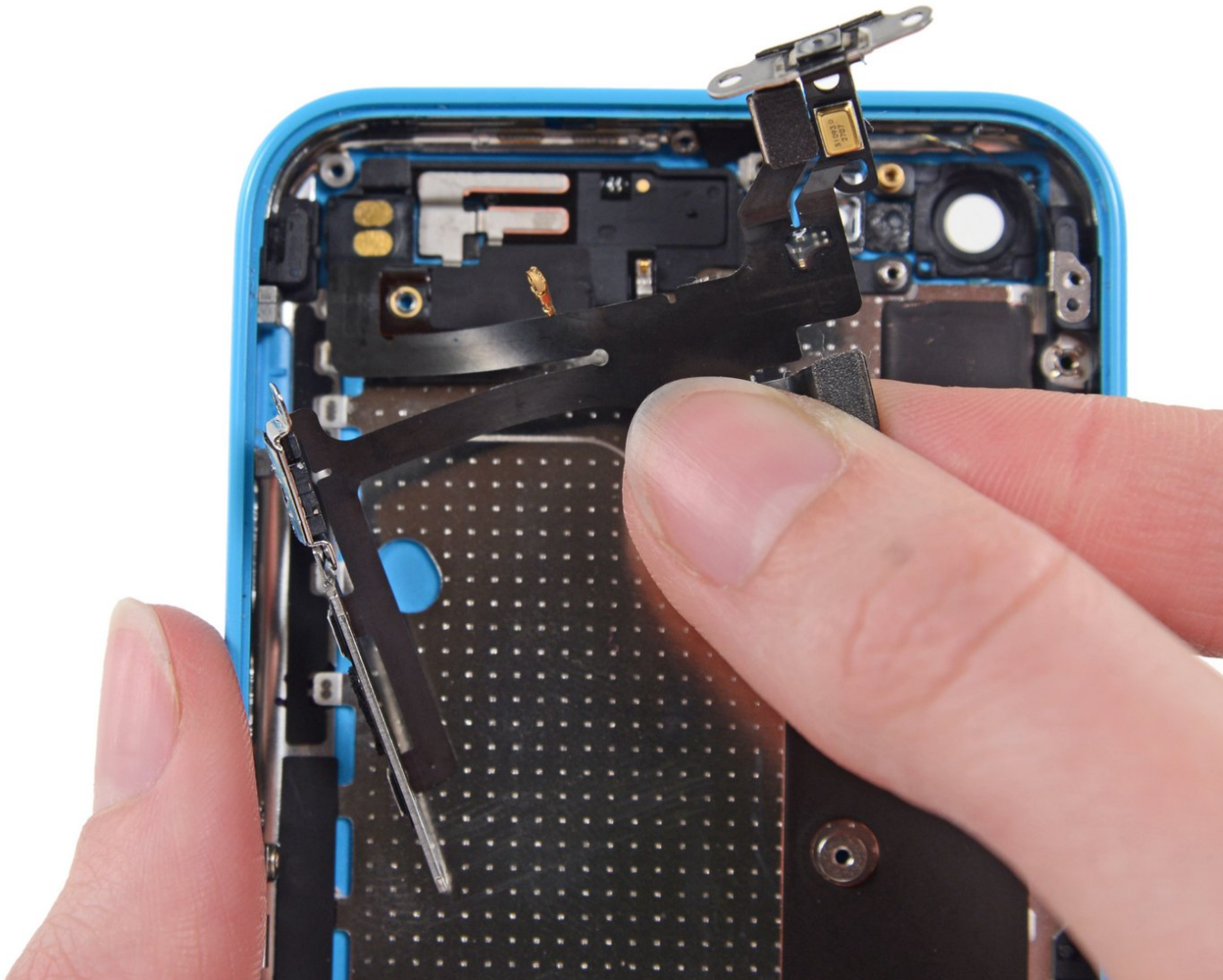




# iPhone 5c Rear Case Replacement

Replace a scratched or damaged iPhone 5c rear case.

Written By: Andrew Optimus Goldheart



# INTRODUCTION

Use this guide to replace a scratched or damaged rear case on your iPhone 5c.

This guide requires removing the battery. The adhesive strips securing the battery are not re-usable, so you'll want to have a supply of replacement adhesive strips on hand before you begin.

Alternatively, you can secure the battery using a piece of double-sided tape. The battery is pretty tightly secured in the device, but the tape will keep it from rattling.

You can also use this guide for reference when replacing the power button grounding cable.



## TOOLS:

- [iOpener](#) (1)
- [Plastic Cards](#) (1)
- [P2 Pentalobe Screwdriver iPhone](#) (1)
- [iFixit Opening Tools](#) (1)
- [Suction Handle](#) (1)
- [SIM Card Eject Tool](#) (1)
- [Utility Scissors](#) (1)
- [Spudger](#) (1)
- [Tweezers](#) (1)
- [Phillips #000 Screwdriver](#) (1)
- [Standoff Screwdriver for iPhones](#) (1)



## PARTS:

- [iPhone 5c Power Button Grounding Cable](#) (1)
- [iPhone 5c Rear Case](#) (1)
- [iPhone 5s/5c/SE Battery Adhesive Strips](#) (1)
- [iPhone 5c Wi-Fi and Bluetooth Antenna](#) (1)

## Step 1 — Taping the display glass



- If your display glass is cracked, keep further breakage contained and prevent bodily harm during your repair by taping the glass.
- Lay overlapping strips of clear packing tape over the iPhone's display until the whole face is covered.
- ⓘ This will keep glass shards contained and provide structural integrity when prying and lifting the display.

⚠ Wear safety glasses to protect your eyes from any glass shaken free during the repair.

## Step 2 — Removing the Pentalobe screws



⚠ Before you proceed, discharge your iPhone 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 3.8 mm P2 Pentalobe screws on either side of the Lightning connector.

### Step 3 — Starting the iSclack Opening Procedure



**i** The next two steps demonstrate using the [iSclack](#), a great tool for safely opening the iPhone 5c that we recommend for anyone doing more than one repair on an iPhone 5, 5s, or 5c. **If you aren't using the iSclack, skip to [Step 5](#).**

- Close the handle on the iSclack, opening the suction-cup jaws.
- Place the bottom of your iPhone in between the suction cups, against the plastic depth gauge.
  - The top suction cup should rest just above 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.



## Step 4 — Finishing the iSclack Opening Procedure



- 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 just enough to separate the pieces, but not enough to damage any cables.
- ⓘ Peel the two suction cups off your iPhone.
- **Skip the next three steps and continue on to [Step 8](#).**

## Step 5 — Manual Opening Procedure



- Press a suction cup onto the screen, just above the home button.
- ⓘ Be sure the cup is completely on the screen to get a tight seal.

## Step 6 — Start lifting the front panel assembly



- ⓘ Make sure the suction cup is firmly attached to the front panel assembly.
  - 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.
  - With a plastic opening tool, begin to gently pry the rear case down, away from the display assembly, while you 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 7



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

## Step 8 — Opening up the phone



- Lift the home button end of the front panel up to gain access to the connectors near the top of the phone.
- 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.
  - In a pinch, you can use an unopened canned beverage to hold the display.
- Add a rubber band to keep the display securely in place while you work. This prevents undue strain on the display cables.



## Step 9



- Remove the two 1.6 mm Phillips #000 screws securing the metal battery connector bracket to the logic board.

## Step 10



- Remove the metal battery connector bracket from the iPhone.

## Step 11 — Disconnecting the battery connector



- Use a spudger or a clean fingernail to gently pry the battery connector up from its socket on the logic board.
- ⚠ Be very careful to only pry up on the battery connector itself and not the socket on the logic board. If you pry up on the logic board socket or the board itself, you may destroy the socket or damage nearby components on the board.

## Step 12



- Remove the following Phillips #000 screws securing the front panel assembly cable bracket to the logic board:

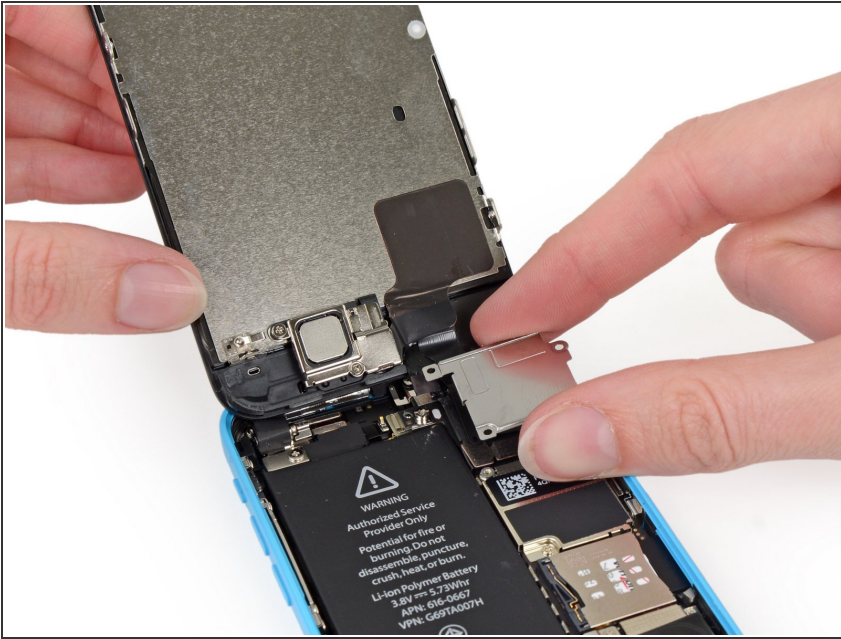
- Two 1.3 mm screws
- One 1.7 mm screw
- One 3.25 mm screw

⚠ It is especially important to keep track of your screws in this step for reassembly. Accidentally using the 3.25 mm screw or the 1.7 mm screw in the bottom right hole will result in significant damage to the logic board causing the phone to no longer boot properly.

⚠ Be careful not to over-tighten the screws. If they don't fit easily when you are securing them, they may be the wrong size—don't force them.



## Step 13



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

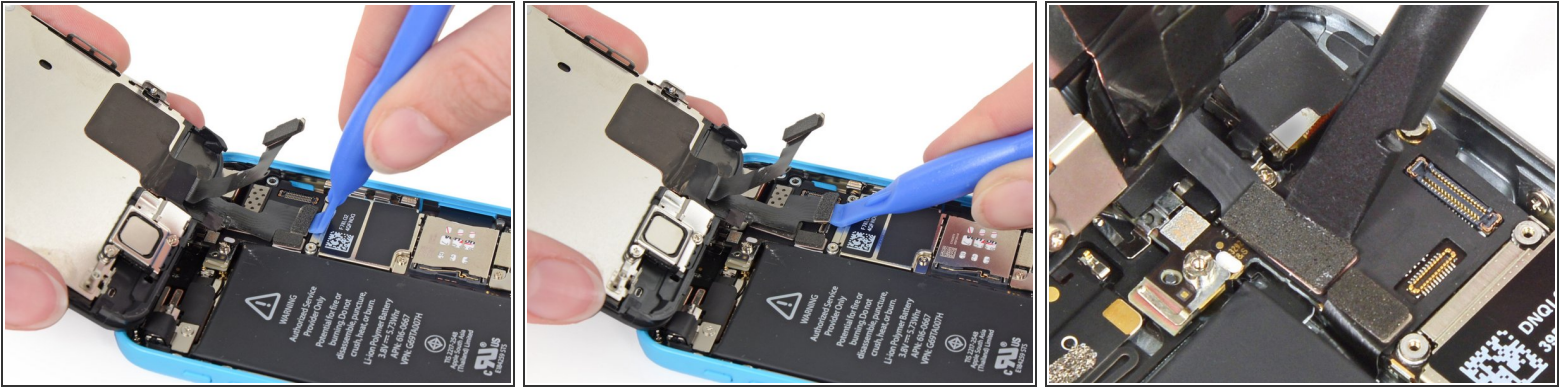
## Step 14 — Disconnecting the front panel assembly cables




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


⚠ Be sure to **only** pry up on the connector, and not on the socket on the logic board.


## Step 15



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

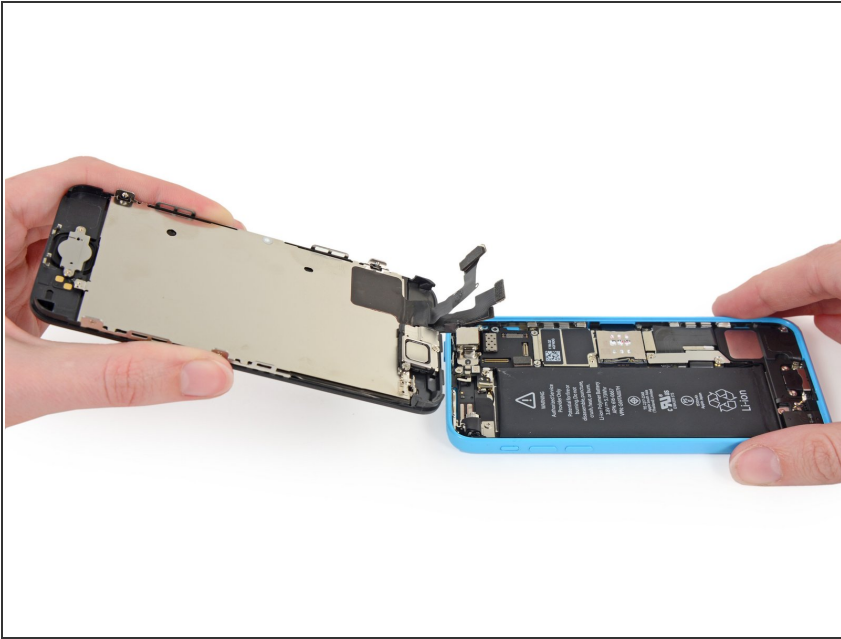
- Use a plastic opening tool or a fingernail to disconnect the LCD cable connector.

 The LCD and Digitizer connectors are on the same cable assembly, so prying the LCD connector up should disconnect both connectors. Double check that the two cables are fully disconnected before removing the display.

-  When reassembling your phone, the LCD cable may pop off its connector. A blank screen, or white lines on the display could be caused by a loose connection. Should this happen, reconnect the cable and power cycle your phone. The best way to power cycle your phone is to disconnect and reconnect the battery.



## Step 16 — Separating front panel assembly and rear case



- Remove the front panel assembly from the rear case.

