



# iPhone 6 Plus Logic Board Replacement

Use this guide to replace the logic board in...

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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.


## PARTS:

[iPhone 6 Plus Logic Board with Paired Home Button](#) (1)

[iPhone 6 Plus Logic Board](#) (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 — 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



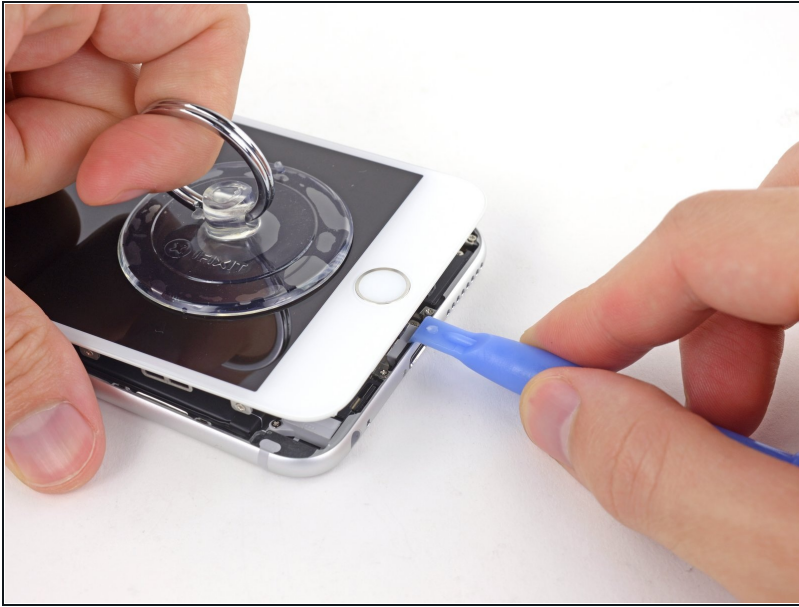
- Pull the blue handle forwards to lock the arms.
- Turn the handle clockwise 360 degrees or until the cups start to stretch.
  - ⓘ Make sure the suction cups remain aligned with each other. If they begin to slip out of alignment, loosen the suction cups slightly and realign the arms.
- Insert an opening pick or tool 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 — Front Panel Assembly



- 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.

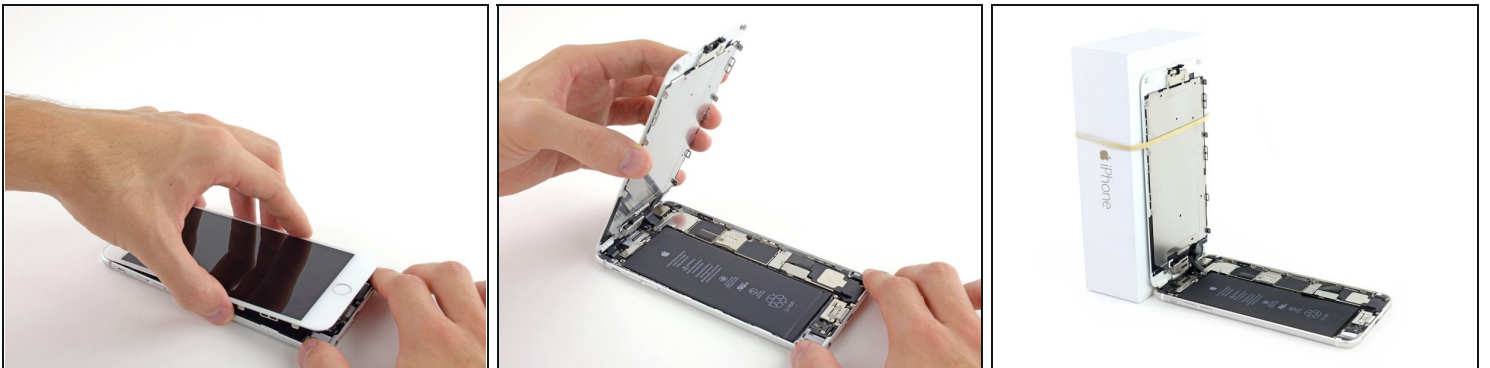
- Using a plastic opening tool, begin to gently pry the rear case down, away from the display assembly, while continuing to pull up with the suction cup.
- ① There are several clips attaching the front panel assembly to the rear case, so you may need to use a combination of the suction cup and plastic opening tool to free the front panel assembly.

