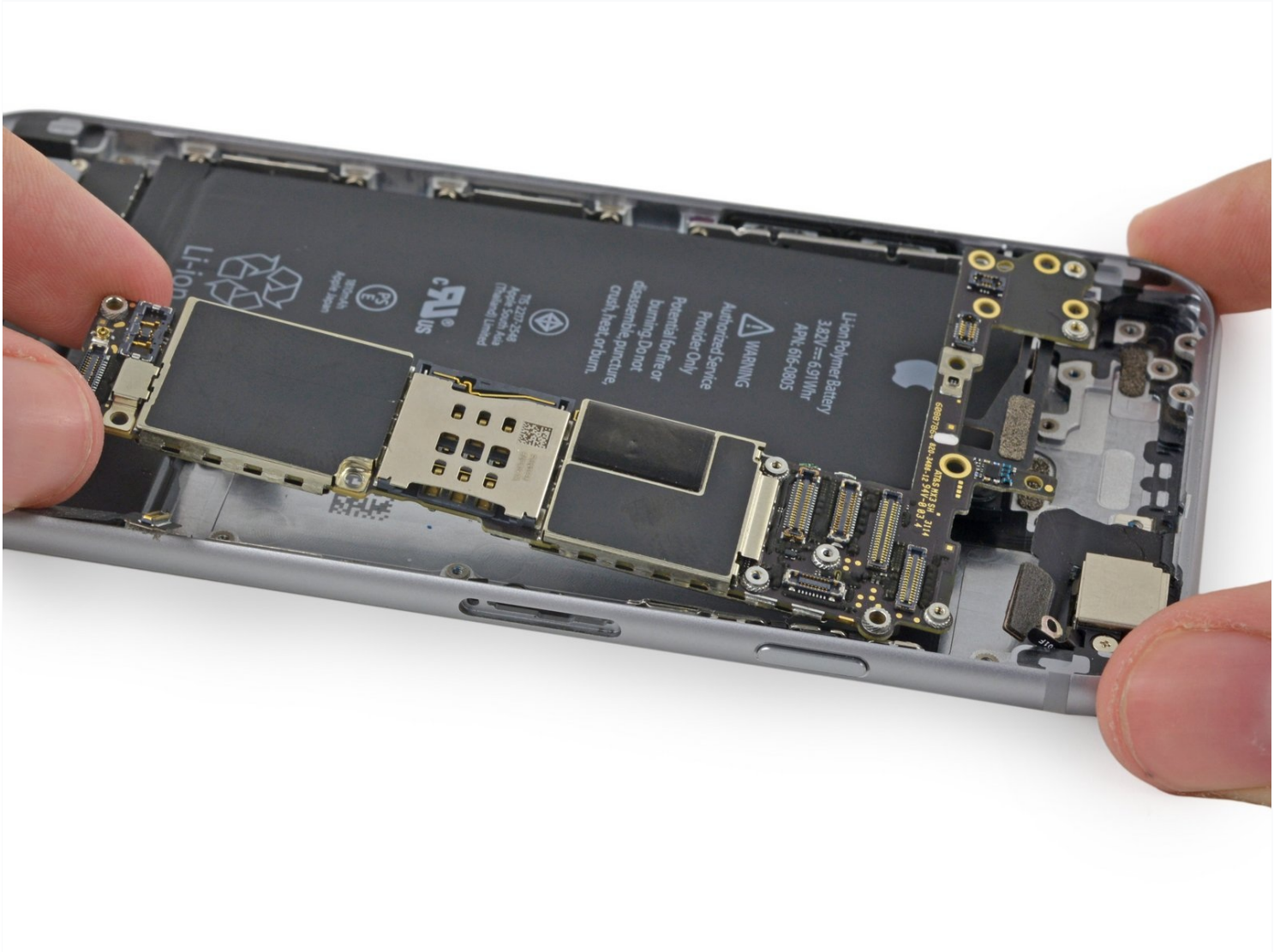




iPhone 6 Logic Board Replacement

Use this guide to remove or replace a faulty...

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INTRODUCTION

Use this guide to remove or replace a faulty logic board in your iPhone 6.

It's important to note that each iPhone's logic board and Touch ID fingerprint sensor are paired at the factory, so replacing the logic board will disable Touch ID *unless* you also install a replacement home button that has been properly paired to your new logic board.

You can also use this guide to replace the [Upper Cable Bracket](#).

TOOLS:


[Anti-Clamp](#) (1)
[P2 Pentalobe Screwdriver iPhone](#) (1)
[iFixit Opening Tool](#) (1)
[Phillips #000 Screwdriver](#) (1)
[Suction Handle](#) (1)
[Tweezers](#) (1)
[Spudger](#) (1)
[SIM Card Eject Tool](#) (1)
[Standoff Screwdriver for iPhones](#) (1)

PARTS:

[iPhone 6 Upper Cable Bracket](#) (1)
[iPhone 6 Logic Board](#) (1)
[iPhone 6 and 6 Plus Screw Set](#) (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 P2 Pentalobe screws next to the Lightning connector.

