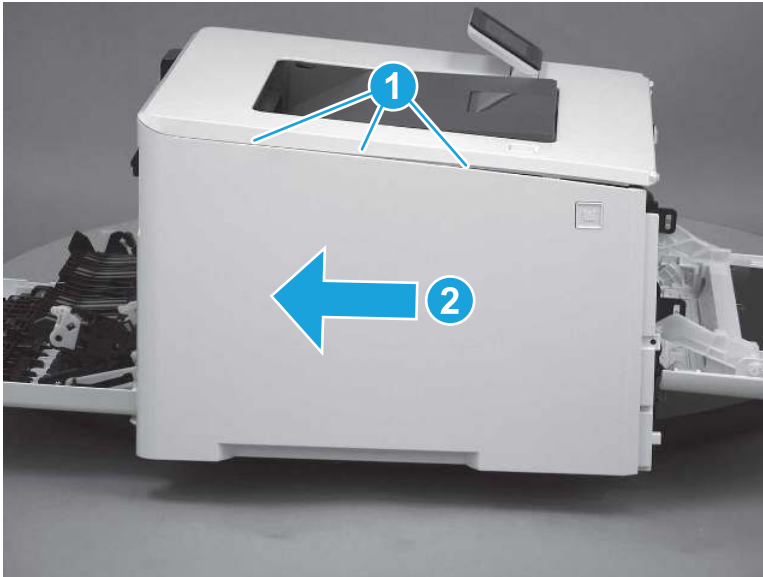
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-2044** Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

**Figure 5-2045** Release three tabs



#### 4. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

1. Raise the scanner.

**Figure 5-2046** Raise the scanner





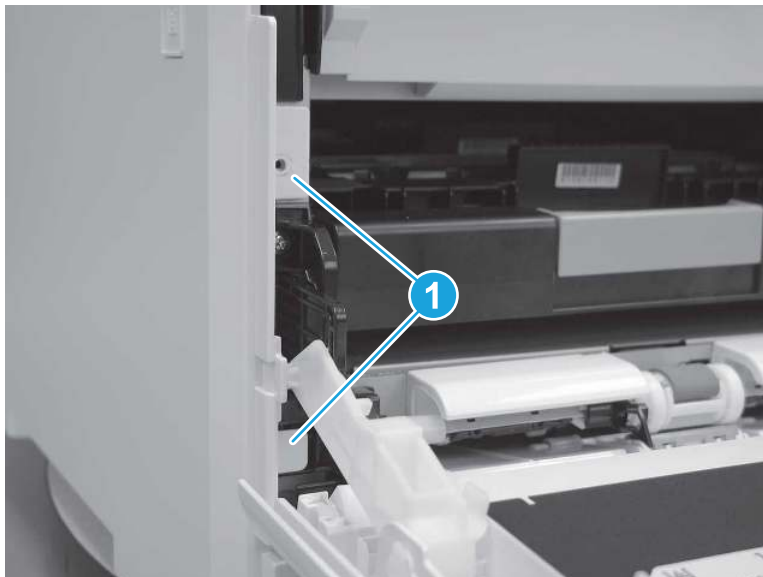
2. At the front of the printer, remove one screw (callout 1).

**Figure 5-2047** Remove one screw



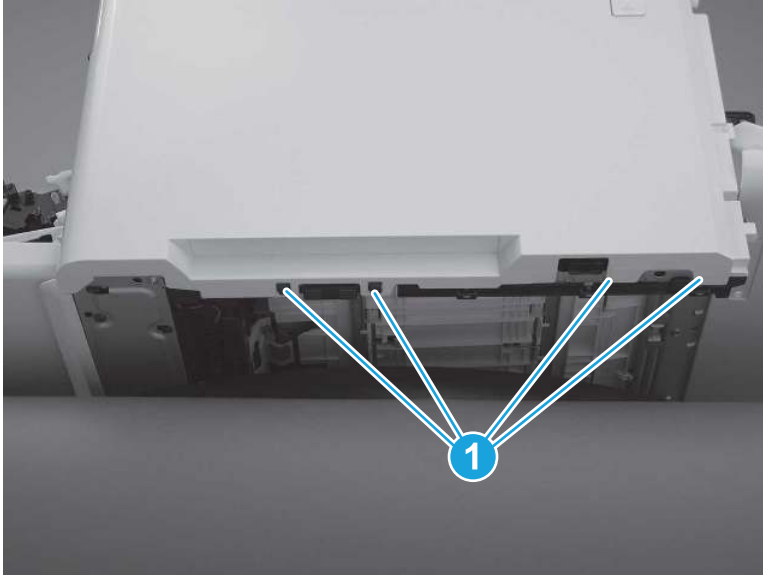
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-2048** Release two tabs



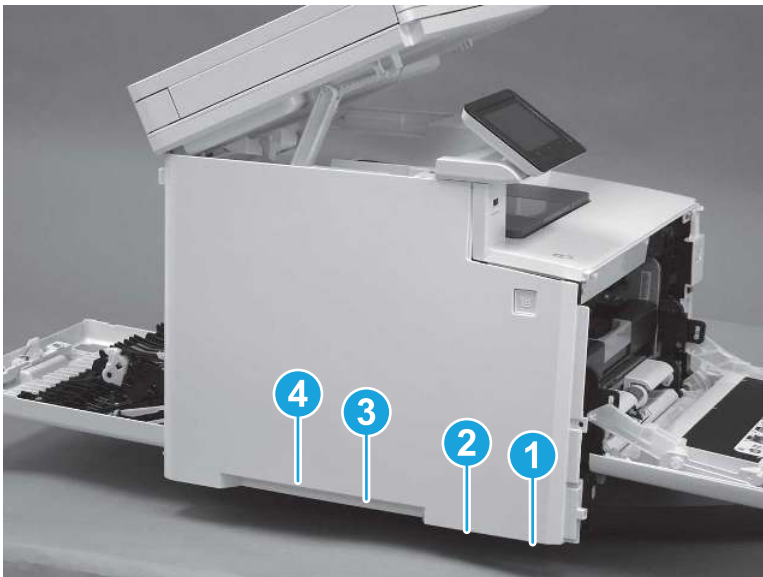
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-2049** Locate the tabs



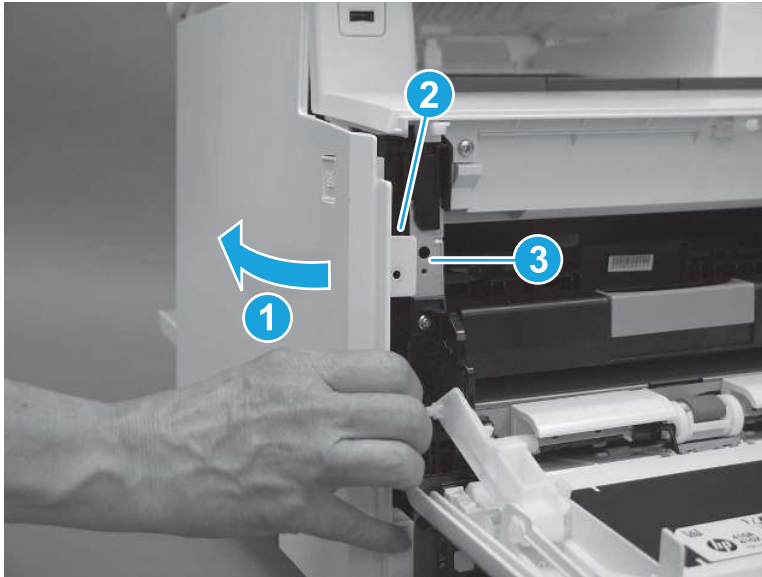
5. Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-2050** Release four tabs



6. Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

**Figure 5-2051** Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-2052** Release one tab and two hooks



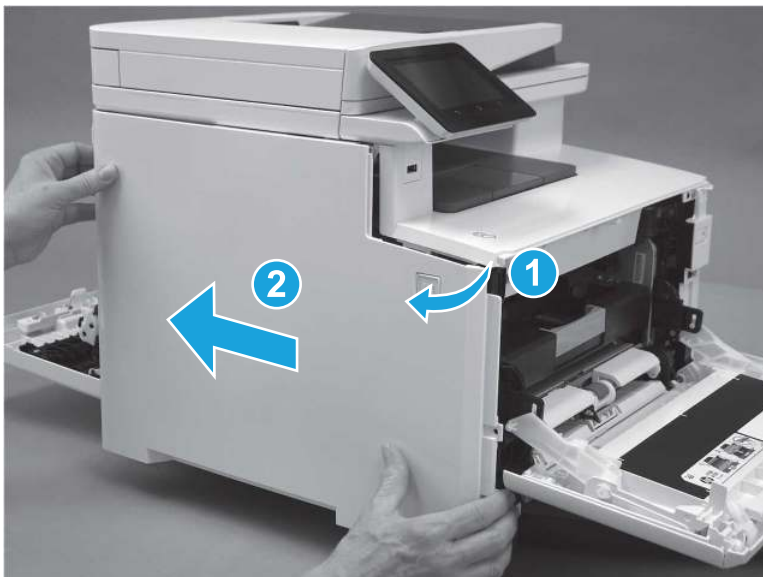
8. Lower the scanner.

Figure 5-2053 Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

Figure 5-2054 Remove the left cover

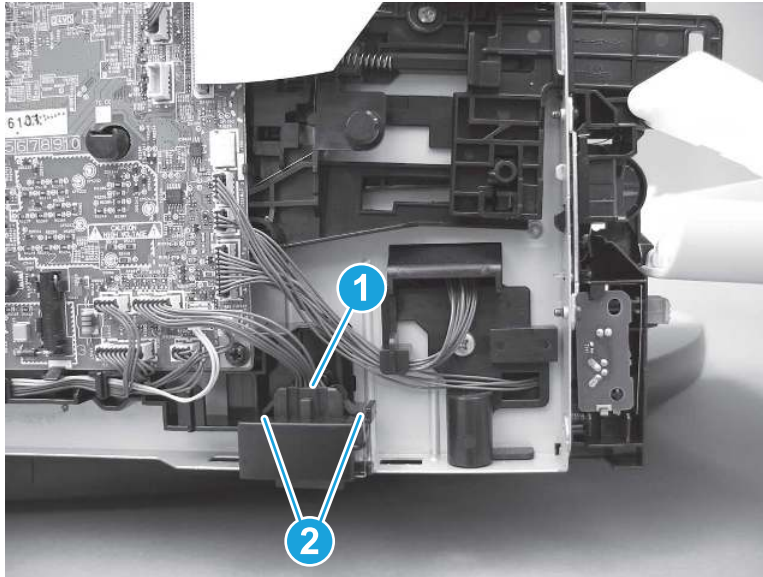


## 5. Remove the drawer connector

Follow these steps to remove the drawer connector.

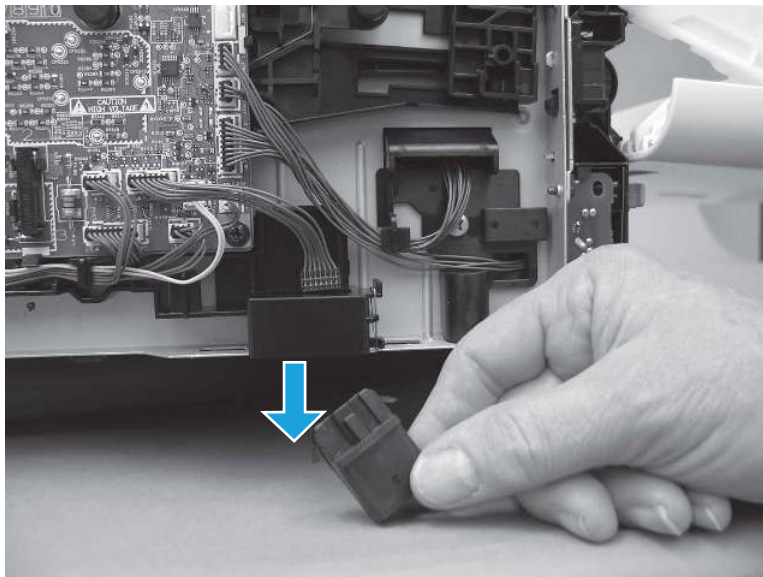
1. Slide the printer slightly over the edge of the work surface in order to access the connector location. On the left side of the printer, disconnect one connector (callout 1), and then release two tabs (callout 2).

**Figure 5-2055** Disconnect one connector and release two tabs



2. Remove the drawer connector.

**Figure 5-2056** Remove the drawer connector



## 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: Front door switch

Learn how to remove and replace the front door switch (SW7).

[View a video of removing and replacing the front door switch.](#)


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](http://www.hp.com/buy/parts).

**Table 5-58** Part information

Part number	Part description
RK2-0534-000CN	Door open switch (SW7, SW501)

### 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


Make sure that the printer initializes to a **Ready** state.

## 1. Remove Tray 2

Follow these steps to remove Tray 2.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

---

 **NOTE:** Removing the tray is the same for SFP and MFP printers.

---

**Figure 5-2057** Remove the tray



## 2. Open the front door and duplexing door

Follow these steps to open the front door and duplexing door.

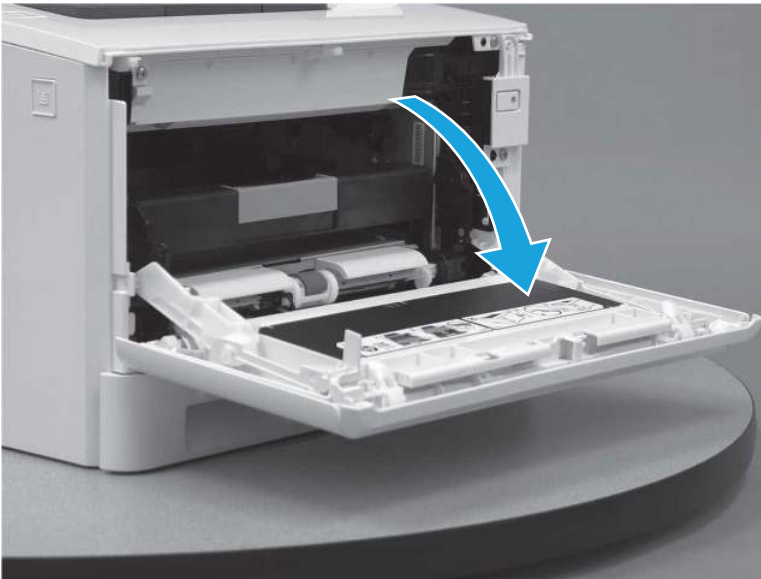
1. Press the button (callout 1) on the left side of the printer to release the front door.

**Figure 5-2058** Release the front door



2. Open the front door.

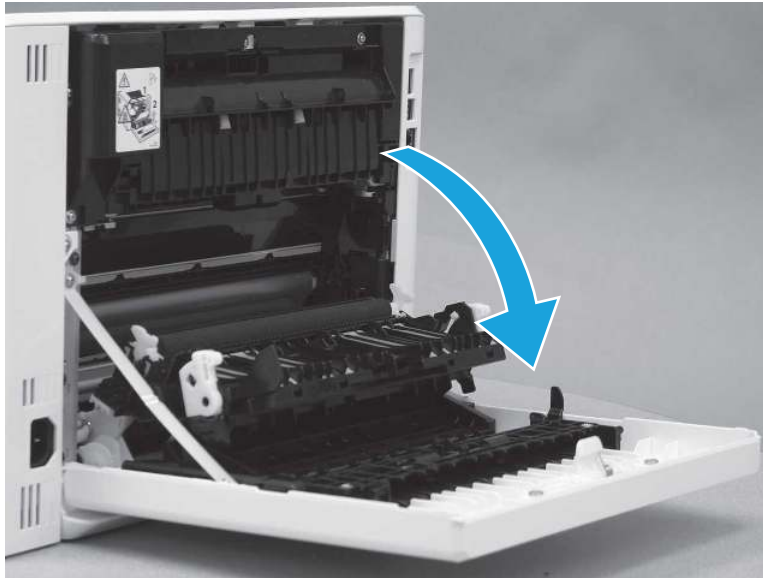
**Figure 5-2059** Open the front door





3. Open the duplexing door.

**Figure 5-2060** Open the duplexer door

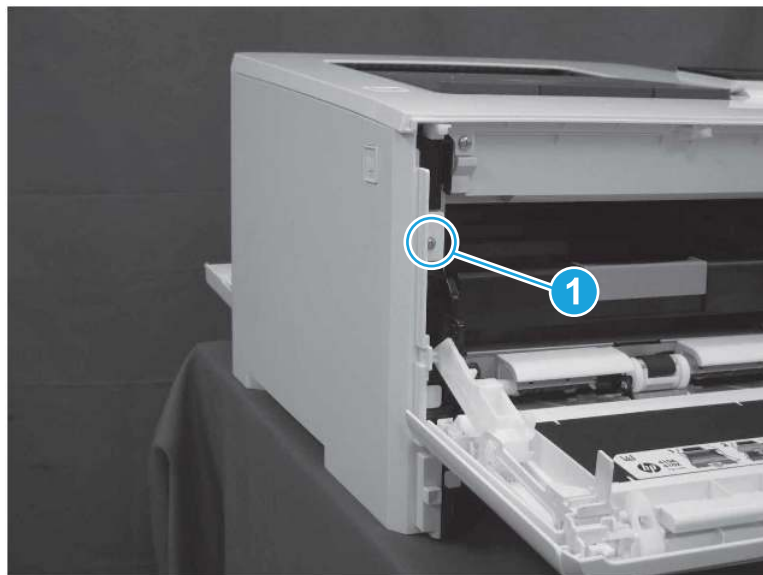


### 3. Remove the left cover (SFP)

Follow these steps to remove the left cover (SFP).

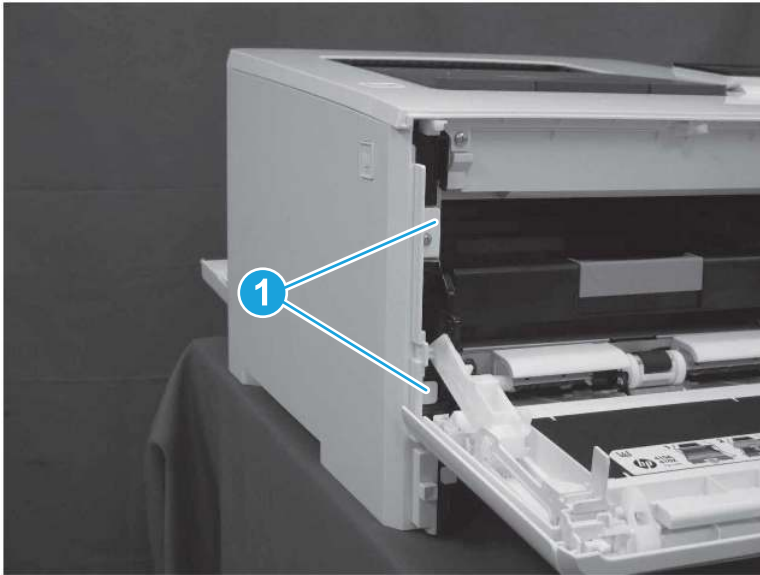
1. At the front of the printer, remove one screw (callout 1).

**Figure 5-2061** Remove one screw



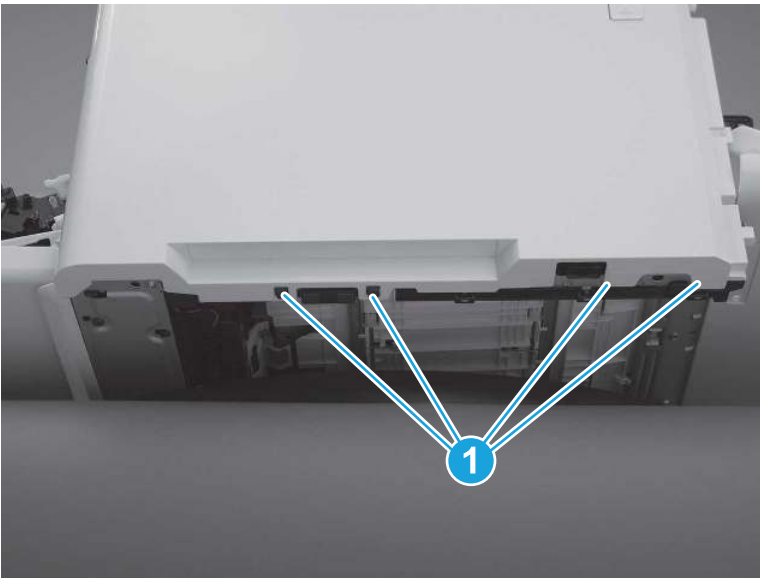
2. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from reengaging.

**Figure 5-2062** Release two tabs



3. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-2063** Locate the tabs



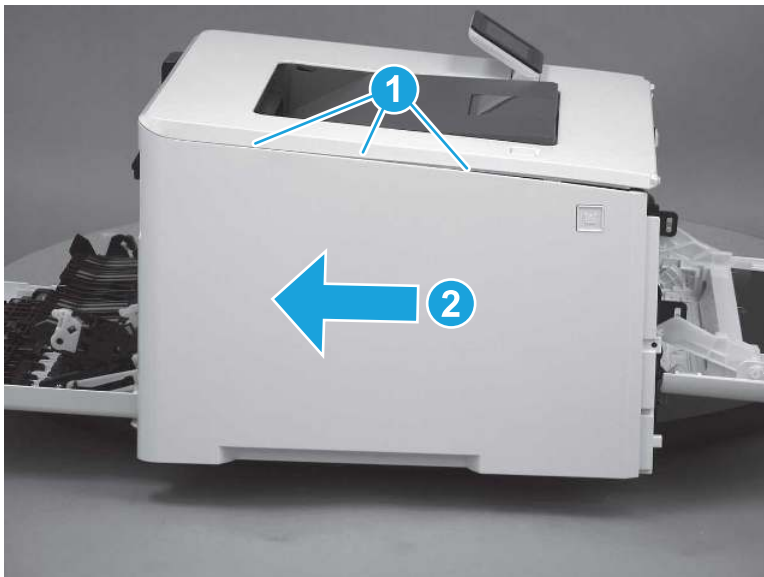
4. Beginning from the front of the cover, release four tabs (callouts 1-4) on the lower edge of the cover.

Figure 5-2064 Release bottom tabs



5. Release three tabs at the top of the cover (callout 1), and then slide the cover toward the rear of the printer to remove it.

Figure 5-2065 Release three tabs



#### 4. Remove the left cover (MFP)

Follow these steps to remove the left cover (MFP).

1. Raise the scanner.

Figure 5-2066 Raise the scanner



2. At the front of the printer, remove one screw (callout 1).

Figure 5-2067 Remove one screw



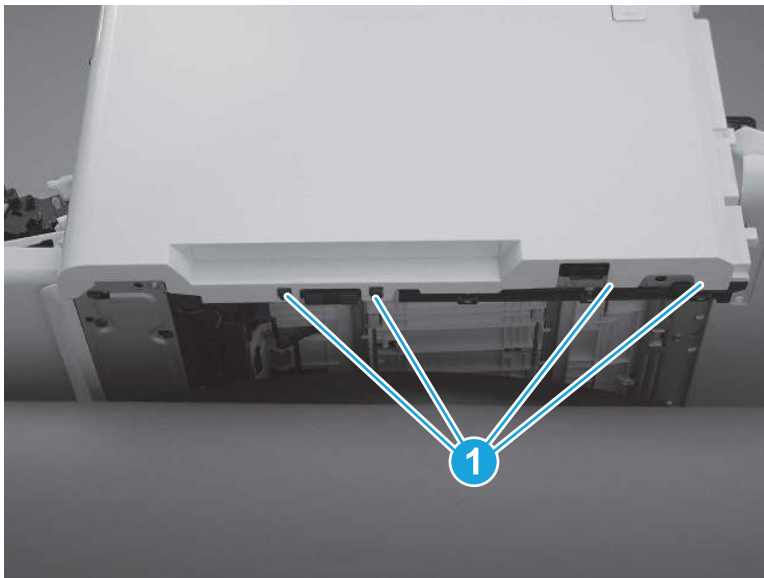
3. Release two tabs (callout 1) at the front of the cover. Hold the cover open to prevent the tabs from re-engaging.

**Figure 5-2068** Release two tabs



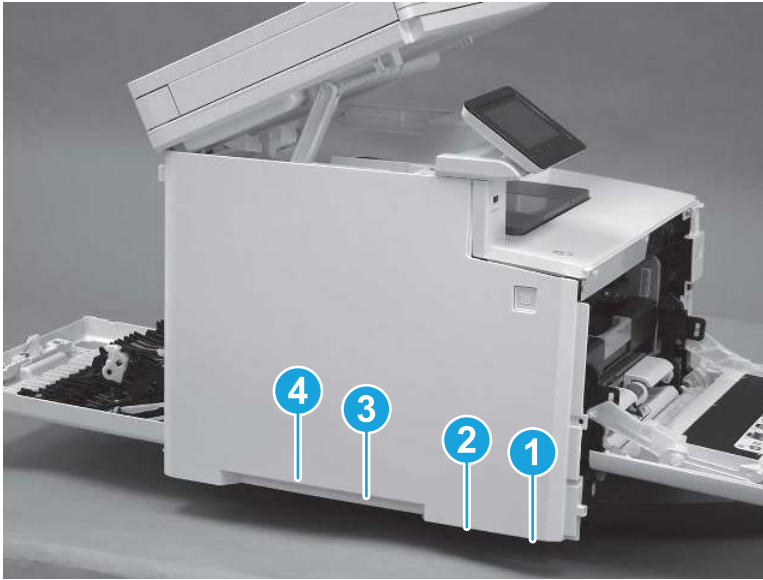
4. Slide the printer to the edge of a work surface. Note the location of the tabs on the lower edge of the cover (callout 1).

**Figure 5-2069** Locate the tabs



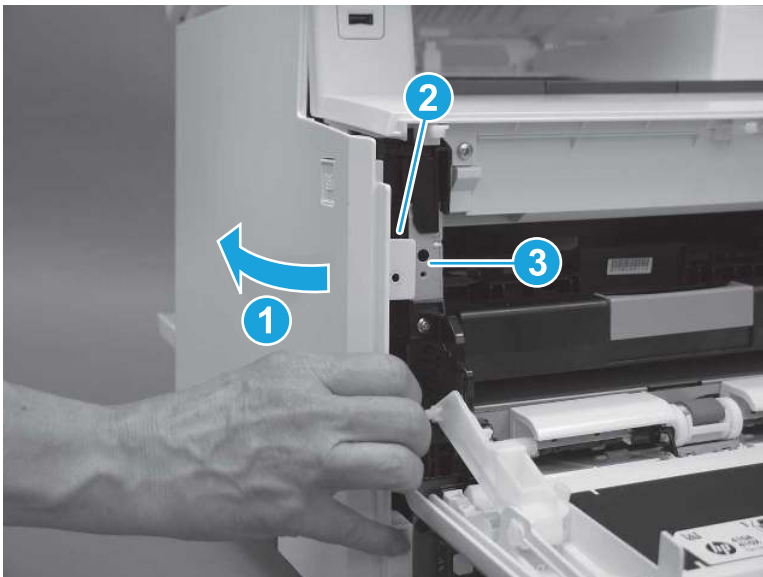
- Beginning from the front of the cover, release the four tabs (callouts 1-4) on the lower edge of the cover.

**Figure 5-2070** Release four tabs



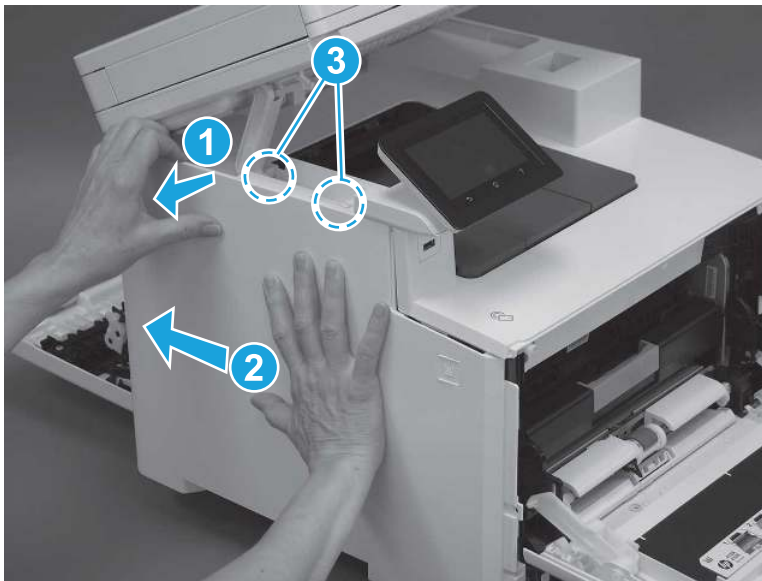
- Rotate the front of the cover away from the printer (callout 1). Make sure that the tab (callout 2) does not get caught on the printer frame (callout 3).

**Figure 5-2071** Rotate the cover



7. At the top of the printer, slightly pull the top of the cover away from the printer to release one retention tab (callout 1) on the inside of the cover. While holding the cover away, slide the cover toward the back of the printer (callout 2) to release two hooks (callout 3) inside the cover.

**Figure 5-2072** Release one tab and two hooks



8. Lower the scanner.

**Figure 5-2073** Lower the scanner



9. Rotate the cover away from the printer (callout 1), and then slide the cover (callout 2) toward the back of the printer to remove it.

Figure 5-2074 Remove the left cover

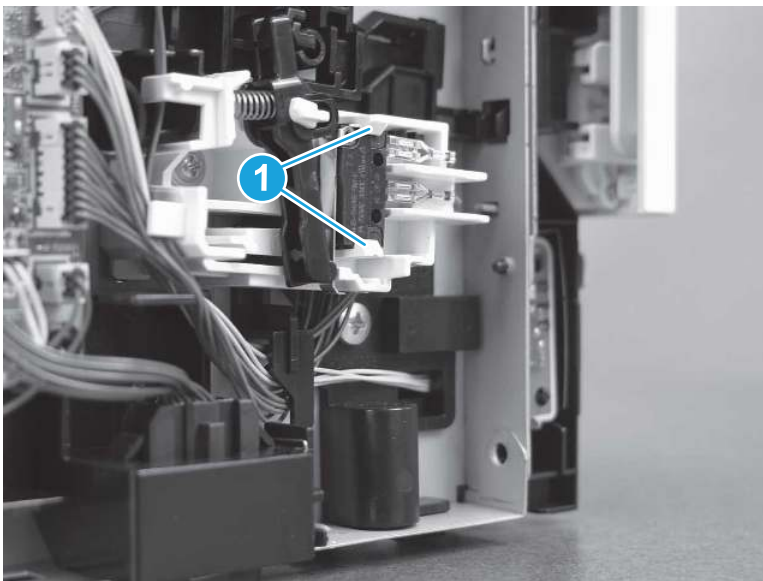


## 5. Remove the front door switch

Follow these steps to remove the front door switch.

1. On the left side of the printer, release two tabs on the front door switch (callout 1).

Figure 5-2075 Release two tabs



2. Separate the front door switch from the printer.

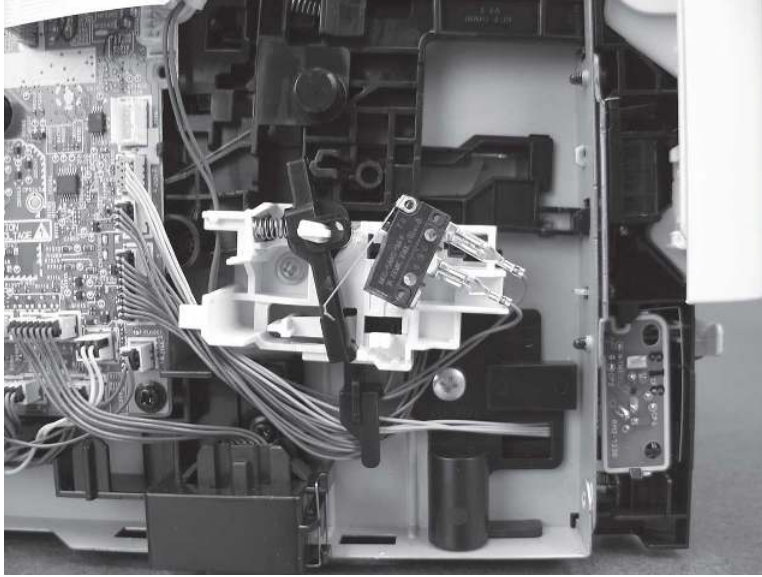
---

**⚠ CAUTION:** Do not attempt to completely remove the switch. It is still connected to the printer by wire harnesses.

---

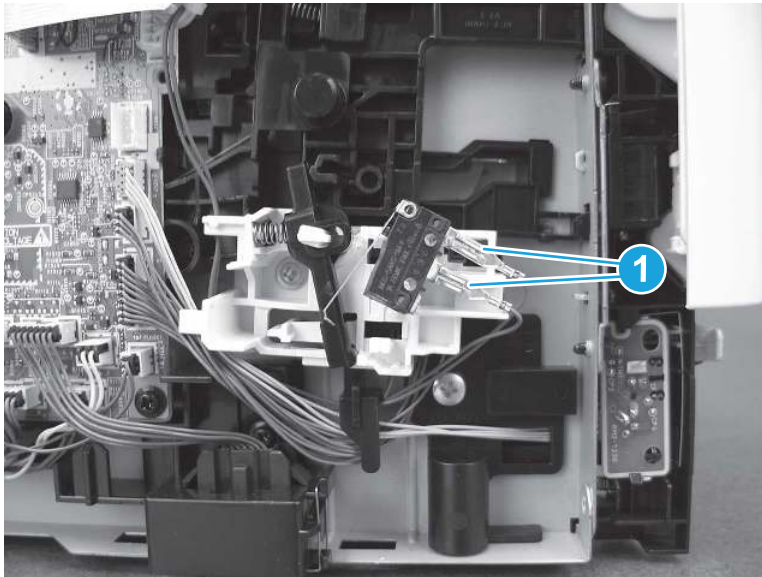


Figure 5-2076 Release the switch



3. Disconnect two connectors, and then remove the front door switch.

Figure 5-2077 Remove the switch



## 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: 550-sheet paper feeder

Learn how to remove and replace the 550-sheet paper feeder parts and assemblies.

### Removal and replacement: Right cover (550-sheet paper feeder)

Learn how to remove and replace the right cover for the 550-sheet paper feeder.

[View a video of how to remove and replace the 550-sheet paper feeder right cover.](#)

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](http://www.hp.com/buy/parts).

**Table 5-59** Part information

Part number	Part description
Not orderable	Cover, right (550-sheet paper feeder)

#### Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

## After performing service

### Turn the printer power on

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

## Post service test

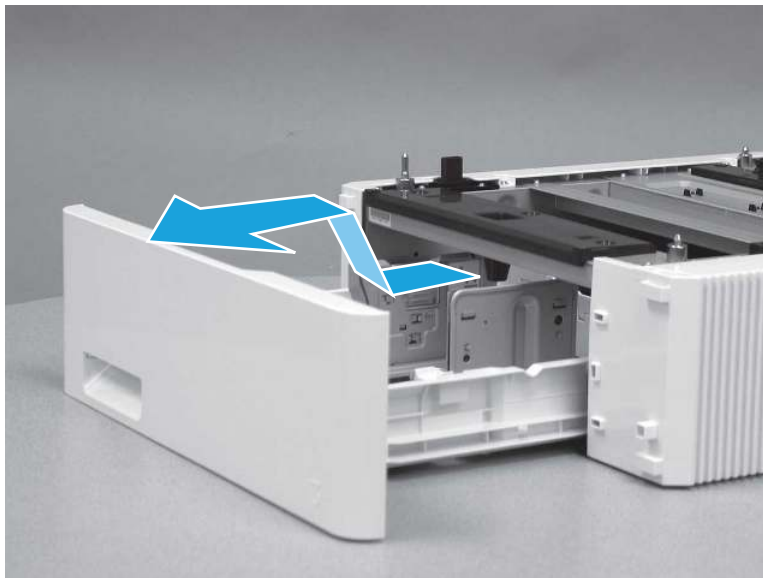
No post service test is available for this assembly.

## 1. Remove Tray 3

Follow these steps to remove Tray 3.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

**Figure 5-2078** Remove the tray

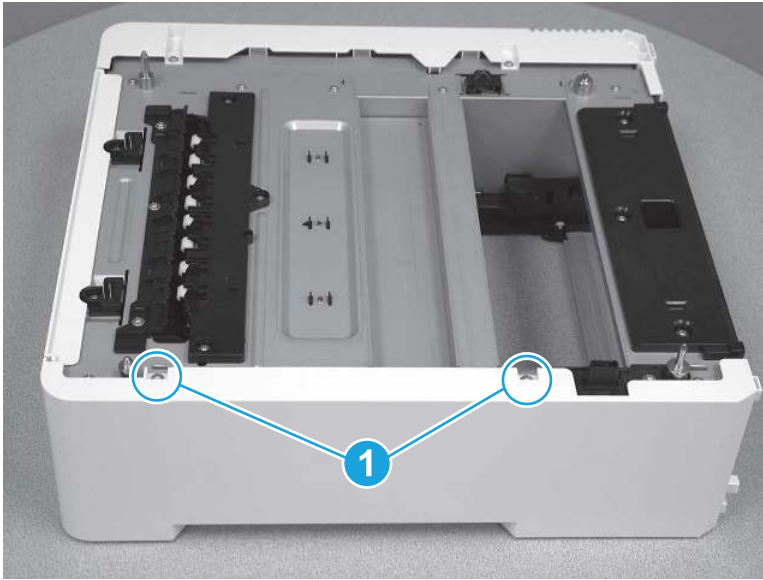


## 2. Remove the right cover (550-sheet paper feeder)

Follow these steps to remove the right cover (550-sheet paper feeder).

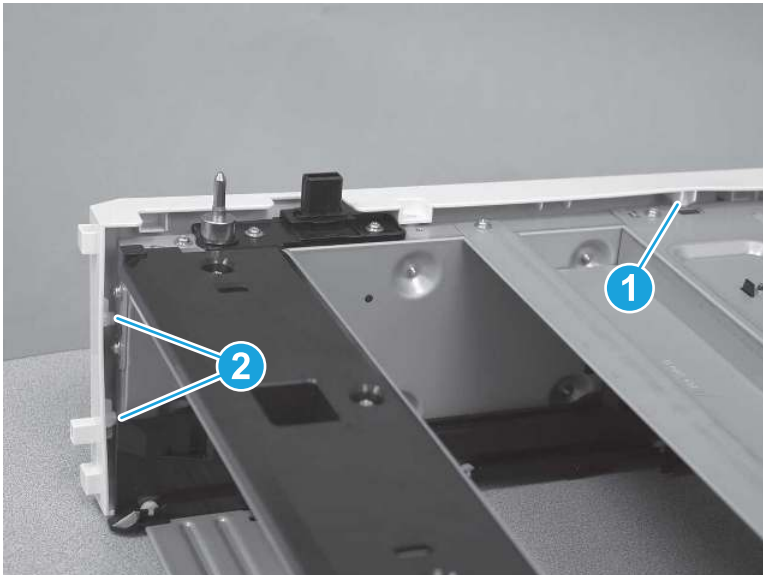
1. Remove two screws (callout 1).

Figure 5-2079 Remove two screws



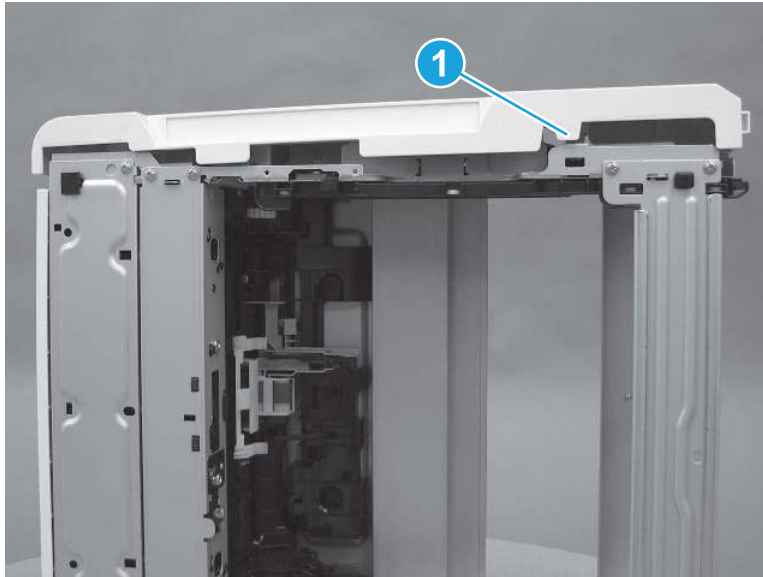
2. Release one tab (callout 1) on the top of the feeder, and then release two tabs (callout 2) at the front of the feeder.

Figure 5-2080 Release three tabs



3. Lay the feeder on the left side so that the right side is facing up, and then release one tab (callout 1) on the bottom of the feeder. Remove the right cover.

Figure 5-2081 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.

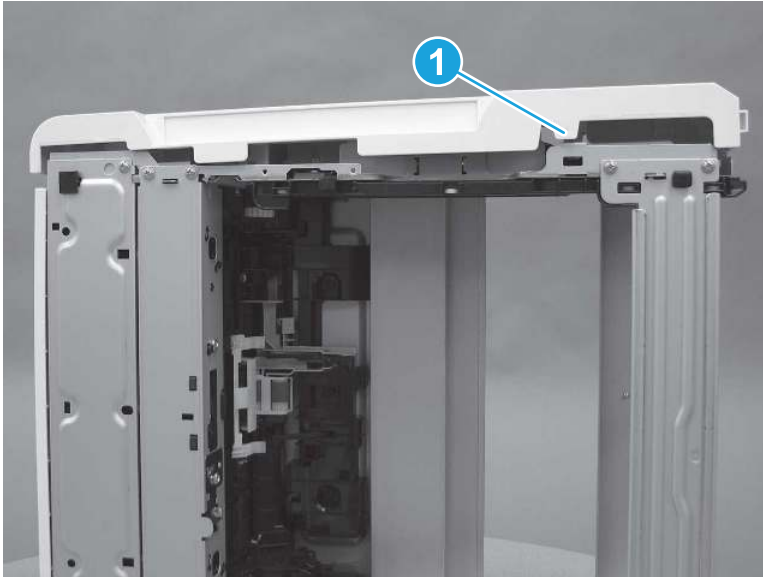
#### 4. Reverse the removal steps to install the assembly

Also use the following special installation instructions.

Right cover (550-sheet paper feeder)

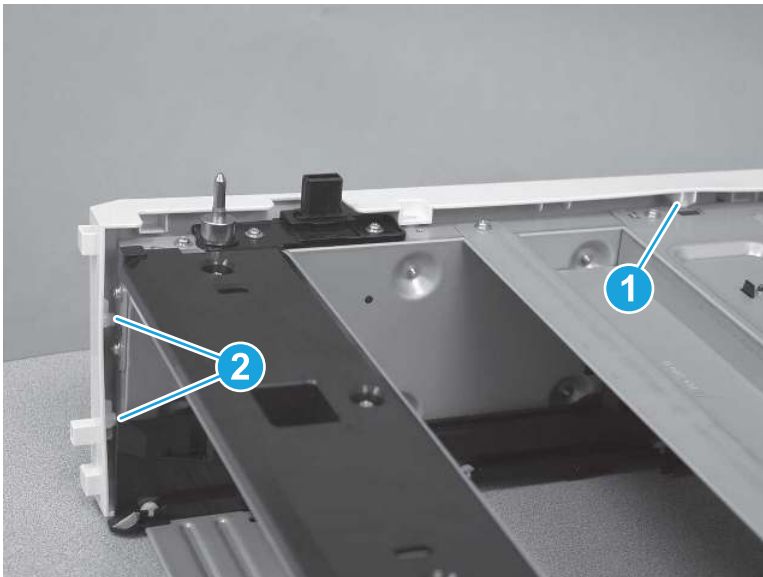
1. Lay the feeder on the left side so that the right side is facing up, and then install one tab (callout 1) on the bottom of the feeder.

**Figure 5-2082** Engage one tab



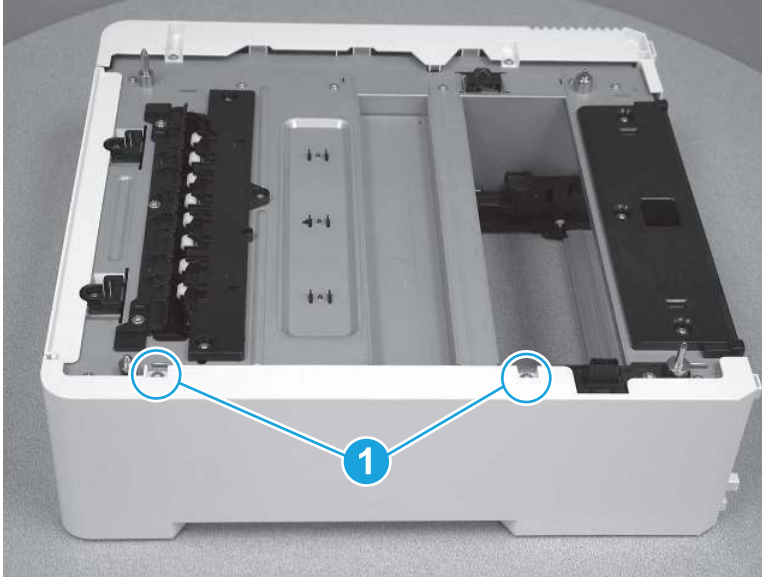
2. Turn the feeder to an upright position with the top facing up. Install one tab (callout 1) on the top of the feeder, and then install two tabs (callout 2) at the front of the feeder.

**Figure 5-2083** Engage three tabs



3. Install two screws (callout 1).

Figure 5-2084 Install two screws



## Removal and replacement: Left cover (550-sheet paper feeder)

Learn how to remove and replace the left cover for the 550-sheet paper feeder.

[View a video of how to remove and replace the 550-sheet paper feeder left cover.](#)

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](http://www.hp.com/buy/parts).

Table 5-60 Part information

Part number	Part description
Not orderable	Cover, left (550-sheet paper feeder)

### Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

### After performing service

#### Turn the printer power on

- Connect the power cable.

- Use the power switch to turn the power on.

### Post service test

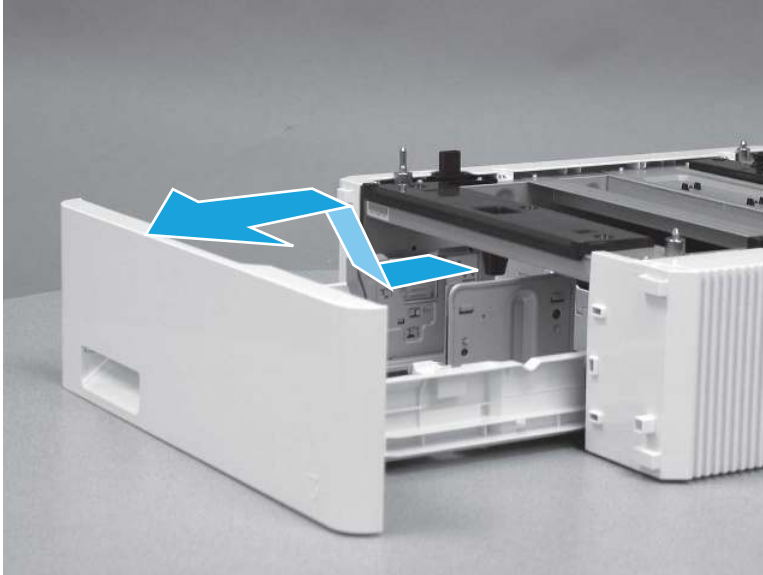
No post service test is available for this assembly.

## 1. Remove Tray 3

Follow these steps to remove Tray 3.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

**Figure 5-2085** Remove the tray



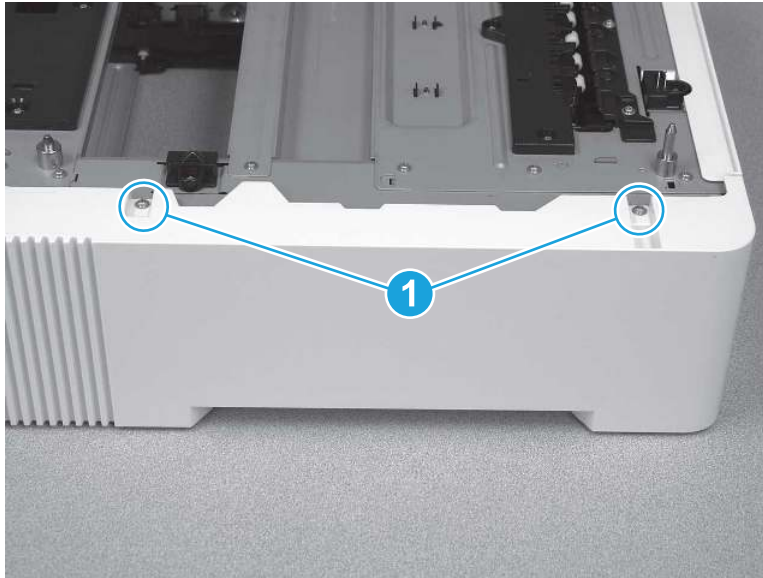
## 2. Remove the left cover (550-sheet paper feeder)

Follow these steps to remove the left cover (550-sheet paper feeder).



1. Remove two screws (callout 1).

**Figure 5-2086** Remove two screws



2. Release one tab (callout 1) on the top of the feeder.

**Figure 5-2087** Release one tab



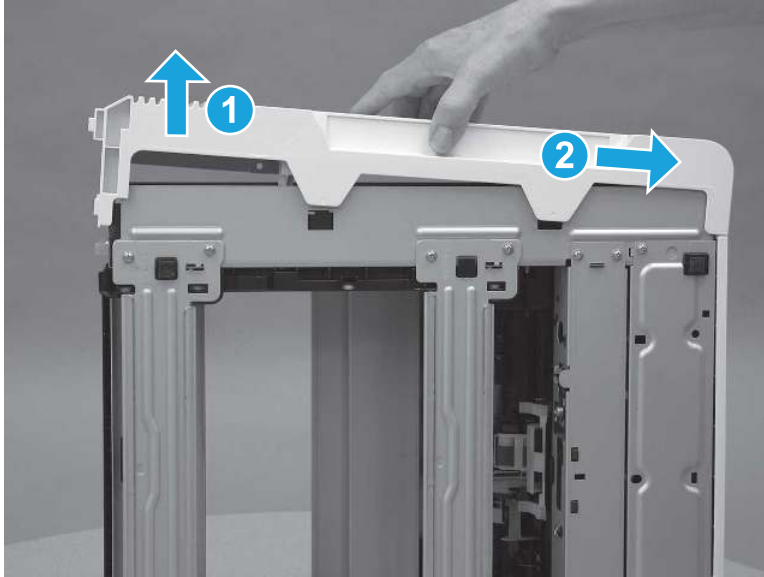
3. Lift the front of the cover up (callout 1), and then slide the cover (callout 2) toward the back of the feeder to remove it.

---

 **NOTE:** Release additional tabs as needed to remove the cover.

---

Figure 5-2088 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.

---

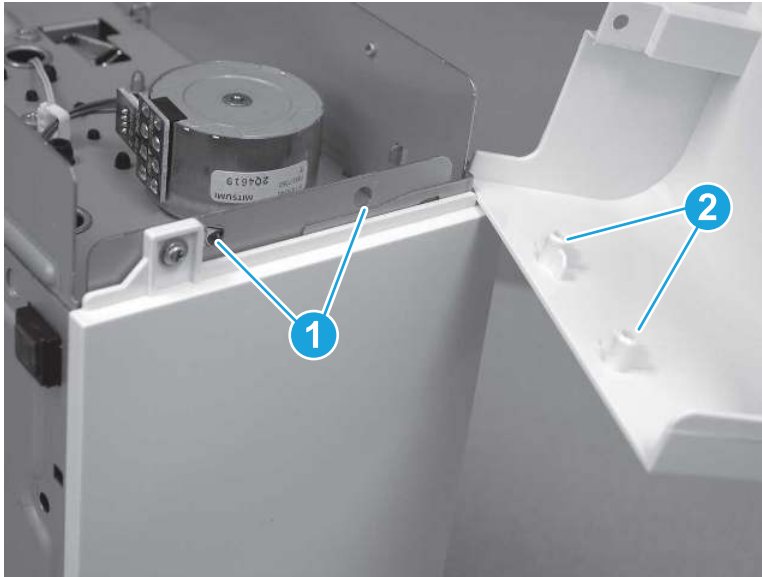
### 4. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Left cover (550-sheet paper feeder)

- ▲ Lay the feeder on the right side so that the left side is facing up. At the back of the feeder, install the tabs (callout 1) on the cover in the holes (callout 2) on the feeder.

Figure 5-2089 Install the left cover



## Removal and replacement: Rear cover (550-sheet paper feeder)

Learn how to remove and replace the rear cover for the 550-sheet paper feeder.

[View a video of how to remove and replace the 550-sheet paper feeder rear cover.](#)

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](http://www.hp.com/buy/parts).

Table 5-61 Part information

Part number	Part description
RC4-2203-000CN	Cover, rear (550-sheet paper feeder)

### Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

### After performing service

### Turn the printer power on

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

### Post service test

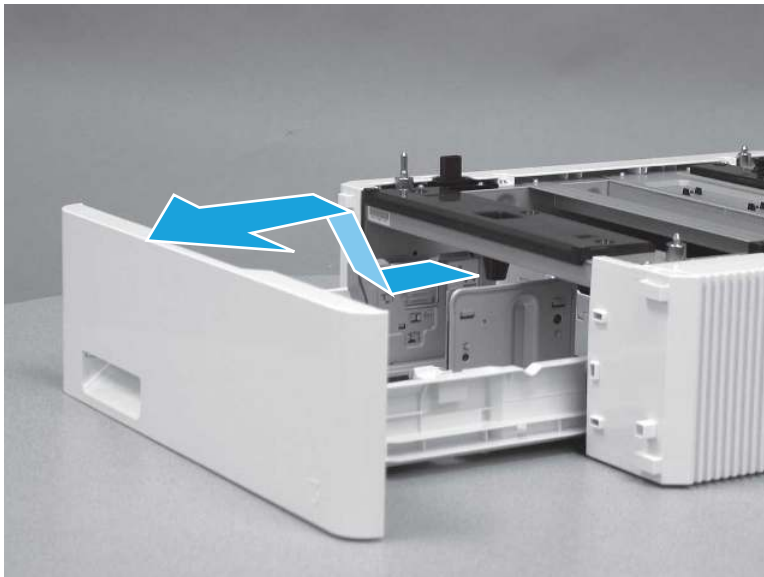
No post service test is available for this assembly.

## 1. Remove Tray 3

Follow these steps to remove Tray 3.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

**Figure 5-2090** Remove the tray

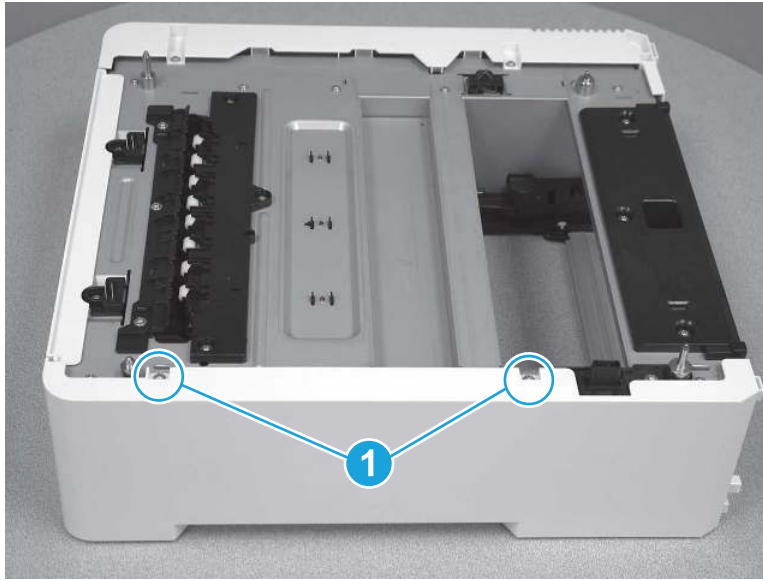


## 2. Remove the right cover (550-sheet paper feeder)

Follow these steps to remove the right cover (550-sheet paper feeder).

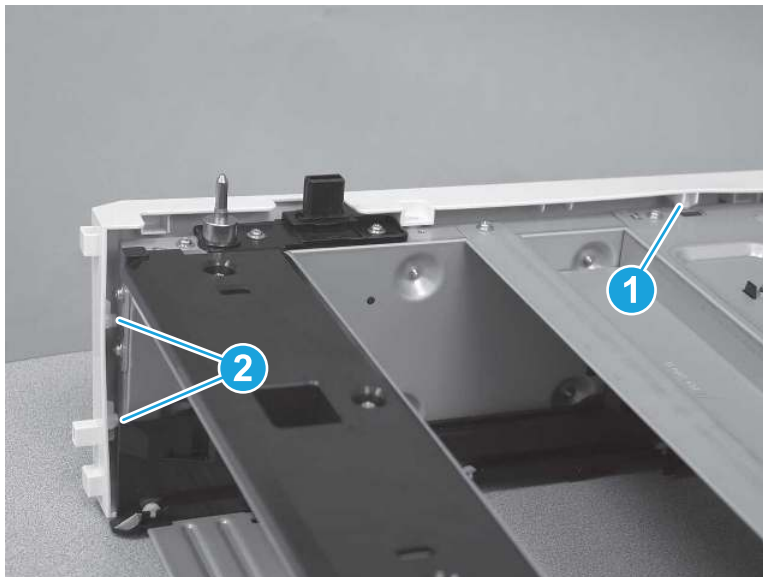
1. Remove two screws (callout 1).

**Figure 5-2091** Remove two screws



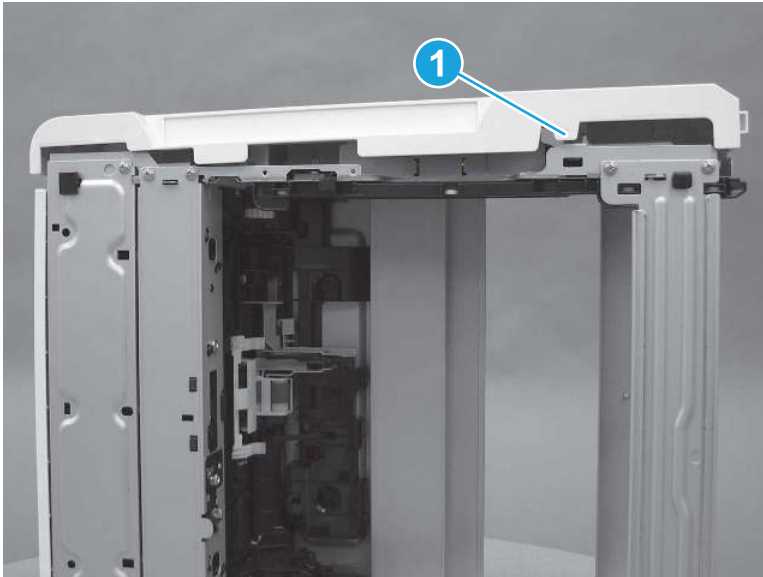
2. Release one tab (callout 1) on the top of the feeder, and then release two tabs (callout 2) at the front of the feeder.

**Figure 5-2092** Release three tabs



3. Lay the feeder on the left side so that the right side is facing up, and then release one tab (callout 1) on the bottom of the feeder. Remove the right cover.

**Figure 5-2093** Remove the cover

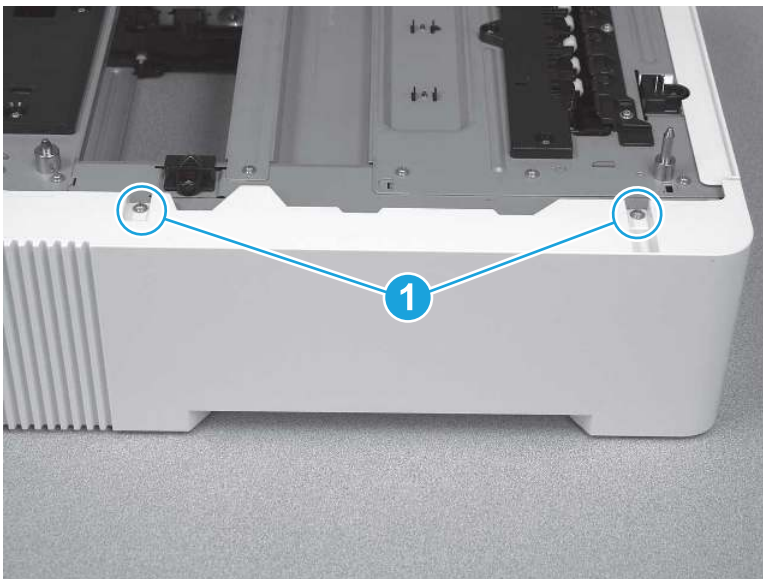


### 3. Remove the left cover (550-sheet paper feeder)

Follow these steps to remove the left cover (550-sheet paper feeder).

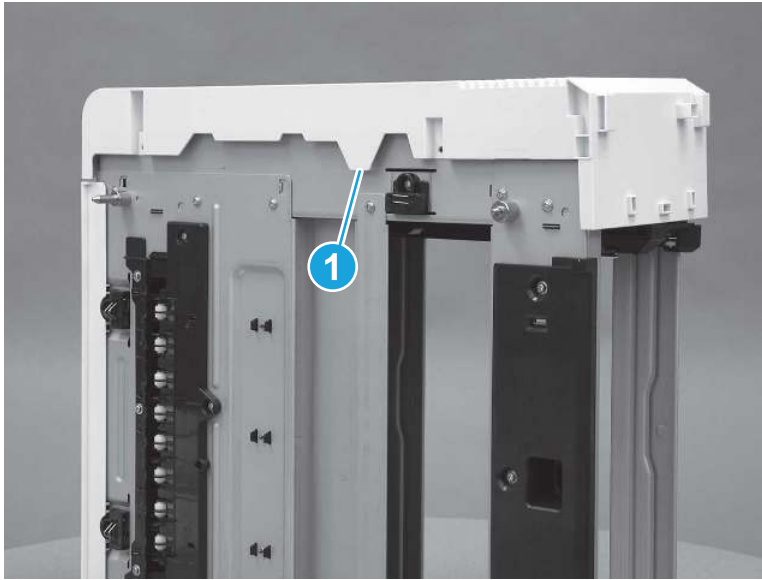
1. Remove two screws (callout 1).

**Figure 5-2094** Remove two screws



2. Release one tab (callout 1) on the top of the feeder.

**Figure 5-2095** Release one tab



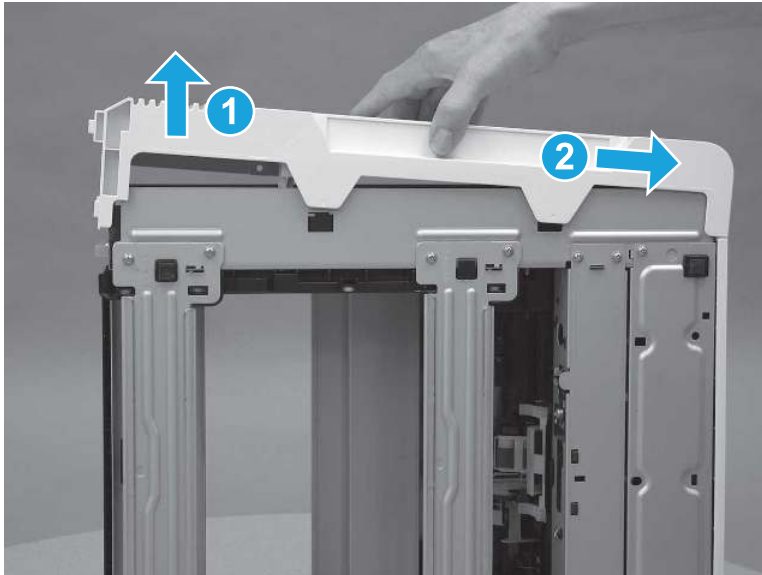
3. Lift the front of the cover up (callout 1), and then slide the cover (callout 2) toward the back of the feeder to remove it.

---

 **NOTE:** Release additional tabs as needed to remove the cover.

---

**Figure 5-2096** Remove the cover

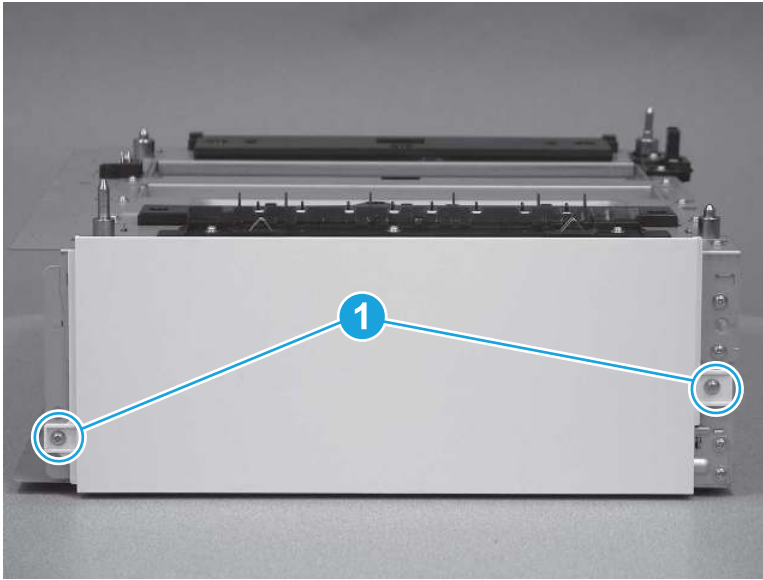


#### 4. Remove the rear cover (550-sheet paper feeder)

Follow these steps to remove the rear cover (550-sheet paper feeder).

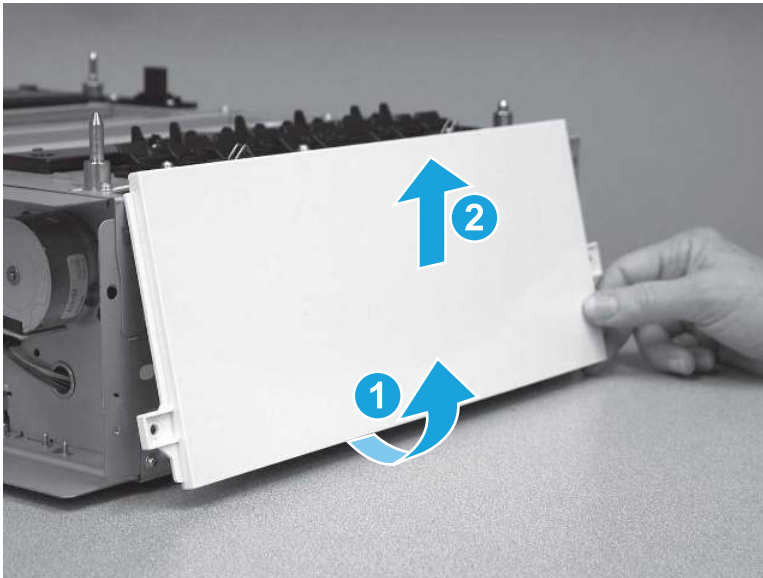
1. Remove two screws (callout 1).

Figure 5-2097 Remove two screws



2. Rotate the bottom edge of the cover (callout 1) away from the feeder, and then raise the cover up (callout 2) to remove it.

Figure 5-2098 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.

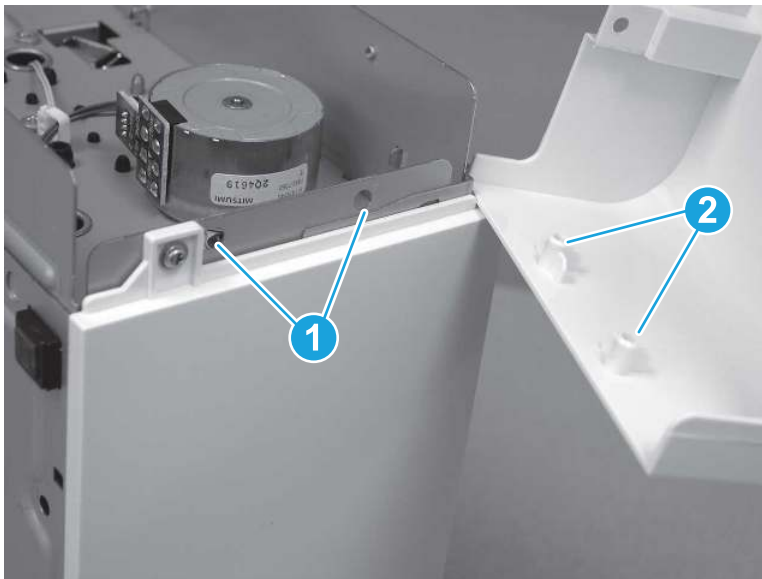
## 6. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Left cover (550-sheet paper feeder)

- ▲ Lay the feeder on the right side so that the left side is facing up. At the back of the feeder, install the tabs (callout 1) on the cover in the holes (callout 2) on the feeder.

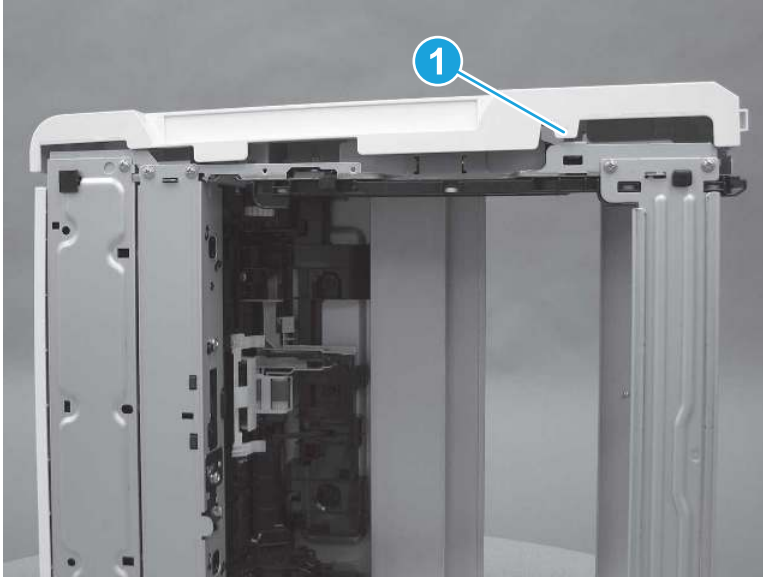
**Figure 5-2099** Install the left cover



Right cover (550-sheet paper feeder)

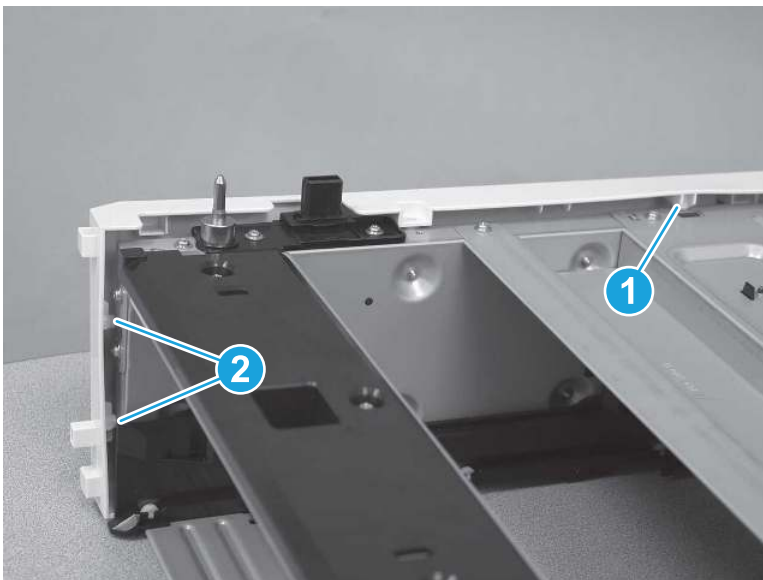
1. Lay the feeder on the left side so that the right side is facing up, and then install one tab (callout 1) on the bottom of the feeder.

**Figure 5-2100** Engage one tab



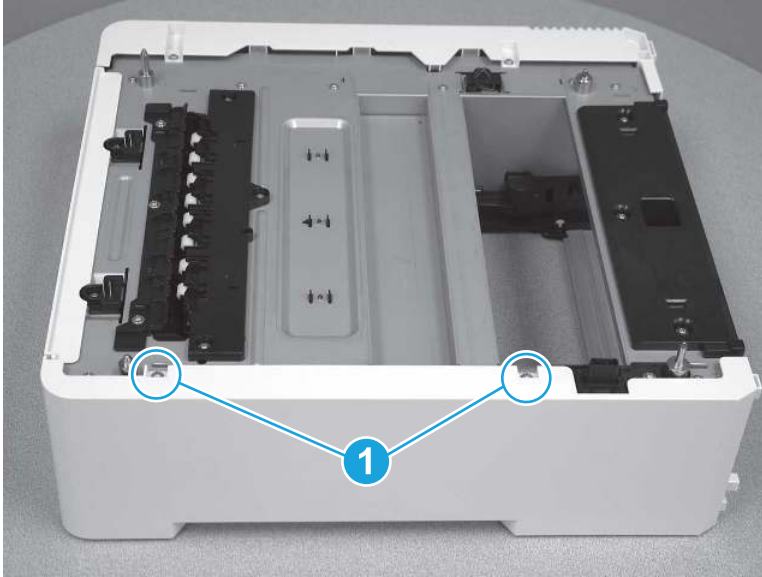
2. Turn the feeder to an upright position with the top facing up. Install one tab (callout 1) on the top of the feeder, and then install two tabs (callout 2) at the front of the feeder.

**Figure 5-2101** Engage three tabs



3. Install two screws (callout 1).

Figure 5-2102 Install two screws



## Removal and replacement: Switch cable assembly (550-sheet paper feeder)

Learn how to remove and replace the switch cable assembly for the 550-sheet paper feeder.

[View a video of how to remove and replace the 550-sheet paper feeder switch cable assembly.](#)

Mean time to repair: 31 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](http://www.hp.com/buy/parts).

Table 5-62 Part information

Part number	Part description
Not orderable	Switch, cable assembly (550-sheet paper feeder)

### Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- Small flat-blade screwdriver

### After performing service

#### Turn the printer power on

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

### Post service test

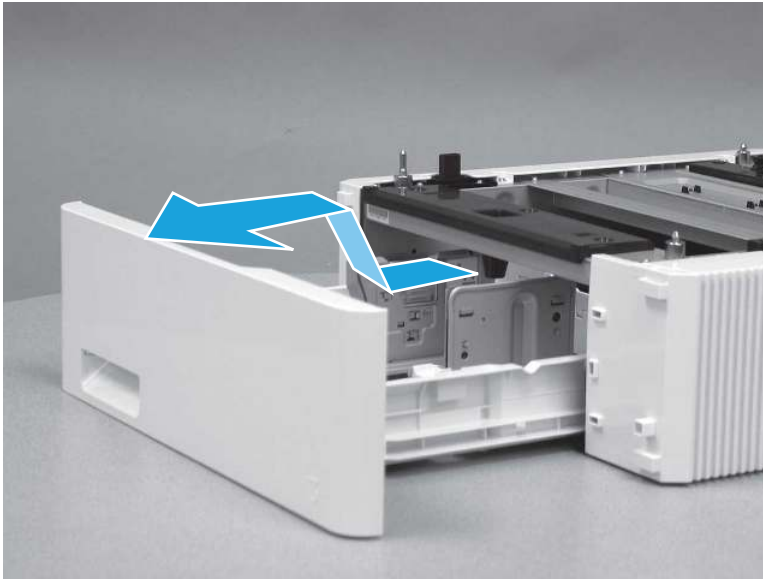
Print any pages necessary to make sure the printer is functioning correctly.

## 1. Remove Tray 3

Follow these steps to remove Tray 3.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

**Figure 5-2103** Remove the tray

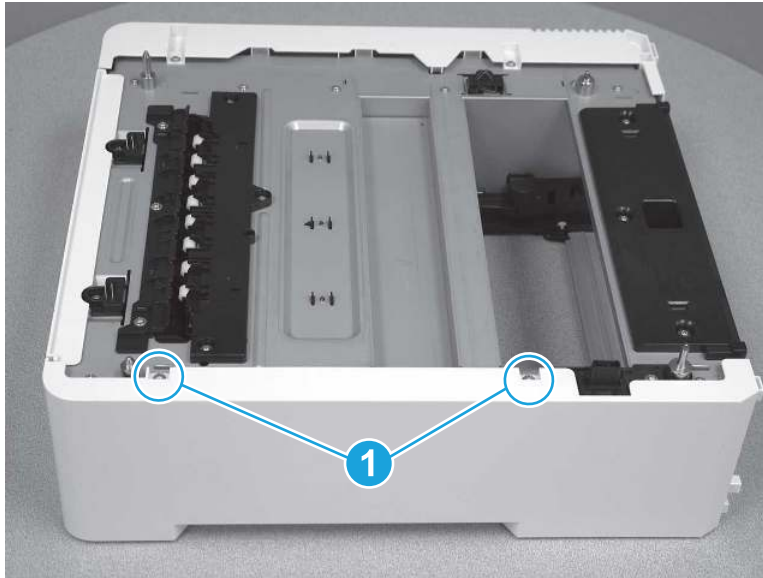


## 2. Remove the right cover (550-sheet paper feeder)

Follow these steps to remove the right cover (550-sheet paper feeder).

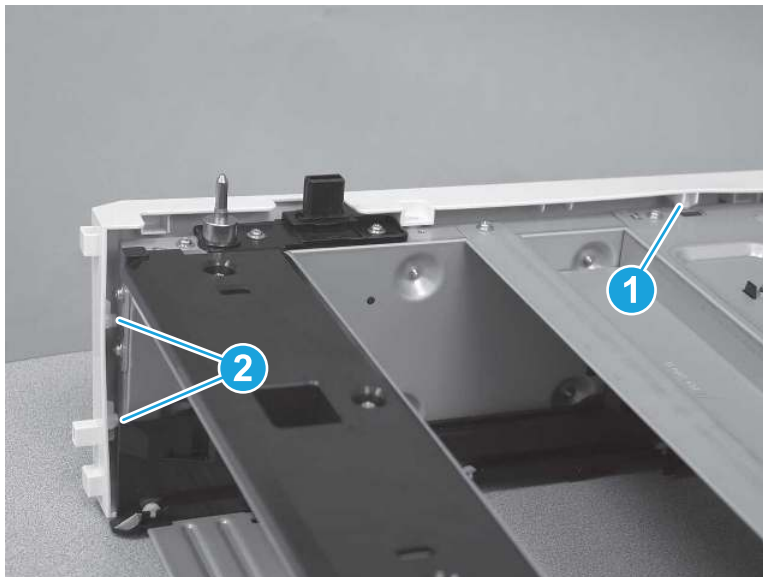
1. Remove two screws (callout 1).

**Figure 5-2104** Remove two screws



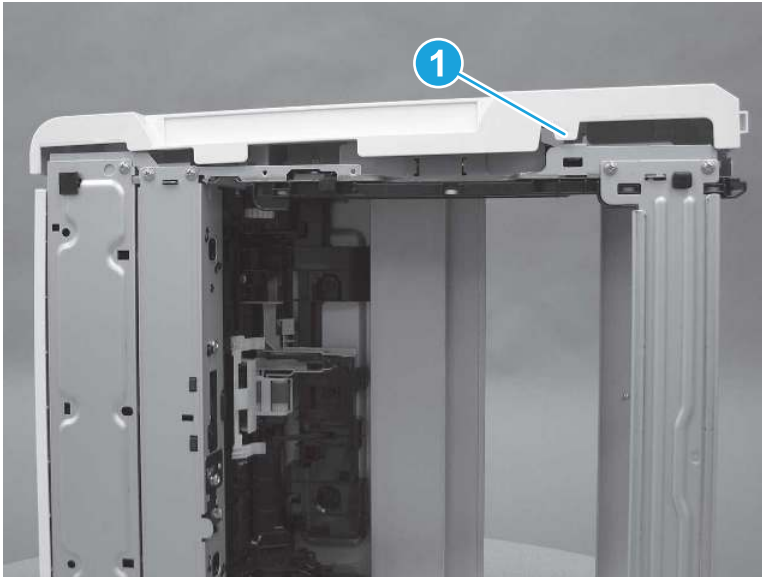
2. Release one tab (callout 1) on the top of the feeder, and then release two tabs (callout 2) at the front of the feeder.

**Figure 5-2105** Release three tabs



3. Lay the feeder on the left side so that the right side is facing up, and then release one tab (callout 1) on the bottom of the feeder. Remove the right cover.

**Figure 5-2106** Remove the cover

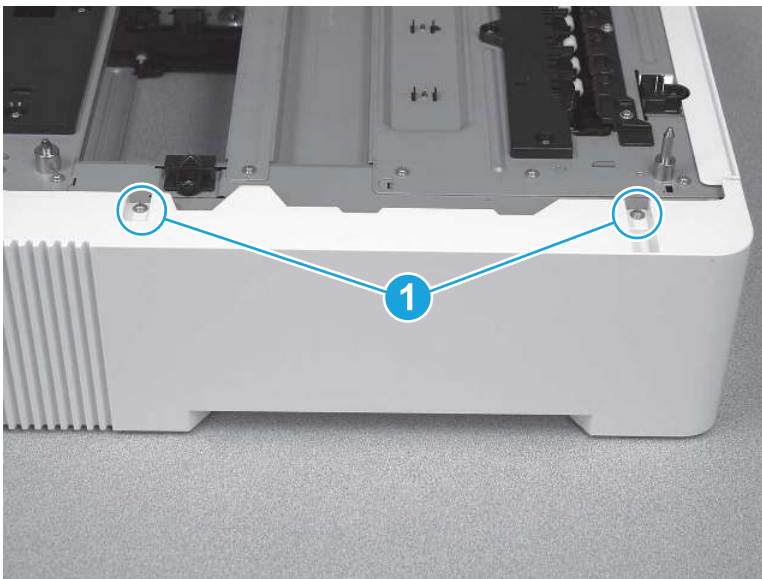


### 3. Remove the left cover (550-sheet paper feeder)

Follow these steps to remove the left cover (550-sheet paper feeder).

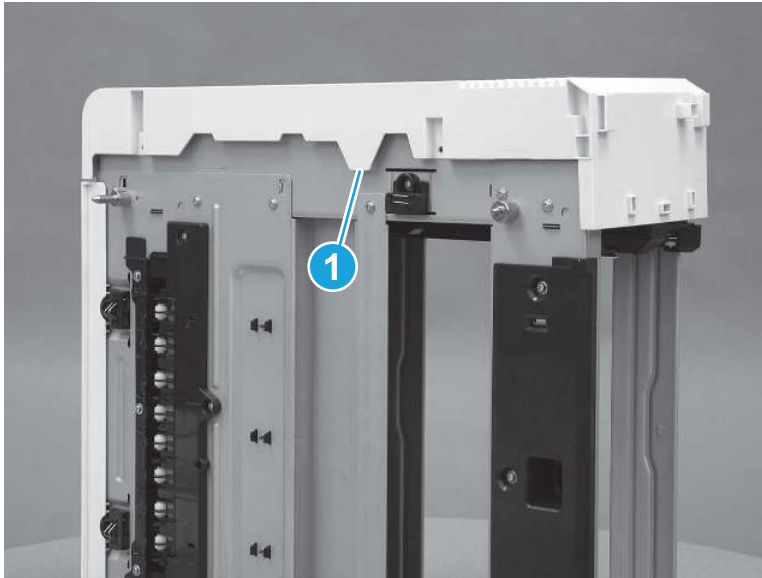
1. Remove two screws (callout 1).

**Figure 5-2107** Remove two screws



2. Release one tab (callout 1) on the top of the feeder.

**Figure 5-2108** Release one tab



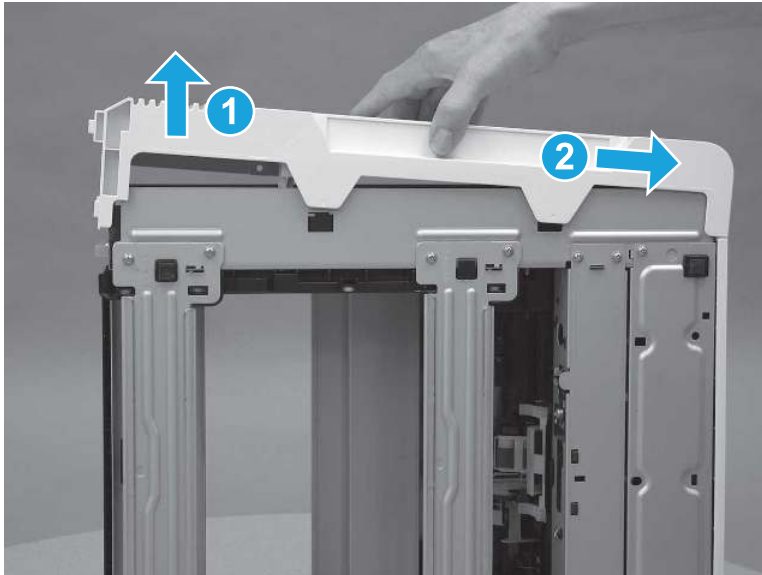
3. Lift the front of the cover up (callout 1), and then slide the cover (callout 2) toward the back of the feeder to remove it.

---

 **NOTE:** Release additional tabs as needed to remove the cover.

---

**Figure 5-2109** Remove the cover

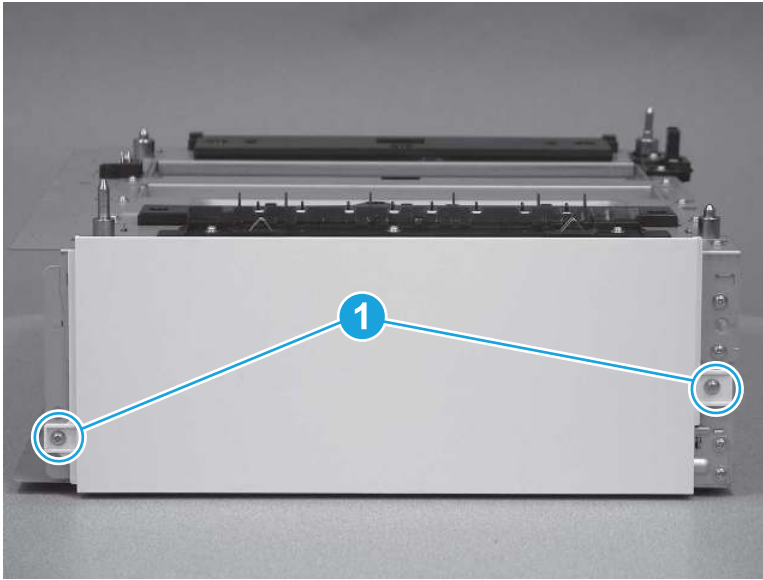


#### 4. Remove the rear cover (550-sheet paper feeder)

Follow these steps to remove the rear cover (550-sheet paper feeder).

