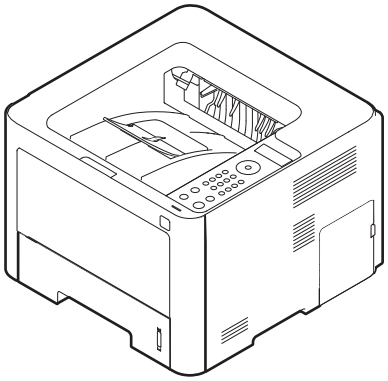
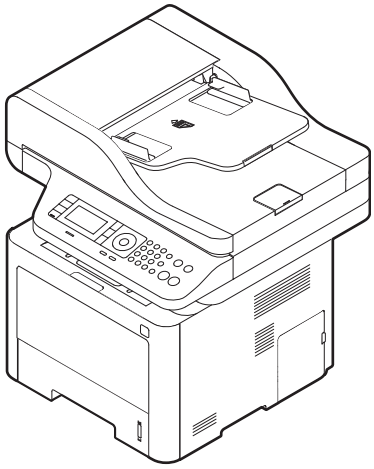
HP Laser 408dn
HP Laser MFP 432fdn

Service Manual





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HP Laser 408dn / HP Laser MFP 432fdn - Service Manual

SUMMARY

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Conventions used in this guide

Learn what **Tips**, **Notes**, **Cautions**, and **Warnings** are.

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.

Table of contents

1 Product specifications and description 1
Printer views 2
Front view 2
Rear view 4
Control panel view 6
Understanding The Status LED 8
Understanding display messages 8
Specifications 12
Supported operating systems 12
Operating-environment range 13
General specifications 13
Print specifications 14
Scan specifications 14
Copy specifications 15
Fax specifications 16
Maintenance and Consumable Life 16
Paper handling specifications 18
System layout 19
Feeding system 22
Tray 1, 2, SCF 22
Pickup / separate / Registration roller 23
Image creation 25
Printing process overview 25
Fuser unit 26
LSU (Laser scanner assembly) 27
Drive system 27
Hardware configuration 29
Formatter (Main PCA) 30
Control panel PCA 34
SO-DIMM PCA 35
ADF PCA 36
SCF PCA 36

CRUM PCA 36
Fax board 37
LVPS/HVPS board 38

2 Parts, diagrams, removal and replacement 41
For additional service and support 41
Order parts by authorized service providers 43
Ordering 43
Orderable parts 43
Supplies parts numbers 43
Accessories part numbers 44
Related documentation and software 44
How to use the parts lists and diagrams 45
Electrostatic discharge 45
Service approach 46
Before performing service 46
After performing service 46
Post-service test 46
Main parts 47
Covers (HP Laser 408dn) 48
Parts and diagrams : Covers (HP Laser 408dn) 48
Removal and replacement: Left and right cover (HP Laser 408dn) 49
Removal and replacement: Front cover (HP Laser 408dn) 53
Removal and replacement: Top cover (HP Laser 408dn) 56
Parts and diagrams: Top cover assembly (HP Laser 408dn) 66
Covers (HP Laser MFP 432fdn) 68
Parts and diagrams: Covers (HP Laser MFP 432fdn) 68
Removal and replacement: Left and right cover (HP Laser MFP 432fdn) 69
Parts and diagrams: Front cover assembly (HP Laser 408dn / HP Laser MFP 432fdn) 74
Removal and replacement: Front cover (HP Laser MFP 432fdn) 75
Parts and diagrams: Middle lower cover assembly (HP Laser MFP 432fdn) 80
Removal and replacement: Middle upper cover (HP Laser MFP 432fdn) 81
Removal and replacement: Middle cover and middle inner cover (HP Laser MFP 432fdn) 89
Removal and replacement: Fax PCA (HP Laser MFP 432fdn) 100
Control panel assembly (HP Laser MFP 432fdn) 110
Parts and diagrams: Control panel assembly (HP Laser MFP 432fdn) 110
Removal and replacement: Control panel PCA (HP Laser MFP 432fdn) 111
Automatic document feeder (ADF) (HP Laser MFP 432fdn) 114
Parts and diagrams: Automatic document feeder(ADF) assembly (HP Laser MFP 432fdn) 114

Removal and replacement: ADF(Automatic document feeder) assembly (HP Laser MFP 432fdn) 115
Parts and diagrams: ADF drive assembly (HP Laser MFP 432fdn) 118
Parts and diagrams: ADF lower assembly (HP Laser MFP 432fdn) 120
Parts and diagrams: ADF upper assembly (HP Laser MFP 432fdn) 122
Flatbed scanner assembly (HP Laser MFP 432fdn) 124
Parts and diagrams: Flatbed scanner assembly (HP Laser MFP 432fdn) 124
Removal and replacement: Flatbed scanner assembly (HP Laser MFP 432fdn) 125
Internal assemblies 132
Frame assembly (1) 133
Parts and diagrams: Frame assembly (1/3) 133
Removal and replacement: LVPS (HP Laser 408dn) 134
Removal and replacement: LVPS (HP Laser MFP 432fdn) 137
Removal and replacement: Main PCA (HP Laser 408dn) 140
Removal and replacement: Main PCA (HP Laser MFP 432fdn) 144
Removal and replacement: Fuser (HP Laser 408dn / HP Laser MFP 432fdn) 147
Removal and replacement: Laser scanning unit(LSU) (HP Laser 408dn) 150
Removal and replacement: Laser scanning unit(LSU) (HP Laser MFP 432fdn) 158
Frame assembly (2) 171
Parts and diagrams: Frame assembly (2/3) 171
Removal and replacement: Main drive assembly (HP Laser 408dn) 172
Removal and replacement: Main drive assembly (HP Laser MFP 432fdn) .. 176
Removal and replacement: Feed drive assembly (HP Laser 408dn) 180
Removal and replacement: Feed drive assembly (HP Laser MFP 432fdn) .. 184
Removal and replacement: Tray 1 (MP) assembly (HP Laser 408dn) 189
Removal and replacement: Tray 1 (MP) assembly (HP Laser MFP 432fdn) . 198
Frame assembly (3) 212
Parts and diagrams: Frame assembly (3/3) 212
Removal and replacement: Transfer roller (HP Laser 408dn) 214
Removal and replacement: Transfer roller (HP Laser MFP 432fdn) 223
Removal and replacement: Tray 2 pickup roller rubber (HP Laser 408dn / HP Laser MFP 432fdn) 236
Removal and replacement: Registration/Feed/Empty sensor (HP Laser 408dn / HP Laser MFP 432fdn) 238
Removal and replacement: Bin full stacker (HP Laser 408dn) 243
Removal and replacement: Bin full stacker (HP Laser MFP 432fdn) 252
Removal and replacement: Pickup/Registration/MP clutch (HP Laser 408dn) 264
Removal and replacement: Pickup/Registration/MP clutch (HP Laser MFP 432fdn) 268

Removal and replacement: HVPS (HP Laser 408dn) 274
Removal and replacement: HVPS (HP Laser MFP 432fdn) 277
Parts and diagrams: Frame rear assembly 282
Parts and diagrams: Tray 1 (MP) assembly 284
Parts and diagrams: Main drive assembly 286
Parts and diagrams: Tray 2 cassette 288
Removal and replacement: Tray 2 reverse roller (HP Laser 408dn / HP Laser MFP 432fdn) 289
Optional - Second cassette feeder (SCF) 293
Parts and diagrams: SCF main 294
Removal and replacement: SCF right cover (HP Laser 408dn / HP Laser MFP 432fdn) 295
Parts and diagrams: SCF cassette 298
Removal and replacement: SCF reverse roller (HP Laser 408dn / HP Laser MFP 432fdn) 299
Parts and diagrams: SCF frame assembly 302
Removal and replacement: SCF pickup assembly (HP Laser 408dn / HP Laser MFP 432fdn) 303
Removal and replacement: SCF main PCA (HP Laser 408dn / HP Laser MFP 432fdn) 308
Removal and replacement: SCF main motor (HP Laser 408dn / HP Laser MFP 432fdn) 310
Removal and replacement: SCF clutch (HP Laser 408dn / HP Laser MFP 432fdn) 313
Parts and diagrams: SCF frame pickup 318
Removal and replacement: SCF pickup/forward roller (HP Laser 408dn / HP Laser MFP 432fdn) ... 319

3 Problem solving 323
Error -code and control-panel-message troubleshooting overview 324
Error codes 324
How to search for printer documentation 326
How to search WISE for printer documentation 326
How to search GCSN for printer documentation 326
Troubleshooting process 329
Solve problems checklist 330
Monitoring the supplies life 331
Printing a report 331
Maintenance menu 331
Determine the problem source 333
Pre-troubleshooting checklist 333
Troubleshooting flowchart 334
Power subsystem 336
Power-on checks 337
Power-on troubleshooting overview 337
Tool for troubleshooting 338
Check the event log using the HP Embedded Web Server 338
Print quality troubleshooting guide 339

Resolving print quality problems 340
Introduction 340
Troubleshoot print quality problems 340
Printer-specific image defects 346
Repetitive image defects 347
Use a ruler to measure between repetitive defects 347
Printer-specific print quality troubleshooting guide 350
Light print 350
Dark print 351
Blank page 351
All black 352
White spots 353
Dirt on the back of the page 355
Vertical lines 355
Vertical white lines 356
Horizontal lines 357
Horizontal white lines 359
Description 359
Dropouts 360
Description 360
Loose toner 361
Toner smear 362
Misformed or misplaced image 363
Wrinkles or creases 364
Dirt on the front of the page 365
Vertical density variation 366
Repetitive image defects 366
Solve paper-handling problems 368
Printer does not pick up paper or misfeeds 369
Introduction 369
The product does not pick up paper 369
The product picks up multiple sheets of paper 369
Prevent paper jams 369
Clear paper jams 371
Introduction 371
Paper path jam sensor locations 371
Frequent or recurring paper jams? 371
Original paper jam in front of scanner 372
Original paper jam inside of scanner 373
Original paper jam in exit area of scanner 375
Original paper jam in scanner duplex path 376

In tray 2 378
In optional tray (Tray 3) 380
Tray 1 387
In exit area 388
Inside the machine 394
In the duplex unit area 397
Determine the problem source 406
Factors affecting print performance 406
Solve fax problems 407
Solve connectivity problems 409
Solve USB connection problems 409
Solve wired network problems 410
Introduction 410
Poor physical connection 410
The computer is unable to communicate with the printer 410
The printer is using incorrect link and duplex settings for the network 411
New software programs might be causing compatibility problems 411
The computer or workstation might be set up incorrectly 411
The printer is disabled, or other network settings are incorrect 411
Service mode functions 412
Entering the Tech Mode 412
Service mode menu 412
Service mode menu description 415
Information > Report 415
Maintenance 415
Diagnostics > Engine 415
Diagnostics > Fax 416
Diagnostics > Scanner 419
Diagnostics > System 419
Service Function 419
Firmware upgrades 421
Update the firmware by using the USB port 421
Update the firmware by using the network 421

4 Connection diagram 423

Index 425

1 Product specifications and description

Printer views

Front view

Locate features on the front of the printer.

Figure 1-1 Printer front view (HP Laser 408dn)

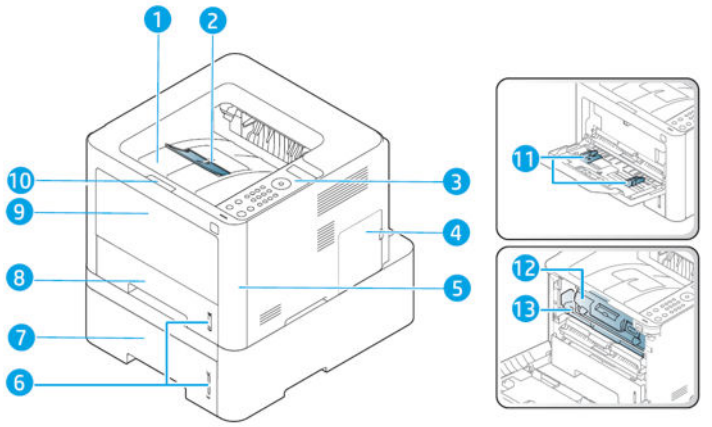


Table 1-1 Printer front view (HP Laser 408dn)

Item	Description
1	Output tray
2	Output support
3	Control panel
4	Control board cover
5	Front cover
6	Paper level indicator
7	Tray 3 (Optional device)
8	Tray 2
9	Tray 1
10	Push-release of front cover button
11	Paper width guides on the Tray 1
12	Toner cartridge
13	Imaging unit

Figure 1-2 Printer front view Laser (HP Laser MFP 432fdn)

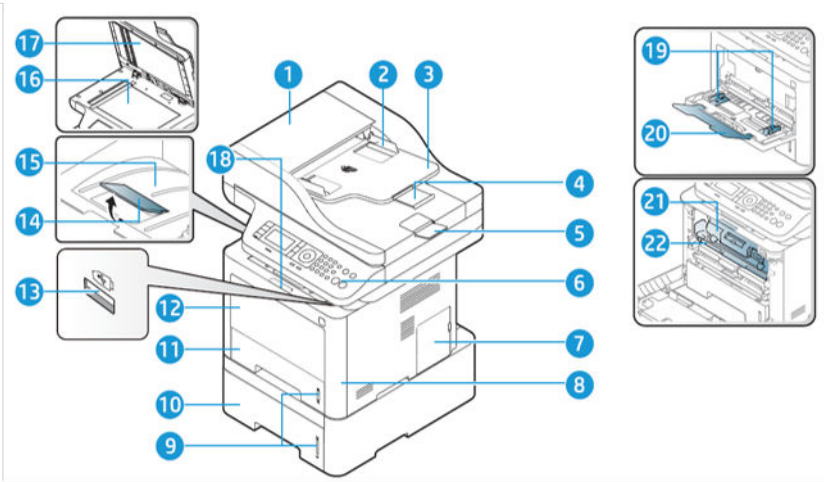


Table 1-2 Printer front view Laser (HP Laser MFP 432fdn)

Item	Description
1	Document feeder cover
2	Document feeder width guide
3	Document feeder input tray
4	Document feeder support tray
5	Document feeder output tray
6	Control panel
7	Control board cover
8	Front cover
9	Paper level indicator
10	Tray 3 (Optional device)
11	Tray 2
12	Tray 1
13	USB memory port
14	Output tray support guide
15	Output tray
16	Scanner glass
17	Scanner lid
18	Front cover handle
19	Paper width guides on a multi-purpose tray
20	Tray 1 support guide
21	Toner cartridge
22	Imaging unit

Rear view

Locate features on the back of the printer.

Figure 1-3 Printer rear view (HP Laser 408dn)

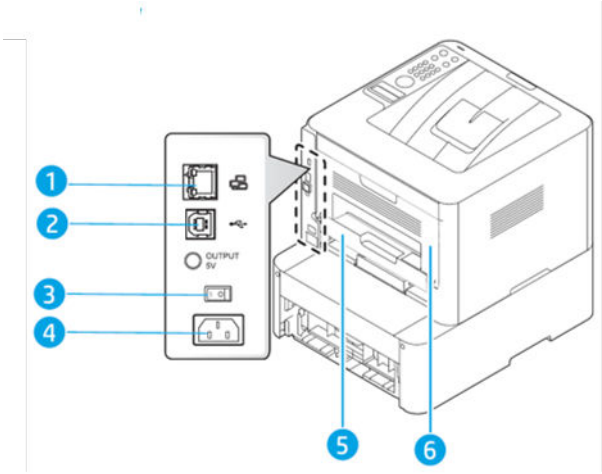


Table 1-3 Printer rear view (HP Laser 408dn)

Item	Description
1	Network port
2	USB port
3	Power-switch
4	Power receptacle
5	Duplex unit
6	Rear cover

Figure 1-4 Printer rear view (HP Laser MFP 432fdn)

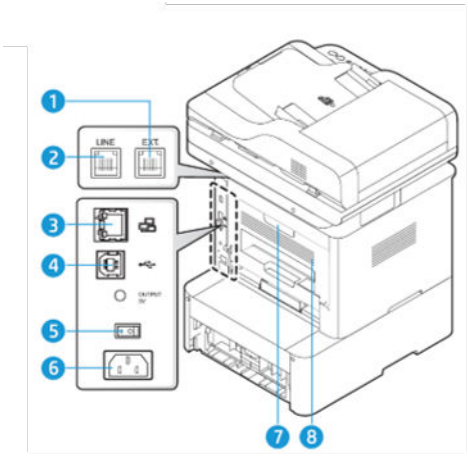


Table 1-4 Printer rear view (HP Laser MFP 432fdn)

Item	Description
1	Extension telephone socket (EXT.)
2	Telephone line socket (LINE)
3	Network port
4	USB port
5	Power-switch
6	Power receptacle
7	Rear cover handle
8	Rear cover

Control panel view

Figure 1-5 Control panel layout(HP Laser 408dn)

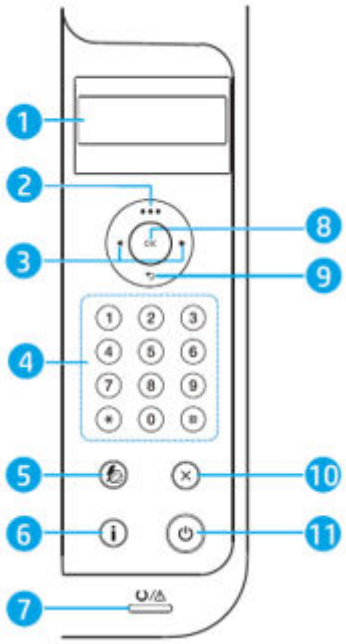


Table 1-5 Control panel layout(HP Laser 408dn)

No	Item	Description
1	Display screen	Shows the current status and prompts during an operation.
2	Menu	Opens Menu mode and scrolls through the available menus
3	Left/Right Arrows	Scrolls through the options available in the selected menu and increases or decreases values.
4	Numeric keypad	Dials a number or enters alphanumeric characters.
5	Power save	Goes into sleep mode.
6	Information	Gives detailed information about machine's information. Prints a configuration page by pressing this button.
7	Status LED	Indicates the status of your machine.
8	OK	Confirms the selection on the screen.
9	Back	Sends you back to the upper menu level.
10	Cancel	Stops an operation at any time.
11	Power	Turns the power on or off, or wakes up the machine from the power save mode. If you need to turn the machine off, press this button for more than three seconds.

Figure 1-6 Control panel layout(HP Laser MFP 432fdn)

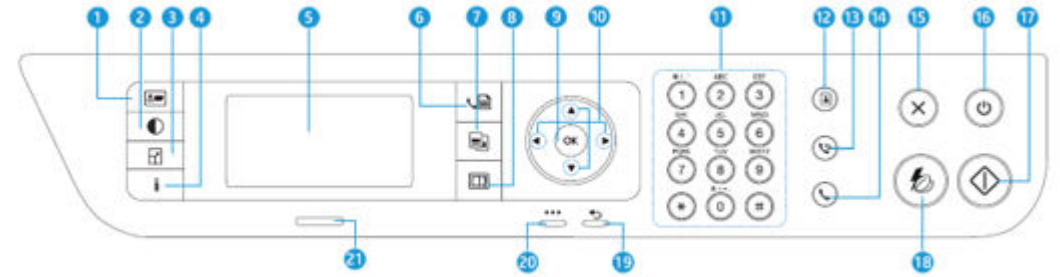


Table 1-6 Control panel layout(HP Laser MFP 432fdn)

No	Item	Description
1	ID Copy	Allows you to copy both sides of an ID card like a driver's license on a single side of paper.
2	Contrast	Adjusts the brightness level to make a copy for easier reading, when the original contains faint markings and dark images.
3	Scale	You can reduce or enlarge the size of a copied image from 25% to 400% when you copy original documents from the scanner glass.
5	Cancel	Gives detailed information about machine's information. Prints a configuration page by pressing this button.
5	Display screen	Shows the current status and displays prompts during operation.
6	Fax	Switches to Fax mode.
7	Copy	Switches to Copy mode.
8	Scan	Switches to Scan mode.
9	OK	Confirms the selection on the screen. You can also manual print. Press this button to print the other side of all pages if you have selected Double-sided Printing(Manual) in your driver.
10	Arrows	Scrolls through the options available in the selected menu and increases or decreases values.
11	Stop/Clear	Dials a number or enters alphanumeric characters.
12	Address Book	Allows you to store frequently used fax numbers or search for stored fax numbers.
13	Redial/Pause	Redials the recently sent fax number or received caller ID in ready mode, or inserts a pause(-) into a fax number in edit mode.
14	On Hook Dial	When you press this button, you can hear a dial tone. Then enter a fax number. It is similar to making a call using speaker phone
15	Cancel	Stops an operations at any time.
16	Power	Turns the power on or off, or wakes up the machine from the power save mode. If you need to turn the machine off, press this button for more than three seconds.
17	Start	Starts a job.
18	Power Saver	Goes into sleep mode.
19	Back	Sends you back to the upper menu level.

Table 1-6 Control panel layout(HP Laser MFP 432fdn) (continued)

No	Item	Description
20	Menu	Opens Menu mode and scrolls through the available menus.
21	Status LED	Indicates the status of your machine.

Understanding The Status LED

The color of the Status indicates the machine's current status.

NOTE:

- Some LEDs may not be available depending on model or country
- To resolve the error, look at the error message and its instructions from the troubleshooting part.

Table 1-7 Status LED (HP Laser 408dn / HP Laser MFP 432fdn)

LED	Status		Description
Status	Off		The machine is off-line.
	Green	On	The machine is on-line and can be used.
		Blinking	When the machine is receiving or printing data, the backlight blinks.
	Orange	On	The machine has stopped due to a major error.
		Blinking	• A minor error has occurred and the machine is waiting for the error to be cleared. Check the display message. When the problem is cleared, the machine resumes. • Small amount of toner is left in the cartridge. The estimated cartridge life[a] • The cover is opened. Close the cover. • There is no paper in the tray when receiving or printing data. Load paper in the tray. • A paper jam has occurred.
Power	White	On	The machine is in ready mode.
		Blinking	The machine is in power save mode.

[a] Estimated cartridge life means the expected or estimated toner cartridge life, which indicates the average capacity of print-outs and is designed pursuant to ISO/IEC 19752. The number of pages may be affected by operating environment, percentage of image area, printing interval, graphics, media and media size. Some amount of toner may remain in the cartridge even when orange LED is on and the printer stops printing.

Understanding display messages

Messages appear on the control panel display to indicate the machine's status or errors. Refer to the tables below to understand the messages' and their meaning, and correct the problem, if necessary.

NOTE:

- If a message is not in the table, reboot the power and try the printing job again. If the problem persists, call a service representative.
- When you call for service, provide the service representative with the contents of display message.
- Some messages may not appear on the display depending on the options or models.
- [error number] indicates the error number.
- [tray type] indicates the tray number.
- [media type] indicates the media type.
- [media size] indicates the media size.

Table 1-8 Paper Jam-related messages

Message	Meaning	Suggested solutions
Paper jam in exit area	Paper has jammed in the exit area.	Clear the jam
Paper jam inside of duplex	Paper has jammed during duplex printing. This is applicable only to machines with this feature.	Clear the jam
Paper jam inside machine	Paper has jammed in inside the machine.	Clear the jam
Paper jam in tray 2	Paper has jammed in the tray 2.	Clear the jam
Paper jam in tray 3	Paper has jammed in the optional tray	Clear the jam
Paper jam in tray 1	Paper has jammed in the tray 1.	Clear the jam

Table 1-9 Toner-related messages

Message	Meaning	Suggested solutions
Install toner	A toner cartridge is not installed.	Reinstall the toner cartridge.
	A toner cartridge is not being detected	Reinstall the toner cartridge two or three times to confirm it is seated properly. If the problem persists, contact the service representatives.
	Not removed protective film from toner.	Remove the protective film from the toner cartridge.
Not Compatible Toner cartridge	The indicated toner cartridge is not suitable for your machine.	Install the corresponding toner cartridge with a HP-genuine cartridge.
Prepare new cartridge	Small amount of toner is left in the indicated cartridge. The estimated cartridge life of toner is close.	
Replace new cartridge	A toner cartridge has reached its estimated cartridge life.	• You can choose **Stop** or **Continue** as shown on the control panel. If you select **Stop**, the printer stops printing. If you select **Continue**,

Table 1-9 Toner-related messages (continued)

Message	Meaning	Suggested solutions
		the printer keeps printing but the printing quality cannot be guaranteed. • Replace the toner cartridge for the best print quality when this message appears. Using a cartridge beyond this stage can result in printing quality issues.

Table 1-10 Imaging unit-related messages

Message	Meaning	Suggested solutions
Not Installed Imaging unit	An imaging unit is not installed.	Reinstall the imaging unit.
	An imaging unit is not being detected	Reinstall the imaging unit two or three times to confirm it is seated properly. If the problem persists, contact the service representatives.
	Not remove protective film from toner.	Remove the protective film from the imaging unit.
Not compatible Imaging unit	The imaging unit is not suitable for your machine.	Install the corresponding cartridge with a HP-genuine cartridge
Prepare new Image unit	Small amount of toner is left in the imaging unit. The estimated cartridge life of toner is close.	Prepare a new imaging unit for a replacement.
Replace new Image unit	An imaging unit has reached its estimated cartridge life.	• You can choose Stop or Continue as shown on the control panel. If you select Stop, the printer stops printing. If you select Continue, the printer keeps printing but the printing quality cannot be guaranteed. • Replace the imaging unit for the best print quality when this message appears. Using a cartridge beyond this stage can result in printing quality issues • If the machine stops printing, replace the imaging unit

Table 1-11 Tray-related messages

Message	Meaning	Suggested solutions
Paper Empty in [tray number]	There is no paper in the indicated tray.	Load paper in the tray
Paper Low in [tray number]	There is low paper in the indicated tray.	Load paper in the tray

Table 1-12 Network-related messages

Message	Meaning	Suggested solutions
Network Problem: IP Conflict	The IP address is used elsewhere.	Check the IP address or obtain a new IP address.
802.1x Network Error	Fail to authenticate.	Check the network authentication protocol. If the problem persists, contact your network administrator.

Table 1-13 Misc. messages

Message	Meaning	Suggested solutions
Door Open Close it	The cover is not securely latched.	Close the cover until it locks into place.
Error [error number] **Install toner**	The toner cartridge is installed improperly, or the connector is polluted.	Reinstall the HP-genuine toner cartridge two or three times to confirm it is seated properly. If the problem persists, please call for service.
Error [error number] **Turn off then on**	The machine unit cannot be controlled.	Reboot the power and try the printing job again. If the problem persists, please call for service.
Error [error number] **Call for service**	The machine unit cannot be controlled.	Reboot the power and try the printing job again. If the problem persists, please call for service.
Not proper room temp. Move set	The machine is in a room with improper room temperature.	Move the machine to a room with proper room temperature.
Output bin Full Remove paper	The output tray is full.	Remove papers from the output tray, the machine resumes printing. If the problem persists, call for service.
Replace Fuser Soon	The life of the fuser unit will be expired soon.	Replace the fuser unit with a new one. If the problem persists, please call for service.
Replace new Fuser unit	The life of the fuser unit will be expired soon.	Replace the fuser unit with a new one. If the problem persists, please call for service.
• Replace new Tray2 roller • Replace new Tray3 roller	The life of the tray pick-up roller will expired soon.	Replace the tray pick-up roller with a new one. If the problem persists, please call for service.
• Replace new Tray2 roller • Replace new Tray3 roller	The life of the tray pick-up roller will expired soon.	Replace the tray pick-up roller with a new one. If the problem persists, please call for service.

Specifications

Supported operating systems

Printer software are occasionally updated due to release of new operating system and etc.

If needed, download the latest version from the HP website.

- http://www.hp.com/support/laser408
- http://www.hp.com/support/laser432MFP

Table 1-14 Operating systems

Operating System	HP Laser 408dn	HP Laser MFP 432fd
Windows	•	•
Linux	•	•

Table 1-15 System requirements

Operating system	Print driver installed (from the software on the web)	Notes
Windows 7, 32-bit and 64-bit	The HP printer-specific print driver is installed for this operating system as part of the software installation.	
Windows 8, 32-bit and 64-bit	The HP printer-specific print driver is installed for this operating system as part of the software installation.	
Windows 8.1, 32-bit and 64-bit	The HP V4 printer-specific print driver is installed for this operating system as part of the software installation.	
Windows 10, 32-bit and 64-bit	The HP V4 printer-specific print driver is installed for this operating system as part of the software installation.	
Windows Server 2008 R2, 64-bit	The HP PCLm.S printer-specific print driver is available for download from the printer-support website. Download the driver, and then use the Microsoft Add Printer tool to install it.	Microsoft retired mainstream support for Windows Server 2008 in January 2015. HP will continue to provide best effort support for the discontinued Server 2008 operating system.
Windows Server 2008 R2, SP1, 64-bit	The HP printer-specific print driver is installed for this operating system as part of the software installation.	
Windows Server 2012	The HP printer-specific print driver is installed for this operating system as part of the software installation.	

Table 1-15 System requirements (continued)

Operating system	Print driver installed (from the software on the web)	Notes
Windows Server 2012 R2	The HP printer-specific print driver is installed for this operating system as part of the software installation.	
Windows Server 2016, 64-bit	The HP printer-specific print driver is installed for this operating system as part of the software installation.	

Operating-environment range

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

Table 1-16 Operating-environment specifications

Environment	Recommended	Allowed
Temperature	15 to 32°C (59 to 90°F)	-20 to 40 °C (-4 to 104 °F)
Relative humidity	10 to 80% RH	10 to 90% RH

General specifications

Learn about the general specifications.

Table 1-17 General specifications (HP Laser 408dn)

Item		Specification
Processor		600 MHz
Memory	Standard	256 MB
	Max	512 MB
Noise Level	Print mode	Less than 56 dB (A)
Power Consumption	Ready mode	Less than 10 Wh
	Average operating mode	Less than 700 W
	Power save mode	Less than 0.9 Wh
Dimension	Width x Length x Height	366 x 365.6 x 262.5 mm (14.4 x 14.4 x 10.3 inches)
Weight	Machine with consumables	10.09 Kg (22.24 lbs)
Reliability & Service	Recommended Monthly Printing Volume (RMPV)	1500 ~ 3500 pages
	Max. Monthly Print Volume	100,000 pages

Table 1-18 General specifications (HP Laser MFP 432fdn)

Item		Specification
Processor		600 MHz
Memory	Standard	256 MB
	Max	512 MB
Noise Level	Print mode	Less than 56 dB (A)
	Copy/ Scan mode	Less than 58 dB (A)
Power Consumption	Ready mode	Less than 10 Wh
	Average operating mode	Less than 700 W
	Power save mode	Less than 1.1 Wh
Dimension	Width x Length x Height	469 x 444.3 x 482.1 mm (18.5 x 17.5 x 19 inches)
Weight	Machine with consumables	16.91 Kg (37.28 lbs)
Reliability & Service	Recommended Monthly Printing Volume (RMPV)	1500 ~ 3500 pages
	Max. Monthly Print Volume	100,000 pages

Print specifications

Learn about the print specifications.

Table 1-19 Print specifications

Item		Specification
Engine Speed	Simplex	Up to 40 ppm in A4 (42 ppm in Letter)
	Duplex	Up to 20 ipm in A4 (21 ipm in Letter)
FPOT	Ready Mode	As fast as 8.2 sec
	Sleep Mode	Less than 16 sec
Resolution	Optical (Standard)	600 x 600 dpi
	Enhanced	Up to 1,200 x 1,200 dpi effective output
Emulation		PostScript3, PCL6/5e, IBM ProPrinter, EPSON, SPL

Scan specifications

Learn about the scan specifications.

Table 1-20 Scan specifications (HP Laser MFP 432fdn)

Item		Specification
Scan Method		3 CH CIS

Table 1-20 Scan specifications (HP Laser MFP 432fdn) (continued)

Item		Specification
Compatibility		TWAIN Standard, WIA Standard
Scan Speed	B/W	24 ipm @300 dpi
	Gray	24 ipm @300 dpi
	Color	8 ipm @300 dpi
Resolution	Platen (Optical)	1200 x 1200 dpi
	(D)ADF (Optical)	600 x 600 dpi
	Max Resolution@Scan to Local Host	4800 x 4800 dpi
Scanning Size ((D)ADF)	Max. Document Width	216 mm [8 ½ inch]
	Effective Scan Width	208 mm [8.19 inch]
	Max. Document Length	356 mm [14 inch]
	Effective Scan Length	348 mm [13.7 inch]
Scanning Size (Platen)	Max. Document Width	216 mm [8 ½ inch]
	Effective Scan Width	208 mm [8.19 inch]
	Max. Document Length	297 mm [11.7 inch]
	Effective Scan Length	289 mm [11.37 inch]
Scan to		PC, Email, USB Memory, FTP, SMB
Scan File Format		PDF, JPEG, XPS, TIFF

Copy specifications

Learn about the copy specifications.

Table 1-21 Copy specifications (HP Laser MFP 432fdn)

Item		Specification
Copy Speed	SDMC (Single Document Multiple Copy)	Up to 40 cpm in A4 (42 cpm in Letter)
FCOT	From Ready @Platen	Less than 10 sec
Resolution (ADF)	Text mode	• Scan : 600 x 600 dpi • Print : 600 x 600 x 2 bit dpi
	Text & Printed Photo mode	• Scan : 600 x 600 dpi • Print : 600 x 600 x 2 bit dpi
	Glossy Photo mode	• Scan : 600 x 600 dpi • Print : 600 x 600 x 2 bit dpi

Table 1-21 Copy specifications (HP Laser MFP 432fdn) (continued)

Item		Specification
Resolution (Platen)	Text mode	• Scan : 600 x 600 dpi • Print : 600 x 600 x 2 bit dpi
	Text & Printed Photo mode	• Scan : 600 x 600 dpi • Print : 600 x 600 x 2 bit dpi
	Glossy Photo mode	• Scan : 600 x 600 dpi • Print : 600 x 600 x 2 bit dpi
Copier Features	Duplex Copy	2-to-1, 2-to-2, 1-to-2
	Reduce/Enlarge	25 to 400% by 1%unit
	ID Card Copy	Yes
	N-up	2,4
	Darkness Adjustment	11 levels
	Multicopy Quanity	Max 99 copies

Fax specifications

Learn about the fax specifications.

Table 1-22 Fax specifications (HP Laser MFP 432fdn)

Item		Specification
Compatibility		ITU-T G3, ECM
Compression Method		MH/MR/MMR,JBIG,JPEG
Modem Speed		33.6 Kbps
Transmission Speed		3sec @336 Kbps
Gray Scale / Halftones		256 levels
Resolution	Standard	203 x 98 dpi
	Fine/Photo	203 x 196 dpi
	Super Fine	300 x 300 dpi
Fax Memory		6 MB
Max Document Width		216 mm [8 ½ inch]
Max Document Length		356 mm [14 inch]

Maintenance and Consumable Life

Learn about the estimated life of maintenance and consumable parts.

A customer or end user can install consumable items for a product.

In circumstances where a contract, CarePack, or other service uplift option exists, refer to the terms and conditions established by the service uplift document to determine how customer replaceable parts will be managed.

The rated life for each of these components is estimated. The rated life for each of the consumable components is listed in the following tables:

Table 1-23 Consumable Life: Cartridges

Region	Product number[1]	Description	Life (A4/letter images)[2]
LATAM	W1330A	Black toner cartridge	Approx. 5,000
	W1330X	Black toner cartridge	Approx. 15,000
	W1330XC	Black toner cartridge	Approx. 15,000
EMEA	W1331A	Black toner cartridge	Approx. 5,000
	W1331X	Black toner cartridge	Approx. 15,000
	W1331XC	Black toner cartridge	Approx. 15,000
	W1331XH	Black toner cartridge	Approx. 15,000

1 All product numbers are subject to change.

2 Print cartridge life is approximate, based on average A4 /Letter-size page count with ISO coverage. Declared cartridge yield value in accordance with ISO/IEC 19752. Actual yields vary considerably based on images printed and other factors.

Table 1-24 Consumable Life: Imaging drums

Region	Product Nmber[1]	Description	Yield[2]
LATAM/ETMA	W1332A	Imaging drum KIT (K)	Approx. 30,000
	W1332AC	Imaging drum KIT (K)	Approx. 30,000
	W1332AH	Imaging drum KIT (K)	Approx. 30,000

1 All product numbers are subject to change.

2 Print cartridge life is approximate, based on average A4 /Letter-size page count with ISO coverage. Declared cartridge yield value in accordance with ISO/IEC 19752. Actual yields vary considerably based on images printed and other factors.

Table 1-25 Consumable Life: Fuser

Part number[1]	Description	Life (A4/letter images)[2]
JC91-01023B	Fuser (110V)	Approx. 90,000 pages
JC91-01024B	Fuser (220V)	

1 All part numbers are subject to change.

2 Some users might experience lower fuser life based on their usage (printing on small media, heavy media, etc.). The printer's control panel will notify the user when they need to replace the fuser.

Table 1-26 Consumable Life: Rollers

Part number[1]	Description	Life (A4/letter images)[2]
JC73-00340A	Tray1 Pick up roller	Approx. 90,000 pages
JC90-01063B	Tray1 Separation(Reverse) roller	Approx. 60,000 pages

Table 1-26 Consumable Life: Rollers (continued)

Part number[1]	Description	Life (A4/letter images)[2]
JC66-02842A	Transfer roller	Approx. 100,000 pages
JC97-02259A	Tray2 Pick up / Forward roller (Optional)	Approx. 200,000 pages
JC97-02259A	Tray2 Separation(Reverse) roller (Optional)	Approx. 100,000 pages

1 All part numbers are subject to change.

2 Roller replacement intervals are based on the total number of pages printed from a tray, not total page count. The number of pages printed from each tray is located on the printer's Usage Page. Roller life might vary based on media types used.

Paper handling specifications

Learn about the paper handling specifications.

Table 1-27 Paper handling specifications

Item		Specification
Standard Capacity		• 250-sheet Cassette Tray @80g/m² • 50–sheet Tray 1 @80g/m²
Max. Capacity		820 sheet (@80g/m²) with Tray 3
Printing		• Max. Size : 216 x 356 mm (8.5" x 14") • Min. Size : 76 x 127 mm (3.0" x 5.0")
Tray 1	Capacity	• Plain Paper : 50 sheets @ 80g/m² • Envelop : 5 sheets
	Media sizes	A4, A5, A6, Letter, Legal, Folio, Oficio, Executive, ISO B5, JIS B5, 3"x5", Envelope (Monarch, No.10, DL, C5, C6), Custom
	Media type	Plain, Thin, Thick, Thicker, Cotton, Colored, Envelope, Pre-Printed, Recycled, Labels, Bond, Card stock, Archive
	Media weight	16~58 lb (60 to 220 g/m²)
	Sensing	Paper Empty
Tray 2	Capacity	250 sheets @ 80 g/m²
	Media sizes	A4, A5, A6, Letter, Legal, Folio, Oficio, Executive, ISO B5, JIS B5, Custom
	Media types	Plain Paper, Thin, Thick, Recycled, Bond, Cardstock, Archive
	Media weight	16~43 lb (60 to 163 g/m²)
	Sensing	Paper Empty
Tray 3 (Optional device)	Capacity	520 sheets @ 80 g/m²
	Media sizes	A4, A5, A6, Letter, Legal, Folio, Oficio, Executive, ISO B5, JIS B5
	Media types	Plain Paper, Thin, Thick, Recycled, Bond, Cardstock, Archive
	Media weight	16~43 lb (60 to 163 g/m²)
	Sensing	CST Open, Paper Empty

Table 1-27 Paper handling specifications (continued)

Item		Specification
Output Stacking	Capacity	• Face-Down : 150 sheets @ 80 g/m² • Face-Up : 1 sheet
	Output Full sensing	Yes
Duplex	Supporting	Built-in
	Media sizes	A4, Letter, Oficio, Folio, Legal
	Media types	Plain Paper, Thin, Thick, Recycled, Bond
	Media weight	16~32 lb (60 to 120 g/m²)
ADF (Only MFP model)	Capacity	50 sheet @80g/m²
	Document Weight	12.5~28lb
	Document Size	• Width: 142 ~ 216 mm (5.6" ~ 8.5") • Length : 148 ~ 356 mm (5.8" ~ 14.0")
Printable Area	Non-Printable Area	• Envelop : 10 mm (0.4") from edge (Top, Bottom, Left, Right) • Other Media : 4 mm (0.16") from edge (Top, Bottom, Left, Right)

System layout

This model consists of the Scanner part, Engine part, Hardware and Firmware. The scanner part consists of the platbed unit, ADF unit, Control paner. The engine part consists of the mechanical parts comprising Frame, Duplex, Toner cartridge, Drive unit, Transfer roller, Fuser, Tray 2. The Hardware part consists of the main control board, power board, operation panel, PC Interface.

Figure 1-7 System layout (HP Laser 408dn)

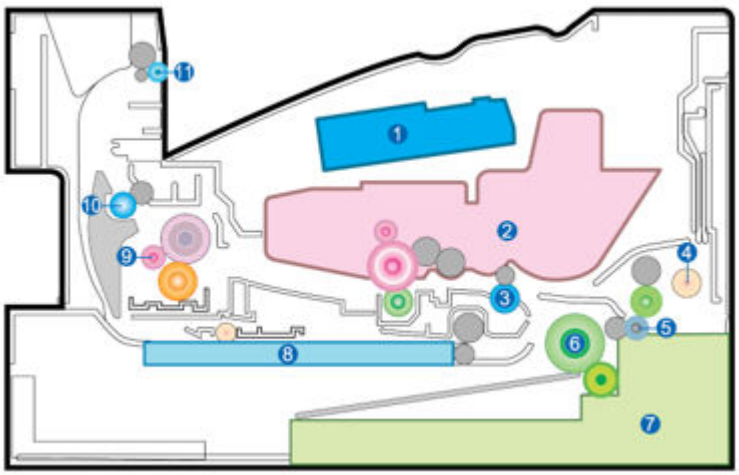


Table 1-28 System layout (HP Laser 408dn)

Item	Description
1	LSU (Laser Scanning Unit)

Table 1-28 System layout (HP Laser 408dn) (continued)

Item	Description
2	Toner Cartridge / Imaging drum
3	Registration Roller
4	Tray 1
5	Feed Roller
6	Pickup Roller
7	Tray 2
8	Duplex Unit
9	Fuser
10	Exit Roller1
11	Exit Roller2

Figure 1-8 System layout (HP Laser MFP 432fdn)

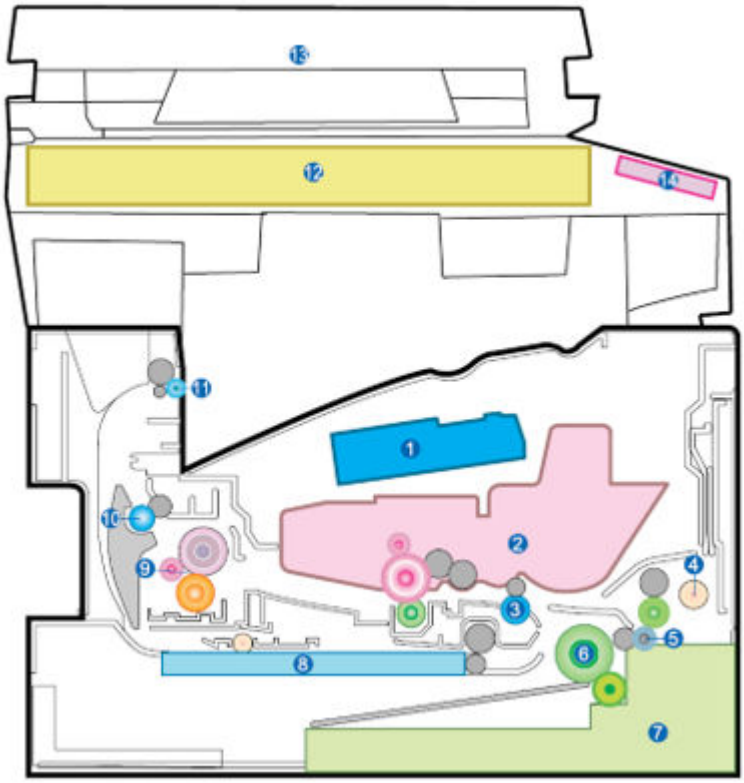


Table 1-29 System layout (HP Laser MFP 432fdn)

Item	Description
1	LSU
2	Toner Cartridge / Imaging drum
3	Registration Roller

Table 1-29 System layout (HP Laser MFP 432fdn) (continued)

Item	Description
4	Tray 1
5	Feed roller
6	Pickup roller
7	Tray 2
8	Duplex
9	Fuser
10	Exit roller1
11	Exit roller2
12	Platbed assembly
13	Autometic Document Feeder (ADF)
14	Control panel

Feeding system

This section describes the peeding system, parts, and functions.

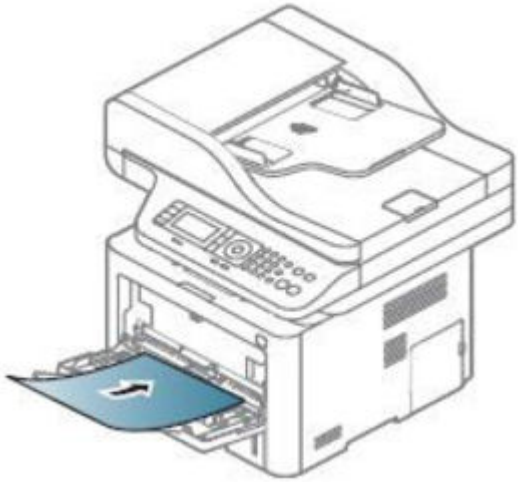
Tray 1, 2, SCF

This section describes the scanner system, parts, and functions. It consists of a cassette, an tray 1 for supplying different types of media (envelope, label, special paper) and parts related to paper feed initialization. It consists of a tray2 , an tray 1 tray for supplying different types of media (envelope, label, special paper) and parts related to paper feed initialization.

Tray 1

The multi-purpose tray can hold special sizes and types of print material, such as postcards, note cards, and envelopes. It is useful for single page printing on letterhead or colored paper. It uses 3 rollers feeding method to feed 50 sheets of general papers.

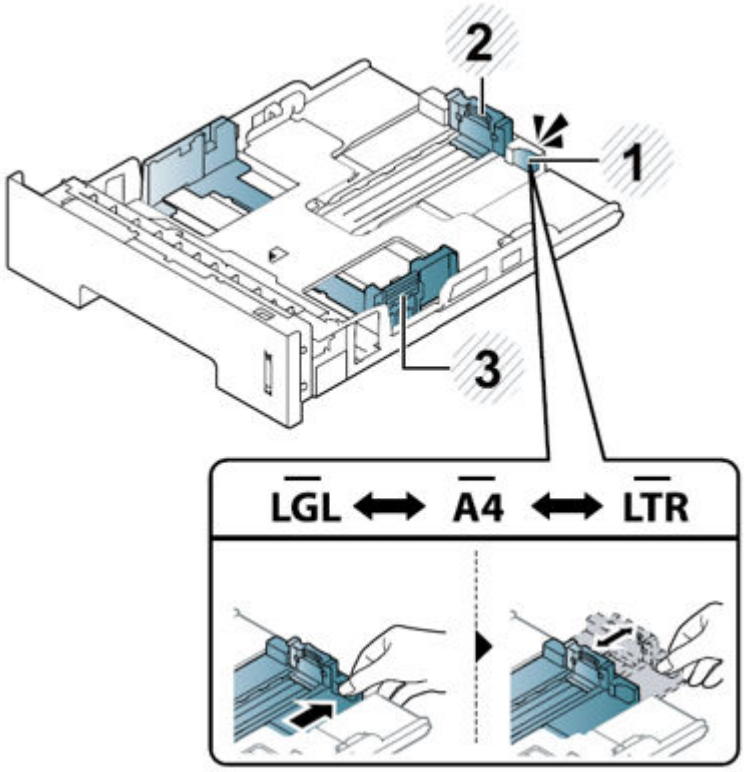
Figure 1-9 Tray 1



Tray 2 (Basic Cassette)

The paper trays consist of the Main trays, Optional trays (SCF), and one Multi-purpose tray. The basic cassette is located on front side of the machine and allows feeding of common paper. Paper size is set using the Size Guides in each tray. Adjust the Paper length/width guides to match the paper size.

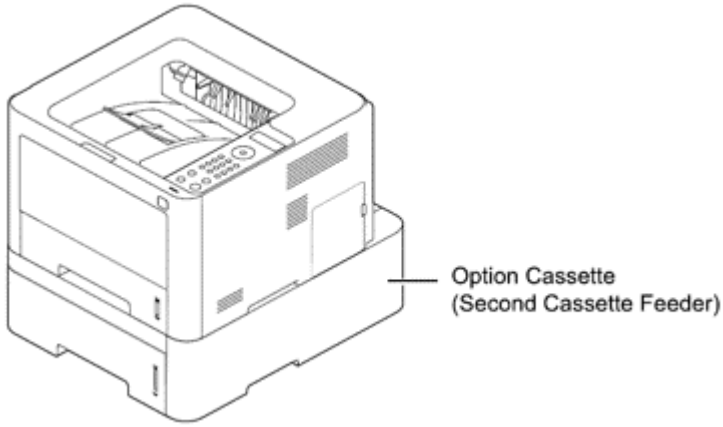
Figure 1-10 Tray 2 (Basic Cassette)



SCF (Second Cassette Feeder)

It is the same method with the main cassette, and the capacity is 520 sheets. It has a separate driving mechanism. It is designed for a common use with a main cassette.

Figure 1-11 SCF (Second Cassette Feeder)



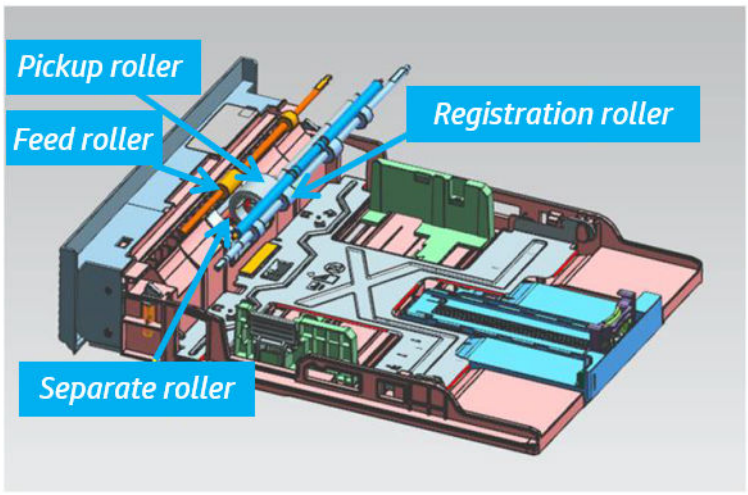
Pickup / separate / Registration roller

Pickup / separate roller

When pickup takes place, the pickup roller rotates to separate and transport the paper. The pickup roller rotates when the pickup clutch is activated. The separate roller serve to make sure that a single sheet of paper is moved

to the paper path, and the paper is moved as far as the registration roller by the work of the feed roller. The following is a diagram of the pickup section :

Figure 1-12 Pick up and separate roller



Registration roller

It is used as an anti skew device, and to setup proper registration timing with that of the toned image on the drum. It also is used for jam detection to ensure paper has left the paper tray.

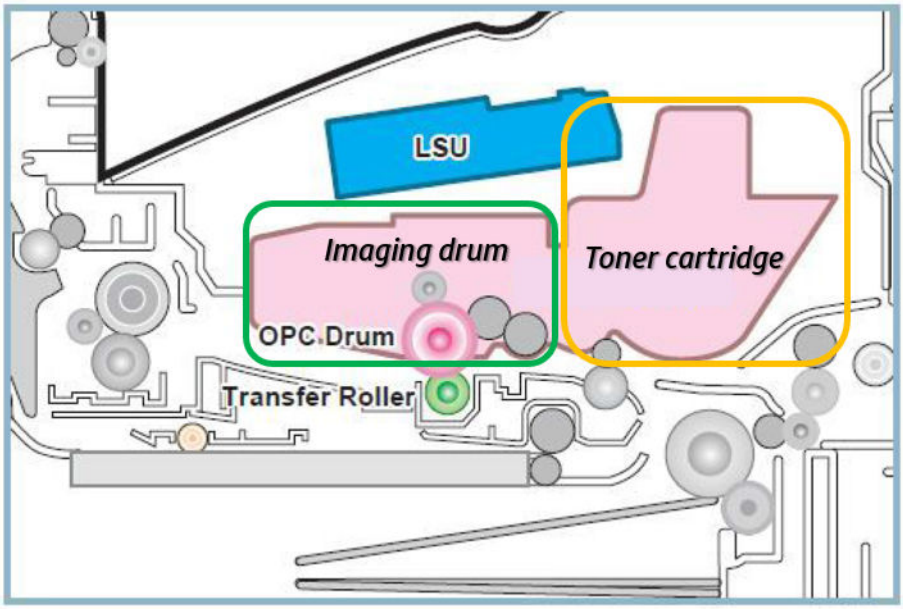
Image creation

This section describes the image creation by the printer.

Printing process overview

This mono printing system includes the LSU with a laser beam, a toner cartridge, a imaging drum and transfer roller.

Figure 1-13 Printing process overview



This machine uses toner cartridge and laser beam for mono printing.

HP Laser 408dn / HP Laser MFP 432fdn has separated toner system. The separated toner system consists of toner cartridge and imaging drum. The imaging unit has an OPC drum, cleaning blade etc.

The OPC drum is charged with a negative voltage by the charge roller and is exposed by the light from the LSU (Laser Scanning unit). The light produced by a laser creates a latent image by discharging on the surface of the OPC drum. The negatively charged toners are attracted to the latent image due to and electric field. The toners (real image) on the OPC drum are moved to the transfer media by the positive bias applied to the transfer roller.

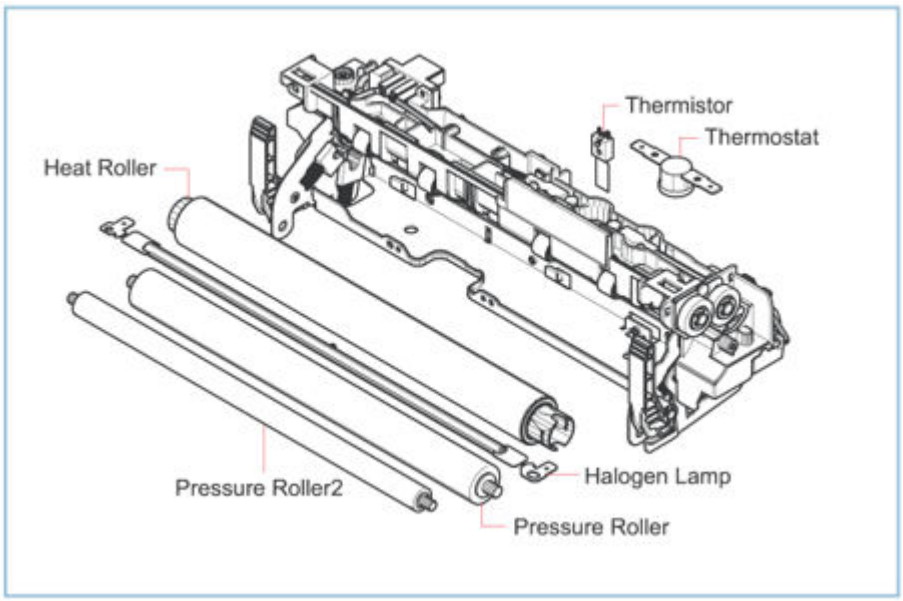
1. Charging the OPC drum : The charge roller gives the drum negative charges.
2. Laser exposure : Light produced by a laser diode irradiates the charged OPC through the lens and mirrors.
3. Development : This machine uses a dual-component development system . The magnetic roller carries negatively charged toner to the latent image on the drum surface.
4. Transfer : The transfer rollers opposite the OPC drums transfer toner from the drums to the transfer media (e.g. paper, OHP film, etc).
5. Cleaning for OPC drum: The cleaning blade removes remaining toners on the drum surface after image transfer to the paper.

Fuser unit

This section describes the fuser system.

It is consisted of a halogen lamp, heat roller, pressure roller, thermistor and thermostat. It sticks the toner on a paper by heat and pressure to complete the printing job.

Figure 1-14 Fuser unit



1. Thermostat

   When a heat lamp is overheated, a Thermostat cuts off the main power to prevent over- heating.

   - Thermostat Type : Non- Contact type
   - Control Temperature : 190℃ ± 5℃

2. Thermistor

   It is a temperature detecting sensor.

   - Temperature Resistance : 7 KΩ(180℃)
   - Rated B-value R25/85 3370K±3% (The Rated B-value is calculated from the zero-power resistance measured at 25℃ and 85℃)

3. Heat roller

   The heat roller transfers the heat from the lamp to apply a heat on the paper.

   The surface of a heat roller is coated with Teflon, so toner does not stick to the surface.

4. Pressure roller

   A pressure roller mounted under a heat roller is made of a silicon resin, and the surface also is coated with Teflon. When a paper passes between a heat roller and a pressure roller, the toner adheres to the surface of a paper permanently through this combination of heat and pressure.

5. Halogen Lamp

- Voltage : 120 V, 115 ± 5 % / 220 V, 230 ± 5 %
- Capacity : 850 Watt ± 42.5W

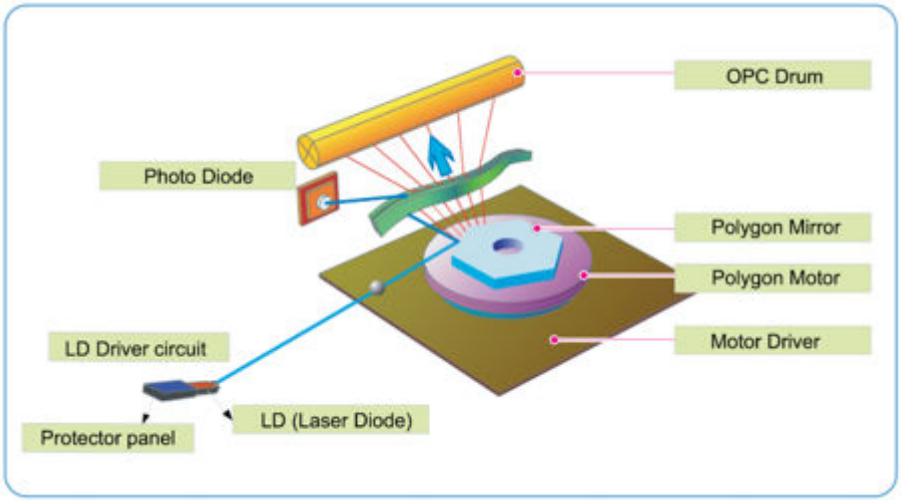
LSU (Laser scanner assembly)

This section describes the LSU system.

It is the core part of the LBP which switches from the video data received to the controller to the electrostatic latent image on the OPC drum by controlling laser beam, exposing OPC drum, and turning principle of polygon mirror.

The OPC drum is turned with the paper feeding speed. The HSYNC signal is created when the laser beam from LSU reaches the end of the polygon mirror, and the signal is sent to the controller. The controller detects the HSYNC signal to adjust the vertical line of the image on paper. In other words, after the HSYNC signal is detected, the image data is sent to the LSU to adjust the left margin on paper. The one side of the polygon mirror is one line for scanning.

Figure 1-15 LSU unit



Drive system

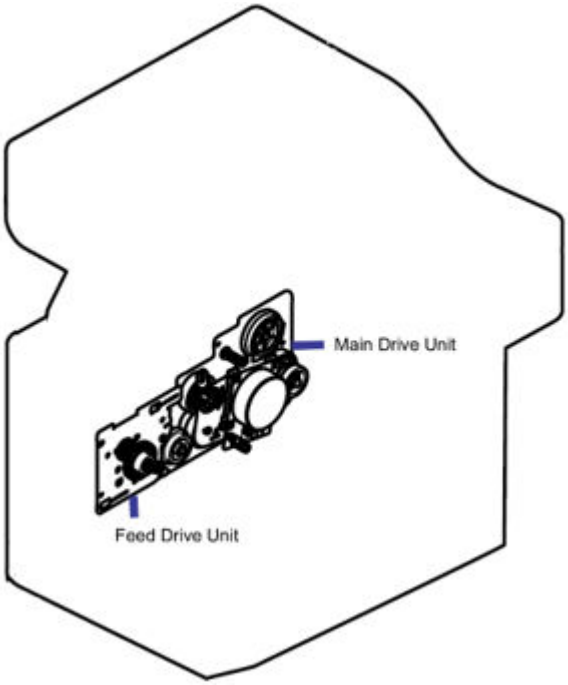
This section describes the drive system.

HP Laser 408dn / HP Laser MFP 432fdn has 2 drive units that is assembled to the right side of the machine.

The main drive unit consists of a BLDC motor, a clutch, various gears for OPC, fuser, exit, feed etc.

The feed drive unit consists of 2 gears for MP, feed.

Figure 1-16 Drive unit

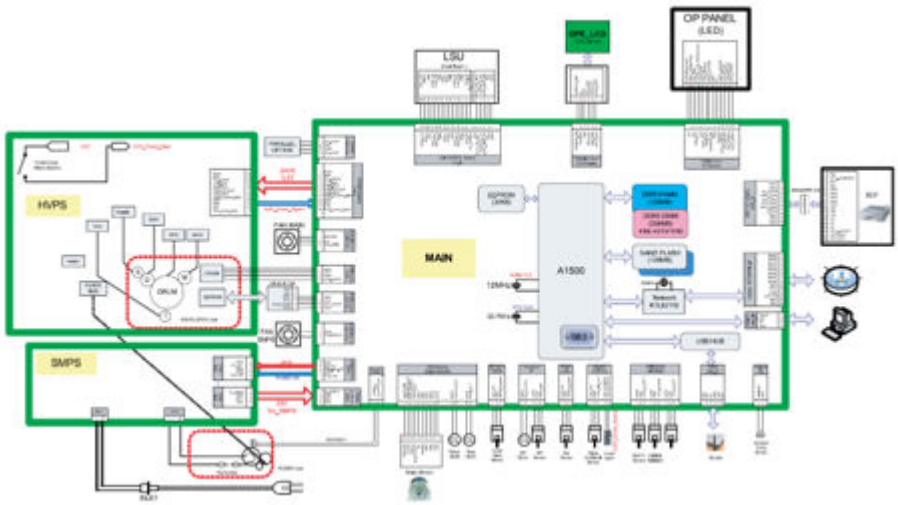


Hardware configuration

The electronic circuit system consists of the following:

Electronic circuit configuration

Figure 1-17 Electronic circuit diagram



The engine controller board (ECB) handles all modules required to print, that is, LSU, HVPS, SMPS, FAN, Fuser, etc.

The engine controller board (ECB) receives print data from the host through network or USB Port or fax, Scanner. It takes this information and generates printable video bitmap data. Engine and Video controller are not separated.

The engine controller board (ECB) adopts the A1500(600MHz) CPU, DIMM PBA on DDR3 memory and external memory to perform printing and Scan jobs successfully.

The control panel controller displays the status of the system using 16 x 4line LCD in response to user actions or the formatter.

The HVPS supplies high voltage for developing Process. High Voltage controlled by PWM signal from CPU.

LVPS and HVPS makes +5V and +24V DC from 220V or 110 AC.

Wireless PCA is used for wireless communication.

Electronic circuit location

Figure 1-18 Electronic circuit location (HP Laser 408dn)

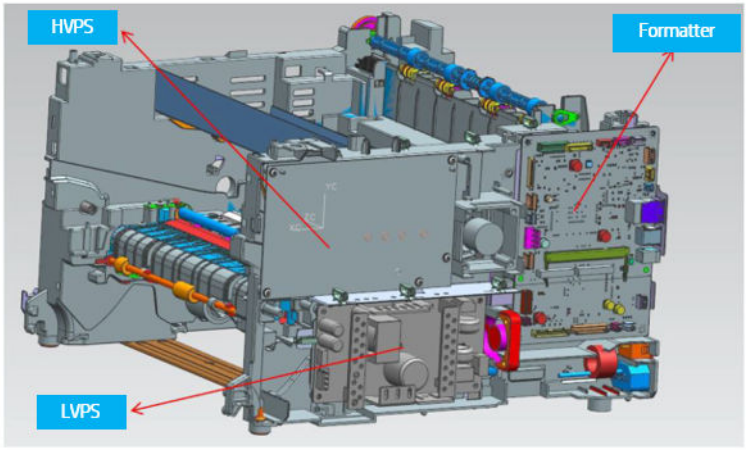
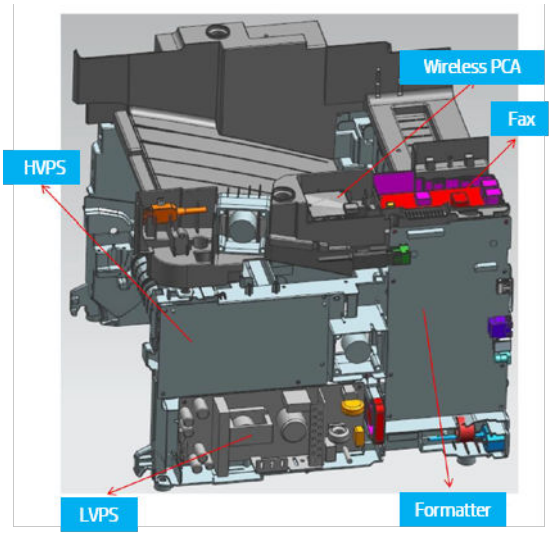


Figure 1-19 Electronic circuit location (HP Laser MFP 432fdn)



Formatter (Main PCA)

Formatter is composed with below components.

- A1500 : To generate the printable video data and control engine / Embedded USB2.0 device
- DDR3 SODIMM : 256MB
- Ethernet PHY : Network printing
- NAND Flash : Program memory (128MB)
- MicroSD Memory : 4GB (HP Laser MFP 432fdn only)

The main controller manages an Electro-photography system, controls the video data of printing images from main board to LSU, provides high-voltages and PWMs, adjusts temperature in the fusing system, reads sensor signals and controls SCF option.

The main controller also controls OPE and N/W PHY, USB Device, Wireless Module.

Figure 1-20 Formatter diagram (HP Laser 408dn)

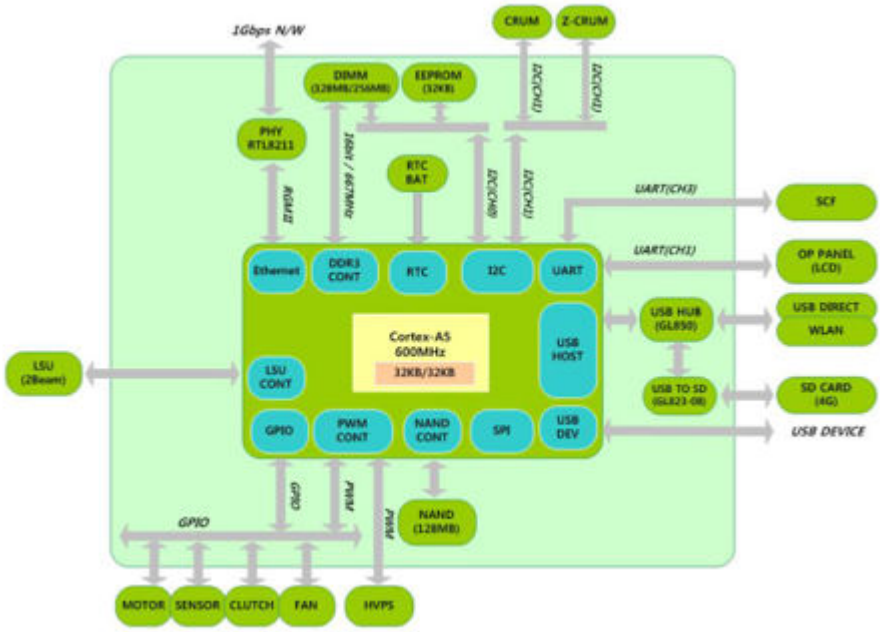


Figure 1-21 Formatter connection information (HP Laser 408dn)

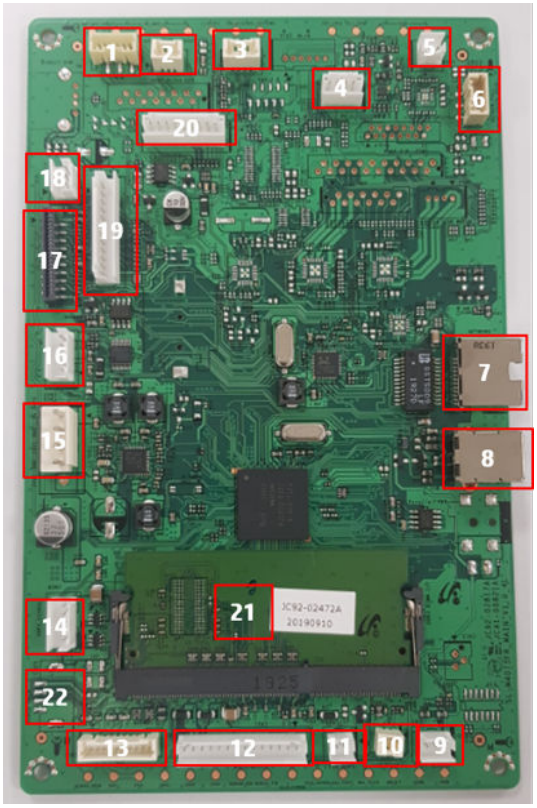


Table 1-30 Formatter connection information (HP Laser 408dn)

No	Description
1	2LINE LCD OPE
2	COVER OPEN SENSOR

Table 1-30 Formatter connection information (HP Laser 408dn) (continued)

No	Description
3	TONER CRUM
4	CRUM
5	FUSER
6	OUT BINFULL / REAR COVER OPEN
7	NETWORK
8	USB DEVICE
9	EXIT SENSOR
10	AIR TEMP
11	FAN SMPS
12	MAIN MOTOR
13	SCF (option)
14	SMPS SIGNAL
15	SMPS POWER
16	TRAY 1
17	LSU
18	FAN MAIN
19	HVPS
20	SENSOR I/F
21	DDR SO-DIMM
22	DEBUG

Figure 1-22 Formatter diagram (HP Laser MFP 432fdn)

Figure 1-23 Formatter connection information (HP Laser MFP 432fdn)

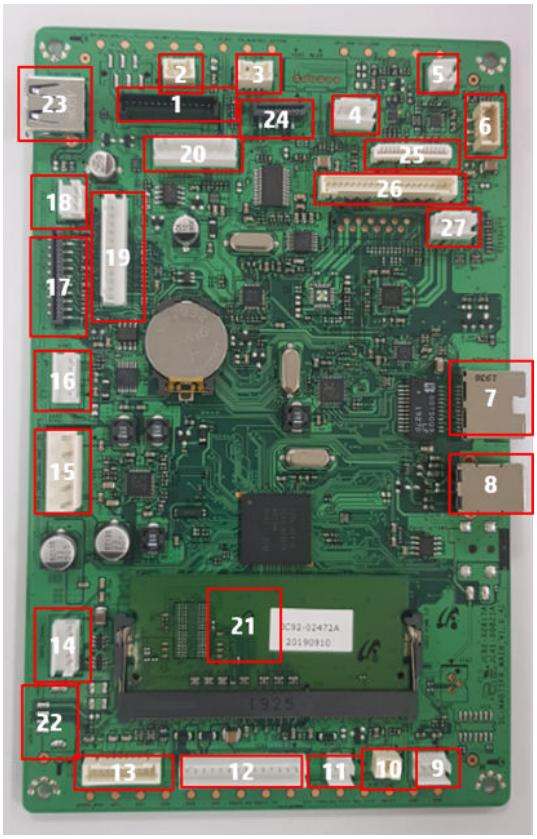


Table 1-31 Formatter connection information (HP Laser MFP 432fdn)

No	Description
1	2LINE LCD OPE

Table 1-31 Formatter connection information (HP Laser MFP 432fdn) (continued)

No	Description
2	COVER OPEN SENSOR
3	TONER CRUM
4	CRUM
5	FUSER
6	OUTBIN FULL / REAR COVER OPEN
7	NETWORK
8	USB DEVICE
9	EXIT SENSOR
10	AIR TEMP
11	FAN SMPS
12	MAIN MOTOR
13	SCF (option)
14	SMPS SIGNAL
15	SMPS POWER
16	TRAY 1
17	LSU
18	FAN MAIN
19	HVPS
20	SENSOR I/F
21	DDR SO-DIMM
22	DEBUG
23	DIRECT USB
24	FAX
25	CIS
26	RADF
27	PLATEN MOTOR

Control panel PCA

The control panel PCA is composed of an OPE MICOM, two status LED, power LED and some keys.

OPE communicates with main controller via UART/USB.

Figure 1-24 Control panel diagram

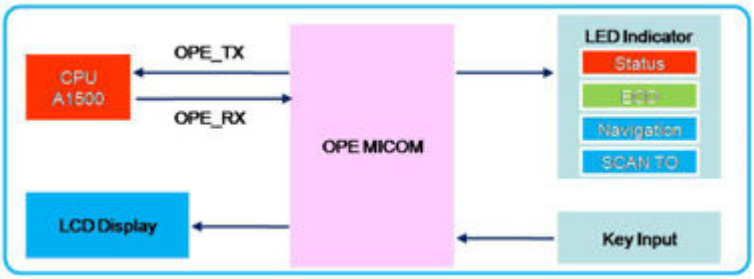


Figure 1-25 Control panel PCA image (HP Laser 408dn)

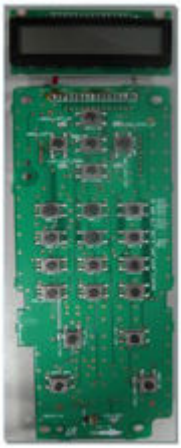
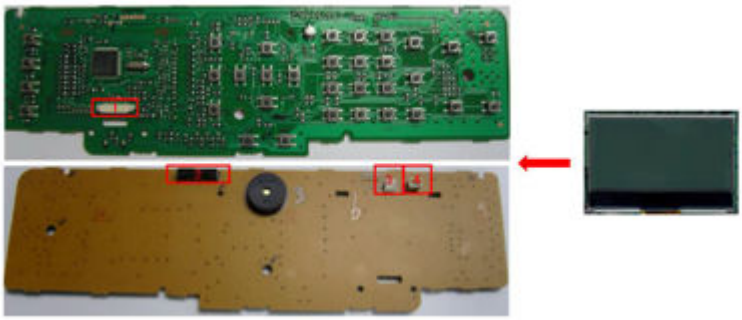


Figure 1-26 Control panel PCA image (HP Laser MFP 432fdn)



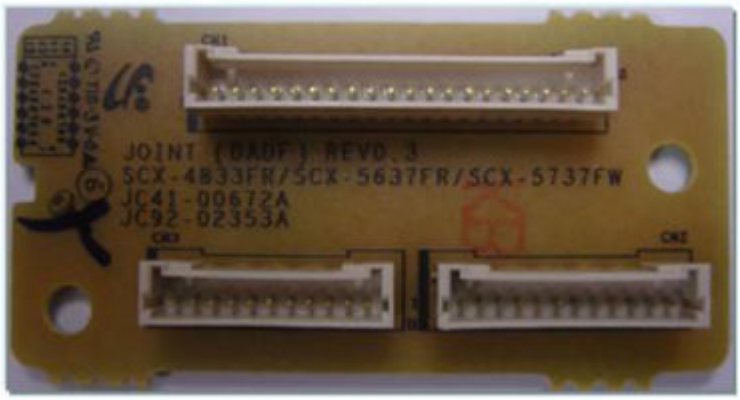
SO-DIMM PCA

SO-DIMM PCA is the system memory module of the main controller. It is used for the operating system, some system application programs, and it stores some print data from the USB and Network port. There are three kinds of SO-DIMMPBA.

Figure 1-27 SO-DIMM PCA

ADF PCA

The JOINT PCA is the Joint Board to Connect between ADF Module and Main PCA.

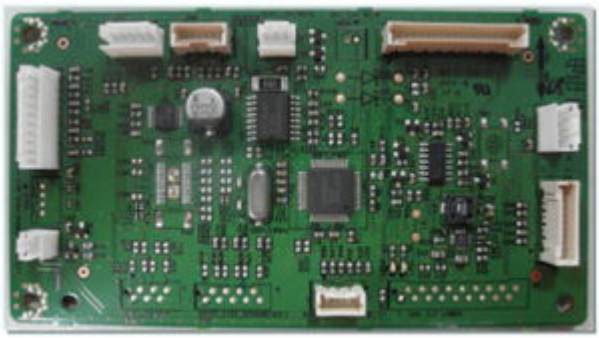


SCF PCA

The SCF PBA is the SCF control board. It use UART communication with main controller.

UPD70F3824 is used as a microcontroller.

Figure 1-28 SCF PCA image

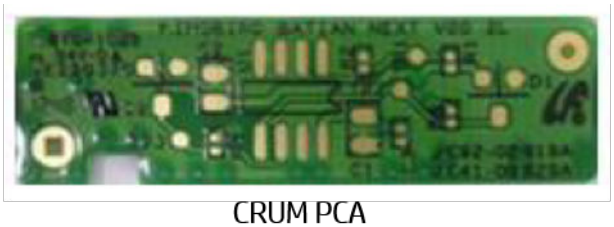


CRUM PCA

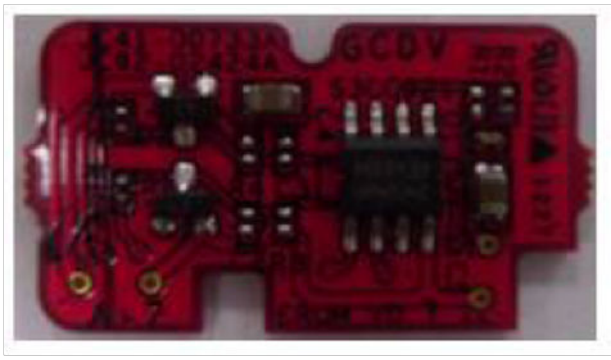
HP Laser 408dn / HP Laser MFP 432fdn use zCRUM PCA, OPC CRUM and CRUM JOINT PCA.

CRUM PCA uses I2C communication with main controller.

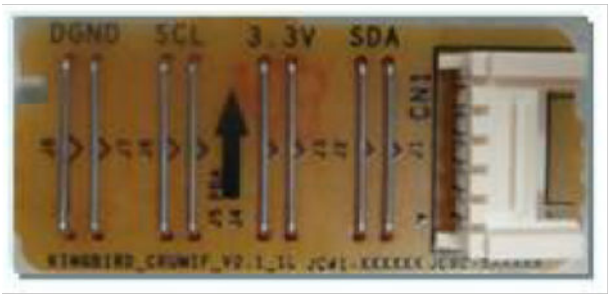
Figure 1-29 CRUM PCA image



CRUM PCA



OPC CRUM PCA



CRUM JOINT PCA

Fax board

The modem card is used to transfer and receive fax data through a telephone line. This board is controlled by the main board and has two connectors, one for the telephone line connection and the other for an external phone connection.

Figure 1-30 Fax board image

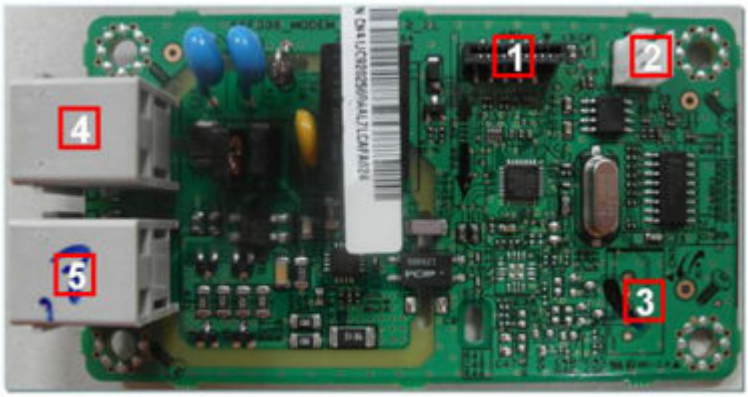


Table 1-32 Fax board infomation

No	Item
1	Main Interface
2	Speaker
3	Hook(only China model)
4	Tel Line
5	Ext Line

LVPS/HVPS board

LVPS board

The LVPS board supplies electric power to the main board and other boards. The voltage provided includes +5V, and +24V from a 110V/220V power input.

Figure 1-31 LVPS board image

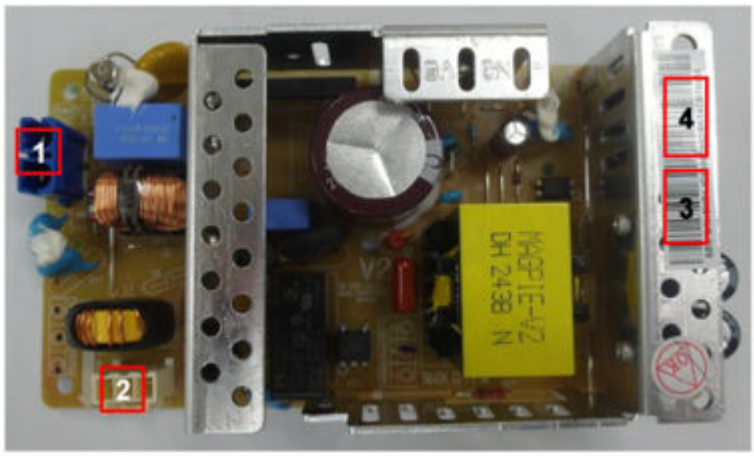


Table 1-33 LVPS board information

No	Item
1	INPUT_AC
2	Fuser_AC Output
3	LVPS Control Signal (from Engine PBA)
4	OUTPUT_5V&24V (to DC POWER PCA)

HVPS board

The LVPS board supplies electric power to the main board and other boards. The voltage provided includes +5V, and +24V from a 110V/220V power input.

Figure 1-32 HVPS board image

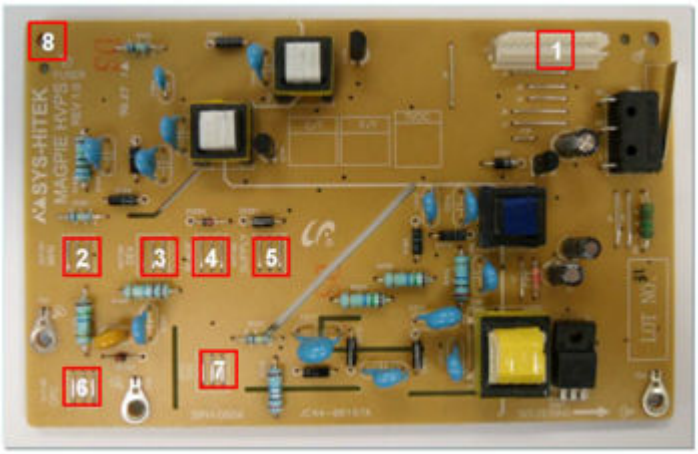


Table 1-34 LVPS board information

No	Item
1	Main Interface
2	MHV(-1240V)
3	DEV(-338V)
4	BLADE(-389V)
5	SUPPLY(-489V)
6	OPC(-51V)
7	THV(+1315V, -1000V)
8	FUSER BIAS(240V)

2 Parts, diagrams, removal and replacement

For additional service and support

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

- AMS
  - https://support.hp.com/wise/home/ams-en
  - https://support.hp.com/wise/home/ams-es
  - https://support.hp.com/wise/home/ams-pt
  - https://support.hp.com/wise/home/ams-fr
- APJ
  - https://support.hp.com/wise/home/apj-en
  - https://support.hp.com/wise/home/apj-ja
  - https://support.hp.com/wise/home/apj-ko
  - https://support.hp.com/wise/home/apj-zh-Hans
  - https://support.hp.com/wise/home/apj-zh-Hant
  - https://support.hp.com/wise/home/apj-th
- EMEA
  - https://support.hp.com/wise/home/emea-en

Channel partners, go to partner.hp.com.

