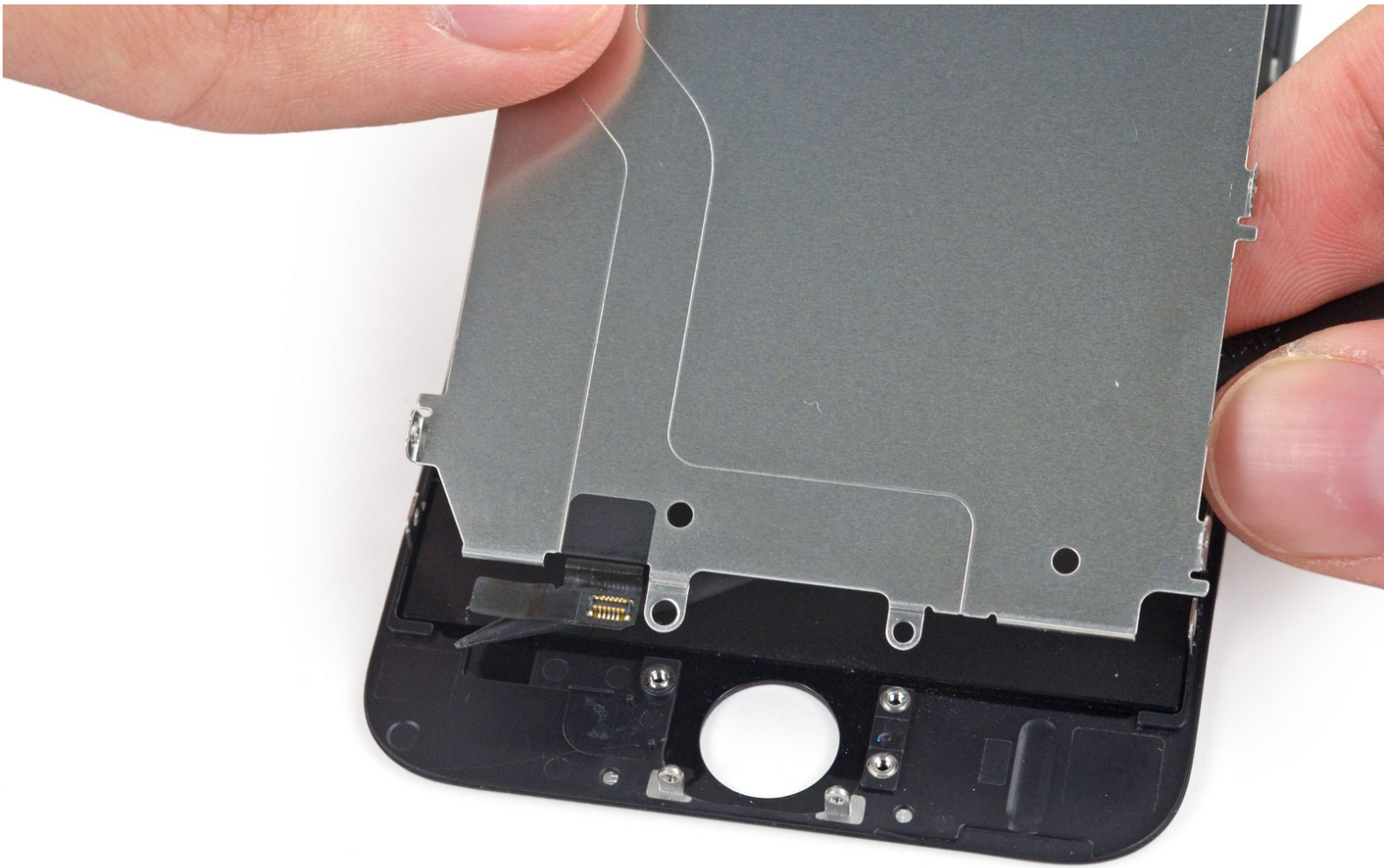




iPhone 6 LCD and Digitizer Replacement

Replace the LCD and digitizer for an iPhone 6.

Written By: Sam Goldheart



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's 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 transfer the original home button onto the new display in order for Touch ID (fingerprint scanning) to function.

You can also use this guide to replace the following parts:

- [Front Panel Assembly Cable Bracket](#)
- [Earpiece Speaker Bracket](#)
- [LCD Shield Plate with Sticker and Home Cable](#)



TOOLS:

- [iSclack](#) (1)
- [P2 Pentalobe Screwdriver iPhone](#) (1)
- [Phillips #000 Screwdriver](#) (1)
- [iFixit Opening Tools](#) (1)
- [Suction Handle](#) (1)
- [Tweezers](#) (1)
- [Spudger](#) (1)




PARTS:

- [iPhone 6 LCD and Digitizer](#) (1)
- [NuGlas Tempered Glass Screen Protector for iPhone 6 6s](#) (1)
- [iPhone 6 Front Panel Assembly Cable Bracket](#) (1)
- [iPhone 6 LCD Shield Plate with Sticker and Home Cable](#) (1)
- [iPhone 6 Earpiece Speaker Bracket](#) (1)

Step 1 — Pentalobe Screws



 Before disassembling your iPhone, discharge the 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 3.6 mm-long Pentalobe screws next to the Lightning connector.

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.
 - ⓘ 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 — iSclack Opening Procedure



- i** The next three steps demonstrate using the iSclack, a great tool for safely opening the iPhone 6 that we recommend for anyone doing more than one repair. **If you aren't using the iSclack, skip down three steps for an alternate method.**
- If the plastic depth gauge is attached at the center of the iSclack, remove it now—it's not needed for larger phones like the iPhone 6.
 - Close the handle on the iSclack, opening the suction-cup jaws.

Step 4



- Place the bottom of your iPhone in between the suction cups.
 - Position the iSlack's upper suction cup against the display, just above (but not covering) the home button.
- Open the handles to close the jaws of the iSlack. Center the suction cups and press them firmly onto the top and bottom of the iPhone.
- ⓘ If your display or back glass is badly cracked, [covering it with a layer of clear packing tape](#) may help the suction cups adhere. The iSlack also includes two pieces of tape for this purpose.

Step 5



- Hold onto your iPhone securely and close the handle of the iSclack to separate the suction cups, pulling the front panel up from the rear case.
- The iSclack is designed to safely open your iPhone just enough to separate the pieces, but not enough to damage the display cables.
- Peel the two suction cups off your iPhone.
- **Skip the next three steps and continue on to Step 8.**

Step 6 — Manual Opening Procedure



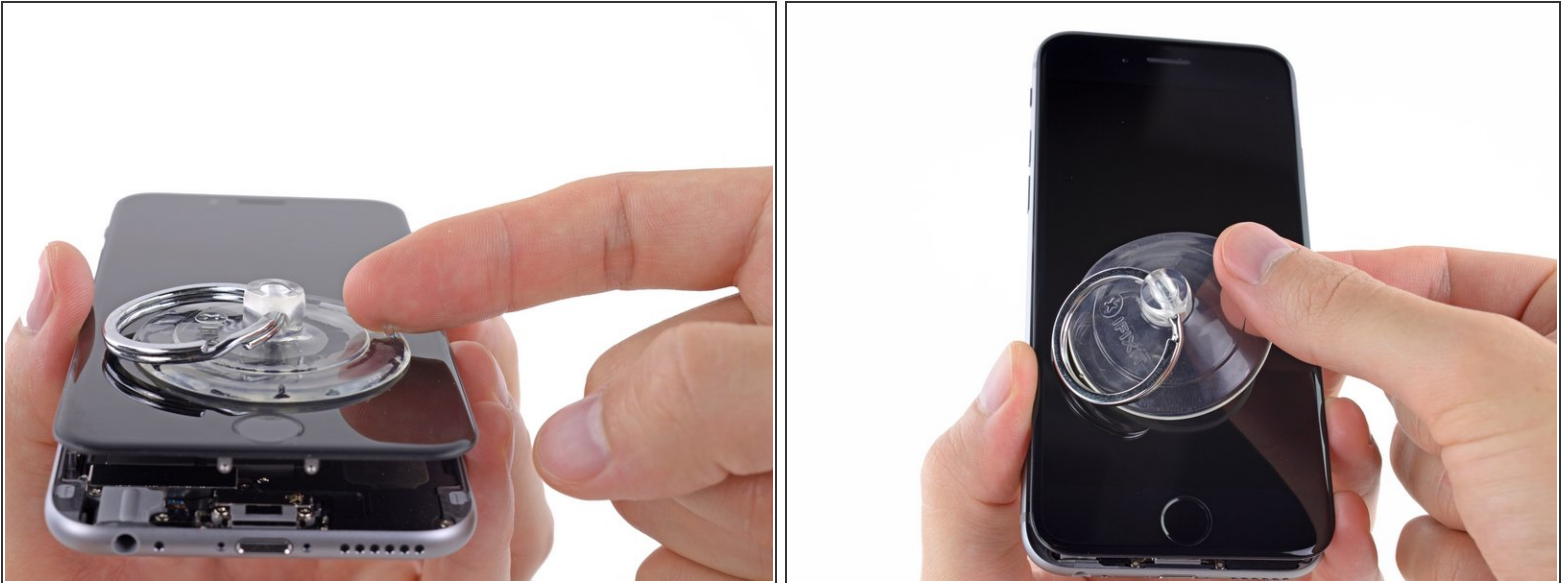
- If you don't have an iSlack, use a single suction cup to lift the front panel:
 - Press a suction cup onto the screen, just above the home button.
- ⓘ Be sure the cup is pressed securely onto the screen to get a tight seal.
- ⓘ If your display is badly cracked, [covering it with a layer of clear packing 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 7



