



Color LaserJet Enterprise M750

Service Manual



M750n



M750dn



HP Color LaserJet Enterprise M750 Printer Series

Service Manual

Copyright and License

© 2013 Copyright Hewlett-Packard Development Company, L.P.

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

The information contained herein is subject to change without notice.

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

Edition 1, 11/2013

Part number: D3L08-90966

Trademark Credits

ENERGY STAR and the ENERGY STAR mark are registered U.S. marks.

Conventions used in this guide

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

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

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

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

Table of contents

1 Theory of operation	1
Basic operation	2
Major product systems	2
Product block diagram	2
Sequence of operation	3
Normal sequence of operation	3
Formatter-control system	5
Sleep mode	5
Input/output	5
CPU	6
Memory	6
Firmware	6
Nonvolatile memory	6
PJM overview	6
PML	6
Control panel	6
Engine-control system	7
DC controller	8
Motors	11
Fans	13
Fuser-control circuit	14
Fuser temperature control	15
Fuser protective function	16
Fuser failure detection	17
Low-voltage power supply	18
Overcurrent/overvoltage protection	20
High-voltage power supply	21
Laser scanner system	23
Laser failure detection	23
Image-formation system	25
Electrophotographic process	25
Image formation process	27

Latent-image formation block	28
Pre-exposure	28
Primary charging	28
Laser beam exposure	29
Developing block	30
Transfer block	31
Primary transfer	31
Secondary transfer	31
Separation	32
Fusing block	32
ITB cleaning block	33
Drum cleaning block	33
Print cartridges	34
Memory tag	35
Cartridge presence detection	35
Toner level detection	35
Cartridge life detection	35
Developing unit engagement and disengagement control	35
ITB unit	37
Primary transfer roller engagement and disengagement control	38
ITB unit presence detection	39
ITB cleaning mechanism	39
Calibration	40
Color-misregistration control	40
Environment change control	41
Image stabilization control	42
Image density control (DMAX)	42
Image halftone control (DHALF)	42
Pickup, feed, and delivery system	43
Photo sensors	45
Motors and solenoids	46
Pickup and feed block	46
Tray 2 cassette pickup	46
Tray 2 cassette multiple-feed prevention	47
Tray 2 cassette media-size detection and Tray 2 cassette-presence detection	49
Tray 2 cassette lift-up operation	50
Cassette media-presence detection	52
Tray 1 (MP tray) paper pickup	52
Tray 1 (MP tray) last-paper detection	53
Paper feed	54
Skew-feed prevention	55

Media detection	57
Feed-speed control	58
Fusing and delivery block	58
Loop control	58
Pressure roller pressurization and depressurization control	59
Output bin full detection	61
Duplex block (duplex models only)	62
Duplex reverse and duplex feed control	62
Duplex operation	63
Jam detection	64
Paper feeder	67
Paper-feeder motors	68
Paper-feeder paper pickup and feed	69
Cassette media-size detection and cassette-presence detection	69
Paper-feeder cassette lift operation	70
Paper-feeder jam detection	71
Optional 3X500-sheet paper deck	72
Motor control	74
Pickup-and-feed operation	75
Cassette media-size detection and cassette-presence detection	76
Cassette lift-up operation	77
Jam detection	78
2 Removal and replacement	81
Removal and replacement strategy	82
Cautions during removal and replacement	82
Required tools	83
Types of screws	83
Service approach	83
Before performing service	84
After performing service	84
Parts removal order	84
Removal and replacement procedures	85
Print cartridges	85
Toner-collection unit	88
Fuser	90
Reset the New Fuser Kit setting at the control panel	90
Pickup roller (Tray 1)	91
Separation pad (Tray 1)	92
Separation roller assembly (Tray 2)	94
Pickup roller (Tray 2)	95

Pickup roller, separation roller, and feed roller (1 x 500-sheet and 3 x 500-sheet paper feeders)	96
Secondary transfer roller	97
Intermediate transfer belt (ITB)	98
Reset the New Transfer Kit setting at the control panel	99
Formatter PCA	100
Hard Drive	102
Remove the encrypted HDD	102
Remove the solid-state module	104
Covers	106
Identification and location	106
Right-front cover and control-panel assembly	108
Left cover	110
Rear cover	111
Remove the rear cover	111
Toner collection unit access door	112
Right-rear cover	114
Reinstall the right-rear cover	114
Top cover	115
Remove the top cover	115
Front-door assembly	117
Right-door assembly	120
Main assemblies	123
Formatter case	123
Remove the formatter case	123
Laser/scanner assembly	125
Remove the laser/scanner assembly	125
Paper pickup assembly	128
Remove the paper pickup assembly	128
Reinstall the paper pickup assembly	131
Registration sensor assembly	135
Remove the registration sensor assembly	135
Lifter-drive assembly	138
Remove the lifter-drive assembly	138
ITB front guide assembly	141
ITB rear guide assembly	144
Residual toner full sensor	145
Remove the residual toner full sensor	145
Main drive assembly	150
Remove the main drive assembly	150
Install the main drive assembly	159

Fuser drive assembly	164
Remove the fuser drive assembly	164
Install a replacement fuser drive assembly	166
Fuser gear assembly	168
Remove the fuser gear assembly	168
Install a replacement fuser gear assembly	173
Paper delivery assembly	176
Remove the delivery assembly	176
Reinstall the paper delivery assembly	177
Duplex drive assembly (duplex models)	179
Remove the duplex-drive assembly	179
Delivery drive assembly (simplex models)	181
Remove the delivery drive assembly	181
Residual-toner-feed assembly	182
Remove the residual-toner-feed assembly	182
ITB motor (M1)	184
Remove the ITB motor	184
Drum motor (M2)	186
Remove the drum motor	186
Developing motor (M3)	187
Remove the developing motor	187
Fuser motor (M4)	188
Remove the fuser motor	188
Developing-disengagement motor (M6)	189
Remove the developing-disengagement motor	189
Power-supply fan (FM1)	190
Remove the power-supply fan	190
Fuser fan (FM2)	192
Remove the fuser fan	192
Formatter fan (FM3) and ICB PCA	194
Remove the formatter fan and ICB PCA	194
DC controller PCA	197
Remove the DC controller PCA	197
Low-voltage power supply	199
Remove the low-voltage power supply	199
Imaging (developing) high-voltage power supply	202
Remove the imaging (developing) high-voltage power supply	202
First transfer high-voltage power supply	203
Remove the first transfer high-voltage power supply	203
Second transfer high-voltage power supply	205
Remove the second transfer high-voltage power supply	205

Driver PCA	207
Remove the driver PCA	207
Power switch PCA	209
Remove the power switch PCA	209
Environmental sensor	210
Remove the environmental sensor	210
1 x 500-sheet paper feeder assembly	211
1 x 500 rear cover	211
1 x 500 left cover	212
1 x 500 right-front cover	214
1 x 500 front-upper cover	215
1 x 500 right door	216
1 x 500 right-lower cover	218
1 x 500 pickup assembly	219
1 x 500 lifter-drive assembly	222
1 x 500 pickup motor	223
1 x 500 driver PCA	224
3 x 500-sheet paper feeder (optional accessory)	225
3 x 500 rear cover	225
3 x 500 right and left cassette rails	226
3 x 500 paper deck controller PCAs	227
3 x 500 paper deck lifter-drive assembly	228
3 x 500 paper deck pickup motor	229
3 x 500 front-lower cover	230
3 x 500 left cover	231
3 x 500 right-corner cover	232
3 x 500 front-upper cover	233
3 x 500 right-door assembly	234
3 x 500 right-lower cover 1	236
3 x 500 right-lower cover 2	237
3 x 500 left-lower cover	238
3 x 500 rear-lower cover	239
Remove the 3 x 500 rear-lower cover	239
3 x 500 paper deck pickup assembly	240
Remove the 3 x 500 paper deck pickup assembly	240
3 Solve problems	243
Solve problems checklist	244
Menu map	246
Current settings pages	246
Control panel menus	247

Sign In menu	247
Retrieve Job From USB menu	247
Retrieve Job From Device Memory menu	247
Supplies menu	248
Trays menu	250
Administration menu	251
Reports menu	251
General Settings menu	251
General Print Settings menu	255
Default Print Options menu	256
Display Settings menu	258
Manage Supplies menu	259
Manage Trays menu	260
Network Settings menu	261
Troubleshooting menu	264
Device Maintenance menu	265
Backup/Restore menu	265
Calibration/Cleaning menu	266
USB Firmware Upgrade menu	266
Service menu	267
Troubleshooting process	268
Determine the problem source	268
Pre-troubleshooting checklist	268
Troubleshooting flowchart	269
Power subsystem	271
Power-on checks	271
Power-on troubleshooting overview	271
Tools for troubleshooting	273
Component diagnostics	273
LED diagnostics	273
Understand lights on the formatter	273
Engine diagnostics	276
Defeating interlocks	277
Disable cartridge check	278
Engine test button	279
Paper-path test	279
Manual sensor test	280
Front-door opening/closing switch (PS14)	281
Right-door opening/closing sensor (PS15)	282
TOP (top-of-page) sensor (PS5)	284
Fuser loop sensors 1 and 2 (PS7 and PS8)	285

Fuser pressure-release sensor (PS9)	286
Fuser output sensor (PS6)	287
Developer alienation sensor (PS11)	288
ITB alienation switch (SW5)	289
Tray/Bin manual sensor test	290
Tray 1 paper sensor (PS2)	292
Tray 2 paper present sensor (PS1)	293
Tray 2 paper surface sensor (PS4)	294
Tray 2 paper size switches (SW7 and SW8)	295
Tray 3 paper sensor (SR3)	296
Tray 3 paper surface sensor (SR2)	297
Tray 3 paper size sensors (SW2 and SW3)	297
Tray 3 feed sensor (SR1)	299
Tray 3 door opening/closing sensor (SW1)	300
Tray 4 paper sensor (SR3)	301
Tray 4 paper surface sensor (SR2)	301
Tray 4 paper size sensors (SW2 and SW3)	301
Tray 4 feed sensor (SR1)	301
Tray 4 door opening/closing door sensor (SW1)	301
Tray 5 paper sensor (SR83)	302
Tray 5 paper surface sensor (SR82)	302
Tray 5 paper size sensors (SW82 and SW83)	302
Tray 5 feed sensor (SR81)	302
Tray 5 door opening/closing sensor (SW1)	302
Tray 6 paper sensor (SR93)	302
Tray 6 paper surface sensor (SR92)	302
Tray 6 paper size sensors (SW92 and SW93)	302
Tray 6 feed sensor (SR91)	302
Tray 6 door opening/closing sensor (SW1)	302
Output-bin-full sensor (PS10)	303
Paper-path sensors test	303
Print/stop test	304
Component tests	304
Component test (special-mode test)	304
Additional component tests	307
Diagrams	309
Block diagrams	309
Plug/jack locations	311
Location of connectors	312
DC controller connections	312
Product connections	314

Locations of major components	321
General timing charts	328
General circuit diagram	330
Internal print-quality test pages	334
Print-quality-troubleshooting pages	334
Diagnostics page	337
Configuration page	339
Configuration page	339
HP embedded Jetdirect page	341
Finding important information on the configuration pages	342
Color-band test	342
Print quality troubleshooting tools	344
Repetitive image-defect ruler	344
Calibrate the product	344
Control-panel menus	346
Administration menu	346
Reports menu	346
General Settings menu	348
General Print Settings menu	361
Default Print Options menu	363
Display Settings menu	365
Manage Supplies menu	366
Manage Trays menu	369
Network Settings menu	370
Troubleshooting menu	381
Device Maintenance menu	386
Backup/Restore menu	386
Calibration/Cleaning menu	387
USB Firmware Upgrade menu	389
Service menu	389
Interpret control-panel messages and event log entries	390
Control-panel message types	390
Control-panel messages and event log entries	390
10.0X.Y0 Supply memory error	390
10.22.50	391
10.22.51	391
10.22.52	391
10.23.50	392
10.23.51	392
10.23.52	392
10.23.70 Printing past very low	392

10.39.50 New Document Feeder Kit	393
10.39.53	393
10.39.55 Clean Document Feeder Rollers	393
10.39.56	393
10.39.60 Document Feeder Kit low	393
10.39.69 Document Feeder Kit very low	393
10.39.70 Scanning past very low	394
10.39.71 Document Feeder has stopped	394
10.XX.34 Used supply in use	394
10.XX.40 Genuine HP supplies installed	394
10.XX.41 Unsupported supply in use	395
10.XX.70 Printing past very low	395
10.YY.15 Install <supply>	396
10.YY.25 Wrong cartridge in <color> slot	397
10.YY.35 Incompatible <supply>	397
11.00.YY Internal clock error	398
13.00.00	398
13.A3.D3	398
13.A3.D4	399
13.A3.D5	399
13.A3.D6	400
13.A3.FF	400
13.A4.D4	400
13.A4.D5	401
13.A4.D6	402
13.A4.FF	402
13.A5.A5	402
13.A5.D6	403
13.A5.FF	403
13.A6.D6	403
13.A6.FF	404
13.AA.EE	404
13.AB.EE	404
13.B2.AX	405
13.B2.DX	406
13.B2.FF	407
13.B4.FF	407
13.B9.AZ	408
13.B9.CZ	409
13.B9.DZ	411
13.B9.FF	412

13.B9.YZ Fuser Area Jam	412
13.BA.EE	414
13.BB.EE	414
13.E1.DZ	414
13.FF.FF	416
20.00.00 Insufficient memory: <Device> To continue, touch "OK"	416
21.00.00 Page too complex To continue, touch "OK"	416
32.1C.XX	416
33.02.01	421
33.02.02	421
33.02.03	422
33.03.01	422
33.03.02	422
40.00.01 USB I/O buffer overflow To continue, touch "OK"	422
40.00.02 Embedded I/O buffer overflow To continue, touch "OK"	422
40.00.04 Unsupported USB accessory detected To continue, touch "OK"	423
40.00.05 Embedded I/O bad transmission To continue, touch "OK"	423
40.08.0X USB storage accessory removed	423
40.0X.05 USB storage accessory removed	423
41.01.YZ	423
41.02.00 Error	425
41.02.0Z Error	425
41.03.YZ Unexpected size in Tray <X>	425
41.03.YZ Unexpected size in Tray <X> To use another tray, touch "Options"	426
41.04.YZ	427
41.05.YZ Unexpected type in Tray <X>	428
41.05.YZ Unexpected type in Tray <X> To use another tray, touch "Options"	429
41.07.YZ Error To continue, touch "OK"	430
41.WX.YZ Error To use another tray, touch "Options"	432
42.XX.YY	433
47.00.00	433
47.00.XX	433
47.01.XX	433
47.02.XX	434
47.03.XX	434
47.04.XX	434
47.05.00	434
47.06.XX	434

47.WX.YZ Printer calibration failed To continue, touch “OK”	435
48.01.XX Error	436
49.XX.YY Error To continue turn off then on	436
50.WX.YZ Fuser error To continue turn off then on	437
51.00.YY Error To continue turn off then on	440
52.00.00 or 52.20.00 To continue turn off then on	441
54.0X.07	441
54.11.05 or 54.12.05	441
54.XX.YY Error	442
55.XX.YY DC controller error To continue turn off then on	443
56.00.01 Illegal Input Printer Error To continue turn off then on	443
56.00.02 Selected media output bin unavailable	444
56.00.03 Media input path operation error	444
57.00.0Y Error To continue turn off then on	444
58.00.02 environmental sensor malfunction	445
58.00.04 Error To continue turn off then on	445
59.00.YY Error To continue turn off then on	446
59.0X.50 Error To continue turn off then on	447
59.0X.60 Error To continue turn off then on	447
59.0X.70 Error To continue turn off then on	448
59.0X.80 Error To continue turn off then on	448
60.00.0Y Tray <Y> lifting error	449
60.10.0Y Media input source <Y> pickup mechanism malfunction	450
61.00.01	450
62.00.00 No system To continue turn off then on	451
69.11.YY Error To continue, touch “OK”	451
70.00.00 Error To continue turn off then on	451
80.0X.YY Embedded Jetdirect Error	451
81.WX.00 Wireless Network Error To continue turn off then on	453
81.WX.YZ Embedded Jetdirect Error To continue turn off then on	453
98.00.0X Corrupt data in X volume	454
99.00.01 Upgrade not performed file is corrupt	454
99.00.02 Upgrade not performed timeout during receive	454
99.00.03 Upgrade not performed error writing to disk	454
99.00.04 Upgrade not performed timeout during receive	455
99.00.05 Upgrade not performed timeout during receive	455
99.00.06 Upgrade not performed error reading upgrade	455
99.00.07 Upgrade not performed error reading upgrade	455
99.00.08 Upgrade not performed error reading upgrade	456
99.00.09 Upgrade canceled by user	456
99.00.10 Upgrade canceled by user	456

99.00.11 Upgrade canceled by user	456
99.00.12 Upgrade not performed the file is invalid	456
99.00.13 Upgrade not performed the file is invalid	457
99.00.14 Upgrade not performed the file is invalid	457
99.00.2X	457
99.01.XX	458
99.02.01	458
99.02.09	458
99.05.56	458
99.09.60 Unsupported disk	459
99.09.61 Unsupported disk	459
99.09.62 Unknown disk	459
99.09.63 Incorrect disk	459
99.09.64 Disk malfunction	460
99.09.65 Disk data error	460
99.09.66 No disk installed	460
99.09.67 Disk is not bootable please download firmware	460
99.09.68	461
99.XX.YY	461
<Binname> full Remove all paper from bin	461
<Supply> almost full	461
<Supply> low OR Supplies low	461
<Supply> very low OR Supplies very low	462
<Tray X> lifting	463
[File System] device failure To clear press OK	463
[File System] file operation failed To clear press OK	463
[File System] file system is full To clear press OK	464
[File System] is not initialized	464
[File System] is write protected	464
Accept bad signature	464
Bad optional tray connection	464
Calibration reset pending	465
Canceling	465
Canceling <jobname>	465
Checking engine	465
Checking paper path	465
Chosen personality not available To continue, touch "OK"	465
Cleaning do not grab paper	466
Cleaning...	466
Clearing event log	466
Clearing paper path	466

Close front door	466
Close lower right door	467
Close middle right door	467
Close right door	467
Close upper right door For help press ?	467
Cooling device	468
Data received To print last page, press OK	468
Event log is empty	468
Expected drive missing	469
HP Secure Hard Drive disabled	469
Incompatible <supply>	469
Incompatible supplies	469
Initializing...	470
Install <supply>	470
Install <supply> Close rear door	470
Install Fuser Unit	471
Install supplies	471
Install Transfer Unit	471
Internal disk not functional	471
Internal disk spinning up	472
Load Tray <X>: [Type], [Size]	472
Load Tray <X>: [Type], [Size] To use another tray, touch OK	472
Loading program <XX>	473
Manually feed output stack Then touch "OK" to print second sides	473
Manually feed: [Type], [Size] To continue, touch "OK"	473
Manually feed: [Type], [Size] To use another tray, touch OK	473
Moving solenoid	474
Moving solenoid and motor	474
No job to cancel	474
Paused	474
Performing Color Band Test...	474
Performing Paper Path Test...	475
Please wait...	475
Printing CMYK samples...	475
Printing Color Usage Log...	475
Printing Configuration...	475
Printing Demo Page...	475
Printing Diagnostics Page...	476
Printing Engine Test...	476
Printing Event Log...	476
Printing File Directory...	476

Printing Font List...	476
Printing Fuser Test Page...	476
Printing Help Page...	477
Printing Menu Map...	477
Printing PQ Troubleshooting...	477
Printing Registration Page...	477
Printing RGB Samples...	477
Printing stopped	477
Printing Supplies Status page...	478
Printing Usage Page...	478
Processing duplex job... Do not grab paper until job completes	478
Processing job from tray <X>... Do not grab paper until job completes	478
Processing... <filename>	478
Processing... copy <X> of <Y>	478
Ready	479
Ready <IP Address>	479
Remove all toner cartridges	479
Remove at least one toner cartridge	479
Remove shipping lock from Tray 2	479
Replace <supply>	480
Replace supplies	480
Restore Factory Settings	481
Restricted from printing in color	481
Rotating <color> motor	481
Rotating Motor	482
Size mismatch in Tray <X>	482
Supplies in wrong positions	482
Tray <X> empty: [Type], [Size]	483
Tray <X> open	483
Tray <X> overfilled	484
Troubleshooting	484
Type mismatch Tray <X>	484
Unsupported drive installed To continue, touch "OK"	485
Unsupported supply in use OR Unsupported supply installed To continue, touch "OK"	485
Unsupported tray configuration	485
Unsupported USB accessory detected Remove USB accessory	486
USB accessory needs too much power Remove USB and turn off then on	486
USB accessory not functional	486
Used supply installed To continue, touch "OK" OR Used supply in use	486

Wrong cartridge in <color> slot	487
Event log messages	488
Print or view an event log	489
Clear an event log	489
Clear jams	490
Common causes of jams	490
Jam locations	491
Clear jams in the upper-right door	496
Clear jams in the lower-right door	498
Clear jams in Tray 1	499
Clear jams from Tray 2, Tray 3, or an optional tray	501
Clear jams in the output bin area	502
Jam causes and solutions	503
Jams in the output bin	503
Jams in the fuser and transfer area	503
Jams in the duplex area (duplex models only)	504
Jams in Tray 1, Tray 2 and internal paper path	505
Jams in Tray 3, 4, 5, and 6	507
Change jam recovery	509
Solve paper-handling problems	510
Product feeds multiple sheets	510
Product feeds incorrect page size	510
Product pulls from incorrect tray	510
Paper does not feed automatically	511
Paper does not feed from Tray 2, 3, 4, 5, or 6	511
Output is curled or wrinkled	512
Product will not duplex or duplexes incorrectly	512
Use manual print modes	514
Solve image-quality problems	517
Print quality examples	517
Clean the product	523
Clean the paper path	523
Solve performance problems	524
Solve connectivity problems	525
Solve direct-connect problems	525
Solve network problems	525
Service mode functions	526
Service menu	526
Product resets	527
Restore factory-set defaults	527
Preboot menu options	528

Product updates	535
Determine the installed revision of firmware	535
Perform a firmware upgrade	535
Embedded Web Server	535
USB storage device (Preboot menu)	536
USB storage device (control-panel menu)	537

4 Parts and diagrams 539

Order parts by authorized service providers	540
Order parts, accessories, and supplies	540
Related documentation and software	540
Supplies part numbers	541
Customer self repair parts	541
Service replacement parts	543
Accessories part numbers	545
How to use the parts lists and diagrams	546
Assembly locations	547
External covers, panels, and doors	548
Right door assembly	550
Internal components (1 of 9)	552
Internal components (2 of 9)	554
Internal components (3 of 9)	556
Internal components (4 of 9)	558
Internal components (5 of 9)	560
Internal components (6 of 9)	562
Internal components (7 of 9)	564
Internal components (8 of 9)	566
Internal components (9 of 9)	568
1x250 cassette	570
Paper pick-up assembly	572
Paper delivery assembly	574
Printed circuit assemblies	576
1x500 paper feeder	578
1x500PF external components	578
1x500PF internal components	580
1x500PF PCA	582
3x500 paper feeder	584
3x500PF external components	584
3x500PF internal components	586
3x500PF cassette	588
3x500PF PCAs	590

Alphabetical parts list	592
Numerical parts list	604
Appendix A Service and support	617
Hewlett-Packard limited warranty statement	618
HP's Premium Protection Warranty: LaserJet toner cartridge limited warranty statement	619
Color LaserJet Fuser Kit, Transfer Kit, and Roller Kit Limited Warranty Statement	620
Data stored on the toner cartridge	621
End User License Agreement	622
Customer self-repair warranty service	624
Customer support	625
Appendix B Product specifications	627
Physical specifications	628
Power consumption, electrical specifications, and acoustic emissions	628
Environmental specifications	628
Appendix C Regulatory information	629
FCC regulations	630
Environmental product stewardship program	631
Protecting the environment	631
Ozone production	631
Power consumption	631
Toner consumption	631
Paper use	631
Plastics	631
HP LaserJet print supplies	631
Return and recycling instructions	632
United States and Puerto Rico	632
Multiple returns (more than one cartridge)	632
Single returns	632
Shipping	632
Non-U.S. returns	633
Paper	633
Material restrictions	633
Disposal of waste equipment by users	634
Electronic hardware recycling	634
Chemical substances	634
Material Safety Data Sheet (MSDS)	634
For more information	634

Declaration of Conformity	635
Certificate of Volatility	637
Safety statements	639
Laser safety	639
Canadian DOC regulations	639
VCCI statement (Japan)	639
Power cord instructions	639
EMC statement (China)	639
Power cord statement (Japan)	640
EMC statement (Korea)	640
EMI statement (Taiwan)	640
Laser statement for Finland	640
GS statement (Germany)	642
Substances Table (China)	642
Restriction on Hazardous Substances statement (Turkey)	642
Restriction on Hazardous Substances statement (Ukraine)	642
Eurasian Conformity (Belarus, Kazakhstan, Russia)	643

Index	645
--------------------	------------

1 Theory of operation

- [Basic operation](#)
- [Formatter-control system](#)
- [Engine-control system](#)
- [Image-formation system](#)
- [Pickup, feed, and delivery system](#)
- [Paper feeder](#)
- [Optional 3X500-sheet paper deck](#)

Basic operation

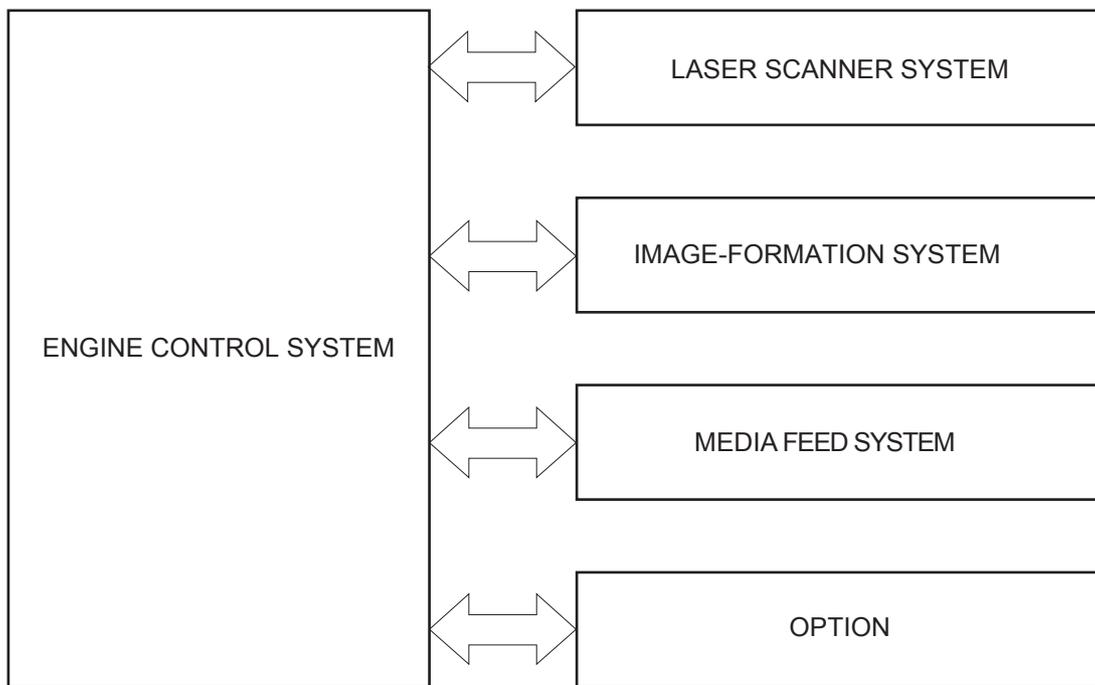
Major product systems

The product contains the following five systems:

- Engine-control system
- Laser scanner system
- Image-formation system
- Media feed system
- Optional paper feeder system

Product block diagram

Figure 1-1 Product block diagram



Sequence of operation

The DC controller in the engine-control system controls the operational sequences of the product. The following table describes durations and operations for each period of a print operation from the time the product is turned on until the motor stops rotating.

Normal sequence of operation

Table 1-1 Sequence of operation

Name	Timing	Purpose
WAIT	From the time the power switch is turned on, the door is closed, or the product exits Sleep mode, until the product is ready for a print operation.	Brings the product to a printable condition: <ul style="list-style-type: none">• Detects and heats the fuser• Detects the print cartridge and any cartridge changes• Detects the ITB, and moves the ITB and the developing unit to the home position• Cleans residual toner from the intermediate transfer belt (ITB) and the secondary transfer roller
STBY (standby)	From the end of the WAIT or LSTR period until either a print command is sent or the power switch is turned off.	Maintains the product in printable condition: <ul style="list-style-type: none">• Enters Sleep mode if the sleep command is received• Performs a calibration if the calibration command is received
INTR (initial rotation)	From the time the print command is received until the product picks up a piece of paper.	Prepares for the print job <ul style="list-style-type: none">• Activates the high-voltage power supply• Activates the laser scanner• Opens the laser shutter• Cleans the protective laser glass• Engages the print cartridges• Warms the fuser

Table 1-1 Sequence of operation (continued)

Name	Timing	Purpose
PRINT	From the end of the INTR period until the last sheet completes the fusing operation.	<p data-bbox="943 260 999 287">Prints</p> <ul data-bbox="943 310 1390 436" style="list-style-type: none"><li data-bbox="943 310 1390 338">• Forms the image on the photosensitive drum<li data-bbox="943 361 1390 388">• Transfers the toner image to the paper<li data-bbox="943 411 1390 438">• Fuses the toner image to the paper
LSTR (last rotation)	From the end of the PRINT period until the main motor stops rotating.	<p data-bbox="943 464 1350 491">Moves the last printed sheet to the output bin.</p> <ul data-bbox="943 514 1318 793" style="list-style-type: none"><li data-bbox="943 514 1318 541">• Stops the high-voltage power supply<li data-bbox="943 564 1198 592">• Stops the laser scanner<li data-bbox="943 615 1198 642">• Closes the laser shutter<li data-bbox="943 665 1278 693">• Cleans the protective laser glass<li data-bbox="943 716 1270 743">• Disengages the print cartridges<li data-bbox="943 766 1126 793">• Stops the fuser <p data-bbox="943 816 1422 894">The product enters the INTR period as the LSTR period is completed, if the formatter sends another print command.</p>

Formatter-control system

The formatter is responsible for the following procedures:

- Controlling sleep mode
- Receiving and processing print data from the various product interfaces
- Monitoring control-panel functions and relaying product-status information (through the control panel and the network or bidirectional interface)
- Developing and coordinating data placement and timing with the DC controller PCA
- Storing font information
- Communicating with the host computer through the network or the bidirectional interface

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

The formatter also provides the electrical interface and mounting locations for an additional DIMM.

Sleep mode



NOTE: In the [General Settings](#) menu (a submenu of the [Administration](#) menu), this item is called [Energy Settings](#).

This feature conserves power after the product has been idle for an adjustable period of time. When the product is in Sleep Mode, the control-panel backlight is turned off, but the product retains all settings, downloaded fonts, and macros. The default setting is for Sleep Mode to be enabled. The product enters Sleep Mode after 60 seconds of idle time.

The product exits Sleep Mode and enters the warm-up cycle when any of the following events occur:

- A print job, valid data, or a PML or PJL command is received
- A control-panel button is pressed
- A cover is opened
- A paper tray is opened
- The engine-test switch is pressed



NOTE: Product error messages override the Sleep message. The product enters Sleep Mode at the appropriate time, but the error message continues to appear.

Input/output

The product has three I/O interfaces:

- USB 2.0 port for connecting directly to a computer
- Internal 10/100Base-T network port
- Walk-up USB port

CPU

The formatter incorporates a 800 MHz Vermillion processor.

Memory

The random access memory (RAM) on the formatter printed circuit assembly (PCA) contains the page, I/O buffers, and the font storage area. It stores printing and font information received from the host system, and can also serve to temporarily store a full page of print-image data before the data is sent to the print engine.



NOTE: If the product encounters a problem when managing available memory, a clearable warning message appears on the control-panel display.

Firmware

The firmware is contained in the internal solid state drive (SSD) or hard disk (HD). A remote firmware upgrade process is used to overwrite and upgrade the firmware on the SSD or HD.

Nonvolatile memory

The product uses nonvolatile memory (NVRAM) to store device and user configuration settings. The contents of NVRAM are retained when the product is turned off or disconnected.

PJL overview

The printer job language (PJL) is an integral part of configuration, in addition to the standard printer command language (PCL). With standard cabling, the product can use PJL to perform a variety of functions.

- Two-way communication with the host computer through a network connection or a USB connection. The product can inform the host about the control-panel settings which can be changed from the host.
- Dynamic I/O switching. The product uses this switching to be configured with a host on each I/O. The product can receive data from more than one I/O simultaneously, until the I/O buffer is full. This can occur even when the product is offline.
- Context-sensitive switching. The product can automatically recognize the personality (PS or PCL) of each job and configure itself to serve that personality.
- Isolation of print environment settings from one print job to the next. For example, if a print job is sent to the product in landscape mode, the subsequent print jobs print in landscape mode only if they are formatted for landscape printing.

PML

The printer management language (PML) allows remote configuration and status read-back through the I/O ports.

Control panel

The formatter sends and receives product status and command data to and from the control-panel PCA.

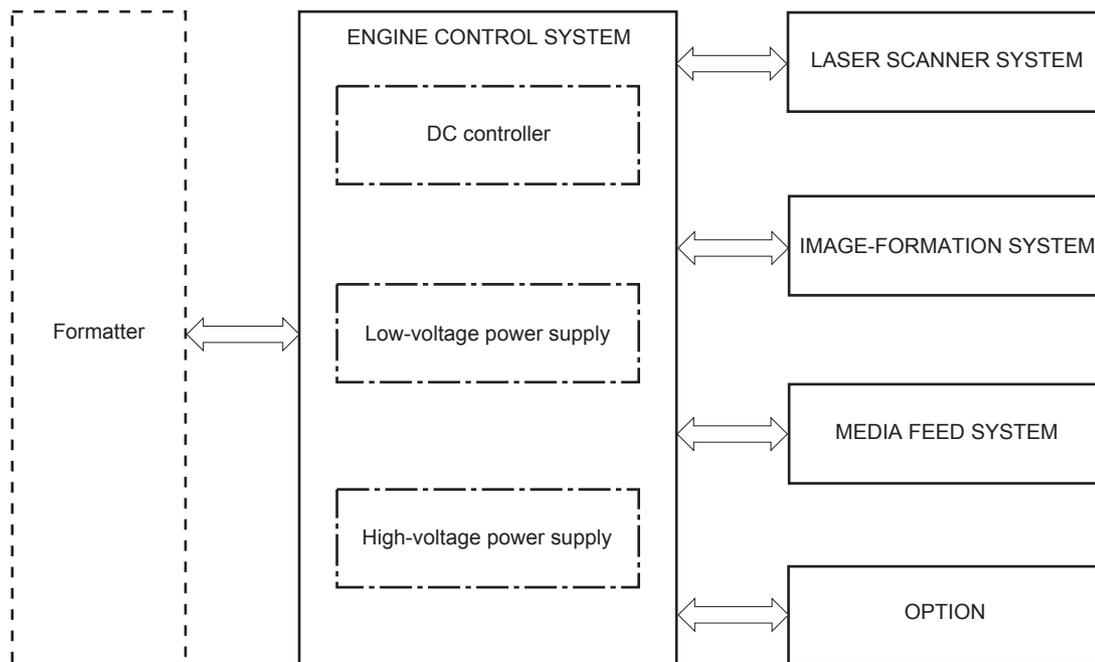
Engine-control system

The engine-control system coordinates all product functions, according to commands that the formatter sends. The engine-control system drives the laser/scanner system, the image formation system, and the pickup/feed/delivery system.

The engine control system contains the following major components:

- DC controller
- Low-voltage power supply
- High-voltage power supply

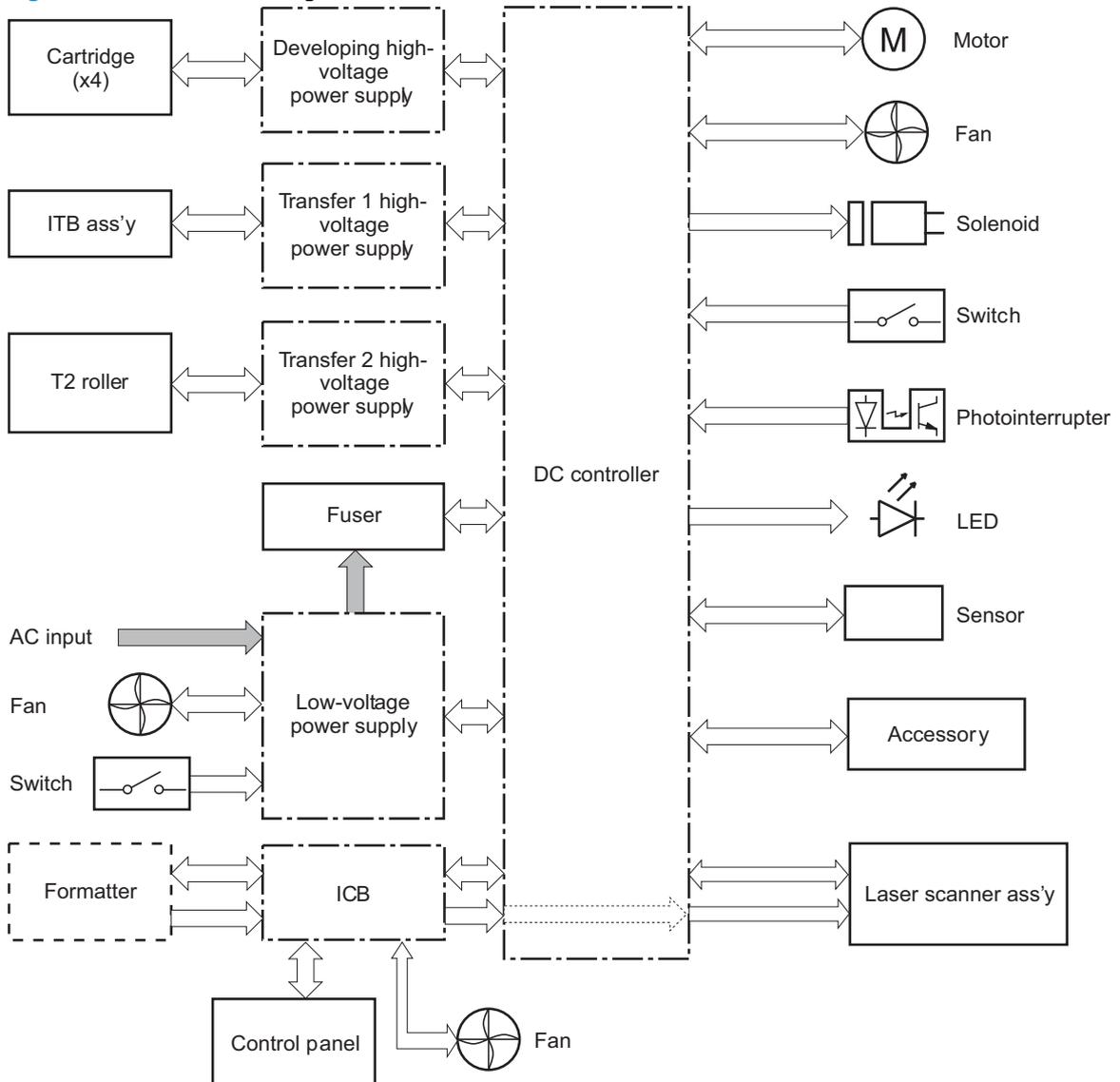
Figure 1-2 Engine-control system



DC controller

The DC controller controls the operational sequence of the product.

Figure 1-3 DC controller diagram



The DC controller controls the product's electrical components, listed in the following table.

Table 1-2 Electrical components

Component type	Abbreviation	Name
Switch	SW1	Power switch
	SW2	24V interlock switch
	SW3	5V interlock switch 1
	SW4	5V interlock switch 2
	SW5	Primary transfer disengagement switch
	SW6	Toner collection unit switch
	SW7	Tray 2 cassette media end guide position switch
	SW8	Tray 2 cassette media width guide position switch
Solenoid	SL1	Tray 2 cassette pickup solenoid
	SL2	Tray 1 pickup solenoid
	SL3	Duplex reverse solenoid 1 (duplex models only)
	SL5	Primary transfer disengagement solenoid
Fan	FM1	Power supply fan
	FM2	Fuser fan
	FM3	Formatter fan
Photointerrupter (sensor)	PS1	Tray 2 cassette paper-presence sensor
	PS2	Tray 1 paper-presence sensor
	PS3	Last-paper sensor
	PS4	Tray 2 cassette paper-stack surface sensor
	PS5	Top-of-page (TOP) sensor
	PS6	Fuser delivery sensor
	PS7	Loop sensor 1
	PS8	Loop sensor 2
	PS9	Fuser pressure-release sensor
	PS10	Output bin full sensor
	PS11	Developing disengagement sensor
	PS12	Black drum home-position sensor
	PS13	YMC drum home-position sensor
	PS14	Front door sensor
	PS15	Right door sensor

Table 1-2 Electrical components (continued)

Component type	Abbreviation	Name
Motor	M1	ITB Motor
	M2	Drum motor
	M3	Developing motor
	M4	Fuser motor
	M5	Pickup motor
	M6	Developing disengagement motor
	M7	Duplex reverse motor (duplex model only)
	M8	Duplex feed motor (duplex model only)
M9	Tray 2 cassette lifter motor	
M10	Scanner motor	

Motors

The product has ten motors for paper feed and image formation. The DC controller determines there is a motor failure if a motor does not reach a specified speed within a specified period after motor startup, or if the rotational speed is outside a specified range for a specified period.

Figure 1-4 Motors

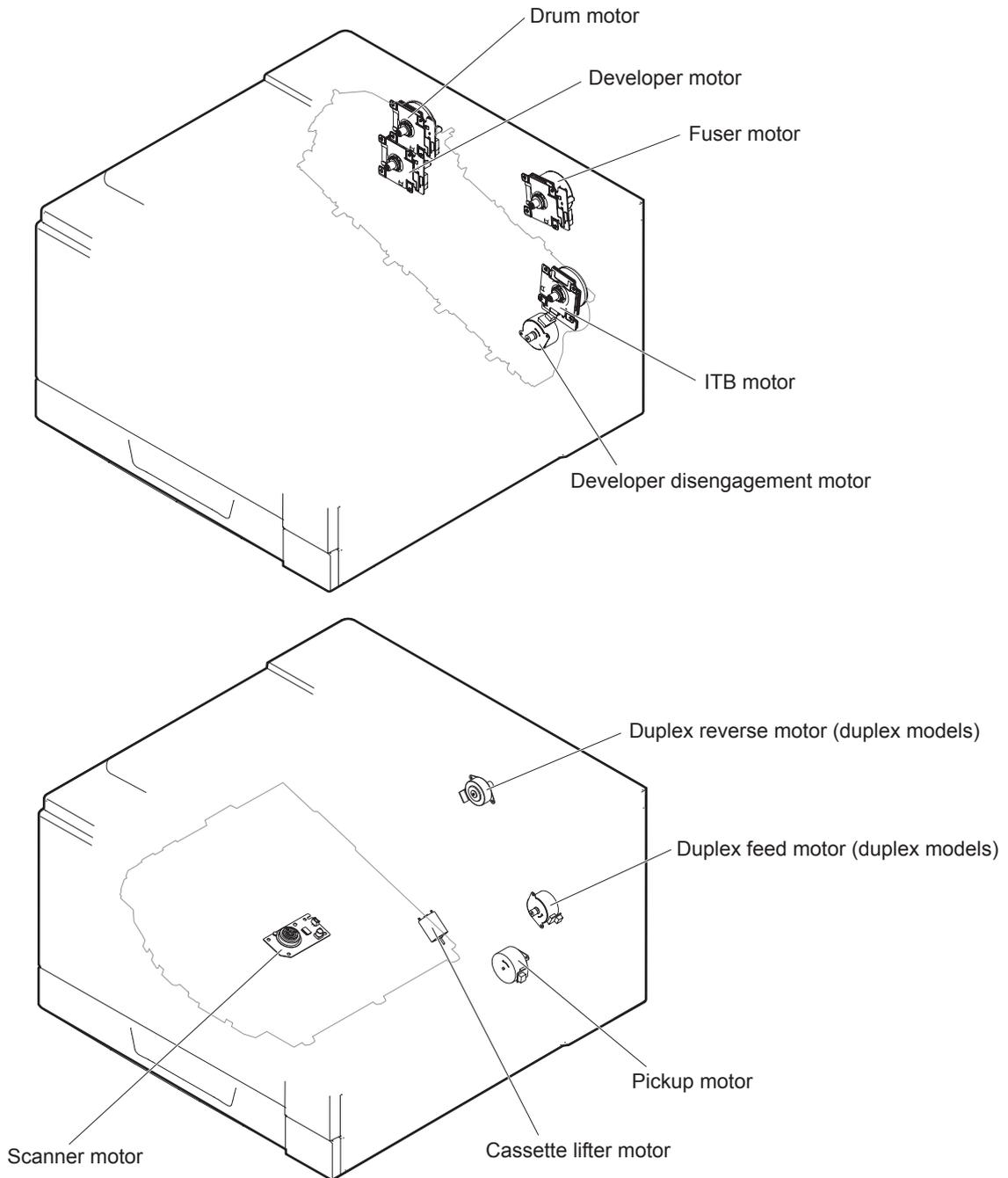


Table 1-3 Motors

Description	Components driven	Failure detection
ITB motor (M1)	ITB Black photosensitive drum Black developing roller	Yes
Drum motor (M2)	Yellow, magenta, and cyan photosensitive drums	Yes
Developing motor (M3)	Yellow, magenta, and cyan developing rollers	Yes
Fuser motor (M4)	Fuser pressure and delivery rollers Pressurizes and depressurizes the pressure roller Engages and disengages the primary transfer roller	Yes
Pickup motor (M5)	Tray 1 pickup roller Tray 2 cassette pickup roller Feed roller	No
Developing disengagement motor (M6)	Engages and disengages the developing unit	No
Duplex reverse motor (M7; duplex models only)	Duplex reverse roller	No
Duplex feed motor (M8; duplex models only)	Duplex feed roller	No
Tray 2 cassette lifter motor (M9)	Lifter for the Tray 2 cassette	No
Scanner motor (M10)	Scanner mirror	No

Fans

The product uses three fans to maintain the correct internal temperature. The DC controller determines a fan failure when a fan locks for a specified period after it starts driving.

Figure 1-5 Fans

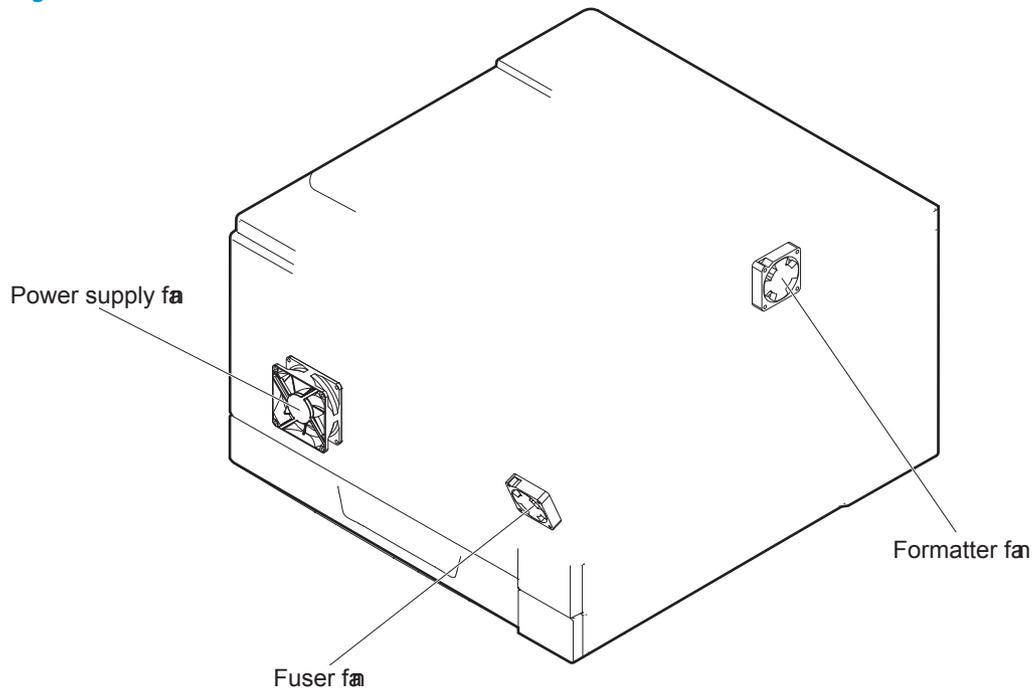


Table 1-4 Fans

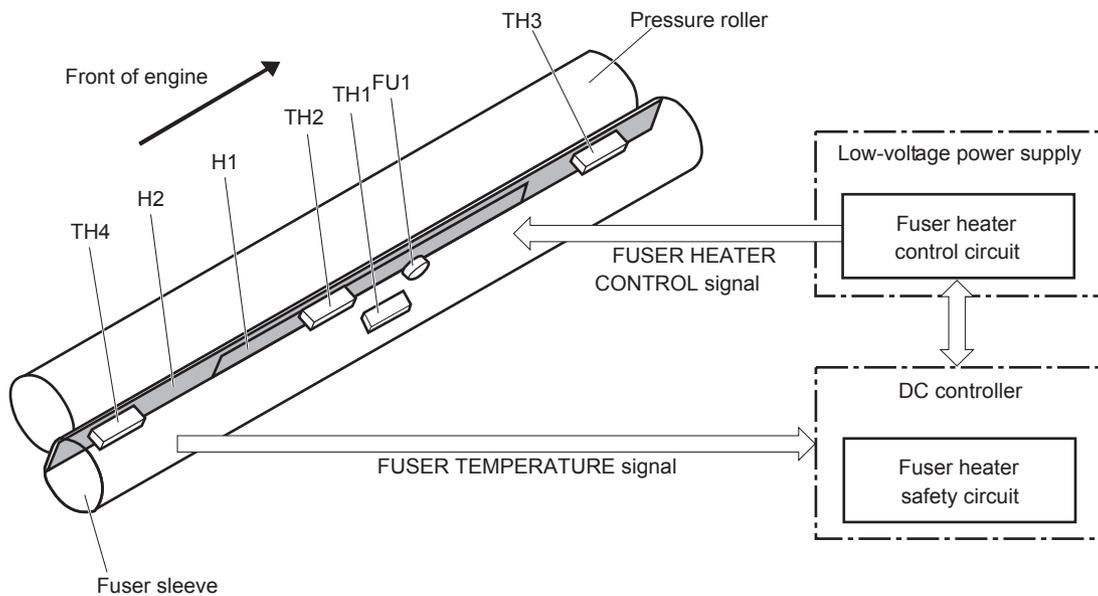
Description	Area cooled	Type	Speed
Power supply fan (FM1)	Low-voltage power supply Output bin Delivery unit Laser scanner unit	Intake	Full/Half
Fuser (FM2)	Duplex feed unit ITB area	Intake	Full
Formatter (FM3)	Formatter area	Intake	Controlled by the formatter

Fuser-control circuit

The fuser-control circuit monitors and controls the temperature in the fuser. The product uses on-demand fusing. The fuser-control circuit consists of the following major components:

- Fuser main heater (H1): Heats the center of the fuser sleeve
- Fuser sub heater (H2): Heats the ends of the fuser sleeve
- Thermistors; detect the fuser temperature (contact type)
 - Sleeve thermistor (TH1): Detects the temperature at the center of the fuser sleeve
 - Main thermistor (TH2): Detects the temperature at the center of the fuser heater
 - Sub thermistor 1 (TH3): Detects the temperature at the end of the fuser heater nearest the front of the product
 - Sub thermistor 2 (TH4): Detects the temperature at the end of the fuser heater nearest the rear of the product
- Thermal fuse (FU1): Prevents abnormal temperature rise in the fuser heater (non-contact type)

Figure 1-6 Fuser-control circuit



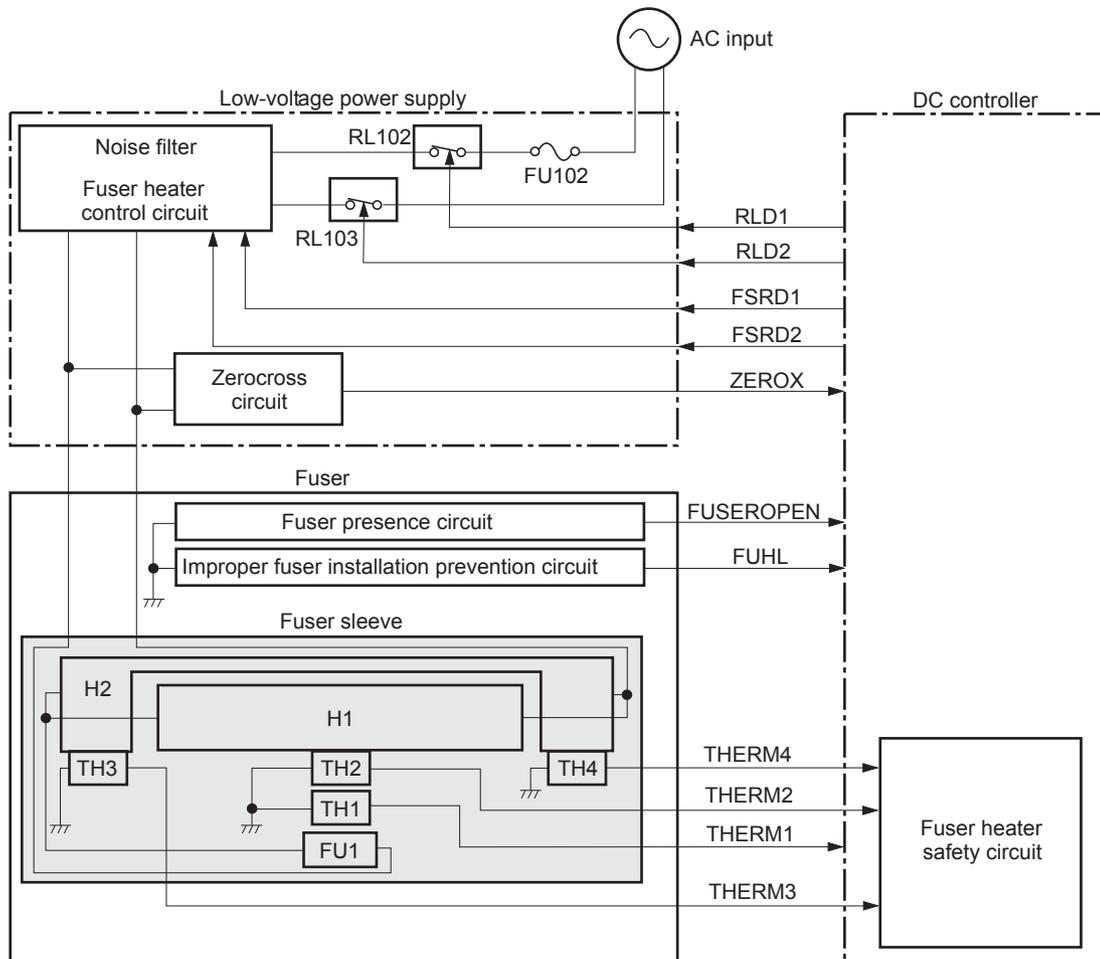
Fuser temperature control

The fuser temperature control maintains the fuser heater at its targeted temperature.

The fuser main heater and sub heater control the temperature of the fuser sleeve.

The DC controller monitors the main thermistor and the sleeve thermistor. The DC controller controls the FUSER MAIN HEATER CONTROL (FSRD1) and the FUSER SUB-HEATER CONTROL (FSRD2) signals according to the detected temperature. The fuser-heater control circuit controls the fuser heater depending on the signal so that the heater remains at the targeted temperature.

Figure 1-7 Fuser-heater control circuit



Fuser protective function

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

The following three protective components prevent an abnormal temperature rise of the fuser heater:

- DC controller
 - The DC controller interrupts power supply to the fuser heater when it detects an abnormal temperature of the fuser heater.
- Fuser-heater safety circuit
 - The fuser heater safety circuit interrupts power supply to the fuser heater when the detected temperature of the main and sub thermistors is abnormal.
- Thermal fuse
 - The thermal fuse is broken to interrupt power supply to the fuser heater when the thermoswitch detects an abnormal temperature of the fuser heater.
 - The current detection circuit detects the current value flowing in the fuser heater control circuit. The DC controller deactivates the FUSER HEATER CONTROL signal and releases the relay to interrupt power supply to the fuser heater when it detects a specified current value or higher by the CURRENT DETECTION (FUR_CURRMS) signal.

Fuser failure detection

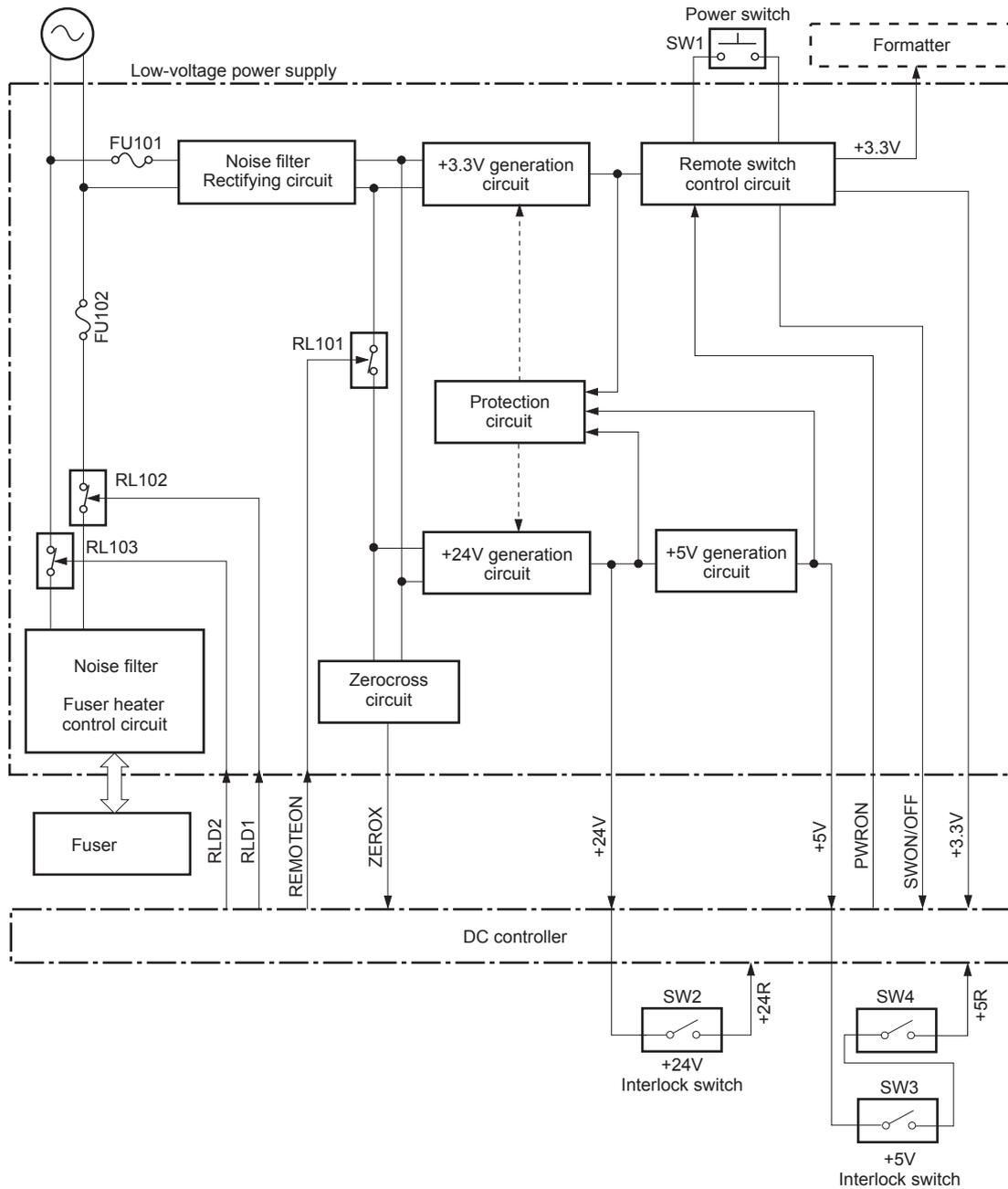
The DC controller determines a fuser unit failure, deactivates the FUSER HEATER CONTROL signal, releases the relay to interrupt power supply to the fuser heater, and then notifies the formatter of a failure state when it encounters the following conditions:

- Abnormal temperature rise: The sleeve thermistor does not rise at a specified temperature within a specified period after the fuser heater control starts.
- Abnormally low temperature: The thermistors are at a specified temperature or lower during a print operation or other fuser heating cycle.
- Abnormally high temperature: The thermistors are at a specified temperature or higher, regardless of the fuser control status.
- Drive circuit abnormality: The frequency in the zerocross circuit is out of a specified range when the product is turned on or is in the standby period.

Low-voltage power supply

The low-voltage power supply (LVPS) converts AC input voltage to DC voltage.

Figure 1-8 Low-voltage power supply



The product uses three DC voltages: 24V, 5V, and 3.3V. The voltages are subdivided as follows:

+24V	Supplied constantly
	Stopped during Sleep mode
+24R	Interrupted when the front or right door is opened

+5V	Supplied constantly Stopped during Sleep mode
+5R	Interrupted when the front or right door is opened
+3.3V	Supplied constantly

Overcurrent/overvoltage protection

The low-voltage power supply has a protective circuit against overcurrent and overvoltage to prevent failures in the power supply circuit. The low-voltage power supply automatically stops supplying the DC voltage whenever excessive current flows or voltage abnormally increases.

If the dc voltage is not being supplied from the low-voltage power supply, the protective function may be running. In this case, turn off the power switch and unplug the power cord. Do not turn the power switch on until the root cause is found.

The LVPS has two fuses on the PCA. The LVPS 24V output is interrupted to the fuser and the high-voltage power supply if the either of the interlock switches (SW3 and SW4) is in the off position (door open).

⚠ WARNING! The product power switch only interrupts dc voltage from the LVPS. The AC voltage is present in the product when the power cord is plugged into a power receptacle and the power switch is in the off position. You must unplug the product power cord before servicing the product.

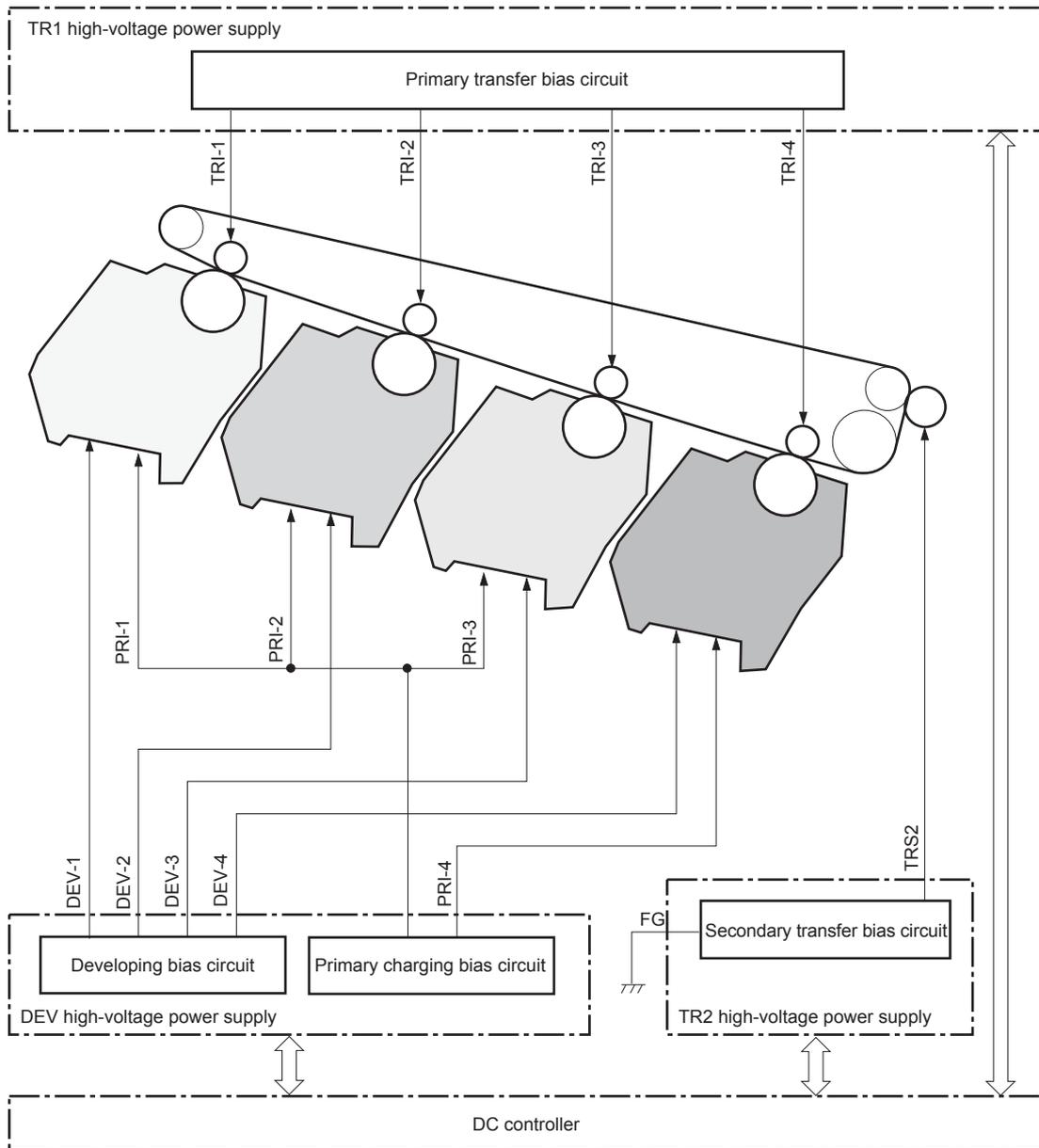
⚠ WARNING! If you believe the overcurrent or overvoltage protection circuits have been activated, do not plug in the product power cord or turn on the product power until the cause of the failure is found and corrected.

In addition, fuses in the low-voltage power supply protect against overcurrent. If overcurrent flows into the AC line, the fuses melt and cut off the power distribution.

High-voltage power supply

The DC controller controls the high-voltage power supply to generate biases.

Figure 1-9 High-voltage power supply



The high-voltage power supply (HVPS) applies biases to the following components:

- **Primary charging roller:** The primary charging bias is applied to the surface of the photosensitive drum to charge it uniformly negative as a preparation for the image formation.
- **Developing roller:** The developing bias is used to adhere toner to an electrostatic latent image formed on the photosensitive drum.

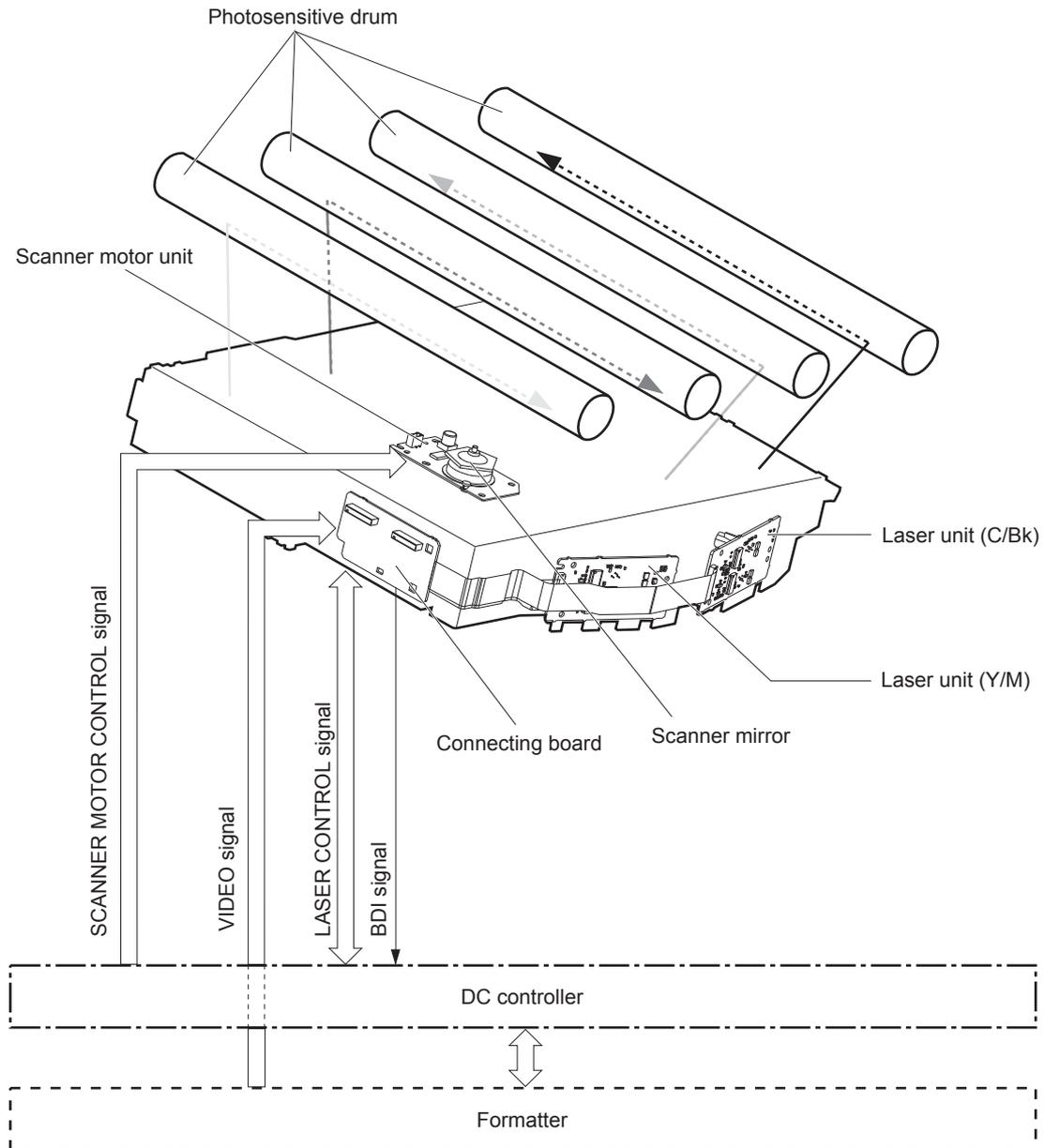
- **Primary transfer roller:** The primary transfer bias is used to transfer the toner from each photosensitive drum onto the ITB.
- **Secondary transfer roller:** The secondary transfer bias is used to transfer the toner image from the ITB onto the paper. The reversed bias is applied to transfer residual toner on the secondary transfer roller back to the ITB. The residual toner on the ITB is deposited in the toner collection unit.

Laser scanner system

The laser scanner system forms latent images on the photosensitive drums according to the VIDEO signals sent from the formatter.

The main components of the laser/scanner are the laser unit and the scanner motor unit. The DC controller sends signals to the laser/scanner to control the functions of these components.

Figure 1-10 Laser/scanner system



Laser failure detection

The DC controller determines an optical unit failure and notifies the formatter, if the laser/scanner encounters the following conditions:

- The scanner motor does not reach a specified rotation frequency within a specified period of the scanner motor start up.
- The beam detect (BD) interval is out of a specified value during a print operation.

Image-formation system

Electrophotographic process

The electrophotographic process forms an image on the paper. Following are the major components used in the process:

- Print cartridges
- Intermediate transfer belt (ITB)
- Secondary transfer roller
- Fuser
- Laser scanner

The DC controller uses the laser scanner and HVPS to form the toner image on the photosensitive drum. The image is transferred to the print media and then fused onto the paper.

Figure 1-11 Electrophotographic process block diagram

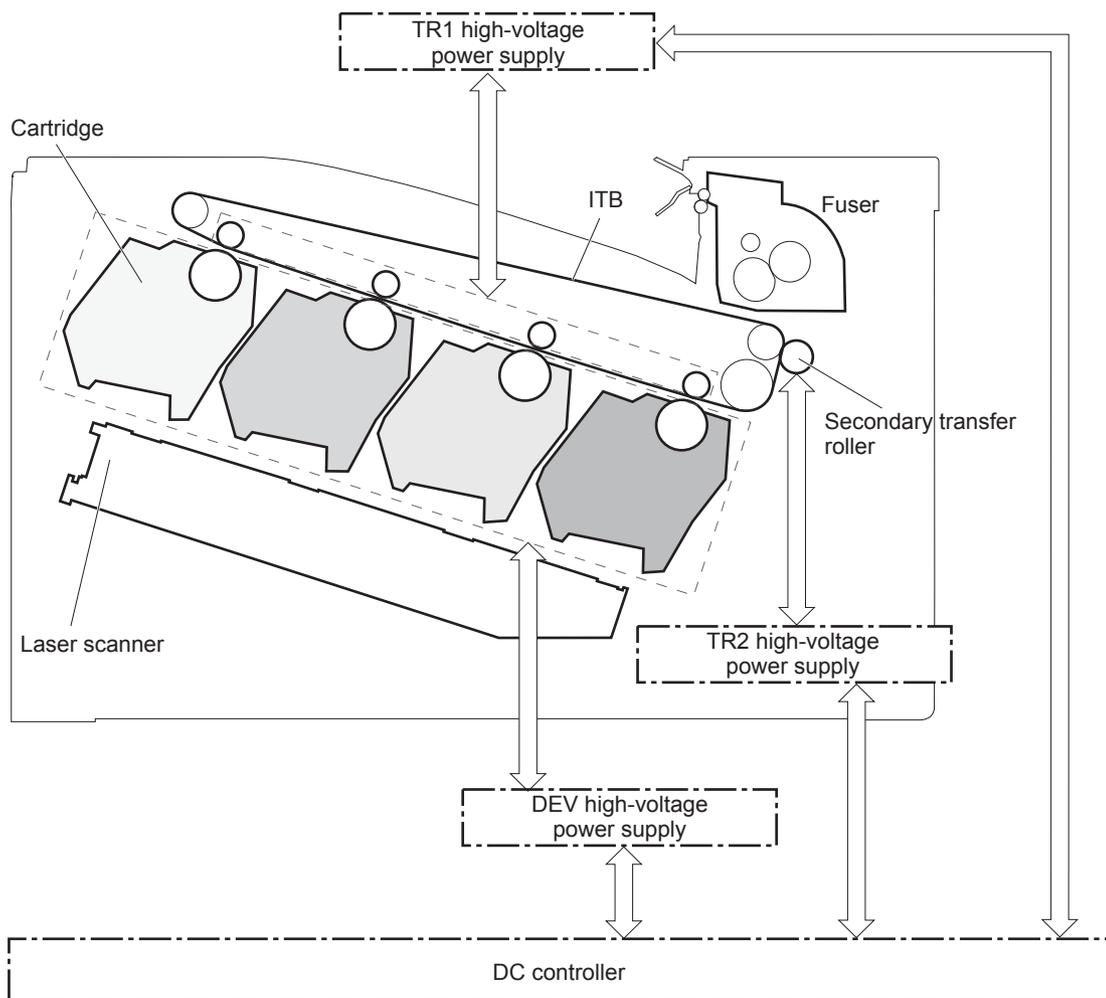


Figure 1-12 Electrophotographic process drive system

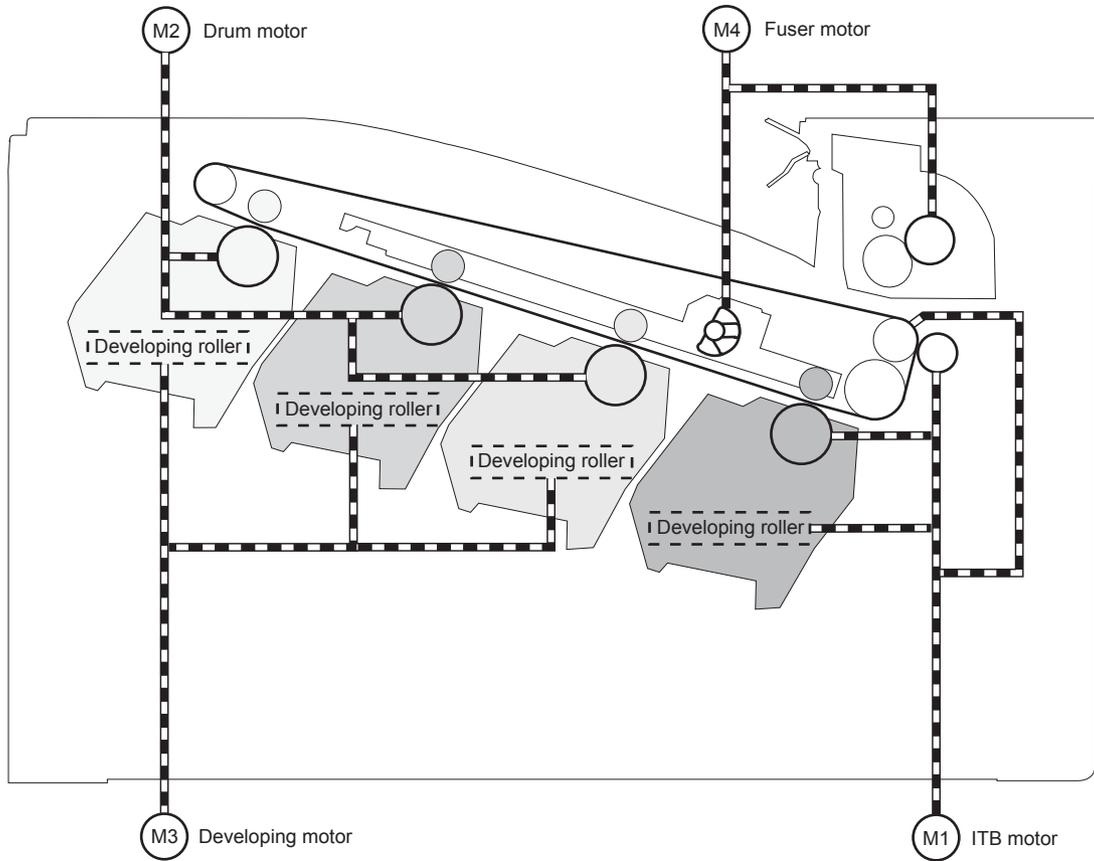
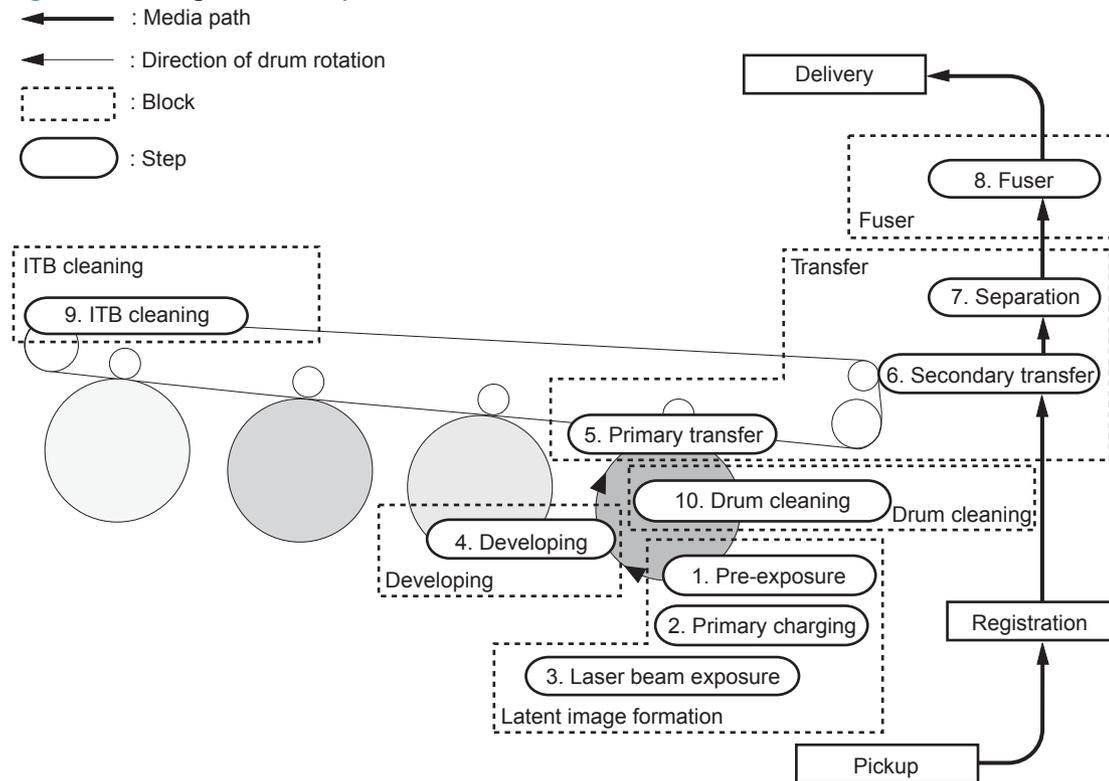


Image formation process

Each of the following processes functions independently and must be coordinated with the other product processes. Image formation consists of the following processes:

Latent-image formation block	Step 1: pre-exposure
	Step 2: primary charging
	Step 3: laser-beam exposure
Developing block	Step 4: developing
Transfer block	Step 5: primary transfer
	Step 6: secondary transfer
	Step 7: separation
Fusing block	Step 8: fusing
ITB cleaning block	Step 9: ITB cleaning
Drum cleaning block	Step 10: Drum cleaning

Figure 1-13 Image formation process



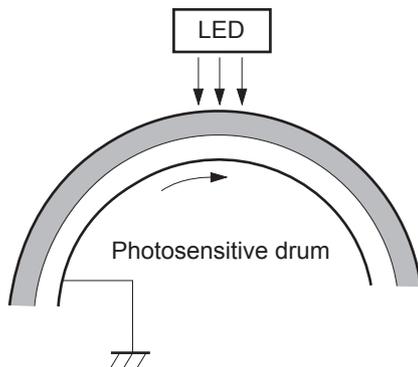
Latent-image formation block

During the latent-image formation stage, the laser scanner forms invisible images on the photosensitive drums in the print cartridges.

Pre-exposure

Step 1: Light from the pre-exposure LED strikes the photosensitive drum surface. This eliminates the residual electrical charges on the drum surface.

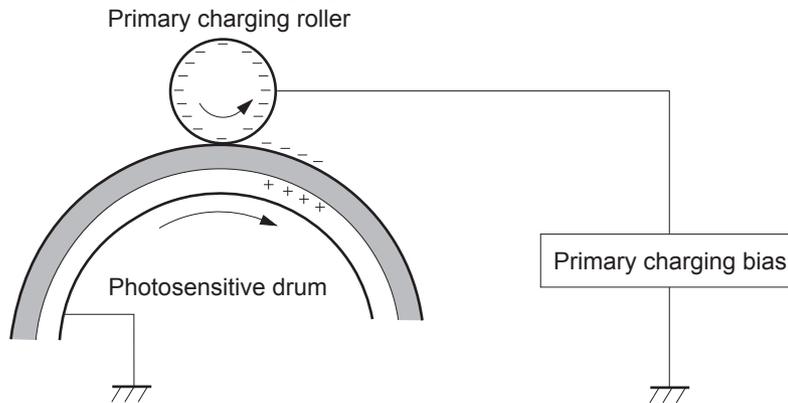
Figure 1-14 Pre-exposure



Primary charging

Step 2: DC and AC biases are applied to the primary charging roller, which transfers a uniform negative potential to the photosensitive drum.

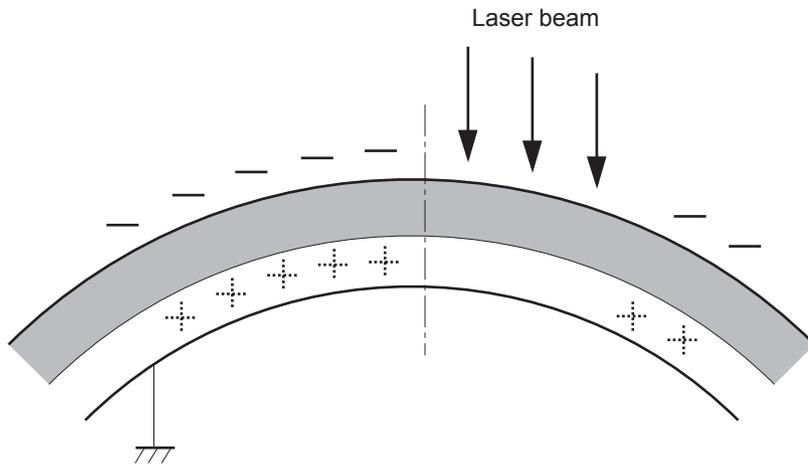
Figure 1-15 Primary charging



Laser beam exposure

Step 3: The laser beam scans the photosensitive drum to neutralize negative charges on parts of the drum surface. An electrostatic latent image is formed on the drum where negative charges were neutralized.

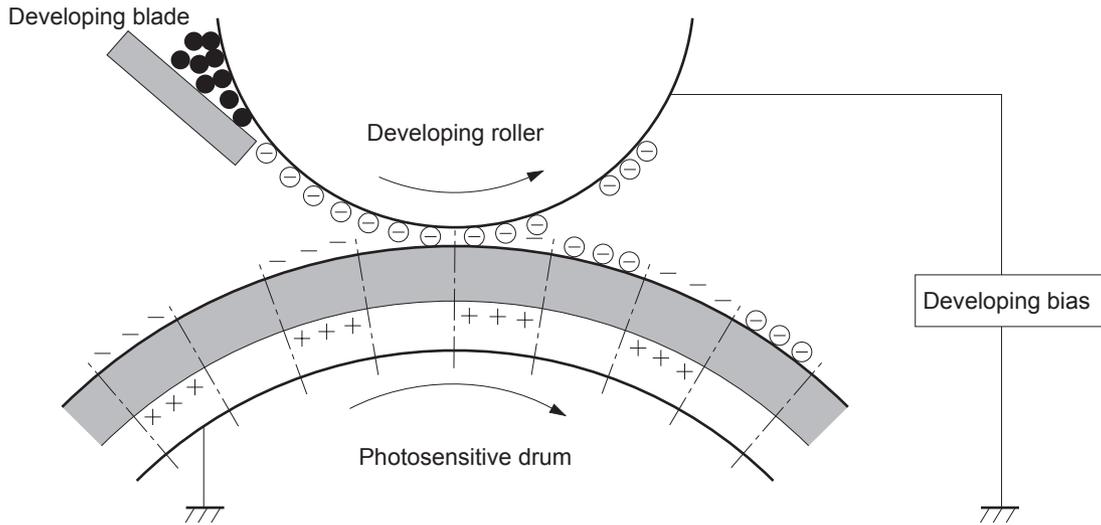
Figure 1-16 Laser beam exposure



Developing block

Step 4: In the print cartridge, toner acquires a negative charge from the friction that occurs when the developing roller rotates against the developing blade. The developing bias is applied to the developing roller to create a difference in the electric potential of the drum. When the negatively charged toner comes in contact with the photosensitive drum, it adheres to the latent image because the drum surface has a higher potential.

Figure 1-17 Developing

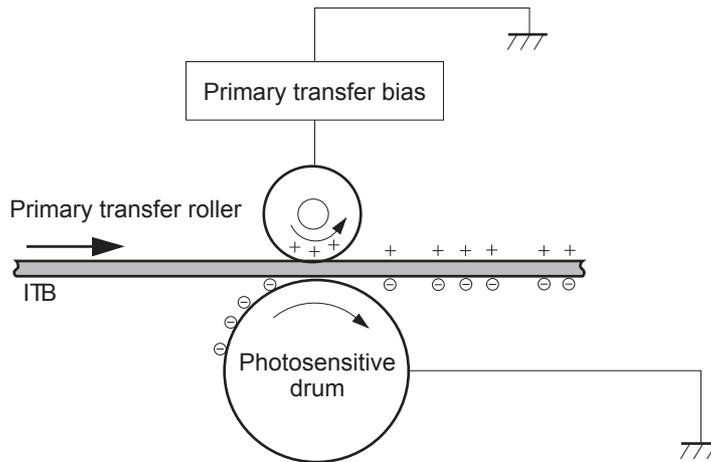


Transfer block

Primary transfer

Step 5: The toner on the photosensitive drum is transferred to the intermediate transfer belt (ITB). The ITB is given a positive charge by the bias of the primary transfer roller. The negatively charged toner on the drum surface is transferred onto the ITB. All four color planes are transferred onto the ITB in this step.

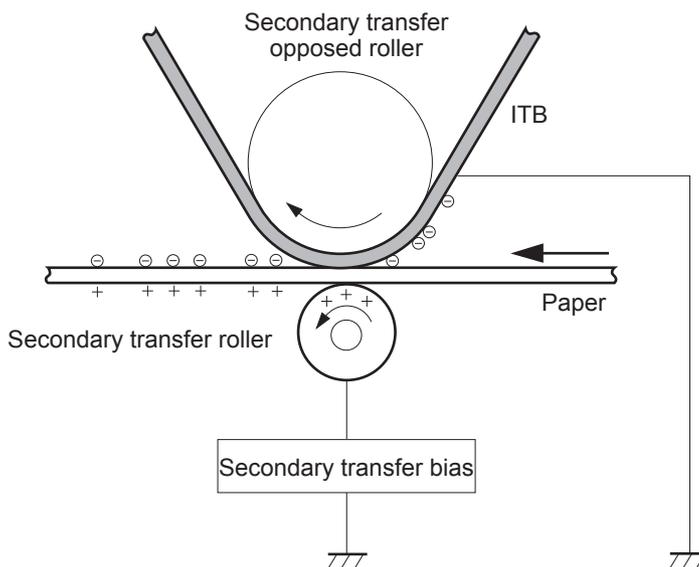
Figure 1-18 Primary transfer



Secondary transfer

Step 6: The toner image on the ITB is transferred to the paper. The secondary transfer bias is applied to the secondary transfer roller to charge the paper positive. As the paper passes between the secondary transfer roller and the ITB, the complete toner image on the ITB is transferred onto the paper.

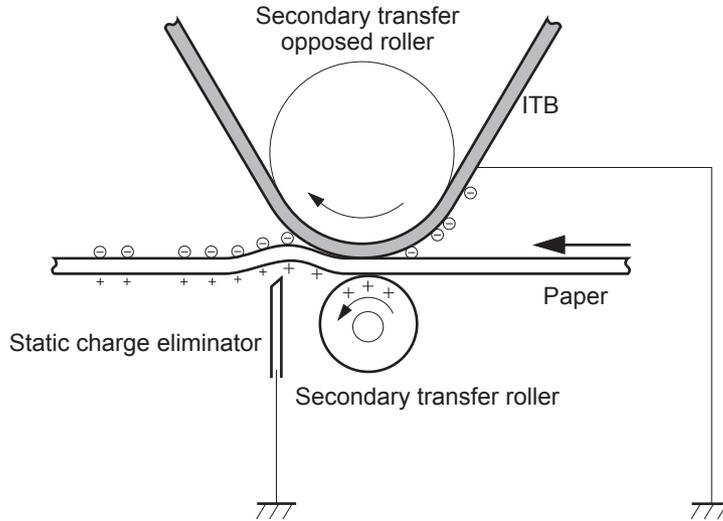
Figure 1-19 Secondary transfer



Separation

Step 7: The elasticity of the paper and the curvature of the secondary transfer opposed roller cause the paper to separate from the ITB. The static charge eliminator reduces back side static charge of the paper and controls excess discharge after the transfer process for stable media feed and image quality.

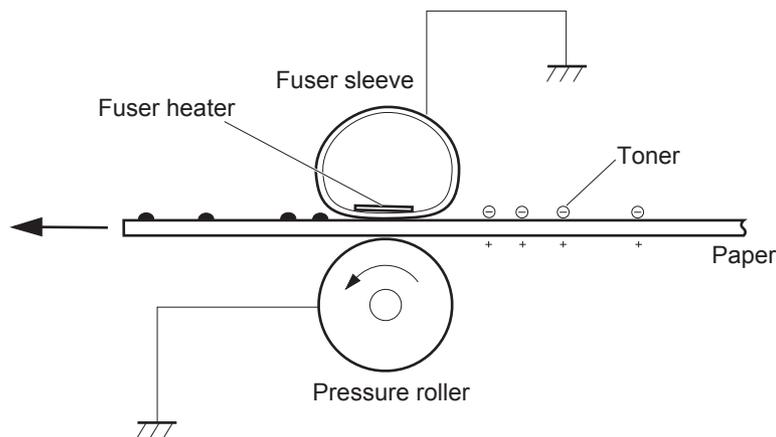
Figure 1-20 Separation



Fusing block

Step 8: The product uses an on-demand fuser. The toner image is permanently affixed to the printing paper by heat and pressure.

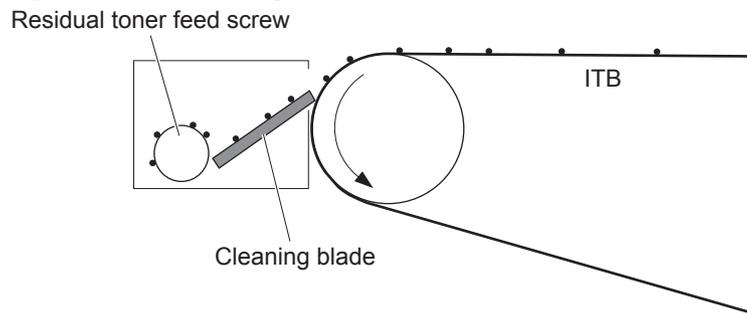
Figure 1-21 Fusing



ITB cleaning block

Step 9: The cleaning blade scrapes the residual toner off the surface of the ITB. The residual toner feed screw deposits residual toner in the toner collection unit.

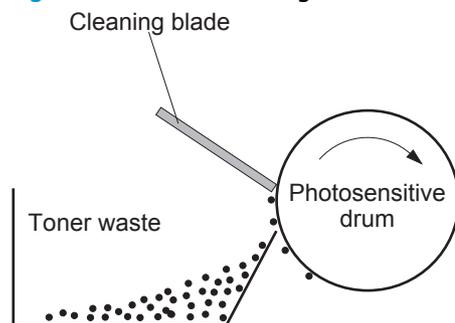
Figure 1-22 ITB cleaning



Drum cleaning block

Step 10: The cleaning blade scrapes the residual toner off the surface of the photosensitive drum, and toner is deposited in the waste section inside the print cartridge.

Figure 1-23 Drum cleaning



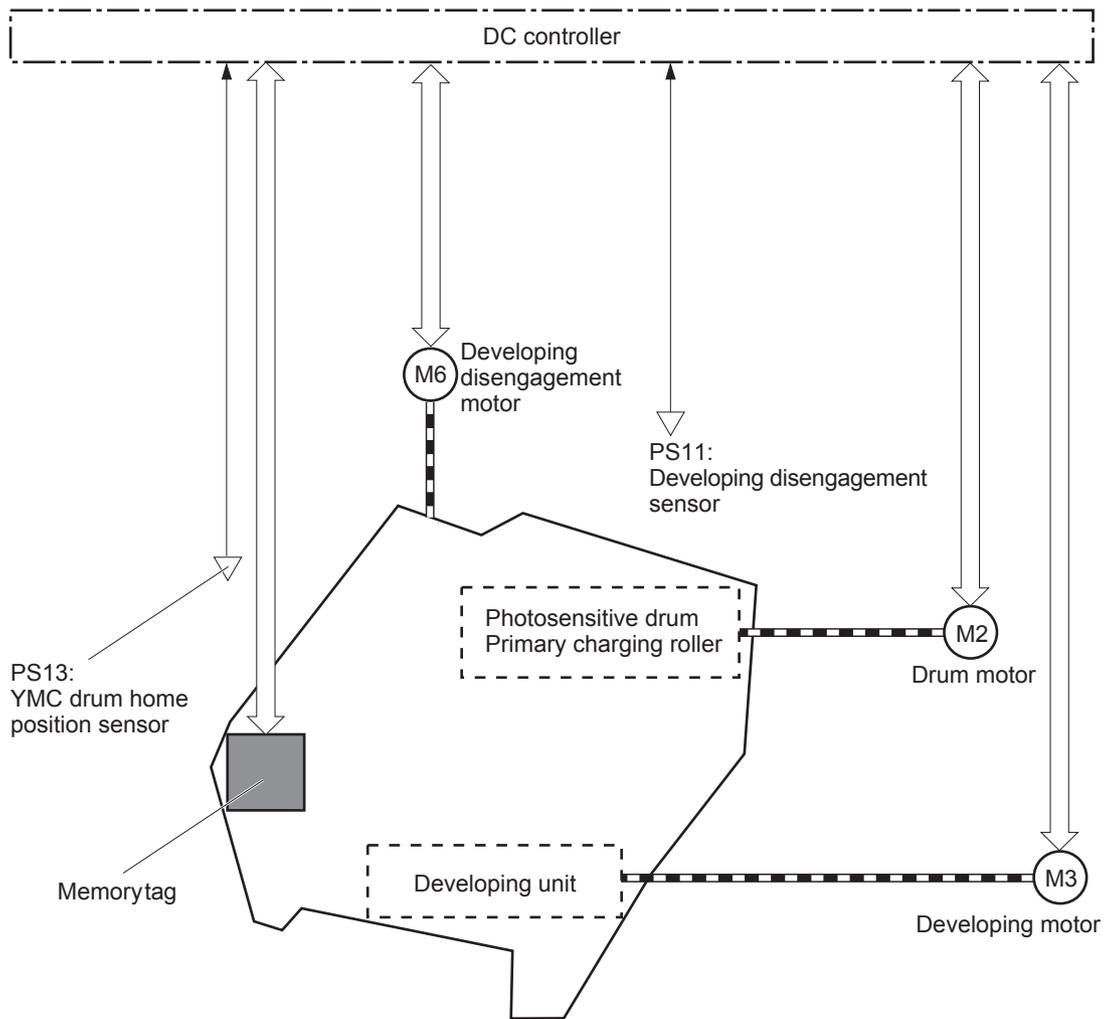
Print cartridges

The product has four print cartridges, one for each color: yellow, magenta, cyan, and black. Each of them has the same structure. The cartridges are filled with toner and consist of the following components:

- Photosensitive drum
- Developing unit
- Primary charging roller

The DC controller rotates the motors to drive the photosensitive drum, developing unit, and primary charging roller.

Figure 1-24 Print cartridge block diagram



Memory tag

The memory tag is a non-volatile memory chip in the cartridge that stores information about usage for the cartridge. The product reads and writes the data in the memory tag. The DC controller determines a memory tag error and notifies the formatter when it fails to either read from or write to the memory tag.

Cartridge presence detection

The DC controller detects the presence of the cartridges by monitoring the cartridge e-label and ground circuit. When the DC controller determines a cartridge absence, it notifies the formatter.

Toner level detection

The DC controller detects the remaining toner level in a cartridge by the optical detection method. The DC controller notifies the formatter of the remaining toner level.

Cartridge life detection

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

Developing unit engagement and disengagement control

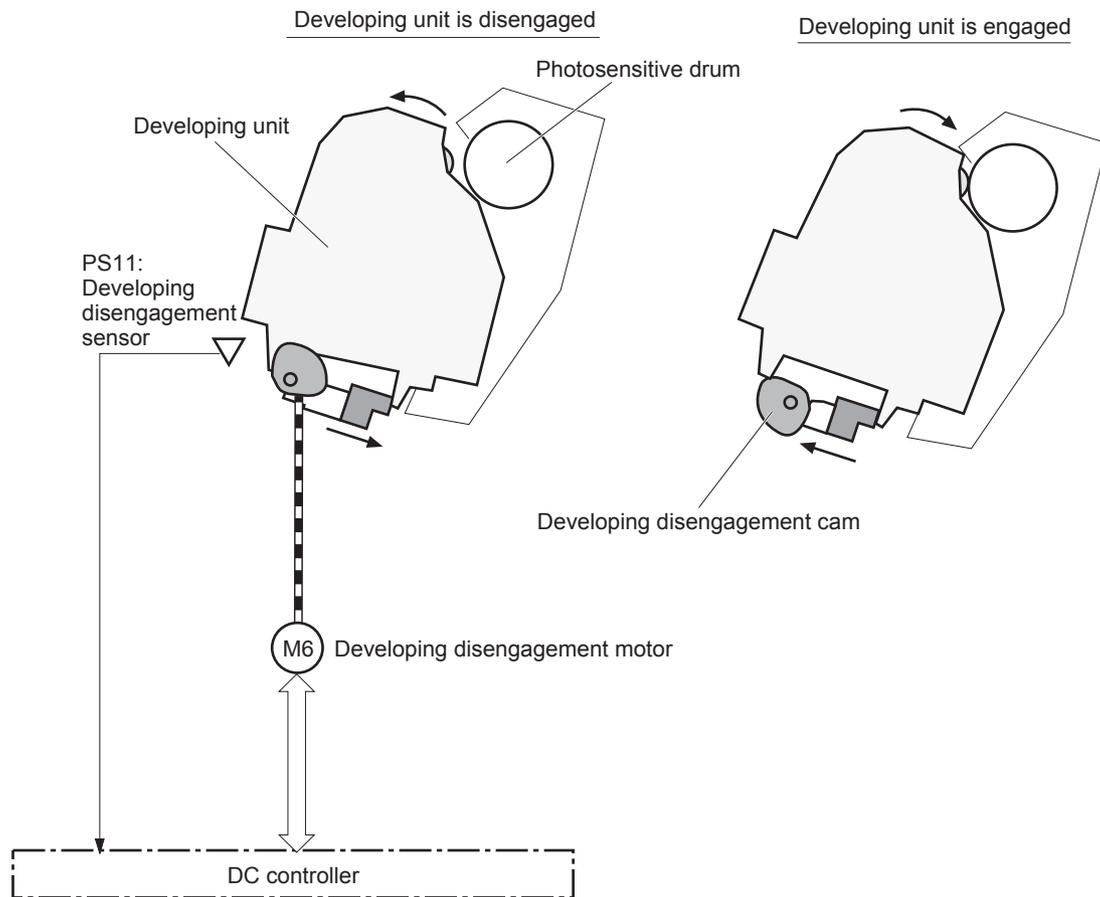
The developing unit engagement and disengagement control engages the developing unit with the photosensitive drum or disengages the developing unit from the drum depending on the print mode: full-color mode or black-only mode. The developing unit is engaged only when required, preventing a deterioration of the drums and maximizing their life.

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

When the product is turned on and when each print job is completed, all four of the developing units disengage from the photosensitive drums. When the print mode is in full-color mode, all of the developing units engage with the drums. When the print mode is in black-only mode, only black developing unit engages with the drum.

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

Figure 1-25 Developing unit engagement and disengagement control



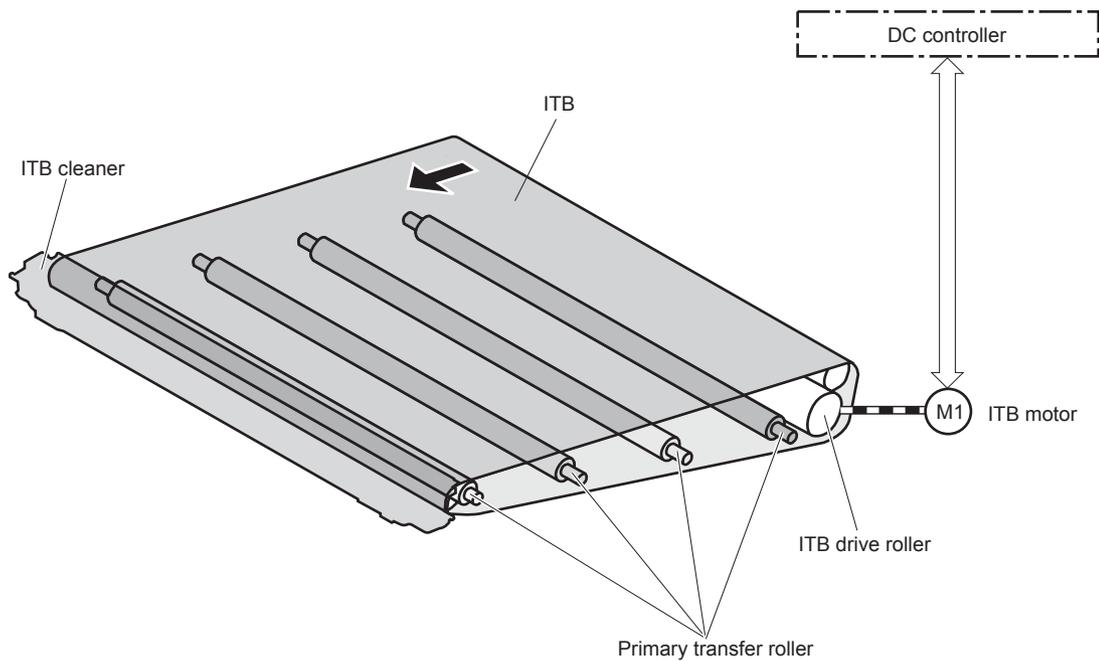
ITB unit

The ITB unit receives the toner image from the photosensitive drums and transfers the complete toner image to the print media. The ITB unit consists of the following components:

- ITB
- ITB drive roller
- Primary transfer rollers
- ITB cleaner

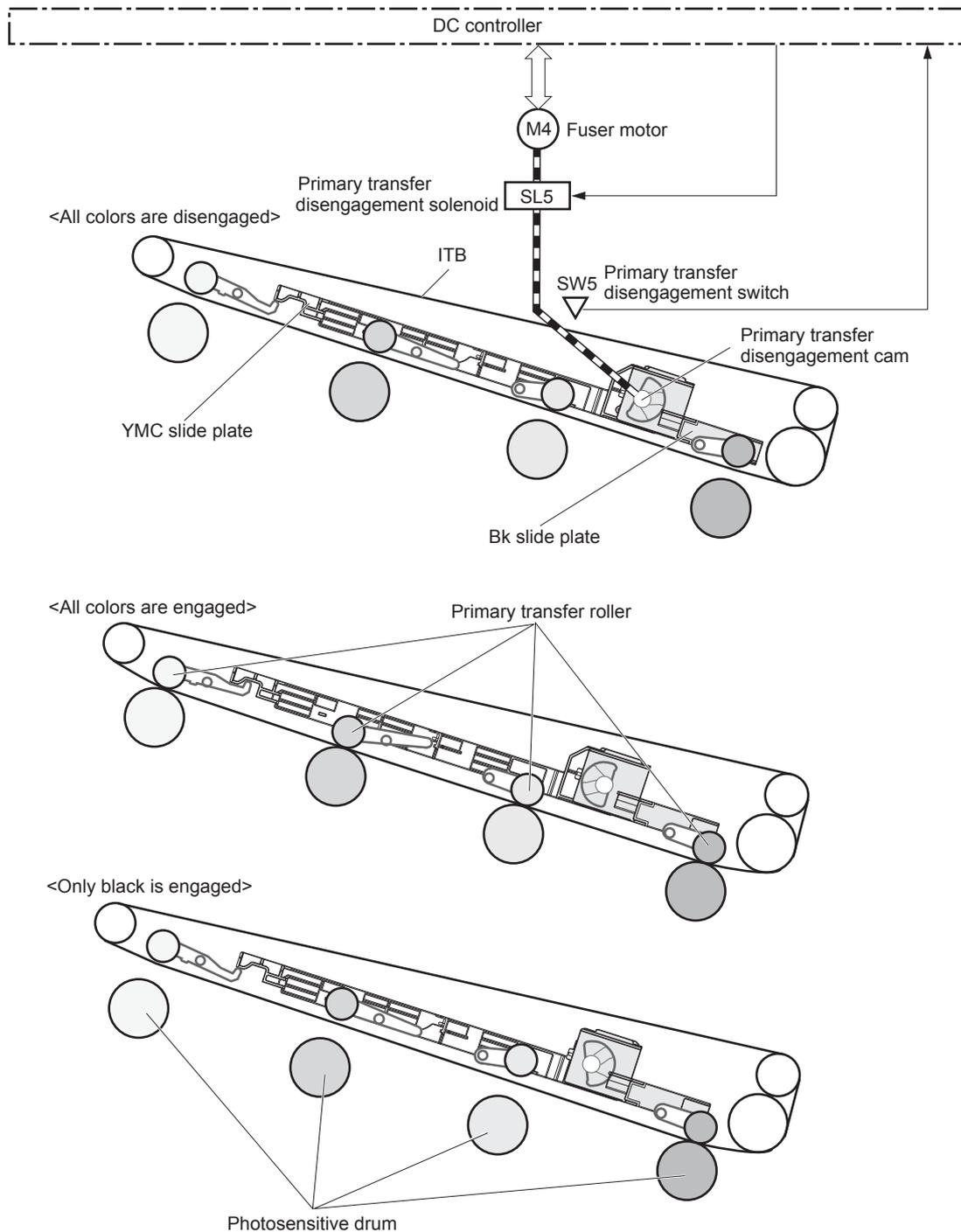
The ITB motor drives the ITB drive roller which rotates the ITB. The rotation of the ITB causes the primary transfer rollers to rotate. The ITB cleaner cleans the ITB surface.

Figure 1-26 ITB unit block diagram



Primary transfer roller engagement and disengagement control

Figure 1-27 Primary transfer roller engagement and disengagement control



The primary transfer roller engagement and disengagement control engages the ITB with the photosensitive drum, or disengages the ITB from the drum, depending on the requirements of the print job.

- **All rollers disengaged:** The ITB disengages from all four photosensitive drums. This is the state during a standby period, and also is the home position for the primary transfer rollers.
- **All rollers engaged:** The ITB engages with all the four photosensitive drums. This is the state for full-color jobs.
- **Only black roller engaged:** The ITB engages with only the black photosensitive drum. This is the state for the black-only print jobs.

The operational sequence of the primary transfer roller engagement and disengagement control is as follows:

1. The fuser motor drives the primary transfer disengagement solenoid to rotate the primary transfer disengagement cam.
2. As the cam rotates, the YMC slide plate or the Bk slide plate moves to right or left. This causes the primary transfer roller to move up or down.
3. The ITB engages with or disengages from the photosensitive drum depending on the movement of the primary transfer rollers.

The DC controller determines that an abnormal primary transfer roller disengagement error has occurred and notifies the formatter. This error happens when the DC controller does not detect a specified signal from the primary transfer disengagement switch, even though the primary transfer disengagement solenoid is driven.

ITB unit presence detection

The DC controller detects the ITB unit presence by monitoring the primary transfer disengagement switch. The DC controller drives the primary transfer disengagement solenoid for specified times during the initial rotation period of the following:

- The product is turned on
- The product exits Sleep mode
- The door is closed

The DC controller determines an ITB unit absence and notifies the formatter when it does not detect a specified signal from the primary transfer disengagement switch.

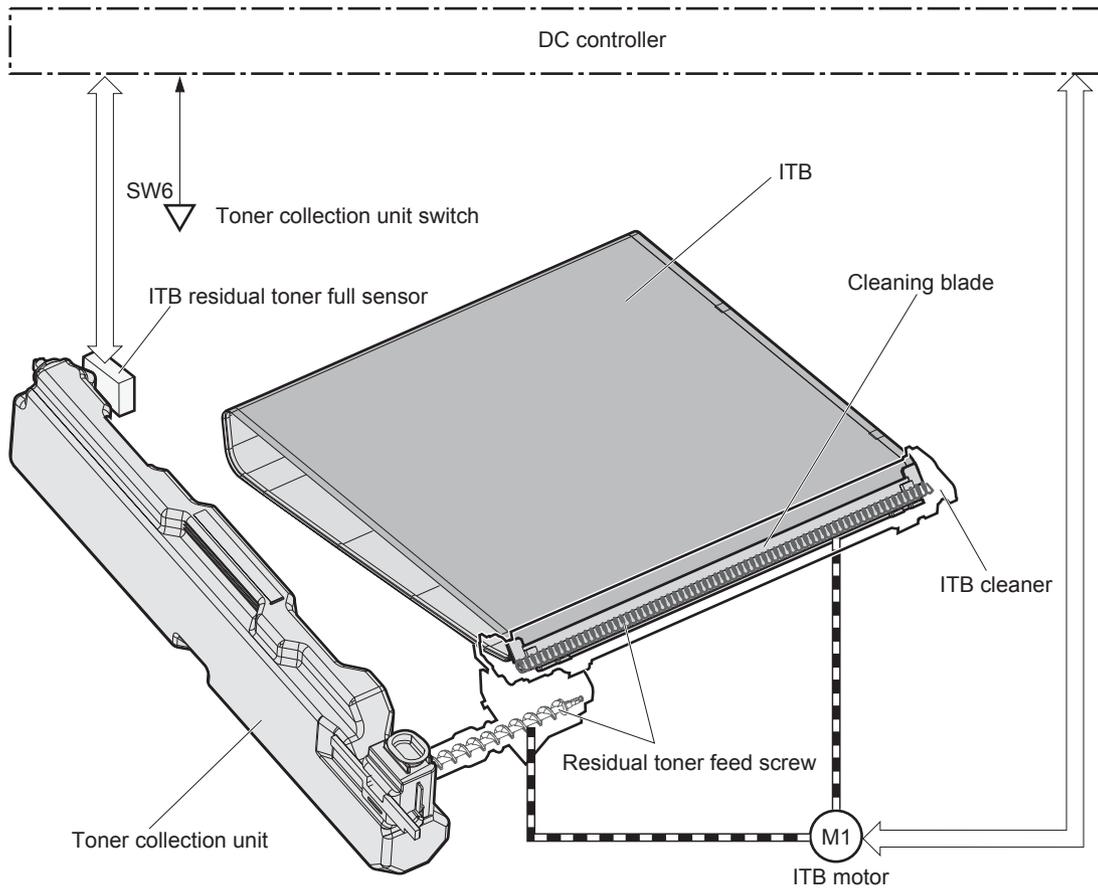
ITB cleaning mechanism

The cleaning blade in the ITB cleaner scrapes the residual toner off the ITB surface. The ITB motor drives the residual toner feed screw and the screw deposits the residual toner in the toner collection unit.

The DC controller detects whether the toner collection unit is full by monitoring the ITB residual toner full sensor. When the DC controller determines the toner collection unit is full, it notifies the formatter. The DC

controller also detects the presence of the toner collection unit by monitoring the toner collection unit switch.

Figure 1-28 ITB cleaning mechanism



Calibration

The product calibrates itself to print a high-quality image. The calibration corrects a color-misregistration and color-density variation caused by environment changes or variation inherent in the product. The product performs the following calibrations:

- Color-misregistration control
- Environment change control
- Image stabilization control

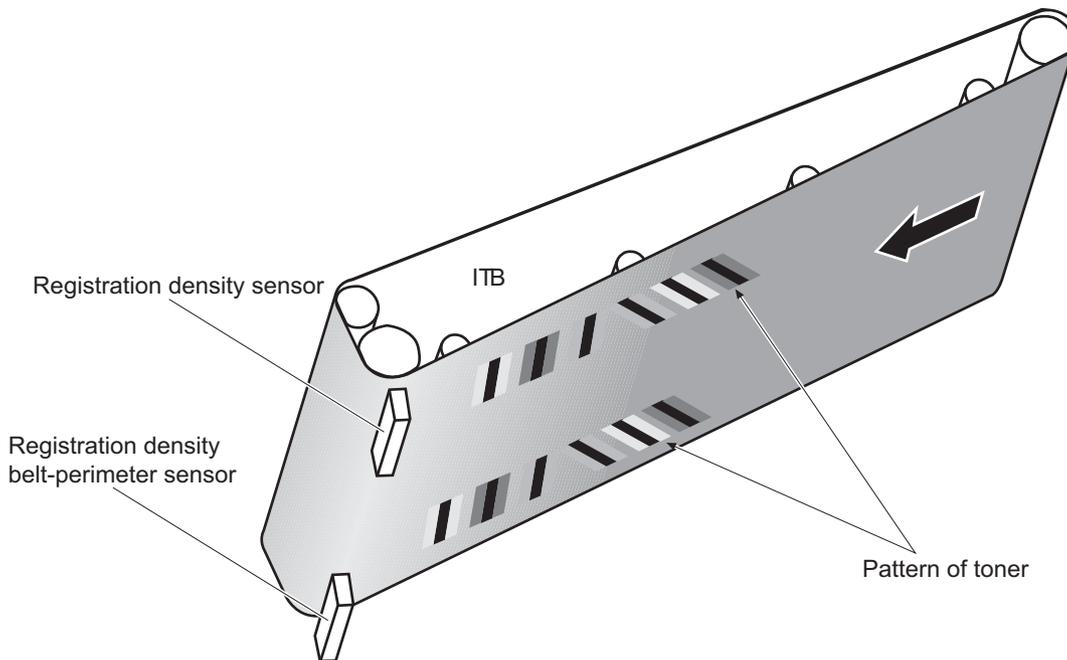
Color-misregistration control

The color-misregistration control corrects the misaligned color planes caused by the variation inherent in the laser scanner units or cartridges. The color-misregistration control corrects the following:

- Horizontal scanning start position
- Horizontal scanning magnification
- Vertical scanning start position

The DC controller forms a pattern of toner on the surface of the ITB, and measures a misaligned length with the registration density sensor and the registration density belt-perimeter sensor. Accordingly, the formatter calibrates the color-misregistration.

Figure 1-29 Color-misregistration control



The DC controller commands the formatter to perform the color-misregistration control whenever one of the following occurs:

- The product is turned on or the door is closed, after replacing any one of the cartridges
- The product is turned on or the door is closed, after replacing the ITB unit or the laser scanner unit
- A specified number of pages have been printed
- Continuous printing for a specified period of time
- Cold starting of the fuser when the product is turned on

If data from the registration density or registration density belt-perimeter sensor is out of a specified range during the cartridge-presence detection or when starting the color-misregistration control, the DC controller determines an abnormal sensor and notifies the formatter.

Environment change control

The environment change control calibrates each high-voltage bias to obtain an appropriate image according to the environment changes. The DC controller determines the environment, where the product is installed, based on the surrounding temperature and humidity data from the environment sensor. It adjusts the high-voltage biases to accommodate environmental changes.

The DC controller determines an environment sensor abnormality and notifies the formatter when it detects out of specified range data from the environment sensor.

Image stabilization control

The image stabilization control reduces the fluctuations in image density caused by environmental changes or deterioration of the photosensitive drums or toner. The two kinds of image stabilization controls are image density control (DMAX) and image halftone control (DHALF).

Image density control (DMAX)

The image density control calibrates each high-voltage bias to stabilize the image density variation caused by the deterioration of the photosensitive drum or toner. The DC controller commands the formatter to control the image density under the following conditions:

- The detected temperature of the fuser is a specified degree or lower when the product is turned on
- The product is turned on, or the door is closed, and also whenever a specified number of pages have been printed after replacing any one of the cartridges
- The product is turned, on or the door is closed, after replacing the ITB unit or the laser scanner unit
- A specified number of pages have been printed
- After a specified period of time from the previous image density control
- The environment is changed for a specified condition after the previous image density control

Image halftone control (DHALF)

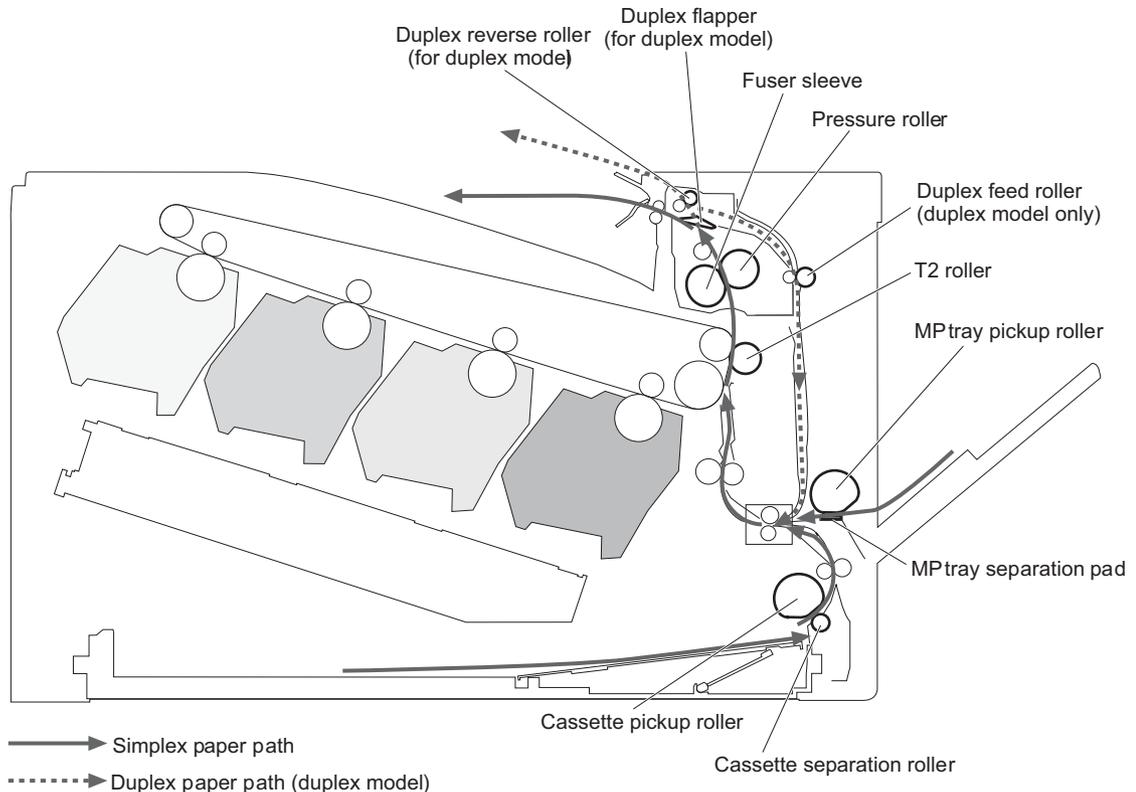
The image halftone control is performed by the formatter to calibrate the halftone. The DC controller measures the halftone pattern according to a command from the formatter. Accordingly, the formatter calibrates the halftone. The DC controller controls the image halftone under the following conditions:

- The image density control is completed
- The formatter sends a command

Pickup, feed, and delivery system

The pickup/feed/delivery system consists of several types of feed rollers and sensors. The duplex model has a mechanism that reverses and refeeds the print media to print two sides automatically.

Figure 1-30 Pickup, feed, and delivery system



The pickup/feed/delivery system can be divided into the following three blocks:

- **Pickup-and-feed block:** From each input source to the fuser inlet
- **Fuser-and-delivery block:** From the fuser to the output bin
- **Duplex block:** From the duplex reverse unit to the duplex re-pickup unit (duplex models only)

Figure 1-31 Pickup, feed, and delivery system blocks

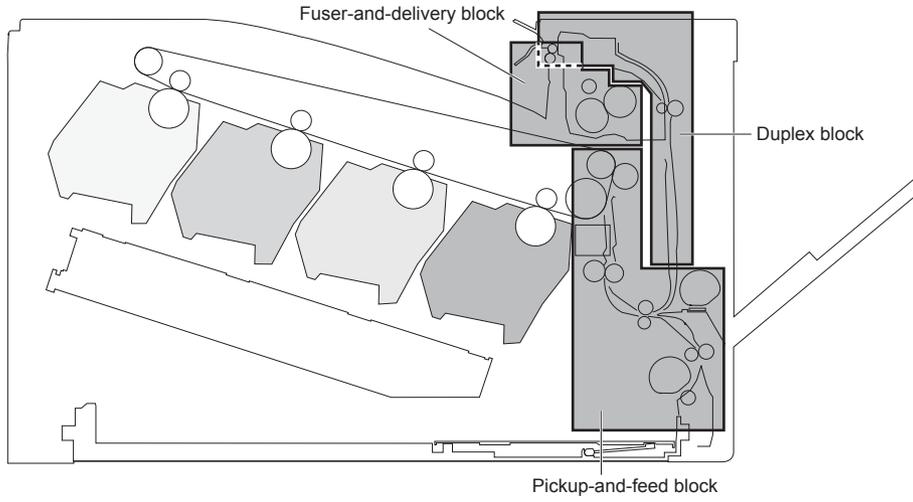


Photo sensors

Figure 1-32 Photo sensors (paper path)

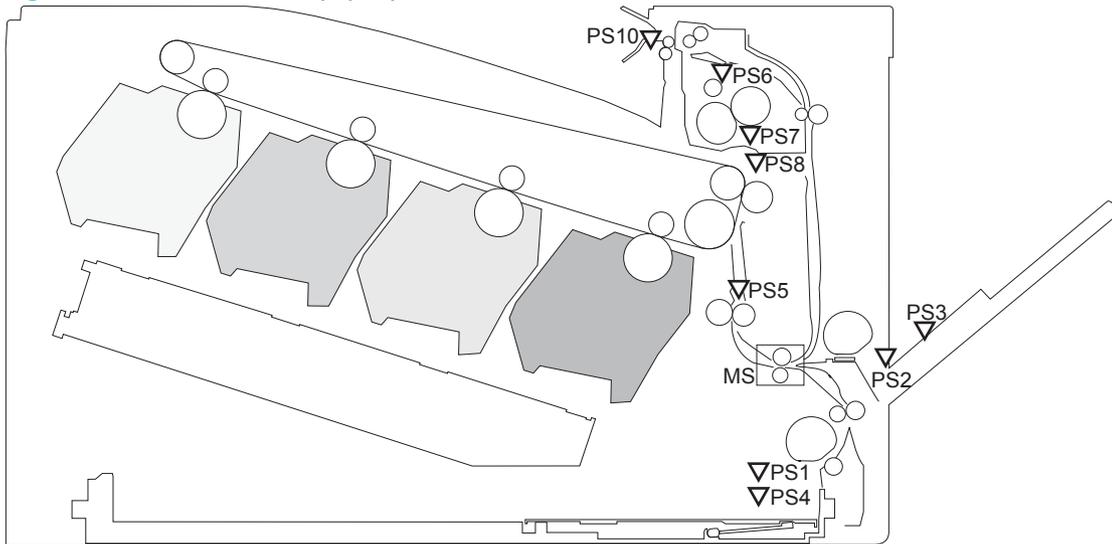


Table 1-5 Photo sensors and switches (product)

Item	Description	Item	Description
PS1	Tray 2 cassette paper-presence sensor	PS6	Fuser delivery sensor
PS2	Tray 1 (MP tray) paper-presence sensor	PS7	Loop sensor 1
PS3	Last-paper sensor	PS8	Loop sensor 1
PS4	Tray 2 cassette paper-stack surface sensor	PS10	Output bin media-full sensor
PS5	Top-of-Page (TOP) sensor		

Motors and solenoids

Figure 1-33 Motors and solenoids (paper path)

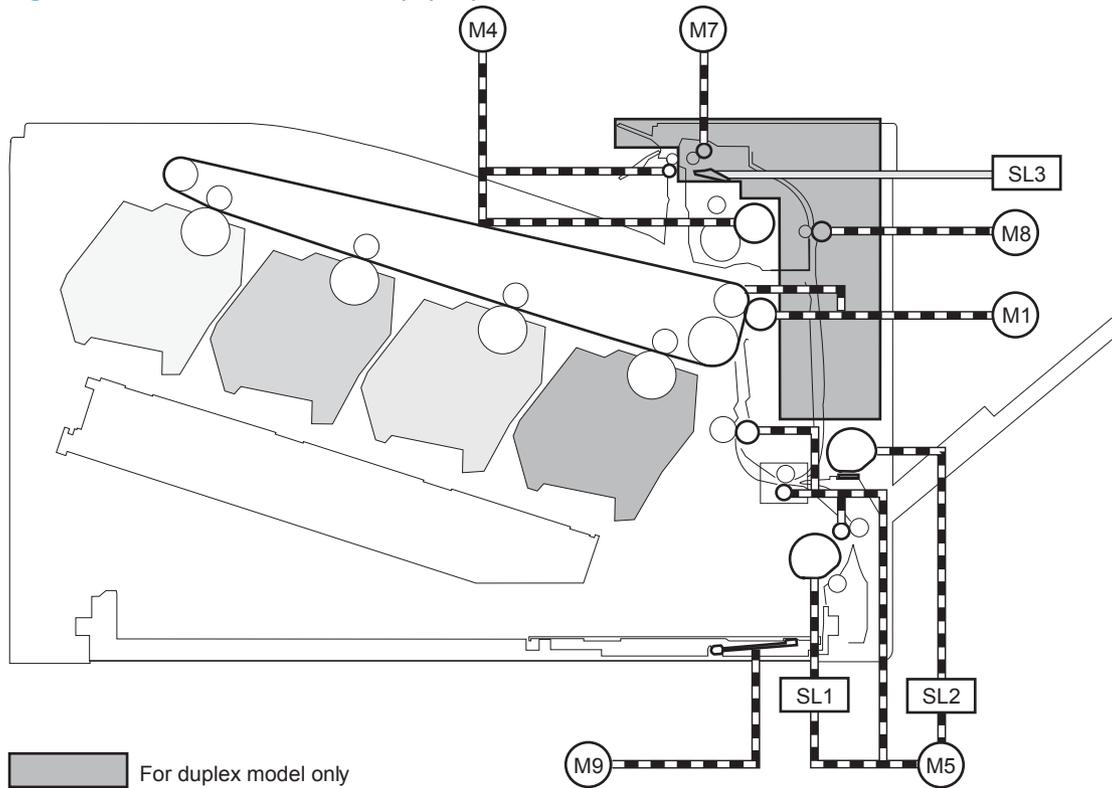


Table 1-6 Motors and solenoids (paper path)

Item	Description	Item	Description
M1	ITB motor	M9	Tray 2 cassette lifter motor
M4	Fuser motor	SL1	Tray 2 cassette pickup solenoid
M5	Pickup motor	SL2	Tray 1 (MP tray) pickup solenoid
M7	Duplex reverse motor (duplex models only)	SL3	Duplex reverse solenoid 1 (duplex models only)
M8	Duplex feed motor (duplex models only)		

Pickup and feed block

The pickup-and-feed block picks one sheet of paper from the Tray 2 cassette or the MP tray and feeds it into the fuser.

Tray 2 cassette pickup

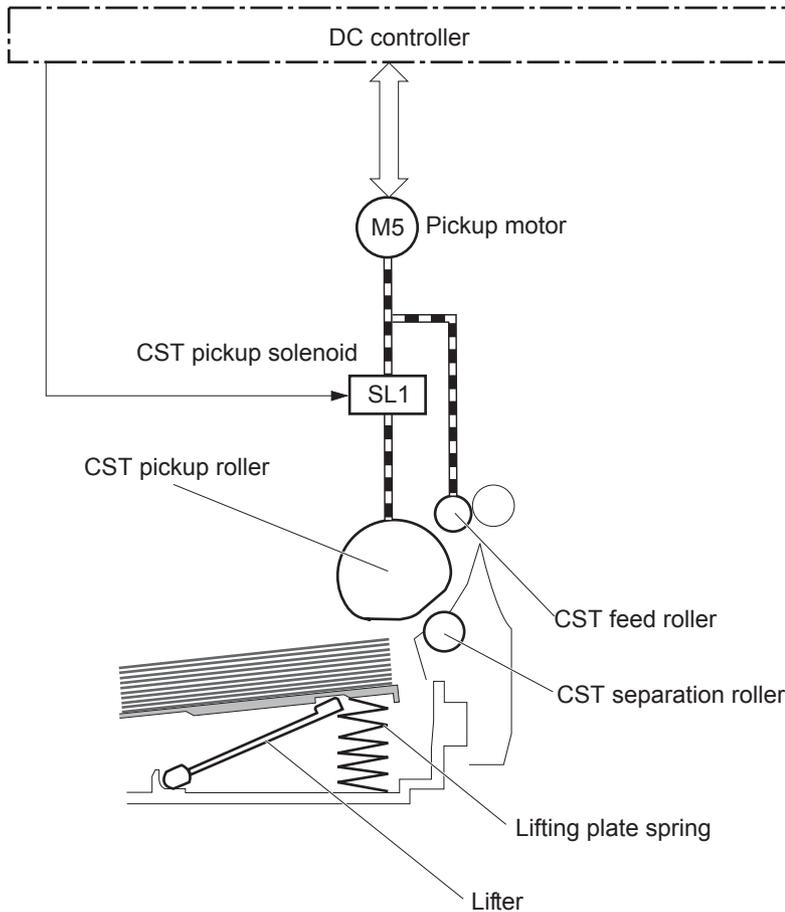
The operational sequence of the Tray 2 cassette pickup is as follows:

1. The product is turned on or the Tray 2 cassette is inserted.
2. The lift-up operation and the lifting plate spring move up the lifting plate to the position where the paper can be picked up.
3. The DC controller rotates the pickup motor when it receives a print command from the formatter.

4. The Tray 2 cassette (CST) feed roller rotates.
5. The Tray 2 cassette (CST) pickup solenoid is driven at a specified timing.
6. The Tray 2 cassette (CST) pickup roller rotates and picks up the paper.
7. The Tray 2 cassette (CST) separation roller removes any multiple-fed sheets.
8. One sheet of paper is fed into the product.

 **NOTE:** The lift-up operation pushes up the lifting plate to keep the stack surface of paper at the pickup position.

Figure 1-34 Tray 2 cassette pickup operation



Tray 2 cassette multiple-feed prevention

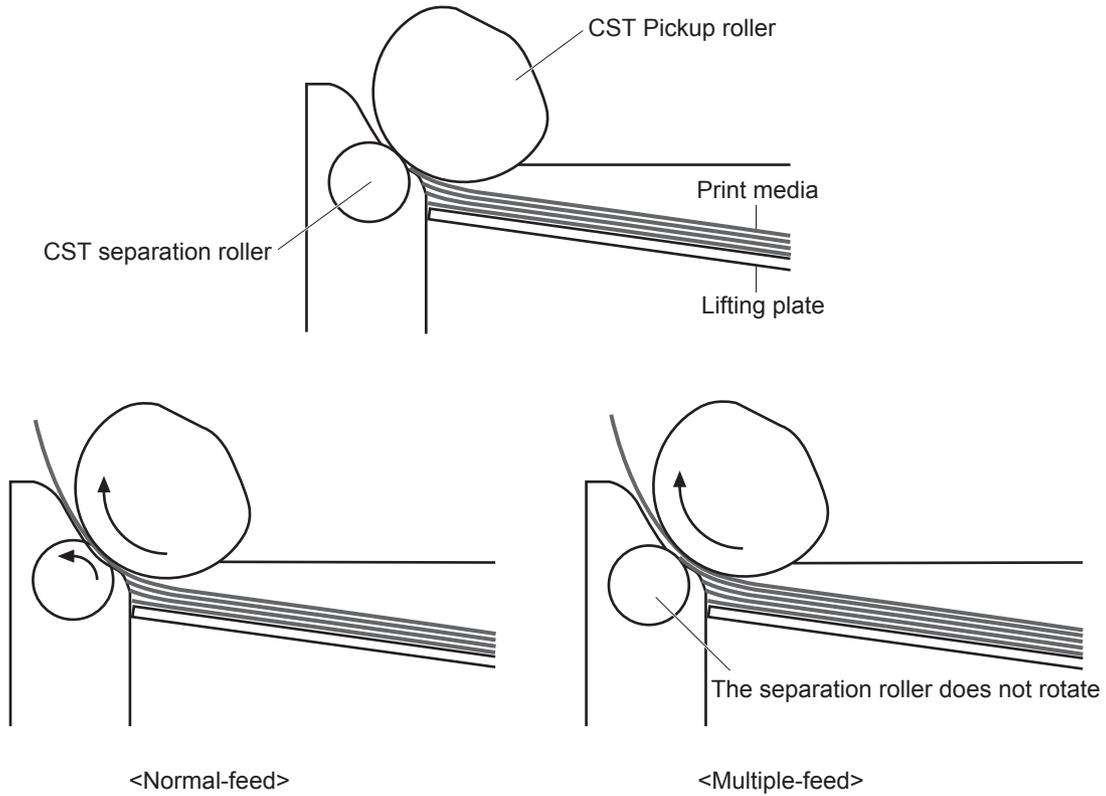
The product uses a separation roller method to prevent multiple sheets of print media from entering the paper path. The Tray 2 cassette separation roller does not have its own driving force. Therefore the Tray 2 cassette separation roller follows the rotation of the Tray 2 cassette pickup roller.

During normal feed, when the product picks up one piece of paper, the Tray 2 cassette separation roller is driven by the Tray 2 cassette pickup roller through one sheet of paper. Thus the separation roller rotates in the paper feed direction.

During multiple-feed, when the product picks up more than one piece of paper, the low friction force between the sheets weakens the driving force from the Tray 2 cassette pickup roller. In addition, some braking force is

always applied to the Tray 2 cassette separation roller, so the weak rotational force of the pickup roller is not enough to rotate the separation roller. Therefore, the separation roller holds back any multiple-fed sheets, and one sheet of paper is fed into the product.

Figure 1-35 Tray 2 cassette multiple-feed prevention



Tray 2 cassette media-size detection and Tray 2 cassette-presence detection

The DC controller detects the size of paper loaded in the Tray 2 cassette by using the Tray 2 cassette-media-end switch and Tray 2 cassette media width switch.

The DC controller also detects the presence of the cassette by using the Tray 2 cassette media end switch. The DC controller notifies the formatter if the Tray 2 cassette is absent.

Table 1-7 Tray 2 cassette media-size detection and Tray 2 cassette-presence detection (product base)

Paper size	Cassette media width sensor			Cassette media end switch		
	Top switch	Center switch	Bottom switch	Top switch ¹	Center switch	Bottom switch
A4	On	On	On	See footnote	Off	Off
Letter	On	On	Off		Off	Off
B5	On	Off	Off		Off	Off
Executive	Off	Off	Off		Off	Off
A5-R	Off	On	On		Off	Off
B5-R	Off	Off	On		Off	Off
Letter-R	On	Off	On		Off	Off
A4-R	On	Off	On		Off	On
A3	On	On	On		On	On
11 X 17	On	On	Off		On	On
B4	On	Off	Off		On	On
Legal	On	Off	On		On	On

¹ The top Tray 2 cassette-media-end switch detects the presence of the Tray 2 cassette. It turns off when the Tray 2 cassette is present and turns on when the Tray 2 cassette is absent.

Tray 2 cassette lift-up operation

The cassette lift-up operation keeps the surface of the paper stack surface at the correct pickup position whenever the following conditions occur:

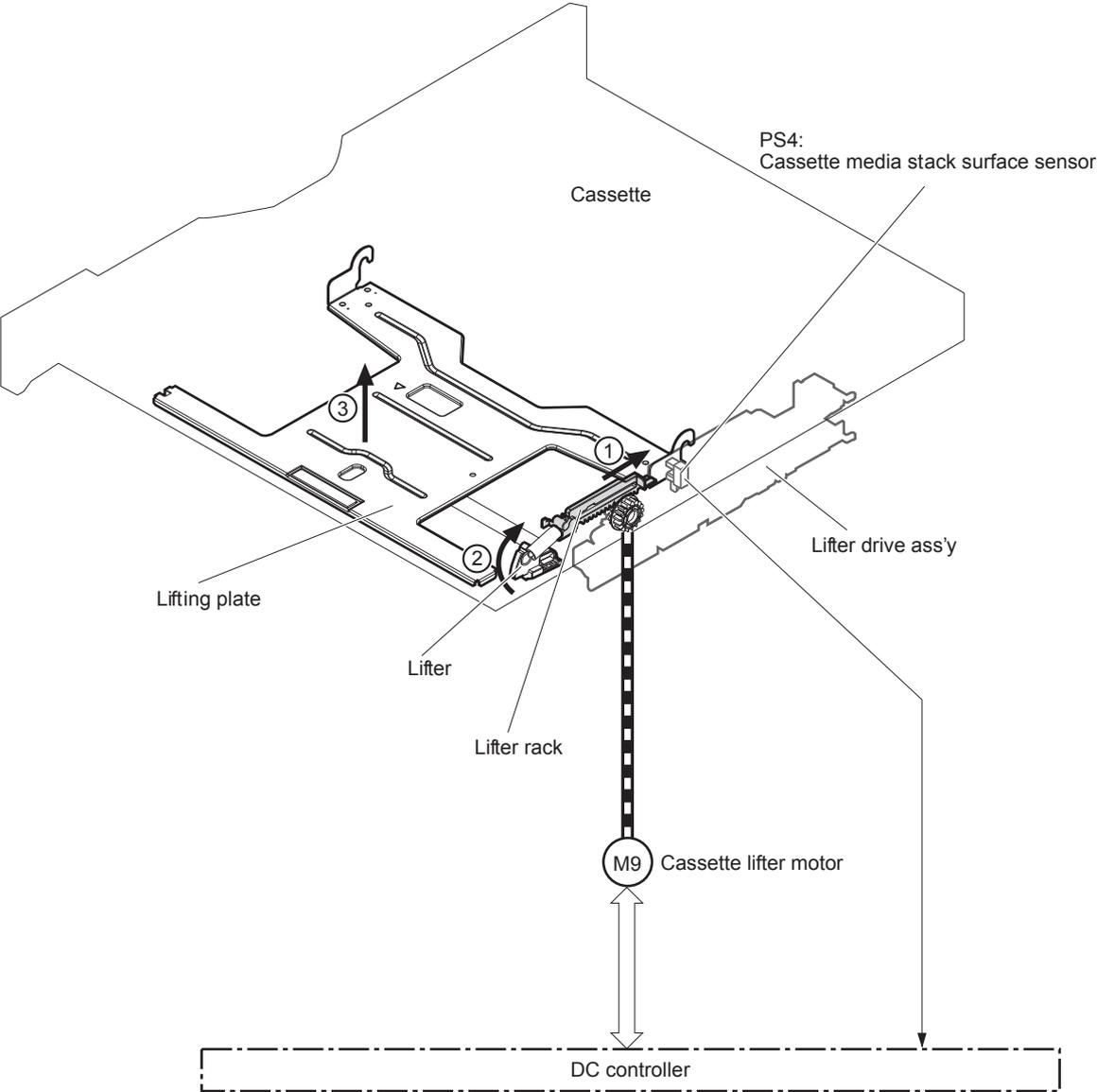
- Product power is turned on
- Tray 2 cassette is installed

The list below describes the sequence of the Tray 2 cassette lift-up operation.

- The Tray 2 cassette lifter motor rotates to move the lifter rack toward the Tray 2 cassette-media-stack surface sensor.
- As the lifter rack moves, the lifter moves up.
- The Tray 2 cassette lifter motor stops when the Tray 2 cassette-media-stack surface sensor detects the lifter rack.

The DC controller determines a Tray 2 cassette lifter motor failure and notifies the formatter if the Tray 2 cassette-media-stack surface sensor does not detect the lifter rack within a specified period after the Tray 2 cassette lifter motor starts rotating.

Figure 1-36 Tary 2 cassette lift-up operation

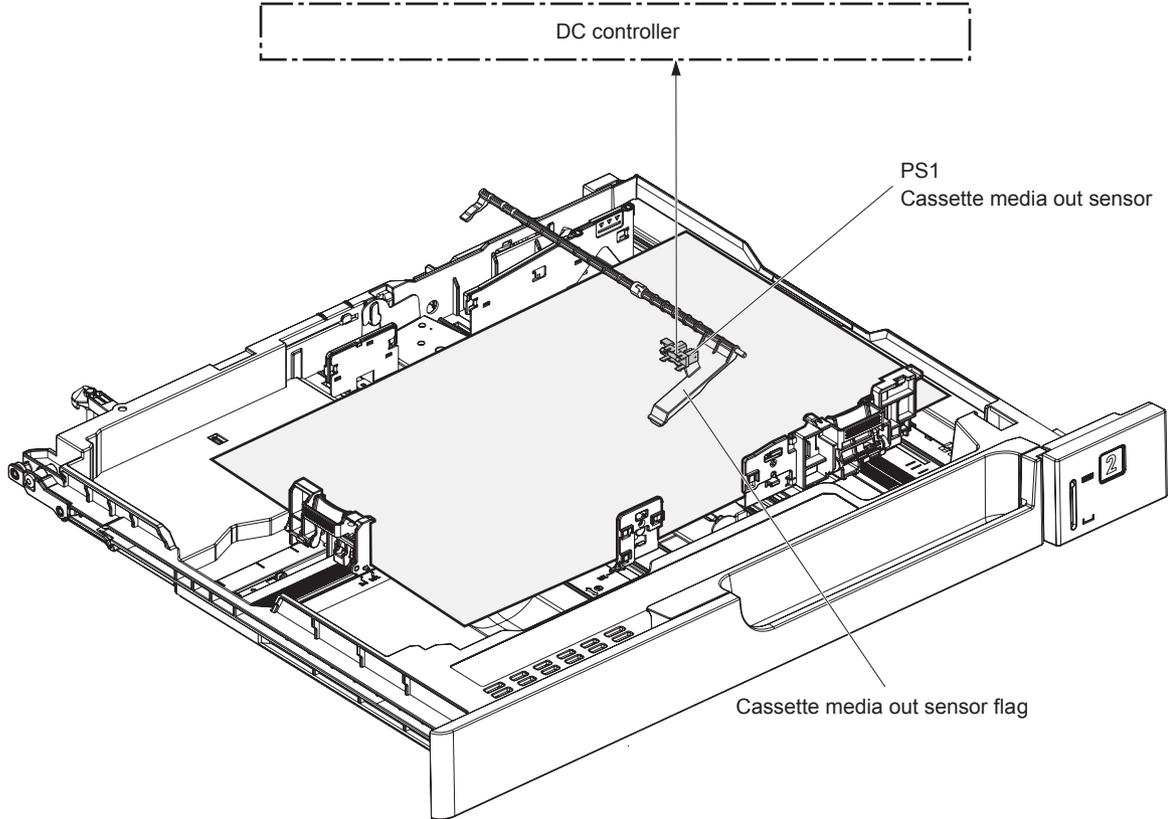


Cassette media-presence detection

The Tray 2 cassette-media-out sensor detects the presence of paper in the Tray 2 cassette.

The DC controller notifies the formatter when the Tray 2 cassette-media-out sensor detects the media is absent.

Figure 1-37 Tray 2 cassette media-presence detection



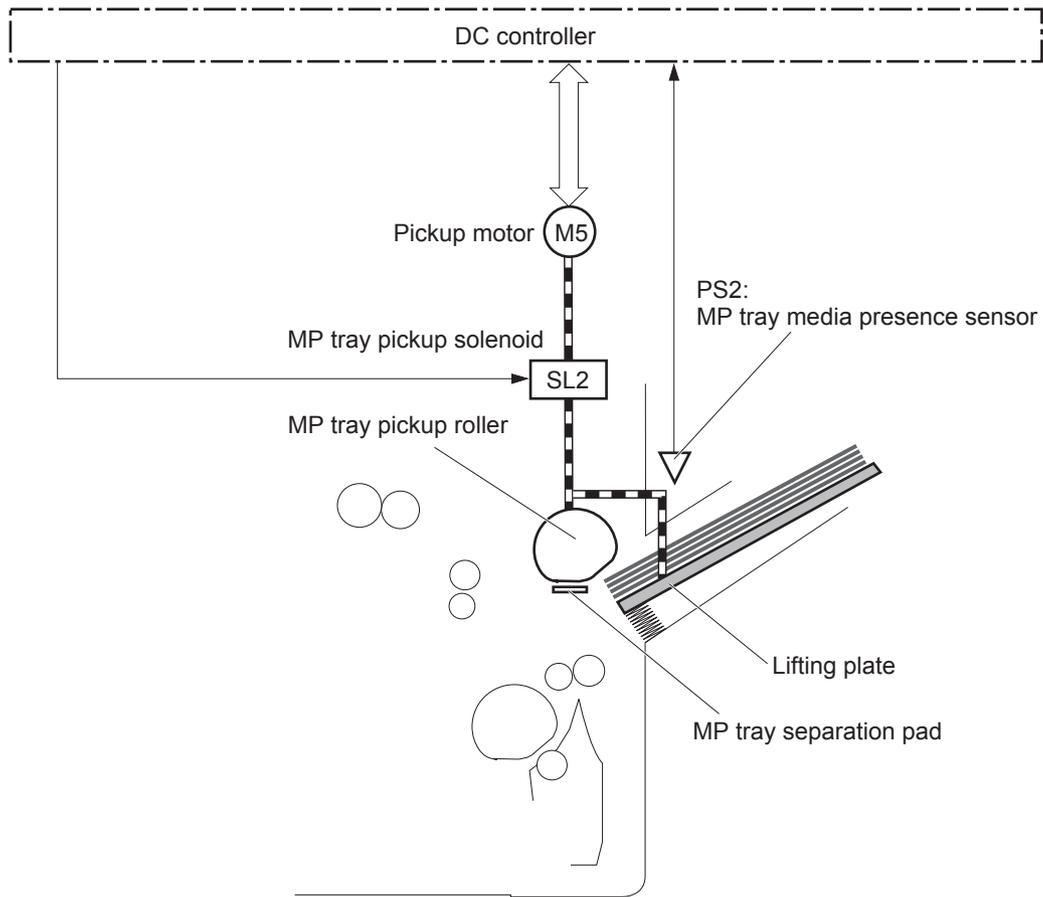
Tray 1 (MP tray) paper pickup

The operational sequence of the MP tray pickup is as follows:

1. The DC controller rotates the pickup motor when it receives a print command from the formatter.
2. As the MP tray pickup solenoid is driven, the MP tray pickup roller rotates and the lifting plate moves up.
3. The MP tray pickup roller picks up the paper.
4. The MP tray separation pad removes any multiple-fed sheets and one sheet of paper is fed into the product.

The MP tray media presence sensor detects the presence of print media on the MP tray.

Figure 1-38 Tray 1 (MP tray) paper pickup



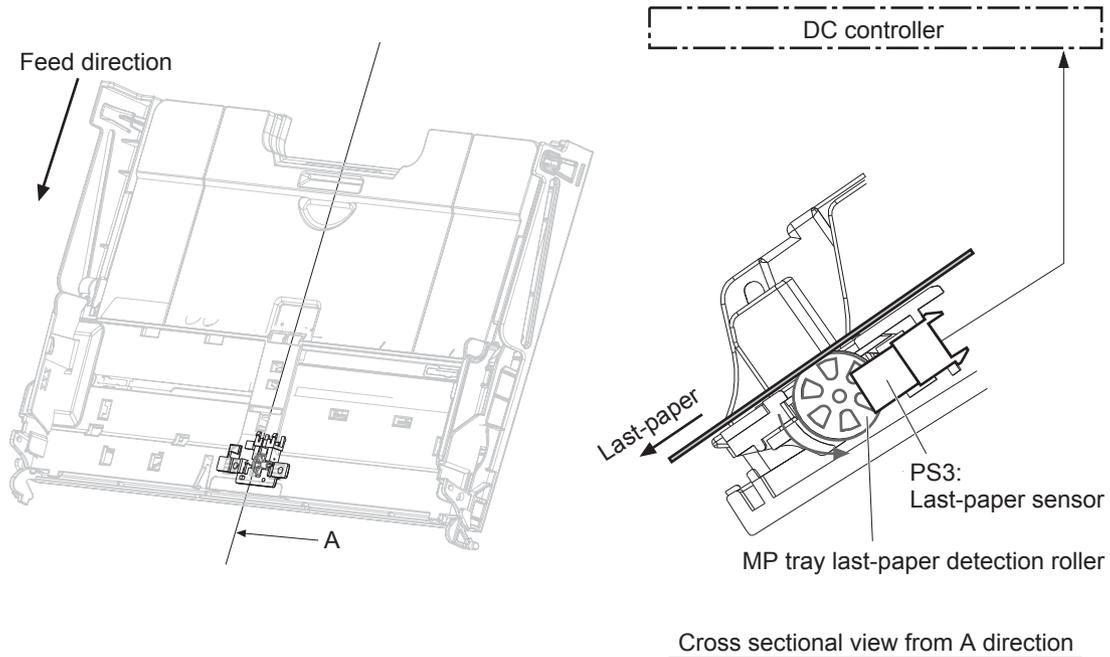
Tray 1 (MP tray) last-paper detection

The product detects whether the print media on the MP tray is the last sheet during continuous printing to prevent toner contamination on the photosensitive drums and the ITB.

The product attempts to form the next image before the DC controller detects a media absence because the paper path between the MP tray media-presence sensor and the registration roller is short. To prevent the photosensitive drums and the ITB from being contaminated with toner, the last-paper sensor detects the

last-paper. The MP tray last-paper detection roller rotates when the last-paper is picked up. The DC controller notifies the formatter of a media absence when it detects the last-paper by the last-paper sensor.

