



iPhone 8 Plus LCD and Digitizer Replacement

Fix a broken screen by replacing just the bare front panel, a.k.a. LCD and digitizer assembly, in an iPhone 8 Plus.

Written By: Jeff Suovanen



INTRODUCTION

For an easier repair, use our [fix kit](#) and follow [this shorter guide](#) to replace your iPhone's entire screen.

For more advanced fixers, this guide will help you replace *only* the iPhone 8 Plus LCD and digitizer assembly (a.k.a. the bare “front panel”). This requires you to transfer several components from your original screen to the new one before installing it—including the [front-facing camera](#), [earpiece speaker](#), LCD shield plate, and home button assembly.

For all screen/display repairs, **it's important to carefully transfer the original home/Touch ID sensor onto the new display in order for it to function.** The solid-state home button is paired to its original logic board by Apple, so replacing it will render it unusable.

Note: If your iPhone's auto brightness feature does not work properly after your screen repair, make sure your iPhone is updated to [iOS 12](#). True Tone functionality is disabled after a screen replacement, even when using an original Apple screen.

TOOLS:

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

PARTS:

- iPhone 8 Plus LCD and Digitizer (1)
- iPhone 8 Plus Display Assembly Adhesive (1)
- iPhone 8 Plus LCD and Digitizer - Choice (1)
- iPhone 8 Plus Display Shield Plate Screw Set (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 3.5 mm pentalobe screws from the bottom edge of the iPhone.

i 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 — Taping Over The Display



- If your display glass is cracked, keep further breakage contained and prevent bodily harm during your repair by taping over the glass.
- Lay overlapping strips of clear packing tape over the iPhone's display until the whole face is covered.
- *(i)* This will keep glass shards contained and provide structural integrity when prying and lifting the display.

 Wear safety glasses to protect your eyes from any glass shaken free during the repair.

- If the broken glass makes it difficult to get a suction cup to stick in the next few steps, try folding a strong piece of tape (such as duct tape) into a handle and lifting the display with that instead.

Step 3 — Opening Procedure



ⓘ Heating the lower edge of the iPhone will help soften the adhesive securing the display, making it easier to open.

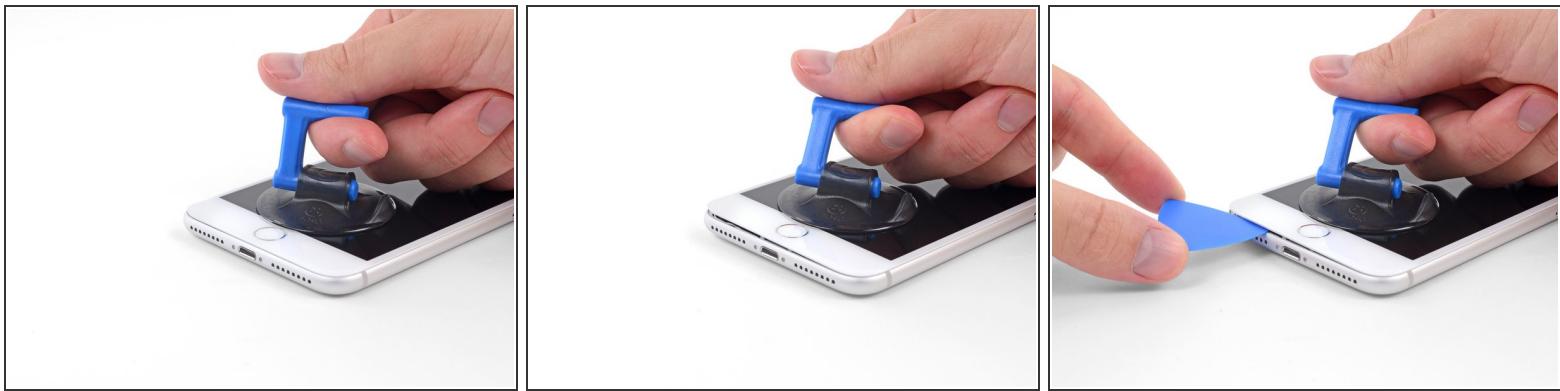
- Use a hairdryer or [prepare an iOpener](#) and apply it to the lower edge of the iPhone for about 90 seconds in order to soften up the adhesive underneath.

Step 4



- 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 5



- Pull up on the suction cup with firm, constant pressure to create a slight gap between the front panel and rear case.
- Insert an opening pick or other thin pry tool a few millimeters into the gap.
 - *(i)* 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, apply more heat, and gently rock the screen up and down to weaken the adhesive until you create enough of a gap to insert your tool.

Step 6



- Slide your pick around the corner and up the left edge of the phone, moving towards the volume control buttons and silent switch, breaking up the adhesive holding the display in place.
- Stop near the top left corner of the display.

Step 7



- Re-insert your tool at the lower right corner of the iPhone, and slide it around the corner and up the right side of the phone to separate the adhesive.

⚠ Don't insert the pick very far, or you may damage the display cables along this side of the iPhone. Insert it only a few millimeters, or about the width of the display bezel.

Step 8



- Gently pull up on the suction cup to lift up the bottom edge of the display.

⚠ **Do not raise the display more than 15°** or you'll risk straining or tearing the ribbon cables connecting the display.