The above websites provide information on the following topics:

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

- Service advisories
- Warranty and regulatory information

Channel partners, access training materials in the HP University and Partner Learning Center at https://content.ext.hp.com/sites/LMS/HPU.page.

To access HP PartSurfer information from any mobile device, go to http://partsurfermobile.hp.com/.

Order parts by authorized service providers

Ordering

Table 2-1 Ordering

Item	Description
Order supplies and paper	http://www.hp.com/go/suresupply
Order genuine HP parts or accessories	
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 parts can be ordered. Refer to the parts table following the exploded diagram in the parts chapter to determine if a part is orderable.

Supplies parts numbers

Table 2-2 Supplies parts numbers

Region	Description	Part number	Yield
LATAM	HP 330A Black Original Laser Toner Cartridge	W1330A	5,000
	HP 330X High Yield Black Original Laser Toner Cartridge	W1330X	15,000
	HP Black Contract Original Laser Toner Cartridge	W1330XC	15,000
EMEA	HP 331A Black Original Laser Toner Cartridge	W1331A	5,000
	HP 331X High Yield Black Original Laser Toner Cartridge	W1331X	15,000
	HP Black Contract Original Laser Toner Cartridge	W1331XC	15,000
	HP Black Contract Original Laser Toner Cartridge	W1331XH	15,000
LATAM/EMEA	HP 332A Black Original Laser Imaging Drum	W1332A	30,000

Table 2-2 Supplies parts numbers (continued)

Region	Description	Part number	Yield
LATAM/EMEA	HP Black Contract Original Laser Imaging Drum	W1332AC	30,000
EMEA	HP Black Contract Original Laser Imaging Drum	W1332AH	30,000

Accessories part numbers

Table 2-3 Accessory list

Item	Product Number	Predecessor	Spec
HP Laser 550 Sheet Paper Tray	7YG00A	SL-SCF3805	550 sheets
HP Laser 512 Expansion Memory Kit	5PJ81A	ML-MEM370	512MB

NOTE: Many part numbers vary based on where you are located. It is important to contact your local HP parts suppliers to ensure you have the most current part number available based on your location.

Related documentation and software

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

AMS

- https://support.hp.com/wise/home/ams-en
- https://support.hp.com/wise/home/ams-es
- https://support.hp.com/wise/home/ams-pt

APJ

- https://support.hp.com/wise/home/apj-en
- https://support.hp.com/wise/home/apj-ja
- https://support.hp.com/wise/home/apj-ko
- https://support.hp.com/wise/home/apj-zh-Hans
- https://support.hp.com/wise/home/apj-zh-Hant

EMEA

- https://support.hp.com/wise/home/emea-en

Channel partners, go to HP Channel Services Network (CSN) at http://www.hp.com/partners/csn.

Channel partners, access training materials in the HP University and Partner Learning Center at https://content.ext.hp.com/sites/LMS/HPU.page.

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. Each table lists the item number, the associated part number, and the description of each part. If there is (*) at the end of the part number in the table, then it is service available.

⚠ CAUTION: Be sure to order the correct part. When looking for part numbers for electrical components, pay careful attention to the voltage that is listed in the description column. Doing so will ensure that the part number selected is for the correct model.

NOTE: In this manual, the abbreviation “PCA” stands for “printed circuit-board assembly.” Components described as a PCA might consist of a single circuit board or a circuit board plus other parts, such as cables and sensors.

Electrostatic discharge

Learn how to protect sensitive parts against damage from electrostatic discharge.

⚠ CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Look for the ESD reminder when removing printer parts. 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.

Service approach

Before performing service

- Remove all paper from the product.
- Turn off the power using the power button.
- Unplug the power cable and interface cable or cables.
- Remove the output bin.
- Place the product on an ESD workstation or mat, or use an ESD strap (if one is available). If an ESD workstation, mat, or strap is not available, ground yourself by touching the sheet-metal chassis before touching an ESD-sensitive part.
- Remove the toner cartridges.
- Remove the Tray 2 cassette.

Releasing plastic latches:

Many of the parts are held in place with plastic latches. The latches break easily; release them carefully. To remove, press the hook end of the latch away from the part to which it is latched.

After performing service

Complete the following after service is performed.

- Plug in the power cable.
- Reinstall the output bin.
- Reinstall the toner cartridges.
- Reinstall the Tray 2 cassette.
- Load paper in the product.

Post-service test

Perform the following tests to verify that the repair or replacement was successful:

Main parts

Covers (HP Laser 408dn)

Parts and diagrams : Covers (HP Laser 408dn)

Figure 2-1 Covers (HP Laser 408dn)

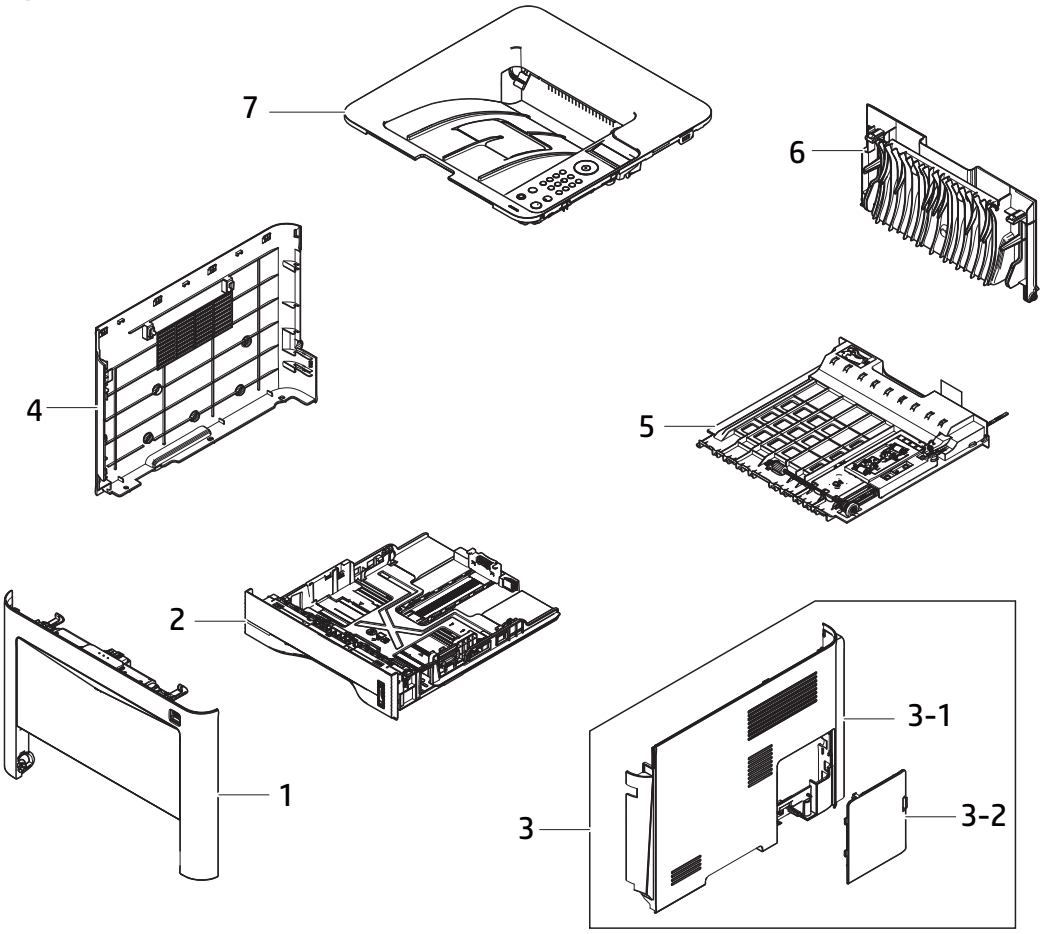


Table 2-4 Covers (HP Laser 408dn)

Ref	Description	Part number (*)	Qty
1	Front cover	7UQ75-40020 (*)	1
2	Tray 2 cassette	7UQ75-40028 (*)	1
3	Right cover assembly	7UQ75-40025	1
3-1	Right cover	7UQ75-40008	1
3-2	Memory module cover	7UQ75-40009	1
4	Left cover	7UQ75-40006	1
5	Duplex assembly	7UQ75-40036 (*)	1
6	Rear cover	7UQ75-40024	1
7	Top cover assembly	7UQ75-40022 (*)	1

(*) This part is in ordering system.

Removal and replacement: Left and right cover (HP Laser 408dn)

Follow these steps to remove the left and right cover.

Mean time to repair: 2 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

NOTE: This part is not in ordering system.

Table 2-5 Part information

Part number	Part description
• 7UQ75-40006	• Left cover
• 7UQ75-40025	• Right cover assembly

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the left and right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-2

b. Remove the left cover by releasing hooks.

Figure 2-3

c. Remove the right cover by releasing hooks.

Figure 2-4

2. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Front cover (HP Laser 408dn)

Follow these steps to remove the front cover.

Mean time to repair: 3 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com/

Table 2-6 Part information

Part number	Part description
7UQ75-40020	Front cover

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-5

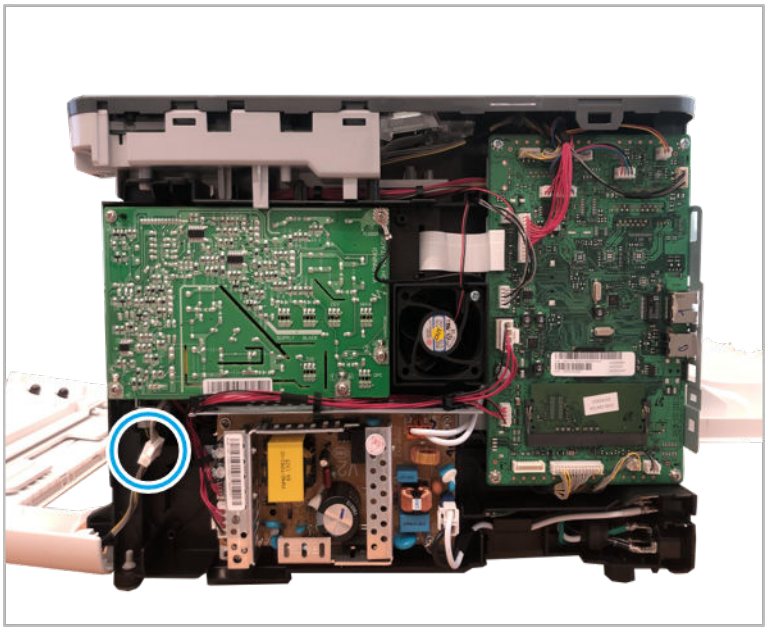
b. Remove the right cover by releasing hooks.

Figure 2-6

2. Remove the front cover.

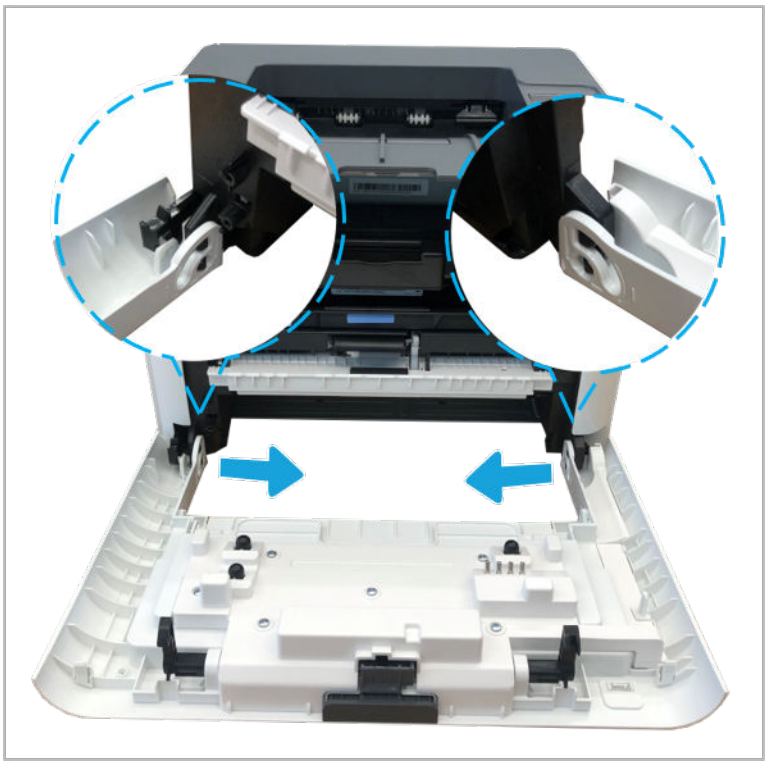
a. Disconnect one connector connecting the front cover.

Figure 2-7



b. Pull the bottom of the front cover inward to release both hooks, and then remove the front cover.

Figure 2-8



3. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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 (HP Laser 408dn)

Follow these steps to remove the top cover.

Mean time to repair: 6 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com/

Table 2-7 Part information

Part number	Part description
7UQ75-40022	Top cover assembly

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the left and right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-9

b. Remove the left cover by releasing hooks.

Figure 2-10

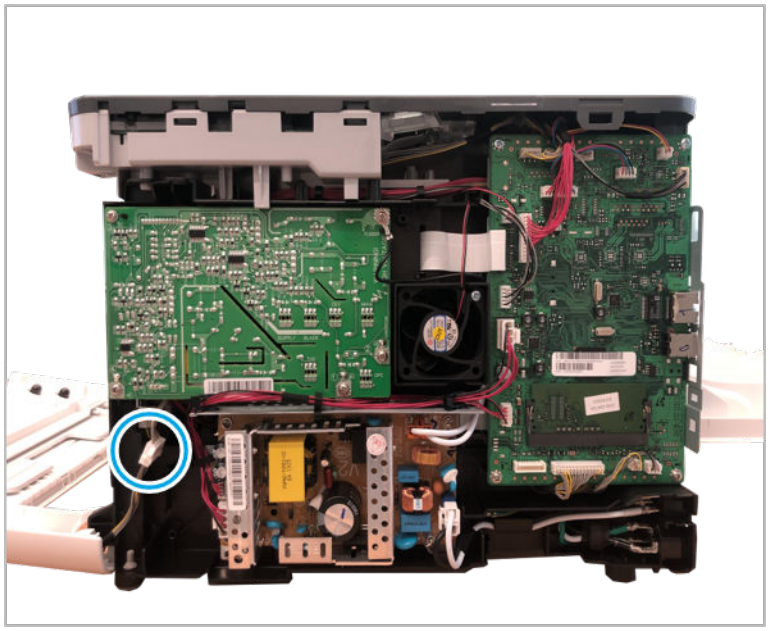
c. Remove the right cover by releasing hooks.

Figure 2-11

2. Remove the front cover.

a. Disconnect one connector connecting the front cover.

Figure 2-12



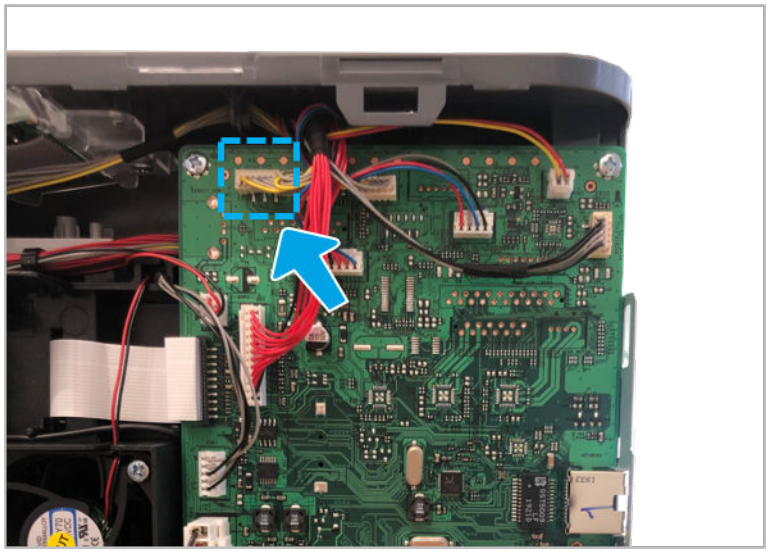
b. Pull the bottom of the front cover inward to release both hooks, and then remove the front cover.

Figure 2-13

3. Remove the Top cover and middle inner cover.

a. Disconnect the control panel connector from the main PCA.

Figure 2-14



b. Remove 2 screws from the front side.

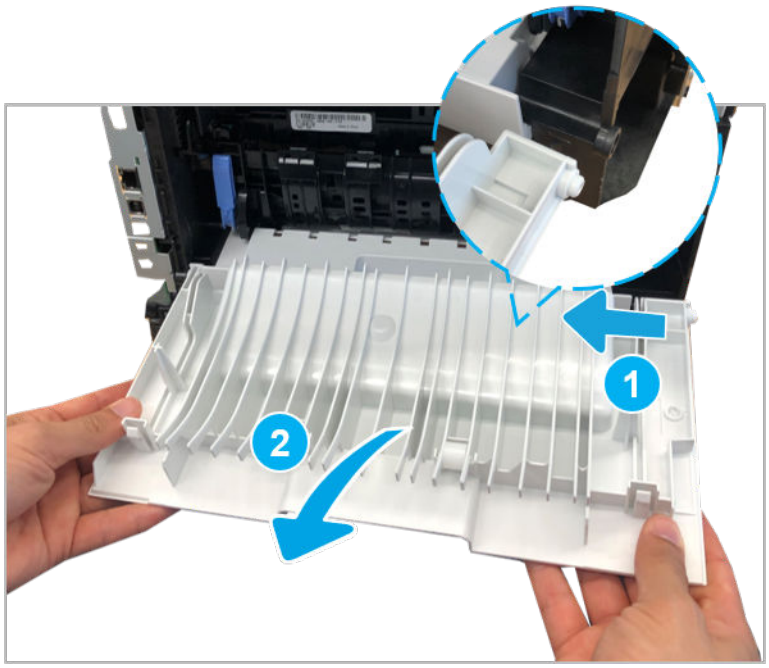
Figure 2-15

c. Remove the duplex assembly.

Figure 2-16

d. Pull the rear cover to the left and then release it.

Figure 2-17



e. Remove 2 screws and dummy cover.

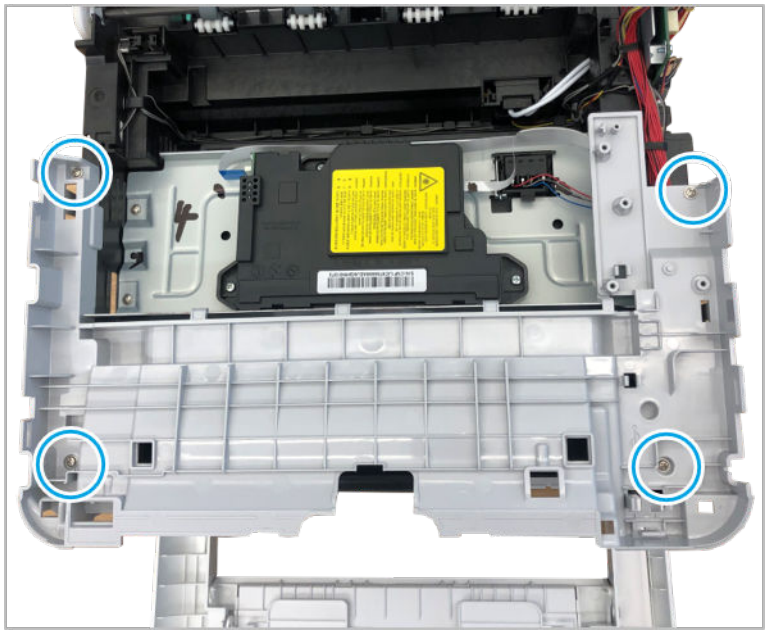
Figure 2-18

f. Lift up the top cover to release it.

Figure 2-19

g. Remove 4 screws, and then remove the middle-inner cover.

Figure 2-20



4. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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.

Parts and diagrams: Top cover assembly (HP Laser 408dn)

Figure 2-21 Top cover assembly (HP Laser 408dn)

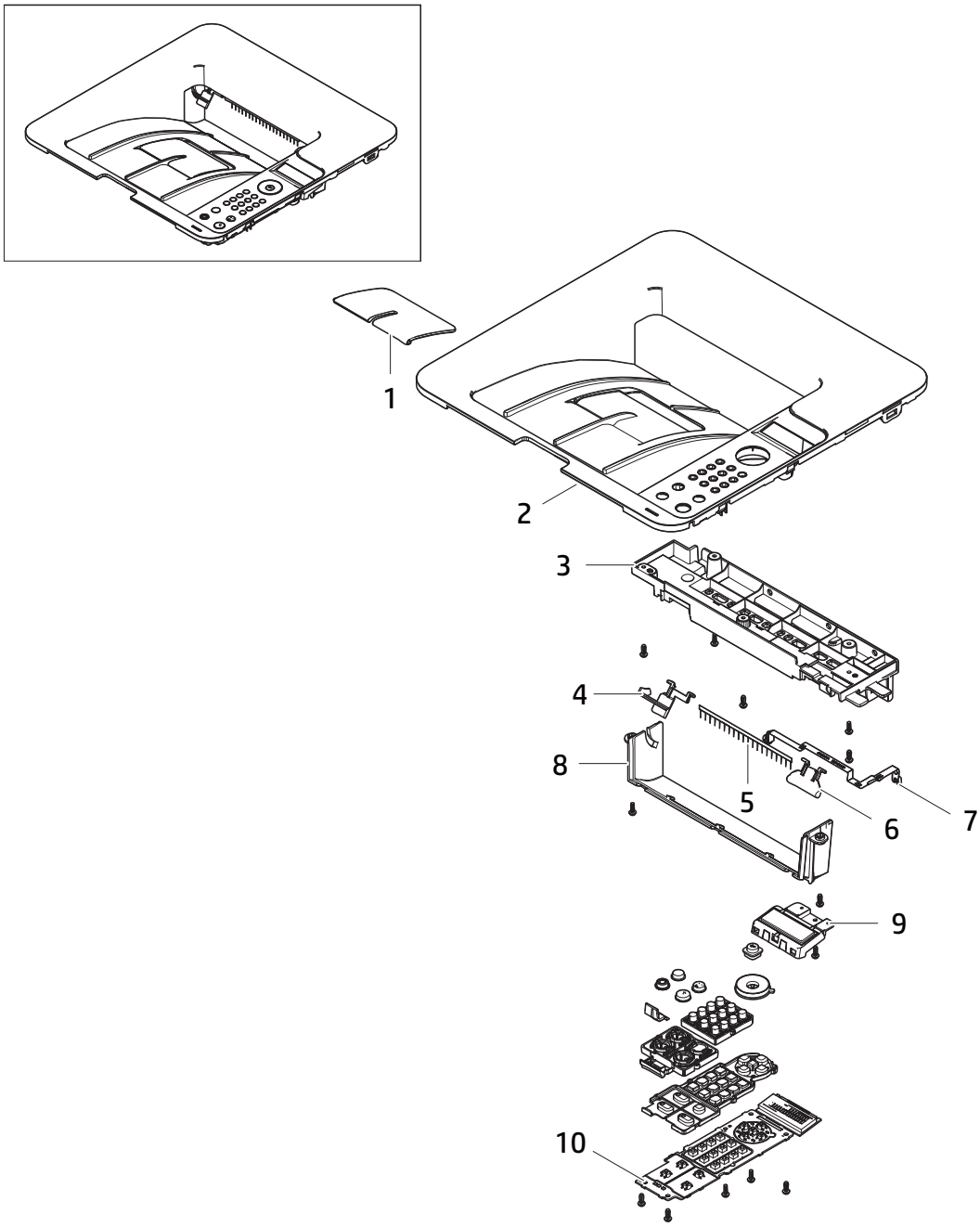


Table 2-8 Top cover assembly (HP Laser 408dn)

Ref	Description	Part number (*)	Qty
1	Main stacker	JC61-05514D	1
2	Top cover	7UQ75-40013	1
3	Path cover	JC63-04185A	1
4	Bin full stacker	JC61-04098A (*)	1
5	Antistatic brush	JC67-00055B	1
6	Stacker pmo sub	JC72-01343A (*)	1
7	Exit ground	JC63-04130A	1
8	Exit cover	JC63-04136D	1
9	LCD window cap	JC67-00708A	1
10	Control panel PCA	7UQ75-60003	1

(*) This part is in ordering system.

Covers (HP Laser MFP 432fdn)

Parts and diagrams: Covers (HP Laser MFP 432fdn)

Figure 2-22 Covers (HP Laser MFP 432fdn)

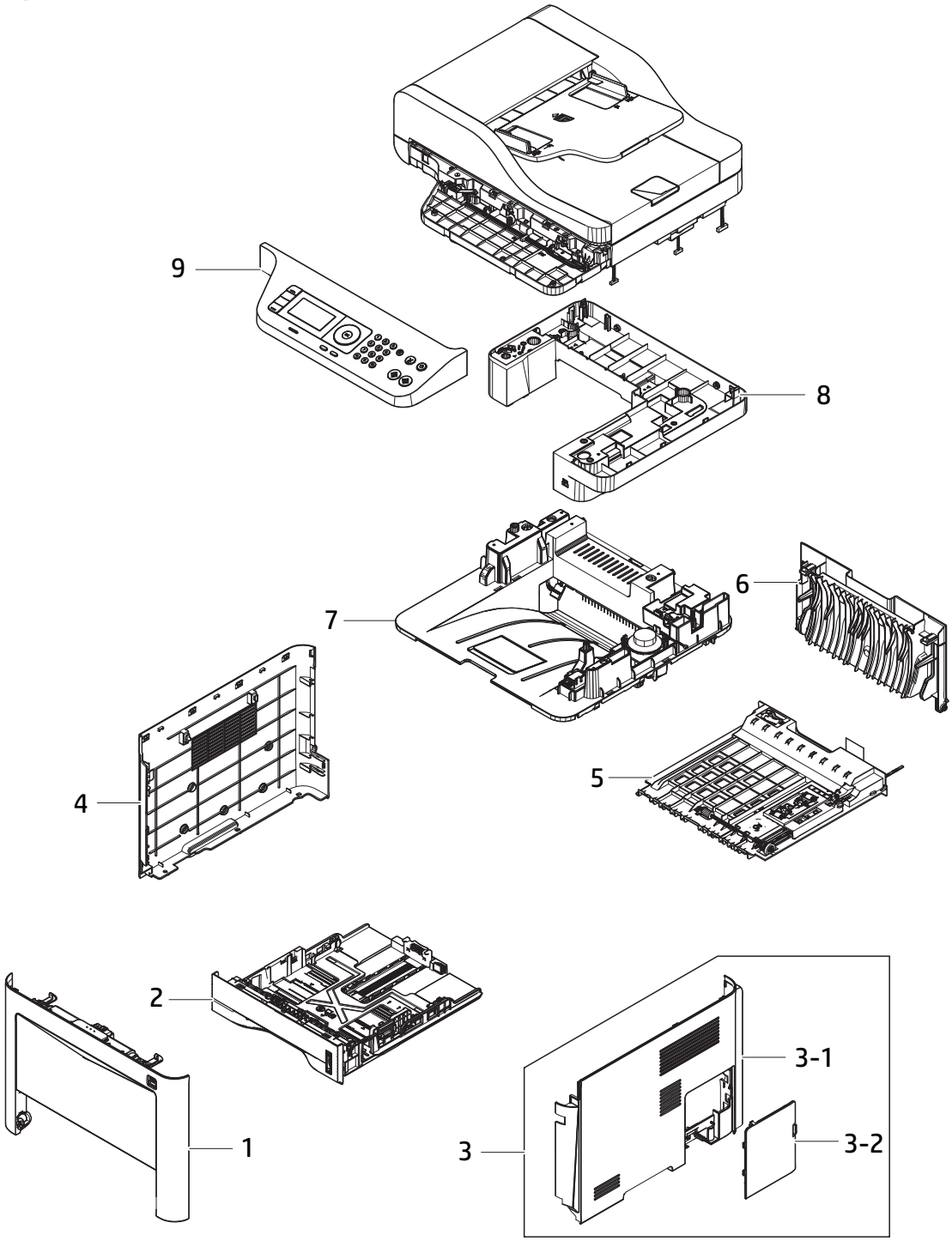


Table 2-9 Covers (HP Laser MFP 432fdn)

Ref	Description	Part number (*)	Qty
1	Front cover	7UQ76-40050 (*)	1
2	Tray 2 cassette	7UQ75-40028	1
3	Right cover assembly	7UQ75-40025	1
3-1	Right cover	7UQ75-40008	1
3-2	Memory module cover	7UQ75-40009	1
4	Left cover	7UQ75-40006	1
5	Duplex assembly	7UQ75-40036	1
6	Rear cover	7UQ75-40024	1
7	Middle lower cover assembly	7UQ76-40051	1
8	Moddle upper cover	7UQ76-40049	1
9	Control panel assembly	7UQ76-61001 (*)	1

(*) This part is in ordering system.

Removal and replacement: Left and right cover (HP Laser MFP 432fdn)

Follow these steps to remove the left and right cover.

Mean time to repair: 2 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

NOTE: This part is not in ordering system.

Table 2-10 Part information

Part number	Part description
• 7UQ75-40006	• Left cover
• 7UQ75-40025	• Right cover assembly

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

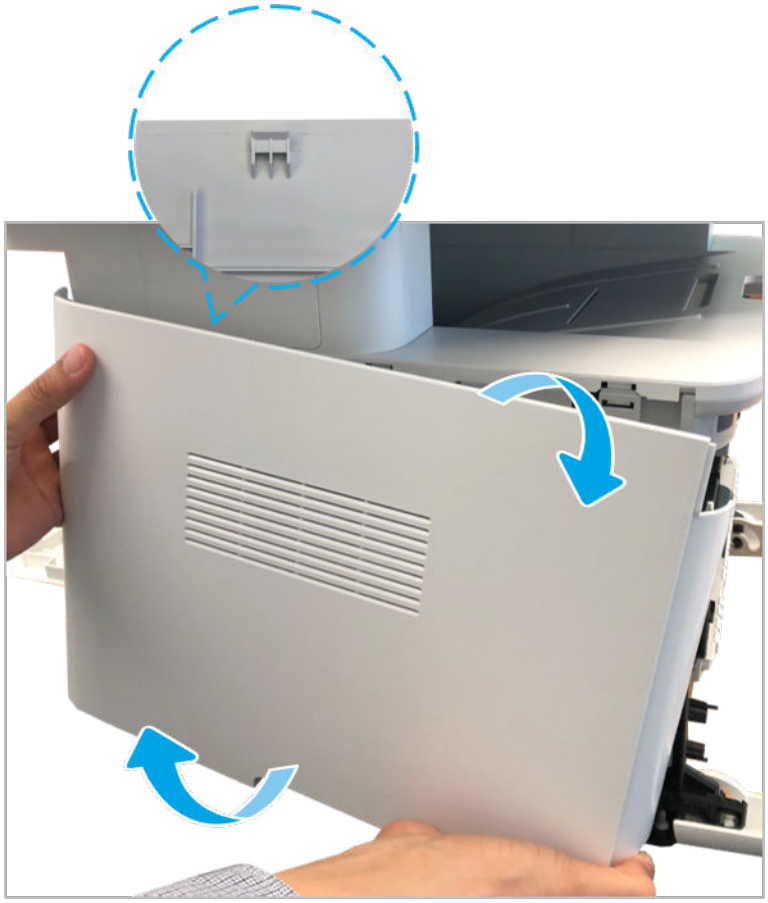
Verify that the document was copied, scanned, or printed correctly.

1. Remove the left and right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-23

b. Remove the left cover by releasing hooks.

Figure 2-24



c. Remove the right cover by releasing hooks.

Figure 2-25

2. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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.

Parts and diagrams: Front cover assembly (HP Laser 408dn / HP Laser MFP 432fdn)

Figure 2-26 Front cover assembly

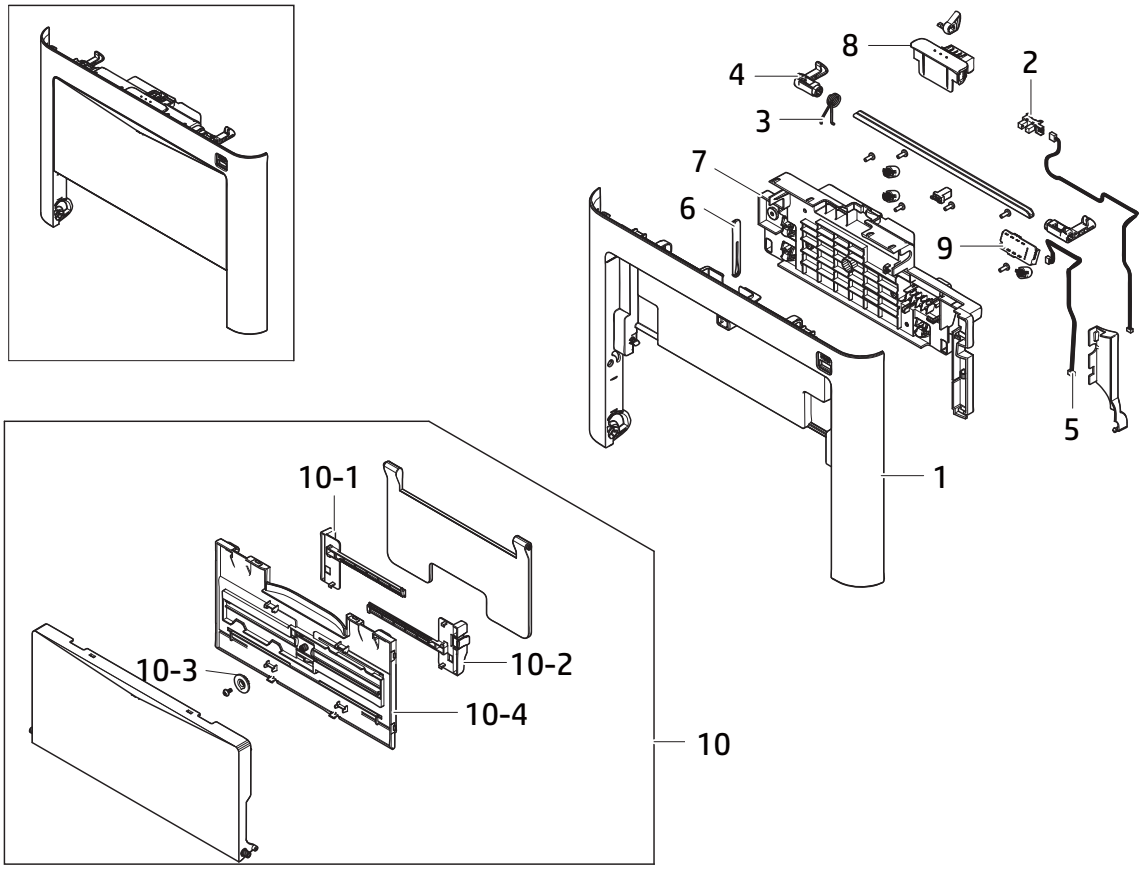


Table 2-11 Front cover assembly

Ref	Description	Part number (*)	Qty
1	Front cover	7UQ75-40001	1
2	Photo interrupter	0604-001415 (*)	1
3	Spring, ts	6107-003474	1
4	Front-right locker	JC64-00368A	1
5	ZCRUM joint harness	JC39-02008A	1
6	Tray 1 cover link	JC66-02086C	1
7	Front-inner cover	JC63-04190B	1
8	Front cover button (HP Laser 408dn)	JC64-00888D	1
	Front cover button (HP Laser MFP 432fdn)	7UQ76-40003	
9	CRUM joint PCA	JC92-02611A	1
10	Tray 1 guide assembly (HP Laser 408dn)	7UQ75-40021	1
	Tray 1 guide assembly (HP Laser MFP 432fdn)	7UQ76-40047	
10-1	Tray 1 left adjust	7UQ75-40040	1
10-2	Tray 1 right adjust	7UQ75-40041	1
10-3	Rack pinion gear	JC66-00387A	1
10-4	Tray 1	7UQ75-40070	1

(*) This part is in ordering system.

Removal and replacement: Front cover (HP Laser MFP 432fdn)

Follow these steps to remove the front cover.

Mean time to repair: 3 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-12 Part information

Part number	Part description
7UQ76-40050	Front cover

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-27

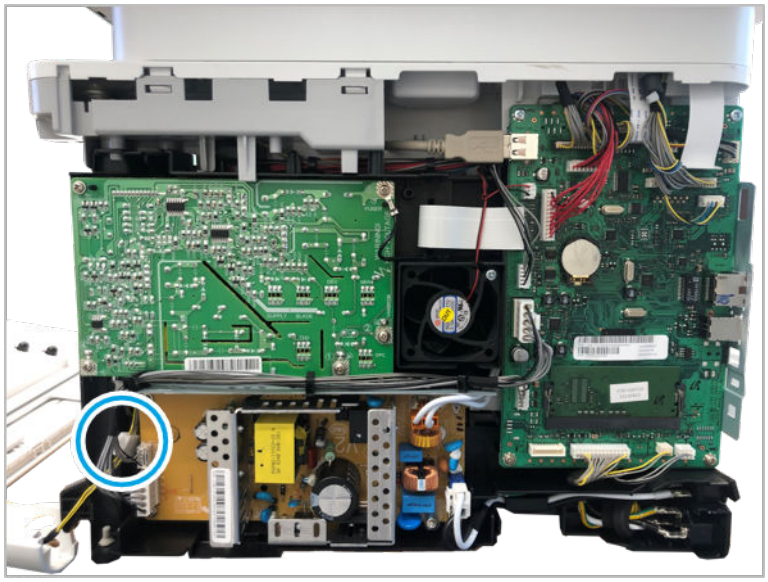
b. Remove the right cover by releasing hooks.

Figure 2-28

2. Remove the front cover.

a. Disconnect one connector connecting the front cover.

Figure 2-29



b. Pull the bottom of the front cover inward to release both hooks, and then remove the front cover.

Figure 2-30

3. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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.

Parts and diagrams: Middle lower cover assembly (HP Laser MFP 432fdn)

Figure 2-31 Middle lower cover assembly (HP Laser MFP 432fdn)

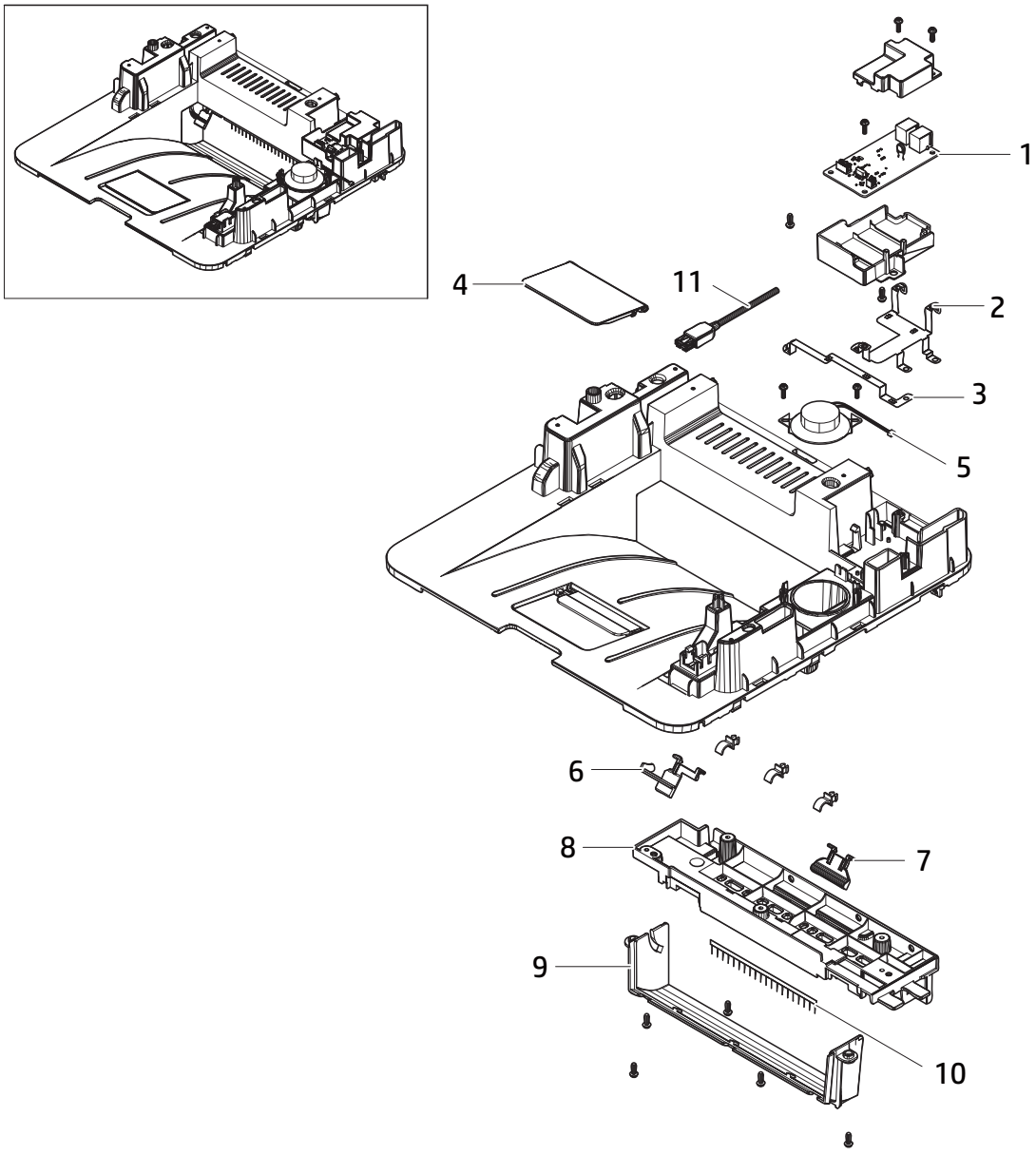


Table 2-13 Middle lower cover assembly (HP Laser MFP 432fdn)

Ref	Description	Part number (*)	Qty
1	Fax PCA	JC92-03045A (*)	1
2	Fax ground	JC63-04068A	1
3	Exit ground	JC63-03090A	1
4	Main stacker	7UQ75-40012	1
5	Speaker	3001-002262 (*)	1
6	Bin full stacker	JC61-04098A (*)	1
7	Stacker pmo sub	JC72-01343A (*)	1
8	Path cover	JC63-04185A	1
9	Exit cover	JC63-04136D	1
10	Antistatic brush	JC67-00055B	1
11	USB host harness	JC39-02016A	1

(*) This part is in ordering system.

Removal and replacement: Middle upper cover (HP Laser MFP 432fdn)

Follow these steps to remove the middle upper cover.

Mean time to repair: 9 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

NOTE: This part is not in ordering system.

Table 2-14 Part information

Part number	Part description
7UQ76-40049	Middle upper cover

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-32

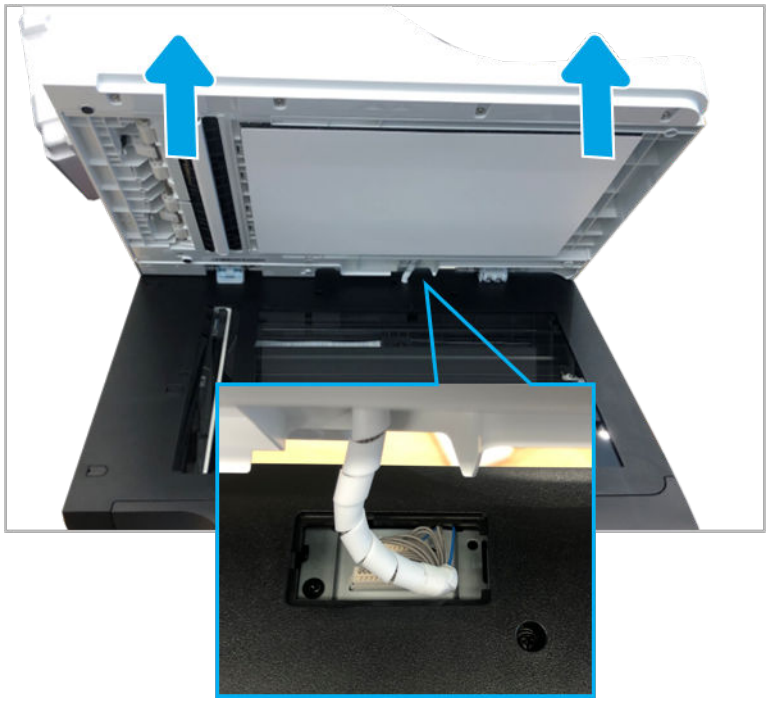
b. Remove the right cover by releasing hooks.

Figure 2-33

2. Remove the ADF.

▲ Open the ADF. Remove the connector cover and disconnect the ADF connector. And then, lift up the ADF to release it.

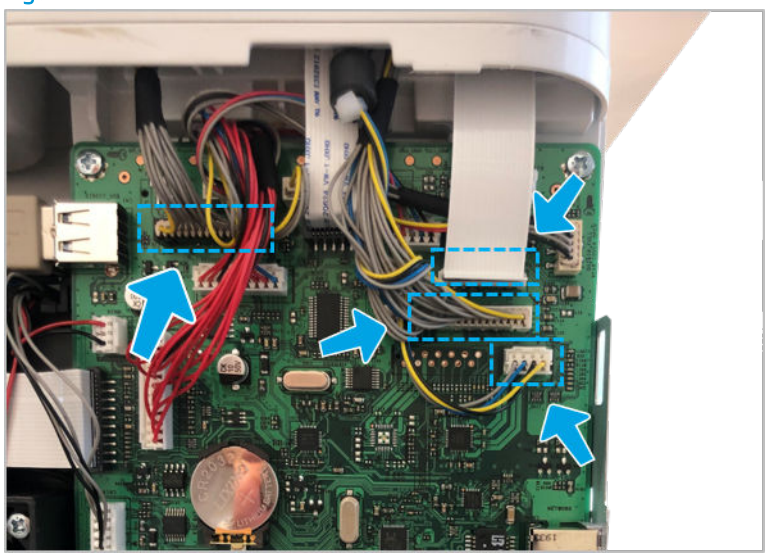
Figure 2-34



3. Remove the flatbed scanner assembly.

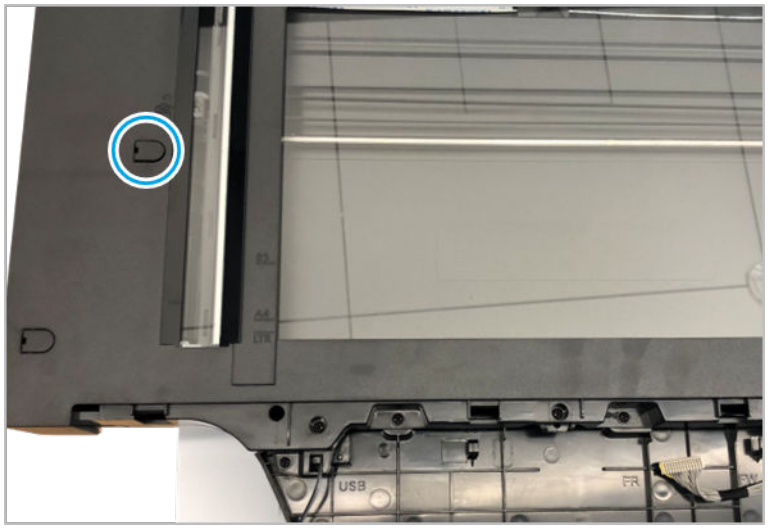
   a. Disconnect all scanner connectors from the main PCA.

Figure 2-35



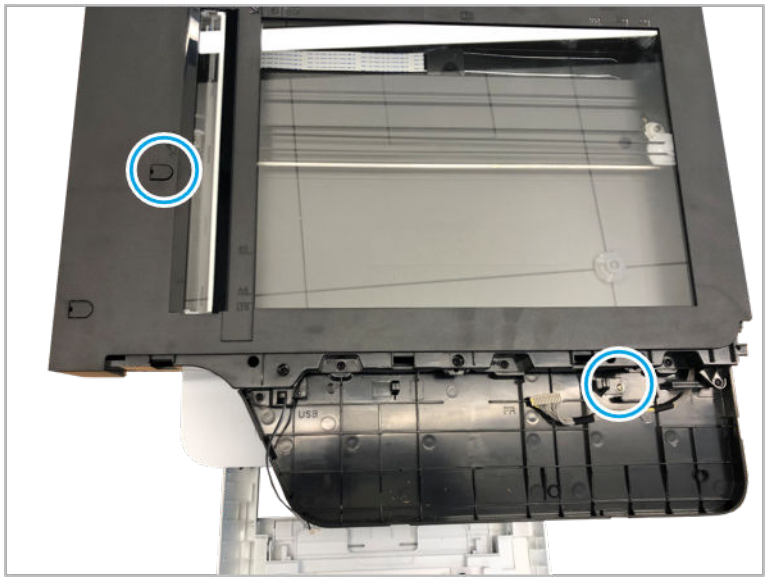
b. Remove the screw cap

Figure 2-36



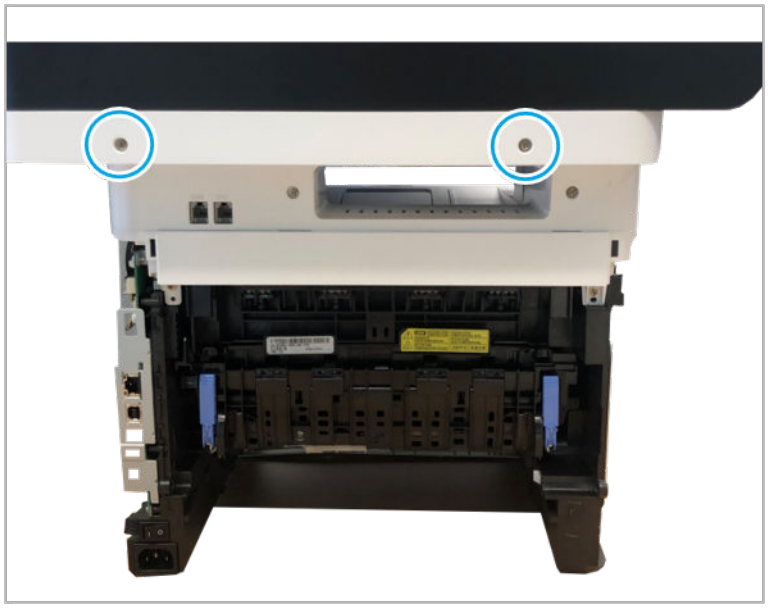
c. Remove 2 screws.

Figure 2-37



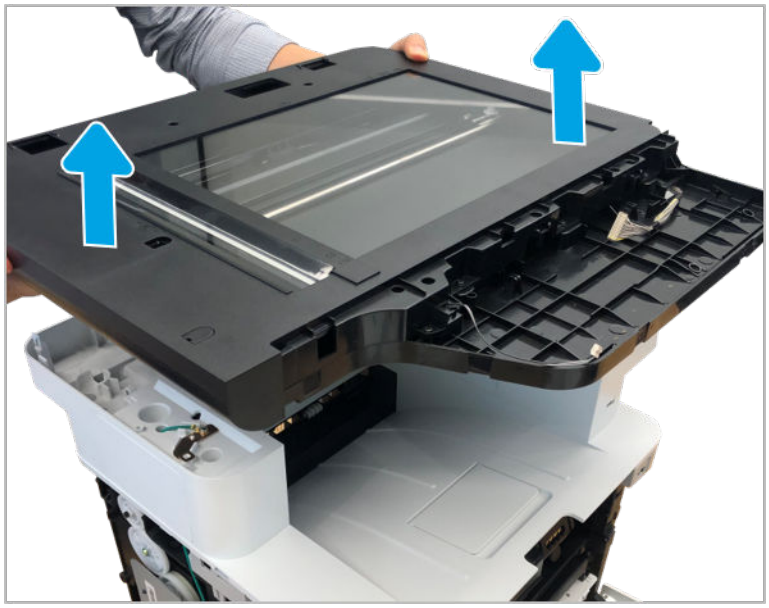
d. Remove 2 screws from the rear side.

Figure 2-38



e. Move the flatbed assembly back slightly, and then lift up it.

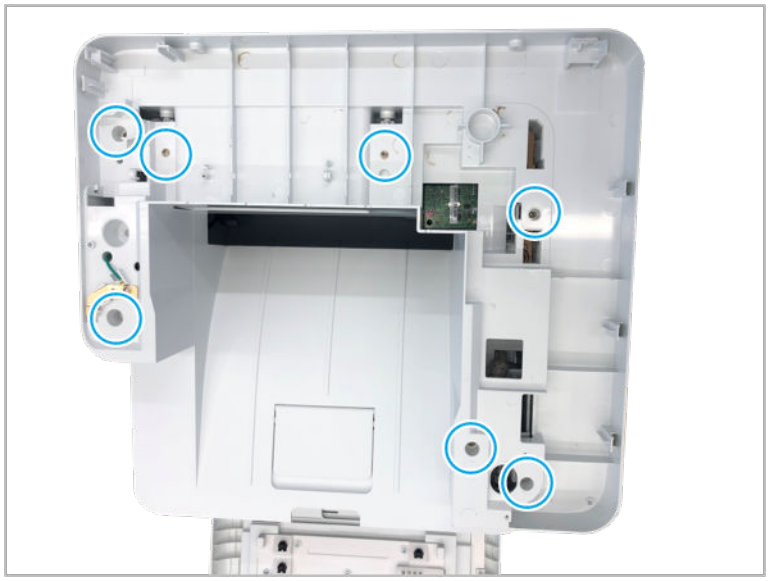
Figure 2-39



4. Remove the middle upper cover.

a. Remove 7 screws.

Figure 2-40

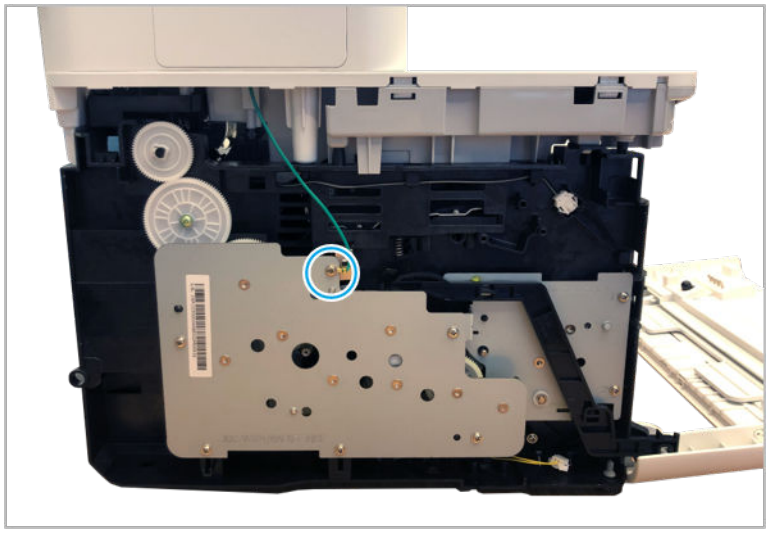


b. Open the rear cover, and then remove 2 screws.

Figure 2-41

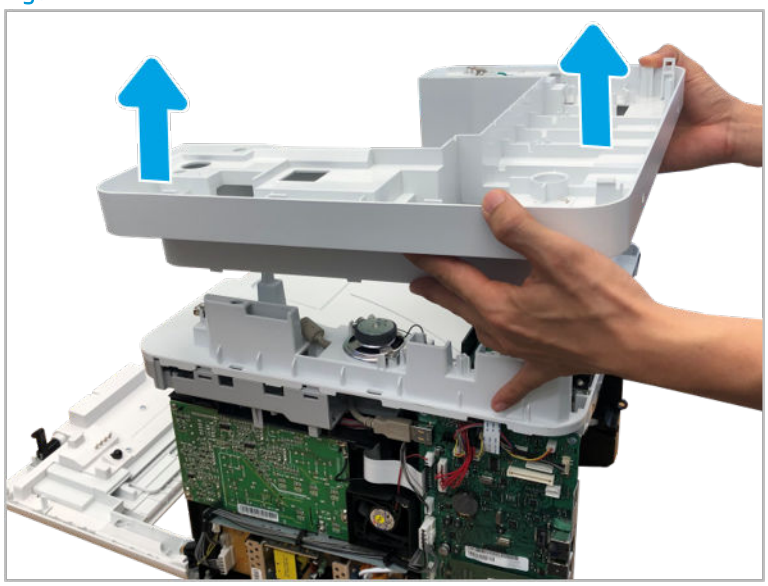
c. Remove 1 screw.

Figure 2-42



d. Lift up the middle upper cover to release it.

Figure 2-43



5. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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: Middle cover and middle inner cover (HP Laser MFP 432fdn)

Follow these steps to remove the middle cover and middle inner cover.

Mean time to repair: 10 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

NOTE: This part is not in ordering system.

Table 2-15 Part information

Part number	Part description
7UQ76-40051	Middle lower cover assembly

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-44

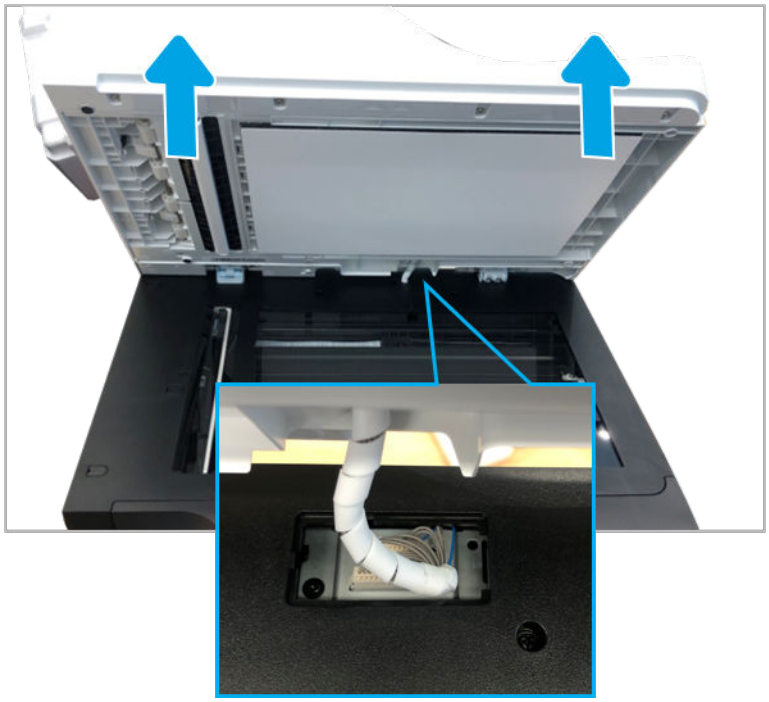
b. Remove the right cover by releasing hooks.

Figure 2-45

2. Remove the ADF.

▲ Open the ADF. Remove the connector cover and disconnect the ADF connector. And then, lift up the ADF to release it.

Figure 2-46



3. Remove the control panel assembly.

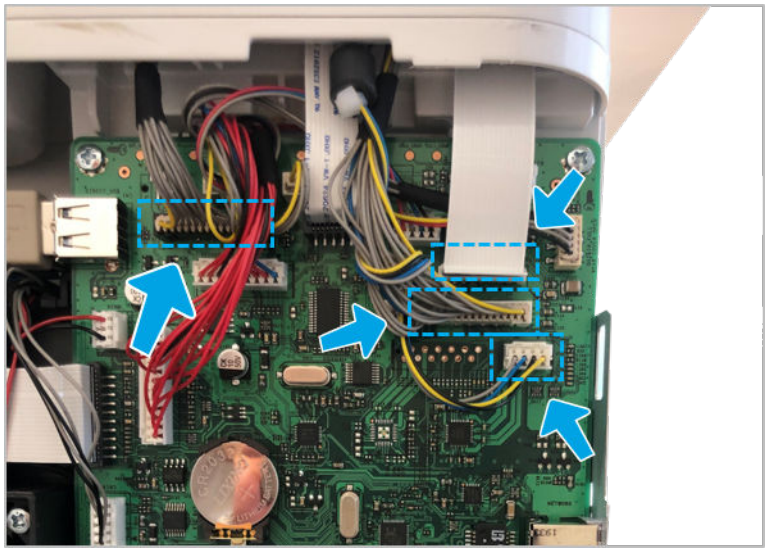
   ▲ Pull up the front edge of the control panel to release it.

Figure 2-47

4. Remove the flatbed scanner assembly.

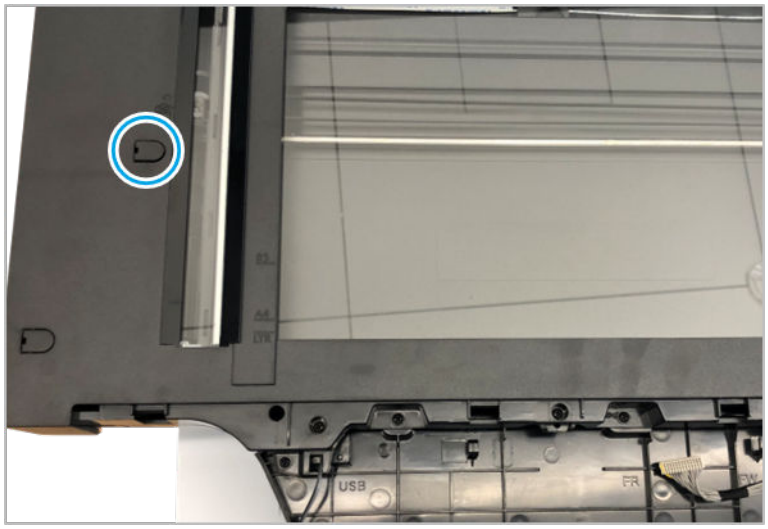
   a. Disconnect all scanner connectors from the main PCA.

Figure 2-48



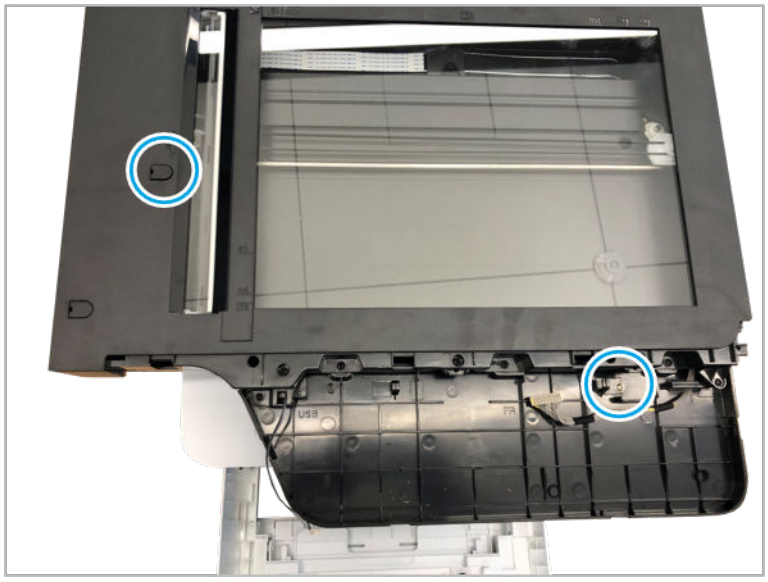
b. Remove the screw cap

Figure 2-49



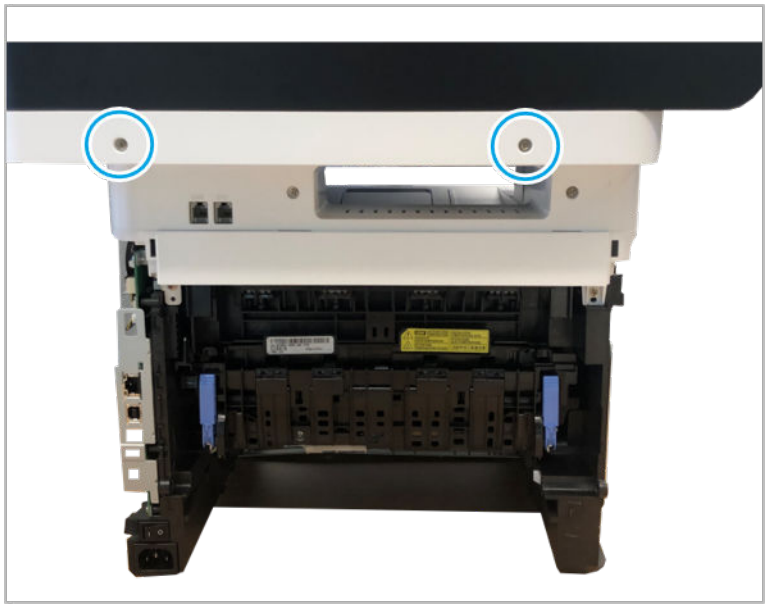
c. Remove 2 screws.

Figure 2-50



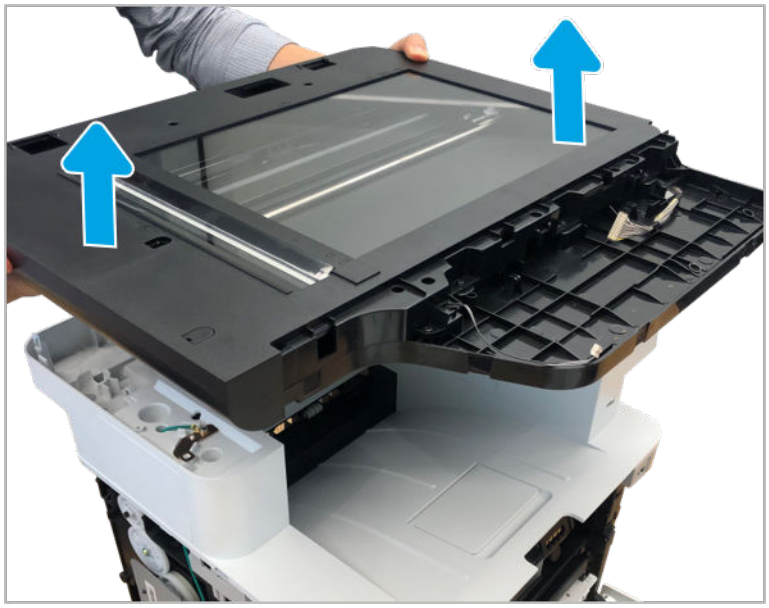
d. Remove 2 screws from the rear side.

Figure 2-51



e. Move the flatbed assembly back slightly, and then lift up it.

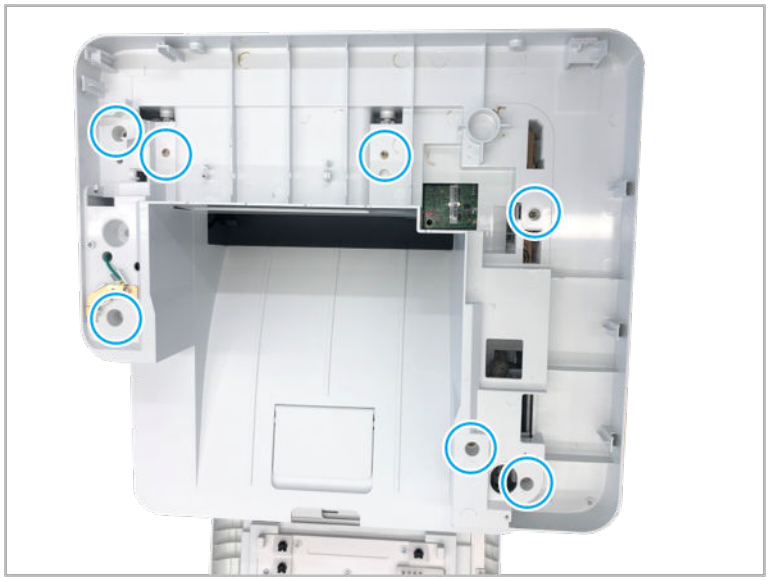
Figure 2-52



5. Remove the middle upper cover.

a. Remove 7 screws.

Figure 2-53

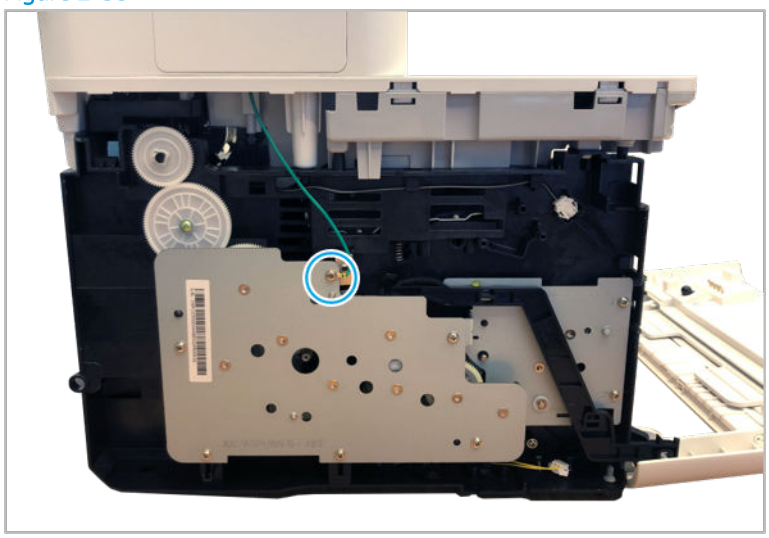


b. Open the rear cover, and then remove 2 screws.

Figure 2-54

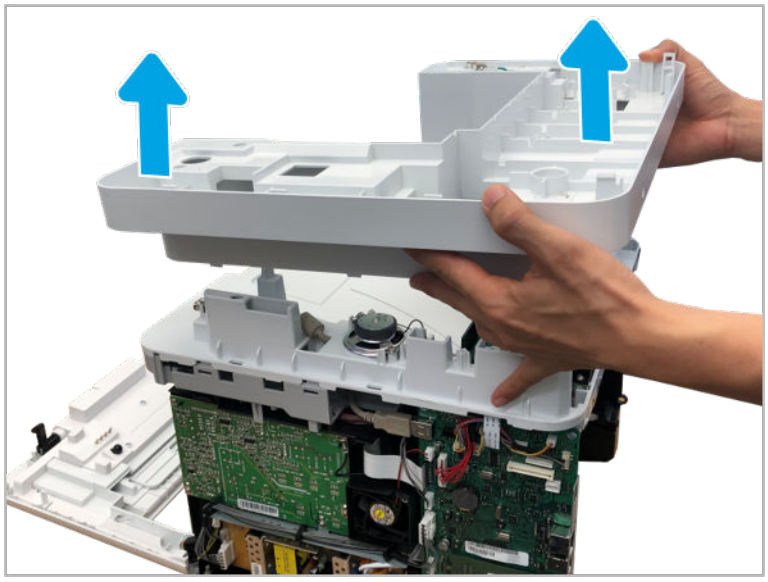
c. Remove 1 screw.

Figure 2-55



d. Lift up the middle upper cover to release it.

Figure 2-56



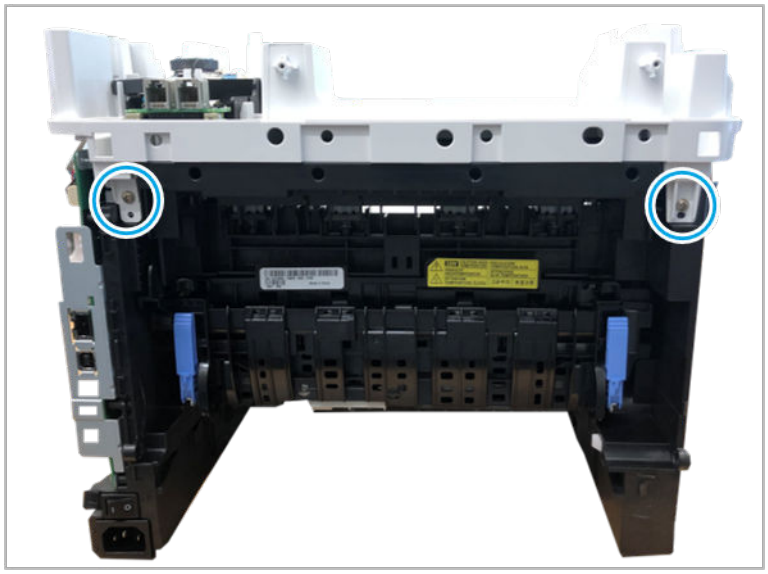
6. Remove the middle lower cover assembly.

a. Remove 2 screws from the front side.

Figure 2-57

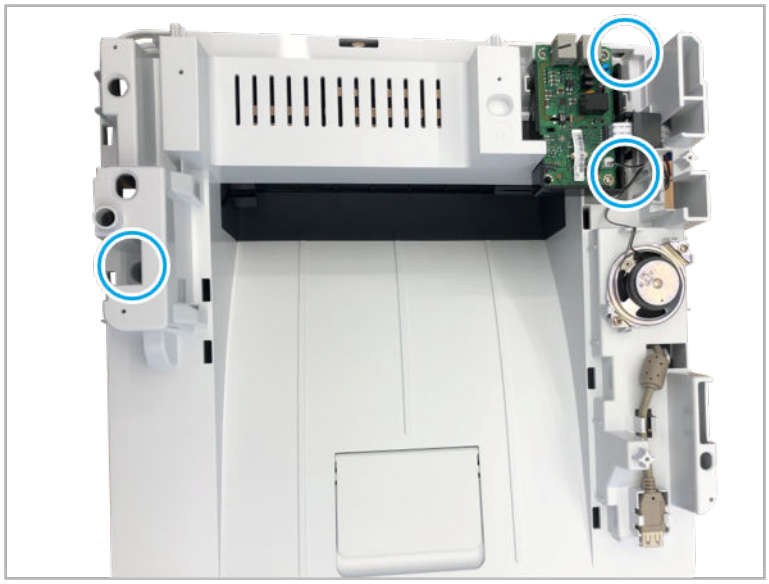
b. Remove 2 screws from the rear side.

Figure 2-58



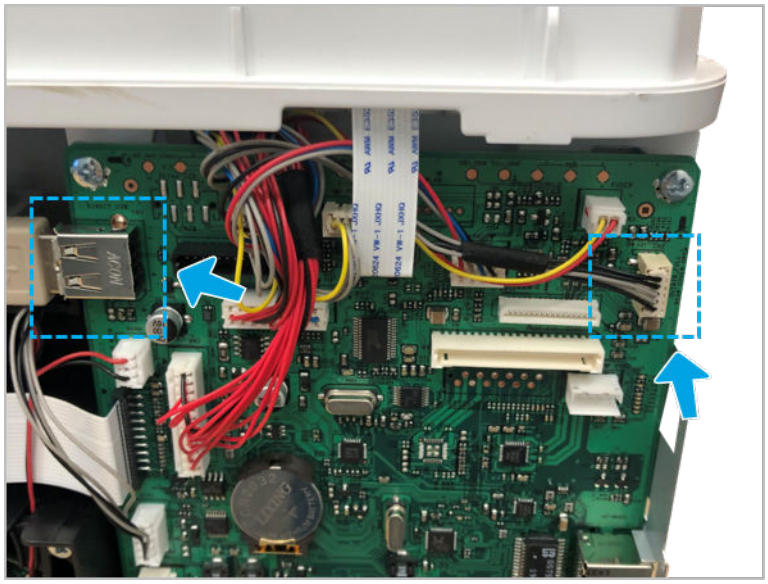
c. Remove 3 screws.

Figure 2-59



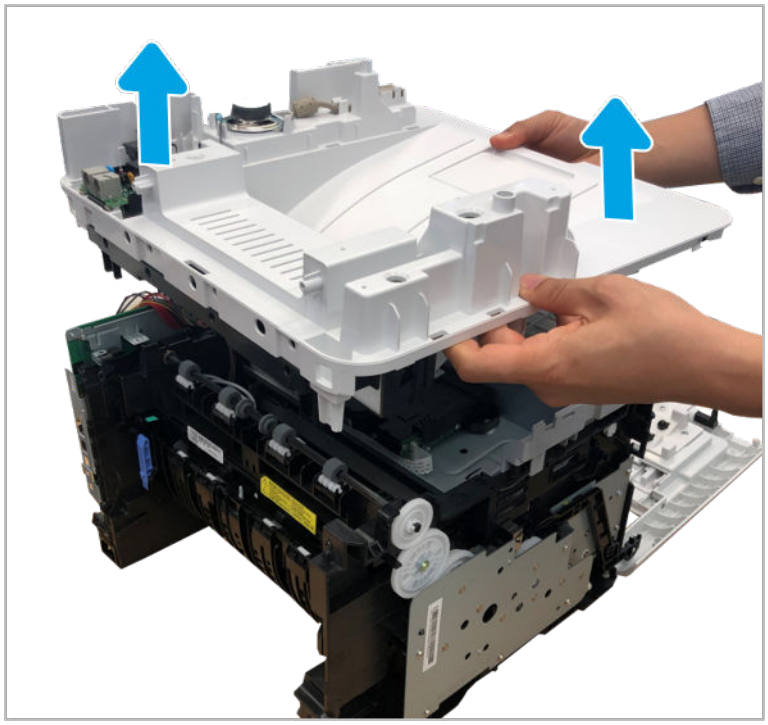
d. Disconnect USB connector and speaker connector.

Figure 2-60



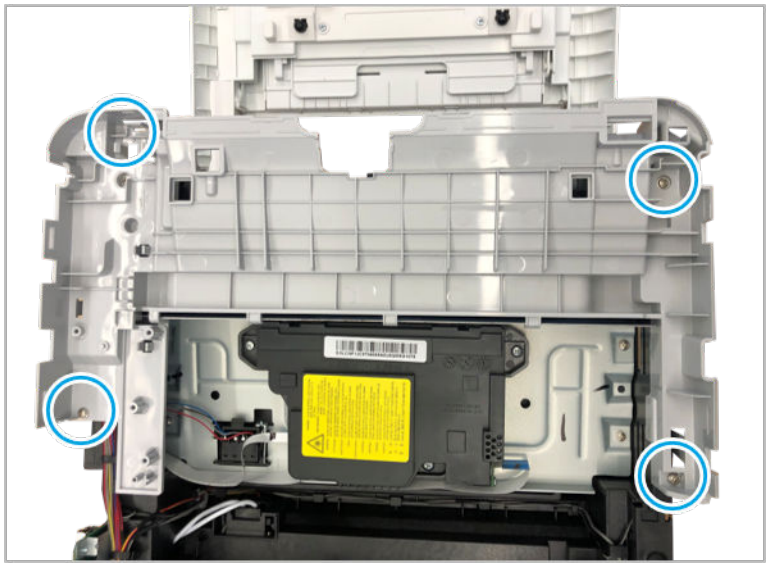
e. Remove the middle lower cover assembly.

Figure 2-61



f. Remove 4 screws, and then remove the middle-inner cover.

Figure 2-62



7. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Fax PCA (HP Laser MFP 432fdn)

Follow these steps to remove the fax PCA.

Mean time to repair: 9 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-16 Part information

Part number	Part description
JC92-03045A	Fax PCA

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

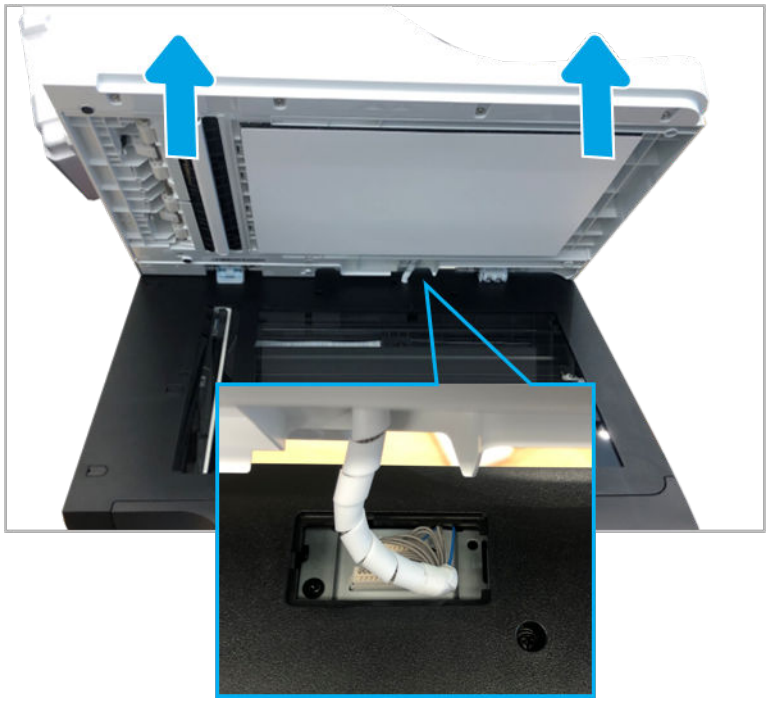
- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the ADF.
   - Open the ADF. Remove the connector cover and disconnect the ADF connector. And then, lift up the ADF to release it.

Figure 2-63



2. Remove the right cover.

   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-64

b. Remove the right cover by releasing hooks.

Figure 2-65

3. Remove the control panel assembly.

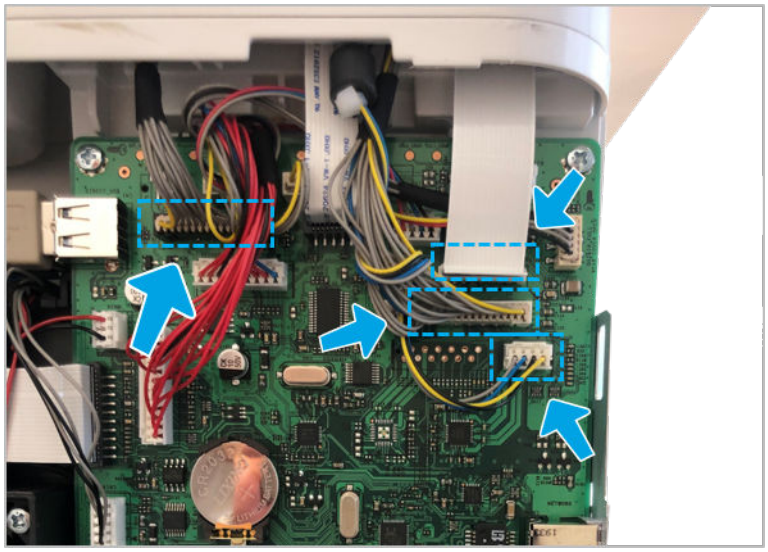
▲ Pull up the front edge of the control panel to release it.

Figure 2-66

4. Remove the flatbed scanner assembly.

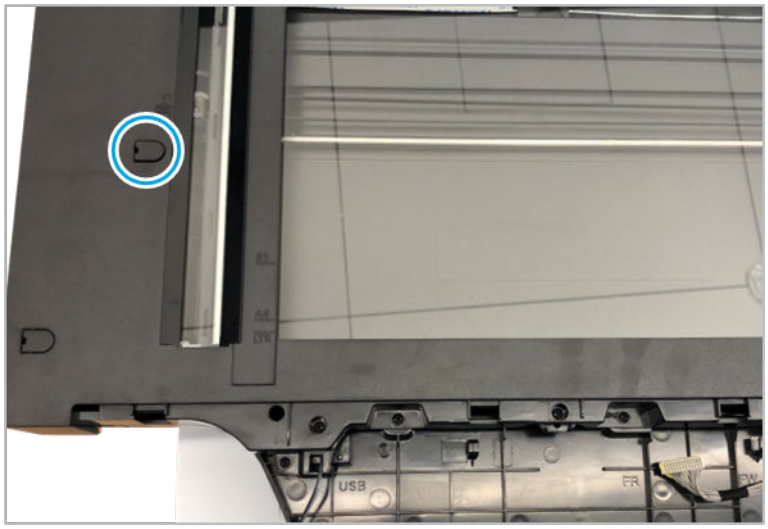
a. Disconnect all scanner connectors from the main PCA.