## Step 6



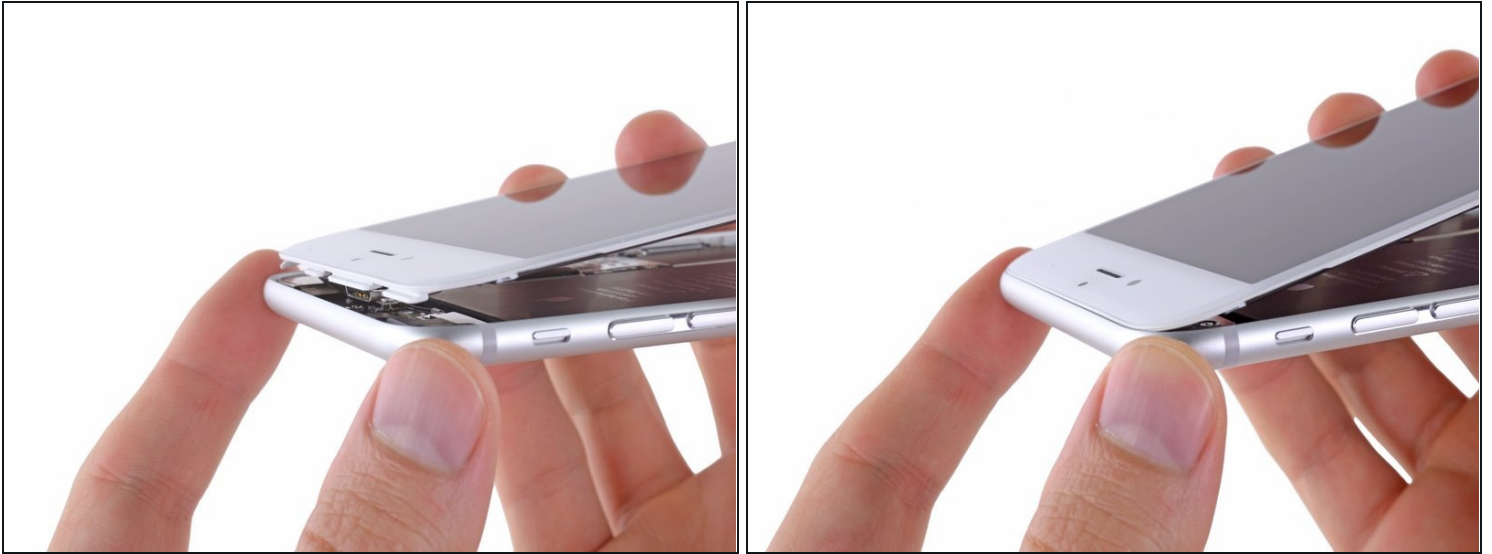
- Pull the plastic nub to release the vacuum seal on the suction cup.
- Remove the suction cup from the display assembly.

## 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.
- ① In a pinch, you can use an unopened canned beverage to hold the display.

## Step 8



- ❶ 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.

