



iPhone 6 Plus Logic Board Replacement

Replace the Logic Board in the iPhone 6 Plus.

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INTRODUCTION

Use this guide to replace the logic board in your iPhone 6s Plus.

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.

TOOLS:

- [P2 Pentalobe Screwdriver iPhone \(1\)](#)
- [iSclack \(1\)](#)
- [Suction Handle \(1\)](#)
- [iFixit Opening Tools \(1\)](#)
- [Tweezers \(1\)](#)
- [SIM Card Eject Tool \(1\)](#)
- [Phillips #000 Screwdriver \(1\)](#)
- [Spudger \(1\)](#)
- [iPhone Standoff Screwdriver \(1\)](#)

PARTS:

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

Step 2 — iSclack Opening Procedure



i The next two steps demonstrate using the [iSclack](#), a great tool for safely opening the iPhone 6 Plus that we recommend for anyone doing more than one repair. **If you aren't using the iSclack, skip down two steps.**

- 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 Plus.
- Close the handle on the iSclack, opening the suction cup jaws.
- Place the bottom of your iPhone in between the suction cups.

i Position the iSclack's upper suction cup against the display, near the home button.

- Open the handles to close the jaws of the iSclack. Center the suction cups and press them firmly onto the top and bottom of the iPhone.

i 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 iSclack also includes two pieces of tape for this purpose.

Step 3



- 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 enough to separate the pieces, but not enough to damage any of the display cables.
- Peel the two suction cups off your iPhone.
- **Skip the next three steps and continue on to Step 7.**

Step 4 — Front Panel Assembly



- 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.

● **i** Be sure the cup is pressed securely onto the screen to get a tight seal.

● **i** 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.
- **ⓘ** There are several clips attaching 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.

