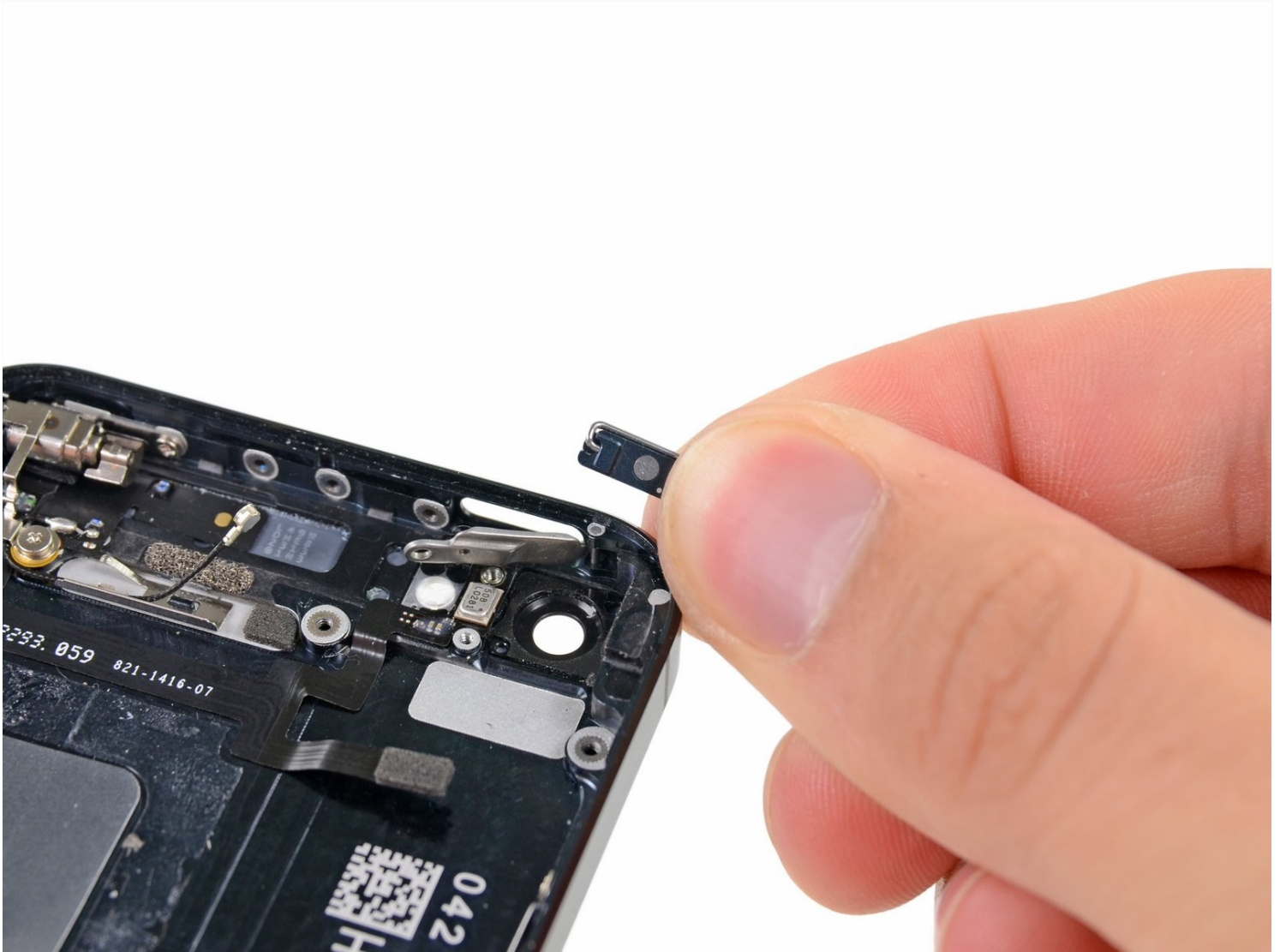# iPhone 5 Power Button Replacement

Use this guide to remove the power button from...

Written By: Andrew Optimus Goldheart

INTRODUCTION

Use this guide to remove the power button from your iPhone 5.

[video: https://www.youtube.com/watch?v=0x-0nh-sjEI]

TOOLS:

Anti-Clamp (1)
SIM Card Eject Tool (1)
SIM Card Eject Tool (1)
or paperclip
Phillips #000 Screwdriver (1)
iFixit Opening Tool (1)
Suction Handle (1)
Spudger (1)
P2 Pentalobe Screwdriver iPhone (1)
Anti-Static Project Tray (1)
Standoff Screwdriver for iPhones (1)

PARTS:

iPhone 5 Power and Lock Button (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.