Figure 2-67



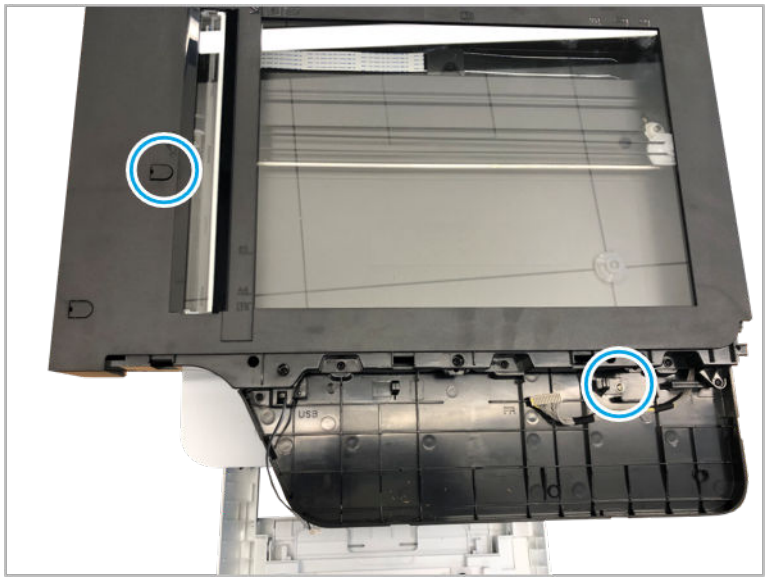
b. Remove the screw cap

Figure 2-68



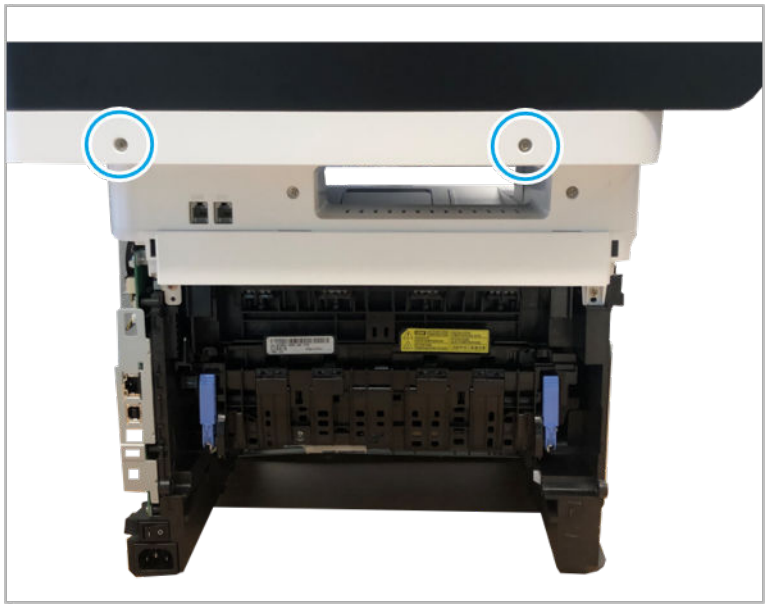
c. Remove 2 screws.

Figure 2-69



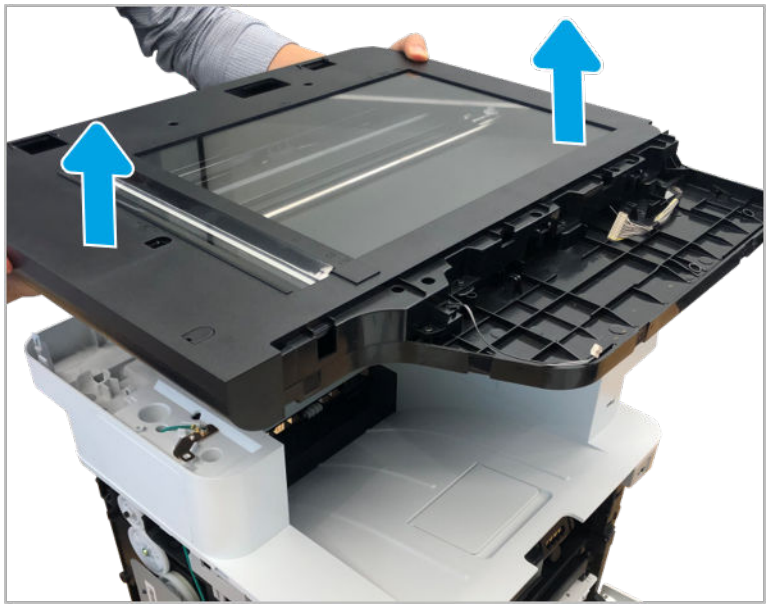
d. Remove 2 screws from the rear side.

Figure 2-70



e. Move the flatbed assembly back slightly, and then lift up it.

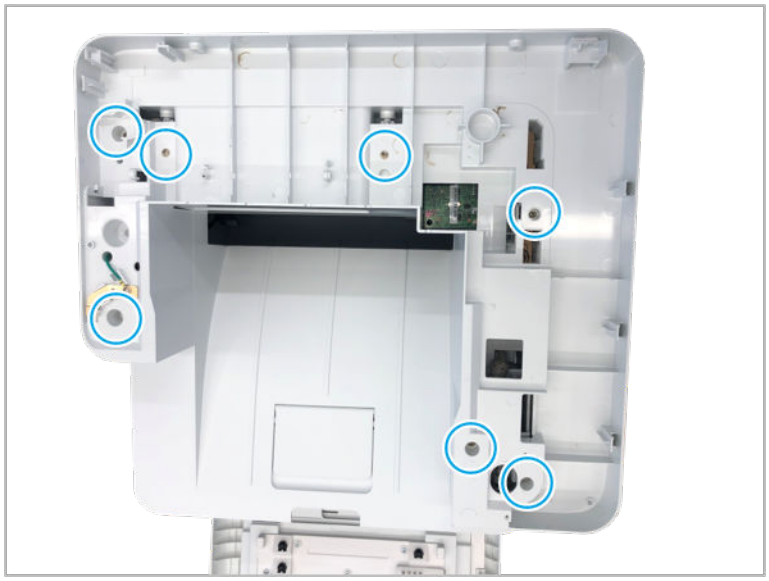
Figure 2-71



5. Remove the middle upper cover.

a. Remove 7 screws.

Figure 2-72

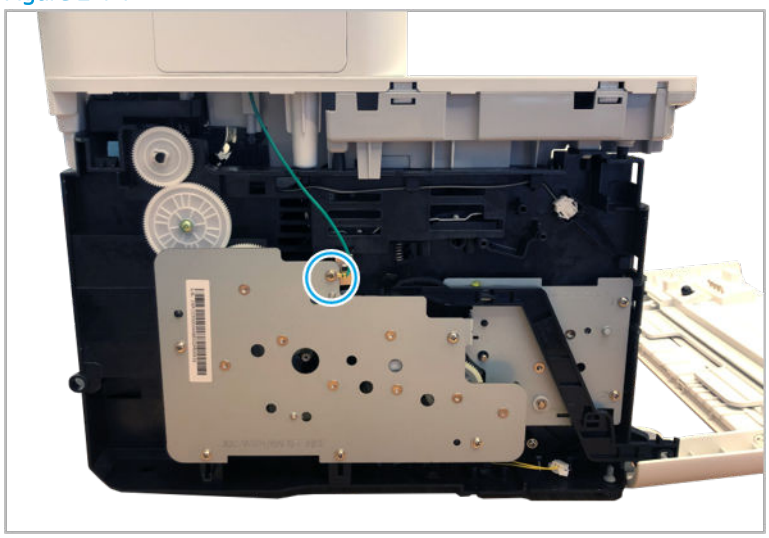


b. Open the rear cover, and then remove 2 screws.

Figure 2-73

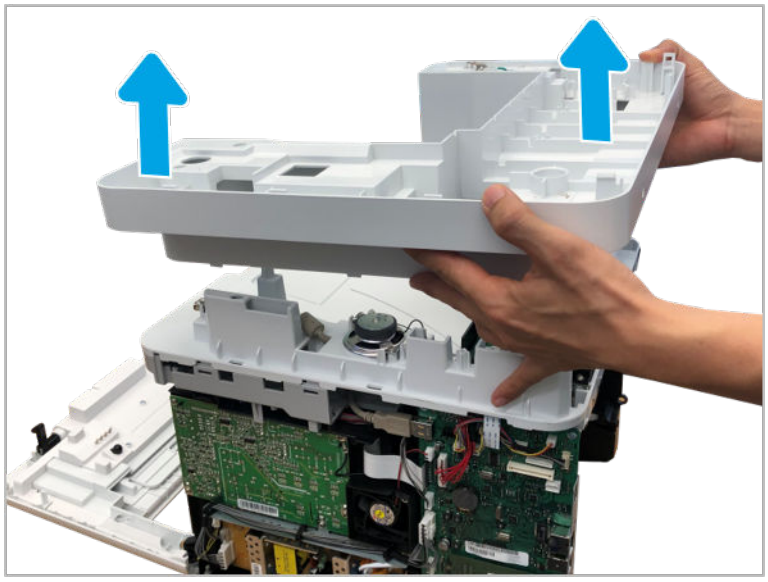
c. Remove 1 screw.

Figure 2-74



d. Lift up the middle upper cover to release it.

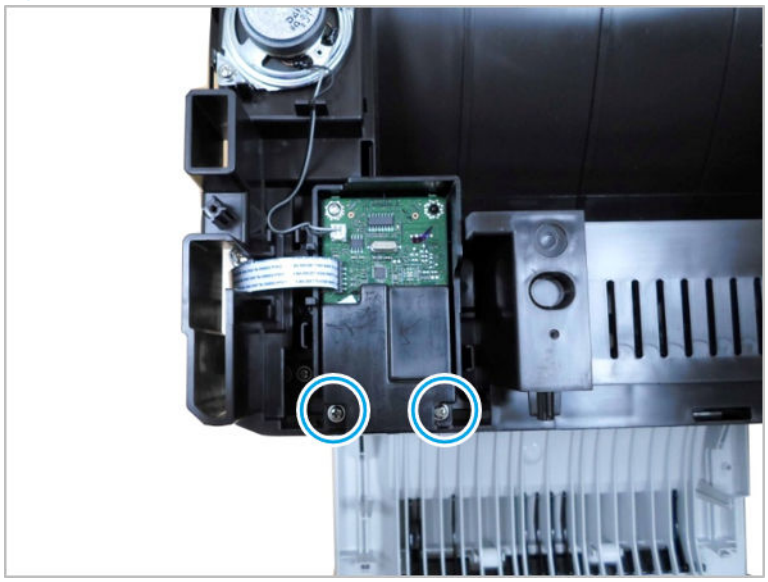
Figure 2-75



6. Remove the fax PCA.

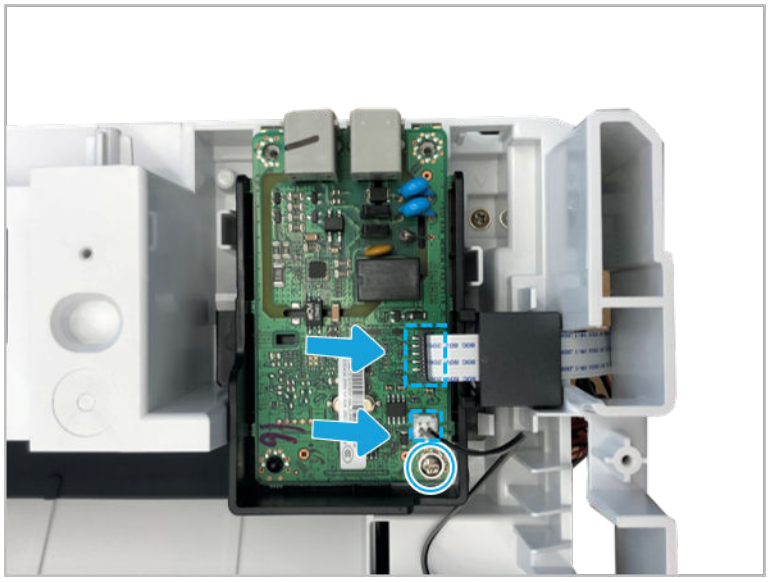
a. Remove 2 screws and then remove the fax cover.

Figure 2-76



b. Remove 1 screw, disconnect one connector and one FFC, and then remove the fax PCA.

Figure 2-77



7. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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.

Control panel assembly (HP Laser MFP 432fdn)

Parts and diagrams: Control panel assembly (HP Laser MFP 432fdn)

Figure 2-78 Control panel assembly (HP Laser MFP 432fdn)

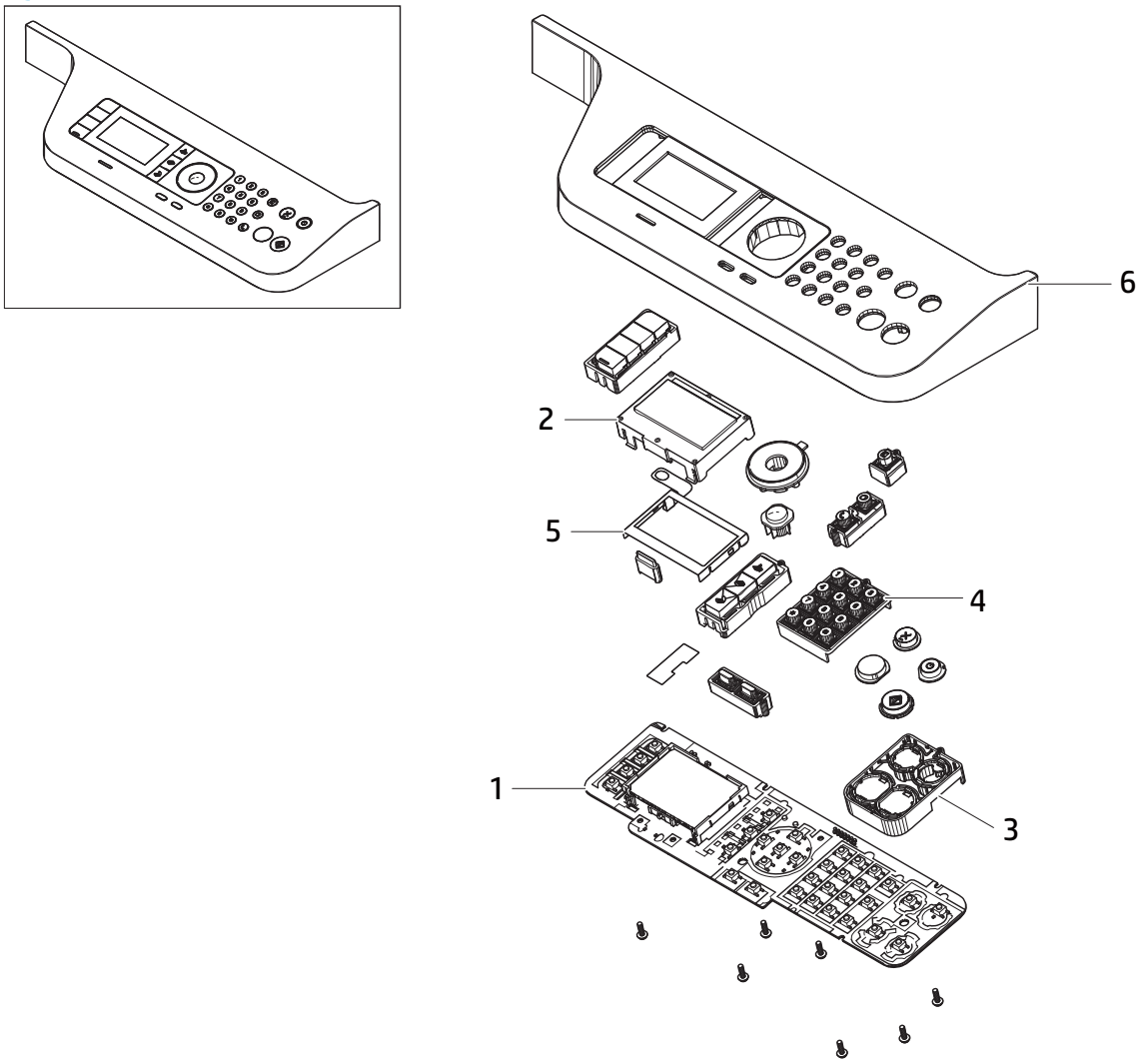


Table 2-17 Control panel assembly (HP Laser MFP 432fdn)

Ref	Description	Part number (*)	Qty
1	Control panel PCA	7UQ76-60003	1
2	LCD cover	JC63-03728A	1
3	Key holder	JC61-05625A	1
4	Numerical key	JC64-00817A	1
5	LCD ground	JC63-03718A	1
6	Control panel cover	7UQ76-40004	1

(*) This part is in ordering system.

Removal and replacement: Control panel PCA (HP Laser MFP 432fdn)

Follow these steps to remove the control panel PCA.

Mean time to repair: 2 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

NOTE: This part is not in ordering system.

Table 2-18 Part information

Part number	Part description
7UQ76-61001	Control panel assembly

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

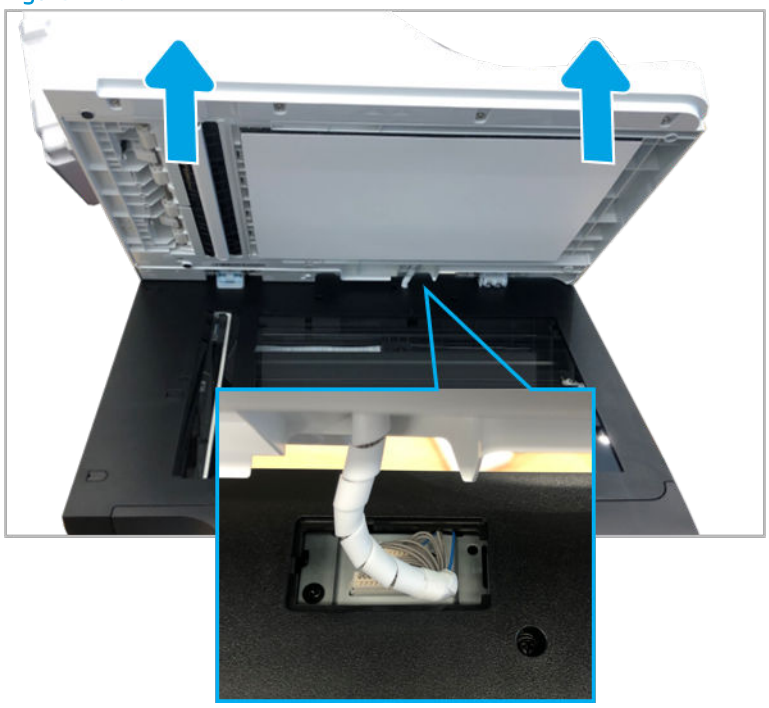
Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the ADF.

   ▲ Open the ADF. Remove the connector cover and disconnect the ADF connector. And then, lift up the ADF to release it.

   Figure 2-79

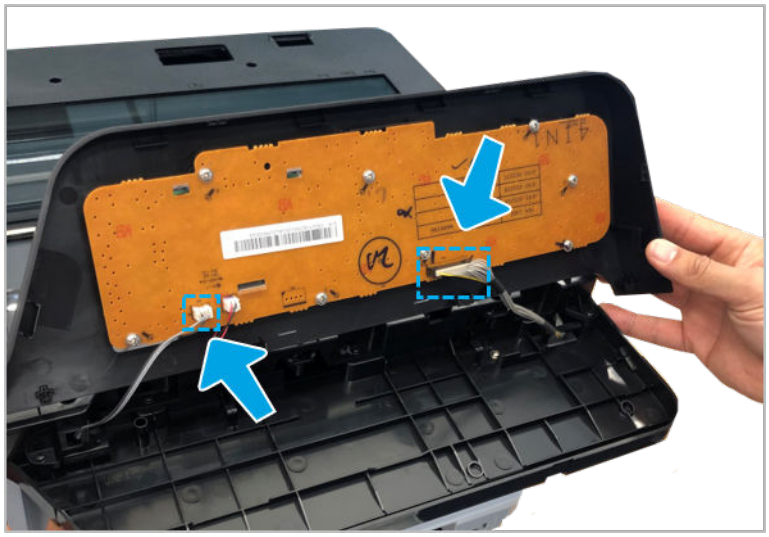
2. Remove the Control panel PCA.

   a. Pull up the front edge of the control panel to release it.

   Figure 2-80

b. Disconnect two connectors.

Figure 2-81



3. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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.

Automatic document feeder (ADF) (HP Laser MFP 432fdn)

Parts and diagrams: Automatic document feeder(ADF) assembly (HP Laser MFP 432fdn)

Figure 2-82 Automatic document feeder(ADF) assembly (HP Laser MFP 432fdn)

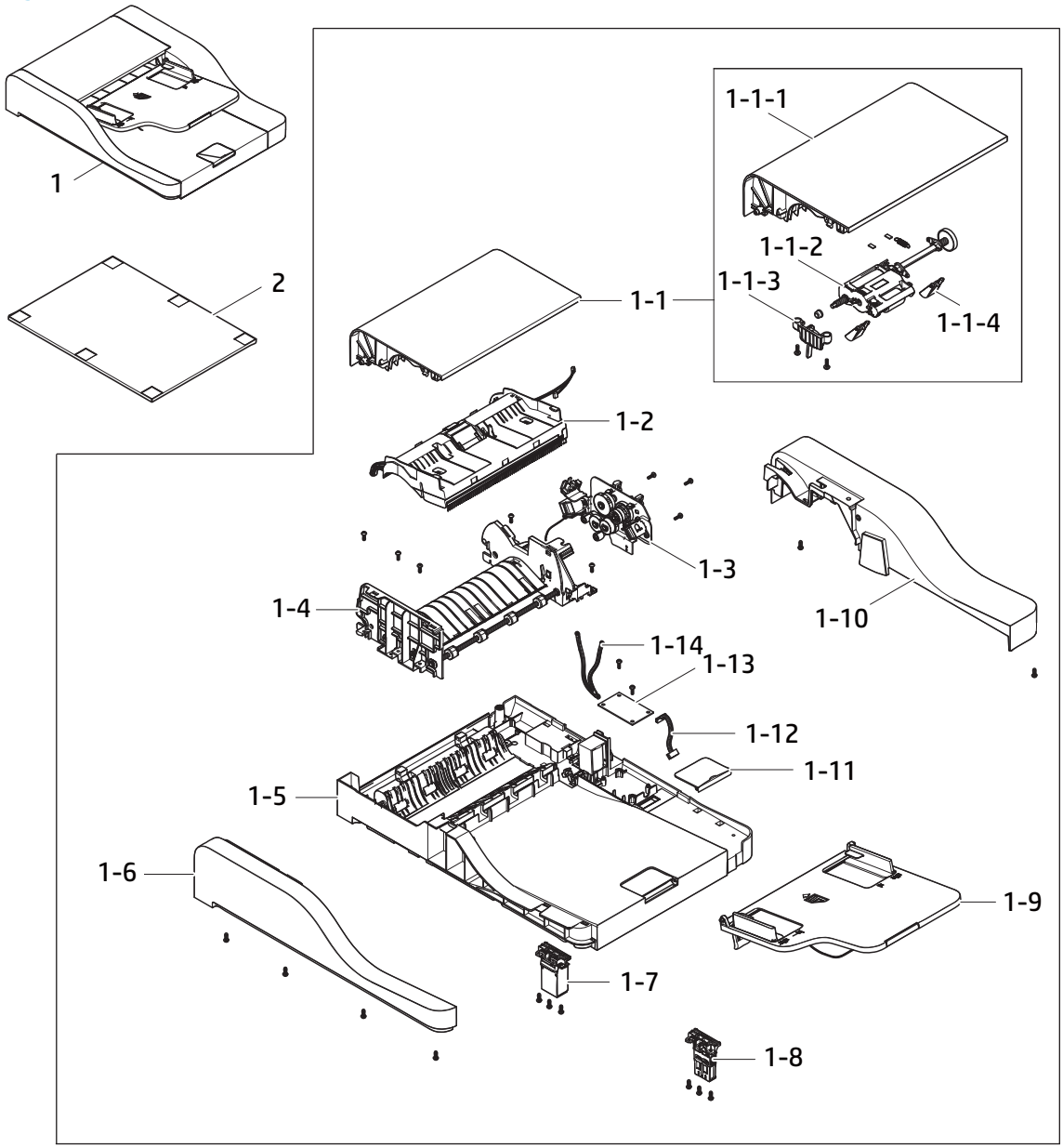


Table 2-19 Automatic document feeder(ADF) assembly (HP Laser MFP 432fdn)

Ref	Description	Part number (*)	Qty
1	Automatic document feeder(ADF) assembly	7UQ76-60101 (*)	1
1-1	ADF open cover assembly	7UQ76-60102 (*)	1
1-1-1	ADF open cover	7UQ76-40038	1
1-1-2	ADF pickup assembly	JC97-04199A (*)	1
1-1-3	ADF stopper	JC97-03060A	1
1-1-4	Document sensor guide	JC61-00788C	2
1-2	ADF upper assembly	JC97-04196A	1
1-3	ADF drive assembly	JC93-00761A (*)	1
1-4	ADF lower assembly	JC97-04160A	1
1-5	ADF platen assembly	7UQ76-60103	1
1-6	ADF front cover	7UQ76-40036	1
1-7	ADF right hinge	JC97-03220A	1
1-8	ADF left hinge	JC97-03038C	1
1-9	ADF stacker	7UQ76-60104	1
1-10	ADF rear cover	7UQ76-40037	1
1-11	Extention guide	7UQ76-40035	1
1-12	ADF harness	JC39-01493A (*)	1
1-13	ADF PCA	JC92-02625A (*)	1
1-14	ADF ground harness	JC39-00892A	1
2	White sponge sheet	JC63-00209A (*)	1

(*) This part is in ordering system.

Removal and replacement: ADF(Automatic document feeder) assembly (HP Laser MFP 432fdn)

Follow these steps to remove the ADF assembly.

Mean time to repair: 2 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-20 Part information

Part number	Part description
7UQ76-60101	Automatic document feeder(ADF) assembly

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

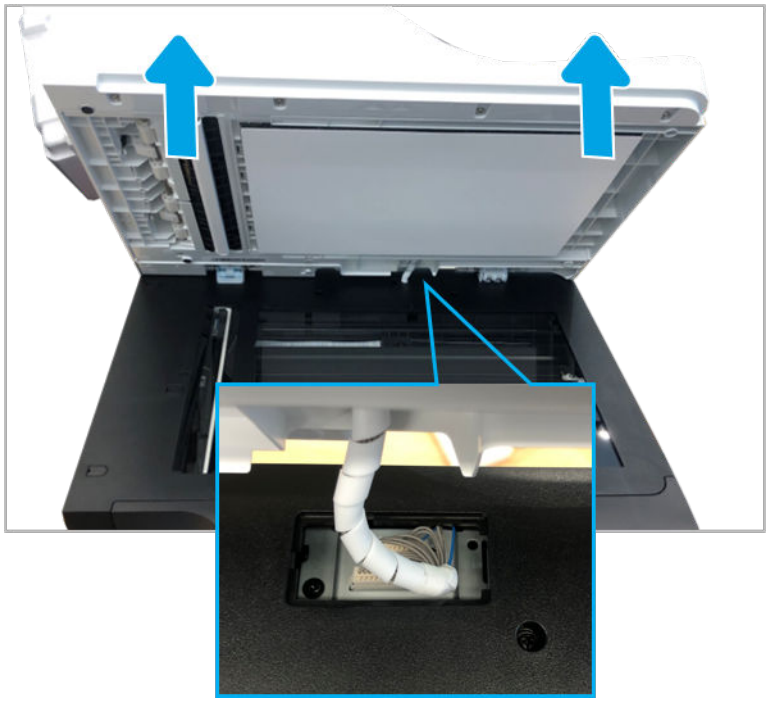
Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the ADF.

   ▲ Open the ADF. Remove the connector cover and disconnect the ADF connector. And then, lift up the ADF to release it.

   Figure 2-83

2. Unpack the replacement assembly.

   a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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.

Parts and diagrams: ADF drive assembly (HP Laser MFP 432fdn)

Figure 2-84 ADF drive assembly (HP Laser MFP 432fdn)

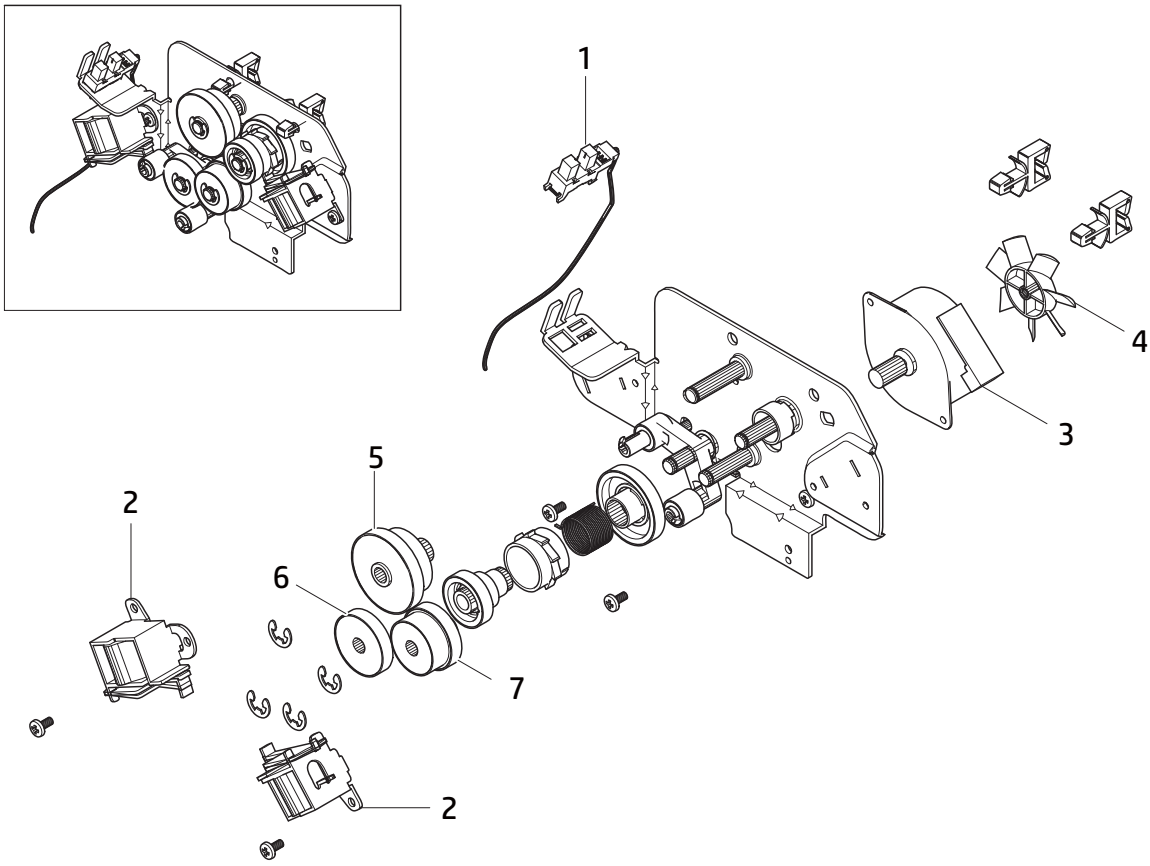


Table 2-21 ADF drive assembly (HP Laser MFP 432fdn)

Ref	Description	Part number (*)	Qty
1	Photo interrupter	0604-001393	1
2	ADF solenoid	JC33-00030A	2
3	ADF motor, step	JC31-00116A	1
4	ADF impeller	JC66-00556A	1
5	Pickup idle gear	JC66-01758A	1
6	Feed idle B gear	JC66-01753A	1
7	Feed idle A gear	JC66-01752A	1

(*) This part is in ordering system.

Parts and diagrams: ADF lower assembly (HP Laser MFP 432fdn)

Figure 2-85 ADF lower assembly (HP Laser MFP 432fdn)

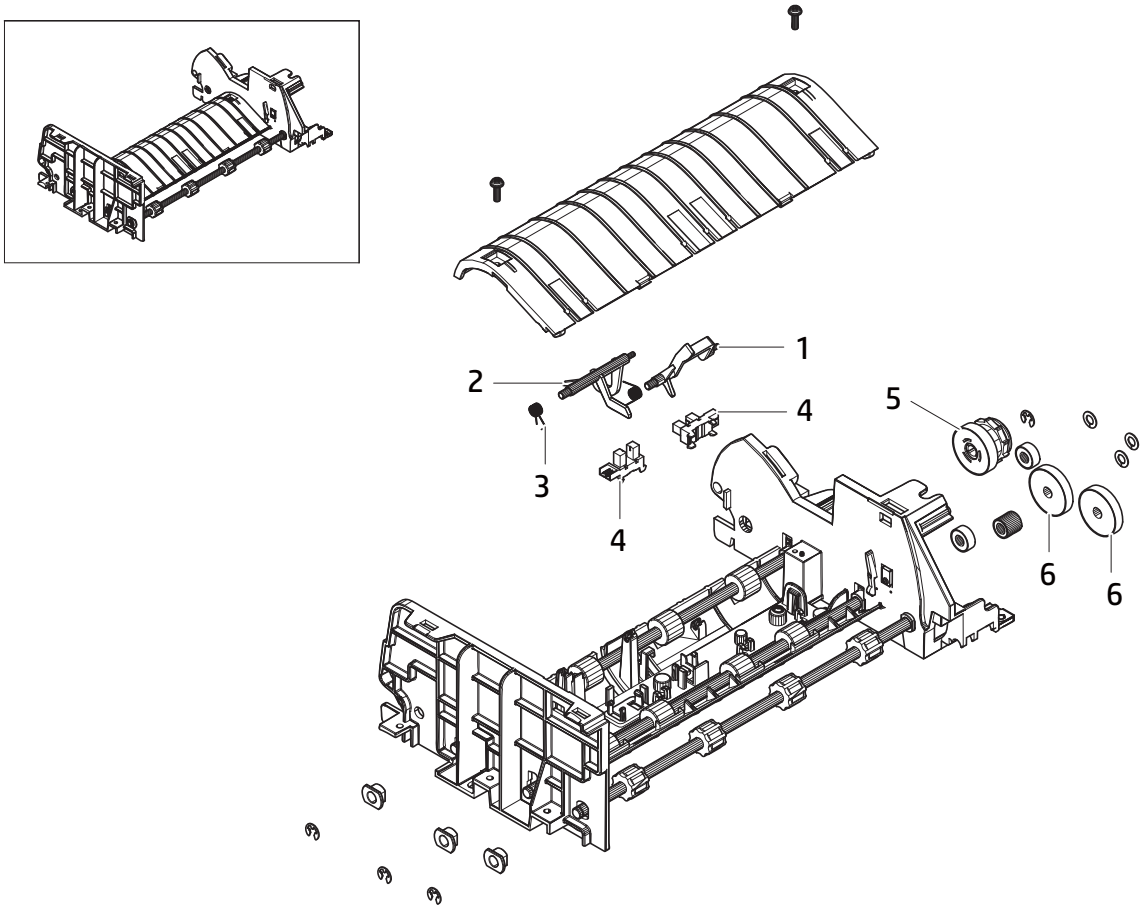


Table 2-22 ADF lower assembly (HP Laser MFP 432fdn)

Ref	Description	Part number (*)	Qty
1	Feed actuator	JC66-01766A	1
2	Registration actuator	JC66-01762A	1
3	Spring, etc	JB61-00076A	1
4	Photo interrupter	0604-001393 (*)	1
5	Feed drive gear	JC93-00762A	1
6	Exit gear	JC66-01757A	2

(*) This part is in ordering system.

Parts and diagrams: ADF upper assembly (HP Laser MFP 432fdn)

Figure 2-86 ADF upper assembly (HP Laser MFP 432fdn)

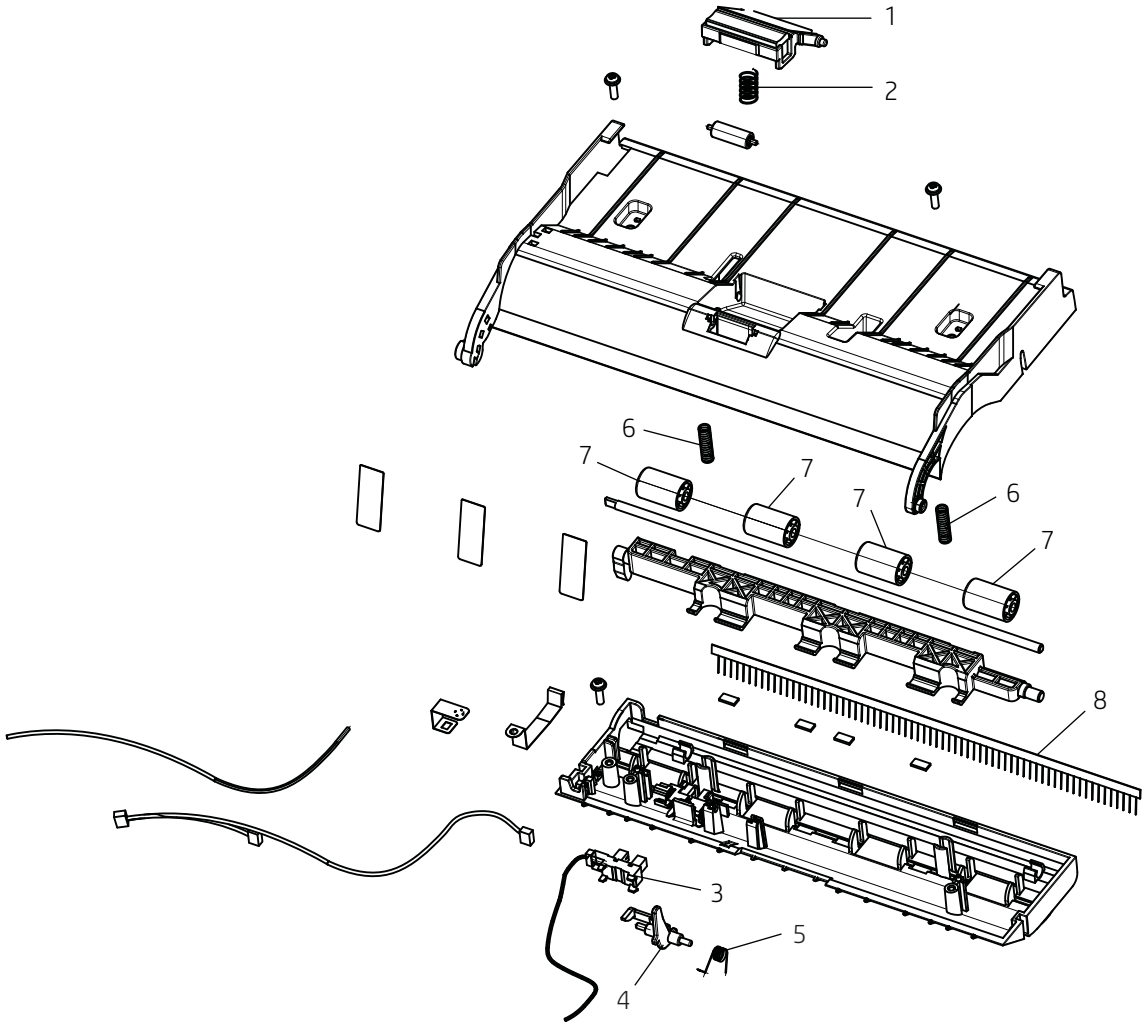


Table 2-23 ADF upper assembly (HP Laser MFP 432fdn)

Ref	Description	Part number (*)	Qty
1	ADF friction pad	JC97-03069A (*)	1
2	Spring, etc	JC61-00387A (*)	1
3	Photo interrupter	0604-001415	1
4	Empty actuator	JC66-01765A	1
5	Spring, etc	JB61-00076A	1
6	Spring, etc	JC61-02428A	2
7	Idle roller	JC66-01022A (*)	4
8	Antistatic brush	JC75-00095A	1

(*) This part is in ordering system.

Flatbed scanner assembly (HP Laser MFP 432fdn)

Parts and diagrams: Flatbed scanner assembly (HP Laser MFP 432fdn)

Figure 2-87 Flatbed scanner assembly (HP Laser MFP 432fdn)

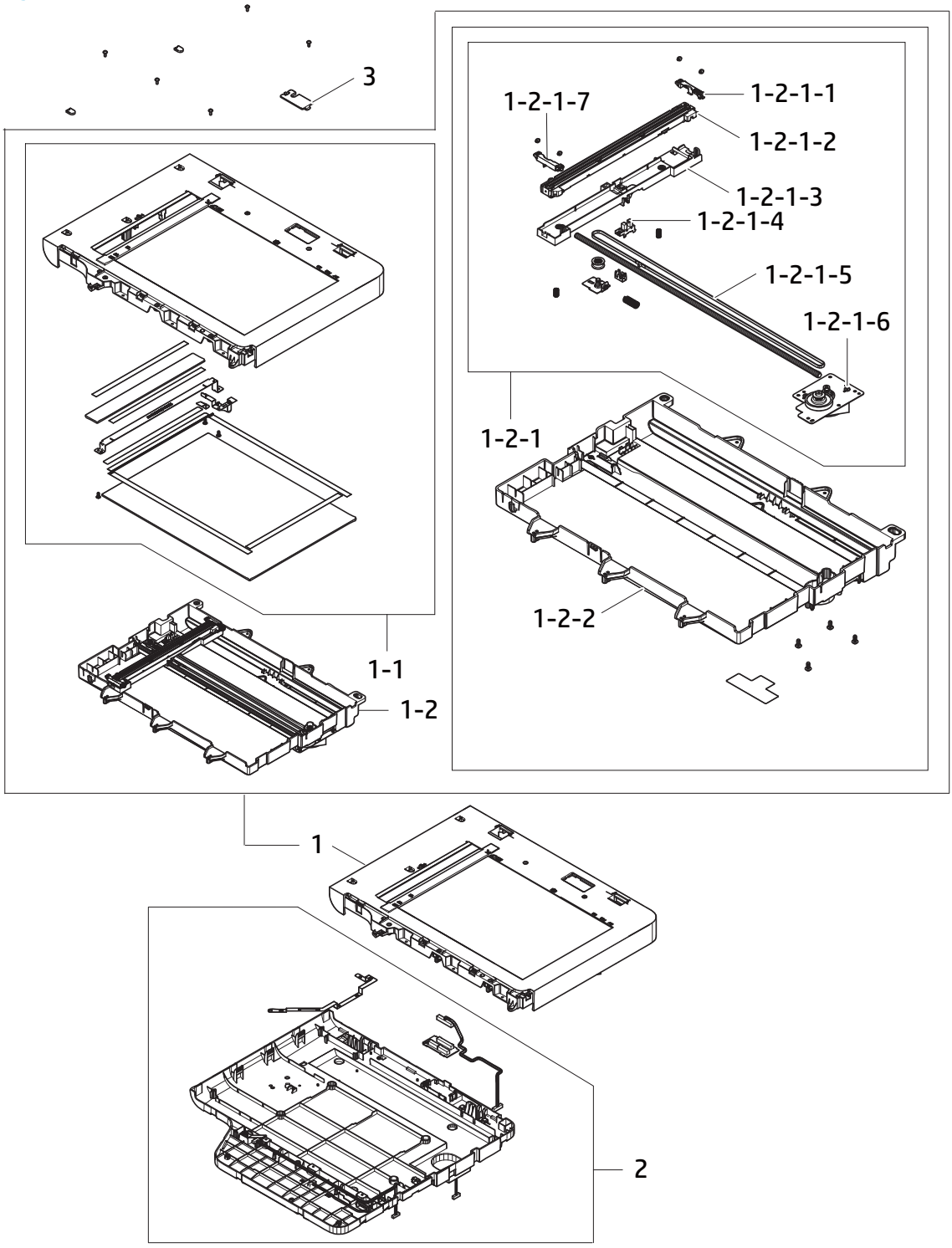


Table 2-24 Flatbed scanner assembly (HP Laser MFP 432fdn)

Ref	Description	Part number (*)	Qty
1	Flatbed scanner assembly	7UQ76-60105	1
1-1	Flatbed scanner upper assembly	7UQ76-60107	1
1-2	Flatbed scanner lower assembly	7UQ76-60106	1
1-2-1	Flatbed scanner core assembly	JC97-04307A	1
1-2-1-1	CIS rear guide	JC97-04716A	1
1-2-1-2	Contact image sensor (CIS)	0609-001408	1
1-2-1-3	CIS bracket	JC61-05646A	1
1-2-1-4	Photo interrupter	0604-001393 (*)	1
1-2-1-5	Timing gear belt	6602-002970 (*)	1
1-2-1-6	CIS drive assembly	JC97-04170A (*)	1
1-2-1-7	CIS front guide	JC97-04717A	1
1-2-2	Flatbed scanner bottom	7UQ76-40044	1
2	Flatbed scanner lower	7UQ76-60108	1
3	Connector cover	7UQ76-40034	1

(*) This part is in ordering system.

Removal and replacement: Flatbed scanner assembly (HP Laser MFP 432fdn)

Follow these steps to remove the flatbed scanner assembly.

Mean time to repair: 8 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-25 Part information

Part number	Part description
7UQ76-60105	Flatbed scanner assembly

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-88

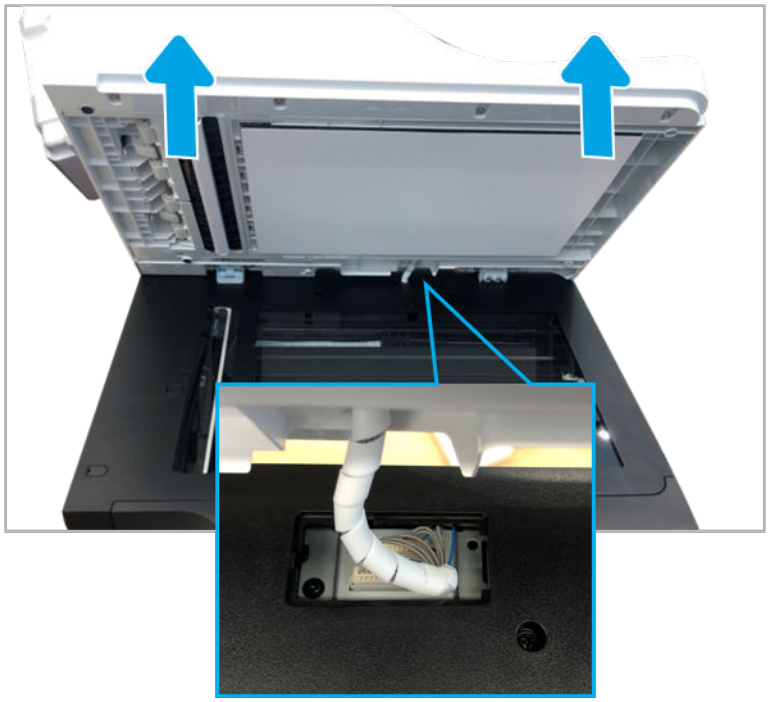
b. Remove the right cover by releasing hooks.

Figure 2-89

2. Remove the ADF.

▲ Open the ADF. Remove the connector cover and disconnect the ADF connector. And then, lift up the ADF to release it.

Figure 2-90



3. Remove the control panel assembly.

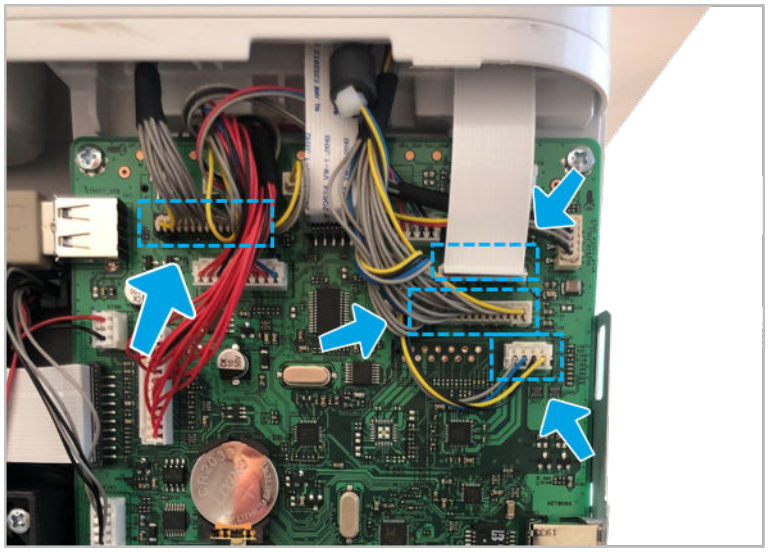
   ▲ Pull up the front edge of the control panel to release it.

Figure 2-91

4. Remove the flatbed scanner assembly.

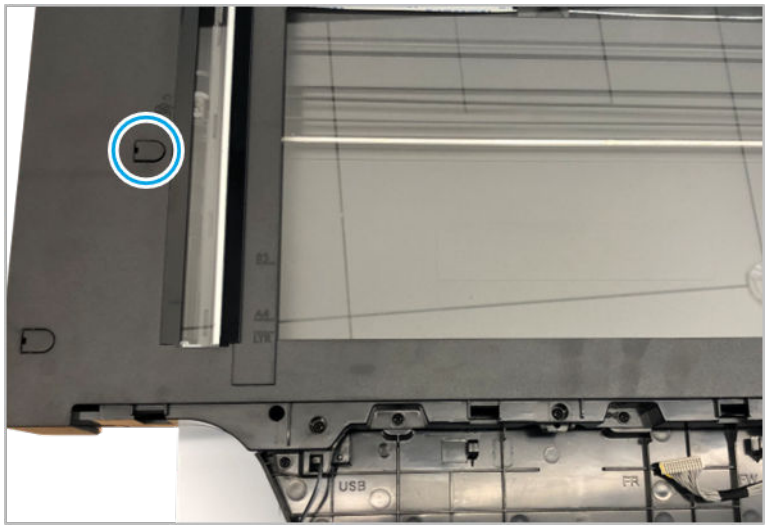
   a. Disconnect all scanner connectors from the main PCA.

Figure 2-92



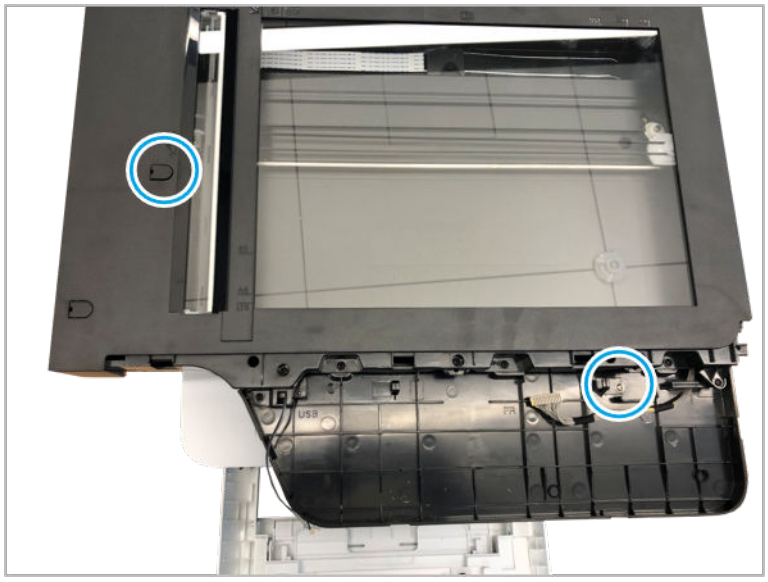
b. Remove the screw cap

Figure 2-93



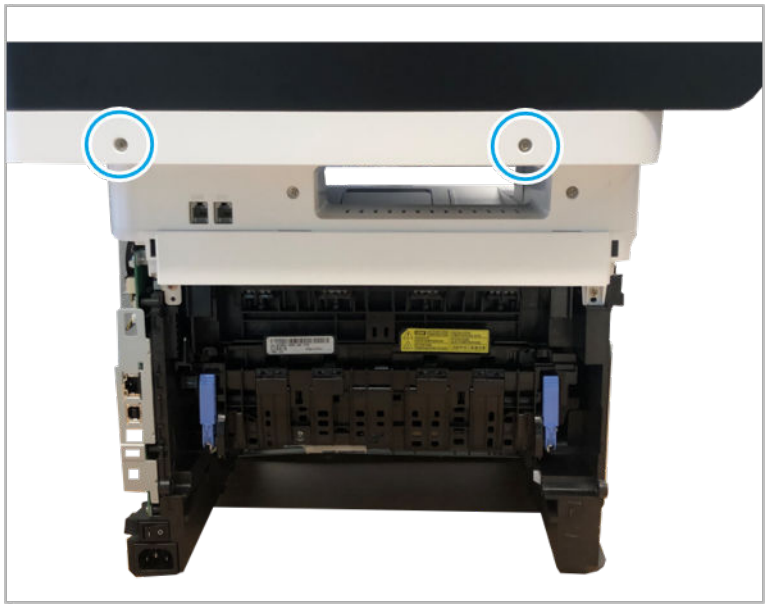
c. Remove 2 screws.

Figure 2-94



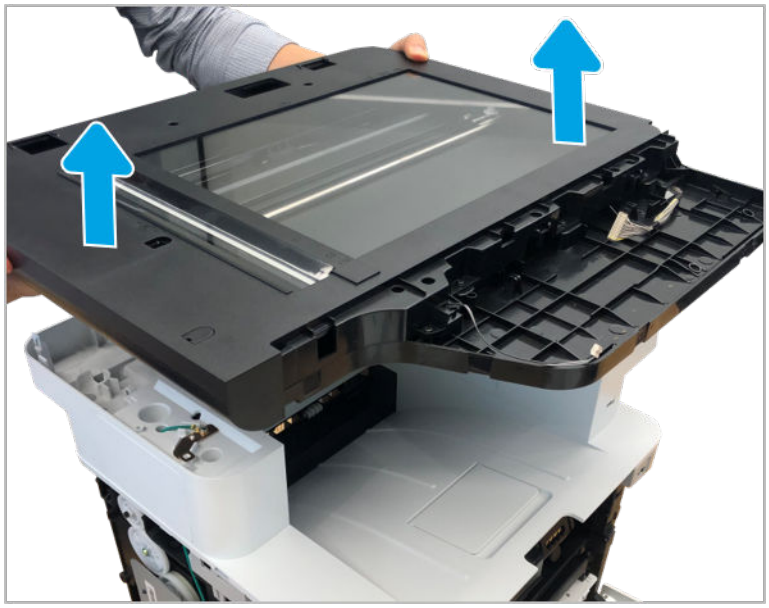
d. Remove 2 screws from the rear side.

Figure 2-95



e. Move the flatbed assembly back slightly, and then lift up it.

Figure 2-96



5. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Internal assemblies

Frame assembly (1)

Parts and diagrams: Frame assembly (1/3)

Figure 2-97 Frame assembly (1/3)

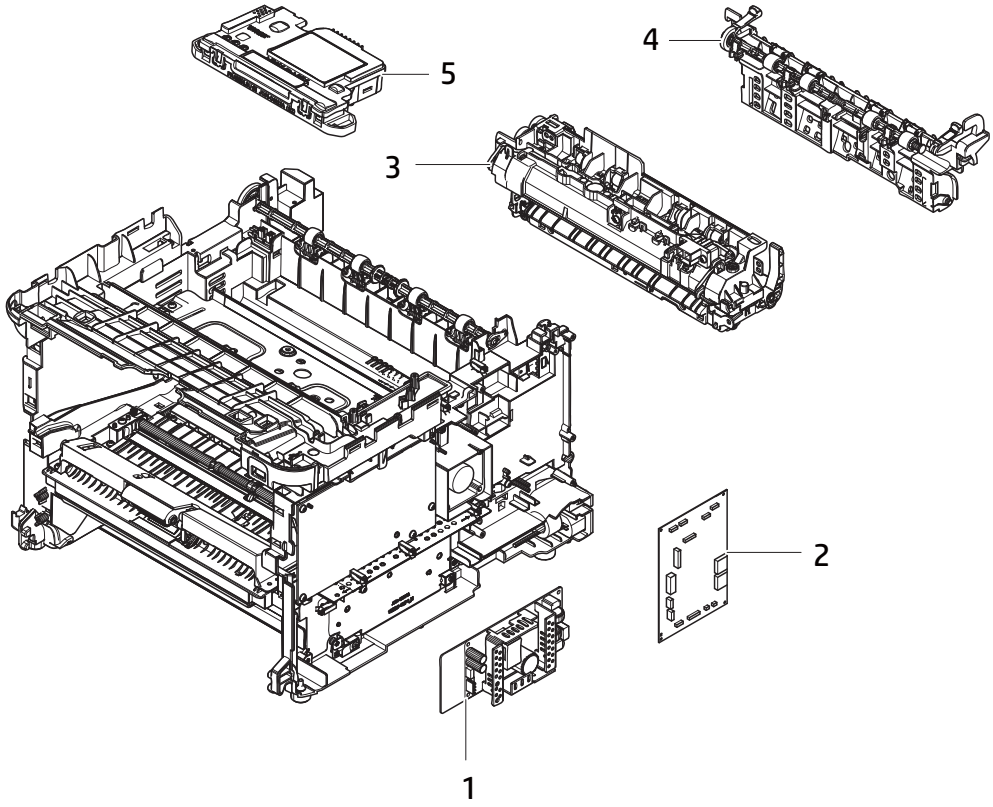


Table 2-26 Frame assembly (1/3)

Ref	Description	Part number (*)	Qty
1	LVPS (220V model, HP Laser 408dn)	JC44-00096E (*)	1
1	LVPS (110V model, HP Laser 408dn)	JC44-00095E (*)	1
1	LVPS (220V model, HP Laser MFP 432fdn)	JC44-00245A (*)	1
1	LVPS (110V model, HP Laser MFP 432fdn)	JC44-00246A (*)	1
2	Main PCA (220V model, HP Laser 408dn)	7UQ75-60001 (*)	1
2	Main PCA (110V model, HP Laser 408dn)	7UQ75-60002 (*)	1
2	Main PCA (220V model, HP Laser MFP 432fdn)	7UQ76-60001 (*)	1
2	Main PCA (110V model, HP Laser MFP 432fdn)	7UQ76-60002 (*)	1
3	Fuser (220V model)	JC91-01024B (*)	1
3	Fuser (110V model)	JC91-01023B (*)	1
4	Frame rear assembly	JC93-00334A (*)	1
5	Laser scanning unit (LSU)	JC97-04065A (*)	1

(*) This part is in ordering system.

Removal and replacement: LVPS (HP Laser 408dn)

Follow these steps to remove the HVPS.

Mean time to repair: 3 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-27 Part information

Part number	Part description
• JC44-00096E	• LVPS (220V model, HP Laser 408dn)
• JC44-00095E	• LVPS (110V model, HP Laser 408dn)

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-98

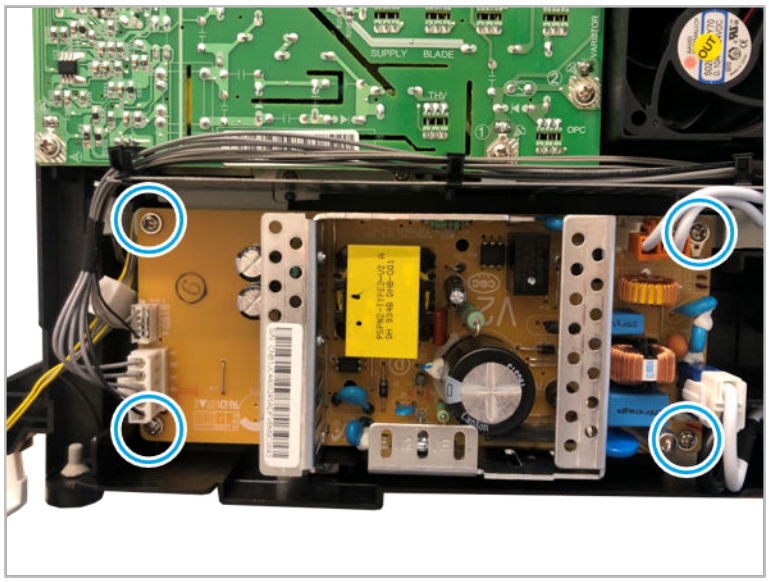
b. Remove the right cover by releasing hooks.

Figure 2-99

2. Remove the LVPS.

▲ Remove 5 screws.

Figure 2-100



3. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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: LVPS (HP Laser MFP 432fdn)

Follow these steps to remove the LVPS.

Mean time to repair: 3 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-28 Part information

Part number	Part description
• JC44-00245A	• LVPS (220V model, HP Laser MFP 432fdn)
• JC44-00246A	• LVPS (110V model, HP Laser MFP 432fdn)

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-101

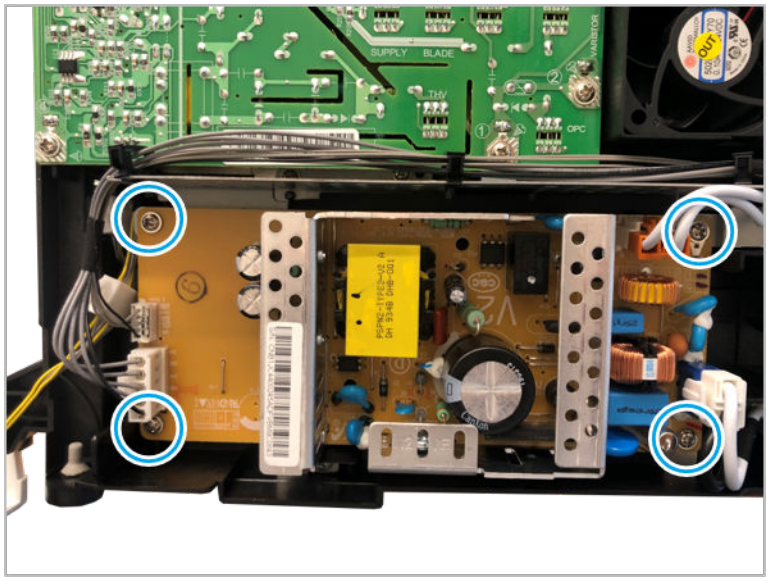
b. Remove the right cover by releasing hooks.

Figure 2-102

2. Remove the LVPS.

▲ Remove 5 screws.

Figure 2-103



3. Unpack the replacement assembly.

   a. 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

   b. 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.

   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.

   IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

   c. 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: Main PCA (HP Laser 408dn)

Follow these steps to remove the main PCA.

Mean time to repair: 3 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-29 Part information

Part number	Part description
7UQ75-60001	Main PCA (220V model, HP Laser 408dn)
7UQ75-60002	Main PCA (110V model, HP Laser 408dn)

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-104

b. Remove the right cover by releasing hooks.

Figure 2-105

2. Remove the main PCA.

▲ Disconnect all connectors on the main PCA, remove 4 screws, and then remove the main PCA.

Figure 2-106

3. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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: Main PCA (HP Laser MFP 432fdn)

Follow these steps to remove the main PCA.

Mean time to repair: 3 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-30 Part information

Part number	Part description
• 7UQ76-60001	• Main PCA (220V model, HP Laser MFP 432fdn)
• 7UQ76-60002	• Main PCA (110V model, HP Laser MFP 432fdn)

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-107

b. Remove the right cover by releasing hooks.

Figure 2-108

2. Remove the main PCA.

   ▲ Disconnect all connectors on the main PCA, remove 4 screws, and then remove the main PCA.

   Figure 2-109

3. Unpack the replacement assembly.

   a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Fuser (HP Laser 408dn / HP Laser MFP 432fdn)

Follow these steps to remove the fuser.

Mean time to repair: 7 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-31 Part information

Part number	Part description
• JC91-01024B	• Fuser (220V model)
• JC91-01023B	• Fuser (110V model)

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

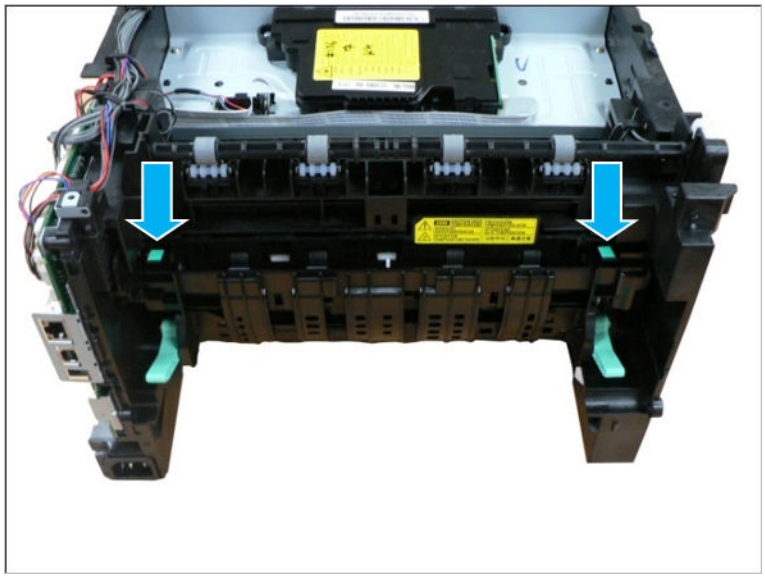
Verify that the document was copied, scanned, or printed correctly.

⚠ CAUTION: The temperature gets high in the vicinity of the fuser assembly.

When replacing it, you may get burned. Before replacing it, make sure that fuser assembly has cooled.

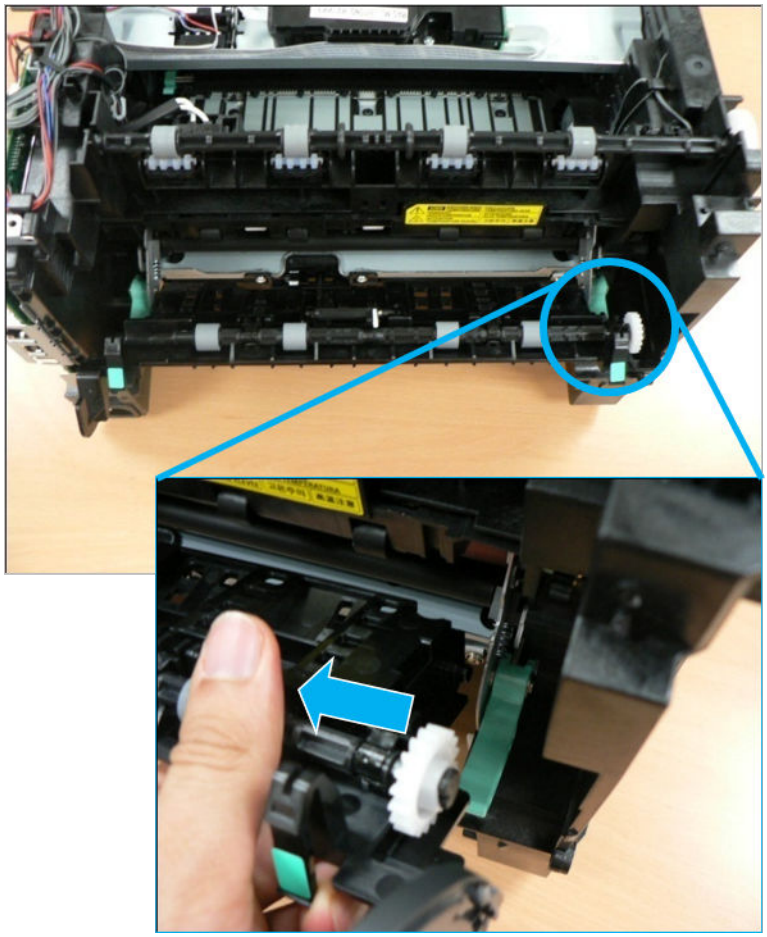
1. Remove the rear cover.
2. Remove the fuser assembly.
   a. Push both green label levers down to open the frame-rear assembly.

Figure 2-110



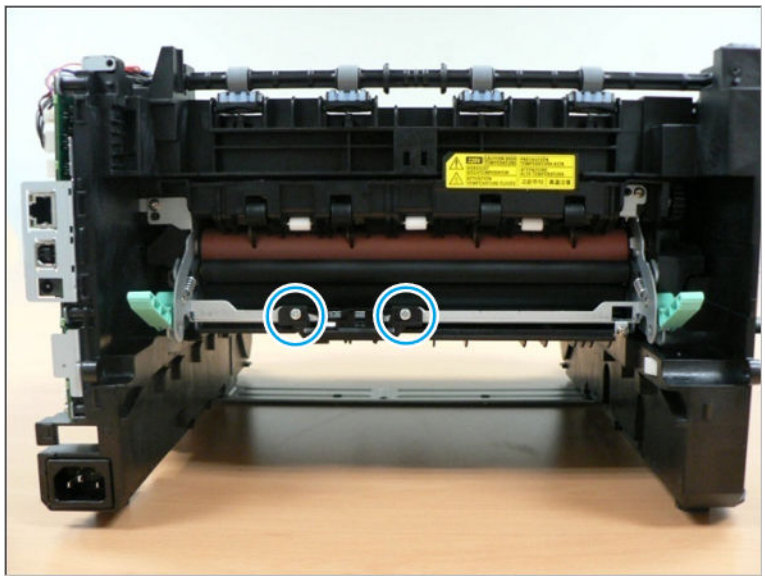
b. Release both hooks of the frame rear assembly to remove it.

Figure 2-111



c. Remove 2 screws, and then remove the exit sensor holder.

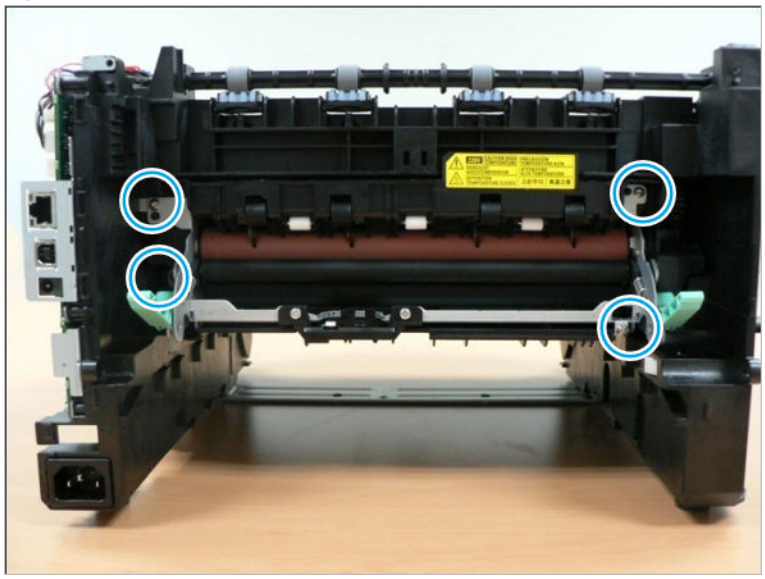
Figure 2-112



d. Remove 4 screws, and then remove the fuser assembly.

CAUTION: When reassembling the fuser assembly, do not forget to tighten these screws.

Figure 2-113



3. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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 scanning unit(LSU) (HP Laser 408dn)

Follow these steps to remove the LSU.

Mean time to repair: 7 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-32 Part information

Part number	Part description
JC97-04065A	Laser scanning unit (LSU)

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the left and right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-114

b. Remove the left cover by releasing hooks.

Figure 2-115

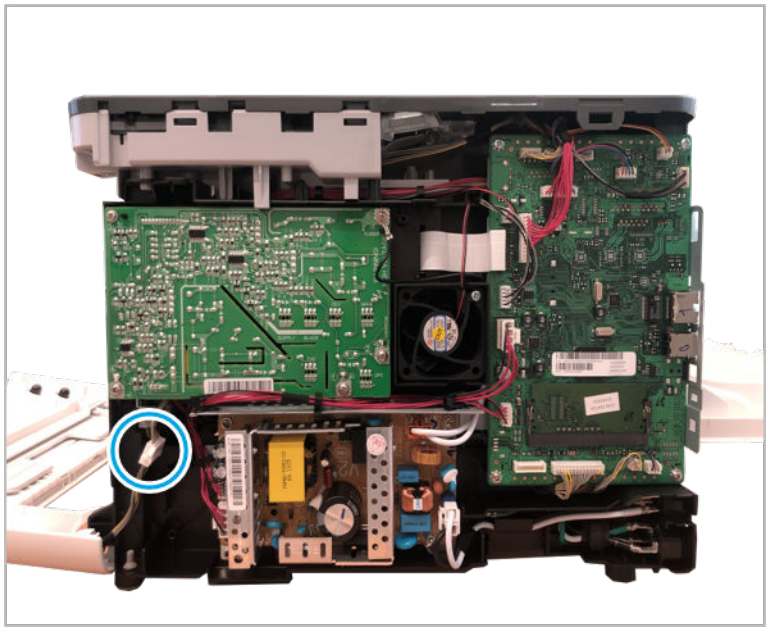
c. Remove the right cover by releasing hooks.

Figure 2-116

2. Remove the front cover.

a. Disconnect one connector connecting the front cover.

Figure 2-117



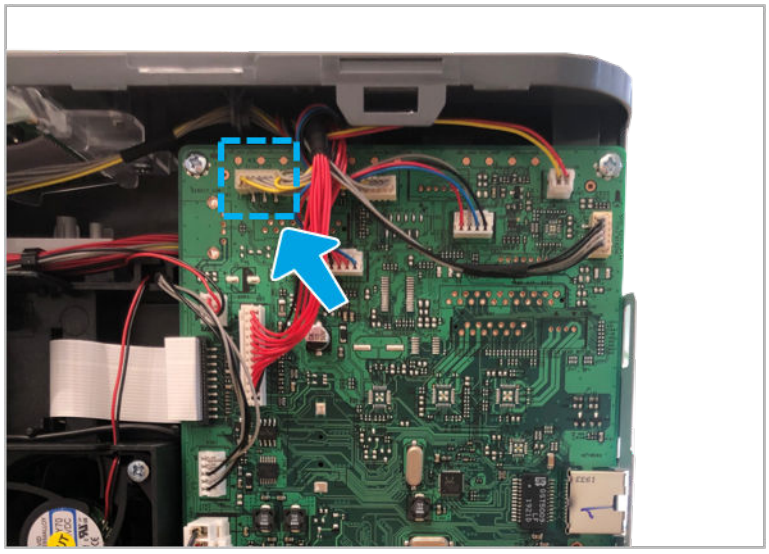
b. Pull the bottom of the front cover inward to release both hooks, and then remove the front cover.

Figure 2-118

3. Remove the Top cover and middle inner cover.

a. Disconnect the control panel connector from the main PCA.

Figure 2-119



b. Remove 2 screws from the front side.

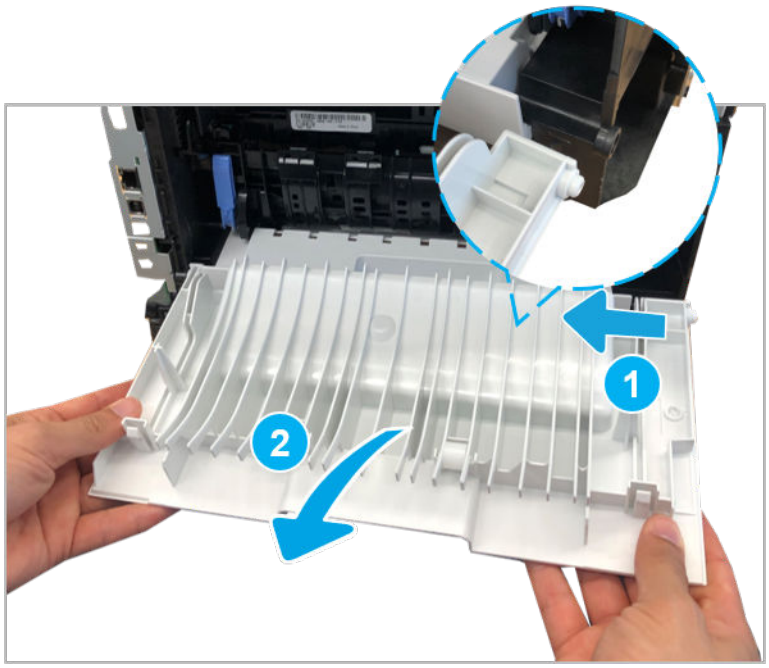
Figure 2-120

c. Remove the duplex assembly.

Figure 2-121

d. Pull the rear cover to the left and then release it.

Figure 2-122



e. Remove 2 screws and dummy cover.

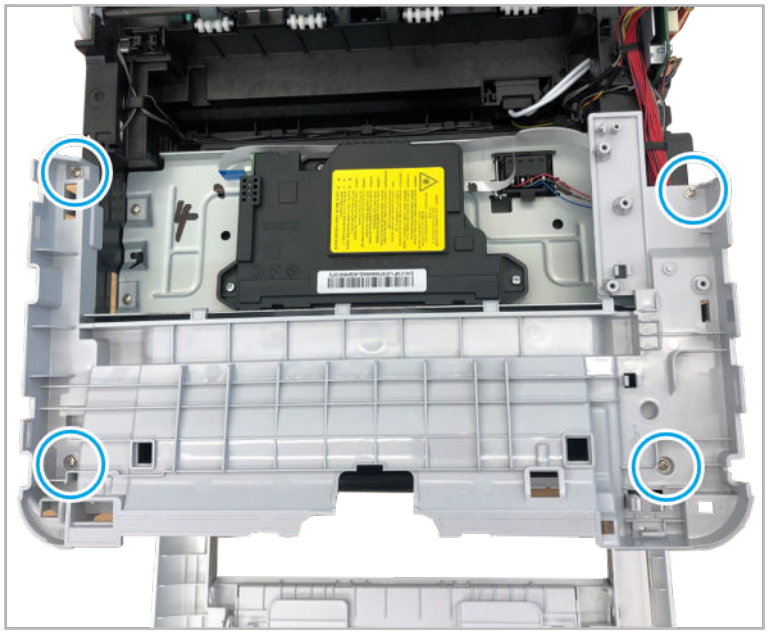
Figure 2-123

f. Lift up the top cover to release it.

Figure 2-124

g. Remove 4 screws, and then remove the middle-inner cover.

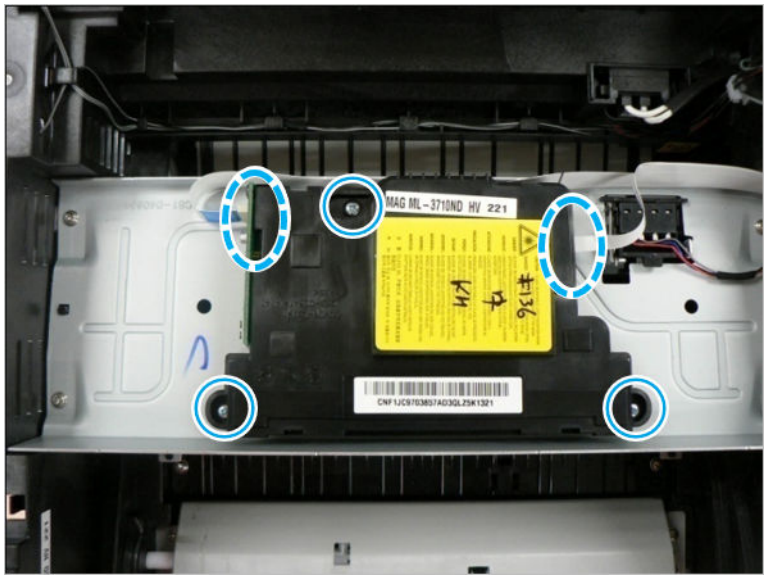
Figure 2-125



4. Remove the LSU.

▲ Remove the Bar coupler.

Figure 2-126



5. Unpack the replacement assembly.

   a. 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

   b. 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.

   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.

   IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

   c. 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 scanning unit(LSU) (HP Laser MFP 432fdn)

Follow these steps to remove the LSU.

Mean time to repair: 10 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-33 Part information

Part number	Part description
JC97-04065A	Laser scanning unit (LSU)

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-127

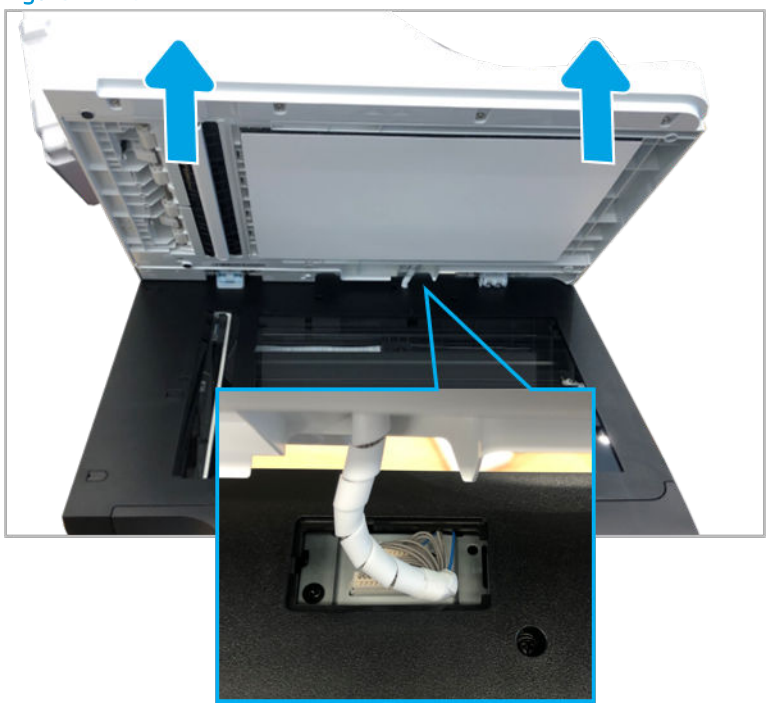
b. Remove the right cover by releasing hooks.

Figure 2-128

2. Remove the ADF.

   ▲ Open the ADF. Remove the connector cover and disconnect the ADF connector. And then, lift up the ADF to release it.

   Figure 2-129



3. Remove the control panel assembly.

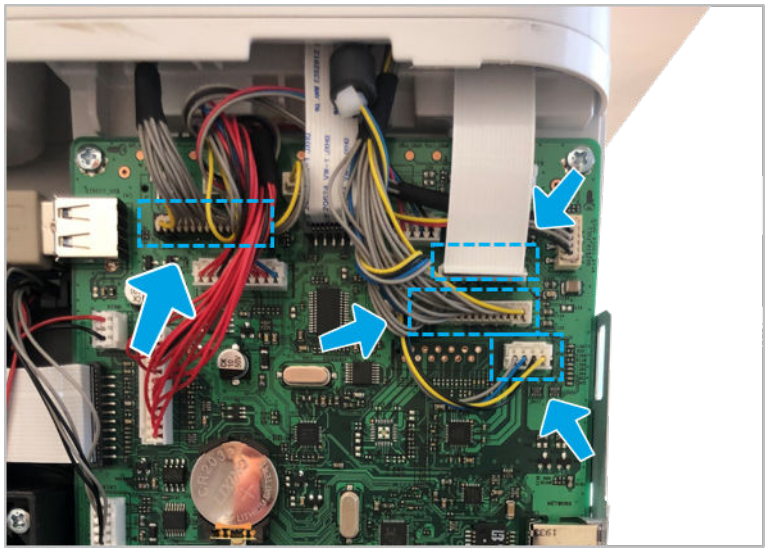
   ▲ Pull up the front edge of the control panel to release it.