Step 9



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

Step 10



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

Step 11



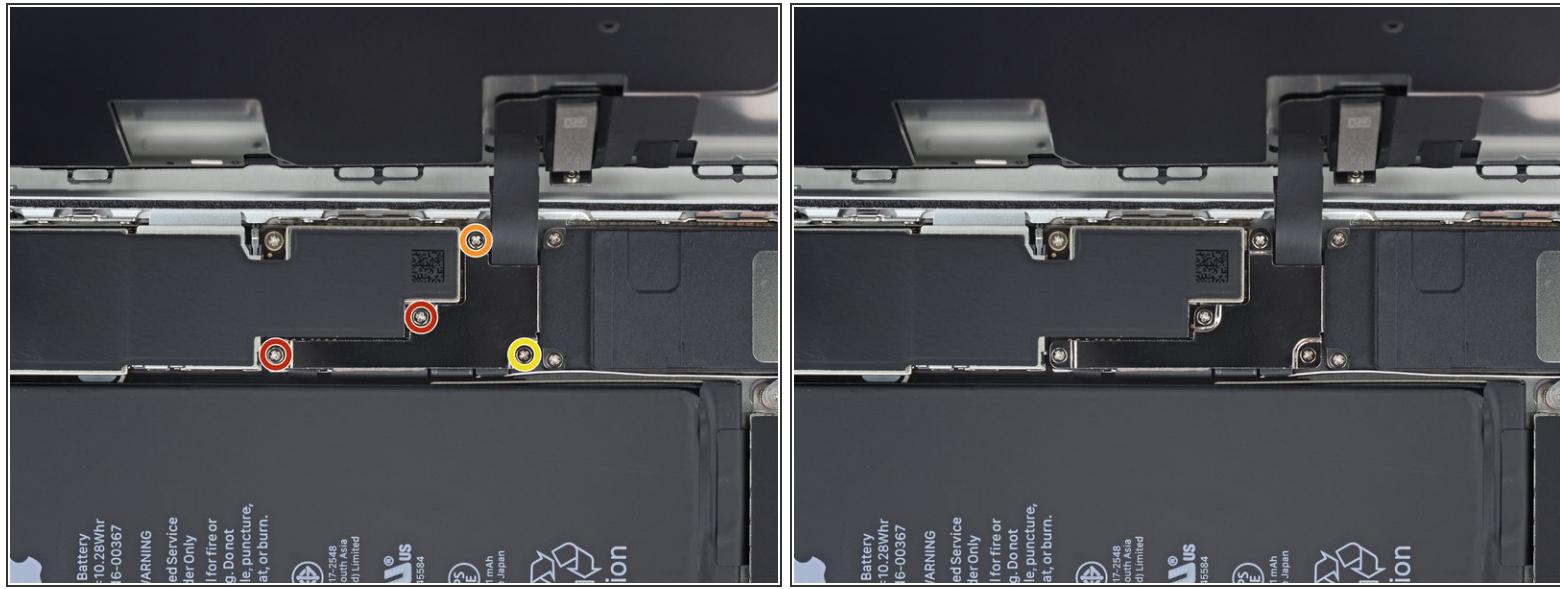
- Slide the display assembly slightly down (away from the top edge of the phone) to disengage the clips holding it to the rear case.

Step 12



- 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.
- Lean the display against something to keep it propped up while you're working on the phone.

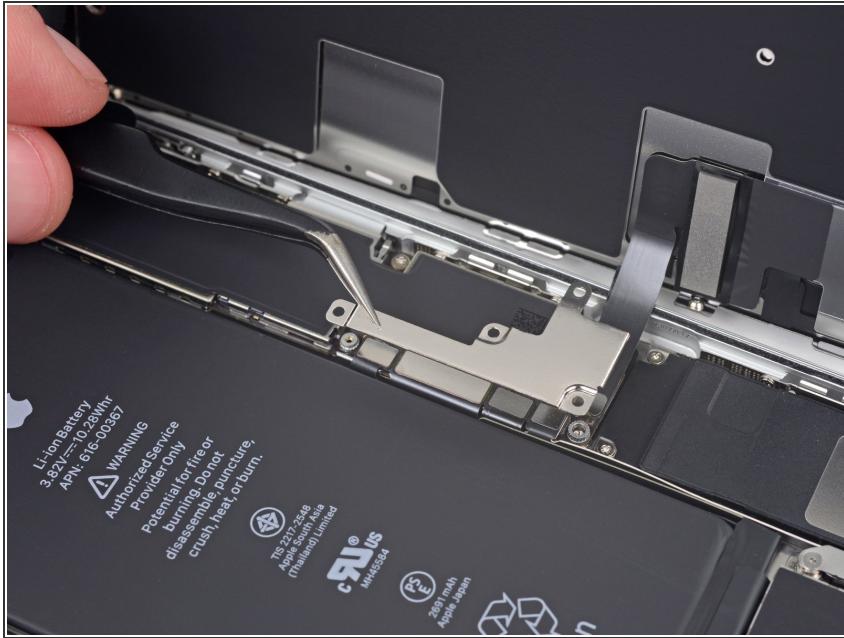
Step 13 — Battery Disconnection



- Remove four Phillips (JIS) screws securing the lower display cable bracket to the logic board, of the following lengths:
 - Two 1.3 mm screws
 - One 1.4 mm screw
 - One 2.7 mm screw

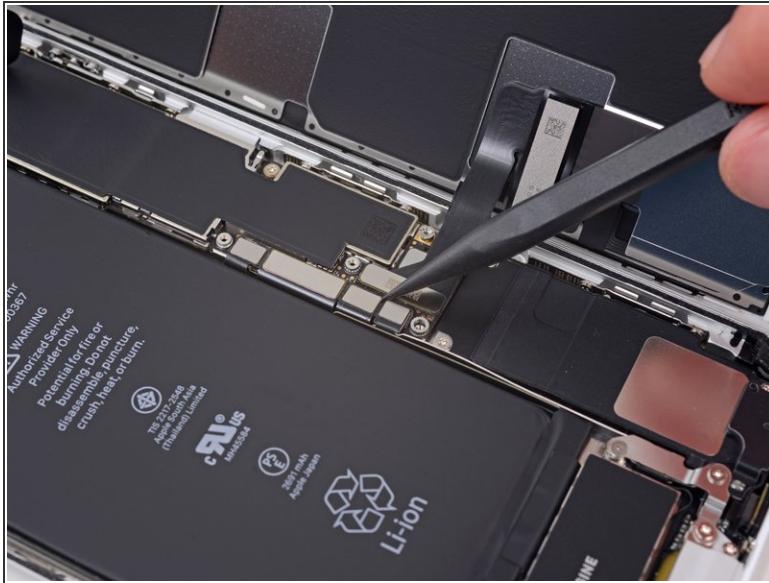
► Throughout this guide, [keep careful track of your screws](#) so that each one goes back where it came from during reassembly. Installing a screw in the wrong place can cause permanent damage.