- While holding the iPhone down with one hand, pull up on the suction cup to slightly separate the front panel assembly from the rear case.
- ⚠ Take your time and apply firm, constant force. The display assembly is a much tighter fit than most devices.
- Using a plastic opening tool, begin to gently pry the rear case down, away from the display assembly, while continuing to pull up with the suction cup.
- ⓘ There are several clips holding the front panel assembly to the rear case, so you may need to use a combination of the suction cup and plastic opening tool to free the front panel assembly.

Step 8



- Pull the plastic nub to release the vacuum seal on the suction cup.
- Remove the suction cup from the display assembly.

Step 9 — Opening up the phone



- Open the iPhone by swinging the home button end of the front panel assembly away from the rear case, using the top of the phone as a hinge.
- ⓘ Several clips along the top edge of the front panel form a partial hinge.
- ☑ During reassembly, align the clips just below the top edge of the rear case. Then, slide the front panel upward until its top edge is flush with that of the rear case.

Step 10



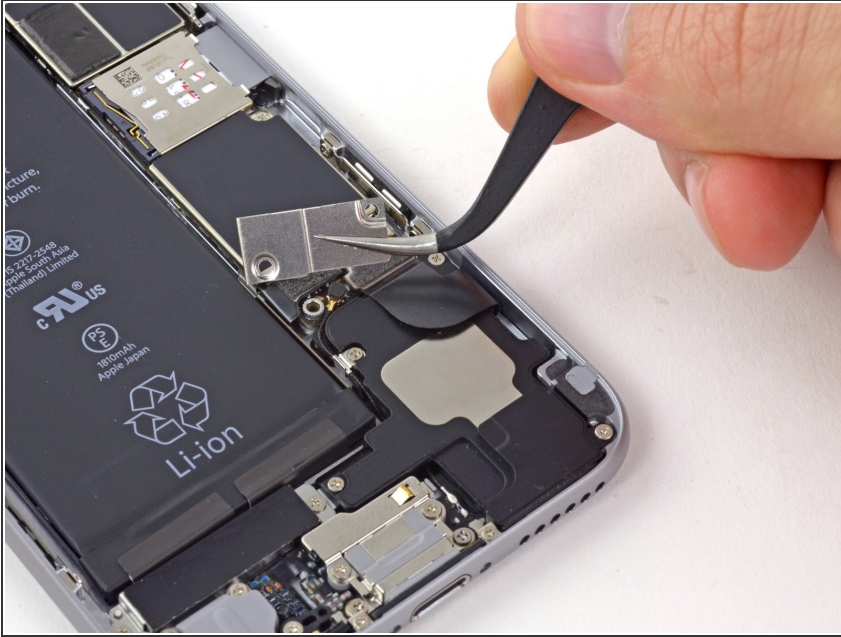
- Open the display to about a 90° angle, and lean it against something to keep it propped up while you're working on the phone.
 - ❗ In a pinch, an unopened canned beverage works well for this.
- Add a rubber band to keep the display securely in place while you work. This prevents undue strain on the display cables.

Step 11 — Removing the battery connector bracket screws



- Remove the following Phillips screws from the battery connector bracket:
 - One 2.2 mm screw
 - One 3.2 mm screw
- ❗ During your repair, [keep track of each screw](#) and make sure it goes back exactly where it came from to avoid damaging your phone.

Step 12



- Remove the metal battery connector bracket from the iPhone.

Step 13 — Disconnecting the battery connector



- Use a plastic opening tool to gently pry the battery connector up from its socket on the logic board.
- ⚠ Take care to only pry up on the battery connector, and not the socket on the logic board. If you pry up on the logic board socket, you may break the connector entirely.

Step 14 — Removing the front panel assembly cable bracket screws

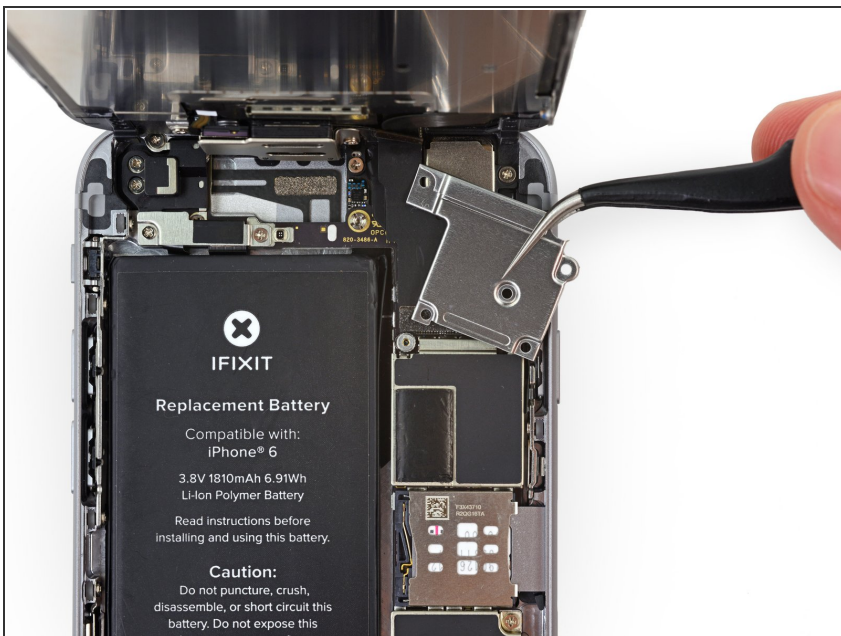


- Remove the following five Phillips screws securing the front panel assembly cable bracket:

- Three 1.2 mm screws
- One 1.7 mm screw
- One 3.1 mm screw

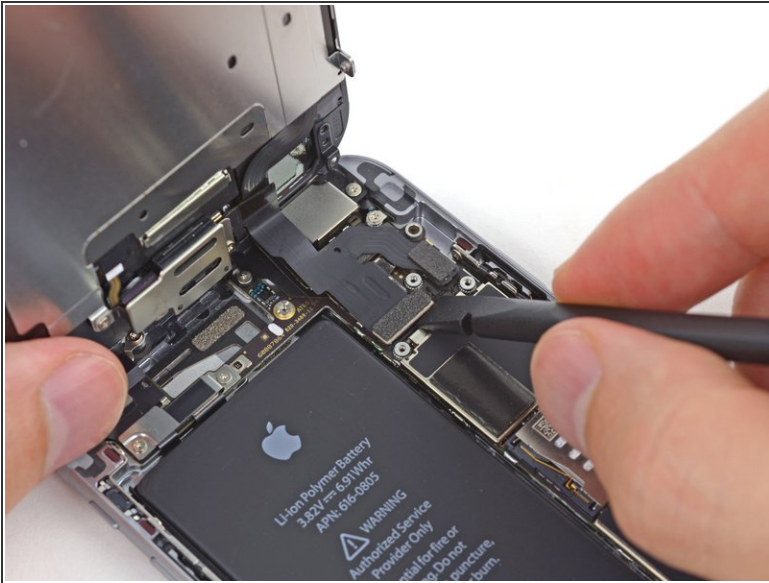
⚠ Incorrect placement of these screws during reassembly will cause permanent damage to your iPhone's logic board.

Step 15



- Remove the front panel assembly cable bracket from the logic board.

Step 16



⚠ In the next four steps, take care to pry up **only** on the cable connectors, and not on their sockets on the logic board.

- Use a spudger or a fingernail to disconnect the front-facing camera and sensor cable connector.