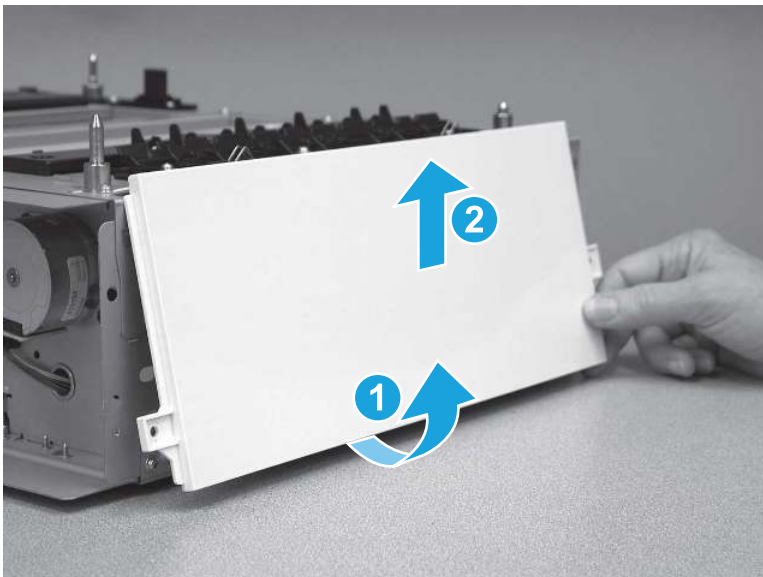
1. Remove two screws (callout 1).

Figure 5-2110 Remove two screws



2. Rotate the bottom edge of the cover (callout 1) away from the feeder, and then raise the cover up (callout 2) to remove it.

Figure 5-2111 Remove the cover



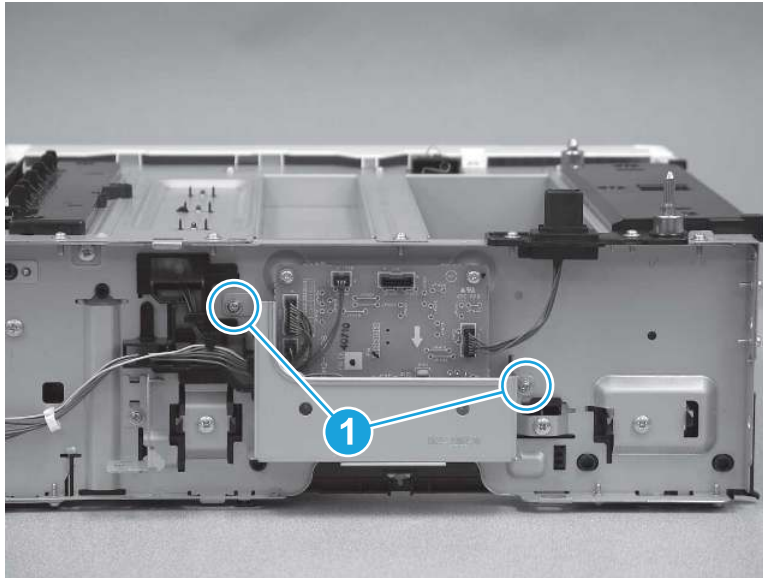
## 5. Remove the PCA cover (550-sheet paper feeder)

Follow these steps to remove the PCA cover (550-sheet paper feeder).



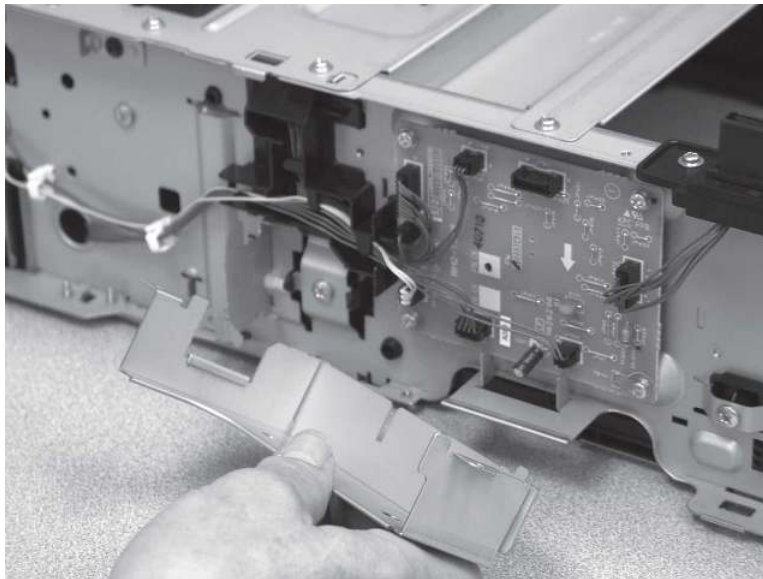
1. On the left side of the feeder, remove two screws (callout 1).

**Figure 5-2112** Remove two screws



2. Remove the PCA cover.

**Figure 5-2113** Remove the cover

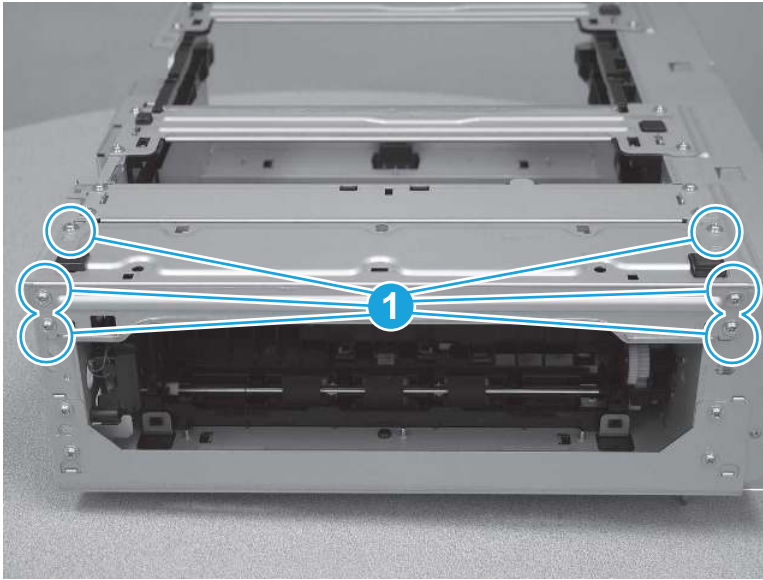


## 6. Remove the base plate (550-sheet paper feeder)

Follow these steps to remove the base plate (550-sheet paper feeder).

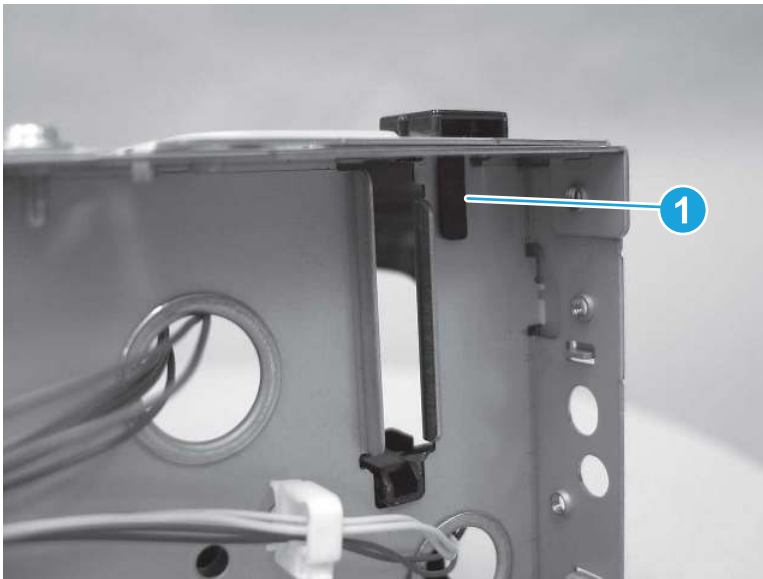
1. Lay the feeder on the top side so that the bottom side is facing up. Remove six screws (callout 1).

Figure 5-2114 Remove six screws



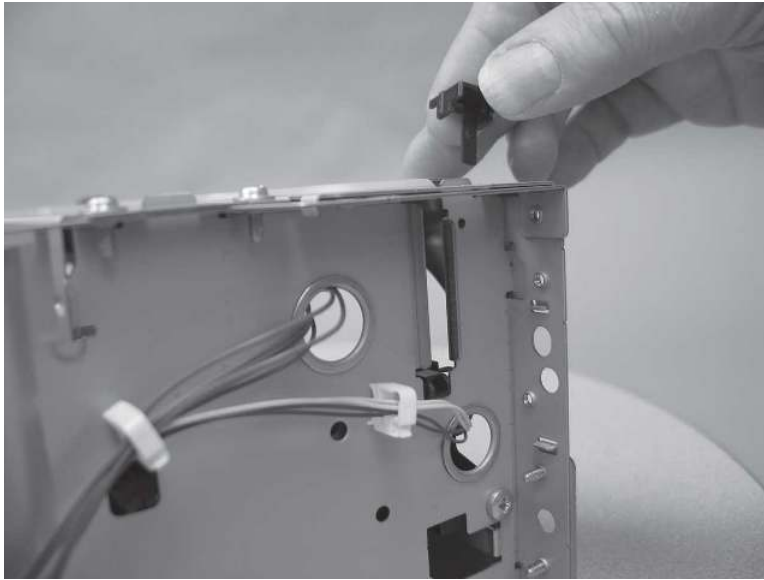
2. On the left side of the feeder, release one tab (callout 1) on the foot.

Figure 5-2115 Release one tab



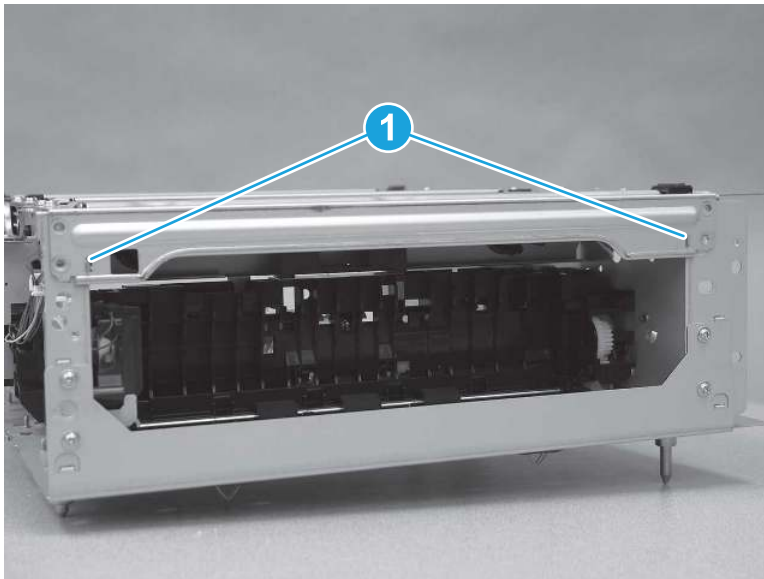
3. Remove the foot.

Figure 5-2116 Remove the foot



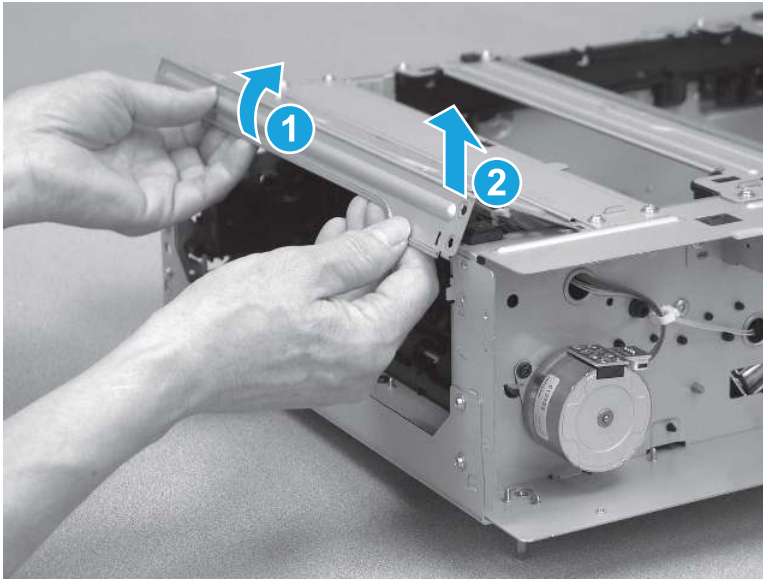
4. Release two tabs (callout 1).

Figure 5-2117 Release two tabs



5. Rotate the edge of the base plate up (callout 1), and then lift it up (callout 2) to remove it.

**Figure 5-2118** Remove the assembly

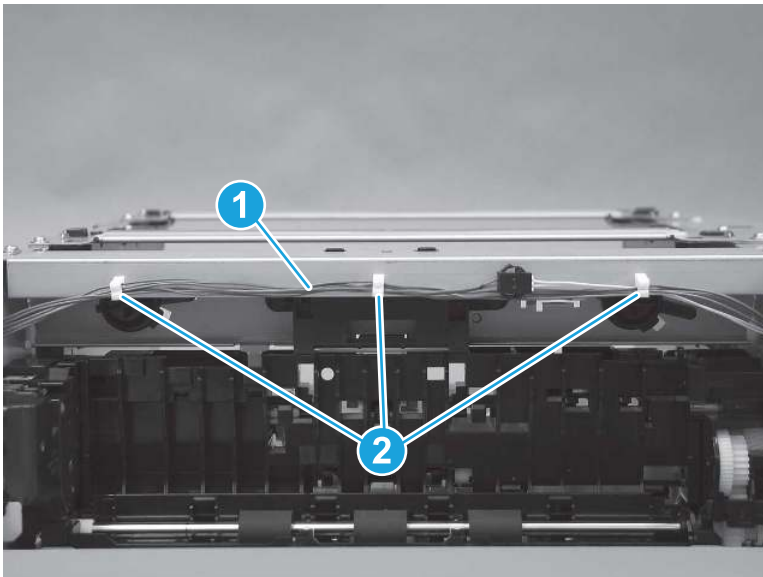


## 7. Remove the feed frame assembly (550-sheet paper feeder)

Follow these steps to remove the feed frame assembly (550-sheet paper feeder).

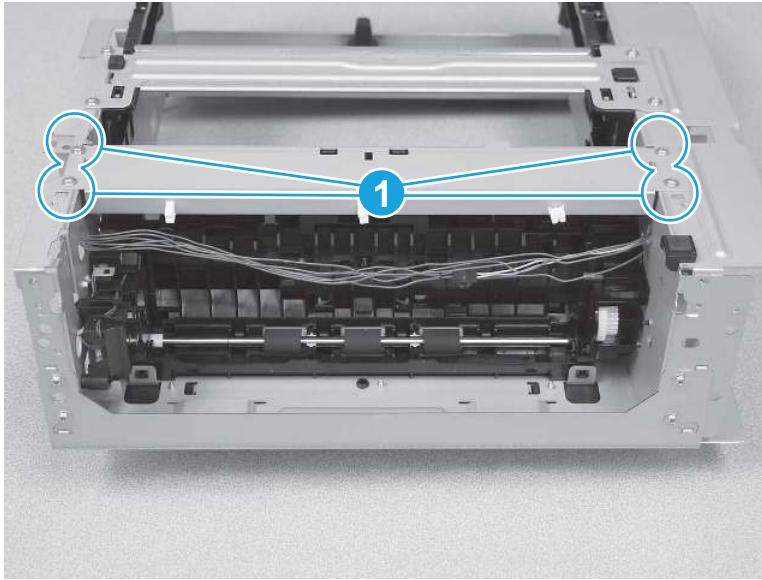
1. Release the cables (callout 1) from the retainers (callout 2).

**Figure 5-2119** Release the cables



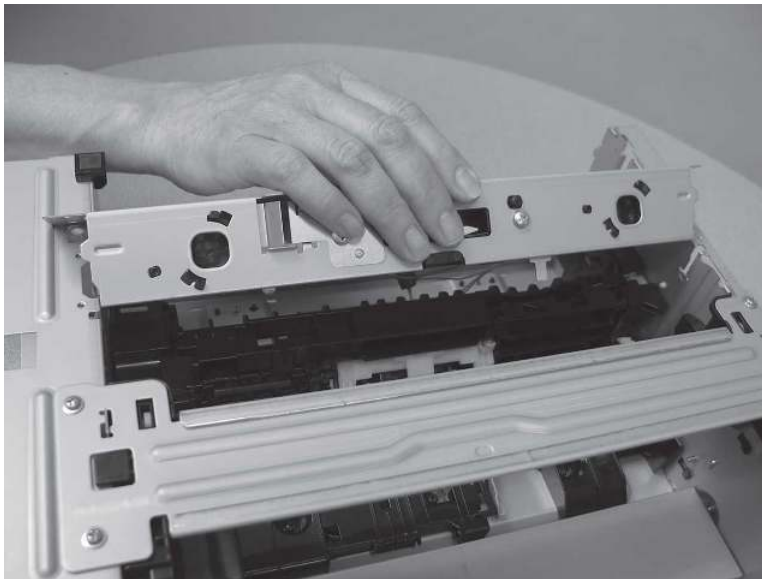
2. Remove four screws (callout 1).

**Figure 5-2120** Remove four screws



3. Remove the feed frame assembly.

**Figure 5-2121** Remove the assembly

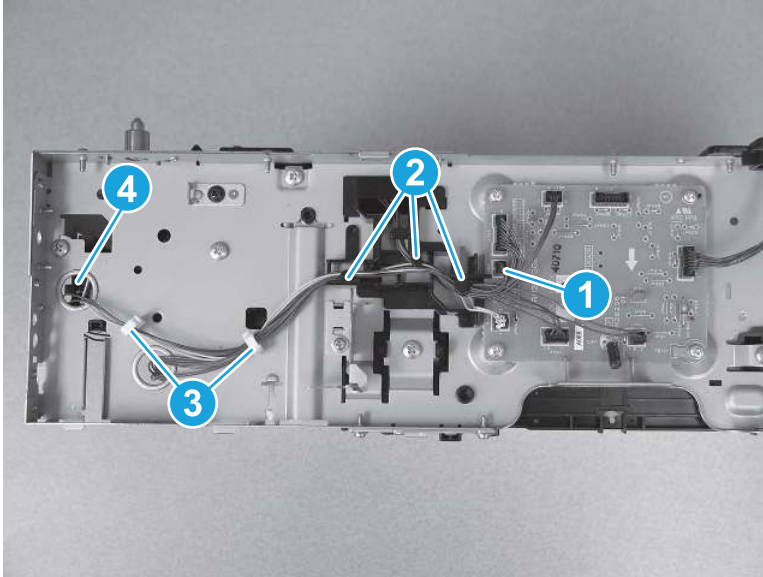


## 8. Remove the switch cable assembly (550-sheet paper feeder)

Follow these steps to remove the switch cable assembly (550-sheet paper feeder).

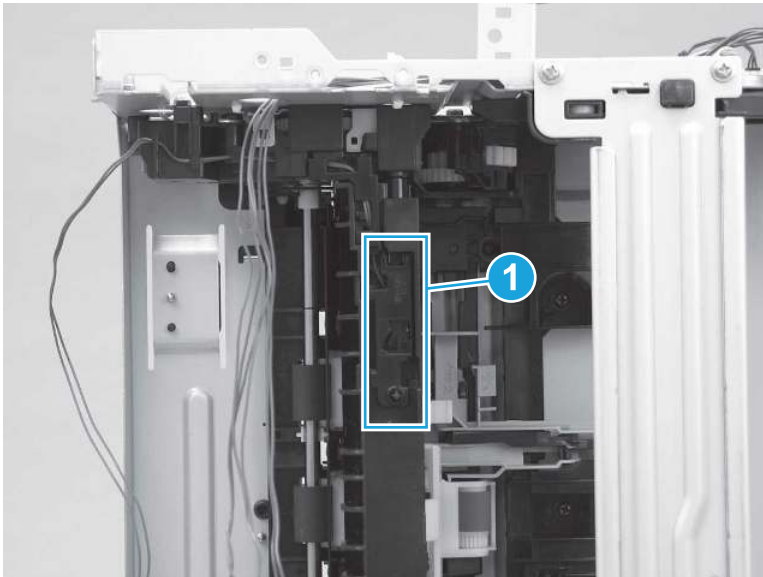
1. Do the following:
  - a. Lay the feeder on the right side so that the left side is facing up, disconnect one connector (callout 1), and then release the cables from the retainers (callout 2).
  - b. Release two retainers (callout 3), and then release the cables from the retainers.
  - c. Pass the connector and cable through the opening (callout 4) in the sheet metal.

Figure 5-2122 Release the cables



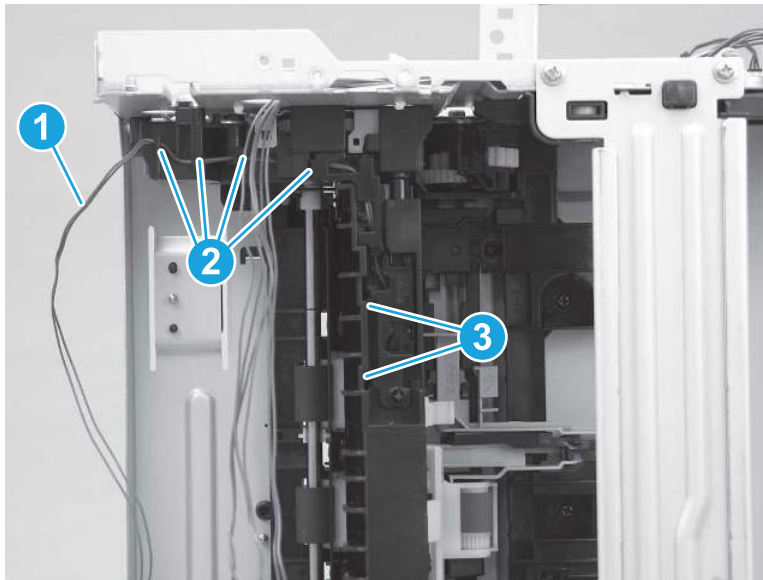
2. Locate the switch cable assembly (callout 1).

Figure 5-2123 Locate the switch cable assembly



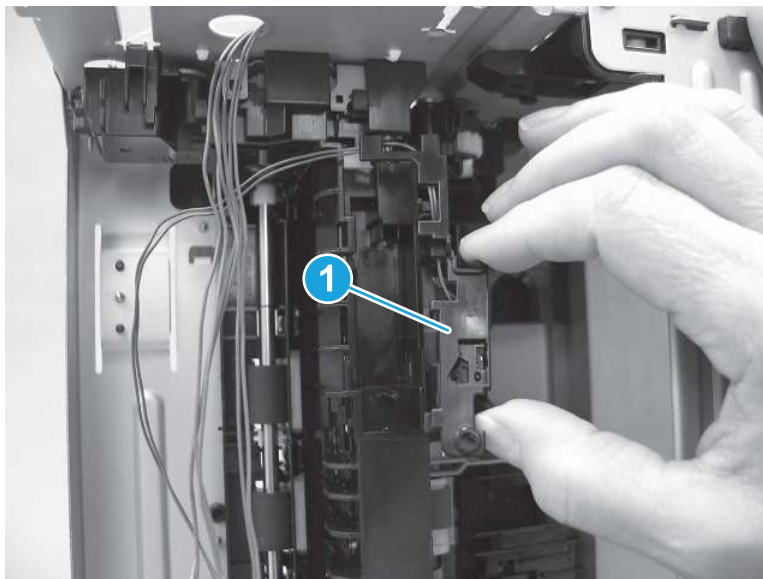
3. Release the cables (callout 1) from the guides (callout 2), and then release two tabs (callout 3).

**Figure 5-2124** Release the cables from the guides



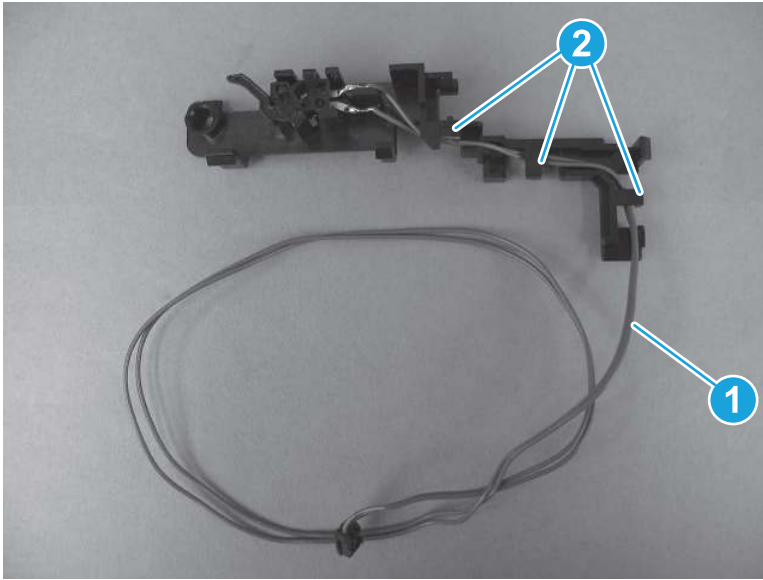
4. Remove the switch cable assembly and holder (callout 1).

**Figure 5-2125** Remove the assembly



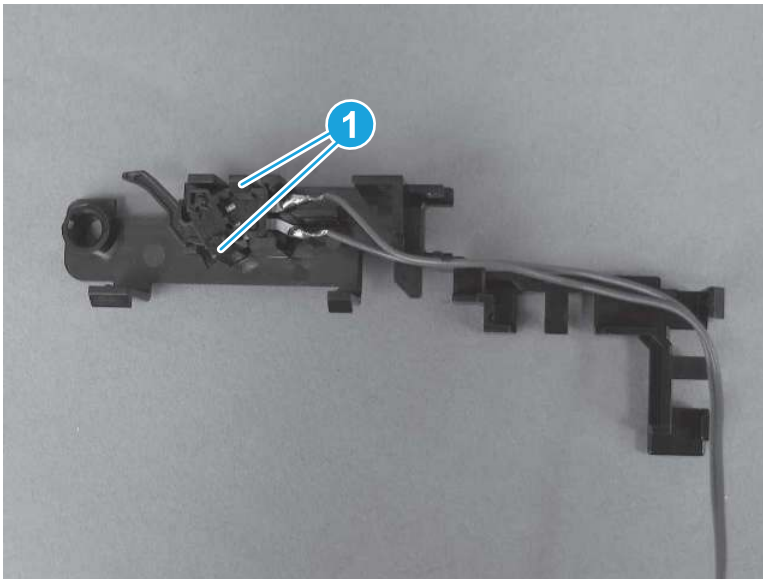
5. Remove the cables (callout 1) on the switch cable assembly from the guides (callout 2) on the switch holder.

Figure 5-2126 Remove the cables from the guides



6. Release two tabs (callout 1).

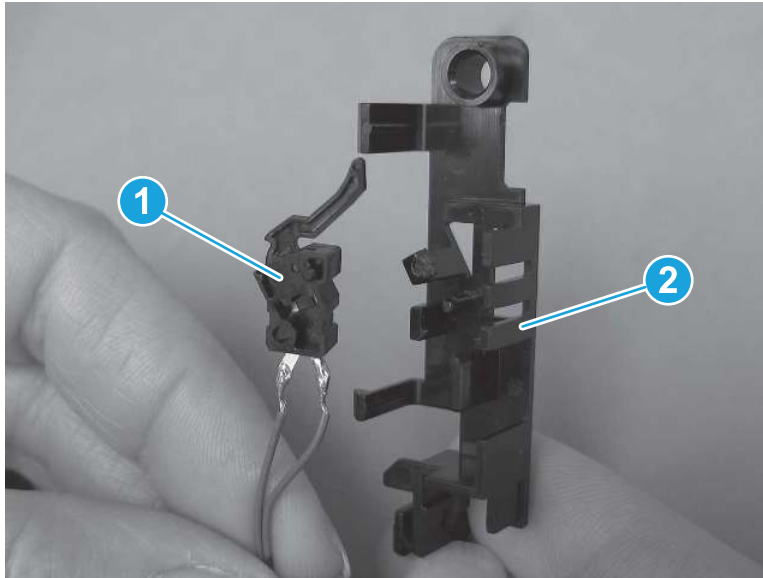
Figure 5-2127 Release two tabs





7. Remove the switch cable assembly (callout 1) from the switch holder (callout 2).

Figure 5-2128 Remove the assembly



## 9. 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.

## 10. Reverse the removal steps to install the assembly

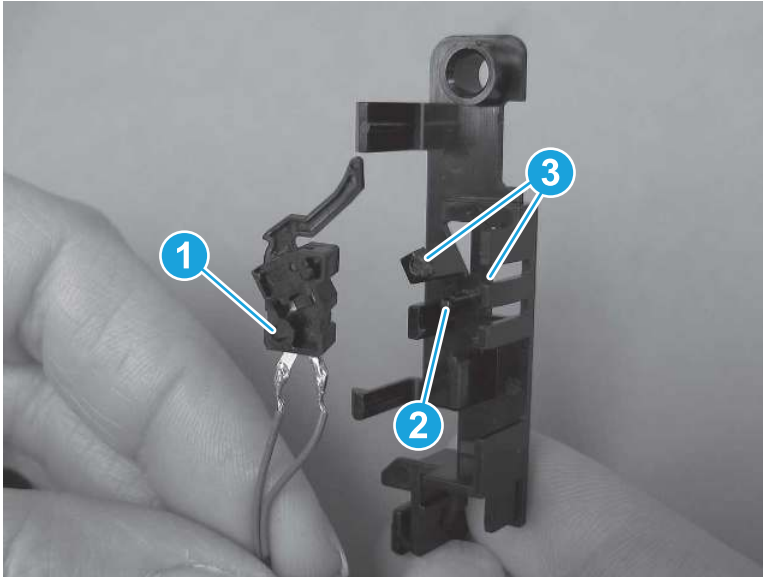
Also use the following special installation instructions.

### Switch cable assembly (550-sheet paper feeder)

- ▲ Position the switch cable assembly into the switch holder so that the hole (callout 1) on the cable assembly fits over the post (callout 2) on the switch holder.

 **NOTE:** Make sure that two tabs (callout 3) snap into place.

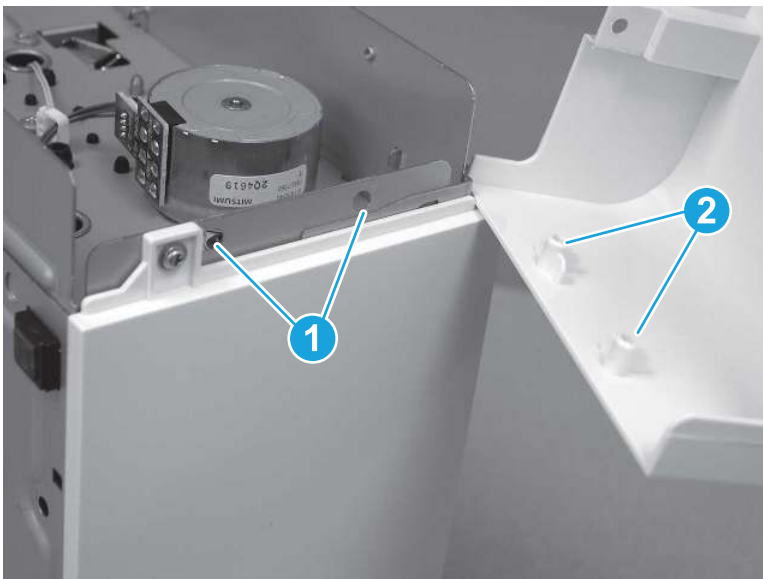
**Figure 5-2129** Install the assembly



### Left cover (550-sheet paper feeder)

- ▲ Lay the feeder on the right side so that the left side is facing up. At the back of the feeder, install the tabs (callout 1) on the cover in the holes (callout 2) on the feeder.

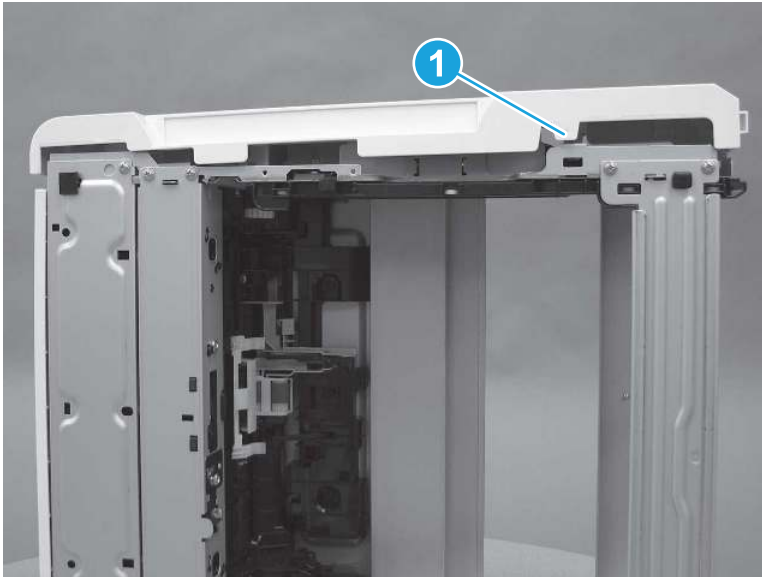
**Figure 5-2130** Install the left cover



### Right cover (550-sheet paper feeder)

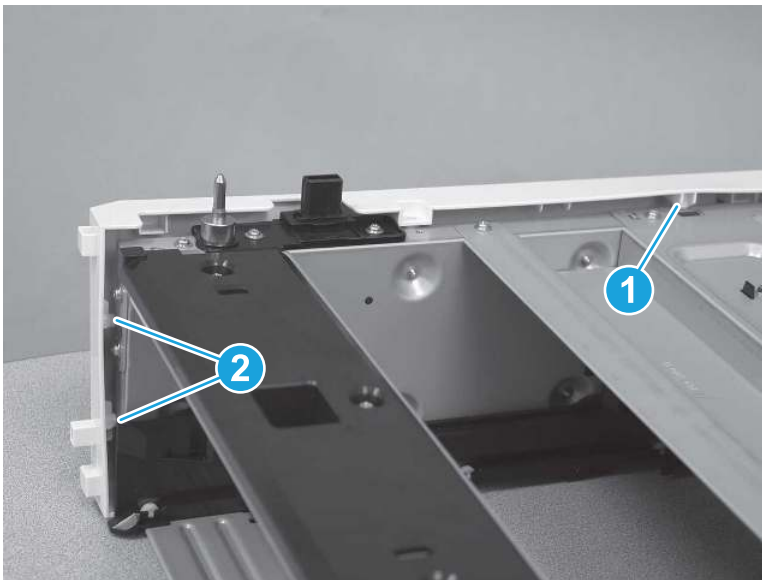
1. Lay the feeder on the left side so that the right side is facing up, and then install one tab (callout 1) on the bottom of the feeder.

Figure 5-2131 Engage one tab



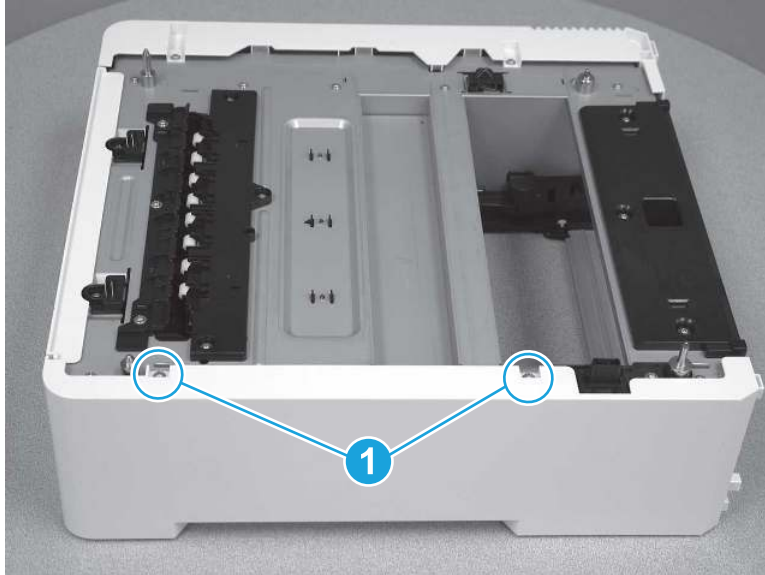
2. Turn the feeder to an upright position with the top facing up. Install one tab (callout 1) on the top of the feeder, and then install two tabs (callout 2) at the front of the feeder.

Figure 5-2132 Engage three tabs



3. Install two screws (callout 1).

Figure 5-2133 Install two screws



## Removal and replacement: Lifter drive assembly (550-sheet paper feeder)

Learn how to remove and replace the lifter drive assembly for the 550-sheet paper feeder.

[View a video of how to remove and replace the 550-sheet paper feeder lifter drive assembly.](#)

Mean time to repair: 41 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](http://www.hp.com/buy/parts).

Table 5-63 Part information

Part number	Part description
RM2-6493-000CN	Lifter drive assembly (550-sheet paper feeder)

### Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- Small flat-blade screwdriver

### After performing service

#### Turn the printer power on

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

### Post service test

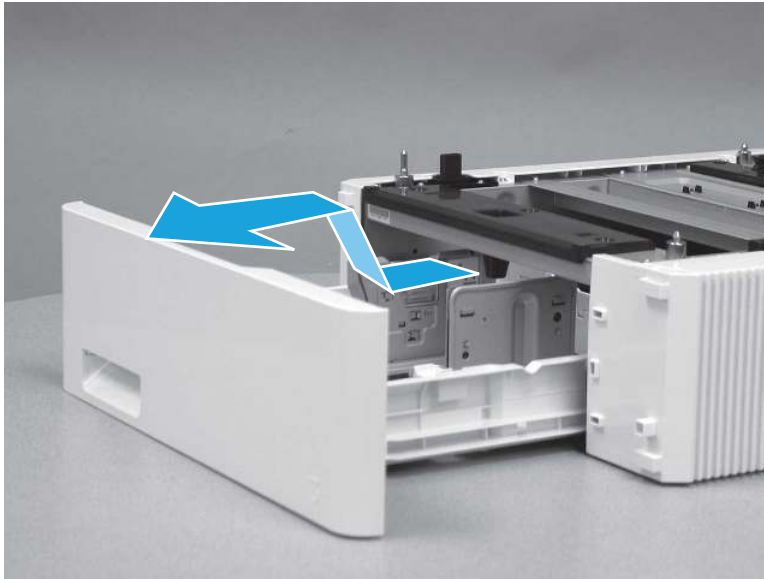
Print any pages necessary to make sure the printer is functioning correctly.

## 1. Remove Tray 3

Follow these steps to remove Tray 3.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

**Figure 5-2134** Remove the tray

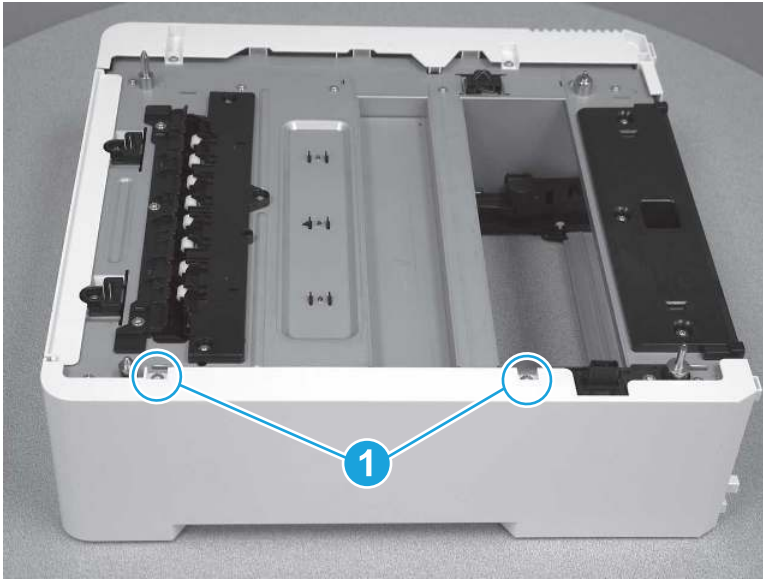


## 2. Remove the right cover (550-sheet paper feeder)

Follow these steps to remove the right cover (550-sheet paper feeder).

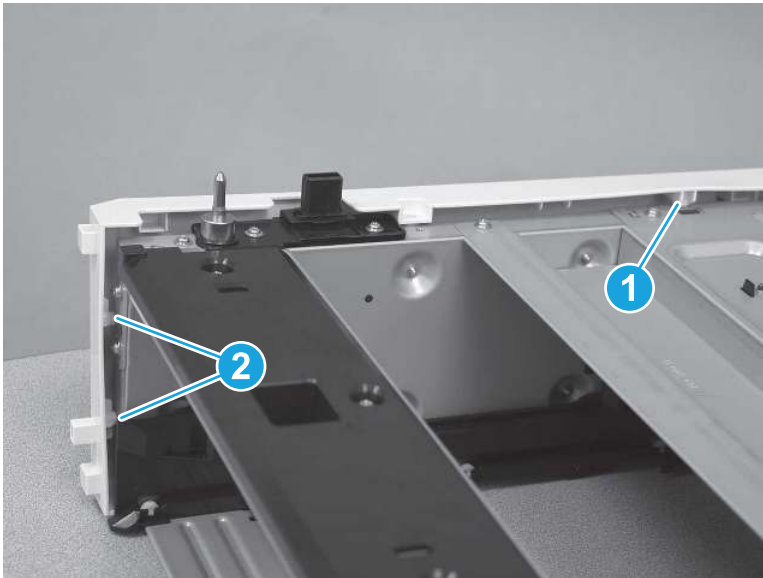
1. Remove two screws (callout 1).

Figure 5-2135 Remove two screws



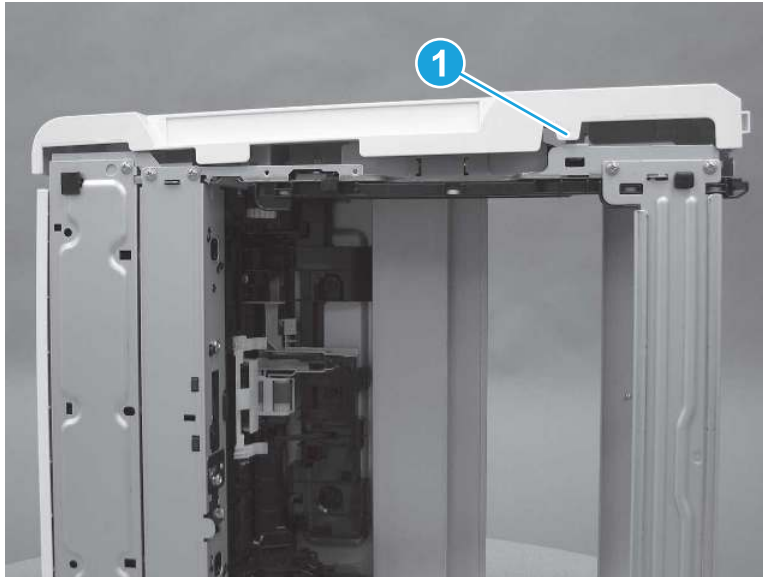
2. Release one tab (callout 1) on the top of the feeder, and then release two tabs (callout 2) at the front of the feeder.

Figure 5-2136 Release three tabs



3. Lay the feeder on the left side so that the right side is facing up, and then release one tab (callout 1) on the bottom of the feeder. Remove the right cover.

**Figure 5-2137** Remove the cover

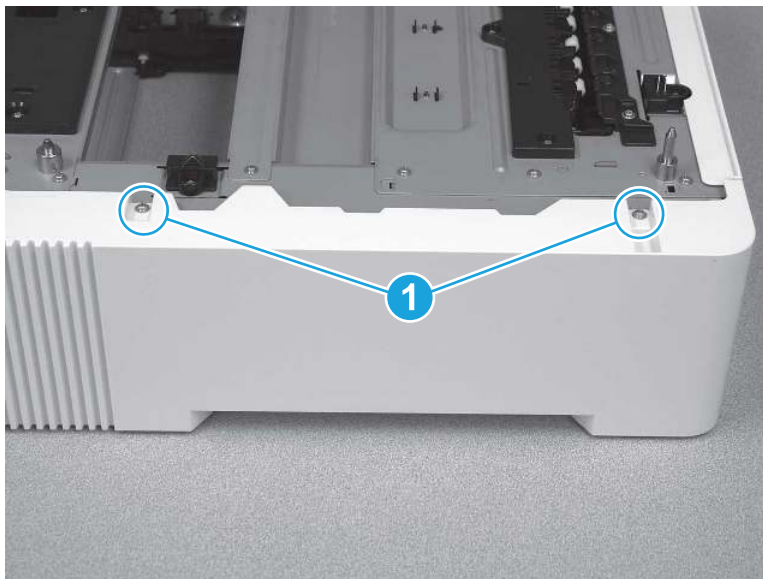


### 3. Remove the left cover (550-sheet paper feeder)

Follow these steps to remove the left cover (550-sheet paper feeder).

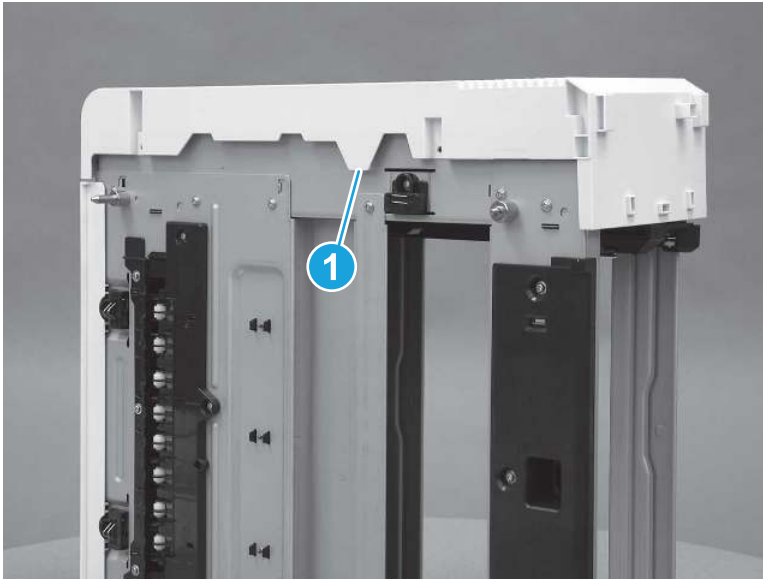
1. Remove two screws (callout 1).

**Figure 5-2138** Remove two screws



2. Release one tab (callout 1) on the top of the feeder.

Figure 5-2139 Release one tab



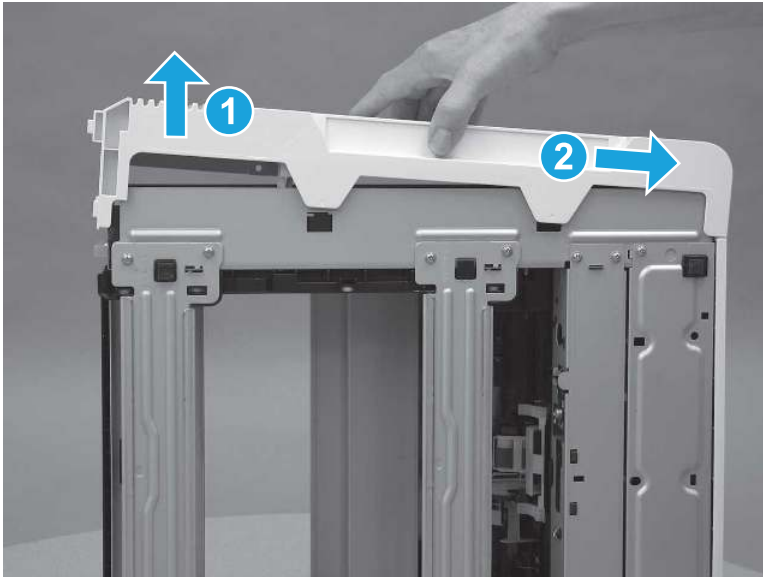
3. Lift the front of the cover up (callout 1), and then slide the cover (callout 2) toward the back of the feeder to remove it.

---

 **NOTE:** Release additional tabs as needed to remove the cover.

---

Figure 5-2140 Remove the cover



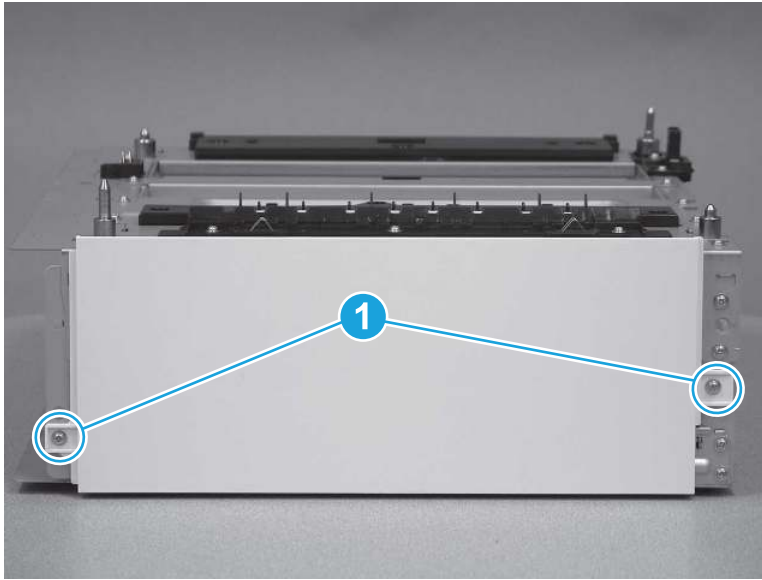
#### 4. Remove the rear cover (550-sheet paper feeder)

Follow these steps to remove the rear cover (550-sheet paper feeder).



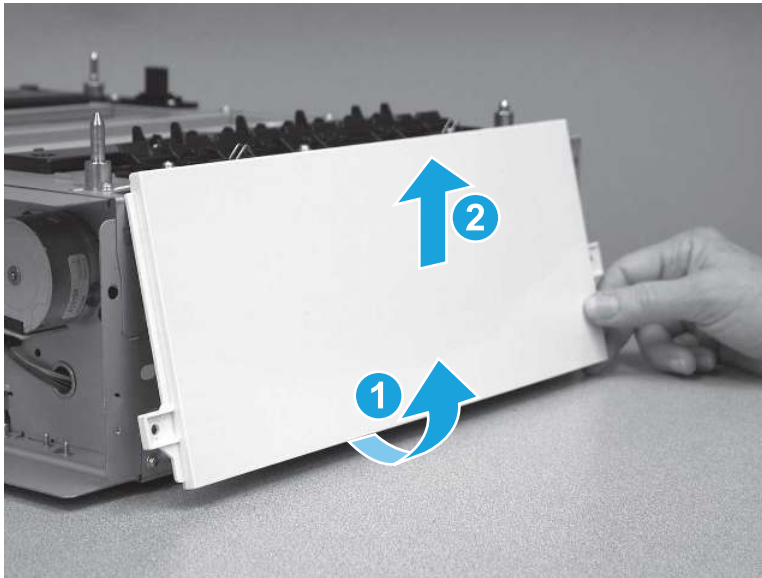
1. Remove two screws (callout 1).

Figure 5-2141 Remove two screws



2. Rotate the bottom edge of the cover (callout 1) away from the feeder, and then raise the cover up (callout 2) to remove it.

Figure 5-2142 Remove the cover

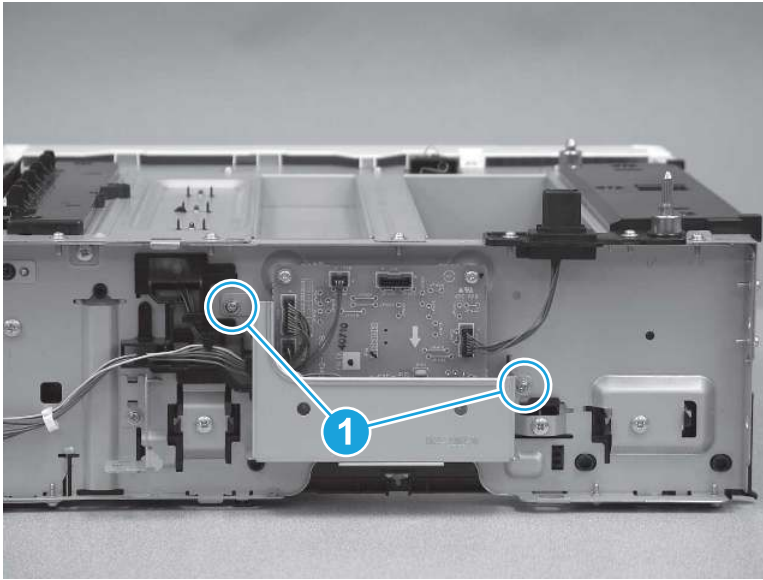


## 5. Remove the PCA cover (550-sheet paper feeder)

Follow these steps to remove the PCA cover (550-sheet paper feeder).

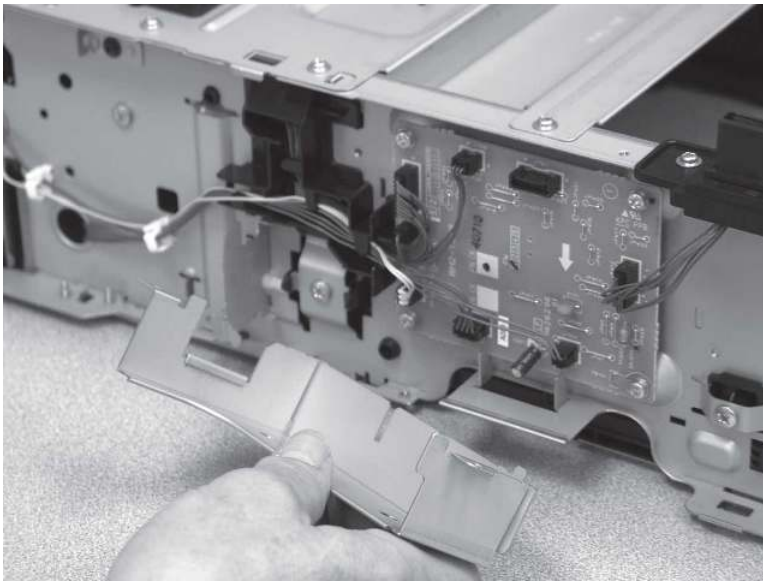
1. On the left side of the feeder, remove two screws (callout 1).

**Figure 5-2143** Remove two screws



2. Remove the PCA cover.

**Figure 5-2144** Remove the cover

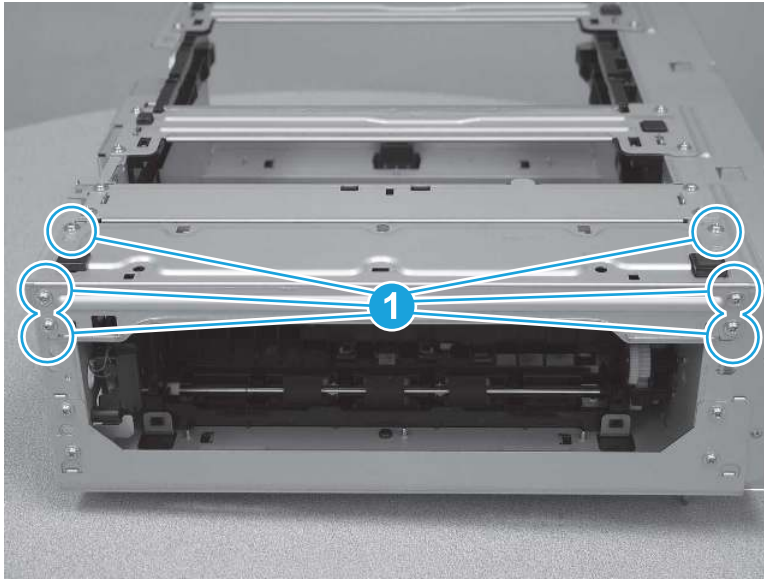


## 6. Remove the base plate (550-sheet paper feeder)

Follow these steps to remove the base plate (550-sheet paper feeder).

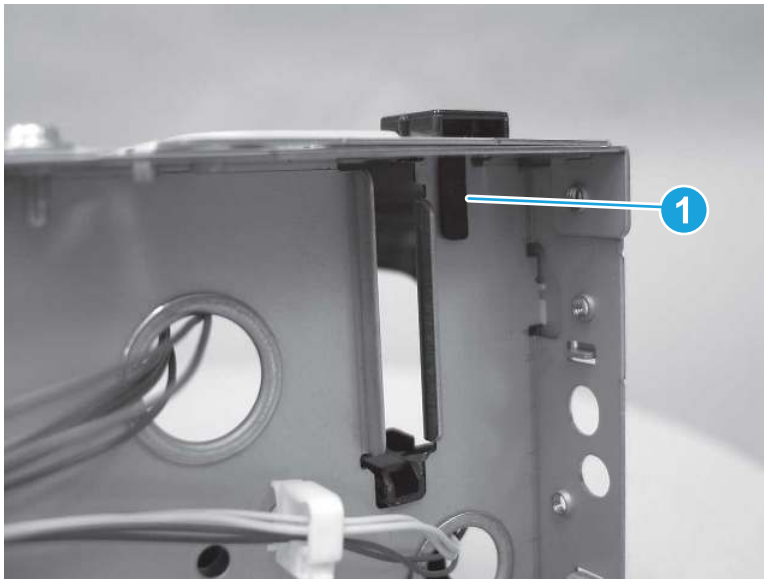
1. Lay the feeder on the top side so that the bottom side is facing up. Remove six screws (callout 1).

Figure 5-2145 Remove six screws



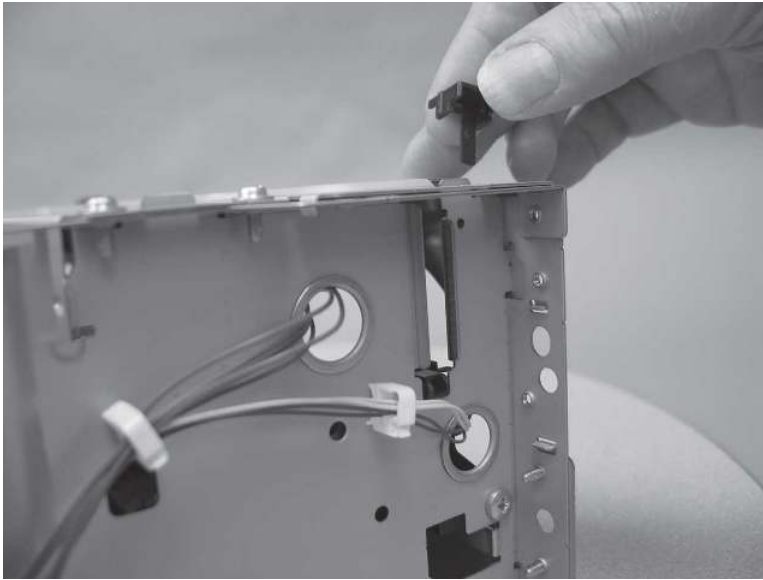
2. On the left side of the feeder, release one tab (callout 1) on the foot.

Figure 5-2146 Release one tab



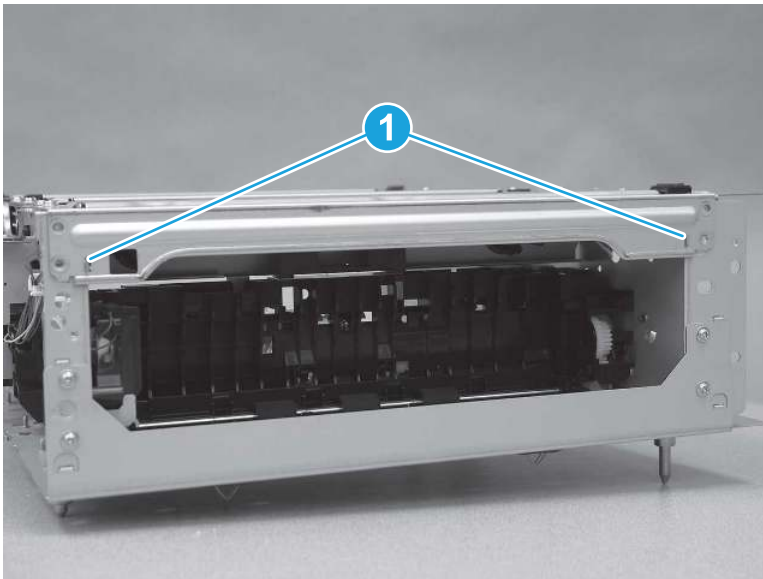
3. Remove the foot.

Figure 5-2147 Remove the foot



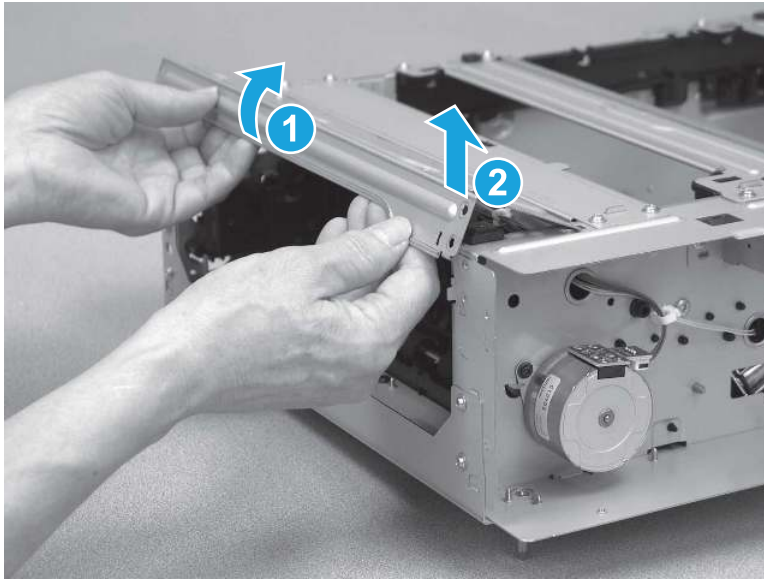
4. Release two tabs (callout 1).

Figure 5-2148 Release two tabs



5. Rotate the edge of the base plate up (callout 1), and then lift it up (callout 2) to remove it.

Figure 5-2149 Remove the assembly

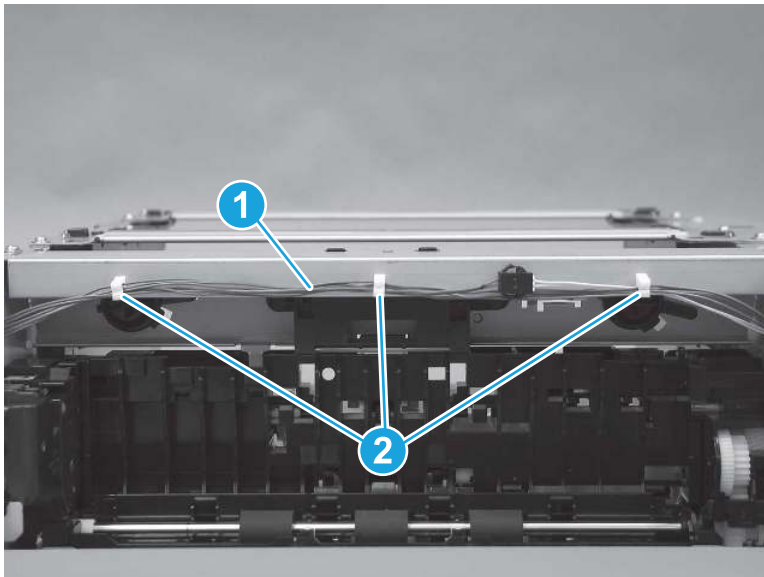


## 7. Remove the feed frame assembly (550-sheet paper feeder)

Follow these steps to remove the feed frame assembly (550-sheet paper feeder).

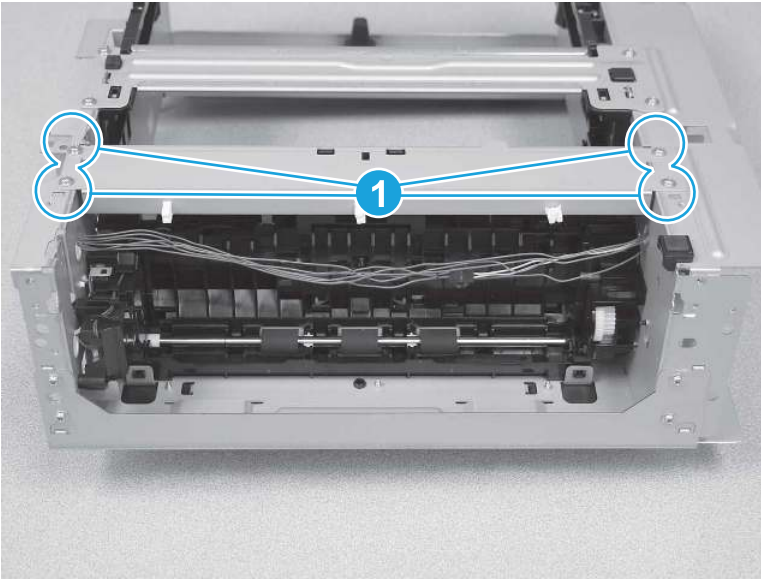
1. Release the cables (callout 1) from the retainers (callout 2).

Figure 5-2150 Release the cables



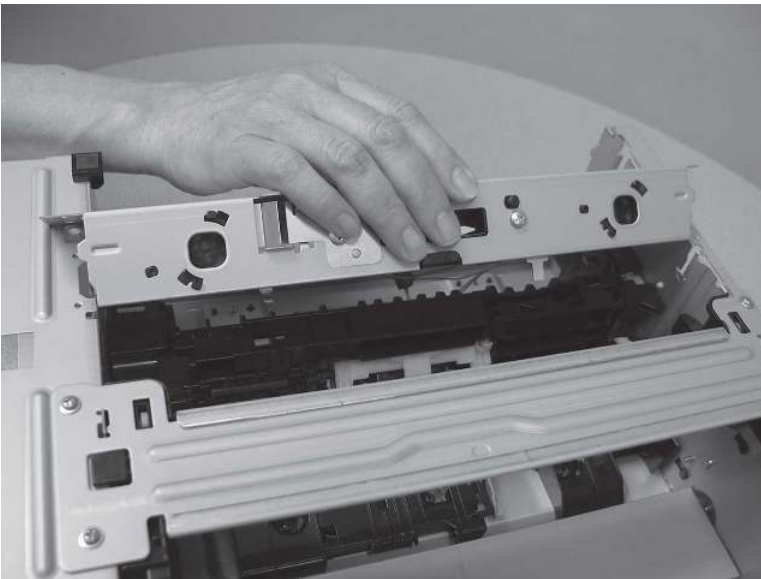
2. Remove four screws (callout 1).

**Figure 5-2151** Remove four screws



3. Remove the feed frame assembly.

**Figure 5-2152** Remove the assembly

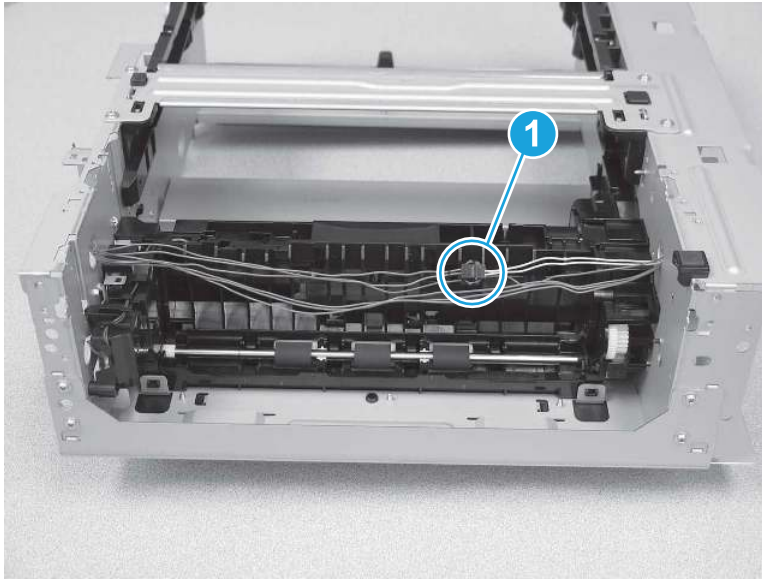


## 8. Remove the lifter drive assembly (550-sheet paper feeder)

Follow these steps to remove the lifter drive assembly (550-sheet paper feeder).

1. Lay the feeder on the top so that the bottom is facing up. Disconnect one in-line connector (callout 1).

**Figure 5-2153** Disconnect one connector



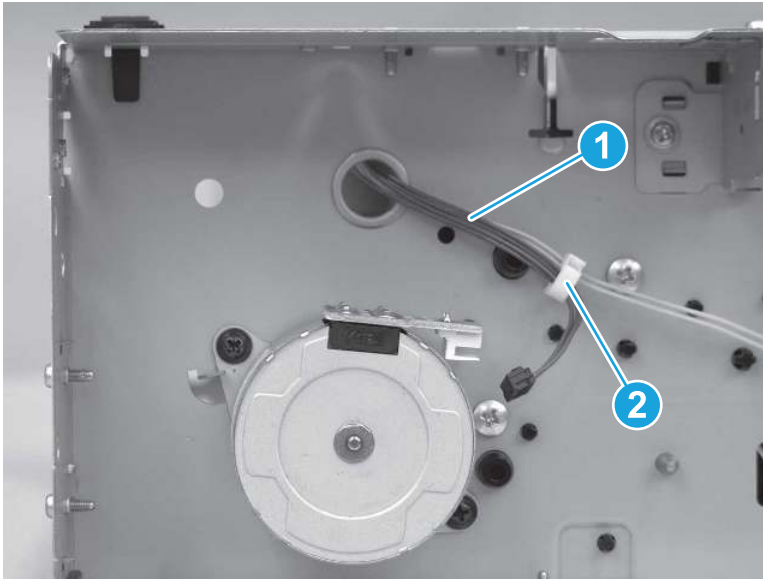
2. On the right side of the feeder, disconnect one connector (callout 1) from the motor.

**Figure 5-2154** Disconnect one connector



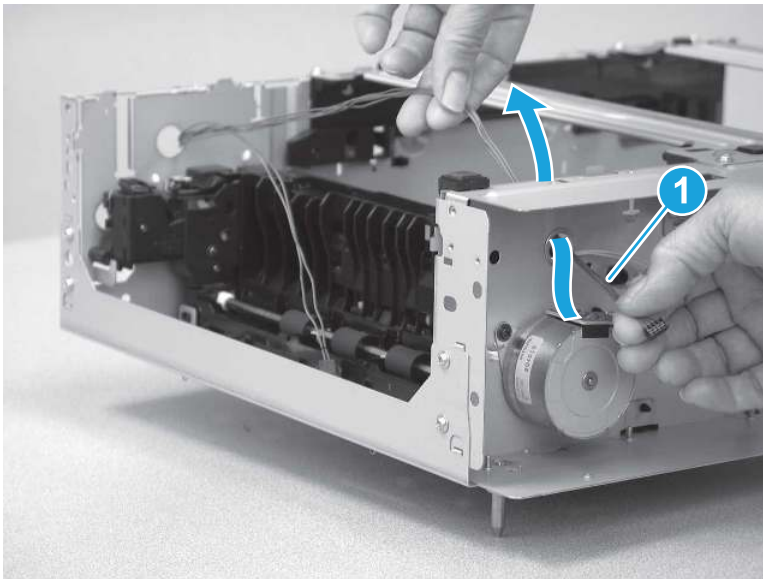
3. Release the cables (callout 1) from the retainer (callout 2).

Figure 5-2155 Release the cables



4. Pass the cables (callout 1) through the hole in the sheet metal.

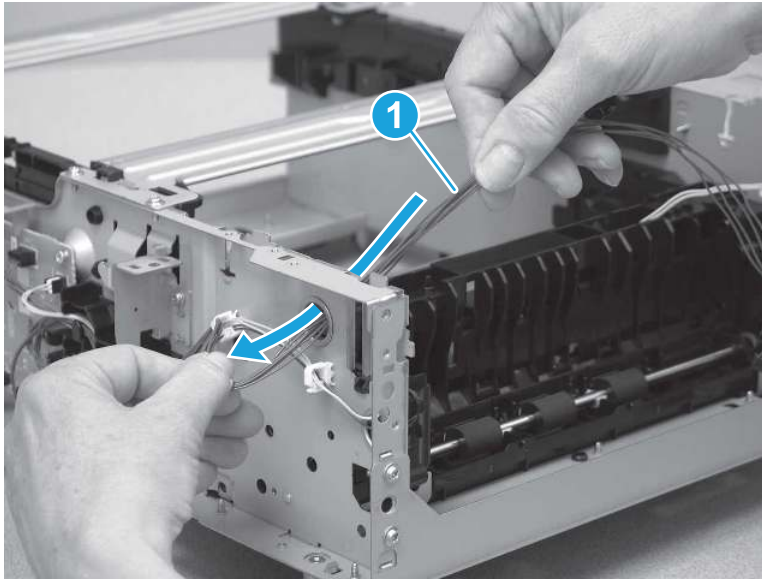
Figure 5-2156 Release the cables






5. On the left side of the feeder, pass all of the cables (callout 1) through the opening in the paper feeder.

**Figure 5-2157** Release the cables



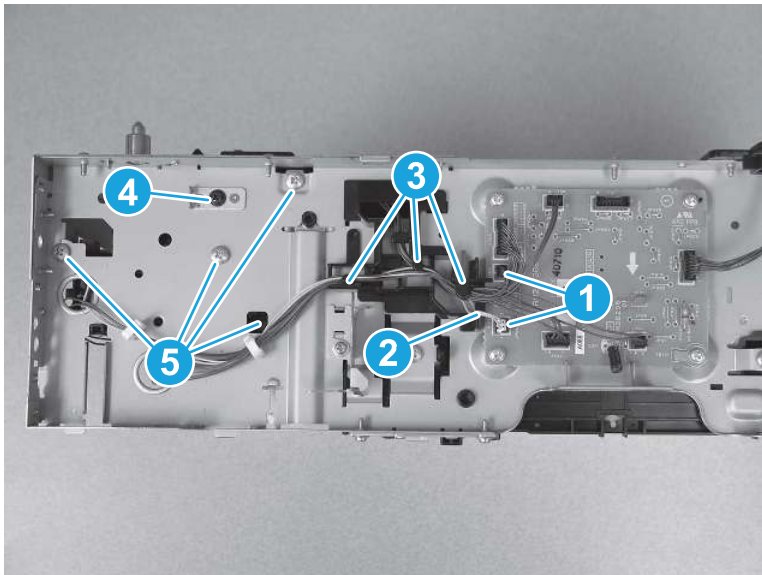
6. Do the following:
  - a. Lay the feeder on the right side so that the left side is facing up, and then disconnect two connectors (callout 1).
  - b. Remove the cables (callout 2) from the guides (callout 3).
  - c. Remove one screw (callout 4), and then remove four more screws (callout 5).

---

 **Reinstallation tip:** One screw (callout 4) is different from the other screws. Make sure that this screw is installed in the correct position.

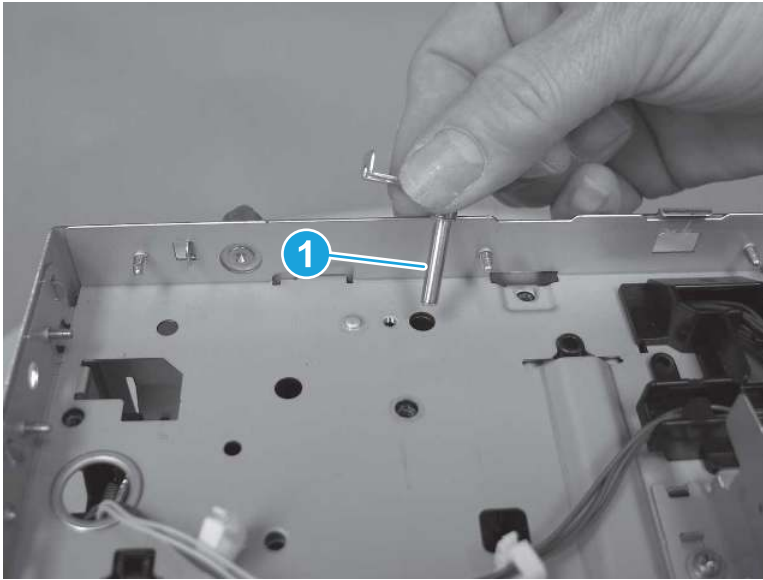
---

**Figure 5-2158** Disconnect connector and remove screws



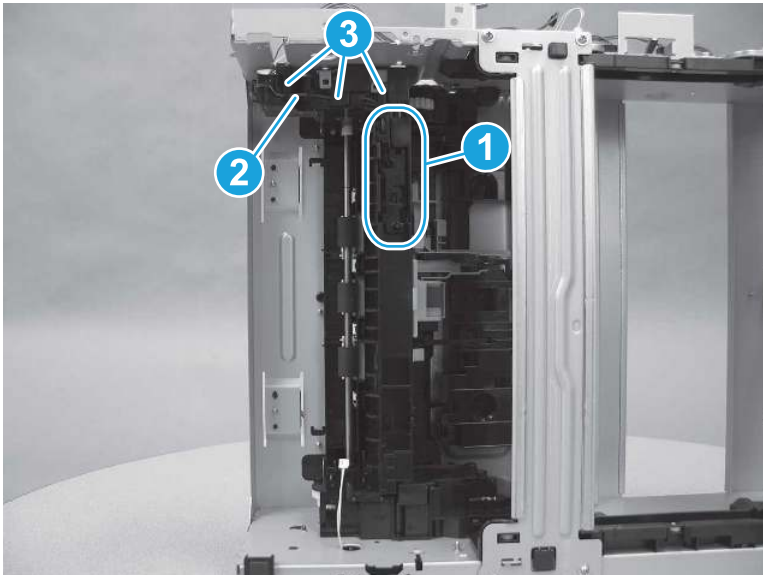
7. Remove one shaft (callout 1).

Figure 5-2159 Remove the shaft



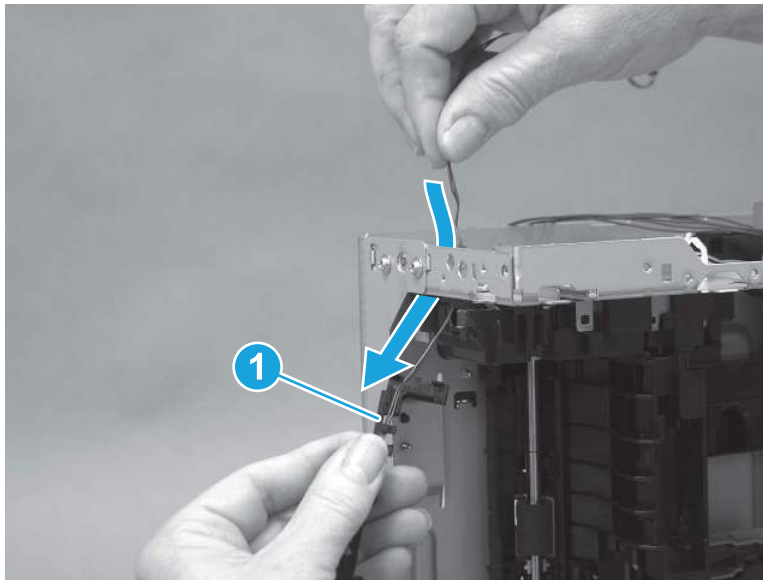
8. Release the tray sensor switch (callout 1), and then remove the cables (callout 2) from the guides (callout 3).

Figure 5-2160 Release the tray sensor switch



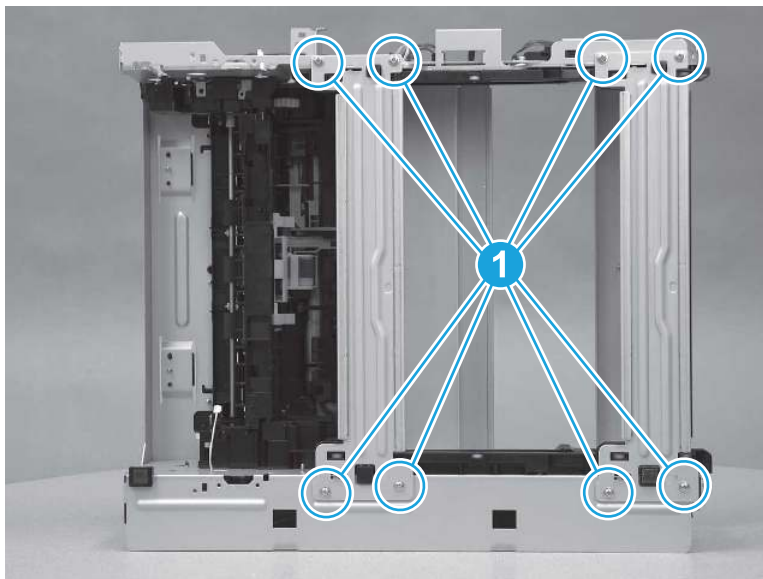
9. Pass the tray sensor switch cables (callout 1) through the hole in the sheet metal.

**Figure 5-2161** Release the cables



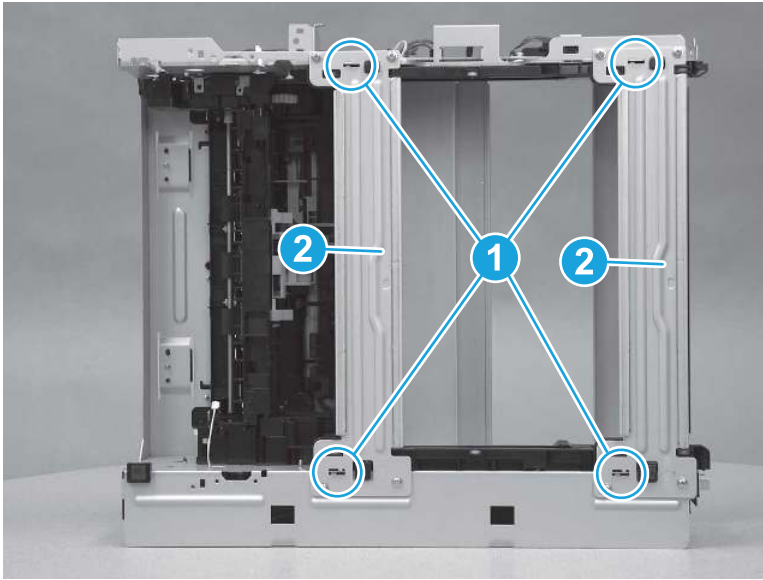
10. Remove eight screws (callout 1).

**Figure 5-2162** Remove eight screws



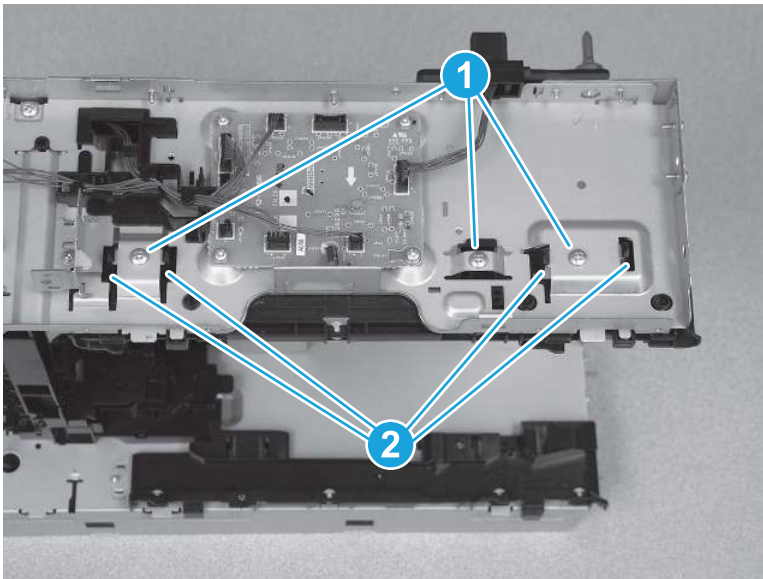
11. Release four tabs (callout 1), and then remove the cross braces (callout 2).

Figure 5-2163 Remove the cross braces



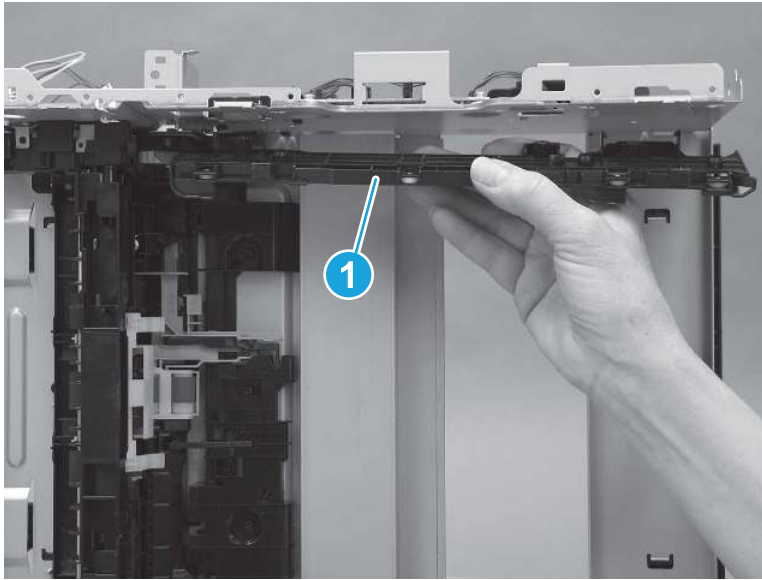
12. On the left side of the feeder, remove three screws (callout 1), and then release three tabs (callout 2).