## Step 17 — SIM Card



**i** Shut your phone down completely before removing the SIM card and tray.

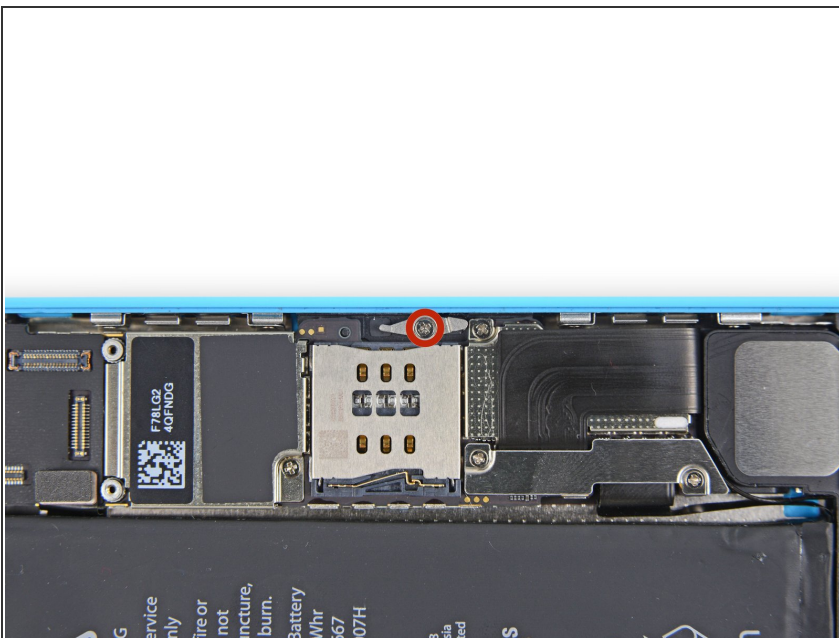
- Insert a SIM card eject tool or a paperclip into the small hole in the SIM card tray.
- Press the SIM card eject tool inwards to eject the tray.
  - This may require a significant amount of force.

## Step 18



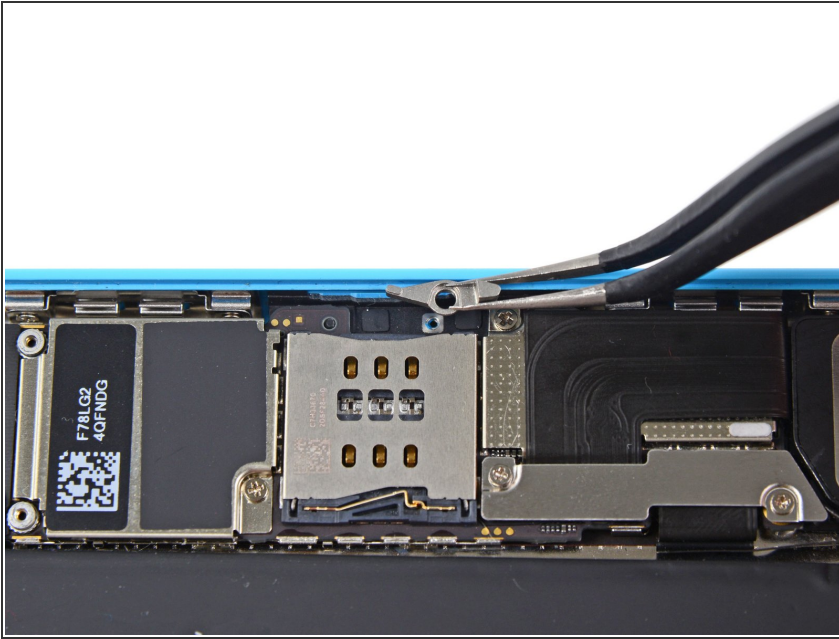
- Remove the SIM Card tray assembly from the iPhone.
- ☑ During reassembly, ensure that the SIM card is in the proper orientation relative to the tray.

## Step 19 — SIM Ejector



- Remove the 2.0 mm Phillips #000 screw securing the SIM ejector.

## Step 20



- Use a set of tweezers to remove the SIM ejector from the phone.
- ★ Note the orientation for reassembly: the raised portion of the ejector should be closest to the bottom of the phone.

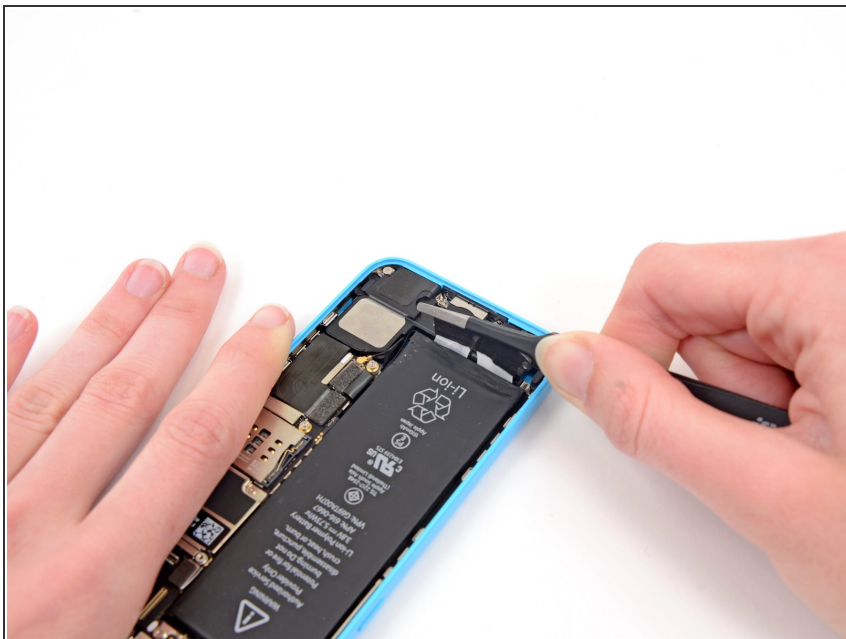
## Step 21 — Battery



- Run the tip of a spudger between the battery and the headphone jack to unfold the battery adhesive tab.

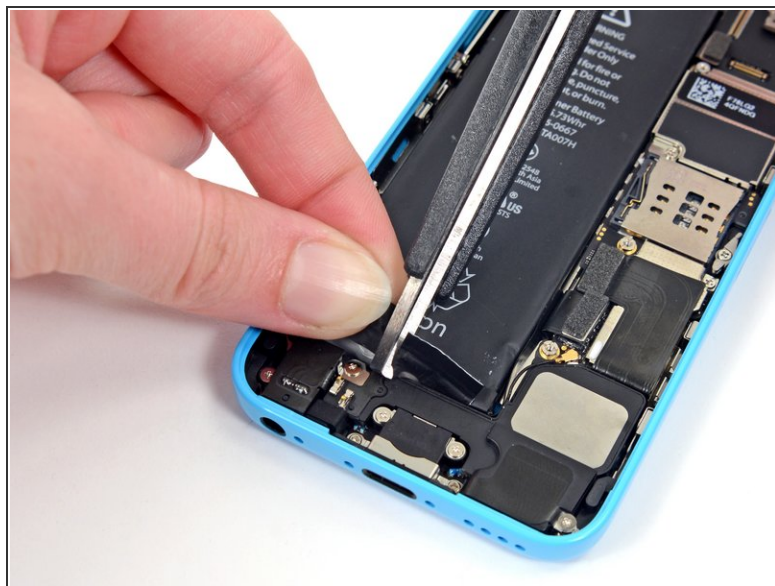


## Step 22



- Pull the battery adhesive tab away from the phone.

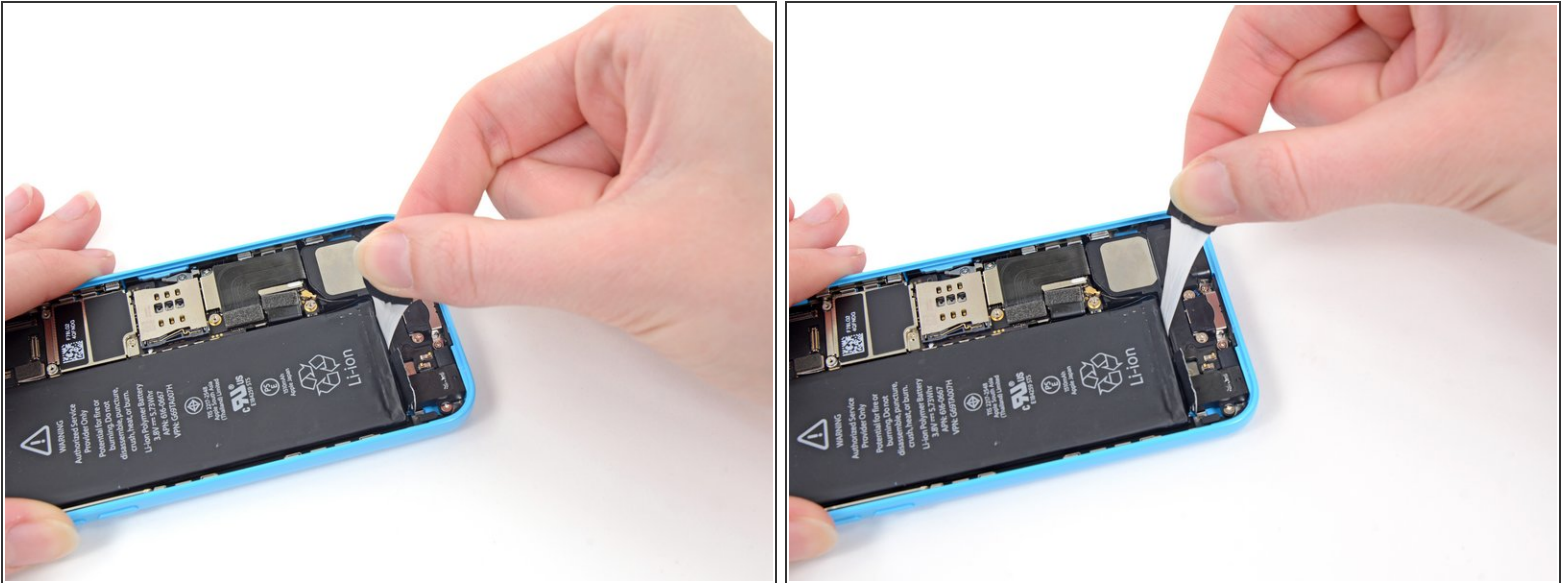
## Step 23





- Cut the black battery adhesive tab between the two white adhesive strips, separating them.



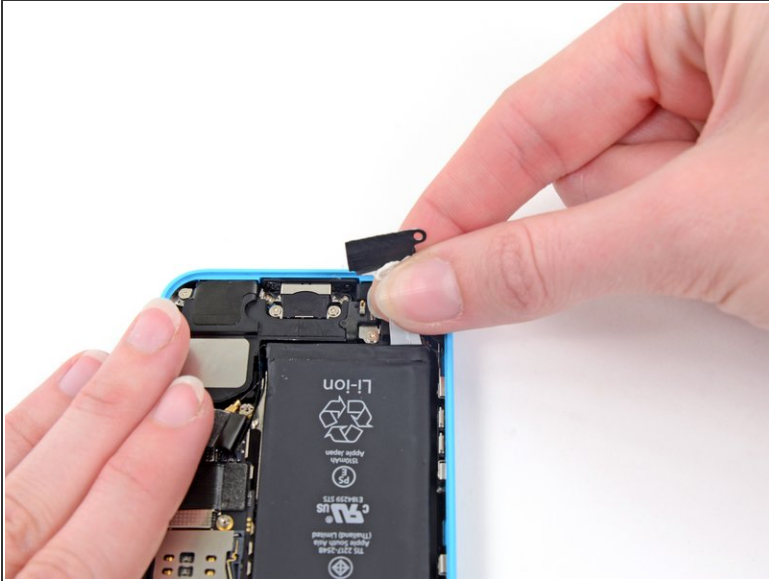
## Step 24



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

- Slowly pull one of the battery adhesive strips away from the battery, toward the bottom of the iPhone.
  - Pull steadily, maintaining constant tension on the strip as it slips out from between the battery and the rear case. For best results, pull the strip at a 60° angle or less.
  - Guide the strip carefully around the corner and up the side of the battery. Be careful not to snag it on any of the other internal iPhone components.
-  The strip will stretch to many times its original length. Continue pulling, re-grabbing the strip near the battery if necessary, until the entire strip comes free.

## Step 25



- Repeat to remove the second strip.

## Step 26




- Remove the battery from your iPhone.

⚠ If one, or both, of the adhesive strips tears, and you are unable to retrieve it with a set of tweezers, **do not pry** the battery out of the phone. Continue on to the next steps to safely remove your battery.

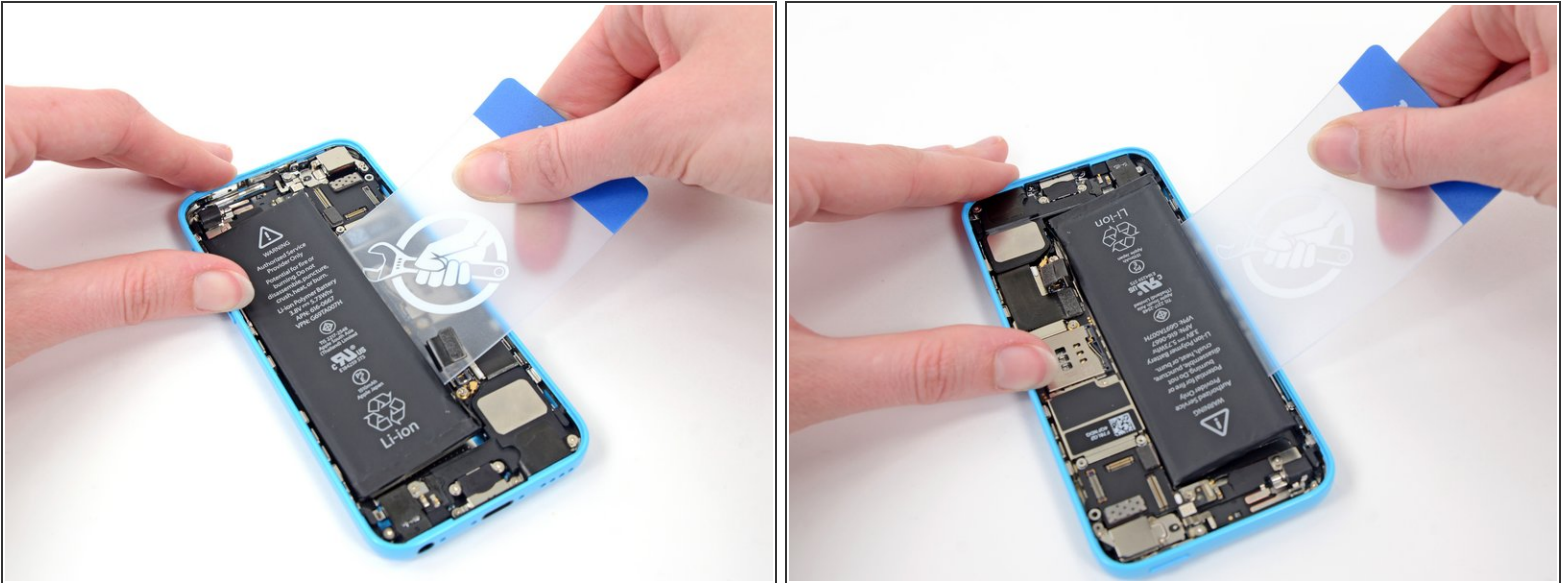
## Step 27 — Battery removal with latent adhesive



- Follow our [iOpener heating instructions](#) or use a hair dryer to heat the adhesive securing your battery to the rear case.
- Lay the iOpener flat on the backside of the iPhone to the right of the camera. Smooth it out so that there is good contact between the back of the iPhone and the iOpener.
- Let the bag sit on the iPhone for approximately 90 seconds before attempting to remove the battery.
- If using a hair dryer or heat gun, heat the back of the iPhone until it's slightly too hot to touch.