Step 2 — Anti-Clamp instructions



- ① The next two steps demonstrate the [Anti-Clamp](#), a tool we designed to make the opening procedure easier. **If you aren't using the Anti-Clamp, skip down three steps for an alternate method.**
- ① For complete instructions on how to use the Anti-Clamp, [check out this guide](#).
- Pull the blue handle backwards to unlock the Anti-Clamp's arms.
- Slide the arms over either the left or right edge of your iPhone.
- Position the suction cups near the bottom edge of the iPhone just above the home button—one on the front, and one on the back.
- Squeeze the cups together to apply suction to the desired area.
- ① If you find that the surface of your iPhone is too slippery for the Anti-Clamp to hold onto, you can [use tape](#) to create a grippier surface.

Step 3



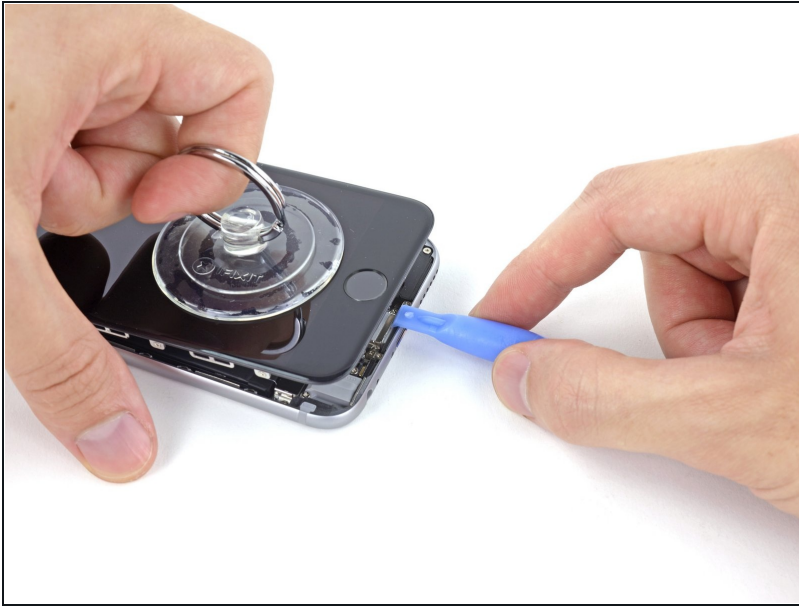
- Pull the blue handle forwards to lock the arms.
- Turn the handle clockwise 360 degrees or until the cups start to stretch.
 - ⓘ Make sure the suction cups remain aligned with each other. If they begin to slip out of alignment, loosen the suction cups slightly and realign the arms.
- Insert an opening pick under the screen when the Anti-Clamp creates a large enough gap.
 - ⓘ If the Anti-Clamp doesn't create a sufficient gap, rotate the handle a quarter turn.
- ⚠ **Don't crank more than a quarter turn at a time, and wait a few seconds between turns. Let the Anti-Clamp and time do the work for you.**
- **Skip the next three steps.**

Step 4 — Manual Opening Procedure



- If you don't have an [Anti-Clamp](#), use a single suction cup to lift the front panel:
- Press a suction cup onto the screen, just above the home button.
- ① Be sure the cup is pressed securely onto the screen to get a tight seal.
- ① 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

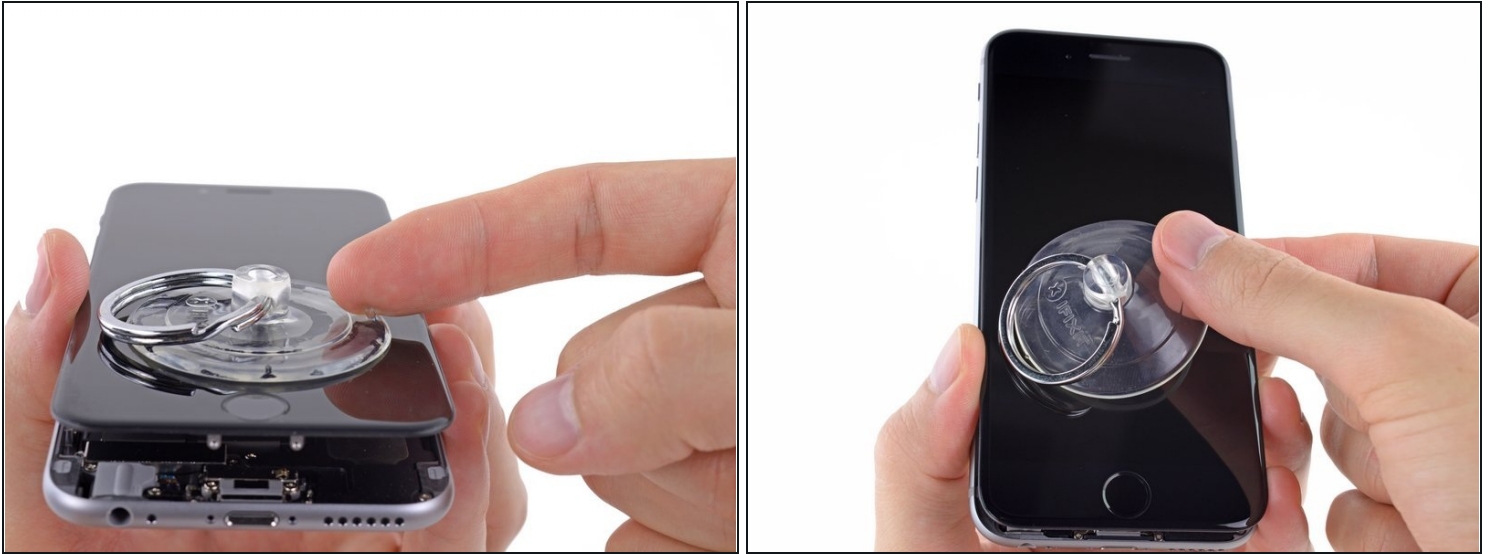


- While holding the iPhone down with one hand, pull up on the suction cup to slightly separate the front panel assembly from the rear case.

