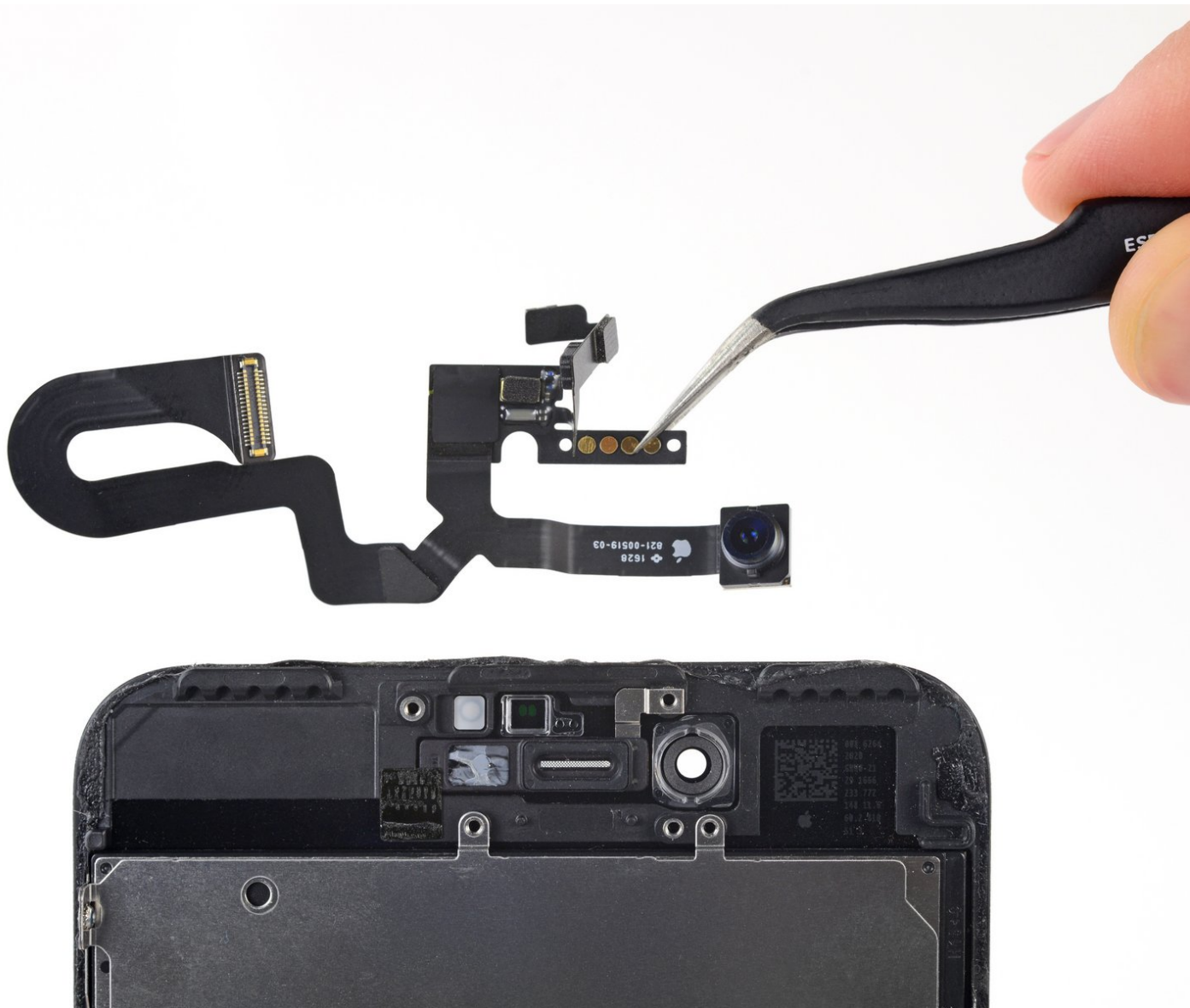




iPhone 7 Plus Front Camera and Sensor Cable Replacement

Replace the selfie camera and cable assembly, which also includes a microphone and proximity/ambient light sensors, on the iPhone 7 Plus.