Step 14



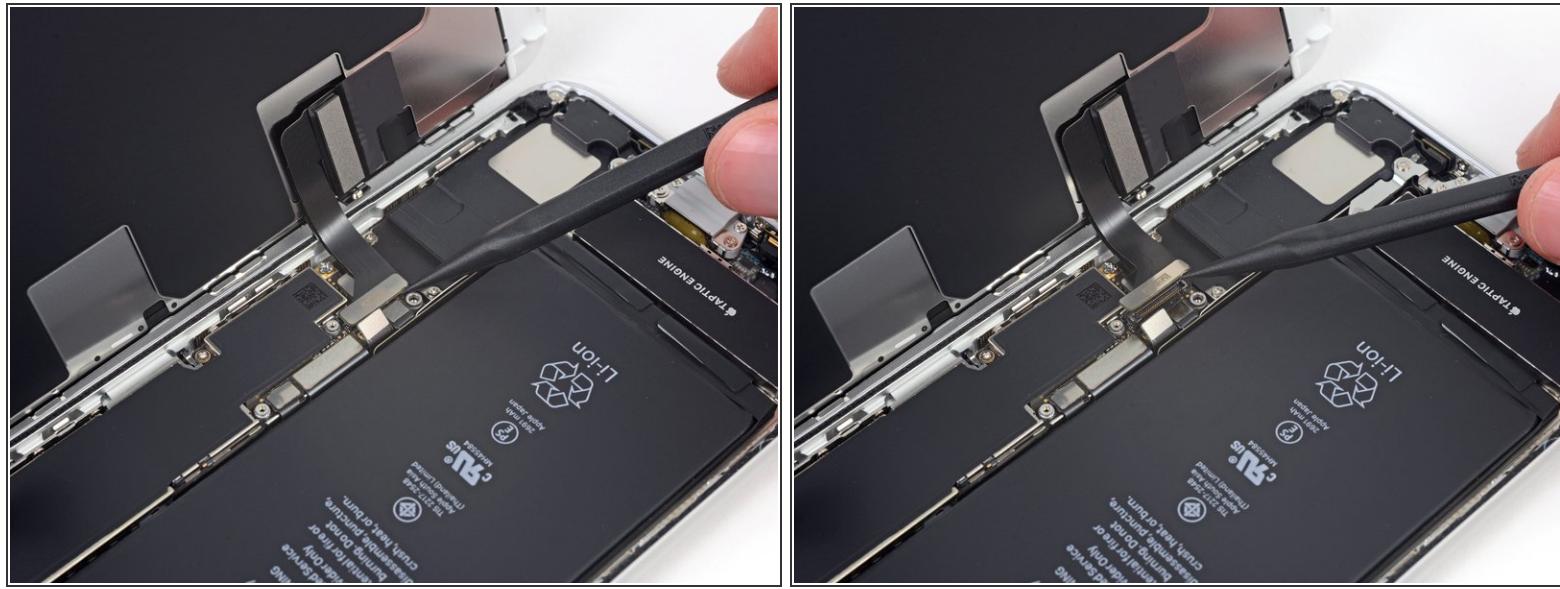
- Remove the lower display cable bracket.

Step 15



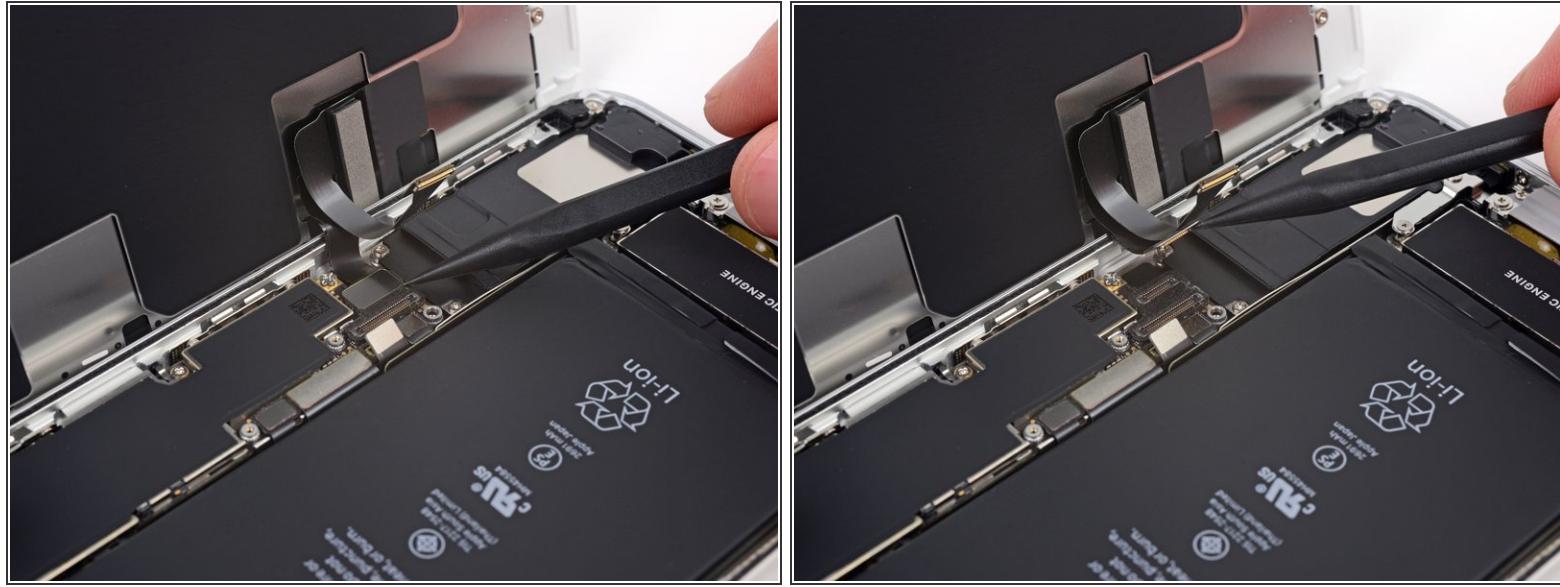
- Use the point of a spudger to pry the battery connector up from its socket on the logic board.
- Bend the connector cable up slightly to prevent it from accidentally making contact with the socket and providing power to the phone during your repair.