⚠ 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.
- ① 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 6



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

Step 7 — 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 8



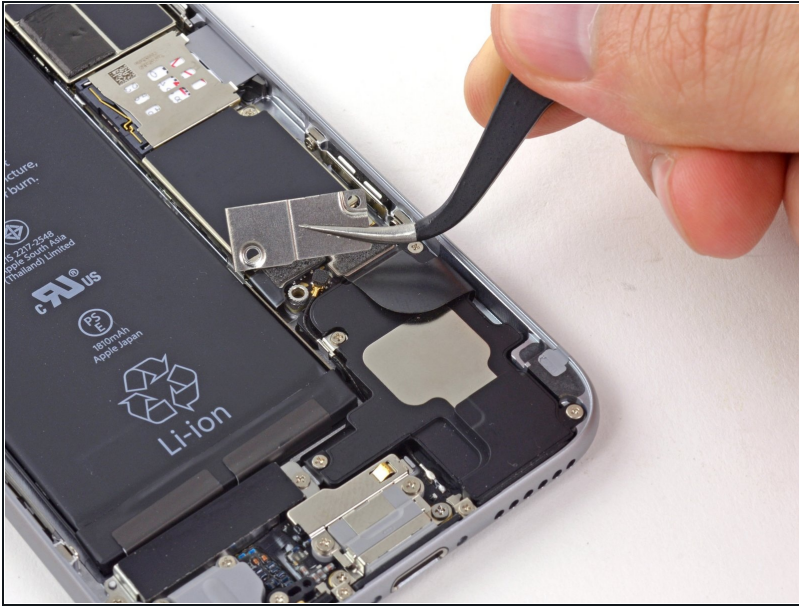
- Open the display to about a 90° angle, and lean it against something to keep it propped up while you're working on the phone.
 - ① In a pinch, an unopened canned beverage works well for this.
- Add a rubber band to keep the display securely in place while you work. This prevents undue strain on the display cables.

Step 9 — 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
- ① 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 10



- Remove the metal battery connector bracket from the iPhone.

Step 11 — 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.

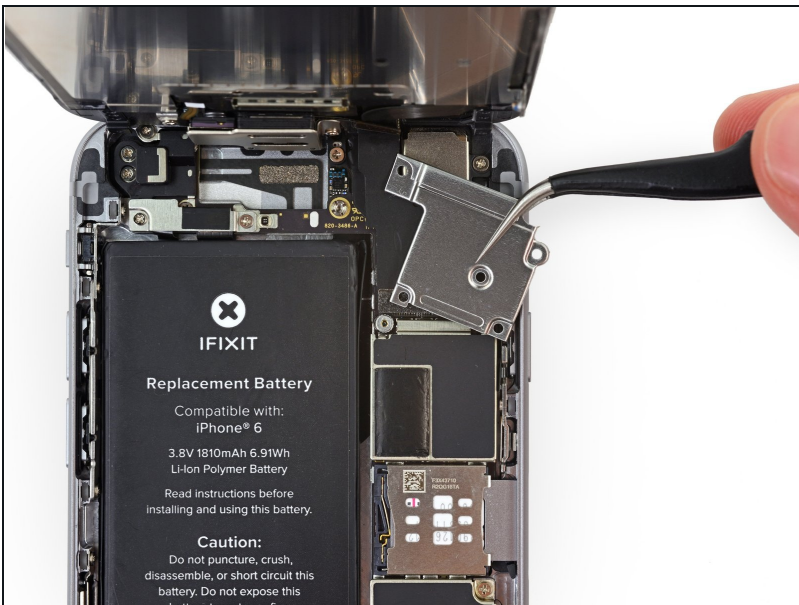
Step 12 — Removing the front panel assembly cable bracket screws