Step 17



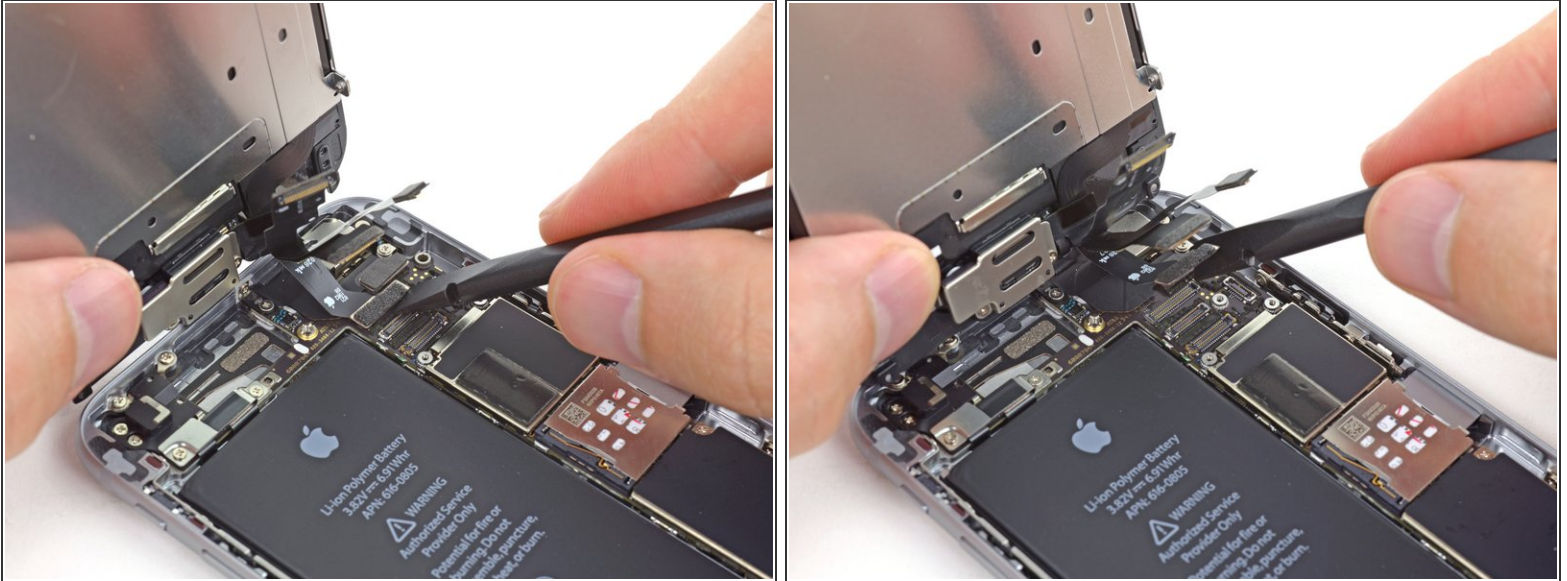
- Use a spudger or a fingernail to disconnect the home button cable connector.

Step 18



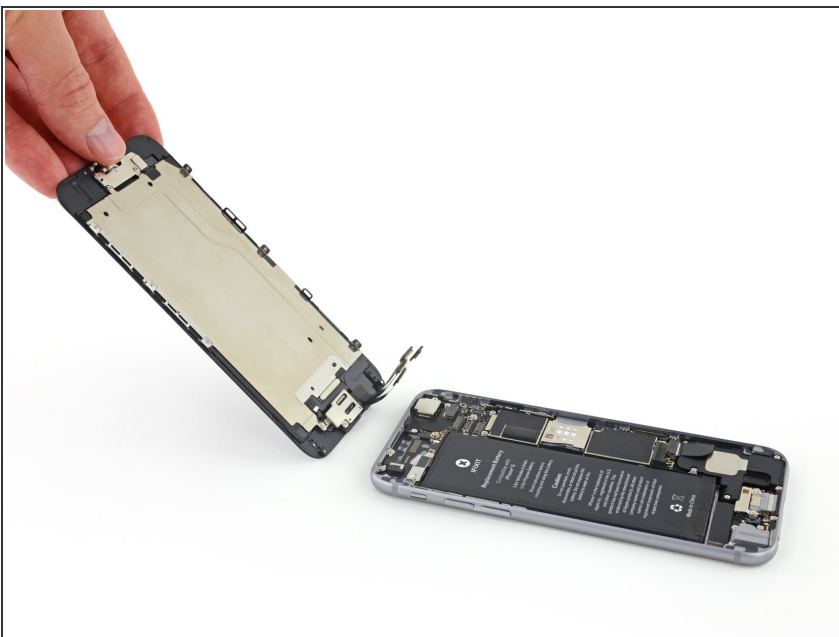
- ⚠ Make sure the battery is disconnected before you disconnect or reconnect the cable in this step.
- Use a spudger or a fingernail to disconnect the display data cable connector.
- 🔧 When reassembling your phone, the display data cable may pop off its connector. This can result in white lines or a blank screen when powering your phone back on. If that happens, simply reconnect the cable and power cycle your phone. The best way to power cycle your phone is to [disconnect and reconnect the battery connector](#).

Step 19



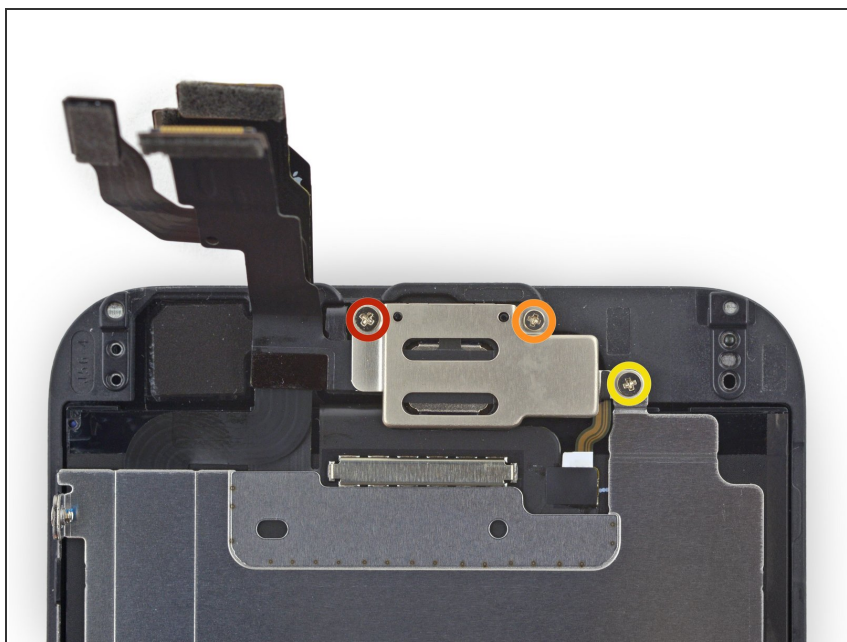
- Use the flat end of a spudger to disconnect the digitizer cable connector.
- ✦ When reconnecting the digitizer cable, **do not press the center of the connector**. Press one end of the connector, then press the opposite end. Pressing in the center of the connector can bend the component and cause digitizer damage.