Figure 1-39 Tray 1 (MP tray) last-paper detection



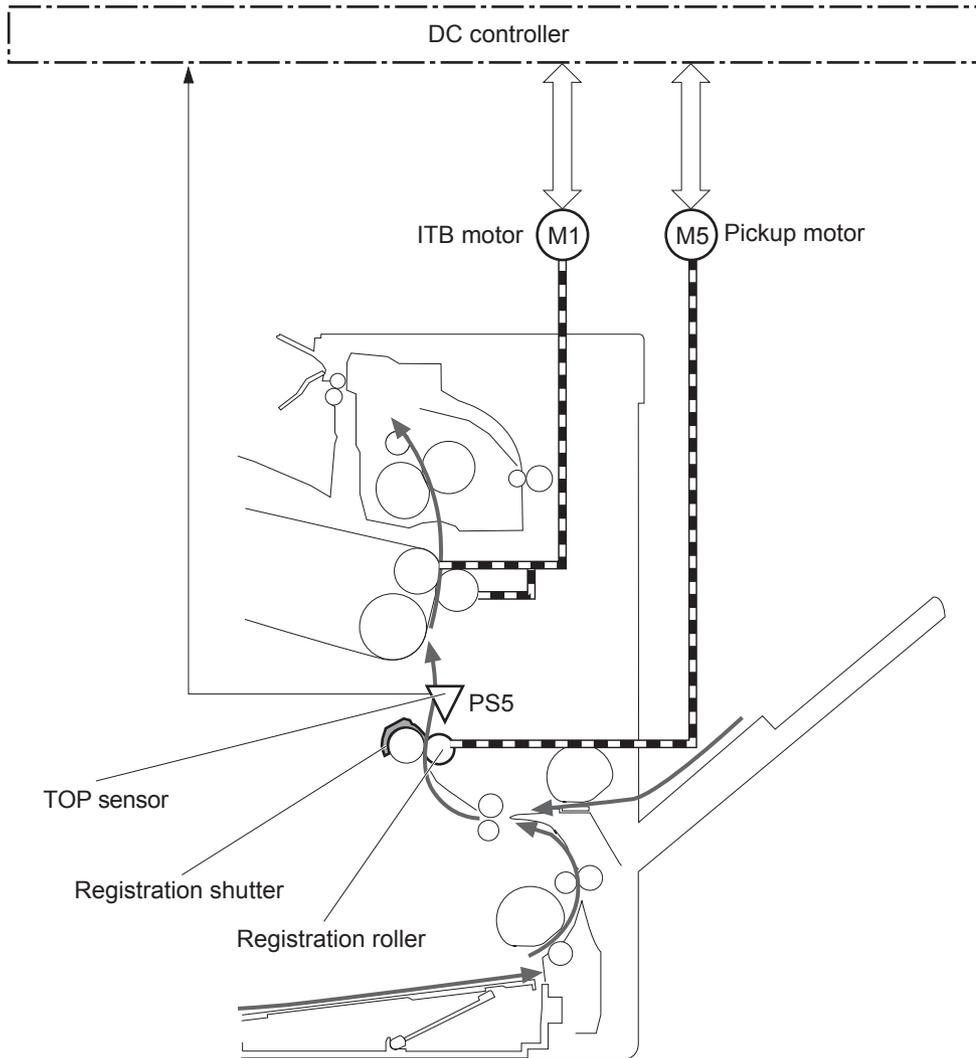
Paper feed

After the paper pickup operation, the paper picked up from either the Tray 2 cassette or MP tray is then fed to the fixing-and-delivery block.

1. The registration shutter corrects the skew-feeding of the paper that is picked up from the Tray 2 cassette or MP tray.
2. When the TOP sensor detects the leading edge of paper, the DC controller controls the rotational speed of the pickup motor to align with the leading edge of toner image on the ITB.
3. The toner image on the ITB is transferred onto the paper, and the paper is fed to the fusing-and-delivery block.

The DC controller notifies the formatter of a paper size mismatch error when the paper length detected by the TOP sensor does not match the paper size specified by the formatter.

Figure 1-40 Paper feed

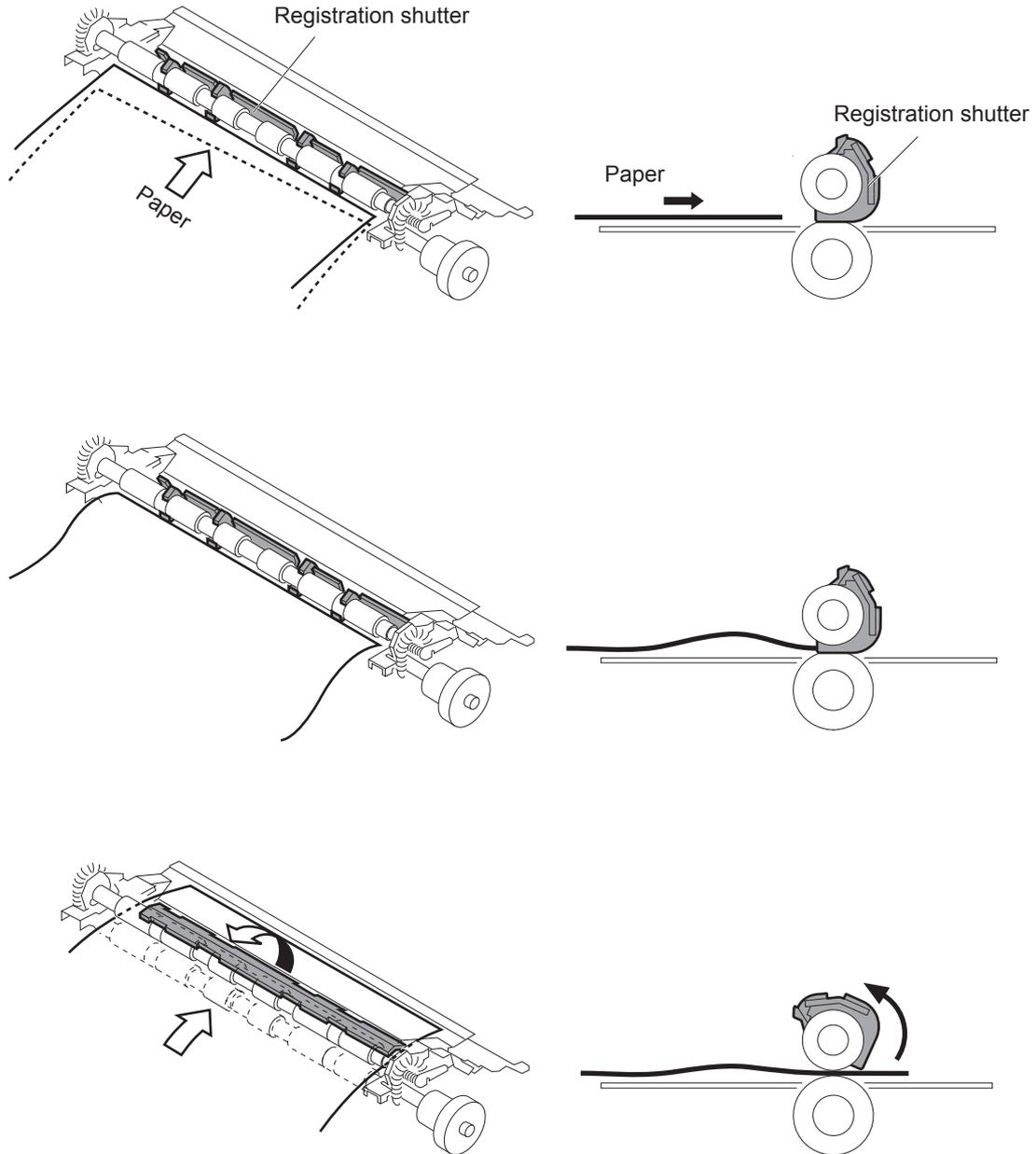


Skew-feed prevention

The printer corrects the skew feed without decreasing the throughput.

1. The leading edge of paper strikes the registration shutter and aligns.
2. As the feed rollers keep pushing the paper, the paper gets warped against the registration shutter.
3. The stiffness of paper pushes up the registration shutter and the realigned paper passes through straightened.

Figure 1-41 Skew-feed prevention



Media detection

The product automatically selects an optimal print mode for a print-media by monitoring the media sensors on the paper path.

Media detection sensor types

- Reflected light type (detects the glossiness of paper)
- Transmitted light type (detects the thickness of paper)

The DC controller detects the type of print-media by the reflected light and the transmitted light, and switches the print modes accordingly. The DC controller identifies the following paper type:

- Plain paper
- Light paper
- Heavy paper
- Glossy paper
- Glossy film
- Overhead transparency (OHT)

The DC controller determines a media mismatch error and notifies the formatter under the following conditions:

- Simplex printing
 - The specified print mode is OHT, but the media sensor detects media other than an overhead transparency.
 - The specified print mode is something other than OHT, but the media sensor detects an overhead transparency.
- Duplex printing
 - The specified print mode is for duplex-printable-print mode, but the media sensor detects an overhead transparency. For more information about duplex-printable mode, see [Duplex block \(duplex models only\) on page 62](#).

The DC controller flashes the media sensor during the initial rotation period under the following conditions:

- Product power is turned on
- The door is closed

The DC controller determines a media sensor abnormality and notifies the formatter when the light intensity is out of a specified range.

Feed-speed control

The product adjusts the feed speed to obtain the best print quality depending on the type of print media. The product prints at the speed corresponding to the print mode specified by the formatter.

Auto Sense mode	Print mode	Print speed	Media sensor detection
Normal mode	Normal	1/1	Yes
Light mode	Light media 1	1/1	Yes
Heavy Mode	Heavy media 1	2/3	Yes
Cardstock Mode	Heavy media 3	1/3	No
Transparency Mode	OHT	1/3	Yes
Transparency2 Mode	OHT + higher fuser temp	1/3	Yes
Envelope Mode	Envelope	2/3	No
Label Mode	Label	1/3	No
Tough Mode	Glossy film	1/3	Yes
Extra Heavy Mode	Heavy media 2	1/3	Yes
Heavy Glossy Mode	Glossy media 1	2/3	Yes
X-hvyglossymode	Glossy media 2	1/3	Yes
Rough Mode	Rough	2/3	No
Card Glossy Mode	Glossy media 3	1/3	Yes
4mm trns Mode	OHT + lower fuser temp	1/3	Yes
Light Rough Mode	Light media 1 + fuser temp adjustments	1/1	Yes

Fusing and delivery block

The fusing-and-delivery block fuses the toner image onto the print media and delivers the printed page to the output bin.

Loop control

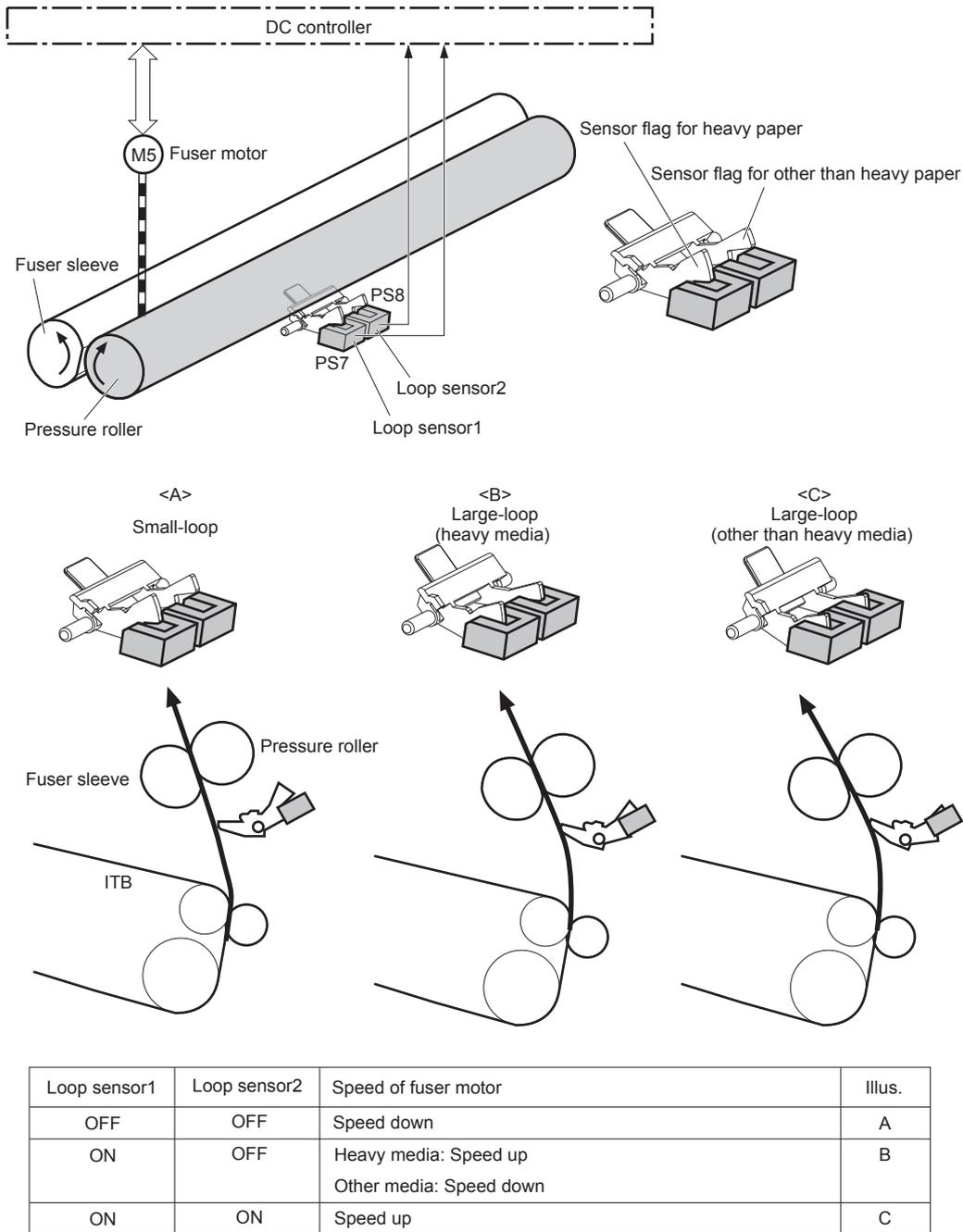
The product controls the loop (slackness) of print media to prevent the defects of print quality and media feed.

- If the fuser sleeve rotates slower than the ITB, the paper loop increases and an image defect or paper crease occurs.
- If the fuser sleeve rotates faster than the ITB, the paper loop decreases and an image is stretched because the toner image is not transferred to the paper correctly

Two loop sensors located between the fuser sleeve and the ITB detect the paper loop. Accordingly the DC controller controls the rotational speed of the fuser motor to keep the loop amount properly.

- Loop sensor 1: Detects the paper loop for heavy media
- Loop sensor 2: Detects the paper loop for plain media other than heavy media

Figure 1-42 Loop control



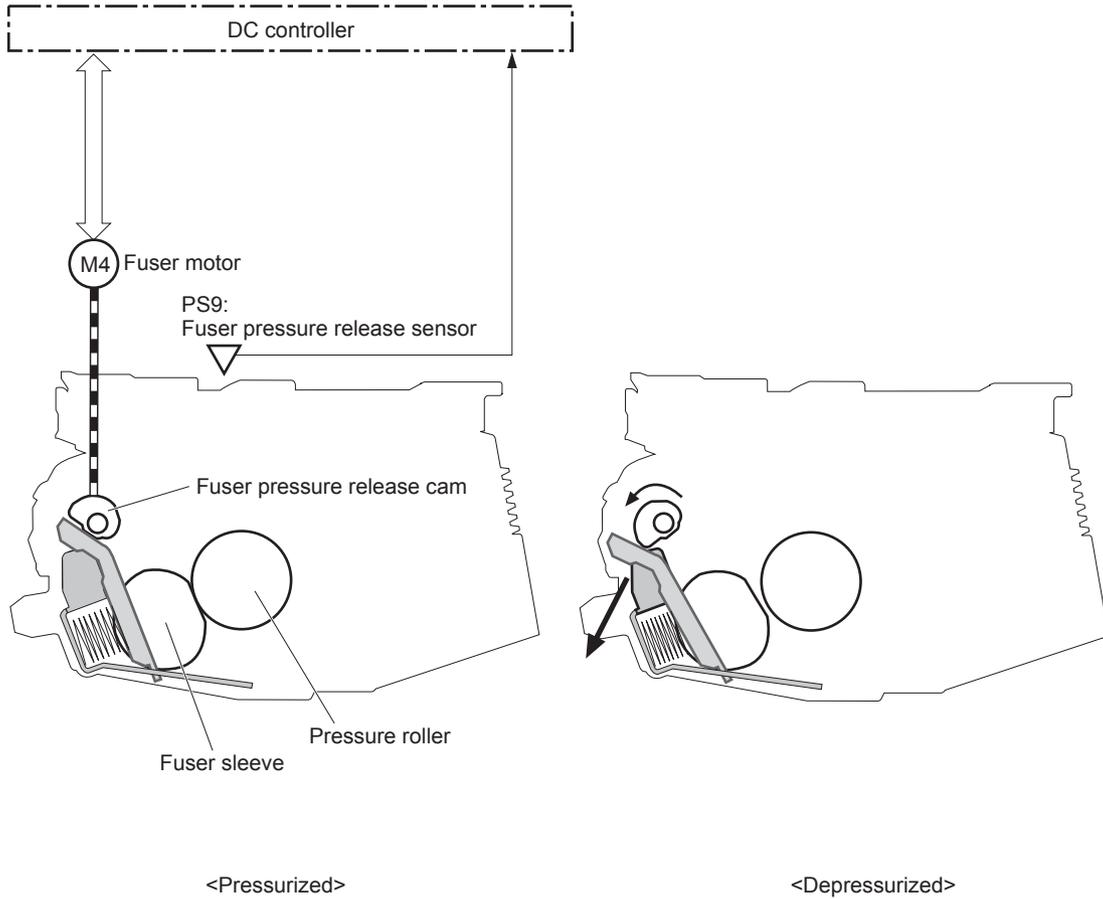
Pressure roller pressurization and depressurization control

The product releases the pressure roller from the fuser sleeve, except during printing, to prevent deforming the fuser sleeve and the pressure roller and to facilitate the jam-clearing procedure.

1. The DC controller reverses the fuser motor to rotate the fuser pressure release cam.
2. The pressure roller is pressurized or depressurized depending on the position of the cam.

The DC controller determines a fuser pressure-release mechanism abnormality and notifies the formatter when it does not sense the fuser pressure-release sensor for a specified period from when it reverses the fuser motor.

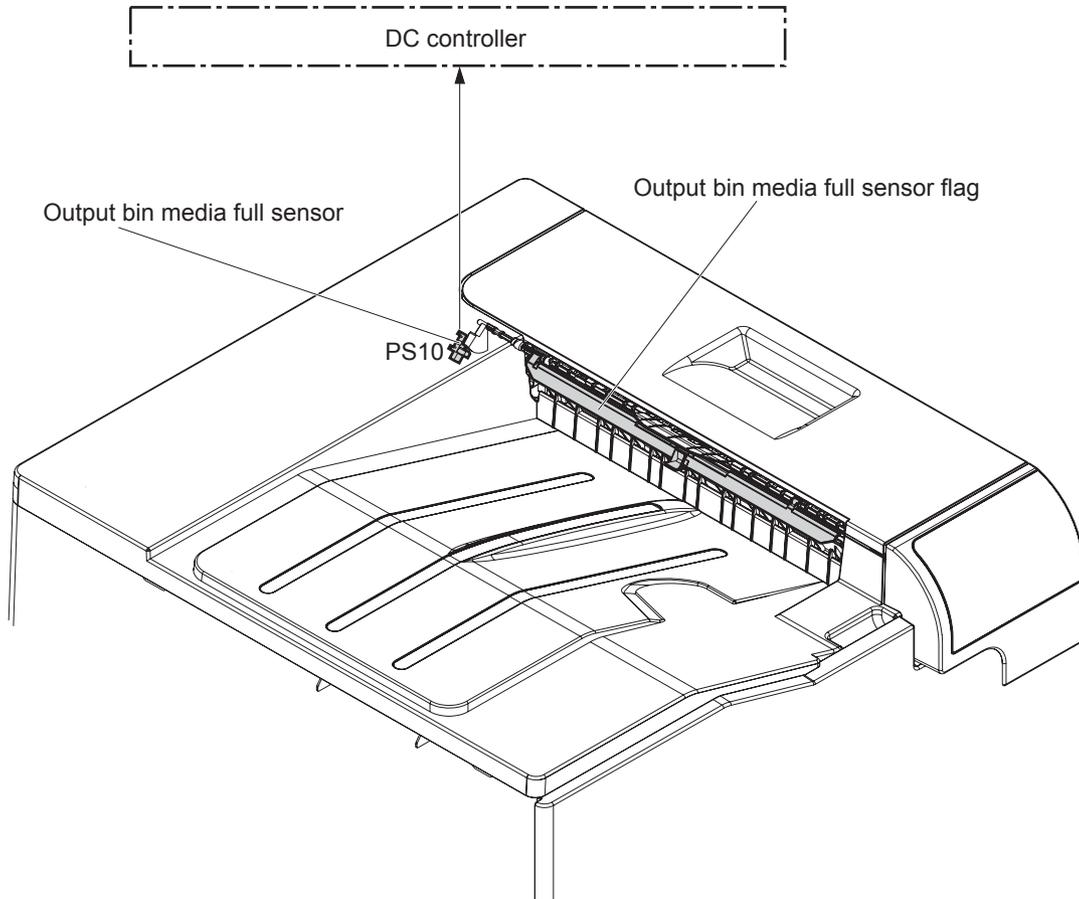
Figure 1-43 Pressure roller pressurization and depressurization control



Output bin full detection

The output bin media-full sensor detects whether the output bin is full of printed pages. The DC controller determines the output bin is full and notifies the formatter when it senses the output bin media-full sensor is on for a specified period during standby or printing.

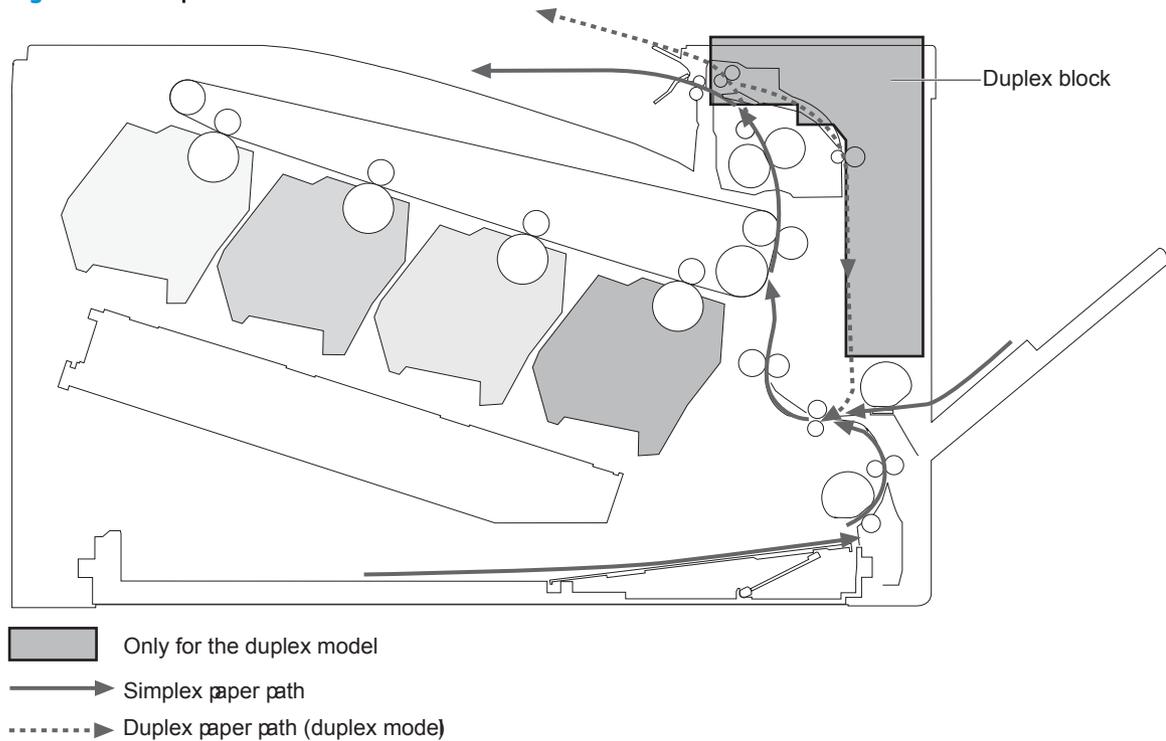
Figure 1-44 Output bin full detection



Duplex block (duplex models only)

The duplex block reverses and feeds the paper.

Figure 1-45 Duplex block



Duplex reverse and duplex feed control

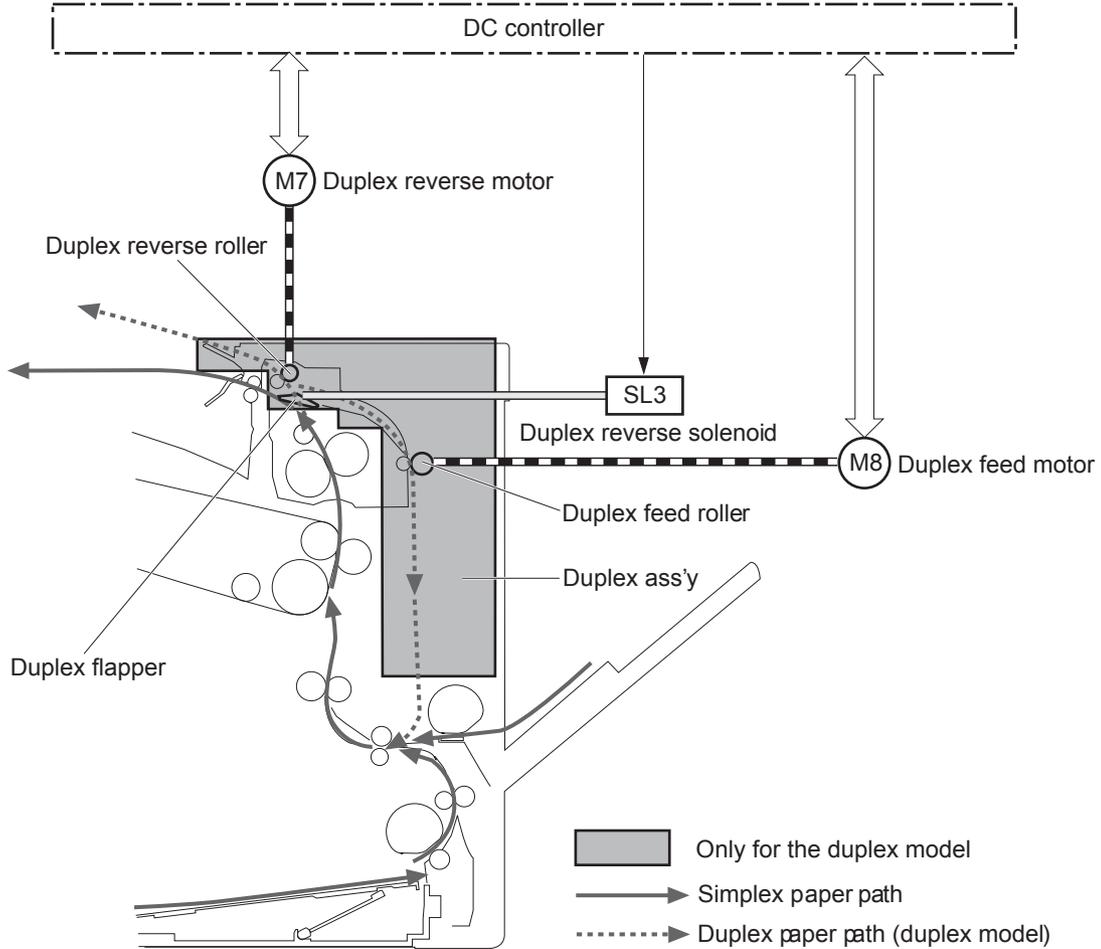
The duplex reverse control reverses the paper after the first side is printed. The duplex feed control feeds the paper to the duplex block to print the second side of the page.

The operational sequence of the duplex reverse and duplex feed control is as follows:

1. The DC controller rotates the duplex reverse motor and drives the duplex reverse solenoid at a specified timing after the first side of page is printed.
2. The duplex flapper moves and the paper is fed by the duplex reverse roller.
3. The duplex reverse motor is reversed.
4. The duplex reverse roller is reversed accordingly the paper is switched back.

5. The duplex feed motor rotates.
6. The duplex feed roller feeds the paper.

Figure 1-46 Duplex operation



Duplex operation

The product prints two sides of paper with the following operation depending on the paper size.

- One-sheet operation: Feeds one sheet of two-sided page in a duplex print operation
- Two-sheet operation: Feeds two sheets of two-sided page in a duplex print operation

The duplex print operation is specified by the formatter.

The duplex print is performed only with the duplex printable paper size and specified print mode. See [Table 1-8 Paper sizes, duplex operation on page 64](#) and [Table 1-9 Print modes, duplex operation on page 64](#).

Table 1-8 Paper sizes, duplex operation

Paper size	Duplexing media feed mode
A4-R	One-sheet operation
A3	
Letter-R	
B4	
B5-R	
Ledger	
Legal	
A4	One-sheet operation
B5	Two-sheet operation
Letter	
A5-R	
Executive	

Table 1-9 Print modes, duplex operation

Print mode	Duplex print ¹	Print mode	Duplex print ¹
AUTO	Yes	X-hvyglossy	Yes
Normal	Yes	Card glossy	No
Light	Yes	Rough	Yes
Light rough	Yes	Transparency	No
Heavy	Yes	4mm transparency	No
Extra heavy	No	Tough	Yes
Cardstock	No	Label	No
heavy glossy	Yes	Envelop	No

¹ This table shows whether the automatic duplex operation is available for each print mode, but it does not mean that the print-quality of the automatic duplex print operation will be acceptable.

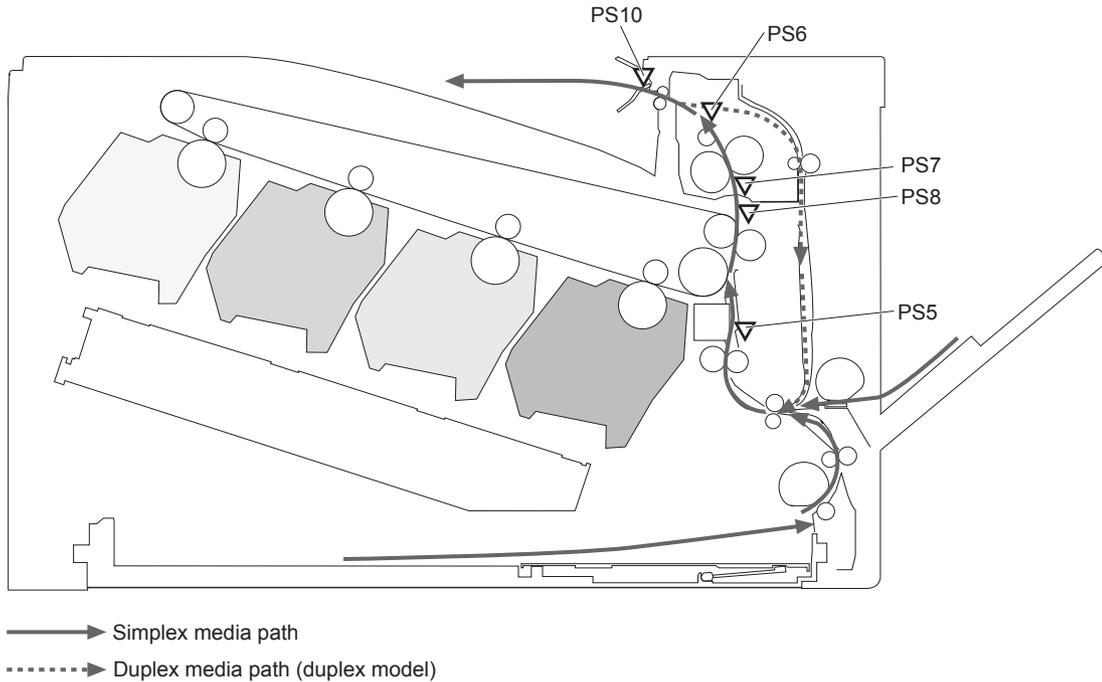
Jam detection

The product uses the following sensors to detect the presence of print-media and to check whether the print-media is being fed correctly or has jammed:

- TOP sensor (PS5)
- Fuser delivery sensor (PS6)
- Loop sensor 1 (PS7)

- Loop sensor 2 (PS8)
- Output bin media full sensor (PS10)

Figure 1-47 Sensors for jam detection



The product detects the following jams:

Pickup delay jam	<p>Tray 1 (MP tray): The TOP sensor does not detect the leading edge of paper within a specified period, including a retry, after the MP tray pickup solenoid is turned on.</p> <p>Tray 2 cassette: The TOP sensor does not detect the leading edge of paper within a specified period, including a retry, after the Tray 2 cassette pickup solenoid is turned on.</p> <p>Paper feeder: The TOP sensor does not detect the leading edge of paper within a specified period after the paper-feeder (PF) feed sensor detects the leading edge.</p>
Pickup stationary jam	The TOP sensor does not detect the trailing edge of paper within a specified period after the leading edge of paper reaches the secondary transfer roller unit.
Fuser delivery delay jam	The fuser delivery sensor does not detect the leading edge of paper within a specified period after the leading edge of paper reaches the secondary transfer roller unit.
Fuser delivery stationary jam	<p>The fuser delivery sensor does not detect the trailing edge of paper within a specified period after the TOP sensor detects the trailing edge.</p> <p>The output bin media full sensor does not detect the leading edge of paper within a specified period after the fuser delivery sensor detects the leading edge.</p>
Wrapping jam	The fuser delivery sensor detects a paper absence yet it does not detect the trailing edge of paper after it detects the leading edge.

Residual paper jam	<p>One of the following sensors detects a presence of paper when the printer is turned on or when the door is closed.</p> <ul style="list-style-type: none">• TOP sensor• Fuser delivery sensor• Loop sensor 1• Loop sensor 2 <p>NOTE: The product automatically clears all paper from the paper path if the TOP sensor detects residual paper when the product is turned on or a door is closed.</p>
Door open jam	<p>The door open is detected during a paper feed operation.</p>
Duplex re-pickup jam (duplex model only)	<p>The TOP sensor does not detect the leading edge of paper within a specified period after the paper is reversed during a duplex print operation.</p>

Paper feeder

This product supports a 500-sheet tray (Tray 3). The operational sequence of the paper feeder is controlled by the paper feeder controller PCA.

Figure 1-48 Paper-feeder paper path

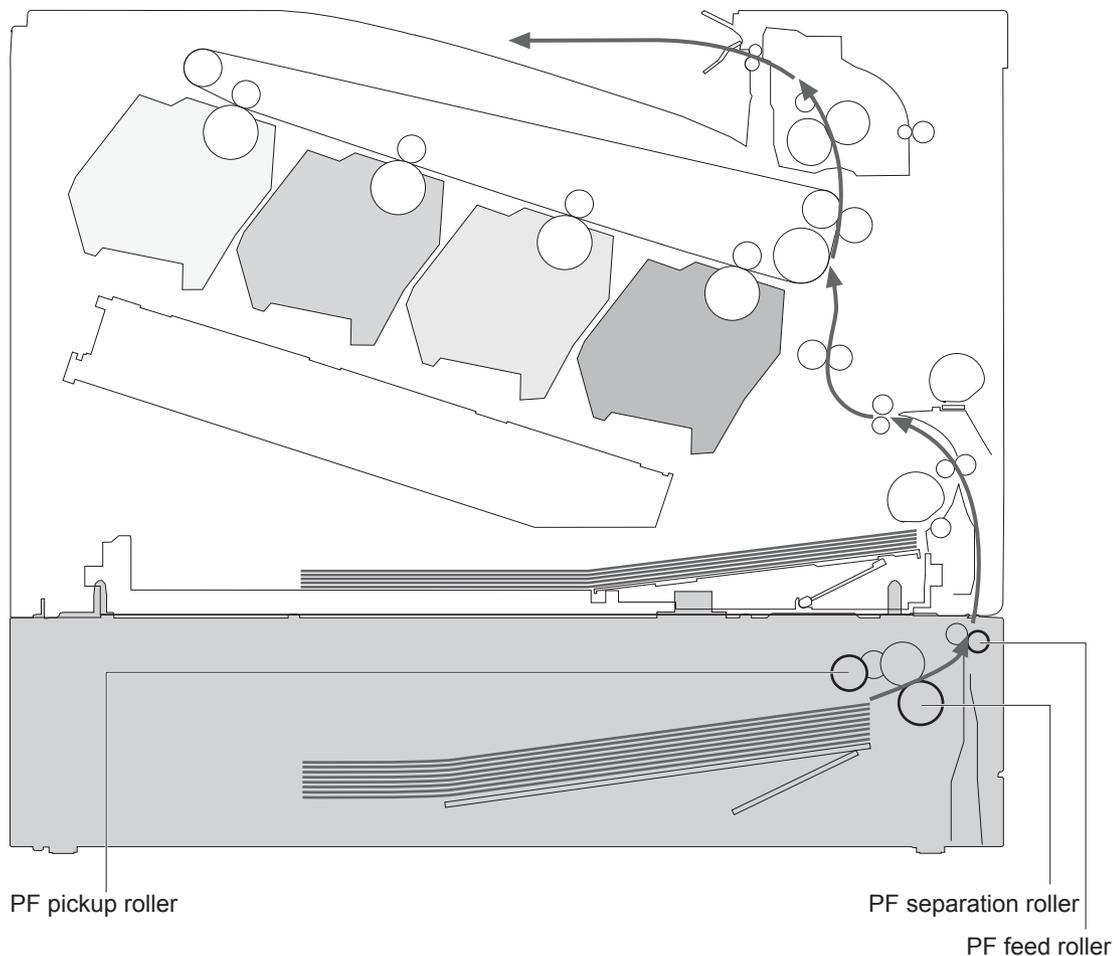
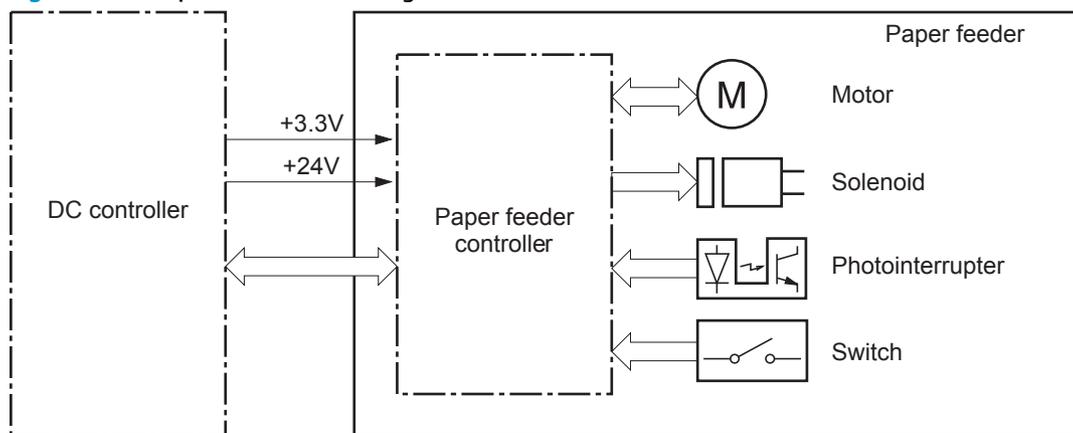


Figure 1-49 Paper-feeder block diagram



Paper-feeder motors

The paper feeder has two motors for paper feed and cassette lift-up operation.

Figure 1-50 Paper-feeder motors

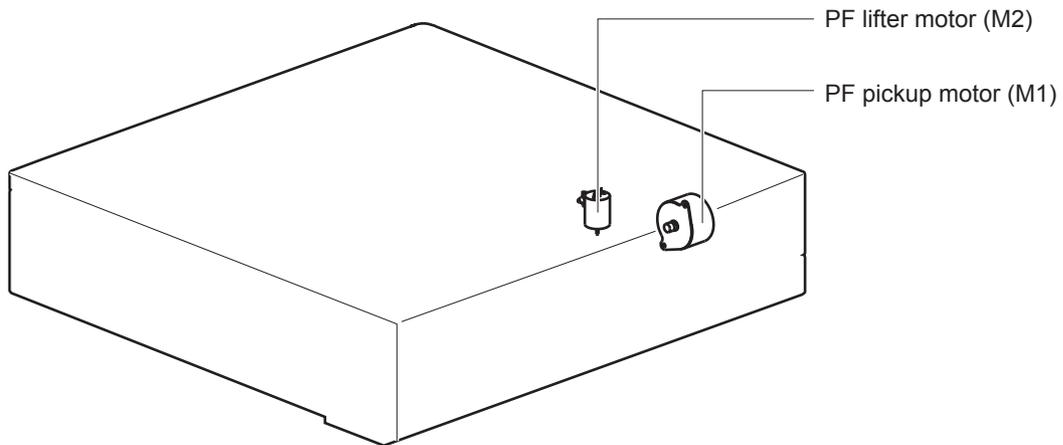


Table 1-10 Paper-feeder motors

Motor	Driving part	Failure detection
PF pickup motor (M1)	PF pickup roller	No
	PF separation roller	
	PF feed roller	
PF lifter motor (M2)	Lifter for the PF cassette	No

Paper-feeder paper pickup and feed

The pickup-and-feed operation picks up one sheet of print media in the paper-feeder cassette and feeds it to the product.

Figure 1-51 Paper-feeder electrical components

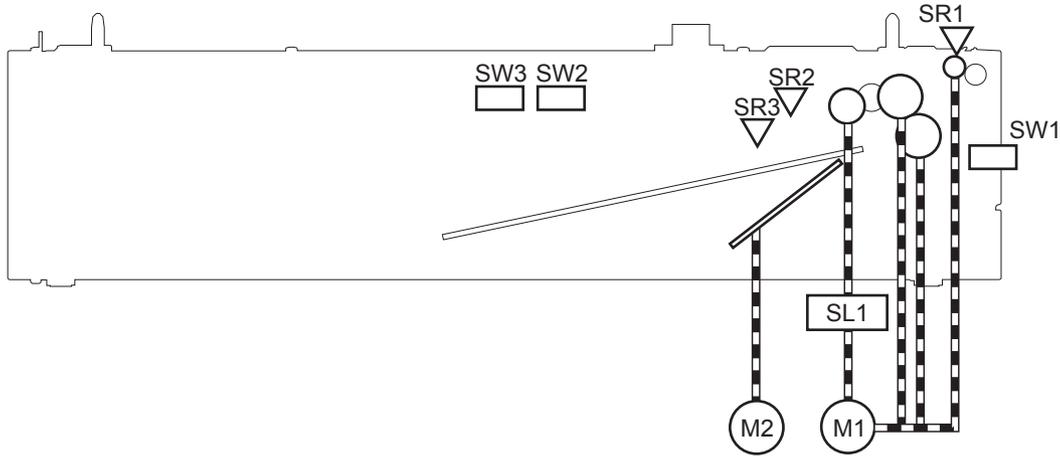


Table 1-11 Paper-feeder electrical components

Component type	Abbreviation	Description	
Motor	M1	PF pickup motor	
	M2	PF lifter motor	
Solenoid	SL01	PF pickup solenoid	
	Photointerruptor (sensor)	SR1	PF paper-feed sensor
		SR2	PF paper-stack surface sensor
Switch	SR3	PF cassette paper-presence sensor	
	SW1	PF door-open switch	
	SW2	PF cassette paper end-plate position switch	
	SW3	PF cassette paper-width switch	

Cassette media-size detection and cassette-presence detection

The paper feeder detects the size of the paper loaded in the paper feeder cassette by monitoring the paper feeder cassette media end switch and the paper feeder cassette media width switch. It also detects the presence of cassette by monitoring the switches. The paper feeder controller notifies the formatter through the DC controller when it determines a cassette is absent.

Table 1-12 Cassette media-size detection and cassette-presence detection (Tray 3)

Paper size	Paper feeder			Paper feeder		
	Cassette media-width sensor			Cassette media-end switch		
	Top switch	Center switch	Bottom switch	Top switch	Center switch	Bottom switch
Executive	Off	On	On	On	On	On

Table 1-12 Cassette media-size detection and cassette-presence detection (Tray 3) (continued)

Letter	Off	Off	On	On	On	On
A5	On	On	Off	On	On	On
B5	Off	On	Off	On	On	On
A4	Off	Off	Off	On	On	On
Ledger	Off	Off	On	Off	Off	On
Legal	On	On	Off	Off	Off	On
B4	Off	On	Off	Off	Off	On
A3	Off	Off	Off	Off	Off	On
A4-R Letter-R	NOTE: The product cannot detect the paper size of A4-R and Letter-R. If A4-R or Letter-R sized paper is loaded to the cassette, A5 size is notified to the formatter.					
Universal	On	On	Off	Off	On	On
Cassette absent	Off	Off	Off	Off	Off	Off

Paper-feeder cassette lift operation

The cassette lift-up operation keeps the surface of the paper stack at the pickup position whenever the following occurs:

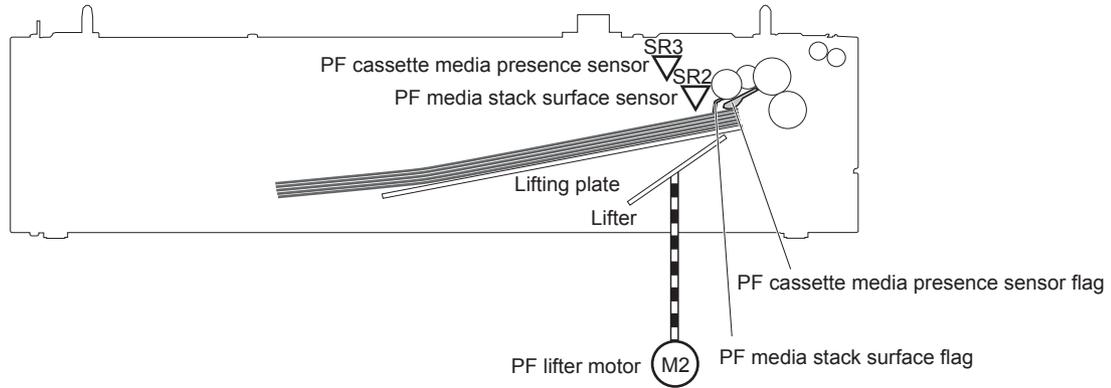
- Product power is turned on
- Cassette is installed
- Stack surface in the cassette lowers

The operational sequence of the cassette lift-up is as follows:

1. The PF lifter motor rotates to raise the lifter.
2. When the PF paper-stack surface sensor detects the surface of the paper stack, the PF lifter motor stops.
3. The lifter motor rotates again when the PF paper-stack surface detects that the paper surface is lowered during a print operation.

The paper feeder controller PCA determines a PF lifter motor failure and notifies the formatter through the DC controller when the PF paper-stack surface sensor does not detect the stack surface within a specified period after the PF lifter motor starts rotating.

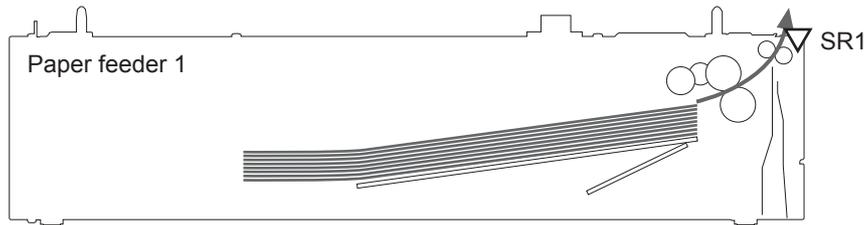
Figure 1-52 Paper-feeder cassette lift operation



Paper-feeder jam detection

The paper feeder uses the PF paper-feed sensor (SR1) to detect the presence of print-media and to check whether print-media is being fed correctly or has jammed.

Figure 1-53 Paper-feeder jam detection



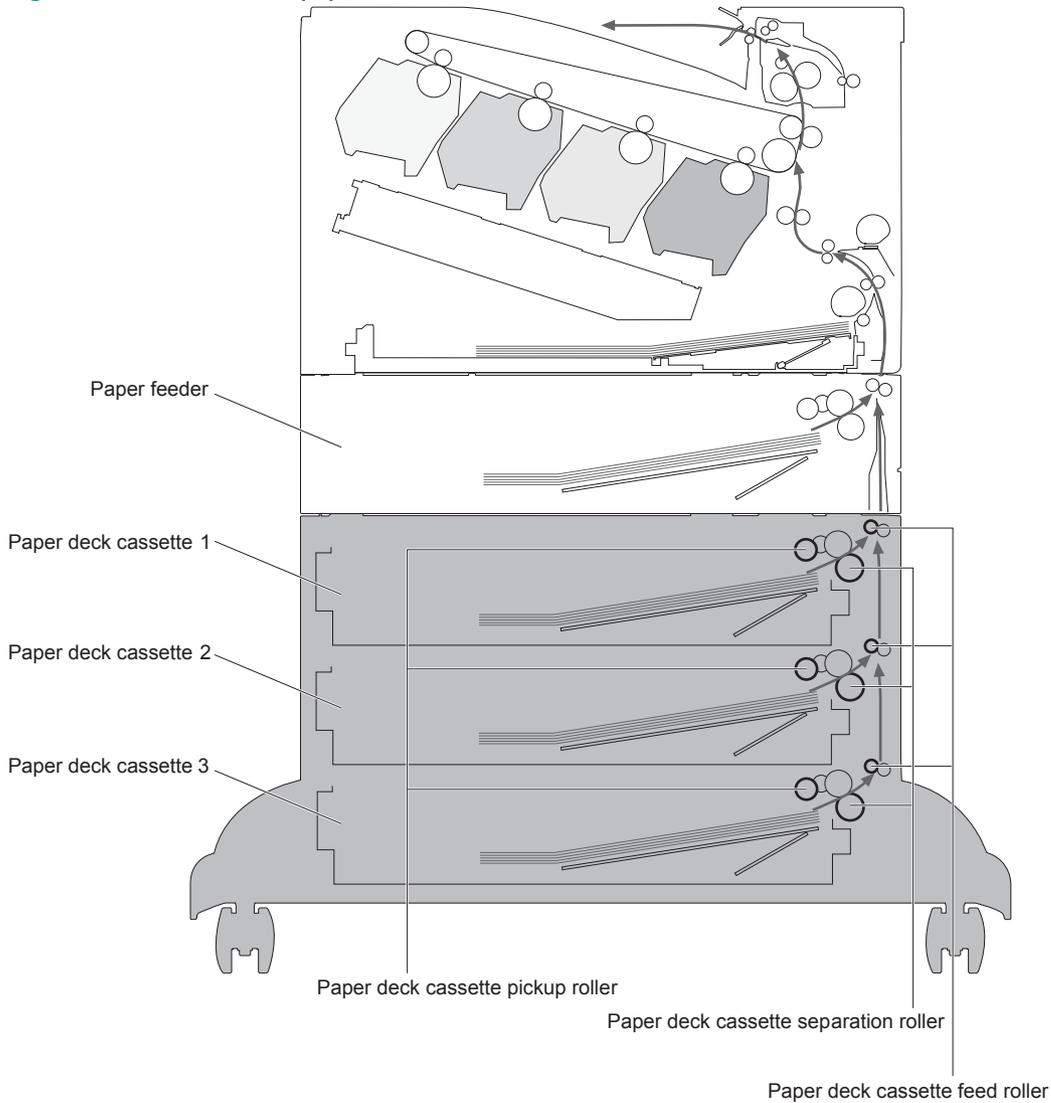
The paper feeder detects the following jams:

PF pickup delay jam	The PF paper-feed sensor does not detect the leading edge of paper within a specified period, including a retry, after the PF pickup solenoid is turned on.
PF residual paper jam	The PF paper-feed sensor detects a presence of paper when the printer is turned on, when the door is closed or when the automatic delivery is performed.
PF door open jam	A door open is detected during paper-feed operation.

Optional 3X500-sheet paper deck

The 3x500-sheet paper deck is installed at bottom of the product. It picks up the paper and feeds it to the printer. The paper deck controller controls the operational sequence of the paper deck.

Figure 1-54 3X500-sheet paper deck



The signal flow of the paper deck controller is shown below.

Figure 1-55 3X500-sheet paper deck block diagram

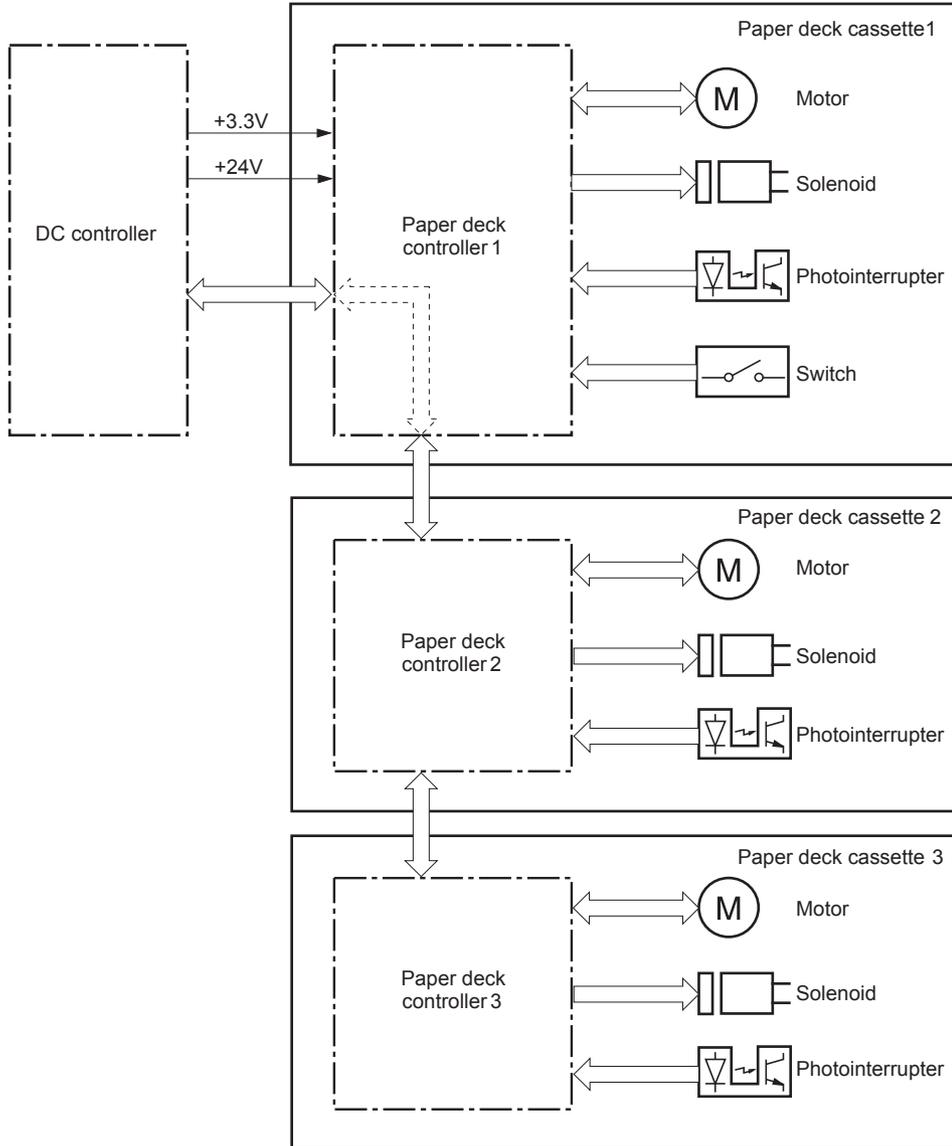


Table 1-13 3X500-sheet paper deck

Component		Description
Motor	M1	Paper deck cassette 1 pickup motor
	M2	Paper deck cassette 1 lifter motor
	M81	Paper deck cassette 2 pickup motor
	M82	Paper deck cassette 2 lifter motor
	M91	Paper deck cassette 3 pickup motor
	M92	Paper deck cassette 3 lifter motor
Solenoid	SL1	Paper deck cassette 1 pickup solenoid
	SL82	Paper deck cassette 2 pickup solenoid
	SL92	Paper deck cassette 3 pickup solenoid

Table 1-13 3X500-sheet paper deck (continued)

Component		Description
Photointerrupter	SR1	Paper deck cassette 1 media feed sensor
	SR2	Paper deck cassette 1 stack surface sensor
	SR3	Paper deck cassette 1 cassette media out sensor
	SR81	Paper deck cassette 2 media feed sensor
	SR82	Paper deck cassette 2 stack surface sensor
	SR83	Paper deck cassette 2 cassette media out sensor
	SR91	Paper deck cassette 3 media feed sensor
	SR92	Paper deck cassette 3 stack surface sensor
	SR93	Paper deck cassette 3 cassette media out sensor
Switch	SW1	Paper deck door-open-detection switch
	SW2	Paper deck cassette 1 cassette media end switch
	SW3	Paper deck cassette 1 cassette media width switch
	SW82	Paper deck cassette 2 cassette media end switch
	SW83	Paper deck cassette 2 cassette media width switch
	SW92	Paper deck cassette 3 cassette media end switch
	SW93	Paper deck cassette 3 cassette media width switch

Motor control

Each of the paper deck cassettes uses two motors for paper-feed and cassette lift-up operation.

Figure 1-56 Paper deck motors

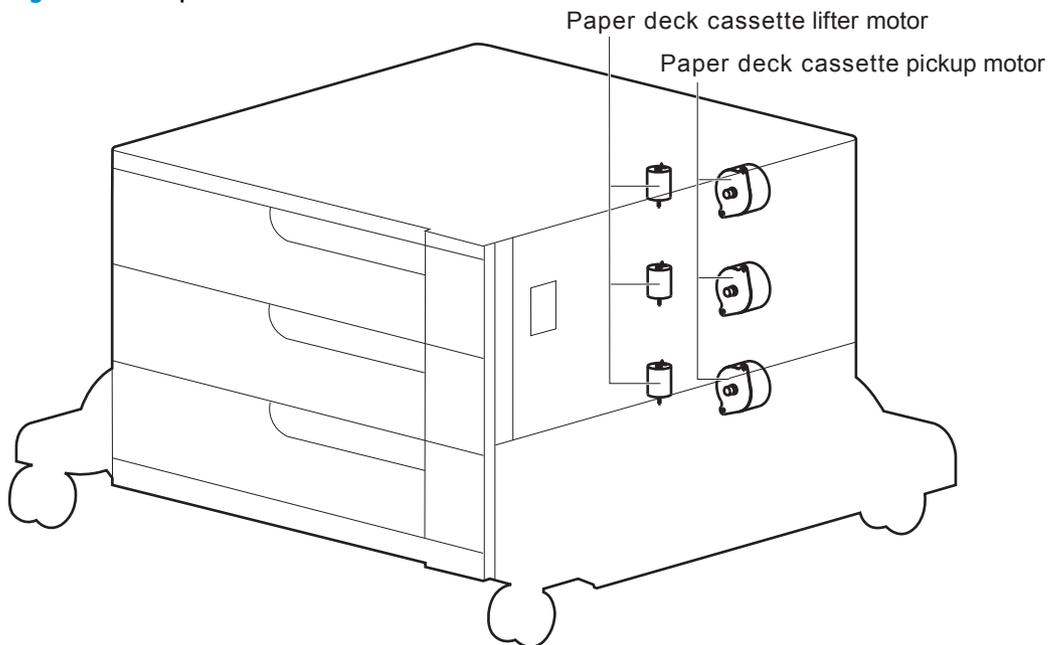


Table 1-14 Paper deck motors

Component		Component driven	Failure detection
Paper deck cassette 1 pickup motor	M1	Paper deck cassette 1 pickup roller, paper deck cassette 1 separation roller, and paper deck cassette 1 feed roller	No
Paper deck cassette 1 lifter motor	M2	Lifter for the paper deck cassette 1	No
Paper deck cassette 2 pickup motor	M81	Paper deck cassette 2 pickup roller, paper deck cassette 2 separation roller, and paper deck cassette 2 feed roller	No
Paper deck cassette 2 lifter motor	M82	Lifter for the paper deck cassette 2	No
Paper deck cassette 3 pickup motor	M91	Paper deck cassette 3 pickup roller, paper deck cassette 3 separation roller, and paper deck cassette 3 feed roller	No
Paper deck cassette 3 lifter motor	M92	Lifter for the paper deck cassette 3	No

Pickup-and-feed operation

The pickup-and-feed operation picks up one sheet of paper in the paper deck cassette and feeds it to the product. The paper deck has three cassettes but each cassette performs the same operation. Paper deck cassette 3 is used to describe the pickup-and-feed operation in this section.

Figure 1-57 Pickup-and-feed operation

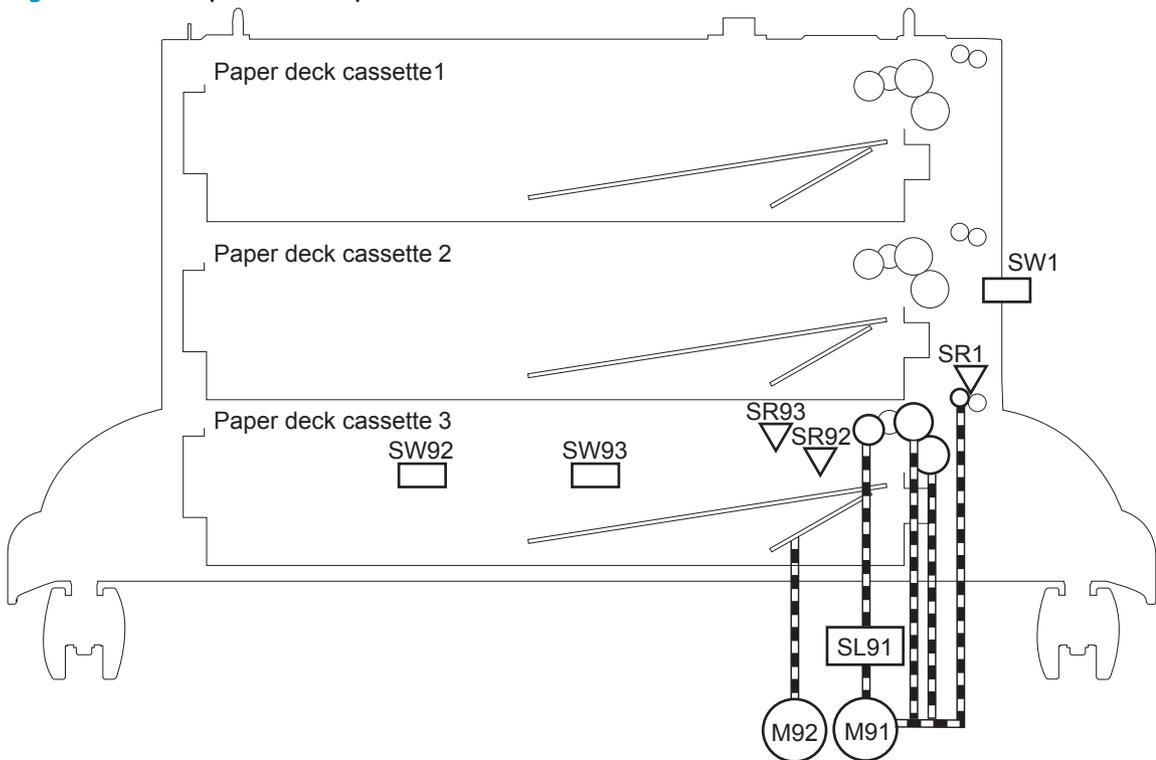


Table 1-15 Pickup-and-feed operation

Component		Signal
Paper deck cassette 1 pickup motor	M1	PAPER DECK CASSETTE 1 PICKUP MOTOR CONTROL signal
Paper deck cassette 1 lifter motor	M2	PAPER DECK CASSETTE 1 LIFTER MOTOR CONTROL signal
Paper deck cassette 1 pickup solenoid	SL01	PAPER DECK CASSETTE 1 SOLENOID signal
Paper deck cassette 1 media feed sensor	SR1	PAPER DECK CASSETTE 1 MEDIA FEED signal
Paper deck cassette 1 media stack surface sensor	SR2	PAPER DECK CASSETTE 1 MEDIA STACK SURFACE signal
Paper deck cassette 1 media out sensor	SR3	PAPER DECK CASSETTE 1 MEDIA OUT signal
Paper deck door-open-detection switch	SW1	PAPER DECK DOOR OPEN DETECTION signal
Paper deck cassette 1 media end switch	SW2	PAPER DECK CASSETTE 1 MEDIA END signal
Paper deck cassette 1 media width switch	SW3	PAPER DECK CASSETTE 1 MEDIA WIDTH signal
Paper deck cassette 2 pickup motor	M81	PAPER DECK CASSETTE 2 PICKUP MOTOR CONTROL signal
Paper deck cassette 2 lifter motor	M82	PAPER DECK CASSETTE 2 LIFTER MOTOR CONTROL signal
Paper deck cassette 2 pickup solenoid	SL82	PAPER DECK CASSETTE 2 SOLENOID signal
Paper deck cassette 2 media feed sensor	SR81	PAPER DECK CASSETTE 2 MEDIA FEED signal
Paper deck cassette 2 media stack surface sensor	SR82	PAPER DECK CASSETTE 2 MEDIA STACK SURFACE signal
Paper deck cassette 2 media out sensor	SR83	PAPER DECK CASSETTE 2 MEDIA OUT signal
Paper deck cassette 2 media end switch	SW82	PAPER DECK CASSETTE 2 MEDIA END signal
Paper deck cassette 2 media width switch	SW83	PAPER DECK CASSETTE 2 MEDIA WIDTH signal
Paper deck cassette 3 pickup motor	M91	PAPER DECK CASSETTE 3 PICKUP MOTOR CONTROL signal
Paper deck cassette 3 lifter motor	M92	PAPER DECK CASSETTE 3 LIFTER MOTOR CONTROL signal
Paper deck cassette 3 pickup solenoid	SL91	PAPER DECK CASSETTE 3 SOLENOID signal
Paper deck cassette 3 media feed sensor	SR91	PAPER DECK CASSETTE 3 MEDIA FEED signal
Paper deck cassette 3 media stack surface sensor	SR92	PAPER DECK CASSETTE 3 MEDIA STACK SURFACE signal
Paper deck cassette 3 media out sensor	SR93	PAPER DECK CASSETTE 3 MEDIA OUT signal
Paper deck cassette 3 media end switch	SW92	PAPER DECK CASSETTE 3 MEDIA END signal
Paper deck cassette 3 media width switch	SW93	PAPER DECK CASSETTE 3 MEDIA WIDTH signal

Cassette media-size detection and cassette-presence detection

The paper deck detects the size of the paper loaded in the paper deck cassette by monitoring the paper deck cassette media end switch and the paper deck cassette media width switch. It also detects the presence of cassette by monitoring the switches. The paper deck controller notifies the formatter through the DC controller when it determines a cassette is absent.

Table 1-16 Cassette media-size detection and cassette-presence detection (3X500-sheet paper deck)

Paper size	3X500-sheet paper deck			3X500-sheet paper deck		
	Cassette media width sensor			Cassette media end switch		
	Top switch	Center switch	Bottom switch	Top switch	Center switch	Bottom switch
Executive	Off	On	On	On	On	On
Letter	Off	Off	On	On	On	On
A5	On	On	Off	On	On	On
B5	Off	On	Off	On	On	On
A4	Off	Off	Off	On	On	On
Ledger	Off	Off	On	Off	Off	On
Legal	On	On	Off	Off	Off	On
B4	Off	On	Off	Off	Off	On
A3	Off	Off	Off	Off	Off	On
A4-R Letter-R	NOTE: The product cannot detect the paper size of A4-R and Letter-R. If A4-R or Letter-R sized paper is loaded to the cassette, A5 size is notified to the formatter.					
Universal	On	On	Off	Off	On	On
Cassette absent	Off	Off	Off	Off	Off	Off

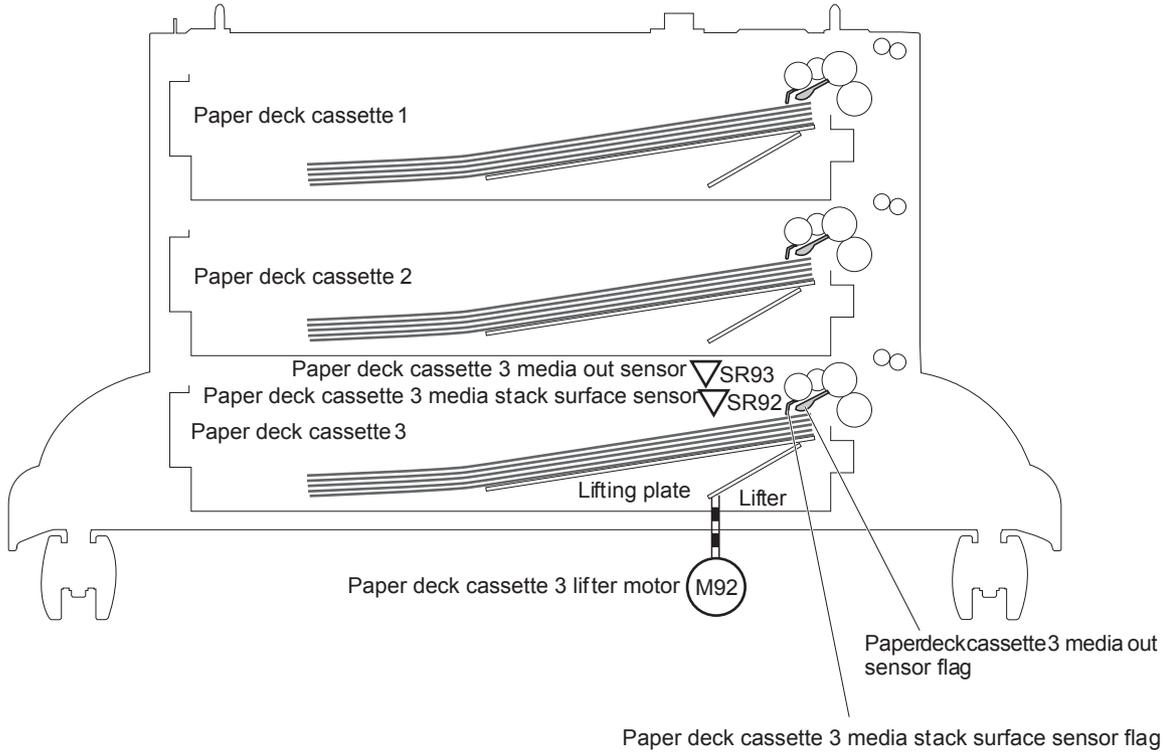
Cassette lift-up operation

The cassette lift-up operation keeps the surface of the paper stack at the pickup position whenever the following occurs:

- Product power is turned on
- Cassette is installed
- Stack surface in the cassette lowers

The paper deck cassette media-out sensor detects the presence of paper in the paper deck cassette. Paper deck cassette 3 is used to describe the Cassette lift-up operation in this section.

Figure 1-58 Cassette lift-up operation

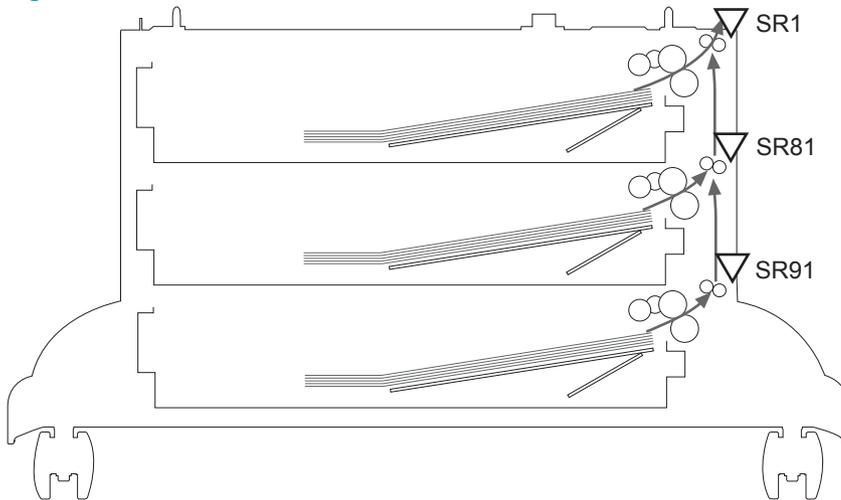


Jam detection

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

- Paper deck cassette 1 media feed sensor (SR1)
- Paper deck cassette 2 media feed sensor (SR81)
- Paper deck cassette 3 media feed sensor (SR91)

Figure 1-59 Jam detection



The paper deck detects the following jams.

- **Paper deck no pick jam 1**
The paper deck cassette 1 media feed sensor does not detect the leading edge of paper within a specified period after the paper deck cassette 2 media feed sensor detects the leading edge. The paper deck cassette 2 media feed sensor does not detect the leading edge of paper within a specified period after the paper deck cassette 3 media feed sensor detects the leading edge.
- **Paper deck no pick jam 2**
The paper deck cassette 1 media feed sensor does not detect the leading edge of paper within a specified period, including a retry, after the paper deck cassette 1 pickup solenoid has turned on. The paper deck cassette 2 media feed sensor does not detect the leading edge of paper within a specified period, including a retry, after the paper deck cassette 2 pickup solenoid has turned on. The paper deck cassette 3 media feed sensor does not detect the leading edge of paper within a specified period, including a retry, after the paper deck cassette 3 pickup solenoid has turned on.
- **Paper deck residual paper jam**
Any one of the following sensors detects a presence of paper after the automatic delivery is performed when the printer is turned on or when the door is closed.
 - Paper deck cassette 1 media feed sensor
 - Paper deck cassette 2 media feed sensor
 - Paper deck cassette 3 media feed sensor
- **Paper deck door open jam**
A paper deck door open is detected during a paper-feed operation.
- **Automatic Delivery**

The paper deck automatically clears the paper if any one of the following sensors detects the residual paper during the initial sequence after the printer is turned on or after the door is closed.

- Paper deck cassette 1 media feed sensor
- Paper deck cassette 2 media feed sensor
- Paper deck cassette 3 media feed sensor

2 Removal and replacement

- [Removal and replacement strategy](#)
- [Removal and replacement procedures](#)

Removal and replacement strategy

Cautions during removal and replacement

This chapter describes the removal and replacement of field-replaceable units (FRUs) only.

Replacing FRUs is generally the reverse of removal. Notes are included to provide directions for difficult or critical replacement procedures.

HP does not support repairing individual subassemblies or troubleshooting to the PCA component level.

Never operate or service the product with the protective cover removed from the laser scanner assembly. The reflected beam, although invisible, can damage your eyes.

The sheet-metal parts can have sharp edges. Be careful when handling sheet-metal parts.



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

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

CAUTION: Do not bend or fold the flat flexible cables (FFCs) during removal or installation.

 **NOTE:** To install a self-tapping screw, first turn it counterclockwise to align it with the existing thread pattern, and then carefully turn it clockwise to tighten. Do not overtighten. If a self-tapping screw-hole becomes stripped, repair the screw-hole or replace the affected assembly.

 **TIP:** For clarity, some figures in this chapter show assemblies removed that are not required to be removed to service the product (for example, the scanner and document feeder assemblies). The procedures in this manual are correct for your product.

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152-mm (6-in) shaft length

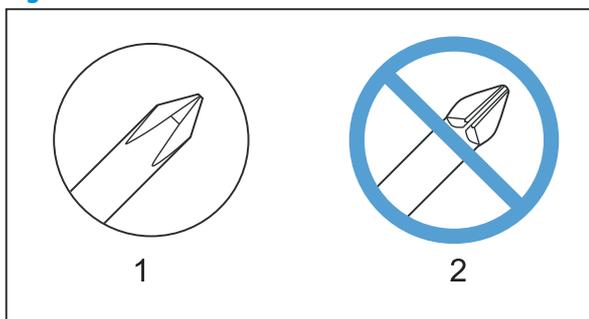


NOTE: For the best fit, use a JIS #2 Phillips screwdriver for the stapler/stacker.

- Small, flat-blade screwdriver
- Needle-nose pliers
- ESD strap (if one is available)
- Penlight

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

Figure 2-1 Screwdrivers



Types of screws

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

For a complete list of screw types and part numbers, see the Parts chapter.

Service approach

The HP Color LaserJet Enterprise M750 Printer Series uses a field repair strategy. Defective parts are diagnosed and replaced at the Field Replaceable Unit (FRU) assembly level. Repair normally begins by using the product internal diagnostics and the following two-step process:

1. Isolate the problem to the major system (for example, the network or server, or the product).
2. Troubleshoot the problem by using the procedures in the troubleshooting chapter.

After you locate a faulty part, the product can usually be repaired at the assembly level by replacing FRUs. Some mechanical assemblies might need to be repaired at the subassembly level. Hewlett-Packard Company does not support replacement of components on the printed circuit assemblies.

The user replaces toner cartridges as they are depleted. Additional instructions about other user-replaceable parts are provided in this section.

The product tracks the amount of use on the customer-replaceable supplies by keeping a page count. The product prompts the user to replace certain items when a supply is depleted or a specific number of pages has been printed.

Swapping toner cartridges between products might cause a misrepresentation of supply life values and is not recommended.

Before performing service

⚠ WARNING! Turn the product off, wait 5 seconds, and then remove the power cord before attempting to service the product. *If this warning is not followed, severe injury and damage to the product can result.* The power must be on for certain functional checks during troubleshooting. However, the power supply should be disconnected during parts removal.

1. Remove all paper.
2. Place the product on an ESD mat (if available). If an ESD workstation or mat is not available, ground yourself by touching the sheet-metal chassis *before* touching an ESD-sensitive part.
3. Remove the toner cartridges.
4. Remove the toner collection unit (TCU)
5. Remove the trays.

After performing service

1. Reinstall the toner cartridges.
2. Reinstall the trays.
3. Return all paper to the trays.
4. Plug in the power cable and turn on the product.
5. Perform print-quality tests by printing from a host computer, the scanner glass, and the document feeder.

Parts removal order

If multiple components must be removed to gain access to an assembly, the first step of the removal procedure lists all of the components that must be removed to gain access to that assembly. Use these lists to determine which parts must be removed before removing other parts.

Removal and replacement procedures

 **NOTE:** The following assemblies are Customer Self Repair (CSR) components. Go to [Covers on page 106](#) or [Main assemblies on page 123](#) for information about removing service assemblies.

Print cartridges

When a print cartridge approaches the end of its estimated useful life, the control panel displays a message recommending that you order a replacement. The product can continue to print using the current print cartridge until the control panel displays a message instructing you to replace the cartridge, unless you have selected the option to override the message by using the [Supply Settings](#) menu.

 **NOTE:** Cartridge life remaining is used to determine if a supply is near or at estimated end of life. Cartridge life remaining is approximate only, and varies depending on types of documents printed and other factors.

The product uses four colors and has a different print cartridge for each color: black (K), magenta (M), cyan (C), and yellow (Y).

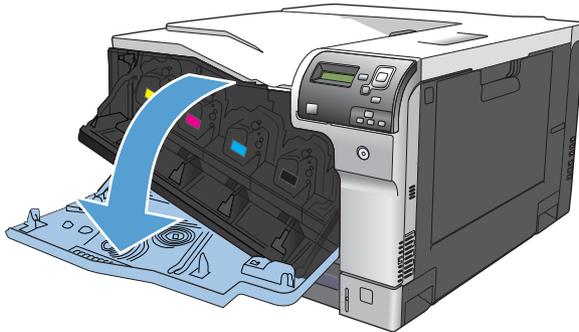
You can replace a print cartridge when the print quality is no longer acceptable. The control-panel message also indicates the color of the cartridge that has reached the end of its estimated useful life. Replacement instructions are provided on the label on the print cartridge.

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

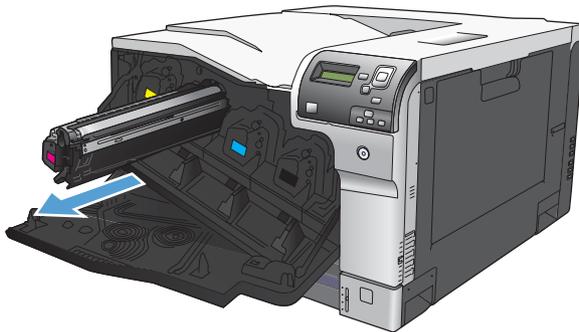
 **NOTE:** Information about recycling used print cartridges is contained in the print-cartridge box.

Replace print cartridges

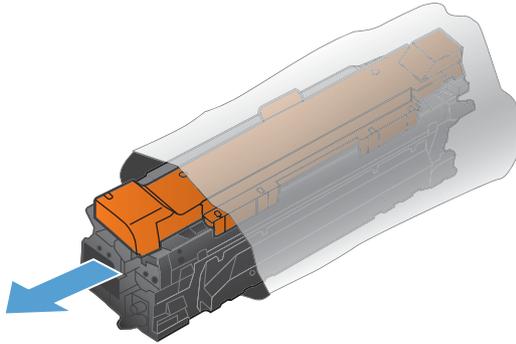
1. Open the front door. Make sure that the door is completely open.



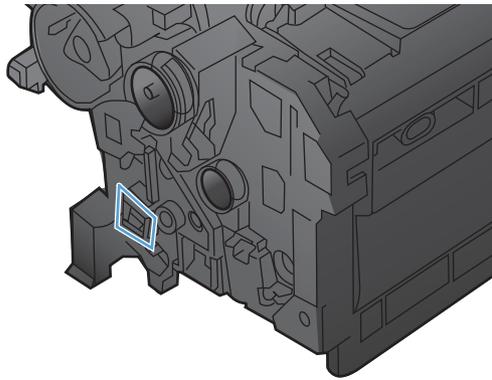
2. Grasp the handle of the used print cartridge and pull out to remove.



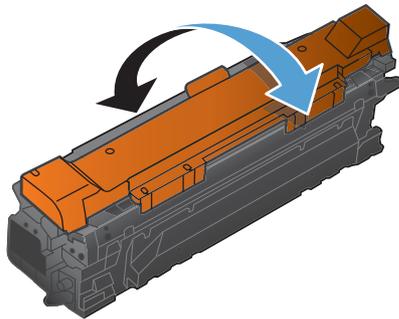
3. Remove the new print cartridge from its protective bag.



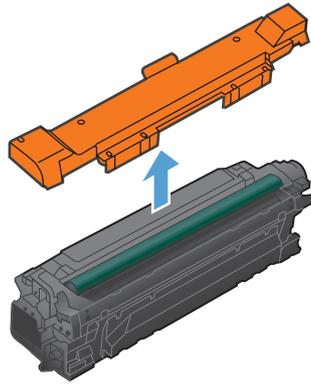
 **NOTE:** Be careful not to damage the memory tag on the print cartridge.



4. Grasp both sides of the print cartridge and distribute the toner by gently rocking the print cartridge.



5. Remove the orange protective cover from the print cartridge. Place the protective cover on the used print cartridge to protect it during shipping.

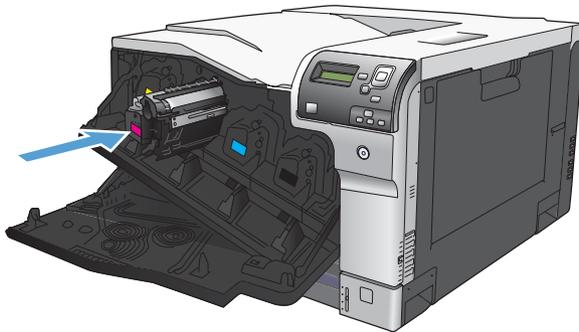


⚠ CAUTION: Avoid prolonged exposure to light.

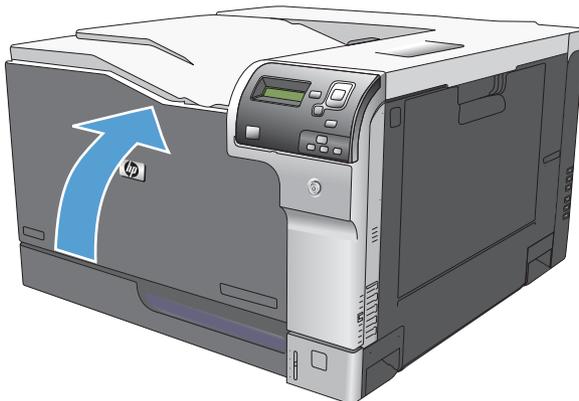
Do not touch the green roller. Doing so can damage the cartridge.

📝 NOTE: Store the used print cartridge in the protective bag removed from the replacement cartridge. Information about recycling used print cartridges is contained in the print-cartridge box.

6. Align the print cartridge with its slot and insert the print cartridge until it clicks into place.



7. Close the front door.

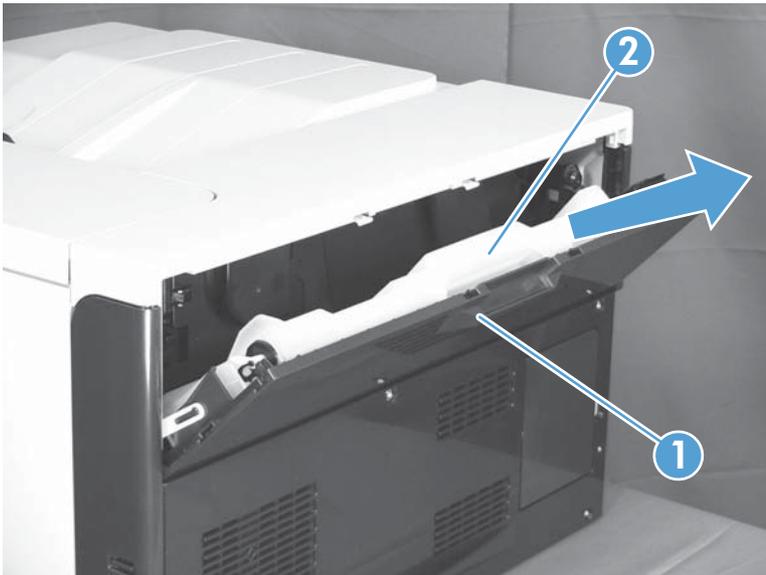


Toner-collection unit

 **NOTE:** The toner-collection unit (TCU) is designed for a single use. Do not try to empty the toner-collection unit and reuse it. To recycle a discarded toner-collection unit, follow the instructions that come with a replacement toner-collection unit.

1. Open the TCU access door (callout 1) on the product back side.
2. Grasp the top of the TCU (callout 2), and then remove it from the product.

Figure 2-2 Remove the toner-collection unit (1 of 3)



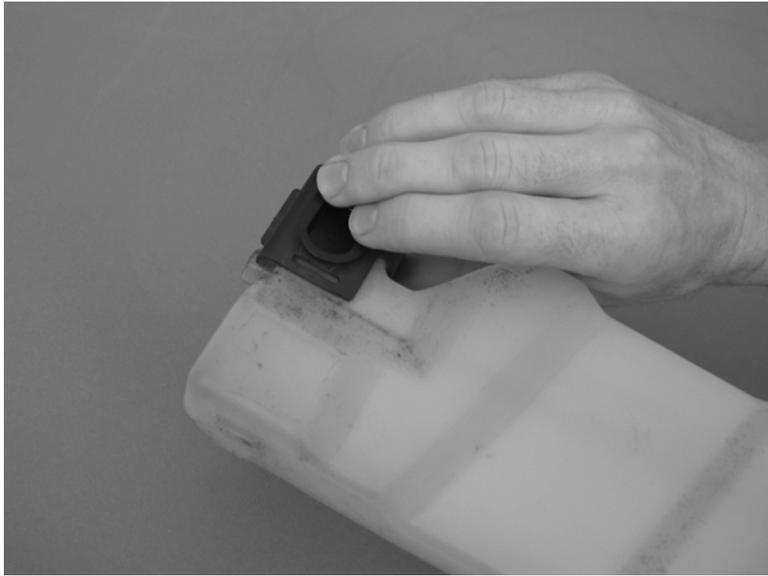
3. Remove the plug from the discarded TCU.

Figure 2-3 Remove the toner-collection unit (2 of 3)



4. Install the plug onto the discarded TCU before putting it into the box and mailing it for recycling.

Figure 2-4 Remove the toner-collection unit (3 of 3)

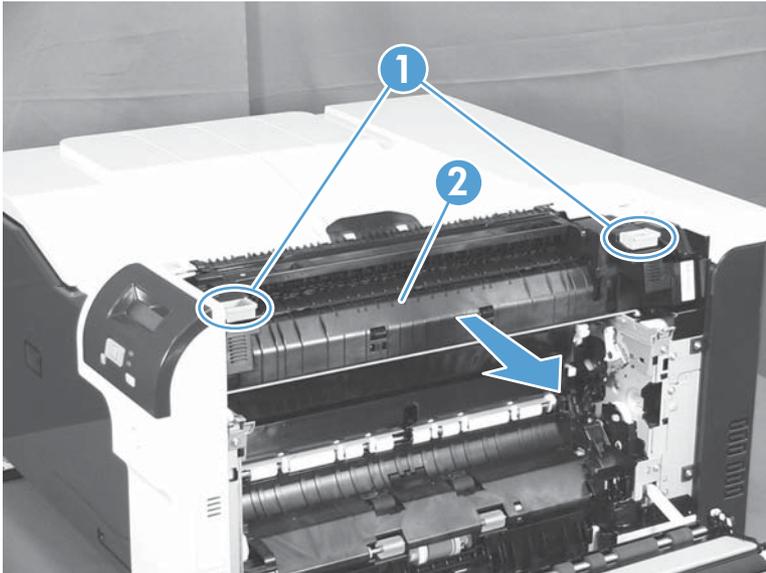


Fuser

CAUTION: The fuser might be hot. Allow enough time after turning off the product power for the fuser to cool.

1. Open the right-door assembly.
2. Grasp the handles and squeeze the blue release levers (callout 1).

Figure 2-5 Remove the fuser



3. Pull the fuser (callout 2) straight out of the product to remove it.

Reset the New Fuser Kit setting at the control panel

NOTE: Use this procedure to reset the internal page count if a replacement fuser is installed.

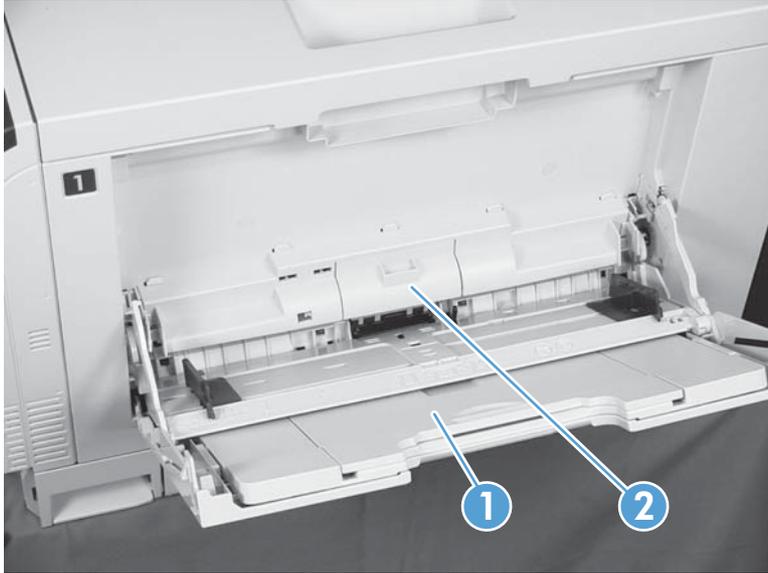
1. At the control panel, press the Home button .
2. Open the following menus:
 - Administration
 - Manage Supplies
 - Reset Supplies
 - New Fuser Kit
3. Use the Down arrow button  to highlight the Yes item, and then press OK to select it.

Pickup roller (Tray 1)

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

1. Open Tray 1 (callout 1), and then remove the pickup roller cover (callout 2).

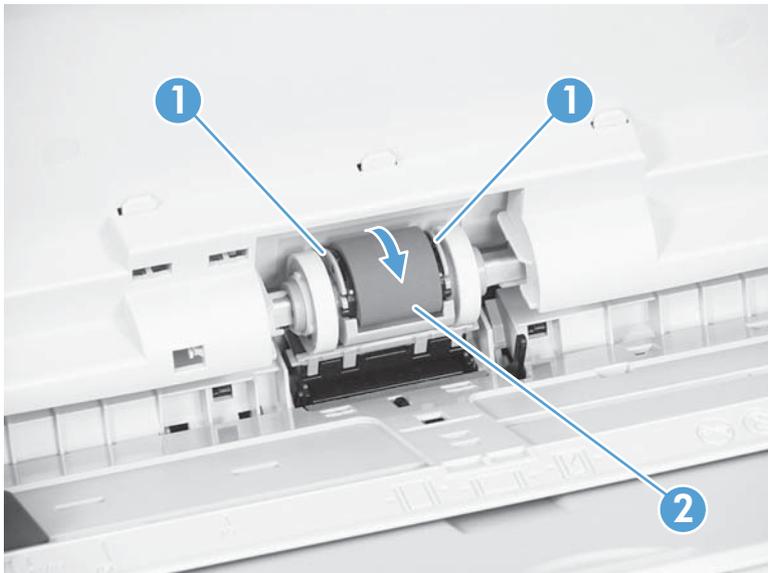
Figure 2-6 Remove the pickup roller (Tray 1) (1 of 2)



2. Spread out the pickup roller retainers (callout 1) until both sides unlatch, and then remove the pickup roller (callout 2).

Reinstallation tip When you reinstall the roller, make sure that the roller snaps into place

Figure 2-7 Remove the pickup roller (Tray 1) (2 of 2)

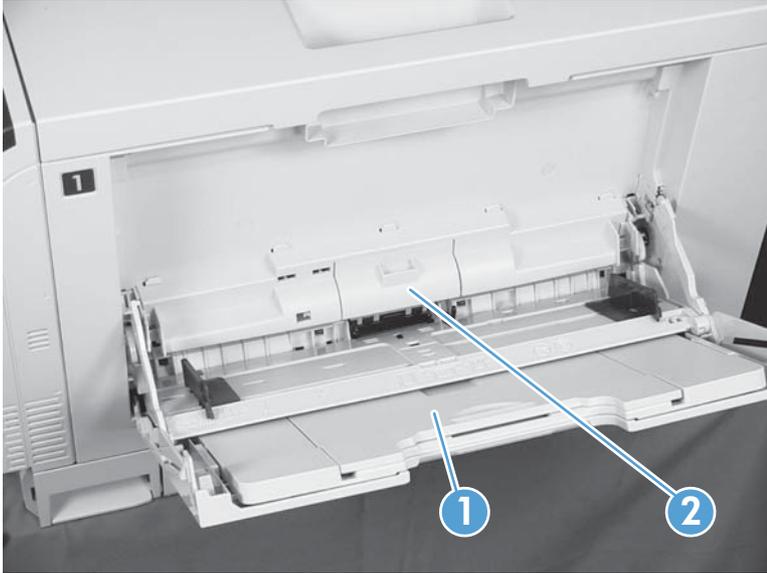


Separation pad (Tray 1)

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

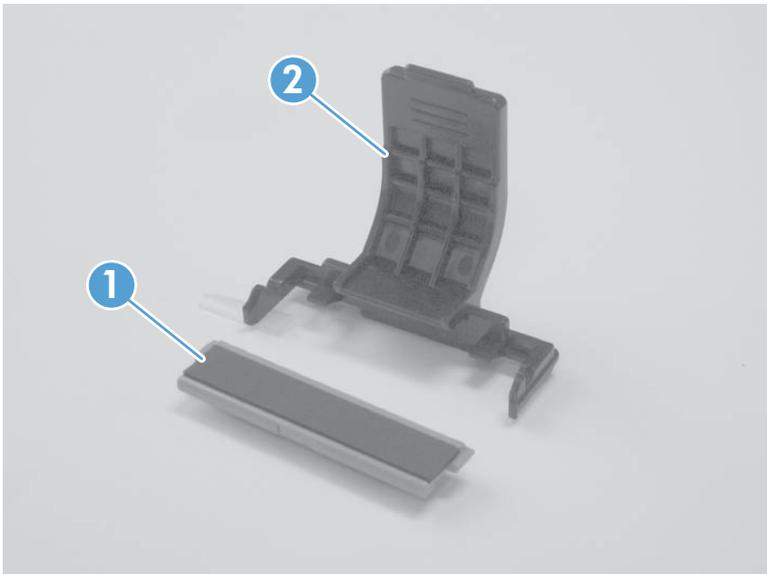
1. Open Tray 1 (callout 1), and then remove the pickup roller cover (callout 2).

Figure 2-8 Remove the separation pad (Tray 1) (1 of 4)



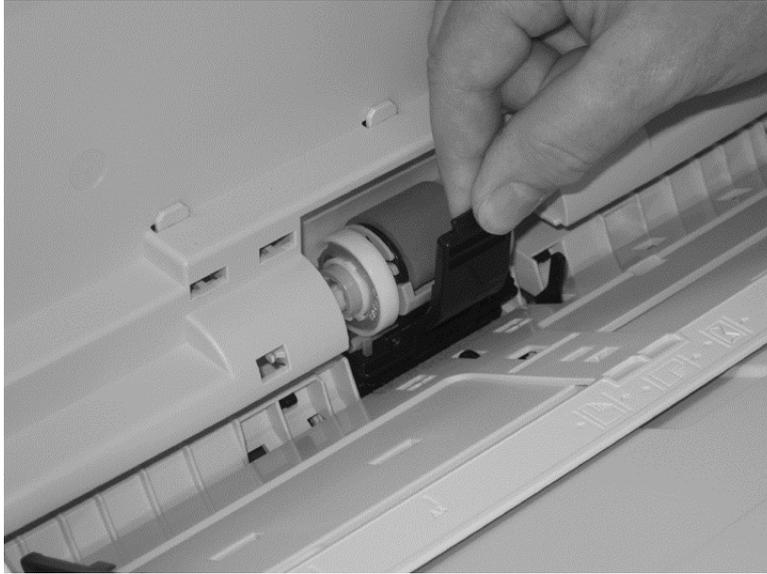
2. Take out the tool (callout 2) supplied with a new separation pad (callout 1).

Figure 2-9 Remove the separation pad (Tray 1) (2 of 4)



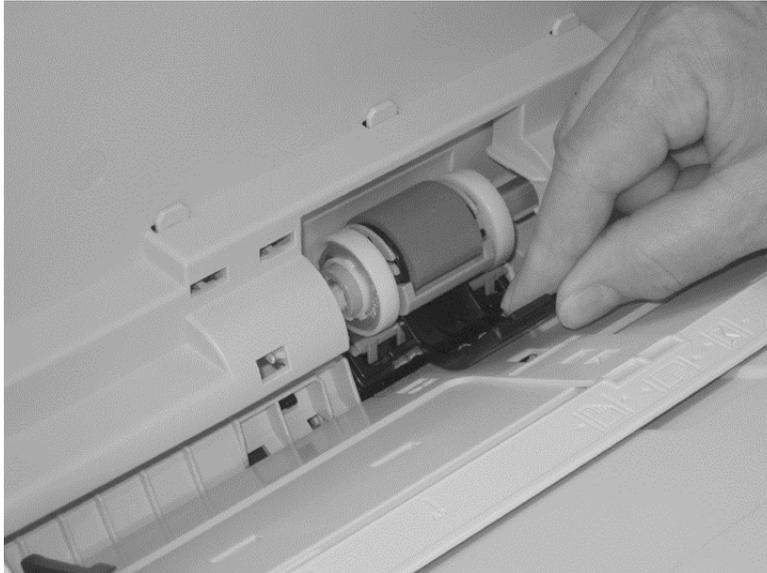
3. Insert the tool under the separation pad.

Figure 2-10 Remove the separation pad (Tray 1) (3 of 4)



4. Rotate the top of the tool away from the product to release the separation pad, and then remove the tool and the separation pad together.

Figure 2-11 Remove the separation pad (Tray 1) (4 of 4)



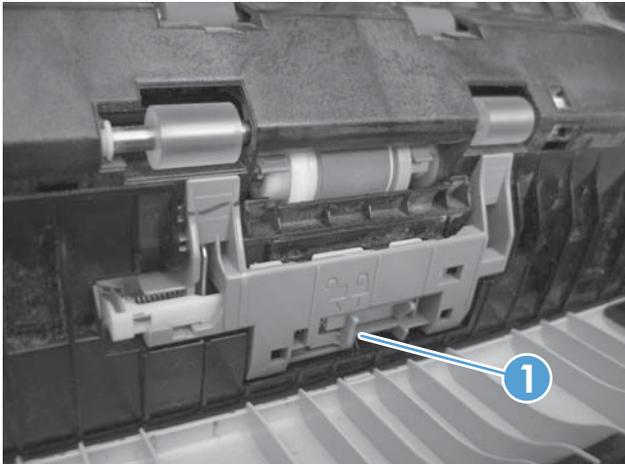
 **Reinstallation tip** You do not need to use the tool to install the new separation pad. Press the new pad with your hand until it snaps into place and engages with the engine.

Separation roller assembly (Tray 2)

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

1. Remove Tray 2 from the product.
2. Open the right-door assembly.
3. On the separation roller assembly, slide the lever (callout 1) toward the unlocked icon  until it clicks into the unlocked position.

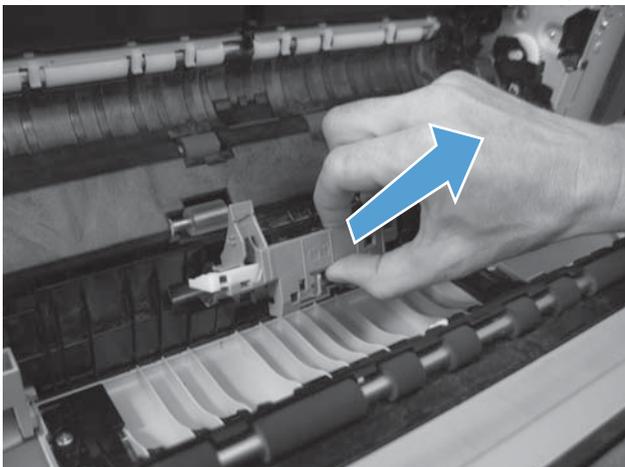
Figure 2-12 Remove the separation roller assembly (Tray 2) (1 of 2)



4. Pull the separation roller assembly up and remove it from the product.

Reinstallation tip When you install the separation roller assembly, make sure that it snaps into the locked position.

Figure 2-13 Remove the separation roller assembly (Tray 2) (2 of 2)

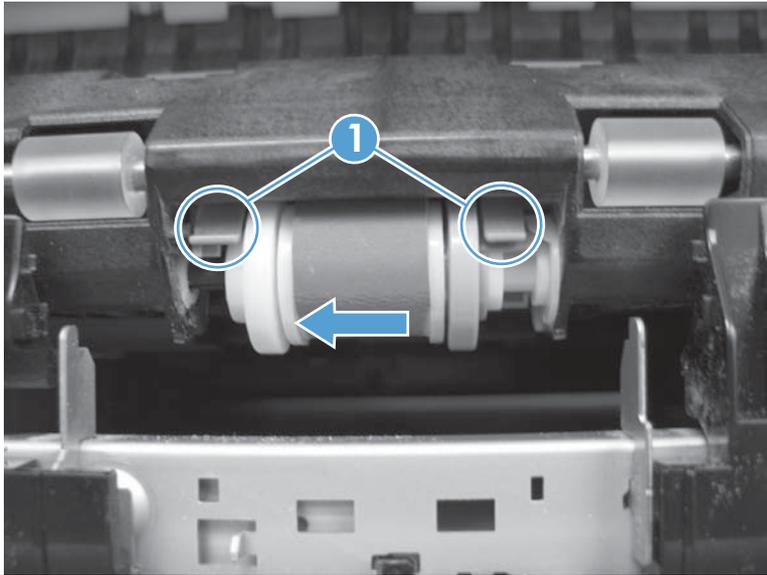


Pickup roller (Tray 2)

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

1. Open Tray 2.
2. Open the right-door assembly.
3. Remove the separation roller assembly (see [Separation roller assembly \(Tray 2\) on page 94](#))
4. Lift one of the two levers (callout 1) on either side of the pickup roller, and then push the right side of the roller in the direction of the arrow.

Figure 2-14 Remove the pickup roller (Tray 2)



5. Remove the pickup roller.

💡 Reinstallation tip Insert the left side of the roller into the product first. Make sure that the replacement roller snaps into place.

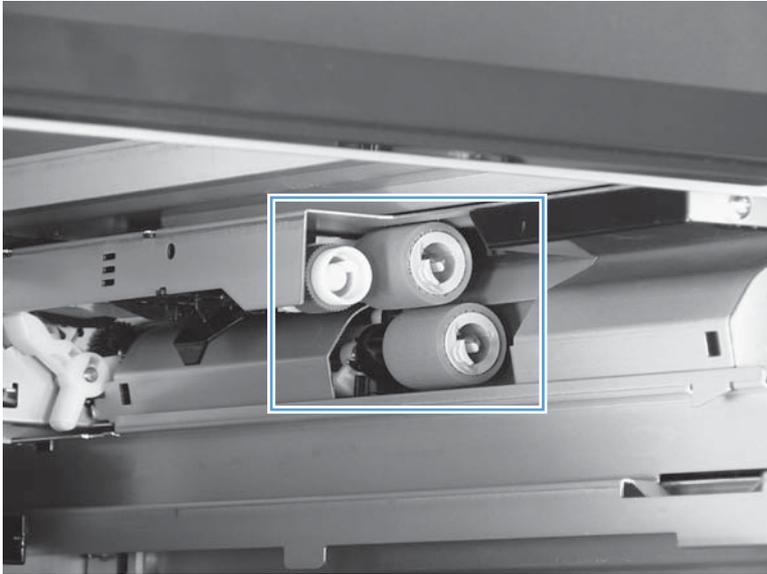
Pickup roller, separation roller, and feed roller (1 x 500-sheet and 3 x 500-sheet paper feeders)

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

TIP: You do not have to separate the product from the feeder to remove these rollers.

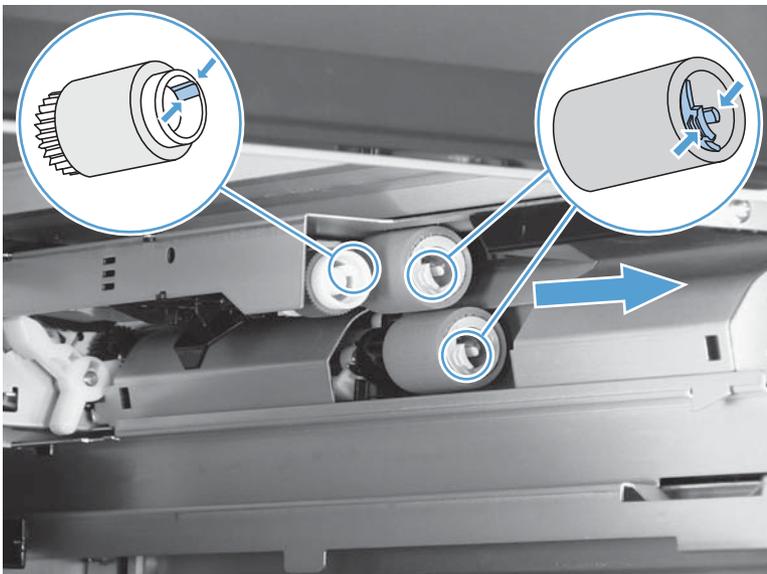
1. Remove the Tray 3 or Tray 4/5/6 cassette from the product, and then locate the rollers on the right-hand side of the tray cavity.

Figure 2-15 Remove the 1 x 500 or 3 x 500 rollers (1 of 2)



2. Release three tabs, and then pull the rollers in the direction of the arrow.

Figure 2-16 Remove the 1 x 500 or 3 x 500 rollers (2 of 2)



Reinstallation tip When you reinstall the rollers, make sure that the rollers snap into place.

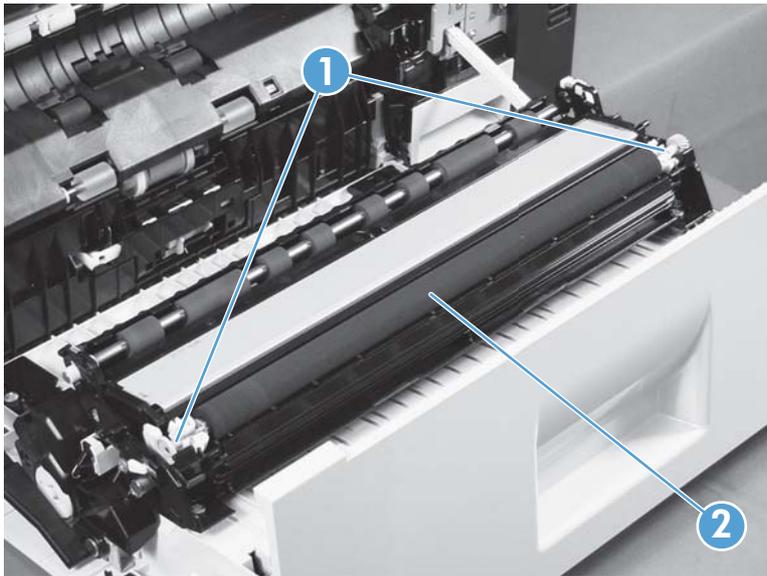
Secondary transfer roller

CAUTION: Do not touch the spongy roller surface unless you are replacing the roller. Skin oils on the roller can cause image quality problems.

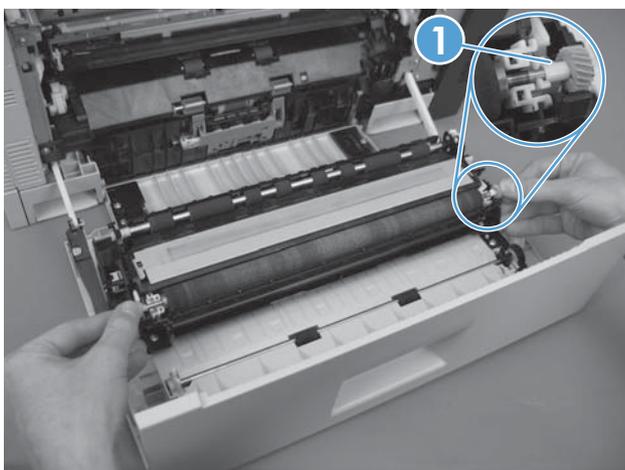
NOTE: If the secondary transfer roller is replaced, HP recommends that the ITB be replaced also. If both components are replaced at the same time, you must use the control-panel menus to reset the **Transfer Kit** menu item. See [Reset the New Transfer Kit setting at the control panel on page 99](#).

1. Open the right-door assembly.
2. Grasp one of the blue round features (callout 1) on either end of the transfer roller, and then lift the transfer roller (callout 2) off of the product.

Figure 2-17 Remove the transfer roller



TIP: Place the new roller assembly in place with the roller gear (callout 1) on the right side, and then press down to ensure that the roller shaft snaps securely in the roller clasps.



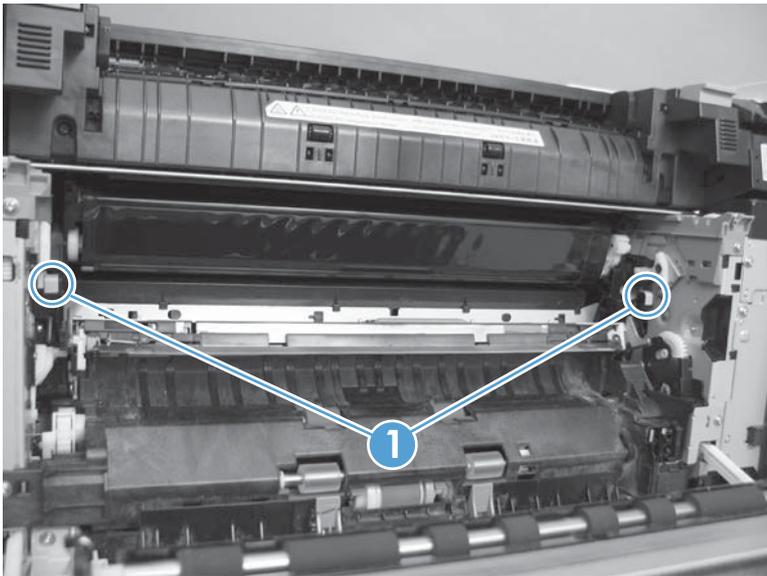
Intermediate transfer belt (ITB)

CAUTION: Do not touch the black-plastic belt. Skin oils and fingerprints on the belt can cause print-quality problems. Always place the ITB on a flat surface in a safe and protected location.

NOTE: If the ITB assembly is replaced, HP recommends that the secondary transfer roller be replaced also. If both components are replaced at the same time, you must use the control-panel menus to reset the [Transfer Kit](#) menu item. See [Reset the New Transfer Kit setting at the control panel on page 99](#).

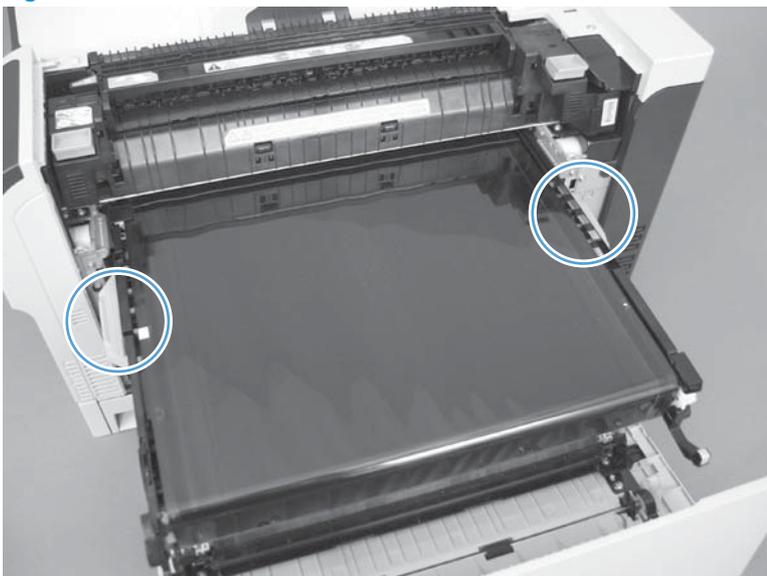
1. Open the right-door assembly.
2. Use both hands to grasp the blue levers (callout 1), apply slight downward pressure, and pull the ITB toward you at a downward angle.

Figure 2-18 Remove the intermediate transfer belt (1 of 3)



3. Pull the ITB out of the product until two large handles expand along the right and left side of the ITB.

Figure 2-19 Remove the intermediate transfer belt (2 of 3)



4. Grasp the large handles on the ITB, pull it straight out of the product until it stops, and then pull up to remove it from the product.

CAUTION: The ITB is a sensitive component. Be careful when handling the ITB so that it is not damaged. Always place the ITB in a safe and protected location.

Figure 2-20 Remove the intermediate transfer belt (3 of 3)



Reinstallation tip If you are installing a replacement ITB, make sure that you remove all of the packing tape and the protective cover sheet.

Reset the New Transfer Kit setting at the control panel

NOTE: Use this procedure to reset the internal page count if a replacement ITB and secondary transfer roller are installed.

1. At the control panel, press the Home button .
2. Open the following menus:
 - Administration
 - Manage Supplies
 - Reset Supplies
 - New Transfer Kit
3. Use the Down arrow button  to highlight the Yes item, and then press OK to select it.

Formatter PCA

CAUTION:  ESD sensitive component.

Do not replace the laser scanner and the formatter PCA at the same time. The settings for the laser scanner are stored in the formatter RAM. When you install a new laser scanner, it reads the settings from the formatter.

Do not replace the DC controller PCA and the formatter PCA at the same time. The settings for the DC Controller PCA are stored in the formatter RAM. When you install a new DC Controller PCA, it reads the settings from the formatter.

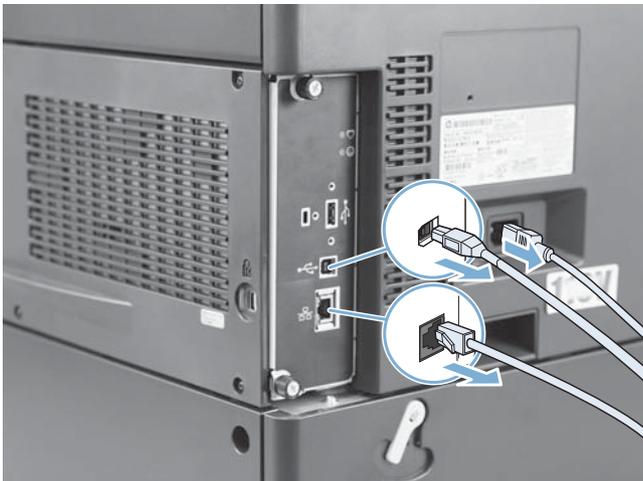
CAUTION: The formatter PCA for the CP5525 will not work and might cause damage if installed in the M750. Make sure you are installing the correct formatter PCA.

NOTE: If possible, print a configuration page before replacing the formatter. You might need to transfer the serial number and the page count information to the new formatter.

1. Disconnect communication cables (if installed).

CAUTION: Make sure that the product power is off and that the power cord is unplugged.

Figure 2-21 Remove the formatter (1 of 3)



2. Loosen two thumb screws.

Figure 2-22 Remove the formatter (2 of 3)



3. Firmly pull the formatter from the product. Place the formatter on a clean, flat, grounded surface.

Figure 2-23 Remove the formatter (3 of 3)



 **Reinstallation tip** If the formatter PCA was replaced, print a configuration page and make sure that the serial number and page count information were transferred to the formatter PCA. If they were not, use the [Service](#) menu to reset these values.

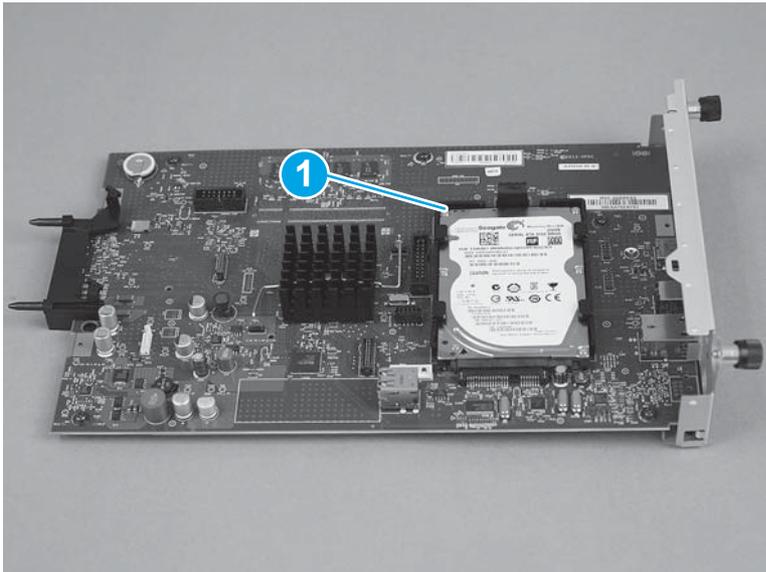
Hard Drive

Before proceeding, remove the following components:

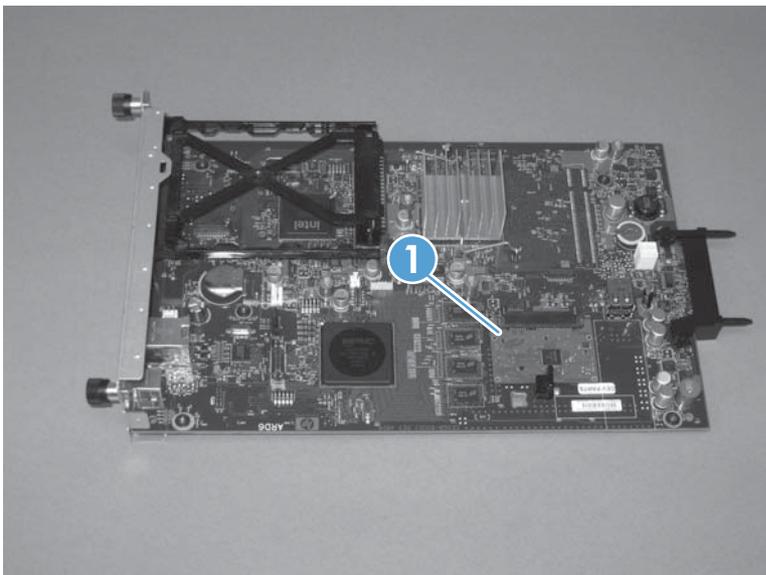
- Formatter PCA. See [Formatter PCA on page 100](#).

Identify the hard drive type

- Encrypted hard-disk drive (callout 1)



- Solid-state module (callout 1)

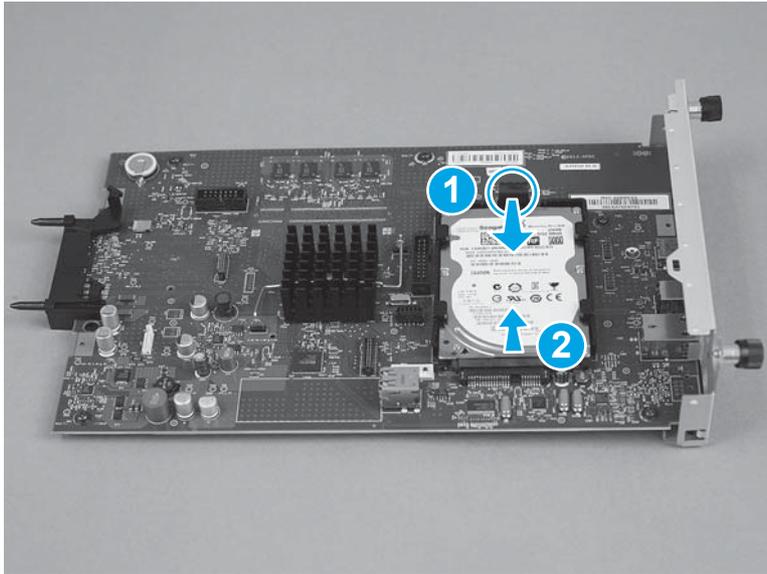


Remove the encrypted HDD

 **NOTE:** If you are installing a replacement hard drive or module, you must reinstall the product firmware. See [Product updates on page 535](#).

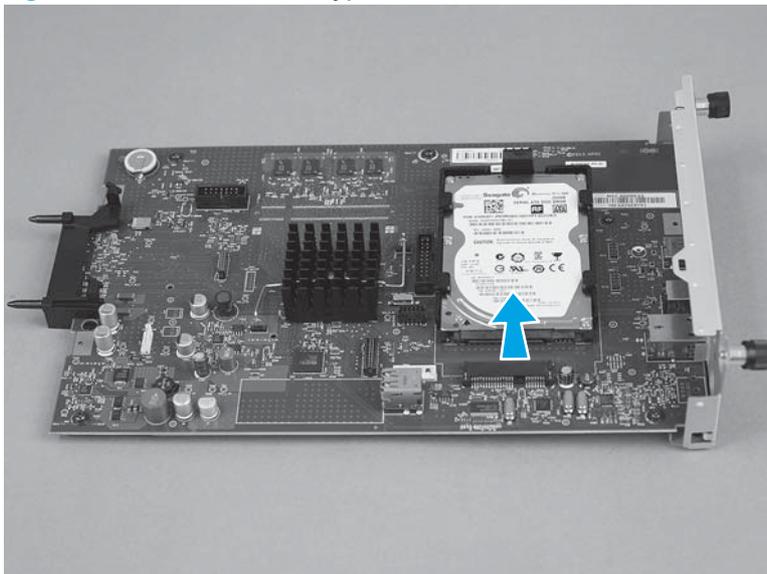
1. Release one tab (callout 1), and then release one connector (callout 2).

Figure 2-24 Remove the encrypted HDD (1 of 2)



2. Remove the encrypted HDD.

Figure 2-25 Remove the encrypted HDD (2 of 2)

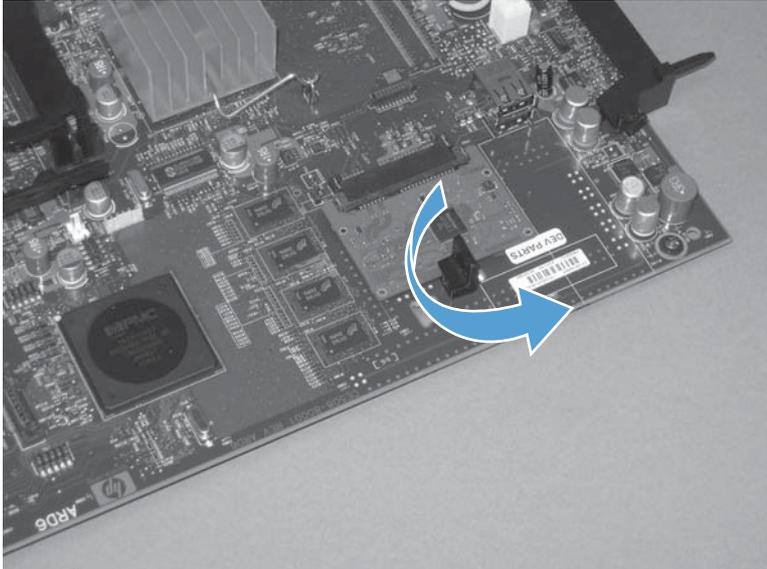


Remove the solid-state module

 **NOTE:** If you are installing a replacement hard drive or module, you must reinstall the product firmware. See [Product updates on page 535](#).

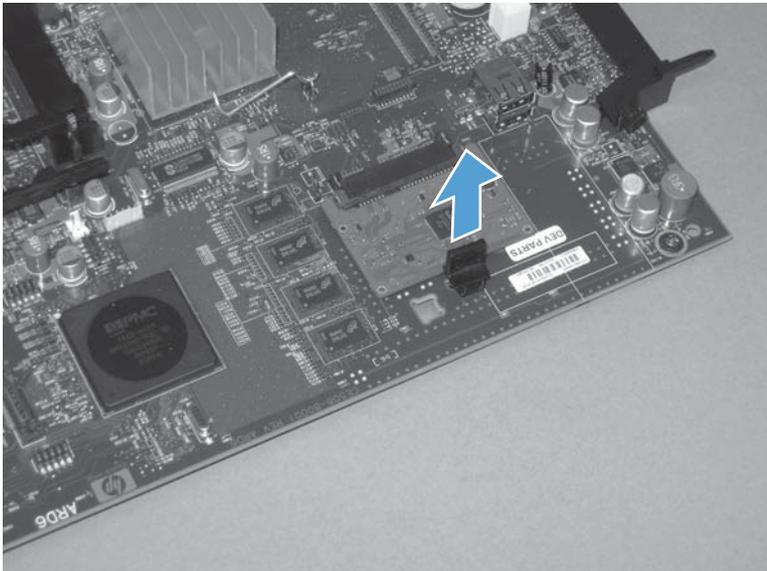
1. Release the hard drive lock.

Figure 2-26 Remove the solid-state module (1 of 3)



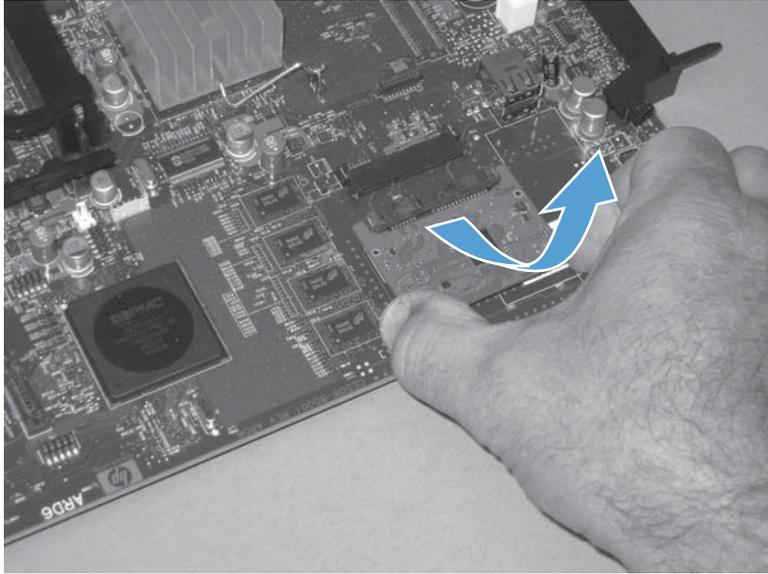
2. Remove the lock from the PCA.

Figure 2-27 Remove the solid-state module (2 of 3)



3. Disconnect the solid-state module from the formatter PCA, and then remove it.

Figure 2-28 Remove the solid-state module (3 of 3)



Covers

Identification and location

Figure 2-29 External panels, covers, and doors

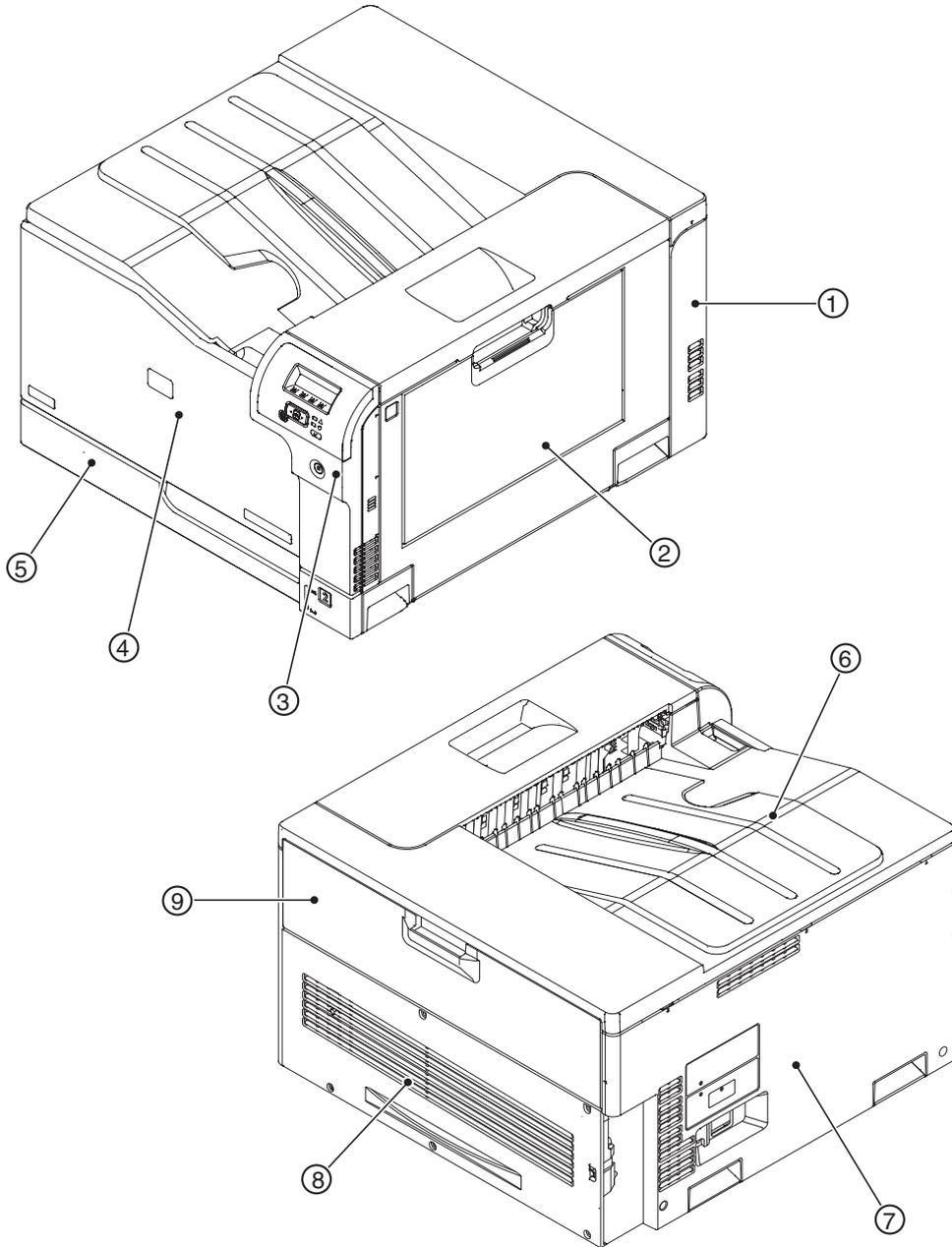


Table 2-1 External panels, covers, and doors

Item	Description	Item	Description
1	Rear-right cover (see Right-rear cover on page 114)	6	Top cover (see Top cover on page 115)
2	Right-door assembly (see Right-door assembly on page 120)	7	Left cover (see Left cover on page 110)

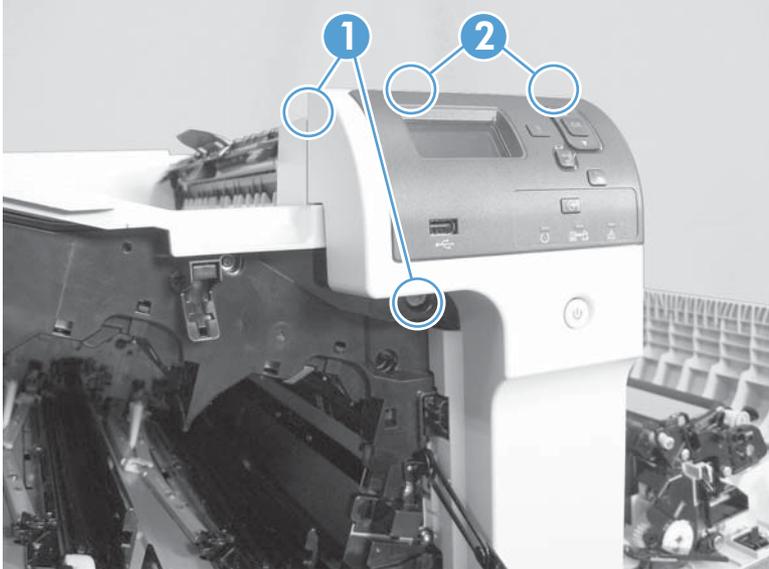
Table 2-1 External panels, covers, and doors (continued)

Item	Description	Item	Description
3	Right-front cover and control-panel assembly (see Right-front cover and control-panel assembly on page 108)	8	Rear cover (see Rear cover on page 111)
4	Front-door assembly (see Front-door assembly on page 117)	9	Toner collection unit access door (see Toner collection unit access door on page 112)
5	Tray 2 cassette		

Right-front cover and control-panel assembly

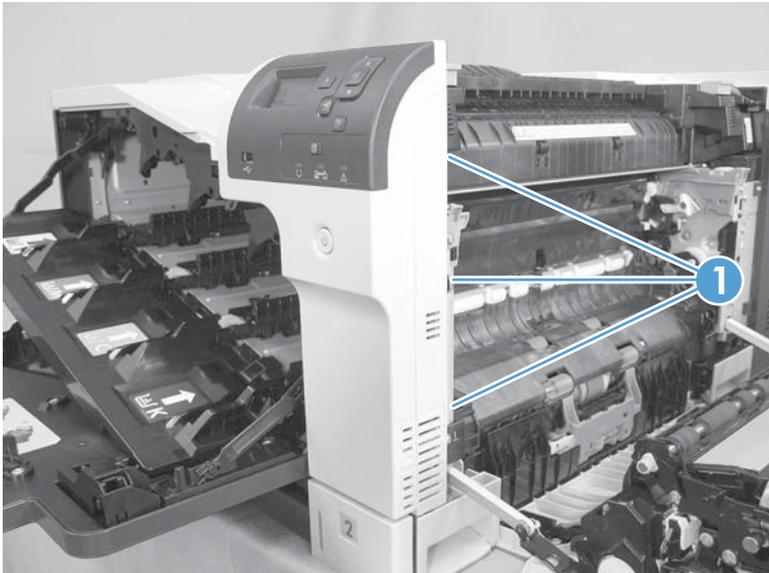
1. Open the front door and the right door.
2. Remove two screws (callout 1), and then release two tabs (callout 2).

Figure 2-30 Remove the right-front cover and control-panel assembly (1 of 3)



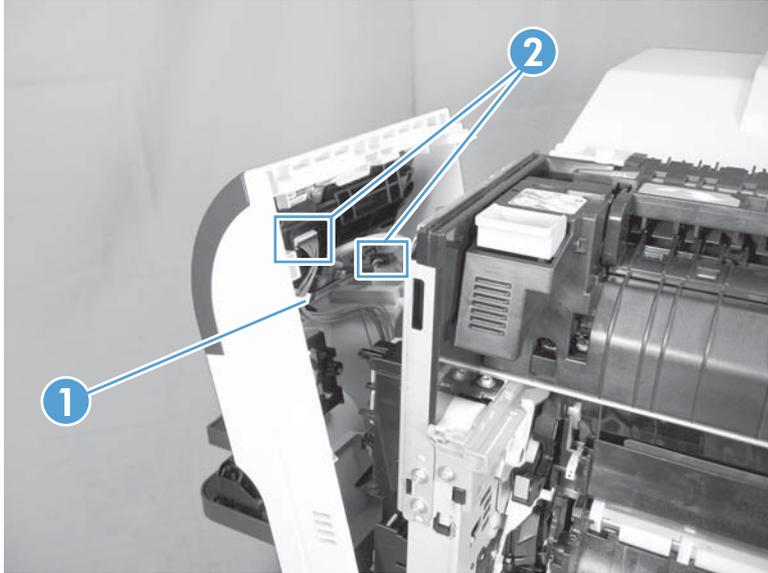
3. Release 3 tabs (callout 1) on the right side of the assembly.

Figure 2-31 Remove the right-front cover and control-panel assembly (2 of 3)



4. Support the assembly, release one cable retainer (callout 1), and then disconnect two connectors (callout 2). Remove the assembly.

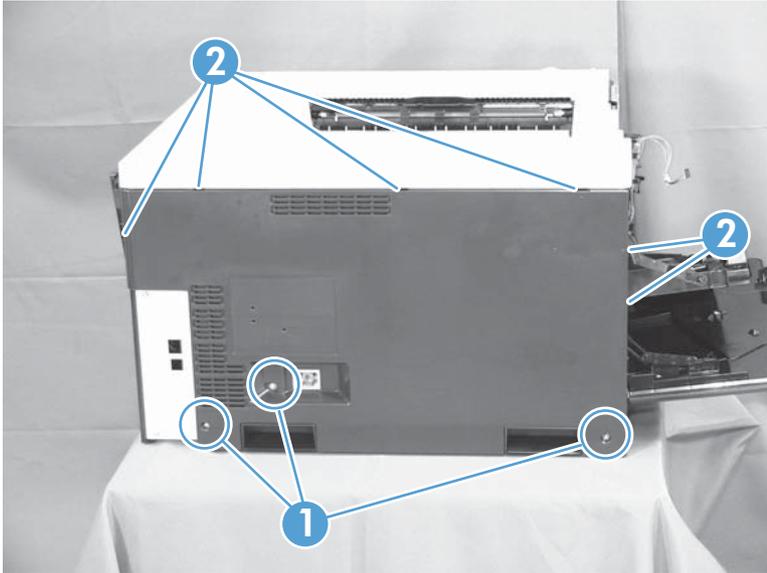
Figure 2-32 Remove the right-front cover and control-panel assembly (3 of 3)



Left cover

1. Remove Tray 2 from the product.
2. Open the front door.
3. Remove three screws (callout 1). Starting from the left side of the cover, release six tabs (callout 2), and then remove the cover from the product.

Figure 2-33 Remove the left cover



 **TIP:** Opening the toner-collection door might make it easier to release the tabs on the left side of the cover.

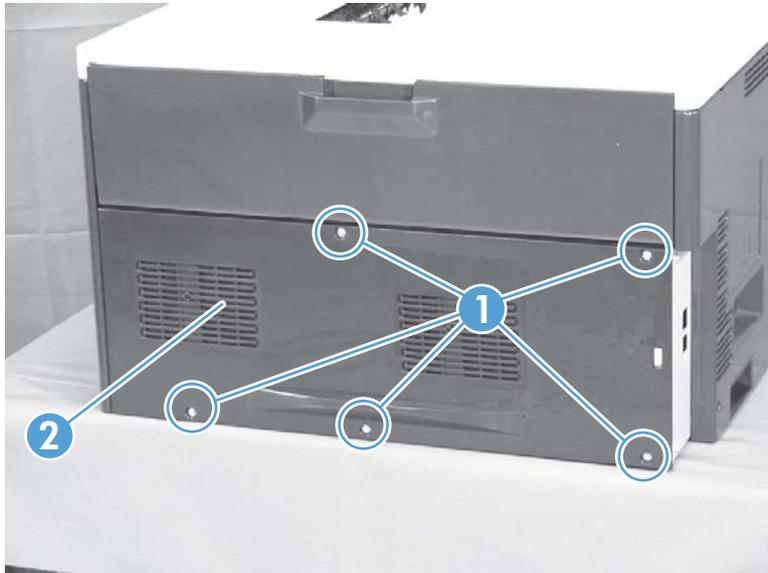
 **Reinstallation tip** If the front door will not close after the left cover has been reinstalled, verify that the two tabs on the right side of the cover have been aligned correctly with the product chassis.

Rear cover

Remove the rear cover

- ▲ Remove five screws (callout 1), and then remove the cover (callout 2) from the product.

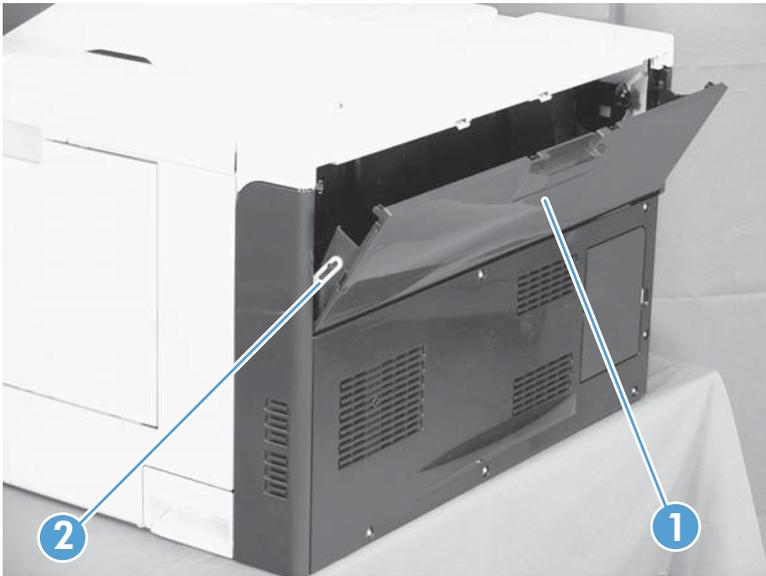
Figure 2-34 Remove the rear cover



Toner collection unit access door

1. Open the toner collection unit access door (callout 1), remove the toner collection unit, and then release the link arm (callout 2) on the left side of the door.

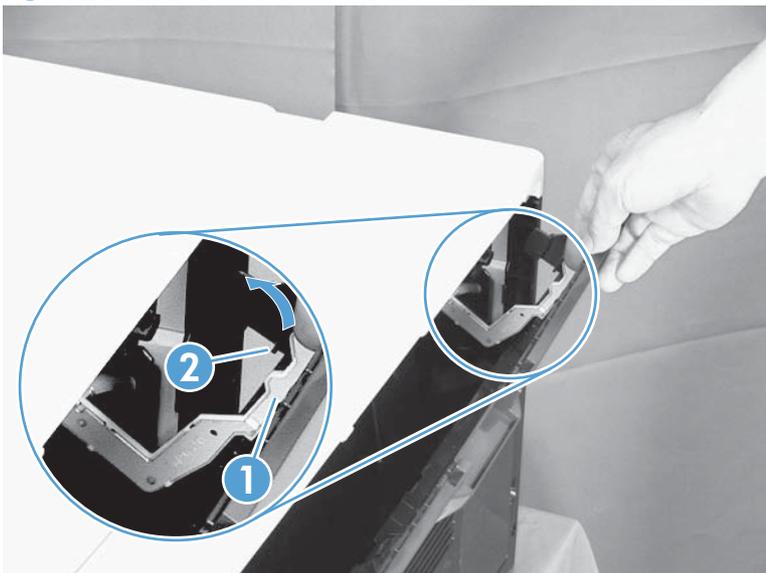
Figure 2-35 Remove the toner collection unit access door (1 of 3)



2. Partially close the door so that the right link arm (callout 1) can clear the stop (callout 2) on the door, and then disengage the link arm from the door.

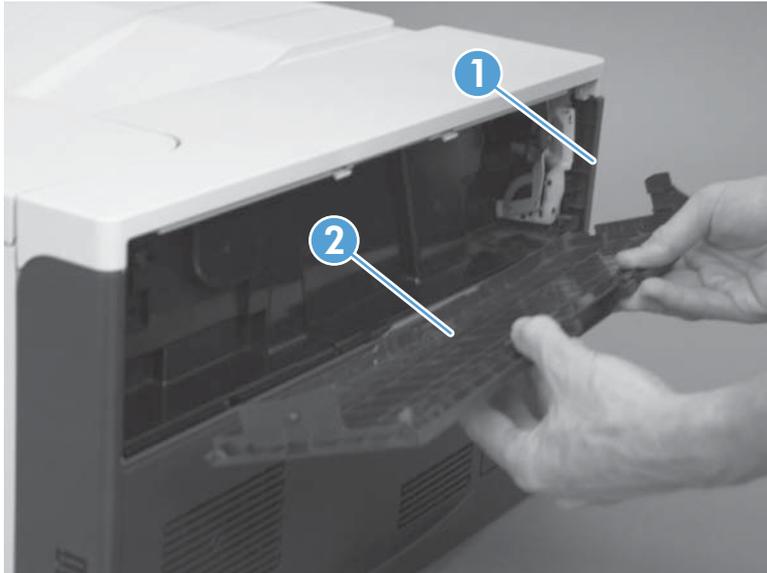
CAUTION: Do not disconnect the right-hand link arm when the door is completely open. Doing so can disconnect the link arm spring.

Figure 2-36 Remove the toner collection unit access door (2 of 3)



3. Rotate the access door down 90 degrees (callout 1), and then pull on the right side of the door (callout 2) to remove the access door.

Figure 2-37 Remove the toner collection unit access door (3 of 3)

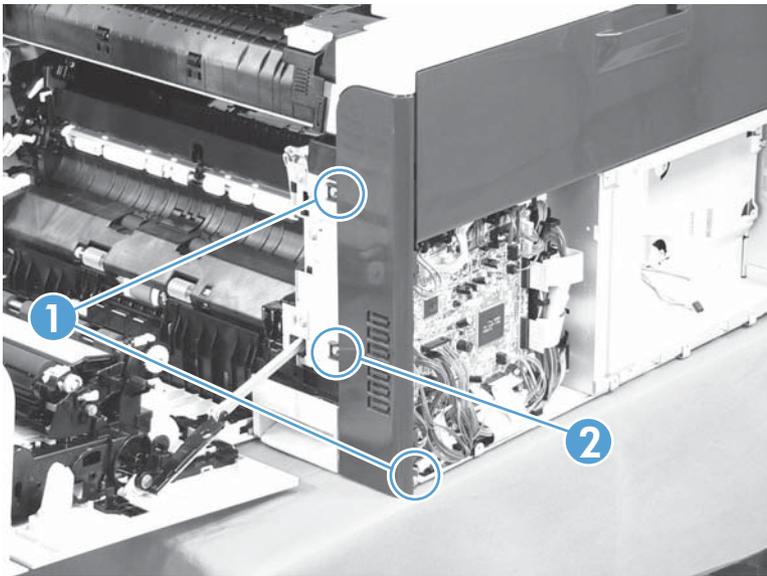


Right-rear cover

1. Remove the rear cover. See [Rear cover on page 111](#).
2. Open the right-door assembly.
3. Remove two screws (callout 1), release one tab (callout 2), and then remove the cover.

⚠ CAUTION: The ground spring on the back of the cover can easily be dislodged. Be careful not to lose it. See [Reinstall the right-rear cover on page 114](#).

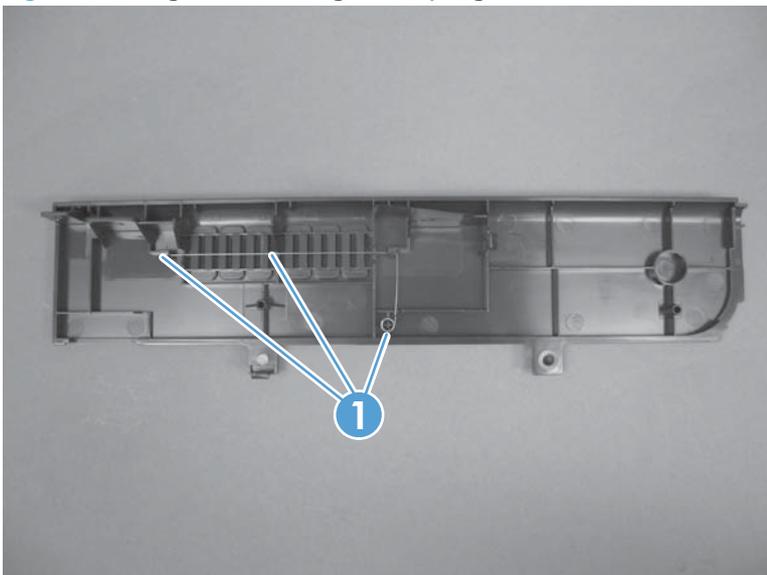
Figure 2-38 Remove the right-rear cover



Reinstall the right-rear cover

- ▲ Make sure that the ground spring (callout 1) is correctly installed before you reinstall the right-rear cover.

Figure 2-39 Right-rear cover ground spring



Top cover

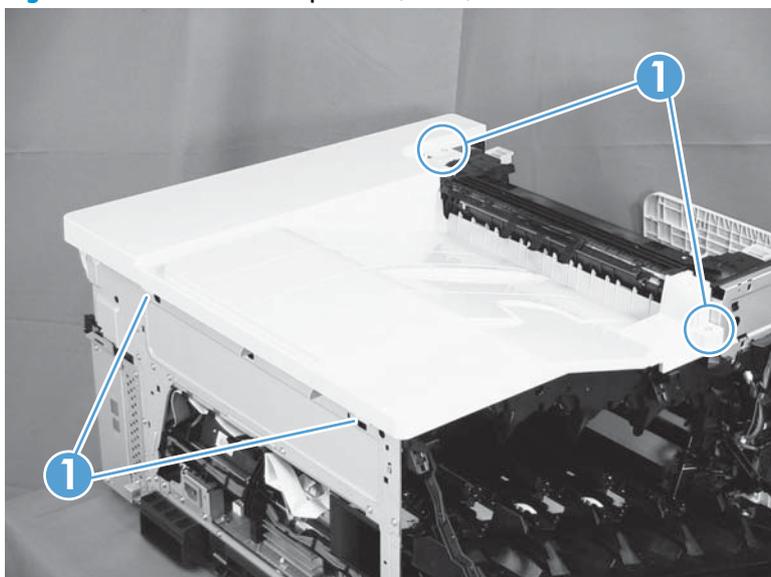
Before proceeding, remove the following components:

- Right-front cover and control-panel assembly. See [Right-front cover and control-panel assembly on page 108](#).
- Left cover. See [Left cover on page 110](#).
- Remove the rear cover. See [Rear cover on page 111](#).
- Right-rear cover. See [Right-rear cover on page 114](#).

Remove the top cover

1. Open the right-door assembly, and then remove four screws (callout 1).

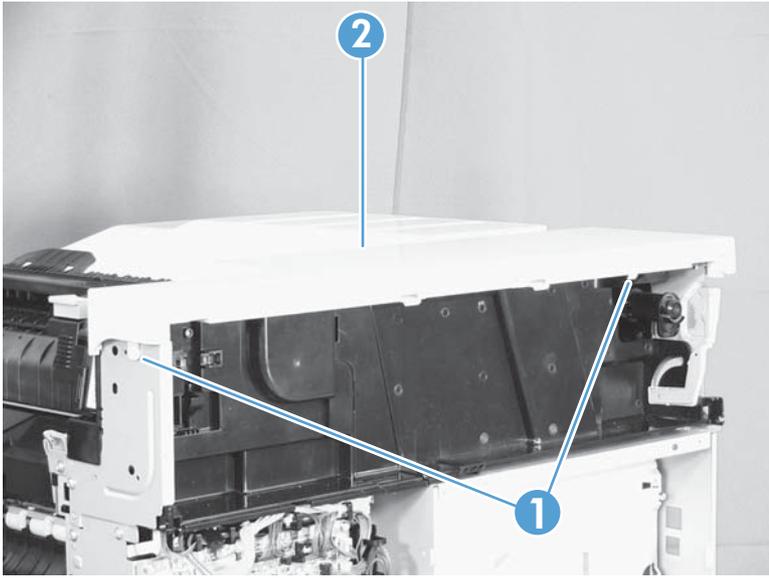
Figure 2-40 Remove the top cover (1 of 2)



2. Open the toner-collection door.

3. Release two tabs (callout 1), and then remove the cover (callout 2).

Figure 2-41 Remove the top cover (2 of 2)



Front-door assembly

1. Remove the control panel. See [Right-front cover and control-panel assembly on page 108](#).
2. Open the front door.
3. Remove one screw (callout 1) and the inner cover rail mount (callout 2).

