



# iPhone 6s Rear Case Replacement

Remove all components from an iPhone 6s to transplant into a new rear case.

Written By: Evan Noronha



## INTRODUCTION

Use this guide to replace a bent or damaged rear case, or to swap out the rear case for cosmetic reasons. The rear case serves as the chassis for the entire phone, so replacing it involves removing all the iPhone's components.

**You can also use this guide for reference when replacing the following parts:**

- [NFC Bracket](#)
- Loudspeaker Mount
- Microphone Mount
- Front Panel Clips

### TOOLS:

- iOpener (1)
- Nut Driver 2.5 mm (1)
- P2 Pentalobe Screwdriver iPhone (1)
- Suction Handle (1)
- Spudger (1)
- Phillips #000 Screwdriver (1)
- Tweezers (1)
- SIM Card Eject Tool (1)
- iFixit Opening Picks set of 6 (1)

### PARTS:

- iPhone 6s Blank Rear Case (1)
- iPhone 6s OEM Rear Case (1)
- iPhone 6s Front Panel Clips (1)
- iPhone 6s Loudspeaker Mount (1)
- iPhone 6s Microphone Mount (1)
- iPhone 6s NFC Bracket (1)
- iPhone 6s Screw Set (1)
- iPhone 6s Display Assembly Adhesive (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 3.4 mm P2 Pentalobe screws on the bottom edge of the iPhone, next to the Lightning connector.

## Step 2 — Opening Procedure



- Optionally, apply mild heat to the lower edge of the iPhone using an [iOpener](#) or hair dryer for about a minute.
- **i** Heat softens the adhesive securing the display, making it easier to open.

## Step 3



**i** Opening the display on the 6s separates a thin strip of adhesive around the perimeter of the display. If you prefer to replace the adhesive, have a set of new adhesive strips ready before you continue. It's possible to complete the repair without replacing the adhesive, and you probably won't notice any difference in functionality.

- Apply a suction cup to the lower left corner of the display assembly.
  - Take care **not** to place the suction cup over the home button.

**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 4



- Pull up on the suction cup with firm, constant pressure to create a slight gap between the front panel and rear case.
  - Take your time and apply firm, constant force. The display assembly is a much tighter fit than most devices and is held down with adhesive.

**⚠** Pulling too hard may damage the display assembly. Apply just enough pressure to create a small gap between the display assembly and the rear case.

**ⓘ** If you have any trouble, heat the front of the iPhone using an iOpener, hair dryer, or heat gun until it's slightly too hot to touch. This will help soften the adhesive securing the edges of the display.

## Step 5



- ⓘ There is a notch on the underside of the display, just above the headphone jack. This is the safest place to begin prying the phone open.
- Place the flat edge of a spudger into the gap between the screen and rear case, directly above the headphone jack.

## Step 6



- Twist the spudger to widen the gap between the front panel assembly and the rest of the phone.

## Step 7



- Insert the flat end of the spudger on the left side of the phone, between the display assembly and rear case.
- Slide the spudger up the side of the phone to separate the adhesive and pop the clips free.

## Step 8



- Remove the spudger and reinsert it on the bottom edge, where you pried the phone open.
- Slide the spudger to the right, along the bottom edge of the phone.

## Step 9



- Slide the spudger up the right side to continue separating the adhesive and popping the display clips free from the iPhone.

## Step 10



- Use the suction cup to open the display, breaking the last of the adhesive.

**⚠** Don't open the display more than 90°, as it is still connected at the top by three cables that may break if stretched.

## Step 11



- Pull up on the nub on the top side of the suction cup to remove it from the front panel.

## Step 12



- Gently grasp the display assembly and lift it up to open the phone, using the clips at the top of the front panel 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 13 — Battery Connector



- Remove two Phillips screws securing the battery connector bracket, of the following lengths:
  - One 2.9 mm screw
  - One 2.2 mm screw

*(i)* Throughout this repair, keep track of each screw and make sure it goes back exactly where it came from to avoid damaging your iPhone.

## Step 14



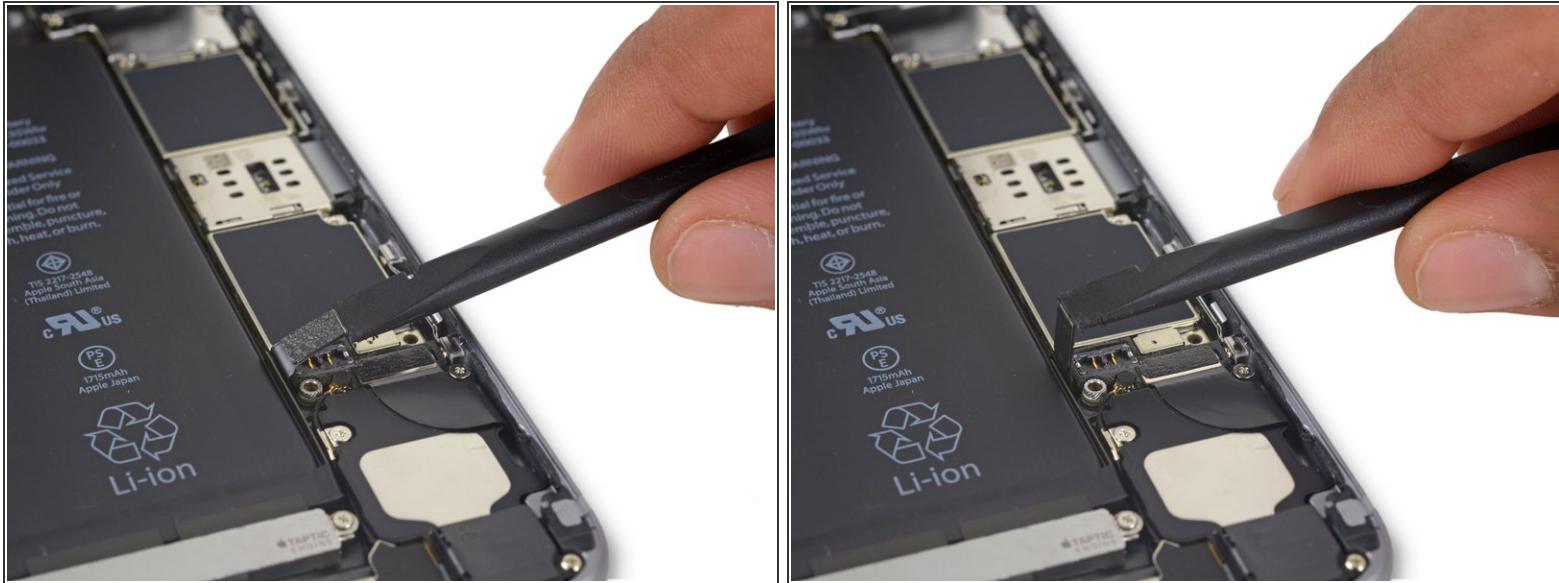
- Remove the battery connector bracket from the iPhone.

