



iPhone 6 Plus Rear Case Replacement

Use this guide to replace a scratched or...

Written By: Jeff Suovanen



INTRODUCTION

Use this guide to replace a scratched or damaged rear case.

This guide requires removing the battery. When reinstalling the battery in your new case, refer to [this guide](#) to replace your battery's adhesive strips. The battery is pretty tightly secured in the device, but reinstalling it properly will keep it from rattling.



TOOLS:

[P2 Pentalobe Screwdriver iPhone](#) (1)
[Anti-Clamp](#) (1)
[Flathead 3/32" or 2.5 mm Screwdriver](#) (1)
Pro
[Suction Handle](#) (1)
[iFixit Opening Tool](#) (1)
[Spudger](#) (1)
[Tweezers](#) (1)
[iOpener](#) (1)
[Plastic Cards](#) (1)
[SIM Card Eject Tool](#) (1)
[Phillips #000 Screwdriver](#) (1)
[iFixit Opening Picks \(Set of 6\)](#) (1)
[Standoff Screwdriver for iPhones](#) (1)



PARTS:

[iPhone 6 Plus OEM Rear Case](#) (1)
[iPhone 6 Plus Blank Rear Case](#) (1)
[iPhone 6 Plus Wi-Fi/Bluetooth Antenna](#) (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



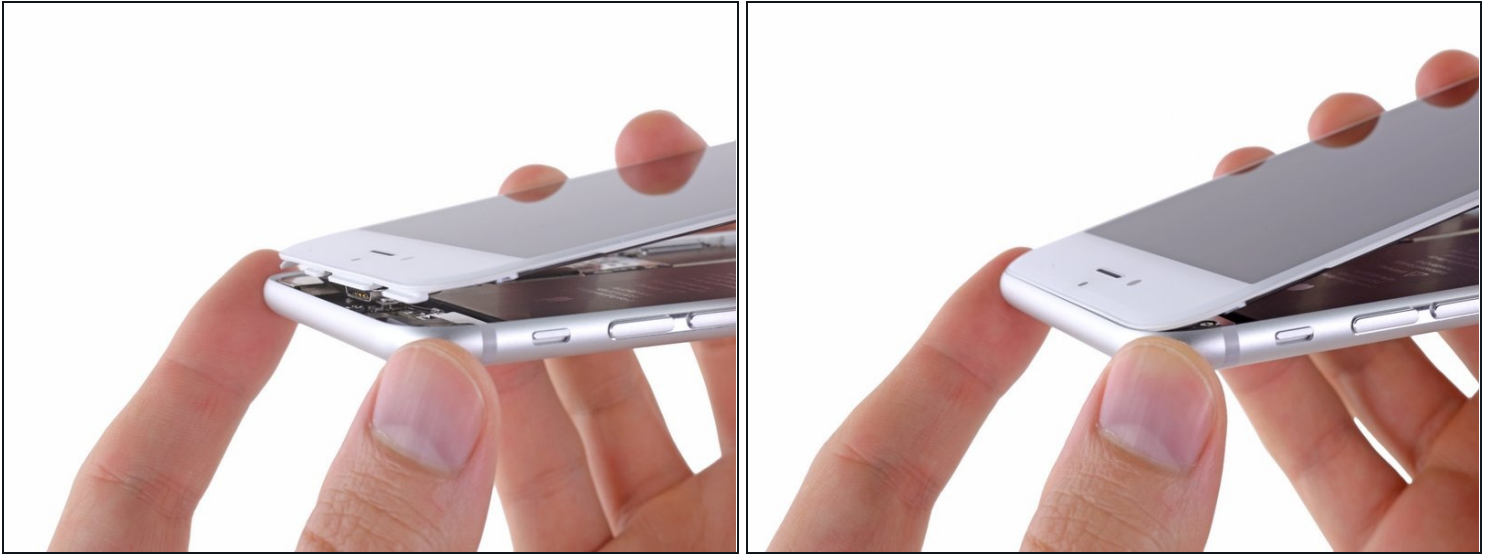
- Pull the plastic nub to release the vacuum seal on the suction cup.
- Remove the suction cup from the display assembly.

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.

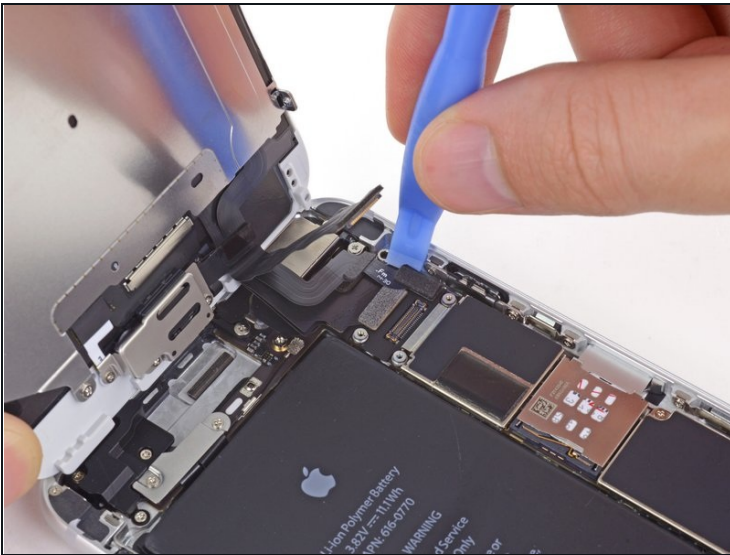
Step 14



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

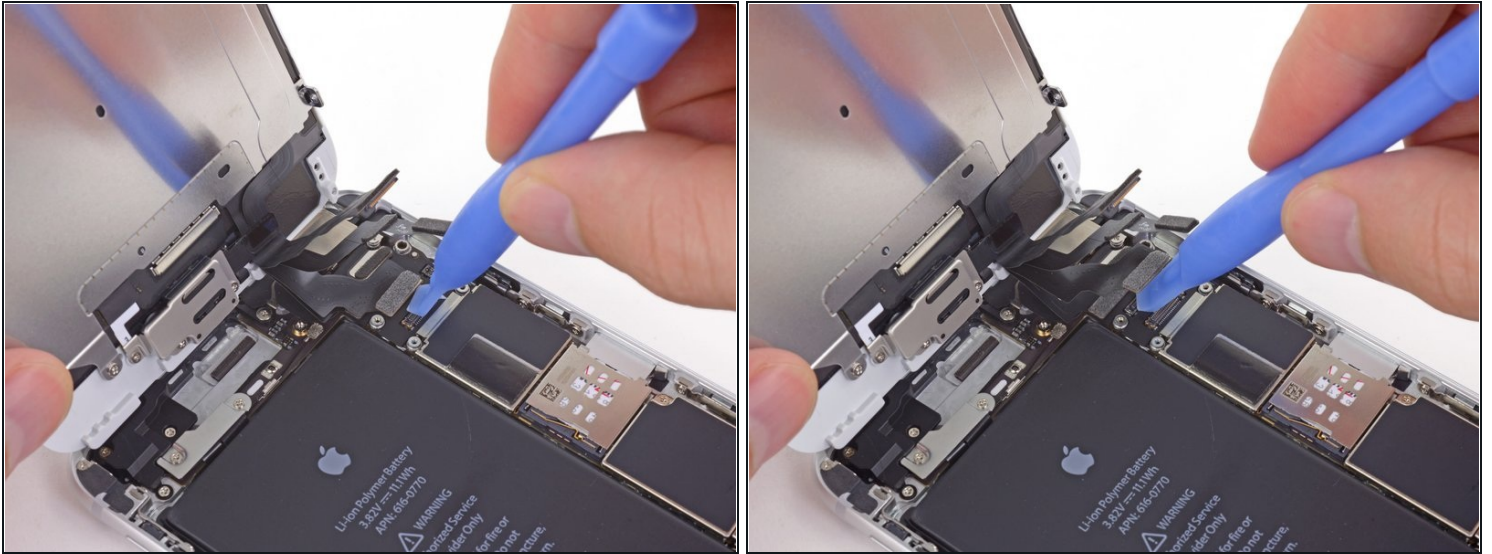
- While still supporting the front panel, use a fingernail or the edge of an opening tool to disconnect the front-facing camera and earpiece speaker connector.

Step 15



- Disconnect the home button cable connector.