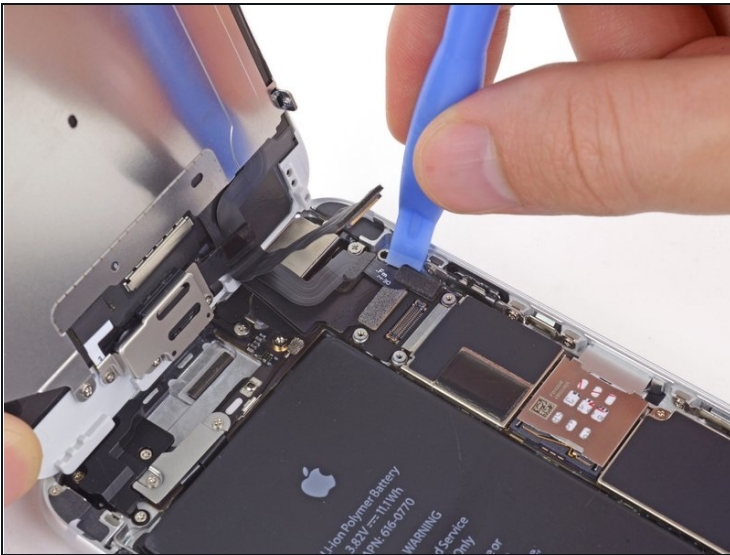
## Step 14



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

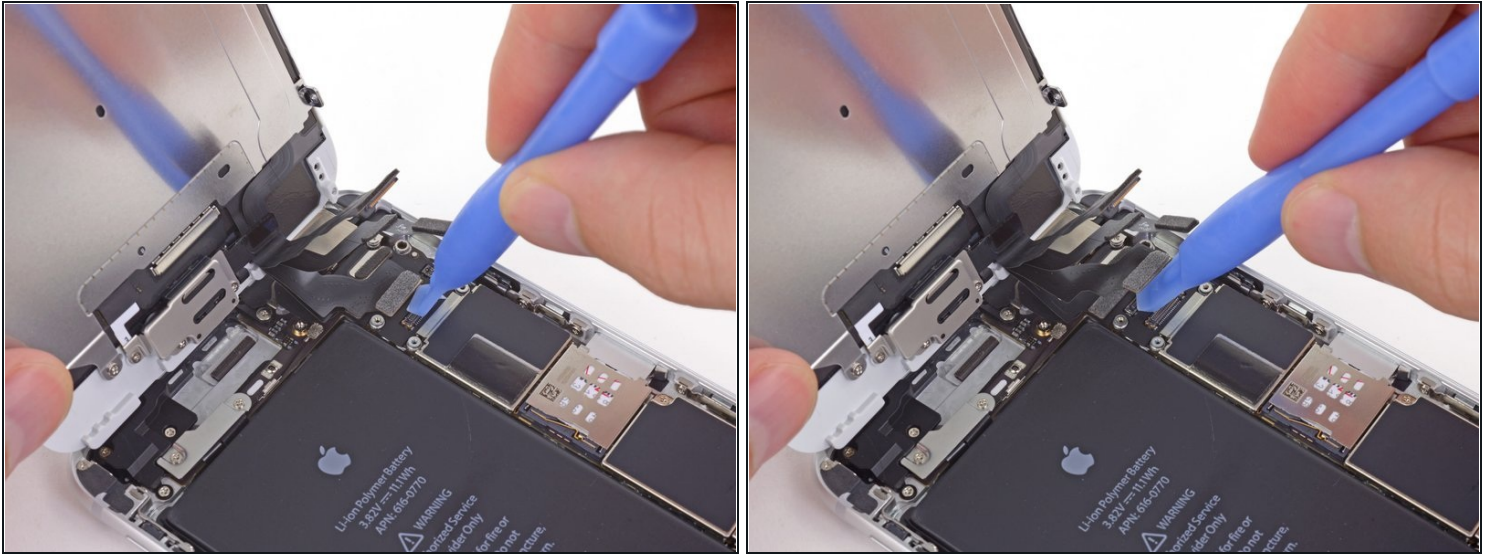
- While still supporting the front panel, use a fingernail or the edge of an opening tool to disconnect the front-facing camera and earpiece speaker connector.

## Step 15



- Disconnect the home button cable connector.

