



COLOR LASERJET PRO MFP

Repair Manual



M176



M177



HP Color LaserJet Pro MFP M176, M177

Repair Manual

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Conventions used in this guide

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

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

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


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

Table of contents

1 Removal and replacement	1
Removal and replacement strategy	2
Introduction	2
Required tools	2
Types of screws	3
Service approach	4
Before performing service	4
After performing service	4
Parts removal order	4
Removal and replacement procedures	5
Customer-replaceable parts	5
Toner cartridges	5
Imaging drum	7
Dust cover, input tray, and extension tray	9
Separation pad assembly	11
Remove the separation pad assembly	11
Covers and external components	12
Left cover	12
Document feeder, scanner, and flat cable cover (M177 model only)	14
Remove the document feeder, scanner, and flat cable cover	14
Scanner and flat cable cover (M176 model only)	16
Remove the scanner and flat cable cover	14
Right cover	18
Top cover	20
Remove the top cover	20
Reinstall the top cover	24
Inner cover	28
Remove the inner cover	28
Grounding cable cover and right top cover	30
Control panel	32
Cartridge door	35
Remove the cartridge door	35

Fuser cover	36
Remove the fuser cover	36
Rear door and secondary transfer assembly	37
Remove the rear door and secondary transfer assembly	37
Power supply cover	38
Remove the power supply cover	38
Main assemblies	39
Formatter PCA (M176 model)	39
Remove the formatter PCA (M176 model)	39
Wireless PCA (M177 model)	42
Remove the wireless PCA (M177 model)	42
Formatter PCA (M177 model)	44
Remove the formatter PCA (M177 model)	44
Fax PCA (M177 model)	45
Remove the fax PCA (M177 model)	45
Control panel FFC	46
Remove the control panel FFC	46
Engine controller assembly and formatter-engine FFC	49
Remove the engine controller assembly and formatter-engine FFC	49
Install a replacement engine controller assembly	53
Fuser delivery assembly	54
Remove the fuser delivery assembly	54
Reinstall the fuser delivery assembly	58
Intermediate transfer belt (ITB) assembly	61
Remove the ITB assembly	62
Reinstall the ITB assembly	71
Low-voltage power supply assembly (LVPS) and support frame	72
Remove the low-voltage power supply assembly and support frame	72
Install a replacement low-voltage power supply	77
Base plate assembly	78
Remove the base plate assembly	78
Paper pickup roller	79
Remove the pickup roller assembly	79
Scanner and document feeder components	80
Separate the scanner lid or document feeder from the scan base	80
Scanner components	82
Scan bezel	82
Scan drive system	84
Scan FFC cable	85
Scan motor	87
Scanner spring assembly	89

Document feeder components	91
Document feeder (ADF) top cover	91
ADF core	92
ADF separation pad	93
ADF inner tray	97
ADF input guides and gear	97
ADF pre-pickup arm assembly	100
2 Parts and diagrams	101
Order parts by authorized service providers	102
Order replacement parts	102
Related documentation and software	102
Supplies part numbers	102
Accessories	103
Customer replaceable units (CRU) kit part numbers	104
Whole-unit replacement part numbers	105
How to use the parts lists and diagrams	106
Assembly locations	107
Base product (no document feeder or scanner)	107
Covers, panels, and doors	108
Internal assemblies	110
Scanner and document feeder (ADF) assemblies	112
Scanner and lid assembly (M176 model)	112
Scanner assemblies (M176 model)	114
Scan drive system assembly (M176 and M177 models)	116
Scanner and document feeder main assemblies (M177 model)	118
Scanner assembly (M177 model)	120
Document feeder assembly (M177 model)	122
ADF top cover assembly (M177 model)	124
Core ADF assembly (M177 model)	126
Alphabetical parts list	128
Numerical parts list	131
Index	135

List of tables

Table 2-1	Order parts, accessories, and supplies	102
Table 2-2	Related documentation and software	102
Table 2-3	Supplies part numbers	102
Table 2-4	Accessories part numbers	103
Table 2-5	Customer replaceable units (CRU) kit part numbers	104
Table 2-6	Whole-unit replacement part numbers	105
Table 2-7	Locations of major components, base product	107
Table 2-8	Covers, panels, and doors	109
Table 2-9	Internal assemblies	111
Table 2-10	Scanner and lid assembly (M176 model)	113
Table 2-11	Scanner assemblies (M176 model)	115
Table 2-12	Scan drive system (M176 and M177 models)	117
Table 2-13	Scanner and document feeder main assemblies (M177 model)	119
Table 2-14	Scanner assembly (M177 model)	121
Table 2-15	Document feeder assembly (M177 model)	123
Table 2-16	ADF top cover assembly (M177 model)	125
Table 2-17	Core ADF assembly (M177 model)	127
Table 2-18	Alphabetical parts list	128
Table 2-19	Numerical parts list	131

List of figures

Figure 1-1	Screwdrivers	2
Figure 1-2	Remove the extension tray	9
Figure 1-3	Remove the dust cover	9
Figure 1-4	Remove the input tray	10
Figure 1-5	Remove the separation pad assembly	11
Figure 1-6	Remove the left cover (1 of 3)	12
Figure 1-7	Remove the left cover (2 of 3)	12
Figure 1-8	Remove the left cover (3 of 3)	13
Figure 1-9	Remove the flat cable cover for the M177 model	14
Figure 1-10	Remove the document feeder and scanner for the M177 model (1 of 3)	14
Figure 1-11	Remove the document feeder and scanner for the M177 model (2 of 3)	15
Figure 1-12	Remove the document feeder and scanner for the M177 model (3 of 3)	15
Figure 1-13	Remove the flat cable cover for the M176 model	14
Figure 1-14	Remove the scanner for the M176 model (1 of 3)	14
Figure 1-15	Remove the scanner for the M176 model (2 of 3)	15
Figure 1-16	Remove the scanner for the M176 model (3 of 3)	15
Figure 1-17	Remove the right cover (1 of 3)	18
Figure 1-18	Remove the right cover (2 of 3)	18
Figure 1-19	Remove the right cover (3 of 3)	19
Figure 1-20	Remove the scanner hinges (1 of 2)	20
Figure 1-21	Remove the scanner hinges (2 of 2)	21
Figure 1-22	Remove the top cover (1 of 5)	21
Figure 1-23	Remove the top cover (2 of 5)	22
Figure 1-24	Remove the top cover (3 of 5)	22
Figure 1-25	Remove the top cover (4 of 5)	23
Figure 1-26	Remove the top cover (5 of 5)	23
Figure 1-27	Reinstall the top cover	24
Figure 1-28	Left-side cartridge lock release spring	25
Figure 1-29	Right-side cartridge lock release spring	25
Figure 1-30	Correct position for the left-side cartridge lock release spring	26
Figure 1-31	Correct position for the right-side cartridge lock release spring	26
Figure 1-32	Incorrect installation of the delivery cover	27

Figure 1-33	Correct installation of the delivery cover	27
Figure 1-34	Remove the inner cover (1 of 2)	28
Figure 1-35	Remove the inner cover (2 of 2)	29
Figure 1-36	Remove the grounding cable cover	30
Figure 1-37	Remove the right top cover	31
Figure 1-38	Remove the control panel (1 of 5)	32
Figure 1-39	Remove the control panel (2 of 5)	32
Figure 1-40	Remove the control panel (3 of 5)	32
Figure 1-41	Remove the control panel (4 of 5)	33
Figure 1-42	Remove the control panel (5 of 5)	34
Figure 1-43	Remove the cartridge door (1 of 2)	35
Figure 1-44	Remove the cartridge door (2 of 2)	35
Figure 1-45	Remove the fuser cover	22
Figure 1-46	Remove the rear door and secondary transfer assembly (1 of 2)	37
Figure 1-47	Remove the rear door and secondary transfer assembly (2 of 2)	37
Figure 1-48	Remove the power supply cover	38
Figure 1-49	Remove the formatter PCA for the M176 model (1 of 4)	39
Figure 1-50	Remove the formatter PCA for the M176 model (2 of 4)	40
Figure 1-51	Remove the formatter PCA for the M176 model (3 of 4)	40
Figure 1-52	Remove the formatter PCA for the M176 model (4 of 4)	41
Figure 1-53	Remove the wireless PCA for the M177 model (1 of 3)	42
Figure 1-54	Remove the wireless PCA for the M177 model (2 of 3)	43
Figure 1-55	Remove the wireless PCA for the M177 model (3 of 3)	43
Figure 1-56	Remove the formatter PCA for the M177 model (1 of 2)	44
Figure 1-57	Remove the formatter PCA for the M177 model (2 of 2)	44
Figure 1-58	Remove the fax PCA for the M177 model (1 of 2)	45
Figure 1-59	Remove the fax PCA for the M177 model (2 of 2)	45
Figure 1-60	Remove the control panel FFC (1 of 5)	46
Figure 1-61	Remove the control panel FFC (2 of 5)	42
Figure 1-62	Remove the control panel FFC (3 of 5)	47
Figure 1-63	Remove the control panel FFC (4 of 5)	48
Figure 1-64	Remove the control panel FFC (5 of 5)	42
Figure 1-65	Remove the formatter-engine FFC	49
Figure 1-66	Remove the engine controller assembly (1 of 6)	50
Figure 1-67	Remove the engine controller assembly (2 of 6)	50
Figure 1-68	Remove the engine controller assembly (3 of 6)	51
Figure 1-69	Remove the engine controller assembly (4 of 6)	51
Figure 1-70	Remove the engine controller assembly (5 of 6)	52
Figure 1-71	Remove the engine controller assembly (6 of 6)	52
Figure 1-72	Install a replacement engine controller assembly	53
Figure 1-73	Remove the fuser delivery assembly (1 of 9)	54

Figure 1-74	Remove the fuser delivery assembly (2 of 9)	49
Figure 1-75	Remove the fuser delivery assembly (3 of 9)	50
Figure 1-76	Remove the fuser delivery assembly (4 of 9)	56
Figure 1-77	Remove the fuser delivery assembly (5 of 9)	56
Figure 1-78	Remove the fuser delivery assembly (6 of 9)	57
Figure 1-79	Remove the fuser delivery assembly (7 of 9)	57
Figure 1-80	Remove the fuser delivery assembly (8 of 9)	58
Figure 1-81	Remove the fuser delivery assembly (9 of 9)	58
Figure 1-82	Reinstall the fuser delivery assembly (1 of 3)	59
Figure 1-83	Reinstall the fuser delivery assembly (2 of 3)	59
Figure 1-84	Reinstall the fuser delivery assembly (3 of 3)	57
Figure 1-85	Remove the ITB assembly (1 of 17)	49
Figure 1-86	Remove the ITB assembly (2 of 17)	62
Figure 1-87	Remove the ITB assembly (3 of 17)	63
Figure 1-88	Remove the ITB assembly (4 of 17)	63
Figure 1-89	Remove the ITB assembly (5 of 17)	64
Figure 1-90	Remove the ITB assembly (6 of 17)	65
Figure 1-91	Remove the ITB assembly (7 of 17)	65
Figure 1-92	Remove the ITB assembly (8 of 17)	66
Figure 1-93	Remove the ITB assembly (9 of 17)	66
Figure 1-94	Remove the ITB assembly (10 of 17)	67
Figure 1-95	Remove the ITB assembly (11 of 17)	67
Figure 1-96	Remove the ITB assembly (12 of 17)	68
Figure 1-97	Remove the ITB assembly (13 of 17)	68
Figure 1-98	Remove the ITB assembly (14 of 17)	69
Figure 1-99	Remove the ITB assembly (15 of 17)	70
Figure 1-100	Remove the ITB assembly (16 of 17)	70
Figure 1-101	Remove the ITB assembly (17 of 17)	71
Figure 1-102	Reinstall the ITB assembly	71
Figure 1-103	Remove the low-voltage power supply assembly and support frame (1 of 10)	49
Figure 1-104	Remove the low-voltage power supply assembly and support frame (2 of 10)	73
Figure 1-105	Remove the low-voltage power supply assembly and support frame (3 of 10)	73
Figure 1-106	Remove the low-voltage power supply assembly and support frame (4 of 10)	74
Figure 1-107	Remove the low-voltage power supply assembly and support frame (5 of 10)	74
Figure 1-108	Remove the low-voltage power supply assembly and support frame (6 of 10)	75
Figure 1-109	Remove the low-voltage power supply assembly and support frame (7 of 10)	75
Figure 1-110	Remove the low-voltage power supply assembly and support frame (8 of 10)	76
Figure 1-111	Remove the low-voltage power supply assembly and support frame (9 of 10)	76
Figure 1-112	Remove the low-voltage power supply assembly and support frame (10 of 10)	77
Figure 1-113	Install a replacement low-voltage power supply	77
Figure 1-114	Remove the base plate assembly	11

Figure 1-115	Remove the pickup roller assembly	79
Figure 1-116	Separate the scanner lid or document feeder from the scan base (1 of 2)	80
Figure 1-117	Separate the scanner lid or document feeder from the scan base (2 of 2)	81
Figure 1-118	Remove the scan bezel (1 of 2)	82
Figure 1-119	Remove the scan bezel (2 of 2)	83
Figure 1-120	Remove the scan drive system	84
Figure 1-121	Remove the scan FFC cable (1 of 3)	85
Figure 1-122	Remove the scan FFC cable (2 of 3)	86
Figure 1-123	Remove the scan FFC cable (3 of 3)	86
Figure 1-124	Remove the scan motor (1 of 2)	87
Figure 1-125	Remove the scan motor (2 of 2)	88
Figure 1-126	Reinstall the scan motor	88
Figure 1-127	Remove the scanner spring assembly (1 of 2)	89
Figure 1-128	Remove the scanner spring assembly (2 of 2)	89
Figure 1-129	Reinstall the scanner spring assembly	90
Figure 1-130	Remove the ADF top cover (1 of 2)	91
Figure 1-131	Remove the ADF top cover (2 of 2)	91
Figure 1-132	Remove the ADF core (1 of 2)	92
Figure 1-133	Remove the ADF core (2 of 2)	92
Figure 1-134	Remove the ADF separation pad assembly (1 of 3)	91
Figure 1-135	Remove the ADF separation pad assembly (2 of 3)	93
Figure 1-136	Remove the ADF separation pad assembly (3 of 3)	94
Figure 1-137	Reinstall the ADF separation pad assembly (1 of 5)	94
Figure 1-138	Reinstall the ADF separation pad assembly (2 of 5)	95
Figure 1-139	Reinstall the ADF separation pad assembly (3 of 5)	95
Figure 1-140	Reinstall the ADF separation pad assembly (4 of 5)	96
Figure 1-141	Reinstall the ADF separation pad assembly (5 of 5)	96
Figure 1-142	Remove the ADF inner tray	97
Figure 1-143	Remove the ADF input guides and gear (1 of 3)	98
Figure 1-144	Remove the ADF input guides and gear (2 of 3)	98
Figure 1-145	Remove the ADF input guides and gear (3 of 3)	99
Figure 1-146	Remove the ADF pre-pickup arm assembly (1 of 2)	100
Figure 1-147	Remove the ADF pre-pickup arm assembly (2 of 2)	100
Figure 2-1	Locations of major components, base product	107
Figure 2-2	Covers, panels, and doors	108
Figure 2-3	Internal assemblies	110
Figure 2-4	Scanner and lid assembly (M176 model)	112
Figure 2-5	Scanner assemblies (M176 model)	114
Figure 2-6	Scan drive system (M176 and M177 models)	116
Figure 2-7	Scanner and document feeder main assemblies (M177 model)	112
Figure 2-8	Scanner assembly (M177 model)	120

Figure 2-9	Document feeder assembly (M177 model)	122
Figure 2-10	ADF top cover assembly (M177 model)	124
Figure 2-11	Core ADF assembly (M177 model)	126

1 Removal and replacement

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

Removal and replacement strategy

Introduction

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 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.

CAUTION: Some parts are sensitive to electrostatic discharge (ESD). Look for the ESD reminder when removing product parts. Always perform service work at an ESD-protected workstation or mat. 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.

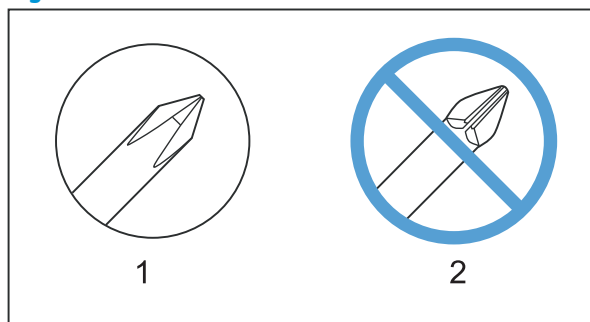
NOTE: To install a self-tapping screw, first turn it counterclockwise to align it with the existing thread pattern, and then carefully turn it clockwise to tighten. Do not overtighten. If a self-tapping screw-hole becomes stripped, repair the screw-hole or replace the affected assembly.

Required tools

- #2 Phillips screwdriver with a magnetic tip and a 152-mm (6-inch) shaft length
- Small flat-blade screwdriver
- Torx® drivers, sizes T8, T9, and T10
- Needle-nose pliers
- ESD strap (if one is available)
- Penlight

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

Figure 1-1 Screwdrivers



⚠ CAUTION: Do *not* pull directly on the wires to disconnect them. *Always* pull on the plastic body of a connector to avoid damaging the connector wires.

Types of screws

⚠ WARNING! Make sure that components are replaced with the correct screw type. Using an 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.

Service approach

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 bodily injury and damage to the device can result.* The power must be on for certain functional checks during troubleshooting. However, the power supply should be disconnected during parts removal.

- Remove the toner cartridges. See [Toner cartridges on page 5](#).
- Remove the imaging drum. See [Imaging drum on page 7](#).
- Remove all paper.
- Remove the dust cover, input tray, and extension tray. See [Dust cover, input tray, and extension tray on page 9](#).
- Place the product on an ESD mat (if available).

After performing service

- Reinstall the dust cover, input tray, and extension tray.
- Return all paper to the tray.
- Plug in the power cable and turn on the product.
- Reinstall the toner cartridges.
- Reinstall the imaging drum.

Parts removal order

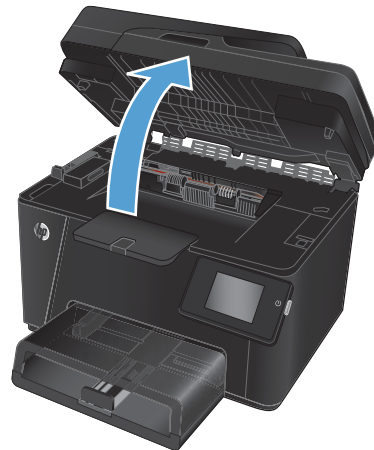
If multiple components must be removed to gain access to an assembly, the first step of the removal procedure lists all of the components that must be removed to gain access to that assembly. Use these lists to determine which parts must be removed before removing other parts.

Removal and replacement procedures

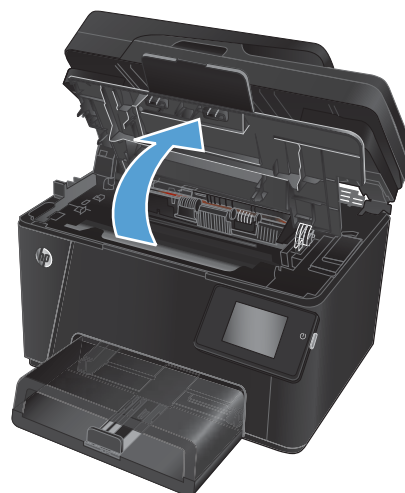
Customer-replaceable parts

Toner cartridges

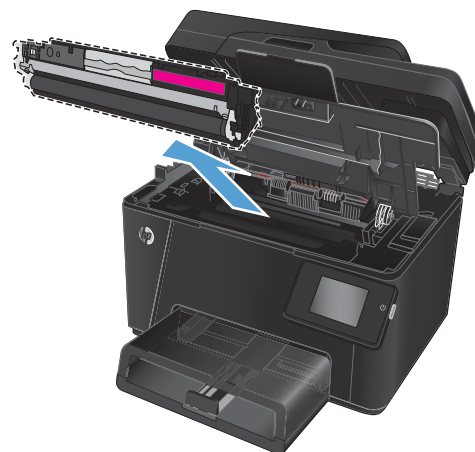
1. Lift the scanner assembly.



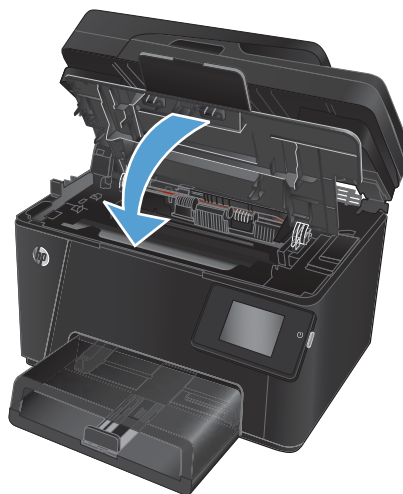
2. Open the top cover.




3. Remove the toner cartridge.

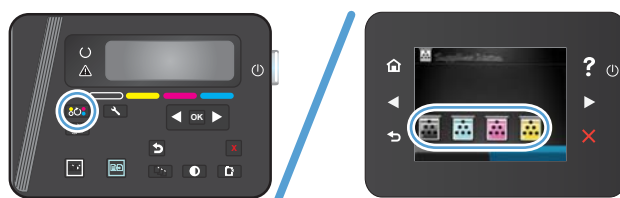


4. Close the top cover.



5. Rotate to the next cartridge to be removed.

- **LCD Control panel:** Press the Rotate Cartridges  button to move to the next cartridge. Repeat this process until all the toner cartridges are removed.
- **Touchscreen control panel:** Touch the Supply icon for the cartridge to be removed. The cartridges rotate to the selected cartridge. Repeat this process until all the toner cartridges are removed.



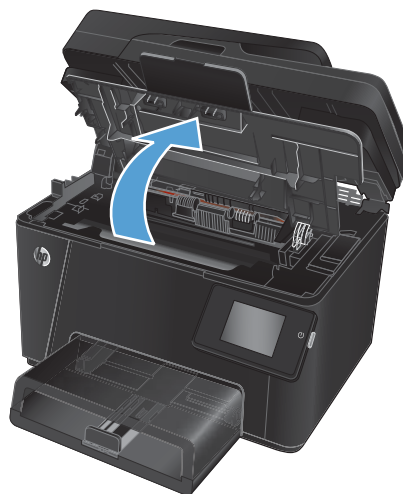
NOTE: The top cover must be closed to rotate the cartridges.

Imaging drum

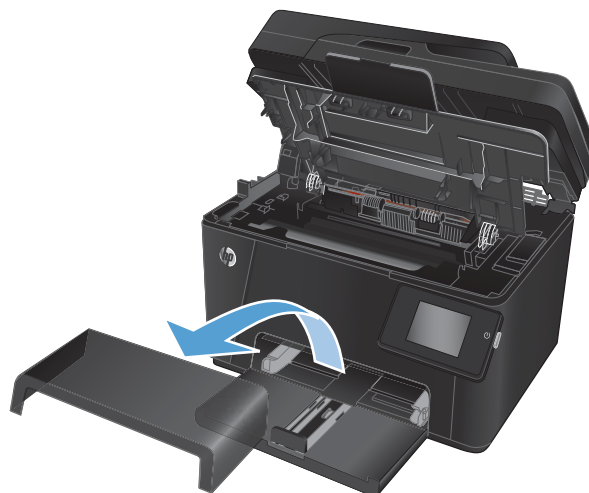
1. Lift the scanner assembly.



2. Open the drum cover.



3. Remove the dust cover from the tray.



4. Open the front cover.



5. Lift the two levers that hold the imaging drum.



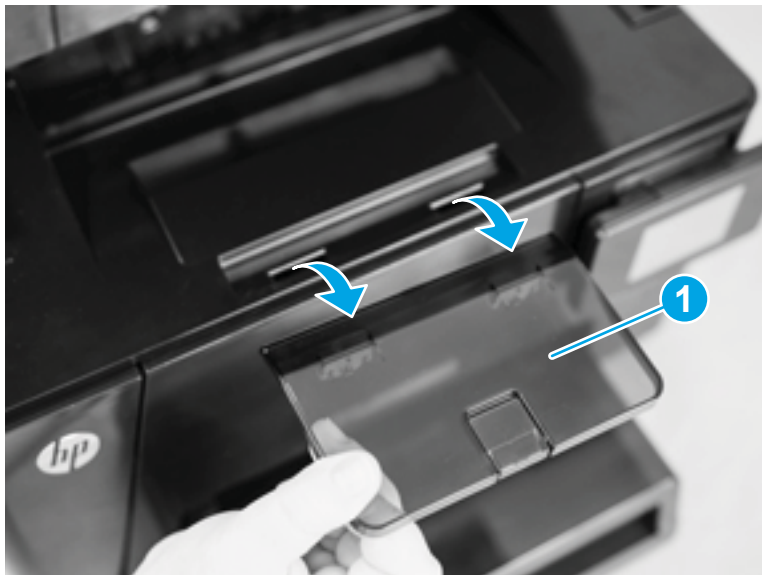
6. Remove the imaging drum.



Dust cover, input tray, and extension tray

1. Lift the extension tray (callout 1) away from the product.

Figure 1-2 Remove the extension tray



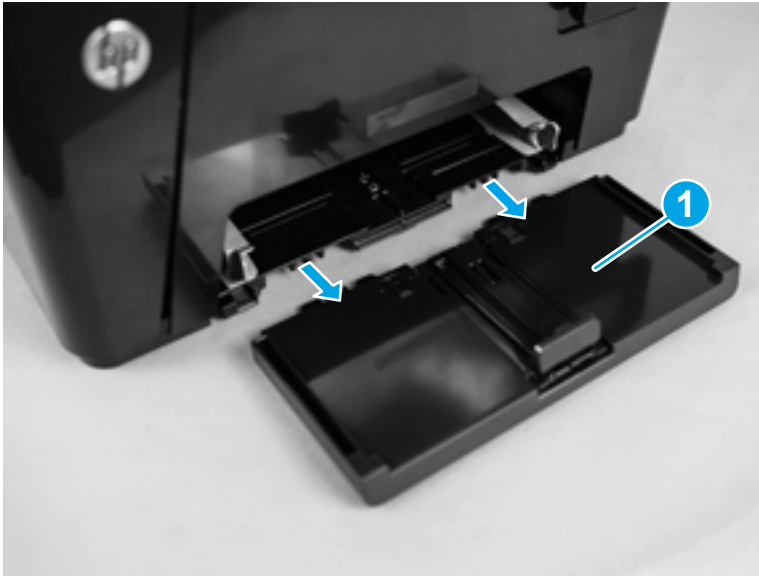
2. Lift the dust cover (callout 1) away from the product.


Figure 1-3 Remove the dust cover



3. Pull the input tray (callout 1) out from the front of the product and remove it.

Figure 1-4 Remove the input tray



 **Reinstallation tip** When reinstalling the input tray, align the tabs on the tray with the slots on the product.

Separation pad assembly

Before proceeding, remove the following components:

- Dust cover, input tray, and extension tray. See [Dust cover, input tray, and extension tray on page 9](#).

Remove the separation pad assembly

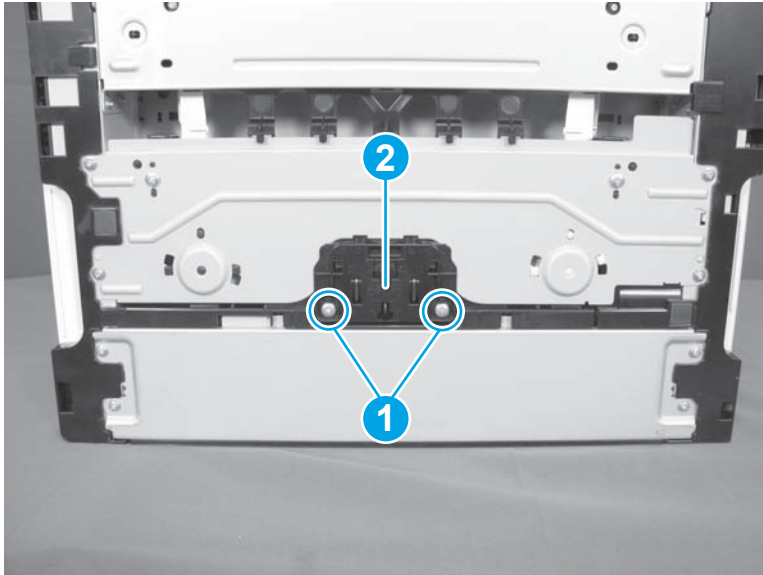
1. Rotate the product onto the rear side.

⚠ WARNING! The ADF portion of the document feeder is not captive and can open when the product is placed face up. Make sure to support the ADF when handling the product.

📝 NOTE: Dirt and debris can scratch the surface of the product. Make sure to place the product face up on a clean work space or on a clean soft cloth.

2. Remove two screws (callout 1) and the separation pad assembly (callout 2).

Figure 1-5 Remove the separation pad assembly

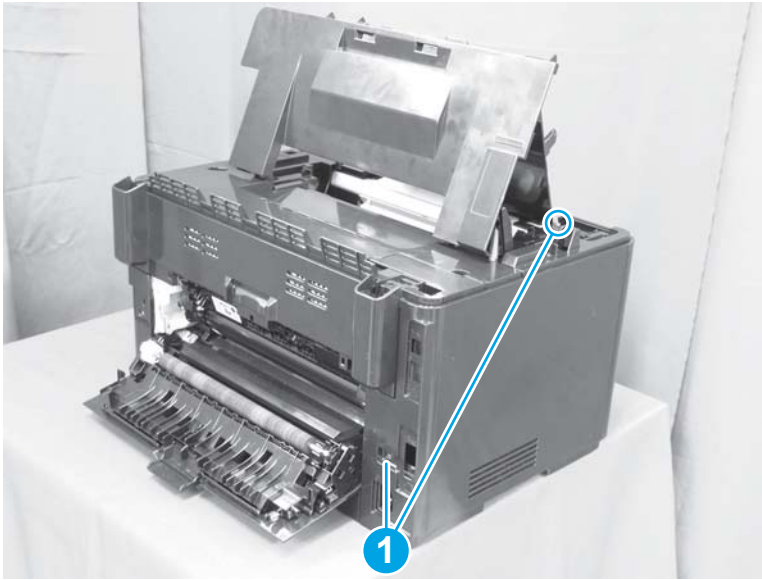


Covers and external components

Left cover

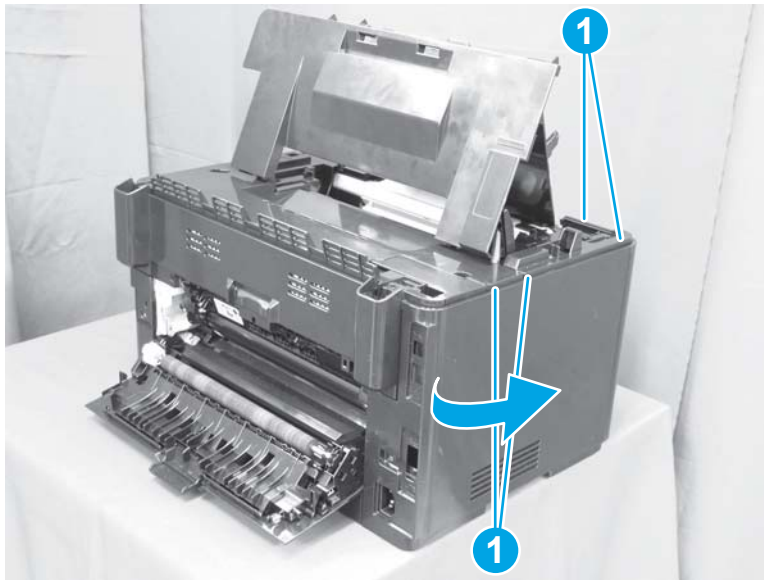
1. Open the following doors:
 - Rear door
 - Front door
 - Top door
2. Remove two screws (callout 1).

Figure 1-6 Remove the left cover (1 of 3)



3. Starting at the rear vertical edge, release four tabs (callout 1) and remove the left cover.

Figure 1-7 Remove the left cover (2 of 3)




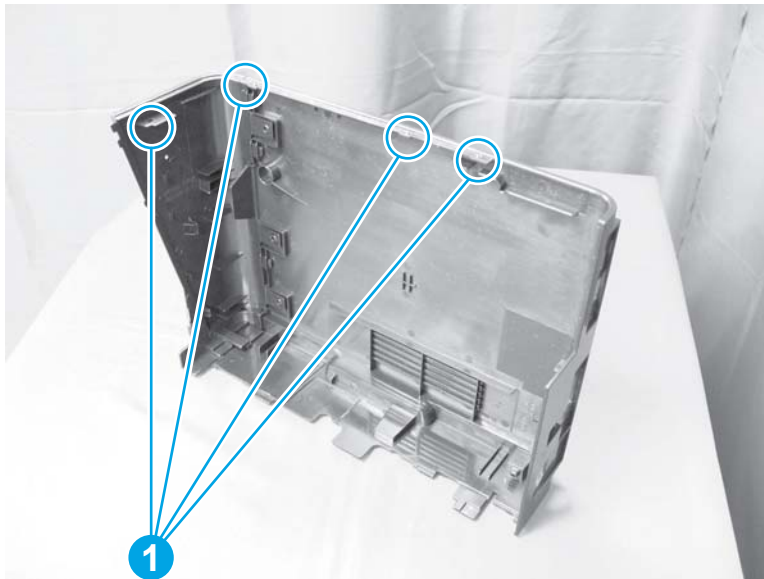
 **NOTE:** Before proceeding, take note of the locations of the tabs (callout 1) on the back side of the cover. When reinstalling the left cover, align all of the tabs with the slots.

Figure 1-8 Remove the left cover (3 of 3)



Document feeder, scanner, and flat cable cover (M177 model only)

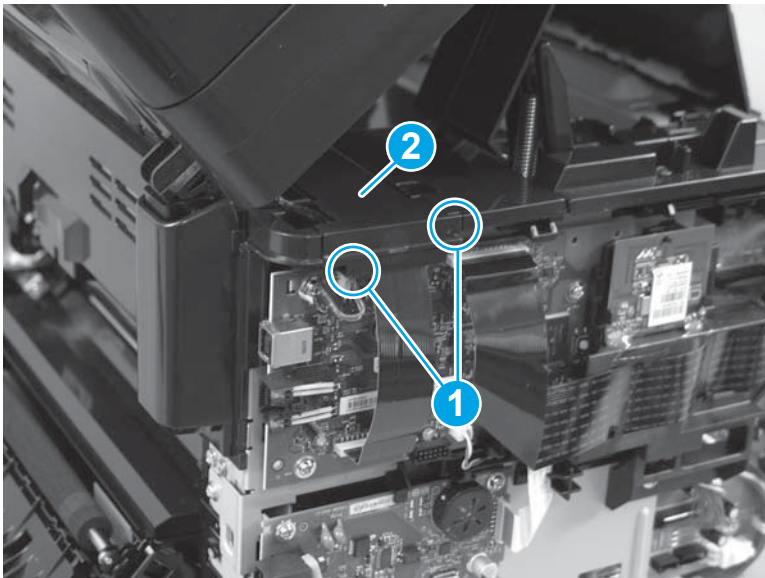
Before proceeding, remove the following components:

- Dust cover, input tray, and extension tray. See [Dust cover, input tray, and extension tray on page 9](#).
- Left cover. See [Left cover on page 12](#).

Remove the document feeder, scanner, and flat cable cover

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

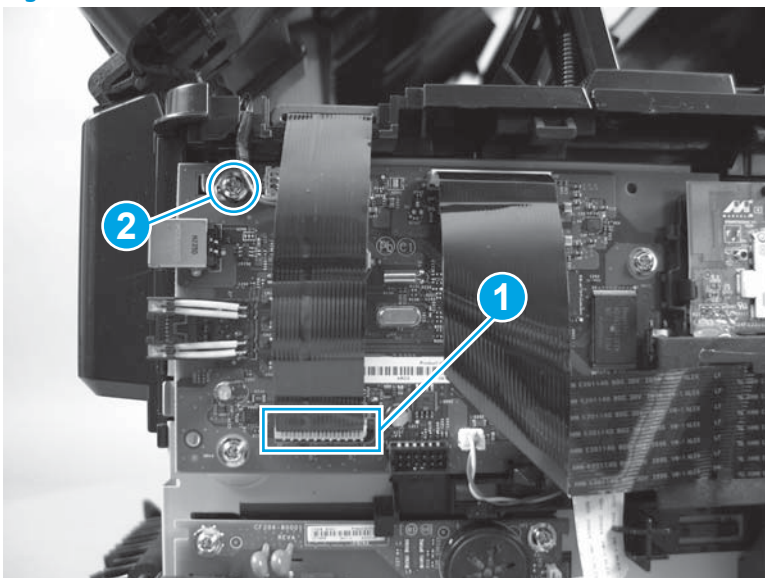
Figure 1-9 Remove the flat cable cover for the M177 model



2. Disconnect one FFC (callout 1), and remove one grounding screw (callout 2).

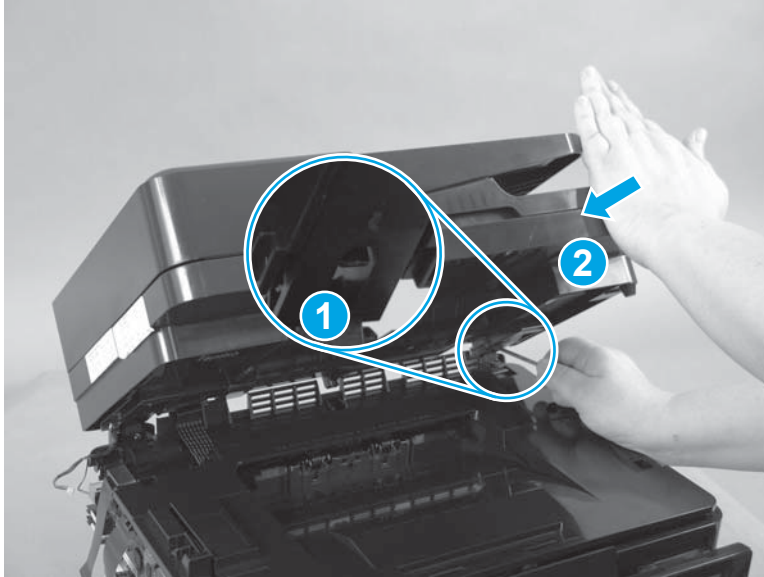
CAUTION: Do not bend or fold the flat flexible cables (FFCs) during removal or installation. Also, do not straighten pre-folds in the FFCs.

Figure 1-10 Remove the document feeder and scanner for the M177 model (1 of 3)



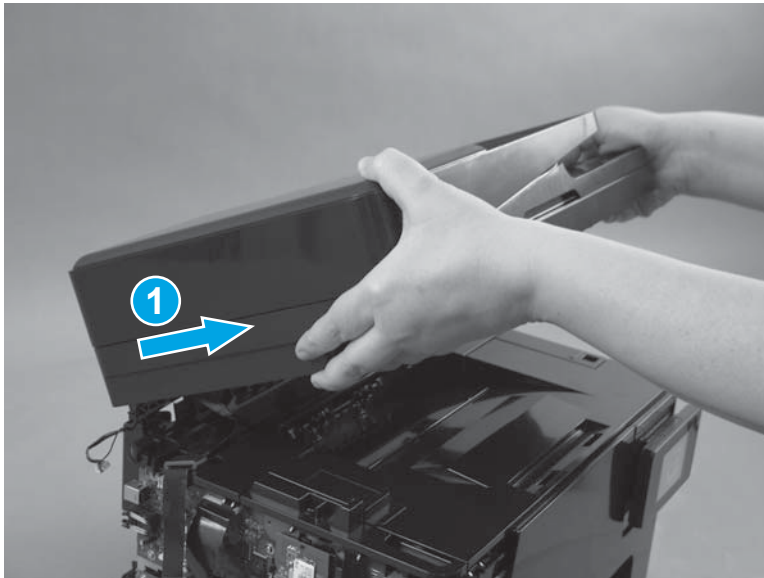
3. Use a flat-blade screwdriver to press up on the tab inside the hinge (callout 1). While pressing the tab, hit the front edge of the scanner (callout 2) with your hand to release the tab.