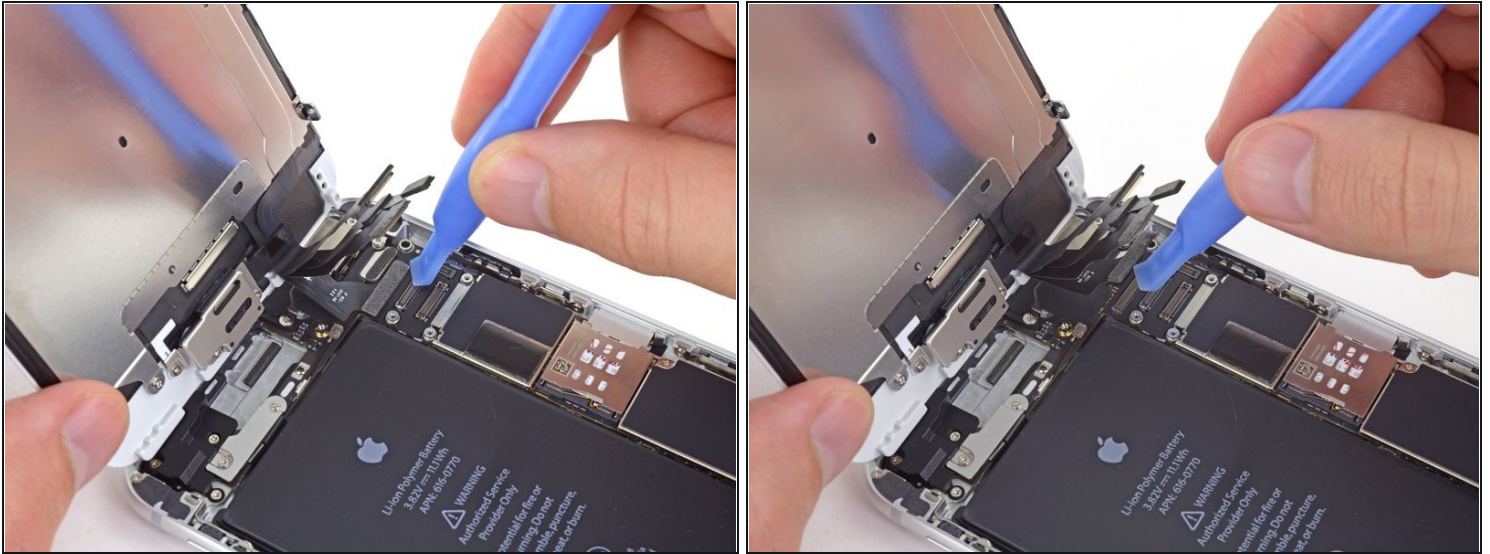
Step 16



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

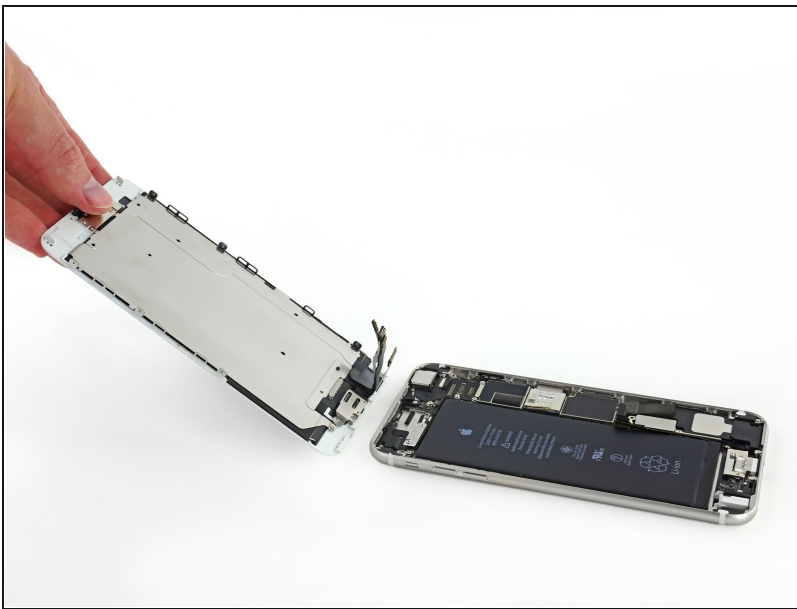
- Use a plastic opening tool to disconnect the display data cable connector.
- ☑ When reassembling your phone, the display data cable may pop off the connector. This can result in white lines or a blank screen when powering your phone back on. If that happens, simply reconnect the cable and power cycle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

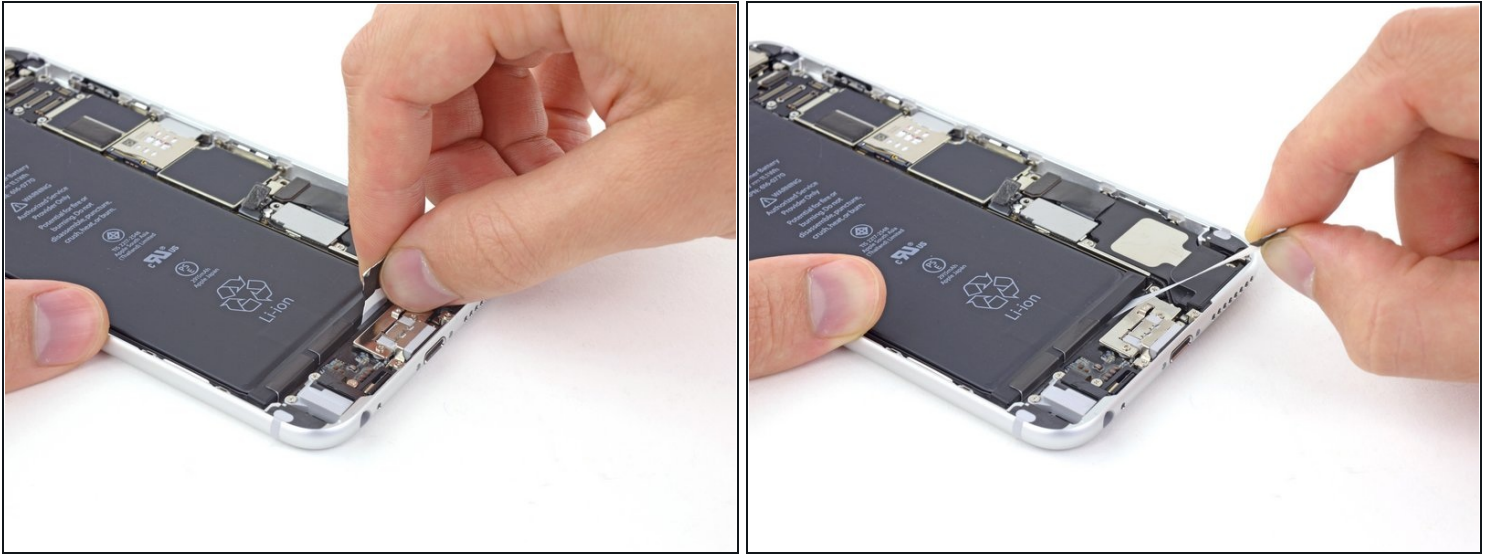
Step 19 — Battery



- Peel back the first battery adhesive tab from the bottom right edge of the battery.

⚠ Use your fingers or blunt tweezers. Be extra careful when working near the battery; puncturing a lithium-ion battery can release dangerous chemicals and cause a fire.

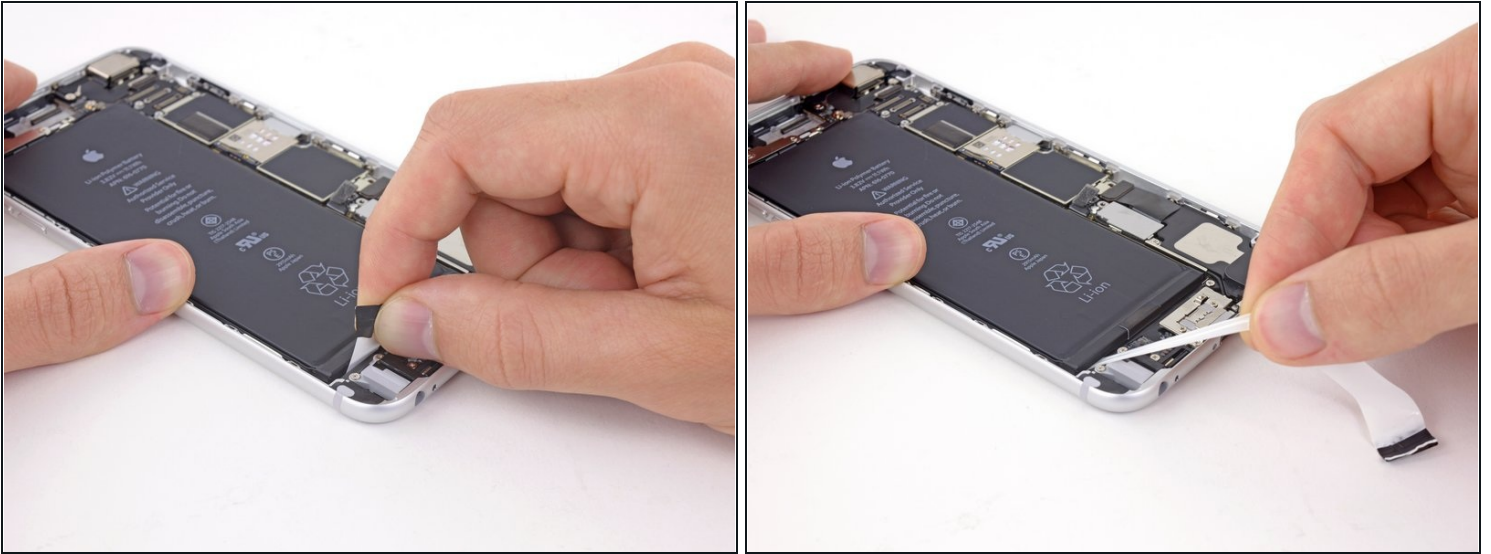
Step 20



⚠ Try to keep the strips flat and unwrinkled during this procedure; wrinkled strips will stick together and break instead of pulling out cleanly.

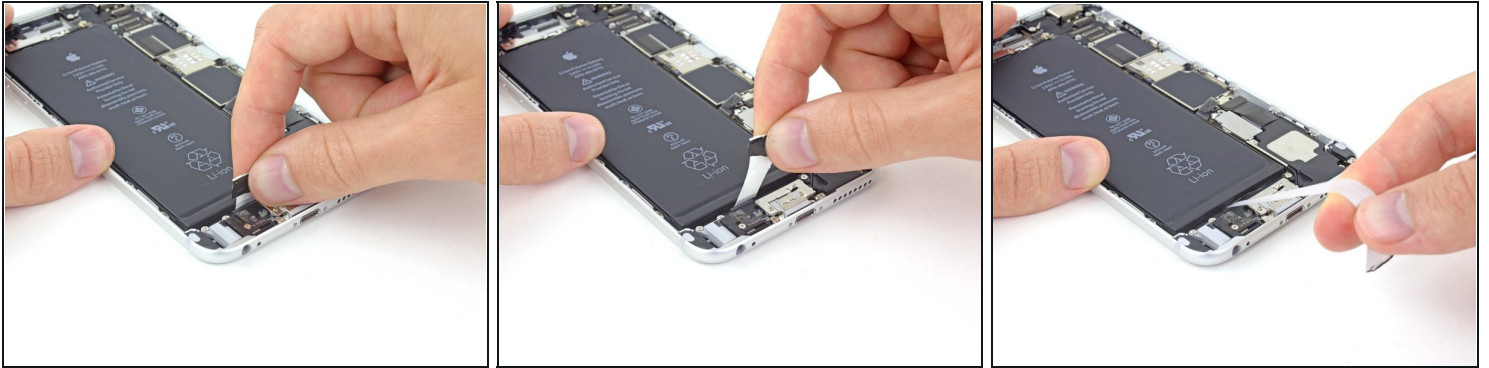
- Very slowly, pull and stretch one adhesive strip away from the battery, toward the bottom of the iPhone.
 - ① Allow the strip to stretch out before pulling any harder. If you can't feel it stretching, ease up, or it will break.
 - Pull at as low of an angle as you can without snagging the adhesive strip on any of the components along the lower edge of the phone.
 - Don't press down on the battery as you pull the strip.
 - ① The strip will stretch to many times its original length. Continue pulling slowly until it releases and slips out from underneath the battery.
 - ① If the battery adhesive tabs break during the removal process, use your fingers or blunt tweezers to retrieve the remaining length of adhesive, and continue pulling.
- ⚠ If any of the adhesive strips break underneath the battery and cannot be retrieved, try to remove the remaining strips, and then **proceed as instructed below**.