## Step 15



- Use the point of a spudger to disconnect the battery connector by prying it straight up from the logic board.

## Step 16



- Push the battery connector away from the logic board until it stays separated from its socket, so as to avoid any accidental connection to the battery while you work.

## Step 17 — Front Panel Assembly



- Remove the following four Phillips screws securing the display cable bracket:
  - Three 1.2 mm screws
  - One 2.8 mm screw

## Step 18



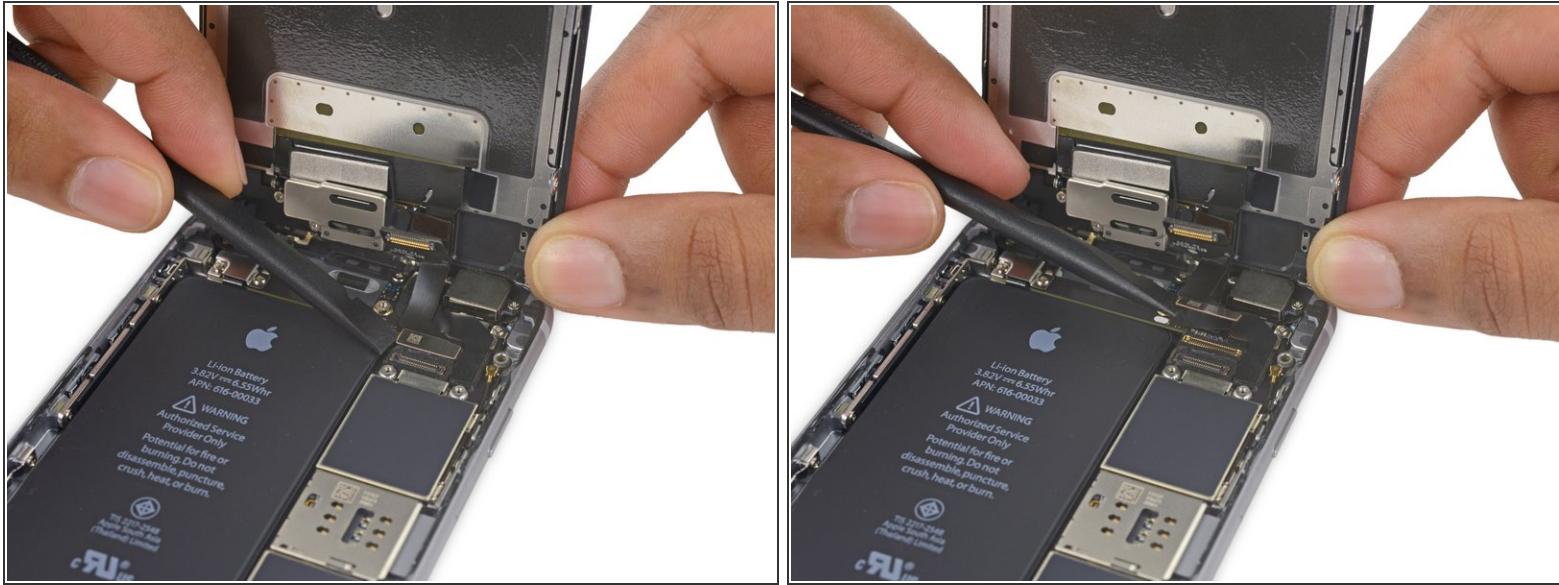
- Remove the display cable bracket.

## Step 19



- Use a spudger or a clean fingernail to disconnect the front camera flex cable by prying it straight up from its socket on the logic board.

## Step 20



- Disconnect the digitizer cable by prying it straight up from its socket on the logic board.

**⚠** 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.

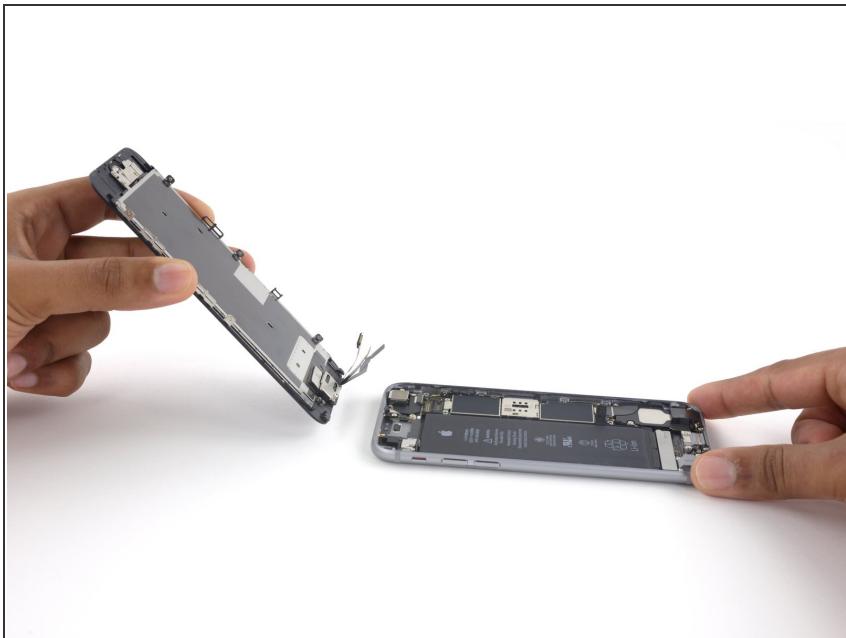
## Step 21



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

- Disconnect the display cable by prying it straight up from its socket on the logic board.

## Step 22



- Remove the display assembly.

↗ During reassembly, pause here if you wish to [replace the adhesive around the edges of the display](#).