 Do not apply heat directly to the battery.

## Step 28



- Carefully wedge a plastic card under the battery on the side nearest the logic board.
  - ⚠ Do not pry against the logic board or you may damage the phone.
  - ⚠ Avoid prying near the top edge of the battery, or you may damage the [upper component ribbon cable](#).
- Slide the card from the top of the battery to the bottom, pushing toward the edge of the case.
- ⓘ If you still trouble, apply some isopropyl alcohol (90% or greater) under the battery and let it flow around the adhesive to help weaken it. High concentration isopropyl alcohol acts as a solvent and dries without leaving any residue, so it will not hurt your iPhone.
- ⓘ If necessary, repeat the same procedure with the case side of the battery.

## Step 29



- Lift and remove the battery from the iPhone.

⚠ There should be no resistance. If the battery remains stuck, reheat the iOpener and pry again.

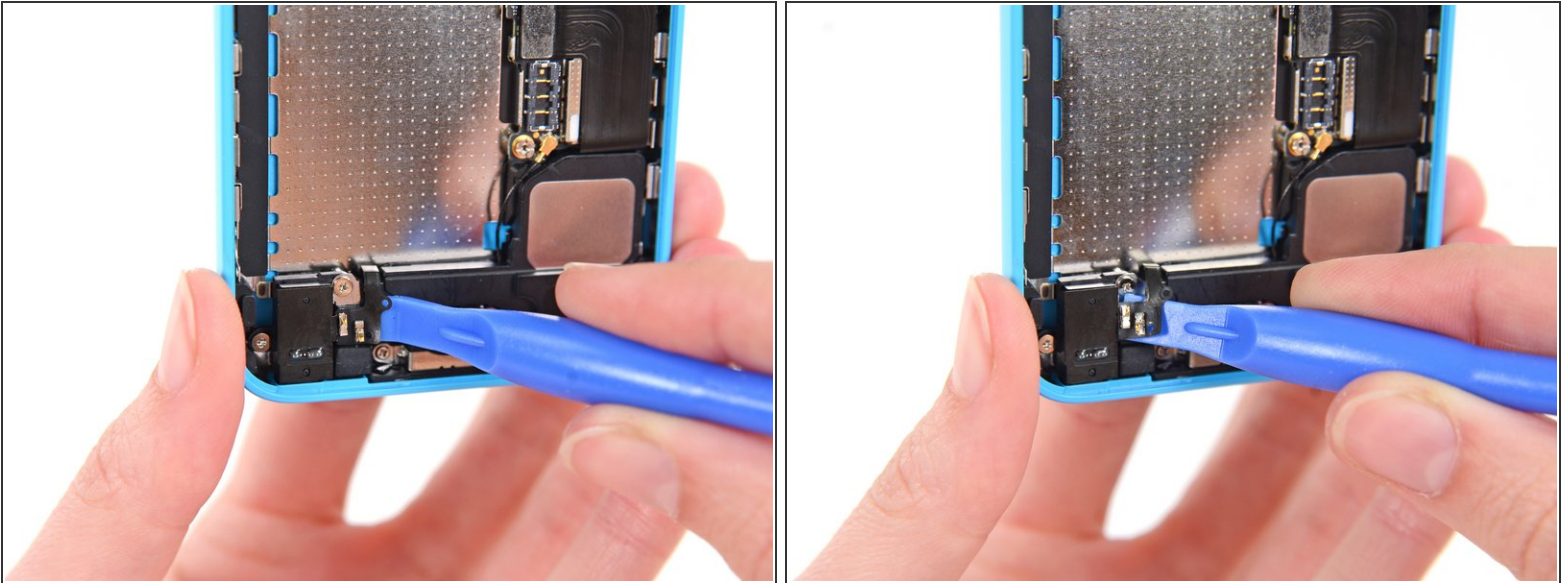
ⓘ If your replacement battery came in a plastic sleeve, remove it before installation by pulling it away from the the ribbon cable.

★ 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.

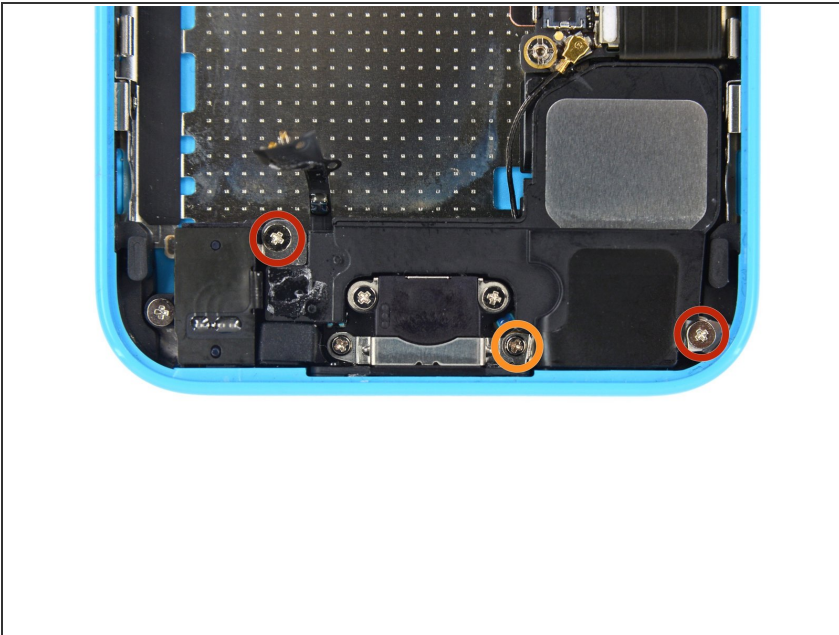


## Step 30 — Lightning Connector Assembly



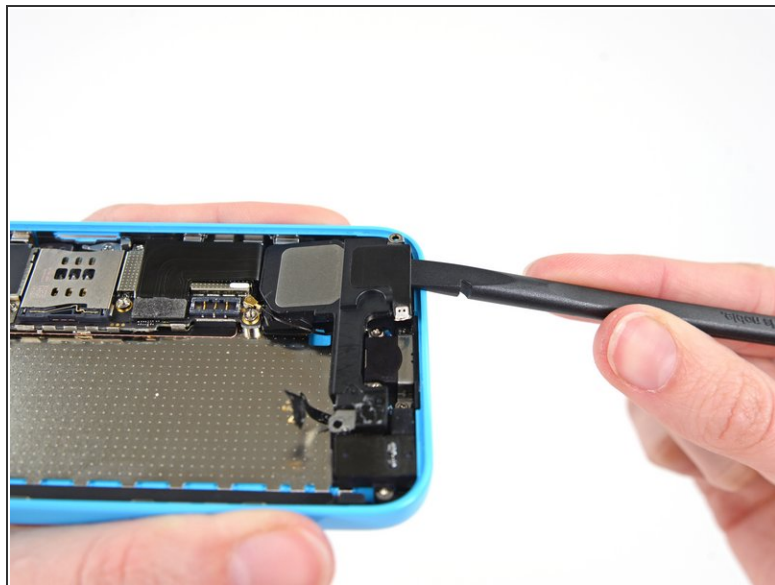
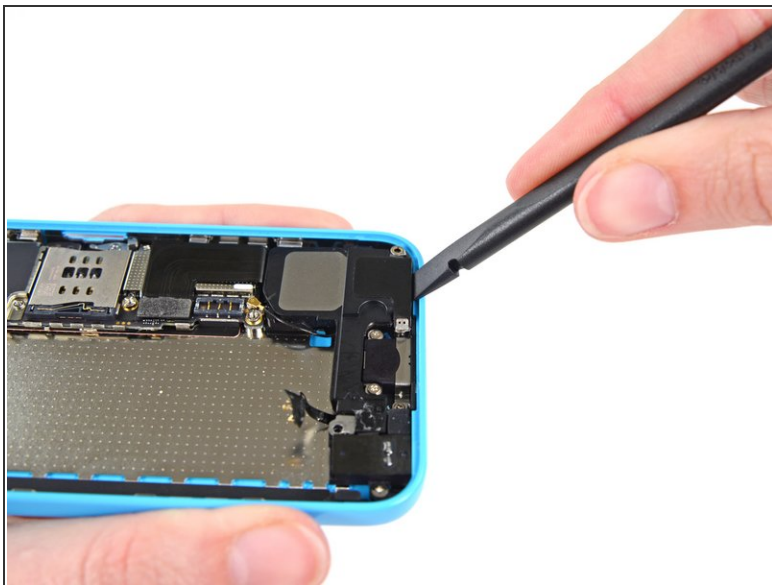
- Use a plastic opening tool to peel the home button spring contact cable up from the speaker enclosure.

## Step 31



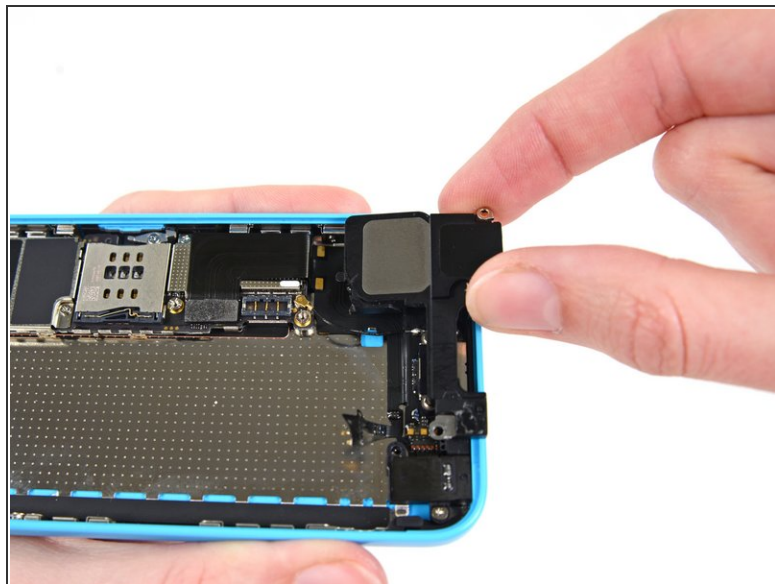
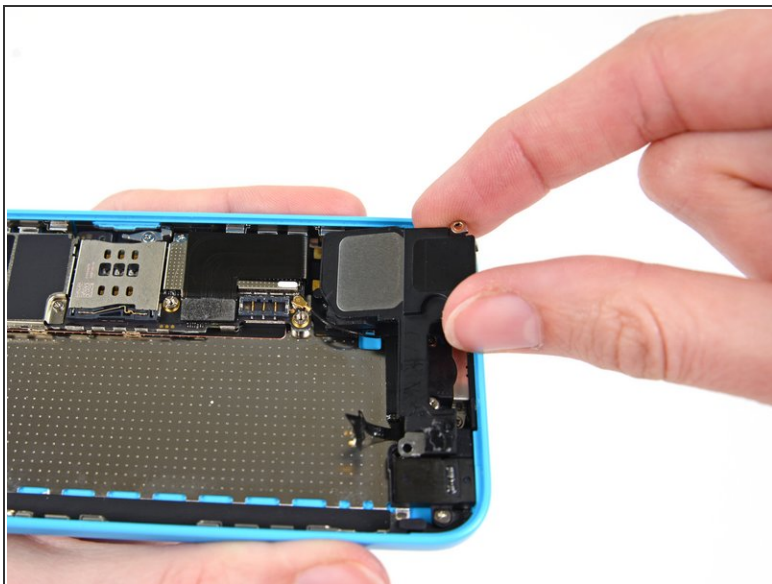
- Remove the following screws securing the speaker enclosure to the rear case:
  - Two 2.7 mm Phillips #000 screws
  - One 2.2 mm Phillips #000 screw

## Step 32



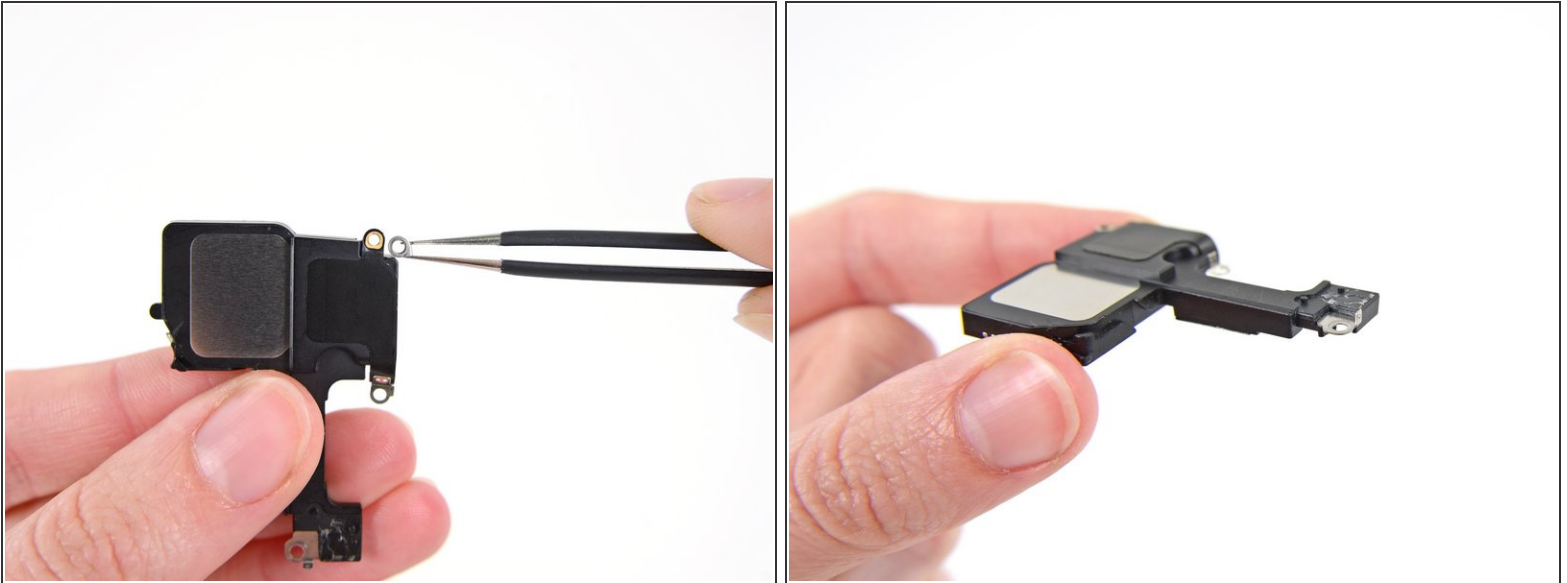
- Use the flat end of a spudger to gently pry the speaker enclosure up from the rear case.