   Figure 2-130

4. Remove the flatbed scanner assembly.

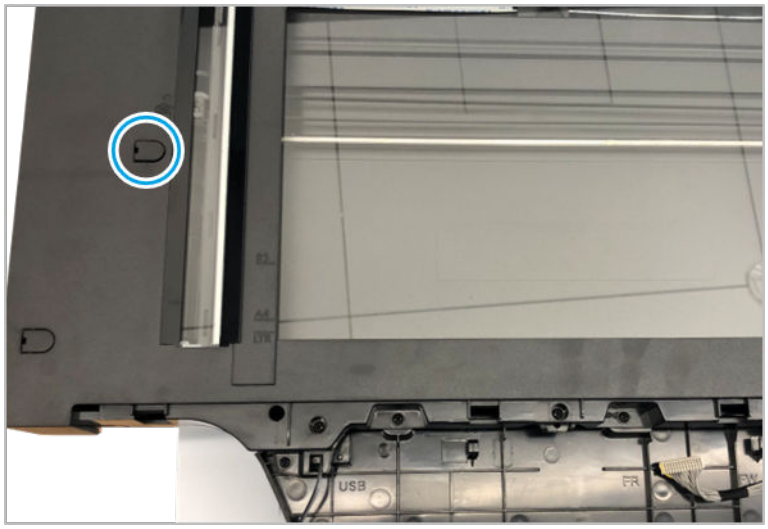
   a. Disconnect all scanner connectors from the main PCA.

Figure 2-131



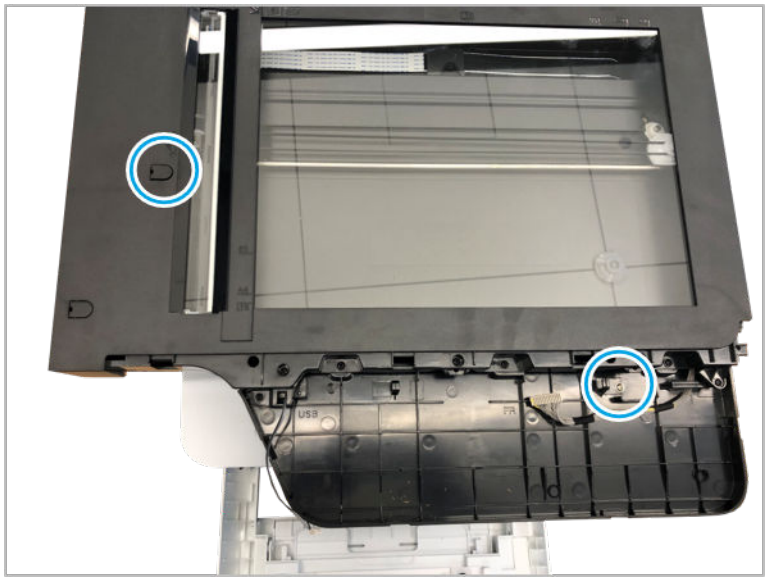
b. Remove the screw cap

Figure 2-132



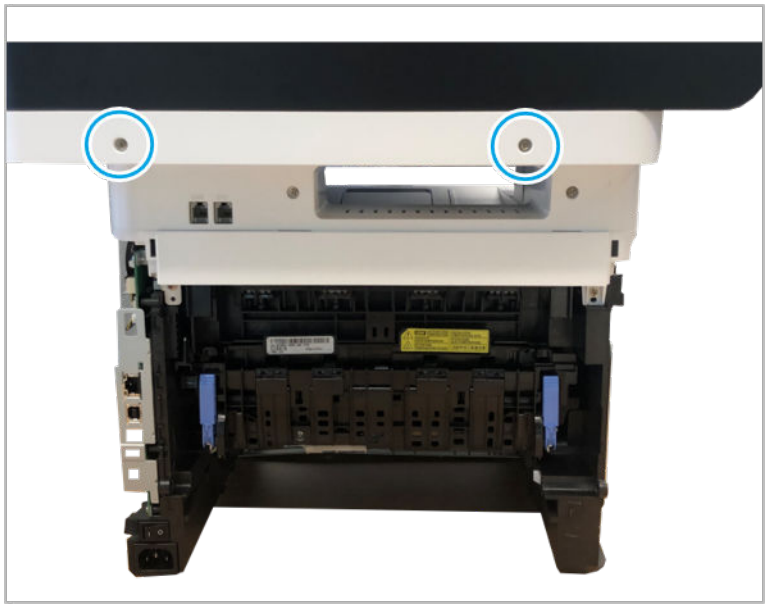
c. Remove 2 screws.

Figure 2-133



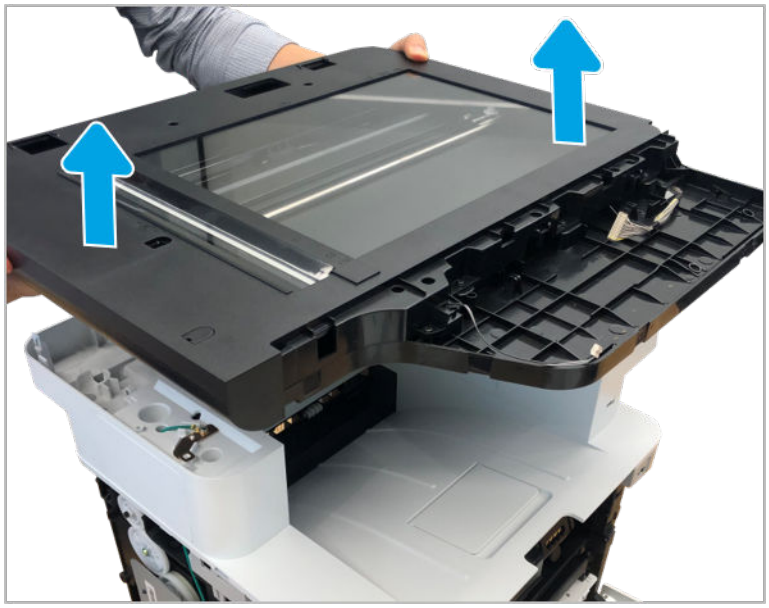
d. Remove 2 screws from the rear side.

Figure 2-134



e. Move the flatbed assembly back slightly, and then lift up it.

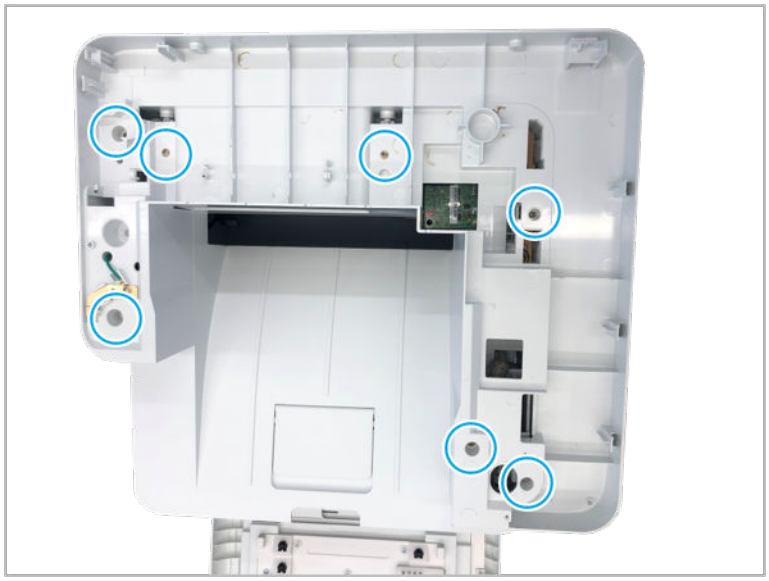
Figure 2-135



5. Remove the middle upper cover.

a. Remove 7 screws.

Figure 2-136

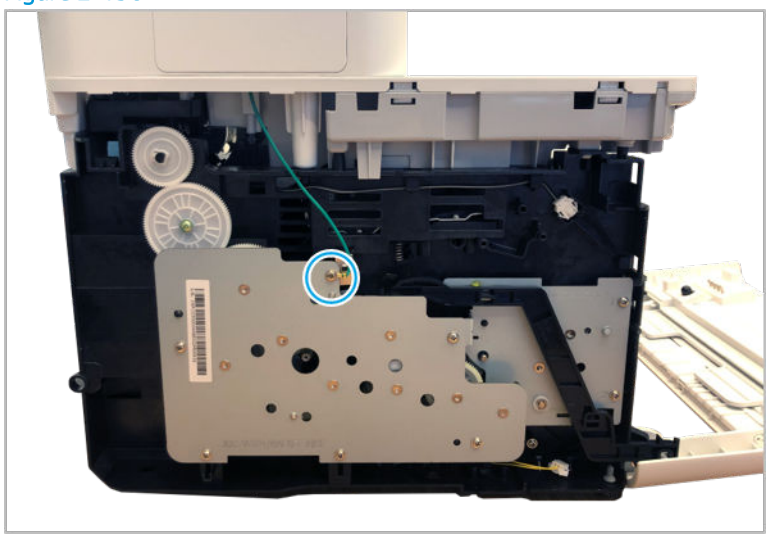


b. Open the rear cover, and then remove 2 screws.

Figure 2-137

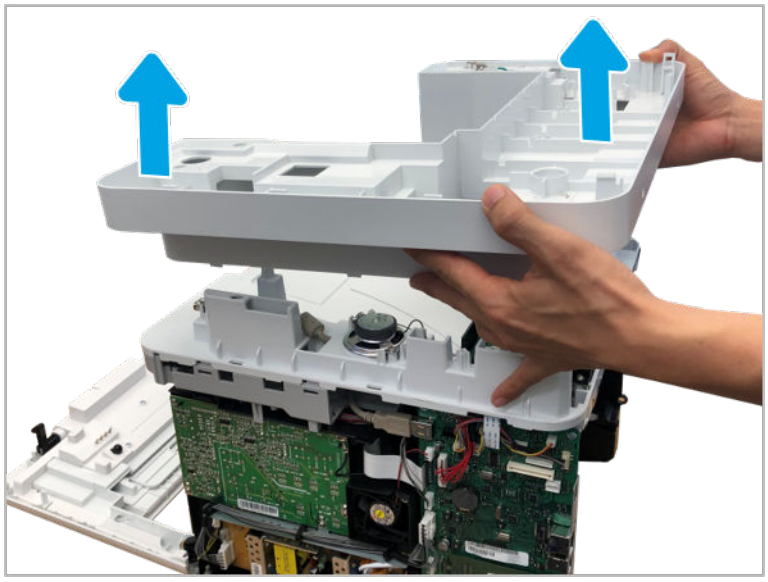
c. Remove 1 screw.

Figure 2-138



d. Lift up the middle upper cover to release it.

Figure 2-139



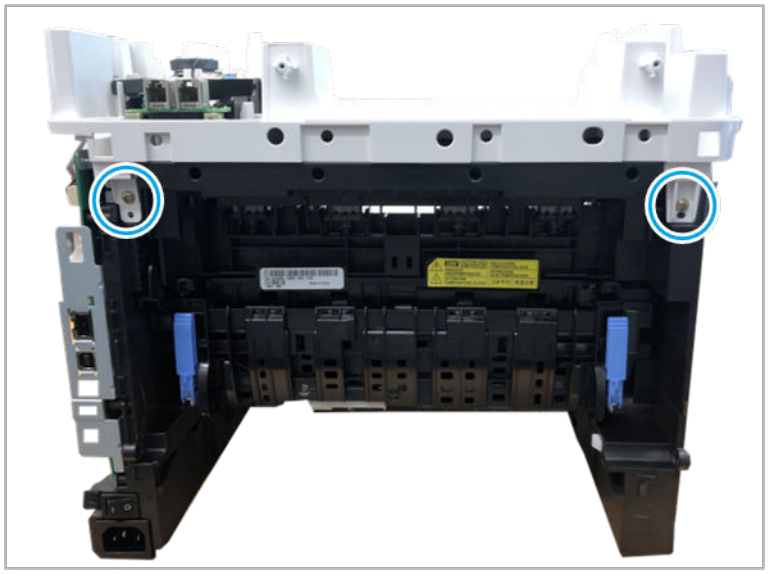
6. Remove the middle lower cover assembly.

a. Remove 2 screws from the front side.

Figure 2-140

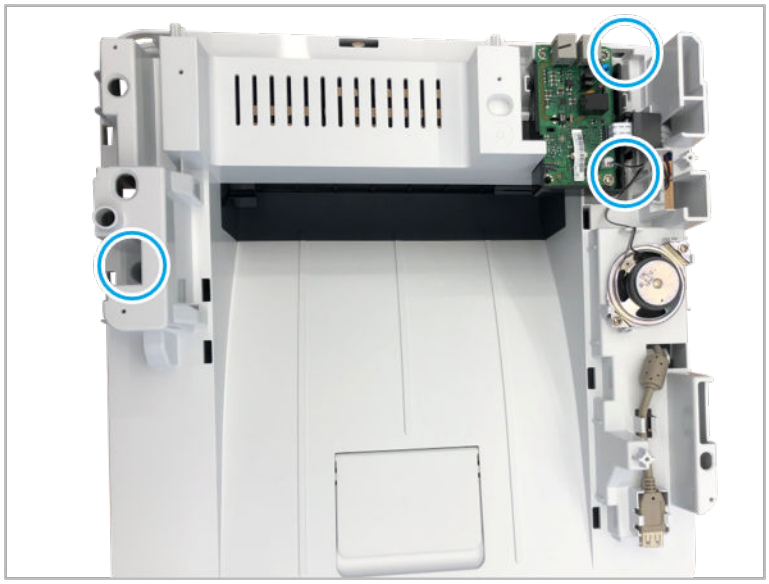
b. Remove 2 screws from the rear side.

Figure 2-141



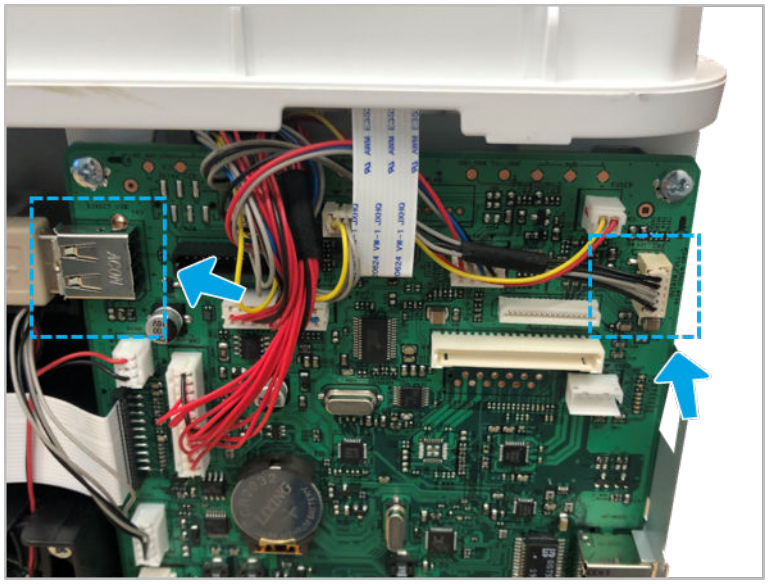
c. Remove 3 screws.

Figure 2-142



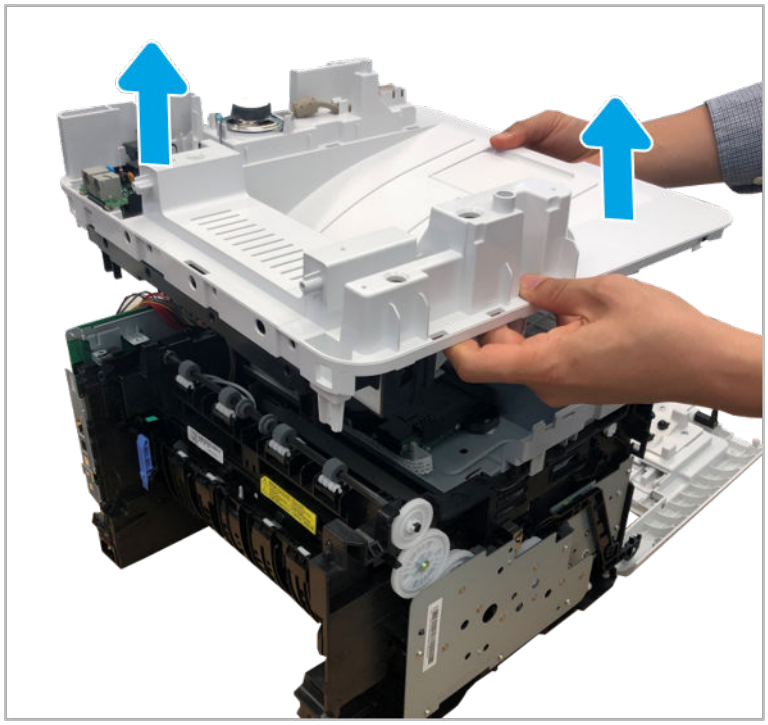
d. Disconnect USB connector and speaker connector.

Figure 2-143



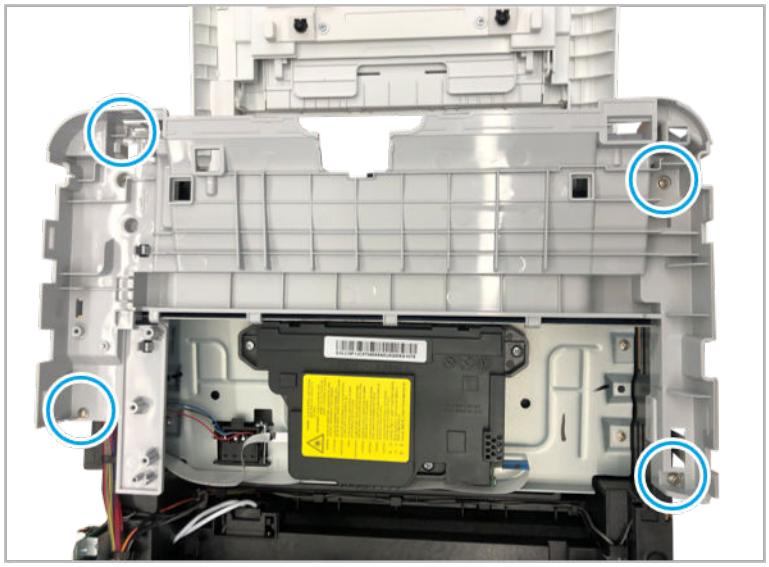
e. Remove the middle lower cover assembly.

Figure 2-144



f. Remove 4 screws, and then remove the middle-inner cover.

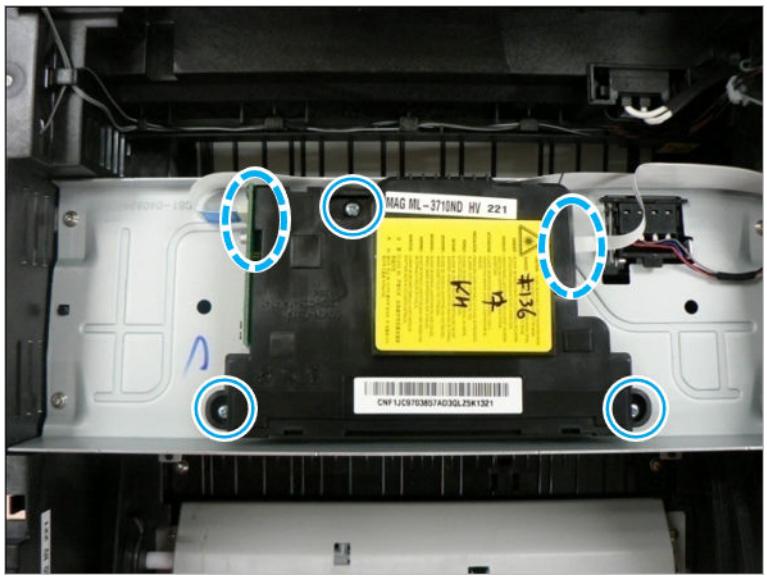
Figure 2-145



7. Remove the LSU.

▲ Remove the Bar coupler.

Figure 2-146



8. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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.

Frame assembly (2)

Parts and diagrams: Frame assembly (2/3)

Figure 2-147 Frame assembly (2/3)

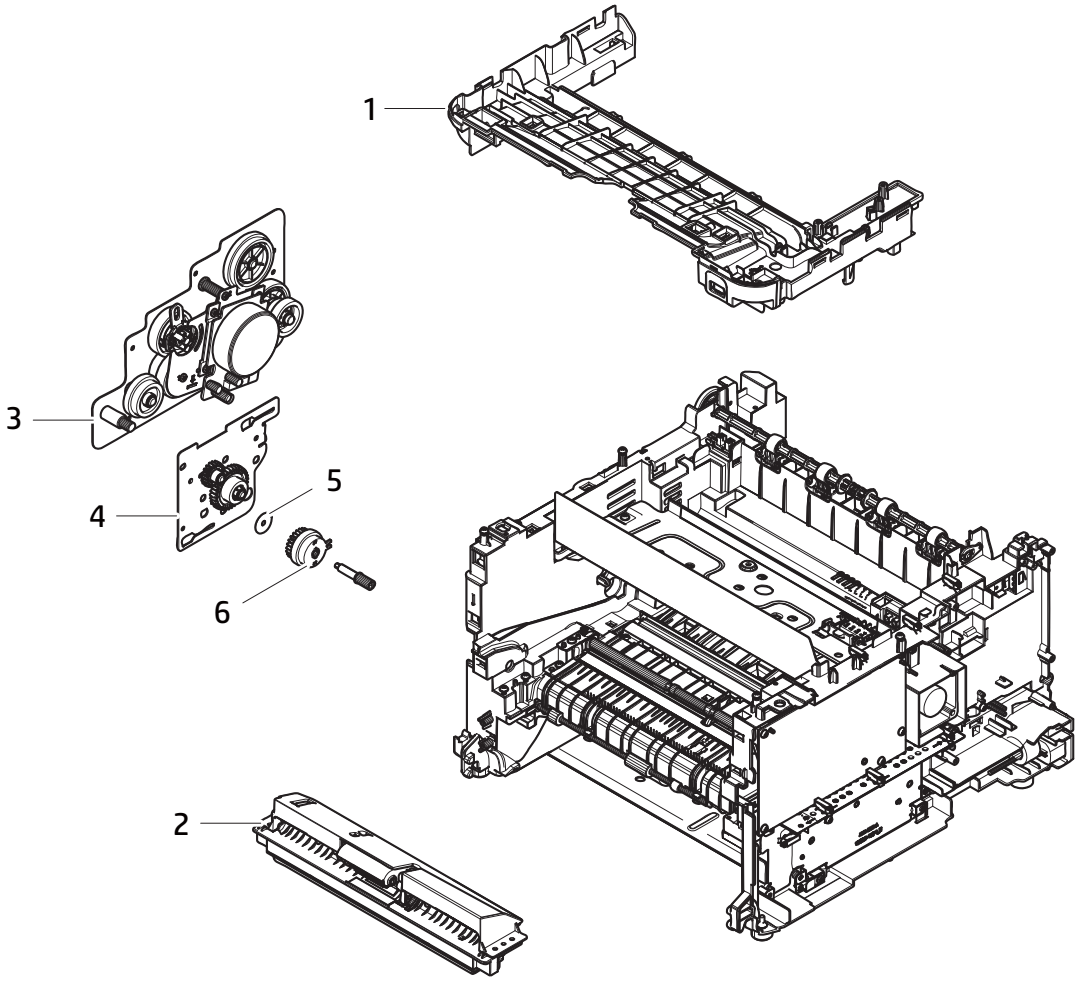


Table 2-34 Frame assembly (2/3)

Ref	Description	Part number (*)	Qty
1	Top inner cover	JC63-04144A	1
2	Tray 1 (MP) assembly	JC90-01043B	1
3	Main drive assembly	JC93-00544B (*)	1
4	Feed drive assembly	JC93-00545A (*)	1
5	Clutch spacer	JC60-00037A	1
6	Electric clutch	JC47-00033A (*)	1

(*) This part is in ordering system.

Removal and replacement: Main drive assembly (HP Laser 408dn)

Follow these steps to remove the main drive assembly.

Mean time to repair: 4 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-35 Part information

Part number	Part description
JC93-00544B	Main drive assembly

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the left cover.

   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-148

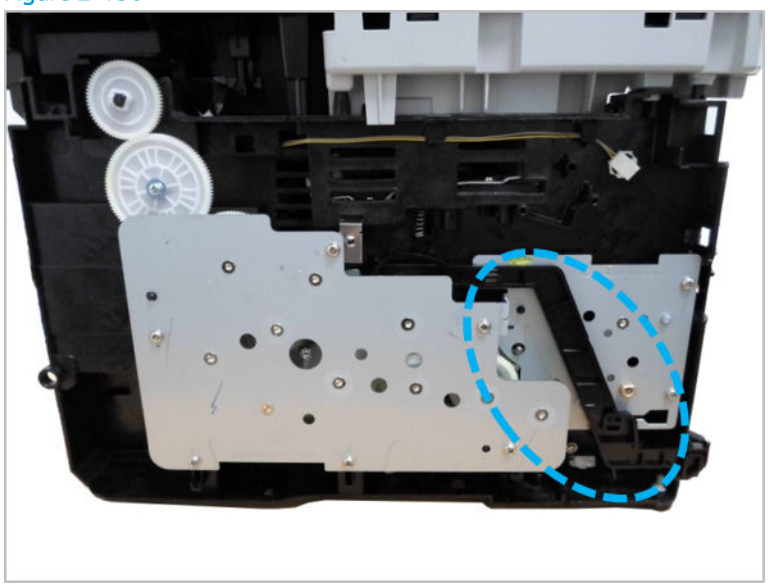
b. Remove the left cover by releasing hooks.

Figure 2-149

2. Remove the main drive.

a. Remove the Bar coupler.

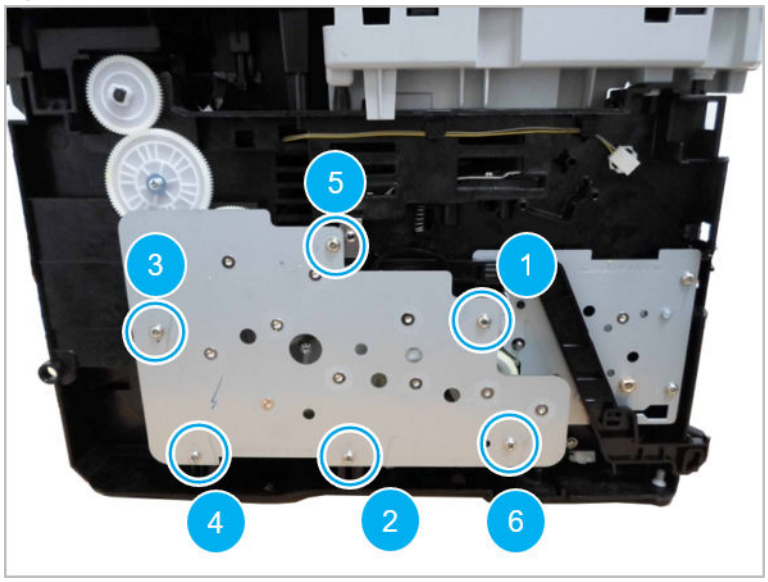
Figure 2-150



b. Remove 6 screws.

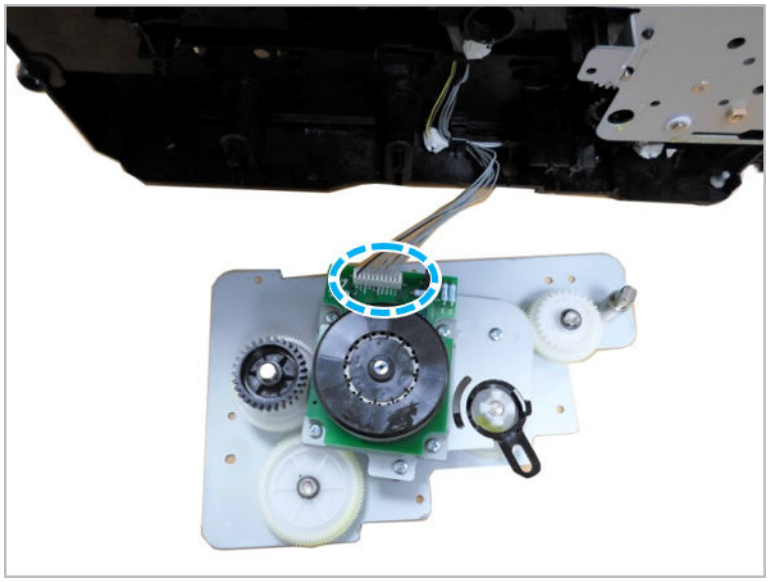
NOTE: When reassembling the main drive assembly, tighten 6 screws in order as shown above.

Figure 2-151



c. Disconnect the motor connector, and then remove the main drive assembly.

Figure 2-152



3. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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: Main drive assembly (HP Laser MFP 432fdn)

Follow these steps to remove the main drive assembly.

Mean time to repair: 4 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-36 Part information

Part number	Part description
JC93-00544B	Main drive assembly

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

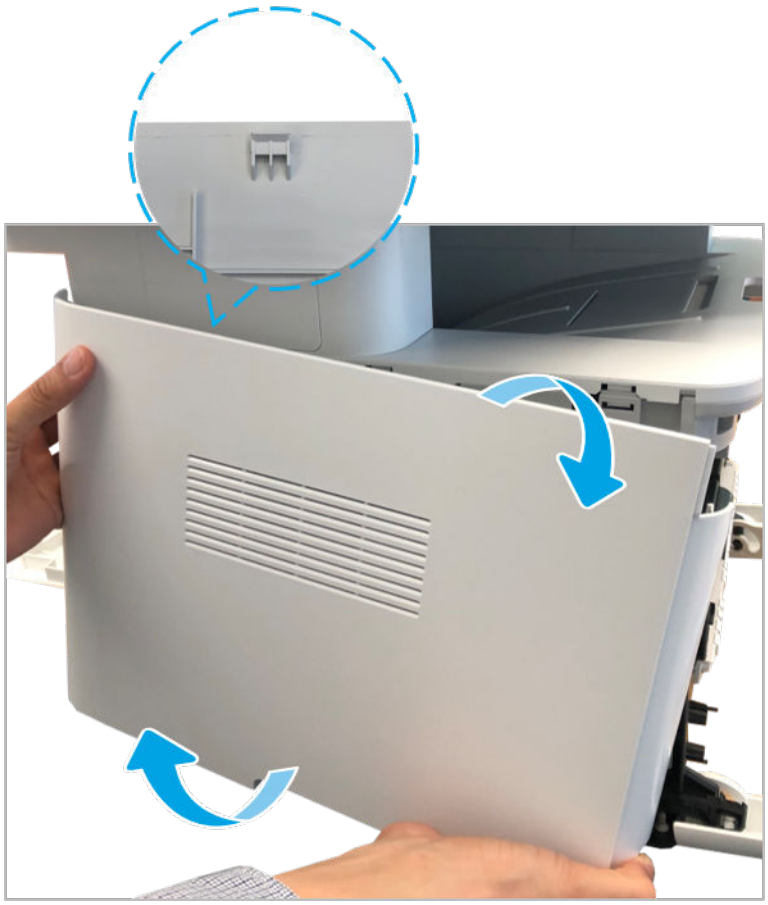
Verify that the document was copied, scanned, or printed correctly.

1. Remove the left cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-153

b. Remove the left cover by releasing hooks.

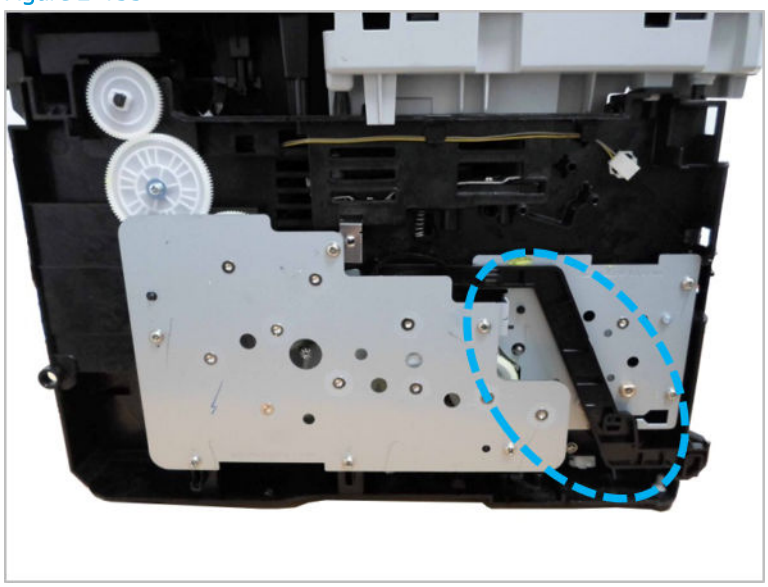
Figure 2-154



2. Remove the main drive.

a. Remove the Bar coupler.

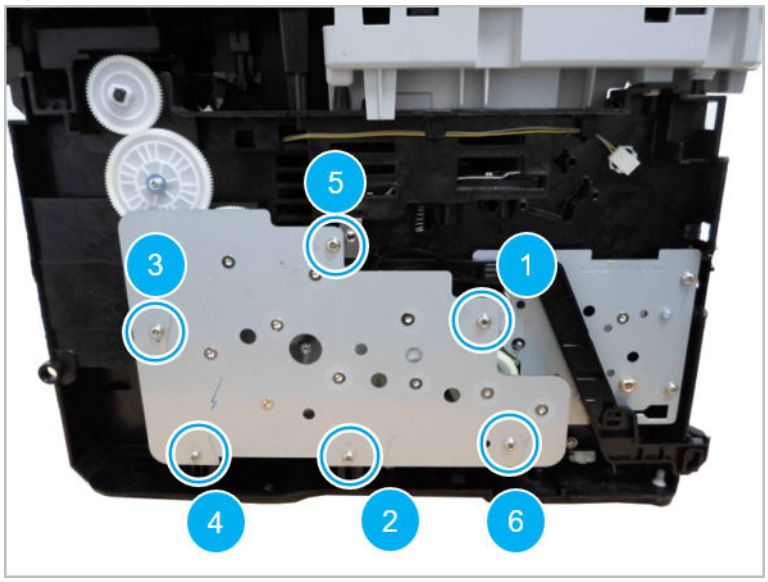
Figure 2-155



b. Remove 6 screws.

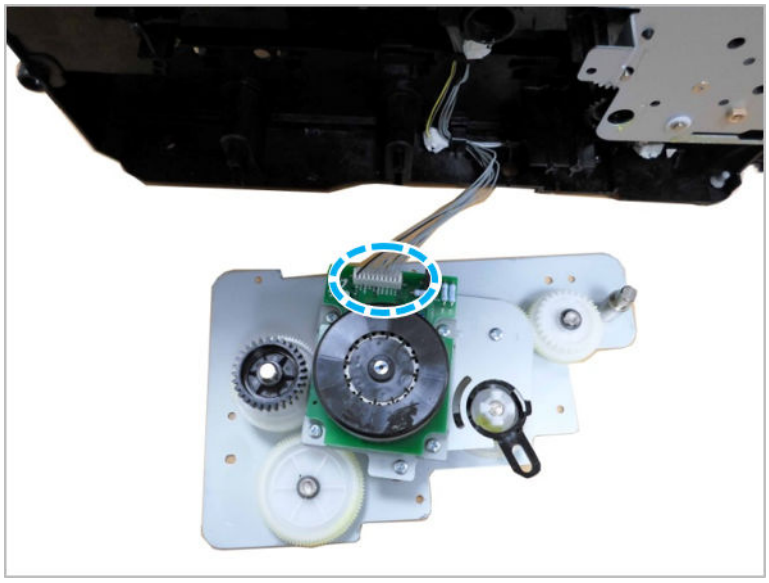
NOTE: When reassembling the main drive assembly, tighten 6 screws in order as shown above.

Figure 2-156



c. Disconnect the motor connector, and then remove the main drive assembly.

Figure 2-157



3. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Feed drive assembly (HP Laser 408dn)

Follow these steps to remove the feed drive assembly.

Mean time to repair: 5 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-37 Part information

Part number	Part description
JC93-00545A	Feed drive assembly

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the left cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-158

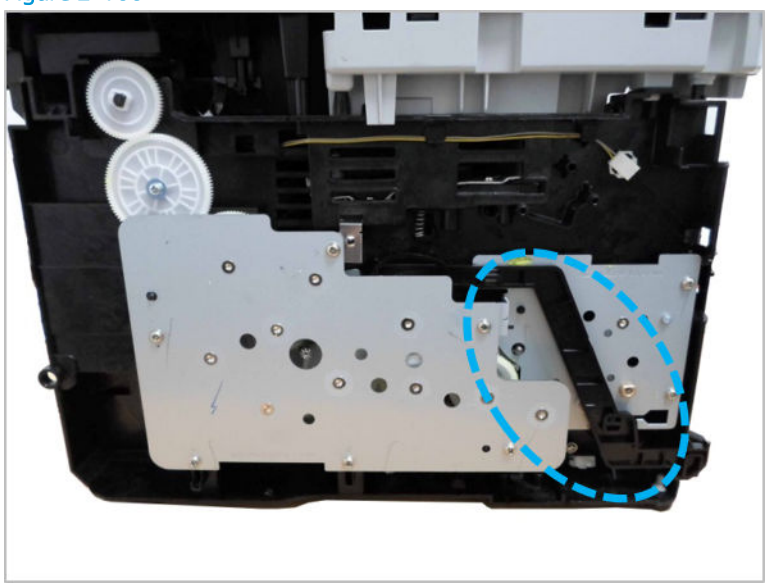
b. Remove the left cover by releasing hooks.

Figure 2-159

2. Remove the main drive.

a. Remove the Bar coupler.

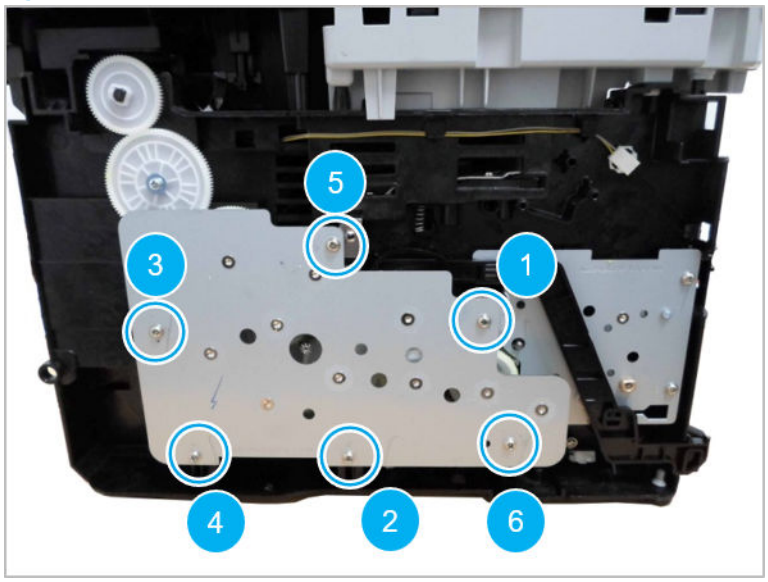
Figure 2-160



b. Remove 6 screws.

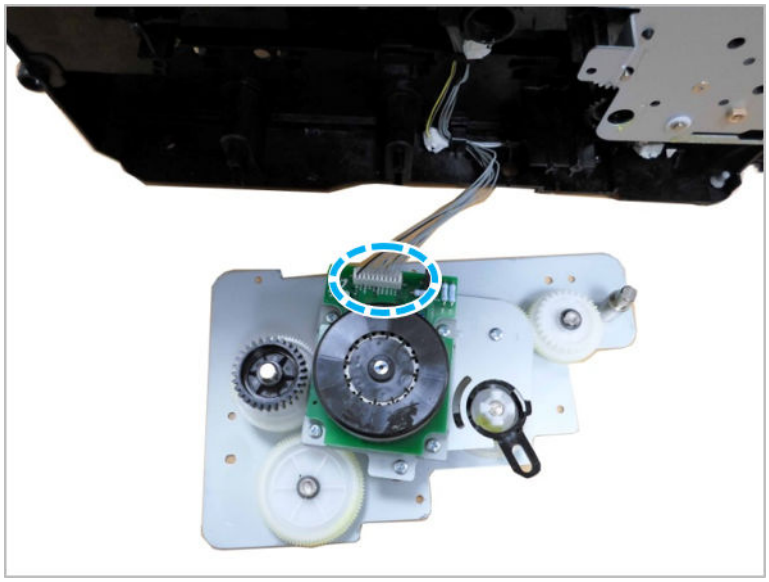
NOTE: When reassembling the main drive assembly, tighten 6 screws in order as shown above.

Figure 2-161



c. Disconnect the motor connector, and then remove the main drive assembly.

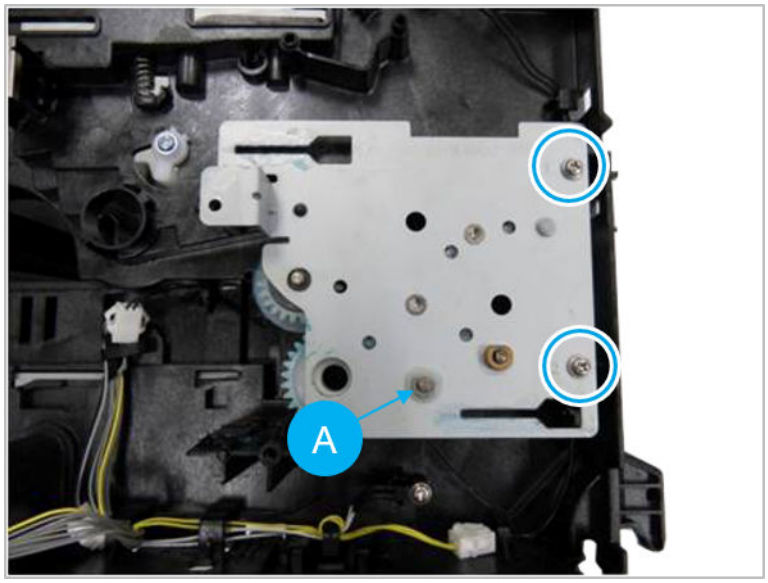
Figure 2-162



3. Remove the feed drive.

▲ Remove 1 e-ring(callout A) and 2 screws, and then remove the feed drive assembly.

Figure 2-163



4. Unpack the replacement assembly.

   a. 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

   b. 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.

   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.

   IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

   c. To install an assembly, reverse the removal steps.

   NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Feed drive assembly (HP Laser MFP 432fdn)

Follow these steps to remove the feed drive assembly.

Mean time to repair: 5 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-38 Part information

Part number	Part description
JC93-00545A	Feed drive assembly

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

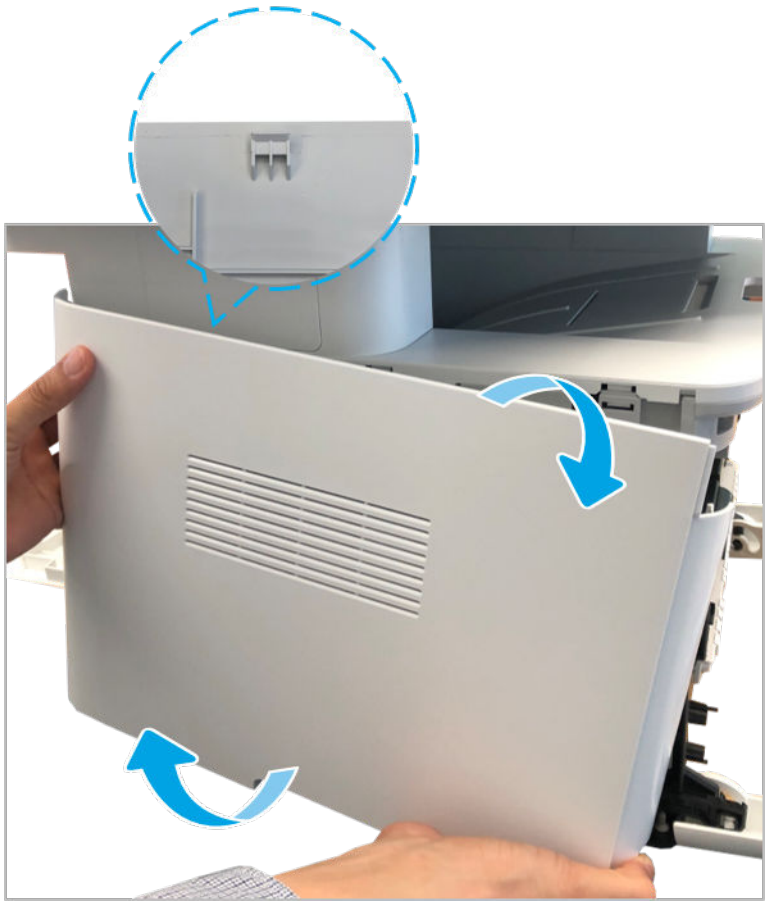
Verify that the document was copied, scanned, or printed correctly.

1. Remove the left cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-164

b. Remove the left cover by releasing hooks.

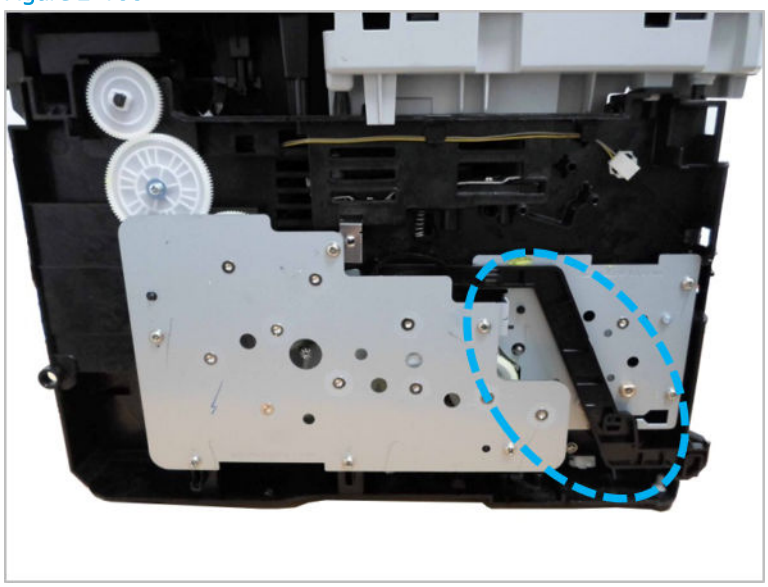
Figure 2-165



2. Remove the main drive.

a. Remove the Bar coupler.

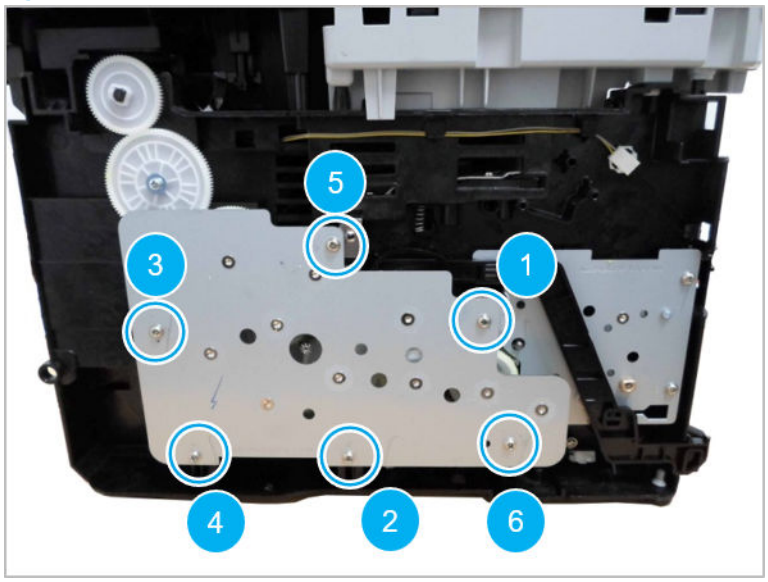
Figure 2-166



b. Remove 6 screws.

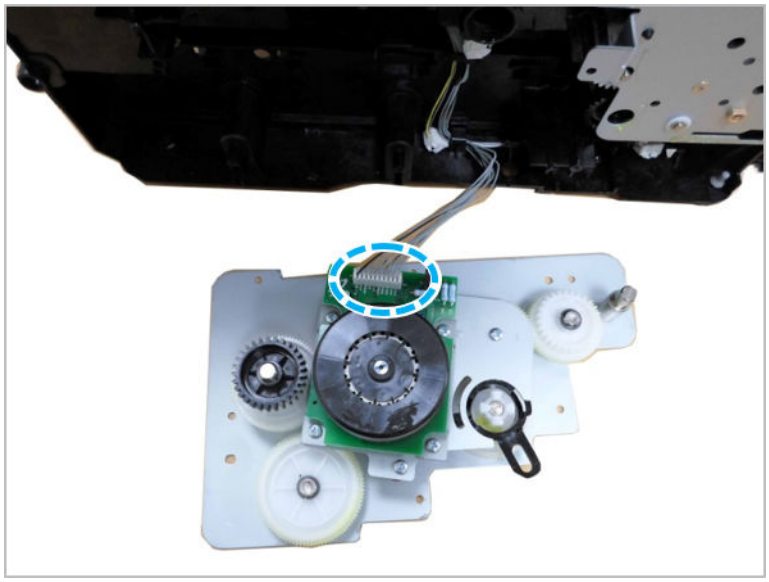
NOTE: When reassembling the main drive assembly, tighten 6 screws in order as shown above.

Figure 2-167



c. Disconnect the motor connector, and then remove the main drive assembly.

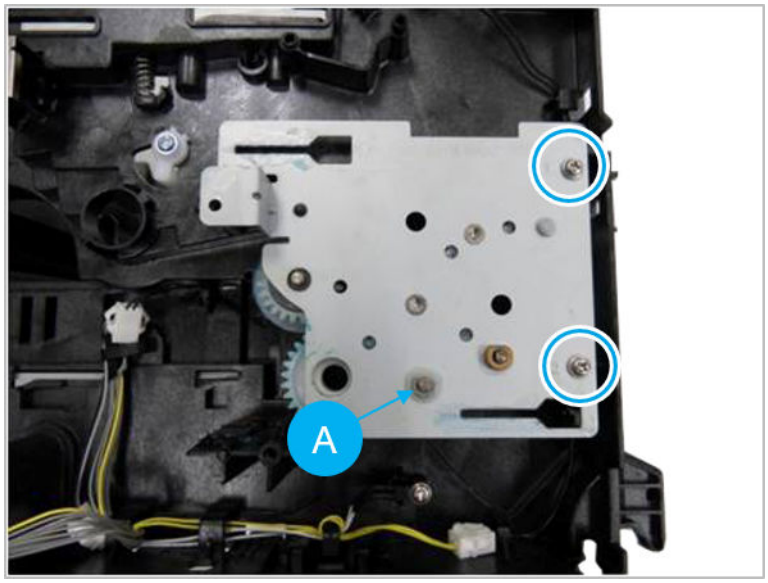
Figure 2-168



3. Remove the feed drive.

▲ Remove 1 e-ring(callout A) and 2 screws, and then remove the feed drive assembly.

Figure 2-169



4. Unpack the replacement assembly.

   a. 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

   b. 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.

   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.

   IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

   c. To install an assembly, reverse the removal steps.

   NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Tray 1 (MP) assembly (HP Laser 408dn)

Follow these steps to remove the tray 1 (MP) assembly.

Mean time to repair: 7 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

NOTE: This part is not in ordering system.

Table 2-39 Part information

Part number	Part description
JC90-01043B	Tray 1 (MP) assembly

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the left and right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-170

b. Remove the left cover by releasing hooks.

Figure 2-171

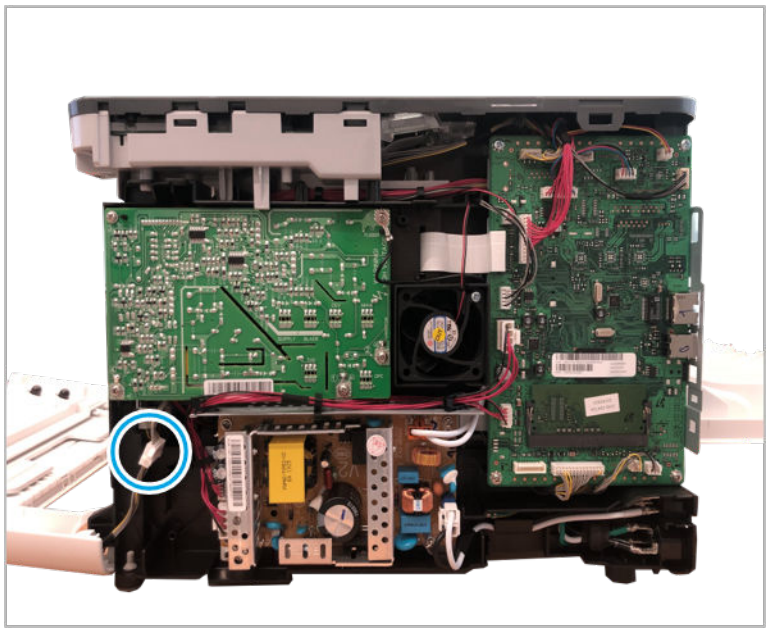
c. Remove the right cover by releasing hooks.

Figure 2-172

2. Remove the front cover.

a. Disconnect one connector connecting the front cover.

Figure 2-173



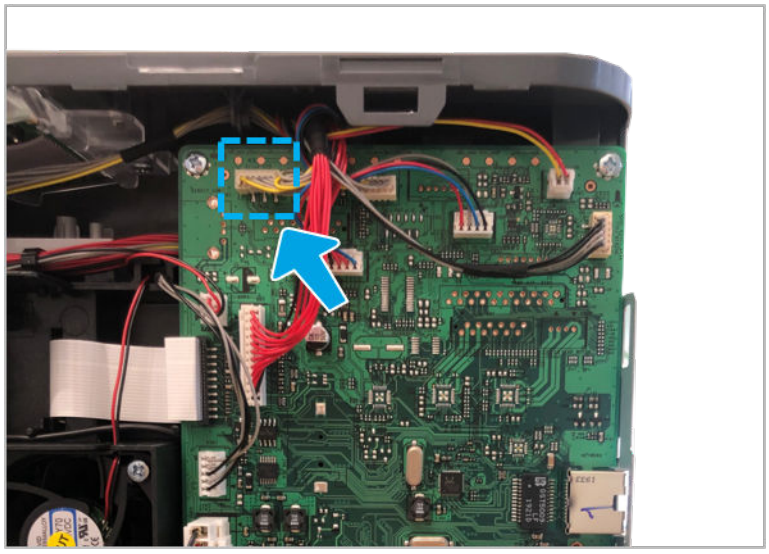
b. Pull the bottom of the front cover inward to release both hooks, and then remove the front cover.

Figure 2-174

3. Remove the Top cover and middle inner cover.

a. Disconnect the control panel connector from the main PCA.

Figure 2-175



b. Remove 2 screws from the front side.

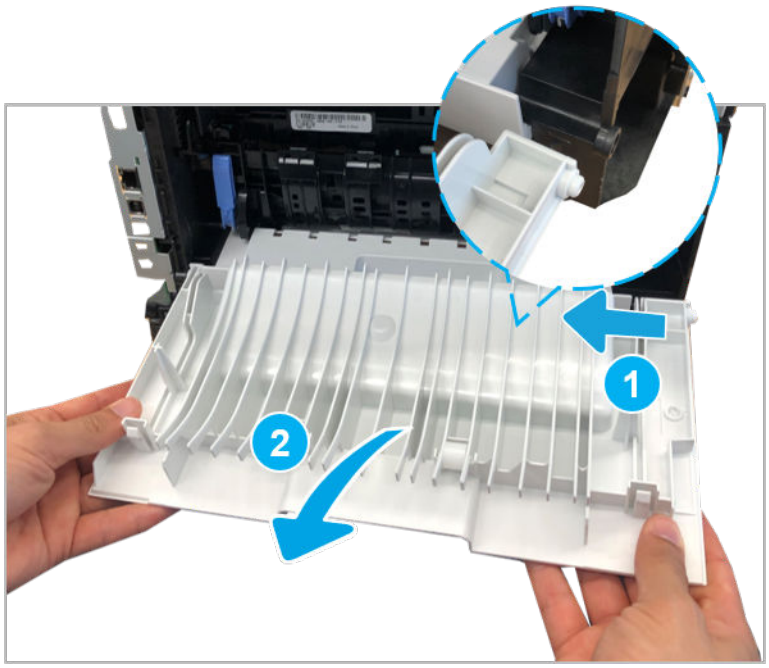
Figure 2-176

c. Remove the duplex assembly.

Figure 2-177

d. Pull the rear cover to the left and then release it.

Figure 2-178



e. Remove 2 screws and dummy cover.

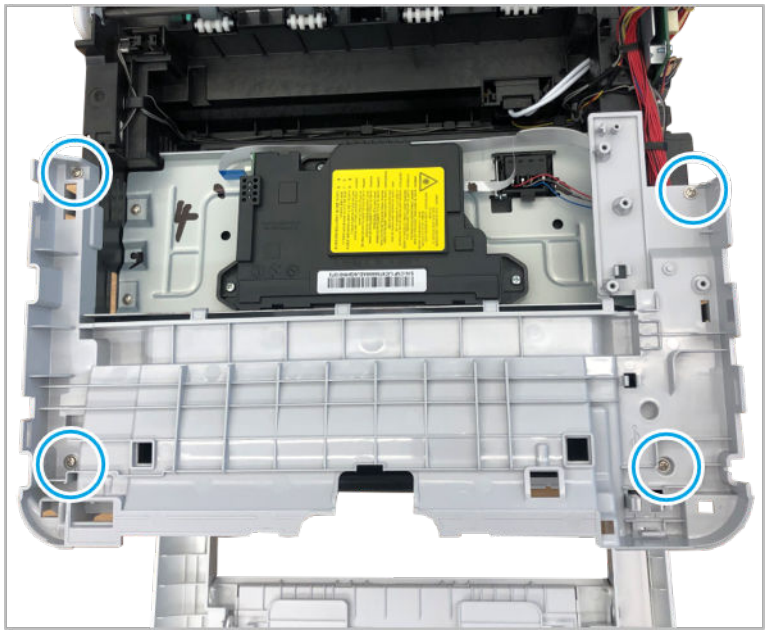
Figure 2-179

f. Lift up the top cover to release it.

Figure 2-180

g. Remove 4 screws, and then remove the middle-inner cover.

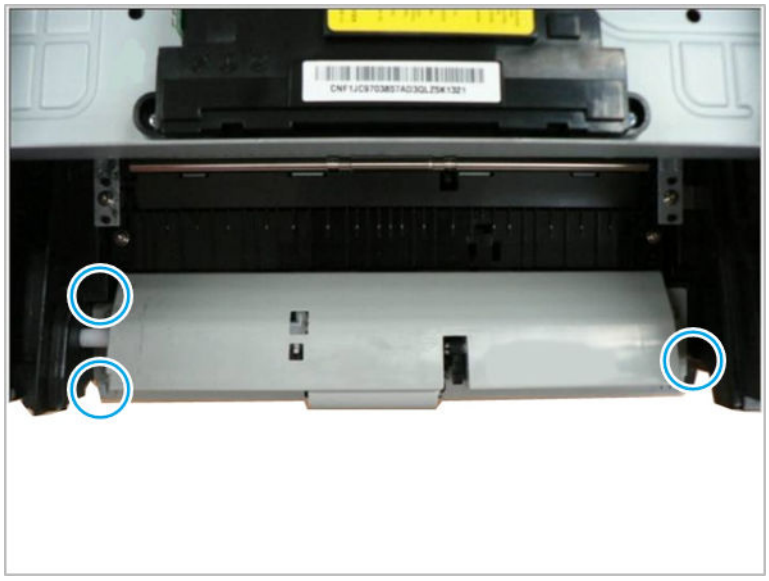
Figure 2-181



4. Remove the tray 1 (MP) assembly.

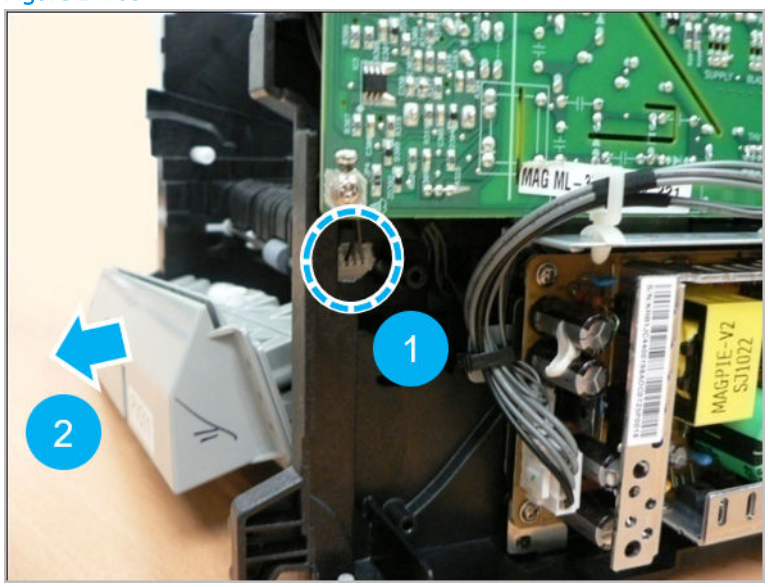
a. Remove 3 screws.

Figure 2-182



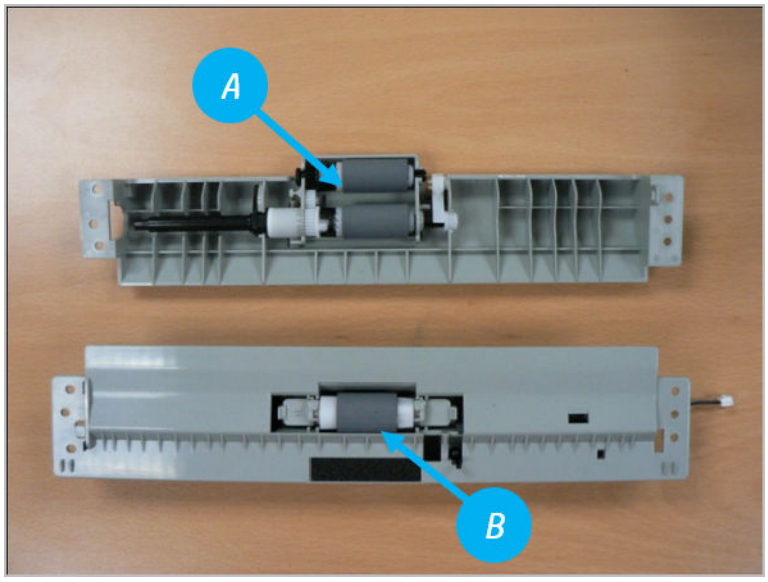
b. Disconnect the connector, and then remove the tray 1 (MP) assembly.

Figure 2-183



c. Separate the MP lower from the MP upper. Remove the tray 1 pickup assembly(callout A) from the MP upper guide. And then, remove the tray 1 reverse roller(callout B) from the MP lower guide.

Figure 2-184



5. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Tray 1 (MP) assembly (HP Laser MFP 432fdn)

Follow these steps to remove the tray 1 (MP) assembly.

Mean time to repair: 11 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

NOTE: This part is not in ordering system.

Table 2-40 Part information

Part number	Part description
JC90-01043B	Tray 1 (MP) assembly

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-185

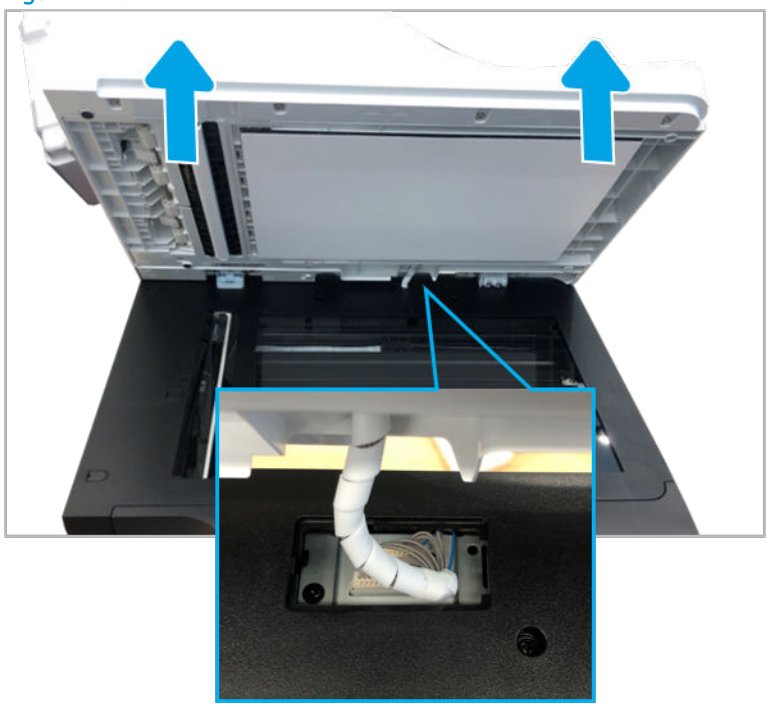
b. Remove the right cover by releasing hooks.

Figure 2-186

2. Remove the ADF.

   ▲ Open the ADF. Remove the connector cover and disconnect the ADF connector. And then, lift up the ADF to release it.

   Figure 2-187



3. Remove the control panel assembly.

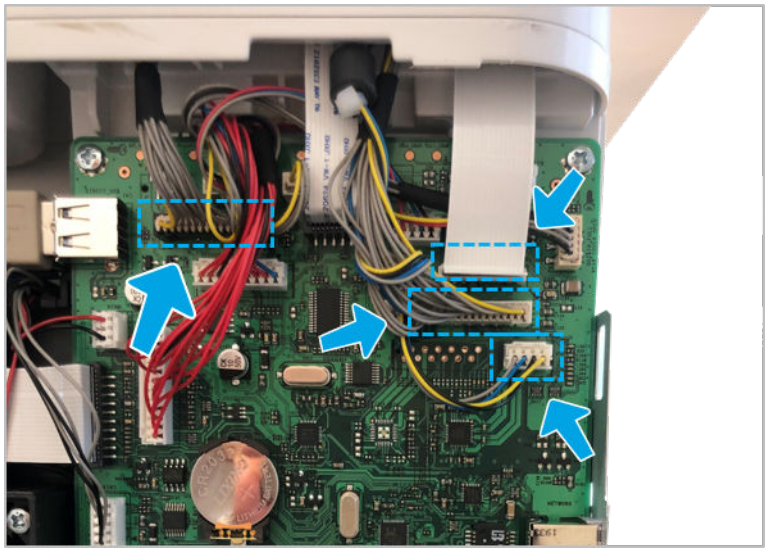
   ▲ Pull up the front edge of the control panel to release it.

   Figure 2-188

4. Remove the flatbed scanner assembly.

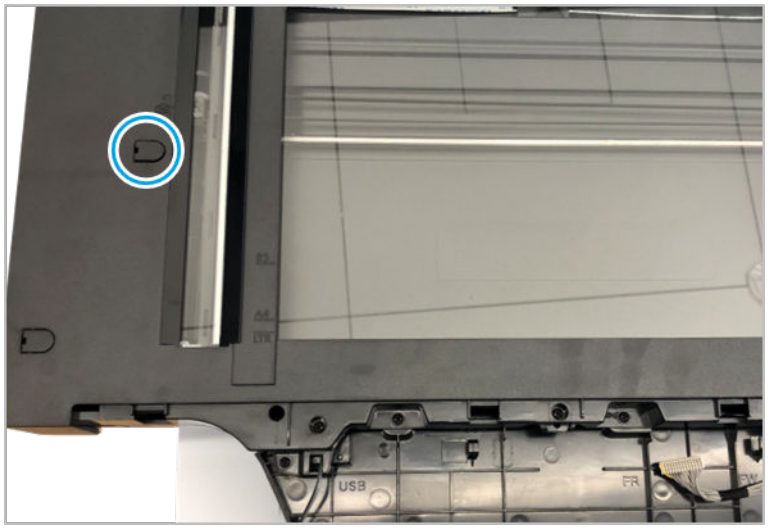
   a. Disconnect all scanner connectors from the main PCA.

Figure 2-189



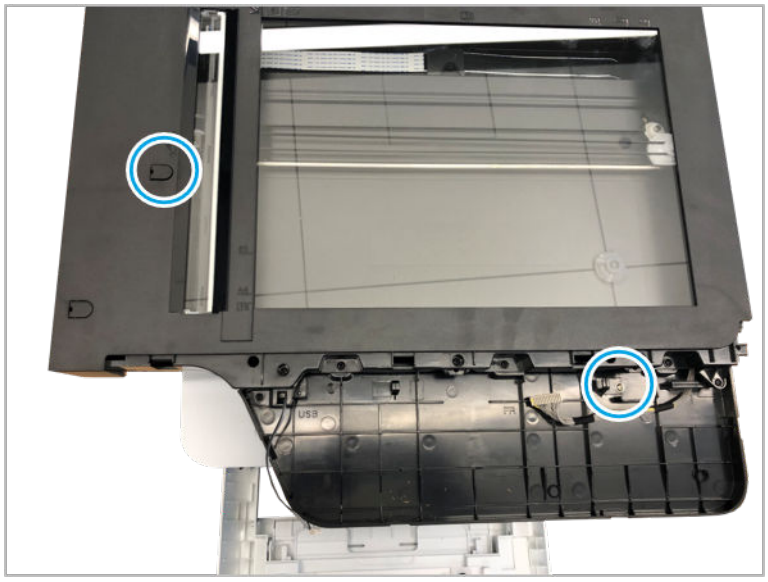
b. Remove the screw cap

Figure 2-190



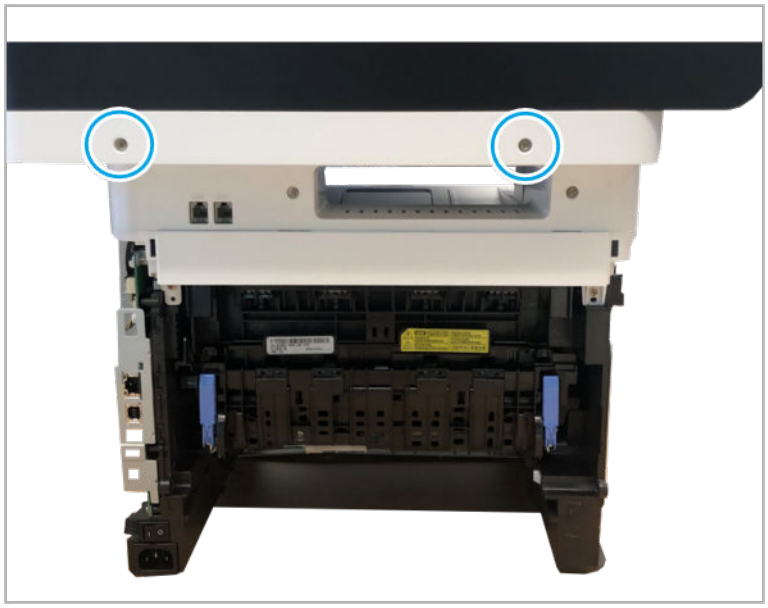
c. Remove 2 screws.

Figure 2-191



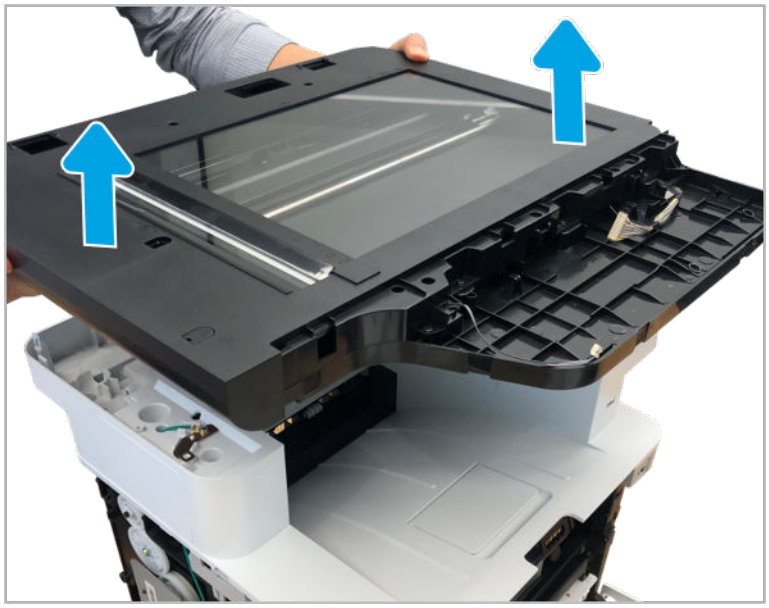
d. Remove 2 screws from the rear side.

Figure 2-192



e. Move the flatbed assembly back slightly, and then lift up it.

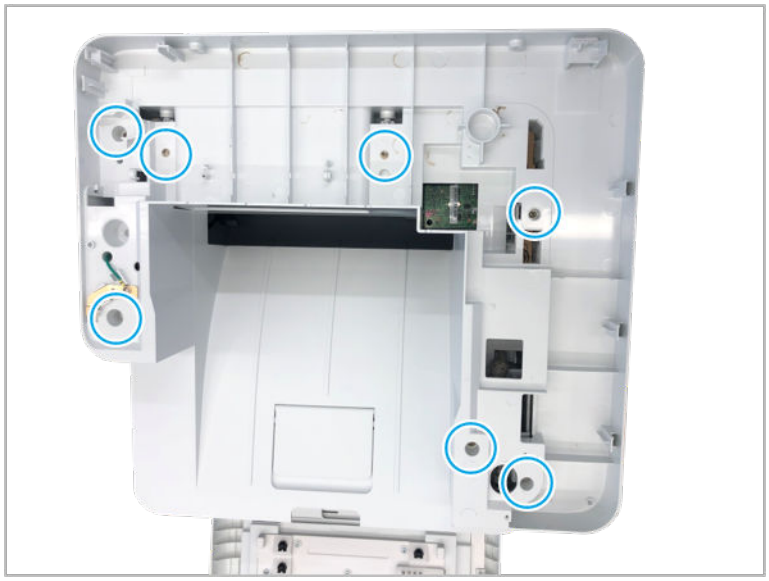
Figure 2-193



5. Remove the middle upper cover.

a. Remove 7 screws.

Figure 2-194

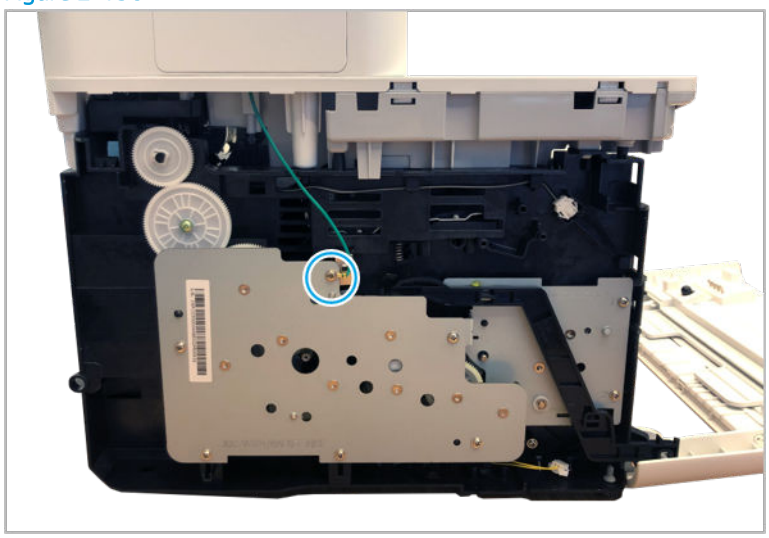


b. Open the rear cover, and then remove 2 screws.

Figure 2-195

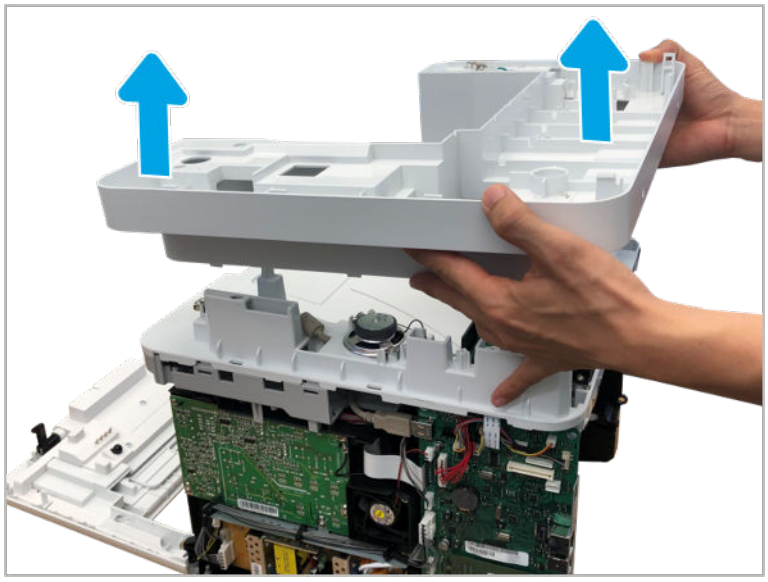
c. Remove 1 screw.

Figure 2-196



d. Lift up the middle upper cover to release it.

Figure 2-197



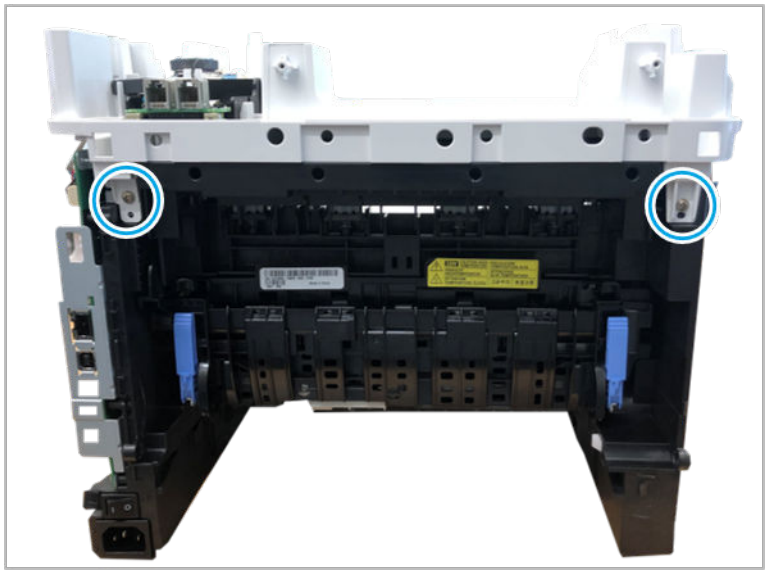
6. Remove the middle lower cover assembly.

a. Remove 2 screws from the front side.

Figure 2-198

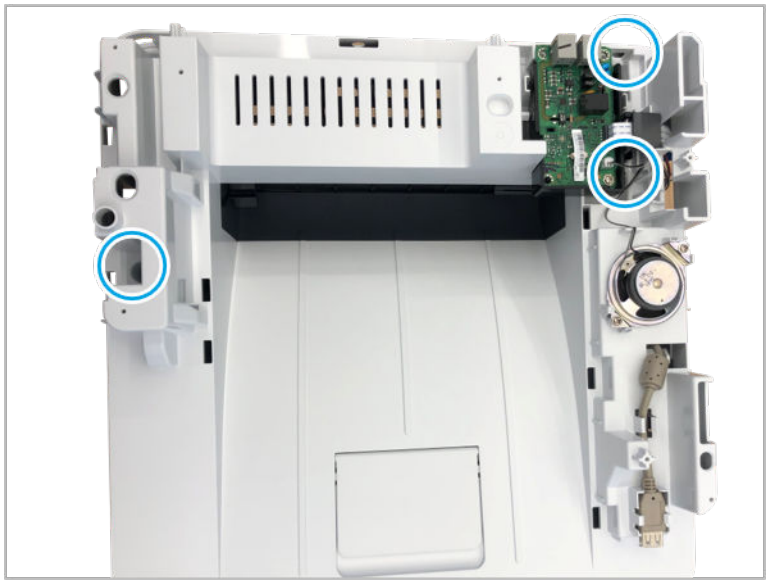
b. Remove 2 screws from the rear side.

Figure 2-199



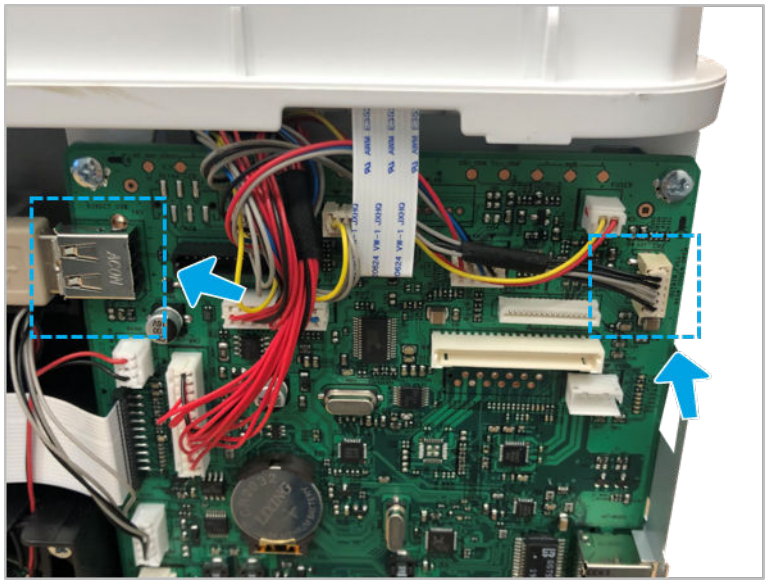
c. Remove 3 screws.

Figure 2-200



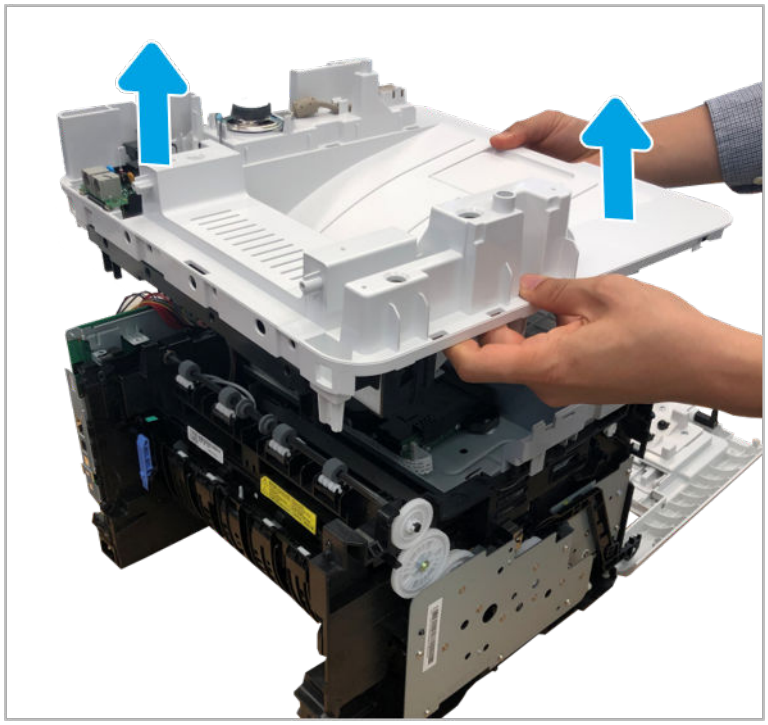
d. Disconnect USB connector and speaker connector.

