


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.


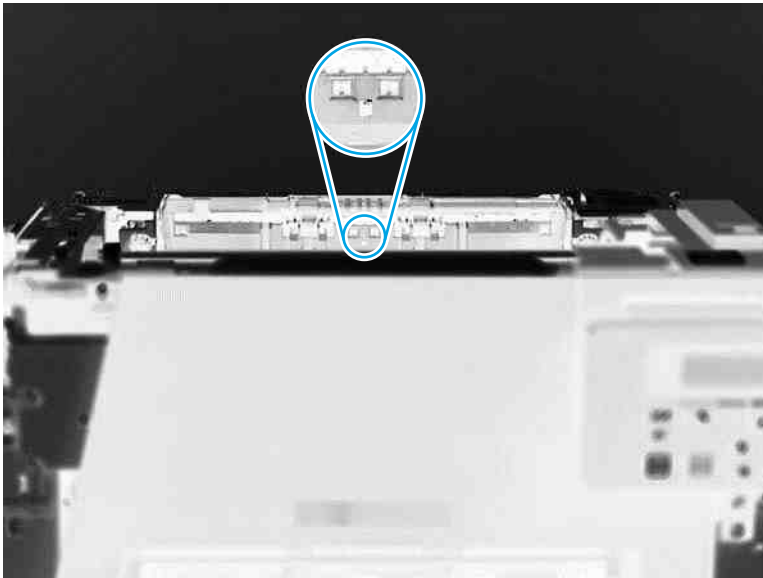
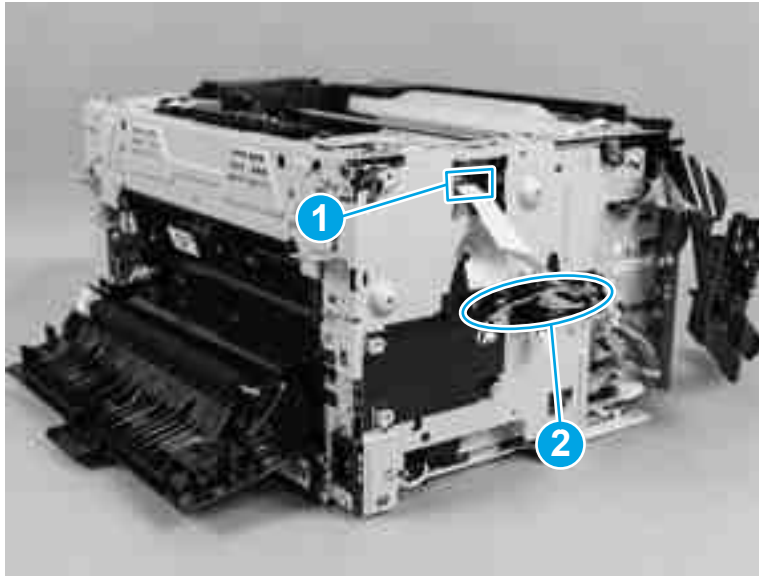
 **CAUTION:** If the silver dot is not visible and the fuser delivery assembly is removed, the gears will not be aligned and it will be difficult to reinstall the fuser delivery assembly.

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



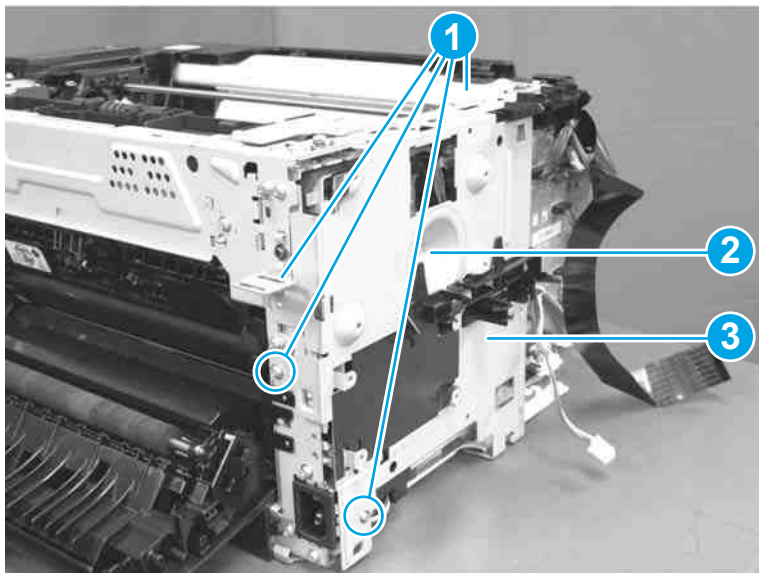
2. Disconnect the formatter-engine FFC (callout 1) and release the cables from the cable guides (callout 2).

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



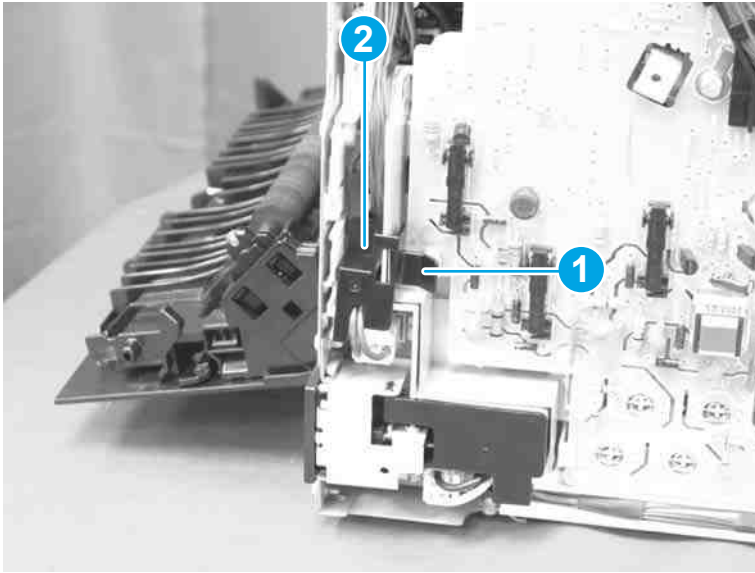
3. Remove four screws (callout 1) and one black screw (callout 2), and then remove the PCA plate (callout 3).

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



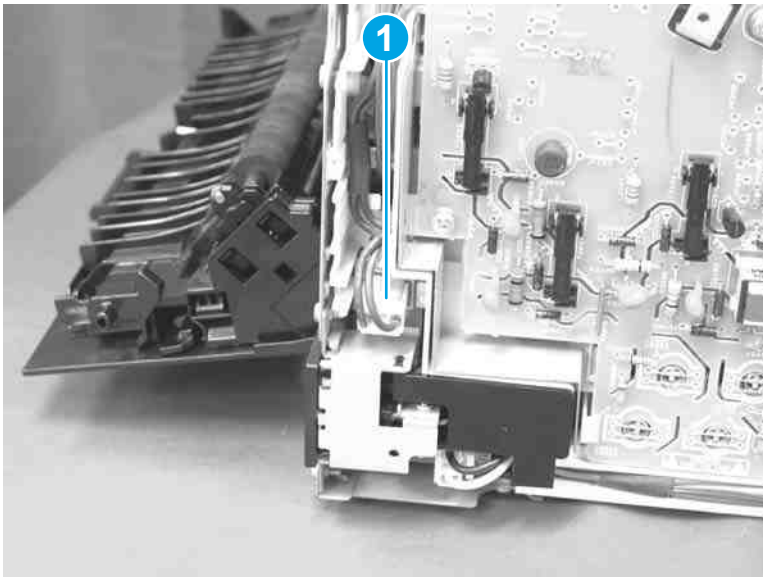
4. Release one tab (callout 1) and remove the cable cover (callout 2).

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



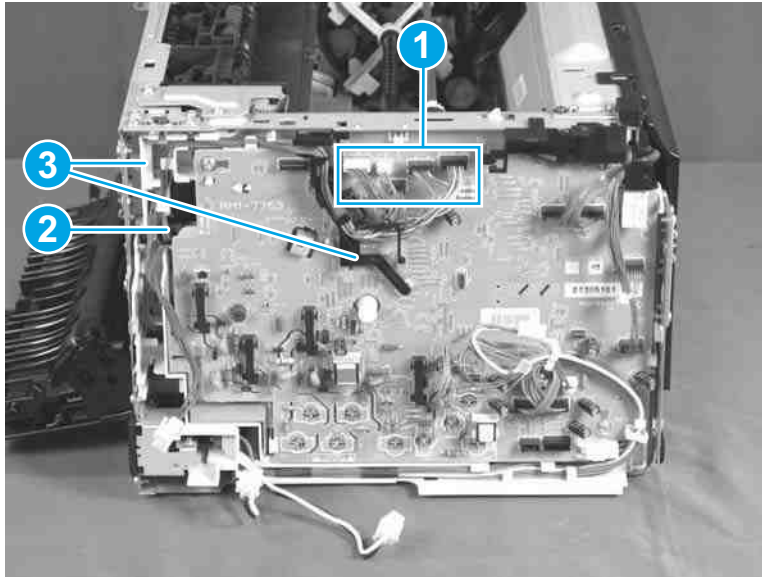
5. Disconnect one connector (callout 1).

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



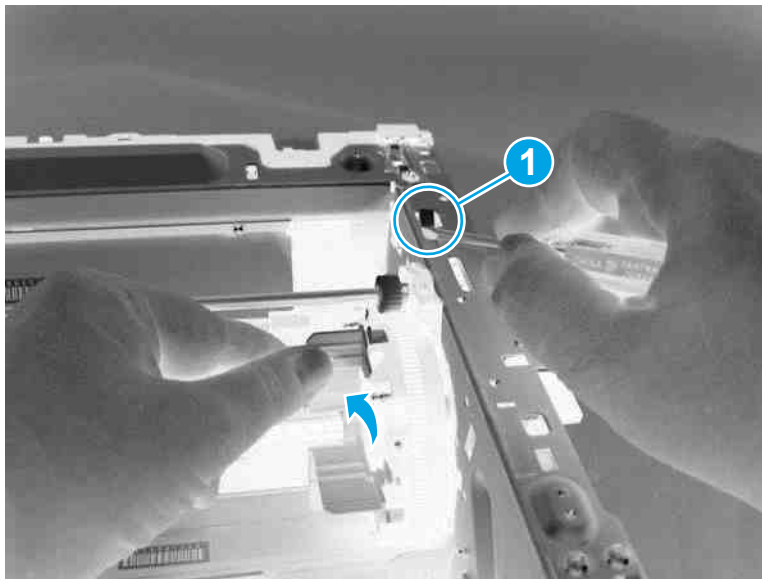
6. Disconnect five connectors (callout 1), and then release the cables (callout 2) from the cable guides (callout 3).

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



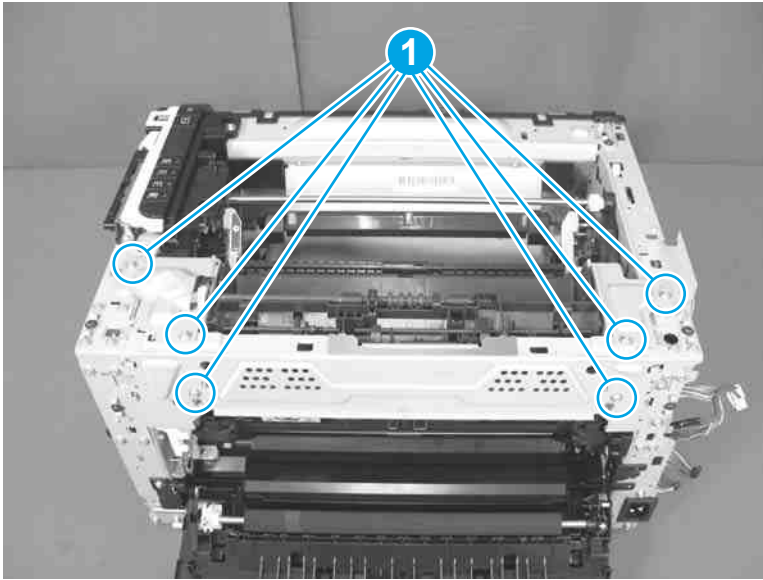
7. Press the cartridge release lever (callout 1) and rotate the toner cartridge carousel toward the front of the product to make more room to remove the fuser delivery assembly.