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INTRODUCTION

Use this guide to replace a faulty front camera on your iPhone 7 Plus. This camera is part of a larger assembly containing a microphone and proximity/ambient light sensors, all of which is replaced as a single unit.



TOOLS:

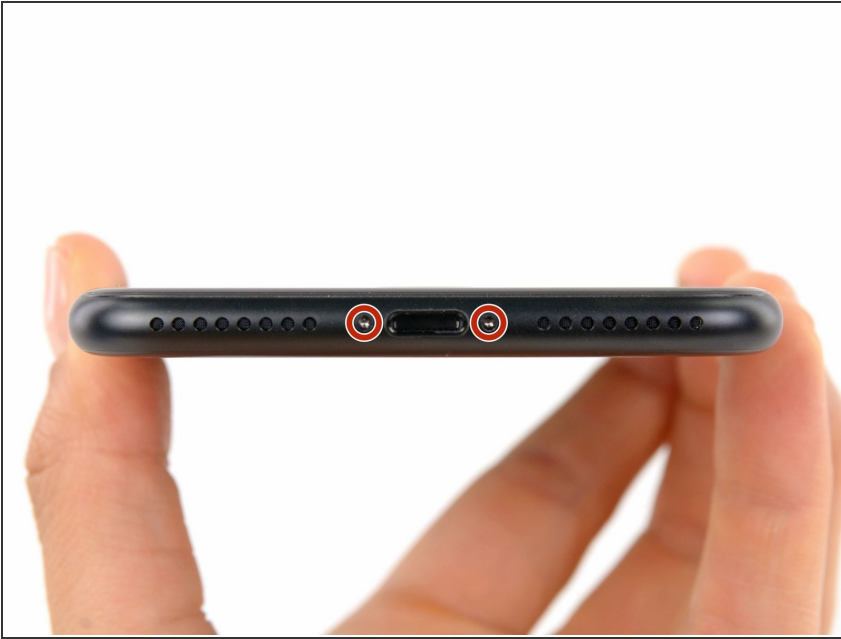
- [P2 Pentalobe Screwdriver iPhone](#) (1)
- [iOpener](#) (1)
- [Suction Handle](#) (1)
- [iFixit Opening Picks set of 6](#) (1)
- [Spudger](#) (1)
- [Tri-point Y000 Screwdriver Bit](#) (1)
- [Tweezers](#) (1)
- [Phillips #000 Screwdriver](#) (1)
- [iFixit Opening Tools](#) (1)



PARTS:

- [iPhone 7 Plus Front Camera and Sensor Cable](#) (1)
- [iPhone 7 Plus Rear Camera Connector Bracket](#) (1)
- [iPhone 7 Plus Display Assembly Adhesive](#) (1)

Step 1 — Pentalobe Screws



- ⚠ Before you begin, discharge your iPhone battery below 25%. A charged lithium-ion battery can catch fire and/or explode if accidentally punctured.
- Power off your iPhone before beginning disassembly.
- Remove the two 3.4 mm pentalobe screws at the bottom edge of the iPhone.
- ⓘ Opening the iPhone's display will compromise its waterproof seals. Have [replacement seals](#) ready before you proceed past this step, or take care to avoid liquid exposure if you reassemble your iPhone without replacing the seals.

Step 2 — Opening Procedure



- ⓘ Heating the lower edge of the iPhone will help soften the adhesive securing the display, making it easier to open.
- Use a hairdryer or [prepare an iOpener](#) and apply it to the lower edge of the iPhone for about a minute in order to soften up the adhesive underneath.