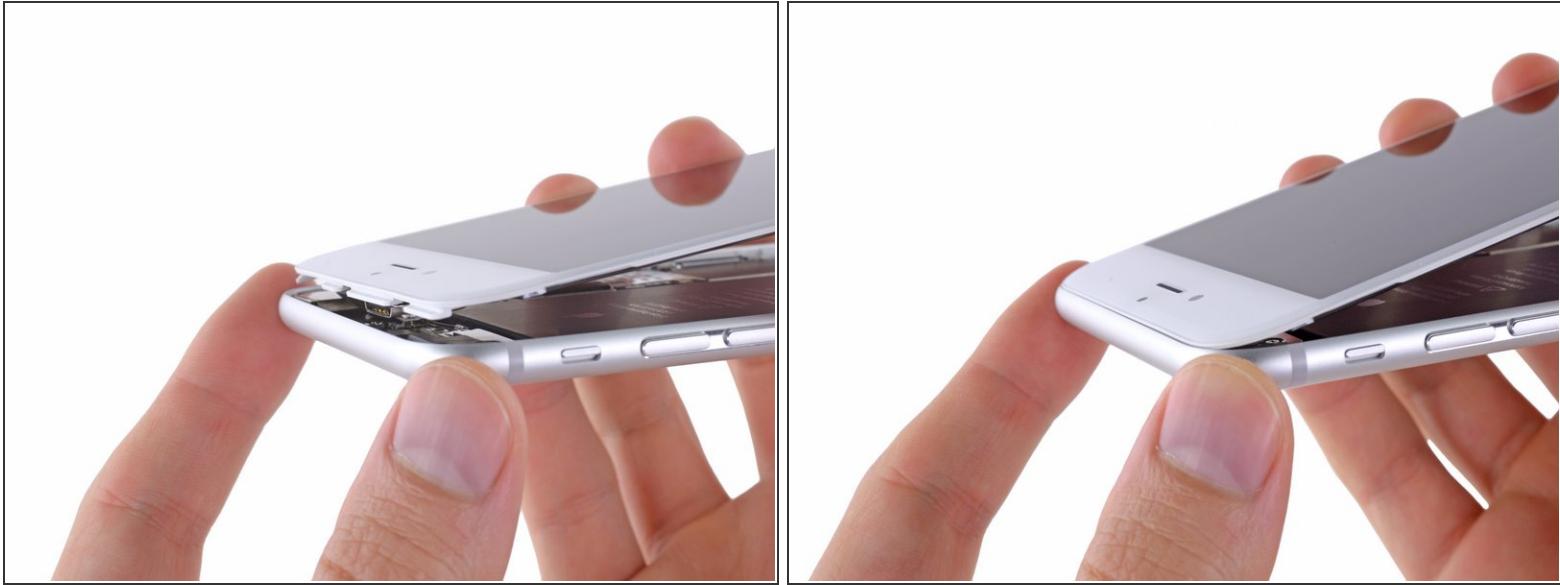
Step 7



- Pull the home button end of the front panel assembly away from the rear case, using the top of the phone as a hinge.
- 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.
- Add a rubber band to keep the display securely in place while you work. This prevents undue strain on the display cables.

(i) In a pinch, you can use an unopened canned beverage to hold the display.

Step 8



- ⓘ Several clips along the top edge of the front panel form a partial hinge, allowing the front panel assembly to swing open like a book.
- ⚡ 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 9



- Remove the following Phillips screws from the battery connector bracket:
 - One 2.3 mm screw
 - One 3.1 mm screw

Step 10



- Remove the metal battery connector bracket from the iPhone.

Step 11



- Use a clean fingernail or the edge of an 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



- Remove the following Phillips screws securing the front panel assembly cable bracket:
 - Three 1.2 mm screws
 - One 1.5 mm screw
 - One 2.9 mm screw

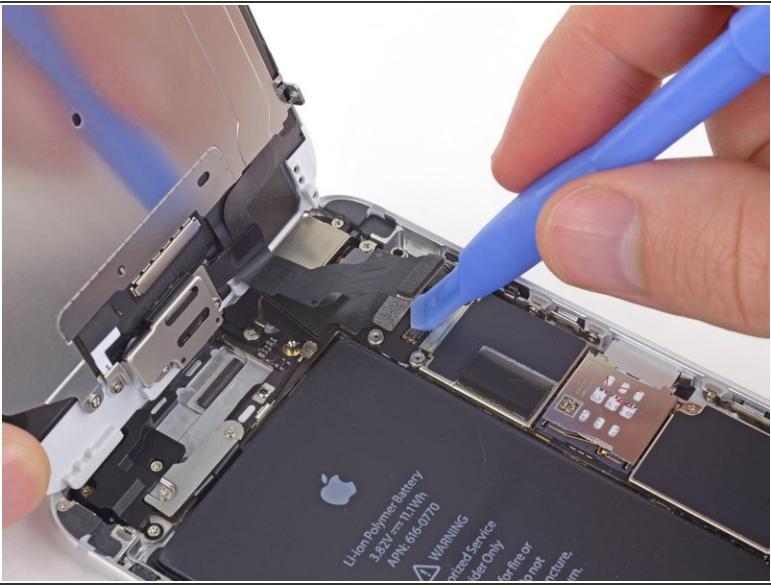
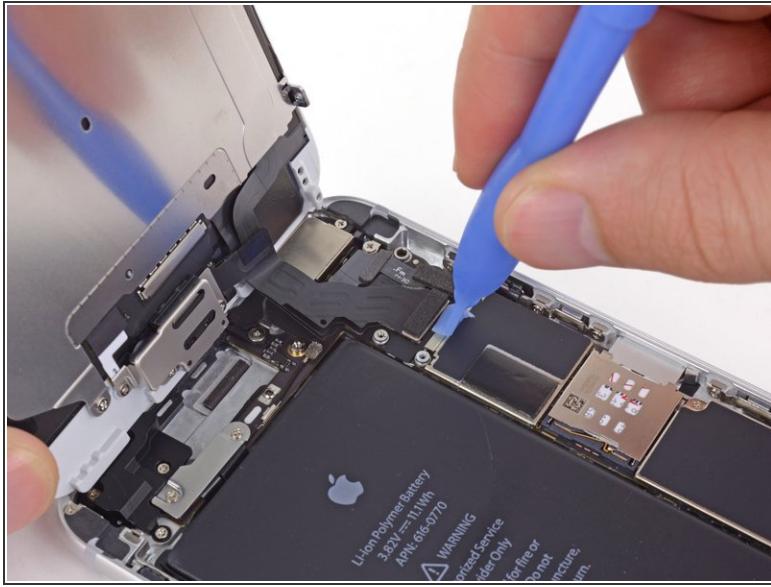
⚠ Do not attempt to insert longer screws into the red marked screw holes. Doing so may result in irreparable damage to the logic board.