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



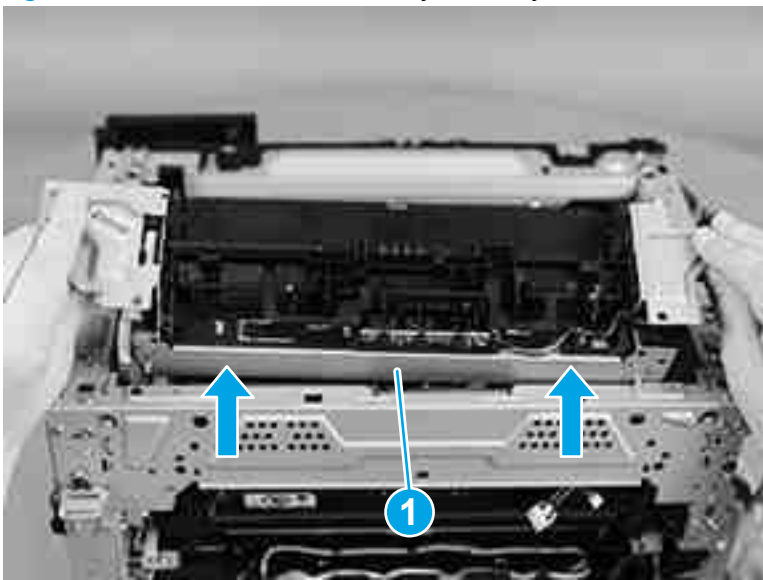
8. Remove six screws (callout 1).

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)

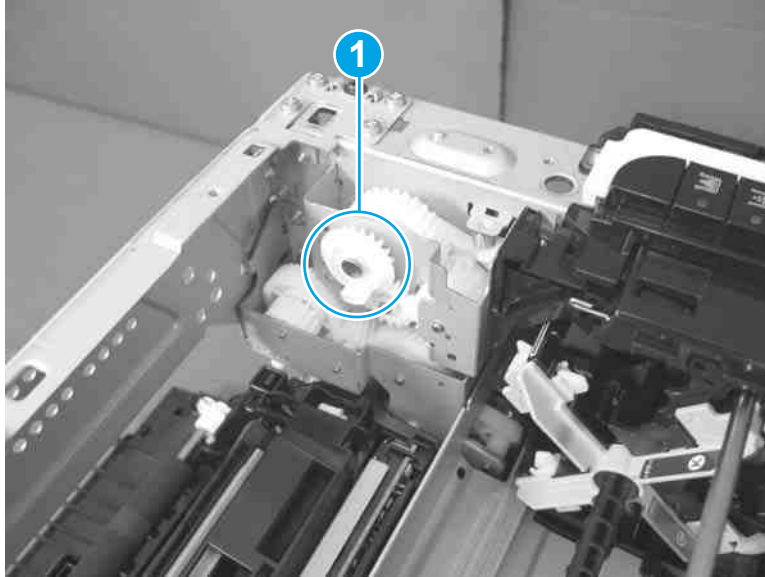
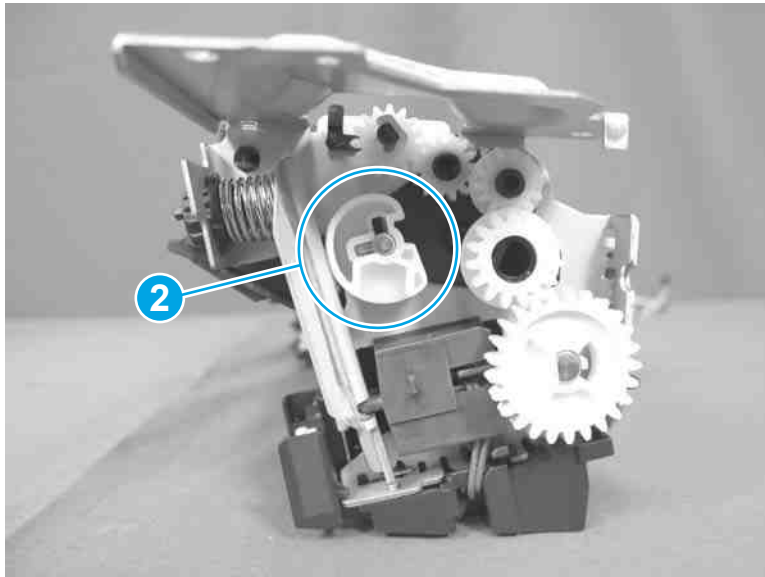
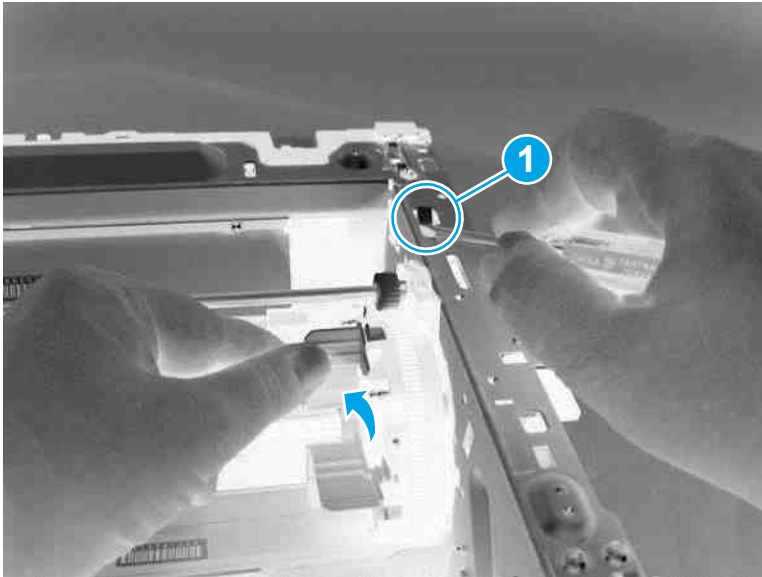


Figure 1-83 Reinstall the fuser delivery assembly (2 of 3)



- 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](#).

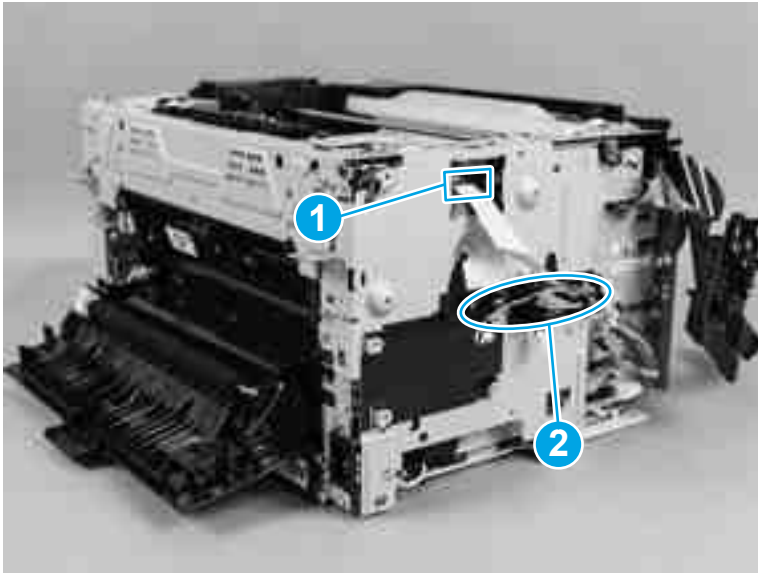
Before proceeding, remove the following components:

- 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

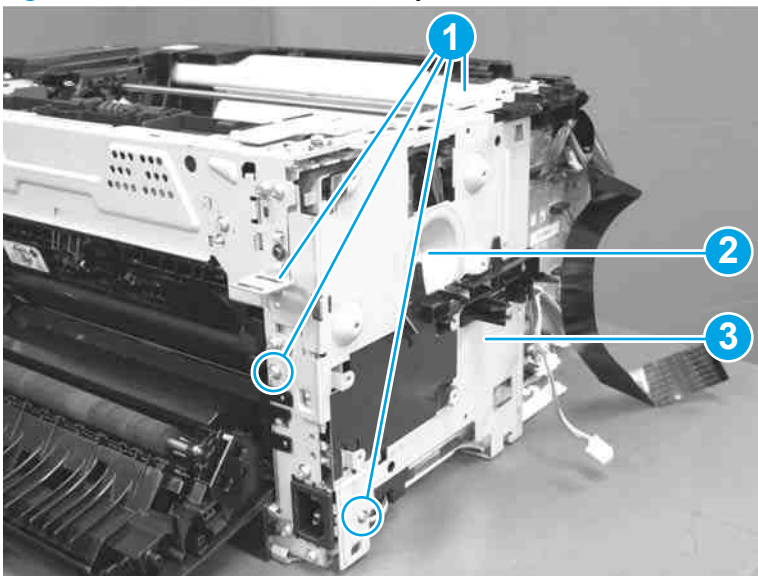
1. Disconnect the formatter-engine FFC (callout 1) and release the cables from the cable guides (callout 2).

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



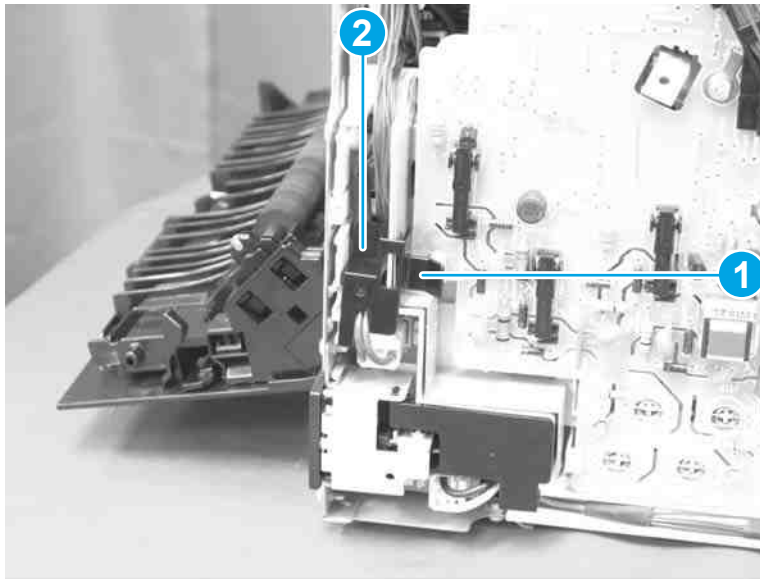
2. Remove four screws (callout 1) and one black screw (callout 2), and then remove the PCA plate (callout 3).

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



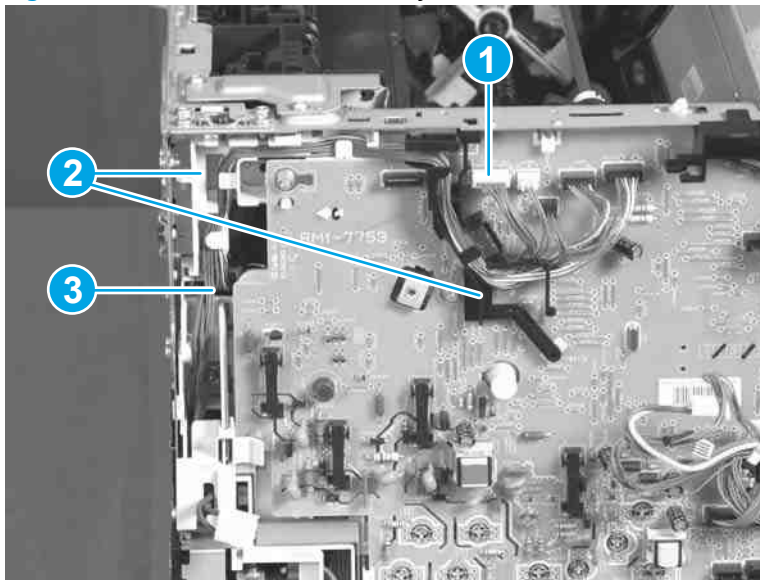
3. Release one tab (callout 1) and remove the cable cover (callout 2).