Step 16 — Display Assembly



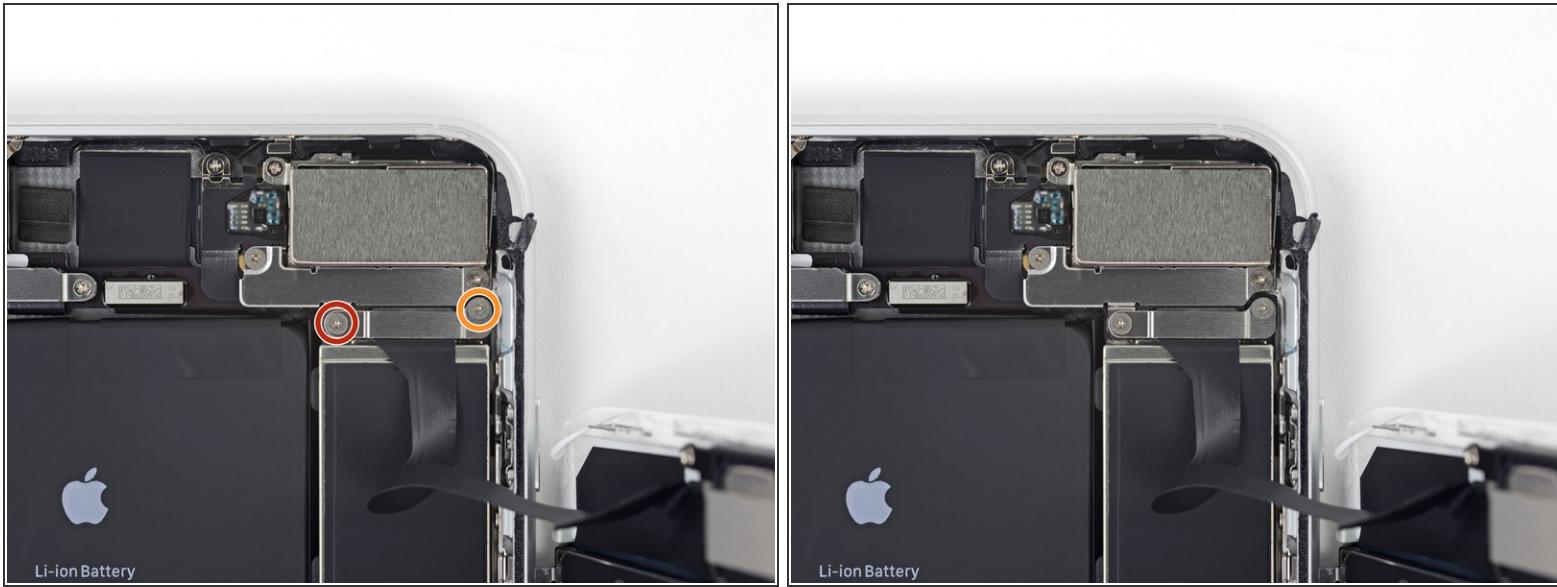
- Use the tip of a spudger or a fingernail to disconnect the large lower display connector by prying it straight up from its socket.
- ☒ To re-attach press connectors like this one, press down on one side until it clicks into place, then repeat on the other side. Do not press down on the middle. If the connector is even slightly misaligned, the connector can bend, causing permanent damage.

Step 17



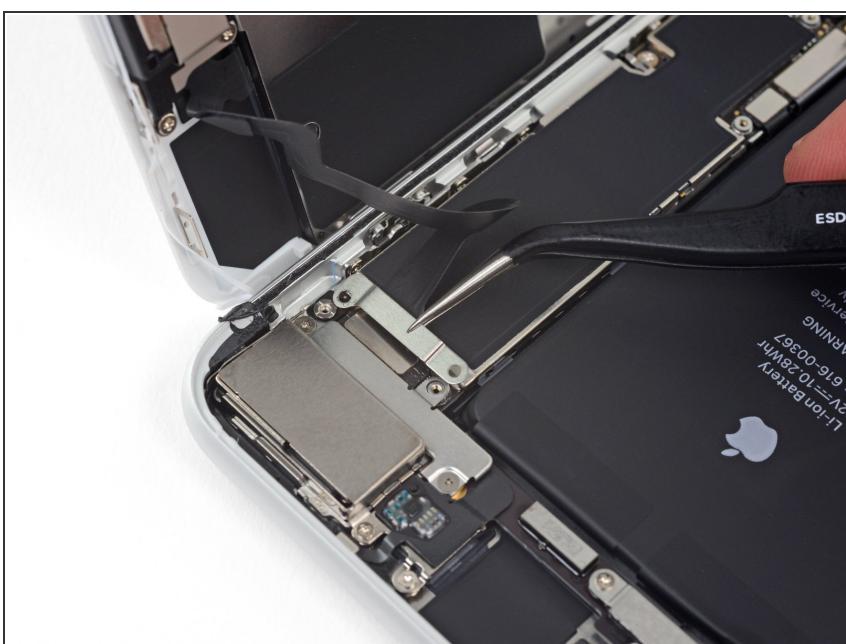
- Disconnect the second lower display cable connector, directly behind the one you disconnected in the previous step.

Step 18



- Remove the two tri-point Y000 screws securing the bracket over the front panel sensor assembly connector:
 - One 1.0 mm screw
 - One 1.2 mm screw

Step 19



- Remove the bracket covering the front panel sensor assembly connector.

Step 20



- Use the tip of a spudger or a fingernail to disconnect the front panel sensor assembly connector from its socket.

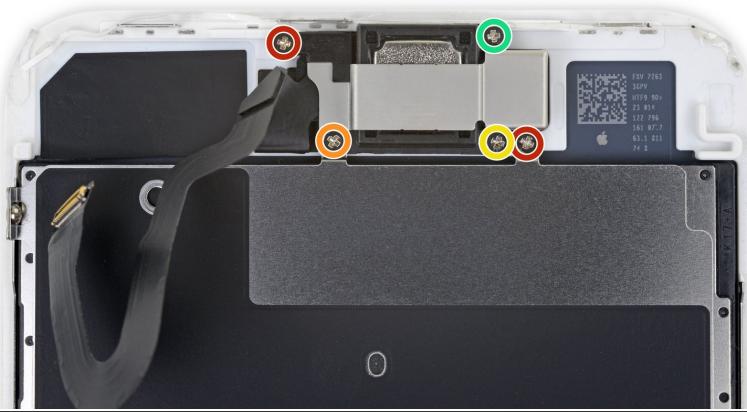
Step 21



- Remove the display assembly.

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

Step 22 — Earpiece Speaker



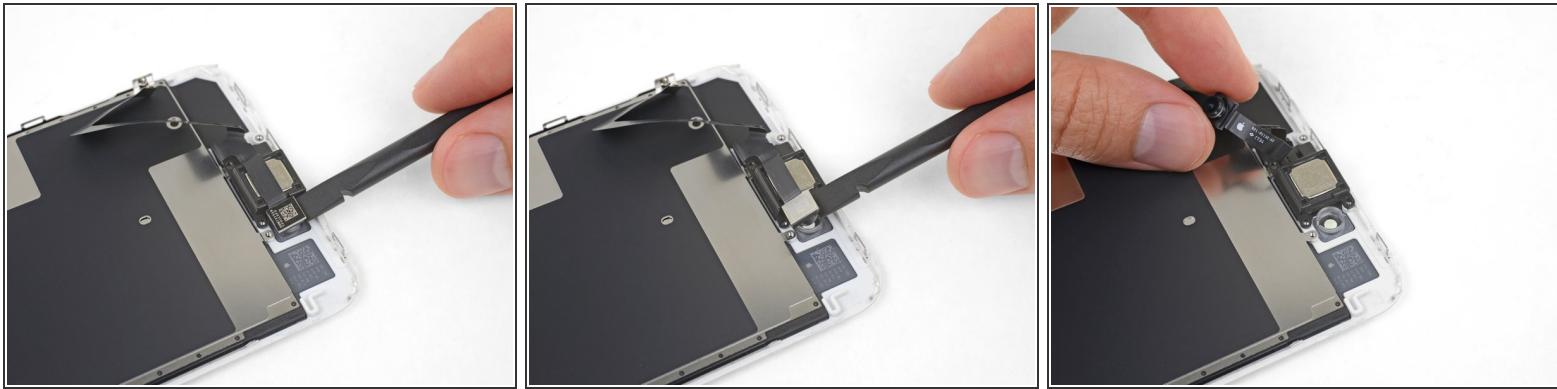
- Remove the five Phillips screws securing the earpiece speaker bracket:
 - Two 1.8 mm screws
 - One 2.3 mm screw
 - One 2.4 mm screw
 - One 2.8 mm screw