Figure 1-11 Remove the document feeder and scanner for the M177 model (2 of 3)



4. Repeat the previous step with the remaining hinge.
5. Lift the assembly up and away from the hinges (callout 1).

Figure 1-12 Remove the document feeder and scanner for the M177 model (3 of 3)



Scanner and flat cable cover (M176 model only)

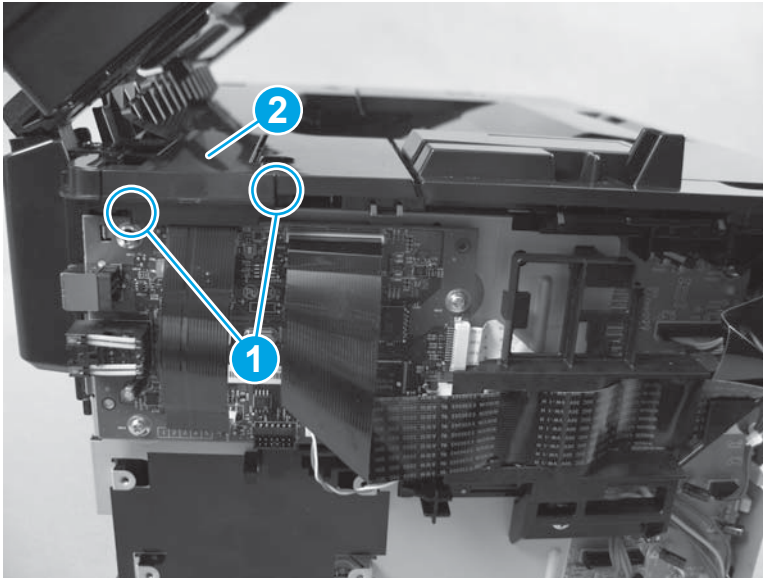
Before proceeding, remove the following components:

- Dust cover, input tray, and extension tray. See [Dust cover, input tray, and extension tray on page 9](#).
- Left cover. See [Left cover on page 12](#).

Remove the scanner and flat cable cover

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

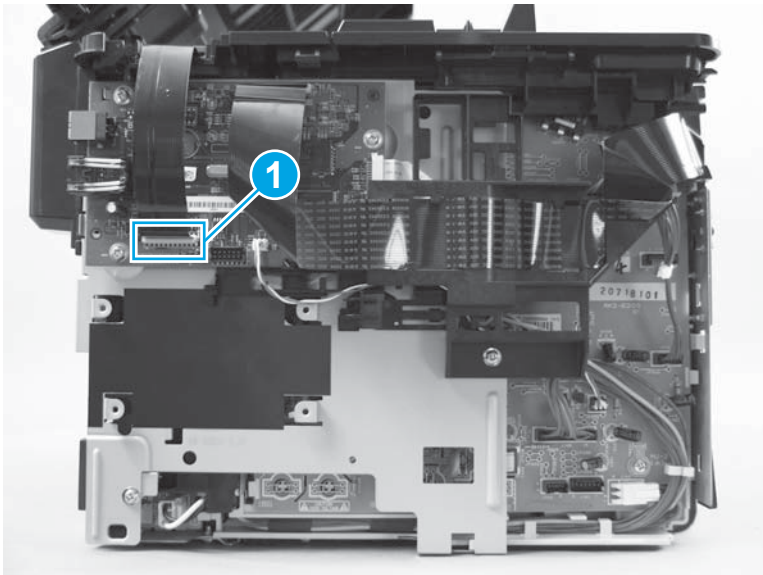
Figure 1-13 Remove the flat cable cover for the M176 model



2. Disconnect one FFC (callout 1).

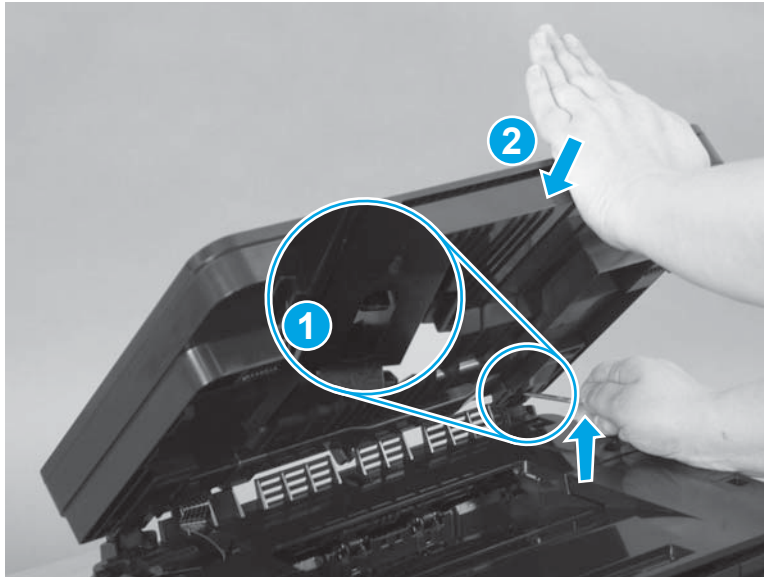
CAUTION: Do not bend or fold the flat flexible cables (FFCs) during removal or installation. Also, do not straighten pre-folds in the FFCs.

Figure 1-14 Remove the scanner for the M176 model (1 of 3)



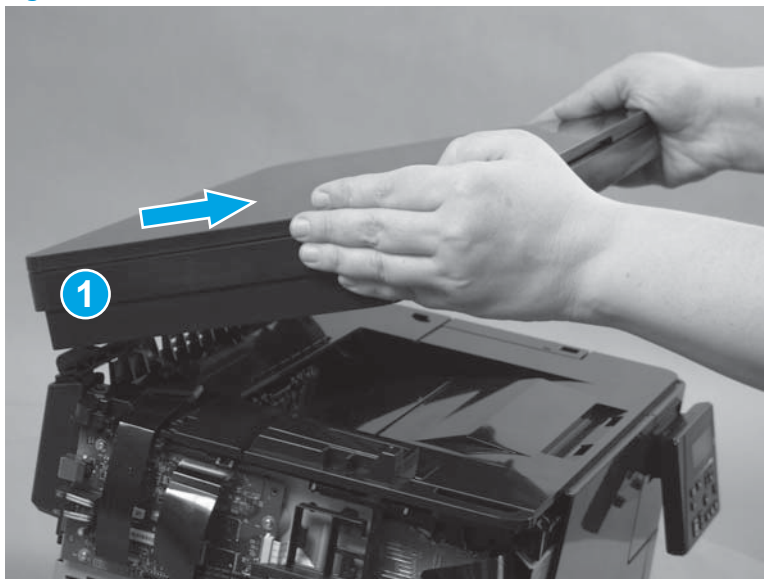
3. Use a flat-blade screwdriver to press up on the tab inside the hinge (callout 1). While pressing the tab, hit the front edge of the scanner (callout 2) with your hand to release the tab.

Figure 1-15 Remove the scanner for the M176 model (2 of 3)



4. Repeat the previous step with the remaining hinge.
5. Lift the assembly up and away from the hinges.

Figure 1-16 Remove the scanner for the M176 model (3 of 3)



Right cover

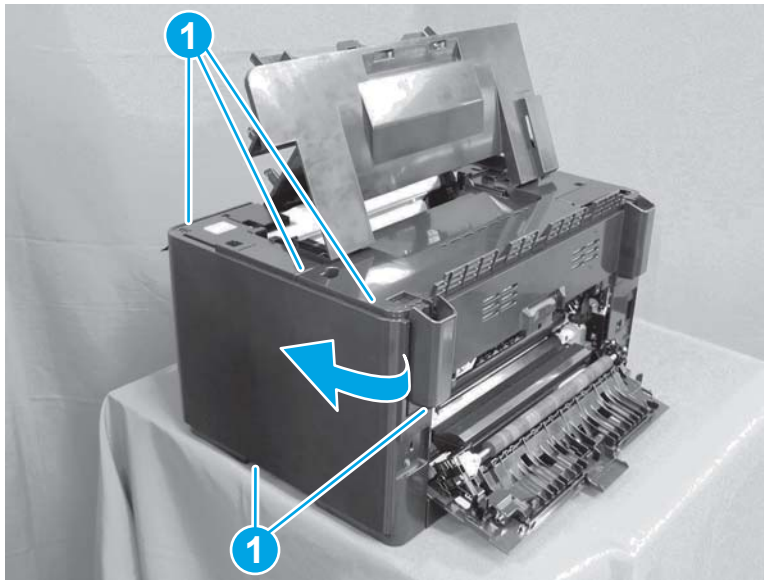
1. Open the following doors:
 - Rear door
 - Front door
 - Top door
2. Remove one screw (callout 1).

Figure 1-17 Remove the right cover (1 of 3)



3. Starting on the rear vertical edge, release five tabs (callout 1) and remove the right cover.

Figure 1-18 Remove the right cover (2 of 3)




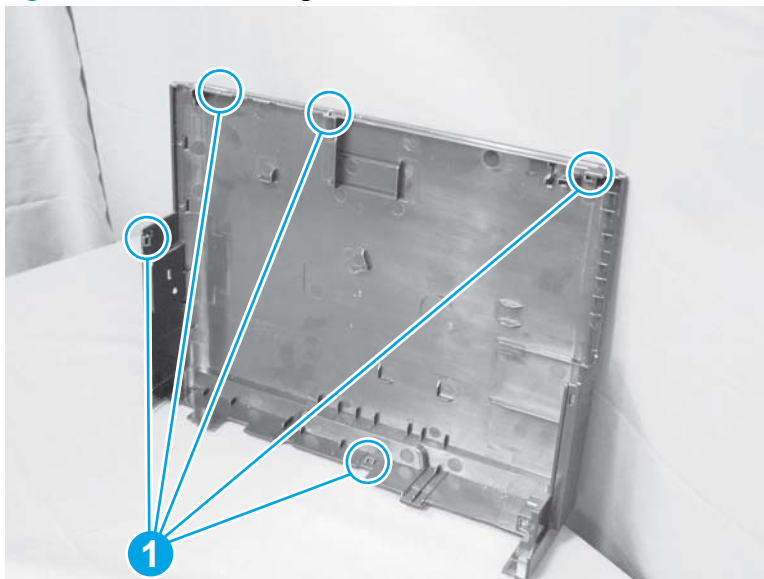
 **NOTE:** Before proceeding, take note of the locations of the tabs (callout 1) on the back side of the cover. When reinstalling the right cover, align all of the tabs with the slots.

Figure 1-19 Remove the right cover (3 of 3)



Top cover

Before proceeding, remove the following components:

- Dust cover, input tray, and extension tray. See [Dust cover, input tray, and extension tray on page 9](#).
- Left cover. See [Left cover on page 12](#).
- Document feeder (M177 model only), scanner, and flat cable cover. See [Document feeder, scanner, and flat cable cover \(M177 model only\) on page 14](#) or [Scanner and flat cable cover \(M176 model only\) on page 16](#).
- Right cover. See [Right cover on page 18](#).

Remove the top cover

1. Remove two screws (callout 1), and remove the hinges.

Figure 1-20 Remove the scanner hinges (1 of 2)

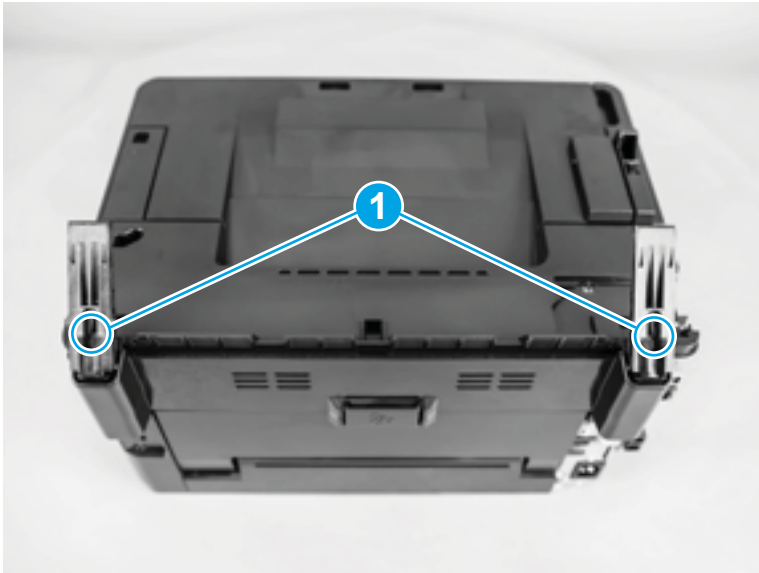
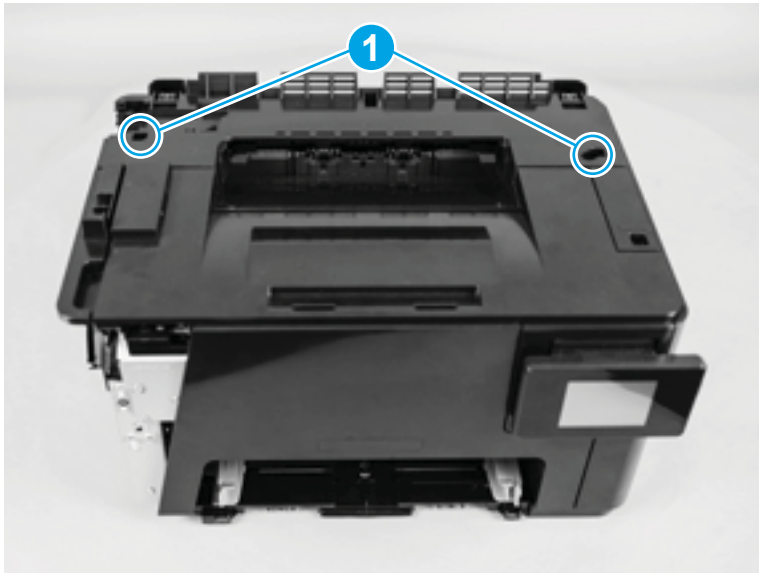


Figure 1-21 Remove the scanner hinges (2 of 2)



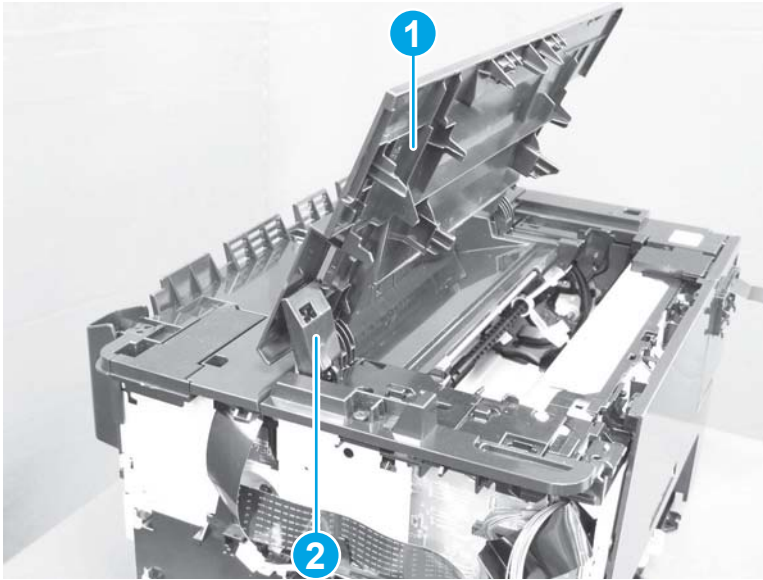
2. Remove two screws (callout 1).

Figure 1-22 Remove the top cover (1 of 5)



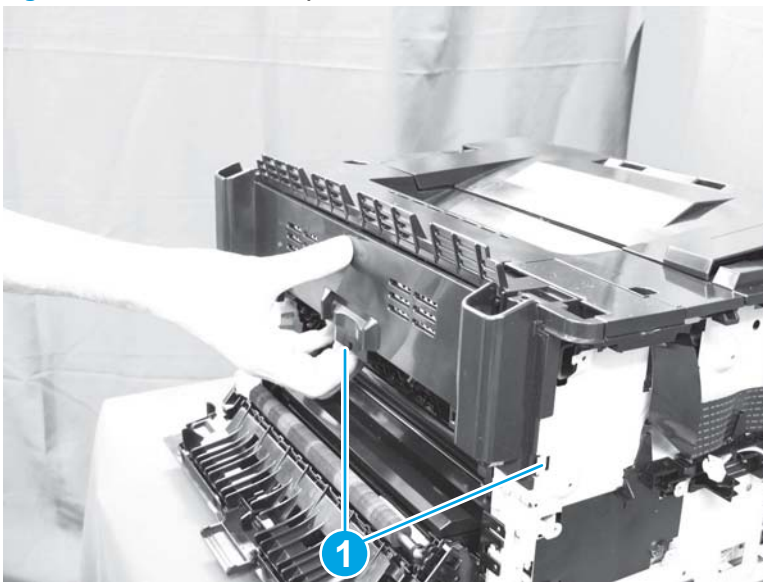
3. Release the arm (callout 2) from the top cover (callout 1).

Figure 1-23 Remove the top cover (2 of 5)



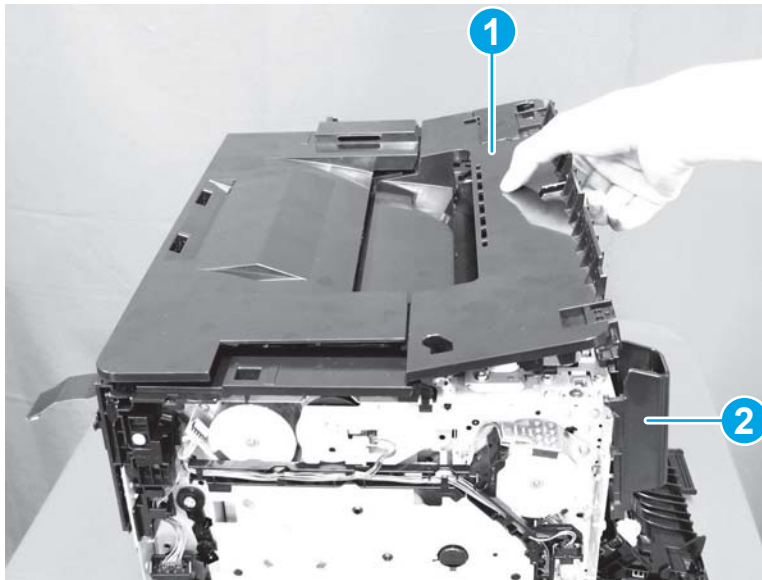
4. Release two tabs (callout 1) on the fuser cover.

Figure 1-24 Remove the top cover (3 of 5)



5. Lift the delivery cover up (callout 1) and separate it from the fuser cover (callout 2).

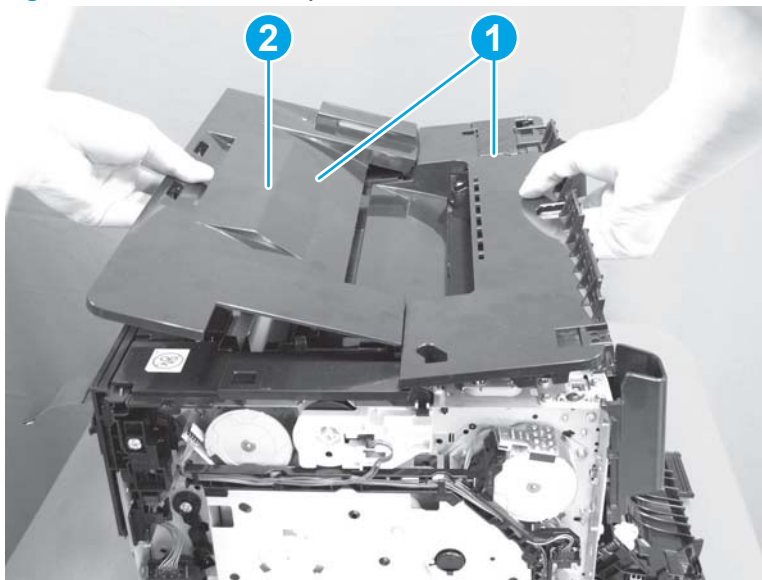
Figure 1-25 Remove the top cover (4 of 5)



6. Lift the top cover (callout 1), and then slide the top cover (callout 2) toward the front of the product to remove it.

⚠ CAUTION: Be careful not to damage the cartridge lock release springs. See [Figure 1-28 Left-side cartridge lock release spring on page 25](#) and [Figure 1-29 Right-side cartridge lock release spring on page 25](#).

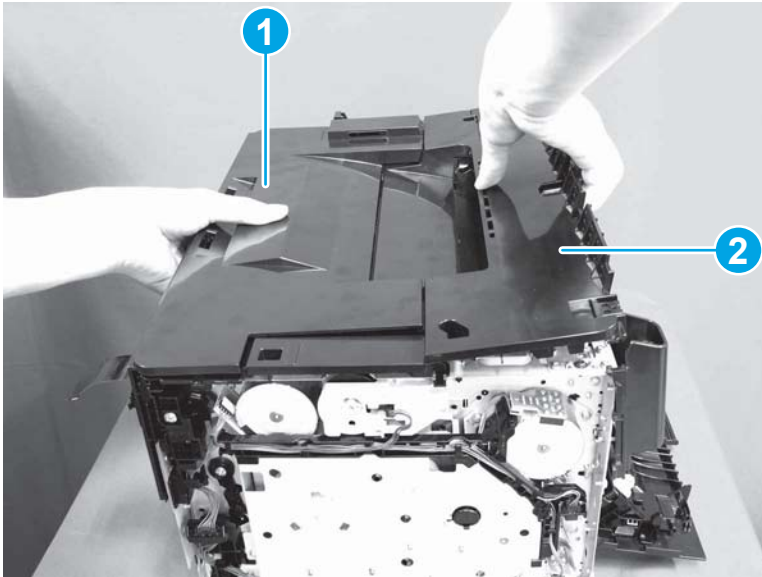
Figure 1-26 Remove the top cover (5 of 5)



Reinstall the top cover

- Reattach the delivery cover (callout 2) while the top cover (callout 1) is closed.

Figure 1-27 Reinstall the top cover



- Be careful not to damage the cartridge lock release springs.

Figure 1-28 Left-side cartridge lock release spring

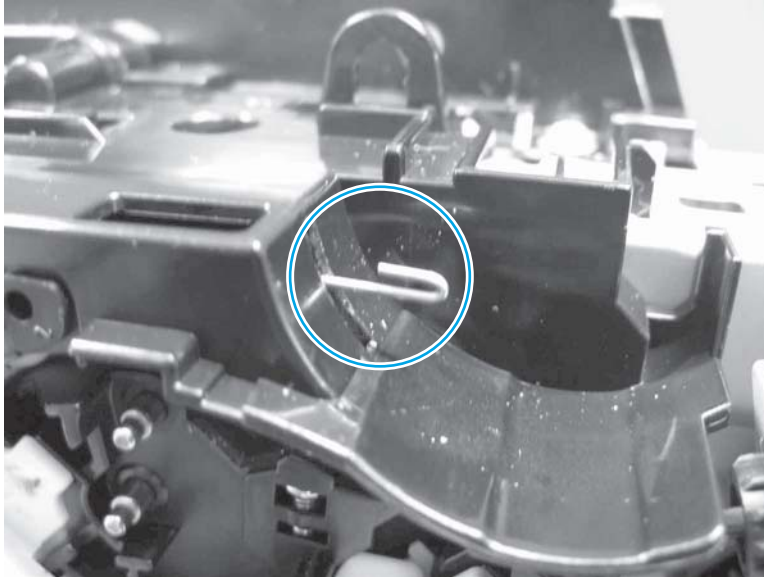
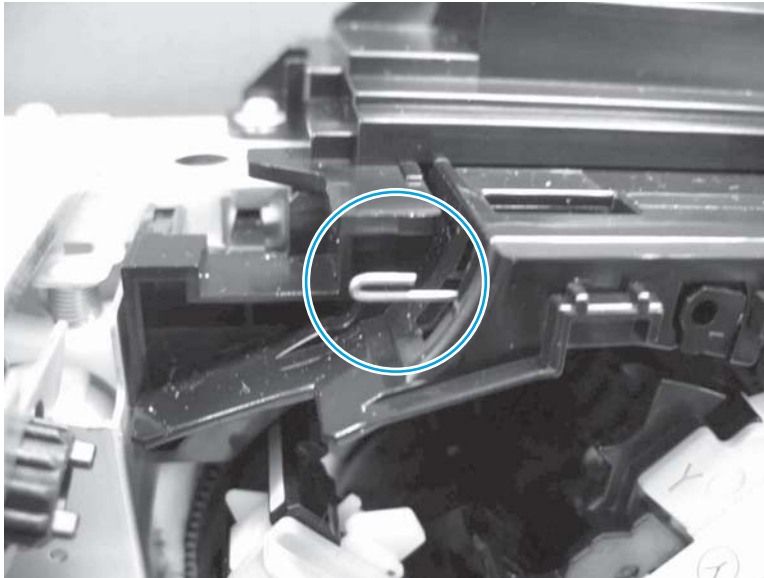


Figure 1-29 Right-side cartridge lock release spring



- Make sure the cartridge lock release springs are positioned correctly. The left spring sits in the center slot of the top cover hinge (callout 1). The right spring sits in the right slot of the top cover hinge (callout 2).

Figure 1-30 Correct position for the left-side cartridge lock release spring

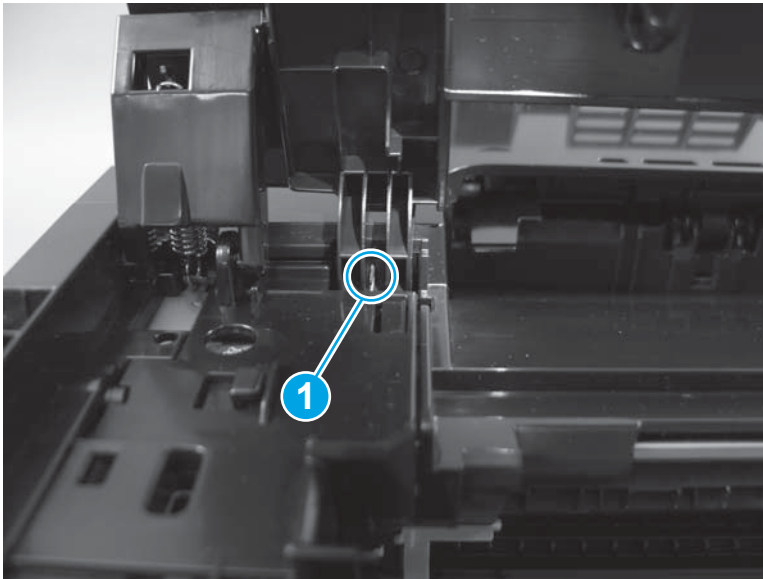
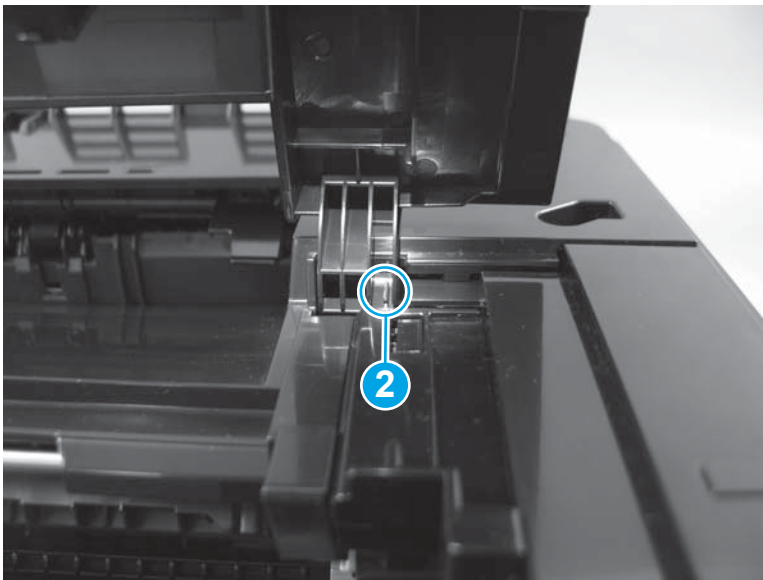


Figure 1-31 Correct position for the right-side cartridge lock release spring



- Make sure that there is not a gap between the delivery cover and the top cover, and that the delivery cover is fully seated.

Figure 1-32 Incorrect installation of the delivery cover



Figure 1-33 Correct installation of the delivery cover



Inner cover

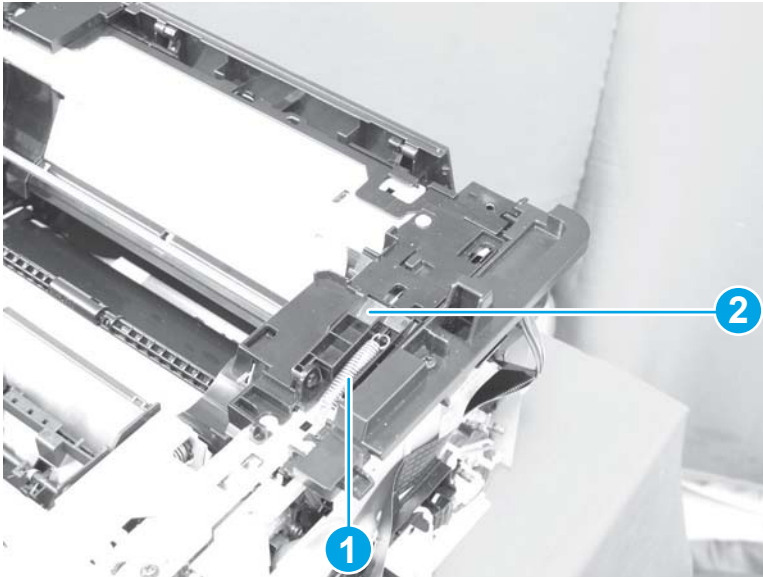
Before proceeding, remove the following components:

- Dust cover, input tray, and extension tray. See [Dust cover, input tray, and extension tray on page 9](#).
- Left cover. See [Left cover on page 12](#).
- Document feeder (M177 model only), scanner, and flat cable cover. See [Document feeder, scanner, and flat cable cover \(M177 model only\) on page 14](#) or [Scanner and flat cable cover \(M176 model only\) on page 16](#).
- Right cover. See [Right cover on page 18](#).
- Top cover. See [Top cover on page 20](#).

Remove the inner cover

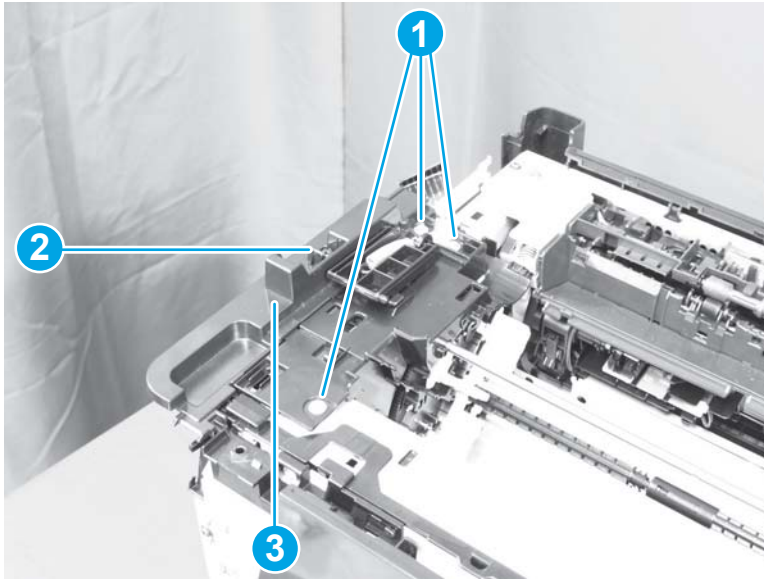
1. Rotate the spring (callout 1) and the arm (callout 2) towards the rear of the printer together and remove them.

Figure 1-34 Remove the inner cover (1 of 2)



2. Remove three screws (callout 1) and one self-tapping screw (callout 2), and then remove the inner cover (callout 3).

Figure 1-35 Remove the inner cover (2 of 2)



Grounding cable cover and right top cover

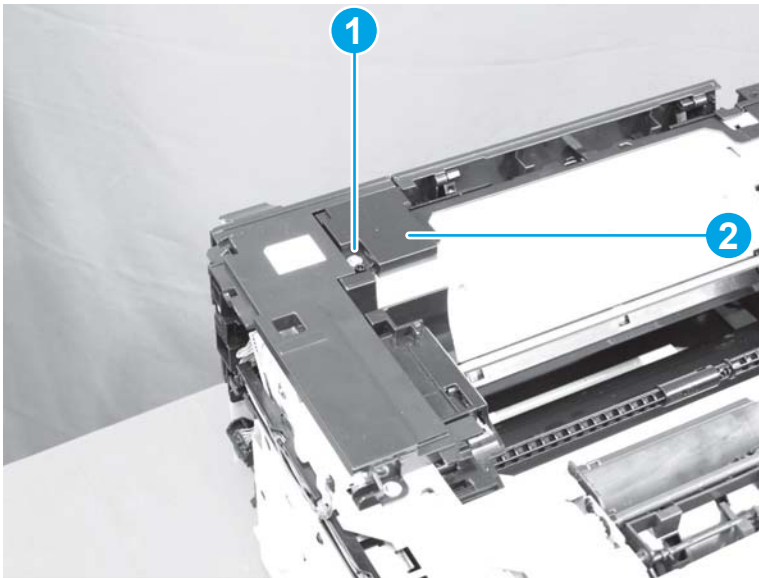
Before proceeding, remove the following components:

- Dust cover, input tray, and extension tray. See [Dust cover, input tray, and extension tray on page 9](#).
- Left cover. See [Left cover on page 12](#).
- Document feeder (M177 model only), scanner, and flat cable cover. See [Document feeder, scanner, and flat cable cover \(M177 model only\) on page 14](#) or [Scanner and flat cable cover \(M176 model only\) on page 16](#).
- Right cover. See [Right cover on page 18](#).
- Top cover. See [Top cover on page 20](#).

Remove the grounding cable cover and the right top cover

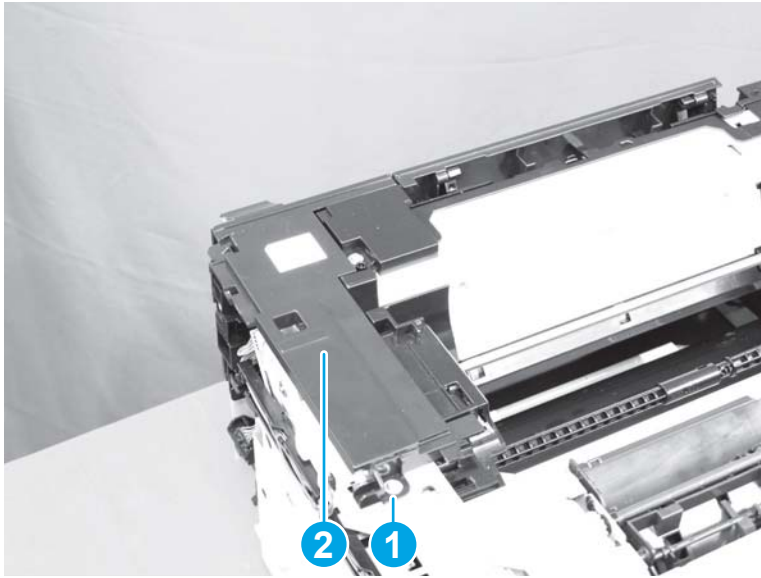
1. Remove one screw (callout 1) and the grounding cable cover (callout 2).

Figure 1-36 Remove the grounding cable cover




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

Figure 1-37 Remove the right top cover



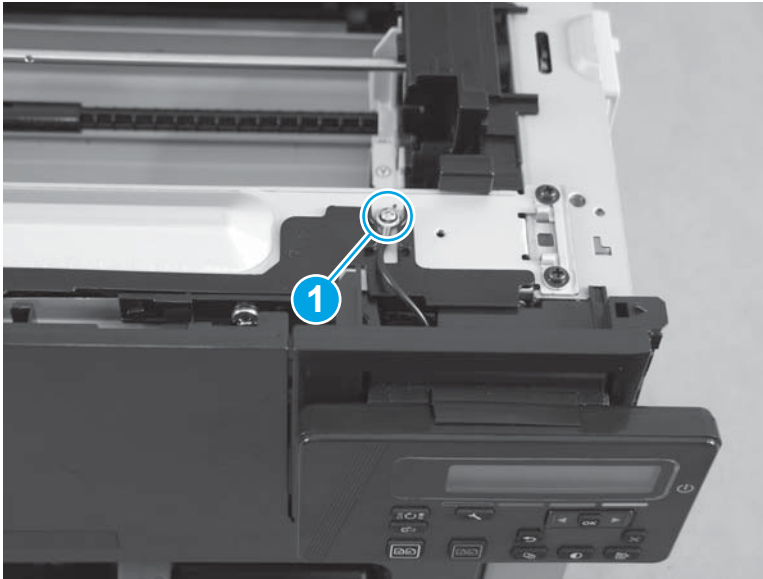
Control panel

 **CAUTION:**  ESD sensitive.

 **NOTE:** Although the photos in this procedure show the M177 model, the steps are the same for the M176 model.

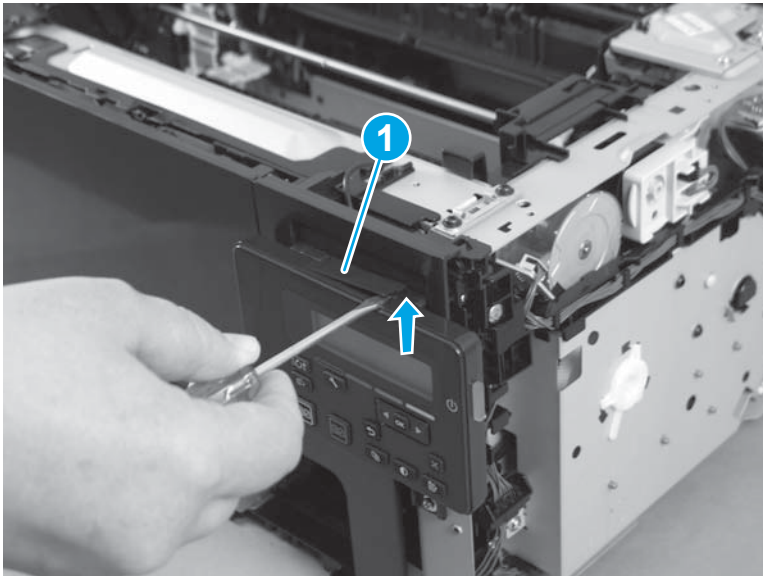
1. Disconnect one grounding screw (callout 1).