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



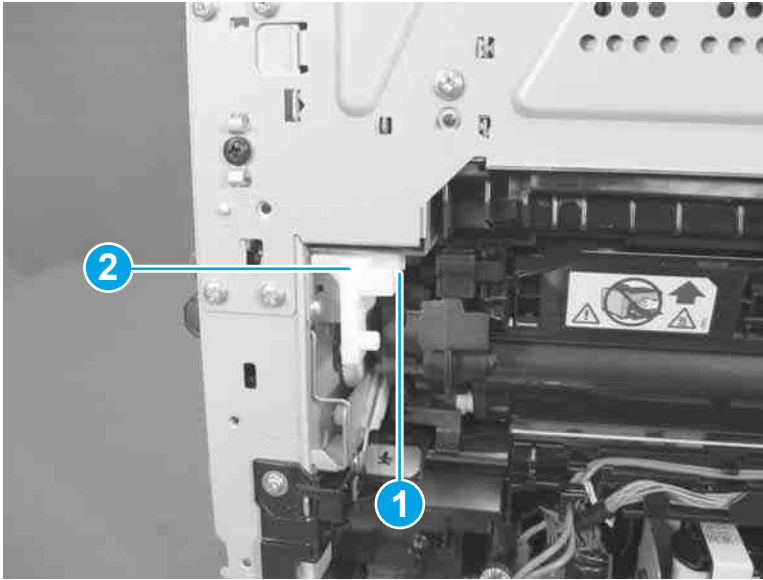
4. Disconnect one connector (callout 1), and release the cable (callout 3) from the cable guides (callout 2).

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)

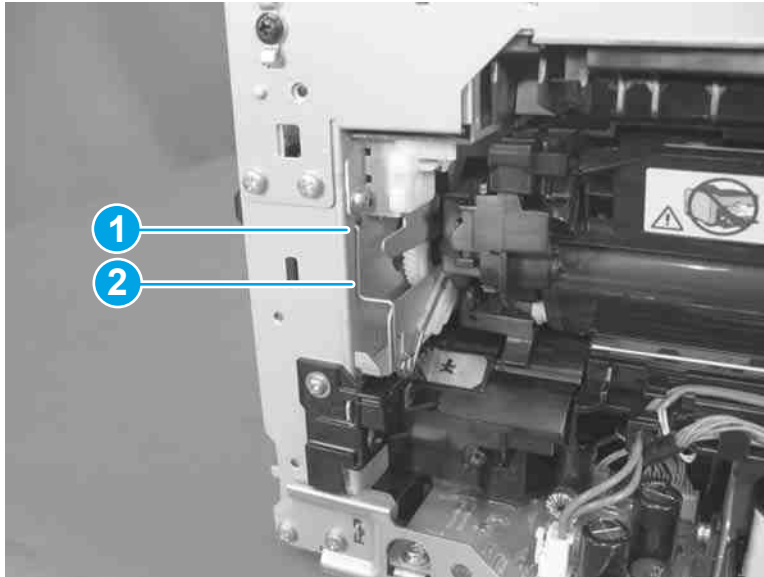
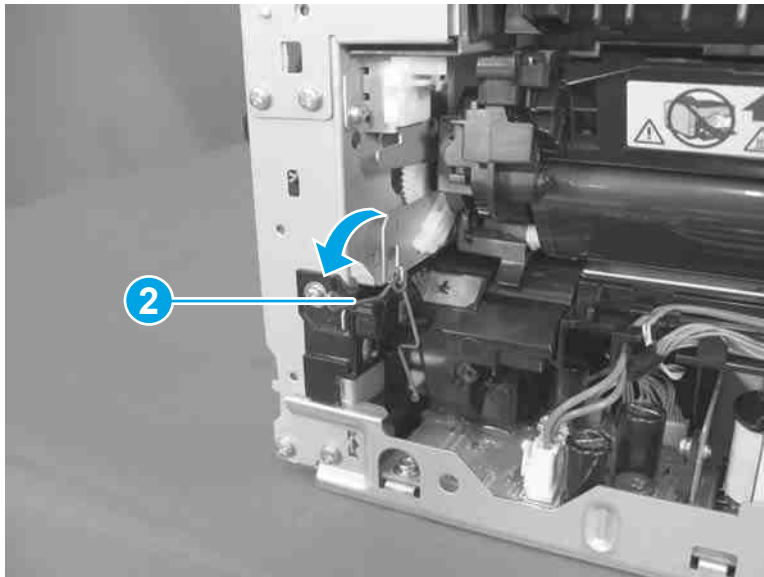


Figure 1-91 Remove the ITB assembly (7 of 17)



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

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

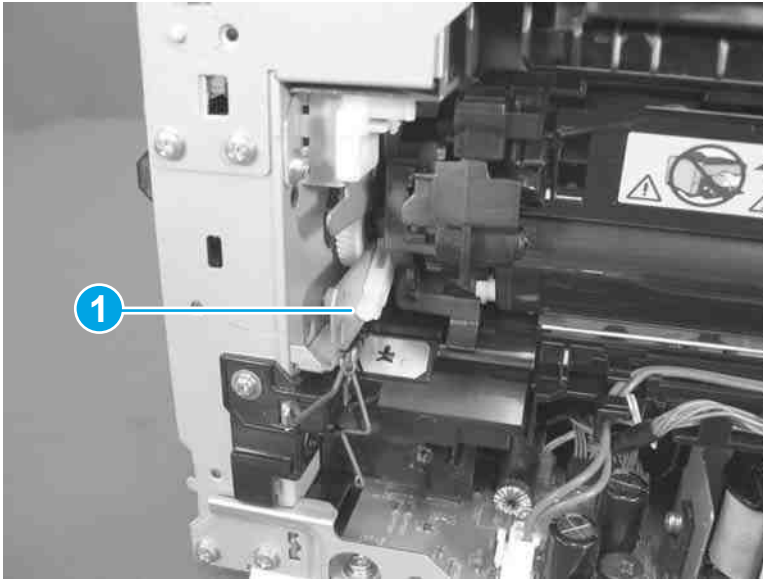
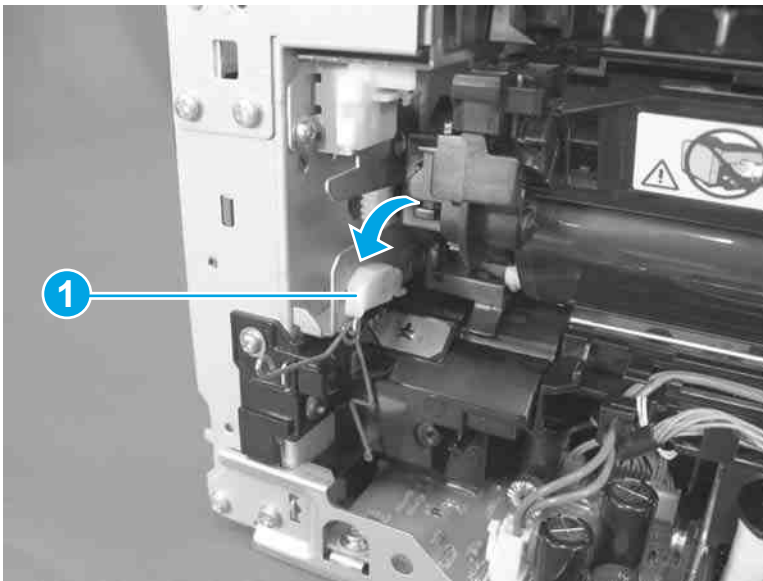
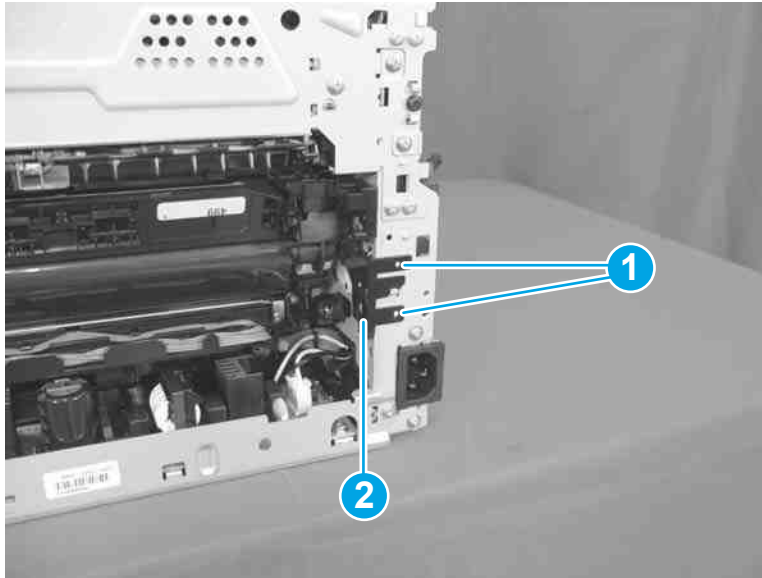


Figure 1-93 Remove the ITB assembly (9 of 17)



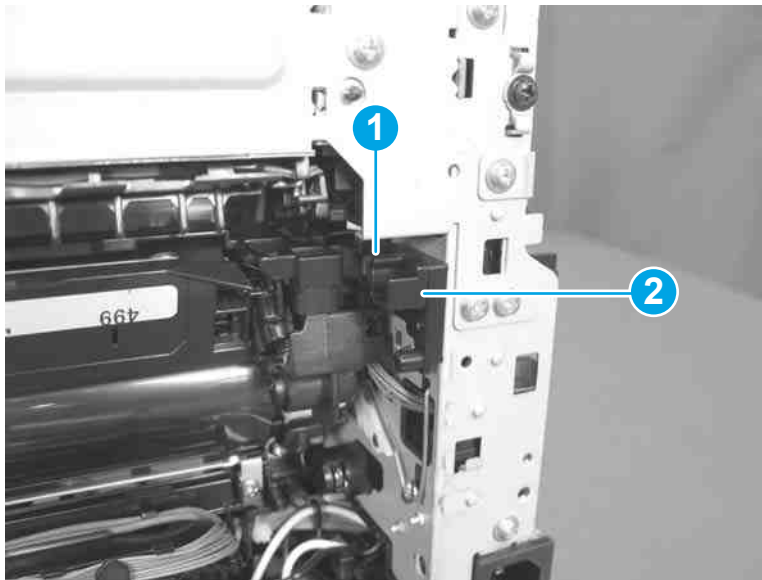
8. Release two tabs (callout 1), and remove the spring cover (callout 2).