Step 20 — Separating front panel assembly and rear case



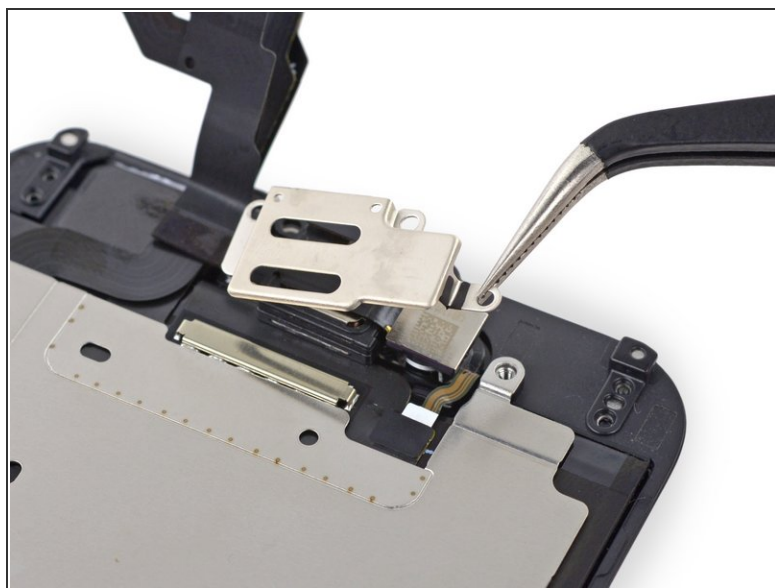
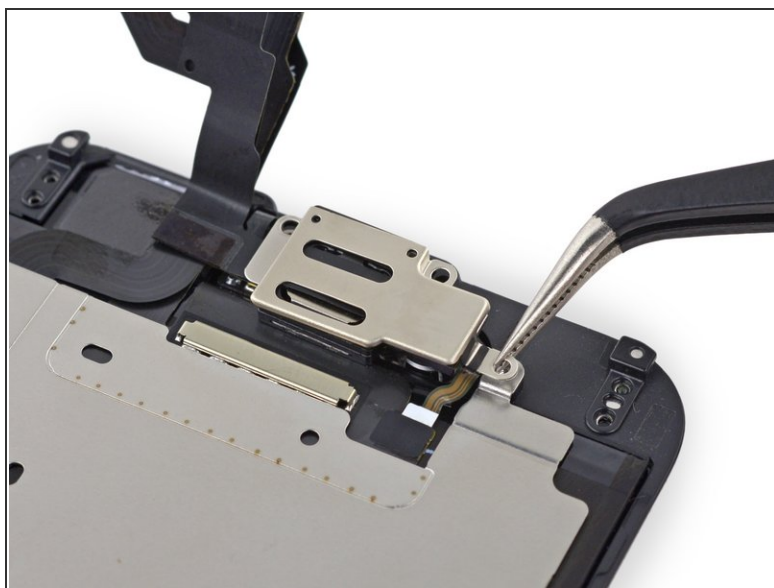
- Remove the front panel assembly from the rear case.

Step 21 — Earpiece Speaker



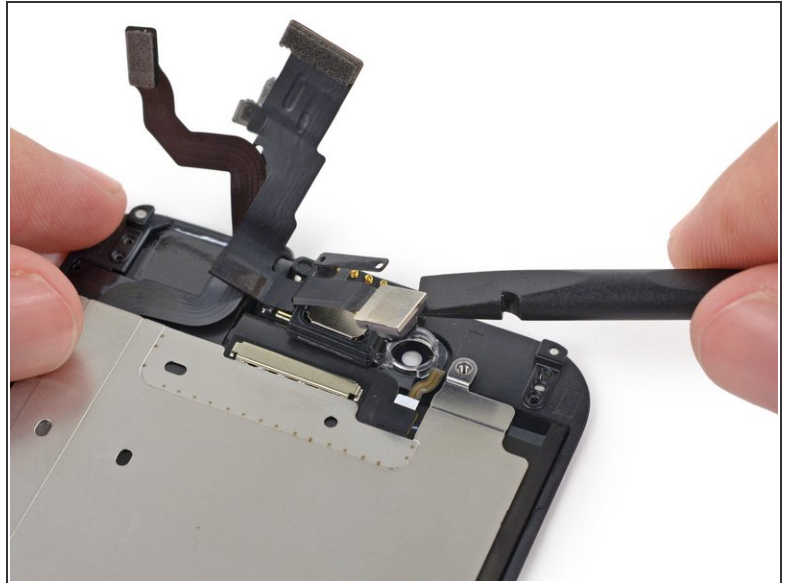
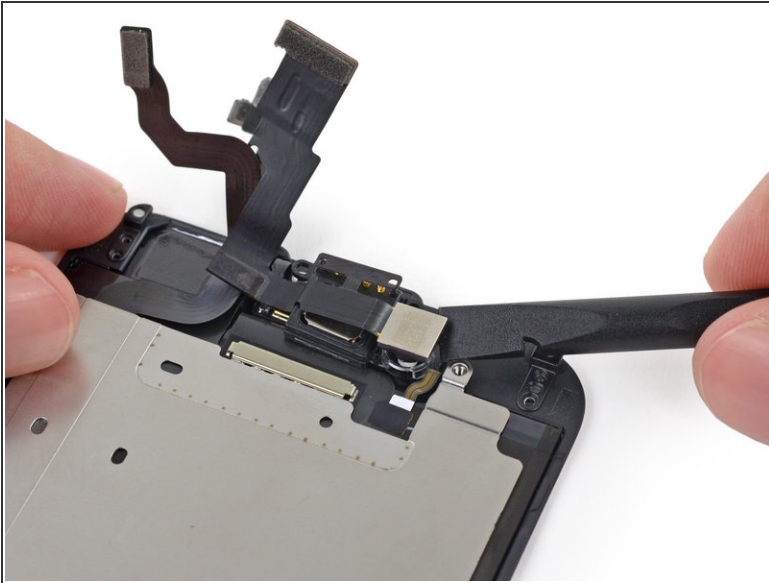
- Remove the following Phillips screws from the earpiece speaker/front-facing camera bracket:
 - One 2.3 mm screw
 - One 3.0 mm screw
 - One 2.2 mm screw

Step 22



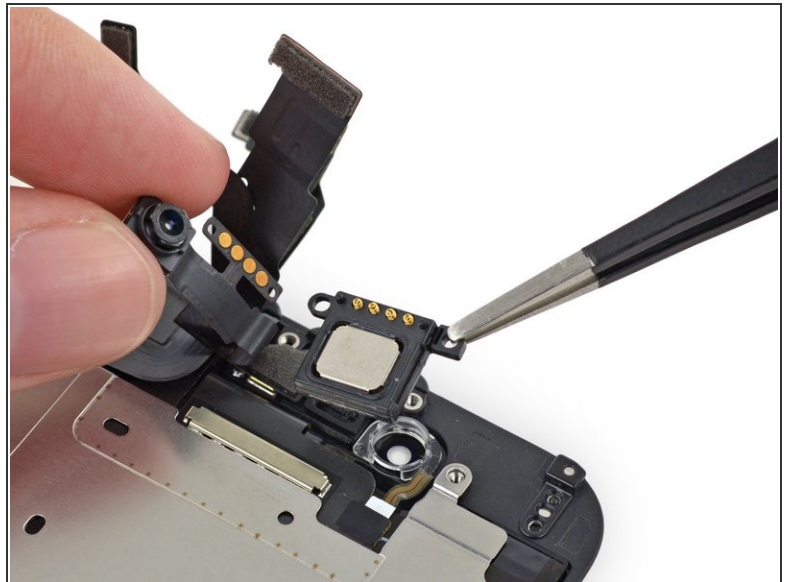
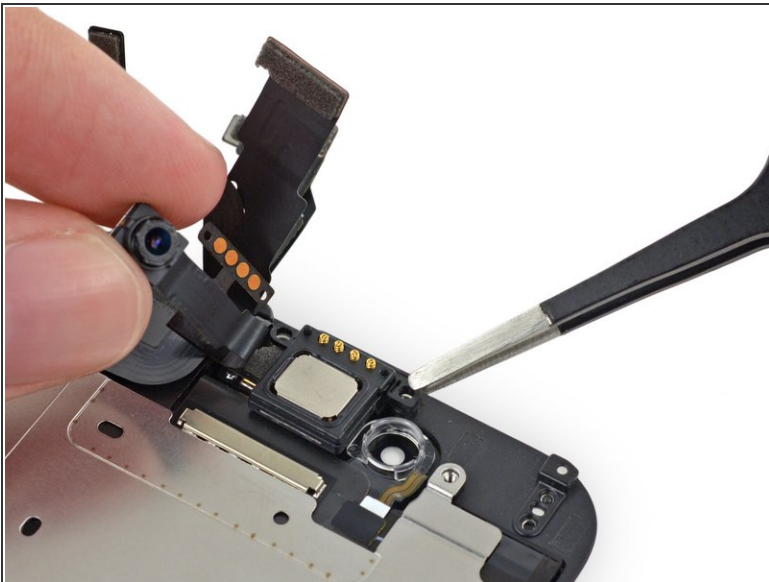
- Remove the earpiece speaker/front-facing camera bracket from the front panel.