Figure 1-38 Remove the control panel (1 of 5)



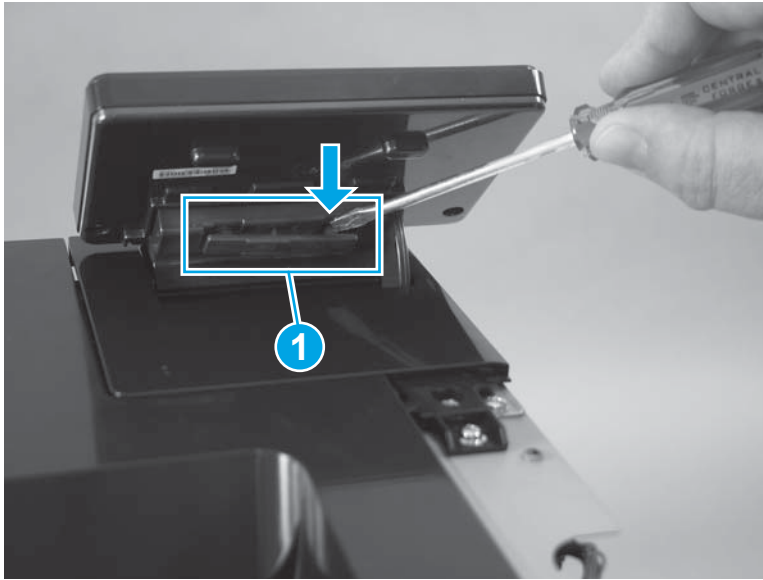
2. With a small flat-blade screwdriver, remove the cover (callout 1) from the top of the control panel.

Figure 1-39 Remove the control panel (2 of 5)



3. With a small flat-blade screwdriver, remove the cover (callout 1) from the back of the control panel.

Figure 1-40 Remove the control panel (3 of 5)



4. Press down on the top edge of the control panel to separate it from the control panel cover.

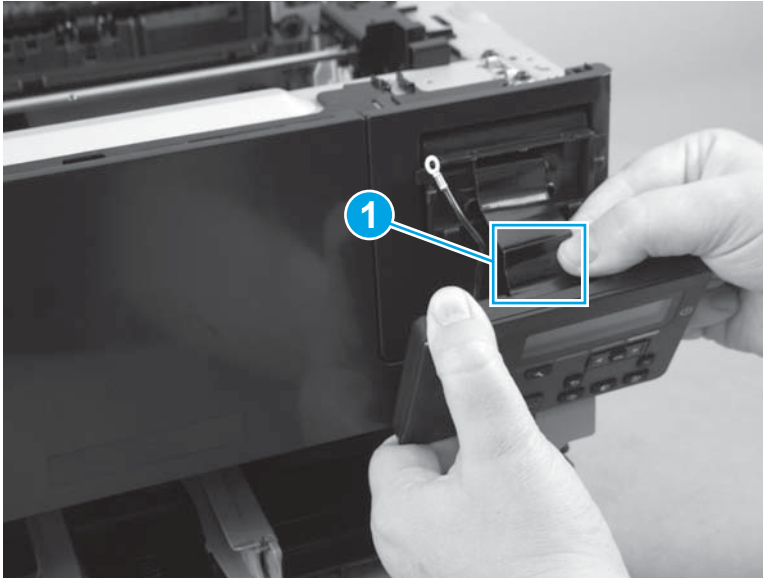
Figure 1-41 Remove the control panel (4 of 5)



5. Disconnect one FFC (callout 1) from the control panel.

⚠ CAUTION: Do not bend or fold the flat flexible cables (FFCs) during removal or installation. Also, do not straighten pre-folds in the FFCs.

Figure 1-42 Remove the control panel (5 of 5)



Cartridge door

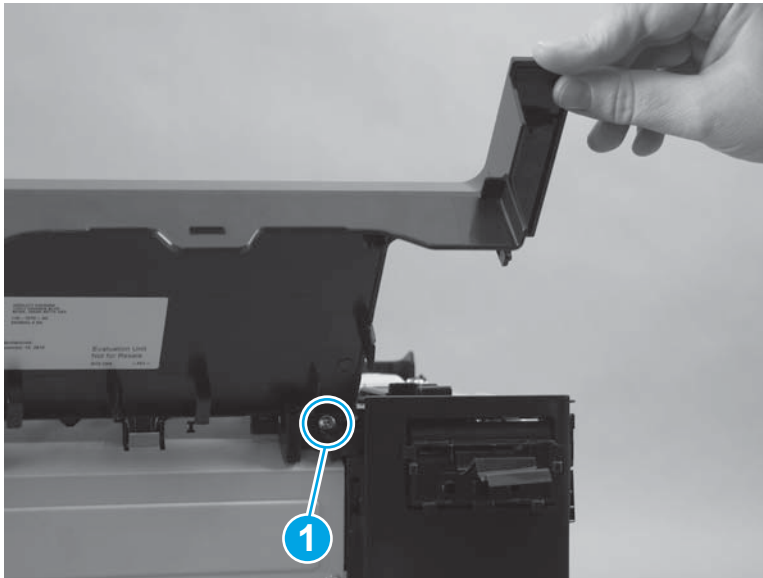
Before proceeding, remove the following components:

- Dust cover, input tray, and extension tray. See [Dust cover, input tray, and extension tray on page 9](#).

Remove the cartridge door

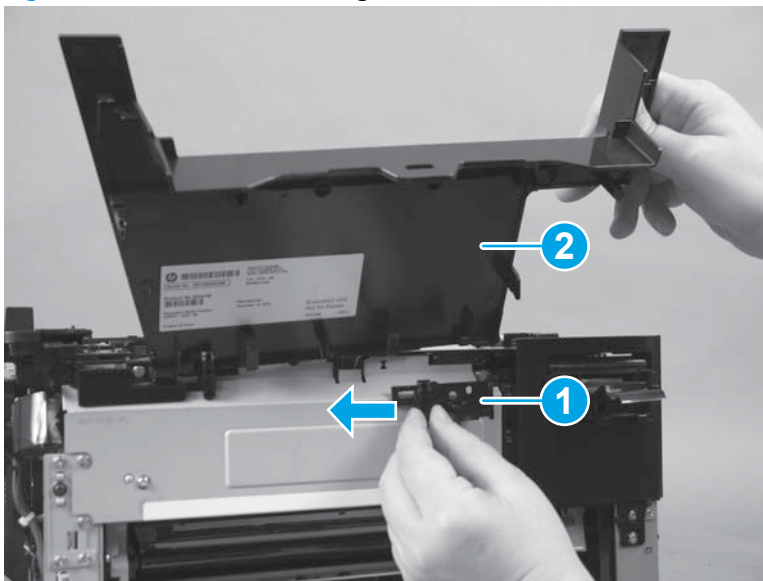
1. Open the front door halfway, and remove one tapping screw (callout 1).

Figure 1-43 Remove the cartridge door (1 of 2)



2. Slide the hinge (callout 1) and the front door (callout 2) toward the left of the product and remove them together.

Figure 1-44 Remove the cartridge door (2 of 2)



Fuser cover

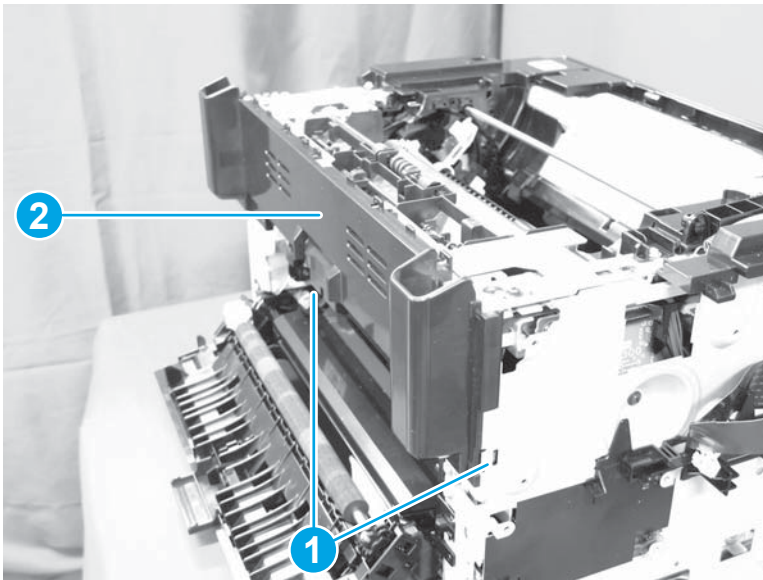
Before proceeding, remove the following components:

- Dust cover, input tray, and extension tray. See [Dust cover, input tray, and extension tray on page 9](#).
- Left cover. See [Left cover on page 12](#).
- Document feeder (M177 model only), scanner, and flat cable cover. See [Document feeder, scanner, and flat cable cover \(M177 model only\) on page 14](#) or [Scanner and flat cable cover \(M176 model only\) on page 16](#).
- Right cover. See [Right cover on page 18](#).
- Top cover. See [Top cover on page 20](#).

Remove the fuser cover

1. Release two tabs (callout 1) on the fuser cover (callout 2).

Figure 1-45 Remove the fuser cover



2. Lift the fuser cover up and remove it.

Rear door and secondary transfer assembly

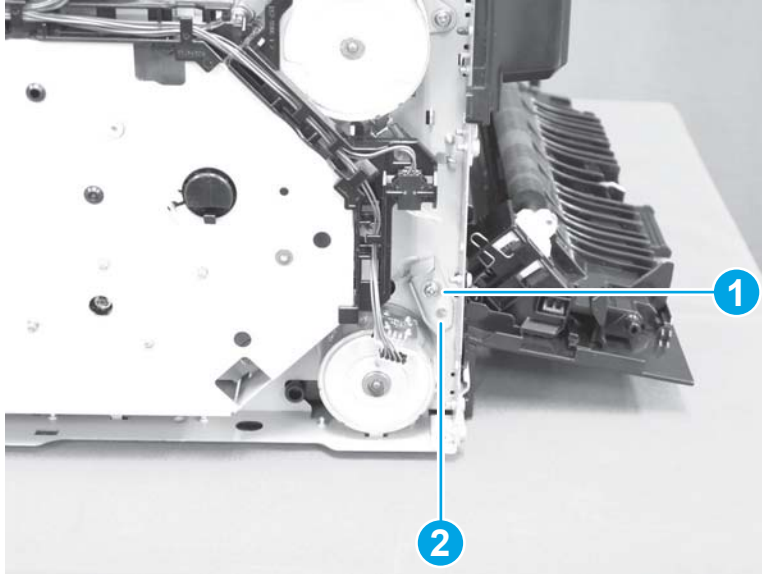
Before proceeding, remove the following components:

- Left cover. See [Left cover on page 12](#).
- Right cover. See [Right cover on page 18](#).

Remove the rear door and secondary transfer assembly

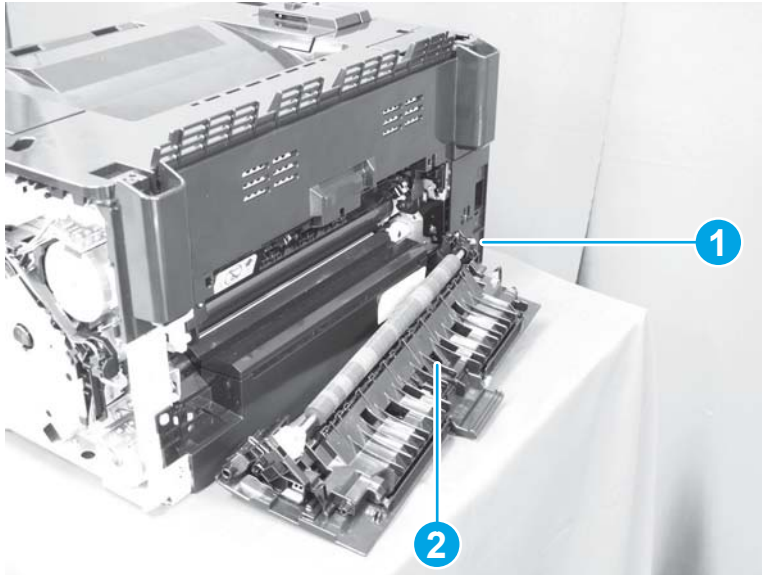
1. Remove one screw (callout 1) and the bushing (callout 2).

Figure 1-46 Remove the rear door and secondary transfer assembly (1 of 2)



2. Pull out the shaft (callout 1) and remove the rear door assembly and secondary transfer assembly (callout 2).

Figure 1-47 Remove the rear door and secondary transfer assembly (2 of 2)



Power supply cover

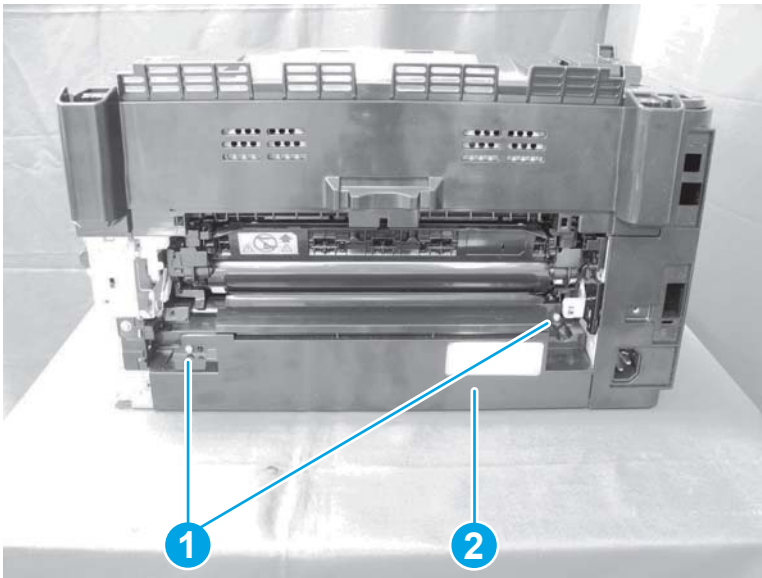
Before proceeding, remove the following components:

- Left cover. See [Left cover on page 12](#).
- Right cover. See [Right cover on page 18](#).
- Rear door and secondary transfer assembly. See [Rear door and secondary transfer assembly on page 37](#).

Remove the power supply cover

- ▲ Remove two screws (callout 1) and the power supply cover (callout 2).

Figure 1-48 Remove the power supply cover



Main assemblies

Formatter PCA (M176 model)

 **CAUTION:**  ESD sensitive.

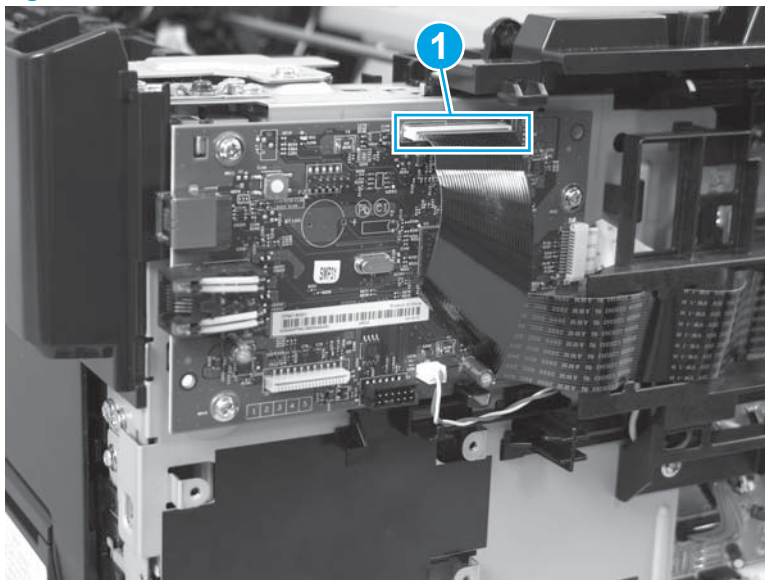
Before proceeding, remove the following components:

- Left cover assembly. See [Left cover on page 12](#).

Remove the formatter PCA (M176 model)

1. Disconnect one FFC (callout 1).

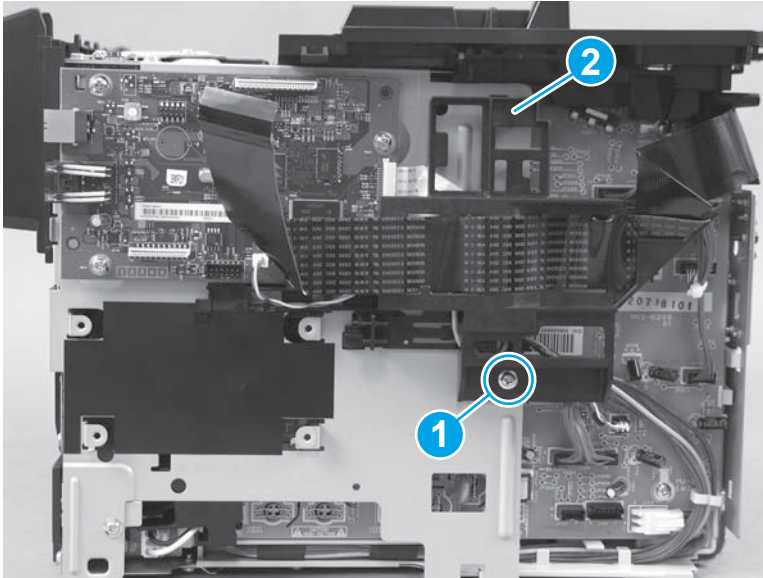
Figure 1-49 Remove the formatter PCA for the M176 model (1 of 4)



2. Remove one screw (callout 1), and remove the FFC guide (callout 2).

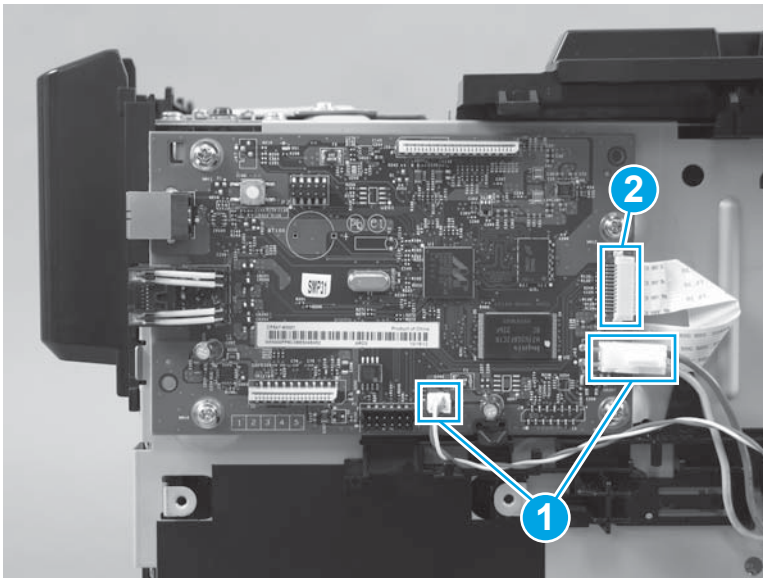
 **NOTE:** The FFC guide might look slightly different, but the procedure is the same.

Figure 1-50 Remove the formatter PCA for the M176 model (2 of 4)



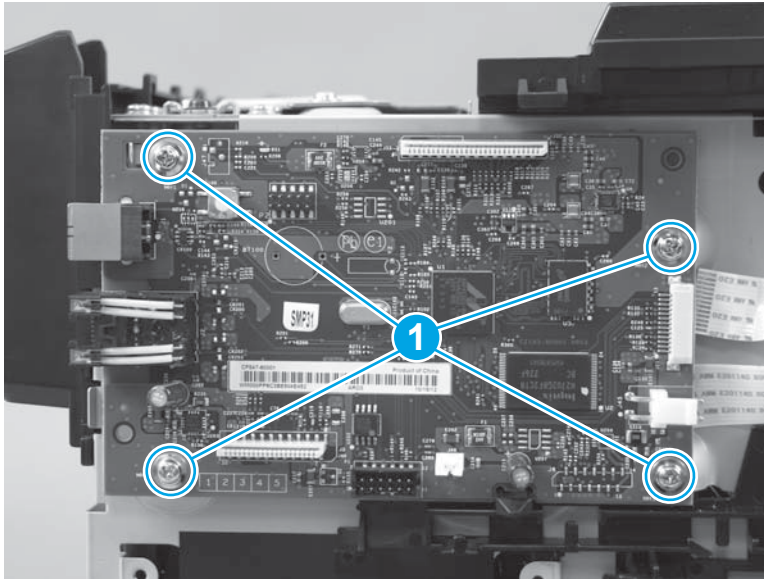
3. Disconnect two connectors (callout 1) and one FFC (callout 2).

Figure 1-51 Remove the formatter PCA for the M176 model (3 of 4)



4. Remove four screws (callout 1), and then remove the formatter PCA.

Figure 1-52 Remove the formatter PCA for the M176 model (4 of 4)




Wireless PCA (M177 model)

 **CAUTION:**  ESD sensitive.

Before proceeding, remove the following components:

- Left cover. See [Left cover on page 12](#).

 **NOTE:** The FFC guide may look different than the one shown in this procedure.

Remove the wireless PCA (M177 model)

1. Disconnect one FFC (callout 1) from the formatter PCA.


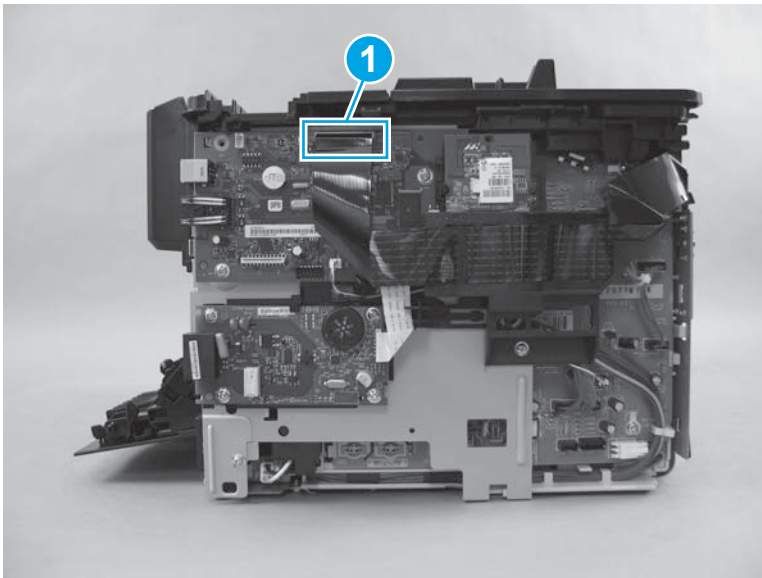
 **CAUTION:** Do not bend or fold the flat flexible cables (FFCs) during removal or installation. Do not straighten pre-folds in the FFCs.

Figure 1-53 Remove the wireless PCA for the M177 model (1 of 3)



- Carefully remove the FFC from the cable guides (callout 1).


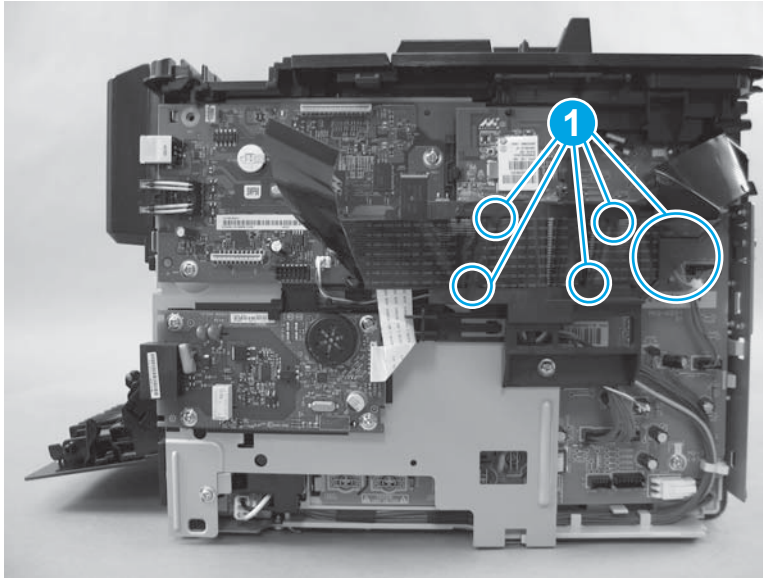
 **NOTE:** The FFC guide might look slightly different, but the procedure is the same.

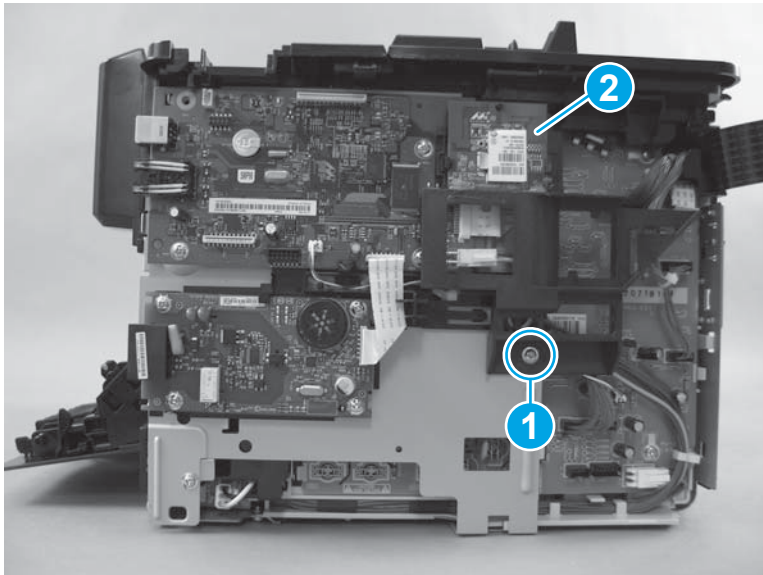
Figure 1-54 Remove the wireless PCA for the M177 model (2 of 3)



- Remove one screw (callout 1), and then remove the wireless PCA and the FFC guide (callout 2).

 **NOTE:** The wireless PCA holder might look slightly different, but the procedure is the same.

Figure 1-55 Remove the wireless PCA for the M177 model (3 of 3)



Formatter PCA (M177 model)

 **CAUTION:**  ESD sensitive.

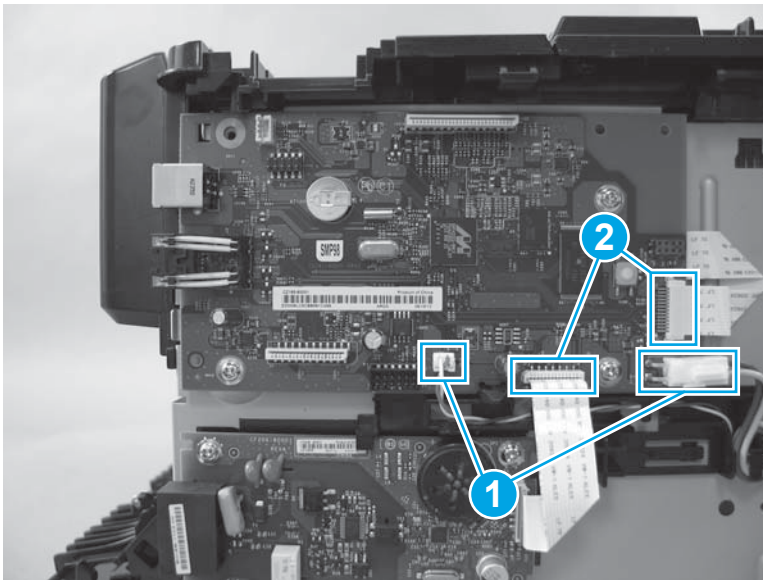
Before proceeding, remove the following components:

- Left cover. See [Left cover on page 12](#).
- Wireless PCA. See [Wireless PCA \(M177 model\) on page 42](#).

Remove the formatter PCA (M177 model)

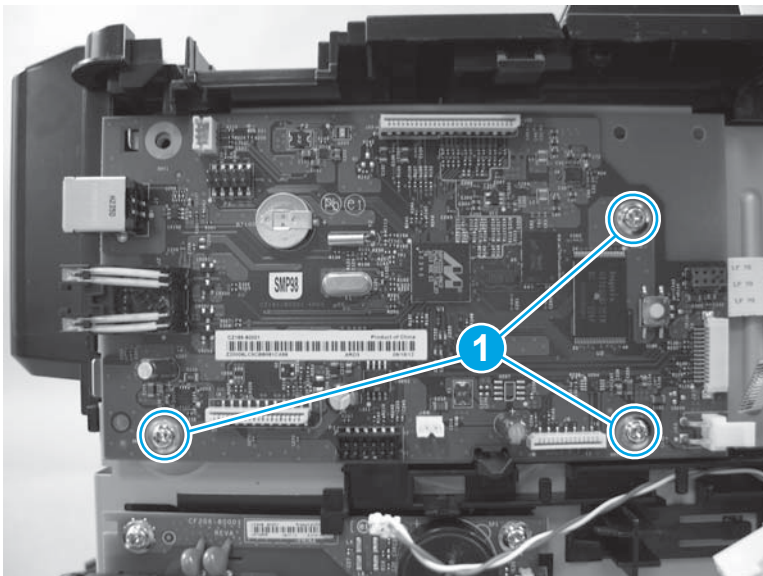
1. Disconnect two connectors (callout 1), and then disconnect two FFCs (callout 2).

Figure 1-56 Remove the formatter PCA for the M177 model (1 of 2)



2. Remove three screws (callout 1), and then remove the formatter PCA.

Figure 1-57 Remove the formatter PCA for the M177 model (2 of 2)



Fax PCA (M177 model)

 **CAUTION:**  ESD sensitive.

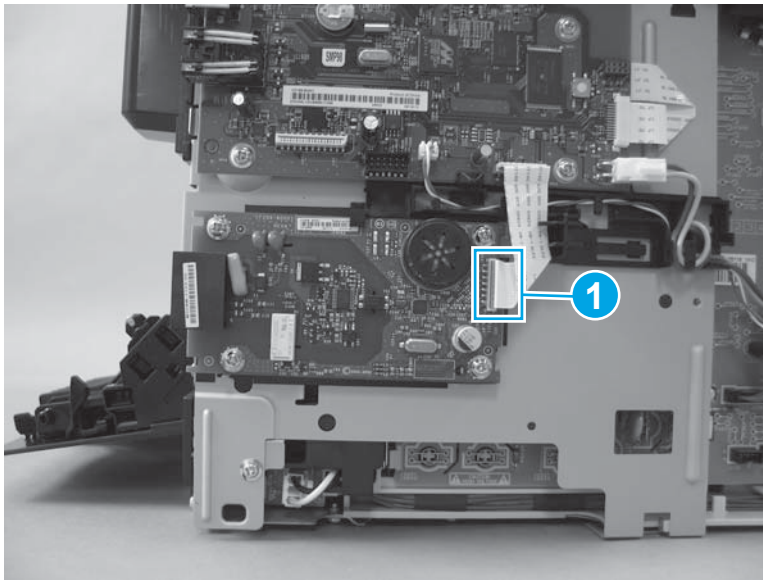
Before proceeding, remove the following components:

- Left cover. See [Left cover on page 12](#).
- Wireless PCA. See [Wireless PCA \(M177 model\) on page 42](#).

Remove the fax PCA (M177 model)

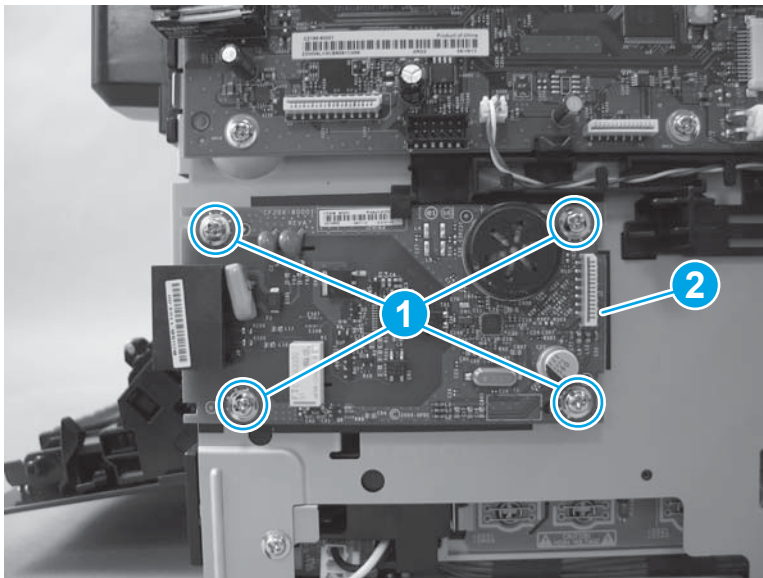
1. Remove one FFC (callout 1).

Figure 1-58 Remove the fax PCA for the M177 model (1 of 2)



2. Remove four screws (callout 1), and remove the fax PCA (callout 2).

Figure 1-59 Remove the fax PCA for the M177 model (2 of 2)



Control panel FFC

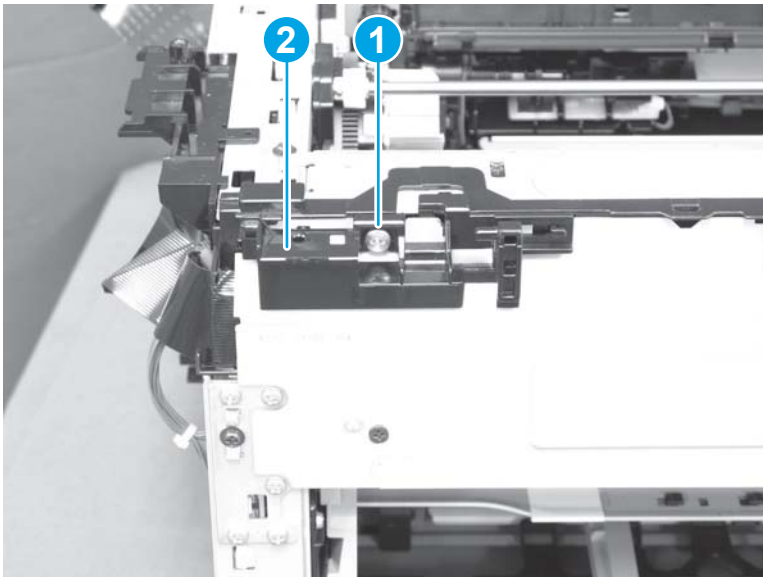
Before proceeding, remove the following components:

- Dust cover, input tray, and extension tray. See [Dust cover, input tray, and extension tray on page 9](#).
- Left cover. See [Left cover on page 12](#).
- Document feeder (M177 model only), scanner, and flat cable cover. See [Document feeder, scanner, and flat cable cover \(M177 model only\) on page 14](#) or [Scanner and flat cable cover \(M176 model only\) on page 16](#).
- Right cover. See [Right cover on page 18](#).
- Top cover. See [Top cover on page 20](#).
- Inner cover. See [Inner cover on page 28](#).
- Grounding cable cover and right top cover. See [Grounding cable cover and right top cover on page 30](#).
- Control panel. See [Control panel on page 32](#).
- Cartridge door. See [Cartridge door on page 35](#).

Remove the control panel FFC

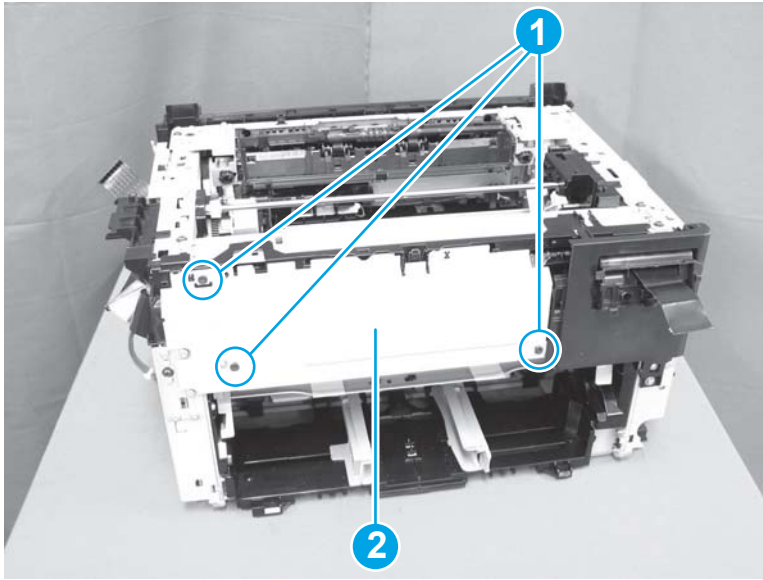
1. Remove one tapping screw (callout 1), and slide the hinge (callout 2) to the right to remove it.

Figure 1-60 Remove the control panel FFC (1 of 5)



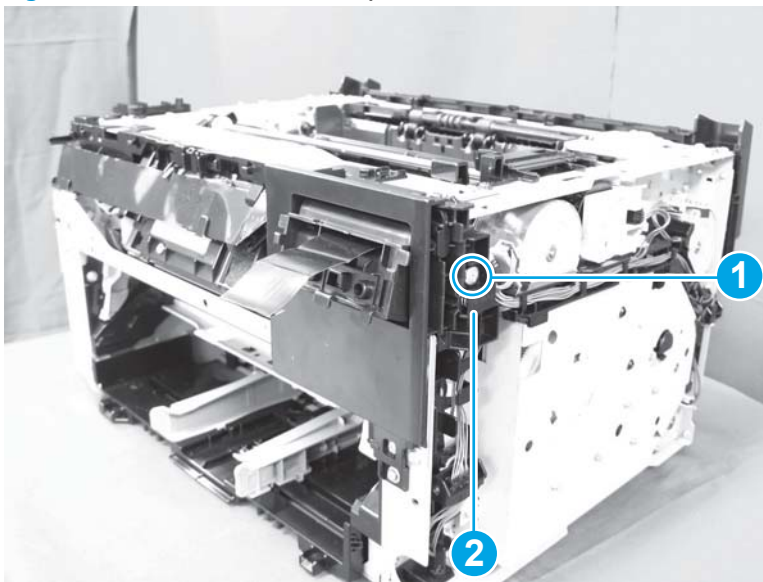
2. Remove three black screws (callout 1) and the scanner cover (callout 2).

Figure 1-61 Remove the control panel FFC (2 of 5)



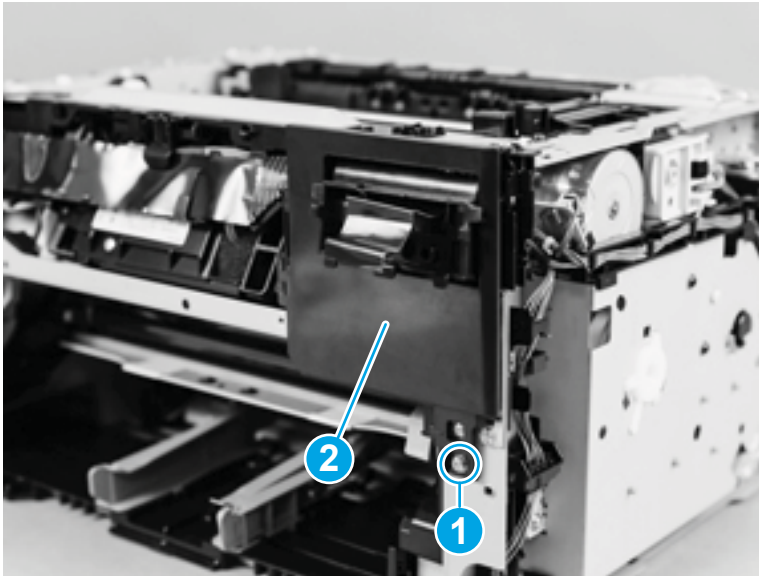
3. Remove one tapping screw (callout 1) and the spring holder (callout 2).