- 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 13



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

Step 14



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

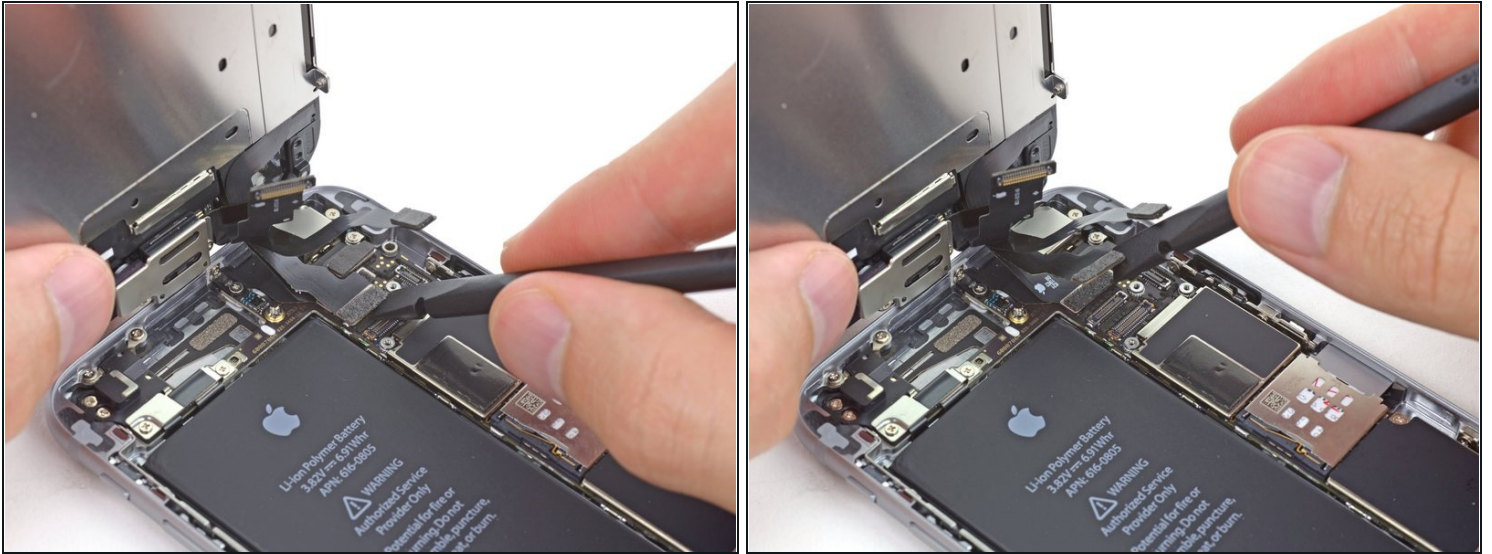
- Use a spudger or a fingernail to disconnect the front-facing camera and sensor cable connector.

Step 15



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

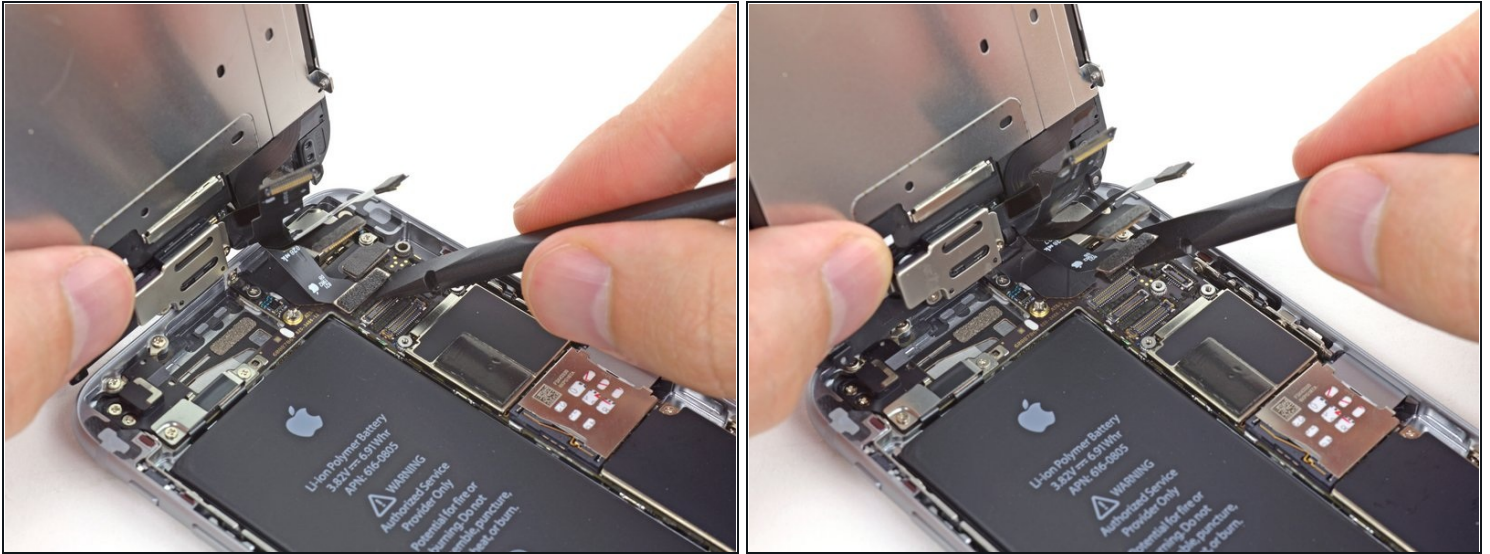
Step 16



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

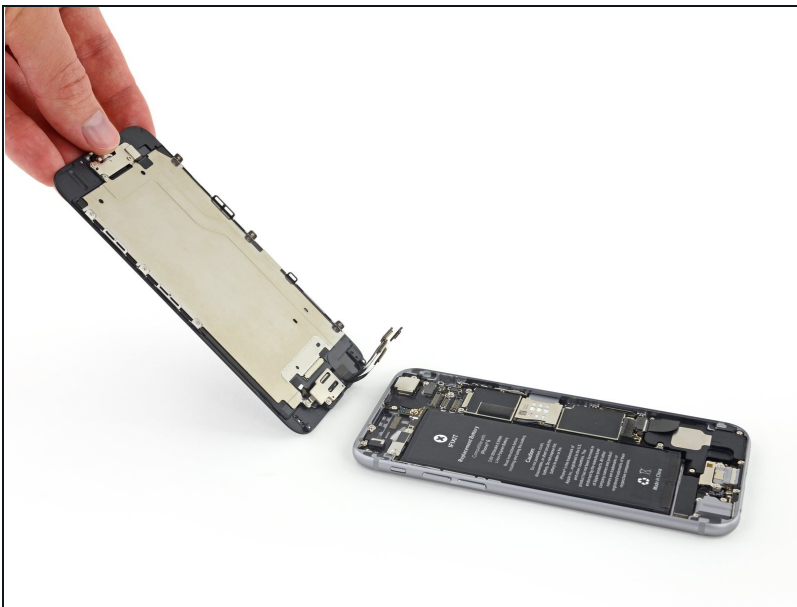
- Use a spudger or a fingernail to disconnect the display data cable connector.
- ☑ When reassembling your phone, the display data cable may pop off its connector. This can result in white lines or a blank screen when powering your phone back on. If that happens, simply reconnect the cable and power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