Step 21



- Peel back the second battery adhesive tab from the other side of the battery.
- Again, pull and slowly stretch the adhesive tab to slide it out from between the battery and the rear case.
- Continue pulling the adhesive tab until it releases completely from the battery. If it breaks, try to retrieve the remaining length and continue pulling, or proceed as instructed below.

Step 22



- Peel back the final battery adhesive tab from the bottom edge of the battery. Gently pull the battery adhesive tab upward and away from the battery, allowing the adhesive strip to slowly slide out from between the battery and the rear case.

⚠ Place one hand over the battery as the final strip comes out, or it may fling the battery out of the iPhone.

- Continue pulling until the final strip comes free from the iPhone.
- ⓘ If you removed all three adhesive strips successfully, continue to **step 24**. Otherwise, if the adhesive breaks off underneath the battery and can't be retrieved, apply a few drops of high concentration (over 90%) isopropyl alcohol under the edge of the battery in the area of the broken adhesive strip(s).
- Wait about one minute for the alcohol solution to weaken the adhesive. Use the flat end of a spudger to gently lift the battery.

⚠ Don't try to forcefully lever the battery out. If needed, apply a few more drops of alcohol to further weaken the adhesive. Never deform or puncture the battery with your pry tool.

⚠ **Do not** pry against the logic board, or you may permanently damage your iPhone. **Do not** pry under the topmost section of the battery, near the volume up button and mute switch, or you may damage the [audio controls cable](#), which is adhered to the rear case just beneath the battery.

- ⓘ For alternative methods to unstick the battery, **continue with the next step below**.

Step 23 — Alternative methods to unstick the battery from the case



- If the battery remains stuck to the rear case, [prepare an iOpener](#) or use a hair dryer to heat the rear case directly behind the battery.
- Then, use a plastic opening tool to gently lift the battery.

⚠ Overheating the iPhone may ignite the battery.

- ① Alternatively, a piece of dental floss may be used to separate the battery from the rear case. A stronger alternative to dental floss is an unwound guitar string, such as a 0.009 E string from a 12-string set.
- Thread the floss or string underneath one end of the battery and pull side to side in a sawing motion to separate the adhesive.

Step 24



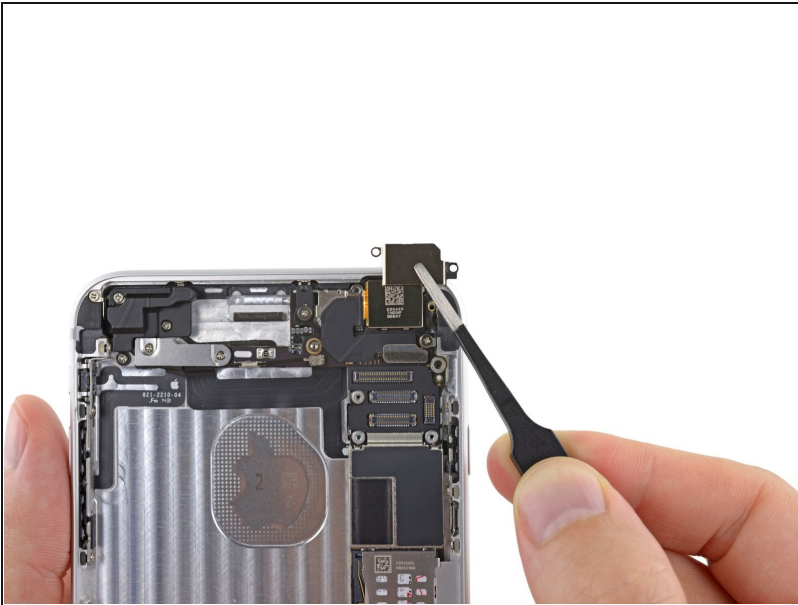
- Remove the battery from the iPhone.
- ⓘ If your replacement battery came in a plastic sleeve, remove the sleeve before installation by pulling it away from the ribbon cable.
- ☑ If there's any alcohol solution remaining in the phone, carefully wipe it off or allow it to air dry before installing your new battery.
- ☑ Before you adhere the replacement battery, temporarily reconnect the battery connector to the logic board socket. This ensures that the battery is properly aligned in its recess.
 - Adhere the battery, disconnect it, and continue reassembling your device.
- ☑ If your new battery doesn't have adhesive preinstalled, refer to [this guide](#) to replace the adhesive strips.
- ☑ Perform a [hard reset](#) after reassembly. This can prevent several issues and simplify troubleshooting.

Step 25 — Rear Facing Camera



- 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 26



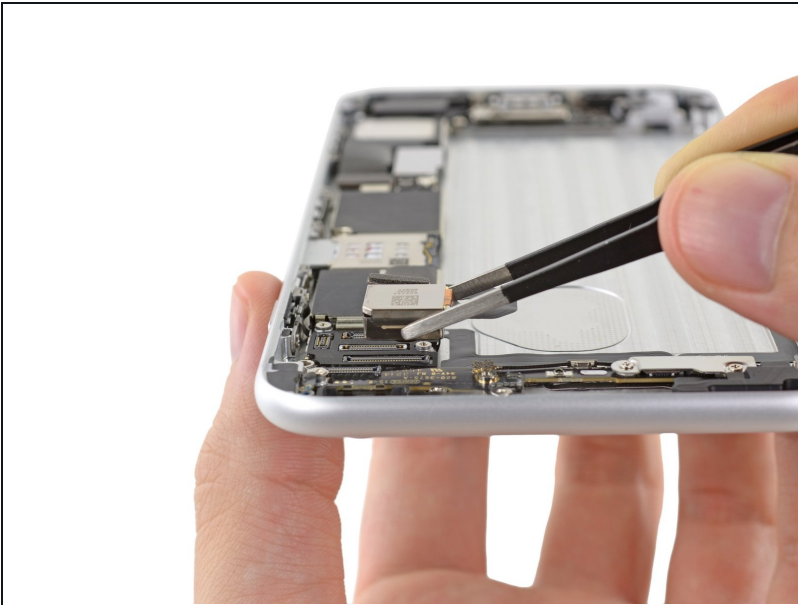
- Lift and remove the rear-facing camera bracket out of the iPhone.

Step 27



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

Step 28



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

Step 29 — Antenna Assembly



- 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 30



- Grasp the antenna bracket with a pair of [tweezers](#) and lift it off the iPhone.

Step 31



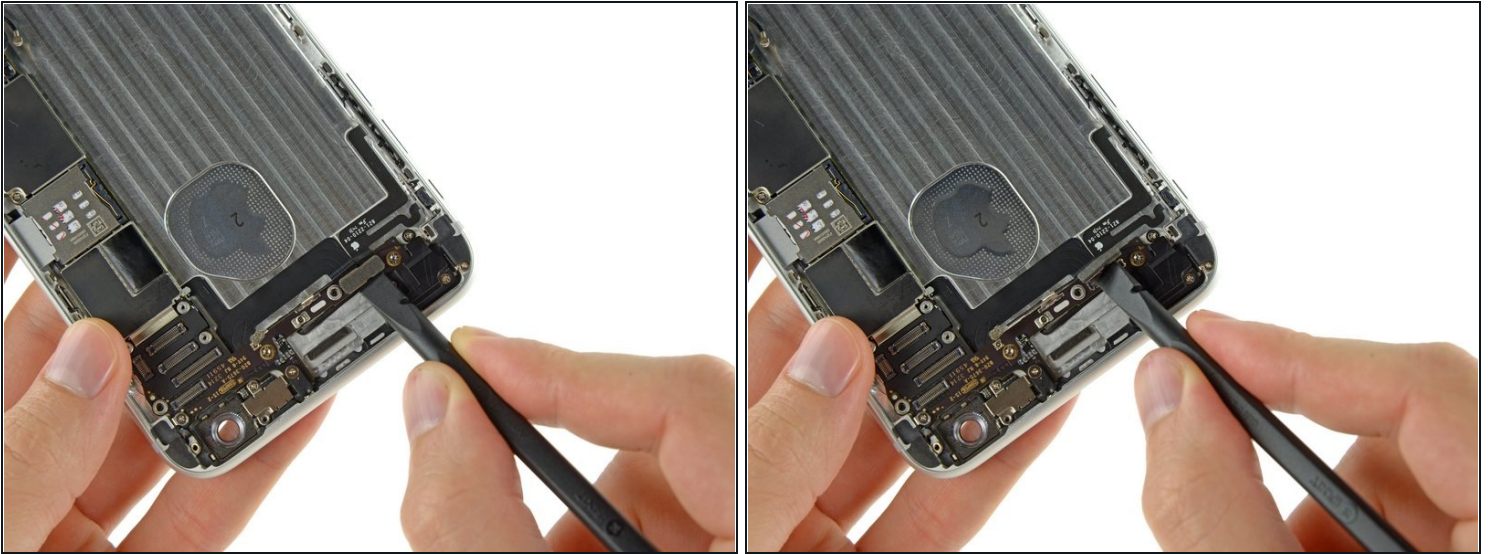
- Carefully pry the antenna connector up off the logic board with a plastic opening tool.