Figure 1-62 Remove the control panel FFC (3 of 5)



4. Remove one screw (callout 1) and the control panel assembly (callout 2).

Figure 1-63 Remove the control panel FFC (4 of 5)

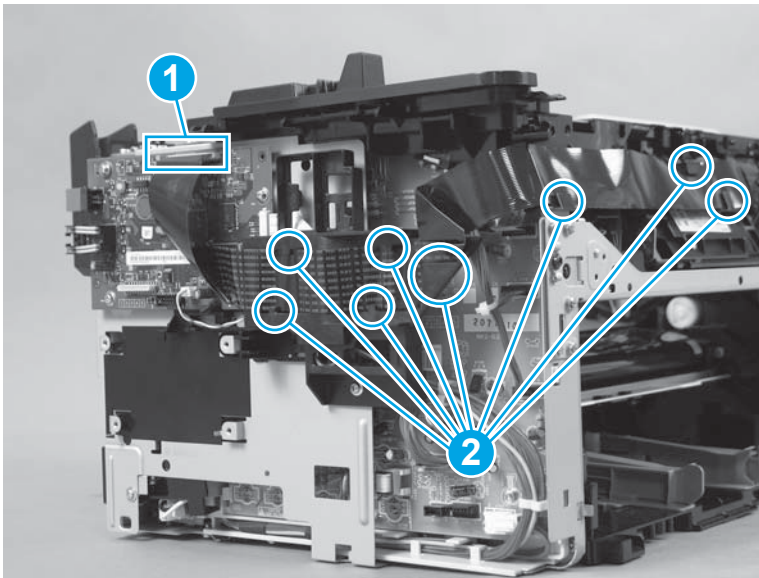


5. Disconnect one FFC (callout 1) from the formatter PCA, and then carefully remove the FFC from the cable guides (callout 2).

CAUTION: Do not bend or fold the flat flexible cables (FFCs) during removal or installation. Do not straighten pre-folds in the FFCs.

NOTE: The FFC guide might look slightly different from the figure, but the procedure is the same.

Figure 1-64 Remove the control panel FFC (5 of 5)



Engine controller assembly and formatter-engine FFC

 **CAUTION:**  ESD sensitive.

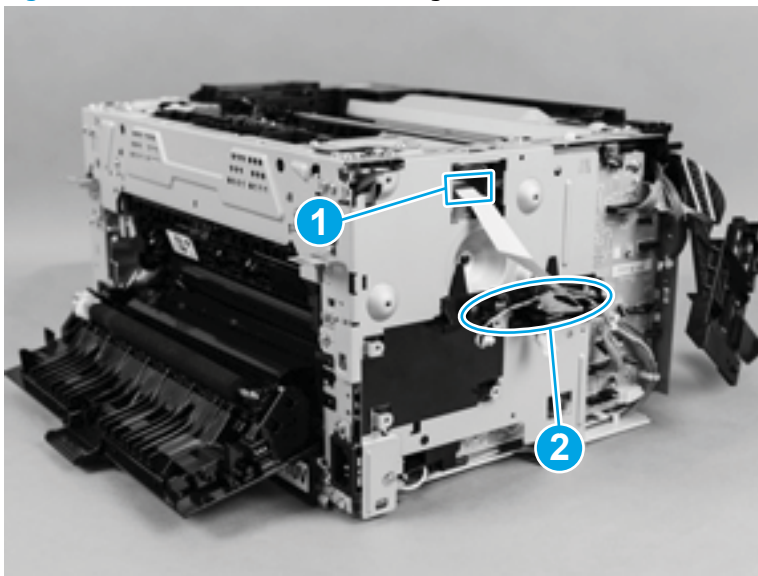
Before proceeding, remove the following components:

- Dust cover, input tray, and extension tray. See [Dust cover, input tray, and extension tray on page 9](#).
- Left cover. See [Left cover on page 12](#).
- Document feeder (M177 model only), scanner, and flat cable cover. See [Document feeder, scanner, and flat cable cover \(M177 model only\) on page 14](#) or [Scanner and flat cable cover \(M176 model only\) on page 16](#).
- Right cover. See [Right cover on page 18](#).
- Top cover. See [Top cover on page 20](#).
- Inner cover. See [Inner cover on page 28](#).
- Wireless PCA (M177 model only). [Wireless PCA \(M177 model\) on page 42](#).
- Formatter PCA. See [Formatter PCA \(M176 model\) on page 39](#) or [Formatter PCA \(M177 model\) on page 44](#).
- Fax PCA. See [Fax PCA \(M177 model\) on page 45](#).

Remove the engine controller assembly and formatter-engine FFC

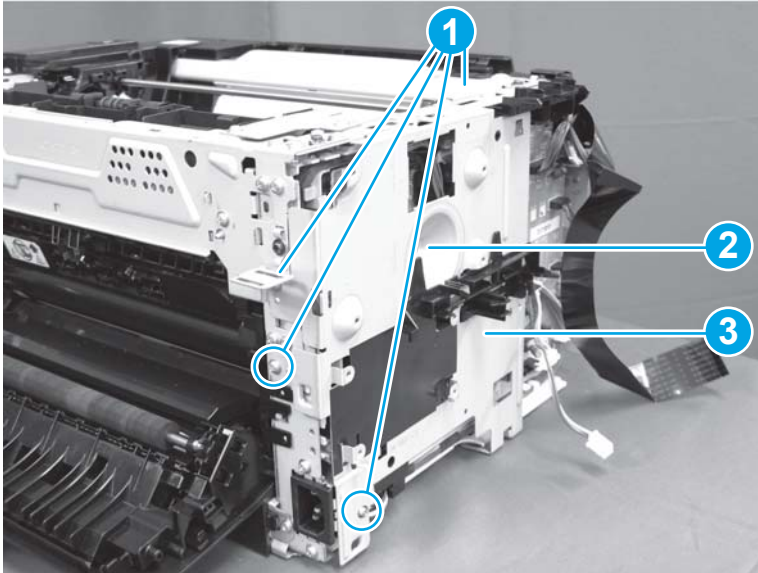
1. Disconnect the formatter-engine FFC (callout 1) and release the cables from the cable guides (callout 2).

Figure 1-65 Remove the formatter-engine FFC



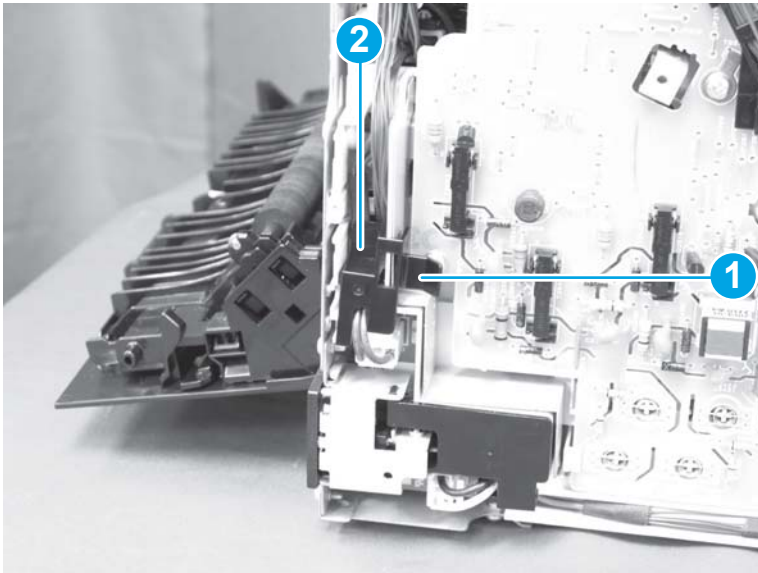
2. Remove four screws (callout 1) and one black screw (callout 2), and then remove the PCA plate (callout 3).

Figure 1-66 Remove the engine controller assembly (1 of 6)



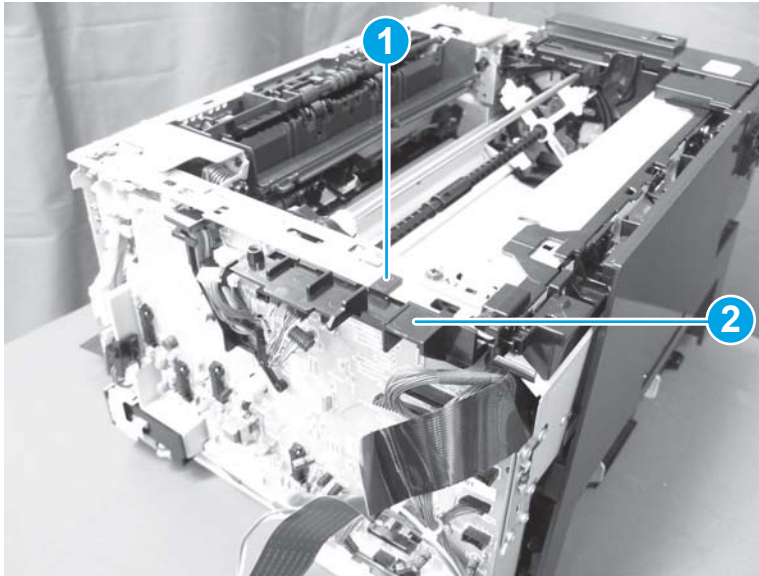
3. Release one tab (callout 1) and remove the cable cover (callout 2).

Figure 1-67 Remove the engine controller assembly (2 of 6)



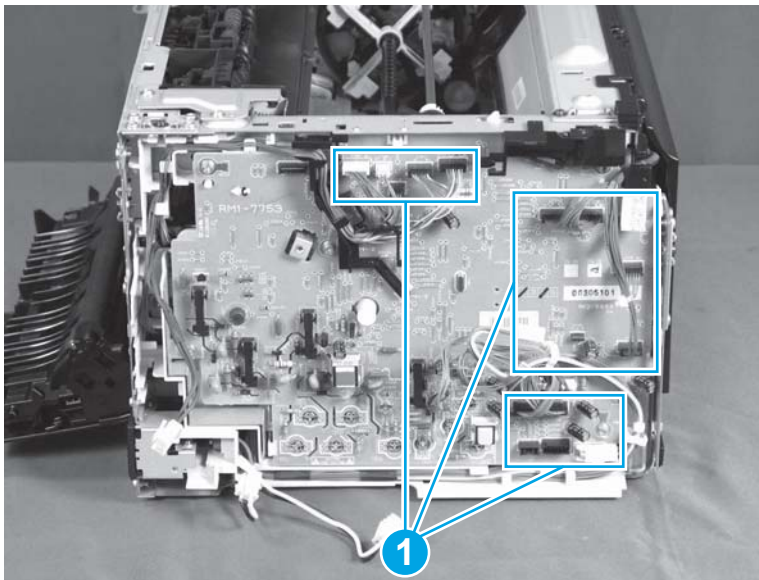
4. Release one boss (callout 1) and remove the switch cover (callout 2).

Figure 1-68 Remove the engine controller assembly (3 of 6)



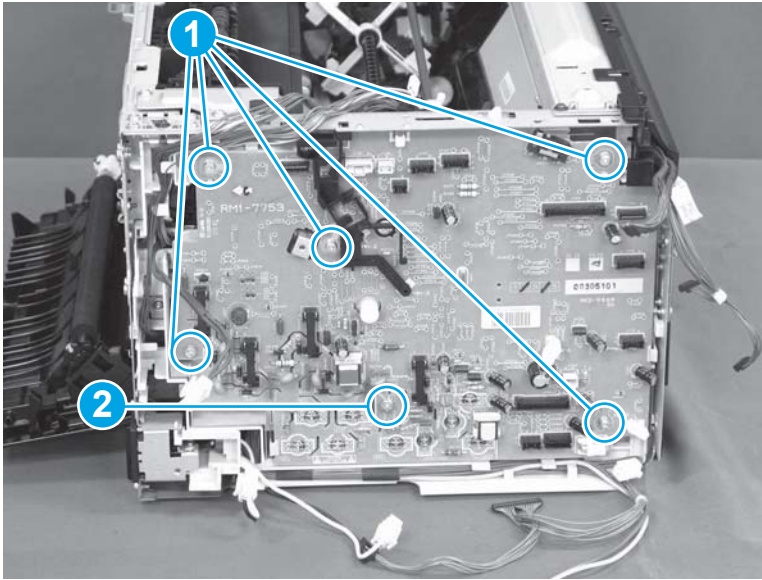
5. Disconnect all of eleven connectors (callout 1) on the engine controller PCA.

Figure 1-69 Remove the engine controller assembly (4 of 6)



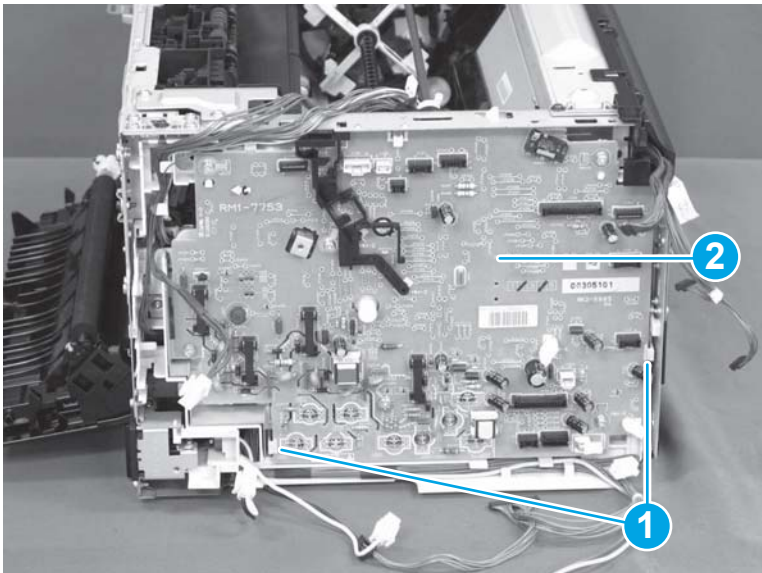
6. Remove five screws with washer (callout 1) and one tapping screw (callout 2).

Figure 1-70 Remove the engine controller assembly (5 of 6)



7. Release two tabs (callout 1) and remove the engine controller PCA (callout 2).

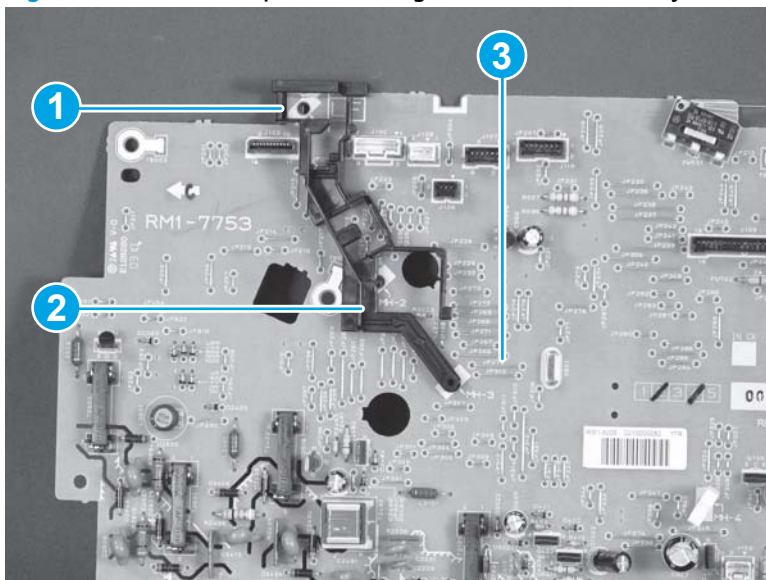
Figure 1-71 Remove the engine controller assembly (6 of 6)



Install a replacement engine controller assembly


Release one tab (callout 1), remove the guide (callout 2) from the discarded engine controller assembly (callout 3), and then install the guide on the replacement assembly.

Figure 1-72 Install a replacement engine controller assembly



Fuser delivery assembly

 **CAUTION:**  ESD sensitive.

 **NOTE:** If the imaging drum was not removed before servicing the product, remove it now. See [Imaging drum on page 7](#).

Before proceeding, remove the following components:

- Dust cover, input tray, and extension tray. See [Dust cover, input tray, and extension tray on page 9](#).
- Left cover. See [Left cover on page 12](#).
- Document feeder (M177 model only), scanner, and flat cable cover. See [Document feeder, scanner, and flat cable cover \(M177 model only\) on page 14](#) or [Scanner and flat cable cover \(M176 model only\) on page 16](#).
- Right cover. See [Right cover on page 18](#).
- Top cover. See [Top cover on page 20](#).
- Inner cover. See [Inner cover on page 28](#).
- Fuser cover. See [Fuser cover on page 36](#).

Remove the fuser delivery assembly

1. Make sure the silver dot is visible in the center fuser opening before removing the fuser delivery assembly. If it is not visible, turn the product on and off again to reset the fuser.


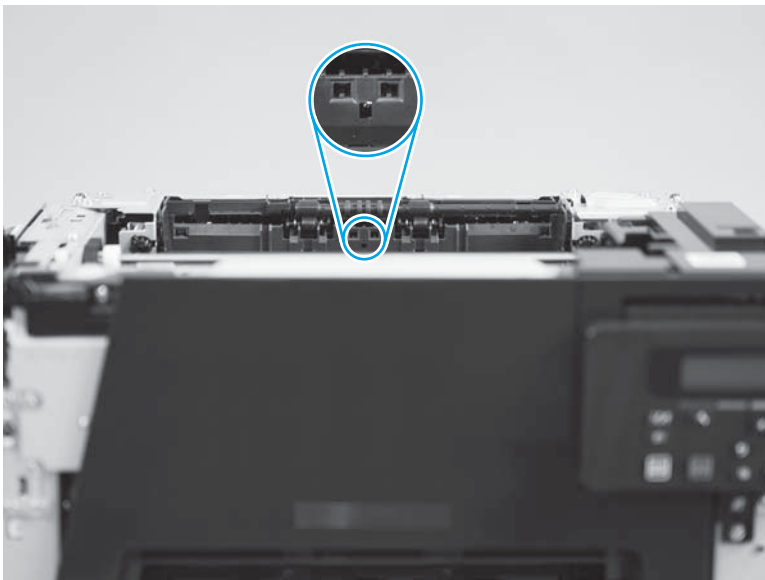
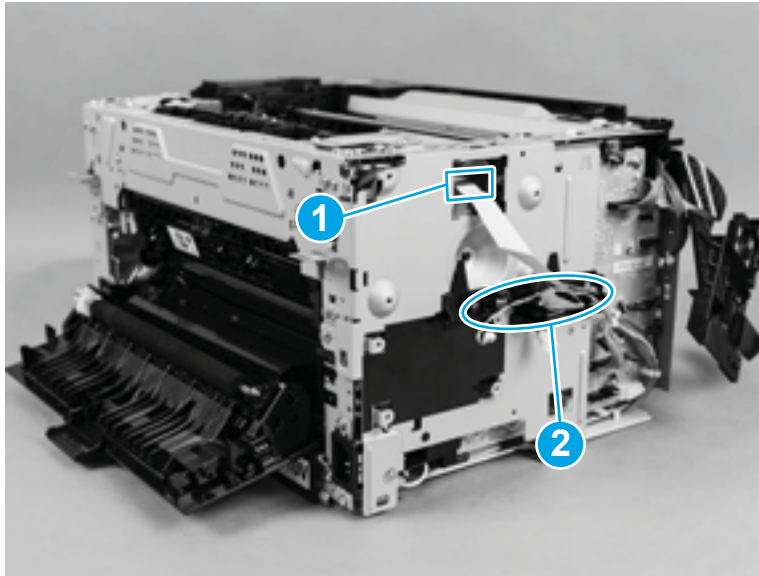
 **CAUTION:** If the silver dot is not visible and the fuser delivery assembly is removed, the gears will not be aligned and it will be difficult to reinstall the fuser delivery assembly.

Figure 1-73 Remove the fuser delivery assembly (1 of 9)



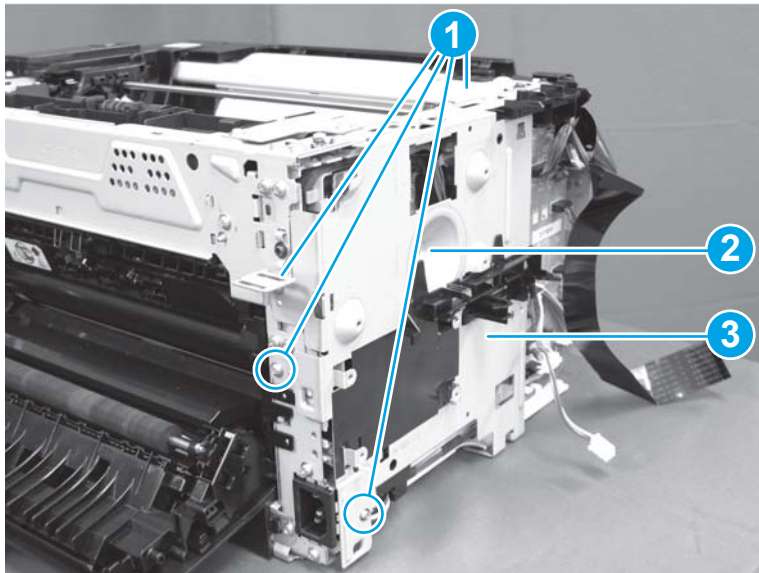
2. Disconnect the formatter-engine FFC (callout 1) and release the cables from the cable guides (callout 2).

Figure 1-74 Remove the fuser delivery assembly (2 of 9)



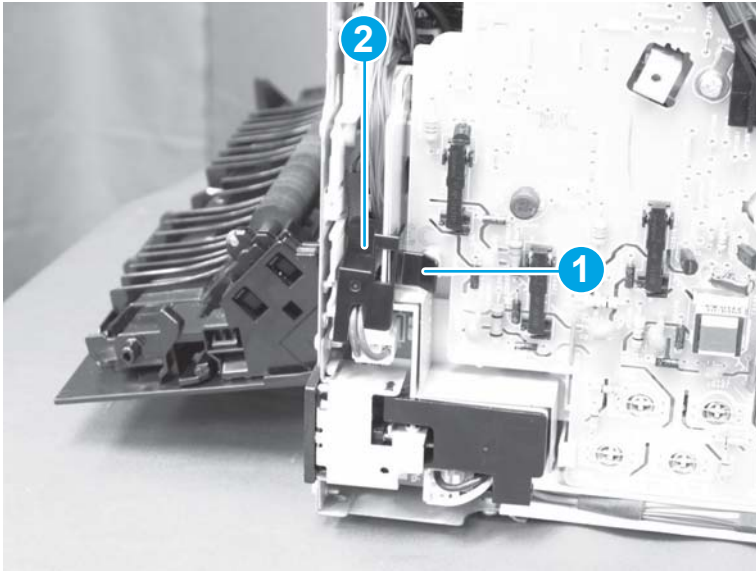
3. Remove four screws (callout 1) and one black screw (callout 2), and then remove the PCA plate (callout 3).

Figure 1-75 Remove the fuser delivery assembly (3 of 9)



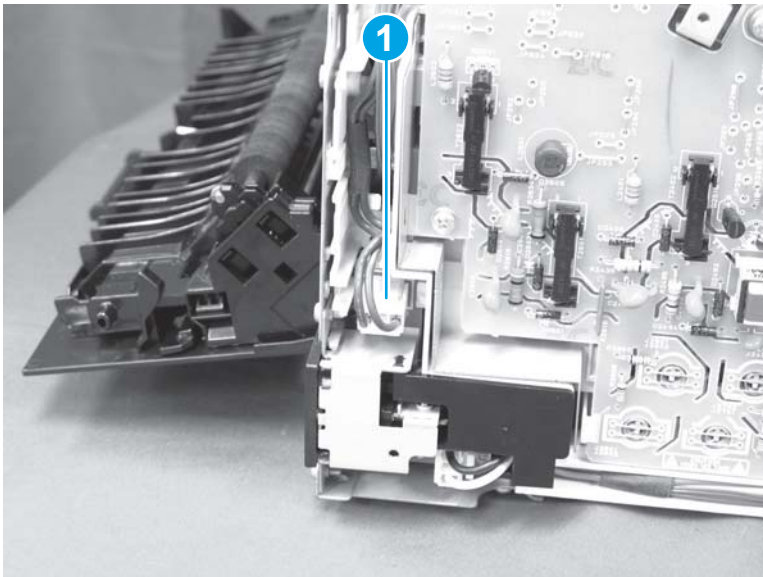
4. Release one tab (callout 1) and remove the cable cover (callout 2).

Figure 1-76 Remove the fuser delivery assembly (4 of 9)



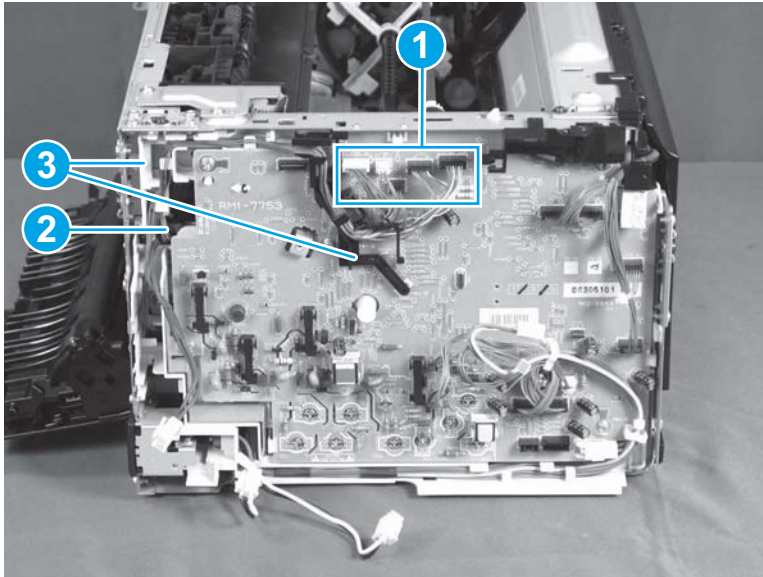
5. Disconnect one connector (callout 1).

Figure 1-77 Remove the fuser delivery assembly (5 of 9)



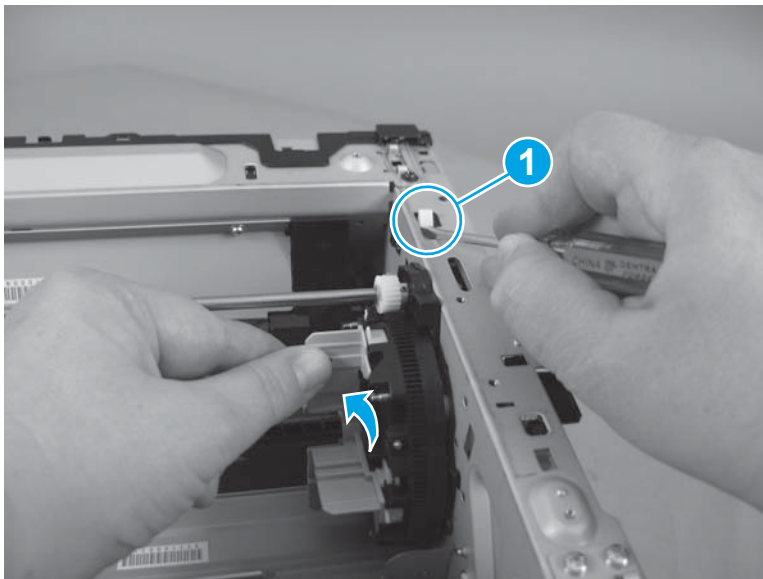
6. Disconnect five connectors (callout 1), and then release the cables (callout 2) from the cable guides (callout 3).

Figure 1-78 Remove the fuser delivery assembly (6 of 9)



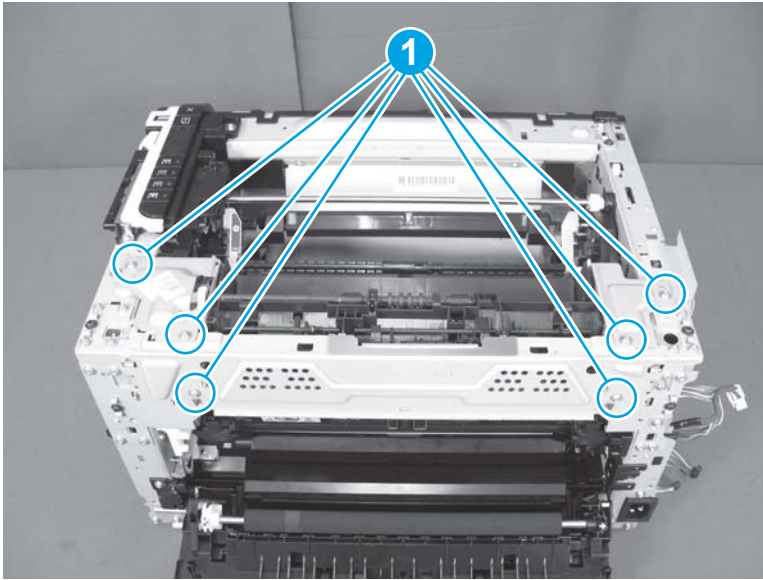
7. Press the cartridge release lever (callout 1) and rotate the toner cartridge carousel toward the front of the product to make more room to remove the fuser delivery assembly.

Figure 1-79 Remove the fuser delivery assembly (7 of 9)



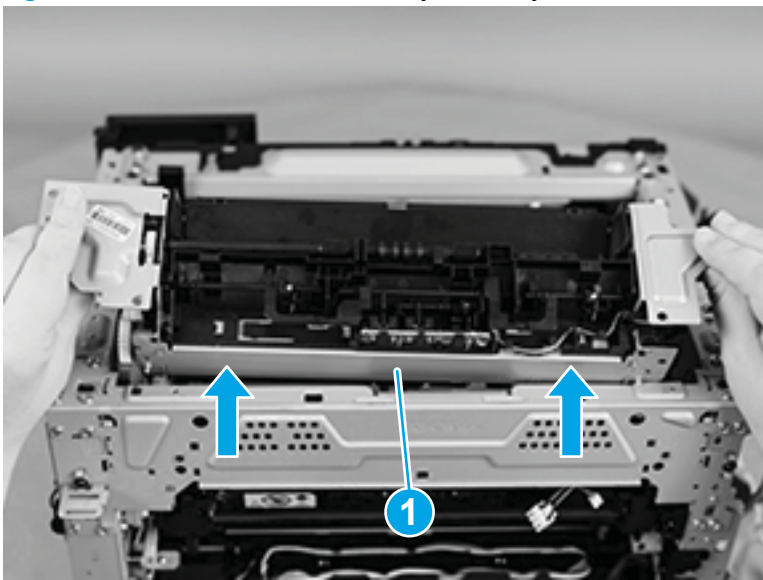
8. Remove six screws (callout 1).

Figure 1-80 Remove the fuser delivery assembly (8 of 9)



9. Lift the fuser delivery assembly to remove it (callout 1).

Figure 1-81 Remove the fuser delivery assembly (9 of 9)



Reinstall the fuser delivery assembly

- When reinstalling the fuser delivery assembly, be sure the drive cam (callout 1) for fuser pressure release is positioned as shown below and meets the matching fuser part (callout 2).


 **NOTE:** These parts should be aligned if the product was turned on and off before removing the fuser delivery assembly.

Figure 1-82 Reinstall the fuser delivery assembly (1 of 3)

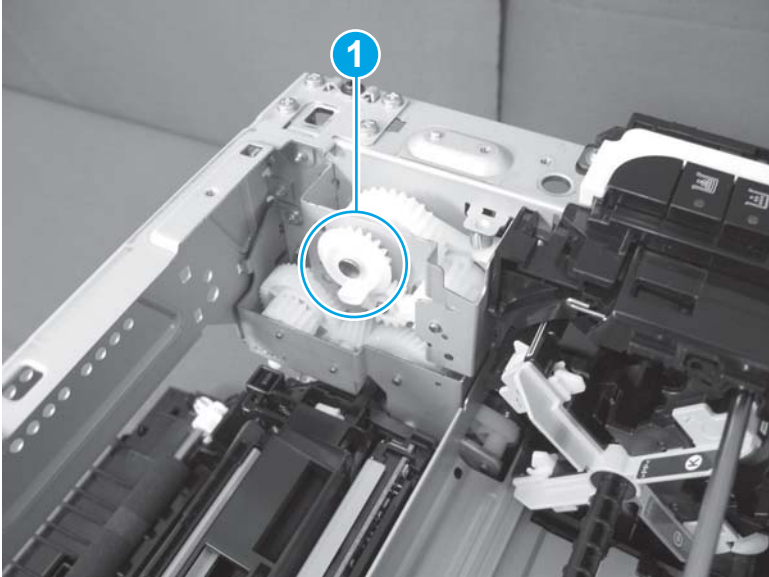
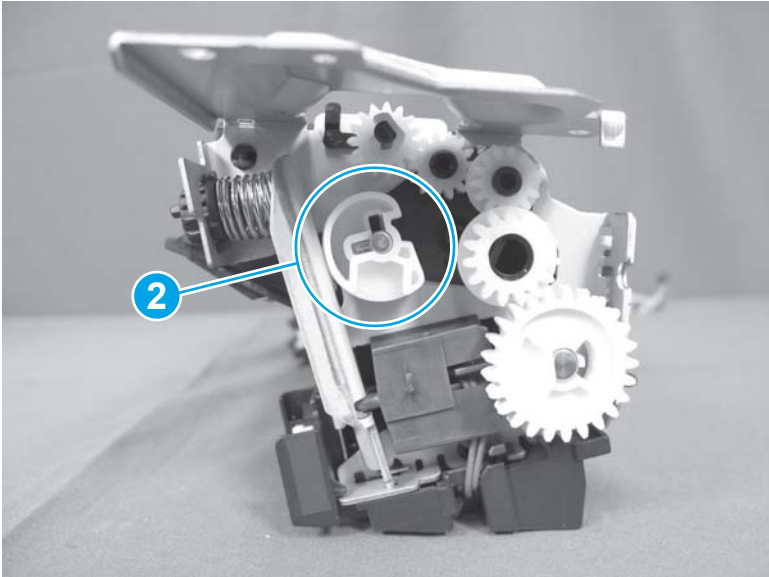
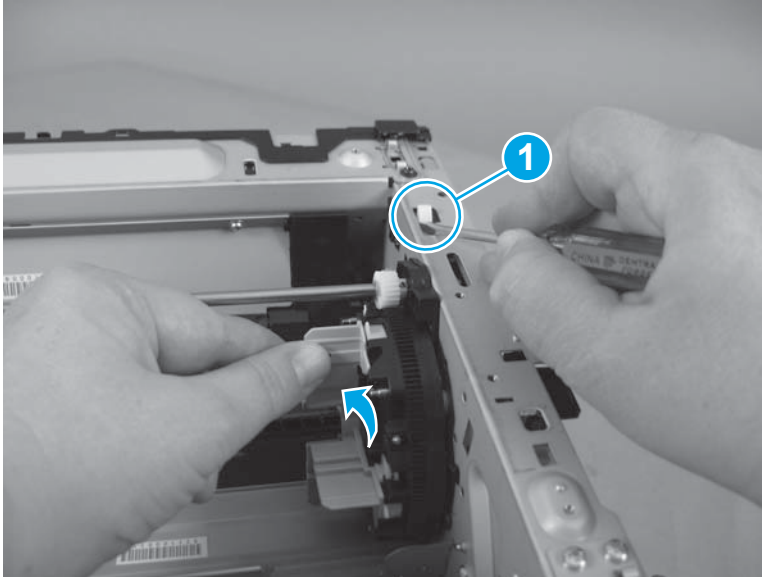


Figure 1-83 Reinstall the fuser delivery assembly (2 of 3)



- Press the cartridge release lever (callout 1) and rotate the toner cartridge carousel toward the front of the product to make more room to reinstall the fuser delivery assembly.


Figure 1-84 Reinstall the fuser delivery assembly (3 of 3)



- Thread all of the fuser cables through the opening in the chassis, and then insert the left side of the fuser delivery assembly.

Intermediate transfer belt (ITB) assembly

 **CAUTION:**  ESD sensitive.

 **NOTE:** If the imaging drum was not removed before servicing the product, remove it now. See [Imaging drum on page 7](#).

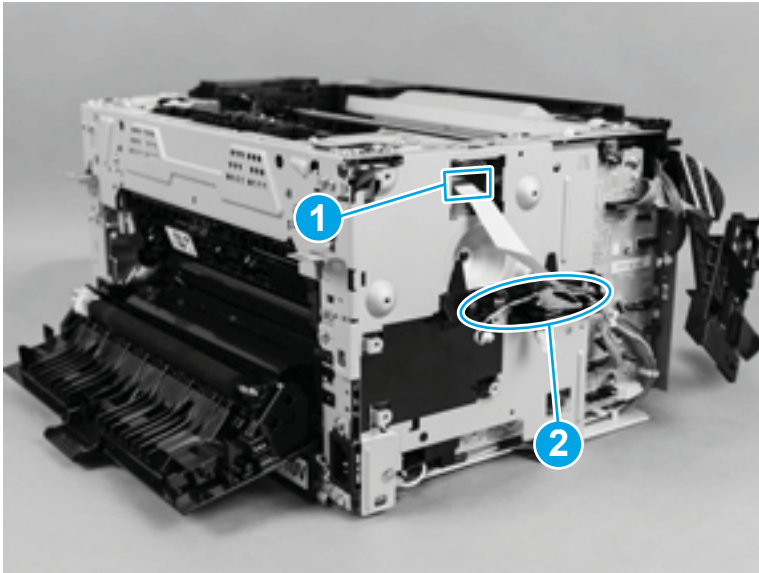
Before proceeding, remove the following components:

- Dust cover, input tray, and extension tray. See [Dust cover, input tray, and extension tray on page 9](#).
- Left cover. See [Left cover on page 12](#).
- Document feeder (M177 model only), scanner, and flat cable cover. See [Document feeder, scanner, and flat cable cover \(M177 model only\) on page 14](#) or [Scanner and flat cable cover \(M176 model only\) on page 16](#).
- Right cover. See [Right cover on page 18](#).
- Top cover. See [Top cover on page 20](#).
- Inner cover. See [Inner cover on page 28](#).
- Fuser cover. See [Fuser cover on page 36](#).
- Rear door and secondary transfer assembly. See [Rear door and secondary transfer assembly on page 37](#).
- Wireless PCA (M177 model only). [Wireless PCA \(M177 model\) on page 42](#).
- Formatter PCA. See [Formatter PCA \(M176 model\) on page 39](#) or [Formatter PCA \(M177 model\) on page 44](#).
- Fax PCA. See [Fax PCA \(M177 model\) on page 45](#).

Remove the ITB assembly

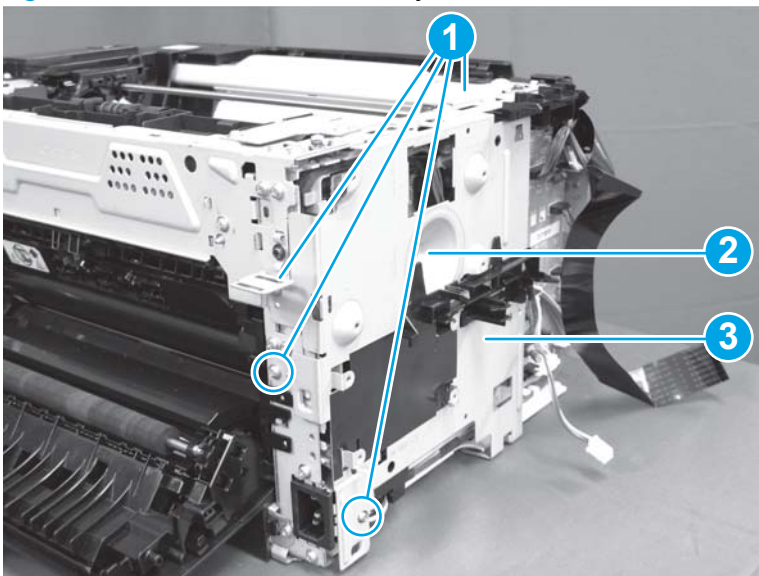
1. Disconnect the formatter-engine FFC (callout 1) and release the cables from the cable guides (callout 2).