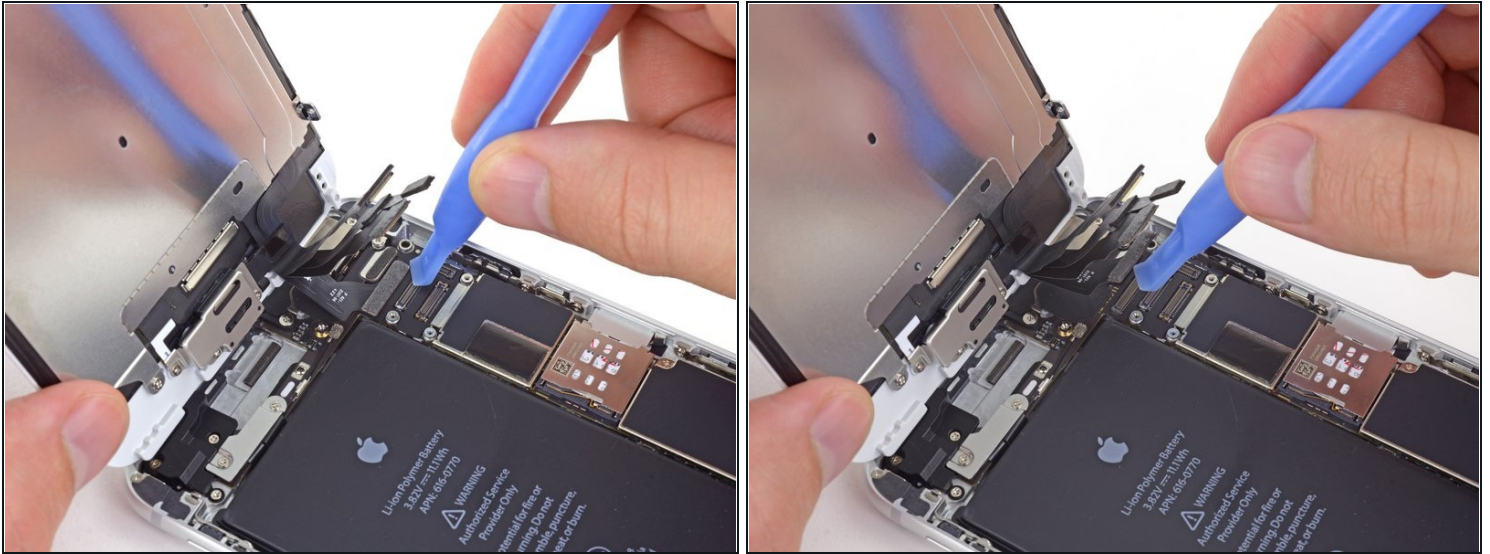
## Step 16



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

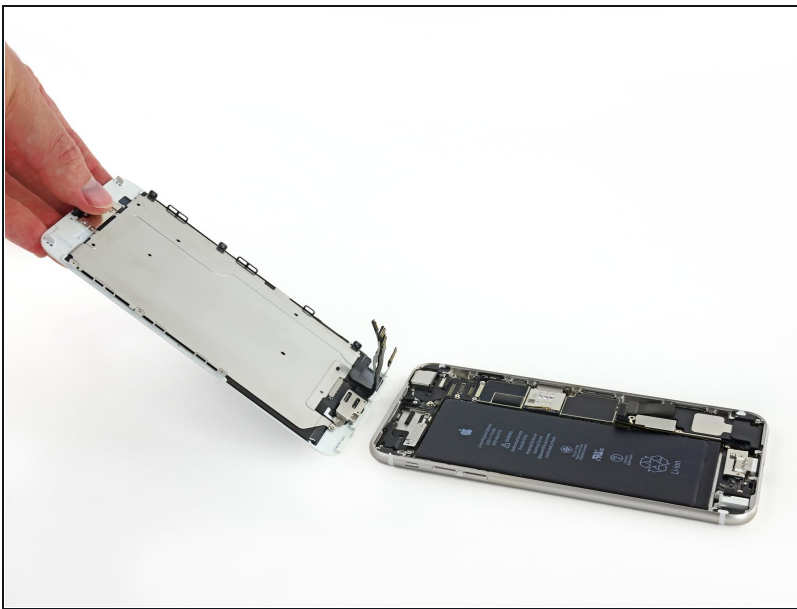
- Use a plastic opening tool to disconnect the display data cable connector.
- ☑ When reassembling your phone, the display data cable may pop off the connector. This can result in white lines or a blank screen when powering your phone back on. If that happens, simply reconnect the cable and power cycle 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



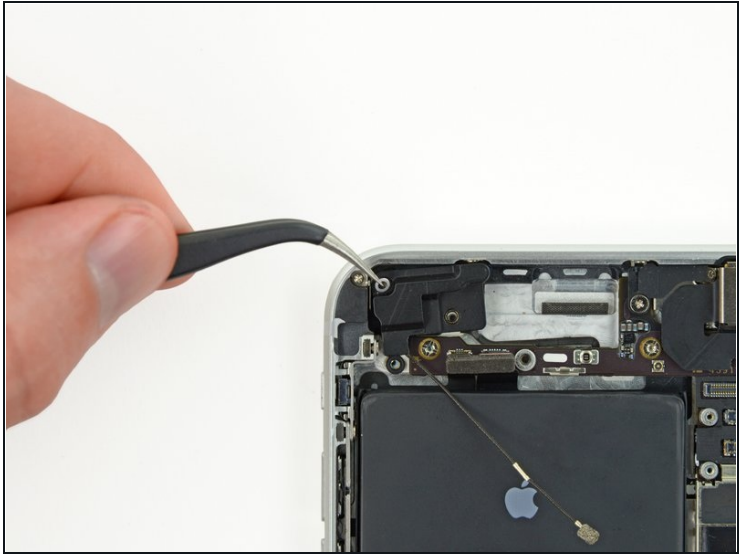
- ① The two connectors may be coupled by a single adhesive tab. If this is the case, then they may detach as a pair.
- Disconnect the power button cable and audio control cable connectors from their respective sockets on the logic board.