Step 32



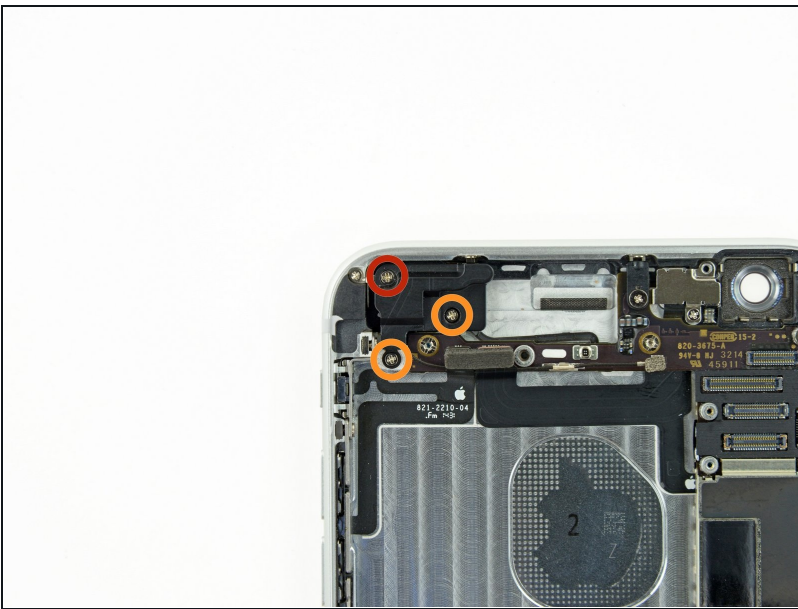
- Grasp the antenna connector with a pair of tweezers and gently lift it from its retaining clip on the logic board.

Step 33



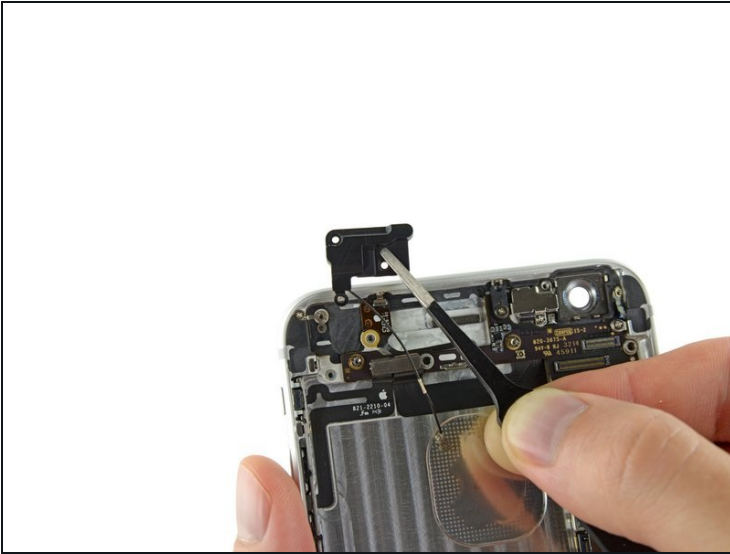
- ① The two connectors may be coupled by a single adhesive tab. If this is the case, then they may detach as a pair.
- Disconnect the power button cable and audio control cable connectors from their respective sockets on the logic board.

Step 34



- Remove the following screws securing the top cellular antenna to the rear case:
 - One 2.8 mm Phillips #00 screw
 - Two 1.6 mm Phillips #00 screws

Step 35



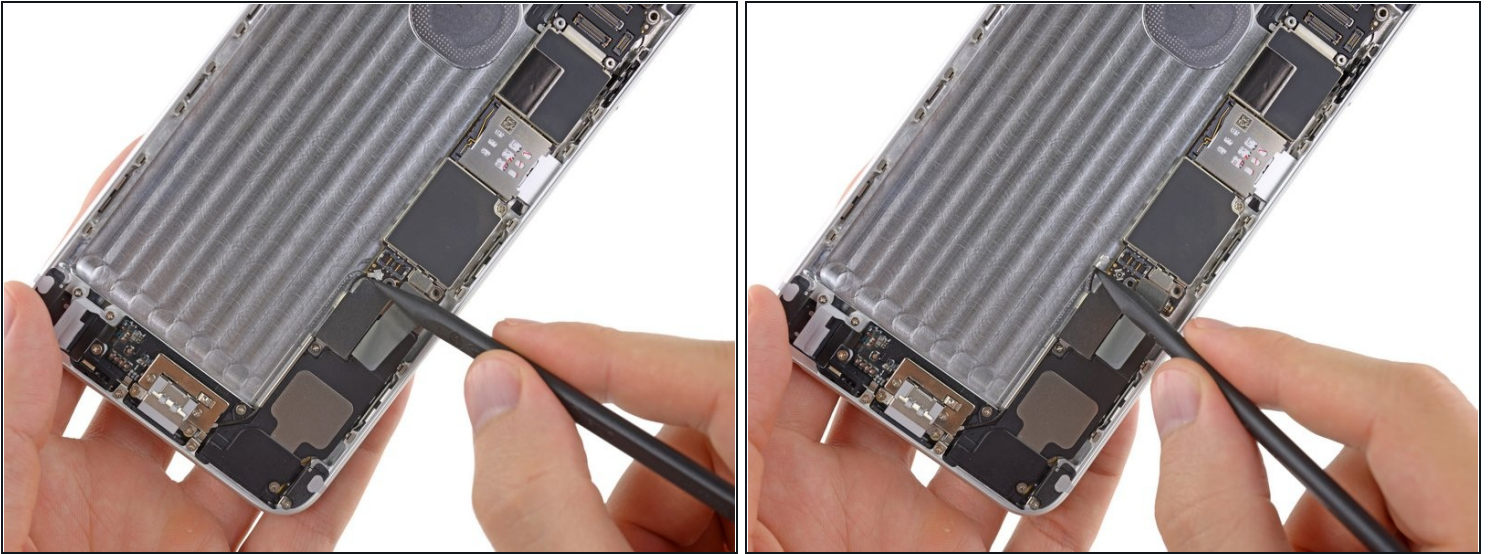
- Use a pair of tweezers to grasp and remove the top cellular antenna out of the iPhone.
- ☑ During reassembly, make sure to place the small washer in the top left corner of the antenna assembly.

Step 36 — Vibrator



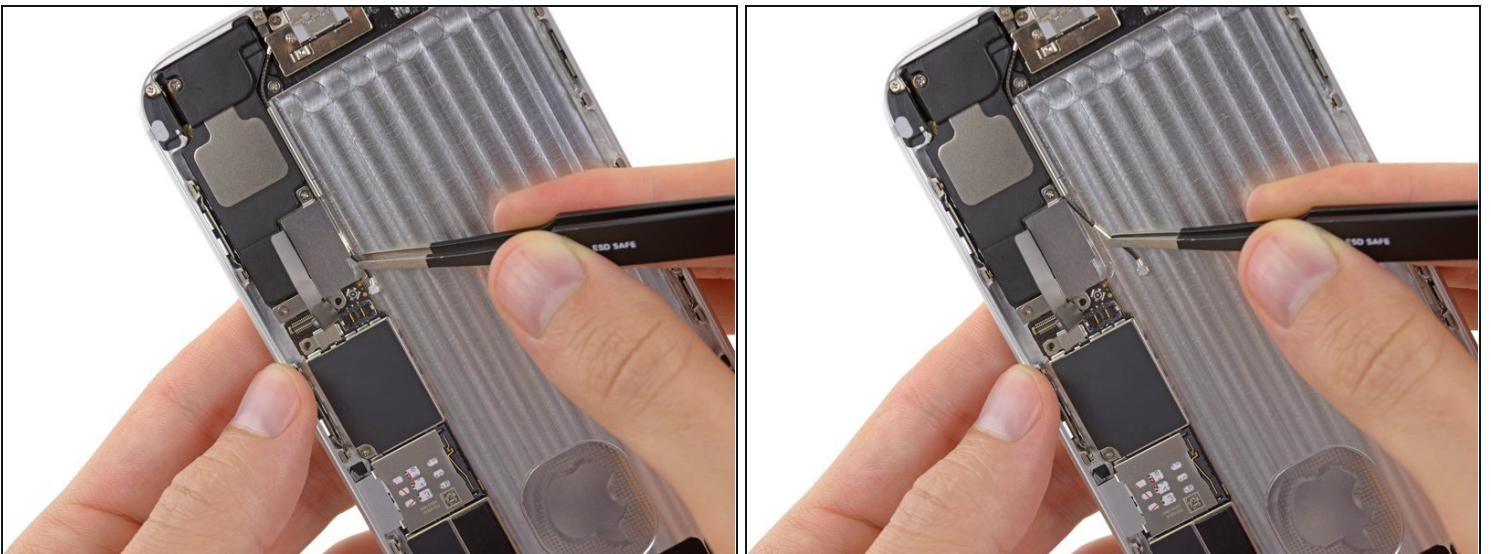
- Pry the vibrator connector cable up from its socket on the logic board with the flat end of a spudger.