Figure 1-85 Remove the ITB assembly (1 of 17)



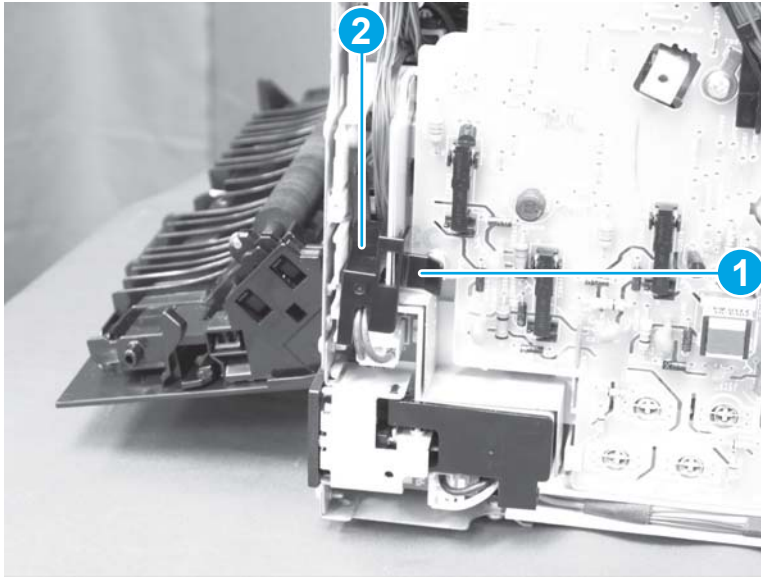
2. Remove four screws (callout 1) and one black screw (callout 2), and then remove the PCA plate (callout 3).

Figure 1-86 Remove the ITB assembly (2 of 17)



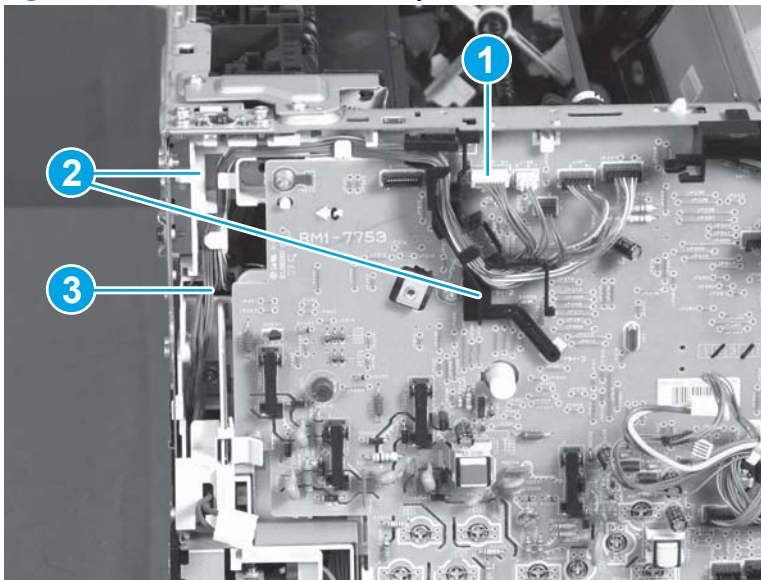
3. Release one tab (callout 1) and remove the cable cover (callout 2).

Figure 1-87 Remove the ITB assembly (3 of 17)



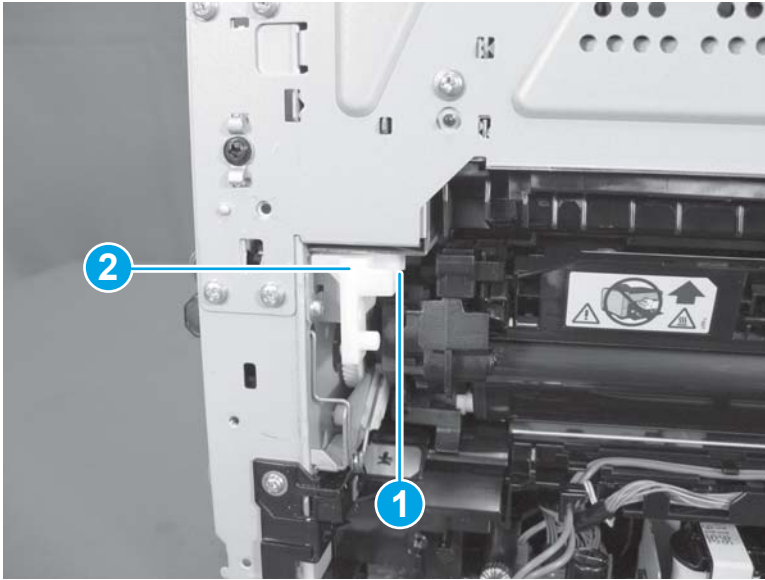
4. Disconnect one connector (callout 1), and release the cable (callout 3) from the cable guides (callout 2).

Figure 1-88 Remove the ITB assembly (4 of 17)



5. Release one tab (callout 1) and remove the rear door arm (callout 2) on the left side.

Figure 1-89 Remove the ITB assembly (5 of 17)



6. Unhook the catching part of the ITB fixing spring (callout 1) and turn the spring (callout 2) toward the front side.

Figure 1-90 Remove the ITB assembly (6 of 17)

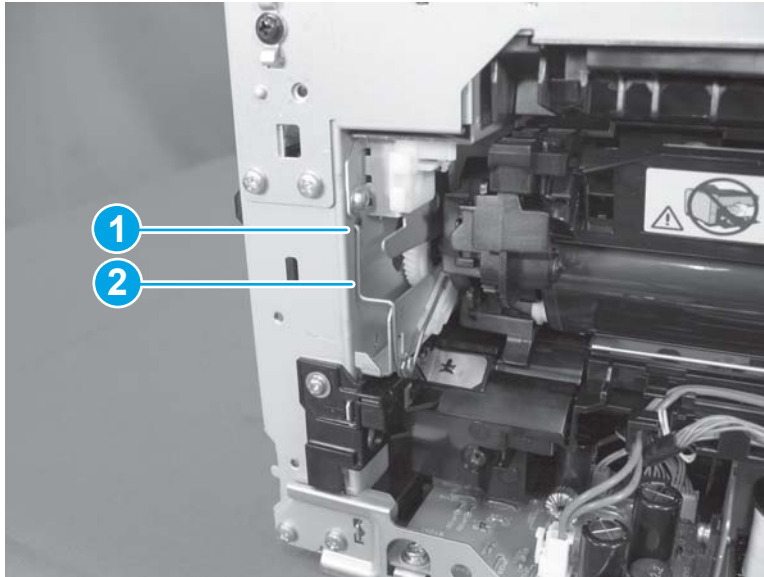
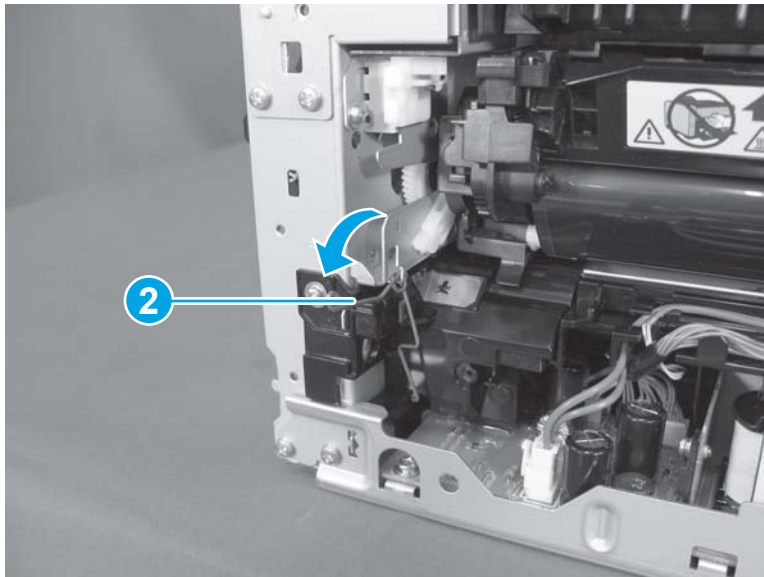


Figure 1-91 Remove the ITB assembly (7 of 17)



7. Turn the ITB fixing part (callout 1) toward the front side.

Figure 1-92 Remove the ITB assembly (8 of 17)

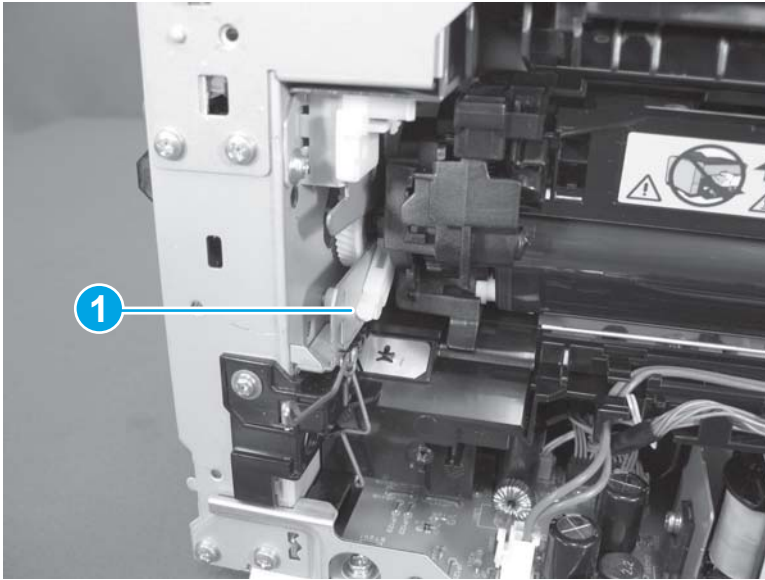
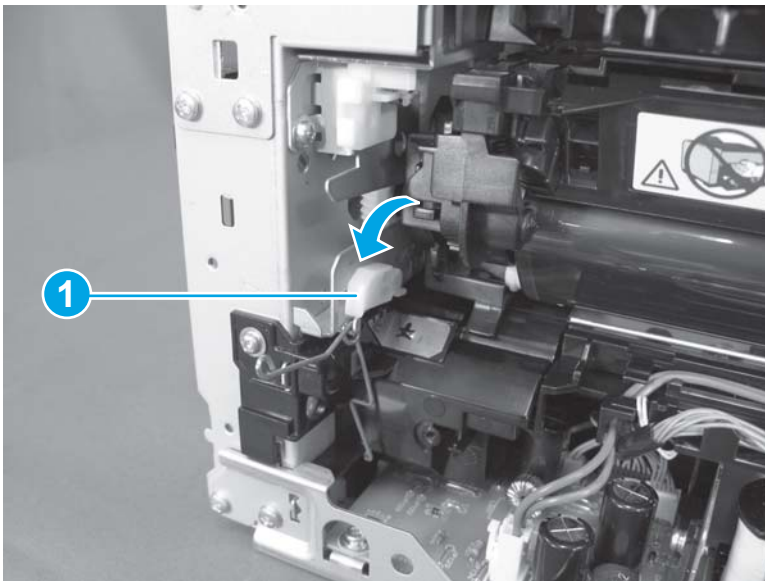
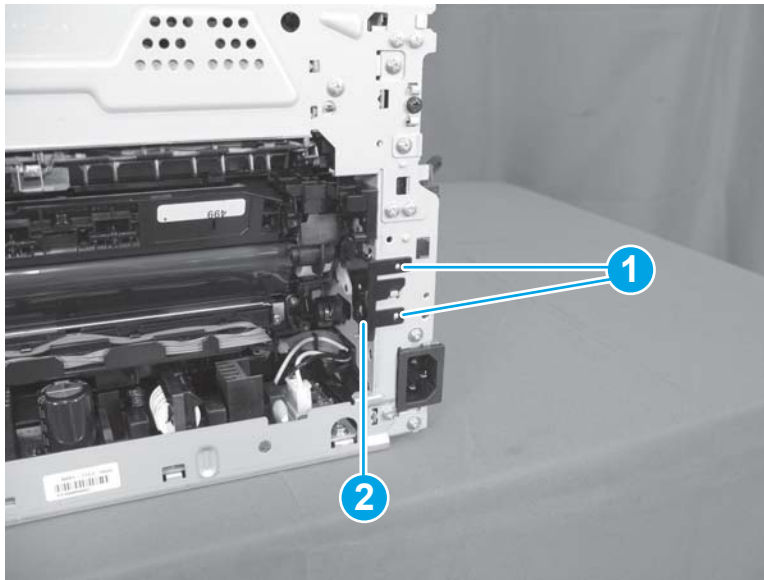


Figure 1-93 Remove the ITB assembly (9 of 17)



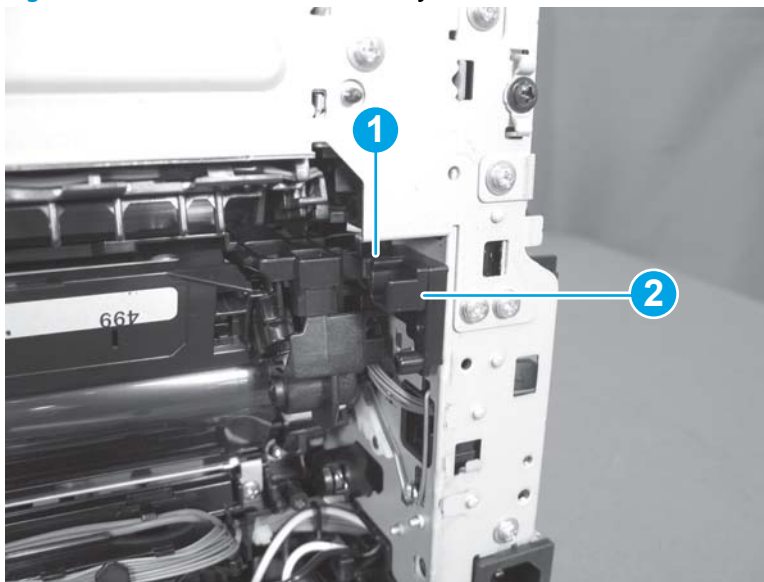
8. Release two tabs (callout 1), and remove the spring cover (callout 2).

Figure 1-94 Remove the ITB assembly (10 of 17)



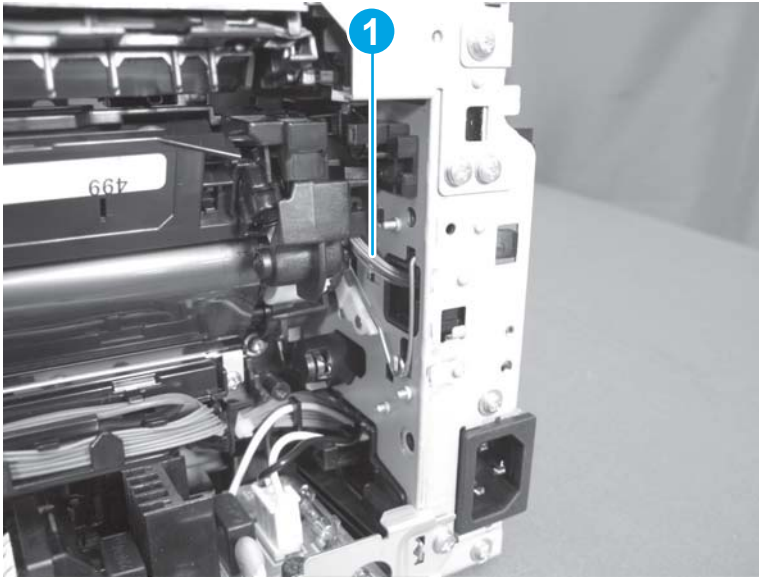
9. Release one tab (callout 1), and remove the rear door arm (callout 2) on the right side.

Figure 1-95 Remove the ITB assembly (11 of 17)



10. Pull out the cables (callout 1).

Figure 1-96 Remove the ITB assembly (12 of 17)



11. Unhook the catching part of the ITB fixing spring (callout 1) and turn the spring (callout 2) toward the front side.

Figure 1-97 Remove the ITB assembly (13 of 17)

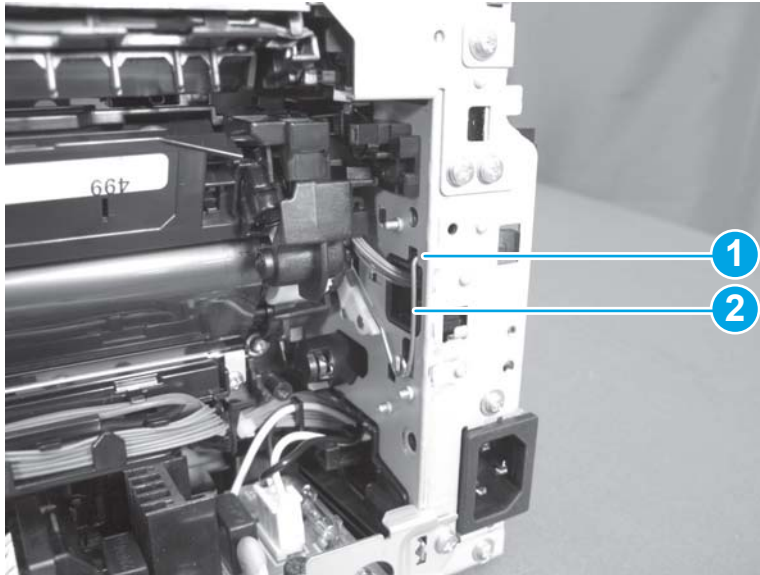
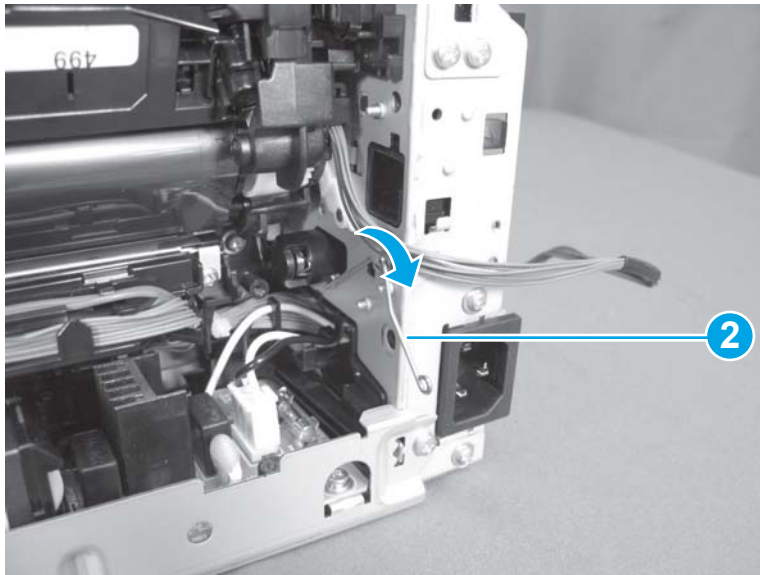


Figure 1-98 Remove the ITB assembly (14 of 17)



12. Rotate the ITB fixing part (callout 1) so that it faces out of the product.

Figure 1-99 Remove the ITB assembly (15 of 17)

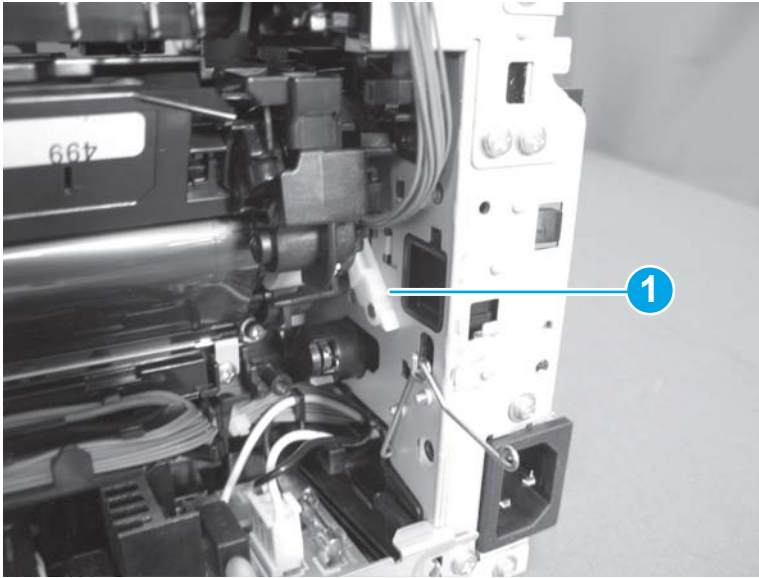
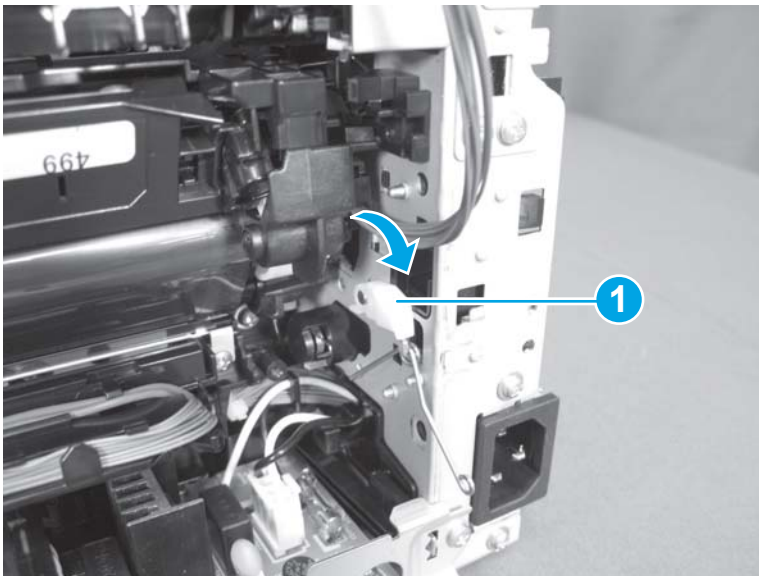


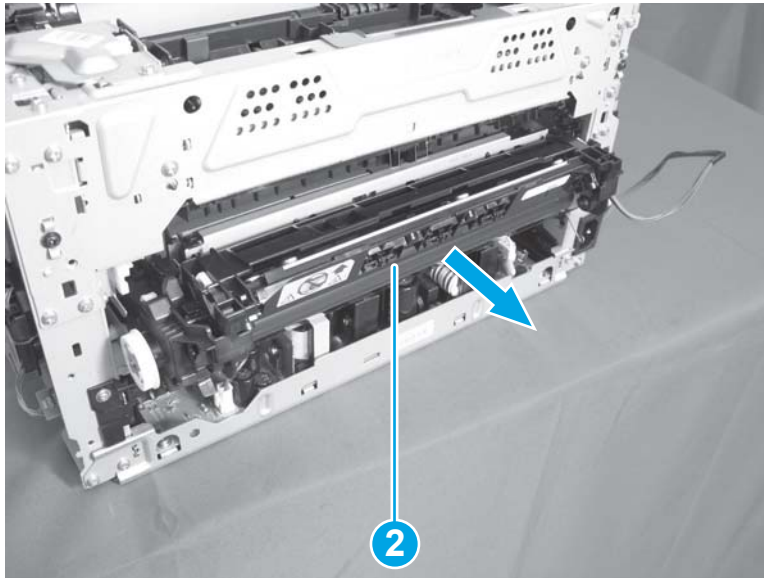
Figure 1-100 Remove the ITB assembly (16 of 17)



13. Pull the ITB assembly (callout 1) straight out of the product.

CAUTION: Avoid touching the black plastic transfer belt. Skin oils on the belt can cause print-quality problems.

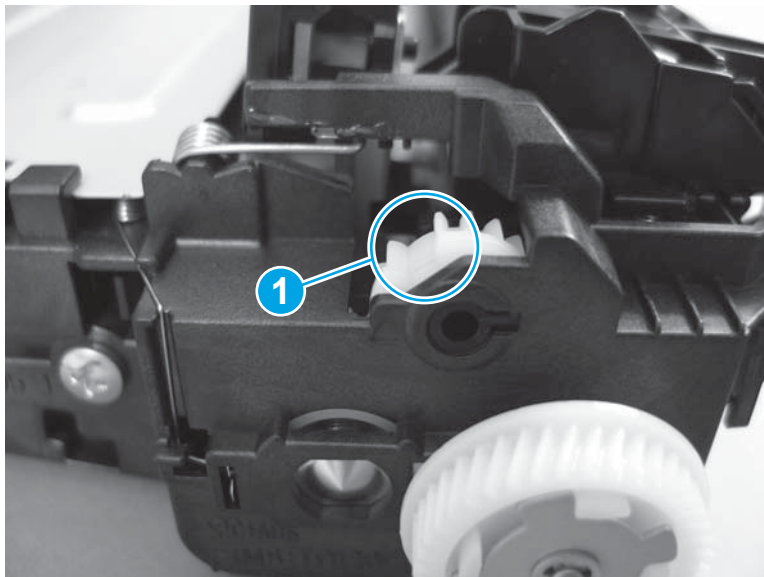
Figure 1-101 Remove the ITB assembly (17 of 17)



Reinstall the ITB assembly

- Before reinstalling the ITB, rotate the small white gear on the left side of the assembly so the gap in the gear (callout 1) lines up with the gap on the frame.

Figure 1-102 Reinstall the ITB assembly



- Reinstall the right-side spring before reinstalling the spring on the left.

Low-voltage power supply assembly (LVPS) and support frame

 **CAUTION:**  ESD sensitive.

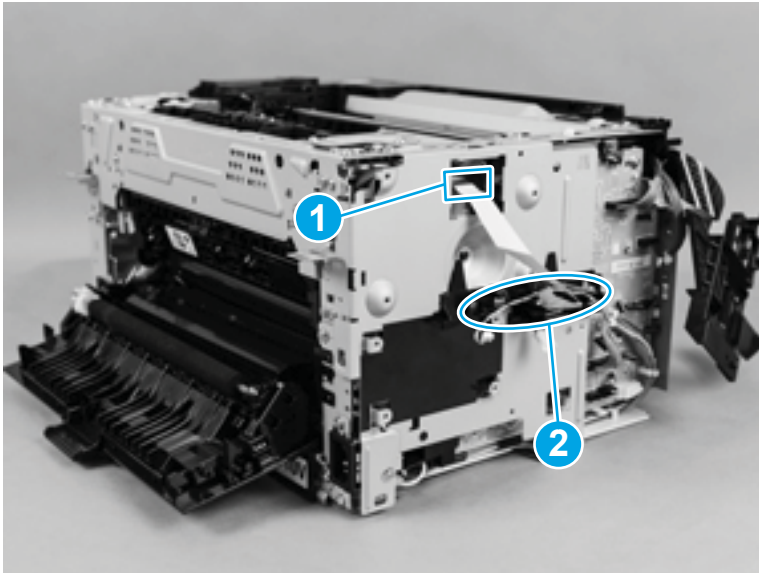
Before proceeding, remove the following components:

- Left cover. See [Left cover on page 12](#).
- Right cover. See [Right cover on page 18](#).
- Rear door and secondary transfer assembly. See [Rear door and secondary transfer assembly on page 37](#).
- Power supply cover. See [Power supply cover on page 38](#).

Remove the low-voltage power supply assembly and support frame

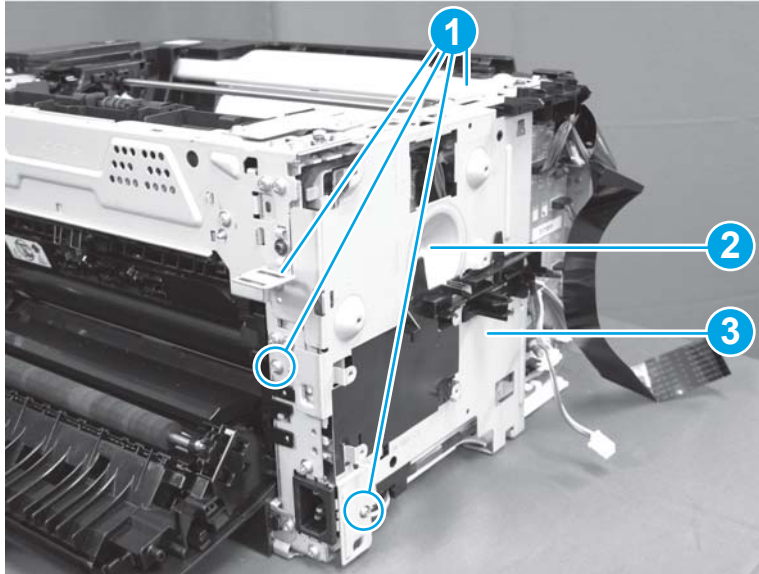
1. Disconnect the formatter-engine FFC (callout 1) and release the cables from the cable guides (callout 2)

Figure 1-103 Remove the low-voltage power supply assembly and support frame (1 of 10)



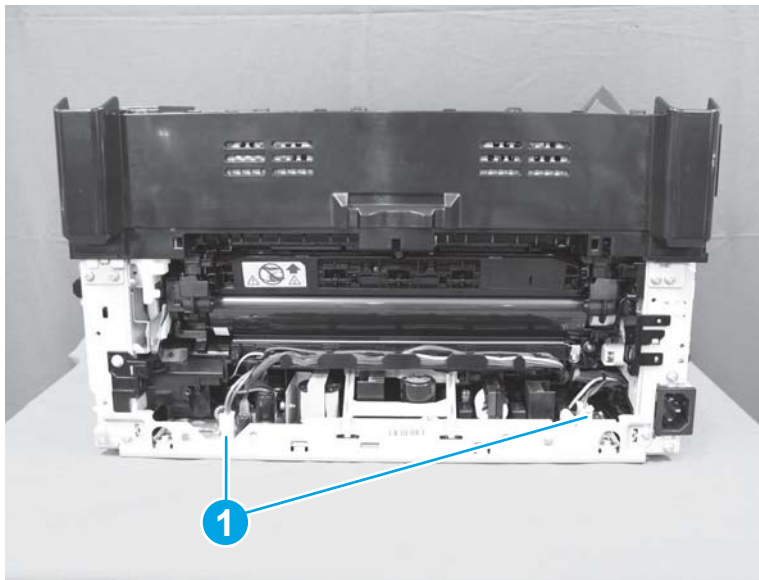
2. Remove four screws (callout 1), one black screw (callout 2), and the PCA plate (callout 3).

Figure 1-104 Remove the low-voltage power supply assembly and support frame (2 of 10)



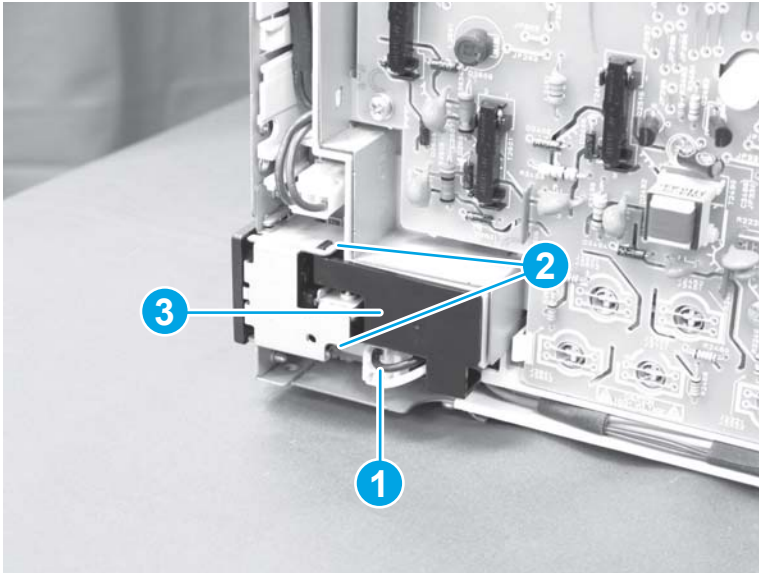
3. Disconnect two connectors (callout 1).

Figure 1-105 Remove the low-voltage power supply assembly and support frame (3 of 10)



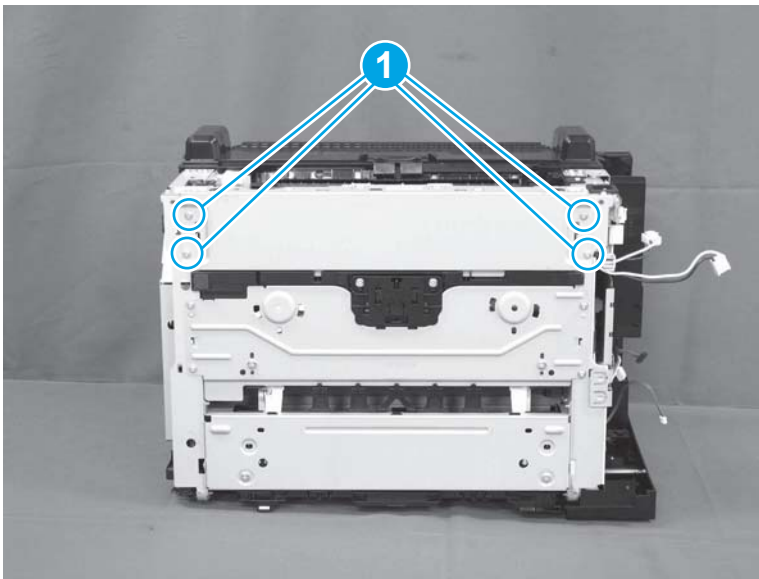
4. Disconnect one connector (callout 1), and then release two tabs (callout 2) and remove the core holder (callout 3).

Figure 1-106 Remove the low-voltage power supply assembly and support frame (4 of 10)



5. Place the product rear-side up
6. Remove four screws (callout 1).

Figure 1-107 Remove the low-voltage power supply assembly and support frame (5 of 10)

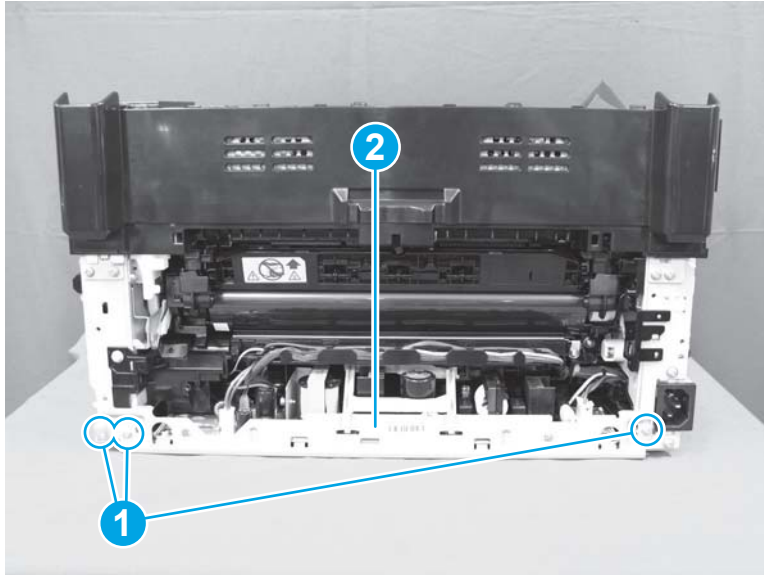


7. Return the product to the upright position.

8. Remove three screws (callout 1), and then separate the low-voltage power supply assembly (callout 2) from the product.

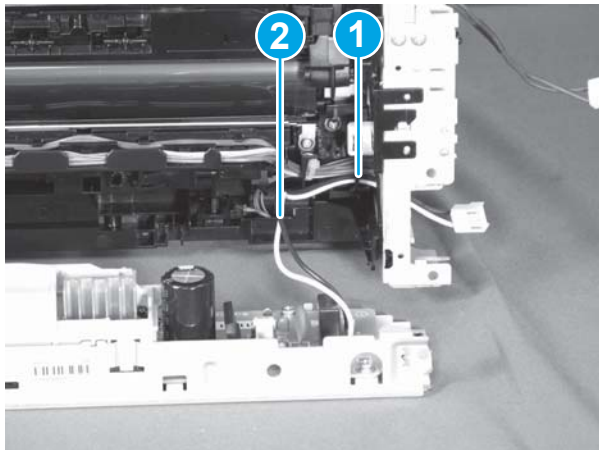
CAUTION: Do not attempt to completely remove the low-voltage power supply. The power supply is still connected to the product by three internal connectors.

Figure 1-108 Remove the low-voltage power supply assembly and support frame (6 of 10)



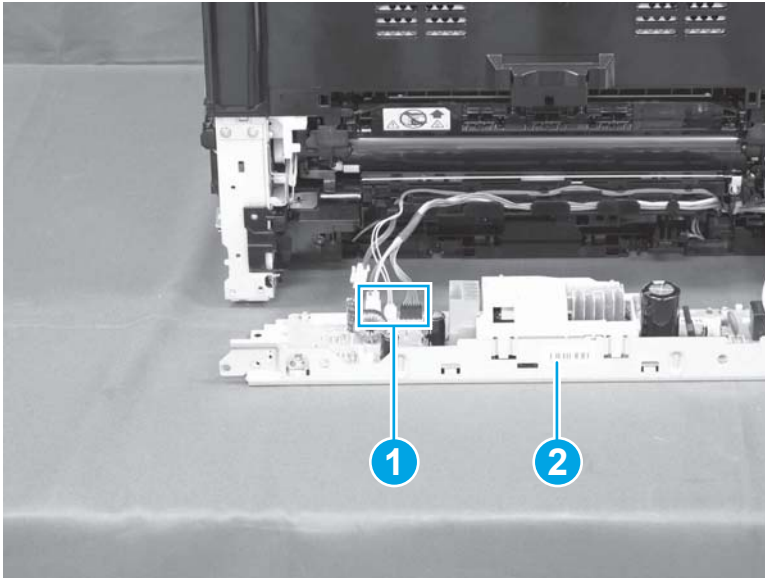
9. Release the cables (callout 2) from the cable guide (callout 1), and then pull the wire harness through the hole in the chassis.

Figure 1-109 Remove the low-voltage power supply assembly and support frame (7 of 10)



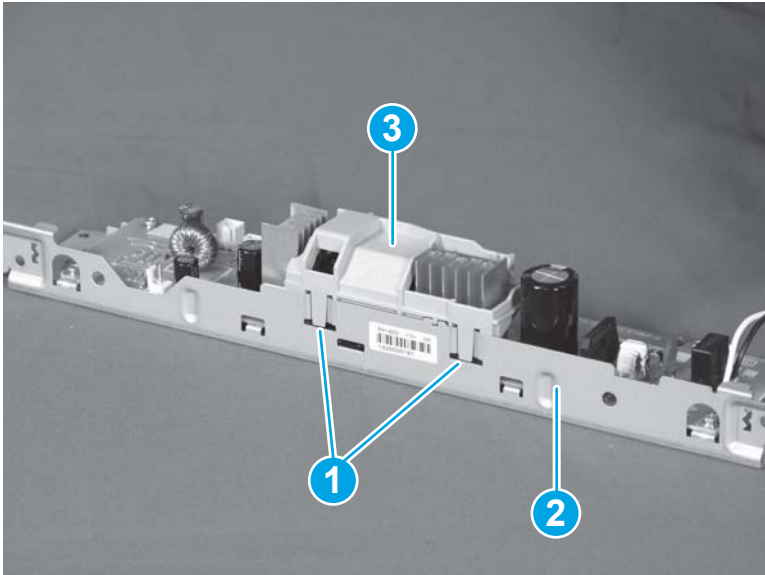
10. Disconnect three connectors (callout 1) and remove the low-voltage power supply (callout 2).