Step 23



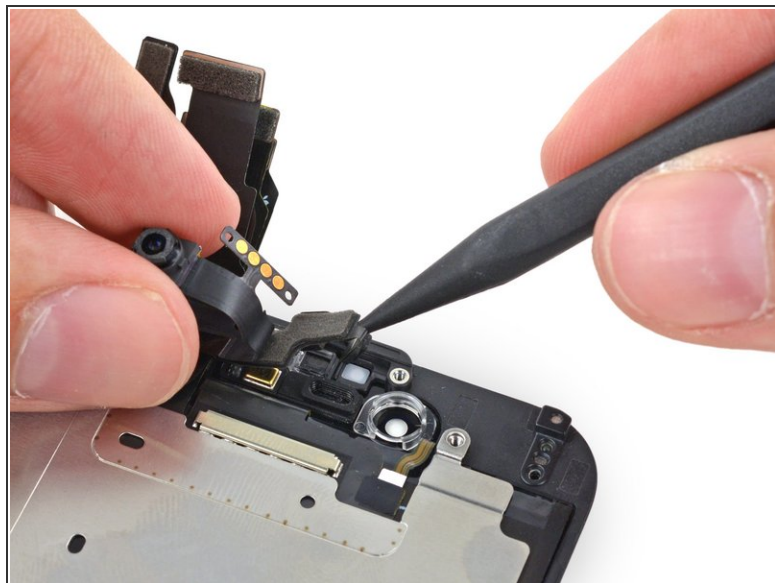
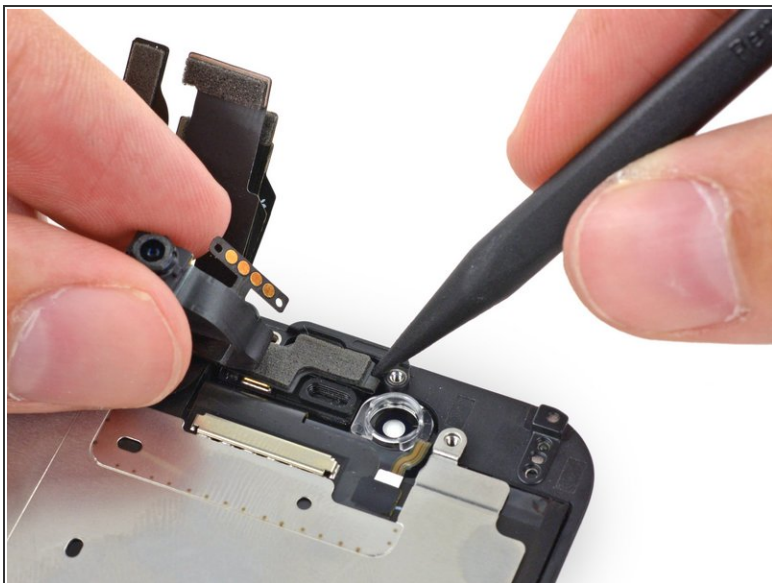
- Lift the front-facing camera out of its recess in the front panel.

Step 24



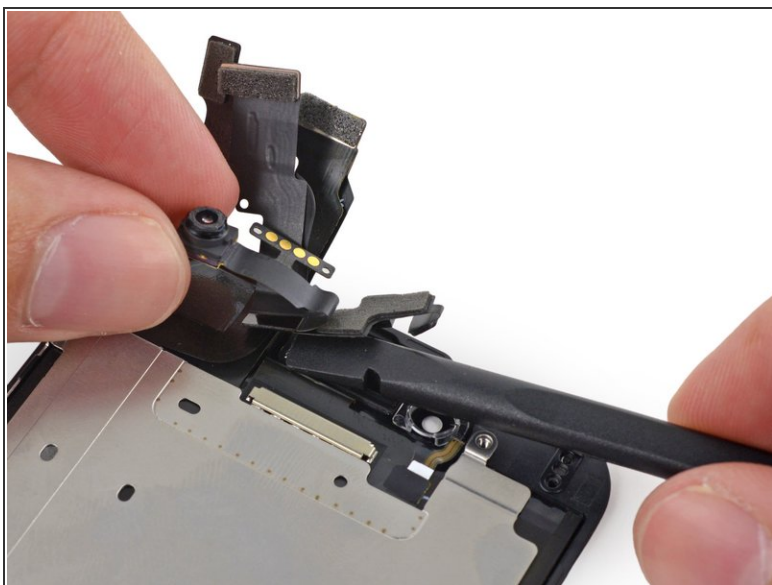
- Holding the front-facing camera out of the way, remove the earpiece speaker from the front panel.
 - ⚠ Try not to touch any of the contacts on the speaker or the cable—skin oils can damage them and interrupt the connection. If you touch them by mistake, clean them with a little isopropyl alcohol and give them a few moments to air dry.

Step 25 — Front-Facing Camera and Sensor Cable



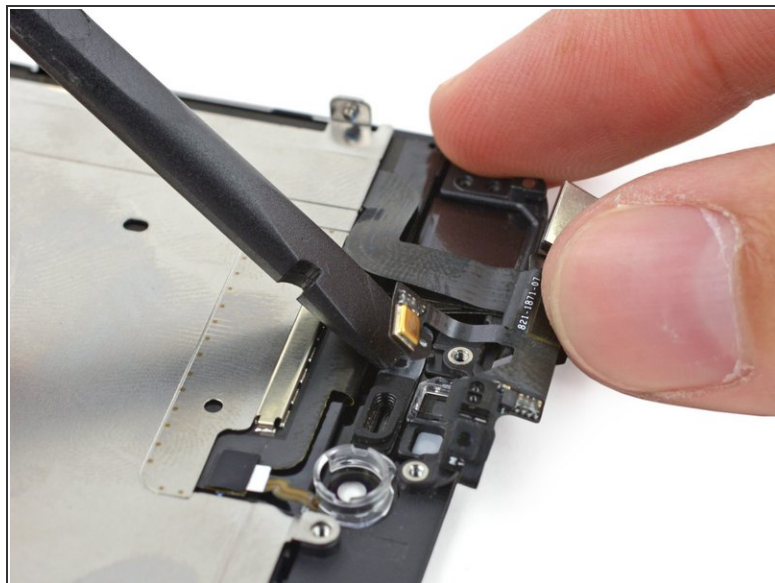
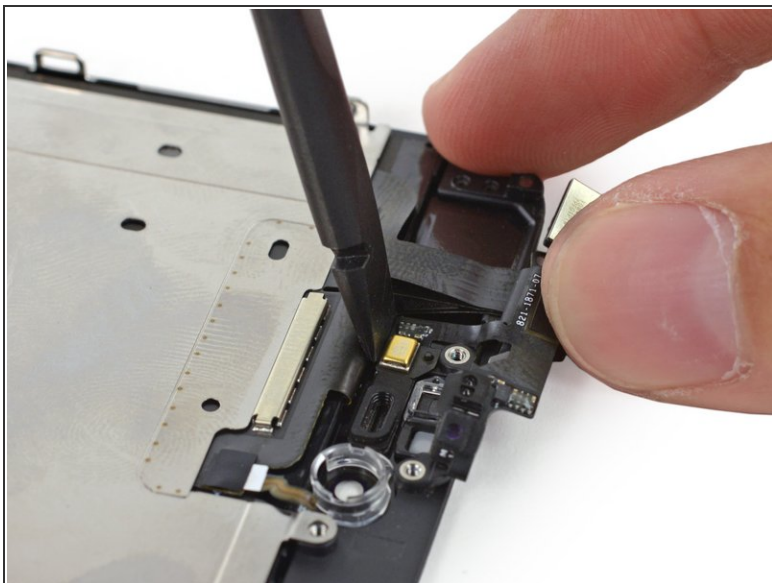
- Keeping the front-facing camera out of the way, use the point of a spudger to push the ambient-light sensor up out of its recess in the front panel.

Step 26



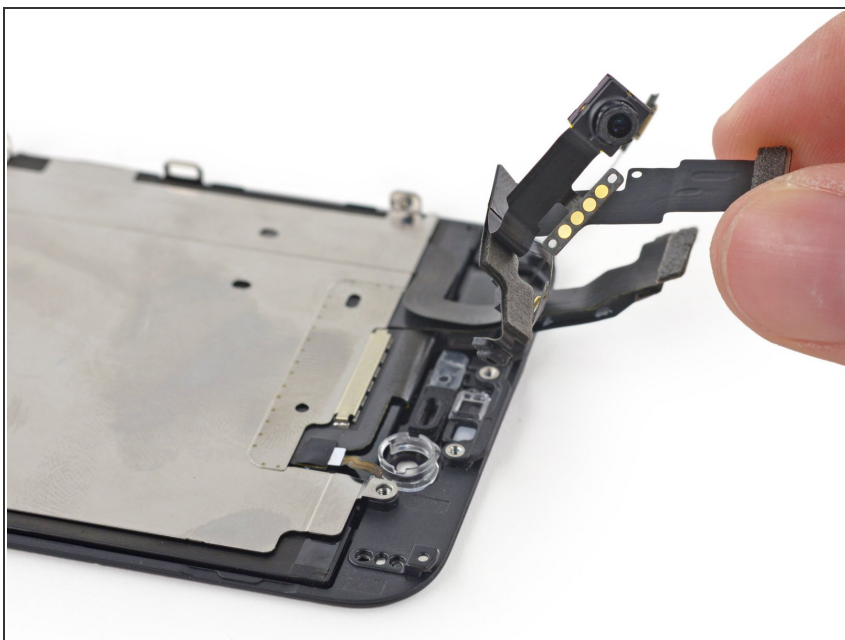
- Fold the front-facing camera and sensor cable up to allow access to the microphone.