Step 23



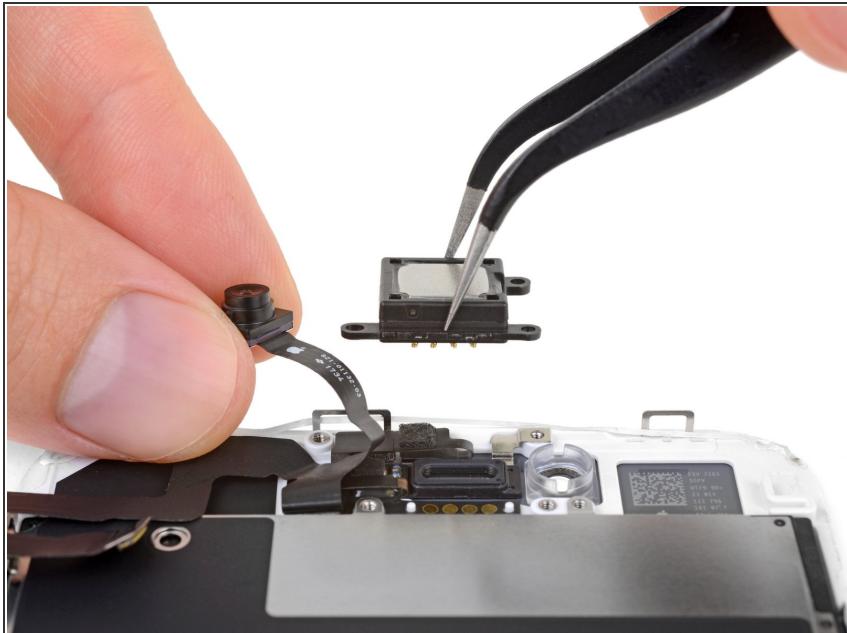
- Remove the earpiece speaker bracket.

Step 24



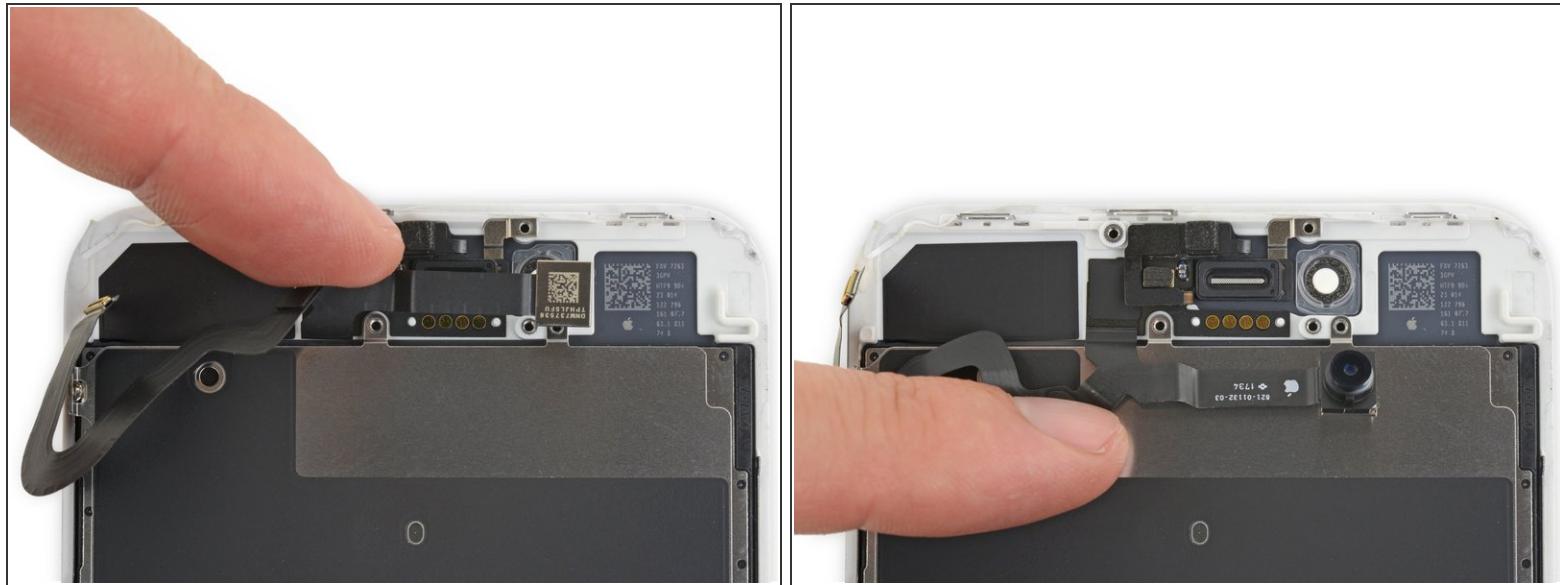
- Use the flat end of a spudger to lift the front-facing camera from its housing.
- Gently bend the camera ribbon cable to the side to clear the way to the earpiece speaker underneath.

Step 25



- Remove the earpiece speaker.

Step 26 — 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 27



- Use a hairdryer or heat gun or [prepare an iOpener](#) and apply it to the top front of the display for about a minute, in order to soften the adhesive securing the sensors.



The sensors in the following steps are fragile. To increase your chances of removing them without damage, repeatedly add more heat as needed. Alternatively, add a drop

or two of isopropyl alcohol and let it penetrate under the sensors before you pry them up.