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

Step 2 — Remove 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 3.6 mm Pentalobe screws next to the Lightning connector.

Step 3 — How to prevent display separation

ⓘ In the following steps you will be pulling the display up out of the phone body. The display is composed of a glass screen and a plastic bezel with metal clips.

- Regardless of the tool you use, you need to be sure you pull up the entire display.

- If the glass begins to separate from the plastic, as shown in the first image, slide a plastic opening tool between the plastic frame and the metal phone body to pry the metal clips out of the case.

📌 If you are reassembling a phone with a separated display bezel, you may want to place a thin strip of adhesive between the plastic bezel and the glass to keep the phone closed.

Step 4 — Anti-Clamp instructions

- ⓘ 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 two steps for an alternate method.**
  - ⓘ 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.
  - ⓘ 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 5

- 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 under the screen when the Anti-Clamp creates a large enough gap.
  - ⓘ If the Anti-Clamp doesn't create a sufficient gap, apply more heat to the area and rotate the handle a quarter turn.

- ⚠ **Don't crank more than a quarter turn at a time, and wait one minute between turns**. Let the Anti-Clamp and time do the work for you.

- **Skip the next two steps.**

Step 6 — 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.

- ⓘ If you're opening an iPhone with cracked glass, neatly lay a couple strips of packing tape across the front and squeeze out as many bubbles as you can. This will give the suction cup a surface to grab, and minimize the spread of broken glass.

Step 7 — 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 screen is a much tighter fit than most devices.

- With a plastic opening tool, begin to gently pry the rear case down, away from the screen, 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 8 — Detaching the front panel side clips

- Continue to pry up around the sides of the front panel assembly, detaching the clips along the left and right side.

Step 9 — Opening up the phone
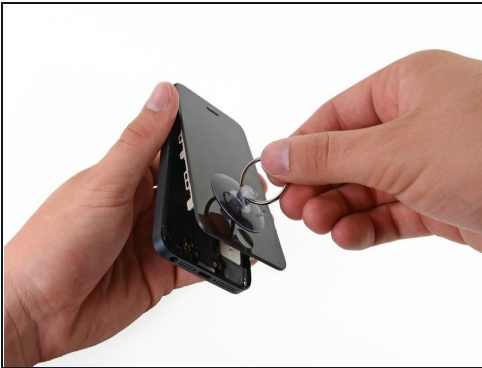
⚠ Do not try to completely remove the front panel assembly from the rear case, as there are several ribbon cables still attached at the top of the iPhone.

- Once the clips have been released on the bottom and sides of the front panel assembly, pull the bottom of the assembly away from the rear case.

- Open the display to about a 90º 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.

Step 10 — Removing the battery connector bracket screws

- Remove the following two screws securing the metal battery connector bracket to the logic board:
  - One 1.8 mm Phillips screw
  - One 1.6 mm Phillips screw

Step 11 — Removing the battery connector bracket

- Remove the metal battery connector bracket from the iPhone.
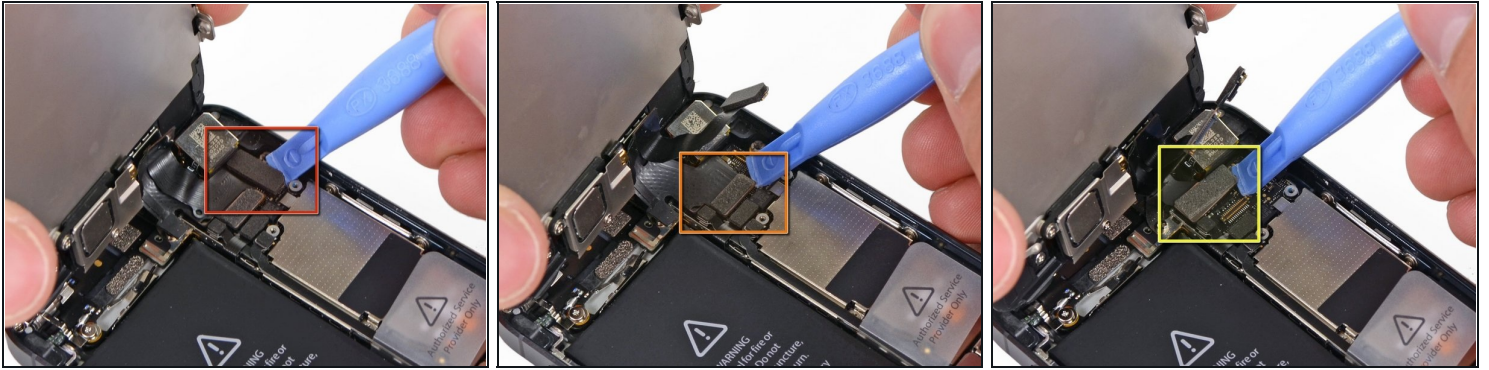
Step 12 — Disconnecting the battery connector

- Use a plastic opening tool to gently pry the battery connector up from its socket on the logic board.