Figure 2-201



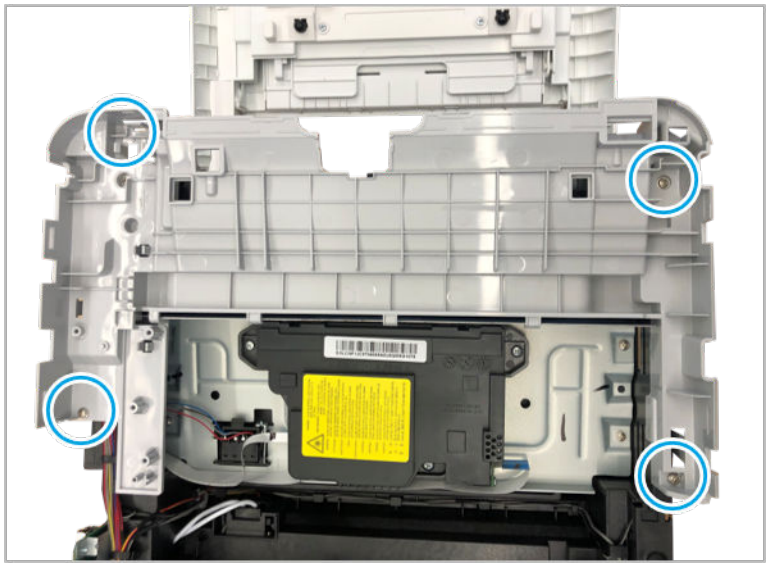
e. Remove the middle lower cover assembly.

Figure 2-202



f. Remove 4 screws, and then remove the middle-inner cover.

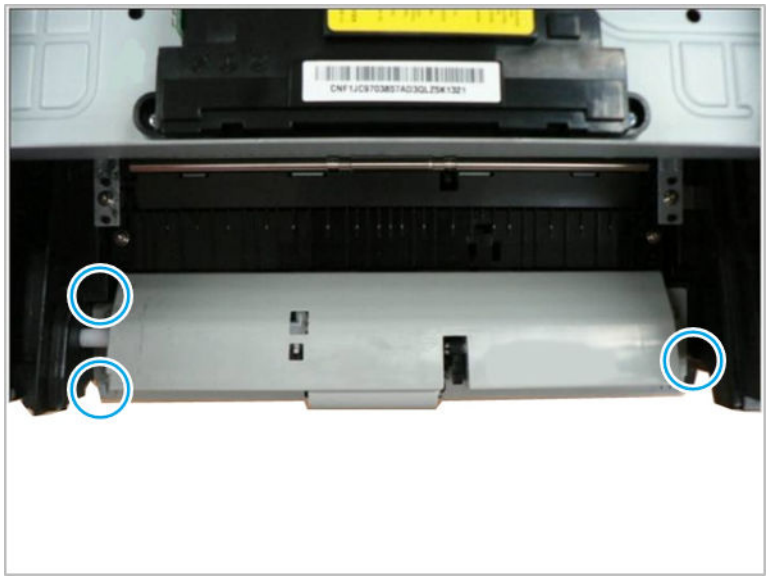
Figure 2-203



7. Remove the tray 1 (MP) assembly.

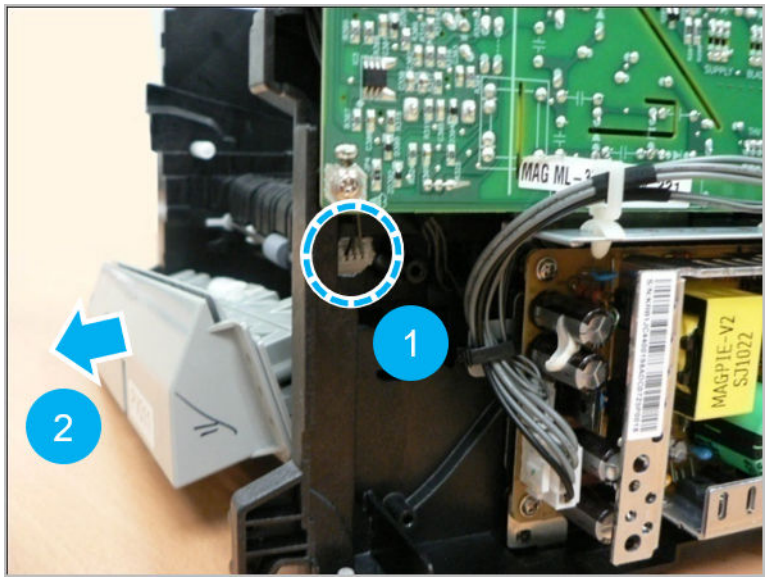
a. Remove 3 screws.

Figure 2-204



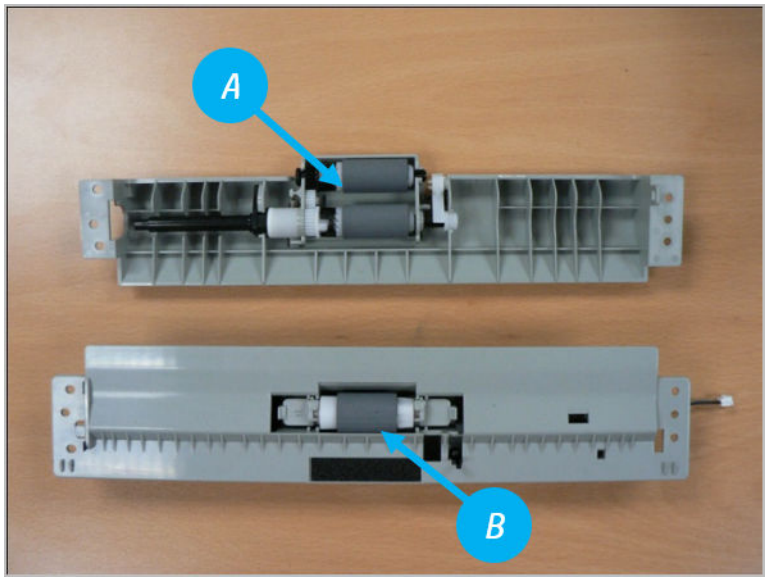
b. Disconnect the connector, and then remove the tray 1(MP) assembly.

Figure 2-205



c. Separate the MP lower from the MP upper. Remove the tray 1 pickup assembly(callout A) from the MP upper guide. And then, remove the tray 1 reverse roller(callout B) from the MP lower guide.

Figure 2-206



8. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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.

Frame assembly (3)

Parts and diagrams: Frame assembly (3/3)

Figure 2-207 Frame assembly (3/3)

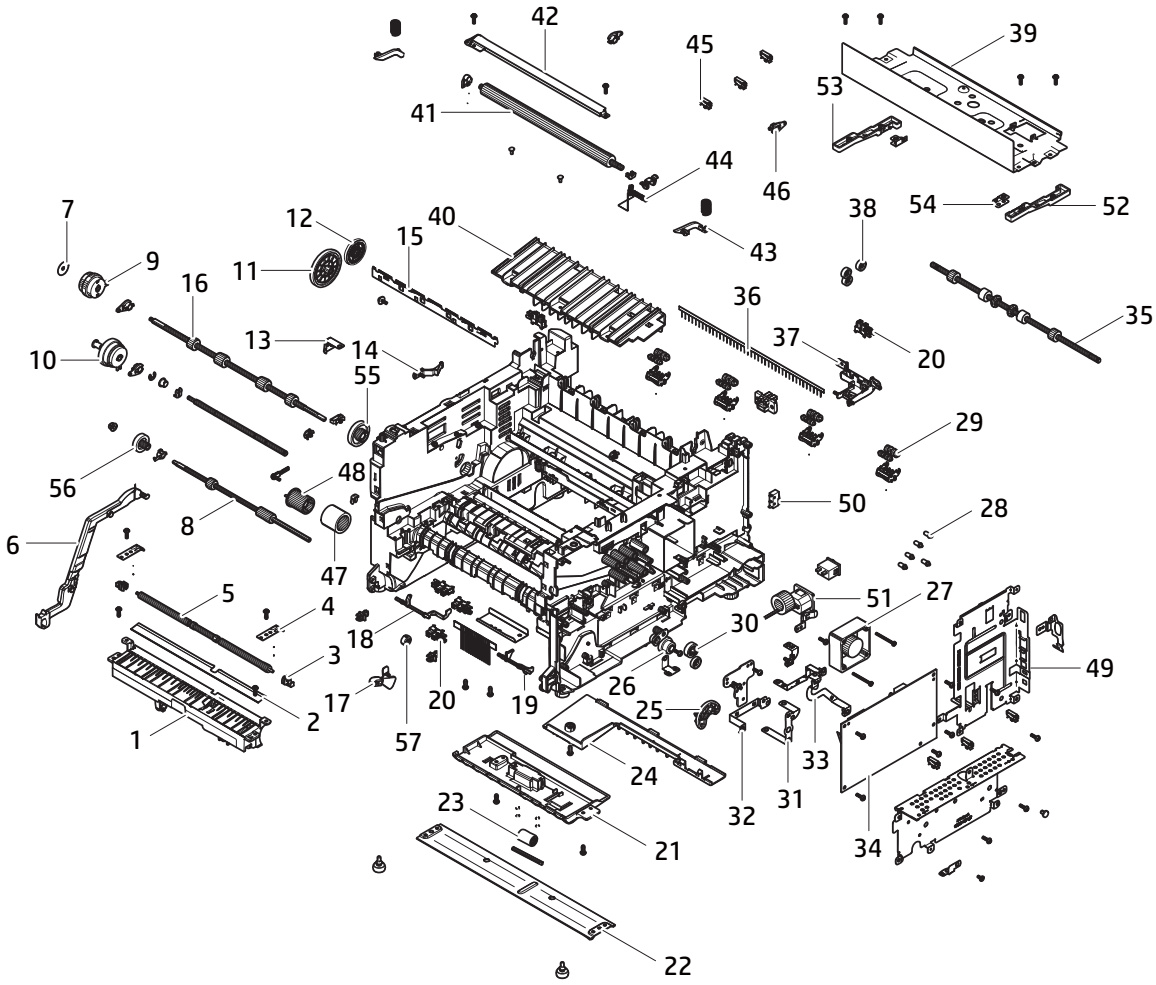


Table 2-41 Frame assembly (3/3)

Ref	Description	Part number (*)	Qty
1	Frame duplex guide	JC61-04064A (*)	1
2	Duplex path sheet	JC63-02956A	1
3	Feed idle bushing	JC61-00585A (*)	2
4	Push bushing plate	JC61-00914A	2
5	Feed idle shaft	JC61-00665A	1
6	Coupling lever	JC66-02770A	1
7	Clutch spacer	JC60-00037A	1
8	Idle feed roller	JC66-02797A (*)	1
9	Electric clutch	JC47-00033A (*)	1
10	Electric clutch	JC47-00036B (*)	1
11	Exit idle 96 gear	JC66-02778A	1
12	Exit 65 gear	JC66-02780A (*)	1
13	Bracket gear ground	JC63-02875A	1
14	Slider lock	JC72-00983A (*)	2
15	Saw plate	JC61-00604A	1
16	Idle feed registration roller	JC66-02834A (*)	1
17	Empty actuator	JC66-02762A (*)	1
18	Registration actuator	JC66-02763A	1
19	Feed actuator	JC66-02764A (*)	1
20	Photo interrupter	0604-001393 (*)	1
21	Duplex path frame	JC61-02752A	1
22	Frame bottom plate	JC61-04069A	1
23	Idle SCF roller	JC66-01022A (*)	1
24	Harness cap	JC67-00291A	1
25	Swing duplex bracket	JC61-02265A	1
26	Reduction gear	JC66-01651A	1
27	Fan	JC31-00146A (*)	1
28	Shaft	JC70-40912A	5
29	Decurl roller	JC93-00324A (*)	2
30	Duplex DR 28 gear	JC66-01639A	1
31	Bracket paper ground	JC63-02874A	1
32	HVPS ground	JC63-02876A	1
33	LSU bracket ground	JC63-02877A	1
34	HVPS	JC44-00197A (*)	1

Table 2-41 Frame assembly (3/3) (continued)

Ref	Description	Part number (*)	Qty
35	Exit roller	JC66-04977A (*)	1
36	Antistatic brush	JC67-00055A	1
37	Exit sensor holder	JC61-04067A (*)	1
38	Swing DR 19 gear	JC66-01635A	3
39	LSU bracket	JC61-04915A	1
40	Transfer rib guide	JC61-04091A	1
41	Transfer roller	JC66-02842A (*)	1
42	Transfer earth plate	JC61-02236A	1
43	Developing guide plate	JC72-00985A (*)	1
44	Transfer terminal	JC65-00047A	1
45	Cable clamp	6502-001130	7
46	PMO	JC72-41191B (*)	3
47	Pickup roller rubber	JC73-00340A (*)	1
48	Pickup rubber housing	JC61-04100A (*)	1
49	Controller shield	JC63-04078A	1
50	Bin full harness	JC39-02434A	1
51	AC inlet harness	JC39-01482A (*)	1
52	LSU right bracket holder	JC61-04912A	1
53	LSU left bracket holder	JC61-04911A	1
54	Bracket extension ground	JC63-03449A	2
55	Feed ilde 29 gear	JC66-03311A	1
56	Feed gear	JC66-02794A	1
57	One way clutch	JC66-00977A (*)	1

(*) This part is in ordering system.

Removal and replacement: Transfer roller (HP Laser 408dn)

Follow these steps to remove the transfer roller.

Mean time to repair: 7 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-42 Part information

Part number	Part description
JC66-02842A	Transfer roller

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the left and right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-208

b. Remove the left cover by releasing hooks.

Figure 2-209

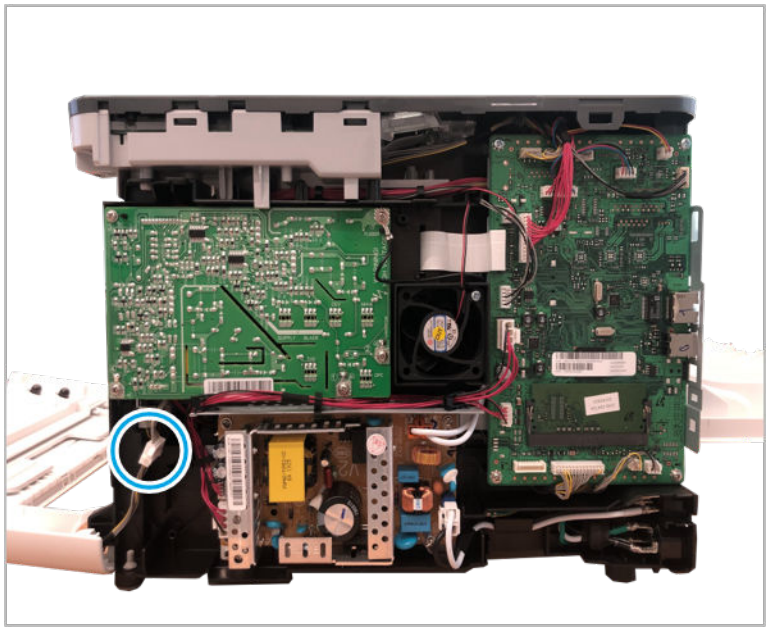
c. Remove the right cover by releasing hooks.

Figure 2-210

2. Remove the front cover.

a. Disconnect one connector connecting the front cover.

Figure 2-211



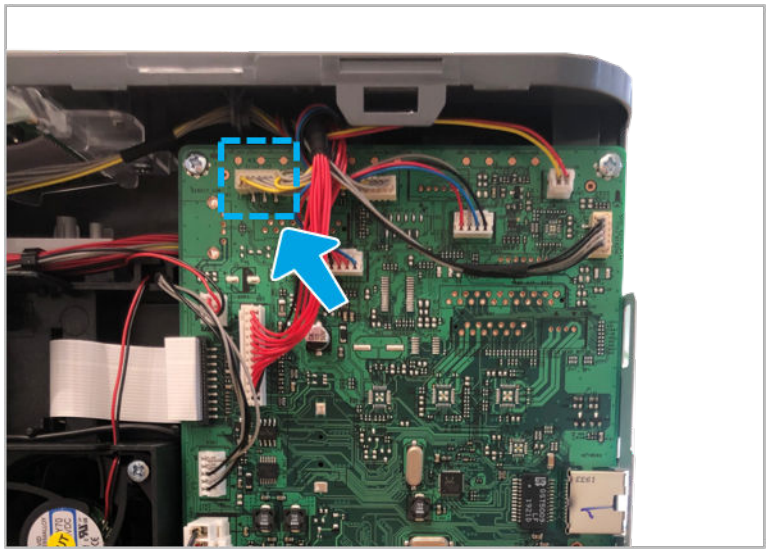
b. Pull the bottom of the front cover inward to release both hooks, and then remove the front cover.

Figure 2-212

3. Remove the Top cover and middle inner cover.

a. Disconnect the control panel connector from the main PCA.

Figure 2-213



b. Remove 2 screws from the front side.

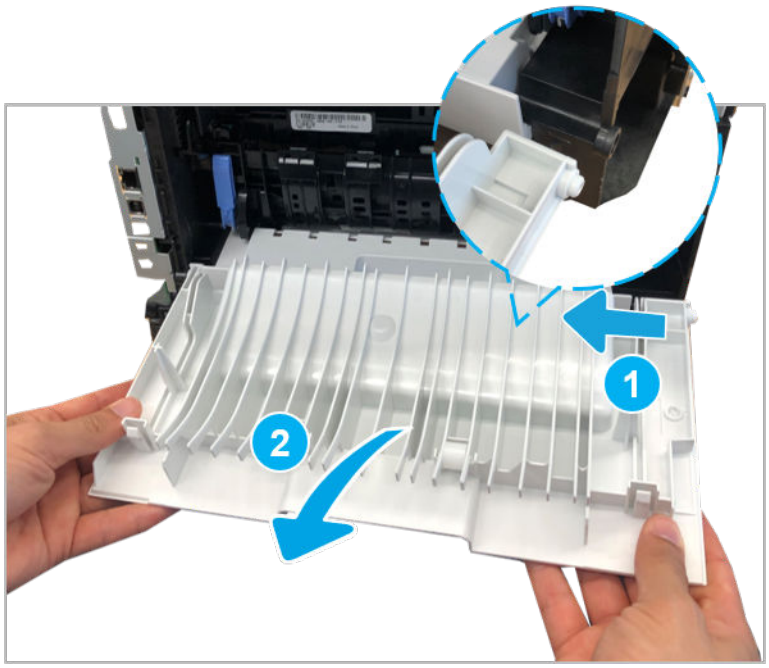
Figure 2-214

c. Remove the duplex assembly.

Figure 2-215

d. Pull the rear cover to the left and then release it.

Figure 2-216



e. Remove 2 screws and dummy cover.

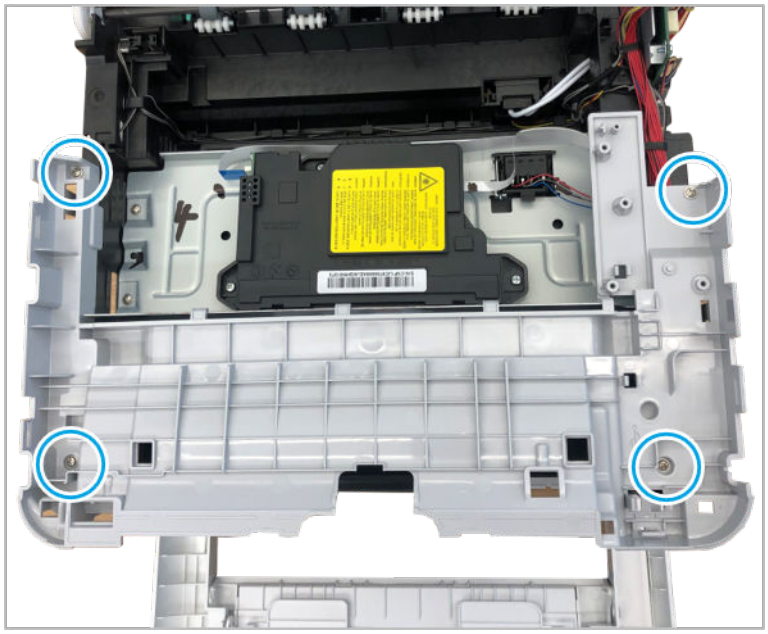
Figure 2-217

f. Lift up the top cover to release it.

Figure 2-218

g. Remove 4 screws, and then remove the middle-inner cover.

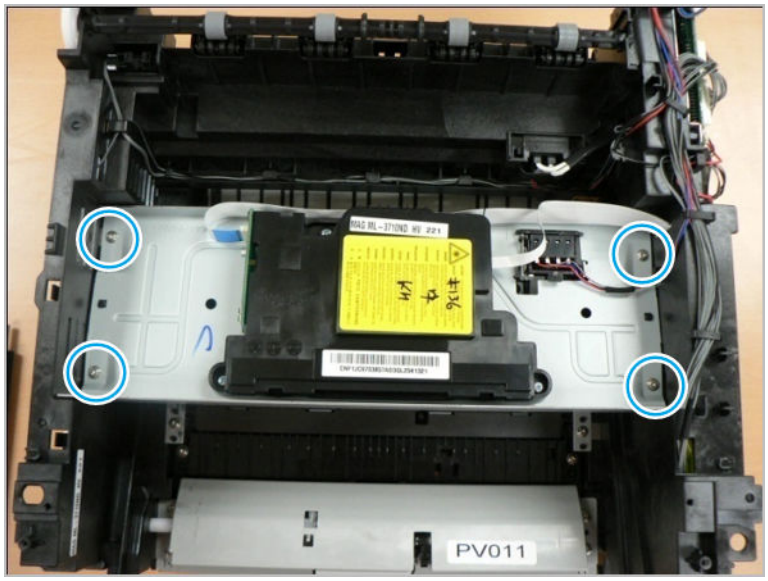
Figure 2-219



4. Remove the transfer roller.

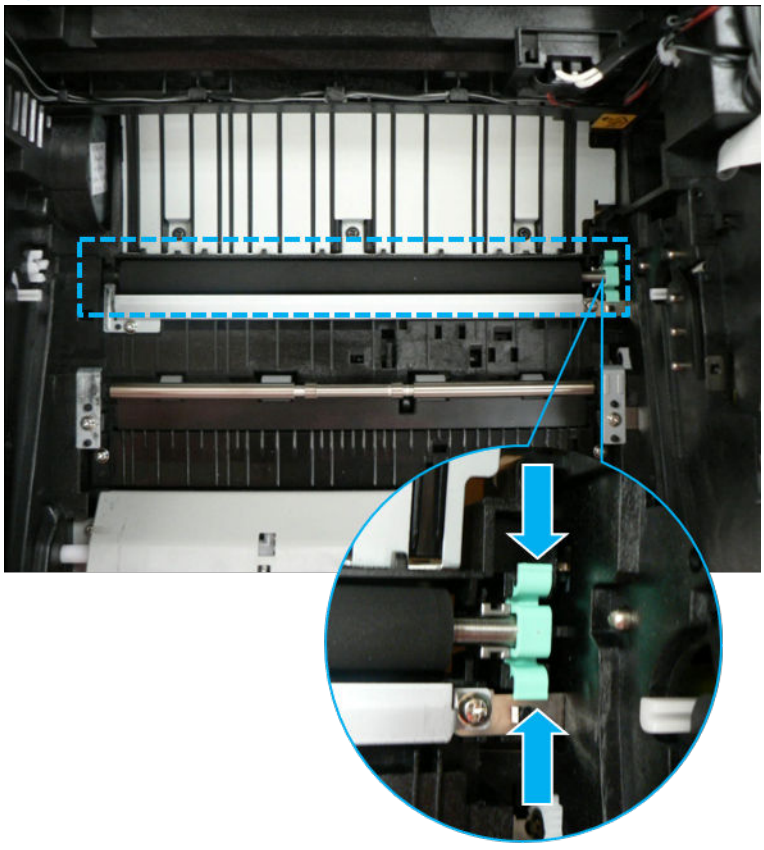
a. Remove 4 screws, and then remove the LSU bracket.

Figure 2-220



b. Push the transfer roller holder to the center to release it, and then remove the transfer roller.

Figure 2-221



5. Unpack the replacement assembly.

   a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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: Transfer roller (HP Laser MFP 432fdn)

Follow these steps to remove the transfer roller.

Mean time to repair: 10 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-43 Part information

Part number	Part description
JC66-02842A	Transfer roller

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-222

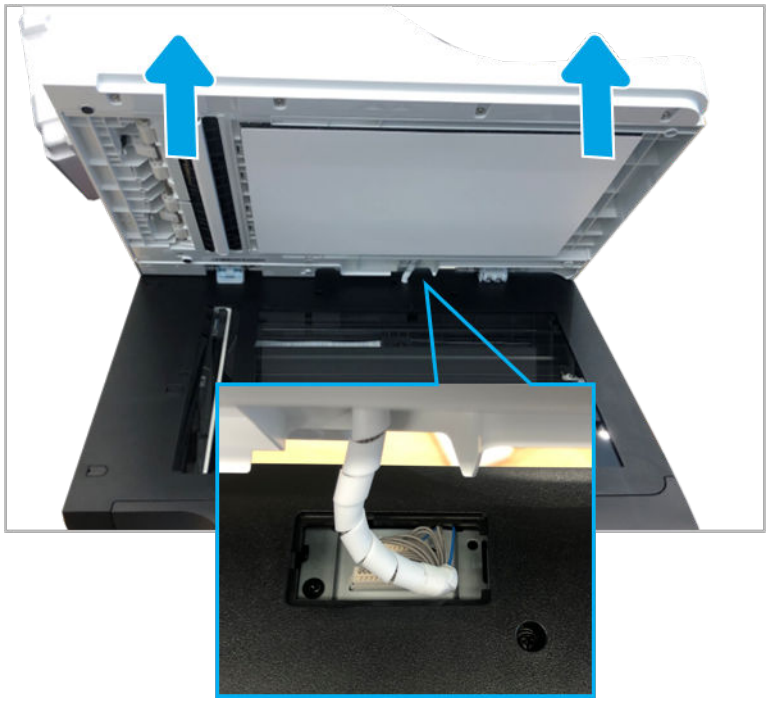
b. Remove the right cover by releasing hooks.

Figure 2-223

2. Remove the ADF.

▲ Open the ADF. Remove the connector cover and disconnect the ADF connector. And then, lift up the ADF to release it.

Figure 2-224



3. Remove the control panel assembly.

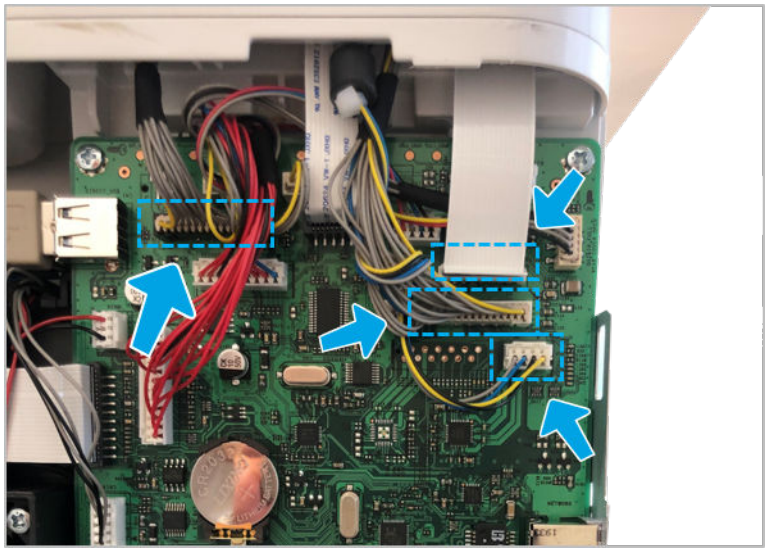
   ▲ Pull up the front edge of the control panel to release it.

Figure 2-225

4. Remove the flatbed scanner assembly.

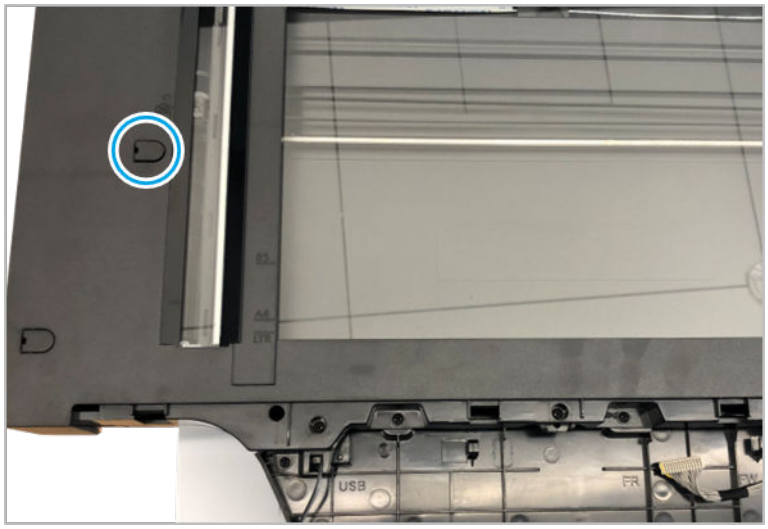
   a. Disconnect all scanner connectors from the main PCA.

Figure 2-226



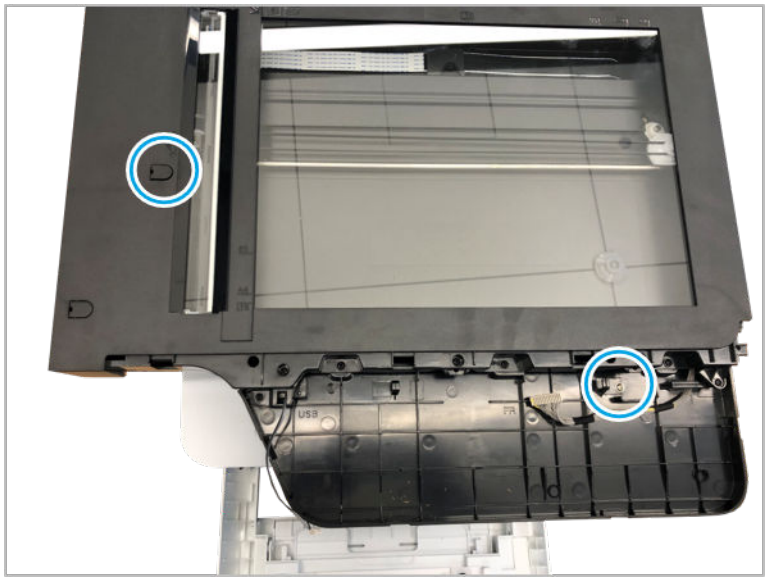
b. Remove the screw cap

Figure 2-227



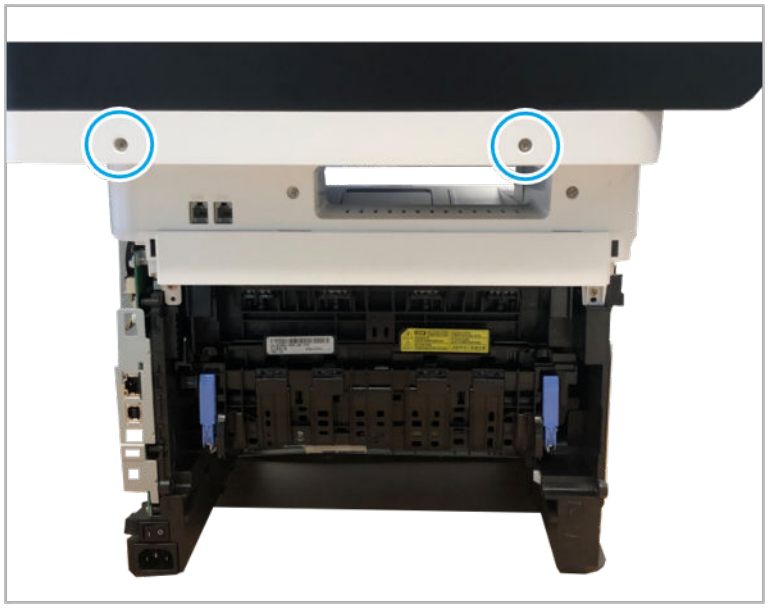
c. Remove 2 screws.

Figure 2-228



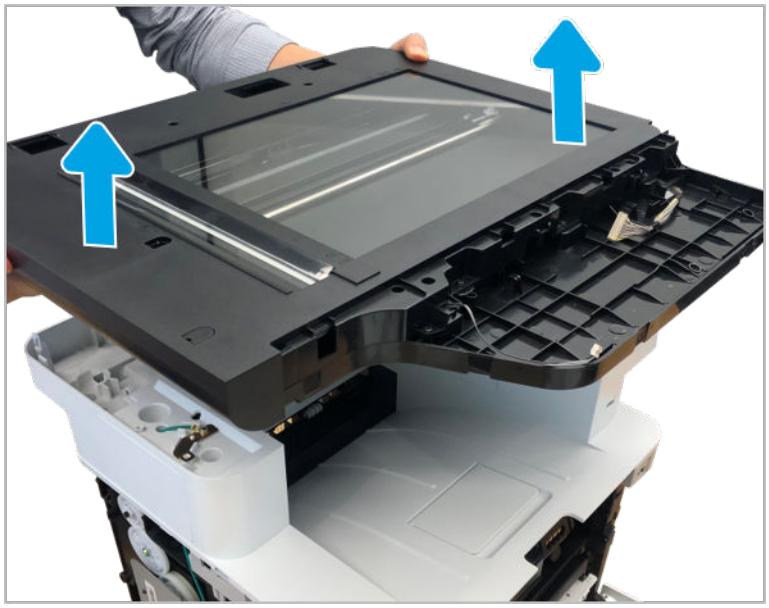
d. Remove 2 screws from the rear side.

Figure 2-229



e. Move the flatbed assembly back slightly, and then lift up it.

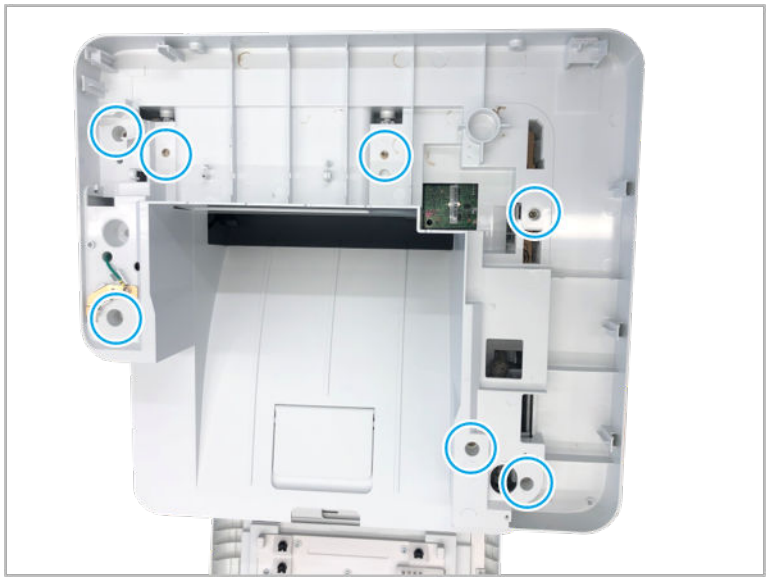
Figure 2-230



5. Remove the middle upper cover.

a. Remove 7 screws.

Figure 2-231

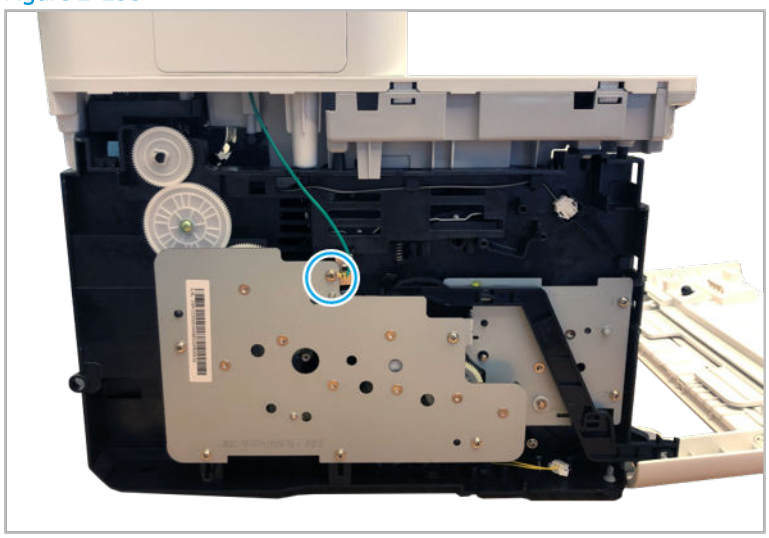


b. Open the rear cover, and then remove 2 screws.

Figure 2-232

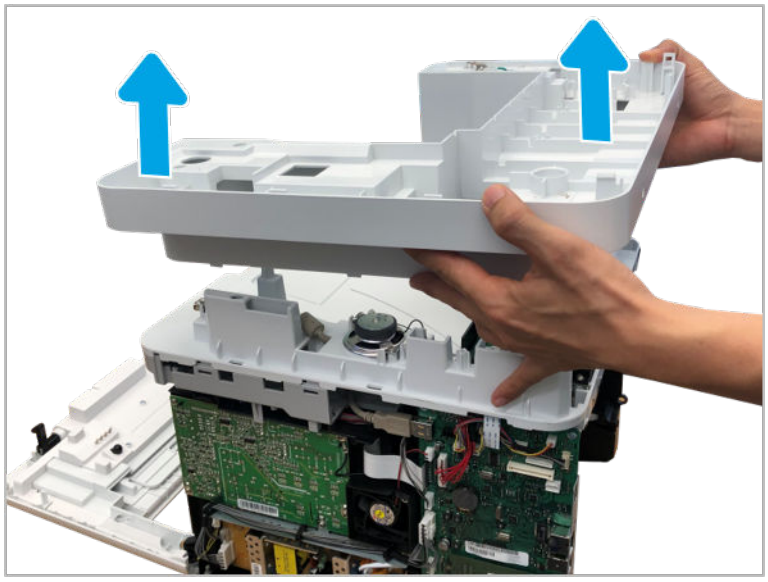
c. Remove 1 screw.

Figure 2-233



d. Lift up the middle upper cover to release it.

Figure 2-234



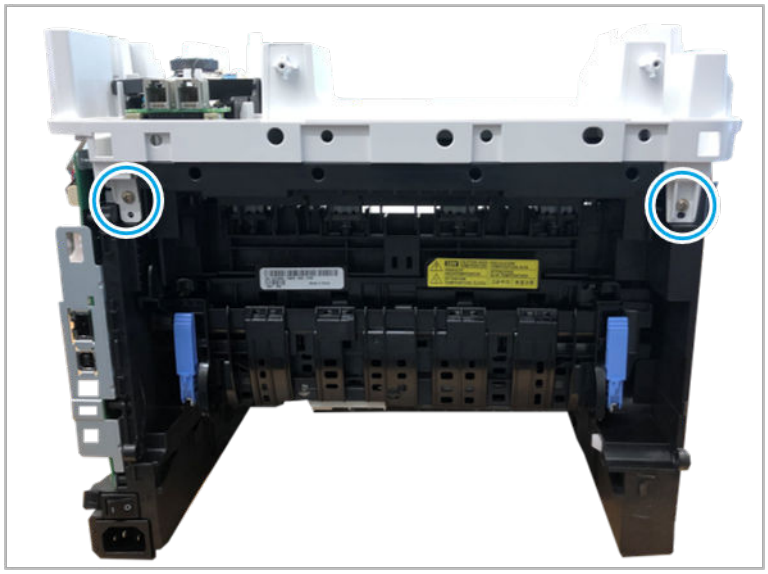
6. Remove the middle lower cover assembly.

a. Remove 2 screws from the front side.

Figure 2-235

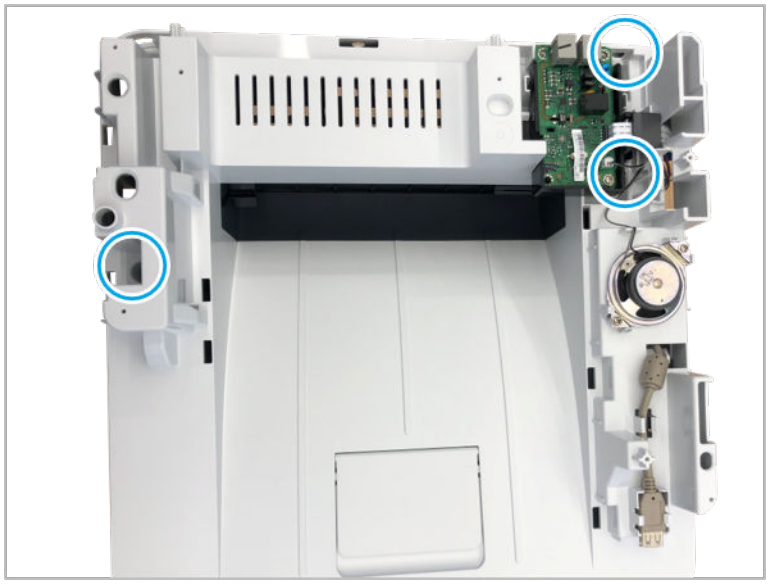
b. Remove 2 screws from the rear side.

Figure 2-236



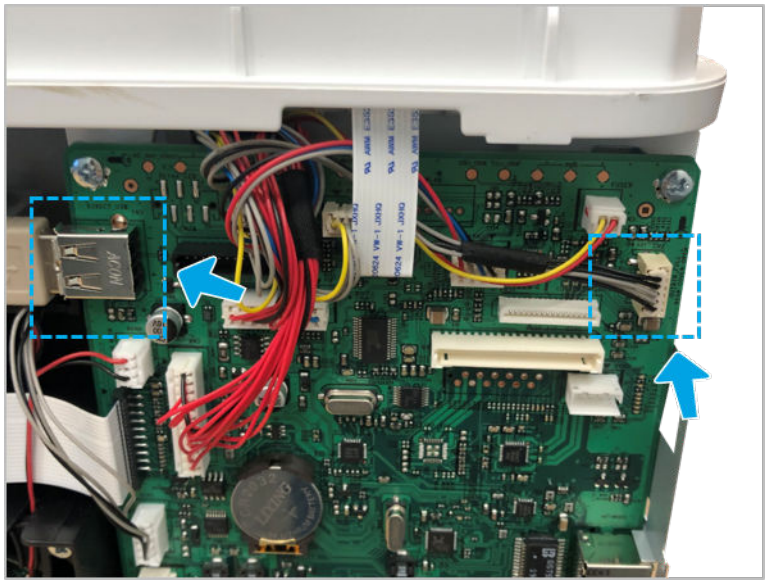
c. Remove 3 screws.

Figure 2-237



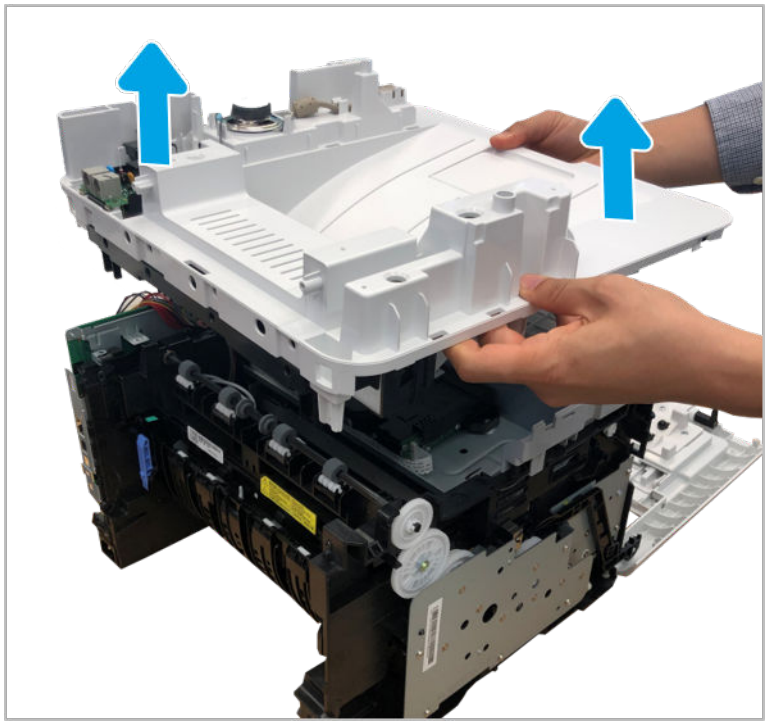
d. Disconnect USB connector and speaker connector.

Figure 2-238



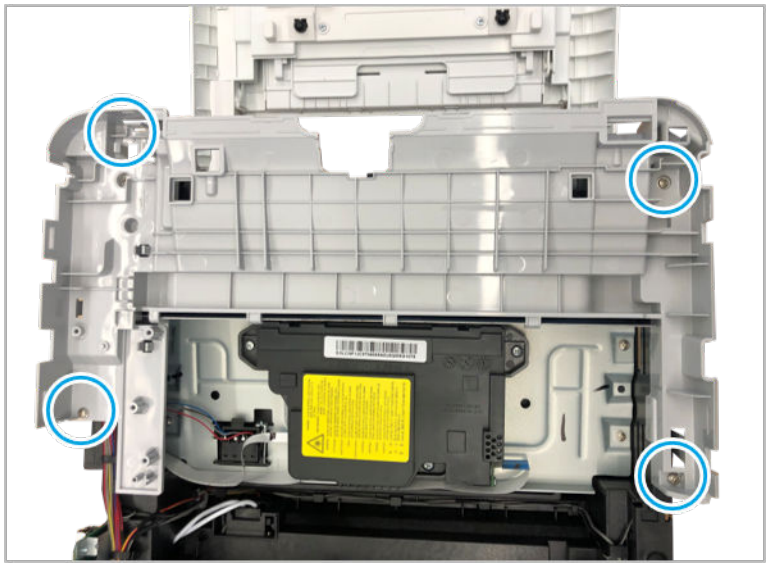
e. Remove the middle lower cover assembly.

Figure 2-239



f. Remove 4 screws, and then remove the middle-inner cover.

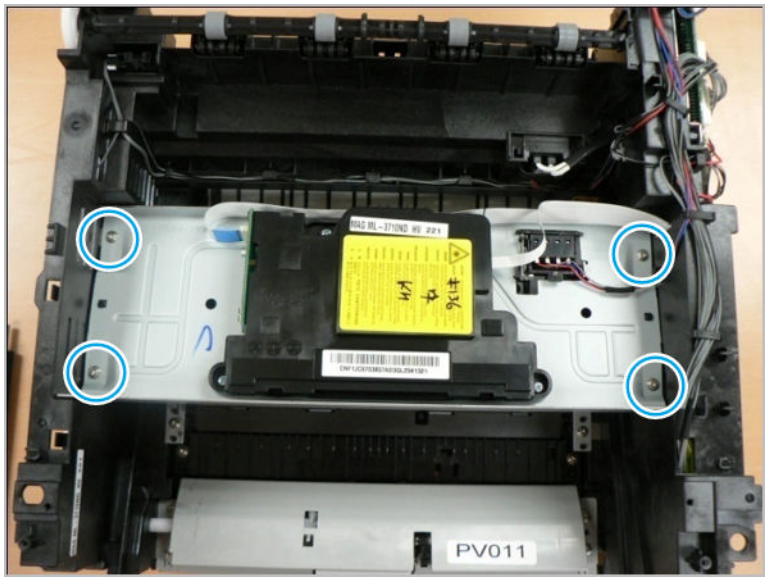
Figure 2-240



7. Remove the transfer roller.

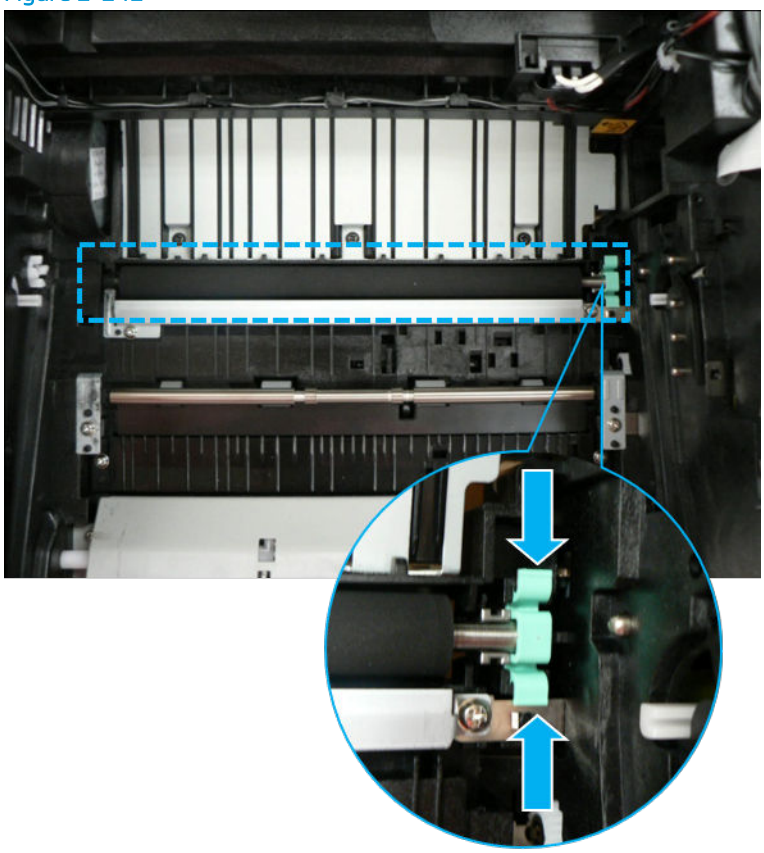
a. Remove 4 screws, and then remove the LSU bracket.

Figure 2-241



b. Push the transfer roller holder to the center to release it, and then remove the transfer roller.

Figure 2-242



8. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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 pickup roller rubber (HP Laser 408dn / HP Laser MFP 432fdn)

Follow these steps to remove the tray 2 pickup roller rubber.

Mean time to repair: 1 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-44 Part information

Part number	Part description
JC73-00340A	Tray 2 pickup roller rubber

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the tray 2 pickup roller.
   a. Remove the tray 2, and then open the front and rear cover.

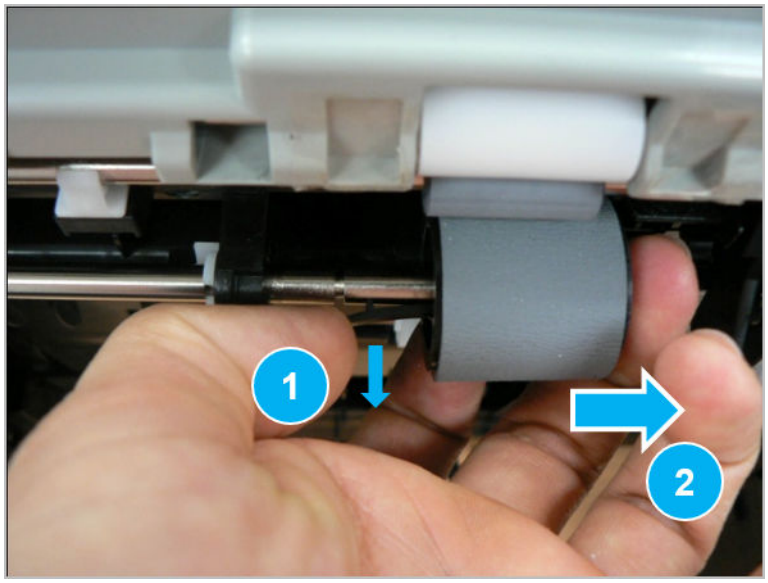
Figure 2-243

b. Remove the duplex assembly.

Figure 2-244

c. Look up into the tray cavity. Pull the locking tab down, and then slide the pickup roller off of the shaft.

Figure 2-245



2. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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: Registration/Feed/Empty sensor (HP Laser 408dn / HP Laser MFP 432fdn)

Follow these steps to remove the registration/feed/empty sensor.

Mean time to repair: 4 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-45 Part information

Part number	Part description
0604-001393	• Registration sensor • Feed sensor • Empty sensor

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the registration/feed/empty sensor.
   a. Remove the tray 2.

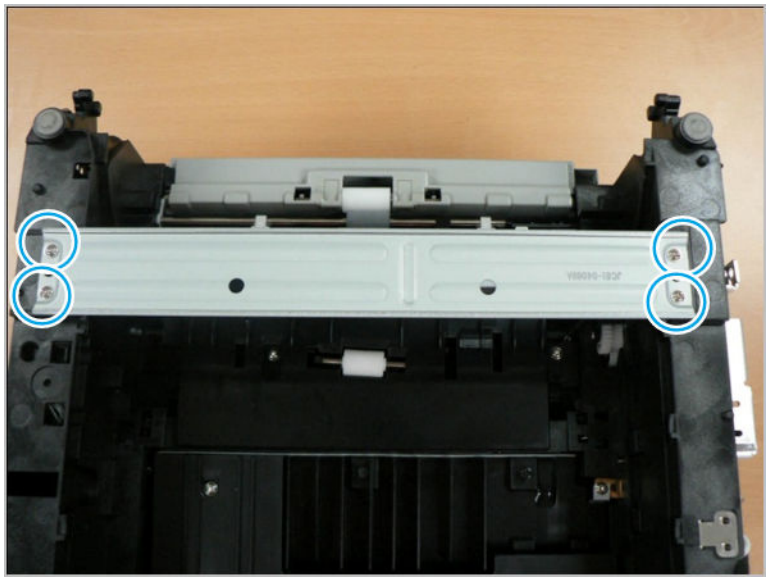
Figure 2-246

b. Remove the duplex assembly.

Figure 2-247

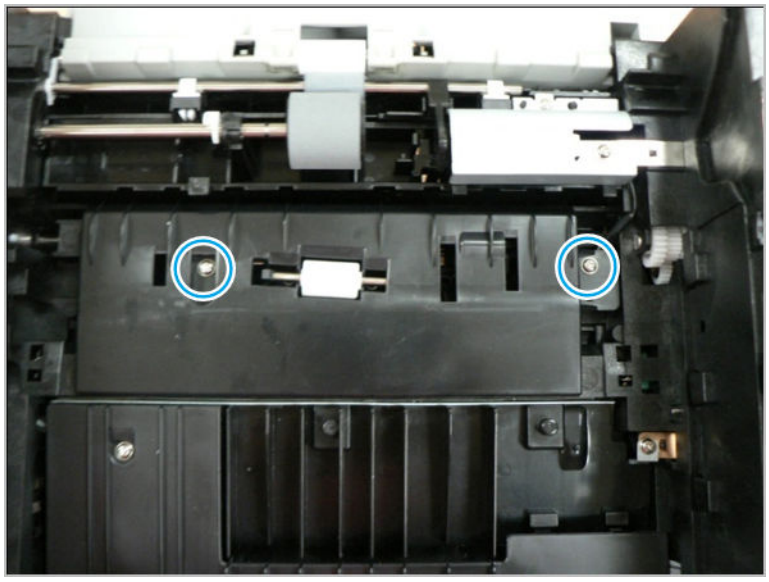
c. Remove 4 screws, and then remove the frame bottom plate.

Figure 2-248



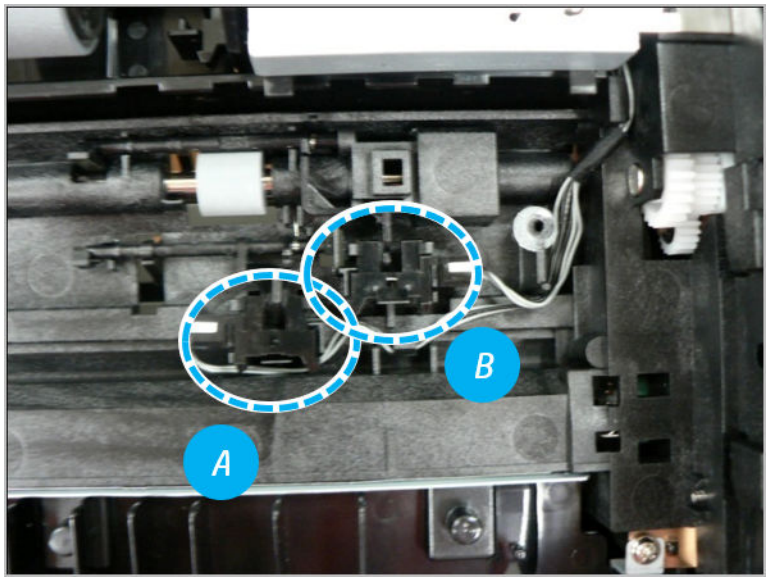
d. Remove 2 screws, and then remove the sensor cover.

Figure 2-249



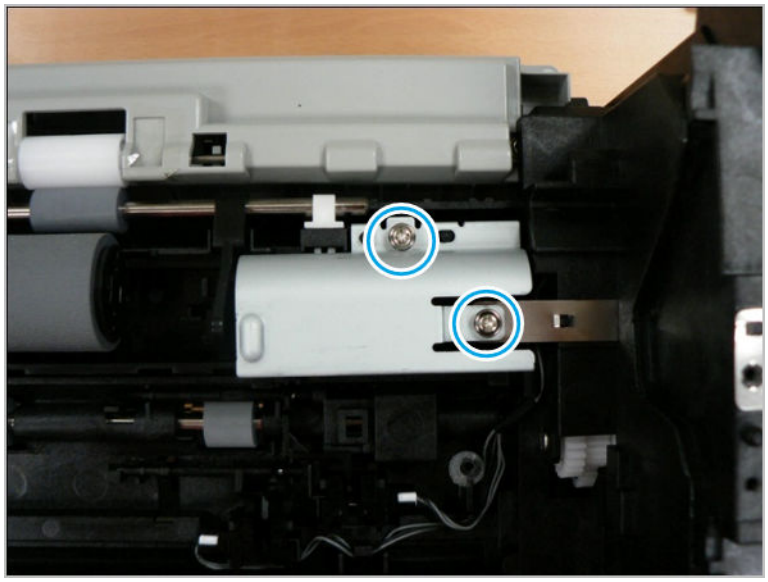
e. For the sensor to require replacement, disconnect the connector, and then replace it. (callout A : Feed sensor / callout B : Registration sensor)

Figure 2-250



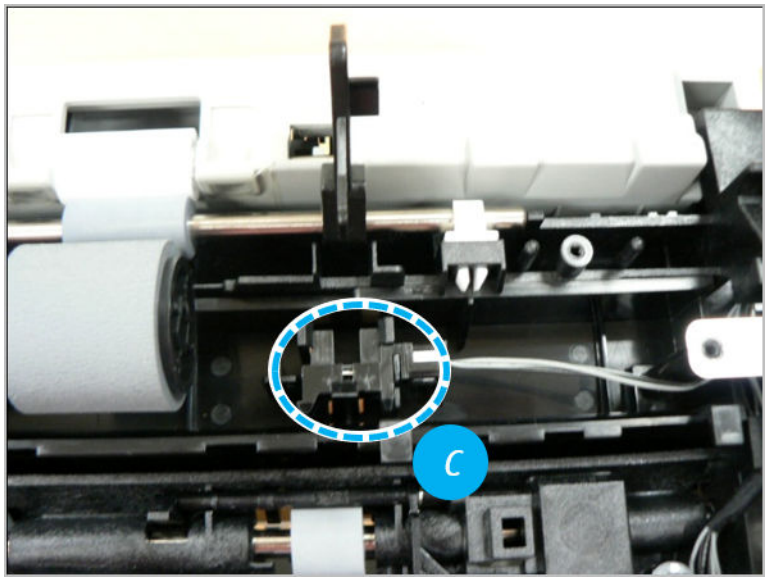
f. Remove 2 screws, and then remove the sensor cover.

Figure 2-251



g. Disconnect the connector, and then remove the empty sensor(callout C).

Figure 2-252



2. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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: Bin full stacker (HP Laser 408dn)

Follow these steps to remove the bin full stacker.

Mean time to repair: 7 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-46 Part information

Part number	Part description
JC61-04098A	Bin full stacker

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the left and right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-253

b. Remove the left cover by releasing hooks.

Figure 2-254

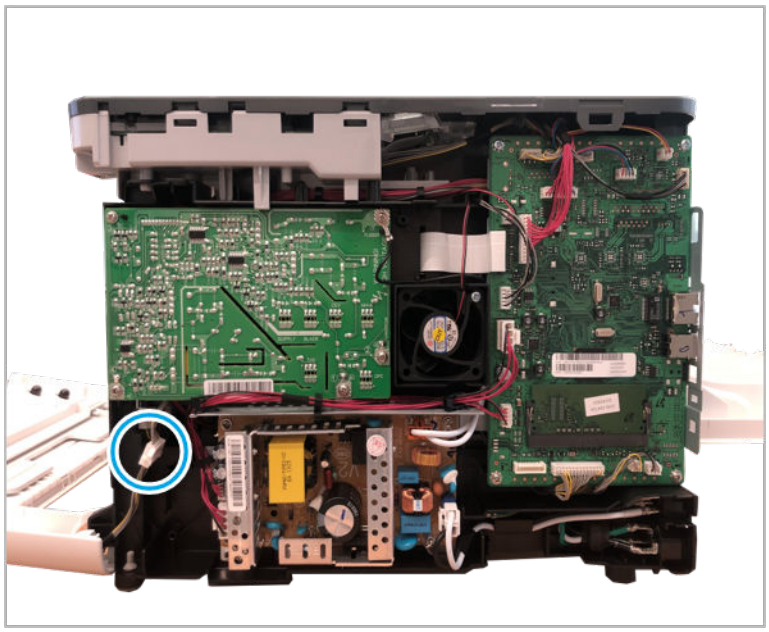
c. Remove the right cover by releasing hooks.

Figure 2-255

2. Remove the front cover.

a. Disconnect one connector connecting the front cover.

Figure 2-256



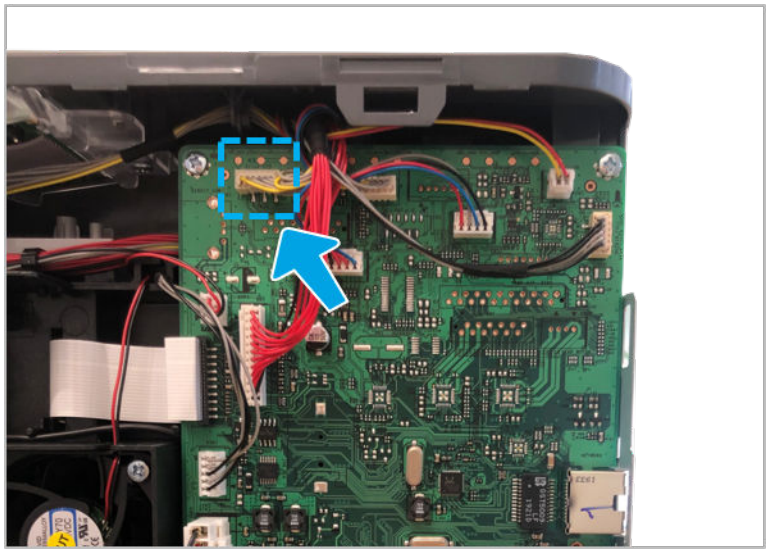
b. Pull the bottom of the front cover inward to release both hooks, and then remove the front cover.

Figure 2-257

3. Remove the Top cover and middle inner cover.

a. Disconnect the control panel connector from the main PCA.

Figure 2-258



b. Remove 2 screws from the front side.

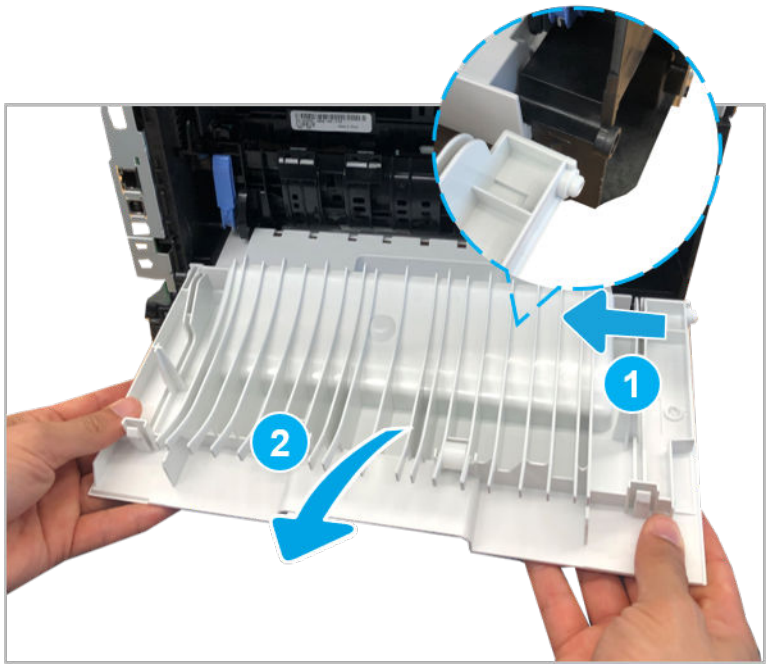
Figure 2-259

c. Remove the duplex assembly.

Figure 2-260

d. Pull the rear cover to the left and then release it.

Figure 2-261



e. Remove 2 screws and dummy cover.

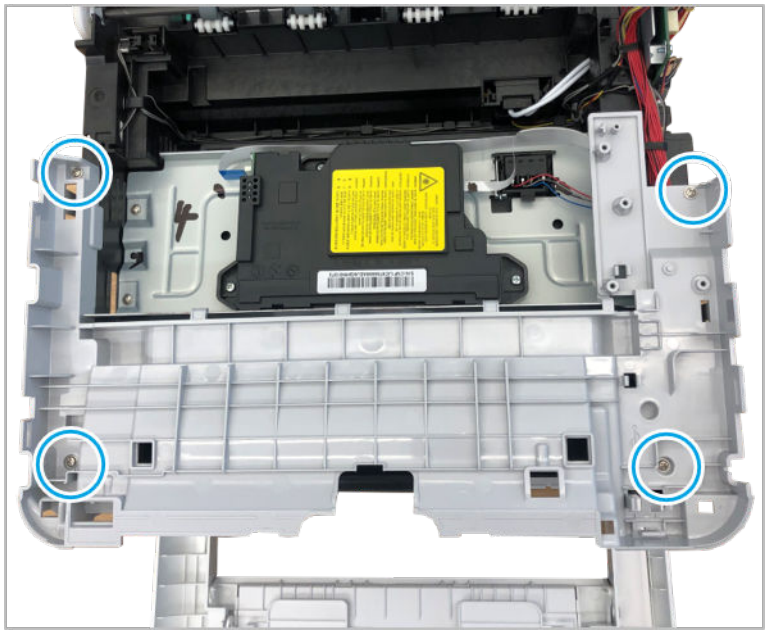
Figure 2-262

f. Lift up the top cover to release it.

Figure 2-263

g. Remove 4 screws, and then remove the middle-inner cover.

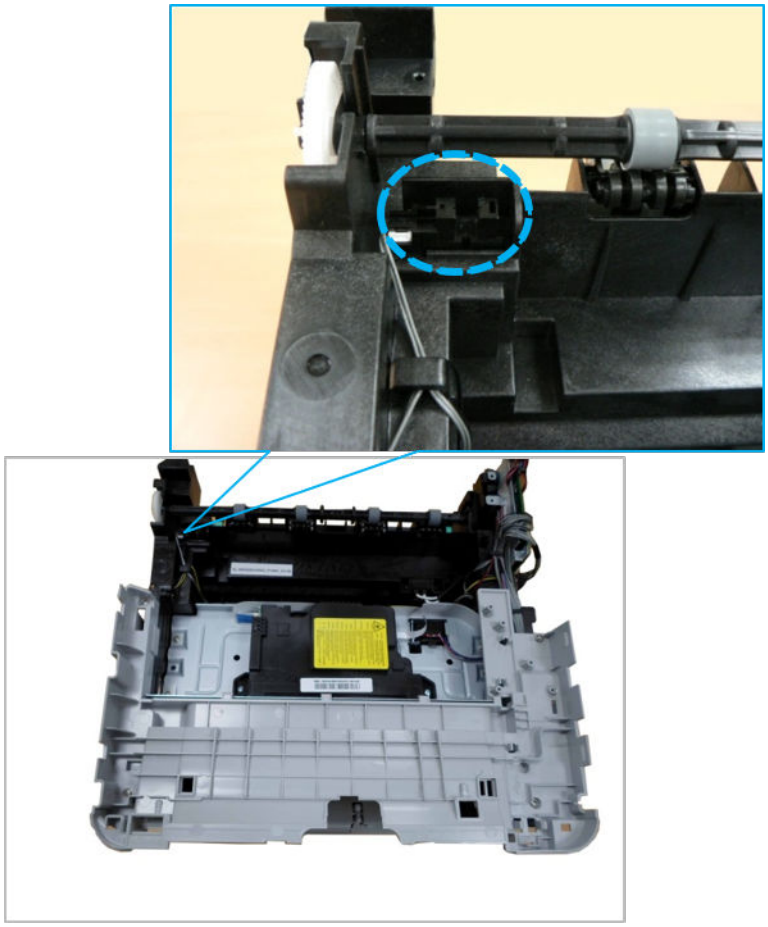
Figure 2-264



4. Remove the bin-full sensor.

▲ Disconnect the connector, and then remove the bin-full sensor.

Figure 2-265



5. Unpack the replacement assembly.

   a. 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

   b. 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.

   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.

   IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

   c. 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: Bin full stacker (HP Laser MFP 432fdn)

Follow these steps to remove the bin-full sensor.

Mean time to repair: 10 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-47 Part information

Part number	Part description
JC61-04098A	Bin full stacker

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-266

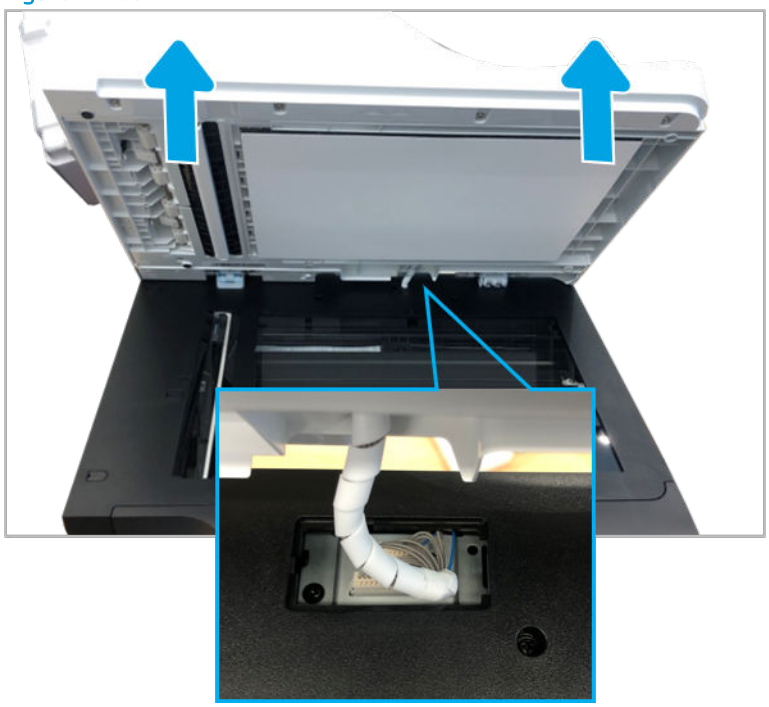
b. Remove the right cover by releasing hooks.

Figure 2-267

2. Remove the ADF.

   ▲ Open the ADF. Remove the connector cover and disconnect the ADF connector. And then, lift up the ADF to release it.

   Figure 2-268

3. Remove the control panel assembly.

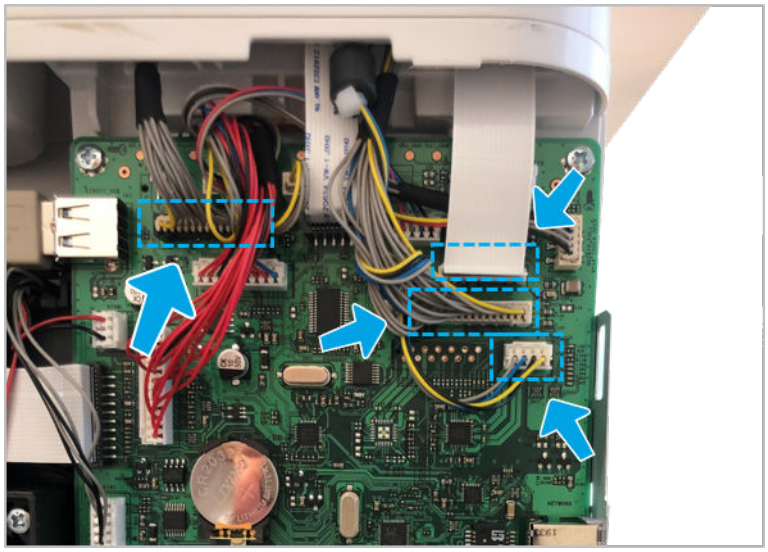
   ▲ Pull up the front edge of the control panel to release it.

   Figure 2-269

4. Remove the flatbed scanner assembly.

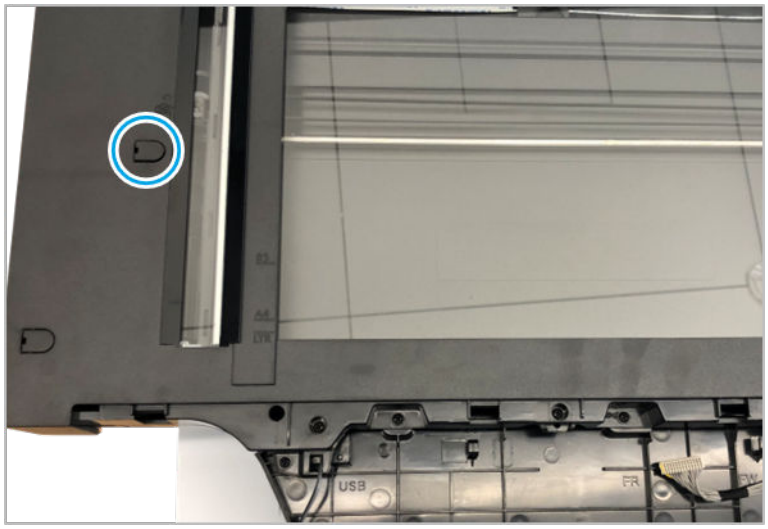
   a. Disconnect all scanner connectors from the main PCA.

Figure 2-270



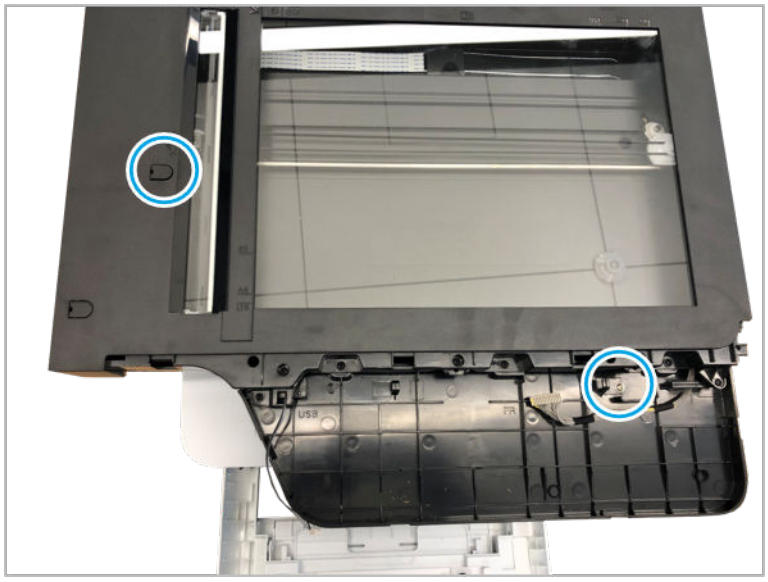
b. Remove the screw cap

Figure 2-271



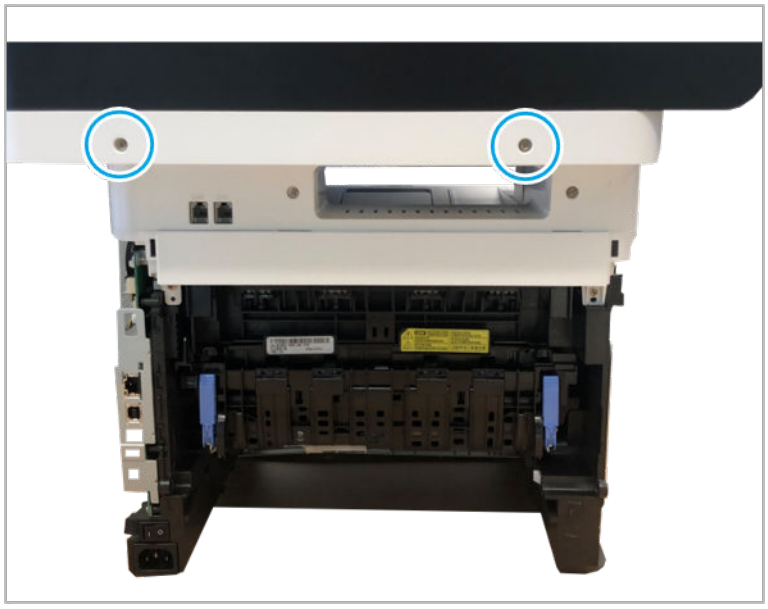
c. Remove 2 screws.

Figure 2-272



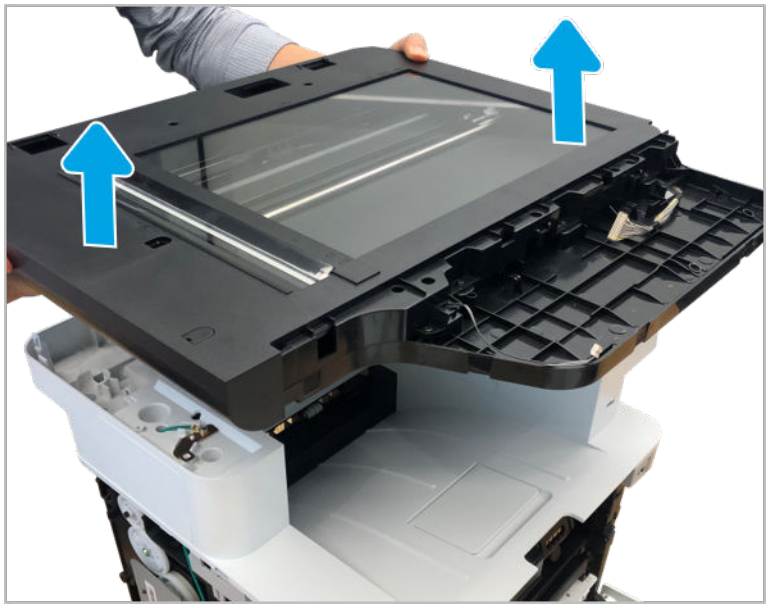
d. Remove 2 screws from the rear side.

Figure 2-273



e. Move the flatbed assembly back slightly, and then lift up it.

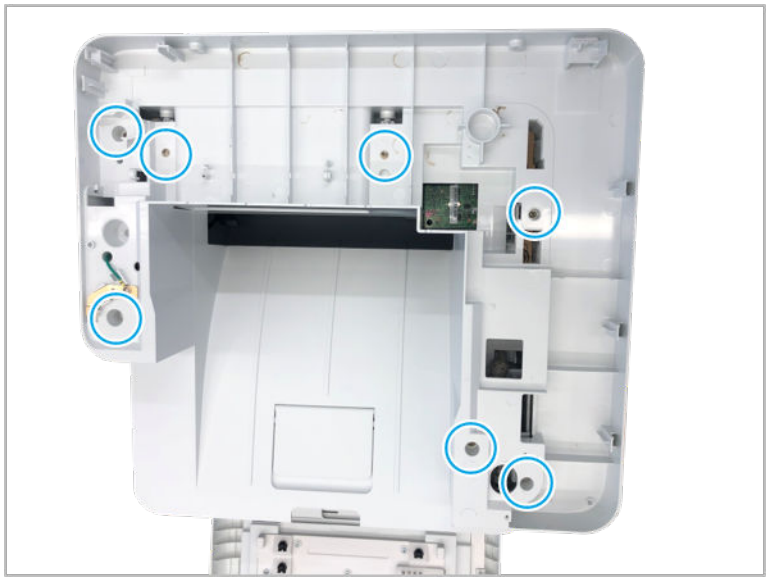
Figure 2-274



5. Remove the middle upper cover.

a. Remove 7 screws.

Figure 2-275

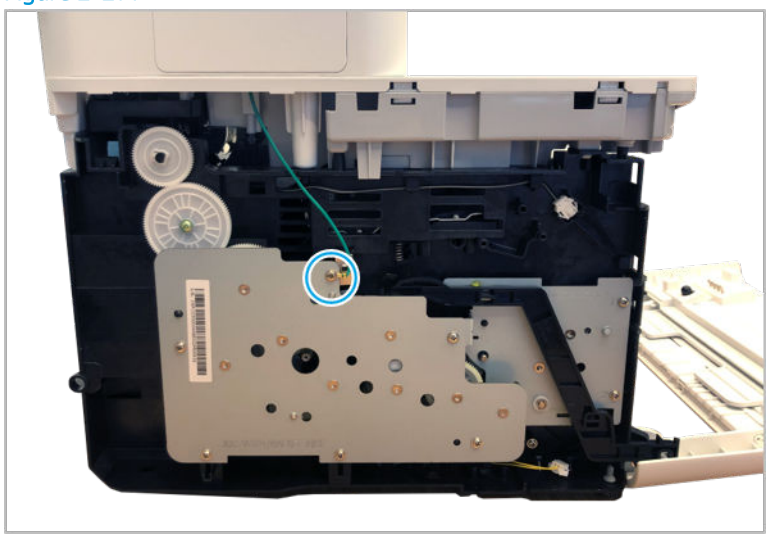


b. Open the rear cover, and then remove 2 screws.

Figure 2-276

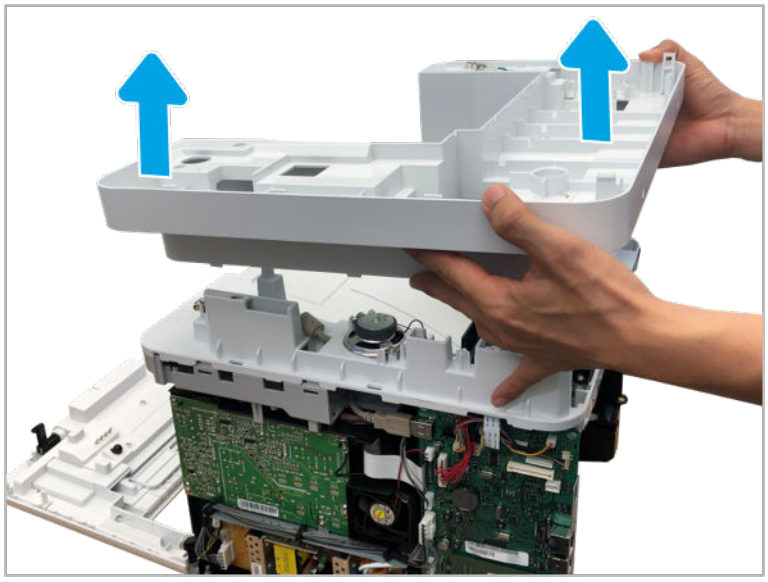
c. Remove 1 screw.

Figure 2-277



d. Lift up the middle upper cover to release it.