Figure 5-2164 Remove screws and release tabs



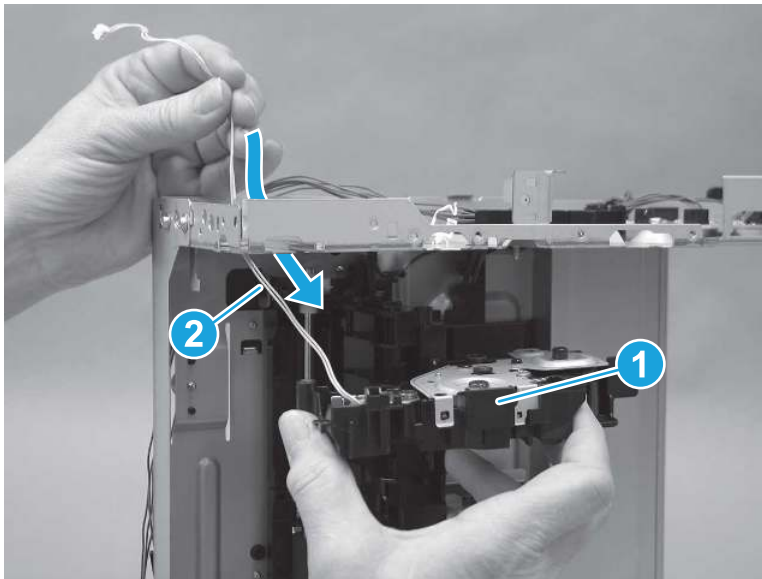
13. Remove the tray guide (callout 1).

**Figure 5-2165** Remove the tray guide



14. Remove the lifter drive assembly (callout 1) while passing the cables (callout 2) through the feeder frame.

**Figure 5-2166** Remove the assembly



## 9. 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.

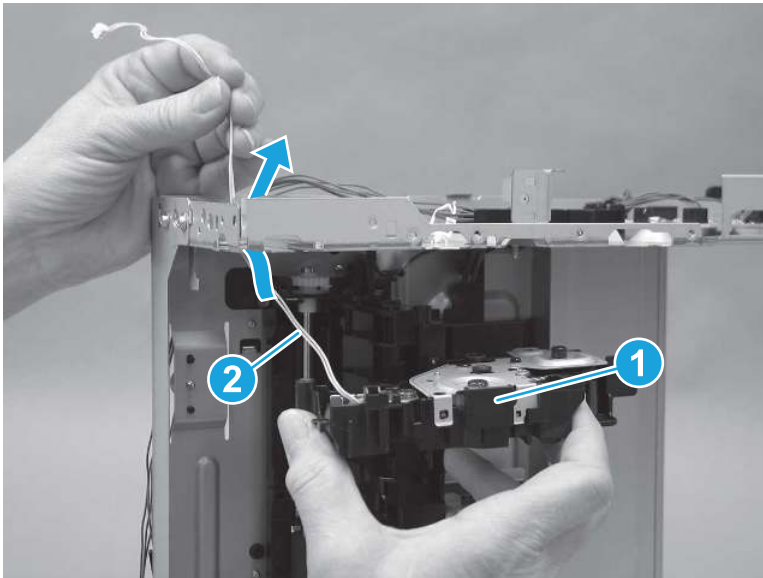
## 10. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Lifter drive assembly (550-sheet paper feeder)

- ▲ Install the lifter drive assembly (callout 1) while passing the cables (callout 2) through the feeder frame.

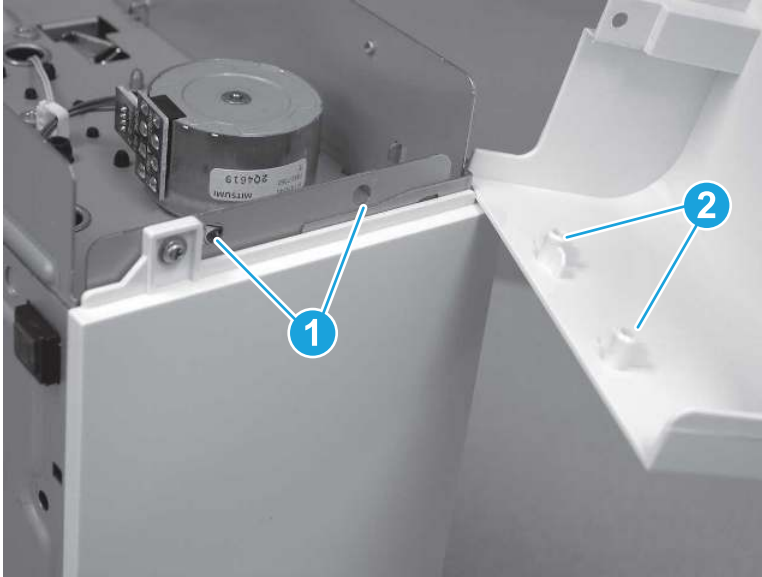
**Figure 5-2167** Install the lifter drive assembly



Left cover (550-sheet paper feeder)

- ▲ Lay the feeder on the right side so that the left side is facing up. At the back of the feeder, install the tabs (callout 1) on the cover in the holes (callout 2) on the feeder.

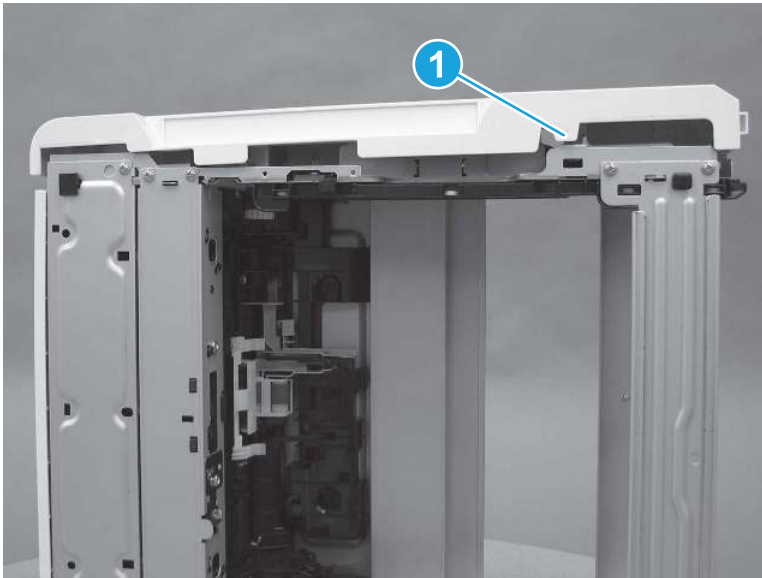
Figure 5-2168 Install the left cover



Right cover (550-sheet paper feeder)

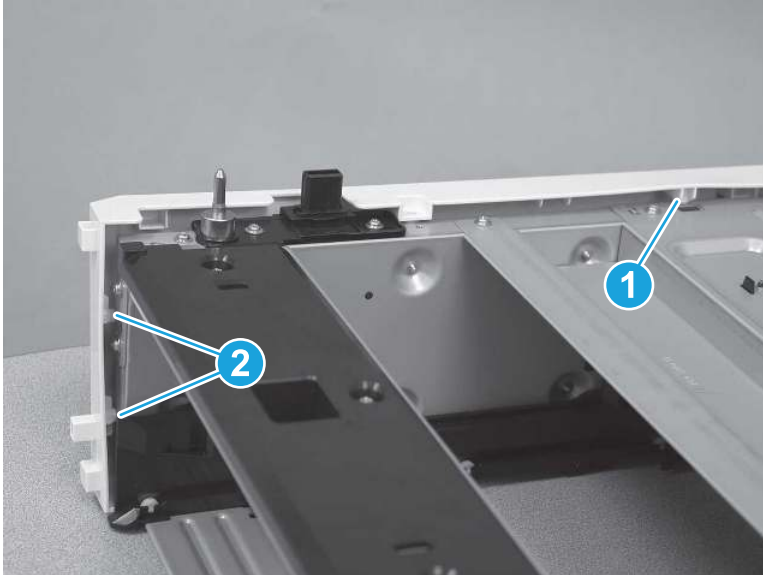
1. Lay the feeder on the left side so that the right side is facing up, and then install one tab (callout 1) on the bottom of the feeder.

Figure 5-2169 Engage one tab



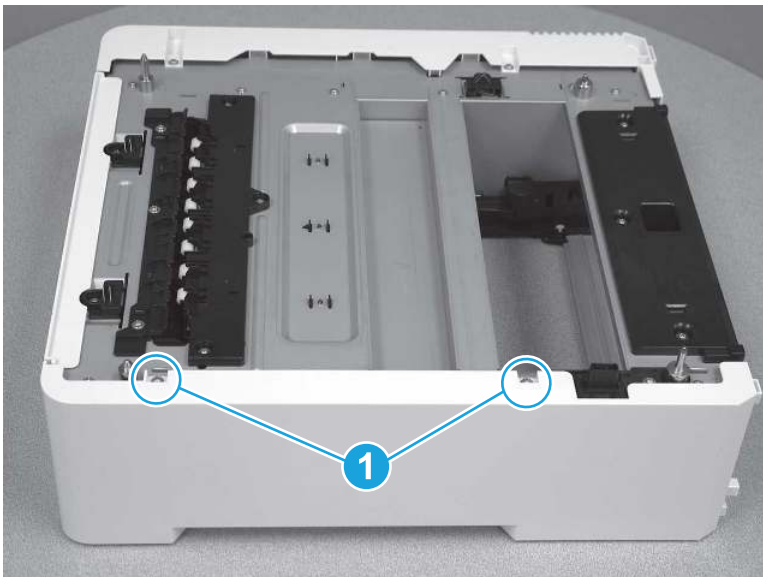
2. Turn the feeder to an upright position with the top facing up. Install one tab (callout 1) on the top of the feeder, and then install two tabs (callout 2) at the front of the feeder.

Figure 5-2170 Engage three tabs



3. Install two screws (callout 1).

Figure 5-2171 Install two screws



## Removal and replacement: Pickup assembly (550-sheet paper feeder)

Learn how to remove and replace the pickup assembly for the 550-sheet paper feeder.

[View a video of how to remove and replace the 550-sheet paper feeder pickup assembly.](#)

Mean time to repair: 53 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](http://www.hp.com/buy/parts).

**Table 5-64 Part information**

Part number	Part description
RM2-6490-000CN	Paper pickup assembly (550-sheet paper feeder)

### Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- Small flat-blade screwdriver

### After performing service

#### Turn the printer power on

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

### Post service test

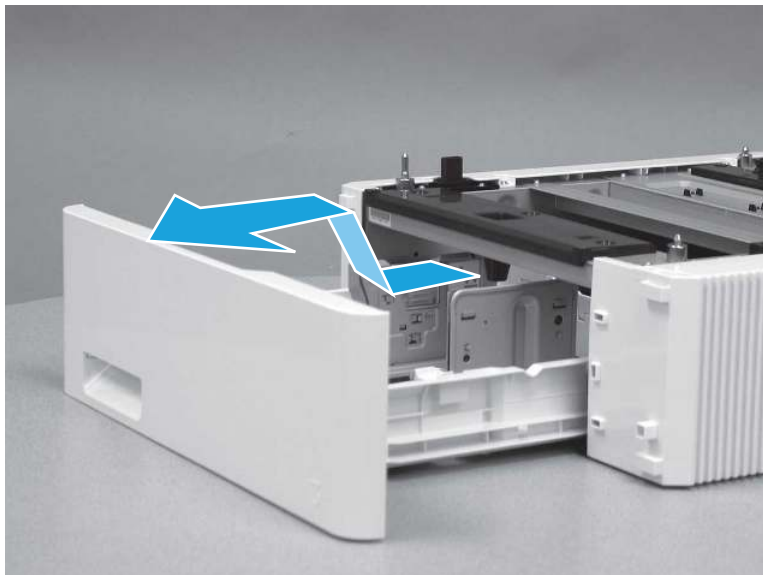
Print any pages necessary to make sure the printer is functioning correctly.

## 1. Remove Tray 3

Follow these steps to remove Tray 3.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

**Figure 5-2172** Remove the tray

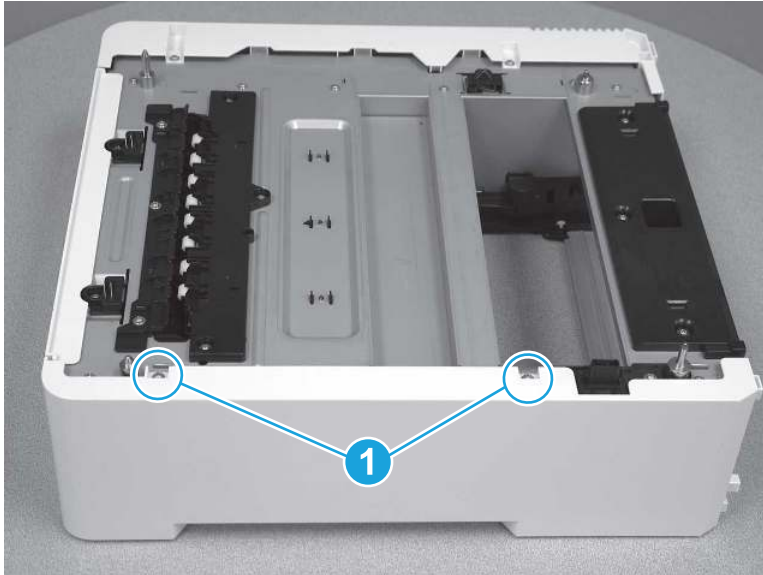


## 2. Remove the right cover (550-sheet paper feeder)

Follow these steps to remove the right cover (550-sheet paper feeder).

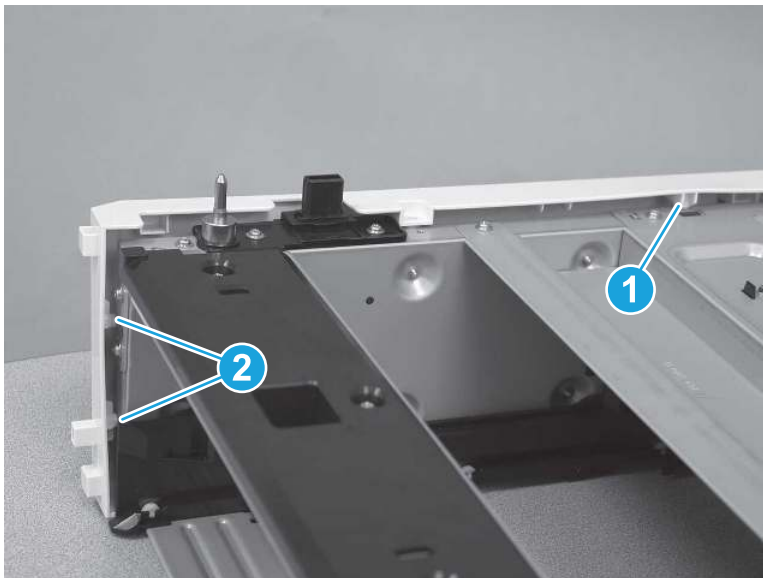
1. Remove two screws (callout 1).

**Figure 5-2173** Remove two screws



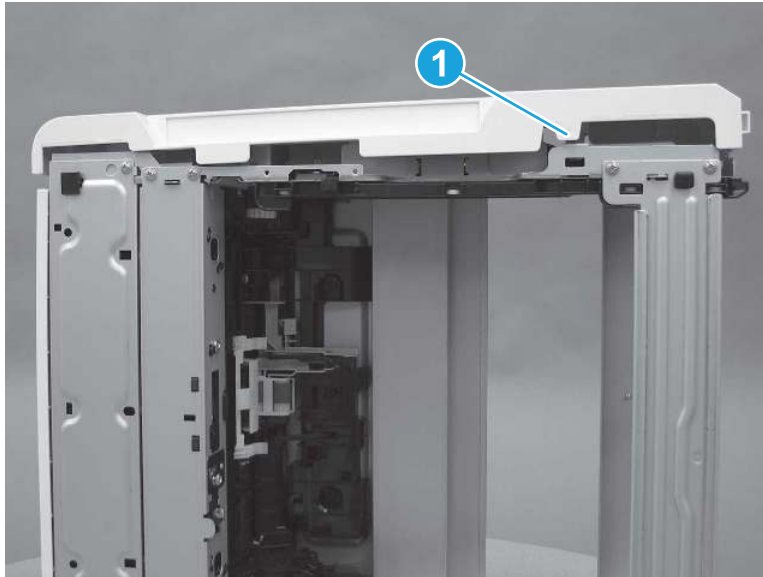
2. Release one tab (callout 1) on the top of the feeder, and then release two tabs (callout 2) at the front of the feeder.

**Figure 5-2174** Release three tabs



3. Lay the feeder on the left side so that the right side is facing up, and then release one tab (callout 1) on the bottom of the feeder. Remove the right cover.

**Figure 5-2175** Remove the cover

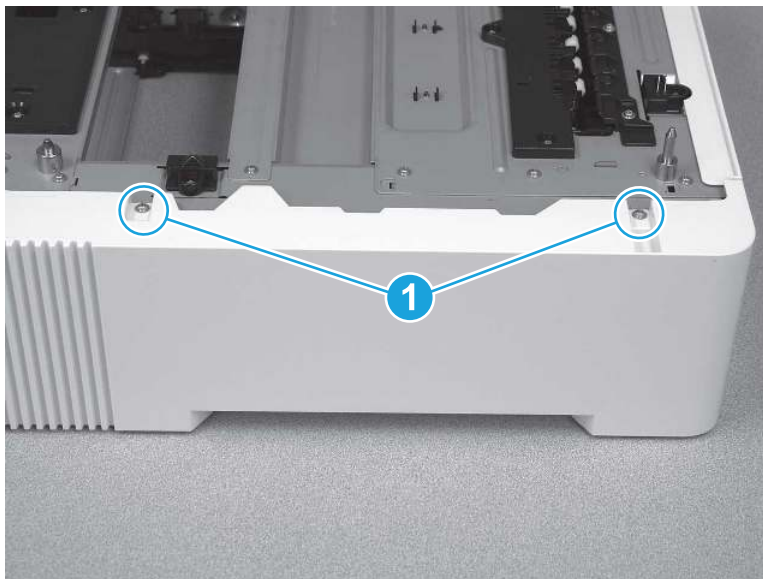


### 3. Remove the left cover (550-sheet paper feeder)

Follow these steps to remove the left cover (550-sheet paper feeder).

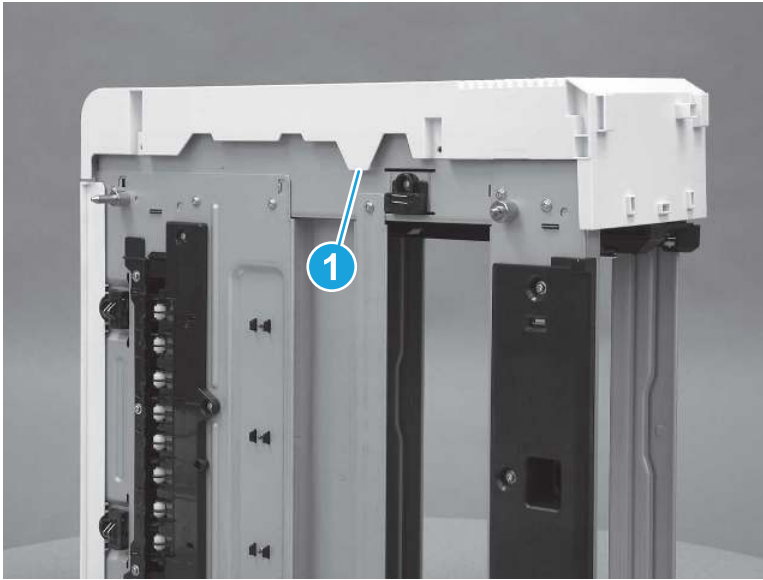
1. Remove two screws (callout 1).

**Figure 5-2176** Remove two screws



2. Release one tab (callout 1) on the top of the feeder.

Figure 5-2177 Release one tab



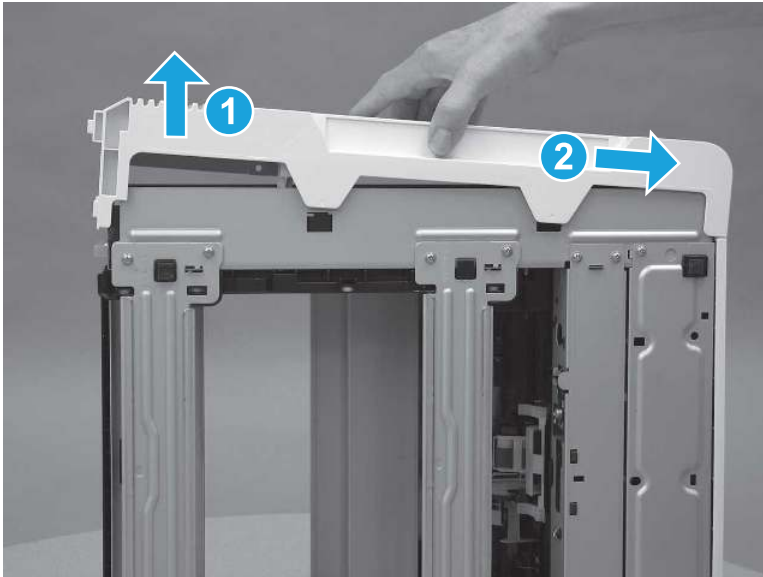
3. Lift the front of the cover up (callout 1), and then slide the cover (callout 2) toward the back of the feeder to remove it.

---

 **NOTE:** Release additional tabs as needed to remove the cover.

---

Figure 5-2178 Remove the cover

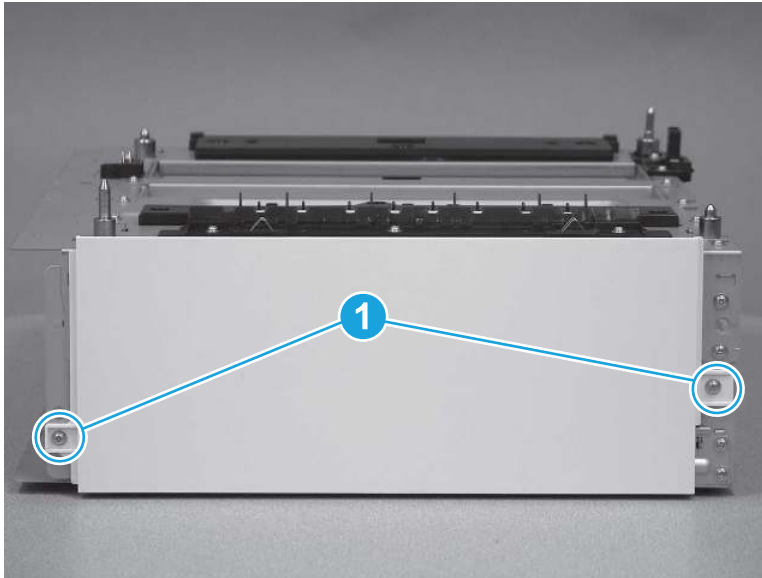


#### 4. Remove the rear cover (550-sheet paper feeder)

Follow these steps to remove the rear cover (550-sheet paper feeder).

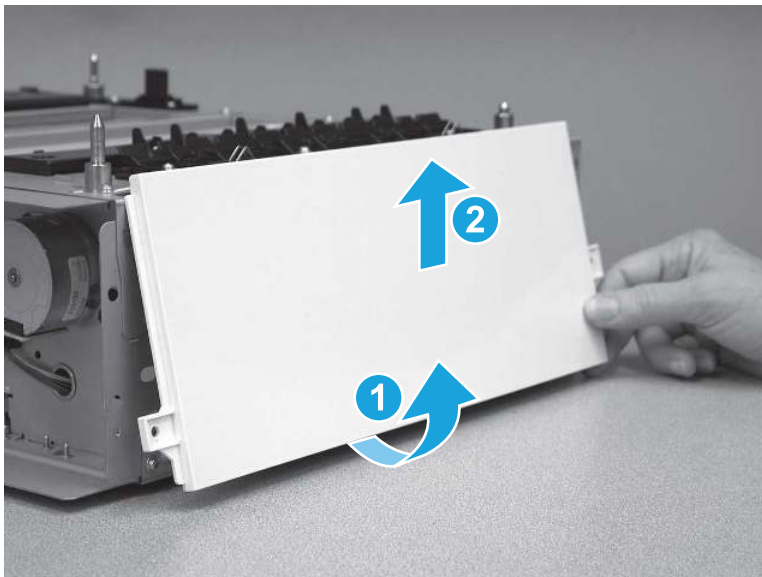
1. Remove two screws (callout 1).

**Figure 5-2179** Remove two screws



2. Rotate the bottom edge of the cover (callout 1) away from the feeder, and then raise the cover up (callout 2) to remove it.

**Figure 5-2180** Remove the cover

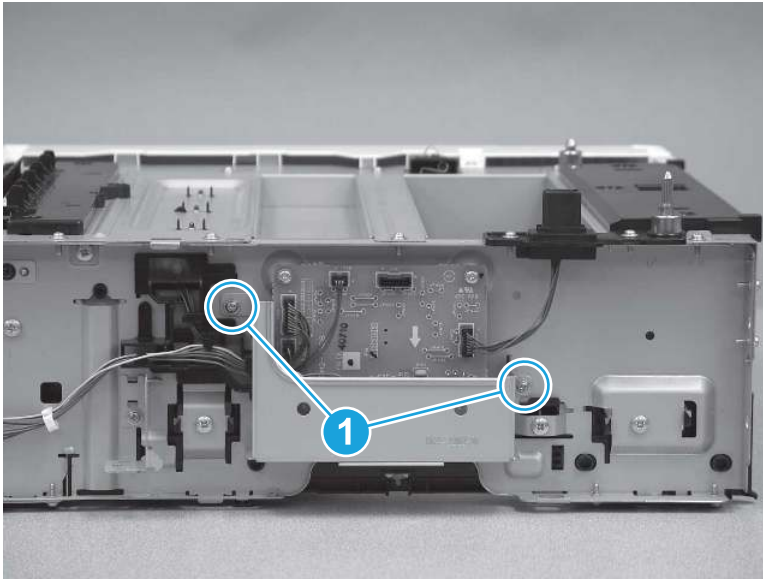


## 5. Remove the PCA cover (550-sheet paper feeder)

Follow these steps to remove the PCA cover (550-sheet paper feeder).

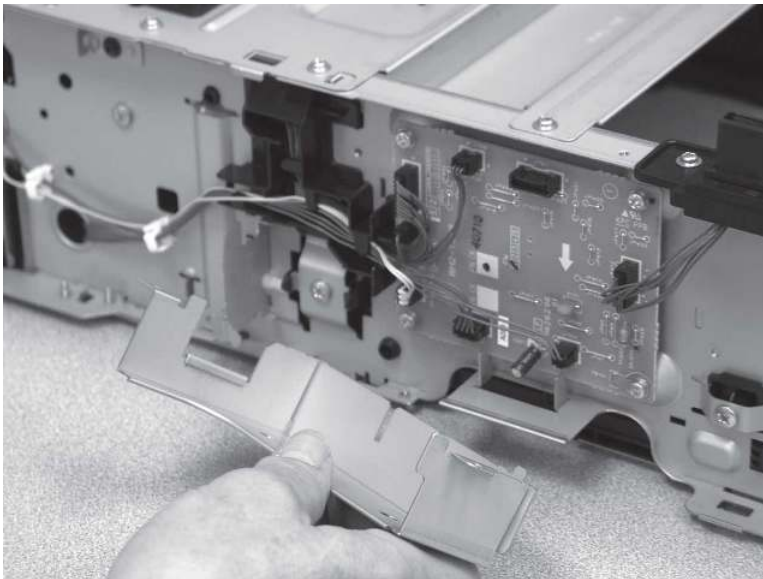
1. On the left side of the feeder, remove two screws (callout 1).

**Figure 5-2181** Remove two screws



2. Remove the PCA cover.

**Figure 5-2182** Remove the cover

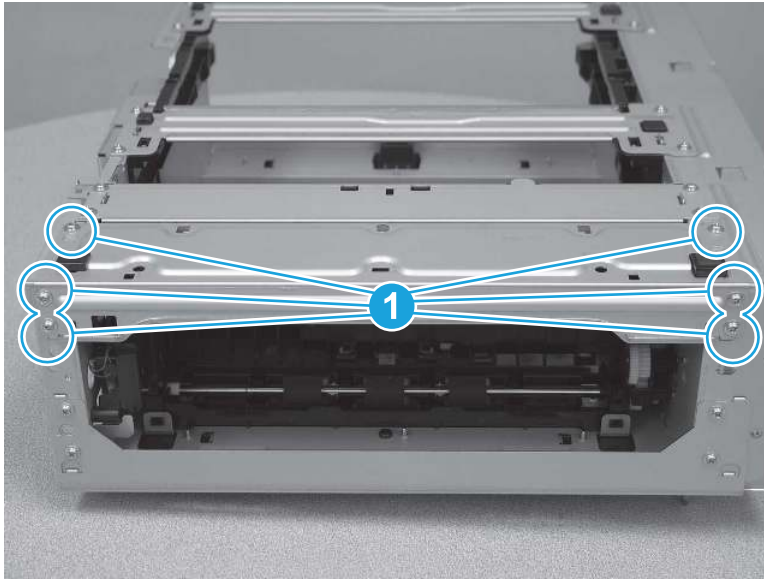


## 6. Remove the base plate (550-sheet paper feeder)

Follow these steps to remove the base plate (550-sheet paper feeder).

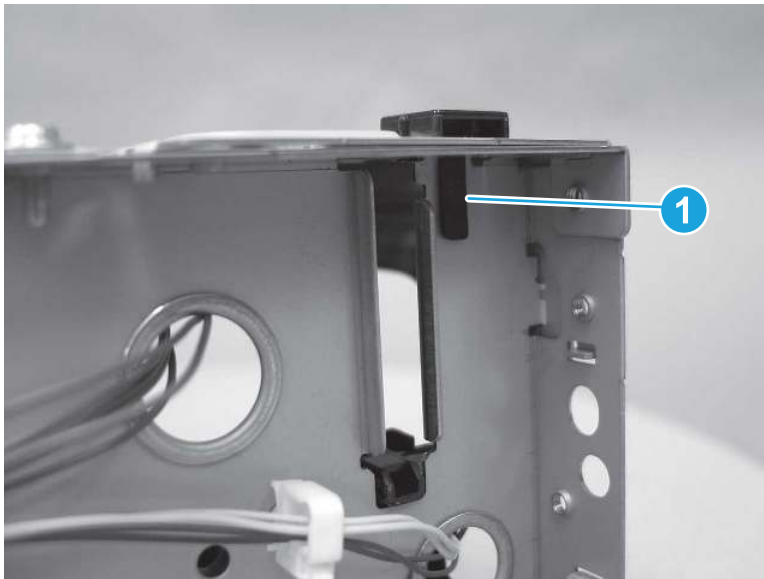
1. Lay the feeder on the top side so that the bottom side is facing up. Remove six screws (callout 1).

**Figure 5-2183** Remove six screws



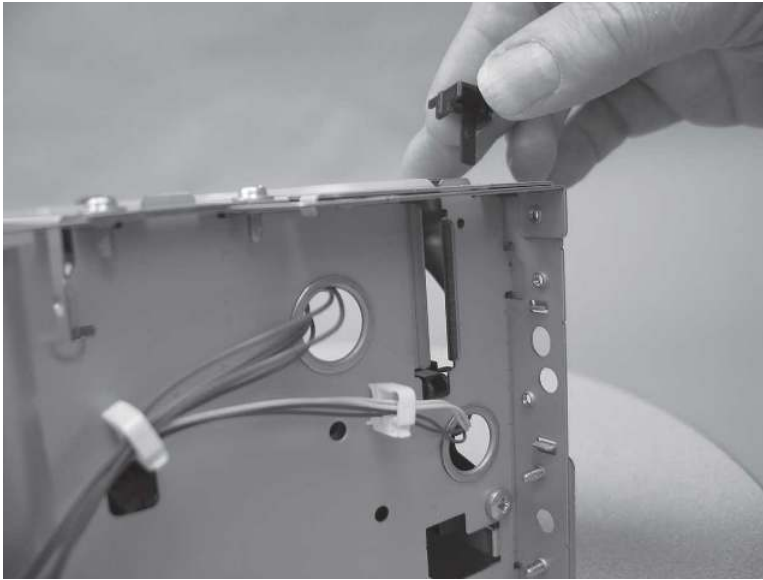
2. On the left side of the feeder, release one tab (callout 1) on the foot.

**Figure 5-2184** Release one tab



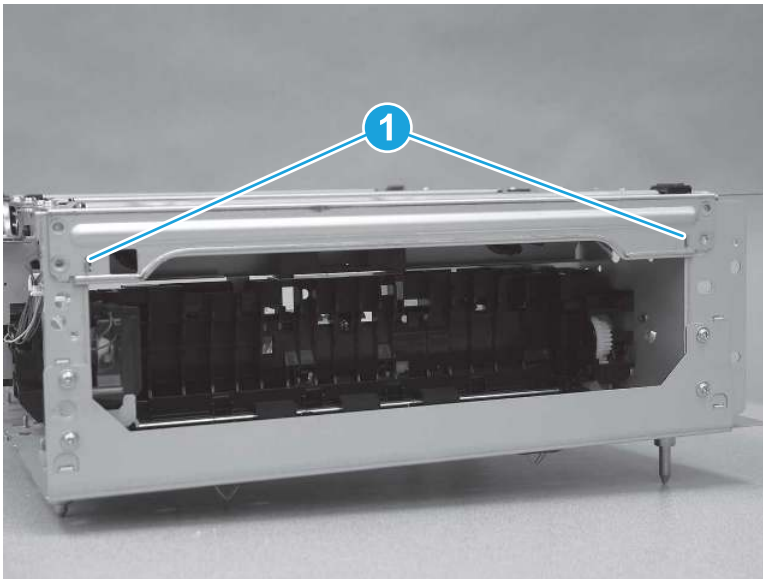
3. Remove the foot.

Figure 5-2185 Remove the foot



4. Release two tabs (callout 1).

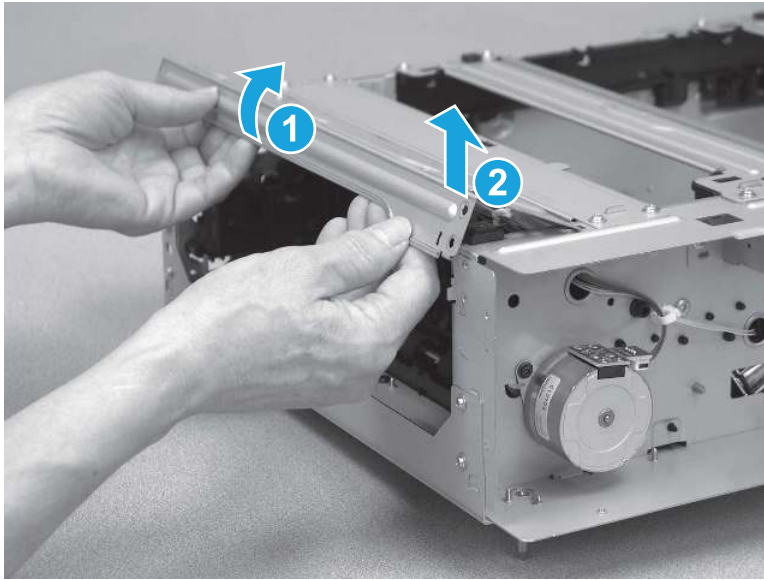
Figure 5-2186 Release two tabs





5. Rotate the edge of the base plate up (callout 1), and then lift it up (callout 2) to remove it.

**Figure 5-2187** Remove the assembly

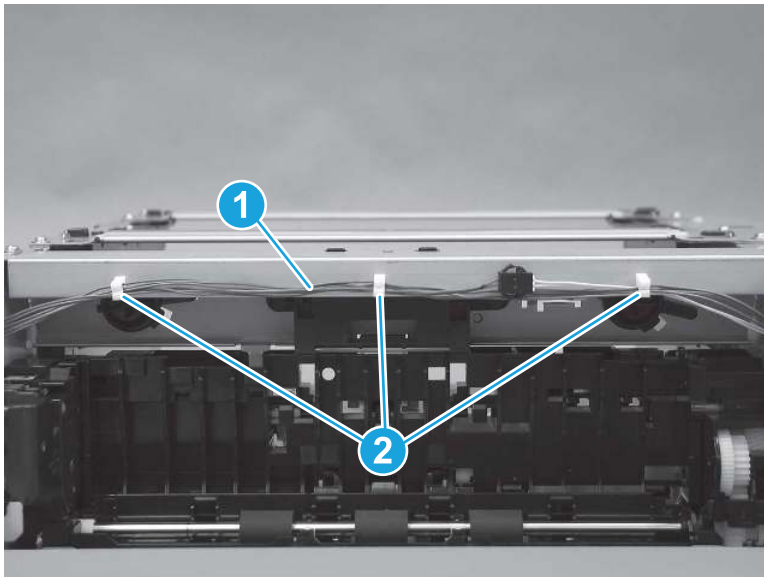


## 7. Remove the feed frame assembly (550-sheet paper feeder)

Follow these steps to remove the feed frame assembly (550-sheet paper feeder).

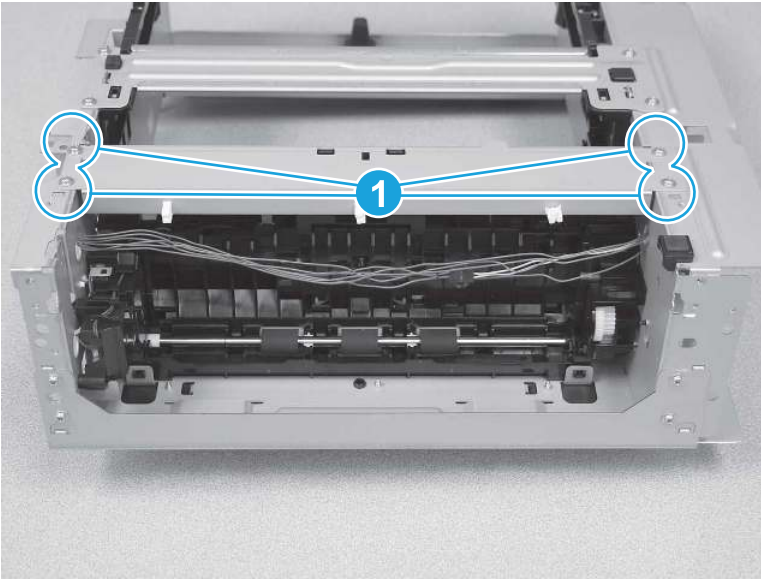
1. Release the cables (callout 1) from the retainers (callout 2).

**Figure 5-2188** Release the cables



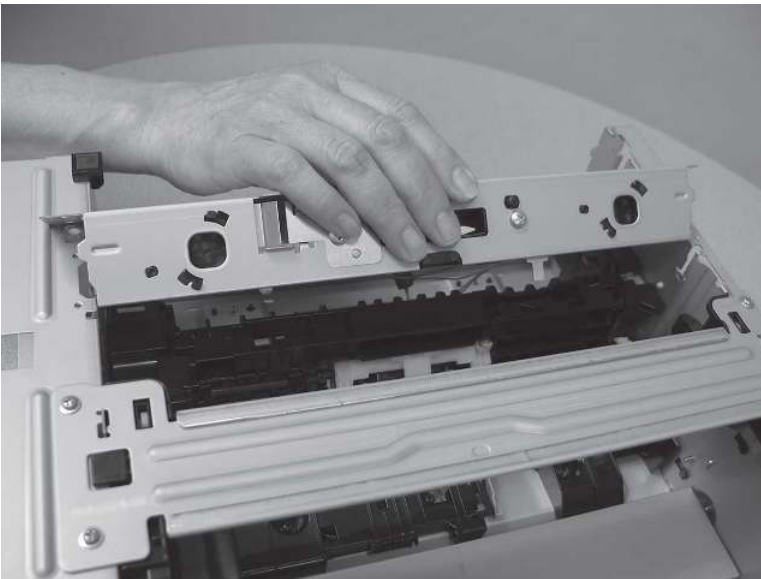
2. Remove four screws (callout 1).

**Figure 5-2189** Remove four screws



3. Remove the feed frame assembly.

**Figure 5-2190** Remove the assembly

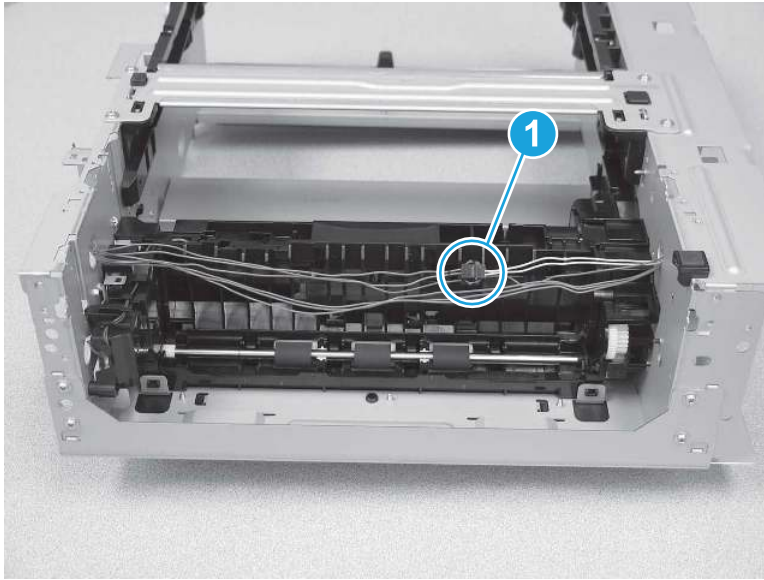


## 8. Remove the lifter drive assembly (550-sheet paper feeder)

Follow these steps to remove the lifter drive assembly (550-sheet paper feeder).

1. Lay the feeder on the top so that the bottom is facing up. Disconnect one in-line connector (callout 1).

**Figure 5-2191** Disconnect one connector



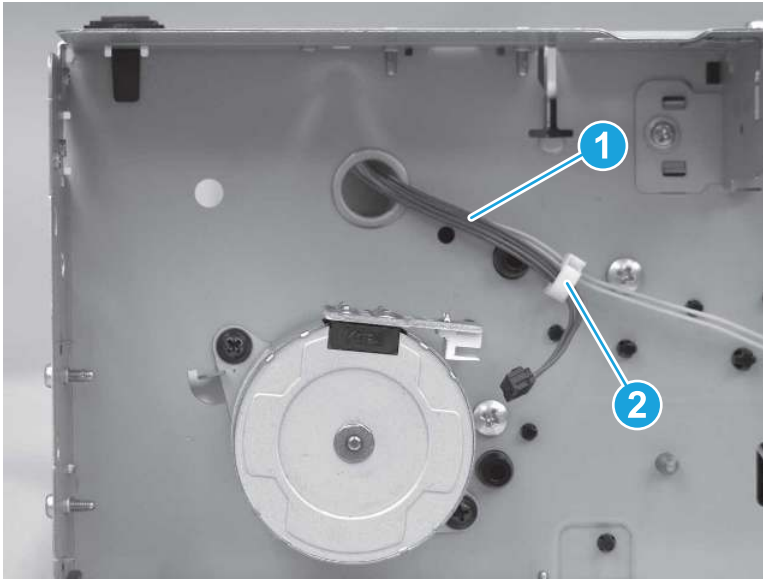
2. On the right side of the feeder, disconnect one connector (callout 1) from the motor.

**Figure 5-2192** Disconnect one connector



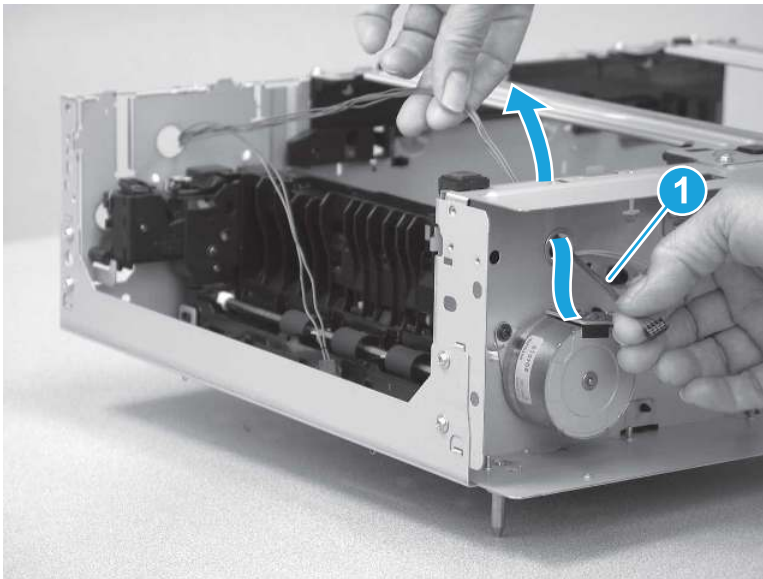
3. Release the cables (callout 1) from the retainer (callout 2).

Figure 5-2193 Release the cables



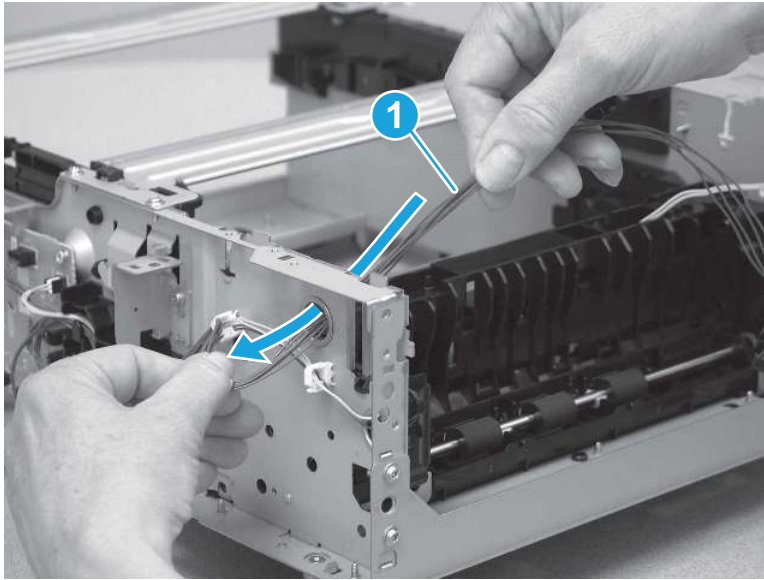
4. Pass the cables (callout 1) through the hole in the sheet metal.

Figure 5-2194 Release the cables




5. On the left side of the feeder, pass all of the cables (callout 1) through the opening in the paper feeder.

**Figure 5-2195** Release the cables



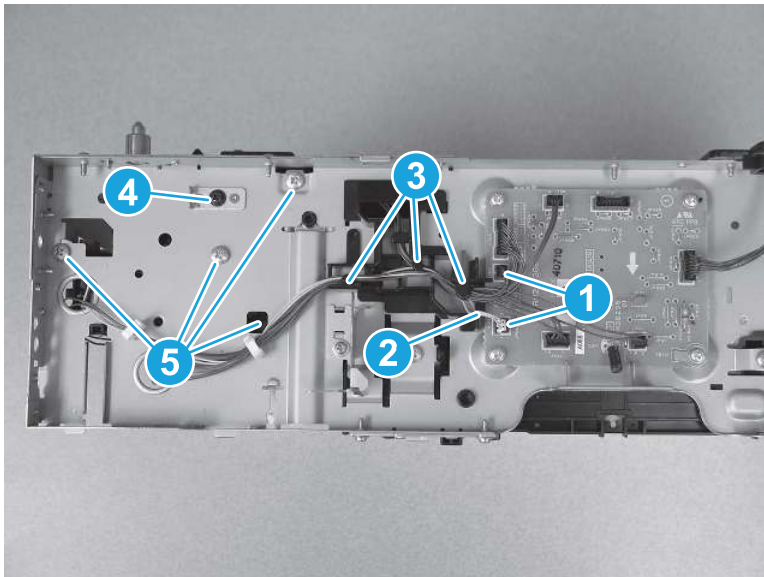
6. Do the following:
  - a. Lay the feeder on the right side so that the left side is facing up, and then disconnect two connectors (callout 1).
  - b. Remove the cables (callout 2) from the guides (callout 3).
  - c. Remove one screw (callout 4), and then remove four more screws (callout 5).

---

 **Reinstallation tip:** One screw (callout 4) is different from the other screws. Make sure that this screw is installed in the correct position.

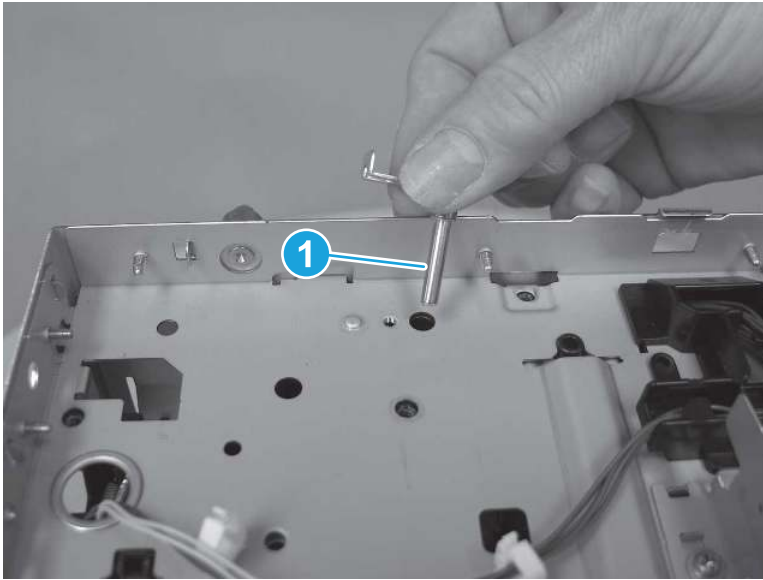
---

**Figure 5-2196** Disconnect connector and remove screws



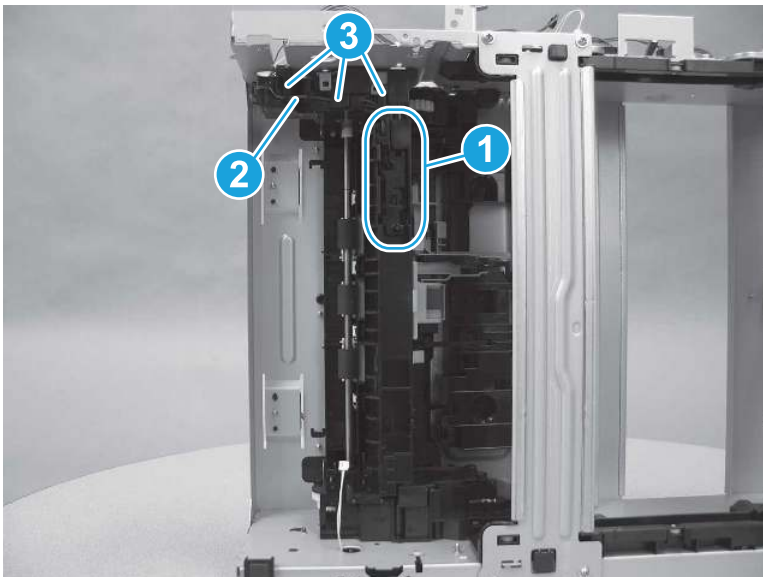
7. Remove one shaft (callout 1).

Figure 5-2197 Remove the shaft



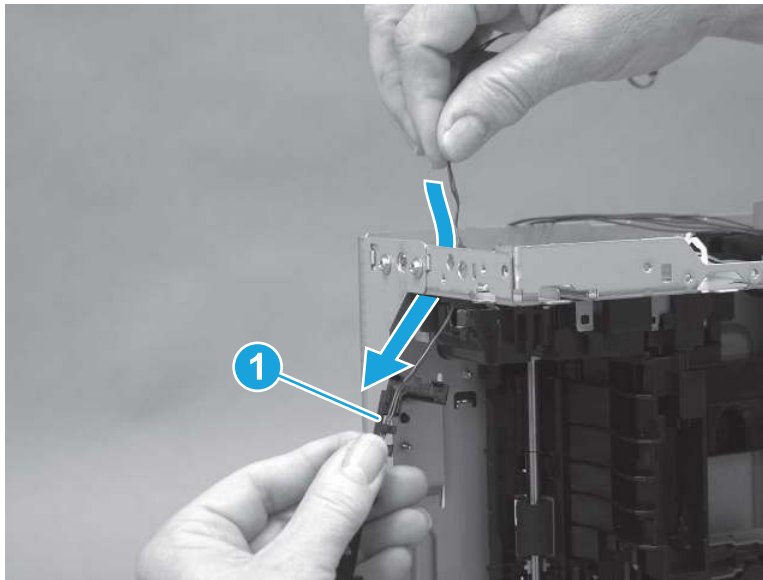
8. Release the tray sensor switch (callout 1), and then remove the cables (callout 2) from the guides (callout 3).

Figure 5-2198 Release the tray sensor switch



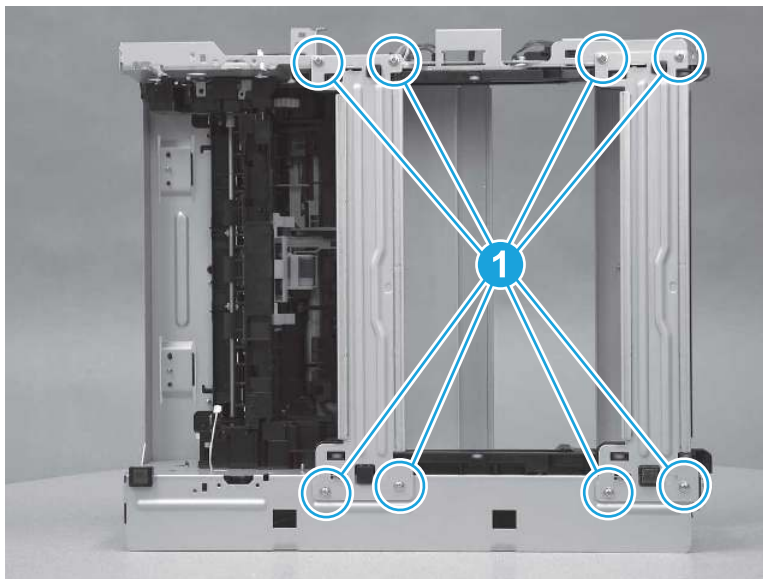
9. Pass the tray sensor switch cables (callout 1) through the hole in the sheet metal.

**Figure 5-2199** Release the cables



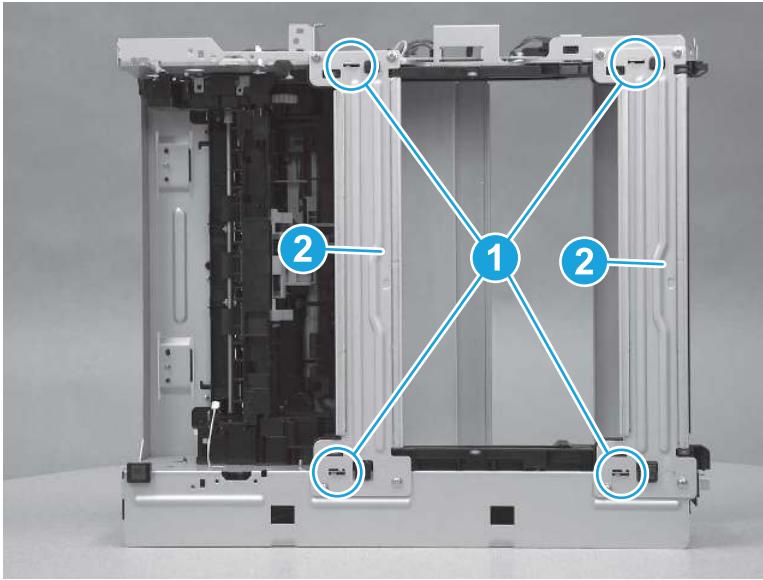
10. Remove eight screws (callout 1).

**Figure 5-2200** Remove eight screws



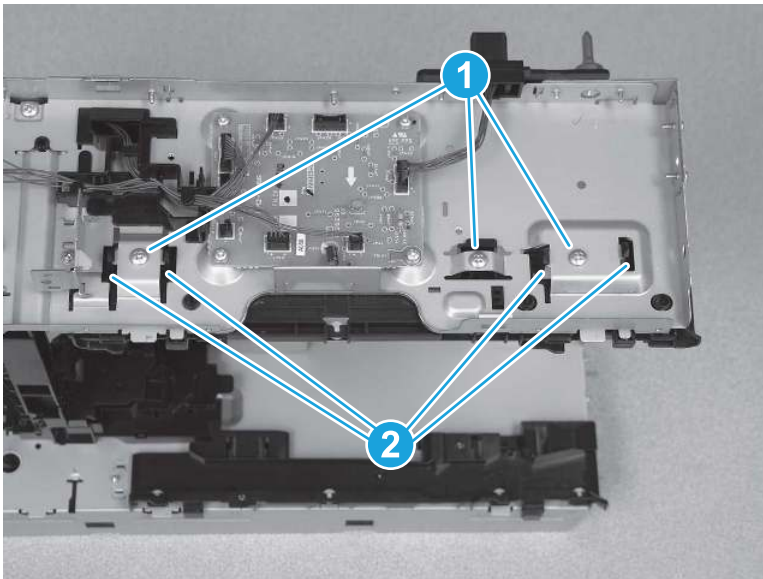
11. Release four tabs (callout 1), and then remove the cross braces (callout 2).

Figure 5-2201 Remove the cross braces



12. On the left side of the feeder, remove three screws (callout 1), and then release three tabs (callout 2).

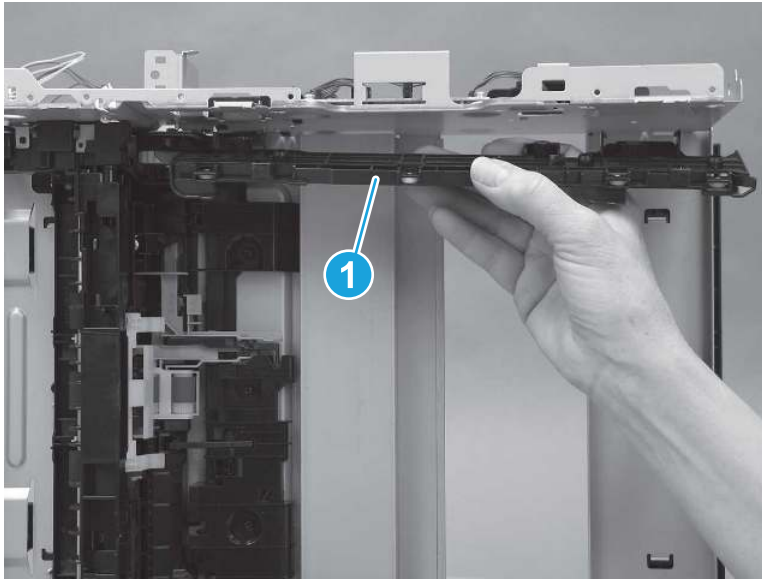
Figure 5-2202 Remove screws and release tabs





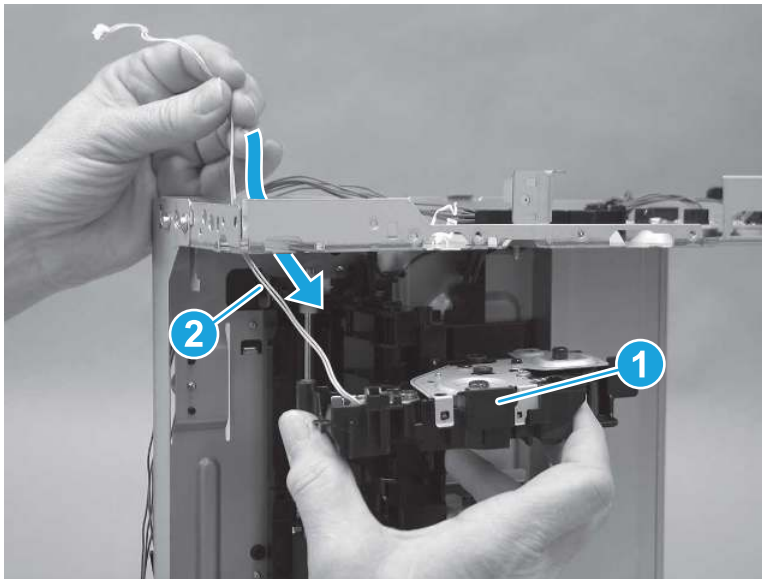
13. Remove the tray guide (callout 1).

**Figure 5-2203** Remove the tray guide



14. Remove the lifter drive assembly (callout 1) while passing the cables (callout 2) through the feeder frame.

**Figure 5-2204** Remove the assembly

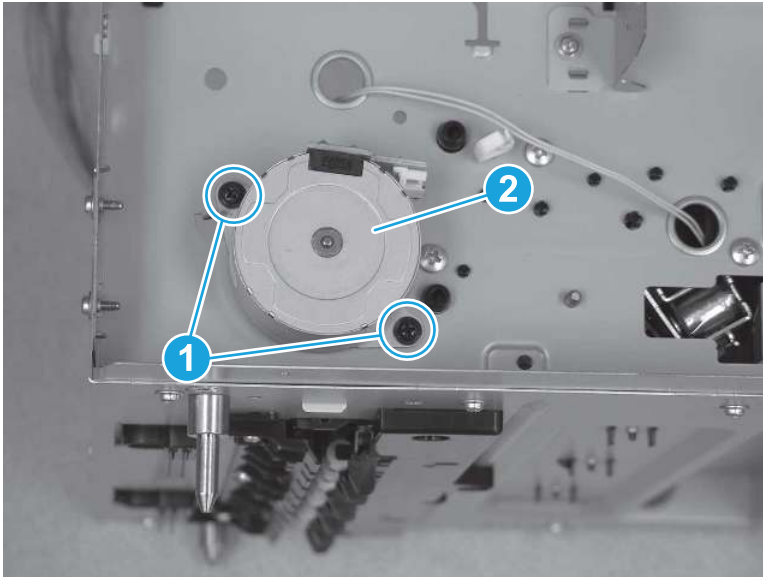


## 9. Remove the pickup assembly (550-sheet paper feeder)

Follow these steps to remove the pickup assembly (550-sheet paper feeder).

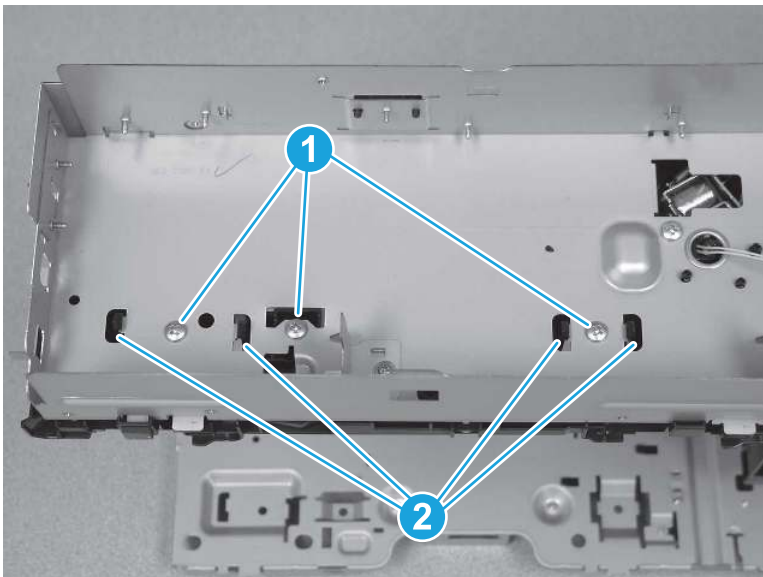
1. Lay the feeder on the left side so that the right side is facing up. Remove two screws (callout 1), and then remove the motor (callout 2).

**Figure 5-2205** Remove the motor



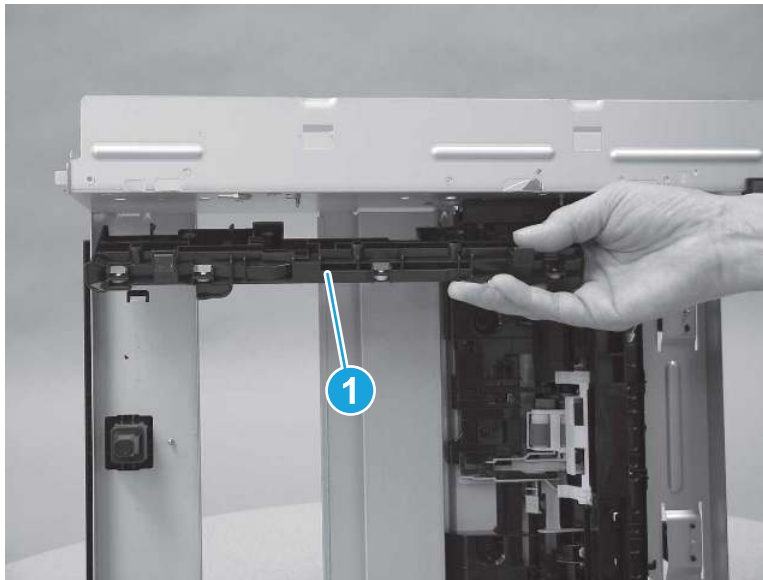
2. Remove three screws (callout 1), and then release three tabs (callout 2).

**Figure 5-2206** Remove screws and release tabs



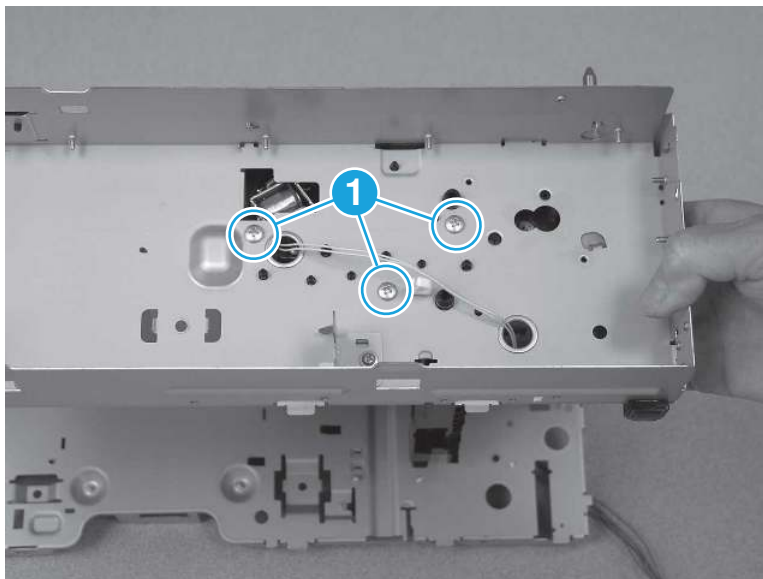
3. Remove the tray guide (callout 1).

**Figure 5-2207** Remove the tray guide



4. Remove three screws (callout 1).

**Figure 5-2208** Remove three screws



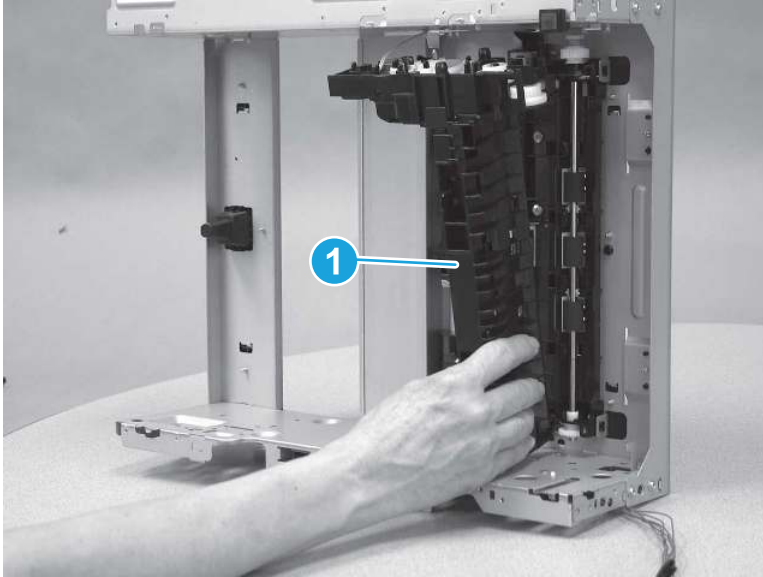
5. Separate the pickup assembly (callout 1) from the feeder frame.

---

**⚠ CAUTION:** Do not attempt to completely remove the assembly. It is still attached to the frame by a wire harness.

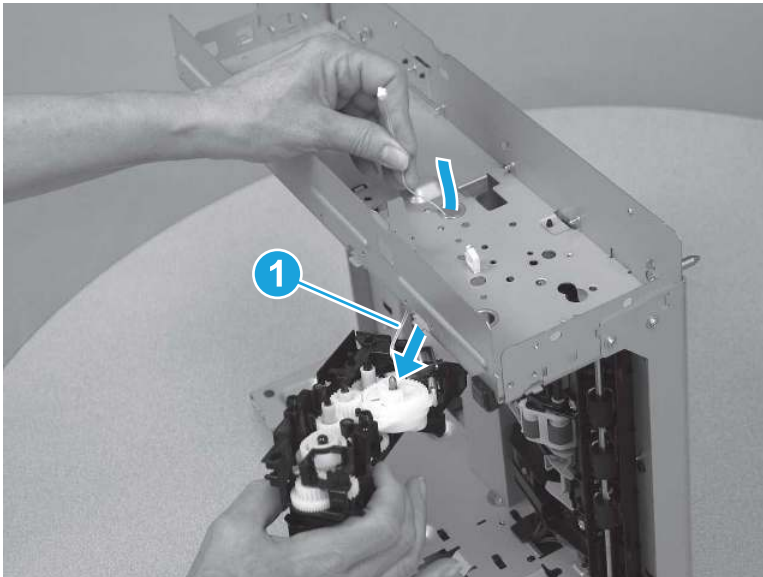
---

Figure 5-2209 Release the assembly



6. Pass the cables (callout 1) through the feeder frame to remove the assembly.

Figure 5-2210 Remove the 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>


---

- 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.

---

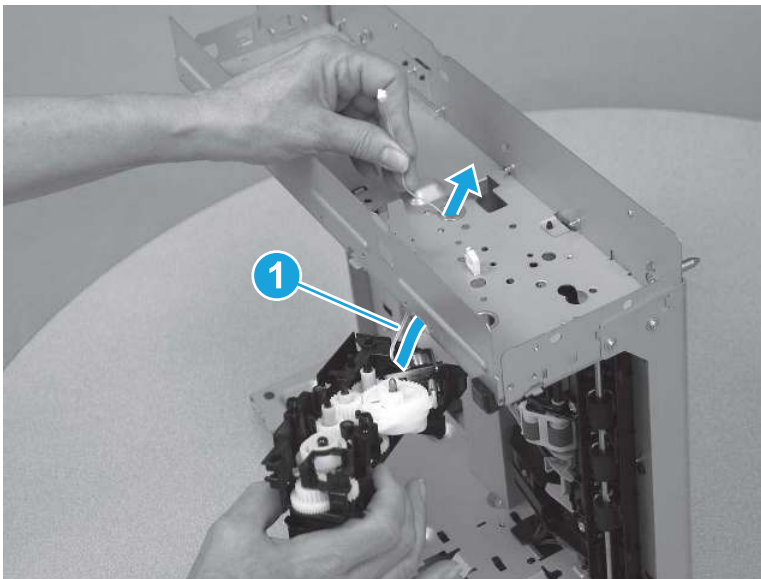
## 11. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Pickup assembly (550-sheet paper feeder)

- ▲ Lay the feeder on the left side so that the right side is facing up. Pass the cables (callout 1) through the feeder frame.

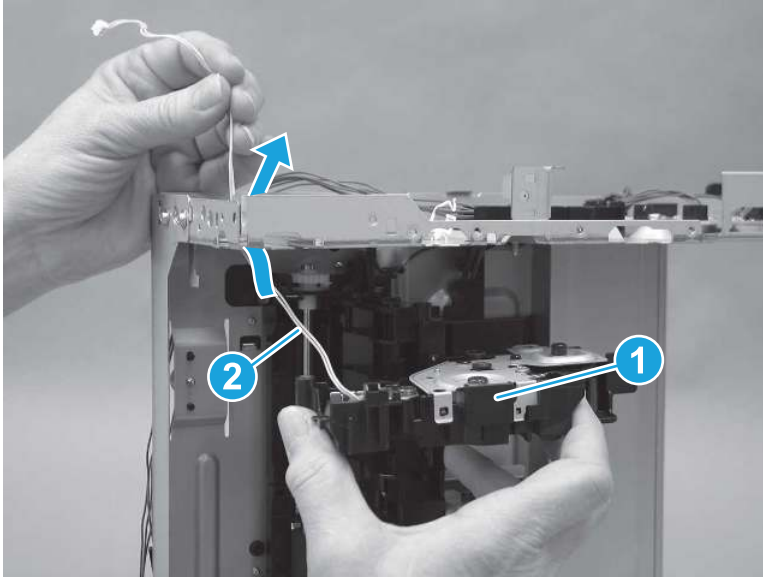
**Figure 5-2211** Install the pickup assembly



Lifter drive assembly (550-sheet paper feeder)

- ▲ Install the lifter drive assembly (callout 1) while passing the cables (callout 2) through the feeder frame.

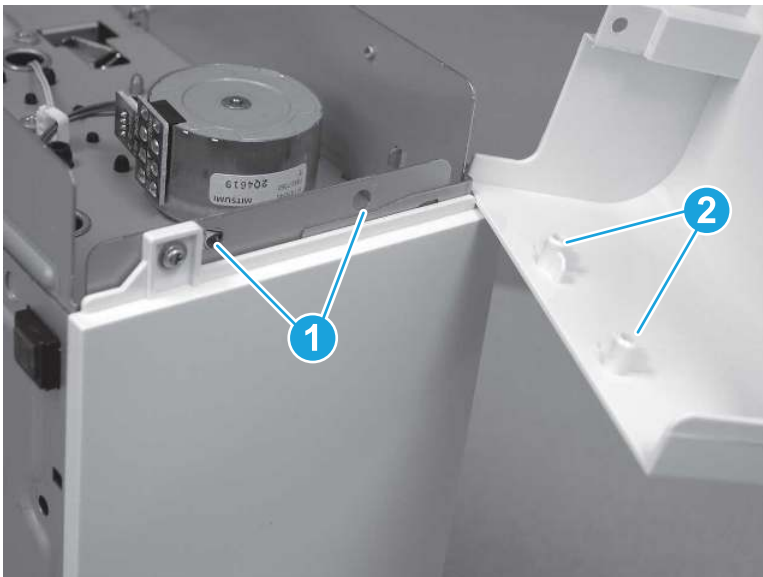
**Figure 5-2212** Install the lifter drive assembly



Left cover (550-sheet paper feeder)

- ▲ Lay the feeder on the right side so that the left side is facing up. At the back of the feeder, install the tabs (callout 1) on the cover in the holes (callout 2) on the feeder.

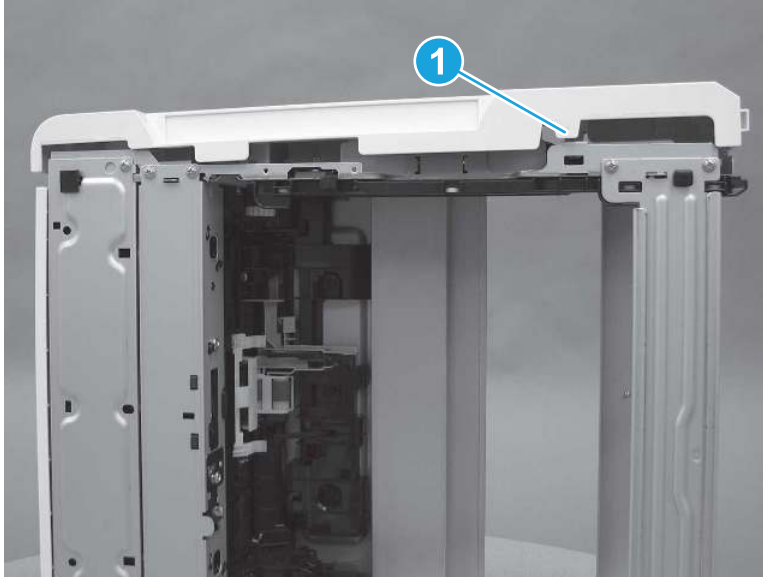
**Figure 5-2213** Install the left cover



Right cover (550-sheet paper feeder)

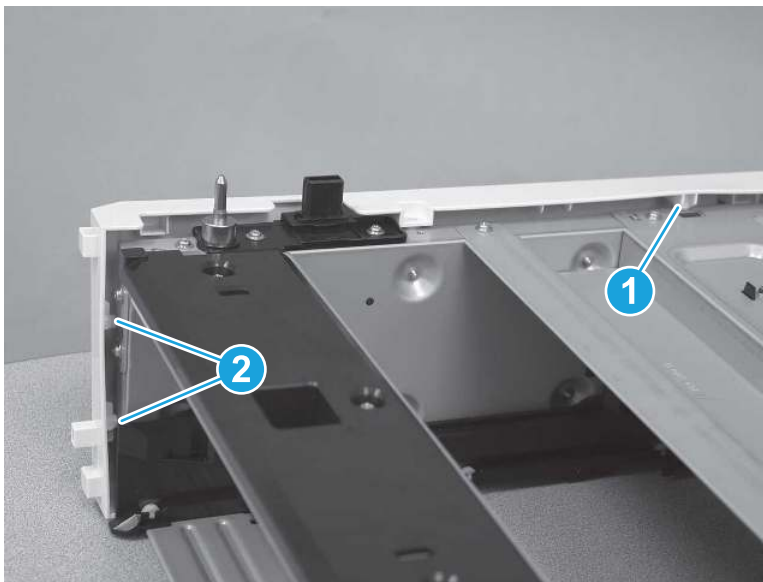
1. Lay the feeder on the left side so that the right side is facing up, and then install one tab (callout 1) on the bottom of the feeder.

Figure 5-2214 Engage one tab



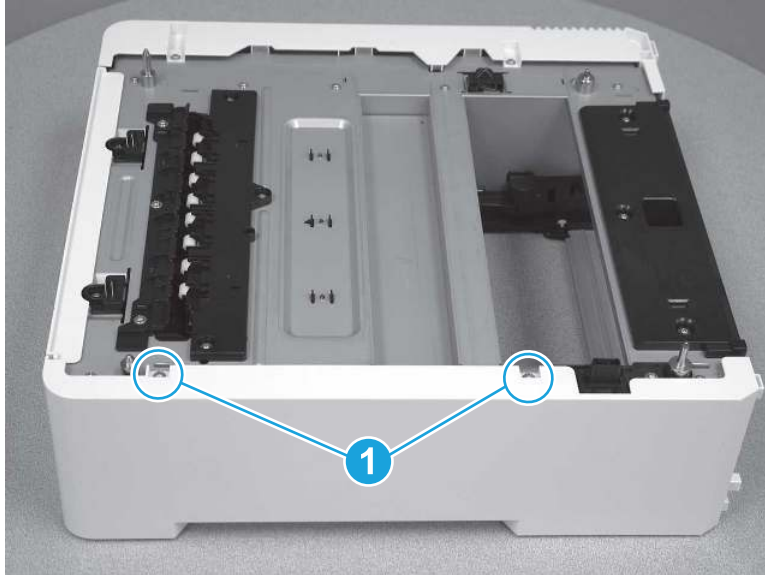
2. Turn the feeder to an upright position with the top facing up. Install one tab (callout 1) on the top of the feeder, and then install two tabs (callout 2) at the front of the feeder.

Figure 5-2215 Engage three tabs



3. Install two screws (callout 1).

Figure 5-2216 Install two screws



## Removal and replacement: Front feed guide assembly (550-sheet paper feeder)

Learn how to remove and replace the front feed guide assembly for the 550-sheet paper feeder.

[View a video of how to remove and replace the 550-sheet paper feeder front feed guide assembly.](#)

Mean time to repair: 65 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](http://www.hp.com/buy/parts).

Table 5-65 Part information

Part number	Part description
Not orderable	Feed guide assembly front (550-sheet paper feeder)

### Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- Small flat-blade screwdriver

### After performing service

#### Turn the printer power on



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

### Post service test

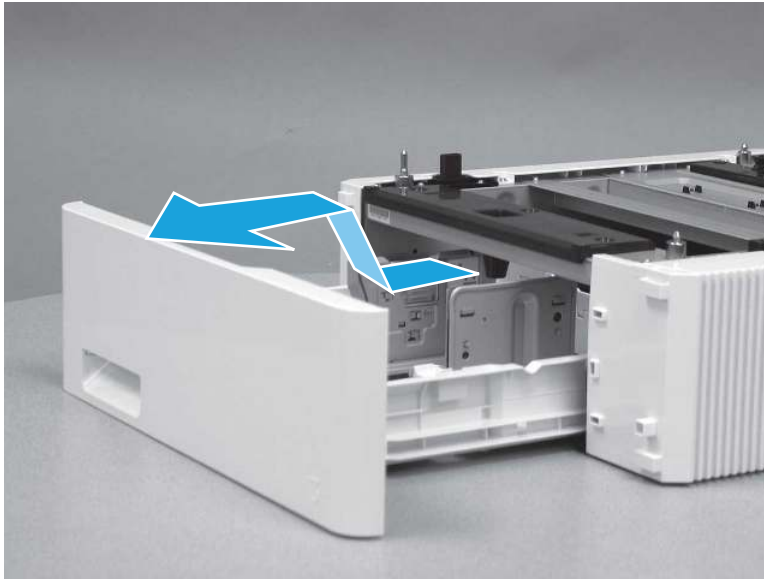
Print any pages necessary to make sure the printer is functioning correctly.

## 1. Remove Tray 3

Follow these steps to remove Tray 3.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

**Figure 5-2217** Remove the tray

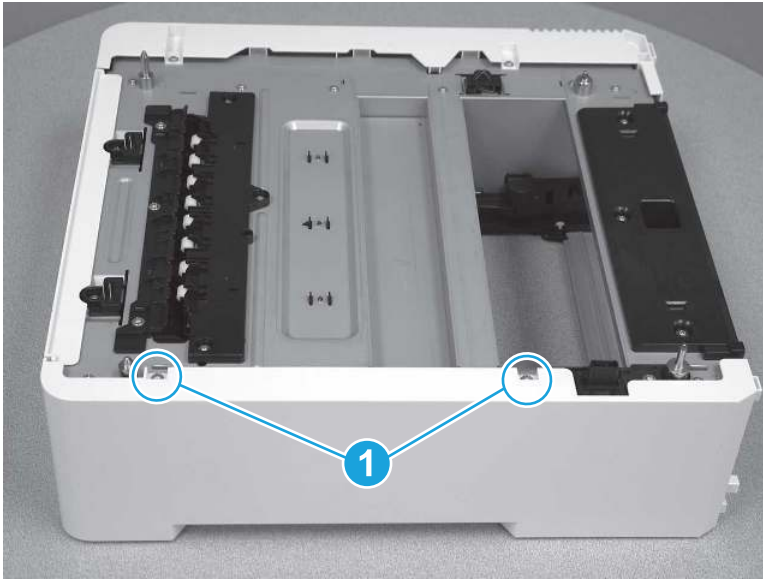


## 2. Remove the right cover (550-sheet paper feeder)

Follow these steps to remove the right cover (550-sheet paper feeder).

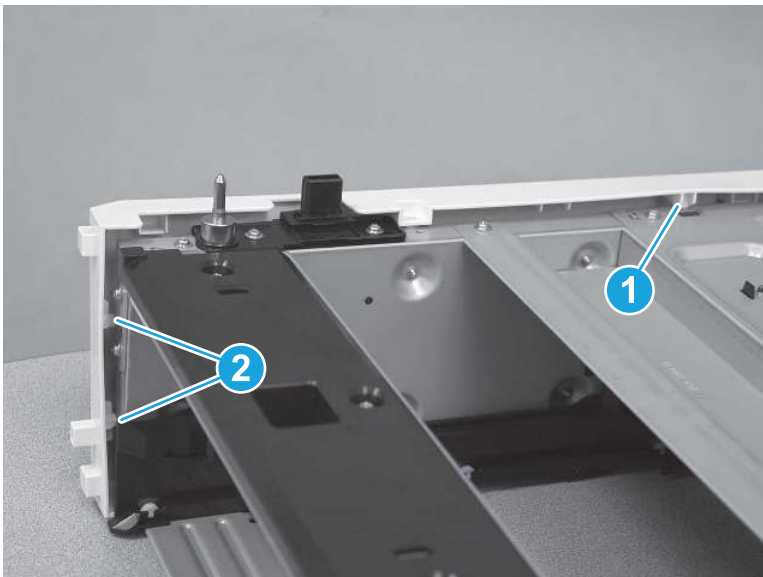
1. Remove two screws (callout 1).

Figure 5-2218 Remove two screws



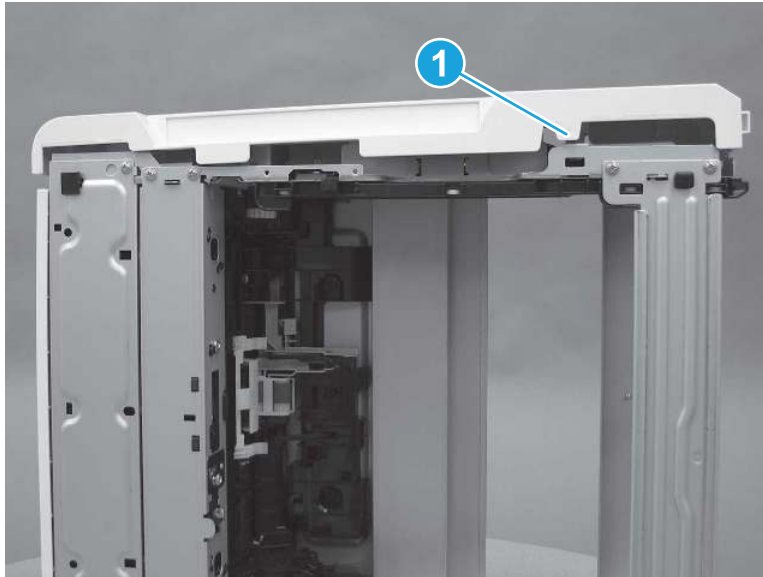
2. Release one tab (callout 1) on the top of the feeder, and then release two tabs (callout 2) at the front of the feeder.

Figure 5-2219 Release three tabs



3. Lay the feeder on the left side so that the right side is facing up, and then release one tab (callout 1) on the bottom of the feeder. Remove the right cover.