- ⚠️ Be careful not to dislodge the small surface-mounted components surrounding the socket.

- ⚠️ 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 13 — Removing the front panel assembly cable bracket screws
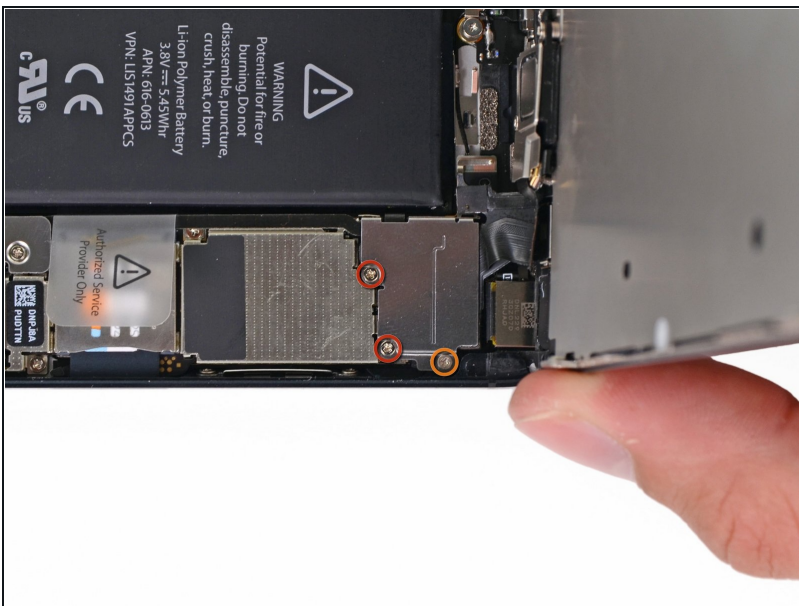
- Remove the following screws securing the front panel assembly cable bracket to the logic board:
  - Two 1.2 mm Phillips screws

  - One 1.6 mm Phillips screw
    - ⓘ This screw tends to not be attracted to a magnetized screwdriver. Take care not to lose it when removing, and make sure it gets back into the right place—a magnetized screw may interfere with the compass.

Step 14 — Removing the front panel assembly cable bracket
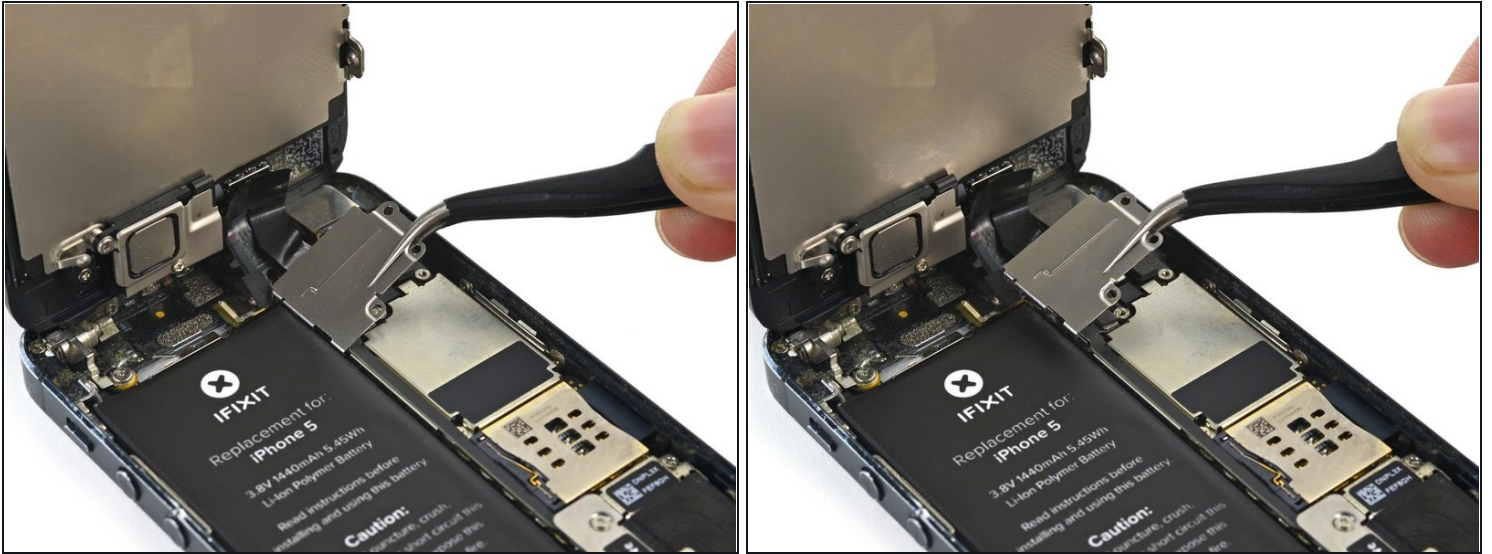
- Lift the display cable bracket toward the battery to unhook it, and remove it from the iPhone.