Figure 2-278



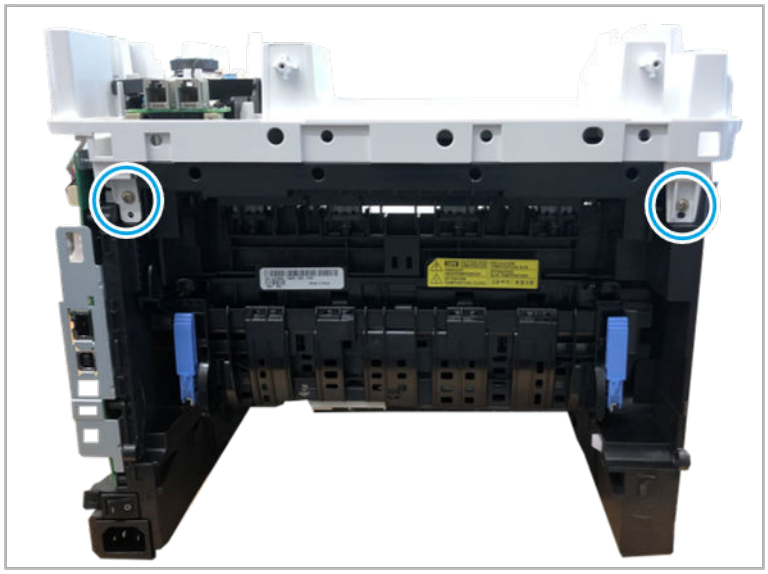
6. Remove the middle lower cover assembly.

a. Remove 2 screws from the front side.

Figure 2-279

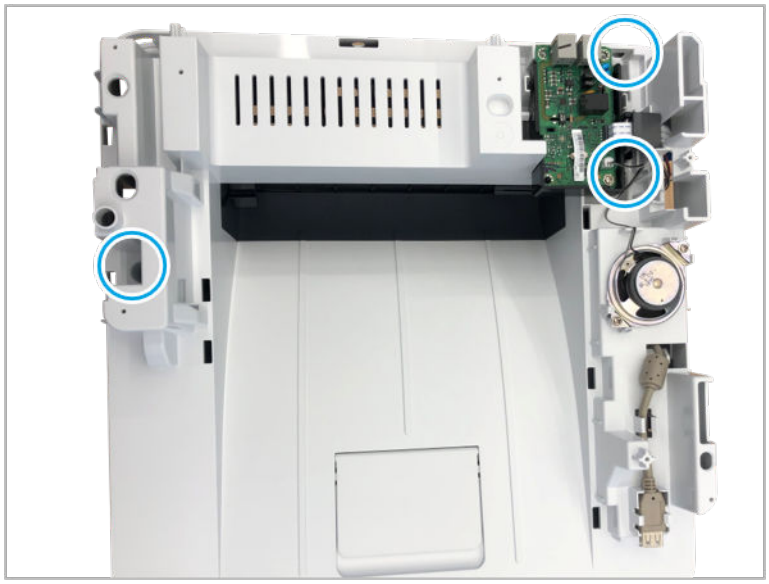
b. Remove 2 screws from the rear side.

Figure 2-280



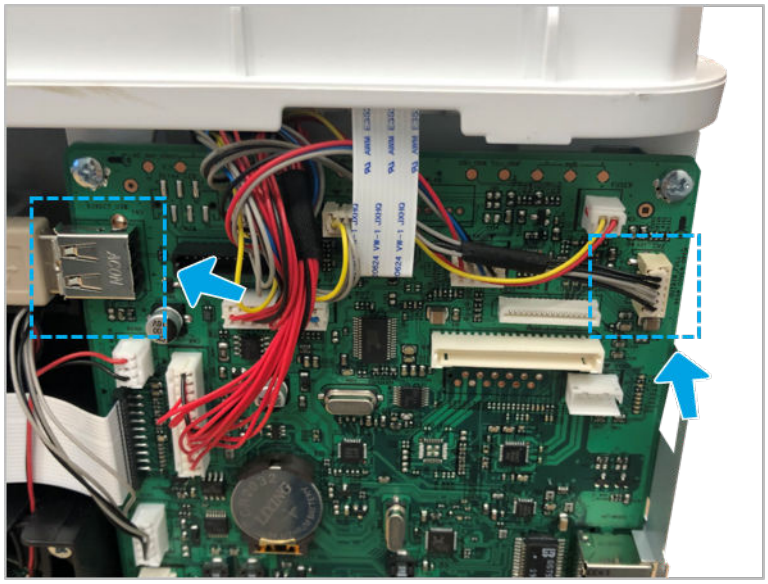
c. Remove 3 screws.

Figure 2-281



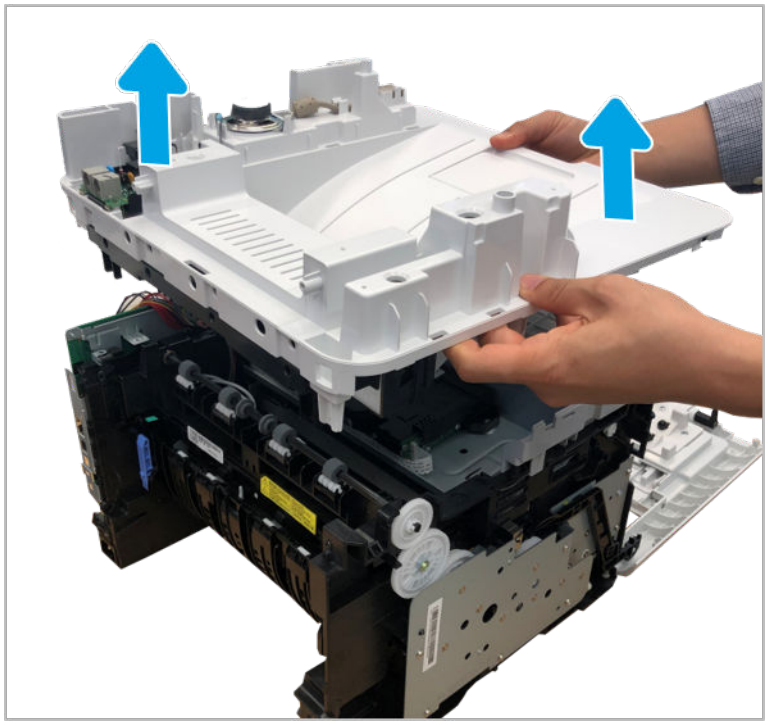
d. Disconnect USB connector and speaker connector.

Figure 2-282



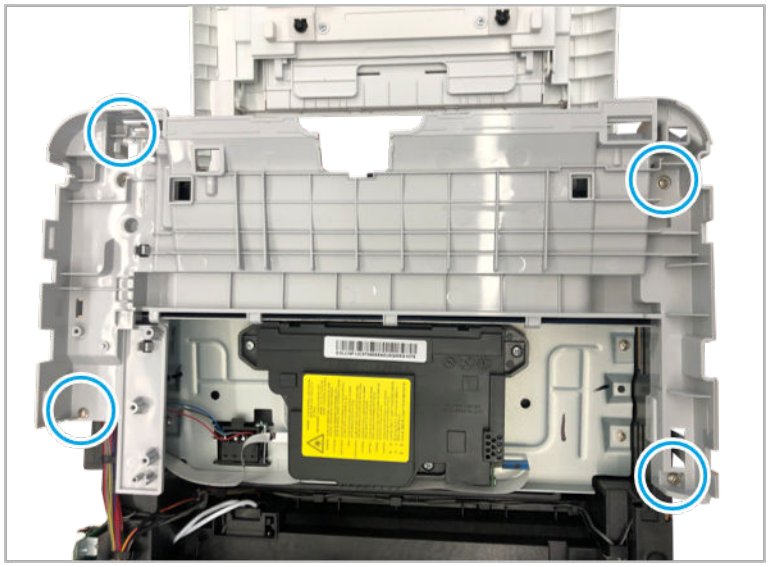
e. Remove the middle lower cover assembly.

Figure 2-283



f. Remove 4 screws, and then remove the middle-inner cover.

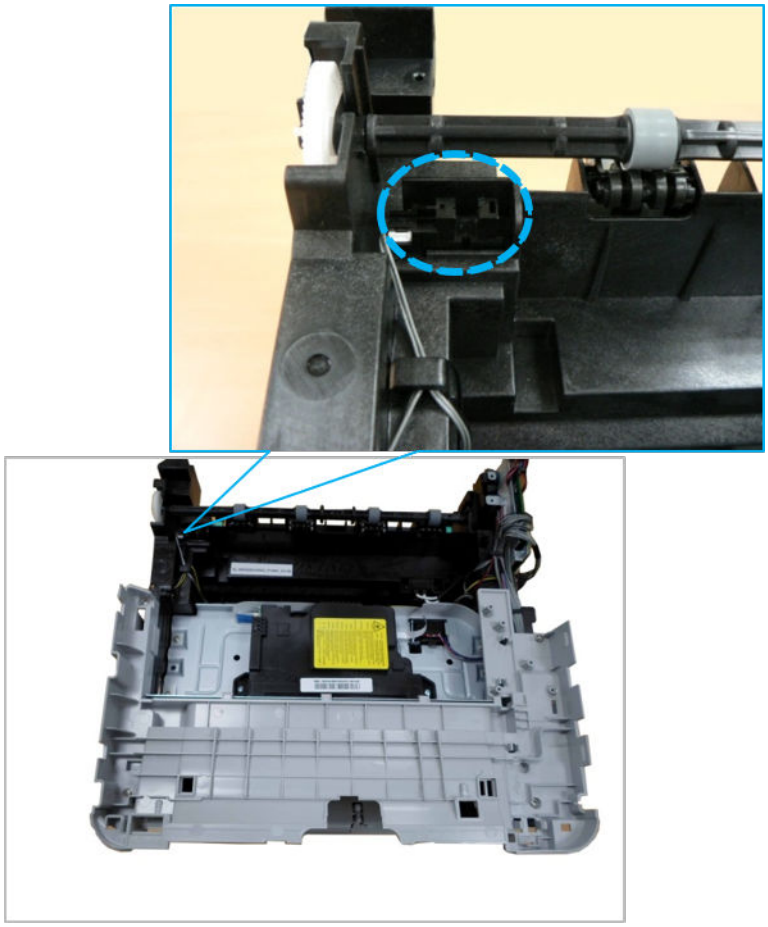
Figure 2-284



7. Remove the bin-full sensor.

▲ Disconnect the connector, and then remove the bin-full sensor.

Figure 2-285



8. Unpack the replacement assembly.

   a. 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

   b. 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.

   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.

   IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

   c. To install an assembly, reverse the removal steps.

NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Pickup/Registration/MP clutch (HP Laser 408dn)

Follow these steps to remove the pickup/registration/MP clutch.

Mean time to repair: 5 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-48 Part information

Part number	Part description
• Registration clutch	• JC47-00033A
• MP clutch	• JC47-00033A
• Pickup clutch	• JC47-00036B

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the left cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-286

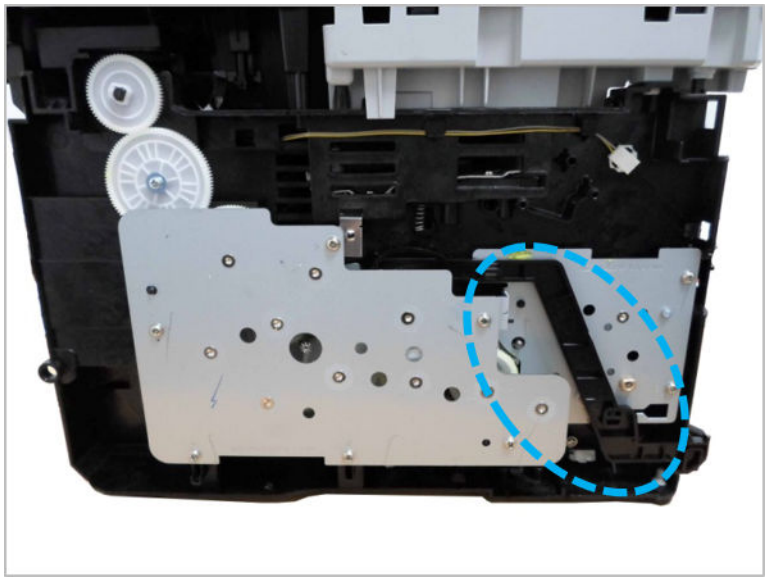
b. Remove the left cover by releasing hooks.

Figure 2-287

2. Remove the main drive.

a. Remove the Bar coupler.

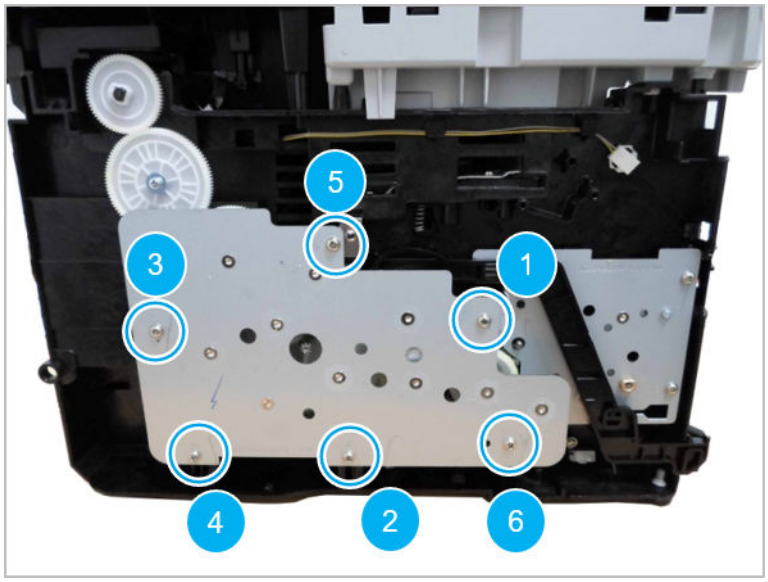
Figure 2-288



b. Remove 6 screws.

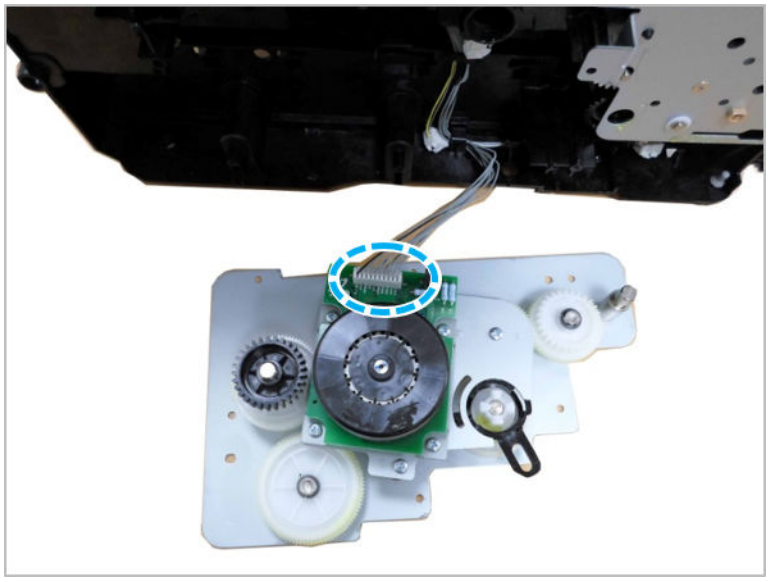
NOTE: When reassembling the main drive assembly, tighten 6 screws in order as shown above.

Figure 2-289



c. Disconnect the motor connector, and then remove the main drive assembly.

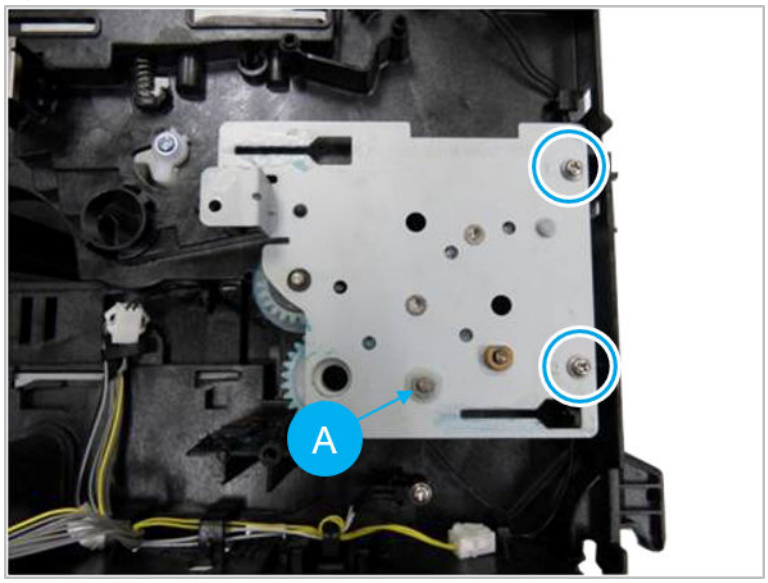
Figure 2-290



3. Remove the feed drive.

▲ Remove 1 e-ring(callout A) and 2 screws, and then remove the feed drive assembly.

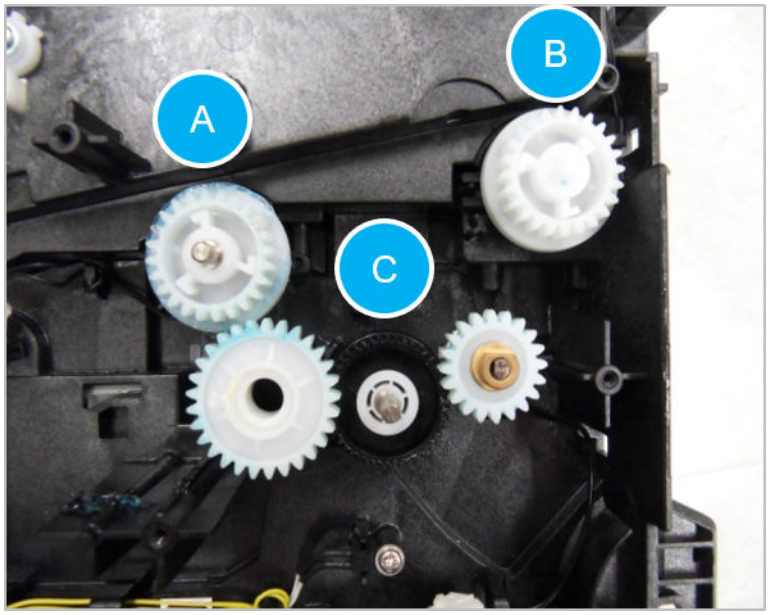
Figure 2-291



4. Remove the pick-up / Registration / MP clutch.

▲ For the clutch to require replacement, disconnect the connector, and then remove it. (callout A : Registration clutch / callout B: MP clutch / callout C : Pickup clutch)

Figure 2-292



5. Unpack the replacement assembly.

   a. 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

   b. 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.

   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.

   IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

   c. To install an assembly, reverse the removal steps.

   NOTE: When applicable, special installation instructions are provided for an assembly at the end of the removal procedure. Always completely read the removal instructions and follow all special installation instructions.

Removal and replacement: Pickup/Registration/MP clutch (HP Laser MFP 432fdn)

Follow these steps to remove the pickup/registration/MP clutch.

Mean time to repair: 5 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-49 Part information

Part number	Part description
• Registration clutch	• JC47-00033A
• MP clutch	• JC47-00033A
• Pickup clutch	• JC47-00036B

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

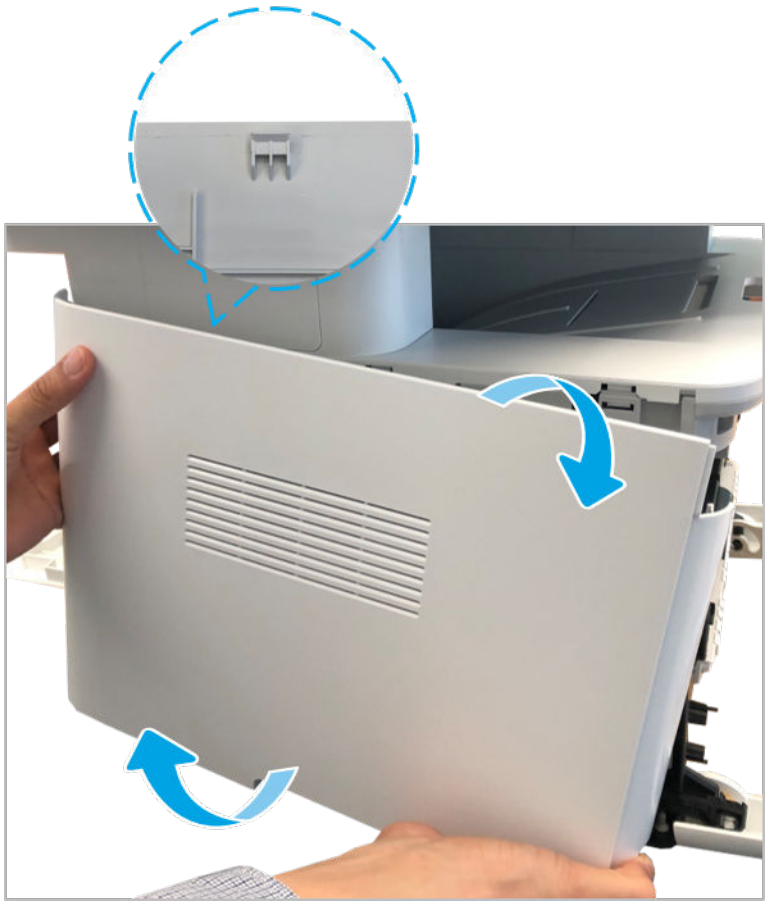
Verify that the document was copied, scanned, or printed correctly.

1. Remove the left cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-293

b. Remove the left cover by releasing hooks.

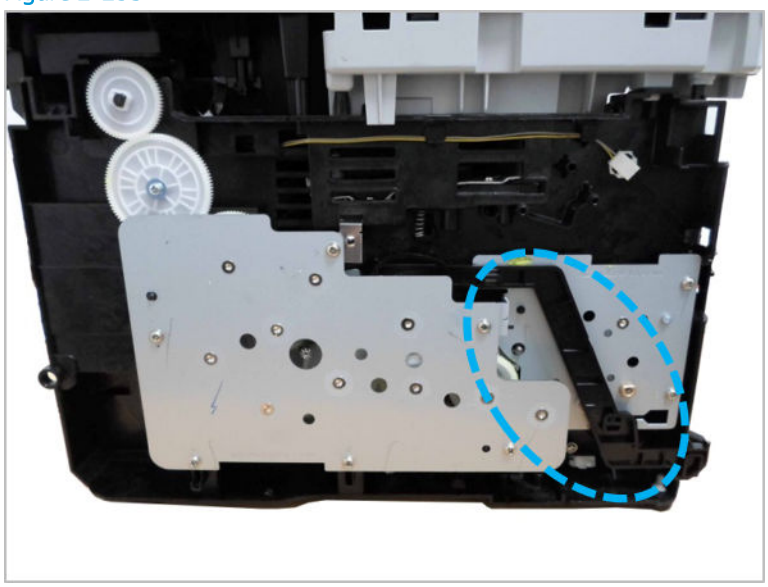
Figure 2-294



2. Remove the main drive.

a. Remove the Bar coupler.

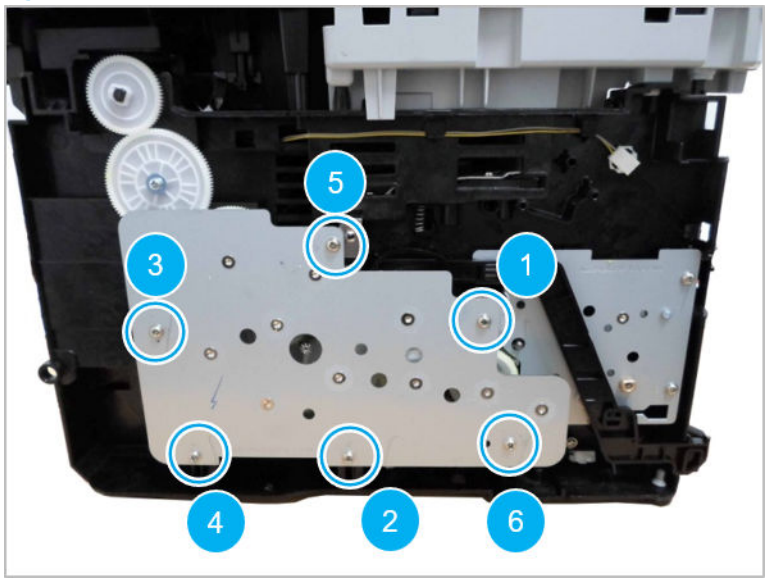
Figure 2-295



b. Remove 6 screws.

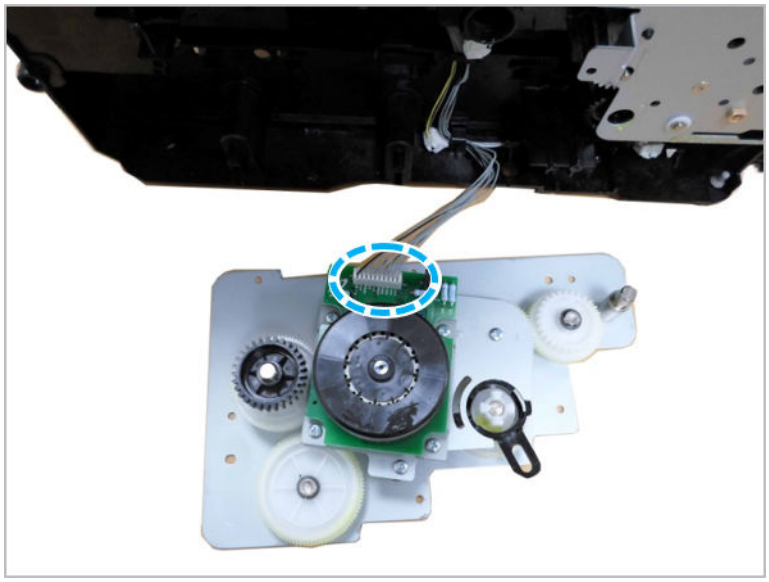
NOTE: When reassembling the main drive assembly, tighten 6 screws in order as shown above.

Figure 2-296



c. Disconnect the motor connector, and then remove the main drive assembly.

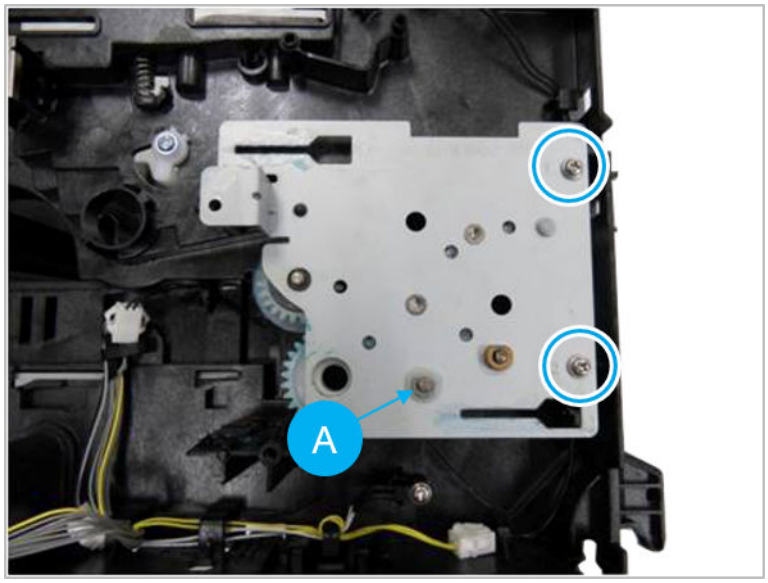
Figure 2-297



3. Remove the feed drive.

▲ Remove 1 e-ring(callout A) and 2 screws, and then remove the feed drive assembly.

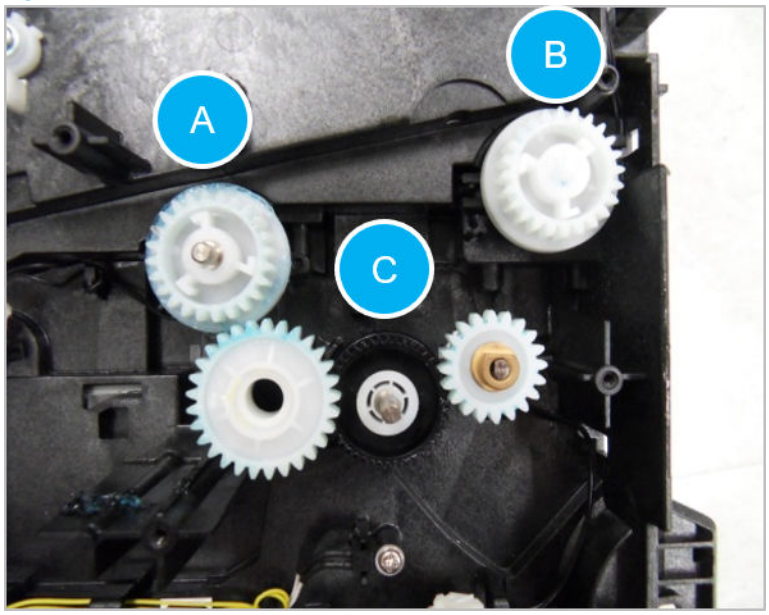
Figure 2-298



4. Remove the pick-up / Registration / MP clutch.

   ▲ For the clutch to require replacement, disconnect the connector, and then remove it. (callout A : Registration clutch / callout B: MP clutch / callout C : Pickup clutch)

Figure 2-299



5. Unpack the replacement assembly.

   a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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: HVPS (HP Laser 408dn)

Follow these steps to remove the HVPS.

Mean time to repair: 3 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-50 Part information

Part number	Part description
• JC44-00197A	• HVPS

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-300

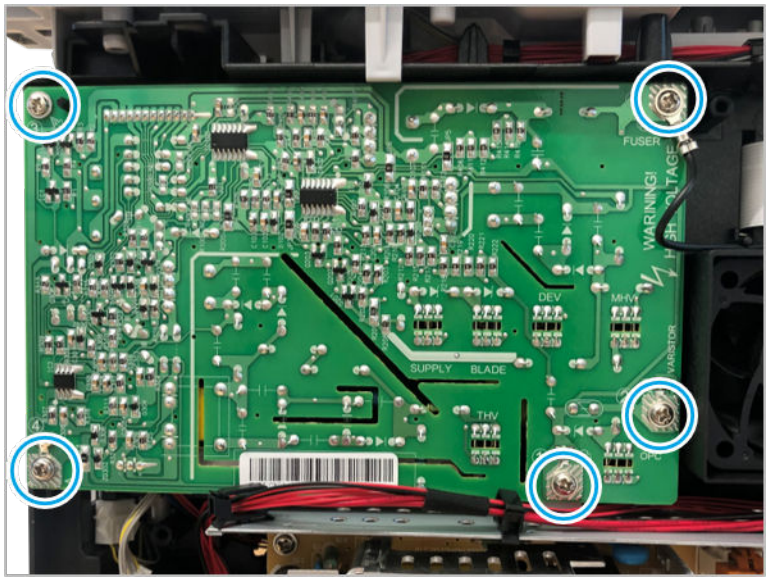
b. Remove the right cover by releasing hooks.

Figure 2-301

2. Remove the HVPS.

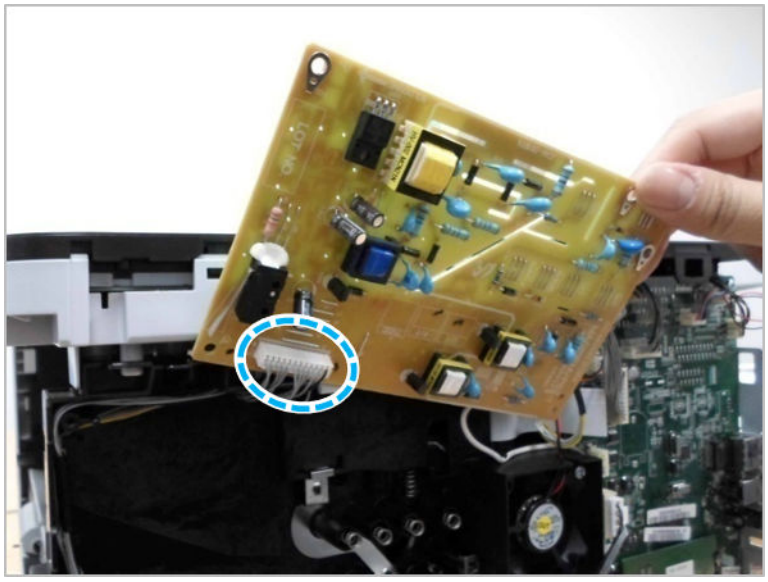
a. Remove 5 screws.

Figure 2-302



b. Disconnect the connector on the HVPS board, and then remove the HVPS board.

Figure 2-303



3. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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: HVPS (HP Laser MFP 432fdn)

Follow these steps to remove the HVPS.

Mean time to repair: 3 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-51 Part information

Part number	Part description
• JC44-00197A	• HVPS

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the right cover.
   a. Remove the tray 2, and then open the front and rear cover.

Figure 2-304

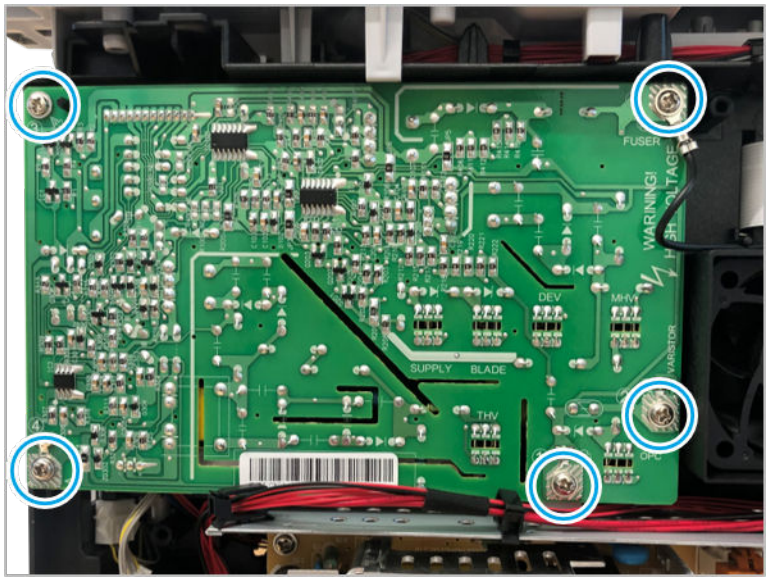
b. Remove the right cover by releasing hooks.

Figure 2-305

2. Remove the HVPS.

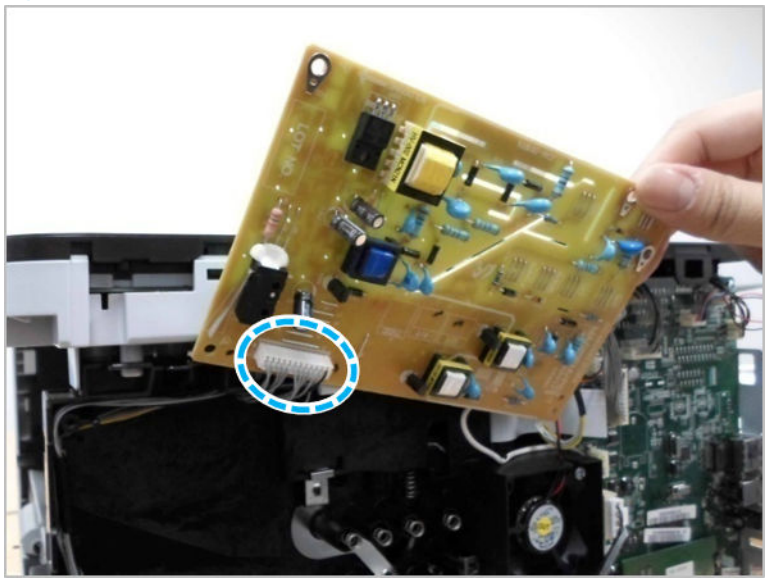
   a. Remove 5 screws.

   Figure 2-306

   b. Disconnect the connector on the HVPS board, and then remove the HVPS board.

   Figure 2-307

3. Unpack the replacement assembly.

   a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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.

Parts and diagrams: Frame rear assembly

Figure 2-308 Frame rear assembly

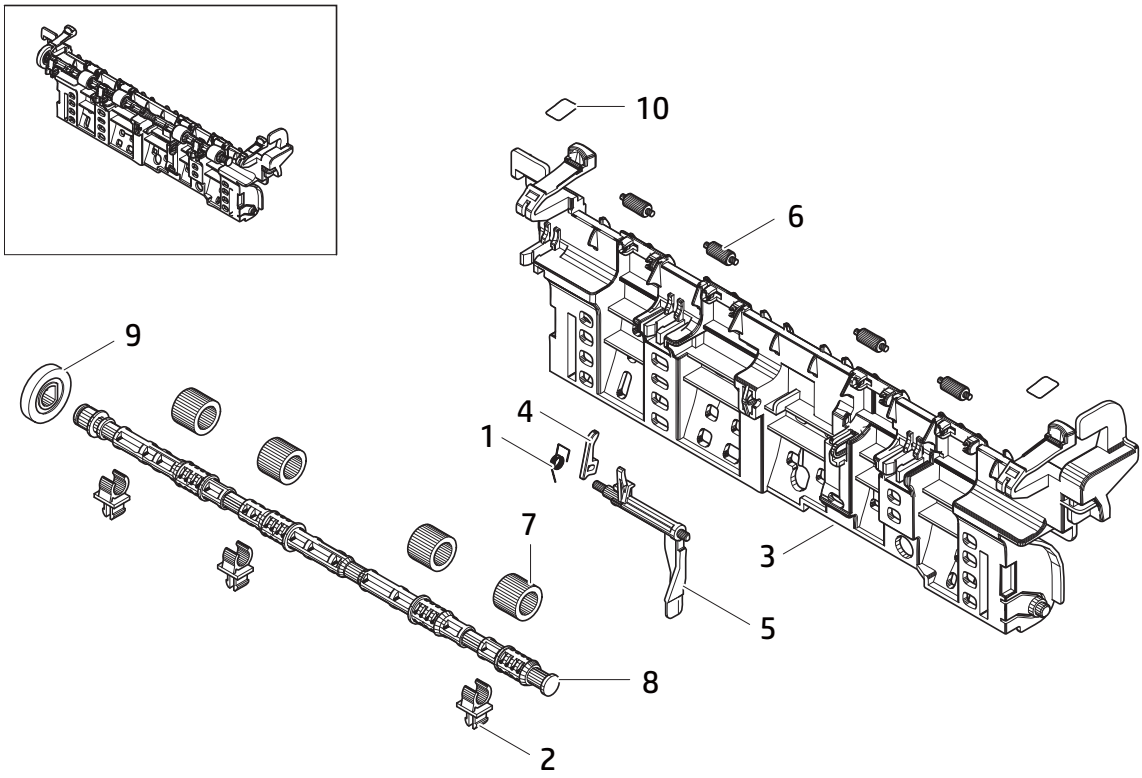


Table 2-52 Frame rear assembly

Ref	Description	Part number (*)	Qty
1	Spring, etc	6107-002670	1
2	Bushing	JC61-02158A	3
3	Rear guide	JC61-04084A	1
4	Actuator holder	JC61-04133A	1
5	Exit actuator	JC66-02774A (*)	1
6	Exit idle roller	JC66-01661A	4
7	Exit silicon roller	JC66-02955A (*)	2
8	Exit shaft	JC66-02773A	1
9	Exit gear	JC66-02777A	1
10	One touch label	JC68-02610A	2

(*) This part is in ordering system.

Parts and diagrams: Tray 1 (MP) assembly

Figure 2-309 Tray 1 (MP) assembly

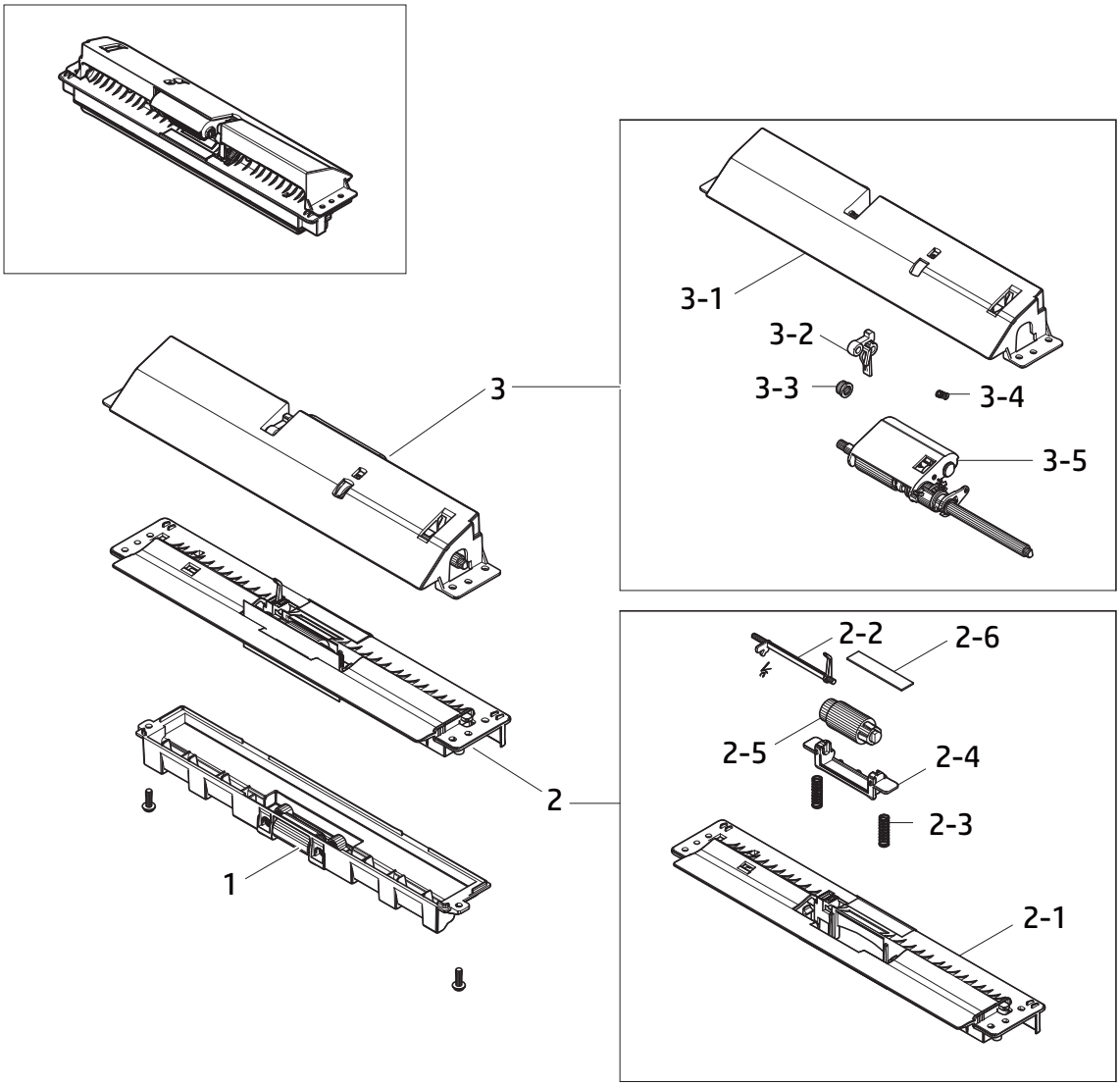


Table 2-53 Tray 1 (MP) assembly

Ref	Description	Part number (*)	Qty
1	Tray 1 (MP) holder idle	JC90-01038B	1
2	Tray 1 (MP) lower	JC90-01039B	3
2-1	Tray 1 (MP) lower guide	JC61-04061B	1
2-2	Tray 1 (MP) empty actuator	JC66-02766A (*)	1
2-3	Spring, cs	6107-002776	2
2-4	Tray 1 reverse roller holder	JC61-04101A	1
2-5	Tray 1 reverse roller	JC90-01032A (*)	2
2-6	Tray 1 friction pad	JC73-00141A (*)	1
3	Tray 1 (MP) upper	JC90-01040B	1
3-1	Tray 1 (MP) upper guide	JC61-04058E	1
3-2	Tray 1 (MP) arm actuator	JC66-02767A	1
3-3	Bushing	JB72-00819A	1
3-4	Spring, es	6107-002780	1
3-5	Tray 1 (MP) pickup roller assembly	JC90-01041B	1

(*) This part is in ordering system.

Parts and diagrams: Main drive assembly

Figure 2-310 Main drive assembly

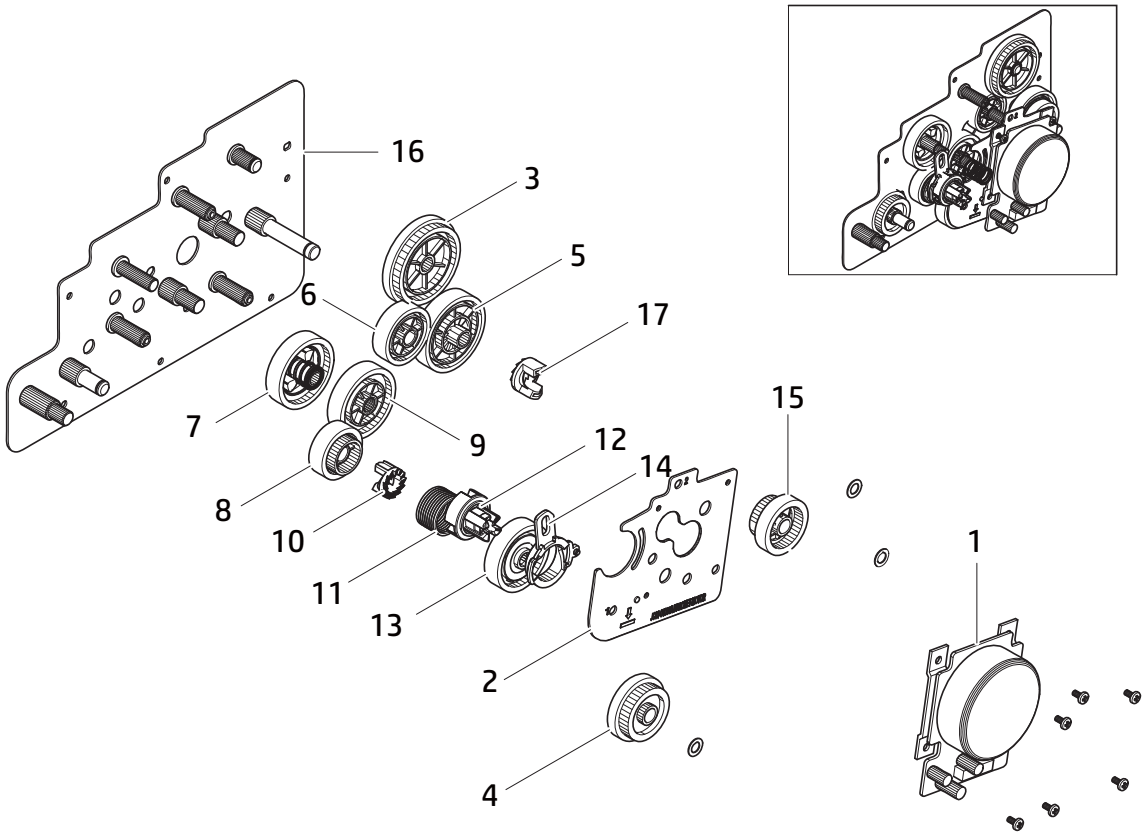


Table 2-54 Main drive assembly

Ref	Description	Part number (*)	Qty
1	Main motor, BLDC	JC31-00144C	1
2	Motor bracket	JC61-08305A	1
3	Exit gear	JC66-02779A	1
4	Feed gear	JC66-02790A	1
5	Fuser DR IN 79 gear	JC66-02781A	1
6	Idle 59 gear	JC66-02785A	1
7	Coupler 73 gear	JC66-02787A	1
8	OPC DR OUT 53 gear	JC66-02788A	1
9	Idle 73 gear	JC66-02786A	1
10	Clutch hub	JC70-00589A	1
11	Spring, cs	6107-002785	1
12	Coupler	JC67-00504A (*)	1
13	OPC DR IN 69 gear	JC66-02789A	1
14	Cam coupler	JC67-00503A	1
15	Fuser DR 29 gear	JC66-02782A	1
16	Gear bracket	JC61-08310A	1
17	Clutch gear hub	JC66-00340A (*)	1

(*) This part is in ordering system.

Parts and diagrams: Tray 2 cassette

Figure 2-311 Tray 2 cassette

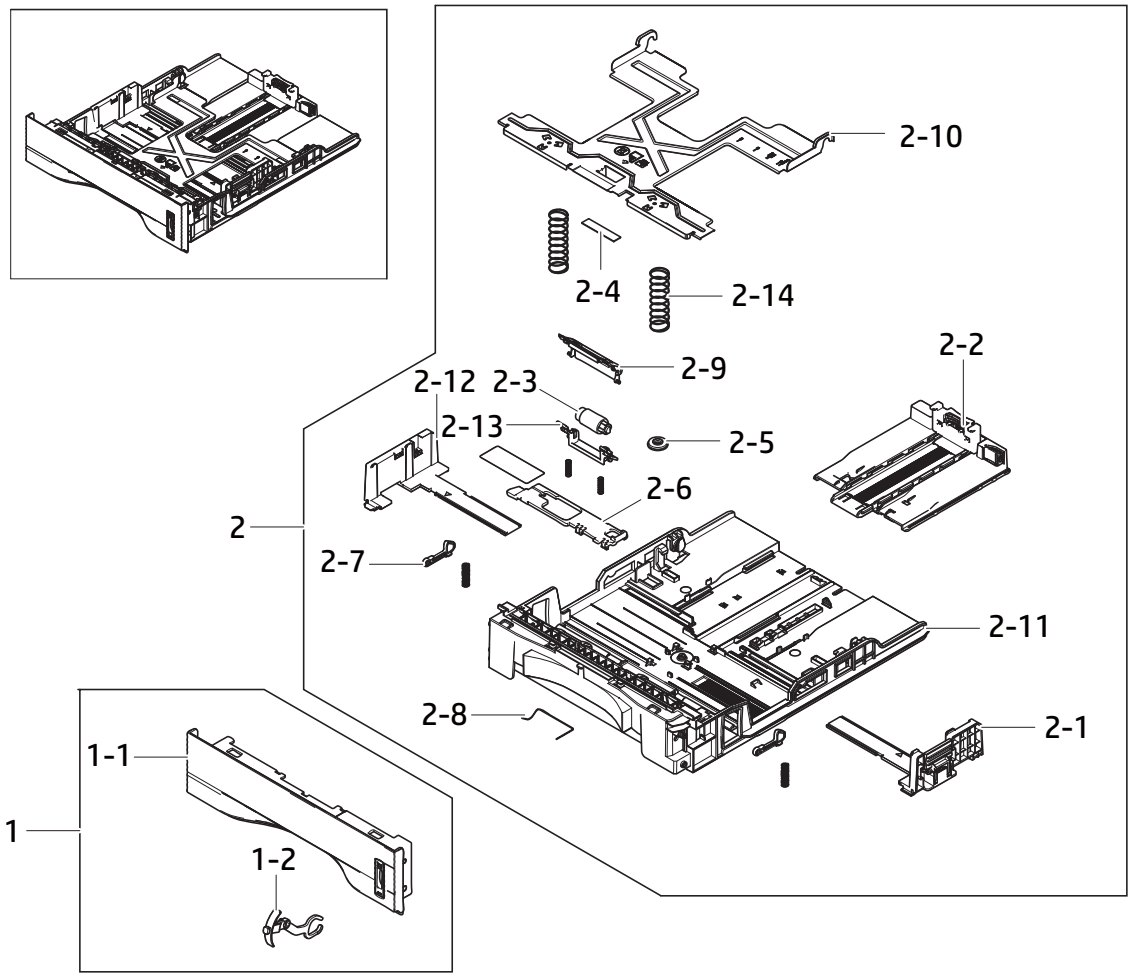


Table 2-55 Tray 2 cassette

Ref	Description	Part number (*)	Qty
1	Cassette handle cover	7UQ75-40035	1
1-1	Cassette handle	7UQ75-40026	1
1-2	Paper indicator	JC64-00609H	1
2	Tray 2 frame assembly	7UQ75-40046	1
2-1	Tray 2 right adustment guide	7UQ75-40048	1
2-2	Tray 2 rear adustment guide	7UQ75-40045	1
2-3	Tray 2 reverse roller	JC90-01063B (*)	1
2-4	Tray 2 friction pad	JC73-00141A (*)	1
2-5	Pinion gear	JC66-03004A	1
2-6	Plate locker	JC64-00611A	1
2-7	Tray 2 locker	JC64-00610A	2
2-8	Tray 2 ground	JC63-02932A	1
2-9	Tray 2 sub cover	JC90-01279C	1
2-10	Knock up plate	JC61-04922A	1
2-11	Tray 2 frame	7UQ75-40067	1
2-12	Tray 2 left adustment guide	7UQ75-40047	1
2-13	Roller holder	JC61-04327A	1
2-14	Spring, cs	6107-002779	2

(*) This part is in ordering system.

Removal and replacement: Tray 2 reverse roller (HP Laser 408dn / HP Laser MFP 432fdn)

Follow these steps to remove the tray 2 reverse roller.

Mean time to repair: 1 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-56 Part information

Part number	Part description
JC90-01063B	Tray 2 reverse roller

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

Post service test

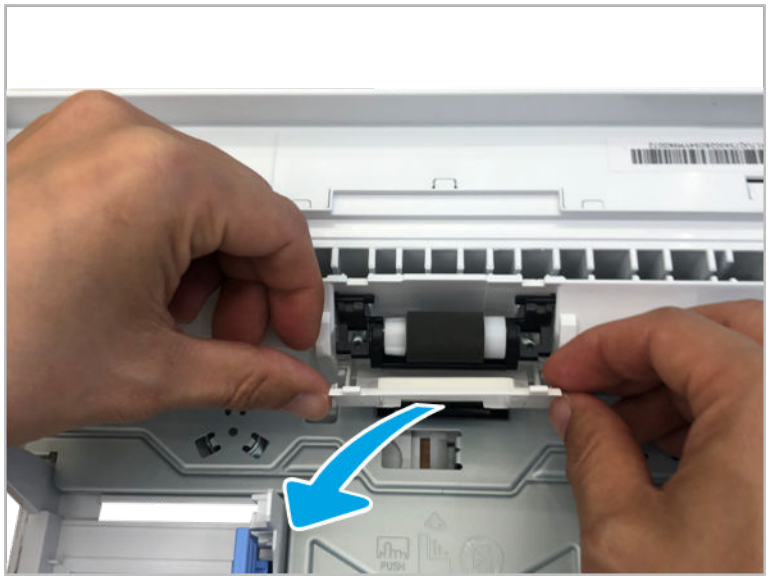
Verify that the document was copied, scanned, or printed correctly.

1. Remove the tray 2 reverse roller.
   a. Remove the tray 2.

Figure 2-312

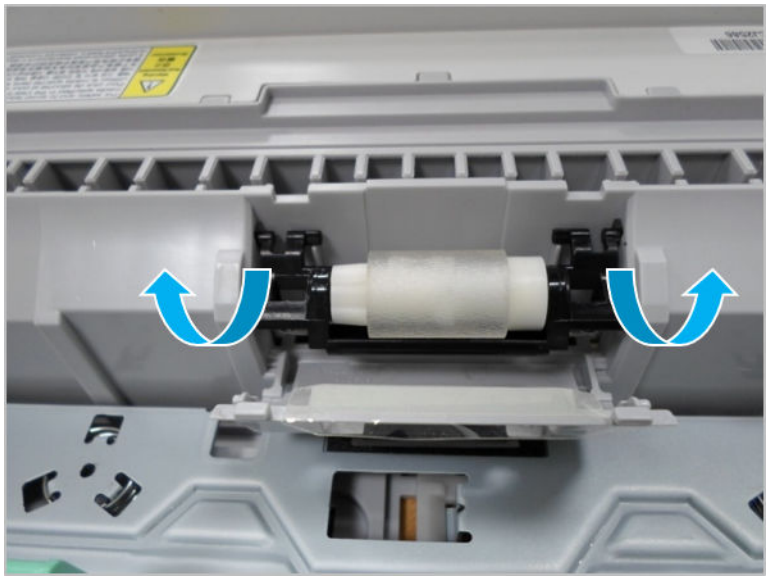
b. Open the reverse roller cover.

Figure 2-313



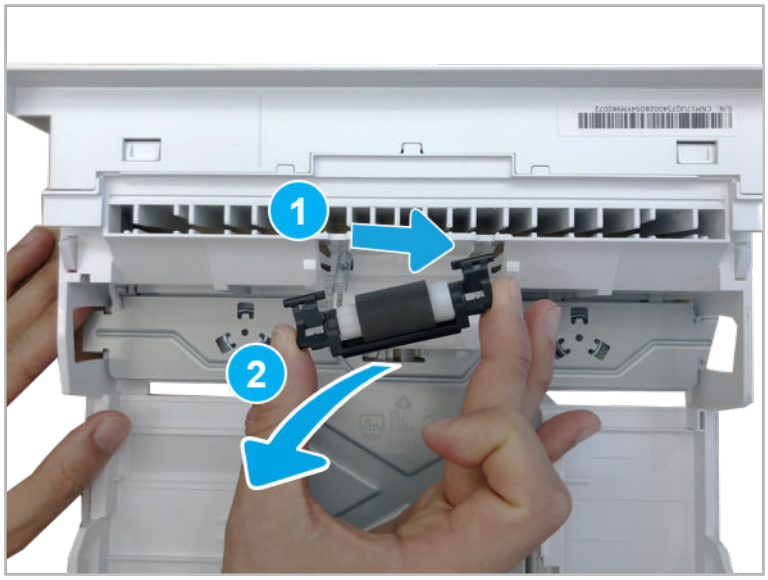
c. Release the reverse roller assembly.

Figure 2-314



d. Release the reverse roller from its holder.

Figure 2-315



2. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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.

Optional - Second cassette feeder (SCF)

Parts and diagrams: SCF main

Figure 2-316 SCF main

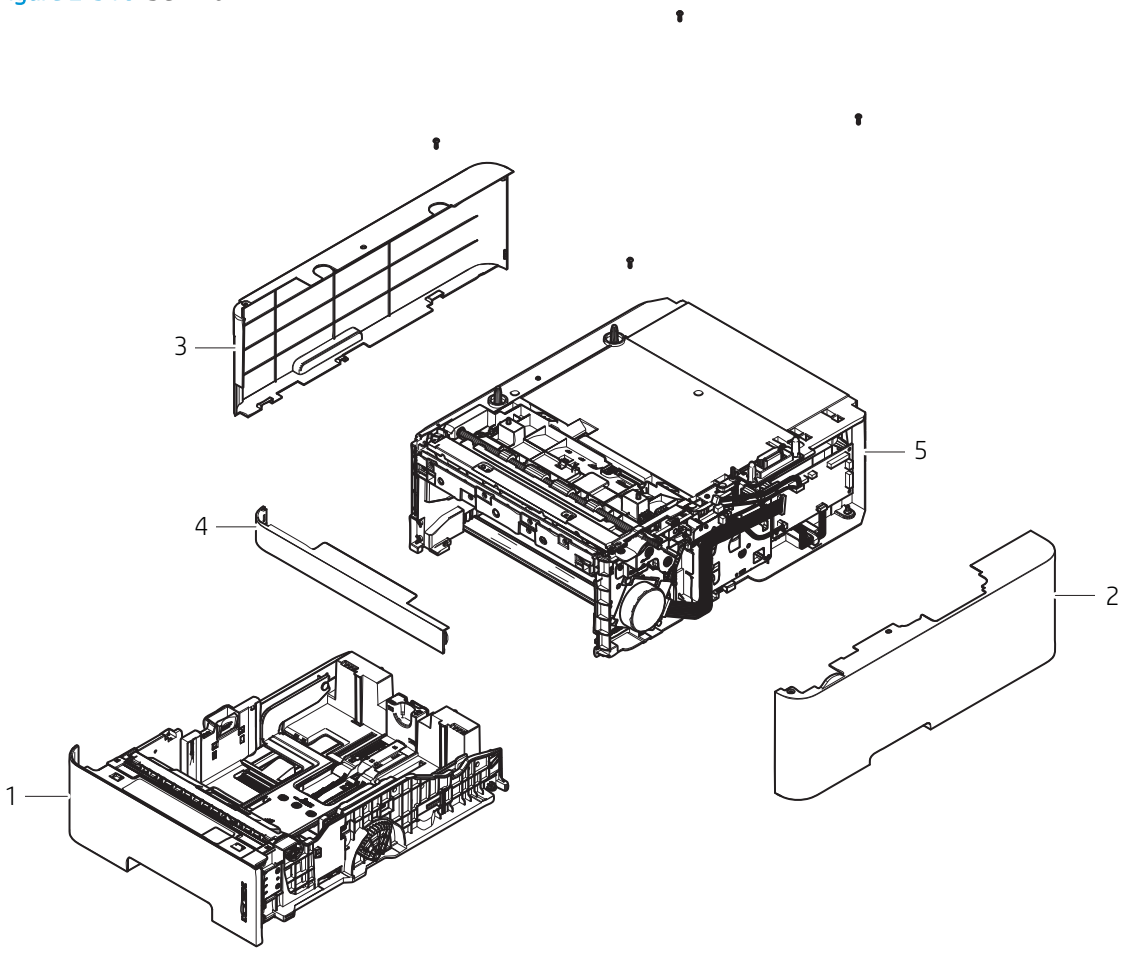


Table 2-57 SCF main

Ref	Description	Part number (*)	Qty
1	Cassette assembly	7UQ75-40032 (*)	1
2	SCF right cover	7YG00-40003	1
3	SCF left cover	7YG00-40002	1
4	SCF Front cover	7YG00-40001	1
5	Frame assembly	7YG00-64001	1

(*) This part is in ordering system.

Removal and replacement: SCF right cover (HP Laser 408dn / HP Laser MFP 432fdn)

Follow these steps to remove the SCF right cover.

Mean time to repair: 2 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

NOTE: This part is not in ordering system.

Table 2-58 Part information

Part number	Part description
• 7YG00-40003	• SCF right cover

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

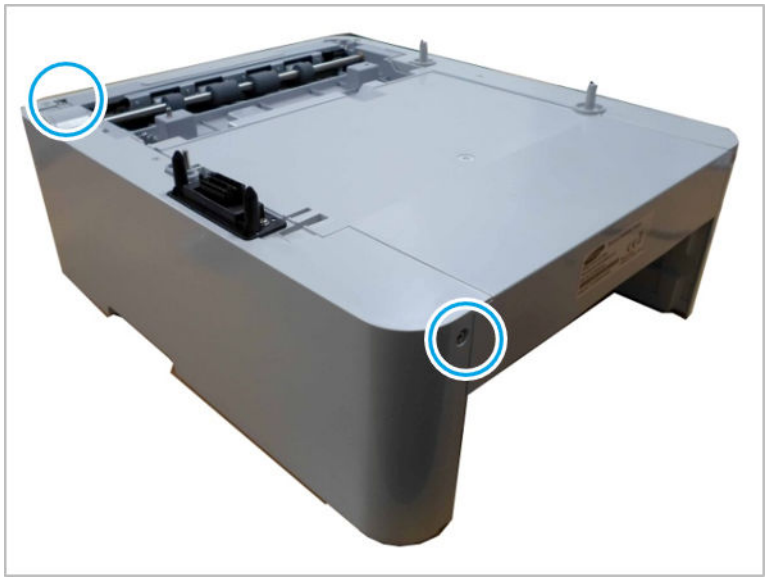
Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the SCF right cover.

a. Remove 2 screws.

Figure 2-317



b. Release the SCF right cover.

Figure 2-318

2. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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.

Parts and diagrams: SCF cassette

Figure 2-319 SCF cassette

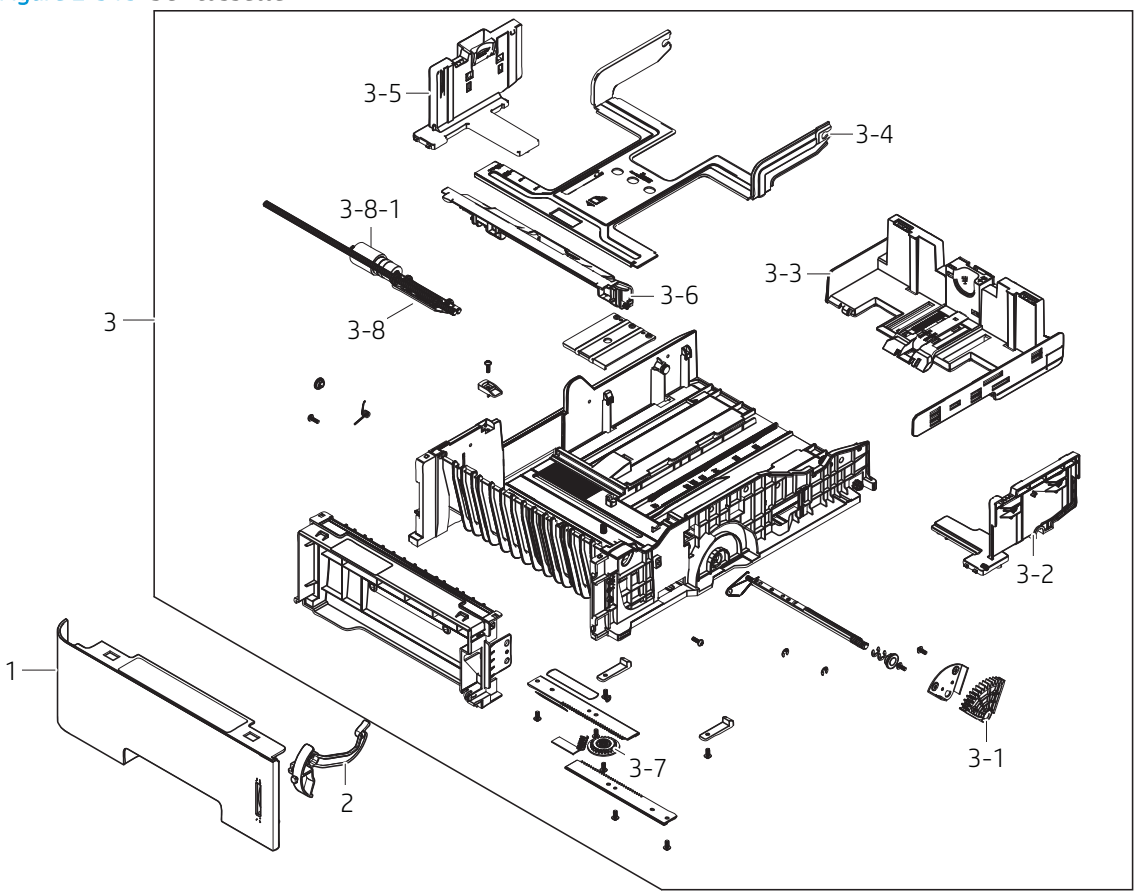


Table 2-59 SCF cassette

Ref	Description	Part number (*)	Qty
1	Handle cassette	7UQ75-40031	1
2	CSP-PAPER INDICATOR	JC81-08738G	1
3	Cassette frame	7UQ75-40052	1
3-1	CSP-GEAR LIFTING	JC81-08478A (*)	1
3-2	Cassette-side right cover	7YG00-40007	1
3-3	Cassette-guide rear paper	7UQ75-40058	1
3-4	CSP-PLATE KNOCK UP	JC81-08519A	1
3-5	Cassette-side left cover	7YG00-40008	1
3-6	CSP-CAP-RETARD	JC81-08479A	1
3-7	GEAR-M_PINION 24	JC66-01020A	1
3-8	Cassette retard	JC90-01598A	1
3-8-1	MEA UNIT-ROLLER PU	JC97-02259A (*)	1

(*) This part is in ordering system.

Removal and replacement: SCF reverse roller (HP Laser 408dn / HP Laser MFP 432fdn)

Follow these steps to remove the SCF reverse roller.

Mean time to repair: 1 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-60 Part information

Part number	Part description
• JC97-02259A	• SCF reverse roller

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

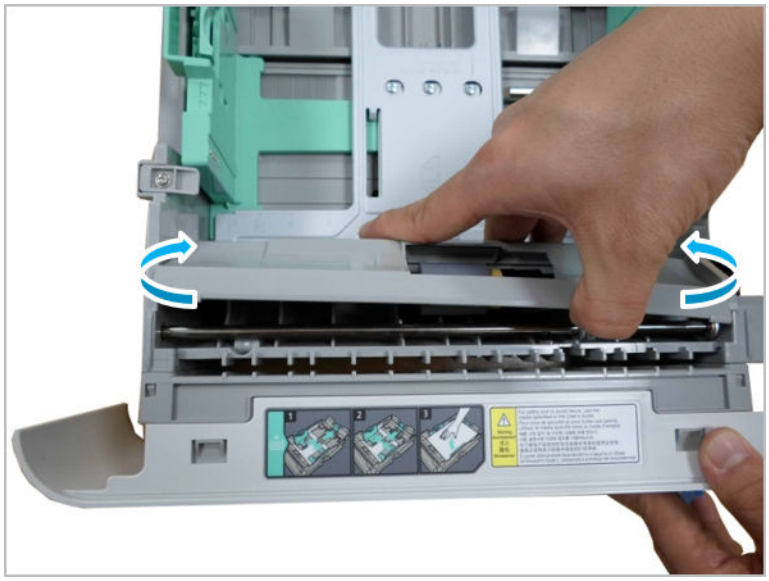
Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the SCF reverse roller.

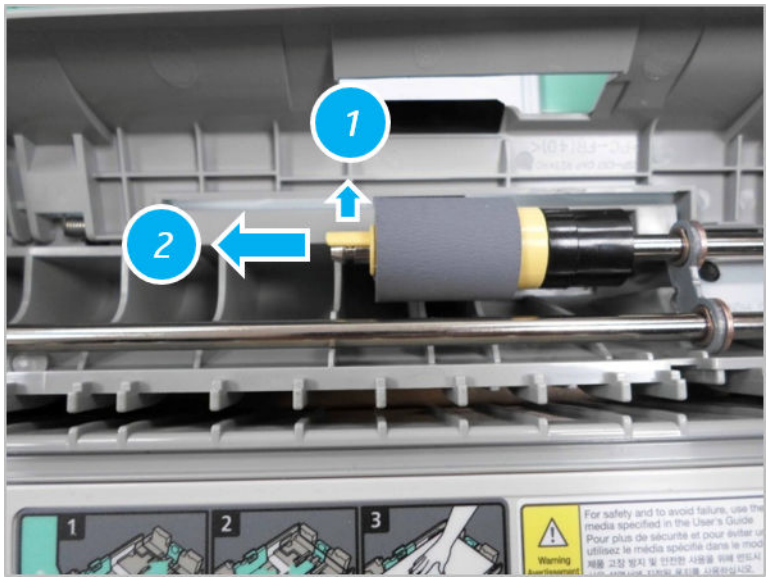
   a. Remove the SCF cassette and then remove the SCF cassette cover.

   Figure 2-320

b. Pull the locking tab up, and then slide the pickup roller off of the shaft.

Figure 2-321



2. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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.

Parts and diagrams: SCF frame assembly

Figure 2-322 SCF frame assembly

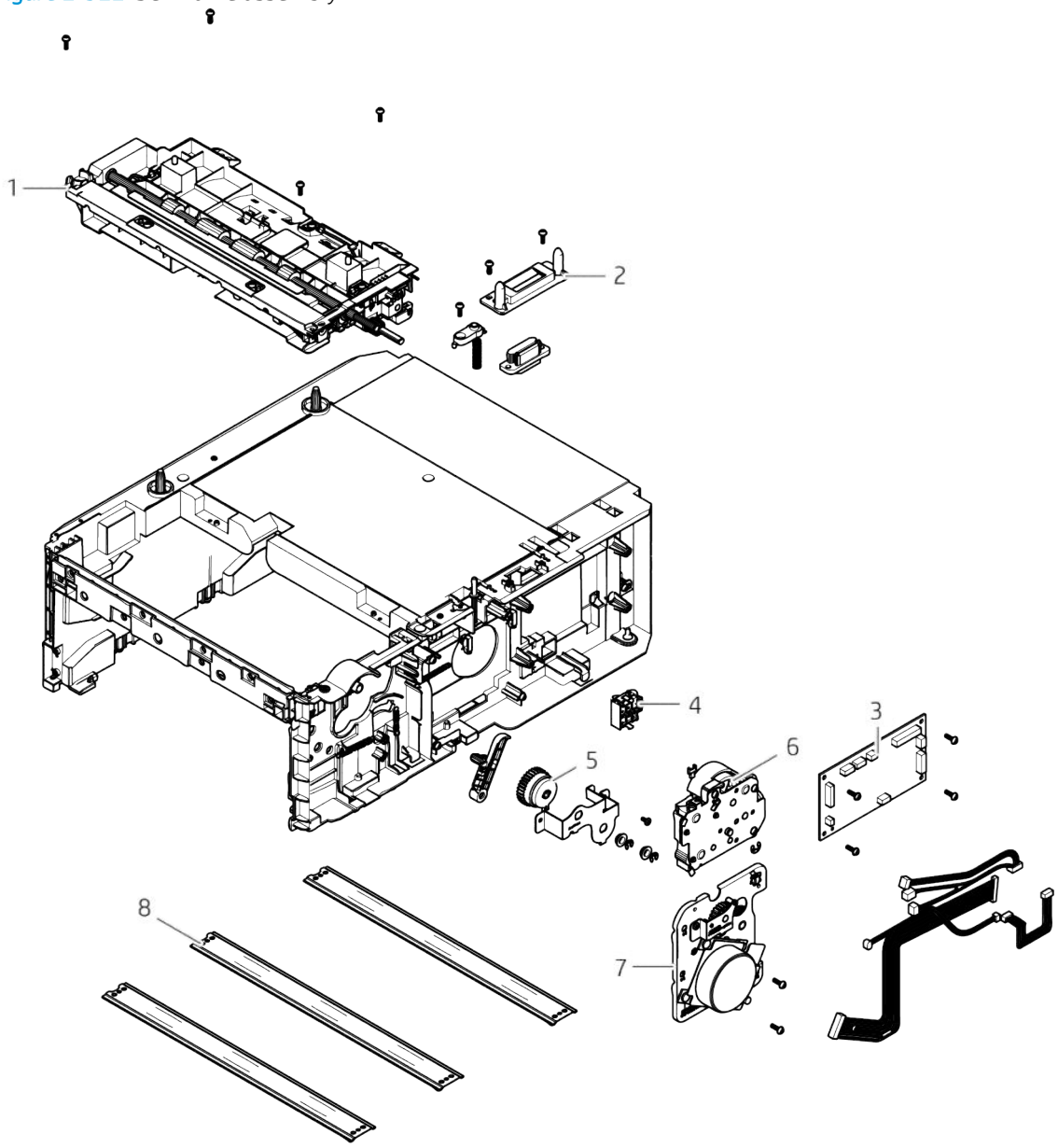


Table 2-61 SCF frame assembly

Ref	Description	Part number (*)	Qty
1	Frame pickup	JC93-00809C (*)	1
2	SCF connector holder	JC61-01742A (*)	1
3	SCF main PCA	JC92-02636A (*)	1
4	SWITCH-SIGNAL	JC34-00001A (*)	1
5	CLUTCH-ELECTRIC	JC47-00034A (*)	1
6	Drive feed	JC93-00350A (*)	1
7	Drive assembly	JC82-00190A (*)	1
8	PLATE-FRAME_BOTTOM	JC61-04358A	3

(*) This part is in ordering system.

Removal and replacement: SCF pickup assembly (HP Laser 408dn / HP Laser MFP 432fdn)

Follow these steps to remove the SCF pickup assembly.

Mean time to repair: 5 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-62 Part information

Part number	Part description
• JC93-00809C	• SCF pickup assembly

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

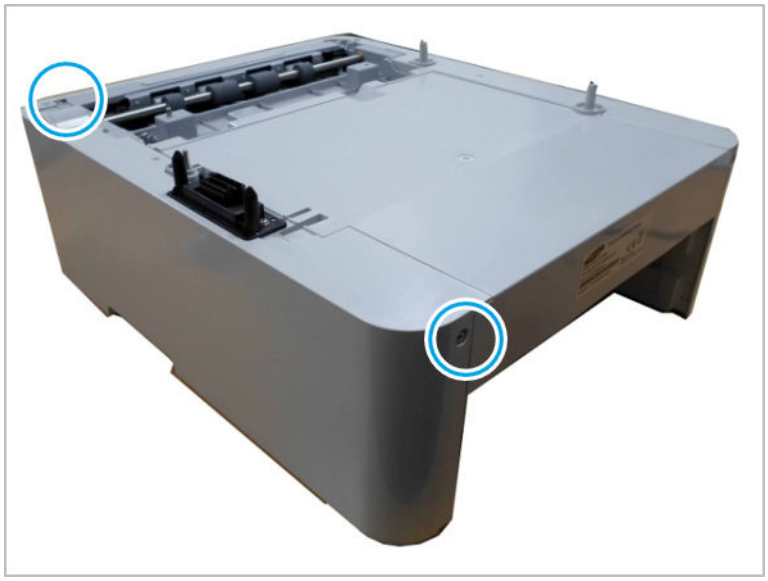
Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the SCF right cover.

   a. Remove 2 screws.

   Figure 2-323

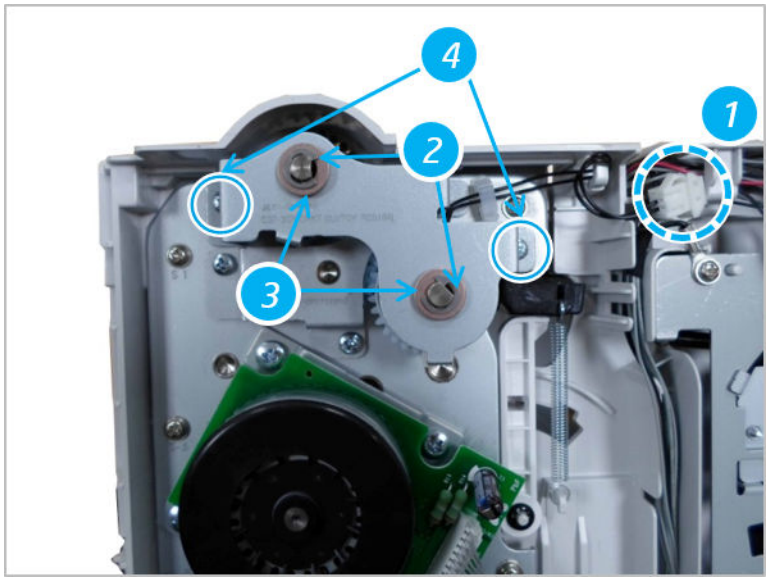
   b. Release the SCF right cover.

   Figure 2-324

2. Remove the main drive assembly.

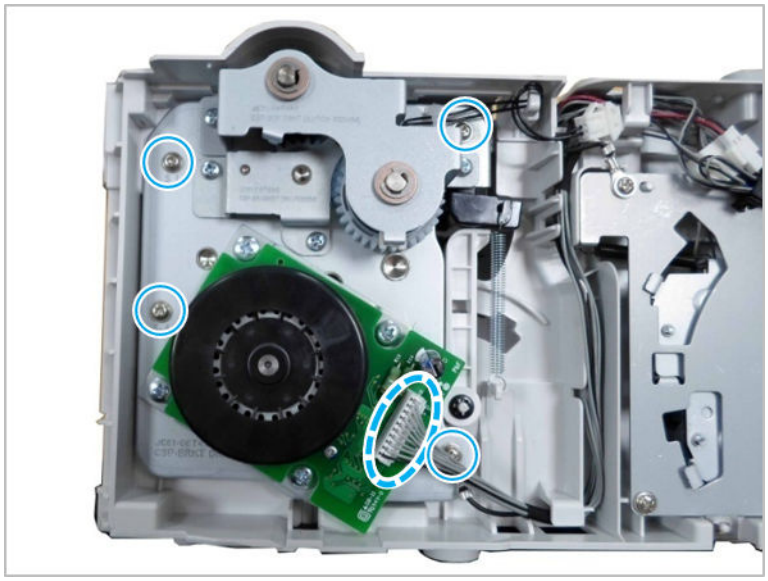
   a. Disconnect the clutch connector(callout 1). Remove 2 e-rings(callout 2), 2 bushes(callout 3), and 2 screws(callout 4). And then, remove the clutch bracket.

Figure 2-325



b. Disconnect the main motor connector, remove 4 screws, and then remove the SCF main drive assembly.

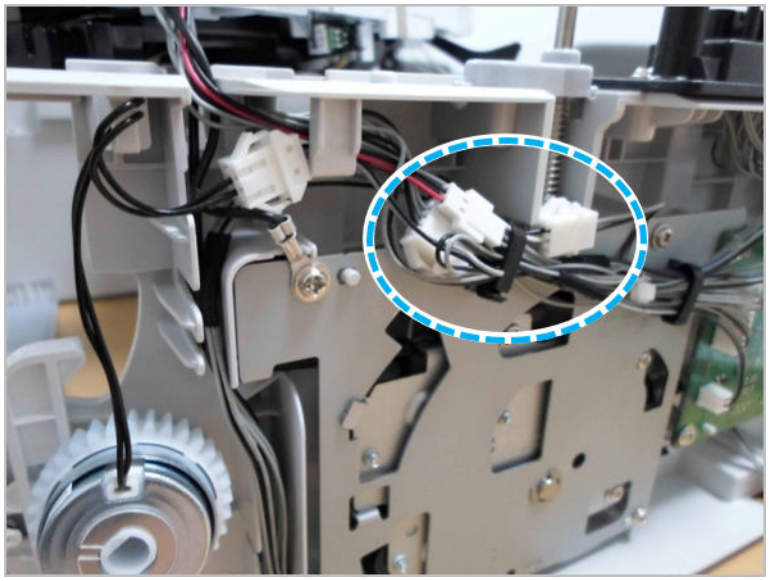
Figure 2-326



3. Remove the pickup assembly.

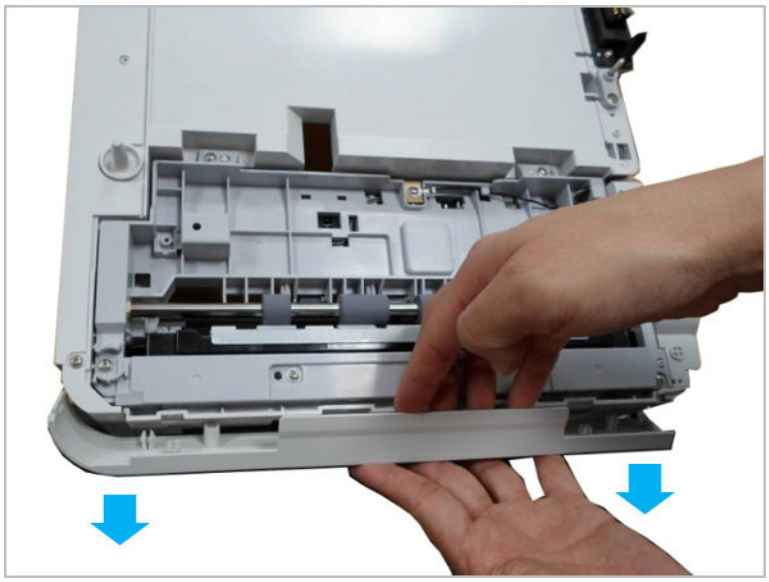
   a. Disconnect the connectors.