## Step 23 — Rear Camera



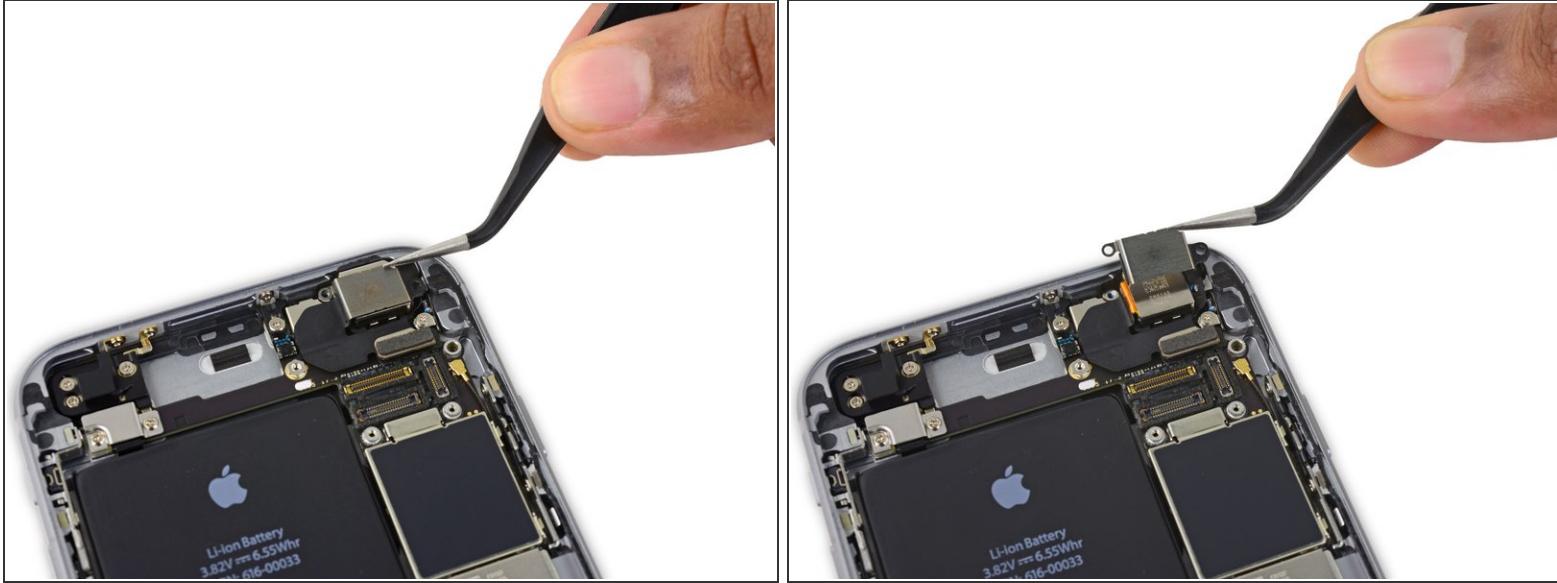
- Use the flat end of a spudger to disconnect the rear camera from its socket on the logic board.

## Step 24



- Remove the following two Phillips screws over the rear camera bracket:
  - One 1.6 mm screw
  - One 2.0 mm screw

## Step 25



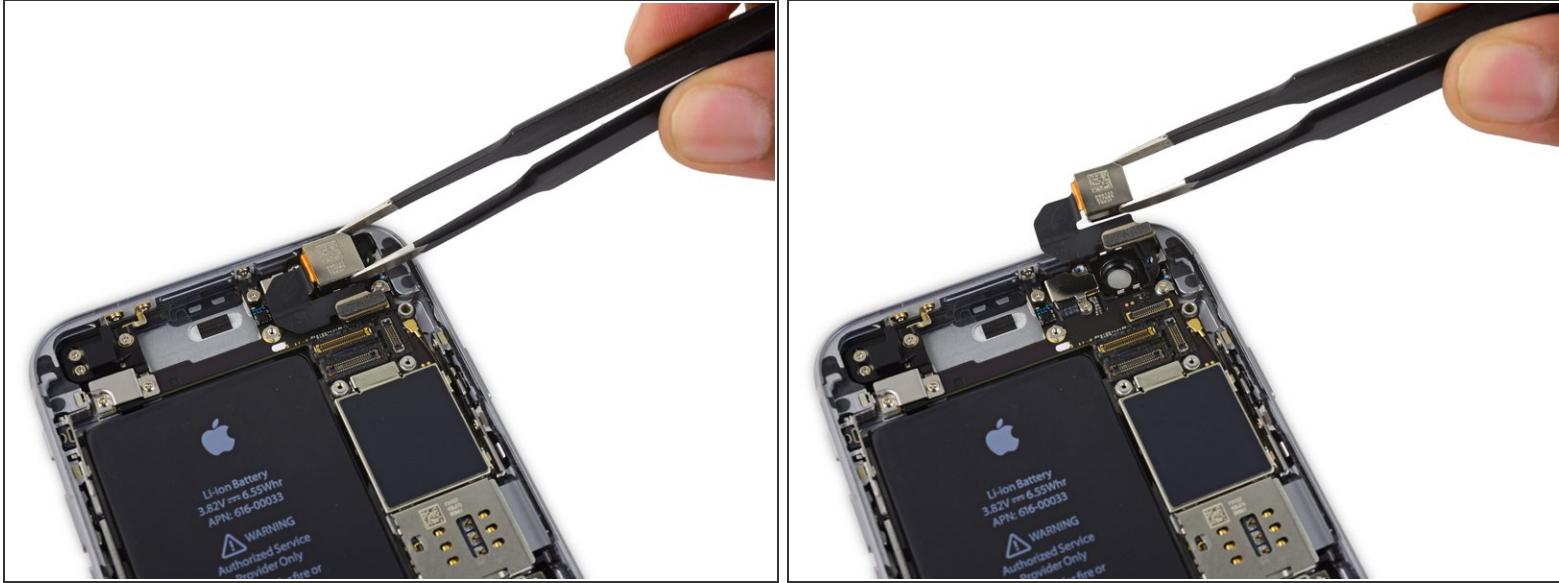
- Remove the camera bracket.

## Step 26



- Insert a spudger to the side of the camera, between the rear case and the camera module.
- Gently pry up on the camera to nudge it out from its housing.

## Step 27



- Remove the camera.

## Step 28 — SIM Tray



- 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 29



- 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 30 — Logic Board



- Remove the two 2.3 mm Phillips screws securing the upper component cable connector bracket.