## Step 33






- Remove the speaker enclosure. Be careful not to snag it on the antenna cable.

## Step 34



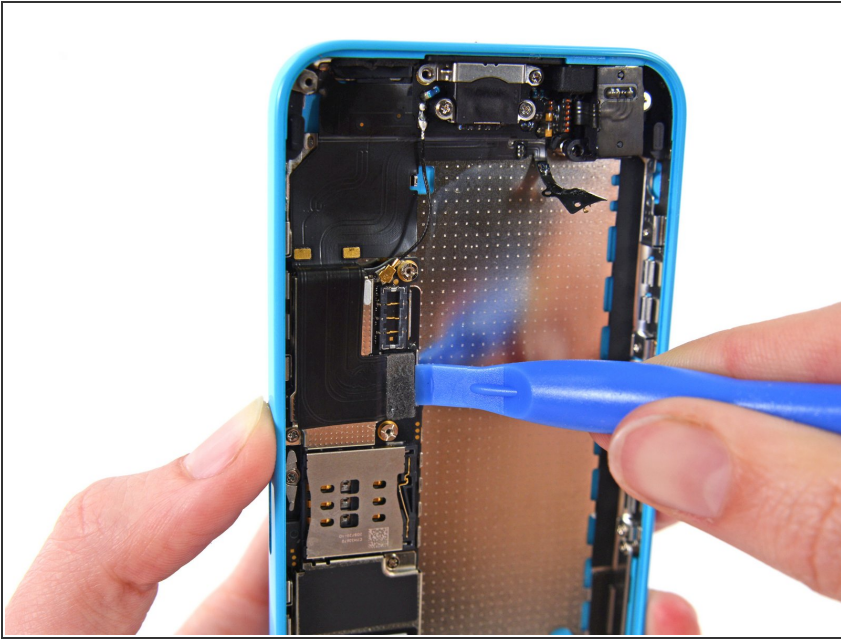
-  The far right screw hole on the speaker has a contact bracket wrapped around it. This small part may fall off unexpectedly, so it's best to remove it and note the orientation for reassembly.

 The flat portion of the contact clip should rest against the speaker, as shown.
-  The alignment bracket on the far end of the speaker assembly is adhered, but may fall off if handled aggressively.

 The angled end should face up and line up with the outside edge of the speaker.

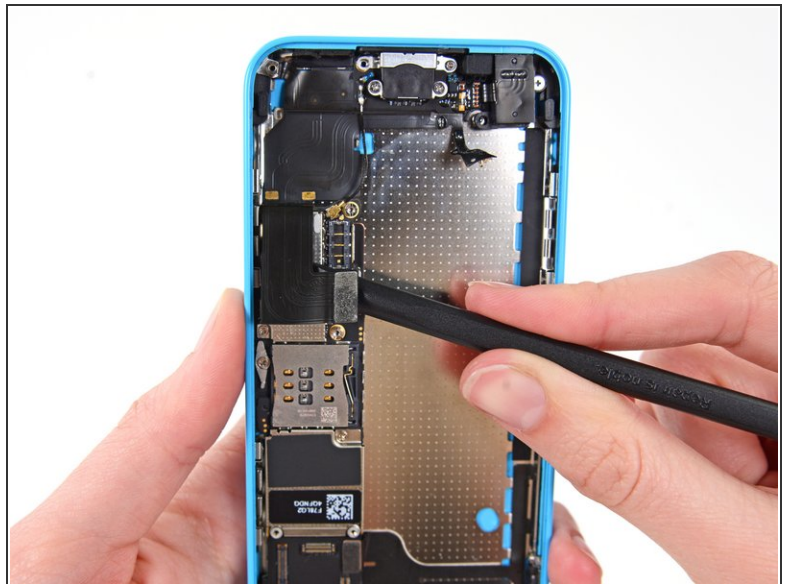
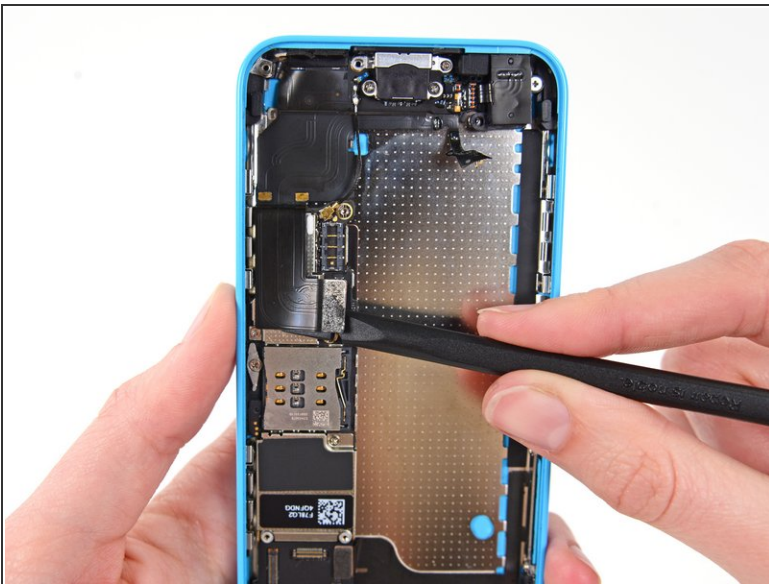


## Step 35



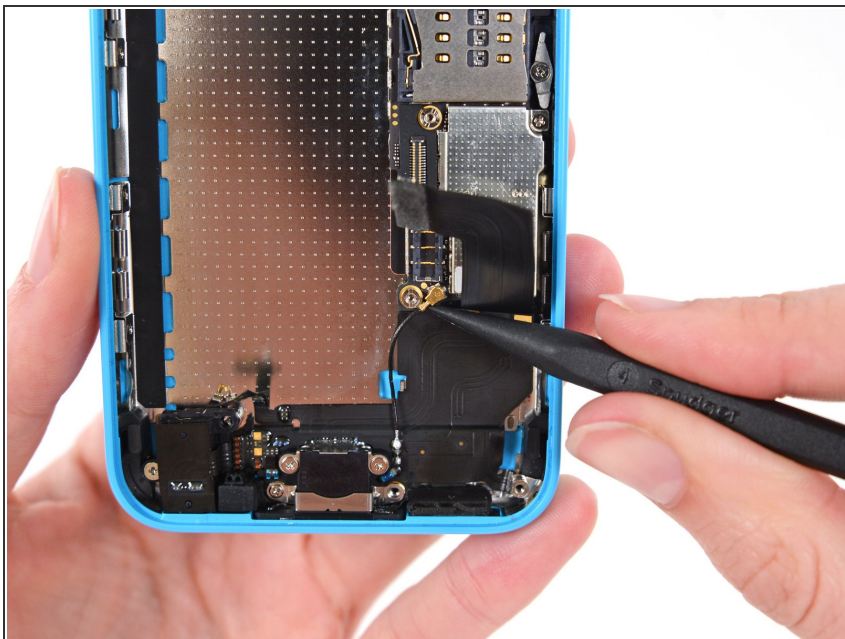
- Use a plastic opening tool to disconnect the Lightning connector ribbon cable from its socket on the logic board.

## Step 36



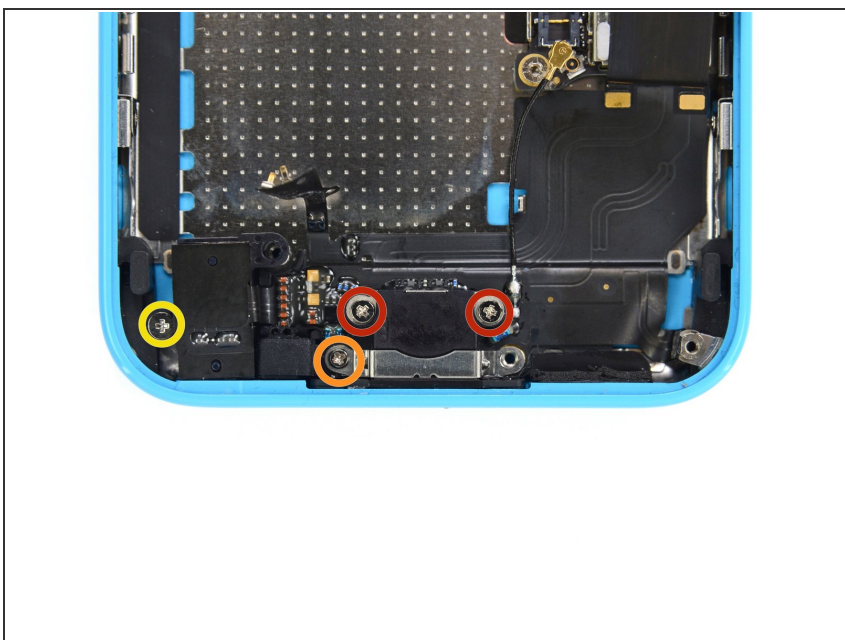
- The Lightning connector cable is lightly adhered to a shield on the logic board. Use the flat end of a spudger to gently peel the cable up.

## Step 37



- Disconnect the cellular antenna connector from the base of the logic board.

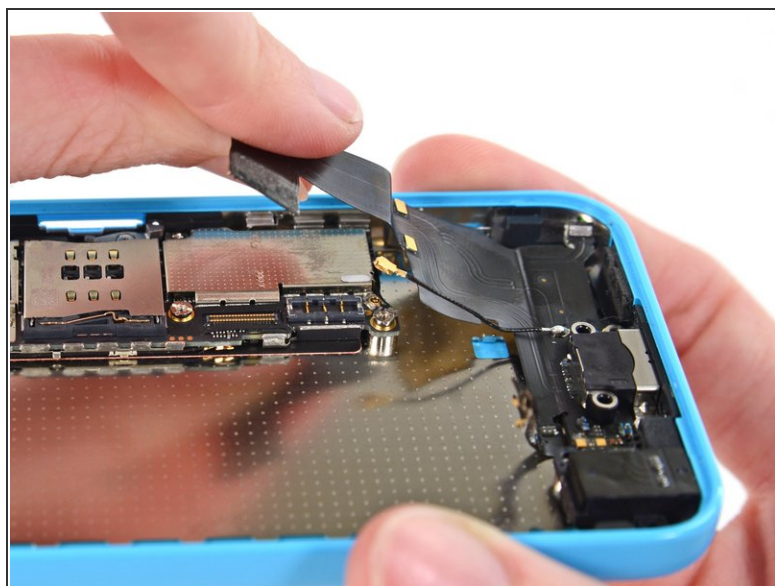
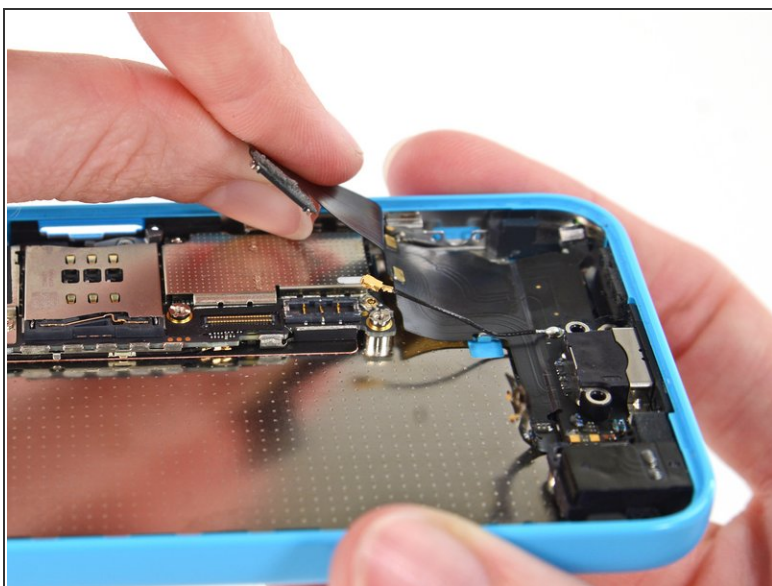
## Step 38



- Remove the following screws securing the Lightning connector to the rear case:
  - Two 3.4 mm Phillips #000 screws
  - One 2.2 mm Phillips #000 screw
  - One 2.7 mm Phillips #000 screw

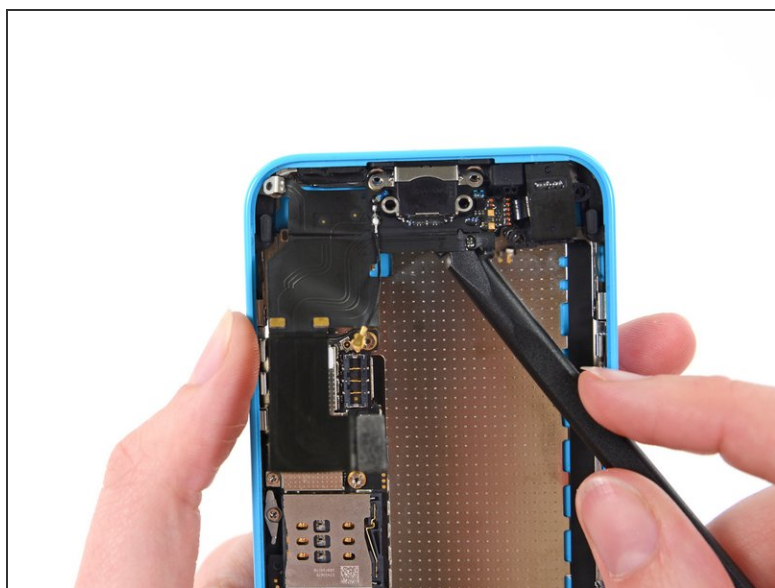
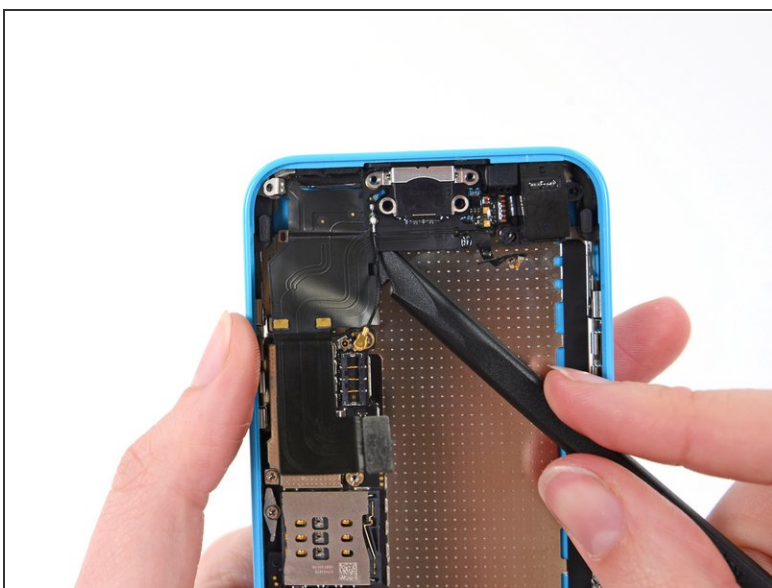


## Step 39



- Gently peel the Lightning connector assembly up from the rear case.