Step 17



- 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 18 — Separating front panel assembly and rear case



- Remove the front panel assembly from the rear case.

Step 19 — SIM Card




- Insert a SIM card eject tool or a paperclip into the small hole in the SIM card tray.
- Press to eject the tray.

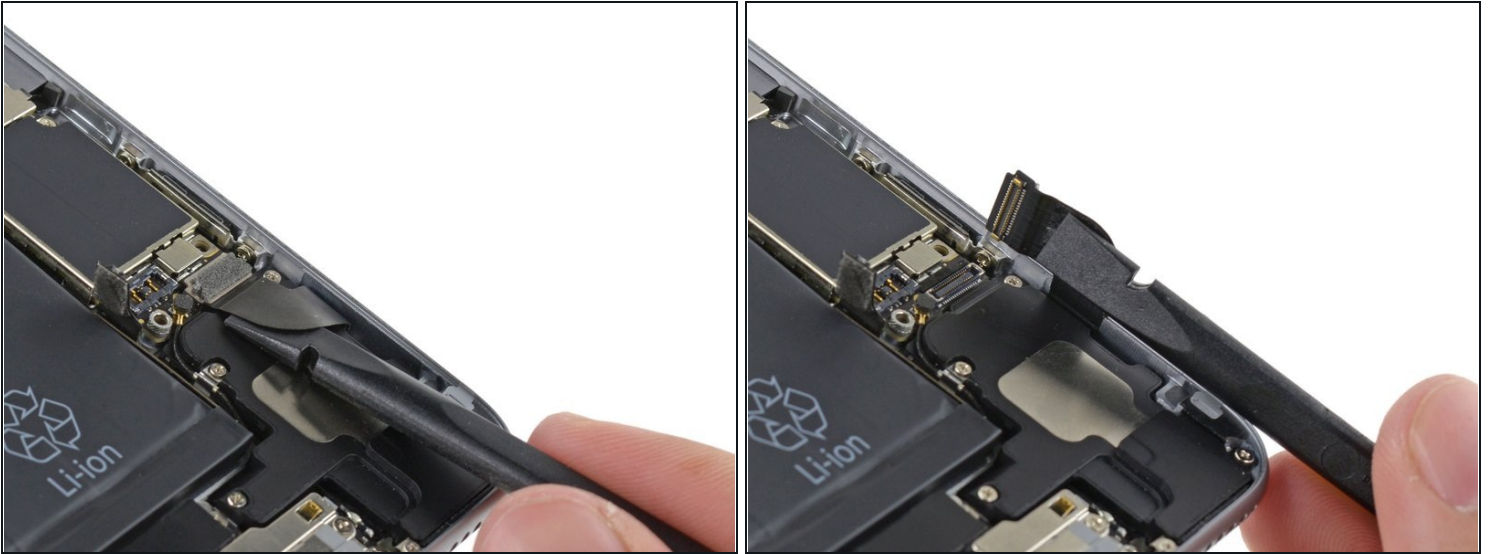
 This may require a significant amount of force.

Step 20



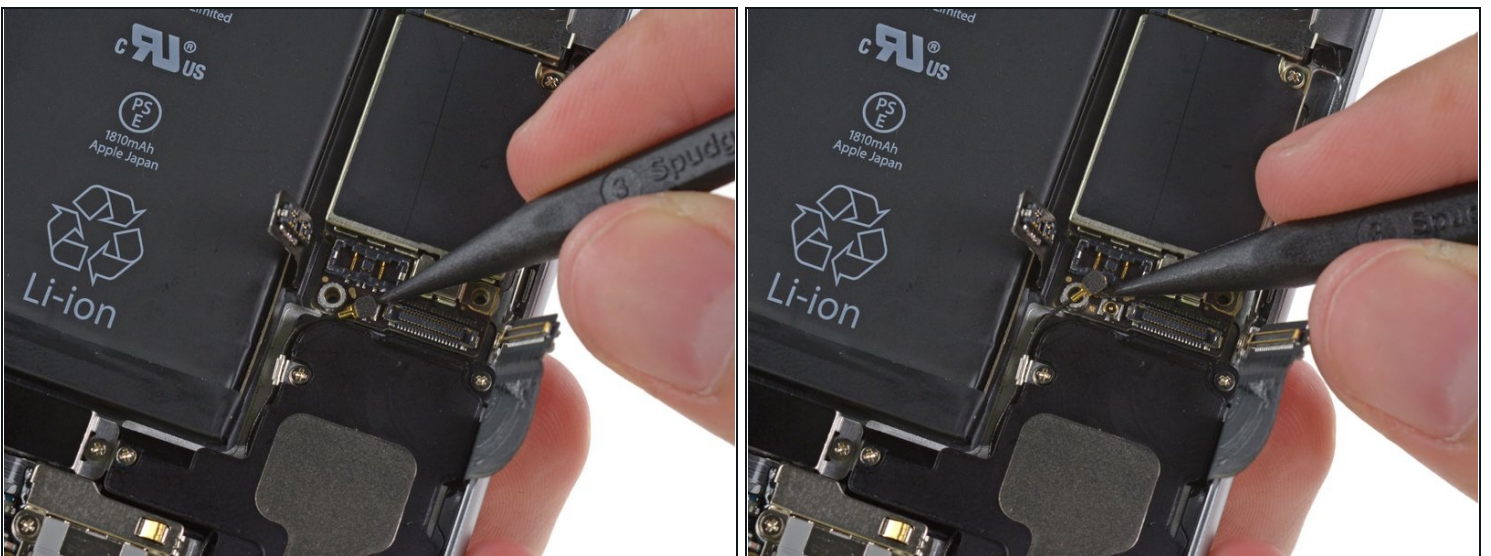
- Remove the SIM card tray assembly from the iPhone.
-  When reinserting the SIM card, ensure that it is in the proper orientation relative to the tray.