- ⬆ During reassembly, clip the left-hand hooks under the logic board and lower the bracket towards the outside of the phone.

Step 15 — Disconnecting the front panel assembly cables

⚠️ 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 three front panel assembly cables:
  - 🔴 Front-facing camera and sensor cable

  - 🟠 LCD cable

  - 🟡 Digitizer cable

    ⚠️ When reassembling your phone, the LCD cable may pop off the connector. This can cause white lines, or nothing at all to appear 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](#).

Step 16 — Separating front panel assembly and rear case

- Remove the front panel assembly from the rear case.

Step 17 — Lifting the battery
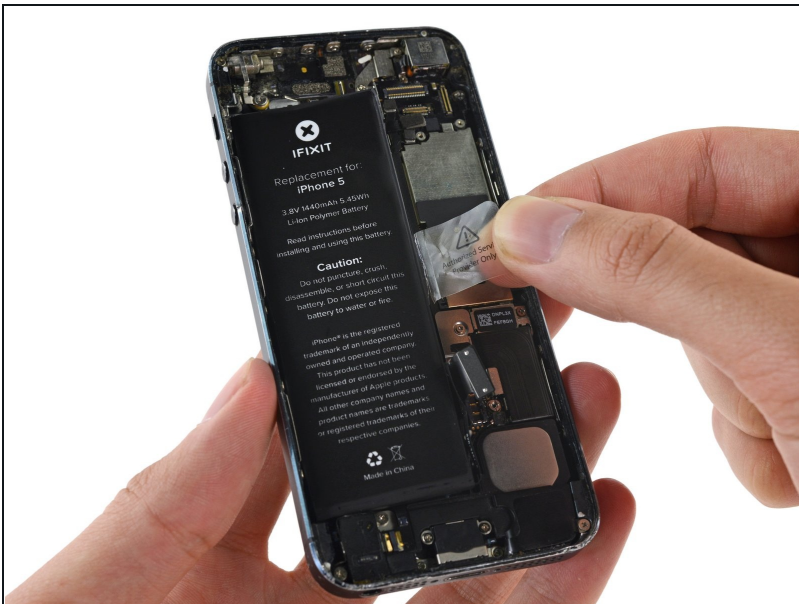
- Use the exposed clear plastic pull tab to peel the battery off the adhesive securing it to the iPhone.

- (i) If you are having trouble peeling the battery up or if the tab breaks, apply a few drops of high concentration (over 90%) isopropyl alcohol under the edge of the battery.
  - Wait about one minute for the alcohol solution to weaken the adhesive. Use an opening tool to gently lift the battery by its edge.

⚠ 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.

⬈ 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.

ⓘ If you still have trouble peeling the battery up, use an iOpener or hair dryer to heat the rear case of the iPhone and soften the adhesive.

⚠ Overheating the iPhone may ignite the battery.

Step 18 — Prying up the battery

⚠️ Use the plastic opening tool to **gently** pry the battery up, **only at the outside edge of the phone**. Prying anywhere else, especially near the logic board, **may result in damage to the logic board**.

ⓘ If the battery doesn't pry easily out of the case, apply a few more drops of isopropyl alcohol.

⚠️ Pry gently and evenly to avoid deforming the battery. A bent battery can be a fire hazard.

● **Do not** pry at the top portion of the battery, you risk severing the volume control cables.

Step 19 — Removing the battery

- Remove the battery.

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

📌 Before you adhere the replacement battery, temporarily reconnect the battery connector to the motherboard socket. This ensures that the battery is properly aligned in its recess.
  - Adhere the battery, disconnect it, and continue reassembling your device.