Figure 1-110 Remove the low-voltage power supply assembly and support frame (8 of 10)



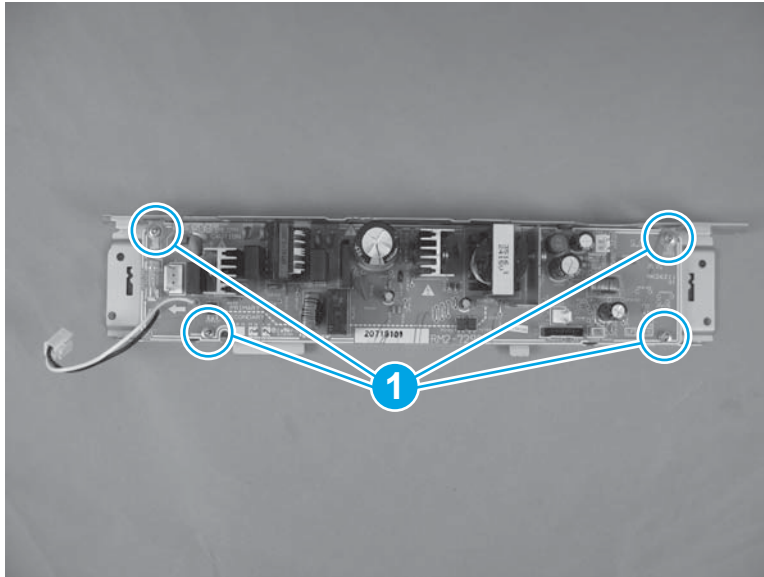
11. Gently release two tabs (callout 1) and remove the support frame (callout 3) from the low-voltage power supply (callout 2).

Figure 1-111 Remove the low-voltage power supply assembly and support frame (9 of 10)



12. Remove four screws (callout 1) from the low-voltage power supply PCA, and remove the PCA from the assembly.

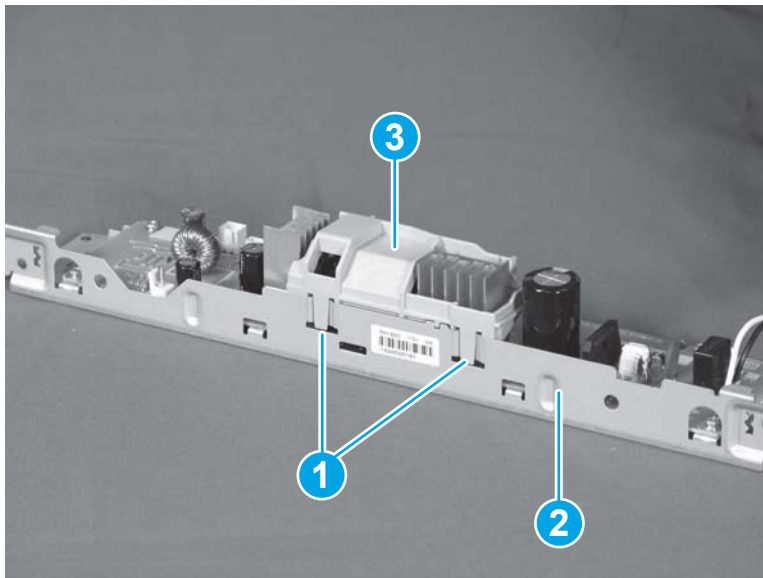
Figure 1-112 Remove the low-voltage power supply assembly and support frame (10 of 10)



Install a replacement low-voltage power supply

Gently release two tabs (callout 1) and remove the support frame (callout 3) from the low-voltage power supply (callout 2). Install the support frame on the replacement assembly.

Figure 1-113 Install a replacement low-voltage power supply



Base plate assembly

Before proceeding, remove the following components:

- Dust cover, input tray, and extension tray. See [Dust cover, input tray, and extension tray on page 9](#).
- Separation pad assembly. See [Separation pad assembly on page 11](#).

Remove the base plate assembly

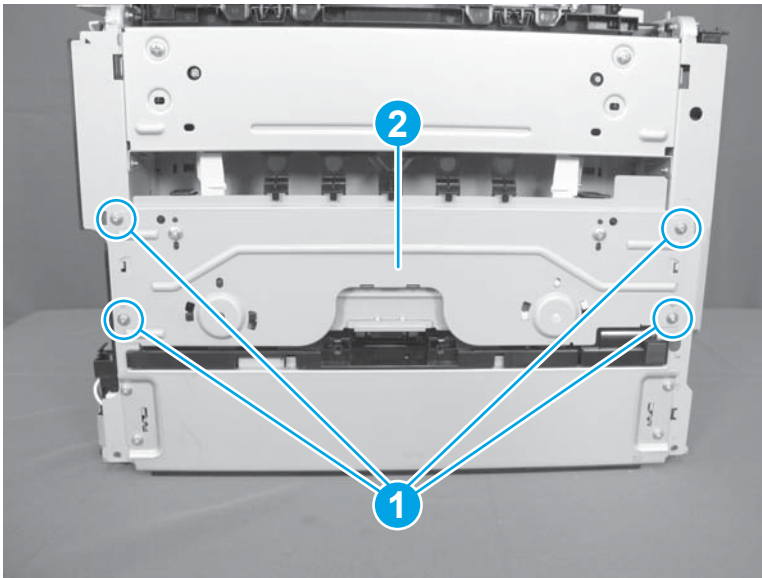
1. Turn the product face up.

WARNING! The ADF portion of the document feeder is not captive and can open when the product is placed face up. Make sure that to support the ADF when handling the product.

NOTE: Dirt and debris can scratch the surface of the product. Make sure that to place the product face up on a clean work space or on a clean soft cloth.

2. Remove four screws (callout 1), and then remove the base plate (callout 2).

Figure 1-114 Remove the base plate assembly



Paper pickup roller

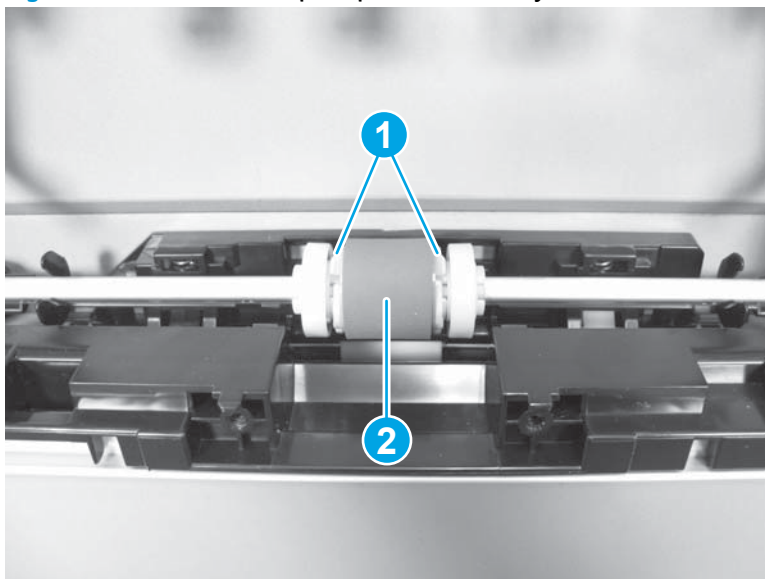
Remove the following components:

- Dust cover, input tray, and extension tray. See [Dust cover, input tray, and extension tray on page 9](#).
- Separation pad assembly. See [Separation pad assembly on page 11](#).
- Base plate assembly. See [Base plate assembly on page 78](#).

Remove the pickup roller assembly

- ▲ Release two tabs (callout 1) and remove the pickup roller (callout 2).

Figure 1-115 Remove the pickup roller assembly




Scanner and document feeder components

This section describes replacement and removal of individual scanner and document feeder components.

Before proceeding, remove the following components:

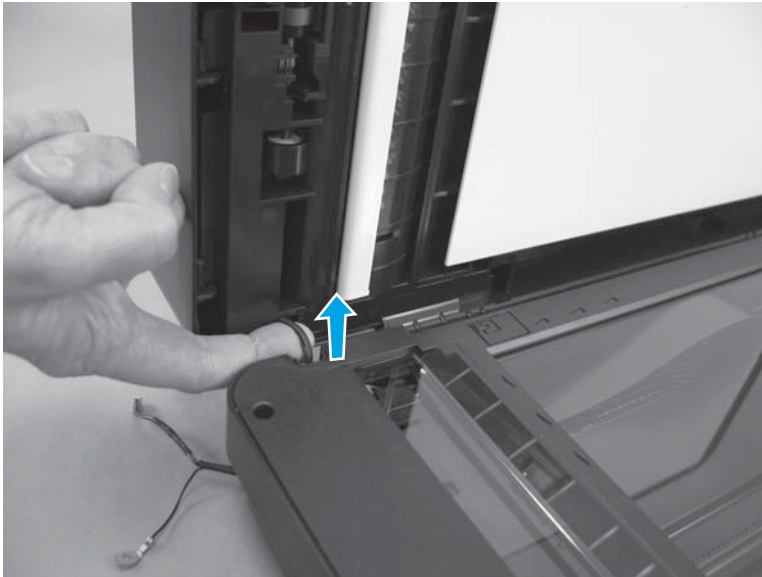
- M177 model: Document feeder, scanner, and flat cable cover. See [Document feeder, scanner, and flat cable cover \(M177 model only\) on page 14](#).
- M176 model: Scanner and flat cable cover. See [Scanner and flat cable cover \(M176 model only\) on page 16](#).

Separate the scanner lid or document feeder from the scan base

 **NOTE:** The photos in the following procedure are of a model that has a document feeder. Other models might look slightly different, but the procedure is the same.

1. **Document feeder models only:** Pull the document-feeder cable through the opening.

Figure 1-116 Separate the scanner lid or document feeder from the scan base (1 of 2)



2. Open the scanner lid or document feeder, and tilt it slightly forward. Push down and back on each of the two hinges to release them.


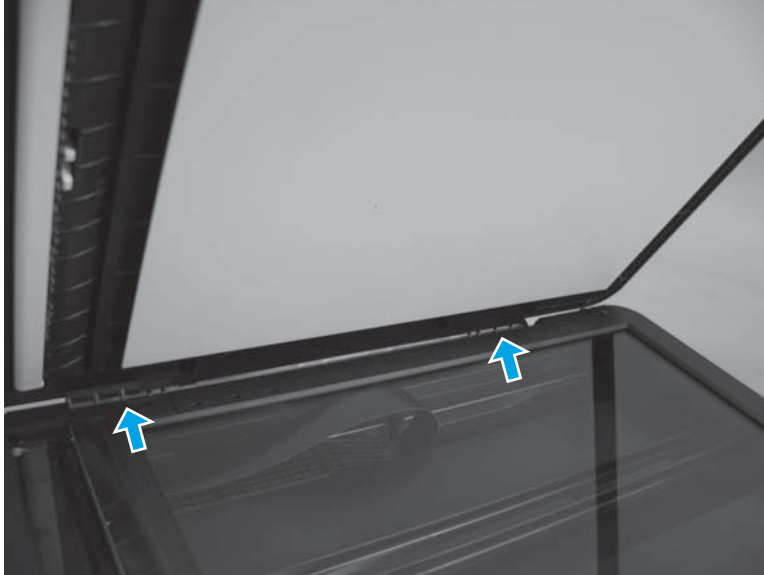
 **NOTE:** This step requires some force, but it is easier to first tilt the scanner lid or document feeder forward.


Figure 1-117 Separate the scanner lid or document feeder from the scan base (2 of 2)




Scanner components

Before proceeding, separate the scanner lid or document feeder from the scan base. See [Separate the scanner lid or document feeder from the scan base on page 80](#).

Scan bezel

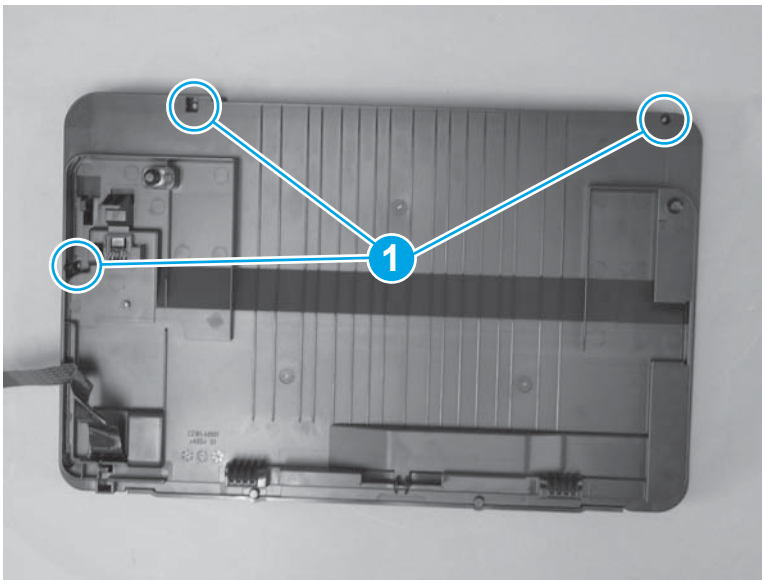
 **NOTE:** The photos in the following procedure are of a model that has a document feeder. Other models might look slightly different, but the procedure is the same.

 **CAUTION:** Perform these procedures in a dust-free environment.

CAUTION: The components inside of the scan assembly are not captive when the bezel is removed.

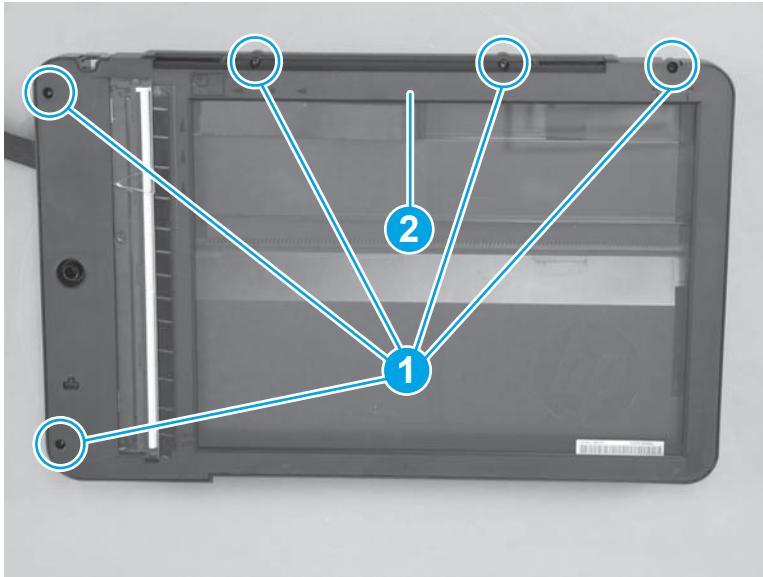
1. Place the scan assembly glass-side-down, and remove three Torx T9 screws (callout 1).

Figure 1-118 Remove the scan bezel (1 of 2)



2. Turn the scan assembly over, and remove five Torx T10 screws (callout 1), and lift the scan bezel (callout 2) off the scan assembly.


Figure 1-119 Remove the scan bezel (2 of 2)




Scan drive system

Before proceeding, remove the following components:

- Scan bezel. See [Scan bezel on page 82](#).

 **NOTE:** The photos in the following procedure are of a model that has a document feeder. Other models might look slightly different, but the procedure is the same.

 **CAUTION:** Perform these procedures in a dust-free environment.

CAUTION: The components inside of the scan assembly are not captive when the bezel is removed.

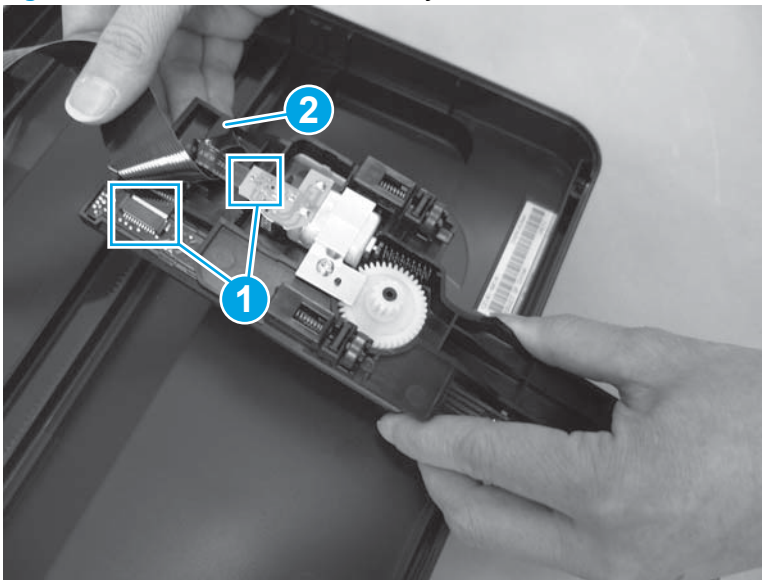
Remove the scan drive system

1. Lift the scan drive system out of the scanner, and turn it over.

 **CAUTION:** The scan drive system is still connected to the scanner assembly by the FFC.

2. Disconnect the two FFC connectors (callout 1) and unthread the FFC from the guide (callout 2), and then remove the scan drive system.


Figure 1-120 Remove the scan drive system




Scan FFC cable

Before proceeding, remove the following components:

- Scan bezel. See [Scan bezel on page 82](#).
- Scan drive system. See [Scan drive system on page 84](#).

 **NOTE:** The photos in the following procedure are of a model that has a document feeder. Other models might look slightly different, but the procedure is the same.

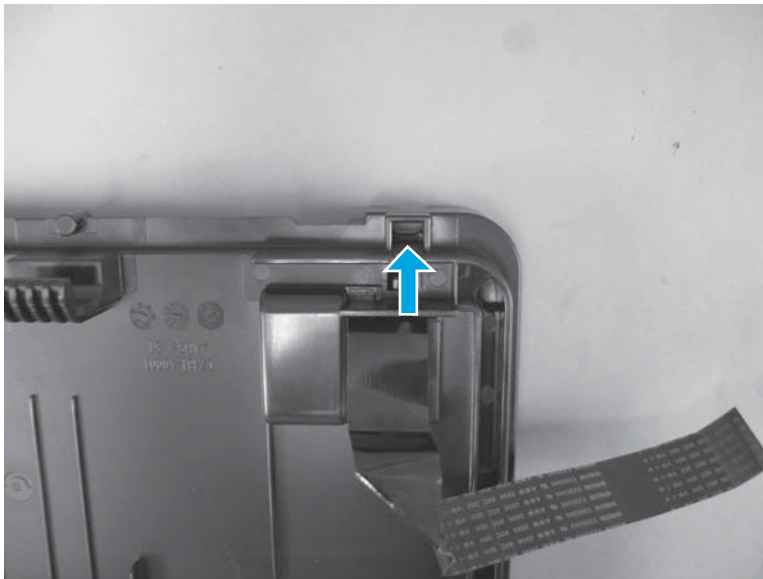
 **CAUTION:** Perform these procedures in a dust-free environment.

CAUTION: The components inside of the scan assembly are not captive when the bezel is removed.

Remove the scan FFC cable

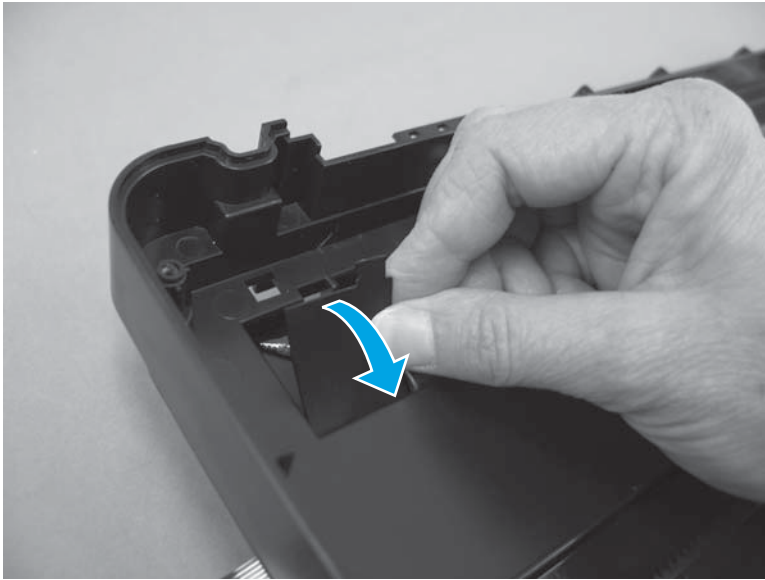
1. From the bottom of the scan assembly, push the tab on the FFC cover through the opening.

Figure 1-121 Remove the scan FFC cable (1 of 3)



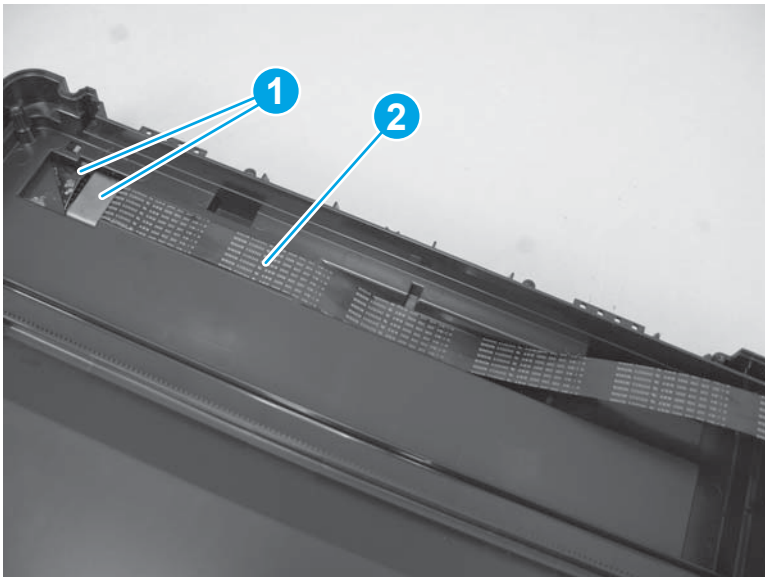
2. Pull the FFC cover off of the FFC.

Figure 1-122 Remove the scan FFC cable (2 of 3)



3. Unthread the FFC through the ferrite and the guides (callout 1), and then loosen the adhesive to remove the FFC (callout 2).

Figure 1-123 Remove the scan FFC cable (3 of 3)



Scan motor

Before proceeding, remove the following components:

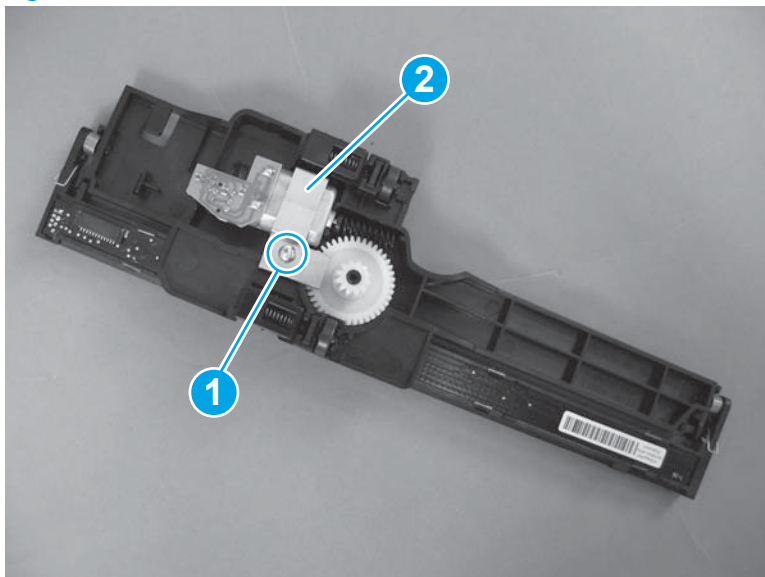
- Scan bezel. See [Scan bezel on page 82](#).
- Scan drive system. See [Scan drive system on page 84](#).

CAUTION: Perform these procedures in a dust-free environment.

Remove the scan motor

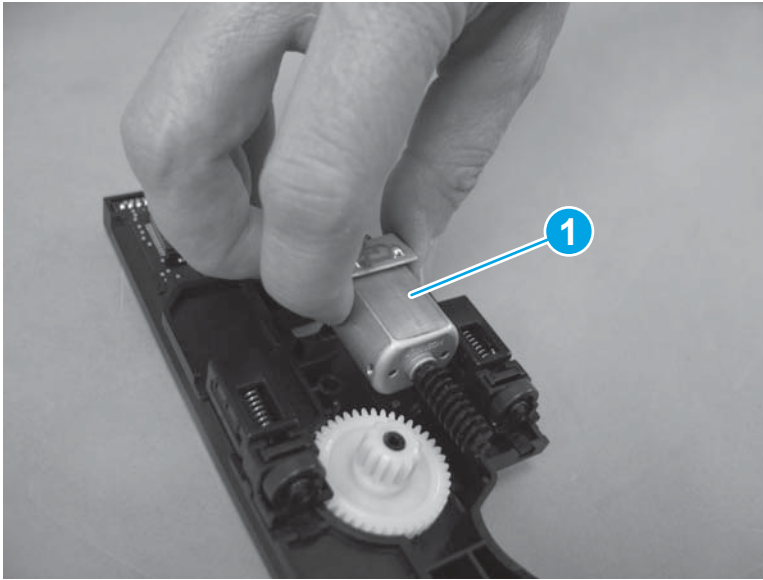
1. On the bottom of the scan drive system, remove one Torx T10 screw (callout 1), and lift off the metal bracket (callout 2).

Figure 1-124 Remove the scan motor (1 of 2)



2. Pull the motor straight up to remove it (callout 1).

Figure 1-125 Remove the scan motor (2 of 2)




 **Reinstallation tip** When reinstalling the scan motor, position the metal bracket so the tab is visible in the notch on the opposite side of the scan drive system.

Figure 1-126 Reinstall the scan motor



Scanner spring assembly

Before proceeding, remove the following components:

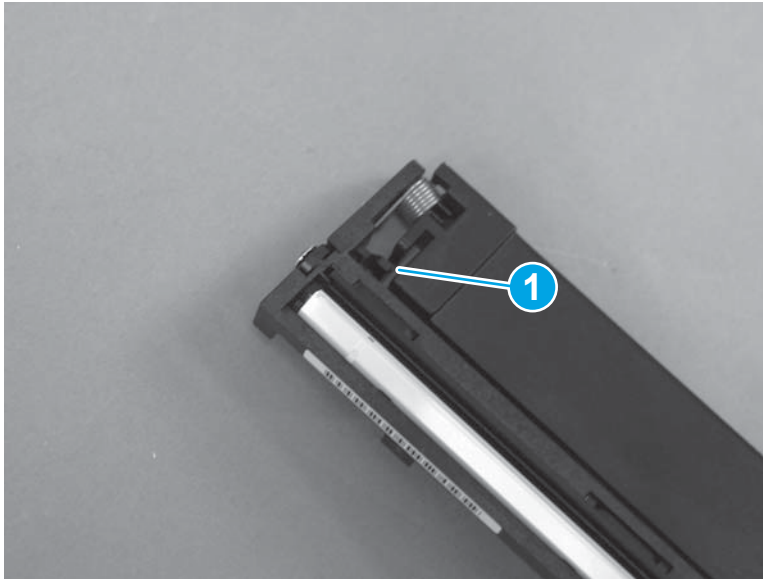
- Scan bezel. See [Scan bezel on page 82](#).
- Scan drive system. See [Scan drive system on page 84](#).

CAUTION: Perform these procedures in a dust-free environment.

Remove the scanner spring assembly

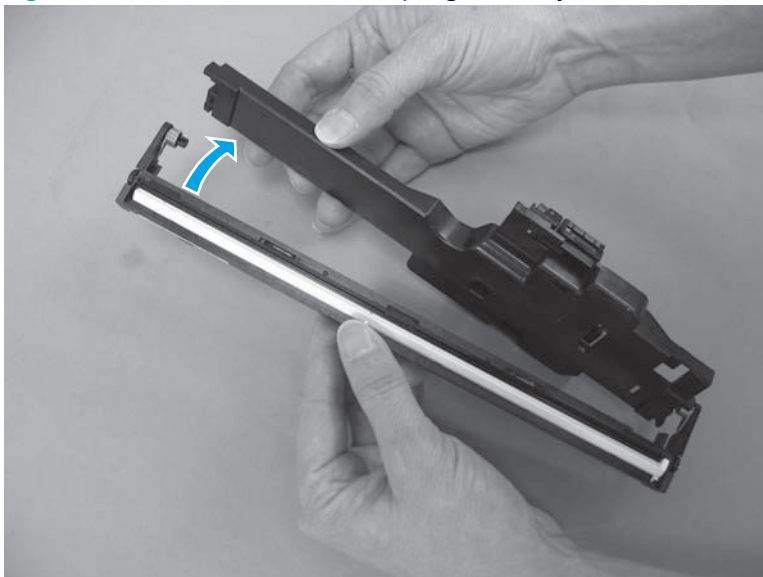
1. Release one tab (callout 1).

Figure 1-127 Remove the scanner spring assembly (1 of 2)



2. Pivot the spring assembly away from the scan drive chassis.

Figure 1-128 Remove the scanner spring assembly (2 of 2)




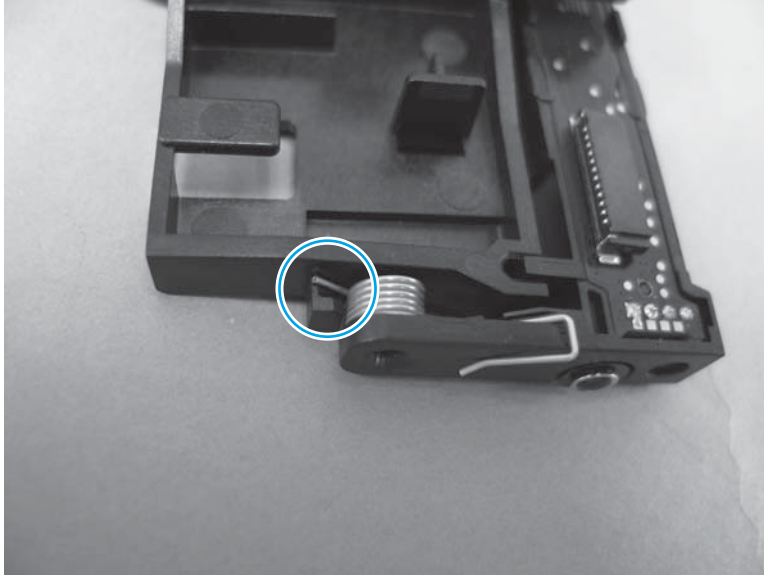
 **Reinstallation tip** When reinstalling the scanner spring assembly, position the spring at each end so that the short wire rests in the notch on the bottom of the scan drive chassis.

Figure 1-129 Reinstall the scanner spring assembly



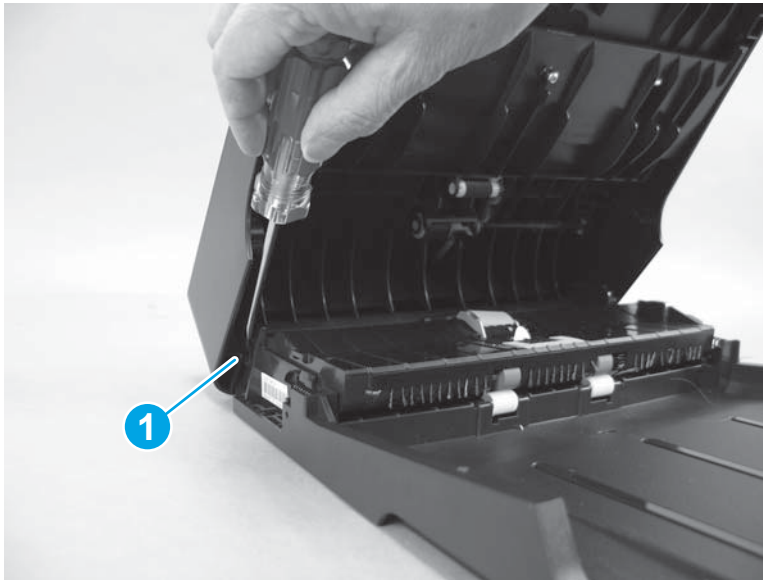
Document feeder components

Before proceeding, separate the scanner lid or document feeder from the scan base. See [Separate the scanner lid or document feeder from the scan base on page 80](#).

Document feeder (ADF) top cover

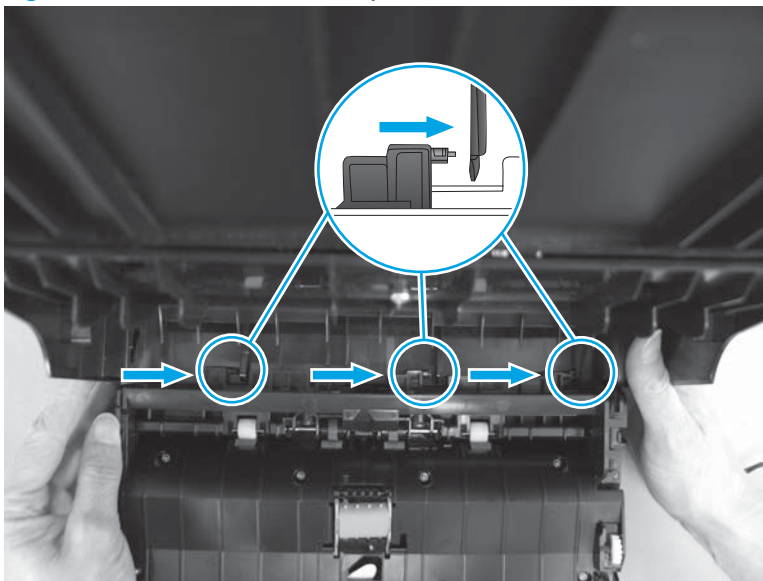
1. Open the ADF top cover. Use a small flat blade screwdriver to release one hinge pin (callout 1), and then fully open the ADF cover.

Figure 1-130 Remove the ADF top cover (1 of 2)



2. Slide the cover toward the rear of the ADF to release the rear hinge pins, and then lift up to remove the cover.

Figure 1-131 Remove the ADF top cover (2 of 2)



ADF core

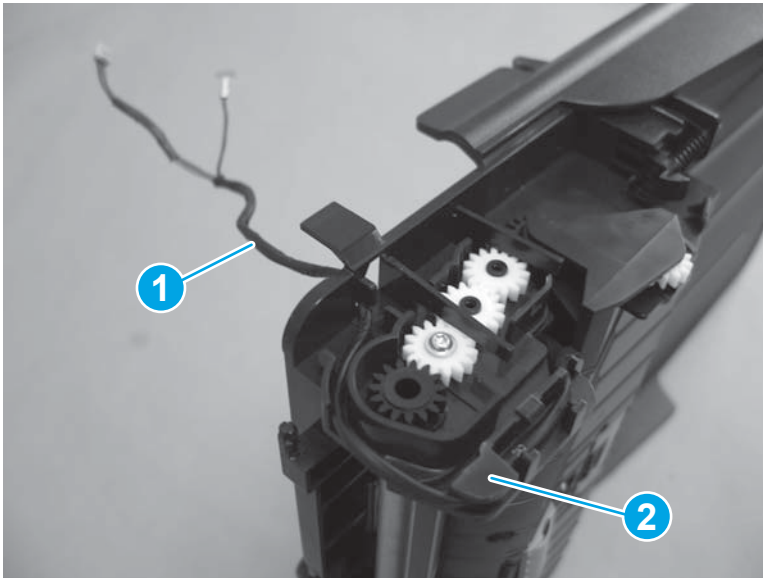
Before proceeding, remove the following components:

- ADF top cover. See [Document feeder \(ADF\) top cover on page 91](#).

Remove the ADF core

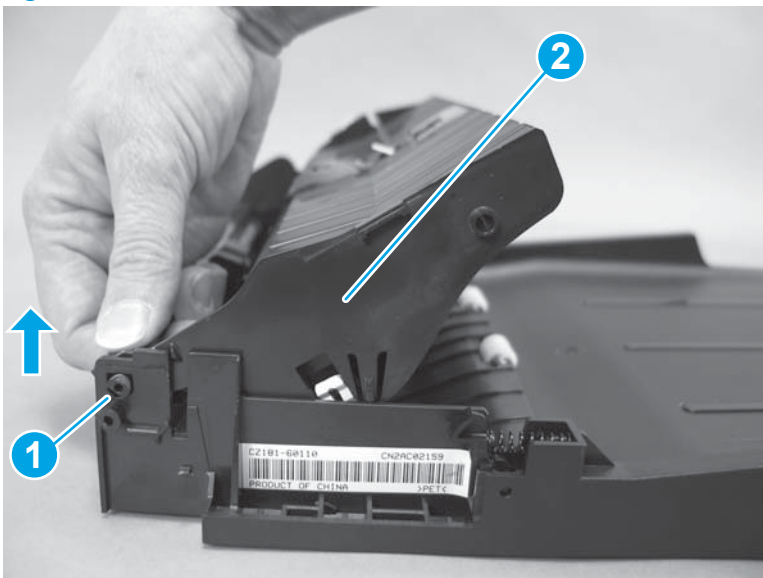
1. At the rear of the ADF core, carefully feed the wire harness (callout 1) through the slot in the guides (callout 2).

Figure 1-132 Remove the ADF core (1 of 2)



2. Open the ADF core, and then flex the chassis to release one hinge pin (callout 1). Lift the ADF core (callout 2) straight up to remove it.

Figure 1-133 Remove the ADF core (2 of 2)

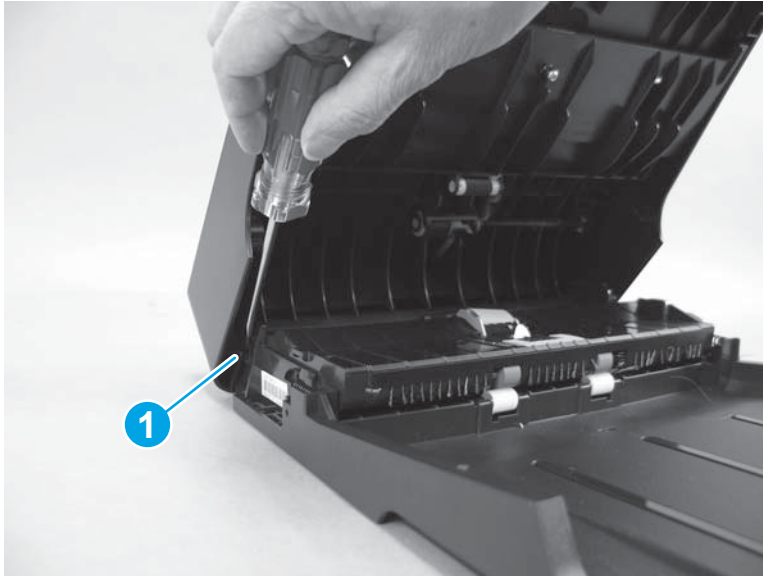


ADF separation pad

Remove the ADF separation pad

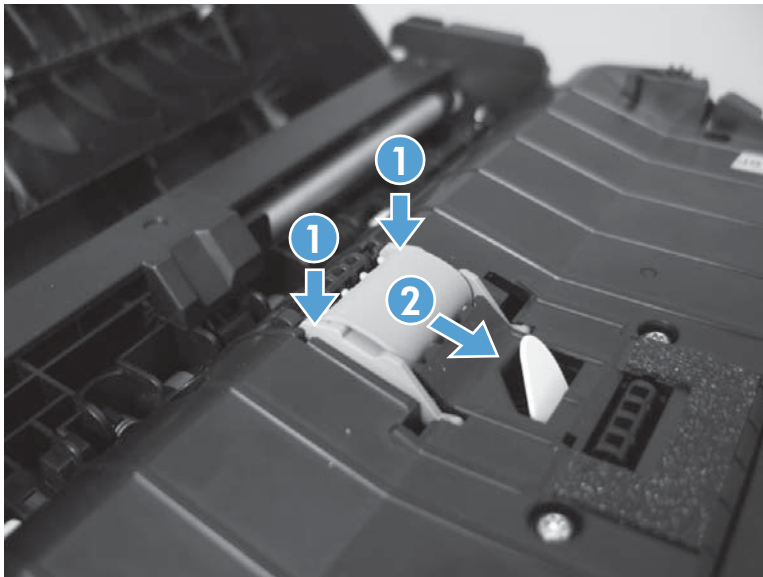
1. Open the ADF top cover. Use a small flat blade screwdriver to release one hinge pin (callout 1), and then fully open the ADF cover.