Step 37



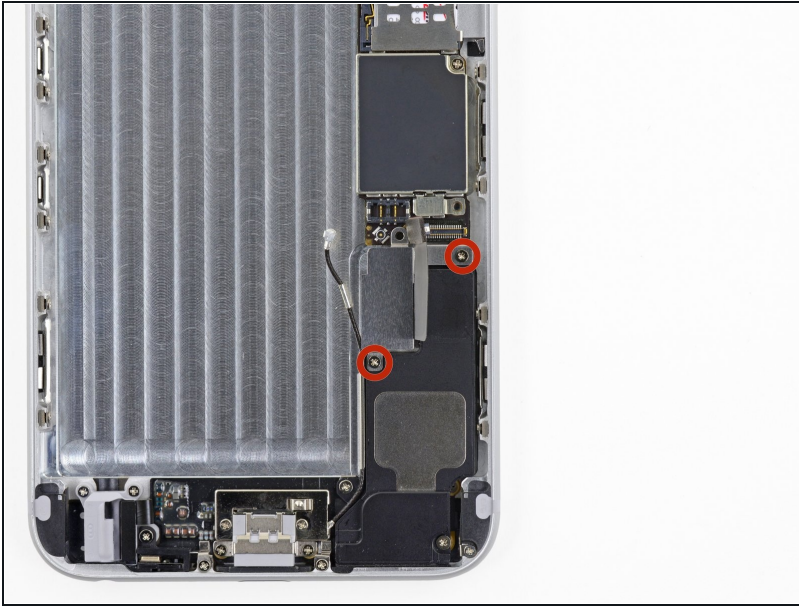
- Use the tip of a spudger to disconnect the interconnect antenna cable from its socket on the logic board.

Step 38



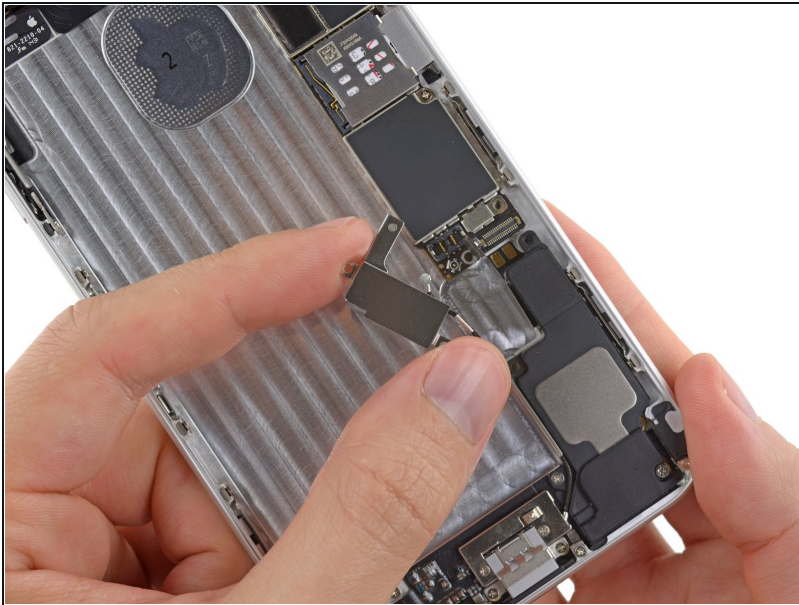
- Grasp the interconnect antenna cable with a pair of [tweezers](#) and carefully deroute it from its channel on the speaker assembly.

Step 39



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

Step 40



- Lift and remove the vibrator out of the iPhone.

Step 41 — 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 42



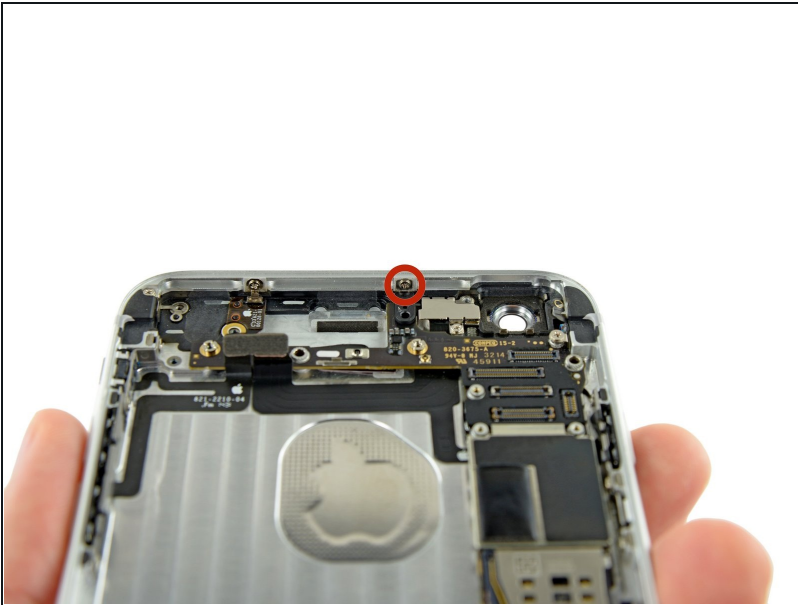
- Remove the SIM Card tray assembly from the iPhone.
-  When reinserting the SIM card, ensure that it is in the proper orientation relative to the tray.

Step 43 — Logic Board Assembly



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

Step 44



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

Step 45



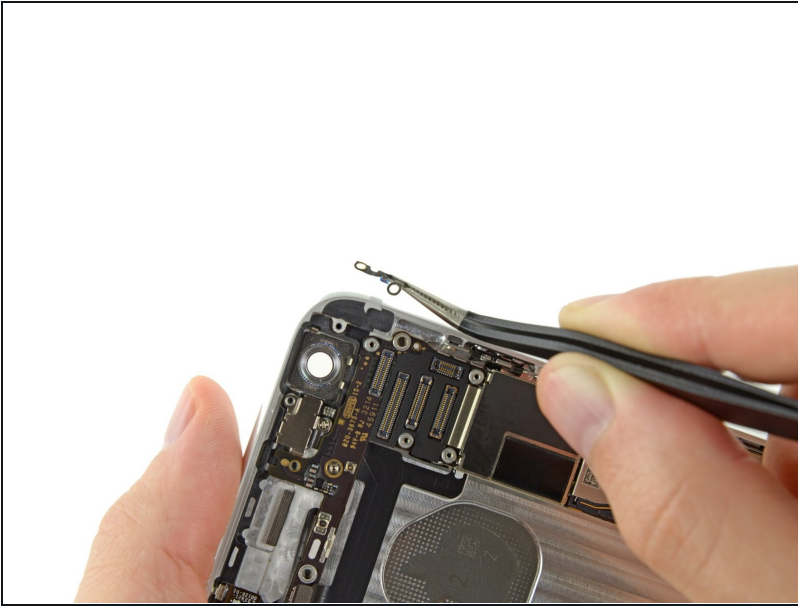
- Use a pair of [tweezers](#) to firmly grasp the plastic clip and remove it from the iPhone.

Step 46



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

Step 47



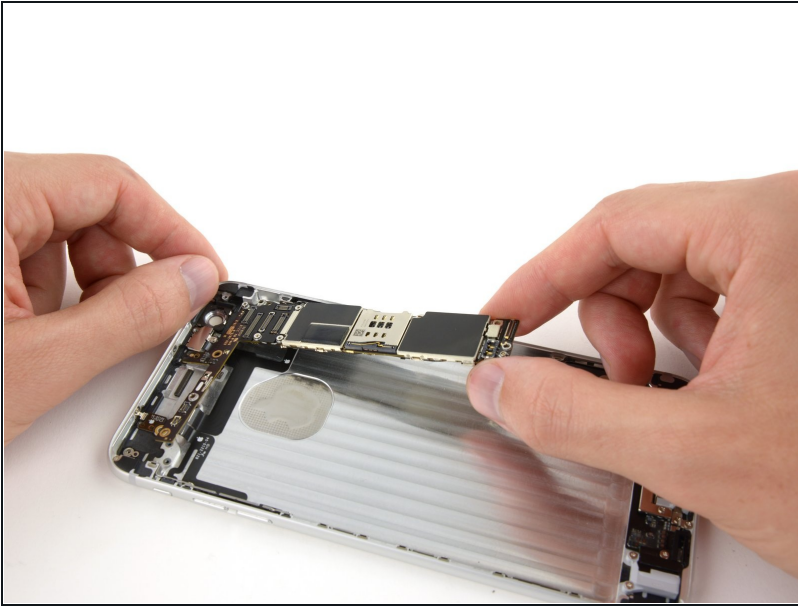
- Carefully grasp the antenna clip with a pair of tweezers and remove it from the iPhone.

Step 48 — Logic Board



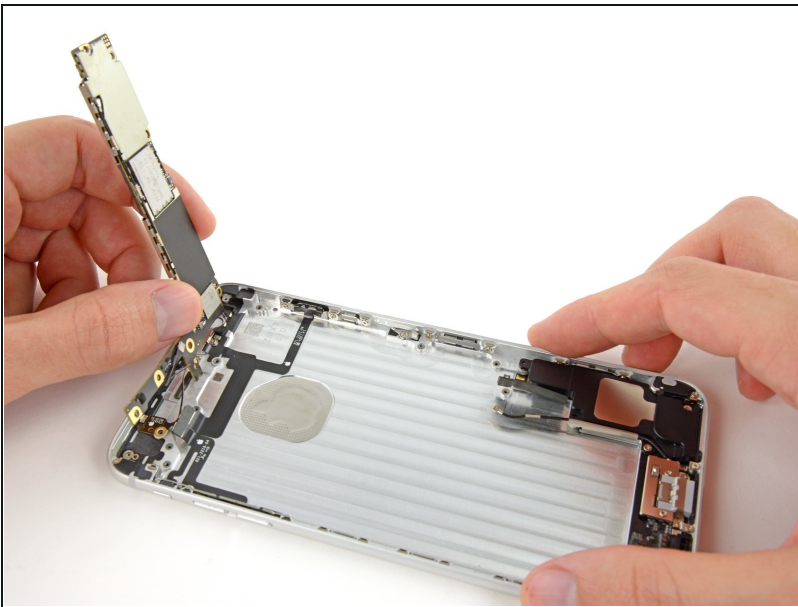
- Remove the following screws securing the logic board to the rear case:
 - Two 2.4 mm standoff screws
 - ⓘ Standoff screws are best removed using a [standoff screwdriver](#) or bit.
 - ⚠ In a pinch, a small flathead screwdriver will do the job—but use extra caution to ensure it doesn't slip and damage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