⚠ CAUTION: As shown in [Figure 2-43 Remove the front-door assembly \(2 of 4\) on page 117](#), when removing the inner cover rail mount (callout 3), hold down the inner cover (callout 4) with one hand to prevent it from springing back at the product.

Figure 2-42 Remove the front-door assembly (1 of 4)

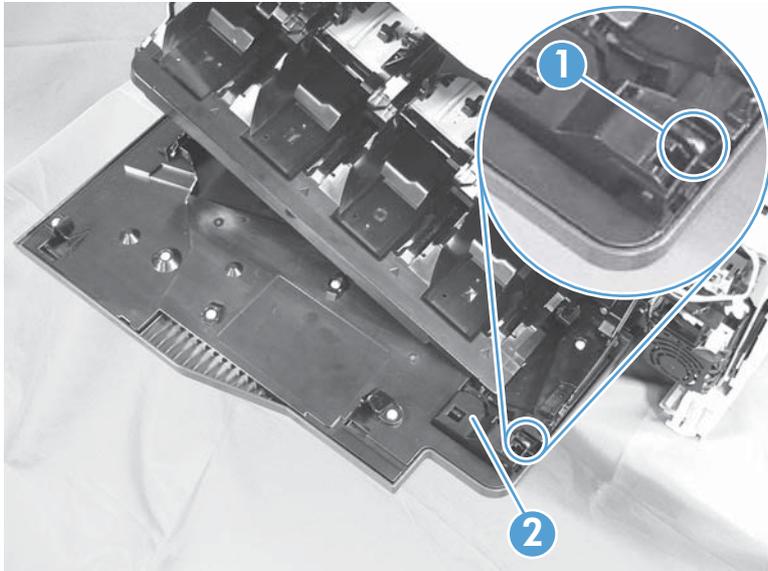
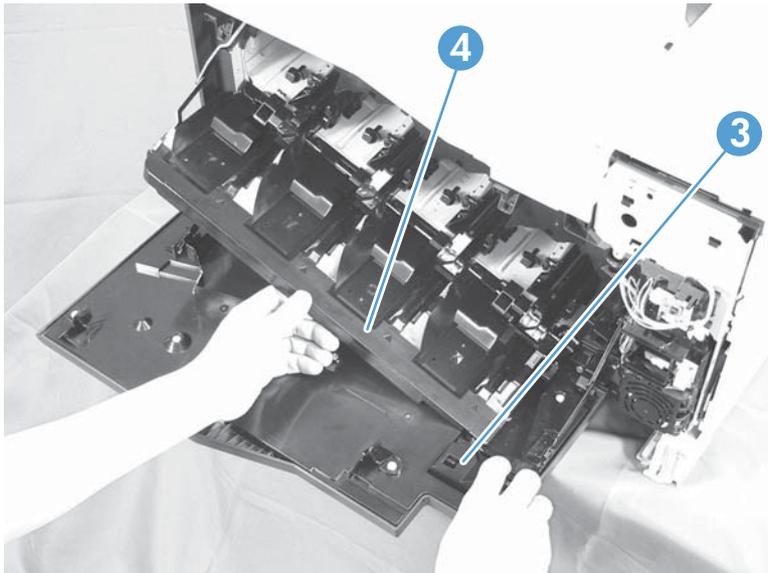
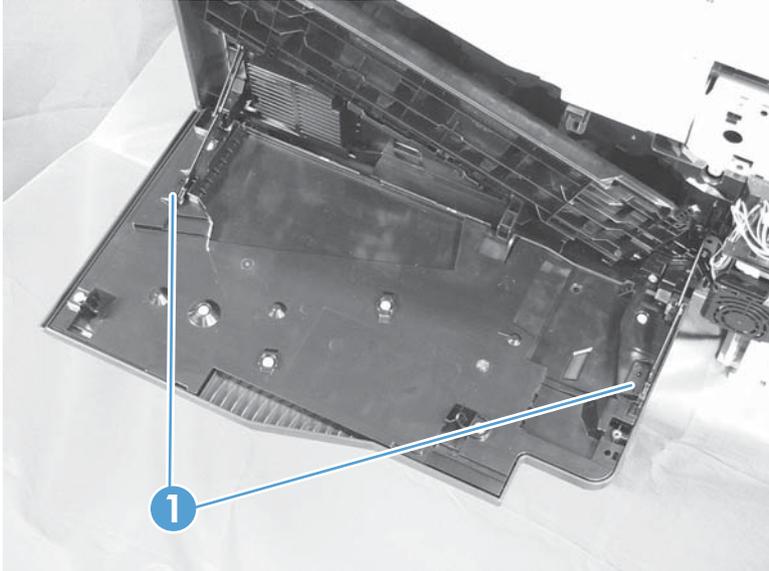


Figure 2-43 Remove the front-door assembly (2 of 4)

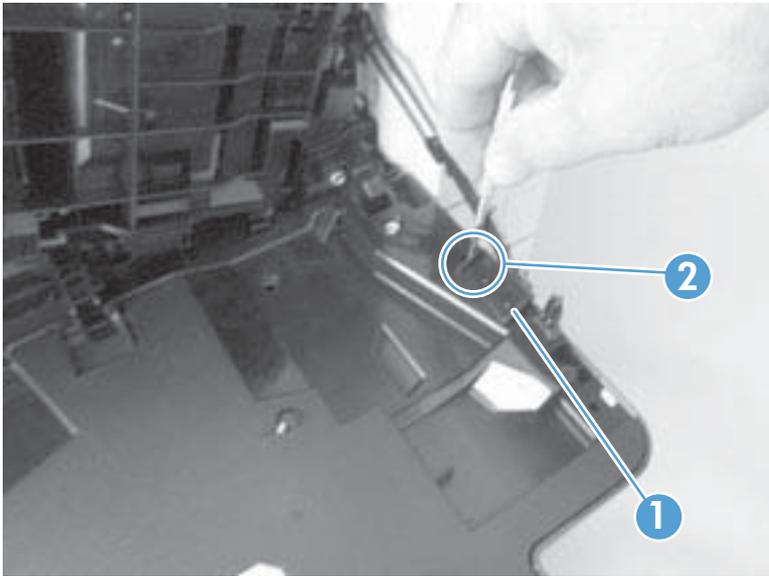


4. Close the inner cover, and then release two tabs on each stopper (callout 1) with a small flat-blade screwdriver (callout 2).

Figure 2-44 Remove the front-door assembly (3 of 4)

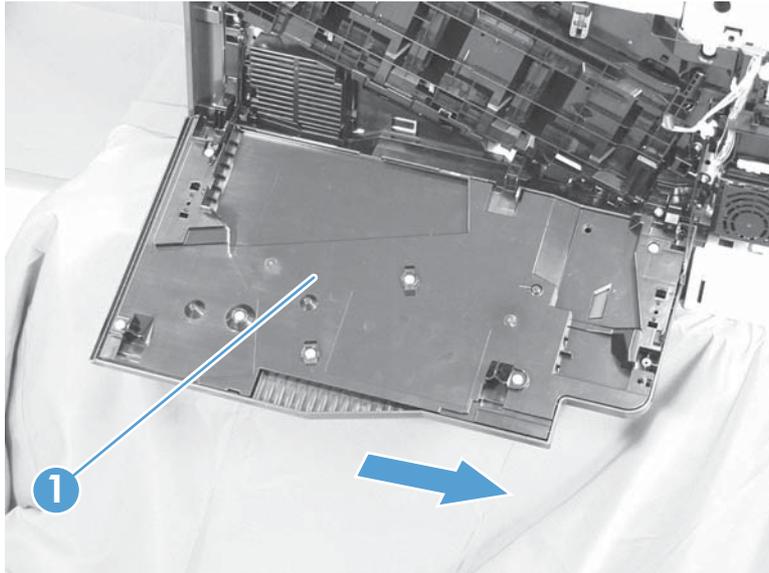


 **NOTE:** Each tab is at the end of the stopper that is closest to the product.



5. Position the door as shown below (callout 1), and then slide the front-door assembly in the direction that the arrow indicates to remove it from the product.

Figure 2-45 Remove the front-door assembly (4 of 4)



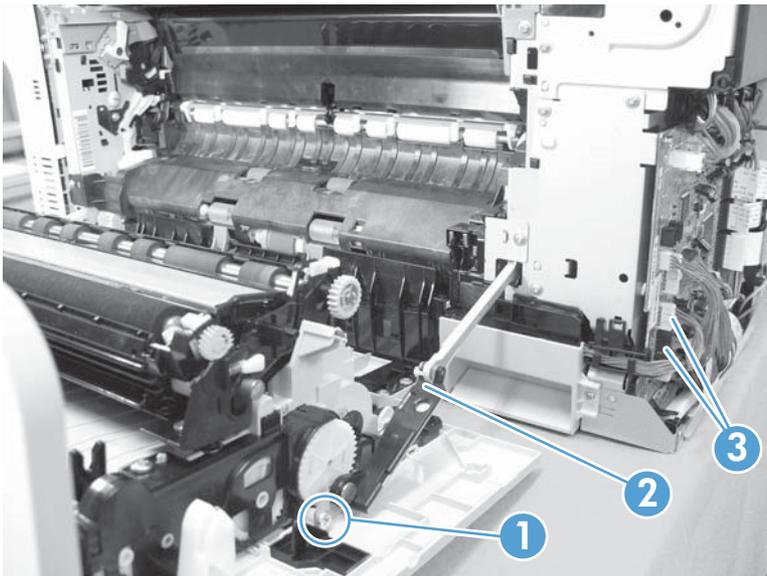
Right-door assembly

Remove the following components:

- Rear cover (see [Rear cover on page 111](#))
 - Right rear cover (see [Right-rear cover on page 114](#))
1. Open the right-door assembly
 2. Remove one screw (callout 1), release the link arm (callout 2), and then disconnect two connectors (J152 and J112) on the DC controller (callout 3).

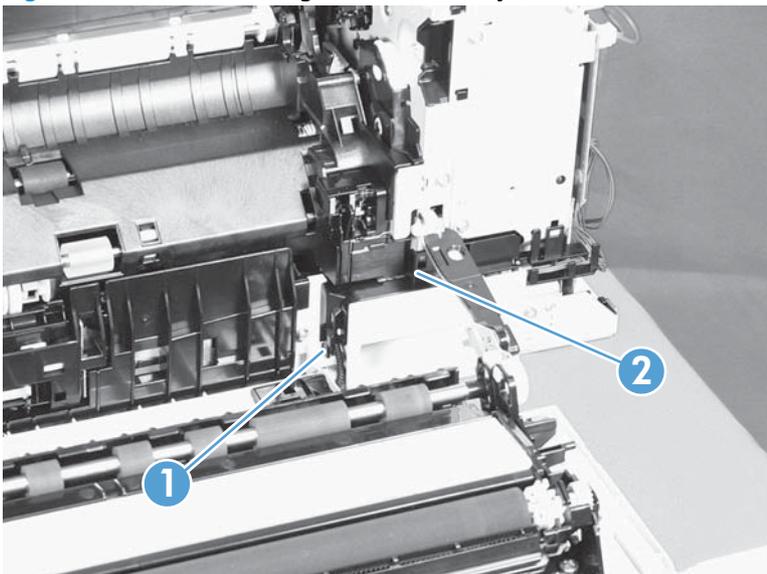
 **NOTE:** The link arm is spring loaded and retracts into the product.

Figure 2-46 Remove the right-door assembly (1 of 6)



3. Carefully release one tab (callout 1), and then remove the cable cover (callout 2).

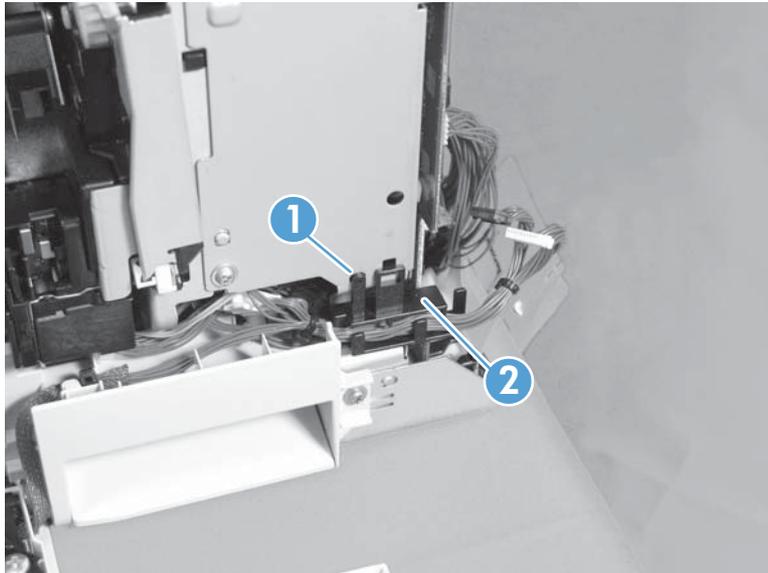
Figure 2-47 Remove the right-door assembly (2 of 6)



4. Release one tab (callout 1), and then remove the guide (callout 2).

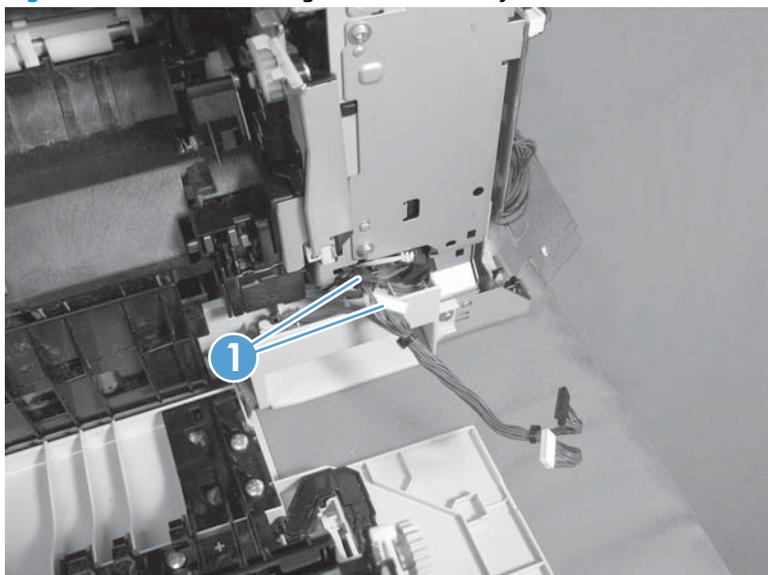
 **TIP:** Release the wire harnesses from the guide as you remove it.

Figure 2-48 Remove the right-door assembly (3 of 6)



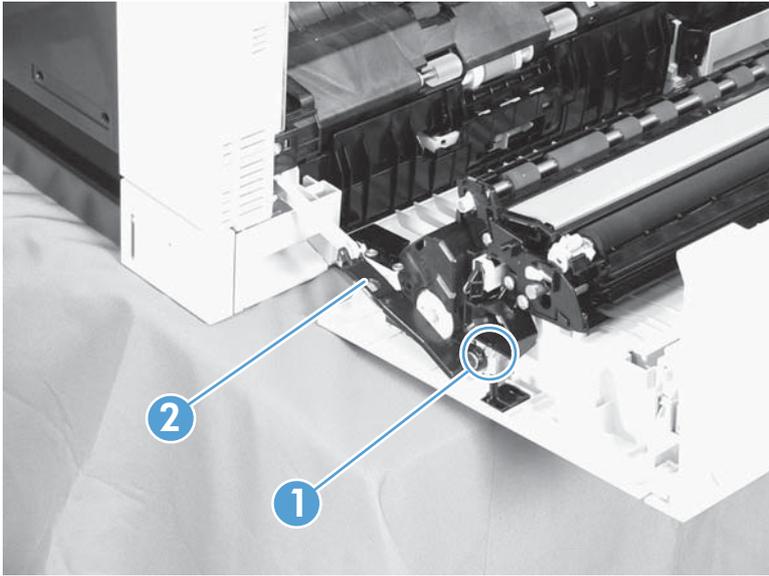
5. Disconnect two connectors (callout 1).

Figure 2-49 Remove the right-door assembly (4 of 6)



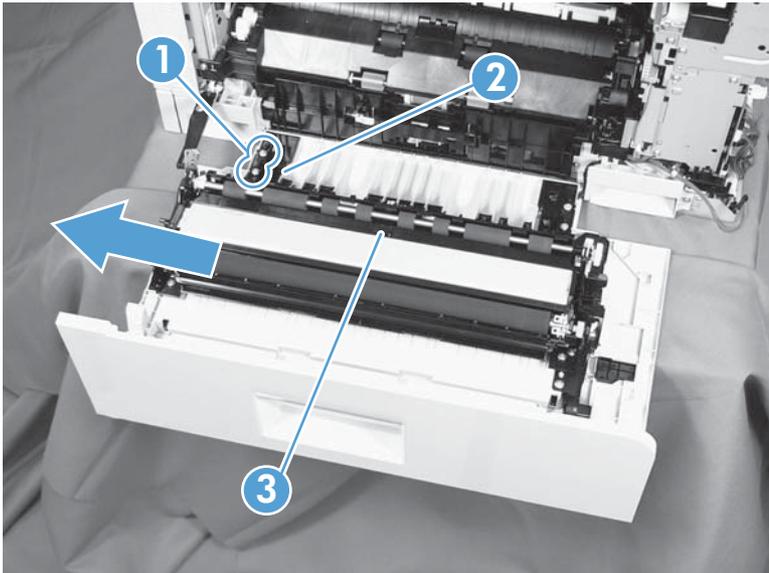
6. Remove one screw (callout 1), and then release the link arm (callout 2).

Figure 2-50 Remove the right-door assembly (5 of 6)



7. Remove two screws (callout 1), remove the hinge (callout 2), and then slide the right-door assembly (callout 3) to the left to remove it.

Figure 2-51 Remove the right-door assembly (6 of 6)



Main assemblies

 **TIP:** For clarity, some photos in this chapter show components removed that would not be removed to service the product. If necessary, remove the components listed at the beginning of a procedure before proceeding to service the product.

Formatter case

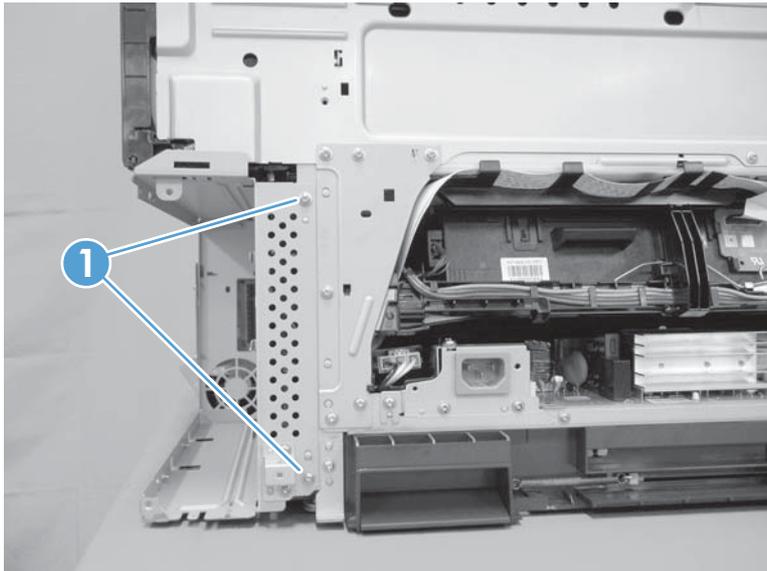
Before proceeding, remove the following components:

- Formatter PCA. See [Formatter PCA on page 100](#).
- Left cover. See [Left cover on page 110](#).
- Rear cover. See [Rear cover on page 111](#).

Remove the formatter case

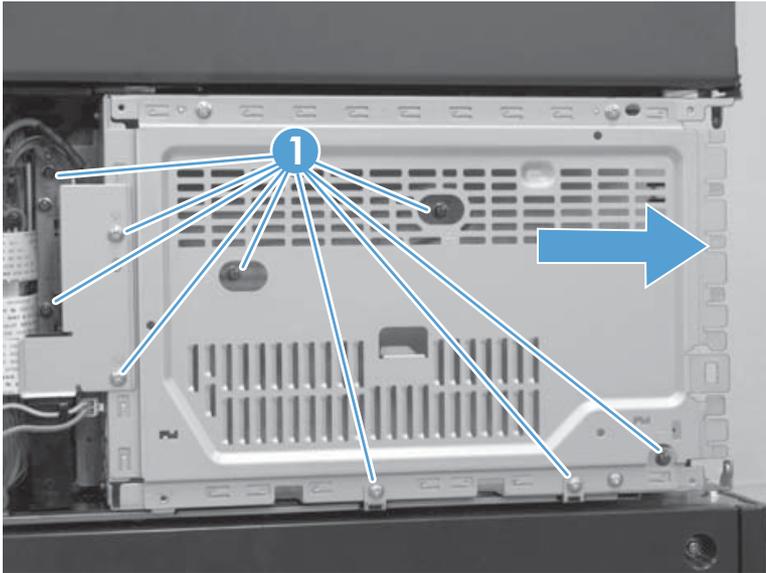
1. Remove two screws (callout 1).

Figure 2-52 Remove the formatter case assembly (1 of 2)



2. Remove nine screws (callout 1), and then slide the formatter case unit (callout 2) away from the DC controller to remove it.

Figure 2-53 Remove the formatter case assembly (2 of 2)



Laser/scanner assembly

⚠ CAUTION: Do not replace the laser scanner and the formatter PCA at the same time. The settings for the laser scanner are stored in the formatter RAM. When you install a new laser scanner, it reads the settings from the formatter.

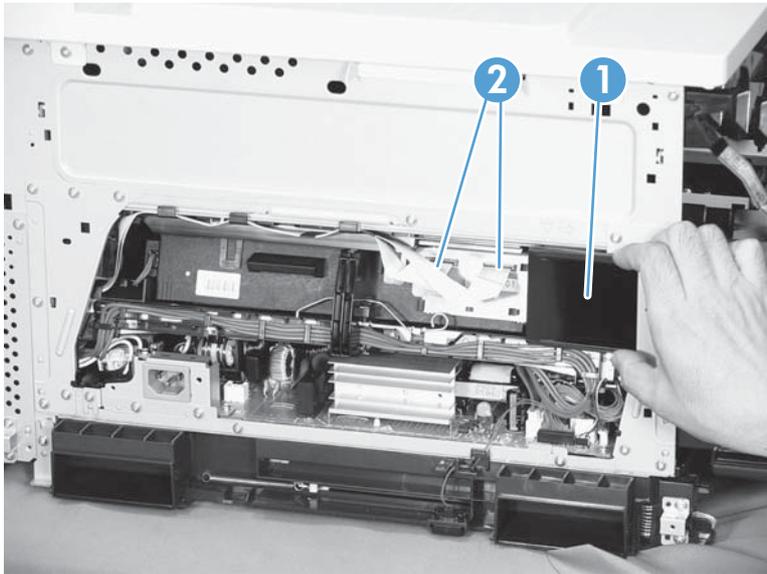
Before proceeding, remove the following components:

- Tray 2
- Left cover. See [Left cover on page 110](#).

Remove the laser/scanner assembly

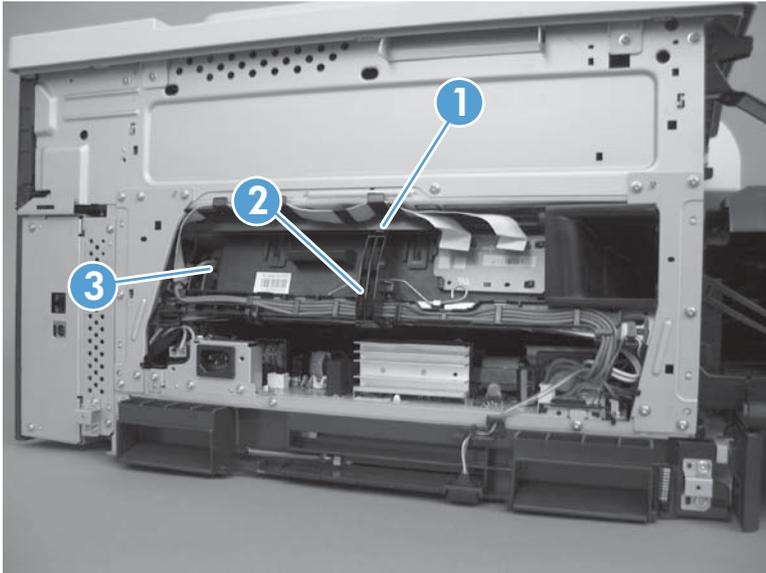
1. Open the front door.
2. On the left side of the product, pinch and remove the fan duct (callout 1), and then disconnect the two flat cables (callout 2).

Figure 2-54 Remove the laser/scanner assembly (1 of 4)



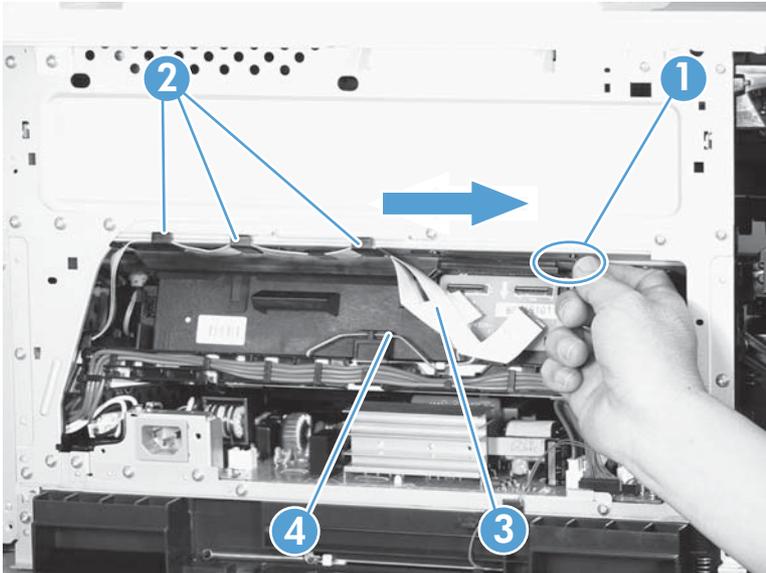
3. Release one tab (callout 1), remove the stopper (callout 2), and then disconnect one connector (callout 3).

Figure 2-55 Remove the laser/scanner assembly (2 of 4)



4. Release one tab (callout 1), and then slide the cable guide (callout 2) in the direction that the arrow indicates.
5. Remove the cable guide (callout 2) and the flat cables (callout 3) together, and then remove one spring (callout 4).

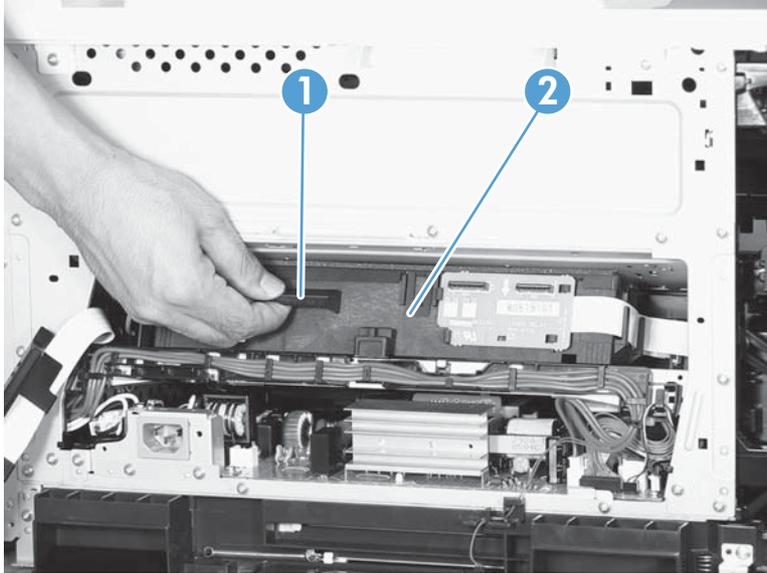
Figure 2-56 Remove the laser/scanner assembly (3 of 4)



6. While holding up the handle (callout 1), pull the laser/scanner (callout 2) up slightly and then out of the product.

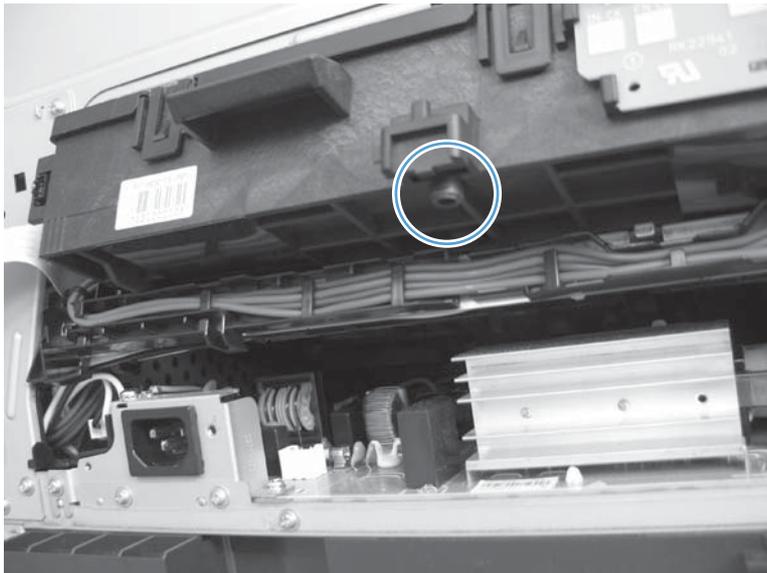
CAUTION: Do not touch the protective glass strip on top of the assembly.

Figure 2-57 Remove the laser/scanner assembly (4 of 4)



Reinstallation tip Align the assembly with the guides on the left side of the opening when reinstalling the assembly.

Align the pin on the bottom of the assembly with the hole in the product when reinstalling the assembly. After pushing the assembly into the product, you might have to pull the assembly slightly forward to seat the pin in the hole.



NOTE: Perform two full calibrations from the control panel after replacing the laser/scanner.

Paper pickup assembly

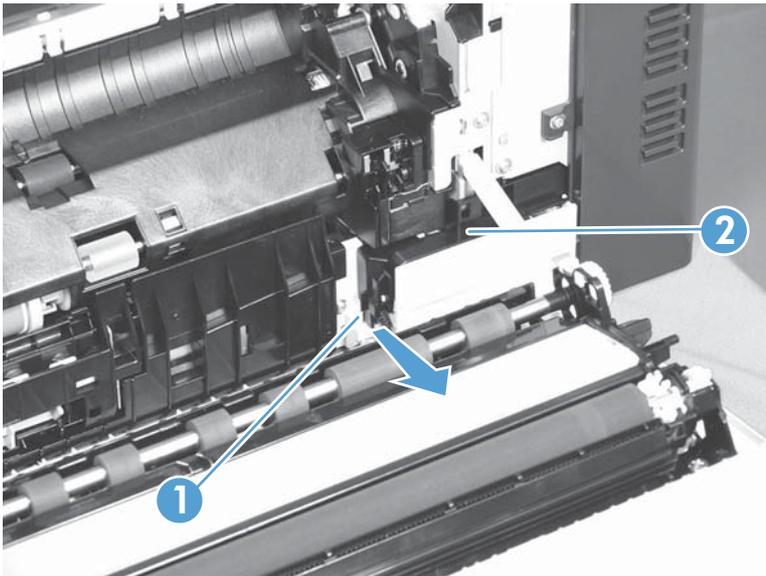
Before proceeding, remove the following components:

- Tray 2 cassette.
- Tray 2 separation roller assembly. See [Separation roller assembly \(Tray 2\) on page 94](#).
- ITB. See [Intermediate transfer belt \(ITB\) on page 98](#).

Remove the paper pickup assembly

1. Open the right door, pull out one tab (callout 1), pull the bottom of the cable cover out, and then pull up to remove the cable cover (callout 2).

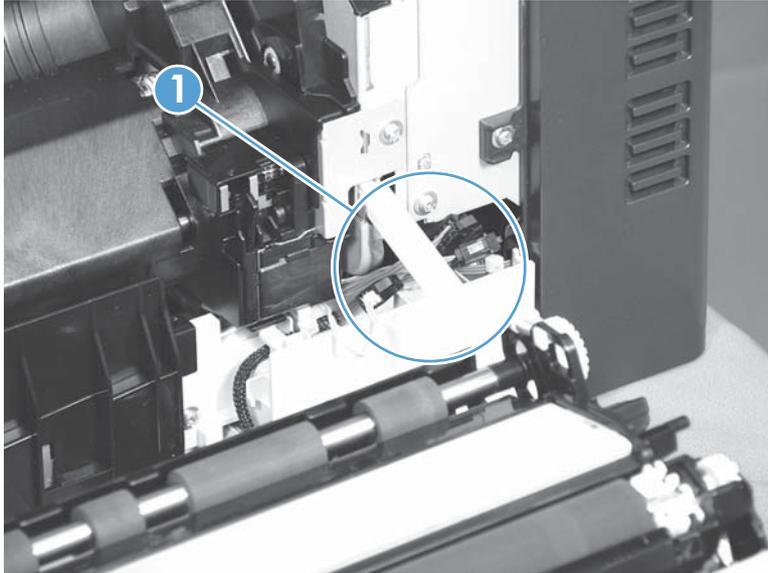
Figure 2-58 Remove the paper pickup assembly (1 of 3)



2. Disconnect four connectors (callout 1).

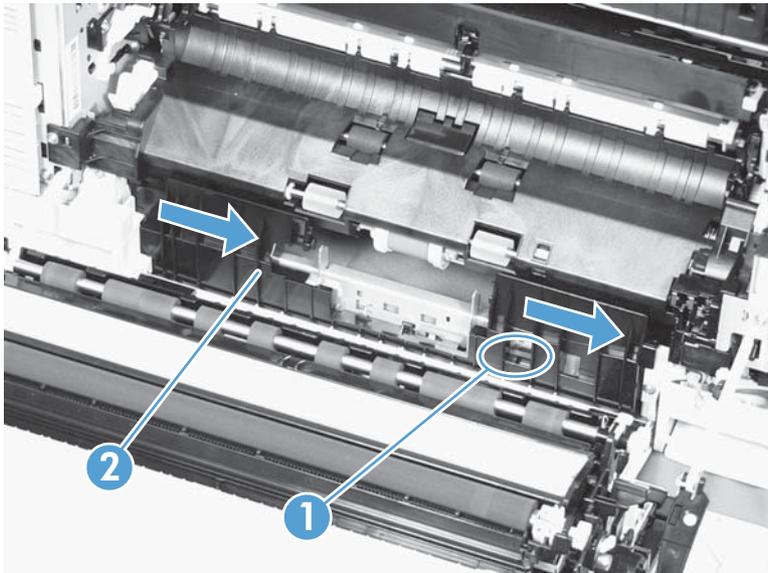
 **NOTE:** The connectors might be hidden behind the assembly.

Figure 2-59 Remove the paper pickup assembly (2 of 3)



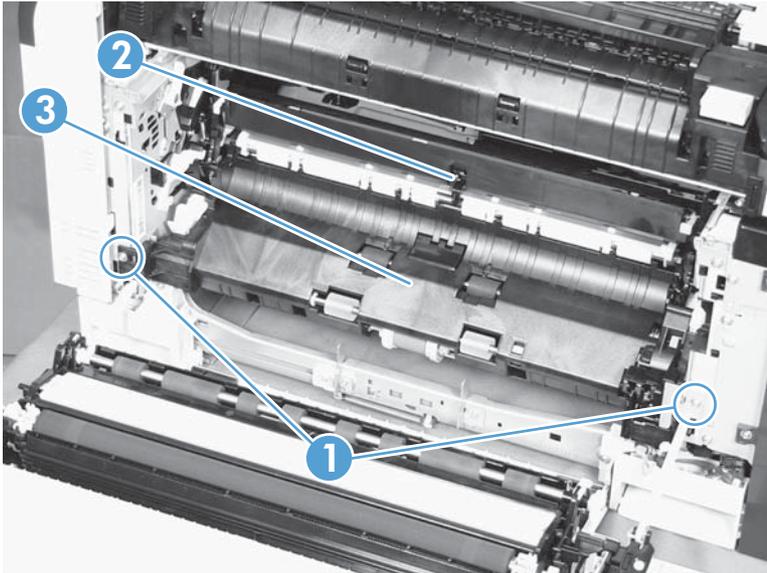
3. Pull out one tab (callout 1), and then slide the guide (callout 2) to the right to remove it.

Figure 2-60 Remove the paper pickup assembly (3 of 3)



4. Remove two screws (callout 1), move the registration sensor flag (callout 2) to the up position, and then pull the paper pickup assembly (callout 3) toward you to remove it.

Figure 2-61 Remove the paper pickup assembly (4 of 4)

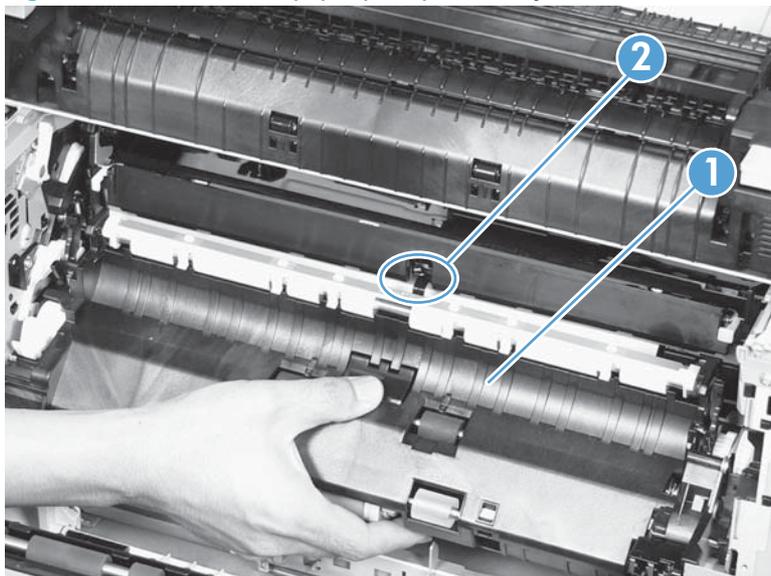


Reinstall the paper pickup assembly

Use the steps below to reinstall the paper pickup assembly. If you are installing a replacement assembly, also see [Installing a replacement paper pickup assembly on page 133](#) after completing these steps.

1. When reassembling the paper pickup assembly (callout 1), the sensor flag (callout 2) is in the way. Be sure to hold up the sensor flag when reassembling.

Figure 2-62 Reinstall the paper pickup assembly



2. Make sure that the sensor flag is correctly installed, and that the flag moves properly after reassembling the paper pickup assembly.

Figure 2-63 Paper pickup assembly sensor flag correctly installed

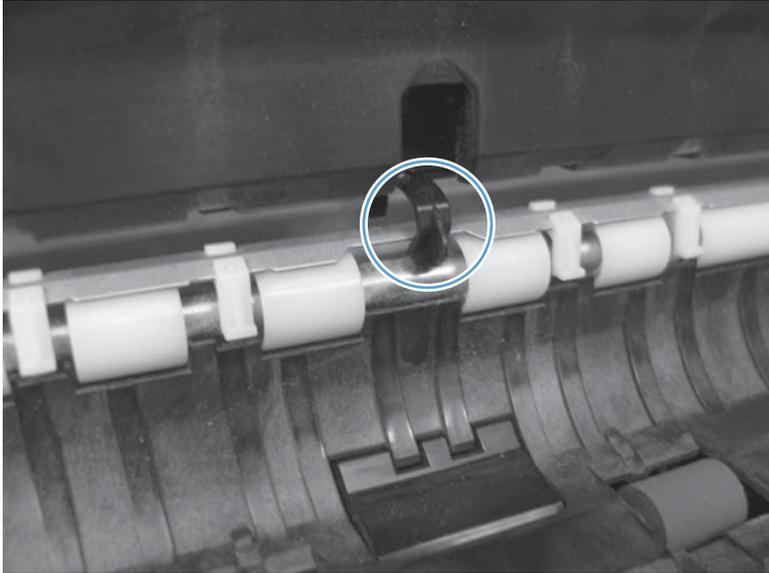


Figure 2-64 Paper pickup assembly sensor flag incorrectly installed



Installing a replacement paper pickup assembly

- ▲ Use the [Service](#) menu to reset the [New Registration Roller](#) menu item and enter the [Media Sensor Value](#) from the replacement paper pickup assembly.

Reset the [New Registration Roller](#) menu item

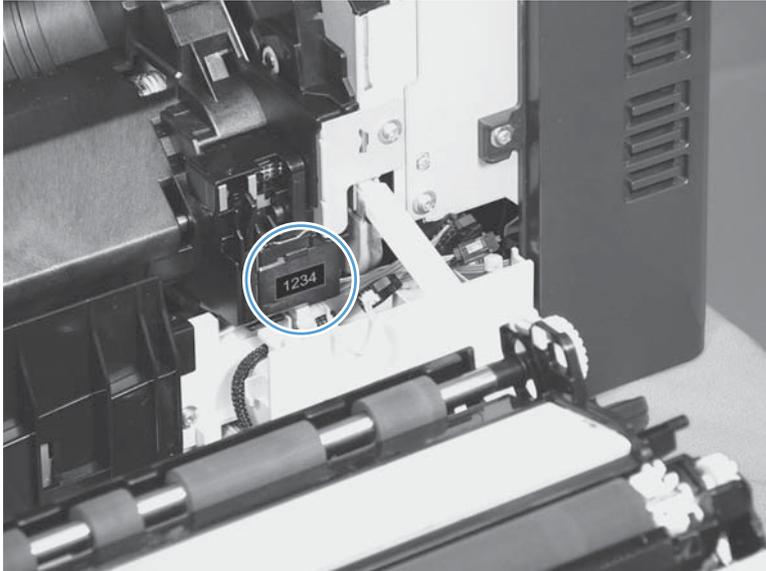
- a. Press the Home button .
- b. Open the following menus:
 - [Device Maintenance](#)
 - [Service](#)
 - [Service Access Code](#)
- c. Use the arrow buttons to enter the access code, and then press the [OK](#) button.
- d. Press the [Down](#) arrow button  to highlight the [New Registration Roller](#) menu, and then press the [OK](#) button.
- e. Press the [Down](#) arrow button  to highlight the [Yes](#) item, and then press the [OK](#) button.

Reset the [Media Sensor Value](#)

- a. Press the Home button .
- b. Open the following menus:
 - [Device Maintenance](#)
 - [Service](#)
 - [Service Access Code](#)
- c. Use the arrow buttons to enter the access code, and then press the [OK](#) button.

- d. Press the **Down** arrow button ▼ to highlight the **Media Sensor Value** menu, and then press the **OK** button.

Figure 2-65 Media sensor value label



- e. Use the arrow buttons to enter the media sensor value found on the replacement assembly.
- f. Press the **OK** button to save to save the value.

Registration sensor assembly

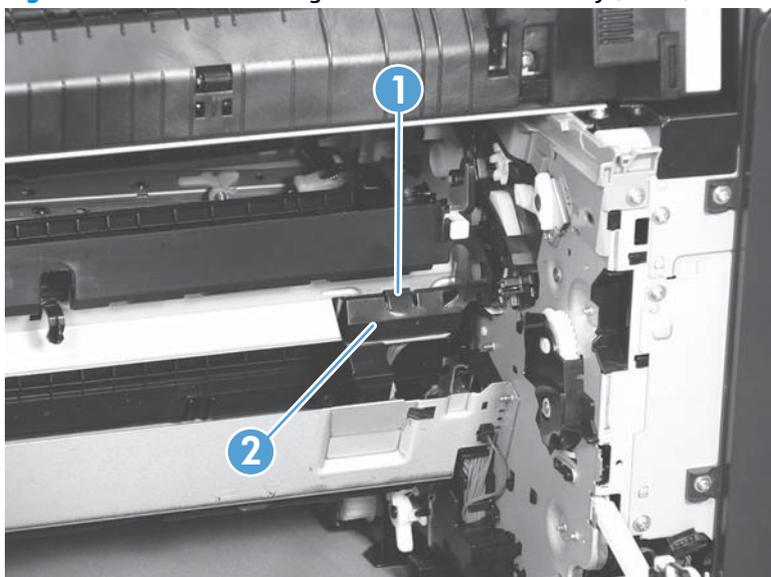
Before proceeding, remove the following components:

- Tray 2 cassette.
- Cassette separation roller assembly. See [Separation roller assembly \(Tray 2\) on page 94](#).
- Intermediate transfer belt (ITB). See [Intermediate transfer belt \(ITB\) on page 98](#).
- Cassette pickup drive assembly. See [Paper pickup assembly on page 128](#).

Remove the registration sensor assembly

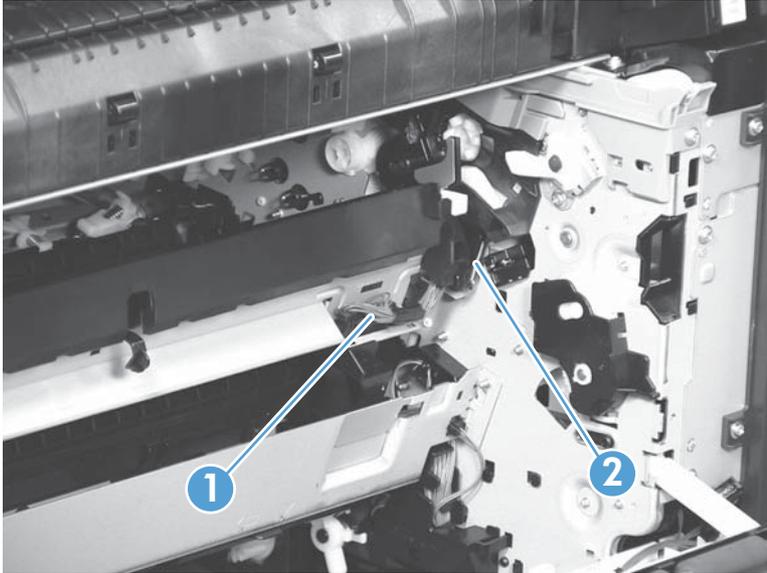
1. Push the tab (callout 1) down, and then pull the top of the cover to remove the cover (callout 2). You might need a small flat-blade screwdriver to press down the tab.

Figure 2-66 Remove the registration sensor assembly (1 of 4)



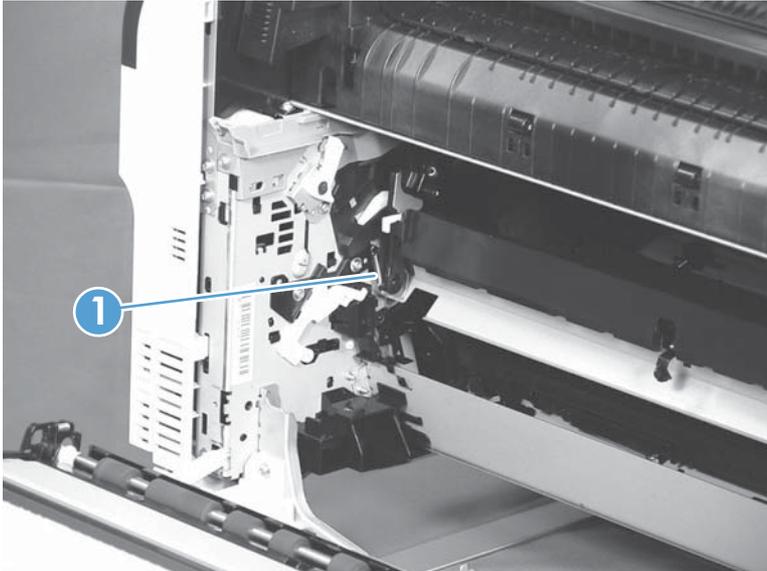
2. Disconnect one connector (callout 1), and then detach the bottom part of the spring (callout 2) at the right end. If necessary, use a pick or needle-nose pliers to detach the spring.

Figure 2-67 Remove the registration sensor assembly (2 of 4)



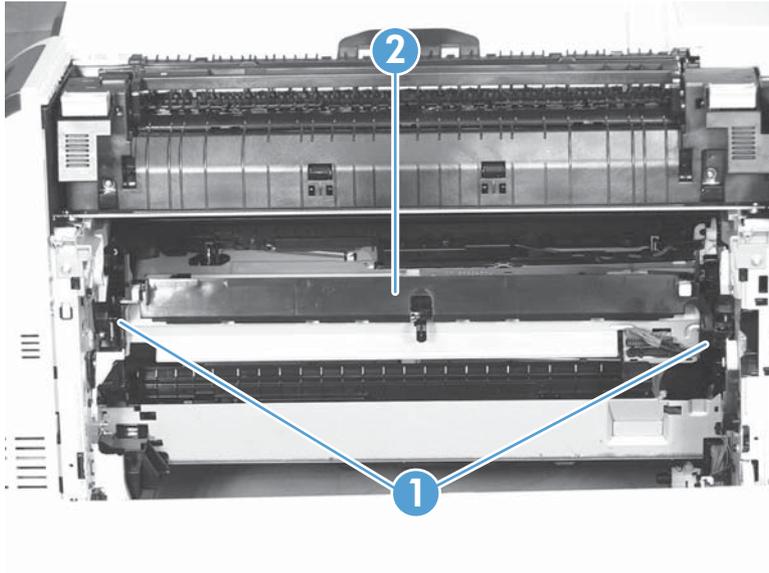
3. Detach the bottom of one spring (callout 1) at the left end.

Figure 2-68 Remove the registration sensor assembly (3 of 4)



4. Release one of the registration sensor unit pivot hinges from the shafts (callout 1), pull out that end of the assembly (callout 2), and then repeat the procedure on the other pivot hinge.

Figure 2-69 Remove the registration sensor assembly (4 of 4)



Lifter-drive assembly

Before proceeding, remove the following components:

- Tray 2 cassette.
- Fuser. See [Fuser on page 90](#).
- ITB. See [Intermediate transfer belt \(ITB\) on page 98](#).
- 1 x 500-paper feeder. See [1 x 500-sheet paper feeder assembly on page 211](#).
- 3 x 500-paper feeder (optional accessory). See [3 x 500-sheet paper feeder \(optional accessory\) on page 225](#).

Remove the lifter-drive assembly

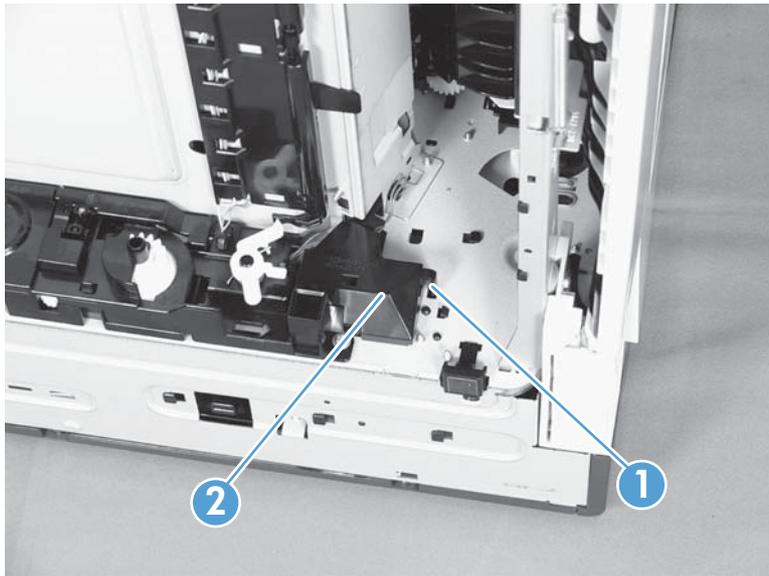
1. Verify that the right door is closed, and then turn the product so that the front side faces up.

Figure 2-70 Remove the lifter-drive assembly (1 of 3)



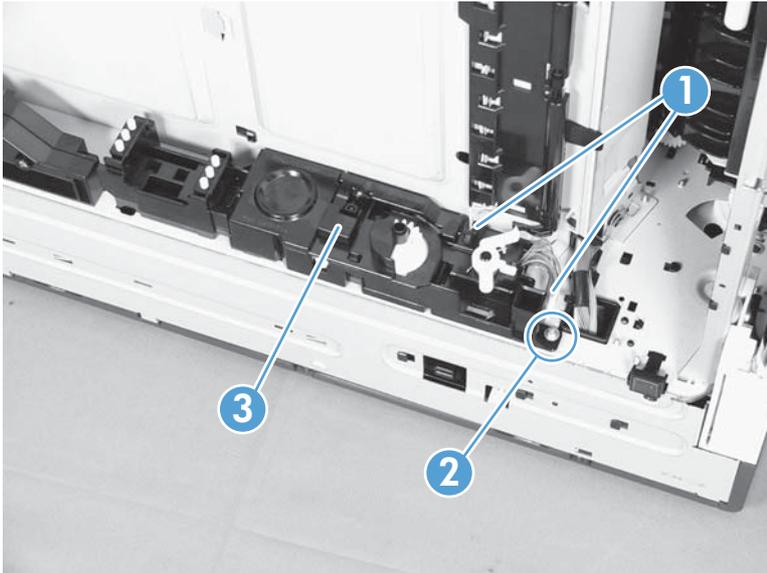
2. Release the tab (callout 1), and then pull up to remove the cover (callout 2).

Figure 2-71 Remove the lifter-drive assembly (2 of 3)

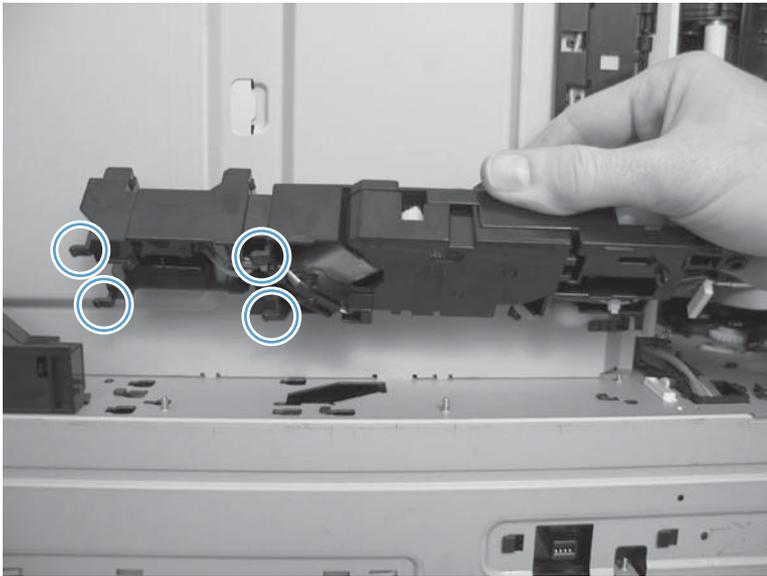


3. Disconnect two connectors (callout 1), remove one screw (callout 2), and then remove the lifter drive unit (callout 3).

Figure 2-72 Remove the lifter-drive assembly (3 of 3)



 **Reinstallation tip** Make sure that the tabs align correctly when reinstalling the lifter-drive assembly.

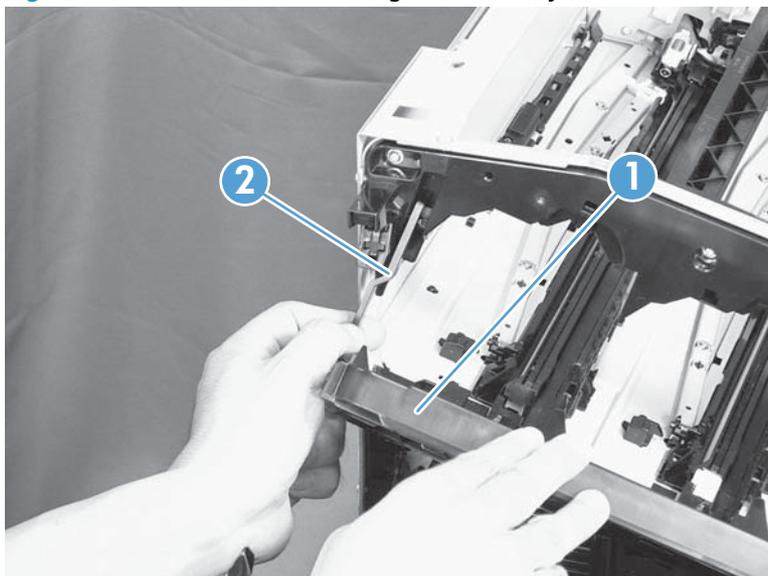


ITB front guide assembly

Before proceeding, remove the following components:

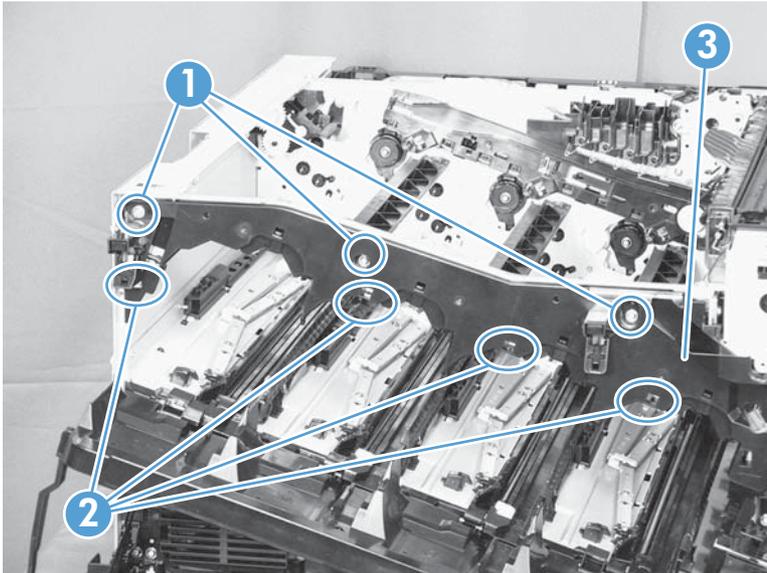
- ITB. See [Intermediate transfer belt \(ITB\) on page 98](#).
 - Right-front cover and control-panel assembly. See [Right-front cover and control-panel assembly on page 108](#).
 - Left cover. See [Left cover on page 110](#).
 - Rear cover. See [Rear cover on page 111](#).
 - Right-rear cover. See [Right-rear cover on page 114](#).
 - Top cover. See [Top cover on page 115](#).
1. Open the front door (callout 1) halfway, and then push up the upper part of the link arm (callout 2) to detach it from the product chassis.

Figure 2-73 Remove the ITB front guide assembly (1 of 4)



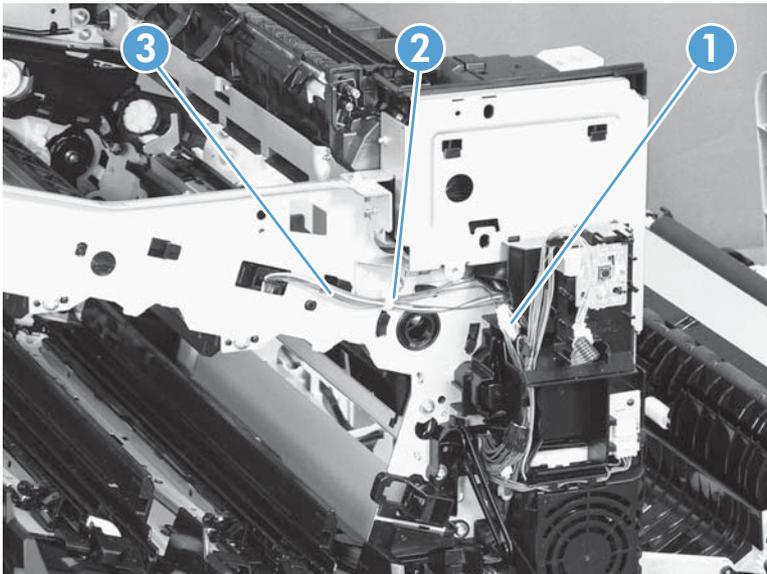
2. Remove three screws (callout 1), release four tabs (callout 2), and then remove the cartridge upper guide unit (callout 3).

Figure 2-74 Remove the ITB front guide assembly (2 of 4)



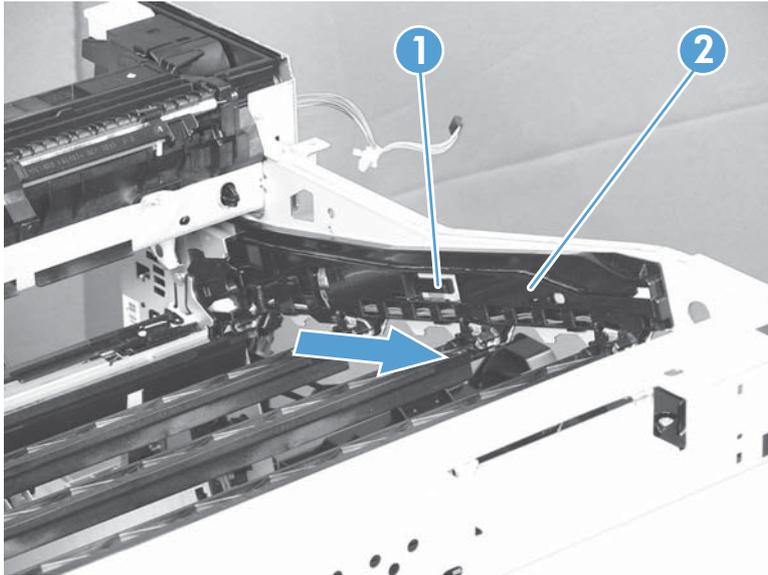
3. Disconnect one connector (callout 1), and then release the cables (callout 3) from the cable clamp (callout 2).

Figure 2-75 Remove the ITB front guide assembly (3 of 4)



4. Release one tab (callout 1), and then slide the ITB front guide assembly (callout 2) in the direction that the arrow indicates to remove it.

Figure 2-76 Remove the ITB front guide assembly (4 of 4)

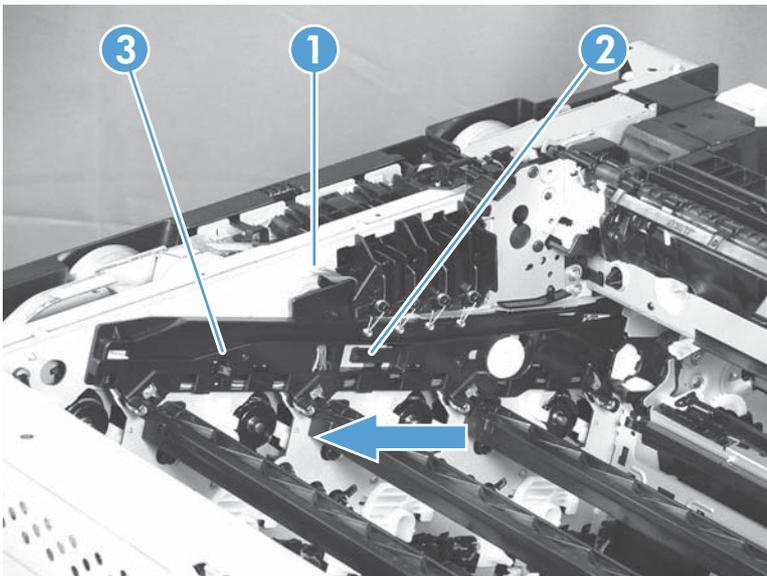


ITB rear guide assembly

Before proceeding, remove the following components:

- ITB. See [Intermediate transfer belt \(ITB\) on page 98](#).
 - Right-front cover and control-panel assembly. See [Right-front cover and control-panel assembly on page 108](#).
 - Left cover. See [Left cover on page 110](#).
 - Rear cover. See [Rear cover on page 111](#).
 - Right-rear cover. See [Right-rear cover on page 114](#).
 - Top cover. See [Top cover on page 115](#).
- ▲ Disconnect one connector (callout 1), release one tab (callout 2), and then slide the ITB rear guide unit (callout 3) in the direction that the arrow indicates to remove it.

Figure 2-77 Remove the ITB rear guide assembly



Residual toner full sensor

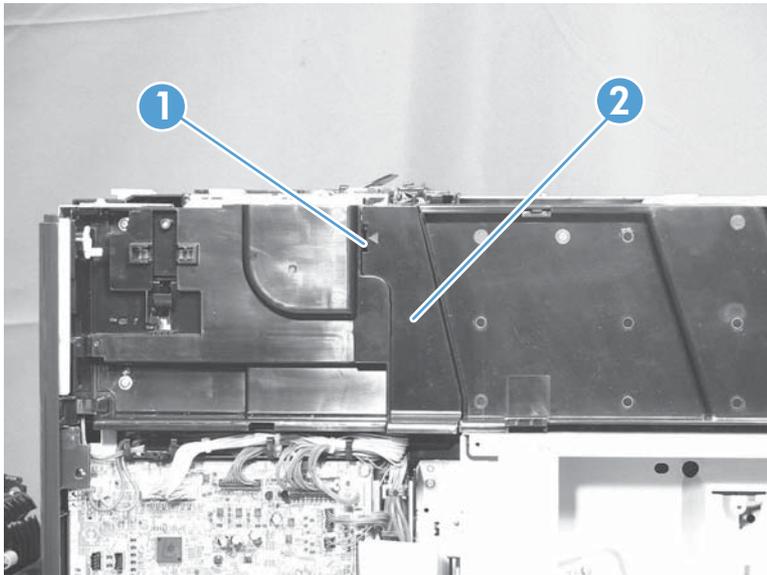
Before proceeding, remove the following components:

- Toner-collection unit. See [Toner-collection unit on page 88](#).
- Right-front cover and control-panel assembly. See [Right-front cover and control-panel assembly on page 108](#).
- Left cover. See [Left cover on page 110](#).
- Rear cover. See [Rear cover on page 111](#).
- Toner collection unit access door. See [Toner collection unit access door on page 112](#).
- Right-rear cover. See [Right-rear cover on page 114](#).
- Top cover. See [Top cover on page 115](#).

Remove the residual toner full sensor

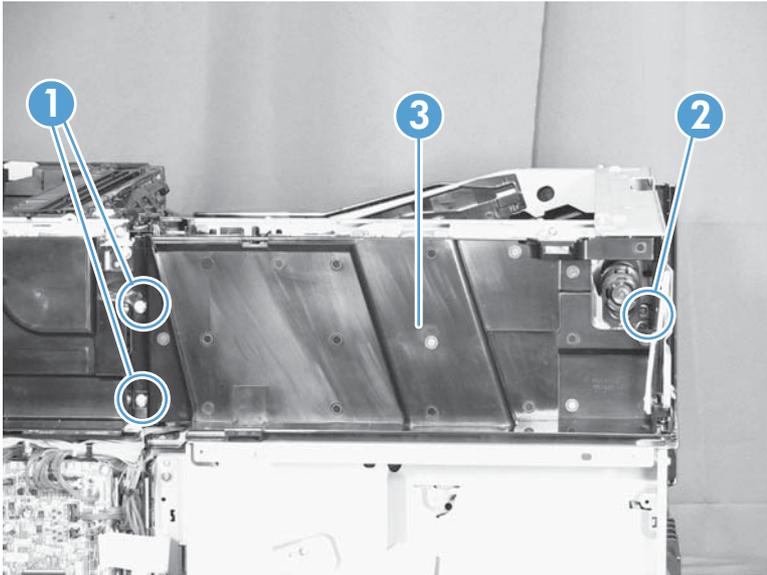
1. Release one tab (callout 1), and then remove the cover (callout 2).

Figure 2-78 Remove the residual toner full sensor (1 of 4)



2. Remove two M4-screws (callout 1) and one M3-screw (callout 2). Then remove the toner cover (callout 3).

Figure 2-79 Remove the residual toner full sensor (2 of 4)



3. Disconnect one connector (callout 1), remove three screws (callout 2), and then remove the residual toner full sensor assembly (callout 3).

⚠ CAUTION: During the removal process, make sure that the white gear (callout 4) does not fall out of the assembly. The white gear might stay on the product, and not come off with the assembly.

Figure 2-80 Remove the residual toner full sensor (3 of 4)

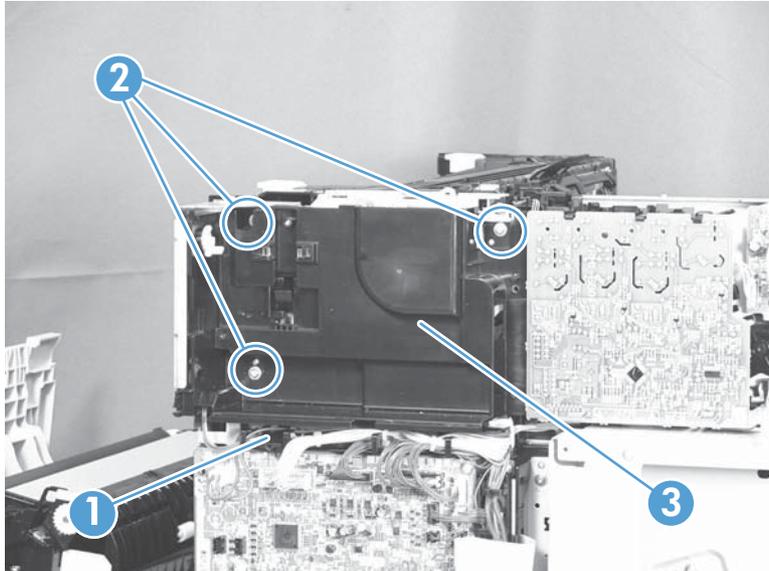
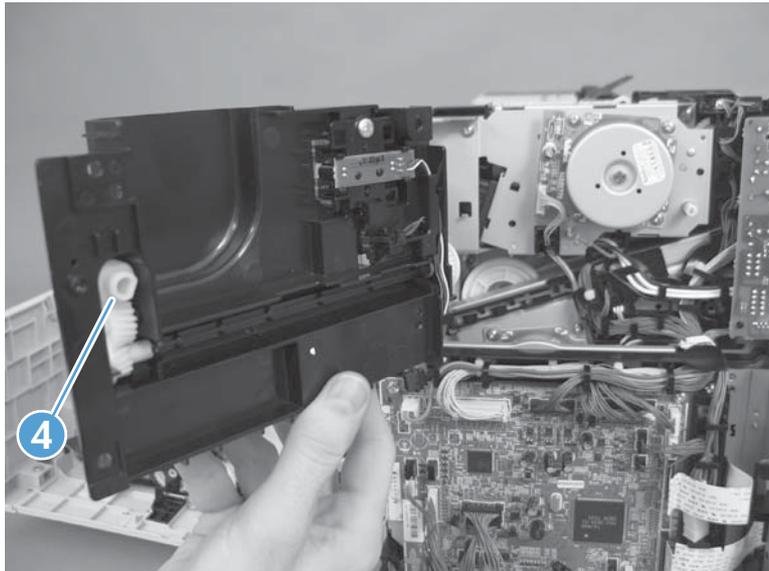


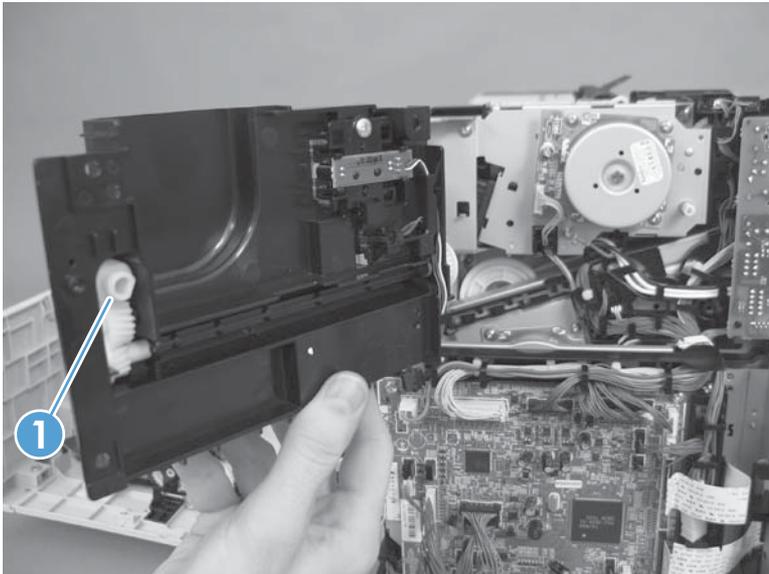
Figure 2-81 Remove the residual toner full sensor (4 of 4)



Reinstall the residual toner full sensor

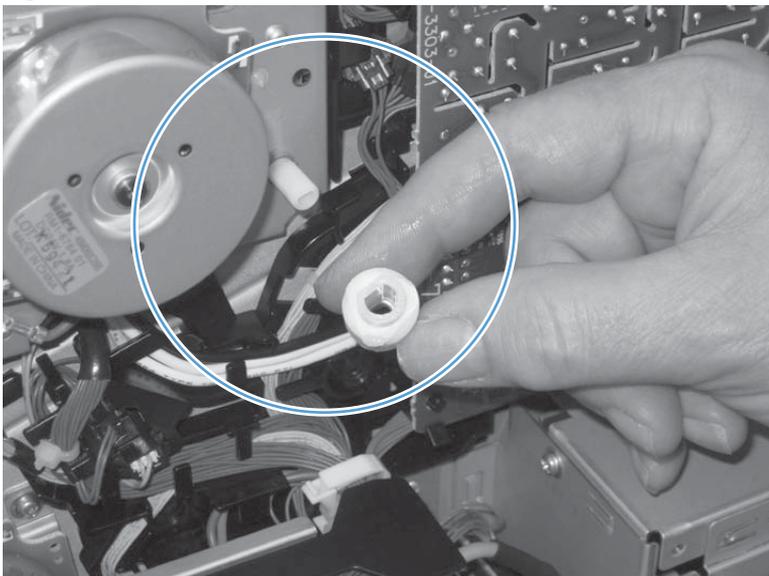
1. If the white gear (callout 1) was removed with the residual toner full sensor assembly, carefully remove it from the assembly.

Figure 2-82 Reinstall the residual toner full sensor (1 of 3)



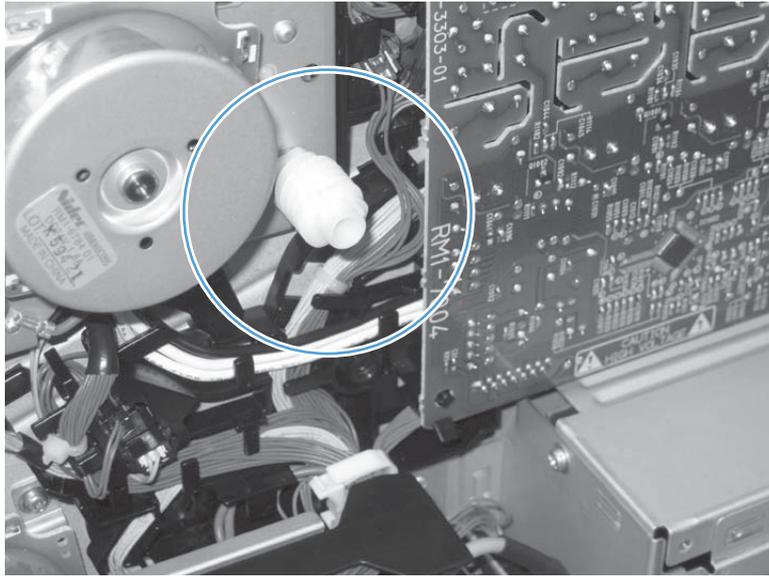
2. Align the flat portion of the gear with the corresponding flat portion of the drive shaft.

Figure 2-83 Reinstall the residual toner full sensor (2 of 3)



3. Install the gear on the shaft before you install the residual toner full sensor assembly.

Figure 2-84 Reinstall the residual toner full sensor (3 of 3)



Main drive assembly



NOTE: The replacement of the main drive assembly will take an experienced service technician approximately four hours. It is also likely that the device will have additional issues caused by this service procedure. Carefully evaluate the possibility of doing a whole unit replacement instead of this repair.

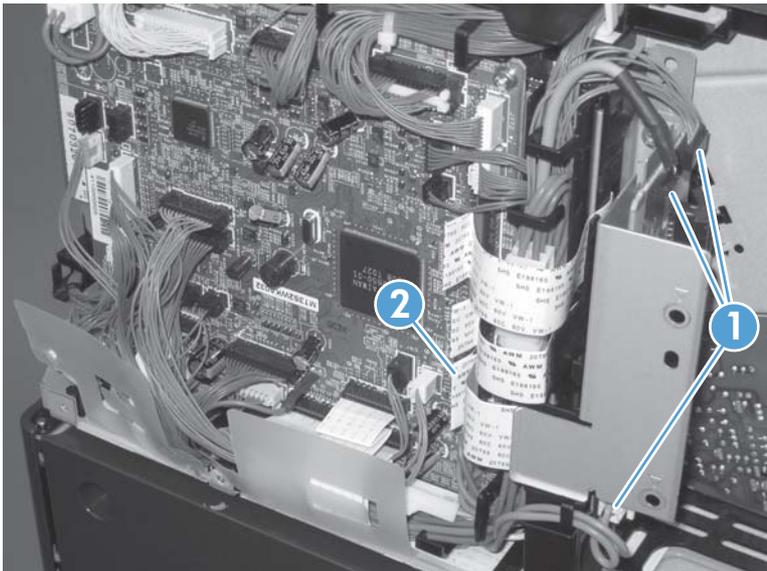
Before proceeding, remove the following components:

- Toner-collection unit. See [Toner-collection unit on page 88](#).
- Formatter PCA. See [Formatter PCA on page 100](#).
- Formatter case. See [Formatter case on page 123](#).
- Right-front cover and control-panel assembly. See [Right-front cover and control-panel assembly on page 108](#).
- Left cover. See [Left cover on page 110](#).
- Rear cover. See [Rear cover on page 111](#).
- Toner collection unit access door. See [Toner collection unit access door on page 112](#).
- Right-rear cover. See [Right-rear cover on page 114](#).
- Top cover. See [Top cover on page 115](#).
- Residual-toner full sensor. See [Residual toner full sensor on page 145](#).

Remove the main drive assembly

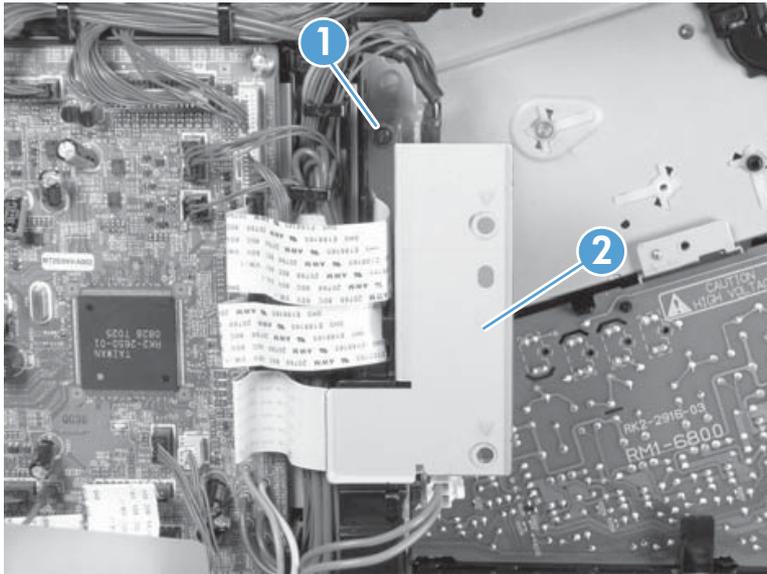
1. Disconnect three connectors (callout 1) and one FFC (callout 2).

Figure 2-85 Remove the main drive assembly (1 of 17)



2. Remove one screw (callout 1), and then remove the sheet-metal plate (callout 2).

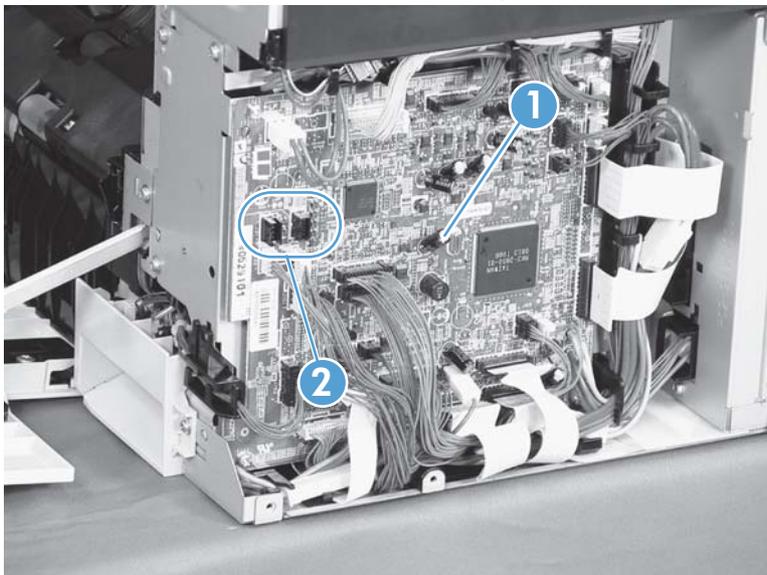
Figure 2-86 Remove the main drive assembly (2 of 17)



3. Disconnect twenty-two connectors and six FFCs on the DC controller PCA (callout 1).

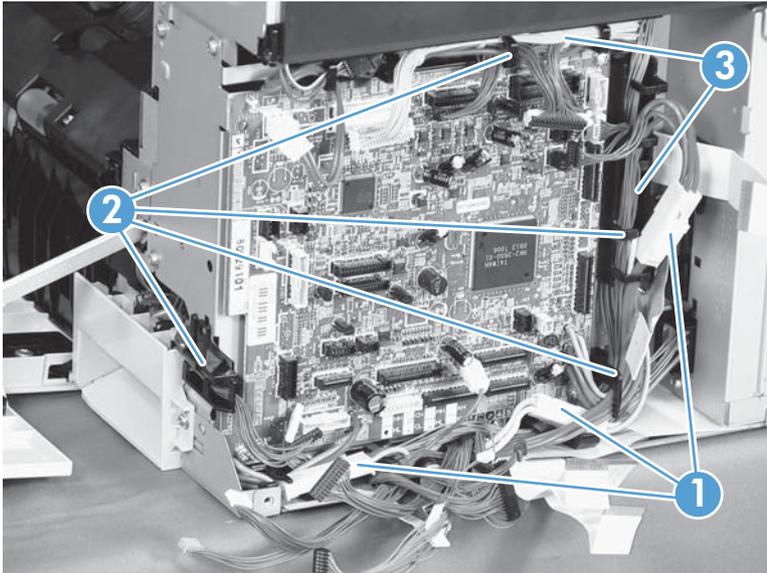
 **TIP:** Three connectors (callout 2) should be empty when the DC controller is reinstalled.

Figure 2-87 Remove the main drive assembly (3 of 17)



4. Disconnect three intermediate connectors (callout 1), and then release the wire harnesses (callout 3) from the guides (callout 2).

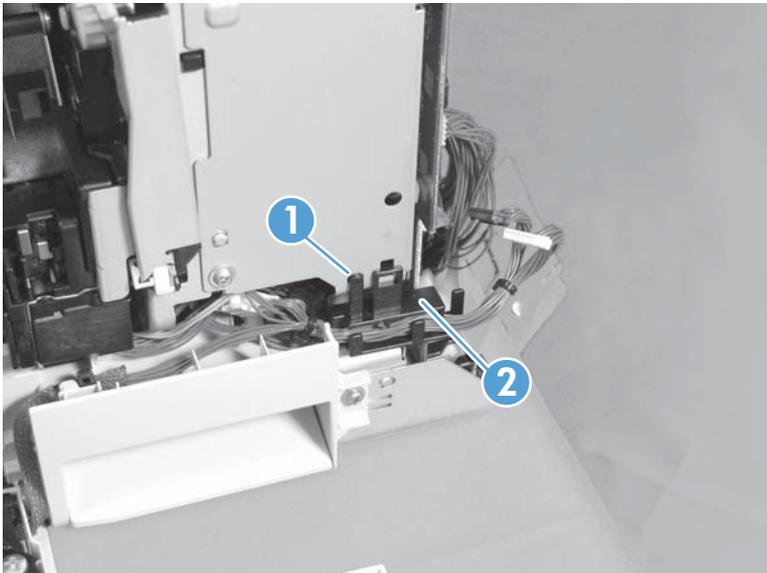
Figure 2-88 Remove the main drive assembly (4 of 17)



5. Release one tab (callout 1), and then remove the guide (callout 2).

 **TIP:** Release the wire harnesses from the guide as you remove it.

Figure 2-89 Remove the main drive assembly (5 of 17)



6. Remove five screws (callout 1), and then remove the DC controller and the two sheet-metal support plates.

CAUTION: Carefully unthread the FFCs from the plate to avoid damaging them when you remove the DC controller and the two sheet-metal support plates.

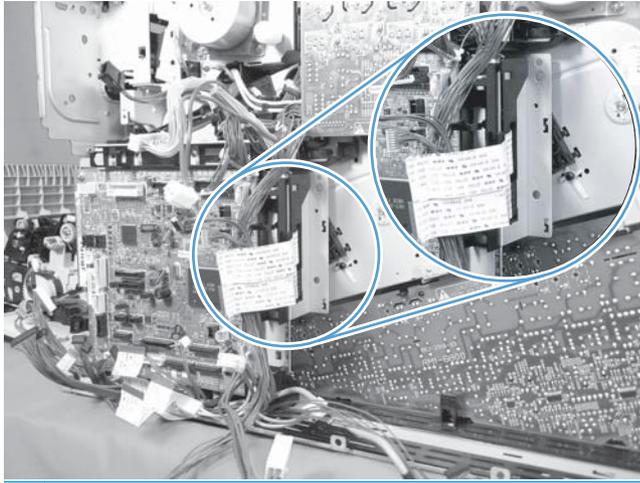
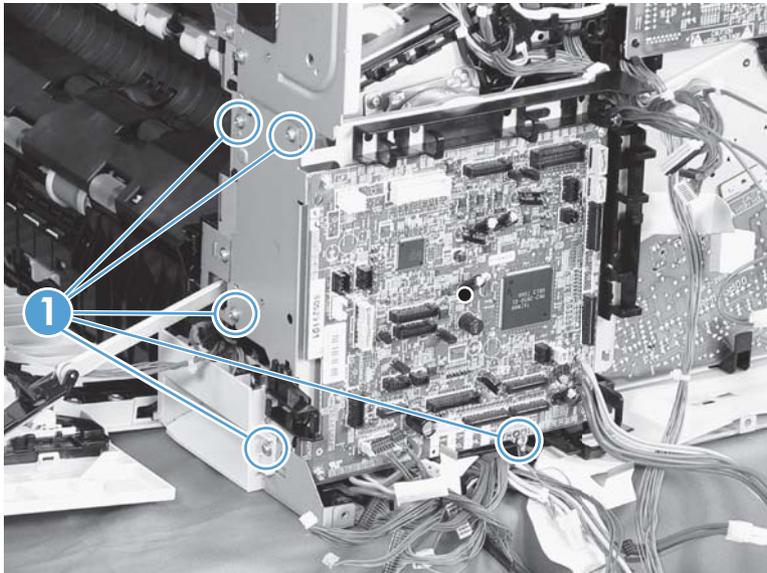
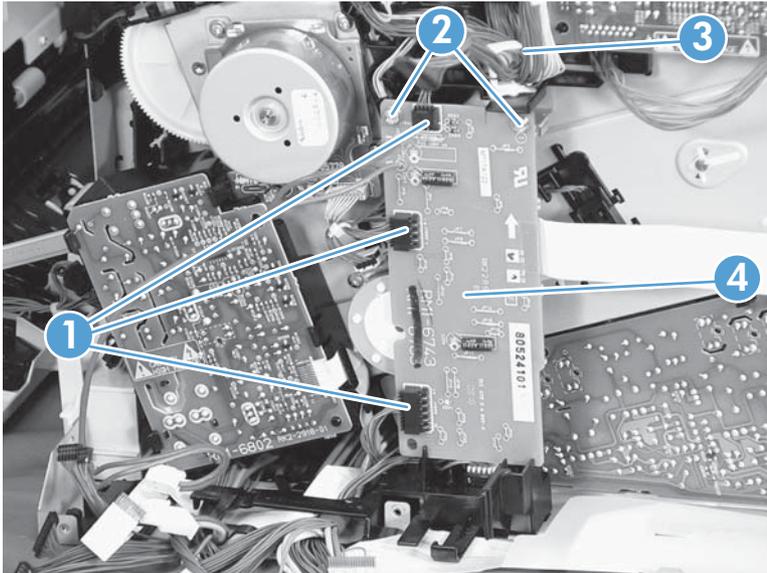


Figure 2-90 Remove the main drive assembly (6 of 17)



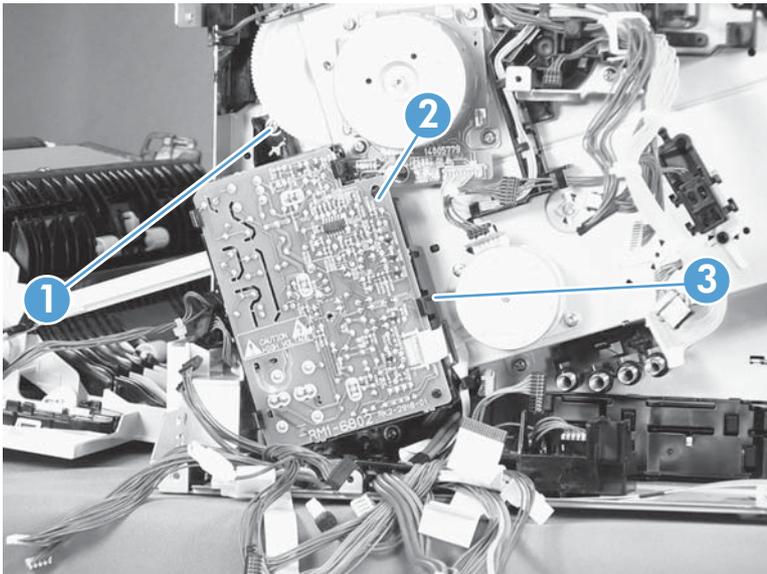
7. Disconnect three connectors (callout 1), remove two screws (callout 2), release one wire retainer (callout 3), and then remove the driver PCA (callout 4).

Figure 2-91 Remove the main drive assembly (7 of 17)



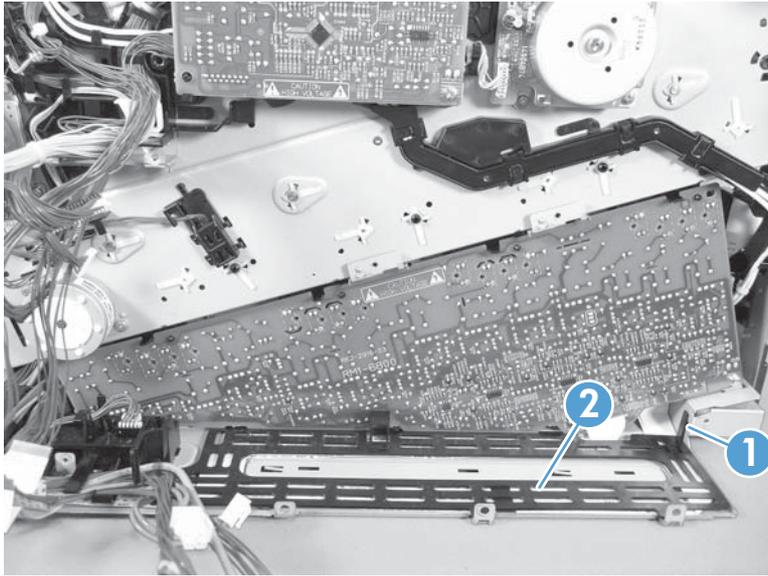
8. Remove one screw (callout 1), and then remove the second transfer high-voltage power supply (callout 2) and the PCA holder (callout 3) assembly.

Figure 2-92 Remove the main drive assembly (8 of 17)



9. Release one tab (callout 1), and then remove the cover (callout 2).

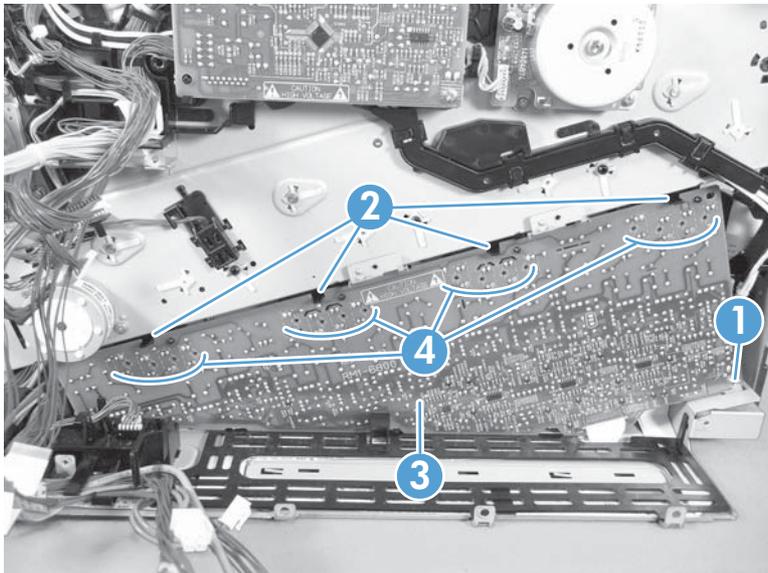
Figure 2-93 Remove the main drive assembly (9 of 17)



10. Remove one screw (callout 1), release four tabs (callout 2), and then remove the developing high-voltage power supply (callout 3).

 **Reinstallation tip** When you reinstall the power supply PCA, look through the holes on the PCA (callout 4) and make sure that the contact springs are correctly positioned against the back side of the PCA.

Figure 2-94 Remove the main drive assembly (10 of 17)

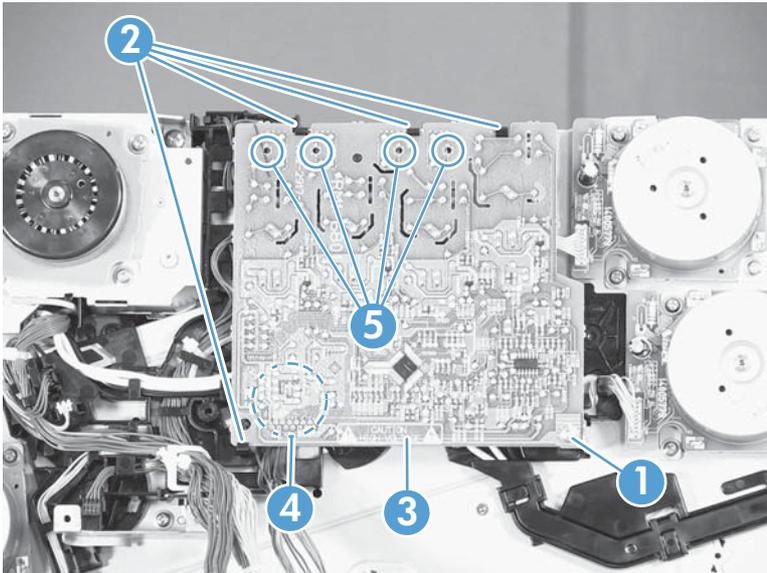


11. Remove one screw (callout 1), release four tabs (callout 2), and then separate the first transfer high-voltage power supply (callout 3) from the product.

CAUTION: The PCA is still connected to the product. Disconnect one connector (callout 4) on the back side of the PCA to remove it.

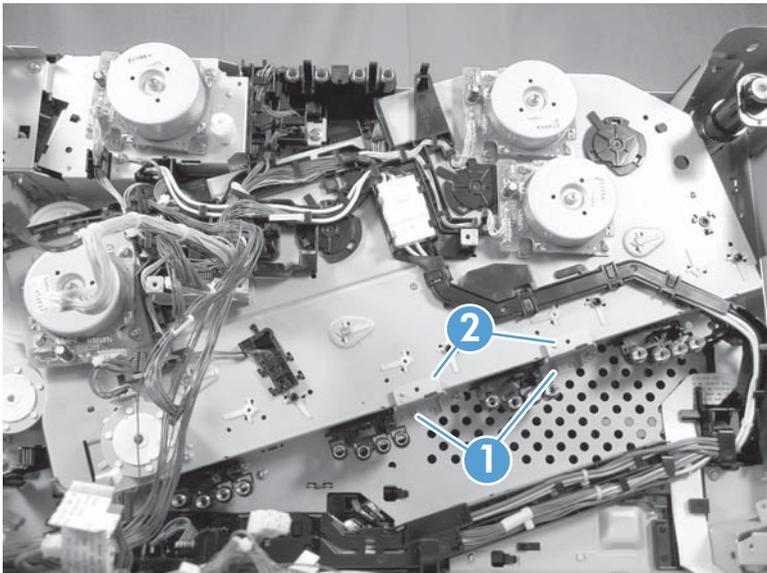
Reinstallation tip When you reinstall the power supply PCA, look through the holes on the PCA (callout 5) and make sure that the contact springs are correctly positioned against the back side of the PCA.

Figure 2-95 Remove the main drive assembly (11 of 17)



12. Remove two screws (callout 1), and then remove the sheet-metal support brackets (callout 2).

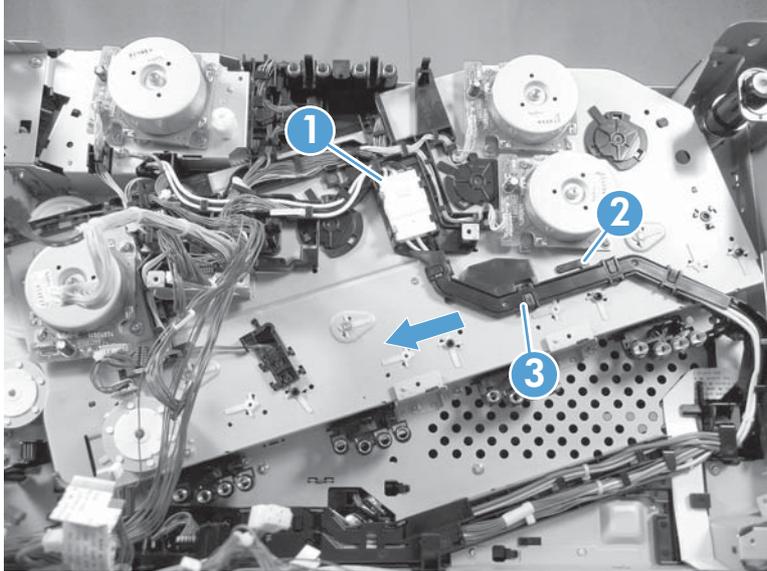
Figure 2-96 Remove the main drive assembly (12 of 17)



13. Disconnect one connector (callout 1), release one tab (callout 2), slide the cable guide (callout 3) to the left to release the it, and then move the guide to the side, out of the way.

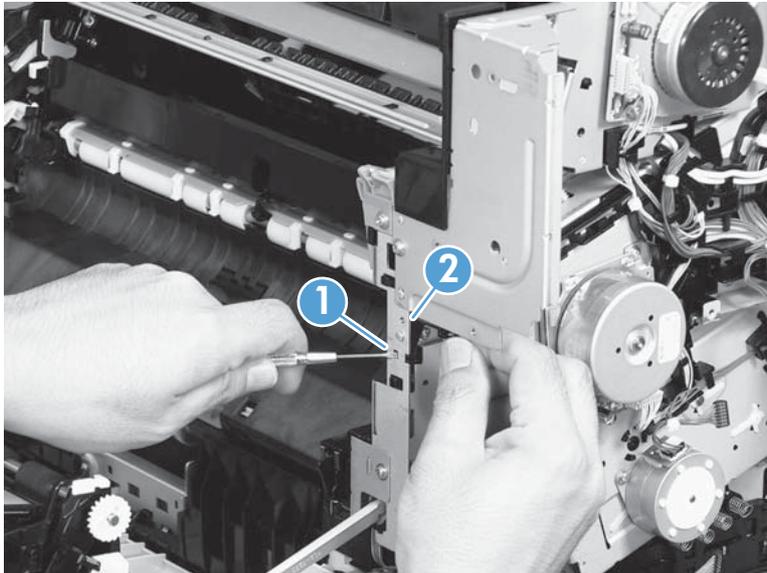
 **TIP:** It might be easier to disconnect the connector if you release it from the holder.

Figure 2-97 Remove the main drive assembly (13 of 17)



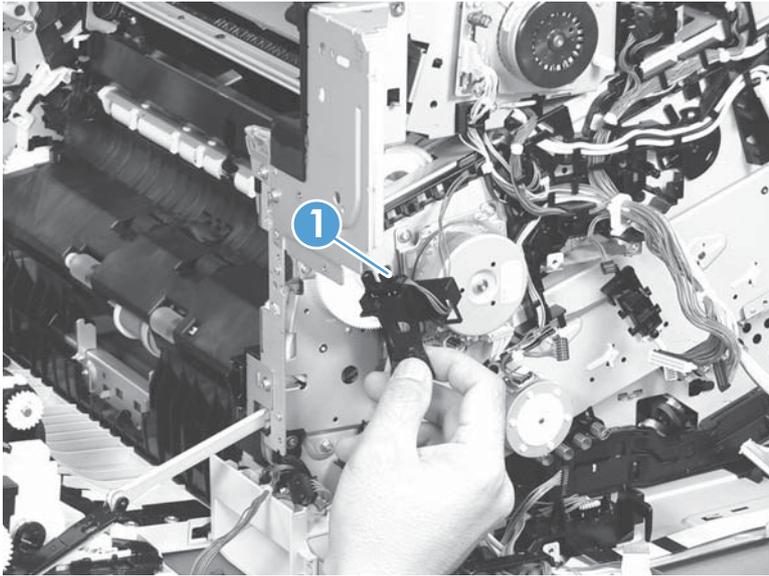
14. Use a small flat blade screwdriver to release one tab (callout 1), and then remove the sensor holder (callout 2).

Figure 2-98 Remove the main drive assembly (14 of 17)



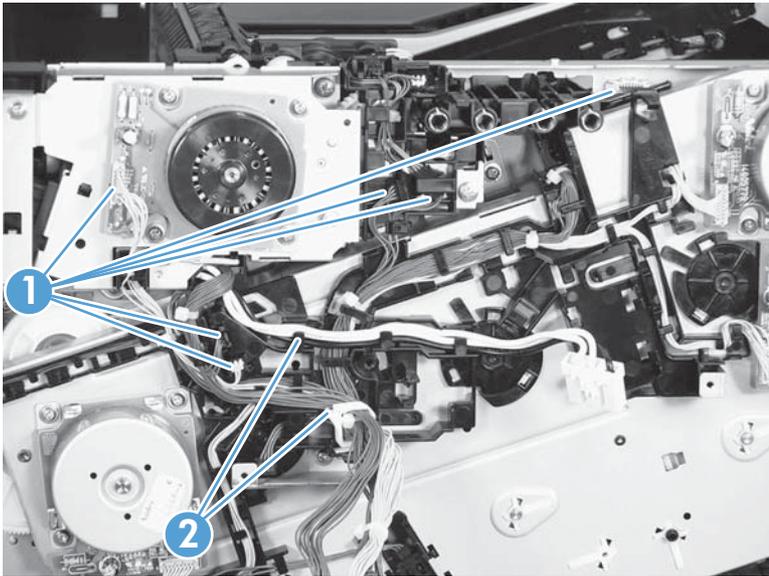
15. Disconnect one connector (callout 1), and then remove the sensor assembly.

Figure 2-99 Remove the main drive assembly (15 of 17)



16. Disconnect six connectors (callout 1), and then release the wire harnesses from the guides (callout 2).

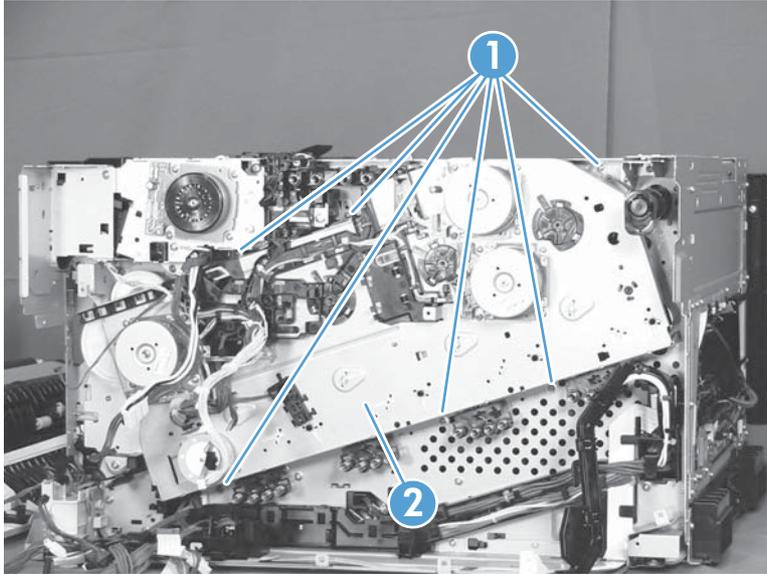
Figure 2-100 Remove the main drive assembly (16 of 17)



17. Remove six screws (callout 1), and then remove the main drive assembly (callout 2).

 **NOTE:** Make sure that the right door is closed.

Figure 2-101 Remove the main drive assembly (17 of 17)



Install the main drive assembly

 **NOTE:** **Installing a replacement assembly:** follow the instructions in this section.

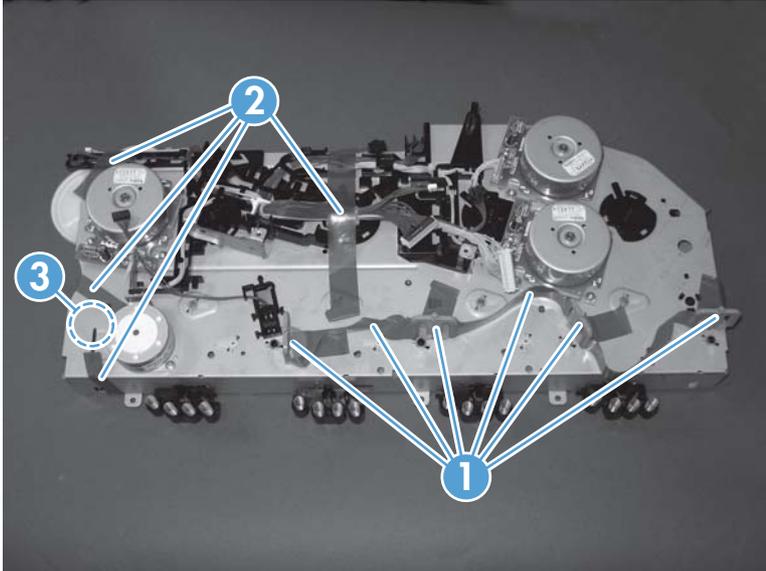
Reinstalling the original assembly: some of these instructions in this section do not apply (for example, removing the shipping spacers). **Do not** rotate the gears when handling the assembly. If the gears are rotated—and become out of phase—it will be difficult to install the assembly on the product.

1. Do not remove the orange spacers and spacer shipping tape (callout 1) installed on the replacement main drive assembly. Remove the remaining shipping tape (callout 2).

 **CAUTION:** A gear (callout 3) on the back of the assembly is not captive when the shipping tape is removed. Do not lose the gear when handling the assembly with the shipping tape removed.

When removing tape, make sure that the entire strip is removed. Check the back of the assembly to verify that the entire strip of tape is removed.

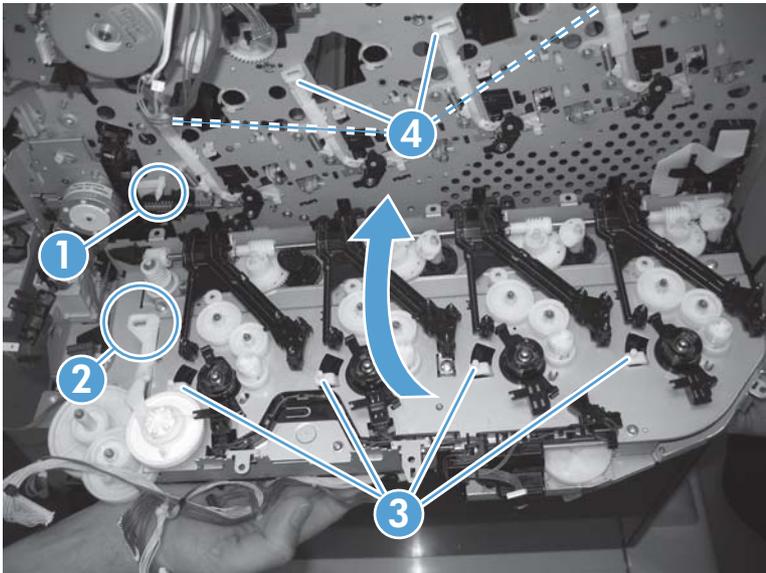
Figure 2-102 Install the main drive assembly (1 of 8)



2. With the right door closed, position the drive assembly near the product, and then rotate it up and onto the chassis.

 **NOTE:** Make sure that the right-door link arm shaft (callout 1) aligns with and is positioned in the hole (callout 2) on the arm on the drive assembly, and that the pins on the assembly (callout 3) are positioned in the holes in the link arms on the chassis (callout 4).

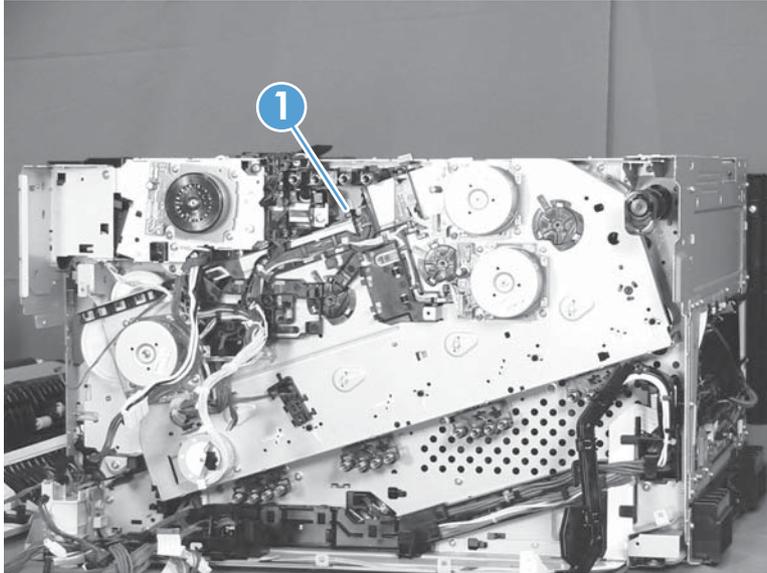
Figure 2-103 Install the main drive assembly (2 of 8)



3. Install one screw (callout 1).

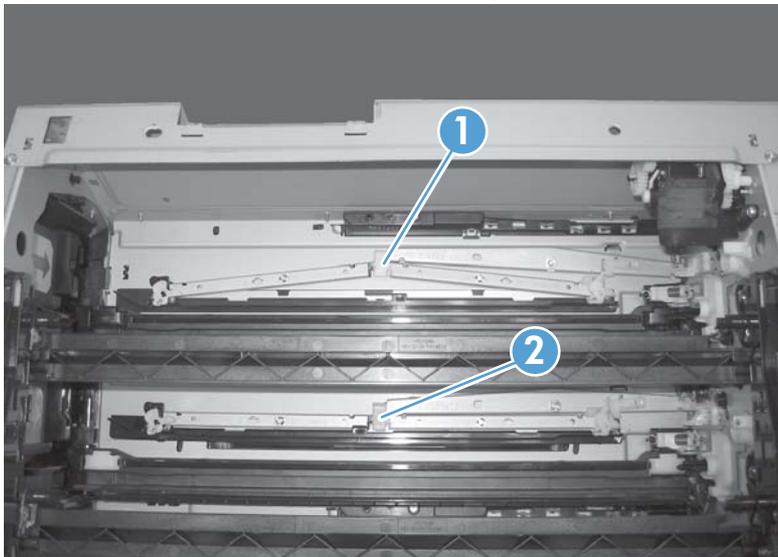
 **NOTE:** Do not fully tighten this screw.

Figure 2-104 Install the main drive assembly (3 of 8)



4. From the top of the product, look at each shutter arm. Make sure that they are in the closed position (callout 1). If they are in the open position (callout 2), carefully push on the shutters to close them.

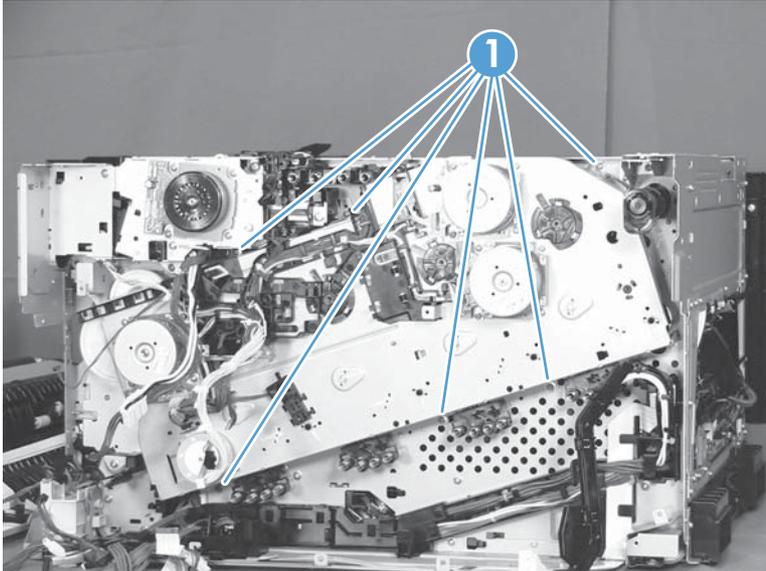
Figure 2-105 Install the main drive assembly (4 of 8)



5. Make sure that the six sheet-metal screw tabs (callout 1) on the drive assembly are flat against the product chassis.

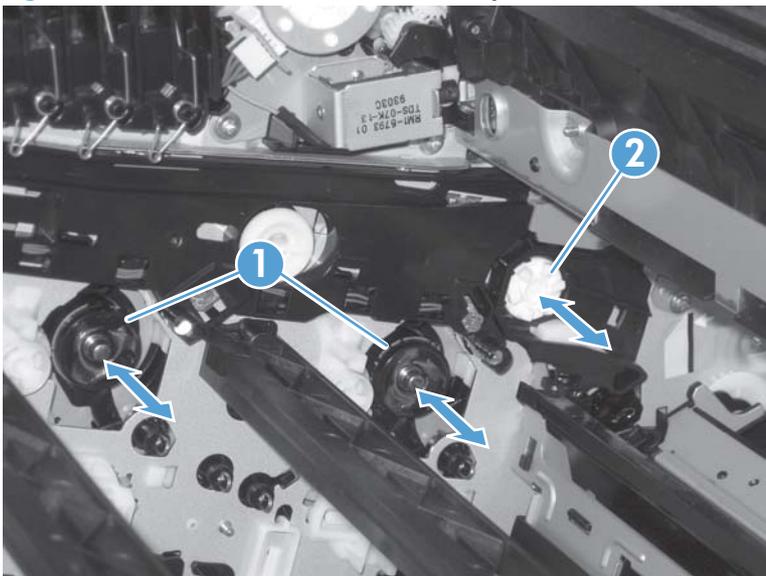
 **NOTE:** If the tabs are not flat against the chassis, the developer-disengagement drive gears and cams —on the back side of the drive assembly— are not properly aligned with, and seated in, the corresponding holes on the product. Remove the drive assembly, realign it, and then reinstall it. See [Figure 2-103 Install the main drive assembly \(2 of 8\) on page 160](#).

Figure 2-106 Install the main drive assembly (5 of 8)



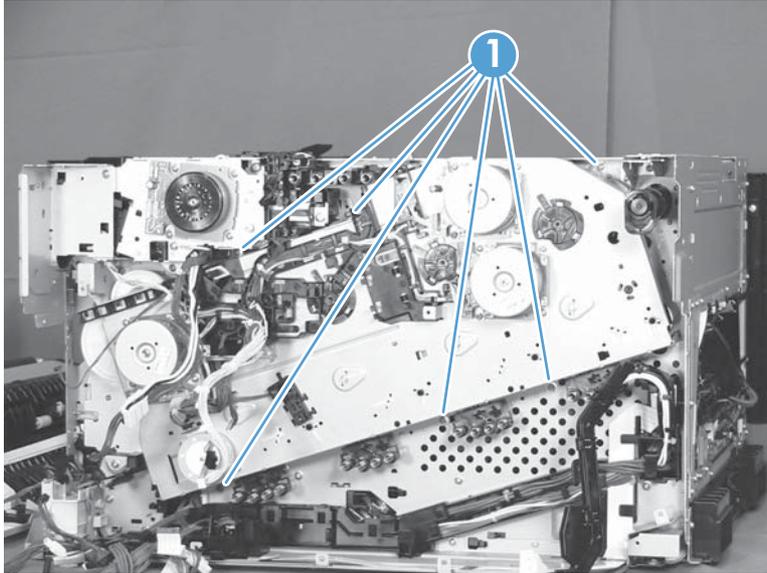
6. With the drive assembly correctly installed, verify the following:
 - Open and close the front door. The OPC drum drive gears (callout 1; two shown, four total) must move in and out when viewed from inside the product.
 - Open and close the right door. The ITB drive gear (callout 2) must move in and out when viewed from inside the product.

Figure 2-107 Install the main drive assembly (6 of 8)



7. Install the remaining five mounting screws, tighten all six screws (callout 1), and then remove the orange spacers and spacer shipping tape.

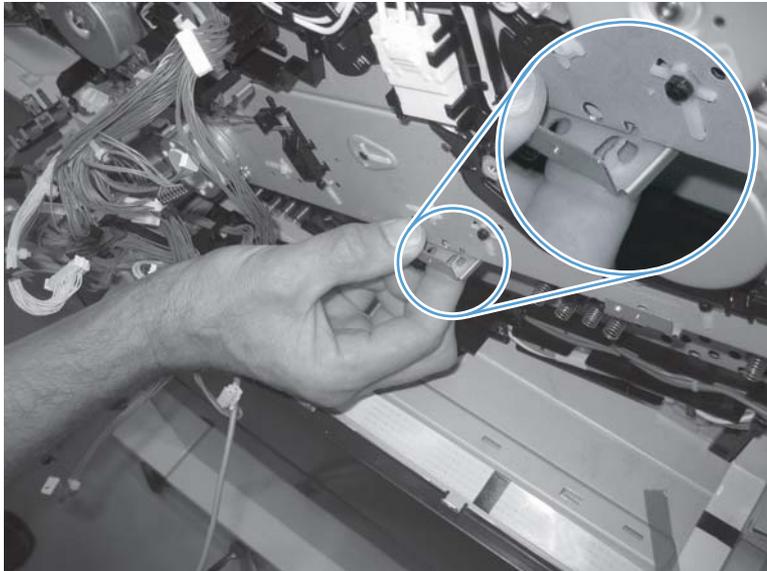
Figure 2-108 Install the main drive assembly (7 of 8)



8. Reinstall the two small sheet-metal brackets.

 **NOTE:** The tab on the sheet-metal brackets must be inserted in the hole in the drive assembly chassis as shown below.

Figure 2-109 Install the main drive assembly (8 of 8)



Fuser drive assembly



NOTE: The replacement of the fuser drive assembly will take an experienced service technician approximately four hours. It is also likely that the device will have additional issues caused by this service procedure. Carefully evaluate the possibility of doing a whole unit replacement instead of this repair.

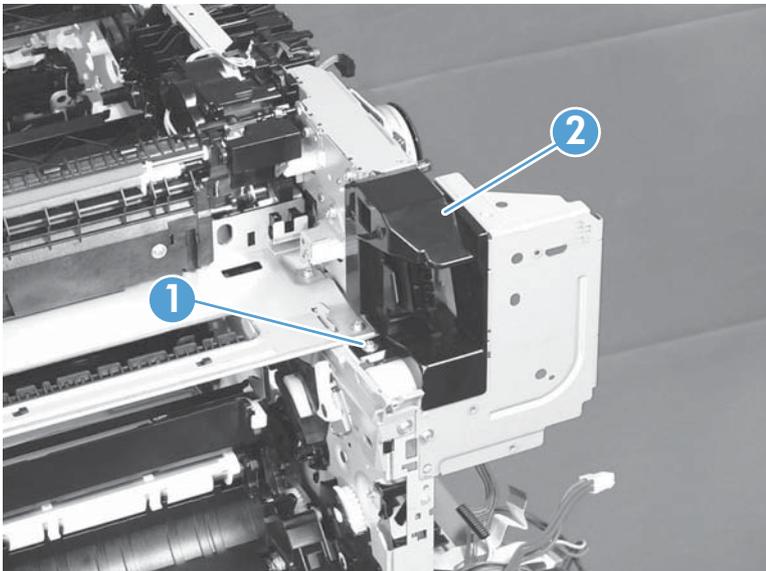
Before proceeding, remove the following components:

- Toner-collection unit. See [Toner-collection unit on page 88](#).
- Fuser. See [Fuser on page 90](#).
- Formatter PCA. See [Formatter PCA on page 100](#).
- Formatter case. See [Formatter case on page 123](#)
- Right-front cover and control-panel assembly. See [Right-front cover and control-panel assembly on page 108](#).
- Left cover. See [Left cover on page 110](#).
- Rear cover. See [Rear cover on page 111](#).
- Toner collection unit access door. See [Toner collection unit access door on page 112](#).
- Right-rear cover. See [Right-rear cover on page 114](#).
- Top cover. See [Top cover on page 115](#).
- Residual-toner full sensor. See [Residual toner full sensor on page 145](#).
- Main drive assembly. See [Main drive assembly on page 150](#).

Remove the fuser drive assembly

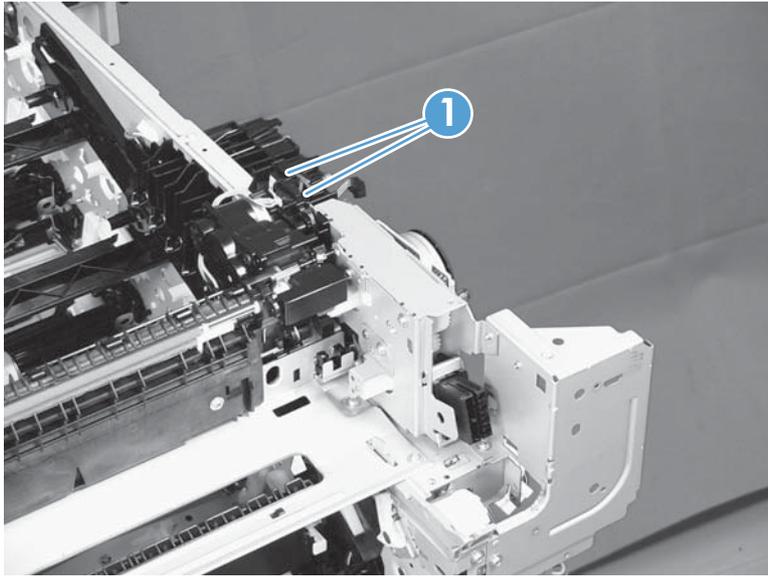
1. Remove one screw (callout 1) and the cover (callout 2).

Figure 2-110 Remove the fuser drive assembly (1 of 3)



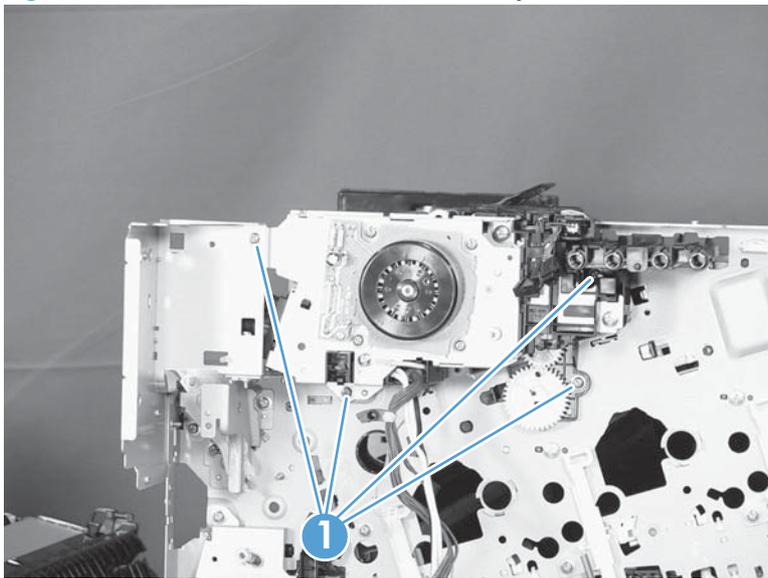
2. Disconnect two connectors (callout 1).

Figure 2-111 Remove the fuser drive assembly (2 of 3)



3. Remove four screws (callout 1), and then remove the fuser drive assembly.

Figure 2-112 Remove the fuser drive assembly (3 of 3)



Install a replacement fuser drive assembly

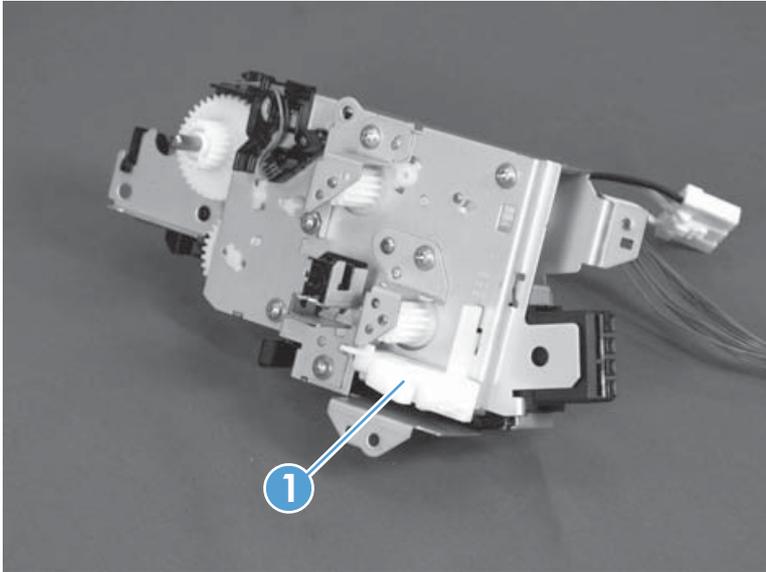
Use the following procedure to install a replacement fuser drive assembly or reinstall the original fuser drive assembly.

1. **Replacement fuser drive assembly:** Before beginning, take note of the spacer (callout 1) on the replacement fuser drive assembly.

Original fuser drive assembly: Proceed to the next step.

 **NOTE:** The fuser drive motor is shown removed in the following figure. However, you do not need to remove the fuser motor to install the fuser drive assembly.

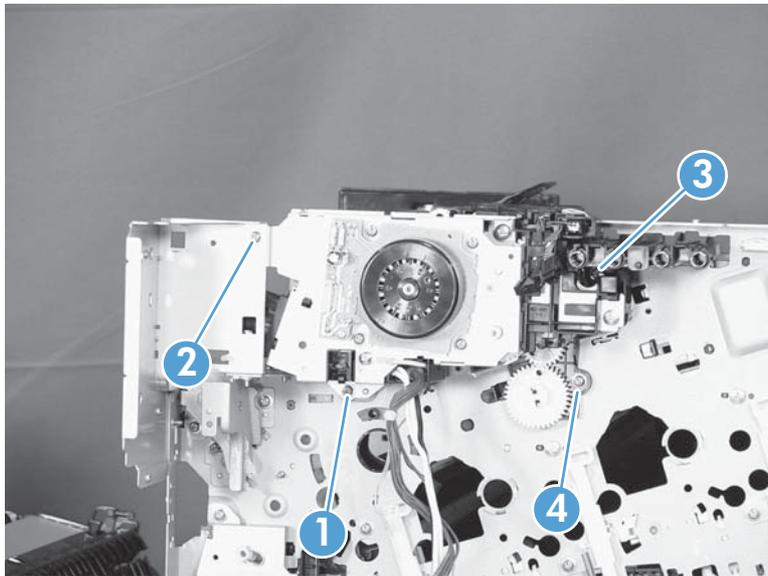
Figure 2-113 Install a replacement fuser drive assembly (1 of 3)



- 2. Replacement fuser drive assembly:** Fasten the replacement fuser gear assembly to the product with four screws. Install the screws in the order shown below (callouts 1 to 4).

Original fuser drive assembly: Install, but do not fully tighten four screws (callouts 1 to 4). Carefully push the drive assembly to the left (toward the right-door side of the product) until it slightly shifts forward. Apply steady pressure to hold the assembly in place, and then tighten the screws.

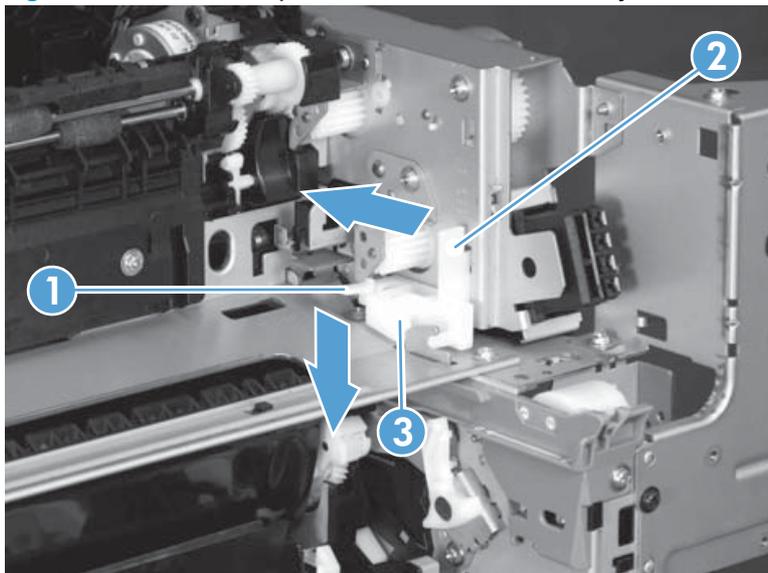
Figure 2-114 Install a replacement fuser drive assembly (2 of 3)



- 3. Replacement fuser drive assembly:** Release two tabs in the order shown below (callouts 1 and 2), and then remove the spacer (callout 3).

Original fuser drive assembly: Installation complete—this step is not required.

Figure 2-115 Install a replacement fuser drive assembly (3 of 3)



Fuser gear assembly

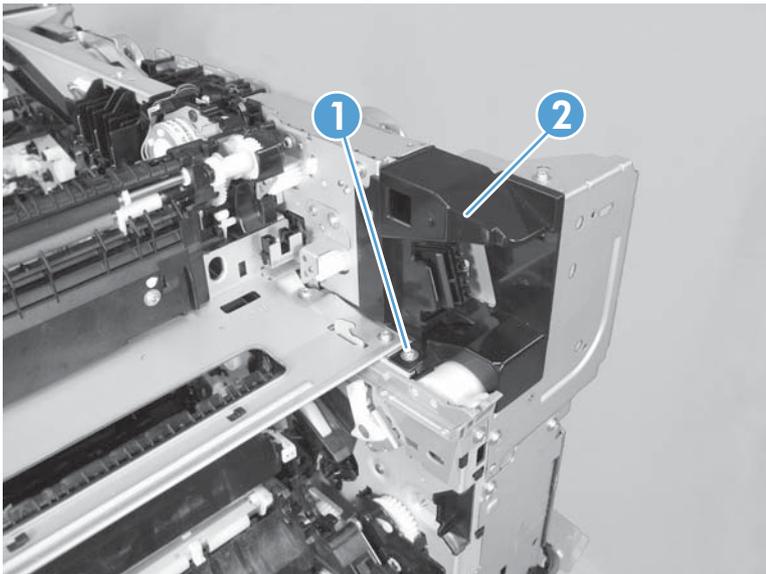
Before proceeding, remove the following components:

- Toner-collection unit. See [Toner-collection unit on page 88](#).
- Fuser. See [Fuser on page 90](#).
- Right-front cover and control-panel assembly. See [Right-front cover and control-panel assembly on page 108](#).
- Left cover. See [Left cover on page 110](#).
- Toner collection unit access door. See [Toner collection unit access door on page 112](#).
- Rear cover. See [Rear cover on page 111](#).
- Right-rear cover. See [Right-rear cover on page 114](#).
- Top cover. See [Top cover on page 115](#).
- Residual toner full sensor. See [Residual toner full sensor on page 145](#).

Remove the fuser gear assembly

1. Remove one screw (callout 1) and the cover (callout 2).

Figure 2-116 Remove the fuser gear assembly (1 of 9)

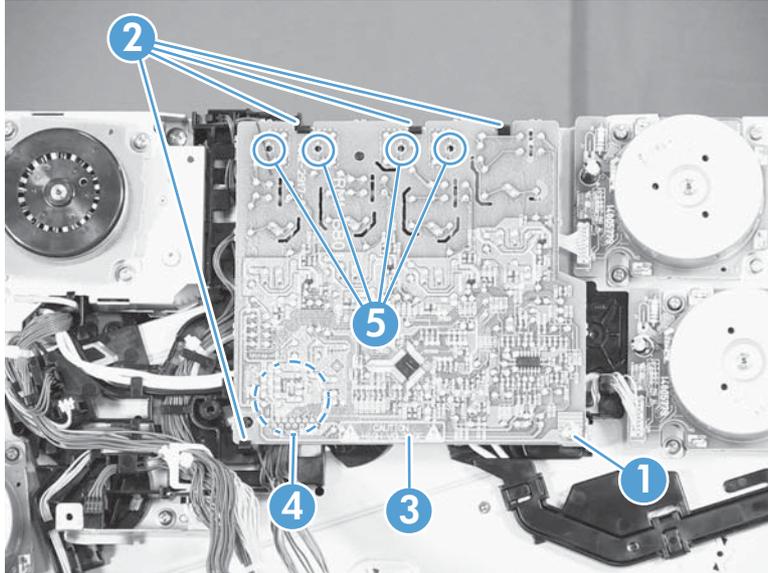


2. Remove one screw (callout 1), release four tabs (callout 2), and then separate the first transfer high-voltage power supply (callout 3) from the product.

CAUTION: The PCA is still connected to the product.

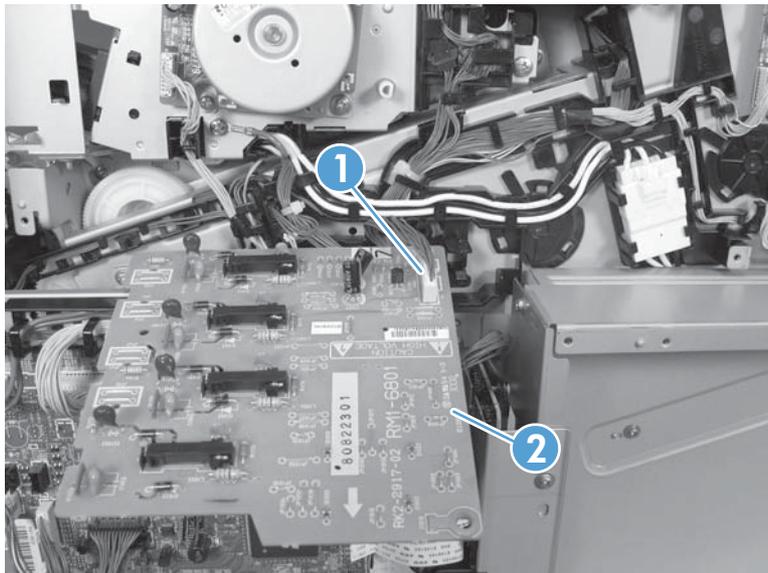
Reinstallation tip When you reinstall the power supply PCA, look through the holes on the PCA (callout 5) and make sure that the contact springs are correctly positioned against the back side of the PCA.

Figure 2-117 Remove the fuser gear assembly (2 of 9)



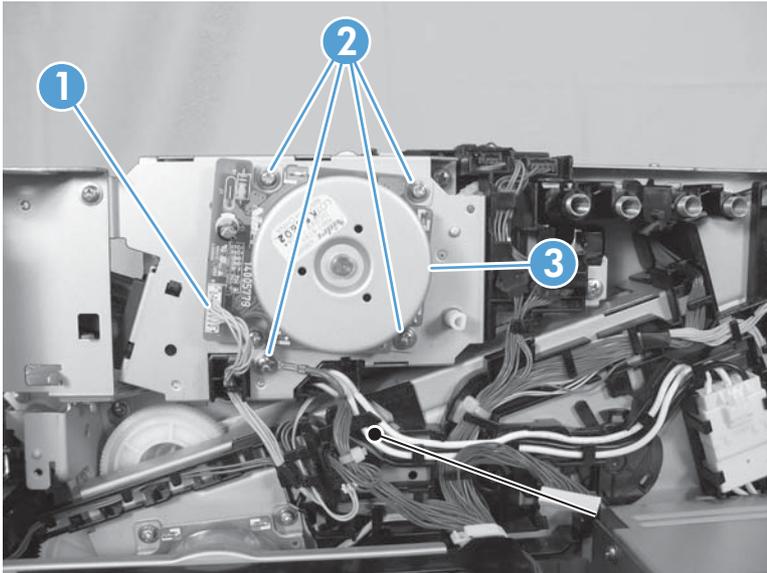
3. Disconnect one connector (callout 1) and then remove the first transfer high-voltage power supply (callout 2).

Figure 2-118 Remove the fuser gear assembly (3 of 9)



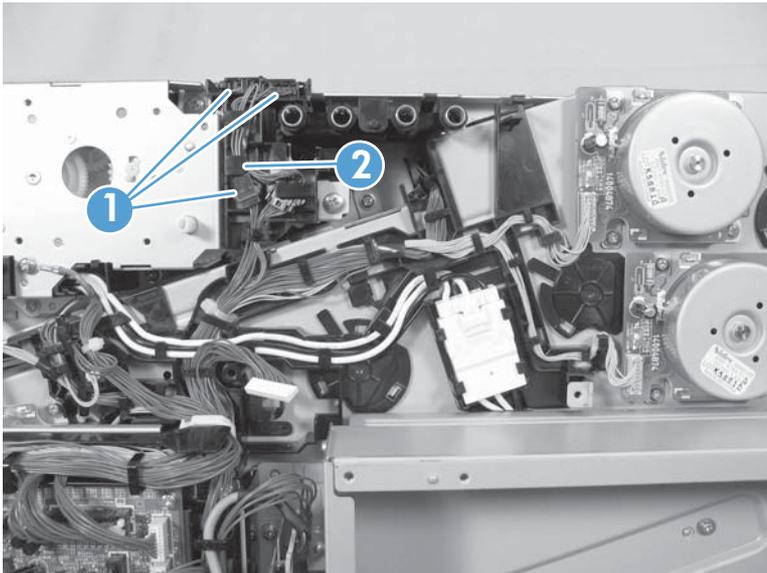
4. Disconnect one connector (callout 1), remove four screws (callout 2), and then remove the fuser motor (callout 3).

Figure 2-119 Remove the fuser gear assembly (4 of 9)



5. Disconnect three connectors (callout 1), and then release the wire harnesses from the guide (callout 2).

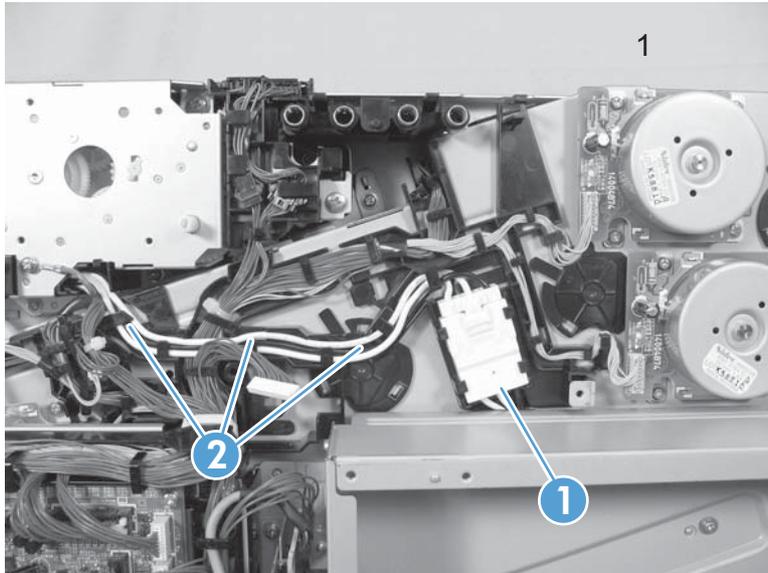
Figure 2-120 Remove the fuser gear assembly (5 of 9)



6. Disconnect one connector (callout 1), and then release the wire harness from the guide (callout 2).

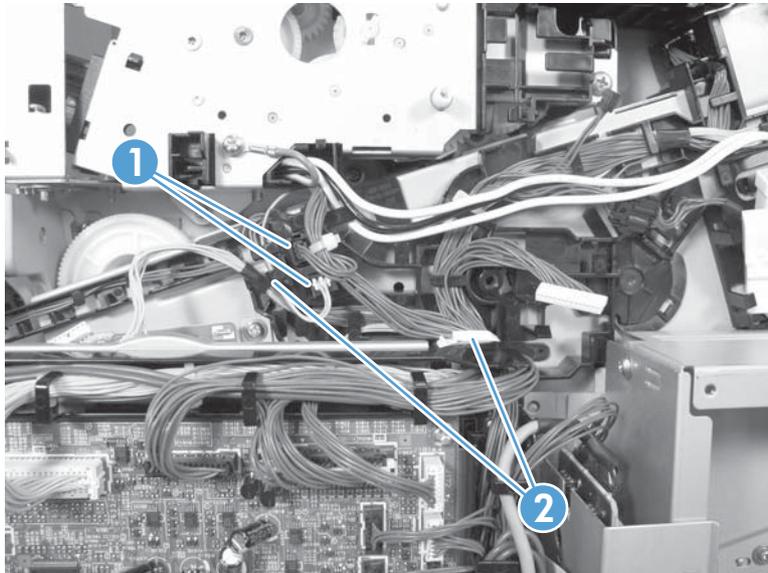
 **TIP:** It might be easier to disconnect the connector, if you release it from the black-plastic holder.

Figure 2-121 Remove the fuser gear assembly (6 of 9)



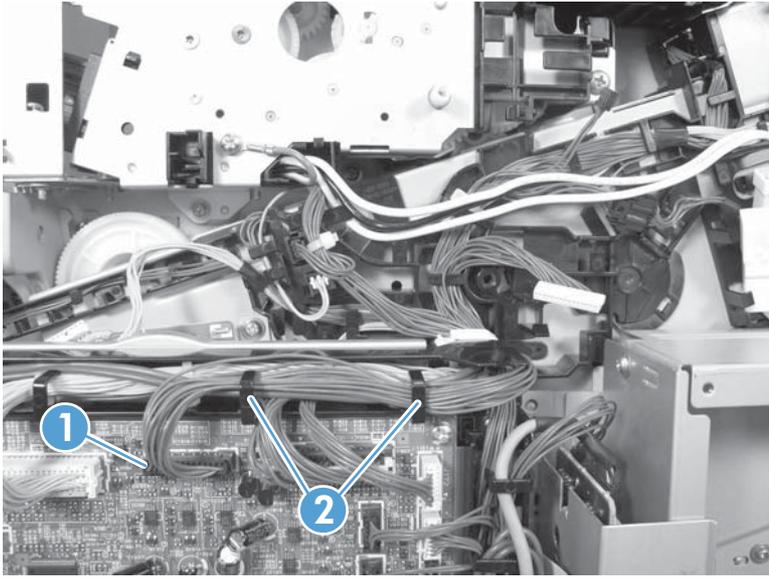
7. Disconnect two connectors (callout 1), and then release the wire harness from the retainer and guide (callout 2).

Figure 2-122 Remove the fuser gear assembly (7 of 9)



8. Disconnect one connector (callout 1), and then release the wire harness from the guide (callout 2).

Figure 2-123 Remove the fuser gear assembly (8 of 9)



9. Remove four screws (callout 1), and then remove the fuser gear assembly (callout 2).

CAUTION: Do not remove the gear or solenoid located behind the fuser gear assembly. The gear and solenoid are installed in specific alignment with the other components behind the assembly. If the gear or solenoid are removed, the product will not properly function.

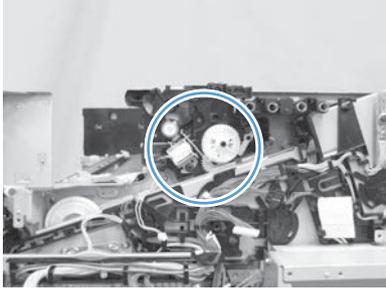
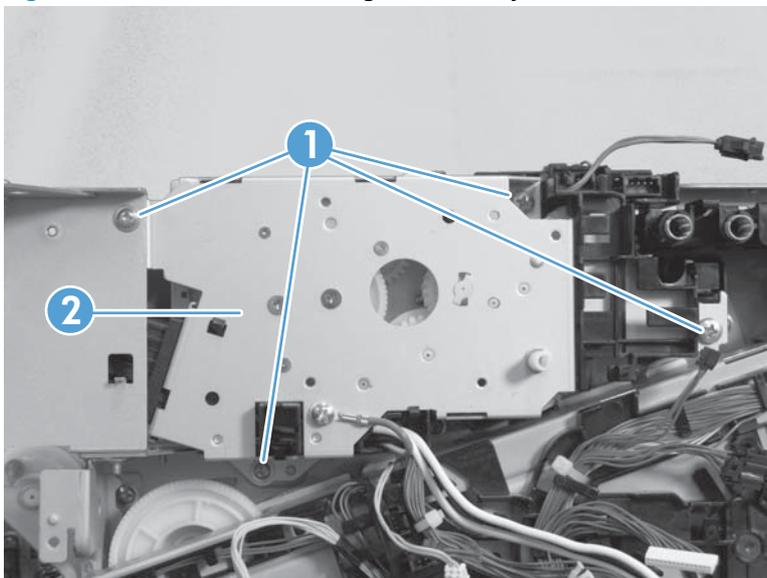


Figure 2-124 Remove the fuser gear assembly (9 of 9)



Install a replacement fuser gear assembly

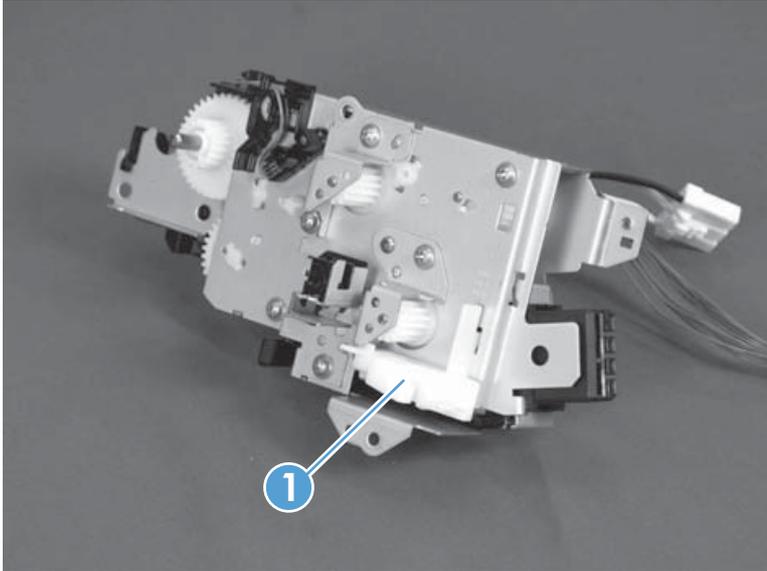
Use the following procedure to install a replacement fuser drive assembly or reinstall the original fuser gear assembly.

1. **Replacement fuser gear assembly:** Before beginning, take note of the spacer (callout 1) on the replacement fuser drive assembly.

Original fuser gear assembly: Proceed to the next step.

NOTE: The fuser drive motor is shown removed in the following figure. However, you do not need to remove the fuser motor to install the fuser gear assembly.

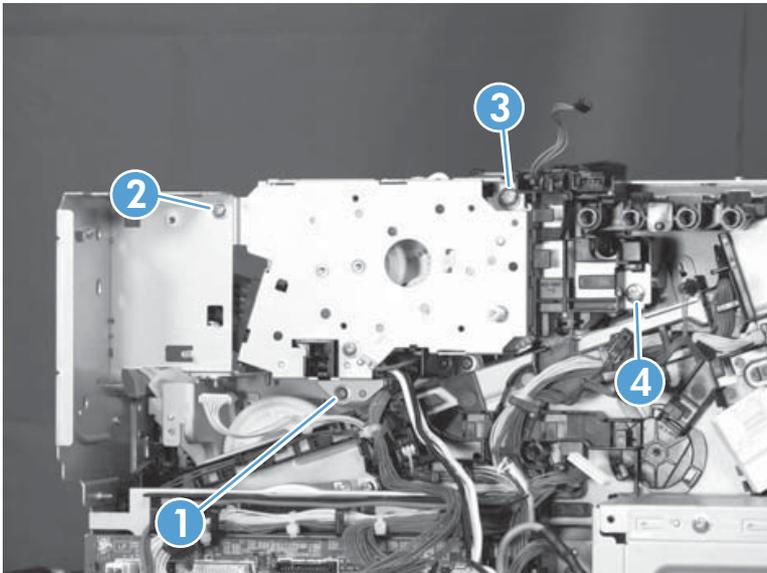
Figure 2-125 Install a replacement fuser gear assembly (1 of 3)



- 2. Replacement fuser drive assembly:** Fasten the replacement fuser gear assembly to the product with four screws. Install the screws in the order shown below (callouts 1 to 4).

Original fuser drive assembly: Install, but do not fully tighten four screws (callouts 1 to 4). Carefully push the drive assembly to the left (toward the right-door side of the product) until it slightly shifts forward. Apply steady pressure to hold the assembly in place, and then tighten the screws.

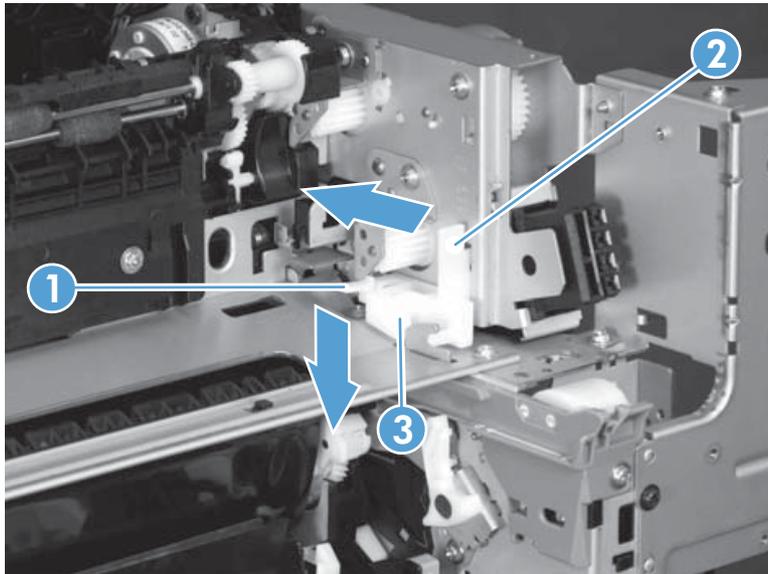
Figure 2-126 Install a replacement fuser gear assembly (2 of 3)



- 3. Replacement fuser drive assembly:** Release two tabs in the order shown below (callouts 1 and 2), and then remove the spacer (callout 3).

Original fuser drive assembly: Installation complete—this step is not required.