⚠️ During reassembly, make sure the battery is seated firmly against the rear case. This will prevent any damage to other components when reinstalling the front panel assembly.

📌 Perform a hard reset after reassembly. This can prevent several issues and simplify troubleshooting.

Step 20 — Logic Board Assembly

- Use the tip of a spudger to pry the cellular data antenna cable connector up from its socket on the logic board, just above the speaker enclosure.

Step 21

- Remove the following two screws securing the top logic board bracket to the rear case:
  - One 1.5 mm Phillips screw
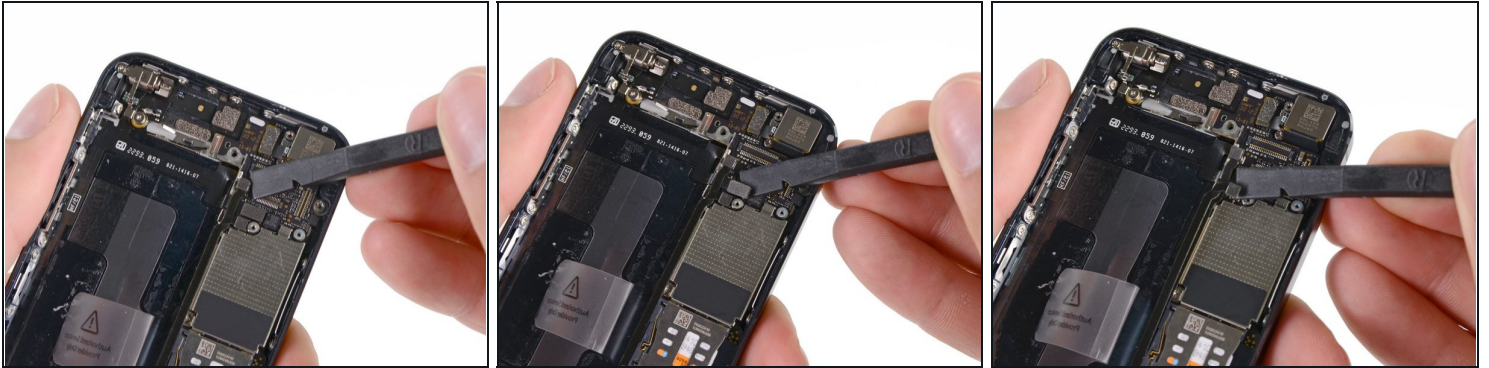 - One 2.3 mm Phillips screw

Step 22
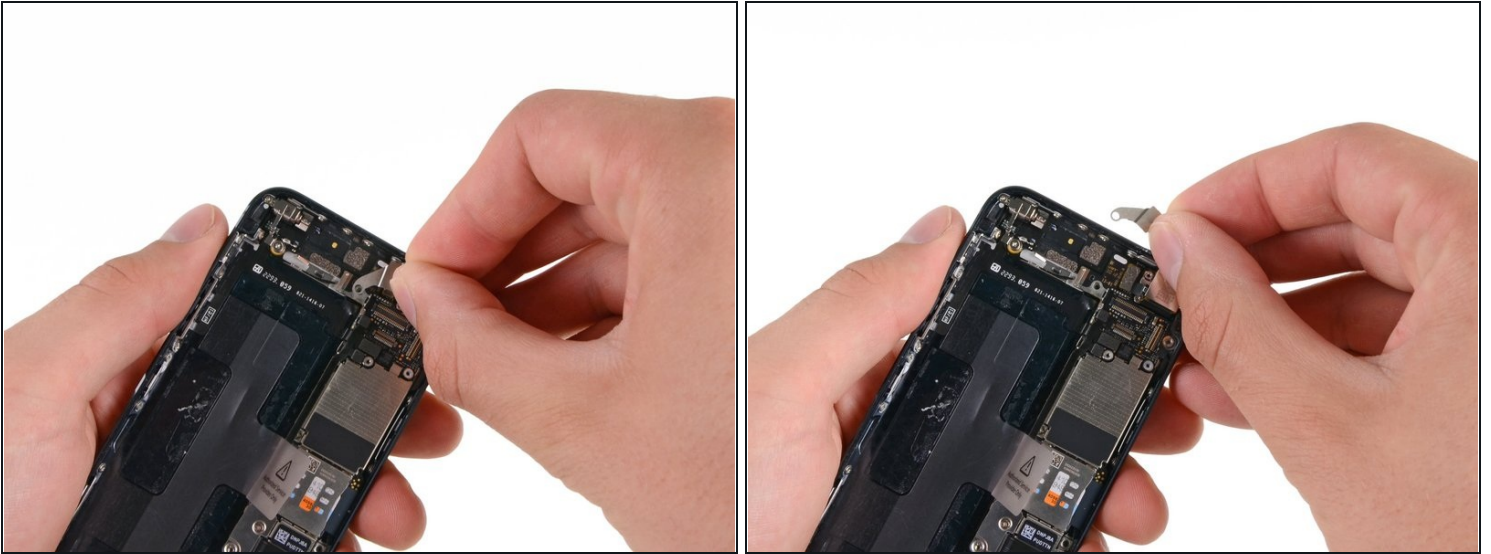
- Remove the bracket from the top of the logic board.