Step 13



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

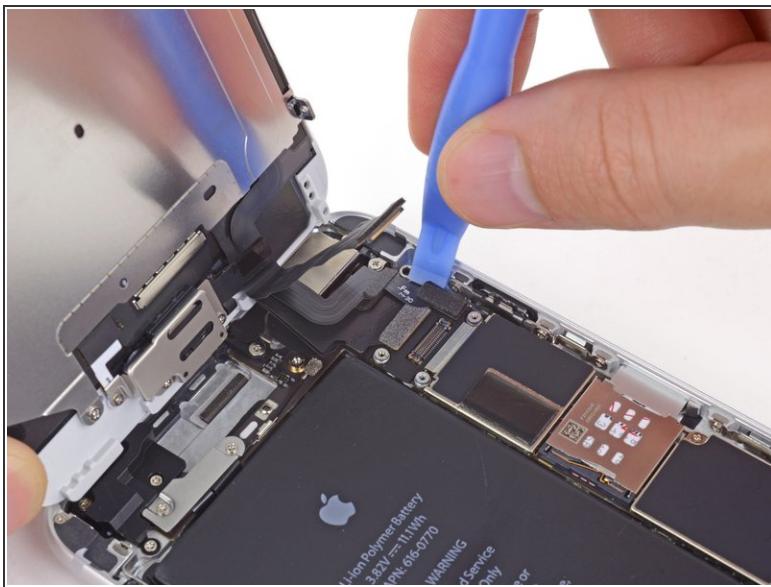
Step 14



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

- While still supporting the front panel, use a fingernail or the edge of an opening tool to disconnect the front-facing camera and earpiece speaker connector.

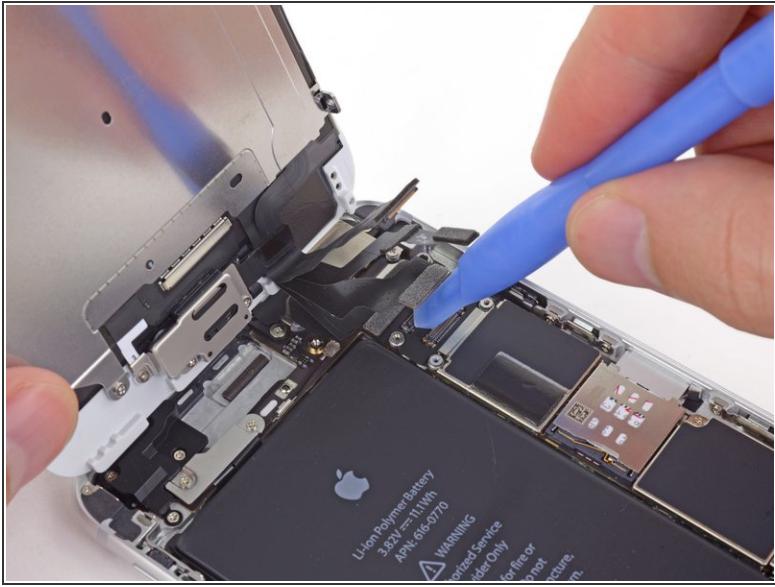
Step 15



- Disconnect the home button cable connector.