Figure 2-127 Install a replacement fuser gear assembly (3 of 3)



Paper delivery assembly

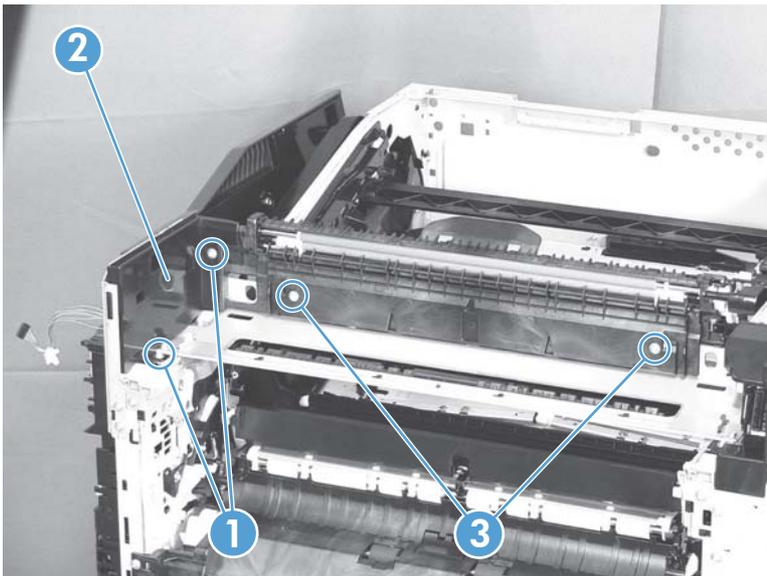
Before proceeding, remove the following components:

- Fuser. See [Fuser on page 90](#).
- Intermediate transfer belt (ITB). See [Intermediate transfer belt \(ITB\) on page 98](#).
- Right-front cover and control-panel assembly. See [Right-front cover and control-panel assembly on page 108](#).
- Left cover. See [Left cover on page 110](#).
- Right-rear cover. See [Right-rear cover on page 114](#).
- Top cover. See [Top cover on page 115](#).

Remove the delivery assembly

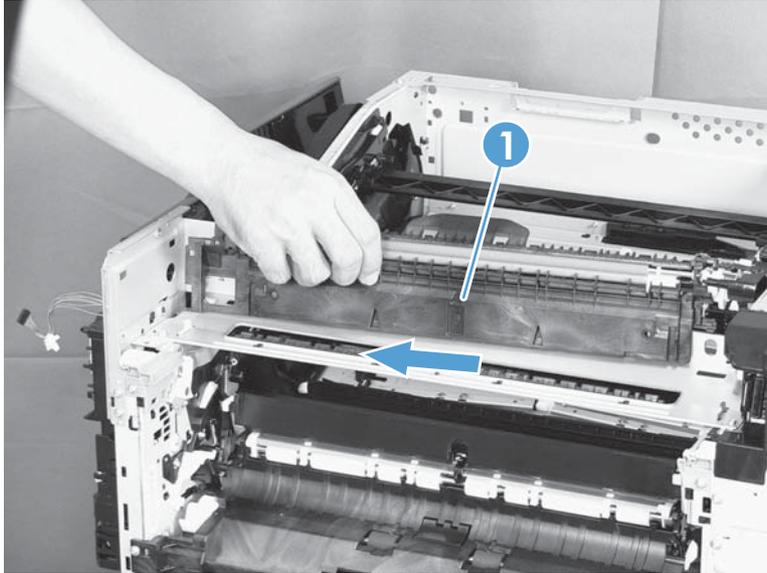
1. Remove two screws (callout 1), remove the cover (callout 2), and then remove two screws (callout 3).

Figure 2-128 Remove the paper delivery assembly (1 of 2)



2. Pull the left side of the unit away from the engine, and then slide the delivery unit (callout 1) in the direction that the arrow indicates to remove it.

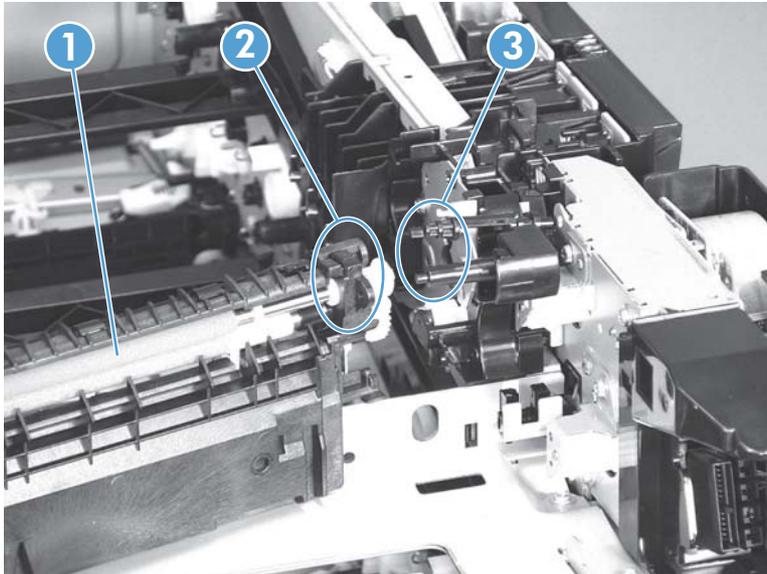
Figure 2-129 Remove the paper delivery assembly (2 of 2)



Reinstall the paper delivery assembly

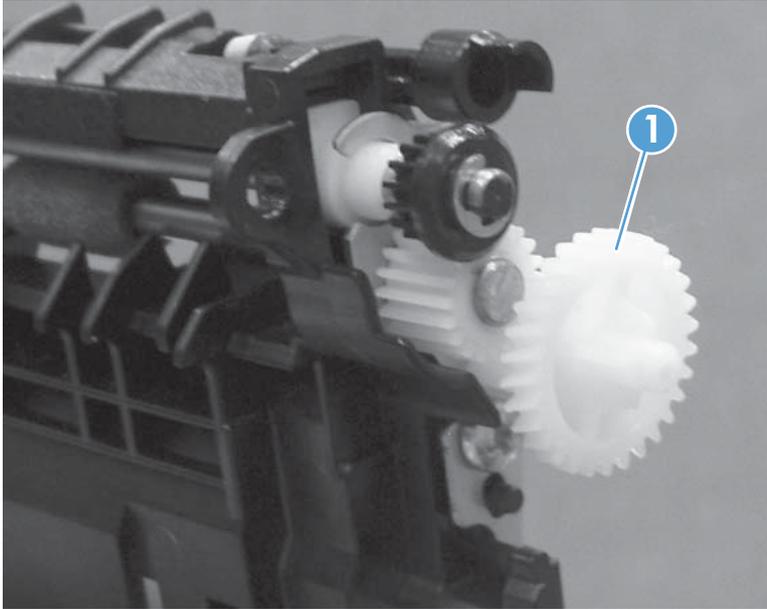
1. Make sure that the delivery assembly (callout 1) two mounting holes (callout 2) align with the shafts (callout 3) on the product.

Figure 2-130 Reinstall the paper delivery assembly (1 of 3)



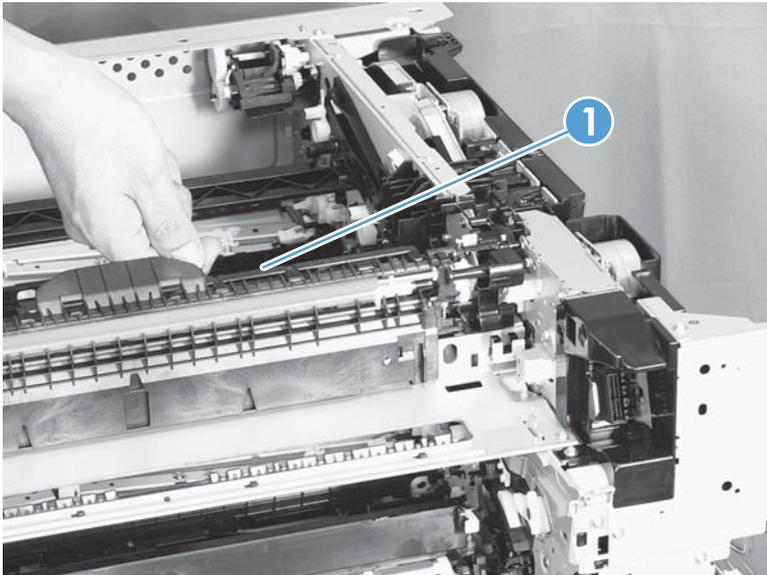
2. During reassembly, the white gear (callout 1) can become dislodged. Make sure that it is correctly installed on the assembly.

Figure 2-131 Reinstall the paper delivery assembly (2 of 3)



3. After reinstalling the delivery assembly, verify that the sensor flag (callout 1) moves smoothly.

Figure 2-132 Reinstall the paper delivery assembly (3 of 3)



Duplex drive assembly (duplex models)

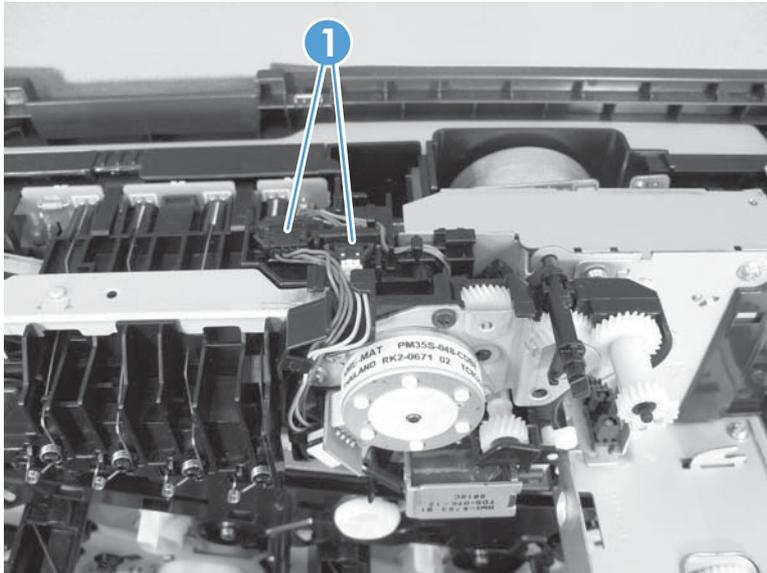
Before proceeding, remove the following components:

- Fuser. See [Fuser on page 90](#).
- Intermediate transfer belt (ITB). See [Intermediate transfer belt \(ITB\) on page 98](#).
- Right-front cover and control-panel assembly. See [Right-front cover and control-panel assembly on page 108](#).
- Left cover. See [Left cover on page 110](#).
- Rear cover. See [Rear cover on page 111](#).
- Right-rear cover. See [Right-rear cover on page 114](#).
- Top cover. See [Top cover on page 115](#).
- Delivery assembly. See [Paper delivery assembly on page 176](#).

Remove the duplex-drive assembly

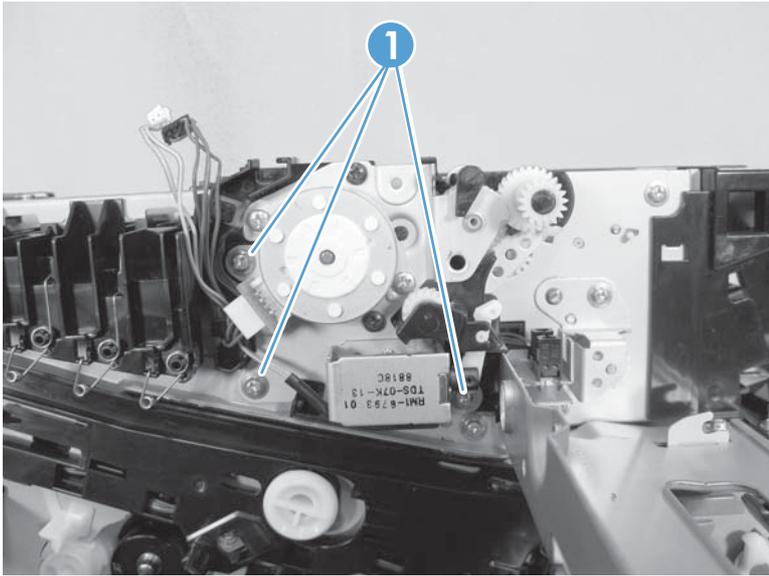
1. Disconnect two connectors (callout 1).

Figure 2-133 Remove the duplex-drive assembly (1 of 3)



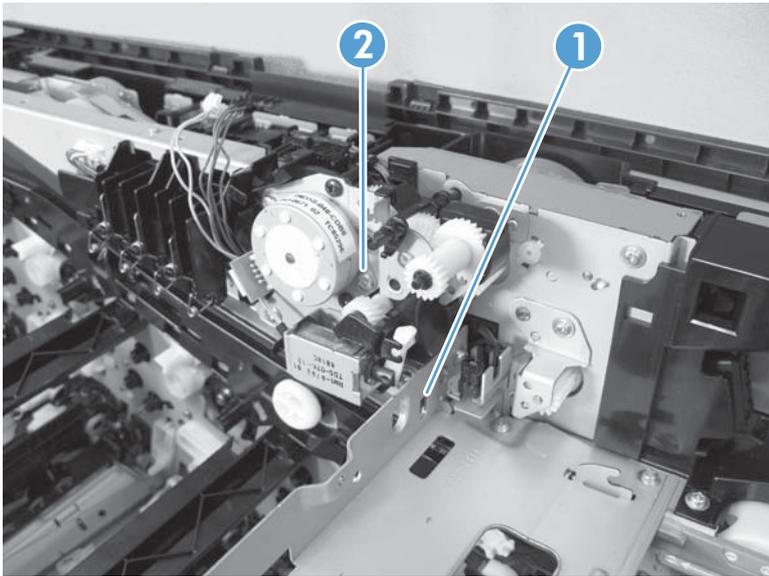
2. Remove three screws (callout 1).

Figure 2-134 Remove the duplex-drive assembly (2 of 3)



3. Release one tab (callout 1), and then remove the assembly (callout 2).

Figure 2-135 Remove the duplex-drive assembly (3 of 3)



Delivery drive assembly (simplex models)

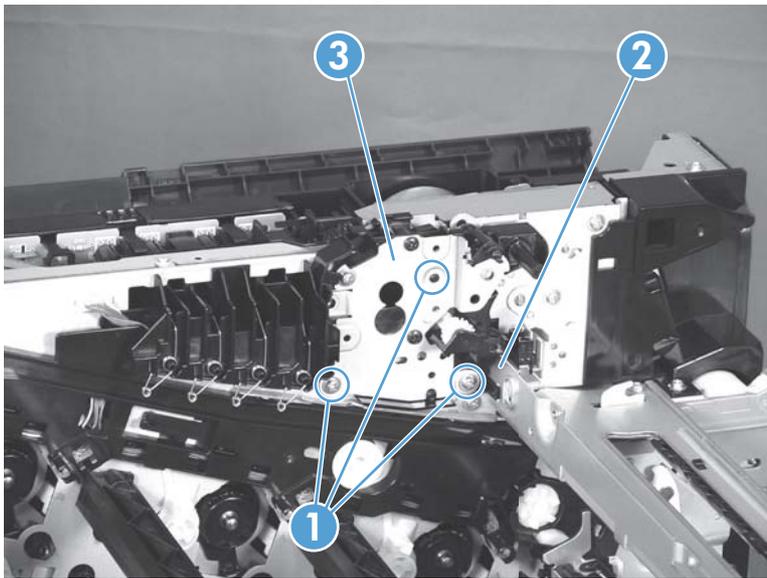
Before proceeding, remove the following components:

- Fuser. See [Fuser on page 90](#).
- Intermediate transfer belt (ITB). See [Intermediate transfer belt \(ITB\) on page 98](#).
- Right-front cover and control-panel assembly. See [Right-front cover and control-panel assembly on page 108](#).
- Left cover. See [Left cover on page 110](#).
- Rear cover. See [Rear cover on page 111](#).
- Right-rear cover. See [Right-rear cover on page 114](#).
- Top cover. See [Top cover on page 115](#).
- Delivery assembly. See [Paper delivery assembly on page 176](#).

Remove the delivery drive assembly

- ▲ Remove three screws (callout 1), release one tab (callout 2), and then remove the delivery drive assembly (callout 3).

Figure 2-136 Remove the delivery drive assembly



Residual-toner-feed assembly

Before proceeding, remove the following components:

- Intermediate transfer belt (ITB). See [Intermediate transfer belt \(ITB\) on page 98](#).
- Left cover. See [Left cover on page 110](#).
- Rear cover. See [Rear cover on page 111](#).
- Toner collection unit access door. See [Toner collection unit access door on page 112](#).
- Right-rear cover. See [Right-rear cover on page 114](#).
- Top cover. See [Top cover on page 115](#).
- Toner cover. See the first step of [Residual toner full sensor on page 145](#).

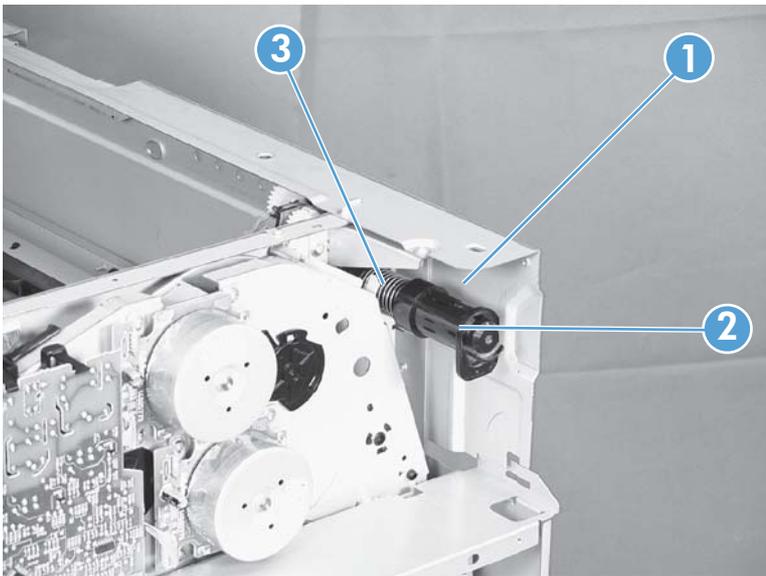
Remove the residual-toner-feed assembly

1. Release one tab (callout 1) by pulling the tab up. If necessary, use a small, flat-blade screwdriver to pull the tab up. Remove the shutter (callout 2), and then pull the spring (callout 3) off the assembly.



NOTE: There might be a piece of transparent tape over the tab (callout 1). Remove the tape to release the tab.

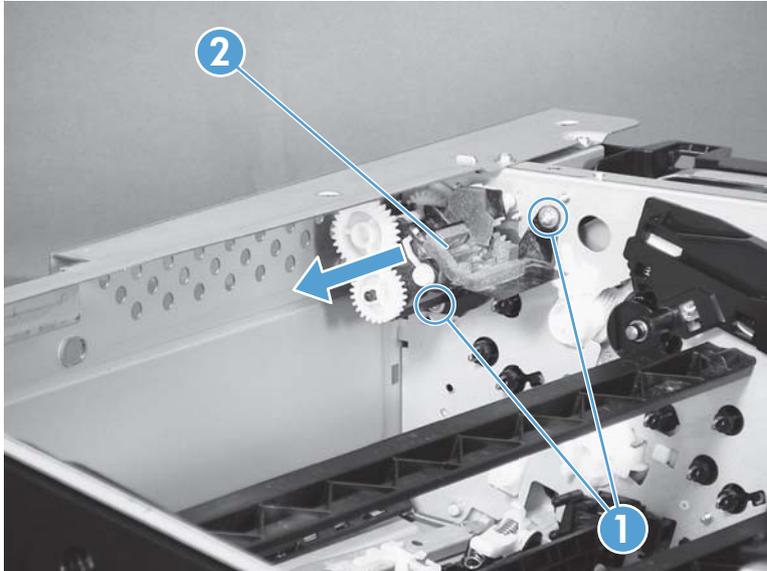
Figure 2-137 Remove the residual-toner-feed assembly (1 of 2)



2. Remove two screws (callout 1), and then remove the residual-toner-feed assembly (callout 2).

 **NOTE:** When removing the residual-toner-feed assembly (callout 2), make sure that the assembly does not separate from the toner auger. This can spill toner in the product. To reduce the risk of such an incident, pull the assembly in the direction indicated by the arrow.

Figure 2-138 Remove the residual-toner-feed assembly (2 of 2)



ITB motor (M1)

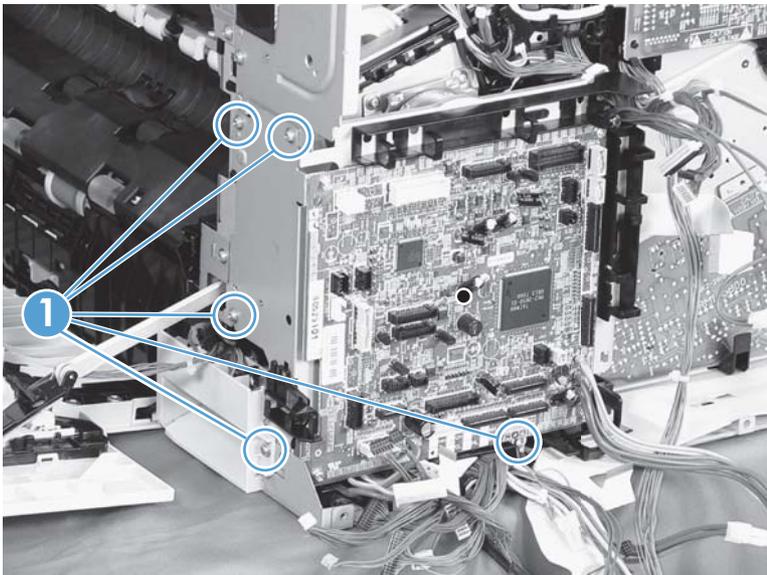
Before proceeding, remove the following components:

- Toner-collection unit. See [Toner-collection unit on page 88](#).
- Toner collection unit access door. See [Toner collection unit access door on page 112](#).
- Rear cover. See [Rear cover on page 111](#).
- Right-rear cover. See [Right-rear cover on page 114](#).

Remove the ITB motor

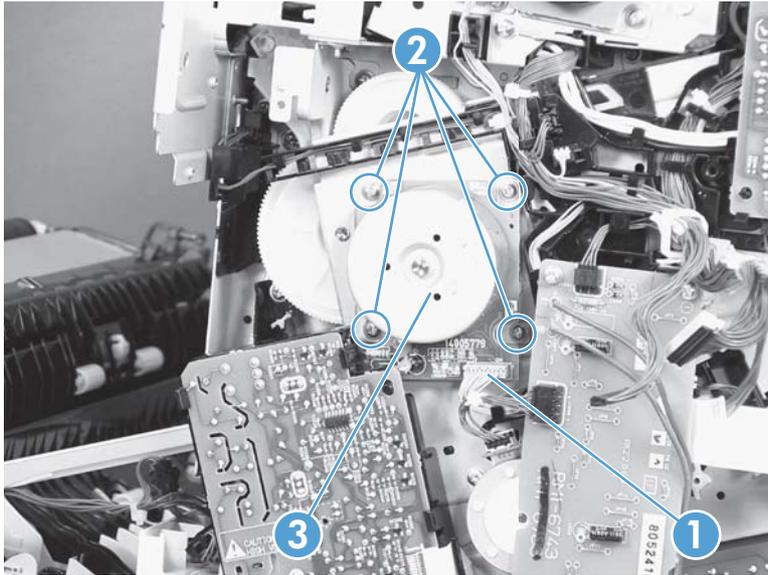
1. Disconnect all of the cables and FFCs from the DC controller (release the cables from the guides), remove six screws (callout 1), and then remove the DC controller and the DC controller support.

Figure 2-139 Remove the ITB motor (1 of 2)



2. Disconnect one connector (callout 1), remove four screws (callout 2), and then remove the motor (callout 3).

Figure 2-140 Remove the ITB motor (2 of 2)



Drum motor (M2)

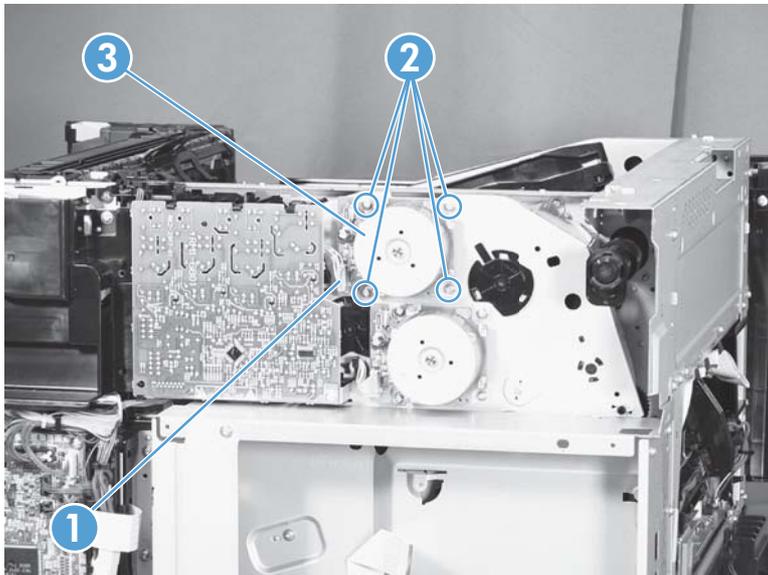
Before proceeding, remove the following components:

- Toner collection unit. See [Toner-collection unit on page 88](#).
- Right-front cover and control-panel assembly. See [Right-front cover and control-panel assembly on page 108](#).
- Left cover. See [Left cover on page 110](#).
- Rear cover. See [Rear cover on page 111](#).
- Toner collection unit access door. See [Toner collection unit access door on page 112](#).
- Right-rear cover. See [Right-rear cover on page 114](#).
- Top cover. See [Top cover on page 115](#).
- Toner cover. See the first and second steps of [Residual toner full sensor on page 145](#).

Remove the drum motor

Disconnect one connector (callout 1), remove four screws (callout 2), and then remove the motor (callout 3).

Figure 2-141 Remove the drum motor



Developing motor (M3)

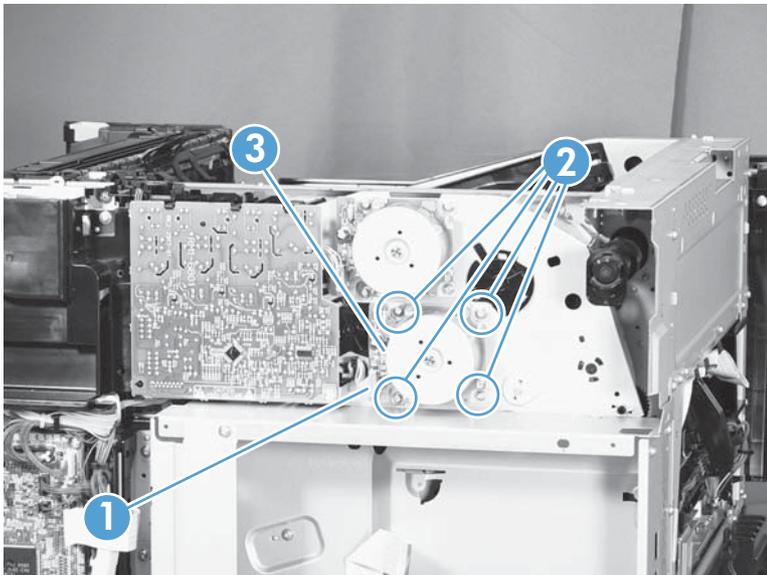
Before proceeding, remove the following components:

- Toner collection unit. See [Toner-collection unit on page 88](#).
- Right-front cover and control-panel assembly. See [Right-front cover and control-panel assembly on page 108](#).
- Left cover. See [Left cover on page 110](#).
- Rear cover. See [Rear cover on page 111](#).
- Toner collection unit access door. See [Toner collection unit access door on page 112](#).
- Right-rear cover. See [Right-rear cover on page 114](#).
- Top cover. See [Top cover on page 115](#).
- Toner cover. See the first and second steps of [Residual toner full sensor on page 145](#).

Remove the developing motor

Disconnect one connector (callout 1), remove four screws (callout 2), and then remove the motor (callout 3).

Figure 2-142 Remove the developing motor



Fuser motor (M4)

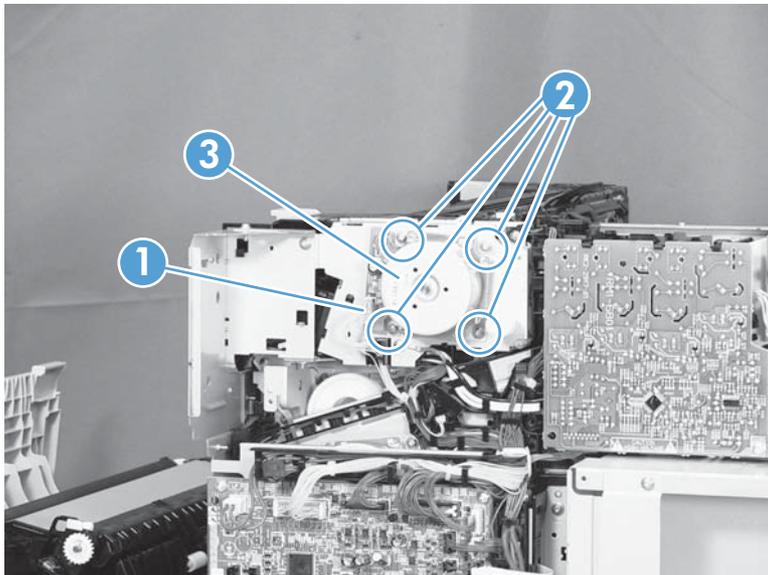
Before proceeding, remove the following components:

- Toner collection unit. See [Toner-collection unit on page 88](#).
- Right-front cover and control-panel assembly. See [Right-front cover and control-panel assembly on page 108](#).
- Left cover. See [Left cover on page 110](#).
- Rear cover. See [Rear cover on page 111](#).
- Toner collection unit access door. See [Toner collection unit access door on page 112](#).
- Right-rear cover. See [Right-rear cover on page 114](#).
- Top cover. See [Top cover on page 115](#).
- Residual toner full sensor. See [Residual toner full sensor on page 145](#).

Remove the fuser motor

Disconnect one connector (callout 1), remove four screws (callout 2), and then remove the motor (callout 3).

Figure 2-143 Remove the fuser motor



Developing-disengagement motor (M6)

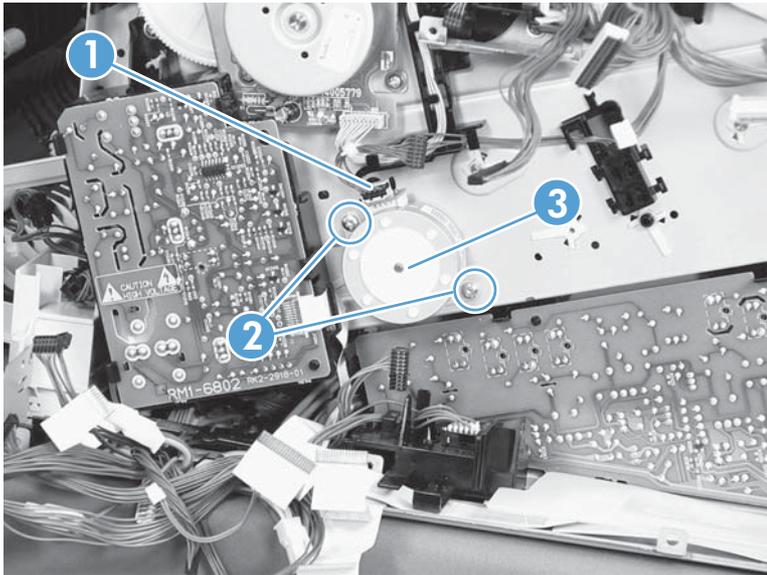
Before proceeding, remove the following components:

- Rear cover. See [Rear cover on page 111](#).
- Right-rear cover. See [Right-rear cover on page 114](#).
- Driver PCA. See [Driver PCA on page 207](#).

Remove the developing-disengagement motor

Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the motor (callout 3).

Figure 2-144 Remove the developing-disengagement motor



Power-supply fan (FM1)

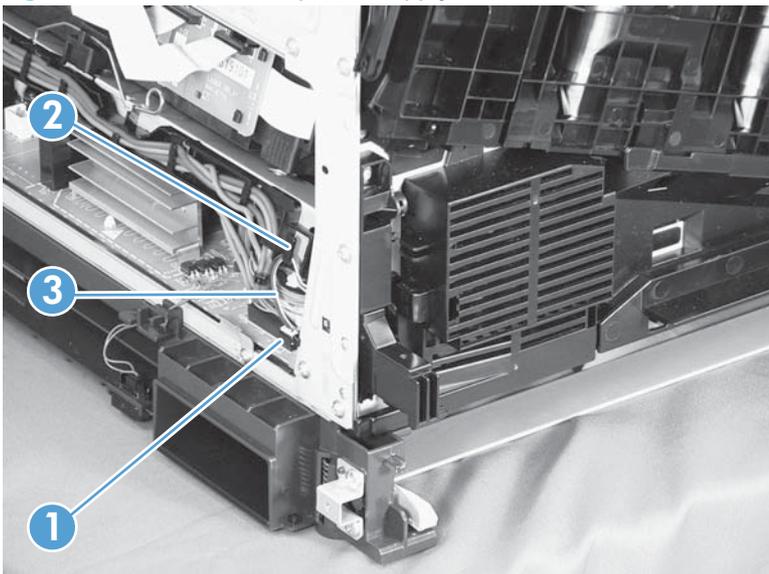
Before proceeding, remove the following components:

- Right-front cover and control-panel assembly. See [Right-front cover and control-panel assembly on page 108](#).
- Left cover. See [Left cover on page 110](#).
- Front-door assembly (steps 1 and 2 only). See [Front-door assembly on page 117](#).

Remove the power-supply fan

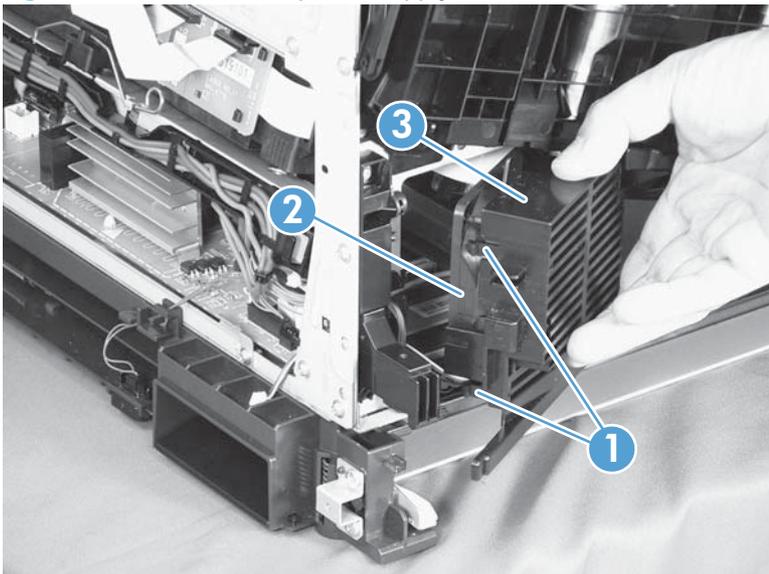
1. Disconnect one connector (callout 1), and then release the cables (callout 3) from the guide (callout 2).

Figure 2-145 Remove the power-supply fan (1 of 3)



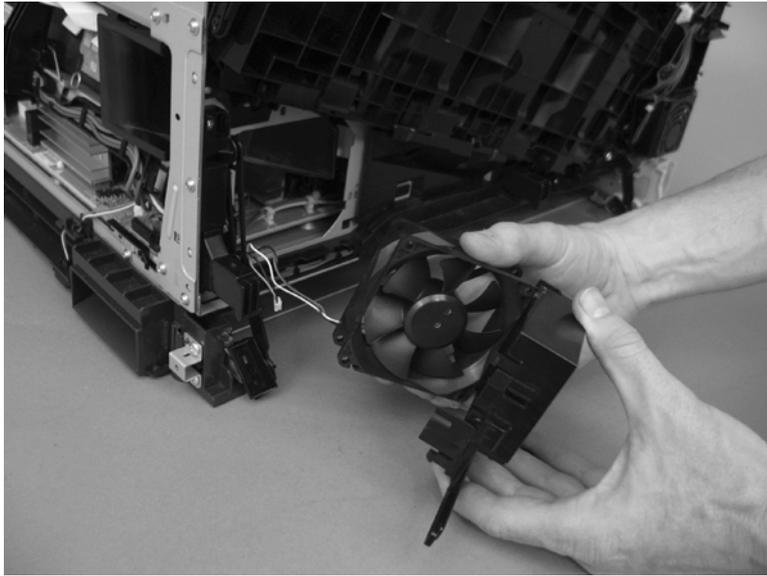
2. Release two tabs (callout 1), and then remove the fan (callout 2) and the fan holder (callout 3) together.

Figure 2-146 Remove the power-supply fan (2 of 3)

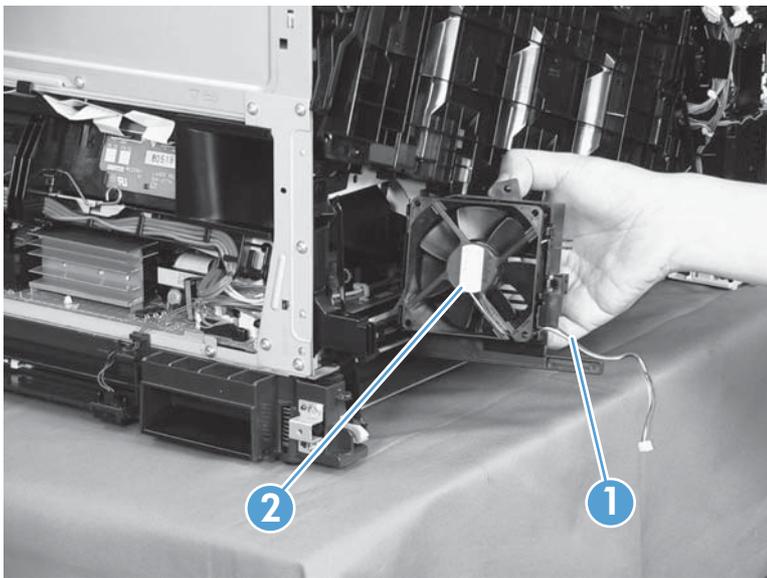


3. Pull on the sides of the fan holder to remove the fan from the holder.

Figure 2-147 Remove the power-supply fan (3 of 3)



 **Reinstallation tip** When reinstalling the fan, verify that the fan cables (callout 1) are positioned as shown and that the label (callout 2) on the fan is facing toward the inside of the product.



Fuser fan (FM2)

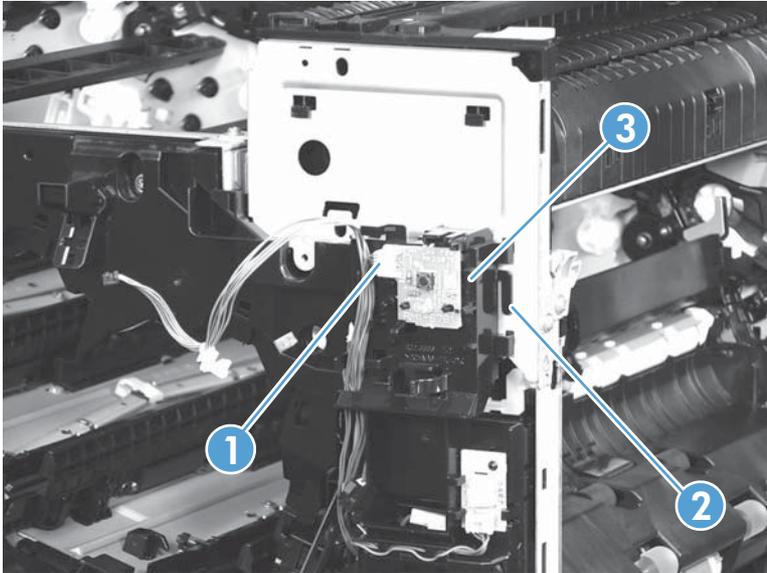
Before proceeding, remove the following components:

- Right-front cover and control-panel assembly. See [Right-front cover and control-panel assembly on page 108](#).

Remove the fuser fan

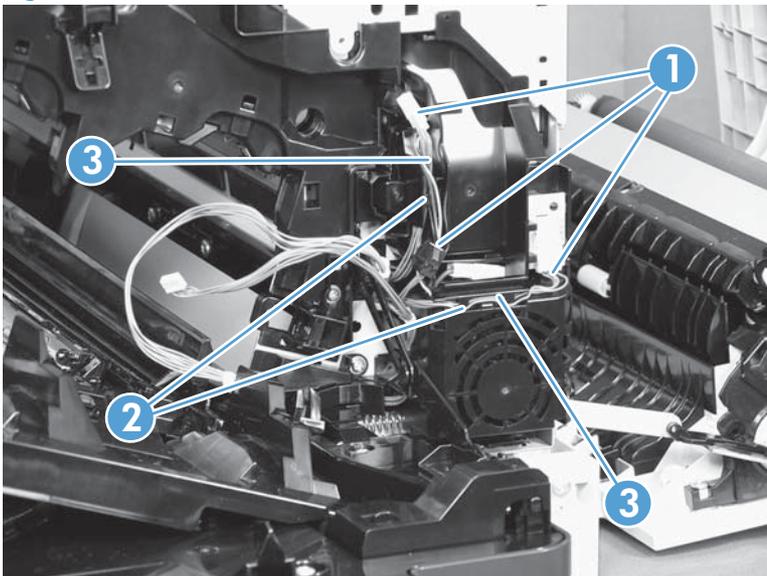
1. Disconnect one connector (callout 1), release one tab (callout 2), and then slide the guide (callout 3) down to remove it.

Figure 2-148 Remove the fuser fan (1 of 4)



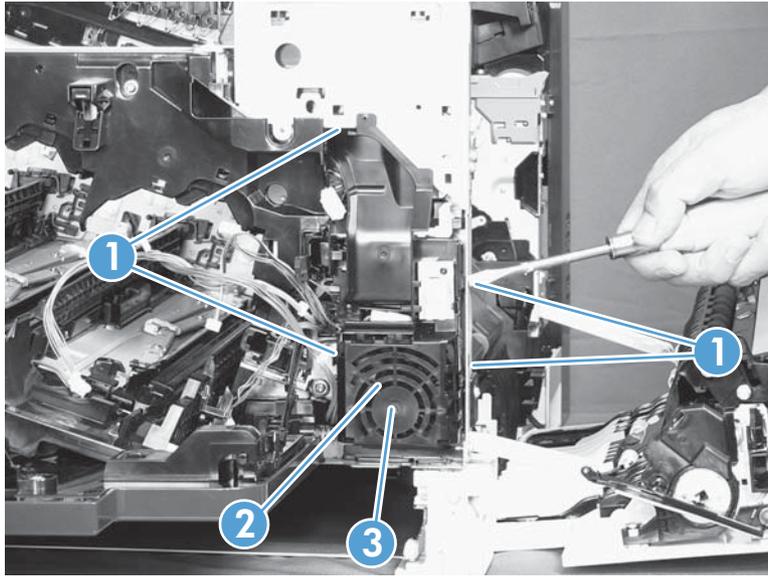
2. Disconnect three connectors (callout 1), and then release the cables (callout 3) from the cable guides (callout 2).

Figure 2-149 Remove the fuser fan (2 of 4)



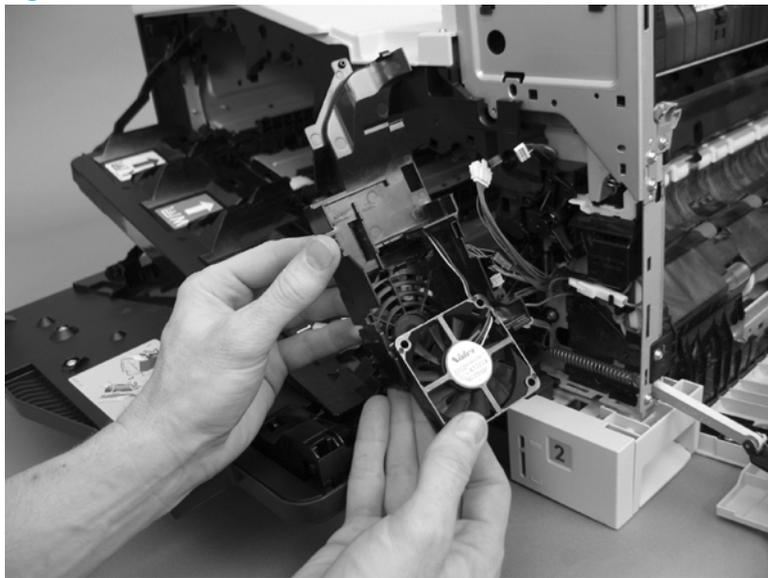
3. Release four tabs (callout 1), and then remove the fan (callout 2) and the fan holder (callout 3) together.

Figure 2-150 Remove the fuser fan (3 of 4)



4. Turn the fan holder over, and then pull the fan out of the holder.

Figure 2-151 Remove the fuser fan (4 of 4)



 **Reinstallation tip** Note the wiring path and label orientation for reinstallation.

Formatter fan (FM3) and ICB PCA

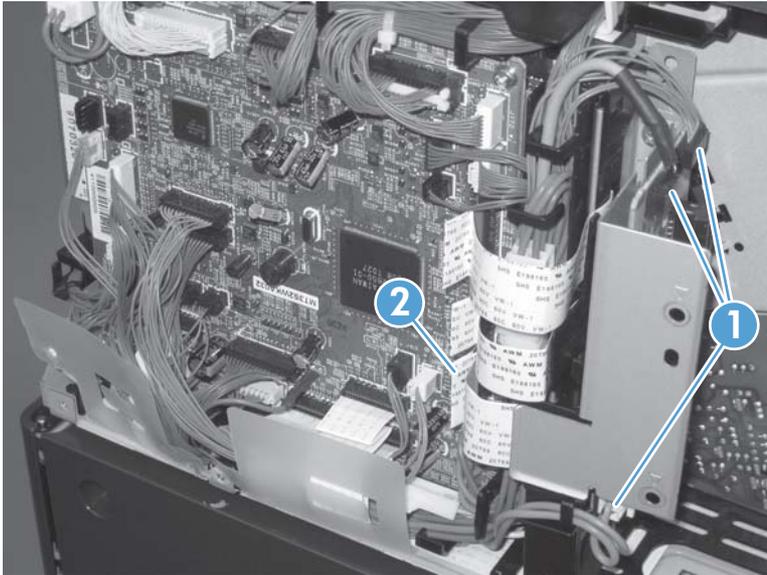
Before proceeding, remove the following components:

- Left cover. See [Left cover on page 110](#).
- Rear cover. See [Rear cover on page 111](#).
- Formatter PCA. See [Formatter PCA on page 100](#).
- Formatter case. See [Formatter case on page 123](#).

Remove the formatter fan and ICB PCA

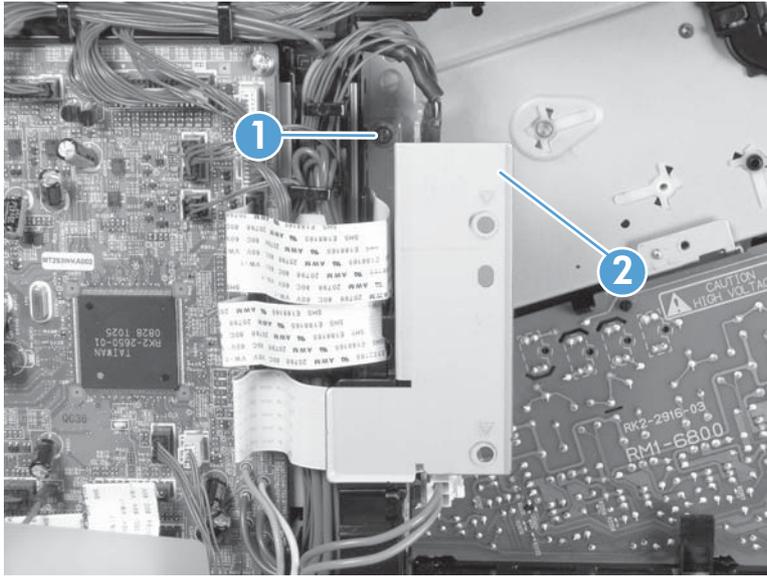
1. Disconnect three connectors (callout 1) and one FFC (callout 2).

Figure 2-152 Remove the formatter fan (1 of 5)



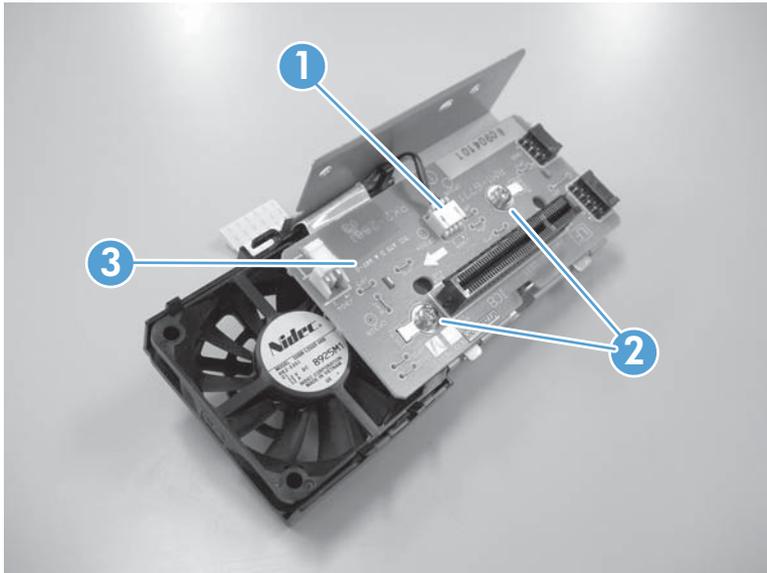
2. Remove one screw (callout 1) and then remove the sheet-metal plate (callout 2).

Figure 2-153 Remove the formatter fan (2 of 5)



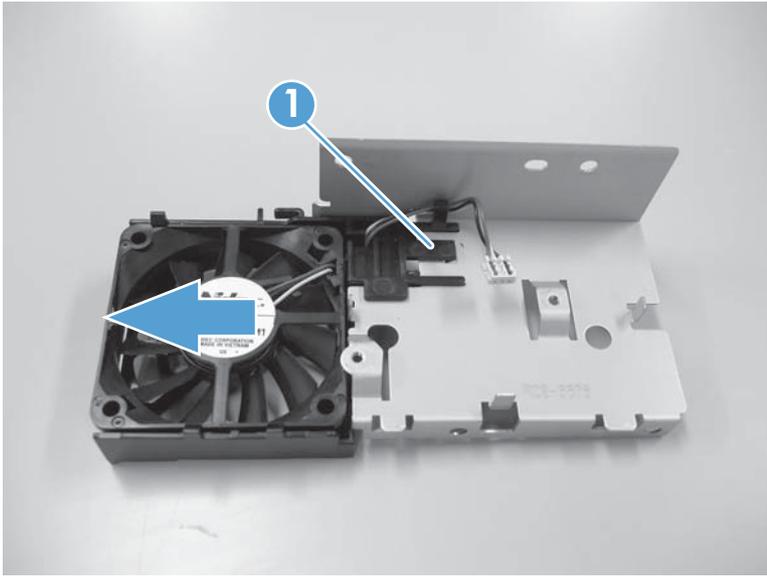
3. Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the inter connect board (IBC) PCA (callout 3) from the assembly.

Figure 2-154 Remove the formatter fan (3 of 5)



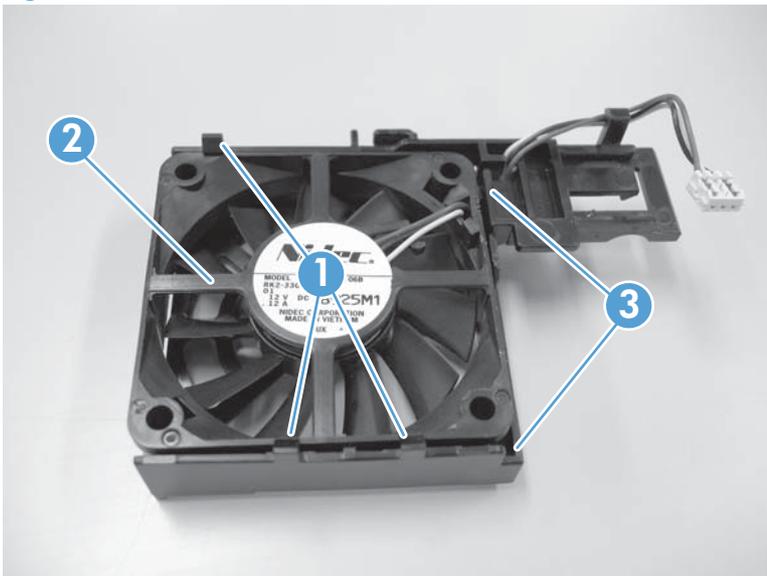
4. Release one tab (callout 1) and slide the formatter fan away from the sheet-metal plate to remove it.

Figure 2-155 Remove the formatter fan (4 of 5)



5. Release three tabs (callout 1) and remove the fan (callout 2) from the holder (callout 3).

Figure 2-156 Remove the formatter fan (5 of 5)



DC controller PCA

CAUTION: Do not replace the DC controller PCA and the formatter PCA at the same time. The settings for the DC Controller PCA are stored in the formatter RAM. When you install a new DC Controller PCA, it reads the settings from the formatter.

Before proceeding, remove the following components:

- Rear cover. See [Rear cover on page 111](#).
- Right-rear cover. See [Right-rear cover on page 114](#).

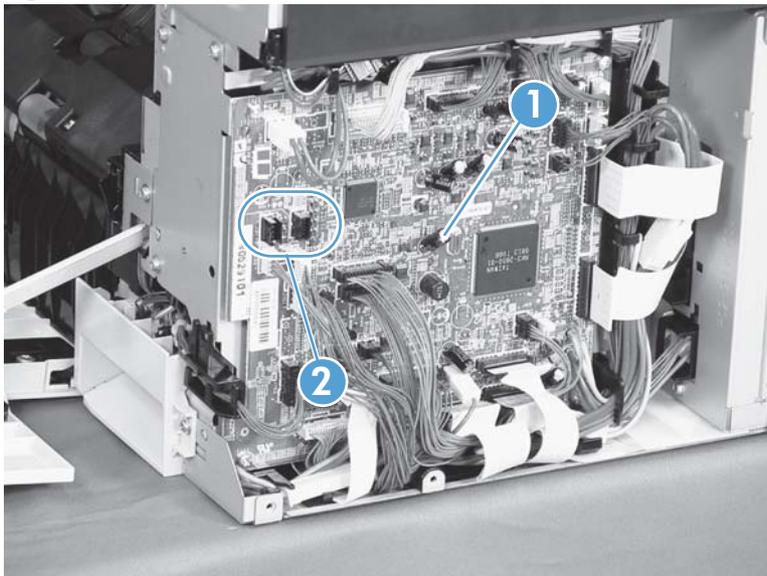
Remove the DC controller PCA

CAUTION:  ESD-sensitive part.

1. Disconnect 22 connectors and six flat cables on the DC controller PCA (callout 1).

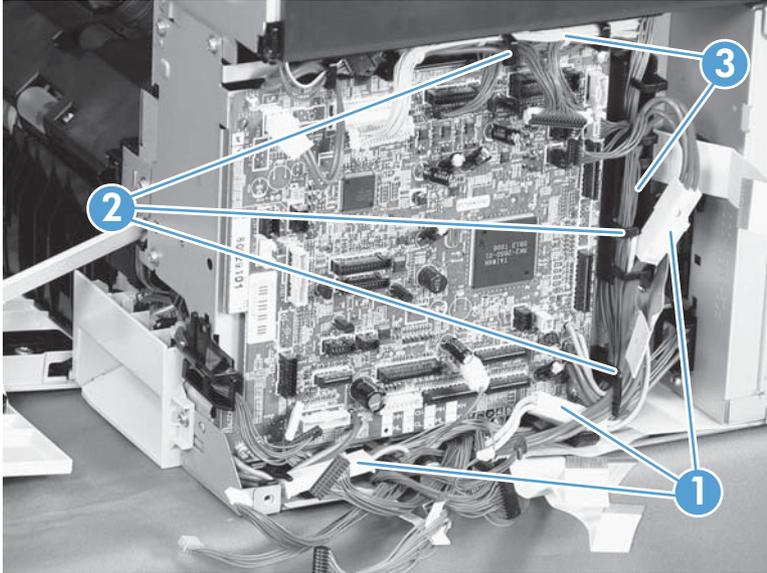
 **Reinstallation tip** Two connectors (callout 2) should be empty when the DC controller is reinstalled. It is typically easier to connect the flat cables last—after all other cables have been connected.

Figure 2-157 Remove the DC controller PCA (1 of 3)



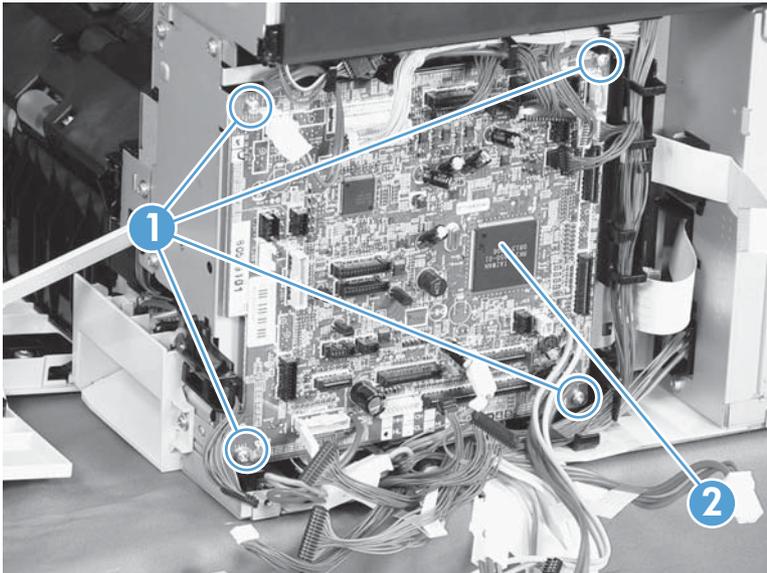
2. Disconnect three intermediate connectors (callout 1), and then release the cables (callout 3) from the cable guides (callout 2) on the top and right sides of the DC controller PCA.

Figure 2-158 Remove the DC controller PCA (2 of 3)



3. Remove four screws (callout 1), and then remove the DC controller PCA (callout 2).

Figure 2-159 Remove the DC controller PCA (3 of 3)



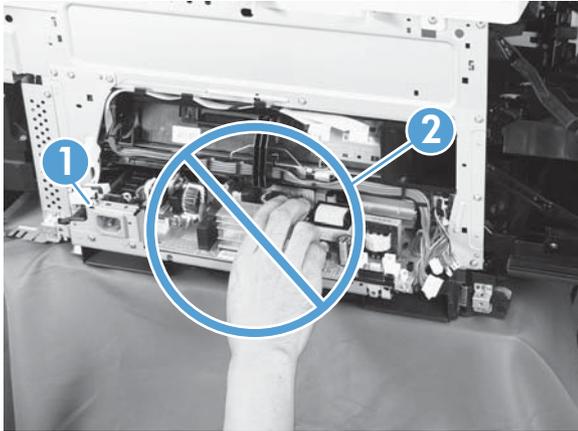
Low-voltage power supply

Before proceeding, remove the following components:

- Tray 2 cassette.
- Left cover. See [Left cover on page 110](#).

Remove the low-voltage power supply

⚠ WARNING! When removing the low-voltage power supply unit (callout 1), do not touch the electric element (callout 2) as shown. Be sure to hold the bottom side of the low-voltage power supply unit.

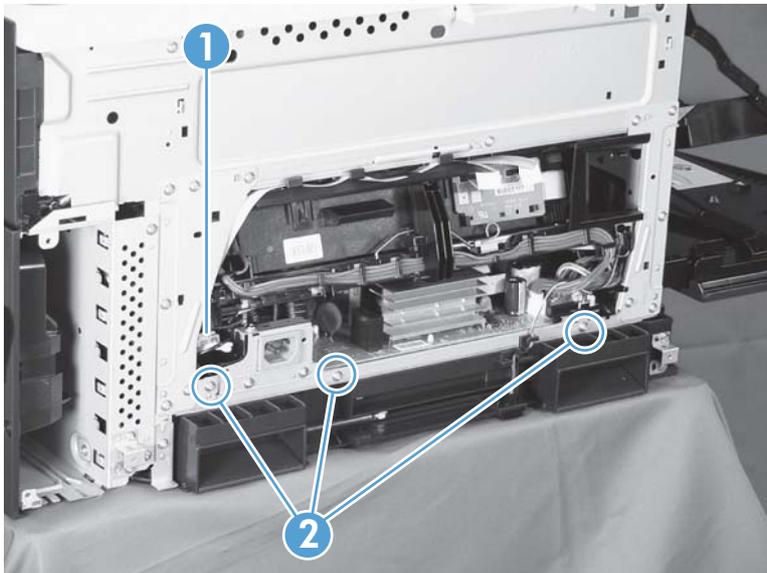


⚠ CAUTION:  ESD-sensitive part.

Unplug the power cord from the product before proceeding.

1. Open the front door, disconnect two connectors (callout 1), and then remove three screws (callout 2) that have a triangular icon next to them.

Figure 2-160 Remove the low-voltage power supply (1 of 3)

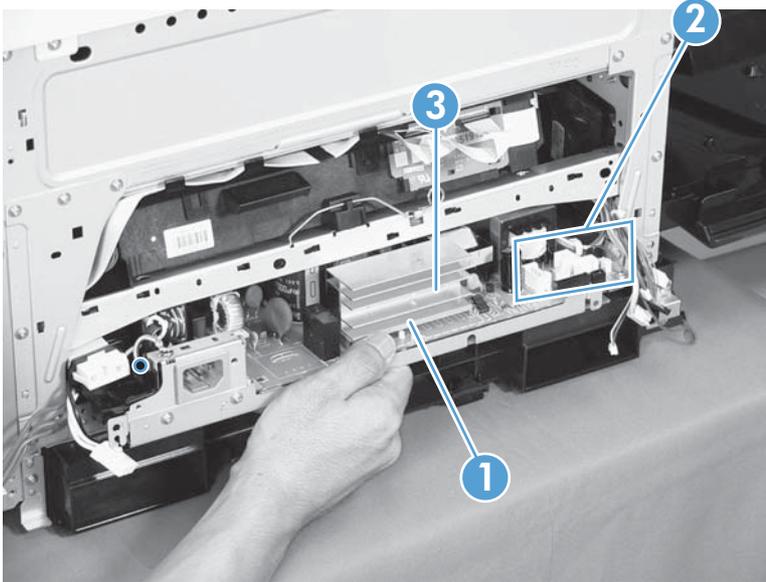


2. Slightly lift up on the low-voltage power supply (callout 1), slide it slightly forward, disconnect eight connectors (callout 2), and then release the cables from the front cable clamp.

⚠ WARNING! Do not use the power supply electric element (callout 3) as a handle to pull out the power supply.

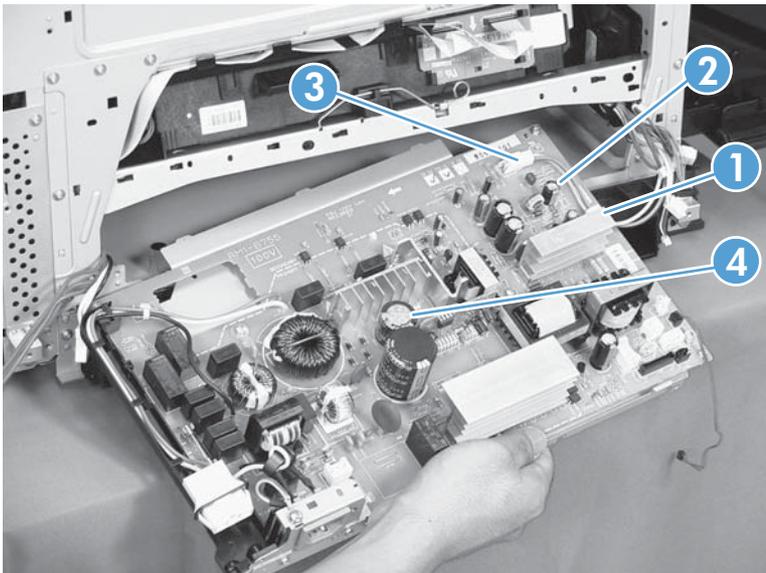
💡 TIP: One of the connectors (callout 2) is located far back inside the product.

Figure 2-161 Remove the low-voltage power supply (2 of 3)

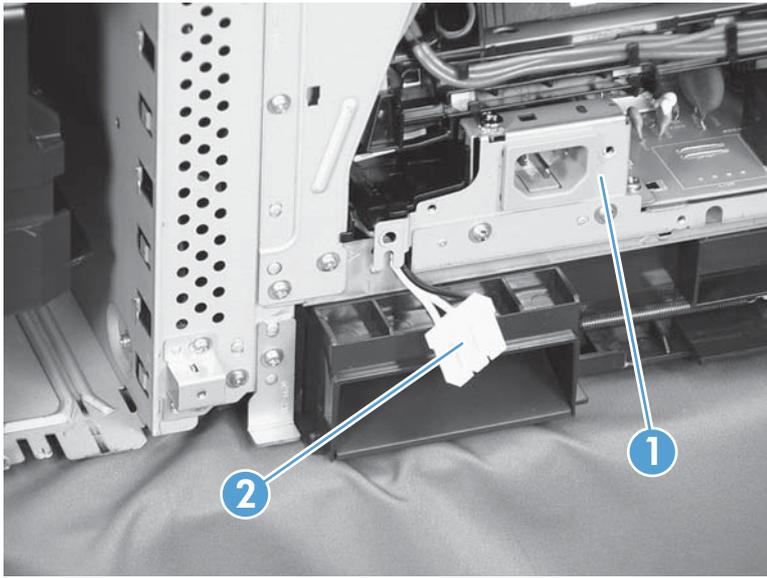


3. Release the cables (callout 2) from the rear cable clamp (callout 1), disconnect one rear connector (callout 3), and then remove the low-voltage power supply unit (callout 4).

Figure 2-162 Remove the low-voltage power supply (3 of 3)



 **Reinstallation tip** When reinstalling the low-voltage power supply unit (callout 1), be careful not to catch the AC cables (callout 2) in the low-voltage power supply unit.



Imaging (developing) high-voltage power supply

Before proceeding, remove the following components:

- Rear cover. See [Rear cover on page 111](#).
- Right-rear cover. See [Right-rear cover on page 114](#).
- Formatter case. See [Formatter case on page 123](#).

Remove the imaging (developing) high-voltage power supply

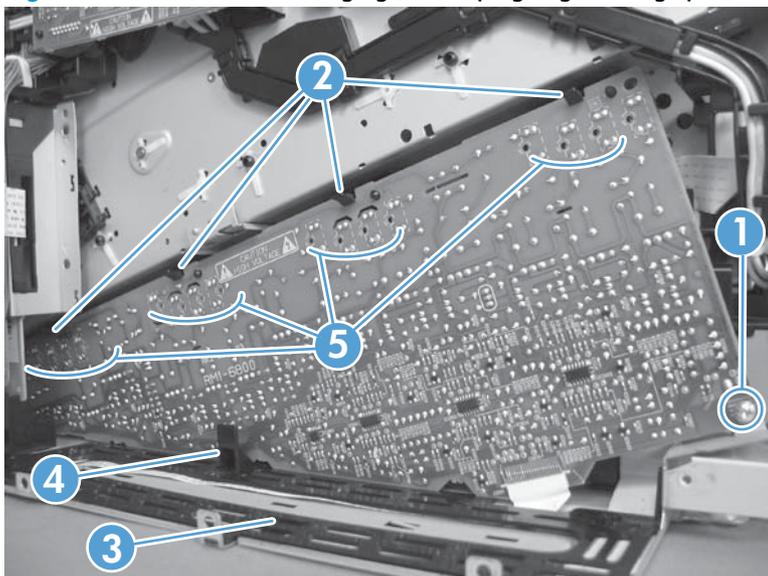
CAUTION:  ESD-sensitive part.

Remove one screw (callout 1), release four tabs (callout 2), remove the cable routing plate (callout 3), and then remove the imaging (developing) high-voltage power supply PCA.

Reinstallation tip  Reinsert the power supply by angling the smaller left end behind the DC controller and driver PCA. Ensure that the power supply sits behind the black tab (callout 4). Carefully press the power supply to engage all four tabs.

When you reinstall the power supply PCA, look through the holes on the PCA (callout 5) and make sure that the contact springs are correctly positioned against the back side of the PCA.

Figure 2-163 Remove the imaging (developing) high-voltage power supply



First transfer high-voltage power supply

Before proceeding, remove the following components:

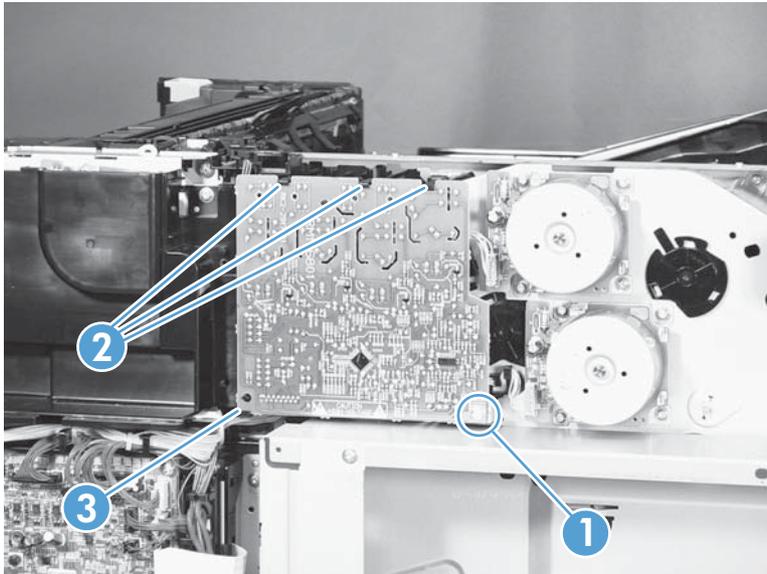
- Toner collection unit. See [Toner-collection unit on page 88](#).
- Right-front cover and control-panel assembly. See [Right-front cover and control-panel assembly on page 108](#).
- Left cover. See [Left cover on page 110](#).
- Rear cover. See [Rear cover on page 111](#).
- Toner collection unit access door. See [Toner collection unit access door on page 112](#).
- Right-rear cover. See [Right-rear cover on page 114](#).
- Top cover. See [Top cover on page 115](#).
- Toner cover. See the first and second steps of [Residual toner full sensor on page 145](#).

Remove the first transfer high-voltage power supply

 **CAUTION:**  ESD-sensitive part.

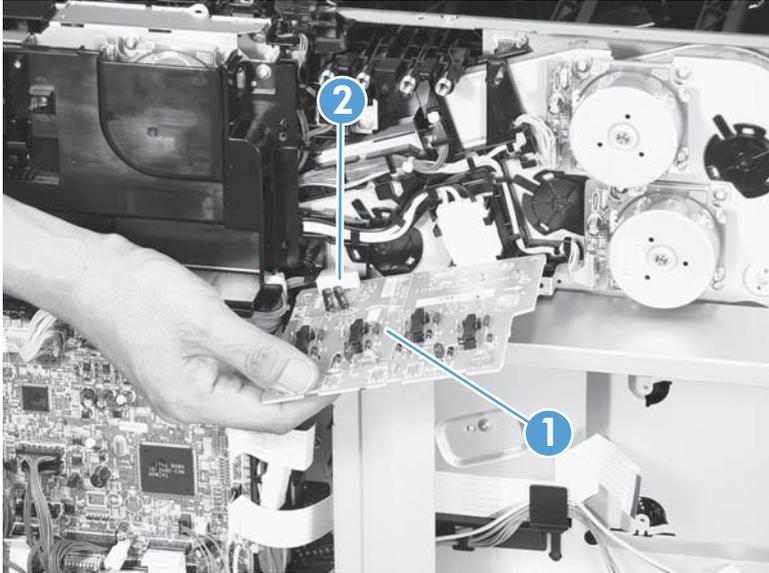
1. Remove one screw (callout 1), release three tabs (callout 2), and then slide the power supply off the alignment post (callout 3).

Figure 2-164 Remove the first transfer high-voltage power supply (1 of 2)



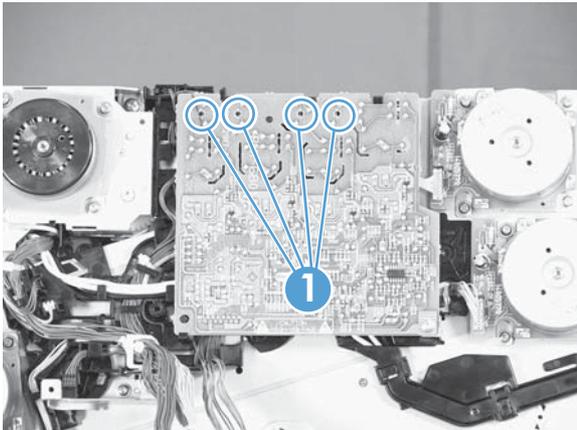
2. Disconnect one connector (callout 2), and then remove the first transfer high-voltage power supply PCA (callout 1).

Figure 2-165 Remove the first transfer high-voltage power supply (2 of 2)



Reinstallation tip When you reinstall the power supply PCA, look through the holes on the PCA (callout 1) and make sure that the contact springs are correctly positioned against the back side of the PCA.

Figure 2-166 Reinstall the first transfer high-voltage power supply



Second transfer high-voltage power supply

Before proceeding, remove the following components:

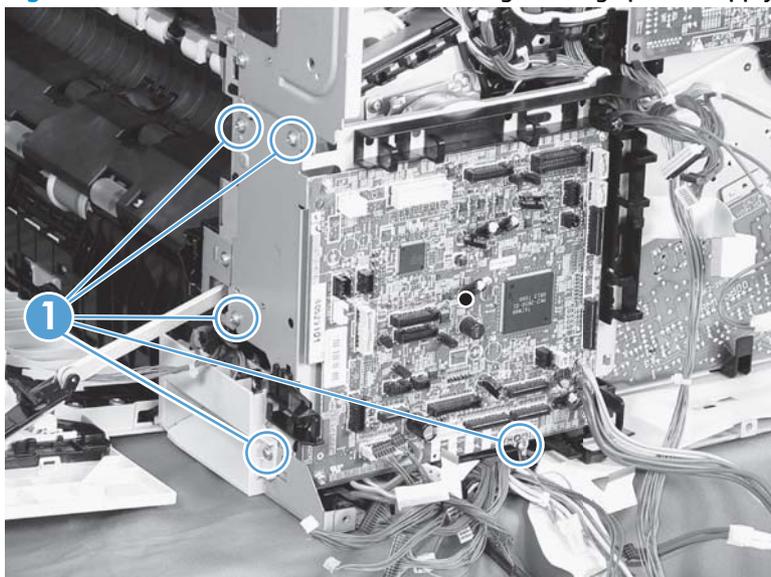
- Rear cover. See [Rear cover on page 111](#).
- Right-rear cover. See [Right-rear cover on page 114](#).

Remove the second transfer high-voltage power supply

 **CAUTION:**  ESD-sensitive part.

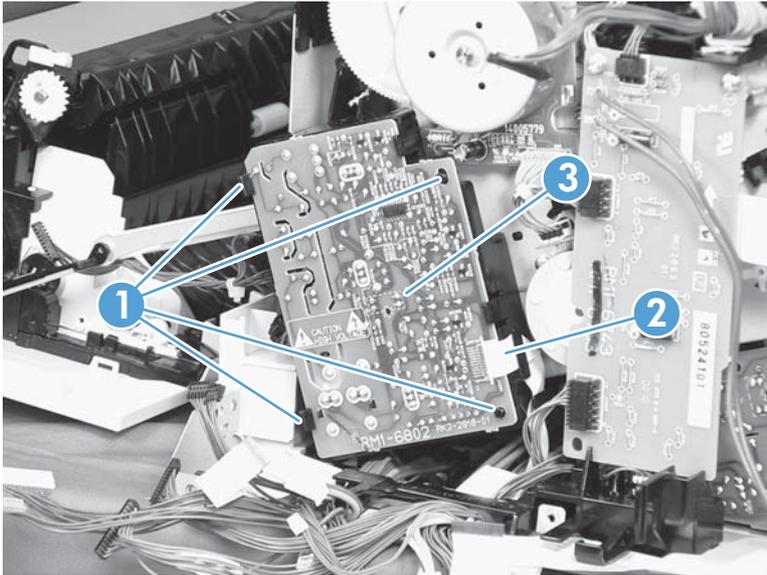
1. Disconnect all of the cables and FFCs from the DC controller (release the cables from the guides), remove five screws (callout 1), and then remove the DC controller and the DC controller support.

Figure 2-167 Remove the second transfer high-voltage power supply (1 of 2)



2. Release four tabs (callout 1), and then unrout the cable (callout 2) as you remove the second transfer high-voltage power supply (callout 3).

Figure 2-168 Remove the second transfer high-voltage power supply (2 of 2)



Driver PCA

Before proceeding, remove the following components:

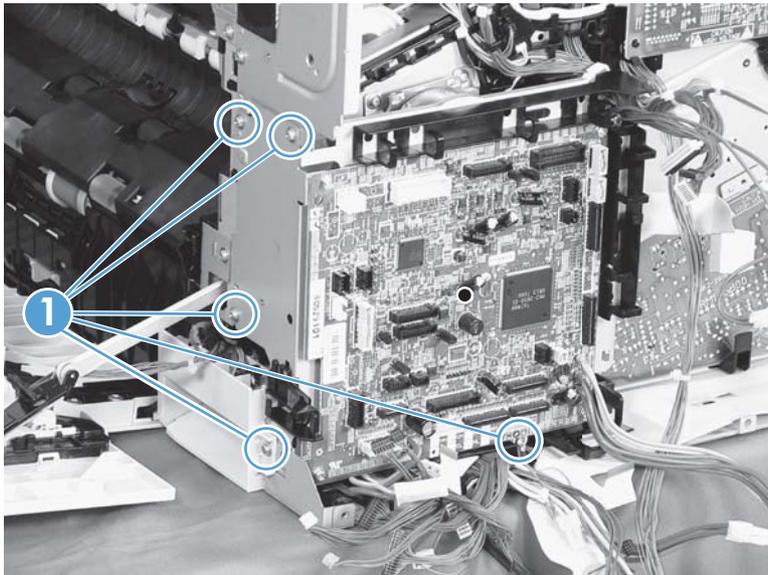
- Rear cover. See [Rear cover on page 111](#).
- Right-rear cover. See [Right-rear cover on page 114](#).

Remove the driver PCA

CAUTION:  ESD-sensitive part.

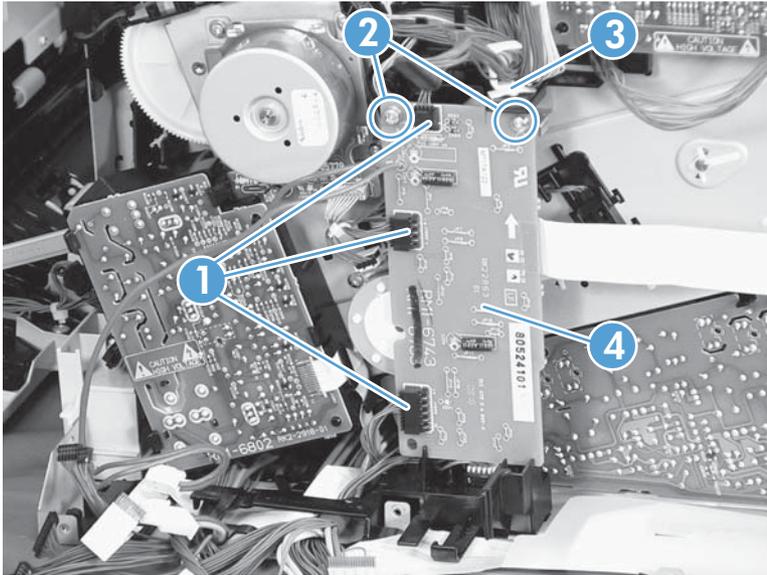
1. Disconnect all of the cables and FFCs from the DC controller (release the cables from the guides), remove six screws (callout 1), and then remove the DC controller and the DC controller support.

Figure 2-169 Remove the driver PCA (1 of 2)



2. Disconnect three connectors (callout 1), remove two screws (callout 2), and then unroute the cable (callout 3) as you remove the driver PCA (callout 4).

Figure 2-170 Remove the driver PCA (2 of 2)



Power switch PCA

Before proceeding, remove the following components:

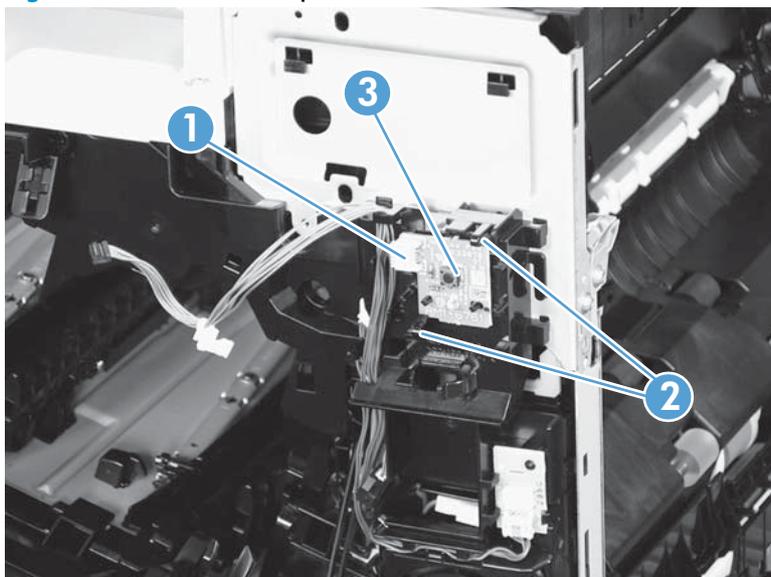
- Right-front cover and control-panel assembly. See [Right-front cover and control-panel assembly on page 108](#).

Remove the power switch PCA

 **CAUTION:**  ESD-sensitive part.

1. Open the front door and the right door.
2. Disconnect one connector (callout 1), release two tabs (callout 2), and then remove the PCA (callout 3).

Figure 2-171 Remove the power switch PCA



Environmental sensor

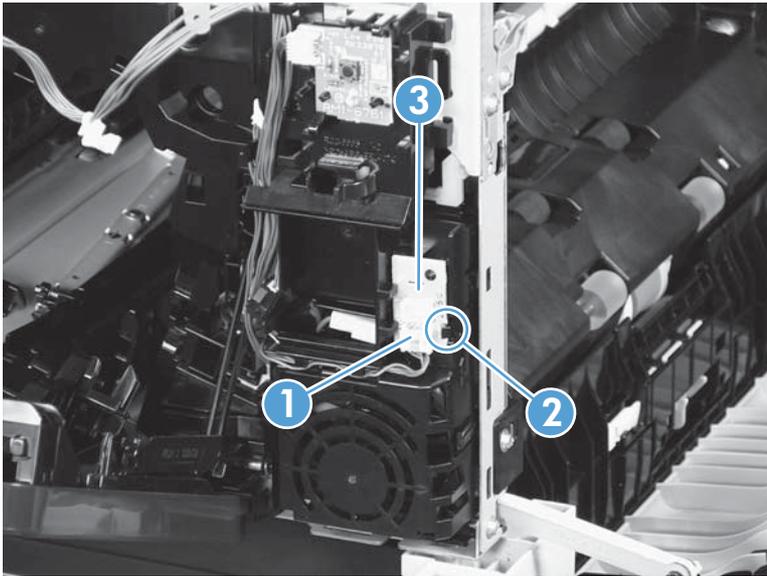
Before proceeding, remove the following components:

- Right-front cover and control-panel assembly. See [Right-front cover and control-panel assembly on page 108](#).

Remove the environmental sensor

1. Open the front door and the right door.
2. Disconnect one connector (callout 1), release one tab (callout 2), and then remove the environmental sensor (callout 3).

Figure 2-172 Remove the environmental sensor

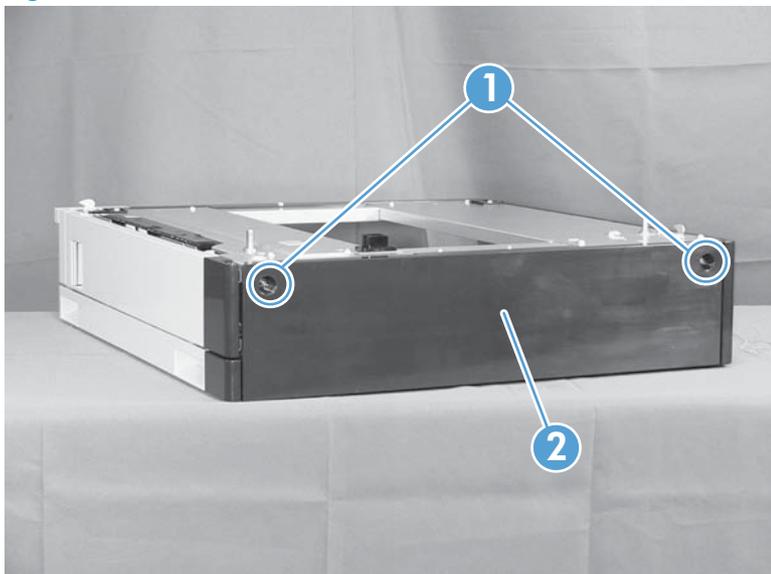


1 x 500-sheet paper feeder assembly

1 x 500 rear cover

Remove two screws (callout 1), and then remove the rear cover (callout 2).

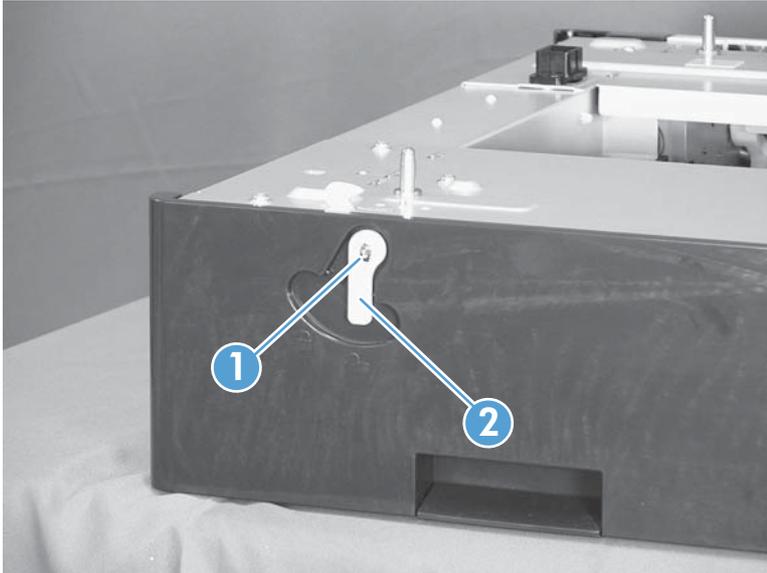
Figure 2-173 Remove the 1 x 500 rear cover



1 x 500 left cover

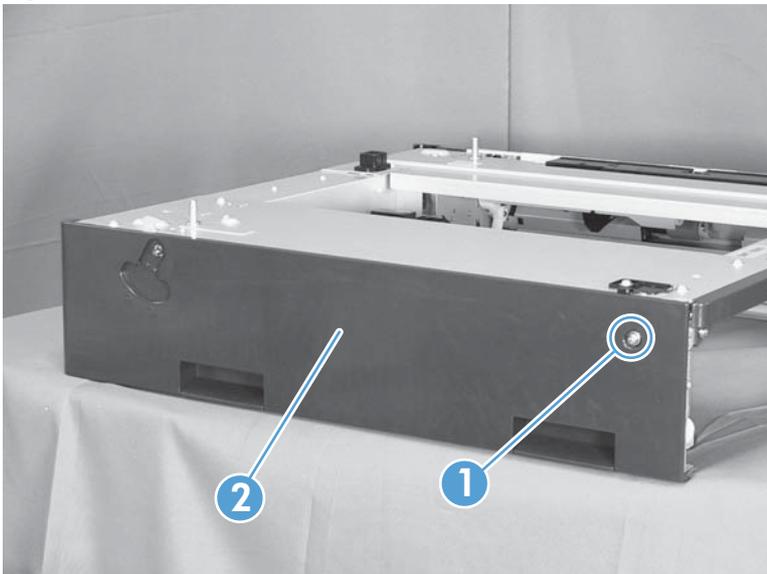
1. Take the cassette out of the feeder, release one tab (callout 1), and then remove the lever (callout 2).

Figure 2-174 Remove the 1 x 500 left cover (1 of 2)

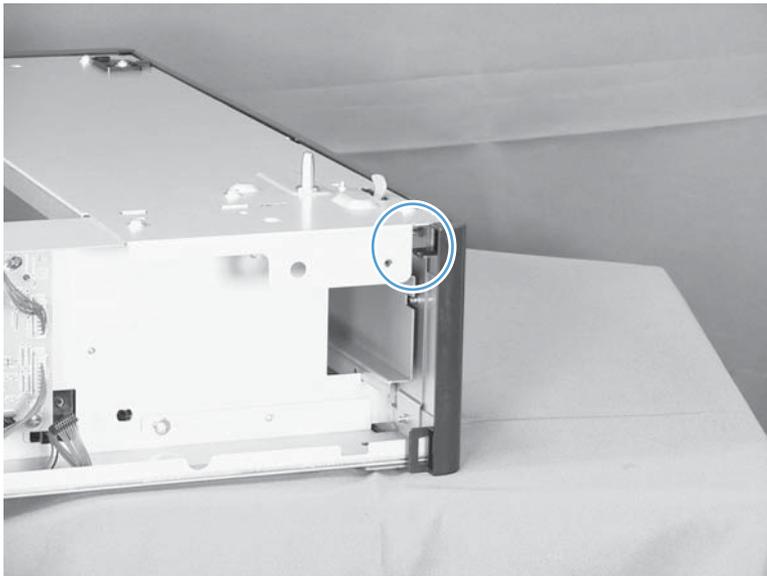
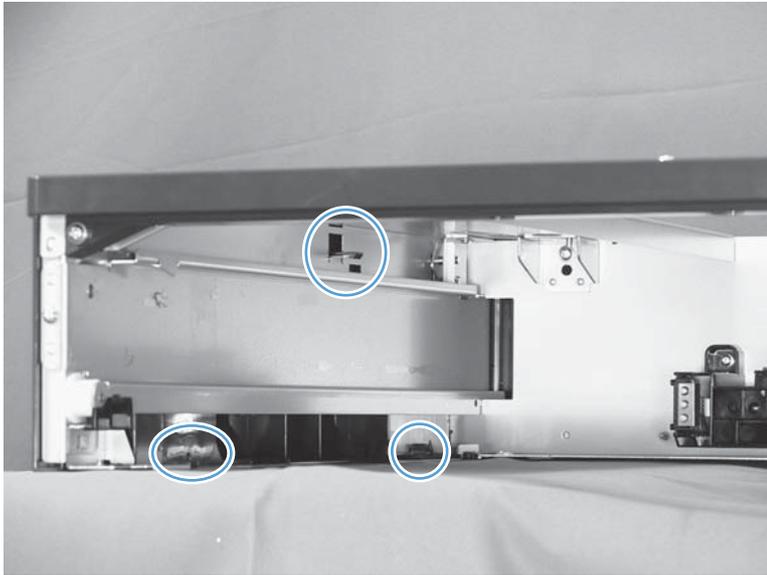


2. Remove one screw (callout 1), release four tabs from the inside (see the tip that follows this step), and then remove the left cover (callout 2).

Figure 2-175 Remove the 1 x 500 left cover (2 of 2)



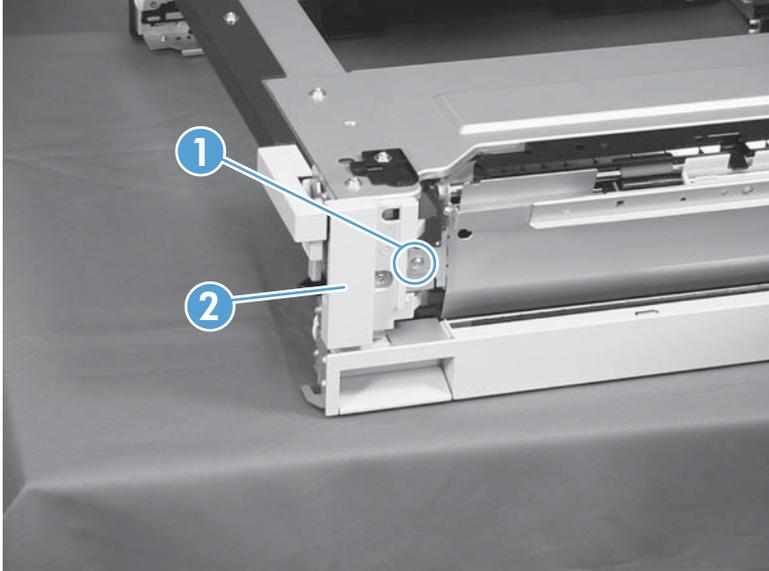
 **TIP:** The following figures show the tabs inside the cover.



1 x 500 right-front cover

1. Take the cassette out of the feeder, and then open the right door.
2. Remove one screw (callout 1), and then remove the right-front cover (callout 2).

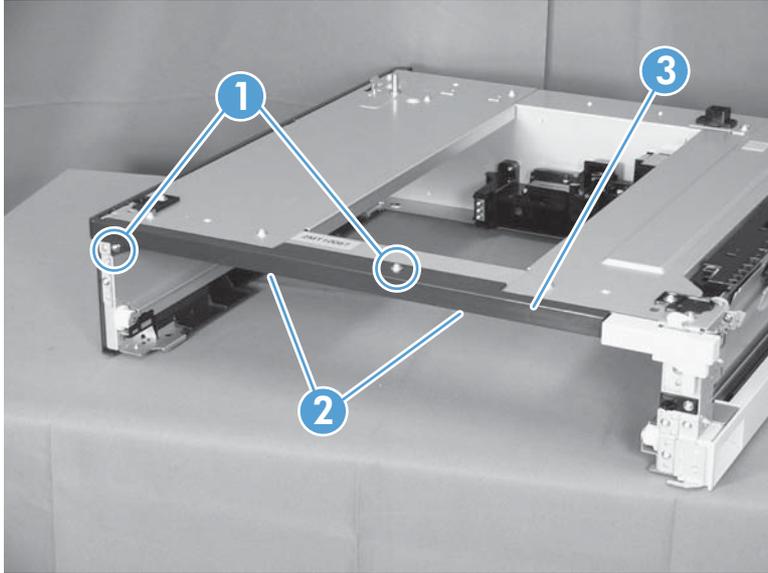
Figure 2-176 Remove the 1 x 500 right-front cover



1 x 500 front-upper cover

1. Remove the cassette from the feeder, and then remove the right-front cover (see [1 x 500 right-front cover on page 214](#)).
2. Remove two screws (callout 1), release two tabs (callout 2), and then remove the front upper cover unit (callout 3).

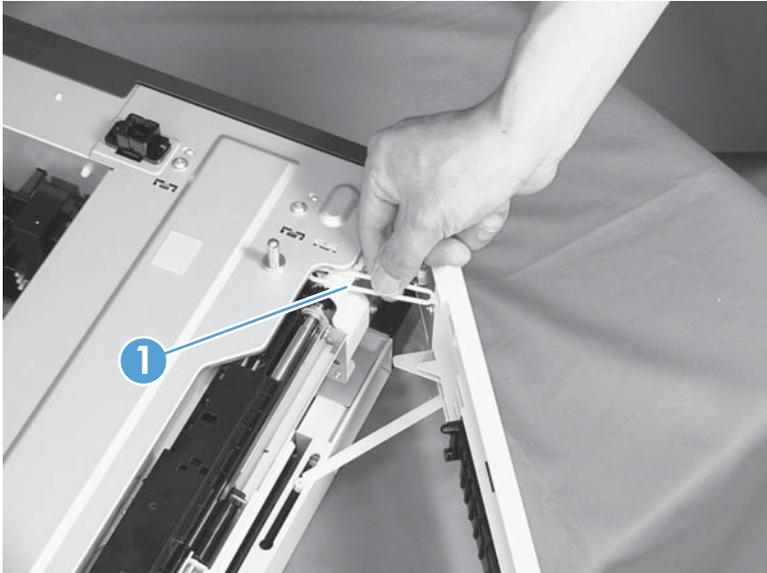
Figure 2-177 Remove the 1 x 500 front-upper cover



1 x 500 right door

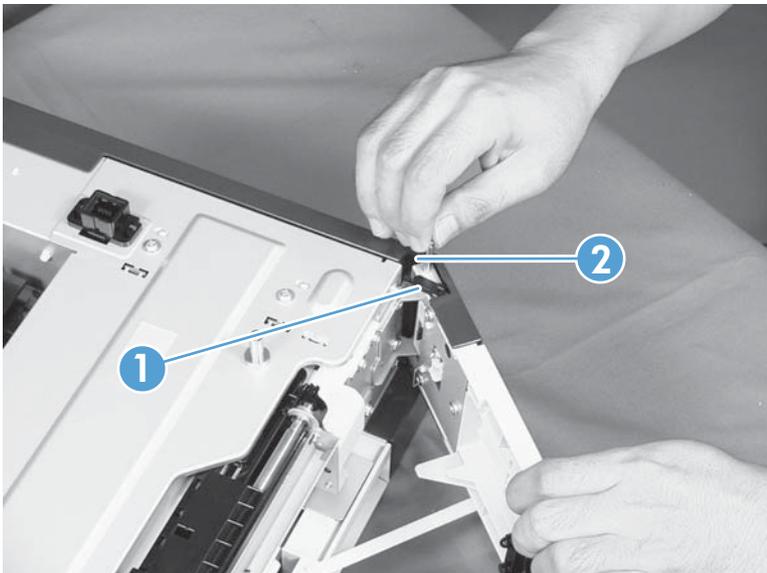
1. Lift the product off the feeder, and then open the tray right door.
2. Release the link arm (callout 1).

Figure 2-178 Remove the 1 x 500 right door (1 of 3)



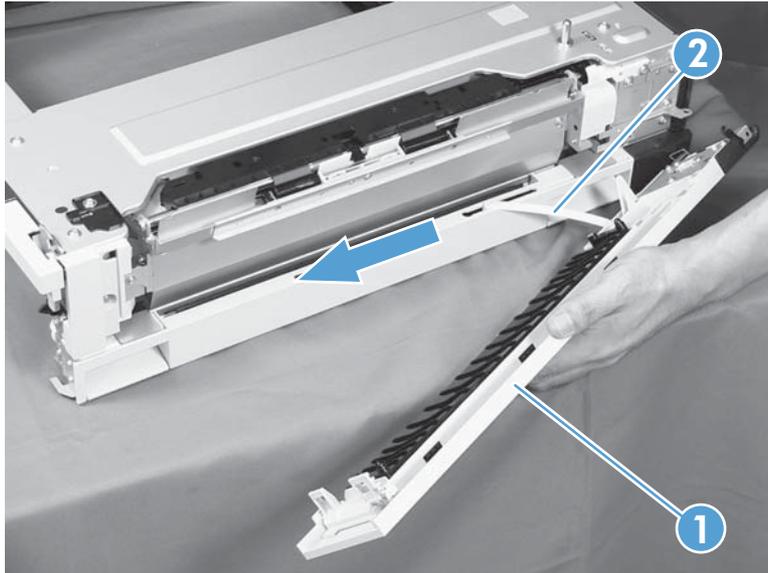
3. Release the stopper (callout 1), and then release the shaft (callout 2).

Figure 2-179 Remove the 1 x 500 right door (2 of 3)



4. Slide the right door (callout 1) and the arm (callout 2) in the direction that the arrow indicates to remove them together, and then remove the arm from the right door unit.

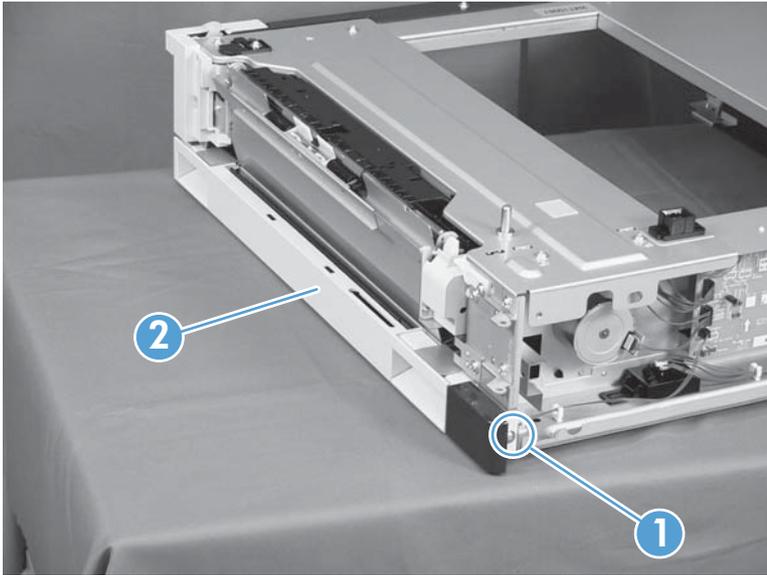
Figure 2-180 Remove the 1 x 500 right door (3 of 3)



1 x 500 right-lower cover

1. Remove the cassette from the feeder, and then remove the right door (see [1 x 500 right door on page 216](#)).
2. Remove one screw (callout 1), and then slide the cover (callout 2) to the right to clear an alignment pin at the left side of the cover.

Figure 2-181 Remove the 1 x 500 right-lower cover

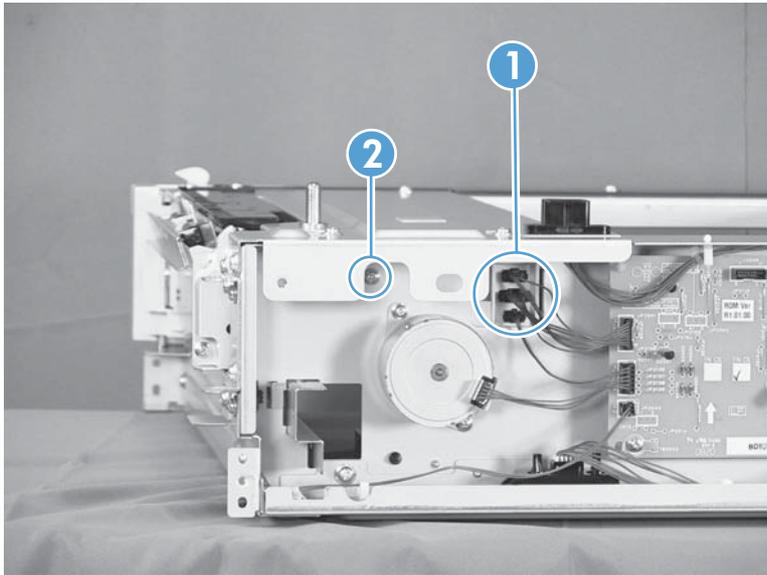


1 x 500 pickup assembly

Before proceeding, remove the following components:

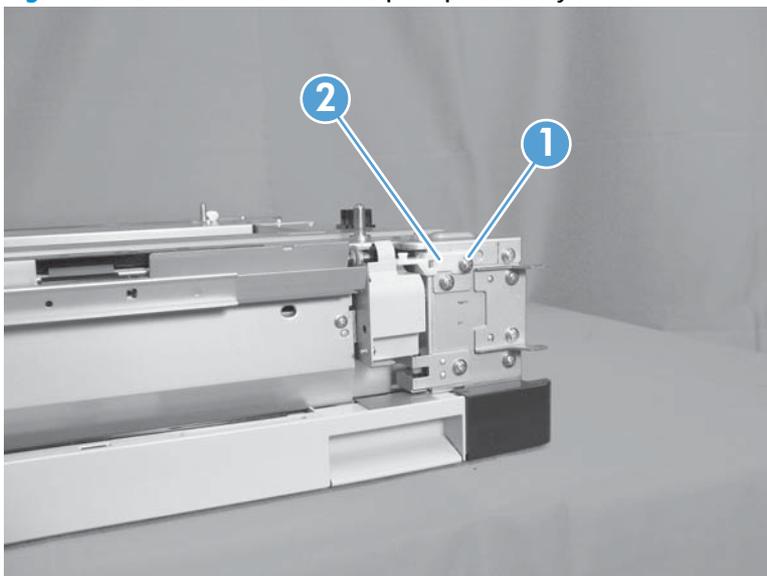
- Rear cover. See [1 x 500 rear cover on page 211](#).
 - Right-front cover. See [1 x 500 right-front cover on page 214](#).
 - Right door. See [1 x 500 right door on page 216](#).
 - Right-lower cover. See [1 x 500 right-lower cover on page 218](#).
1. Disconnect three connectors (callout 1), and then remove one screw (callout 2).

Figure 2-182 Remove the 1 x 500 pickup assembly (1 of 4)



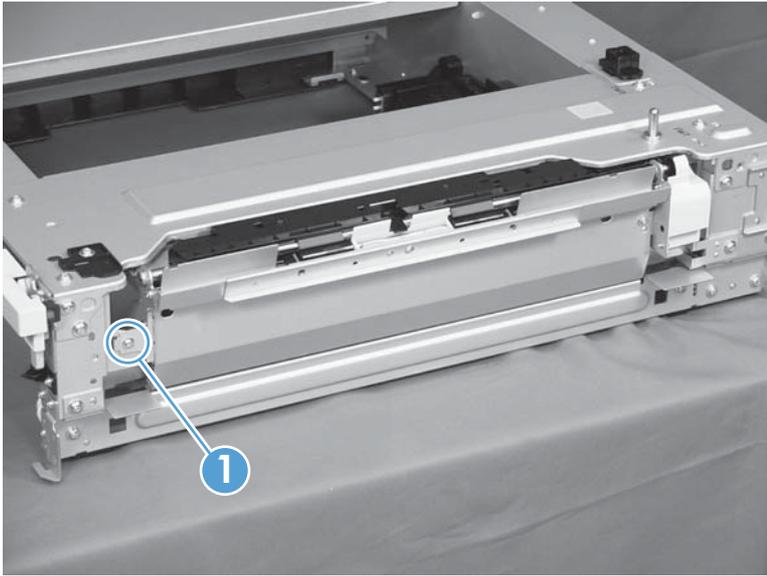
2. Remove one screw (callout 1), and then remove the stopper of the right-door link (callout 2).

Figure 2-183 Remove the 1 x 500 pickup assembly (2 of 4)



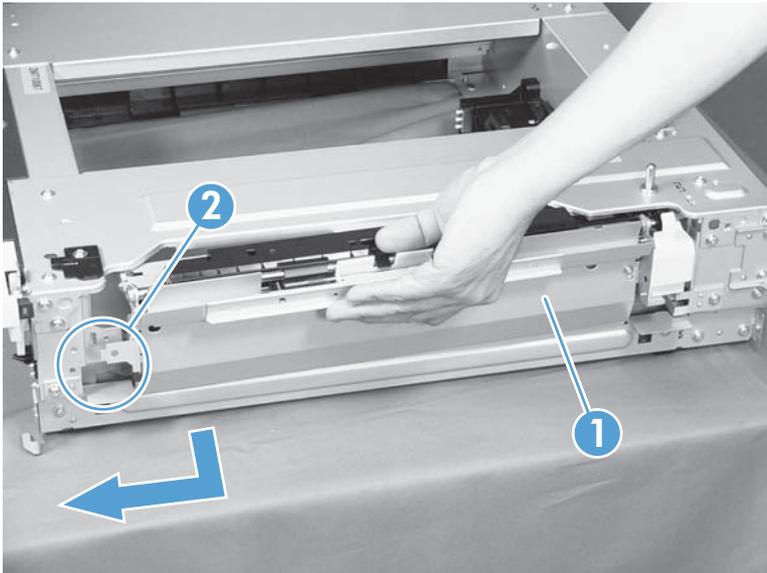
3. Remove one screw (callout 1).

Figure 2-184 Remove the 1 x 500 pickup assembly (3 of 4)

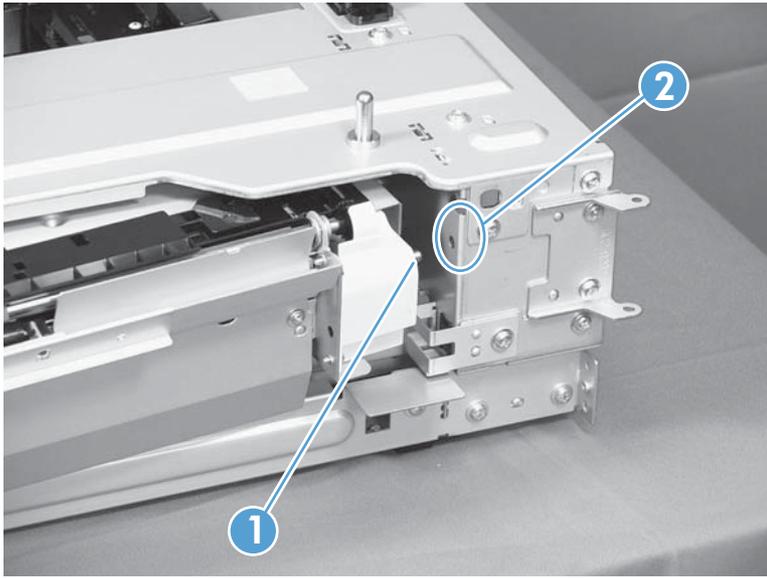


4. Lift the 1 x 500 pickup assembly (callout 1) slightly to clear a tab (callout 2), and then slide it in the direction that the arrow indicates to remove it.

Figure 2-185 Remove the 1 x 500 pickup assembly (4 of 4)



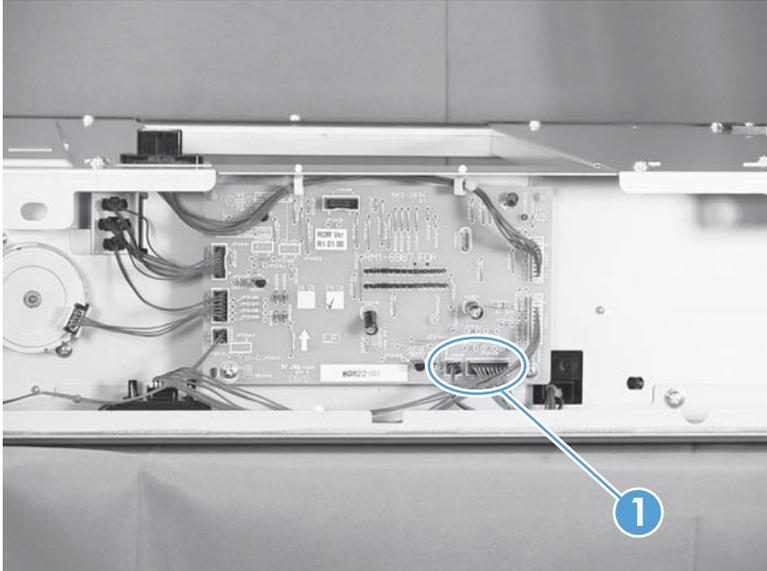
 **Reinstallation tip** When reassembling the 1 x 500 pickup assembly, be sure to fit the shaft (callout 1) on the assembly to the hole (callout 2) in the feeder.



1 x 500 lifter-drive assembly

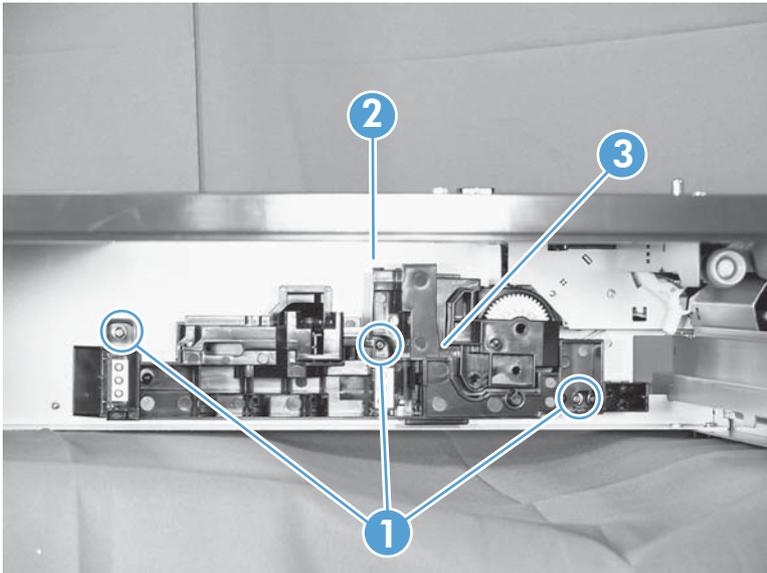
1. Remove the cassette from the feeder, and then remove the rear cover (see [1 x 500 rear cover on page 211](#)).
2. Disconnect two connectors (callout 1).

Figure 2-186 Remove the 1 x 500 lifter-drive assembly (1 of 2)



3. From the front, inside the tray cavity, remove three screws (callout 1), release one tab (callout 2), and then remove the 1 x 500 lifter-drive assembly (callout 3).

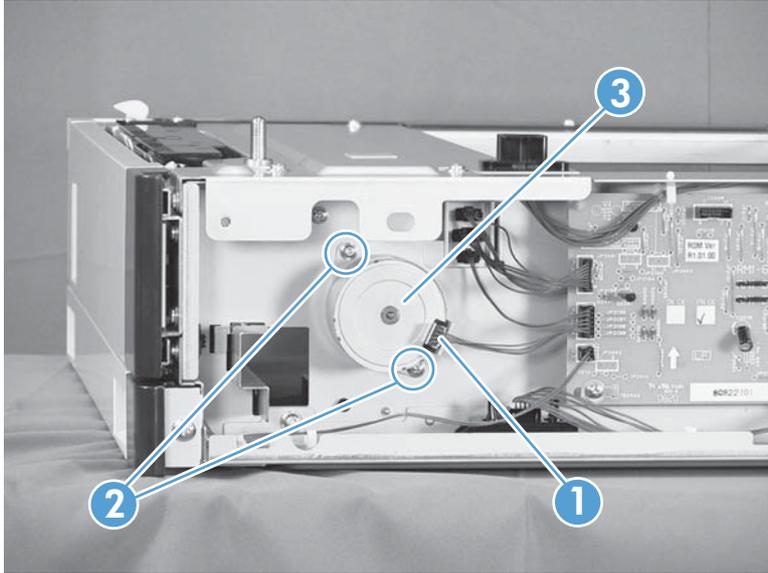
Figure 2-187 Remove the 1 x 500 lifter-drive assembly (2 of 2)



1 x 500 pickup motor

1. Remove the cassette from the feeder, and then remove the rear cover (see [1 x 500 rear cover on page 211](#)).
2. Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the 1 x 500 pickup motor (callout 3).

Figure 2-188 Remove the 1 x 500 pickup motor

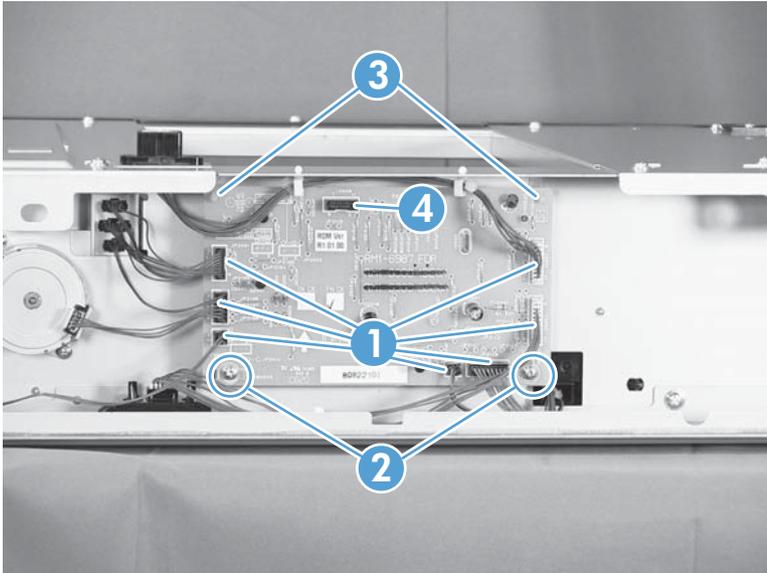


1 x 500 driver PCA

1. Remove the cassette from the feeder, and then remove the rear cover (see [1 x 500 rear cover on page 211](#)).
2. Disconnect seven connectors (callout 1), remove two screws (callout 2), release two tabs (callout 3), and then remove the 1 x 500 driver PCA.

 **NOTE:** One connector (callout 4) on the 1 x 500 driver PCA remains empty.

Figure 2-189 Remove the 1 x 500 driver PCA

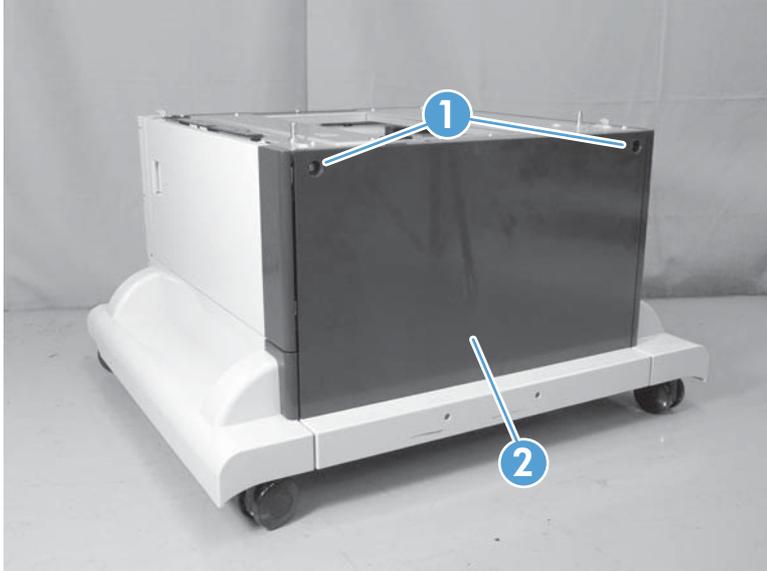


3 x 500-sheet paper feeder (optional accessory)

3 x 500 rear cover

Remove two screws (callout 1), and then remove the 3 x 500 rear cover (callout 2).

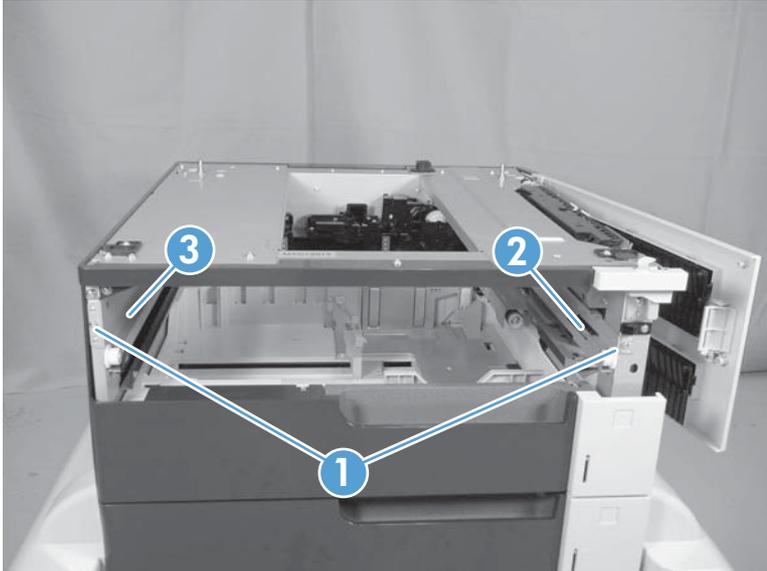
Figure 2-190 Remove the 3 x 500 rear cover



3 x 500 right and left cassette rails

1. Remove a cassette.
2. Remove two screws (callout 1), and then remove the 3 x 500 right (callout 2) and left (callout 3) cassette rails. Repeat this procedure for the remaining cassette rails.

Figure 2-191 Remove the 3 x 500 right and left cassette rails

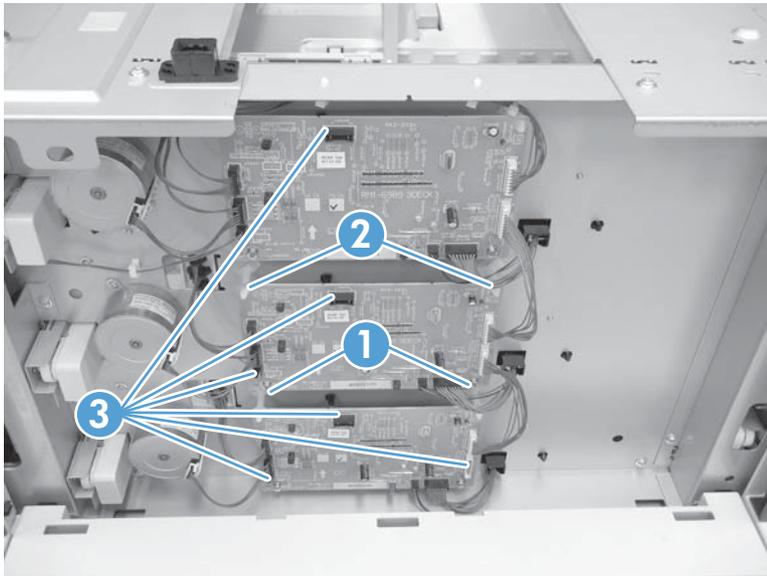


3 x 500 paper deck controller PCAs

1. Remove the 3 x 500 rear cover (see [3 x 500 rear cover on page 225](#)).
2. Disconnect all of the connectors for the desired PCA.
 - The top PCA has seven connectors.
 - The middle PCA has six connectors.
 - The bottom PCA has five connectors.
3. Remove two screws (callout 1), release two tabs (callout 2), and then remove the PCA. Repeat this procedure for the remaining PCAs.

 **NOTE:** Some connectors (callout 3) on the PCAs are not used.

Figure 2-192 Remove the 3 x 500 paper deck controller PCA

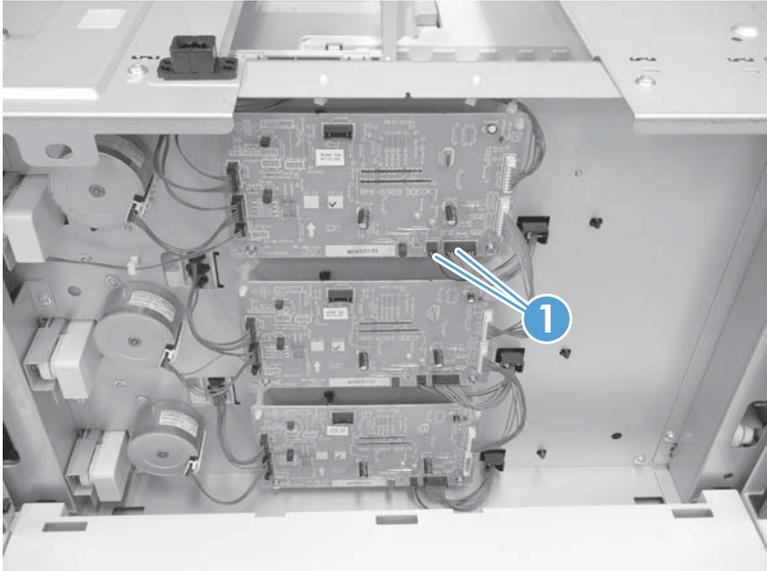


3 x 500 paper deck lifter-drive assembly

This procedure describes removing the paper deck cassette 1 lifter-drive assembly. Use this procedure for any of the paper deck lifter assemblies.

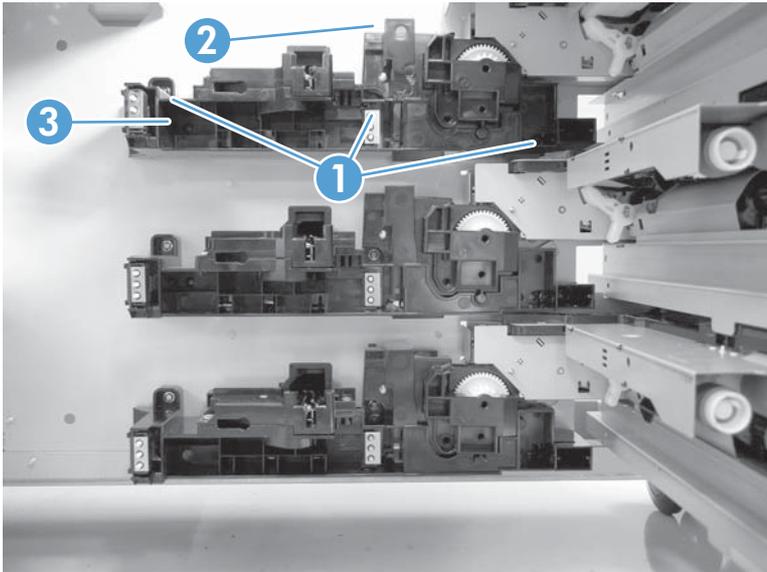
1. Remove the 3 x 500 rear cover. See [3 x 500 rear cover on page 225](#).
2. Disconnect two connectors (callout 1).

Figure 2-193 Remove the 3 x 500 paper deck lifter-drive assembly (1 of 2)



3. Remove all of the cassettes, remove three screws (callout 1), release one tab (callout 2), and then remove the cassette lifter assembly (callout 3).

Figure 2-194 Remove the 3 x 500 paper deck lifter-drive assembly (2 of 2)

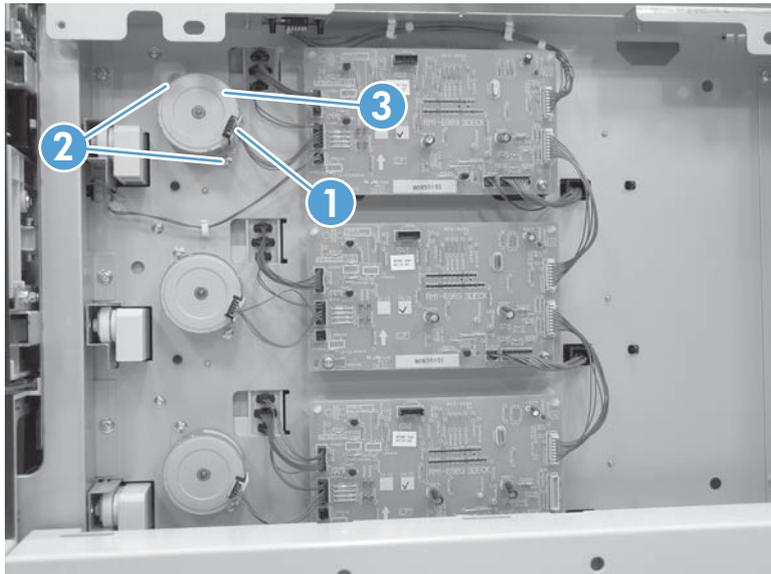


3 x 500 paper deck pickup motor

This procedure describes removing the paper deck cassette 1 pickup motor. Use this procedure for any of the paper deck pickup motors.

1. Remove the 3 x 500 rear cover. See [3 x 500 rear cover on page 225](#).
2. Disconnect one connector (callout 1), remove two screws (callout 2), and then remove the cassette pickup motor (callout 3).

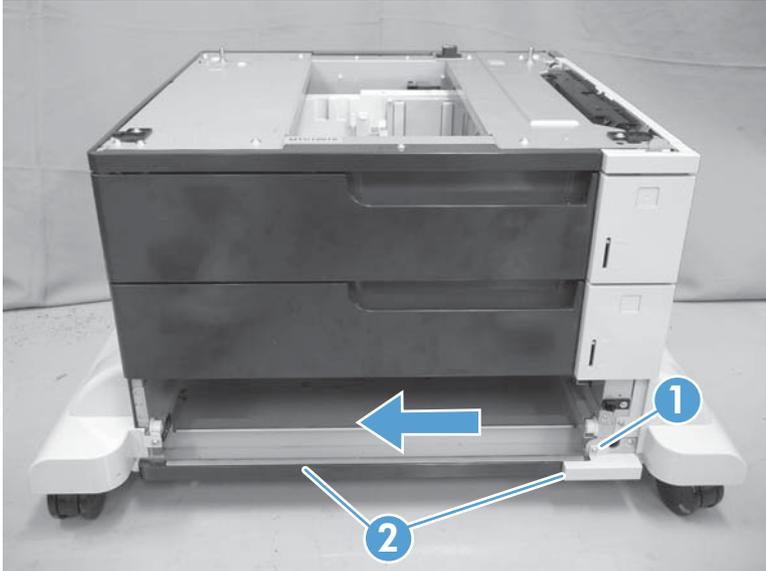
Figure 2-195 Remove the 3 x 500 paper deck pickup motor



3 x 500 front-lower cover

1. Remove the lowest cassette.
2. Remove one screw (callout 1), and then slide the 3 x 500 front-lower cover (callout 2) toward the left side of the feeder to remove it.

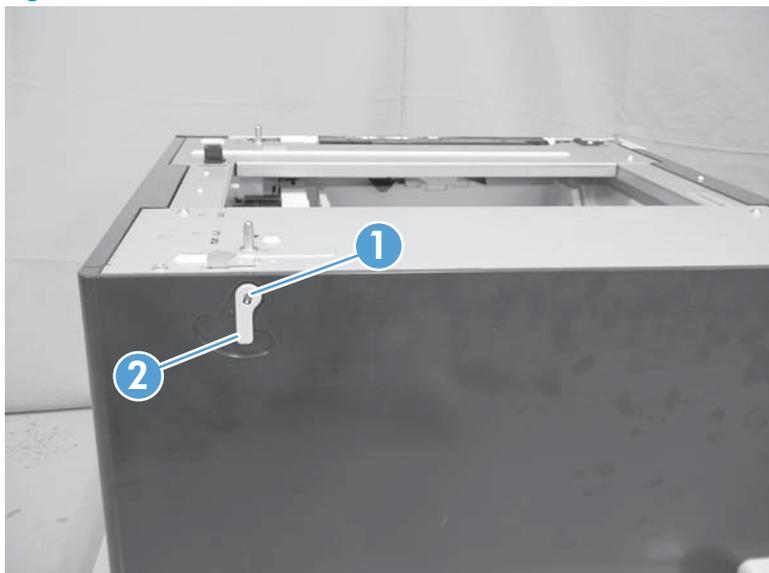
Figure 2-196 Remove the 3 x 500 front-lower cover



3 x 500 left cover

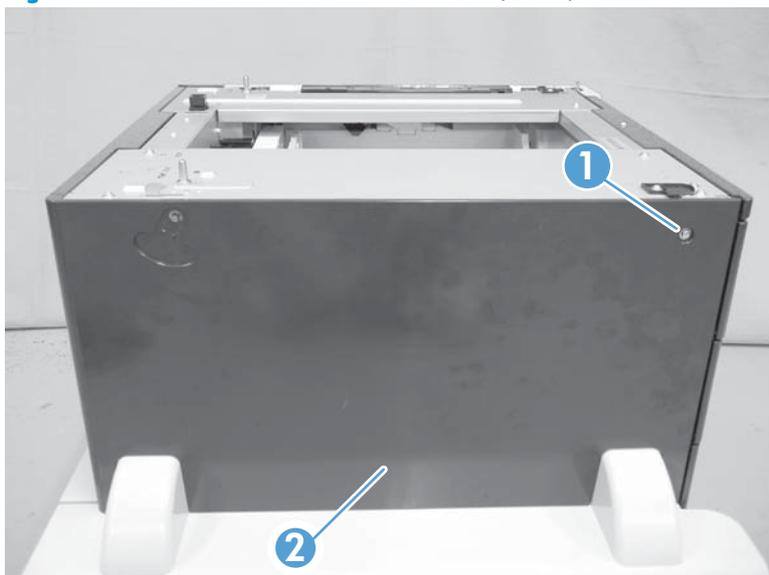
1. Release one tab (callout 1), and then remove the locking lever (callout 2).

Figure 2-197 Remove the 3 x 500 left cover (1 of 2)



2. Remove one screw (callout 1), and then remove the left cover (callout 2).

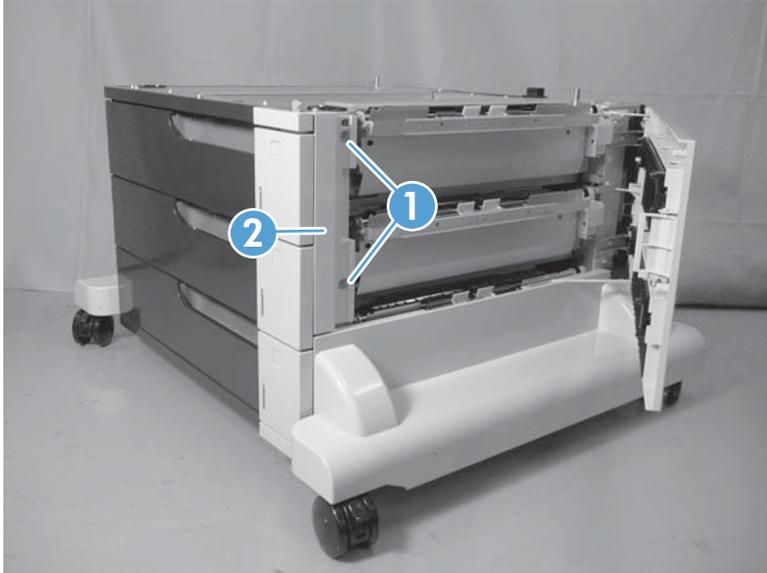
Figure 2-198 Remove the 3 x 500 left cover (2 of 2)



3 x 500 right-corner cover

Open the right door, remove two screws (callout 1), and then remove the 3 x 500 right-corner cover (callout 2).

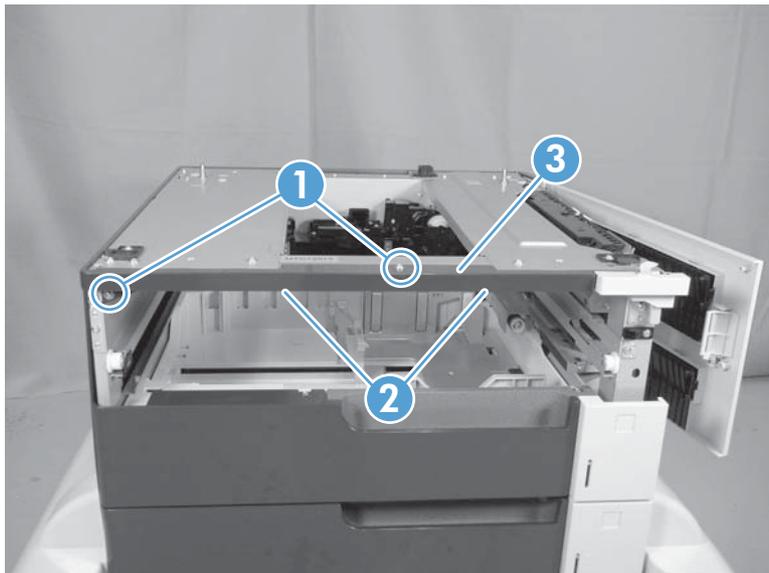
Figure 2-199 Remove the 3 x 500 right-corner cover



3 x 500 front-upper cover

1. Remove the right-corner cover (see [3 x 500 right-corner cover on page 232](#)).
2. Remove the upper cassette.
3. Remove two screws (callout 1), release two tabs (callout 2), and then remove the front-upper cover (callout 3).

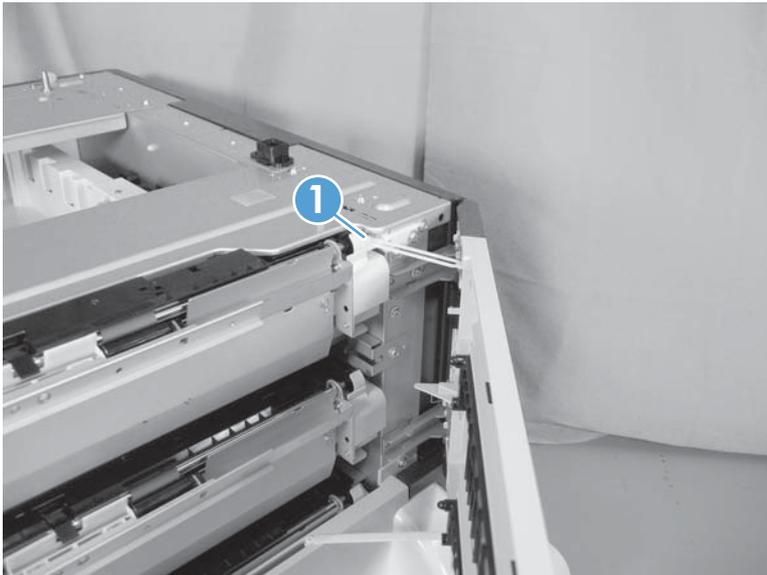
Figure 2-200 Remove the 3 x 500 front-upper cover



3 x 500 right-door assembly

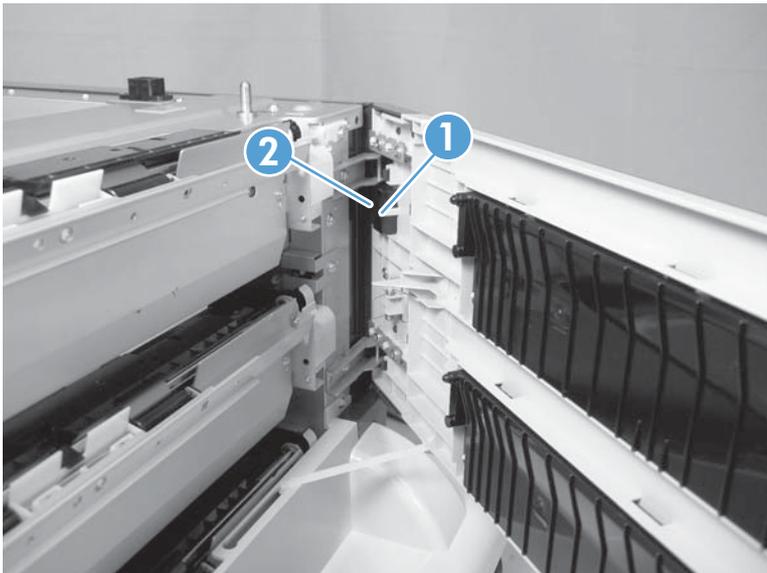
1. Open the right door, and then release one upper-link arm (callout 1).

Figure 2-201 Remove the 3 x 500 right-door assembly (1 of 3)



2. Release one tab (callout 1), and then remove the stopper (callout 2).

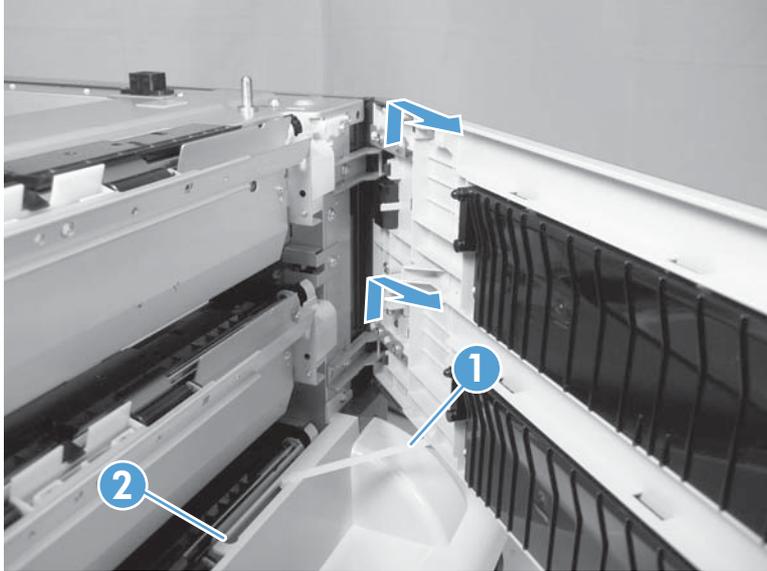
Figure 2-202 Remove the 3 x 500 right-door assembly (2 of 3)



3. Lift up on the door to release it, slide the lower-link arm (callout 1) along the slot in the chassis to the release point (callout 2), and then remove the 3 x 500 right door.

CAUTION: The door remains attached to the feeder until the link arm is released. Do not damage the link arm when the door is removed.

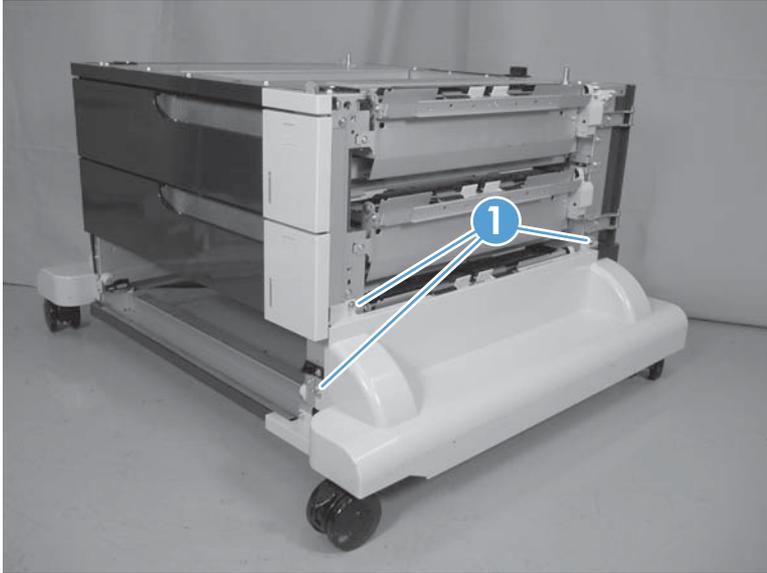
Figure 2-203 Remove the 3 x 500 right-door assembly (3 of 3)



3 x 500 right-lower cover 1

1. Remove the lowest cassette, and then remove the 3 x 500 right door assembly (see [3 x 500 right-door assembly on page 234](#)).
2. Remove three screws (callout 1), loosen the top portion of the cover, and then remove the 3 x 500 right-lower cover 1.

Figure 2-204 Remove the 3 x 500 right-lower cover 1

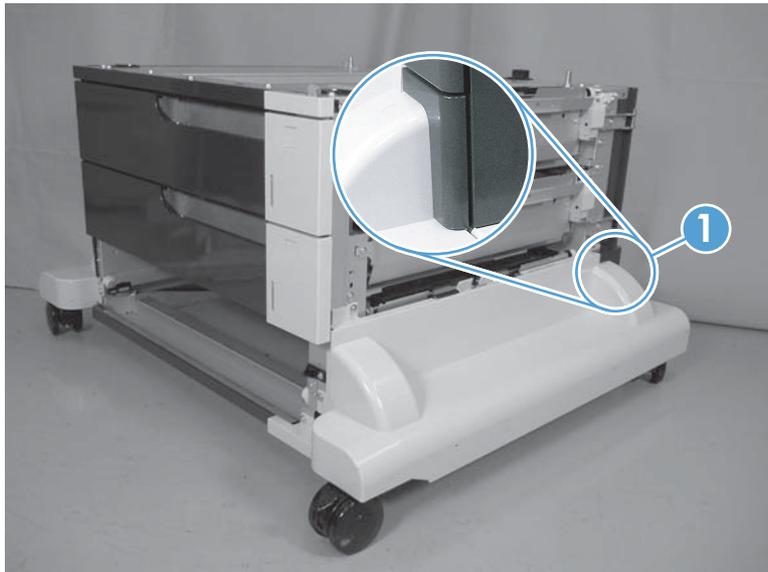


3 x 500 right-lower cover 2

1. Remove the 3 x 500 rear cover (see [3 x 500 rear cover on page 225](#)).
2. Release one tab (not shown), and then slide the 3 x 500 right-lower cover 2 (callout 1) toward the back of the feeder to remove it.

 **NOTE:** The figure in this step does not show the rear cover removed. Remove the rear cover to access the tab.

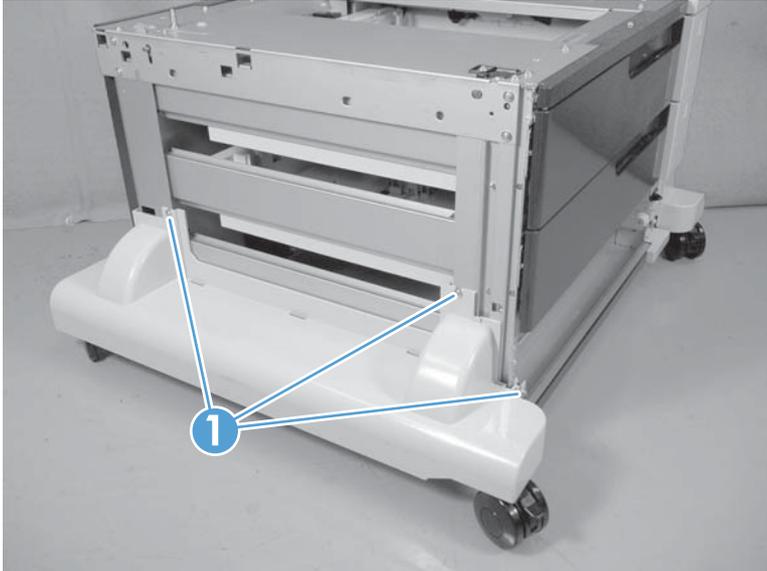
Figure 2-205 Remove the 3 x 500 right-lower cover 2



3 x 500 left-lower cover

1. Remove the lowest cassette, and then remove the 3 x 500 right door assembly (see [3 x 500 left cover on page 231](#)).
2. Remove three screws (callout 1), and then remove the 3 x 500 left-lower cover.

Figure 2-206 Remove the 3 x 500 left-lower cover



3 x 500 rear-lower cover

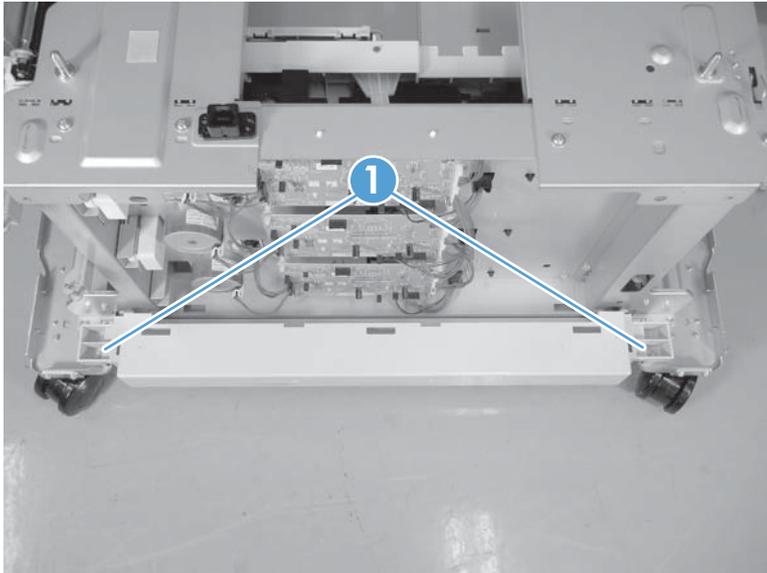
Before proceeding, remove the following components:

- Lowest cassette.
- Rear cover. See [3 x 500 rear cover on page 225](#).
- Right door assembly. See [3 x 500 right-door assembly on page 234](#).
- Right-lower cover. See [3 x 500 right-lower cover 1 on page 236](#).
- Left cover. See [3 x 500 left cover on page 231](#).
- Left-lower cover. See [3 x 500 left-lower cover on page 238](#).

Remove the 3 x 500 rear-lower cover

Remove two screws (callout 1), and then remove the 3 x 500 rear-lower cover.

Figure 2-207 Remove the 3 x 500 rear-lower cover



3 x 500 paper deck pickup assembly

Before proceeding, remove the following components:

- 3 x 500 rear cover. See [3 x 500 rear cover on page 225](#).
- Right-corner cover. See [3 x 500 right-corner cover on page 232](#)
- Right door assembly. See [3 x 500 right-door assembly on page 234](#).
- Right-lower cover. See [3 x 500 rear-lower cover on page 239](#).

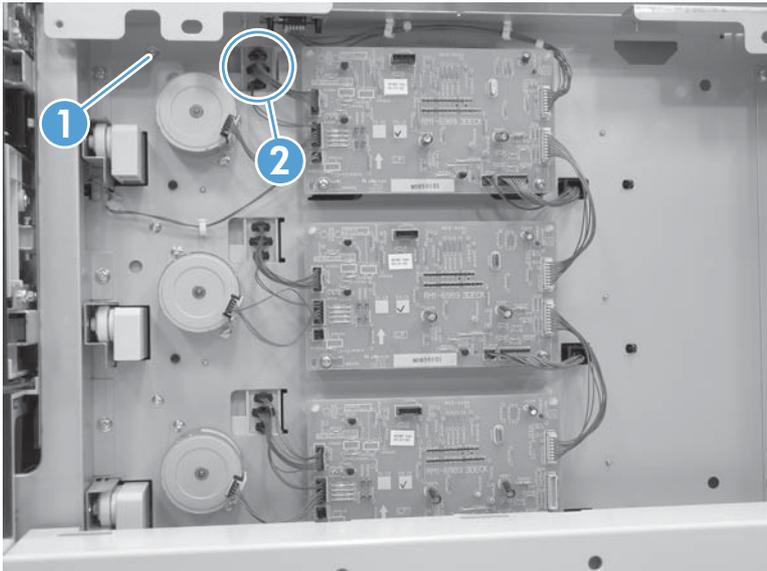
 **NOTE:** Remove this cover only if you are removing the paper-feeder cassette 3 pickup assembly.

Remove the 3 x 500 paper deck pickup assembly

This procedure describes removing the paper deck cassette 1 assembly. Use this procedure for any of the paper deck pickup assemblies.

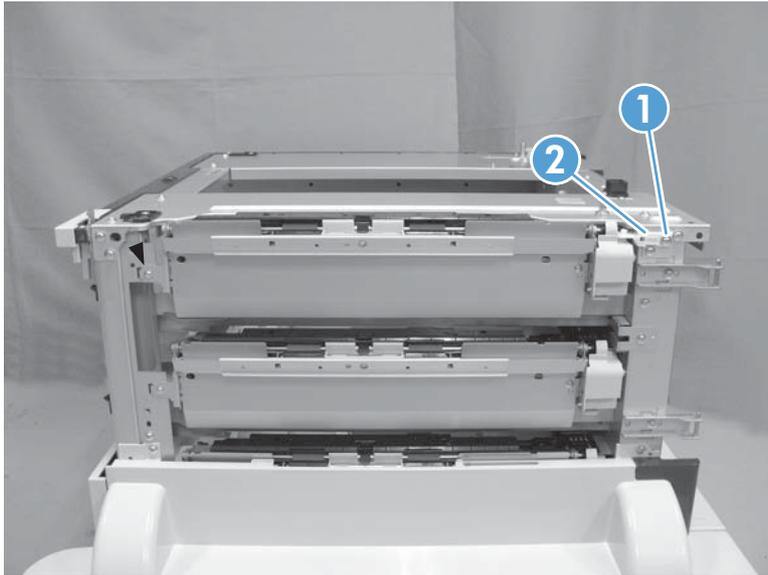
1. Remove one screw (callout 1), and then disconnect three connectors (callout 2).

Figure 2-208 Remove the 3 x 500 paper deck pickup assembly (1 of 3)



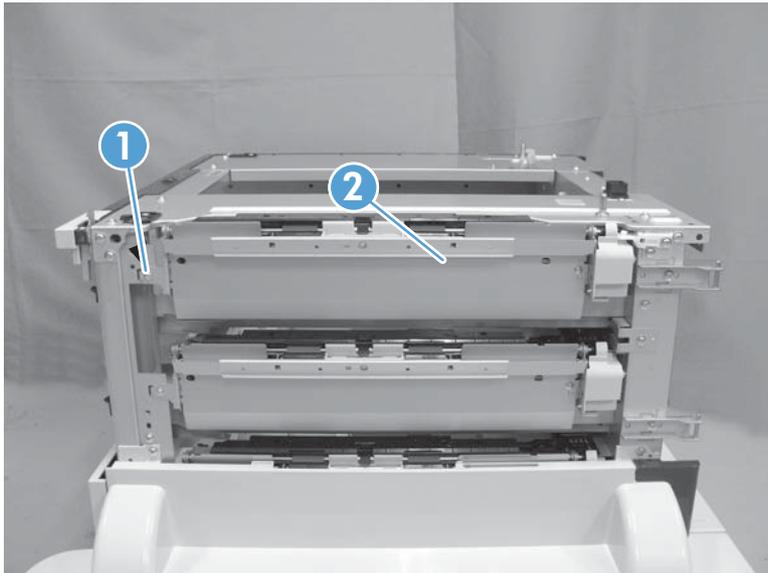
2. Remove the cassette, remove one screw (callout 1), and then remove the right-door link stopper (callout 2).