Figure 5-2220 Remove the cover

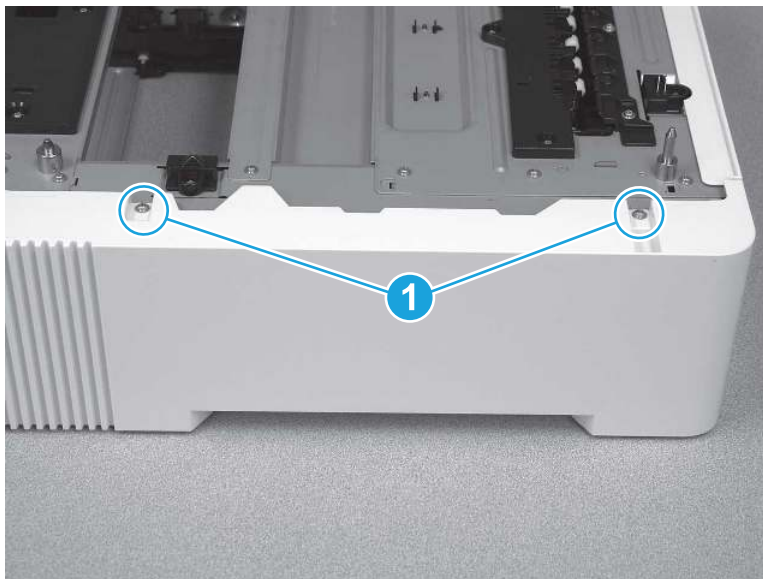


### 3. Remove the left cover (550-sheet paper feeder)

Follow these steps to remove the left cover (550-sheet paper feeder).

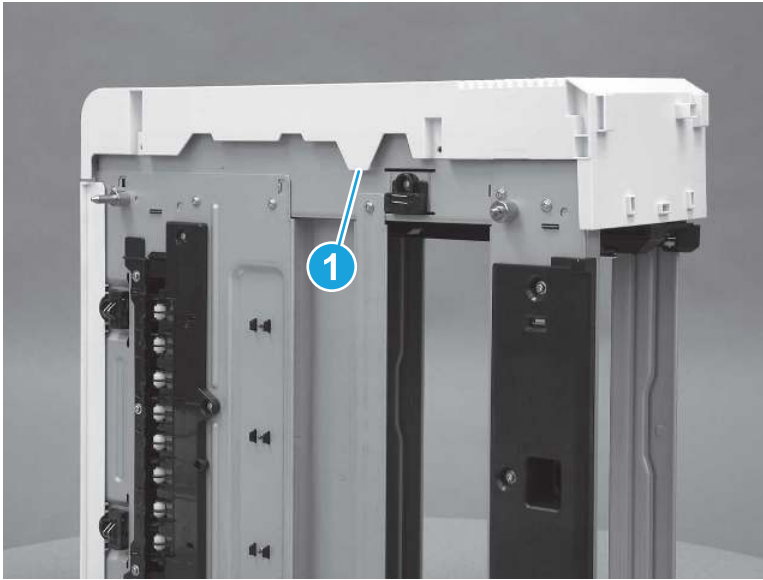
1. Remove two screws (callout 1).

Figure 5-2221 Remove two screws



2. Release one tab (callout 1) on the top of the feeder.

Figure 5-2222 Release one tab



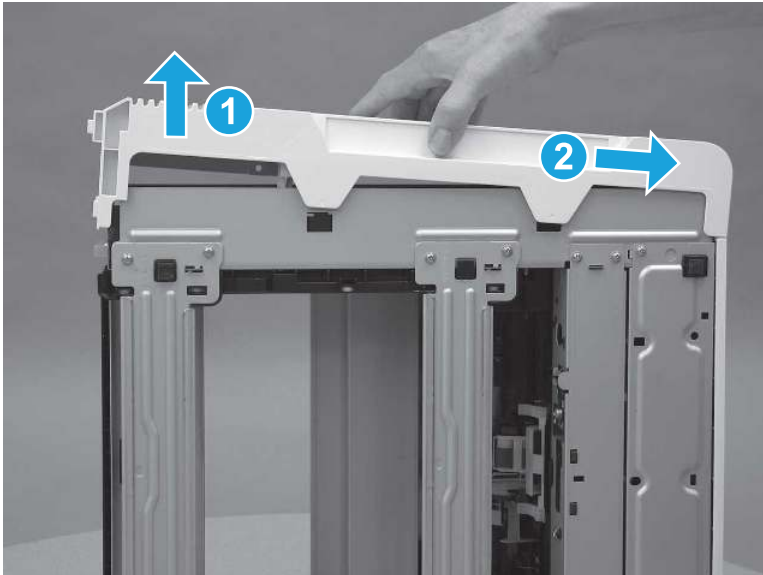
3. Lift the front of the cover up (callout 1), and then slide the cover (callout 2) toward the back of the feeder to remove it.

---

 **NOTE:** Release additional tabs as needed to remove the cover.

---

Figure 5-2223 Remove the cover

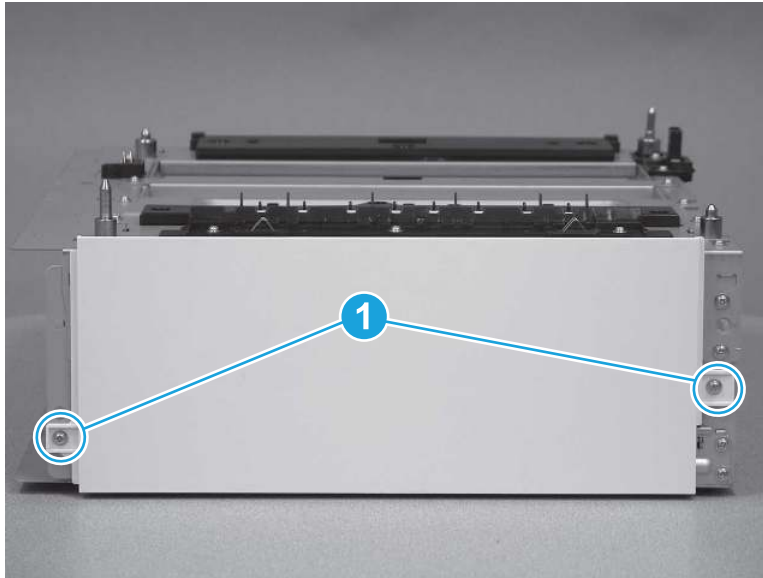


#### 4. Remove the rear cover (550-sheet paper feeder)

Follow these steps to remove the rear cover (550-sheet paper feeder).

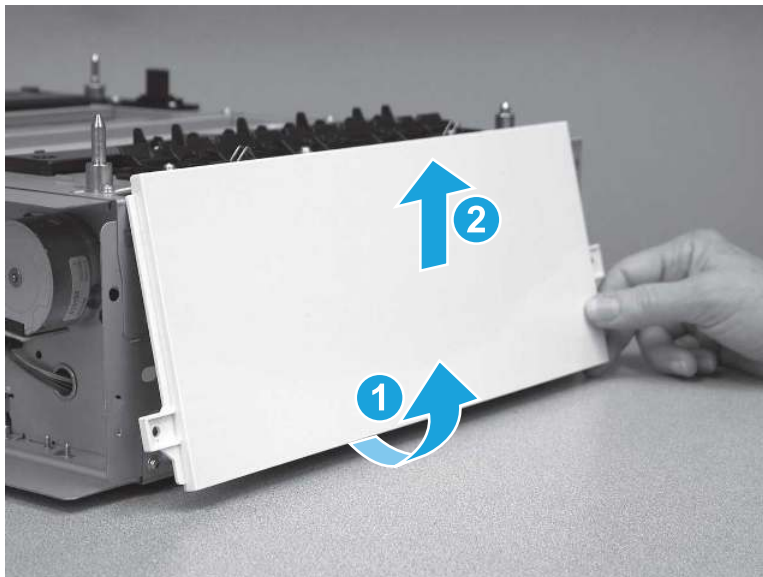
1. Remove two screws (callout 1).

Figure 5-2224 Remove two screws



2. Rotate the bottom edge of the cover (callout 1) away from the feeder, and then raise the cover up (callout 2) to remove it.

Figure 5-2225 Remove the cover

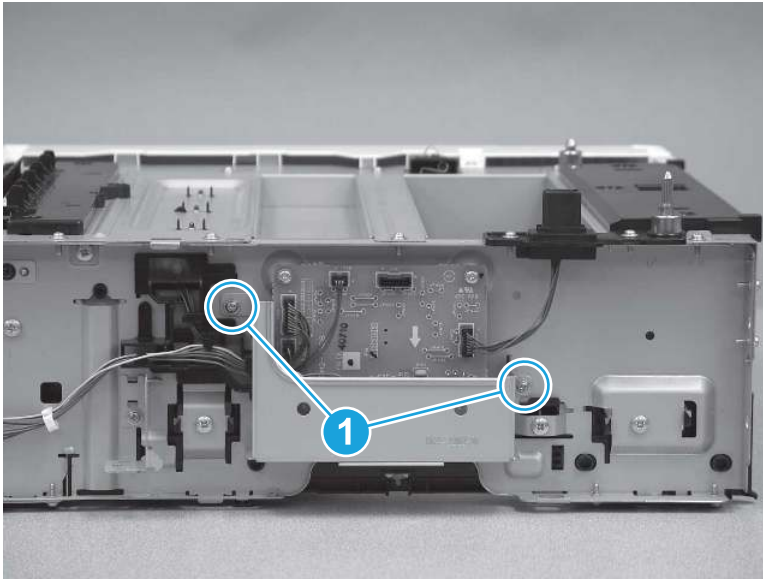


## 5. Remove the PCA cover (550-sheet paper feeder)

Follow these steps to remove the PCA cover (550-sheet paper feeder).

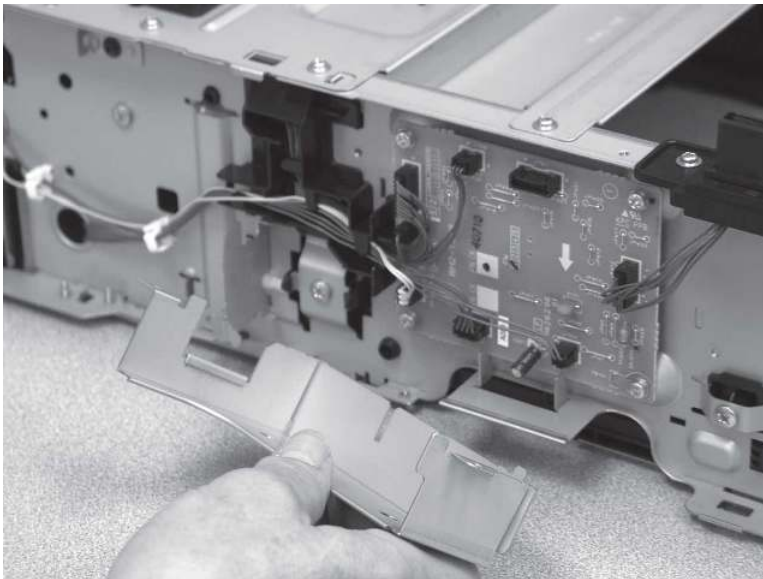
1. On the left side of the feeder, remove two screws (callout 1).

**Figure 5-2226** Remove two screws



2. Remove the PCA cover.

**Figure 5-2227** Remove the cover

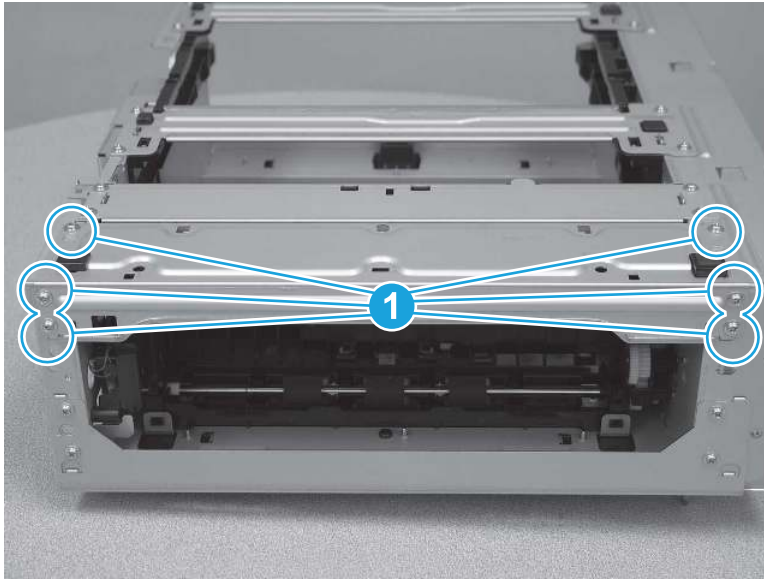


## 6. Remove the base plate (550-sheet paper feeder)

Follow these steps to remove the base plate (550-sheet paper feeder).

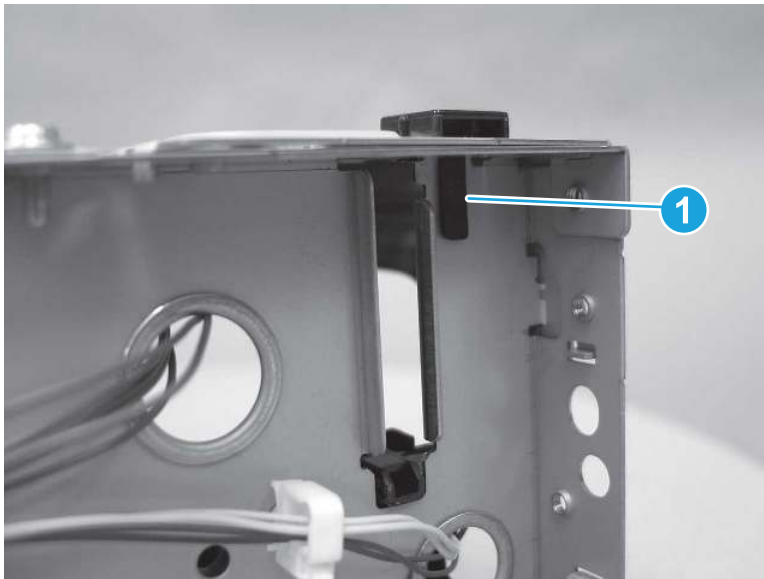
1. Lay the feeder on the top side so that the bottom side is facing up. Remove six screws (callout 1).

**Figure 5-2228** Remove six screws



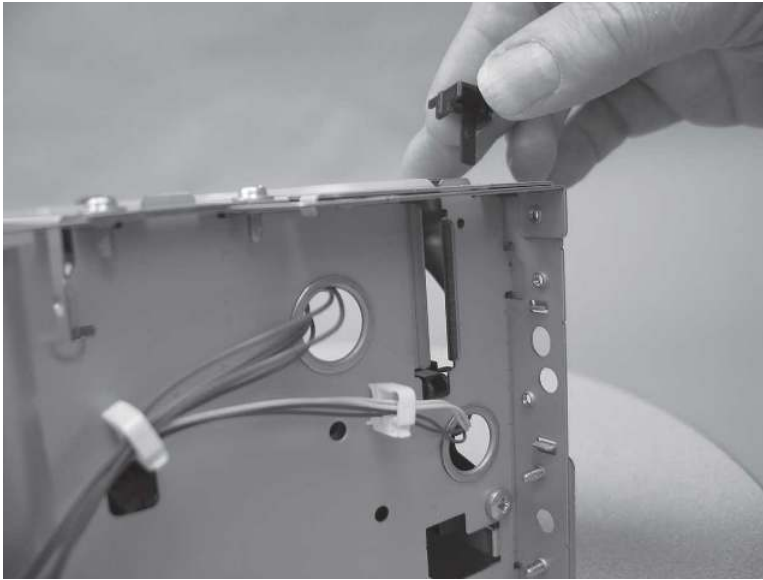
2. On the left side of the feeder, release one tab (callout 1) on the foot.

**Figure 5-2229** Release one tab



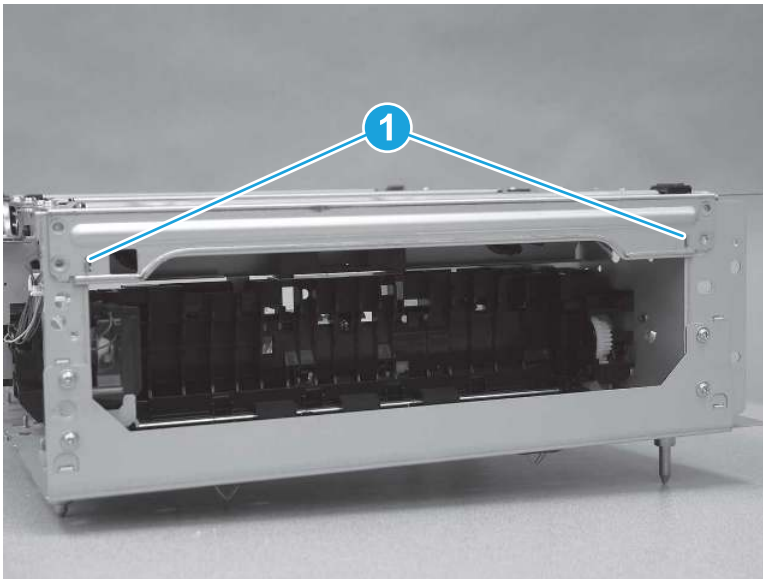
3. Remove the foot.

Figure 5-2230 Remove the foot



4. Release two tabs (callout 1).

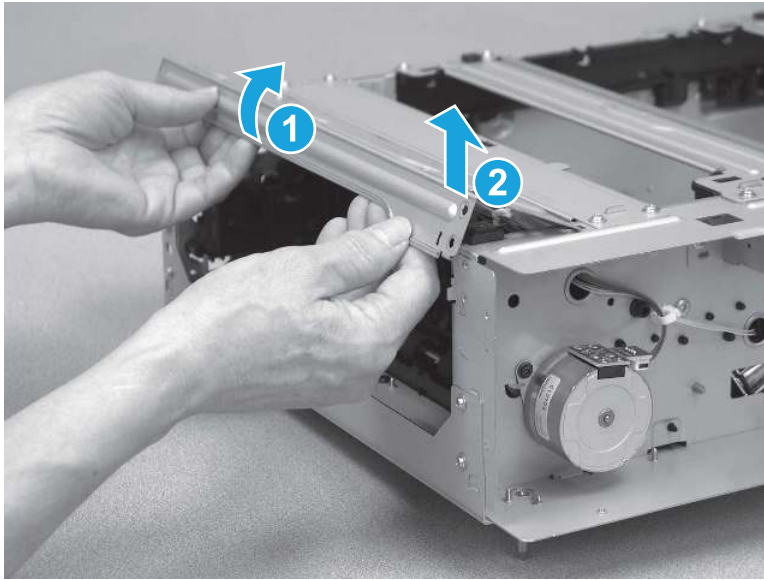
Figure 5-2231 Release two tabs





5. Rotate the edge of the base plate up (callout 1), and then lift it up (callout 2) to remove it.

Figure 5-2232 Remove the assembly

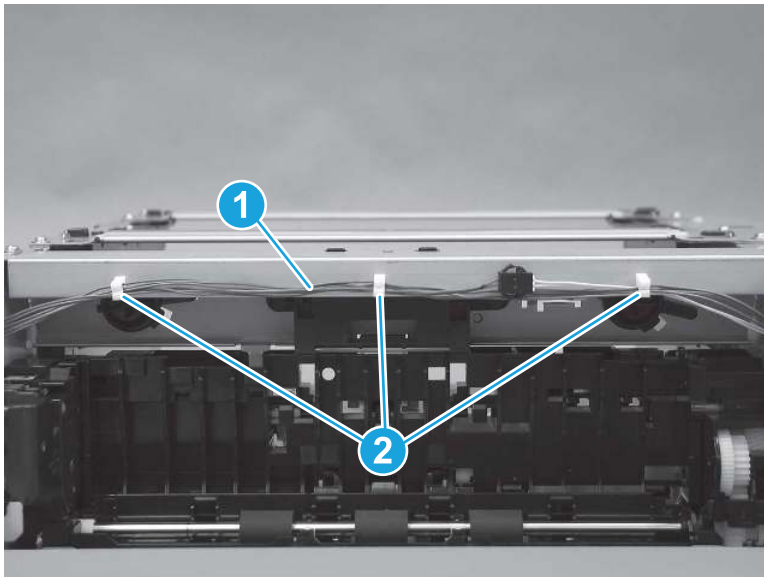


## 7. Remove the feed frame assembly (550-sheet paper feeder)

Follow these steps to remove the feed frame assembly (550-sheet paper feeder).

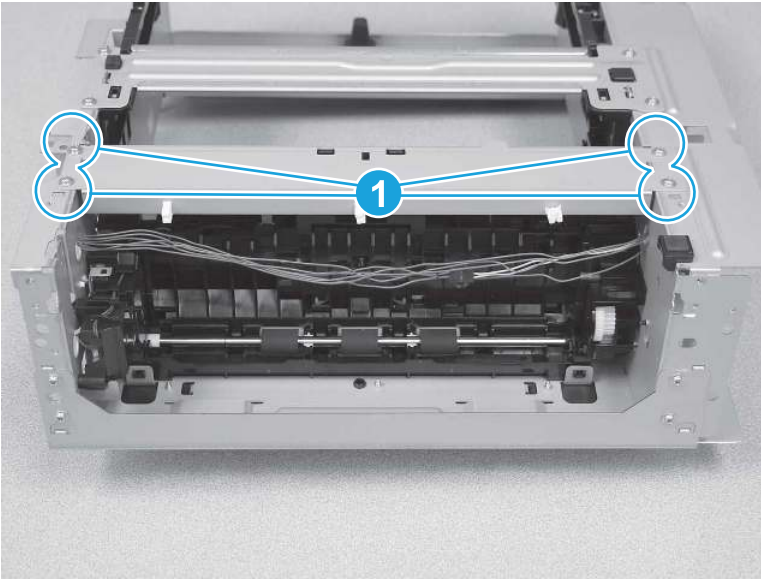
1. Release the cables (callout 1) from the retainers (callout 2).

Figure 5-2233 Release the cables



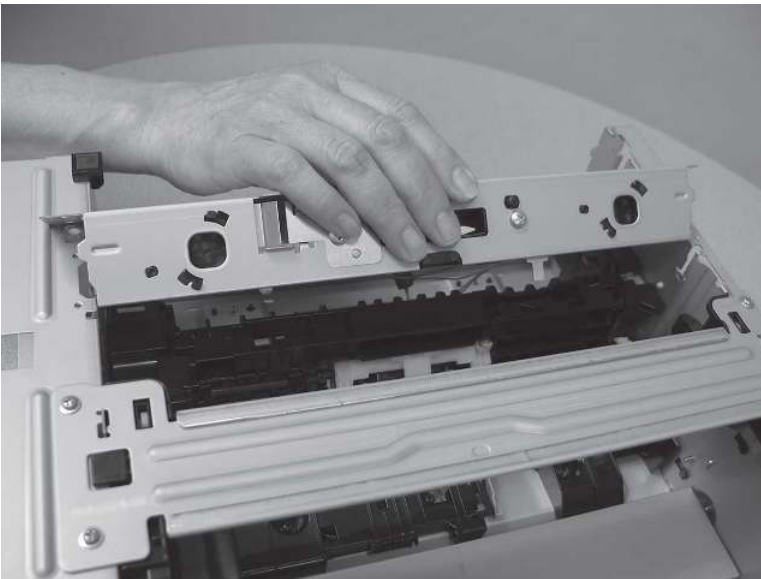
2. Remove four screws (callout 1).

**Figure 5-2234** Remove four screws



3. Remove the feed frame assembly.

**Figure 5-2235** Remove the assembly

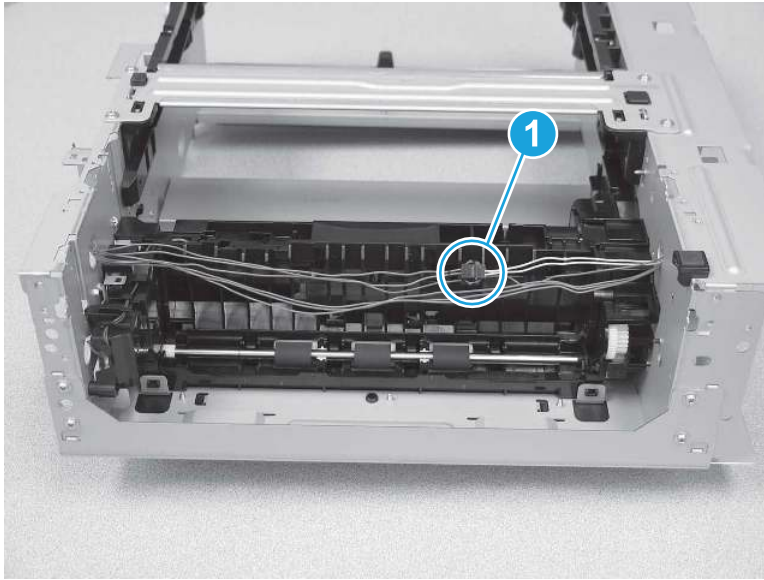


## 8. Remove the lifter drive assembly (550-sheet paper feeder)

Follow these steps to remove the lifter drive assembly (550-sheet paper feeder).

1. Lay the feeder on the top so that the bottom is facing up. Disconnect one in-line connector (callout 1).

**Figure 5-2236** Disconnect one connector



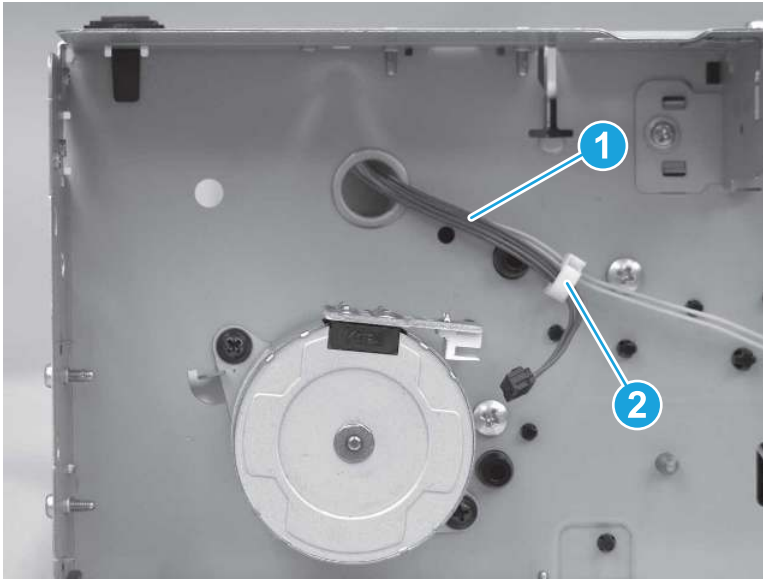
2. On the right side of the feeder, disconnect one connector (callout 1) from the motor.

**Figure 5-2237** Disconnect one connector



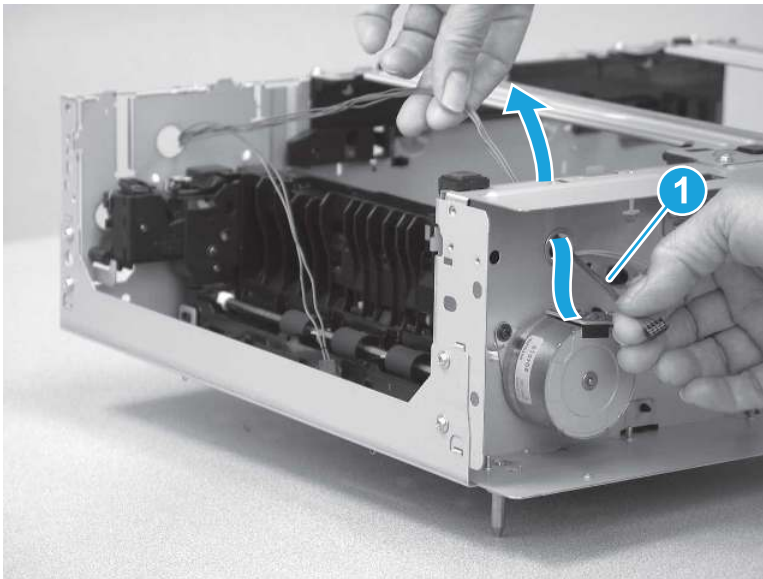
3. Release the cables (callout 1) from the retainer (callout 2).

Figure 5-2238 Release the cables



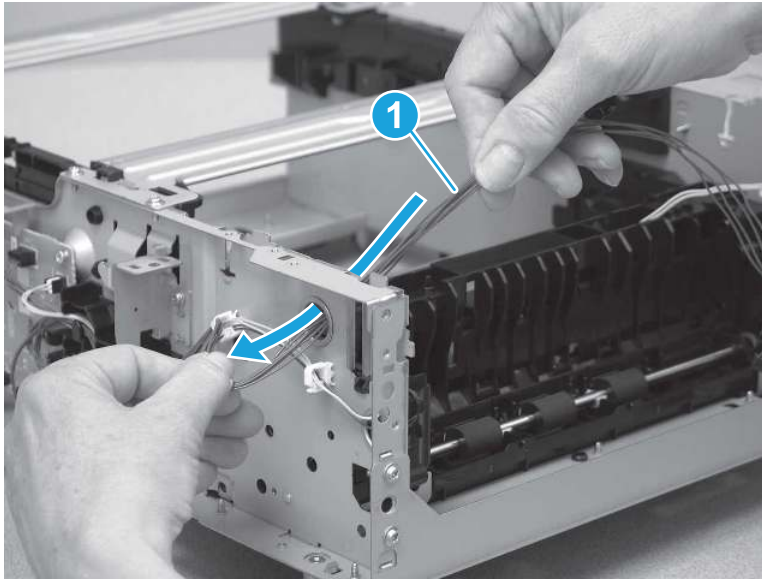
4. Pass the cables (callout 1) through the hole in the sheet metal.

Figure 5-2239 Release the cables




5. On the left side of the feeder, pass all of the cables (callout 1) through the opening in the paper feeder.

Figure 5-2240 Release the cables



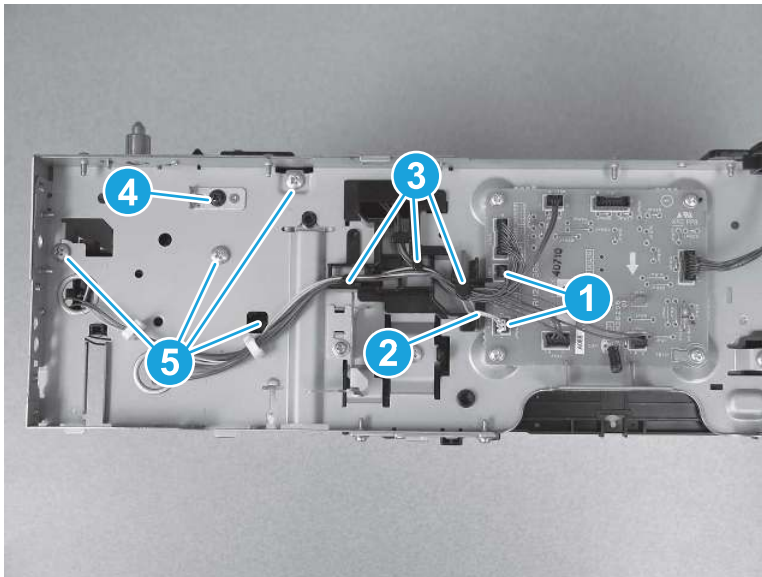
6. Do the following:
  - a. Lay the feeder on the right side so that the left side is facing up, and then disconnect two connectors (callout 1).
  - b. Remove the cables (callout 2) from the guides (callout 3).
  - c. Remove one screw (callout 4), and then remove four more screws (callout 5).

---

 **Reinstallation tip:** One screw (callout 4) is different from the other screws. Make sure that this screw is installed in the correct position.

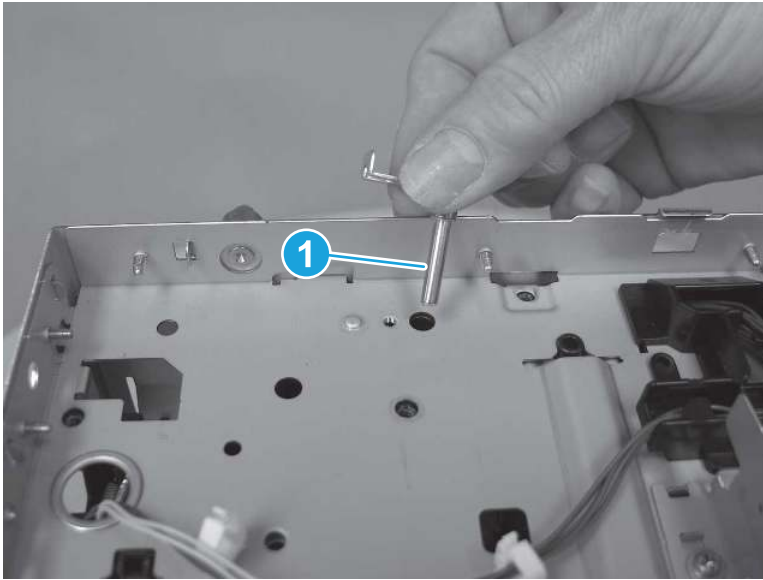
---

Figure 5-2241 Disconnect connector and remove screws



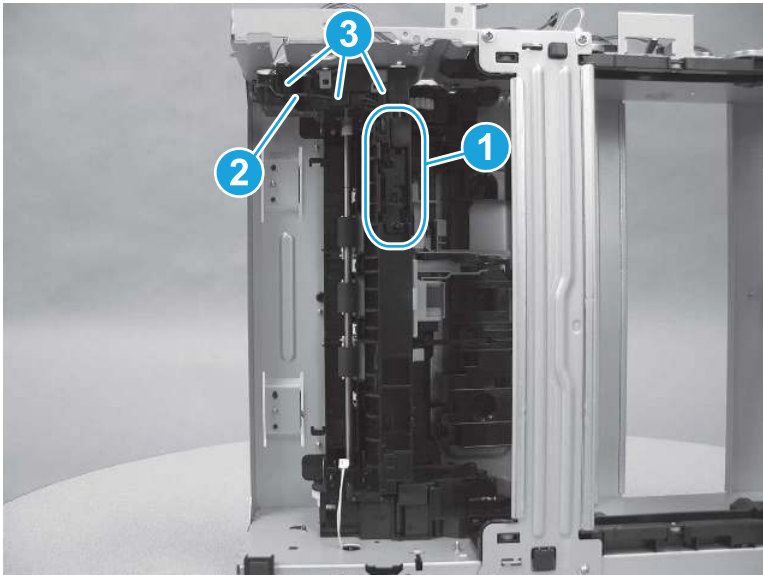
7. Remove one shaft (callout 1).

Figure 5-2242 Remove the shaft



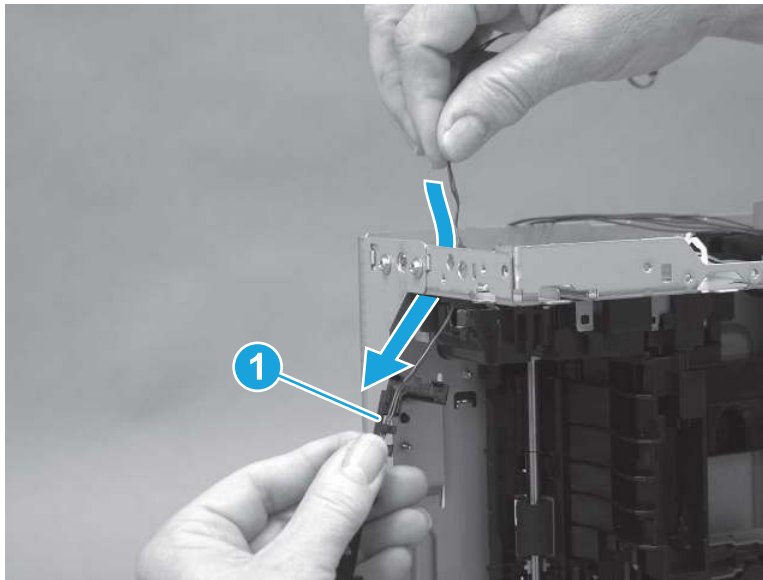
8. Release the tray sensor switch (callout 1), and then remove the cables (callout 2) from the guides (callout 3).

Figure 5-2243 Release the tray sensor switch



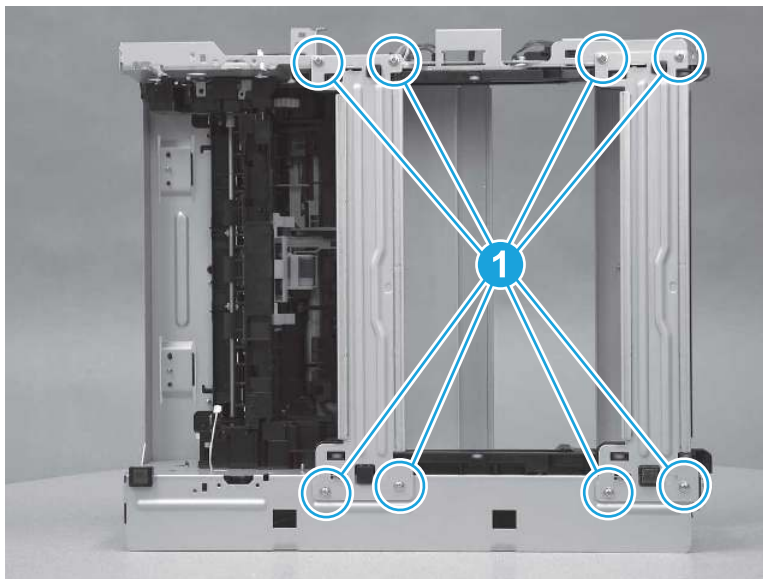
9. Pass the tray sensor switch cables (callout 1) through the hole in the sheet metal.

Figure 5-2244 Release the cables



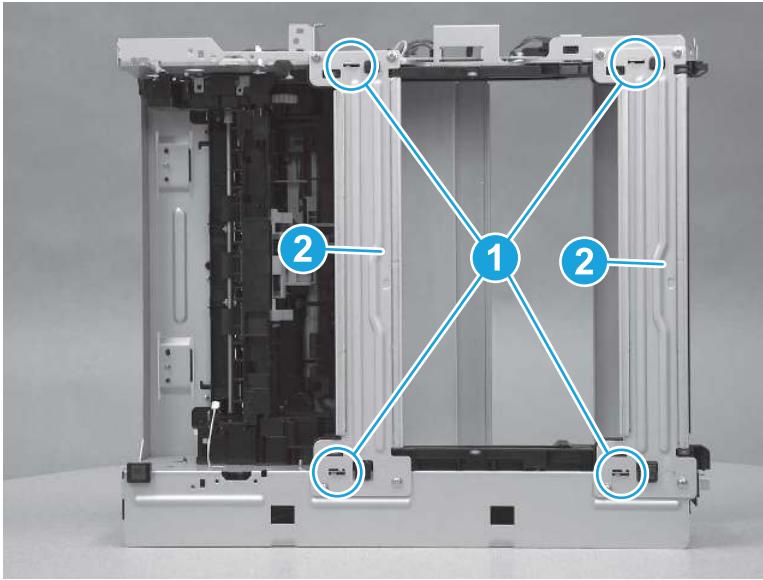
10. Remove eight screws (callout 1).

Figure 5-2245 Remove eight screws



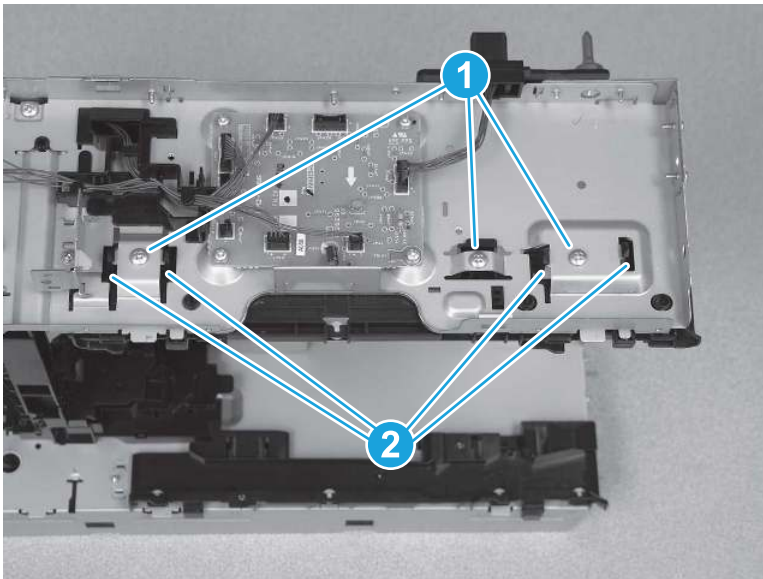
11. Release four tabs (callout 1), and then remove the cross braces (callout 2).

Figure 5-2246 Remove the cross braces



12. On the left side of the feeder, remove three screws (callout 1), and then release three tabs (callout 2).

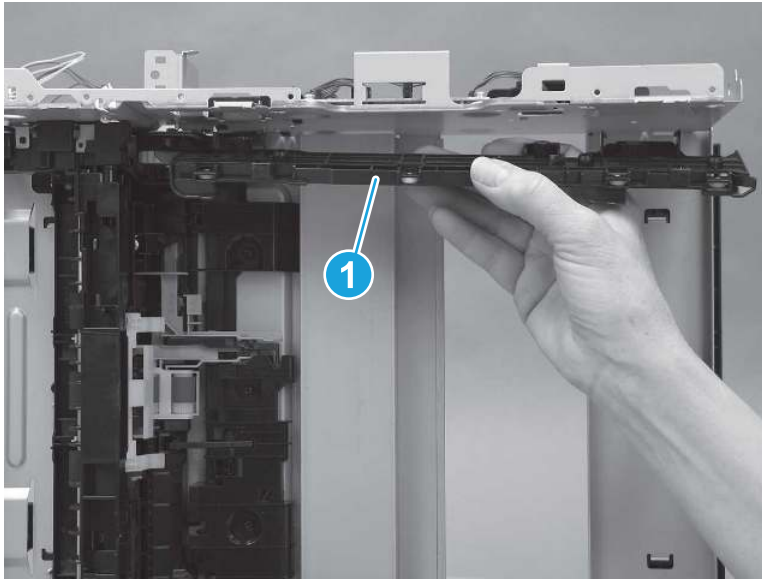
Figure 5-2247 Remove screws and release tabs





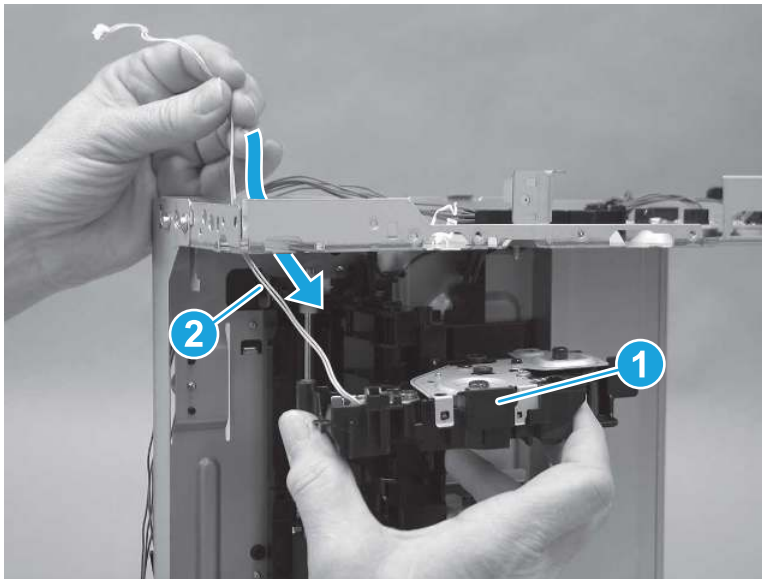
13. Remove the tray guide (callout 1).

**Figure 5-2248** Remove the tray guide



14. Remove the lifter drive assembly (callout 1) while passing the cables (callout 2) through the feeder frame.

**Figure 5-2249** Remove the assembly

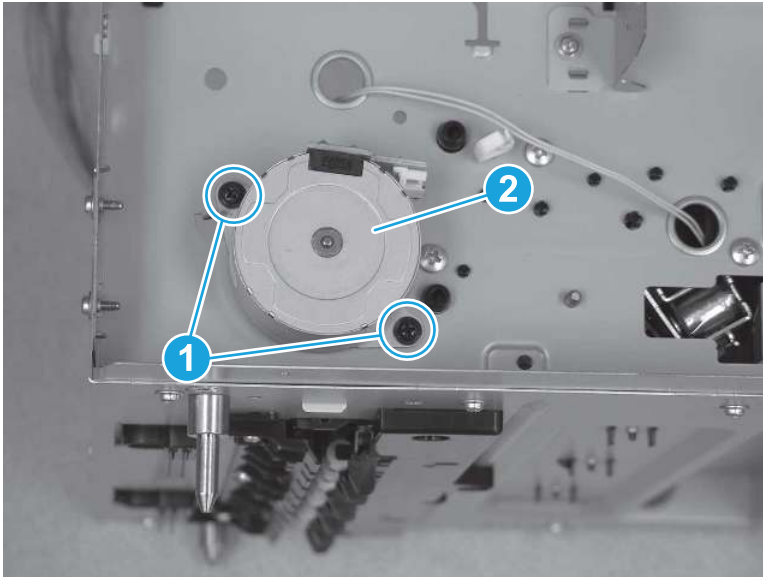


## 9. Remove the pickup assembly (550-sheet paper feeder)

Follow these steps to remove the pickup assembly (550-sheet paper feeder).

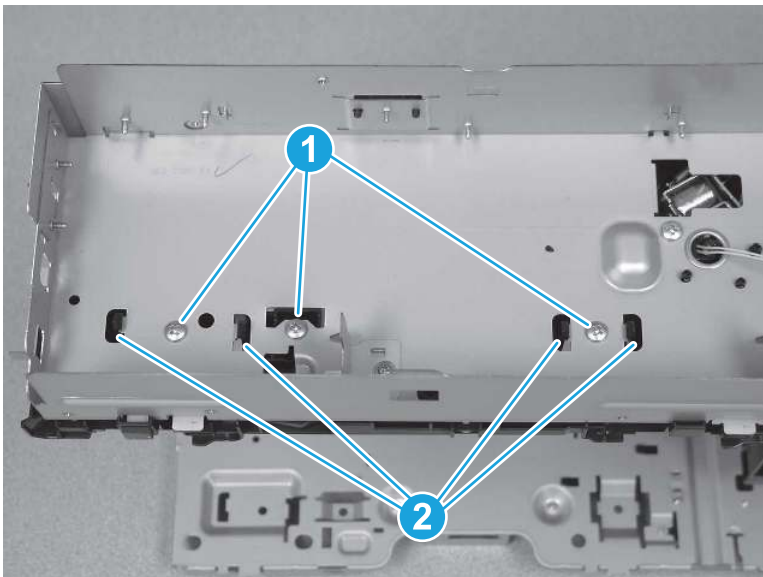
1. Lay the feeder on the left side so that the right side is facing up. Remove two screws (callout 1), and then remove the motor (callout 2).

**Figure 5-2250** Remove the motor



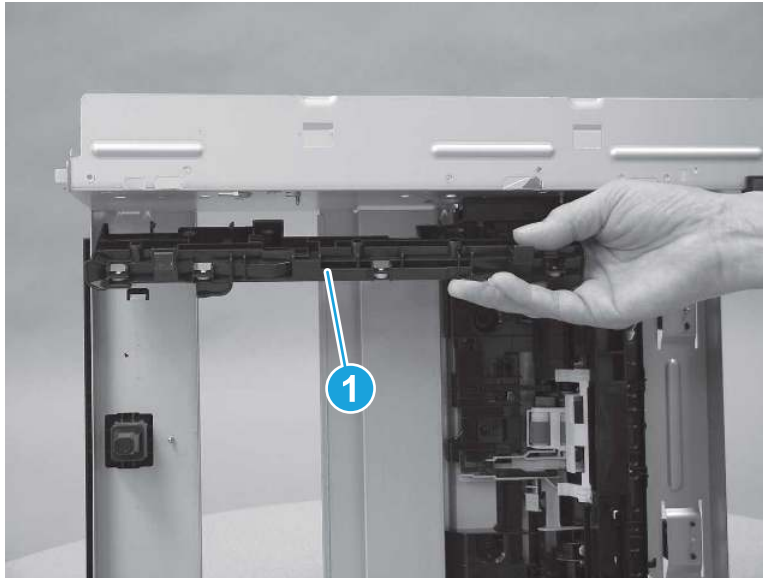
2. Remove three screws (callout 1), and then release three tabs (callout 2).

**Figure 5-2251** Remove screws and release tabs



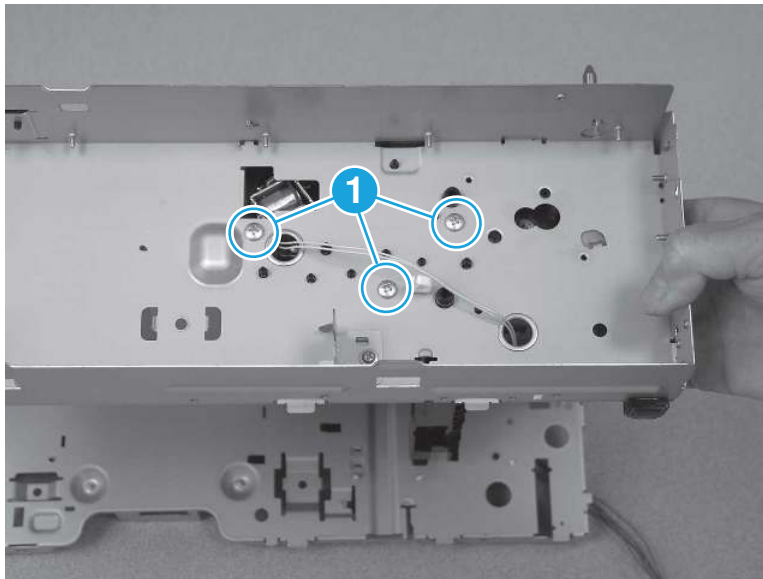
3. Remove the tray guide (callout 1).

Figure 5-2252 Remove the tray guide



4. Remove three screws (callout 1).

Figure 5-2253 Remove three screws



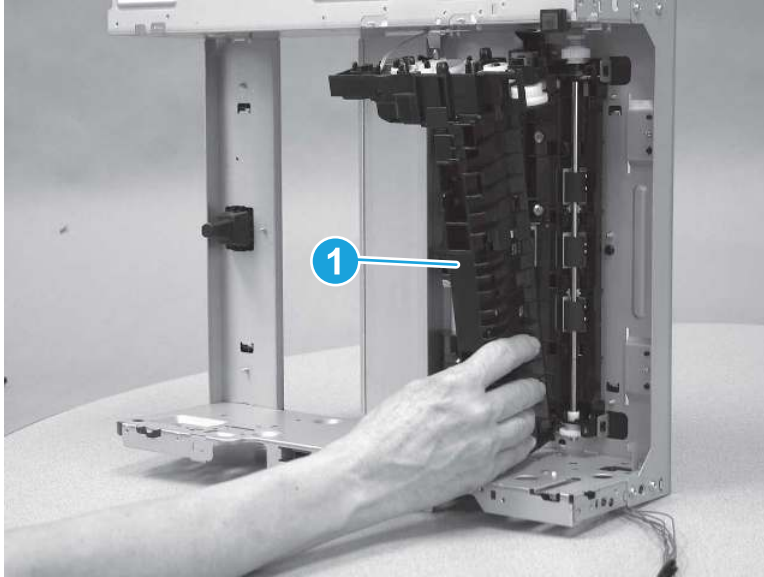
5. Separate the pickup assembly (callout 1) from the feeder frame.

---

**⚠ CAUTION:** Do not attempt to completely remove the assembly. It is still attached to the frame by a wire harness.

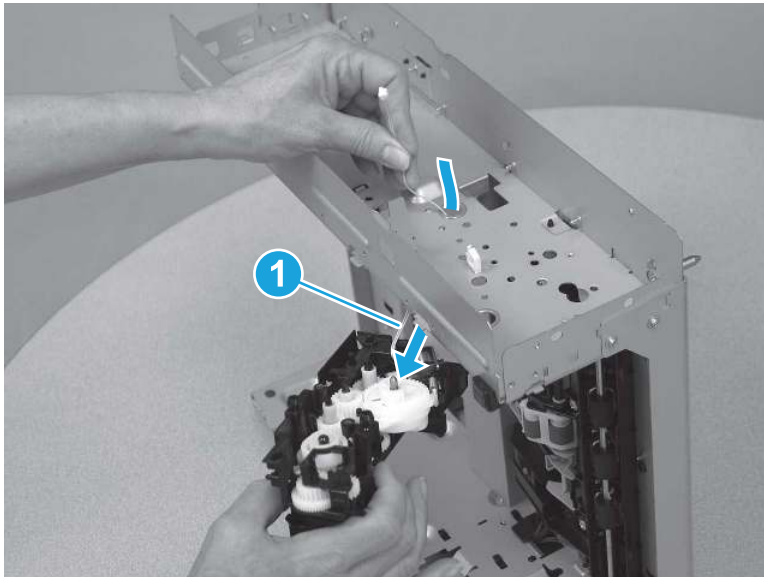
---

**Figure 5-2254** Release the assembly



6. Pass the cables (callout 1) through the feeder frame to remove the assembly.

**Figure 5-2255** Remove the assembly

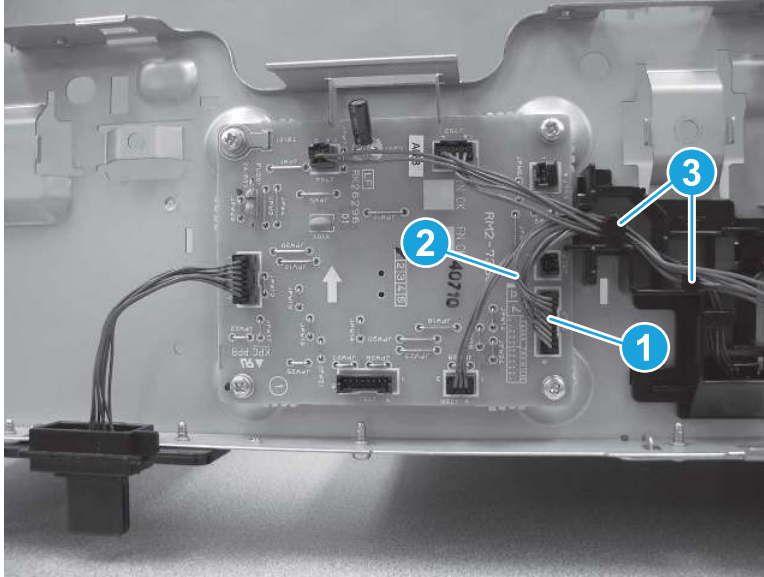


## 10. Remove the front feed guide assembly (550-sheet paper feeder)

Follow these steps to remove the front feed guide assembly (550-sheet paper feeder).

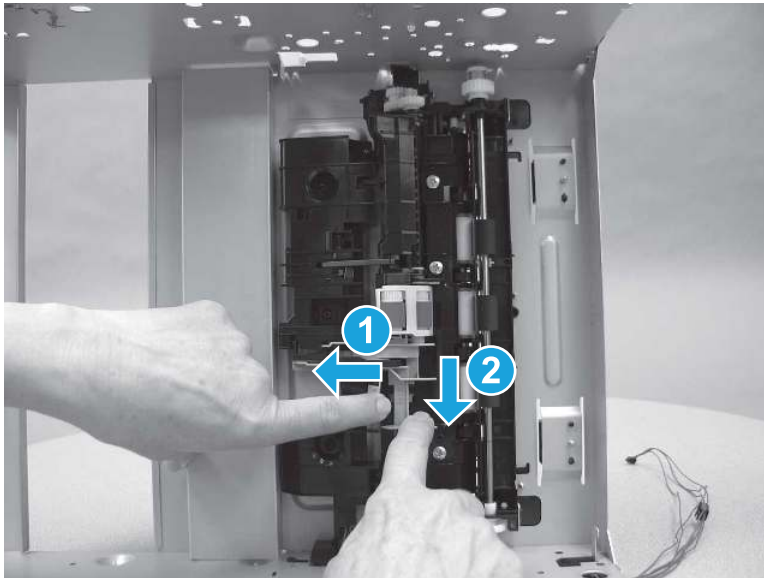
1. Lay the feeder on the right side so that the left side is facing up. Disconnect one connector (callout 1), and then remove the cables (callout 2) from the guides (callout 3).

**Figure 5-2256** Disconnect one connector



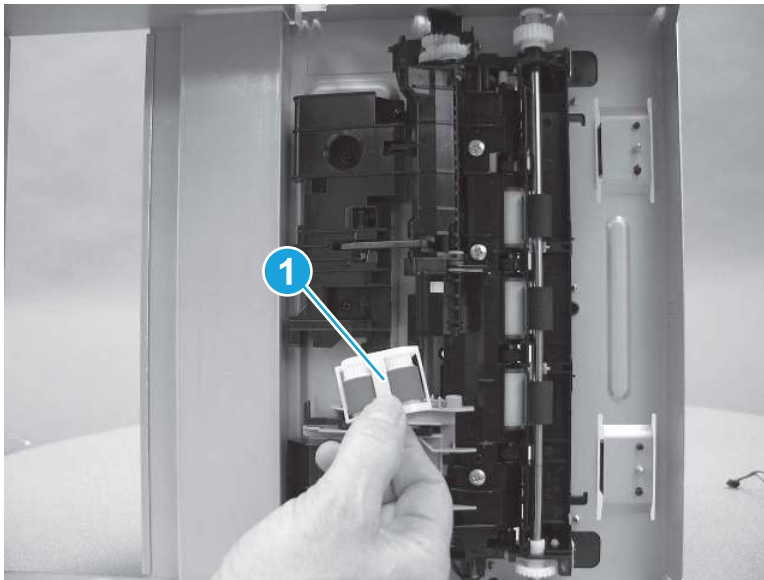
2. Press the lever (callout 1) on the roller holder, and then slide the roller holder down (callout 2).

**Figure 5-2257** Slide the roller holder



3. Remove the roller holder (callout 1).

Figure 5-2258 Remove the roller holder



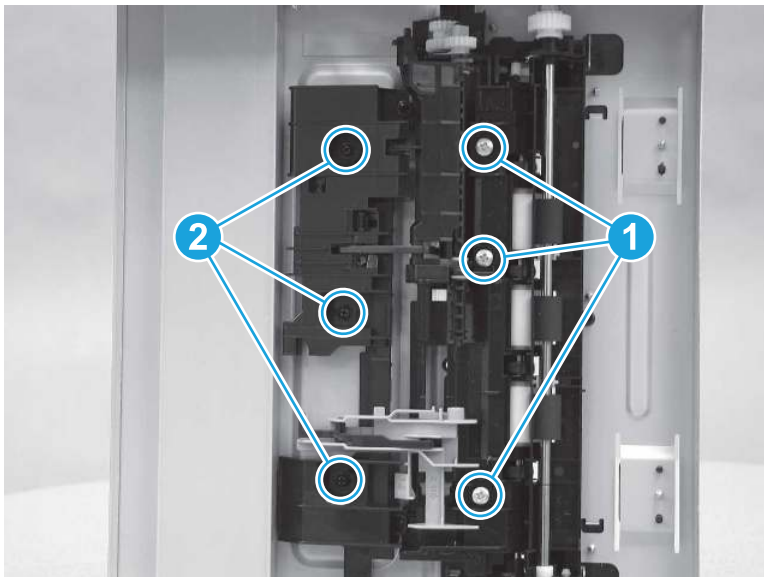
4. Remove three screws (callout 1) on the rear feed guide assembly, and then remove three screws (callout 2) on the front feed guide assembly.

---

 **Reinstallation tip:** The three screws (callout 1) on the rear feed guide assembly are larger than the screws on the front feed guide assembly.

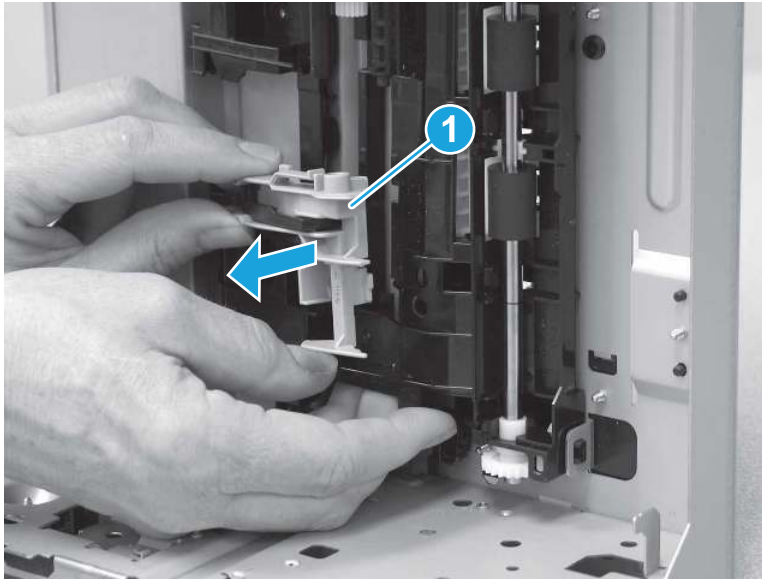
---

Figure 5-2259 Remove six screws



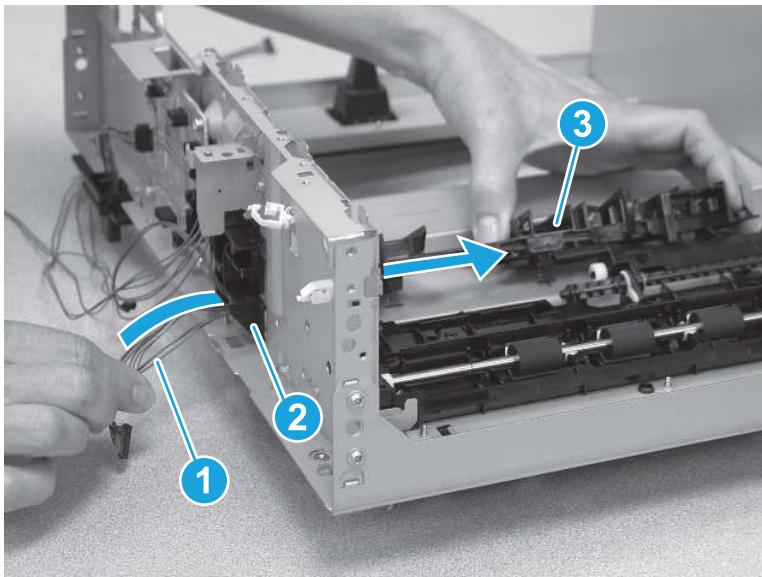
5. Remove the roller holder (callout 1).

Figure 5-2260 Remove the roller holder



6. Pass the cables (callout 1) through the feeder frame (callout 2), and then remove the front feed guide assembly (callout 3).

Figure 5-2261 Remove the assembly



## 11. 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.

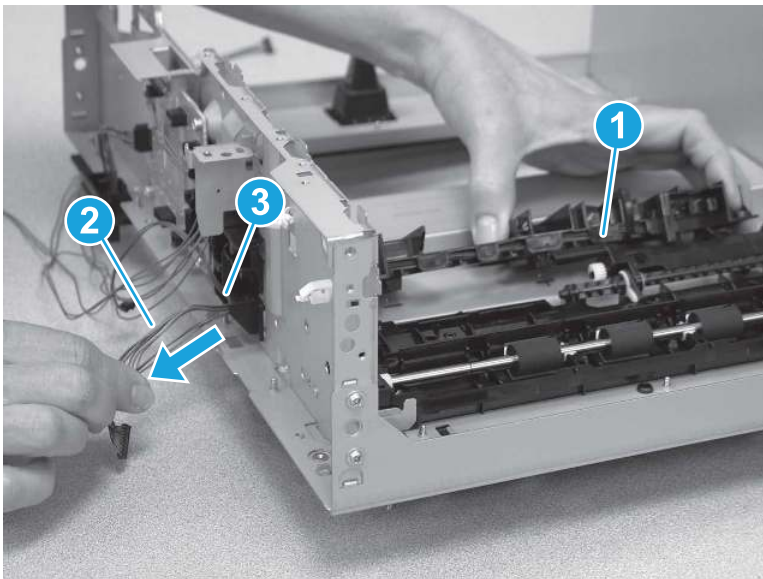
## 12. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Front feed guide assembly (550-sheet paper feeder)

- ▲ Install the front feed guide (callout 1), and then pass the cables (callout 2) through the feeder frame (callout 3).

**Figure 5-2262** Install the front feed guide assembly

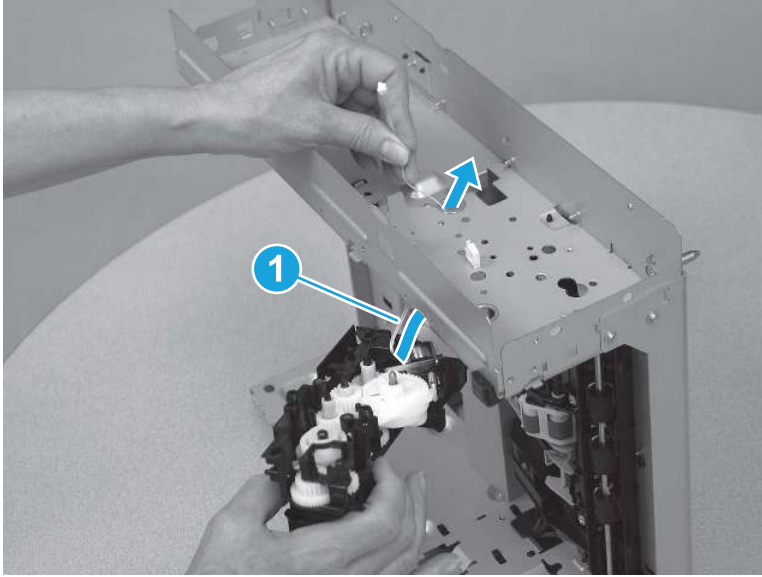


Pickup assembly (550-sheet paper feeder)

- ▲ Lay the feeder on the left side so that the right side is facing up. Pass the cables (callout 1) through the feeder frame.



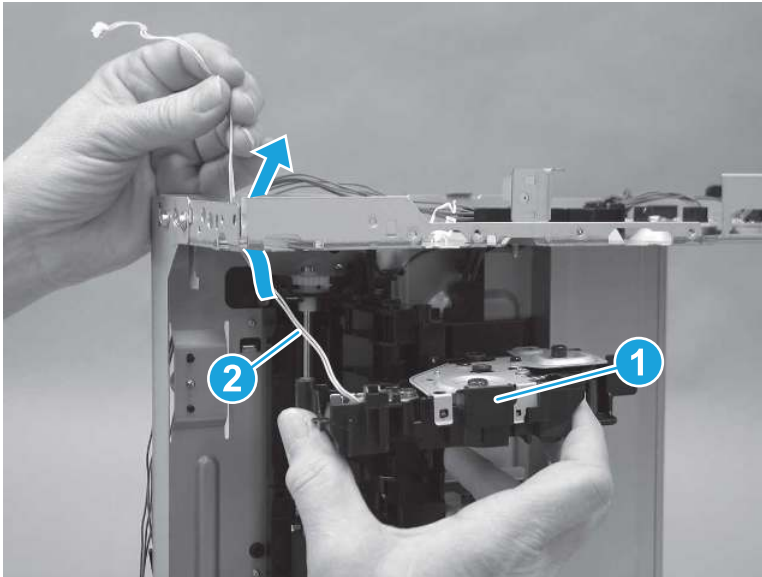
**Figure 5-2263** Install the pickup assembly



Lifter drive assembly (550-sheet paper feeder)

- ▲ Install the lifter drive assembly (callout 1) while passing the cables (callout 2) through the feeder frame.

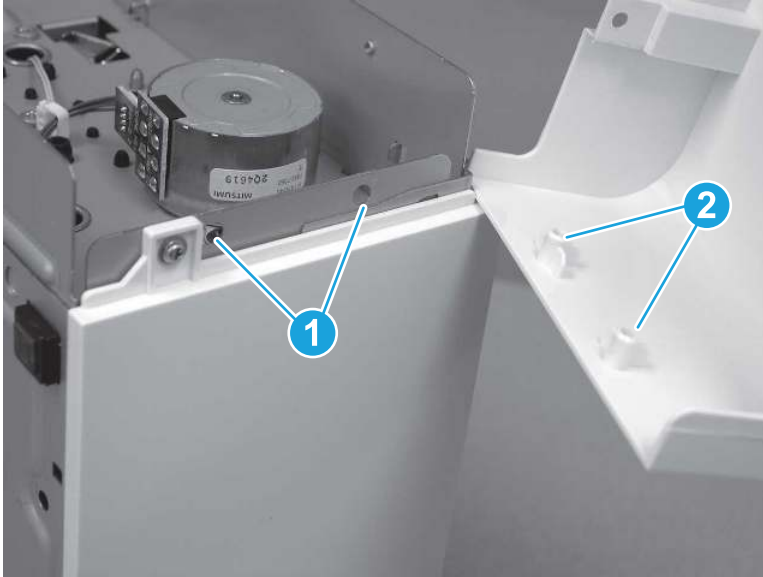
**Figure 5-2264** Install the lifter drive assembly



Left cover (550-sheet paper feeder)

- ▲ Lay the feeder on the right side so that the left side is facing up. At the back of the feeder, install the tabs (callout 1) on the cover in the holes (callout 2) on the feeder.

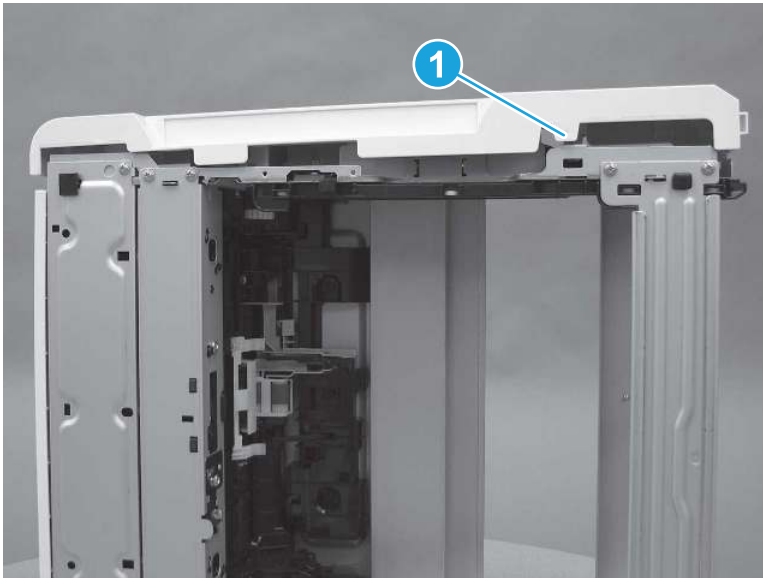
**Figure 5-2265** Install the left cover



Right cover (550-sheet paper feeder)

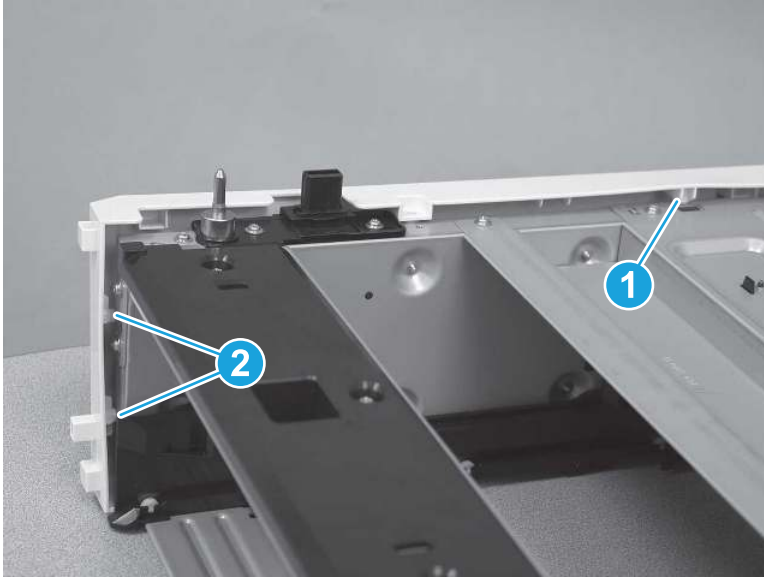
1. Lay the feeder on the left side so that the right side is facing up, and then install one tab (callout 1) on the bottom of the feeder.

**Figure 5-2266** Engage one tab



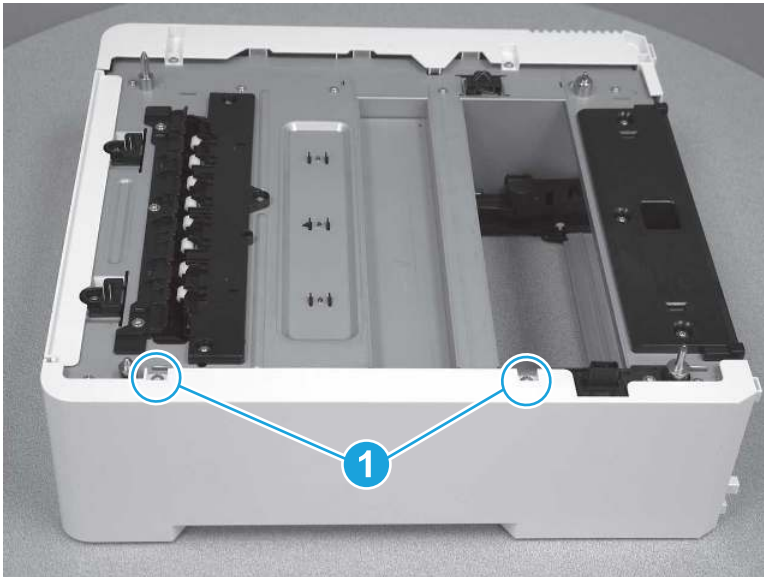
2. Turn the feeder to an upright position with the top facing up. Install one tab (callout 1) on the top of the feeder, and then install two tabs (callout 2) at the front of the feeder.

Figure 5-2267 Engage three tabs



3. Install two screws (callout 1).

Figure 5-2268 Install two screws



## Removal and replacement: Rear feed guide assembly (550-sheet paper feeder)

Learn how to remove and replace the rear feed guide assembly for the 550-sheet paper feeder.

[View a video of how to remove and replace the 550-sheet paper feeder rear feed guide assembly.](#)

Mean time to repair: 67 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](http://www.hp.com/buy/parts).

**Table 5-66** Part information

Part number	Part description
RM2-6366-000CN	Feed guide assembly rear (550-sheet paper feeder)

### Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- Small flat-blade screwdriver

### After performing service

#### Turn the printer power on

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

### Post service test

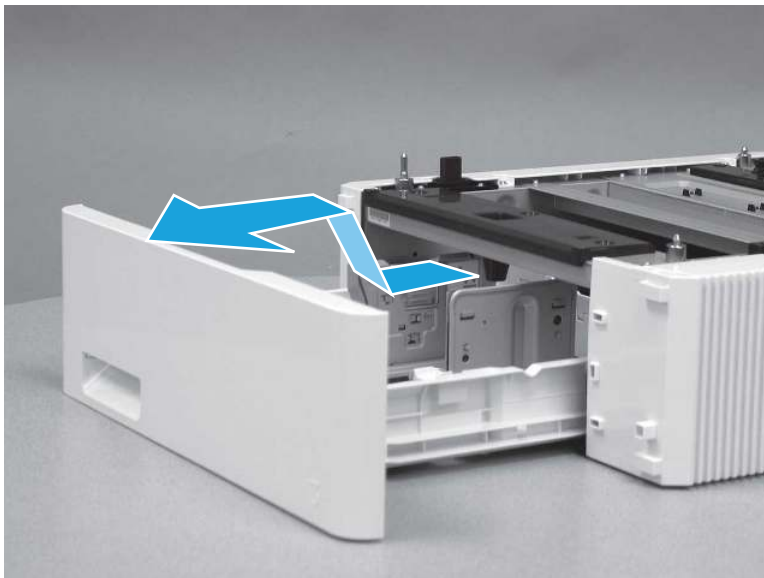
Print any pages necessary to make sure the printer is functioning correctly.

## 1. Remove Tray 3

Follow these steps to remove Tray 3.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

**Figure 5-2269** Remove the tray

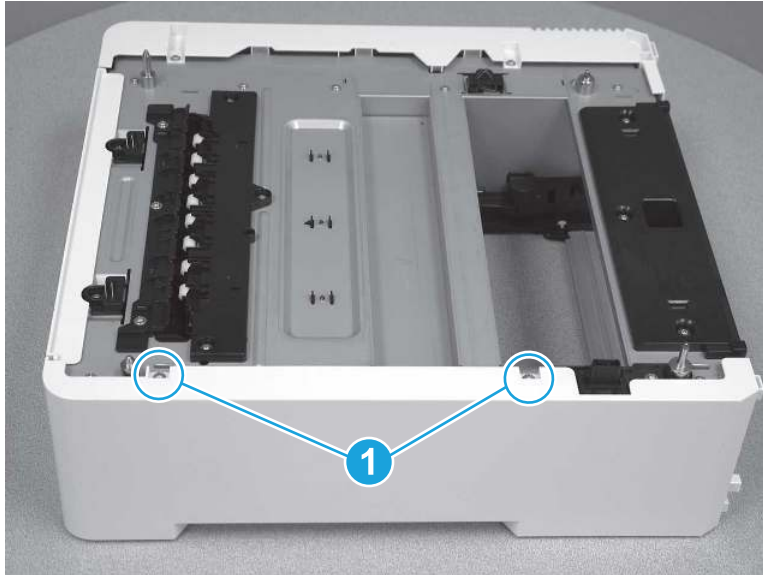


## 2. Remove the right cover (550-sheet paper feeder)

Follow these steps to remove the right cover (550-sheet paper feeder).

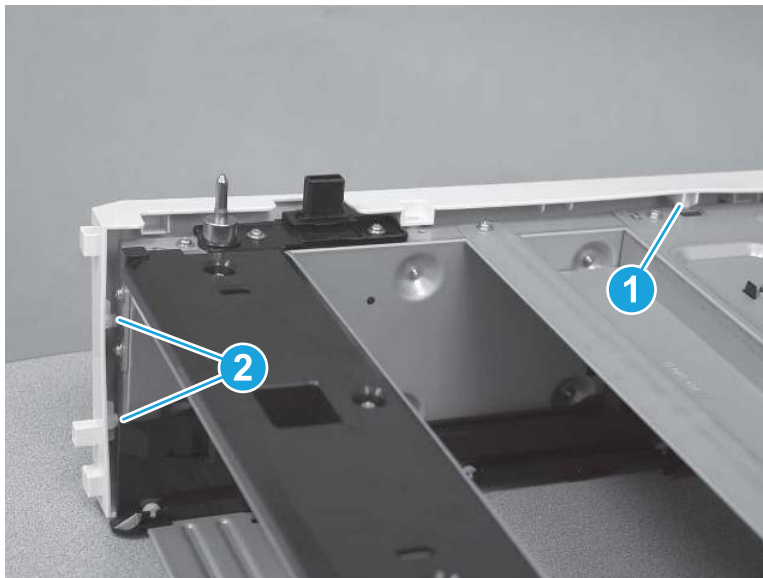
1. Remove two screws (callout 1).

**Figure 5-2270** Remove two screws



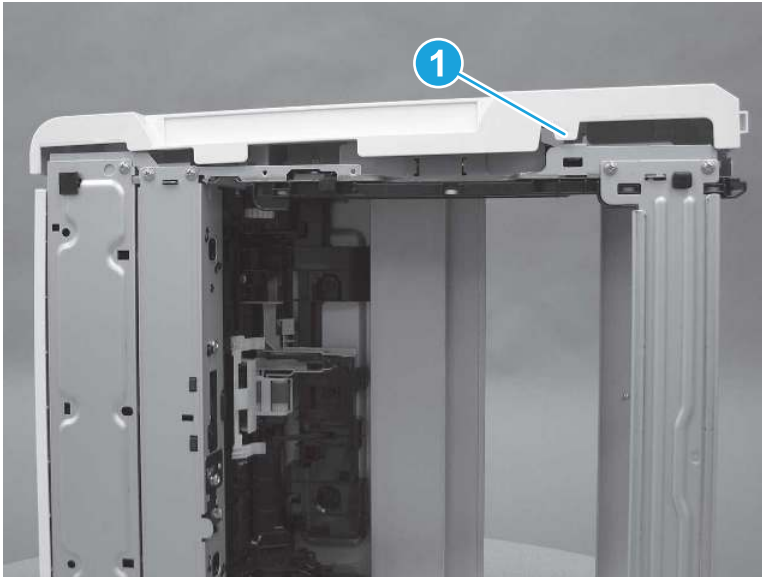
2. Release one tab (callout 1) on the top of the feeder, and then release two tabs (callout 2) at the front of the feeder.

**Figure 5-2271** Release three tabs



3. Lay the feeder on the left side so that the right side is facing up, and then release one tab (callout 1) on the bottom of the feeder. Remove the right cover.

Figure 5-2272 Remove the cover

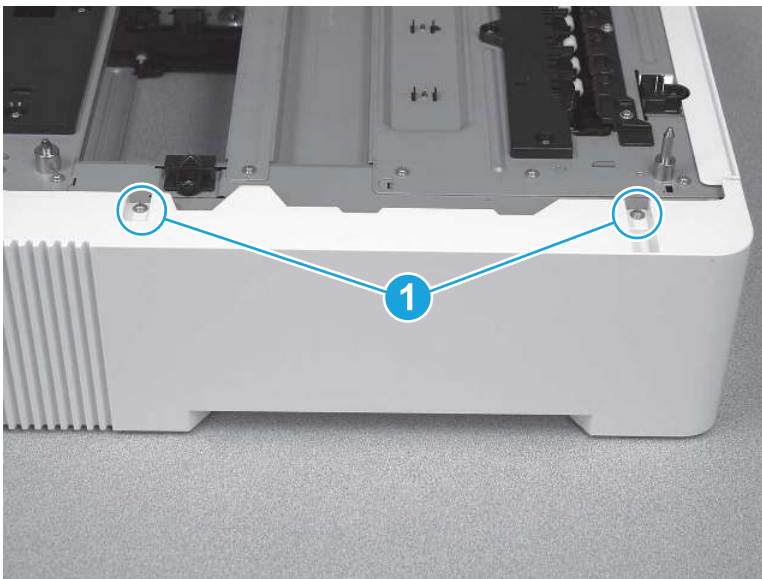


### 3. Remove the left cover (550-sheet paper feeder)

Follow these steps to remove the left cover (550-sheet paper feeder).

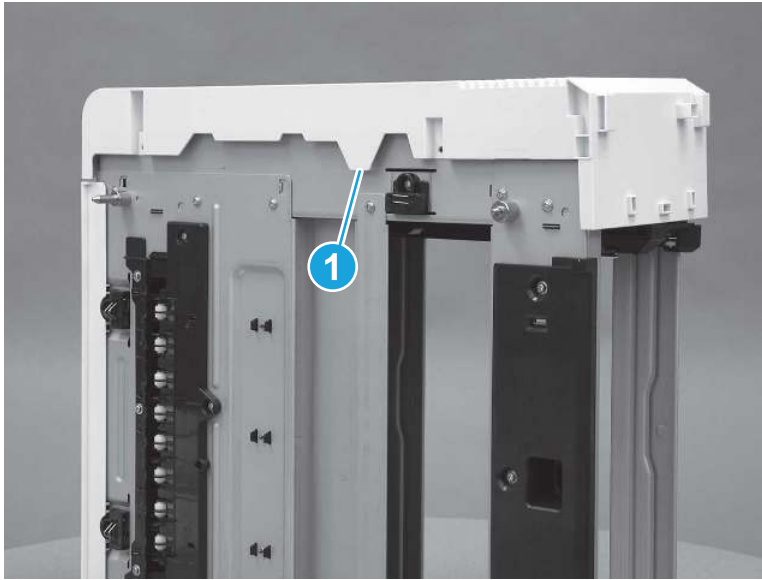
1. Remove two screws (callout 1).

Figure 5-2273 Remove two screws



2. Release one tab (callout 1) on the top of the feeder.

Figure 5-2274 Release one tab



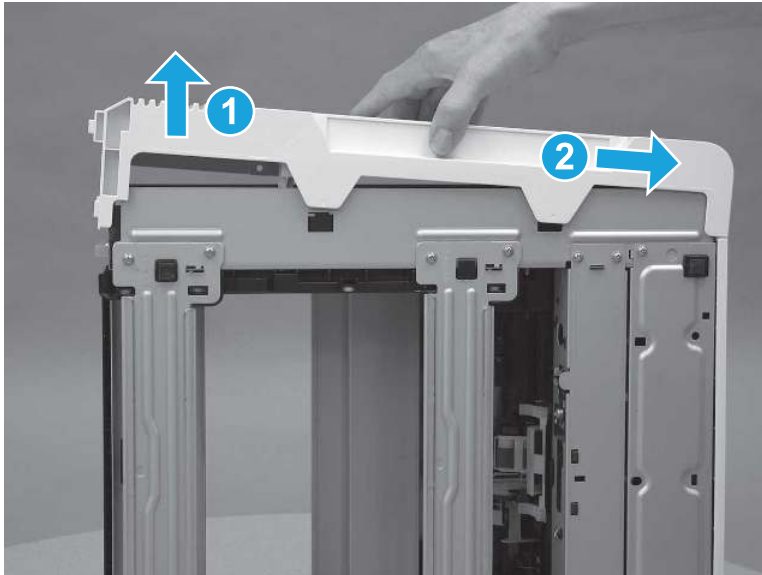
3. Lift the front of the cover up (callout 1), and then slide the cover (callout 2) toward the back of the feeder to remove it.

---

 **NOTE:** Release additional tabs as needed to remove the cover.

---

Figure 5-2275 Remove the cover

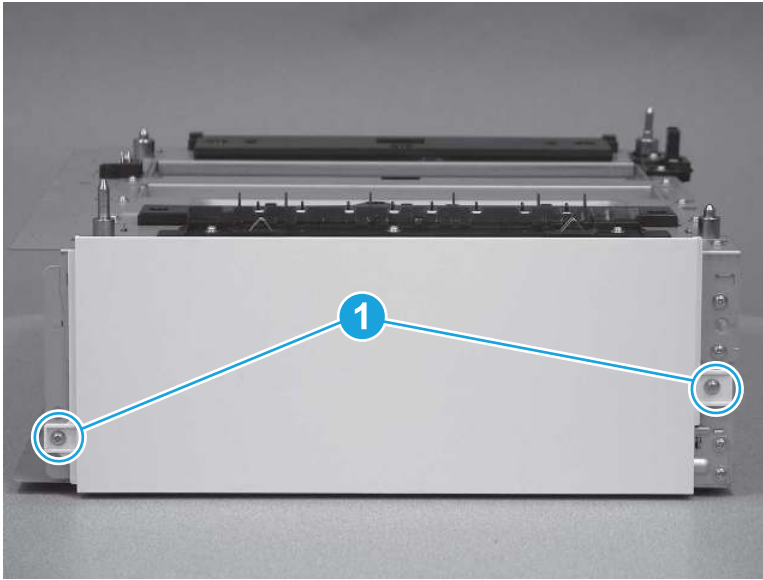


#### 4. Remove the rear cover (550-sheet paper feeder)

Follow these steps to remove the rear cover (550-sheet paper feeder).