Step 3



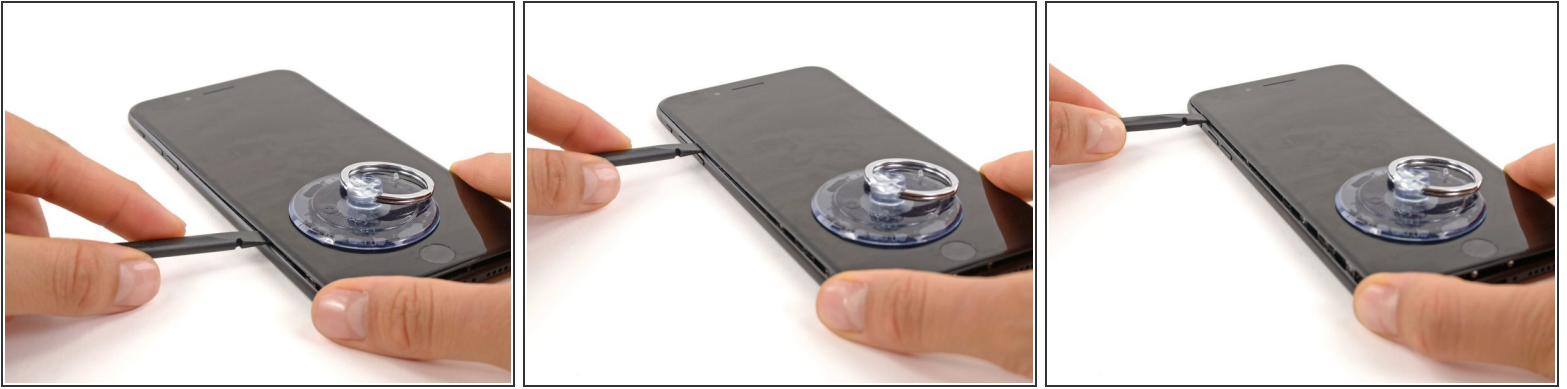
- Apply a suction cup to the lower half of the front panel, just above the home button.
 - ⓘ Be sure the suction cup does not overlap with the home button, as this will prevent a seal from forming between the suction cup and front glass.
 - ⓘ If your display is badly cracked, [covering it with a layer of clear packing tape](#) may allow the suction cup to adhere. Alternatively, very strong tape may be used instead of the suction cup. If all else fails, you can superglue the suction cup to the broken screen.

Step 4



- Pull up on the suction cup with firm, constant pressure to create a slight gap between the front panel and rear case.
- Insert the flat end of a spudger into the gap.
 - ⓘ The watertight adhesive holding the display in place is very strong; creating this initial gap takes a significant amount of force. If you're having a hard time opening a gap, rock the screen up and down to weaken the adhesive until you can fit a spudger inside.
- While pulling up on the suction cup, twist the spudger to widen the opening between the screen and rear case.

Step 5



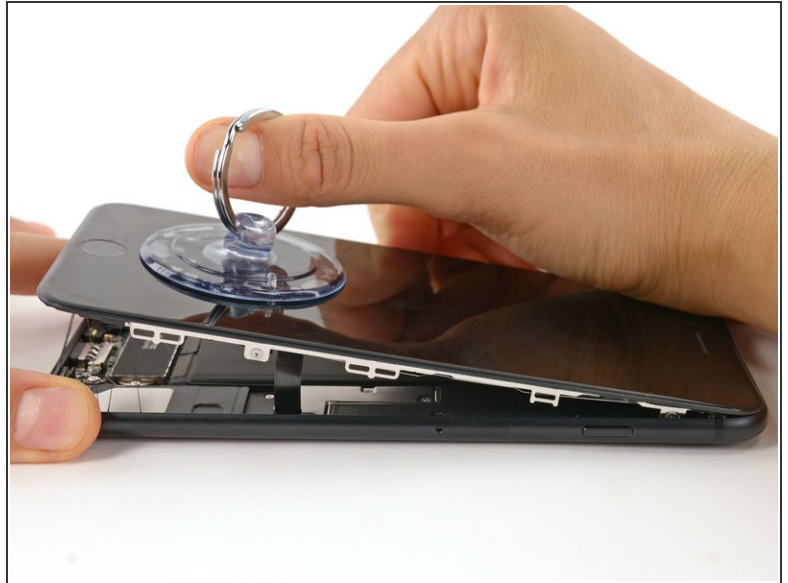
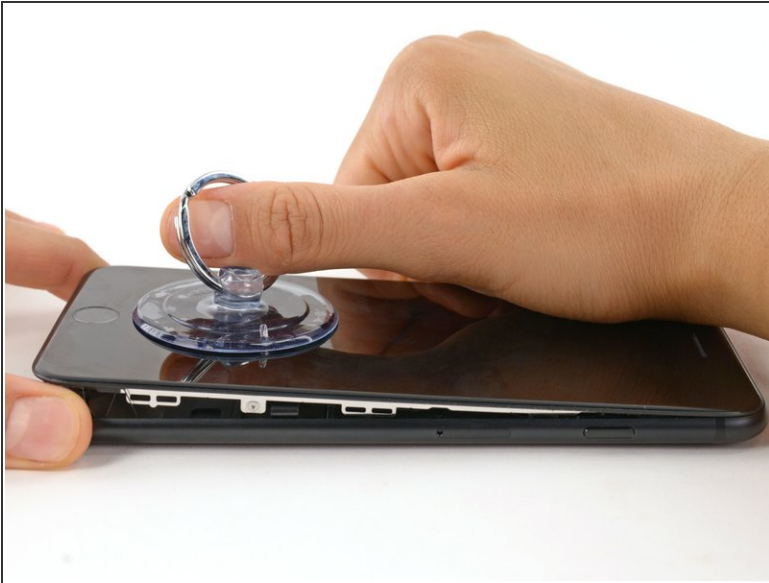
- Insert the flat end of the spudger between the front panel and the rear case at the lower left edge of the iPhone.
 - Slide the spudger up the left edge of the phone starting at the lower edge and moving towards the volume control buttons and silent switch, breaking up the adhesive holding the display in place.
- ⚠ Do not try to pry the top edge of the display away from the rear case, as it is held in place by plastic clips that may break.