Figure 2-209 Remove the 3 x 500 paper deck pickup assembly (2 of 3)



3. Remove one screw (callout 1), and then remove the paper deck pickup assembly (callout 2).

Figure 2-210 Remove the 3 x 500 paper deck pickup assembly (3 of 3)



3 Solve problems

To use the information in this chapter, you should have a basic understanding of the HP LaserJet printing process. Explanations of each mechanical assembly, the printer systems, and the basic theory of operation are contained in the English-language service manual. Do not perform any of these troubleshooting processes unless you understand the function of each product component.

- [Solve problems checklist](#)
- [Menu map](#)
- [Troubleshooting process](#)
- [Tools for troubleshooting](#)
- [Clear jams](#)
- [Solve paper-handling problems](#)
- [Use manual print modes](#)
- [Solve image-quality problems](#)
- [Clean the product](#)
- [Solve performance problems](#)
- [Solve connectivity problems](#)
- [Service mode functions](#)
- [Preboot menu options](#)
- [Product updates](#)

Solve problems checklist

If the product is not responding correctly, complete the steps in the following checklist, in order. If the product does not pass a step, follow the corresponding troubleshooting suggestions. If a step resolves the problem, you can stop without performing the other steps on the checklist.

1. The control-panel display and LEDs may be off if the product is in Sleep Mode. If the device does not respond to a key press, then it is either not in Sleep Mode or will now come out of Sleep Mode. If no LEDs are illuminated or the control-panel display does not come on, use the Power-on checks section in the product service manual to troubleshoot the problem.
2. Check the cables.
 - a. Check the cable connection between the product and the computer or network port. Make sure that the connection is secure.
 - b. Make sure that the cable itself is not faulty by using a different cable, if possible.
 - c. Check the network connection.
3. Ensure that the print media that you are using meets specifications.
 - Ensure your maintenance items don't need to be replaced. Print a Supplies Status Page to verify they are not at end of life.

Estimate life for maintenance items

- Fuser Kit—estimated life: 150,000 images
 - 110V kit number: CE977A
 - 220V kit number: CE978A
 - ITB/ETB Transfer Kit (include ITB, T2 roller, feed and suppression rollers for all trays)—estimated life: 150,000 images
 - Kit number: CE516A
 - Toner Collection Unit—estimated life: 150,000 images
 - Kit number: CE980A
4. Print a configuration page. If the product is connected to a network, an HP Jetdirect page also prints.
 - a. If the pages do not print, check that at least one tray contains print media.
 - b. If the page jams in the product, see the jams section.
 5. If the configuration page prints, check the following items.
 - a. If the page prints correctly, the product hardware is working. The problem is with the computer you are using, with the printer driver, or with the program.
 - b. If the page does not print correctly, the problem is with the product hardware.
 6. Does the image quality meet the user's requirements? If yes, see step 7. If no, check the following items:

- Print the print-quality (PQ) troubleshooting pages.
 - Solve the print-quality problems, and then see step 7.
7. At the computer, check to see if the print queue is stopped, paused, or set to print offline.
- Windows:** Click **Start**, click **Settings**, and then click **Printers** or **Printers and Faxes**. Double-click the **HP Color LaserJet M750n**, **HP Color LaserJet M750dn**, or **HP Color LaserJet M750xh** item depending on the product model installed.
- or-**
- Mac OS X:** Open **Printer Setup Utility**, and then double-click the line for the **HP Color LaserJet M750n**, **HP Color LaserJet M750dn**, or **HP Color LaserJet M750xh** item depending on the product model installed.
8. Verify that you have installed the HP Color LaserJet Enterprise M750 Printer Series printer driver. Check the program to make sure that you are using the HP Color LaserJet Enterprise M750 Printer Series printer driver.
9. Print a short document from a different program that has worked in the past. If this solution works, the problem is with the program that you are using. If this solution does not work (the document does not print) complete these steps:
- a. Try printing the job from another computer that has the product software installed.
 - b. If you connected the product to the network, connect the product directly to a computer with a USB cable. Redirect the product to the correct port, or reinstall the software, and select the new connection type that you are using.

Menu map

Print the menu maps

1. At the control panel, press the Home button .
2. Open the following menus:
 - Administration
 - Reports
 - Configuration/Status Pages
3. Use the Down arrow button  to highlight the Administration Menu Map item, and then press the OK button to select it.
4. Use the Up arrow button  to highlight the Print item, and then press the OK button.
5. Press the Home button  or Back button  to exit the menus.

Current settings pages

Printing the current settings pages provides a map of the user configurable settings that might be helpful in the troubleshooting process.

Print the current settings pages

1. At the control panel, press the Home button .
2. Open the following menus:
 - Administration
 - Reports
 - Configuration/Status Pages
3. Use the Down arrow button  to highlight the Current Settings Page item, and then press the OK button to select it.
4. Use the Up arrow button  to highlight the Print item, and then press the OK button.
5. Press the Home button  or Back button  to exit the menus.

Control panel menus

To use all of the capabilities of this product, a firmware upgrade might be required. HP recommends that you periodically go to www.hp.com/support/colorljM750 to see if a new version of firmware is available.



NOTE: Print a configuration page to determine the version of firmware currently installed in this product.

Navigate the control-panel menus

- Press the Home button  to access the menus.
- Use the up arrow button  and down arrow button  to highlight a desired menu item.
- Press the **OK** button to select the menu item.

Sign In menu

Table 3-1 Sign In menu

First level	Second level	Values
User Access Code	Access Code	
Administrator Access Code	Access Code	
Service Access Code	Access Code	

Retrieve Job From USB menu

Use the **Retrieve Job From USB** menu to view listings of jobs stored on an external USB memory device.

Table 3-2 Retrieve Job From USB menu

First level	Second level	Values
Retrieve Job From USB		OK Cancel
	Select a File or Folder	Select from the provided list.

Retrieve Job From Device Memory menu

Use the **Retrieve Job From Device Memory** menu to view listings of jobs stored on the internal product memory.

Table 3-3 Retrieve Job From Device Memory menu

First level	Second level	Third level	Values
Retrieve Job From Device Memory	All Jobs (No PIN)	Print	Range: 1 – 9999 Default = 1
	NOTE: Individual job names also appear.	Delete	Select from the provided list.

Supplies menu

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

Table 3-4 Supplies menu

First level	Second level	Third level	Fourth level	Values
Manage Supplies	Print Supplies Status			
	Supply Settings	Black Cartridge	Very Low Settings	Stop Prompt to continue* Continue
			Low Threshold Settings	1-100%
		Color Cartridges	Very Low Settings	Stop Prompt to continue* Continue
			Low Threshold Settings	Cyan Magenta Yellow 1-100%
		Transfer Kit	Very Low Settings	Stop Prompt to continue* Continue
		Fuser Kit	Very Low Settings	Stop Prompt to continue* Continue
			Low Threshold Settings	1-100%
			Low Threshold Settings	1-100%
		Restrict Color Mix		Enable color Disable color Color if allowed
		Color/Black Mix		Auto* Mostly Color Pages Mostly Black Pages
	Supply Messages	Low Message		On* Off

Table 3-4 Supplies menu (continued)

First level	Second level	Third level	Fourth level	Values
		Level Gauge		On* Off
	Reset Supplies			New Fuser New Transfer Kit

Trays menu

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

Table 3-5 Trays menu

First level	Second level	Values
Manage Trays	Use Requested Tray	Exclusively*
		First
		Always*
	Manually Feed Prompt	Unless loaded
		Display*
		Do not display
	Use Another Tray	Enabled*
		Disabled
		Disabled*
Alternative Letterhead Mode	Enabled	
	Auto*	
	Yes	
Duplex Blank Pages	Yes*	
	No	
Tray 1 Size		Select from a provided list.
Tray 1 Type		Select from a provided list.
Tray 2 Size		Select from a provided list.
Tray 2 Type		Select from a provided list.
Tray 3 Size		Select from a provided list.
Tray 3 Type		Select from a provided list.
Tray 4 Size		Select from a provided list.
Tray 4 Type		Select from a provided list.
Tray 5 Size		Select from a provided list.
Tray 5 Type		Select from a provided list.
Tray 6 Size		Select from a provided list.
Tray 6 Type		Select from a provided list.

Administration menu

Reports menu

Table 3-6 Reports menu

First level	Second level	Third level	Values		
Configuration/Status Pages	Print	Administration Menu Map			
		Current setting page			
		Configuration Page			
		Supplies Status Page			
		Usage Page			
		File Directory Page			
		Web Services Status Page			
		Color Usage Job Log			
		Other Pages	Print	Demonstration Page	
				RGB Samples	
	CMYK Samples				
	PCL Font List				
	PS Font List				

General Settings menu

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

Table 3-7 General Settings menu

First level	Second level	Third level	Fourth level	Values		
Date/Time Settings	Date/Time Format	Date Format		DD/MMM/YYYY		
				MMM/DD/YYYY*		
				YYYY/MMM/DD		
			Time Format		12 hour (AM/PM)*	
					24 hours	
			Date/Time	Date		
				Time		
				Time Zone		
				Adjust for Daylight Savings		On
						Off*

Table 3-7 General Settings menu (continued)

First level	Second level	Third level	Fourth level	Values
Energy Settings	Sleep Timer Settings	Sleep/Auto Timer		Enable Disable NOTE: For units sold in Europe (Blue Angel), there will be no option to disable sleep.
		Sleep/Auto Off After		60* 0 - 120 minutes NOTE: Setting this value to "0" will cause the product to attempt to enter sleep as soon as possible.
	Optimum Speed/Energy Usage			Faster first page* Save energy Save more energy Save most energy
Print Quality	Adjust Color	Highlights	Cyan	-5 to 5
			Magenta	Default = 0
			Yellow	
			Black	
	Midtones	Cyan	-5 to 5	
		Magenta	Default = 0	
		Yellow		
		Black		
	Shadows	Cyan	-5 to 5	
		Magenta	Default = 0	
		Yellow		
		Black		
	Restore Color Values			
	Image Registration	Adjust Tray <X>	Print Test Page	
			X1 Shift	-5.00 mm to 5.00 mm
			Y1 Shift	Default = 0
			X2 Shift	
			Y2 Shift	

Table 3-7 General Settings menu (continued)

First level	Second level	Third level	Fourth level	Values
	Auto Sense Mode	Tray 1 Sensing		Full sensing Expanded sensing* Transparency Only
		Tray X Sensing		Expanded sensing* Transparency Only
	Adjust Paper Types	Select from a list of paper types that the product supports. The available options are the same for each paper type.	Print Mode	Select from a list of print modes. Default = Auto Sense Mode
			Resistance Mode	Normal* Up Down
			Humidity Mode	Normal* High
			Fuser Temp Mode	Normal* Up Down
			Paper Curl Mode	Normal* Reduced
	Optimize	Normal Paper		Standard* Smooth
		Light Media		Normal* Alternate
		Heavy Paper		Standard* Smooth
		Envelop Control		Normal* Alternate 1 Alternate 2
		Environment		Normal* Low Temp
		Line Voltage		Normal* Low Voltage
		Tray 1		Normal* Alternate

Table 3-7 General Settings menu (continued)

First level	Second level	Third level	Fourth level	Values
		Cleaning Control		Normal* Alternate
		Background		Normal* Alternate 1 Alternate 2 Alternate 3
		Media Temp		Normal* Alternate
		Uniformity Control		Normal* Alternate 1 Alternate 2 Alternate 3
		Pre-Rotation Mode		Normal* Alternate 1 Alternate 2 Alternate 3
		Registration		Normal* Alternate
		Transfer Control		Normal* Alternate 1 Alternate 2 Alternate 3
		Moisture Control		Normal* Alternate
		Restore Optimize		
	Edge Control			Off Light Normal* Maximum
Jam Recovery				Auto* Off On

Table 3-7 General Settings menu (continued)

First level	Second level	Third level	Fourth level	Values
Auto Recovery				Enable Disable*
General Stored Job Settings	Sort Stored Jobs By			Job Name
	Default Folder Name			Date Untitled
	Temporary Stored Jobs	Retain Temporary Jobs After Reboot		Do not retain Personal jobs only All temporary jobs
	Quick Copy Job Held Timeout			Off* 1 Hour 4 Hours 1 Day 1 Week
Enable Retrieve from USB				Enabled Disabled*
Enable AutoSend				Disabled* Enabled
Hold Off Print Job				Enabled* Disabled
Restore Factory Settings				Cancel Restore

General Print Settings menu

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

Table 3-8 Print Settings menu

First level	Second level	Values
Manual Feed		Enabled Disabled*
	Courier Font	Regular* Dark
Wide A4		Enabled Disabled*

Table 3-8 Print Settings menu (continued)

First level	Second level	Values
Suppress Blank Pages		No*
		Yes
Print PS Errors		Enabled
		Disabled*
Print PDF Errors		Enabled
		Disabled*
Personality		Auto*
		PCL
		POSTSCRIPT
		PDF
PCL	Form Length	Range: 5 – 128
		Default = 60
	Orientation	Portrait*
		Landscape
	Font Source	Internal*
		Soft
		USB
	Font Number	Range: 0 – 999
		Default = 0
	Font Pitch	Range: 0.44 – 99.99
Default = 10		
Font Point Size	Range: 4.00 – 999.75	
	Default = 12.00	
Symbol Set	Select from a list of symbol sets.	
Append CR to LF		No*
		Yes
Media Source Mapping		Standard*
		Classic

Default Print Options menu

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

Table 3-9 Default Print Options menu

First level	Second level	Values
Number of Copies		Default = 1
Default Paper Size		Select from a list of sizes that the product supports.
Default Custom Paper Size	Inches	X Dimension Range: 2.99 – 12.28 Default = 12.28
		Y Dimension Range: 5.00 – 18.50 Default = 18.5
	MM	X Dimension Range: 76 – 312 Default = 312
		Y Dimension Range: 127 – 470 Default = 470
Sides		1-sided* 2-sided
Two-Sided Format		Book-style* Flip-style
Enable Edge to Edge Overrides		Enabled Disabled*

Display Settings menu

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

Table 3-10 Display Settings menu

First level	Second level	Values
Display Brightness		Range: -10 to 10 Default = 0
Language		Select from a list of languages that the product supports.
Show IP address		Display* Hide
Inactivity Timeout		Range: 10 – 300 seconds Default = 60
Clearable Warnings		On Job*
Continuable Events		Auto-continue (10 seconds)* Touch OK to continue

Manage Supplies menu

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

Table 3-11 Manage Supplies menu

First level	Second level	Third level	Fourth level	Values
Print Supply Status				
Supply Settings	Black Cartridge	Very Low Settings		Stop
				Prompt to continue*
				Continue
		Low Threshold Settings		1-100%
	Color Cartridges	Very Low Settings		Stop
			Prompt to continue*	
				Continue
		Low Threshold Settings	Cyan	1-100%
			Magenta	
			Yellow	
	Transfer Kit	Very Low Settings		Stop
			Prompt to continue*	
				Continue
	Fuser Kit	Very Low Settings		Stop
			Prompt to continue*	
				Continue
		Low Threshold Settings		1-100%
		Low Threshold Settings		1-100%
	Restrict Color Use			Auto*
				Mostly color pages
				Mostly black pages
	Color/Black Mix			Auto*
				Mostly Color Pages
				Mostly Black Pages
	Store Usage Data			On supplies
				Not on supplies
Supply Messages	Low Message			On*
				Off

Table 3-11 Manage Supplies menu (continued)

First level	Second level	Third level	Fourth level	Values
	Level Gauge			On*
				Off
Reset Supplies	New Fuser Kit			No
				Yes
	New Transfer Kit			No
				Yes

Manage Trays menu

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

Table 3-12 Manage Trays menu

First level	Values
Use Requested Tray	Exclusively*
	First
Manually Feed Prompt	Always*
	Unless loaded
Size/Type Prompt	Display*
	Do not display
Use Another Tray	Enabled*
	Disabled
Alternative Letterhead Mode	Disabled*
	Enabled
Duplex Blank Pages	Auto*
	Yes
Image Rotation	Standard
	Alternate
Override A4/Letter	Yes*
	No

Network Settings menu

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

Table 3-13 Network Settings menu

First level	Values
I/O Timeout	Range: 5 – 300 sec Default = 15
Embedded Jetdirect Menu	See the table that follows for details. These menus have the same structure. If an additional HP Jetdirect network card is installed in the EIO slot, then both menus are available.

Table 3-14 Embedded Jetdirect Menu

First level	Second level	Third level	Fourth level	Fifth level	Values
Information	Print Sec Report				Yes
					No*
TCP/IP	Enable				On*
					Off
	Host Name				Use the arrow buttons to edit the host name. NPXXXXXX*
	IPV4 Settings	Config Method			Bootp*
					DHCP
					Auto IP
					Manual
		Default IP			Auto IP*
					Legacy
		DHCP Release			Yes
					No*
		DHCP Renew			Yes
					No*
		Primary DNS			Range: 0 – 255 Default = xxx.xxx.xx.xx
		Secondary DNS			Range: 0 – 255 Default = 0.0.0.0
	IPV6 Settings	Enable			On*
					Off

Table 3-14 Embedded Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values
		Address	Manual Settings	Enable	On Off*
				Address	Select from a provided list.
		DHCPV6 Policy			Router Specified Router Unavailable* Always
		Primary DNS			Select from a provided list.
		Secondary DNS			Select from a provided list.
		Proxy Server			Select from a provided list.
		Proxy Port			Default = 00080
		Idle Timeout			Default = 0270
Security	Secure Web				HTTPS Required* HTTPS Optional
	IPSEC				Keep Disable*
	802.1X				Reset Keep*
	Announcement Agent				
	Reset Security				Yes No*
Diagnostics	Embedded Tests	LAN HW Test			Yes No*
		HTTP Test			Yes No*
		SNMP Test			Yes No*
		Data Path Test			Yes No*
		Select All Tests			Yes No*

Table 3-14 Embedded Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values
		Execution Time [H]			Range: 1 – 60 hours Default = 1
		Execute			Yes No*
	Ping Test	Dest Type			IPv4 IPv6
		Dest IPv4			Range: 0 – 255 Default = 127.0.0.1
		Dest IPv6			Select from a provided list. Default = ::1
		Packet Size			Default = 64
		Timeout			Default = 001
		Count			Default = 004
		Print Results			Yes No*
		Execute			Yes No*
	Ping Results	Packets Sent			Default = 00000
		Packets Received			Default = 00000
		Percent Lost			Default = 000
		RTT Min			Default = 0000
		RTT Max			Default = 0000
		RTT Average			Default = 0000
		Ping In Progress			Yes No*

Table 3-14 Embedded Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Fifth level	Values
		Refresh			Yes No*
Link Speed					Auto* 10T Half 10T Full 100TX Half 100TX Full 100TX Auto 1000TX Full

Troubleshooting menu

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

Table 3-15 Troubleshooting menu

First level	Second level	Third level	Fourth level	Values
Exit Troubleshooting				
NOTE: This item only displays if you are backing out of the Troubleshooting menu.				
Print Event Log				
View Event Log				
Print Paper Path Page				
Print Quality Pages	Print PQ Troubleshooting Pages			
	Diagnostics Page			
	Color Band Test	Print Test Page		
		Copies		Range: 1 – 30 Default = 1
Diagnostic Tests	Disable Cartridge Check			
	Paper Path Sensors			Start Test
	Paper Path Test	Print Test Page		Print
		Source		Select from a list of the available trays.
		Test Duplex Path		Off* On

Table 3-15 Troubleshooting menu (continued)

First level	Second level	Third level	Fourth level	Values
		Number of Copies		Range: 1 – 500 Default = 1
	Manual Sensor Test			Select from a list of the product sensors.
	Tray/Bin Manual Sensor Test			Select from a list of the product sensors.
	Component Test			Select from a list of available components.
		Repeat		Off* On
	Print/Stop Test			
Retrieve Diagnostic Data	Export to USB			
	Diagnostic Files			Device Data File Debug Information File*
	Include Crash Dumps			Off On*
	Cleanup Debug Info			Off On*
General Debug Data				

Device Maintenance menu

Backup/Restore menu

 **CAUTION:** Data backup and restoration is the responsibility of the customer/administrator of the product. Service personnel should not back up or restore customer data under any circumstances.

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

Table 3-16 Backup/Restore menu

First level	Second level	Third level	Values
Backup Data	Scheduled Backups	Enable Scheduling	Disabled* Enabled
		Backup Time	Default = current time
		Days Between Backups	Default = 1
		Backup Now	

Table 3-16 Backup/Restore menu (continued)

First level	Second level	Third level	Values
	Export Last Backup		
Restore Data			Insert a USB drive that contains the backup file.

Calibration/Cleaning menu

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

Table 3-17 Calibration/Cleaning menu

First level	Second level	Values
Print Cleaning Page		
Clean Laser Glass		
Quick Calibration		
Full Calibration		
Restore Calibration		Cancel Restore
Delay Calibration at Wake/Power On		Yes* No

USB Firmware Upgrade menu

To display: At the product control panel, select the [Device Maintenance](#) menu, and then select the [USB Firmware Upgrade](#) menu.

Insert a USB storage device with a firmware upgrade bundle into the USB port, and follow the on-screen instructions.

Service menu

The personal identification number (PIN; [Service Access Code](#)) used to access the [Service](#) menu is 11075013. In the following table, asterisks (*) indicate the factory default setting.

First level	Second level	Third level	Values
User Access Code			
Administrator Access Code			
Service Access Code	Print Event Log		
	View Event Log		
	Clear Event Log		
	Cycle Counts	Total Engine Cycles	0*
		Mono Cycle Counts	Range: 0 – 9999999
		Color Cycle Count	0* Range: 0 – 9999999
		Refurbish Cycle Count	0* Range: 0 – 9999999
Serial Number			
Service ID			20182*
Cold Reset Paper			Letter* A4
New Registration Roller			Yes No*
Low Alerts			Enable Disabled
Rest Low Alerts Settings			Reset to level 1 Reset to level 2 Reset to level 3 Set to non-HP managed mode
Media Sensor Value			0* Range: 0 – 4095
Manual Laser Glass Cleaning			
Test Support	Continuous Print from USB		
	Automatic Calibrations		

Troubleshooting process

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

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

Before beginning any troubleshooting procedure, check the following issues:

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



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

Determine the problem source

When the product malfunctions or encounters an unexpected situation, the product control panel alerts you to the situation. This section contains a pre-troubleshooting checklist to filter out many possible causes of the problem. A troubleshooting flowchart helps you diagnose the root cause of the problem. The remainder of this chapter provides steps for correcting problems.

Pre-troubleshooting checklist

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

General topic	Questions
Environment	<ul style="list-style-type: none">• Is the product 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 product and the outlet (not a power strip)?• Is the operating environment within the specified parameters?• Is the product 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 affect on some product components (for example, the print-cartridge OPC).• Is the product exposed to direct sunlight?
Media	<ul style="list-style-type: none">• Does the customer use only supported media?• Is the media in good condition (no curls, folds, or distortion)?• Is the media stored correctly and within environmental limits?

General topic	Questions
Input trays	<ul style="list-style-type: none"> • Is the amount of media in the tray within specifications? • Is the media correctly placed in the tray? • Are the paper guides aligned with the stack? • Is the cassette correctly installed in the product?
Print cartridges	<ul style="list-style-type: none"> • Is each print cartridge installed correctly? • Are original HP print cartridges installed? • Are the cartridges damaged?
ITB and fuser	<ul style="list-style-type: none"> • Are the ITB and fuser correctly installed? • Is the ITB or fuser damaged?
Doors	<ul style="list-style-type: none"> • Are the right and front doors closed?
Condensation	<ul style="list-style-type: none"> • Does condensation occur following a temperature change (particularly in winter following cold storage)? If so, wipe affected parts dry or leave the product on for 10 to 20 minutes. • Was a print cartridge opened soon after being moved from a cold to a warm room? If so, allow the print cartridge to sit at room temperature for 1 to 2 hours.
Miscellaneous	<ul style="list-style-type: none"> • Check for and remove any non-HP components (for example, print cartridges or memory modules) from the product. • Check to see whether the hardware or software configuration has changed or the problem is not associated with any specific software. • Remove the product from the network and ensure that the failure is associated with the product before beginning troubleshooting. • For any print-quality issues, calibrate the product. See Calibrate the product.

Troubleshooting flowchart

This flowchart highlights the general processes that you can follow to quickly isolate and solve product hardware problems.

Each row depicts a major troubleshooting step. A “yes” answer to a question allows you 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 3-18 Troubleshooting flowchart

1 Power on	Is the product on and does a readable message display?	Follow the power-on troubleshooting checks. See Power subsystem. After the control panel display is functional, see step 2.
	Yes ↓ No →	
2 Control panel messages	Does the message Ready display on the control panel?	If an error message displays, see Interpret control-panel messages and event log entries. After the errors have been corrected, go to step 3.
	Yes ↓ No →	

Table 3-18 Troubleshooting flowchart (continued)

3 Event log	Open the Troubleshooting menu and print an event log to see the history of errors with this product.		If the event log does not print, see Print or view an event log. If paper jams inside the product, see Clear jams. If error messages display on the control panel when you try to print an event log, see Print or view an event log. After successfully printing and evaluating the event log, see step 4.
	Does the event log print?		
	Yes ↓	No →	
4 Information pages	Open the Reports menu and print the configuration pages to verify that all the accessories are 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.
	Are all the accessories installed?		
	Yes ↓	No →	
5 Image quality	Does the print quality meet the customer's requirements?		Compare the images with the sample defects in the image defect tables. See Print quality examples. After the print quality is acceptable, see step 6.
	Does the print quality meet the customer's requirements?		
	Yes ↓	No →	
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 Jetdirect configuration page. If error messages display on the control panel, see Print or view an event log. When the customer can print from the host computer, this is the end of the troubleshooting process.
	Can the customer print successfully from the host computer?		
	Yes. This is the end of the troubleshooting process.	No →	

Power subsystem

Power-on checks

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

Power-on troubleshooting overview

Turn on the product power. 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.

During normal operation, the power supply, fuser, and formatter cooling fans begin to spin after the product power is turned on. Place your hand over the holes in the left-side cover, near the formatter. If the fan is operating, you will feel air passing out of the product. You can also lean close to the product and hear the fan operating. You can also place your hand over the hole in the right-front lower corner. If the fan is operating, you should feel air being drawn into the product. When these fans are operational, the DC side of the power supply is functioning correctly.

After the fans are operating, the motor turn on and off (unless the right or front cover is open, a jam condition is sensed, or the paper-path sensors are damaged). You might be able to visually and audibly determine if the motors turn on and off.

If the fans and motors are operating correctly, the next troubleshooting step is to isolate print engine, formatter, and control panel problems. Perform an engine test (see Engine test button). 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.

If the control panel is blank when you turn on the product, check the following items.

1. Make sure that the product is plugged directly into an active electrical outlet (not a power strip) that delivers the correct voltage.
2. Make sure that the power switch is in the *on* position.
3. Make sure that the fans run briefly, which indicates that the power supply is operational.
4. Make sure that the control panel display wire harness is connected.
5. Make sure that the formatter is seated and operating correctly. Turn off the product and remove the formatter. Reinstall the formatter, and then verify that the heartbeat LED is flashing.



NOTE: If the control panel display is blank, but the cooling fans run after the product power is turned on, try printing an engine-test page to determine whether the problem is with the control-panel display, formatter, or other product components. See Engine test button.

Power-on timing (approximate)

Power-on timing from boot sequence to the **Ready** state might change as the firmware is upgraded.

- 00.00 seconds; power-button LED illuminates and fans rotate at high speed
- 00.06 seconds; engine noises begin
- 00:10 seconds; HP logo appears on the control-panel display, boot sequence count appears on the control-panel display

Boot sequence

- 1/8 = 10 seconds
- 2/8 = 15 seconds



NOTE: Depending on how the product was shut down, the product might stay at this point for several minutes while the Disk Check process completes.

- 7/8 = 25 seconds
- 8/8 = 35 seconds
- 36 seconds; hardware Initialization begins
- 45 seconds; initialization n count begins
- 01:30 seconds; fuser fan noise stops and engine noises stop
- 01:50 seconds; product enters the **Ready** state

Tools for troubleshooting

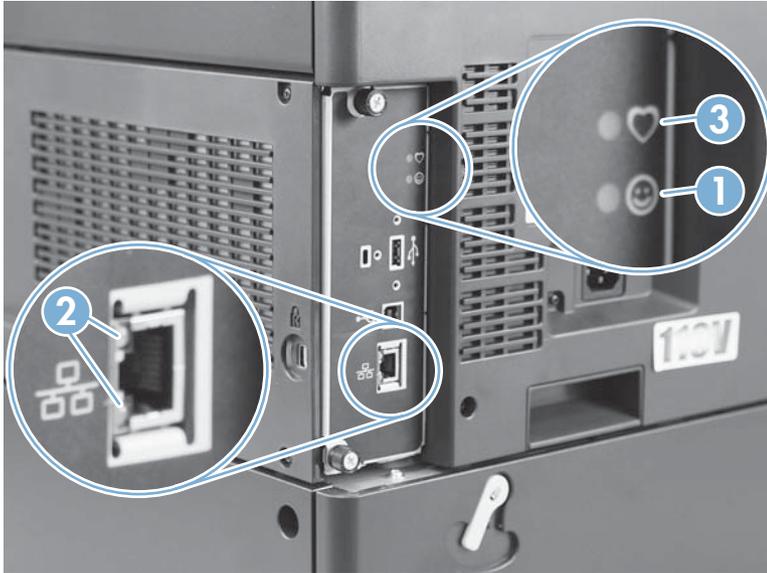
Component diagnostics

LED diagnostics

LED, engine, and individual diagnostics can identify and troubleshoot product problems.

Understand lights on the formatter

Three LEDs on the formatter indicate that the product is functioning correctly.



1	Formatter connectivity LED (lit when formatter is correctly seated)
2	HP Jetdirect LEDs
3	Heartbeat LED

HP Jetdirect LEDs

The embedded HP Jetdirect print server has two LEDs. The yellow LED indicates network activity, and the green LED indicates the link status. A blinking yellow LED indicates network traffic. If the green LED is off, a link has failed.

For link failures, check all the network cable connections. In addition, you can try to manually configure the link settings on the embedded print server by using the product control-panel menus.

1. Press the Home button .
2. Press the **Down** arrow  to highlight the **Administration** menu, and then press the **OK** button.
3. Press the **Down** arrow  to highlight the **Network Settings** menu, and then press the **OK** button.
4. Press the **Down** arrow  to highlight the **Embedded Jetdirect Menu** option, and then press the **OK** button.

5. Press the **Down** arrow ▼ to highlight the **Link Speed** menu, and then press the **OK** button.
6. Select the appropriate link speed, and then press the **OK** button.

Heartbeat LED

The heartbeat LED provides information about product operation. If a product error occurs, the formatter displays a message on the control-panel display. However, error situations can occur causing the formatter-to-control panel communication to be interrupted.

 **NOTE:** HP recommends fully troubleshooting the formatter and control panel before replacing either assembly. Use the heartbeat LED to troubleshoot formatter and control panel errors to avoid unnecessarily replacing these assemblies.

Formatter-to-control panel communication interruptions

- The firmware does not fully initialize and configure the control panel interface.
- The control panel is not functioning (either a failed assembly or power problem).
- Interface cabling between the formatter and control panel is damaged or disconnected.

 **TIP:** If the heartbeat LED is illuminated—by an error condition or normal operation—the formatter is fully seated and the power is on. The pins for the LED circuit in the formatter connector are recessed so that this LED will not illuminate unless the formatter is fully seated.

The heartbeat LED operates according to the product state. When the product is initializing, see **Heartbeat LED, product initialization**. When the product is in **Ready** mode, see **Heartbeat LED, product operational**.

Heartbeat LED, product initialization

The following table describes the heartbeat LED operation while the product is executing the firmware boot process.

 **NOTE:** When the initialization process completes, the heartbeat LED should be illuminated solid green.

If after initialization, the heartbeat LED is not solid green, see **Heartbeat LED, product operational**.

Table 3-19 Heartbeat LED, product initialization

Product initializing state	Heartbeat LED, normal state	Heartbeat LED, error state
No power (power cable disconnected or power switch off)	Off	Not applicable
Power on (immediately after the power switch pressed)	Red, solid <ul style="list-style-type: none"> • Duration should be 1 second or less 	Red, solid <ul style="list-style-type: none"> • Firmware error; problem finding hardware and booting the serial peripheral interface flash memory <ul style="list-style-type: none"> ◦ Boot process halted Replace the formatter.
Serial peripheral interface (SPI) flash memory boot	Green, solid	Red, solid <ul style="list-style-type: none"> • Firmware error; problem corrupt or missing SPI flash memory

Table 3-19 Heartbeat LED, product initialization (continued)

Product initializing state	Heartbeat LED, normal state	Heartbeat LED, error state
		<ul style="list-style-type: none"> ◦ Boot process halted <p>Replace the formatter.</p>
HW checks on board DRAM	Green, solid	<p>Red, solid</p> <ul style="list-style-type: none"> • Power on self check failure ◦ Boot process halted <p>Replace the formatter.</p>
Control panel connection initializes	Green, solid NOTE: Control panel communication successful. If an error occurs, a message will appear on the control-panel display.	<p>Yellow, fast flash</p> <ul style="list-style-type: none"> • Formatter to control panel connection failed ◦ Boot process continues <p>Check the cables between the formatter and control panel for damage. Make sure that the cables are fully seated.</p>
Preboot menu available (including diagnostics)	Green, solid	<p>Red, solid</p> <ul style="list-style-type: none"> • Diagnostic failure ◦ Follow diagnostic instructions <p>Turn the power off, and then on again to restart the initialization process.</p>
Accessing disk for firmware image	Green, solid NOTE: If applicable, disk error messages appear on the control-panel display.	<p>Yellow, fast flash</p> <ul style="list-style-type: none"> • Control panel not connected
Firmware boot	Green, solid NOTE: If applicable, error messages appear on the control-panel display.	<p>Yellow, fast flash</p> <ul style="list-style-type: none"> • Control panel not connected
Product operational	Green, heartbeat blink NOTE: If applicable, error messages appear on the control-panel display.	<p>Yellow, fast flash</p> <ul style="list-style-type: none"> • Control panel not connected
49.XX.YY error or initialization freezes	Not applicable	<p>LED off</p> <p>NOTE: An error message (for example, 49.XX.YY) might appear on the control-panel display.</p> <p>Eventually a formatter connection missing message will appear.</p> <p>Turn the power off, and then on again to restart the initialization process.</p> <p>If the error persists, perform a firmware upgrade.</p>
Control panel connection interrupted after the product is operational	Not applicable	<p>Yellow, fast flash</p> <ul style="list-style-type: none"> • Control panel not connected
Sleep Mode	Green, slow blink	Not applicable

Table 3-19 Heartbeat LED, product initialization (continued)

Product initializing state	Heartbeat LED, normal state	Heartbeat LED, error state
Approaching Sleep Mode	Green, slow blink	Not applicable
Wake up from Sleep Mode	Follows initialization progression	Follows initialization progression
Approaching wake up from Sleep Mode	Follows initialization progression	Follows initialization progression

Heartbeat LED, product operational

The following table describes the heartbeat operation when the product completes the firmware boot process and is in the **Ready** state.

Table 3-20 Heartbeat LED, product operational

LED color	Description
Green	<ul style="list-style-type: none"> • Normal operation <ul style="list-style-type: none"> ◦ Formatter is operating normally ◦ Firmware is operating normally ◦ Control panel is connected
Yellow	<ul style="list-style-type: none"> • Formatter cannot connect to the control panel <ul style="list-style-type: none"> ◦ Check control panel connections ◦ Verify control panel functionality
Red	<ul style="list-style-type: none"> • Formatter error or failure <ul style="list-style-type: none"> ◦ Serial peripheral interface (SPI) flash memory boot error ◦ Power on self test (formatter) failed ◦ Diagnostic (formatter) failed
Off	<p>TIP: The connectivity LED is off if the power cable is disconnected, the product power switch is in the off position, or the product is in Sleep Mode.</p> <ul style="list-style-type: none"> • Firmware or system freeze <ul style="list-style-type: none"> ◦ Check control panel for an error message ◦ Control panel failure <p>NOTE: This condition is not usually caused by a formatter failure. Turn the power off, and then on again. If the error persists, perform a firmware upgrade.</p>

Engine diagnostics

This section provides an overview of the engine diagnostics that are available in the HP Color LaserJet Enterprise M750 Printer Series product. The product contains extensive internal diagnostics that help in troubleshooting print quality, paper path, noise, component, and timing issues.

Defeating interlocks

Different tests can be used to isolate different types of issues. For component or noise isolation, you can run the diagnostic test when the front and right doors are open. To operate the product with the doors open, the door switch levers must be depressed to simulate a closed-door position.

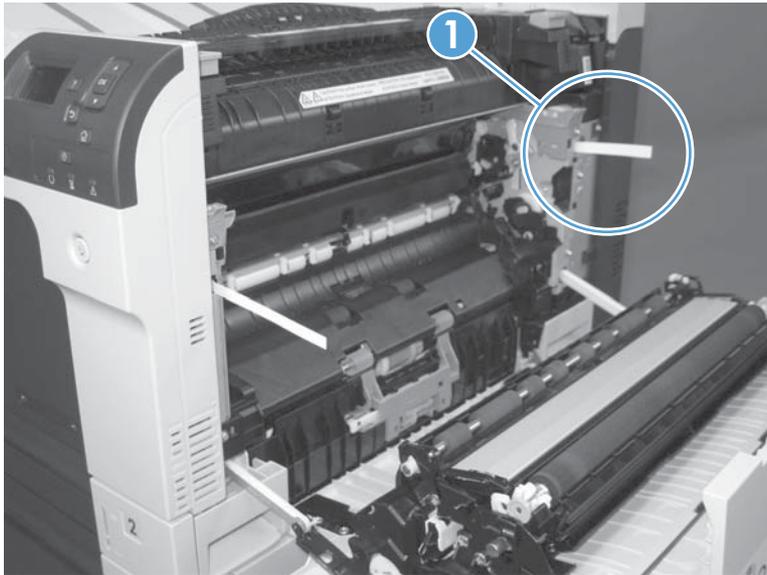
⚠ WARNING! Be careful when performing printer diagnostics to avoid risk of injury. Only trained service personnel should open the doors and run the diagnostics with the covers removed. Never touch any of the power supplies when the printer is plugged in or turned on.

Defeat the right-door opening/closing sensor (PS15)

1. Open the right and front doors.
2. Insert a thin piece of paper into the right-door sensor slot (callout 1).

⚠ CAUTION: Using too thick of a piece of paper to activate this sensor might dislodge the photo-interrupter body from its mounting bracket. Make sure you use a thin piece of paper to activate the sensor.

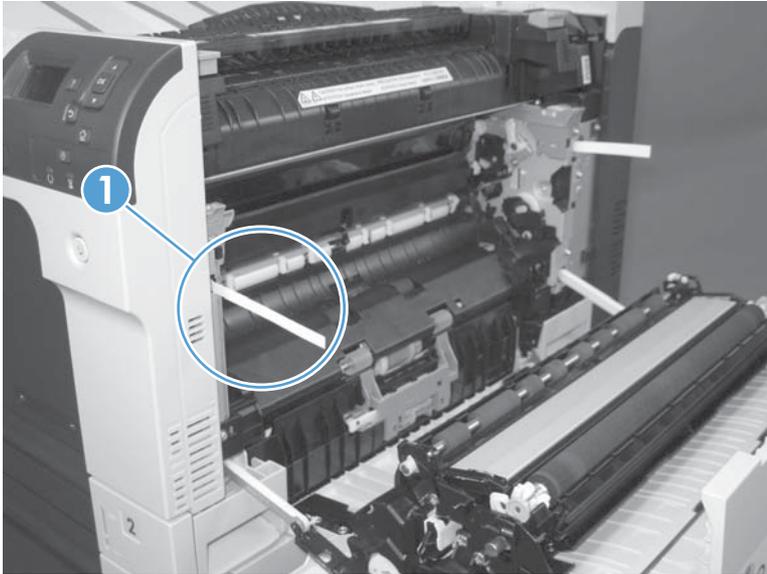
Figure 3-1 Defeating door interlocks (1 of 2)



3. Insert a folded piece of paper into the front door switch (callout 1). Wait until the product enters the **Ready** state.

 **NOTE:** The paper must be thick enough to depress and hold in place the sensor actuator arm.

Figure 3-2 Defeating door interlocks (2 of 2)



Disable cartridge check

Use this diagnostic test to print internal pages or send an external job to the product when one or more print cartridges are removed or exchanged. Consumable supply errors are ignored while the product is in this mode. When the product is in this mode, you can navigate the troubleshooting menus and print internal pages (the print quality pages will be the most useful). This test can be used isolate problems, such as noise, and to isolate print-quality problems that are related to individual print cartridges.

 **NOTE:** Cartridges are not keyed and can be interchanged. An error will display on the control panel if a print cartridge is installed in the wrong position. The **Supplies Status** menu will explain which print cartridge is misplaced.

 **NOTE:** Do not remove or exchange print cartridges and image drums until after you start the disable cartridge check diagnostic.

1. Press the Home  button.
2. Open the following menus:
 - [Administration](#)
 - [Troubleshooting](#)
 - [Diagnostic Tests](#)
3. Press the **Down** arrow  to highlight **DISABLE CARTRIDGE CHECK**, and then press the **OK** button .

To exit this diagnostic test, press the **Stop** button  and then select **EXIT TROUBLESHOOTING**.

Engine test button

1. Turn the product on.
2. Use a fine-point tool, (for example a precision-slotted screwdriver with a 1 mm (0.04 in) blade width) to press the engine test button.

 **NOTE:** Access the engine test button through a hole in the rear cover.

3. An engine test page (lines in each of the print cartridge colors) prints.

Figure 3-3 Engine test button location



Paper-path test

This diagnostic test generates one or more test pages that you can use to isolate the cause of jams.

To isolate a problem, specify which input tray to use, specify whether to use the duplex path, and specify the number of copies to print. Multiple copies can be printed to help isolate intermittent problems. The following options become available after you start the diagnostic feature:

- **Print Test Page.** Run the paper-path test from the default settings: Tray 2, no duplex, and one copy. To specify other settings, scroll down the menu and select the setting, and then scroll back up and select **Print Test Page** to start the test.
- **Source Tray.** Select Tray 1, Tray 2, or the optional tray.
- **Test Duplex Path.** Enable or disable two-sided printing.

 **NOTE:** Duplex models only.

- **Number of Copies.** Set the numbers of copies to be printed; the choices are 1,10, 50, 100, or 500.
1. Press the Home  button.
 2. Open the following menus:

- Administration
 - Troubleshooting
 - Diagnostic Tests
3. Press the **Down** arrow ▼ to highlight **PAPER PATH TEST**, and then press the **OK** button.
 4. Select the paper-path test options for the test you want to run.

Manual sensor test

Use this diagnostic test to manually test the product sensors and switches. Each sensor is represented by a letter and number on the control panel display.

1. Press the Home button .
2. Open the following menus:
 - Administration
 - Troubleshooting
 - Diagnostic Tests
3. Press the **Down** arrow ▼ to highlight the **Manual Sensor Test** item, and then press the **OK** button.

To exit this diagnostic, press the Stop button , and then select **EXIT TROUBLESHOOTING**.

Menus cannot be opened during this test, so the **OK** button serves the same function as the **Stop** button .

Table 3-21 Manual sensor diagnostic tests

Sensor or switch name	Sensor or switch number
Front door opening/closing switch	PS14
Right door opening/closing sensor	PS15
A TOP (top of page) sensor	PS5
Fuser loop 1 sensor	PS7
Fuser loop 2 sensor	PS8
Fuser pressure-release sensor	PS9
Fuser output sensor	PS6
Developer alienation sensor	PS11
ITB alienation sensor	SW5

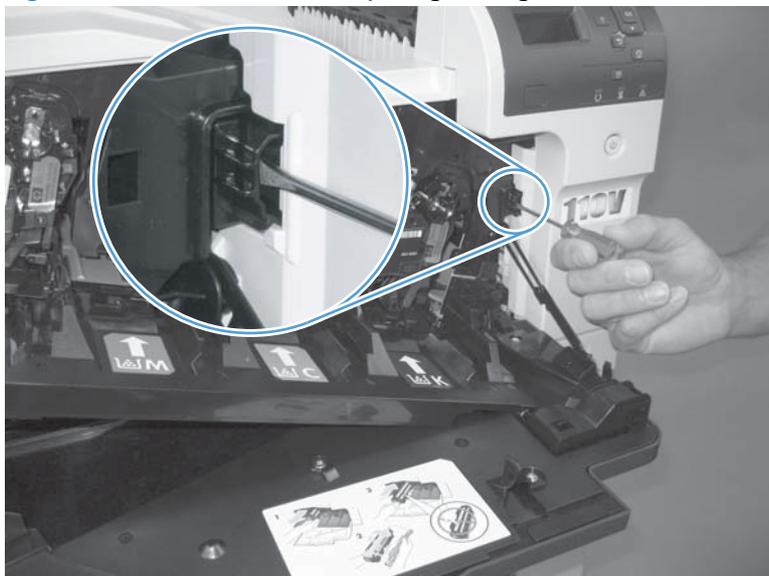
Front-door opening/closing switch (PS14)

 **NOTE:** This switch is also activated by the right door. See [Right-door opening/closing sensor \(PS15\) on page 282](#). During this test, the right door must remain closed.

1. Open the front-door assembly to disengage the front-door opening/closing switch.
2. Close the front-door assembly, and then check the control panel on the product for sensor response.

 **TIP:** You can leave the front door open and use a folded piece of paper to activate the switch.

Figure 3-4 Test the front-door opening/closing switch



3. Check the control-panel display for sensor response.
4. If there is no response, replace the front-door opening/closing microswitch or the cable.

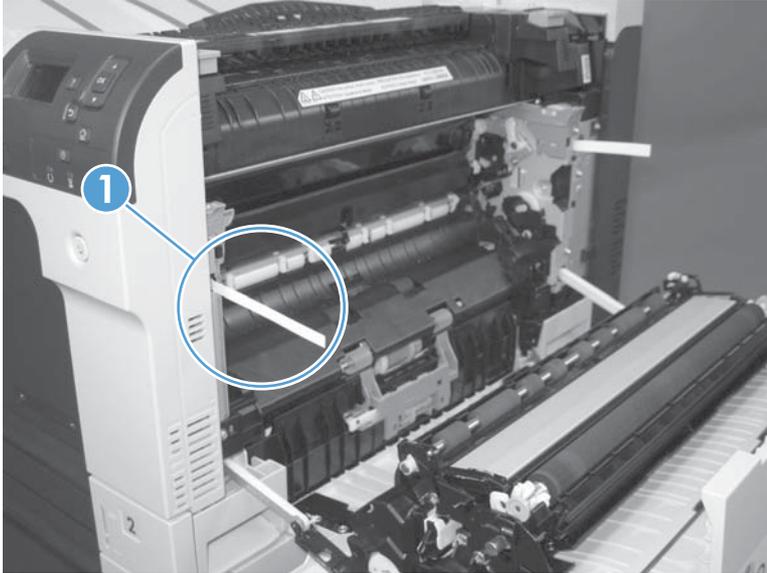
Right-door opening/closing sensor (PS15)

 **NOTE:** The front-door opening/closing switch (PS14) is also activated by the right door. During this test, the front door must remain closed.

1. Open the right-door assembly to disengage the right-door opening/closing photo-interrupter sensor.
2. Insert a piece of paper (callout 1) to override the front-door opening/closing switch (PS14).

 **NOTE:** The paper must be thick enough to depress and hold in place the sensor actuator arm.

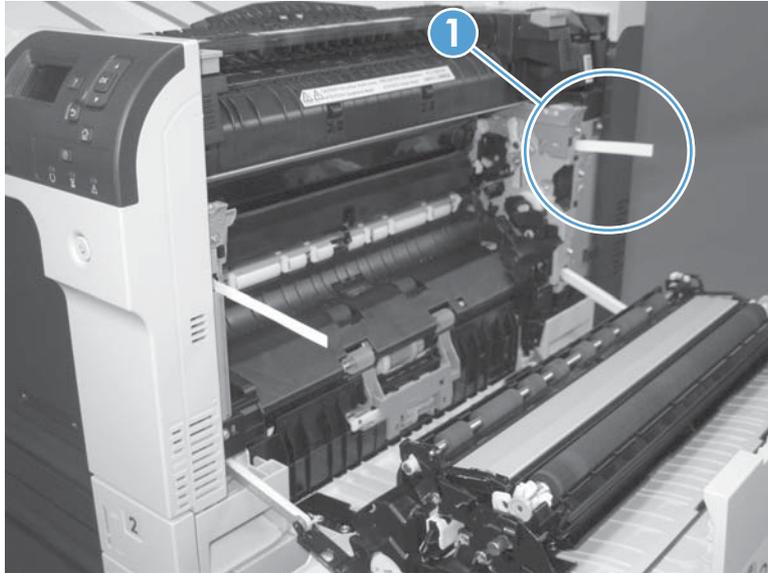
Figure 3-5 Test the right-door opening/closing switch (1 of 2)



3. Insert a thin piece of paper (callout 1) to activate the right-door opening/closing sensor (PS15).

CAUTION: Using too thick of a piece of paper to activate this sensor might dislodge the photo-interrupter body from its mounting bracket. Make sure you use a thin piece of paper to activate the sensor.

Figure 3-6 Test the right-door opening/closing switch (2 of 2)

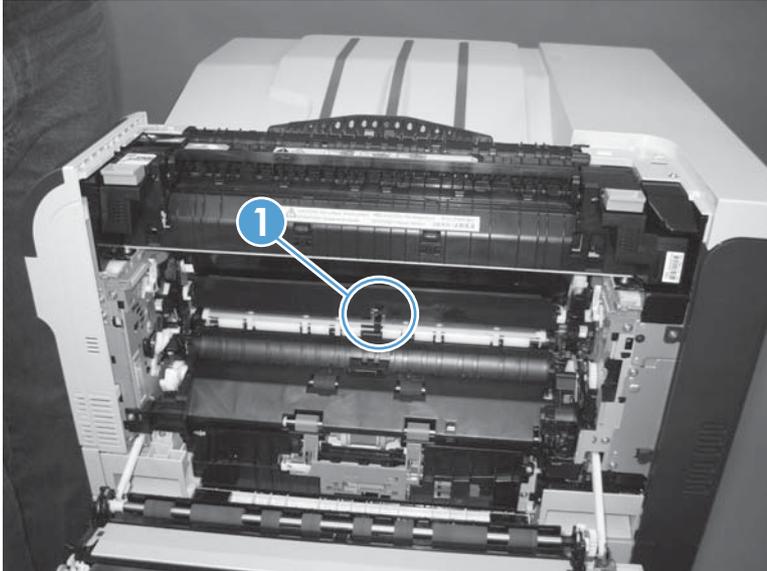


4. If there is no response, replace the right-door sensor.

TOP (top-of-page) sensor (PS5)

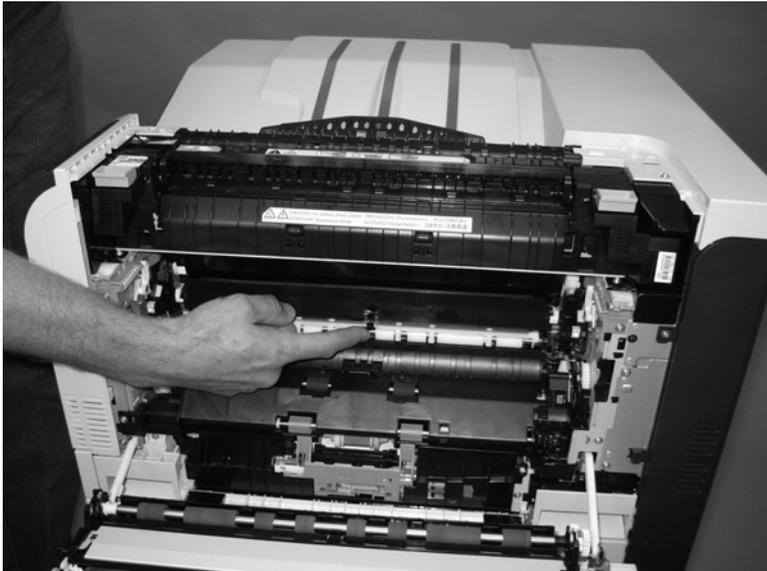
1. Open the right door, and then locate the sensor flag (callout 1).

Figure 3-7 Test the TOP sensor (1 of 2)



2. Activate the TOP sensor.

Figure 3-8 Test the TOP sensor (2 of 2)

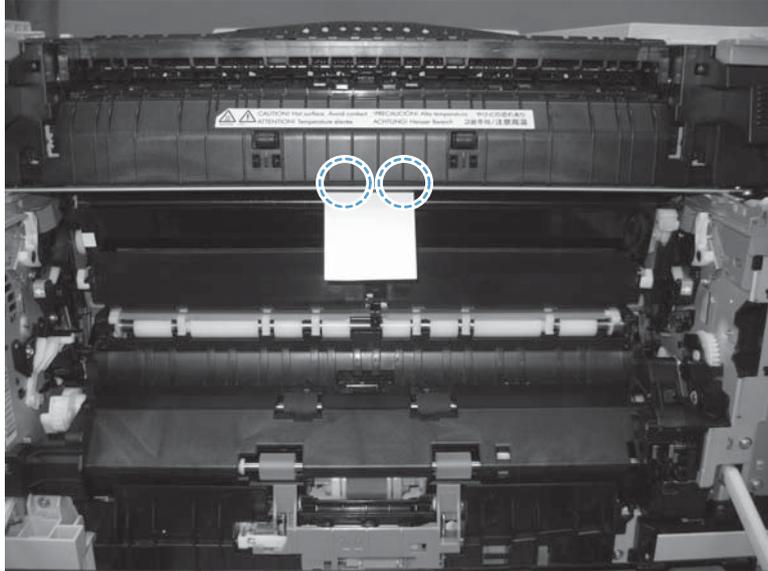


3. Check the control-panel display for sensor response.
4. If there is no response, replace the registration assembly.

Fuser loop sensors 1 and 2 (PS7 and PS8)

1. Open the right door.
2. Slowly insert a piece of paper at the entrance of the fuser to activate the fuser loop sensors 1 and 2 underneath the fuser.

Figure 3-9 Test the fuser loop sensors

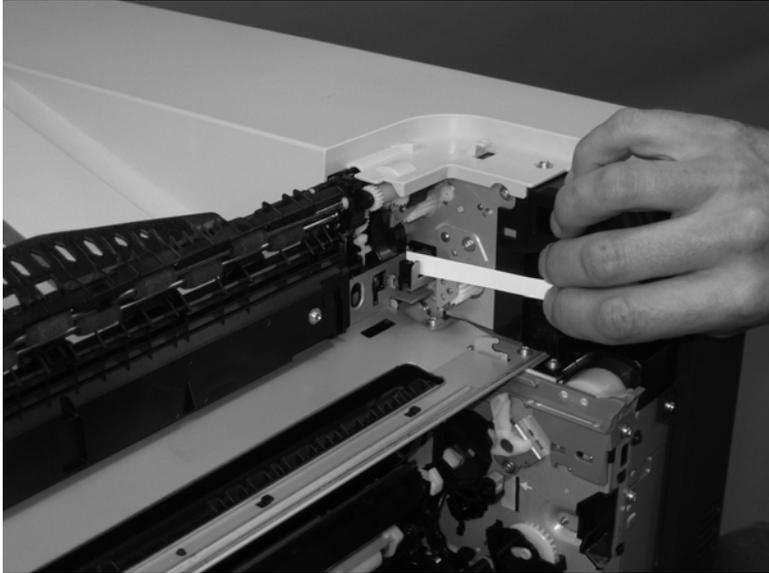


3. Check the control-panel display for a sensor response.
4. If there is no response, replace fuser.

Fuser pressure-release sensor (PS9)

1. Open the right-door assembly.
2. Remove the fuser.
3. Insert a piece of paper as shown to activate the fuser pressure-release sensor.

Figure 3-10 Test the fuser pressure-release sensor

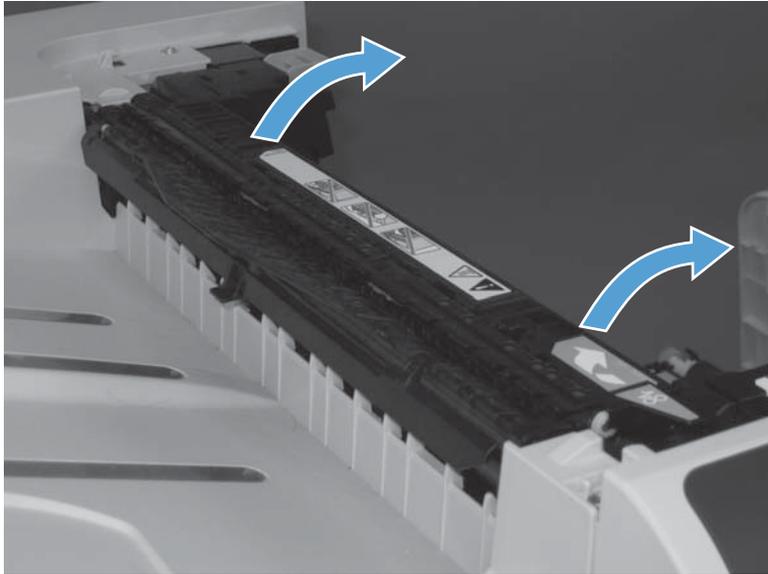


4. Check the control-panel display for sensor response.
5. If there is no response, replace the fuser drive assembly.

Fuser output sensor (PS6)

1. Open the right-door assembly.
2. Open the fuser jam-access flap.

Figure 3-11 Test the fuser output sensor (1 of 2)



3. Locate the fuser output sensor flag (callout 1), and then activate the sensor flag.

Figure 3-12 Test the fuser output sensor (2 of 2)



4. Check the control-panel display for a sensor response.
5. If there is no response, replace the fuser.

Developer alienation sensor (PS11)

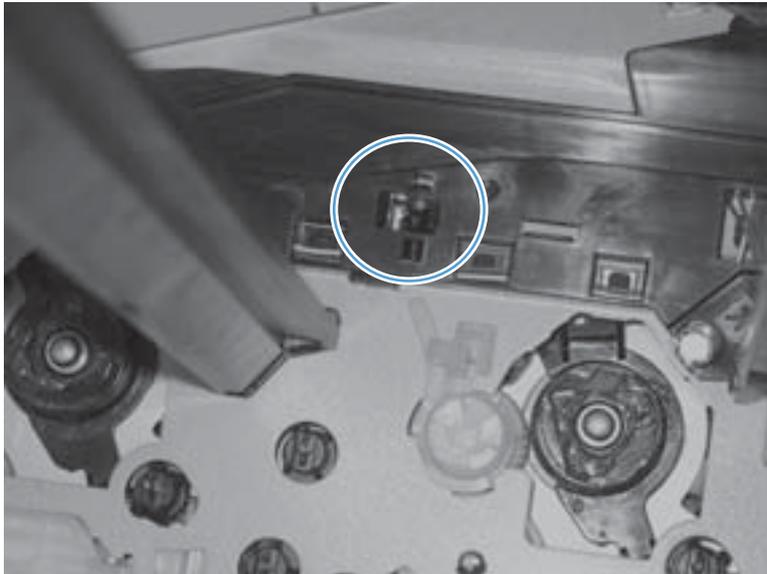
This sensor is located inside the main-drive assembly and cannot be accessed for direct manual testing. Use the paper path sensor test to test this sensor.

1. Press the Home button .
2. Open the following menus:
 - [Administration](#)
 - [Troubleshooting](#)
 - [Diagnostic Tests](#)
3. Press the **Down** arrow ▼ to highlight the [Paper Path Sensors](#) item, and then press the **OK** button.
4. Press the **Down** arrow ▼ to highlight **Start**, and then check the control-panel display for sensor response (watch the developer alienation sensor (PS11) in the list).
5. If there is no response, replace the main drive assembly.

ITB alienation switch (SW5)

1. Remove the toner cartridges and the ITB. Activate the sensor by moving the flag located on the rear ITB guide rail.

Figure 3-13 Test the ITB alienation switch



2. Check the control-panel display for sensor response.
3. If there is no response, replace the main drive assembly.

Tray/Bin manual sensor test

Use this test to test the tray and bin sensors and switches manually. The following illustrations and table show the locations of these sensors.

1. Press the Home button .
2. Open the following menus:
 - [Administration](#)
 - [Troubleshooting](#)
 - [Diagnostic Tests](#)
3. Press the **Down** arrow ▼ to highlight the [Tray/Bin Manual Sensor Test](#) item, and then press the **OK** button.

Table 3-22 Tray/Bin manual sensor test

Sensor or switch name	Sensor or switch number
Tray 1 paper sensor	PS2
Tray 2 paper sensor	PS1
Tray 2 paper surface sensor	PS4
Tray 2 paper size switches	SW7 and SW 8
Tray 3 paper sensor	SR3
Tray 3 paper surface sensor	SR2
Tray 3 paper size switches	SW2 and SW3
Tray 3 feed sensor	SR1
Tray 3 door opening/closing sensor	SW1
Tray 4 paper sensor	SR3
Tray 4 paper surface sensor	SR2
Tray 4 paper size switches	SW2 and SW3
Tray 4 feed sensor	SR1
Tray 4 opening/closing sensor ¹	SW1
Tray 5 paper sensor	SR83
Tray 5 paper surface sensor	SR82
Tray 5 paper size switches	SW82 and SW83
Tray 5 feed sensor	SR81
Tray 5 opening/closing sensor ¹	SW1
Tray 6 paper sensor	SR93
Tray 6 paper surface sensor	SR92
Tray 6 paper size switches	SW92 and SW93
Tray 6 feed sensor	SR91

Table 3-22 Tray/Bin manual sensor test (continued)

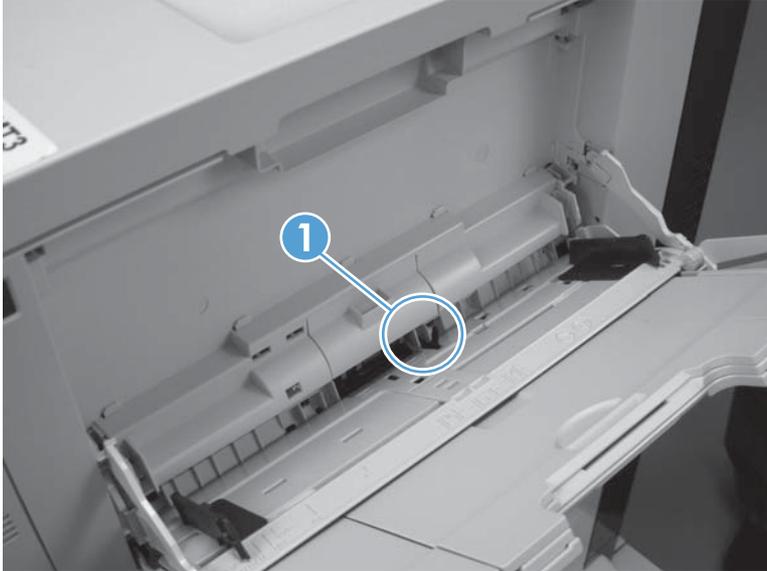
Sensor or switch name	Sensor or switch number
Tray 6 opening/closing sensor ¹	SW1
Output bin full sensor	PS10

¹ Tray 4, Tray 5, and Tray 6 use the same opening/closing sensor (SW1) on the right door of the accessory.

Tray 1 paper sensor (PS2)

1. Open Tray 1.
2. Locate the Tray 1 paper-present sensor flag (callout 1), and then toggle the sensor flag to activate the sensor.

Figure 3-14 Test the Tray 1 paper present sensor

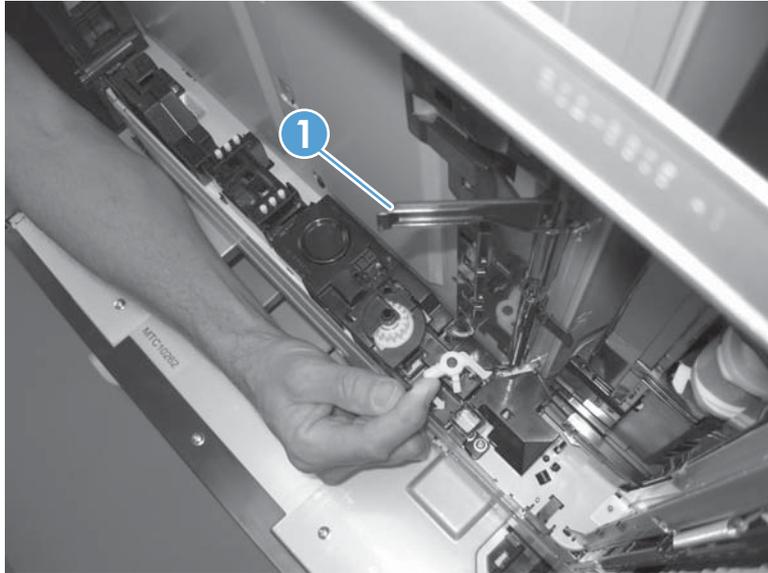


3. Check the control-panel display for sensor response.
4. If there is no response, replace the paper pickup assembly.

Tray 2 paper present sensor (PS1)

1. Remove the tray.
2. In the tray cavity, release the spring loaded tray-present lever to lower the flag (callout 1), and then toggle the flag to activate the sensor.

Figure 3-15 Test the tray 2 paper sensor

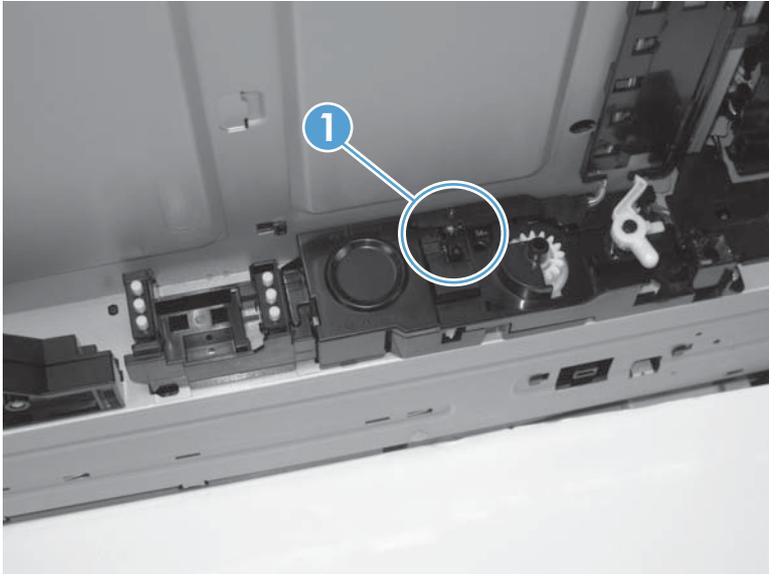


3. Check the control-panel display for sensor response.
4. If there is no response, replace the last paper detect sensor.

Tray 2 paper surface sensor (PS4)

1. Remove the tray.
2. In the tray cavity, insert a slip of paper in the photo sensor receptor and transmitter (callout 1).

Figure 3-16 Tray 2 paper surface sensor



3. Check the control-panel display for sensor response.
4. If there is no response, replace the lifter drive assembly.

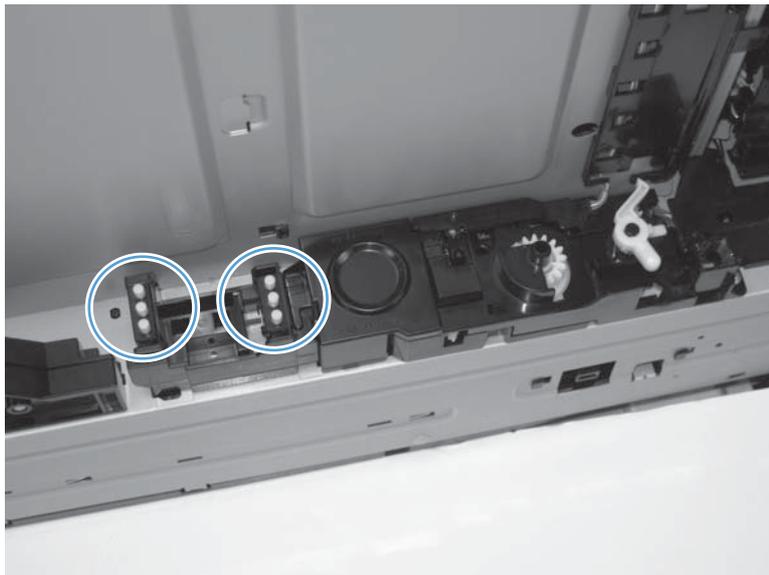
Tray 2 paper size switches (SW7 and SW8)

 **NOTE:** These switches also detect cassette presence. If these switches fail, the message **Tray <X> open** could appear on the control-panel display.

1. Remove the tray. From inside the tray cavity, push any of the switch buttons (callout 1).

 **TIP:** You can test these sensors by opening, and then closing the tray.

Figure 3-17 Test the Tray 2 paper size switches

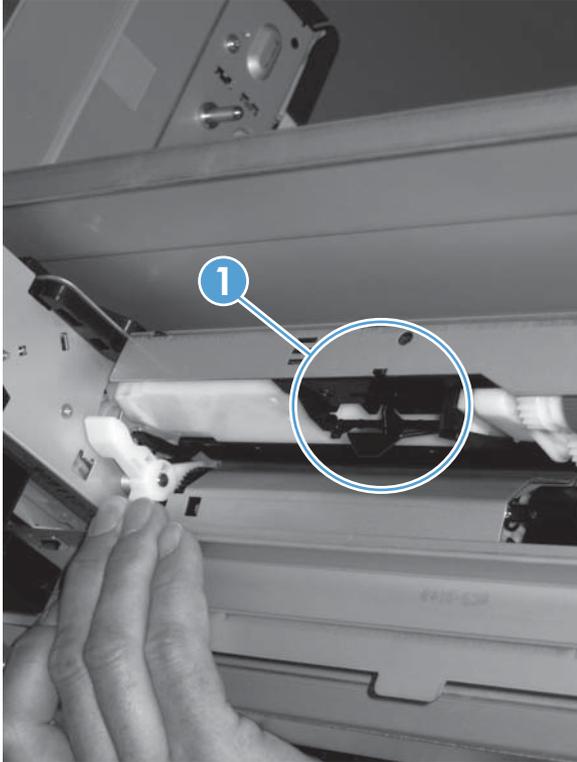


2. Check the control-panel display for sensor response.
3. If there is no response, replace the lifter assembly.

Tray 3 paper sensor (SR3)

1. Remove the tray.
2. In the tray cavity, release the spring loaded tray-present lever to lower the flag (callout 1), and then toggle the flag to activate the sensor.

Figure 3-18 Test Tray 3 paper sensor

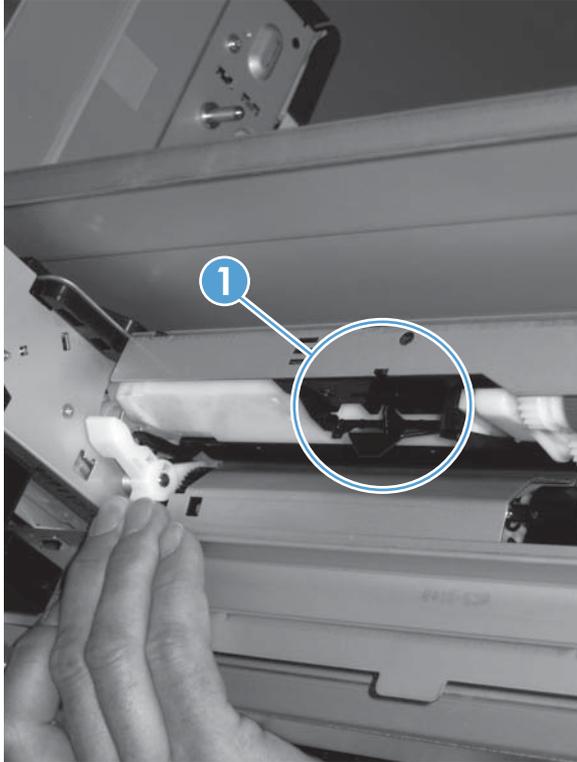


3. Check the control-panel display for sensor response.
4. If there is no response, replace the paper pickup assembly.

Tray 3 paper surface sensor (SR2)

1. Remove the tray.
2. In the tray cavity, release the spring loaded tray-present lever to lower the flag (callout 1), and then toggle the flag to activate the sensor.

Figure 3-19 Test Tray 3 paper sensor



3. Check the control-panel display for sensor response.
4. If there is no response, replace the paper pickup assembly.

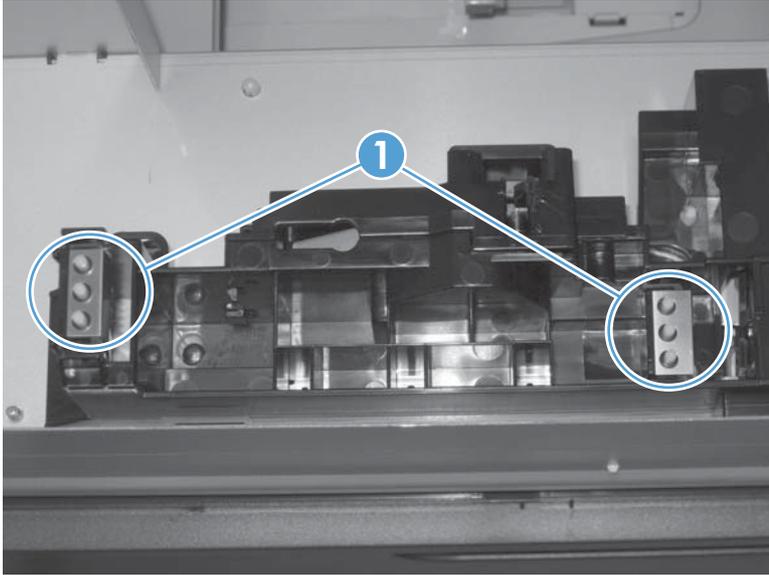
Tray 3 paper size sensors (SW2 and SW3)

 **NOTE:** These switches also detect cassette presence. If these switches fail, the message **Tray <X> open** could appear on the control-panel display.

1. Remove the tray. From inside the tray cavity, push any of the switch buttons (callout 1).

 **TIP:** You can test these sensors by opening, and then closing the tray.

Figure 3-20 Test Tray 3 paper size sensors



2. Check the control-panel display for sensor response.
3. If no response, replace the lifter drive assembly.

Tray 3 feed sensor (SR1)

1. Open the paper-feeder door.
2. Insert a piece of paper as shown to activate the feed sensor.

 **TIP:** Use stiff paper when performing this test (for example a business card or index card).

Figure 3-21 Test the Tray 3 feed sensor

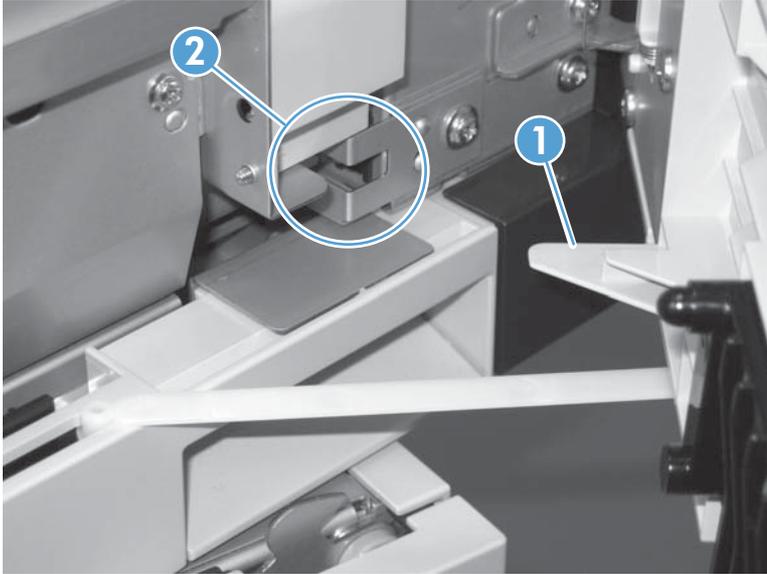


3. Check the control-panel display for sensor response.
4. If no response, replace the paper pickup assembly.

Tray 3 door opening/closing sensor (SW1)

1. Open and then close the paper-feeder door to activate the sensor. The tab on the door (callout 1) activates the sensor (callout 2).

Figure 3-22 Test the Tray 3 door opening/closing sensor



2. Check the control-panel display for sensor response.
3. If no response, replace the button switch.

Tray 4 paper sensor (SR3)

See [Tray 3 paper sensor \(SR3\) on page 296](#).

Tray 4 paper surface sensor (SR2)

See [Tray 3 paper surface sensor \(SR2\) on page 297](#).

Tray 4 paper size sensors (SW2 and SW3)

See [Tray 3 paper size sensors \(SW2 and SW3\) on page 297](#).

Tray 4 feed sensor (SR1)

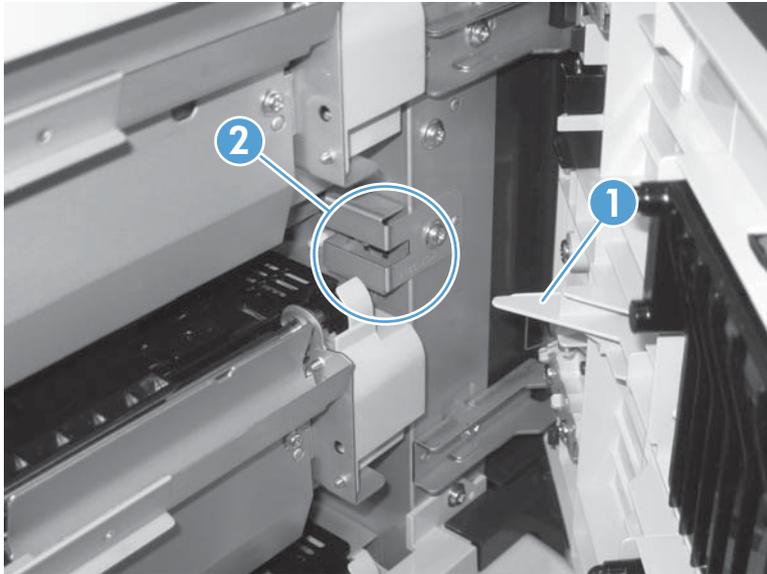
See [Tray 3 feed sensor \(SR1\) on page 299](#).

Tray 4 door opening/closing door sensor (SW1)

 **NOTE:** Tray 4, Tray 5, and Tray 6 use the same opening/closing door sensor (SW1).

1. Open and then close the paper-feeder door to activate the sensor (the tab on the door (callout 1) activates the sensor (callout 2)).

Figure 3-23 Test the Tray 4 door opening/closing sensor



2. Check the control-panel display for sensor response.
3. If no response, replace the button switch.

Tray 5 paper sensor (SR83)

See [Tray 3 paper sensor \(SR3\) on page 296](#).

Tray 5 paper surface sensor (SR82)

See [Tray 3 paper surface sensor \(SR2\) on page 297](#).

Tray 5 paper size sensors (SW82 and SW83)

See [Tray 3 paper size sensors \(SW2 and SW3\) on page 297](#).

Tray 5 feed sensor (SR81)

See [Tray 3 feed sensor \(SR1\) on page 299](#).

Tray 5 door opening/closing sensor (SW1)

See [Tray 4 door opening/closing door sensor \(SW1\) on page 301](#).

Tray 6 paper sensor (SR93)

See [Tray 2 paper present sensor \(PS1\) on page 293](#).

Tray 6 paper surface sensor (SR92)

See [Tray 3 paper surface sensor \(SR2\) on page 297](#).

Tray 6 paper size sensors (SW92 and SW93)

See [Tray 3 paper size sensors \(SW2 and SW3\) on page 297](#).

Tray 6 feed sensor (SR91)

See [Tray 3 feed sensor \(SR1\) on page 299](#).

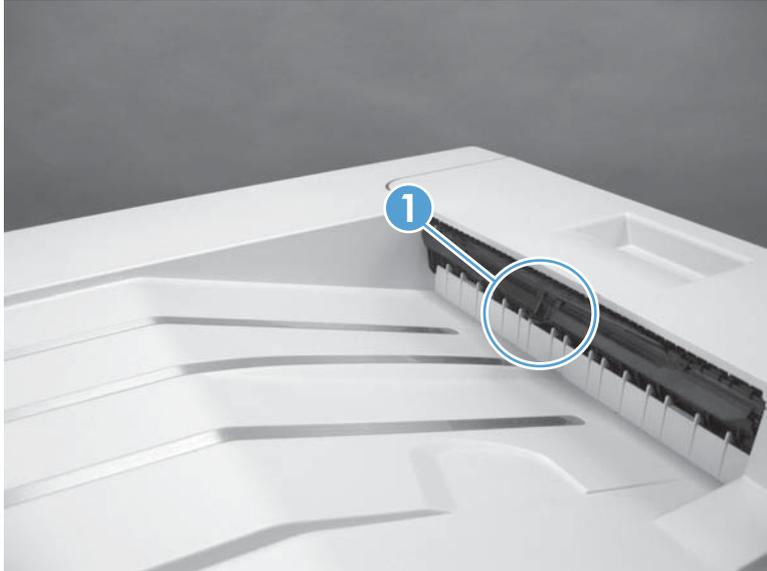
Tray 6 door opening/closing sensor (SW1)

See [Tray 4 door opening/closing door sensor \(SW1\) on page 301](#).

Output-bin-full sensor (PS10)

1. Locate the output-bin-full sensor flag (callout 1), and then activate the sensor flag.

Figure 3-24 Test the output-bin-full sensor



2. Check the control-panel display for sensor response.
3. If there is no response, examine the flag at the left end of the output bin full sensor flag. If the flag is broken, replace the paper delivery assembly. If the flag is not broken, replace the fuser gear assembly.

Paper-path sensors test

This test displays the status of each paper-path sensor and allows viewing of sensor status while printing internal pages.

1. Press the Home  button.
2. Open the following menus:
 - Administration
 - Troubleshooting
 - Diagnostic Tests
3. Press the Down arrow  to highlight the Paper Path Sensors option, and then press the OK button.
4. Select Start Test. Press the down arrow  to see the test results.

 **NOTE:** Exiting the Paper-path sensor test menu and then reentering it will clear the test values from the previous test.

Viewing the sensor status before you activate the test should show that the sensors PS9, PS11 and SW5 have already been activated. After running the Paper-path sensor test, sensor PS9 does not show any activation status.

Table 3-23 Paper-path sensors diagnostic tests

Sensor name	Sensor number
TOP (top of page) sensor	PS5
Fuser loop sensor	PS7
Fuser loop sensor	PS8
Fuser delivery sensor	PS6
Output bin full sensor	PS10
Developer alienation	PS11
Fuser pressure-release sensor	PS9
Primary transfer-roller-disengagement sensor	SW5

Print/stop test

Use this diagnostic test to isolate the cause of problems such as image-formation defects and jams within the engine. During this test you can stop the paper anywhere along the product paper path. The test can be programmed to stop printing internal pages or an external print job when the paper reaches a certain position. The test can also be programmed to stop from 0 to 60,000 ms. If the timer is set to a value that is greater than the job-print time, you can recover the product in one of two ways.

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

When the timer trips, the control panel display shows the message **Printing stopped To continue, touch "OK"**. Pressing the Home button  will print the previously selected job. If you do not want the previous job to print, press the **Stop** button  first, and then press the Home button .



NOTE: Do not try to perform a print/stop test while the product is calibrating, because you will be required to power-cycle the product. If a jam message displays on the control panel during testing, activate the door switch.

Component tests

Component test (special-mode test)

This test activates individual parts independently to isolate problems.

Each component test can be performed once or repeatedly. If you select the **Repeat** option (at the end of the menu), the test cycles the component on and off. This process continues for two minutes, and then the test terminates.



NOTE: The front or side door interlocks must be defeated to run the component tests. Some tests may require that the ITB and print cartridges be removed. The control panel display prompts you to remove some or all cartridges during certain tests.

1. Press the Home button .
2. Open the following menus:

- [Administration](#)
- [Troubleshooting](#)
- [Diagnostic Tests](#)

3. Press the **Down** arrow ▼ to highlight the **Component Test** item, and then press the **OK** button.

4. Select the component test options for the test you want to run.

Table 3-24 Component tests (1 of 2)

Component test	Component tested	Comments
Transfer Motors	M1 (ITB motor)	Drives the ITB motor and drum motor together at a specified speed for 5 seconds.
	M2 (drum motor)	
Belt Only	M1 (ITB motor)	Drives ITB drive motor at a specified speed for 5 seconds.
Developer Motors	M1 (ITB motor)	Drives the ITB motor at a specified speed for 5 seconds.
	M3 (developer motor)	Drives the developer motor at a specified speed for 5 seconds (drives 3 times).
Cartridge Motors	M1 (ITB motor)	Drives the ITB motor at a specified speed for 5 seconds.
	M2 (drum motor)	Drives the drum motor at a specified speed for 5 seconds (drives 3 times).
Fuser Motor	M4	Drives the fuser motor at a specified speed for 5 seconds.
Alienation Motor (cartridge)	M6 (developer alienation motor)	Drives the developer disengagement motor and engages or disengages the developer (drives the motor four times). If the home position of the developer is not commanded within 5 seconds, the product brings the developer to its home position.

Table 3-24 Component tests (1 of 2) (continued)

Component test	Component tested	Comments
ITB Contact/Alienation Motor	M4 (fuser motor) SL5 (disengagement solenoid)	<p>Drives the fuser motor M4 (drives the motor four times) and the T1 roller disengagement solenoid SL5, and brings the T1 roller to either one of the following states:</p> <ul style="list-style-type: none"> • 4 rollers are disengaged (home position) • Only K T1 roller is engaged or 4 rollers are engaged <p>If home position of the T1 roller is not commanded within 10 seconds, the printer moves the T1 roller to its home position.</p> <p>Additionally, the printer keeps the state of 4 rollers engagement so that the service technician can access and manually clean the dust-proof glass (open the front door and remove the cartridge).</p>
Fuser Contact/Alienation Drive	M4 (fuser motor)	<p>Reverses the fuser motor to rotate the fuser pressure release cam and pressurize or depressurize the pressure roller. If home position of the pressure roller is not commanded within 5 seconds, the printer brings the pressure roller to its home position.</p>
Tray<X> Pickup Motor	M5 (pickup motor) M1 (Tray 3 pickup motor) M1 (Tray 4 pickup motor) M81 (Tray 5 pickup motor) M91 (Tray 6 pickup motor)	<p>Drives the pickup motor M5, the 500 sheet paper feeder pickup motor M1, and each of the 3x500 paper deck cassette pickup motors, cassette 1 M1, cassette 2 M81, and cassette 3 M91 individually at a specified speed for 5 seconds.</p>
DuplexerPickup Motor	M8 (duplex pickup motor)	<p>Drives the duplex feed motor at a specified speed for 5 seconds.</p>
Switchback Motor	M7 (duplex reverse motor)	<p>Drives the duplex reverse motor at a specified speed for 5 seconds.</p>

Table 3-24 Component tests (1 of 2) (continued)

Component test	Component tested	Comments
Tray<X> Pickup Solenoid	SL2 (Tray 1 pickup solenoid)	Drives the Tray 1 pickup solenoid SL2, the Tray 2 cassette pickup solenoid SL1, the 500 sheet feeder pickup solenoid SL1, and each of the 3x500 paper deck cassette solenoids, cassette 1 SL1, cassette 2 SL82, and cassette 3 SL92, individually for 5 seconds.
	SL1 (Tray 2 pickup solenoid)	
	SL1 (Tray 3 pickup solenoid)	
	SL1 (Tray 4 pickup solenoid)	
	SL82 (Tray 5 pickup solenoid)	
	SL92 (Tray 6 pickup solenoid)	
Switchback Flapper Solenoid	SL3 (duplex reverse solenoid)	Drives the duplex reverse solenoid for 10 seconds.
Laser Scanner Motor	M10 (laser/scanner motor)	Drives the laser/scanner motor at a specified speed for 10 seconds.

Additional component tests

The following tests are not supported in the firmware. These component tests are accomplished by manipulating or observing the product during operation or when the power is turned on.

Table 3-25 Component tests (2 of 2)

Component test	Component tested	Comments
Paper Deck Cassette Lifter Motor	M9 (Tray 2 lifter drive assembly)	Open and then close a paper tray. Listen at the back side of the product for the sound of the lift motor for that tray.
	M2 (Tray 3 lifter drive assembly)	
	M2 (Tray 4 lifter drive assembly)	
	M82 (Tray 5 lifter drive assembly)	
	M92 (Tray 6 lifter drive assembly)	
Power Supply Fan	FM1	Turn the product power off, and then on. Listen at the left-front-lower corner area of the print engine for fan noise while the product initializes.

Full/half speed intake fan

Cools the following areas:

- low-voltage power supply area
- face-down bin
- delivery bin
- laser scanner area

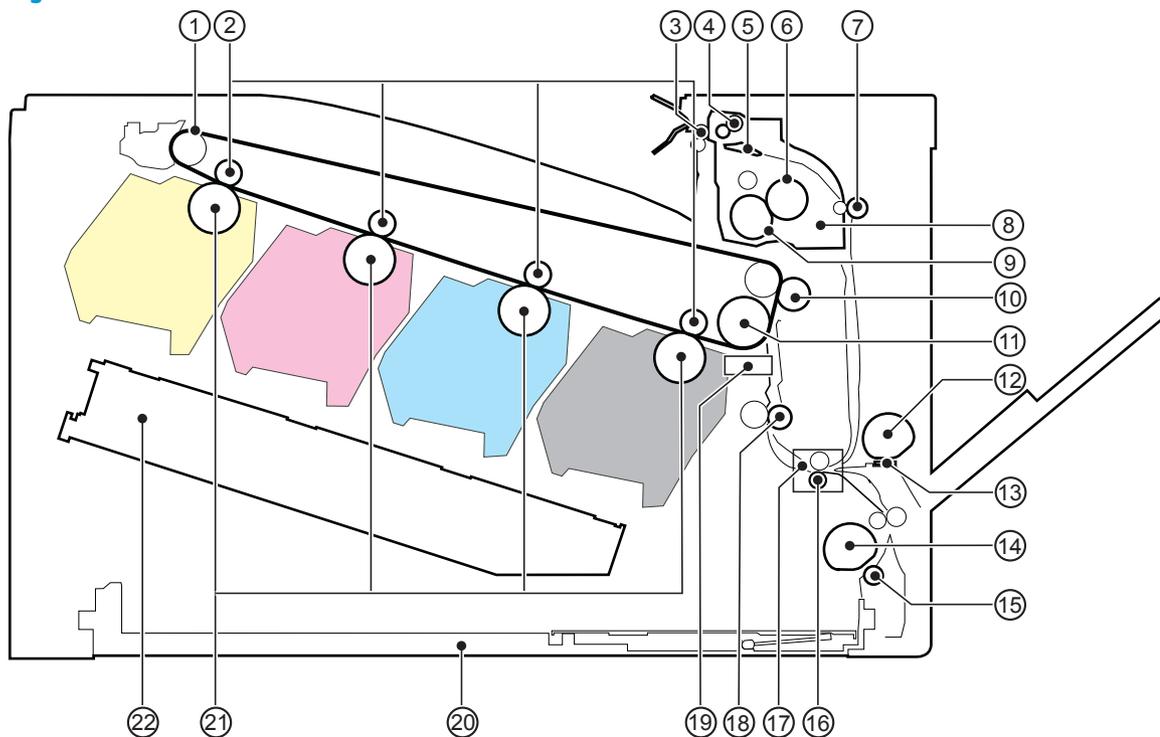
Table 3-25 Component tests (2 of 2) (continued)

Component test	Component tested	Comments
Fuser Fan	FM2	<p>Turn the product power off, and then on. Listen at the front-right-lower corner of the print engine for fan noise while the product initializes.</p> <p>Full speed intake fan</p> <p>Cools the following areas:</p> <ul style="list-style-type: none">• duplex feed• ITB
Formatter Fan	FM3	<p>Turn the product power off, and then on. Listen at the back-lower center area of the rear cover for fan noise while the product initializes.</p> <p>Speed controlled intake fan</p> <p>Cools the following areas:</p> <ul style="list-style-type: none">• DC controller• ICB• formatter <p>NOTE: The formatter controls the speed of this fan depending on product operations.</p>

Diagrams

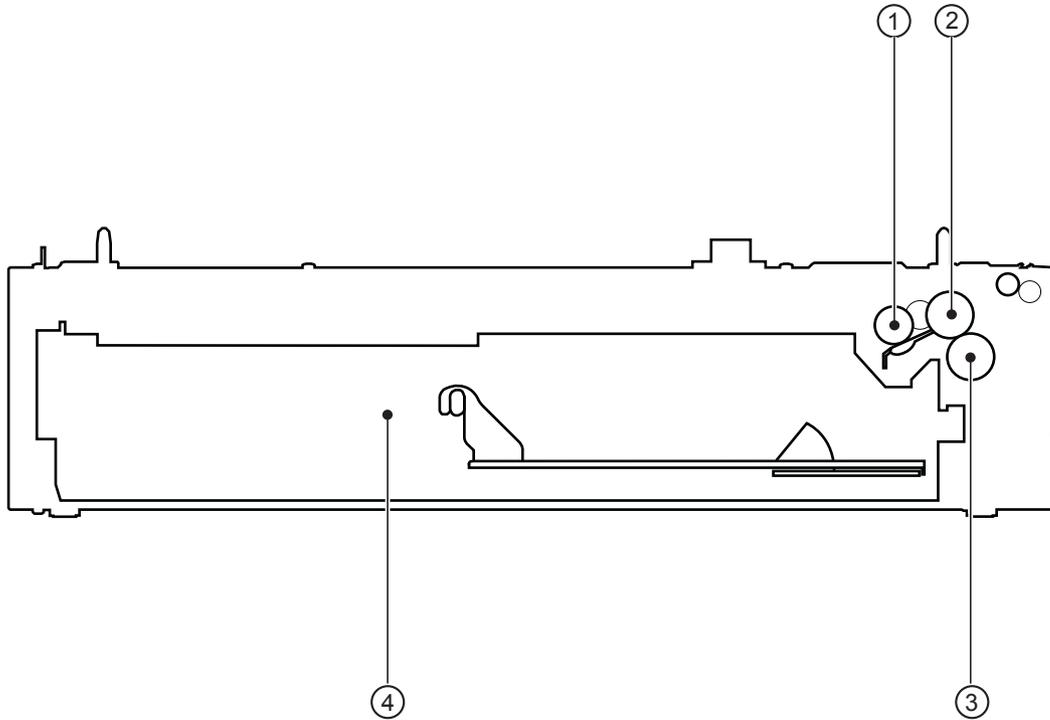
Block diagrams

Figure 3-25 Product cross section



Item	Description	Item	Description
1	ITB	12	MP tray pickup roller
2	Primary transfer roller	13	MP tray separation pad
3	Delivery roller	14	Cassette pickup roller
4	Duplex reverse roller (duplex models only)	15	Cassette separation roller
5	Duplex flapper (duplex models only)	16	Feed roller
6	Pressure roller	17	Media sensor
7	Duplex feed roller (duplex models only)	18	Registration roller
8	IFuser	19	Registration density sensor
9	Fuser sleeve	20	Cassette
10	Secondary transfer roller	21	Photosensitive drum
	ITB drive roller		Laser/scanner assembly

Figure 3-26 Optional paper feeder (Tray 3) cross section



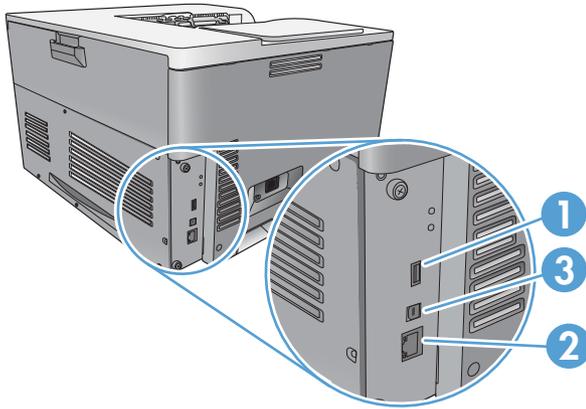
1 Pickup roller

2 Feed roller

3 Separation roller

4 Cassette

Plug/jack locations



-
- | | |
|---|--|
| 1 | Hi-Speed USB 2.0 printing port |
| 2 | Local area network (LAN) Ethernet (RJ-45) network port |
| 3 | USB port for a third-party device |
-

Location of connectors

DC controller connections

Figure 3-27 DC controller connections

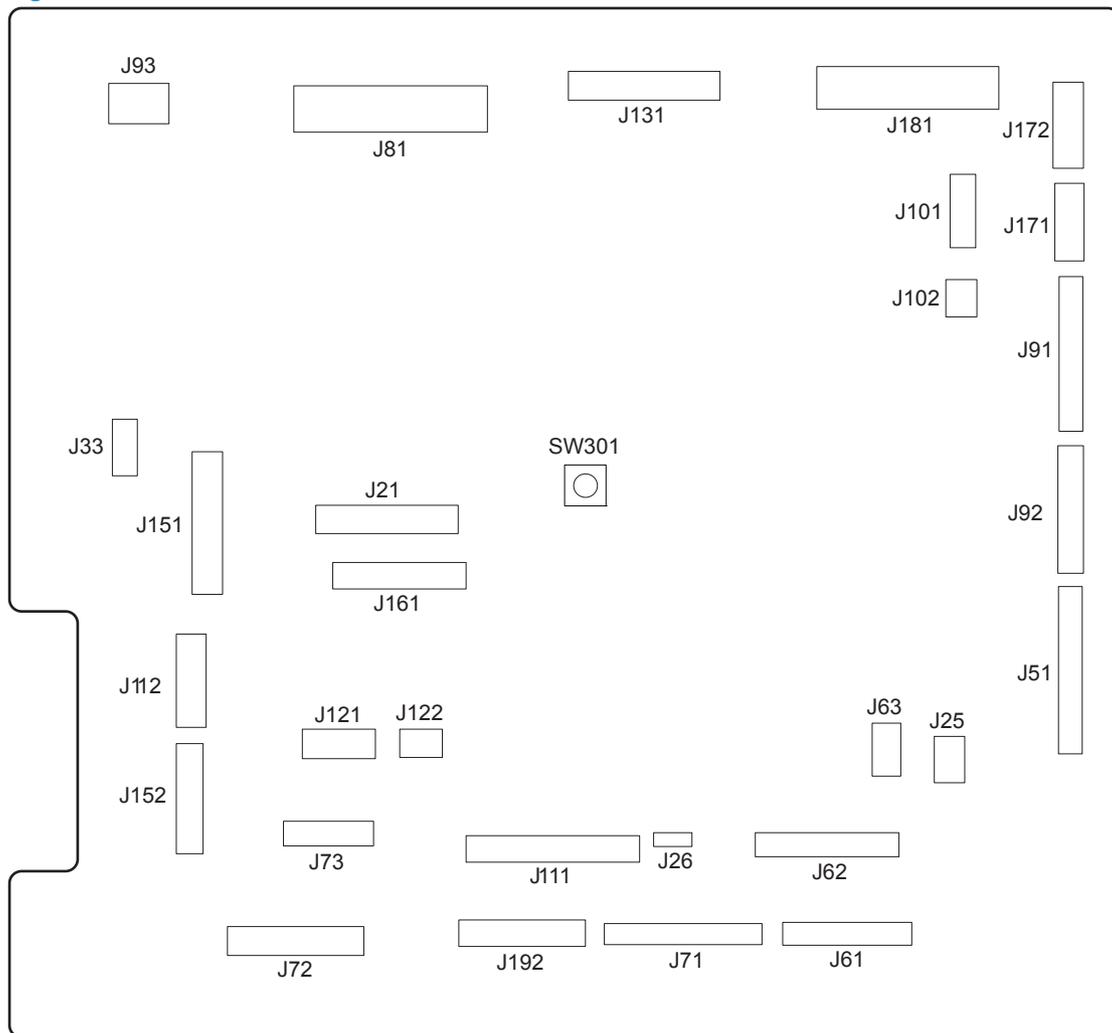


Table 3-26 DC controller connections

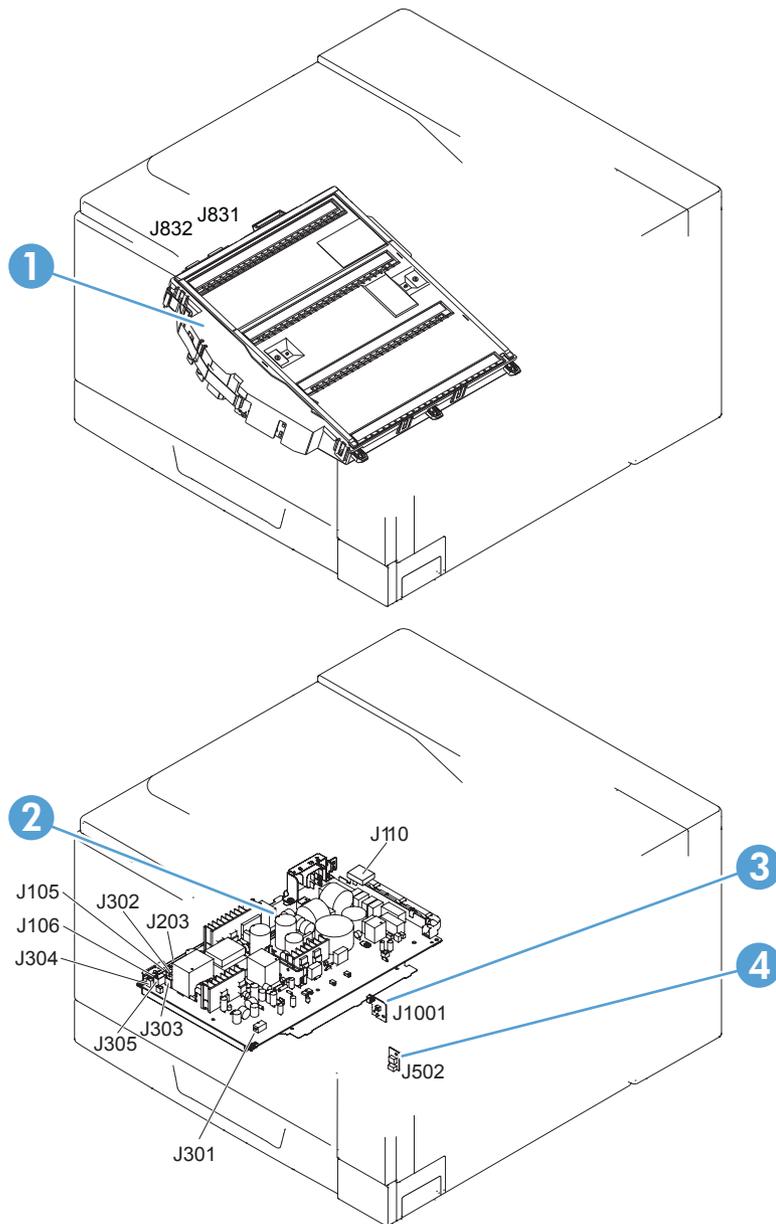
Item	Description	Item	Description	Item	Description
J21	DC controller power	J73	Secondary transfer	J122	Top of page sensor
J25	Low-voltage power supply	J81	ITB motor	J131	Fuser
			Fuser motor		
			Drum motor		
			Developing motor		

Table 3-26 DC controller connections (continued)

Item	Description	Item	Description	Item	Description
J33	Environment sensor	J91	Duplex reverse solenoid	J151	Cassette paper size
			Cassette pickup solenoid		Cassette paper presence
			Pickup motor		Cassette lifter motor
			Developing disengagement motor		
J51	Formatter	J92	Duplex feed motor	J152	MP tray paper presence
			Duplex reverse motor		MP tray pickup solenoid
J61	Laser scanner	J93	Driver PCA	J161	Cartridge toner level sensors
J62	Laser scanner	J101	Cartridge memory tag (yellow, magenta, cyan)	J171	Cartridge pre-exposure LEDs
J63	Laser scanner motor	J102	Cartridge memory tag (black)	J172	Cartridge pre-exposure LEDs
J71	Developing high-voltage PCA	J111	Registration and density sensor	J181	Cartridge drum home-position sensors
					Right door switch
					Primary transfer disengagement solenoid
					Fuser pressure release
					Output bin full sensor
					Toner collection unit full sensor
J72	Cartridge primary transfer	J121	Front door switch	J192	Paper feeder
			Fuser fan		

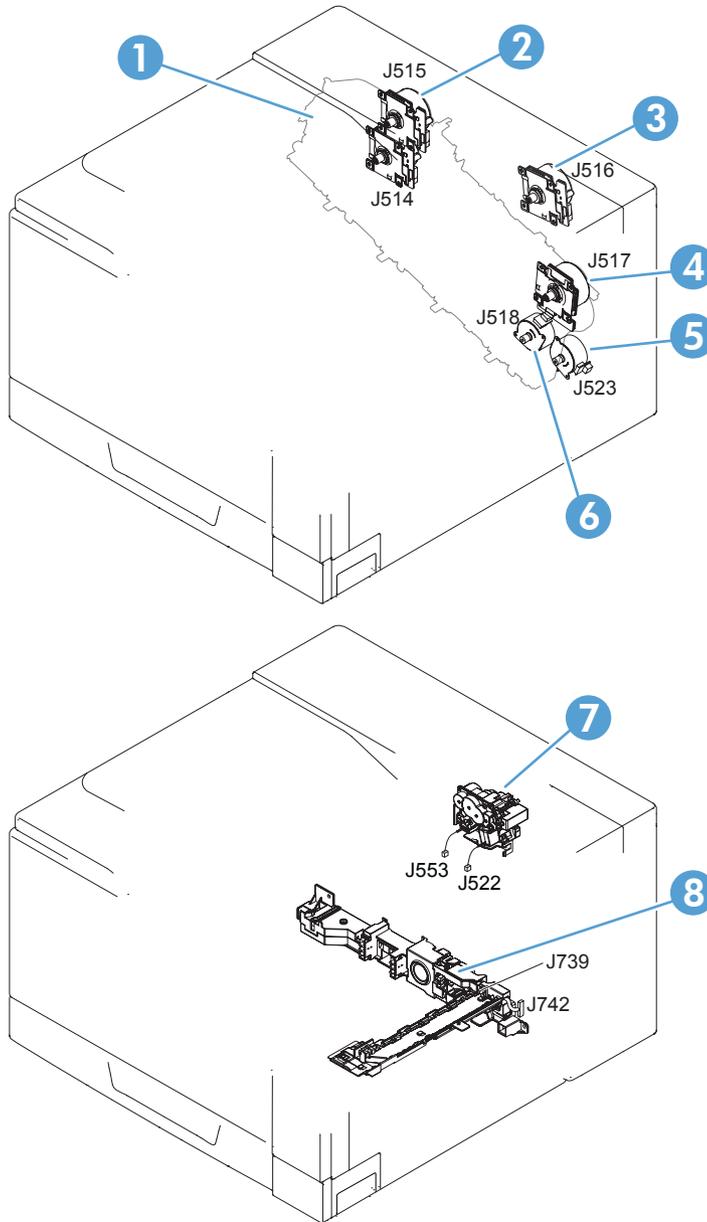
Product connections

Figure 3-28 Product connections (1 of 6)



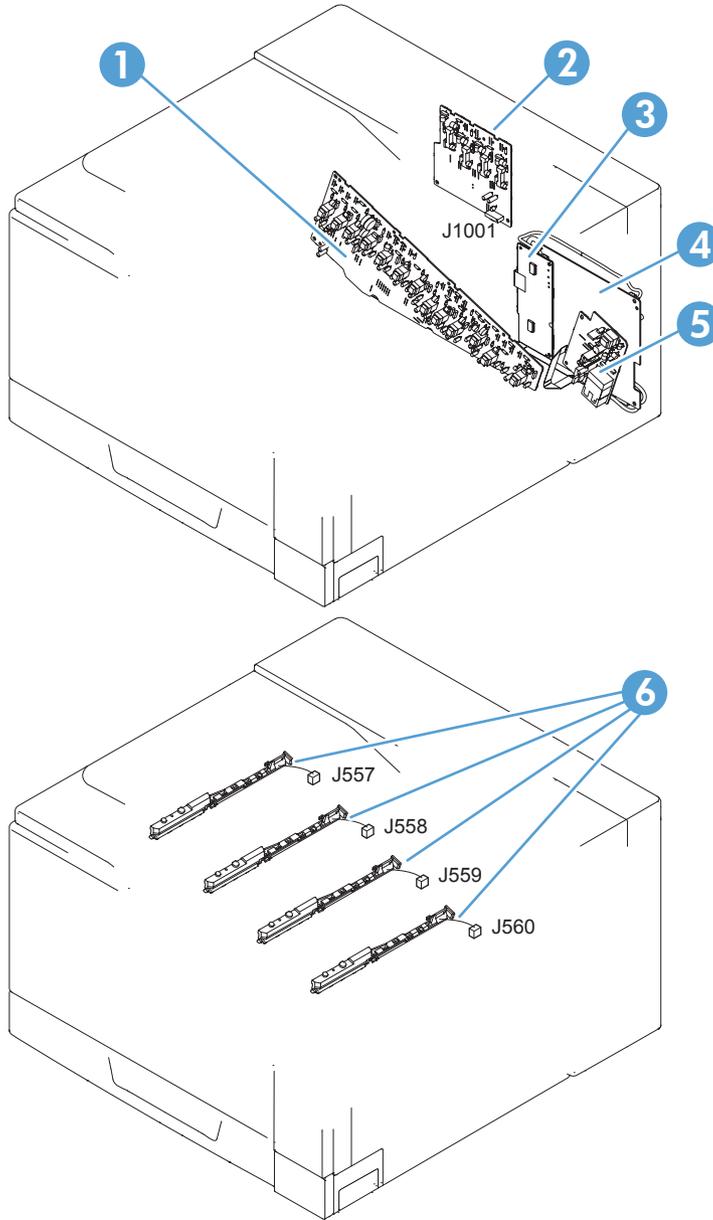
Item	Description
1	Laser scanner unit
2	Low-voltage power supply
3	Power switch PCA
4	Environment sensor

Figure 3-29 Product connections (2 of 6)



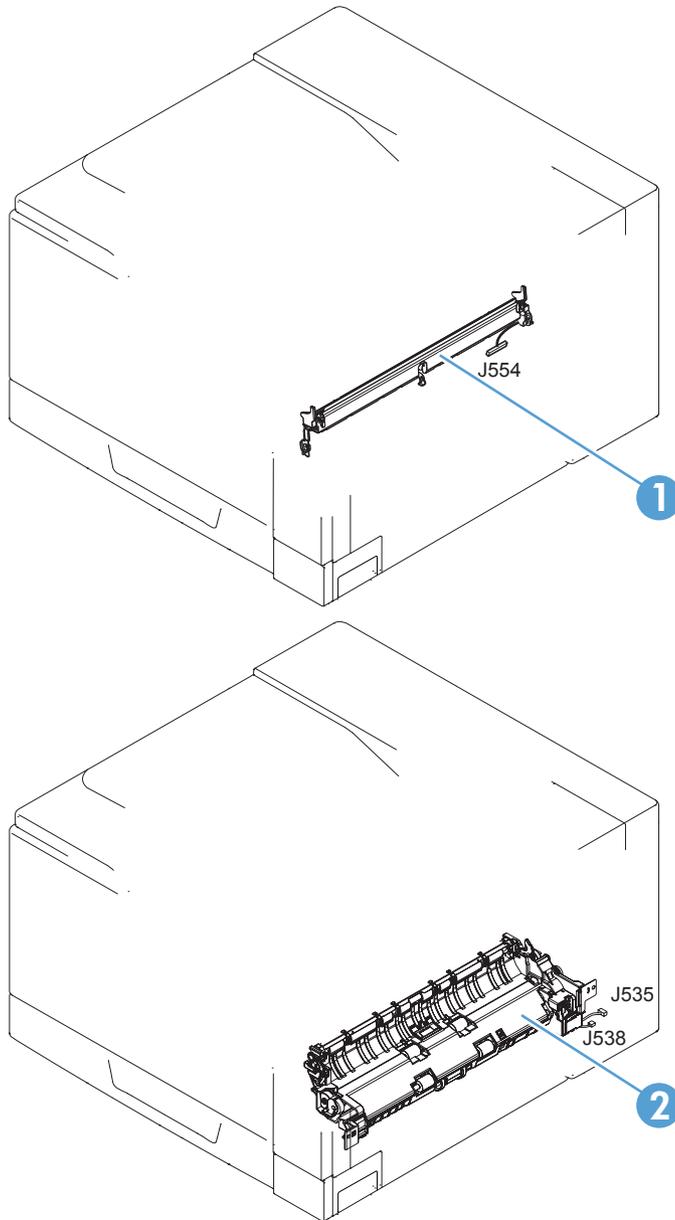
Item	Description
1	Developing motor
2	Drum motor
3	Fuser motor
4	ITB motor
5	Pickup motor
6	Developing disengagement motor
7	Drive unit
8	Lifter drive unit

Figure 3-30 Product connections (3 of 6)



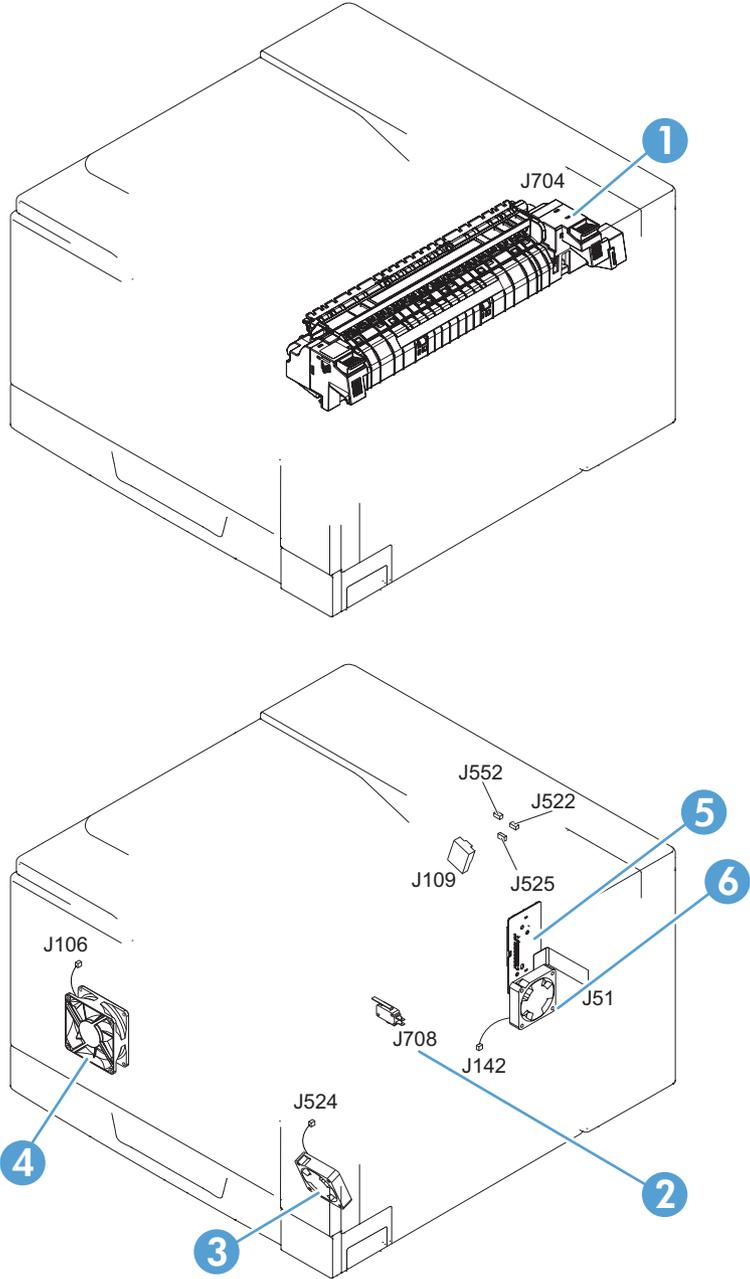
Item	Description
1	High-voltage power supply imaging (developing) PCA
2	High-voltage power supply 1st transfer PCA
3	Driver PCA
4	DC controller PCA
5	High-voltage power supply 2nd transfer PCA
6	Toner remaining detect PCA

Figure 3-31 Product connections (4 of 6)



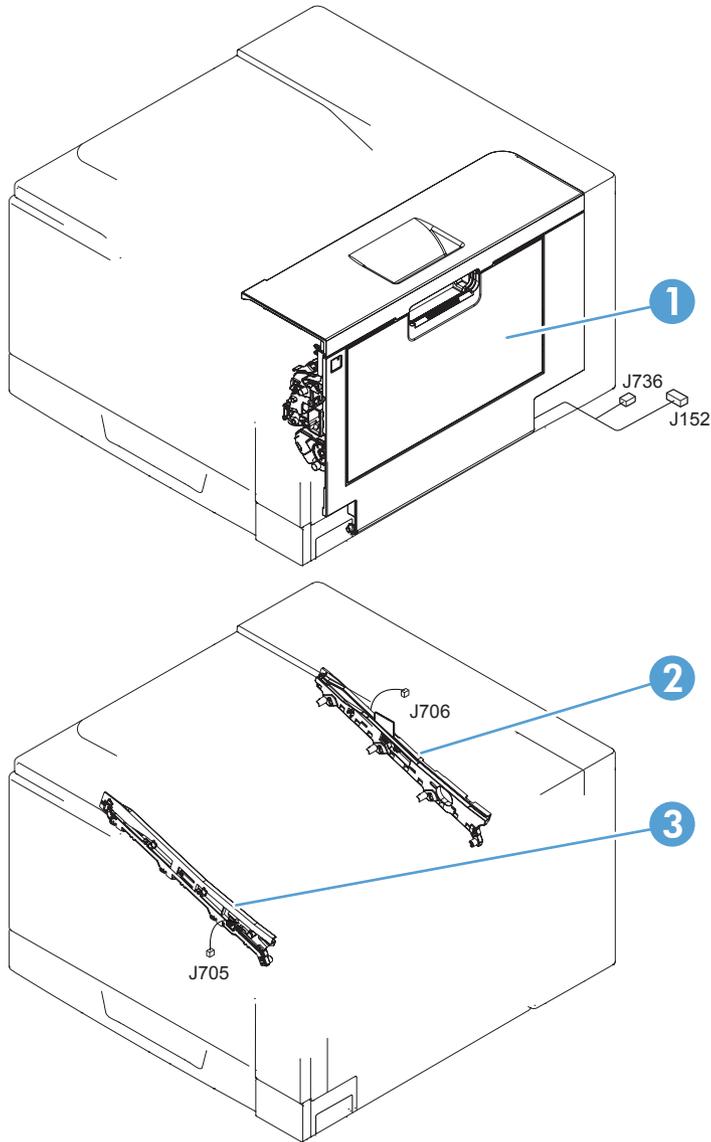
Item	Description
1	Registration sensor assembly
2	Paper pickup drive unit

Figure 3-32 Product connections (5 of 6)



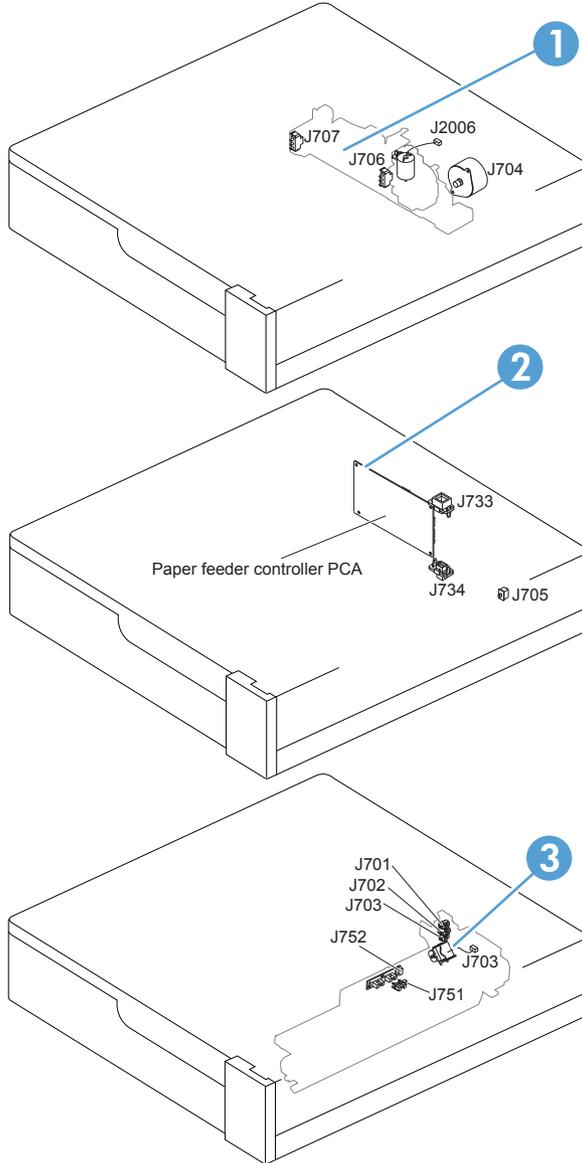
Item	Description
1	Fuser
2	24V interlock switch
3	Fuser fan
4	Power supply fan
5	ICB PCA
6	Formatter fan

Figure 3-33 Product connections (6 of 6)



Item	Description
1	Right door assembly
2	ITB rear guide
3	ITB front guide

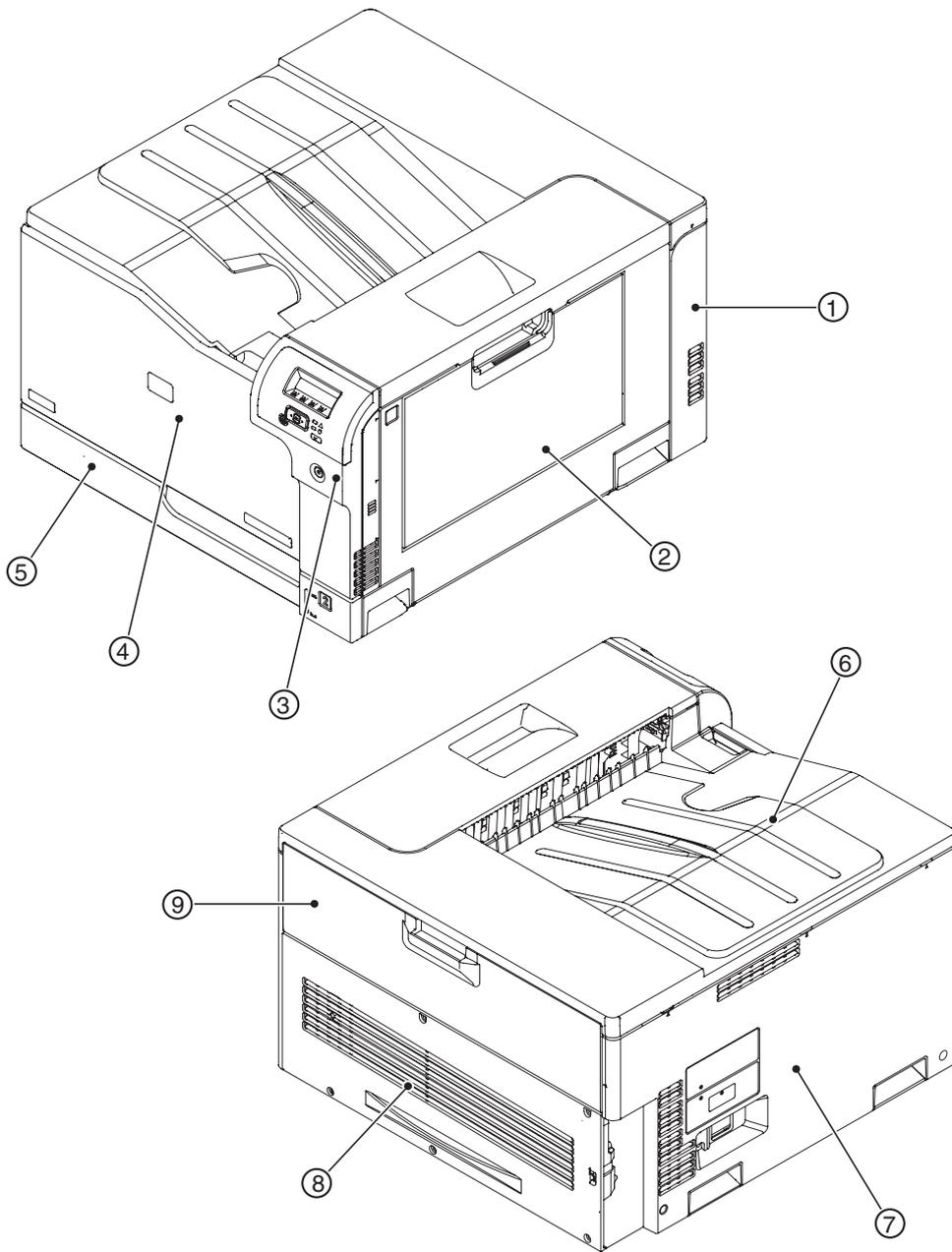
Figure 3-34 Paper feeder connections



Item	Description
1	Paper feeder lifter-drive assembly
2	Paper feeder PCA
3	Paper feeder paper-pickup assembly

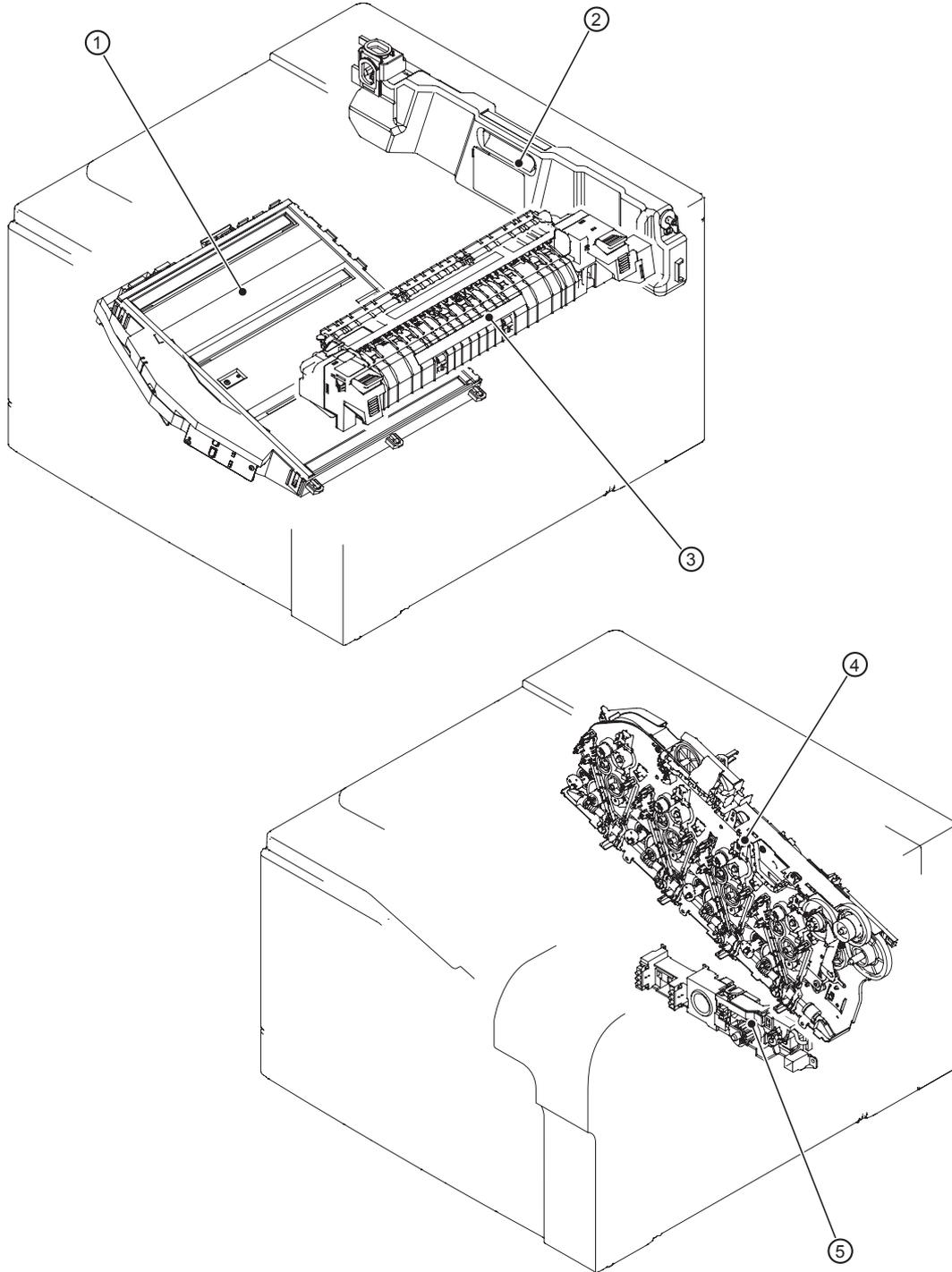
Locations of major components

Figure 3-35 External component locations



Item	Description	Item	Description
1	Right-rear cover	6	Top cover
2	Right-door assembly	7	Left cover
3	Right-front cover	8	Rear cover
4	Front-door assembly	9	Toner collection unit access-door
5	Cassette (Tray 2)		

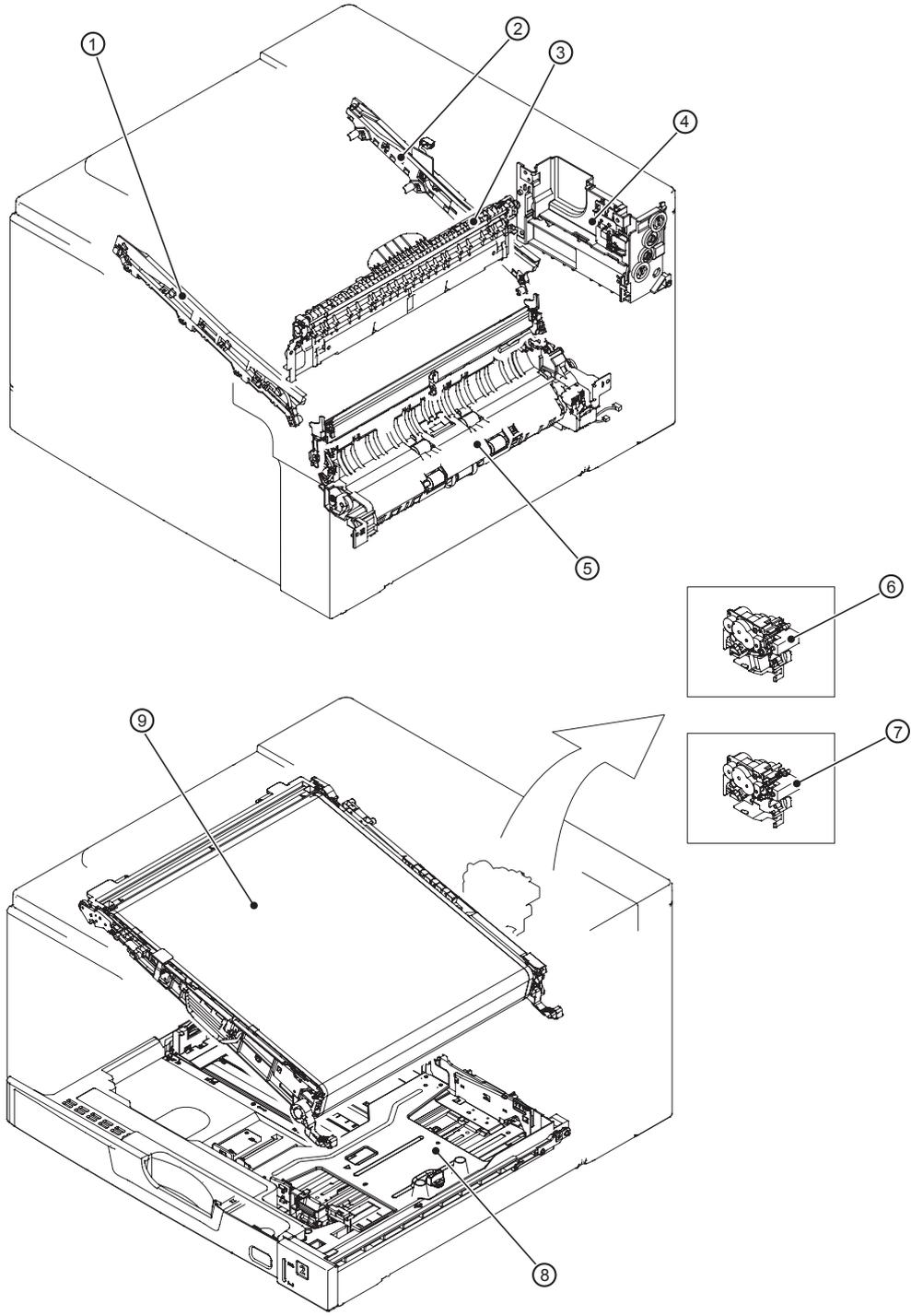
Figure 3-36 Major component locations (1 of 3)



Item	Description
1	Laser scanner unit
2	Toner collection unit
3	Fuser

Item	Description
4	Main drive unit
5	Lifter drive unit

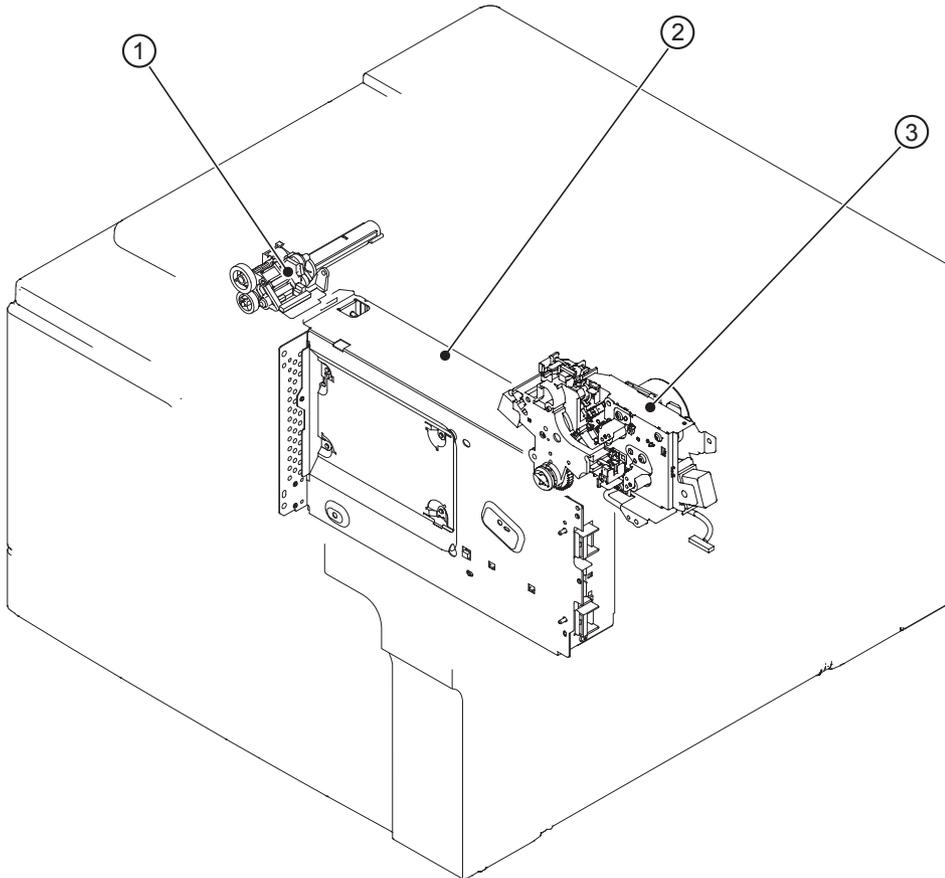
Figure 3-37 Major component locations (2 of 3)



Item	Description	Item	Description
1	ITB front guide unit	6	Duplex drive unit (duplex models only)
2	ITB rear guide unit	7	Delivery drive unit (simplex models only)
3	Delivery unit	8	Cassette (Tray 2)

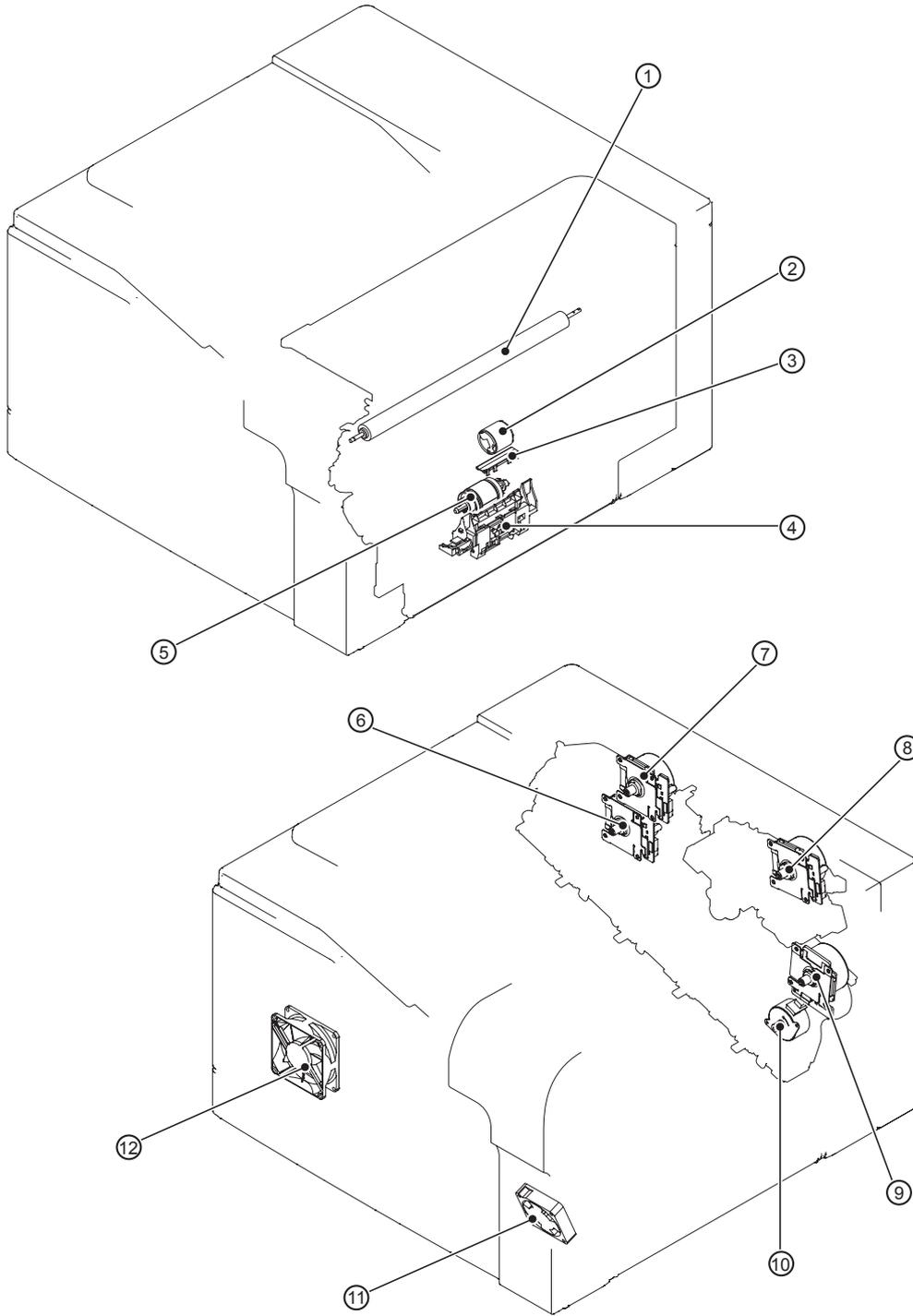
Item	Description	Item	Description
4	Toner collection unit full sensor	9	ITB unit
5	Cassette pickup drive unit		

Figure 3-38 Major component locations (3 of 3)



Item	Description
1	Waste toner carrier unit
2	Formatter
3	Fuser drive unit

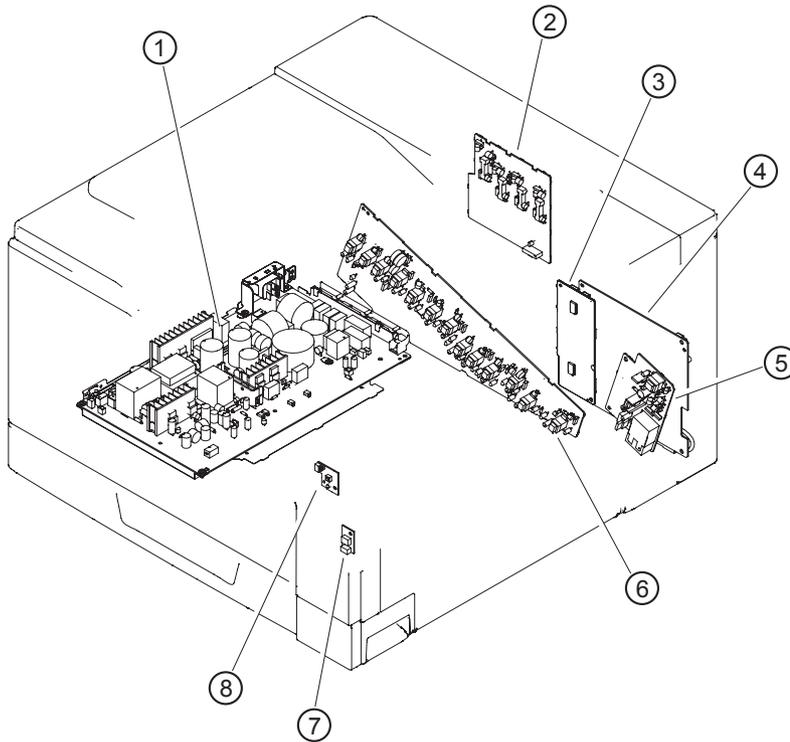
Figure 3-39 Motors, fans, and rollers component locations



Item	Description	Item	Description
1	Secondary transfer roller unit	7	Drum motor
2	MP tray (Tray 1) pickup roller	8	Fuser motor
3	MP tray (Tray 1) separation pad	9	ITB motor
4	Cassette (Tray 2) separation roller unit	10	Developing disengagement motor

Item	Description	Item	Description
5	Cassette (Tray 2) pickup roller unit	11	Fuser fan
6	Developing motor	12	Power supply fan

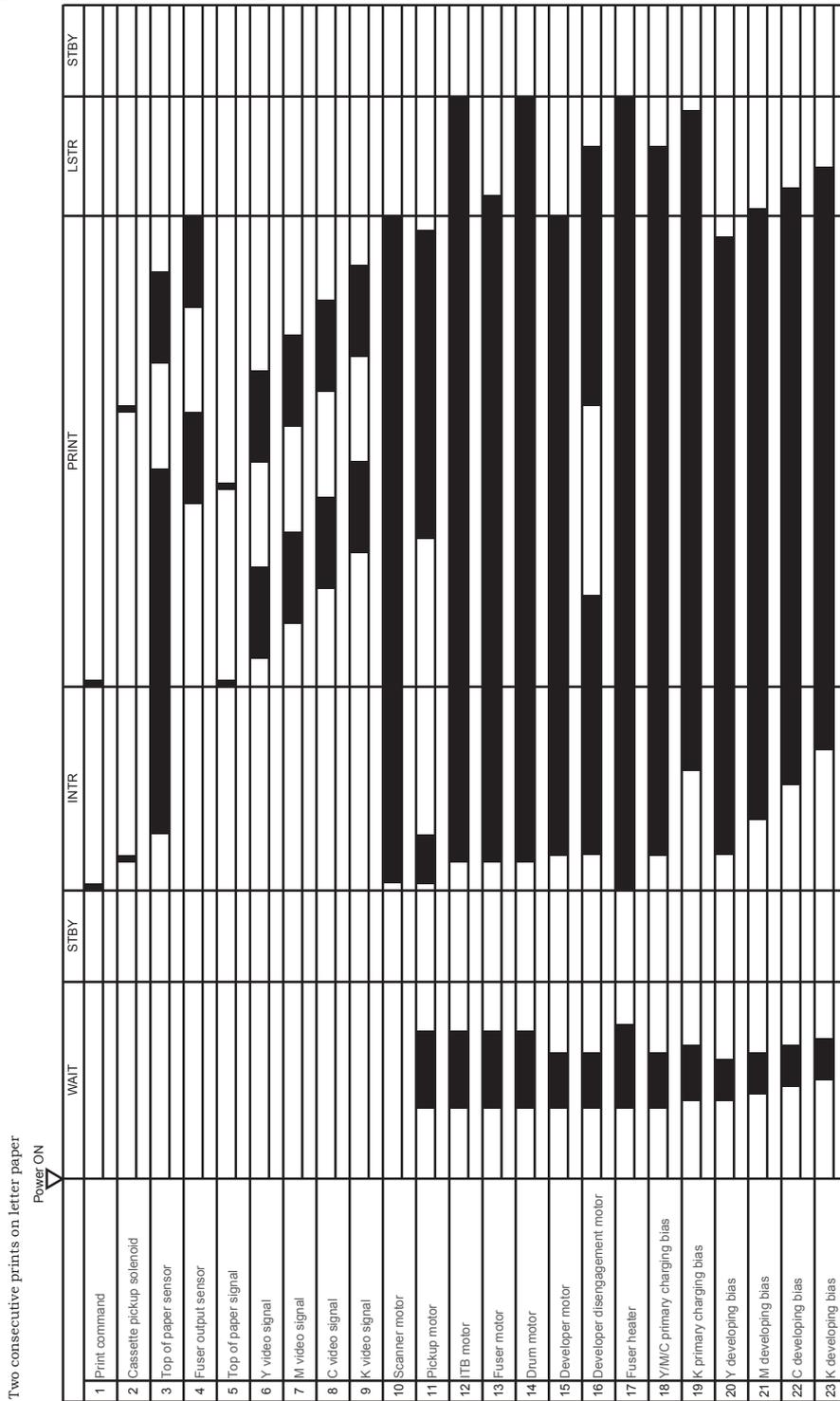
Figure 3-40 PCA component locations



Item	Description	Item	Description
1	Low-voltage power-supply PCA	5	High-voltage power supply 2nd transfer PCA
2	High-voltage power supply 1st transfer PCA	6	High-voltage power supply imaging (development) PCA
3	Driver PCA	7	Environment sensor PCA
4	DC controller PCA	8	Power switch PCA

General timing charts

Figure 3-41 General timing chart (1 of 2)



General circuit diagram

Figure 3-43 General circuit diagram (1 of 2)

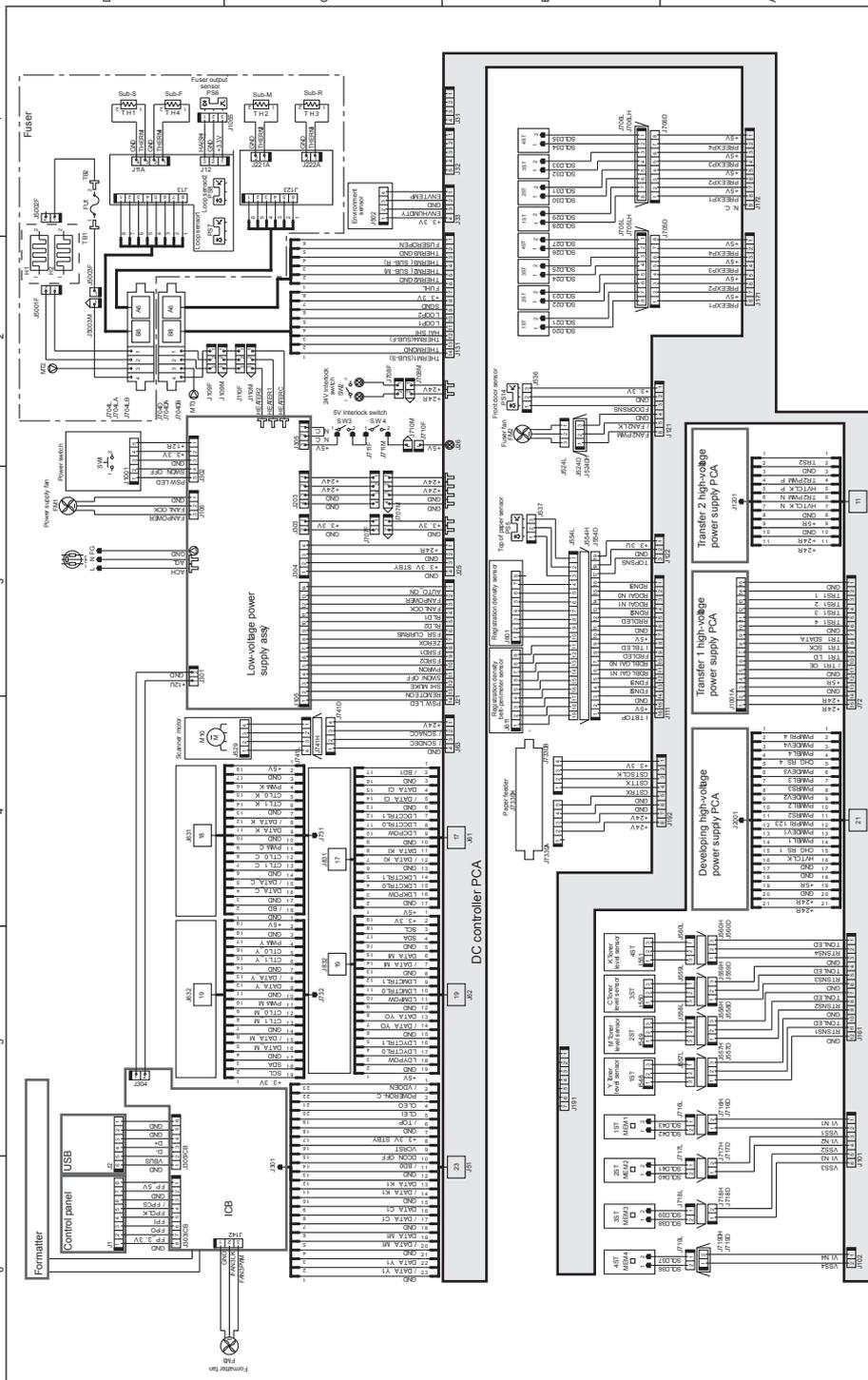
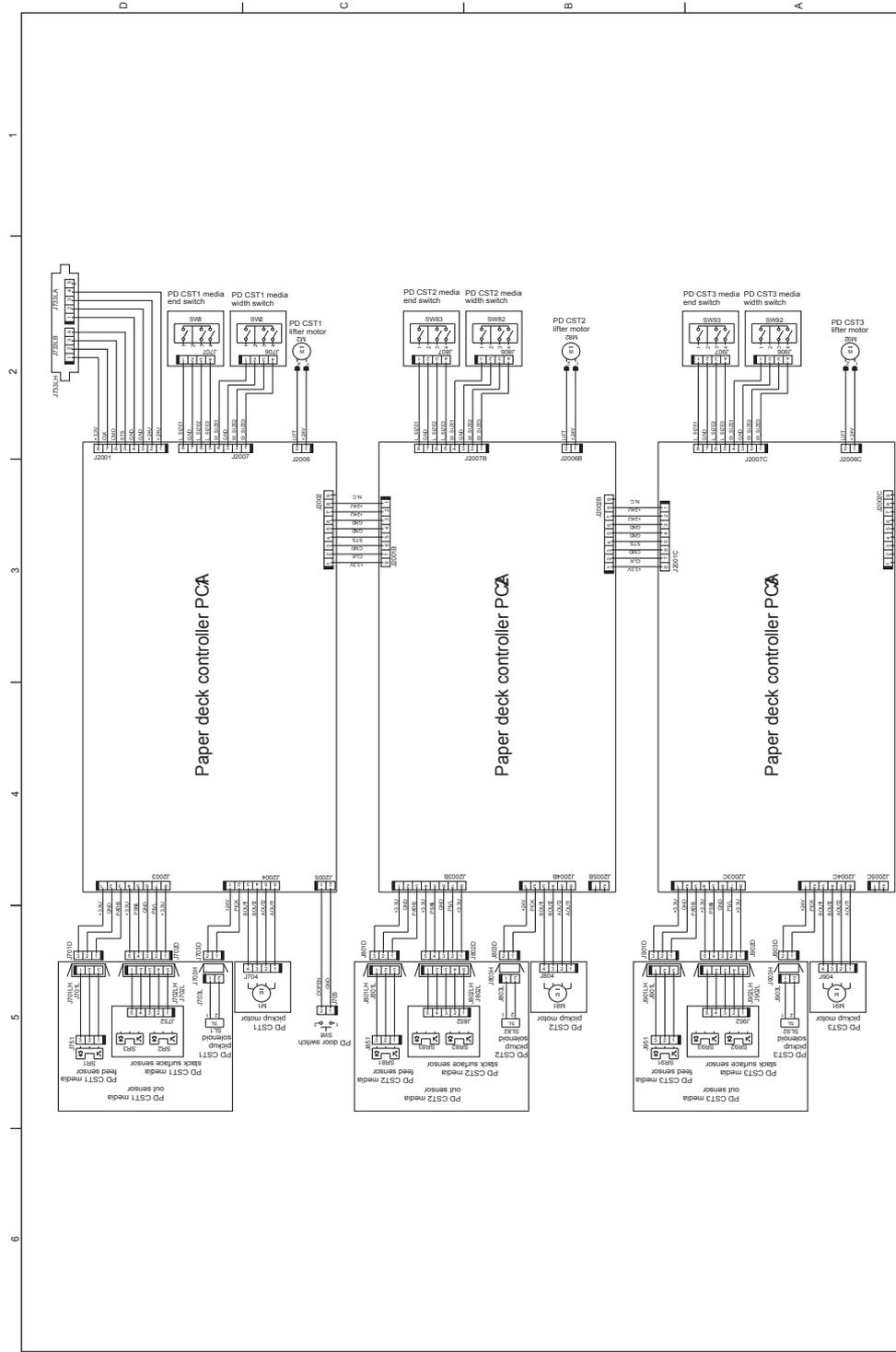


Figure 3-46 Paper deck general circuit diagram (3 X 500)



Internal print-quality test pages

Print-quality-troubleshooting pages

Use the built-in print-quality-troubleshooting pages to help diagnose and solve print-quality problems.