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



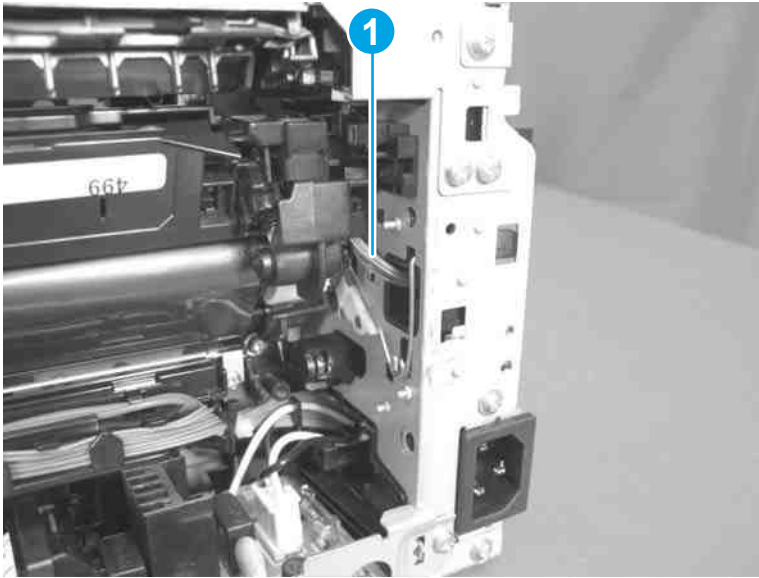
9. Release one tab (callout 1), and remove the rear door arm (callout 2) on the right side.

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)

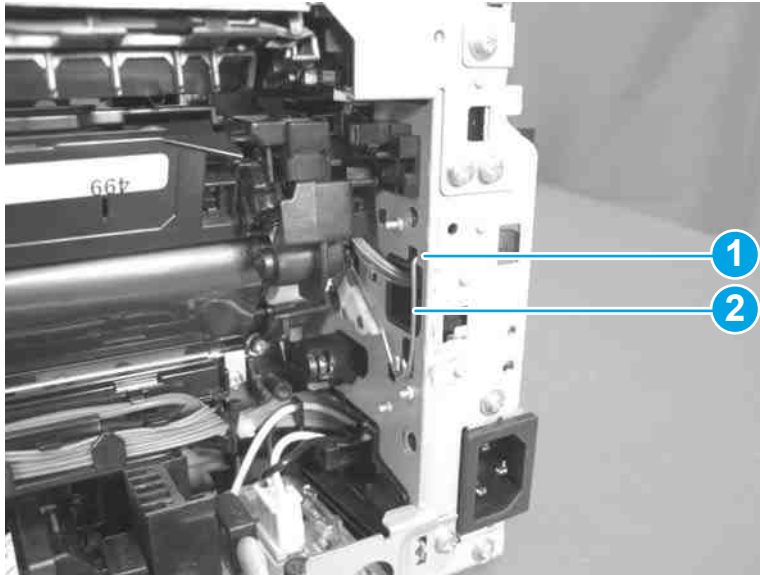
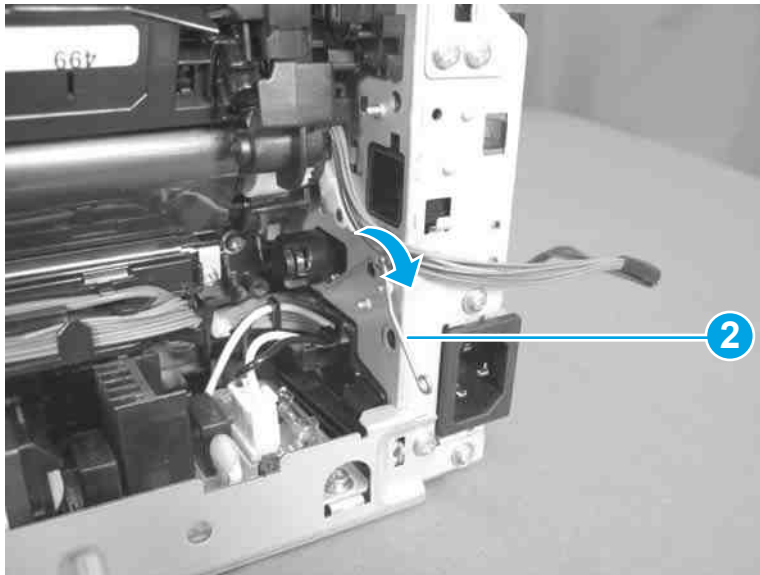


Figure 1-98 Remove the ITB assembly (14 of 17)



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)

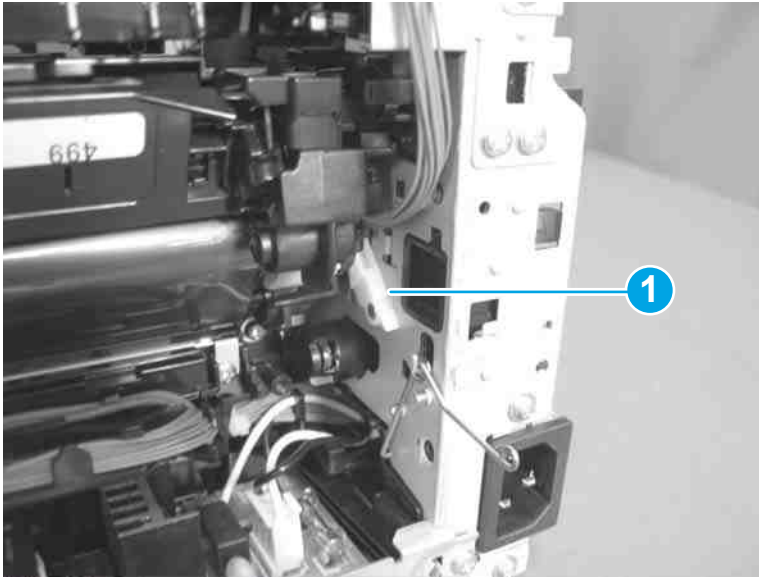
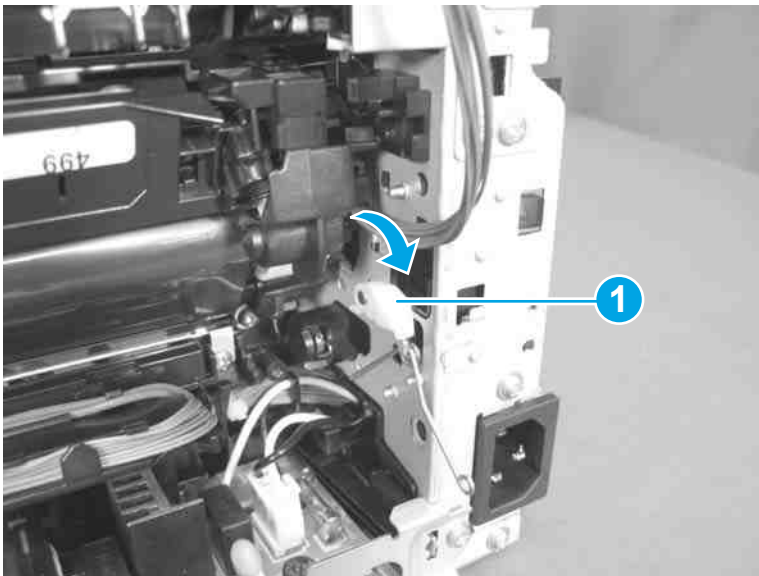


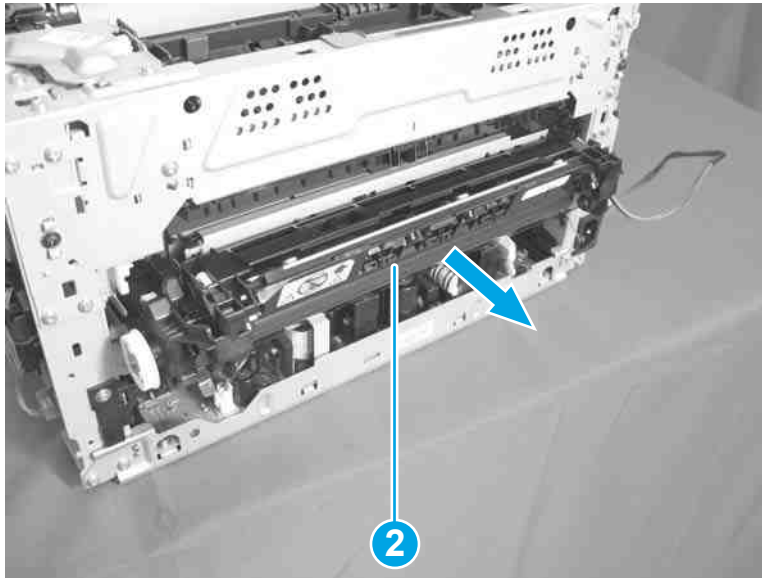
Figure 1-100 Remove the ITB assembly (16 of 17)



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.

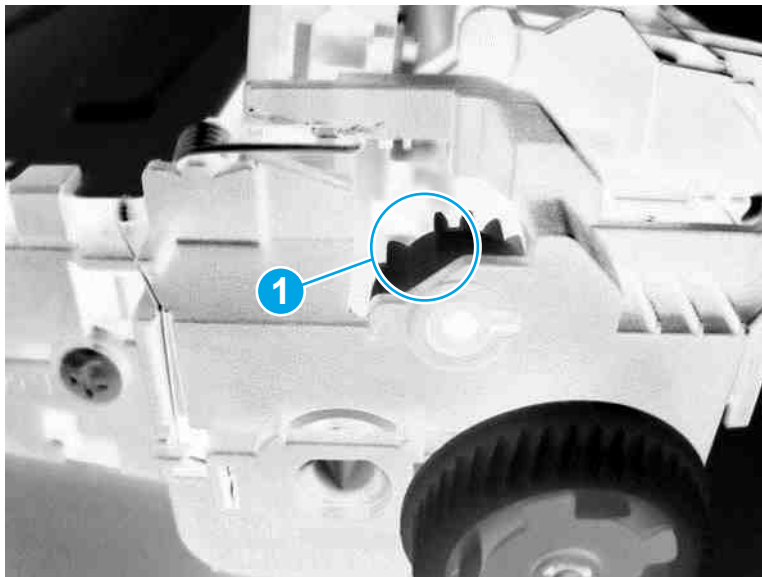
Figure 1-101 Remove the ITB assembly (17 of 17)



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.

Paper pickup roller

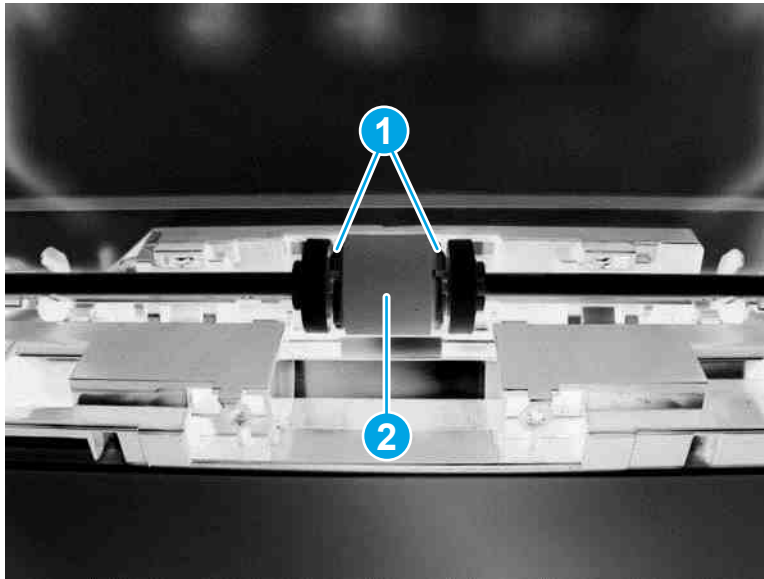
Remove the following components:

- 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.