## Step 31



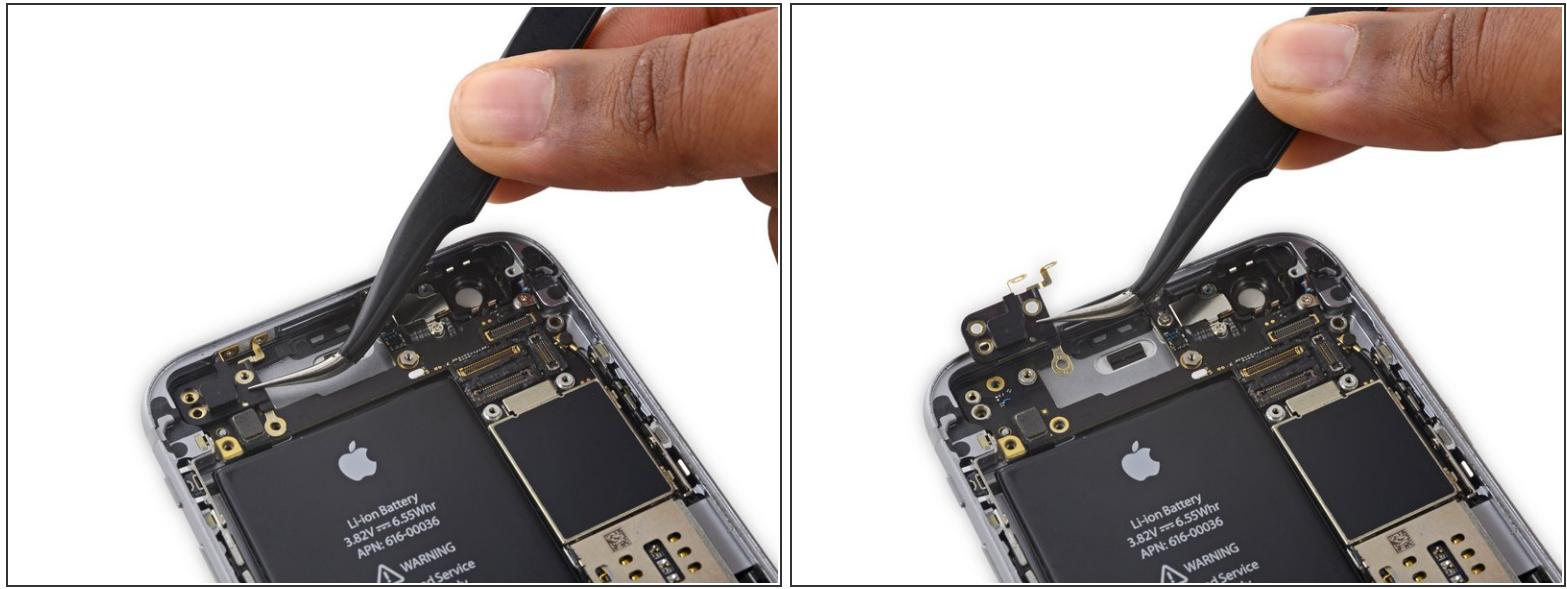
- Remove the upper component cable connector bracket.

## Step 32



- Remove the following five Phillips screws securing the top left Wi-Fi antenna:
  - Two 1.5mm screws
  - One 2.3 mm screw
  - One 1.9 mm screw
  - One 2.0 mm screw

## Step 33



- Remove the top left Wi-Fi antenna.

## Step 34



- Use the flat end of a spudger to disconnect the audio control cable from its socket on the logic board.

## Step 35



- Use the pointed tip of a spudger to disconnect the antenna cable from its socket on the upper right corner of the logic board.

## Step 36



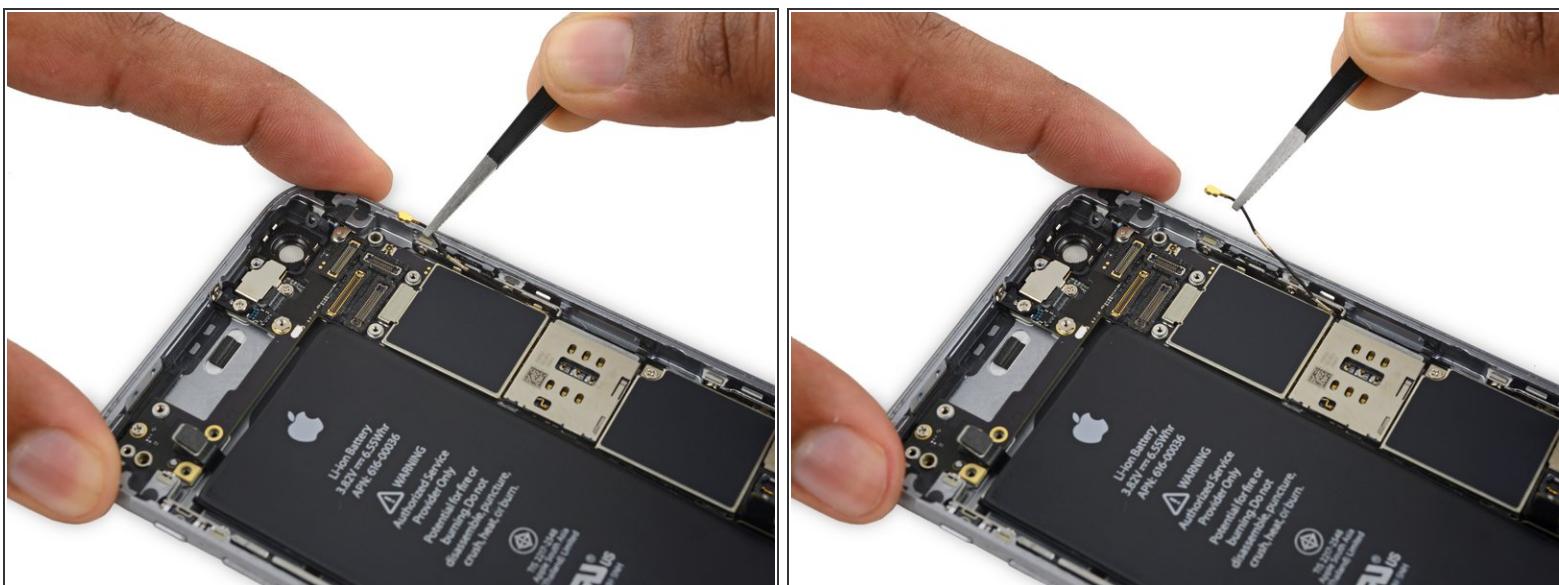
- Use the pointed tip of a spudger to disconnect the antenna cable from its socket on the lower left corner of the logic board.

## Step 37



- Insert the flat end of a spudger underneath the Lightning connector ribbon cable. Lift up to disconnect it from its socket on the logic board.

## Step 38



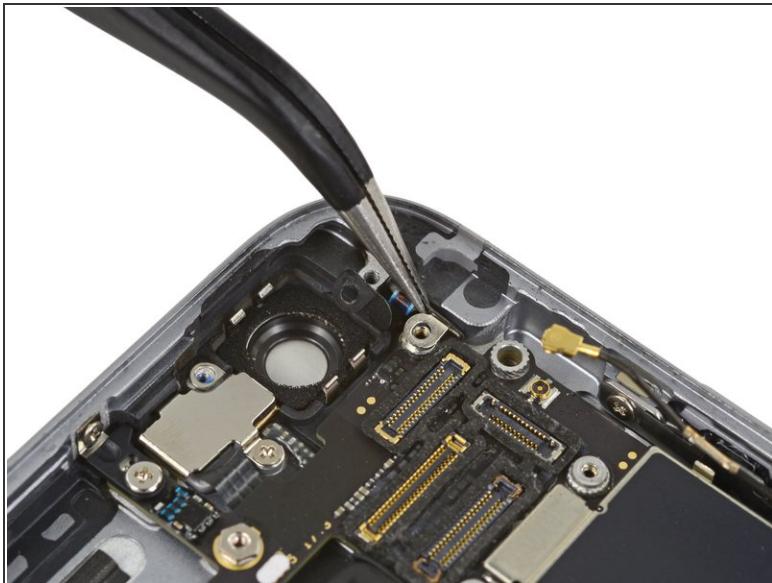
- Gently pull up on the antenna cable to de-route it from the two clips on the right side of the logic board.