Step 28



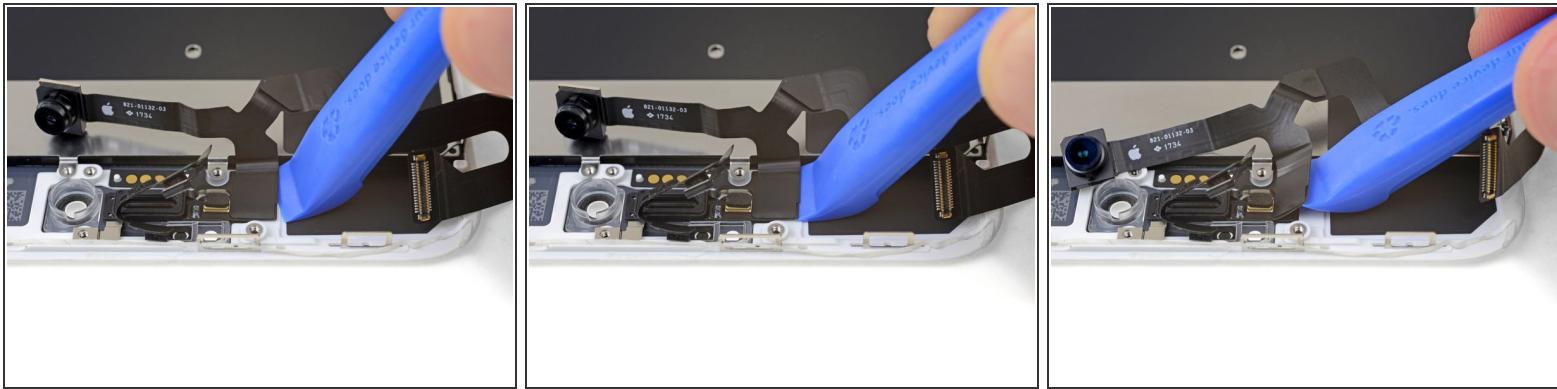
- Slide a spudger under the ambient light sensor flex cable, and lift the sensor out of its housing.

Step 29



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

Step 30



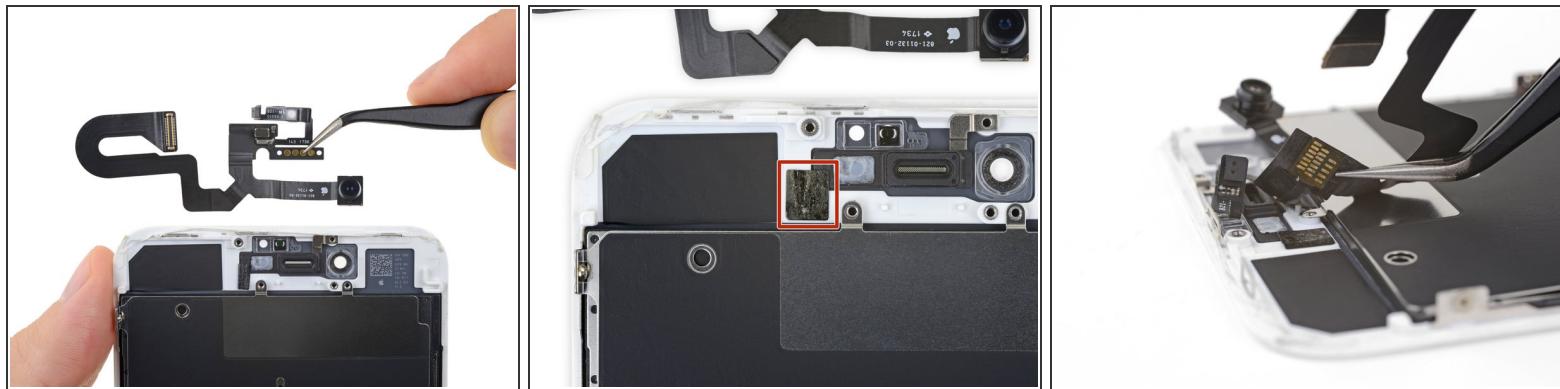
- Insert the sharp edge of an iFixit opening tool underneath the camera assembly's flex cable, on the opposite side from the front-facing camera.
 Use an iOpener or hair dryer as needed to heat the top portion of the display and soften the adhesive securing the flex cable.
- Pry up to separate the edge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

Step 31



- 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 underneath the row of circular gold earpiece speaker contacts.

Step 32



- 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.

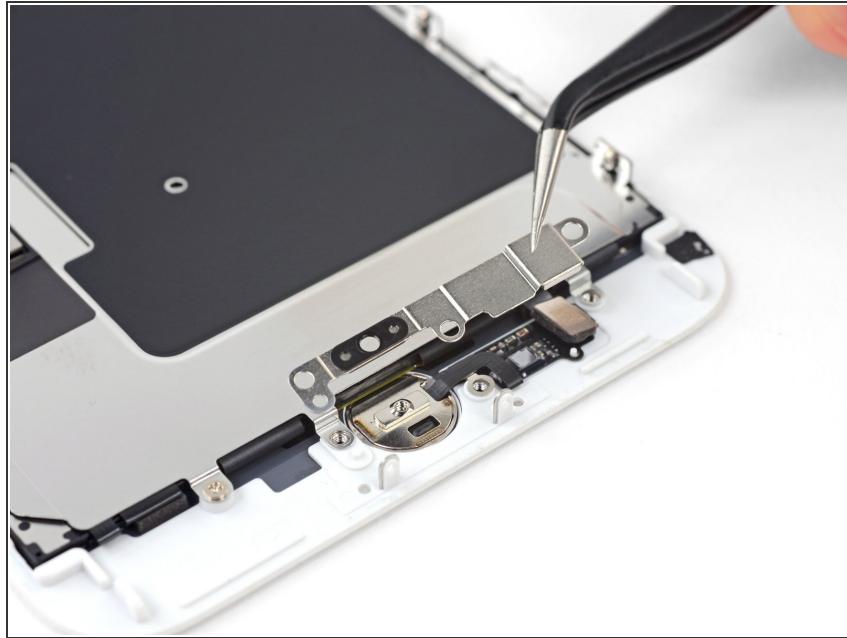
Step 33 — Home/Touch ID Sensor



- Remove the four Y000 screws securing the bracket over the home/Touch ID sensor:
 - One 1.2 mm screw
 - Three 1.3 mm screws

 During reassembly, be careful not to overtighten these screws, or your home button may not work.

Step 34



- Remove the bracket that secures the home/Touch ID sensor.

Step 35



- Pry under the left edge of the home button cable connector to disconnect it from its socket.

⚠ If the entire connector begins to flip up without separating, press down on the cable at the top edge of the connector with the flat of your spudger, while simultaneously prying up the left edge of the connector. Be very careful not to damage the cable or connector, or you will permanently disable the sensor.