Step 21 — Logic Board



- Use the flat end of a spudger to disconnect the Lightning connector assembly cable and fold it out of the way of the speaker.

Step 22



- Use the point of a spudger to lift the antenna cable connector up off of its socket on the logic board.

Step 23



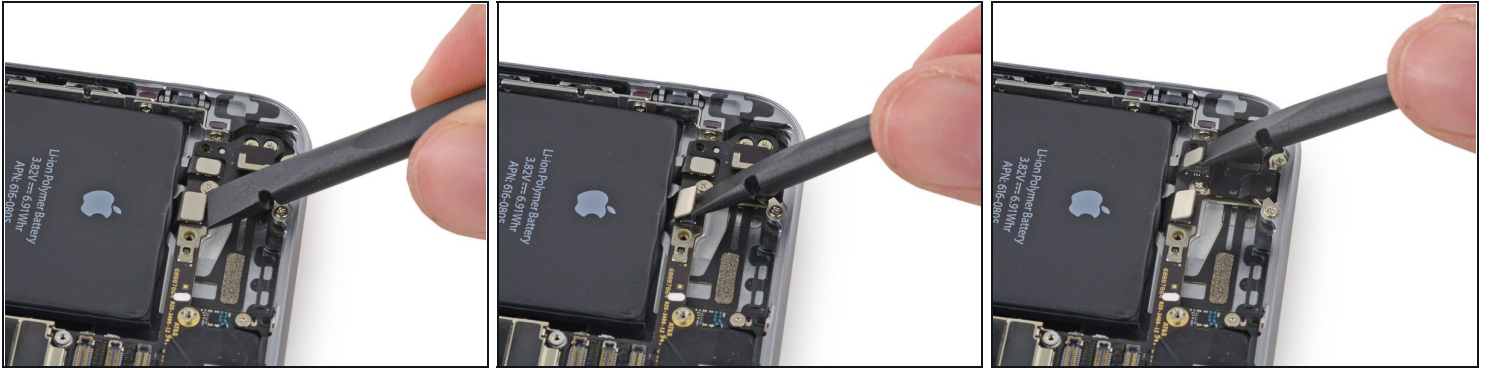
- Remove the following Phillips screws from the upper cable bracket:
 - One 2.9 mm screw
 - One 2.2 mm screw

Step 24



- Remove the upper cable bracket from the iPhone.

Step 25



⚠ When disconnecting the following connectors, only pry up on the connector, **not the socket** on the logic board or you risk permanent damage.

- Use the flat end of a spudger to lift the power button and flash assembly cable connector up off of its socket.
- Lift the volume control cable connector up out of its socket on the logic board.

Step 26



- Remove the following four Phillips screws from the Wi-Fi antenna:
 - One 1.5 mm screw
 - One 1.4 mm screw
 - Two 2.1 mm screws

Step 27



- Remove the Wi-Fi antenna from the iPhone.
- ⓘ Be careful not to touch any metal to metal contact points with your bare fingers—use tweezers or gloves. Finger oils may disrupt conductivity. If you do touch any of these components, clean them with a degreaser like windex or isopropyl alcohol before reassembly.