Step 27



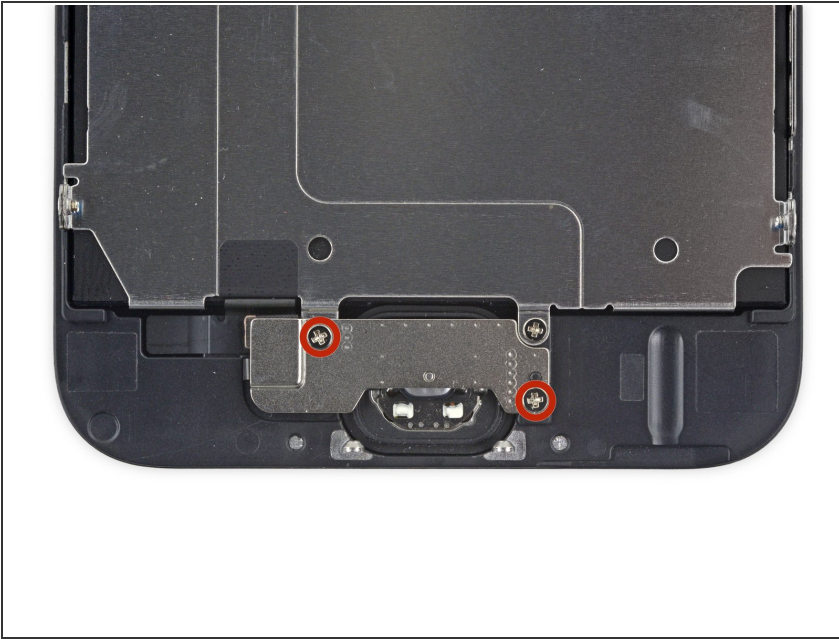
- Carefully pry the microphone end of the sensor cable off of the adhesive holding it to the front panel.

Step 28



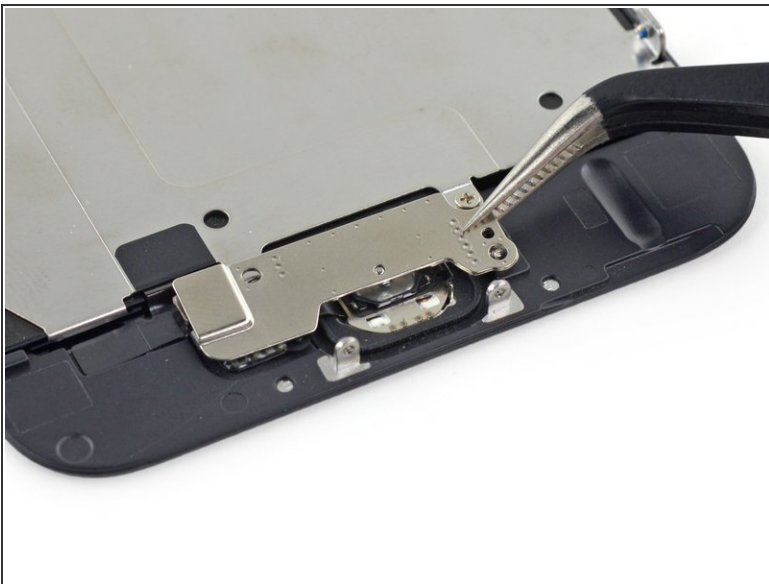
- Remove the front-facing camera and sensor cable from the front panel.

Step 29 — Home Button



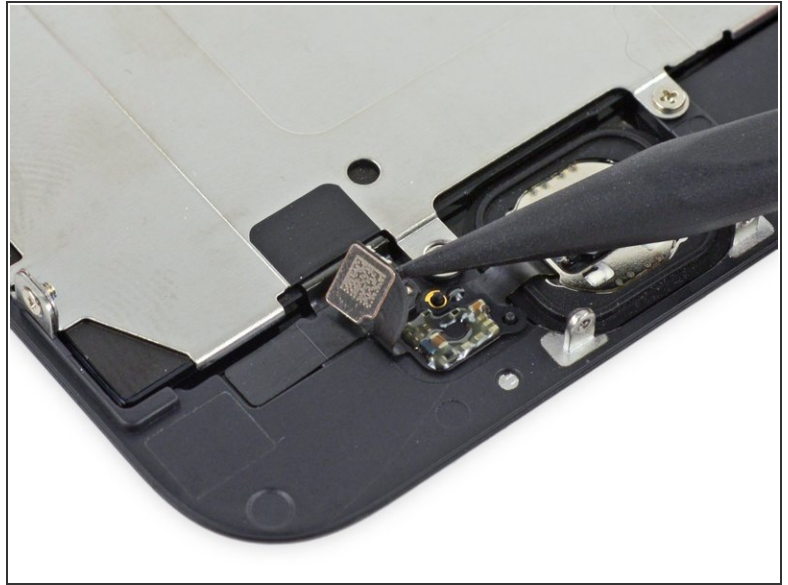
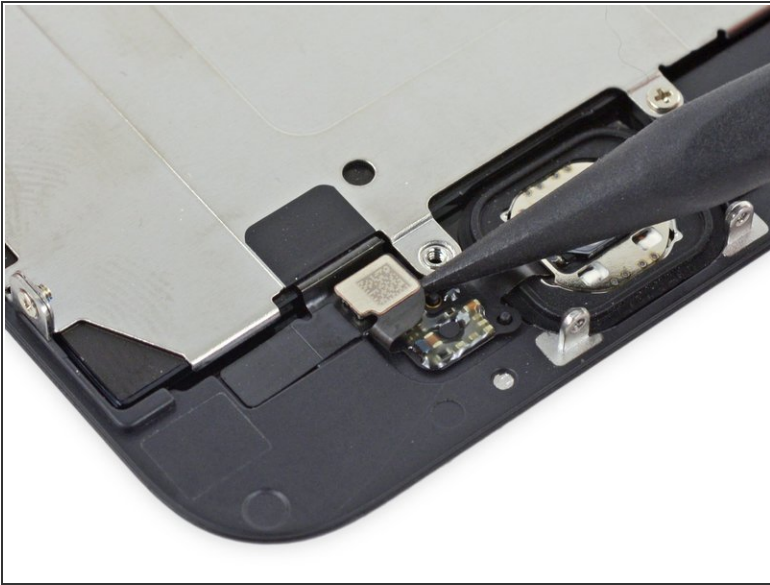
- Remove the two 1.9 mm Phillips screws securing the home button bracket.

Step 30



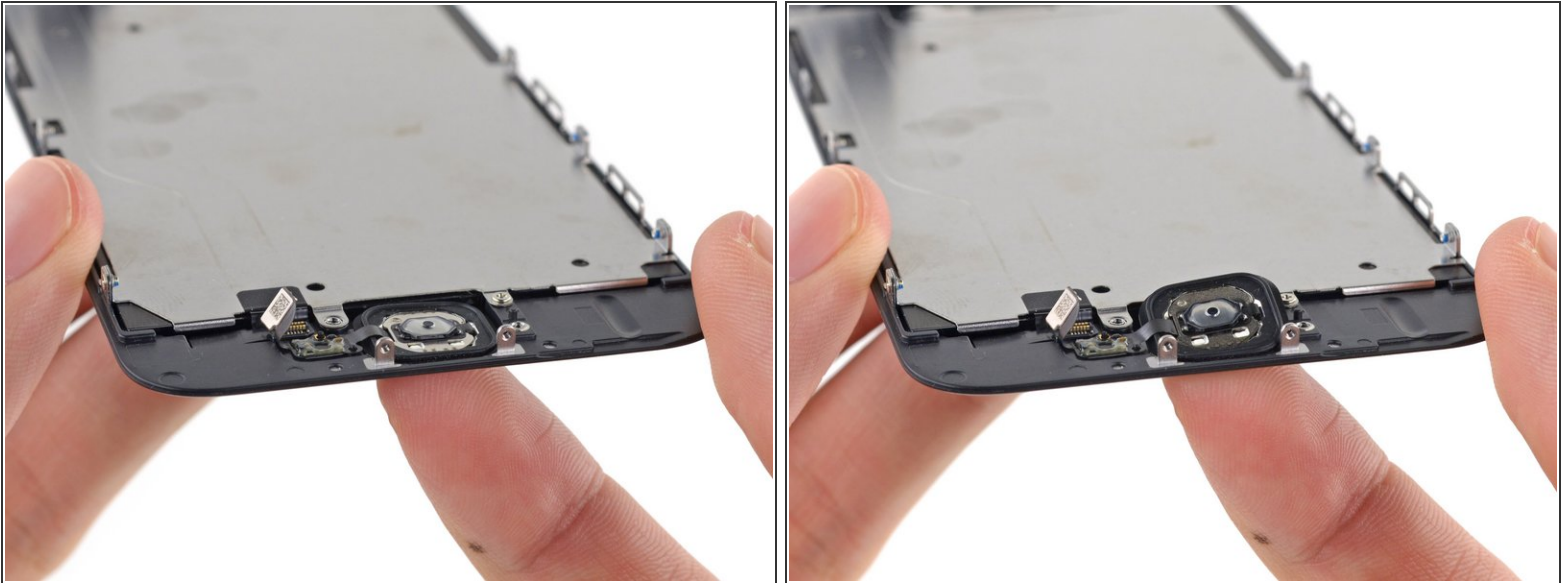
- Remove the home button bracket from the front panel.