Figure 2-327



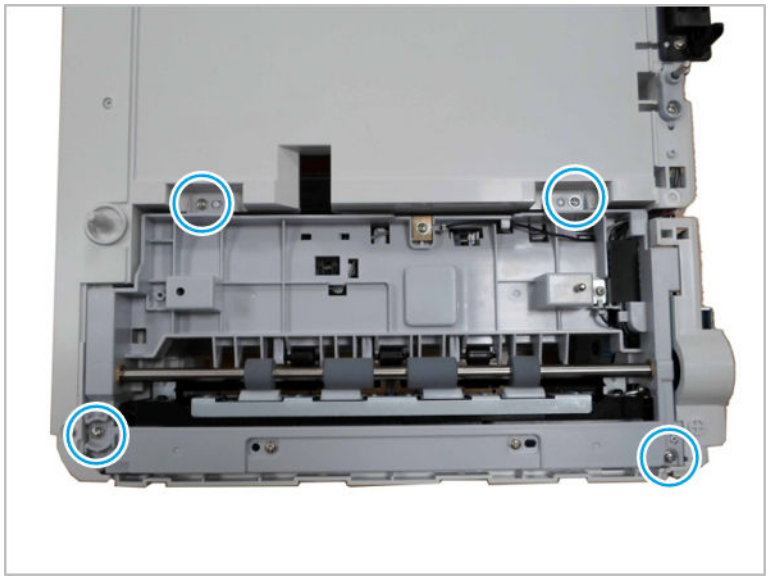
b. Remove the front cover.

Figure 2-328



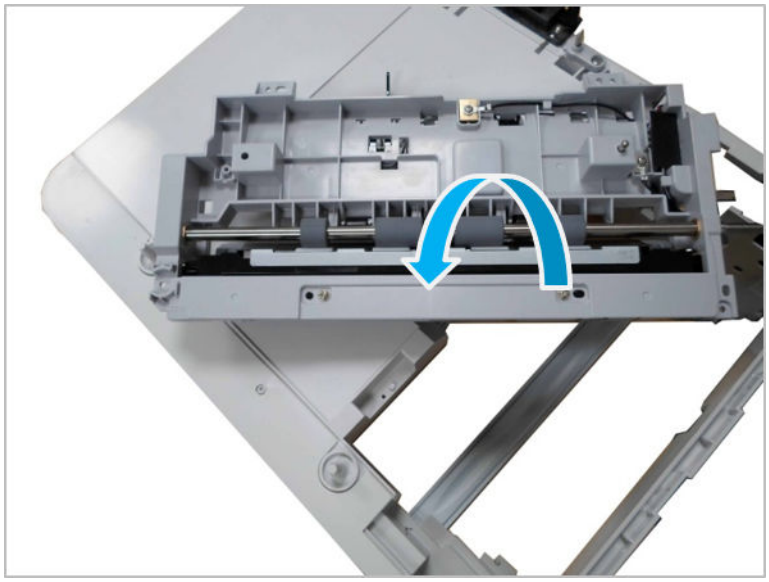
c. Remove 4 screws.

Figure 2-329



d. Remove the SCF pickup assembly.

Figure 2-330



4. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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: SCF main PCA (HP Laser 408dn / HP Laser MFP 432fdn)

Follow these steps to remove the SCF main PCA.

Mean time to repair: 3 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-63 Part information

Part number	Part description
• JC92-02636A	• SCF main PCA

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

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

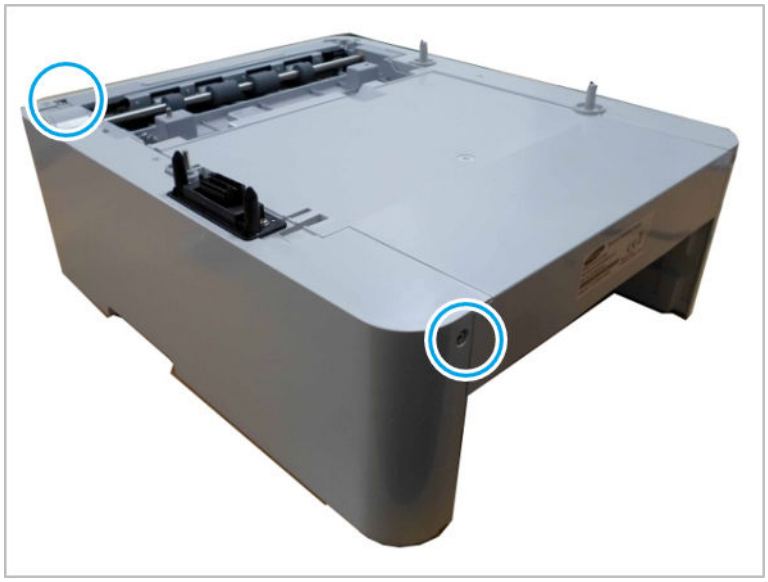
Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the SCF right cover.

   a. Remove 2 screws.

   Figure 2-331

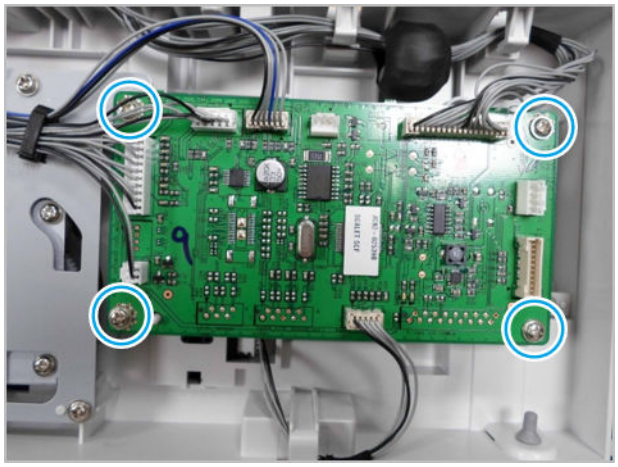
   b. Release the SCF right cover.

   Figure 2-332

2. Remove the SCF main PCA.

▲ Open two cable restraints, remove 4 screws, and then remove the SCF lift assembly.

Figure 2-333



3. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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: SCF main motor (HP Laser 408dn / HP Laser MFP 432fdn)

Follow these steps to remove the SCF main motor.

Mean time to repair: 2 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-64 Part information

Part number	Part description
• JC82-00190A	• SCF main motor

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

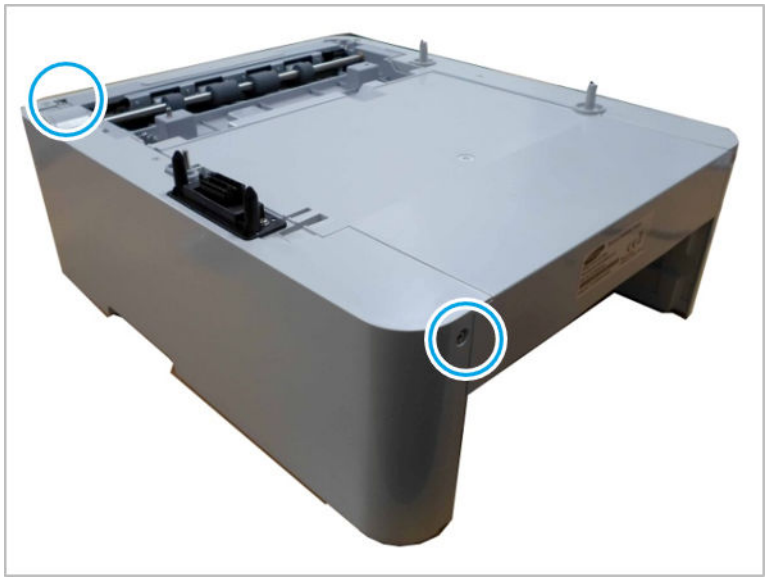
- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the SCF right cover.
   a. Remove 2 screws.

Figure 2-334



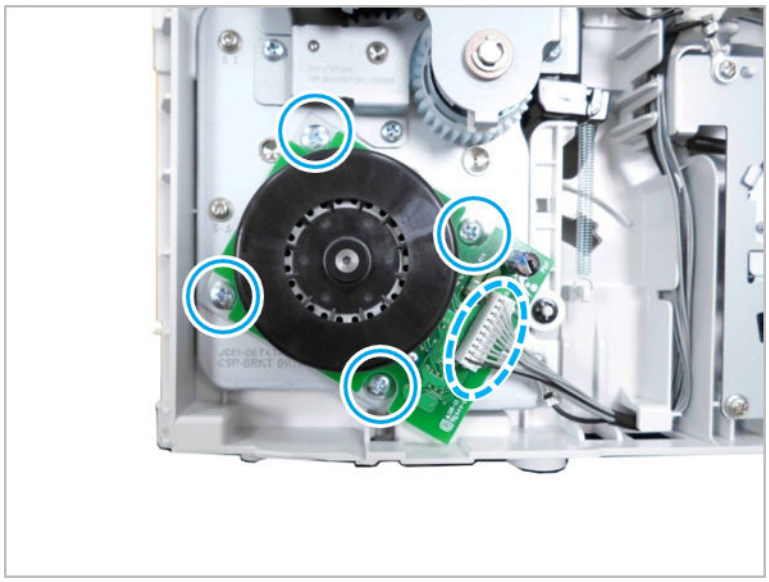
b. Release the SCF right cover.

Figure 2-335

2. Remove the SCF main motor.

▲ Disconnect the motor connector, remove 4 screws, and then remove the SCF main motor.

Figure 2-336



3. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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: SCF clutch (HP Laser 408dn / HP Laser MFP 432fdn)

Follow these steps to remove the SCF clutch.

Mean time to repair: 5 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-65 Part information

Part number	Part description
• JC47-00034A	• SCF clutch

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

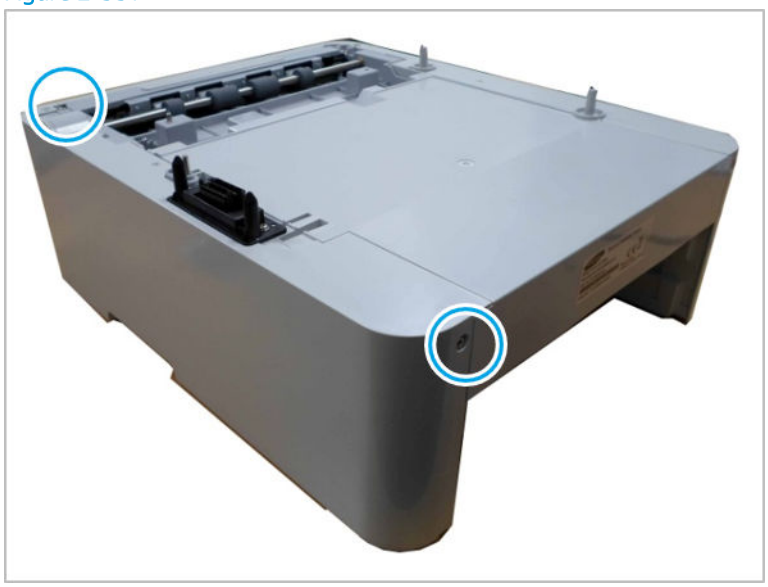
- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the SCF right cover.
   a. Remove 2 screws.

   Figure 2-337

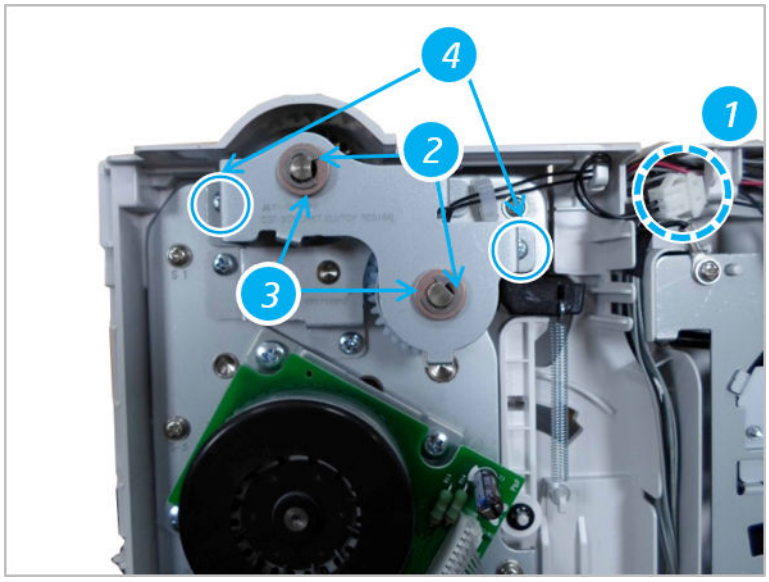
   b. Release the SCF right cover.

   Figure 2-338

2. Remove the SCF clutch.

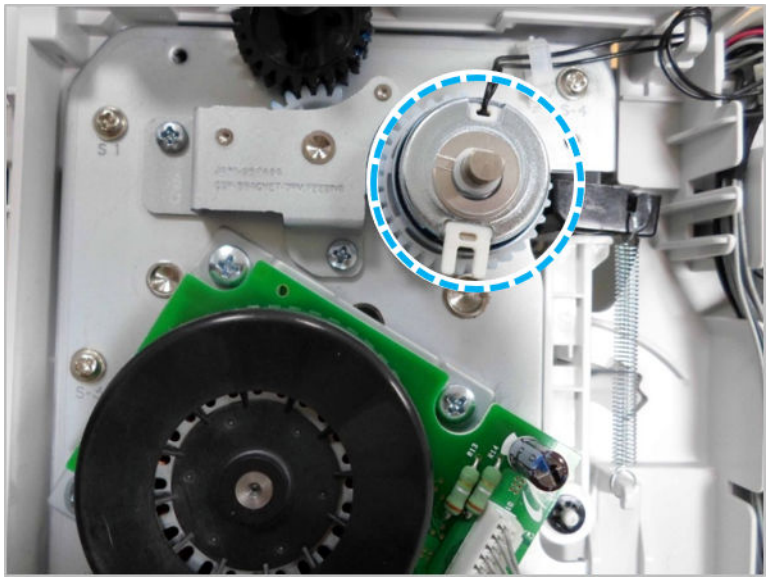
a. Disconnect the clutch connector(callout 1). Remove 2 e-rings(callout 2), 2 bushes(callout 3), and 2 screws(callout 4). And then, remove the clutch bracket.

Figure 2-339



b. Remove the SCF clutch.

Figure 2-340



3. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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.

Parts and diagrams: SCF frame pickup

Figure 2-341 SCF frame pickup

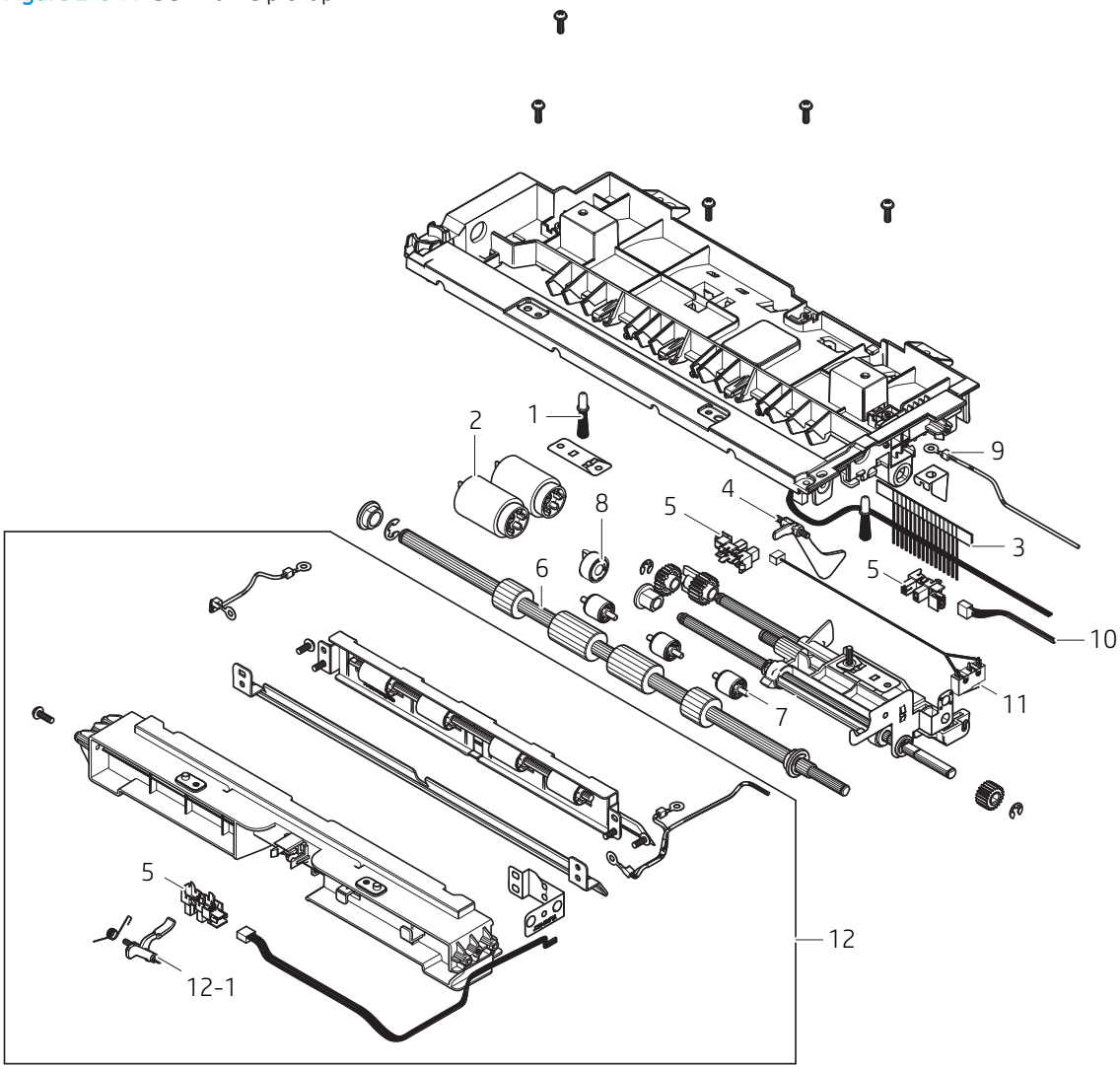


Table 2-66 SCF frame pickup

Ref	Description	Part number (*)	Qty
1	MEA UNIT-TERMINAL:TR	JC97-01401A	1
2	MEA UNIT-ROLLER PU	JC97-02259A (*)	2
3	BRUSH-PICK; ML-6510ND,SUS	JC67-00468A	1
4	ACTUATOR-PAPER_EMPTY	JC66-02613A (*)	1
5	Photo-interrupter	0604-001325 (*)	2
6	SCF Registration roller	JC66-03957A	1
7	ROLLER-M IDLE JF	JC66-01013A	3
8	HOLDER-M_IDLE ONE WAY	JC61-01288A	1
9	HARNESS-GND	JC39-01955A	1
10	Feed sensor harness	JC39-01963A	1
11	Motor SW harness	JC39-01956A	1
12	A/S COM-FRAME FEED	JC81-08708B	1
12-1	CSP-SCF ACTUATOR FEED	JC81-08460A	1

(*) This part is in ordering system.

Removal and replacement: SCF pickup/forward roller (HP Laser 408dn / HP Laser MFP 432fdn)

Follow these steps to remove the SCF pickup/forward roller.

Mean time to repair: 1 minutes

Service level: Basic

IMPORTANT: 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.

Before performing service

- Disconnect the power cable.

Use the table below to identify the correct part number for your printer. To order the part, go to https://parts.hp.com

Table 2-67 Part information

Part number	Part description
• JC97-02259A	• SCF pickup/forward roller

Required tools

- #2 JIS screwdriver with a magnetic tip

After performing service

Turn the printer power on

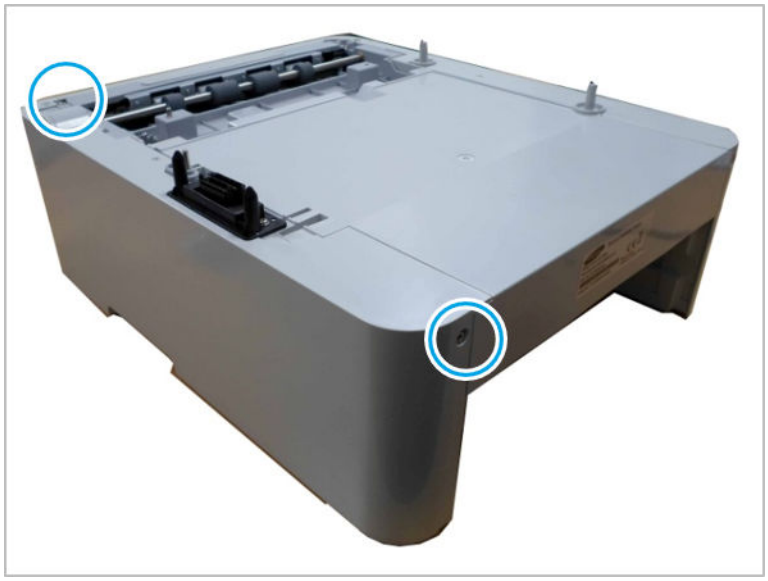
- Connect the power cable.
- Use the power switch to turn the power on.

Post service test

Verify that the document was copied, scanned, or printed correctly.

1. Remove the SCF right cover.
   a. Remove 2 screws.

Figure 2-342



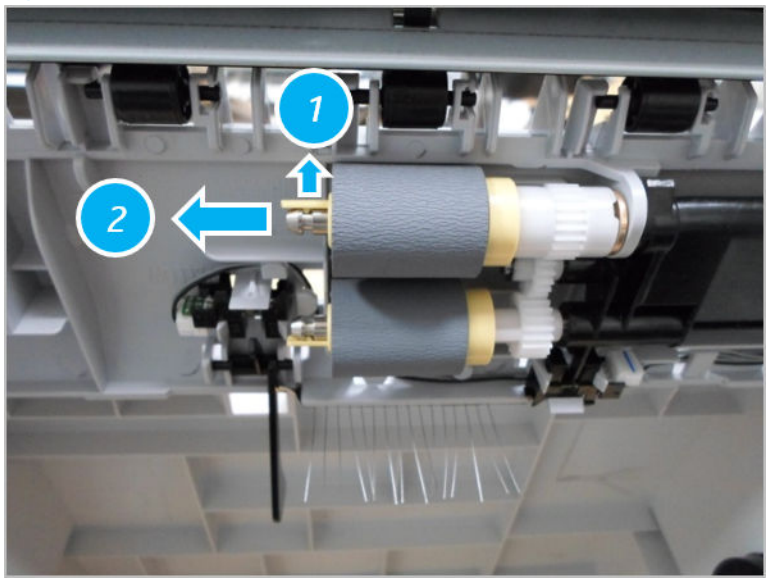
b. Release the SCF right cover.

Figure 2-343

2. Remove the SCF pickup/forward roller.

▲ Look up into the tray cavity. Pull the locking tab up, and then slide the pickup roller off of the shaft.

Figure 2-344



3. Unpack the replacement assembly.

a. 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

b. 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.

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.

IMPORTANT: Make sure that all of the shipping materials (for example shipping tape) are removed from the replacement part prior to installation.

c. 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 Problem solving

Error -code and control-panel-message troubleshooting overview

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: A1-xxxx).

- The first two characters are numeric and represent the system component that is causing the error. For example, in error code `A1-1211`, **A1** = **Motor** for these printers.
- The remaining four digits further define the error.

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

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

Table 3-1 **ERROR Codes: The first two characters**

Error code	System Component	System Error Description
11-2Txx	Tray- Paper	Tray X paper mismatch
A1-xxxx	Motors	Motor failure
A2-xxxx	Fans	Fan rotation error
A3-xxxx	Sensors (non-paper path)	Temp or humidity sensor error
C1-xxxx	Toner cartridge	Toner cartridge relate error
C3-xxxx	Drum unit	Drum unit related error
C5-xxxx	ITB Unit (Color printer) or Transfer roller (Mono printers)	ITB Unit or Transfer roller life message
C6-xxxx	Fuser unit	Fuser unit either not installed, wrong fuser or has been replaced
C7-xxxx	Waste toner	Waste toner container error
C8-xxxx	Developer	Developer unit error
C9-xxxx	Transfer roller	Transfer roller error
H1-xxxx	Optional tray	Optional paper tray error
H2-xxxx	Inner finisher	Miscellaneous error including general and misprint or mismatch errors typically involving (but not limited to) the fuser, the laser scanner, or the paper path
Mx-xxxx	Paper Path/Paper Tray	Paper path or paper tray sensor error (This includes tray empty, tray not installed and bin full
Sx-xxxx	System	System error, Clock, Video, HDD MSOK, Supply checking
U1-xxxx	Fuser error	Fuser error (Temp, voltage, or pressure control)

Table 3-1 ERROR Codes: The first two characters (continued)

Error code	System Component	System Error Description
U2-xxxx	Laser/Scanner	Laser/scanner error
U3-xxxx	Document feeder	Document feeder error (Jams, loading or open)

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 (c05048451):

- 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

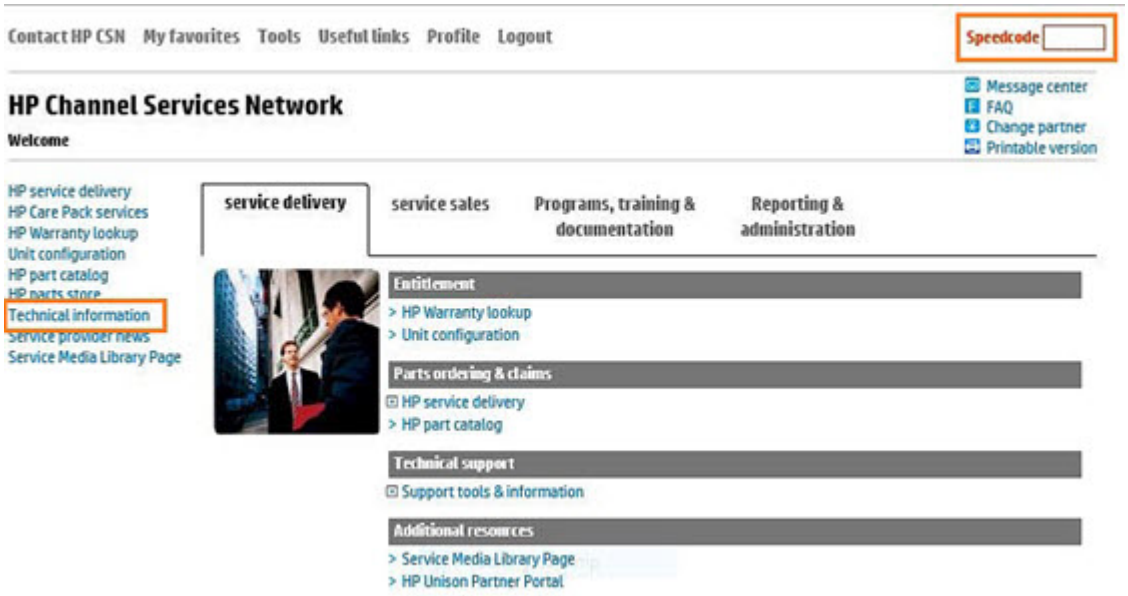
These instructions are for HP internal use by call agents, service technicians, and other internal users. To learn how to find support content in WISE, watch the video here.

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 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.



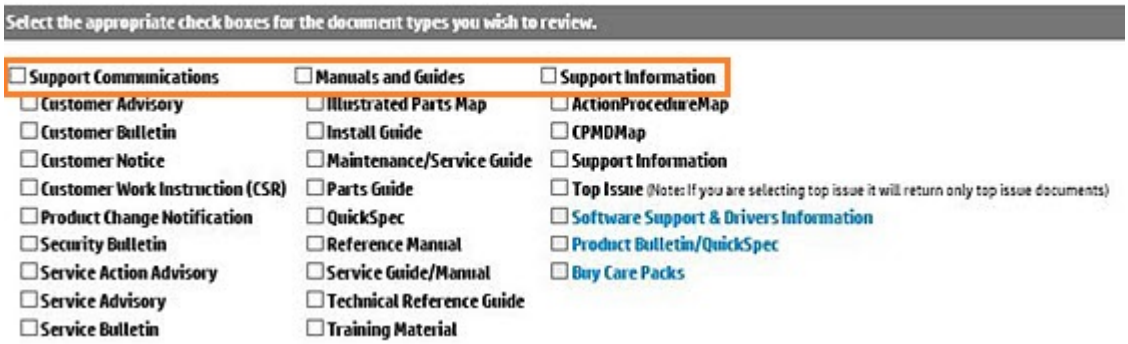
2. Under **Product Search**, select the **Type**, **Category**, **Family**, and **Series** that match your product model (leave the **Model** field as blank or the default).

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 3-1 Sample product search criteria

3. 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).

4. Clear all of the high-level check boxes.



5. 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.

6. Select **Submit**.

7. 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

Troubleshooting process

Solve problems checklist

If the printer is not correctly functioning, complete the steps (in the order given) in the following checklist. If the printer fails a checklist step, follow the corresponding troubleshooting suggestions for that step. If a checklist step resolves the problem, skip the remaining checklist items.

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

        If the printer remains unable to connect to the network, uninstall and then reinstall the printer. If the error persists, contact a network administrator.
3. Check to see if any messages appear on the control panel.
4. Make sure that the paper you are using meets specifications.
5. Make sure that the paper is loaded correctly in the input tray.
6. Make sure that the printer software is installed correctly.
7. Verify that you have installed the printer driver for this printer, and that you are selecting this printer from the list of available printers.
8. Print a configuration page.

    After printing the configuration page, check the following:

    1. If the page does not print, verify that the input tray contains paper and that the paper is properly loaded.
    2. Make sure that the toner cartridge is installed correctly.
    3. If the page jams in the printer, clear the jam.
    4. If the print quality is unacceptable, complete the following steps:

- Verify that the print settings are correct for the paper you are using.
- Solve print-quality problems.

9. Print a small document from a different program that has printed in the past. If this solution works, then the problem is with the program you are using. If this solution does not work (the document does not print), complete these steps:
    1. Try printing the job from another computer that has the printer software installed.
    2. Check the cable connection. Direct the printer to the correct port, or reinstall the software, selecting the connection type you are using.

Monitoring the supplies life

If you experience frequent paper jams or printing problems, check the number of pages the machine has printed or scanned. Replace the corresponding parts, if necessary.

NOTE: It may be necessary to press OK to navigate to lower-level menus for some models.

1. Select **Menu > System Setup > Maintenance > Supplies Life** on the control panel.
2. Select the option you want and press **OK**.
3. Press **Cancel** button to return to ready mode.

Printing a report

This product provides several printable reports for maintenance purposes.

These reports can be used to aid the diagnosis of print quality problems.

- **Configuration report**

  You can print a report on the machine's overall configuration. It shows various SW version and current machinesetting status.

  – HP Laser 408dn: **Menu > Information > Configuration on the control panel**

  – HP Laser MFP 432fdn: **Menu > System Setup > Report > Configuration**

- **Supplies Information report**

  You can print supplies' information page. It shows consumable unit life status and toner using status.

  – HP Laser 408dn: **Menu > Information > Supplies Info.**

  – HP Laser MFP 432fdn: **Menu > System Setup > Report > Supplies Info.**

- **Usage Counter**

  You can print a usage page. The usage page contains the total number of pages printed.

- HP Laser 408dn: **Menu > Information > Usage Counter**
- HP Laser MFP 432fdn: **Menu > System Setup > Report > Usage Counter**

Maintenance menu

This menu allows you to maintain your machine. **(Menu > System setup > Maintenance)**

- **CLR Empty Msg.** : This option appears only when toner cartridge is empty.
- **Supplies Life** : This item allows you to check how many pages are printed and how much toner are left in the cartridge.
- **Image Mar. (Only MFP model)** : Allows you to adjust the color setting such as color registration, color density, etc.
- **TonerLow Alert** : Customizes the level to alert toner low or toner empty
- **Serial Number (Only MFP model)**: Shows the machine's serial number.
- **Ram Disk (Only MFP model)**: Enables/disables RAM disk to manage jobs.

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 to filter out many possible causes of the problem. Use the troubleshooting flowchart to help diagnose the root cause of the problem. The remainder of this chapter provides steps for correcting problems.

- Use the troubleshooting flowchart to pinpoint the root cause of hardware malfunctions. The fl owchart provides guides to the sections of this chapter that contain steps to correct 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 3-2 Pre-troubleshooting checklist

General topic	Questions
Environment	• Is the printer installed on a solid, level surface (+/- 1°)? • Is the power-supply voltage within ± 10 volts of the specified power source? • Is the power-supply plug inserted in the printer and the outlet? • Is the operating environment within the specified parameters? • Is the printer exposed to ammonia gas, such as that produced by diazo copiers or office cleaning materials? NOTE: Diazo copiers produce ammonia gas as part of the copying processes. Ammonia gas (from cleaning supplies or a diazo copier) can have an adverse effect on some printer components (for example, the toner cartridge OPC). • Is the printer exposed to direct sunlight?
Media	• Does the customer use only supported media? • Is the media in good condition (no curls, folds, or distortion)? • Is the media stored correctly and within environmental limits?
Input trays	• Is the amount of media in the tray within specifications? • Is the media correctly placed in the tray? • Are the paper guides aligned with the stack? • Is the tray correctly installed in the printer?
HP Genuine Toner cartridge	Is the correct regionalized toner cartridge (or cartridges) installed correctly?

Table 3-2 Pre-troubleshooting checklist (continued)

General topic	Questions
Transfer unit and fuser	Are the transfer unit and fuser installed correctly? NOTE: For printers with an intermediate transfer belt (ITB), is the ITB installed correctly and fully seated. If a replacement ITB was installed, was all of the packing materials removed?
Covers	Is the toner cartridge door closed?
Condensation	• Does condensation occur following a temperature change (particularly in winter following cold storage)? If so, wipe affected parts dry or leave the printer on for 10 to 20 minutes. • Was a toner cartridge opened soon after being moved from a cold to a warm room? If so, allow the toner cartridge to sit at room temperature for 1 to 2 hours.
Miscellaneous	• Check for and remove any non-HP components (toner cartridges, memory modules, and EIO cards) from the printer. • If the hardware or software configuration has not changed or the problem is not associated with any specific software, see the complete service manual for this printer. • Remove the printer from the network and ensure that the failure is associated with the printer before beginning troubleshooting. • For any print-quality issues, calibrate the printer.

Troubleshooting flowchart

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

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 3-3 Troubleshooting flowchart

Step	Check	Action
Power on	Is the printer on and does a readable message display?	Follow the power-on troubleshooting checks detailed following this table. After the control panel display is functional, see step 2.
Control panel messages	Does the message Ready display on the control panel?	After the errors have been corrected, go to step 3.
Event log	Open the Troubleshooting menu and print an event log to see the history of errors with this printer. Does the event log print?	If the event log does not print, check for error messages. If paper jams inside the printer, see the jams section of the printer service manual. If error messages display on the control panel when trying to print an event log, see the control panel message section of the printer troubleshooting service manual. After successfully printing and evaluating the event log, see step 4.

Table 3-3 Troubleshooting flowchart (continued)

Step	Check	Action
Information pages	Open the Reports menu and print the configuration pages to verify that all the accessories are installed. Are all the accessories installed?	If accessories that are installed are not listed on the configuration page, remove the accessory and reinstall it. After evaluating the configuration pages, see step 5.
Print quality	Does the print quality meet the customer's requirements?	Compare the images with the sample defects in the image defect tables. See the images defects table in the printer repair service manual. After the print quality is acceptable, see step 6.
Interface	Can the customer print successfully from the host computer?	Verify that all I/O cables are connected correctly and that a valid IP address is listed on the HP Jetdirect configuration page. If error messages display on the control panel when trying to print an event log, see the control-panel message section of the printer troubleshooting service manual. When the customer can print from the host computer, this is the end of the troubleshooting process.

Power subsystem

Power-on checks

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

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

Power-on troubleshooting overview

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

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

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

Tool for troubleshooting

Check the event log using the HP Embedded Web Server

1. Open the HP Embedded Web Service (EWS):

NOTE: HP Device Toolbox is software used to connect to the HP Embedded Web Server when the printer is connected to a computer using a USB cable. It is available only if a full installation was performed when the printer was installed on a computer. Depending on how the printer is connected, some features might not be available.

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

Network connected printers

1. Print a configuration report to determine 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 configuration report. Press the Enter key on the computer keyboard. The EWS will open.

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

2. Select the Home tab, and then select the Event Log page.

TIP: If needed, print the event log from the browser.

Print quality troubleshooting guide

Resolving print quality problems

Introduction

The following information provides troubleshooting steps for solving image defect issues, including the following defects:

- Light print
- Gray background or dark print
- Blank pages
- Black pages
- Dark or light bands
- Dark or light streaks
- Missing toner
- Skewed images
- Curled paper

Troubleshoot print quality problems

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. 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 that 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 https://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 short-edge first.

Table 3-4 Light print

Description	Sample	Possible solutions
Light print: The printed content on the entire page is light or faded.		1. Reprint the document. 2. Remove the imaging drum, and then shake it to redistribute the toner. 3. Make sure that the imaging drum is installed correctly. 4. Print a configuration report and check for life and usage of the imaging drum. 5. Replace the cartridge. 6. If the problem persists, go to https://support.hp.com.

Table 3-5 Gray background or dark print

Description	Sample	Possible solutions
Gray background or dark print: The image or text is darker than expected.		1. Make sure that the paper in the input tray has not already been run through the printer. 2. Use a different paper type. 3. Reprint the document. 4. Mono models only: From the printer EWS, go to the Adjust Toner Density menu, and then adjust the toner density to a lower level. 5. Make sure that the printer is in within the supported operating temperature and humidity range. 6. Replace the cartridge. 7. If the problem persists, go to https://support.hp.com.

Table 3-6 Blank page — No print

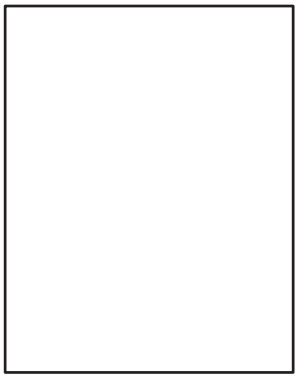
Description	Sample	Possible solutions
Blank page — No print: The page is completely blank and contains no printed content.		1. Make sure that the cartridge is genuine HP cartridges. 2. Make sure that the cartridge is installed correctly. 3. Print with a different cartridge. 4. Check the paper type in the paper tray and adjust the printer settings to match. If necessary, select a lighter paper type. 5. If the problem persists, go to https://support.hp.com.

Table 3-7 Black page

Description	Sample	Possible solutions
Black page: The entire printed page is black.		1. Visually inspect the imaging drum to check for damage. 2. Make sure that the imaging drum is installed correctly. 3. Replace the cartridge 4. If the problem persists, go to https://support.hp.com.

Table 3-8 Banding defects

Description	Sample	Possible solutions
Repetitive wide-pitch banding and Impulse bands: Dark or light lines which repeat down the length of the page. 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.		1. Reprint the document. 2. Replace the cartridge. 3. Replace the cartridge. 4. If the problem persists, go to https://support.hp.com.

Table 3-9 Streak defects

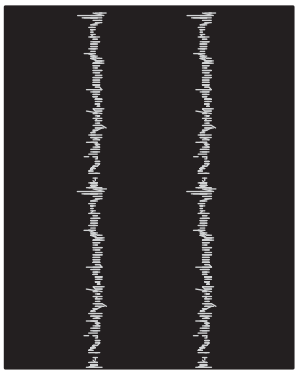
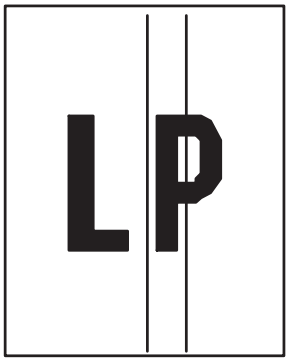
Description	Sample	Possible solutions
Light vertical streaks: Light streaks that usually span the length of the page. The defect displays only in areas of fill, not in text or sections with no printed content.		1. Reprint the document. 2. Remove the cartridge, and then shake it to redistribute the toner. 3. If the problem persists, go to https://support.hp.com. NOTE: Both light and dark vertical streaks can occur when the printing environment is outside the specified range for temperature or humidity. Refer to your printer's environmental specifications for allowable temperature and humidity levels.
Dark vertical streaks and ITB cleaning streaks (color models only): Dark 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.		1. Reprint the document. 2. Remove the cartridge, and then shake it to redistribute the toner. 3. Print a cleaning page. 4. Check the toner level in the cartridge. 5. If the problem persists, go to https://support.hp.com.

Table 3-10 Fixing/fuser defects

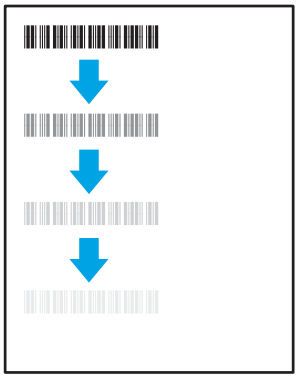
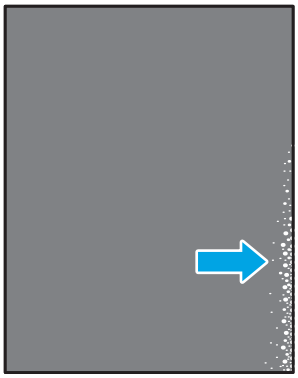
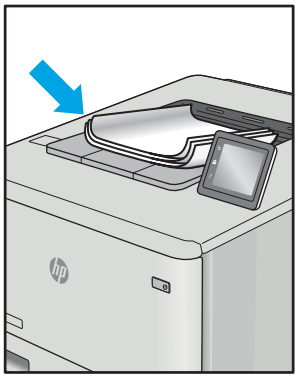
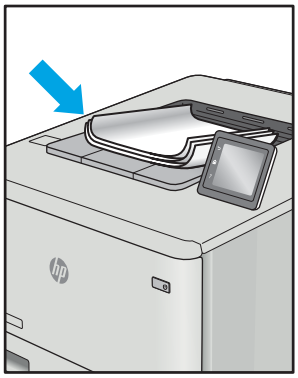
Description	Sample	Possible solutions
Hot fuser offset (shadow): Slight shadows, or offsets, of the image repeated down the page. The repeated image might fade with each recurrence.		1. Reprint the document. 2. Check the paper type in the paper tray and adjust the printer settings to match. If necessary, select a lighter paper type. 3. If the problem persists, go to https://support.hp.com.
Poor fusing: Toner rubs off along either edge of 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.		1. Reprint the document. 2. Check the paper type in the paper tray and adjust the printer settings to match. If necessary, select a lighter paper type. 3. If the problem persists, go to https://support.hp.com.

Table 3-11 Image placement defects

Description	Sample	Possible solutions
Margins and skew: 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.		1. Reprint the document. 2. Remove the paper and then reload the tray. Make sure that all the paper edges are even on all sides. 3. Make sure that the top of the paper stack is below the tray full indicator. Do not overfill the tray. 4. Make sure that the paper guides are adjusted to the correct size for the paper. Do not adjust the paper guides tightly against the paper stack. Adjust them to the indentations or markings in the tray. 5. If the problem persists, go to https://support.hp.com.

Table 3-12 Output defects

Description	Sample	Possible solutions
Output curl: Printed paper has curled edges. The curled edge can be along the short or long side of the paper. Two types of curl are possible: • **Positive curl:** The paper curls toward the printed side. The defect occurs in dry environments or when printing high coverage pages. • **Negative curl:** The paper curls away from the printed side. The defect occurs in high-humidity environments or when printing low coverage pages.		1. Reprint the document. 2. **Positive curl:** From the printer EWS, select a heavier paper type. The heavier paper type creates a higher temperature for printing. **Negative curl:** From the printer EWS, select a lighter paper type. The lighter paper type creates a lower temperature for printing. Try storing the paper in a dry environment prior or use freshly opened paper. 3. Print in duplex mode. 4. If the problem persists, go to https://support.hp.com.
Output stacking: 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: • Extreme paper curl • The paper in the tray is wrinkled or deformed • The paper is a non-standard paper type, such as envelopes • The output tray is too full		1. Reprint the document. 2. Extend the output bin extension. 3. If the defect is caused by extreme paper curl, complete the troubleshooting steps for Output curl. 4. Use a different paper type. 5. Use freshly opened paper. 6. Remove the paper from the output tray before the tray gets too full. 7. If the problem persists, go to https://support.hp.com.

Printer-specific image defects

Repetitive image defects

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.

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.

NOTE: Do not use solvents or oils to clean rollers. Instead, rub the roller with lint-free paper. If dirt is difficult to remove, rub the roller with lint-free paper that has been dampened with water

Table 3-13 Repetitive image defects

Distance between identical defects	Component	Component Notes
26.0 mm (1.03 in)	Primary charging roller[1]	Appears in the form of dropouts.
31.0 mm (1.22 in)	Developer roller[1]	Appears in the form of dropouts or dirt on the page.
39.0 mm (1.54 in)	Transfer roller	Appears in the form of dropouts or dirt on the back of the page.
45.0 mm (1.77 in)	Pressure roller	Appears in the form of dirt on the page, dropouts, or dirt on the back of the page.
57.0 mm (2.24 in)	Fuser film	Appears in the form of dropouts or dirt on the page.
63.0 mm (2.48 in)	Photosensitive drum	Appears in the form of dropouts or dirt on the page.

[1] The primary charging roller, photosensitive drum, and developer roller cannot be cleaned. If any of these rollers are indicated, replace the toner cartridge.

Use a ruler to measure between repetitive defects

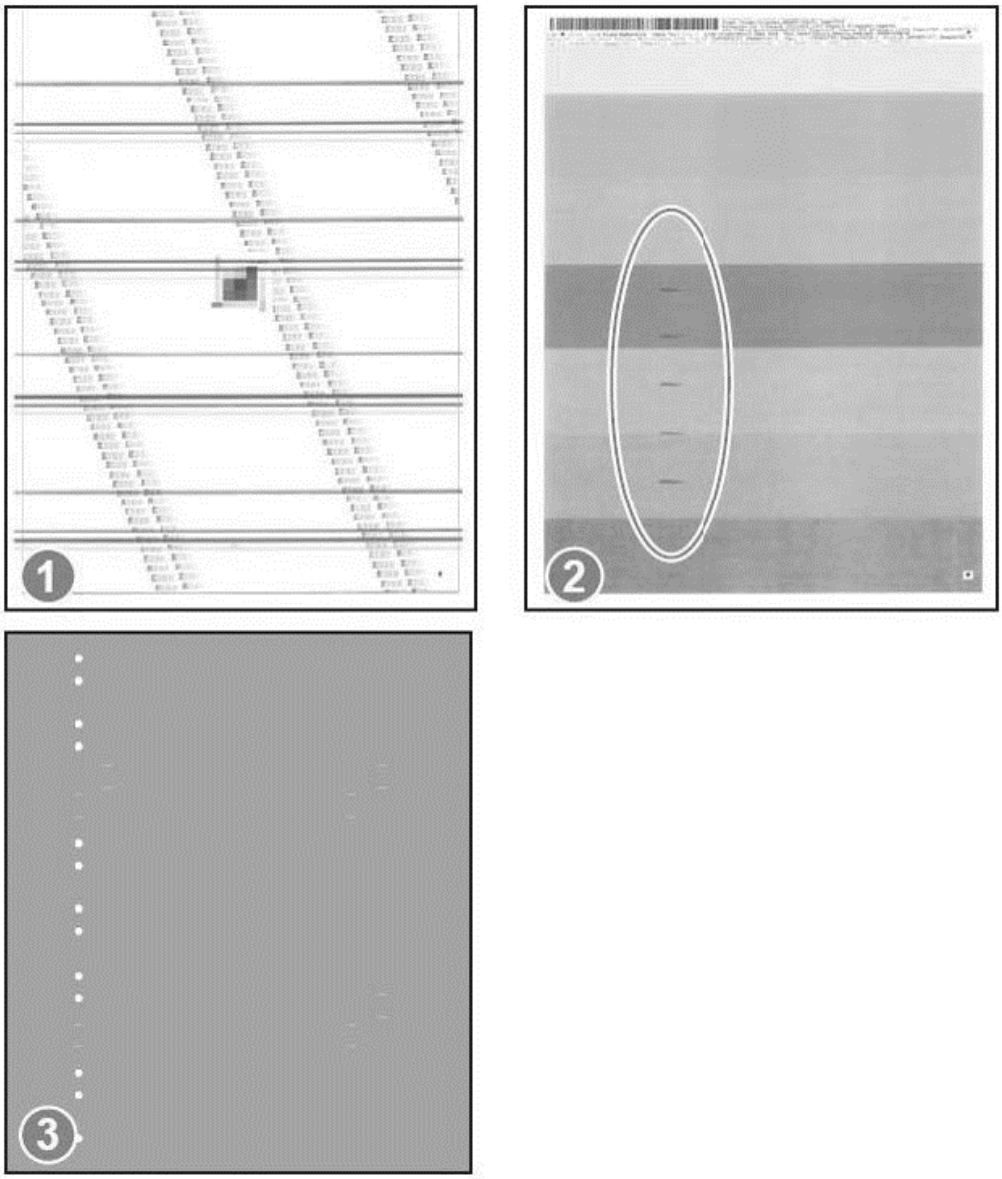
The figures in this section show color repetitive defect pages. However, the process for measuring repetitive defects is valid for mono pages.

1. Identify a repetitive defect on the page.

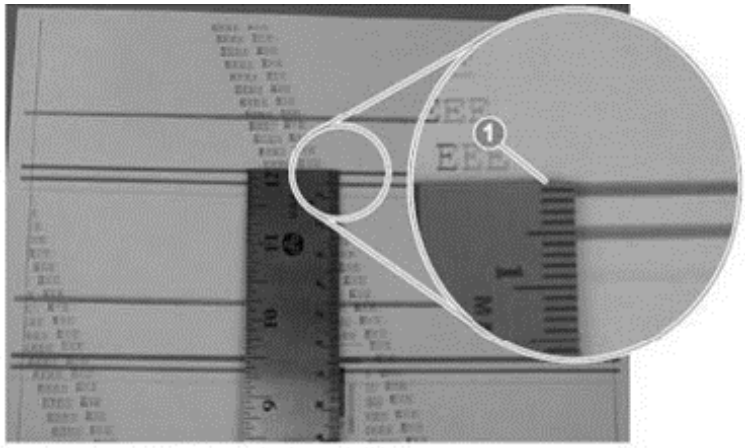
TIP: Print a cleaning page to see if that resolves the defect.

NOTE: These are examples only, other types of repetitive defects might appear on a page.

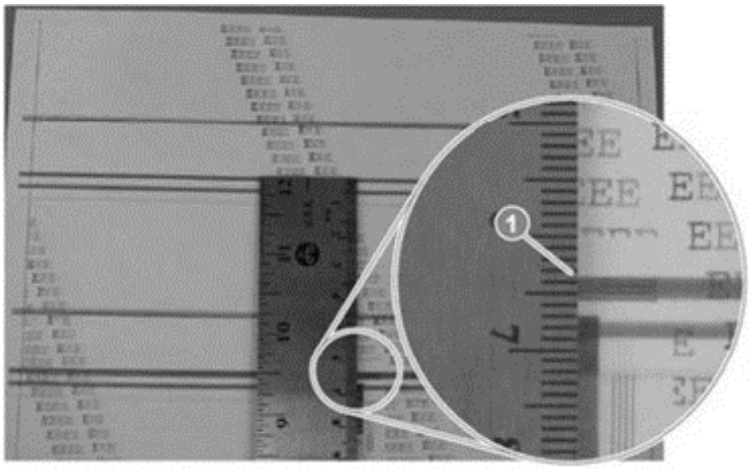
- Lines (callout 1)
- Smudges (callout 2)
- Dots or spots (callout 3)



2. Position a metric ruler on the page with the “zero” ruler mark at one occurrence of the defect (callout 1).

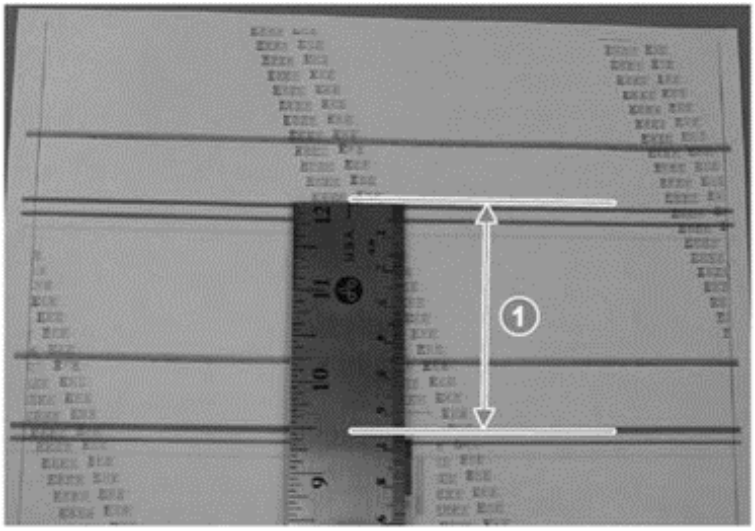


3. Locate the next occurrence of the defect (callout 1).



4. Measure the distance (in millimeters) between the two occurrences (callout 1).

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.



Printer-specific print quality troubleshooting guide

Light print

Figure 3-2 Light print

Description

Print is light on the entire page.

Solution

Poor contact between the transfer roller contact and the transfer roller shaft.

Clean the contacts. If the problem remains after cleaning, check the contacts for deformation or damage. Replace any defective parts.

Dark print

Figure 3-3 Dark print

Description

The image on the page is too dark.

Solution

- Poor contact between the drum grounding contact and the toner cartridge.

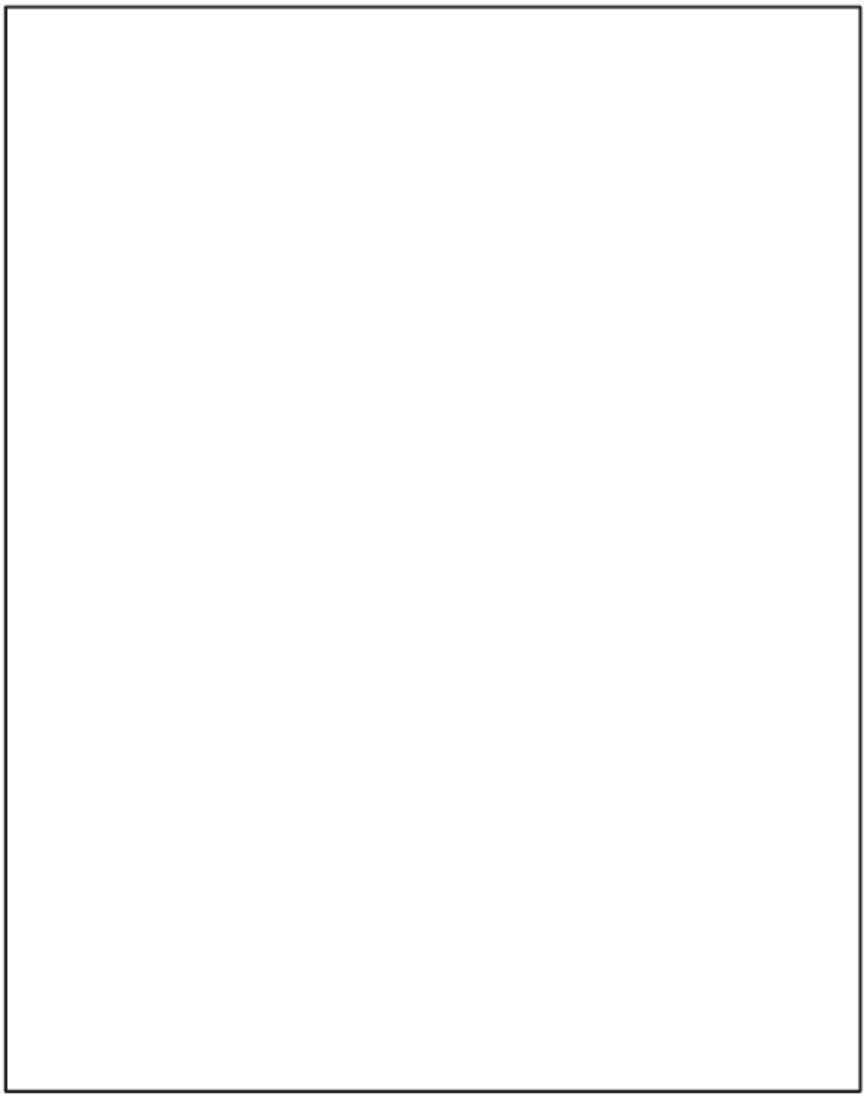
  Clean the contacts. If the problem remains after cleaning, check the contacts for deformation or damage. Replace any defective parts.

- Poor contact between the primary charging bias contact and the toner cartridge.

  Clean the contacts. If the problem remains after cleaning, check the contacts for deformation or damage. Replace any defective parts.

Blank page

Figure 3-4 Blank page



Description

The page is completely blank.

Solution

- Poor contact between the drum grounding contact and the toner cartridge.

  Clean the contacts. If the problem remains after cleaning, check the contacts for deformation or damage. Replace any defective parts.

- The high-voltage power supply is defective (no developing bias).

  Replace the engine controller PCA.

All black

Figure 3-5 All black page

Description

The page is all black.

Solution

- Poor contact between the drum grounding contact and the toner cartridge.

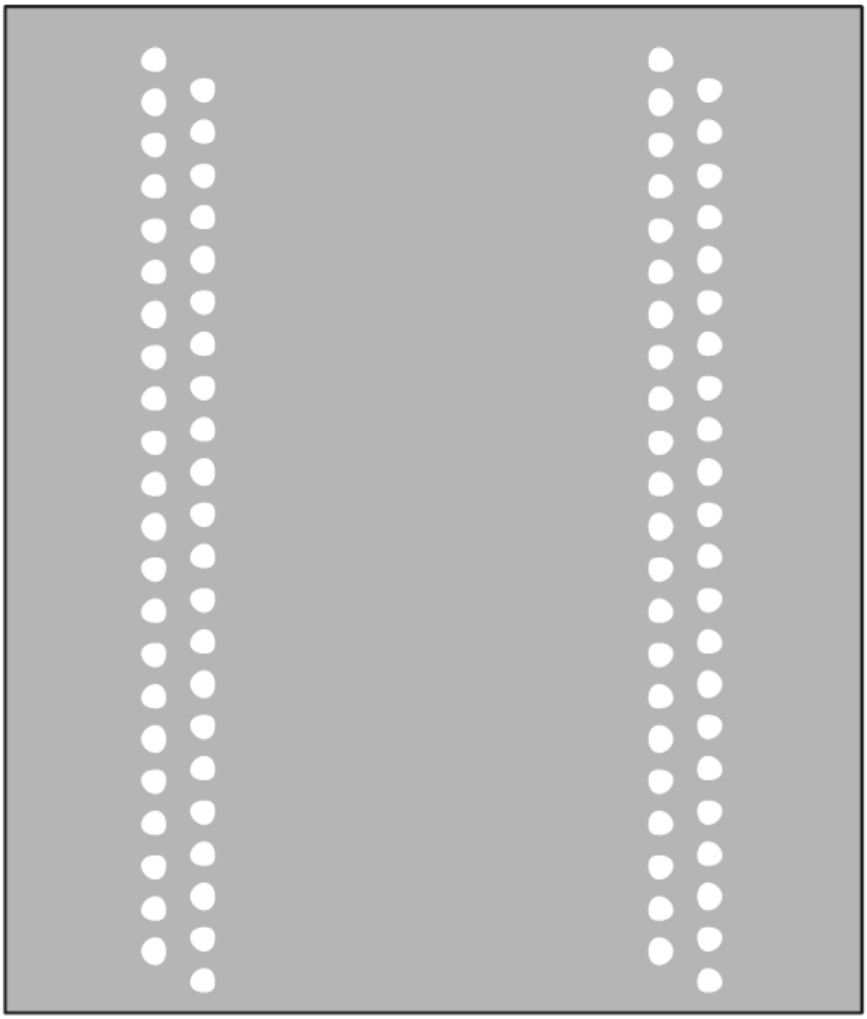
  Clean the contacts. If the problem remains after cleaning, check the contacts for deformation or damage. Replace any defective parts.

- The primary charging roller is defective.

  Replace the toner cartridge.

White spots

Figure 3-6 White spots



Description

White spots appear on the page.

Solution

- The static charge eliminator is dirty.

  Clean the static charge eliminator.

- The transfer roller is deformed or damaged.

  Replace the transfer roller.

- Poor contact between the transfer roller contact and the transfer roller shaft.

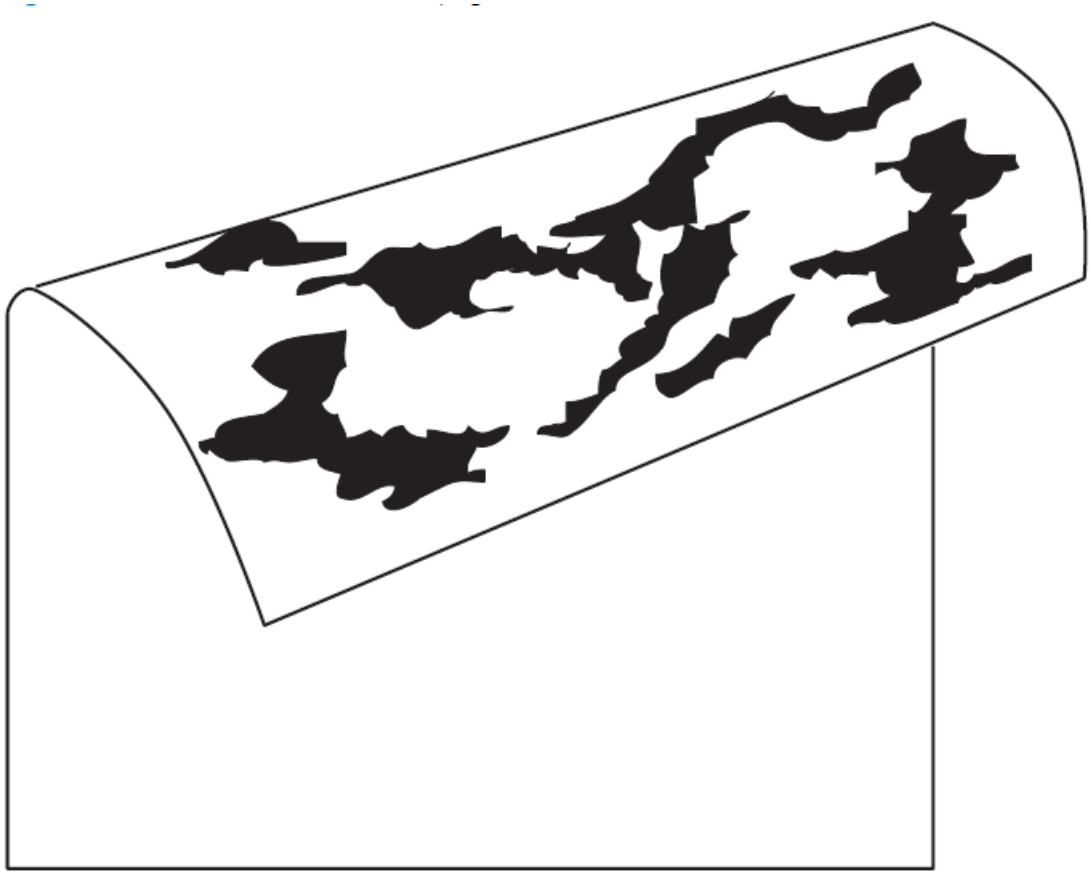
  Clean the contacts. If the problem remains after cleaning, check the contacts for deformation or damage. Replace any defective parts.

- The static charge eliminator is deformed or damaged.

  Replace the printer

Dirt on the back of the page

Figure 3-7 Dirt on the back of the page



Description

The back of the page is dirty.

Solution

- The transfer roller is dirty

  Replace the transfer roller

- The fuser inlet guide or separation guide is dirty.

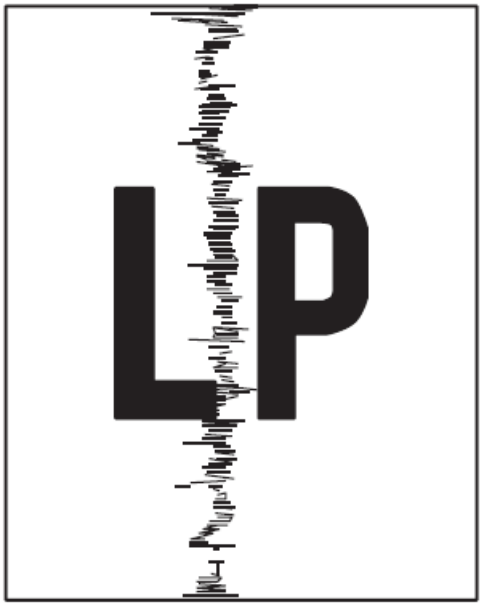
  Clean the dirty parts. If the contamination does not come off, replace the fuser.

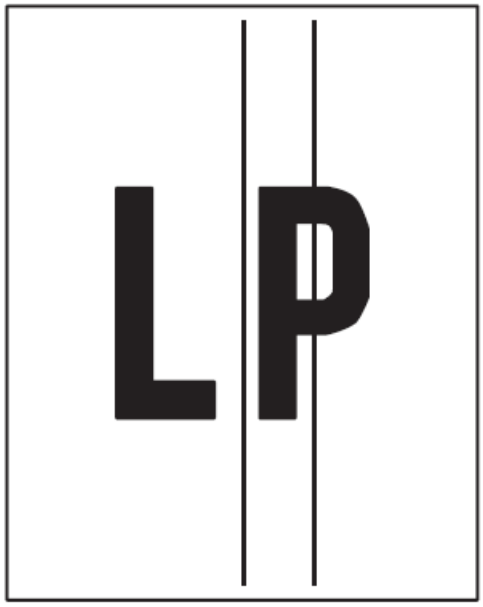
- The pressure roller is dirty.

  Print 2 or 3 blank page in color mode. If the contamination does not come off, replace the fuser

Vertical lines

Figure 3-8 Vertical lines





Description

Vertical bands or streaks appear on the page.

Solution

- Inspect the toner cartridge.

  If scratches are present on the surface of the photosensitive drum, replace the toner cartridge.

- Inspect the fuser film.

  If scratches are present on the surface of the film, replace the fuser.

Vertical white lines

Figure 3-9 Vertical white lines

Description

Vertical bands or streaks appear on the page.

Solution

- Inspect the toner cartridge.

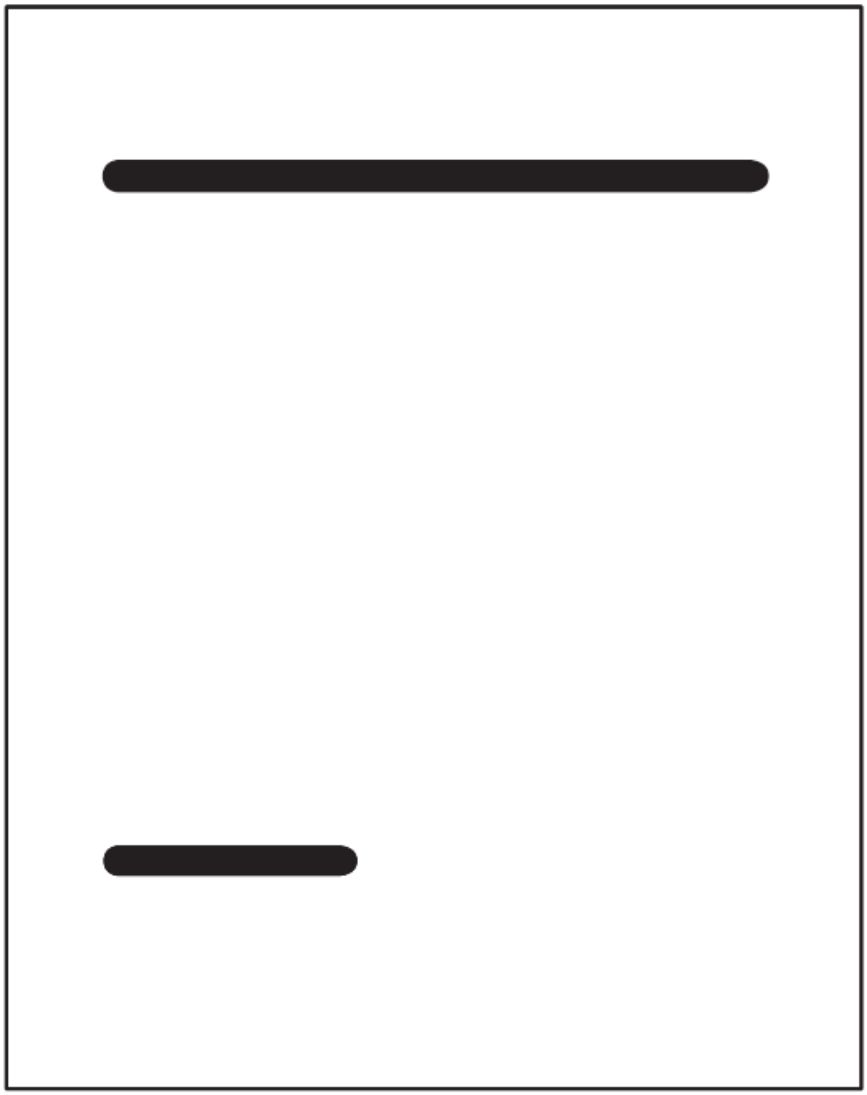
  If scratches are present on the developer roller or photosensitive drum in the toner cartridge, replace the toner cartridge.

- The laser scanner mirror is dirty.

  Replace the printer.

Horizontal lines

Figure 3-10 Horizontal lines



Description

Horizontal lines appear on the page.

Solution

- If the lines are repeating down the page, see Use a ruler to measure between repetitive defects on page 79 for instructions on how to measure the distance between the lines and associate a printer component with that measurement.

  Clean any contamination off of the identified roller. If the contamination cannot be removed, replace the roller or corresponding printer component.

- Horizontal scratches are present on the photosensitive drum.

  Replace the toner cartridge.

- Horizontal scratches are present on the fuser film.

Replace the fuser.

Horizontal white lines

Figure 3-11 Horizontal white lines

Description

Horizontal white lines appear on the page.

Solution

- If the lines are repeating down the page, see Use a ruler to measure between repetitive defects on page 79 for instructions on how to measure the distance between the lines and associate a printer component with that measurement.

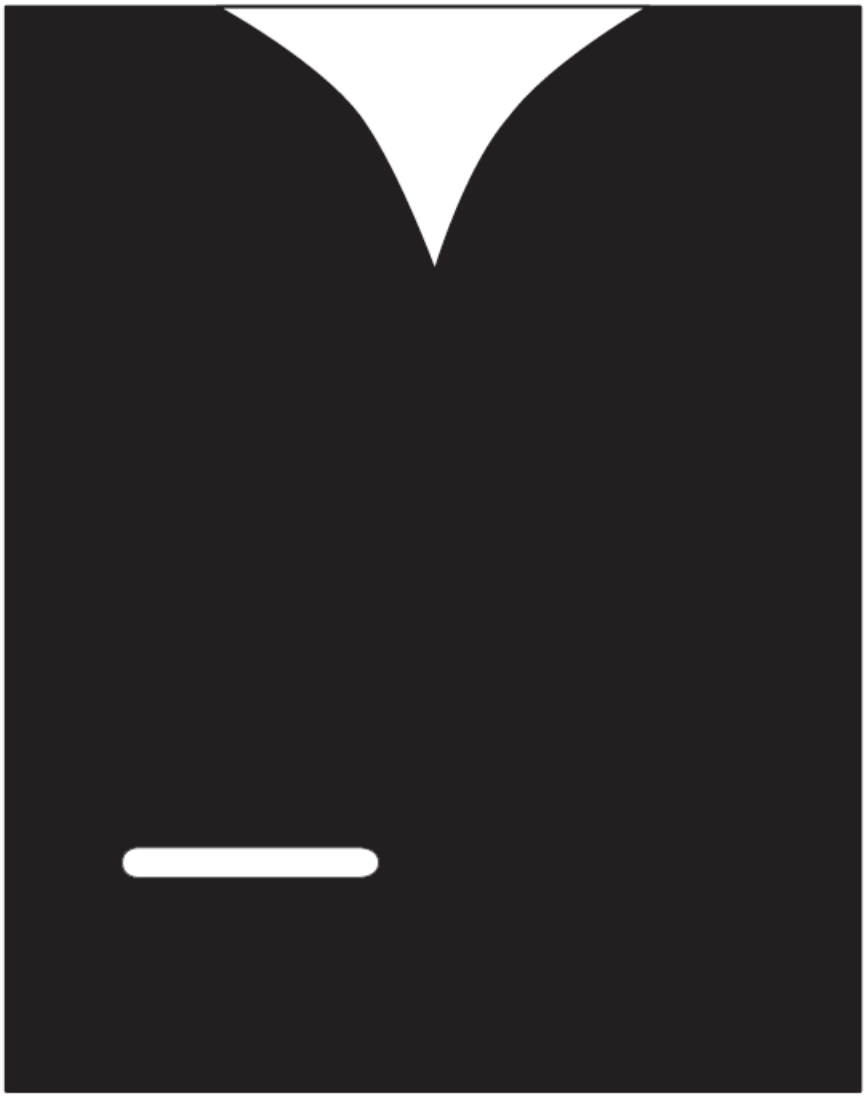
Clean any contamination off of the identified roller. If the contamination cannot be removed, replace the roller or corresponding printer component.

- Horizontal scratches are present on the photosensitive drum.

  Replace the toner cartridge.

Dropouts

Figure 3-12 Dropouts



Description

Portions of the image are missing.

Solution

- If transfer roller is deformed or has deteriorated.

Replace the transfer roller

- If the primary charging roller, developer roller, or photosensitive drum in the toner cartridge are deformed or have deteriorated.

  Replace the toner cartridge.

- The fuser film is deformed or has deteriorated.

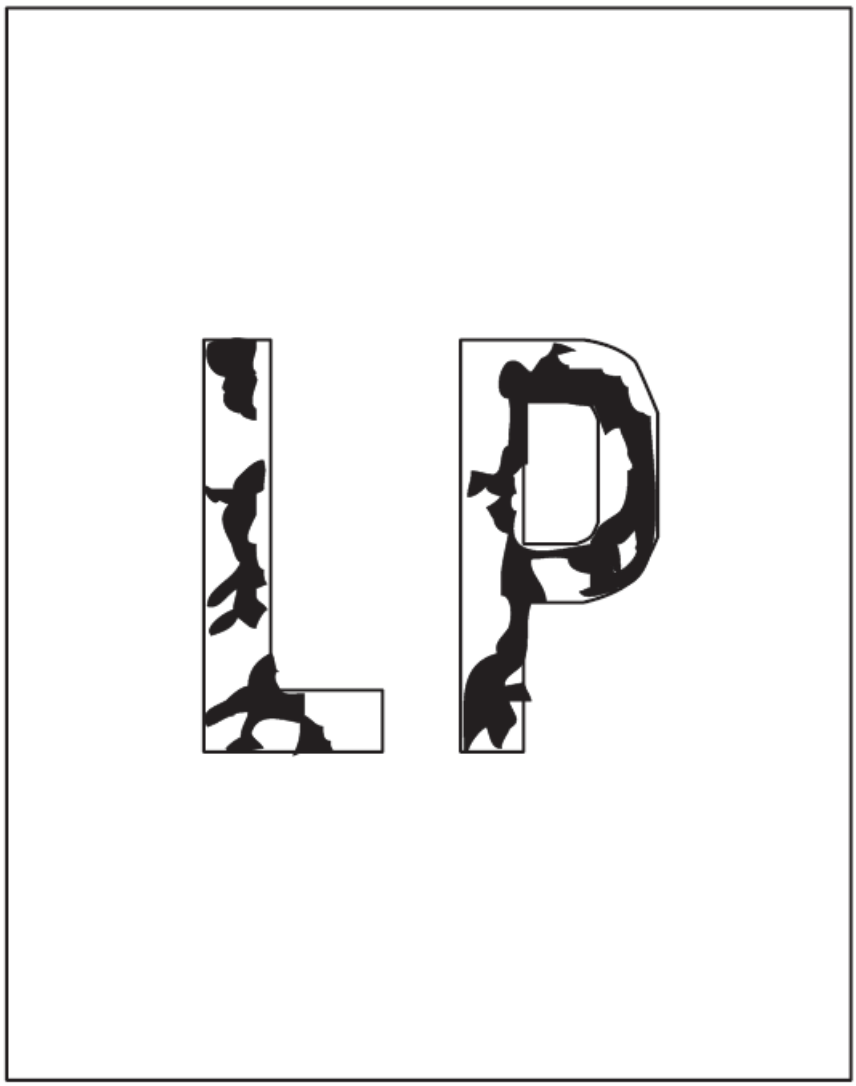
  Replace the fuser.

- The high-voltage power supply is defective (no transfer bias output).

  Replace the engine controller assembly.

Loose toner

Figure 3-13 Loose toner



Description

Toner is not fully fused to the paper.

Solution

- The fuser film or pressure roller is scarred or deformed.

  Replace the fuser.

- If the thermistor is defective.

  Replace the fuser.

- The fuser heater is defective.

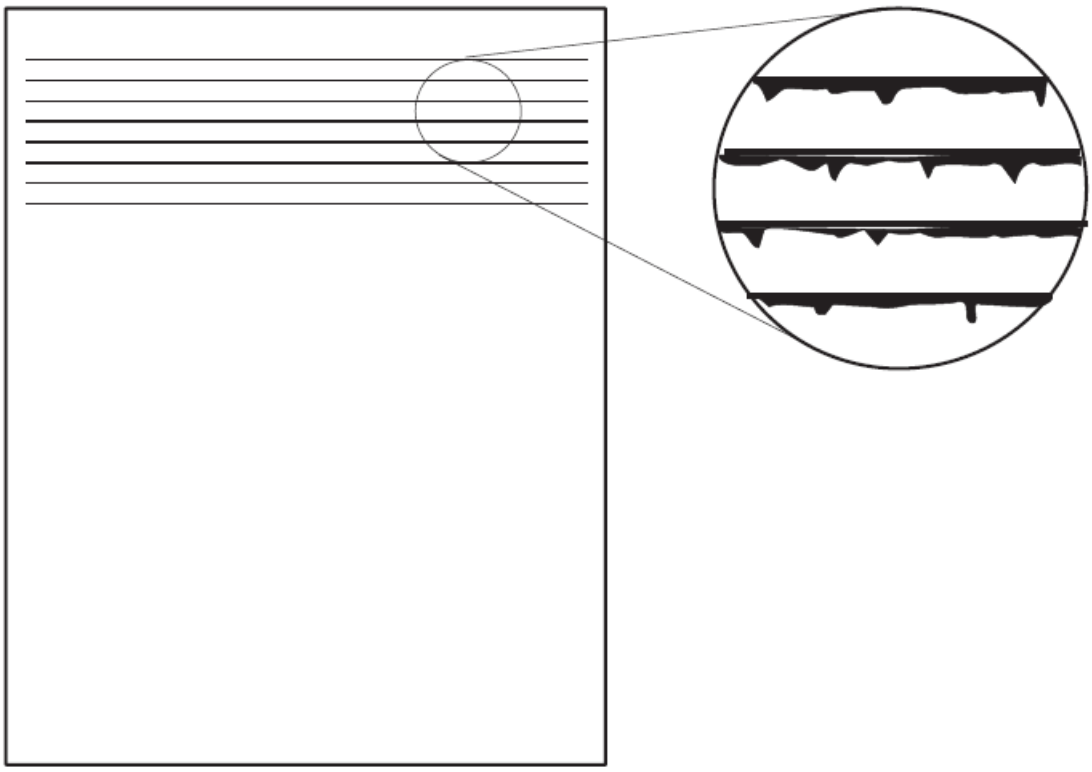
  Replace the fuser.

- The fuser control circuit is defective.

  Replace the engine controller assembly.

Toner smear

Figure 3-14 Toner smear



Description

Toner is smeared on the paper.

Solution

- Residual paper present in the printer.

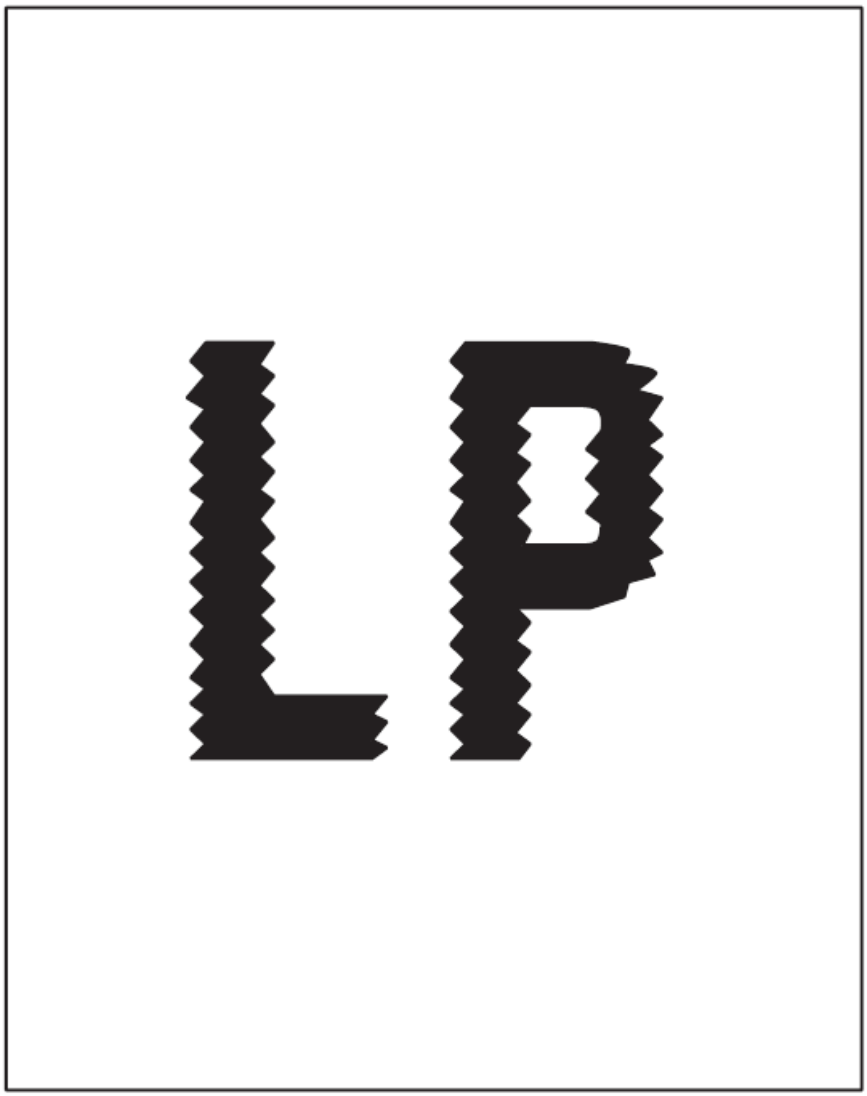
  Remove residual paper.

- Poor toner cartridge grounding contact.
- A foreign substance is adhered to the fuser inlet guide or the guide is dirty.

  Clean the fuser inlet guide. If the contamination does not come off, replace the fuser

Misformed or misplaced image

Figure 3-15 Malformed or misplaced image



Description

An image on the page is misformed or incorrectly placed.