## Step 39



- Remove the 1.3 mm Phillips screw securing the NFC bracket to the logic board.

## Step 40



- Remove the NFC bracket.

## Step 41



- Remove the following two Phillips screws:
  - One 2.5 mm screw at the top of the logic board
  - One 1.4 mm screw set into the upper edge of the rear case

## Step 42



- Remove the plastic clip.

## Step 43



- Remove the final three screws securing the logic board to the rear case:
  - One 1.9 mm Phillips screw
  - One 2.5 mm hex nut
  - One 1.8 mm Phillips screw

## Step 44



- Insert an opening pick below the lower edge of the logic board, between the board and the loudspeaker.
- Use the opening pick to gently lift the logic board out of its housing.
- Remove the logic board.

## Step 45 — Upper Component Cable



- Remove the two 1.5 mm Phillips screws holding the Taptic Engine in place.
- Remove the Taptic Engine.

## Step 46



- Use tweezers to peel up the tips of the battery adhesive strips at the lower edge of the battery.

## Step 47



**⚠** Try not to wrinkle the strips during this procedure—they will become very difficult to deal with and will not straighten out again.

- Pull one of the adhesive strips straight out, towards the bottom of the iPhone.
- For best results, pull the strip at a 60° angle or less.

**i** The strip will stretch to many times its original length. Continue to pull steadily, re-grabbing the strip closer to the iPhone if necessary.

- Continue pulling until the strip is fully removed.

**⚠** If the battery adhesive tabs break off at any point during the removal process, use your fingers or blunt tweezers to retrieve the remaining length of adhesive, and continue pulling.

- If one of the adhesive strips breaks under the battery during this procedure, and cannot be retrieved, remove the remaining strip, and then skip to [Step 48](#).

## Step 48



- Repeat the previous step for the second adhesive strip.

**⚠** Use one hand to hold down the battery as you remove the second strip, or the strip may fling the battery from the phone once it separates from the rear case.

## Step 49



- **If you successfully removed all three adhesive strips, move on to the next step.** Otherwise, you will need to pry the battery from the rear case.
- Prepare an iOpener and apply it to the back of the rear case, directly over the battery. Alternatively, you can apply heat using a heat gun or hair dryer.
- After about a minute, flip the phone over and use a plastic card to break up any remaining adhesive behind the battery.

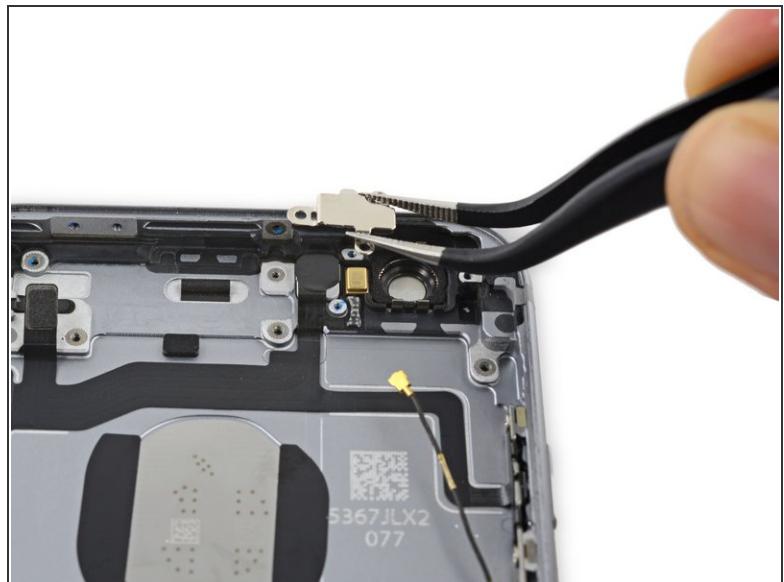
## Step 50



- Remove the battery.

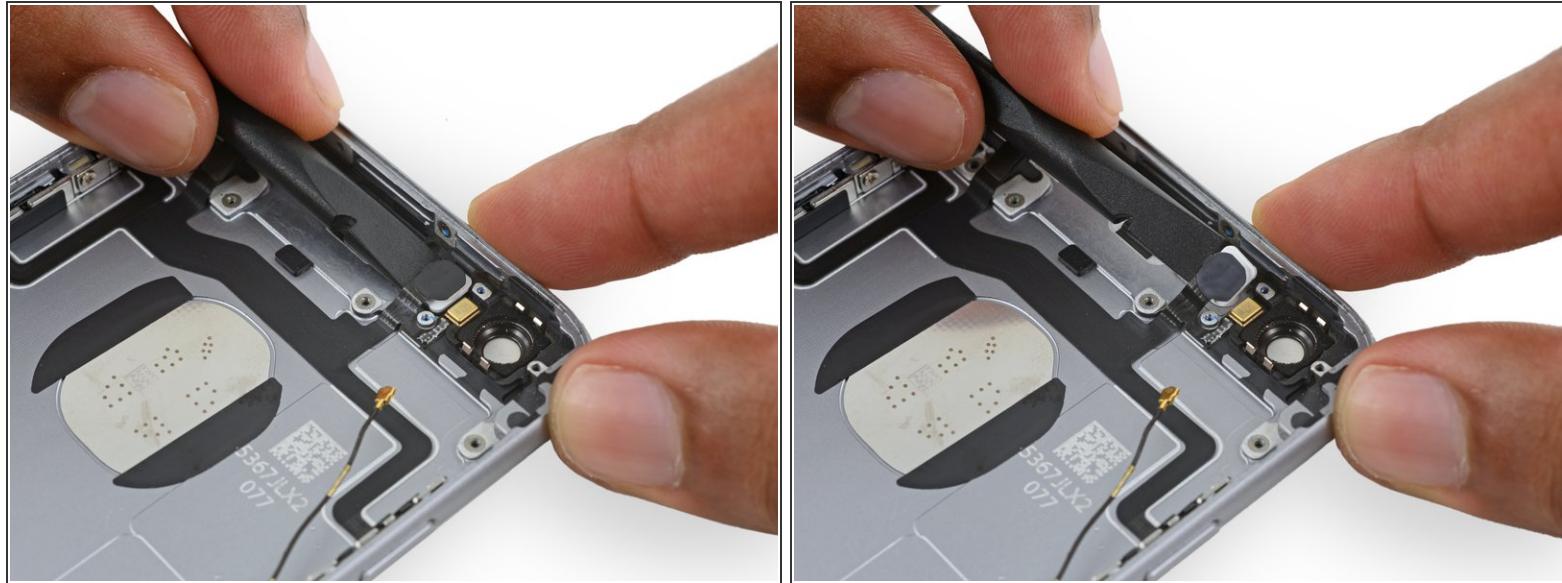
➡ When installing the battery, refer to [this guide](#) to replace your battery's adhesive strips.