⚠️ Be sure not to break off the tiny grounding tab that sticks up off of the bracket next to the rear facing camera.

ⓘ On newer models, the bracket may be attached to the camera housing and will not come completely out.
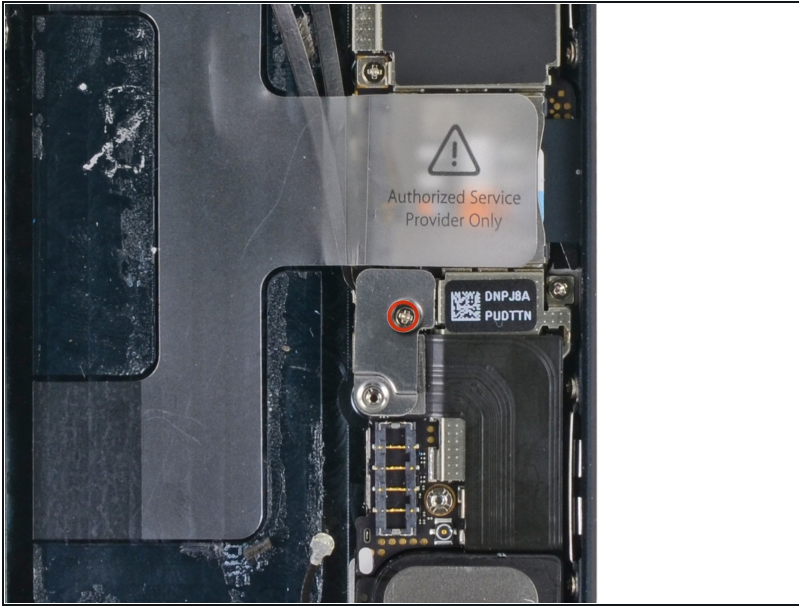
Step 23

- Use the flat end of a spudger to disconnect the following three cables from the logic board:
  - Upper interconnect cable