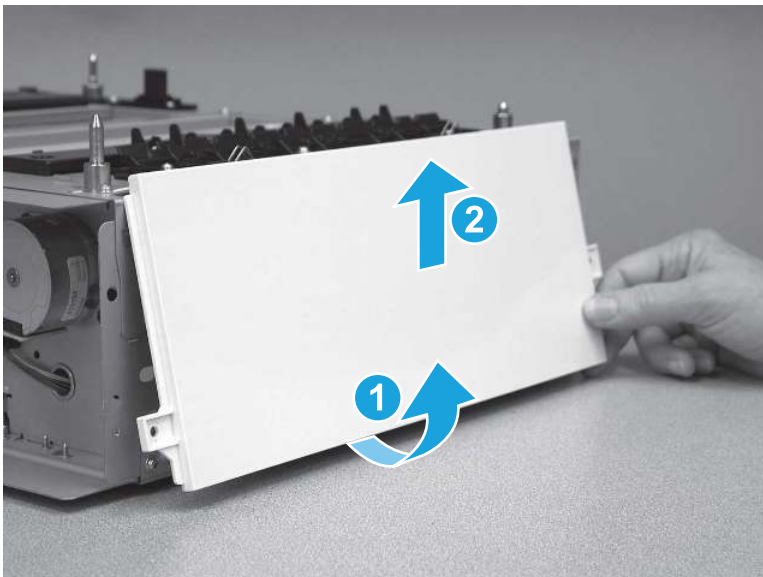
1. Remove two screws (callout 1).

Figure 5-2276 Remove two screws



2. Rotate the bottom edge of the cover (callout 1) away from the feeder, and then raise the cover up (callout 2) to remove it.

Figure 5-2277 Remove the cover



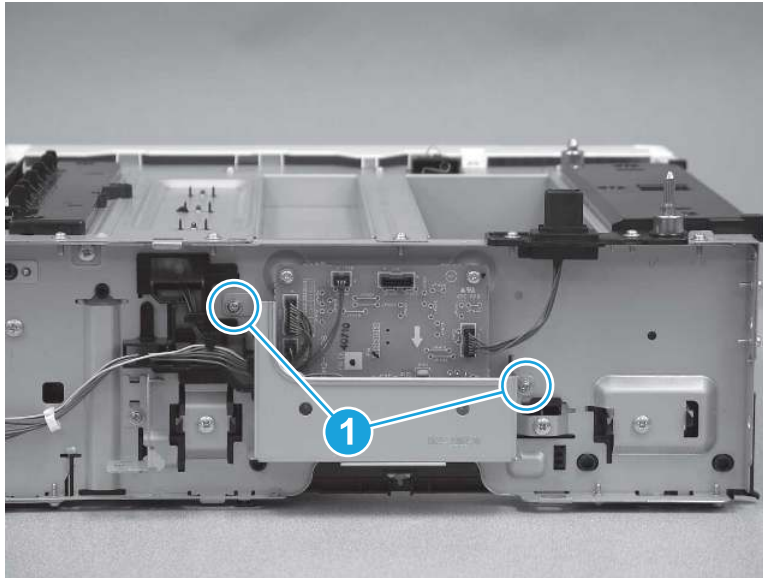
## 5. Remove the PCA cover (550-sheet paper feeder)

Follow these steps to remove the PCA cover (550-sheet paper feeder).



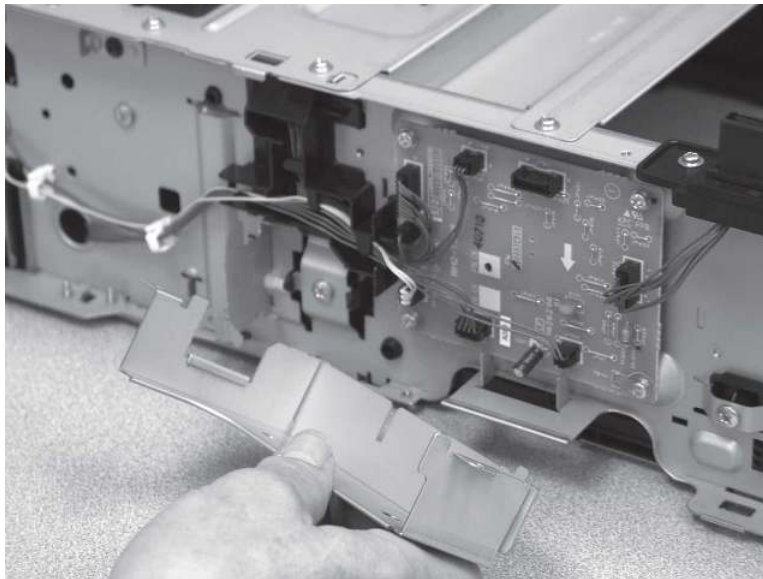
1. On the left side of the feeder, remove two screws (callout 1).

**Figure 5-2278** Remove two screws



2. Remove the PCA cover.

**Figure 5-2279** Remove the cover

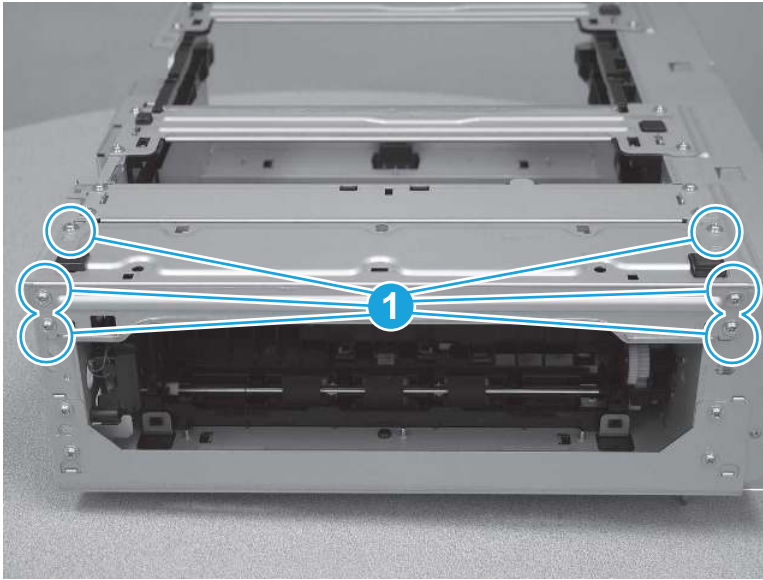


## 6. Remove the base plate (550-sheet paper feeder)

Follow these steps to remove the base plate (550-sheet paper feeder).

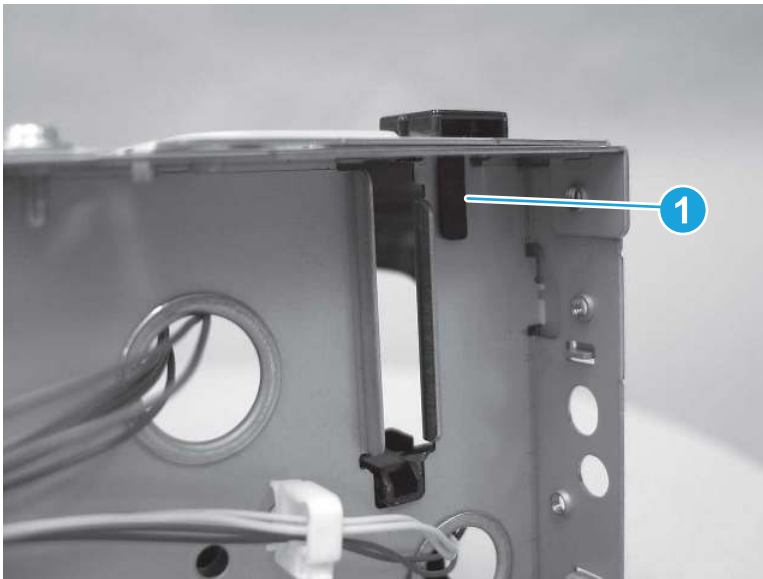
1. Lay the feeder on the top side so that the bottom side is facing up. Remove six screws (callout 1).

Figure 5-2280 Remove six screws



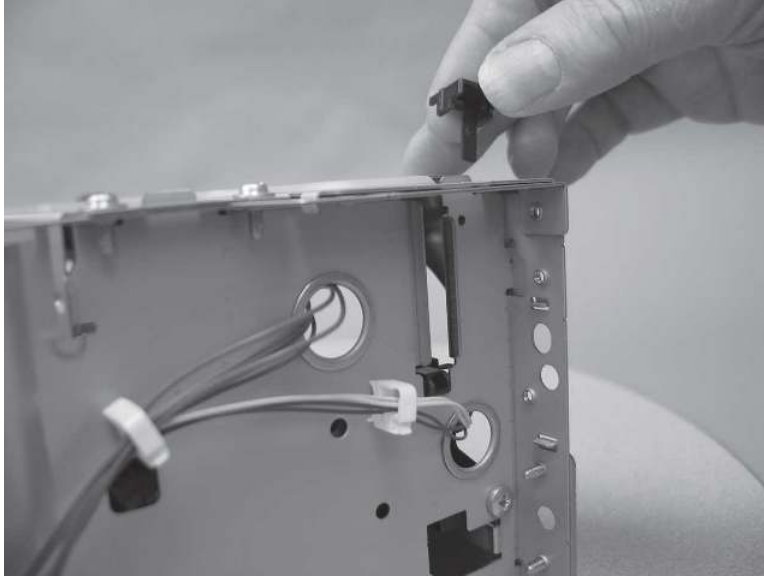
2. On the left side of the feeder, release one tab (callout 1) on the foot.

Figure 5-2281 Release one tab



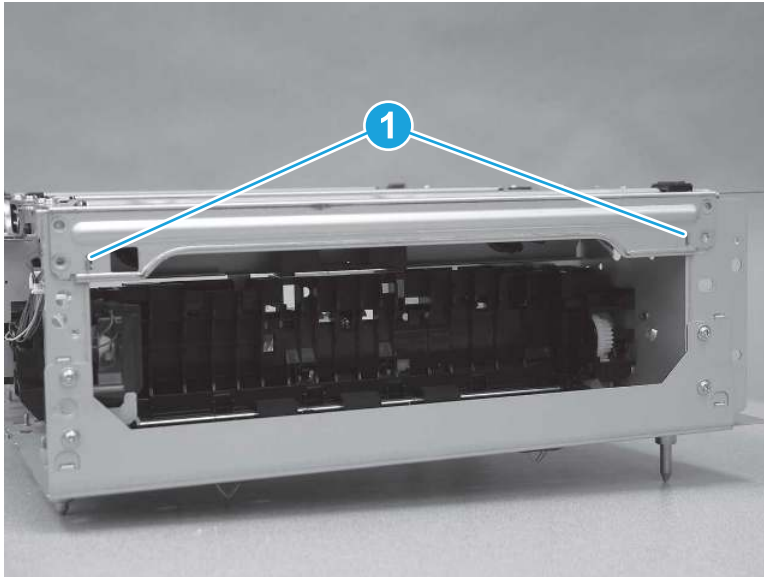
3. Remove the foot.

Figure 5-2282 Remove the foot



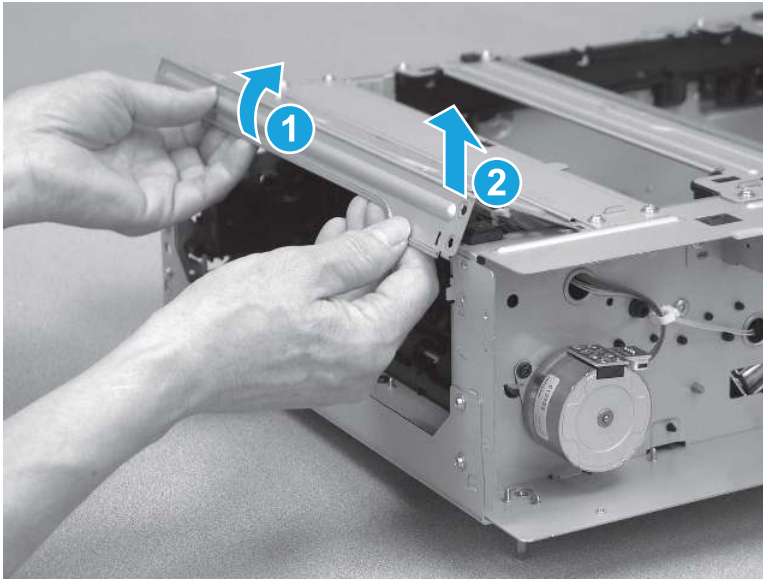
4. Release two tabs (callout 1).

Figure 5-2283 Release two tabs



5. Rotate the edge of the base plate up (callout 1), and then lift it up (callout 2) to remove it.

**Figure 5-2284** Remove the assembly

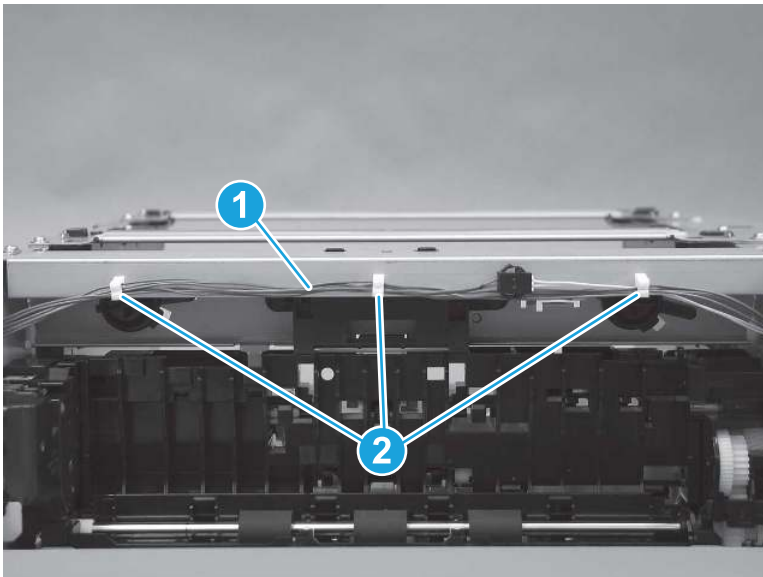


## 7. Remove the feed frame assembly (550-sheet paper feeder)

Follow these steps to remove the feed frame assembly (550-sheet paper feeder).

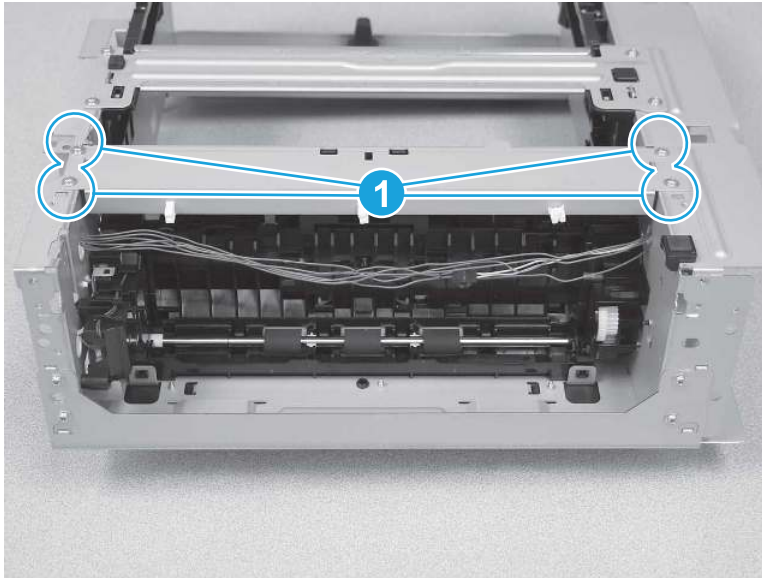
1. Release the cables (callout 1) from the retainers (callout 2).

**Figure 5-2285** Release the cables



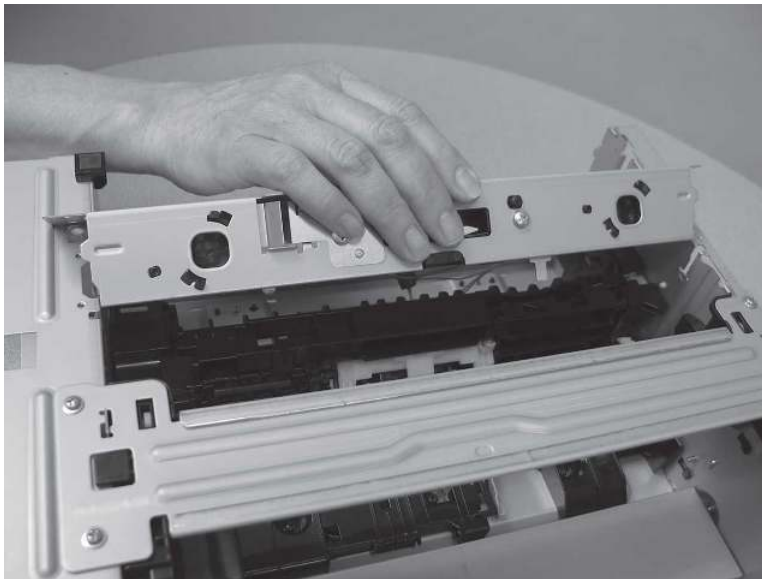
2. Remove four screws (callout 1).

**Figure 5-2286** Remove four screws



3. Remove the feed frame assembly.

**Figure 5-2287** Remove the assembly

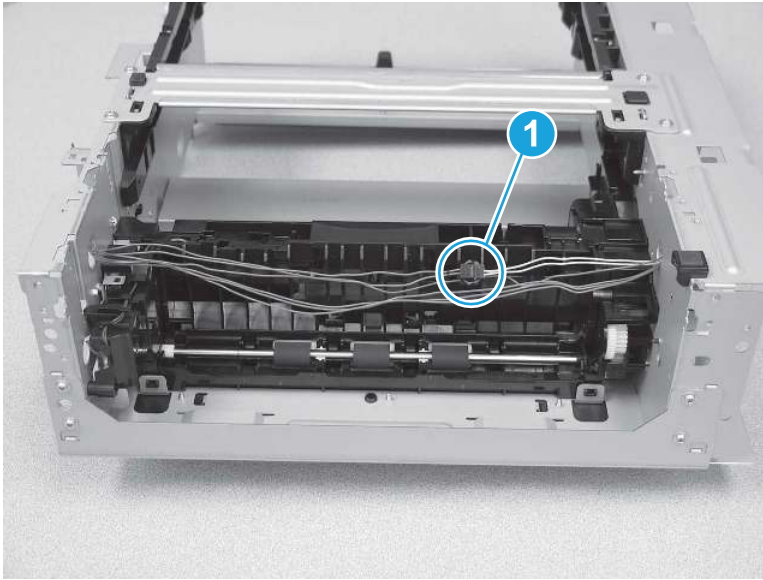


## 8. Remove the lifter drive assembly (550-sheet paper feeder)

Follow these steps to remove the lifter drive assembly (550-sheet paper feeder).

1. Lay the feeder on the top so that the bottom is facing up. Disconnect one in-line connector (callout 1).

**Figure 5-2288** Disconnect one connector



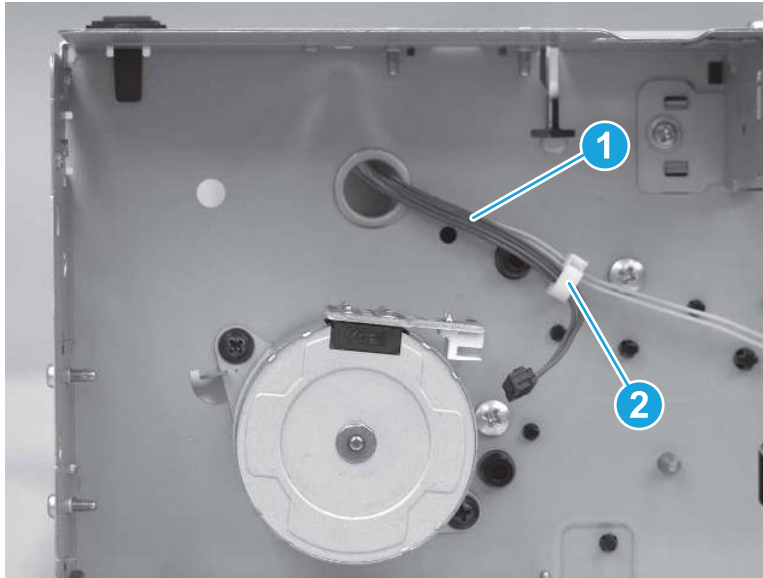
2. On the right side of the feeder, disconnect one connector (callout 1) from the motor.

**Figure 5-2289** Disconnect one connector



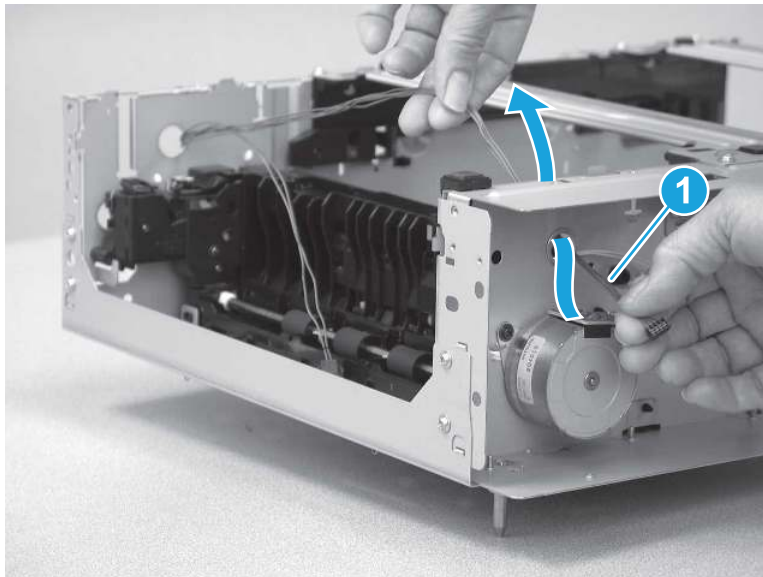
3. Release the cables (callout 1) from the retainer (callout 2).

Figure 5-2290 Release the cables



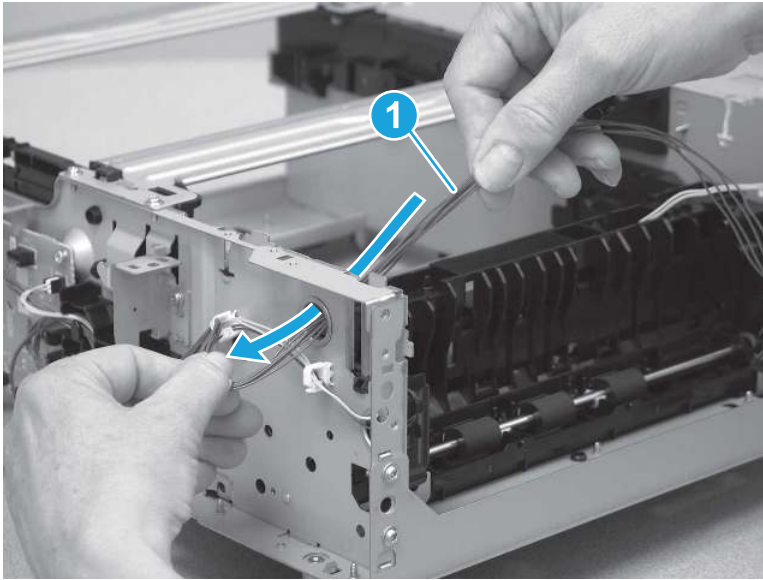
4. Pass the cables (callout 1) through the hole in the sheet metal.

Figure 5-2291 Release the cables




5. On the left side of the feeder, pass all of the cables (callout 1) through the opening in the paper feeder.

Figure 5-2292 Release the cables



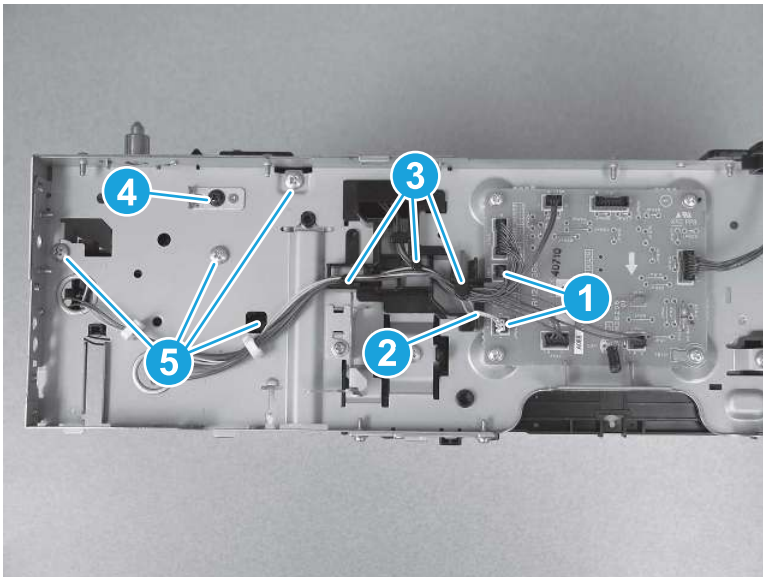
6. Do the following:
  - a. Lay the feeder on the right side so that the left side is facing up, and then disconnect two connectors (callout 1).
  - b. Remove the cables (callout 2) from the guides (callout 3).
  - c. Remove one screw (callout 4), and then remove four more screws (callout 5).

---

 **Reinstallation tip:** One screw (callout 4) is different from the other screws. Make sure that this screw is installed in the correct position.

---

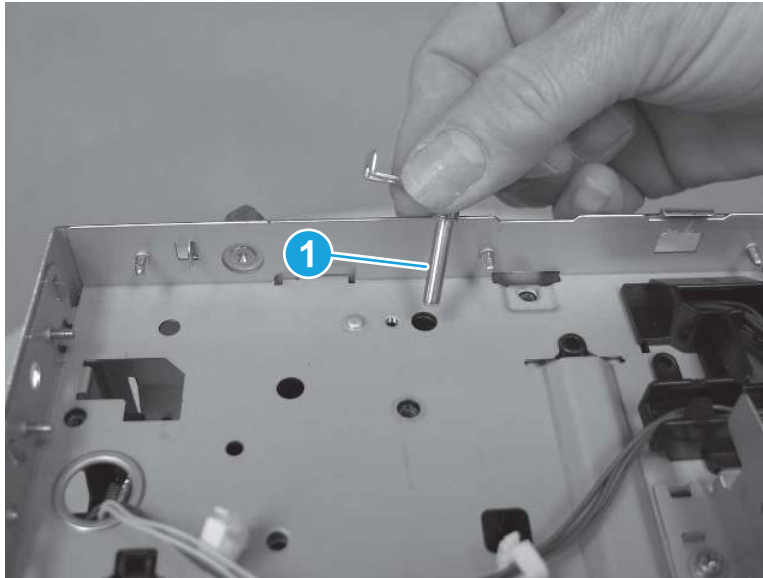
Figure 5-2293 Disconnect connector and remove screws





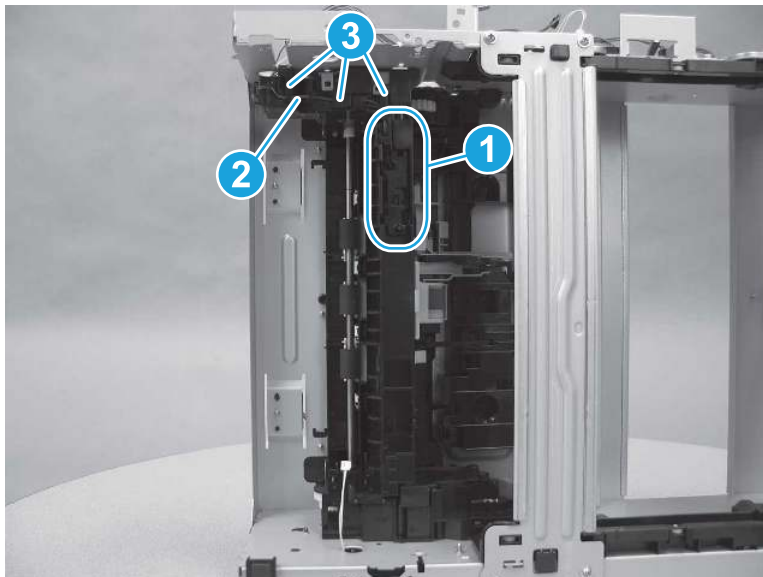
7. Remove one shaft (callout 1).

Figure 5-2294 Remove the shaft



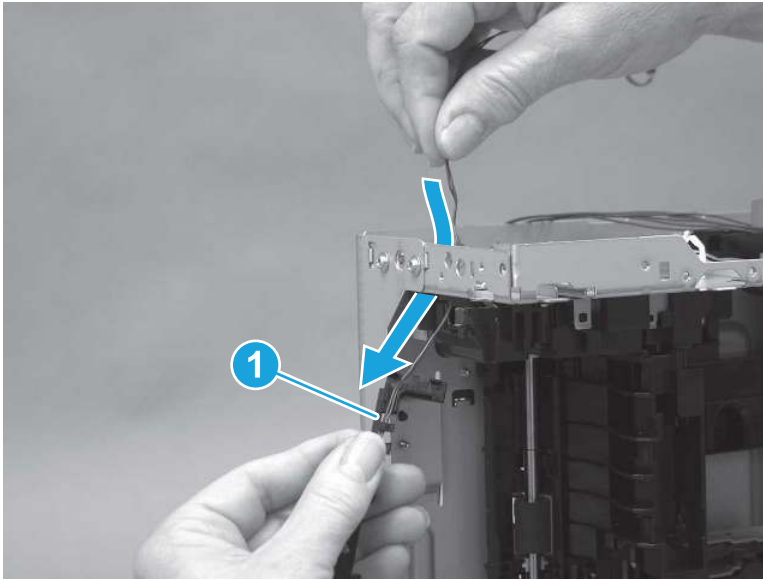
8. Release the tray sensor switch (callout 1), and then remove the cables (callout 2) from the guides (callout 3).

Figure 5-2295 Release the tray sensor switch



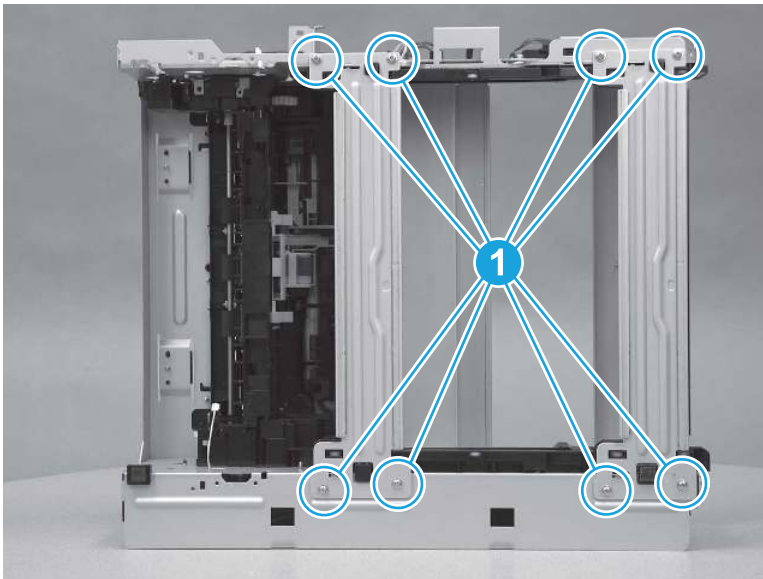
9. Pass the tray sensor switch cables (callout 1) through the hole in the sheet metal.

Figure 5-2296 Release the cables



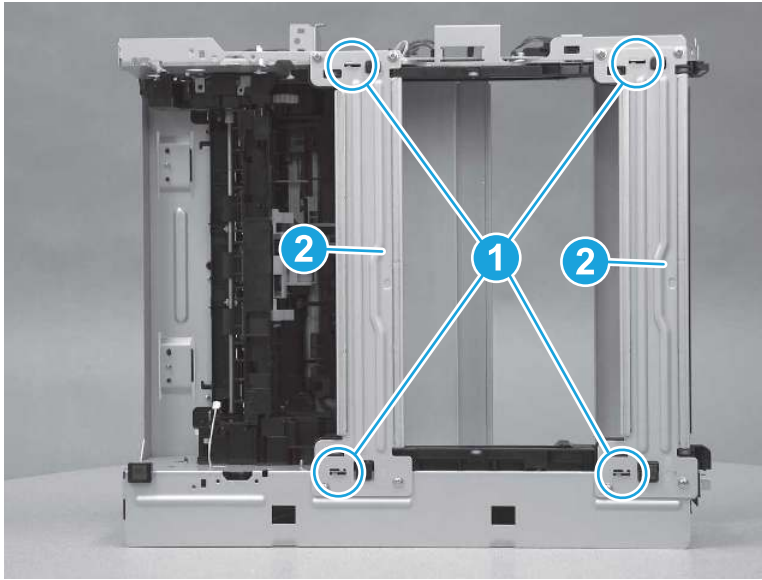
10. Remove eight screws (callout 1).

Figure 5-2297 Remove eight screws



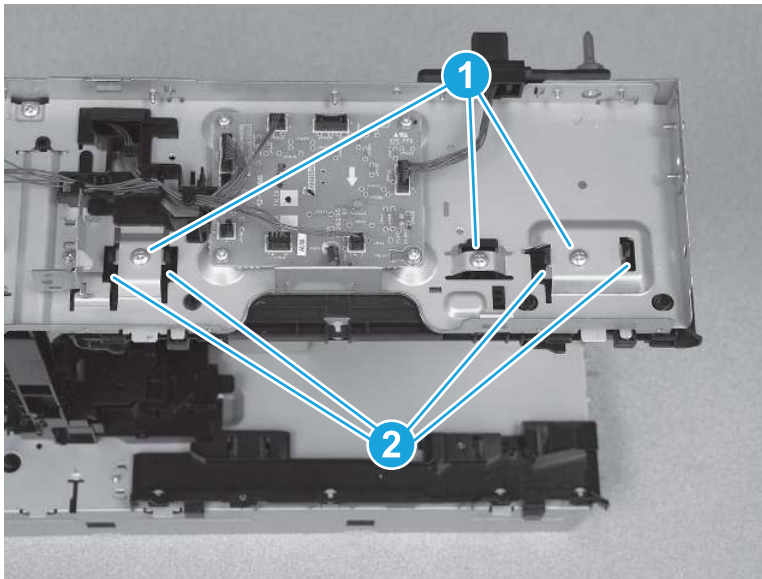
11. Release four tabs (callout 1), and then remove the cross braces (callout 2).

**Figure 5-2298** Remove the cross braces



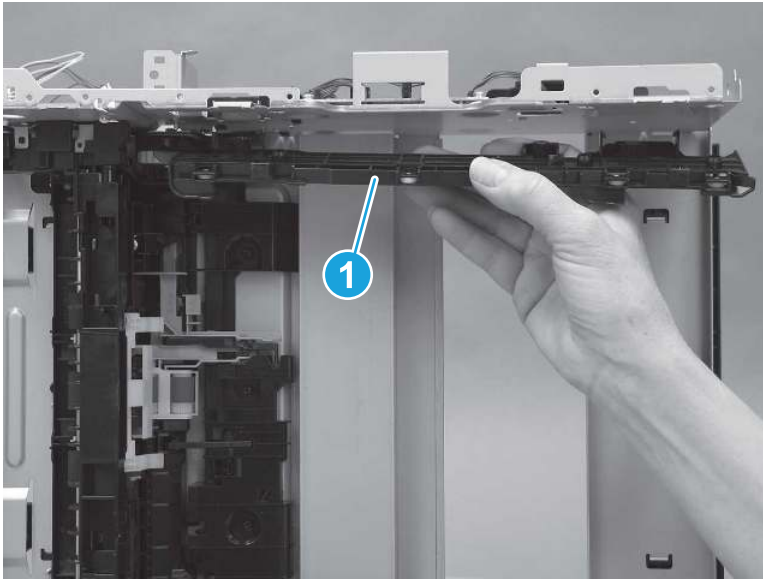
12. On the left side of the feeder, remove three screws (callout 1), and then release three tabs (callout 2).

**Figure 5-2299** Remove screws and release tabs



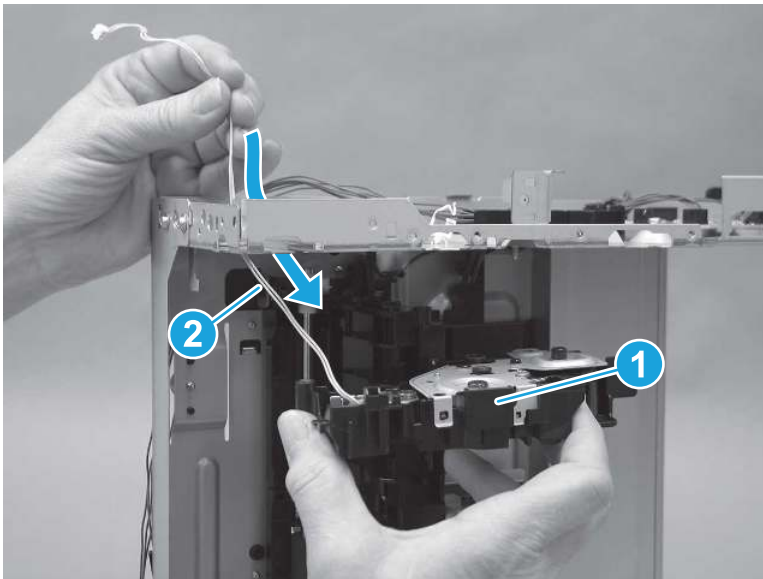
13. Remove the tray guide (callout 1).

Figure 5-2300 Remove the tray guide



14. Remove the lifter drive assembly (callout 1) while passing the cables (callout 2) through the feeder frame.

Figure 5-2301 Remove the assembly

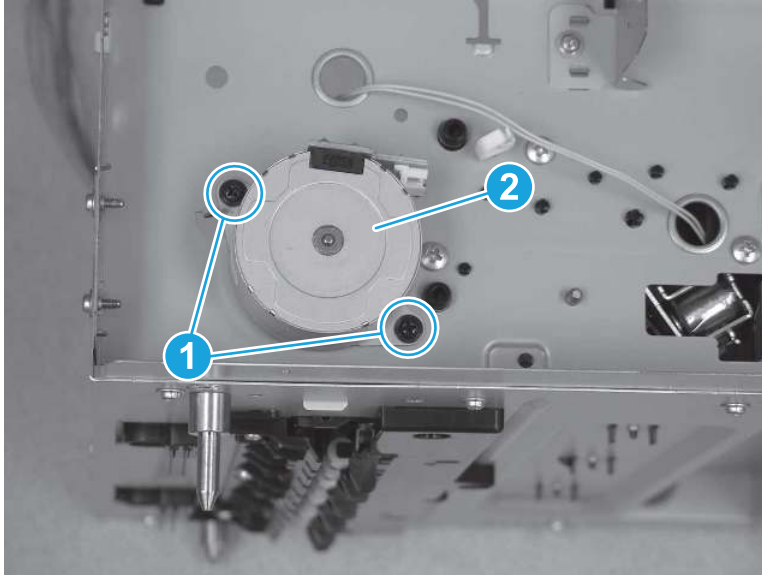


## 9. Remove the pickup assembly (550-sheet paper feeder)

Follow these steps to remove the pickup assembly (550-sheet paper feeder).

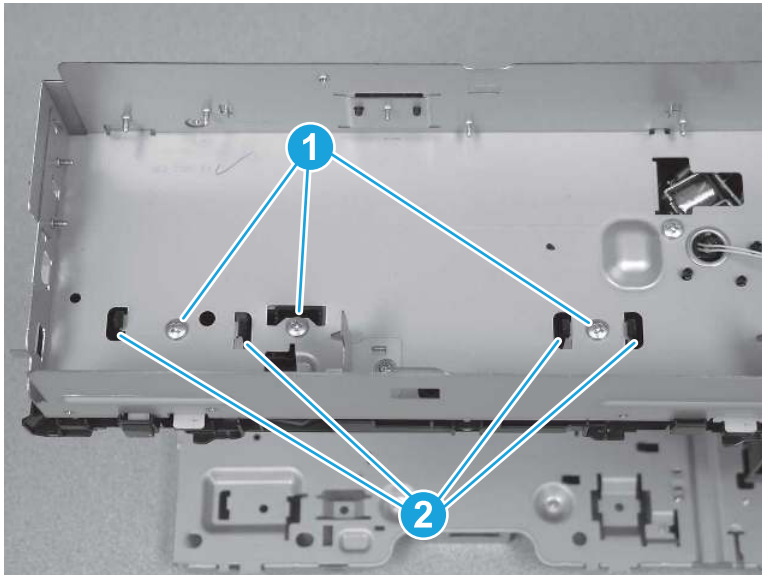
1. Lay the feeder on the left side so that the right side is facing up. Remove two screws (callout 1), and then remove the motor (callout 2).

**Figure 5-2302** Remove the motor



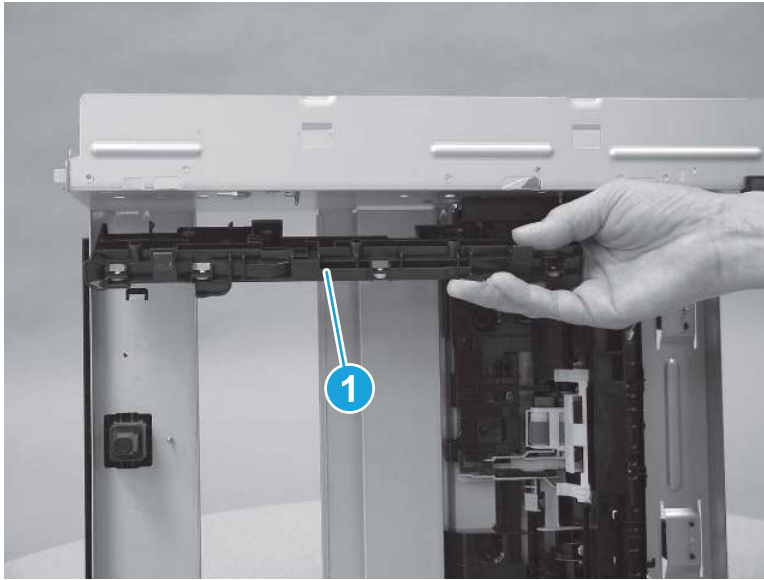
2. Remove three screws (callout 1), and then release three tabs (callout 2).

**Figure 5-2303** Remove screws and release tabs



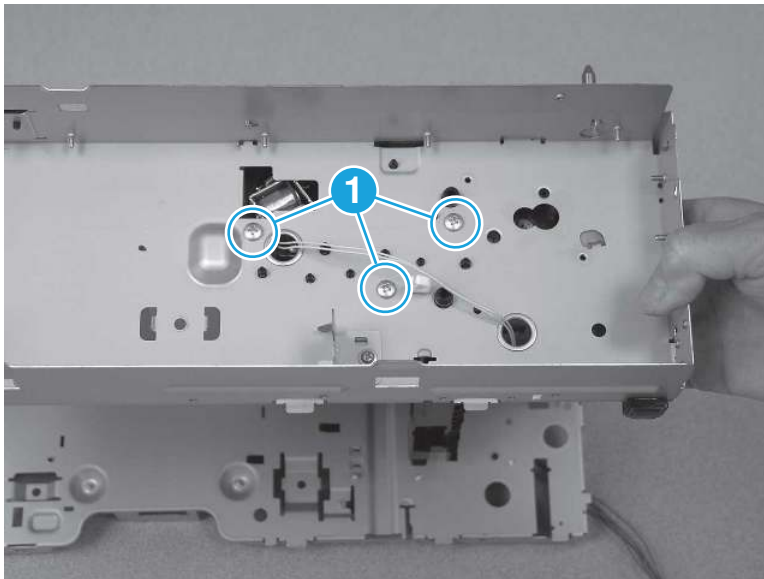
3. Remove the tray guide (callout 1).

Figure 5-2304 Remove the tray guide



4. Remove three screws (callout 1).

Figure 5-2305 Remove three screws



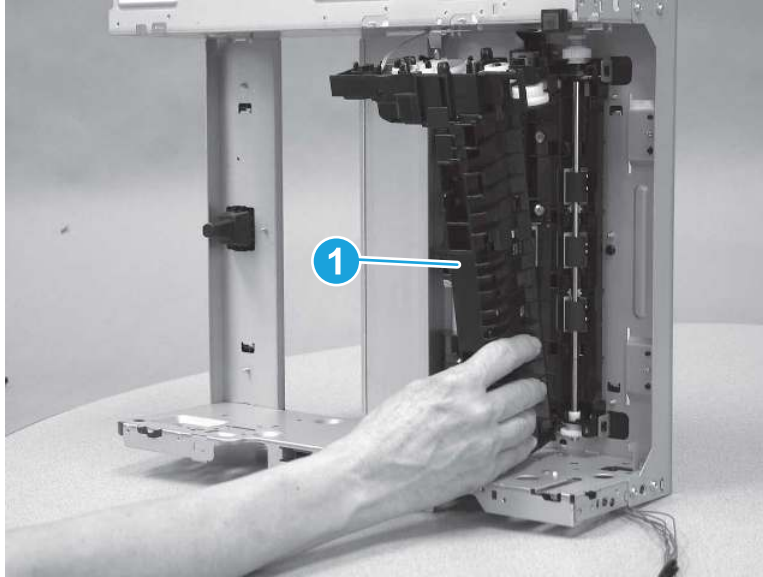
5. Separate the pickup assembly (callout 1) from the feeder frame.

---

**⚠ CAUTION:** Do not attempt to completely remove the assembly. It is still attached to the frame by a wire harness.

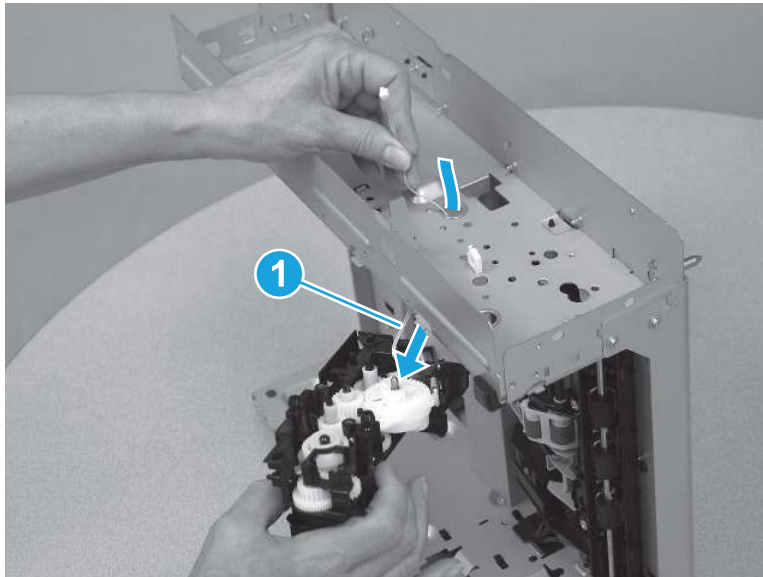
---

Figure 5-2306 Release the assembly



6. Pass the cables (callout 1) through the feeder frame to remove the assembly.

Figure 5-2307 Remove the assembly

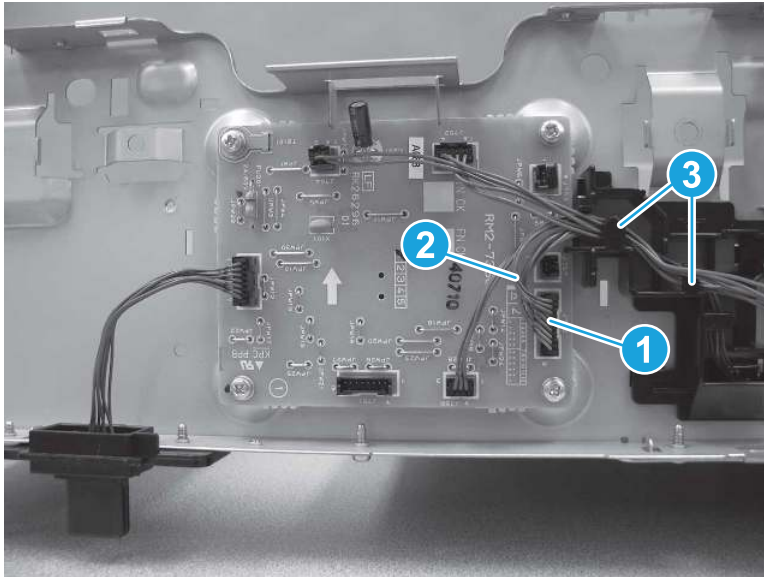


## 10. Remove the front feed guide assembly (550-sheet paper feeder)

Follow these steps to remove the front feed guide assembly (550-sheet paper feeder).

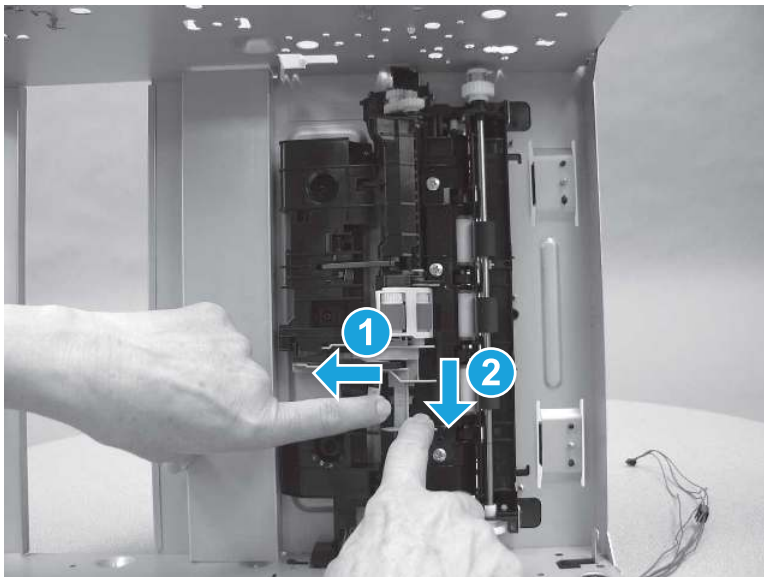
1. Lay the feeder on the right side so that the left side is facing up. Disconnect one connector (callout 1), and then remove the cables (callout 2) from the guides (callout 3).

**Figure 5-2308** Disconnect one connector



2. Press the lever (callout 1) on the roller holder, and then slide the roller holder down (callout 2).

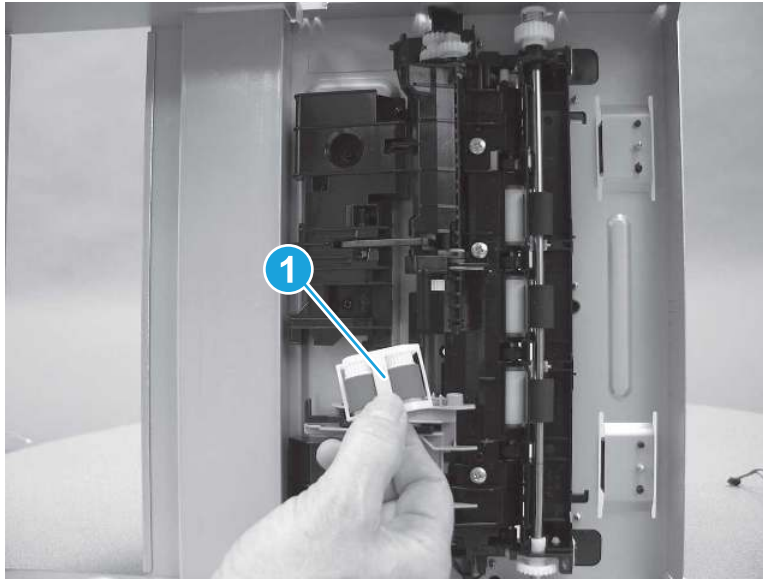
**Figure 5-2309** Slide the roller holder





3. Remove the roller holder (callout 1).

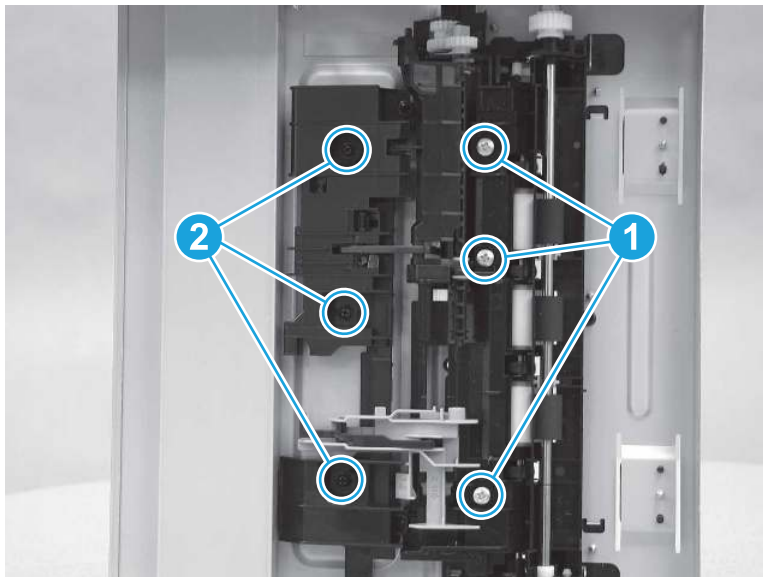
**Figure 5-2310** Remove the roller holder



4. Remove three screws (callout 1) on the rear feed guide assembly, and then remove three screws (callout 2) on the front feed guide assembly.

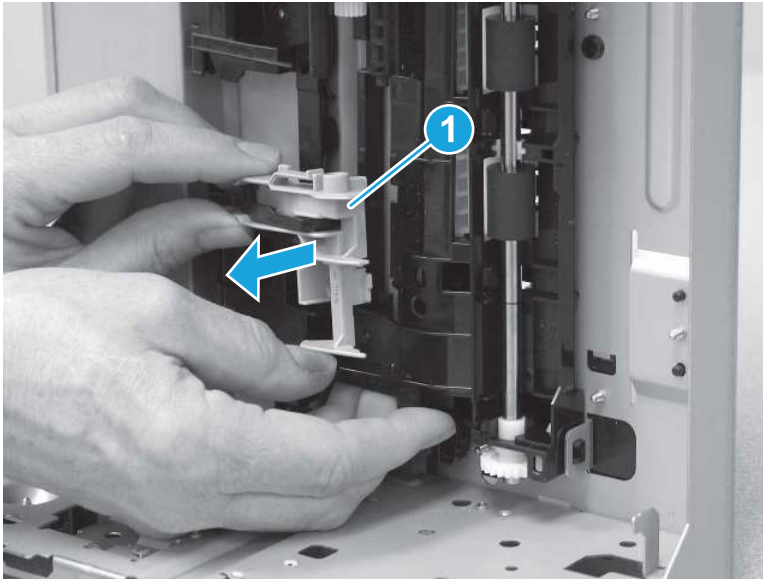
 **Reinstallation tip:** The three screws (callout 1) on the rear feed guide assembly are larger than the screws on the front feed guide assembly.

**Figure 5-2311** Remove six screws



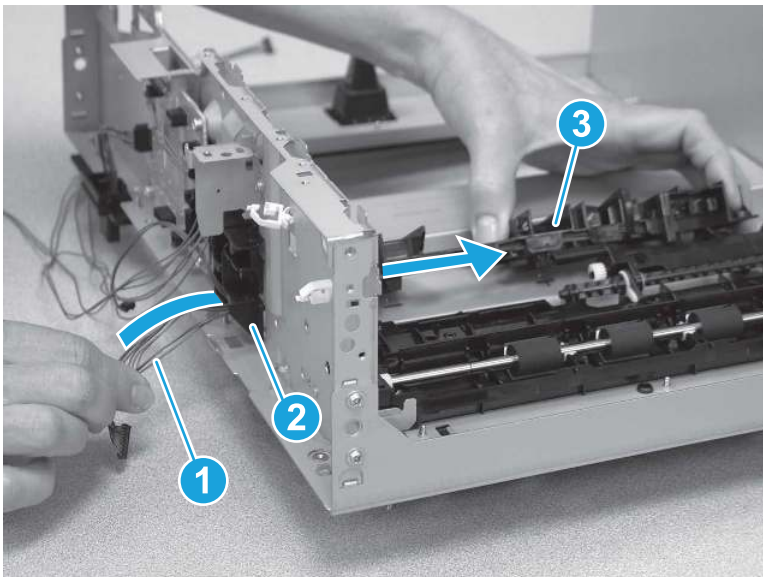
5. Remove the roller holder (callout 1).

Figure 5-2312 Remove the roller holder



6. Pass the cables (callout 1) through the feeder frame (callout 2), and then remove the front feed guide assembly (callout 3).

Figure 5-2313 Remove the assembly

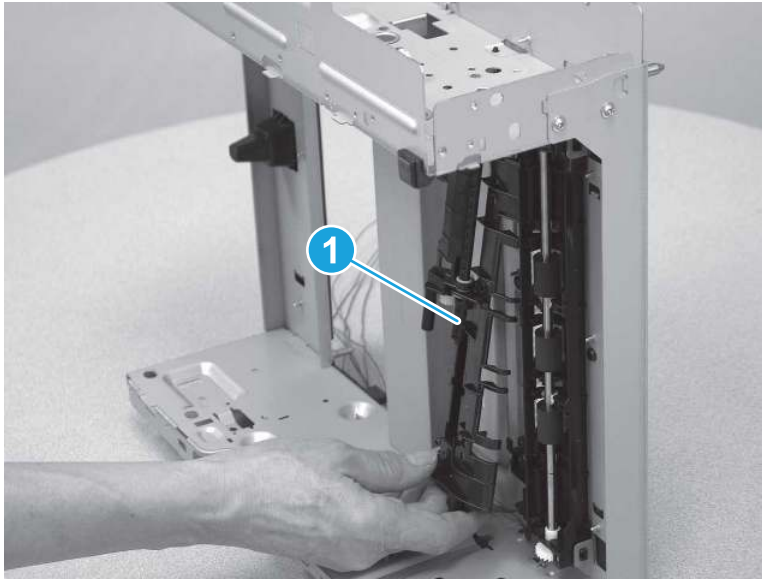


## 11. Remove the rear feed guide assembly (550-sheet paper feeder)

Follow these steps to remove the rear feed guide assembly (550-sheet paper feeder).

- ▲ Remove the rear feed guide assembly (callout 1).

Figure 5-2314 Remove the assembly



## 12. 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.

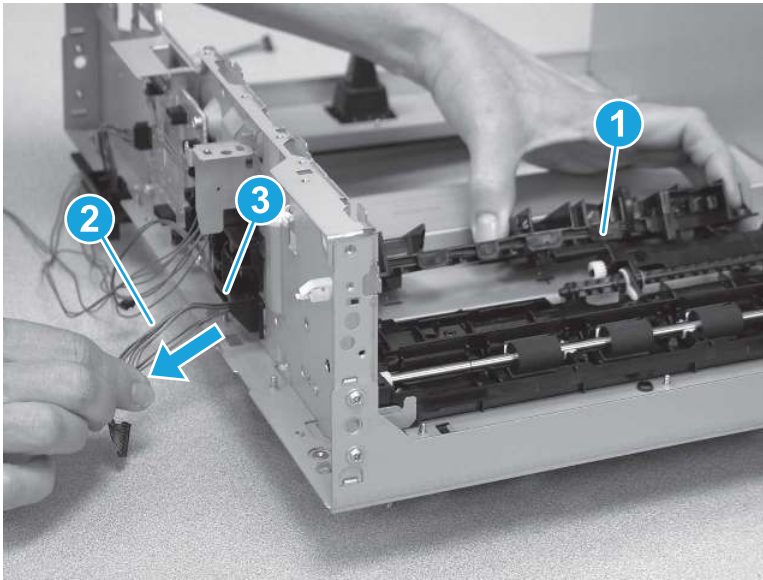
## 13. Reverse the removal steps to install the assembly

Also use the following special installation instructions.

### Front feed guide assembly (550-sheet paper feeder)

- ▲ Install the front feed guide (callout 1), and then pass the cables (callout 2) through the feeder frame (callout 3).

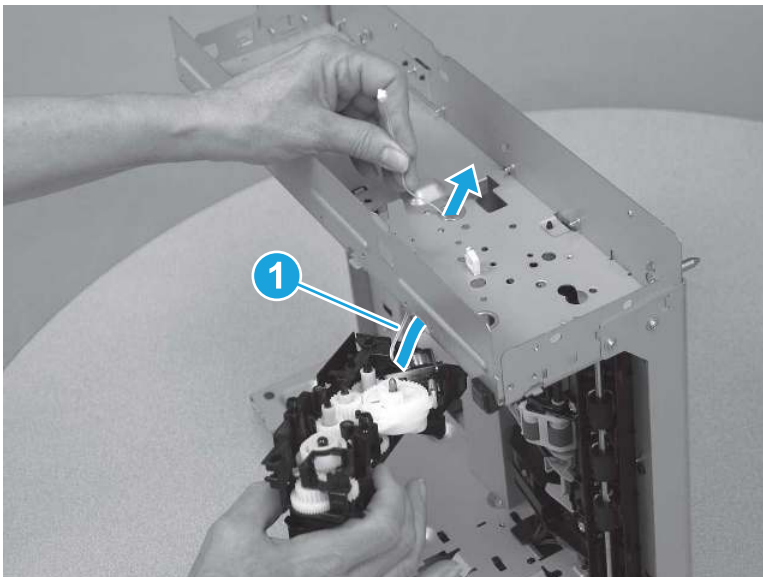
**Figure 5-2315** Install the front feed guide assembly



### Pickup assembly (550-sheet paper feeder)

- ▲ Lay the feeder on the left side so that the right side is facing up. Pass the cables (callout 1) through the feeder frame.

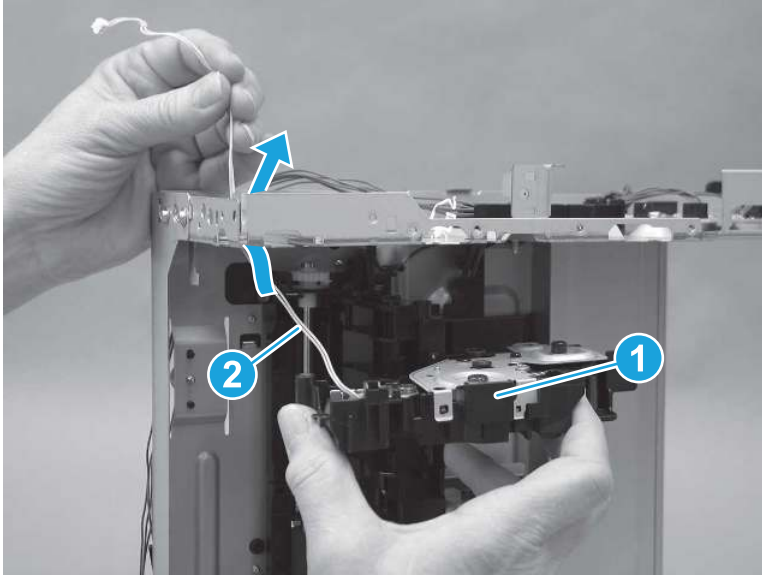
**Figure 5-2316** Install the pickup assembly



### Lifter drive assembly (550-sheet paper feeder)

- ▲ Install the lifter drive assembly (callout 1) while passing the cables (callout 2) through the feeder frame.

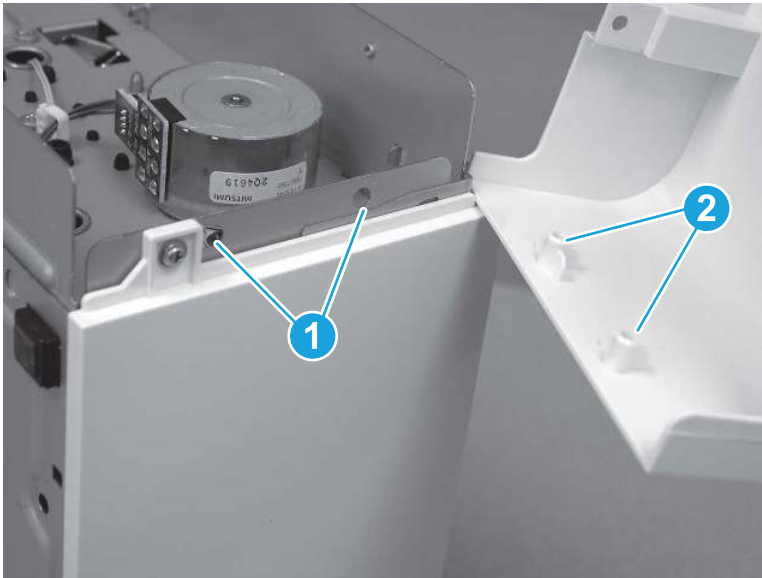
Figure 5-2317 Install the lifter drive assembly



Left cover (550-sheet paper feeder)

- ▲ Lay the feeder on the right side so that the left side is facing up. At the back of the feeder, install the tabs (callout 1) on the cover in the holes (callout 2) on the feeder.

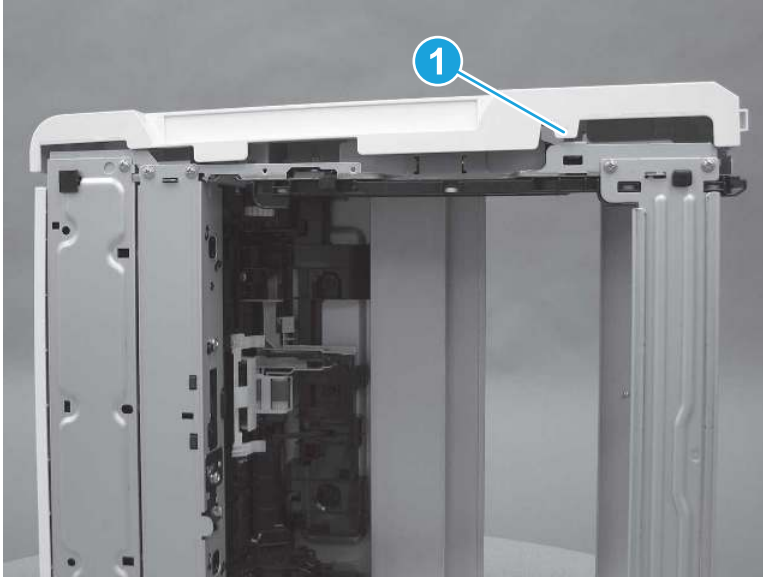
Figure 5-2318 Install the left cover



Right cover (550-sheet paper feeder)

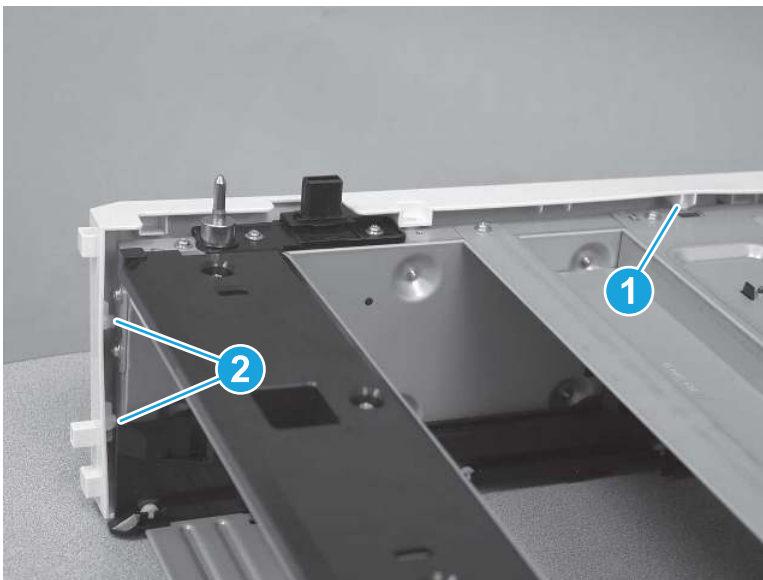
1. Lay the feeder on the left side so that the right side is facing up, and then install one tab (callout 1) on the bottom of the feeder.

**Figure 5-2319** Engage one tab



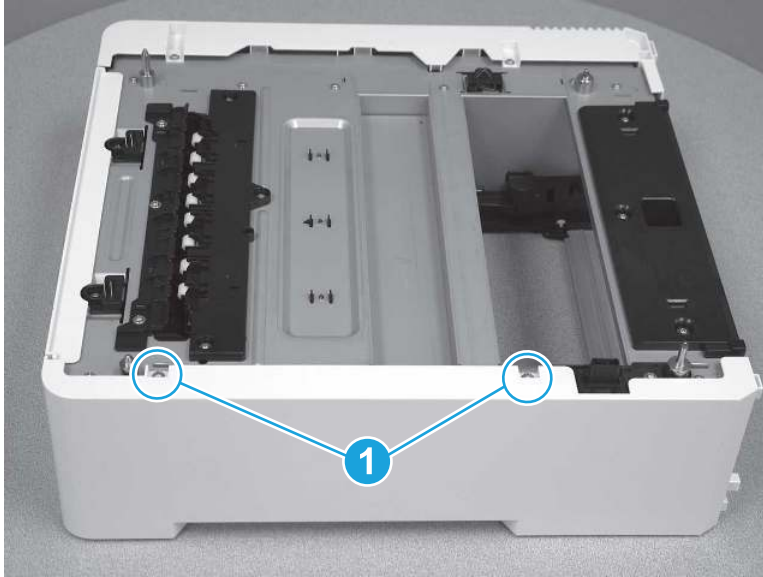
2. Turn the feeder to an upright position with the top facing up. Install one tab (callout 1) on the top of the feeder, and then install two tabs (callout 2) at the front of the feeder.

**Figure 5-2320** Engage three tabs



3. Install two screws (callout 1).

Figure 5-2321 Install two screws



## Removal and replacement: Paper feed assembly (550-sheet paper feeder)

Learn how to remove and replace the paper feed assembly for the 550-sheet paper feeder.

[View a video of how to remove and replace the 550-sheet paper feeder paper feed assembly.](#)

Mean time to repair: 75 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](http://www.hp.com/buy/parts).

Table 5-67 Part information

Part number	Part description
RM2-6494-000CN	Paper feed assembly (550-sheet paper feeder)

### Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length
- Small flat-blade screwdriver

### After performing service

#### Turn the printer power on

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

### Post service test

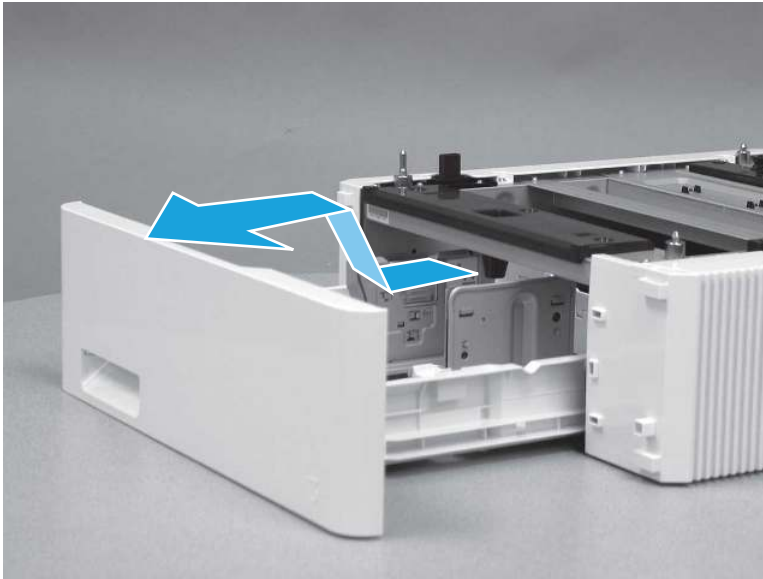
Print any pages necessary to make sure the printer is functioning correctly.

## 1. Remove Tray 3

Follow these steps to remove Tray 3.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

**Figure 5-2322** Remove the tray



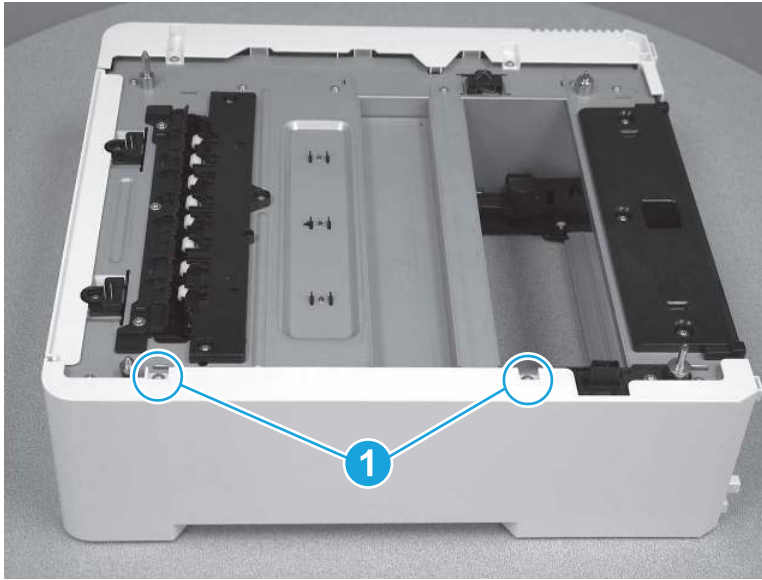
## 2. Remove the right cover (550-sheet paper feeder)

Follow these steps to remove the right cover (550-sheet paper feeder).



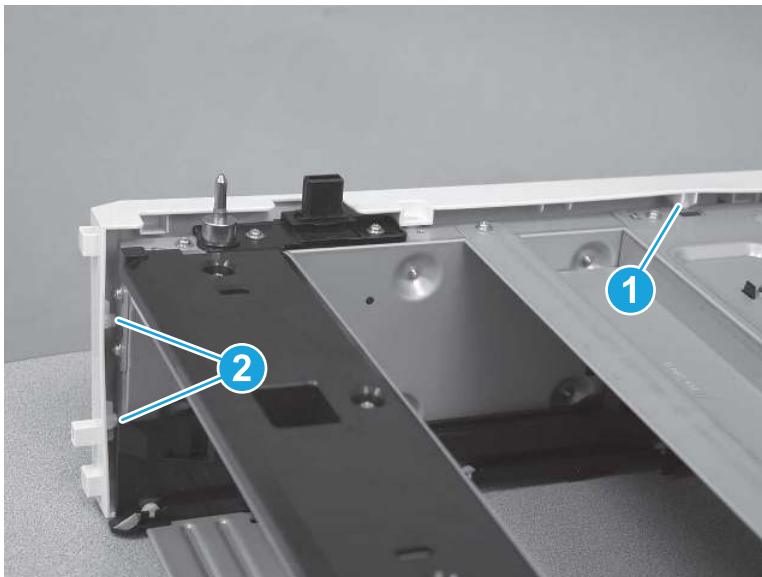
1. Remove two screws (callout 1).

Figure 5-2323 Remove two screws



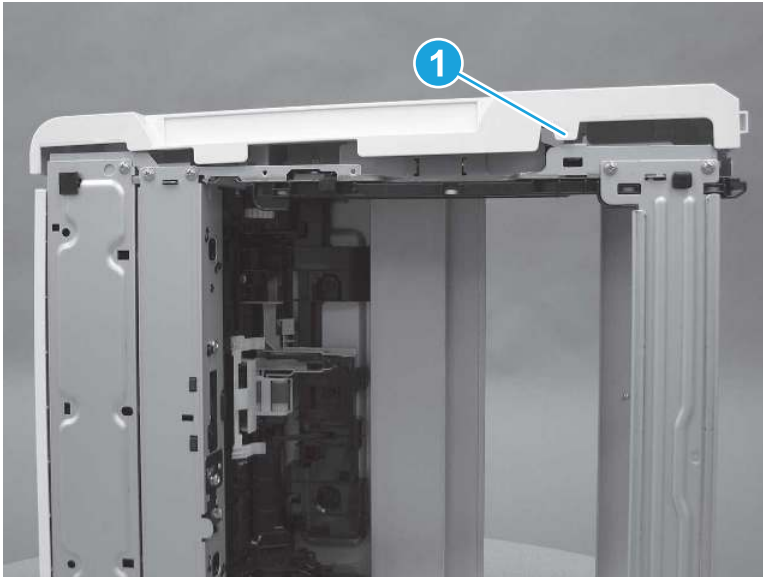
2. Release one tab (callout 1) on the top of the feeder, and then release two tabs (callout 2) at the front of the feeder.

Figure 5-2324 Release three tabs



3. Lay the feeder on the left side so that the right side is facing up, and then release one tab (callout 1) on the bottom of the feeder. Remove the right cover.

Figure 5-2325 Remove the cover

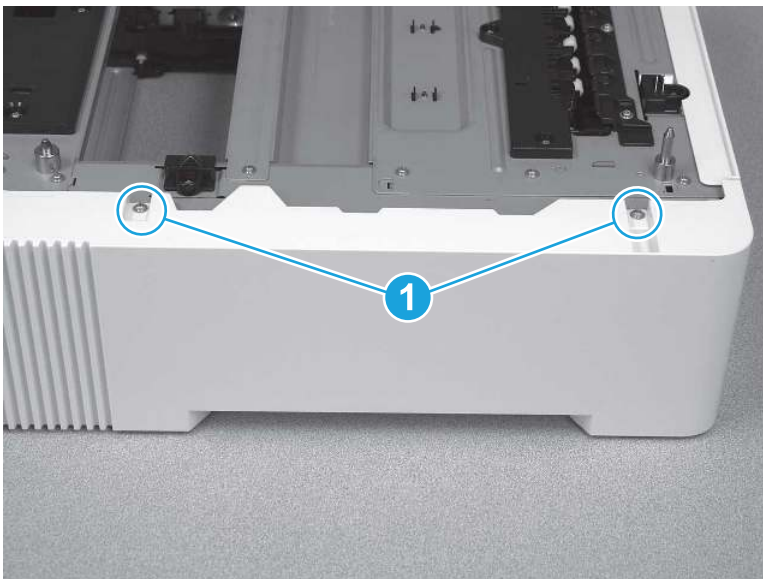


### 3. Remove the left cover (550-sheet paper feeder)

Follow these steps to remove the left cover (550-sheet paper feeder).

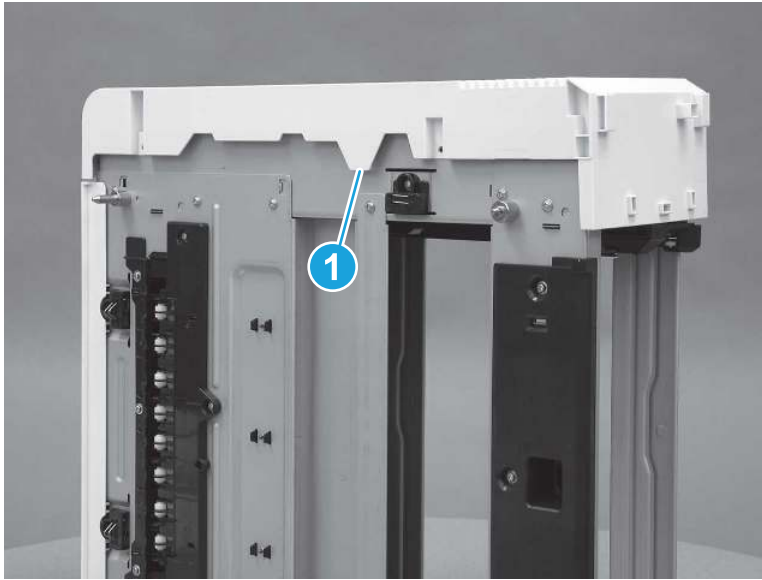
1. Remove two screws (callout 1).

Figure 5-2326 Remove two screws



2. Release one tab (callout 1) on the top of the feeder.

Figure 5-2327 Release one tab



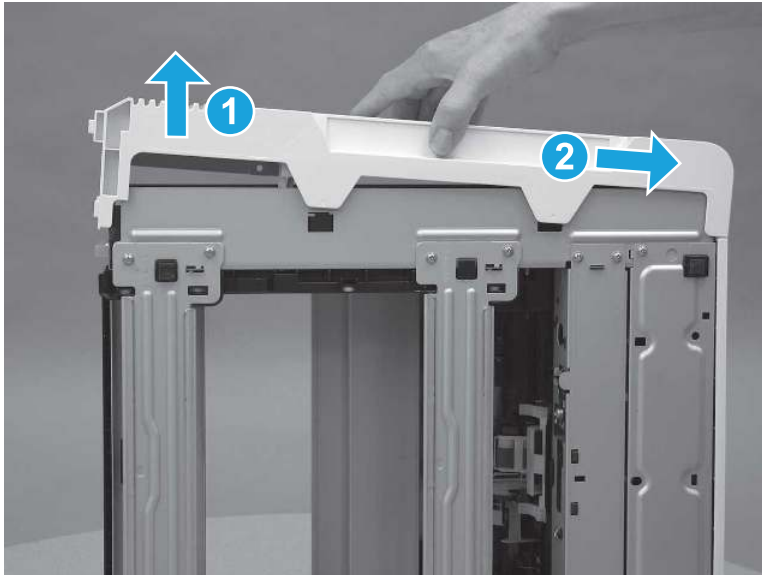
3. Lift the front of the cover up (callout 1), and then slide the cover (callout 2) toward the back of the feeder to remove it.

---

 **NOTE:** Release additional tabs as needed to remove the cover.

---

Figure 5-2328 Remove the cover

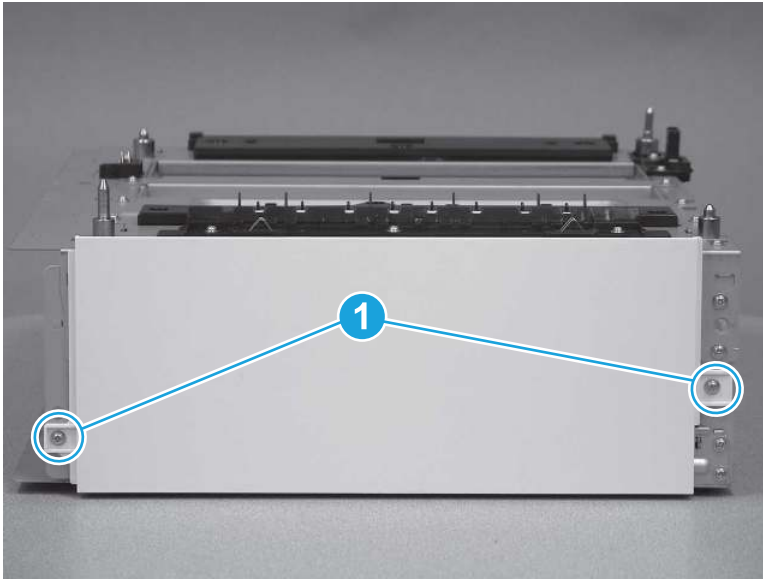


#### 4. Remove the rear cover (550-sheet paper feeder)

Follow these steps to remove the rear cover (550-sheet paper feeder).

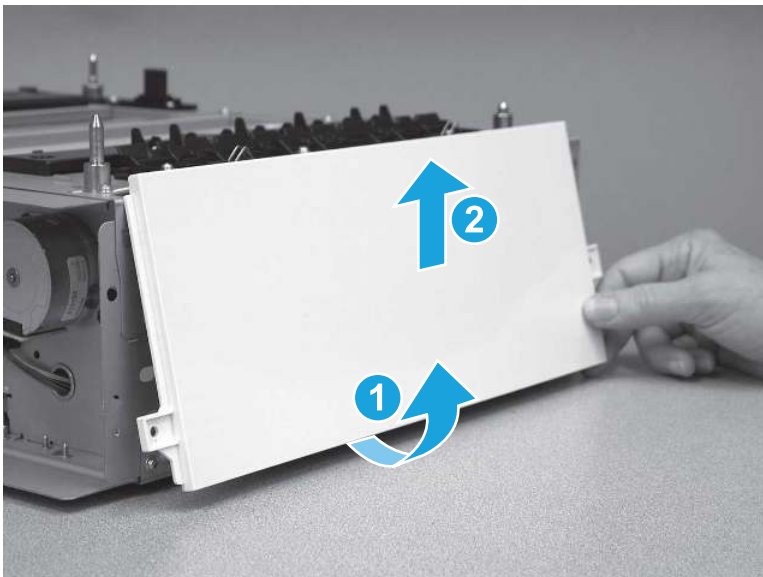
1. Remove two screws (callout 1).

Figure 5-2329 Remove two screws



2. Rotate the bottom edge of the cover (callout 1) away from the feeder, and then raise the cover up (callout 2) to remove it.

Figure 5-2330 Remove the cover

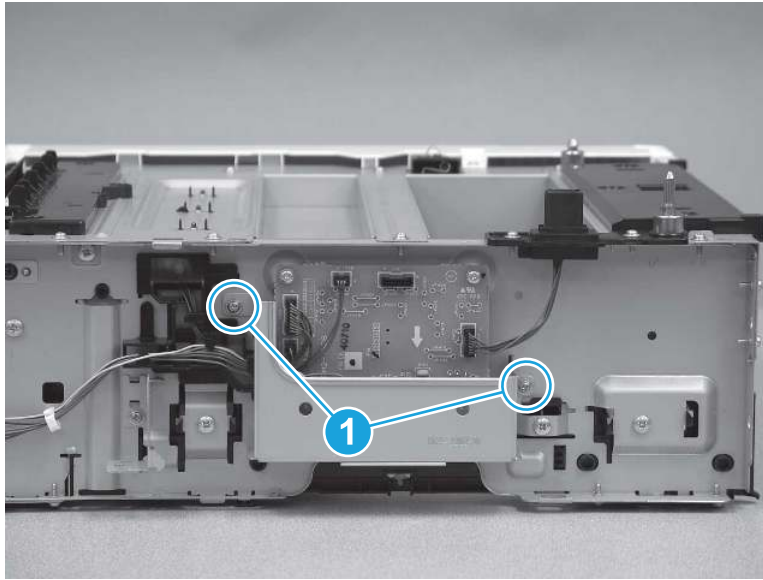


## 5. Remove the PCA cover (550-sheet paper feeder)

Follow these steps to remove the PCA cover (550-sheet paper feeder).