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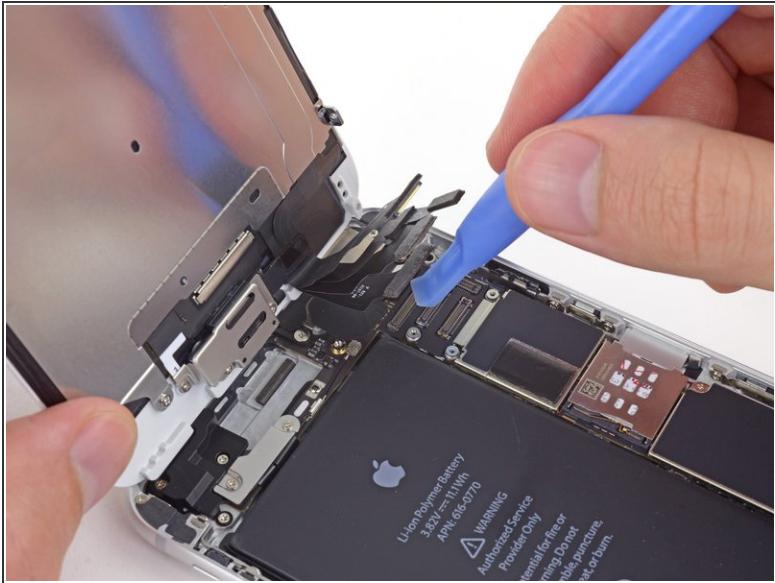
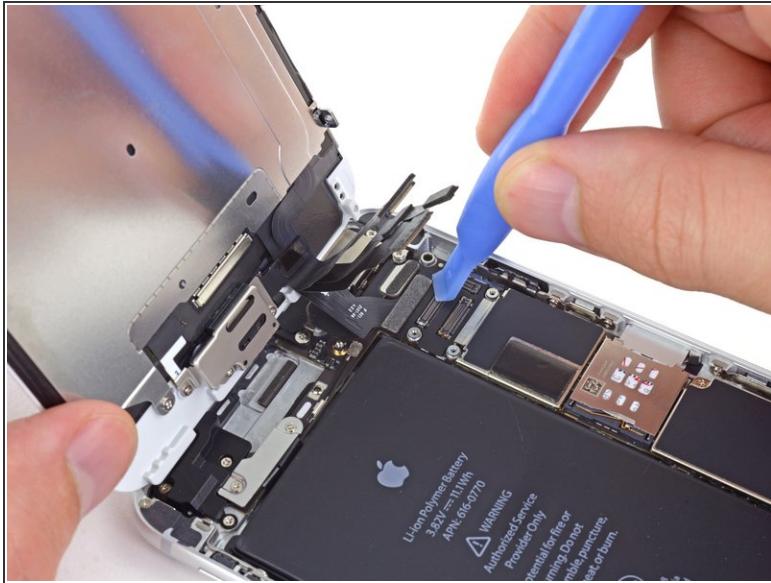
Step 16



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

- Use a plastic opening tool to disconnect the display data cable connector.
- ⚠ When reassembling your phone, the display data cable may pop off the 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](#).

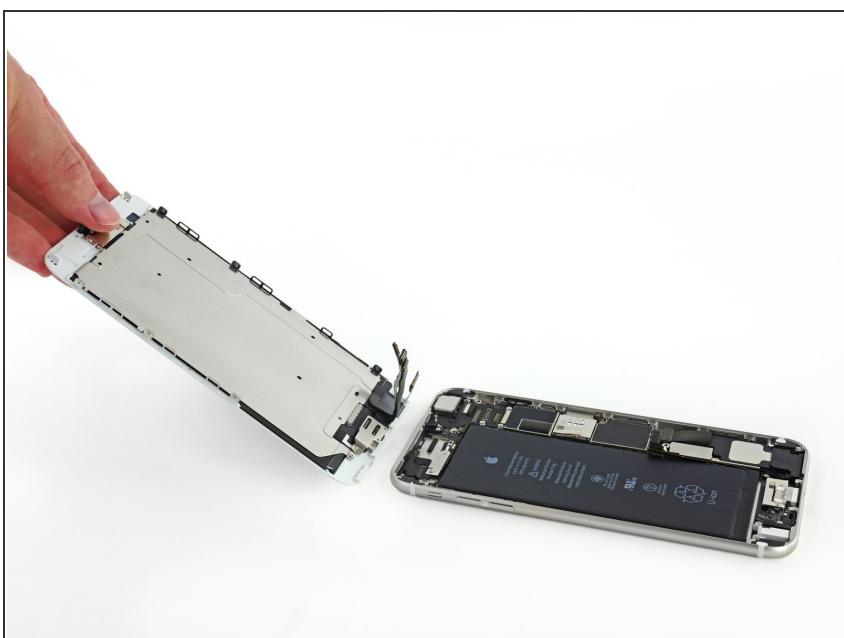
Step 17



- Finally, 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



- Remove the front panel assembly from the rear case.