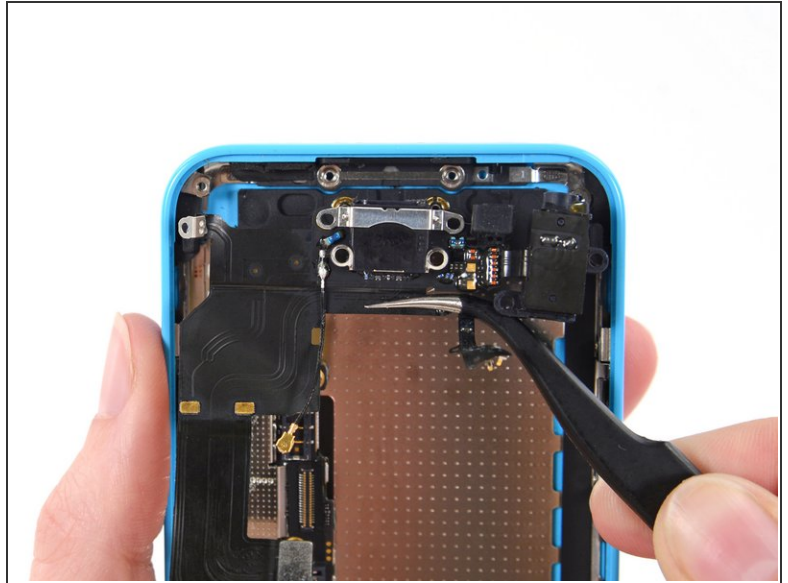
## Step 40



- You may need to use the flat end of a spudger to completely free the assembly.

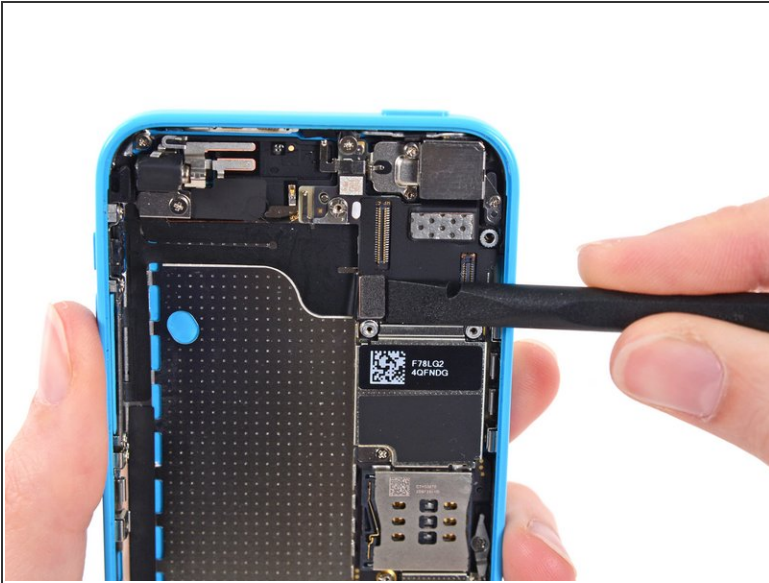


## Step 41



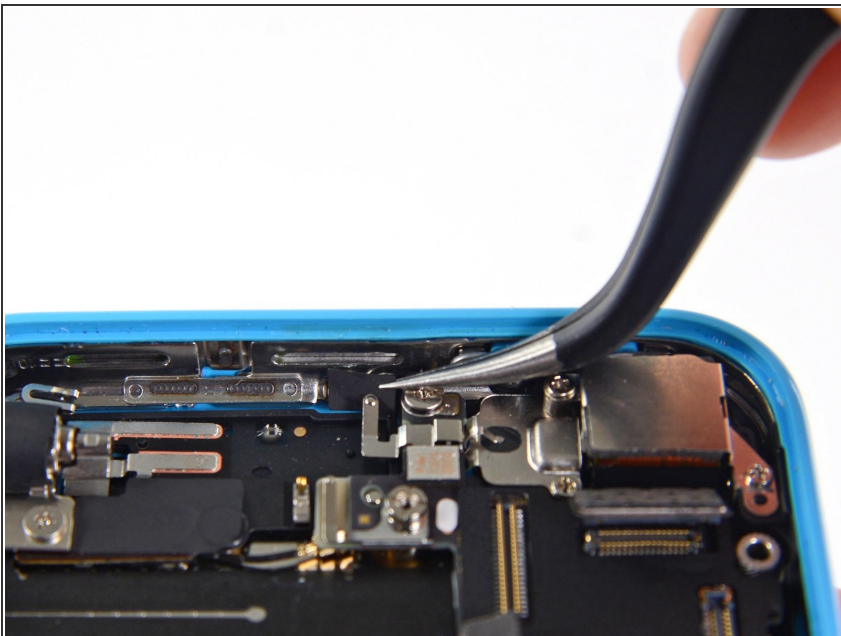
- Remove the Lightning connector assembly.
- There is a small rubber gasket attached to the microphone. Be sure to transfer it to the new assembly.

## Step 42 — Logic Board



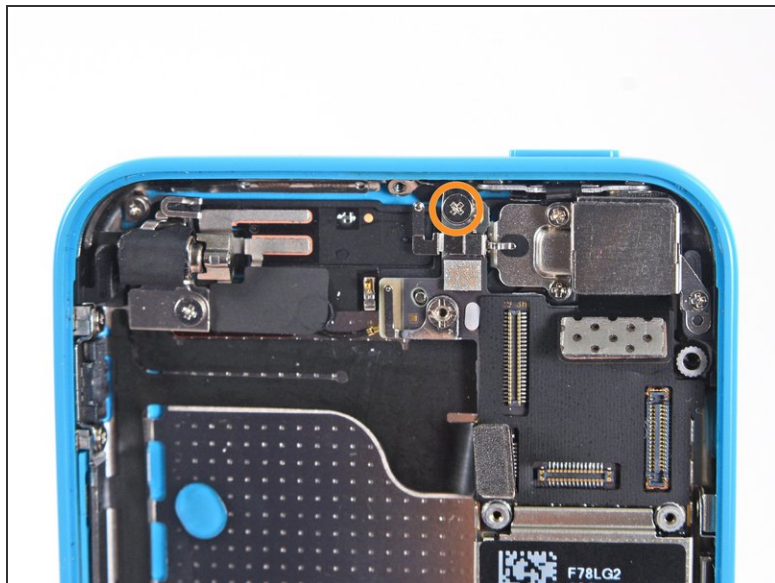
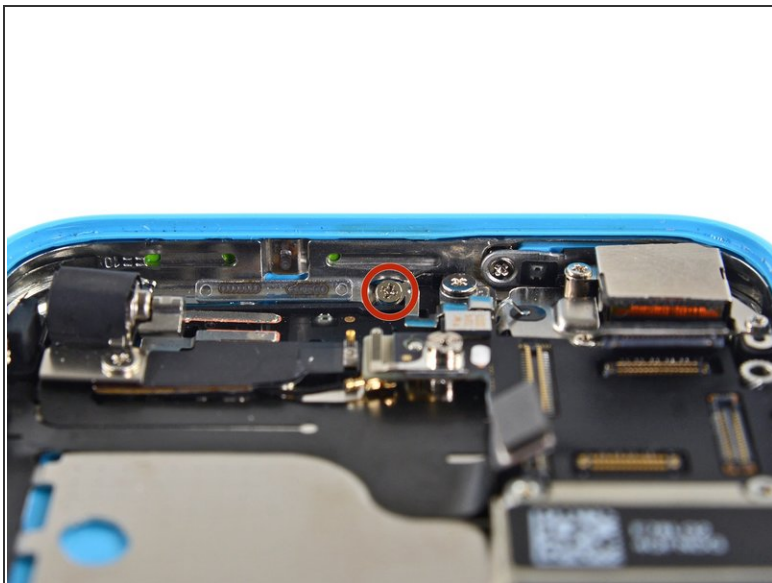
- Use the flat end of a spudger to disconnect the audio control cable connector from its socket on the logic board.
- Disconnect the rear facing camera cable connector from its socket on the logic board.

## Step 43



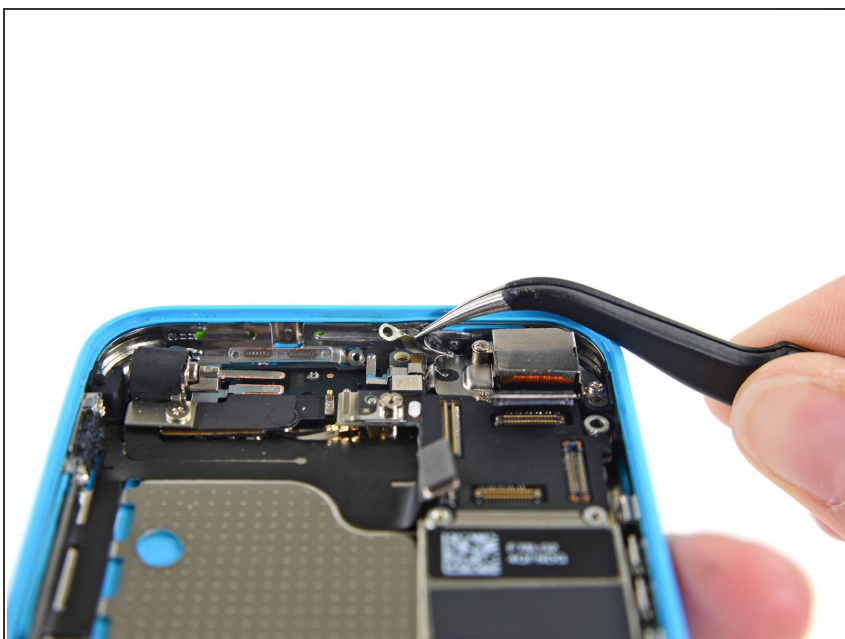
- A small piece of tape may obscure the logic board grounding clip. If so, use a pair of tweezers to remove the tape.

## Step 44



- Remove the following screws securing the logic board grounding clip to the rear case:
  - 1.2 mm Phillips #000 in the top side-wall
  - 2.5 mm Phillips #000

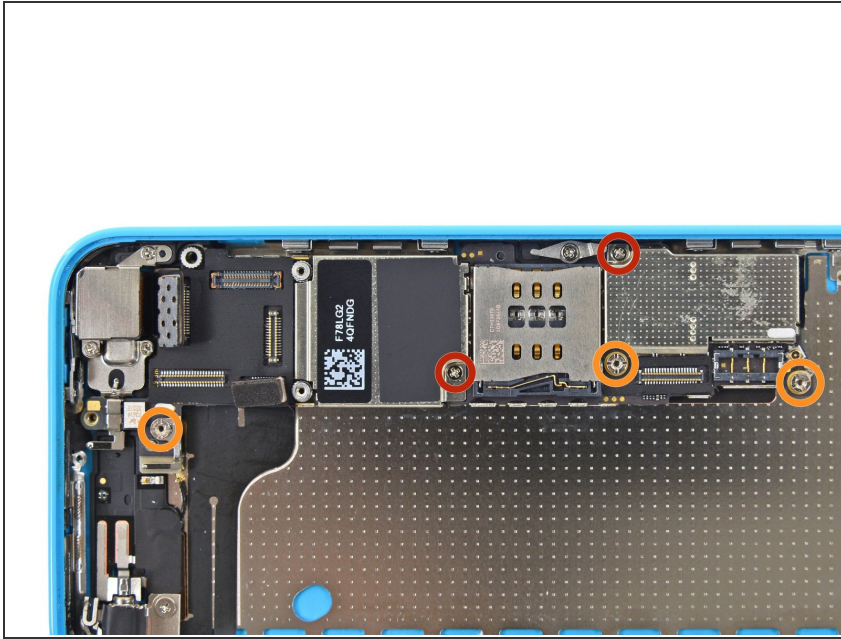
## Step 45



- Use tweezers to remove the logic board grounding clip.