Step 28



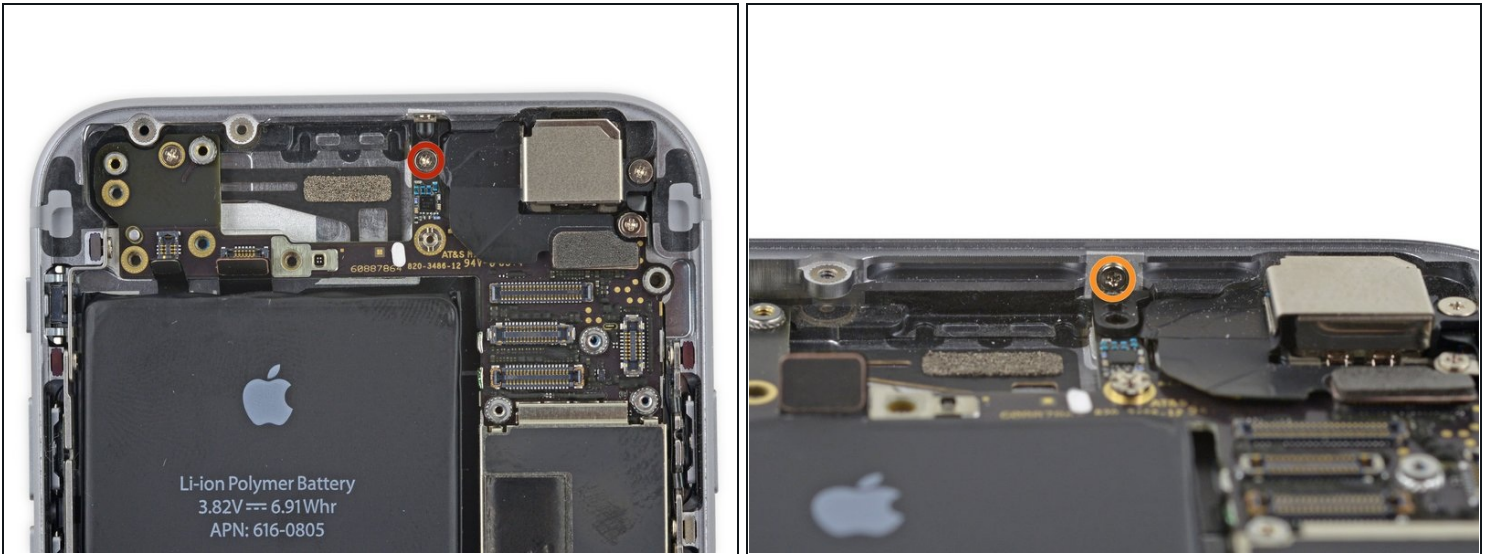
- Remove the two 1.6 mm Phillips screws from the grounding bracket.

Step 29



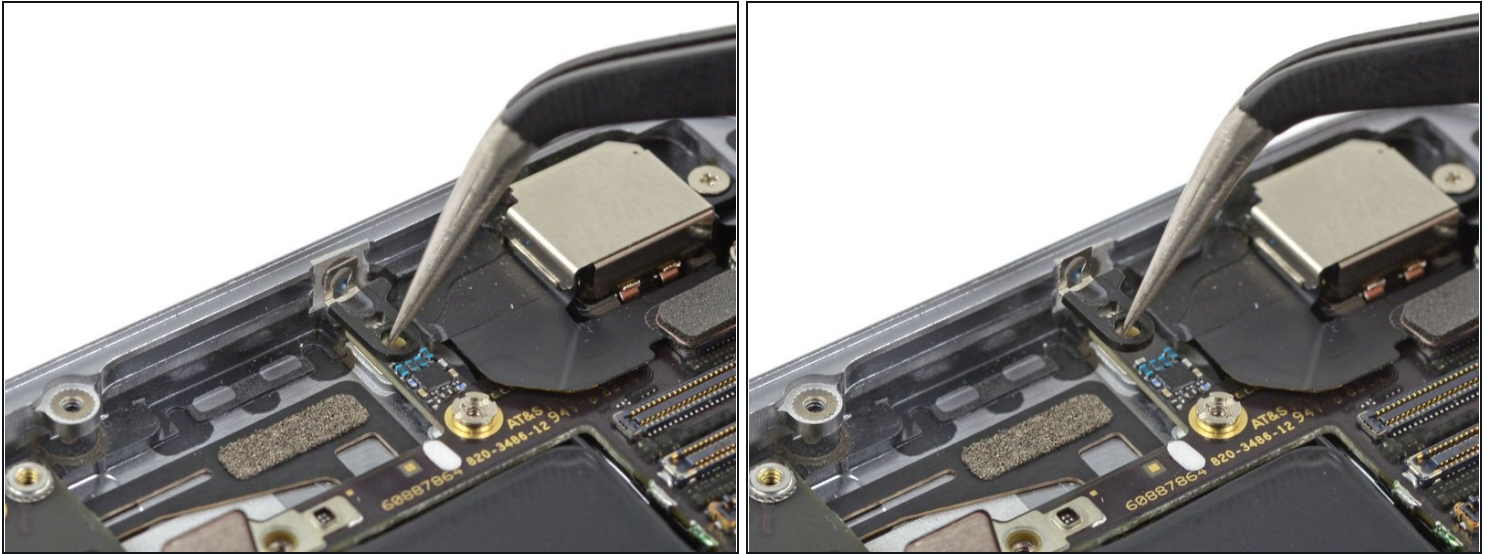
- Remove the grounding bracket from the iPhone.

Step 30



- Remove the following Phillips screws securing the angled logic board bracket.
 - One 2.6 mm screw
 - One 1.3 mm screw, located horizontally in the upper sidewall of the iPhone.