  - Button assembly cable

  - Lower interconnect cable

Step 24
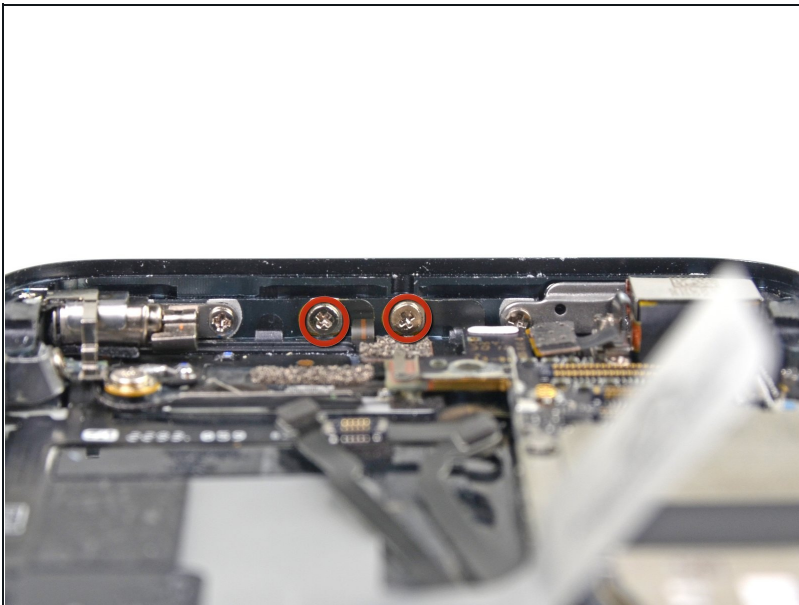
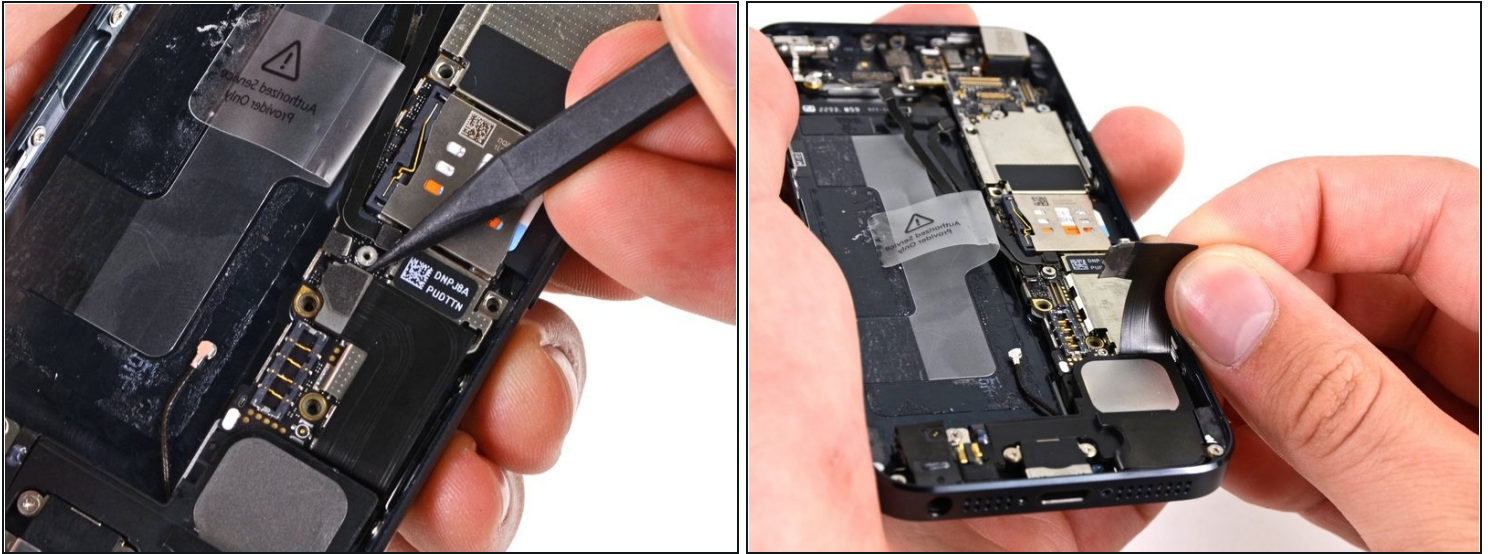- Remove the two 1.3 mm Phillips screws from the inner top of the rear case.

Step 25

- Remove the single 1.2 mm Phillips screw remaining in the mid-section logic board bracket.
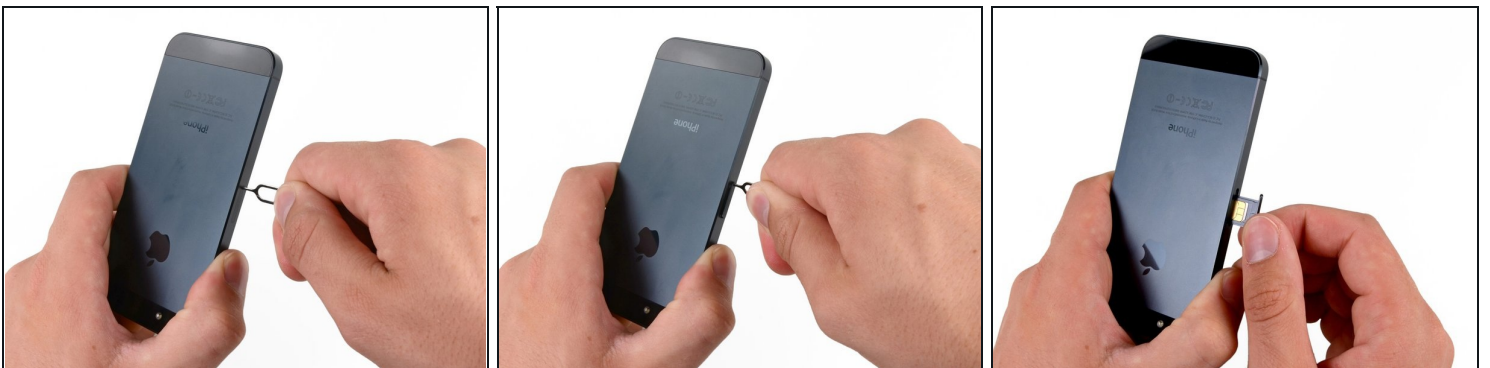
Step 26

- Remove the mid-section bracket from the logic board.