Step 19 — 5GHz Wi-Fi Antenna



- Remove the following screws securing the antenna bracket to the rear case:
 - One 1.5 mm Phillips #00 screw
 - One 2.8 mm Phillips #00 screw

Step 20



- Grasp the 5GHz Wi-Fi antenna bracket with a pair of tweezers and lift it off the iPhone.

Step 21

- Carefully pry the 5GHz Wi-Fi antenna connector up off the logic board with a plastic opening tool.

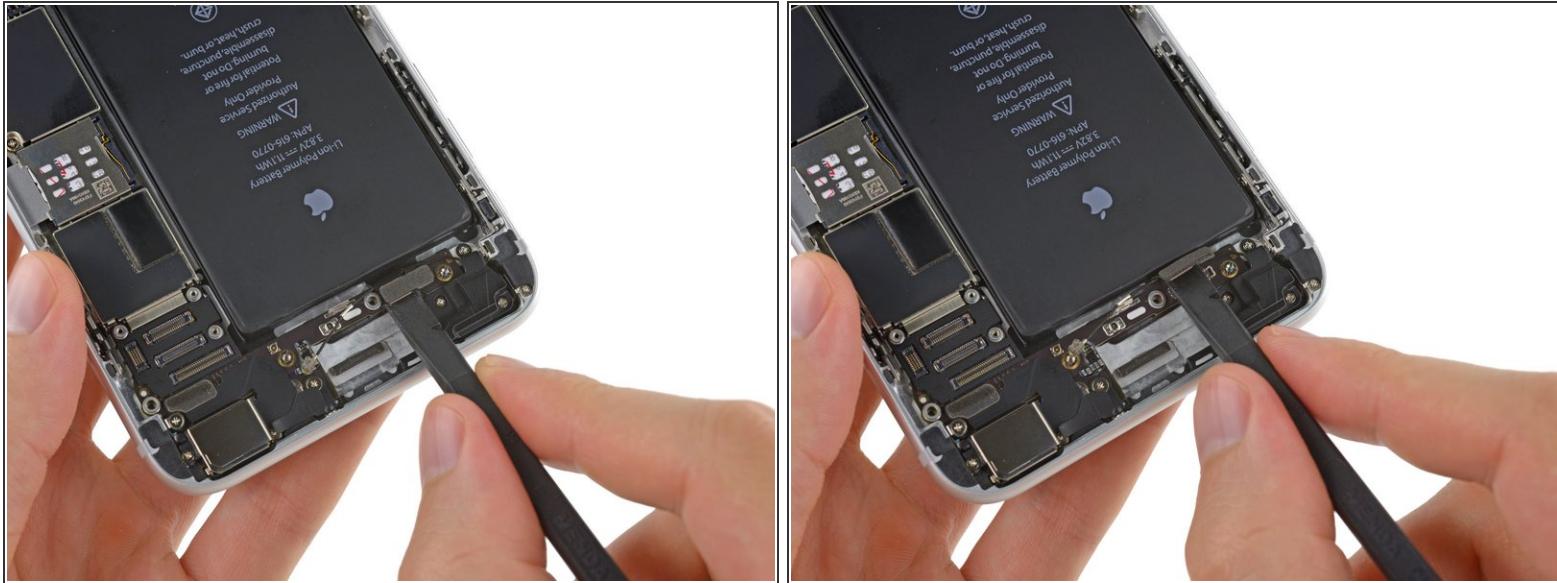


Step 22



- Grasp the 5GHz Wi-Fi antenna connector with a pair of tweezers and gently lift it from its retaining clip on the logic board.