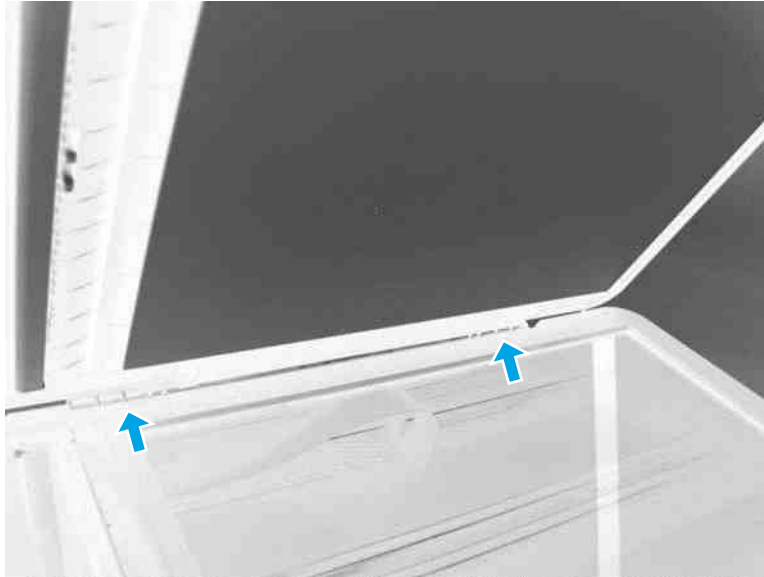
 **NOTE:** This step requires some force, but it is easier to first tilt the scanner lid or document feeder forward.


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

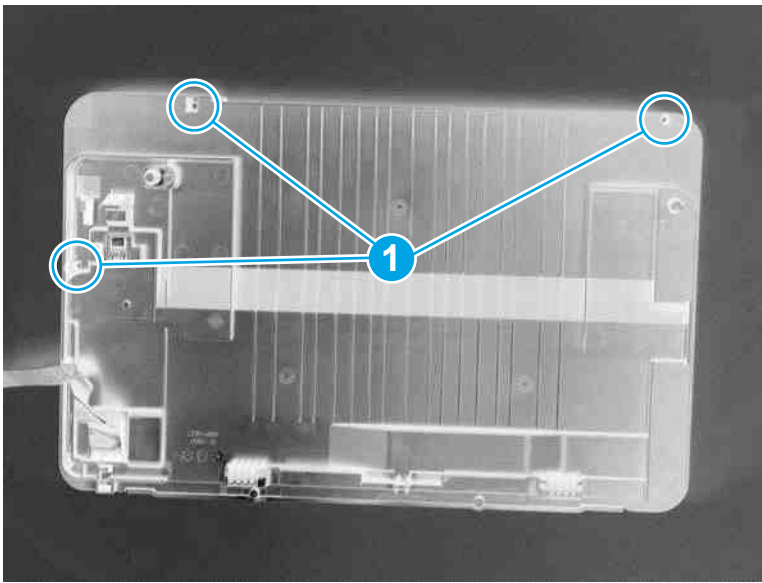
 **NOTE:** The photos in the following procedure are of a model that has a document feeder. Other models might look slightly different, but the procedure is the same.

 **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.

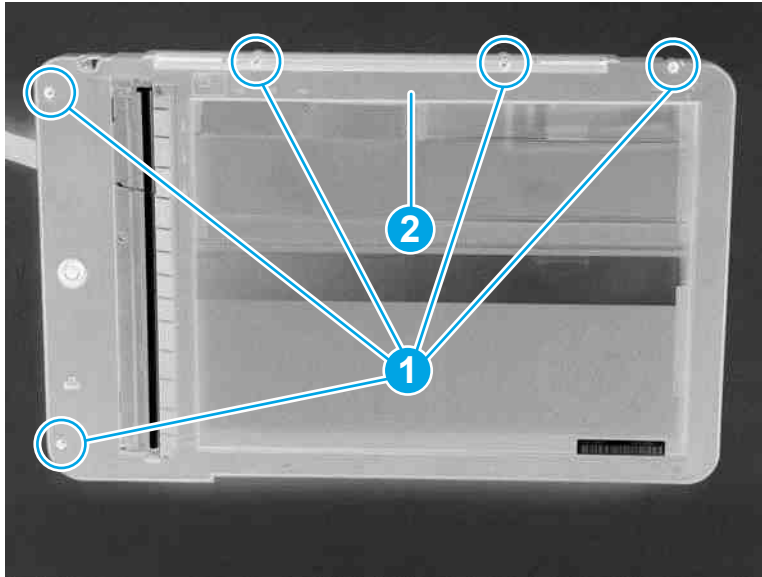
1. Place the scan assembly glass-side-down, and remove three Torx T9 screws (callout 1).

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

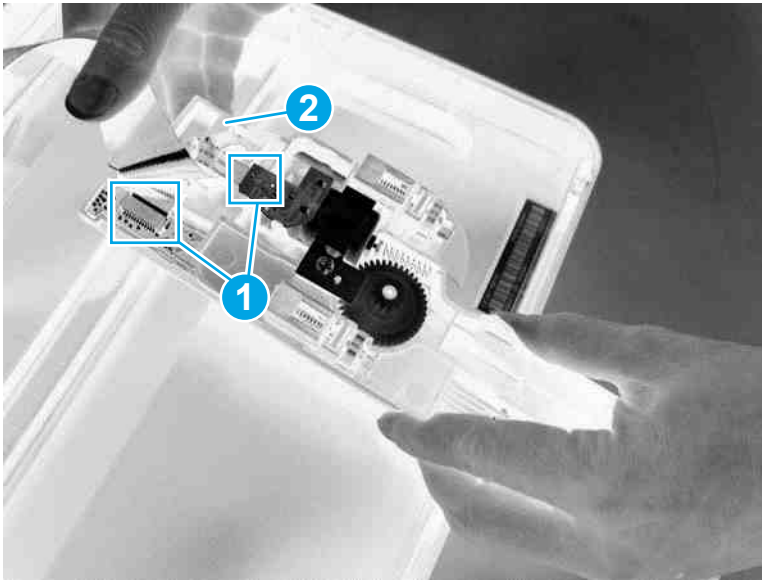
1. Lift the scan drive system out of the scanner, and turn it over.



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.

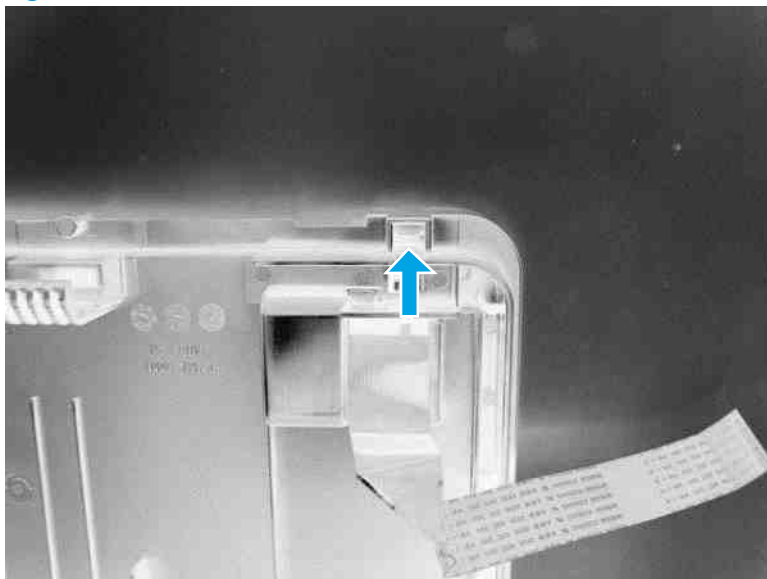
 **CAUTION:** Perform these procedures in a dust-free environment.

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

Remove the scan FFC cable

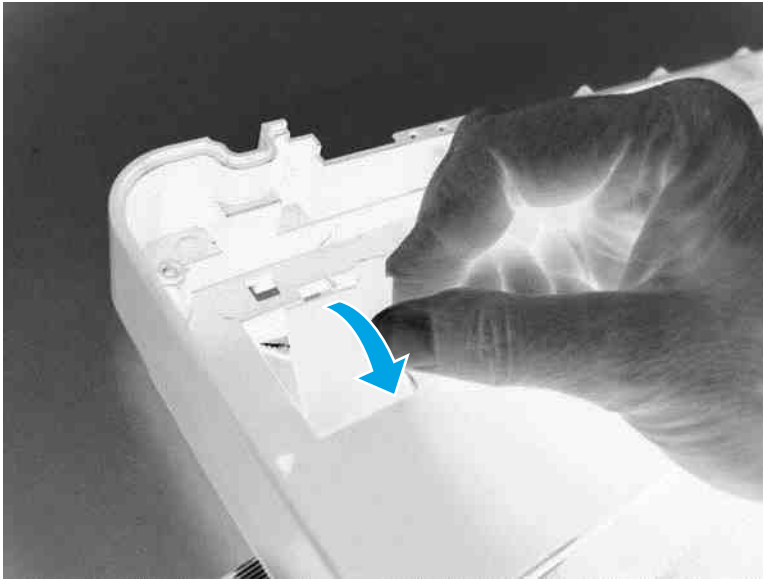
1. From the bottom of the scan assembly, push the tab on the FFC cover through the opening.

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



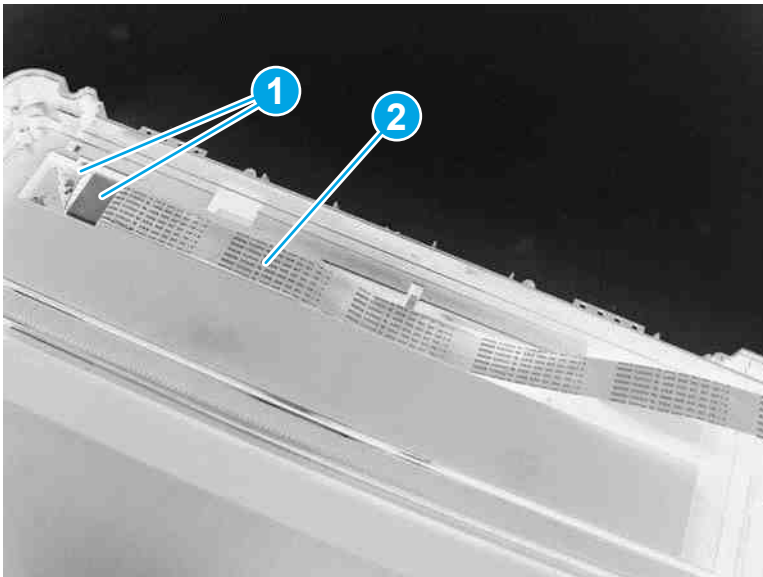
2. Pull the FFC cover off of the FFC.

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:

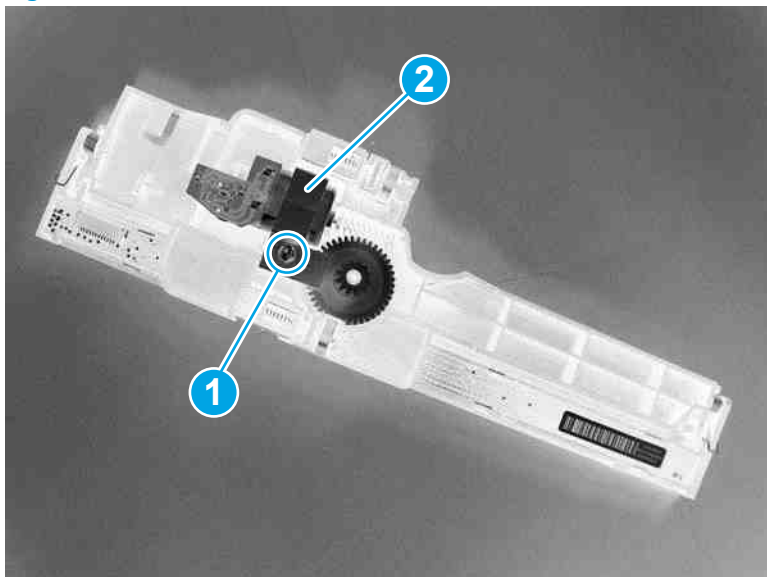
- Scan bezel. See [Scan bezel on page 82](#).
- Scan drive system. See [Scan drive system on page 84](#).