Step 6




- Remove the spudger from the left side of the phone and insert the flat end into the bottom right corner.
- Slide the spudger up the right edge of the phone to the top corner, breaking up the adhesive holding the display in place.

Step 7



- Pull up on the suction cup to lift up the display and open the iPhone.

 **Do not raise the display more than 10°** as there are delicate ribbon cables along the right edge of the device connecting the display to the logic board.

Step 8



- Pull up on the small nub on the suction cup to remove it from the front panel.

Step 9



- Slide an opening pick underneath the display along the top edge of the phone to loosen the last of the adhesive.

Step 10



- Pull the display assembly slightly away from the top edge of the phone to disengage the clips holding it to the rear case.
- Open the iPhone by swinging the display up from the left side, like the back cover of a book.
 - ⚠ Don't try to fully separate the display yet, as several fragile ribbon cables still connect it to the iPhone's logic board.

Step 11 — Battery Disconnection



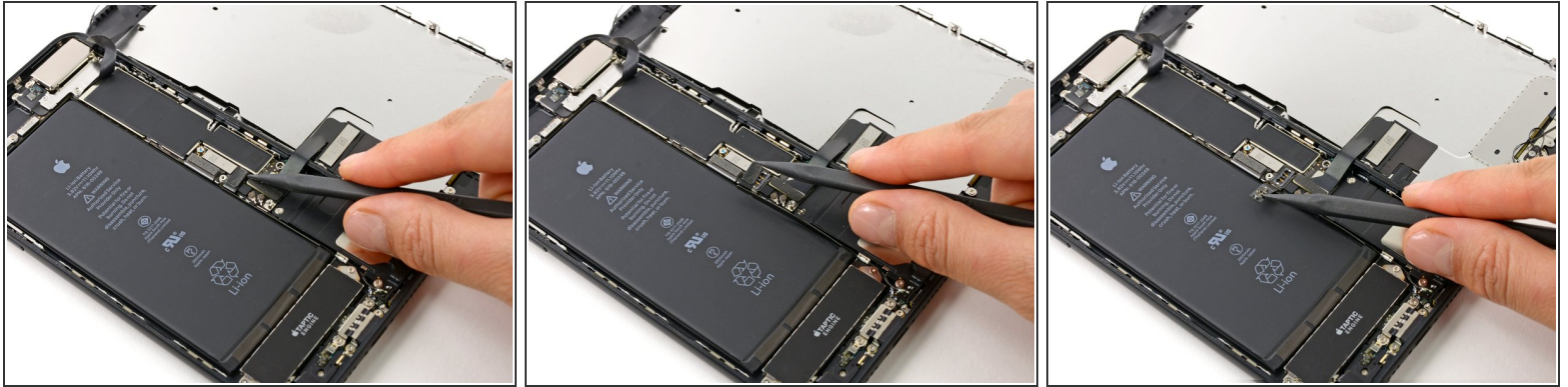
- Remove the following four tri-point Y000 screws securing the lower display cable bracket to the logic board:
 - Three 1.2 mm screws
 - One 2.6 mm screw

Step 12



- Remove the lower display cable bracket.