Figure 1-134 Remove the ADF separation pad assembly (1 of 3)



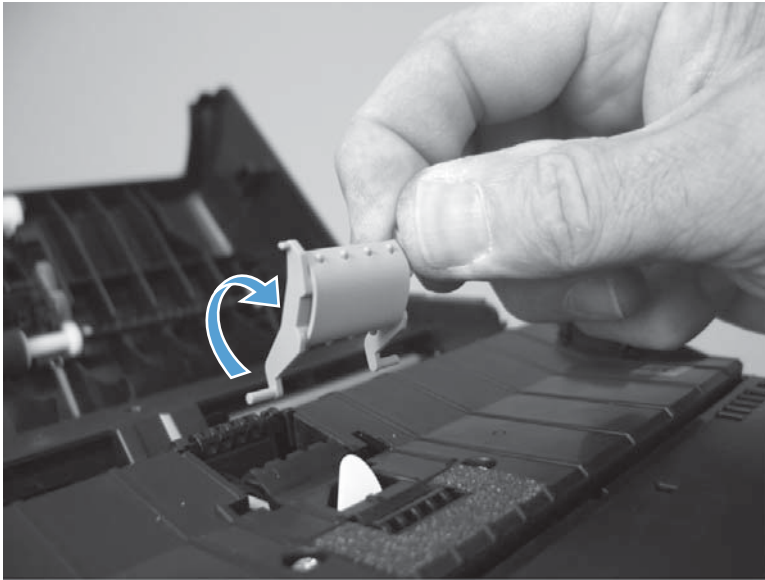
2. Push down on the edges of the assembly (callout 1), and then move it toward the right side of the product (callout 2).

Figure 1-135 Remove the ADF separation pad assembly (2 of 3)



3. Remove the assembly.

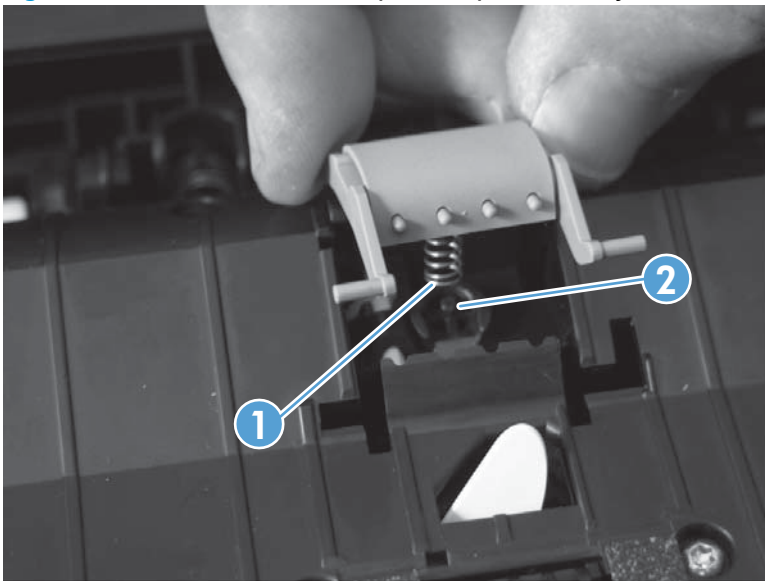
Figure 1-136 Remove the ADF separation pad assembly (3 of 3)



Reinstall the ADF separation pad assembly

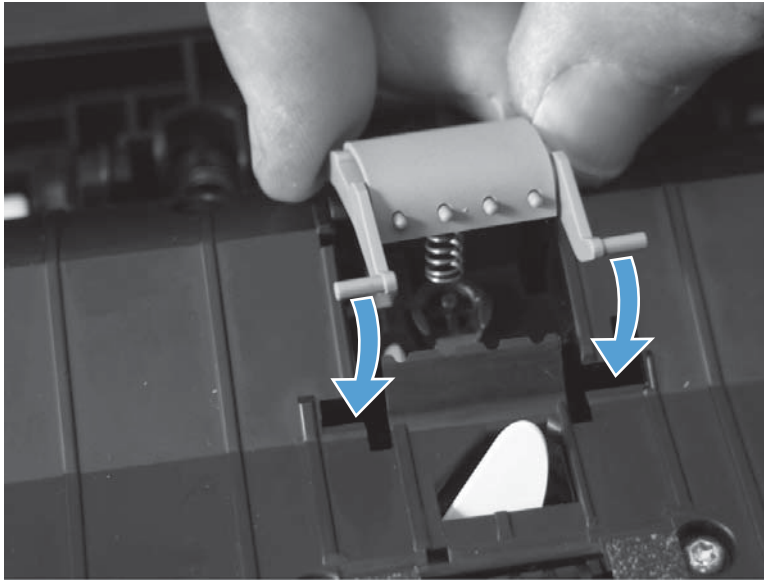
1. Place the base of the spring (callout 1) on the pedestal (callout 2).

Figure 1-137 Reinstall the ADF separation pad assembly (1 of 5)



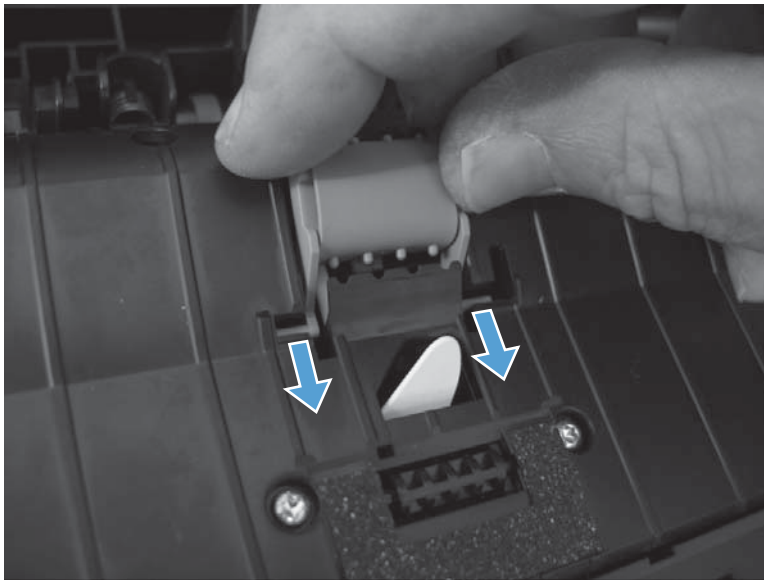
2. Place the assembly hinge pins in the slots in the ADF core.

Figure 1-138 Reinstall the ADF separation pad assembly (2 of 5)



3. Slightly slide the assembly down and into the slots in the product to engage the hinge pins.

Figure 1-139 Reinstall the ADF separation pad assembly (3 of 5)



4. Locate the upper locking pins.


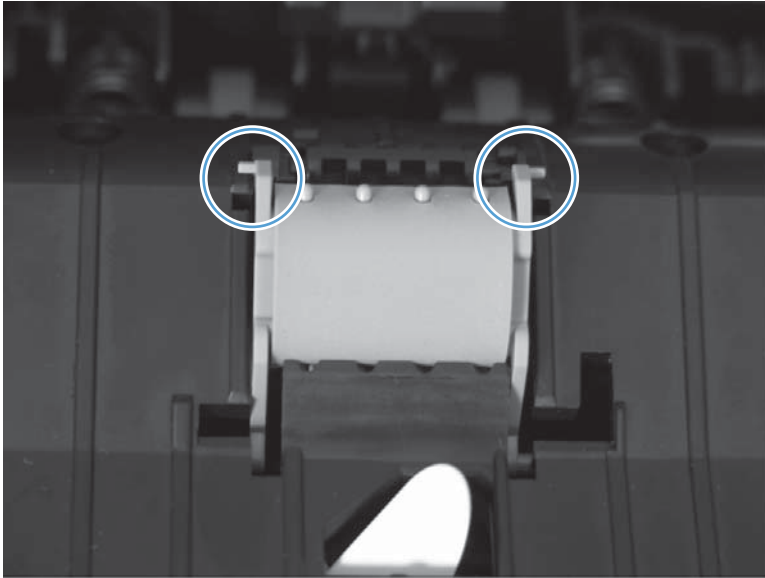

 **NOTE:** When the assembly is correctly installed, these pins are engaged in a slot in the ADF core, and the spring underneath the assembly keeps the assembly in the raised position.

Figure 1-140 Reinstall the ADF separation pad assembly (4 of 5)



5. Push down on the assembly until the pins reach the bottom of the slot in the ADF core, and then slightly slide the assembly toward the left side of the product to engage the locking pins in the closed slot. Release the assembly.

 **CAUTION:** The pins on the assembly are fragile and can easily be broken off. Do not force the assembly into place, or the pins might break.


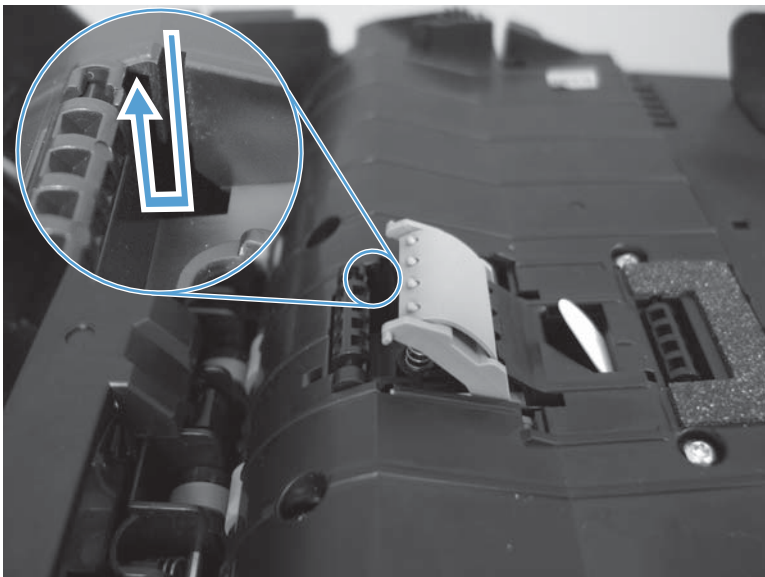
 **TIP:** Slightly tip the assembly and engage one pin, and then tip the assembly in the opposite direction to engage the second pin.

Figure 1-141 Reinstall the ADF separation pad assembly (5 of 5)



ADF inner tray

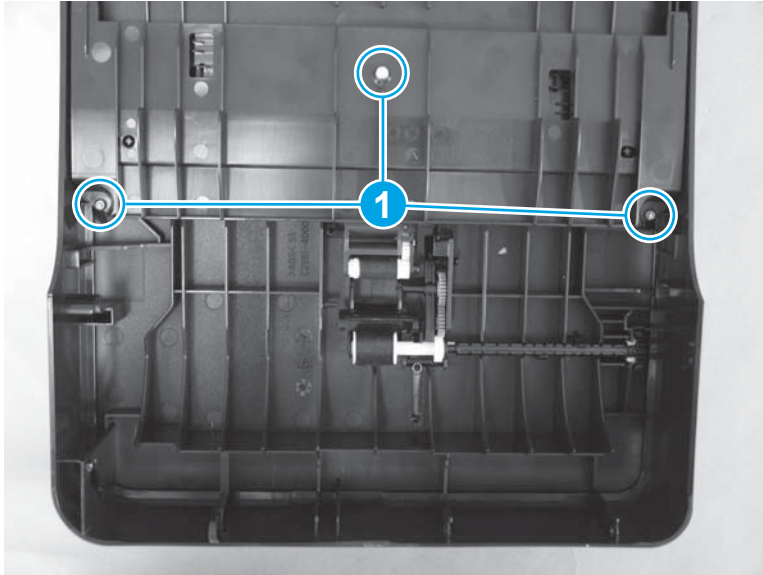
Before proceeding, remove the following components:

- ADF top cover. See [Document feeder \(ADF\) top cover on page 91](#).
- ADF core. See [ADF core on page 92](#).

Remove the ADF inner tray

- ▲ Remove three Torx T10 screws (callout 1), and then lift the ADF inner tray off.

Figure 1-142 Remove the ADF inner tray



ADF input guides and gear

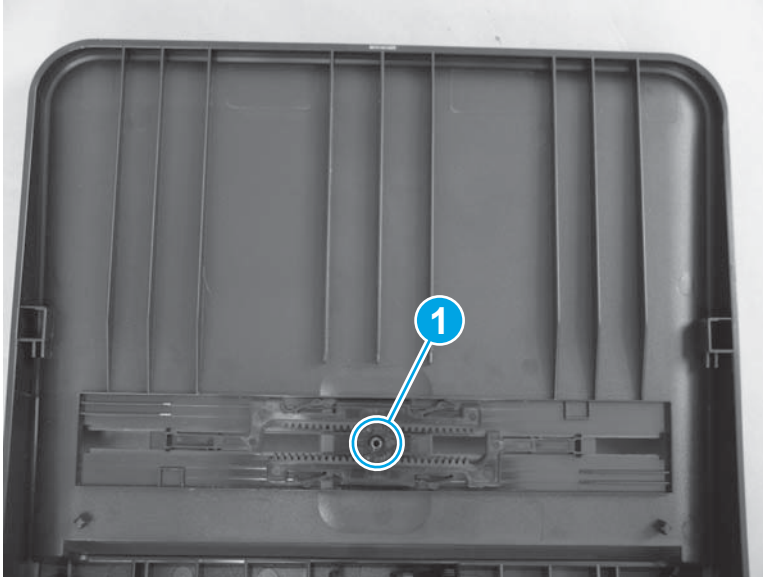
Before proceeding, remove the following components:

- ADF top cover. See [Document feeder \(ADF\) top cover on page 91](#).
- ADF core. See [ADF core on page 92](#).
- ADF inner tray. [ADF inner tray on page 97](#).

Remove the ADF input guides and gear

1. Pull the input-guide gear (callout 1) straight up to remove it

Figure 1-143 Remove the ADF input guides and gear (1 of 3)



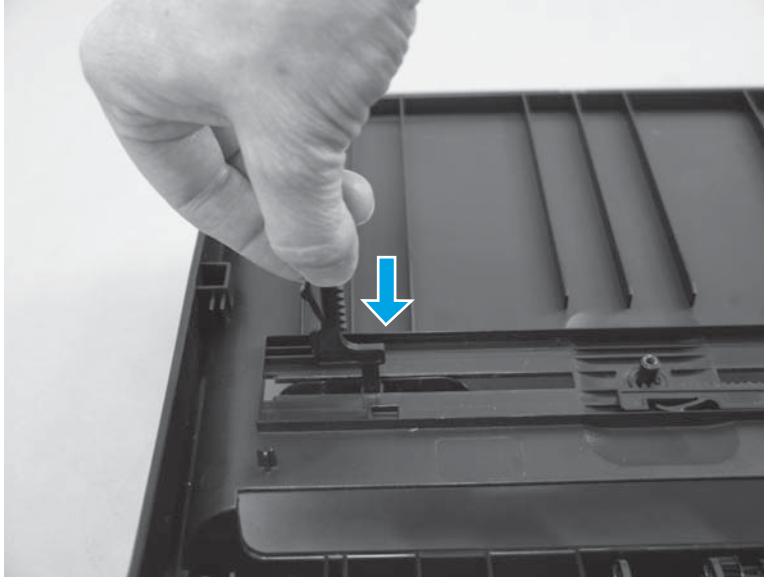
2. Slide each ADF input guide all the way outward.

Figure 1-144 Remove the ADF input guides and gear (2 of 3)



3. Push each guide down, rotate it, and push it through the slot to remove it.

Figure 1-145 Remove the ADF input guides and gear (3 of 3)



ADF pre-pickup arm assembly

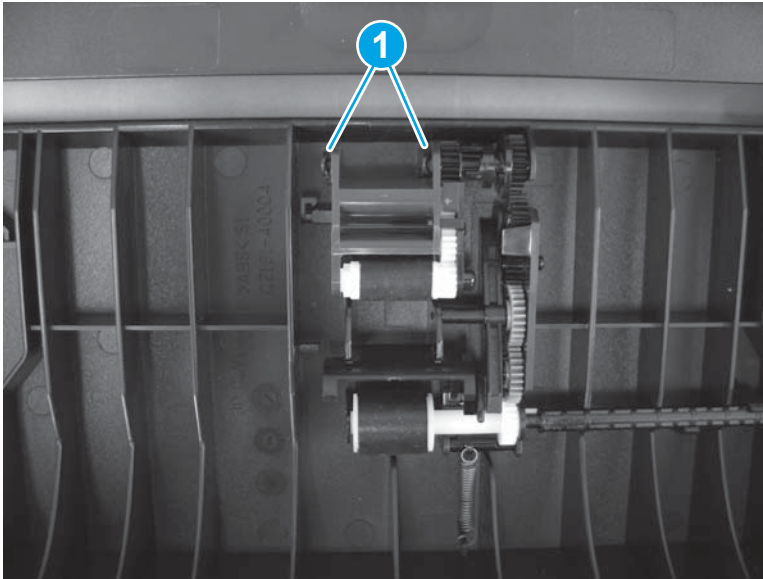
Before proceeding, remove the following components:

- ADF top cover. See [Document feeder \(ADF\) top cover on page 91](#).
- ADF core. See [ADF core on page 92](#).
- ADF inner tray. [ADF inner tray on page 97](#).

Remove the ADF pre-pickup arm assembly

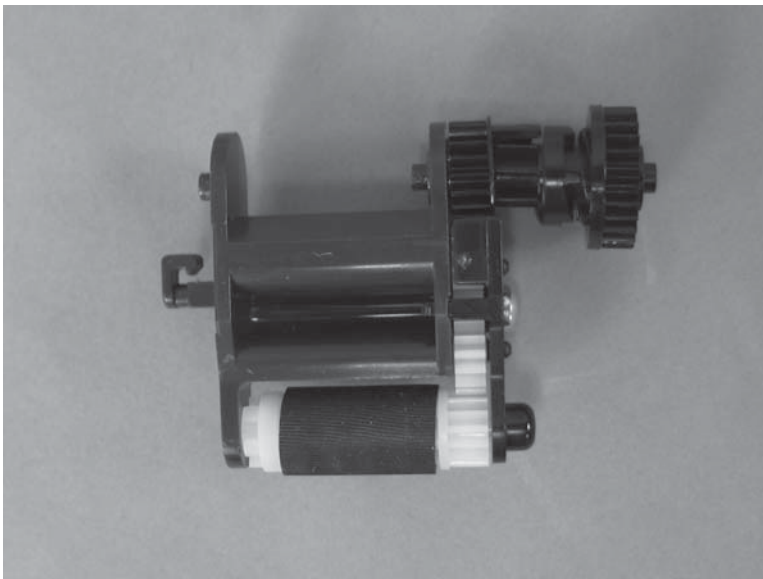
1. Release two tabs (callout 1).

Figure 1-146 Remove the ADF pre-pickup arm assembly (1 of 2)



2. Lift the pre-pickup arm assembly up to remove it.

Figure 1-147 Remove the ADF pre-pickup arm assembly (2 of 2)



2 Parts and diagrams

- [Order parts by authorized service providers](#)
- [How to use the parts lists and diagrams](#)
- [Assembly locations](#)
- [Covers, panels, and doors](#)
- [Internal assemblies](#)
- [Scanner and document feeder \(ADF\) assemblies](#)
- [Alphabetical parts list](#)
- [Numerical parts list](#)

Order parts by authorized service providers

Order replacement parts

Table 2-1 Order parts, accessories, and supplies

Order supplies and paper	www.hp.com/go/suresupply
Order genuine HP parts or accessories	www.hp.com/buy/parts
Order through service or support providers	Contact an HP-authorized service or support provider.

Related documentation and software

Table 2-2 Related documentation and software

Item	Description	Part number
<i>HP Color LaserJet Pro MFP M176, M177 User Guide</i>	Product user guide	CF548-90908
<i>HP Color LaserJet Pro MFP M176, M177 Repair Manual</i>	English repair manual (this manual)	CZ165-90943
<i>HP Color LaserJet Pro MFP M176, M177 Troubleshooting Manual</i>	English troubleshooting manual	CZ165-90944
<i>HP Color LaserJet Pro MFP M176, M177 Removal and Troubleshooting Manual</i>	Simplified Chinese manual	CZ165-90945

Supplies part numbers

Table 2-3 Supplies part numbers

Item	Description	Part number
HP 130A Black LaserJet Toner Cartridge	Replacement black toner cartridge	CF350A
HP 130A Cyan LaserJet Toner Cartridge	Replacement cyan toner cartridge	CF351A
HP 130A Magenta LaserJet Toner Cartridge	Replacement magenta toner cartridge	CF352A
HP 130A Yellow LaserJet Toner Cartridge	Replacement yellow toner cartridge	CF353A
Imaging drum	Replacement imaging drum	CE314A

Accessories

Table 2-4 Accessories part numbers

Item	Description	Part number
Power Cord, straight	(AB2) 220V-10A China	8121-0943
	(AB0) 110V - 13A Taiwan	8121-0964
	(AB1, BBU, B19, AAZ) 220V - 10A Korea, EU generic	8121-0731
	(ACJ) 220V - 6A India	8121-0564
	(BBU, B19) 220V - 10A UK, Asia Pacific Countries/Regions	8121-0739
	(BGM) 220V - 10A Australia, New Zealand	8121-0837
	(ABT) 220V - 10A Israel	8121-1004
	(ABY) 220V - 10A Denmark	8121-0733
	(ACQ) 220V - 10A South Africa	8121-0737
	(BAZ) 220V - 10A Switzerland	8121-0738
	(AC4, 696) 110V - 10A Brazil	8121-1071
	(AC8) 220V - 10A Argentina	8121-0729
	(201, 202, 697, AAZ, ABM, AKV, B1H, BGJ) 110V - 10A North America	8121-0740
	(697, AAZ, AKV) 220V - 10A South America, Chile, Peru	8121-0735
	(BBU) 220/110V - Thailand, Philippines	8121-0734
Phone cord (M177 model)	Israel - Unique cord	8120-8913
	Switzerland - Unique cord	8121-0844
	Korea - Unique cord	8120-8908
	4 wire RJ-11 phone cord (Europe, Middle East, Africa)	8120-8922
	2-wire RJ-11 phone cord (rest of world)	8121-0811
USB cable	Cable Assembly USB A-B; 28 AWG-twisted ROHS (M176 model)	8121-0868
	Cable Assembly USB A-B 1.0-M-LG ROHS (M177 model)	8121-1058
Other	Adapter, PTT/RJ11, UK, Black (BGM required with 8121-0811)	234441-032

Customer replaceable units (CRU) kit part numbers

Table 2-5 Customer replaceable units (CRU) kit part numbers

Item	Description	Part number
Kit, separation pad install replacement	Separation pad	CF547-65010
	Instruction sheet	
Kit, paper pickup tray install replacement	Paper pickup tray	CF547-65011
	Instruction sheet	
Kit, paper deliver tray install replacement	Paper delivery tray	CF547-65012
	Instruction sheet	
Kit, dust cover install replacement	Dust cover	CF547-65013
	Instruction sheet	

Whole-unit replacement part numbers





NOTE: Whole-unit replacement products include the formatter PCA.

Table 2-6 Whole-unit replacement part numbers

Item	Description	Replacement part number	Exchange part number
HP Color LaserJet Pro MFP M176n	110 V	CF547-67901	CF547-69001
	220 V	CF547-67902	CF547-69002
HP Color LaserJet Pro MFP M177fw	110 V	CZ165-67901	CZ165-69001
	220 V, Asia Pacific Countries/Regions	CZ165-67903	CZ165-69003
	220 V, Europe	CZ165-67904	CZ165-69004

How to use the parts lists and diagrams

 **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. Doing so will make sure 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.

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, it is not a field replacement unit (FRU).

Assembly locations

Base product (no document feeder or scanner)

Figure 2-1 Locations of major components, base product

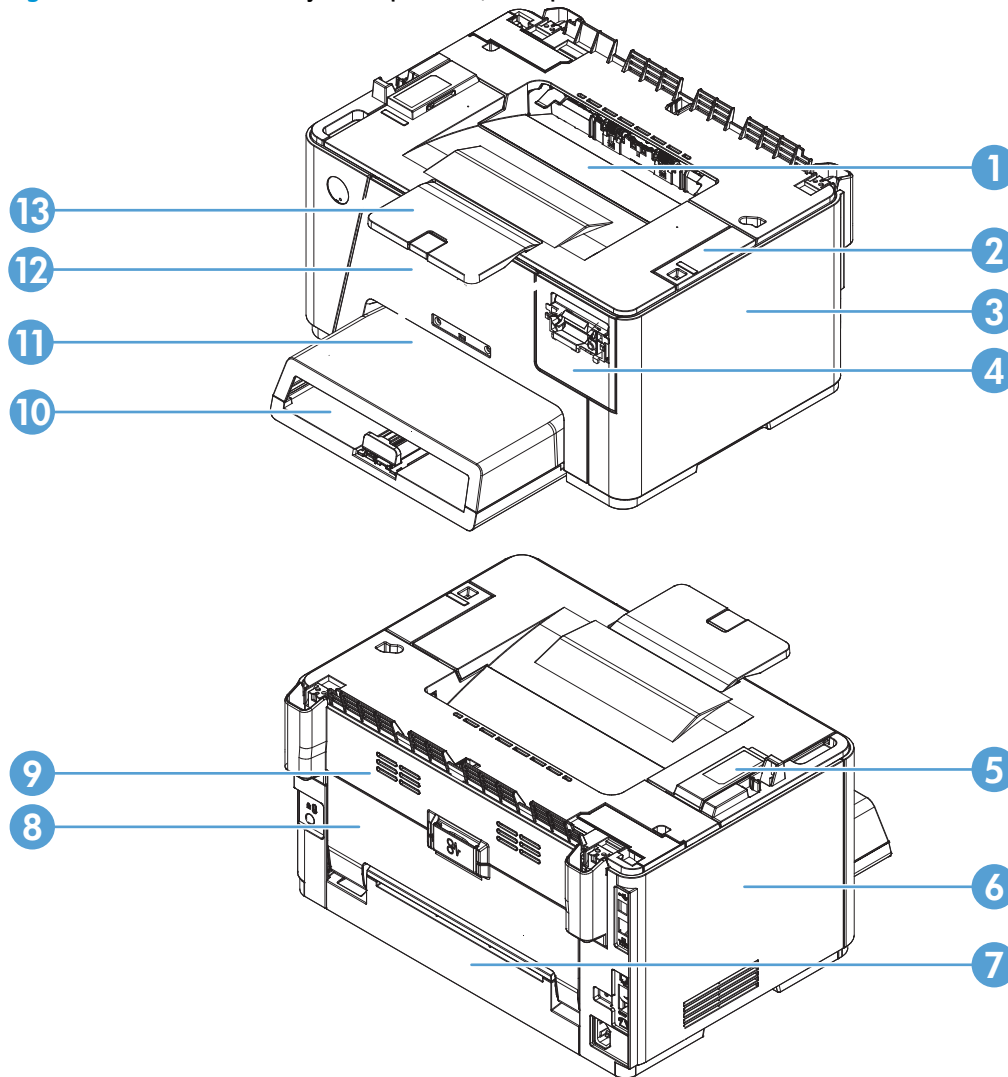


Table 2-7 Locations of major components, base product

Item	Description	Item	Description
1	Upper cover assembly	8	Rear cover assembly
2	Right upper cover assembly	9	Fuser cover
3	Right cover	10	Input tray
4	Control panel cover	11	Dust cover
5	Inner cover assembly	12	Cartridge door
6	Left cover assembly	13	Output extension tray
7	Power supply cover assembly		

Covers, panels, and doors

Figure 2-2 Covers, panels, and doors

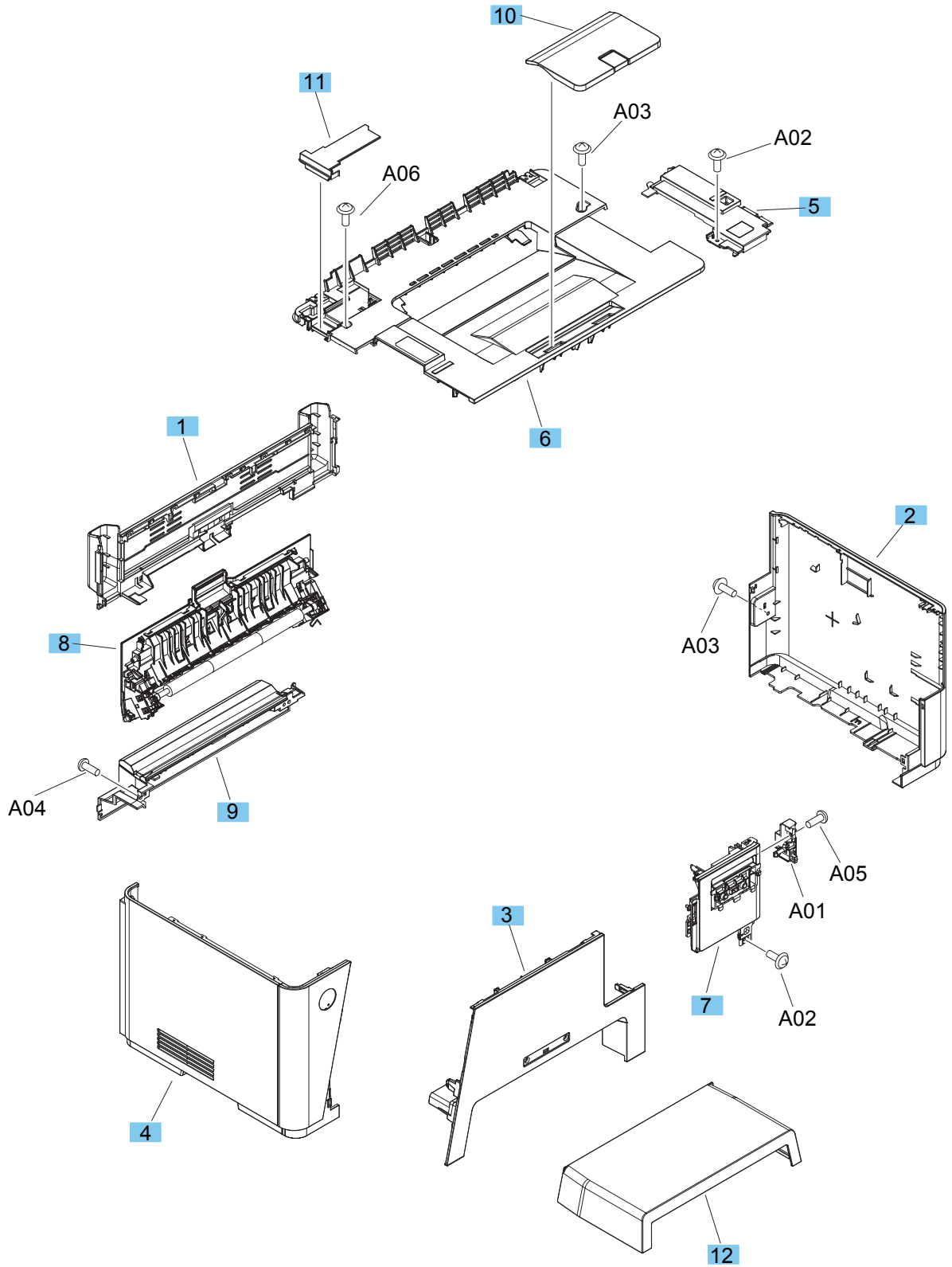


Table 2-8 Covers, panels, and doors

Ref	Description	Part number	Qty
1	Cover, fuser	RC3-5345-000CN	1
2	Cover, right	RC3-5348-000CN	1
3	Door, cartridge	RC3-5357-000CN	1
4	Left cover assembly	RL1-3930-000CN	1
5	Right upper cover assembly	RL1-3936-000CN	1
6	Upper cover assembly	RM2-0138-000CN	1
7	Operation panel assembly	RM2-0142-000CN	1
8	Rear cover/secondary transfer assembly	RM2-0162-000CN	1
9	Power supply cover assembly	RM2-0164-000CN	1
10	Extension tray assembly	RM2-0168-000CN	1
11	Cover, flat cable	RC3-5353-000CN	1
12	Cover, dust	RC3-5146-000CN	1
	Control panel assembly—2 line LCD (M176 model) (not shown)	CF547-60109	1
	Control panel assembly—touchscreen (M177 model) (not shown)	CF547-60110	1
	Fax rubber cap (M177 model) (not shown)	CZ185-40001	1

Internal assemblies

Figure 2-3 Internal assemblies

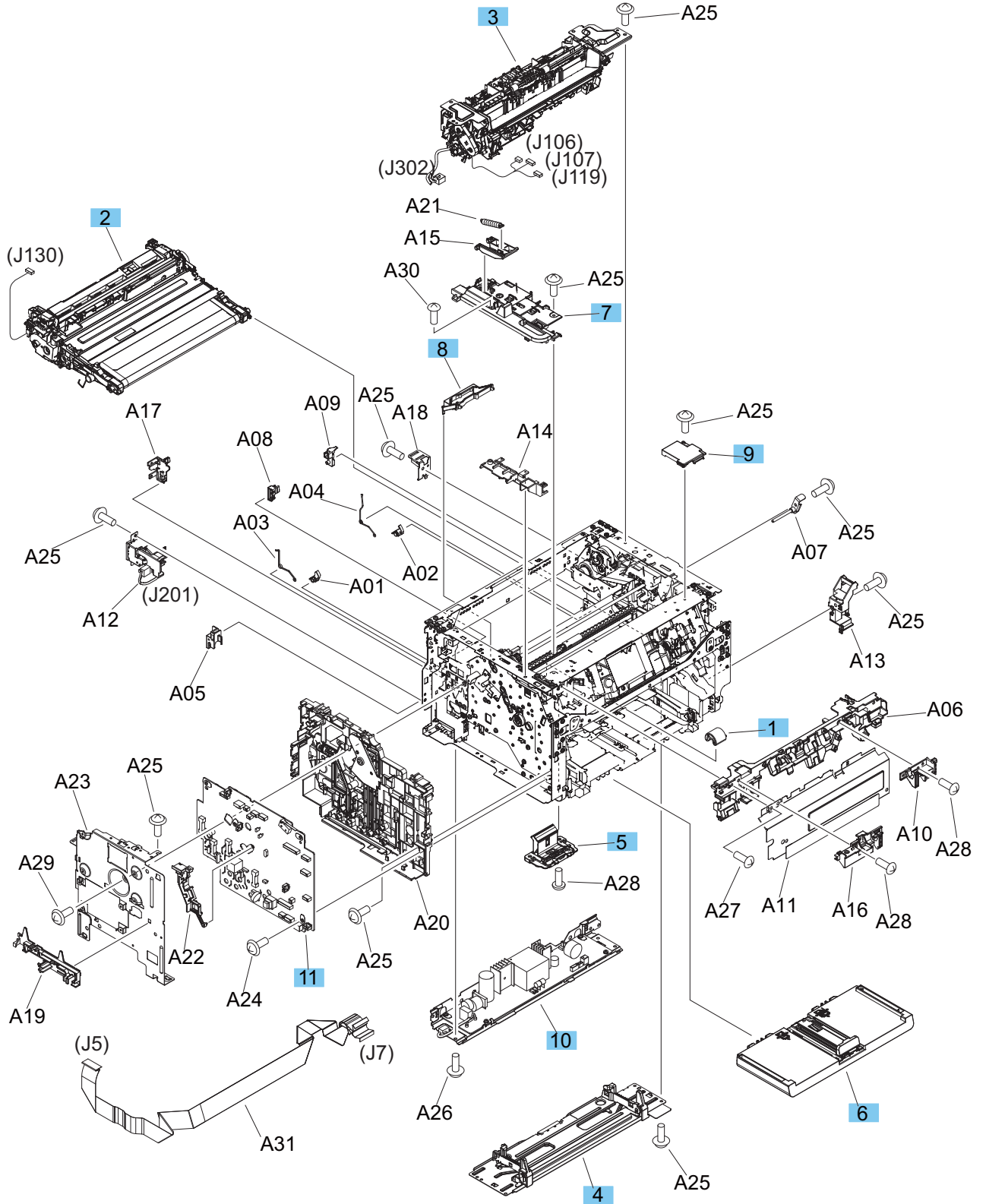


Table 2-9 Internal assemblies

Ref	Description	Part number	Qty
1	Roller, paper pick-up	RL1-2671-000CN	1
2	Intermediate transfer belt assembly (ITB)	RM2-0175-000CN	1
3	Fuser delivery assembly (110-127 V)	RM2-0157-000CN	1
3	Fuser delivery assembly (220-240 V)	RM2-0167-000CN	1
4	Base plate assembly	RM2-0160-000CN	1
5	Separation pad assembly	RM2-0170-000CN	1
6	Main tray assembly	RM2-0144-000CN	1
7	Inner cover assembly	RM2-0139-000CN	1
8	Support, frame	RC3-0230-000CN	1
9	Cover, grounding cable	RC3-5365-000CN	1
10	Low voltage power supply assembly (110-127V)	RM2-7292-000CN	1
10	Low voltage power supply assembly (220-240V)	RM2-7293-000CN	1
11	Engine controller PCA	RM2-7300-000CN	1
	Fax module-Asia/US (M177 model) (not shown)	CF206-60001	1
	Fax module-EU (M177 model) (not shown)	CF207-60001	1
	Fax module-Brazil (M177 model) (not shown)	CF208-60001	1
	PCA, formatter (M176 model) (not shown)	CF547-60001	1
	PCA, formatter (M177 model) (not shown)	CZ165-60001	1
	WiFi board (M177 model) (not shown)	1150-7957	1

Scanner and document feeder (ADF) assemblies

Scanner and lid assembly (M176 model)

Figure 2-4 Scanner and lid assembly (M176 model)

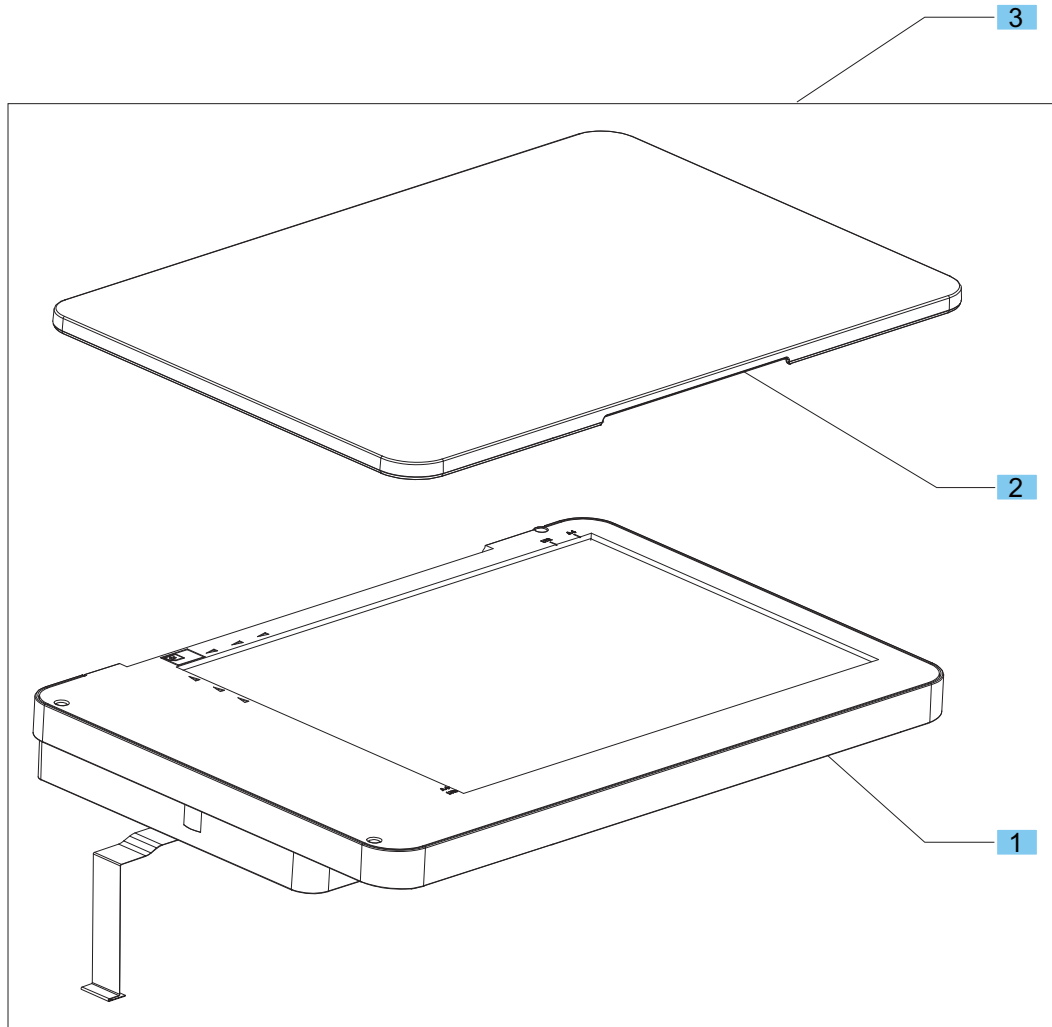



Table 2-10 Scanner and lid assembly (M176 model)