Step 49



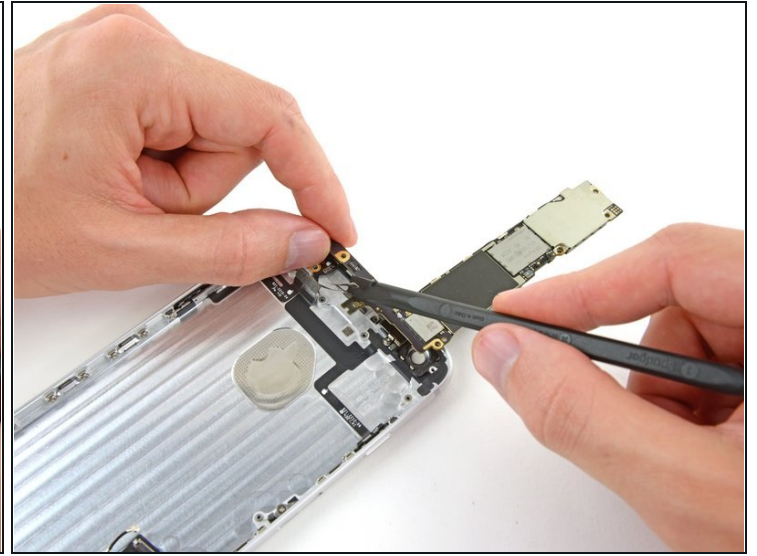
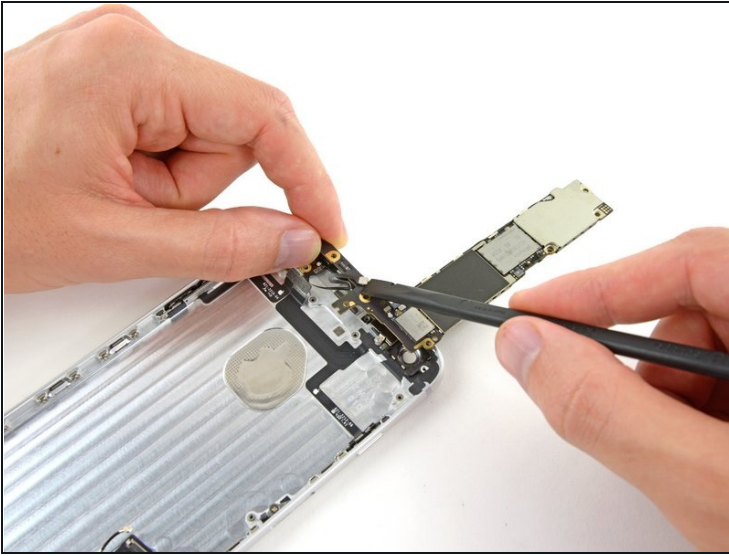
- Carefully raise—but do **not** remove—the logic board, lifting it from the bottom edge nearest the Lightning connector.

Step 50



- ⚠ 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 51



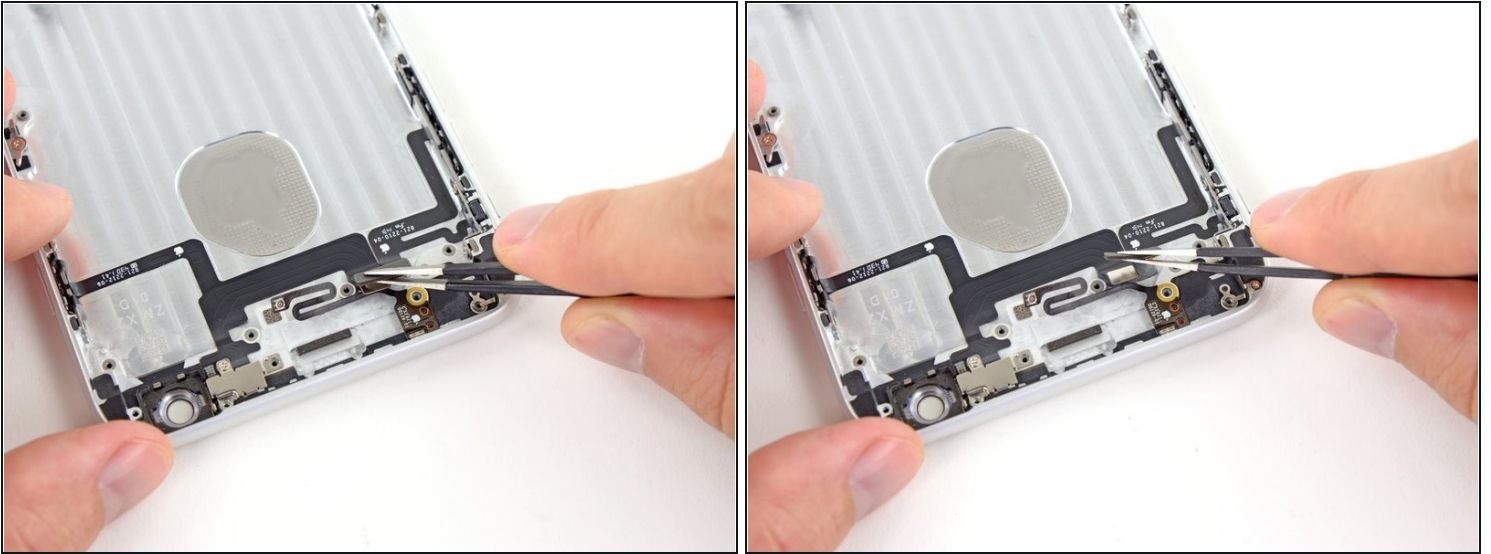
- Gently lay the logic board upside-down, with the top portion resting against the rear case of the iPhone.
- Use the flat end of a spudger to disconnect the antenna connector from its socket on the back of the logic board.

Step 52



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

Step 53 — Power Button Cable



- Use a pair of [tweezers](#) to peel the single adhesive tab that resides on top of both the power button and audio control/rocker switch cable connectors.

Step 54



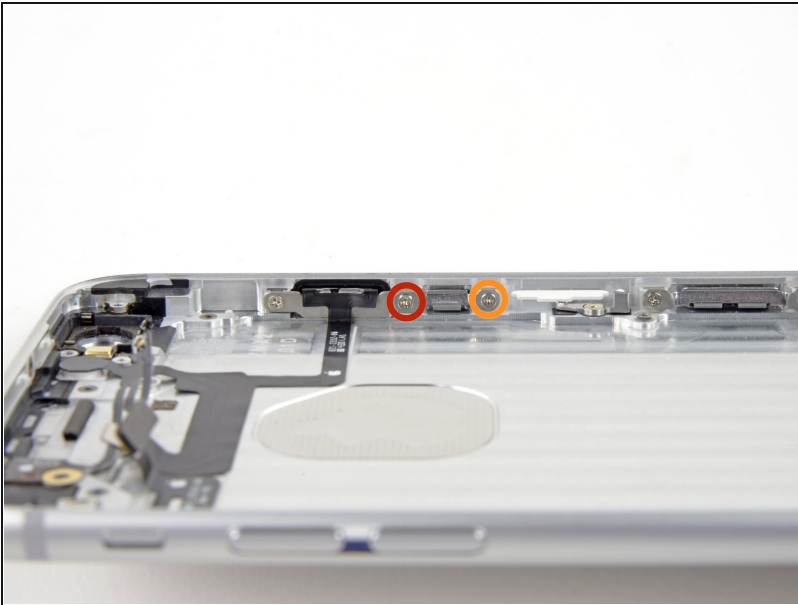
- Remove the single 1.3 mm Phillips #00 screw securing the power button cable bracket to the rear case.

Step 55



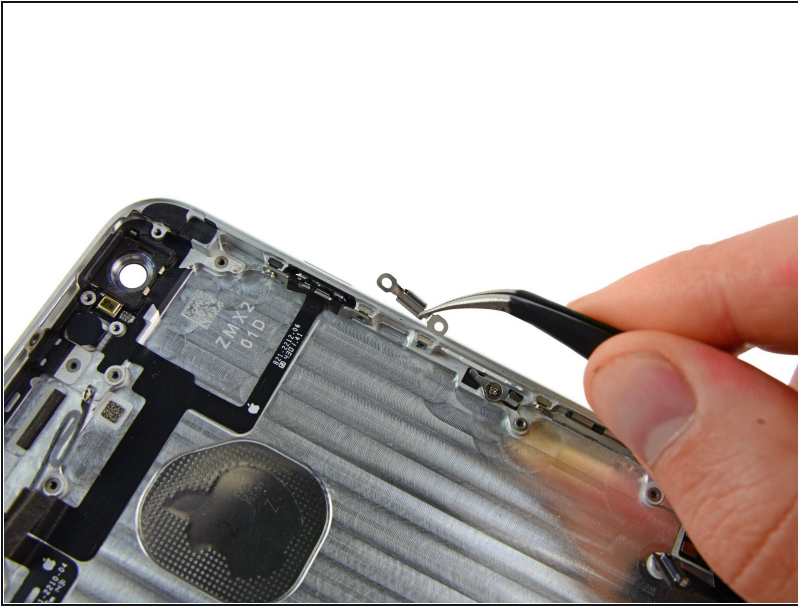
- Carefully grasp the bracket with a pair of tweezers and remove it from the iPhone.

Step 56



- Remove the following screws securing the power button cable bracket to the inner edge of the rear case:
 - One 2.1 mm Phillips #00 screw
 - One 1.7 mm Phillips #00 screw

Step 57



- Grasp the power button cable bracket with a pair of tweezers and remove it from the iPhone.