## Step 46



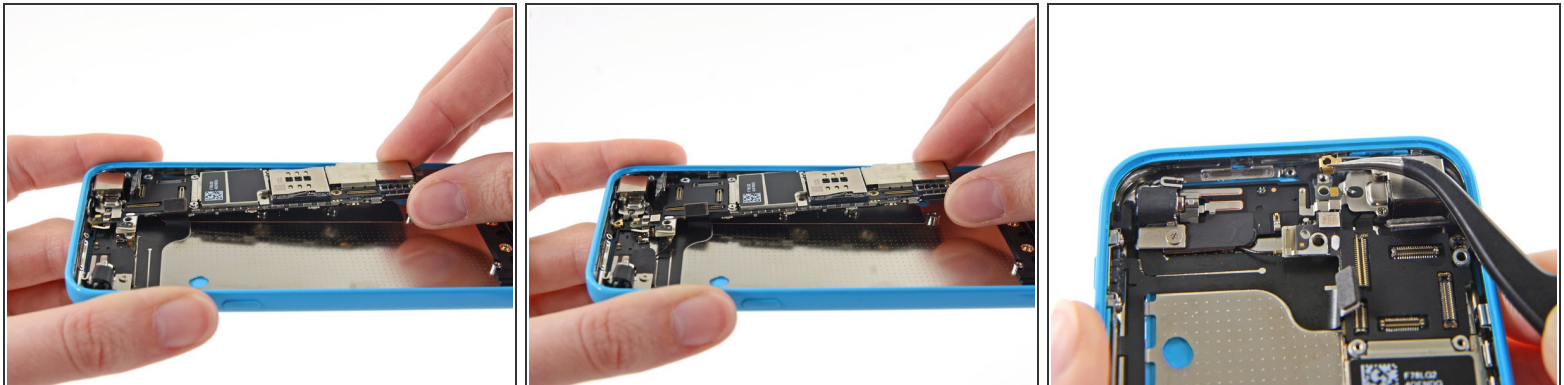
- Remove the following screws securing the logic board to the rear case:

- Two 2.3 mm Phillips screws
- Three 2.7 mm standoff screws

**i** Standoff screws are best removed using an [iPhone Standoff Screwdriver Bit](#) and [driver handle](#).

**!** 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 47




- Holding the phone level, lift the bottom end of the logic board up enough to grasp it with your fingers.
- Pull the logic board away from the rear-facing camera just enough to expose the gold contact cap under the top end of the board.
- Remove the gold-colored contact cap from the threaded post in the rear case, and set it aside.

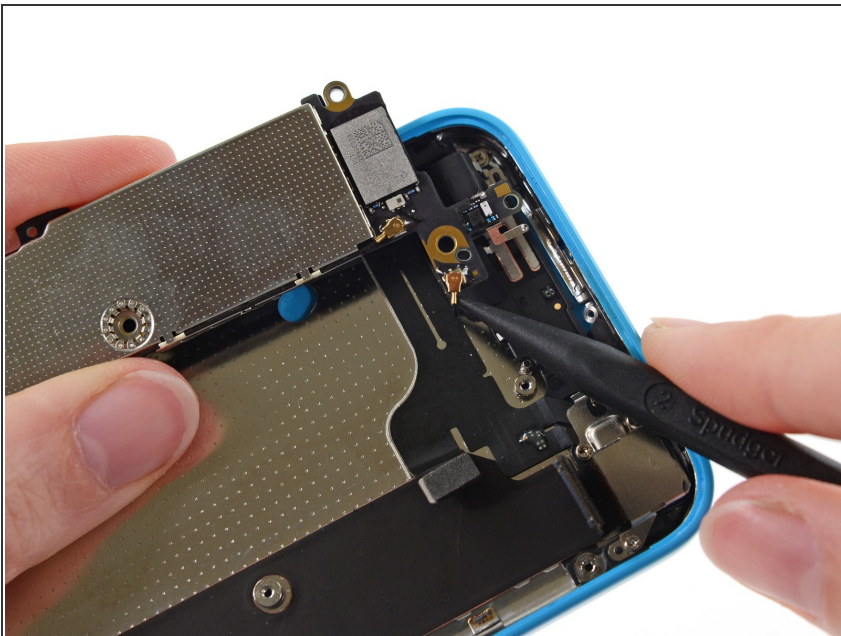
## Step 48



- Flip the logic board up toward the volume control buttons to expose the antenna connector.

 Do not try to remove the logic board from the rear case yet, as it is still connected by an antenna cable on the back.

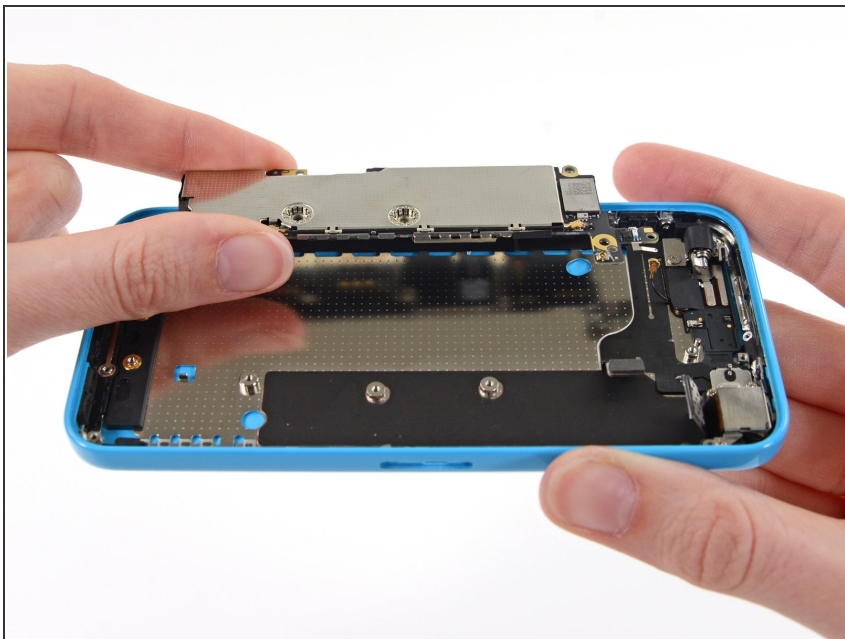
## Step 49



- Disconnect the antenna connector from the back of the logic board.

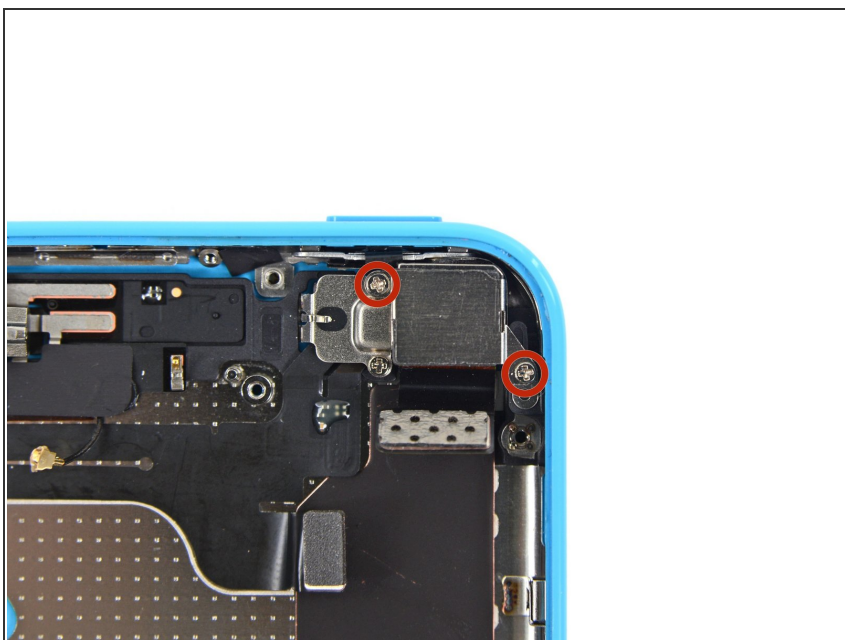


## Step 50



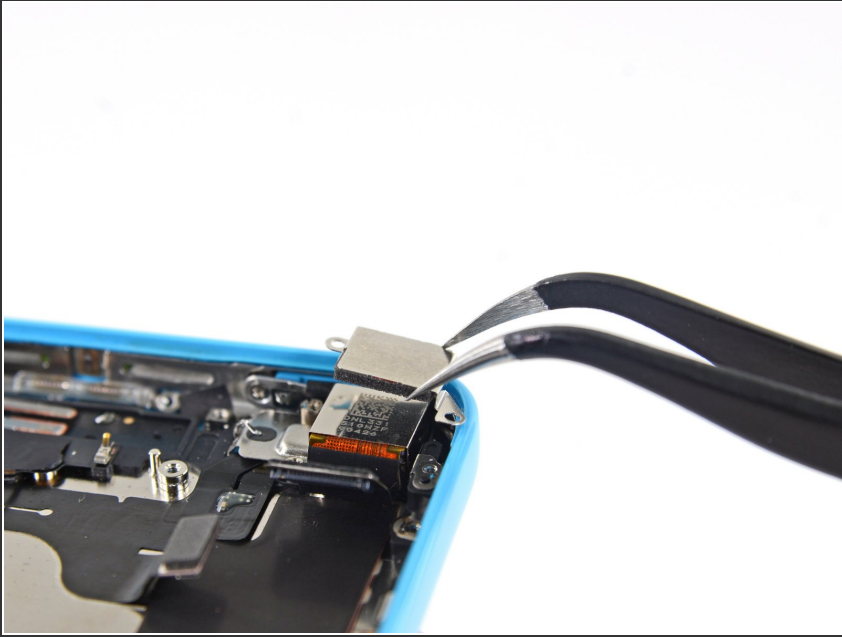
- Remove the logic board from the rear case.

## Step 51 — Audio Control and Power Button Cable



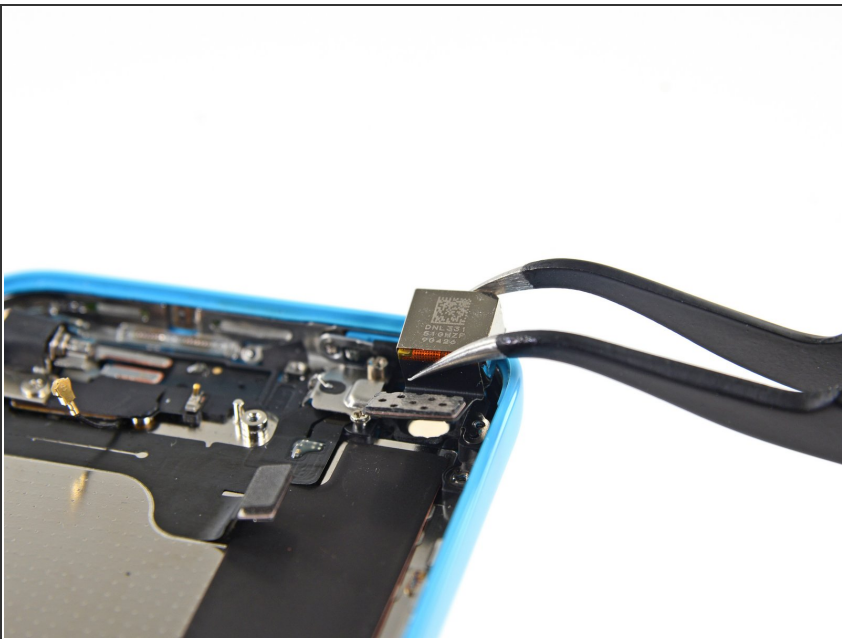
- Remove the two 1.5 mm Phillips #000 screws securing the rear camera cover to the rear case.

## Step 52



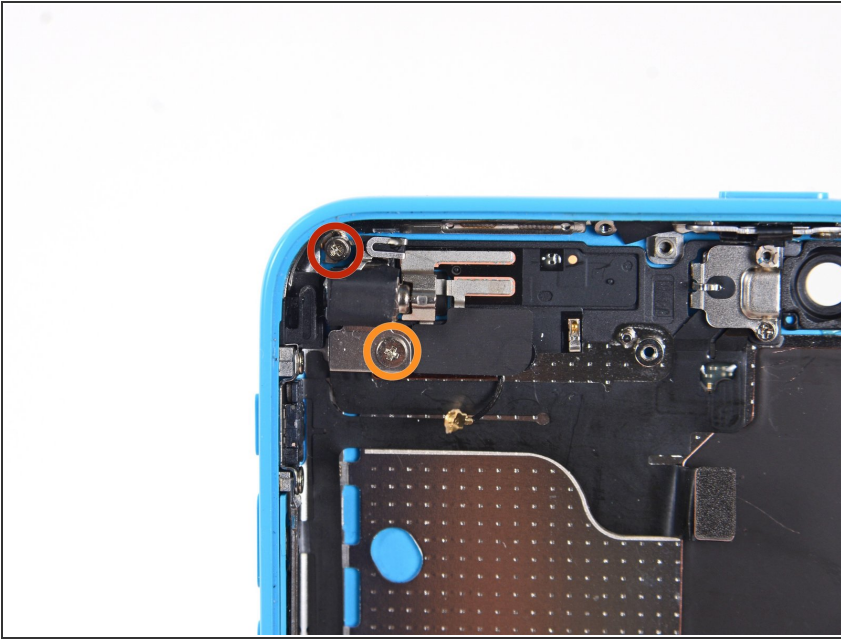
- Remove the rear facing camera cover.

## Step 53



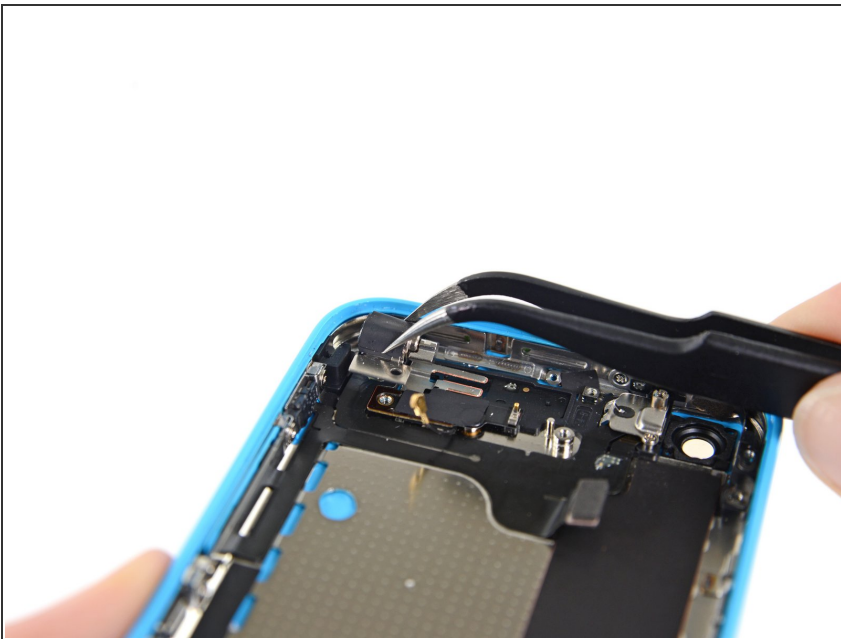
- Remove the rear facing camera.