## Step 51



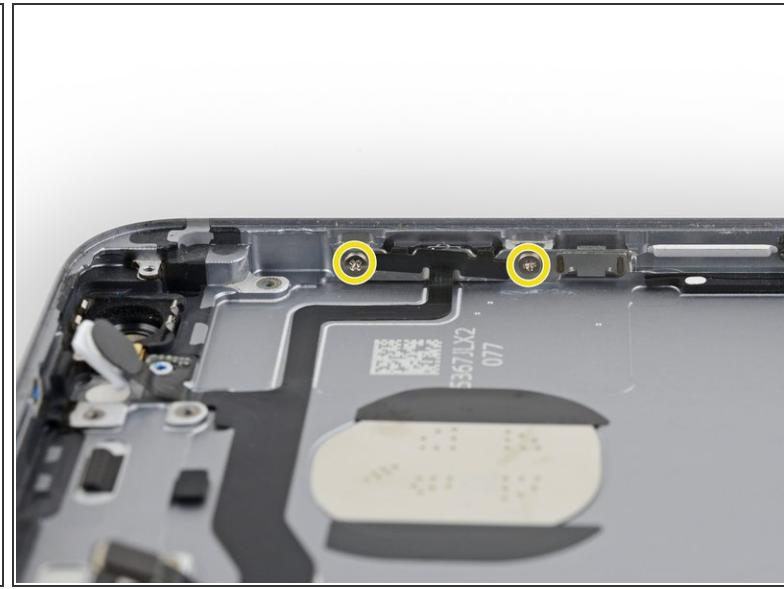
- Remove the single 1.3 mm Phillips screw securing the flash bracket.
- Remove the flash bracket.

## Step 52



- Use the flat end of a spudger to lift the flash out of its housing in the rear case.

## Step 53



- Remove the following five Phillips screws:

- Two 2.5 mm screws set into the left edge of the rear case
- One 2.1 mm Phillips #000 screw set into the left edge of the rear case
- Two 2.1 mm screws set into the right edge of the rear case

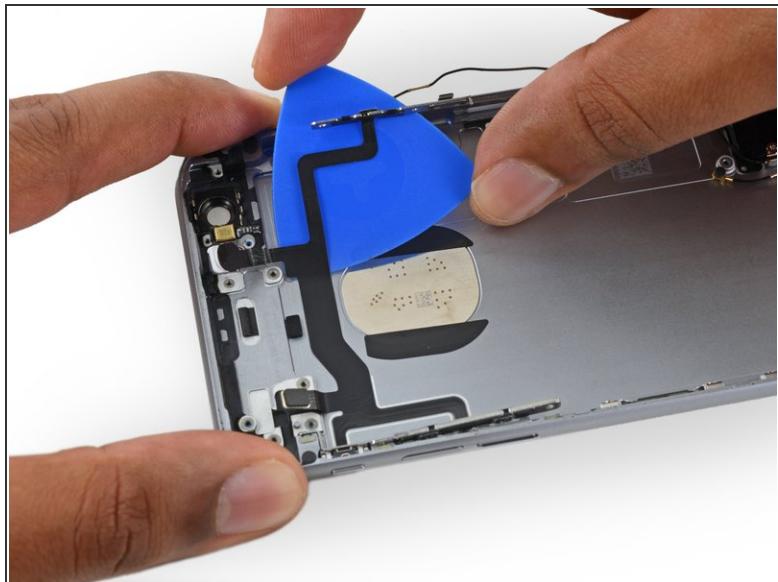
★ If you overtighten these screws during reassembly, your power and volume buttons may not click properly. Check the clicking action on each button before you continue with reassembly.

## Step 54



- Use the pointed tip of a spudger to gently separate the microphone from the rear case.

## Step 55



- Slide an opening pick between the upper component cable and the rear case.
- Gently separate the cable from the rear case.

## Step 56



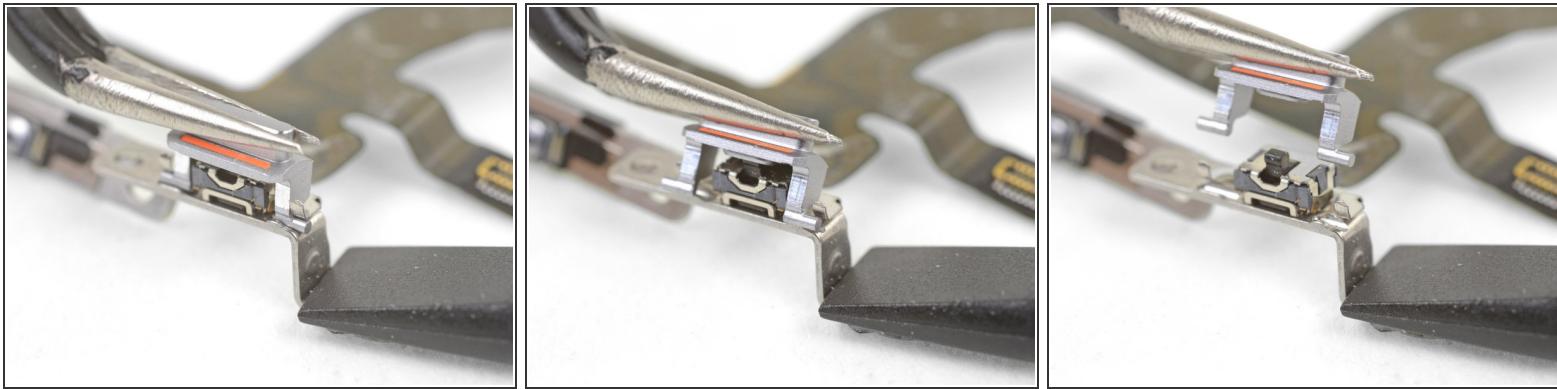
- Continue pushing the opening pick under the cable until it fully separates from the rear case.

## Step 57



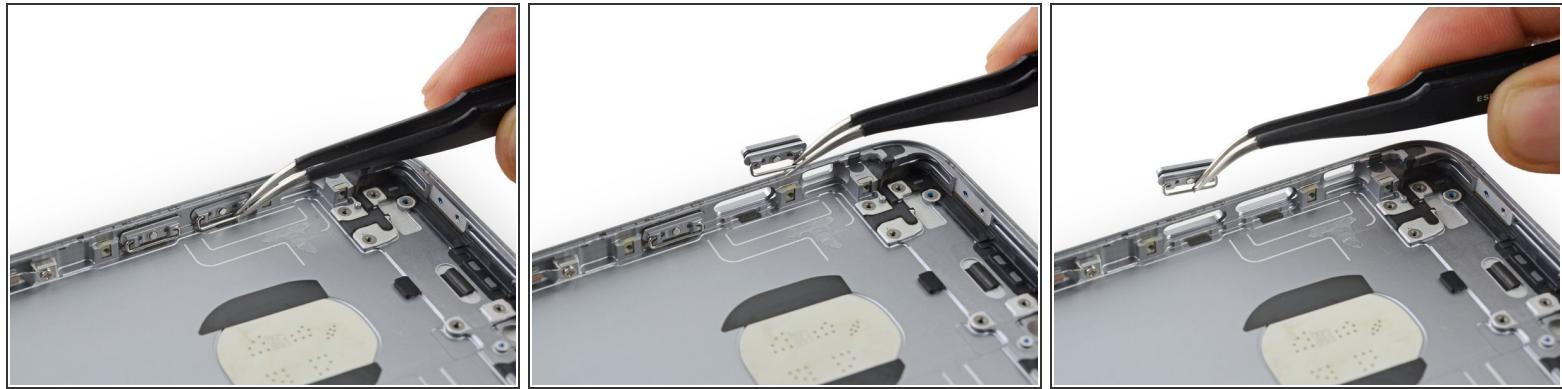
- Remove the upper component cable assembly.