Step 58



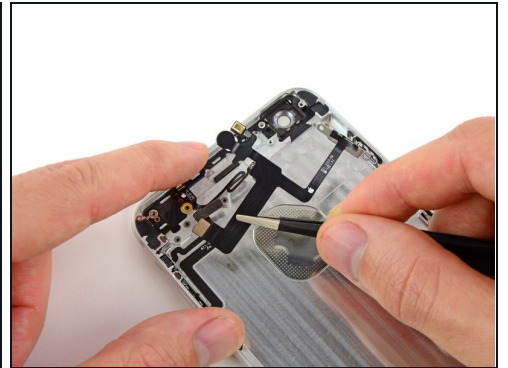
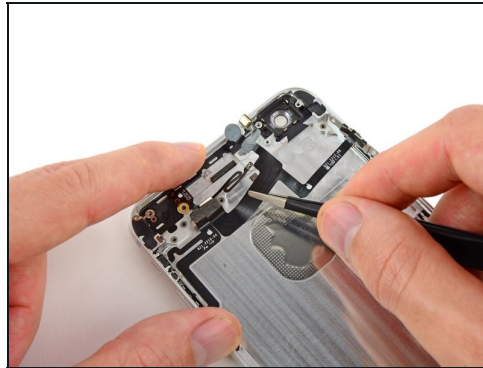
- Remove the single 2.1 mm Phillips #00 screw securing the power button switch to the rear case.

Step 59



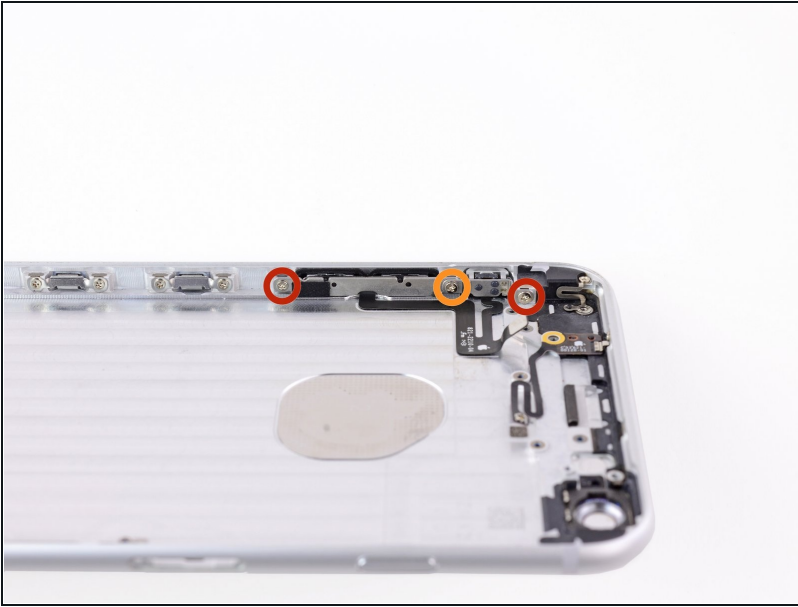
- Pull the power button switch out of its recess on the rear case with a pair of tweezers, and begin carefully peeling the power button cable from the rear case.

Step 60



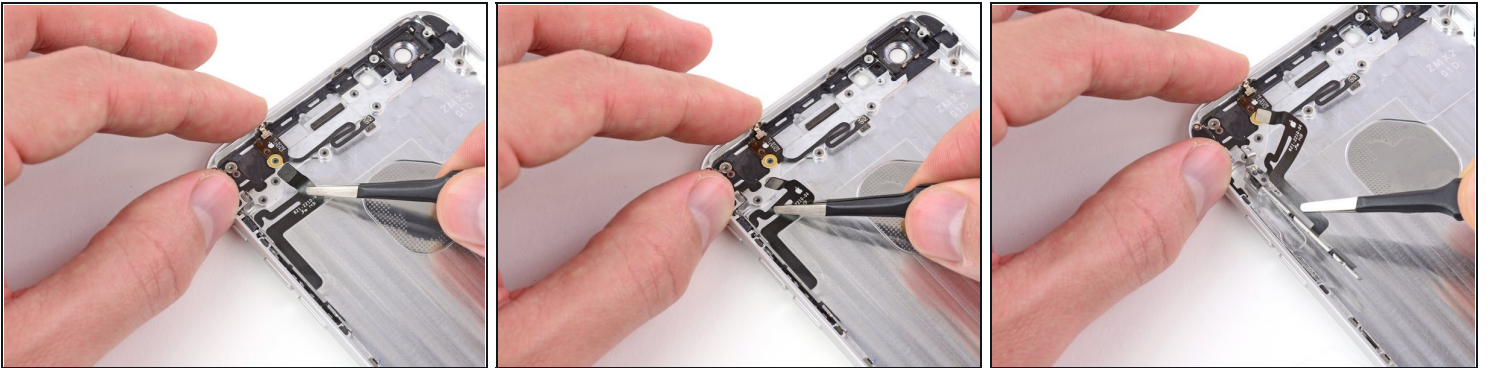
- Continue gently peeling the power button cable off the rear case and remove it from the iPhone.

Step 61 — Audio Control and Rocker Switch Cable



- Remove the following screws securing the audio controls and rocker switch to the rear case:
 - Two 2.0 mm Phillips #00 screws
 - One 2.5 mm Phillips #00 screw

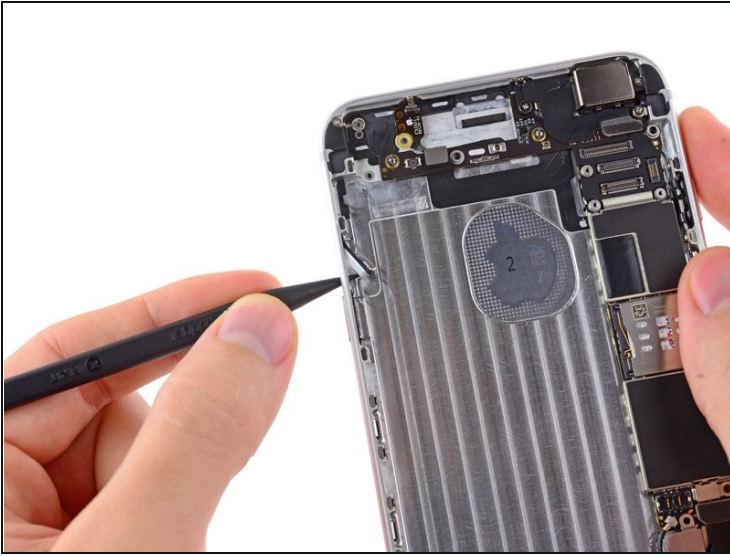
Step 62



- Grasp the audio control and rocker switch cable with a pair of [tweezers](#).
- Slowly peel the audio control and rocker switch cable up off the rear case.

⚠ Peel with care. The cable is secured to the rear case with mild adhesive.

Step 63 — Audio Control and Rocker Switch Buttons



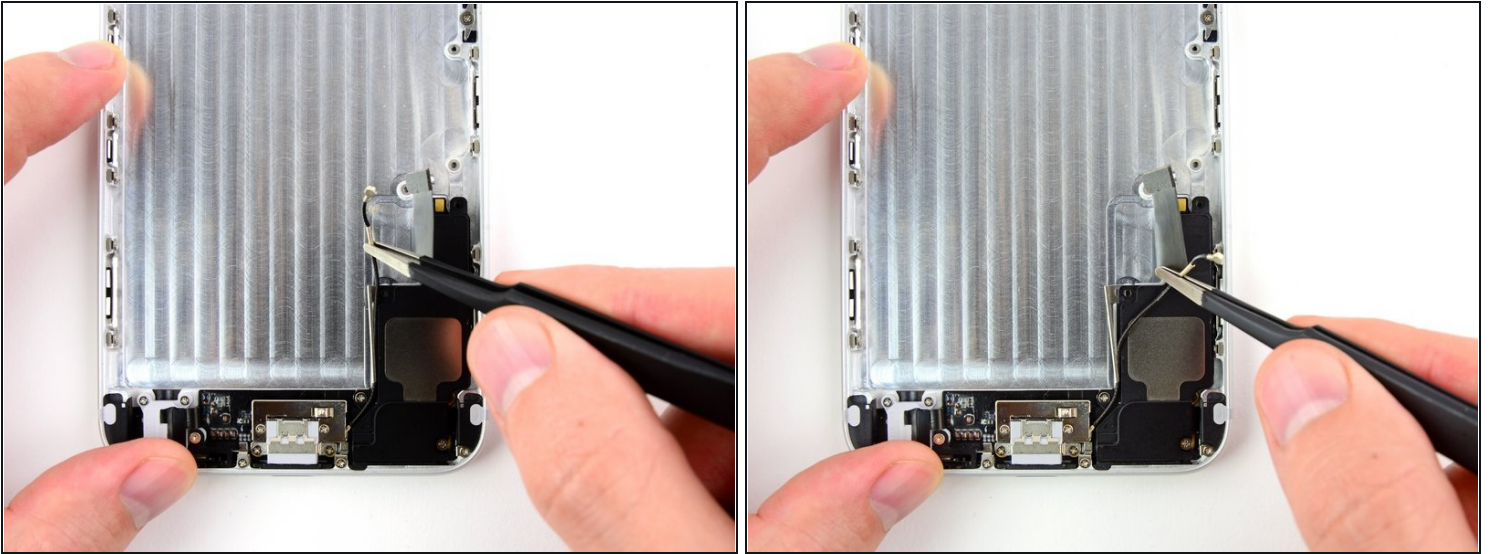
- Use the tip of a spudger to push the audio control and rocker switch buttons out of their recess on the rear case.

Step 64



- Gently grasp both top and bottom audio control buttons with a pair of [tweezers](#) and remove them from the iPhone.