Step 13





- Use the point of a spudger to lift the battery connector out of its socket on the logic board.
- ⓘ Bend the connector cable up slightly to prevent it from making contact with the socket and providing power to the phone.

Step 14 — Display Assembly



 Make sure the battery is disconnected before you disconnect or reconnect the cables in this step.

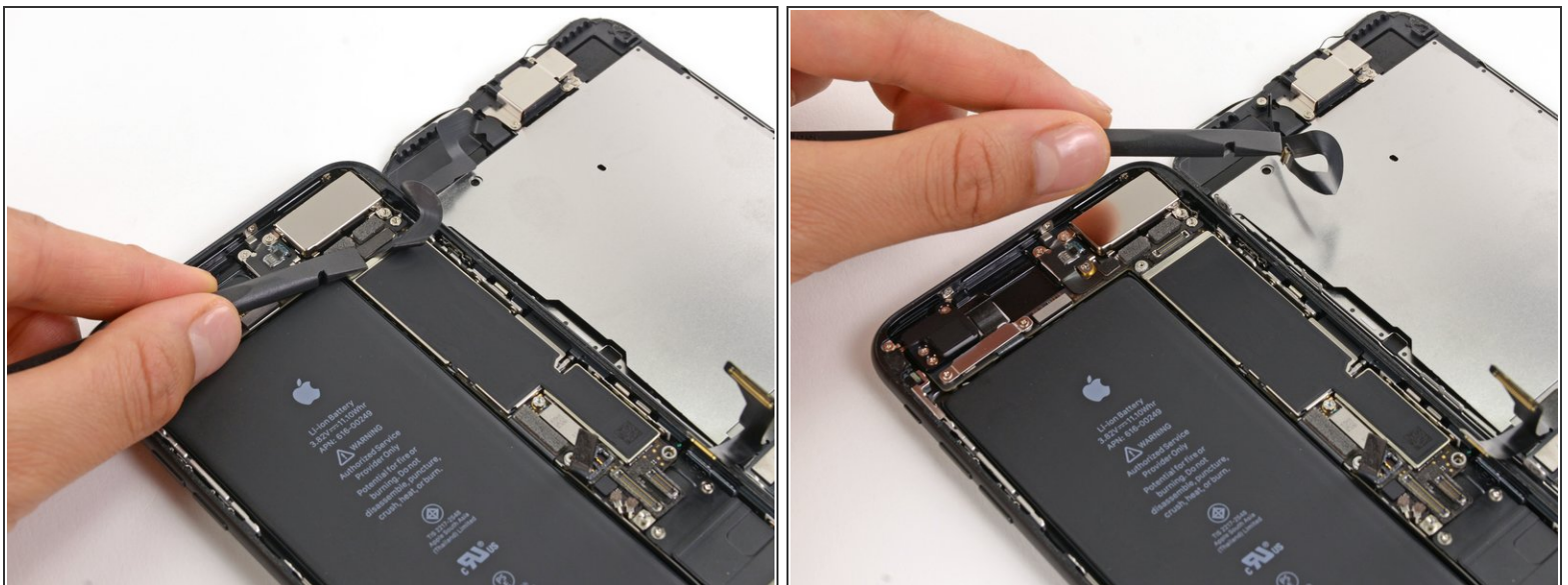
- Use the flat end of a spudger or a fingernail to disconnect the two lower display connectors by prying them straight up from their sockets on the logic board.
-  To re-attach press connectors, press down on one end until it clicks into place, then repeat on the other end. Do not press down on the middle. If the connector is even slightly misaligned, the connector can bend, causing permanent damage.
-  If you have a blank screen, white lines on the display, or partial or complete lack of touch response after reassembling your phone, try disconnecting and carefully reconnecting both of these cables and make sure they are fully seated.