## Step 58



- If your replacement part did not come with the mute switch cover, you will need to remove the switch cover and transfer it.
  - Use the flat end of the spudger to press down and hold the old bracket firmly in place.
  - Use tweezers or your fingers to carefully rock the switch cover such that the switch cover pins swing out of their clips.
  - Lift the switch cover straight up.
- ☒ To install the mute switch cover onto the new upper cable assembly, reverse the steps.
  - ⓘ The pins are supposed to rest near the clip opening. Do not attempt to force the pins far into the clips. The switch cover will be held securely in place once you screw the bracket back onto the case.
  - ⓘ The switch cover goes on in only one orientation. If you are having a hard time getting the switch cover onto the new part, try toggling the switch so that the black protruding lever is in a different position.
- ☒ Before reassembling the phone, check all switches and buttons to see if they physically work.

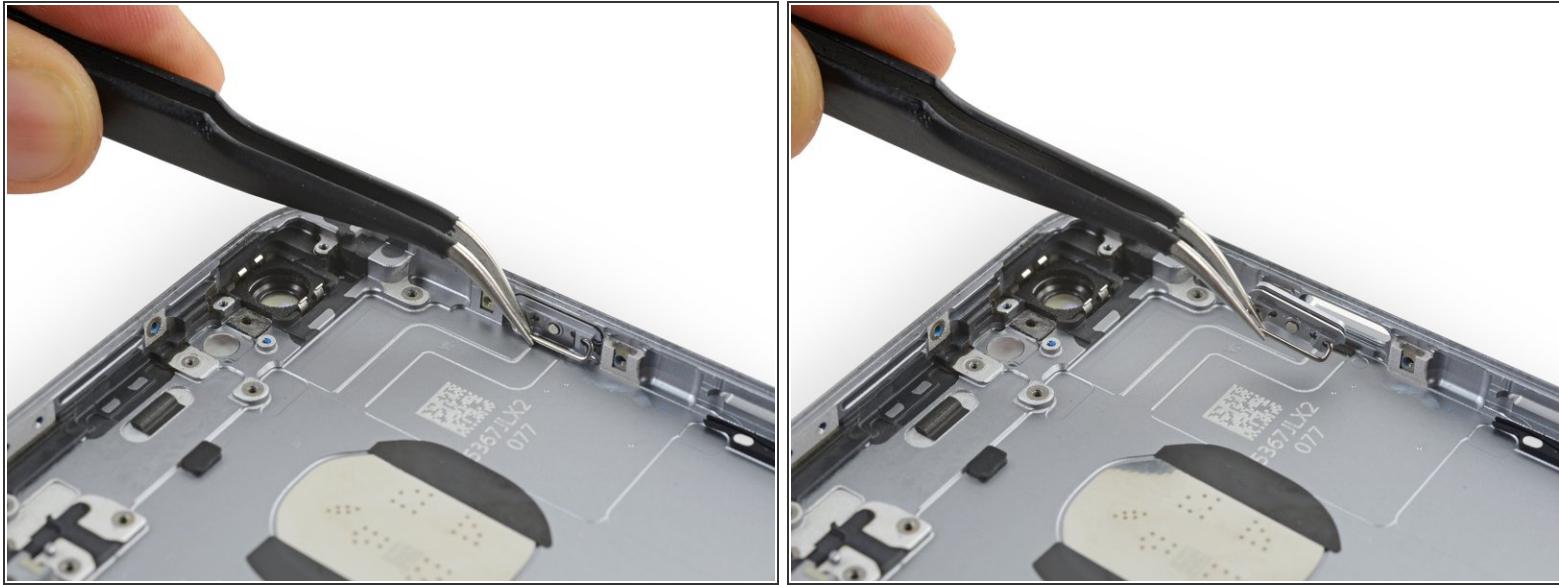
## Step 59 — Volume Control Button Covers



- Grasp the metal bar behind either of the two volume control button covers, and pull the button cover out of its housing in the rear case.
- Repeat for the second volume control button cover.

 Check for proper orientation when reinstalling the button covers. The metal bar should swing downward, towards the rear case of the iPhone.

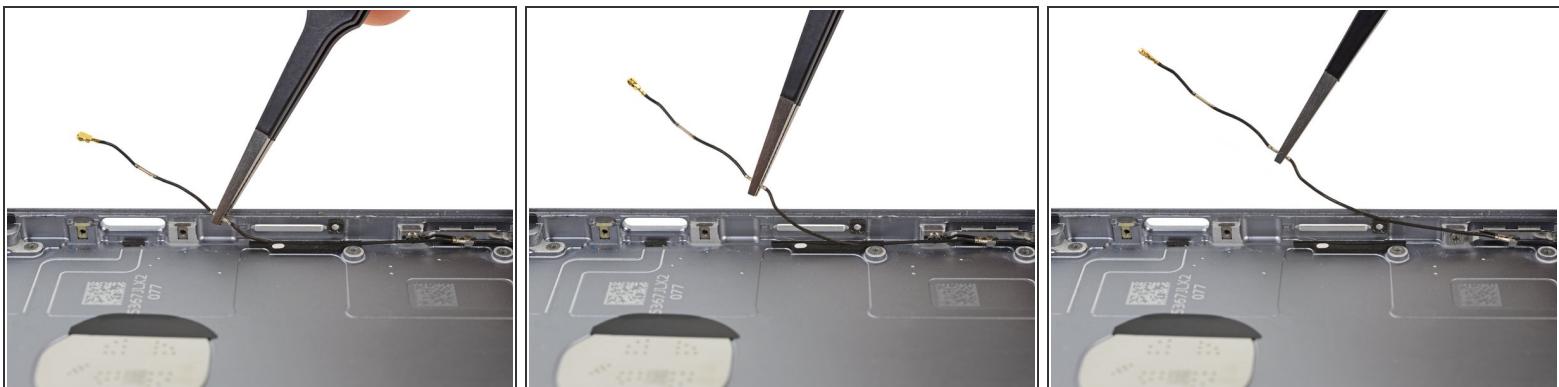
## Step 60 — Power Button Cover



- Grasp the metal bar on the back of the power button cover.
- Remove the power button cover.