## Step 54



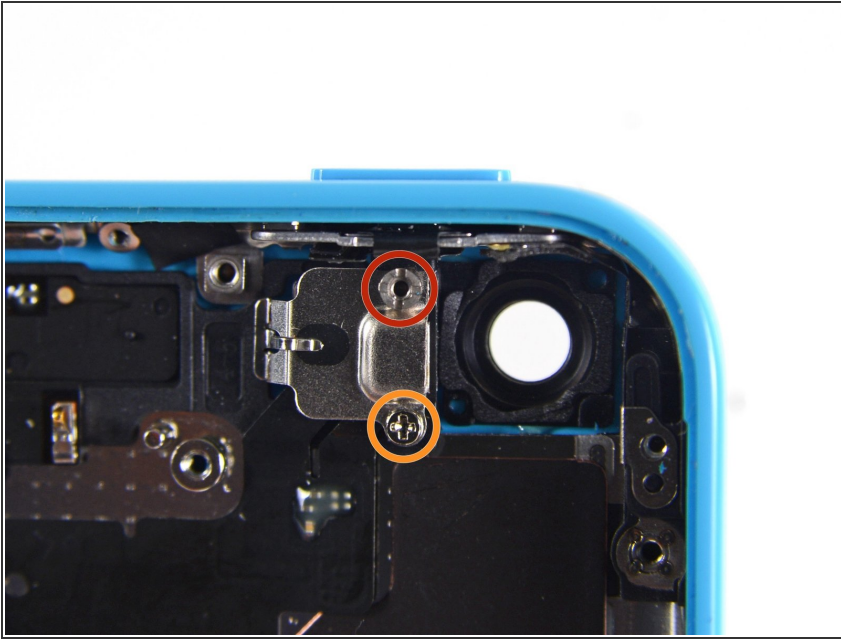
- Remove the following screws securing the vibrator motor to the rear case:
  - 1.2 mm Phillips #000
  - 2.2 mm Phillips #000

## Step 55



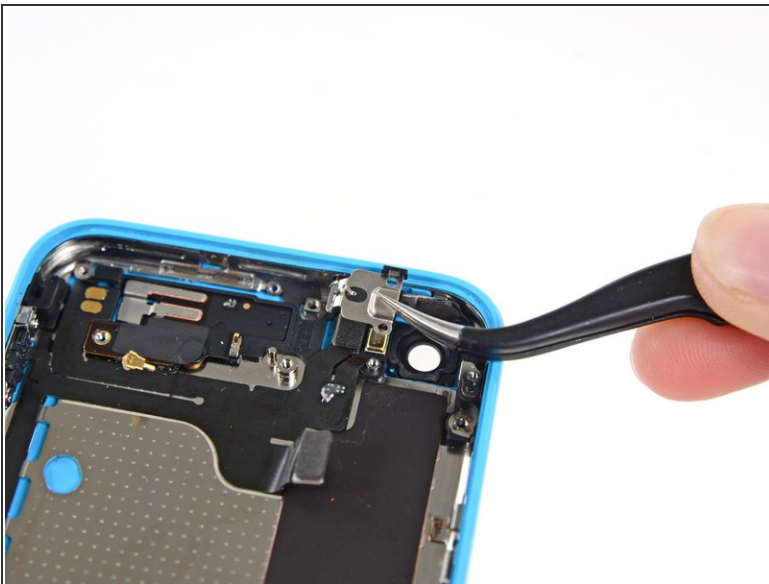
- Remove the vibrator motor.

## Step 56



- Remove the following screws securing the upper assembly contact bracket to the rear case:
  - 3.0 mm standoff screw
  - 1.5 mm Phillips #000 screw

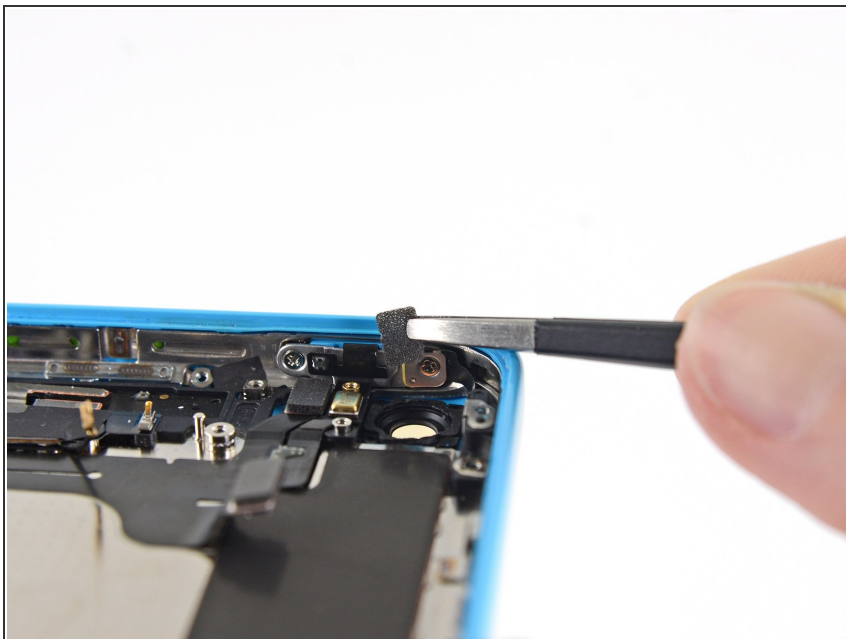
## Step 57



- Remove the upper assembly contact bracket from the rear case.
- A small rubber bumper may fall off the top of the bracket—take care not to lose it.



## Step 58



- Remove any foam tape obscuring the screws near the camera cavity.

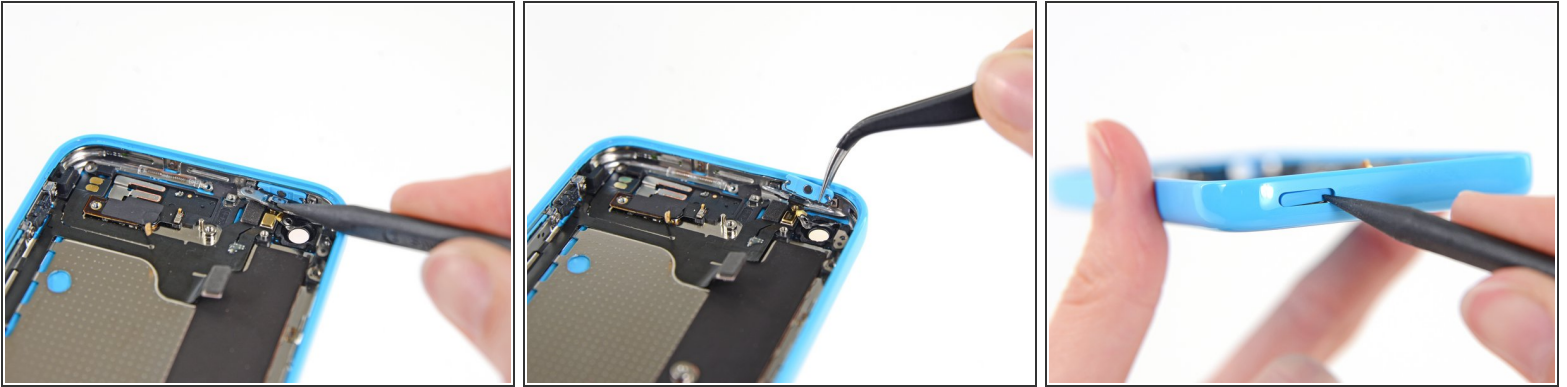
## Step 59



- Remove the two 1.4 mm Phillips #000 screws securing the power/sleep button bracket.

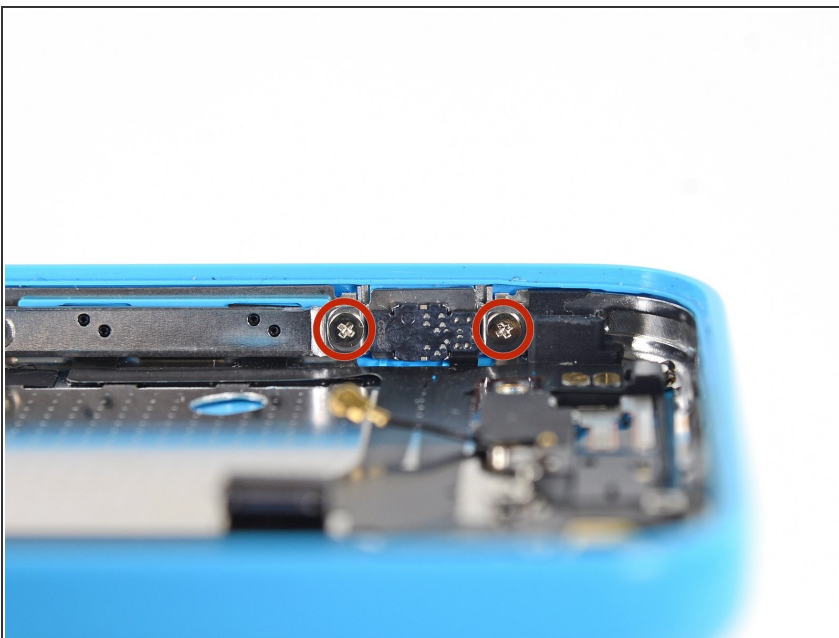


## Step 60



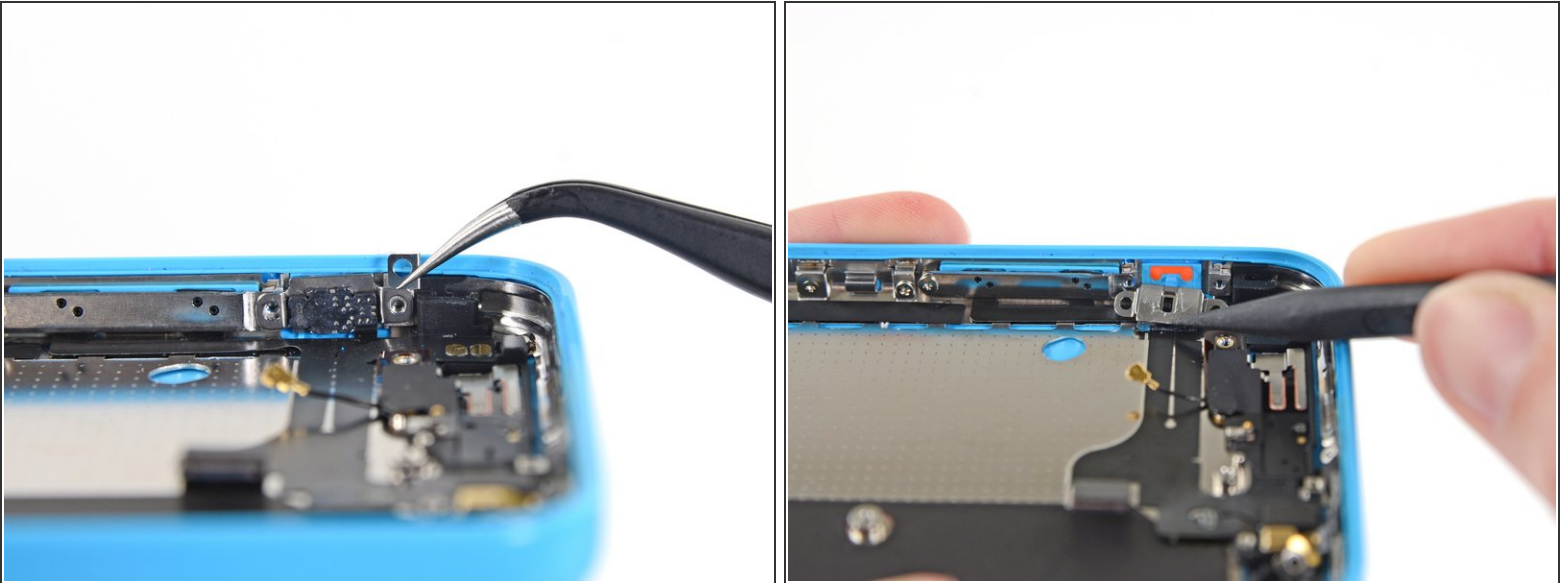
- Use the pointed end of a spudger to gently fold the power/sleep button bracket down from the top of the rear case.
- Use tweezers to grab and remove the button.
  - ✦ For reassembly, note the orientation—the metal bar should be flush with the bottom of the button.
- ⓘ If you can't get a hold on the power button from inside the case, use a spudger to slightly push it in from the outside.

## Step 61



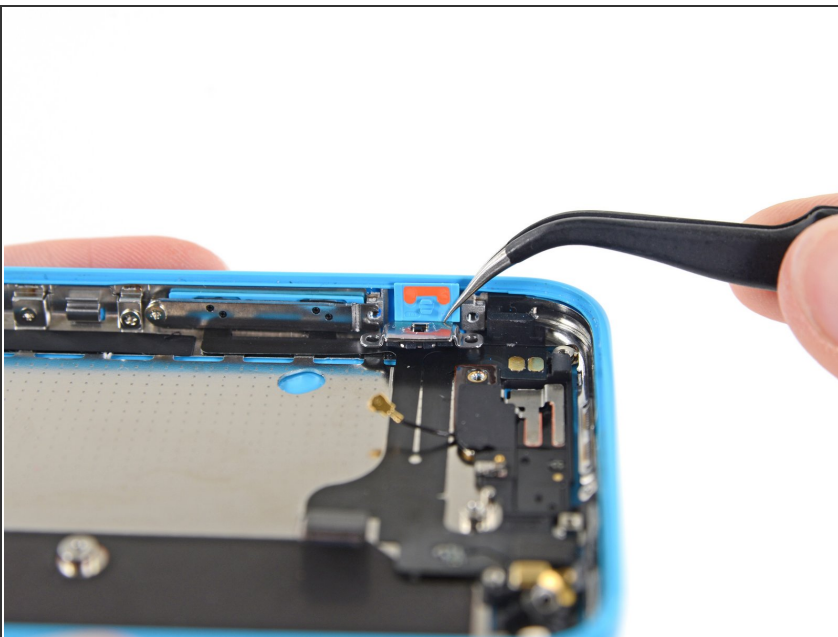
- Remove the two 1.6 mm Phillips #000 screws from the mute/silent switch bracket.