Step 31




- Use the point of a spudger to disconnect the home button cable connector by pushing it up and away from the home button.

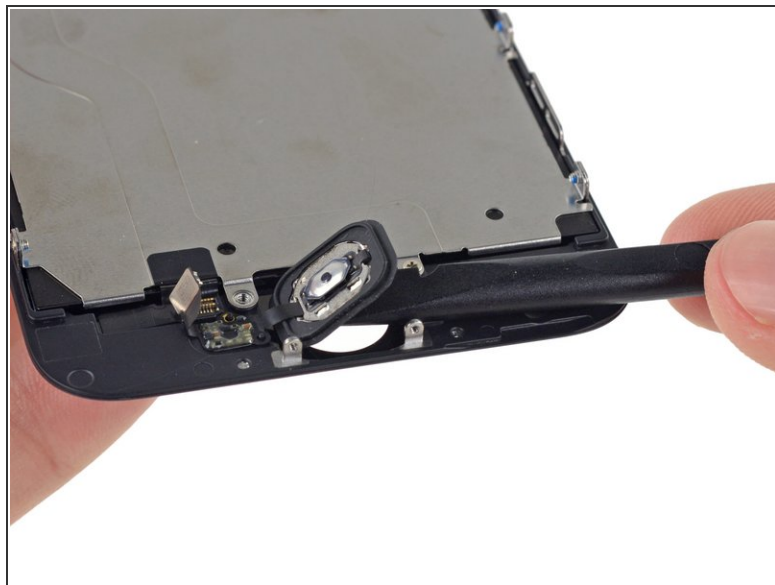
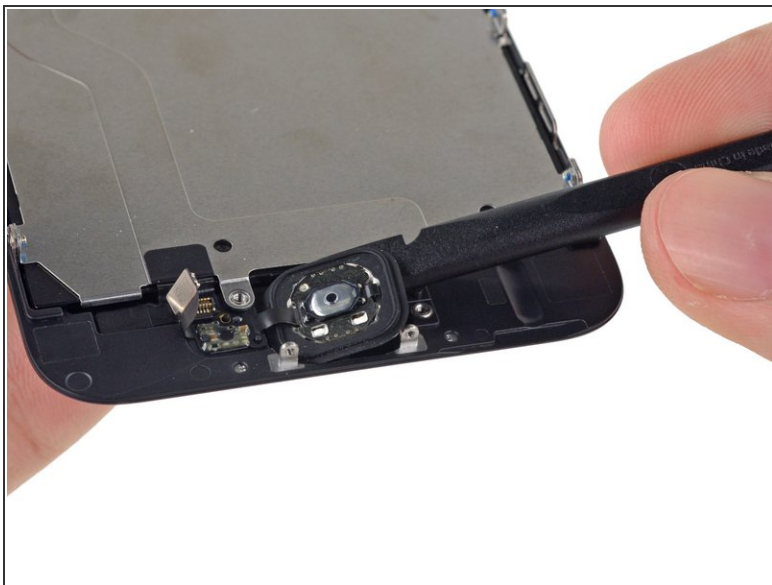
Step 32



The rubber membrane surrounding the home button is very thin and tears easily.

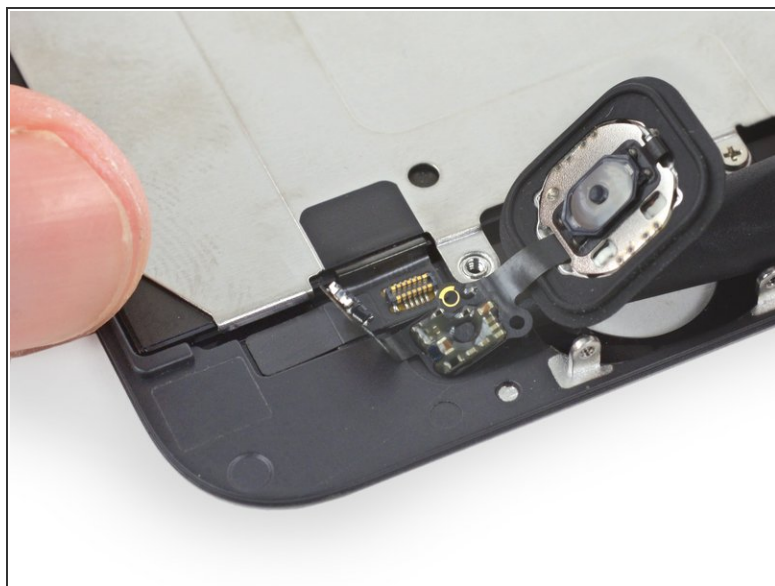
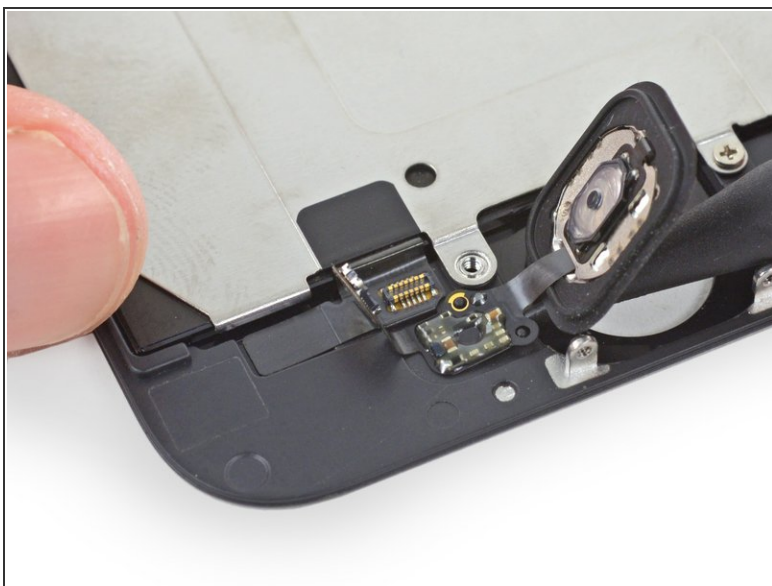
- Apply mild heat (with an [iOpener](#), heat gun, or hair dryer) to soften the adhesive securing the home button membrane.
 - Using your fingertip, apply firm, constant pressure on the home button from the front side of the display assembly, until the membrane starts to separate from the front panel.
-  Do not push the home button all the way through—you only need to get a corner free so that you can pry it free with a spudger.

Step 33



- Peel the home button the rest of the way off of the display by prying gently with a spudger.