1. Press the Home  button.
2. Open the following menus:
 - Administration
 - Troubleshooting
 - Print Quality Pages
3. Press the Down arrow  to highlight the **Print PQ Troubleshooting Pages** item, and then press the OK button to print the pages.

The product returns to the **Ready** state after printing the print-quality-troubleshooting pages. Follow the instructions on the pages that print out.

Figure 3-47 Print-quality troubleshooting procedure



Figure 3-48 Yellow print-quality troubleshooting page

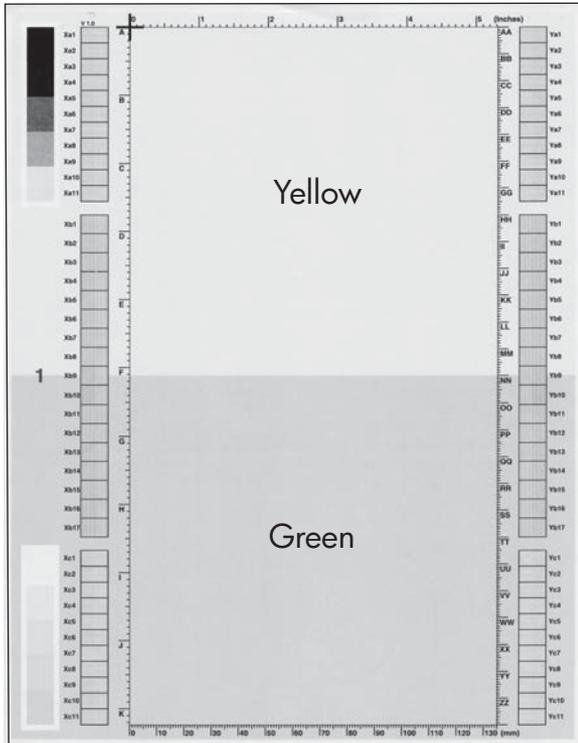
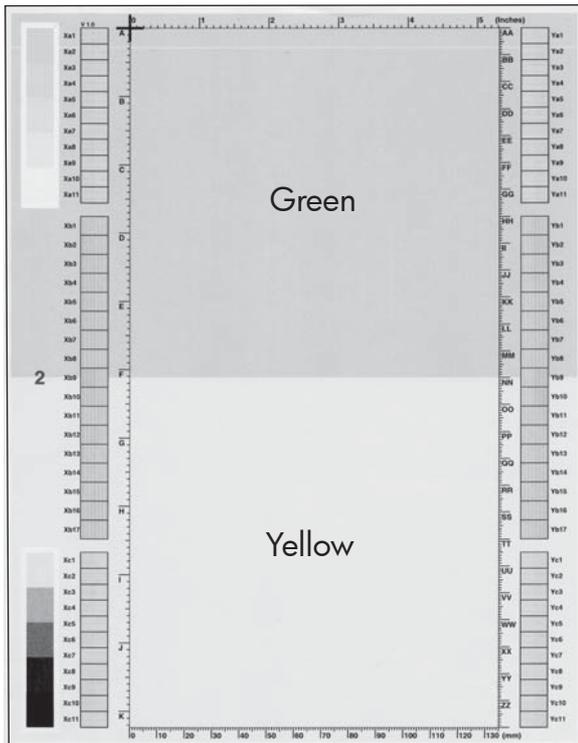
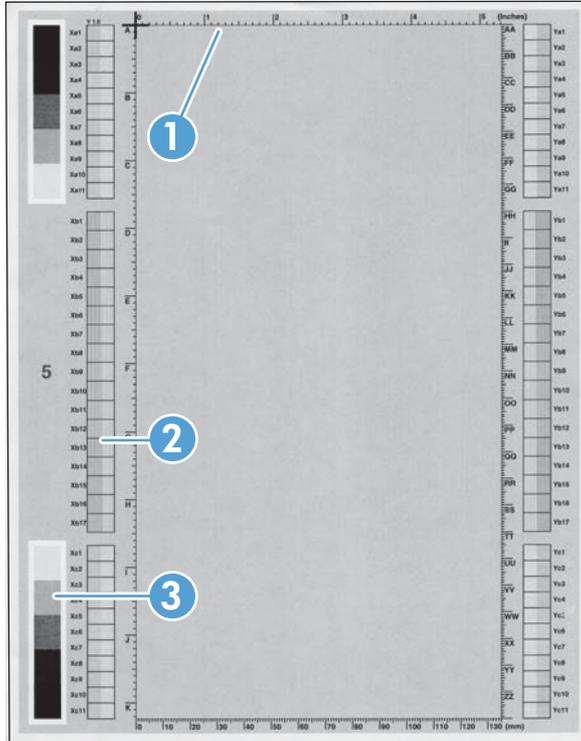


Figure 3-49 Yellow comparison page



Yellow cannot be easily seen unless combined with cyan, so half of each page is yellow and the other half is an amplified version of yellow problems (green half). Compare the yellow on page one with the corresponding green on page two for defects. You can also check the cyan page for defects.

Figure 3-50 Black print-quality troubleshooting page



1. Grids

The grids are in inches and millimeters. They are label with letters and numbers so that defects can be described by position and by distance between repeats.

2. Color plane registration (CPR) bars

After printing, the box with no extra color in each area on each page shows how far off the CPR of that color is. Each page has two process direction areas and three scan direction areas that are labeled x and y and 1–11. The page should be fed by the long edge. Each square from the center equals 42 microns.

3. Color ramp patches

Used to detect offset for the OPC or developer in the image drum or offset in the fuser.



NOTE: To get further assistance in print quality troubleshooting, go to www.hp.com/support/colorljm750 and select PQ Troubleshooting Tools.

Diagnostics page

Use the diagnostics page to evaluate problems with color plane registration, EP parameters, and print quality.

1. Press the Home  button.
2. Open the following menus:
 - Administration
 - Troubleshooting
 - Print Quality Pages
3. Press the Down arrow  to highlight the **Diagnostics Page** item, and then press the **OK** button to print the page.

Diagnostics Page HP Color LaserJet M750 Series Page 1

1 Calibration Information

- Last CPR (Engine Cycles): 149
- Last CPR: 11 Oct. 2010/20:27
- Last DMx/DxHf (Engine Cycles): 149
- Last DMx/DxHf: 11 Oct. 2010/19:54
- Model Number: CE705V
- Device Serial Number: CN1C882001
- Firmware Datecode: 20100826
- Firmware Revision: 103033.1_104646
- Engine Cycles: 150
- Color Engine Cycles: 85

3 Color Density

	C	M	Y	K
Highlights	0	0	0	0
Midtones	0	0	0	0
Shadows	0	0	0	0

Three Most Recent Event Log Entries

Number	Cycles	Entry
10	0	33.02.01
9	16	10.99.40
8	96	10.99.40

2 Parameters

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q	R	S	T	U	V	W	X	Y	Z	AA	BB	CC	DD	EE	FF	
1	03	00	07	00	00	04	06	0F	00	09	0F	03	09	06	19	07	16	10	10	14	00	0C	15	08	0E	14	21	18	19	20	23	24	
2	28	39	49	59	79	85	92	9F	AB	80	C5	CA	CE	00	00	6F	83	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
3	03	00	08	00	00	0C	06	11	00	00	06	00	01	0A	12	02	12	13	15	07	11	06	0F	0A	00	0F	18	20	18	20	19	29	
4	2F	3E	53	60	81	8A	9C	AB	B2	C0	C7	C8	00	02	02	74	89	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
5	00	07	01	00	01	09	01	13	05	01	0C	00	00	01	10	00	10	0C	0E	08	09	0E	11	00	08	0C	10	10	13	18	12	26	
6	26	33	43	54	7A	87	9A	A5	B0	BC	C0	C2	C3	C3	C6	88	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
7	05	02	00	01	00	00	00	00	00	09	00	01	06	12	06	00	02	11	06	04	05	10	09	08	0C	13	14	16	15	17	15		
8	21	30	3E	4E	6C	78	88	92	90	84	C0	C9	01	04	05	5F	AA	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
9	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
10	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
11	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
12	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
13	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
14	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
15	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
16	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
17	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
18	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
19	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
20	00	30	FF	EE	00	00	00	38	00	05	FF	00	FF	E7	00	00	FF	F2	00	10	00	27	00	00	00	00	00	00	00	00	00		
21	19	14	29	00	04	59	00	00	01	52	00	00	03	67	22	00	03	67	22	00	03	67	22	00	03	67	22	00	03	67	22	00	
22	03	67	00	03	67	22	00	03	67	22	00	03	67	22	00	03	67	22	00	03	67	22	00	03	67	22	00	03	67	22	00	03	67
23	03	67	22	03	67	22	00	03	67	22	00	03	67	22	00	03	67	22	00	03	67	22	00	03	67	22	00	03	67	22	00	03	67
24	19	18	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
25	1E	EF	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
26	A6	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	A6	00	00	00													
27	A6	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	A6	00	00	00													
28	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
29	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
30	64	64	64	64	63	63	63	63	63	63	63	64	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
31	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
32	FF	92	00	00	00	05	FF	F5	FF	6F	00	A3	00	33	FF	AE	00	20	00	93	00	57	FF	02	00	00	00	00	00	00	00	00	
33	FF	A5	FF	BC	FF	F0	FF	D1	FF	BE	FF	96	FF	AB	FF	D1	FF	00	03	F6	00	00	00	00	00	00	00	00	00	00	00	00	
34	00	00	00	00	00	00	00	00	00	00	00	3C	BF	F4	00	00	47	29	00	F4	00	00	47	06	34	70	FA	02	10	02	74		
35	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	
36	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	

4 Color plane registration

Oct/11/2010 6:14:18 PM English (United States)

1	Calibration information
2	Parameters
3	Color density
4	Color plane registration

5	Primary colors
6	Secondary colors
7	Temperature values (21A)
8	Humidity values (21B)

Configuration page

Depending on the model, up to three pages print when you print a configuration page. In addition to the main configuration page, the embedded Jetdirect configuration pages print.

Configuration page

Use the configuration page to view current product settings, to help troubleshoot product problems, or to verify installation of optional accessories, such as memory (DIMMs), paper trays, and printer languages.

1. Press the Home button .
2. Open the following menus:
 - [Administration](#)
 - [Reports](#)
 - [Configuration/Status Pages](#)
3. Press the **Down** arrow ▼ to highlight the [Configuration Page](#) item, and then press the **OK** button.
4. Press the **Up** arrow ▲ to highlight the [Print](#) item, and then press the **OK** button.

The message [Submitted to Queue](#) displays on the control panel until the product finishes printing the configuration page. The product returns to the **Ready** state after printing the configuration page.



NOTE: If the product is configured with EIO cards (for example, an HP Jetdirect Print Server) or an optional hard-disk drive, additional pages will print that provide information about those devices.

Figure 3-51 Configuration page

Configuration Page
HP Color LaserJet M750 Series
Page 1

1 Device Information

Product Name: HP Color LaserJet CP5520 Series
 Device Name: HP Color LaserJet CP5520 Series
 Model Number: CE709V
 DC Controller Version: 4.89
 Optional Trays Version: 3.103
 Device Serial Number: DN10882001
 Formatter Number: PN001LR
 Firmware Datecode: 20100825
 Firmware Revision: 103033_1_104646
 Service ID: 20266
 PS Wait Time-out: 300 seconds
 Engine Cycles*: 305
 Color Engine Cycles*: 234
 *Not weighted for billing

2 Installed Personalities and Options

PCL: 20010402
 PCLXL: 20010402
 POSTSCRIPT: 20010402
 PDF: 20050131
 Internal Disk: Hard Disk: Enabled
 Serial Number: 5401E7M
 Model: HP Secure Hard Disk
 Capacity: 11473 MB
 Hard Disk Encryption Status: Encrypted
 EIO 1: Empty
 Embedded IP JetDirect J8016E: 15.5.176.177
 Custom Color Table: Not Installed

3 Color Density

	C	M	Y	K
Highlights	0	0	0	0
Midtones	0	0	0	0
Shadows	0	0	0	0

4 Calibration Information

Last CPR (Engine Cycles): 298
 Last CPR: 12 Oct 2010/17:54
 Last DMax/DHalf (Engine Cycles): 231
 Last DMax/DHalf: 12 Oct 2010/17:36

5 Memory

Total RAM: 1024 MB

6 Event Log

Number of Entries In Use: 10
 Three Most Recent Entries:

Number	Cycles	Event
10	0	33.02.01
9	16	10.99.40
8	96	10.99.40

7 Security

Hard Disk Encryption Status: Encrypted
 File Erase Mode: Non-Secure Fast Erase (No overwrite)
 Control Panel Password: Disabled
 Support Key: 6094-2043-8030
 Host USB plug and play: Enabled
 Device USB: Enabled

8 Paper Trays and Options

Default Paper Size: Letter
 Tray 1 Size: Any Size
 Tray 1 Type: Any Type
 Tray 2 Size: Letter
 Tray 2 Type: Plain
 Tray 3 Size: Letter
 Tray 3 Type: Plain
 Tray 4 Size: 11x17
 Tray 4 Type: HP Glossy 130g
 Tray 5 Size: Letter
 Tray 5 Type: Plain
 Tray 6 Size: 11x17
 Tray 6 Type: Plain
 Duplex Unit

I: Output Bin 1, 300 Sheets, Standard top bin

Oct12/2010 4:00:04 PM

English (United States)

1	Printer information
2	Installed personalities and options
3	Color density
4	Calibration information
5	Memory
6	Event log
7	Security
8	Paper trays and options

HP embedded Jetdirect page

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

```
Embedded Jetdirect Page      HP Color LaserJet M750 Series      Page 1

----- General Information -----
Status: I/O Card Ready
Model Number: J8056
Hardware Address: 1C2C83E3F63
Firmware Version: V.39.38.FF
JAM: 1C2C83E3F63
Port Config: 1001F.F63
Auto Negotiation: ON
Manufacturing ID: 502652809***
Date Manufactured: 27/2010

----- Security Settings -----
802.1X: Not Specified
IPsec: Disabled
Admin Password: Not Specified
Secure Web: HTTPS Required
Cert Expires: 2015-07-31 00:00 UTC
SNMP Versions: 1-2
SNMP Set Only Name: Not Specified/Default
SNMP Get Only Name: Not Specified/Default
Access List: Not Specified

----- Network Statistics -----
Total Packets Received: 2062478
Unicast Packets Received: 228035
Bad Packets Received: 0
Framing Errors Received: 0
Total Packets Transmitted: 330075
Unsuccessful Packets: 0
Transmit Collisions: 0
Transmit Late Collisions: 0

----- TCP/IP -----
IPv4: Enabled
IPv6: Enabled
Host Name: HP323763
IPv4 Domain Name: america.hpqcorp.net
IPv6 Domain Name: Not Specified
Primary DNS Server: 16.110.136.51
Secondary DNS Server: 16.110.136.52
DNS (IPv4): Not Specified
DNS (IPv6): Not Specified
WINS Server: 16.202.7.246
Idle Timeout: 270 sec

----- IPv6 -----
Status: Ready
IP Address: 15.5.176.177
Subnet Mask: 255.255.252.0
Default Gateway: 15.5.176.1
Config By: DHCP
DHCP Server: 16.202.7.250
TFTP Server: Not Specified
Bonjour Service Name: HP Color LaserJet CP5500 Series (83E3F63)
Status: Ready

Link-Local: fe80::1c2c:83ff:fe63:e963
 Stateless: Not Configured

DHCPv6: Not Configured
Manual: Not Configured

Oct132010 4:00:04 PM      English (United States)
```

Always make sure the status line under the HP Jetdirect configuration lines indicates "I/O Card Ready".

Finding important information on the configuration pages

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

Table 3-27 Important information on the configuration pages

Type of information	Specific information	Configuration page
Firmware date codes When you use the remote firmware upgrade procedure, all of these firmware components are upgraded.	DC controller	Look on the main configuration page, under “Device Information.”
	Firmware datecode	Look on the main configuration page, under “Device Information.”
	Embedded Jetdirect firmware version	Look on the embedded Jetdirect page, under “HP Jetdirect Configuration.”
Accessories and internal storage All optional devices that are installed on the product should be listed on the main configuration page. In addition, separate pages print for the optional paper handling devices and the fax accessory. These pages list more-detailed information for those devices.	External disk (optional)	Look on the main configuration page, under “Installed Personalities and Options.” Shows model and capacity.
	Embedded HP Jetdirect	Look on the main configuration page, under “Installed Personalities and Options.” Shows model and ID.
	Total RAM	Look on the main configuration page, under “Memory.”
	Duplex unit	Look on the main configuration page, under “Paper Trays and Options.”
Additional 500-sheet feeders	Additional 500-sheet feeders	Look on the main configuration page, under “Paper Trays and Options.”
Engine cycles and event logs Total page counts and maintenance kit counts are important for ongoing product maintenance. The configuration page lists only the three most recent errors. To see a list of the 50 most recent errors, print an event log from the Diagnostics menu.	Engine cycles	Look on the main configuration page, under “Device Information.”
	Event-log information	Event-log information

Color-band test

The color-band test page shows bands of colors that can indicate whether or not the product is producing colors correctly.

1. Press the Home button .
2. Open the following menus:
 - [Administration](#)
 - [Troubleshooting](#)
 - [Print Quality Pages](#)

3. Press the **Down** arrow ▼ to highlight the **Color Band Test** item, and then press the **OK** button.
4. Press the **Down** arrow ▼ to highlight the **Print Test Page** item, and then press the **OK** button.

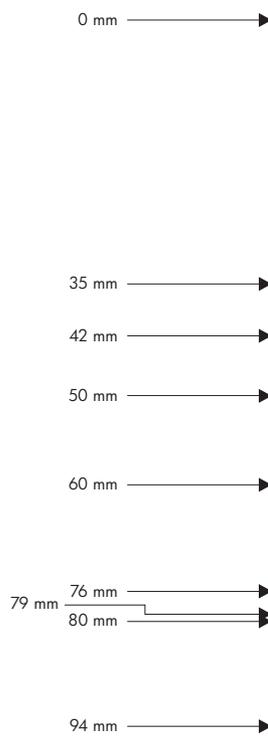
Print quality troubleshooting tools

Repetitive image-defect ruler

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 figure below to identify the component that is causing the defect.



NOTE: When printing this defect ruler, verify that any scaling options in the printer driver are disabled.



Distance between defects	Product components that cause the defect
35 mm	Print cartridge (primary charging roller)
42 mm	Print cartridge (developer roller)
50 mm	Print engine (primary transfer roller)
60 mm	Print engine (secondary transfer roller)
76 mm	Fuser (fuser film)
79 mm	Fuser (pressure roller)
94 mm	Print cartridge (OPC)

Calibrate the product

Calibration is a product function that optimizes print quality. If you experience any image-quality problems, calibrate the product.

1. Press the Home button .
2. Press the **Down** arrow ▼ to highlight the **Device Maintenance** menu, and then press the **OK** button.
3. Press the **Down** arrow ▼ to highlight the **Calibration/Cleaning** menu, and then press the **OK** button.
4. Press the **Down** arrow ▼ to highlight the **Full Calibration** or **Quick Calibration** setting, and then press the **OK** button.
 - **Full Calibration**: takes about 70 seconds and performs color plane registration, environment change control, and Dmax and Dhalf adjustments. Use **Full Calibration** if colors are misaligned or appear blurry. **Full Calibration** runs automatically after a replacement transfer belt (ITB) is installed. **Full Calibration** must be run manually after a laser scanner is replaced.
 - **Quick Calibration**: takes about 45 seconds and performs Dmax and Dhalf adjustments. Use **Quick Calibration** if colors are wrong, highlights are missing, or if colors are too dark or too light.

Control-panel menus

Administration menu

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

Reports menu

To display: At the product control panel, select the [Administration](#) menu, and then select the [Reports](#) menu.

Table 3-28 Reports menu

First level	Second level	Values	Description
Configuration/Status Pages	Administration Menu Map	Print	Shows a map of the entire Administration menu and the selected values for each setting.
		View	
	Current Settings Page	Print	Shows a summary of the current settings for the product. Printing this page might be helpful if you plan to make changes and need a record of the present configuration.
		View	
	Configuration Page	Print	Shows the product settings and installed accessories.
		View	
	Supplies Status Page	Print	Shows the approximate remaining life for the supplies; reports statistics on total number of pages and jobs processed, serial number, page counts, and maintenance information. HP provides approximations of the remaining life for the supplies as a customer convenience. The actual remaining supply levels might be different from the approximations provided.
		View	
	Usage Page	Print	Shows a count of all paper sizes that have passed through the product; lists whether they were simplex, duplex, monochrome, or color; and reports the page count.
		View	
File Directory Page	Print	Shows the file name and folder name for files that are stored in the product memory.	
	View		
Web Services Status Page	Print	Shows the detected Web Services for the product.	
	View		
Color Usage Job Log	Print	Shows the number of color and black and white pages that each user has printed. It also indicates from which software program each of the jobs was printed.	

Table 3-28 Reports menu (continued)

First level	Second level	Values	Description
Other Pages	Demonstration Page	Print	Prints a demonstration page.
	RGB Samples	Print	Prints color samples for different RGB values. Use the samples as a guide for matching printed colors.
	CMYK Samples	Print	Prints color samples for different CMYK values. Use the samples as a guide for matching printed colors.
	PCL Font List	Print	Prints the available PCL fonts.
	PS Font List	Print	Prints the available PS fonts.

General Settings menu

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

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

Table 3-29 General Settings menu

First level	Second level	Third level	Fourth level	Values	Description	
Date/Time Settings	Date/Time Format	Date Format		DD/MMM/YYYY	Specify the date and time and configure date/time settings.	
				MMM/DD/YYYY		
			YYYY/MMM/DD			
		Date/Time	Time Format	12 hour (AM/PM)	Select the format that the product uses to show the date and time, for example 12-hour format or 24-hour format.	
			24 hours			
			Time Zone		Select the time zone from a list.	
			Date		Select the date from a pop-up calendar.	
			Time		Select the time from a pop-up keypad.	
			Adjust for Daylight Savings		Checkbox	If you are in an area that uses daylight savings time, select the Adjust for Daylight Savings check box.
	Energy Settings	Sleep Schedule	A list of scheduled events displays.		+ (Add)	Configure the product to automatically wake up or go to sleep at specific times on specific days. Using this feature saves energy.
				Edit		
				Delete		
	Event Type		Wake	Select whether to add or edit a Wake event or a Sleep event, and then select the time and the days for the wake or sleep event.		
		Sleep				
	Event Time					
	Event Days			Select days of the week from a list.		

Table 3-29 General Settings menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Sleep Timer Settings	Sleep/Auto Off After		<p>Enable</p> <p>Disable</p> <p>Range: 0 to 120 minutes</p> <p>Default = 60 minutes</p>		<p>Set the number of minutes after which the product enters Sleep Mode/Auto Off After. Use the arrow buttons on the control panel to increase or decrease the number of minutes.</p> <p>NOTE: For units sold in Europe (Blue Angel), there will be no option to disable sleep.</p> <p>NOTE: Setting this value to "0" will cause the product to attempt to enter sleep as soon as possible.</p>
Wake/Auto On to These Events			<p>All Events*</p> <p>Network port</p> <p>Power button only</p>		<p>All Events: product enters a Suspend state, and not Deep Suspend.</p> <p>Network port: product enters both a Suspend state, and at Deep Suspend state. Both network jobs, and any jobs listed in All Events wake the product.</p> <p>Power button only: product will not enter a Deep Suspend, but it will power off and you must press the power button to restart the product.</p>
Optimum Speed/Energy Usage			<p>Faster first page*</p> <p>Save energy</p> <p>Save more energy</p> <p>Save most energy</p>		<p>Specifies how much the fuser cools down between print or copy jobs. To maximize the product speed, select the Faster first page option. To maximize energy conservation, select the Save most energy option. Or, select one of the other settings to compromise between speed and energy conservation.</p>

Table 3-29 General Settings menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Print Quality	Adjust Color	Highlights	Cyan	-5 to 5	<p>Set the default print-quality values and trigger cleaning actions for optimum print quality. If you are using specific types of paper or placing the product in extreme environments, you might need to make adjustments in this menu.</p> <p>Highlights are the brightest color-values in an image. For each color, select a setting to adjust the darkness or lightness of highlights on the printed page. Decrease the value to lighten the highlights. Increase the value to darken the highlights.</p> <p>Default: Resets all the color-density settings to the factory default values.</p>
			Magenta		
			Yellow		
Black					
Default					
		Midtones	Cyan	-5 to 5	<p>Midtones are the middle-range color-values in an image. For each color, select a setting to adjust the darkness or lightness of midtones on the printed page. Decrease the value to lighten the midtones. Increase the value to darken the midtones.</p>
		Magenta			
		Yellow			
		Black			
		Default			
		Shadows	Cyan	-5 to 5	<p>Shadows are the darkest color-values in an image. For each color, select a setting to adjust the darkness or lightness of shadows on the printed page. Decrease the value to lighten the shadows. Increase the value to darken the shadows.</p> <p>Default: Resets all the color-density settings to the factory default values.</p>
		Magenta			
		Yellow			
		Black			
		Default			

Table 3-29 General Settings menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
	Image Registration	Adjust Tray <X>	Print Test Page		<p>Shift the margin alignment to center the image on the page from top to bottom and from left to right. You can also align the image on the front with the image printed on the back.</p> <p>Use the Adjust Tray <X> menu to adjust the registration settings for each tray. Before adjusting these values, print a registration test page. It provides alignment guides in the X and Y directions so you can determine which adjustments are necessary. You can adjust values for X1 Shift, X2 Shift, Y1 Shift, and Y2 Shift.</p> <p>Use the Print Test Page option to print a page to test the image registration. It provides alignment guides in the X and Y directions so you can determine which adjustments are necessary.</p>

Table 3-29 General Settings menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
			X1 Shift	-5.00 mm to 5.00 mm	<p>X is the direction that is perpendicular to the way the paper passes through the product. This is also known as the scan direction. X1 is the scan direction for a single-sided page or for the second side of a two-sided page. X2 is the scan direction for the first side of a two-sided page.</p> <p>Y is the direction that the paper feeds through the product. Y1 is the feed direction for a single-sided page or for the second side of a two-sided page. Y2 is the feed direction for the first side of a two-sided page.</p>
			Y1 Shift		
			X2 Shift		
			Y2 Shift		
	Auto Sense Mode	Tray 1 Sensing		<p>Full sensing</p> <p>Expanded sensing*</p> <p>Transparency Only</p>	<p>Configure which paper types the product should automatically sense. The following settings are available:</p> <p>Full sensing: Use this setting if you don't want media type misprints and can accept slower performance and possible decreased cartridge life.</p> <p>Expanded sensing: The product senses only the first page and assumes the rest of the pages are the same type.</p> <p>Transparency Only: The product senses only the first page. The product distinguishes transparencies from other paper types.</p>

Table 3-29 General Settings menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Tray X Sensing		Expanded sensing* Transparency Only	When Configuring the Auto Sense Mode option for Tray 1 and Tray 2, the <x> variable represents the highest number of trays installed on the product.
	Adjust Paper Types	Select from a list of paper types that the product supports. The available options are the same for each paper type.	Print Mode	Select from a list of print modes.	Changing the Print Mode setting is usually the first step in trying to resolve print-quality problems. Problems can include toner not sticking well to the page, a faint image of the page repeated on the same or following page, incorrect gloss level, etc.
			Resistance Mode	Normal mode Up Down	Use this setting to correct print quality problems in low-humidity environments with highly resistive paper. Use the Up option to solve print quality problems that are related to poor toner-transfer. Use the Down option in the event that small, “pin-hole” defects occur.
			Humidity Mode	Normal High	Use this setting to correct print quality problems in high-humidity environments. Use the High setting if you are in a high-humidity environment and you are seeing problems with low toner density on the first page of a job.
			Pre-Rotation Mode	Off On	Turn on if horizontal lines appear on pages. Using this feature increases the first-page-out time by a few seconds.

Table 3-29 General Settings menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
			Fuser Temp Mode	Normal Up Down	If you continue to see ghost images on your print jobs after adjusting the Print Mode setting, set this feature by using the Up option or Down option. Using this mode increases wear on product parts and might also slow down the printing process.
			Paper Curl Mode	Normal Reduced	If excessive curling of paper occurs in warm, high-humidity environments above 23° C (73° F), use the Reduced setting. Using this setting slows printing and increases the frequency of consumable replacements.
	Restore Modes				
	Optimize	Normal Paper		Standard* Smooth	Use to optimize various print modes that address print quality issues. Use the Smooth setting to correct print quality problems when using very smooth paper of normal weight.
		Heavy Paper		Standard* Smooth	Use this setting to correct print quality problems when using very smooth, heavy-weight paper 129-216 g/m ² (32-58 lb). The Smooth setting should be used if you are having print quality problems with very smooth, heavy paper.
		Envelope Control		Normal* Reduced Temp	If envelopes are sticking together in the output bin, use this setting to reduce the fuser temperature.

Table 3-29 General Settings menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Environment		Normal* Low Temp	Enable if the product is operating in a low temperature environment and you are having problems with print quality, such as blisters in the printed image.
		Line Voltage		Normal* Low Voltage	Enable if the product is operating in a low -voltage environment and you are having problems with print quality, such as blisters in the printed image.
		Tray 1		Normal* Alternate	Affects how often the product performs an internal cleaning procedure. Use the Alternate setting if you are having problems with extra toner on pages. In this mode, the product performs the cleaning procedure after each job that is printed from Tray 1. Using this mode increases wear on all the toner cartridges.
		Background		Normal* Alternate 1 Alternate 2 Alternate 3	Use if pages are printing with a shaded background. Using this feature might reduce gloss levels. Use the Alternate 1 setting if you are seeing a shaded background on the entire page. Use the Alternate 2 setting if you are seeing thin vertical lines on the background. The Alternate 3 setting applies the Alternate 1 setting and the Alternate 2 setting at the same time. Use this setting if the first two settings do not correct the problem.

Table 3-29 General Settings menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Uniformity Control		Normal* Alternate 1 Alternate 2 Alternate 3	<p>This setting might help correct uniformity in print quality issues, such as a mottled appearance due to poor transfer of toner onto the page. The Alternate 1 setting increases the T1 transfer bias and can be used for any media type. The Alternate 2 setting decreases the fuser temperature and reduces the throughput. Use this setting if you are experiencing mottled output due to poor fusing on normal or light paper types. The Alternate 3 setting applies the Alternate 1 setting and the Alternate 2 setting at the same time. Use this setting if the first two settings do not correct the problem.</p>
		Tracking Control		On* Off	<p>Normally, this setting should be set to On. Tracking control algorithm is turned ON/OFF. It is not expected that the customer will ever need to change this setting.</p>
		Registration		Normal* Alternate	<p>Use this setting if you are having trouble with color-planes shifting or overlapping on the page. Use the Alternate setting if you are seeing color mis-registration problems.</p>

Table 3-29 General Settings menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Transfer Control		Normal* Alternate 1 Alternate 2 Alternate 3	Corrects transfer issues in print jobs. Turn this feature on if green, mottled images are printed on the page. Note that using this mode can increase problems with blurry images or specks of toner on the leading or trailing edge of the paper. The Alternate 1 setting reduces the T1 bias and should be used when re-transfer occurs. The Alternate 2 setting increases the inter-page gap. Using this setting reduces throughput and might decrease the print-cartridge life. The Alternate 3 setting applies the Alternate 1 setting and the Alternate 2 setting at the same time. Use this setting if the first two settings do not correct the problem.
		Fuser Temp		Normal* Alternate	If you are seeing a faint image of the page repeated at the bottom of the page or on the following page, you should first make sure the Adjust Paper Types setting and the Print Mode setting are correct for the type of paper you are using. If you continue to see ghost images on your print jobs, set the Fuser Temp feature to the Alternate setting.
		Restore Optimize			Returns all the settings in the Optimize menu to the factory-default values.
	Resolution			Image Ret 3600 1200 x 1200dpi	Sets the resolution at which the product prints.

Table 3-29 General Settings menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
	Edge Control			Off Light Normal* Maximum	<p>Determines how edges are rendered. Edge Control has two components: adaptive halftoning and trapping. Adaptive halftoning increases edge sharpness. Trapping reduces the effect of color-plane misregistration by overlapping the edges of adjacent objects slightly. Select one of the following options:</p> <p>Off: Turns off both trapping and adaptive halftoning.</p> <p>Light: Sets trapping at a minimal level, and adaptive halftoning is on.</p> <p>Normal: Trapping is at a medium level and adaptive halftoning is on.</p> <p>Maximum: Trapping is at the highest level, and adaptive halftoning is on.</p>

Table 3-29 General Settings menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Jam Recovery				Auto* Off On	<p>This product provides a jam recovery feature that reprints jammed pages. Select one of the following options:</p> <p>Auto: The product attempts to reprint jammed pages when sufficient memory is available. This is the default setting.</p> <p>Off: The product does not attempt to reprint jammed pages. Because no memory is used to store the most recent pages, performance is optimal.</p> <p>NOTE: When using this option, if the product runs out of paper and the job is being printed on both sides, some pages can be lost.</p> <p>On: The product always reprints jammed pages. Additional memory is allocated to store the last few pages printed. This might cause overall performance to suffer.</p>
Auto Recovery				Enabled Disabled*	<p>The product attempts to reprint jammed pages when sufficient memory is available. This is the default setting.</p>

Table 3-29 General Settings menu (continued)

First level	Second level	Third level	Fourth level	Values	Description	
Manage Stored Jobs	Sort Stored Jobs By			Job Name*	This option allows you list to the jobs either Alphabetically or Chronologically.	
				Date		
				Quick Copy Job Held Timeout	Off*	Sets a maximum storage-time limit for stored Quick Copy and Proof and Hold jobs. If a stored job is not printed during this period, it is deleted.
					1 Hour	
			4 Hours			
			1 Day			
				1 Week		
			Quick Copy Job Storage Limit	1-100	Configure global settings for jobs that are stored in the product memory.	
				Default = 32		
					The Quick Copy Job Storage Limit feature specifies the number of Quick Copy and Proof and Hold jobs that can be stored on the product. The maximum allowed value is 100.	
			Default Folder Name		Type the name for the stored jobs folder that is accessible to all users.	
Enable Retrieve from USB				Enabled	Enables the product to open a file from a USB device.	
				Disabled*		

Table 3-29 General Settings menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Hold Off Print Job				Enabled* Disabled	Enable this feature if you want to prevent print jobs from starting while a user is initiating a copy job from the control panel. Held print jobs start printing after the copy job is finished, provided that no other copy job is in the print queue.
Restore Factory Settings				Address Book Calibration Copy Digital Send E-mail Fax General Print Security	Restores all product settings to their factory defaults.

General Print Settings menu

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

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

Table 3-30 General Print Settings menu

First level	Second level	Values	Description
Manual Feed		Enabled Disabled*	Enable or disable the manual-feed feature, which allows the user to feed paper into the product by hand. When this feature is enabled, the user can select manual feed from the control panel as the paper source for a job. If a tray is not specified as part of a job, manual feed is selected.
Courier Font		Regular* Dark	Select which version of the Courier font you want to use. The factory default setting is Regular , which uses an average stroke width. The Dark setting can be used if a heavier Courier font is needed.

Table 3-30 General Print Settings menu (continued)

First level	Second level	Values	Description
Wide A4		Enabled Disabled*	Changes the printable area of A4-size paper. If enabled, eighty 10-pitch characters can be printed on a single line of A4 paper.
Suppress Blank Pages		No* Yes	
Print PS Errors		Enabled Disabled*	Selects whether a PostScript (PS) error page is printed when the product encounters a PS error.
Print PDF Errors		Enabled Disabled*	Selects whether a PDF error page is printed when the product encounters a PDF error.
Personality		Auto* PCL POSTSCRIPT PDF	Configures the default print language or personality for the product. Normally you should not change the product language. If you change the setting to a specific product language, the product does not automatically switch from one language to another unless specific software commands are sent to it.
PCL	Form Length	Range: 5 – 128 Default = 60	Controls the PCL print-command options. PCL is a set of product commands that Hewlett-Packard developed to provide access to product features. Use the Form Length feature to select the user-soft default vertical form length.
	Orientation	Portrait* Landscape	Select the orientation that is most often used for copy or scan originals. Select the Portrait option if the short edge is at the top, or select the Landscape option if the long edge is at the top.
	Font Source	Internal* USB	Selects the font source for the user-soft default font. The list of available options varies depending on the installed product options.
	Font Number	Range: 0 – 110 Default = 0	Specifies the font number for the user-soft default font using the source that is specified in the Font Source menu. The product assigns a number to each font and lists it on the PCL font list. The font number displays in the Font # column of the printout.

Table 3-30 General Print Settings menu (continued)

First level	Second level	Values	Description
	Font Pitch	Range: 0.44 – 99.99 Default = 10	If the Font Source option and the Font Number setting indicate a contour font, use this feature to select a default pitch (for a fixed-spaced font).
	Font Point Size	Range: 4.00 – 999.75 Default = 12.00	If the Font Source option and the Font Number setting indicate a contour font, then use this feature to select a default point size (for a proportional-spaced font).
	Symbol Set	Select from a list of symbol sets.	Select any one of several available symbol sets from the control panel. A symbol set is a unique grouping of all the characters in a font. The factory default value for this option is PC-8. Either PC-8 or PC-850 are recommended for line-draw characters.
	Append CR to LF	No* Yes	Selects whether a carriage return (CR) is appended to each line feed (LF) encountered in backwards-compatible PCL jobs (pure text, no job control). Select Yes to append the carriage return. The default setting is No . Some environments, such as UNIX, indicate a new line by using only the line-feed control code. This option allows the user to append the required carriage return to each line feed.
	Media Source Mapping	Standard* Classic	Use to select and maintain input trays by number when you are not using the product driver, or when the software program has no option for tray selection. The following options are available: Standard : Tray numbering is based on newer HP LaserJet models. Classic : Tray numbering is based on HP LaserJet 4 and older models.

Default Print Options menu

To display: At the product control panel, select the [Administration](#) menu, and then select the [Default Print Options](#) menu.

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

Table 3-31 Default Print Options menu

First level	Second level	Values	Description
Number of Copies		Range: 1 – 32000 Default = 1	Sets the default number of copies for a copy job. This default applies when the Copy function or the Quick Copy function is initiated from the product Home screen.
Default Paper Size		Select from a list of sizes that the product supports.	Configures the default paper size used for print jobs.
Default Custom Paper Size	X Dimension	Range: 3 – 8.5 inches Default = 8.5 inches	Configures the default paper size that is used when the user selects Custom as the paper size for a print job.
	Y Dimension	Range: 5 – 14 inches Default = 14 inches	
	Use Inches	Enabled * Disabled	
Sides		1-sided * 2-sided	Specifies whether the original document is printed on one or both sides, and whether the copies should be printed on one or both sides. For example: select the 1-sided original, 2-sided output option when the original is printed on one side, but you want to make two-sided copies. Select the Orientation setting to specify portrait or landscape orientation and to select the way the second sides are printed.
2-Sided Format		Book-style * Flip-style	Configures the default style for 2-sided print jobs. If the Book-style option is selected, the back side of the page is printed with the right side up. This option is for print jobs that are bound along the left edge. If the Flip-style option is selected, the back side of the page is printed upside-down. This option is for print jobs that are bound along the top edge.
Edge-to-Edge		Normal (recommended) * Edge-to-Edge output	Use to avoid shadows that can appear along the edges of copies when the original document is printed close to the edges.

Display Settings menu

To display: At the product control panel, select the [Administration](#) menu, and then select the [Display Settings](#) menu.

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

Table 3-32 Display Settings menu

First level	Second level	Values	Description
Display Brightness		Range: -10 to 10 Default = 0	Sets the brightness of the control panel display. The default is 0 . This item also controls the viewing angle at which the display is visible.
Language		Select from a list of languages that the product supports.	Sets the language. The default language is English.
Show IP address		Display * Hide	Use this feature to display or hide the IP address on the control-panel display.
Inactivity Timeout		Range: 10 – 300 seconds Default = 60	Idle Timeout: The time period, in seconds, after which an idle TCP print data connection is closed (default is 60 seconds, 0 disables the timeout).
Clearable Warnings		On Job *	Sets whether a warning is cleared on the control panel or when another job is sent. Job: The warning message disappears at the end of the job. On: The warning message remains until you press the OK button.
Continuable Events		Auto-continue (10 seconds) * Touch OK to continue	Determines product behavior when the system generates an Auto Continuable error. On: Allows the product to continue printing. Off: Stops the product from printing until the error is cleared by the user.

Manage Supplies menu

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

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

Table 3-33 Manage Supplies menu

First level	Second level	Third level	Fourth level	Values	Description
Print Supplies Status					Use the Supplies Status menu to configure how the product reacts when supplies are reaching the end of their estimated life.
Supply Settings	Black Cartridge	Very Low Settings		Stop Prompt to continue* Continue	Select what the product should do when the print cartridge is very near the end of its estimated life. Stop: The product stops until you replace the cartridge. Prompt to continue: The product stops until you clear the prompt message. After the prompt message is cleared, there will not be another message indicating that the supply needs to be replaced. Continue: The product provides an alert message, but it continues printing. There will not be another message indicating that the supply needs to be replaced.
		Low Threshold Settings		1-100%	Set the percentage at which the product notifies you when the supply is very low.

Table 3-33 Manage Supplies menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
	Color Cartridges	Very Low Settings		Stop Prompt to continue* Continue	Select what the product should do when the print cartridge is very near the end of its estimated life. Stop: The product stops until you replace the cartridge. Prompt to continue: The product stops until you clear the prompt message. Continue: The product provides an alert message, but it continues printing.
		Low Threshold Settings	Cyan Magenta Yellow	1-100%	Set the percentage at which the product notifies you when the supply is very low.
	Transfer Kit	Very Low Settings		Stop Prompt to continue* Continue	Stop: The product stops until you replace the transfer kit. Prompt to continue: The product stops until you clear the prompt message. Continue: The product provides an alert message, but it continues printing.
		Low Threshold Settings		1-100%	Set the percentage at which the product notifies you when the supply is very low.
	Fuser Kit	Very Low Settings		Stop Prompt to continue* Continue	Stop: The product stops until you replace the fuser kit. Prompt to continue: The product stops until you clear the prompt message. Continue: The product provides an alert message, but it continues printing.

Table 3-33 Manage Supplies menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Low Threshold Settings		1-100%	Set the percentage at which the product notifies you when the supply is very low.
	Restrict Color Use			Auto* Mostly color pages Mostly black pages	
	Color/Black Mix			Auto* Mostly Color Pages Mostly Black Pages	<p>These menu selections allow you to balance the trade-off between supply life and performance.</p> <p>Auto: The product software uses an algorithm based on printing data to achieve the best output.</p> <p>Mostly Color Pages: This selection provides the highest performance. If most of the printing is in color, this selection will not negatively affect supply life.</p> <p>Mostly Black Pages: This selection conserves the most supply life and is the best choice if most of the printing is done in black and white.</p>
	Store Usage Data			On supplies Not on supplies	
Supply Messages	Low Message			On* Off	<p>Select how the product displays the supply information.</p> <p>Low Message: Determines whether or not a low supply message is displayed on the control panel.</p>
	Level Gauge			On* Off	<p>Level Gauge: Determines whether or not a supply level gauge appears on the control panel.</p>

Table 3-33 Manage Supplies menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Reset Supplies	New Fuser Kit			No	Use this menu to notify the product that a new fuser kit has been installed.
				Yes	
	New Transfer Kit			No	Use this menu to notify the product that a new transfer kit has been installed.
				Yes	

Manage Trays menu

To display: At the product control panel, select the [Administration](#) menu, and then select the [Manage Trays](#) menu.

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

Table 3-34 Manage Trays menu

First level	Values	Description
Use Requested Tray	Exclusively*	Controls how the product handles jobs that have specified a specific input tray. Two options are available: Exclusively: The product never selects a different tray when the user has indicated that a specific tray should be used, even if that tray is empty. First: The product pulls from another tray if the specified tray is empty, even though the user specifically indicated a tray for the job.
	First	
Manually Feed Prompt	Always*	Indicates whether a prompt should appear when the type or size for a job does not match the specified tray and the product pulls from the multipurpose tray instead. Two options are available: Always: A prompt always displays before using the multipurpose tray. Unless loaded: A message displays only if the multipurpose tray is empty.
	Unless loaded	
Size/Type Prompt	Display*	Controls whether the tray configuration message displays whenever a tray is closed. Two options are available: Display: This option shows the tray configuration message when a tray is closed. The user is able to configure the tray settings directly from this message. Do not display: This option prevents the tray configuration message from automatically appearing.
	Do not display	

Table 3-34 Manage Trays menu (continued)

First level	Values	Description
Use Another Tray	Enabled*	Turns on or off the control-panel prompt to select another tray when the specified tray is empty. Two options are available: Enabled: When this option is selected, the user is prompted either to add paper to the selected tray or to choose a different tray. Disabled: When this option is selected, the user is not given the option of selecting a different tray. The product prompts the user to add paper to the tray that was initially selected.
	Disabled	
Alternative Letterhead Mode	Disabled*	Use this option to load letterhead or preprinted paper into the tray the same way for all print jobs, whether you are printing to one side or both sides of the sheet. When this option is selected, load the paper as you would for printing on both sides. See the user documentation that came with the product for instructions about loading letterhead for printing on both sides. When this option is selected, the product speed slows to the speed required for printing on both sides.
	Enabled	
Duplex Blank Pages	Auto*	Controls how the product handles two-sided jobs (duplexing). Two options are available: Auto: Enables Smart Duplexing , which instructs the product not to process blank pages. Yes: Disables Smart Duplexing and forces the duplexer to flip the sheet of paper even if it is printed on only one side. This might be preferable for certain jobs that use paper types such as letterhead or prepunched paper.
	Yes	
Image Rotation	Standard	
	Alternate	
Override A4/Letter	Yes*	Prints on letter-size paper when an A4 job is sent but no A4-size paper is loaded in the product (or to print on A4 paper when a letter-size job is sent but no letter-size paper is loaded). This option will also override A3-size paper with ledger-size paper and ledger-size paper with A3-size paper.
	No	

Network Settings menu

To display: At the product control panel, select the **Administration** menu, and then select the **Network Settings** menu.

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

Table 3-35 Network Settings menu

First level	Values	Description
I/O Timeout	Range: 5 – 300 sec Default = 15	Sets the I/O timeout period in seconds. I/O timeout refers to the elapsed time before a print job fails. If the stream of data that the product receives for a print job is interrupted, this setting indicates how long the product will wait before it reports that the job has failed.
Jetdirect Menu	See the table that follows for details. These menus have the same structure. If an additional HP Jetdirect network card is installed in the USB port, then both menus are available.	

Table 3-36 Jetdirect Menu

First level	Second level	Third level	Fourth level	Values	Description
Information	Print Sec Report			Yes No*	Yes: Prints a page that contains the current security settings on the HP Jetdirect print server. No: A security settings page is not printed.
TCP/IP	Enable			On* Off	On: Enables the TCP/IP protocol. Off: Disables the TCP/IP protocol.
	Host Name			Use the arrow buttons to edit the host name. NPIXXXXXX*	An alphanumeric string, up to 32 characters, used to identify the product. This name is listed on the HP Jetdirect configuration page. The default host name is NPIxxxxxx, where xxxxxx is the last six digits of the LAN hardware (MAC) address.

Table 3-36 Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
	IPv4 Settings	Config Method		Bootp DHCP* Auto IP Manual	<p>Specifies the method by which TCP/IPv4 parameters will be configured on the HP Jetdirect print server.</p> <p>Bootp (Bootstrap Protocol): Use for automatic configuration from a BootP server.</p> <p>DHCP (Dynamic Host Configuration Protocol): Use for automatic configuration from a DHCPv4 server. If selected and a DHCP lease exists, the DHCP Release menu and the DHCP Renew menu are available to set DHCP lease options.</p> <p>Auto IP: Use for automatic link-local IPv4 addressing. An address in the form 169.254.x.x is assigned automatically.</p> <p>If you set this option to the manual setting, use the Manual Settings menu to configure TCP/IPv4 parameters.</p>
		Manual Settings	IP Address	Enter the address.	(Available only if the Config Method option is set to the Manual option.) Configure parameters directly from the product control panel.
			Subnet Mask	Enter the address.	
			Default Gateway	Enter the address.	

Table 3-36 Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
		Default IP		Auto IP* Legacy	Specify the IP address for the product to default to when the print server is unable to obtain an IP address from the network during a forced TCP/IP reconfiguration (for example, when manually configured to use BootP or DHCP). NOTE: This feature assigns a static IP address that might interfere with a managed network. Auto IP: A link-local IP address 169.254.x.x is set. Legacy: The address 192.0.0.192 is set, consistent with older HP Jetdirect products.
		Primary DNS		Range: 0 – 255 Default = xxx.xxx.xx.xx	Specify the IP address (n.n.n.n) of a Primary Domain Name System (DNS) Server.
		Secondary DNS		Range: 0 – 255 Default = 0.0.0.0	Specify the IP address (n.n.n.n) of a Secondary DNS Server.
	IPv6 Settings	Enable		Off On*	Enable or disable IPv6 operation on the print server. Off: IPv6 is disabled. On: IPv6 is enabled.
		Address	Manual Settings	Enable Address	Enable and manually configure a TCP/IPv6 address.

Table 3-36 Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
		DHCPv6 Policy		Router Specified Router Unavailable* Always	<p>Router Specified: The stateful auto-configuration method to be used by the print server is determined by a router. The router specifies whether the print server obtains its address, its configuration information, or both from a DHCPv6 server.</p> <p>Router Unavailable: If a router is not available, the print server should attempt to obtain its stateful configuration from a DHCPv6 server.</p> <p>Always: Whether a router is available, the print server always attempts to obtain its stateful configuration from a DHCPv6 server.</p>
		Primary DNS			
		Secondary DNS			
	Proxy Server			Select from a provided list.	<p>Specifies the proxy server to be used by embedded applications in the product. A proxy server is typically used by network clients for Internet access. It caches Web pages and provides a degree of Internet security for those clients.</p> <p>To specify a proxy server, enter its IPv4 address or fully-qualified domain name. The name can be up to 255 octets.</p> <p>For some networks, you might need to contact your Internet Service Provider (ISP) for the proxy server address.</p>

Table 3-36 Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
	Proxy Port			Default = 00080	Enter the port number used by the proxy server for client support. The port number identifies the port reserved for proxy activity on your network, and can be a value from 0 to 65535.
	Idle Timeout			Default = 0270	The time period, in seconds, after which an idle TCP print data connection is closed (default is 270 seconds; 0 disables the timeout).

Table 3-36 Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Security	Secure Web			HTTPS Required* HTTPS Optional	<p>For configuration management, specify whether the HP Embedded Web Server will accept communications using HTTPS (Secure HTTP) only, or both HTTP and HTTPS.</p> <p>HTTPS Required: For secure, encrypted communications, only HTTPS access is accepted. The print server will appear as a secure site.</p>
		IPSEC		Keep Disable*	<p>Specify the IPsec status on the print server.</p> <p>Keep: IPsec status remains the same as currently configured.</p> <p>Disable: IPsec operation on the print server is disabled.</p>
		802.1X		Reset Keep*	<p>Specify whether the 802.1X settings on the print server are reset to the factory defaults.</p> <p>Reset: The 802.1X settings are reset to the factory defaults.</p> <p>Keep: The current 802.1X settings are maintained.</p>
		Reset Security		Yes No*	<p>Specify whether the current security settings on the print server will be saved or reset to factory defaults.</p> <p>Yes: Security settings are reset to factory defaults.</p> <p>No: The current security settings are maintained.</p>

Table 3-36 Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Diagnostics	Embedded Tests	LAN HW Test		Yes No*	<p>Provides tests to help diagnose network hardware or TCP/IP network connection problems.</p> <p>Embedded tests help to identify whether a network fault is internal or external to the product. Use an embedded test to check hardware and communication paths on the print server. After you select and enable a test and set the execution time, you must select the Execute option to initiate the test.</p> <p>Depending on the execution time, a selected test runs continuously until either the product is turned off or an error occurs and a diagnostic page is printed.</p> <p>CAUTION: Running this embedded test will erase your TCP/IP configuration.</p> <p>This test performs an internal loopback test. An internal loopback test will send and receive packets only on the internal network hardware. There are no external transmissions on your network.</p>
		HTTP Test		Yes No*	<p>Checks operation of HTTP by retrieving predefined pages from the product, and tests the HP Embedded Web Server.</p> <p>Select the Yes option to use this test, or the No option to not use it.</p>

Table 3-36 Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
		SNMP Test		Yes No*	Checks operation of SNMP communications by accessing predefined SNMP objects on the product. Select the Yes option to choose this test, or the No option to not choose it.
		Data Path Test		Yes No*	This test helps to identify data path and corruption problems on an HP postscript level 3 emulation product. It sends a predefined PS file to the product. However, the test is paperless; the file will not print. Select the Yes option to choose this test, or the No option to not choose it.
		Select All Tests		Yes No*	Use this item to select all available embedded tests. Select the Yes option to choose all tests. Select the No option to select individual tests.
		Execution Time [H]		Range: 1 – 24 hours Default = 1 hour	Specify the length of time (in hours) that an embedded test will be run. If you select zero (0), the test runs indefinitely until an error occurs or the product is turned off. Data gathered from the HTTP, SNMP, and Data Path tests is printed after the tests have completed.
	Execute		No* Yes	No: Do not initiate the selected tests. Yes: Initiate the selected tests.	

Table 3-36 Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Ping Test	Dest Type		IPv4 IPv6		This test is used to check network communications. This test sends link-level packets to a remote network host and then waits for an appropriate response. To run a ping test, set the following items: Dest Type Specify whether the target product is an IPv4 or IPv6 node.
	Dest IPv4			Range: 0 – 255 Default = 127.0.0.1	Enter the IPv4 address.
	Dest IPv6			Select from a provided list. Default = ::1	Enter the IPv6 address.
	Packet Size			Range: 64 – 2048 Default = 64	Specify the size of each packet, in bytes, to be sent to the remote host.
	Timeout			Range: 001 – 100 Default = 001	Specify the length of time, in seconds, to wait for a response from the remote host.
	Count			Range: 0 – 100 Default = 004	Specify the number of ping test packets to send for this test. Select a value from 0 to 100. To configure the test to run continuously, select 0.
	Print Results			Yes No*	
	Execute			Yes No*	No: Do not initiate the selected tests. Yes: Initiate the selected tests.
Ping Results	Packets Sent			Range: 0 – 65535 Default = 00000	Shows the number of packets sent to the remote host since the most recent test was initiated or completed.

Table 3-36 Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Packets Received		Range: 0 – 65535 Default = 00000	Shows the number of packets received from the remote host since the most recent test was initiated or completed. The default is 0.		
Percent Lost		Range: 0 – 100 Default = 000	Shows the percent (0 to 100) of ping test packets that were sent with no response from the remote host since the most recent test was initiated or completed.		
RTT Min		Range: 0 – 4096 Default = 0000	Shows the minimum detected roundtrip-time (RTT) for packet transmission and response.		
RTT Max		Range: 0 – 4096 Default = 0000	Shows the maximum detected roundtrip-time (RTT) for packet transmission and response.		
RTT Average		Range: 0 – 4096 Default = 0000	Shows the average round-trip-time (RTT), from 0 to 4096 milliseconds, for packet transmission and response.		
Ping In Progress		Yes No*	Shows whether a ping test is in progress. Yes: Indicates a test in progress. No: Indicates that a test completed or was not run.		
Refresh		Yes No*	When viewing the ping test results, this item upgrades the ping test data with current results. Select the Yes option to upgrade the data, or the No option to maintain the existing data. However, a refresh automatically occurs when the menu times out or you manually return to the main menu.		

Table 3-36 Jetdirect Menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Link Speed				Auto*	<p>The link speed and communication mode of the print server must match the network. The available settings depend on the product and installed print server.</p> <p>CAUTION: If you change the link setting, network communications with the print server and network product might be lost.</p> <p>The print server uses auto-negotiation to configure itself with the highest link speed and communication mode allowed. If auto-negotiation fails, either the 100TX Half feature or the 10T Half feature is set depending on the detected link speed of the hub/switch port. (A 1000T half-duplex selection is not supported.)</p>
				10T Half	10 Mbps, half-duplex operation.
				10T Full	10 Mbps, full-duplex operation.
				10T Auto	10 Mbps, half-duplex operation.
				100TX Half	100 Mbps, half-duplex operation.
				100TX Full	Limits auto-negotiation to a maximum link speed of 100 Mbps, full-duplex operation..
				100TX Auto	100 Mbps, full-duplex operation.

Troubleshooting menu

To display: At the product control panel, select the **Administration** menu, and then select the **Troubleshooting** menu.

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

Table 3-37 Troubleshooting menu

First level	Second level	Third level	Fourth level	Values	Description
Event Log				View* Print	View or print a list of the 1,000 most recent events in the Event Log. For each event, the printed log shows the error number, page count, error code, and description or personality.
Paper Path Page				View* Print	Shows how many pages were printed from each tray.

Table 3-37 Troubleshooting menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Fax	Fax T.30 Trace	Print T.30 Report		Print	Print or configure the fax T.30 trace report. T.30 is the standard that specifies handshaking, protocols, and error correction between fax machines.
		When to Print Report		Never automatically print* Print after every fax Print only after fax send jobs Print after any fax error Print only after fax send errors Print only after fax receive errors	Configure the T.30 report to print after certain events. You can choose to print the report after every fax job, every fax job sent, every fax job received, every send error, or every receive error.
	Fax V.34			Normal* Off	Use to disable V.34 modulations if several fax failures have occurred or if phone line conditions require it.
	Fax Speaker Mode			Normal* Diagnostic	Used by a technician to evaluate and diagnose fax issues by listening to the sounds of fax modulations.
	Fax Log Entries			On Off*	The standard fax log includes basic information such as the time and whether the fax was successful. The detailed fax log shows the intermediate results of the redial process not shown in the standard fax log.

Table 3-37 Troubleshooting menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
Print Quality Pages	Print PQ Troubleshooting Page			Print	Use to print pages that help you resolve problems with print quality.
	Diagnosics Page			Print	Print a diagnostics page. The page includes color swatches and a table of electro-photographic (EP) parameters.
	Color Band Test	Print Test Page		Print	Print a page to help identify arcing in the high-voltage power supply for each color. The page contains a series of colored bars. If streaks appear on a bar, the high-voltage power supply for the corresponding color might have a problem.
		Copies		Range: 1 – 30 Default = 1	Some problems with the high-voltage power supply do not appear until after several pages have been printed, so this test includes an option to print up to 30 pages.
Diagnostic Tests	Disable Cartridge Check				<p>Puts the product into a special mode in which you can remove a toner cartridge and still print internal pages. This can help you identify the source of a problem.</p> <p>When you are finished testing, press the OK button on the product control panel to return to the Troubleshooting menu.</p> <p>To return to normal product operation, press the OK button and reinstall the cartridge.</p>
	Paper Path Sensors			Select from a list of the product sensors.	Initiates a test of the paper path sensors.

Table 3-37 Troubleshooting menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
	Paper Path Test	Source Tray		Select from a list of the available trays.	Generates a test page for testing paper handling features. You can define the path that is used for the test in order to test specific paper paths.
		Test Duplex Path		Off* On	
		Number of Copies		Range: 1 – 500 Default = 1	Sets the default number of copies for a copy job. This default applies when the OK or Quick Copy function is initiated from the product Home screen. The factory default setting is 1.
	Manual Sensor Test			Select from a list of available components. Reset Sensors	Test the product sensors and switches for correct operation. Each sensor is displayed on the control-panel screen, along with its status. Manually trip each sensor and watch for it to change on the screen. Press the Stop button to abort the test.
	Tray/Bin Manual Sensor Test			Select from a list of available components. Reset Sensors	Test the sensors in the trays and bins for correct operation. Each sensor is displayed on the control-panel screen, along with its status. Manually trip each sensor and watch for it to change on the screen. Press the Stop button to abort the test.

Table 3-37 Troubleshooting menu (continued)

First level	Second level	Third level	Fourth level	Values	Description
	Component Test			Select from a list of available components.	Exercise individual parts independently to isolate noise, leaking, or other issues. To start the test, select one of the components. The test will run the number of times specified by the Repeat option. You might be prompted to remove parts from the product during the test. Press the Stop button to abort the test.
	Continuous Scan			2-sided	
	Scanner Tests			Sensors	
Retrieve Diagnostic Data				Create device data file Create zipped debug information file Include crash dump files Clean up debug information Send to E-mail Export to USB	Create files that contain information about the product that can help identify the cause of problems.
Generate Debug Data				Start	

Device Maintenance menu

Backup/Restore menu

To display: At the product control panel, select the [Device Maintenance](#) menu, and then select the [Backup/Restore](#) menu.

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

Table 3-38 Backup/Restore menu

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

Calibration/Cleaning menu

To display: At the product control panel, select the [Device Maintenance](#) menu, and then select the [Calibration/Cleaning](#) menu.

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

Table 3-39 Calibration/Cleaning menu

First level	Second level	Values	Description
Print Cleaning Page		Print	Process the cleaning page that was created by using the Create Cleaning Page menu. The process takes up to 1.5 minutes.
Clean Laser Glass			The product autonomically cycles the laser glass cover arms to remove debris from the upper surface of the laser glass.
Quick Calibration		Start	<p>The product automatically calibrates itself at various times. However, you can calibrate the product immediately if you see problems with print quality. Use this feature to perform a partial calibration. Use this calibration if color density or tone seems incorrect.</p> <p>Before calibrating the product, make sure that the Ready indicator displays on the control-panel display. If a job is in progress, the calibration occurs when that job is complete.</p>

Table 3-39 Calibration/Cleaning menu (continued)

First level	Second level	Values	Description
Full Calibration		Start	<p>The product automatically calibrates itself at various times. However, you can calibrate the product immediately if you see problems with print quality. Use this feature to perform a full calibration, which can take up to three minutes. Use this calibration if the color layers seem to be shifted on the page.</p> <p>Before calibrating the product, make sure that the Ready indicator displays on the control-panel display. If a job is in progress, the calibration occurs when that job is complete.</p>
Restore Calibration		Cancel Restore	<p>The product automatically reloads previously stored calibration values.</p>
Delay Calibration at Wake/Power On		Disabled Enabled*	<p>Controls the timing of power-on calibration when the product wakes up or is turned on.</p> <p>Wake: Select if you are not using the feature and want to print jobs immediately when the product wakes up or is turned on, before calibration begins.</p> <p>No: The product will calibrate immediately when it wakes up or is turned on. The product will not print any jobs until it finishes calibrating.</p> <p>Yes: Enables the product that is asleep to accept print jobs before it calibrates. It might start calibrating before it has printed all the jobs it has received. This option allows quicker printing when coming out of sleep mode or when you turn the product on, but print quality might be reduced.</p> <p>NOTE: For the best results, allow the product to calibrate before printing. Print jobs performed before calibration might not be of the highest quality.</p>

USB Firmware Upgrade menu

To display: At the product control panel, select the [Device Maintenance](#) menu, and then select the [USB Firmware Upgrade](#) menu.

Insert a USB storage device with a firmware upgrade bundle into the USB port, and follow the on-screen instructions.

Service menu

To display: At the product control panel, select the [Device Maintenance](#) menu, and then select the [Service](#) menu.

The [Service](#) menu is locked and requires a PIN for access. This menu is intended for use by authorized service personnel.

Interpret control-panel messages and event log entries

Control-panel message types

The control-panel messages and event code entries indicate the current product status or situations that might require action.

 **NOTE:** Event log errors do not appear on the control-panel display. Open the event log to view or print the event log errors.

A control-panel message displays temporarily and might require that you acknowledge the message by touching the **OK** button to resume printing or by touching the **Stop** button to cancel the job. With certain messages, the job might not finish printing or the print quality might be affected. If the message is related to printing and the auto-continue feature is on, the product will attempt to resume printing after the message has appeared for 10 seconds without acknowledgement.

For some messages, restarting the product might fix the problem. If a critical error persists, the product might require service.

Control-panel messages and event log entries

 **NOTE:** Some of the messages in the following sections only appear in the event log.

 **TIP:** Some control-panel messages and event log entries refer to a specific product sensor or switch in the recommended action to solve the problem. See the diagrams in the clear jams section of the product troubleshooting manual for sensor and switch locations.

10.0X.Y0 Supply memory error

Description

The product cannot read or write to at least one print cartridge memory tag or a memory tag is missing from a print cartridge.

Memory error

- **10.00.00** (event code)
Black print cartridge
- **10.01.00** (event code)
Cyan print cartridge
- **10.02.00** (event code)
Magenta print cartridge
- **10.03.00** (event code)
Yellow print cartridge

E-label missing

- **10.00.10** (event code)
Black print cartridge
- **10.01.10** (event code)
Cyan print cartridge
- **10.02.10** (event code)
Magenta print cartridge
- **10.03.10** (event code)
Yellow print cartridge

Recommended action

1. Remove, and then reinstall the indicated print cartridge.
2. If the error reappears, turn the power off, and then on.
3. Check the cartridge e-label. If it is damaged, replace the cartridge.
4. If the error persists, replace the indicated print cartridge.

10.22.50

Description

The transfer kit life was reset above the order threshold.

A new ITB was installed.

Recommended action

No action necessary.

10.22.51

Description

The transfer kit life was reset above the replace threshold.

A new ITB was installed.

Recommended action

No action necessary.

10.22.52

Description

The transfer kit life was reset above the reset threshold.

A new ITB was installed.

Recommended action

No action necessary.

10.23.50**Description**

The fuser kit life was reset above the order threshold.

A new fuser was installed.

Recommended action

No action necessary.

10.23.51**Description**

The fuser kit life was reset above the replace threshold.

A new fuser was installed.

Recommended action

No action necessary.

10.23.52**Description**

The fuser kit life was reset above the reset threshold.

A new ITB was installed.

Recommended action

No action necessary.

10.23.70 Printing past very low**Description**

The product indicates when fuser kit is very low. The actual remaining fuse kit life might vary.

You do not need to replace the fuser kit at this time unless print quality is no longer acceptable.

 **CAUTION:** After an HP supply has reached the very low threshold, the HP premium protection warranty ends.

Recommended action

If print quality is no longer acceptable, replace the fuser kit. See the parts chapter in the repair manual for the fuser kit part number.

 **TIP:** Advise the customer that HP recommends that they have replacement supplies available to install when the print quality is no longer acceptable.

10.39.50 New Document Feeder Kit

Description

A new document feeder maintenance kit has been installed and [New Document Feeder Kit](#) has been selected from the control panel menus.

Recommended action

No action necessary.

10.39.53

Description

Document feeder kit recommend clean prompt.

Recommended action

Remove the document feeder pick roller, feed roller, and the separation pad assemblies. Clean the rollers and pad with a damp lint-free cloth.

10.39.55 Clean Document Feeder Rollers

Description

The document feeder separation pad and rollers need to be cleaned.

Recommended action

Remove the document feeder pick roller, feed roller, and the separation pad assemblies. Clean the rollers and pad with a damp lint free cloth.

10.39.56

Description

Scanned past document feeder scheduled cleaning prompt.

Recommended action

Remove the document feeder pick roller, feed roller, and the separation pad assemblies. Clean the rollers and pad with a damp lint free cloth.

10.39.60 Document Feeder Kit low

Description

The document feeder pick roller, feed roller, and separation pad are near their end of life.

Recommended action

No action necessary.

10.39.69 Document Feeder Kit very low

Description

The document feeder pick roller, feed roller, and separation pad are at their end of life.

Recommended action

Order and install a document feeder maintenance kit.

10.39.70 Scanning past very low**Description**

The document feeder pick roller, feed roller, and separation pad are at their end of life.

Recommended action

Order and install a document feeder maintenance kit.

10.39.71 Document Feeder has stopped**Description**

The document feeder pick roller, feed roller, and separation pad are at their end of life.

Recommended action

Order and install a document feeder maintenance kit.

10.XX.34 Used supply in use**Description**

The indicated cartridge is used.

- **10.00.34** (event code)
Black print cartridge
- **10.01.34** (event code)
Cyan print cartridge
- **10.02.34** (event code)
Magenta print cartridge
- **10.03.34** (event code)
Yellow print cartridge

Recommended action

Make sure this is a genuine HP supply.



NOTE: Removing a cartridge from one product and then installing it in a different product (for testing functionality) will cause this event code.

10.XX.40 Genuine HP supplies installed**Description**

More than one genuine HP print cartridge has been installed.

- **10.00.40** (event code)

- Black print cartridge
- **10.01.40** (event code)
Cyan print cartridge
- **10.02.40** (event code)
Magenta print cartridge
- **10.03.40** (event code)
Yellow print cartridge

Recommended action

No action necessary.

10.XX.41 Unsupported supply in use

Description

The indicated print cartridge is for a different product.

- **10.00.41** (event code)
Black print cartridge
- **10.01.41** (event code)
Cyan print cartridge
- **10.02.41** (event code)
Magenta print cartridge
- **10.03.41** (event code)
Yellow print cartridge

Recommended action

Remove the indicated print cartridge, and then install the correct cartridge for this product.



TIP: See the parts chapter in the product repair manual for the correct cartridge part number.

10.XX.70 Printing past very low

Description

The product indicates when one of the consumables is very low. The actual remaining consumable life might vary.

You do not need to replace the consumable at this time unless print quality is no longer acceptable.



CAUTION: After an HP supply has reached the very low threshold, the HP premium protection warranty ends.

- **10.00.70** (event code)

Black print cartridge

- **10.01.70** (event code)

Cyan print cartridge

- **10.02.70** (event code)

Magenta print cartridge

- **10.03.70** (event code)

Yellow print cartridge

- **10.23.70** (event code)

The product indicates when the fuser kit is very low. The actual remaining fuser kit life might vary.

You do not need to replace the fuser kit at this time unless print quality is no longer acceptable.

Recommended action

If print quality is no longer acceptable, replace the indicated print cartridge or fuser kit. See the parts chapter in the repair manual for the print cartridge or fuser kit part number.



TIP: Advise the customer that HP recommends that they have replacement supplies available to install when the print quality is no longer acceptable.

10.YY.15 Install <supply>

Description

The indicated supply has been removed or installed incorrectly.

- **10.00.15** (event code)

Black print cartridge

- **10.01.15** (event code)

Cyan print cartridge

- **10.02.15** (event code)

Magenta print cartridge

- **10.03.15** (event code)

Yellow print cartridge

- **10.23.15**

Fuser kit

- **10.31.15**

Toner collection unit (TCU)

Recommended action

Replace or install the indicated supply.

See the parts chapter in the product repair manual for the correct supply or kit part number.

10.YY.25 Wrong cartridge in <color> slot

Description

The indicated cartridge is installed in the wrong position.

- **10.00.25** (event code)
Black print cartridge
- **10.01.25** (event code)
Cyan print cartridge
- **10.02.25** (event code)
Magenta print cartridge
- **10.03.25** (event code)
Yellow print cartridge

Recommended action

Install the indicated cartridge in the correct position.

From left to right, the correct cartridge order follows:

- Yellow
- Magenta
- Cyan
- Black

10.YY.35 Incompatible <supply>

Description

The indicated cartridge is not compatible with this product.

- **10.00.35** (event code)
Black print cartridge
- **10.01.35** (event code)
Cyan print cartridge
- **10.02.35** (event code)
Magenta print cartridge
- **10.03.35** (event code)
Yellow print cartridge
- **10.23.35** (event code)

 **CAUTION:** The fuser might be hot. Be careful when removing the fuser.

Recommended action

Install a supply that is designed for this product.

See the parts chapter in the product repair manual for the correct supply part number.

11.00.YY Internal clock error

Description

The product real-time clock has experienced an error.

- **11.00.01:** Internal clock battery has zero voltage.
- **11.00.02:** Real-time clock has failed.

Recommended action

Turn the product off, and then on again. Set the time and date at the control panel.

If the error persists, replace the formatter.

13.00.00

Description

Generic jam event code.

Recommended action

Check the product for a jam. See the Clear jams section in this manual.

13.A3.D3

Description

Misfeed jam from tray 3. No-pick jam from tray 3. The leading edge of paper fed from Tray 3 is stopped before SR1 HCI Tray 3 media feed sensor PS3302 (sensor does not detect the leading edge of paper within a specified period), including a two time retry, after the HCI right cassette pickup solenoid is turned on.

Recommended action

1. Open Tray 3, remove any jammed paper, and then close the tray.
2. Inspect the Tray 3 pick, feed, and separation rollers. Clean or replace if necessary.
3. Check the connectors at the feed sensor, solenoid, feed motor, and the controller PCA.
4. Use the Tray/bin manual sensor tests to toggle the Tray 3 feed sensor. If the sensor or lever is not properly functioning, replace the Tray 3 paper pickup assembly.
5. Use the Component tests to activate the Tray 3 solenoid. Listen for the solenoid to activate. If the solenoid is not properly functioning, replace the Tray 3 paper pickup assembly.
6. Use the Component tests to activate the Tray 3 motor. Listen for the motor to activate. If the motor is not properly functioning, replace the Tray 3 pickup motor.

13.A3.D4

Description

Late to tray 3 feed sensor jam, from tray 4. Late to path jam from Tray 4. This jam occurs when the paper does not reach the Tray 3 feed sensor SR1 in designated amount of time after the Tray 4 feed sensor SR1 sensed the leading edge.

500-sheet trays

- The leading edge of paper fed from Tray 4 is stopped before Tray 3 SR1 after passing Tray 4 SR1.

High capacity input feeder

- The HCI media feed sensor PS3301 does not detect the leading edge of paper within a specified period after the Tray 4 cassette media feed sensor PS3305 detects the leading edge of paper.

Recommended action

1. Open the lower-right door, remove any jammed paper, and then close the door.
2. Inspect the Tray 4 pick, feed, and separation rollers. Clean or replace if necessary.
3. Check the connectors at the feed sensor, solenoid, feed motor, and the controller PCA.
4. Use the Tray/bin manual sensor tests to toggle the Tray 4 feed sensor. If the sensor or lever is not properly functioning, replace the Tray 4 paper pickup assembly.
5. Use the Component tests to activate the Tray 4 solenoid. Listen for the solenoid to activate. If the solenoid is not properly functioning, replace the Tray 4 paper pickup assembly.
6. Use the Component tests to activate the Tray 4 motor. Listen for the motor to activate. If the motor is not properly functioning, replace the Tray 4 pickup motor.
7. Use the Tray/bin manual sensor tests to toggle the Tray 3 feed sensor. If the sensor or lever is not properly functioning, replace the Tray 3 paper pickup assembly or HCI crossing paper feed assembly.

13.A3.D5

Description

Late to tray 3 feed sensor jam, from tray 5. Late to path jam from Tray 5. This jam occurs when the paper does not reach the Tray 3 feed sensor SR1 in specified amount of time after the Tray 5 feed sensor SR81 sensed the leading edge.

Recommended action

1. Open the lower-right door, remove any jammed paper, and then close the door.
2. Inspect the Tray 5 pick, feed, and separation rollers. Clean or replace if necessary.
3. Check the connectors at the feed sensor, solenoid, feed motor, and the controller PCA.
4. Use the Tray/bin manual sensor tests to toggle the Tray 5 feed sensor. If the sensor or lever is not properly functioning, replace the Tray 5 paper pickup assembly.
5. Use the Component tests to activate the Tray 5 solenoid. Listen for the solenoid to activate. If the solenoid is not properly functioning, replace the Tray 5 paper pickup assembly.

6. Use the Component tests to activate the Tray 5 motor. Listen for the motor to activate. If the motor is not properly functioning, replace the Tray 5 pickup motor.
7. Use the Tray/bin manual sensor tests to toggle the Tray 3 feed sensor. If the sensor or lever is not properly functioning, replace the Tray 3 paper pickup assembly.

13.A3.D6

Description

Late to tray 3 feed sensor jam, from tray 6. Late to path jam from Tray 6. The leading edge of paper fed from Tray 6 is stopped before Tray 3 SR1 after passing Tray 6 SR91.

Recommended action

1. Open the lower-right door, remove any jammed paper, and then close the door.
2. Inspect the Tray 6 pick, feed, and separation rollers. Clean or replace if necessary.
3. Check the connectors at the feed sensor, solenoid, feed motor, and the controller PCA.
4. Use the Tray/bin manual sensor tests to toggle the Tray 6 feed sensor. If the sensor or lever is not properly functioning, replace the Tray 6 paper pickup assembly.
5. Use the Component tests to activate the Tray 6 solenoid. Listen for the solenoid to activate. If the solenoid is not properly functioning, replace the Tray 6 paper pickup assembly.
6. Use the Component tests to activate the Tray 6 motor. Listen for the motor to activate. If the motor is not properly functioning, replace the Tray 6 pickup motor.
7. Use the Tray/bin manual sensor tests to toggle the Tray 3 feed sensor. If the sensor or lever is not properly functioning, replace the Tray 3 paper pickup assembly.

13.A3.FF

Description

Power on jam, tray 3 feed sensor. Power on residual paper jam.

This jam occurs when the paper exists at SR1 at power on or door close. Due to the current firmware timing requirements, the displayed jam code is always 13.FF.FF (the event log will have 13.WX.FF).

Recommended action

1. Open the lower-right door, clear any jammed paper, and then close the door.
2. Use the Tray/bin manual sensor tests to toggle the Tray 3 feed sensor. If the sensor or lever is not properly functioning, check the connectors to the sensor. If the error persists, replace the Tray 3 paper pickup assembly.

13.A4.D4

Description

Late to tray 4 feed sensor jam, from Tray 4. No-pick jam from Tray 4.

500-sheet trays

- The leading edge of paper fed from Tray 4 does not reach Tray 4 SR1 in specified amount of time.

High capacity input feeder

- Tray 4 media feed sensor PS3305 does not detect the leading edge of paper within a specified period, including two times retry, after the HCI left cassette pickup solenoid is turned on.

Recommended action

500-sheet trays

- a. Open Tray 4, clear any jammed paper, and then close the tray.
- b. Open the lower-right door, clear any jammed paper, and then close the door.

High capacity input feeder

- a. Open Tray 4, clear any jammed paper, and then close the tray.
- b. Open Tray 3, release the jam access tray and clear any jammed paper, and then close the tray.

500-sheet trays and high capacity input feeder

1. Inspect the Tray 4 pick, feed, and separation rollers. Clean or replace if necessary.
2. Check the connectors at the feed sensor, solenoid, feed motor, and the controller PCA.
3. Use the Tray/bin manual sensor tests to toggle the Tray 4 feed sensor. If the sensor or lever is not properly functioning, replace the Tray 4 paper pickup assembly.
4. Use the component tests to activate the Tray 4 solenoid. Listen for the solenoid to activate. If the solenoid is not properly functioning, replace the Tray 4 paper pickup assembly.
5. Use the component tests to activate the Tray 4 motor. Listen for the motor to activate. If the motor is not properly functioning, replace the Tray 4 pickup motor.

13.A4.D5

Description

Late to path jam from Tray 5. This jam occurs when the paper does not reach the Tray 4 feed sensor SR1 in designated amount of time after the Tray 5 feed sensor SR81 sensed the leading edge.

Recommended action

1. Open the lower-right door, remove any jammed paper, and then close the door.
2. Inspect the Tray 5 pick, feed, and separation rollers. Clean or replace if necessary.
3. Check the connectors at the feed sensor, solenoid, feed motor, and the controller PCA.
4. Use the Tray/bin manual sensor tests to toggle the Tray 5 feed sensor. If the sensor or lever is not properly functioning, replace the Tray 5 paper pickup assembly.
5. Use the Component tests to activate the Tray 5 solenoid. Listen for the solenoid to activate. If the solenoid is not properly functioning, replace the Tray 5 paper pickup assembly.
6. Use the Component tests to activate the Tray 5 motor. Listen for the motor to activate. If the motor is not properly functioning, replace the Tray 5 pickup motor.

13.A4.D6

Description

Late to path jam from Tray 6. This jam occurs when the paper does not reach the Tray 4 feed sensor SR1 in designated amount of time after the Tray 6 feed sensor SR91 sensed the leading edge.

Recommended action

1. Open the lower-right door, remove any jammed paper, and then close the door.
2. Inspect the Tray 6 pick, feed, and separation rollers. Clean or replace if necessary.
3. Check the connectors at the feed sensor, solenoid, feed motor, and the controller PCA.
4. Use the Tray/bin manual sensor tests to toggle the Tray 6 feed sensor. If the sensor or lever is not properly functioning, replace the Tray 6 paper pickup assembly.
5. Use the Component tests to activate the Tray 6 solenoid Listen for the solenoid to activate. If the solenoid is not properly functioning, replace the Tray 6 paper pickup assembly.
6. Use the Component tests to activate the Tray 6 motor. Listen for the motor to activate. If the motor is not properly functioning, replace the Tray 6 pickup motor.
7. Use the Tray/bin manual sensor tests to toggle the Tray 4 feed sensor. If the sensor or lever is not properly functioning, replace the Tray 4 paper pickup assembly.

13.A4.FF

Description

Power on jam, tray 4 feed sensor. Power on residual paper jam. This jam occurs when the paper exists at SR1 at power on or door close. Due to the current firmware timing requirements, the displayed jam code is always 13.FF.FF (the event log will have 13.WX.FF).

Recommended action

1. Open the lower-right door, remove any jammed paper, and then close the door.
2. Use the Tray/bin manual sensor tests to toggle the Tray 4 feed sensor. If the sensor or lever is not properly functioning, check the connectors to the sensor. If the error persists, replace the Tray 4 paper pickup assembly.

13.A5.A5

Description

Misfeed jam, from tray 5. Stopped at tray path jam, from Tray 5.

Leading edge of paper fed from Tray 5 is stopped before Tray 3 SR81.

Recommended action

1. Open Tray 4, clear any jammed paper, and then close the tray.
2. Inspect the Tray 5 pick, feed, and separation rollers. Clean or replace if necessary.
3. Check the connectors at the feed sensor, solenoid, feed motor, and the controller PCA.

4. Use the Tray/bin manual sensor tests to toggle the Tray 5 feed sensor. If the sensor or lever is not properly functioning, replace the Tray 5 paper pickup assembly.
5. Use the Component tests to activate the Tray 5 solenoid. Listen for the solenoid to activate. If the solenoid is not properly functioning, replace the Tray 5 paper pickup assembly.
6. Use the Component tests to activate the Tray 5 motor. Listen for the motor to activate. If the motor is not properly functioning, replace the Tray 5 pickup motor.

13.A5.D6

Description

Late to path jam from Tray 6. This jam occurs when the paper does not reach the Tray 5 feed sensor SR81 in designated amount of time after the Tray 6 feed sensor SR91 sensed the leading edge.

Recommended action

1. Open the lower-right door, clear any jammed paper, and then close the door.
2. Inspect the Tray 6 pick, feed, and separation rollers. Clean or replace if necessary.
3. Check the connectors at the feed sensor, solenoid, feed motor, and the controller PCA.
4. Use the Tray/bin manual sensor tests to toggle the Tray 6 feed sensor. If the sensor or lever is not properly functioning, replace the Tray 6 paper pickup assembly.
5. Use the Component tests to activate the Tray 6 solenoid. Listen for the solenoid to activate. If the solenoid is not properly functioning, replace the Tray 6 paper pickup assembly.
6. Use the Component tests to activate the Tray 6 motor. Listen for the motor to activate. If the motor is not properly functioning, replace the Tray 6 pickup motor.
7. Use the Tray/bin manual sensor tests to toggle the Tray 5 feed sensor. If the sensor or lever is not properly functioning, replace the Tray 5 paper pickup assembly.

13.A5.FF

Description

Power on jam, tray 5 feed sensor. Power on residual paper jam.

This jam occurs when the paper exists at SR81 at power on or door close. Due to the current firmware timing requirements, the displayed jam code is always 13.FF.FF (the event log will have 13.WX.FF).

Recommended action

1. Open the lower-right door, clear any jammed paper, and then close the door.
2. Use the Tray/bin manual sensor tests to toggle the Tray 5 feed sensor. If the sensor or lever is not properly functioning, check the connectors to the sensor. If the error persists, replace the Tray 5 paper pickup assembly.

13.A6.D6

Description

Misfeed jam, from tray 6. No-pick jam from tray 6.

The leading edge of paper fed from Tray 6 is stopped before SR91.

Recommended action

1. Open Tray 6, clear any jammed paper, and then close the tray.
2. Open the lower-right door, clear any jammed paper, and then close the door.
3. Inspect the Tray 6 pick, feed, and separation rollers. Clean or replace if necessary.
4. Check the connectors at the feed sensor, solenoid, feed motor, and the controller PCA.
5. Use the Tray/bin manual sensor tests to toggle the Tray 6 feed sensor. If the sensor or lever is not properly functioning, replace the Tray 6 paper pickup assembly.
6. Use the Component tests to activate the Tray 6 solenoid. Listen for the solenoid to activate. If the solenoid is not properly functioning, replace the Tray 6 paper pickup assembly.
7. Use the Component tests to activate the Tray 6 motor. Listen for the motor to activate. If the motor is not properly functioning, replace the Tray 6 pickup motor.

13.A6.FF**Description**

Power on jam, tray 6 feed sensor. Power on residual paper jam.

This jam occurs when the paper exists at SR91 at power on or door close. Due to the current firmware timing requirements, the displayed jam code is always 13.FF.FF (the event log will have 13.WX.FF).

Recommended action

1. Open the lower-right door, clear any jammed paper, and then close the door.
2. Use the Tray/bin manual sensor tests to toggle the Tray 6 feed sensor. If the sensor or lever is not properly functioning, check the connectors to the sensor. If the error persists, replace the Tray 6 paper pickup assembly.

13.AA.EE**Description**

Door open jam. Tray 3, 4, or 5 right tray access door was opened during print job.

Recommended action

1. Close the lower right door.
2. Check the tab of the lower right door that engages the right door sensor. If it is damaged, replace the right door assembly.
3. Use the manual sensor tests to toggle the lower right door sensor (SW1 or SW3301). If a sensor is not properly functioning, replace the sensor.
4. Check the connectors (J192S) on the DC controller PCA and the connector (J751 or J905) on the right door sensor.

13.AB.EE**Description**

Door open jam. Tray 4, 5, or 6 right tray access door was opened during print job.

Recommended action

1. Close the door.
2. Depending on input tray configuration, check the appropriate tab of the lower right door that engages the right door sensor. If it is damaged, replace the right door assembly.
3. Use the manual sensor tests to toggle the middle right door sensors. If a sensor is not properly functioning, replace the sensor.
4. Do one of the following:
 - **500-sheet paper feeder:** check the connectors (J2003) on the PF controller PCA and the connector (J751) on the PF right door open detection switch SW1.
 - **3x500-sheet paper deck:** check the connectors (J2005) on the PD controller PCA and the connector (J705) on the PD right door open detection switch.
 - **High capacity input feeder:** check the connectors (J3006) on the HCI controller PCA and the connector (J905) on the HCI right door open detection switch.

13.B2.AX

Description

Media stay jam at registration sensor PS5.

- **13.B2.A1** (event code)

Media input stay jam 1 (registration sensor) paper from tray 1. Paper stays at PS5 – media longer than allowed from Tray 1.
- **13.B2.A2** (event code)

Media input stay jam 1 (registration sensor) paper from tray 1. Paper stays at PS5 – media longer than allowed from Tray 2.
- **13.B2.A2** (event code)

Media input stay jam 1 (registration sensor) paper from tray 1. Paper stays at PS5 – media longer than allowed from Tray 3.
- **13.B2.A4** (event code)

Media input stay jam 1 (registration sensor) paper from tray 1. Paper stays at PS5 – media longer than allowed from Tray 4.
- **13.B2.A5** (event code)

Media input stay jam 1 (registration sensor) paper from tray 1. Paper stays at PS5 – media longer than allowed from Tray 5.
- **13.B2.A6** (event code)

Media input stay jam 1 (registration sensor) paper from tray 1. Paper stays at PS5 – media longer than allowed from Tray 6.
- **13.B2.AD** (event code)

Media stay jam at registration sensor PS5. Paper stays at PS5 – media longer than allowed from duplexer.

Recommended action

1. Open the right door, clear any jammed paper, and then close the door.
2. Check for obstructions in the paper path.
3. Verify that the second transfer roller is seated properly and not worn or deformed. Replaced it if necessary.
4. Verify that the registration assembly shutter is properly functioning. Replace it if it is damaged.
5. Use the manual sensor tests to toggle the TOP sensor (PS5). If the sensor is not properly functioning, replace the registration sensor assembly.
6. Check the connectors (J122S) on the DC controller and (J537) on the PS5 sensor.

13.B2.DX

Description

- **13.B2.D1** (event code)
Late to registration jam, from Tray 1. This may be a misfeed jam from Tray 1.
The leading edge of paper fed from Tray 1 is stopped before PS5.
- **13.B2.D2** (event code)
Late to registration jam, from Tray 2. This may be a misfeed jam from Tray 2.
The leading edge of paper fed from Tray 2 is stopped before PS5.
- **13.B2.D3** (event code)
Late to registration jam, from tray 3.
The leading edge of paper fed from Tray 3 is stopped before PS5 after passing SR1.
- **13.B2.D4** (event code)
Late to registration jam, from Tray 4.
The leading edge of paper fed from Tray 4 is stopped before PS5 after passing SR1.
- **13.B2.D5** (event code)
Late to registration jam, from Tray 5.
Leading edge of paper fed from Tray 5 is stopped before PS5 after passing SR1.
- **13.B2.D6** (event code)
Late to registration jam, from Tray 6.
The leading edge of paper fed from Tray 6 is stopped before PS5 after passing SR1.
- **13.B2.DD** (event code)

This jam occurs when the paper does not reach the registration sensor in a designated amount of time after it is reversed from the switchback position during duplex printing. The media either did not reverse (it was either ejected to the output bin or the user grabbed the exposed page during duplex reverse), or is jammed in the duplex reversing path in the product's right door.

Duplex re-feed paper is stopped between PS6 and PS5.

Recommended action

1. Open the right door, clear any jammed paper, and then close the door.
2. Check for obstructions in the paper path.
3. Verify that the second transfer roller is seated properly and not worn or deformed. Replace it if necessary.
4. Check the pickup, feed, and separation rollers from the source tray. Replace them if they are worn or defective.
5. Verify that the registration assembly shutter is properly functioning. Replace it if it is damaged.
6. Use the manual sensor tests to toggle the TOP sensor (PS5). If the sensor is not properly functioning, replace the registration sensor assembly.
7. Check the connectors (J122S) on the DC controller and (J537) on the PS5 sensor.
8. Use the Component tests to activate the pickup motor and pickup solenoid/clutch for the source tray. If the motor or solenoid/clutch is not properly functioning, replace the motor or solenoid/clutch assembly.

13.B2.FF

Description

At power on, door close, or auto-flushing: paper stays at PS5.

Power on residual paper jam. This jam occurs when the paper exists at PS5 at power on or door close. Due to the current FW timing requirements, the displayed jam code is always 13.FF.FF, only the event log will have 13.WX.FF.

Recommended action

1. Open the right door, clear any jammed paper, and then close the door.
2. Use the manual sensor tests to toggle the TOP sensor (PS5). If the sensor is not properly functioning, replace the registration sensor assembly.

13.B4.FF

Description

At power on, door close, or auto-flushing: paper stays at PS7/PS8 (loop sensors).

Power on residual paper jam. This jam occurs when the paper exists at PS7/8 at power on or door close. Due to the current FW timing requirements, the displayed jam code is always 13.FF.FF, only the event log will have 13.WX.FF.

Recommended action

1. Open the right door, clear any jammed paper, and then close the door.
2. Use the manual sensor tests to toggle the Loop sensors (PS7/PS8). If the sensors or levers are not properly functioning, replace the fuser assembly.

13.B9.AZ

Description

Stopped at fuser jam.

This jam occurs when the paper stays at the fuser output sensor PS6 for a designated amount of time after it has reached the fuser output sensor PS6.

Z = Fuser mode.

- **13.B9.A1** (event code)
Stopped at fuser jam, Auto Sense (Normal)--special case distinguished from typed Normal.
- **13.B9.A2** (event code)
Stopped at fuser jam, Normal (typed not from Auto Sense).
- **13.B9.A3** (event code)
Stopped at fuser jam, Light media 1 (either typed or from Auto Sense).
- **13.B9.A4** (event code)
Stopped at fuser jam, Heavy media 1 (either typed or from Auto Sense).
- **13.B9.A5** (event code)
Stopped at fuser jam, Heavy media 2 (either typed or from Auto Sense).
- **13.B9.A6** (event code)
Stopped at fuser jam, Heavy media 3 (either typed or from Auto Sense).
- **13.B9.A7** (event code)
Stopped at fuser jam, Glossy media 1 (either typed or from Auto Sense).
- **13.B9.A8** (event code)
Stopped at fuser jam, Glossy media 2 (either typed or from Auto Sense).
- **13.B9.A9** (event code)
Stopped at fuser jam, Glossy media 3 (either typed or from Auto Sense).
- **13.B9.AA** (event code)
Stopped at fuser jam, Glossy film (either typed or from Auto Sense).
- **13.B9.AB** (event code)
Stopped at fuser jam, OHT (either typed or from Auto Sense).

- **13.B9.AC** (event code)
Stopped at fuser jam, Label.
- **13.B9.AD** (event code)
Stopped at fuser jam, Envelope 1.
- **13.B9.AE** (event code)
Stopped at fuser jam (engine fuser mode).
- **13.B9.AF** (event code)
Stopped at fuser jam (unknown fuser mode).

Recommended action

1. Open the right door, and then clear any jammed paper.
2. Make sure that the paper meets HP specifications.
3. Remove the fuser, and then clear any jammed paper.

 **CAUTION:** The fuser might be hot.

4. Replace the fuser, and then close the door.
5. Check for obstructions in the paper path.
6. Verify that the second transfer roller is seated properly and not worn or deformed. Replace it if necessary.
7. Check the paper path rollers at the fuser and paper delivery assembly for blockage or damage. Replace the fuser or paper delivery assembly if necessary.
8. Use the manual sensor tests to toggle the fuser output sensor (PS6). If the sensor is not properly functioning, replace the fuser assembly.
9. Use the components tests to activate the fuser motor (M4). If the motor is not properly functioning, replace the motor.

13.B9.CZ

Description

Fuser wrap jam.

This jam occurs when the paper does not reach the fuser output sensor (PS6) in a designated amount of time after the paper reached the fuser output sensor (PS6). It is determined that the paper is being wrapped around the fuser roller.

Z = Fuser mode.

- **13.B9.C1** (event code)
Fuser wrap jam, Auto Sense (Normal)--special case distinguished from typed Normal.
- **13.B9.C2** (event code)
Fuser wrap jam, Normal (typed not from Auto Sense).

- **13.B9.C3** (event code)
Fuser wrap jam, Light media 1 (either typed or from Auto Sense).
- **13.B9.C4** (event code)
Fuser wrap jam, Heavy media 1 (either typed or from Auto Sense).
- **13.B9.C5** (event code)
Fuser wrap jam, Heavy media 2 (either typed or from Auto Sense).
- **13.B9.C6** (event code)
Fuser wrap jam, Heavy media 3 (either typed or from Auto Sense).
- **13.B9.C7** (event code)
Fuser wrap jam, Glossy media 1 (either typed or from Auto Sense).
- **13.B9.C8** (event code)
Fuser wrap jam, Glossy media 2 (either typed or from Auto Sense).
- **13.B9.C9** (event code)
Fuser wrap jam, Glossy media 3 (either typed or from Auto Sense).
- **13.B9.CA** (event code)
Fuser wrap jam, Glossy film (either typed or from Auto Sense).
- **13.B9.CB** (event code)
Stopped at fuser jam, OHT (either typed or from Auto Sense).
- **13.B9.CC** (event code)
Stopped at fuser jam, Label.
- **13.B9.CD** (event code)
Stopped at fuser jam, Envelope 1.
- **13.B9.CE** (event code)
Stopped at fuser jam (engine fuser mode).
- **13.B9.CF** (event code)
Stopped at fuser jam (unknown fuser mode).

Recommended action

1. Open the right door.
2. Remove the fuser, and then remove any paper wrapped around the fuser roller.

 **CAUTION:** The fuser might be hot.

3. Replace the fuser, and then close the door.

4. Perform a cleaning page procedure to make sure that all of the toner is removed from the fuser roller.
5. Use the manual sensor tests to toggle the fuser output sensor (PS6). If the sensor is not properly functioning, replace the fuser assembly.
6. If the error persists, the fuser roller or pressure roller might be damaged. Replace the fuser.

13.B9.DZ

Description

Fuser delivery delay jam.

This jam occurs when the paper does not reach the fuser output sensor (PS6) in a designated amount of time after the paper reached the fuser output sensor (PS6).

- **13.B9.D0** (event code)
Leading edge of paper is stopped between PS5 and PS6 – unknown source tray.
- **13.B9.D1** (event code)
Leading edge of paper is stopped between PS5 and PS6 – fed from Tray 1.
- **13.B9.D2** (event code)
The leading edge of paper is stopped between PS5 and PS6 – fed from Tray 2.
- **13.B9.D3** (event code)
The leading edge of paper is stopped between PS5 and PS6 – fed from Tray 3.
- **13.B9.D4** (event code)
The leading edge of paper is stopped between PS5 and PS6 – fed from Tray 4.
- **13.B9.D5** (event code)
The leading edge of paper is stopped between PS5 and PS6 – fed from Tray 5.
- **13.B9.D6** (event code)
The leading edge of paper is stopped between PS5 and PS6 – fed from Tray 6.
- **13.B9.DD** (event code)
The leading edge of paper is stopped between PS5 and PS6 – fed from duplexer.

Recommended action

1. Open the right door, and then remove any jammed paper.
2. Remove the fuser, and then remove any jammed paper.

 **CAUTION:** The fuser might be hot.

3. Replace the fuser, and then close the door.
4. Make sure that the paper meets HP specifications.
5. Check for obstructions in and around the fuser.

6. Use the manual sensor tests to toggle the fuser output sensor (PS6). If the sensor is not properly functioning, replace the fuser assembly.
7. Check connections (J516) on the fuser motor and (J81A) on the DC controller.
8. Use the components tests to toggle the fuser motor (M4). If the sensor is not properly functioning, replace the motor.

13.B9.FF

Description

Power on jam, fuser output sensor. At power on, door close, or auto-flushing: paper stays at PS6.

This jam occurs when the paper exists at PS6 at power on or door close. Due to the current FW timing requirements, the displayed jam code is always 13.FF.FF, only the event log will have 13.WX.FF.

Recommended action

1. Open the right door, and then remove any jammed paper.
2. Remove the fuser, and then remove any jammed paper.

 **CAUTION:** The fuser might be hot.

3. Use the Manual sensor tests to toggle the fuser exit sensor. If the sensor or lever is not properly functioning, replace the fuser assembly.

13.B9.YZ Fuser Area Jam

Description

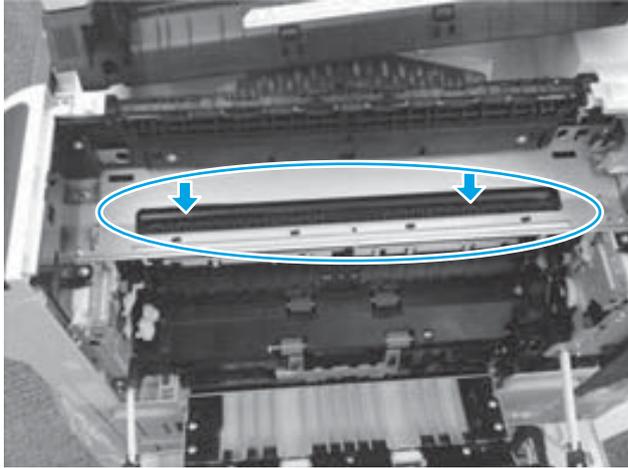
Paper Jam at fuser sensor. Y= A: Paper Stay Jam D: Paper Delay Jam C: Wrap Jam B: Multi-Feed Jam

1. Customers report experiencing *reoccurring* 13.B9.YZ paper jams in the fuser area. The paper is pulled partway into the fuser before jamming. The jam happens when feeding paper from ANY of the input trays.
2. Customers report experiencing *non-clearable* 13.B9.YZ paper jams in the fuser area. The paper is pulled partway into the fuser before jamming. The jam happens when feeding paper from ANY of the input trays.

Recommended action

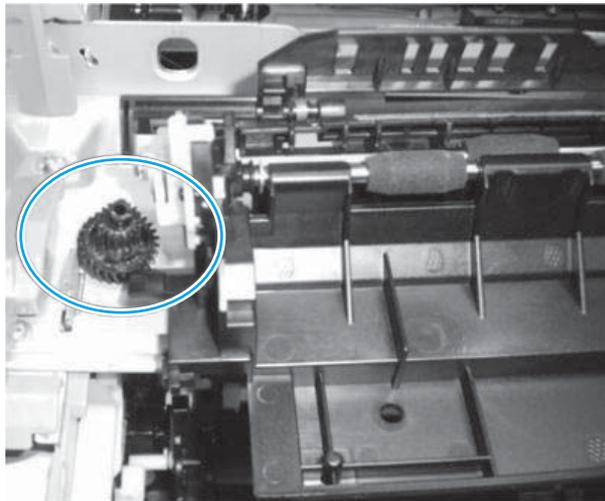
1. Solution for *reoccurring* 13.B9.YZ paper jams in the fuser area: Inspect the fuser guide, if broken, and then order part # RC2-6551-000CN and replace the guide. The guide can easily be installed as a CSR A.

Figure 3-52 Fuser guide location



2. Solution for *non-clearable* 13.B9.YZ paper jams in the fuser area.
 - a. Determine if the delivery rollers (located at where the paper exits to the top output bin) move when the product is turned ON.
 - b. Run the **Fuser Motor** test from the **Troubleshooting/Component Test** menus to check if the rollers move or not.
 - c. If the rollers do not move, then replace the paper delivery assembly, part number RM1-6165-000CN

Figure 3-53 Paper deliver assembly gear



For a 13.B9.DZ jam, make sure media is within specifications, check for obstructions in the fuser, and check that the T2 roller is installed properly.

13.BA.EE

Description

This jam occurs when the front door is opened during a print job.

Recommended action

1. Close the front door.
2. Check the projection tabs of the front door that engage the door sensor (SW2 and PS14). If either tab is damaged, replace the appropriate part.
3. Check the connectors (SW2 - J241/J242 and PS14 - J171S) on the DC controller PCA and the connector (SW2 - J708F and PS14 - J536S) on the door open detection switch SW2 and PS14.

13.BB.EE

Description

This jam accrues when the stapler stacker jam access, right door, or Tray 3, 4, 5, or 6 right tray access door was opened during print job.

Recommended action

1. Check the upper or lower right doors to make sure that they are closed.
2. Check the projection tabs of the right doors that engage the door sensor (SW1 or SW3301). If either tab is damaged, replace the appropriate part.
3. Use the Manual sensor test to activate the door switch. Replace the switch if it is not properly functioning.
4. Check the appropriate connectors on the DC controller PCA and the appropriate connector on the paper feeder or stapler stacker assembly.

13.E1.DZ

Description

Late to standard bin sensor (output bin).

This jam occurs when the leading edge of the paper does not reach the face-down output bin full sensor (PS10) in the designated amount of time after activating PS6.

Z = Fuser mode.

- **13.E1.D1** (event code)
Late to standard bin sensor, Auto Sense (Normal)--special case distinguished from typed Normal.
- **13.E1.D2** (event code)
Late to standard bin sensor, Normal (typed not from Auto Sense).
- **13.E1.D3** (event code)
Late to standard bin sensor, Light media 1 (either typed or from Auto Sense).
- **13.E1.D4** (event code)

- Late to standard bin sensor, Heavy media 1 (either typed or from Auto Sense).

 - **13.E1.D5** (event code)

Late to standard bin sensor, Heavy media 2 (either typed or from Auto Sense).

 - **13.E1.D6** (event code)

Late to standard bin sensor, Heavy media 3 (either typed or from Auto Sense).

 - **13.E1.D7** (event code)

Late to standard bin sensor, Glossy media 1 (either typed or from Auto Sense).

 - **13.E1.D8** (event code)

Late to standard bin sensor, Glossy media 2 (either typed or from Auto Sense).

 - **13.E1.D9** (event code)

Late to standard bin sensor, Glossy media 3 (either typed or from Auto Sense).

 - **13.E1.DA** (event code)

Late to standard bin sensor, Glossy film (either typed or from Auto Sense).

 - **13.E1.DB** (event code)

Late to standard bin sensor, OHT (either typed or from Auto Sense).

 - **13.E1.DC** (event code)

Late to standard bin sensor, Label.

 - **13.E1.DD** (event code)

Late to standard bin sensor, Envelope 1.

 - **13.E1.DE** (event code)

Late to standard bin sensor. Rough mode (either typed or from Auto Sense).

Recommended action

1. Remove any paper from the output bin.
2. Open the right door.
3. Remove the fuser, and then remove any paper wrapped around the fuser roller.

 **CAUTION:** The fuser might be hot.

4. Replace the fuser, and then close the door.
5. Verify that the output gate on the paper delivery assembly and output-bin full sensor flag are properly functioning.
6. Use the Tray/bin manual sensor tests to toggle the following sensors:

- Output-bin-Full Sensor (PS10). If the sensor does not respond, send an onsite technician to replace the paper delivery assembly.
- Fuser Output Sensor (PS6). If the sensor does not respond, replace the fuser.

13.FF.FF

Description

Jams at multiple sensors. Power on residual paper jam, multiple sensors in multiple subsystems.

This jam occurs when the paper exists at multiple sensors at power on or door close. Due to the current FW timing requirements, the displayed jam code is always 13.FF.FF, only the event log will have 13.WX.FF.

Recommended action

1. Remove any paper form the output bin.
2. Open the right door.
3. Remove the fuser, and then remove any paper wrapped around the fuser roller.

 **CAUTION:** The fuser might be hot.

4. Replace the fuser, and then close the door.
5. View or print the event log to find previous jam errors. Troubleshoot jam errors starting with the most recent.

20.00.00 Insufficient memory: <Device> To continue, touch “OK”

Description

The product has experienced a memory error. You might have tried to transfer too many fonts or macros.

Recommended action

Touch the **OK** button to print the transferred data. Some data might be lost. Reduce the page complexity.

21.00.00 Page too complex To continue, touch “OK”

Description

The page decompression process was too slow for the product.

Recommended action

Touch the **OK** button to continue. There may be some data loss.

32.1C.XX

Description

- **32.1C.01** (event code)
NVRAM backup/restore service backup started.
- **32.1C.02** (event code)
NVRAM backup/restore service restore started.

- **32.1C.03** (event code)
NVRAM backup/restore administrator backup started.
- **32.1C.04** (event code)
NVRAM backup/restore administrator restore started.
- **32.1C.05** (event code)
Backup/restore complete.
- **32.1C.06** (event code)
Data model failed to clone job ticket.
- **32.1C.07** (event code)
Backup restore permissions error.
- **32.1C.08** (event code)
Not enough disk space to perform backup/restore or network share issue.
- **32.1C.09** (event code)
Tried to restore a backup file that was not valid for this product.
- **32.1C.0A** (event code)
Backup file is invalid.
- **32.1C.0B** (event code)
Backup is from newer version of FW than what is currently on the product.
- **32.1C.0C** (event code)
Backup canceled from the HP Embedded Web Server.
- **32.1C.0D** (event code)
Backup/restore failed, auto-reboot failed, or the product might be busy.
- **32.1C.0E** (event code)
Backup/restore timeout while communicating with the formatter.
- **32.1C.11** (event code)
Backup/restore timeout while communicating with the engine.
- **32.1C.12** (event code)
Backup/restore timeout while communicating with the disk.
- **32.1C.13** (event code)
Scheduled backup failure.
- **32.1C.14** (event code)

NVRAM restore timeout while communicating with the formatter.

- **32.1C.17** (event code)

NVRAM restore timeout while communicating with the engine.

- **32.1C.18** (event code)

Copy subsystem backup failed.

- **32.1C.19** (event code)

Backup/restore unknown error.

- **32.1C.1A** (event code)

Digital Send subsystem backup failed.

- **32.1C.1B** (event code)

Backup of print subsystem failed.

- **32.1C.1C** (event code)

Backup of networking subsystem failed.

- **32.1C.1E** (event code)

Copy subsystem restore failed.

- **32.1C.1F** (event code)

Fax subsystem restore failed.

- **32.1C.20** (event code)

Digital Send subsystem restore failed.

- **32.1C.21** (event code)

Restore of print subsystem failed.

- **32.1C.22** (event code)

Restore of networking subsystem failed.

- **32.1C.23** (event code)

Failed to restore address book subsystem.

- **32.1C.24** (event code)

NVRAM backup/restore successful.

- **32.1C.25** (event code)

Copy subsystem reset failed.

- **32.1C.26** (event code)

Fax subsystem reset failed.

- **32.1C.27** (event code)
Digital Send subsystem reset failed.
- **32.1C.28** (event code)
Reset of print subsystem failed.
- **32.1C.29** (event code)
Reset of networking subsystem failed.
- **32.1C.2B** (event code)
Reset formatter timeout.
- **32.1C.2E** (event code)
Reset engine timeout.
- **32.1C.2F** (event code)
Reset failure.

Recommended action

- **32.1C.01** (event code)
No action necessary
- **32.1C.02** (event code)
No action necessary
- **32.1C.03** (event code)
No action necessary
- **32.1C.04** (event code)
No action necessary
- **32.1C.05** (event code)
No action necessary
- **32.1C.06** (event code)
Retry
- **32.1C.07** (event code)
Retry
- **32.1C.08** (event code)
Remove stored jobs and retry
Use larger capacity storage device
Check network share

- **32.1C.09** (event code)
Use a valid backup file
- **32.1C.0A** (event code)
Use a valid backup file
Reboot and observe state of product
Do a partition clean using the [Preboot](#) menu
- **32.1C.0B** (event code)
Use a valid backup file, or put correct firmware version on the product
- **32.1C.0C** (event code)
No action necessary
- **32.1C.0D** (event code)
Reboot and then retry the backup/restore
- **32.1C.0E** (event code)
Turn the product off, and then on, and retry
- **32.1C.11** (event code)
Turn the product off, and then on, and retry
- **32.1C.12** (event code)
Turn the product off, and then on, and retry
- **32.1C.13** (event code)
Turn the product off, and then on, and retry
- **32.1C.14** (event code)
Turn the product off, and then on, and retry
- **32.1C.17** (event code)
Turn the product off, and then on, and retry
- **32.1C.1B** (event code)
Turn the product off, and then on, and retry
- **32.1C.1C** (event code)
Turn the product off, and then on, and retry
- **32.1C.21** (event code)
Turn the product off, and then on, and retry

If the error persists, clear the firmware image from the active partition by using the [Partial Clean](#) item in the [Preboot](#) menu.

- **32.1C.22** (event code)
Turn the product off, and then on, and retry
If the error persists, clear the firmware image from the active partition by using the [Partial Clean](#) item in the [Preboot](#) menu.
- **32.1C.24** (event code)
Turn the product off, and then on, and retry
- **32.1C.28** (event code)
Turn the product off, and then on, and retry
- **32.1C.29** (event code)
Turn the product off, and then on, and retry
- **32.1C.2B** (event code)
Turn the product off, and then on, and retry
- **32.1C.2E** (event code)
Turn the product off, and then on, and retry
- **32.1C.2F** (event code)
Turn the product off, and then on, and retry

33.02.01

Description

A used part with data was replaced in the device. Used board/disk installed.

Recommended action

Turn the product power off, and then on again.

If the error persists, escalate this problem to your Global Business unit.

33.02.02

Description

A Save/Recover status error has occurred on the product and one, or both, of the Save/Recover features are disabled.

Recommended action

Turn the product power off, and then on again.

If the error persists, escalate this problem to your Global Business unit.

33.02.03

Description

The Save/Recover backup feature has failed, and the Save/Recover features are disabled, but the product continues to function.

Recommended action

Turn the product power off, and then on again.

If the error persists, escalate this problem to your Global Business unit.

33.03.01

Description

The controller encountered an unexpected data length for the Storage ID value.

Recommended action

Turn the product power off, and then on again.

If the error persists, escalate this problem to your Global Business unit (return the product ICB to the Global Business unit with a full diagnostic log from the product).

33.03.02

Description

The controller encountered an unexpected data length value for the engine to recover the DCC NVRAM value.

Recommended action

Turn the product power off, and then on again.

If the error persists, escalate this problem to your Global Business unit (return the product ICB to the Global Business unit with a full diagnostic log from the product).

40.00.01 USB I/O buffer overflow To continue, touch “OK”

Description

The USB buffer overflowed during a busy state.

Recommended action

1. Touch the **OK** button to print the transferred data. Some data might be lost.
2. Check the host configuration.

40.00.02 Embedded I/O buffer overflow To continue, touch “OK”

Description

Too much data was sent to the embedded HP Jetdirect print server. An incorrect communications protocol might be in use.

Recommended action

1. Touch the **OK** button to print the transferred data. Some data might be lost.
2. Check the host configuration.

40.00.04 Unsupported USB accessory detected To continue, touch “OK”**Description**

The connection between the product and the USB device has been broken.

Recommended action

Press the **OK** button to clear the error message and continue printing.

Remove, and then reinstall the USB device.

40.00.05 Embedded I/O bad transmission To continue, touch “OK”**Description**

The USB device has been removed.

Recommended action

Press the **OK** button to clear the error message. (Data will be lost.)

Install the USB device.

40.08.0X USB storage accessory removed**Description**

X = 0 or 1; information code

Secure file erase is enabled.

Recommended action

No action necessary.

40.0X.05 USB storage accessory removed**Description**

X = 1, 2, 3, 5, or 6; information code

The USB storage accessory was removed.

Recommended action

No action necessary.

41.01.YZ**Description**

An unknown misprint error occurred on the product.

Y = Type, Z = Tray

- Y = 0: Photo Media (1, 2, or 3)
- Y = 1: Auto Sense (Normal)
- Y = 2: Normal (typed not from Auto Sense)
- Y = 3: Light media 1, 2, or 3 mode
- Y = 4: Heavy media 1
- Y = 5: Heavy media 2
- Y = 6: Heavy media 3
- Y = 7: Glossy media 1
- Y = 8: Glossy media 2
- Y = 9: Glossy media 3
- Y = A: Glossy film
- Y = B: OHT
- Y = C: Label
- Y = D: Envelope 1, 2, or 3 mode
- Y = E: Rough
- Y = F: Other mode
- Z = 0: From unknown tray
- Z = 1: From Tray 1
- Z = 2: From Tray 2
- Z = 3: From Tray 3
- Z = 4: From Tray 4
- Z = 5: From Tray 5
- Z = 6: From Tray 6
- Z = 7: From Tray 7
- Z = 8: From Tray 8
- Z = 9: From Tray 9
- Z = D: From duplexer

Recommended action

Turn the product power off, and then on again.

41.02.00 Error

Description

A beam detected misprint error.

Recommended action

Turn the product off, and then on.

If the error persists, replace the laser/scanner assembly.

41.02.0Z Error

Description

A beam detected misprint error.

- Z = 5: Black drum station
- Z = 6: Cyan drum station
- Z = 7: Magenta drum station
- Z = 8: Yellow drum station

Recommended action

Turn the product power off, and then on again.

If the error persists, replace the laser/scanner assembly.

41.03.YZ Unexpected size in Tray <X>

Description

The product detected a different paper size than expected.

- Y = 0
Size mismatch. Detected media is longer or shorter than expected.
- Y = A
Size mismatch. Detected media too long.
- Y = B
Size mismatch. Detected media too short.
- Z = 1
Source is Tray 1.
- Z = 2
Source is Tray 2.
- Z = 3
Source is Tray 3.

- Z = 4
Source is Tray 4.
- Z = 5
Source is Tray 5.
- Z = 6
Source is Tray 6.

Recommended action

Make sure that the tray is loaded with the correct paper size and that the sliding paper guides are correctly adjusted.

Use the [Tray/Bin Manual Sensor Test](#) to verify that the tray paper switch is correctly functioning.

If the error persists, replace the lifter assembly.

41.03.YZ Unexpected size in Tray <X> To use another tray, touch "Options"

Description

The product detected a different paper size than expected.

Y = Size mismatch, Z = Source

- Y = 0: Detected paper is longer or shorter than expected
- Y = A: Detected paper too long
- Y = B: Detected paper too short
- Y = C: Unexpected size
- Y = D: Detected media too wide
- Y = E: Detected media too narrow
- Z = 1: Tray 1
- Z = 2: Tray 2
- Z = 3: Tray 3
- Z = 4: Tray 4
- Z = 5: Tray 5
- Z = 6: Tray 6
- Z = D: Duplexer

Recommended action

1. Make sure that the tray is loaded with the correct paper size and that the sliding paper guides are correctly adjusted.
2. Use the [Tray/Bin Manual Sensor Test](#) to verify that the tray paper switch is correctly functioning.
3. If the error persists, replace the lifter assembly.

41.04.YZ

Description

An unknown misprint error occurred on the product.

Y = Type, Z = Tray

- Y = 0: Photo Media (1, 2, or 3)
- Y = 1: Auto Sense (Normal)
- Y = 2: Normal (typed not from Auto Sense)
- Y = 3: Light media 1, 2, or 3 mode
- Y = 4: Heavy media 1
- Y = 5: Heavy media 2
- Y = 6: Heavy media 3
- Y = 7: Glossy media 1
- Y = 8: Glossy media 2
- Y = 9: Glossy media 3
- Y = A: Glossy film
- Y = B: OHT
- Y = C: Label
- Y = D: Envelope 1, 2, or 3 mode
- Y = E: Rough
- Y = F: Other mode
- Z = 0: From unknown tray
- Z = 1: From Tray 1
- Z = 2: From Tray 2
- Z = 3: From Tray 3
- Z = 4: From Tray 4
- Z = 5: From Tray 5
- Z = 6: From Tray 6

- Z = 7: From Tray 7
- Z = 8: From Tray 8
- Z = 9: From Tray 9
- Z = D: From duplexer

Recommended action

1. Turn the product power off, and then on.
2. If the error persists, replace the laser/scanner assembly.

41.05.YZ Unexpected type in Tray <X>

Description

The product detected a different paper type than expected.

Y = Expected type, Z = Detected type

- Y = 0: Unknown
- Y = 1: Normal paper
- Y = 3: LBP transparency
- Y = 4: Glossy paper
- Y = 5: Gloss film
- Y = 6: Non-assured transparency
- Y = 7: Heavy paper
- Y = 8: Light paper
- Y = 9: Rough paper
- Y = A: Extra heavy glossy paper (glossy paper 3)
- Y = B: Heavy glossy paper (glossy paper 2)
- Y = C: Heavy paper 3
- Y = D: Heavy paper 2
- Z = 1: Normal paper
- Z = 3: LBP transparency
- Z = 4: Glossy paper
- Z = 5: Gloss film
- Z = 6: Non-assured transparency
- Z = 7: Heavy paper
- Z = 8: Light paper

- Z = A: Extra heavy glossy paper (glossy paper 3)
- Z = B: Heavy glossy paper (glossy paper 2)
- Z = C: Heavy paper 3
- Z = D: Heavy paper 2

Recommended action

1. Load the tray with the size and type of paper indicated, or use another tray if available.
2. If this message displays and the tray is loaded with the correct paper type, check the print driver settings to make sure that they match the tray type settings.
3. Clean the media sensor.
4. If the error persists, replace the paper pickup assembly.

41.05.YZ Unexpected type in Tray <X> To use another tray, touch "Options"

Description

The product detected a different paper type than expected and another tray is available for use.

Y = Expected type, Z = Detected type

- Y = 0: Unknown
- Y = 1: Normal paper
- Y = 3: LBP transparency
- Y = 4 Glossy paper
- Y = 5: Gloss film
- Y = 6: Non-assured transparency
- Y = 7: Heavy paper
- Y = 8: Light paper
- Y = 9: Rough paper
- Y = A: Extra heavy glossy paper (glossy paper 3)
- Y = B: Heavy glossy paper (glossy paper 2)
- Y = C: Heavy paper 3
- Y = D: Heavy paper 2
- Z = 1: Normal paper
- Z = 3: LBP transparency
- Z = 4: Glossy paper
- Z = 5: Gloss film
- Z = 6: Non-assured transparency

- Z = 7: Heavy paper
- Z = 8: Light paper
- Z = A: Extra heavy glossy paper (glossy paper 3)
- Z = B: Heavy glossy paper (glossy paper 2)
- Z = C: Heavy paper 3
- Z = D: Heavy paper 2

Recommended action

1. Load the tray with the size and type of paper indicated, or use another tray if available.
2. If this message displays and the tray is loaded with the correct paper type, check the print driver settings to make sure that they match the tray type settings.
3. Clean the paper sensor.
4. If the error persists, replace the paper pickup assembly.

41.07.YZ Error To continue, touch “OK”

Description

A media transportation error has occurred.

- Y = 0
Photo media 1, Photo media 2, Photo media 3, Designated media 2, Designated media 3, or N/A, typed or AutoSense.
- Y = 1
AutoSense (Normal): special case distinguished from typed Normal.
- Y = 2
Normal: typed (not AutoSense).
- Y = 3
Light media 1, 2, or 3: typed or AutoSense.
- Y = 4
Heavy media 1: typed or AutoSense.
- Y = 5
Heavy media 2: typed or AutoSense.
- Y = 6
Heavy media 3: typed or AutoSense.
- Y = 7
Glossy media 1: typed or AutoSense.

- Y = 8
Glossy media 2: typed or AutoSense.
- Y = 9
Glossy media 3: typed or AutoSense.
- Y = A
Glossy film: typed or AutoSense.
- Y = B
OHT: typed or AutoSense.
- Y = C
Label.
- Y = D
Envelope 1, Envelope 2, or Envelope 3.
- Y = E
Rough (designated media 1): typed or AutoSense.
- Z = 1
Tray 1.
- Z = 2
Tray 2.
- Z = 3
Tray 3.
- Z = 4
Tray 4.
- Z = 5
Tray 5.
- Z = 6
Tray 6.
- Z = D
Duplexer.

Recommended action

Turn the product off, and then on.

If the error persists, replace the DC controller PCA.

41.WX.YZ Error To use another tray, touch "Options"

Description

A printer error has occurred.

WX =

- 02: Beam detected misprint error
- 06: ITB top detection error
- 07: Optional input source delay
- 08: Media transportation error
- 09: Sub-thermistor abnormally high temperature
- 10: Pickup failure
- 11: Illegal duplex
- 18: Scan line inclination adjustment request
- 19: T2 roller HV
- 20: Image drum HV

Y = fuser mode

- 0: Photo paper 1, Photo paper 2, Photo paper 3, Designated paper 2, Designated paper 3, or NA, typed or Autosense
- 1: Autosense (normal): special case distinguished from typed Normal
- 2: Normal, typed (not Autosense)
- 3: Light paper 1, 2, or 3, typed or Autosense
- 4: Heavy paper 1, typed or Autosense
- 5: Heavy paper 2, typed or Autosense
- 6: Heavy paper 3, typed or Autosense
- 7: Glossy paper 1, typed or Autosense
- 8: Glossy paper 2, typed or Autosense
- 9: Glossy paper 3, typed or Autosense
- A: Glossy film, typed or Autosense
- B: Transparency, typed or Autosense
- C: Label
- D: Envelope 1, Envelope 2, Envelope 3
- E: Rough (designated paper 1), typed or Autosense
- F: reserved for future fuser mode

Z = source tray

- 1: Tray 1
- 2: Tray 2
- 3: Tray 3
- D: Duplexer

Recommended action

1. To clear message, touch the [OK](#) button.
2. If the message reappears, turn the product off, and then on.
3. If the error persists, replace the DC controller PCA.

42.XX.YY

Description

Internal system failure.

Recommended action

Turn the product off, and then on, and retry.

If the error persists, clear the firmware image from the active partition by using the [Partial Clean](#) item in the Preboot menu.

47.00.00

Description

Print Notification Provider internal error.

Recommended action

Turn the product off, and then on again. Resend the print job.

If the error persists, run the [Partial Clean](#) from the Preboot menu.

47.00.XX

Description

Backchannel internal error

Recommended action

Turn the product off, and then on again. Resend the print job.

If the error persists, execute the [Partial Clean](#) item in the [Preboot](#) menu.

47.01.XX

Description

Image transformer internal error.

Recommended action

Turn the product off, and then on again. Resend the print job.

If the error persists, execute the [Partial Clean](#) item in the [Preboot](#) menu.

47.02.XX**Description**

Job parser internal error.

Recommended action

Turn the product off, and then on again. Resend the print job.

If the error persists, execute the [Partial Clean](#) item in the [Preboot](#) menu.

47.03.XX**Description**

Print job internal error.

Recommended action

Turn the product off, and then on again. Resend the print job.

If the error persists, execute the [Partial Clean](#) item in the [Preboot](#) menu.

47.04.XX**Description**

Print spooler 9100 internal error.

Recommended action

Turn the product off, and then on again. Resend the print job.

If the error persists, execute the [Partial Clean](#) item in the [Preboot](#) menu.

47.05.00**Description**

Print spooler framework internal error.

Recommended action

Turn the product off, and then on again. Resend the print job.

If the error persists, execute the [Partial Clean](#) item in the [Preboot](#) menu.

47.06.XX**Description**

Print App internal error.

Recommended action

Turn the product off, and then on again. Resend the print job.

If the error persists, execute the [Partial Clean](#) item in the [Preboot](#) menu.

47.WX.YZ Printer calibration failed To continue, touch “OK”

Description

The device is unable to access or implement one of the image patterns files.

Y = calibration type, Z = event

- **47.FC.00** (event code)
Color plane registration (CPR) Image not found at system initialization.
- **47.FC.01** (event code)
CPR Store Image failure.
- **47.FC.02** (event code)
CPR Image not found.
- **47.FC.03** (event code)
CPR Print engine execution failure.
- **47.FC.10** (event code)
Consecutive Dmax Dhalf Image not found at system initialization.
- **47.FC.11** (event code)
Consecutive Dmax Dhalf Store image failure.
- **47.FC.12** (event code)
Consecutive Dmax Dhalf Image not found.
- **47.FC.13** (event code)
Consecutive Dmax Dhalf Print engine execution failure.
- **47.FC.20** (event code)
Error Diffusion Image not found at system initialization.
- **47.FC.21** (event code)
Error Diffusion Store image failure.
- **47.FC.22** (event code)
Error Diffusion Image not found.
- **47.FC.23**
Error Diffusion Print engine execution failure.

- **47.FC.30** (event code)
Drum Speed Adjustment Image not found at system initialization.
- **47.FC.31** (event code)
Drum Speed Adjustment Store image failure.
- **47.FC.32** (event code)
Drum Speed Adjustment Image not found.
- **47.FC.33** (event code)
Drum Speed Adjustment Print engine execution failure.
- **47.FC.40** (event code)
Pulse Width Modulation Image not found at system initialization.
- **47.FC.41** (event code)
Pulse Width Modulation Store image failure.
- **47.FC.42** (event code)
Pulse Width Modulation Image not found.
- **47.FC.43** (event code)
Pulse Width Modulation Print engine execution failure.

Recommended action

Turn the product off, and then on.

If the error persists, reload the firmware.

48.01.XX Error

Description

A job framework internal error has occurred.

XX values range from 0 to 9 and 0A to 0C. All enumerations have the same description and recommended action.

Recommended action

No action necessary.

49.XX.YY Error To continue turn off then on

Description

A firmware error has occurred. This error can be caused by corrupted print jobs, software applications issues, non-product specific print drivers, poor-quality USB or network cables, bad network connections or incorrect configurations, invalid firmware operations, or unsupported accessories.

Recommended action

1. Turn the product off, and then on.
2. If the error persists, check the following:
 - The error might be caused by a network connectivity problem, such as a bad interface cable, a bad USB port, or an invalid network configuration setting.
 - The error might be caused by the print job, such as an invalid print driver, a problem with the software application, or a problem with the file you are printing.
 - Upgrading the product firmware might help resolve the error. See the product user guide for more information.
 - If the error persists, escalate this problem to your Global Business unit.

50.WX.YZ Fuser error To continue turn off then on

Description

The fuser has experienced an error.

W = fuser error code, X = fuser mode, Y = previous printer sleep state, Z = next printer sleep state

Fuser modes

- Normal—Auto Sense
- Normal
- Light 1
- Heavy 1
- Heavy 2
- Heavy 3
- Glossy 1
- Glossy 2
- Glossy 3
- Glossy Film
- Transparency
- Label
- Envelope 1
- Rough

Sleep states

- Standby level 1 (no temperature control)
- Standby level 2 (high temperature control)

- Standby level 3 (middle temperature control)
- Standby level 2 (low temperature control)
- Middle sleep
- Deep sleep
- Power off

Recommended action

W = 1 or W = 2

50.1X or 50.2X

Low fuser temperature and fuser warm-up failure

1. Remove and then reseal the fuser. Make sure there is no residual paper in the fuser. Make sure the device is not located in front of a vent or window where cool air may interfere with the ability of the fuser to heat up.
2. Check the product power source. Make sure the power source meets product requirements. Make sure this is the only device using the circuit.
3. Replace the fuser.
4. Check the connector (J704) between the fuser and the printer. If it is damaged, replace the fuser drive assembly or fuser.
5. If the error persists, replace the low-voltage power supply.
6. If this product has been previously serviced, check the connector (J131) on the DC controller PCA and the connectors (J109 and J110) on the power line between the low-voltage power supply assembly and the fuser.

W = 3

50.3X

High fuser temperature

1. Remove and then reseal the fuser.
2. Check the paper type setting using the product menus and in the printer driver. Make sure that they match and are correct for the type of media being used.
3. Replace the fuser.
4. If the error persists, replace the low-voltage power supply.
5. If this product has been previously serviced, check the connector (J131) on the DC controller PCA.

W = 4

50.4X

Drive circuit fault

1. Check the power source. Make sure the power source meets product requirements.



NOTE: If the power source does not meet the power frequency requirement of 43 to 67Hz, the fuser temperature control does not work properly and causes this error.

2. If the error persists, replace the low-voltage power supply.
3. If this product has been previously serviced, check the connector (J21) on the DC controller PCA.

W = 7

50.7X

Fuser pressure-release mechanism failure

1. Remove and then reseal the fuser. Make sure there is no residual paper in the fuser.
2. Check the fuser pressure-release sensor flag. If it is damaged, replace the fuser.
3. Use the sensor test in the Manual sensor test to verify that the fuser pressure-release sensor (PS9) is properly functioning. If it is not, replace the fuser gear assembly.
4. Use the fuser pressure-release drive test in the component test to verify that the fuser motor (M4) is properly functioning. If it is not, replace the fuser motor.
5. If the error persists, replace the low-voltage power supply.
6. If this product has been previously serviced, check the connector (J181) on the DC controller PCA.

W = 8

50.8X

Low fuser temperature 2

1. Remove and then reseal the fuser. Make sure there is no residual paper in the fuser. Make sure the device is not located in front of a vent or window where cool air may interfere with the ability of the fuser to heat up.
2. Check the product power source. Make sure the power source meets product requirements. Make sure this is the only device using the circuit.
3. Replace the fuser.
4. Check the connector (J704) between the fuser and the printer. If it is damaged, replace the fuser drive assembly or fuser.
5. If the error persists, replace the low-voltage power supply.
6. If this product has been previously serviced, check the connector (J131) on the DC controller PCA and the connectors (J109 and J110) on the power line between the low-voltage power supply assembly and the fuser.

W = 9

50.9X

High fuser temperature 2

1. Remove and then reseal the fuser.
2. Check the paper type setting using the product menus and in the printer driver. Make sure that they match and are correct for the type of media being used.

3. Replace the fuser.
4. If this product has been previously serviced, check the connector (J131) on the DC controller PCA.

W = A

50.AX

Low fuser temperature 3

1. Remove and then reseal the fuser. Make sure there is no residual paper in the fuser. Make sure the device is not located in front of a vent or window where cool air may interfere with the ability of the fuser to heat up.
2. Check the product power source. Make sure the power source meets product requirements. Make sure this is the only device using the circuit.
3. Replace the fuser.
4. Check the connector (J704) between the fuser and the printer. If it is damaged, replace the fuser drive assembly or fuser.
5. If this product has been previously serviced, check the connector (J131) on the DC controller PCA and the connectors (J109 and J110) on the power line between the low-voltage power supply assembly and the fuser.

W = B

50.BX

High fuser temperature 3

1. Remove and then reseal the fuser.
2. Check the paper type setting using the product menus and in the printer driver. Making sure that they match and are correct for the type of media being used.
3. Replace the fuser.
4. Check the connector (J704) between the fuser and the printer. If it is damaged, replace the fuser drive assembly or fuser.
5. If this product has been previously serviced, check the connector (J131) on the DC controller PCA.

51.00.YY Error To continue turn off then on

Description

An error with the laser/scanner assembly has occurred in the product.

- **51.00.10:** Beam detect error
- **51.00.19:** Laser malfunction
- **51.00.20:** Black laser scanner error
- **51.00.21:** Cyan laser scanner error
- **51.00.22:** Magenta laser scanner error
- **51.00.23:** Yellow laser scanner error

Recommended action

1. Turn the product off, and then on.
2. Check the flat flexible cable (FFC) connections to the laser scanners.
3. Replace the laser scanner.

52.00.00 or 52.20.00 To continue turn off then on**Description**

Laser/scanner error

- XX = 00

Laser/scanner motor startup error

- XX = 20

Laser/scanner rotation error

Recommended action

Use the scanner motor (M10) drive test in the component test to test the motor. If the motor does not run, replace the laser/scanner assembly.



NOTE: Listen for a high pitched whine from the motor.

If the laser/scanner assembly has been removed or replaced, check the connectors (J831 and J832) on the laser-driver PCA and the connectors (J61 and J62) on the DC controller PCA.

54.0X.07**Description**

Drum home position sensor failure

X = 5 black, X = 6 cyan, X = 7 magenta, X = 8 yellow

Recommended action

1. Turn the product off, and then on.
2. If the error persists, replace the main drive assembly.
3. If the product has had parts removed or replaced, check the connector (J181) on the DC controller PCA.

54.11.05 or 54.12.05**Description**

Media sensor is not functioning properly.

Recommended action

1. Clean the media sensor with a lint-free cloth, and then turn the product off and then on.
2. **54.11.05:** If the error persists replace the paper pickup assembly. The threshold level for the media sensor (Media sensor value) is located on a label on the paper pickup assembly. Use the [Service](#) menu to input this value into the product memory after replacing the paper pickup assembly.

-or-

54.12.05: If the error persists replace the right door assembly.

3. **54.11.05:** If the product has had parts removed or replace check the connector (J542) on the media sensor and the connector (J112) on the DC controller PCA.

-or-

54.12.05: If the product has had parts removed or replace check the connector (J114) on the media sensor and the connector (J152) on the DC controller PCA.

54.XX.YY Error

Description

A sensor error has occurred.

Recommended action

54.00.03: Environmental sensor failure

1. Turn the product off, and then on.
2. If the environment sensor has been removed or replaced, check the connector (J2) on the environment sensor and the connector (J108) on the DC controller PCA.
3. If the error persists, replace the environment sensor assembly.

54.00.06 or 54.00.14 or 54.00.19: Registration density sensor failure

1. Open and close the right door (or turn on and then off the power switch) to perform the color plane registration.
2. If the error persists, replace the registration density sensor assembly.

54.01.05: Paper sensor is out of calibration range

1. Turn the product off, and then clean the paper sensor with a lint-free cloth. Turn the product on.
2. If the error persists, replace the paper pickup assembly.

54.06.21: Primary laser/scanner beam detect abnormality

1. Turn the product off, and then on.
2. If the error persists, replace the laser/scanner assembly.
3. If the product has had parts removed or replaced, check the connector (J110-C/M or J111-C/M) on the DC controller PCA.

54.0X.0B or 54.0X.0C: Density sensor out of range error or Dhalf calibration failure

X = 0 black, X = 1 cyan, X = 2 magenta, X = 3 yellow

1. Check the supplies status page to make sure the toner cartridges are not past their useful life.
2. Check the ITB for damage.
3. Make sure the CPR sensor is not contaminated with toner or paper dust. Clean the sensor with compressed air and soft brush.
4. If error persists, replace the registration sensor assembly.

54.OX.O0 or 54.OX.OE: Optical memory element abnormal or CPR sensor out of range

X = 0 black, X = 1 cyan, X = 2 magenta, X = 3 yellow

1. Check the supplies status page to make sure the toner cartridges are not past their useful life.
2. Check the ITB for damage.
3. Make sure the CPR sensor is not contaminated with toner or paper dust. Clean the sensor with compressed air and soft brush.
4. If error persists, replace the registration sensor assembly.

55.XX.YY DC controller error To continue turn off then on

Description

The communication link between the formatter and DC controller was lost.

- **55.00.00:** Internal communication error
- **55.00.01:** DC controller memory error
- **55.00.03:** DC controller no engine response
- **55.00.04:** DC controller communications timeout
- **55.01.06:** DC controller NVRAM abnormal read/write
- **55.02.06:** DC controller NVRAM not accessible

Recommended action

1. Turn the product off, and then on.
2. Perform an engine test.
3. Verify the connectors on the DC controller.
4. If the error persists, replace the DC controller.

56.00.01 Illegal Input Printer Error To continue turn off then on

Description

The product experienced a communication error with the optional paper tray.

Recommended action

1. Turn the product off, and then on.
2. Remove, and then reseal the optional tray.
3. Check the input connectors for damage. Replace a damaged connector.
4. Remove any third-party hardware.
5. Upgrade the firmware.
6. If the error persists, replace the DC controller.

56.00.02 Selected media output bin unavailable**Description**

The bin selected for output is unavailable.

Recommended action

1. Turn the product off, and then on.
2. Remove any third-party hardware.
3. Attempt the remote firmware update again.
4. If the error persists, escalate this problem to your Global Business unit.

56.00.03 Media input path operation error**Description**

A tray is open, and is blocking the paper path, above the selected tray.

Recommended action

1. Close the open tray.
2. If all trays are closed, use the sensor tests to check the tray closed sensors for the above trays.
3. If the error persists, escalate this problem to your Global Business unit.

57.00.0Y Error To continue turn off then on**Description**

Fan error

Recommended action**57.00.01**

Power supply fan (FM1) failure

1. Turn the product off, and then on. Listen for fan noise at the front lower-left corner of the product. If no noise is heard, replace the power supply fan (FM1).
2. If this part has been removed or replaced, check the connector (J21) on the DC controller PCA and the connector (J106) on the low-voltage power supply assembly.

57.00.02

Fuser fan (FM2) failure

1. Turn the product off, and then on. Listen for fan noise at the front lower-right corner of the product. If no noise is heard, replace the fuser fan (FM2).
2. If this part has been removed or replaced, check the connector (J121) on the DC controller PCA and the intermediate connector (J524).

57.00.03

Formatter fan (FM3) failure

1. Turn the product off, and then on. Listen for fan noise at the lower back-center of the product. If no noise is heard, replace the formatter fan (FM3).
2. If this part has been removed or replaced, check the connector (J142) on the intermediate connect board.

57.00.04

Cartridge fan motor 4 (FM4) malfunction

1. Turn the product off, and then on. Listen for fan noise at the left-side, upper-center, of the product. If no noise is heard, replace the cartridge fan (FM4).
2. If this part has been removed or replaced, verify that the connectors (J142S) on the DC Comptroller board and (J143SL) on the fan are connected correctly and undamaged.

57.00.05

Sub power supply fan (scanner power supply) (FM5) failure

1. Turn the product off, and then on. Listen for fan noise at the back-side, upper-right, of the product. If no noise is heard, replace the Sub power supply fan (scanner power supply) (FM5).
2. If this part has been removed or replaced, verify that the connector (J308) on the Sub Power Supply PCA is connected correctly and undamaged.

58.00.02 environmental sensor malfunction

Description

The product has experienced an environmental sensor error.

Recommended action

1. Turn the product off and then on.
2. Verify that the connector (J33S) on the DC controller PCA and the sensor (J502S) are connected correctly and undamaged.
3. If the error persists, replace the environmental sensor.

58.00.04 Error To continue turn off then on

Description

The low-voltage power supply is defective.

Recommended action

1. Turn the product off, and then on.
2. Check the connector (J143) on the DC controller PCA.
3. If the error persists, replace the low voltage power supply.

59.00.YY Error To continue turn off then on**Description**

Printing error

Recommended action**59.00.30 or 59.00.40**

Fuser motor (M4) start up error or fuser motor (M4) rotational error

1. Use the fuser motor (M4) drive test in the component test to verify that the fuser motor is properly functioning. If it is not, replace the fuser motor assembly.
2. If the product has been serviced, check the connector (J516) on the fuser motor and the connector (J81) on the DC controller PCA.

59.00.90 or 59.00.A0

ITB motor (M1) start up error or ITB motor (M1) abnormal rotational error

1. Use the ITB motor (M1) drive test in the component test to verify that the ITB motor is properly functioning. If it is not, replace the ITB motor assembly.
2. If the product has been serviced, check the connector (J517) on the ITB motor and the connector (J81) on the DC controller PCA.

59.00.C0

Developer alienation motor (M6) error

1. Use the developer engagement and disengagement drive test in the component test to verify that the disengagement mechanism is properly functioning. If it is not, replace the ITB motor assembly.
2. Use the sensor test in the Manual sensor test to verify that the developer disengagement sensor (PS11) is properly functioning. If it is not, replace the main drive assembly.
3. If the product has been serviced, check the connector (J518) on the developer disengagement motor, the connector (J1005) on the driver PCA and the connector (J91) on the DC controller PCA.

59.00.F0

T1 alienation mechanism failure

1. Make sure that the ITB is correctly installed.
2. Use the T1 roller alienation switch (SW5) test in the Manual sensor test to verify that the switch is properly functioning. If it is not, replace the main drive assembly.

3. Use the T1 roller engagement and disengagement drive test in the component test to verify that the T1 roller disengagement mechanism is properly functioning. If it is not, replace the fuser drive assembly.
4. If the product has been serviced, check the connector (J181) on the DC controller PCA.

59.0X.50 Error To continue turn off then on

Description

Motor startup error

59.05.50 = black

59.06.50 = cyan

59.07.50 = magenta

59.08.50 = yellow

Recommended action

59.05.50

Black image drum start up error (ITB motor; M1)

1. Use the ITB drum motor (M1) drive test in the Component test to verify that the motor is properly functioning. If it is not, replace the ITB motor assembly.
2. If the product has been serviced, check the connector (J517) on the ITB motor and the connector (J81) on the DC controller PCA.

59.06.50 or 59.07.50 or 59.08.50

CMY drum motor (M2) start up error

1. Use the drum motor (M2) drive test in the Component test to verify that the motor is properly functioning. If it is not, replace the drum motor assembly.
2. If the product has been serviced, check the connector (J515) on the drum motor and the connector (J81) on the DC controller PCA.

59.0X.60 Error To continue turn off then on

Description

Motor rotational error

59.05.60 = black

59.06.60 = cyan

59.07.60 = magenta

59.08.60 = yellow

Recommended action

59.05.60

Black image drum start up error (ITB motor; M1).

1. Use the ITB drum motor (M1) drive test in the Component test to verify that the motor is properly functioning. If it is not, replace the ITB motor assembly.
2. If the product has been serviced, check the connector (J517) on the ITB motor and the connector (J81) on the DC controller PCA.

59.06.60 or 59.07.60 or 59.08.60

CMY drum motor (M2) rotation error

1. Use the drum motor (M2) drive test in the Component test to verify that the motor is properly functioning. If it is not, replace the drum motor assembly.
2. If the product has been serviced, check the connector (J515) on the drum motor and the connector (J81) on the DC controller PCA.

59.OX.70 Error To continue turn off then on

Description

Motor abnormal rotation

59.05.70 = black

59.06.70 = cyan

59.07.70 = magenta

59.08.70 = yellow

Recommended action

59.05.70

Black developer motor abnormal start up error (ITB motor; M1)

1. Use the ITB drum motor (M1) drive test in the Component test to verify that the motor is properly functioning. If it is not, replace the ITB motor assembly.
2. If the product has been serviced, check the connector (J517) on the ITB motor and the connector (J81) on the DC controller PCA.

59.06.70 or 59.07.70 or 59.08.70

CMY developer motor (M3) abnormal start up error

1. Use the developer motor (M3) drive test in the Component test to verify that the motor is properly functioning. If it is not, replace the developer motor assembly.
2. If the product has been serviced, check the connector (J514) on the developer motor and the connector (J81) on the DC controller PCA.

59.OX.80 Error To continue turn off then on

Description

Developer motor failure

Recommended action

59.05.80

Black developer motor failure error (ITB motor; M1)

1. Use the ITB drum motor (M1) drive test in the Component test to verify that the motor is properly functioning. If it is not, replace the ITB motor assembly.
2. If the product has been serviced, check the connector (J517) on the ITB motor and the connector (J81) on the DC controller PCA.

59.06.80 or 59.07.80 or 59.08.80

CMY developer motor (M3) failure error

1. Use the developer motor (M3) drive test in the Component test to verify that the motor is properly functioning. If it is not, replace the developer motor assembly.
2. If the product has been serviced, check the connector (J514) on the developer motor and the connector (J81) on the DC controller PCA.

60.00.0Y Tray <Y> lifting error

Description

Tray lift motors error

Recommended action

60.00.02

Media input Tray 2 lift-up motor (M9) failure

1. Use the Tray 2 paper surface sensor (PS4) test in the Tray/Bin manual sensor test to verify that the sensor is properly functioning. If it is not, replace the lifter drive assembly.
2. Open and close Tray 2 and listen at the back of the product for the sound of the lifer motor (M9) operating. If it does not operate, replace the lifter drive assembly.
3. If the product has been serviced, check the intermediate connector (J742) and the connector (J151) on the DC controller PCA.
4. If the error persists, replace the cassette tray.

60.00.03 or 60.00.04

Media input Tray 3 lift-up motor (M2) failure or media input Tray 4 lift-up motor (M2) failure

1. Use the Tray 3 paper surface sensor (SR2) or Tray 4 paper surface sensor (SR2) test in the Tray/Bin manual sensor test to verify that the sensor is properly functioning. If it is not, replace the lifter drive assembly.



NOTE: Both the Tray 3 and Tray 4 paper surface sensors are designated as SR2. The first one listed in the Tray/Bin manual test is Tray 3, the second one listed is for Tray 4.

2. Open and close Tray 3 or Tray 4 and listen at the back of the product for the sound of the lifer motor (M2) operating. If it does not operate, replace the lifter drive assembly.



NOTE: Both the Tray 3 and Tray 4 lifter motors are designated as M2. Listen for the appropriate motor to operate.

3. If the product has been serviced, check the connector (J2003) on the paper feeder controller PCA, the intermediate connector (J702) and the connector (J2006) on the paper feeder controller PCA.

 **TIP:** Check the connector (J2006) on the paper feeder controller PCA associated with the tray.

4. If the error persists, replace the cassette tray.

60.00.05 or 60.00.06

Media input Tray 5 lift-up motor (M82) failure or media input Tray 6 lift-up motor (M92) failure

1. Use the Tray 5 paper surface sensor (SR82) or Tray 6 paper surface sensor (SR92) test in the Tray/Bin manual sensor test to verify that the sensor is properly functioning. If it is not, replace the lifter drive assembly.
2. Open and close Tray 5 or Tray 6 and listen at the back of the product for the sound of the lifter motor (M82 or M92) operating. If it does not operate, replace the lifter drive assembly.
3. If the product has been serviced, check the connector (J2003) on the paper feeder controller PCA, the intermediate connector (J702), and the connector (J2006) on the paper feeder controller PCA.

 **TIP:** Check the connector (J2006) on the paper feeder controller PCA associated with the tray.

4. If the error persists, replace the cassette tray.

60.10.0Y Media input source <Y> pickup mechanism malfunction

Description

- **60.10.01 Media input source 1 pickup mechanism malfunction**
- **60.10.02 Media input source 2 pickup mechanism malfunction**
- **60.10.03 Media input source 3 pickup mechanism malfunction**
- **60.10.04 Media input source 4 pickup mechanism malfunction**
- **60.10.05 Media input source 5 pickup mechanism malfunction**
- **60.10.06 Media input source 6 pickup mechanism malfunction**

Recommended action

1. Turn the product off, and then on again.
2. Use the Paper Pick-up motor (M5, M1, M82, M92, M3301, M3304) test in the [Component test](#) to verify that the pickup motor is properly functioning. If the pickup motor is not functioning, replace the Paper Pick-up assembly.
3. If the error persists, escalate this problem to your Global Business unit.

61.00.01

Description

Color table read failure.

Recommended action

Turn the product off, and then on.

If the error persists, reload the firmware. If the error still persists, perform a firmware upgrade.

If the firmware upgrade does not resolve the problem, replace the hard disk.

62.00.00 No system To continue turn off then on

Description

The product experienced an internal system failure.

Recommended action

1. Turn the product off, and then on.
2. Reload the firmware.
3. Perform a firmware upgrade.
4. If the error persists, replace the hard disk.

69.11.YY Error To continue, touch “OK”

Description

This message displays to indicate an error during a duplex operation.

Recommended action

Turn the product off, and then on.

70.00.00 Error To continue turn off then on

Description

The product experienced a DC controller failure.

Recommended action

1. Turn the product off, and then on.
2. If the error persists, replace the DC controller.

80.0X.YY Embedded Jetdirect Error

Description

Embedded HP JetDirect print server critical error.

- **80.01.80** (event code)
No heartbeat
- **80.01.81** (event code)
Reclaim timeout
- **80.01.82** (event code)
Invalid data length
- **80.01.8B** (event code)
Invalid max outstanding packet header field

- **80.01.8C** (event code)
Invalid channel mapping response
- **80.03.01** (event code)
No PGP buffers
- **80.03.02** (event code)
Channel table full
- **80.03.03** (event code)
Producer index not reset
- **80.03.04** (event code)
Consumer index not reset
- **80.03.05** (event code)
Queue position size too small
- **80.03.06** (event code)
Transport overflow
- **80.03.07** (event code)
No overflow packets
- **80.03.08** (event code)
Invalid identify response
- **80.03.09** (event code)
Invalid channel map return status
- **80.03.10** (event code)
Invalid reclaim return status
- **80.03.12** (event code)
Datagram invalid buffer
- **80.03.13** (event code)
Max stream channels
- **80.03.14** (event code)
Max datagram channels
- **80.03.15** (event code)
Card reset failed
- **80.03.16** (event code)

- Self test failure
- **80.03.17** (event code)
Unknown PGP packet
- **80.03.18** (event code)
Duplicate I/O channel

Recommended action

Turn the product off, and then on.

If the error persists, replace the formatter.

81.WX.00 Wireless Network Error To continue turn off then on

Description

A wireless network component on the product has failed.

Recommended action

1. Turn the product off, and then on.
2. If the error persists, turn the product off, reseal the wireless network component, and then turn the product on.
3. If the error persists, replace the wireless network component.

81.WX.YZ Embedded Jetdirect Error To continue turn off then on

Description

The product experienced an embedded HP Jetdirect print server critical error.