Step 15



- Remove the three tri-point Y000 screws securing the bracket over the front panel sensor assembly connector:
 - One 1.3 mm screw
 - Two 1.0 mm screws
- Remove the bracket.

Step 16



- Disconnect the front panel sensor assembly connector from its socket on the logic board.
- ✦ This press connector should also be reconnected one end at a time to minimize the risk of bending.

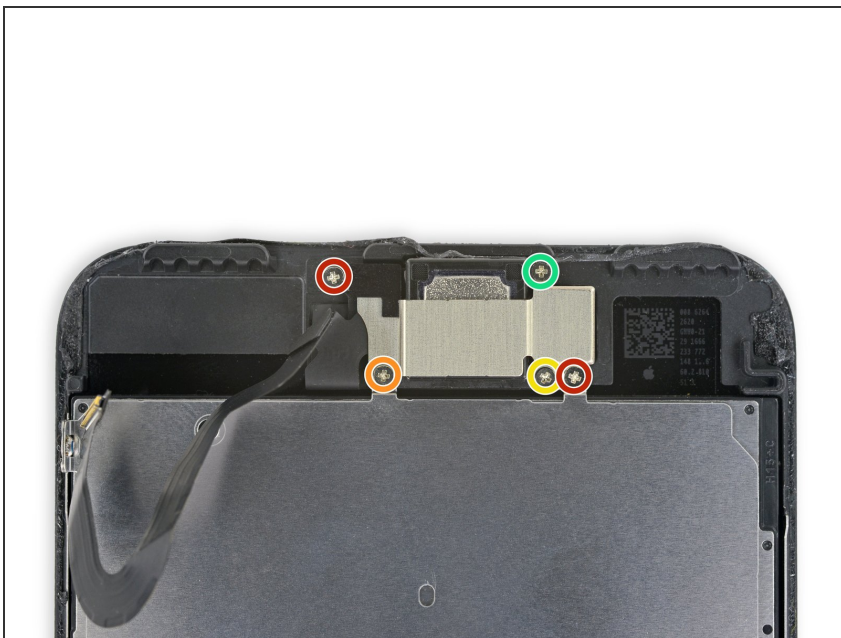
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Step 17



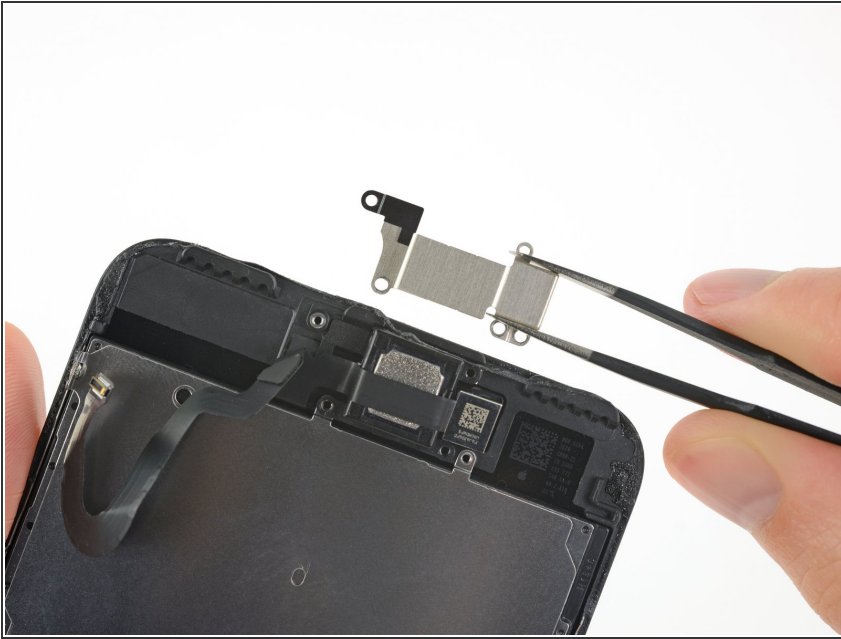
- Remove the display assembly.
- ☑ During reassembly, pause here if you wish to [replace the adhesive around the edges of the display](#).