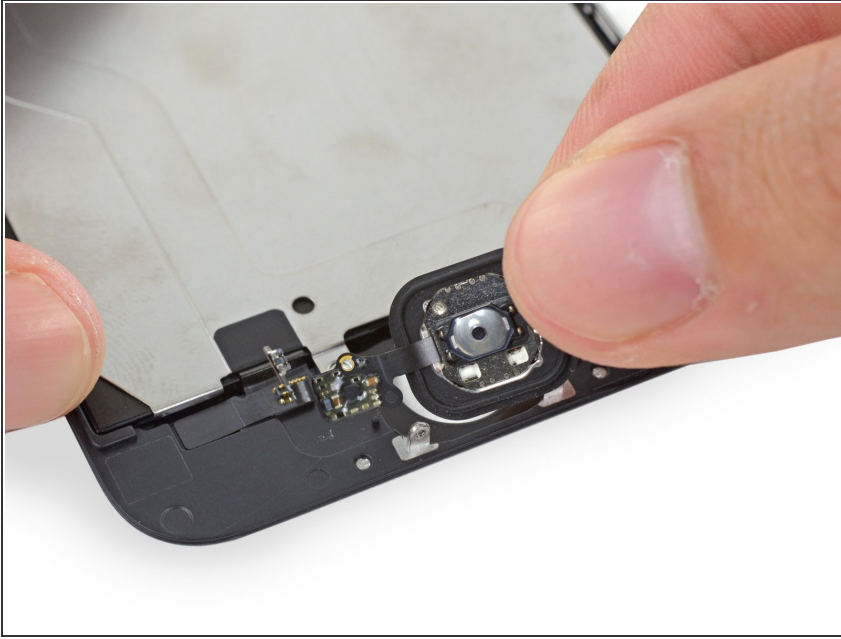
Step 34



- Use the point of a spudger to carefully separate the home button cable from the adhesive securing it to the front panel.

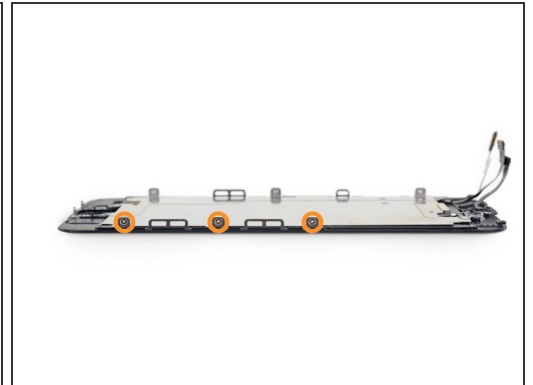
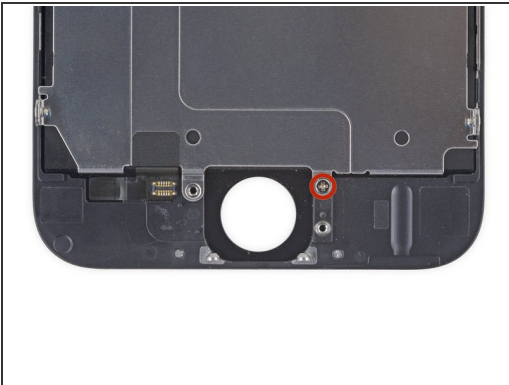
⚠ If the cable doesn't separate easily, apply heat using an [iOpener](#) or hair dryer to soften the adhesive, and try again. Be careful not to damage the cable.

Step 35



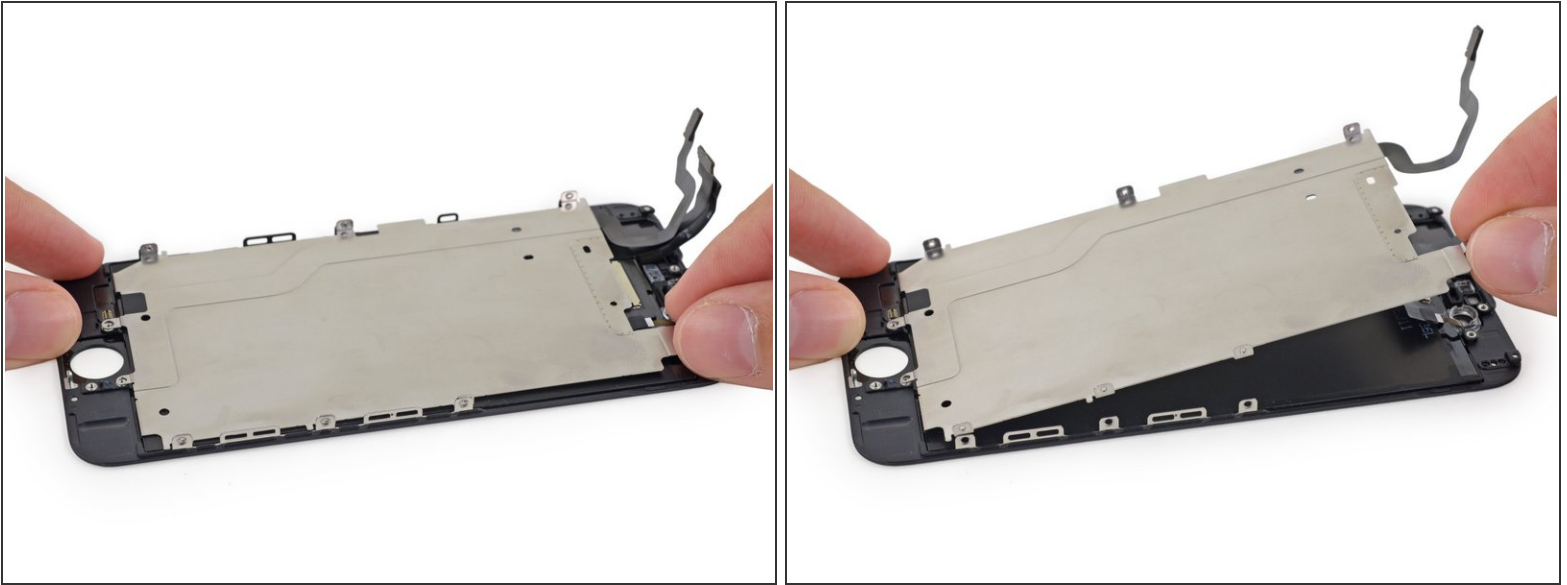
- Once all the adhesive has been separated, remove the home button from the front panel.
- ⓘ If you are replacing a broken front panel, there may be glass shards stuck to the home button. Carefully remove any remaining glass before transferring your home button to a new display.
- ★ Your replacement part may come with an [extra Phillips screw](#) already installed left of the Home Button. Remove the unnecessary screw so that you can reinstall the home button bracket.

Step 36 — LCD and Digitizer



- Remove the following Phillips #00 screws securing the LCD shield plate to the front panel:
 - One 1.7 mm screw
 - Six 1.6 mm screws (three on each side)

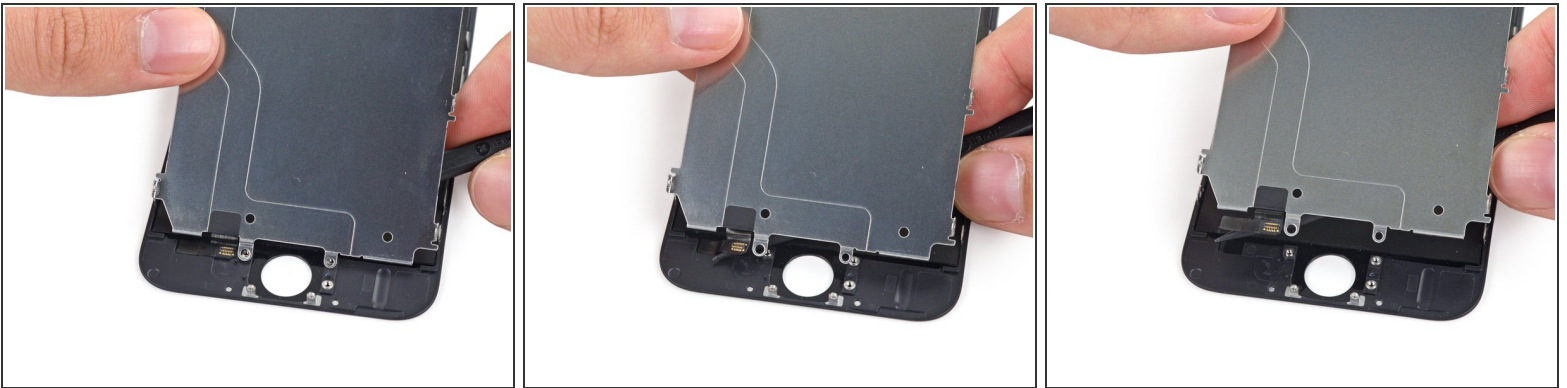
Step 37



- Lift the front-facing camera end of the LCD shield plate up slightly.

⚠ Do not attempt to remove the shield plate entirely, it is still attached to the front panel by the adhered-down home button cable.

Step 38



- Slide the point of a spudger behind the shield plate to gently peel the home button cable up off of the front panel.

⚠ Be extremely cautious as you peel the home button cable. It is a fragile cable. If you feel more than slight resistance, stop and apply some heat from a hair dryer or iOpener to soften the adhesive, and then try again.

- Remove the LCD shield plate.

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