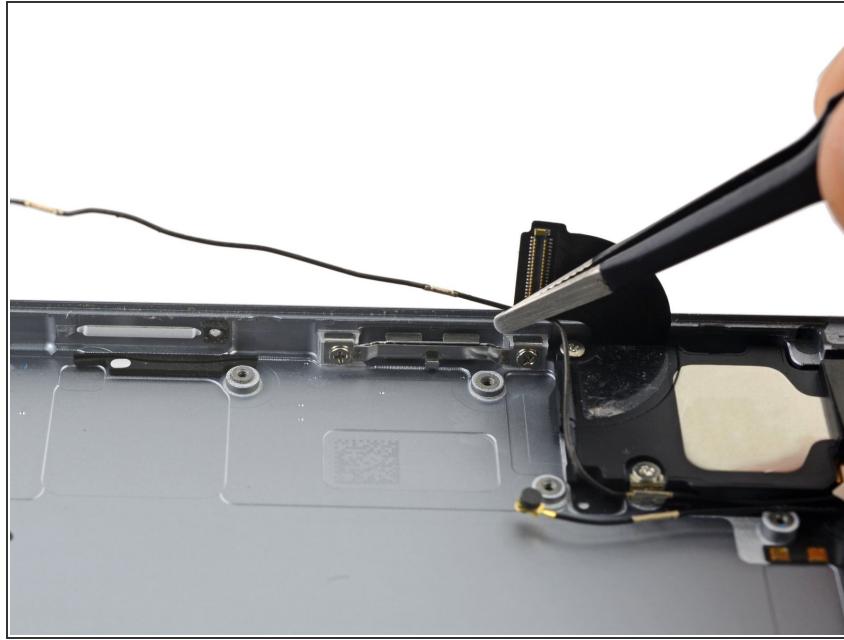
 Check for proper orientation when reinstalling the button cover. The metal bar should swing downward, towards the rear case of the iPhone.

## Step 61 — Rear Case



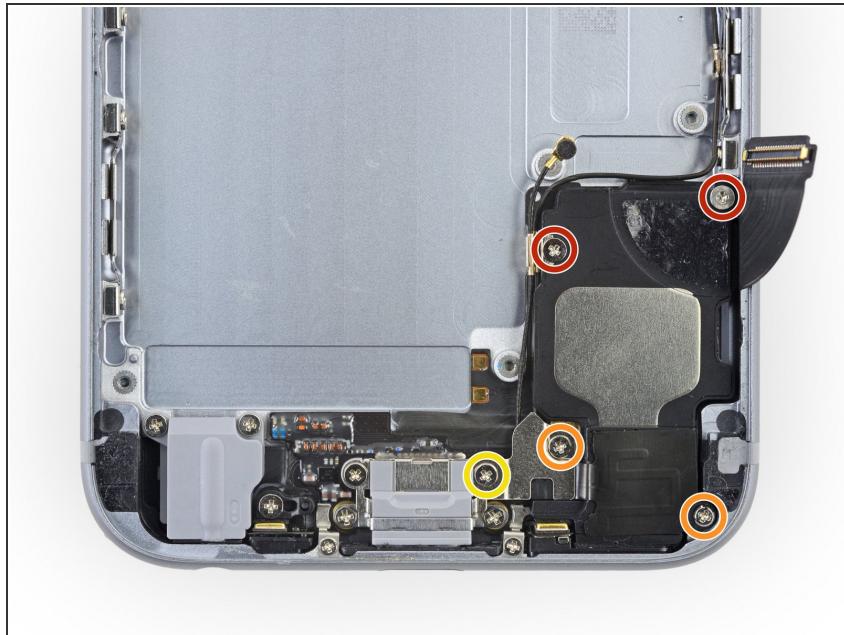
- Deroute the antenna cable from its rubber sleeve on the right edge of the rear case.

## Step 62



- Remove the antenna cable from the metal clip on the right edge of the rear case.

## Step 63



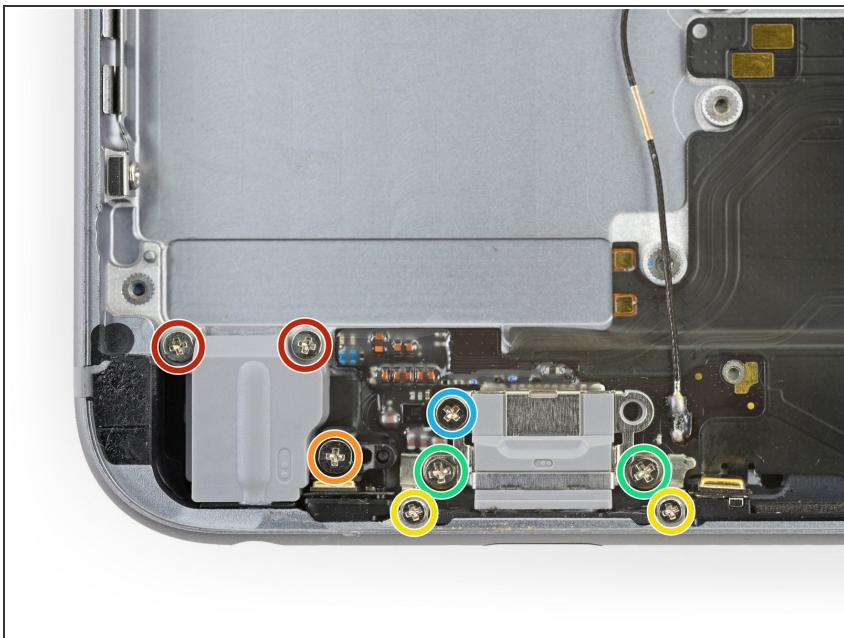
- Remove the following five Phillips screws securing the speaker to the rear case:
  - Two 2.6 mm screws
  - Two 2.3 mm screws
  - One 3.0 mm screw

## Step 64



- Use your fingers to lift the speaker out of its housing in the rear case.
- Remove the speaker assembly.

## Step 65



- Remove the following eight Phillips screws:
  - Two 2.9 mm screws securing the headphone jack
  - One 3.7 mm screw securing the microphone bracket
  - Two 1.3 mm screws on the lower edge of the iPhone
  - Two 1.9 mm screws on either side of the Lighting connector
  - One 3.0 mm screw to the left of the connector

## Step 66



- Remove the plastic microphone bracket.

## Step 67



- Insert an opening pick between the Lightning connector assembly and the rear case to begin breaking up the adhesive holding the flex cable in place.

## Step 68



- Use the flat end of a spudger to continue separating the Lightning connector assembly from the rear case.

## Step 69



- Use the tip of a spudger to separate the two microphones from the lower edge of the rear case.

## Step 70



- Remove the Lightning connector and headphone jack assembly.

## Step 71



- Only the rear case remains.

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