Step 18 — Earpiece Speaker



- Remove the five Phillips screws securing the earpiece speaker bracket:
 - Two 1.8 mm screws
 - One 2.3 mm screw
 - One 2.4 mm screw
 - One 2.8 mm screw

Step 19



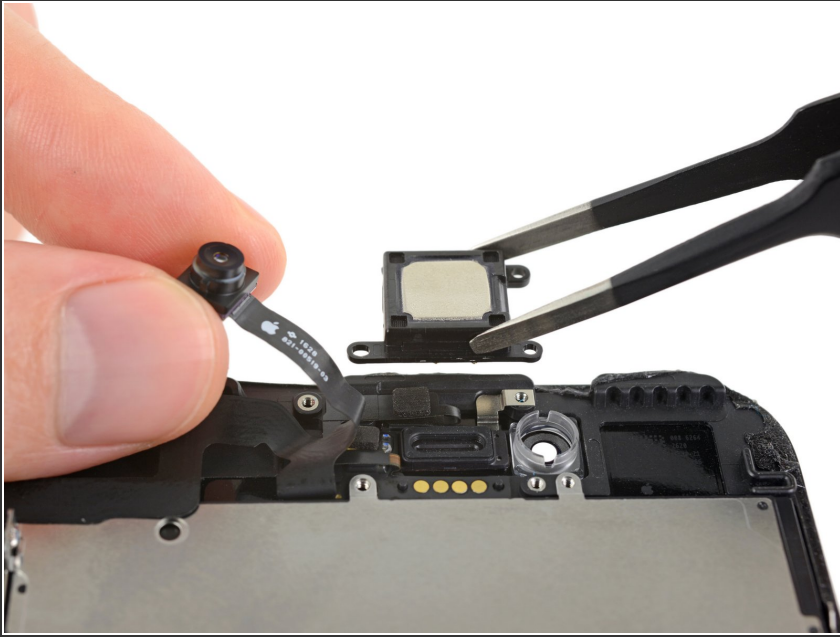
- Remove the earpiece speaker bracket.

Step 20



- Use the flat end of a spudger to lift the front-facing camera from its housing.
- Gently bend the camera ribbon cable to the side to clear the way to the earpiece speaker underneath.

Step 21



- Remove the earpiece speaker.
- ⚠ Don't touch the four spring contacts with your fingers—your skin oils may cause a malfunction. If accidentally touched, clean the contacts gently with isopropyl alcohol (90% or higher).


Step 22 — Front Camera and Sensor Cable



- Gently fold the camera and attached ribbon cable toward the bottom of the iPhone to allow access to the components underneath.

Step 23



 The sensors on this step are fragile. To increase your chances of removing them without damage, use your iOpener or hair dryer to apply heat to the upper portion of the display before you proceed. Alternatively, add a drop or two of isopropyl alcohol and let it penetrate under the sensors before you pry them up.

- Slide a spudger under the ambient light sensor flex cable, and lift the sensor out of its housing.

Step 24



- Slide the tip of a spudger underneath the proximity sensor flex cable, and lift the sensor out of its housing.

Step 25



- Insert the sharp edge of an iFixit opening tool underneath the camera assembly's flex cable, on the opposite side from the front-facing camera.
- ⚠ If necessary, use an iOpener or hair dryer to heat the top portion of the display and soften the adhesive securing the flex cable.
- Pry up to separate the edge of the flex cable from the back of the display.

Step 26



- Insert the point of a spudger underneath the same portion of the flex cable that you separated in the previous step.
- Continue separating the remainder of the flex cable, pushing the spudger toward the row of circular gold earpiece speaker contacts.

Step 27



- Continue using your spudger to carefully separate the last of the flex cable from the back of the display.

Step 28



- Remove the front camera and sensor cable assembly.
- A piece of black double-sided insulating tape lies between the display and three rows of copper contacts on the back of the camera/sensor cable. It may remain stuck to the display, or it may come off with the cable.
- ☑ When reassembling, verify the tape is in place, or else cover the contacts on the back of the cable with an appropriate tape, such as Kapton tape.

To reassemble your device, follow these instructions in reverse order.