Step 36



i Heating the area around the home/Touch ID sensor will help soften the adhesive holding its delicate cable in place, making it easier to remove safely.

- Flip the display assembly over. Use a hairdryer or [prepare an iOpener](#) and apply it to the lower edge of the display for about 90 seconds in order to soften up the adhesive underneath.

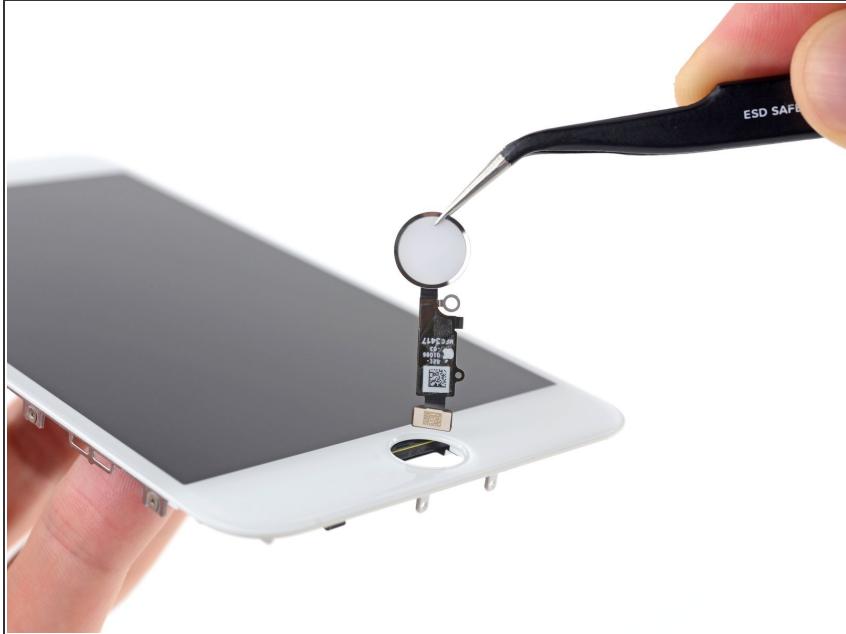
⚠ Don't overheat the display. It should be slightly too hot to touch comfortably.

Step 37



- Use an opening pick to gently separate the adhesive holding the home/Touch ID sensor cable to the back side of the display panel.

Step 38

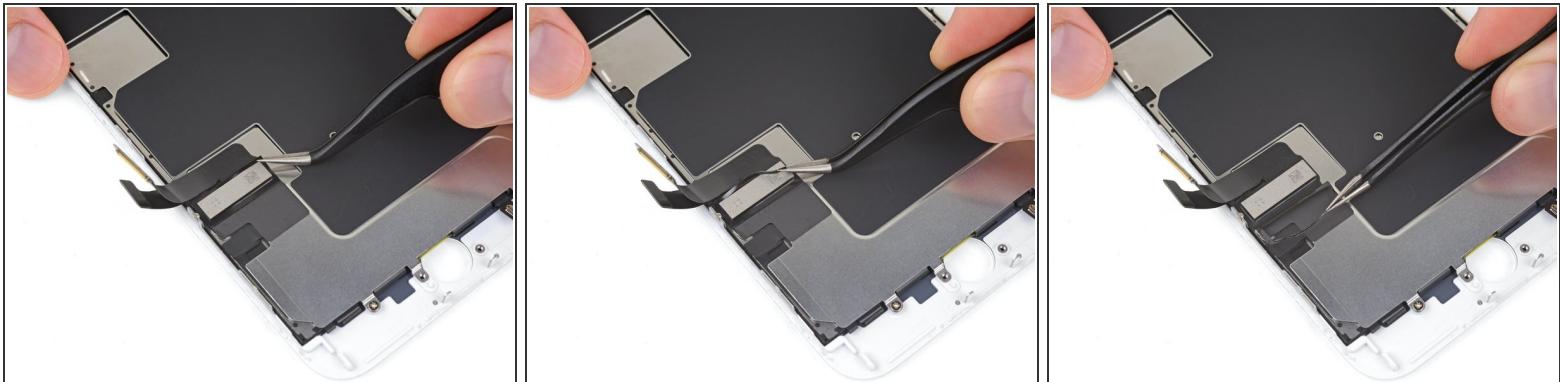


- Remove the home/Touch ID sensor assembly by lifting it through the front side of the display.

☞ To reinstall, first feed the cable through the hole in the front of the display as shown.

☞ Your replacement part may come with [extra Y000 screws](#) already installed near the Home Button. Remove the unnecessary screws so that you can reinstall the home button bracket.

Step 39 — LCD and Digitizer



- Peel back the upper, rectangular portion of the LCD shield plate sticker to separate it from the flex cable underneath.

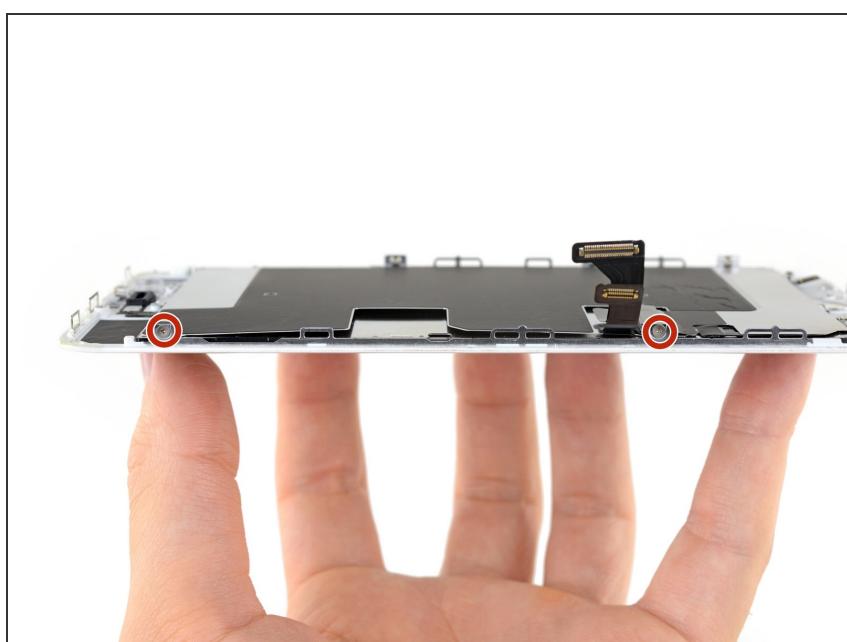
ⓘ You don't need to remove the sticker completely unless you intend to replace it.