Step 23



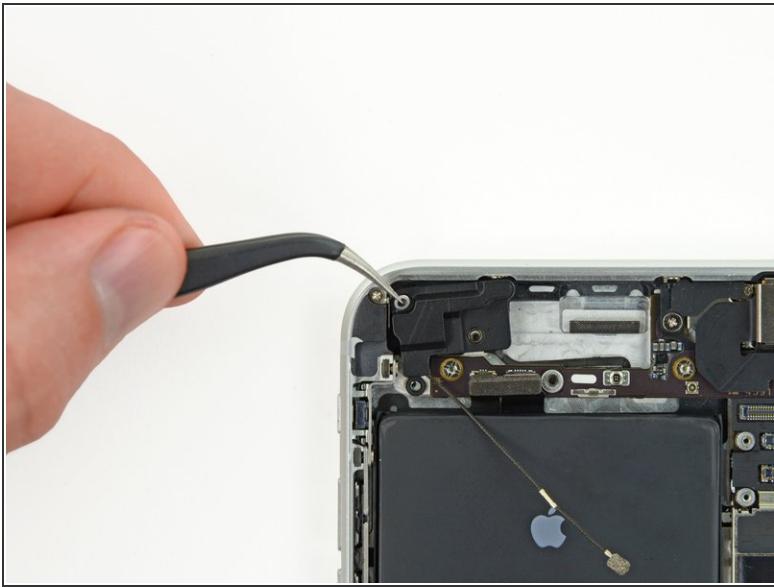
- ⓘ The two connectors may be coupled by a single adhesive tab. If this is the case, then they may detach as a pair.
- Disconnect the power button cable and audio control cable connectors from their respective sockets on the logic board.

Step 24



- Remove the following screws securing the 5GHz Wi-Fi antenna to the rear case:
 - One 2.8 mm Phillips #00 screw
 - Two 1.6 mm Phillips #00 screws

Step 25



- Use a pair of tweezers to grasp and remove the 5GHz Wi-Fi antenna out of the iPhone.
- During reassembly, make sure to place the small washer in the top left corner of the 5GHz Wi-Fi antenna.

Step 26 — Vibrator



- Pry the vibrator connector cable up from its socket on the logic board with the flat end of a spudger.

Step 27



- Use the tip of a spudger to disconnect the interconnect antenna cable from its socket on the logic board.

Step 28



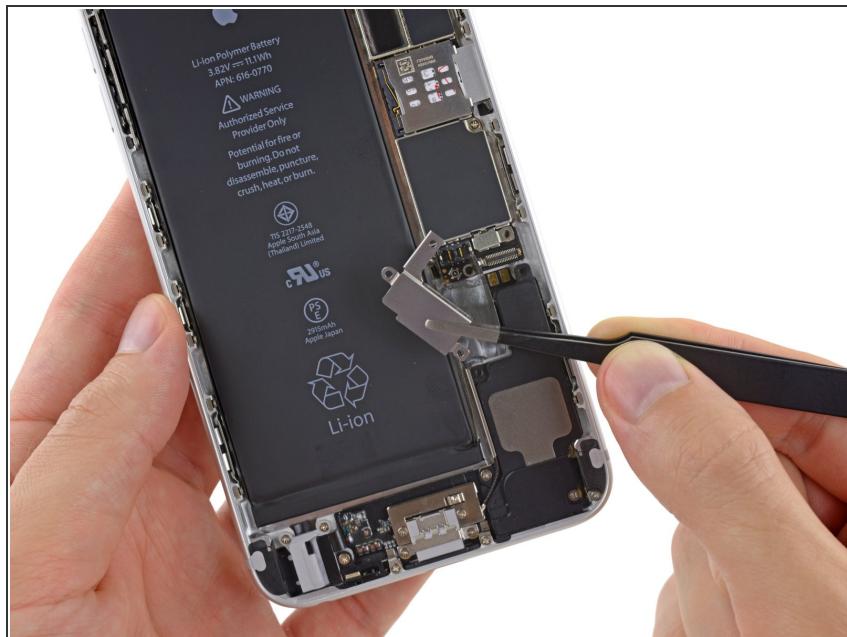
- Grasp the interconnect antenna cable with a pair of tweezers and carefully de-route it from its channel on the vibrator assembly.

Step 29



- Remove the two 2.5 mm Phillips #00 screws securing the vibrator to the rear case.

Step 30



- Remove the vibrator from the iPhone.

Step 31 — 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.

(i) This may require a significant amount of force.