- **81.02.00** (event code): Wireless Networking Event <UVWXYZ>
- **81.03.00** (event code): Access Point Wireless Networking Event <UVWXYZ>
- **81.04.00** (event code): Jetdirect Inside Networking Event <UVWXYZ>
- **81.07.00** (event code): Internal Wireless Networking Event <UVWXYZ>
- **81.08.00** (event code): Internal Access Point Wireless Networking Event <UVWXYZ>
- **81.09.00** (event code): Internal Jetdirect Inside Networking Event <UVWXYZ>

Recommended action

1. Turn the product off, and then on.
2. Turn the product off, reseal the EIO accessory, and then turn the product on.
3. If the error persists, replace the formatter.

98.00.0X Corrupt data in X volume

Description

Data corruption has occurred in the firmware volume.

- **98.00.01 Corrupt data in firmware volume Reinstall firmware**
- **98.00.02 Corrupt data in solutions volume Re-install accessory solutions**
- **98.00.03 Corrupt data in configuration volume Re-configure the product**
- **98.00.04 Corrupt data in job data volume All job data was erased**

Recommended action

98.00.01 or 98.00.02 or 98.00.03

1. Turn the product off, and then on.
2. Use the [Clean Disk](#) item in the [Preboot](#) menu.
3. Reload the firmware.

98.00.04

1. Turn the product off, and then on.
2. Rerun the file erase function.

99.00.01 Upgrade not performed file is corrupt

Description

Remote firmware upgrade (.bdl) was not performed. The file is corrupt.

Recommended action

The firmware file is corrupt. Download the firmware file and attempt the upgrade again.

99.00.02 Upgrade not performed timeout during receive

Description

Remote firmware upgrade (.bdl) was not performed. Timeout during receipt.

Recommended action

The I/O timed out during the firmware download. The most common cause is an issue with the network environment. Ensure a good connection to the product, and attempt the upgrade again or upgrade using the easy-access USB port.

99.00.03 Upgrade not performed error writing to disk

Description

Remote firmware upgrade (.bdl) was not performed. An error occurred when writing to the hard disk.

Recommended action

1. Download the firmware again, and then attempt the upgrade again.
2. If the error persists, perform the clean disk/format disk process.
3. Download the firmware from the [Preboot](#) menu, and then attempt the upgrade again.
4. If the error persists, replace the hard disk.

99.00.04 Upgrade not performed timeout during receive**Description**

A remote firmware upgrade (RFU) was not performed.

I/O timeout when reading rest of header.

Recommended action

The most common cause is an issue with the network environment. Make sure that there is a good connection to the device and attempt the upgrade again, or upgrade using the easy-access USB port.

99.00.05 Upgrade not performed timeout during receive**Description**

A remote firmware upgrade (RFU) was not performed.

I/O timeout when reading image data.

Recommended action

The most common cause is an issue with the network environment. Make sure that there is a good connection to the device and attempt the upgrade again, or upgrade using the easy-access USB port.

99.00.06 Upgrade not performed error reading upgrade**Description**

A remote firmware upgrade (RFU) was not performed.

Unexpected read error when reading header number and size.

Recommended action

1. Download the RFU file and attempt the upgrade again.
2. If the error persists, replace the hard disk.

99.00.07 Upgrade not performed error reading upgrade**Description**

A remote firmware upgrade (RFU) was not performed.

Unexpected read error when reading rest of header.

Recommended action

1. Download the RFU file and attempt the upgrade again.
2. If the error persists, replace the hard disk.

99.00.08 Upgrade not performed error reading upgrade**Description**

A remote firmware upgrade (RFU) was not performed.
Unexpected read error when reading image data.

Recommended action

1. Download the RFU file and attempt the upgrade again.
2. If the error persists, replace the hard disk.

99.00.09 Upgrade canceled by user**Description**

A remote firmware upgrade (RFU) was not performed.
The RFU was canceled by the user.

Recommended action

Resend the RFU.

99.00.10 Upgrade canceled by user**Description**

A remote firmware upgrade (RFU) was not performed.
Job canceled when reading header number and size.

Recommended action

Resend the RFU.

99.00.11 Upgrade canceled by user**Description**

A remote firmware upgrade (RFU) was not performed.
Job canceled when reading rest of header.

Recommended action

Resend the RFU.

99.00.12 Upgrade not performed the file is invalid**Description**

A remote firmware upgrade (RFU) was not performed.

Header number is 1 but header size doesn't match version 1 size.

Recommended action

Download the RFU file again. Make sure that you download the file for the correct product model. Resend the RFU.

99.00.13 Upgrade not performed the file is invalid

Description

A remote firmware upgrade (RFU) was not performed.

Header number is 2 but header size doesn't match version 2 size.

Recommended action

Download the RFU file again. Make sure that you download the file for the correct product model. Resend the RFU.

99.00.14 Upgrade not performed the file is invalid

Description

A remote firmware upgrade (RFU) was not performed.

The file is invalid.

Recommended action

Download the RFU file again. Make sure that you download the file for the correct product model. Resend the RFU.

99.00.2X

Description

- **99.00.20** (event log)
The bundle is not for this product.
- **99.00.21** (event log)
The bundle is not signed with the correct signature, or the signature is invalid.
- **99.00.22** (event log)
The bundle header version is not supported by this firmware.
- **99.00.23** (event log)
The package header version is not supported by this firmware.
- **99.00.24** (event log)
The format of the bundle is invalid.
- **99.00.25** (event log)
The format of the package is invalid.

- **99.00.26** (event log)

A CRC32 check did not pass.

- **99.00.27** (event log)

An I/O error occurred while downloading the bundle.

Recommended action

Download the correct firmware file from www.hp.com/support/colorljM750, and then resend the firmware upgrade.

99.00.27 only: Turn the product off, and then on again. Resend the firmware upgrade. If the error persists, try the sending the upgrade by another method (USB or HP Embedded Web Server).

99.01.XX

Description

- **99.01.00**
- **99.01.10**
- **99.01.20**
- **99.01.21**

A firmware install error has occurred.

Recommended action

Reload the firmware.

99.02.01

Description

Firmware installation was successful.

Recommended action

No action necessary.

99.02.09

Description

Firmware upgrade cancelled by user.

Recommended action

No action necessary.

99.05.56

Description

Firmware install error: ioctlSetBaudRate failed

Recommended action

1. Perform a clean disk from the [Preboot](#) menu.
2. Reload latest version of firmware via USB drive.
3. If the issue persists, replace the formatter assembly.

99.09.60 Unsupported disk**Description**

[Preboot](#) menu error.

The hard disk currently installed is not recognized or supported by the product.

Recommended action

Install the correct hard disk for this product.

If the recommended hard disk is installed and this error persists, run the Clean Disk procedure from the [Preboot](#) menu ([Administrator /Clean Disk](#)) and then reload the firmware.

99.09.61 Unsupported disk**Description**

[Preboot](#) menu error.

The installed disk is installed in a product configured for an encrypted hard disk.

Recommended action

Open the [Preboot](#) menu, and then select [Lock Disk](#) to lock the disk.

99.09.62 Unknown disk**Description**

[Preboot](#) menu error.

The installed disk was previously locked in another product.

Recommended action

Install a new disk or use the [Preboot](#) menu to unlock this disk. If the disk is to be reused in a different product, execute the [Clean Disk](#) procedure from the [Preboot](#) menu, and then reload firmware and lock the disk.



NOTE: The hard disk drive may no longer be encrypted. Go to the EWS **Security** tab to encrypt the hard disk drive.

99.09.63 Incorrect disk**Description**

A new or blank disk has been installed in a device which previously had an encrypted disk.

Recommended action

Follow the procedure to load firmware on a new hard disk, and then lock it to this product.

99.09.64 Disk malfunction**Description**

A fatal hard disk failure has occurred.

Recommended action

Replace the hard disk drive.

99.09.65 Disk data error**Description**

Disk data corruption has occurred.

Recommended action

Execute the [Clean Disk](#) procedure from the [Preboot](#) menu, and then resend the RFU.

99.09.66 No disk installed**Description**

A disk drive is not installed in the product.

Recommended action

1. Install a compatible hard disk drive.
2. If a compatible hard disk is installed, reseal the hard disk to make sure it is correctly connected.
3. If the error persists, replace the hard disk drive.

99.09.67 Disk is not bootable please download firmware**Description**

The product has a non-secure disk installed as the boot disk, and it has been replaced with a new service part. A new firmware image needs to be downloaded to the device.

Recommended action

1. Press any button to continue to the main [Preboot](#) menu.
2. Press the [Help](#) button to see the help text for the error.
3. Select the [Administration](#) menu.



NOTE: If there is a password assigned to the Administrator, a prompt to enter the password displays.

4. Select the Download item.
5. The user can now download a new firmware bundle to the product.

99.09.68

Description

The secondary encrypted disk has been removed from this device.

Recommended action

Reinstall the secondary encrypted storage device.

99.XX.YY

Description

Firmware installation error

Recommended action

Reload the firmware.

<Binname> full Remove all paper from bin

Description

The specified output bin is full.

Recommended action

Empty the bin to continue printing.

<Supply> almost full

Description

Toner collection bottle is almost full.

- **10.31.60** (event code)

Toner collection unit

Recommended action

Replace the toner collection unit.

<Supply> low OR Supplies low

Description

The product indicates when a supply level, or more than one supply, is low. Actual print cartridge life might vary. You do not need to replace the print cartridge at this time unless print quality is no longer acceptable.

When multiple supplies are low, more than one event code is recorded.

- **10.00.60** (event code)

Black print cartridge

- **10.01.60** (event code)

Cyan print cartridge

- **10.02.60** (event code)
Magenta print cartridge
- **10.03.60** (event code)
Yellow print cartridge
- **10.23.60** (event code)
Fuser kit
- **10.22.60** (event code)
Transfer kit

Recommended action

If print quality is no longer acceptable, replace the supply.

HP recommends that the customer have a replacement supply available to install when print quality is no longer acceptable.



NOTE: When an HP supply has reached its approximated end of life, the HP Premium Protection Warranty ends.

<Supply> very low OR Supplies very low

Description

The product indicates when a supply level, or more than one supply, is very low. Actual print cartridge life might vary. You do not need to replace the print cartridge at this time unless print quality is no longer acceptable.

When multiple supplies are low, more than one event code is recorded.

- **10.00.70** (event code)
Black print cartridge
- **10.01.70** (event code)
Cyan print cartridge
- **10.02.70** (event code)
Magenta print cartridge
- **10.03.70** (event code)
Yellow print cartridge
- **10.23.70** (event code)
Fuser kit
- **10.22.70** (event code)
Transfer kit

Recommended action

If print quality is no longer acceptable, replace the supply.

HP recommends that the customer have a replacement supply available to install when print quality is no longer acceptable.



NOTE: When an HP supply has reached its approximated end of life, the HP Premium Protection Warranty ends.

<Tray X> lifting**Description**

The product is in the process of lifting paper in the indicated tray.

- X = 2
Tray 2
- X = 3
Tray 3
- X = 4
Tray 4
- X = 5
Tray 5
- X = 6
Tray 6

Recommended action

No action necessary.

[File System] device failure To clear press OK**Description**

The specified device has failed.

Recommended action

Press the **OK** button to clear the error.

[File System] file operation failed To clear press OK**Description**

A P JL file system command attempted to perform an illogical operation.

Recommended action

Press the **OK** button to clear the error.

[File System] file system is full To clear press OK

Description

A PJJ file system command could not store something on the file system, because the file system was full.

Recommended action

Press the **OK** button to clear the error.

[File System] is not initialized

Description

This file-storage component must be initialized before use.

Recommended action

Use the HP Embedded Web Server or HP Web Jetadmin to initialize the file system.

[File System] is write protected

Description

The file system device is protected and no new files can be written to it.

Recommended action

Press the **OK** button to clear the error.

Accept bad signature

Description

The product is performing a remote firmware upgrade, and the code signature is invalid.

Recommended action

Download the correct firmware upgrade file for this product, and then reinstall the upgrade. See the product user guide for more information.

Bad optional tray connection

Description

The optional tray is not connected, not connected correctly, or a connection is not working correctly.

Recommended action

1. Turn the product off.
2. Remove and reinstall the optional tray.
3. Reconnect connectors for the tray.
4. Turn the product on.

Calibration reset pending

Description

A calibration reset occurs when all jobs are processed.

Recommended action

To begin the reset sooner, cancel all jobs by pressing the **Stop** button ⊗.

Canceling

Description

The product is canceling the current job.

Recommended action

No action is necessary.

Canceling <jobname>

Description

The product is canceling the current job <jobname>.

Recommended action

No action is necessary.

Checking engine

Description

The product is conducting an internal test.

Recommended action

No action is necessary.

Checking paper path

Description

The product is checking for possible paper jams.

Recommended action

No action is necessary.

Chosen personality not available To continue, touch “OK”

Description

A print job requested a product language (personality) that is not available for this product. The job will not print and will be cleared from memory.

Recommended action

Print the job by using a product driver for a different print language, or add the requested language to the product (if possible). To see a list of available personalities, print a configuration page.

Cleaning do not grab paper**Description**

The product is performing an automatic cleaning cycle. Printing will continue after the cleaning is complete.

Recommended action

No action is necessary.

Cleaning...**Description**

The product is performing an automatic cleaning cycle. Printing will continue after the cleaning is complete.

Recommended action

No action is necessary.

Clearing event log**Description**

This message is displayed while the event log is cleared. The product exits the menus when the event log has been cleared.

Recommended action

No action is necessary.

Clearing paper path**Description**

The product is attempting to eject jammed paper.

Recommended action

Check progress at the bottom of the display.

Close front door**Description**

The front door of the product is open.

Recommended action

1. Close the door.
2. Use the manual sensor test to verify that the front-door switch is properly functioning. If the switch fails the test, replace the switch.

3. Check the sensor flag on the front-door assembly. If it is damaged, replace the front-door assembly.
4. If the product has been recently serviced, check the connector (J708) on the 24V interlock switch and the connector (J121) on the DC controller PCA.

Close lower right door

Description

The optional paper feeder right door is open.

Recommended action

1. Open and then close the door.
2. Use the right-door switch (SW1) test in the tray/bin manual sensor test to verify that the switch is properly functioning. If the switch fails the test, replace the switch.
3. Check the sensor flag on the right door assembly. If it is damaged, replace the lower right door assembly.

Close middle right door

Description

The 1 x 500-sheet optional paper feeder right door is open.

Recommended action

1. Close the door.
2. Use the right-door switch (SW1) test in the tray/bin manual sensor test to verify that the switch is properly functioning. If the switch fails the test, replace the switch.
3. Check the sensor flag on the right door assembly. If it is damaged, replace the door assembly.

Close right door

Description

A door on the right side of the product is open.

Recommended action

1. Close the right door.
2. If the error persists, use the manual sensor test to verify that the right door opening/closing sensor is properly functioning. If the sensor fails, replace the right door switch.
3. Check the right door sensor flag. If it is damaged, replace the right door.
4. If this product was previously serviced, reconnect the connector (J708) on the 24V interlock switch and the connector (J181) on the DC controller PCA.

Close upper right door For help press ?

Description

The upper-right door of the product is open.

Recommended action

1. Close the door.
2. Use the right-door switch (SP15) test in the Manual sensor test to verify that the switch is properly functioning. If the switch fails the test, replace the switch.
3. Check the sensor flag on the right door assembly. If it is damaged, replace the door assembly.
4. If the product has been recently serviced, check the connector (J708) on the 24V interlock switch and the connector (J181) on the DC controller PCA.

Cooling device

Description

The product is cooling.

Customers may report seeing a **Cooling Device** message displayed on the product control panel and experience a noticeable decrease in print speed.

This is typically seen during long, continuous print runs (greater than 1,000 pages) and is more common in high temperature/high humidity environments. When this message is displayed, the product will print for several seconds and then pause several seconds before printing again. This will continue until the current job finishes or the job is canceled.

After the product has completed the job, or the user cancels the current job, the product may require several minutes to cool sufficiently to continue printing at normal print speeds.

Recommended action

No action is necessary.

This is normal behavior for this product and is done to protect the toner cartridges from overheating.

Advise a customer who is experiencing this condition to allow the product to cool down before beginning to print again.

The customer can avoid this scenario by ensuring the product is in a location that is within the product's specifications for temperature and humidity and by avoiding long, continuous printing situations by breaking down print jobs into smaller sections with some delay in between.

Data received To print last page, press OK

Description

The product is waiting for the command to print the last page.

Recommended action

Press the **OK** button to print the last page of the job.

Event log is empty

Description

No product events are in the log.

Recommended action

No action is necessary.

Expected drive missing**Description**

The product cannot find the encrypted hard drive.

Recommended action

Install the encrypted hard drive.

HP Secure Hard Drive disabled**Description**

The drive has been encrypted for another product.

Recommended action

Remove the drive or use the HP Embedded Web Server for more information.

Incompatible <supply>**Description**

The indicated supply <supply> is not compatible with this product.

- **10.00.35** (event code)
Black print cartridge
- **10.01.35** (event code)
Cyan print cartridge
- **10.02.35** (event code)
Magenta print cartridge
- **10.03.35** (event code)
Yellow print cartridge
- Fuser kite
10.23.35 (event code)

Recommended action

Replace the supply with one that is designed for this product.

Incompatible supplies**Description**

Print cartridges or other supply items are installed that were not designed for this product. The product cannot print with these supplies installed.

Event codes are supply specific.

Recommended action

Touch the **OK** button to identify the incompatible supplies.

Replace the supplies with those that are designed for this product.

Initializing...

Description

The product is starting.

Recommended action

No action is necessary. Wait until the **Ready** message displays on the control-panel.

Install <supply>

Description

A supply item is either not installed or installed incorrectly.

- Black cartridge
10.00.15 (event code)
- Cyan cartridge
10.10.15 (event code)
- Magenta cartridge
10.02.15 (event code)
- Yellow cartridge
10.03.15 (event code)
- Fuser kite
10.23.15 (event code)

Recommended action

Install the supply item or make sure that the installed supply item is fully seated.

Install <supply> Close rear door

Description

The toner collection unit has been removed or has been installed incorrectly.

- Toner collection unit
10.31.15 (event code)

Recommended action

Replace or reinstall the toner collection unit correctly to continue printing.

Install Fuser Unit

Description

The fuser has been removed or installed incorrectly.

Recommended action

 **CAUTION:** The fuser can be hot while the product is in use. Wait for the fuser to cool before handling it.

1. Open the right door.
2. Install or adjust the fuser.
3. Close the right door.

Install supplies

Description

More than one supply is missing or is installed incorrectly.

Recommended action

Press the **OK** button to identify the supplies that need to be replaced.

Press the **OK** button a second time for more information about the specific supply.

Insert the supply or make sure it is correctly installed and fully seated.

Install Transfer Unit

Description

The transfer unit is either not installed or not installed correctly.

Recommended action

1. Open the right door.
2. Install the ITB.



NOTE: If the ITB is already installed, remove it, and then reinstall the ITB.

3. Close the right door.
4. If the error persists, use the ITB alienation sensor switch (SW5) in the manual sensor test to verify that the switch is properly functioning. If it is not, replace the main drive assembly.
5. If the error persists, use the T1 roller engagement and disengagement drive test in the component test to verify that the ITB alienation mechanism is properly functioning. If it is not, replace the fuser drive assembly.
6. If the product was recently serviced, check the connector (J181) on the DC controller PCA.

Internal disk not functional

Description

The product internal disk is not working correctly.

Recommended action

1. Turn off the product, and then remove and reinstall the disk. Turn on the product.
2. If the error persists, replace the internal hard drive.

Internal disk spinning up**Description**

Internal disk device is spinning up its platter. Jobs that require disk access must wait.

Recommended action

No action is necessary.

Load Tray <X>: [Type], [Size]**Description**

This message displays even though there is media loaded in the tray.

Recommended action

Use the cassette media present sensor test in the [Tray/bin manual sensor test](#) to verify that the sensor is correctly functioning.

Make sure that the sensor flag on the media presence sensor is not damaged and moves freely.

Reconnect the corresponding connector:

- MP tray: connector (J736) on the MP tray media out sensor and the connector (J152) on the DC controller PCA.
- Printer cassette: connectors (J739 and J742) on the cassette media out sensor and the connector (J151) on the DC controller PCA.
- 1 X 500-sheet paper feeder cassette: connector (J702D) on the paper feeder cassette media out sensor and the connector (J2003) on the paper feeder controller PCA.
- Paper deck cassette 1: connector (J702D) on the paper deck cassette 1 media out sensor and connector (J2003) on the paper deck controller PCA 1
- Paper deck cassette 2: connector (J802D) on the paper deck cassette 2 media out sensor and connector (J2003B) on the paper deck controller PCA 2.
- Paper deck cassette 3: connector (J902D) on the paper deck cassette 3 media out sensor and connector (J2003C) on the paper deck controller PCA 3.

Load Tray <X>: [Type], [Size] To use another tray, touch OK**Description**

This message displays when the indicated tray is selected but is not loaded, and other paper trays are available for use. It also displays when the tray is configured for a different paper type or size than the print job requires.

Recommended action

Load the correct paper in the tray.

If prompted, confirm the size and type of paper loaded.

Otherwise, press the **OK** button to select another tray.

Loading program <XX>

Description

Programs and fonts can be stored on the product's file system and are loaded into RAM when the product is turned on. The number <XX> specifies a sequence number indicating the current program being loaded.

Recommended action

No action necessary.



NOTE: Do not turn the product off.

Manually feed output stack Then touch "OK" to print second sides

Description

The product has printed the first side of a manual duplex job and is waiting for the user to insert the output stack to print the second side.

Recommended action

The even-numbered pages of the two-sided document have printed. Follow the next steps to print the odd-numbered pages.

1. Maintaining the same orientation, remove the document from the output bin. Do not discard blank pages.
2. Flip the document over so the printed side is up.
3. Load document in Tray 1.
4. Touch the **OK** button to print the second side of the job.

Manually feed: [Type], [Size] To continue, touch "OK"

Description

This message displays when manual feed is selected, Tray 1 is not loaded, and other trays are available.

Recommended action

- Load tray with requested paper.
- If paper is already in tray, touch the **Help** button to exit the message, and then touch the **OK** button to print.
- To use another tray, clear paper from Tray 1, touch the **Help** button to exit the message, and then touch the **OK** button.

Manually feed: [Type], [Size] To use another tray, touch OK

Description

This message displays when manual feed is selected, Tray 1 is loaded, and other trays are available.

Recommended action

Load tray with requested paper.

If paper is already in tray, press the **Help** button to exit the message, and then press the **OK** button to print.

To use another tray, clear paper from Tray 1, press the **Help** button to exit the message and then press the **OK** button.

Moving solenoid**Description**

The solenoid is moving as part of a component test.

Recommended action

To exit press **X**

Moving solenoid and motor**Description**

The solenoid and a motor are moving as part of a component test.

Recommended action

To exit press **X**

No job to cancel**Description**

You have pressed the stop button, but the product is not actively processing any jobs.

Recommended action

No action necessary.

Paused**Description**

The product is paused, and there are no error messages pending at the display. The I/O continues receiving data until memory is full.

Recommended action

Press the Stop  button.

Performing Color Band Test...**Description**

A color-band test is being performed.

Recommended action

No action necessary.

Performing Paper Path Test...

Description

A paper-path test is being performed.

Recommended action

No action necessary.

Please wait...

Description

The product is in the process of clearing data.

Recommended action

No action necessary.

Printing CMYK samples...

Description

The product is printing the CMYK sample pages.

Recommended action

No action necessary.

Printing Color Usage Log...

Description

The product is printing the Color Usage log.

Recommended action

No action necessary.

Printing Configuration...

Description

The product is printing the Configuration page.

Recommended action

No action necessary.

Printing Demo Page...

Description

The product is printing the Demo page.

Recommended action

No action necessary.

Printing Diagnostics Page...

Description

The product is printing the Diagnostics page.

Recommended action

No action necessary.

Printing Engine Test...

Description

The product is printing an Engine Test page.

Recommended action

No action necessary.

Printing Event Log...

Description

The product is printing the Event Log page.

Recommended action

No action necessary.

Printing File Directory...

Description

The product is printing the File Directory pages.

Recommended action

No action necessary.

Printing Font List...

Description

The product is printing the Font List pages.

Recommended action

No action necessary.

Printing Fuser Test Page...

Description

The product is printing the Fuser Test page.

Recommended action

No action necessary.

Printing Help Page...

Description

The product is printing the Help page.

Recommended action

No action necessary.

Printing Menu Map...

Description

The product is printing the Menu Map pages.

Recommended action

No action necessary.

Printing PQ Troubleshooting...

Description

The product is printing the PQ Troubleshooting pages.

Recommended action

No action necessary.

Printing Registration Page...

Description

The product is printing the Registration pages.

Recommended action

No action necessary.

Printing RGB Samples...

Description

The product is printing the RGB Sample pages.

Recommended action

No action necessary.

Printing stopped

Description

Time has expired on the Print/Stop test.

Recommended action

Press the **OK** button to continue.

Printing Supplies Status page...

Description

The product is printing the Supplies Status page.

Recommended action

No action necessary.

Printing Usage Page...

Description

The product is printing the Usage page.

Recommended action

No action necessary.

Processing duplex job... Do not grab paper until job completes

Description

Paper temporarily comes into the output bin while printing a duplex job.

 **CAUTION:** Do not grab paper as it temporarily comes into the output bin. The message disappears when the job is finished.

Recommended action

No action necessary.

Processing job from tray <X>... Do not grab paper until job completes

Description

The product is actively processing a job from the designated tray.

Recommended action

No action necessary.

Processing... <filename>

Description

The product is currently processing a job but is not yet picking pages. When paper motion begins, this message is replaced by a message that indicates the tray the job is using.

Recommended action

No action necessary.

Processing... copy <X> of <Y>

Description

The product is currently processing or printing collated copies. The message indicates that copy number <X> of total copies <Y> is currently being processed.

Recommended action

No action necessary.

Ready**Description**

The product is online and ready for data. No status or product attendance messages are pending at the display.

Recommended action

No action is necessary.

Ready <IP Address>**Description**

The product is online and ready for data. No status or product attendance messages are pending at the display. The product IP address displays.

Recommended action

No action is necessary.

Remove all toner cartridges**Description**

The product is testing the transfer unit assembly.

Recommended action

To perform the test, remove all the print cartridges. To cancel the test, press the **Stop** button ⊗.

To exit press X**Remove at least one toner cartridge****Description**

The product is testing the print-cartridge motor.

Recommended action

To perform the test, remove at least one print cartridge. To cancel the test, press the **Stop** button ⊗.

To exit press X**Remove shipping lock from Tray 2****Description**

The Tray 2 shipping lock was not removed before you turned the product on.

Recommended action

Open tray 2, and then remove the shipping lock.

Replace <supply>

Description

This alert displays only if the product is configured to stop when a supply reaches the very low threshold. The product indicates when a supply level is at its estimated end of life. The actual life remaining might be different than estimated.

The supply does not need to be replaced now unless the print quality is no longer acceptable.

HP recommends that the customer have a replacement supply available to install when print quality is no longer acceptable.

The product can be configured to stop when the supply level is very low. The supply might still be able to produce acceptable print quality.



NOTE: When an HP supply has reached its approximated end of life, the HP Premium Protection Warranty on that supply ends.

- **10.00.70** (event code)
Black print cartridge
- **10.01.70** (event code)
Cyan print cartridge
- **10.02.70** (event code)
Magenta print cartridge
- **10.03.70** (event code)
Yellow print cartridge
- **10.23.70** (event code)
Fuser Kit
- **10.31.70** (event code)
Toner collection unit
- **10.22.70** (event code)
Transfer kit

Recommended action

Replace the specified supply.

Or, configure the product to continue printing by using the [Manage Supplies](#) menu.

Replace supplies

Description

This alert displays only if the product is configured to stop when a supplies reach the very low threshold. Two or more supplies have reached the estimated end of life. The product indicates when a supply level is at its estimated end of life. The actual life remaining might be different than estimated.

The supply does not need to be replaced now, unless the print quality is no longer acceptable.

HP recommends that the customer have a replacement supply available to install when print quality is no longer acceptable.



NOTE: When an HP supply has reached its approximated end of life, the HP Premium Protection Warranty on that supply ends.

Recorded event codes depend on which supplies are at the end of life.

- **10.00.70** (event code): Black toner cartridge
- **10.01.70** (event code): Cyan toner cartridge
- **10.02.70** (event code): Magenta toner cartridge
- **10.03.70** (event code): Yellow toner cartridge
- **10.23.70** (event code): Fuser kit
- **10.31.70** (event code): Toner collection unit
- **10.22.70** (event code): Transfer kit

Recommended action

1. Touch the **OK** button to find out which supplies need to be replaced.
2. Configure the product to continue printing by using the **Manage Supplies** menu.

Restore Factory Settings

Description

The product is restoring factory settings.

Recommended action

No action necessary.

Restricted from printing in color

Description

This message displays when color printing is disabled for the product or when it is disabled for a particular user or print job.

Recommended action

To enable color printing for the product, change the **Restrict color use** setting in the **Manage Supplies** menu.

Rotating <color> motor

Description

A component test is in progress. the component selected is the indicated <color> cartridge motor.

<color> =

- Black
- Cyan
- Magenta
- Yellow

Recommended action

Press the **Stop** button ⊗ when ready to stop this test.

To exit press X

Rotating Motor

Description

The product is executing a component test, and the component selected is a motor.

Recommended action

Press the **Stop** button ⊗ when ready to stop this test.

To exit press ▼

Size mismatch in Tray <X>

Description

The paper in the listed tray does not match the size specified for that tray.

Recommended action

1. Load the correct paper.
2. Verify that the paper is positioned correctly.
3. Close the tray and verify that the control panel lists the correct paper size and type. Reconfigure the size and type if necessary.
4. If necessary, use the control-panel menus to reconfigure the size and type settings for the specified tray.

Supplies in wrong positions

Description

Two or more print-cartridge slots contain the wrong print cartridge.

From left to right, the print cartridges should be installed in the following order:

- Yellow
- Magenta
- Cyan
- Black

Recommended action

Install the correct cartridge in each slot.

Tray <X> empty: [Type], [Size]**Description**

The specified tray is empty and the current job does not need this tray to print.

- X = 1
Tray 1
- X = 2
Tray 2
- X = 3
Tray 3
- X = 4
Tray 4
- X = 5
Tray 5
- X = 6
Tray 6

Recommended action

Refill the tray at a convenient time.



NOTE: This could be a false message. If the tray is loaded without removing the shipping lock, the product does not sense that the paper is loaded. Remove the shipping lock, and then load the tray.

Tray <X> open**Description**

The specified tray is open or not closed completely.

- **Tray 2 open**
- **Tray 3 open**
- **Tray 4 open**
- **Tray 5 open**
- **Tray 6 open**

Recommended action

Close the tray.



NOTE: If this message appears after the lifter drive assembly was removed or replaced, make sure that the connector on the assembly is correctly connected and fully seated.

If the error persists, use the Media size switches (SW2,3 - SW82,83 - SW92,93) test in the Tray/Bin manual sensor test to test the switches.

If they do not respond, replace the associated the lifter drive assembly.

Tray <X> overfilled

Description

The tray is filled above the stack-height mark.

- X = 2
Tray 2
- X = 3
Tray 3
- X = 4
Tray 4
- X = 5
Tray 5
- X = 6
Tray 6

Recommended action

Remove enough paper so that the paper stack does not exceed the limit for the tray.



NOTE: If this message displays after lifter drive assembly was removed or replaced, make sure that the connector on the assembly is correctly connected and fully seated.

Troubleshooting

Description

The product is in the troubleshooting process.

Recommended action

Press the **Stop** ⊗ button .

To exit press X

Type mismatch Tray <X>

Description

The specified tray contains a paper type that does not match the configured type.

Recommended action

The specified tray will not be used until this condition is addressed. Printing can continue from other trays.

1. Load the correct paper in the specified tray.
2. At the control panel, verify the type configuration.

Unsupported drive installed To continue, touch “OK”**Description**

A non-supported hard drive has been installed. The drive is unusable by this product.

Recommended action

1. Turn the product off.
2. Remove the hard drive.
3. Turn the product on.

Unsupported supply in use OR Unsupported supply installed To continue, touch “OK”**Description**

A non-supported supply has been installed.

OR

One of the print cartridges is for a different HP product.

- XX = 00
Black print cartridge
- XX = 01
Cyan print cartridge
- XX = 02
Magenta print cartridge
- XX = 03
Yellow print cartridge

Recommended action

Install the correct supplies for this product. See the Parts chapter in this manual for supply part numbers.

Unsupported tray configuration**Description**

The product has too many optional trays installed. This product supports a maximum of two input/output devices. Input devices include optional paper tray accessories. Some product configurations ship with input/output devices already installed, for example:

- The product may ship with one optional 500-sheet tray installed. A customer may purchase one additional 500-sheet paper tray **OR** one 3x500 sheet tray with stand and install it on their product.
- If a customer attempts to add an additional paper tray that exceeds the maximum of two input/output devices, the printer will display the following error message:

- **Unsupported tray configuration**

Read this entire message. The maximum number of optional tray accessories for this device is 1 [or 2]. Turn device off, then remove excess tray accessories. Turn device on.

The product will not print any pages until the extra tray is removed.

Recommended action

Turn the product off, remove the unsupported/extra input/output devices, and then turn the product on.

Unsupported USB accessory detected Remove USB accessory

Description

A non-supported USB accessory has been installed.

Recommended action

Turn the product off, remove the USB accessory, and then turn the product on.

USB accessory needs too much power Remove USB and turn off then on

Description

A USB accessory is drawing too much electrical current. Printing cannot continue.

Recommended action

Remove the USB accessory. Turn the product off, and then on.

Use a USB accessory that uses less power or that contains its own power supply.

USB accessory not functional

Description

A USB accessory is not working correctly.

Recommended action

1. Turn the product off.
2. Remove the USB accessory.
3. Insert a replacement USB accessory.

Used supply installed To continue, touch “OK” OR Used supply in use

Description

One of the print cartridges has been previously used.

- XX = 00

- Black print cartridge
 - XX = 01
- Cyan print cartridge
 - XX = 02
- Magenta print cartridge
 - XX = 03
- Yellow print cartridge

Recommended action

If you believe you purchased a genuine HP supply, go to www.hp.com/go/anticounterfeit.

Wrong cartridge in <color> slot

Description

The indicated slot for a toner cartridge contains a toner cartridge that is not the correct color.

The indicated toner cartridge is installed in the wrong position:

- **10.00.25** (event code): Black toner cartridge
- **10.01.25** (event code): Cyan toner cartridge
- **10.02.25** (event code): Magenta toner cartridge
- **10.03.25** (event code): Yellow toner cartridge

Recommended action

Remove the toner cartridge from that slot, and install a toner cartridge that is the correct color.

Event log messages

See the control-panel message and event-log entries section of the product troubleshooting manual for event-log entry descriptions and solutions.

Figure 3-54 Sample event log

Event Log		HP Color LaserJet M750 Series		Page 1		
1 Device Information						
Device Serial Number: CN1C88700P						
Number	Date and Time	Cycles	Event	Firmware	Description or Personality	Consecutive Repeats
35	10/13/2010 10:42:09 AM	205	10.23.15	103104_104867	Install Supply	0
10	10/10/2010 10:13:16 AM	1	10.23.15	103104_104867	Install Supply	0
1	10/8/2010 9:18:04 AM	1	10.23.15	103104_104867	Install Supply	0
1	10/8/2010 3:05:14 PM	1	10.23.15	103104_104867	Install Supply	1
10	10/8/2010 11:38:24 AM	1	10.23.15	103104_104867	Install Supply	0
30	10/8/2010 5:30:39 PM	50	32.08.A2	103104_104867	Add Link	0
29	10/8/2010 5:30:39 PM	50	47.04.04	103104_104867	Print spooler 9100 internal error	0
28	10/8/2010 5:24:56 PM	49	10.23.15	103104_104867	Install Supply	1
27	10/8/2010 5:02:28 PM	34	10.23.15	103104_104867	Install Supply	4
26	10/8/2010 4:24:52 PM	34	32.08.A3	103104_104867	Add Link	0
25	10/8/2010 3:06:26 PM	34	32.08.A2	103104_104867	Add Link	0
24	10/8/2010 3:06:26 PM	34	47.04.04	103104_104867	Print spooler 9100 internal error	0
23	10/7/2010 5:17:44 PM	23	13.00.EE	103104_104867	Unknown	0
22	10/7/2010 5:17:03 PM	22	13.00.EE	103104_104867	Unknown	0
21	10/6/2010 4:45:52 PM	20	32.08.A3	103104_104867	Add Link	0
20	10/4/2010 3:00:03 PM	20	10.23.15	103104_104867	Install Supply	0
19	10/2/2010 6:17:04 PM	20	32.08.A2	103104_104867	Add Link	0
18	10/2/2010 6:17:04 PM	20	47.04.04	103104_104867	Print spooler 9100 internal error	0
17	10/2/2010 5:54:32 PM	18	10.22.15	103104_104867	Install Supply	0
16	10/2/2010 3:07:20 PM	18	32.08.A2	103104_104867	Add Link	0
15	10/2/2010 3:07:20 PM	18	47.04.04	103104_104867	Print spooler 9100 internal error	0
14	9/28/2010 5:38:32 PM	18	32.08.A3	103104_104867	Add Link	0
13	9/28/2010 5:35:54 PM	16	32.08.A2	103104_104867	Add Link	0
12	9/28/2010 5:35:53 PM	16	47.04.04	103104_104867	Print spooler 9100 internal error	0
11	9/28/2010 5:21:56 PM	16	10.99.40	103104_104867	Genuine HP supplies installed	0
10	9/28/2010 5:21:55 PM	16	33.01.01	103104_104867	Restore occurred	0
9	9/28/2010 5:21:53 PM	16	33.01.01	103104_104867	Restore occurred	0
8	9/28/2010 5:21:52 PM	16	33.01.01	103104_104867	Restore occurred	0
7	9/28/2010 5:21:48 PM	16	33.01.01	103104_104867	Restore occurred	0
6	9/28/2010 5:21:44 PM	16	33.01.01	103104_104867	Restore occurred	0
5	9/28/2010 5:21:44 PM	16	33.01.01	103104_104867	Restore occurred	0
4	9/28/2010 5:21:25 PM	16	00.00.00	103104_104867	Unknown	2
3	9/28/2010 5:20:31 PM	16	33.01.03	103104_104867	[[[CellUsedPartReplaced]]]	0
2	9/28/2010 5:20:31 PM	16	99.02.01	103104_104867	Unknown	0
1	9/28/2010 5:19:58 PM	16	99.02.01	103104_104867	Unknown	0

Oct13/2010 12:41:29 PM English (United States)

1 Product information

2 Event number

3 Date and time

4 Engine cycles

5 Event log code

6 Firmware version number

7 Description of personality

8 Consecutive Repeats

Print or view an event log



NOTE: The event log in the [Administration](#) menu shows only a subset of events. For a complete event log, use the [Service](#) menu.

Print or view the event log from the Administration menu

1. From the [Home](#) screen on the product control panel, scroll to and touch the [Administration](#) button.
2. Open the following menus:
 - [Troubleshooting](#)
 - [Event Log](#)
3. The event log displays on the screen. To print it, touch the [Print](#) button.

Print or view the event log from the Service menu

The service menu event log will show all events and informational posting for the product. This event log will be a more inclusive event list than that from the [Administration](#) menu.

1. From the [Home](#) screen on the product control panel, scroll to and touch the [Device Maintenance](#) button.
2. Open the [Service](#) menu.
3. On the sign-in screen, select the [Service Access Code](#) option from the drop-down list.
4. Enter the following service access code for this product: 11077512.
5. Open the [Event Log](#) menu.
6. The event log displays on the screen. To print it, touch the [Print](#) button.

Clear an event log

1. From the [Home](#) screen on the product control panel, scroll to and touch the [Device Maintenance](#) button.
2. Open the [Service](#) menu.
3. On the sign-in screen, select the [Service Access Code](#) option from the drop-down list.
4. Enter the following service access code for this product: 11077512.
5. Open the [Event Log](#) menu.
6. Select the [Clear Event Log](#) item, and then touch the [OK](#) button.

Clear jams

Common causes of jams

The product is jammed.

Cause	Solution
The paper does not meet specifications.	Use only paper that meets HP specifications. See the product user guide.
A component is installed incorrectly.	Verify that the transfer belt and transfer roller are correctly installed.
You are using paper that has already passed through a printer or copier.	Do not use paper that has been previously printed on or copied.
An input tray is loaded incorrectly.	Remove any excess paper from the input tray. Make sure that the stack is below the maximum stack height mark in the tray.
The paper is skewed.	The input-tray guides are not adjusted correctly. Adjust them so they hold the stack firmly in place without bending it.
The paper is binding or sticking together.	Remove the paper, flex it, rotate it 180°, or flip it over. Reload the paper into the input tray.
The paper is removed before it settles into the output bin.	Reset the product, and then resend the print job. Wait until the page completely settles in the output bin before removing it.
During two-sided printing, you removed the paper before the second side of the document was printed.	Reset the product and print the document again. Wait until the page completely settles in the output bin before removing it.
The paper is in poor condition.	Replace the paper.
The internal tray rollers are not picking up the paper.	If the paper is heavier than the heaviest supported weight for the tray, it might not be picked from the tray. The rollers are worn. Replace the rollers.
The paper has rough or jagged edges.	Replace the paper.
The paper is perforated or embossed.	Perforated or embossed paper does not separate easily. Feed single sheets from Tray 1.
Paper was not stored correctly.	Replace the paper in the trays. Paper should be stored in the original packaging in a controlled environment.
Not all product packing material was removed.	Verify that the packing tape, cardboard, and plastic shipping locks have been removed from the product.

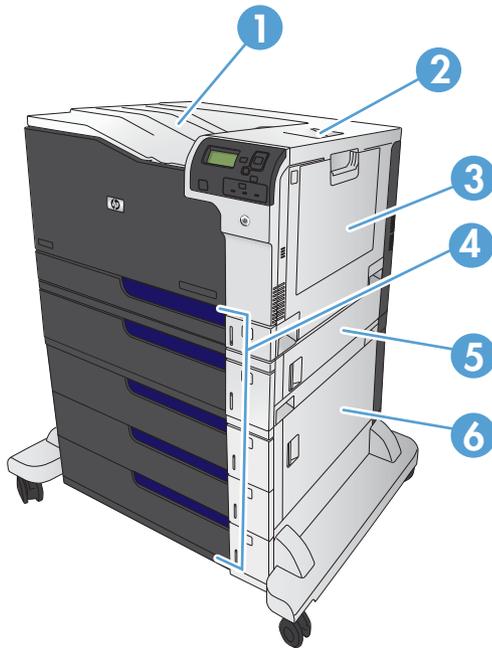
Jam locations

Use this illustration to identify locations of jams. In addition, instructions appear on the control panel to direct you to the location of jammed paper and how to clear it. Internal areas of the product that might need to be opened to clear jams, have green handles or green labels.

WARNING! To avoid electrical shock, remove any necklaces, bracelets, or other metal items before reaching into the inside of the product.

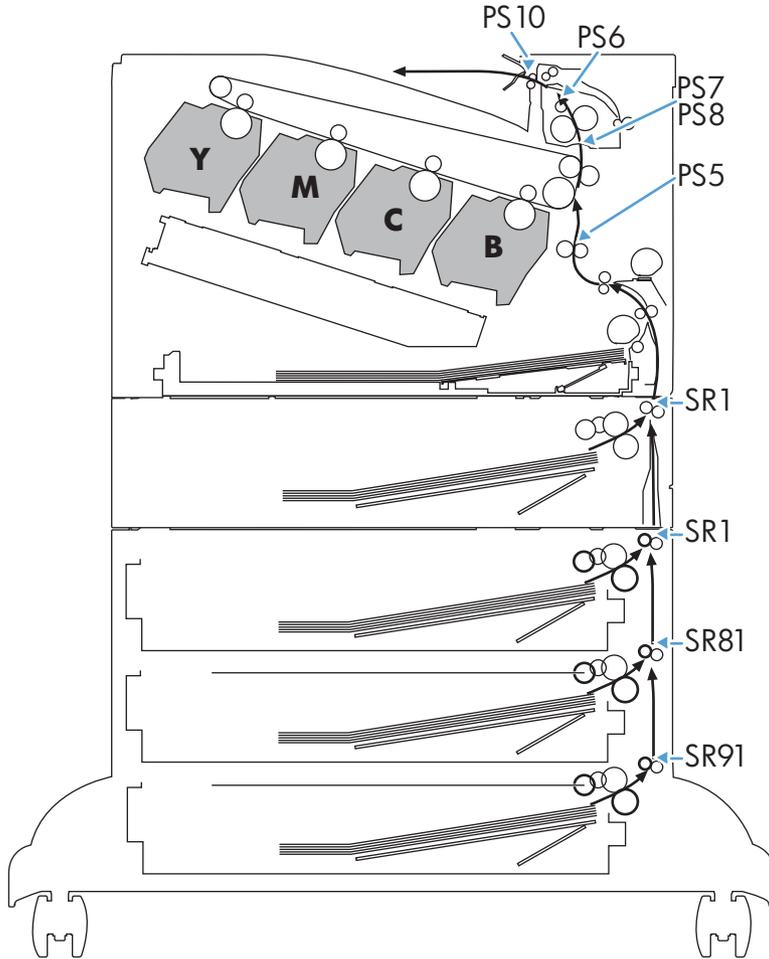
NOTE: Sensors in the paper path generate event codes if a jam occurs. For sensor locations, see Paper path jam sensors. For jam event code information, see Event codes for jams.

Figure 3-55 Jam locations



1	Output bin
2	Upper right door
3	Tray 1 area
4	Tray 2, Tray 3, and optional Trays 4, 5, and 6
5	Middle right door
6	Lower right door

Figure 3-56 Paper path jam sensors



Note: Both the 1 X 500-sheet feeder and the 3 X 500-sheet feeder use a SR1 tray feed sensor.

Table 3-41 Paper path jam sensors

Sensor	Description
PS5	Registration sensor
PS6	Fuser output sensor
PS7	Loop sensor
PS8	
PS10	Bin full sensor
SR1	Tray 3 feed sensor
SR1	Tray 4 feed sensor
SR81	Tray 5 feed sensor
SR91	Tray 6 feed sensor

Table 3-42 Event codes for jams

Jam event code	Jammed paper location
13.A3.D3	Leading edge of paper fed from Tray 3 is stopped before SR1
13.A3.D4	Leading edge of paper fed from Tray 4 is stopped before SR1 after passing Tray 4 SR1
13.A3.D5	Leading edge of paper fed from Tray 5 is stopped before SR1 after passing Tray 4 SR1
13.A3.D6	Leading edge of paper fed from Tray 6 is stopped before SR1 after passing Tray 4 SR1
13.A3.FF	At auto-flushing : Paper stays at SR1
13.A4.D4	Leading edge of paper fed from Tray 4 is stopped before Tray 4 SR1
13.A4.D5	Leading edge of paper fed from Tray 5 is stopped before Tray 4 SR1 after passing SR81
13.A4.D6	Leading edge of paper fed from Tray 6 is stopped before Tray 4 SR1 after passing SR81
13.A4.FF	At auto-flushing : Paper stays at Tray 4 SR1
13.A5.D5	Leading edge of paper fed from Tray 5 is stopped before SR81
13.A5.D6	Leading edge of paper fed from Tray 6 is stopped before SR81 after passing SR91
13.A5.FF	At auto-flushing: paper stays at SR81
13.A6.D6	Leading edge of paper fed from Tray 6 is stopped before SR91
13.A6.FF	At auto-flushing : Paper stays at SR91
13.B2.A1	Paper stays at PS5 – media longer than allowed from Tray 1
13.B2.A2	Paper stays at PS5 - media longer than allowed from Tray 2
13.B2.A3	Paper stays at PS5 - media longer than allowed from Tray 3
13.B2.A4	Paper stays at PS5 - media longer than allowed from Tray 4
13.B2.A5	Paper stays at PS5 - media longer than allowed from Tray 5
13.B2.A6	Paper stays at PS5 - media longer than allowed from Tray 6
13.B2.AD	Paper stays at PS5 - media longer than allowed from Duplexer
13.B2.D1	Leading edge of paper fed from Tray 1 is stopped before PS5
13.B2.D2	Leading edge of paper fed from Tray 2 is stopped before PS5
13.B2.D3	Leading edge of paper fed from Tray 3 is stopped before PS5 after passing SR1
13.B2.D4	Leading edge of paper fed from Tray 4 is stopped before PS5 after passing SR1
13.B2.D5	Leading edge of paper fed from Tray 5 is stopped before PS5 after passing SR1
13.B2.D6	Leading edge of paper fed from Tray 6 is stopped before PS5 after passing SR1
13.B2.DD	Duplex re-feed paper is stopped between PS6 and PS5
13.B2.FF	At power on, door close, or auto-flushing: paper stays at PS5
13.B4.FF	At power on, door close, or auto-flushing : paper stays at PS7/PS8
13.B9.Az	Paper stays at PS6

NOTE: z is the fuser mode, see Fuser modes for jam event codes (Z).

Table 3-42 Event codes for jams (continued)

Jam event code	Jammed paper location
13.B9.Cz	Paper is wrapping at fuser
NOTE: z is the fuser mode, see Fuser modes for jam event codes (Z).	
13.B9.D1	Leading edge of paper is stopped between PS5 and PS6 – fed from tray 1
13.B9.D2	Leading edge of paper is stopped between PS5 and PS6 – fed from Tray 2
13.B9.D3	Leading edge of paper is stopped between PS5 and PS6 – fed from Tray 3
13.B9.D4	Leading edge of paper is stopped between PS5 and PS6 – fed from Tray 4
13.B9.D5	Leading edge of paper is stopped between PS5 and PS6 – fed from Tray 5
13.B9.D6	Leading edge of paper is stopped between PS5 and PS6 – fed from Tray 6
13.B9.DD	Leading edge of paper is stopped between PS5 and PS6 – fed from Duplexer
13.B9.FF	At power on, door close, or auto-flushing: paper stays at PS6
13.E1.Dz	Leading edge of paper is stopped before PS10 after passing PS6
NOTE: z is the fuser mode, see Fuser modes for jam event codes (Z).	
13.00.EE	Door was opened during printing
13.AA.EE	Tray 3, 4, or 5 right tray access door was opened during print job
13.AB.EE	Tray 4, 5, 6 right tray access door was opened during print job
13.BB.EE	Front door was opened during print job
13.BA.EE	Right door was opened during print job
13.FF.FF	Jams at multiple sensors

Fuser modes for jam event codes (Z)

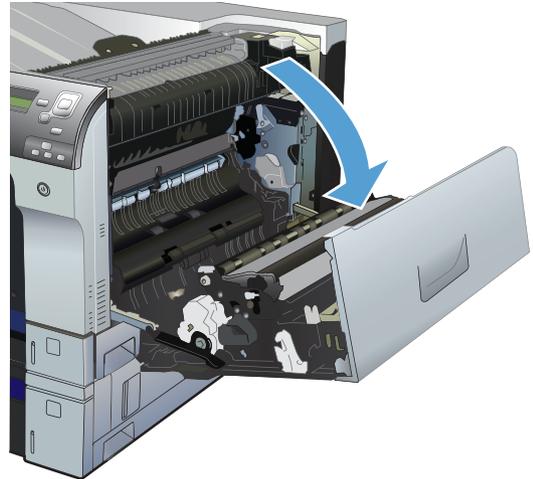
- 1 = Normal auto sense
- 2 = Normal non-auto sense
- 3 = Light 1 to 3
- 4 = Heavy 1
- 5 = heavy 2
- 6 = Heavy 3
- 7 = Glossy 1
- 8 = Glossy 2
- 9 = Glossy 3
- A = Glossy film
- B = Transparency

- C = Label
- D = Envelope 1 to 3

Clear jams in the upper-right door

⚠ WARNING! The fuser can be hot while the product is in use. Wait for the fuser to cool before handling it.

1. Open the upper-right door.

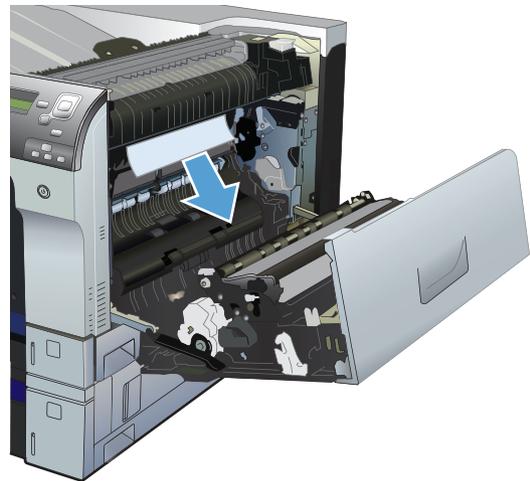


2. Gently pull the paper out of the pickup area.



3. If paper is visible entering the bottom of the fuser, gently pull downward to remove it.

CAUTION: Do not touch the transfer roller. Contaminants on the roller can affect print quality.

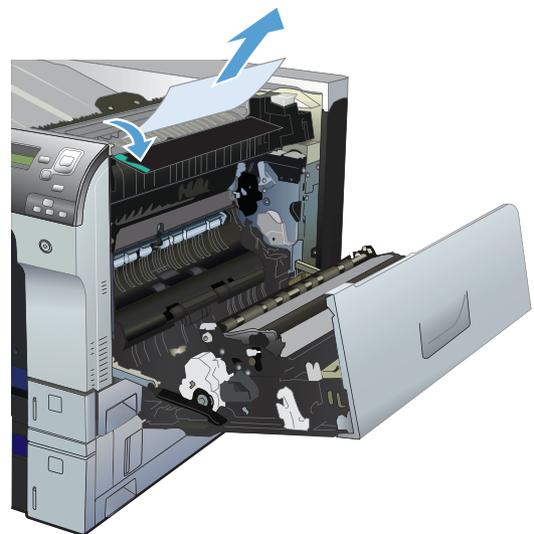


4. Paper could be jammed inside the fuser where it would not be visible. Open the fuser jam access door. If paper is jammed inside the fuser, gently pull it straight up to remove it. If the paper tears, remove all paper fragments.

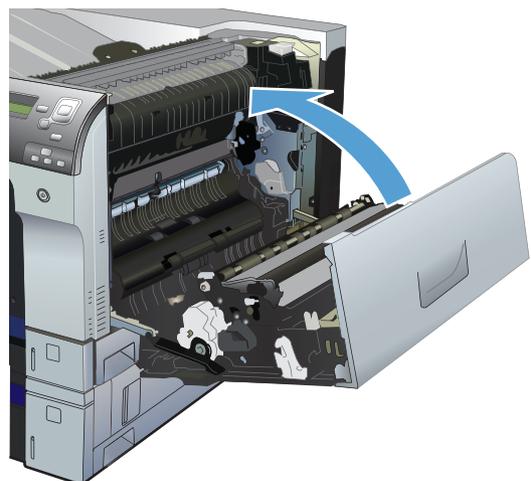
WARNING! Even if the body of the fuser has cooled, the rollers that are inside could still be hot. Do not touch the fuser rollers until they have cooled.

If no paper is found but the product still reports a jam, remove the fuser to check for jammed paper inside the fuser cavity. Remove any paper, and then reinstall the fuser.

NOTE: Make sure that the fuser is reinstalled correctly before closing the upper right door.

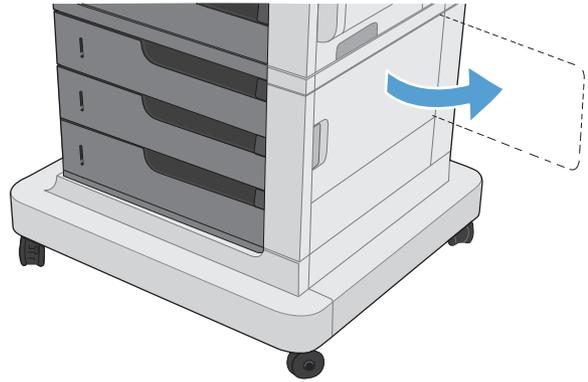


5. Close the upper-right door.

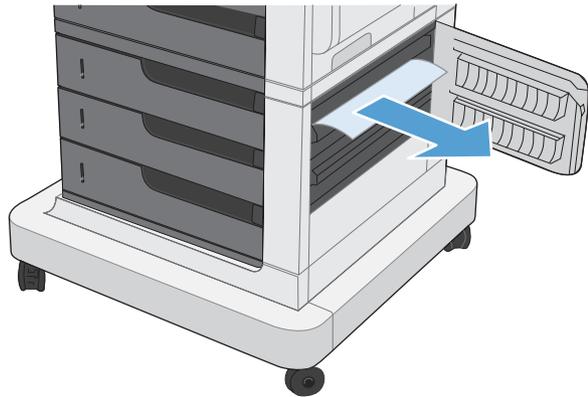


Clear jams in the lower-right door

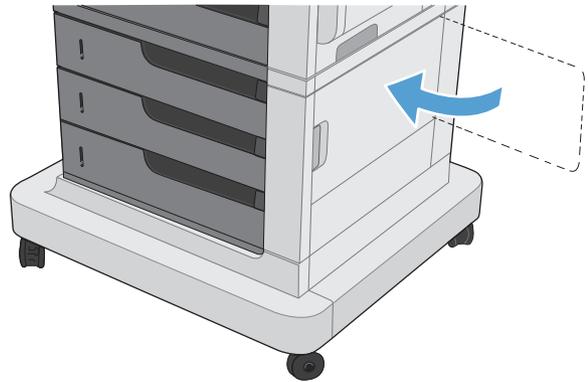
1. Open the lower-right door.



2. If paper is visible, gently pull the jammed paper up or down to remove it.

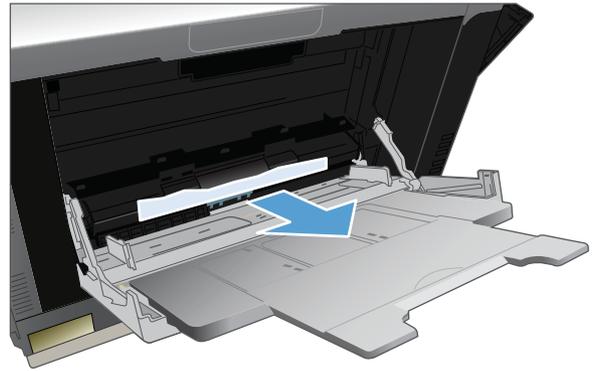


3. Close the lower-right door.

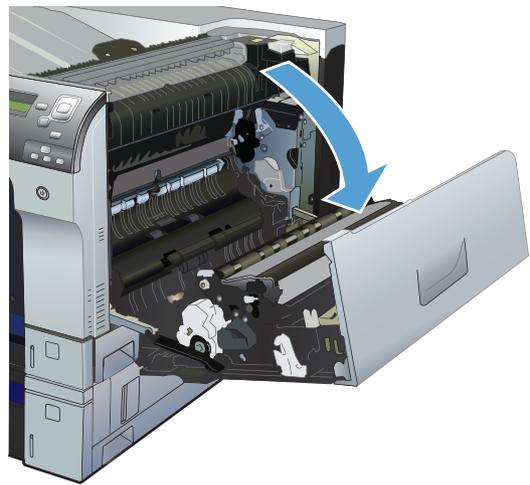


Clear jams in Tray 1

1. If jammed paper is visible in Tray 1, clear the jam by gently pulling the paper straight out. Press the **OK** button to clear the message.



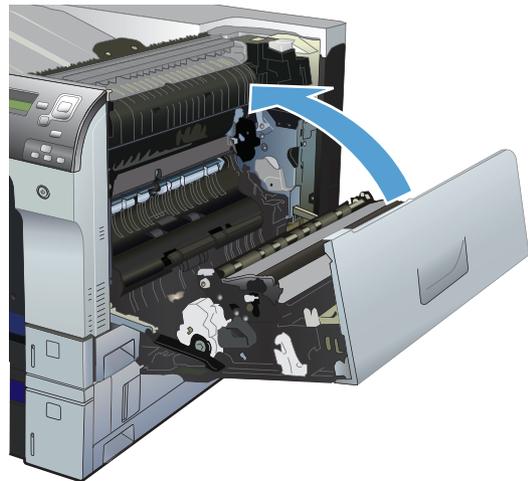
2. If you cannot remove the paper, or if no jammed paper is visible in Tray 1, close Tray 1 and open the upper right door.



3. Gently pull the paper out of the pick up area.



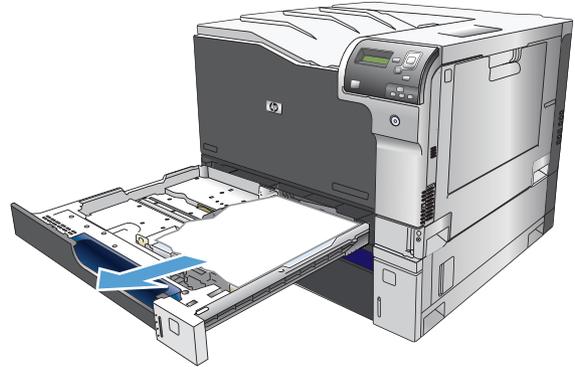
4. Close the upper right door.



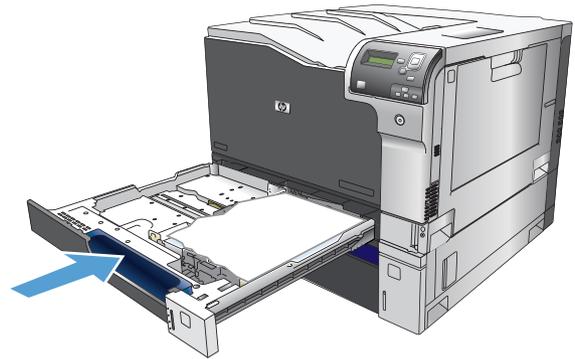
Clear jams from Tray 2, Tray 3, or an optional tray

⚠ CAUTION: Opening a tray when paper is jammed can cause the paper to tear and leave pieces of paper in the tray, which might cause another jam. Be sure to clear jams from the upper and lower right door before opening a tray.

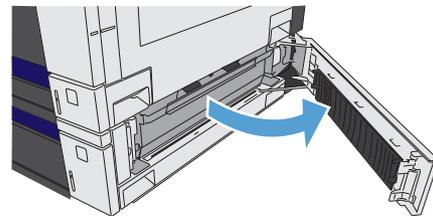
1. Open the tray and make sure that the paper is stacked correctly. Remove any jammed or damaged sheets of paper. To access jammed paper from the tray cavity, remove the tray from the product.



2. Close the tray.

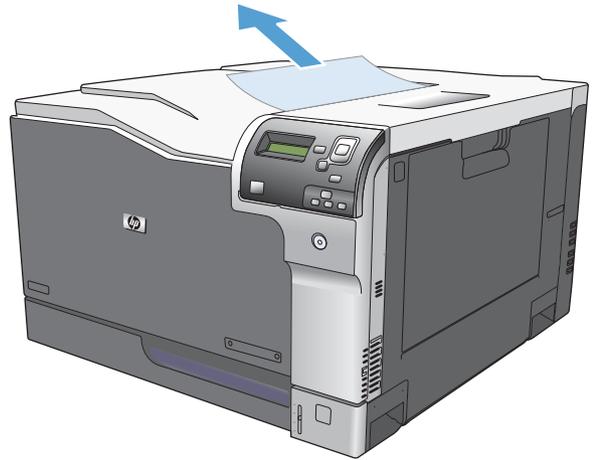


3. If the jam is in Tray 3, you also can open the door on the right side of the tray, remove the jammed paper, and then close the door.



Clear jams in the output bin area

1. If paper is visible from the output bin, grasp the leading edge and remove it.



Jam causes and solutions

Jams in the output bin

Table 3-43 Causes and solutions for delivery delay jam

Cause	Solution
The output-bin full sensor flag is damaged.	Examine the output-bin full sensor flag for damage. If the flag is damaged, replace the paper delivery assembly. See Output-bin-full sensor (PS10) for troubleshooting information.
Poor contact of the output-bin full sensor connector.	If the product was recently repaired, check and reconnect the connector (J181) on the DC controller PCA and the intermediate connector (J743).
The output bin full sensor (PS10) is defective.	Check the output bin full sensor (PS10) using the manual sensor test. See Output-bin-full sensor (PS10) for troubleshooting information.
Poor contact of the fuser-motor (M4) connector.	Reconnect the connectors of the fuser motor (J516), and the DC controller PCA (J81).
The fuser motor (M4) is defective.	Execute the fuser-motor driving test in the component test (see Component test). If the motor is defective, replace the fuser motor (M4).

Jams in the fuser and transfer area

Table 3-44 Causes and solutions for fuser delivery delay jams

Cause	Solution
The fuser-output sensor connector has a poor connection.	Reconnect connector J131 on the DC controller PCA.
The fuser-output sensor (PS6) is defective.	Check the fuser-output sensor (PS6) with the manual sensor test. See Fuser output sensor (PS6). If the sensor is defective, replace the fuser.

Table 3-45 Causes and solutions for wrapping jams

Cause	Solution
The fuser roller or pressure roller is dirty.	Print a cleaning page. See Process a cleaning page.
The fuser roller or the pressure roller is worn or deformed.	Replace the fuser.
The output bin full sensor has a poor connection.	Reconnect the connector J181 on the DC controller PCA, and the intermediate connector J743.
The output bin full sensor is defective.	Run the manual sensor test to verify the output bin full sensor is functioning properly. See Output-bin-full sensor (PS10). If not, replace the fuser gear assembly.

Table 3-46 Causes and solutions for fuser delivery stationary jams

Cause	Solution
The fuser roller or pressure roller is worn or deformed.	Replace the fuser.
The fuser-delivery roller is deformed.	
The gear of the fuser-delivery roller is damaged.	
Poor contact of the fuser-output sensor connector.	Reconnect the connector J131 on the DC controller PCA.
The fuser-output sensor (PS6) is defective.	Run the manual sensor test to verify that the fuser-output sensor is functioning properly. See Fuser output sensor (PS6). If it is not, replace the fuser.

Jams in the duplex area (duplex models only)

Table 3-47 Causes and solutions for duplexing reverse jams

Cause	Solution
The duplex reverse roller is worn or deformed.	Replace the fuser.
The duplex feed roller is worn or deformed.	Replace the right door.
Poor contact of the duplex reverse-motor (M7) connector	Reconnect the connectors (J520) on the duplex reverse motor, intermediate connectors (J552L and J552D), connector (J1006) on the driver PCA, and connectors (J93; J92; J91) on the DC controller PCA.
The duplex reverse motor is defective.	Replace the duplex drive assembly.

Table 3-48 Causes and solutions for duplex repick jams

Cause	Solution
The duplex re-pickup sensor lever is set incorrectly or damaged.	Check the sensor lever to make sure it is set correctly. If it is damaged, replace the right door assembly.
The spring of the duplex re-pickup sensor lever is unhooked.	Check the spring and place it in correct position.
Poor contact of the duplex reverse solenoid (SL3) connector	Reconnect the intermediate connectors (J522L and J522D), connector (J1005) on the driver PCA, and connectors (J93; J92; J91) on the DC controller PCA.
The duplex reverse solenoid is defective.	Replace the duplex-drive assembly.
The duplex flapper is damaged or malfunctioning.	Replace the delivery assembly.
The duplex reverse solenoid is defective.	Replace the duplex-drive assembly.
The duplex flapper is damaged or malfunctioning.	Replace the paper delivery assembly.
The duplex repick roller is worn or damaged.	Replace the registration sensor assembly.
The duplex repick clutch is defective.	Run the solenoid drive test in component test (see Component tests) to verify that the duplex repick clutch is functioning properly. If it is not, replace the duplex drive assembly.

Table 3-49 Causes and solutions for residual media jams

Cause	Solution
Poor contact of the fuser loop-sensor connector and fuser loop sensor 1 and 2.	Reconnect the connectors of the fuser loop sensor 1 and 2 (J13) and the connector (J131) on the DC controller PCA.
The loop sensor is defective.	Run the manual sensor test. See Fuser loop sensors (PS7 and PS8) for information. If the sensor is defective, replace fuser. See Tray/Bin manual sensor test.
The spring of the fuser-output-sensor lever is unhooked.	Check the spring of the fuser and right door and place it in the correct position.
The fuser-output sensor lever is damaged.	Replace the sensor (PS6).
Poor contact of the fuser-output sensor connector.	Reconnect connector (J1055) of the fuser-output sensor and connector (J131) on the DC controller PCA.
The fuser-output sensor is defective.	Run the manual sensor test to make sure the fuser-delivery sensor is functioning properly. See Fuser output sensor (PS6) for information. If the sensor is defective, replace the fuser.
The duplex pickup sensor lever is damaged.	Replace the right door assembly.

 **NOTE:** Even if jammed paper is visible in Tray 1, clear the jam from the inside of the product by opening the right door.

Jams in Tray 1, Tray 2 and internal paper path

Table 3-50 Causes and solutions for pickup delay jam 1: tray pickup

Cause	Solution
The tray 1 pick up roller or the tray 1 separation pad is worn or deformed.	Replace the tray 1 pickup roller and separation pad.
Poor contact of the tray 1 media-presence-sensor connector	Reconnect the connectors of the tray media-feed sensor intermediate connectors (J531L and J531D), and the connector (J152) on the DC controller.
Poor contact of the TOP sensor connector.	Reconnect the intermediate connector (J554L and J554D) of the TOP sensor and connector (J122) on the DC controller PCA.
The TOP sensor is defective.	Run the manual sensor test to verify that the TOP sensor is functioning properly. If not, replace the registration assembly.
Poor contact of the MP-pickup-solenoid drive connector	Reconnect the connector of the tray pickup solenoid intermediate connectors (J530L and J530D), and the connector (J152) on the DC controller PCA.
The MP-pickup solenoid is defective.	Execute the tray-pickup-solenoid driving test in the component test (see Component tests). If the solenoid is defective, replace the right door assembly.
Poor contact of the pickup-motor drive connector (M5)	Reconnect the pickup-motor connector (J523) and connector (J260), intermediate connectors (J535L and J535D), and the connector (J1003) on the DC controller PCA.
The pickup motor is defective.	Execute the pickup-motor driving test in the component test (see Component tests). If the motor is defective, replace the paper pickup assembly.

Table 3-51 Causes and solutions for pickup delay jams Tray 2

Cause	Solution
Poor contact of the pickup motor drive connector.	Reconnect the connector J91 on the DC controller PCA .
The pickup motor is defective.	Execute the Tray 2 pickup motor test in the component test (see Component tests). If the motor is defective, replace the paper pickup assembly.
The pickup roller is worn or deformed.	Replace the pickup roller.
The tray 2 separation roller is worn or deformed.	Replace the separation roller.
Poor contact of the TOP sensor connector.	Reconnect the connector J122 on the DC controller PCA.
The TOP sensor (P55) is defective.	Run the manual sensor test to verify that the TOP sensor is functioning properly. See TOP (top-of-page) sensor (P55) for information. If it is not, replace the registration sensor assembly.
Poor contact of the Tray 2 pickup solenoid drive connector.	Reconnect the connector J1003 on the DC controller PCA.
The Tray 2 pickup solenoid is defective.	Run the Tray 2 pickup solenoid test in the component test See Component test (special-mode test) to verify that the Tray 2 pickup solenoid is functioning properly. If it is not, replace the paper pickup assembly.

Table 3-52 Causes and solutions for pickup stationary jams

Cause	Solution
Multiple feed of media	<p>Replace any worn or deformed parts (tray separation pad, tray feed roller, MP tray pickup roller or MP tray separation pad).</p> <p>Check the separation pad and MP tray separation pad to see if they are firmly seated and coupled with the torque limiter.</p> <p>Replace the separation pad and feed roller for the associated tray.</p> <p>If the MP tray pickup roller is defective, replace the roller. If the MP tray separation pad is defective, replace the separation pad assembly.</p>
The secondary transfer roller is not set correctly.	Place the secondary-transfer-roller unit in the correct position.
The secondary-transfer roller is worn or deformed.	Replace the secondary-transfer-roller assembly.
Poor contact of the drum drive connector	Reconnect the connectors of the ITB motor (J517) and the DC controller PCA (J81).
The drum motor is defective.	Execute the drum motor driving test in the component test (see Component tests). If the motor is defective, replace the motor.
The ITB does not rotate smoothly.	Replace the ITB.
The TOP sensor lever is incorrectly positioned or damaged	Check the sensor lever to make sure it is correctly positioned . If it is damaged, replace the registration sensor assembly.
Poor contact of the TOP sensor connector	Reconnect the connector J122 on the DC controller PCA.
The TOP sensor is defective.	Run the manual sensor test to verify that the TOP sensor (P55) is functioning properly. See TOP (top-of-page) sensor (P55) for information. If it is not, replace the registration sensor assembly.

Table 3-53 Causes and solutions for residual media jams

Cause	Solution
A piece of paper remains at the sensor detecting the jam.	Make sure that all paper, including small bits of paper, are removed from the product when a jam is removed.
The sensor detecting a residual media jam is not working.	Test each sensor using the manual sensor test. See Manual sensor test for information. If the sensor does not respond, replace the component indicated: <ul style="list-style-type: none"> • TOP sensor (PS5): Replace the registration sensor assembly. • Fuser-output sensor (PS6): Replace the fuser. • Fuser loop sensors 1 and 2 (PS7 and PS8): Replace the fuser.
If service was recently performed on the product, a sensor connector might be disconnected.	Run the manual sensor tests to verify which sensor detects the media. See Manual sensor test or Tray/Bin manual sensor test for information. Reconnect the corresponding sensor connector: <ul style="list-style-type: none"> • TOP sensor: Connector (J122) on the DC controller PCA • Fuser-output sensor: Connector (J131) on the DC controller PCA • Fuser Loop sensor 1 or 2: Connector (J131) on the DC controller PCA

Jams in Tray 3, 4, 5, and 6

Table 3-54 Causes and solutions for pickup delay and pickup stationary jams

Cause	Solution
The paper-feeder pickup roller is worn or deformed.	Replace the pickup roller.
The paper-feeder separation roller is worn or deformed.	Replace the separation roller.
The paper-feeder feed roller is worn or deformed.	Replace the feed roller.
Poor contact of the paper-feeder media-feed sensor connectors	Disconnect and reconnect the sensor connector.
A tray feed sensor is defective.	Run the manual sensor test to verify that the paper-feeder media feed sensor is functioning properly. See Tray/Bin manual sensor test for information. If it is not, replace the paper pickup assembly of the specific tray.
Poor contact of a paper-feeder pickup solenoid drive connector	Disconnect and reconnect the sensor connector.
The paper-feeder pickup solenoid is defective.	Run the solenoid drive test in the component test (see Component tests) to verify that the paper-feeder pickup solenoid is functioning properly. If it is not, replace the paper pickup assembly of the specific tray.
Poor contact of paper-feeder pickup motor drive connector.	Disconnect and reconnect the sensor connector.
The paper-feeder pickup motor is defective.	Run the pickup motor drive test in the component test (see Component tests) to verify that the paper-feeder pickup motor is functioning properly. If it is not, replace the pickup assembly of the specific tray.
Multiple feed of media	If the tray 3 pickup roller, separation roller, or feed roller is worn or deformed, replace any defective parts.

Table 3-54 Causes and solutions for pickup delay and pickup stationary jams (continued)

Cause	Solution
The paper-feeder media-feed sensor lever is set incorrectly or damaged.	Check the sensor lever to make sure it is set correctly. If it is damaged, replace the paper-feeder assembly.
The spring of the paper-feeder media-feed sensor lever is unhooked.	Check the spring and place it in correct position.
Poor contact of the paper-feeder media-feed sensor connector.	Reconnect the connector (J406) on the connector PCA and connector (J22) of the paper-feeder media feed sensor.
A tray feed sensor is defective.	Run the manual sensor test to verify that the tray feed sensor is functioning properly. See Tray/Bin manual sensor test for information. If it is not, replace the pickup assembly of the specific tray.

Table 3-55 Causes and solutions for residual media jams

Cause	Solution
The sensor that detects residual paper jams is set incorrectly or damaged.	Run the manual sensor test to verify which sensor detects the paper. See Tray/Bin manual sensor test for information. Check the sensor lever to make sure it is set correctly. If it is damaged, replace the corresponding pickup assembly.
The spring of the sensor lever that detects residual paper jams is unhooked.	Run the manual sensor test to verify which sensor detects the paper. See Tray/Bin manual sensor test for information. Check the spring of the sensor lever to make sure it is set correctly.
Poor contact exists in the sensor that detects residual paper jams.	Run the manual sensor test to verify which sensor detects the paper. See Tray/Bin manual sensor test for information. Disconnect and reconnect the sensor connector.
The sensor that detects residual paper jams is defective.	Run the manual sensor test to verify which sensor detects the paper. See Tray/Bin manual sensor test for information. Disconnect and reconnect the sensor connector.

Change jam recovery

This product provides a jam recovery feature that reprints jammed pages. The following options are available:

- **Auto** — The product attempts to reprint jammed pages when enough memory is available. This is the default setting.
- **Off** — The product does not try to reprint jammed pages. Because no memory is used to store the most recent pages, performance is optimal.



NOTE: When using this option, if the product runs out of paper and the job is being printed on both sides, some pages can be lost.

- **On** — The product always reprints jammed pages. Additional memory is allocated to store the last few pages printed. This might cause overall performance to suffer.

Set the jam recovery feature

1. Press the Home button .
2. Open the following menus:
 - Administration
 - General Settings
 - Jam Recovery
3. Press the **Down** arrow or **Up** arrow / button to highlight the appropriate setting, and then press the **OK** button.
4. Press the Home button  to return to the **Ready** state.

Solve paper-handling problems

Product feeds multiple sheets

Product feeds multiple sheets

Cause	Solution
The input tray is overfilled. Open the tray and verify that the paper stack is below the maximum stack height mark.	Remove excess paper from the input tray.
Print paper is sticking together.	Remove paper, flex it, rotate it 180 degrees or flip it over, and then reload it into the tray. NOTE: Do not fan paper. Fanning can cause static electricity, which can cause paper to stick together.
Paper does not meet the specifications for this product.	Use only paper that meets HP paper specifications for this product.
Trays are not properly adjusted.	Make sure that the paper guides match the size of paper being used.
Tray 2 feeds multiple sheets.	Make sure Tray 2 is not overfilled. Open the tray and verify that the paper stack is below the maximum stack height mark. Remove paper from Tray 2 to avoid jams.

Product feeds incorrect page size

Product feeds incorrect page size

Cause	Solution
The correct size paper is not loaded in the tray.	Load the correct size paper in the tray.
The correct size paper is not selected in the software program or printer driver.	Confirm that the settings in the software program and printer driver are correct, because the software program settings override the printer driver and control panel settings, and the printer driver settings override the control panel settings.
The correct size paper for the tray is not selected in the product control panel.	From the control panel, select the correct size paper for the tray.
The paper size is not configured correctly for the tray.	Print a configuration page or use the control panel to determine the paper size for which the tray is configured.
The guides in the tray are not against the paper.	Verify that the paper guides are touching the paper.

Product pulls from incorrect tray

Product pulls from incorrect tray

Cause	Solution
You are using a driver for a different product.	Use a driver for this product.
The specified tray is empty.	Load paper in the specified tray.

Product pulls from incorrect tray

Cause	Solution
The paper size is not configured correctly for the input tray.	Print a configuration page or use the control panel to determine the paper size for which the tray is configured.
The guides in the tray are not against the paper.	Verify that the guides are touching the paper.

Paper does not feed automatically

Paper does not feed automatically

Cause	Solution
Manual feed is selected in the software program.	Load Tray 1 with paper, or, if the paper is loaded, press the OK button.
The correct size paper is not loaded.	Load the correct size paper.
The input tray is empty.	Load paper into the input tray.
Paper from a previous jam has not been completely removed.	Open the product and remove any paper in the paper path.
The paper size is not configured correctly for the input tray.	Print a configuration page or use the control panel to determine the paper size for which the tray is configured.
The guides in the tray are not against the paper.	Verify that the rear and width paper guides are touching the paper.
The Manually Feed Prompt item is set to Always . The product always prompts for manual feed, even if the tray is loaded.	Open the tray, reload the media, and then close the tray. Or, change the Manually Feed Prompt setting to Unless loaded , so that the product prompts for manual feed only when the tray is empty.
The Use Requested Tray setting on the product is set to Exclusively , and the requested tray is empty. The product will not use another tray.	Load the requested tray. Or, change the setting from Exclusively to First on the Manage Trays menu. The product can use other trays if no media is loaded in the specified tray.

Paper does not feed from Tray 2, 3, 4, 5, or 6

Paper does not feed from Tray 2, 3, 4, 5, or 6

Cause	Solution
The correct size paper is not loaded.	Load the correct size paper.
The input tray is empty.	Load paper in the input tray.
The correct paper type for the input tray is not selected in the product control panel.	From the product control panel, select the correct paper type for the input tray. Trays configured for a paper type with a specific weight range will not match a print job that specifies an exact weight, even if the specified weight is within the weight range.
Paper from a previous jam has not been completely removed.	Open the product and remove any paper in the paper path. Closely inspect the fuser area for jams.

Paper does not feed from Tray 2, 3, 4, 5, or 6

Cause	Solution
None of the optional trays appear as input tray options.	The optional trays only display as available if they are installed. Verify that any optional trays are correctly installed. Verify that the printer driver has been configured to recognize the optional trays.
An optional tray is incorrectly installed.	Print a configuration page to confirm that the optional tray is installed. If not, verify that the tray is correctly attached to the product.
The paper size is not configured correctly for the input tray.	Print a configuration page or use the control panel to determine the paper size for which the tray is configured.
The guides in the tray are not against the paper.	Verify that the guides are touching the paper.

Output is curled or wrinkled

Output is curled or wrinkled

Cause	Solution
Paper does not meet the specifications for this product.	Use only paper that meets the HP paper specifications for this product.
Paper is damaged or in poor condition.	Remove paper from the input tray and load paper that is in good condition.
Product is operating in an excessively humid environment.	Verify that the printing environment is within humidity specifications.
You are printing large, solid-filled areas.	Large, solid-filled areas can cause excessive curl. Try using a different pattern.
Paper used was not stored correctly and might have absorbed moisture.	Remove paper and replace it with paper from a fresh, unopened package.
Paper has poorly cut edges.	Remove paper, flex it, rotate it 180 degrees or turn it over, and then reload it into the input tray. Do not fan paper. If the problem persists, replace the paper.
The specific paper type was not configured for the tray or selected in the software.	Configure the software for the paper (see the software documentation). Configure the tray for the paper.
The paper has previously been used for a print job.	Do not re-use paper.

Product will not duplex or duplexes incorrectly

Product will not duplex (print 2-sided jobs) or duplexes incorrectly

Cause	Solution
You are trying to duplex on unsupported paper.	Verify that the paper is supported for duplex printing.
The printer driver is not set up for duplex printing.	Set up the printer driver to enable duplex printing.

Product will not duplex (print 2-sided jobs) or duplexes incorrectly

Cause	Solution
The first page is printing on the back of preprinted forms or letterhead.	Load preprinted forms and letterhead in Tray 1 with the letterhead or printed side down, with the top of the page leading into the product. For Tray 2 and 3, load the paper printed side up with the top of the page toward the right of the product.
The product model does not support automatic 2-sided printing.	The HP Color LaserJet M750n does not support automatic 2-sided printing.
The product configuration is not set for duplexing.	In Windows, run the automatic configuration feature: <ol style="list-style-type: none"><li data-bbox="879 531 1414 600">1. Click the Start button, point to Settings, and then click Printers (for Windows 2000) or Printers and Faxes (for Windows XP).<li data-bbox="879 632 1461 680">2. Right-click the HP product icon, and then click Properties or Printing Preferences.<li data-bbox="879 711 1190 732">3. Click the Device Settings tab.<li data-bbox="879 764 1382 810">4. Under Installable Options, click Update Now in the Automatic Configuration list.

Use manual print modes

Try the following multi-purpose (MP) modes to see if they solve the image-quality problems. To access the manual print modes, open the following menus:

- Administration
- General Settings
- Print Quality
- Adjust Paper Types

Table 3-56 MP modes under the **Adjust Paper Types** sub menu

Print Mode	
	<ul style="list-style-type: none">• AUTOSENSE MODE• NORMAL MODE• LIGHT MODE• HEAVY MODE• CARDSTOCK MODE• TRANSPARENCY MODE• TRANSPARENCY MODE 2• ENVELOPE MODE• LABEL MODE• TOUGH MODE• EXTRA TOUGH MODE• HEAVY GLOSSY MODE• X-HVY GLOSSY MODE• ROUGH MODE• CARD GLOSSY MODE• 4MM TRNS MODE• LIGHT ROUGH MODE
RESISTANCE MODE	<p>NOTE: Not all print modes are available for all paper types.</p> <p>Set to Up to resolve print-quality issues caused by poor secondary transfer in low-humidity environments with resistive or rough surface media.</p>

Table 3-56 MP modes under the Adjust Paper Types sub menu (continued)

HUMIDITY MODE	<p>With glossy film, set to High when the product is in a high-humidity environment and print-quality defects occur on HP Tough Paper or Opaque film.</p> <p>With transparencies, set to High when the product is in a high-humidity environment and print-quality defects occur on color transparencies on the first page of a print job.</p> <p>With all other paper types, set to High when the product is in a high-humidity environment and light density occurs on the first page of a print job.</p>
FUSER TEMP MODE	<p>If you are seeing a faint image of the page repeated at the bottom of the page or on the following page, first make sure the Paper Type and Print Mode settings are correct for the type of paper you are using. If you continue to see ghost images on your print jobs, set the Fuser Temp feature to one of the Alternate settings. Try the ALTERNATE 1 setting first and see if it solves the problem. If you continue to see the problem, try ALTERNATE 2 and then ALTERNATE 3. Using the ALTERNATE 2 and ALTERNATE 3 settings might cause an extra delay between jobs.</p>
PAPER CURL MODE	<p>Use in high-humidity and high-temperature environments. The REDUCED setting decreases fuser temperature and increases the interpage gap.</p>

Table 3-57 MP modes under the Optimize submenu

NORMAL PAPER	Set to SMOOTH when printing on smooth paper of normal weight.
HEAVY PAPER	Set to SMOOTH when printing on smooth, heavy media types.
LIGHT MEDIA	Set to SMOOTH when printing on smooth, light media types.
ENVELOPE CONTROL	Set to REDUCED TEMP if envelopes are sticking due to moisture in the envelop adhesive.
ENVIRONMENT	Set to LOW TEMP if the product is operating in a low-temperature environment and you are having problems with print quality such as blisters in the printed image.
LINE VOLTAGE	Set to LOW VOLTAGE if the product is operating in a low-voltage environment and you are having problems with print quality such as blisters in the printed image.
TRAY1	Set to ALTERNATE if you are seeing marks on the back side of the paper when printing from Tray 1. This sets the product to initiate a clean sequence every time a job finishes when the product is set for Any Size and Any Type for Tray 1.
BACKGROUND	Set to ALTERNATE 1 when a background occurs all over the page. Set to ALTERNATE 2 when thin vertical lines appear on the page. Set to ALTERNATE 3 when the other alternatives do not correct the problem.
CLEANING CONTROL	<p>Changes the control of toner purge. Toner purge is executed with the CRG in contact with the ITB. Toner purge is executed right after this mode is selected at the control panel.</p> <p>ALTERNATE 1: Use this option when ITB cleaning failure occurs during lower coverage printing or when abnormal noise occurs from ITB cleaning blade.</p>

Table 3-57 MP modes under the Optimize submenu (continued)

MEDIA TEMP	Use ALTERNATE 1 to preventing media in the output bin from sticking together.
UNIFORMITY CONTROL	Set to ALTERNATE 1 to improve uniformity on any paper type. Set to ALTERNATE 2 to improve uniformity on normal and light paper types. Set to ALTERNATE 3 when the other alternatives do not correct the problem.
PRE-ROTATION	Set to ALTERNATE 1 when horizontal banding occurs with the drum pitch, or when 53 mm band occurs after leaving engine for a long period of time. Set to ALTERNATE 2 when the problems like fade finger (trailing edge toner starvation) occur after high coverage continuous printing.
REGISTRATION	Set to ALTERNATE when color misregistration occurs.
TRANSFER CONTROL	Set to ALTERNATE 1 to reduce primary transfer bias and to resolve low density or blotchy images. Set to ALTERNATE 2 to resolve ghosting outlines that look like a finger or fingers. Set to ALTERNATE 3 when the other alternatives do not correct the problem.
MOISTURE CONTROL	Set to ALTERNATE when image failure occurs due to water drops.

Solve image-quality problems

Occasionally, you might encounter problems with print quality. The information in the following sections helps you identify and resolve these issues.

Print quality examples

Some print quality problems arise from low or very low cartridges or other supplies. The solution is to replace the low or very low supplies.

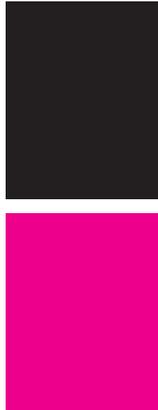
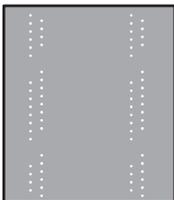
Some print quality problems arise from use of inappropriate paper.

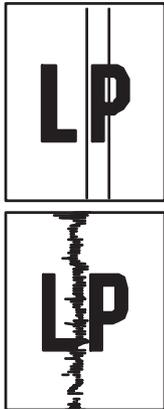
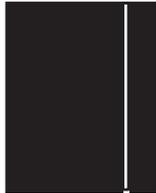
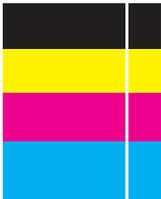
- Use paper that meets HP paper specifications.
- The surface of the paper is too rough. Use paper that meets HP paper specifications.
- The printer driver setting or paper tray setting might be incorrect. Be sure that you have configured the paper tray at the product control panel and have also selected the correct driver setting for the paper that you are using.
- The print mode might be set incorrectly, or the paper might not meet recommended specifications.
- The transparencies you are using are not designed for proper toner adhesion. Use only transparencies designed for HP Color LaserJet products.
- The moisture content of the paper is uneven, too high, or too low. Use paper from a different source or from an unopened ream of paper.
- Some areas of the paper reject toner. Use paper from a different source or from an unopened ream of paper.
- The letterhead you are using is printed on rough paper. Use a smoother, xerographic paper. If this solves your problem, consult with the printer of your letterhead to verify that the paper used meets the specifications for this product.
- Several optimize print modes can be used to address print quality issues. See the print modes section of this manual.

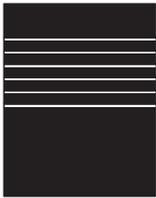
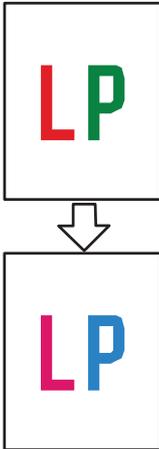
If you are having problems with light streaks in an image, use the [Administration](#) menu to print the supplies status page. If none of the cartridges has reached its estimated end of life, remove the cartridges from the product, and then reinstall them. The product initiates a cleaning mechanism that might correct the light streaks.

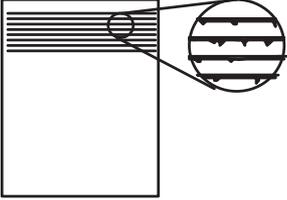
The following examples depict letter-size paper that has passed through the product short-edge first. These examples illustrate problems that would affect all the pages that you print, whether you print in color or in black only. The topics that follow list the typical cause and solution for each of these examples.

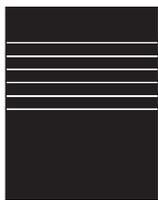
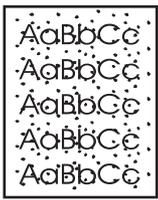
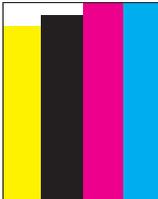
Problem	Sample	Cause	Solution
Print is light or faded on entire page.		Poor contacts exist on the ITB unit and the product grounding unit.	Clean the grounding contacts. If the problem remains after cleaning, check the contacts for damage. Replace any deformed or damaged parts.
		Poor secondary transfer contacts exist on the secondary transfer roller and the ITB.	Clean the contacts. If the problem remains after cleaning, check the contacts for damage. Replace any deformed or damaged parts.

Problem	Sample	Cause	Solution
Print is light or faded in a particular color.		<p>Poor primary transfer bias contacts on the ITB unit and product.</p> <p>Poor primary charging bias contacts with the print cartridge and product.</p> <p>Poor developing bias contacts with the print cartridge and product.</p>	Clean the contacts of the color that produces the light print. If the problem remains after cleaning, check the contacts for damage. Replace any deformed or damaged parts.
Image is too dark.		The registration density (RD) sensor is defective.	Replace the RD sensor.
Page is blank.		The imaging high-voltage power-supply is defective (no developing bias output).	Replace the imaging high-voltage power-supply .
The page is all black or a solid color.		Poor contact exists in the primary charging bias or developing bias contacts between the print cartridge and the product.	Clean each contact of the color that produces the all black or solid color. If the problem remains after cleaning, check the contacts for damage. Replace any deformed or damaged parts. Replace the affected print cartridge.
White spots appear in an image		<p>Poor conductivity caused by dirt on the static eliminator.</p> <p>The primary transfer roller is deformed or has deteriorated.</p> <p>The secondary transfer roller is deformed or has deteriorated.</p>	<p>Clean the static eliminator.</p> <p>Replace the ITB.</p> <p>Replace the secondary-transfer-roller.</p>

Problem	Sample	Cause	Solution
The back of the page is dirty.		The secondary transfer roller is dirty.	Replace the secondary transfer roller.
		The fuser inlet guide or separation guide is dirty.	Clean the dirty parts. If the dirt does not come off, replace the guide.
		The pressure roller is dirty.	Run the cleaning page several times. If the dirt does not come off, install a fuser cleaning kit. If the issue persists, replace the fuser.
Vertical streaks or bands appear on the page.		Scratches are present on the circumference of the photosensitive drum.	Replace the print cartridge of the color that matches the defect.
		Scratches are present on the circumference of the fuser roller.	Replace the fuser.
		Scratches are present on the circumference of the ITB.	Replace the ITB.
		The ITB drive roller is deformed or has deteriorated.	
Vertical white lines appear in a particular color.		The laser beam window is dirty.	Execute the Clean Laser Glass item in the Calibration/Cleaning submenu (in the Device Maintenance menu)
			If the error persists, manually clean the window and remove any foreign substances.
		Scratches are present on the circumference of the developing cylinder or photosensitive drum.	Replace the affected print cartridge. If the problem persists, replace the affected print cartridge.
Vertical white lines appear in all colors.		The laser/scanner-unit mirror is dirty.	Replace the laser/scanner assembly.
		Horizontal scratches on the fuser roller.	Replace the fuser.
		Scratches are present on the circumference of the ITB.	Replace the affected print cartridge. Replace the ITB.
Horizontal lines appear on the page.		Repetitive horizontal lines appear.	Use the repetitive defects ruler to identify the dirty roller. Clean the roller. If the roller cannot be cleaned, replace the fuser.
		Horizontal scratches are present on the photosensitive drum.	Replace the print cartridge of the color that matches the defect.
		Horizontal scratches are present on the fuser roller.	Replace the fuser.

Problem	Sample	Cause	Solution
A horizontal white line appears on the page.		Repetitive horizontal white lines appear.	Use the repetitive defects ruler to identify the dirty roller. Clean the roller. If the roller cannot be cleaned, replace the roller.
		Horizontal scratches are present on the photosensitive drum.	Replace the print cartridge of the color that matches the defect.
		Scratches are present on the circumference of the ITB.	Replace the ITB.
Image in a particular color does not print in the correct color.		Poor contact exists in the primary charging bias or developing bias contacts between the print cartridge and the product.	Clean each contact of the color that produces the missing color. If the problem remains after cleaning, check the contacts for damage. Replace any deformed or damaged parts.
		The print cartridge (primary charging roller, developing roller, or photosensitive drum) is defective.	Replace the print cartridge of the color that matches the defect.
		The imaging high-voltage power-supply is defective (no primary charging bias or developing bias output).	Replace the imaging high-voltage power-supply.
		The laser/scanner unit is defective.	Replace the laser/scanner assembly.
Dropouts appear.		The secondary transfer roller is deformed or has deteriorated.	Replace the secondary-transfer-roller.
		The primary charging roller, developing roller, or photosensitive drum is deformed or has deteriorated.	Replace the print cartridge of the color that matches the defect.
		The fuser roller is deformed or has deteriorated.	Replace the fuser.
		The transfer 1 high-voltage power-supply PCA is defective (no transfer 1 bias output).	Replace the transfer 1 high-voltage power-supply.
		The transfer 2 high-voltage power-supply PCA is defective (no transfer 2 bias output).	Replace the transfer 2 high-voltage power-supply.
The toner is not fully fused to the paper.		The fuser roller or pressure roller is scarred or deformed.	Replace the fuser.
		The fuser control circuit is defective.	Replace the low-voltage power supply.
		The thermistor is defective.	Replace the fuser.
		The fuser heater is defective.	

Problem	Sample	Cause	Solution
Some color is misregistered.		The product is incorrectly calibrated.	Calibrate the product.
		The ITB unit is defective.	If the ITB does not rotate smoothly or a cleaning malfunction occurs (ITB is dirty), replace the ITB.
		The drive gear of the ITB motor is worn or chipped.	Check each drive gear between the ITB drive roller and the ITB motor. If the gear is worn or chipped, replace the drive unit.
		The RD sensor is defective.	Open and close the right door several times to clean the RD sensor. If the problem persists, replace the RD sensor.
		The laser/scanner unit is defective.	Replace the laser/scanner assembly.
		The print cartridge is defective.	Replace the print cartridge of the affected color.
Toner smears appear on the media.		The product has residual media.	Remove the residual media.
		Poor contact exists in the primary charging bias or developing bias contacts between the print cartridge and the product.	Clean each contact of the color that produces the missing color. If the problem remains after cleaning, check the contacts for damage. Replace any deformed or damaged parts.
		The fuser inlet guide is dirty.	Clean the fuser inlet guide.
The printed page contains misformed characters.		The product is experiencing page skew.	See the "Text or graphics are skewed on the printed page" row in this table.
		The laser/scanner unit is defective.	Replace the laser/scanner assembly.
Text or graphics are skewed on the printed page.		The registration shutter spring is unhooked.	Check the spring and place it in the correct position.
		The registration shutter spring is deformed.	Replace the cassette pickup assembly.
The printed page contains wrinkles or creases.		The roller or media feed guide is dirty.	Clean any dirty components.
		A feed roller is deformed or has deteriorated.	Replace any deformed or deteriorated rollers.
		The paper feed guide is damaged.	Replace the paper-feed-guide unit.

Problem	Sample	Cause	Solution
The front of the page is dirty.		<p>The photosensitive drum is dirty.</p> <p>The fuser roller or pressure roller is dirty.</p>	<p>Replace the print cartridge.</p> <p>Execute a cleaning page to clean the contaminate off the fuser. If the dirt does not come off, replace the fuser.</p> <p>NOTE: Cleaning the fuser with HP tough paper provides better results than with plain paper. You might need to execute the cleaning process several times to remove all contaminates on the fuser.</p>
Repetitive horizontal lines		Damaged or dirty roller.	<p>See repetitive image defect ruler. Clean the indicated roller. If the contaminate does not come off, replace appropriate roller or assembly.</p>
Pages have flecks of toner		Dirty paper path.	<p>Execute a cleaning page to clean the contaminate off the fuser. The cleaning page may need to be run several time to clean the fuser. Do not replace the fuser.</p> <p>NOTE: Cleaning the fuser with HP tough paper provides better results than with plain paper. You might need to execute the cleaning process several times to remove all contaminates on the fuser. A fuser cleaning kit (CC468-67919) is available.</p>
Pages have one or more skewed color planes (can appear on the right or left side of the page)		Print cartridge incorrectly installed or damaged.	Remove, and then reinstall the print cartridge associated with the defect.

Clean the product

Over time, particles of toner and paper accumulate inside the product. This can cause print-quality problems during printing. Cleaning the product eliminates or reduces these problems.

Clean the paper path and print-cartridge areas every time that you change the print cartridge or whenever print-quality problems occur. As much as possible, keep the product free from dust and debris.

To clean the product exterior, use a soft, water-moistened cloth.

Clean the paper path



NOTE: If you are processing a cleaning page to clean the fuser, repeat the process 1 to 6 times until the paper comes out clean.

Process a cleaning page

1. Press the Home button .
2. Open the following menus:
 - [Device Maintenance](#)
 - [Calibration/Cleaning](#)
3. Press the **Down** arrow ▼ to highlight the [Print Cleaning Page](#) item, and then press the **OK** button.
4. The product prints a cleaning page, and then returns to the main menu. Discard the printed page.

Solve performance problems

Problem	Cause	Solution
Pages print but are totally blank.	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.
	All of the print cartridges might be very low on toner.	Replace the toner cartridges if a Supplies very low message is displayed.
Pages print very slowly.	Heavier paper types can slow the print job.	Print on a different type of paper. Proper fusing may require a slower print speed to ensure the best print quality.
	Complex pages can print slowly.	Simplify the page.
Pages did not print.	The product might not be pulling paper correctly.	Make sure paper is loaded in the tray correctly.
	The paper is jamming in the product.	Clear the jam.
	The USB cable might be defective or incorrectly connected.	<ul style="list-style-type: none">• Disconnect the USB cable at both ends and reconnect it.• Try printing a job that has printed in the past.• Try using a different USB cable.
	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 connectivity problems

Solve direct-connect problems

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

- Verify that the cable is connected to the computer and to the product.
- Verify that the cable is not longer than 2 m (6.5 ft). Replace the cable if necessary.
- Verify that the cable is working correctly by connecting it to another product. Replace the cable if necessary.

Solve network problems

Check the following items to verify that the product is communicating with the network. Before beginning, print a configuration page. See Configuration page.

Problem	Solution
Poor physical connection	<p>Verify that the product is attached to the correct network port using a cable of the correct length.</p> <p>Verify that cable connections are secure.</p> <p>Look at the network port connection on the back of the product, and verify that the amber activity light and the green link-status light are lit.</p> <p>If the problem continues, try a different cable or port on the hub.</p>
The computer is unable to communicate with the product.	<p>Use the command prompt to ping the product from your computer. For example:</p> <pre>ping 192.168.45.39</pre> <p>Verify that the ping displays round-trip times, which indicates that it is working.</p> <p>If the ping command failed, verify that the network hubs are on, and then verify that the network settings, the product, and the computer are all configured for the same network.</p>
Incorrect link and duplex settings	<p>Hewlett-Packard recommends leaving this setting in automatic mode (the default setting). See the user guide.</p>
Incorrect IP address for the product on the computer	<p>Use the correct IP address. The IP address is listed on the configuration page.</p> <p>If the IP address is correct, delete the product and then add it again.</p>
New software programs have caused compatibility problems.	<p>Verify that any new software programs are correctly installed and that they use the correct printer driver.</p>
Your computer or workstation is set up incorrectly.	<p>Check the network drivers, printer drivers, and the network redirection.</p> <p>Verify that the operating system is configured correctly.</p>
The protocol is disabled, or other network settings are incorrect.	<p>Review the configuration page to check the status of the protocol. Enable it if necessary.</p> <p>Reconfigure the network settings if necessary. See the user guide.</p>

Service mode functions

Service menu

The [Service](#) menu is PIN-protected for added security. Only authorized service people have access to the [Service](#) menu. When you select [Service](#) from the list of menus, the product prompts you to enter an eight-digit PIN number ([Service Access Code](#)). The PIN for the HP Color LaserJet Enterprise M750 Printer Series is 11075013.

1. Press the Home  button.
2. Open the following menus:
 - [Device Maintenance](#)
 - [Service](#)
 - [Service Access Code](#)
3. Enter the eight-digit PIN using the arrow buttons.



NOTE: Only the [Service Access Code](#) can be used to access the [Service](#) menu. The message **Your user account does not have permission to access the selected item** displays if the correct [Service Access Code](#) is not used.

4. Press the [OK](#) button to enter the PIN and open the [Service](#) menu.

The following menu items appear in the [Service](#) menu:

First level	Second level	Third level	Description
User Access Code			Only the Service Access Code can be used to access the Service menu. The message Your user account does not have permission to access the selected item displays if the correct Service Access Code is not used.
Administrator Access Code			Only the Service Access Code can be used to access the Service menu. The message Your user account does not have permission to access the selected item displays if the correct Service Access Code is not used.
Service Access Code			This item allows access to the Service sub menus.
	Print Event Log		Use this item to print the service event log.
	View Event Log		Use this item to view the service event log.
	Clear Event Log		Use this item to clear (erase) the service event log.

First level	Second level	Third level	Description
	Cycle Counts	Mono Cycle Counts	Use this item to reset the mono print job page count.
		Color Cycle Count	Use this item to reset the color print job page count.
		Refurbish Cycle Count	Use this item to reset the refurbish print job page count.
	Serial Number		Use this item to reset the product serial number.
	Service ID		Use this item to reset the product service identification number.
	Cold Reset Paper		Use this item to set the cold reset paper size.
	New Registration Roller		Use this item to reset the registration roller page count.
	Media Sensor Value		Use this item to record the media sensor value found on a replacement paper pickup assembly.
	Manual Laser Glass Cleaning		Use this item to execute a manual laser glass cleaning. The laser shutters are moved away from the laser glass windows so that they can be manually cleaned.
Test Support	Continuous Print from USB		Use this item to test print from an external USB.
	Automatic Calibrations		Use this item to enable automatic calibrations.

Product resets

Restore factory-set defaults

1. Press the Home button .
2. Open the following menus:
 - Administration
 - General Settings
 - Restore Factory Settings
3. Press the Down arrow button  to highlight and select **Restore**, and then press the **OK** button.

Preboot menu options

If an error occurs while the product is booting, an error message appears on the control-panel display. This error may prevent the unit from booting up, which makes accessing menus impossible. To assist in these cases, the user can access the Preboot menus. The preboot menus allow several operations to be performed in an attempt to correct the cause of the error. The Error menu item will not be seen if an error did not occur.

Access the Preboot menu

1. Turn the product on.
2. Press the **Stop** ⊗ button when the **Ready**, **Data**, and **Attention** LEDs are illuminated solid.
3. Use the **Down** arrow ▼ button to navigate the **Preboot** menu options.
4. Press the **OK** button to select a menu item.

Table 3-58 Preboot menu options (1 of 5)

Menu option	First level	Second level	Third level	Description
Continue				Selecting the Continue item exits the Preboot menu and continues the normal boot process. If a selection is not made in the initial menu within 30 seconds, the product returns to a normal boot (the same as selecting Continue . If the user navigates to another menu, the timeout does not apply.
Sign In				Enter the Administrator PIN or Service PIN if one is required to access the Preboot menu.

Table 3-58 Preboot menu options (1 of 5) (continued)

Menu option	First level	Second level	Third level	Description	
Administrator Tools				This item navigates to the Administrator sub menus. If authentication is required (and the user is not already signed in) the Sign In displays. The user is required to sign in.	
	Download			This item initiates a preboot firmware download process. A USB device interface or a Network connection can be used to download firmware.	
			Network		See Product updates.
			USB Device		See Product updates.
Format Disk				This item reinitializes the disk and formats all disk partitions. CAUTION: Selecting the Format Disk item removes all data. A delete confirmation prompt is not provided. The system is not bootable after this action—a firmware download must be performed to return the system to a bootable state. Insure you have the latest firmware available before completing this operation.	
	Partial Clean			This item reinitializes the disk (removing all data except the firmware repository where the master firmware bundle is downloaded and saved). CAUTION: Selecting the Partial Clean item removes all data except the firmware repository. A delete confirmation prompt is not provided. This allows user to reformat the disk by removing the firmware image from the active directory without having to download new firmware code (product remains bootable).	
					Select this item to set or change the administrator password.
Change Password				Select the Clear Password item to remove a password from the Administrator menu. Before the password is actually cleared, a message will be shown asking to confirm that the password should be cleared. Press the OK button to confirm the action. When the confirmation prompt appears, press the OK button to clear the password.	

Table 3-59 Preboot menu options (2 of 5)

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

Table 3-60 Preboot menu options (3 of 5)

Menu option	First level	Second level	Third level	Description
Administrator Tools	Manage Disk	Internal Device		Select the Internal Device item to erase the internal device or get status about the internal device.
continued	continued		Secure Erase	Select the Secure Erase item to erase all of the data on the disk and unlock it if required. This might take a long time. NOTE: The system will be unusable until the system files are reinstalled. ATA secure-erase command one pass over write. Erases the entire disk, including firmware. The disk remains an encrypted disk.
			Erase/Unlock	Select the Erase and Unlock item to cryptographically erase all data on disk and unlock the disk to allow access to it from any product. NOTE: The system will be unusable until the system files are reinstalled. Erases the crypto key. The disk becomes a non-encrypted disk.
			Get Status	This item provides disk status information if any is available.
		External Device		Select the External Device item to erase the internal device or get status about the internal device.
			Secure Erase	Select the Secure Erase item to erase all of the data on the disk and unlock it if required. This might take a long time. NOTE: The system will be unusable until the system files are reinstalled. ATA secure-erase command one pass over write. Erases the entire disk, including firmware. The disk remains an encrypted disk.
			Erase/Unlock	Select the Erase and Unlock item to cryptographically erase all data on disk and unlock the disk to allow access to it from any product. NOTE: The system will be unusable until the system files are reinstalled. Erases the crypto key. The disk becomes a non-encrypted disk.
			Get Status	This item provides disk status information if any is available.

Table 3-61 Preboot menu options (4 of 5)

Menu option	First level	Second level	Third level	Description
Administrator Tools	Configure LAN			Select the Configure LAN item to setup the network settings for the PreBoot menu firmware upgrade.
continued	Network Setup			The network can be configured obtain the network settings from a DHCP server or as static.
	IP Mode []			
		[DHCP]		Use this item for automatic IP address acquisition from the DHCP server.
		[Static]		Use this item to manually assign the network addresses.
			IP Address	Use this item to manually enter the IP addresses.
			Subnet Mask	Use this item to manually enter the subnet mask.
			Default Gateway	Use this item to manually enter the default gateway.
			Save and Exit	Select the Save and Exit item to save the manual settings.

Table 3-62 Preboot menu options (5 of 5)

Menu option	First level	Second level	Third level	Description
Administrator Tools	Startup Options			Select the Startup Options item to specify options that can be set for the next time the product is turned on and initializes to the Ready state.
continued		Show Revision		Not currently functional: Check the Show Revision item to allow the product to initialize and show the firmware version when the device reaches the Ready state. When the product power is turned on the next time, the Show Revision item is unchecked so the firmware revision is not shown.
		Cold Reset		Check the Cold Reset item to clear the IP address and all customer settings (this item also returns all settings to factory defaults). NOTE: Items in the Service menu are not reset.
		Skip Disk Load		This item allows the device to be started without loading the third party applications. This means that files including Accessible Architecture on the disk will not be available at bootup. This is useful for troubleshooting problems with the hard disk without having to remove the hard disk. It also applies to flash file system disks on DIMMs. In this case, this function will cause the printer to configure the HP firmware first, followed by the third-party applications. NOTE: The files on the disk will be available after the printer enters the Ready state.
		Skip Cal		Select the Skip Cal item to initialize the product the next time the power is turned on without calibrating.

Table 3-62 Preboot menu options (5 of 5) (continued)

Menu option	First level	Second level	Third level	Description
Administrator Tools	Startup Options	Lock Service		CAUTION: Select the Lock Service item to lock the Service menu access (both PreBoot and Device Maintenance application). Service personnel must have the Administrator remove the Lock Service setting before they can enter the Service menu.
continued	continued			
		Skip FSCK		Check the Skip FSCK item to allow the product to initialize without scanning the disk. If the product is crashing on Step 4/8, checking this item may isolate the problem. Once the device is turned on the next time, the Skip FSCK item is unchecked and the disk scan is not skipped.
		First Power		Not currently functional: This item allows the product initialize as if it is the first time it has been turned on. For example, the user is prompted to configure first time settings like Select Date/Time, Select Language, and other settings). Check this item so that it is enabled for the next time the product power is turned on. When the product power is turned on the next time, this item is unchecked so that the pre-configured settings are used during configuration and the first time setting prompt is not used.
		Embedded Jetdirect Off		Check the Embedded Jetdirect Off item to disable the embedded Jetdirect. By default this item is unchecked so that Jetdirect is always enabled.
		WiFi Accessory JetDirect Off		Check the WiFi Accessory JetDirect Off item to disable the WiFi JetDirect Accessories . This item is unchecked so that JetDirect is always enabled by default.

Table 3-63 Preboot menu options (5 of 5)

Menu option	First level	Second level	Third level	Description
Administrator Tools	Diagnostics			The Diagnostics feature helps to diagnose hardware failures and allow service technicians to identify and replace only the hardware components that have failed on a device.
		[x] Memory	<input type="checkbox"/> Do not run	Enables testing of system memory (RAM).
			<input type="checkbox"/> Short	Enabled by default.
			<input type="checkbox"/> Long	
		[x] Disk	<input type="checkbox"/> Do not run	Enables testing of the disk drive.
			<input type="checkbox"/> Short	Enabled by default.
			<input type="checkbox"/> Long	NOTE: This test takes a long time to execute.
			<input type="checkbox"/> Optimized	
		[x] ICB		Enables testing of the ICB board. Enabled by default.
		[x] CPB		Enables testing of the CPB board. Enabled by default.
[x] Interconnect		Enables a quick ping test for connectivity. Enabled by default. Checks for the presence of the boot disk, checks for connectivity with the control panel, checks I2C communications with the controller used for power management.		
Remote Admin	Start Telnet	Stop Telnet		The Remote Admin feature provides the service technician a valuable way to access a printer in its BIOS environment without physically having to be at the device.
		Refresh IP		The product acts as a Telnet server which is a well-accepted standard networking protocol for transmitting textual data. This implementation allows any standard Telnet client to display the BIOS screen as well as receive keyboard input for navigation and allows the user to interact with the BIOS as if he were standing right at the device.
		Copy Logs		Copy Logs will place existing log files onto a USB Thumbdrive inserted into the device. The drive must be FAT32 formatted.
Service Tools	Reset Admin Password			This item requires the Service access code. Use this item to clear the Administrator password.
	Subsystems			For manufacturing use only. Do not change these values.

Product updates

To download the most recent firmware upgrade for the product, go to www.hp.com/support/colorljM750.

Determine the installed revision of firmware

Print a configuration page to determine the installed revision of firmware. See [Configuration page on page 339](#).

On the configuration page, look in the section marked Device Information for the firmware datecode and firmware revision.

Firmware datecode and firmware revision examples

- 20100831 (firmware datecode)
- 103067_104746 (firmware revision)

Perform a firmware upgrade

The firmware bundle is a xxxxxxxx .bd1 file. This file requires an interactive upgrade method. You cannot upgrade the printer using the traditional FTP, LPR or Port 9100 methods of upgrading. Use one of the following methods to upgrade the firmware for this product.

Embedded Web Server

1. Open a browser window.
2. Enter the product IP address in the URL line.
3. Select the **Firmware upgrade** link from within the **Troubleshooting** tab.



NOTE: If you get a warning screen, follow the instructions for setting an administrator password from the **Security** tab.

4. Browse to the location that the firmware upgrade file was downloaded to, and then select the firmware file. Select the Install button to perform the upgrade.



NOTE: Do not close the browser window until the Embedded Web Server (EWS) displays the confirmation page.

5. Select **Restart Now** from the EWS confirmation page, or turn the product off, and then on again using the power switch.

USB storage device (Preboot menu)

1. Copy the `xxxxxxxx.bdl` file to a portable USB flash memory storage device (thumb drive).
2. Turn the product on.
3. Press the **Stop** button when the **Ready**, **Data** and **Attention** LEDs illuminate solid.
4. Press the down arrow ▼ button to highlight **Administrator**, and then press the **OK** button.
5. Press the down arrow ▼ button to highlight **Download**, and then press the **OK** button.
6. Insert the portable USB storage device with the `xxxxxxxx.bdl` file on it.



NOTE: If the error message **No USB Thumbdrive Files Found** appears on the control-panel display, you might need to connect the storage device to the external USB connection on the formatter or try using a different portable storage device.

7. Press the down arrow ▼ button to highlight **USB Thumbdrive**, and then press the **OK** button.
8. Press the down arrow ▼ button to highlight the `xxxxxxxx.bdl` file, and then press the **OK** button.



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



TIP: If there is more than one `xxxxxxxx.bdl` file on the storage device, make sure that you select the correct file for this product.

9. When the message **Complete** appears on the control-panel display, press the **Back** button 3 times.
10. When the message **Continue** appears on the control-panel display, press the **OK** button. The product will initialize.
11. When the upgrade process is complete, print a configuration page and verify that the upgrade firmware version was installed. See [Configuration page on page 339](#) and [Determine the installed revision of firmware on page 535](#).

USB storage device (control-panel menu)

1. Copy the `xxxxxxxx.bdl` file to a portable USB flash memory storage device (thumbdrive).
2. Turn the product on, and then wait until it reaches the Ready state.
3. Press the Home button or **OK** button.
4. Press the down arrow ▼ button to highlight **Device Maintenance**, and then press the **OK** button.
5. Press the down arrow ▼ button to highlight **USB Firmware Upgrade**, and then press the **OK** button.
6. Insert the portable USB storage device with the `xxxxxxxx.bdl` file on it into the USB port on the front of the product, and then press the **OK** button.
7. Press the down arrow ▼ button to highlight the `xxxxxxxx.bdl` file, and then press the **OK** button.



TIP: If there is more than one `xxxxxxxx.bdl` file on the storage device, make sure that you select the correct file for this product.

8. A prompt to upgrade an older, newer, or reinstall the same version appears. Press the down arrow ▼ button to highlight the desired option, and then press the **OK** button.

When the upgrade is complete, the product will initialize.



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

9. When the upgrade process is complete, print a configuration page and verify that the upgrade firmware version was installed. See [Configuration page on page 339](#) and [Determine the installed revision of firmware on page 535](#).

4 Parts and diagrams

- [Order parts by authorized service providers](#)
- [How to use the parts lists and diagrams](#)
- [Assembly locations](#)
- [External covers, panels, and doors](#)
- [Right door assembly](#)
- [Internal components \(1 of 9\)](#)
- [Internal components \(2 of 9\)](#)
- [Internal components \(3 of 9\)](#)
- [Internal components \(4 of 9\)](#)
- [Internal components \(5 of 9\)](#)
- [Internal components \(6 of 9\)](#)
- [Internal components \(7 of 9\)](#)
- [Internal components \(8 of 9\)](#)
- [Internal components \(9 of 9\)](#)
- [1x250 cassette](#)
- [Paper pick-up assembly](#)
- [Paper delivery assembly](#)
- [Printed circuit assemblies](#)
- [1x500 paper feeder](#)
- [3x500 paper feeder](#)
- [Alphabetical parts list](#)
- [Numerical parts list](#)

Order parts by authorized service providers

Order parts, accessories, and supplies

Table 4-1 Order parts, accessories, and supplies

Order supplies and paper	www.hp.com/go/suresupply
Order genuine HP parts or accessories	www.partsurfer.hp.com
Order through service or support providers	Contact an HP-authorized service or support provider.
Order using HP software	For information about using the HP software to order parts, accessories, and supplies, see the product user guide.

Related documentation and software

Table 4-2 Related documentation and software

Item	Description	Part number
<i>HP Color LaserJet Enterprise M750 Printer Series User Guide</i>	Product user guide	D3L08-90907
<i>HP Color LaserJet Enterprise M750 Printer Series Service Manual</i>	English service manual (this manual)	D3L08-90966

Supplies part numbers

Table 4-3 Supplies part numbers

Item	Description	Part number
HP LaserJet print cartridges with HP ColorSphere toner	Black print cartridge	CE270A (new) CE270-67901 (service)
	Cyan print cartridge	CE271A (new) CE271-67901 (service)
	Yellow print cartridge	CE272A (new) CE272-67901 (service)
	Magenta print cartridge	CE273A (new) CE273-67901 (service)

Customer self repair parts

Each kit includes parts and installation instructions. The customer self repair (CSR) level indicates the expected difficulty the customer will experience when replacing this part:

- A = Mandatory customer replaceable
- B = Optional—customer may request service replacement
- C = Service replaceable only

Item	Part number	CSR level
Tray 2 replacement kit	CE710-67907	A
<ul style="list-style-type: none"> • Tray 2 cassette • Tray label kit • Tray 2 shipping lock document for just the tray • Installation instructions 		
1x500 sheet tray 3-6 replacement kit; gray	CF235-67917	A
<ul style="list-style-type: none"> • 1X500 sheet tray - cassette; gray • Tray label kit 		
Tray label kit	5851-5600	A
1x500-sheet feeder (Tray 3) kit	CE860-67901	A
<ul style="list-style-type: none"> • 1x500-sheet feeder • Installation instructions 		

Item	Part number	CSR level
3x500-sheet feeder (Trays 4, 5, and 6) with stand kit	CE725-67901	A
<ul style="list-style-type: none"> • 3x500-sheet feeder with stand • Installation instructions 		
Encrypted hard disk drive kit	D3L08-67903	B
<ul style="list-style-type: none"> • Encrypted hard disk drive, 320 GB • Disk drive cradle • Installation instructions 		
U.S. Government hard disk drive,	D3L08-67904	B
<ul style="list-style-type: none"> • FIPS 140 HDD • Disk drive cradle • Installation instructions 		
Solid-state memory	CE707-67901	B
<ul style="list-style-type: none"> • Solid-state module, 8GB • Solid-state module retainer • Installation instructions 		
Formatter kit	D3L08-67901	A
<ul style="list-style-type: none"> • Formatter PCA • Formatter tray • Screws • PCI X Guide • Face plate I/O label • Installation instructions 		
Fuser kit	110 volt: CE707-67912	A
<ul style="list-style-type: none"> • Fuser assembly • Installation instructions 	220 volt: CE707-67913	
Intermediate transfer belt (ITB) maintenance kit	CC522-67910	A
<ul style="list-style-type: none"> • ITB assembly • Secondary transfer roller assembly • Tray 2 pick-up roller assembly • Tray 2 separation roller assembly • Tray 3, 4, 5, 6 pick-up rollers • Tray 3, 4, 5, 6 feed roller assembly • Installation instructions 		

Item	Part number	CSR level
Intermediate transfer belt (ITB) repair kit	CC522-67911	A
<ul style="list-style-type: none"> ITB assembly Secondary transfer roller assembly Installation instructions 		
Secondary transfer roller (T2) kit	CC522-67912	A
<ul style="list-style-type: none"> Secondary transfer roller assembly Installation instructions 		
Toner collection unit kit	CE980-67901	A
<ul style="list-style-type: none"> Waste toner box assembly Toner cleaning cloth Installation instructions 		
Tray 1 paper pick-up roller and separation pad kit	CC522-67928	A
<ul style="list-style-type: none"> Paper pick-up roller Separation pad Installation instructions 		
Tray 2 paper pick-up roller kit	CE710-69007	A
<ul style="list-style-type: none"> Paper pick-up roller assembly Separation roller assembly Installation instructions 		
Tray 3, 4, 5, and 6 paper pick-up roller kit	CC522-67909	A
<ul style="list-style-type: none"> Paper pick-up roller assembly Feed roller assembly Installation instructions 		

Service replacement parts

Item	Part number
DC controller assembly	Simplex: CE707-67906
<ul style="list-style-type: none"> DC controller assembly Installation instructions 	Duplex: CE708-67902
Front cover assembly kit	CE707-67902
<ul style="list-style-type: none"> Front cover assembly HP logo jewel 	

Item	Part number
Fuser drive unit	CE707-67904
<ul style="list-style-type: none"> • Fuser drive assembly • Installation instructions 	
Inner door assembly	CC522-67906
<ul style="list-style-type: none"> • Inner door assembly • Four color cartridge labels 	
Interconnect board (ICB) PCA	CE707-67907
<ul style="list-style-type: none"> • ICB PCA • Installation instructions 	
Main drive assembly	Simplex: CE707-67905
<ul style="list-style-type: none"> • Main drive assembly • Installation instructions 	Duplex: CE708-67901
Paper pick-up assembly	CE707-67903
<ul style="list-style-type: none"> • Paper pick-up assembly • Installation instructions 	
Toner vacuum kit	110 volt: CC468-69002
<ul style="list-style-type: none"> • Toner vacuum • Instructions for use 	220 volt: CC468-69003
Tray 2 gray handle kit	CC522-67940
<ul style="list-style-type: none"> • Tray 2 gray handle • Installation instructions 	
1x500/3x500 gray handle kit	CC522-67941
<ul style="list-style-type: none"> • 1x500/3x500 gray handle • Installation instructions 	

Accessories part numbers

Table 4-4 Accessories part numbers

Item	Description	Part number
Optional 1x500-sheet tray	Optional tray to increase paper capacity.	CE860A
Optional 3x500-sheet tray and feeder unit	Optional tray to increase paper capacity.	CE725A
USB cable	2-meter A-to-B cable	C6518A
Power cord	China 220V - 10A	8121-0943
	Taiwan 110V - 13A	8121-0964
	Korea 220V - 10A	8121-0731
	Japan 110V - 12A	8121-1143
	India 220V - 6A	8121-0564
	Asia Pacific 220V - 10A	8121-0739
	Australia/New Zealand 220V - 10A	8121-0837
	Israel 220V - 10A	8121-1004
	Denmark 220V - 10A	8121-0733
	South Africa 220V - 10A	8121-0737
	Switzerland 220V - 10A	8121-0738
	Brazil 110V - 10A	8121-0734
	Argentina 220V - 10A	8121-0729
	North America 110V - 13A	8121-1141
	Israel - Unique cord	8120-8913
Switzerland - Unique cord	8121-0844	
Rest of World - Standard 2-wire RJ-11	8121-0811	

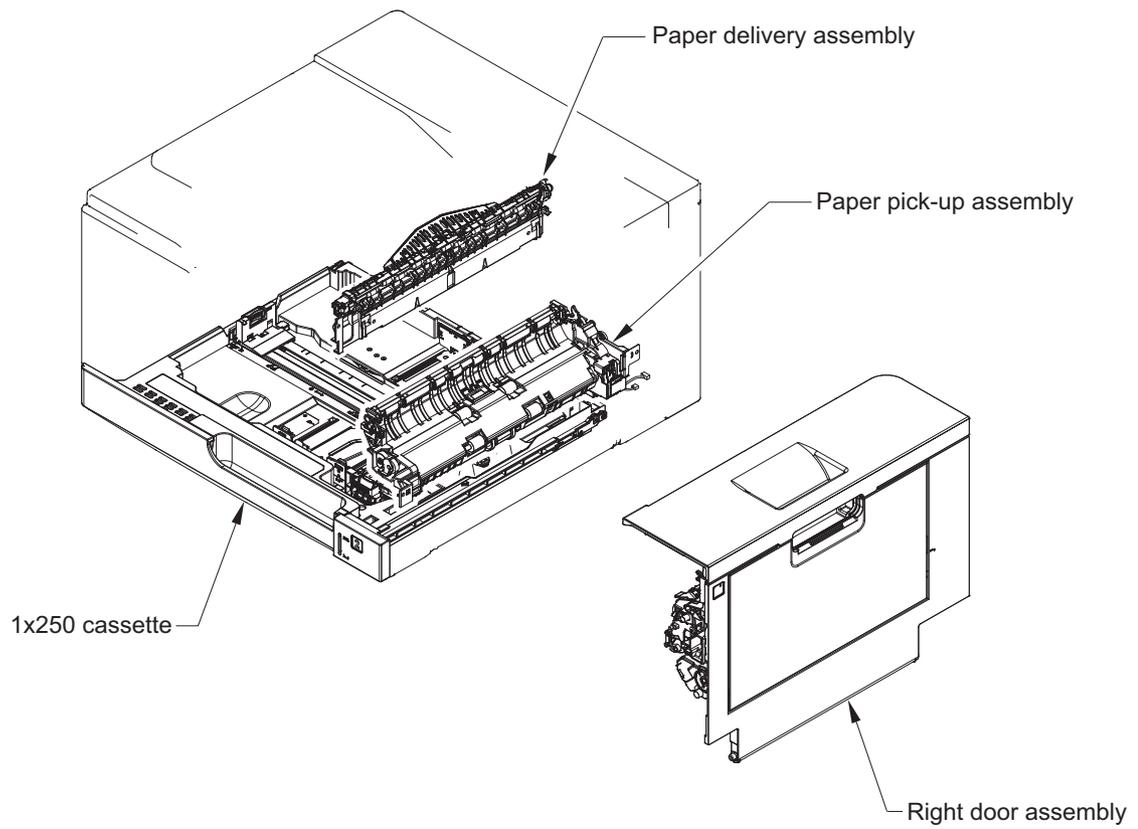
How to use the parts lists and diagrams

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

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

Assembly locations



External covers, panels, and doors

Figure 4-1 External covers, panels, and doors

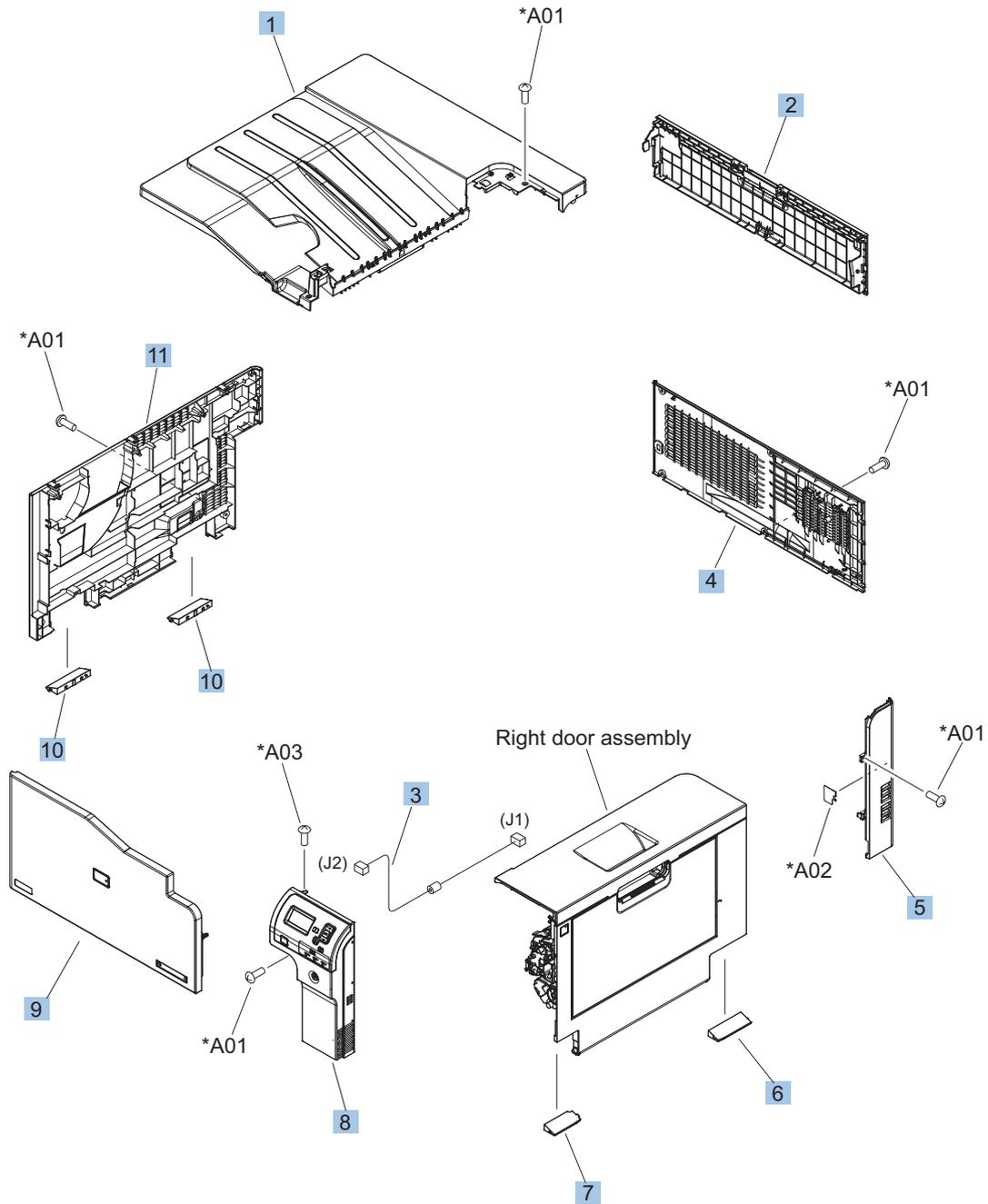


Table 4-5 External covers, panels, and doors

Ref	Description	Part number	Qty
1	Cover, top	RM1-7148-000CN	1
2	Door, toner collection unit access	RC2-7034-000CN	1
3	Cable, USB	RK2-2901-000CN	1
4	Cover, rear	RM1-7147-000CN	1
5	Cover, right rear	RM1-7142-000CN	1
6	Cover, handle, lower-right, rear	RC2-6626-000CN	1
7	Cover, handle, lower-right, front	RC2-6627-000CN	1
8	Cover, right front assembly (includes control panel)	RM1-7144-000CN	1
9	Cover, front assembly	CE707-67902	1
10	Cover, handle, lower-left	RC2-6625-000CN	2
11	Cover, left assembly	RM1-7143-000CN	1

Right door assembly

Figure 4-2 Right door assembly

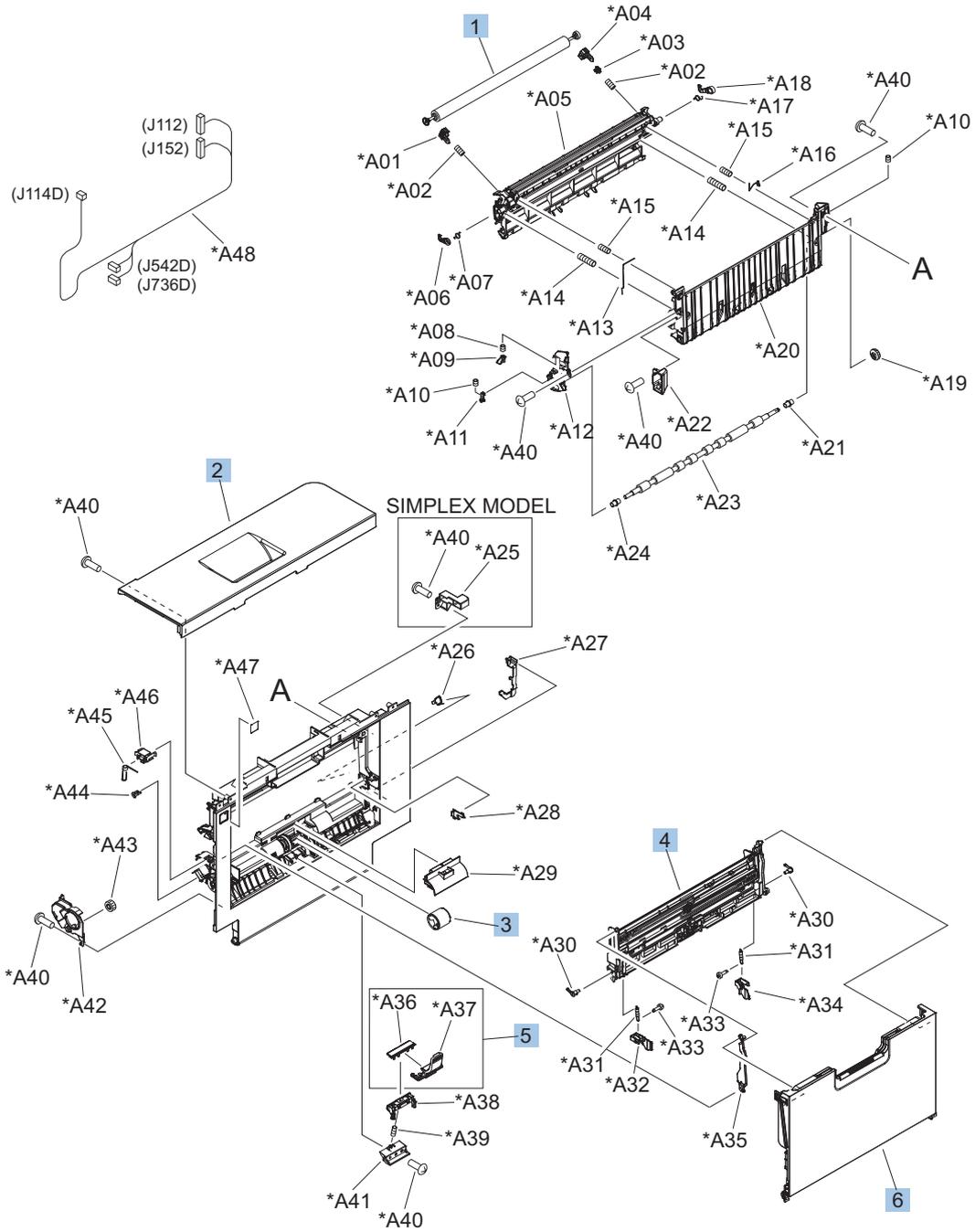


Table 4-6 Right door assembly

Ref	Description	Part number	Qty
	Right door assembly, duplex model	RM1-6007-000CN	1
	Right door assembly, simplex model	RM1-6138-000CN	1
1	Roller, secondary transfer, T2 (included in the service kit)	CC522-67912	1
2	Door, right upper	RC2-7091-000CN	1
3	Roller, paper pick-up, Tray 1 (included in the service kit)	CC522-67928	1
4	Lifter plate assembly, Tray 1	RM1-6043-000	1
5	Pick roller and separation pad, Tray 1 (included in the service kit)	CC522-67928	1
6	Tray 1 (MP tray) assembly	RM1-6045-000CN	1

Internal components (1 of 9)

Figure 4-3 Internal components (1 of 9)

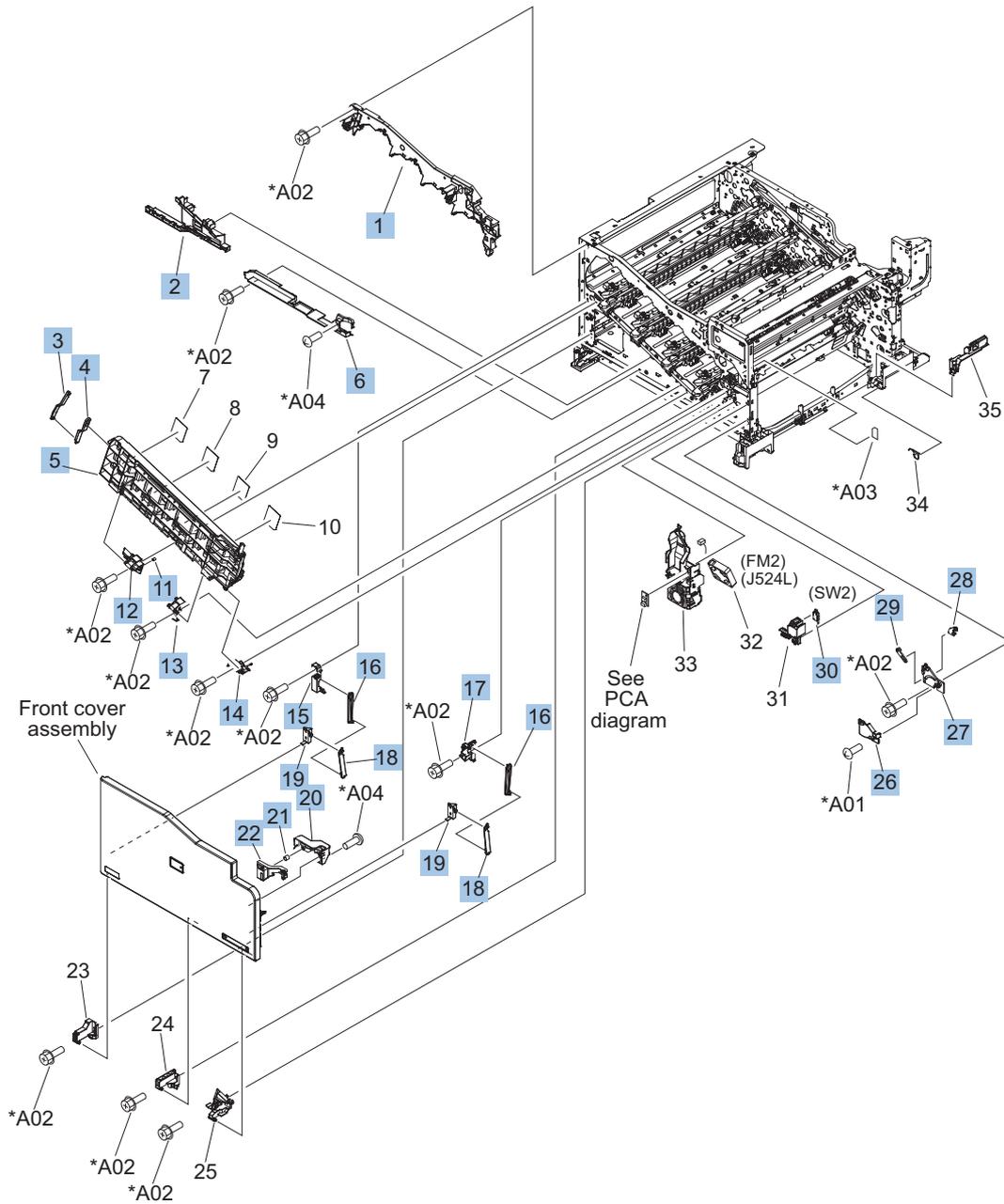


Table 4-7 Internal components (1 of 9)

Ref	Description	Part number	Qty
1	Upper cartridge guide assembly	RM1-5990-000CN	1
2	Duct, front	RC2-7300-000CN	1
3	Stopper, inner door, 1	RC2-6719-000CN	1
4	Stopper, inner door, 2	RC2-6736-000CN	1
5	Door, inner, service kit includes all labels	CC522-67906	1
6	Cover, lower front	RC2-6737-000CN	1
11	Spring, grounding	RC2-7209-000CN	1
12	Hinge, inner door, left	RC2-6716-000CN	1
13	Hinge, inner door, right	RC2-6712-000CN	1
14	Rail, cartridge auxiliary	RC2-6724-000CN	1
15	Mount, cover arm, front	RC2-6735-000CN	1
16	Arm, front cover, 1	RC2-6732-000CN	2
17	Mount, inner door toggle	RC2-6717-000CN	1
18	Arm, front cover, 2	RC2-6733-000CN	2
19	Mount, stopper arm	RC2-6745-000CN	2
20	Mount, inner door rail	RC2-6743-000CN	1
21	Spring, compression	RU6-2721-000CN	1
22	Lever, inner door pressure	RC2-6744-000CN	1
23	Hinge, front cover, left	RC2-6713-000CN	1
24	Hinge, front cover, center	RC2-6738-000CN	1
25	Hinge, front cover, right	RC2-6715-000CN	1
26	Cover, guide	RC2-7204-000CN	1
27	Guide, arm, front	RC2-6632-000CN	1
28	Lever, push	RC2-7198-000CN	1
29	Lever, lift, 2	RC2-7200-000CN	1
30	Microswitch	WC4-5251-000CN	1

Internal components (2 of 9)

Figure 4-4 Internal components (2 of 9)

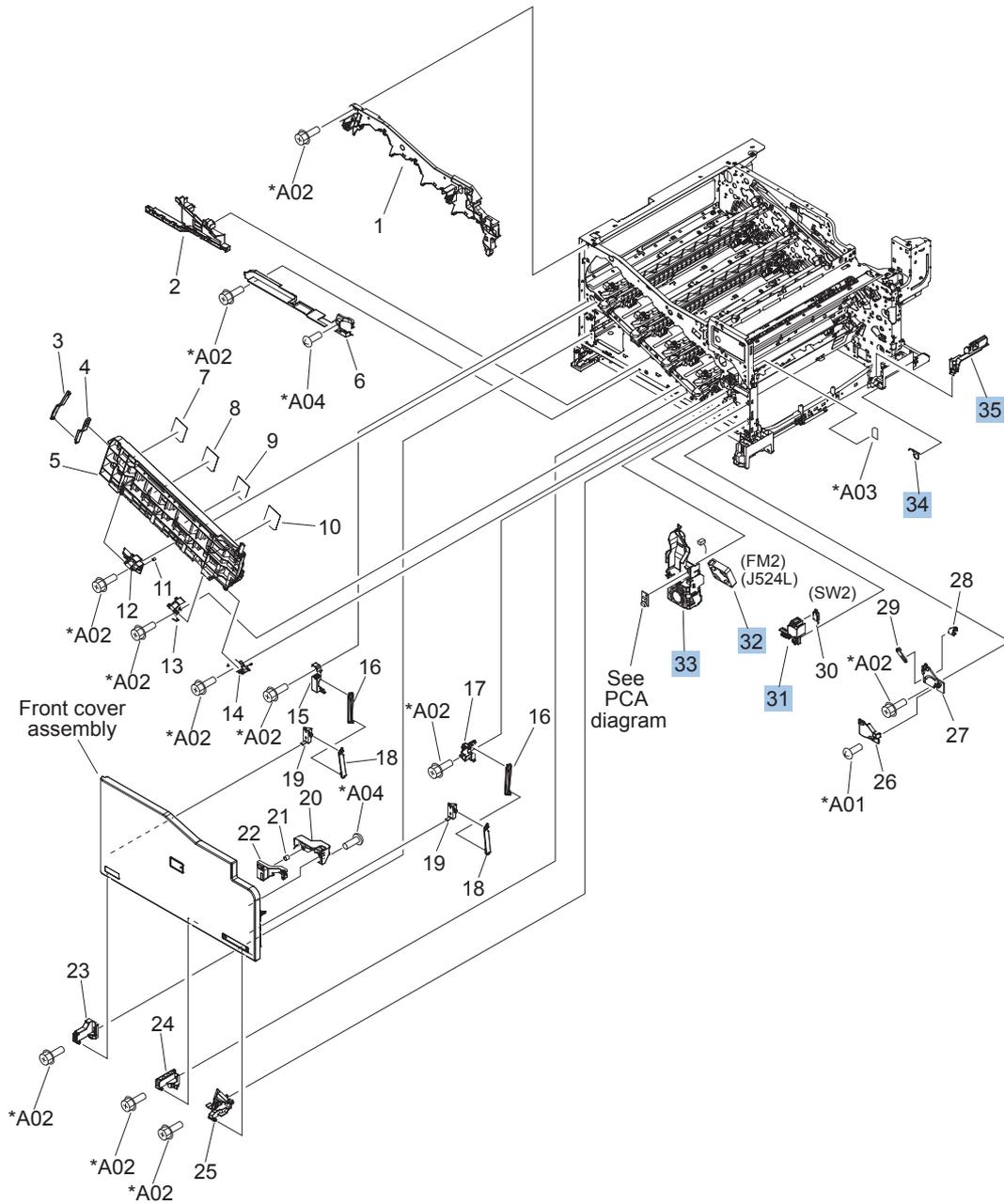


Table 4-8 Internal components (2 of 9)

Ref	Description	Part number	Qty
31	Holder, interlock switch	RC2-6689-000CN	1
32	Fan, fuser	RK2-2728-000CN	1
33	Holder, duplexing fan	RC2-8357-000CN	1
34	Spring, leaf, grounding	RC2-7092-000CN	1
35	Cover, handle guide	RC2-6670-000CN	1

Internal components (3 of 9)

Figure 4-5 Internal components (3 of 9)

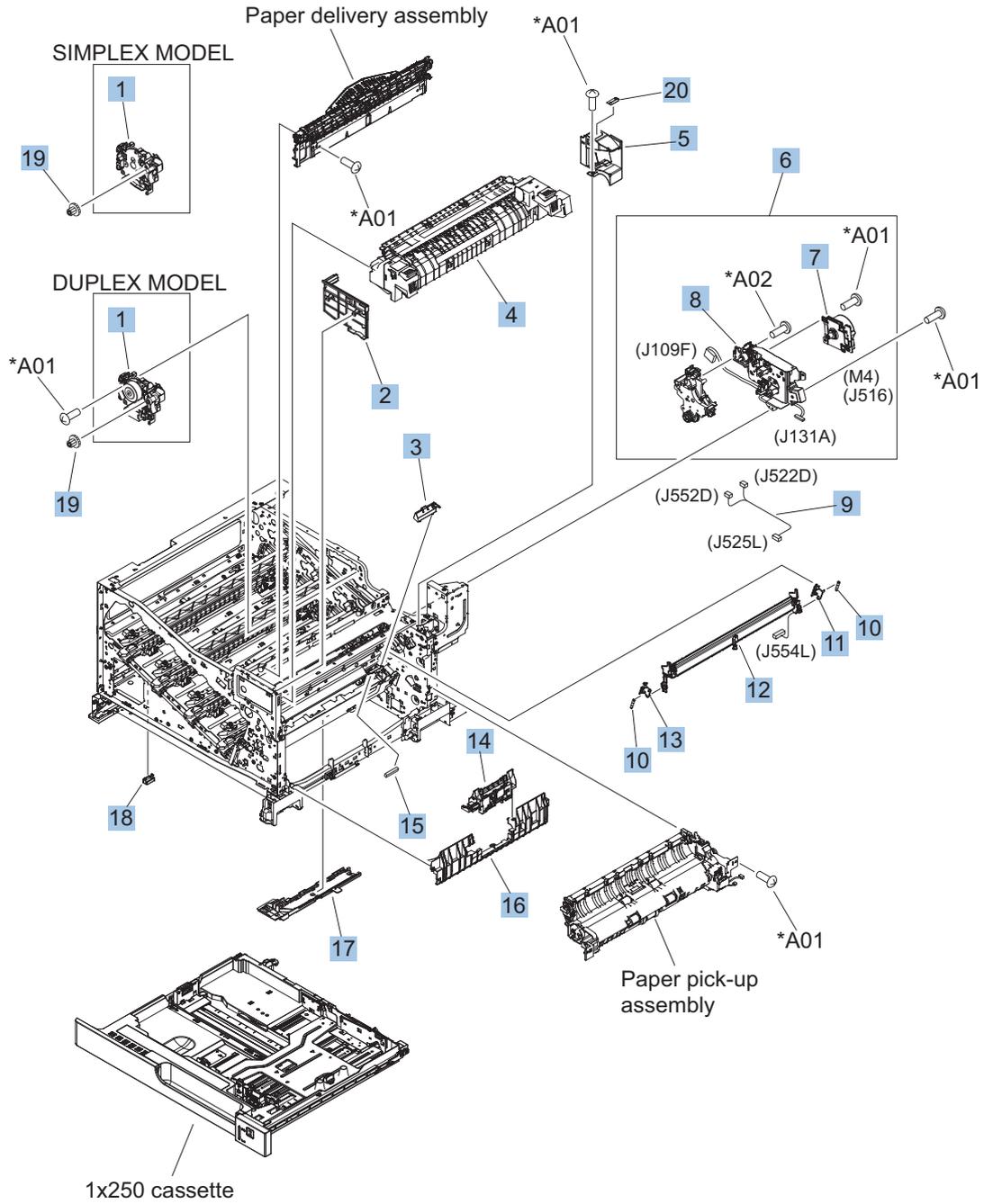


Table 4-9 Internal components (3 of 9)

Ref	Description	Part number	Qty
1	Drive assembly, duplex reverse, duplex model	RM1-6005-000CN	1
1	Drive assembly, simplex reverse, simplex model	RM1-6120-000CN	1
2	Guide, fuser, front	RC2-6546-000CN	1
3	Cover, cable, protective	RC2-6832-000CN	1
4	Fuser assembly, 110V (included in service kit)	CE707-67912	1
4	Fuser assembly, 220V (included in service kit)	CE707-67913	1
5	Guide, fuser, rear	RC2-6547-000CN	1
6	Fuser drive assembly	CE707-67904	1
7	Fuser motor assembly	RM1-6074-000CN	1
8	Gear assembly, fuser	RM1-7914-060CN	1
9	Cable, SB joint, low-voltage power supply, duplex model	RM1-6867-000CN	1
10	Spring, tension, registration sensor	RU6-2710-000CN	2
11	Support, frame, rear	RC2-7197-000CN	1
12	Registration sensor assembly	RM1-7922-000CN	1
13	Support, frame, front	RC2-7196-000CN	1
14	Tray 2 pickup and separation roller assembly (included in service kit)	CE710-69007	1
15	Connector, snap tight, black	VS1-7207-019CN	1
16	Guide, paper feed	RC2-7297-000CN	1
17	Sensor, cassette last paper presence	RM1-6164-000CN	1
18	Cover, connector, lower	RC2-6642-000CN	1
19	Gear, 18T/29T	RU6-0775-000CN	1
20	Label, fuser insert	RU6-8042-000CN	1

Internal components (4 of 9)

Figure 4-6 Internal components (4 of 9)