## 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 — Disconnect Charge Port



- Pry the charge port 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.

 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



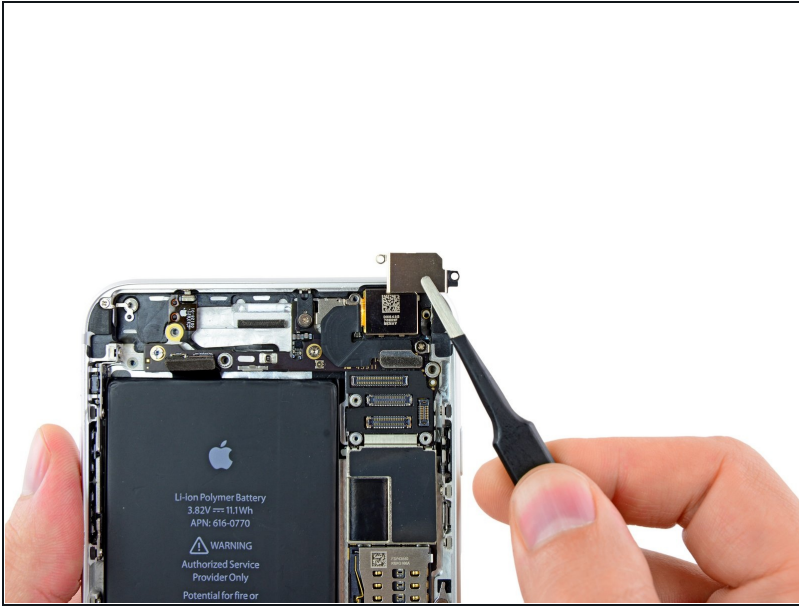
- Use a pair of [tweezers](#) to peel back the piece of tape covering the hidden screw securing the rear-facing camera bracket to the rear case.

## 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



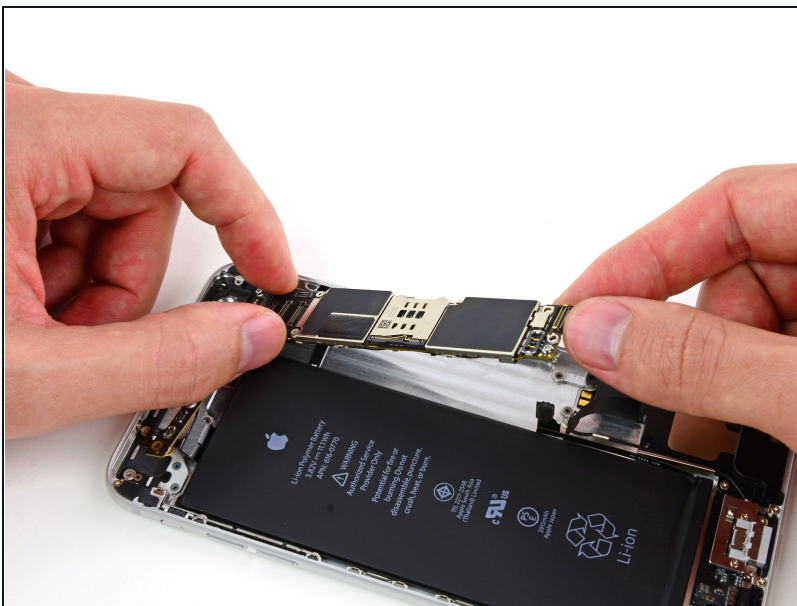
- Carefully grasp the antenna clip with a pair of tweezers and remove it from the iPhone.