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

Remove the scan motor

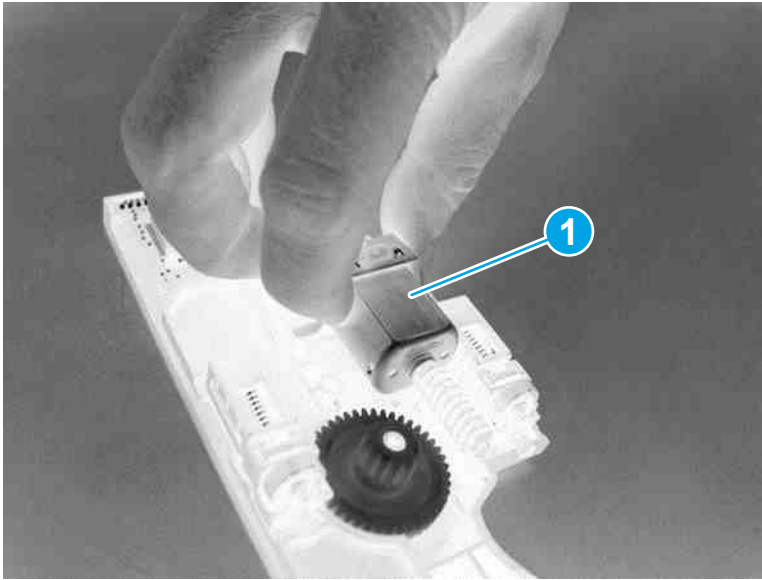
1. On the bottom of the scan drive system, remove one Torx T10 screw (callout 1), and lift off the metal bracket (callout 2).

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)




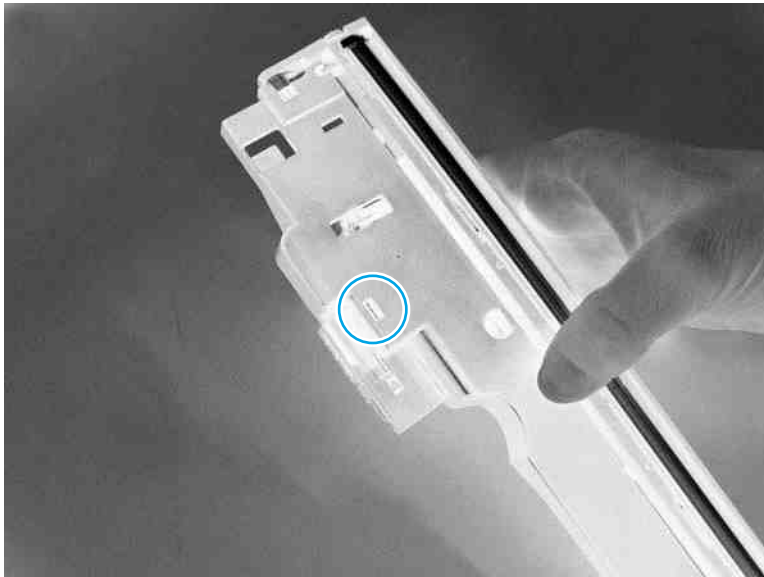
 **Reinstallation tip** When reinstalling the scan motor, position the metal bracket so the tab is visible in the notch on the opposite side of the scan drive system.

Figure 1-126 Reinstall the scan motor



Scanner spring assembly

Before proceeding, remove the following components:

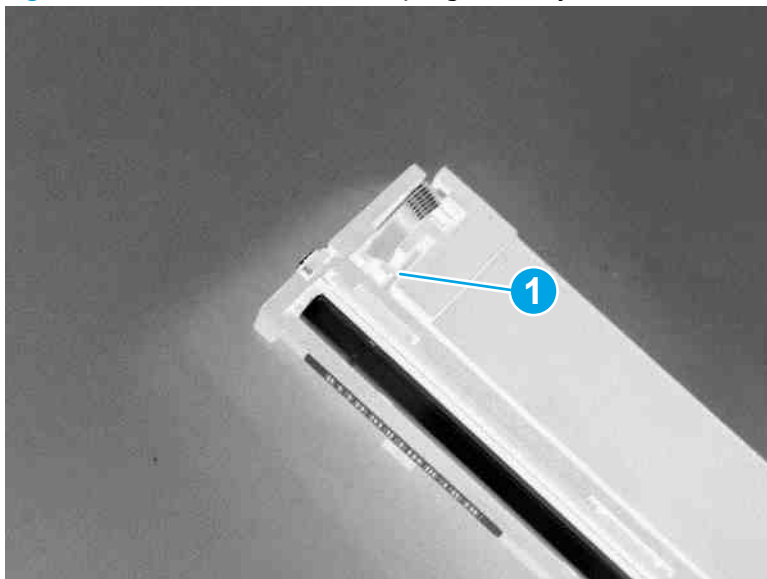
- Scan bezel. See [Scan bezel on page 82](#).
- Scan drive system. See [Scan drive system on page 84](#).

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

Remove the scanner spring assembly

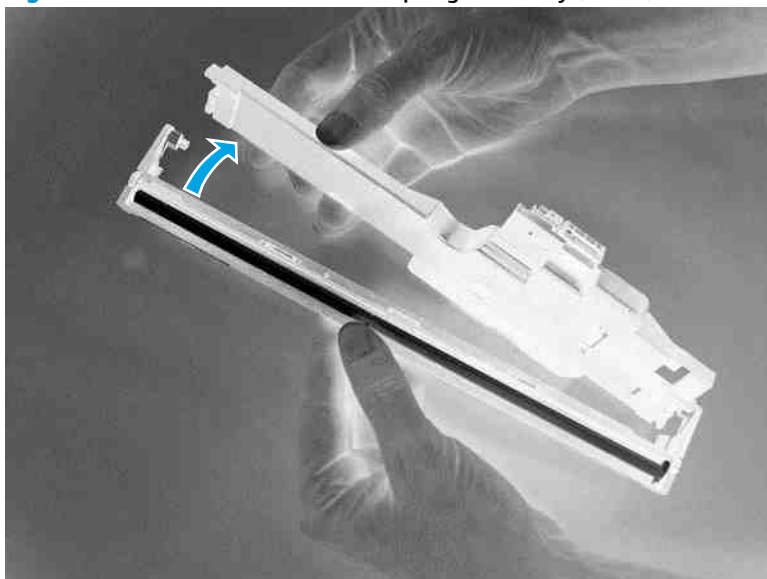
1. Release one tab (callout 1).

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



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

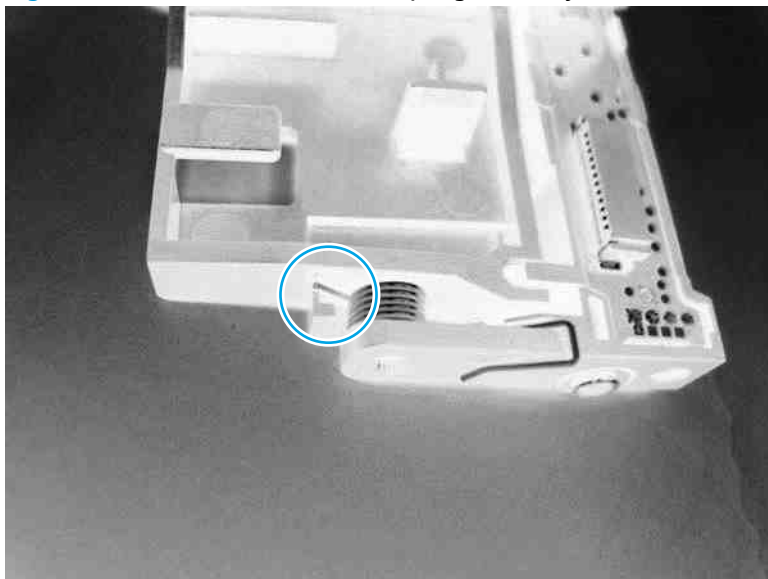
Figure 1-128 Remove the scanner spring assembly (2 of 2)





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



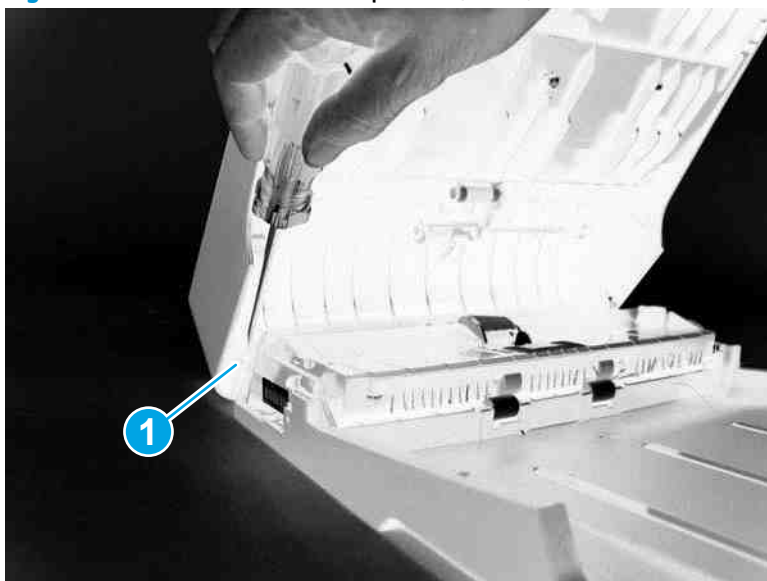
Document feeder components

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

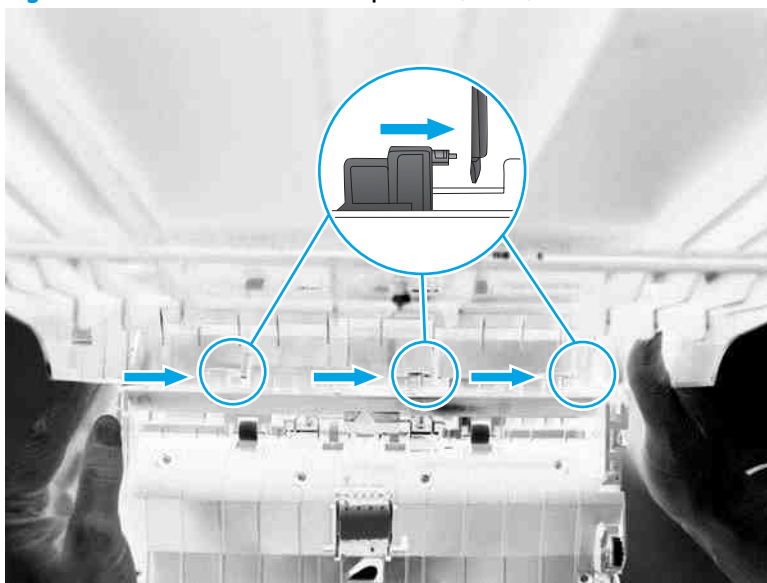
1. Open the ADF top cover. Use a small flat blade screwdriver to release one hinge pin (callout 1), and then fully open the ADF cover.