Step 65 — Speaker



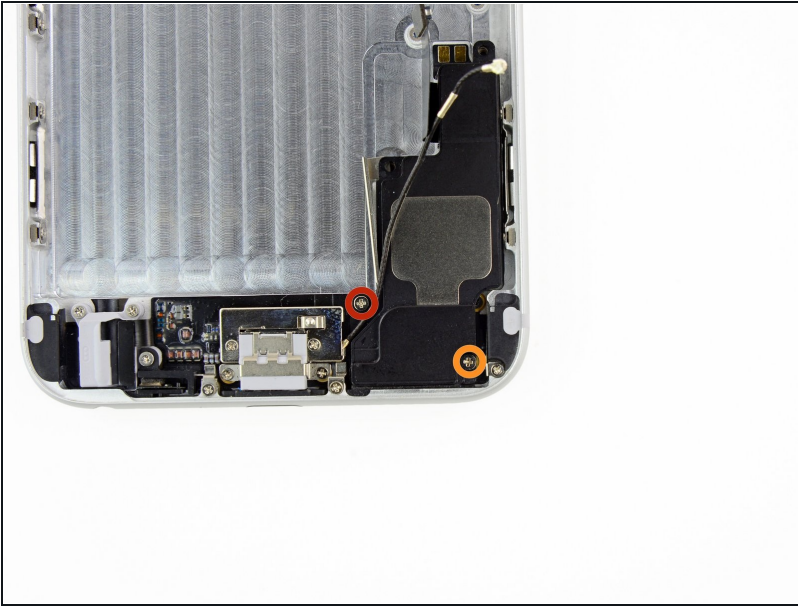
- Grasp the antenna connector with a pair of [tweezers](#) and carefully begin de-routing it from its channel on the speaker.

Step 66



- ① To fully de-route the antenna connector, you may need to gently pull back the metal clip securing it to the speaker assembly.

Step 67



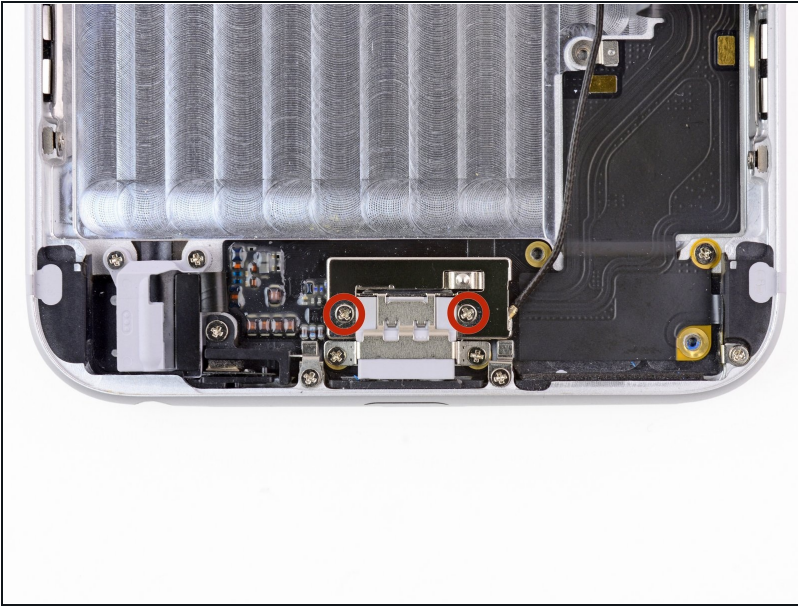
- Remove the following screws securing the speaker to the rear case:
 - One 2.3 mm Phillips #00 screw
 - One 2.8 mm Phillips #00 screw

Step 68



- Lift and remove the speaker out of the iPhone.

Step 69 — Lightning Connector Assembly



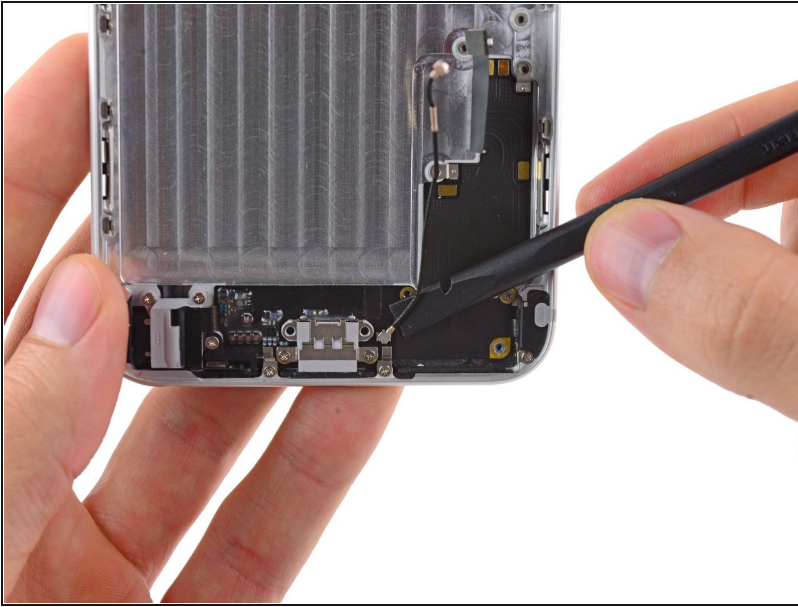
- Remove the two 3.3 mm Phillips #00 screws securing the metal bracket to the Lightning connector assembly.

Step 70



- Use a pair of [tweezers](#) to lift and remove the metal bracket out of the iPhone.

Step 71



- Use the flat edge of a spudger to pry the antenna connector cable up off its socket on the Lightning connector assembly.

Step 72



- Lift and remove the antenna connector out of the iPhone.

Step 73



- Remove the following Phillips #00 screws securing the Lightning connector assembly to the rear case:
 - Two 3.2 mm screws
 - One 3.8 mm screw
 - Two 1.7 mm screws
 - Two 1.5 mm screws
 - Two 1.4 mm screws

Step 74



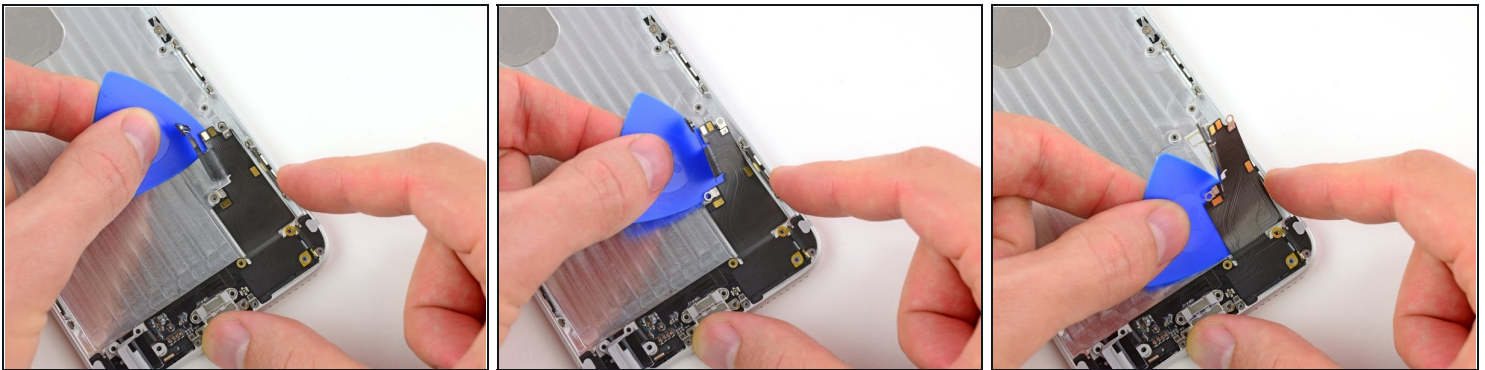
- Use a pair of tweezers to grasp the plastic clip that is situated to the right of the headphone jack and remove it from the iPhone.

Step 75 — Lightning Connector and Headphone Jack Cable



- ⓘ The next step requires peeling up the Lightning connector and headphone jack cable that is affixed to the inside of the rear case with mild adhesive. We highly recommend [using an iOpener](#) on the lower backside of the rear case to soften the adhesive.

Step 76



- Use an opening pick to slowly separate the Lightning connector and headphone jack cable from the rear case.
- ⓘ Carefully work the pick down the right side of the Lightning connector and headphone jack cable, making sure to **stop** right as you hit the bottom.

Step 77



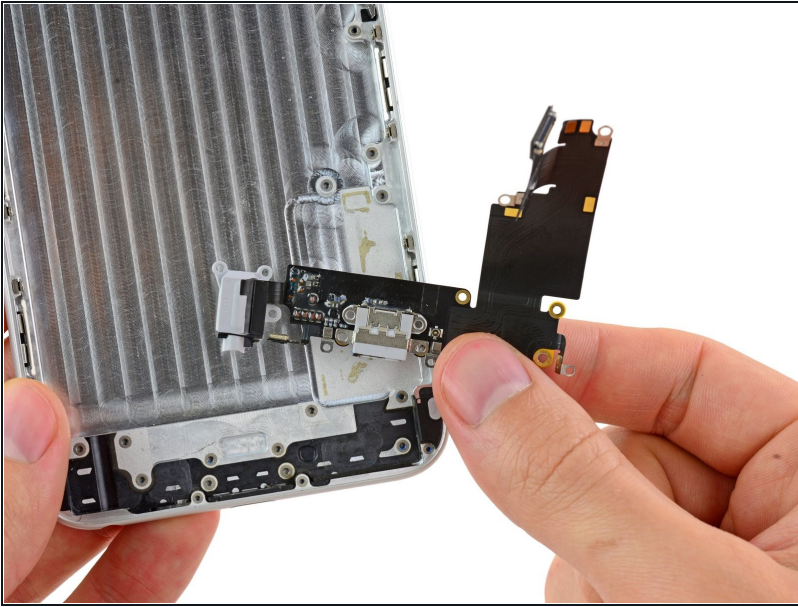
- Insert the pick underneath the right bottom corner of the Lightning connector and headphone jack cable.

Step 78



- Run the opening pick across the top of Lightning connector and headphone jack cable to loosen the adhesive securing it to the rear case.

Step 79



- Lift and remove the Lightning connector and headphone jack cable assembly out of the iPhone.

Step 80 — Rear Case



- Rear case remains.

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