Step 32



- 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 33 — Rear Facing Camera



- Use a pair of tweezers to peel back the piece of tape covering the hidden screw securing the rear-facing camera bracket to the rear case.

Step 34



- Remove the following screws securing the rear-facing camera bracket to the rear case:
 - One 1.7 mm Phillips #00 screw
 - One 2.3 mm Phillips #00 screw

Step 35

- Lift and remove the rear-facing camera bracket off the rear-facing camera.



Step 36

- Use the flat end of a spudger to disconnect the rear-facing camera connector from its socket on the logic board.



Step 37



- Carefully lift and remove the rear-facing camera out of the iPhone.

Step 38 — Logic Board Assembly



- Remove the single 2.8 mm Phillips #00 screw securing the plastic clip to the logic board.

Step 39

- Remove the single 1.3 mm Phillips #00 screw recessed against the top of the rear case.



Step 40



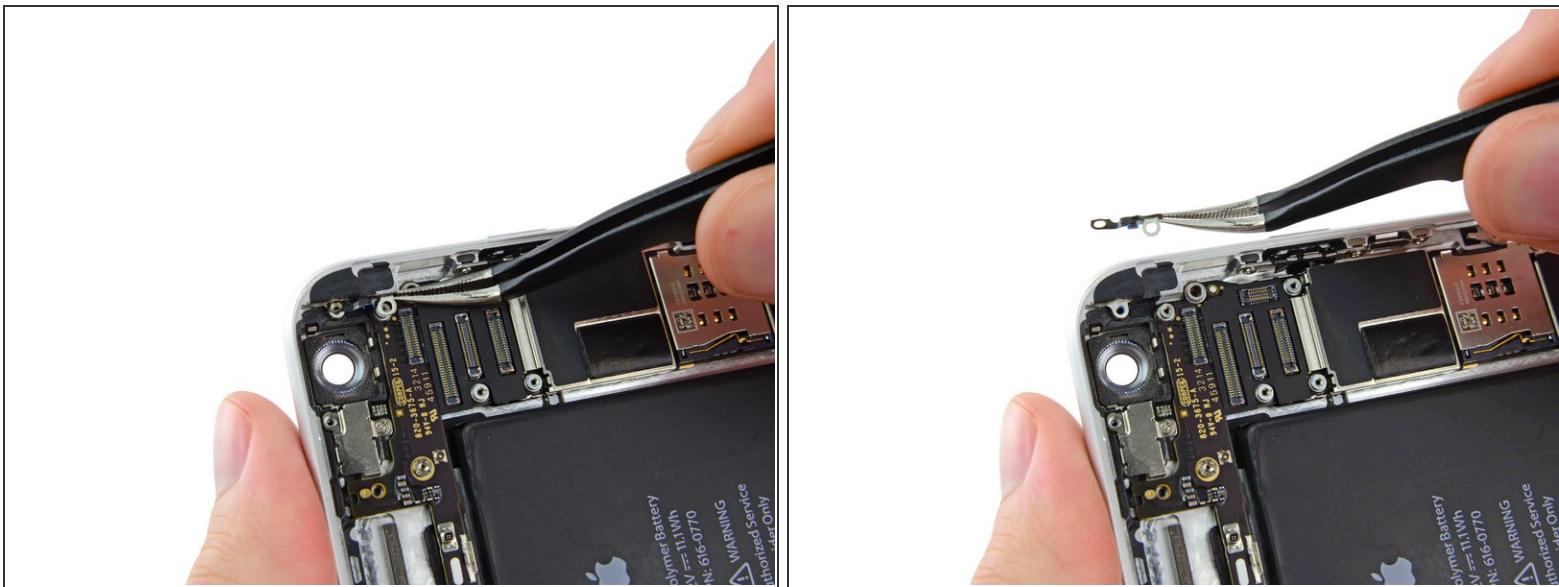
- Use a pair of tweezers to firmly grasp the plastic clip and remove it from the iPhone.

Step 41



- Remove the single 1.6 mm Phillips #00 screw securing the antenna clip to the rear case.

Step 42



- Carefully grasp the antenna clip with a pair of tweezers and remove it from the iPhone.