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

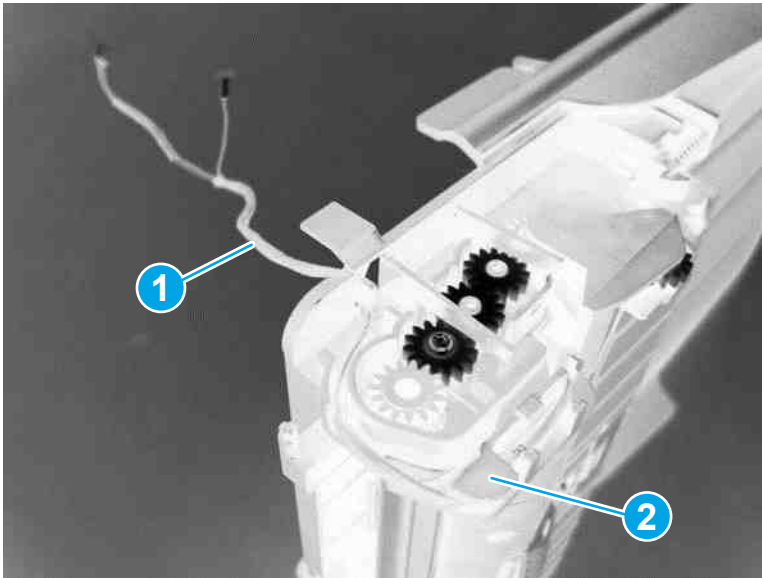
Before proceeding, remove the following components:

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

Remove the ADF core

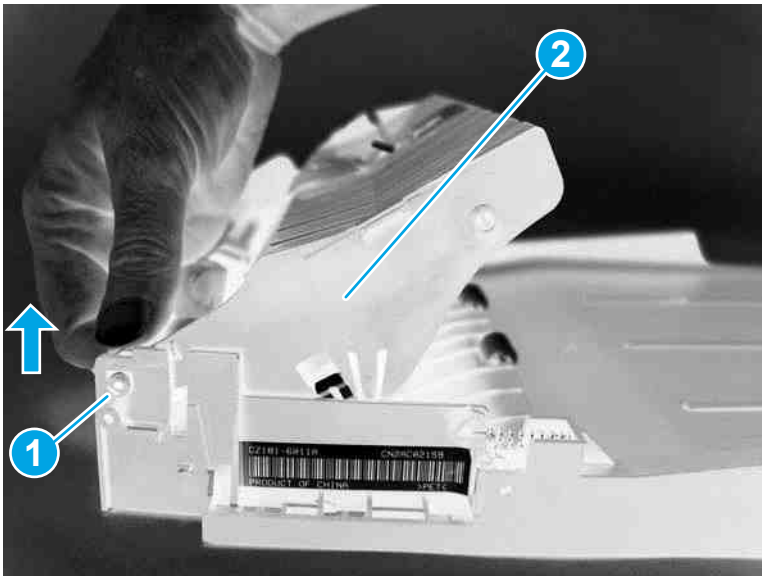
1. At the rear of the ADF core, carefully feed the wire harness (callout 1) through the slot in the guides (callout 2).

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)

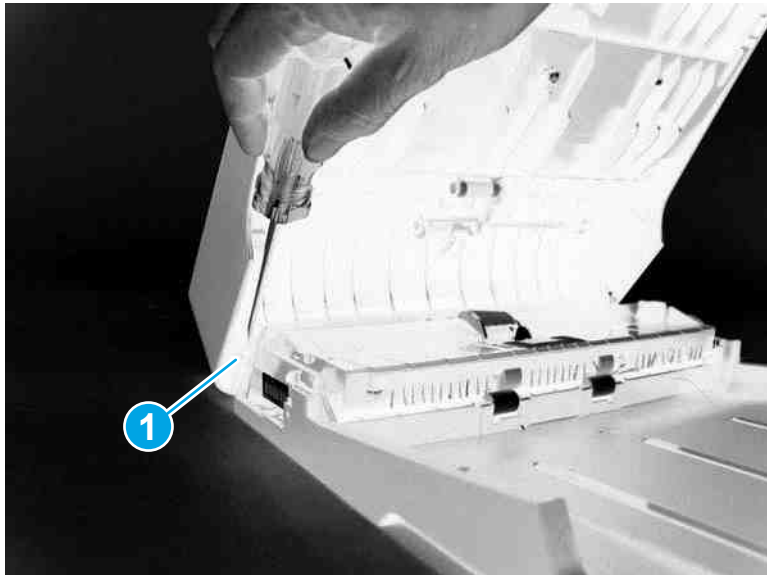


ADF separation pad

Remove the ADF separation pad

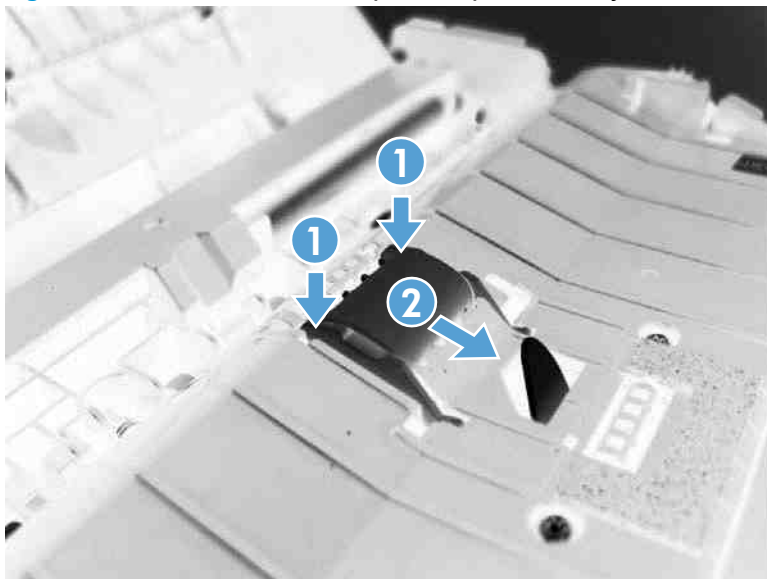
1. Open the ADF top cover. Use a small flat blade screwdriver to release one hinge pin (callout 1), and then fully open the ADF cover.

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



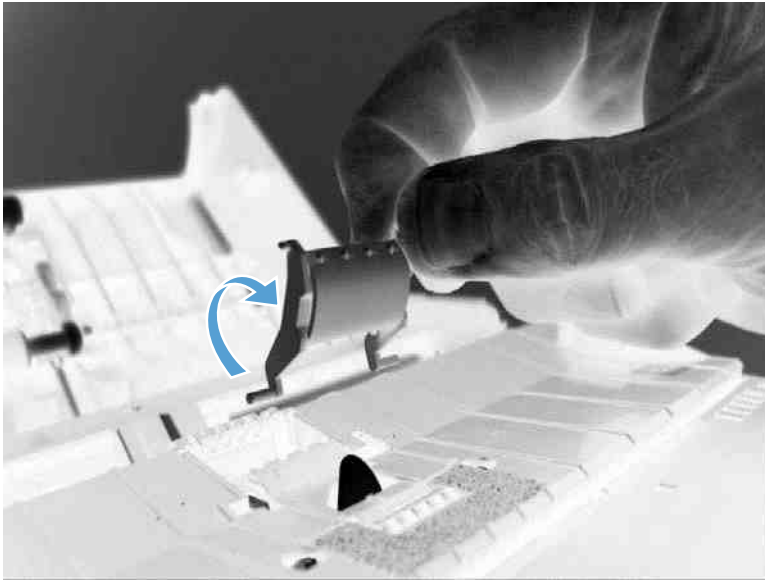
2. Push down on the edges of the assembly (callout 1), and then move it toward the right side of the product (callout 2).

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



3. Remove the assembly.

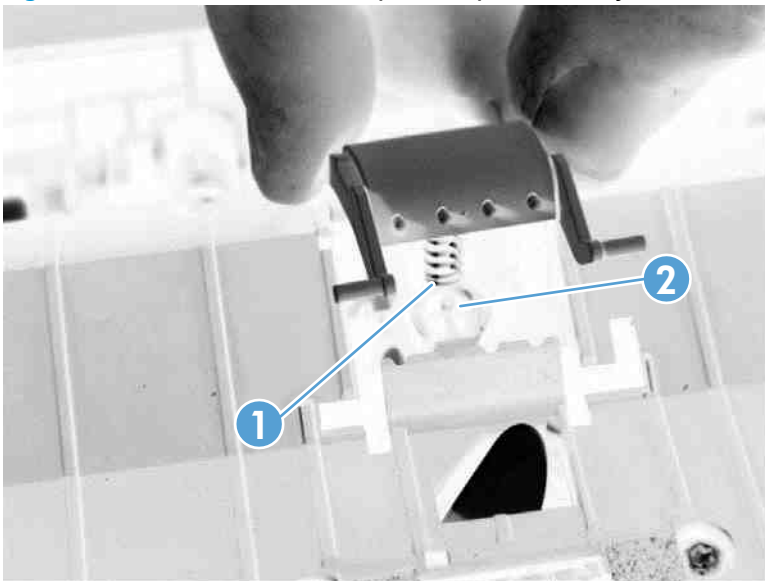
Figure 1-136 Remove the ADF separation pad assembly (3 of 3)



Reinstall the ADF separation pad assembly

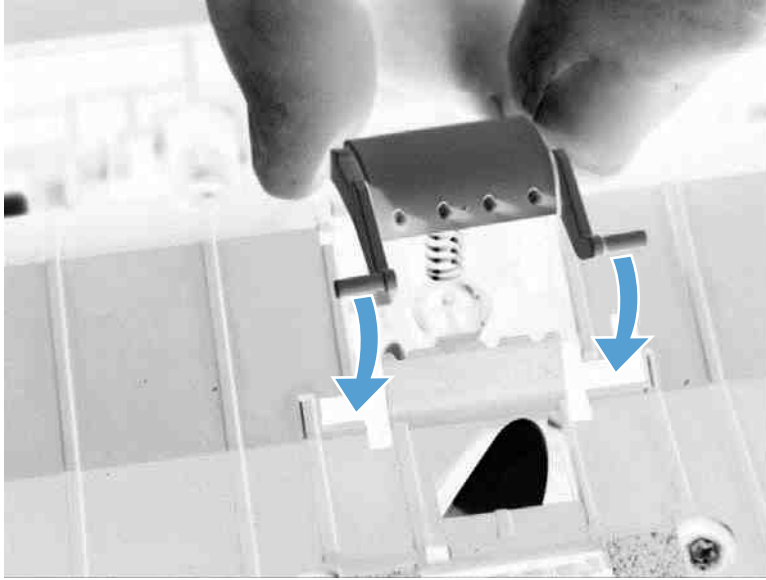
1. Place the base of the spring (callout 1) on the pedestal (callout 2).

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



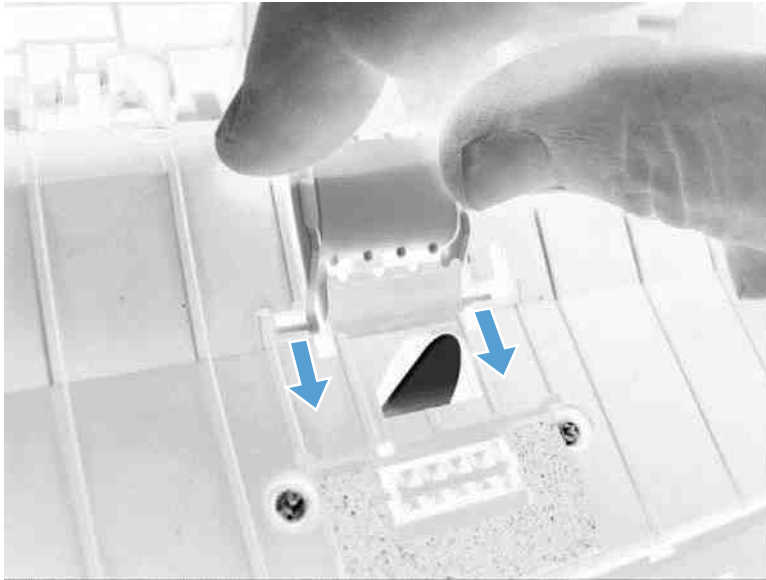
2. Place the assembly hinge pins in the slots in the ADF core.

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.