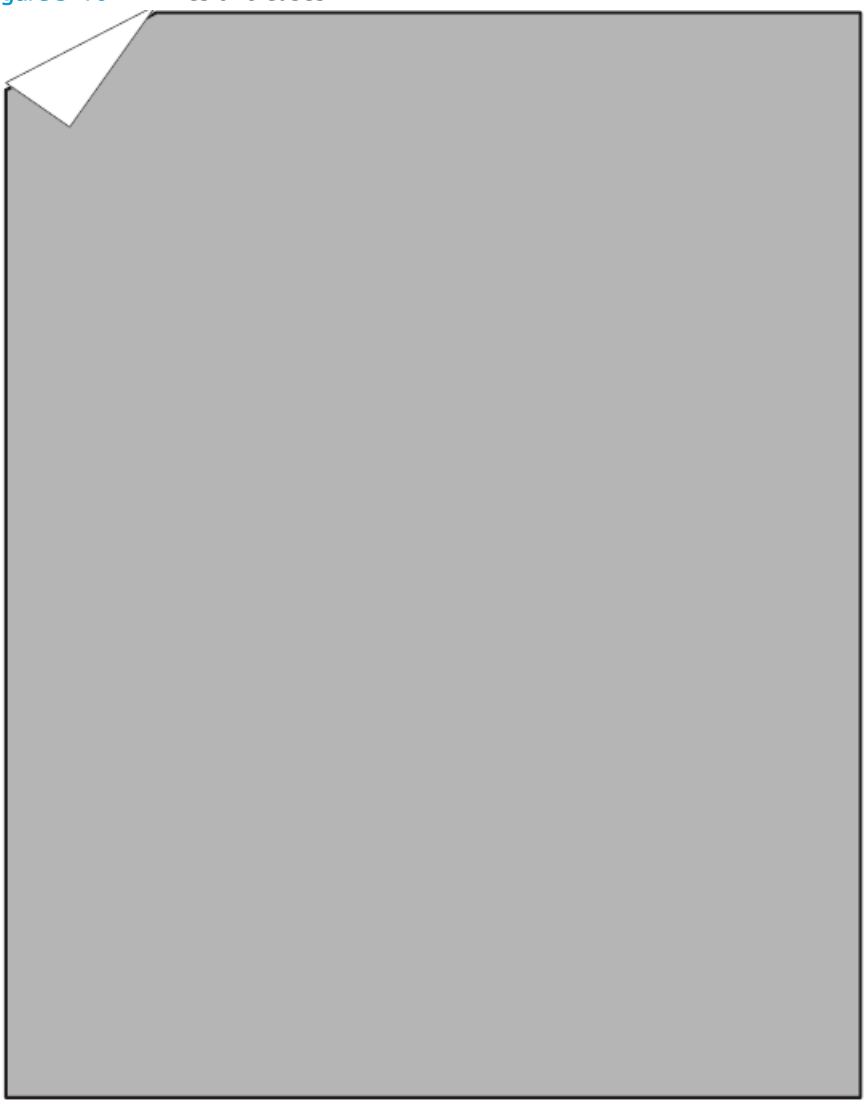
Solution

- The laser scanner assembly is defective.

  Replace the printer.

Wrinkles or creases

Figure 3-16 Wrinkles or creases



Description

The printed page contains wrinkles or creases.

Solution

- The feed roller or paper feed guide are dirty.

  Clean any dirty parts.

- A foreign substance is adhered to the fuser inlet guide or the guide is dirty.

Dirt on the front of the page

Figure 3-17 Dirt on the front of the page

Description

The front of the page is dirty (stray toner marks).

Solution

- If the photosensitive drum or the developer roller is dirty.

  Replace the toner cartridge.

- The fuser film or pressure roller is contaminated.

  Perform a Fuser Roller Cleaning operation in multipurpose mode. If the contamination does not come off, replace the fuser.

Vertical density variation

Figure 3-18 Vertical density variation

Description

The vertical density varies on images on the page.

Solution

- The photosensitive drum surface has deteriorated.

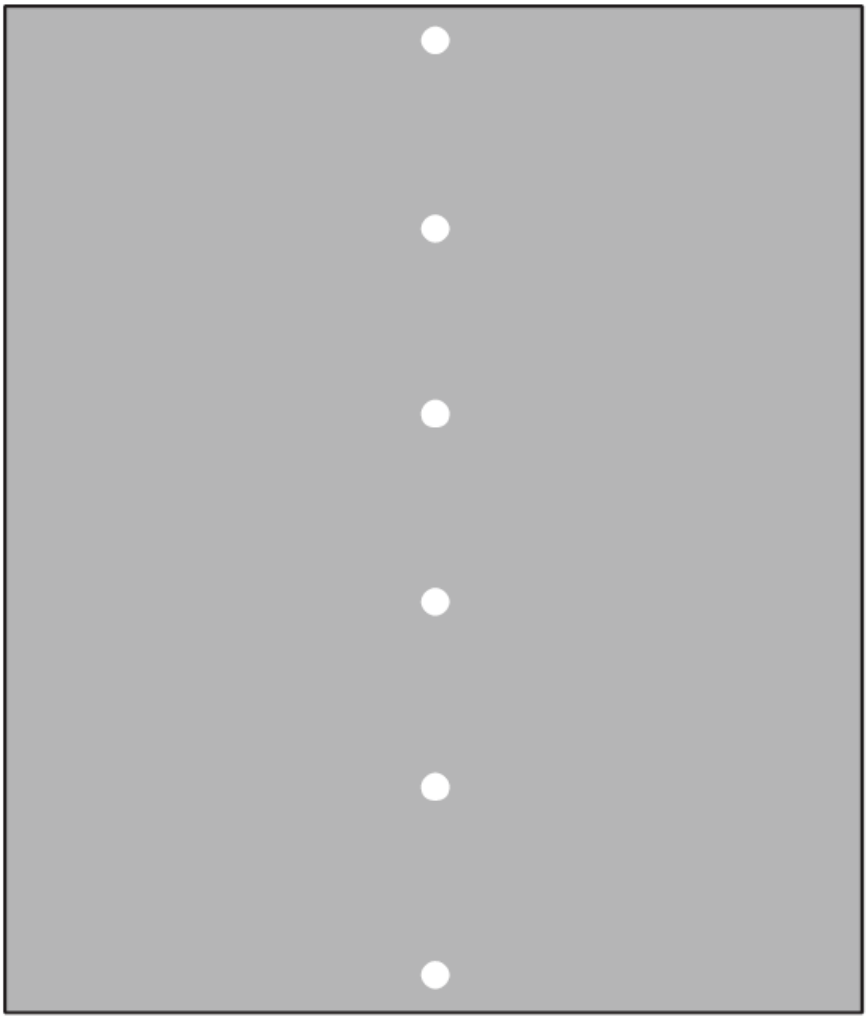
  Replace the toner cartridge.

- The laser scanner assembly is defective.

  Replace the printer.

Repetitive image defects

Figure 3-19 Repetitive image defects



Description

Repetitive white spots appear in an image.

Solution

- If the lines are repeating down the page, see Use a ruler to measure between repetitive defects on page 79 for instructions on how to measure the distance between the lines and associate a printer component with that measurement.

  Clean any contamination off of the identified roller. If the contamination cannot be removed, replace the roller or corresponding printer component.

- The transfer roller is deformed or has deteriorated.

  Replace the transfer roller.

- A foreign substance is adhered to the primary charging roller or photosensitive drum.

  Replace the toner cartridge. ENWW

Solve paper-handling problems

Printer does not pick up paper or misfeeds

Introduction

The following solutions can help solve problems if the printer is not picking up paper from the tray or is picking up multiple sheets of paper at one time. Either of these situations can result in paper jams.

- The product does not pick up paper
- The product picks up multiple sheets of paper

The product does not pick up paper

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

1. Open the product and remove any jammed sheets of paper.
2. Load the correct size of paper for your job.
3. Make sure you select the correct paper size and type when setting up the print job.
4. Make sure the paper guides in the input tray are adjusted correctly for the size of paper.
5. The rollers above the input tray might be contaminated. Clean the rollers with a lint-free cloth dampened with warm water.

The product picks up multiple sheets of paper

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

1. Remove the stack of paper from the input tray and flex it, rotate it 180 degrees, and flip it over. Return the stack of paper to the input tray.
2. Use only paper that meets HP specifications for this product.
3. Use paper that is not wrinkled, folded, or damaged. If necessary, use paper from a different package.
4. Make sure the input 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 input tray.
5. Make sure the paper guides in the tray are adjusted correctly for the size of paper.
6. Make sure the printing environment is within recommended specifications.

Prevent paper jams

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

- Use only paper that meets HP specifications for this printer.
- Use paper that is not wrinkled, folded, or damaged. If necessary, use paper from a different package.

- Use paper that has not previously been printed or copied on.
- If the frequent paper jam occurs, make sure the leading edge of the paper is waved. If yes, turn the stack of paper over in the tray.

Clear paper jams

Introduction

The following information includes instructions for clearing paper jams from the printer.

- Paper path jam sensor locations
- Experiencing frequent or recurring paper jams?
- Paper jam locations
- Clear jams from the input tray
- Clear jams from inside the product
- Clear jams from the output areas

Paper path jam sensor locations

The printer uses the following sensors to detect the paper as it moves through the paper path and to report to the DC controller if the paper has jammed.

- Feed sensor (PS1)

Frequent or recurring paper jams?

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

1. If paper has jammed in the printer, clear the jam and then print a configuration page to test the printer.
2. Check that the input tray is configured for the correct paper size and type. Adjust paper settings if necessary.
    1. Print a configuration page to determine the IP address or host name.
        1. Press and hold the **Resume** button for three seconds.
        2. Release the **Resume** button.
    2. Open a web browser, and in the address line, type the IP address or host name exactly as it displays on the printer configuration page. 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.

    3. Click the **System** tab, and then click the **Paper Setup** page.
    4. Select the type of paper that is in the input tray.
    5. Select the size of paper that is in the input tray.

3. Turn the printer off, wait 30 seconds, and then turn it on again.
4. Print a configuration page to test the printer.
    1. Press and hold the **Resume** button for three seconds.
    2. Release the **Resume** button.

    If none of these steps resolves the problem, the printer might need service. Contact HP customer support.

Original paper jam in front of scanner

HP Laser MFP 432fdn

NOTE: Illustrations on this user's guide may differ from your machine depending on its options or models. Check your machine type.

1. Open the document feeder cover.

2. Gently remove the original carefully from the document feeder.

3. Close the document feeder cover.

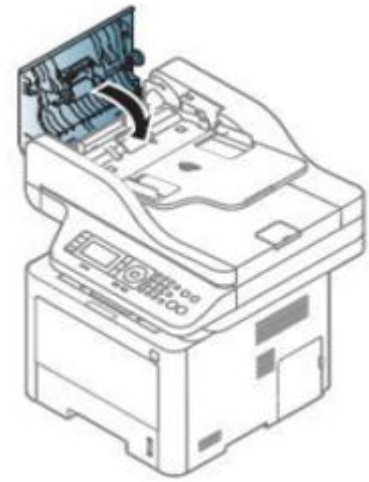
Original paper jam inside of scanner

HP Laser MFP 432fdn

1. Open the document feeder cover.

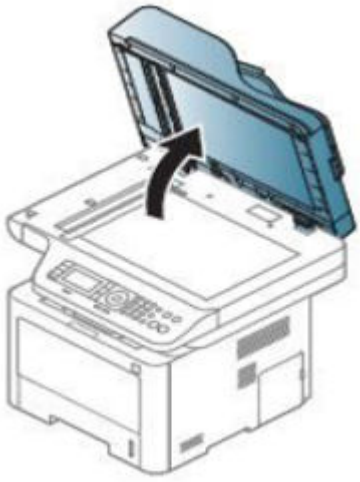
2. Gently remove the original carefully from the document feeder.

3. Close the document feeder cover.



If you see no paper in this area, go to next step.

4. Open the document feeder.



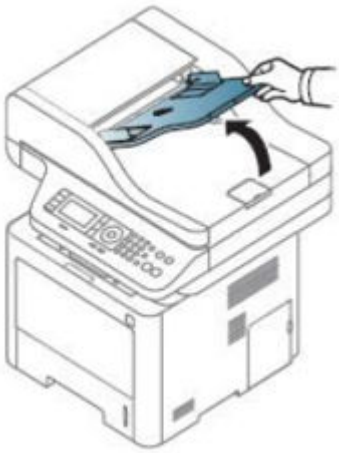
5. Grasp the misfeed original, and remove the paper from the feed area by carefully pulling it.

6. Close the document feeder.

Original paper jam in exit area of scanner

HP Laser MFP 432fdn

1. Lift up the stacker.



2. Gently remove the original carefully from the document feeder.

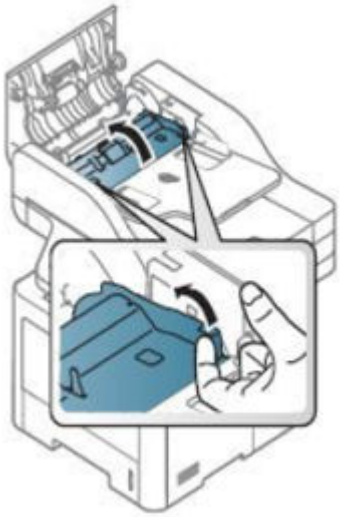
3. Pull down the stacker.

Original paper jam in scanner duplex path

HP Laser MFP 432fdn

1. Open the document feeder cover.

2. Open the duplex jam cover.



3. Pull the original document gently out of the document feeder.

4. Close the duplex jam cover and document feeder cover.

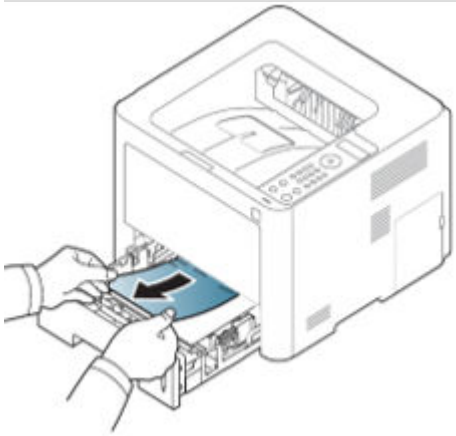
In tray 2

HP Laser 408dn

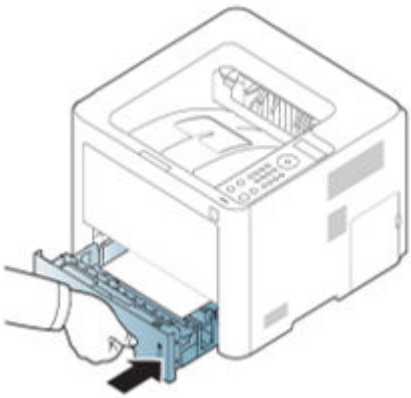
NOTE: To avoid tearing the paper, pull the jammed paper out slowly and gently.

1. Pull out tray 2 .

2. Remove the jammed paper by gently pulling it straight out.



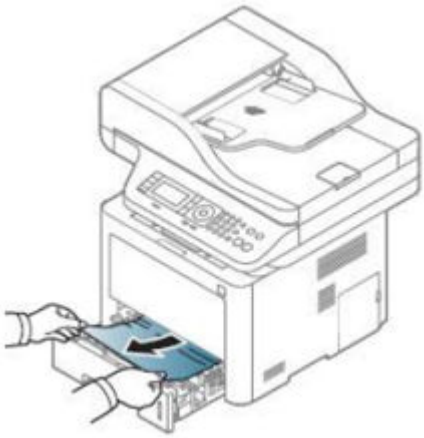
3. Insert tray 2 back into the machine until it snaps into place.



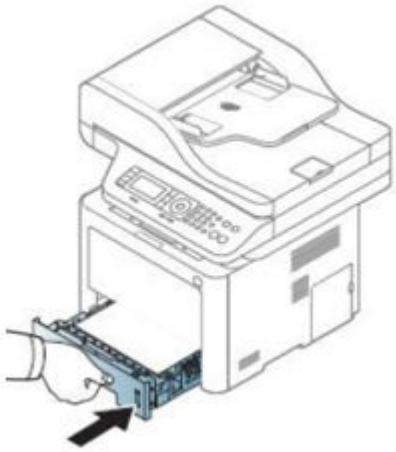
HP Laser MFP 432fdn

1. Pull out tray 1 .

2. Remove the jammed paper by gently pulling it straight out.



3. Insert tray 1 back into the machine until it snaps into place.

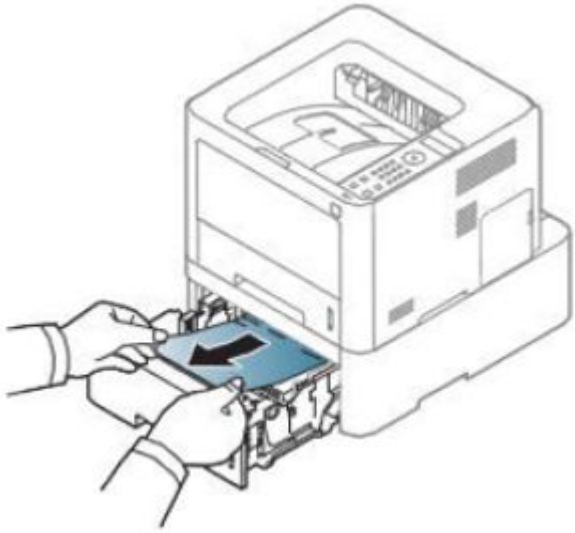


In optional tray (Tray 3)

HP Laser 408dn

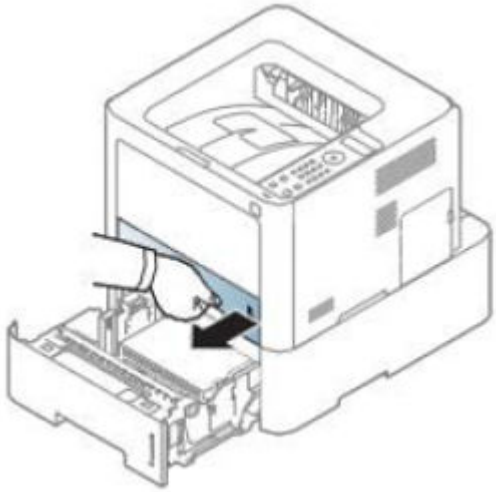
1. Pull out optional tray 3.

2. Remove the jammed paper from the machine.

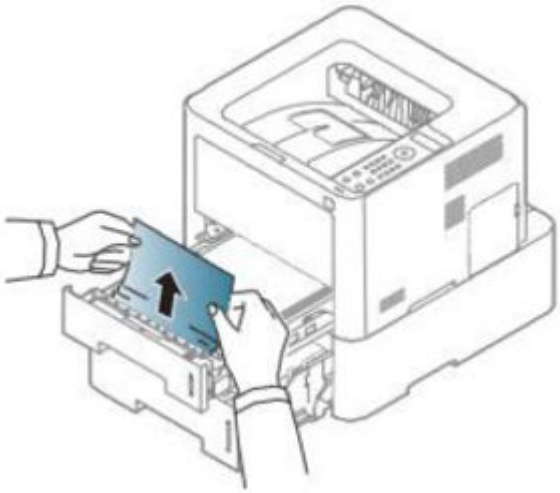


If the paper does not move when you pull or if you do not see the paper in this area, stop and go to the next step.

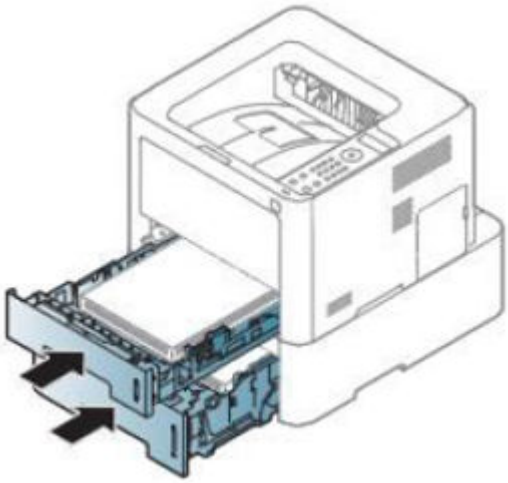
3. Pull tray 2 half-way out.



4. Pull the paper straight up and out.



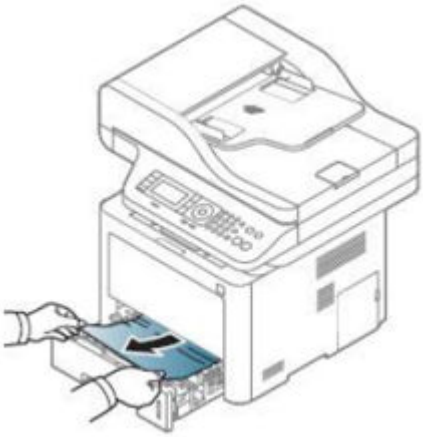
5. Insert the trays back into the machine.



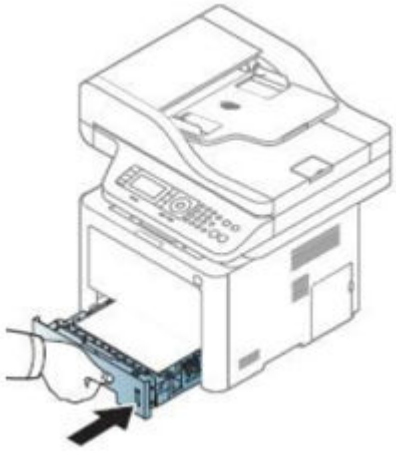
HP Laser MFP 432fdn

1. Pull out optional tray 3.

2. Remove the jammed paper from the machine.



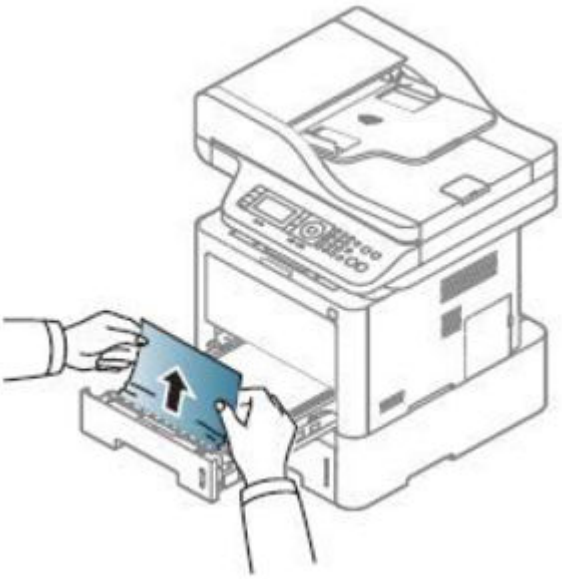
3. Insert tray 3 back into the machine until it snaps into place.



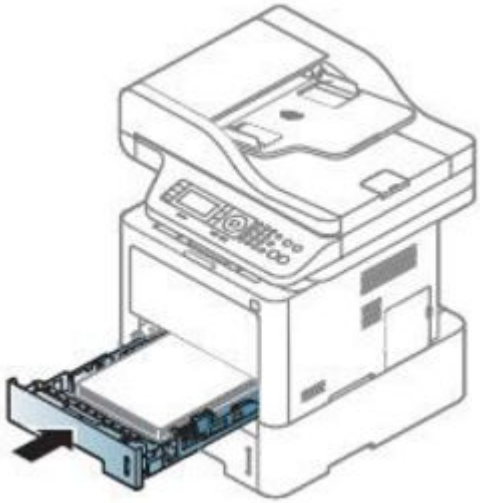
If you do not see the paper in this area, stop and go to next step :

4. Pull out tray 2.

5. Pull the paper straight up and out.

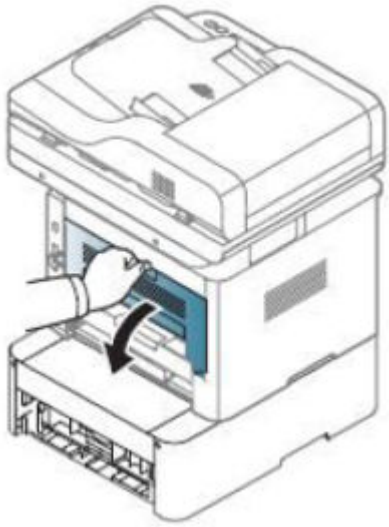


6. Insert the tray 2 back into the machine.

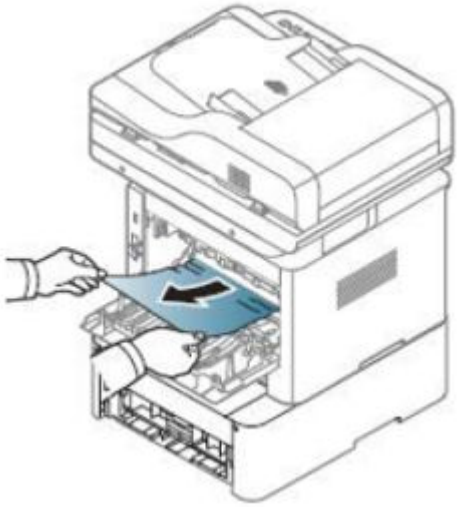


If you do not see the paper in this area, stop and go to next step:

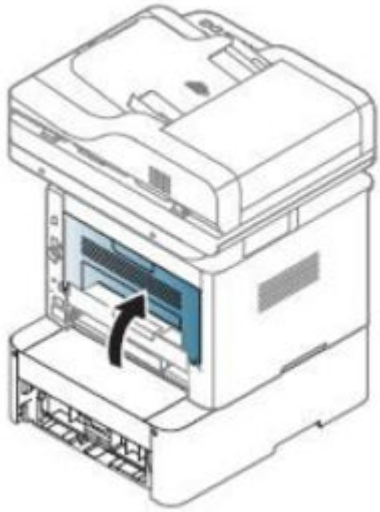
7. Open the rear cover.



8. Remove the jammed paper.



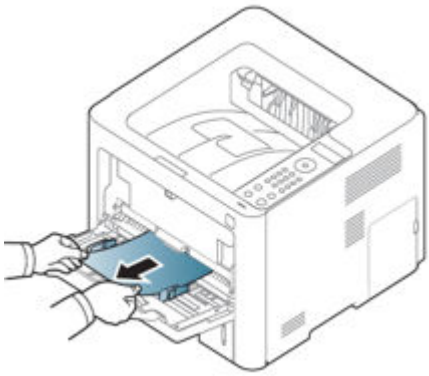
9. Close the rear cover.



Tray 1

HP Laser 408dn

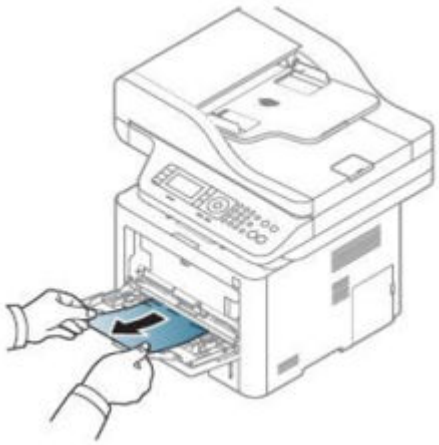
1. If the paper is not feeding properly, pull the paper out of the machine.



2. Open and close the front cover.

HP Laser MFP 432fdn

1. Pull out optional tray 2.



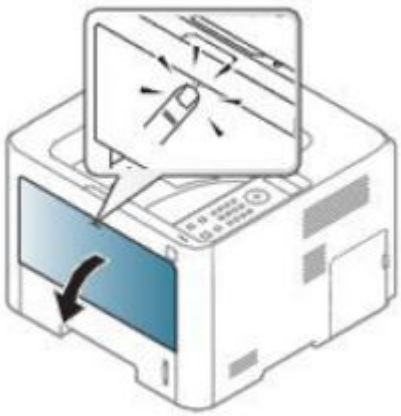
2. Remove the jammed paper from the machine.

In exit area

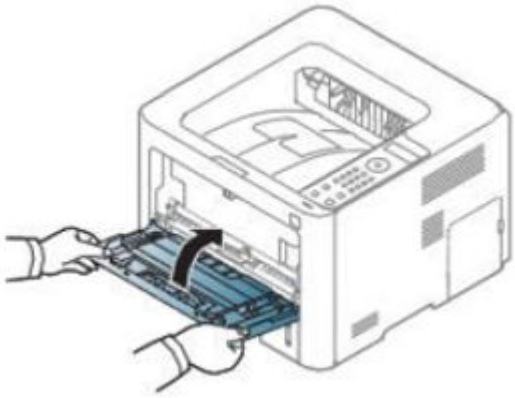
HP Laser 408dn

⚠ CAUTION: The fuser area is hot. Take care when removing paper from the machine.

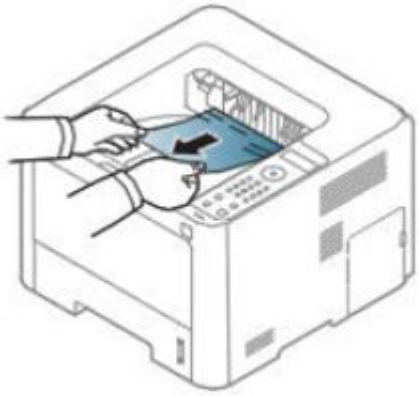
1. Open the MP Tray.



2. Close the MP Tray to eject the jammed paper from the machine.



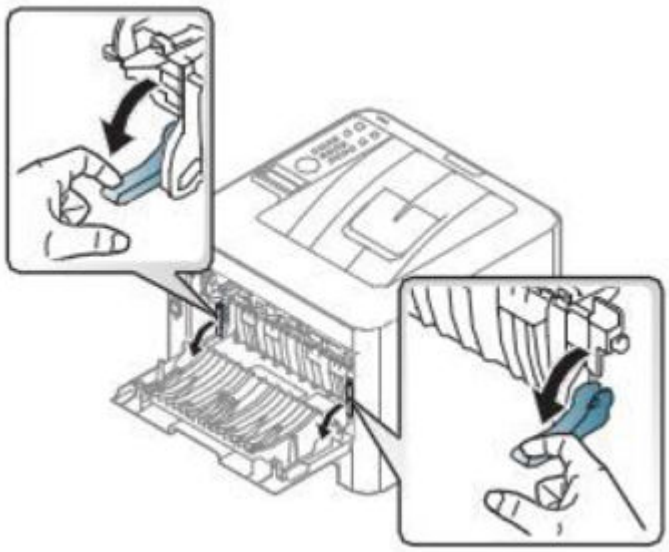
3. Gently pull the paper out of the output tray.



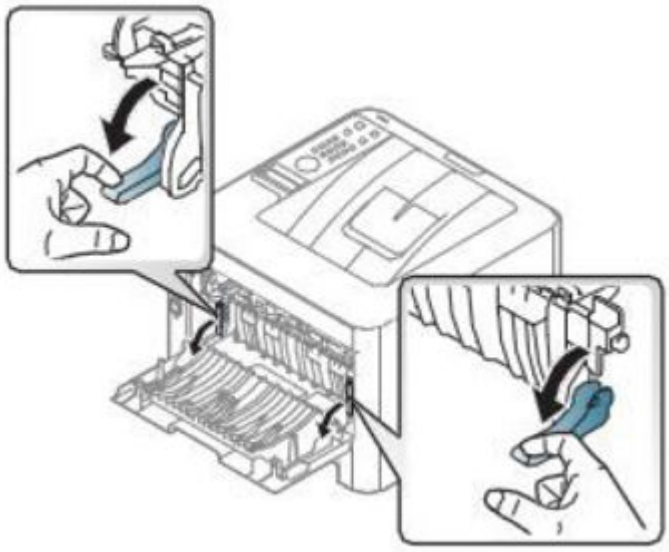
If you do not see the jammed paper or if there is any resistance when you pull, stop and go to the next step.

4. Open the rear cover.

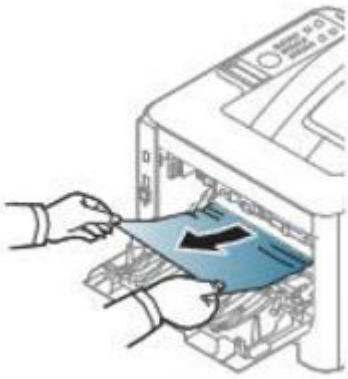
5. Pull down the both fuser levers.



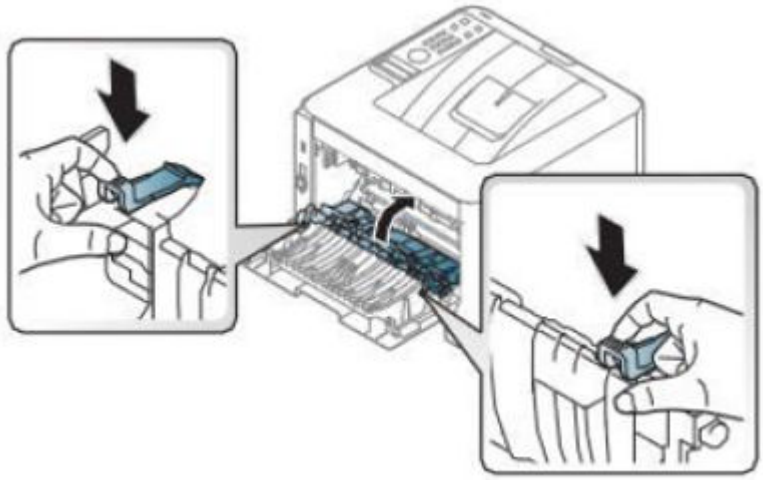
6. Pull down the both fuser levers.



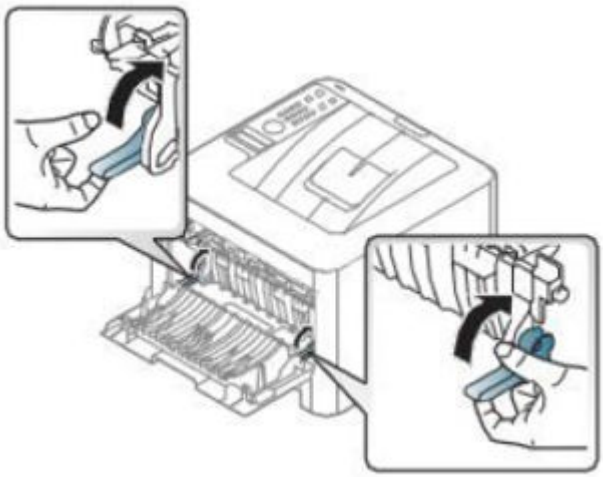
7. Remove the jammed paper by gently pulling it straight out.



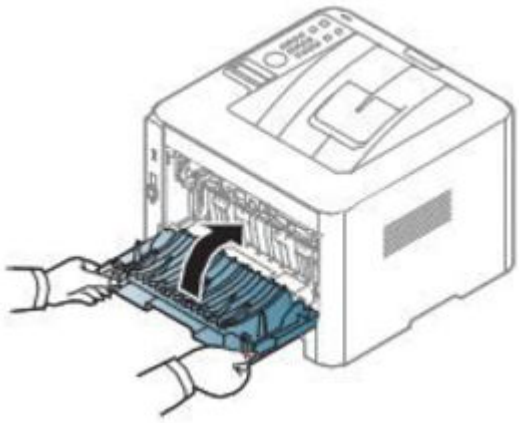
8. Close the fuser jam cover.



9. Pull up the both fuser levers.

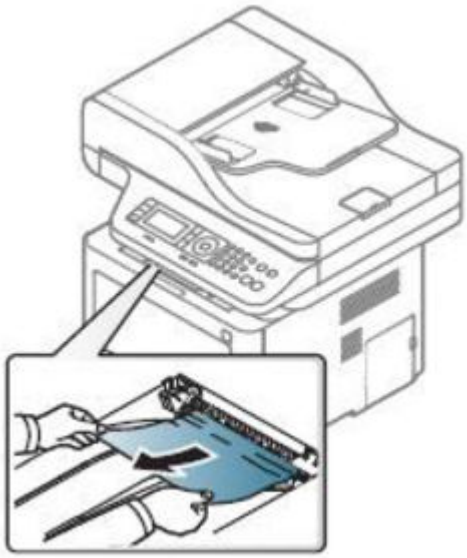


10. Close the rear cover.



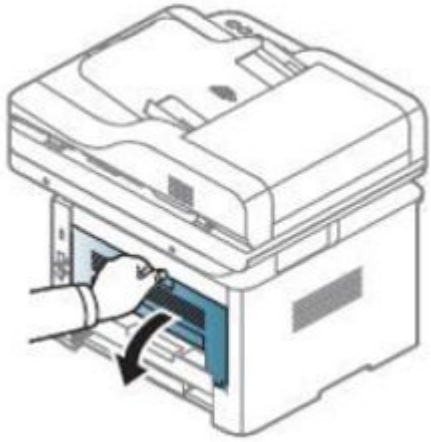
HP Laser MFP 432fdn

1. Remove the jammed paper by gently pulling it straight out.

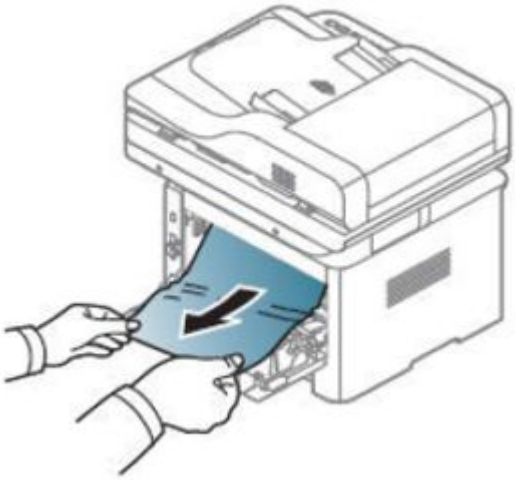


If you do not see the paper in this area, stop and go to next step:

2. Open the rear cover.



3. Remove the jammed paper by gently pulling it straight out.

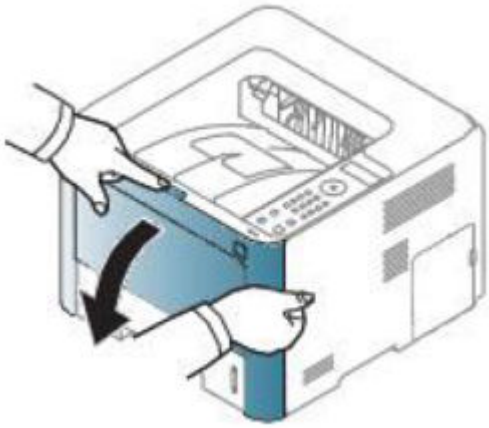


4. Close the rear cover.

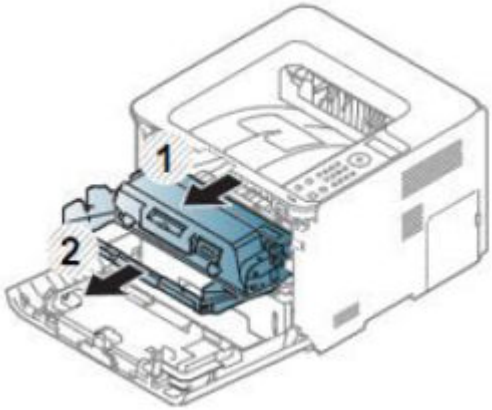
Inside the machine

HP Laser 408dn

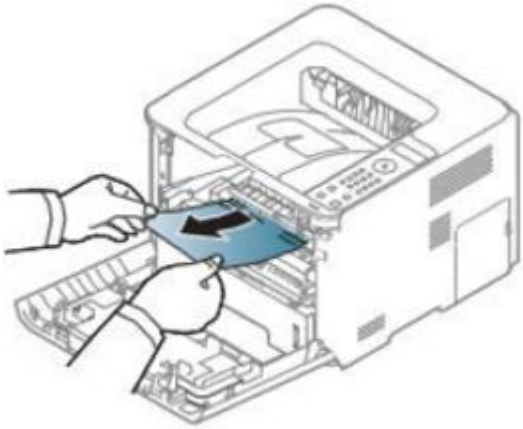
1. Open the front cover.



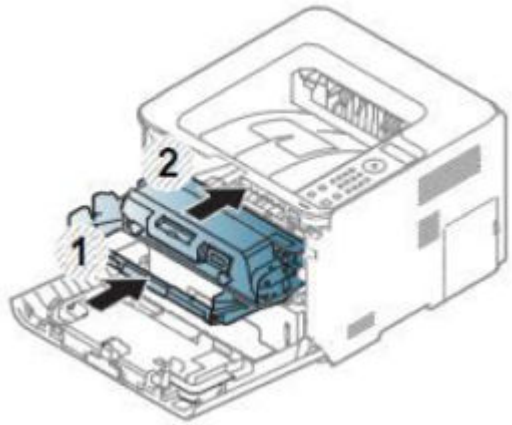
2. Pull out the toner cartridge and imaging unit.



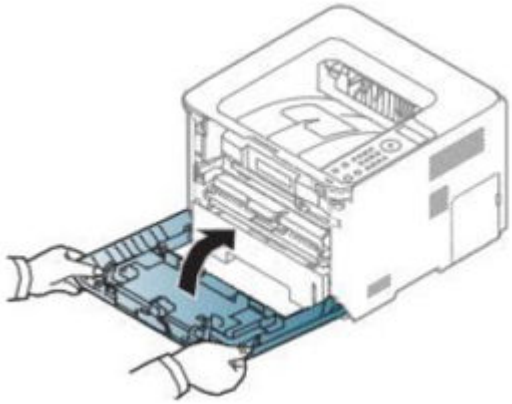
3. Remove the jammed paper by gently pulling it straight out.



4. Insert the imaging unit and toner cartridge.

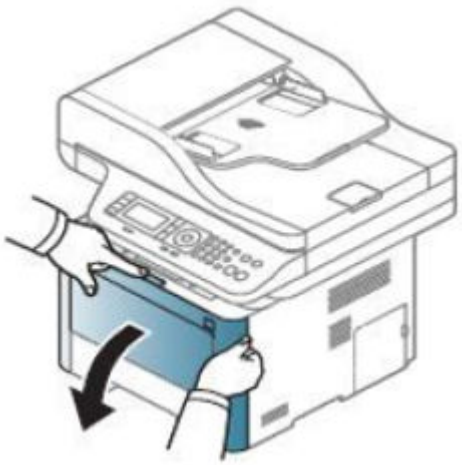


5. Close the front cover.

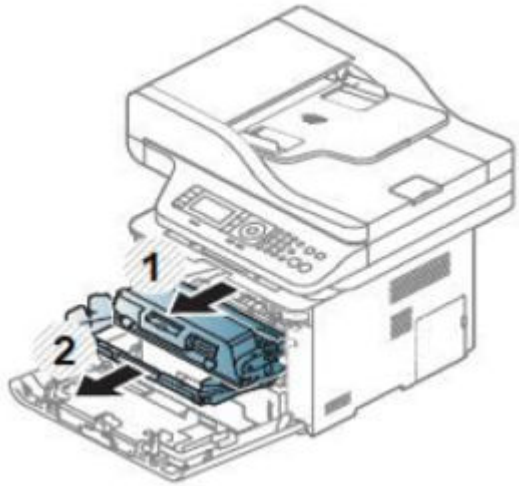


HP Laser MFP 432fdn

1. Open the front cover.

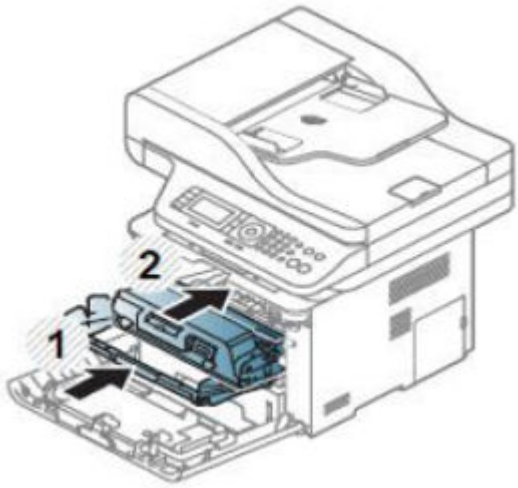


2. Pull the toner cartridge out.

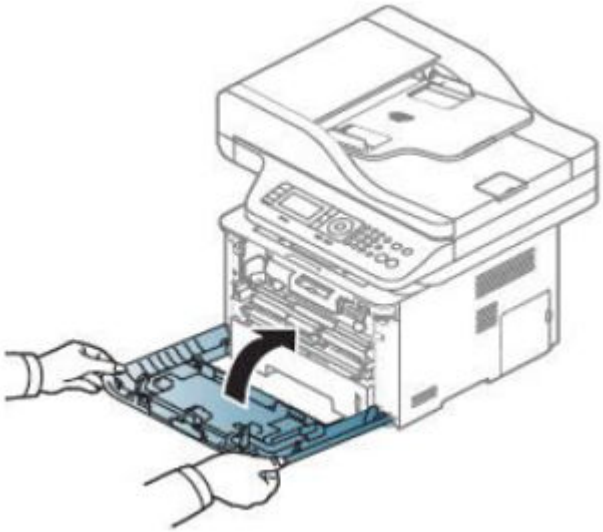


3. Remove the jammed paper by gently pulling it straight out.

4. Insert the toner cartridge.



5. Close the front cover.

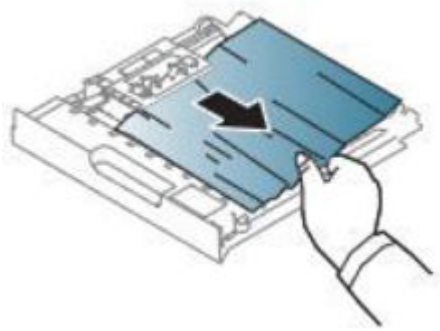


In the duplex unit area

HP Laser 408dn

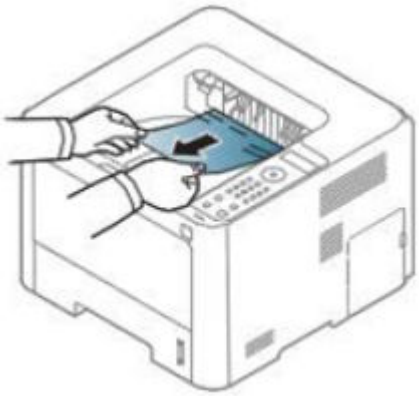
1. Pull the duplex unit out of the machine.

2. Remove the jammed paper from the duplex unit.



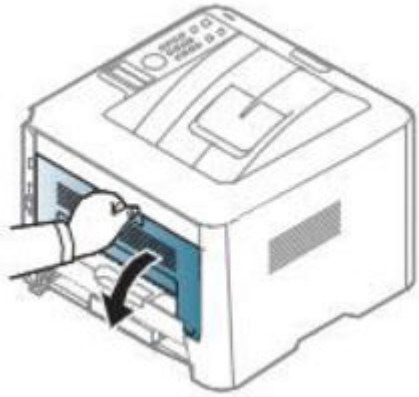
If the paper does not come out with the duplex unit, remove the paper from the bottom of the machine.

3. Insert the duplex unit into the machine.

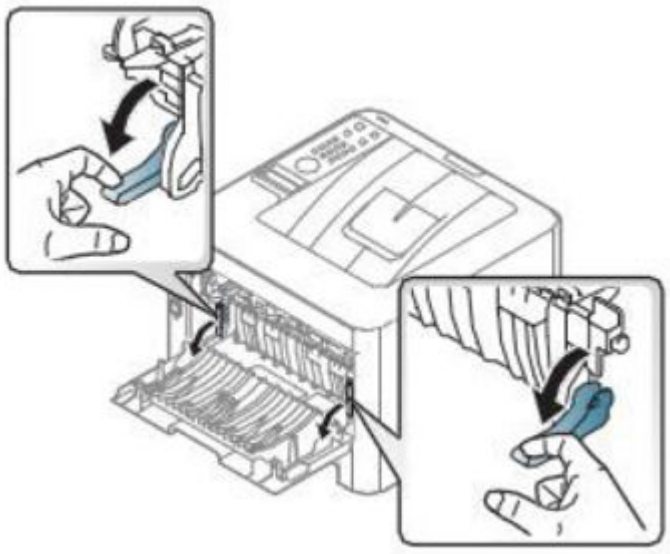


If you still do not see the paper, go to the next step.

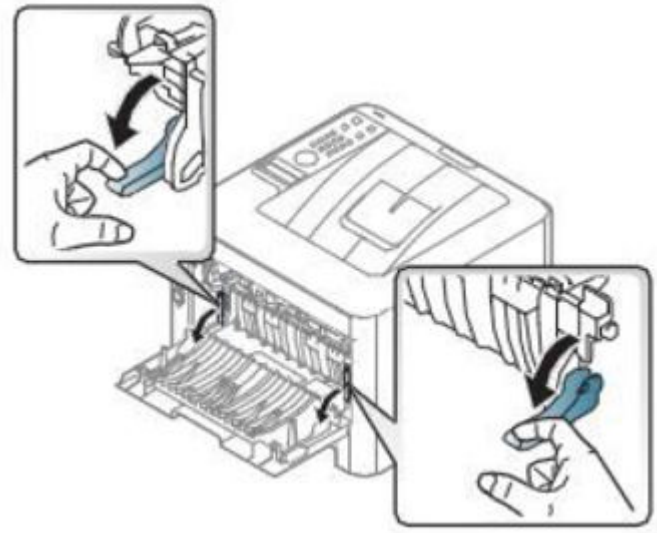
4. Open the rear cover.



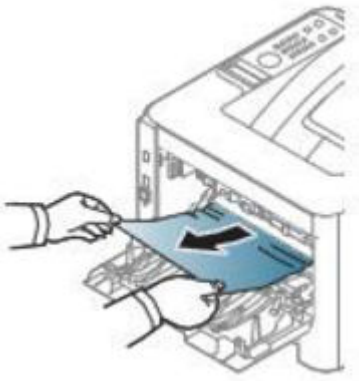
5. Pull down the both fuser levers.



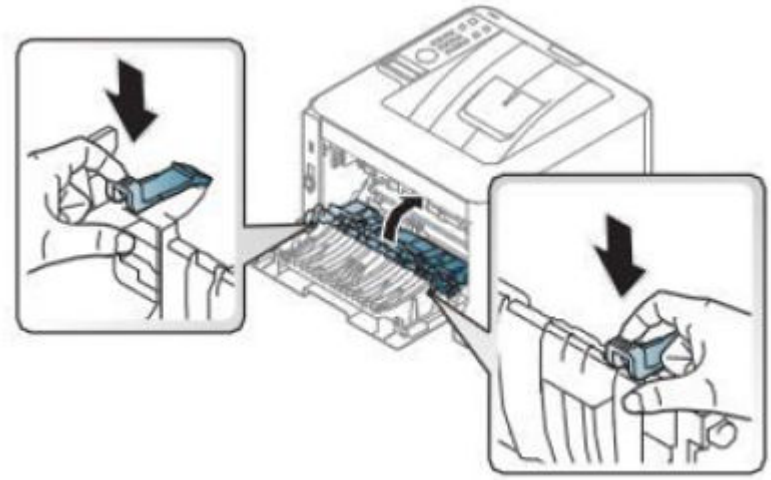
6. Open the fuser jam cover.



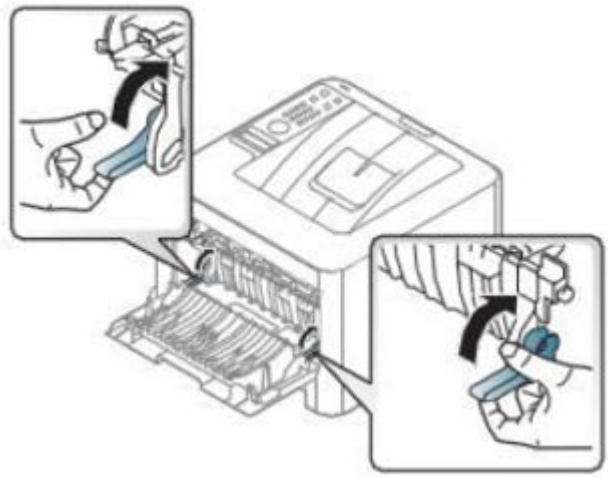
7. Remove the jammed paper by gently pulling it straight out.



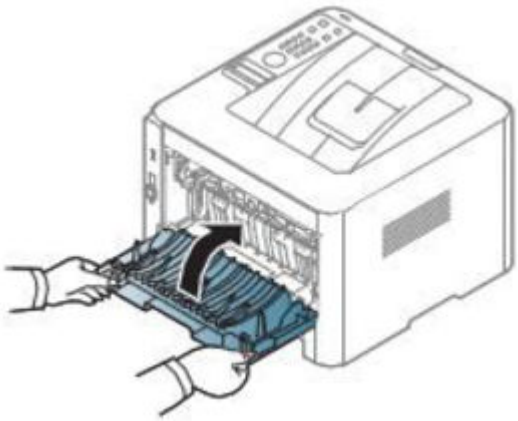
8. Close the fuser jam cover.



9. Pull up the both fuser levers.



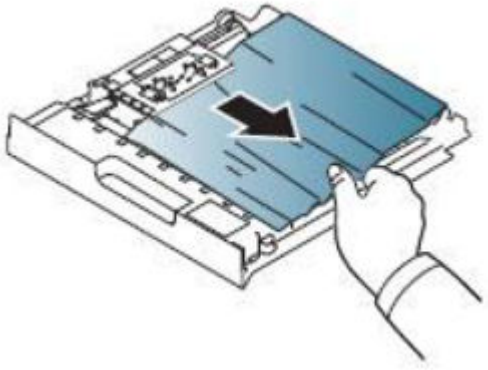
10. Close the rear cover.



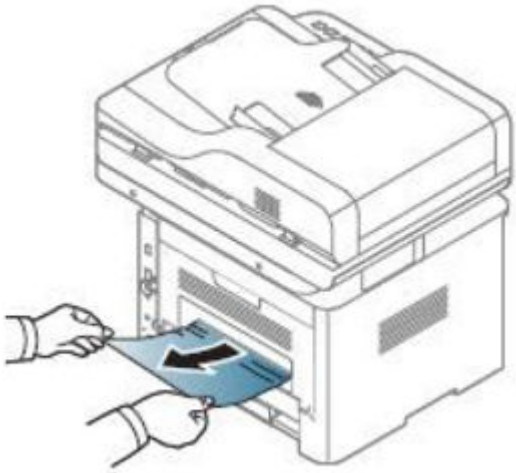
HP Laser MFP 432fdn

1. Pull the duplex unit out of the machine.

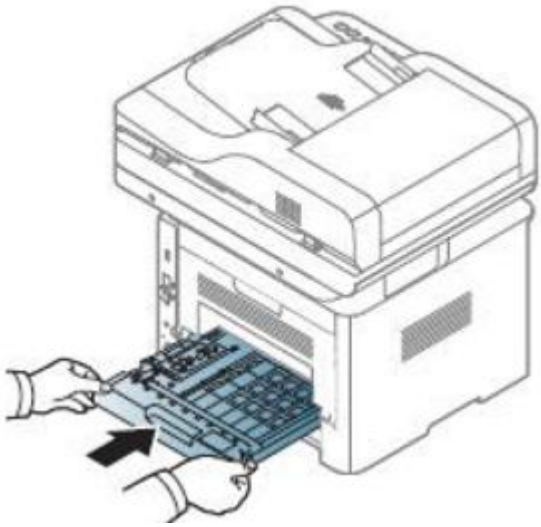
2. Remove the jammed paper from the duplex unit.



If the paper does not come out with the duplex unit, remove the paper from the bottom of the machine.



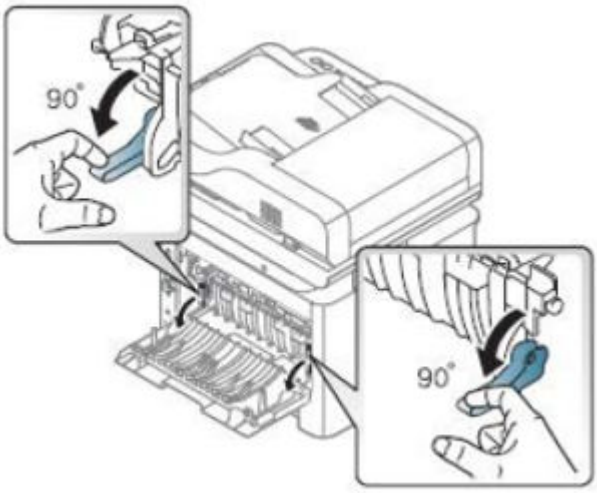
3. Insert the duplex unit into the machine.



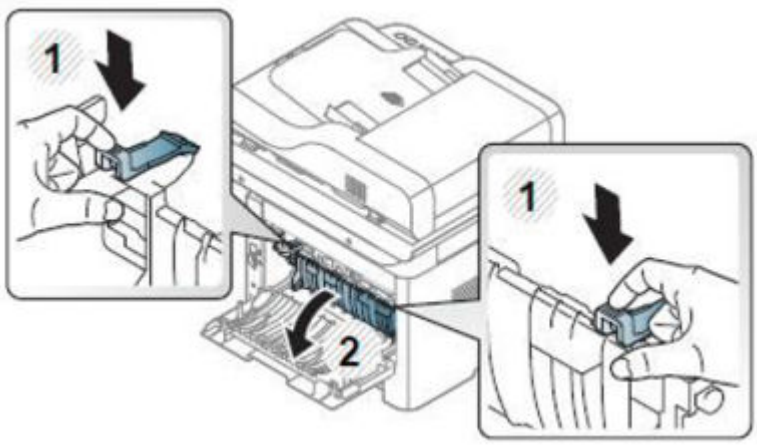
If you still do not see the paper, go to the next step.

4. Close the rear cover.

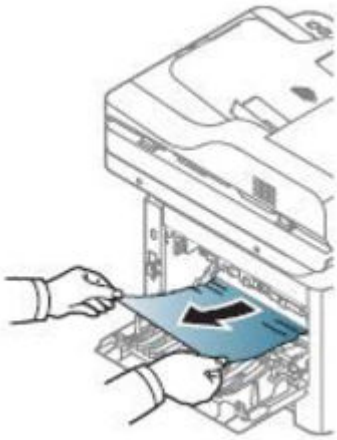
5. Pull down the both fuser levers.



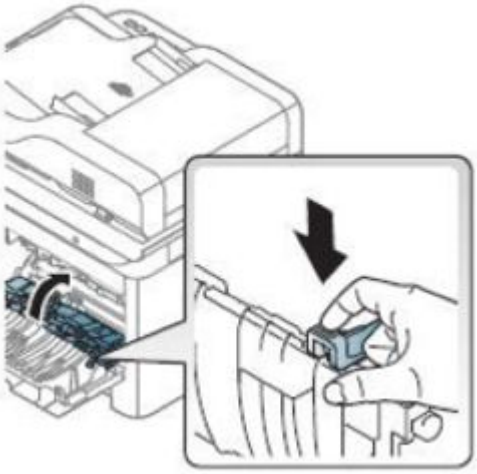
6. Open the fuser jam cover.



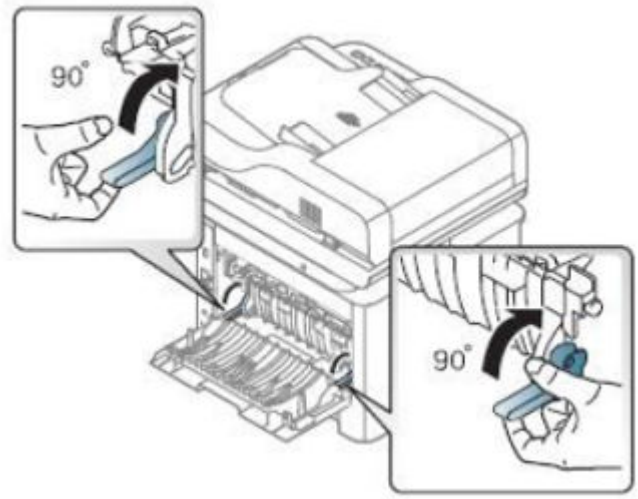
7. Remove the jammed paper by gently pulling it straight out.



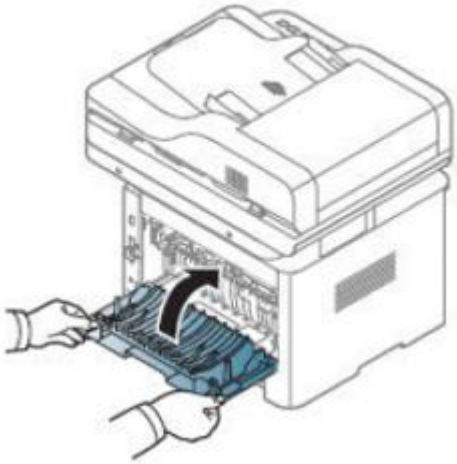
8. Close the fuser jam cover.



9. Pull up the both fuser levers.



10. Close the rear cover.



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 to filter out many possible causes of the problem. Use the troubleshooting flowchart to help diagnose the root cause of the problem. The remainder of this chapter provides steps for correcting problems.

- Use the troubleshooting flowchart to pinpoint the root cause of hardware malfunctions. The fl owchart provides guides to the sections of this chapter that contain steps to correct 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.

Factors affecting print performance

Table 3-14 Factors affecting print performance

Problem	Cause	Solution
Pages print but, are totally blank.	The sealing tape might still be in the toner cartridges.	Verify that the sealing tape has been completely removed from the toner cartridges.
	The document might contain blank pages.	Check the document that you are printing to see if content appears on all of the pages.
	The product might be malfunctioning.	To check the product, print a Configuration page.
Pages print very slowly. NOTE: The product print speed is effected by various factors (for example, media size or page complexity).	Heavier media types can slow the print job.	Print on a different type of media.
	Complex pages can print slowly.	Proper fusing might require a slower print speed to ensure the best print quality.
	Large batches, narrow paper, and special paper such as gloss, 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 product might not be pulling media correctly.	Ensure paper is loaded in the tray correctly. If the problem persists, you might need to replace the pickup rollers and the separation pad.
	The media is jamming in the product.	Clear the jam.

Table 3-14 Factors affecting print performance (continued)

Problem	Cause	Solution
	The USB cable might be defective or incorrectly connected.	• Disconnect the USB cable at both ends and reconnect it. • Try printing a job that has printed in the past. • Try using a different USB cable.
	Other devices are running on your computer.	The product might not share a USB port. If you have an external hard drive or network switchbox that is connected to the same port as the product, the other device might be interfering. To connect and use the product, you must disconnect the other device or you must use two USB ports on the computer.

Solve fax problems

Table 3-15 Faxing problems

Condition	Suggested solutions
The machine is not working, there is no display, or the buttons are not working.	• Unplug the power cord and plug it in again. • Ensure that there is power being supplied to the electrical outlet. • Ensure that the power is turned on.
No dial tone.	• Check that the phone line is properly connected. • Check that the phone socket on the wall is working by plugging in another phone.
The numbers stored in memory do not dial correctly.	Make sure that the numbers are stored in memory correctly. To check that, print an address book list.
The original does not feed into the machine.	• Make sure that the paper is not wrinkled and you are inserting it in correctly. Check that the original is the right size, not too thick or thin. • Make sure that the document feeder is firmly closed. • The document feeder rubber pad may need to be replaced. Contact a service representative.
Faxes are not received automatically.	• The receiving mode should be set to fax. • Make sure that there is paper in the tray. • Check to see if the display shows any error message. If it does, clear the problem.
The machine does not send.	• Make sure that the original is loaded in the document feeder or on the scanner glass. • Check the fax machine you are sending to, to see if it can receive your fax.

Table 3-15 Faxing problems (continued)

Condition	Suggested solutions
The incoming fax has blank spaces or is of poor-quality.	• The fax machine sending you the fax may be faulty. • A noisy phone line can cause line errors. • Check your machine by making a copy. • A toner cartridge has almost reached its estimated cartridge life. Replace the toner cartridge.
Some of the words on an incoming fax are stretched.	The fax machine sending the fax had a temporary document jam.
There are lines on the originals you sent.	Check your scan unit for marks and clean it.
The machine dials a number, but the connection with the other fax machine fails.	The other fax machine may be turned off, out of paper, or cannot answer incoming calls. Speak with the other machine operator and ask them to solve the problem on their side.
Faxes do not store in memory.	There may not be enough memory space to store the fax. If the display indicating the memory status shows, delete any faxes you no longer need from the memory, and then try to store the fax again. Call for service.
Blank areas appear at the bottom of each page or on other pages, with a small strip of text at the top.	You may have chosen the wrong paper settings in the user option setting. Check the paper size and type again.

Solve connectivity problems

Solve USB connection problems

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

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

Solve wired network problems

Introduction

Certain types of problems can indicate there is a network communication problem. These problems include the following issues:

- The periodic loss of ability to communicate with the printer
- The printer cannot be found during driver installation
- A periodic failure to print

NOTE: If you have been experiencing intermittent loss of network connectivity, first update the printer firmware. For instructions on how to update the printer firmware, go to http://support.hp.com, search for your printer, and then search on “update the firmware.”

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 flashes indicating network traffic, and the green link-status light is continuously lit indicating a network link.
4. If the problem continues, try a different cable or port on the hub.

The computer is unable to communicate with the printer

1. Test network communication by pinging the network.
    1. Open a command-line prompt on your computer.
        - For Windows, click **Start**, click **Run**, type cmd, and then press Enter.
        - For OS X, go to **Applications**, then **Utilities**, and open **Terminal**.
    2. Type "ping" followed by the IP address for your printer.
    3. 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 (also known as subnet).
3. 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.
4. 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**.
5. If you installed the printer using a Microsoft standard TCP/IP port, use the printer’s hostname instead of the IP address.
6. If the IP address is correct, delete the printer and then add it again.

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

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

1. Review the printer's configuration/networking pages to check the status of the network settings and protocols.
2. Reconfigure the network settings if necessary.

Service mode functions

In service (tech) mode, the technician can check the machine and perform various test to isolate the cause of a malfunction. While in Tech mode, the machine still performs all normal operations.

Entering the Tech Mode

In service (tech) mode, the technician can check the machine and perform various test to isolate the cause of a malfunction. While in Tech mode, the machine still performs all normal operations.

To enter the Tech Mode, press **Menu > # > 1 > 9 > 3 > 4** in sequence

Service mode menu

In service (tech) mode, the technician can check the machine and perform various test to isolate the cause of a malfunction. While in Tech mode, the machine still performs all normal operations.

HP Laser 408dn

Depth1	Depth2	Depth3	Depth4
Information	Report	Menu Map	
		Configuration	
		Supplies Info.	
		Usage Counter	
		Error Info.	
		Job Duty	
		Memory Usage	
		Assert History	
Diagnostics	Engine	NVM Read/Write	106-Dev Bias
			107-ATTR Bias
		Test Routine	100-Motor
			101-Clutch
			102-Sensor
			105-MHV Bias
			106-Dev Bias
			107-ATTR Bias
			109-Fuser Heat
			110-LSU
	RestartMachine		
Service Func.	Clear All Mem.		
	Clear Admin PW		

(continued)

Depth1	Depth2	Depth3	Depth4
	TonerLow Level		
	ImgU.Low Level		
	Clear Counts		
	Engine Footer	Off *	
		On	
	F/W Upgrade	Off *	
		On	

HP Laser MFP 432fdn

Depth1	Depth2	Depth3	Depth4
Information	Report	Configuration	
		Supplies Information	
		Usage Counter	
		Error Information	
		Fax Protocol Dump	
		Job Duty	
		Handset Information	
		Memory Usage	
Maintenance Counts	Clear Counts	Enter Passcode	ADF Scan
			Platen Scan
			Fuser
			Transfer Roller
			Tray 1 Roller
			Tray 1 Retard Roller
			Tray 2 Roller
			Tray 2 Retard Roller
Diagnostics	Engine	NVM Initialize	
		NVM Read/Write	106-Dev Bias
			107-ATTR Bias
		Test Routines	100-Motor
			101-Clutch
			102-Sensor
			105-MHV Bias

(continued)

Depth1	Depth2	Depth3	Depth4
			106-Dev Bias
			107-ATTR Bias
			109-Fuser Heat
			110-LSU
	Fax	NVM Read/Write	020-Fax
			022-Handset
		Test Routines	020-Fax
	Scanner	Shading Test	Shading Print
			Print
	System	Switch Test	
	Restart Machine		
Service Functions	Clear All Memory		
	Clear Admin Password	Reset?	
	Format HDD		
	Engine Footer	Off	
		On	
	F/W Upgrade	Off	
		On	
	Low Alert Level	Toner	[1-30]%
		Imaging Unit	[1-30]%

Service mode menu description

Information > Report

- **Configuration**

  It shows current machine status for software version, hardware version, paper setting etc.

- **Supplies Info**

  It shows consumable unit life status and toner using status.

- **Usage Counter**

  It contains the total number of pages printed.

- **Error Info.**

  It shows various kinds of errors which can be occurred in machine. It also store history error count how many errors are issued.

- **Fax Protocol Dump**

  It shows fax protocol dump list.

- **Job Duty**

  It shows printing usage by print job duty.

- **Memory Usage**

  It shows memory usage.

Maintenance

- **Clear Counts**

  This function resets the count information for selected item.

Diagnostics > Engine

- **NVM Initialize**

  This menu initializes all engine NVM value to the default.

- **NVRAM Read/Write**

  This menu can change a configuration value for engine firmware.

Code	LCD	Meaning	Default	Max/Min
106-0030	0030-Deve DC K	Deve DC Black	1	0~3
107-0030	0030-THV K	Transfer1 HV Black Duty	1	0~3

- **Test Routines**

This menu can perform the operation test for the main components.

Code	LCD	Meaning	State Displayed
100-0000	0000-Main BLDC	Main BLDC Motor is On/Off	On[Off]
100-0010	0010-Main BLDC Rdy	Detect if Main BLDC Motor runs at normal speed	High[Low]
100-0260	0260-SMPS Fan	Start/Stop Deve. Fan run	On[Off]
101-0000	0000-MP Feed Clutch	Engages drive to pick up a paper from bypass Tray(MP Tray).	On[Off]
101-0010	0010-Tray1 Pickup	Engages drive to pick up a paper from tray1.	On[Off]
101-0020	0020-Tray2 Pickup	Engages drive to pick up a paper from tray2. (Optional)	On[Off]
101-0050	0050-Registration	Engages drive to registartion rolls.	On[Off]
101-0190	0190-OutBin Full	Detect when a paper is at Out-Bin Full Sensor	High[Low]
102-0010	0010-Tray1 Empty	Detect when paper is in Tray 1.	High[Low]
102-0010	0080-Tray2 Empty	Detect when paper is in Tray 2.	High[Low]
102-0080	0280-MP Empty	Detects when paper is in Bypass Tray(MP Tray).	High[Low]
102-0290	0290-Feed Sensor	Detect when a paper is at Feed sensor.	High[Low]
102-0300	0300-T2 Feed Sens	Detect when a paper is at T2 Feed sensor. (optional)	High[Low]
102-0360	0360-Regi Sens	Detect when a paper is at Regi. sensor.	High[Low]
102-0370	0370-Exit Sens	Detect when a paper is at Exit. sensor.	High[Low]
105-0030	0030-K MHV Bias	Black MHV bias voltage on at normal drive level	On[Off]
106-0030	0030-K Dev Bias	Black Dev bias voltage on at normal drive level	On[Off]
107-0030	0030-K THV Bias	Black THV bias voltage on at normal drive level	On[Off]
107-0031	0031-K THV- Bias	Black THV bias voltage on at normal drive level	On[Off]
107-0070	0070-K THV Bias R	Detect what the THV value is on the THV Roller	Numeric 3 digits
109-0000	0000-Temp A	Detects what the temperature A is on fuser.	Numeric 3 digits
109-0040	0040-Fuser Fan Run	Fuser Fan Motor On/Off	On[Off]
109-0050	0050-Fuser Bias	Fuser Fan Motor On/Off	On[Off]
110-0000	0000-LSU Mot1 Rdy	Detects if LSU motor1 runs at normal speed.	High[Low]
110-0060	0060-LSU Mot1 Run	LSU Motor1 On/Off	On[Off]
110-0110	0110-LD Power4	LSU LD4 Power On/Off (black)	On[Off]
110-0170	0170-LSU HSync4	Detect LSU HSync4 (black)	High[Low]

Diagnostics > Fax

- **NVRAM Read/Write**

  This menu can change a configuration value for fax.

LCD	Meaning
020-Fax	0200-Pause Dial Time
	0210-Dial Pul. M/B
	0220-AutoDial P-Time
	0300-Ring On Time
	0310-Ring Off Time
	0320-Ring Det. Freq
	0330-Ring On Max Time
	0340-Ring Off Max Time
	0400-DTMF H-Freq Lv
	0410-DTMF L-Freq Lv
	0420-DTMF Timing
	0500-Dial Mode
	0520-Error Rate
	0530-Dial tone detect
	0540-Loop cur. det.
	0550-Busy sngl det.
	0560-TCF Duration
	0800-Modem Speed
	0810-Fax Trans. Lv
	0830-AutoDialTimeout
	0920-CNG Det. Cnt
022-Handset	0010-Line Echo Can.
	0020-Mic Input Scl.
	0030-Line Out Scl.
	0040-Line Inp Scl.
	0050-Spkr Out Scl.
	0060-Pre Emp.F Tx
	0070-Pre Emp.F Rx
	0080-Side Tone MIC
	0090-Side Tone Line
	0100-Hearing Aid
	0110-Speaker Gain
	0120-Mic Gain
	0130-DTMF H-Adj Lv

(continued)

LCD	Meaning
	0140-DTMF L-Adj Lv
	0150-Auto AGC Gain
	0160-A.AGC 2k Cur
	0170-A.AGC 5k Cur
	0180-A.AGC Emp. Rx
	0190-A.AGC Emp. Tx
	0200-A.Mic Inp Scl.
	0210-A.Mic Out Scl.
	0220-A.Line Inp Scl
	0230-A.Spkr Out Scl
	0240-Complex
	0250-DC Curve

- Test Routines

  This menu can perform the operation test for fax.

LCD	Meaning
020-Fax	0012-Sngl T 1100 L1
	0014-Sngl T 1650 L1
	0015-Sngl T 1850 L1
	0016-Sngl T 2100 L1
	0040-V.21 300 Ln1
	0041-V.27ter2400L1
	0042-V.27ter4800L1
	0043-V.29 7200 L1
	0044-V.29 9600 L1
	0045-V.17 7200 L1
	0046-V.17 9600 L1
	0047-V.17 12000 L1
	0048-V.17 14400 L1
	0049-V.34 2400 L1
	0050-V.34 4800 L1
	0051-V.34 7200 L1

(continued)

LCD	Meaning
	0052-V.34 9600 L1
	0053-V.34 12000 L1
	0054-V.34 14400 L1
	0055-V.34 16800 L1
	0056-V.34 19200 L1
	0057-V.34 21600 L1
	0058-V.34 24000 L1
	0059-V.34 26400 L1
	0060-V.34 28800 L1
	0061-V.34 31200 L1
	0062-V.34 33600 L1

Diagnostics > Scanner

- **Shading Test**

  The function is to get the optimum scan quality by the specific character of the CIS (Contact Image Sensor). If the copy image quality is poor, perform this function to check the condition CIS unit.

Diagnostics > System

- **Switch Test**

  Use this feature to test all keys on the operation control panel. The result is displayed on the LCD window each time you press a key.

Service Function

- **Clear All Mem.**

  The function resets the system to factory default settings. This function is used to reset the system to the initial value when the product is functioning abnormally . All the values are returned to the default values, and all the information, which was set by the user, will be erased.

  NOTE: Always perform a memory clear after replacing the main board. Otherwise, the system may not operate properly.

- **Clear Admin Password**

  This menu resets the Admin password.

- **Format HDD**

  This menu executes SD card format.

- **Engine Footer**

This function is for monitoring of the engine status. If you perform this function, at printing, the setting value for engine is shown on the bottom of the printed page.

- F/W Upgrade

  The function is to upgrade the firmware by using “usblist.exe” file. When updating firmware, you must select “On” for this menu.

- Low Alert Level

  – Toner

    The function is to set up the time to inform toner low status. This function can provide user convenience for replacing the toner cartridge.

  – Imaging Unit

    The function is to set up the time to inform imaging unit low status. This function can provide user convenience for replacing the imaging unit.

Firmware upgrades

Follow these steps to update the firmware for a single printer.

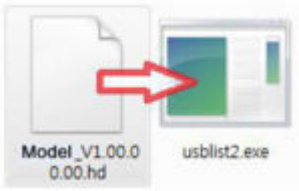
Update the firmware by using the USB port

Upgrading preparations

- usblist2.exe : Tool which sends firmware data to printer.
- Firmware file to update.

Upgrade Procedure

1. Turn the machine off.
2. Connect USB cable to printer.
3. Turn the machine on. Check if the printer is the ready status.
4. Drag the firmware file and Drop down on the usblist2.exe.



And then firmware update will be started automatically.

5. When upgrading is completed, machine is automatically re-booting.

Update the firmware by using the network

HP Embedded Web Server

NOTE: The product 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 product to reinitialize.

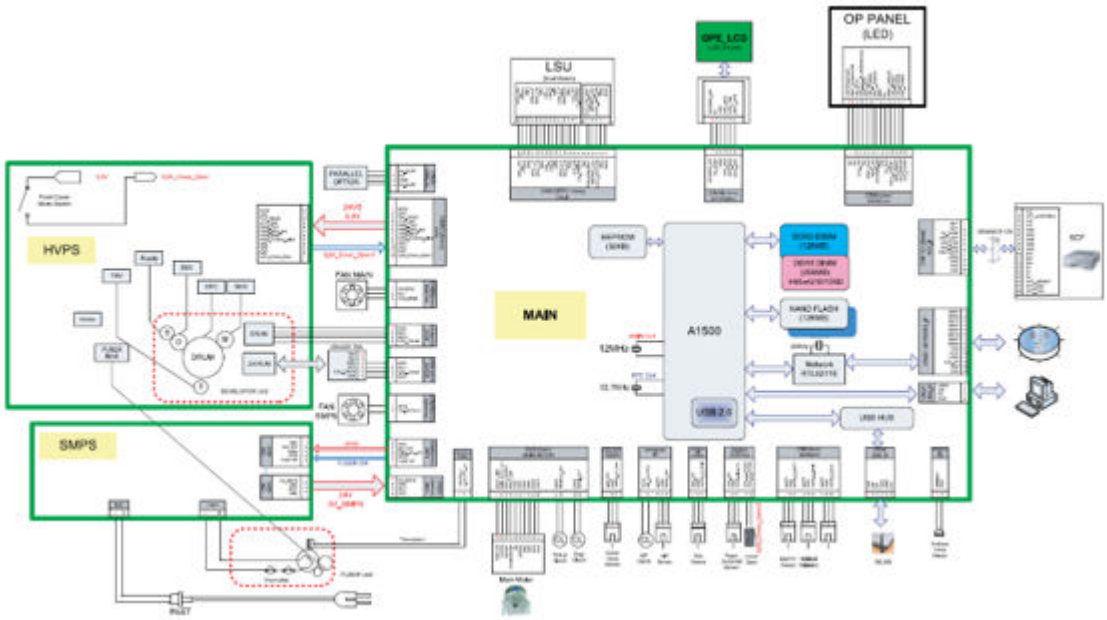
1. Open an Internet browser window.
2. Enter the product IP address in the URL line.
3. Sign in using the Admin User name and password: admin/pin code (initially configured 8-digit PIN number)
4. Select the Maintenance tab.
5. Click Upgrade Wizard.
6. Click Browse and browse to the location where the firmware upgrade file was downloaded to, and then select the firmware file—the file has an .hd file extension. Click the Next button to verify the firmware file. Click the Next 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.

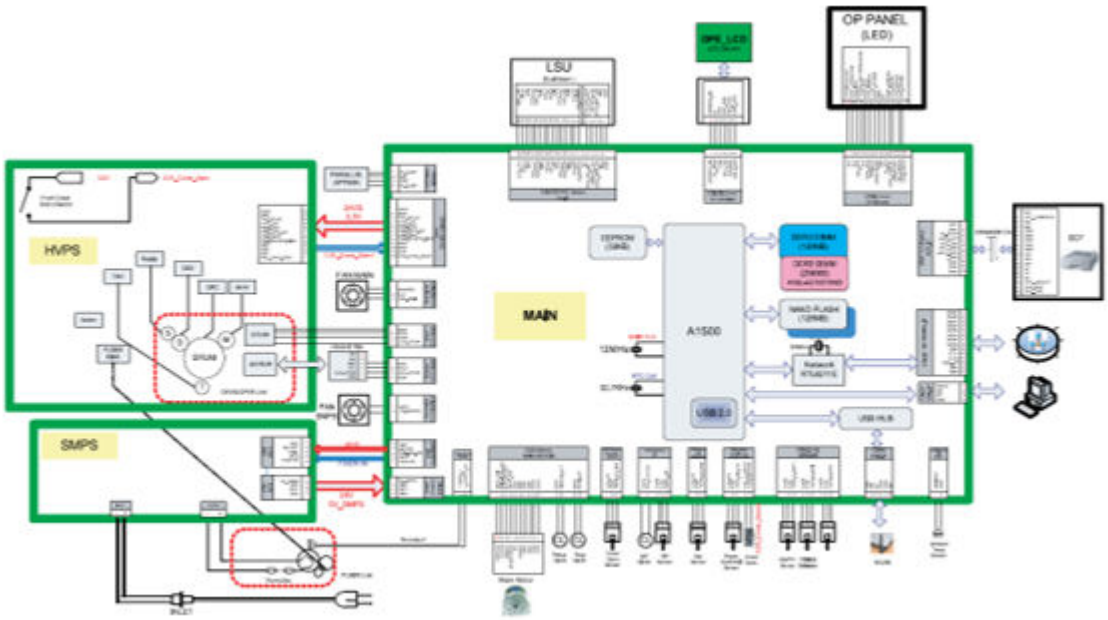
7. After the product reinitializes, return to the Maintenance tab to verify the updated firmware version or print a configuration page and verify that the latest firmware version has been installed.

4 Connection diagram

HP Laser 408dn



HP Laser MFP 432fdn



Index

A
Accessories part numbers 44

C
c05048451 326
cautions iii
control panel
  CPMD 324
conventions, document iii

D
decoding
  message 324
Delivery system 19
Developer unit error
  C8-xxxx error 324
document conventions iii
Document feeder error
  U3-xxxx error 325
Drum unit error
  C3-xxxx error 324

E
electrostatic discharge 45
error 324

F
Fan error
  A2-xxxx error 324
Feed system 19
Firmware Update 421
Firmware Update Utility 421
for additional service and support 41
Fuser error
  U1-xxxx error 324
fuser error
  41.WX.YZ error 324
  laser scanner error 324
  paper path error 324
Fuser unit error
  C6-xxxx error 324

I
ITB Unit or Transfer roller error
  C5-xxxx error 324

L
LSU error
  U2-xxxx error 325

M
motor error
  A1-xxxx error 324

N
notes iii

O
Optional tray error
  H1-xxxx error 324

P
Paper handling system 19
Paper Jam error
  Mx-xxxx error 324
paper mismatch error
  11-2T## error 324
Pick up problem 369
Pick up system 19
post-service test 46

S
Sensor error
  A3-xxxx error 324
service approach 46
Solve USB connection problems 409
Supplies 43
supported operating systems 12
System error
  Sx-xxxx error 324

T
test
  post-service 46
tips iii
Toner cartridge 43
Toner cartridge error
  C1-xxxx error 324
Toner collection unit 43
transfer roller error
  C9-xxxx error 324
Troubleshoot print quality problems 340

W
warnings iii
Waste toner container
  C7-xxxx error 324