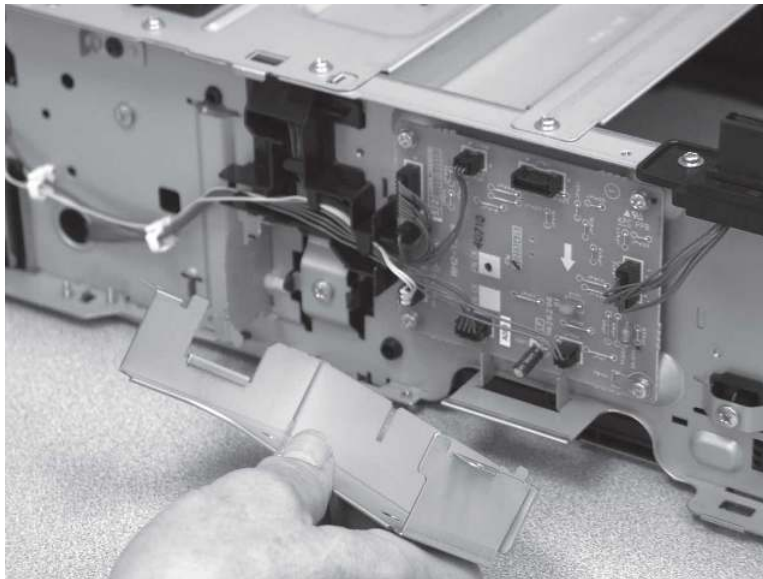
1. On the left side of the feeder, remove two screws (callout 1).

**Figure 5-2331** Remove two screws



2. Remove the PCA cover.

**Figure 5-2332** Remove the cover

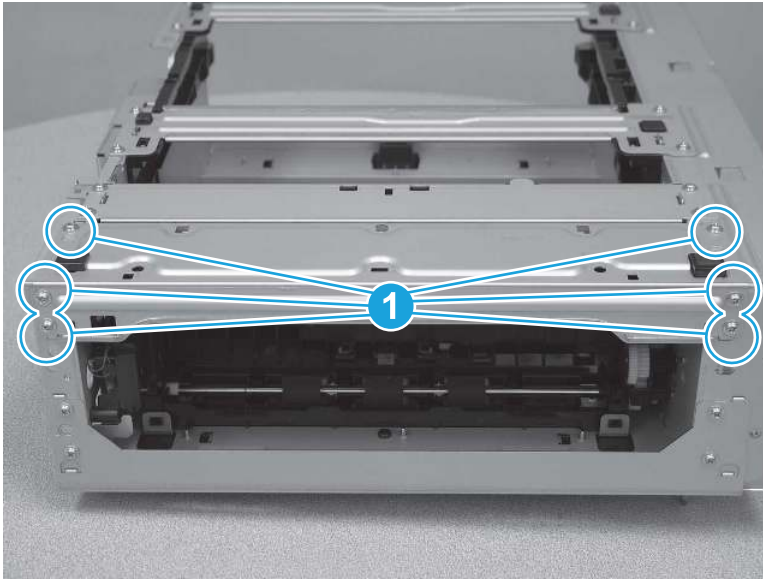


## 6. Remove the base plate (550-sheet paper feeder)

Follow these steps to remove the base plate (550-sheet paper feeder).

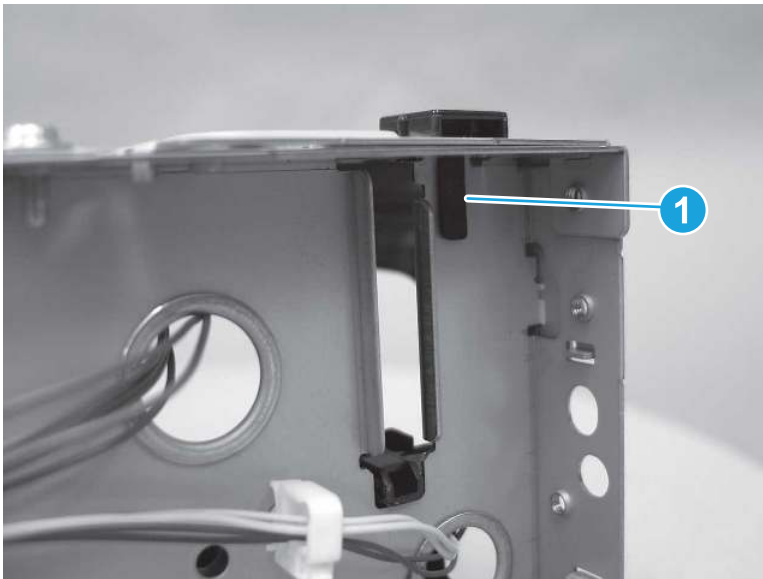
1. Lay the feeder on the top side so that the bottom side is facing up. Remove six screws (callout 1).

Figure 5-2333 Remove six screws



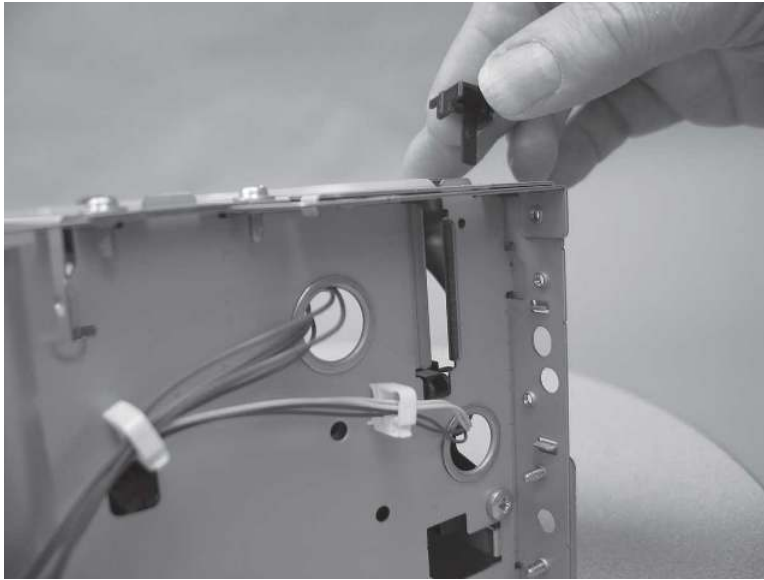
2. On the left side of the feeder, release one tab (callout 1) on the foot.

Figure 5-2334 Release one tab



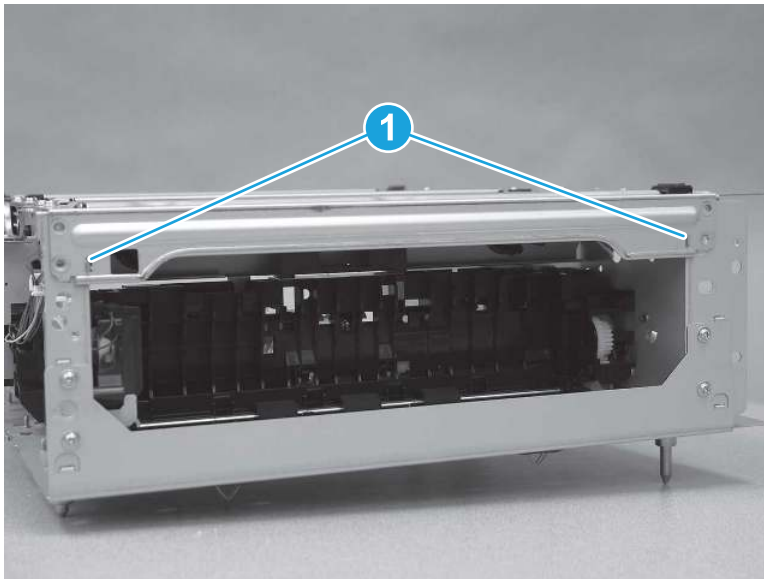
3. Remove the foot.

Figure 5-2335 Remove the foot



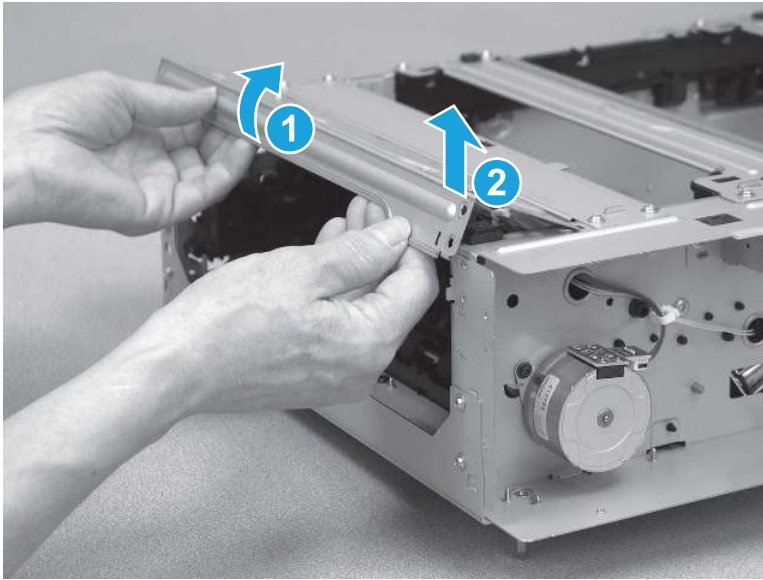
4. Release two tabs (callout 1).

Figure 5-2336 Release two tabs



5. Rotate the edge of the base plate up (callout 1), and then lift it up (callout 2) to remove it.

**Figure 5-2337** Remove the assembly

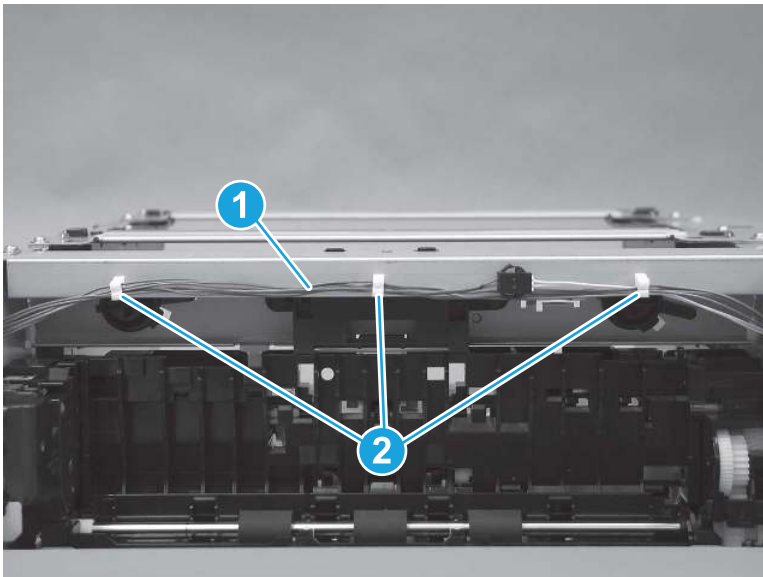


## 7. Remove the feed frame assembly (550-sheet paper feeder)

Follow these steps to remove the feed frame assembly (550-sheet paper feeder).

1. Release the cables (callout 1) from the retainers (callout 2).

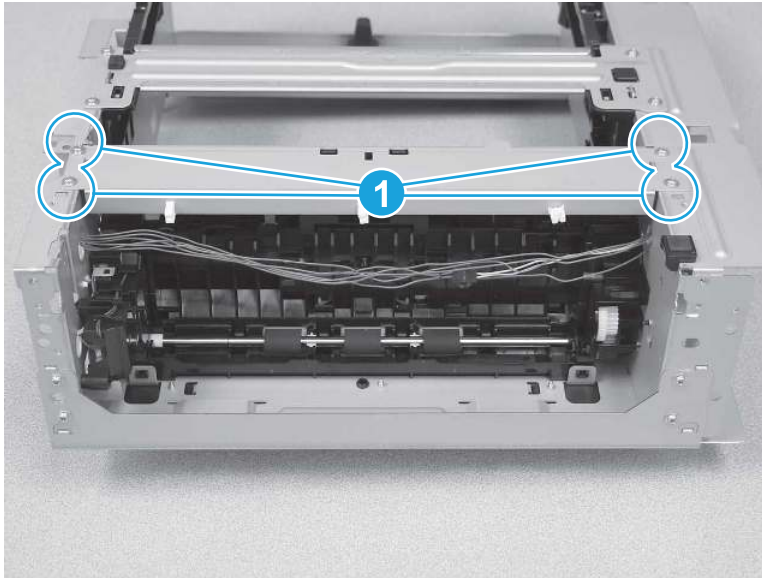
**Figure 5-2338** Release the cables





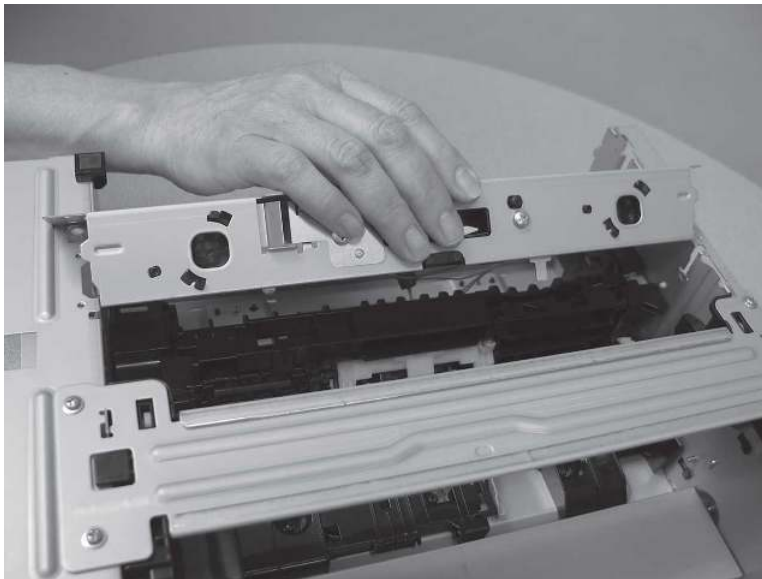
2. Remove four screws (callout 1).

**Figure 5-2339** Remove four screws



3. Remove the feed frame assembly.

**Figure 5-2340** Remove the assembly

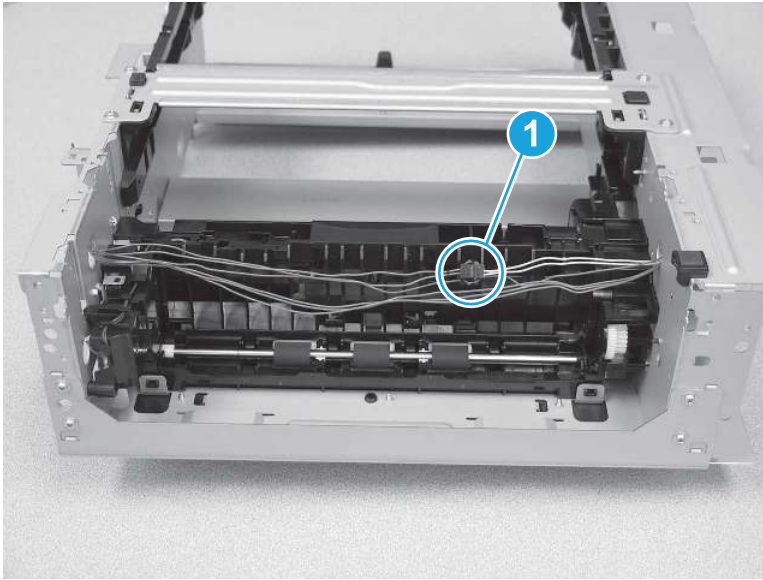


## 8. Remove the lifter drive assembly (550-sheet paper feeder)

Follow these steps to remove the lifter drive assembly (550-sheet paper feeder).

1. Lay the feeder on the top so that the bottom is facing up. Disconnect one in-line connector (callout 1).

**Figure 5-2341** Disconnect one connector



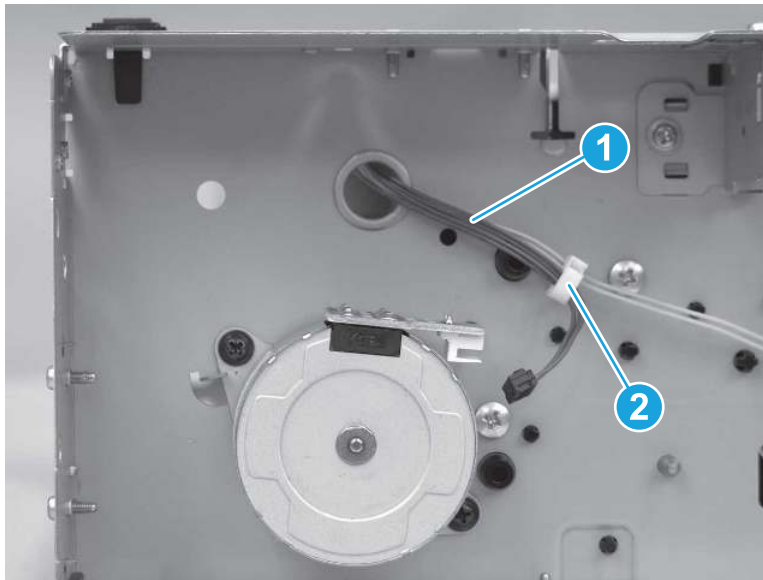
2. On the right side of the feeder, disconnect one connector (callout 1) from the motor.

**Figure 5-2342** Disconnect one connector



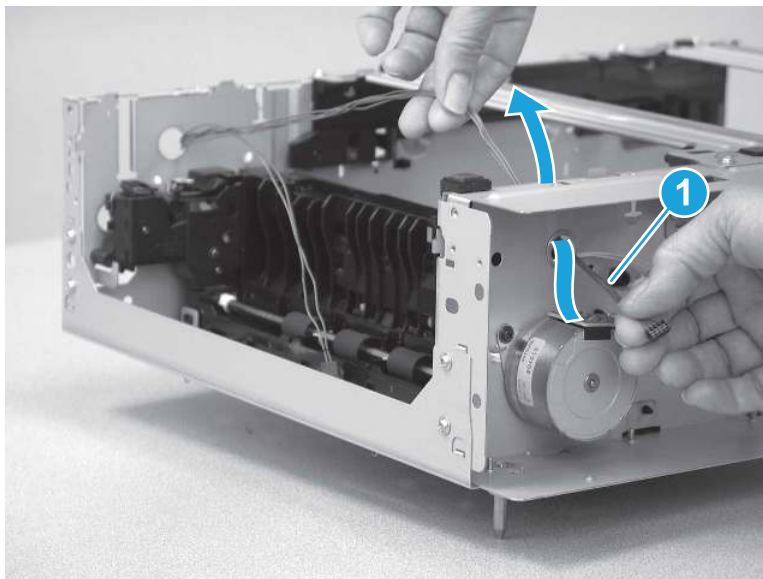
3. Release the cables (callout 1) from the retainer (callout 2).

Figure 5-2343 Release the cables



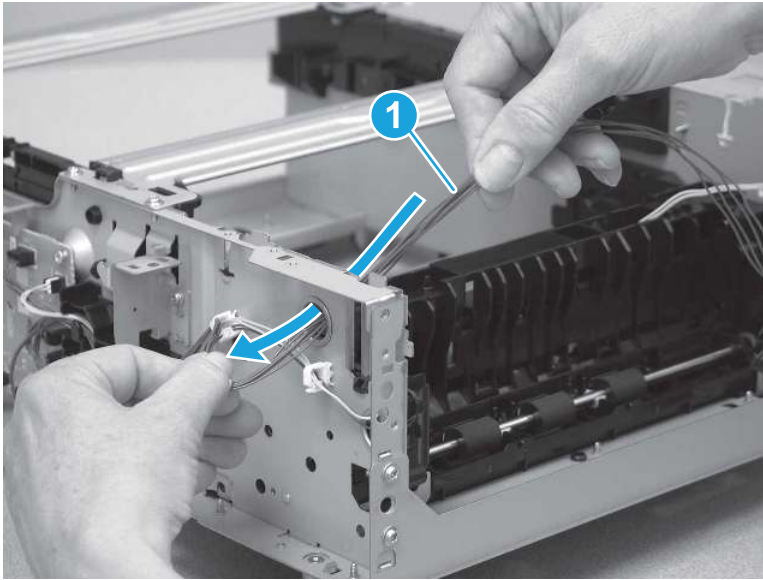
4. Pass the cables (callout 1) through the hole in the sheet metal.

Figure 5-2344 Release the cables




5. On the left side of the feeder, pass all of the cables (callout 1) through the opening in the paper feeder.

**Figure 5-2345** Release the cables



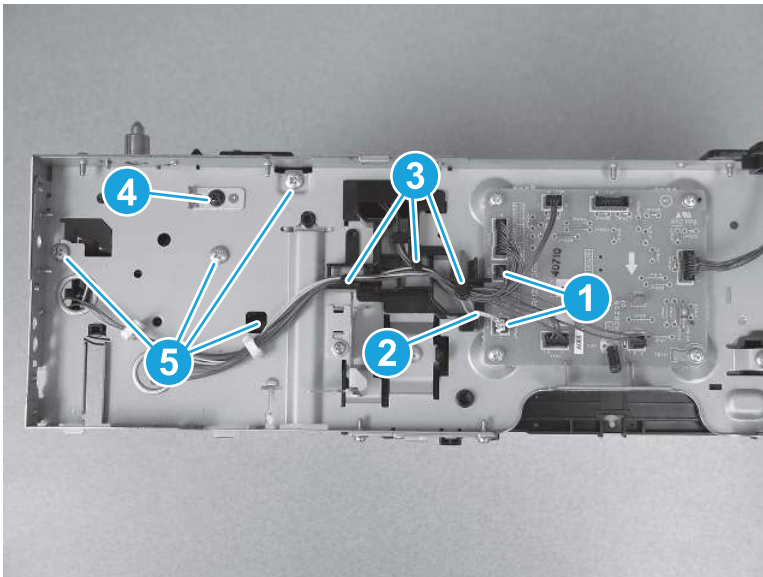
6. Do the following:
  - a. Lay the feeder on the right side so that the left side is facing up, and then disconnect two connectors (callout 1).
  - b. Remove the cables (callout 2) from the guides (callout 3).
  - c. Remove one screw (callout 4), and then remove four more screws (callout 5).

---

 **Reinstallation tip:** One screw (callout 4) is different from the other screws. Make sure that this screw is installed in the correct position.

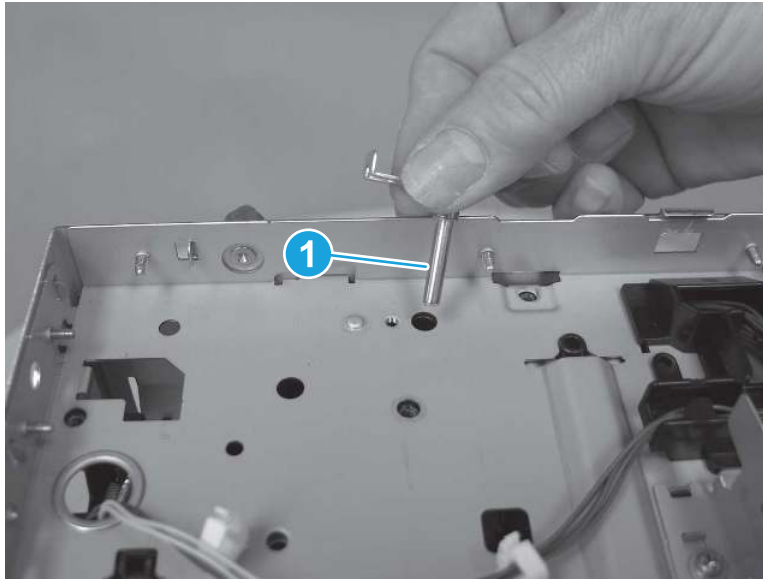
---

**Figure 5-2346** Disconnect connector and remove screws



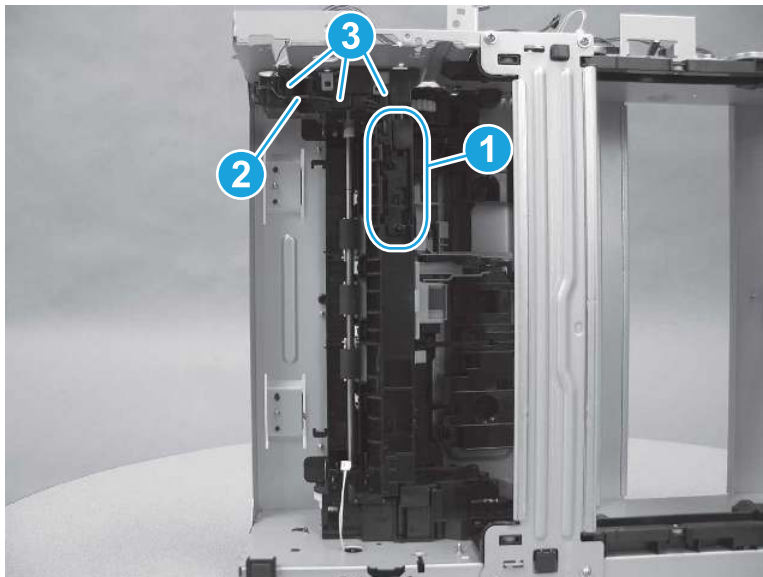
7. Remove one shaft (callout 1).

Figure 5-2347 Remove the shaft



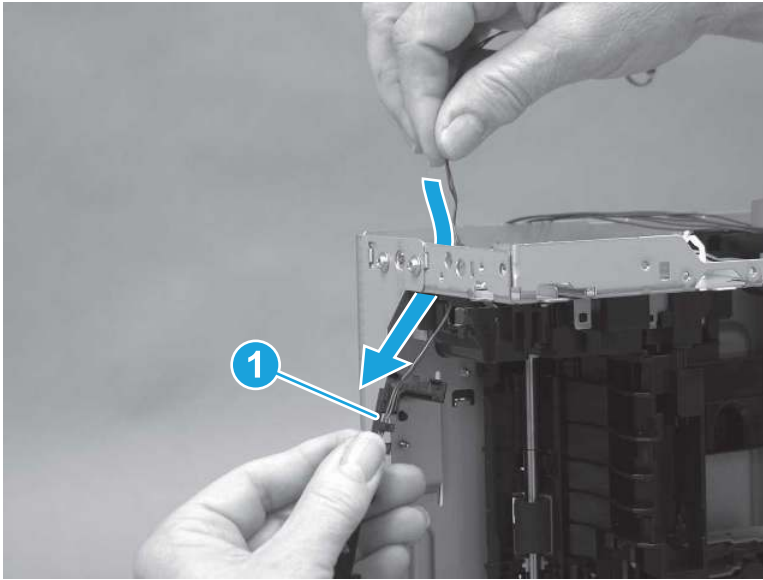
8. Release the tray sensor switch (callout 1), and then remove the cables (callout 2) from the guides (callout 3).

Figure 5-2348 Release the tray sensor switch



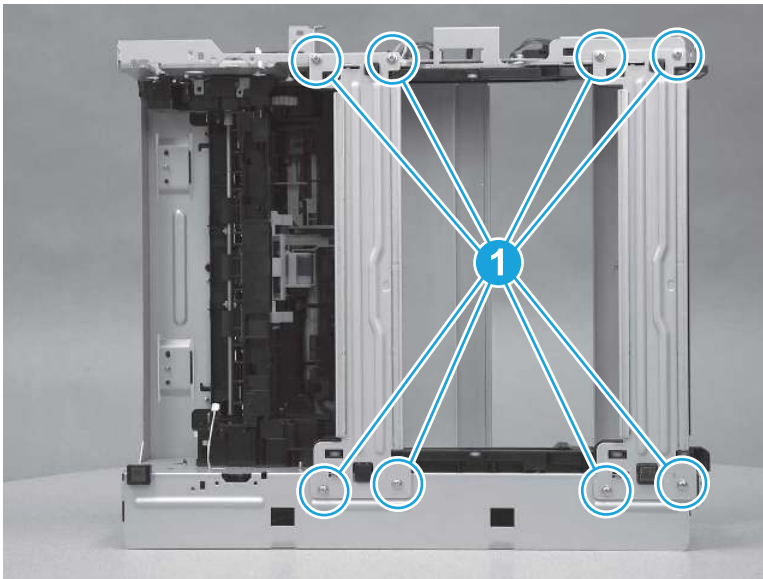
9. Pass the tray sensor switch cables (callout 1) through the hole in the sheet metal.

Figure 5-2349 Release the cables



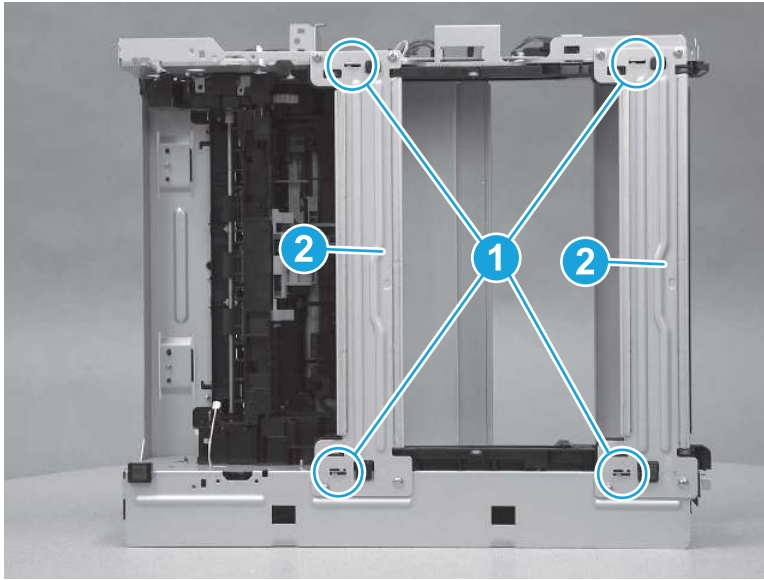
10. Remove eight screws (callout 1).

Figure 5-2350 Remove eight screws



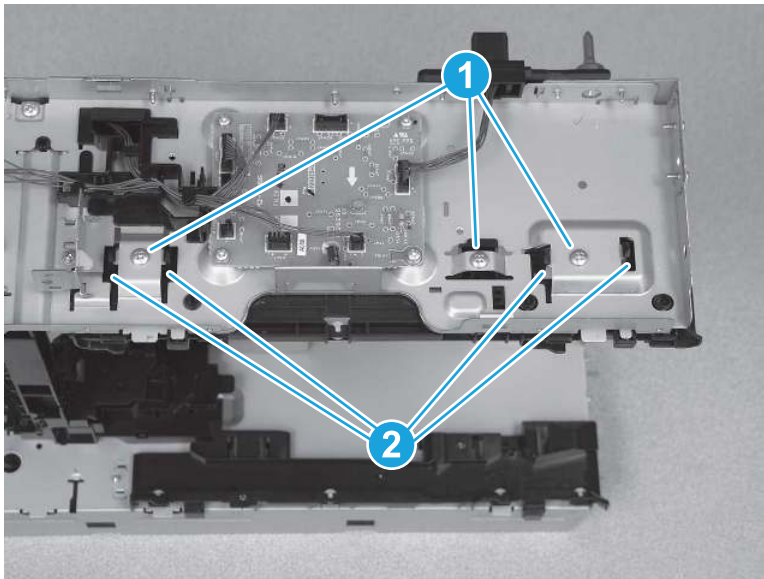
11. Release four tabs (callout 1), and then remove the cross braces (callout 2).

**Figure 5-2351** Remove the cross braces



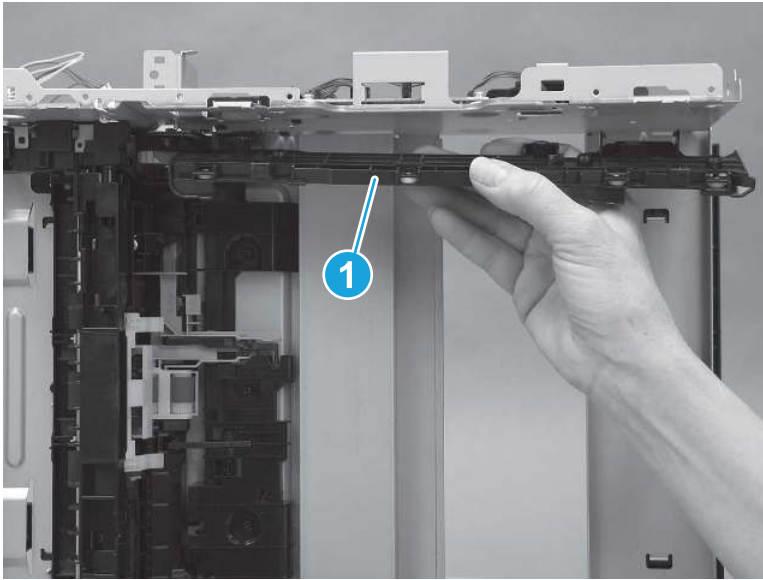
12. On the left side of the feeder, remove three screws (callout 1), and then release three tabs (callout 2).

**Figure 5-2352** Remove screws and release tabs



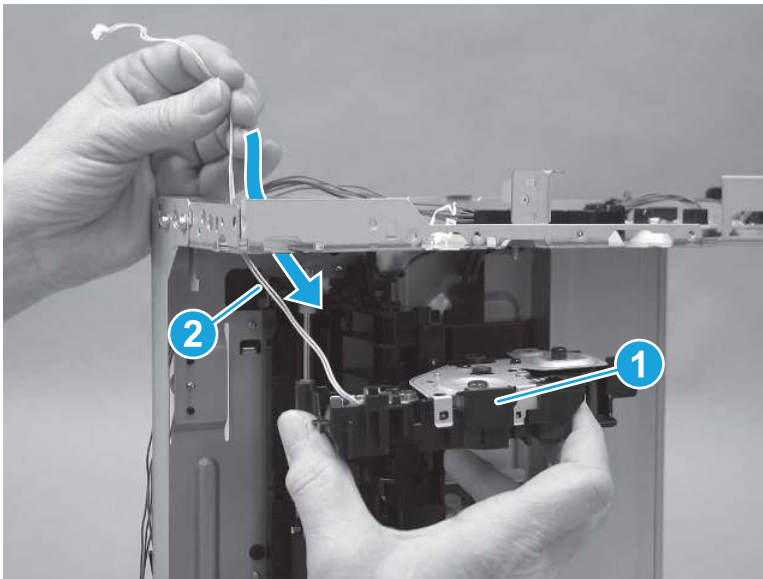
13. Remove the tray guide (callout 1).

Figure 5-2353 Remove the tray guide



14. Remove the lifter drive assembly (callout 1) while passing the cables (callout 2) through the feeder frame.

Figure 5-2354 Remove the assembly



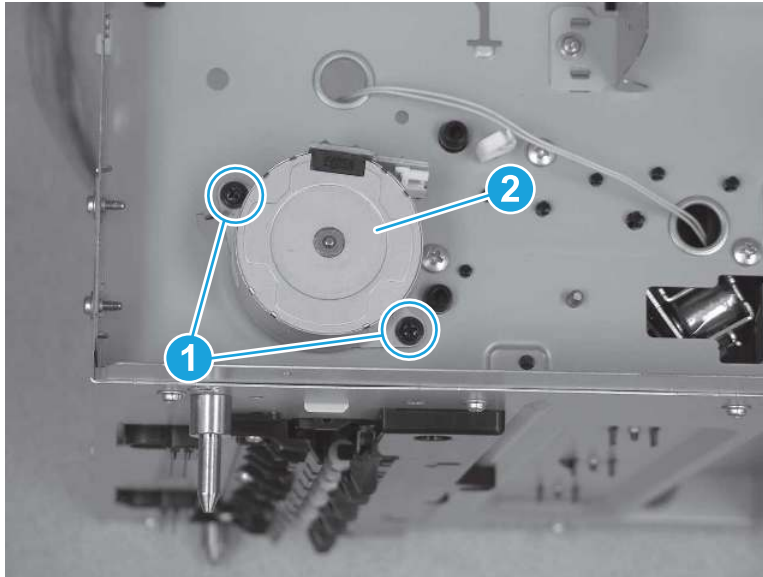
## 9. Remove the pickup assembly (550-sheet paper feeder)

Follow these steps to remove the pickup assembly (550-sheet paper feeder).



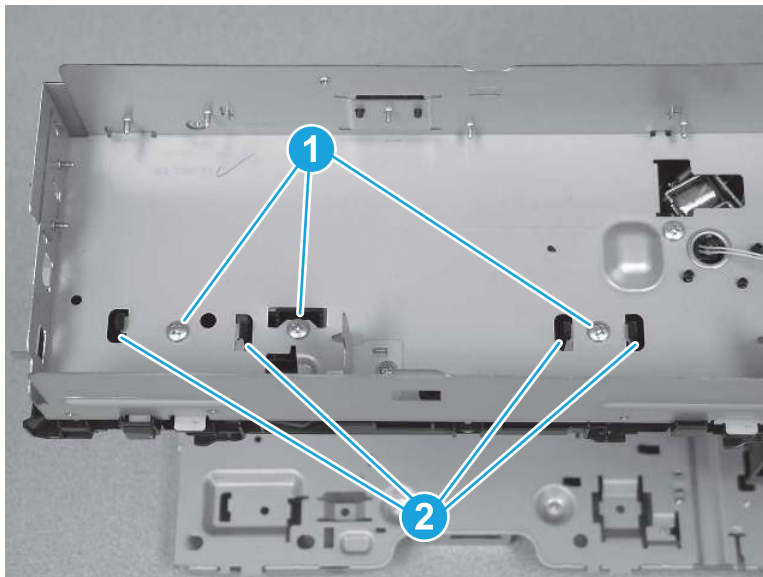
1. Lay the feeder on the left side so that the right side is facing up. Remove two screws (callout 1), and then remove the motor (callout 2).

**Figure 5-2355** Remove the motor



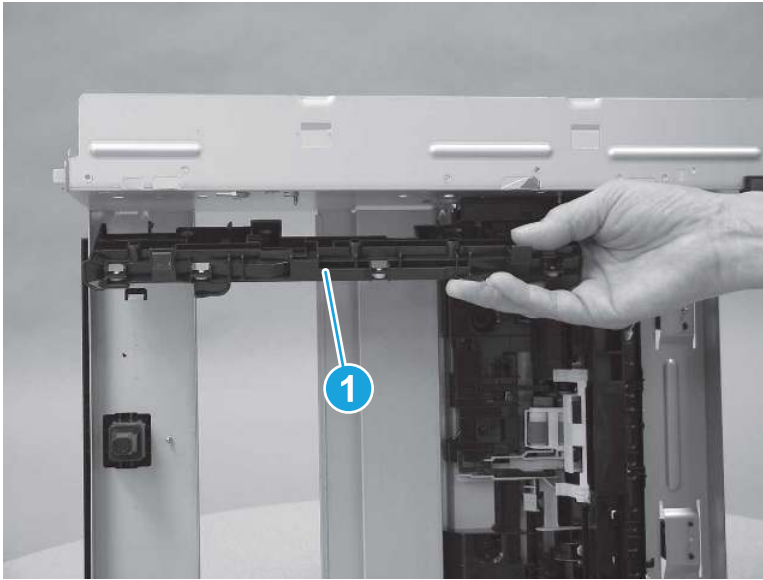
2. Remove three screws (callout 1), and then release three tabs (callout 2).

**Figure 5-2356** Remove screws and release tabs



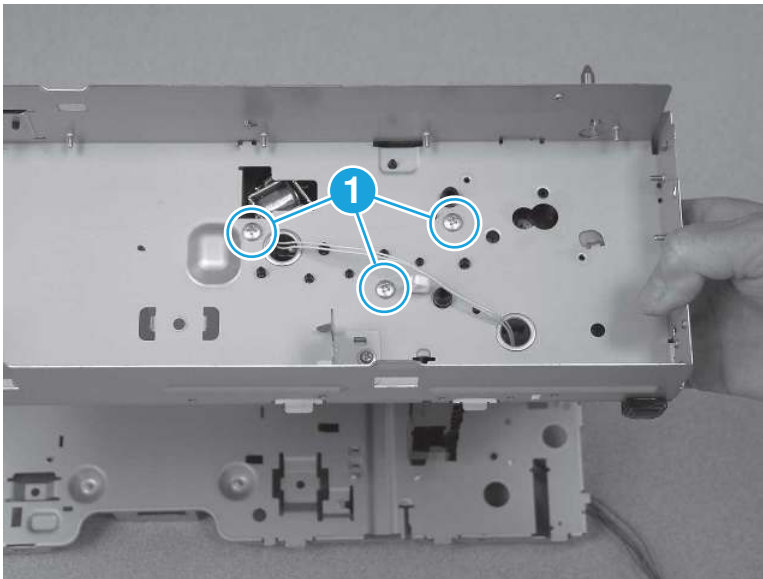
3. Remove the tray guide (callout 1).

Figure 5-2357 Remove the tray guide



4. Remove three screws (callout 1).

Figure 5-2358 Remove three screws



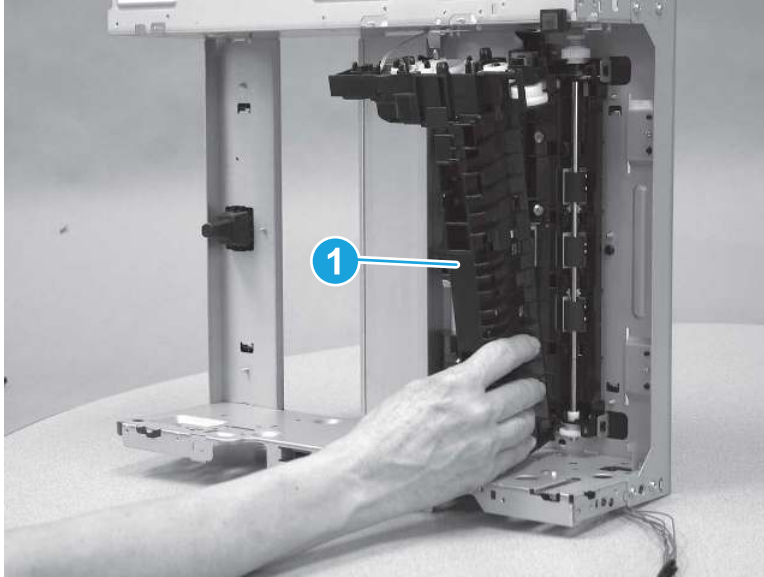
5. Separate the pickup assembly (callout 1) from the feeder frame.

---

**⚠ CAUTION:** Do not attempt to completely remove the assembly. It is still attached to the frame by a wire harness.

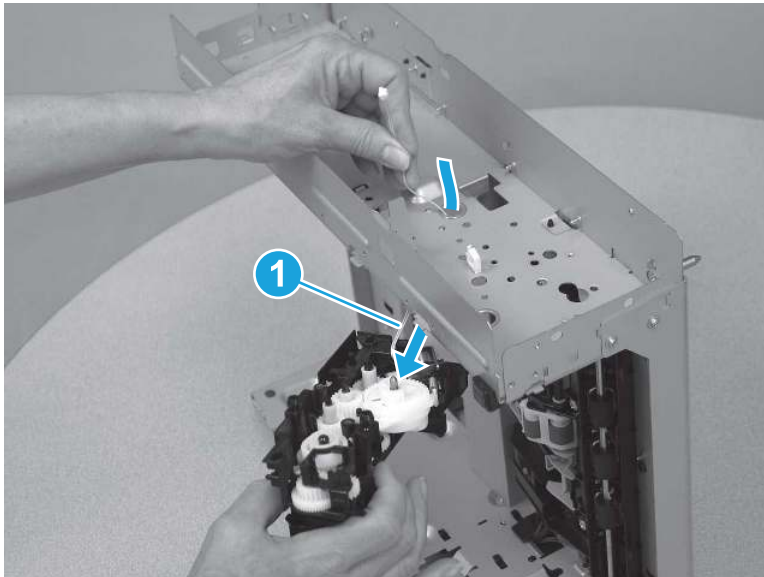
---

Figure 5-2359 Release the assembly



6. Pass the cables (callout 1) through the feeder frame to remove the assembly.

Figure 5-2360 Remove the assembly

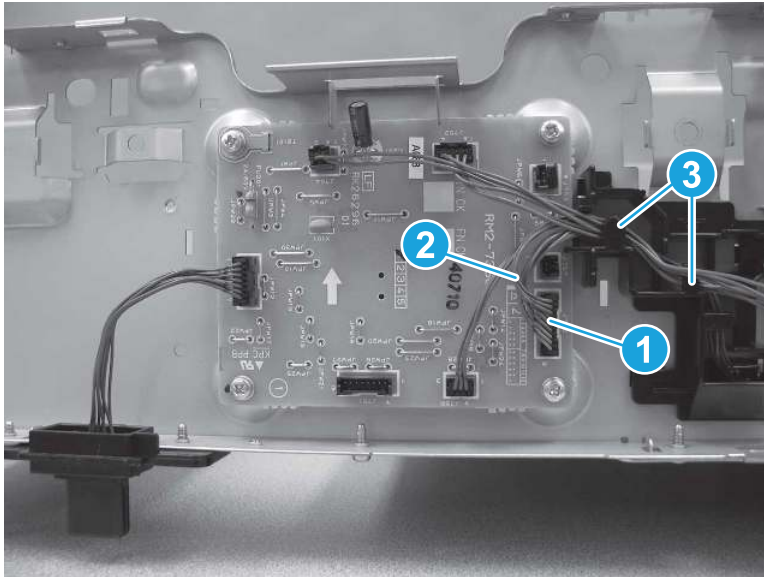


## 10. Remove the front feed guide assembly (550-sheet paper feeder)

Follow these steps to remove the front feed guide assembly (550-sheet paper feeder).

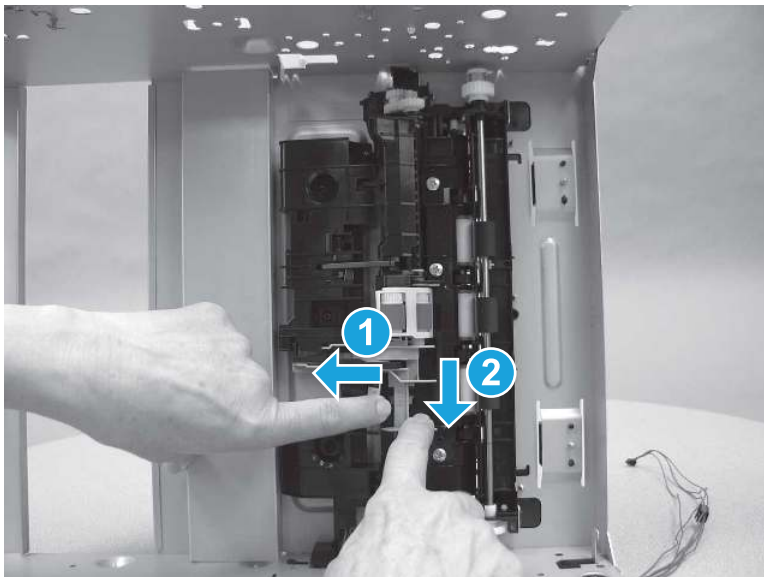
1. Lay the feeder on the right side so that the left side is facing up. Disconnect one connector (callout 1), and then remove the cables (callout 2) from the guides (callout 3).

**Figure 5-2361** Disconnect one connector



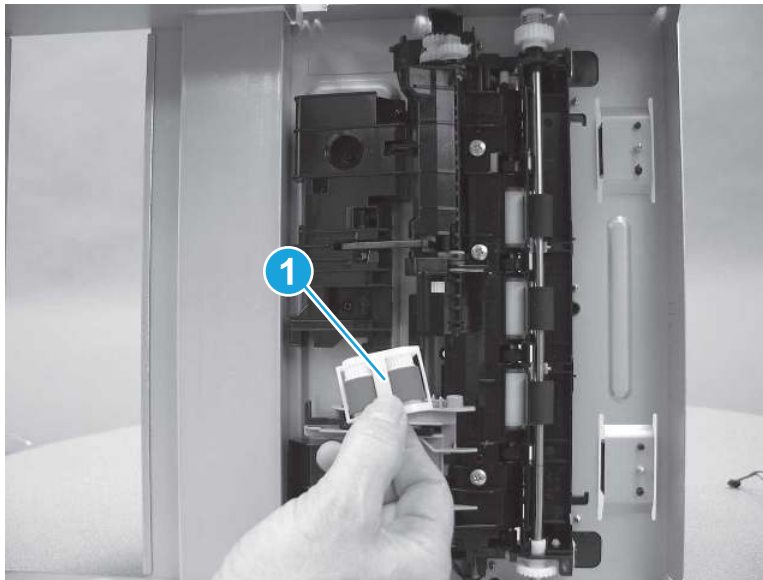
2. Press the lever (callout 1) on the roller holder, and then slide the roller holder down (callout 2).

**Figure 5-2362** Slide the roller holder



3. Remove the roller holder (callout 1).

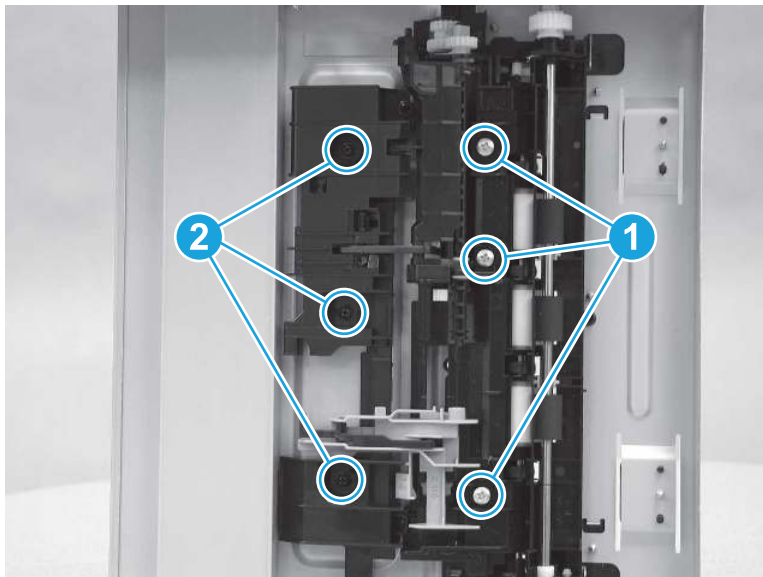
**Figure 5-2363** Remove the roller holder



4. Remove three screws (callout 1) on the rear feed guide assembly, and then remove three screws (callout 2) on the front feed guide assembly.

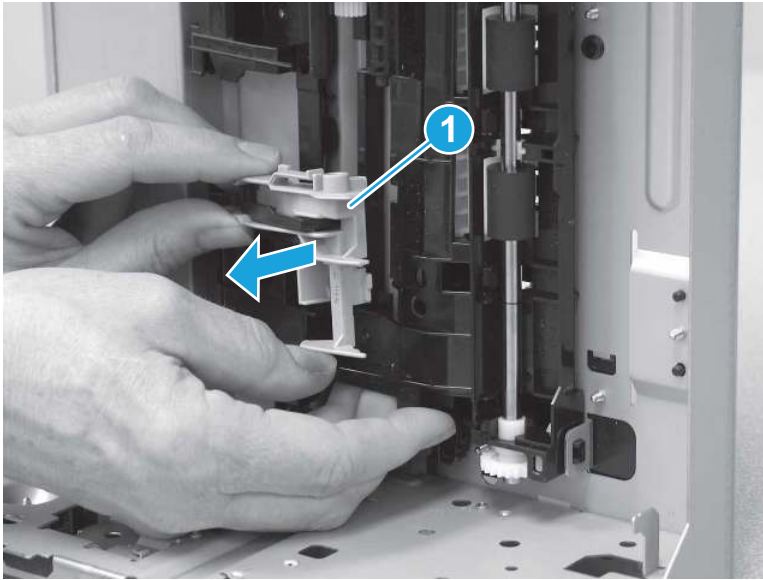
 **Reinstallation tip:** The three screws (callout 1) on the rear feed guide assembly are larger than the screws on the front feed guide assembly.

**Figure 5-2364** Remove six screws



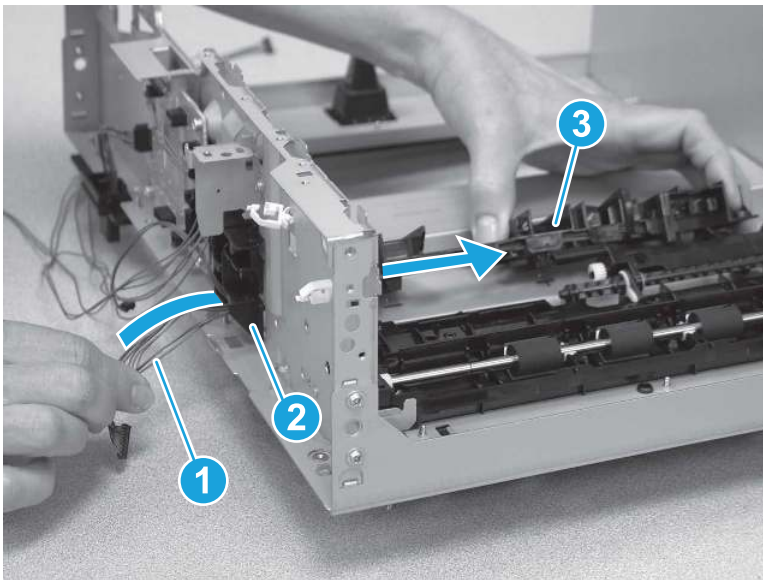
5. Remove the roller holder (callout 1).

**Figure 5-2365** Remove the roller holder



6. Pass the cables (callout 1) through the feeder frame (callout 2), and then remove the front feed guide assembly (callout 3).

**Figure 5-2366** Remove the assembly

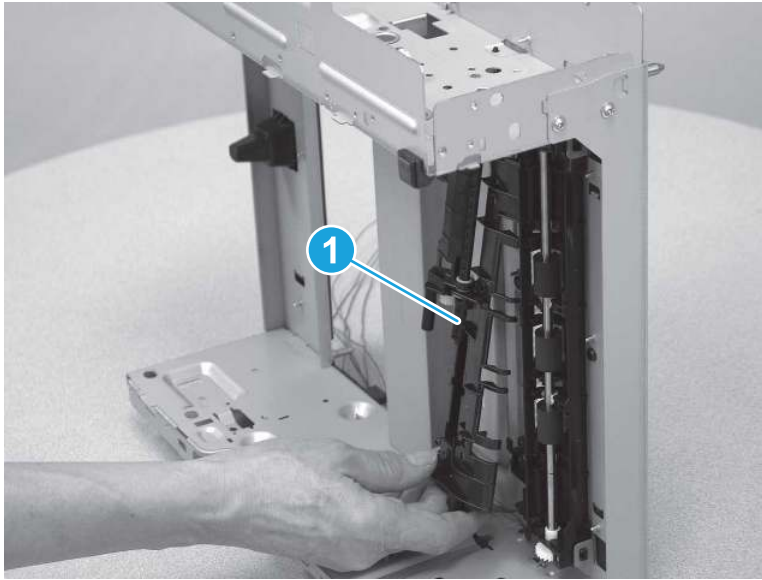


## 11. Remove the rear feed guide assembly (550-sheet paper feeder)

Follow these steps to remove the rear feed guide assembly (550-sheet paper feeder).

- ▲ Remove the rear feed guide assembly (callout 1).

Figure 5-2367 Remove the assembly

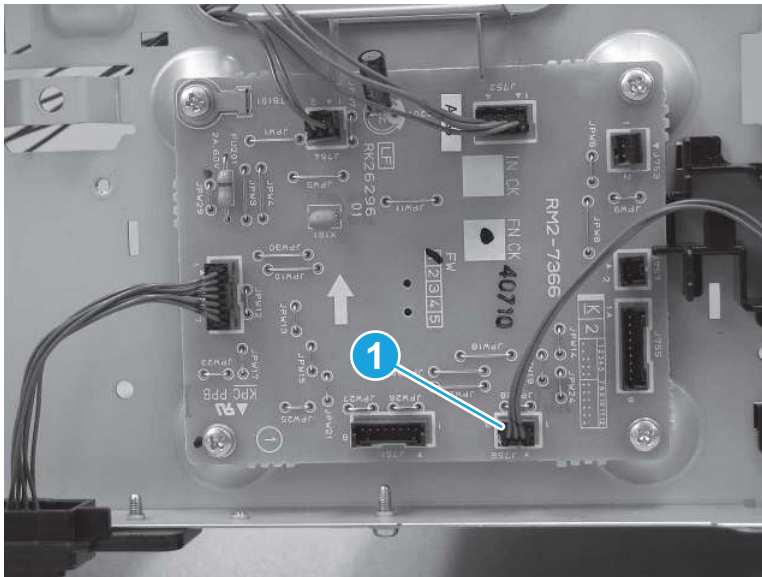


## 12. Remove the paper feed assembly (550-sheet paper feeder)

Follow these steps to remove the paper feed assembly (550-sheet paper feeder).

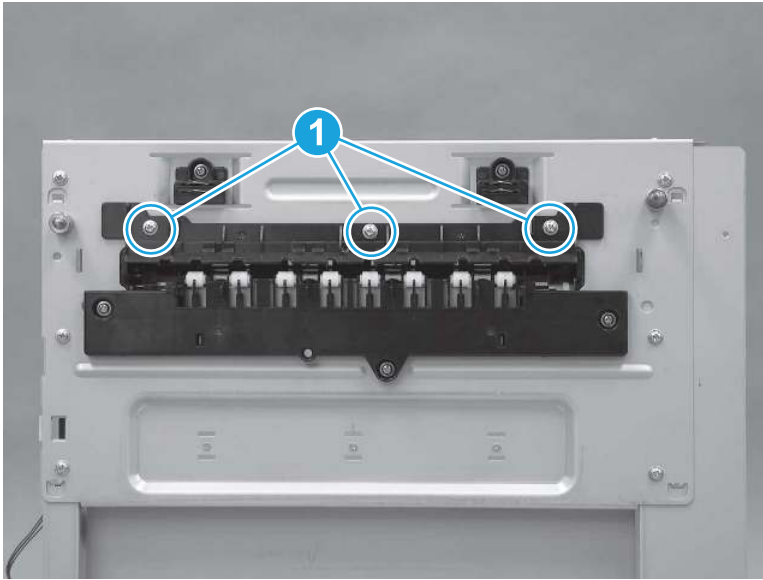
1. On the left side of the feeder, disconnect one connector (callout 1).

Figure 5-2368 Disconnect one connector



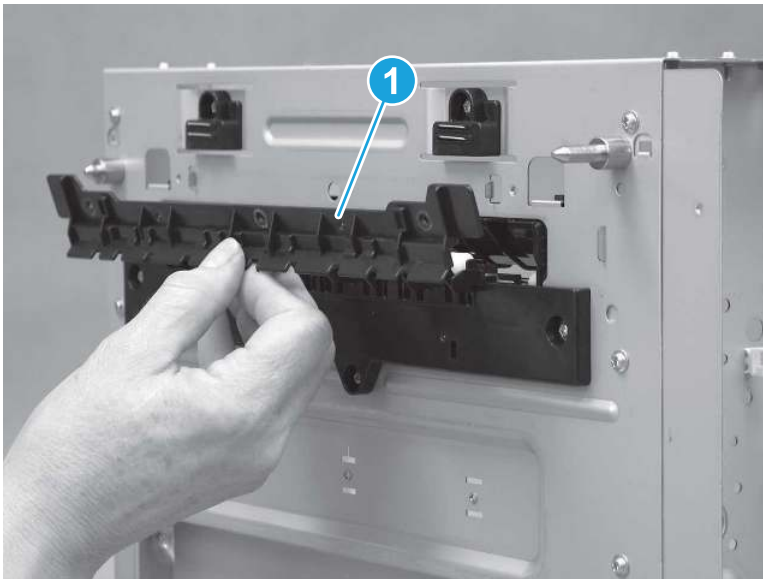
2. On the top of the feeder toward the back, remove three screws (callout 1).

Figure 5-2369 Remove three screws



3. Remove the front paper feed guide (callout 1).

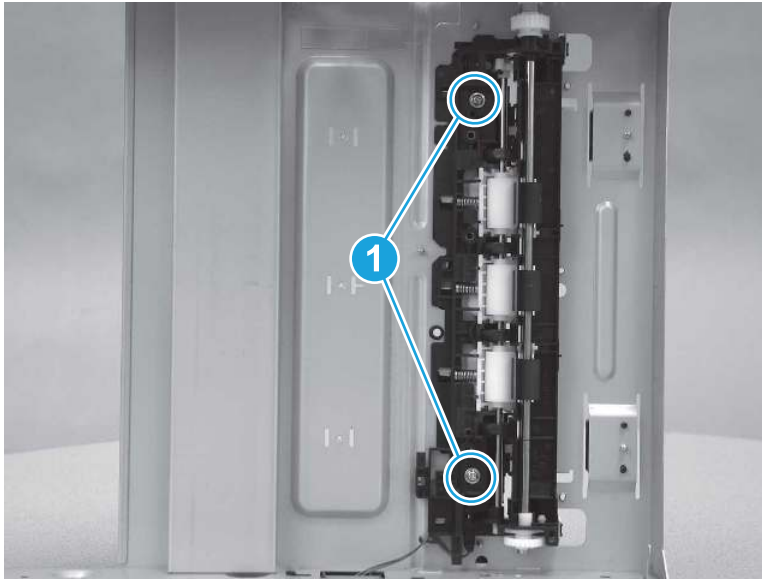
Figure 5-2370 Remove the front paper feed guide





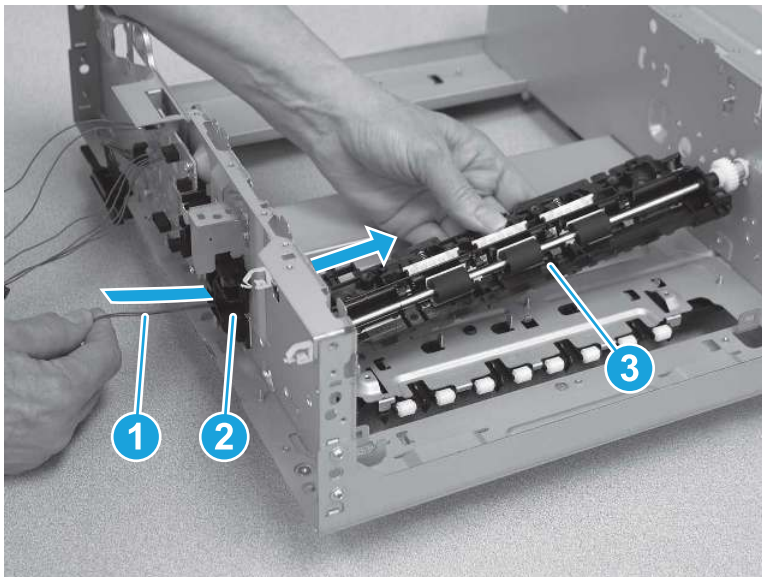
4. Inside the paper feeder toward the back, remove two screws (callout 1).

**Figure 5-2371** Remove two screws



5. Release the cables (callout 1) through the opening (callout 2) in the feeder, and then remove the paper feed assembly (callout 3).

**Figure 5-2372** Remove the 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.

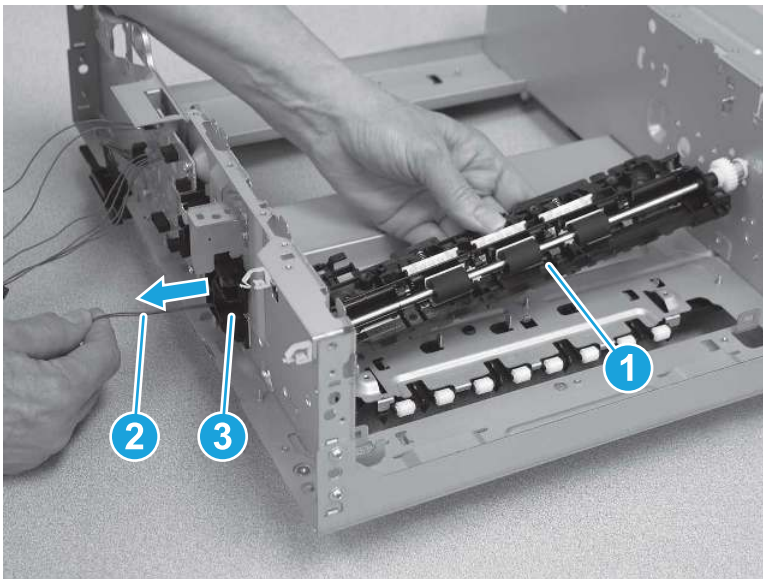
## 14. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Paper feed assembly (550-sheet paper feeder)

- ▲ Position the paper feed assembly (callout 1) in the feeder. Pass the cables (callout 2) through the opening (callout 3) in the feeder.

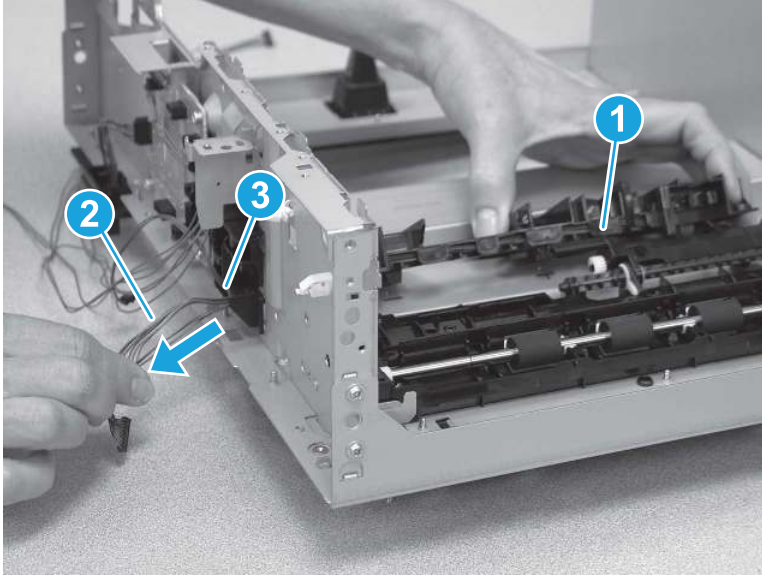
**Figure 5-2373** Install the paper feed assembly



Front feed guide assembly (550-sheet paper feeder)

- ▲ Install the front feed guide (callout 1), and then pass the cables (callout 2) through the feeder frame (callout 3).

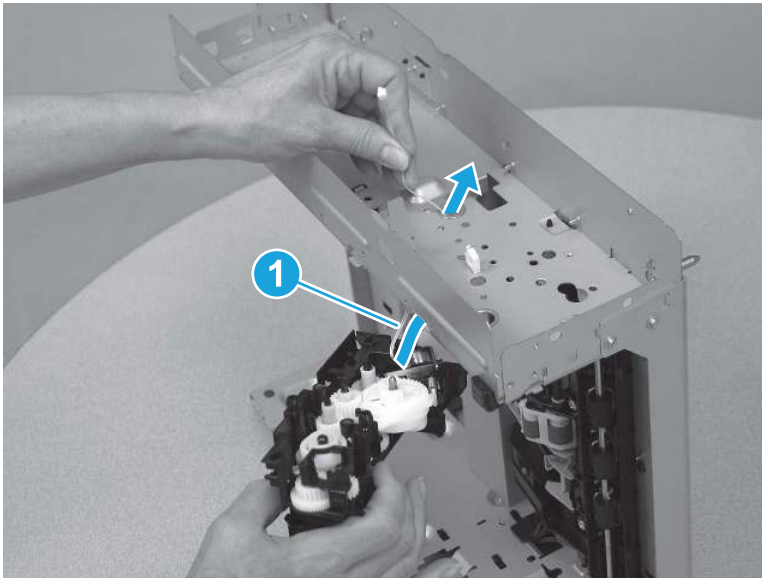
**Figure 5-2374** Install the front feed guide assembly



Pickup assembly (550-sheet paper feeder)

- ▲ Lay the feeder on the left side so that the right side is facing up. Pass the cables (callout 1) through the feeder frame.

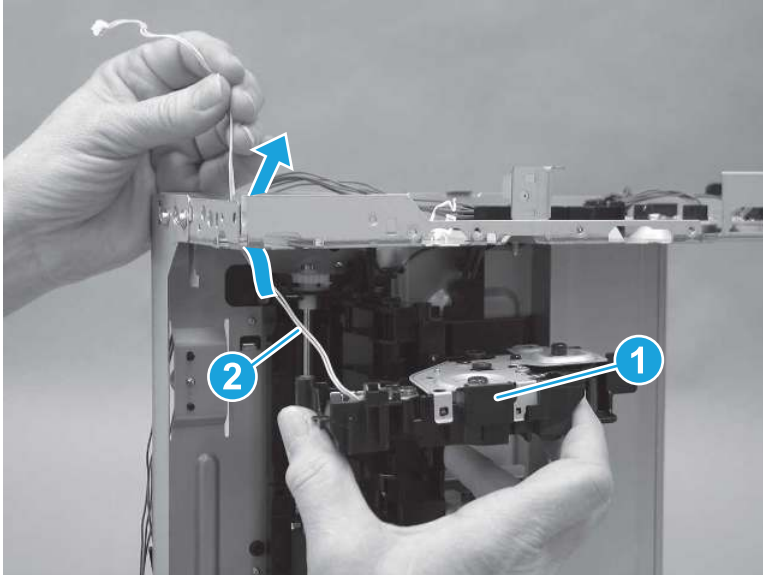
**Figure 5-2375** Install the pickup assembly



Lifter drive assembly (550-sheet paper feeder)

- ▲ Install the lifter drive assembly (callout 1) while passing the cables (callout 2) through the feeder frame.

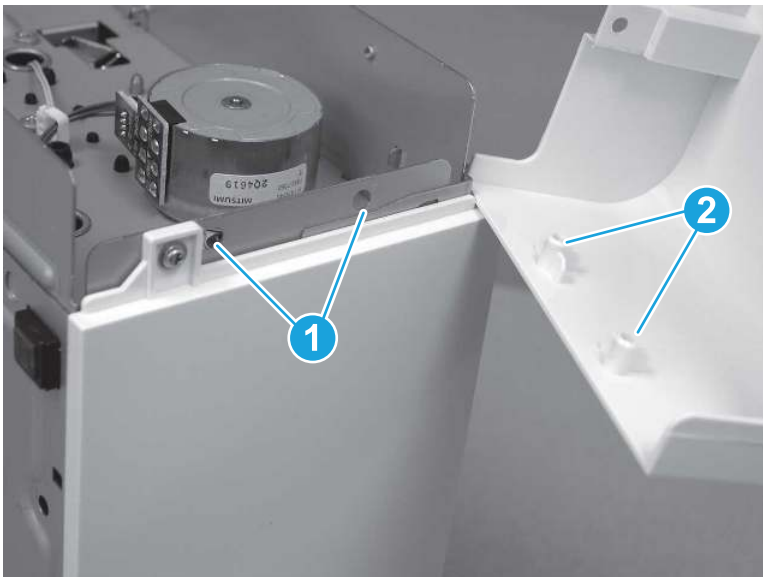
**Figure 5-2376** Install the lifter drive assembly



Left cover (550-sheet paper feeder)

- ▲ Lay the feeder on the right side so that the left side is facing up. At the back of the feeder, install the tabs (callout 1) on the cover in the holes (callout 2) on the feeder.

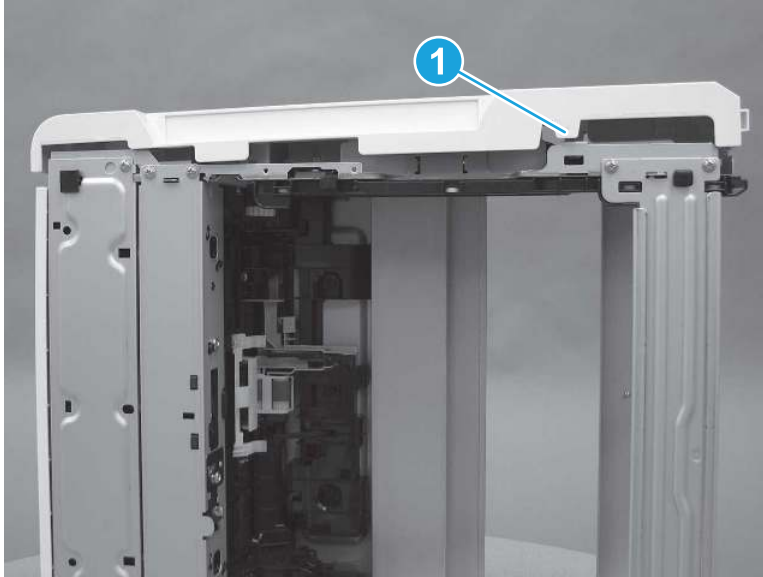
**Figure 5-2377** Install the left cover



Right cover (550-sheet paper feeder)

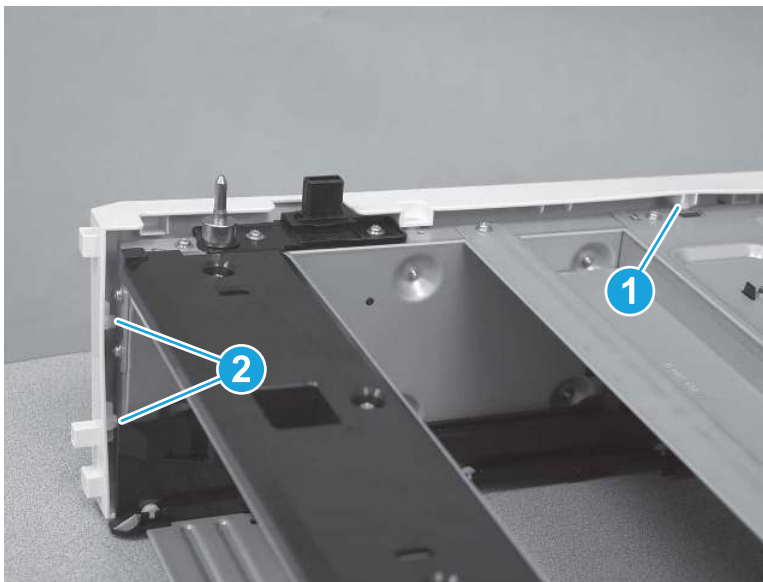
1. Lay the feeder on the left side so that the right side is facing up, and then install one tab (callout 1) on the bottom of the feeder.

Figure 5-2378 Engage one tab



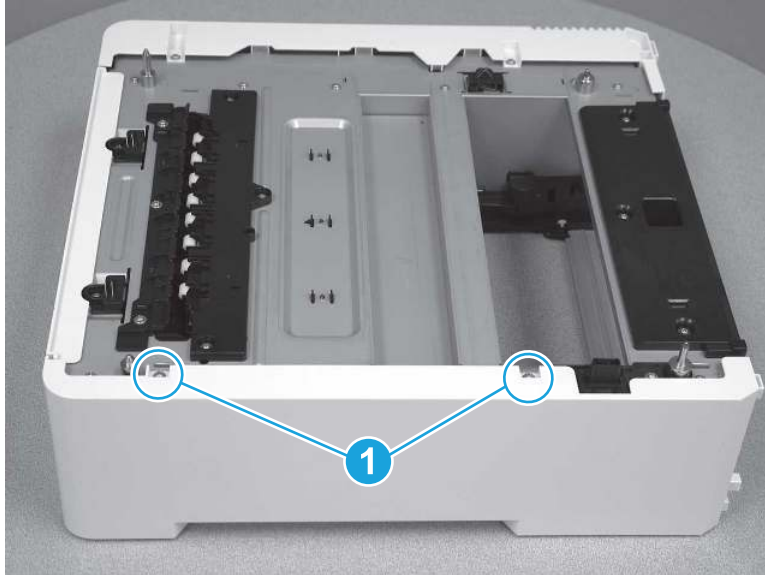
2. Turn the feeder to an upright position with the top facing up. Install one tab (callout 1) on the top of the feeder, and then install two tabs (callout 2) at the front of the feeder.

Figure 5-2379 Engage three tabs



3. Install two screws (callout 1).

Figure 5-2380 Install two screws



## Removal and replacement: Pickup motor (550-sheet paper feeder)

Learn how to remove and replace the pickup motor for the 550-sheet paper feeder.

[View a video of how to remove and replace the 550-sheet paper feeder pickup motor.](#)

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](http://www.hp.com/buy/parts).

Table 5-68 Part information

Part number	Part description
RM2-7350-000CN	Pickup motor assembly (M9; 550-sheet paper feeder)

### Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

### After performing service

#### Turn the printer power on

- Connect the power cable.

- Use the power switch to turn the power on.

### Post service test

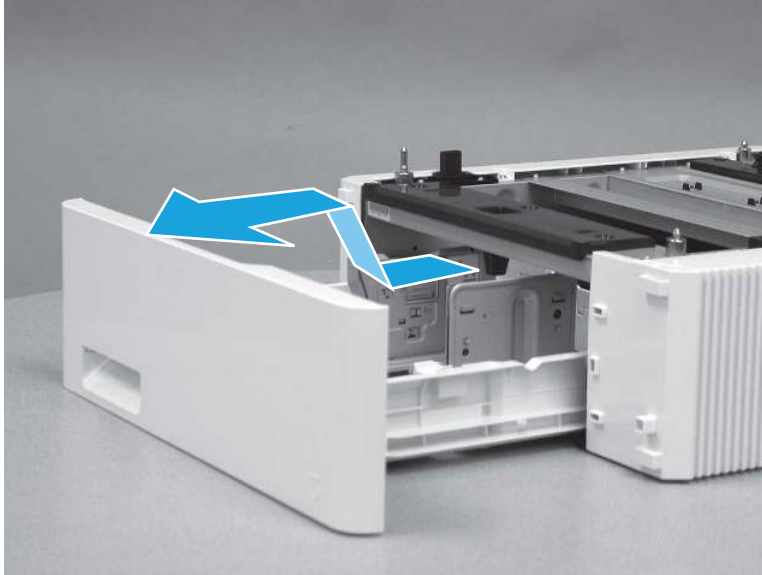
Print any pages necessary to make sure the printer is functioning correctly.

## 1. Remove Tray 3

Follow these steps to remove Tray 3.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

**Figure 5-2381** Remove the tray

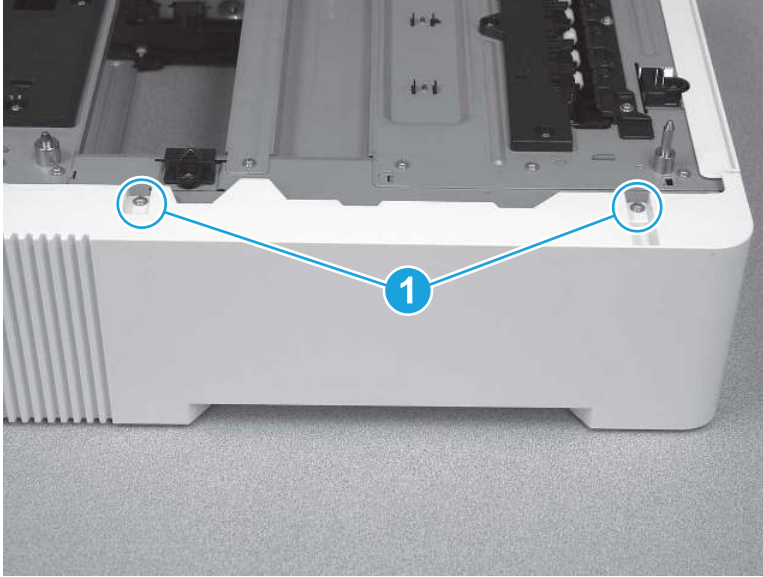


## 2. Remove the left cover (550-sheet paper feeder)

Follow these steps to remove the left cover (550-sheet paper feeder).

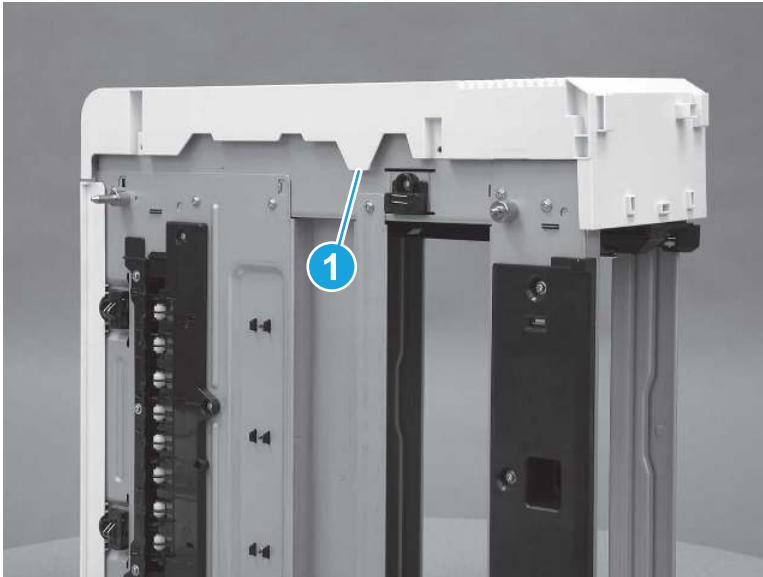
1. Remove two screws (callout 1).

Figure 5-2382 Remove two screws



2. Release one tab (callout 1) on the top of the feeder.

Figure 5-2383 Release one tab



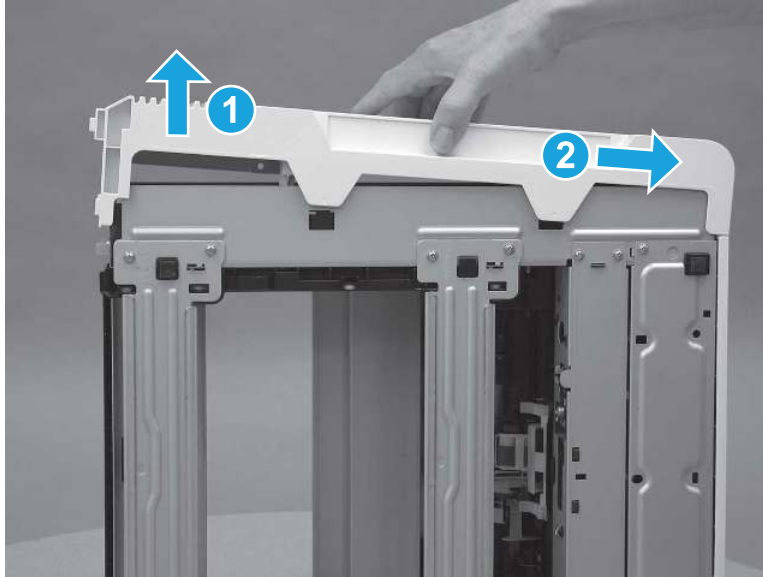
3. Lift the front of the cover up (callout 1), and then slide the cover (callout 2) toward the back of the feeder to remove it.



**NOTE:** Release additional tabs as needed to remove the cover.



Figure 5-2384 Remove the cover

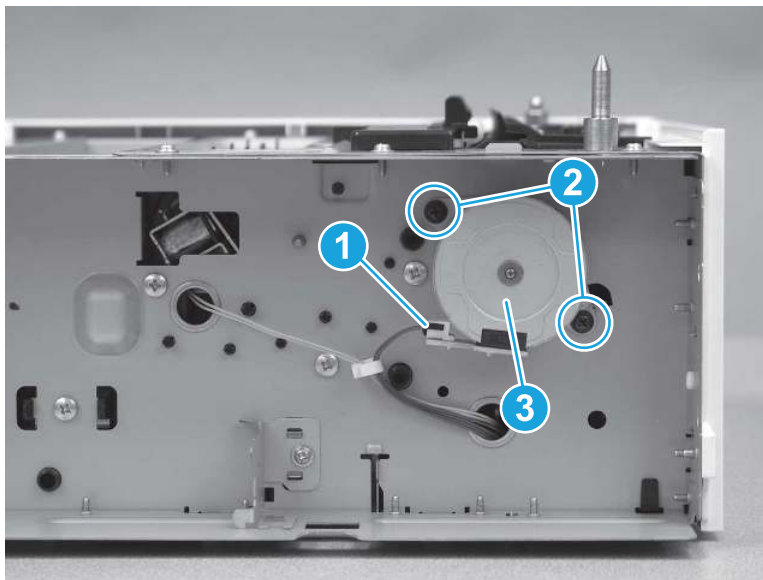


### 3. Remove the pickup motor (550-sheet paper feeder)

Follow these steps to remove the pickup motor (550-sheet paper feeder).

- ▲ Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the pickup motor (callout 3).

Figure 5-2385 Remove the pickup 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.

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.

---

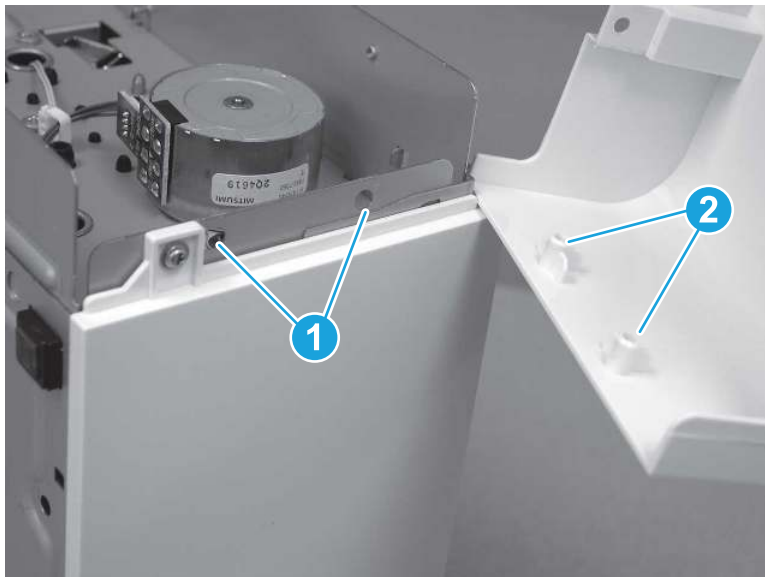
## 5. Reverse the removal steps to install the assembly

Also use the followingspecial installation instructions.

Left cover (550-sheet paper feeder)

- ▲ Lay the feeder on the right side so that the left side is facing up. At the back of the feeder, install the tabs (callout 1) on the cover in the holes (callout 2) on the feeder.

**Figure 5-2386** Install the left cover



## Removal and replacement: Drawer connector (550-sheet paper feeder)

Learn how to remove and replace the drawer connector for the 550-sheet paper feeder.

[View a video of how to remove and replace the 550-sheet paper feeder drawer connector.](#)

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](http://www.hp.com/buy/parts).