Step 43 — Logic Board



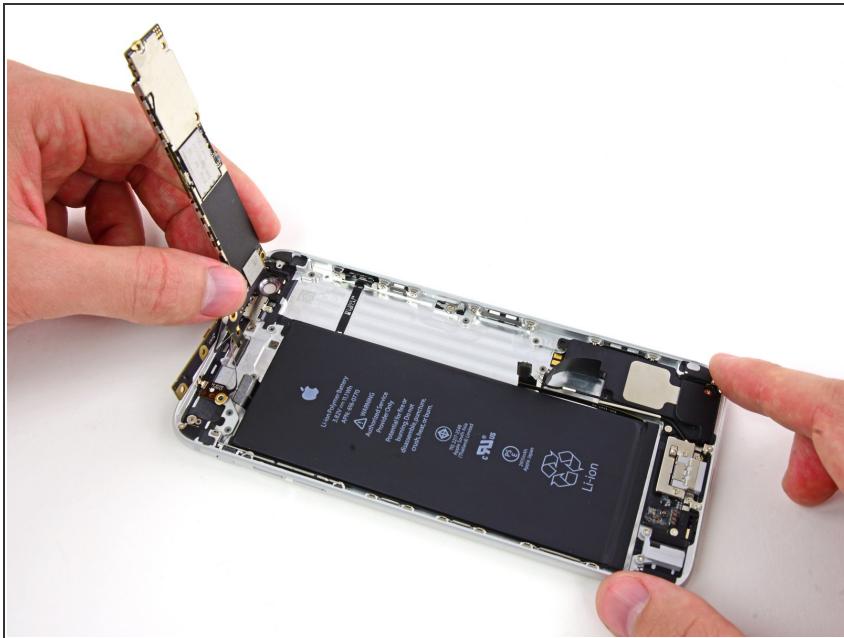
- Remove the following screws securing the logic board to the rear case:
 - Two 2.4 mm standoff screws
 - **(i)** Standoff screws are best removed with a [standoff screwdriver](#) or [standoff driver bit](#). A small flathead screwdriver can also do the job—but use extra caution to ensure it doesn't slip and damage surrounding components.
- One 2.1 mm Phillips #00 screw

Step 44



- Carefully raise—but do **not** remove—the logic board, lifting it from the bottom edge nearest the Lightning connector.

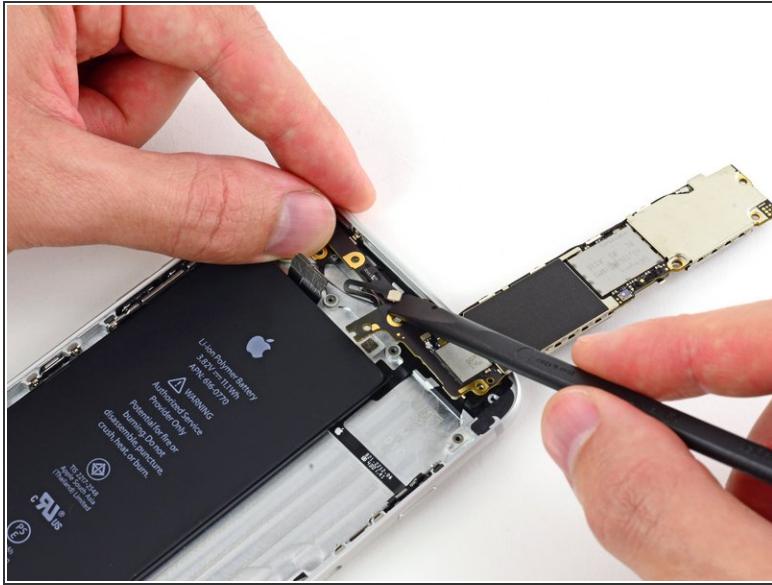
Step 45



⚠ Do not remove the logic board. At this point it is still tethered to the rear case via an antenna connector.

- Continue carefully lifting the bottom side of the logic board until it is vertical.

Step 46



- Gently lay the logic board upside-down, with the top portion resting against the rear case of the iPhone.
- Use the flat end of a spudger to disconnect the antenna connector from its socket on the back of the logic board.

Step 47



- Lift and remove the logic board out of the iPhone.

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