## Step 43 — Logic Board



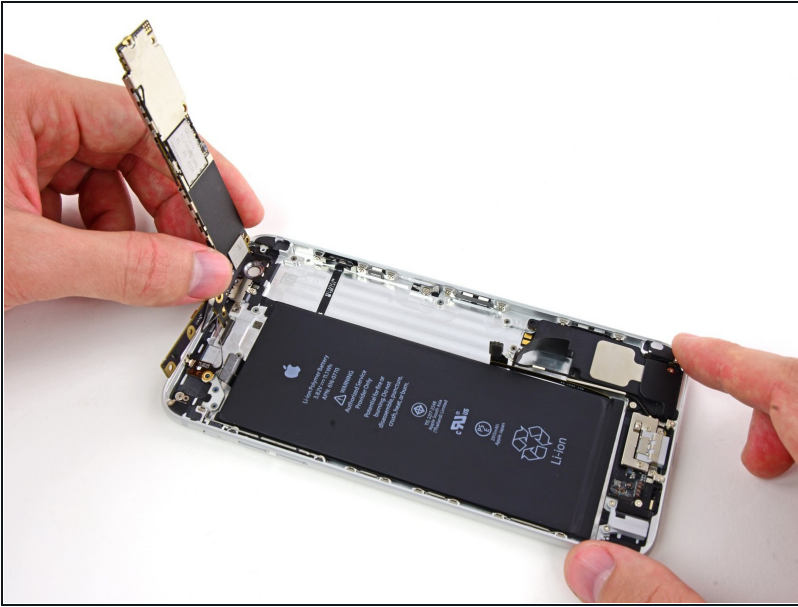
- Remove the following screws securing the logic board to the rear case:
  - Two 2.4 mm standoff screws
    - ⓘ Standoff screws are best removed with a [standoff screwdriver](#) or standoff driver bit. A small flathead screwdriver can also do the job—but use extra caution to ensure it doesn't slip and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

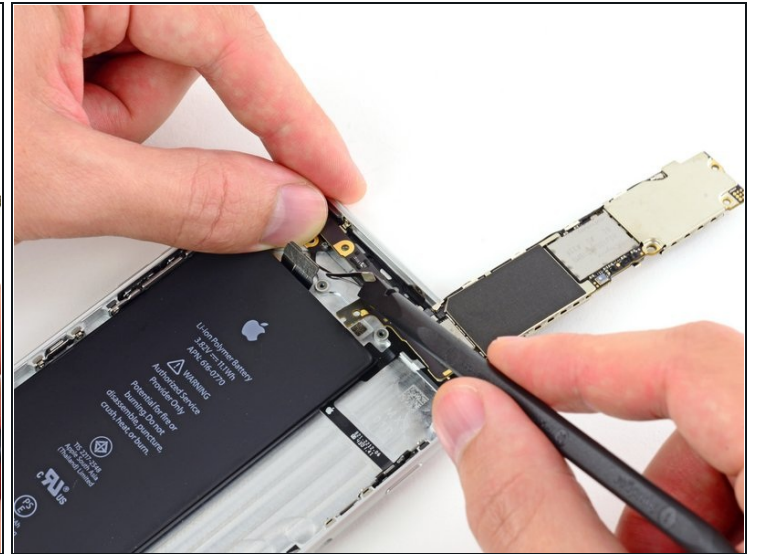
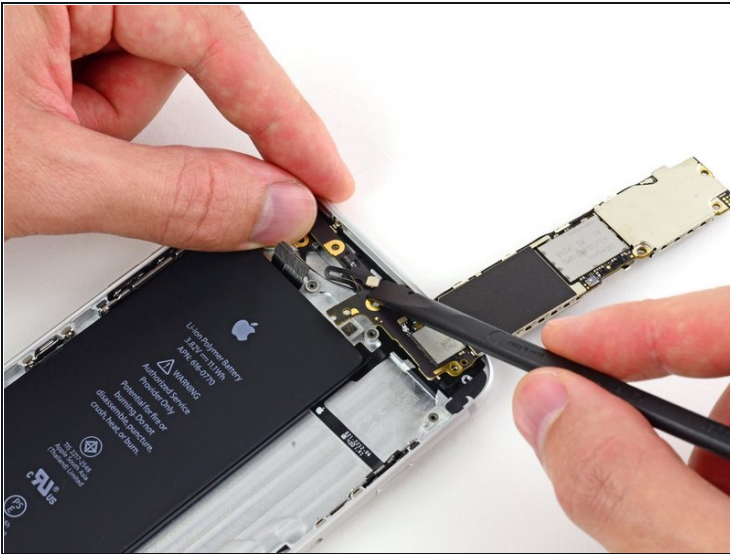
## Step 45



⚠ 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.

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