**Table 5-69** Part information

Part number	Part description
VS1-7257-007CN	Connector, drawer Tray 3 (550-sheet paper feeder)

## Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

## After performing service

### Turn the printer power on

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

## Post service test

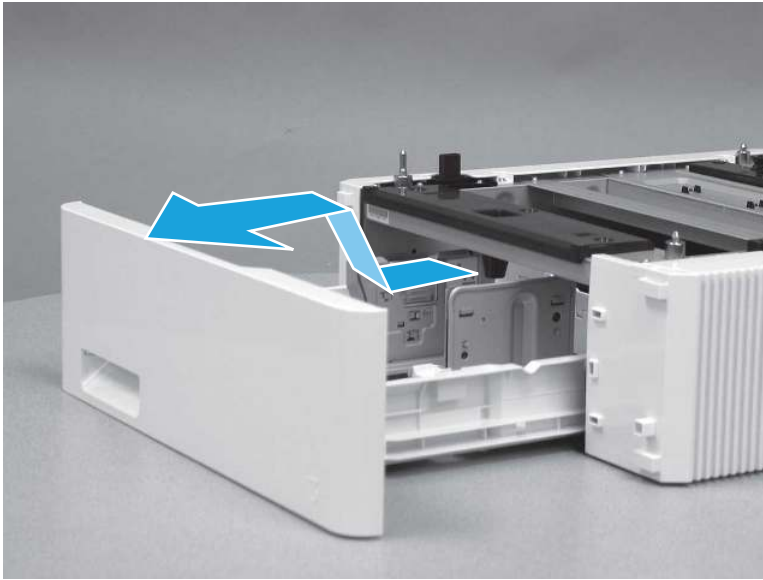
No post service test is available for this assembly.

## 1. Remove Tray 3

Follow these steps to remove Tray 3.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

Figure 5-2387 Remove the tray

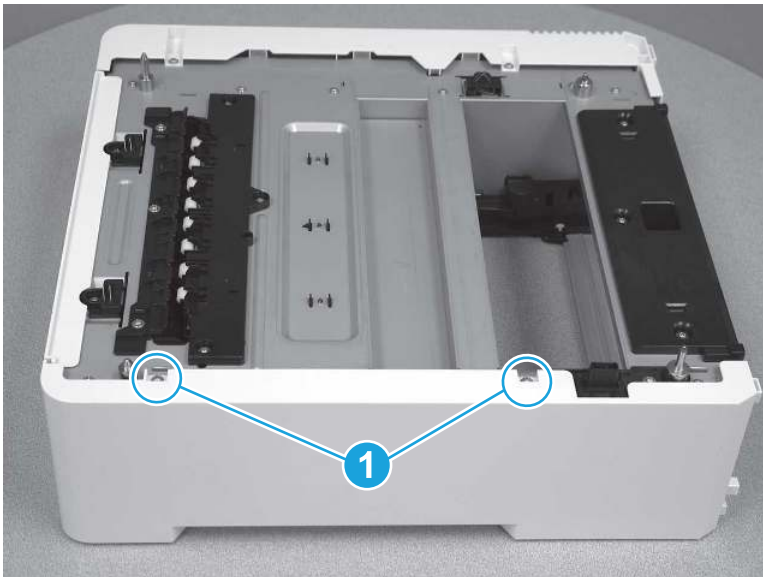


## 2. Remove the right cover (550-sheet paper feeder)

Follow these steps to remove the right cover (550-sheet paper feeder).

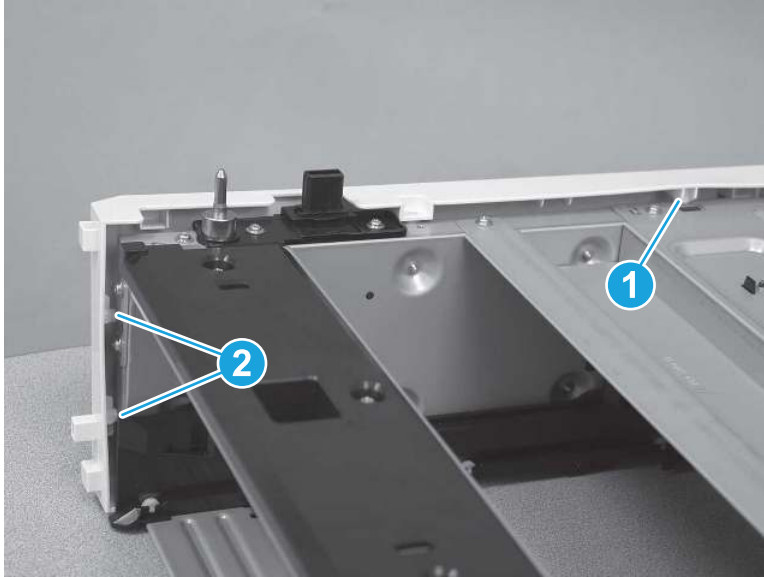
1. Remove two screws (callout 1).

Figure 5-2388 Remove two screws



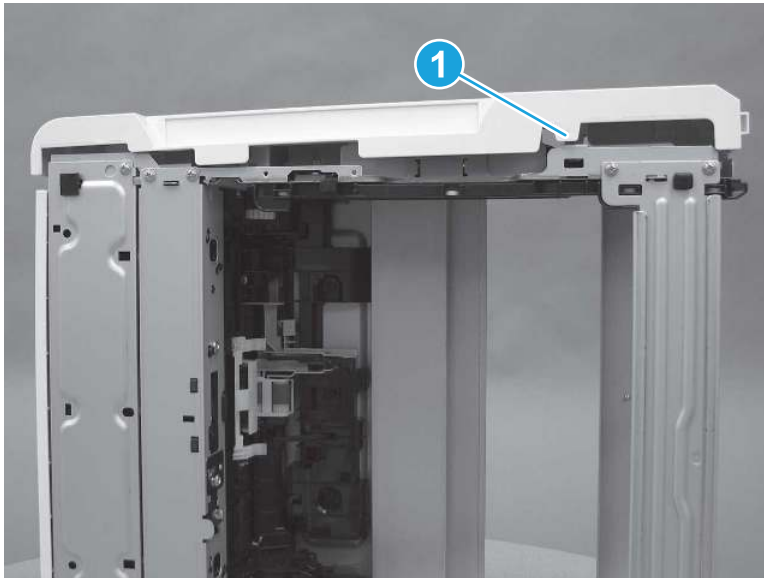
2. Release one tab (callout 1) on the top of the feeder, and then release two tabs (callout 2) at the front of the feeder.

**Figure 5-2389** Release three tabs



3. Lay the feeder on the left side so that the right side is facing up, and then release one tab (callout 1) on the bottom of the feeder. Remove the right cover.

**Figure 5-2390** Remove the cover

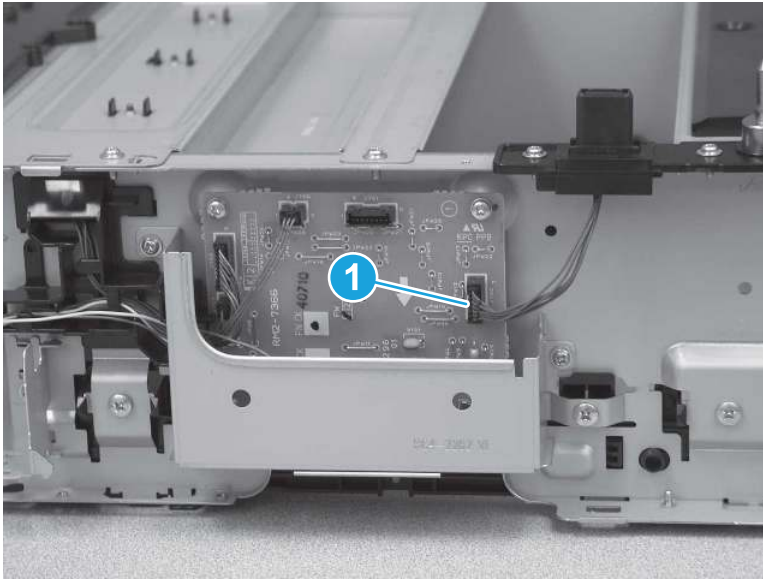


### 3. Remove the drawer connector (550-sheet paper feeder)

Follow these steps to remove the drawer connector (550-sheet paper feeder).

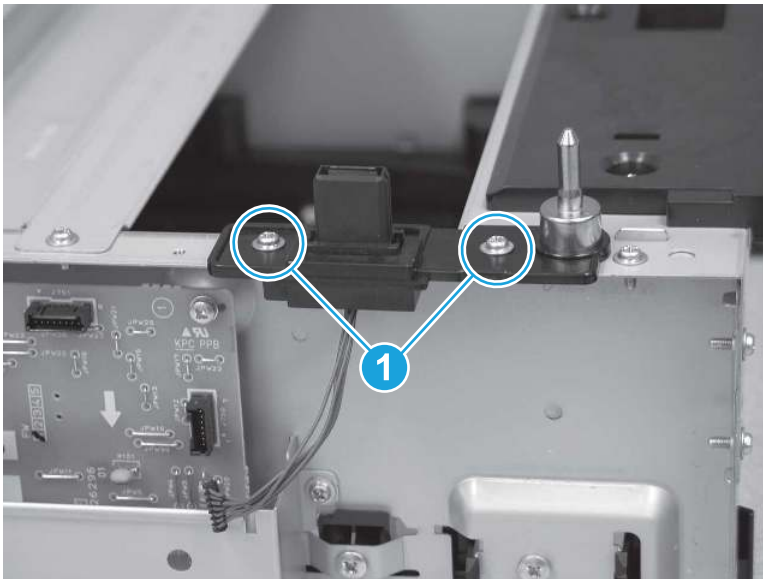
1. On the right side of the feeder, disconnect one connector (callout 1).

Figure 5-2391 Disconnect one connector



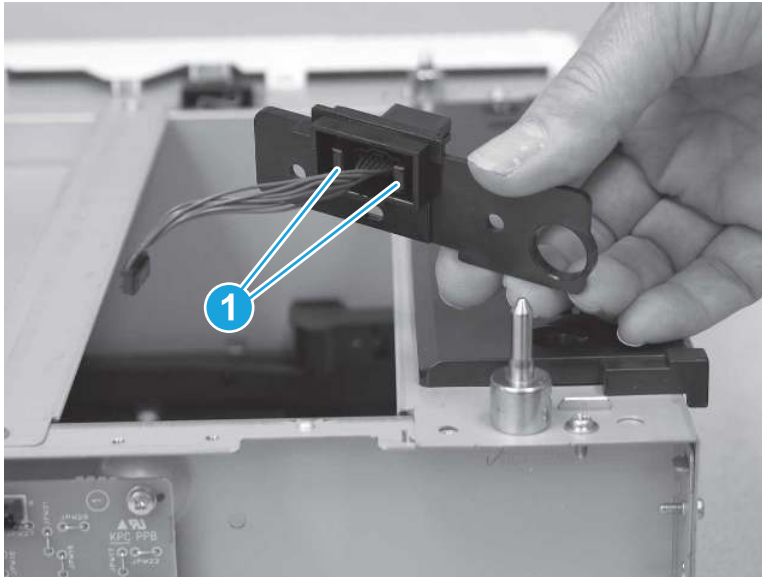
2. Remove two screws (callout 1).

Figure 5-2392 Remove two screws



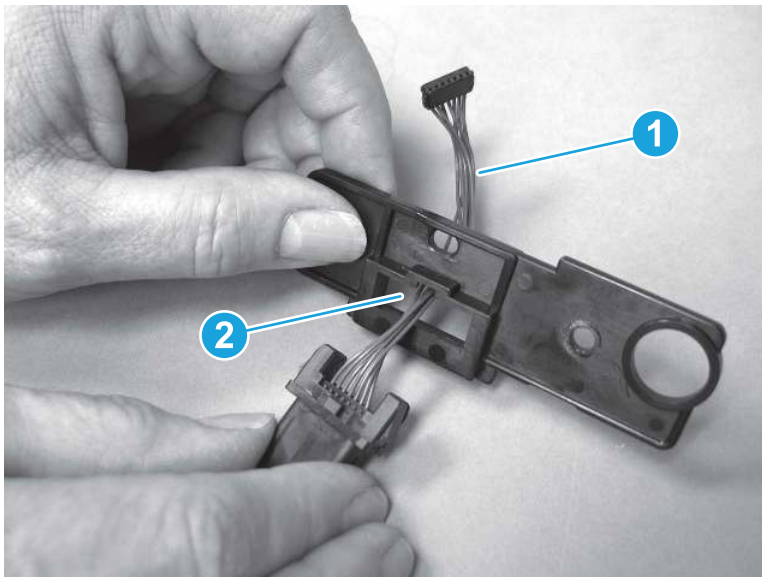
3. Lift the connector holder off of the feeder, and then release two tabs (callout 1) to release the connector from the holder.

**Figure 5-2393** Release two tabs



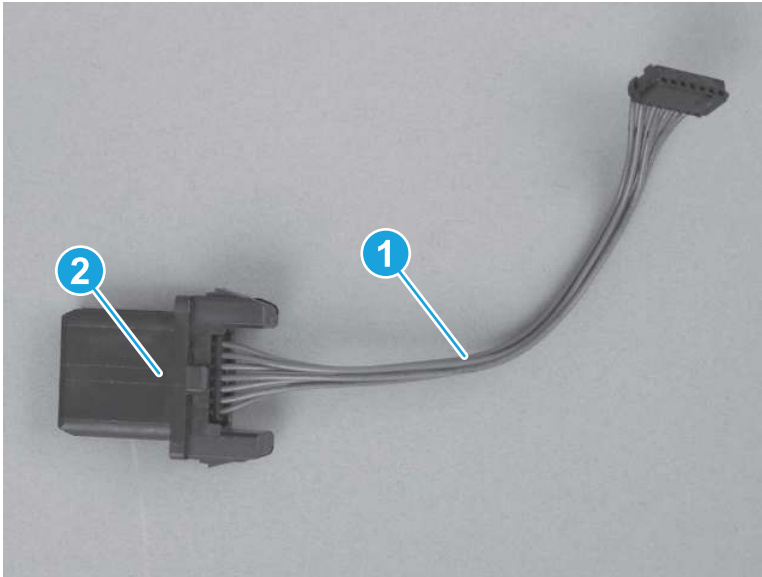
4. Pass the cables (callout 1) through the opening in the connector holder (callout 2) to remove the connector.

**Figure 5-2394** Remove the drawer connector



5. Disconnect the wire harness (callout 1) from the connector (callout 2). Install the wire harness on the replacement part.

**Figure 5-2395** Disconnect the wire harness



#### 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.

---



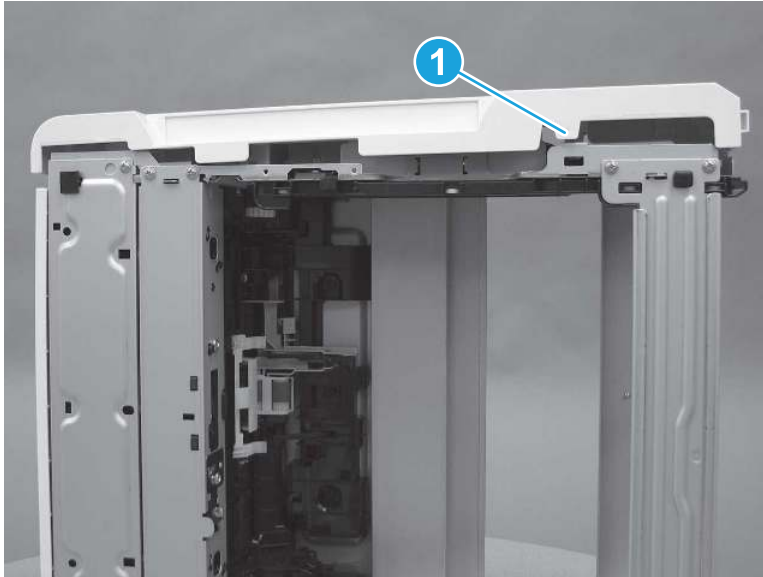
## 5. Reverse the removal steps to install the assembly

Also use the following special installation instructions.

Right cover (550-sheet paper feeder)

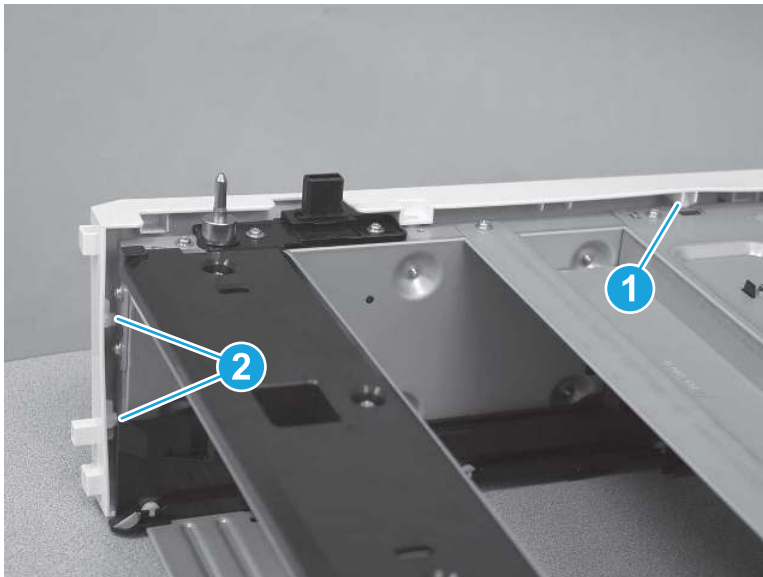
1. Lay the feeder on the left side so that the right side is facing up, and then install one tab (callout 1) on the bottom of the feeder.

Figure 5-2396 Engage one tab



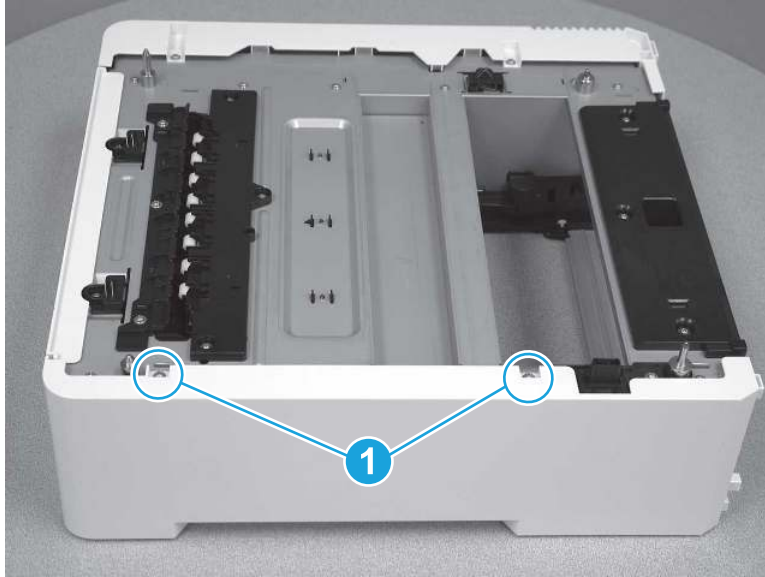
2. Turn the feeder to an upright position with the top facing up. Install one tab (callout 1) on the top of the feeder, and then install two tabs (callout 2) at the front of the feeder.

Figure 5-2397 Engage three tabs



3. Install two screws (callout 1).

Figure 5-2398 Install two screws



## Removal and replacement: Driver PCA (550-sheet paper feeder)

Learn how to remove and replace the driver printed-circuit assembly (PCA) for the 550-sheet paper feeder.

[View a video of how to remove and replace the 550-sheet paper feeder driver printed-circuit assembly \(PCA\).](#)

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](http://www.hp.com/buy/parts).

Table 5-70 Part information

Part number	Part description
Not orderable	Paper feeder driver PCA (550-sheet paper feeder)

### Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152 mm (6 in) shaft length

### After performing service

#### Turn the printer power on

- Connect the power cable.

- Use the power switch to turn the power on.

### Post service test

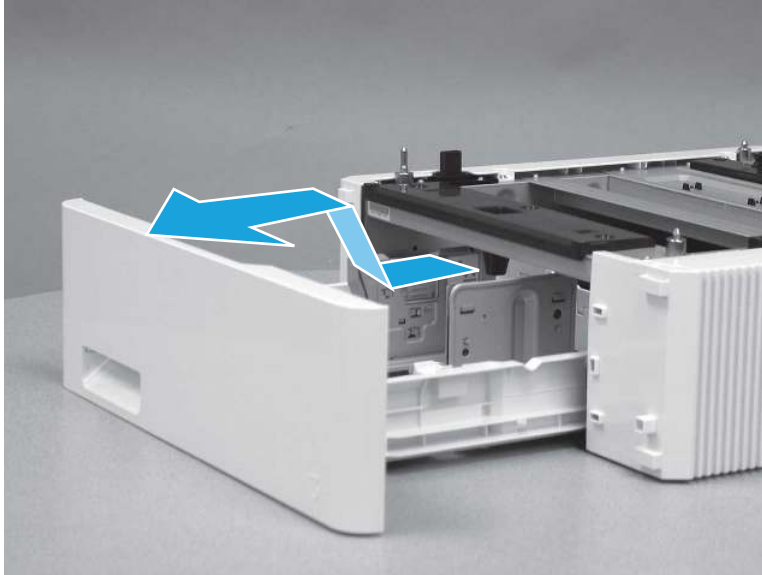
Print any pages necessary to make sure the printer is functioning correctly.

## 1. Remove Tray 3

Follow these steps to remove Tray 3.

- ▲ Pull the tray out until it stops. Lift the front of the tray, and then pull it out of the printer to remove it.

**Figure 5-2399** Remove the tray

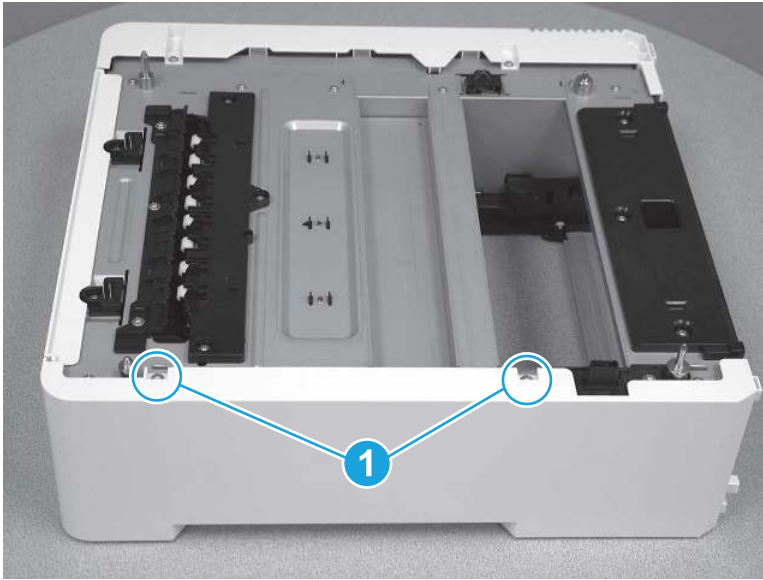


## 2. Remove the right cover (550-sheet paper feeder)

Follow these steps to remove the right cover (550-sheet paper feeder).

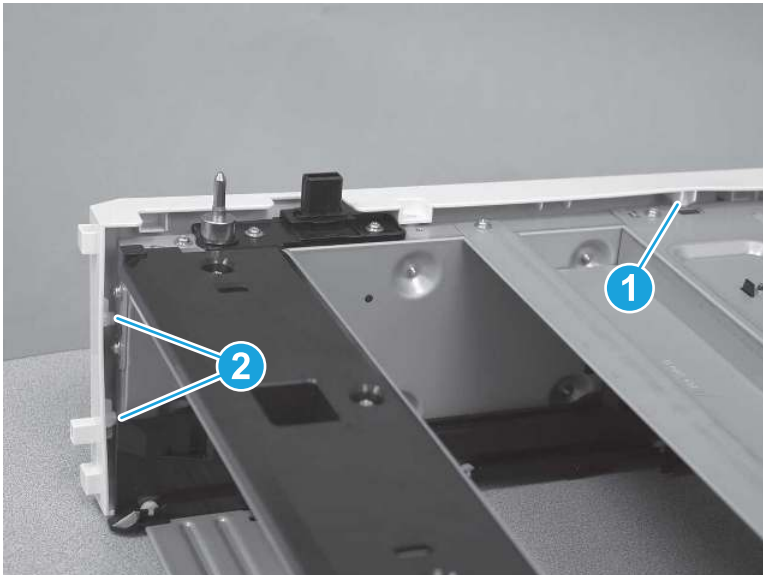
1. Remove two screws (callout 1).

Figure 5-2400 Remove two screws



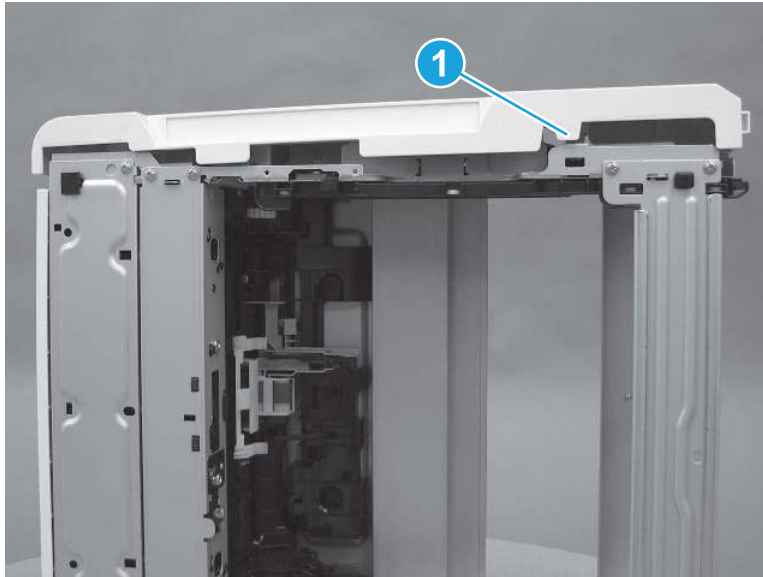
2. Release one tab (callout 1) on the top of the feeder, and then release two tabs (callout 2) at the front of the feeder.

Figure 5-2401 Release three tabs



3. Lay the feeder on the left side so that the right side is facing up, and then release one tab (callout 1) on the bottom of the feeder. Remove the right cover.

**Figure 5-2402** Remove the cover

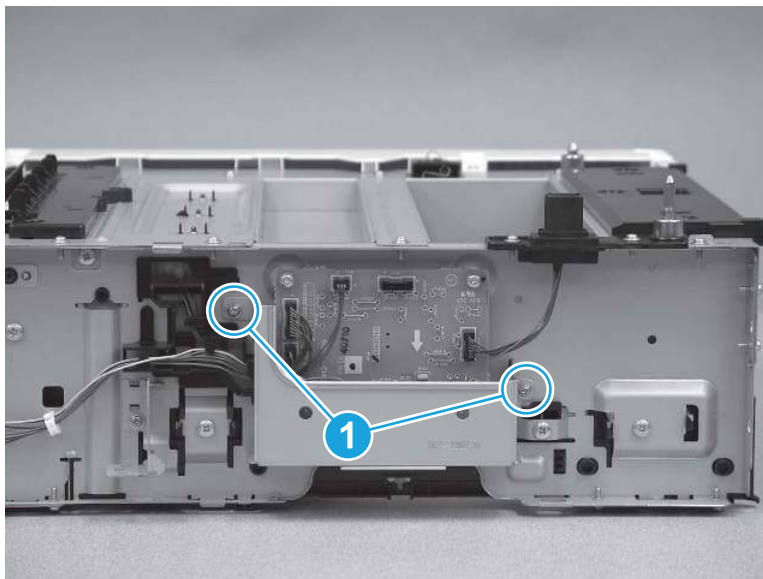


### 3. Remove the PCA cover (550-sheet paper feeder)

Follow these steps to remove the PCA cover (550-sheet paper feeder).

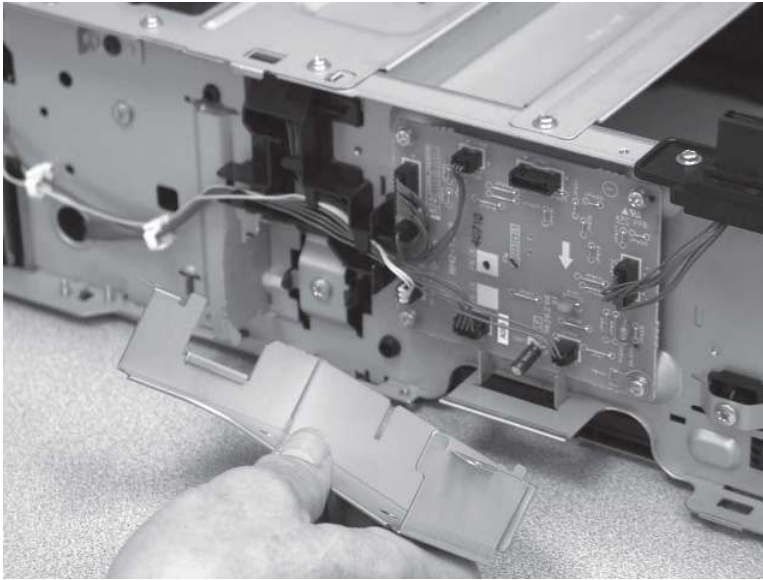
1. On the left side of the feeder, remove two screws (callout 1).

**Figure 5-2403** Remove two screws



2. Remove the PCA cover.

Figure 5-2404 Remove the cover

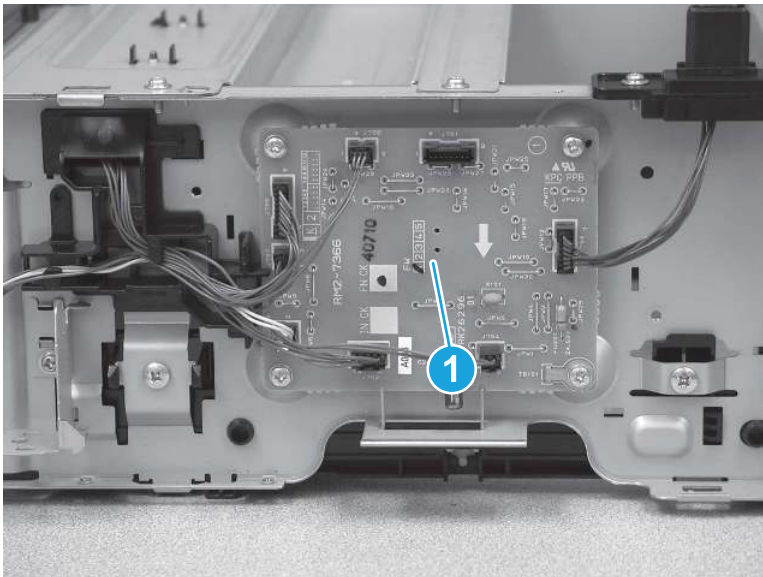


#### 4. Remove the driver PCA (550-sheet paper feeder)

Follow these steps to remove the driver PCA (550-sheet paper feeder).

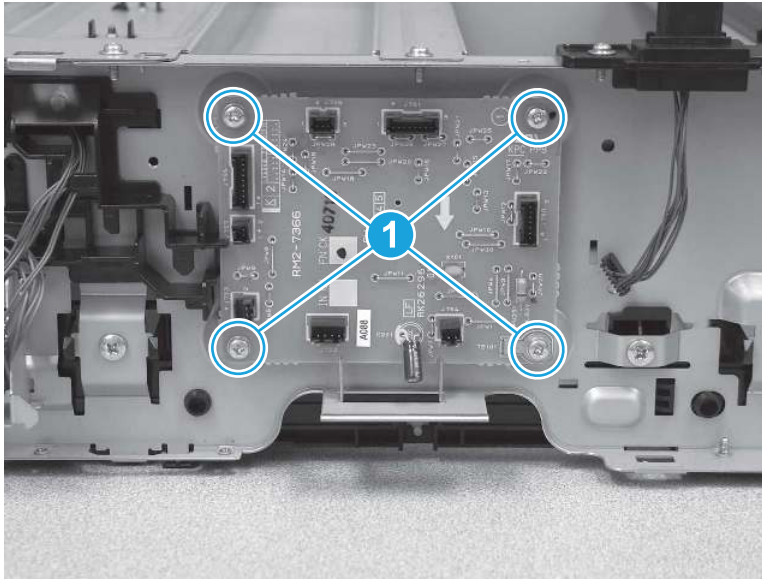
1. Disconnect all of the connectors on the driver PCA (callout 1).

Figure 5-2405 Disconnect all connectors



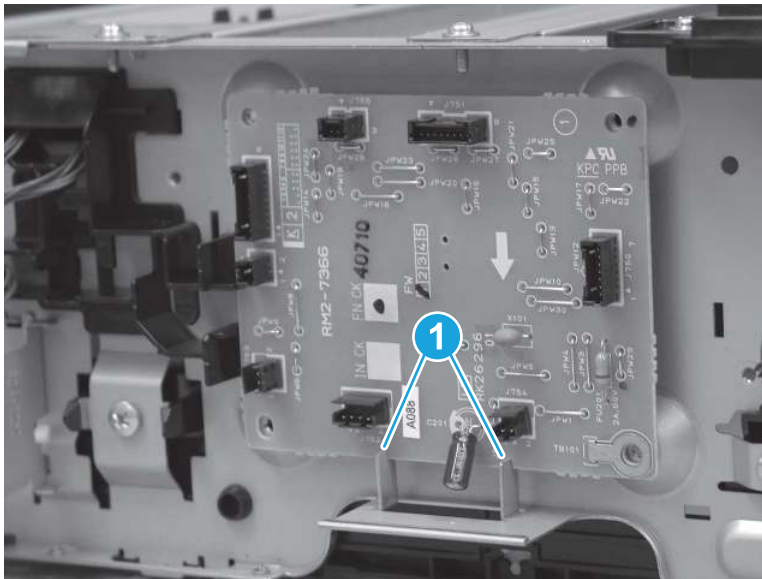
2. Remove four screws (callout 1).

**Figure 5-2406** Remove four screws



3. Lift the driver PCA up and off of two brackets (callout 1) to remove it.

**Figure 5-2407** Remove the driver PCA



## 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.

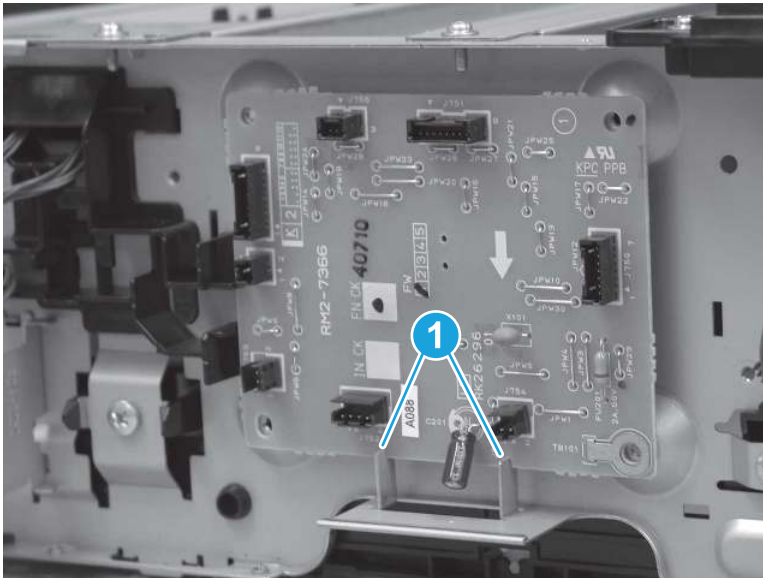
## 6. Reverse the removal steps to install the assembly

Also use the following **special installation instructions**.

Driver PCA (550-sheet paper feeder)

- ▲ Position the driver PCA on two brackets (callout 1).

**Figure 5-2408** Install the driver PCA

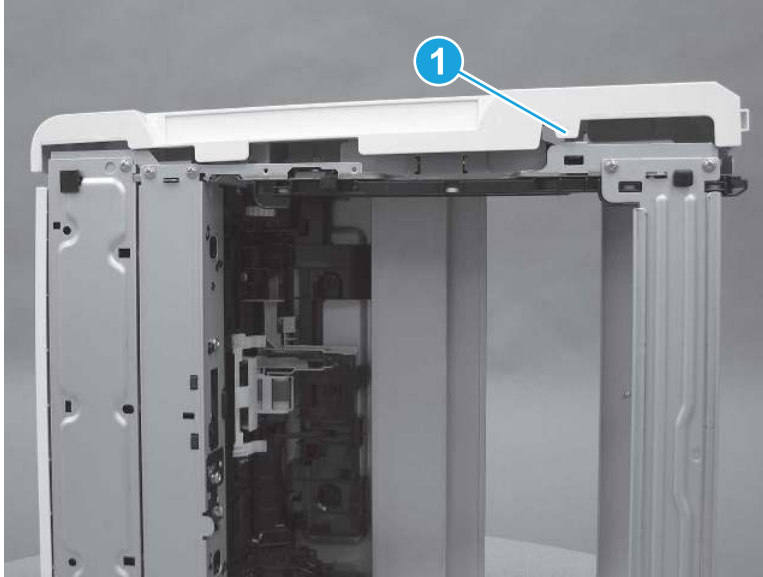


Right cover (550-sheet paper feeder)

1. Lay the feeder on the left side so that the right side is facing up, and then install one tab (callout 1) on the bottom of the feeder.

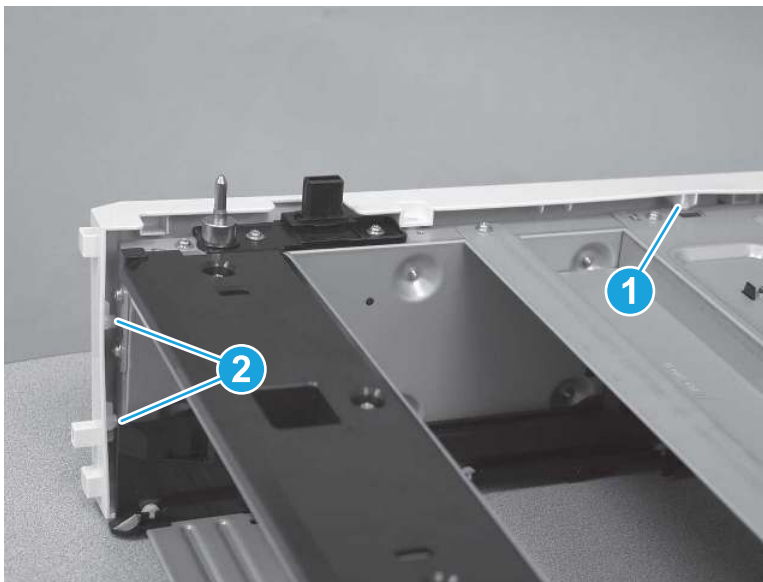


Figure 5-2409 Engage one tab



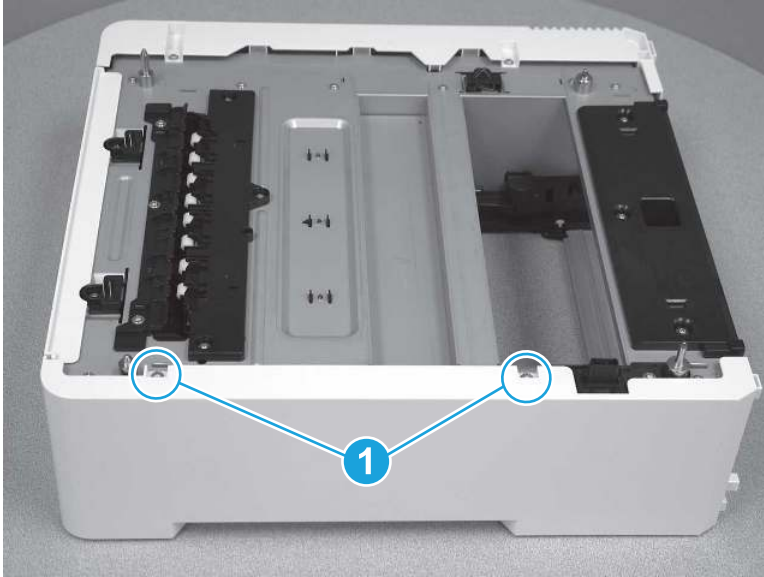
2. Turn the feeder to an upright position with the top facing up. Install one tab (callout 1) on the top of the feeder, and then install two tabs (callout 2) at the front of the feeder.

Figure 5-2410 Engage three tabs



3. Install two screws (callout 1).

Figure 5-2411 Install two screws





---

# 6 Parts and diagrams

Printer parts information including exploded assembly diagrams and part number lists.

## HP service and support

Learn about HP access to additional service and support information.

### Additional service and support for channel partners

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

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

Access WISE for Channel partners

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

Find information about the following topics

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

### Additional service and support for HP internal personnel

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

[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\).](#)

## Order parts by authorized service providers

Find information about ordering parts and supplies for the printer.

### Ordering

Order parts by authorized service providers.

**Table 6-1 Ordering**

Item or provider	Description
Order supplies and paper	<a href="http://www.hp.com/go/suresupply">www.hp.com/go/suresupply</a>
Order parts from authorized service providers	<a href="http://www.hp.com/buy/parts">www.hp.com/buy/parts</a> or <a href="http://partsurfer.hp.com">partsurfer.hp.com</a>
Order through service or support providers	Contact an HP-authorized service or support provider.
Order using the HP Embedded Web Server (EWS)	To access, in a supported web browser on your computer, enter the printer IP address or host name in the address/URL field. The EWS contains a link to the HP SureSupply web site, which provides options for purchasing Original HP supplies.

### Orderable parts

Not all of the parts shown in the exploded assembly diagrams are orderable parts.

Refer to the tables following the diagrams or the alphabetical/numerical parts lists to determine if a part is orderable.

## Supplies and accessories

Learn about the supplies and accessories that are available for the printer.

To order cartridges, visit <http://www.hp.com> (some portions of the HP Web site are available in English only). Ordering cartridges online is not supported in all countries/regions. However, many countries/regions have information about ordering by telephone, locating a local store, and printing a shopping list. In addition, go to [hp.com/supplies](http://hp.com/supplies) to obtain information about purchasing HP products in your country/region.

Use only the replacement cartridges that have the same cartridge number as the cartridge that is being replaced. Find the cartridge number in the following places:

- On the label of the cartridge that is being replaced.
- On a sticker inside the printer. Open the cartridge door to locate the sticker.
- Open the printer software (**HP Printer Assistant**), and then click **Shop > Shop For Supplies Online**.
- Open the HP Embedded Web Server (EWS), and then click **Tools > Supply Status** (under the **Product Information** item).

**Table 6-2 Supplies part numbers**

Item	Description	Part number (service)	Product number (new)
Toner cartridge	HP 414A Black Original LaserJet Toner Cartridge	W2020-67901	W2020A
Toner cartridge	HP 414X High Yield Black Original LaserJet Toner Cartridge	W2020-67902	W2020X
Toner cartridge	HP 414X High Yield (Contract) Black Original LaserJet Toner Cartridge	W2020-67903	W2020XC
Toner cartridge	HP 414A Cyan Original LaserJet Toner Cartridge	W2021-67901	W2021A
Toner cartridge	HP 414X High Yield Cyan Original LaserJet Toner Cartridge	W2021-67902	W2021X
Toner cartridge	HP 414X High Yield (Contract) Cyan Original LaserJet Toner Cartridge	W2021-67903	W2021XC
Toner cartridge	HP 414A Yellow Original LaserJet Toner Cartridge	W2022-67901	W2022A
Toner cartridge	HP 414X High Yield Yellow Original LaserJet Toner Cartridge	W2022-67902	W2022X
Toner cartridge	HP 414X High Yield (Contract) Yellow Original LaserJet Toner Cartridge	W2022-67903	W2022XC
Toner cartridge	HP 414A Magenta Original LaserJet Toner Cartridge	W2023-67901	W2023A
Toner cartridge	HP 414X High Yield Magenta Original LaserJet Toner Cartridge	W2023-67902	W2023X
Toner cartridge	HP 414X High Yield (Contract) Magenta Original LaserJet Toner Cartridge	W2023-67903	W2023XC

**Table 6-2 Supplies part numbers (continued)**

<b>Item</b>	<b>Description</b>	<b>Part number (service)</b>	<b>Product number (new)</b>
Toner cartridge	HP 415A Black Original LaserJet Toner Cartridge	W2030-67901	W2030A
Toner cartridge	HP 415X High Yield Black Original LaserJet Toner Cartridge	W2030-67902	W2030X
Toner cartridge	HP 415X High Yield (Contract) Black Original LaserJet Toner Cartridge	W2030-67903	W2030XC
Toner cartridge	HP 415A Cyan Original LaserJet Toner Cartridge	W2031-67901	W2031A
Toner cartridge	HP 415X High Yield Cyan Original LaserJet Toner Cartridge	W2031-67902	W2031X
Toner cartridge	HP 415X High Yield (Contract) Cyan Original LaserJet Toner Cartridge	W2031-67903	W2031XC
Toner cartridge	HP 415A Yellow Original LaserJet Toner Cartridge	W2032-67901	W2032A
Toner cartridge	HP 415X High Yield Yellow Original LaserJet Toner Cartridge	W2032-67902	W2032X
Toner cartridge	HP 415X High Yield (Contract) Yellow Original LaserJet Toner Cartridge	W2032-67903	W2032XC
Toner cartridge	HP 415A Magenta Original LaserJet Toner Cartridge	W2033-67901	W2033A
Toner cartridge	HP 415X High Yield Magenta Original LaserJet Toner Cartridge	W2033-67902	W2033X
Toner cartridge	HP 415X High Yield (Contract) Magenta Original LaserJet Toner Cartridge	W2033-67903	W2033XC
Toner cartridge	HP 416A Black Original LaserJet Toner Cartridge	W2040-67901	W2040A
Toner cartridge	HP 416X High Yield Black Original LaserJet Toner Cartridge	W2040-67902	W2040X
Toner cartridge	HP 416X High Yield (Contract) Black Original LaserJet Toner Cartridge	W2040-67903	W2040XC
Toner cartridge	HP 416A Cyan Original LaserJet Toner Cartridge	W2041-67901	W2041A
Toner cartridge	HP 416X High Yield Cyan Original LaserJet Toner Cartridge	W2041-67902	W2041X
Toner cartridge	HP 416X High Yield (Contract) Cyan Original LaserJet Toner Cartridge	W2041-67903	W2041XC
Toner cartridge	HP 416A Yellow Original LaserJet Toner Cartridge	W2042-67901	W2042A
Toner cartridge	HP 416X High Yield Yellow Original LaserJet Toner Cartridge	W2042-67902	W2042X
Toner cartridge	HP 416X High Yield (Contract) Yellow Original LaserJet Toner Cartridge	W2042-67903	W2042XC

**Table 6-2 Supplies part numbers (continued)**

Item	Description	Part number (service)	Product number (new)
Toner cartridge	HP 416A Magenta Original LaserJet Toner Cartridge	W2043-67901	W2043A
Toner cartridge	HP 416X High Yield Magenta Original LaserJet Toner Cartridge	W2043-67902	W2043X
Toner cartridge	HP 416X High Yield (Contract) Magenta Original LaserJet Toner Cartridge	W2043-67903	W2043XC

**Table 6-3 Accessories**

Description	Part number (service)	Product number
550-sheet paper feeder	CF404-67901	CF404A
HP JetDirect 3100w BLE/NFC/Wireless accessory	3JN69-61001	3JN69A
HP Accessibility Kit	2TD64-61001	2TD64A
HP Accessibility Assistant	2MU47-61001	2MU47A
Locking Tray Guides (managed printers only)	3PZ95-67906	NA
HP Jetdirect LAN Accessory Module	5851-8004	8FP31A

## Customer self-repair parts

Learn about printer customer self-repair parts.

Customer self-repair (CSR) parts are available for many HP LaserJet printers to reduce repair time.



**NOTE:** More information about the CSR program and benefits can be found at [www.hp.com/go/csr-support](http://www.hp.com/go/csr-support) and [www.hp.com/go/csr-faq](http://www.hp.com/go/csr-faq).

Genuine HP replacement parts can be ordered at [www.hp.com/buy/parts](http://www.hp.com/buy/parts) or by contacting an HP-authorized service or support provider. When ordering, one of the following will be needed: part number, serial number (found on back of printer), product number, or printer name.

- Parts listed as **A**: Easy
- Parts listed as **B**: Difficult and/or require tools
- Parts listed as **Mandatory**: Customer installed self-replacement parts (unless the customer is willing to pay for HP service personnel to perform the repair). For these parts, on-site or return-to-depot support is not provided under the HP printer warranty.
- Parts listed as **Optional**: HP service personnel installed self-replacement parts by customer request for no additional charge during the printer warranty period.

**Table 6-4 Customer self-repair (CSR) parts**

Kit name	Description	CSR level	Self-replacement options	Part number
Tray 2	Cassette (Tray 2) assembly	A	Mandatory	RM2-6377-000CN



**Table 6-4 Customer self-repair (CSR) parts (continued)**

Kit name	Description	CSR level	Self-replacement options	Part number
Tray 3	Cassette assembly, Tray 3 (550-sheet paper feeder)	A	Mandatory	RM2-6486-000CN
Tray 3 assembly (whole unit)	550-sheet paper feeder	A	Mandatory	CF404-67901
Toner cartridge	HP 414A Black Original LaserJet Toner Cartridge HP 414X High Yield Black Original LaserJet Toner Cartridge HP 414X High Yield (Contract) Black Original LaserJet Toner Cartridge	A	Mandatory	W2020A/W2020X/ W2020XC
Toner cartridge	HP 414A Cyan Original LaserJet Toner Cartridge HP 414X High Yield Cyan Original LaserJet Toner Cartridge HP 414X High Yield (Contract) Cyan Original LaserJet Toner Cartridge	A	Mandatory	W2021A/W2021X/ W2021XC
Toner cartridge	HP 414A Yellow Original LaserJet Toner Cartridge HP 414X High Yield Yellow Original LaserJet Toner Cartridge HP 414X High Yield (Contract) Yellow Original LaserJet Toner Cartridge	A	Mandatory	W2022A/W2022X/ W2022XC
Toner cartridge	HP 414A Magenta Original LaserJet Toner Cartridge HP 414X High Yield Magenta Original LaserJet Toner Cartridge HP 414X High Yield (Contract) Magenta Original LaserJet Toner Cartridge	A	Mandatory	W2023A/W2023X/ W2023XC
Toner cartridge	HP 415A Black Original LaserJet Toner Cartridge HP 415X High Yield Black Original LaserJet Toner Cartridge HP 415X High Yield (Contract) Black Original LaserJet Toner Cartridge	A	Mandatory	W2030A/W2030X/ W2030XC
Toner cartridge	HP 415A Cyan Original LaserJet Toner Cartridge HP 415X High Yield Cyan Original LaserJet Toner Cartridge HP 415X High Yield (Contract) Cyan Original LaserJet Toner Cartridge	A	Mandatory	W2031A/W2031X/ W2031XC
Toner cartridge	HP 415A Yellow Original LaserJet Toner Cartridge HP 415X High Yield Yellow Original LaserJet Toner Cartridge HP 415X High Yield (Contract) Yellow Original LaserJet Toner Cartridge	A	Mandatory	W2032A/W2032X/ W2032XC
Toner cartridge	HP 415A Magenta Original LaserJet Toner Cartridge HP 415X High Yield Magenta Original LaserJet Toner Cartridge HP 415X High Yield (Contract) Magenta Original LaserJet Toner Cartridge	A	Mandatory	W2033A/W2033X/ W2033XC

**Table 6-4 Customer self-repair (CSR) parts (continued)**

Kit name	Description	CSR level	Self-replacement options	Part number
Toner cartridge	HP 416A Black Original LaserJet Toner Cartridge HP 416X High Yield Black Original LaserJet Toner Cartridge HP 416X High Yield (Contract) Black Original LaserJet Toner Cartridge	A	Mandatory	W2040A/W2040X/ W2040XC
Toner cartridge	HP 416A Cyan Original LaserJet Toner Cartridge HP 416X High Yield Cyan Original LaserJet Toner Cartridge HP 416X High Yield (Contract) Cyan Original LaserJet Toner Cartridge	A	Mandatory	W2041A/W2041X/ W2041XC
Toner cartridge	HP 416A Yellow Original LaserJet Toner Cartridge HP 416X High Yield Yellow Original LaserJet Toner Cartridge HP 416X High Yield (Contract) Yellow Original LaserJet Toner Cartridge	A	Mandatory	W2042A/W2042X/ W2042XC
Toner cartridge	HP 416A Magenta Original LaserJet Toner Cartridge HP 416X High Yield Magenta Original LaserJet Toner Cartridge HP 416X High Yield (Contract) Magenta Original LaserJet Toner Cartridge	A	Mandatory	W2043A/W2043X/ W2043XC

## How to use parts lists and diagrams

Learn how to use the parts lists and diagrams.

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



**NOTE:** Be sure to order the correct part. When looking for part numbers for electrical parts, pay careful attention to the voltage that is listed in the part description. Doing so will make sure that the selected part number is for the correct printer model.

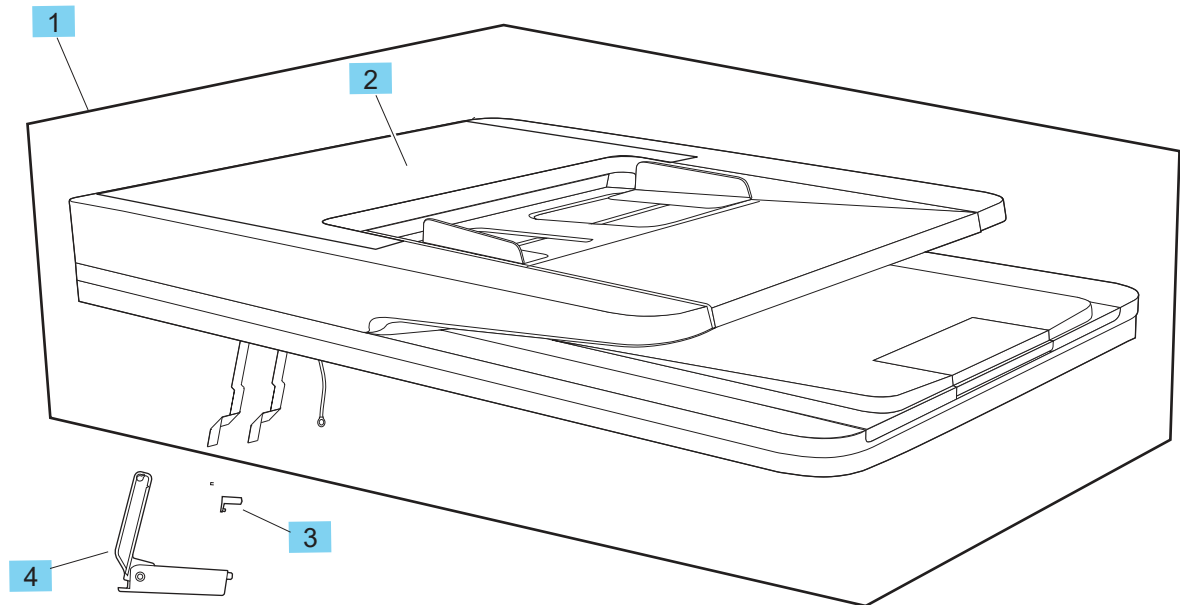


**NOTE:** The abbreviation “PCA” stands for “printed circuit-board assembly.” Components described as a PCA might consist of a single circuit board or a circuit board plus other parts, such as cables and sensors.

# Document feeder and image scanner

Parts diagram and part list for the document feeder and image scanner.

**Figure 6-1** Document feeder and image scanner



**Table 6-5** Document feeder and image scanner

Ref No	Part number	Description	Qty
1	W1A73-60110	ISA assembly scanner/ADF duplex	1
2	W1A77-67903	Document feeder top cover assembly with rollers	1
3	B3Q10-40041	ISA lift slider pin	1
4	B3Q10-60128	ISA lift assembly	1

# Parts and diagrams: Covers (M455/E45028)

Parts diagram and parts list for the SFP printer covers.

Figure 6-2 Covers (M455/E45028)

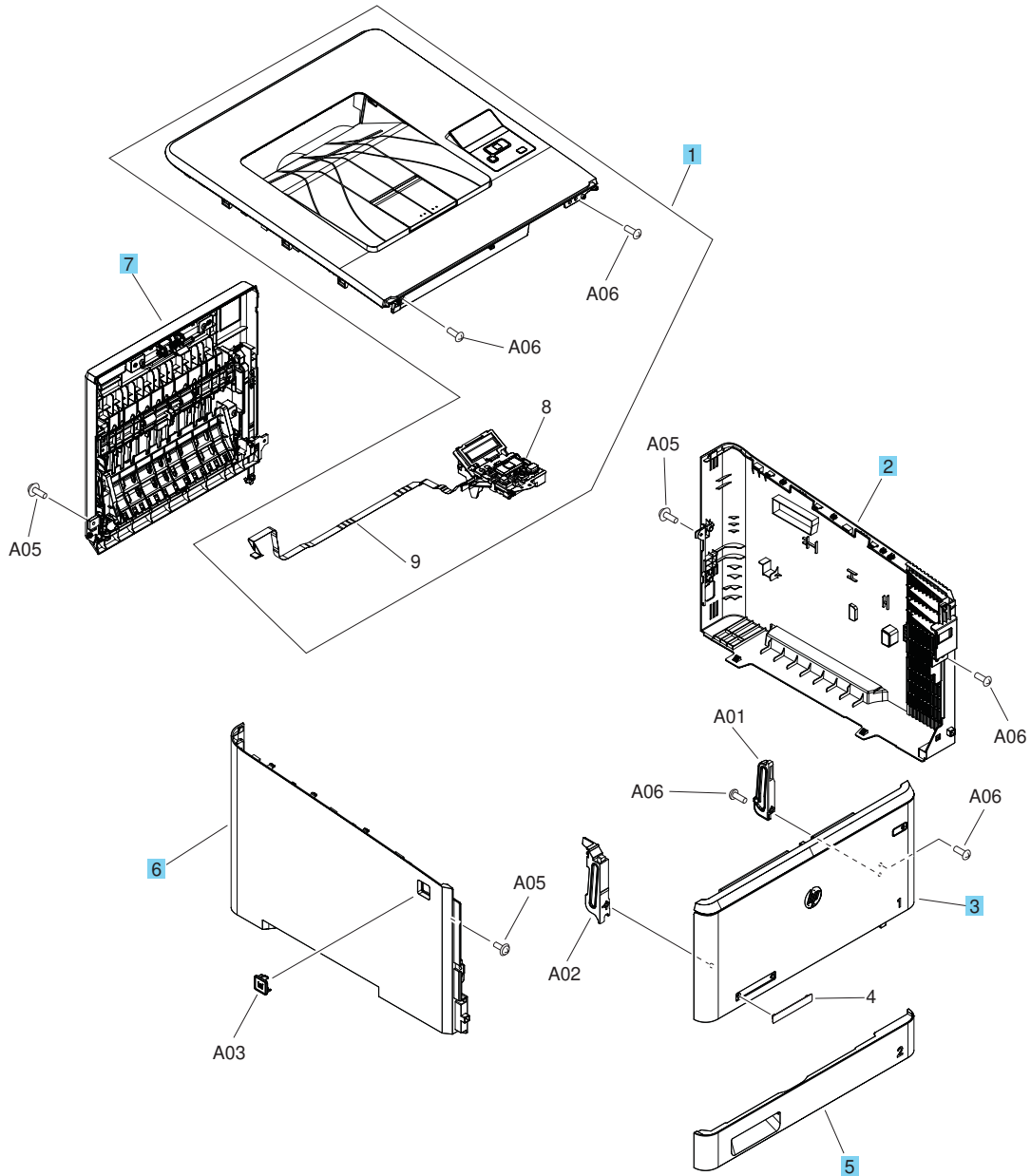


Table 6-6 Covers (M455/E45028)

Ref No	Part number	Description	Qty
1	RM2-3088-000CN	Cover, top assembly (SFP) (includes control panel and FFC)	1
2	RC4-4853-000CN	Cover, right (SFP)	1
3	RM2-1823-000CN	Front (cartridge) door assembly (SFP)	1

Table 6-6 Covers (M455/E45028) (continued)

Ref No	Part number	Description	Qty
5	RC4-5334-000CN	Cover, cassette	1
6	RC4-4854-000CN	Cover, left (SFP)	1
7	RM2-6383-000CN	Duplexing door assembly	1
Not shown	7121-8684	HP logo jewel	1

# Parts and diagrams: Covers (M480/E47528)

Parts diagram and parts list for the MFP printer covers.

Figure 6-3 Covers (M480/E47528)

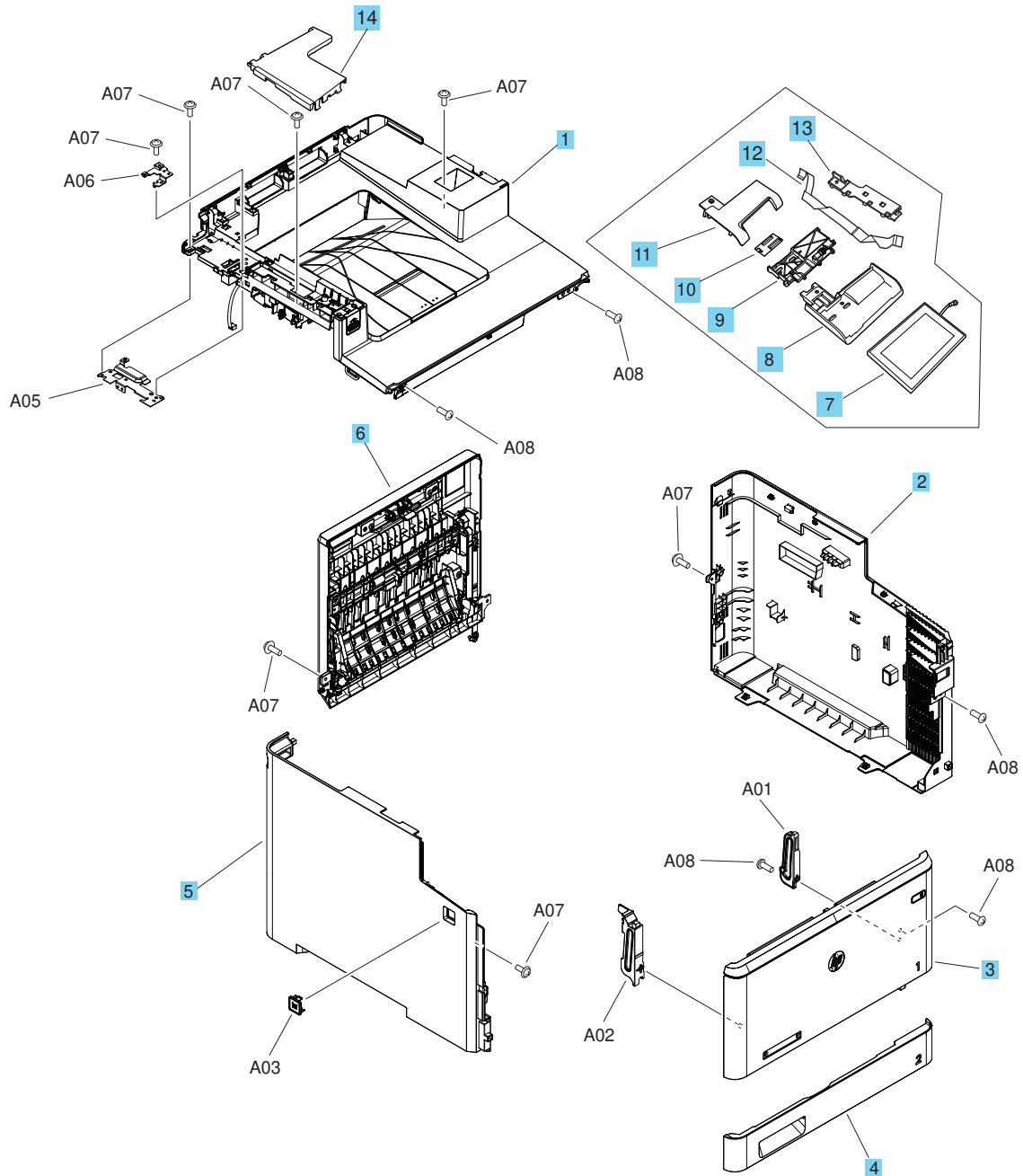


Table 6-7 Covers (M480/E47528)

Ref No	Part number	Description	Qty
1	RM2-3091-000CN	Cover, top assembly (MFP)	1
2	RC4-6044-000CN	Cover, right (MFP)	1

Table 6-7 Covers (M480/E47528) (continued)

Ref No	Part number	Description	Qty
3	RM2-1824-000CN	Front (cartridge) door assembly (MFP)	1
4	RC4-5334-000CN	Cover, cassette	1
5	RC4-6045-000CN	Cover, left (MFP)	1
6	RM2-6383-000CN	Duplexing door assembly	1
7	3PZ55-67901	Control panel assembly	1
8	3PZ55-67984	Control panel mount base	1
9	3PZ55-67904	Control panel ICB chassis mount	1
10	3PZ55-67903	CP interconnect board and ground clip kit	1
11	3PZ55-67902	Cover, top control panel mount	1
12	3QA55-67903	Cable, flexible flat control panel to frmtr	1
13	CF377-40005	Guide, control panel FFC and USB cable	1
14	CF377-40004	Cover, ISA FFCs	1
Not shown	7121-8684	HP logo jewel	1

# Parts and diagrams: Internal assemblies (1 of 5)

Parts diagram and parts list for the internal printer assemblies.

Figure 6-4 Internal assemblies (1 of 5)

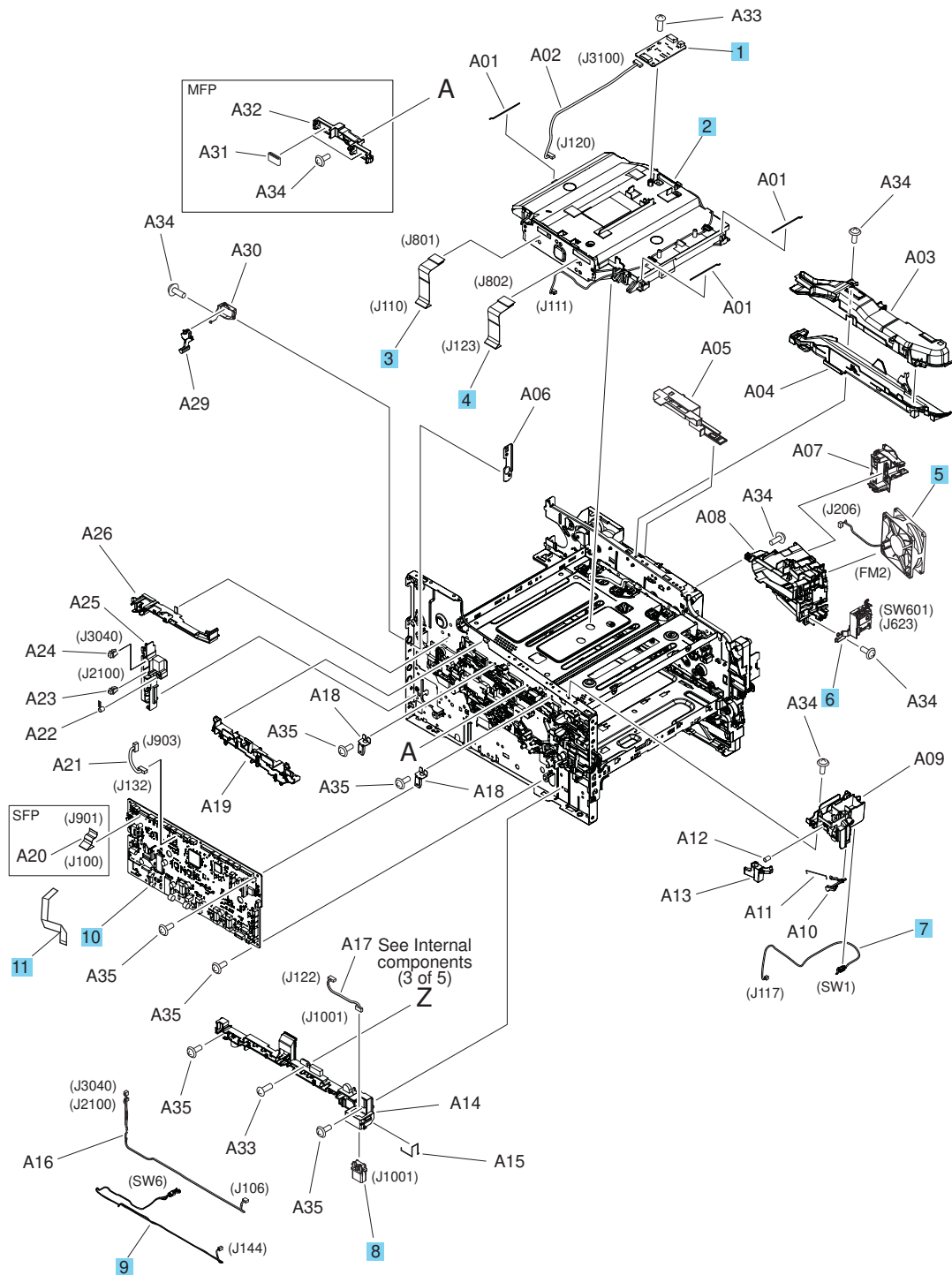




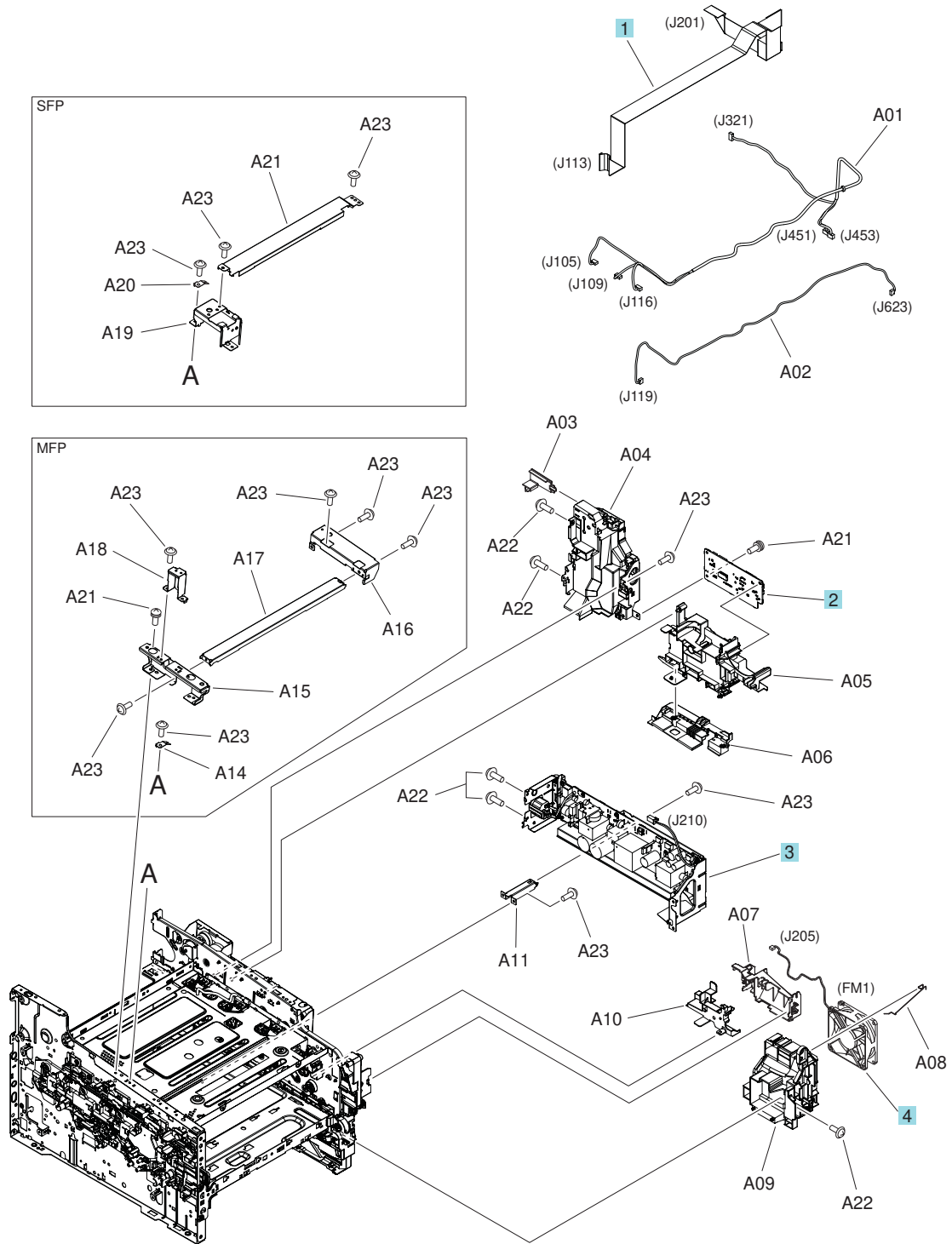
Table 6-8 Internal assemblies (1 of 5)

Ref No	Part number	Description	Qty
1	RM3-7245-000CN	Memory PCA	1
2	RM2-5612-000CN	Laser scanner assembly	1
3	RM2-8662-000CN	Cable, flexible flat scanner	1
4	RM2-8663-000CN	Cable, flexible flat scanner	1
5	RK2-6270-000CN	Fan assembly	1
6	RM2-6373-000CN	Power switch (SW601) assembly	1
7	RM3-7227-000CN	Front door switch cable assembly	1
8	VS1-7258-007CN	Connector, drawer	1
9	RM2-7896-000CN	Cassette switch cable assembly	1
10	RM3-7272-000CN	DC controller	1
11	CF388-60116	Cable, flexible flat DC controller to frmtr	1

# Parts and diagrams: Internal assemblies (2 of 5)

Parts diagram and parts list for the internal printer assemblies.

Figure 6-5 Internal assemblies (2 of 5)



**Table 6-9** Internal assemblies (2 of 5)

Ref No	Part number	Description	Qty
1	RM2-8661-000CN	Cable, flexible flat (DCC to driver PCA)	1
2	RM2-7369-000CN	Driver PCA assembly	1
3	RM3-7278-000CN	LV power supply PCA (110-127V)	1
3	RM3-7279-000CN	LV power supply PCA (220-240V)	1
4	RK2-6270-000CN	Fan assembly	1

# Parts and diagrams: Internal assemblies (3 of 5)

Parts diagram and parts list for the internal printer assemblies.

Figure 6-6 Internal assemblies (3 of 5)

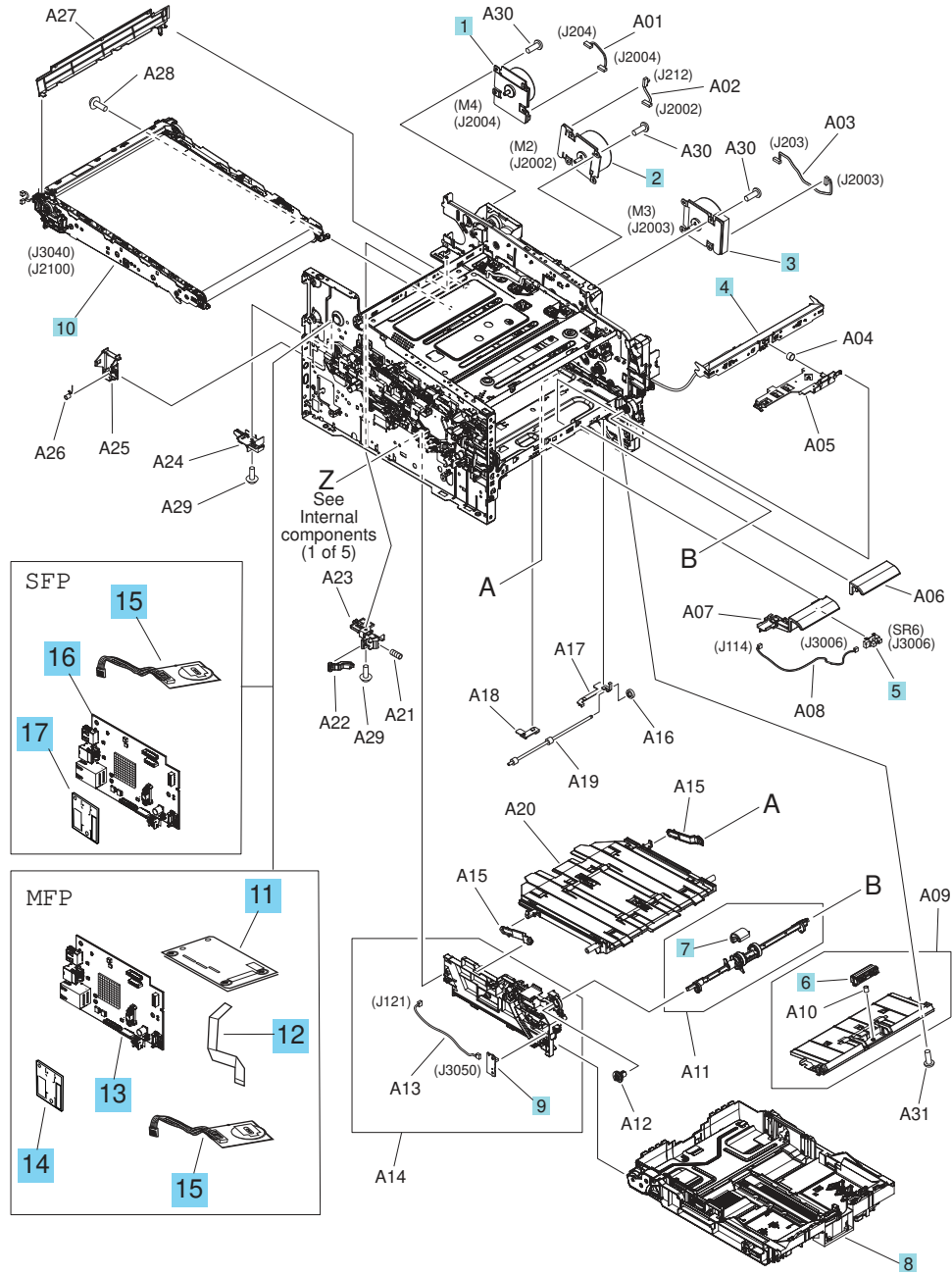


Table 6-10 Internal assemblies (3 of 5)

Ref No	Part number	Description	Qty
1	RM2-7349-000CN	Assembly, fixing motor	1
2	RM2-7342-000CN	Drum motor (M2)	1

Table 6-10 Internal assemblies (3 of 5) (continued)

Ref No	Part number	Description	Qty
3	RM2-7344-000CN	Developing motor (M3)	1
4	RM2-7399-000CN	Density detect sensor	1
5	WG8-5935-000CN	Photointerrupter, IC	1
6	RM2-6406-000CN	Separation pad assembly	1
7	RL1-2593-000CN	Roller, paper pickup	1
8	RM2-6377-000CN	Cassette (Tray 2) assembly	1
9	RM3-7236-000CN	Environment sensor PCB assembly	1
10	RM2-6454-000CN	Intermediate transfer belt (ITB) assembly	1
11	3PZ55-67980	Fax PCA with plug kit (USA)	1
11	3PZ55-67981	Fax PCA with plug kit (EURO)	1
11	3PZ55-67982	Fax PCA with plug kit (BRAZIL)	1
11	3PZ55-67983	Fax PCA with plug kit (AP)	1
12	3QA55-67904	Cable, FFC fax to formatter	1
13	3QA55-67901	Formatter (MFP)	1
13	3QA55-67902	Formatter (China/India; MFP)	1
14	B5L32-60002	eMMC 16GB (MFP)	1
15	3PZ15-67908	Island of Data (IOD)	1
16	3PZ95-67903	Formatter (SFP)	1
16	3PZ95-67904	Formatter (China/India; SFP)	1
17	3PZ15-67905	eMMC 4GB (SFP)	1
Not shown	3PZ95-67906	Locking Tray Guides (managed printers only)	1

# Parts and diagrams: Internal assemblies (4 of 5)

Parts diagram and parts list for the internal printer assemblies.

Figure 6-7 Internal assemblies (4 of 5)

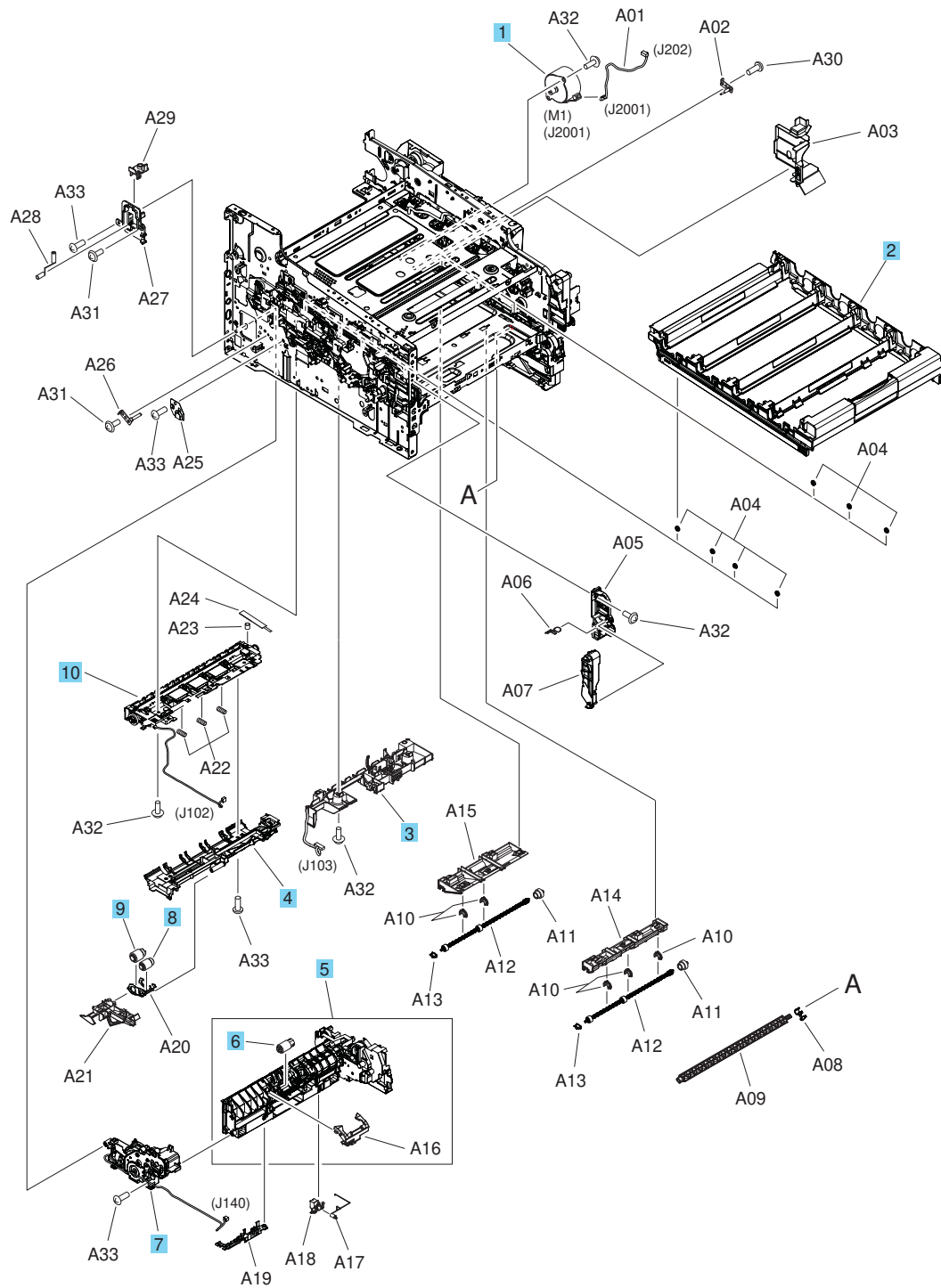


Table 6-11 Internal assemblies (4 of 5)

Ref No	Part number	Description	Qty
1	RM2-7350-000CN	Pickup motor assembly	1
2	RM2-1807-000CN	Cartridge (toner) tray assembly	1
3	RM2-6368-000CN	Feed guide assembly (front)	1
4	RM2-6366-000CN	Feed guide assembly (rear)	1
5	RM2-6372-000CN	Paper pickup assembly	1
6	RM2-5881-000CN	Roller, separation assembly	1
7	RM2-6370-000CN	Lifter drive assembly	1
8	RM2-5576-000CN	Roller, paper pickup assembly	1
9	RM2-5577-000CN	Roller, feed assembly	1
10	RM2-6374-000CN	Registration assembly	1

# Parts and diagrams: Internal assemblies (5 of 5)

Parts diagram and parts list for the internal printer assemblies.

Figure 6-8 Internal assemblies (5 of 5)

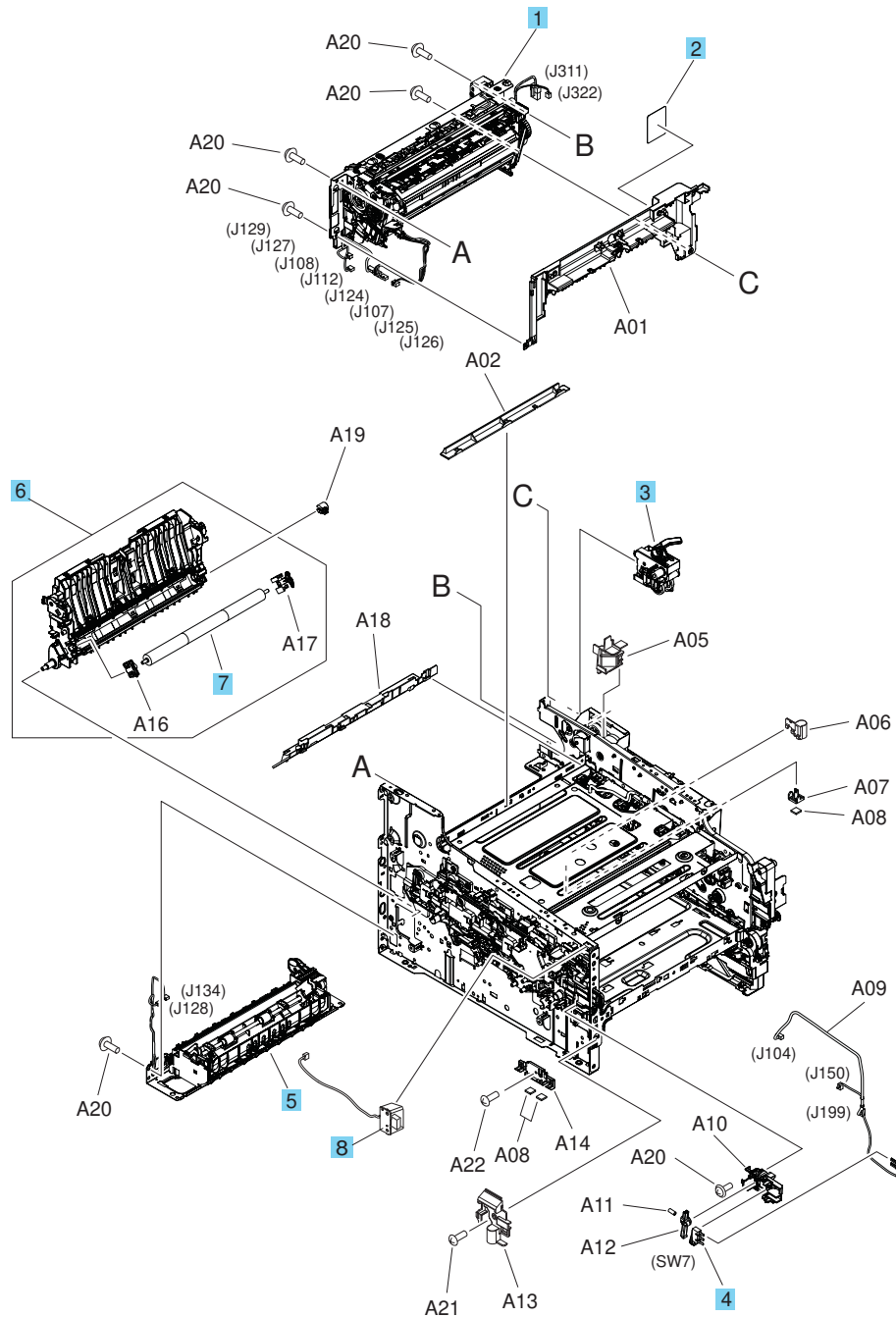


Table 6-12 Internal assemblies (5 of 5)

Ref No	Part number	Description	Qty
1	RM2-6460-000CN	Fuser assembly (110-127V)	1
1	RM2-6461-000CN	Fuser assembly (220-240V)	1



Table 6-12 Internal assemblies (5 of 5) (continued)

Ref No	Part number	Description	Qty
2	RU7-8613-000CN	Label, high-temperature caution	1
3	RM2-6389-000CN	Reverse drive assembly	1
4	RK2-0534-000CN	Door open switch (SW7, SW501)	1
5	RM2-6387-000CN	Paper re-pickup assembly	1
6	RM2-6397-000CN	Secondary transfer assembly	1
7	RM2-6455-000CN	Roller, secondary transfer assembly	1
8	5851-7008	USB connector (walk-up) and cable	1

# Parts and diagrams: 550-sheet paper feeder covers

Parts diagram and part list for the 550-sheet paper feeder covers.