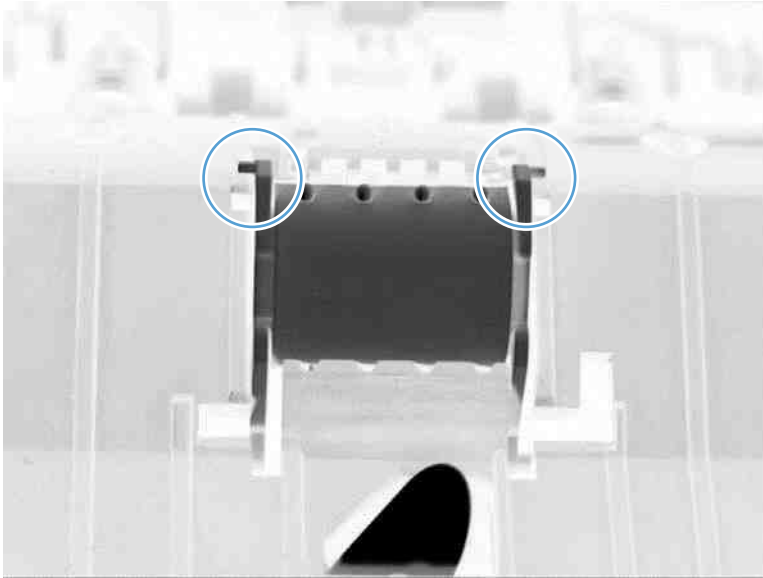

 **NOTE:** When the assembly is correctly installed, these pins are engaged in a slot in the ADF core, and the spring underneath the assembly keeps the assembly in the raised position.

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.


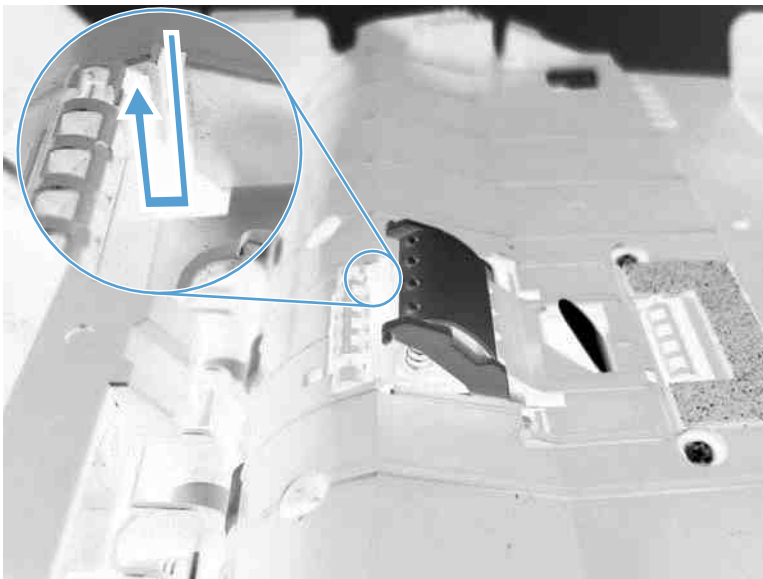
 **TIP:** Slightly tip the assembly and engage one pin, and then tip the assembly in the opposite direction to engage the second pin.

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



ADF inner tray

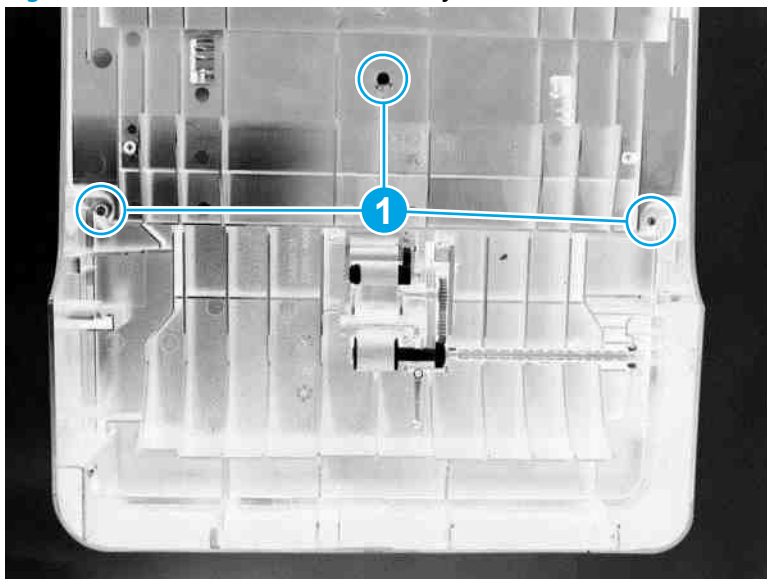
Before proceeding, remove the following components:

- 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

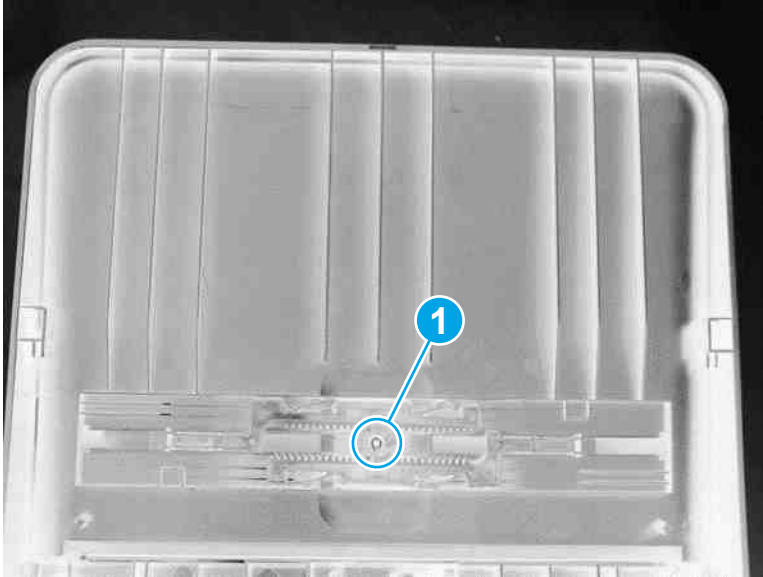
Before proceeding, remove the following components:

- 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

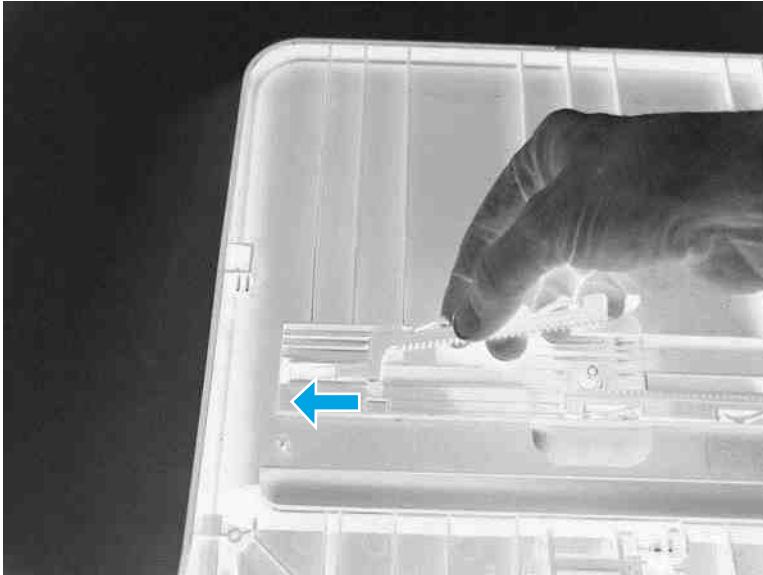
1. Pull the input-guide gear (callout 1) straight up to remove it

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



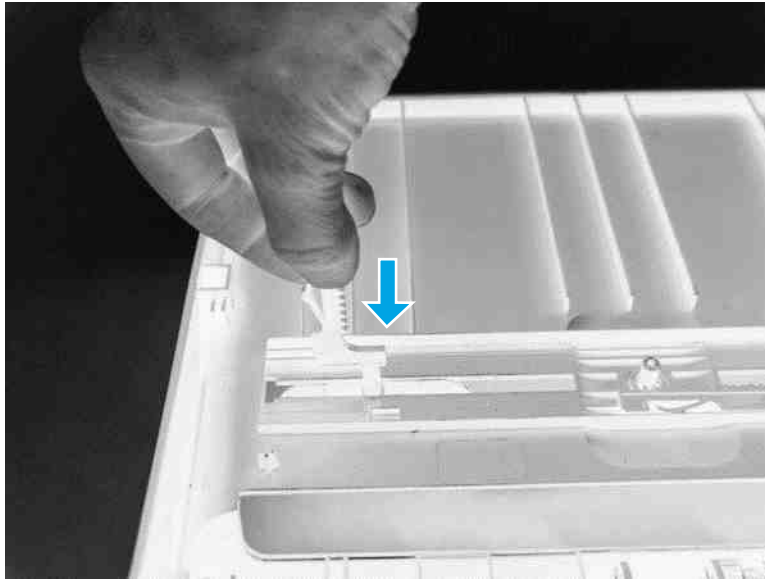
2. Slide each ADF input guide all the way outward.

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

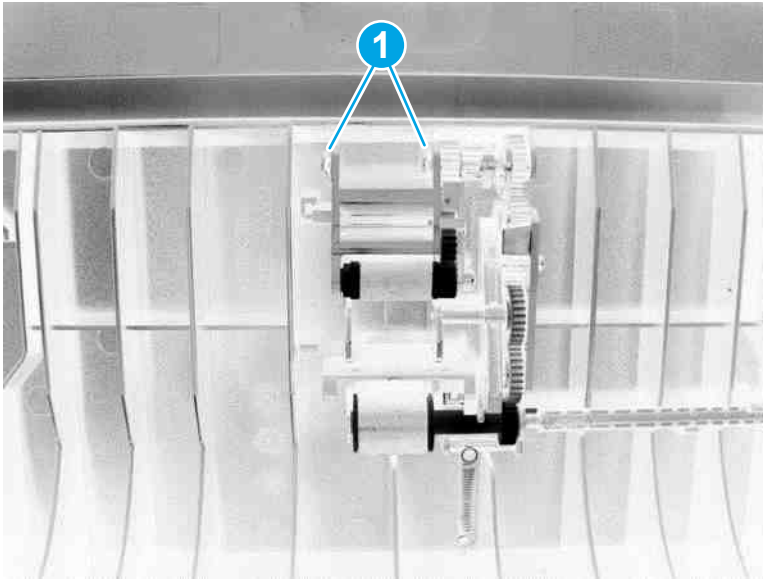
Before proceeding, remove the following components:

- 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

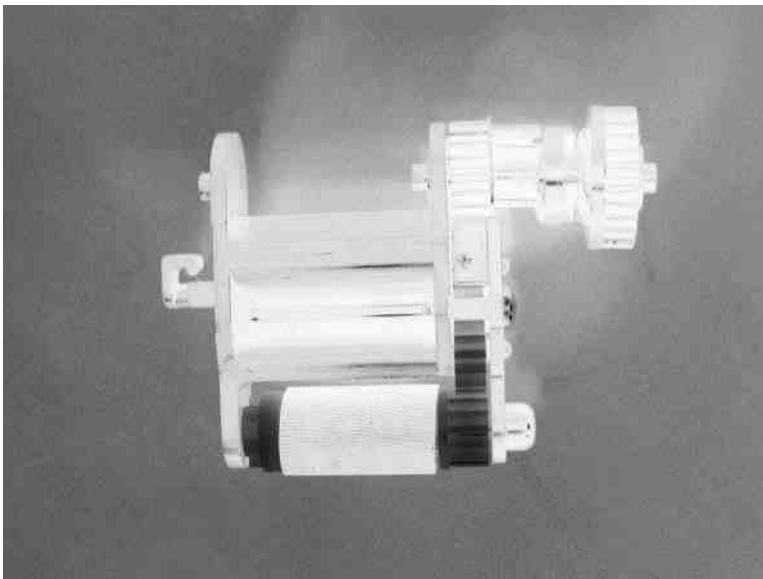
1. Release two tabs (callout 1).

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)



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