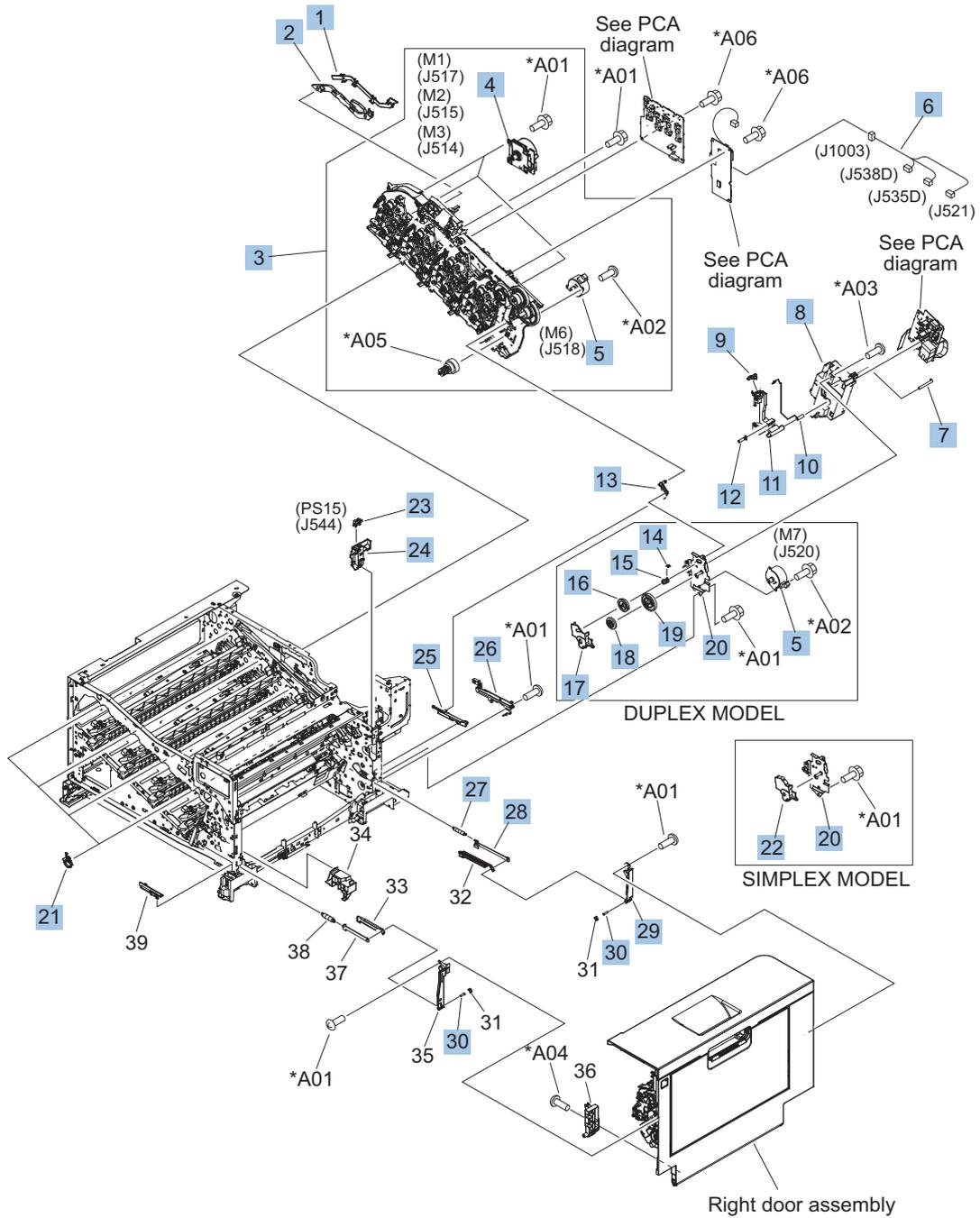


Table 4-10 Internal components (4 of 9)

Ref	Description	Part number	Qty
1	Cover, main drive cable, lower	RC2-6574-000CN	1
2	Guide, main drive cable	RC2-6659-000CN	1
3	Main drive assembly, duplex model	CE708-67901	1
3	Main drive assembly, simplex model	CE707-67905	1
4	DC motor assembly	RM1-6088-000CN	3
5	Motor, stepping, DC, duplex model	RK2-3298-000CN	2
5	Motor, stepping, DC, simplex model	RK2-3298-000CN	1
6	Cable, feed joint, duplex model	RM1-6846-000CN	1
7	Spring, grounding, second-transfer high-voltage PCA	RU6-2772-000CN	1
8	Holder, secondary transfer HVT	RC2-6681-010CN	1
9	Cap, T2 contact, second-transfer high-voltage PCA	RC2-6691-000CN	1
10	Spring, contact, second-transfer high-voltage PCA	RU6-2771-000CN	1
11	Holder, secondary transfer, power dispatching	RC2-6682-000CN	1
12	Spring, grounding, second-transfer high-voltage PCA	RC2-6700-000CN	1
13	Link, ITB coupling release	RC2-6823-000CN	1
14	Spring, tension, duplex model	RU6-2671-000CN	1
15	Hook, duplexing spring, duplex model	RC2-6932-000CN	1
16	Gear, 25T, duplex model	RU6-0771-000CN	1
17	Cover, duplexing gear, duplex model	RC2-6931-000CN	1
18	Gear, 25T, duplex model	RU6-0772-000CN	1
19	Gear, 74T, duplex model	RU6-0773-000CN	1
20	Plate, duplexing drive gear	RL1-2266-000CN	1
21	Support, developing coupling	RC2-6811-000CN	4
22	Cover, gear, simplex model	RC3-0688-000CN	1
23	Sensor, right door	WG8-5935-000	1
24	Holder, door sensor, right	RC2-6645-000CN	1
25	Arm, ITB coupling release	RC2-6824-000CN	1
26	Rail, door link, rear lower	RC2-6635-000CN	1
27	Spring, tension, rear	RU6-2744-000CN	1
28	Plate, right door link, rear	RC2-7273-000CN	1
29	Plate, right door link, fixed, rear	RL1-2282-000CN	1
30	Shaft, right door link	RU5-4979-000CN	2

Table 4-11 Internal components (5 of 9)

Ref	Description	Part number	Qty
31	Lock, door link, right	RC2-7234-000CN	2
32	Link, right door, 2 rear	RC2-7236-000CN	1
33	Link, right door, 2 front	RC2-7233-000CN	1
34	Duct, joint	RC2-8360-000CN	1
35	Plate, right door link, fixed, front	RL1-2281-000CN	1
36	Hinge, right door, front	RC2-7094-000CN	1
37	Plate, right door link, front	RC2-7272-000CN	1
38	Spring, tension, front	RU6-2727-000CN	1
39	Rail, door link, front lower	RC2-6634-000CN	1

Internal components (6 of 9)

Figure 4-8 Internal components (6 of 9)

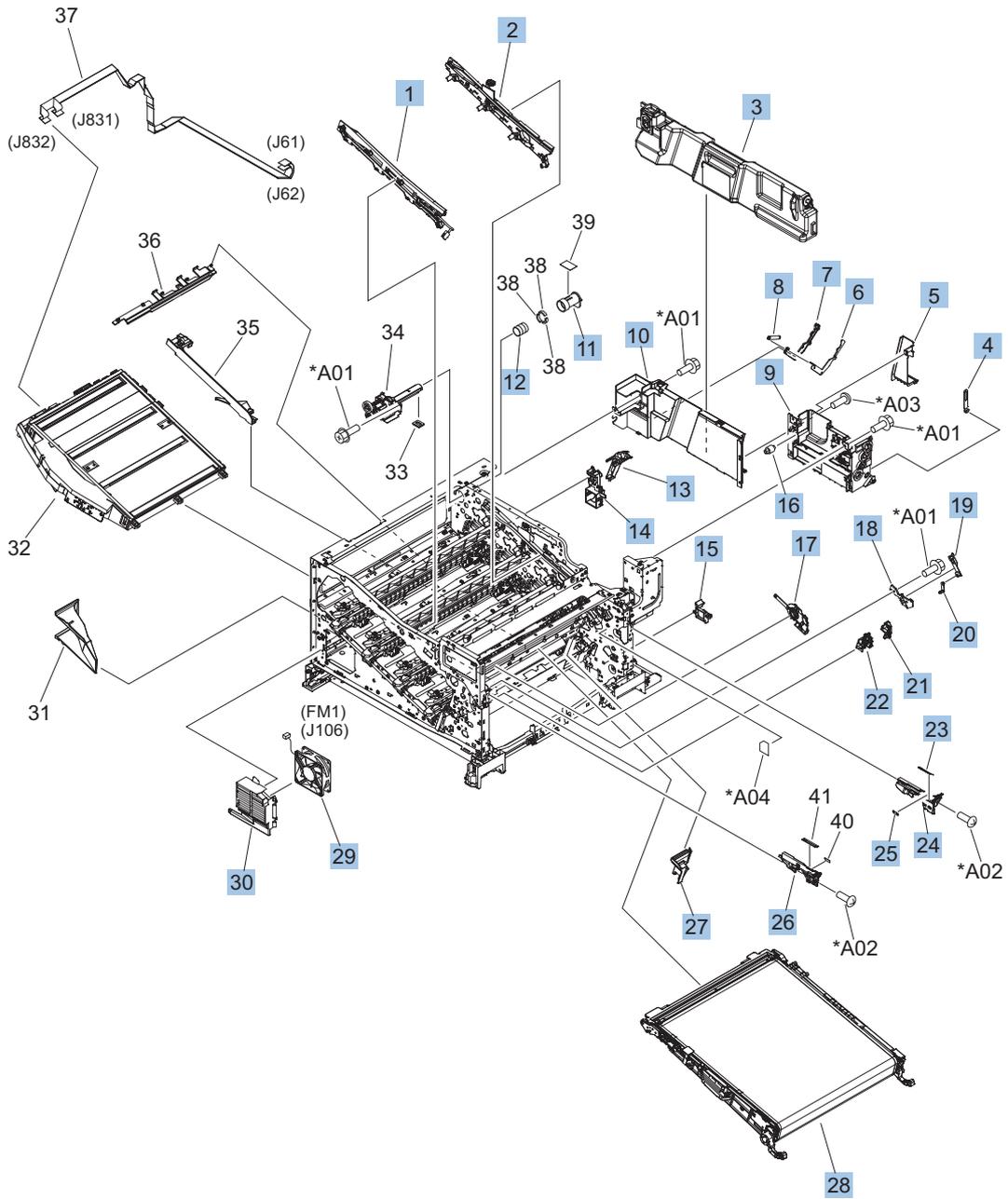


Table 4-12 Internal components (6 of 9)

Ref	Description	Part number	Qty
1	IT belt guide rail assembly	RM1-6018-000CN	1
2	IT belt guide rail R1 assembly	RM1-6037-000CN	1
3	Toner collection unit (included in the service kit)	CE980-67901	1
4	Arm, waste toner, left	RC2-7035-000CN	1
5	Cover, waste toner, 3	RC2-6963-000CN	1
6	Plate, arm reinforcement	RC2-9649-000CN	1
7	Arm, waste toner, right	RC2-7036-000CN	1
8	Spring, tension	RU6-2831-000CN	1
9	Waste toner cover assembly (includes Residual Toner Full Sensor)	RM1-6012-000CN	1
10	Cover, waste toner, 2	RC2-6962-000CN	1
11	Shutter, exhaust	RC2-7010-000CN	1
12	Spring, compression	RU6-2683-000CN	1
13	Guide, fuser AC cable	RC2-6693-000CN	1
14	Guide, LVT cable	RC2-6662-000CN	1
15	Clamp, edge	RC2-6663-000CN	1
16	Gear, link worm	RU6-0795-000CN	1
17	ITB guide rail assembly	RM1-6019-000CN	1
18	Guide, slide	RC2-7203-000CN	1
19	Slider, push	RC2-7201-000CN	1
20	Lever, lift, 1	RC2-7199-000CN	1
21	Cover, main cross-member cable	RC2-6650-000CN	1
22	Guide, main cross-member cable	RC2-6600-000CN	1
23	Label, ITB set, RH	RU5-8807-000CN	1
24	Rail, ITB guide	RC2-7185-000CN	1
25	Label, ITB, RV	RU5-8805-000CN	1
26	Rail, ITB guide, F3	RC2-7193-000CN	1
27	Guide, inside cable	RC2-6589-000CN	1
28	ITB assembly (included in the service kit; includes transfer roller)	CC522-67911	1
29	Fan, power supply	RK2-2276-000CN	1
30	Holder, power supply fan	RC2-7299-000CN	1

Internal components (7 of 9)

Figure 4-9 Internal components (7 of 9)

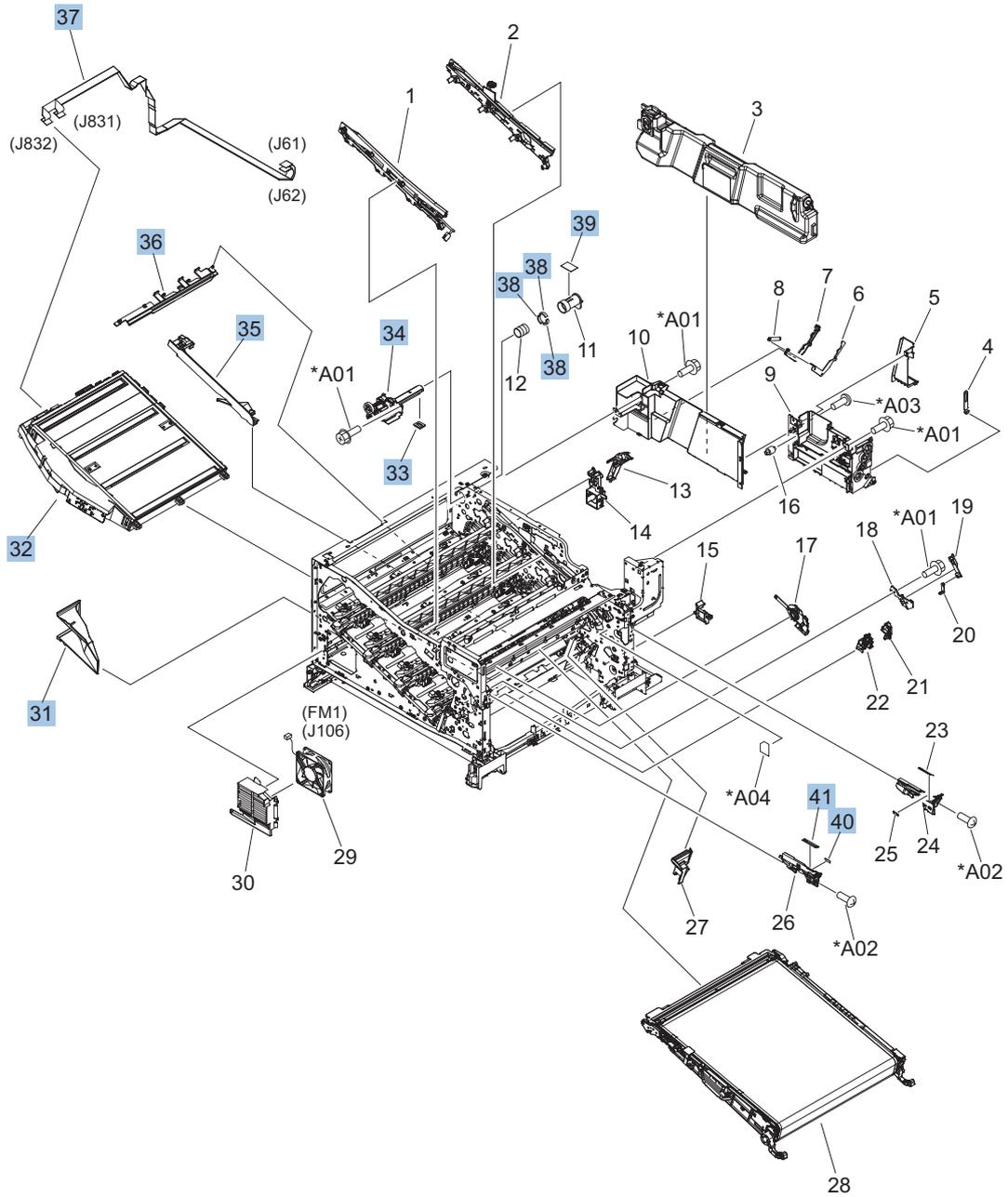


Table 4-13 Internal components (7 of 9)

Ref	Description	Part number	Qty
31	Duct, fan, 1	RC2-8388-000CN	1
32	Laser scanner assembly	RM1-6122-070CN	1
33	Seal, toner supporter guide 1	RC2-7018-000CN	1
34	Toner feed assembly	RM1-6040-000CN	1
35	Guide, laser	RC2-6628-000CN	1
36	Holder, flat flexible cable	RC2-6655-000CN	1
37	Cable assembly, flat-flexible	RM1-6804-000CN	1
38	Seal, slide shutter	RC3-1014-000CN	3
39	Sheet, slide seal	RC3-1013-000CN	1
40	Label, ITB insert, FV	RU5-8804-000CN	1
41	Label, ITB insert, FH	RU5-8806-000CN	1

Internal components (8 of 9)

Figure 4-10 Internal components (8 of 9)

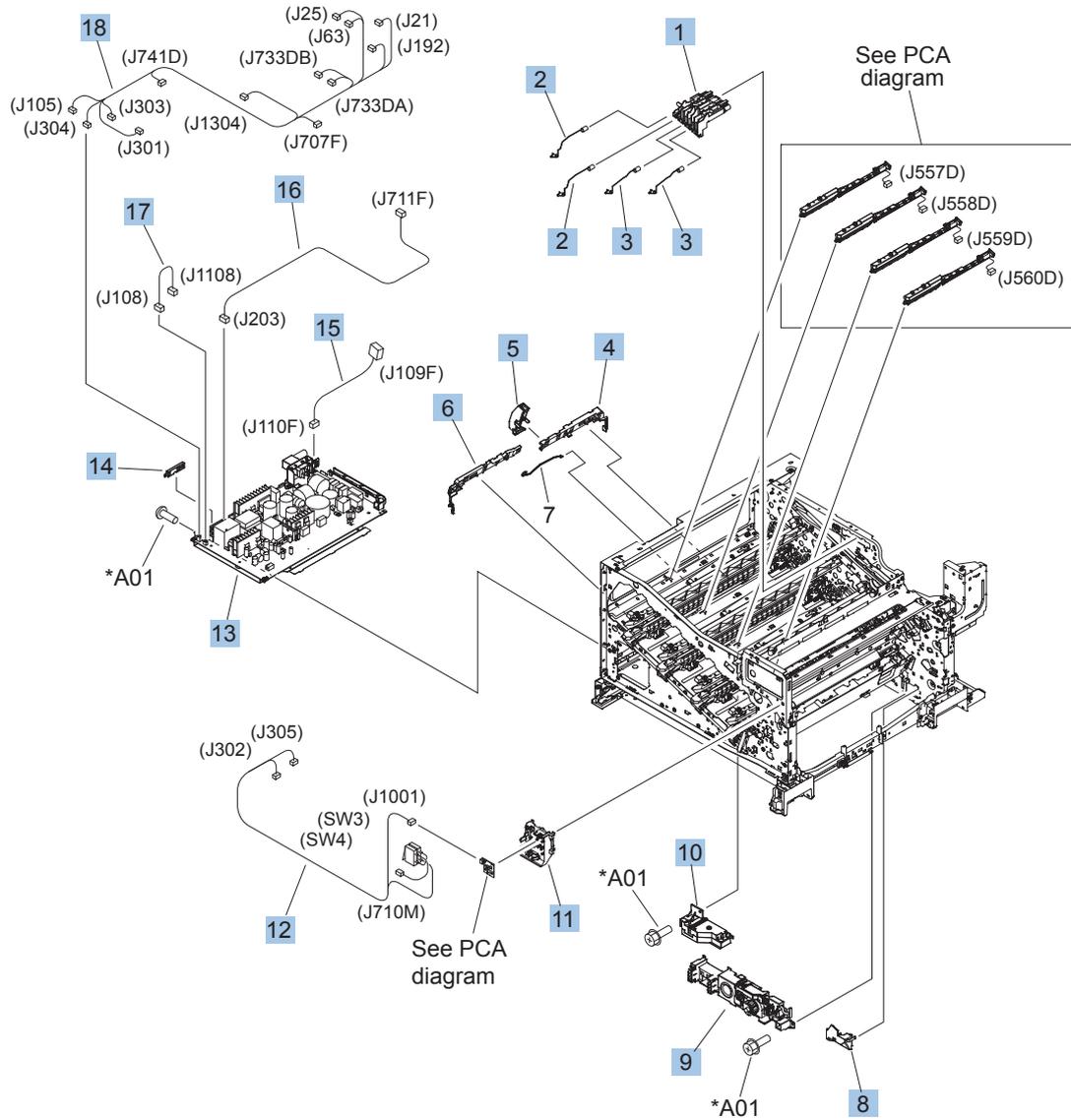


Table 4-14 Internal components (8 of 9)

Ref	Description	Part number	Qty
1	Holder, first power dispatching	RC2-6680-000CN	1
2	Spring, contact	RU6-2767-000CN	2
3	Spring, contact	RU6-2768-000CN	2
4	Guide, cross-member cable, rear	RC2-6588-000CN	1
5	Stopper, laser	RC2-6646-000CN	1
6	Guide, cross-member cable, front	RC2-6587-000CN	1
7	Spring, rod	RC2-6611-000CN	1
8	Cover, cable, right rear	RC2-8424-000CN	1
9	Lifter drive assembly	RM1-6039-000CN	1
10	Auto close assembly	RM1-6036-000CN	1
11	Holder, switch	RC2-6666-000CN	1
12	Cable, switch	RM1-6830-000CN	1
13	Low voltage power supply assembly, 110V	RM1-6753-000CN	1
13	Low voltage power supply assembly, 220V	RM1-6754-000CN	1
14	Guide, cable	RC3-0684-000CN	1
15	Cable, low-voltage AC joint	RM1-6811-000CN	1
16	Cable, low-voltage power supply	RM1-6807-000CN	1
17	Cable, low-voltage power supply, test	RM1-6813-000CN	1
18	Cable, left, high-voltage power supply to low-voltage power supply	RM1-6833-000CN	1

Internal components (9 of 9)

Figure 4-11 Internal components (9 of 9)

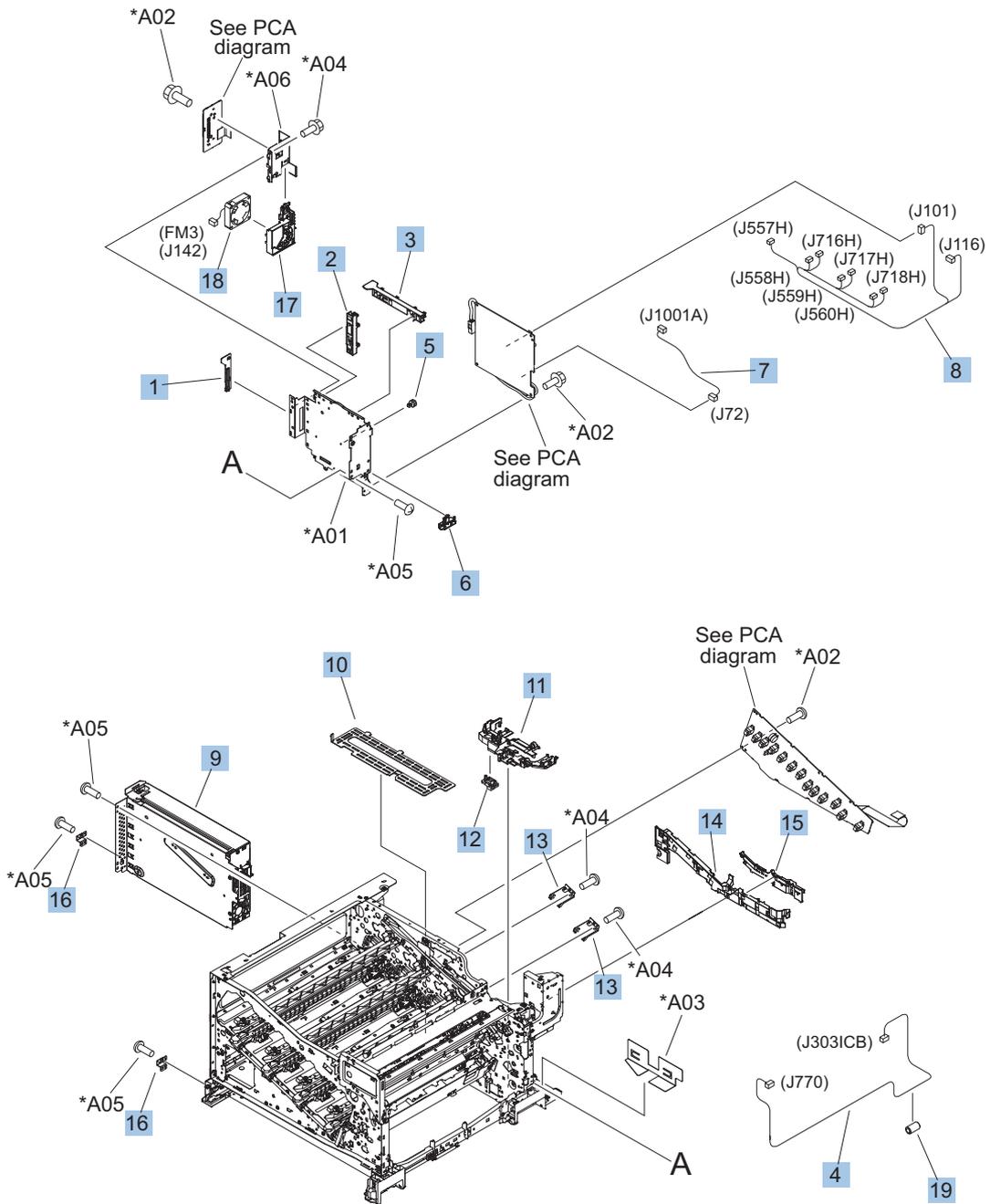


Table 4-15 Internal components (9 of 9)

Ref	Description	Part number	Qty
1	Clamp, edge, D	RC2-6674-000CN	1
2	Guide, cable, right	RC2-6842-000CN	1
3	Guide, cable, upper	RC2-6841-000CN	1
4	Cable, PNL-H-HI	RM1-6849-000CN	1
5	Spacer, DC controller PCA	VT2-5176-004CN	5
6	Guide, DC cont. support cable	RC2-6665-000CN	1
7	Cable, primary transfer	RM1-6822-000CN	1
8	Cable, rear	RM1-6863-000CN	1
9	Formatter case	RM1-6065-000CN	1
10	Plate, FFC protective	RC2-9687-000CN	1
11	Holder, paper pick-up connector	RC2-6638-000CN	1
12	Connector, 8-pin, paper-pick-up	VS1-7514-008CN	1
13	Plate, box pillar	RC2-6673-000CN	2
14	Guide, imaging HVT cable	RC2-6661-000CN	1
15	Cover, imaging HVT cable	RC2-6573-000CN	1
16	Cross-member, cover, left	RC2-6760-000CN	2
17	Holder, formatter fan	RC2-6648-000CN	1
18	Fan, formatter	RK2-3301-000CN	1
19	Core, ring	WE8-6639-000CN	1

1x250 cassette

Figure 4-12 1x250 cassette

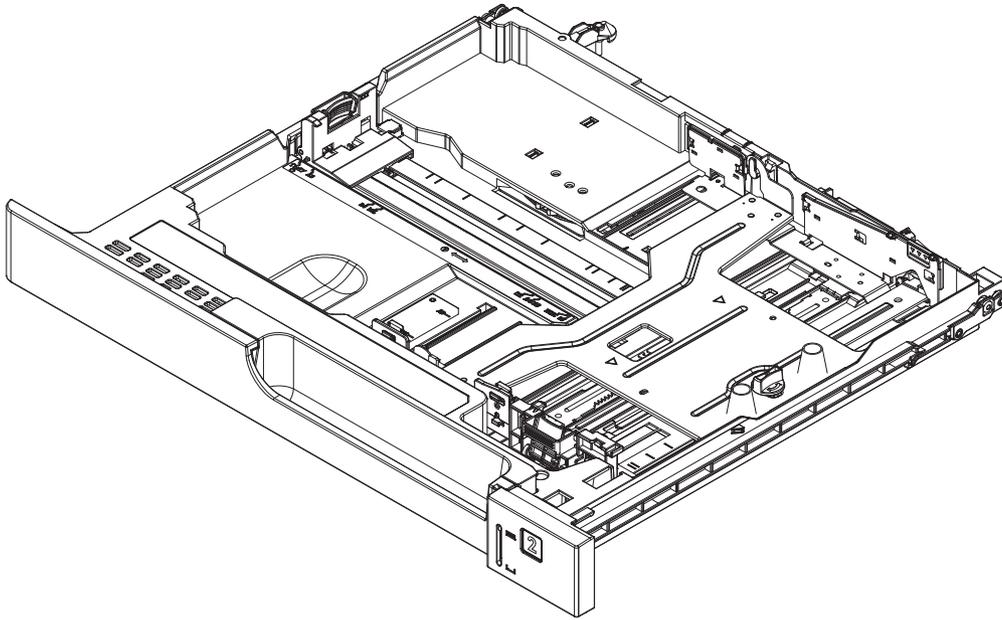


Table 4-16 1x250 cassette

Ref	Description	Part number	Qty
	Tray 2 replacement, gray	CE710-67907	1

Paper pick-up assembly

Figure 4-13 Paper pick-up assembly

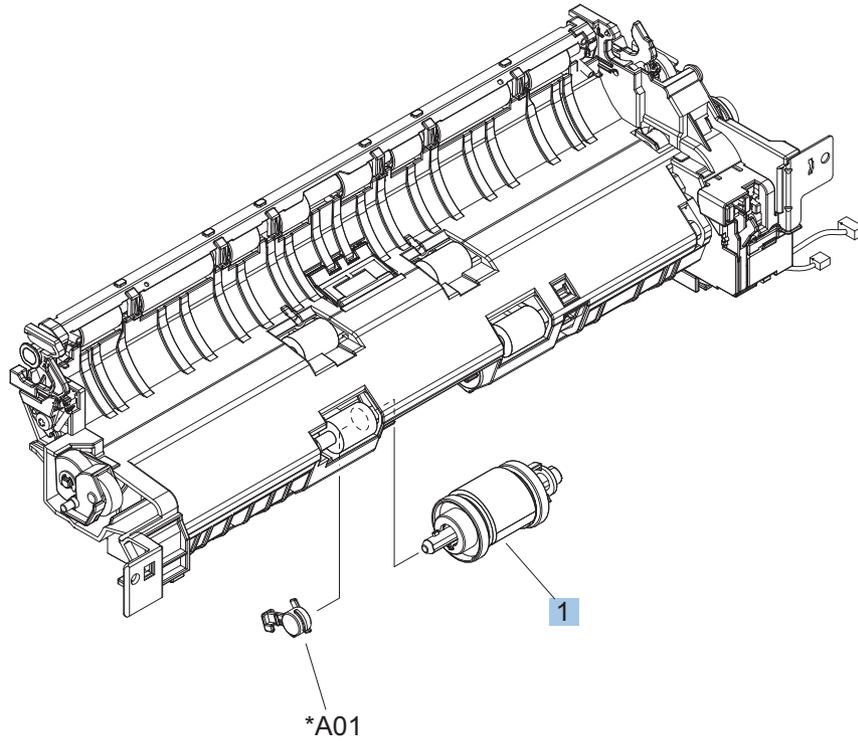


Table 4-17 Paper pick-up assembly

Ref	Description	Part number	Qty
	Paper pick-up assembly	CE707-67903	1

Paper delivery assembly

Figure 4-14 Paper delivery assembly

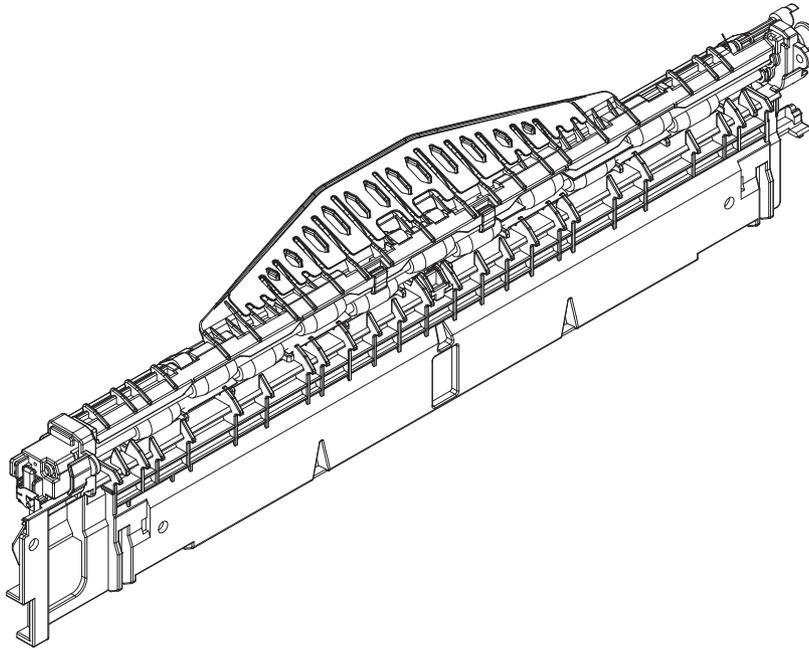


Table 4-18 Paper delivery assembly

Ref	Description	Part number	Qty
	Paper delivery assembly	RM1-6165-000CN	1

Printed circuit assemblies

Figure 4-15 PCAs

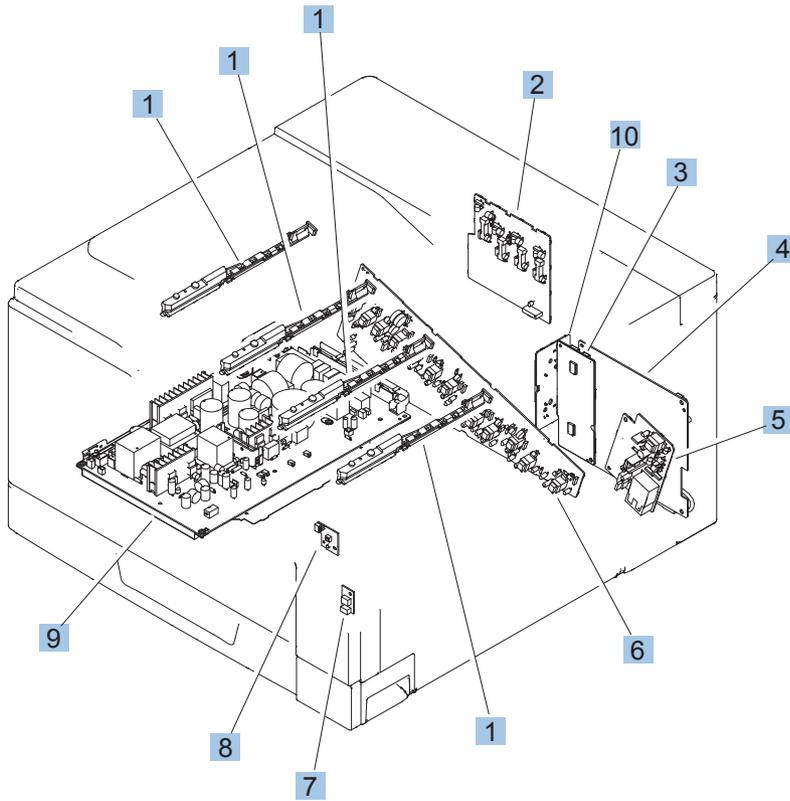


Table 4-19 PCAs

Ref	Description	Part number	Qty
1	Toner remaining detect PCA	RM1-6779-000CN	4
2	Primary transfer high-voltage PCA	RM1-7004-000CN	1
3	Driver PCA (duplex model)	RM1-6742-000CN	1
3	Driver PCA (simplex model)	RM1-6783-000CN	1
4	DC Controller PCA (duplex model)	CE708-67902	1
4	DC Controller PCA (simplex model)	CE707-67906	1
5	Secondary transfer high-voltage PCA	RM1-6802-000CN	1
6	Imaging high-voltage PCA	RM1-6800-000CN	1
7	Environment sensor PCA	RK2-2884-000CN	1
8	Power switch PCA	RM1-6759-000CN	1
9	Low-voltage power supply PCA (110V)	RM1-6753-000CN	1
9	Low-voltage power supply PCA (220V)	RM1-6754-000CN	1
Not shown	Formatter, replacement kit	D3L08-67901	1
Not shown	Formatter, replacement kit (China)	D3L08-67902	
10	Inter connect board (ICB) PCA	CE707-67907	1

1x500 paper feeder

The 1x500 paper feeder is referred to as the 1x500PF.

1x500PF external components

Figure 4-16 1x500PF external components

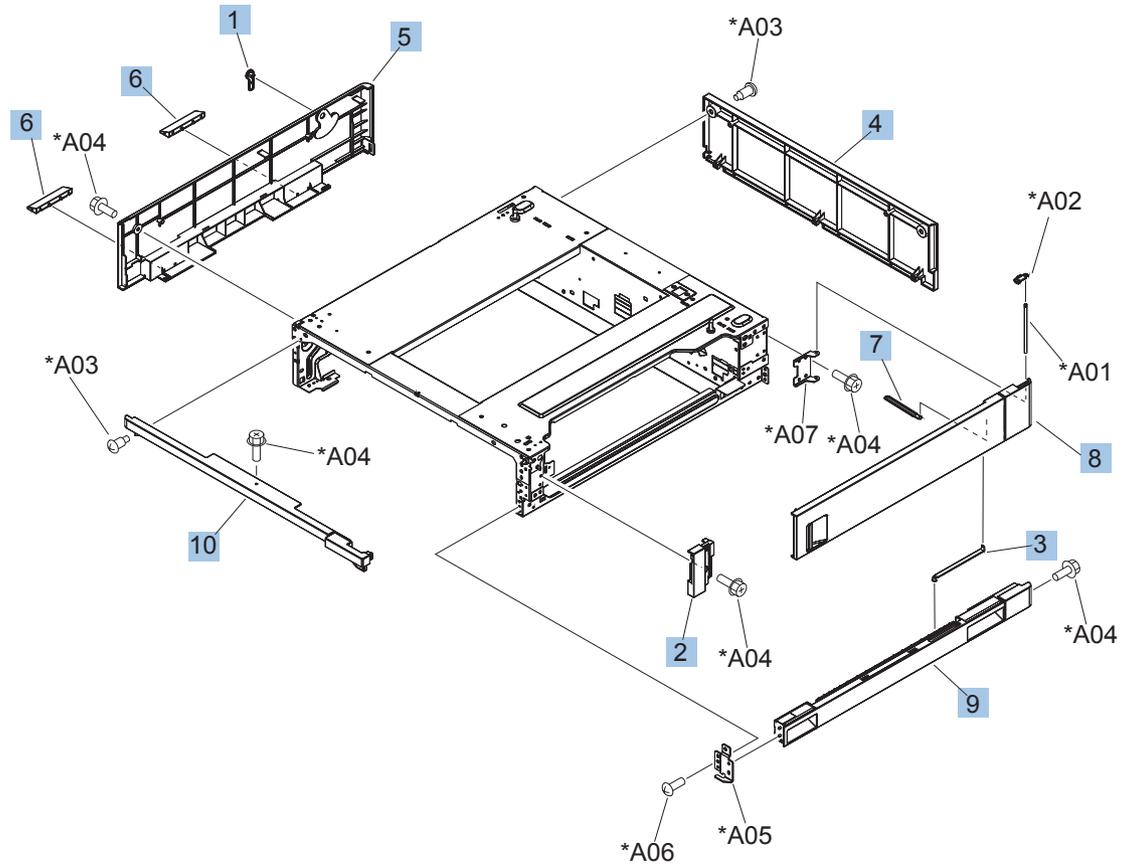


Table 4-20 1x500PF external components

Ref	Description	Part number	Qty
1	Handle, lock, rear (1x500PF)	RC2-9303-000CN	1
2	Cover, right front (1x500PF)	RC2-9320-000CN	1
3	Link, right door, lower (1x500PF)	RC2-9327-000CN	1
4	Cover, rear (1x500PF)	RC2-9330-000CN	1
5	Cover, left (1x500PF)	RC2-9331-000CN	1
6	Cover, handle, lower (1x500PF)	RC2-9332-000CN	2
7	Link, right door, upper (1x500PF)	RC2-9335-000CN	1
8	Right door assembly (1x500PF)	RM1-6946-000CN	1
9	Cover, right lower assembly (1x500PF)	RM1-6948-000CN	1
10	Cover, upper front assembly (1x500PF)	RM1-6949-000CN	1

1x500PF internal components

Figure 4-17 1x500PF internal components

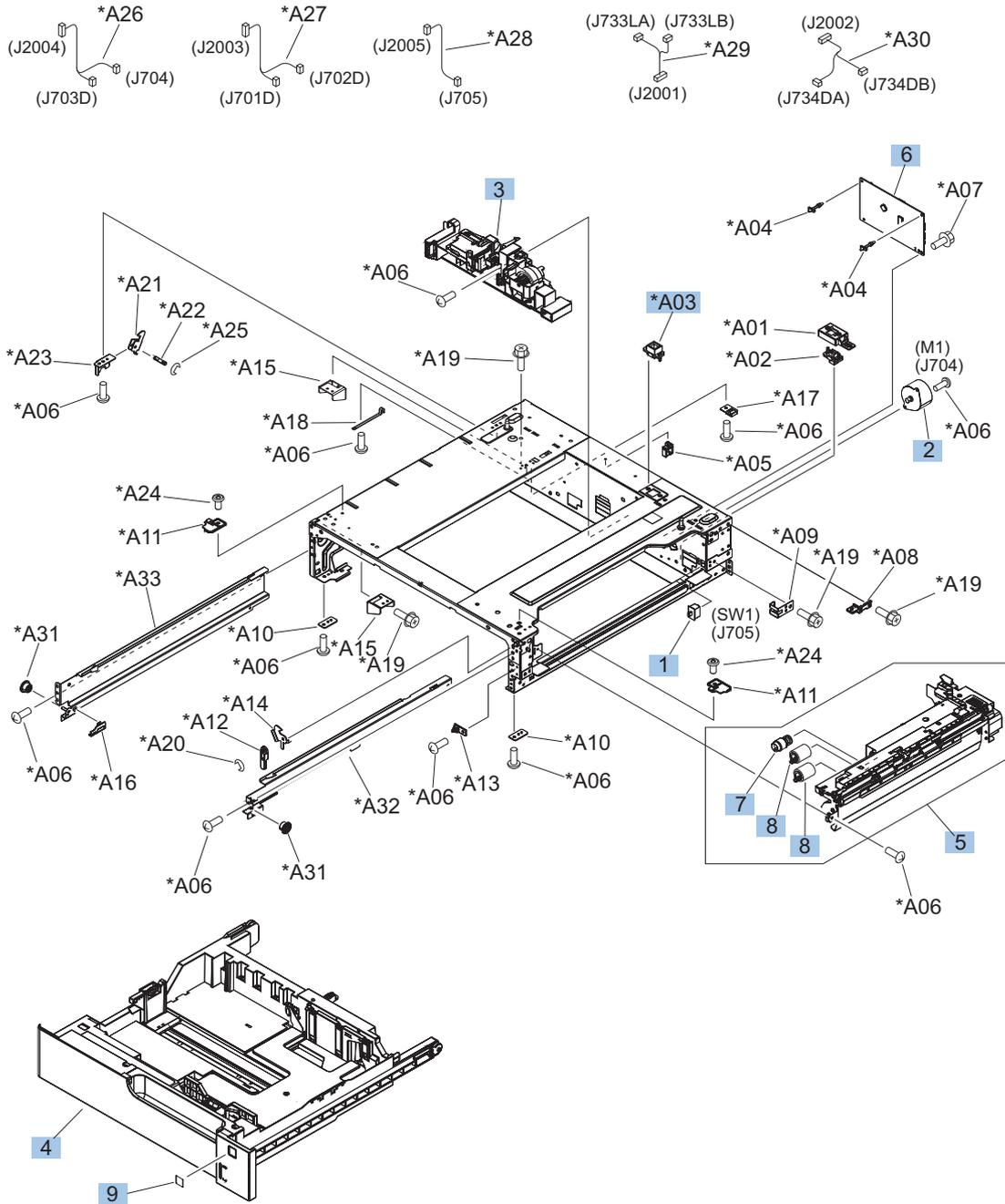


Table 4-21 1x500PF internal components

Ref	Description	Part number	Qty
1	Switch, bottom (1x500PF)	WC2-5512-000CN	1
2	Motor, pick-up (1x500PF)	RK2-1331-000CN	1
3	Lifter drive assembly (1x500PF)	RM1-3819-000CN	1
4	Cassette (1x500PF)	CF235-67917	1
5	Paper pick-up assembly (1x500PF)	RM1-6944-000CN	1
6	Paper feeder driver PCA (1x500PF)	RM1-6987-000CN	1
8	Roller, feed, paper feeder (included in service kit)	CE710-67908	2
9	Label, cassette number (1x500PF)	5851-5600	1
A03	Connector, 8P (1x500PF)	VS1-7514-008CN	1

1x500PF PCA

Figure 4-18 1x500PF PCA

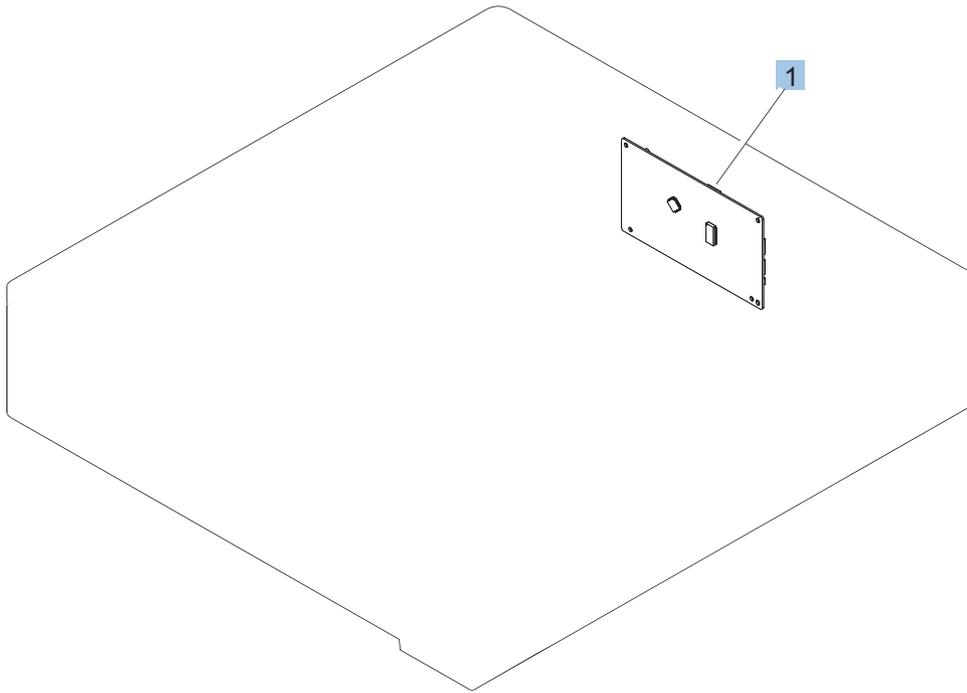


Table 4-22 1x500PF PCA

Ref	Description	Part number	Qty
1	Paper feeder driver PCA (1x500PF)	RM1-6987-000CN	1

3x500 paper feeder

The 3x500 paper feeder is referred to as the 3x500PF.

3x500PF external components

Figure 4-19 3x500PF external components

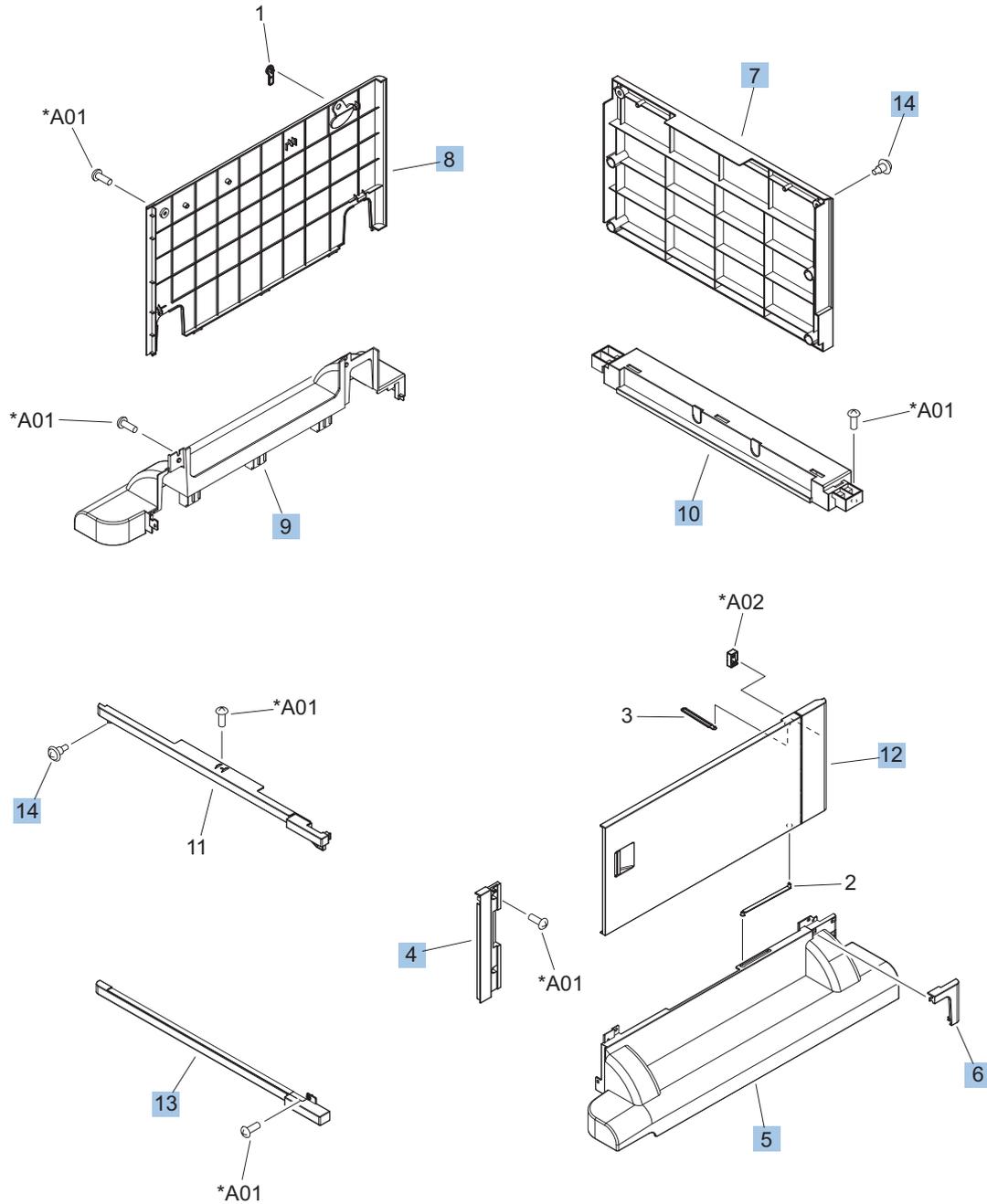


Table 4-23 3x500PF external components

Ref	Description	Part number	Qty
4	Cover, right corner (3x500PF)	RC2-9343-000CN	1
5	Cover, right lower, 1 (3x500PF)	RC2-9346-000CN	1
6	Cover, right lower, 2 (3x500PF)	RC2-9347-000CN	1
7	Cover, rear (3x500PF)	RC2-9348-000CN	1
8	Cover, left (3x500PF)	RC2-9349-000CN	1
9	Cover, left lower (3x500PF)	RC2-9350-000CN	1
10	Cover, rear lower (3x500PF)	RC2-9357-000CN	1
12	Right door assembly (3x500PF)	RM1-6953-000CN	1
13	Front lower cover assembly (3x500PF)	RM1-6958-000CN	1
14	Screw, stepped (3x500PF)	RS5-9099-000CN	3

3x500PF internal components

Figure 4-20 3x500PF internal components

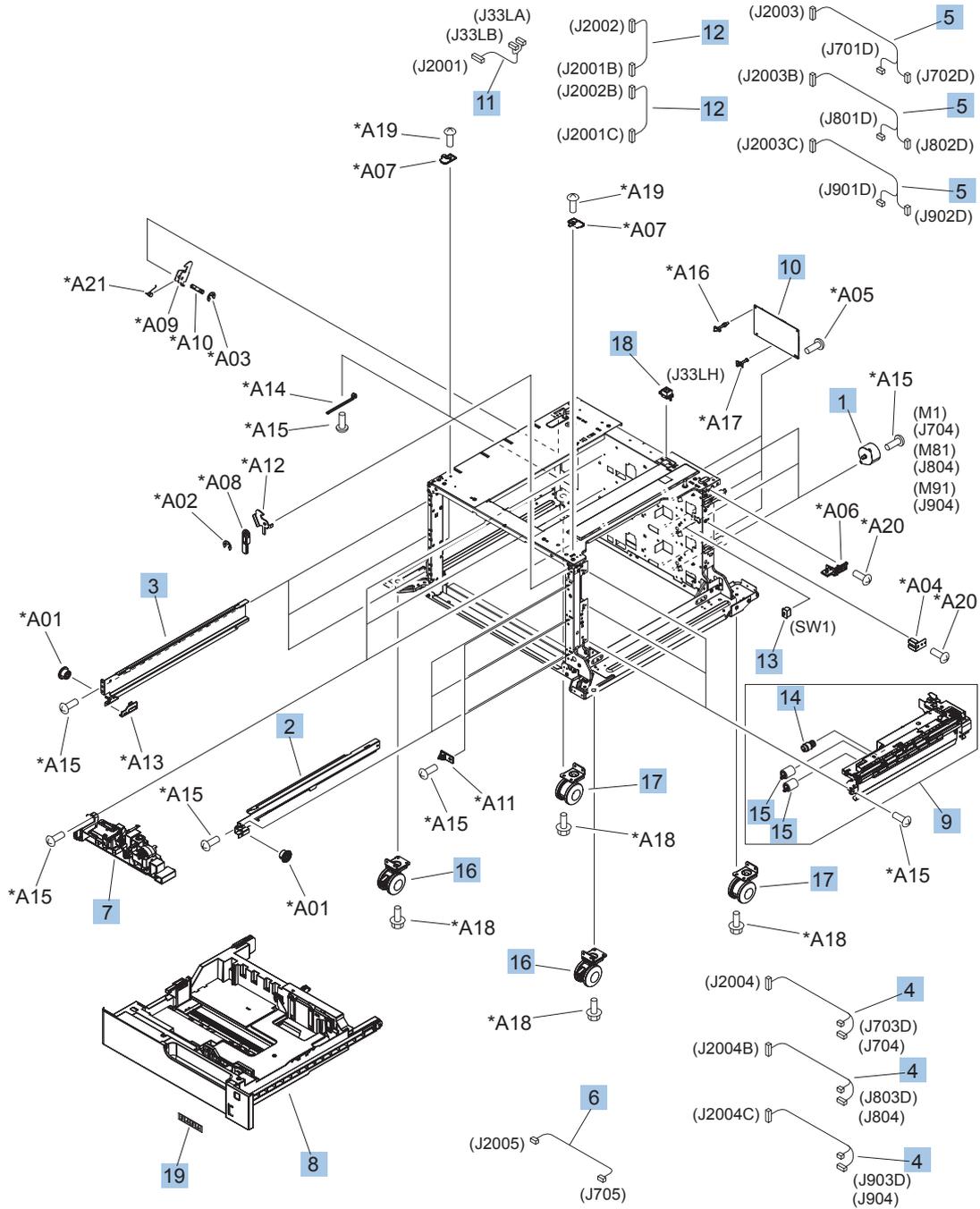


Table 4-24 3x500PF internal components

Ref	Description	Part number	Qty
1	Motor, stepping, DC (3x500PF)	RK2-1331-000CN	3
2	Rail, cassette, right (3x500PF)	RL1-1390-000CN	3
3	Rail, cassette, left (3x500PF)	RL1-1391-000CN	3
4	Cable, paper pick-up option (3x500PF)	RM1-3575-000CN	3
5	Cable, multisensor (3x500PF)	RM1-3647-000CN	3
6	Cable, door open switch (3x500PF)	RM1-3651-000CN	1
7	Lifter drive assembly (3x500PF)	RM1-3819-000CN	3
8	Cassette (3x500PF)	CF235-67917	1
9	Paper pick-up assembly (3x500PF)	RM1-6944-000CN	3
10	Feeder PCA (3x500PF)	RM1-6989-000CN	1
11	Cable, engine interface (3x500PF)	RM1-6991-000CN	1
12	Cable, PCA joint (3x500PF)	RM1-6992-000CN	2
13	Switch, button (3x500PF)	WC2-5512-000CN	1
14	Roller, pick-up (included in the service kit; 3x500PF)	CC522-67909	1
16	Caster, double lock, front (3x500PF)	RC1-9896-000CN	2
17	Caster, rear	RC3-2994-000	1
18	Connector, 8P (3x500PF)	VS1-7500-008CN	1
19	Label, cassette number (3x500PF)	5851-5600	1

3x500PF cassette

Figure 4-21 3x500PF cassette

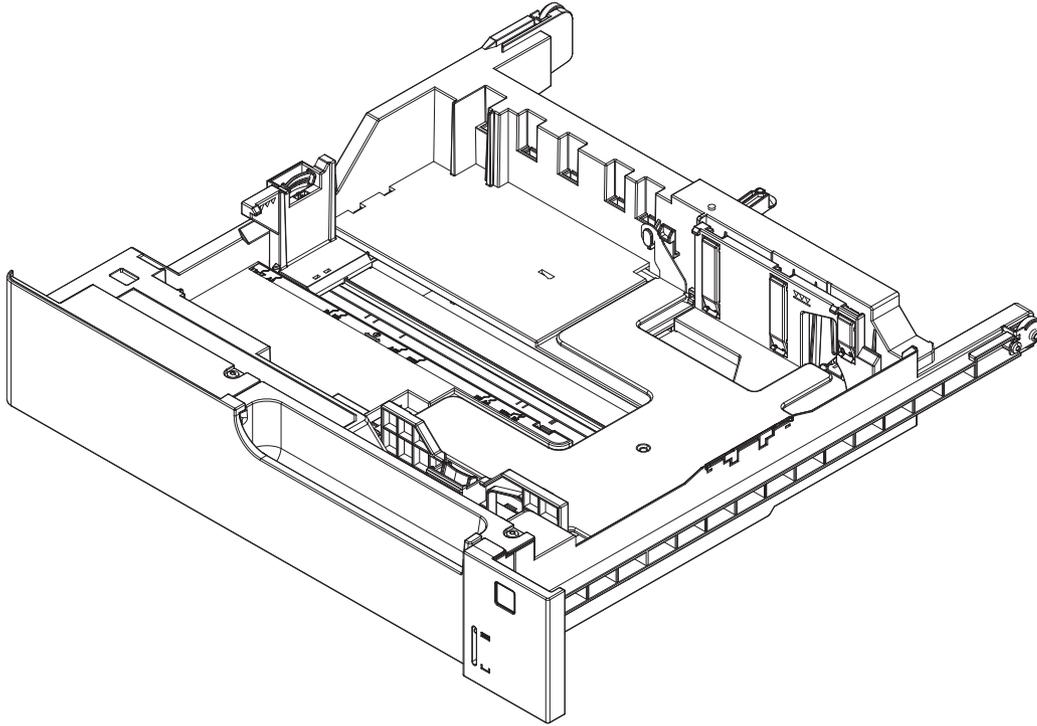


Table 4-25 3x500PF cassette

Ref	Description	Part number	Qty
	Cassette (3x500PF)	CF235-67917	3

3x500PF PCAs

Figure 4-22 3x500PF PCAs

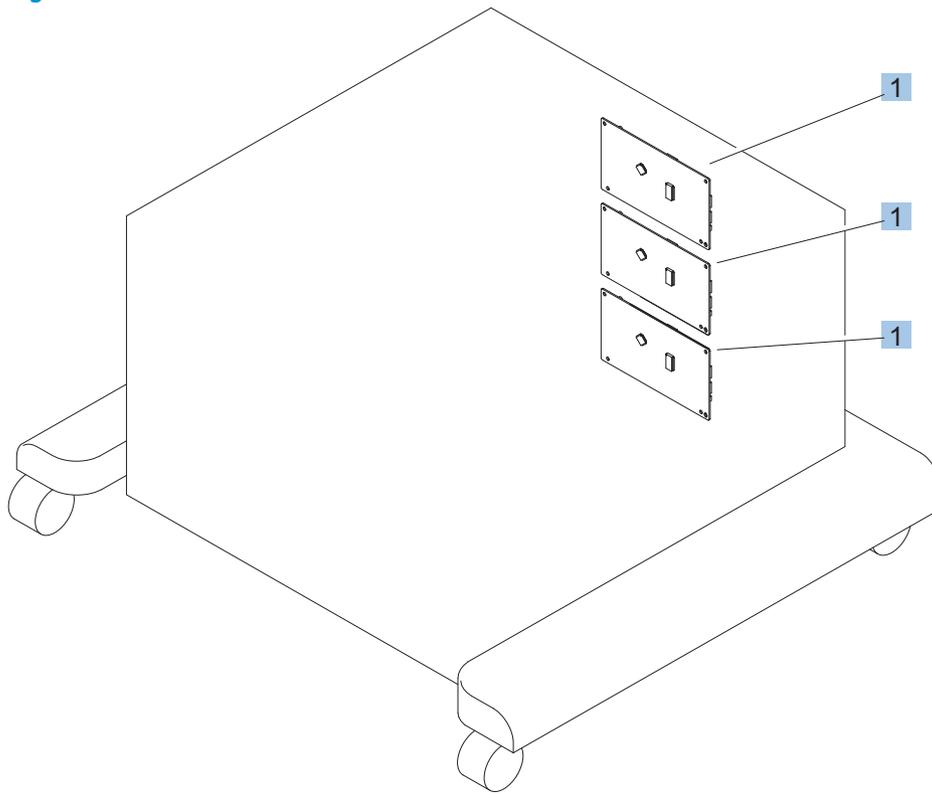


Table 4-26 3x500PF PCAs

Ref	Description	Part number	Qty
1	Feeder PCAs (3x500PF)	RM1-6989-000CN	3

Alphabetical parts list

Table 4-27 Alphabetical parts list

Description	Part number	Table and page
Arm, front cover, 1	RC2-6732-000CN	Internal components (1 of 9) on page 553
Arm, front cover, 2	RC2-6733-000CN	Internal components (1 of 9) on page 553
Arm, ITB coupling release	RC2-6824-000CN	Internal components (4 of 9) on page 559
Arm, waste toner, left	RC2-7035-000CN	Internal components (6 of 9) on page 563
Arm, waste toner, right	RC2-7036-000CN	Internal components (6 of 9) on page 563
Auto close assembly	RM1-6036-000CN	Internal components (8 of 9) on page 567
Cable assembly, flat-flexible	RM1-6804-000CN	Internal components (7 of 9) on page 565
Cable, door open switch (3x500PF)	RM1-3651-000CN	3x500PF internal components on page 587
Cable, engine interface (3x500PF)	RM1-6991-000CN	3x500PF internal components on page 587
Cable, feed joint, duplex model	RM1-6846-000CN	Internal components (4 of 9) on page 559
Cable, left, high-voltage power supply to low-voltage power supply	RM1-6833-000CN	Internal components (8 of 9) on page 567
Cable, low-voltage AC joint	RM1-6811-000CN	Internal components (8 of 9) on page 567
Cable, low-voltage power supply	RM1-6807-000CN	Internal components (8 of 9) on page 567
Cable, low-voltage power supply, test	RM1-6813-000CN	Internal components (8 of 9) on page 567
Cable, multisensor (3x500PF)	RM1-3647-000CN	3x500PF internal components on page 587
Cable, paper pick-up option (3x500PF)	RM1-3575-000CN	3x500PF internal components on page 587
Cable, PCA joint (3x500PF)	RM1-6992-000CN	3x500PF internal components on page 587
Cable, PNL-H-HI	RM1-6849-000CN	Internal components (9 of 9) on page 569
Cable, primary transfer	RM1-6822-000CN	Internal components (9 of 9) on page 569
Cable, rear	RM1-6863-000CN	Internal components (9 of 9) on page 569

Table 4-27 Alphabetical parts list (continued)

Description	Part number	Table and page
Cable, SB joint, low-voltage power supply, duplex model	RM1-6867-000CN	Internal components (3 of 9) on page 557
Cable, switch	RM1-6830-000CN	Internal components (8 of 9) on page 567
Cable, USB	RK2-2901-000CN	External covers, panels, and doors on page 549
Cap, T2 contact, second-transfer high-voltage PCA	RC2-6691-000CN	Internal components (4 of 9) on page 559
Cassette (1x500PF)	CF235-67917	1x500PF internal components on page 581
Cassette (3x500PF)	CF235-67917	3x500PF internal components on page 587
Cassette (3x500PF)	CF235-67917	3x500PF cassette on page 589
Caster, double lock, front (3x500PF)	RC1-9896-000CN	3x500PF internal components on page 587
Caster, rear	RC3-2994-000	3x500PF internal components on page 587
Clamp, edge	RC2-6663-000CN	Internal components (6 of 9) on page 563
Clamp, edge, D	RC2-6674-000CN	Internal components (9 of 9) on page 569
Connector, 8-pin, paper-pick-up	VS1-7514-008CN	Internal components (9 of 9) on page 569
Connector, 8P (1x500PF)	VS1-7514-008CN	1x500PF internal components on page 581
Connector, 8P (3x500PF)	VS1-7500-008CN	3x500PF internal components on page 587
Connector, snap tight, black	VS1-7207-019CN	Internal components (3 of 9) on page 557
Core, ring	WE8-6639-000CN	Internal components (9 of 9) on page 569
Cover, cable, protective	RC2-6832-000CN	Internal components (3 of 9) on page 557
Cover, cable, right rear	RC2-8424-000CN	Internal components (8 of 9) on page 567
Cover, connector, lower	RC2-6642-000CN	Internal components (3 of 9) on page 557
Cover, duplexing gear, duplex model	RC2-6931-000CN	Internal components (4 of 9) on page 559
Cover, front assembly	CE707-67902	External covers, panels, and doors on page 549
Cover, gear, simplex model	RC3-0688-000CN	Internal components (4 of 9) on page 559

Table 4-27 Alphabetical parts list (continued)

Description	Part number	Table and page
Cover, guide	RC2-7204-000CN	Internal components (1 of 9) on page 553
Cover, handle guide	RC2-6670-000CN	Internal components (2 of 9) on page 555
Cover, handle, lower (1x500PF)	RC2-9332-000CN	1x500PF external components on page 579
Cover, handle, lower-left	RC2-6625-000CN	External covers, panels, and doors on page 549
Cover, handle, lower-right, front	RC2-6627-000CN	External covers, panels, and doors on page 549
Cover, handle, lower-right, rear	RC2-6626-000CN	External covers, panels, and doors on page 549
Cover, imaging HVT cable	RC2-6573-000CN	Internal components (9 of 9) on page 569
Cover, left (1x500PF)	RC2-9331-000CN	1x500PF external components on page 579
Cover, left (3x500PF)	RC2-9349-000CN	3x500PF external components on page 585
Cover, left assembly	RM1-7143-000CN	External covers, panels, and doors on page 549
Cover, left lower (3x500PF)	RC2-9350-000CN	3x500PF external components on page 585
Cover, lower front	RC2-6737-000CN	Internal components (1 of 9) on page 553
Cover, main cross-member cable	RC2-6650-000CN	Internal components (6 of 9) on page 563
Cover, main drive cable, lower	RC2-6574-000CN	Internal components (4 of 9) on page 559
Cover, rear	RM1-7147-000CN	External covers, panels, and doors on page 549
Cover, rear (1x500PF)	RC2-9330-000CN	1x500PF external components on page 579
Cover, rear (3x500PF)	RC2-9348-000CN	3x500PF external components on page 585
Cover, rear lower (3x500PF)	RC2-9357-000CN	3x500PF external components on page 585
Cover, right corner (3x500PF)	RC2-9343-000CN	3x500PF external components on page 585
Cover, right front (1x500PF)	RC2-9320-000CN	1x500PF external components on page 579
Cover, right front assembly (includes control panel)	RM1-7144-000CN	External covers, panels, and doors on page 549

Table 4-27 Alphabetical parts list (continued)

Description	Part number	Table and page
Cover, right lower assembly (1x500PF)	RM1-6948-000CN	1x500PF external components on page 579
Cover, right lower, 1 (3x500PF)	RC2-9346-000CN	3x500PF external components on page 585
Cover, right lower, 2 (3x500PF)	RC2-9347-000CN	3x500PF external components on page 585
Cover, right rear	RM1-7142-000CN	External covers, panels, and doors on page 549
Cover, top	RM1-7148-000CN	External covers, panels, and doors on page 549
Cover, upper front assembly (1x500PF)	RM1-6949-000CN	1x500PF external components on page 579
Cover, waste toner, 2	RC2-6962-000CN	Internal components (6 of 9) on page 563
Cover, waste toner, 3	RC2-6963-000CN	Internal components (6 of 9) on page 563
Cross-member, cover, left	RC2-6760-000CN	Internal components (9 of 9) on page 569
DC Controller PCA (duplex model)	CE708-67902	PCAs on page 577
DC Controller PCA (simplex model)	CE707-67906	PCAs on page 577
DC motor assembly	RM1-6088-000CN	Internal components (4 of 9) on page 559
Door, inner, service kit includes all labels	CC522-67906	Internal components (1 of 9) on page 553
Door, right upper	RC2-7091-000CN	Right door assembly on page 551
Door, toner collection unit access	RC2-7034-000CN	External covers, panels, and doors on page 549
Drive assembly, duplex reverse, duplex model	RM1-6005-000CN	Internal components (3 of 9) on page 557
Drive assembly, simplex reverse, simplex model	RM1-6120-000CN	Internal components (3 of 9) on page 557
Driver PCA (duplex model)	RM1-6742-000CN	PCAs on page 577
Driver PCA (simplex model)	RM1-6783-000CN	PCAs on page 577
Duct, fan, 1	RC2-8388-000CN	Internal components (7 of 9) on page 565
Duct, front	RC2-7300-000CN	Internal components (1 of 9) on page 553
Duct, joint	RC2-8360-000CN	Internal components (5 of 9) on page 561
Environment sensor PCA	RK2-2884-000CN	PCAs on page 577

Table 4-27 Alphabetical parts list (continued)

Description	Part number	Table and page
Fan, formatter	RK2-3301-000CN	Internal components (9 of 9) on page 569
Fan, fuser	RK2-2728-000CN	Internal components (2 of 9) on page 555
Fan, power supply	RK2-2276-000CN	Internal components (6 of 9) on page 563
Feeder PCA (3x500PF)	RM1-6989-000CN	3x500PF internal components on page 587
Feeder PCAs (3x500PF)	RM1-6989-000CN	3x500PF PCAs on page 591
Formatter case	RM1-6065-000CN	Internal components (9 of 9) on page 569
Formatter, replacement kit	D3L08-67901	PCAs on page 577
Formatter, replacement kit (China)	D3L08-67902	PCAs on page 577
Front lower cover assembly (3x500PF)	RM1-6958-000CN	3x500PF external components on page 585
Fuser assembly, 110V (included in service kit)	CE707-67912	Internal components (3 of 9) on page 557
Fuser assembly, 220V (included in service kit)	CE707-67913	Internal components (3 of 9) on page 557
Fuser drive assembly	CE707-67904	Internal components (3 of 9) on page 557
Fuser motor assembly	RM1-6074-000CN	Internal components (3 of 9) on page 557
Gear assembly, fuser	RM1-7914-060CN	Internal components (3 of 9) on page 557
Gear, 18T/29T	RU6-0775-000CN	Internal components (3 of 9) on page 557
Gear, 25T, duplex model	RU6-0771-000CN	Internal components (4 of 9) on page 559
Gear, 25T, duplex model	RU6-0772-000CN	Internal components (4 of 9) on page 559
Gear, 74T, duplex model	RU6-0773-000CN	Internal components (4 of 9) on page 559
Gear, link worm	RU6-0795-000CN	Internal components (6 of 9) on page 563
Guide, arm, front	RC2-6632-000CN	Internal components (1 of 9) on page 553
Guide, cable	RC3-0684-000CN	Internal components (8 of 9) on page 567
Guide, cable, right	RC2-6842-000CN	Internal components (9 of 9) on page 569
Guide, cable, upper	RC2-6841-000CN	Internal components (9 of 9) on page 569

Table 4-27 Alphabetical parts list (continued)

Description	Part number	Table and page
Guide, cross-member cable, front	RC2-6587-000CN	Internal components (8 of 9) on page 567
Guide, cross-member cable, rear	RC2-6588-000CN	Internal components (8 of 9) on page 567
Guide, DC cont. support cable	RC2-6665-000CN	Internal components (9 of 9) on page 569
Guide, fuser AC cable	RC2-6693-000CN	Internal components (6 of 9) on page 563
Guide, fuser, front	RC2-6546-000CN	Internal components (3 of 9) on page 557
Guide, fuser, rear	RC2-6547-000CN	Internal components (3 of 9) on page 557
Guide, imaging HVT cable	RC2-6661-000CN	Internal components (9 of 9) on page 569
Guide, inside cable	RC2-6589-000CN	Internal components (6 of 9) on page 563
Guide, laser	RC2-6628-000CN	Internal components (7 of 9) on page 565
Guide, LVT cable	RC2-6662-000CN	Internal components (6 of 9) on page 563
Guide, main cross-member cable	RC2-6600-000CN	Internal components (6 of 9) on page 563
Guide, main drive cable	RC2-6659-000CN	Internal components (4 of 9) on page 559
Guide, paper feed	RC2-7297-000CN	Internal components (3 of 9) on page 557
Guide, slide	RC2-7203-000CN	Internal components (6 of 9) on page 563
Handle, lock, rear (1x500PF)	RC2-9303-000CN	1x500PF external components on page 579
Hinge, front cover, center	RC2-6738-000CN	Internal components (1 of 9) on page 553
Hinge, front cover, left	RC2-6713-000CN	Internal components (1 of 9) on page 553
Hinge, front cover, right	RC2-6715-000CN	Internal components (1 of 9) on page 553
Hinge, inner door, left	RC2-6716-000CN	Internal components (1 of 9) on page 553
Hinge, inner door, right	RC2-6712-000CN	Internal components (1 of 9) on page 553
Hinge, right door, front	RC2-7094-000CN	Internal components (5 of 9) on page 561

Table 4-27 Alphabetical parts list (continued)

Description	Part number	Table and page
Holder, door sensor, right	RC2-6645-000CN	Internal components (4 of 9) on page 559
Holder, duplexing fan	RC2-8357-000CN	Internal components (2 of 9) on page 555
Holder, first power dispatching	RC2-6680-000CN	Internal components (8 of 9) on page 567
Holder, flat flexible cable	RC2-6655-000CN	Internal components (7 of 9) on page 565
Holder, formatter fan	RC2-6648-000CN	Internal components (9 of 9) on page 569
Holder, interlock switch	RC2-6689-000CN	Internal components (2 of 9) on page 555
Holder, paper pick-up connector	RC2-6638-000CN	Internal components (9 of 9) on page 569
Holder, power supply fan	RC2-7299-000CN	Internal components (6 of 9) on page 563
Holder, secondary transfer HVT	RC2-6681-010CN	Internal components (4 of 9) on page 559
Holder, secondary transfer, power dispatching	RC2-6682-000CN	Internal components (4 of 9) on page 559
Holder, switch	RC2-6666-000CN	Internal components (8 of 9) on page 567
Hook, duplexing spring, duplex model	RC2-6932-000CN	Internal components (4 of 9) on page 559
Imaging high-voltage PCA	RM1-6800-000CN	PCAs on page 577
Inter connect board (ICB) PCA	CE707-67907	PCAs on page 577
IT belt guide rail assembly	RM1-6018-000CN	Internal components (6 of 9) on page 563
IT belt guide rail R1 assembly	RM1-6037-000CN	Internal components (6 of 9) on page 563
ITB assembly (included in the service kit; includes transfer roller)	CC522-67911	Internal components (6 of 9) on page 563
ITB guide rail assembly	RM1-6019-000CN	Internal components (6 of 9) on page 563
Label, cassette number (1x500PF)	5851-5600	1x500PF internal components on page 581
Label, cassette number (3x500PF)	5851-5600	3x500PF internal components on page 587
Label, fuser insert	RU6-8042-000CN	Internal components (3 of 9) on page 557
Label, ITB insert, FH	RU5-8806-000CN	Internal components (7 of 9) on page 565

Table 4-27 Alphabetical parts list (continued)

Description	Part number	Table and page
Label, ITB insert, FV	RU5-8804-000CN	Internal components (7 of 9) on page 565
Label, ITB set, RH	RU5-8807-000CN	Internal components (6 of 9) on page 563
Label, ITB, RV	RU5-8805-000CN	Internal components (6 of 9) on page 563
Laser scanner assembly	RM1-6122-070CN	Internal components (7 of 9) on page 565
Lever, inner door pressure	RC2-6744-000CN	Internal components (1 of 9) on page 553
Lever, lift, 1	RC2-7199-000CN	Internal components (6 of 9) on page 563
Lever, lift, 2	RC2-7200-000CN	Internal components (1 of 9) on page 553
Lever, push	RC2-7198-000CN	Internal components (1 of 9) on page 553
Lifter drive assembly	RM1-6039-000CN	Internal components (8 of 9) on page 567
Lifter drive assembly (1x500PF)	RM1-3819-000CN	1x500PF internal components on page 581
Lifter drive assembly (3x500PF)	RM1-3819-000CN	3x500PF internal components on page 587
Lifter plate assembly, Tray 1	RM1-6043-000	Right door assembly on page 551
Link, ITB coupling release	RC2-6823-000CN	Internal components (4 of 9) on page 559
Link, right door, 2 front	RC2-7233-000CN	Internal components (5 of 9) on page 561
Link, right door, 2 rear	RC2-7236-000CN	Internal components (5 of 9) on page 561
Link, right door, lower (1x500PF)	RC2-9327-000CN	1x500PF external components on page 579
Link, right door, upper (1x500PF)	RC2-9335-000CN	1x500PF external components on page 579
Lock, door link, right	RC2-7234-000CN	Internal components (5 of 9) on page 561
Low voltage power supply assembly, 110V	RM1-6753-000CN	Internal components (8 of 9) on page 567
Low voltage power supply assembly, 220V	RM1-6754-000CN	Internal components (8 of 9) on page 567
Low-voltage power supply PCA (110V)	RM1-6753-000CN	PCAs on page 577
Low-voltage power supply PCA (220V)	RM1-6754-000CN	PCAs on page 577

Table 4-27 Alphabetical parts list (continued)

Description	Part number	Table and page
Main drive assembly, duplex model	CE708-67901	Internal components (4 of 9) on page 559
Main drive assembly, simplex model	CE707-67905	Internal components (4 of 9) on page 559
Microswitch	WC4-5251-000CN	Internal components (1 of 9) on page 553
Motor, pick-up (1x500PF)	RK2-1331-000CN	1x500PF internal components on page 581
Motor, stepping, DC (3x500PF)	RK2-1331-000CN	3x500PF internal components on page 587
Motor, stepping, DC, duplex model	RK2-3298-000CN	Internal components (4 of 9) on page 559
Motor, stepping, DC, simplex model	RK2-3298-000CN	Internal components (4 of 9) on page 559
Mount, cover arm, front	RC2-6735-000CN	Internal components (1 of 9) on page 553
Mount, inner door rail	RC2-6743-000CN	Internal components (1 of 9) on page 553
Mount, inner door toggle	RC2-6717-000CN	Internal components (1 of 9) on page 553
Mount, stopper arm	RC2-6745-000CN	Internal components (1 of 9) on page 553
Paper delivery assembly	RM1-6165-000CN	Paper delivery assembly on page 575
Paper feeder driver PCA (1x500PF)	RM1-6987-000CN	1x500PF internal components on page 581
Paper feeder driver PCA (1x500PF)	RM1-6987-000CN	1x500PF PCA on page 583
Paper pick-up assembly	CE707-67903	Paper pick-up assembly on page 573
Paper pick-up assembly (1x500PF)	RM1-6944-000CN	1x500PF internal components on page 581
Paper pick-up assembly (3x500PF)	RM1-6944-000CN	3x500PF internal components on page 587
Pick roller and separation pad, Tray 1 (included in the service kit)	CC522-67928	Right door assembly on page 551
Plate, arm reinforcement	RC2-9649-000CN	Internal components (6 of 9) on page 563
Plate, box pillar	RC2-6673-000CN	Internal components (9 of 9) on page 569
Plate, duplexing drive gear	RL1-2266-000CN	Internal components (4 of 9) on page 559
Plate, FFC protective	RC2-9687-000CN	Internal components (9 of 9) on page 569

Table 4-27 Alphabetical parts list (continued)

Description	Part number	Table and page
Plate, right door link, fixed, front	RL1-2281-000CN	Internal components (5 of 9) on page 561
Plate, right door link, fixed, rear	RL1-2282-000CN	Internal components (4 of 9) on page 559
Plate, right door link, front	RC2-7272-000CN	Internal components (5 of 9) on page 561
Plate, right door link, rear	RC2-7273-000CN	Internal components (4 of 9) on page 559
Power switch PCA	RM1-6759-000CN	PCAs on page 577
Primary transfer high-voltage PCA	RM1-7004-000CN	PCAs on page 577
Rail, cartridge auxiliary	RC2-6724-000CN	Internal components (1 of 9) on page 553
Rail, cassette, left (3x500PF)	RL1-1391-000CN	3x500PF internal components on page 587
Rail, cassette, right (3x500PF)	RL1-1390-000CN	3x500PF internal components on page 587
Rail, door link, front lower	RC2-6634-000CN	Internal components (5 of 9) on page 561
Rail, door link, rear lower	RC2-6635-000CN	Internal components (4 of 9) on page 559
Rail, ITB guide	RC2-7185-000CN	Internal components (6 of 9) on page 563
Rail, ITB guide, F3	RC2-7193-000CN	Internal components (6 of 9) on page 563
Registration sensor assembly	RM1-7922-000CN	Internal components (3 of 9) on page 557
Right door assembly (1x500PF)	RM1-6946-000CN	1x500PF external components on page 579
Right door assembly (3x500PF)	RM1-6953-000CN	3x500PF external components on page 585
Right door assembly, duplex model	RM1-6007-000CN	Right door assembly on page 551
Right door assembly, simplex model	RM1-6138-000CN	Right door assembly on page 551
Roller, feed, paper feeder (included in service kit)	CE710-67908	1x500PF internal components on page 581
Roller, paper pick-up, Tray 1 (included in the service kit)	CC522-67928	Right door assembly on page 551
Roller, pick-up (included in the service kit; 3x500PF)	CC522-67909	3x500PF internal components on page 587
Roller, secondary transfer, T2 (included in the service kit)	CC522-67912	Right door assembly on page 551

Table 4-27 Alphabetical parts list (continued)

Description	Part number	Table and page
Screw, stepped (3x500PF)	RS5-9099-000CN	3x500PF external components on page 585
Seal, slide shutter	RC3-1014-000CN	Internal components (7 of 9) on page 565
Seal, toner supporter guide 1	RC2-7018-000CN	Internal components (7 of 9) on page 565
Secondary transfer high-voltage PCA	RM1-6802-000CN	PCAs on page 577
Sensor, cassette last paper presence	RM1-6164-000CN	Internal components (3 of 9) on page 557
Sensor, right door	WG8-5935-000	Internal components (4 of 9) on page 559
Shaft, right door link	RU5-4979-000CN	Internal components (4 of 9) on page 559
Sheet, slide seal	RC3-1013-000CN	Internal components (7 of 9) on page 565
Shutter, exhaust	RC2-7010-000CN	Internal components (6 of 9) on page 563
Slider, push	RC2-7201-000CN	Internal components (6 of 9) on page 563
Spacer, DC controller PCA	VT2-5176-004CN	Internal components (9 of 9) on page 569
Spring, compression	RU6-2721-000CN	Internal components (1 of 9) on page 553
Spring, compression	RU6-2683-000CN	Internal components (6 of 9) on page 563
Spring, contact	RU6-2767-000CN	Internal components (8 of 9) on page 567
Spring, contact	RU6-2768-000CN	Internal components (8 of 9) on page 567
Spring, contact, second-transfer high-voltage PCA	RU6-2771-000CN	Internal components (4 of 9) on page 559
Spring, grounding	RC2-7209-000CN	Internal components (1 of 9) on page 553
Spring, grounding, second-transfer high-voltage PCA	RU6-2772-000CN	Internal components (4 of 9) on page 559
Spring, grounding, second-transfer high-voltage PCA	RC2-6700-000CN	Internal components (4 of 9) on page 559
Spring, leaf, grounding	RC2-7092-000CN	Internal components (2 of 9) on page 555
Spring, rod	RC2-6611-000CN	Internal components (8 of 9) on page 567
Spring, tension	RU6-2831-000CN	Internal components (6 of 9) on page 563

Table 4-27 Alphabetical parts list (continued)

Description	Part number	Table and page
Spring, tension, duplex model	RU6-2671-000CN	Internal components (4 of 9) on page 559
Spring, tension, front	RU6-2727-000CN	Internal components (5 of 9) on page 561
Spring, tension, rear	RU6-2744-000CN	Internal components (4 of 9) on page 559
Spring, tension, registration sensor	RU6-2710-000CN	Internal components (3 of 9) on page 557
Stopper, inner door, 1	RC2-6719-000CN	Internal components (1 of 9) on page 553
Stopper, inner door, 2	RC2-6736-000CN	Internal components (1 of 9) on page 553
Stopper, laser	RC2-6646-000CN	Internal components (8 of 9) on page 567
Support, developing coupling	RC2-6811-000CN	Internal components (4 of 9) on page 559
Support, frame, front	RC2-7196-000CN	Internal components (3 of 9) on page 557
Support, frame, rear	RC2-7197-000CN	Internal components (3 of 9) on page 557
Switch, bottom (1x500PF)	WC2-5512-000CN	1x500PF internal components on page 581
Switch, button (3x500PF)	WC2-5512-000CN	3x500PF internal components on page 587
Toner collection unit (included in the service kit)	CE980-67901	Internal components (6 of 9) on page 563
Toner feed assembly	RM1-6040-000CN	Internal components (7 of 9) on page 565
Toner remaining detect PCA	RM1-6779-000CN	PCAs on page 577
Tray 1 (MP tray) assembly	RM1-6045-000CN	Right door assembly on page 551
Tray 2 pickup and separation roller assembly (included in service kit)	CE710-69007	Internal components (3 of 9) on page 557
Tray 2 replacement, gray	CE710-67907	1x250 cassette on page 571
Upper cartridge guide assembly	RM1-5990-000CN	Internal components (1 of 9) on page 553
Waste toner cover assembly (includes Residual Toner Full Sensor)	RM1-6012-000CN	Internal components (6 of 9) on page 563

Numerical parts list

Table 4-28 Numerical parts list

Part number	Description	Table and page
5851-5600	Label, cassette number (1x500PF)	1x500PF internal components on page 581
5851-5600	Label, cassette number (3x500PF)	3x500PF internal components on page 587
CC522-67906	Door, inner, service kit includes all labels	Internal components (1 of 9) on page 553
CC522-67909	Roller, pick-up (included in the service kit; 3x500PF)	3x500PF internal components on page 587
CC522-67911	ITB assembly (included in the service kit; includes transfer roller)	Internal components (6 of 9) on page 563
CC522-67912	Roller, secondary transfer, T2 (included in the service kit)	Right door assembly on page 551
CC522-67928	Roller, paper pick-up, Tray 1 (included in the service kit)	Right door assembly on page 551
CC522-67928	Pick roller and separation pad, Tray 1 (included in the service kit)	Right door assembly on page 551
CE707-67902	Cover, front assembly	External covers, panels, and doors on page 549
CE707-67903	Paper pick-up assembly	Paper pick-up assembly on page 573
CE707-67904	Fuser drive assembly	Internal components (3 of 9) on page 557
CE707-67905	Main drive assembly, simplex model	Internal components (4 of 9) on page 559
CE707-67906	DC Controller PCA (simplex model)	PCAs on page 577
CE707-67907	Inter connect board (ICB) PCA	PCAs on page 577
CE707-67912	Fuser assembly, 110V (included in service kit)	Internal components (3 of 9) on page 557
CE707-67913	Fuser assembly, 220V (included in service kit)	Internal components (3 of 9) on page 557
CE708-67901	Main drive assembly, duplex model	Internal components (4 of 9) on page 559
CE708-67902	DC Controller PCA (duplex model)	PCAs on page 577
CE710-67907	Tray 2 replacement, gray	1x250 cassette on page 571
CE710-67908	Roller, feed, paper feeder (included in service kit)	1x500PF internal components on page 581
CE710-69007	Tray 2 pickup and separation roller assembly (included in service kit)	Internal components (3 of 9) on page 557
CE980-67901	Toner collection unit (included in the service kit)	Internal components (6 of 9) on page 563

Table 4-28 Numerical parts list (continued)

Part number	Description	Table and page
CF235-67917	Cassette (1x500PF)	1x500PF internal components on page 581
CF235-67917	Cassette (3x500PF)	3x500PF internal components on page 587
CF235-67917	Cassette (3x500PF)	3x500PF cassette on page 589
D3L08-67901	Formatter, replacement kit	PCAs on page 577
D3L08-67902	Formatter, replacement kit (China)	PCAs on page 577
RC1-9896-000CN	Caster, double lock, front (3x500PF)	3x500PF internal components on page 587
RC2-6546-000CN	Guide, fuser, front	Internal components (3 of 9) on page 557
RC2-6547-000CN	Guide, fuser, rear	Internal components (3 of 9) on page 557
RC2-6573-000CN	Cover, imaging HVT cable	Internal components (9 of 9) on page 569
RC2-6574-000CN	Cover, main drive cable, lower	Internal components (4 of 9) on page 559
RC2-6587-000CN	Guide, cross-member cable, front	Internal components (8 of 9) on page 567
RC2-6588-000CN	Guide, cross-member cable, rear	Internal components (8 of 9) on page 567
RC2-6589-000CN	Guide, inside cable	Internal components (6 of 9) on page 563
RC2-6600-000CN	Guide, main cross-member cable	Internal components (6 of 9) on page 563
RC2-6611-000CN	Spring, rod	Internal components (8 of 9) on page 567
RC2-6625-000CN	Cover, handle, lower-left	External covers, panels, and doors on page 549
RC2-6626-000CN	Cover, handle, lower-right, rear	External covers, panels, and doors on page 549
RC2-6627-000CN	Cover, handle, lower-right, front	External covers, panels, and doors on page 549
RC2-6628-000CN	Guide, laser	Internal components (7 of 9) on page 565
RC2-6632-000CN	Guide, arm, front	Internal components (1 of 9) on page 553
RC2-6634-000CN	Rail, door link, front lower	Internal components (5 of 9) on page 561
RC2-6635-000CN	Rail, door link, rear lower	Internal components (4 of 9) on page 559
RC2-6638-000CN	Holder, paper pick-up connector	Internal components (9 of 9) on page 569

Table 4-28 Numerical parts list (continued)

Part number	Description	Table and page
RC2-6642-000CN	Cover, connector, lower	Internal components (3 of 9) on page 557
RC2-6645-000CN	Holder, door sensor, right	Internal components (4 of 9) on page 559
RC2-6646-000CN	Stopper, laser	Internal components (8 of 9) on page 567
RC2-6648-000CN	Holder, formatter fan	Internal components (9 of 9) on page 569
RC2-6650-000CN	Cover, main cross-member cable	Internal components (6 of 9) on page 563
RC2-6655-000CN	Holder, flat flexible cable	Internal components (7 of 9) on page 565
RC2-6659-000CN	Guide, main drive cable	Internal components (4 of 9) on page 559
RC2-6661-000CN	Guide, imaging HVT cable	Internal components (9 of 9) on page 569
RC2-6662-000CN	Guide, LVT cable	Internal components (6 of 9) on page 563
RC2-6663-000CN	Clamp, edge	Internal components (6 of 9) on page 563
RC2-6665-000CN	Guide, DC cont. support cable	Internal components (9 of 9) on page 569
RC2-6666-000CN	Holder, switch	Internal components (8 of 9) on page 567
RC2-6670-000CN	Cover, handle guide	Internal components (2 of 9) on page 555
RC2-6673-000CN	Plate, box pillar	Internal components (9 of 9) on page 569
RC2-6674-000CN	Clamp, edge, D	Internal components (9 of 9) on page 569
RC2-6680-000CN	Holder, first power dispatching	Internal components (8 of 9) on page 567
RC2-6681-010CN	Holder, secondary transfer HVT	Internal components (4 of 9) on page 559
RC2-6682-000CN	Holder, secondary transfer, power dispatching	Internal components (4 of 9) on page 559
RC2-6689-000CN	Holder, interlock switch	Internal components (2 of 9) on page 555
RC2-6691-000CN	Cap, T2 contact, second-transfer high-voltage PCA	Internal components (4 of 9) on page 559
RC2-6693-000CN	Guide, fuser AC cable	Internal components (6 of 9) on page 563

Table 4-28 Numerical parts list (continued)

Part number	Description	Table and page
RC2-6700-000CN	Spring, grounding, second-transfer high-voltage PCA	Internal components (4 of 9) on page 559
RC2-6712-000CN	Hinge, inner door, right	Internal components (1 of 9) on page 553
RC2-6713-000CN	Hinge, front cover, left	Internal components (1 of 9) on page 553
RC2-6715-000CN	Hinge, front cover, right	Internal components (1 of 9) on page 553
RC2-6716-000CN	Hinge, inner door, left	Internal components (1 of 9) on page 553
RC2-6717-000CN	Mount, inner door toggle	Internal components (1 of 9) on page 553
RC2-6719-000CN	Stopper, inner door, 1	Internal components (1 of 9) on page 553
RC2-6724-000CN	Rail, cartridge auxiliary	Internal components (1 of 9) on page 553
RC2-6732-000CN	Arm, front cover, 1	Internal components (1 of 9) on page 553
RC2-6733-000CN	Arm, front cover, 2	Internal components (1 of 9) on page 553
RC2-6735-000CN	Mount, cover arm, front	Internal components (1 of 9) on page 553
RC2-6736-000CN	Stopper, inner door, 2	Internal components (1 of 9) on page 553
RC2-6737-000CN	Cover, lower front	Internal components (1 of 9) on page 553
RC2-6738-000CN	Hinge, front cover, center	Internal components (1 of 9) on page 553
RC2-6743-000CN	Mount, inner door rail	Internal components (1 of 9) on page 553
RC2-6744-000CN	Lever, inner door pressure	Internal components (1 of 9) on page 553
RC2-6745-000CN	Mount, stopper arm	Internal components (1 of 9) on page 553
RC2-6760-000CN	Cross-member, cover, left	Internal components (9 of 9) on page 569
RC2-6811-000CN	Support, developing coupling	Internal components (4 of 9) on page 559
RC2-6823-000CN	Link, ITB coupling release	Internal components (4 of 9) on page 559
RC2-6824-000CN	Arm, ITB coupling release	Internal components (4 of 9) on page 559

Table 4-28 Numerical parts list (continued)

Part number	Description	Table and page
RC2-6832-000CN	Cover, cable, protective	Internal components (3 of 9) on page 557
RC2-6841-000CN	Guide, cable, upper	Internal components (9 of 9) on page 569
RC2-6842-000CN	Guide, cable, right	Internal components (9 of 9) on page 569
RC2-6931-000CN	Cover, duplexing gear, duplex model	Internal components (4 of 9) on page 559
RC2-6932-000CN	Hook, duplexing spring, duplex model	Internal components (4 of 9) on page 559
RC2-6962-000CN	Cover, waste toner, 2	Internal components (6 of 9) on page 563
RC2-6963-000CN	Cover, waste toner, 3	Internal components (6 of 9) on page 563
RC2-7010-000CN	Shutter, exhaust	Internal components (6 of 9) on page 563
RC2-7018-000CN	Seal, toner supporter guide 1	Internal components (7 of 9) on page 565
RC2-7034-000CN	Door, toner collection unit access	External covers, panels, and doors on page 549
RC2-7035-000CN	Arm, waste toner, left	Internal components (6 of 9) on page 563
RC2-7036-000CN	Arm, waste toner, right	Internal components (6 of 9) on page 563
RC2-7091-000CN	Door, right upper	Right door assembly on page 551
RC2-7092-000CN	Spring, leaf, grounding	Internal components (2 of 9) on page 555
RC2-7094-000CN	Hinge, right door, front	Internal components (5 of 9) on page 561
RC2-7185-000CN	Rail, ITB guide	Internal components (6 of 9) on page 563
RC2-7193-000CN	Rail, ITB guide, F3	Internal components (6 of 9) on page 563
RC2-7196-000CN	Support, frame, front	Internal components (3 of 9) on page 557
RC2-7197-000CN	Support, frame, rear	Internal components (3 of 9) on page 557
RC2-7198-000CN	Lever, push	Internal components (1 of 9) on page 553
RC2-7199-000CN	Lever, lift, 1	Internal components (6 of 9) on page 563

Table 4-28 Numerical parts list (continued)

Part number	Description	Table and page
RC2-7200-000CN	Lever, lift, 2	Internal components (1 of 9) on page 553
RC2-7201-000CN	Slider, push	Internal components (6 of 9) on page 563
RC2-7203-000CN	Guide, slide	Internal components (6 of 9) on page 563
RC2-7204-000CN	Cover, guide	Internal components (1 of 9) on page 553
RC2-7209-000CN	Spring, grounding	Internal components (1 of 9) on page 553
RC2-7233-000CN	Link, right door, 2 front	Internal components (5 of 9) on page 561
RC2-7234-000CN	Lock, door link, right	Internal components (5 of 9) on page 561
RC2-7236-000CN	Link, right door, 2 rear	Internal components (5 of 9) on page 561
RC2-7272-000CN	Plate, right door link, front	Internal components (5 of 9) on page 561
RC2-7273-000CN	Plate, right door link, rear	Internal components (4 of 9) on page 559
RC2-7297-000CN	Guide, paper feed	Internal components (3 of 9) on page 557
RC2-7299-000CN	Holder, power supply fan	Internal components (6 of 9) on page 563
RC2-7300-000CN	Duct, front	Internal components (1 of 9) on page 553
RC2-8357-000CN	Holder, duplexing fan	Internal components (2 of 9) on page 555
RC2-8360-000CN	Duct, joint	Internal components (5 of 9) on page 561
RC2-8388-000CN	Duct, fan, 1	Internal components (7 of 9) on page 565
RC2-8424-000CN	Cover, cable, right rear	Internal components (8 of 9) on page 567
RC2-9303-000CN	Handle, lock, rear (1x500PF)	1x500PF external components on page 579
RC2-9320-000CN	Cover, right front (1x500PF)	1x500PF external components on page 579
RC2-9327-000CN	Link, right door, lower (1x500PF)	1x500PF external components on page 579
RC2-9330-000CN	Cover, rear (1x500PF)	1x500PF external components on page 579

Table 4-28 Numerical parts list (continued)

Part number	Description	Table and page
RC2-9331-000CN	Cover, left (1x500PF)	1x500PF external components on page 579
RC2-9332-000CN	Cover, handle, lower (1x500PF)	1x500PF external components on page 579
RC2-9335-000CN	Link, right door, upper (1x500PF)	1x500PF external components on page 579
RC2-9343-000CN	Cover, right corner (3x500PF)	3x500PF external components on page 585
RC2-9346-000CN	Cover, right lower, 1 (3x500PF)	3x500PF external components on page 585
RC2-9347-000CN	Cover, right lower, 2 (3x500PF)	3x500PF external components on page 585
RC2-9348-000CN	Cover, rear (3x500PF)	3x500PF external components on page 585
RC2-9349-000CN	Cover, left (3x500PF)	3x500PF external components on page 585
RC2-9350-000CN	Cover, left lower (3x500PF)	3x500PF external components on page 585
RC2-9357-000CN	Cover, rear lower (3x500PF)	3x500PF external components on page 585
RC2-9649-000CN	Plate, arm reinforcement	Internal components (6 of 9) on page 563
RC2-9687-000CN	Plate, FFC protective	Internal components (9 of 9) on page 569
RC3-0684-000CN	Guide, cable	Internal components (8 of 9) on page 567
RC3-0688-000CN	Cover, gear, simplex model	Internal components (4 of 9) on page 559
RC3-1013-000CN	Sheet, slide seal	Internal components (7 of 9) on page 565
RC3-1014-000CN	Seal, slide shutter	Internal components (7 of 9) on page 565
RC3-2994-000	Caster, rear	3x500PF internal components on page 587
RK2-1331-000CN	Motor, pick-up (1x500PF)	1x500PF internal components on page 581
RK2-1331-000CN	Motor, stepping, DC (3x500PF)	3x500PF internal components on page 587
RK2-2276-000CN	Fan, power supply	Internal components (6 of 9) on page 563
RK2-2728-000CN	Fan, fuser	Internal components (2 of 9) on page 555
RK2-2884-000CN	Environment sensor PCA	PCAs on page 577

Table 4-28 Numerical parts list (continued)

Part number	Description	Table and page
RK2-2901-000CN	Cable, USB	External covers, panels, and doors on page 549
RK2-3298-000CN	Motor, stepping, DC, duplex model	Internal components (4 of 9) on page 559
RK2-3298-000CN	Motor, stepping, DC, simplex model	Internal components (4 of 9) on page 559
RK2-3301-000CN	Fan, formatter	Internal components (9 of 9) on page 569
RL1-1390-000CN	Rail, cassette, right (3x500PF)	3x500PF internal components on page 587
RL1-1391-000CN	Rail, cassette, left (3x500PF)	3x500PF internal components on page 587
RL1-2266-000CN	Plate, duplexing drive gear	Internal components (4 of 9) on page 559
RL1-2281-000CN	Plate, right door link, fixed, front	Internal components (5 of 9) on page 561
RL1-2282-000CN	Plate, right door link, fixed, rear	Internal components (4 of 9) on page 559
RM1-3575-000CN	Cable, paper pick-up option (3x500PF)	3x500PF internal components on page 587
RM1-3647-000CN	Cable, multisensor (3x500PF)	3x500PF internal components on page 587
RM1-3651-000CN	Cable, door open switch (3x500PF)	3x500PF internal components on page 587
RM1-3819-000CN	Lifter drive assembly (1x500PF)	1x500PF internal components on page 581
RM1-3819-000CN	Lifter drive assembly (3x500PF)	3x500PF internal components on page 587
RM1-5990-000CN	Upper cartridge guide assembly	Internal components (1 of 9) on page 553
RM1-6005-000CN	Drive assembly, duplex reverse, duplex model	Internal components (3 of 9) on page 557
RM1-6007-000CN	Right door assembly, duplex model	Right door assembly on page 551
RM1-6012-000CN	Waste toner cover assembly (includes Residual Toner Full Sensor)	Internal components (6 of 9) on page 563
RM1-6018-000CN	IT belt guide rail assembly	Internal components (6 of 9) on page 563
RM1-6019-000CN	ITB guide rail assembly	Internal components (6 of 9) on page 563
RM1-6036-000CN	Auto close assembly	Internal components (8 of 9) on page 567

Table 4-28 Numerical parts list (continued)

Part number	Description	Table and page
RM1-6037-000CN	IT belt guide rail R1 assembly	Internal components (6 of 9) on page 563
RM1-6039-000CN	Lifter drive assembly	Internal components (8 of 9) on page 567
RM1-6040-000CN	Toner feed assembly	Internal components (7 of 9) on page 565
RM1-6043-000	Lifter plate assembly, Tray 1	Right door assembly on page 551
RM1-6045-000CN	Tray 1 (MP tray) assembly	Right door assembly on page 551
RM1-6065-000CN	Formatter case	Internal components (9 of 9) on page 569
RM1-6074-000CN	Fuser motor assembly	Internal components (3 of 9) on page 557
RM1-6088-000CN	DC motor assembly	Internal components (4 of 9) on page 559
RM1-6120-000CN	Drive assembly, simplex reverse, simplex model	Internal components (3 of 9) on page 557
RM1-6122-070CN	Laser scanner assembly	Internal components (7 of 9) on page 565
RM1-6138-000CN	Right door assembly, simplex model	Right door assembly on page 551
RM1-6164-000CN	Sensor, cassette last paper presence	Internal components (3 of 9) on page 557
RM1-6165-000CN	Paper delivery assembly	Paper delivery assembly on page 575
RM1-6742-000CN	Driver PCA (duplex model)	PCAs on page 577
RM1-6753-000CN	Low voltage power supply assembly, 110V	Internal components (8 of 9) on page 567
RM1-6753-000CN	Low-voltage power supply PCA (110V)	PCAs on page 577
RM1-6754-000CN	Low voltage power supply assembly, 220V	Internal components (8 of 9) on page 567
RM1-6754-000CN	Low-voltage power supply PCA (220V)	PCAs on page 577
RM1-6759-000CN	Power switch PCA	PCAs on page 577
RM1-6779-000CN	Toner remaining detect PCA	PCAs on page 577
RM1-6783-000CN	Driver PCA (simplex model)	PCAs on page 577
RM1-6800-000CN	Imaging high-voltage PCA	PCAs on page 577
RM1-6802-000CN	Secondary transfer high-voltage PCA	PCAs on page 577
RM1-6804-000CN	Cable assembly, flat-flexible	Internal components (7 of 9) on page 565

Table 4-28 Numerical parts list (continued)

Part number	Description	Table and page
RM1-6807-000CN	Cable, low-voltage power supply	Internal components (8 of 9) on page 567
RM1-6811-000CN	Cable, low-voltage AC joint	Internal components (8 of 9) on page 567
RM1-6813-000CN	Cable, low-voltage power supply, test	Internal components (8 of 9) on page 567
RM1-6822-000CN	Cable, primary transfer	Internal components (9 of 9) on page 569
RM1-6830-000CN	Cable, switch	Internal components (8 of 9) on page 567
RM1-6833-000CN	Cable, left, high-voltage power supply to low-voltage power supply	Internal components (8 of 9) on page 567
RM1-6846-000CN	Cable, feed joint, duplex model	Internal components (4 of 9) on page 559
RM1-6849-000CN	Cable, PNL-H-HI	Internal components (9 of 9) on page 569
RM1-6863-000CN	Cable, rear	Internal components (9 of 9) on page 569
RM1-6867-000CN	Cable, SB joint, low-voltage power supply, duplex model	Internal components (3 of 9) on page 557
RM1-6944-000CN	Paper pick-up assembly (1x500PF)	1x500PF internal components on page 581
RM1-6944-000CN	Paper pick-up assembly (3x500PF)	3x500PF internal components on page 587
RM1-6946-000CN	Right door assembly (1x500PF)	1x500PF external components on page 579
RM1-6948-000CN	Cover, right lower assembly (1x500PF)	1x500PF external components on page 579
RM1-6949-000CN	Cover, upper front assembly (1x500PF)	1x500PF external components on page 579
RM1-6953-000CN	Right door assembly (3x500PF)	3x500PF external components on page 585
RM1-6958-000CN	Front lower cover assembly (3x500PF)	3x500PF external components on page 585
RM1-6987-000CN	Paper feeder driver PCA (1x500PF)	1x500PF internal components on page 581
RM1-6987-000CN	Paper feeder driver PCA (1x500PF)	1x500PF PCA on page 583
RM1-6989-000CN	Feeder PCA (3x500PF)	3x500PF internal components on page 587
RM1-6989-000CN	Feeder PCAs (3x500PF)	3x500PF PCAs on page 591
RM1-6991-000CN	Cable, engine interface (3x500PF)	3x500PF internal components on page 587

Table 4-28 Numerical parts list (continued)

Part number	Description	Table and page
RM1-6992-000CN	Cable, PCA joint (3x500PF)	3x500PF internal components on page 587
RM1-7004-000CN	Primary transfer high-voltage PCA	PCAs on page 577
RM1-7142-000CN	Cover, right rear	External covers, panels, and doors on page 549
RM1-7143-000CN	Cover, left assembly	External covers, panels, and doors on page 549
RM1-7144-000CN	Cover, right front assembly (includes control panel)	External covers, panels, and doors on page 549
RM1-7147-000CN	Cover, rear	External covers, panels, and doors on page 549
RM1-7148-000CN	Cover, top	External covers, panels, and doors on page 549
RM1-7914-060CN	Gear assembly, fuser	Internal components (3 of 9) on page 557
RM1-7922-000CN	Registration sensor assembly	Internal components (3 of 9) on page 557
RS5-9099-000CN	Screw, stepped (3x500PF)	3x500PF external components on page 585
RU5-4979-000CN	Shaft, right door link	Internal components (4 of 9) on page 559
RU5-8804-000CN	Label, ITB insert, FV	Internal components (7 of 9) on page 565
RU5-8805-000CN	Label, ITB, RV	Internal components (6 of 9) on page 563
RU5-8806-000CN	Label, ITB insert, FH	Internal components (7 of 9) on page 565
RU5-8807-000CN	Label, ITB set, RH	Internal components (6 of 9) on page 563
RU6-0771-000CN	Gear, 25T, duplex model	Internal components (4 of 9) on page 559
RU6-0772-000CN	Gear, 25T, duplex model	Internal components (4 of 9) on page 559
RU6-0773-000CN	Gear, 74T, duplex model	Internal components (4 of 9) on page 559
RU6-0775-000CN	Gear, 18T/29T	Internal components (3 of 9) on page 557
RU6-0795-000CN	Gear, link worm	Internal components (6 of 9) on page 563
RU6-2671-000CN	Spring, tension, duplex model	Internal components (4 of 9) on page 559
RU6-2683-000CN	Spring, compression	Internal components (6 of 9) on page 563

Table 4-28 Numerical parts list (continued)

Part number	Description	Table and page
RU6-2710-000CN	Spring, tension, registration sensor	Internal components (3 of 9) on page 557
RU6-2721-000CN	Spring, compression	Internal components (1 of 9) on page 553
RU6-2727-000CN	Spring, tension, front	Internal components (5 of 9) on page 561
RU6-2744-000CN	Spring, tension, rear	Internal components (4 of 9) on page 559
RU6-2767-000CN	Spring, contact	Internal components (8 of 9) on page 567
RU6-2768-000CN	Spring, contact	Internal components (8 of 9) on page 567
RU6-2771-000CN	Spring, contact, second-transfer high-voltage PCA	Internal components (4 of 9) on page 559
RU6-2772-000CN	Spring, grounding, second-transfer high-voltage PCA	Internal components (4 of 9) on page 559
RU6-2831-000CN	Spring, tension	Internal components (6 of 9) on page 563
RU6-8042-000CN	Label, fuser insert	Internal components (3 of 9) on page 557
VS1-7207-019CN	Connector, snap tight, black	Internal components (3 of 9) on page 557
VS1-7500-008CN	Connector, 8P (3x500PF)	3x500PF internal components on page 587
VS1-7514-008CN	Connector, 8-pin, paper-pick-up	Internal components (9 of 9) on page 569
VS1-7514-008CN	Connector, 8P (1x500PF)	1x500PF internal components on page 581
VT2-5176-004CN	Spacer, DC controller PCA	Internal components (9 of 9) on page 569
WC2-5512-000CN	Switch, bottom (1x500PF)	1x500PF internal components on page 581
WC2-5512-000CN	Switch, button (3x500PF)	3x500PF internal components on page 587
WC4-5251-000CN	Microswitch	Internal components (1 of 9) on page 553
WE8-6639-000CN	Core, ring	Internal components (9 of 9) on page 569
WG8-5935-000	Sensor, right door	Internal components (4 of 9) on page 559

A Service and support

- [Hewlett-Packard limited warranty statement](#)
- [HP's Premium Protection Warranty: LaserJet toner cartridge limited warranty statement](#)
- [Color LaserJet Fuser Kit, Transfer Kit, and Roller Kit Limited Warranty Statement](#)
- [Data stored on the toner cartridge](#)
- [End User License Agreement](#)
- [Customer self-repair warranty service](#)
- [Customer support](#)

Hewlett-Packard limited warranty statement

HP PRODUCT	DURATION OF LIMITED WARRANTY
HP Color LaserJet M7505n, M750dn, M750xh	One-year on-site warranty

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

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

Color LaserJet Fuser Kit, Transfer Kit, and Roller Kit Limited Warranty Statement

This HP product is warranted to be free from defects in materials and workmanship until the printer provides a low-life indicator on the control panel.

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

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

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

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

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

Data stored on the toner cartridge

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

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

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

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

Any third party possessing the toner cartridge might have access to the anonymous information on the memory chip.

End User License Agreement

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

RIGHTS IN THE SOFTWARE ARE OFFERED ONLY ON THE CONDITION THAT YOU AGREE TO ALL TERMS AND CONDITIONS OF THIS EULA. BY INSTALLING, COPYING, DOWNLOADING, OR OTHERWISE USING THE SOFTWARE, YOU AGREE TO BE BOUND BY THIS EULA. IF YOU DO NOT ACCEPT THIS EULA, DO NOT INSTALL, DOWNLOAD, OR OTHERWISE USE THE SOFTWARE. IF YOU PURCHASED THE SOFTWARE BUT DO NOT AGREE TO THIS EULA, PLEASE RETURN THE SOFTWARE TO YOUR PLACE OF PURCHASE WITHIN FOURTEEN DAYS FOR A REFUND OF THE PURCHASE PRICE; IF THE SOFTWARE IS INSTALLED ON OR MADE AVAILABLE WITH ANOTHER HP PRODUCT, YOU MAY RETURN THE ENTIRE UNUSED PRODUCT.

- 1. THIRD PARTY SOFTWARE.** The Software may include, in addition to HP proprietary software (“HP Software”), software under licenses from third parties (“Third Party Software” and “Third Party License”). Any Third Party Software is licensed to you subject to the terms and conditions of the corresponding Third Party License. Generally, the Third Party License is in a file such as “license.txt” or a “readme” file. You should contact HP support if you cannot find a Third Party License. If the Third Party Licenses include licenses that provide for the availability of source code (such as the GNU General Public License) and the corresponding source code is not included with the Software, then check the product support pages of HP's website (hp.com) to learn how to obtain such source code.
- 2. LICENSE RIGHTS.** You will have the following rights provided you comply with all terms and conditions of this EULA:
 - a. Use.** HP grants you a license to Use one copy of the HP Software. “Use” means installing, copying, storing, loading, executing, displaying, or otherwise using the HP Software. You may not modify the HP Software or disable any licensing or control feature of the HP Software. If this Software is provided by HP for Use with an imaging or printing product (for example, if the Software is a printer driver, firmware, or add-on), the HP Software may only be used with such product (“HP Product”). Additional restrictions on Use may appear in the User Documentation. You may not separate component parts of the HP Software for Use. You do not have the right to distribute the HP Software.
 - b. Copying.** Your right to copy means you may make archival or back-up copies of the HP Software, provided each copy contains all the original HP Software's proprietary notices and is used only for back-up purposes.
- 3. UPGRADES.** To Use HP Software provided by HP as an upgrade, update, or supplement (collectively “Upgrade”), you must first be licensed for the original HP Software identified by HP as eligible for the Upgrade. To the extent the Upgrade supersedes the original HP Software, you may no longer use such HP Software. This EULA applies to each Upgrade unless HP provides other terms with the Upgrade. In case of a conflict between this EULA and such other terms, the other terms will prevail.

4. TRANSFER.

- a.** Third Party Transfer. The initial end user of the HP Software may make a one-time transfer of the HP Software to another end user. Any transfer will include all component parts, media, User Documentation, this EULA, and if applicable, the Certificate of Authenticity. The transfer may not be an indirect transfer, such as a consignment. Prior to the transfer, the end user receiving the transferred Software will agree to this EULA. Upon transfer of the HP Software, your license is automatically terminated.
- b.** Restrictions. You may not rent, lease or lend the HP Software or Use the HP Software for commercial timesharing or bureau use. You may not sublicense, assign or otherwise transfer the HP Software except as expressly provided in this EULA.
- 5. PROPRIETARY RIGHTS.** All intellectual property rights in the Software and User Documentation are owned by HP or its suppliers and are protected by law, including applicable copyright, trade secret, patent, and trademark laws. You will not remove any product identification, copyright notice, or proprietary restriction from the Software.
- 6. LIMITATION ON REVERSE ENGINEERING.** You may not reverse engineer, decompile, or disassemble the HP Software, except and only to the extent that the right to do so is allowed under applicable law.
- 7. CONSENT TO USE OF DATA.** HP and its affiliates may collect and use technical information you provide in relation to (i) your Use of the Software or the HP Product, or (ii) the provision of support services related to the Software or the HP Product. All such information will be subject to HP's privacy policy. HP will not use such information in a form that personally identifies you except to the extent necessary to enhance your Use or provide support services.
- 8. LIMITATION OF LIABILITY.** Notwithstanding any damages that you might incur, the entire liability of HP and its suppliers under this EULA and your exclusive remedy under this EULA will be limited to the greater of the amount actually paid by you for the Product or U.S. \$5.00. TO THE MAXIMUM EXTENT PERMITTED BY APPLICABLE LAW, IN NO EVENT WILL HP OR ITS SUPPLIERS BE LIABLE FOR ANY SPECIAL, INCIDENTAL, INDIRECT, OR CONSEQUENTIAL DAMAGES (INCLUDING DAMAGES FOR LOST PROFITS, LOST DATA, BUSINESS INTERRUPTION, PERSONAL INJURY, OR LOSS OF PRIVACY) RELATED IN ANY WAY TO THE USE OF OR INABILITY TO USE THE SOFTWARE, EVEN IF HP OR ANY SUPPLIER HAS BEEN ADVISED OF THE POSSIBILITY OF SUCH DAMAGES AND EVEN IF THE ABOVE REMEDY FAILS OF ITS ESSENTIAL PURPOSE. Some states or other jurisdictions do not allow the exclusion or limitation of incidental or consequential damages, so the above limitation or exclusion may not apply to you.
- 9. U.S. GOVERNMENT CUSTOMERS.** Software was developed entirely at private expense. All Software is commercial computer software within the meaning of the applicable acquisition regulations. Accordingly, pursuant to US FAR 48 CFR 12.212 and DFAR 48 CFR 227.7202, use, duplication and disclosure of the Software by or for the U.S. Government or a U.S. Government subcontractor is subject solely to the terms and conditions set forth in this End User License Agreement, except for provisions which are contrary to applicable mandatory federal laws.
- 10. COMPLIANCE WITH EXPORT LAWS.** You will comply with all laws, rules, and regulations (i) applicable to the export or import of the Software, or (ii) restricting the Use of the Software, including any restrictions on nuclear, chemical, or biological weapons proliferation.
- 11. RESERVATION OF RIGHTS.** HP and its suppliers reserve all rights not expressly granted to you in this EULA.

© 2009 Hewlett-Packard Development Company, L.P.

Rev. 04/09

Customer self-repair warranty service

HP products are designed with many Customer Self Repair (CSR) parts to minimize repair time and allow for greater flexibility in performing defective parts replacement. If during the diagnosis period, HP identifies that the repair can be accomplished by the use of a CSR part, HP will ship that part directly to you for replacement. There are two categories of CSR parts: 1) Parts for which customer self repair is mandatory. If you request HP to replace these parts, you will be charged for the travel and labor costs of this service. 2) Parts for which customer self repair is optional. These parts are also designed for Customer Self Repair. If, however, you require that HP replace them for you, this may be done at no additional charge under the type of warranty service designated for your product.

Based on availability and where geography permits, CSR parts will be shipped for next business day delivery. Same-day or four-hour delivery may be offered at an additional charge where geography permits. If assistance is required, you can call the HP Technical Support Center and a technician will help you over the phone. HP specifies in the materials shipped with a replacement CSR part whether a defective part must be returned to HP. In cases where it is required to return the defective part to HP, you must ship the defective part back to HP within a defined period of time, normally five (5) business days. The defective part must be returned with the associated documentation in the provided shipping material. Failure to return the defective part may result in HP billing you for the replacement. With a customer self repair, HP will pay all shipping and part return costs and determine the courier/carrier to be used.

Customer support

Get telephone support for your country/region	Country/region phone numbers are on the flyer that was in the box with your product or at www.hp.com/support/ .
Have the product name, serial number, date of purchase, and problem description ready.	
Get 24-hour Internet support	<ul style="list-style-type: none">• In the US, go to www.hp.com/support/colorljM750.• Outside the US, go to www.hp.com/support. Select your country/region. Click Product Support & Troubleshooting. Enter the product name, and then select Search.
Download software utilities, drivers, and electronic information	<ul style="list-style-type: none">• In the US, go to www.hp.com/support/colorljM750. Click Drivers & Software.• Outside the US, go to www.hp.com/support. Select your country/region. Click Drivers & Software. Enter the product name (for example, "LaserJet M575"), and then select Search.
Order additional HP service or maintenance agreements	www.hp.com/go/carepack
Register your product	www.register.hp.com

B Product specifications

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

Physical specifications

Table B-1 Product dimensions

Product	Height	Depth	Width	Weight
HP Color LaserJet M750n	465 mm (18 in)	586 mm (23 in)	544 mm (21.4 in)	53.3 kg (117.3 lb)
HP Color LaserJet M750dn	465 mm (18 in)	586 mm (23 in)	544 mm (21.4 in)	53.5 kg (117.8 lb)
HP Color LaserJet M750xh	885 mm (34.8 in)	688 mm (27 in)	745 mm (29.3 in)	84 kg (184.8 lb)

Power consumption, electrical specifications, and acoustic emissions

See www.hp.com/support/colorljM750 for current information.

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

Environmental specifications

Environmental condition	Recommended	Allowed
Temperature (product and print cartridge)	17° to 25°C (63° to 77°F)	15° to 27°C (59° to 81°F)
Relative humidity	30% to 70% relative humidity (RH)	10% to 70% RH
Altitude	N/A	0 m (0 ft) to 3000 m (9842 ft)

C Regulatory information

- [FCC regulations](#)
- [Environmental product stewardship program](#)
- [Declaration of Conformity](#)
- [Certificate of Volatility](#)
- [Safety statements](#)

FCC regulations

This equipment has been tested and found to comply with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference when the equipment is operated in a commercial environment. This equipment generates, uses, and can radiate radio frequency energy, and if not installed and used in accordance with the instruction manual, may cause harmful interference to radio communications. Operation of this equipment in a residential area is likely to cause harmful interference in which case the user will be required to correct the interference at his own expense.



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

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

Environmental product stewardship program

Protecting the environment

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

Ozone production

This product generates no appreciable ozone gas (O₃).

Power consumption

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



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

www.hp.com/go/energystar

Toner consumption

EconoMode uses less toner, which might extend the life of the toner cartridge. HP does not recommend the full-time use of EconoMode. If EconoMode is used full-time, the toner supply might outlast the mechanical parts in the toner cartridge. If print quality begins to degrade and is no longer acceptable, consider replacing the toner cartridge.

Paper use

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

Plastics

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

HP LaserJet print supplies

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

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



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

Return and recycling instructions

United States and Puerto Rico

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

Multiple returns (more than one cartridge)

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

OR

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

Single returns

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

Shipping

For US and Puerto Rico HP LaserJet toner cartridge recycling returns, use the pre-paid, pre-addressed shipping label contained in the box. To use the UPS label, give the package to the UPS driver during your next delivery or pick-up, or take it to an authorized UPS drop-off center. (Requested UPS Ground pickup will be charged normal pick-up rates) For the location of your local UPS drop-off center, call 1-800-PICKUPS or visit www.ups.com.

If you are returning the package with the FedEx label, give the package to either the U.S. Postal Service carrier or FedEx driver during your next pick-up or delivery. (Requested FedEx Ground pickup will be charged normal pick-up rates). Or, you can drop off your packaged toner cartridge(s) at any U.S. Post Office or any FedEx shipping center or store. For the location of your nearest U.S. Post Office, please call 1-800-ASK-USPS or visit www.usps.com. For the location of your nearest FedEx shipping center/store, please call 1-800-GOFEDEX or visit www.fedex.com.

For more information, or to order additional labels or boxes for bulk returns, visit www.hp.com/recycle or call 1-800-340-2445. Information subject to change without notice.

Residents of Alaska and Hawaii

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

Non-U.S. returns

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

Paper

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

Material restrictions

This HP product does not contain added mercury.

This HP product contains a battery that might require special handling at end-of-life. The batteries contained in or supplied by Hewlett-Packard for this product include the following:

HP Laser Jet MFP M750	
Type	Carbon monofluoride lithium
Weight	0.8 g
Location	On formatter board
User-removable	No



廢電池請回收

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

Disposal of waste equipment by users



This symbol means do not dispose of your product with your other household waste. Instead, you should protect human health and the environment by handing over your waste equipment to a designated collection point for the recycling of waste electrical and electronic equipment. For more information, please contact your household waste disposal service, or go to: www.hp.com/recycle.

Electronic hardware recycling

HP encourages customers to recycle used electronic hardware. For more information about recycling programs go to: www.hp.com/recycle.

Chemical substances

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

Material Safety Data Sheet (MSDS)

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

For more information

To obtain information about these environmental topics:

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

Visit www.hp.com/go/environment or www.hp.com/hpinfo/globalcitizenship/environment.

Declaration of Conformity

Declaration of Conformity

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

Manufacturer's Name: Hewlett-Packard Company DoC#: BOISB-0905-00 rel.1.0

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

declares, that the product

Product Name: HP LaserJet Enterprise M750 Series
Including:
CE860A – 500-sheet paper tray
CE725A – 3x500-sheet paper tray and stand

Regulatory Model Number²⁾ BOISB-0905-00

Product Options: ALL

Print Cartridges: CE270A, CE271A, CE272A, CE273A

conforms to the following Product Specifications:

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

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

ENERGY USE: Regulation (EC) No. 1275/2008
ENERGY STAR® Qualified Imaging Equipment Typical Electricity Consumption (TEC) Test Procedure

Supplementary Information:

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

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

1. The product was tested in a typical configuration with Hewlett-Packard Personal Computer Systems.
2. The product meets the requirements of EN55022 & CNS13438 Class A in which case the following applies: "Warning – This is a class A product. In a domestic environment this product may cause radio interference in which case the user may be required to take adequate measures."
3. 3) For regulatory purposes, this product is assigned a Regulatory model number. This number should not be confused with the product name or the product number(s).

Boise, Idaho USA

October 2010

For regulatory topics only:

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

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

Certificate of Volatility

Figure C-1 Certificate of Volatility (1 of 2)

Hewlett-Packard Certificate of Volatility				
Model: HP LaserJet Enterprise M750 Series	Part Number: CLJ M750n / D3L08A CLJ M750dn / D3L09A CLJ M750xh / D3L10A	Address: Hewlett Packard Company 11311 Chinden Blvd Boise, ID 83714		
Volatile Memory				
Does the device contain volatile memory (Memory whose contents are lost when power is removed)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (SRAM, DRAM, etc): DDR2 - DRAM	Size: 1 GB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Used for temporary storage during the process of jobs, and for applications that are running on the OS.	Steps to clear memory: When the printer is powered off, the memory is erased.
Type (SRAM, DRAM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
Type (SRAM, DRAM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
Non-Volatile Memory				
Does the device contain non-volatile memory (Memory whose contents are retained when power is removed)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (Flash, EEPROM, etc): SPI Flash	Size: 4 MB	User Modifiable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Function: Contains the boot code and factory product configuration data required for the device to function. User modifications are limited to downloading digitally signed HP firmware images.	Steps to clear memory: There are no steps to clear this data.
Type (Flash, EEPROM, etc): ICB EEPROM	Size: 32KB	User Modifiable: <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Function: Backup device for critical system counters and product configuration information.	Steps to clear memory: There are no steps to clear this data.
Type (Flash, EEPROM, etc):	Size:	User Modifiable: <input type="checkbox"/> Yes <input type="checkbox"/> No	Function:	Steps to clear memory:
Mass Storage				
Does the device contain mass storage memory (Hard Disk Drive, Tape Backup)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe the type, size, function, and steps to clear the memory below				
Type (HDD, Tape, etc): Self Encrypting Hard Disk, SATA 1 and SATA 2	Size: 320 GB	User Modifiable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Function: Stores customer data, OS, applications, digitally signed firmware images, persistent data, and temporary data used for processing and system functions. (Note: HDD is standard on D3L10A model, optional on D3L08A and D3L09A models)	Steps to clear memory: There are several ways to erase this: 1. Erase and Unlock Encrypted Disk - This changes the encryption keys rendering all data unreadable. 2. Secure Storage Erase - Erases temporary files and job data by overwriting information one or three times 3. Secure Disk Erase - Industry standard ATA Secure Erase. Overwrites all data on the hard drive. 4. Secure File Erase - Erases files when jobs finish processing by overwriting them one or three times.
Type (HDD, Tape, etc): Solid State Storage	Size: 8 GB	User Modifiable: <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Function: Stores customer data, OS,	Steps to clear memory: Industry standard ATA Secure

Figure C-2 Certificate of Volatility (2 of 2)

Device (SSD)		applications, persistent data, and temporary data used for processing and system functions. User modifications are limited to downloading digitally signed HP firmware images. (Note: SSD is standard on D3L08A and D3L09A models.	Erase. Overwrites all data on the device.
--------------	--	--	---

USB	
Does the item accept USB input and if so, for what purpose (i.e Print Jobs, device firmware updates, scan upload)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below	
Print jobs, HP digitally signed firmware upgrades, 3rd party application loading. USB ports can be disabled.	
Can any data other than scan upload be sent to the USB device)? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No If Yes please describe below	
Diagnostic service logs can be uploaded.	

RF/RFID	
Does the item use RF or RFID for receive or transmit of any data including remote diagnostics. (e.g. Cellular phone, Bluetooth) <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes please describe below	
Purpose:	
Frequency:	Bandwidth:
Modulation:	Effective Radiate Power (ERP):
Specifications:	

Other Transmission Capabilities	
Does the device employ any other methods of non-wired access to transmit or receive any data whatsoever (e.g. anything other than standard hard wired TCP/IP, direct USB, or parallel connections)? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes please describe below:	
Purpose:	
Frequency:	Bandwidth:
Modulation:	Effective Radiate Power (ERP):
Specifications:	

Other Capabilities	
Does the device employ any other method of communications such as a Modem to transmit or receive any data whatsoever? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No If Yes please describe below:	
Purpose:	
Specifications:	

Author Information			
Name:	Title:	Email:	Business Unit:
			Date Prepared: 07/09/2013

Safety statements

Laser safety

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

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

Canadian DOC regulations

Complies with Canadian EMC Class A requirements.

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

VCCI statement (Japan)

この装置は、クラスA情報技術装置です。この装置を家庭環境で使用すると電波妨害を引き起こすことがあります。この場合には使用者は適切な対策を講ずるよう要求されることがあります。

VCCI-A

Power cord instructions

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

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

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

EMC statement (China)

此为A级产品，在生活环境中，该产品可能会造成无线电干扰。在这种情况下，可能需要用户对其干扰采取切实可行的措施。

Power cord statement (Japan)

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

EMC statement (Korea)

A급 기기 (업무용 방송통신기기)	이 기기는 업무용(A급)으로 전자파적합등록을 한 기기이오니 판매자 또는 사용자는 이점을 주의하시기 바라며, 가정 외의 지역에서 사용하는 것을 목적으로 합니다.
-----------------------	--

EMI statement (Taiwan)

警告使用者：

這是甲類的資訊產品，在居住的環境中使用時，可能會造成射頻干擾，在這種情況下，使用者會被要求採取某些適當的對策。

Laser statement for Finland

Luokan 1 laserlaite

Klass 1 Laser Apparat

HP Color LaserJet M750n, M750dn, M750xh, laserkirjoitin on käyttäjän kannalta turvallinen luokan 1 laserlaite. Normaalisissa käytössä kirjoittimen suojakotelointi estää lasersäteen pääsyn laitteen ulkopuolelle. Laitteen turvallisuusluokka on määritetty standardin EN 60825-1 (2007) mukaisesti.

VAROITUS!

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

WARNING!

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

HUOLTO

HP Color LaserJet M750n, M750dn, M750xh - kirjoittimen sisällä ei ole käyttäjän huollettavissa olevia kohteita. Laitteen saa avata ja huoltaa ainoastaan sen huoltamiseen koulutettu henkilö. Tällaiseksi huoltotoimenpiteeksi ei katsota väriainekasetin vaihtamista, paperiradan puhdistusta tai muita käyttäjän käsikirjassa lueteltuja, käyttäjän tehtäväksi tarkoitettuja ylläpitotoimia, jotka voidaan suorittaa ilman erikoistyökaluja.

VARO!

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

VARNING !

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

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

GS statement (Germany)

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

Das Gerät ist kein Bildschirmarbeitsplatz gemäß BildscharbV. Bei ungünstigen Lichtverhältnissen (z. B. direkte Sonneneinstrahlung) kann es zu Reflexionen auf dem Display und damit zu Einschränkungen der Lesbarkeit der dargestellten Zeichen kommen.

Substances Table (China)

有毒有害物质表

根据中国电子信息产品污染控制管理办法的要求而出台

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

0609

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

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

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

Restriction on Hazardous Substances statement (Turkey)

Türkiye Cumhuriyeti: EEE Yönetmeliğine Uygundur

Restriction on Hazardous Substances statement (Ukraine)

Обладнання відповідає вимогам Технічного регламенту щодо обмеження використання деяких небезпечних речовин в електричному та електронному обладнанні, затвердженого постановою Кабінету Міністрів України від 3 грудня 2008 № 1057

Eurasian Conformity (Belarus, Kazakhstan, Russia)



Производитель: Hewlett-Packard Company, 3000 Hanover Street, Palo Alto, California 94304, США.

Представитель производителя:

- **Россия:** ЗАО «Хьюлетт-Паккард А.О.», 125171, Россия, Москва, Ленинградское шоссе, 16А, стр. 3
Тел./факс: +7 (495) 797 35 00, +7 (495) 287 89 05
- **Беларусь:** ИООО «Хьюлетт-Паккард Бел», 220030, Беларусь, г. Минск, ул. Интернациональная, 36-1, офис 722-723, тел.: +375 (17) 392 28 18, факс: +375 (17) 392 28 21
- **Казахстан:** ТОО «Хьюлетт-Паккард (К)», 050040, Казахстан, г. Алматы, Бостандыкский район, ул. Тимирязева, 28В, 1 этаж, тел./факс: +7 (727) 355 35 50, +7 (727) 355 35 51

Index

Symbols/Numerics

- 1 x 500-sheet paper feeder assembly
 - components, removing 211
- 3 x 500-paper feeder assembly
 - components, removing 225

A

- accessories
 - ordering 540
- accessories installed, information 342
- acoustic specifications 628
- Administration menu, control panel 251, 346
- after-service checklist 84

B

- Backup/Restore menu, control panel 265, 386
- bands, troubleshooting 519
- batteries included 633
- before-service checklist 84
- blank pages
 - troubleshooting 524
- blank pages, troubleshooting 518
- buffer overflow errors 422

C

- cable, USB
 - troubleshooting 524
- Calibrate/Cleaning menu, control panel 266, 387
- calibration
 - information, printed 337
 - process 40
- Canadian DOC regulations 639
- cartridge
 - developing unit engagement and disengagement 35

- life detection 35
- memory tag 35
- ordering 541
- part number 541
- presence detection 35
- toner level detection 35
- cartridges
 - error messages 480
 - recycling 631
 - removing 85
 - replace message 480
 - warranty 619
- cautions iii
- characters, troubleshooting 521
- circuit diagram 330
- clean the paper path
 - cleaning page printing 523
- cleaning
 - product 523
- cleaning page 387
- clock
 - error message 398
- color
 - diagnostic test 342
 - troubleshooting 337, 520
- components
 - diagnostic tests 304
- configuration page 273
- configuration pages
 - information 342
 - printing 339
- connectivity
 - solving problems 525
- control panel
 - Administration menu 251, 346
 - assembly, removing 108
 - Backup/Restore menu 265, 386
 - Calibrate/Cleaning menu 266, 387

- Display Settings menu 258, 365
- General Settings menu 251, 348
- Manage Supplies menu 259, 366
- Manage Trays menu 260, 369
- messages, numerical list 390
- messages, types of 390
- Network Settings menu 261, 370
- Print Options menu 256, 363
- Print Settings menu 255, 361
- Reports menu 251, 346
- Service menu 267, 389
- Supplies menu 248
- Trays menu 250
- Troubleshooting menu 264, 381
- USB Firmware Upgrade menu 266, 389
- control-panel menus 346
 - retrieve job from device memory 247
 - Retrieve Job From USB 247
 - Sign In 247
- conventions, document iii
- counts 526
 - page, reset 526
 - reset after replacing formatter 526
 - See *also* pages counts
- covers
 - control-panel assembly, removing 108
 - front-door assembly, removing 117
 - identification and location 106
 - left, removing 110
 - rear, removing 111
 - right-door assembly, removing 120

- right-front, removing 108
- right-rear, removing 114
- top, removing 115
- creases, troubleshooting 521
- crooked pages
 - troubleshooting 521
- customer support
 - online 625

D

- dark image, troubleshooting 518
- date
 - codes for firmware 342
 - manufacture 341
- DC controller
 - PCA, removing 197
- DC controller, operation 8
- defeating
 - interlocks 277
- delivery unit
 - delivery drive assembly (simplex models), removing 181
- demo page 273
- determine the problem source 268
- developing stage 30
- diagnostics 337
 - component 304
 - engine 276
 - LED 273
 - networks 377
 - page, printing 337
 - See also* tests; troubleshooting
- diagrams 539
- Display Settings menu, control panel 258, 365
- disposal, end-of-life 633
- document conventions iii
- doors. *See* covers
- driver PCA
 - removing 207
- drum cleaning stage 33
- duplex
 - paper path 62
- duplexing unit
 - duplex drive assembly (duplex models), removing 179
 - jam causes 504

E

- EIO cards
 - buffer overflow 422
- electrical specifications 628
- electronic hardware recycling 634
- electrostatic discharge (ESD) 82
- end-of-life disposal 633
- engine
 - diagnostics 276
- engine speed
 - paper type 58
- engine test button 279
- engine-control system 7
- environment, specifications 628
- environmental stewardship program 631
- error messages
 - numerical list 390
 - types of 390
- ESD electrostatic discharge (ESD) 82
- Eurasian conformity 643
- event log 273
 - clear 489
 - information 342
 - print 489
 - view 489
- event-log messages 390, 488

F

- faded print 517
- fans
 - fuser, removing 192
 - power-supply fan and fan duct, removing 190
- FCC regulations 630
- field-replaceable units (FRUs)
 - replacing 82
- Finnish laser safety statement 640
- firmware
 - date codes 342
 - version information 341
- firmware, downloading new 535
- flowcharts
 - troubleshooting 269
- formatter
 - case, removing 123
 - PCA, removing 100
 - resets after replacing 526

- formatter fan
 - removing 194
- formatter lights 273
- FRUs (field-replaceable units)
 - replacing 82
- fuser
 - jam causes 503
 - jams 496
 - motor, removing 188
 - operation 58
 - part number 542
- fuser drive assembly
 - removing 164
- fusing stage 32

G

- General Settings menu, control panel 251, 348

H

- high-voltage power supply
 - removing, first transfer 203
 - removing, imaging (developing) 202
 - removing, second transfer 205
- HP Customer Care 625
- HP Jetdirect print server
 - configuration page 341
 - lights 273
- humidity requirements 628
- humidity values, printed 337

I

- ICB PCA
 - removing 194
- image quality
 - calibration process 40
 - print, troubleshooting 517
- imaging drums
 - diagnostic test 278
- installation 82
 - screws 82
 - verify for optional accessories 339
 - See also* replacing parts
- interlocks
 - defeating 277
- intermediate transfer belt (ITB) 98
- internal clock errors 398
- interpret control-panel messages and event log entries 390

- ITB
 - part number 542, 543
- ITB cleaning stage 33
- ITB unit
 - operation 37
- J**
- jams
 - common causes of 490
 - detection theory 64
 - diagnostic test for 279
 - duplex area 504
 - fuser 496
 - fuser area 503
 - locations 491
 - lower right door 498
 - output bin 502, 503
 - recovery 509
 - Tray 1 499
 - Tray 1 and Tray 2 505
 - Tray 2 501
 - Tray 3 501
 - Tray 3, 4, and 5 507
 - Tray 4 501
 - Tray 4, 5, or 6 498
 - Tray 5 501
 - Tray 6 501
 - upper right door 496
- Japanese VCCI statement 639
- Jetdirect print server
 - lights 273
- K**
- Korean EMC statement 640
- L**
- laser beam exposure stage 29
- laser safety statements 639, 640
- laser scanner
 - cautions for servicing 82
- laser/scanner
 - assembly, removing 125
 - operations 23
- LEDs. *See* lights
- left cover, removing 110
- license, software 622
- lifter-drive assembly
 - removing 138
- light print, troubleshooting 517
- lights
 - formatter 273
 - troubleshooting with 273
- lines, troubleshooting 519
- link speed settings 381
- loose toner, troubleshooting 520
- low-voltage power supply
 - removing 199
- lower right door
 - jams 498
- M**
- main drive assembly
 - removing 150
- Manage Supplies menu, control panel 259, 366
- Manage Trays menu, control panel 260, 369
- manual print modes 514
- material restrictions 633
- Material Safety Data Sheet (MSDS) 634
- memory
 - information 339
 - insufficient 416
 - print cartridge 35
 - supply errors 390
- memory chip, toner cartridge
 - description 621
- menus, control panel
 - Administration 251, 346
 - Backup/Restore 265, 386
 - Calibrate/Cleaning 266, 387
 - Display Settings 258, 365
 - General Settings 251, 348
 - Manage Supplies 259, 366
 - Manage Trays 260, 369
 - Network Settings 261, 370
 - Print Options 256, 363
 - Print Settings 255, 361
 - Reports 251, 346
 - Service 267, 389
 - Supplies 248
 - Trays 250
 - Troubleshooting 264, 381
 - USB Firmware Upgrade 266, 389
- menus, control-panel
 - retrieve job from device
 - memory 247
 - Retrieve Job From USB 247
 - Sign In 247
- mercury-free product 633
- messages
 - numerical list 390
 - types of 390
- model number 341
- motors
 - developing motor, removing 187
 - developing-disengagement, removing 189
 - drum motor, removing 186
 - fuser, removing 188
 - ITB, removing 184
 - paper path 46
- N**
- Network Settings menu, control panel 261, 370
- networks
 - diagnostics 377
 - HP embedded Jetdirect
 - configuration page 341
 - link speed settings 381
- notes iii
- O**
- online support 625
- operating environment
 - specifications 628
- operations
 - engine-control system 7
 - laser/scanner 23
 - print cartridge memory 35
- ordering
 - 500-sheet tray 545
 - print cartridge 541
 - product documents 540
 - supplies and accessories 540
- output bin
 - jam causes 503
 - jams 502
- output quality
 - print, troubleshooting 517
- P**
- pages
 - blank 524
 - not printing 524

- printing slowly 524
- skewed 521
- pages count 526
- reset 526
- See also* counts
- paper
 - pickup assembly, removing 128
 - stop in path for testing 304
 - wrinkled 521
- paper delivery assembly
 - removing 176
- paper jams
 - locations 491
- paper movement
 - operation 43
- paper path
 - diagnostic test 279
 - operation 54
 - stop movement for testing 304
- paper-path
 - test, sensors 303
- parameters, EP, troubleshooting 337
- part number
 - 500-sheet tray 545
 - print cartridge 541
- parts 539
- parts lists and diagrams
 - 1x500 paper feeder 578
 - 3x500 paper feeder 584
 - cassette 570
 - covers, panels, and doors 548
 - internal components 552, 554, 556, 558, 560, 562, 564, 566, 568
 - paper delivery assembly 574
 - paper pick-up assembly 572
 - printed circuit assemblies 576
 - right door components 550
 - using 546
- password
 - Service menu PIN 526
- pick-up rollers
 - part numbers 543
- port configuration information 341
- power
 - consumption 628
- power supply
 - troubleshooting 271

- power switch PCA
 - removing 209
- pre-exposure stage 28
- pre-troubleshooting checklist 268
- primary charging stage 28
- primary transfer stage 31
- print cartridge
 - developing unit engagement and disengagement 35
 - life detection 35
 - memory tag 35
 - ordering 541
 - part number 541
 - presence detection 35
 - toner level detection 35
- print cartridges
 - diagnostic test 278
 - error messages 480
 - removing 85
 - replace message 480
- Print Options menu, control panel 256, 363
- print quality
 - built-in troubleshooting pages 334
 - manual print modes 514
 - test pages 334
 - troubleshooting 517
- Print Quality menu options 514
- Print Settings menu, control panel 255, 361
- Print Test Page 351
- printing
 - modes, manual 514
 - stop for testing 304
 - troubleshooting 524
- problem source
 - determine 268
- problem-solving
 - event-log messages 390, 488
 - messages, types of 390
 - networks 377
- Process Cleaning Page 387
- product specifications 627

Q

- quality
 - print, troubleshooting 517

R

- recycling 631
 - electronic hardware 634
 - HP printing supplies returns and environmental program 632
- removal order
 - removing order 84
- removal strategy
 - removing and replacing 82
- removing parts
 - 1 x 500-sheet paper feeder assembly 211
 - 3 x 500-sheet paper feeder assembly 225
 - after-service checklist 84
 - before-service checklist 84
 - control-panel assembly 108
 - DC controller PCA 197
 - delivery drive assembly (simplex models) 181
 - developing motor 187
 - developing-disengagement motor 189
 - driver PCA 207
 - drum motor 186
 - duplex drive assembly (duplex models) 179
 - environmental sensor 210
 - formatter case 123
 - formatter fan 194
 - formatter PCA 100
 - front-door assembly 117
 - fuser 90
 - fuser drive assembly 164
 - fuser fan 192
 - fuser gear assembly 168
 - fuser motor 188
 - high-voltage power supply, first transfer 203
 - high-voltage power supply, second transfer 205
 - ICB PCA 194
 - imaging (developing) high-voltage power supply 202
 - intermediate transfer belt 98
 - ITB motor 184
 - laser/scanner assembly 125
 - left cover 110
 - lifter-drive assembly 138
 - low-voltage power supply 199

- main drive assembly 150
- paper delivery assembly 176
- paper pickup assembly 128
- pickup roller (tray 1) 91
- pickup roller (tray 2) 95
- power switch PCA 209
- power-supply fan and fan duct 190
- print cartridges 85
- rear cover 111
- registration sensor assembly 135
- residual toner full sensor 145
- residual-toner-feed assembly 182
- right-door assembly 120
- right-front cover 108
- right-rear cover 114
- secondary transfer roller 97
- separation pad (Tray 1) 92
- separation roller (tray 2) 94
- service approach 83
- toner-collection unit 88
- tools, required 83
- top cover 115
- repair approach 83
- replace supplies message 480
- replacing parts
 - about 82
 - after-service checklist 84
 - before-service checklist 84
 - screws 82
 - service approach 83
 - tools, required 83
- Reports menu, control panel 251, 346
- retrieve job from device memory menu 247
- Retrieve Job From USB menu 247
- roller
 - pickup roller (Tray 1), removing 91
 - pickup roller (Tray 2), removing 95
- rollers
 - separation roller (Tray 2), removing 94
- S**
- safety statements 639, 640
- screwdrivers, required 83
- screws
 - installing 82
 - types of 83
- secondary transfer roller
 - part number 543
- secondary transfer roller, removing 97
- secondary transfer stage 31
- sensor tests manual
 - developer alienation sensor (PS11) 288
 - front-door opening/closing switch (PS14) 281
 - fuser loop sensors 1 and 2 (PS7 and PS8) 285
 - fuser output sensor (PS 6) 287
 - fuser pressure-release sensor (PS9) 286
 - ITB alienation switch (SW5) 289
 - output-bin-full sensor (PS10) 303
 - right-door opening/closing sensor (PS15) 282
 - TOP sensor (PS5) 284
 - tray 3 paper size sensors (SW2 and SW3) 297
 - tray 4 paper size sensors (SW2 and SW3) 301
- sensor tests manual tray/bin
 - tray 1 paper sensor (PS2) 292
 - tray 2 paper sensor (PS1) 293
 - tray 2 paper size switches (SW7 and SW8) 295
 - tray 2 paper surface (PS4) 294
 - tray 3 door opening/closing sensor (SW1) 300
 - tray 3 feed sensor (SR1) 299
 - tray 3 paper sensor (SR1) 297
 - tray 3 paper sensor (SR3) 296
 - tray 4 door opening/closing door sensor (SW1) 301
 - tray 4 feed sensor (X) 301
 - tray 4 paper sensor (SR3) 301
 - tray 4 paper surface sensor (SR2) 301
 - tray 5 door opening/closing sensor (SW1) 302
 - tray 5 feed sensor (SR81) 302
 - tray 5 paper sensor (SR83) 302
- tray 5 paper size sensors (SW82 and SW83) 302
- tray 5 paper surface sensor (SR82) 302
- tray 6 door opening/closing sensor (SW1) 302
- tray 6 feed sensor (SR91) 302
- tray 6 paper sensor (SR93) 302
- tray 6 paper size sensors (SW92 and SW93) 302
- tray 6 paper surface sensor (SR92) 302
- sensors
 - diagnostic tests 303
 - environmental, removing 210
 - fuser gear assembly, removing 168
 - paper path 45
 - registration sensor assembly, removing 135
 - residual toner full sensor, removing 145
 - tests, manual 280
 - tests, manual tray/bin 290
- separation stage 32
- service approach 83
- Service menu options 526
- Service menu, control panel 267, 389
- Sign In menu 247
- skew prevention 55
- skewed pages
 - troubleshooting 521
- smear toner, troubleshooting 521
- software
 - software license agreement 622
- solenoids
 - paper path 46
- solve problems 243
- solving
 - direct-connect problems 525
 - network problems 525
- specifications 627
 - electrical and acoustic 628
 - operating environment 628
- static, precautions for 82
- status
 - messages, types of 390
- status page 273

- stop printing for test 304
- streaks, troubleshooting 519
- supplies
 - error messages 480
 - memory errors 390
 - ordering 540
 - recycling 631
 - replace message 480
- Supplies menu, control panel 248
- support
 - online 625

T

- Taiwan EMI statement 640
- technical support
 - online 625
- temperature
 - values, printed 337
- temperature requirements 628
- test page
 - engine 279
- tests
 - color band 342
 - component tests list and descriptions (1 of 2) 305
 - component tests list and descriptions (2 of 2) 307
 - disable cartridge check 278
 - manual sensor 280
 - networks 377
 - paper path 279
 - paper-path sensors 303
 - print/stop 304
 - tray/bin manual sensor 290
- text, troubleshooting 521
- tips iii
- toner
 - loose, troubleshooting 520
 - smear, troubleshooting 521
- toner cartridges
 - memory chips 621
 - recycling 631
 - warranty 619
- toner collection unit
 - part number 543
 - removing 88
- tools, required 83
- transfer stage 31
- transfer unit
 - operation 37

- Tray 1
 - jams 499
- Tray 2
 - jams 501
- tray selection - use requested tray 369
- trays
 - jam causes 505, 507
- Trays menu, control panel 250
- troubleshooting 243, 337
 - about 268
 - blank pages 524
 - checklist 244, 268
 - clean the paper path 523
 - color 337
 - configuration page 273
 - configuration pages for 339
 - control panel messages, numerical 390
 - demo page 273
 - direct-connect problems 525
 - duplexing 512
 - EP parameters 337
 - event log 273
 - flowchart 269
 - jams in duplex area 504
 - jams in fuser area 503
 - jams in output bin 503
 - jams in Tray 1 and Tray 2 505
 - jams in Tray 3, 4, and 5 507
 - lights, using 273
 - lines, printed pages 519
 - network problems 525
 - pages not printing 524
 - pages printing slowly 524
 - power 271
 - print quality 517
 - problem source 268
 - reports and tools 273
 - service approach 83
 - skewed pages 521
 - status page 273
 - text 521
 - toner smear 521
 - USB cables 524
 - wrinkles 521
- See also* diagnostics
- Troubleshooting menu, control panel 264, 381

U

- understand the lights on the formatter
 - heartbeat LED 274
 - heartbeat LED, product 274
 - heartbeat LED, product operating 276
- updates, downloading product 535
- upper right door
 - jams 496
- USB Firmware Upgrade menu, control panel 266, 389
- USB port
 - troubleshooting 524
- Use Requested Tray 369

V

- version, hardware firmware 341
- vertical lines, troubleshooting 519

W

- warnings iii
- warranty
 - customer self repair 624
 - license 622
 - product 618
 - toner cartridges 619
- waste disposal 634
- Web sites
 - customer support 625
 - Material Safety Data Sheet (MSDS) 634
- white spots, troubleshooting 518
- wiring diagram 330
- wrinkles, troubleshooting 521