Step 40



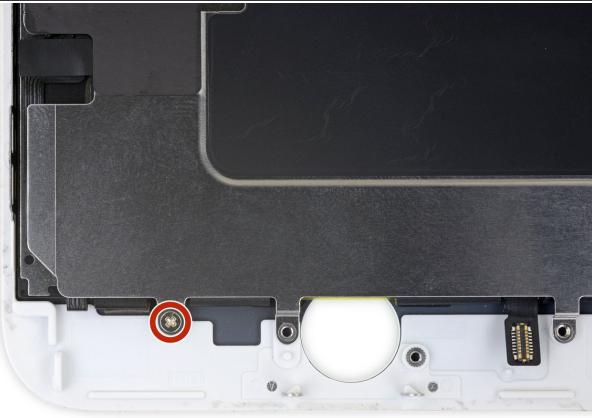
- Use a Y000 driver to remove three 1.2 mm screws from one side of the display EMI shield.
 - If you have trouble loosening these screws, press the driver harder onto the screw as you turn it. If necessary, use the flat edge of your spudger to brace each display clip from behind so you can apply more pressure to the screws, without bending the clips.

Step 41



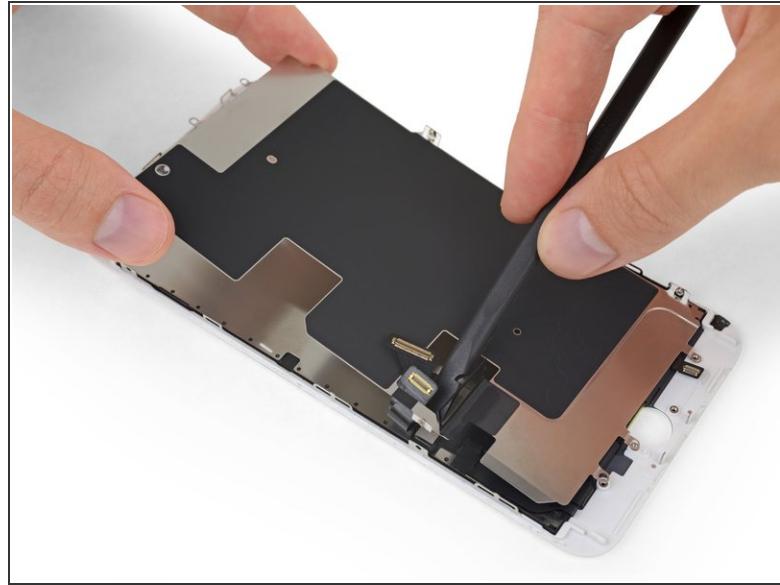
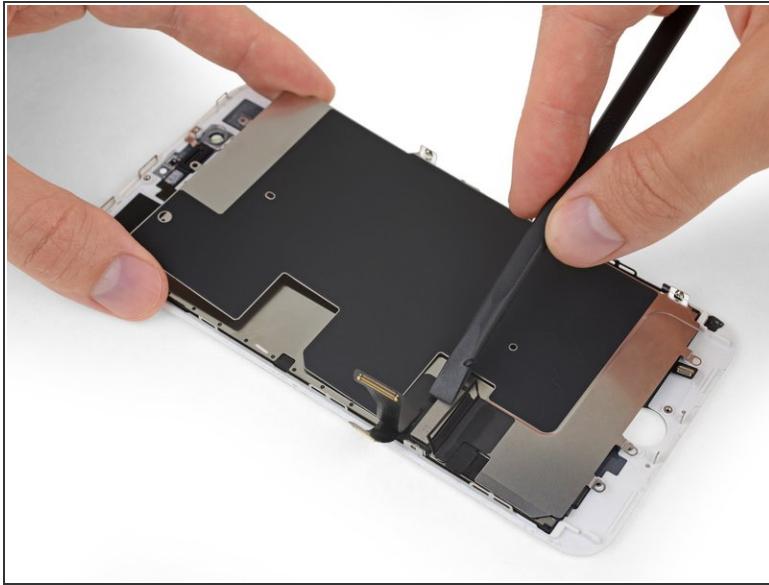
- Use a Y000 driver to remove two more 1.2 mm screws from the other side of the EMI shield.

Step 42



- Remove the 1.8 mm Phillips screw securing the EMI shield near the bottom of the display.

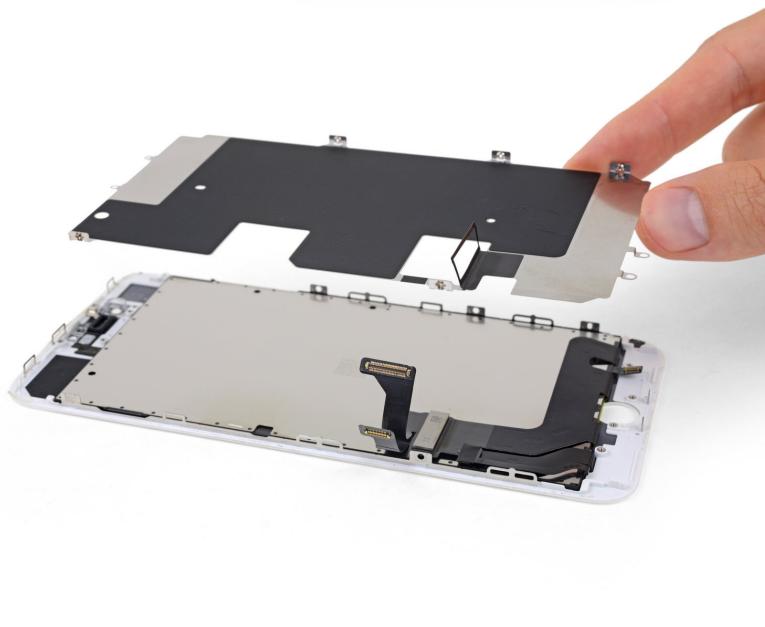
Step 43



- Lift the LCD shield plate while pressing down on the flex cable it surrounds.
- Feed the flex cable through the cutout in the LCD shield plate, being careful not to snag it.

Step 44

- Remove the LCD shield plate.



Step 45

- Only the LCD and digitizer remains.



Compare your new replacement part to the original part—you may need to transfer remaining components or remove adhesive backings from the new part before installing.

To reassemble your device, follow the above steps in reverse order.

Take your e-waste to an [R2 or e-Stewards certified recycler](#).

Repair didn't go as planned? Check out our [Answers community](#) for troubleshooting help.