Ref	Description	Part number	Qty
1	Scanner assembly (M176 model)	CF547-60108	1
2	Lid, document	CF547-60111	1
3	Scanner/lid assembly	CF547-60101	1
	Scanner/lid assembly (bulk pack) (not shown)	CF547-60107	1

 **CAUTION:** Replace the internal scanner assemblies only in a dust-free environment.

Scanner assemblies (M176 model)

Figure 2-5 Scanner assemblies (M176 model)

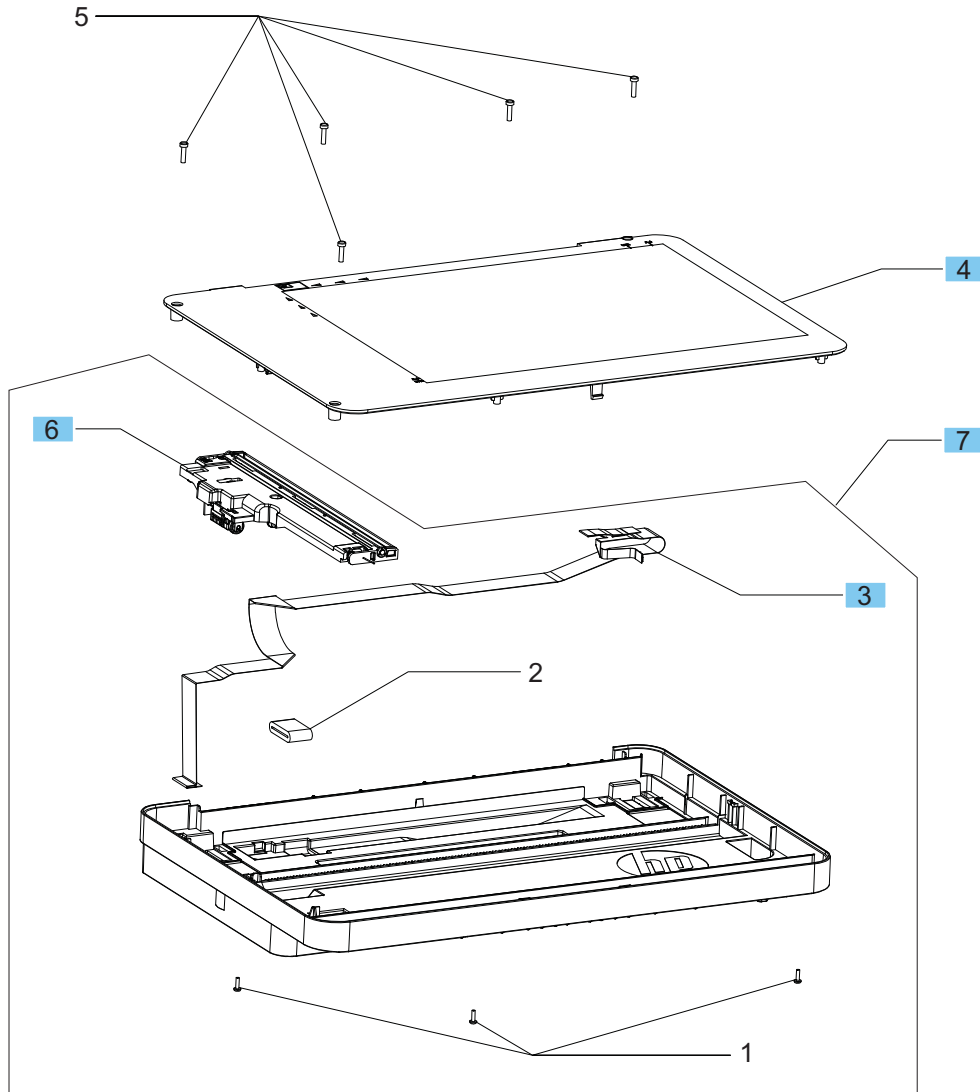



Table 2-11 Scanner assemblies (M176 model)

Ref	Description	Part number	Qty
3	SSA FFC Cable, 20 Pin	CZ165-60106	1
4	Scan bezel assembly	CF547-60112	1
6	Scan drive system assembly	CZ181-60104	1
7	Scanner base assembly	CF547-60102	1

 **CAUTION:** Replace the internal scanner assemblies only in a dust-free environment.

Scan drive system assembly (M176 and M177 models)

Figure 2-6 Scan drive system (M176 and M177 models)

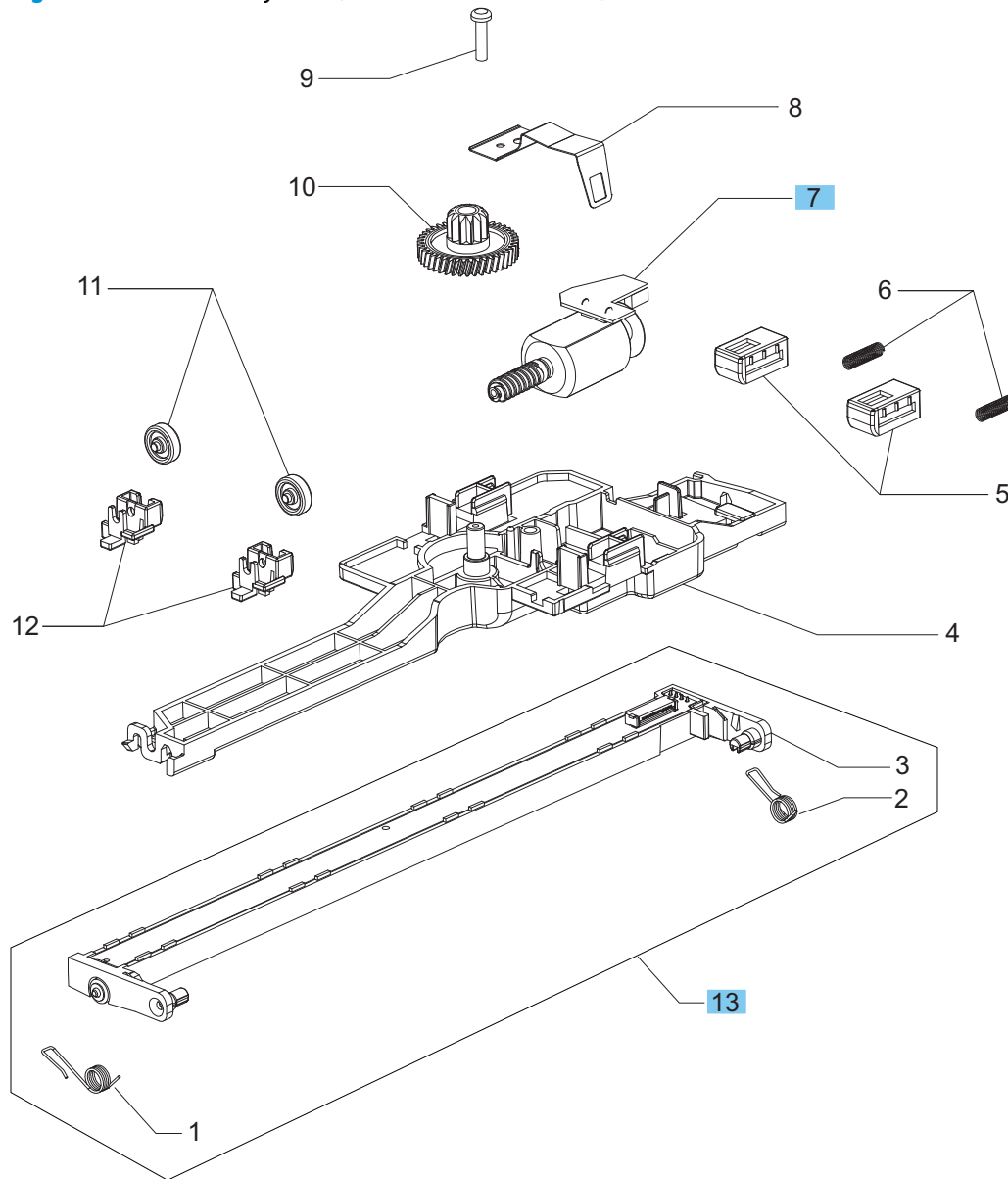



Table 2-12 Scan drive system (M176 and M177 models)

Ref	Description	Part number	Qty
7	Motor/encoder assembly	CN503-60006	1
13	Scanner with spring assembly	CZ181-60113	1

 **CAUTION:** Replace the internal scanner assemblies only in a dust-free environment.

Scanner and document feeder main assemblies (M177 model)

Figure 2-7 Scanner and document feeder main assemblies (M177 model)

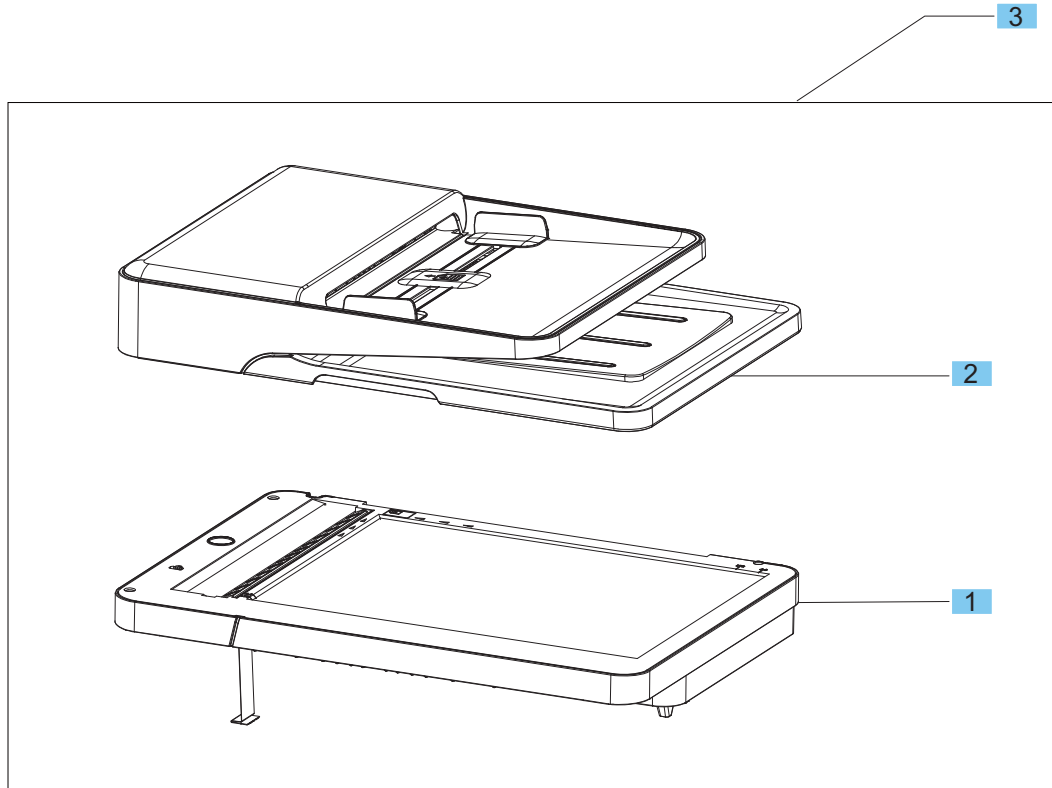



Table 2-13 Scanner and document feeder main assemblies (M177 model)

Ref	Description	Part number	Qty
1	Scanner assembly (M177 model)	CZ165-60109	1
2	Auto document feeder assembly	CZ165-60112	1
3	Scanner/ADF assembly	CZ165-60101	1
	Scanner/ADF assembly (bulk pack) (not shown)	CZ165-60107	1

 **CAUTION:** Replace the internal scanner assemblies only in a dust-free environment.

Scanner assembly (M177 model)

Figure 2-8 Scanner assembly (M177 model)

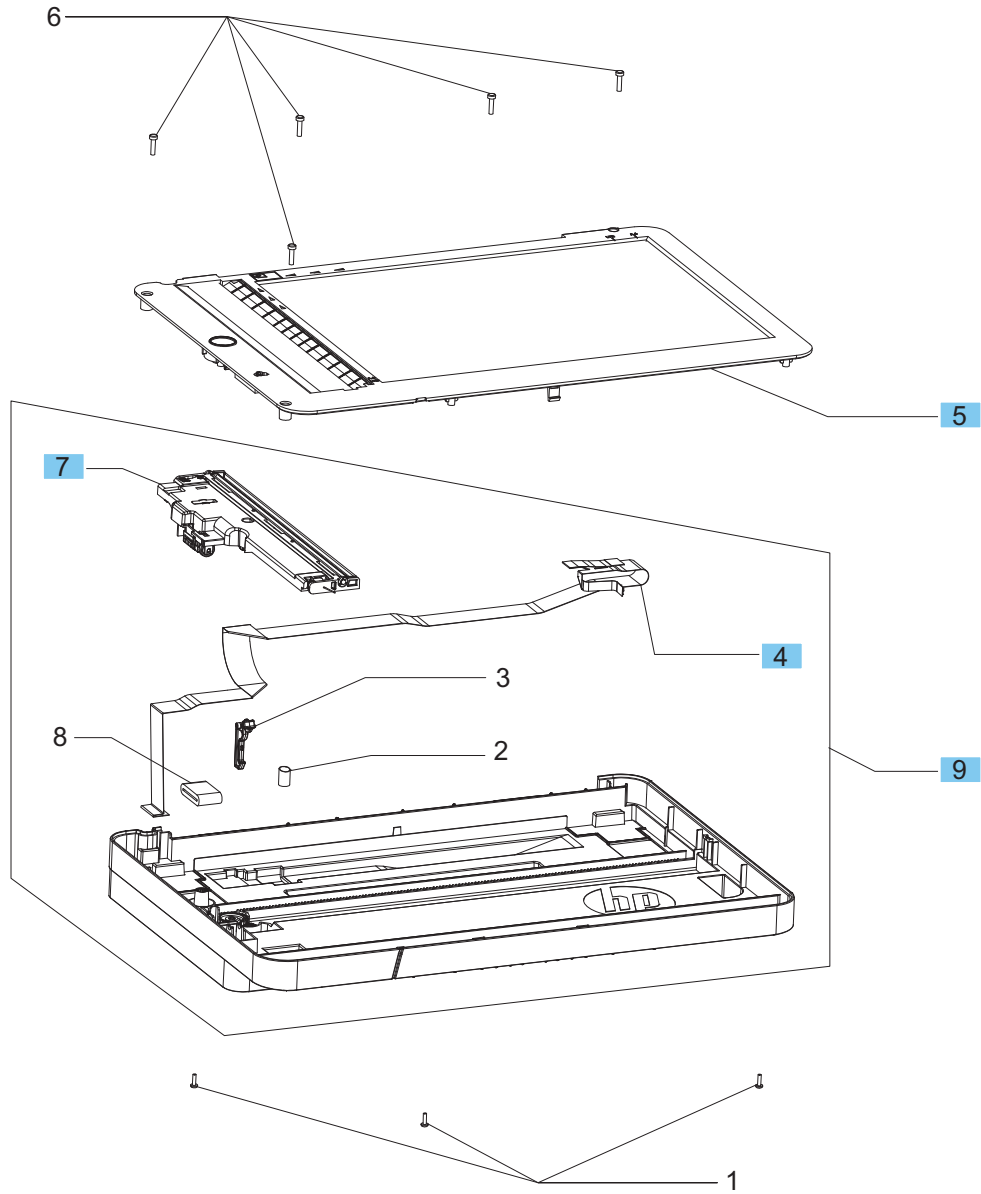



Table 2-14 Scanner assembly (M177 model)

Ref	Description	Part number	Qty
4	SSA FFC Cable, 20 Pin	CZ165-60106	1
5	Scan bezel assembly	CZ165-60115	1
7	Scan drive system assembly	CZ181-60104	1
9	Scanner base assembly	CZ165-60102	1

 **CAUTION:** Replace the internal scanner assemblies only in a dust-free environment.

Document feeder assembly (M177 model)

Figure 2-9 Document feeder assembly (M177 model)

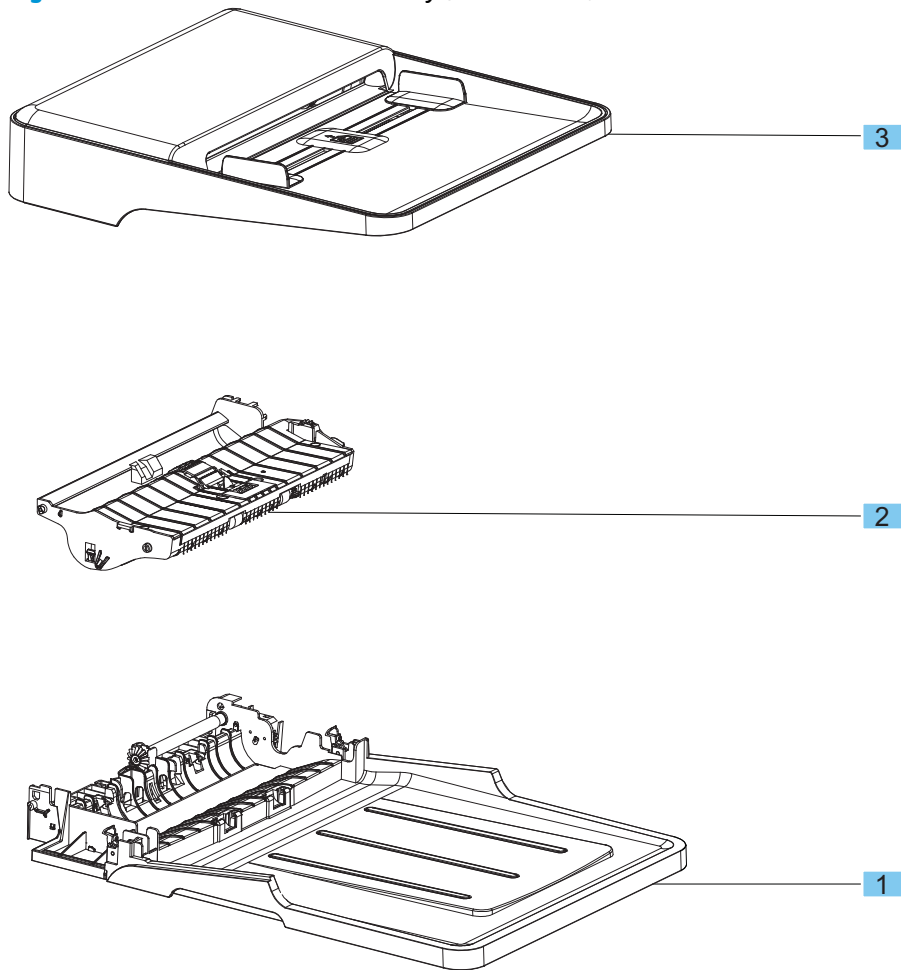


Table 2-15 Document feeder assembly (M177 model)

Ref	Description	Part number	Qty
1	ADF base	CZ165-60111	1
2	Core ADF assembly	CZ181-60107	1
3	ADF top cover assembly	CZ165-60110	1

ADF top cover assembly (M177 model)

Figure 2-10 ADF top cover assembly (M177 model)

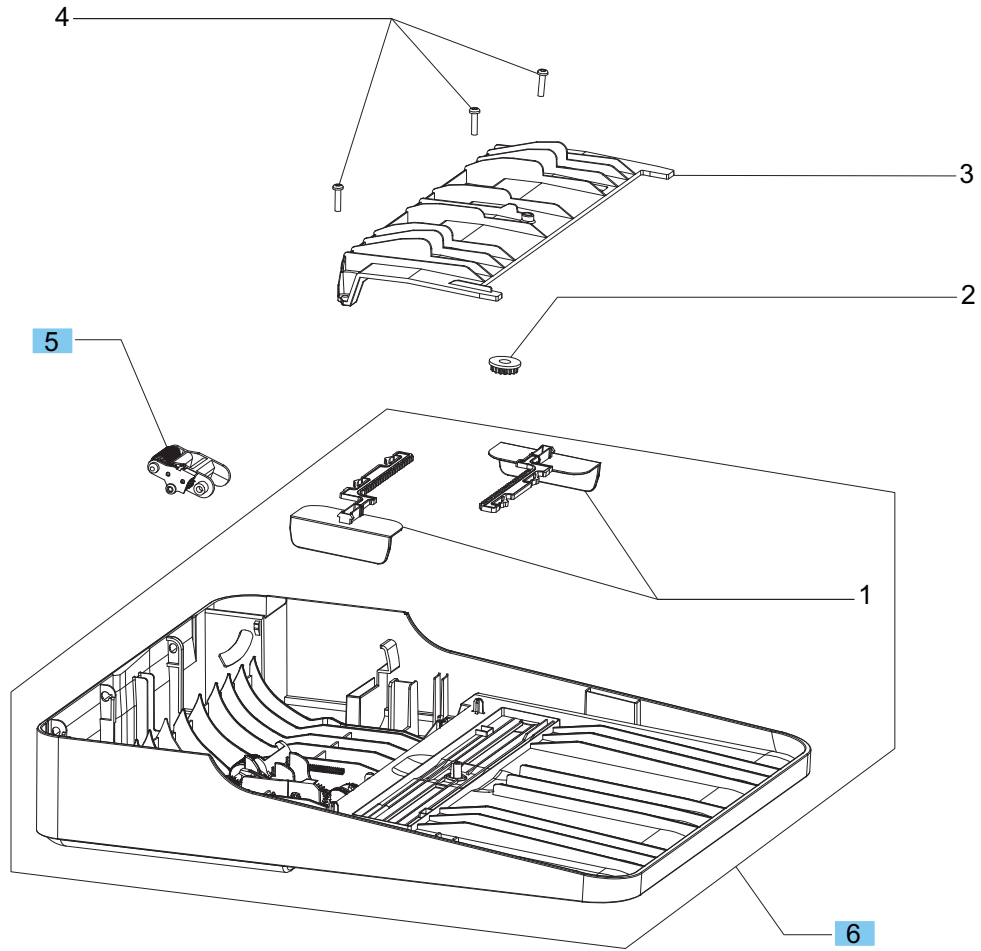


Table 2-16 ADF top cover assembly (M177 model)

Ref	Description	Part number	Qty
5	Assembly pre-pick arm	CB780-60032	1
6	Top cover with guide assembly	CZ165-60116	1

Core ADF assembly (M177 model)

Figure 2-11 Core ADF assembly (M177 model)

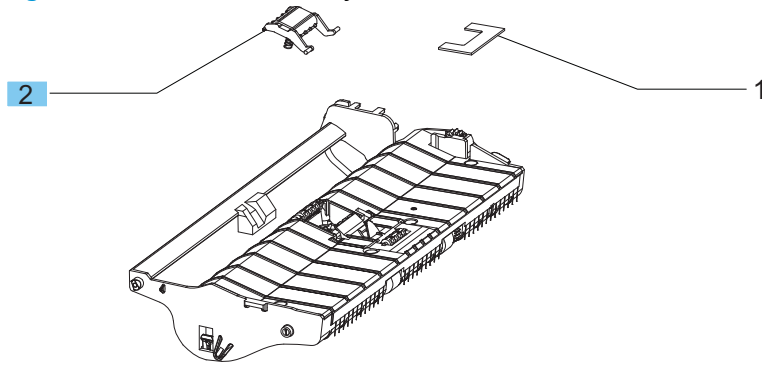


Table 2-17 Core ADF assembly (M177 model)

Ref	Description	Part number	Qty
2	Separator pad	CB780-60009	1

Alphabetical parts list

Table 2-18 Alphabetical parts list

Description	Part number	Table and page
ADF base	CZ165-60111	Document feeder assembly (M177 model) on page 123
ADF top cover assembly	CZ165-60110	Document feeder assembly (M177 model) on page 123
Assembly pre-pick arm	CB780-60032	ADF top cover assembly (M177 model) on page 125
Auto document feeder assembly	CZ165-60112	Scanner and document feeder main assemblies (M177 model) on page 119
Base plate assembly	RM2-0160-000CN	Internal assemblies on page 111
Control panel assembly–2 line LCD (M176 model) (not shown)	CF547-60109	Covers, panels, and doors on page 109
Control panel assembly–touchscreen (M177 model) (not shown)	CF547-60110	Covers, panels, and doors on page 109
Core ADF assembly	CZ181-60107	Document feeder assembly (M177 model) on page 123
Cover, dust	RC3-5146-000CN	Covers, panels, and doors on page 109
Cover, flat cable	RC3-5353-000CN	Covers, panels, and doors on page 109
Cover, fuser	RC3-5345-000CN	Covers, panels, and doors on page 109
Cover, grounding cable	RC3-5365-000CN	Internal assemblies on page 111
Cover, right	RC3-5348-000CN	Covers, panels, and doors on page 109
Door, cartridge	RC3-5357-000CN	Covers, panels, and doors on page 109
Engine controller PCA	RM2-7300-000CN	Internal assemblies on page 111
Extension tray assembly	RM2-0168-000CN	Covers, panels, and doors on page 109
Fax module–Asia/US (M177 model) (not shown)	CF206-60001	Internal assemblies on page 111
Fax module–Brazil (M177 model) (not shown)	CF208-60001	Internal assemblies on page 111
Fax module–EU (M177 model) (not shown)	CF207-60001	Internal assemblies on page 111
Fax rubber cap (M177 model) (not shown)	CZ185-40001	Covers, panels, and doors on page 109
Fuser delivery assembly (110–127 V)	RM2-0157-000CN	Internal assemblies on page 111
Fuser delivery assembly (220–240 V)	RM2-0167-000CN	Internal assemblies on page 111
Inner cover assembly	RM2-0139-000CN	Internal assemblies on page 111
Intermediate transfer belt assembly (ITB)	RM2-0175-000CN	Internal assemblies on page 111

Table 2-18 Alphabetical parts list (continued)

Description	Part number	Table and page
Left cover assembly	RL1-3930-000CN	Covers, panels, and doors on page 109
Lid, document	CF547-60111	Scanner and lid assembly (M176 model) on page 113
Low voltage power supply assembly (110-127V)	RM2-7292-000CN	Internal assemblies on page 111
Low voltage power supply assembly (220-240V)	RM2-7293-000CN	Internal assemblies on page 111
Main tray assembly	RM2-0144-000CN	Internal assemblies on page 111
Motor/encoder assembly	CN503-60006	Scan drive system (M176 and M177 models) on page 117
Operation panel assembly	RM2-0142-000CN	Covers, panels, and doors on page 109
PCA, formatter (M176 model) (not shown)	CF547-60001	Internal assemblies on page 111
PCA, formatter (M177 model) (not shown)	CZ165-60001	Internal assemblies on page 111
Power supply cover assembly	RM2-0164-000CN	Covers, panels, and doors on page 109
Rear cover/secondary transfer assembly	RM2-0162-000CN	Covers, panels, and doors on page 109
Right upper cover assembly	RL1-3936-000CN	Covers, panels, and doors on page 109
Roller, paper pick-up	RL1-2671-000CN	Internal assemblies on page 111
Scan bezel assembly	CF547-60112	Scanner assemblies (M176 model) on page 115
Scan bezel assembly	CZ165-60115	Scanner assembly (M177 model) on page 121
Scan drive system assembly	CZ181-60104	Scanner assemblies (M176 model) on page 115
Scan drive system assembly	CZ181-60104	Scanner assembly (M177 model) on page 121
Scanner assembly (M176 model)	CF547-60108	Scanner and lid assembly (M176 model) on page 113
Scanner assembly (M177 model)	CZ165-60109	Scanner and document feeder main assemblies (M177 model) on page 119
Scanner base assembly	CF547-60102	Scanner assemblies (M176 model) on page 115
Scanner base assembly	CZ165-60102	Scanner assembly (M177 model) on page 121
Scanner with spring assembly	CZ181-60113	Scan drive system (M176 and M177 models) on page 117
Scanner/ADF assembly	CZ165-60101	Scanner and document feeder main assemblies (M177 model) on page 119

Table 2-18 Alphabetical parts list (continued)

Description	Part number	Table and page
Scanner/ADF assembly (bulk pack) (not shown)	CZ165-60107	Scanner and document feeder main assemblies (M177 model) on page 119
Scanner/lid assembly	CF547-60101	Scanner and lid assembly (M176 model) on page 113
Scanner/lid assembly (bulk pack) (not shown)	CF547-60107	Scanner and lid assembly (M176 model) on page 113
Separation pad assembly	RM2-0170-000CN	Internal assemblies on page 111
Separator pad	CB780-60009	Core ADF assembly (M177 model) on page 127
SSA FFC Cable, 20 Pin	CZ165-60106	Scanner assemblies (M176 model) on page 115
SSA FFC Cable, 20 Pin	CZ165-60106	Scanner assembly (M177 model) on page 121
Support, frame	RC3-0230-000CN	Internal assemblies on page 111
Top cover with guide assembly	CZ165-60116	ADF top cover assembly (M177 model) on page 125
Upper cover assembly	RM2-0138-000CN	Covers, panels, and doors on page 109
WiFi board (M177 model) (not shown)	1150-7957	Internal assemblies on page 111

Numerical parts list

Table 2-19 Numerical parts list

Part number	Description	Table and page
1150-7957	WiFi board (M177 model) (not shown)	Internal assemblies on page 111
CB780-60009	Separator pad	Core ADF assembly (M177 model) on page 127
CB780-60032	Assembly pre-pick arm	ADF top cover assembly (M177 model) on page 125
CF206-60001	Fax module–Asia/US (M177 model) (not shown)	Internal assemblies on page 111
CF207-60001	Fax module–EU (M177 model) (not shown)	Internal assemblies on page 111
CF208-60001	Fax module–Brazil (M177 model) (not shown)	Internal assemblies on page 111
CF547-60001	PCA, formatter (M176 model) (not shown)	Internal assemblies on page 111
CF547-60101	Scanner/lid assembly	Scanner and lid assembly (M176 model) on page 113
CF547-60102	Scanner base assembly	Scanner assemblies (M176 model) on page 115
CF547-60107	Scanner/lid assembly (bulk pack) (not shown)	Scanner and lid assembly (M176 model) on page 113
CF547-60108	Scanner assembly (M176 model)	Scanner and lid assembly (M176 model) on page 113
CF547-60109	Control panel assembly–2 line LCD (M176 model) (not shown)	Covers, panels, and doors on page 109
CF547-60110	Control panel assembly–touchscreen (M177 model) (not shown)	Covers, panels, and doors on page 109
CF547-60111	Lid, document	Scanner and lid assembly (M176 model) on page 113
CF547-60112	Scan bezel assembly	Scanner assemblies (M176 model) on page 115
CN503-60006	Motor/encoder assembly	Scan drive system (M176 and M177 models) on page 117
CZ165-60001	PCA, formatter (M177 model) (not shown)	Internal assemblies on page 111
CZ165-60101	Scanner/ADF assembly	Scanner and document feeder main assemblies (M177 model) on page 119
CZ165-60102	Scanner base assembly	Scanner assembly (M177 model) on page 121
CZ165-60106	SSA FFC Cable, 20 Pin	Scanner assemblies (M176 model) on page 115
CZ165-60106	SSA FFC Cable, 20 Pin	Scanner assembly (M177 model) on page 121
CZ165-60107	Scanner/ADF assembly (bulk pack) (not shown)	Scanner and document feeder main assemblies (M177 model) on page 119

Table 2-19 Numerical parts list (continued)

Part number	Description	Table and page
CZ165-60109	Scanner assembly (M177 model)	Scanner and document feeder main assemblies (M177 model) on page 119
CZ165-60110	ADF top cover assembly	Document feeder assembly (M177 model) on page 123
CZ165-60111	ADF base	Document feeder assembly (M177 model) on page 123
CZ165-60112	Auto document feeder assembly	Scanner and document feeder main assemblies (M177 model) on page 119
CZ165-60115	Scan bezel assembly	Scanner assembly (M177 model) on page 121
CZ165-60116	Top cover with guide assembly	ADF top cover assembly (M177 model) on page 125
CZ181-60104	Scan drive system assembly	Scanner assemblies (M176 model) on page 115
CZ181-60104	Scan drive system assembly	Scanner assembly (M177 model) on page 121
CZ181-60107	Core ADF assembly	Document feeder assembly (M177 model) on page 123
CZ181-60113	Scanner with spring assembly	Scan drive system (M176 and M177 models) on page 117
CZ185-40001	Fax rubber cap (M177 model) (not shown)	Covers, panels, and doors on page 109
RC3-0230-000CN	Support, frame	Internal assemblies on page 111
RC3-5146-000CN	Cover, dust	Covers, panels, and doors on page 109
RC3-5345-000CN	Cover, fuser	Covers, panels, and doors on page 109
RC3-5348-000CN	Cover, right	Covers, panels, and doors on page 109
RC3-5353-000CN	Cover, flat cable	Covers, panels, and doors on page 109
RC3-5357-000CN	Door, cartridge	Covers, panels, and doors on page 109
RC3-5365-000CN	Cover, grounding cable	Internal assemblies on page 111
RL1-2671-000CN	Roller, paper pick-up	Internal assemblies on page 111
RL1-3930-000CN	Left cover assembly	Covers, panels, and doors on page 109
RL1-3936-000CN	Right upper cover assembly	Covers, panels, and doors on page 109
RM2-0138-000CN	Upper cover assembly	Covers, panels, and doors on page 109

Table 2-19 Numerical parts list (continued)

Part number	Description	Table and page
RM2-0139-000CN	Inner cover assembly	Internal assemblies on page 111
RM2-0142-000CN	Operation panel assembly	Covers, panels, and doors on page 109
RM2-0144-000CN	Main tray assembly	Internal assemblies on page 111
RM2-0157-000CN	Fuser delivery assembly (110-127 V)	Internal assemblies on page 111
RM2-0160-000CN	Base plate assembly	Internal assemblies on page 111
RM2-0162-000CN	Rear cover/secondary transfer assembly	Covers, panels, and doors on page 109
RM2-0164-000CN	Power supply cover assembly	Covers, panels, and doors on page 109
RM2-0167-000CN	Fuser delivery assembly (220–240 V)	Internal assemblies on page 111
RM2-0168-000CN	Extension tray assembly	Covers, panels, and doors on page 109
RM2-0170-000CN	Separation pad assembly	Internal assemblies on page 111
RM2-0175-000CN	Intermediate transfer belt assembly (ITB)	Internal assemblies on page 111
RM2-7292-000CN	Low voltage power supply assembly (110-127V)	Internal assemblies on page 111
RM2-7293-000CN	Low voltage power supply assembly (220-240V)	Internal assemblies on page 111
RM2-7300-000CN	Engine controller PCA	Internal assemblies on page 111

Index

A

- accessories
 - ordering 102
- ADF
 - removing 14
- ADF core
 - removal 92
- ADF input guides and gear
 - removal 97
- ADF pre-pickup arm assembly
 - removal 100
- ADF separation pad
 - removal 93
- ADF top cover
 - removal 91
- after-service checklist 4
- automatic document feeder
 - removing 14

B

- base plate
 - removing 78
- before-service checklist 4

C

- cartridge door
 - removing 35
- cartridges
 - part numbers 102
 - removing toner 5
- cautions iii
- control panel
 - removing 32
- control panel FFC
 - removing 46
- conventions, document iii
- cover, dust
 - removing 9

- cover, flat cable
 - removing 14, 16
- cover, fuser
 - removing 36
- cover, grounding cable
 - removing 30
- cover, inner
 - removing 28
- cover, left
 - removing 12
- cover, power supply
 - removing 38
- cover, right
 - removing 18
- cover, right top
 - removing 30
- cover, top
 - removing 20
- covers
 - locations 108
 - parts list 108

D

- diagrams
 - covers, panels, and doors 108
- document conventions iii
- document feeder
 - removing 14
- document feeder top cover
 - removal 91
- door, cartridge
 - removing 35
- door, front
 - removing 35
- door, rear
 - removing 37
- doors
 - parts list 108

drum

- removing imaging 7
- dust cover
 - removing 9

E

- ECU (engine controller assembly)
 - removing 49
- electrostatic discharge (ESD) 2
- engine controller assembly
 - removing 49
- ESD electrostatic discharge (ESD) 2
- extension tray
 - removing 9

F

- fax PCA
 - removing 45
- FFC, control panel
 - removing 46
- FFC, formatter-engine
 - removing 49
- field-replaceable units (FRUs)
 - replacing 2
- flat cable cover
 - removing 14, 16
- formatter PCA (M176 model)
 - removing 39
- formatter PCA (M177 model)
 - removing 44
- formatter-engine FFC
 - removing 49
- front door
 - removing 35
- FRUs (field-replaceable units)
 - replacing 2
- fuser cover
 - removing 36

fuser delivery assembly
removing 54

G

grounding cable cover
removing 30

I

imaging drum
part numbers 102
removing 7

inner cover
removing 28

input tray
removing 9

installation 2
screws 2

See also replacing parts

intermediate transfer belt (ITB)
assembly
removing 61

ITB (intermediate transfer belt)
assembly
removing 61

L

laser/scanner
cautions for servicing 2

left cover
removing 12

location
assemblies 0

low-voltage power supply assembly
(LVPS)
removing 72

LVPS (low-voltage power supply)
assembly
removing 72

M

main assemblies
removing 39

N

notes iii

O

ordering
product documents 102
supplies and accessories 102
whole-unit replacement 105

output extension tray
removing 9

P

panels
parts list 108

paper pickup roller
removing 79

paper tray
removing 9

part numbers
imaging drum 102
toner cartridges 102
whole-unit replacement 105

parts
assemblies 0
cover locations 108
door locations 108
panel locations 108

PCA, engine controller assembly
removing 49

PCA, fax
removing 45

PCA, formatter (M176 model)
removing 39

PCA, formatter (M177 model)
removing 44

PCA, wireless
removing 42

power supply cover
removing 38

R

rear door
removing 37

removing parts
about 2
after-service checklist 4
before-service checklist 4
service approach 4
tools, required 2

repair approach 4

replacing parts
about 2
after-service checklist 4
before-service checklist 4
screws 2
service approach 4
tools, required 2

right cover
removing 18

right top cover
removing 30
roller, paper pickup
removing 79

S

scan bezel
removal 82

scan drive system
removal 84

scan FFC cable
removal 85

scan motor
removal 87

scanner (M176)
removing 16

scanner (M177)
removing 14

scanner spring assembly
removal 89

screwdrivers, required 2
screws

installing 2

types of 3

secondary transfer assembly
removing 37

separation pad
removing 11

service approach 4

static, precautions for 2
supplies

ordering 102

part numbers 102

support frame
removing 72

T

T2 assembly
removing 37

tips iii

toner cartridges
part numbers 102
removing 5

tools, required 2

top cover
removing 20

tray, extension
removing 9

tray, paper
 removing 9
troubleshooting
 service approach 4

W

warnings iii
wireless PCA
 removing 42



CZ165-90943