## Step 62



- Remove this mute/silent switch bracket clip and set it aside.
  - ☑ During reassembly, the bracket clip goes over the mute/silent switch bracket. Ensure the angled portion is to the right.
- Use the tip of a spudger to flip the mute/silent switch bracket down.

## Step 63



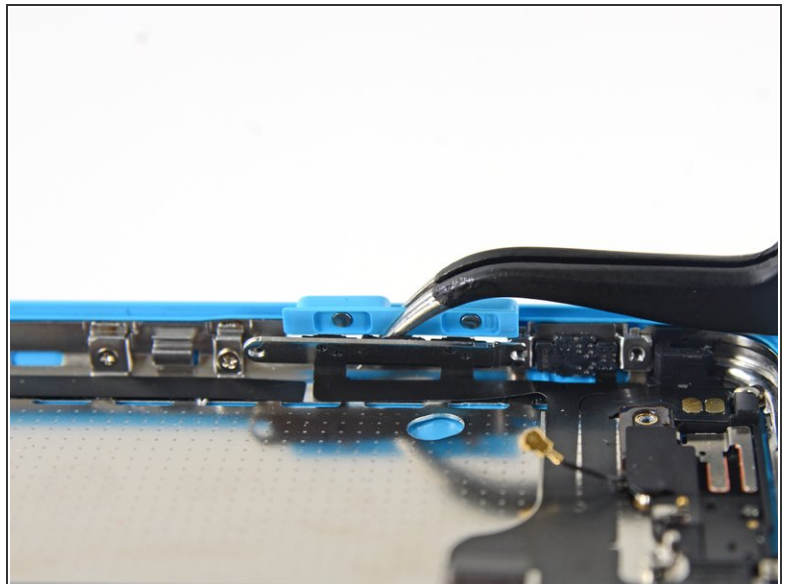
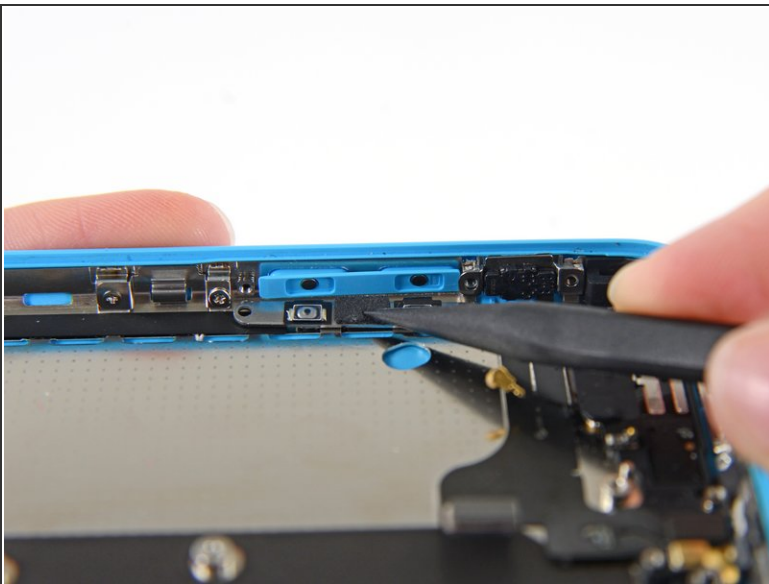
- Use tweezers to remove the mute/silent switch.
- ☑ Note the orientation for reassembly: The red line should be at the top of the button. The notch in the back of the switch should be in the same position as, and mate with, the mechanical switch on the cable.

## Step 64



- Remove the 1.6 mm Phillips #000 screw securing the volume rocker bracket to the side wall.

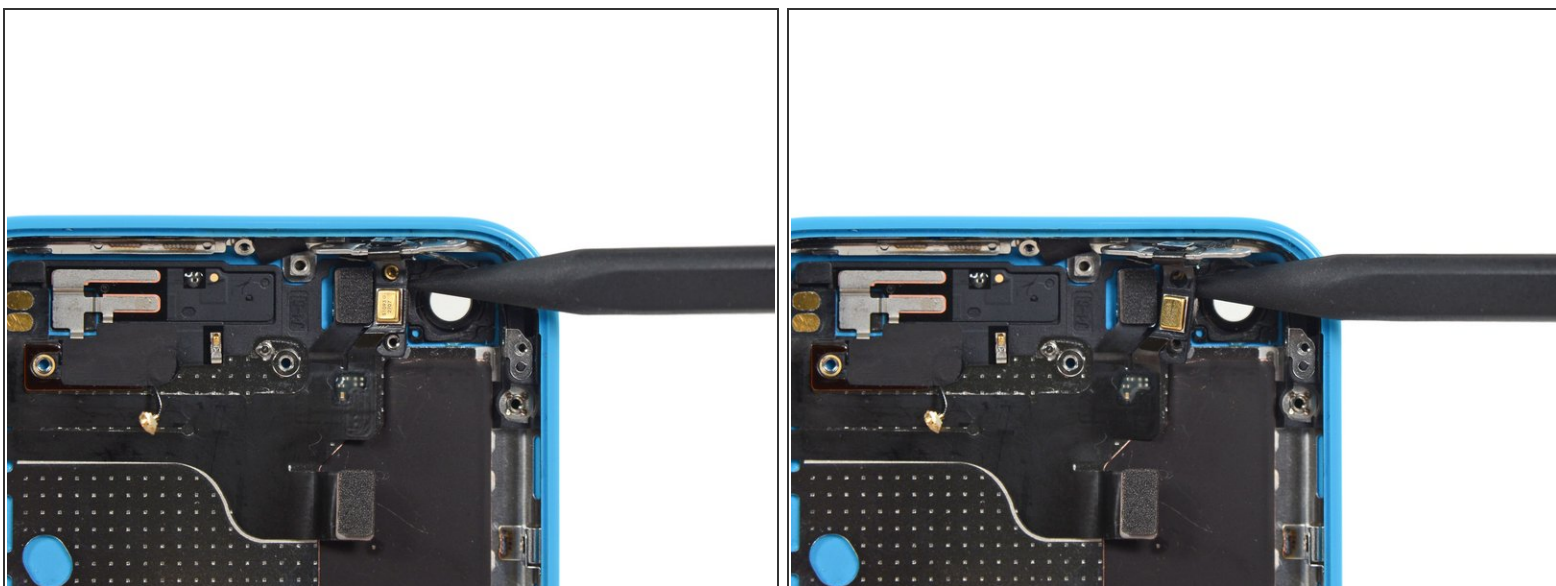
## Step 65



- Use the tip of a spudger to fold the volume rocker bracket down from the side wall. Remove the volume rocker.

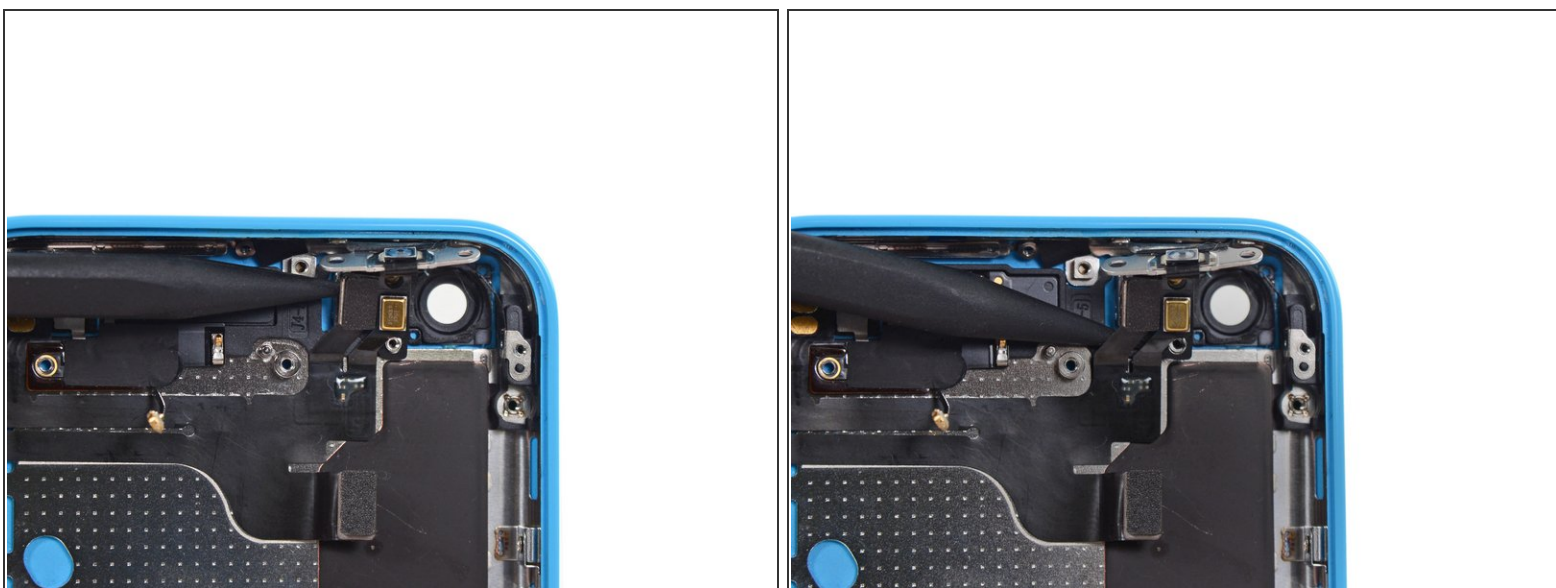


## Step 66



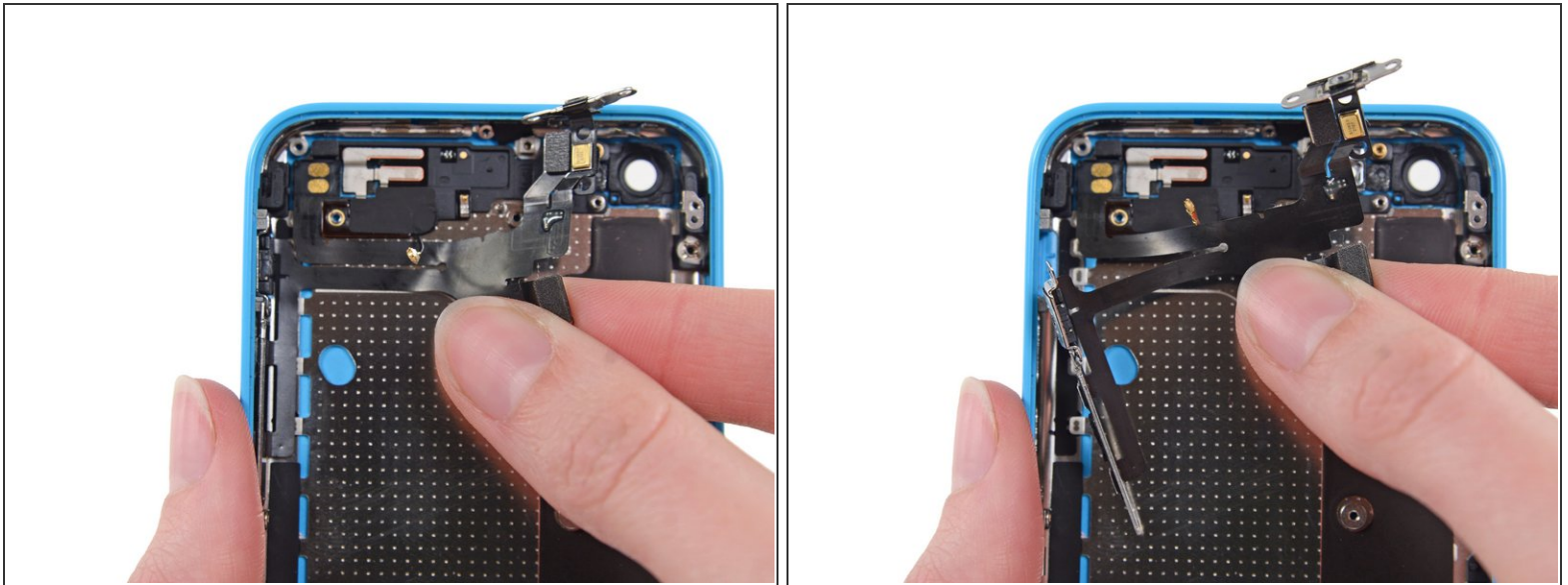
- Use the tip of a spudger to peel the power/sleep button cable off of the rear case.

## Step 67



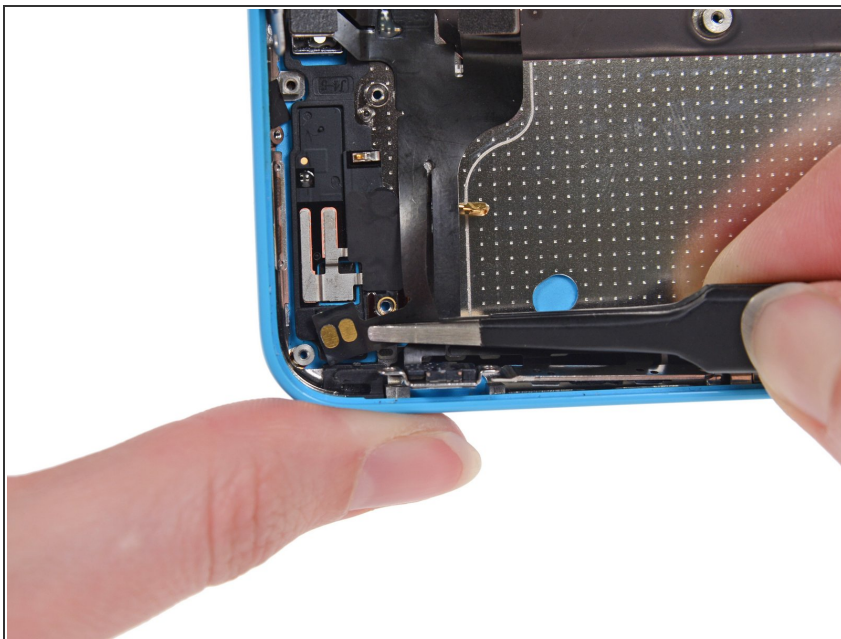
- Run a spudger gently under the flash assembly cable to separate it from the phone.

## Step 68



- Peel the upper assembly cable up from right to left to separate the adhesive holding it to the case.

## Step 69



- ⓘ Take extra care in peeling the vibrator contact end of the cable off of the phone.
- ⚠ Do not touch the contacts; finger oils can corrode the metal and prevent a solid connection.
- ⓘ You can now remove the assembly from the phone.

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