Step 31



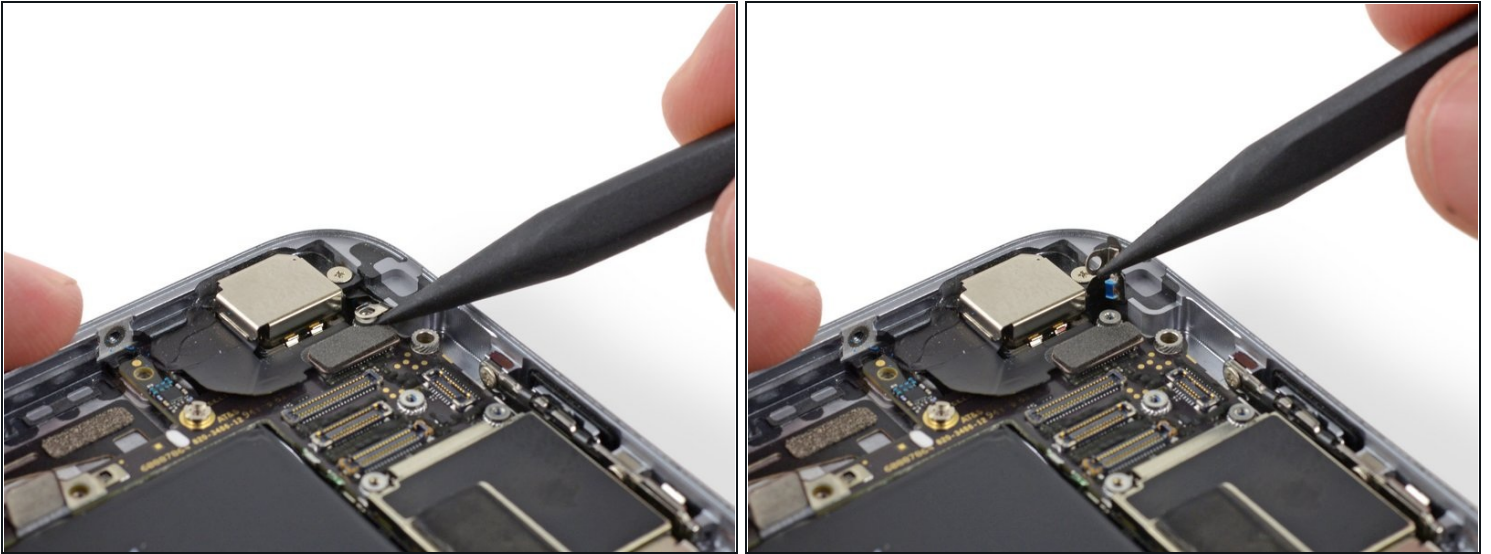
- Remove the angled logic board bracket.

Step 32



- Remove the single 1.2 mm Phillips screw securing the antenna interconnect cable to the logic board.

Step 33



- Use the point of a spudger to fold the antenna interconnect cable up out of the way of the logic board.

Step 34



- Use the flat end of a spudger to lift the camera cable connector straight up out of its socket on the logic board.
 - ⚠ Be sure to only pry on the connector **not** the socket itself or you can cause permanent damage to the logic board.
- Fold the camera cable up out of the way of the logic board.

Step 35



- Remove the following screws securing the logic board to the rear case:

- Two 1.9 mm Phillips screws
- One 2.3 mm standoff screw

❗ Standoff screws are best removed using a [standoff screwdriver](#) or bit.

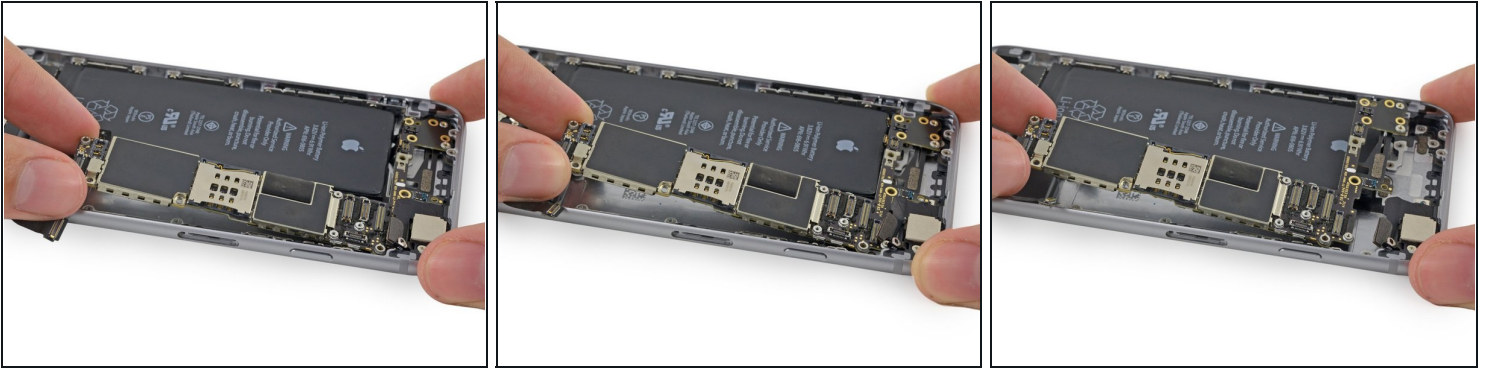
⚠ In a pinch, a small flathead screwdriver will do the job—but use extra caution to ensure it doesn't slip and damage surrounding components.

Step 36



- Use the flat end of a spudger to lift the battery connector end of the logic board up slightly, just enough to grab with your fingers.
- ❗ Insert the spudger near the metal shields below the SIM card tray to avoid damaging any chips or sockets.

Step 37



- Lift the battery connector end of the logic board and pull it up and out of the rear case.
⚠ Be careful not to snag the logic board on any cables.

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