Figure 6-9 550-sheet paper feeder covers

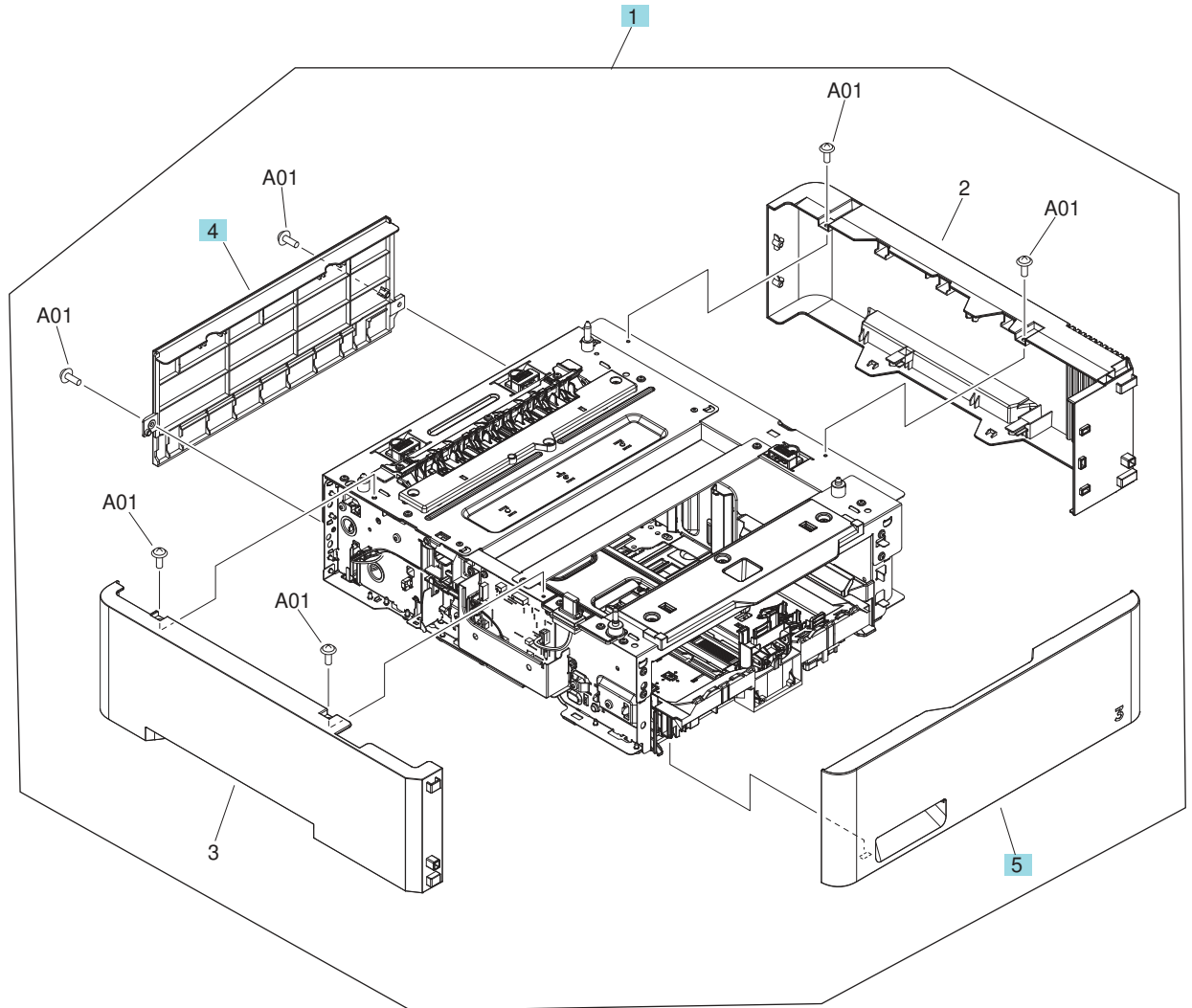


Table 6-13 550-sheet paper feeder covers

Ref No	Part number	Description	Qty
1	CF404-67901	550-sheet paper feeder	1
4	RC4-2203-000CN	Cover, rear (550-sheet paper feeder)	1
5	RC4-2224-000CN	Cover, cassette (550-sheet paper feeder)	1

# Parts and diagrams: 550-sheet paper feeder main body (1 of 2)

Parts diagram and part list for the 550-sheet paper feeder main body.

Figure 6-10 550-sheet paper feeder main body (1 of 2)

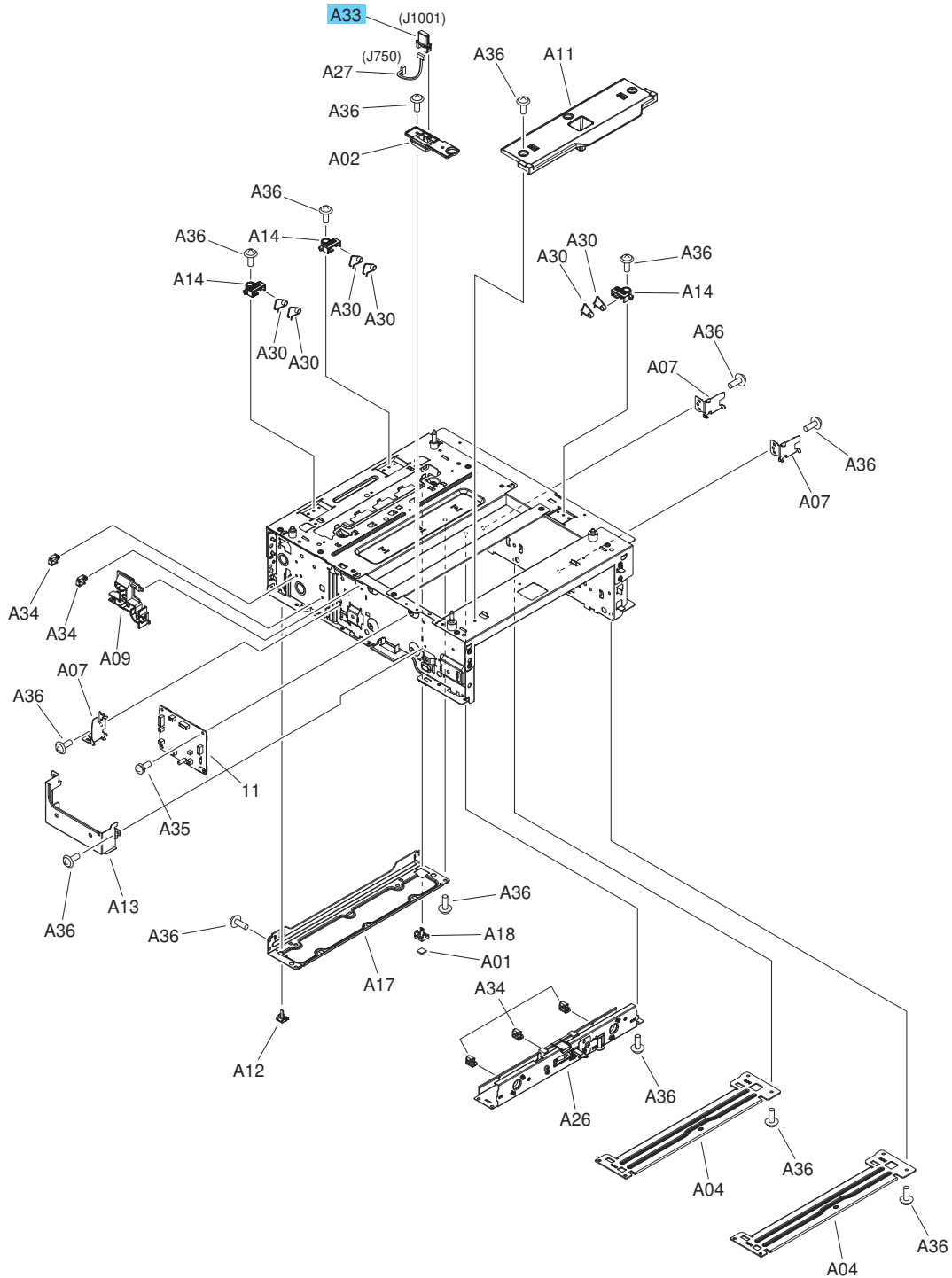


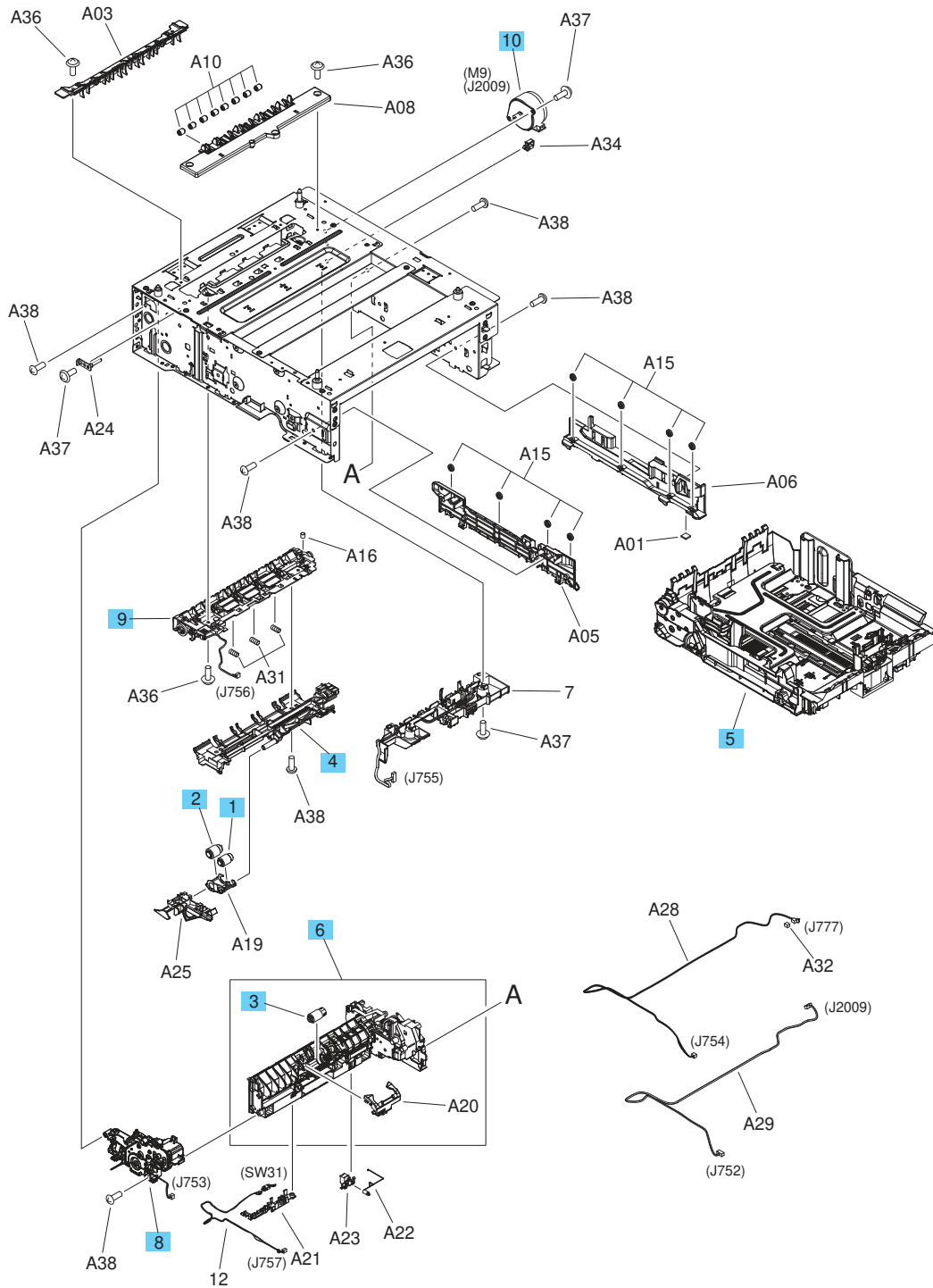
Table 6-14 550-sheet paper feeder main body (1 of 2)

Ref No	Part number	Description	Qty
A33	V51-7257-007CN	Connector, drawer Tray 3 (550-sheet paper feeder)	1

# Parts and diagrams: 550-sheet paper feeder main body (2 of 2)

Parts diagram and part list for the 550-sheet paper feeder main body.

Figure 6-11 550-sheet paper feeder main body (2 of 2)



**Table 6-15 550-sheet paper feeder main body (2 of 2)**

Ref No	Part number	Description	Qty
1	RM2-5576-000CN	Roller, paper pickup assembly	1
2	RM2-5577-000CN	Roller, feed assembly	1
3	RM2-5881-000CN	Roller, separation assembly	1
4	RM2-6366-000CN	Feed guide assembly (rear)	1
5	RM2-6486-000CN	Cassette assembly, Tray 3 (550-sheet paper feeder)	1
6	RM2-6490-000CN	Paper pickup assembly (550-sheet paper feeder)	1
8	RM2-6493-000CN	Lifter drive assembly (550-sheet paper feeder)	1
9	RM2-6494-000CN	Paper feed assembly (550-sheet paper feeder)	1
10	RM2-7350-000CN	Pickup motor assembly (M9; 550-sheet paper feeder)	1

# Alphabetical parts list

**Table 6-16 Alphabetical parts list**

Description	Part number	Table and page
550-sheet paper feeder	CF404-67901	<a href="#">550-sheet paper feeder covers on page 1636</a>
Assembly, fixing motor	RM2-7349-000CN	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
CP interconnect board and ground clip kit	3PZ55-67903	<a href="#">Covers (M480/E47528) on page 1624</a>
Cable, FFC fax to formatter	3QA55-67904	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
Cable, flexible flat (DCC to driver PCA)	RM2-8661-000CN	<a href="#">Internal assemblies (2 of 5) on page 1629</a>
Cable, flexible flat DC controller to frmtr	CF388-60116	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
Cable, flexible flat control panel to frmtr	3QA55-67903	<a href="#">Covers (M480/E47528) on page 1624</a>
Cable, flexible flat scanner	RM2-8662-000CN	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
Cable, flexible flat scanner	RM2-8663-000CN	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
Cartridge (toner) tray assembly	RM2-1807-000CN	<a href="#">Internal assemblies (4 of 5) on page 1633</a>
Cassette (Tray 2) assembly	RM2-6377-000CN	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
Cassette assembly, Tray 3 (550-sheet paper feeder)	RM2-6486-000CN	<a href="#">550-sheet paper feeder main body (2 of 2) on page 1640</a>
Cassette switch cable assembly	RM2-7896-000CN	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
Connector, drawer	VS1-7258-007CN	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
Connector, drawer Tray 3 (550-sheet paper feeder)	VS1-7257-007CN	<a href="#">550-sheet paper feeder main body (1 of 2) on page 1638</a>
Control panel ICB chassis mount	3PZ55-67904	<a href="#">Covers (M480/E47528) on page 1624</a>
Control panel assembly	3PZ55-67901	<a href="#">Covers (M480/E47528) on page 1624</a>
Control panel mount base	3PZ55-67984	<a href="#">Covers (M480/E47528) on page 1624</a>
Cover, ISA FFCs	CF377-40004	<a href="#">Covers (M480/E47528) on page 1624</a>
Cover, cassette	RC4-5334-000CN	<a href="#">Covers (M455/E45028) on page 1622</a>
Cover, cassette	RC4-5334-000CN	<a href="#">Covers (M480/E47528) on page 1624</a>

**Table 6-16** Alphabetical parts list (continued)

Description	Part number	Table and page
Cover, cassette (550-sheet paper feeder)	RC4-2224-000CN	<a href="#">550-sheet paper feeder covers on page 1636</a>
Cover, left (MFP)	RC4-6045-000CN	<a href="#">Covers (M480/E47528) on page 1624</a>
Cover, left (SFP)	RC4-4854-000CN	<a href="#">Covers (M455/E45028) on page 1622</a>
Cover, rear (550-sheet paper feeder)	RC4-2203-000CN	<a href="#">550-sheet paper feeder covers on page 1636</a>
Cover, right (MFP)	RC4-6044-000CN	<a href="#">Covers (M480/E47528) on page 1624</a>
Cover, right (SFP)	RC4-4853-000CN	<a href="#">Covers (M455/E45028) on page 1622</a>
Cover, top assembly (MFP)	RM2-3091-000CN	<a href="#">Covers (M480/E47528) on page 1624</a>
Cover, top assembly (SFP) (includes control panel and FFC)	RM2-3088-000CN	<a href="#">Covers (M455/E45028) on page 1622</a>
Cover, top control panel mount	3PZ55-67902	<a href="#">Covers (M480/E47528) on page 1624</a>
DC controller	RM3-7272-000CN	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
Density detect sensor	RM2-7399-000CN	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
Developing motor (M3)	RM2-7344-000CN	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
Document feeder top cover assembly with rollers	W1A77-67903	<a href="#">Document feeder and image scanner on page 1621</a>
Door open switch (SW7, SW501)	RK2-0534-000CN	<a href="#">Internal assemblies (5 of 5) on page 1634</a>
Driver PCA assembly	RM2-7369-000CN	<a href="#">Internal assemblies (2 of 5) on page 1629</a>
Drum motor (M2)	RM2-7342-000CN	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
Duplexing door assembly	RM2-6383-000CN	<a href="#">Covers (M455/E45028) on page 1622</a>
Duplexing door assembly	RM2-6383-000CN	<a href="#">Covers (M480/E47528) on page 1624</a>
Environment sensor PCB assembly	RM3-7236-000CN	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
Fan assembly	RK2-6270-000CN	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
Fan assembly	RK2-6270-000CN	<a href="#">Internal assemblies (2 of 5) on page 1629</a>
Fax PCA with plug kit (AP)	3PZ55-67983	<a href="#">Internal assemblies (3 of 5) on page 1630</a>



**Table 6-16 Alphabetical parts list (continued)**

Description	Part number	Table and page
Fax PCA with plug kit (BRAZIL)	3PZ55-67982	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
Fax PCA with plug kit (EURO)	3PZ55-67981	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
Fax PCA with plug kit (USA)	3PZ55-67980	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
Feed guide assembly (front)	RM2-6368-000CN	<a href="#">Internal assemblies (4 of 5) on page 1633</a>
Feed guide assembly (rear)	RM2-6366-000CN	<a href="#">Internal assemblies (4 of 5) on page 1633</a>
Feed guide assembly (rear)	RM2-6366-000CN	<a href="#">550-sheet paper feeder main body (2 of 2) on page 1640</a>
Formatter (China/India; MFP)	3QA55-67902	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
Formatter (China/India; SFP)	3PZ95-67904	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
Formatter (MFP)	3QA55-67901	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
Formatter (SFP)	3PZ95-67903	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
Front (cartridge) door assembly (MFP)	RM2-1824-000CN	<a href="#">Covers (M480/E47528) on page 1624</a>
Front (cartridge) door assembly (SFP)	RM2-1823-000CN	<a href="#">Covers (M455/E45028) on page 1622</a>
Front door switch cable assembly	RM3-7227-000CN	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
Fuser assembly (110-127V)	RM2-6460-000CN	<a href="#">Internal assemblies (5 of 5) on page 1634</a>
Fuser assembly (220-240V)	RM2-6461-000CN	<a href="#">Internal assemblies (5 of 5) on page 1634</a>
Guide, control panel FFC and USB cable	CF377-40005	<a href="#">Covers (M480/E47528) on page 1624</a>
HP logo jewel	7121-8684	<a href="#">Covers (M455/E45028) on page 1622</a>
HP logo jewel	7121-8684	<a href="#">Covers (M480/E47528) on page 1624</a>
ISA assembly scanner/ADF duplex	W1A73-60110	<a href="#">Document feeder and image scanner on page 1621</a>
ISA lift assembly	B3Q10-60128	<a href="#">Document feeder and image scanner on page 1621</a>
ISA lift slider pin	B3Q10-40041	<a href="#">Document feeder and image scanner on page 1621</a>
Intermediate transfer belt (ITB) assembly	RM2-6454-000CN	<a href="#">Internal assemblies (3 of 5) on page 1630</a>

**Table 6-16** Alphabetical parts list (continued)

Description	Part number	Table and page
Island of Data (IOD)	3PZ15-67908	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
LV power supply PCA (110-127V)	RM3-7278-000CN	<a href="#">Internal assemblies (2 of 5) on page 1629</a>
LV power supply PCA (220-240V)	RM3-7279-000CN	<a href="#">Internal assemblies (2 of 5) on page 1629</a>
Label, high-temperature caution	RU7-8613-000CN	<a href="#">Internal assemblies (5 of 5) on page 1634</a>
Laser scanner assembly	RM2-5612-000CN	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
Lifter drive assembly	RM2-6370-000CN	<a href="#">Internal assemblies (4 of 5) on page 1633</a>
Lifter drive assembly (550-sheet paper feeder)	RM2-6493-000CN	<a href="#">550-sheet paper feeder main body (2 of 2) on page 1640</a>
Locking Tray Guides (managed printers only)	3PZ95-67906	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
Memory PCA	RM3-7245-000CN	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
Paper feed assembly (550-sheet paper feeder)	RM2-6494-000CN	<a href="#">550-sheet paper feeder main body (2 of 2) on page 1640</a>
Paper pickup assembly	RM2-6372-000CN	<a href="#">Internal assemblies (4 of 5) on page 1633</a>
Paper pickup assembly (550-sheet paper feeder)	RM2-6490-000CN	<a href="#">550-sheet paper feeder main body (2 of 2) on page 1640</a>
Paper re-pickup assembly	RM2-6387-000CN	<a href="#">Internal assemblies (5 of 5) on page 1634</a>
Photointerrupter, IC	WG8-5935-000CN	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
Pickup motor assembly	RM2-7350-000CN	<a href="#">Internal assemblies (4 of 5) on page 1633</a>
Pickup motor assembly	RM2-7350-000CN	<a href="#">550-sheet paper feeder main body (2 of 2) on page 1640</a>
Power switch (SW601) assembly	RM2-6373-000CN	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
Registration assembly	RM2-6374-000CN	<a href="#">Internal assemblies (4 of 5) on page 1633</a>
Reverse drive assembly	RM2-6389-000CN	<a href="#">Internal assemblies (5 of 5) on page 1634</a>
Roller, feed assembly	RM2-5577-000CN	<a href="#">Internal assemblies (4 of 5) on page 1633</a>
Roller, feed assembly	RM2-5577-000CN	<a href="#">550-sheet paper feeder main body (2 of 2) on page 1640</a>
Roller, paper pickup	RL1-2593-000CN	<a href="#">Internal assemblies (3 of 5) on page 1630</a>

**Table 6-16 Alphabetical parts list (continued)**

Description	Part number	Table and page
Roller, paper pickup assembly	RM2-5576-000CN	<a href="#">Internal assemblies (4 of 5) on page 1633</a>
Roller, paper pickup assembly	RM2-5576-000CN	<a href="#">550-sheet paper feeder main body (2 of 2) on page 1640</a>
Roller, secondary transfer assembly	RM2-6455-000CN	<a href="#">Internal assemblies (5 of 5) on page 1634</a>
Roller, separation assembly	RM2-5881-000CN	<a href="#">Internal assemblies (4 of 5) on page 1633</a>
Roller, separation assembly	RM2-5881-000CN	<a href="#">550-sheet paper feeder main body (2 of 2) on page 1640</a>
Secondary transfer assembly	RM2-6397-000CN	<a href="#">Internal assemblies (5 of 5) on page 1634</a>
Separation pad assembly	RM2-6406-000CN	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
USB connector (walk-up) and cable	5851-7008	<a href="#">Internal assemblies (5 of 5) on page 1634</a>
eMMC 16GB	B5L32-60002	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
eMMC 4GB	3PZ15-67905	<a href="#">Internal assemblies (3 of 5) on page 1630</a>

# Numerical parts list

**Table 6-17 Numerical parts list**

Part number	Description	Table and page
3PZ15-67905	eMMC 4GB	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
3PZ15-67908	Island of Data (IOD)	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
3PZ55-67901	Control panel assembly	<a href="#">Covers (M480/E47528) on page 1624</a>
3PZ55-67902	Cover, top control panel mount	<a href="#">Covers (M480/E47528) on page 1624</a>
3PZ55-67903	CP interconnect board and ground clip kit	<a href="#">Covers (M480/E47528) on page 1624</a>
3PZ55-67904	Control panel ICB chassis mount	<a href="#">Covers (M480/E47528) on page 1624</a>
3PZ55-67980	Fax PCA with plug kit (USA)	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
3PZ55-67981	Fax PCA with plug kit (EURO)	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
3PZ55-67982	Fax PCA with plug kit (BRAZIL)	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
3PZ55-67983	Fax PCA with plug kit (AP)	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
3PZ55-67984	Control panel mount base	<a href="#">Covers (M480/E47528) on page 1624</a>
3PZ95-67903	Formatter (SFP)	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
3PZ95-67904	Formatter (China/India; SFP)	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
3PZ95-67906	Locking Tray Guides (managed printers only)	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
3QA55-67901	Formatter (MFP)	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
3QA55-67902	Formatter (China/India; MFP)	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
3QA55-67903	Cable, flexible flat control panel to frmtr	<a href="#">Covers (M480/E47528) on page 1624</a>
3QA55-67904	Cable, FFC fax to formatter	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
5851-7008	USB connector (walk-up) and cable	<a href="#">Internal assemblies (5 of 5) on page 1634</a>
7121-8684	HP logo jewel	<a href="#">Covers (M455/E45028) on page 1622</a>
7121-8684	HP logo jewel	<a href="#">Covers (M480/E47528) on page 1624</a>

**Table 6-17 Numerical parts list (continued)**

Part number	Description	Table and page
B3Q10-40041	ISA lift slider pin	<a href="#">Document feeder and image scanner on page 1621</a>
B3Q10-60128	ISA lift assembly	<a href="#">Document feeder and image scanner on page 1621</a>
B5L32-60002	eMMC 16GB	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
CF377-40004	Cover, ISA FFCs	<a href="#">Covers (M480/E47528) on page 1624</a>
CF377-40005	Guide, control panel FFC and USB cable	<a href="#">Covers (M480/E47528) on page 1624</a>
CF388-60116	Cable, flexible flat DC controller to frmtr	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
CF404-67901	550-sheet paper feeder	<a href="#">550-sheet paper feeder covers on page 1636</a>
RC4-2203-000CN	Cover, rear (550-sheet paper feeder)	<a href="#">550-sheet paper feeder covers on page 1636</a>
RC4-2224-000CN	Cover, cassette (550-sheet paper feeder)	<a href="#">550-sheet paper feeder covers on page 1636</a>
RC4-4853-000CN	Cover, right (SFP)	<a href="#">Covers (M455/E45028) on page 1622</a>
RC4-4854-000CN	Cover, left (SFP)	<a href="#">Covers (M455/E45028) on page 1622</a>
RC4-5334-000CN	Cover, cassette	<a href="#">Covers (M455/E45028) on page 1622</a>
RC4-5334-000CN	Cover, cassette	<a href="#">Covers (M480/E47528) on page 1624</a>
RC4-6044-000CN	Cover, right (MFP)	<a href="#">Covers (M480/E47528) on page 1624</a>
RC4-6045-000CN	Cover, left (MFP)	<a href="#">Covers (M480/E47528) on page 1624</a>
RK2-0534-000CN	Door open switch (SW7, SW501)	<a href="#">Internal assemblies (5 of 5) on page 1634</a>
RK2-6270-000CN	Fan assembly	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
RK2-6270-000CN	Fan assembly	<a href="#">Internal assemblies (2 of 5) on page 1629</a>
RL1-2593-000CN	Roller, paper pickup	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
RM2-1807-000CN	Cartridge (toner) tray assembly	<a href="#">Internal assemblies (4 of 5) on page 1633</a>
RM2-1823-000CN	Front (cartridge) door assembly (SFP)	<a href="#">Covers (M455/E45028) on page 1622</a>
RM2-1824-000CN	Front (cartridge) door assembly (MFP)	<a href="#">Covers (M480/E47528) on page 1624</a>

**Table 6-17 Numerical parts list (continued)**

<b>Part number</b>	<b>Description</b>	<b>Table and page</b>
RM2-3088-000CN	Cover, top assembly (SFP) (includes control panel and FFC)	<a href="#">Covers (M455/E45028) on page 1622</a>
RM2-3091-000CN	Cover, top assembly (MFP)	<a href="#">Covers (M480/E47528) on page 1624</a>
RM2-5576-000CN	Roller, paper pickup assembly	<a href="#">Internal assemblies (4 of 5) on page 1633</a>
RM2-5576-000CN	Roller, paper pickup assembly	<a href="#">550-sheet paper feeder main body (2 of 2) on page 1640</a>
RM2-5577-000CN	Roller, feed assembly	<a href="#">Internal assemblies (4 of 5) on page 1633</a>
RM2-5577-000CN	Roller, feed assembly	<a href="#">550-sheet paper feeder main body (2 of 2) on page 1640</a>
RM2-5612-000CN	Laser scanner assembly	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
RM2-5881-000CN	Roller, separation assembly	<a href="#">Internal assemblies (4 of 5) on page 1633</a>
RM2-5881-000CN	Roller, separation assembly	<a href="#">550-sheet paper feeder main body (2 of 2) on page 1640</a>
RM2-6366-000CN	Feed guide assembly (rear)	<a href="#">Internal assemblies (4 of 5) on page 1633</a>
RM2-6366-000CN	Feed guide assembly (rear)	<a href="#">550-sheet paper feeder main body (2 of 2) on page 1640</a>
RM2-6368-000CN	Feed guide assembly (front)	<a href="#">Internal assemblies (4 of 5) on page 1633</a>
RM2-6370-000CN	Lifter drive assembly	<a href="#">Internal assemblies (4 of 5) on page 1633</a>
RM2-6372-000CN	Paper pickup assembly	<a href="#">Internal assemblies (4 of 5) on page 1633</a>
RM2-6373-000CN	Power switch (SW601) assembly	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
RM2-6374-000CN	Registration assembly	<a href="#">Internal assemblies (4 of 5) on page 1633</a>
RM2-6377-000CN	Cassette (Tray 2) assembly	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
RM2-6383-000CN	Duplexing door assembly	<a href="#">Covers (M455/E45028) on page 1622</a>
RM2-6383-000CN	Duplexing door assembly	<a href="#">Covers (M480/E47528) on page 1624</a>
RM2-6387-000CN	Paper re-pickup assembly	<a href="#">Internal assemblies (5 of 5) on page 1634</a>
RM2-6389-000CN	Reverse drive assembly	<a href="#">Internal assemblies (5 of 5) on page 1634</a>
RM2-6397-000CN	Secondary transfer assembly	<a href="#">Internal assemblies (5 of 5) on page 1634</a>

**Table 6-17 Numerical parts list (continued)**

Part number	Description	Table and page
RM2-6406-000CN	Separation pad assembly	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
RM2-6454-000CN	Intermediate transfer belt (ITB) assembly	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
RM2-6455-000CN	Roller, secondary transfer assembly	<a href="#">Internal assemblies (5 of 5) on page 1634</a>
RM2-6460-000CN	Fuser assembly (110-127V)	<a href="#">Internal assemblies (5 of 5) on page 1634</a>
RM2-6461-000CN	Fuser assembly (220-240V)	<a href="#">Internal assemblies (5 of 5) on page 1634</a>
RM2-6486-000CN	Cassette assembly, Tray 3 (550-sheet paper feeder)	<a href="#">550-sheet paper feeder main body (2 of 2) on page 1640</a>
RM2-6490-000CN	Paper pickup assembly (550-sheet paper feeder)	<a href="#">550-sheet paper feeder main body (2 of 2) on page 1640</a>
RM2-6493-000CN	Lifter drive assembly (550-sheet paper feeder)	<a href="#">550-sheet paper feeder main body (2 of 2) on page 1640</a>
RM2-6494-000CN	Paper feed assembly (550-sheet paper feeder)	<a href="#">550-sheet paper feeder main body (2 of 2) on page 1640</a>
RM2-7342-000CN	Drum motor (M2)	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
RM2-7344-000CN	Developing motor (M3)	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
RM2-7349-000CN	Assembly, fixing motor	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
RM2-7350-000CN	Pickup motor assembly	<a href="#">Internal assemblies (4 of 5) on page 1633</a>
RM2-7350-000CN	Pickup motor assembly	<a href="#">550-sheet paper feeder main body (2 of 2) on page 1640</a>
RM2-7369-000CN	Driver PCA assembly	<a href="#">Internal assemblies (2 of 5) on page 1629</a>
RM2-7399-000CN	Density detect sensor	<a href="#">Internal assemblies (3 of 5) on page 1630</a>
RM2-7896-000CN	Cassette switch cable assembly	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
RM2-8661-000CN	Cable, flexible flat (DCC to driver PCA)	<a href="#">Internal assemblies (2 of 5) on page 1629</a>
RM2-8662-000CN	Cable, flexible flat scanner	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
RM2-8663-000CN	Cable, flexible flat scanner	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
RM3-7227-000CN	Front door switch cable assembly	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
RM3-7236-000CN	Environment sensor PCB assembly	<a href="#">Internal assemblies (3 of 5) on page 1630</a>

**Table 6-17 Numerical parts list (continued)**

<b>Part number</b>	<b>Description</b>	<b>Table and page</b>
RM3-7245-000CN	Memory PCA	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
RM3-7272-000CN	DC controller	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
RM3-7278-000CN	LV power supply PCA (110-127V)	<a href="#">Internal assemblies (2 of 5) on page 1629</a>
RM3-7279-000CN	LV power supply PCA (220-240V)	<a href="#">Internal assemblies (2 of 5) on page 1629</a>
RU7-8613-000CN	Label, high-temperature caution	<a href="#">Internal assemblies (5 of 5) on page 1634</a>
VS1-7257-007CN	Connector, drawer Tray 3 (550-sheet paper feeder)	<a href="#">550-sheet paper feeder main body (1 of 2) on page 1638</a>
VS1-7258-007CN	Connector, drawer	<a href="#">Internal assemblies (1 of 5) on page 1627</a>
W1A73-60110	ISA assembly scanner/ADF duplex	<a href="#">Document feeder and image scanner on page 1621</a>
W1A77-67903	Document feeder top cover assembly with rollers	<a href="#">Document feeder and image scanner on page 1621</a>
WG8-5935-000CN	Photointerrupter, IC	<a href="#">Internal assemblies (3 of 5) on page 1630</a>



---

# A Certificate of Volatility

View the product certificates of volatility.

## Certificate of Volatility

Review the certificates of volatility for the printers.

Figure A-1 Certificate of Volatility SFP (1 of 2)

Hewlett-Packard Certificate of Volatility				
Model: HP LaserJet M455 (Enterprise) E45028 (Managed)	Part Number: <b>Enterprise</b> M455dn = 3PZ95A		<b>Managed</b> E45028 = 3QA35A	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): DDR3 - DRAM	Size: 1280MB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Operation system and print/scan buffer	Steps to clear memory: When the printer is powered off the memory is erased.
Non-Volatile Memory				
Does the device contain non-volatile memory (Memory whose contents are retained when power is removed)? <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): IOD EEPROM	Size: 32KB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Store customer setting data for backup/restore	Steps to clear memory: There are no steps to clear this data.
Type (Flash, EEPROM, etc): SPI Flash	Size: 8MB	User Modifiable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Function: Contains the boot code and factory product configuration data required for the device to function. User modifications are limited to downloading digitally signed HP firmware images.	Steps to clear memory: There are no steps to clear this data
Mass Storage				
Does the device contain mass storage memory (Hard Disk Drive, Tape Backup)? <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 (HDD, Tape, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
EMMC	4GB	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	OS and user data	Firmware update
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				
Print jobs, HP digitally signed firmware upgrades, 3rd party application loading. USB ports can be disabled.				
Can any data other than scan upload be sent to the USB device)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below				
Diagnostic service logs can be uploaded. Print files can be printed via a USB thumb drive.				
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:				

Figure A-2 Certificate of Volatility SFP (2 of 2)

Other Transmission Capabilities	
Does the device employ any other methods of non-wired access to transmit or receive any data whatsoever (e.g. anything other than standard hard wired TCP/IP, direct USB, or parallel connections)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes please describe below:	
Purpose:	
Frequency:	Effective Radiate Power (ERP):
Modulation:	
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:	

Figure A-3 Certificate of Volatility MFP (1 of 2)

Hewlett-Packard Certificate of Volatility				
Model: HP LaserJet M480 (Enterprise) E47528 (Managed)	Part Number: <b>Enterprise</b> M480f = 3QA55A		<b>Managed</b> E47528f = 3QA75A	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): DDR3 - DRAM	Size: 2048MB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Operation system and print/scan buffer	Steps to clear memory: When the printer is powered off the memory is erased.
Non-Volatile Memory				
Does the device contain non-volatile memory (Memory whose contents are retained when power is removed)? <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): IOD EEPROM	Size: 32KB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Store customer setting data for backup/restore	Steps to clear memory: There are no steps to clear this data.
Type (Flash, EEPROM, etc): SCAN EEPROM	Size: 32KB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Store Scan/Customer settings	Steps to clear memory: There are no steps to clear this data.
Type (Flash, EEPROM, etc): SPI Flash	Size: 8MB	User Modifiable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Function: Contains the boot code and factory product configuration data required for the device to function. User modifications are limited to downloading digitally signed HP firmware images.	Steps to clear memory: There are no steps to clear this data.
Mass Storage				
Does the device contain mass storage memory (Hard Disk Drive, Tape Backup)? <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 (HDD, Tape, etc): EMMC	Size: 16GB	User Modifiable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Function: OS and user data	Steps to clear memory: Firmware update
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				
Print jobs, HP digitally signed firmware upgrades, 3rd party application loading. USB ports can be disabled.				
Can any data other than scan upload be sent to the USB device? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below				
Diagnostic service logs can be uploaded. Print files can be printed via a USB thumb drive.				
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:	

**Figure A-4** Certificate of Volatility MFP (2 of 2)

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:	
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:	



---

# Glossary of terms

## **802.11**

802.11 is a set of standards for wireless local area network (WLAN) communication, developed by the IEEE LAN/MAN Standards Committee (IEEE 802).

## **802.11b/g/n**

802.11b/g/n can share the same hardware and use the 2.4 GHz band. 802.11b supports bandwidth up to 11 Mbps, 802.11n supports bandwidth up to 150 Mbps. 802.11b/g/n devices might occasionally suffer interferences from microwave ovens, cordless telephones, and Bluetooth devices.

## **AC**

An electric current that reverses its direction many times a second at regular intervals. For example, the 110V line current found in a typical US electrical wall receptacle.

## **AC Control Module (PageWide)**

The AC Control Module controls the heating elements in the airflow assembly. Function include: voltage monitoring (ensuring correct operation in a low-quality-power environment), isolation (low voltage heater control signals are isolated from the high voltage AC power for safety), AC switching (power is switched on/off to the heater), and heating element configuration (heating element configuration is changed between series and parallel for temperature predictability).

## **ADF**

An Automatic Document Feeder (ADF) is a device that automatically feeds an original sheet (or multiple sheets) of paper into the image scanner. The document feeder is a component of the integrated scanner assembly (ADF and image scanner).

## **Airflow System (PageWide)**

The airflow system conditions the printed pages to avoid page curling due to the ink on the page. The airflow system functionally consists of a fan and heating elements. The pressurized air is blown on the page through the nozzles that are placed on the paper path of the airflow system between print and eject zone.

## **BOOTP**

Bootstrap Protocol. A network protocol used by a network client to obtain its IP address automatically. This is usually done in the bootstrap process of computers or operating systems running on them. The BOOTP servers assigns an IP address from a pool of addresses to each client. BOOTP enables “diskless workstation” computers to obtain an IP address prior to loading any advanced operating system.

## **CCD**

A Charged Coupled Device (CCD) is the scanner module which enables a scan job. A CCD locking mechanism is used to hold the CCD module to prevent any damage when the printer is moved.

## **CIS**

A Contact Image Sensor (CIS) scanner captures an image using the printer's optical path. Red, green, and blue LEDs sequentially illuminate a small strip of the document (often called a raster line), and the optical system captures each color in a single row of Charged Coupled Device (CCD) sensors that cover the entire page width.

### **Collation**

Collation is a process of printing a multiple-copy job in sets. When collation is selected, the device prints an entire set before printing additional copies.

### **Control Panel**

The control panel is a flat, typically vertical panel or screen where the user can control and/or monitor the printer. The control panel is found on the front of the printer.

### **Coverage**

Coverage is the printing term used for a toner usage measurement on printing. For example, 5% coverage means that an A4 sided paper has about 5% image or text on it. If the paper or original has complicated images or a large amount of text, the coverage will be higher and at the same time, a toner usage will be as much as the coverage.

### **DC**

An electric current flowing in one direction only. Typically a low voltage load current supplied to an electrical assembly.

### **DCC**

The DC controller (DCC) controls the operation of the printer sub-systems and electrical components. The DCC sends out various signals to operate motors, solenoids, and other printer components based on the print command and image data that the host computer sends the formatter.

### **Default**

The value or setting that is in effect when a printer is unboxed, reset, or initialized.

### **DHCP**

Dynamic Host Configuration Protocol (DHCP) is a client-server networking protocol. A DHCP server provides configuration parameters specific to the DHCP client host requesting, generally, information required by the client host to participate on an IP network. The DHCP also provides a mechanism for allocation of IP addresses to client hosts.

### **Digital Send Software**

Digital send software allows a 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 or non-HP circuitry might not work (now or in the future).

### **e-Duplex**

Single-pass electronic duplex (e-Duplex) printer use two separate scan modules to scan the front-side and back-side of an e-duplex copy job page in a single pass through the document feeder.

### **EMC**

EMC is a measure of a device's ability to operate as intended in its shared operating environment while, at the same time, not affecting the ability of other equipment within the same environment to operate as intended.

### **EMI**

EMI is the electromagnetic energy which affects the functioning of an electronic device. Electronic devices (like printers) are a source of EMI. Because it is rare for electronics to operate in isolation, products are generally engineered to function in the presence of some amount of EMI.

### **eMMC**

An embedded Multi-Media Card is a compact memory device consisting of NAND flash memory and a simple storage controller.

### **Emulation**

Emulation is a technique of one machine obtaining the same results as another. An emulator duplicates the functions of one system with a different system, so that the second system behaves like the first system. Emulation focuses on exact reproduction of external behavior. This is different from simulation, which concerns an abstract model of the system being simulated, often considering its internal state.

### **EPS**

Encapsulated PostScript (EPS) is a PostScript (PS) code file which is used for storing font and vector graphic image information.

### **ESD**

An electrostatic discharge (ESD) is a sudden flow of electricity between two electrically charged objects caused by contact, an electrical short, or dielectric breakdown. Discharge of built up static electricity.

### **Ethernet**

Ethernet is a frame-based computer networking technology for local area networks (LANs). It defines wiring and signaling for the physical layer, and frame formats and protocols for the media access control (MAC)/data link layer of the OSI model. Ethernet is mostly standardized as IEEE 802.3. Ethernet has become the most widespread LAN technology in use during the 1990s to present.

### **Ferrite**

A ferrite are used to reduce the amount of radio frequency noise (or interference) in a wire or cable. A ferrite enables proper EMC/EMI performance for regulatory purposes.

### **FFC**

Flat Flexible Cables (FFCs) are designed for Printed Circuit Assembly (PCA) to PCA connections (for example, connecting a fax PCA to the formatter).

**FIH**

A Foreign Interface Harness (FIH) is a port that enables HP multifunction printers (MFPs) to use third-party devices to extend the capabilities of the MFP.

**Firmware**

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

**Flash memory**

Flash memory is non-volatile, meaning it retains stored data even when the power is turned off.

**Flow integrated scanner assembly**

A printer scanner assembly that includes a slide-out external physical keyboard.

**Formatter (LaserJet)**

The formatter controls printer functions like receiving and processes print data, developing and coordinating data placement and timing with the DC controller PCA, storing font and customer configuration information, communicating with the host computer, and monitoring control panel functions and relaying printer status information through the control panel.

**FTP**

FTP stands for File Transfer Protocol. FTP is a protocol designed for transferring files over the Internet. Files stored on an FTP server can be accessed using an FTP client, such as a web browser, FTP software program, or a command line interface.

**Fuser Unit**

The fuser unit is part of a laser printer that adheres the toner onto the printed page. It consists of a heat roller and a pressure roller. After toner is transferred onto the paper, the fuser unit applies heat and pressure to make sure that the toner stays on the paper permanently (which is why paper is warm when it comes out of a laser printer).

**Gateway**

A connection between computer networks, or between a computer network and a telephone line. A gateway is used to connect two different computer networks, especially a connection to the Internet.

**Grayscale**

Shades of gray that represent light and dark portions of a color image printed in monochrome. Colors are represented by a range of gray shades from white to black.

**Halftone**

Halftone is a way of reproducing a photograph or other image in which the various tones of gray or color are produced by variously sized dots of ink or toner. Halftone simulates grayscale by varying the number of dots. Highly colored areas consist of a large number of dots, while lighter areas consist of a smaller number of dots.

**HDD**

A Hard-Disk Drive (HDD) (commonly referred to as a hard drive or hard disk) is a non-volatile storage device which stores digitally-encoded data on rapidly rotating platters with magnetic surfaces.

**IEEE**

The Institute of Electrical and Electronics Engineers (IEEE) is an international non-profit, professional organization for the advancement of technology related to electricity.

**Image scanner**

The image scanner (or Sub Scanner Assembly) contains the components to digitally scan an original source document. The image scanner is a component of the integrated scanner assembly (ADF and image scanner).

**IP address**

An Internet Protocol (IP) address is a unique number that a device uses in order to identify and communicate with other devices on a network utilizing the Internet Protocol standard.

**IPM**

The Images Per Minute (IPM) is a method of measuring the speed of a printer. An IPM rate indicates the number of single-sided sheets a printer can complete in one minute.

**IPP**

The Internet Printing Protocol (IPP) defines a standard protocol for printing and managing print jobs, media size, resolution, etc. IPP can be used locally, or over the internet to reach hundreds of printers. IPP also supports access control, authentication, and encryption, making it a capable and secure printing solution.

**ISA**

The Integrated Scanner Assembly (ISA) includes the document feeder and image scanner.

**ISO**

The International Organization for Standardization (ISO) is an international standard-setting body composed of representatives from national standards bodies. 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 functionality in a single physical body. For example, an MFP printer can scan, digitally send, fax, copy, and print.

### **MHV**

Miniature High Voltage (MHV) is designed for high voltage applications of BNC connectors (DC voltage between 500 V and 5 kV).

### **Modem**

A device that modulates a carrier signal to encode digital information, and also demodulates such a carrier signal to decode transmitted information.

### **MPCA (PageWide)**

The MPCA integrates both formatter (LaserJet) and engine control electronics (DC controller) into a single assembly. The Main PCA (MPCA) controls printer functions like receiving and processes print data, developing and coordinating data placement, storing font and customer configuration information, communicating with the host computer, and monitoring control panel functions and relaying printer status information through the control panel.

### **NAND**

NAND is not an acronym (the term is short for **NOT AND** a Boolean operator and logic gate). NAND (flash) memory is non-volatile, meaning it retains stored data even when the power is turned off.

### **NVRAM**

Nonvolatile random access memory (NVRAM) is used to store I/O and information about the print environment configuration (stored data even when the power is turned off).

### **OPC**

Organic Photo Conductor (OPC) is a mechanism that makes a virtual image for print using a laser beam emitted from a laser printer. It is usually green or rust colored and has a cylinder shape. An imaging unit containing a drum slowly wears the drum surface during its usage in the printer, and it should be replaced appropriately due to wear from contact with the cartridge development brush, cleaning mechanism, and paper.

### **Originals**

The first example of something, such as a document, photograph, or text which is copied, reproduced, or translated to produce additional copies. The original itself is not copied or derived from something else.

### **PCA**

Printed Circuit Assembly (PCA). Once the printed circuit board (PCB) is complete, electronic components must be assembled to form a functional printed circuit assembly or PCA.

### **PCL**

Printer Command Language (PCL) is a Page Description Language (PDL) developed by HP as a printer protocol. PCL has become an industry standard. Originally developed for early Inkjet printers, PCL has been released in varying levels for thermal, dot matrix printers and laser printers.

**PDF**

Portable Document Format (PDF) is a proprietary file format developed by Adobe Systems. A PDF represents two dimension documents in a device independent and resolution independent format.

**PJL**

Printer job language (PJL) is an integral part of printer configuration, in addition to the standard PCL and PostScript (PS). With standard cabling, the printer can use PJL to perform a variety of functions like dynamic I/O switching, context-sensitive switching, and isolation of print environment settings from one print job to the next.

**PML**

Printer management language (PML) allows remote configuration of the printer and status read-back from the printer through the I/O ports.

**PostScript (PS)**

PostScript (PS) is a Page Description Language (PDL) and programming language used primarily in electronic and desktop publishing. PostScript is run in an interpreter to generate an image.

**PPM**

Pages Per Minute (PPM) is a method of measurement for determining how fast a printer works, meaning the number of pages a printer can produce in one minute.

**Print Media**

Media like paper, envelopes, labels, and transparencies which can be used in a printer, scanner, fax, or copier.

**Printer Driver**

A program used to send commands and transfer data from the computer to the printer.

**Printhead (PageWide)**

The printhead converts the digital firing instructions from the printer electronics into properly formed and timed microscopic drops of the four ink colors.

**Printhead Wiper (PageWide)**

The printhead wiper system keeps the printhead nozzles firing correctly throughout the life of the printer as it performs the wiping and capping functions. The wiping function cleans the nozzles of ink residue and particulates. The capping function keeps the nozzles moist during storage and when the printer is idle.

**Protocol**

A convention or standard that controls or enables the connection, communication, and data transfer between two computing endpoints.

**RAM**

Random Access Memory (RAM) is the printer memory device where the data in current use is kept so it can be quickly retrieved by the device's processor. This memory is an important factor in avoiding errors and printing documents properly. Printer memory is used to store and process print jobs as they are sent to the printer from a computer. After printing, the job is cleared from the memory to make room for more print jobs. Printer memory is directly linked to two print characteristics: speed and print quality. More memory allows you to print faster and print larger, high-quality graphics.

**Resolution**

The sharpness of an image, measured in Dots Per Inch (DPI). The higher the DPI, the greater the resolution.

**SCB**

The Scanner Control Board (SCB) controls the functions of the image scanner components in the Sub Scanner Assembly (SSA).

### **Service fluid and aerosol management systems (PageWide)**

There are two types of service fluid, shipping fluid and ink. The service fluid management system is contained entirely within the duplex module. Service fluid is discharged as droplets from the printhead, and then collected in a container inside the duplex module. Some of the droplets are called aerosol because they are lighter than air. Aerosol can float inside the printer and collect on the lens of optical sensors, producing false failures. The aerosol management system transports the aerosol and collects it in a safe place. Aerosol management consists of an aerosol fan, mounted on the rear wall of the air flow assembly, which creates air flow that pulls the aerosol through the holes in the platen and into the aerosol filter inside the duplex module.

### **SFP**

A single-function printer only processes print jobs sent from a host computer or from an USB port on the printer.

### **SMB**

Server Message Block (SMB) is a network protocol mainly applied to share files, printers, serial ports, and miscellaneous communications between nodes on a network. SMB also provides an authenticated inter-process communication mechanism.

### **SMTP**

Simple Mail Transfer Protocol (SMTP) is the standard for email transmissions across the internet. SMTP is a relatively simple, text-based protocol, where one or more recipient of a message are specified and the message text is transferred. It is a client server protocol where the client transmits an email message to the server.

### **SODIMM**

Small outline dual in-line memory module (SODIMM) is a thin profile memory storage device (a smaller alternative to a standard DIMM device).

### **SSA**

The Sub-Scanner Assembly is the image scanner component of the Integrated Scanner Assembly (ISA; which includes the document feeder and the image scanner).

### **Subnet Mask**

The subnet mask is used in conjunction with the network address to determine which part of the address is the network address and which part is the host address.

### **TCP/IP**

The Transmission Control Protocol (TCP) and the Internet Protocol (IP) are the set of communications protocols that implement the protocol stack on which the internet and most commercial networks run.

### **TIFF**

Tagged Image File Format (TIFF) is a variable-resolution bit mapped image format. TIFF describes image data that typically come from scanners. TIFF images use tags, keywords defining the characteristics of the image that is included in the file. This flexible and platform-independent format can be used for pictures that have been made by various image processing applications.

### **Toner Cartridge**

A bottle or container that holds toner, which is used in a machine like a printer. Toner is a powder used in laser printers and photocopiers. The toner forms the text and images on printed paper. Toner can be fused by a combination of heat/pressure from the fuser, causing it to bind the fibers in the paper.

### **TPM**

The HP Trusted Platform Module (TPM) is a security accessory for printers. The TPM strengthens protection of encrypted credentials and data stored on your printer. Certificate private keys are both generated by and protected by the TPM. Once installed, the printer and the TPM are sealed and the printer owns the TPM. The TPM may not be moved to another device without losing its ownership from the original printer. Installing a TPM accessory might necessitate a firmware upgrade. The TPM prevents the printer from starting if the TPM is missing. If the TPM is removed from the printer, a control-panel error message appears indicating that the TPM is missing.

### **TWAIN**

An industry standard for scanners and software. By using a TWAIN compliant scanner with TWAIN-compliant software, a scan can be initiated from the program. TWAIN is an image capture API for Microsoft Windows and Apple Macintosh operating systems.

### **URL**

Uniform Resource Locator (URL) is the global address of documents and resources on the internet. The first part of the address indicates what protocol to use. The second part specifies the IP address or the domain name where the resource is located.

### **USB**

Universal Serial Bus (USB) is a standard that was developed by the USB Implementers Forum, Inc., to connect computers and peripherals. Unlike the parallel port, USB is designed to concurrently connect a single computer USB port to multiple peripherals.

### **Walk-up USB**

Some printers support direct printing from a USB flash drive (the walk-up USB port is usually near the control panel).

### **Watermark**

A watermark is a recognizable image or pattern in paper that appears lighter when viewed by transmitted light. Watermarks were first introduced in Bologna, Italy in 1282. Watermarks have been used by paper makers to identify their product, and also on postage stamps, currency, and other government documents to discourage counterfeiting.

### **XPS**

XML Paper Specification (XPS) is a specification for a Page Description Language (PDL) and a new document format developed by Microsoft. This has benefits for portable document and electronic documents. It is an XML-based specification based on a new print path and vector-based, device-independent document format.

### **ZIF Connector**

Zero insertion force (ZIF) connectors use a mechanical locking method to secure Flat Flexible Cables (FFCs) to a Printed Circuit Assembly (PCA).





# Index

## Symbols/Numerics

- 10/100/1000 functions
  - theory of operations..... 53
- 550-sheet paper feeder
  - main body 1 of 2..... 1637
  - main body 2 of 2..... 1639
- 550-sheet paper feeder covers
  - whole unit replacement..... 1636
- 550-sheet trays
  - jams MFP.....247
  - jams SFP..... 230

## A

- accessories..... 309, 1616
- accessories, input
  - tray 3.....81
- accessories, toner part numbers.. 309, 1616
- acoustic specifications..... 15
- assemblies 550-sheet paper feeder
  - remove and replace..... 1428
- assemblies base printer, remove and replace.....464
- assembly locations..... 314
- authorized service providers, parts..... 308, 1615
- auto on / auto off mode
  - setup and operation..... 50
- automatic cleaning page intervals
  - set up..... 25

## B

- backup error
  - 32.WX.YZ error.....229
  - reset error.....229
  - restore error..... 229
- Backup/Restore (Maintenance) menu
  - control-panel menu..... 193
- base printer
  - configuration.....5
  - information.....2
  - specifications..... 8

- basic printer operation.....48
- bin, output
  - locating MFP.....4, 316
  - locating SFP..... 2, 314
- blank pages
  - troubleshooting..... 301
- Bonjour
  - identifying..... 111
- browser requirements
  - HP Embedded Web Server..... 111

## C

- cables
  - USB, troubleshooting.....301
- Calibrate/Cleaning menu, control panel..... 192
- Calibrate/Cleaning menu, control-panel menu..... 193
- calibration, color
  - theory.....58, 71, 72
- cartridge
  - developing unit engagement and disengagement..... 58
  - life detection..... 58, 69
  - memory chip.....58, 69
  - presence detection..... 58, 69
  - toner level detection.....58, 69
- cartridges, toner part numbers.....309, 1616
- caution.....iv
- certificate of volatility..... 1651
- Channel partners
  - WISE..... v, 85, 307, 313, 1614
- checklists
  - pre-troubleshooting..... 86
- circuit base printer, diagrams..... 155
- circuit diagrams
  - high-voltage power supply...54, 58
- cleaning
  - remove tray 1 rollers and separation pad.....26

- tray 1 rollers and separation pad.... 25
- tray 2 rollers and separation pad.... 29
- tray 3 rollers and separation pad.... 40
- cleaning page.....192, 193
  - automatic..... 25
  - print.....24, 281
- clutches
  - theory of operation..... 55
- cold rest
  - reset.....203
- color self calibration
  - theory..... 58, 71, 72
- component diagnostics
  - solve problems..... 142
- components
  - DC controller..... 54, 55
  - engine-control unit.....54
  - intermediate transfer belt (ITB). 58, 71
  - pickup, feed, and delivery..... 73
  - toner cartridge..... 58
- configuration
  - base printer..... 5
  - printer.....1
- configuration page
  - determine installed firmware.....90
  - find information..... 156
  - solve problems..... 156
- configurations, M455/E45028.....5
- configurations, M480/E47528.....6
- connectivity and performance
  - troubleshooting..... 300
- connector error
  - 65.WX.YZ error.....230
- connector locations
  - external plug and port diagrams.... 149
  - printed circuit assembly diagrams.. 145
- control panel..... 52



failure detection		
laser/scanner.....	58, 59	
motors.....	54, 56	
faint copies		
copy-quality problems.....	298	
fan error		
58.WX.YZ error.....	229	
fans		
DC controller.....	54, 57	
exhaust.....	54, 57	
intake.....	54, 57	
theory of operation.....	55	
Fax (Settings) menu (MFP)		
control-panel menu.....	176	
fax functions		
theory of operations.....	53	
fax problems		
get help from WISE.....	300	
fax settings		
HP Embedded Web Server.....	111, 112, 117	
firmware		
determine the installed version..	90	
theory of operations.....	53	
firmware communication error		
49.WX.YZ error.....	229	
firmware install error		
99.WX.YZ error.....	230	
hard disk error.....	230	
remote firmware upgrade error.....	230	
firmware locations		
active and repository.....	205	
firmware upgrade		
firmware version determine.....	90	
firmware upgrade)		
embedded web server.....	89	
USB flash drive, control panel....	89	
USB flash drive, pre-boot menu.	89	
firmware, upgrade		
downloading.....	89	
firmware, version determine		
find information.....	90	
firmware, version determining.....	89	
flash memory		
theory of operations.....	53	
flatbed		
scanning and image capture MFP		
only.....	48	
flowcharts		
troubleshooting.....	86, 88	
format disk		
solve problems.....	205	
formatter		
locating MFP.....	4, 317	
locating SFP.....	3, 315	
formatter control system.....	50	
fuser		
jams.....	243, 264, 266	
fuser error		
41.WX.YZ error.....	229	
laser scanner error.....	229	
paper path error.....	229	
fuser error (LaserJet)		
50.WX.YZ error.....	229	
fusing		
image formation.....	66	
fusing process.....	58, 59	
<b>G</b>		
General (Settings) menu		
control-panel menu.....	162	
general configuration		
HP Embedded Web Server.....	111, 112, 114	
glossary		
terms and definitions.....	1657	
<b>H</b>		
hard disk partition error		
98.WX.YZ error.....	230	
high-voltage power supply (HVPS)		
operations.....	54, 58	
HP Embedded Web Server		
copy settings.....	111, 112, 115	
digital send settings	111, 112, 115	
fax settings.....	111, 112, 117	
network settings.....	111, 112, 119	
print settings.....	111, 112, 115	
scan settings.....	111, 112, 115	
security settings.....	111, 112, 118	
supplies.....	117	
HP Embedded Web Server		
general configuration.....	111, 112, 114	
HP Web Services.....	111, 112, 119	
information pages.....	111-113	
other links list.....	111, 112, 115	
troubleshooting tools.....	111, 112, 117	
HP Embedded Web Server (EWS)		
features.....	111	
network connection.....	111	
HP internal users		
WISE.....	v, 85, 307, 313, 1614	
HP Web Services		
enabling.....	111, 112, 119	
HVPS (high-voltage power supply)		
operations.....	54, 58	
<b>I</b>		
I/O functions		
theory of operations.....	53	
image capture system		
scanning MFP only.....	48	
image defects, repetitive ruler.....	275	
image formation development		
theory of operation.....	64	
image formation drum cleaning		
theory of operation.....	67	
image formation fusing		
theory of operation.....	66	
image formation laser-beam		
exposure		
theory of operation.....	64	
image formation primary charging		
theory of operation.....	63	
image formation primary transfer		
theory of operation.....	65	
image formation secondary transfer		
theory of operation.....	65	
image formation separation		
theory of operation.....	66	
image quality		
check toner-cartridge status....	280	
tray 1 rollers and separation pad,		
clean.....	25	
tray 2 rollers and separation pad,		
clean.....	29	
tray 3 rollers and separation pad,		
clean.....	40	
image-formation process		
development process.....	58, 59	
drum cleaning.....	58, 59	
fusing process.....	58, 59	
laser-beam exposure.....	58, 59	
primary charging.....	58, 59	
primary transfer process.....	58, 59	
secondary transfer process..	58, 59	
separation process.....	58, 59	
image-information system.....	58	
image-quality troubleshooting.....	274	
individual component test (not		
available for this printer)		
solve problems.....	144	
information		
document feeder and scanner.....	1	
input devices.....	16	
printer.....	1	
printer base.....	2	
information pages		
configuration page.....	156	
HP Embedded Web Server.....	111-113	

- Jetdirect page..... 156
- initial rotation period..... 48, 49
- input accessory error
  - 67.WX.YZ error..... 230
- input devices
  - information..... 16
  - remove and replace, 550-sheet paper feeder..... 1428
- input/output error
  - 40.WX.YZ error..... 229
- input/output functions
  - theory of operations..... 53
- installation
  - printer..... 17
- installation, base printer..... 20
- installation, document feeder / scanner..... 17
- installation, input devices..... 39
- intake fans..... 54, 57
- interface ports
  - locating MFP..... 4, 317
  - locating SFP..... 3, 315
- interlocks
  - defeating..... 211
- intermediate transfer belt (ITB)
  - components..... 58, 71
  - operations..... 58, 71
- internal assemblies (1 of 5), parts..... 1626
- internal assemblies (2 of 5), parts..... 1628
- internal assemblies (3 of 5), parts..... 1630
- internal assemblies (4 of 5), parts..... 1632
- internal assemblies (5 of 5), parts..... 1634
- internal assemblies 550-sheet paper feeder..... 1428
- internal assemblies base printer... 464
- internal diagnostics error
  - 90.WX.YZ error..... 230
  - video display error..... 230
- internal parts 550-sheet paper feeder remove and replace..... 1428
- internal parts base printer, remove and replace..... 464
- internal test and information pages solve problems..... 156
- Internet Explorer, versions supported HP Embedded Web Server..... 111
- ITB (intermediate transfer belt) operation..... 58, 71

## J

- jam detection
  - tray 3..... 81, 84
- jam error (LaserJet)
  - 13.WX.YZ error..... 228
- jam error (PageWide)
  - 13.WX.YZ error..... 228
- jams
  - 550-sheet trays MFP..... 247
  - 550-sheet trays SFP..... 230
  - auto-navigation..... 231, 248
  - auto-navigation MFP..... 247
  - auto-navigation SFP..... 230
  - causes of..... 231, 248
  - causes of MFP..... 247
  - causes of SFP..... 230
  - document feeder..... 249
  - duplexer..... 245, 267
  - duplexer MFP..... 247
  - duplexer SFP..... 230
  - fuser..... 243, 264, 266
  - locations..... 230, 247
  - locations MFP..... 247
  - locations SFP..... 230
  - output bin..... 246, 269
  - output bin MFP..... 247
  - output bin SFP..... 230
  - rear door..... 240, 261
  - Tray 1..... 234, 255
  - Tray 1 MFP..... 247
  - Tray 1 SFP..... 230
  - Tray 2..... 237, 258
  - Tray 2 MFP..... 247
  - Tray 2 SFP..... 230
  - tray 3..... 81, 84
  - Tray 3..... 232, 253
- Jetdirect page solve problems..... 156
- JetIntelligence
  - toner cartridge..... 69
- job accounting error (firmware)
  - 48.WX.YZ error..... 229
- job management error (firmware).. 229
- job pipeline error (firmware)..... 229
- job parser error (firmware)
  - 47.WX.YZ error..... 229
- printer calibration error..... 229

## K

- keyboard..... 52
- keypad
  - locating SFP..... 2, 314

## L

- laser scanner error (LaserJet)
  - 51.WX.YZ error..... 229
  - 52.WX.YZ error..... 229
- laser-beam exposure..... 58, 59
- image formation..... 64
- laser/scanner
  - failure detection..... 58, 59
  - operations..... 58
- last rotation period..... 48, 49
- latent image formation..... 58, 59
- life detection
  - toner cartridge..... 69
- light copies
  - copy-quality problems..... 298
- lines, bands, streaks
  - copy-quality problems..... 293
- local area network (LAN)
  - locating MFP..... 4, 317

## M

- maintenance
  - printer..... 17
- maintenance, base printer..... 20
- maintenance, document feeder / scanner..... 17
- maintenance, input devices..... 39
- major component diagrams
  - locations..... 149
- major component locations
  - diagrams..... 149
- Manage Supplies (Settings) menu
  - control-panel menu..... 185
- manual sensor test, tray/bin (not available for this printer)
  - solve problems..... 144
- manual sensor tests (not available for this printer)
  - solve problem..... 144
- memory
  - toner cartridge..... 58, 69
- Memory Enhancement technology
  - theory of operations..... 53
- Memory Enhancement technology (MET)..... 50
- memory error
  - 82.WX.YZ error..... 230
  - EMMC error..... 230
  - hard disk error..... 230
- memory functions
  - theory of operations..... 53
- memory, E45028
  - included..... 9

memory, E47528		Bluetooth error.....	230	OXPd/Web kit error	
included.....	11	external I/O card error.....	230	45.WX.YZ error.....	229
memory, M455		internal EIO error.....	230	<b>P</b>	
included.....	8	wireless error.....	230	page error	
memory, M480		Netscape Navigator, versions		21.WX.YZ error.....	229
included.....	10	supported		pages	
menu, control panel		HP Embedded Web Server.....	111	blank.....	301
Backup/Restore (Maintenance)		network port		not printing.....	301
menu.....	193	locating SFP.....	3, 315	printing slowly.....	301
Backup/Restore menu.....	192	network settings		pages per minute, E45028.....	9
Calibrate/Cleaning menu.....	192, 193	HP Embedded Web Server.....	111, 112, 119	pages per minute, E47528.....	11
Copy/Print (Settings) menu (MFP)...	121	Networking (Settings) menu		pages per minute, M455.....	8
.....	121	control-panel menu.....	188	pages per minute, M480.....	10
Fax (Settings) menu (MFP).....	176	networks, E45028		panels, external	
General (Settings) menu.....	162	supported.....	9	remove and replace.....	347
Manage Supplies (Settings) menu).	185	networks, E47528		paper	
.....	185	supported.....	11	jams.....	231, 248
Networking (Settings) menu....	188	networks, M455		jams MFP.....	247
Print (Settings) menu (SFP).....	121	supported.....	8	jams SFP.....	230
Reports menu.....	161	networks, M480		selecting.....	282
Scan/Digital Send (Settings) menu		supported.....	10	paper feeder, 550-sheet	
(MFP).....	168	note.....	iv	main body 1 of 2.....	1637
Service (Maintenance) menu....	195	NVRAM		main body 2 of 2.....	1639
Service menu.....	192	theory of operations.....	53	whole unit replacement part..	1636
Settings menu.....	162	<b>O</b>		paper handling	
Supplies menu.....	191	on/off button		solve problems.....	230
Support Tools menu.....	192	locating MFP.....	4, 316	paper handling error (LaserJet)	
Trays menu.....	192	locating SFP.....	2, 314	56.WX.YZ error.....	229
Troubleshooting (Maintenance)		operating-environment range		paper jams	
menu.....	195	printer.....	15	550-sheet trays MFP.....	247
USB Firmware Upgrade		operation		550-sheet trays SFP.....	230
(Maintenance) menu.....	195	Sleep delay.....	50	document feeder.....	249
USB Firmware Upgrade menu..	192	Sleep mode.....	50	duplexer.....	245, 267
menus control panel, control panel		operation sequence.....	48, 49	duplexer MFP.....	247
Calibrate/Cleaning).....	192	operations		duplexer SFP.....	230
menus, control panel		laser/scanner.....	58	fuser.....	243, 264, 266
Calibrate/Cleaning.....	193	toner cartridge memory.....	58, 69	locations.....	230, 247
motor control		orderable parts.....	309, 1615	locations MFP.....	247
tray 3.....	81, 82	other functions, Tray 3		locations SFP.....	230
motor error (LaserJet)		theory of operation.....	83	output bin.....	246, 269
59.WX.YZ error.....	229	other links list		output bin MFP.....	247
motors		HP Embedded Web Server.....	111, 112, 115	output bin SFP.....	230
DC controller.....	54, 56	output accessory error		rear door.....	240, 261
failure detection.....	54, 56	66.WX.YZ error.....	230	Tray 1.....	234, 255
pickup, feed, and delivery system...	73, 75	output bin		Tray 1 MFP.....	247
.....	73, 75	clear jams.....	246, 269	Tray 1 SFP.....	230
stepping.....	54, 56	clear jams MFP.....	247	Tray 2.....	237, 258
theory of operation.....	55	clear jams SFP.....	230	Tray 2 MFP.....	247
movement of paper through printer		locating MFP.....	4, 316	Tray 2 SFP.....	230
<i>See</i> pickup, feed, and delivery		locating SFP.....	2, 314	Tray 3.....	232, 253
<b>N</b>				paper movement	
Near Field Communication error				operation.....	73
81.WX.YZ error.....	230				

paper path		printer management language (PML)..	50
printer.....	73	printer memory error	
paper path sensors test (not available		20.WX.YZ error.....	229
for this printer)		printer resets	
solve problems.....	144	solve problems.....	203
paper path test		printer settings	
solve problems.....	142	copy-quality problems.....	297
paper pickup		printer, base	
tray 3.....	81	configuration.....	5
part numbers		information.....	2
customer self-repair parts.....	311,	specifications.....	8
1618		printing	
partial clean (disk)		period in operation sequence... 48,	
solve problems.....	205	49	
parts.....	308, 1615	troubleshooting.....	301
550-sheet paper feeder covers.....		Process Cleaning Page.....	192, 193
.....	1636	product number	
550-sheet paper feeder main		locating SFP.....	3, 315
body (1 of 2).....	1637	location MFP.....	4, 317
550-sheet paper feeder main			
body (2 of 2).....	1639	<b>R</b>	
covers MFP.....	1624	RAM	
covers SFP.....	1622	theory of operations.....	53
document feeder and scanner		real-time clock error	
whole units.....	1621	11.WX.YZ error.....	228
use parts lists and diagrams..	1620	rear door	
parts and diagrams, using.....	1620	jams.....	240, 261
parts internal 550-sheet paper feeder		locating MFP.....	4, 317
remove and replace.....	1428	removal and replacement.....	307
parts internal base printer, remove		remove	
and replace.....	464	tray 1 rollers and separation pad,	
parts list and diagrams, how to use....		clean.....	26
.....	1620	remove and replace	
parts, internal assemblies (1 of 5).....	1626	550-sheet paper feeder, internal	
.....	1628	parts and assemblies.....	1428
parts, internal assemblies (2 of 5).....	1628	external panels, covers, and doors.	
.....	1630	.....	347
parts, internal assemblies (3 of 5).....	1630	remove and replace parts	
.....	1632	document feeder / scanner.....	326
parts, internal assemblies (4 of 5).....	1632	remove and replace, internal parts	
.....	1634	and assemblies base printer....	464
parts, internal assemblies (5 of 5).....	1634	repetitive image defect ruler.....	275
parts, order by authorized service		replacement parts	
providers.....	308, 1615	customer self-repair parts.....	311,
parts, orderable.....	309, 1615	1618	
parts, ordering.....	308, 1615	Reports menu	
performance and connectivity		control-panel menu.....	161
troubleshooting.....	300	resets	
periods of the operation sequence.48,		printer.....	203
49		revision history.....	iii
personal identification number (PIN)			
service menu.....	199		
pickup and feed functions, other			
tray 3.....	81		
pickup, feed, and delivery			
components.....	73		
overview.....	73		
PJL (printer job language).....	50, 52		
PML (printer management language)..			
.....	50		
ports			
locating MFP.....	4, 317		
power			
consumption.....	15		
power connection			
locating MFP.....	4, 317		
locating SFP.....	3, 315		
power management			
theory of operation.....	51		
power switch			
locating MFP.....	4, 316		
locating SFP.....	2, 314		
pre-boot menu options.....	94		
pre-troubleshooting checklist.....	86		
primary charging			
image formation.....	63		
primary charging process.....	58, 59		
Print (Settings) menu (SFP)			
control-panel menu.....	121		
print a cleaning page.....	24, 281		
print bar error (PageWide)			
62.WX.YZ error.....	230		
print settings			
HP Embedded Web Server.....	111,		
112, 115			
print-quality troubleshooting.....	275		
print/stop test			
solve problems.....	141, 143		
printed circuit assembly diagrams			
connector locations.....	145		
printer			
information, configuration, and			
specifications.....	1		
installation and maintenance....	17		
operating-environment range....	15		
resets.....	203		
space requirements.....	15		
printer information, configuration,			
and specifications			
document feeder and scanner			
specifications.....	2		
document feeder and scanner			
views.....	1		
printer installation and maintenance			
base printer.....	20		
document feeder / scanner.....	17		
input devices.....	39		
printer job language (PJL).....	50, 52		

## S

- scan or copy quality improvement
  - copy-quality problems..... 297
- scan settings
  - HP Embedded Web Server..... 111, 112, 115
- Scan/Digital Send (Settings) menu (MFP)
  - control-panel menu..... 168
- scanner
  - remove and replace parts..... 326
- scanner and document feeder
  - information..... 1
  - specifications..... 2
- scanner error
  - 30.WX.YZ error..... 229
- scanner, image
  - whole unit replacement part.. 1621
- scanner/document feeder
  - theory of operations..... 47
- scanning
  - image capture MFP only..... 48
- seal, toner cartridge
  - theory of operation..... 68
- secondary transfer
  - image formation..... 65
- secondary transfer processes.... 58, 59
- security
  - dynamic security ..... 58, 70
- security error
  - 33.WX.YZ error..... 229
- security settings
  - HP Embedded Web Server..... 111, 112, 118
- sensor error
  - 54.WX.YZ error..... 229
  - 58.WX.YZ error..... 229
- sensors
  - pickup, feed, and delivery system... .. 73, 74
  - theory of operation..... 55
- sensors and switches diagrams
  - 550-sheet paper feeder..... 144
  - base printer..... 144
- separation
  - image formation..... 66
- separation process..... 58, 59
- serial number
  - locating MFP..... 4, 317
  - locating SFP..... 3, 315
- Service (Maintenance) menu
  - control-panel menu..... 195
- service and support
  - WISE..... v, 85, 307, 313, 1614
- service ID
  - restore..... 203
- service menu
  - personal identification number (PIN)..... 199
  - solve problems..... 199
- Settings (Copy/Print, MFP) menu
  - control-panel menu..... 121
- Settings (Fax) menu (MFP)
  - control-panel menu..... 176
- Settings (General) menu
  - control-panel menu..... 162
- Settings (Manage Supplies) menu
  - control-panel menu..... 185
- Settings (Networking) menu
  - control-panel menu..... 188
- Settings (Print, SFP) menu
  - control-panel menu..... 121
- Settings (Scan/Digital Send) menu (MFP)
  - control-panel menu..... 168
- Settings menu
  - control-panel menu..... 162
- sleep delay
  - operation..... 50
- sleep mode
  - operation..... 50
- sleep settings..... 50
- solenoids
  - pickup, feed, and delivery system... .. 73, 75
  - theory of operation..... 55
- solve connectivity problems..... 303
- solve performance problems..... 300
  - factors affecting print
    - performance..... 301
    - print speeds..... 302
    - printer does not print..... 302
    - printer prints slowly..... 303
- solve problems
  - circuit diagrams..... 155
  - configuration page..... 156
  - control panel..... 213
  - control panel messages..... 225
  - copy-quality troubleshooting... 291
  - CPMD..... 225
  - defeating interlocks..... 139, 212
  - diagrams, block..... 144
  - disable cartridge check (not available for this printer).... 141
  - engine test..... 94, 211
  - external plug and port location
    - diagrams..... 149
  - firmware upgrade..... 89
  - firmware, determine version..... 90
- format disk and partial clean
  - functions..... 205
- image-quality troubleshooting 274
- individual component diagnostics.. .. 142
- individual component test (not available for this printer).... 144
- internal test and information
  - pages..... 156
- LED diagnostics..... 140
- major component locations
  - diagrams..... 149
- manual sensor test (not available for this printer)..... 144
- output is curled or wrinkled.... 230, 271
- paper does not feed automatically. .... 230, 273
- paper does not feed from Tray 2-X ..... 230, 271
- paper handling..... 230
- paper path sensors test (not available for this printer).... 144
- paper path test..... 142
- performance and connectivity
  - troubleshooting..... 300
- print-quality troubleshooting... 275
- print/stop test..... 141, 143
- printed circuit assembly connector
  - location diagrams..... 145
- printer does not pick up paper. 230
- printer does not pick up paper or misfeeds..... 230
- printer feeds incorrect page size.... .. 230, 270
- printer picks up multiple sheets of paper..... 230
- printer pulls from incorrect tray..... .. 230, 270
- printer resets..... 203
- printer will not duplex or duplexes incorrectly..... 230, 271
- sensors and switches diagrams..... .. 144
- service menu..... 199
- system diagnostics, MFP control panel..... 213
- timing chart diagrams..... 154
- tray/bin manual sensor test (not available for this printer).... 144
- troubleshooting tools..... 94
- solving
  - direct-connect problems..... 303
- space requirements
  - printer..... 15

specifications		
base printer.....	8	
document feeder and scanner.....	2	
electrical and acoustic.....	15	
printer.....	1	
specifications, document feeder and scanner		
printer information, configuration, and specifications.....	2	
standby period.....	48, 49	
stepping motors.....	54, 56	
supplies.....	309, 1616	
HP Embedded Web Server.....	117	
supplies error (LaserJet)		
10.WX.YZ error.....	228	
supplies error (PageWide)		
17.WX.YZ error.....	228	
Supplies menu		
control-panel menu.....	191	
Support Tools menu		
control-panel menu.....	192	
switches		
pickup, feed, and delivery system.....	73, 74	
theory of operation.....	55	
system error (LaserJet)		
62.WX.YZ error.....	229	
system requirements		
HP Embedded Web Server.....	111	
<b>T</b>		
terms and definitions		
glossary.....	1657	
tests		
disable cartridge check.....	211	
engine.....	211	
theory of operation.....	47	
clutches.....	55	
DC controller.....	55	
engagement and disengagement control, developing unit.....	70	
fans.....	55	
image formation development..	64	
image formation drum cleaning..	67	
image formation fusing.....	66	
image formation laser-beam exposure.....	64	
image formation primary charging.....	63	
image formation primary transfer..	65	
image formation secondary transfer.....	65	
image formation separation.....	66	
JetIntelligence, toner cartridge..	69	
life detection, toner cartridge.....	69	
motors.....	55	
scanning and image capture.....	48	
seal, toner cartridge.....	68	
sensors.....	55	
solenoids.....	55	
switches.....	55	
toner cartridges.....	67	
Tray 3 other functions.....	83	
Tray 3 paper path.....	81	
theory of operations		
10/100/1000 functions.....	53	
ADF / scanner.....	47	
base printer.....	48	
document feeder / scanner.....	47	
fax functions.....	53	
firmware.....	53	
flash memory.....	53	
I/O functions.....	53	
input devices.....	81	
input/output functions.....	53	
Memory Enhancement technology.....	53	
memory functions.....	53	
NVRAM.....	53	
printer, base.....	48	
RAM.....	53	
scanner / document feeder.....	47	
USB functions.....	53	
USB hosts functions.....	53	
timing chart, diagrams.....	154	
tip.....	iv	
toner		
image formation, use during.....	58, 59	
toner cartridge		
developing unit engagement and disengagement.....	58	
diagnostic test.....	211	
JetIntelligence.....	69	
life detection.....	58, 69	
memory chip.....	58, 69	
presence detection.....	58, 69	
seal.....	68	
toner level detection.....	58, 69	
toner cartridges.....	58	
components.....	58	
error conditions.....	58	
operations.....	58	
theory of operation.....	67	
toner cartridges, part numbers.....	309, 1616	
touchscreen control panel.....	52	
transfer processes.....	58, 59	
transfer unit		
operation.....	58, 71	
tray		
location assemblies, 550-sheet paper feeder.....	16	
Tray 1		
jams.....	234, 255	
jams MFP.....	247	
jams SFP.....	230	
tray 1 rollers and separation pad		
cleaning.....	25	
remove.....	26	
Tray 2		
jams.....	237, 258	
jams MFP.....	247	
jams SFP.....	230	
tray 2 rollers and separation pad		
cleaning.....	29	
tray 3		
input accessories.....	81	
motor control.....	81, 82	
paper pickup.....	81	
Tray 3		
electrical components.....	82	
jams.....	232, 253	
other functions.....	83	
paper path.....	81	
Tray 3 paper path		
theory of operation.....	81	
tray 3 rollers and separation pad		
cleaning.....	40	
tray motor error (LaserJet)		
60.WX.YZ error.....	229	
tray/bin, manual sensor test (not available for this printer)		
solve problems.....	144	
trays		
locating MFP.....	4, 316	
locating SFP.....	2, 314	
Trays menu		
control-panel menu.....	192	
trays, E45028		
capacity.....	9	
included.....	9	
trays, E47528		
capacity.....	11	
included.....	11	
trays, M455		
capacity.....	8	
included.....	8	
trays, M480		
capacity.....	10	
included.....	10	
troubleshooting		
blank pages.....	301	



- check toner-cartridge status.... 280
- checklist.....86
- control panel..... 213
- defeating interlocks..... 139, 212
- direct-connect problems..... 303
- disable cartridge check (not available for this printer).... 141
- engine test..... 94, 211
- flowchart..... 86, 88
- format disk and partial clean functions..... 205
- individual component test (not available for this printer).... 144
- jams..... 231, 248
- jams MFP.....247
- jams SFP..... 230
- LED diagnostics..... 140
- manual sensor test (not available for this printer)..... 144
- network problems..... 303
- pages not printing..... 301
- pages printing slowly..... 301
- paper path sensors test (not available for this printer).... 144
- paper path test..... 142
- print/stop test..... 141, 143
- printer resets.....203
- service menu..... 199
- system diagnostics, MFP control panel..... 213
- tray/bin manual sensor test (not available for this printer).... 144
- USB cables..... 301
- wired network..... 303
- Troubleshooting (Maintenance) menu control-panel menu..... 195
- troubleshooting tools
  - control panel messages..... 225
  - copy-quality troubleshooting... 291
  - CPMD..... 225
  - determine the problem source... 86
  - diagrams, block..... 144
  - firmware upgrade..... 89
  - HP Embedded Web Server..... 111, 112, 117
  - image-quality troubleshooting 274
  - individual component diagnostics.. ..... 142
  - performance and connectivity troubleshooting..... 300
  - print-quality troubleshooting... 275
  - solve problems..... 94

## U

- upgrade, product firmware..... 89
- USB Firmware Upgrade (Maintenance) menu
  - control-panel menu..... 195
- USB functions
  - theory of operations..... 53
- USB hosts functions
  - theory of operations..... 53
- USB port
  - troubleshooting..... 301

## V

- vertical lines, bands, or streaks
  - copy-quality problems..... 293
- views, document feeder and scanner
  - printer information, configuration, and specifications..... 1

## W

- waiting period..... 48, 49
- warning..... iv
- web browser requirements
  - HP Embedded Web Server..... 111
- Web-based Interactive Search Engine (WISE)
  - HP internal users and Channel partners.. v, 85, 307, 313, 1614
- weight, MFP printer..... 14
- weight, SFP printer..... 12
- WISE
  - email problems..... 300
  - fax problems..... 300
  - HP internal users and Channel partners.. v, 85, 307, 313, 1614