Step 27

- Use a spudger to pry the Lightning connector cable connector up from its socket on the logic board.

- Gently peel the cable back and out of the way of the logic board.

Step 28

- Depress the SIM card release on the right side of the iPhone with a SIM card eject tool or a bent paperclip to eject the SIM card tray.
  - ⓘ Alternatively, you can press the SIM card eject lever from the inside with the flat end of a spudger.

- Remove the SIM card tray from the iPhone.

Step 29
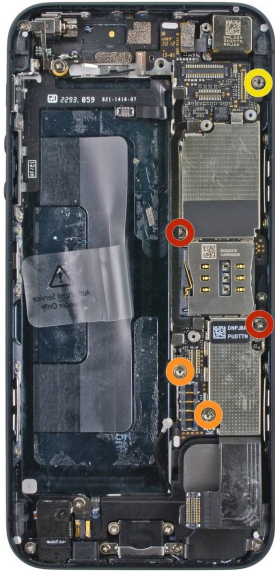
- Remove the following screws securing the logic board to the rear case:
  - Two 2.3 mm Phillips screws

  - Two 2.7 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 non-magnetic 2.7 mm standoff screw
    - ⓘ Be sure to put this screw back in its original position at the top of the logic board. A magnetized screw may interfere with the digital compass.

Step 30

- Rotate the logic board assembly toward the battery side of the rear case.

⚠ Do not attempt to completely remove the logic board assembly from the rear case, yet; there is still one cable connected to the underside of the logic board.

- The flash surround is adhered to the flash unit and the rear case. If it stays on the rear case remove with tweezers and mount it back on the flash unit.

- *Note: when reassembling your device, be sure that the lower interconnect cable is not tucked underneath the logic board.*
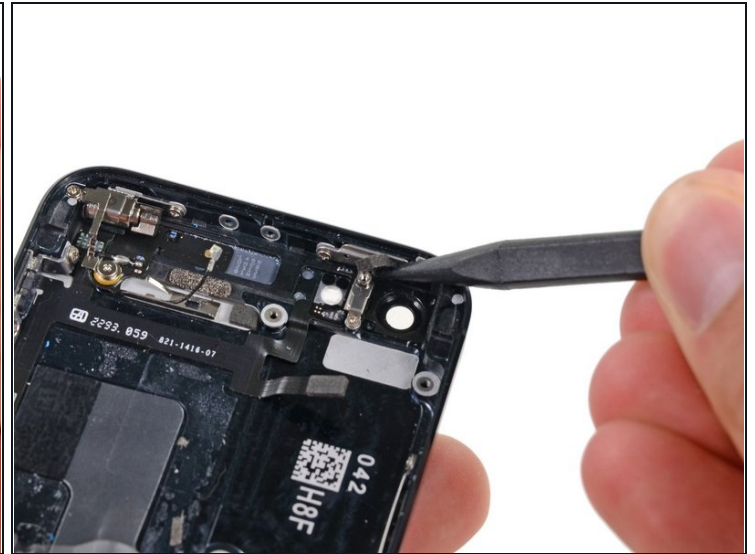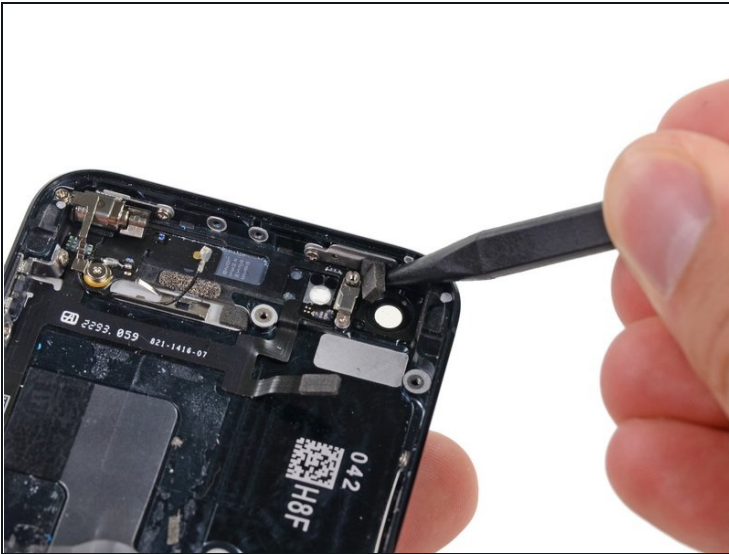
Step 31

- Use the tip of a spudger to pry the Wi-Fi antenna cable connector up from its socket on the underside of the logic board.
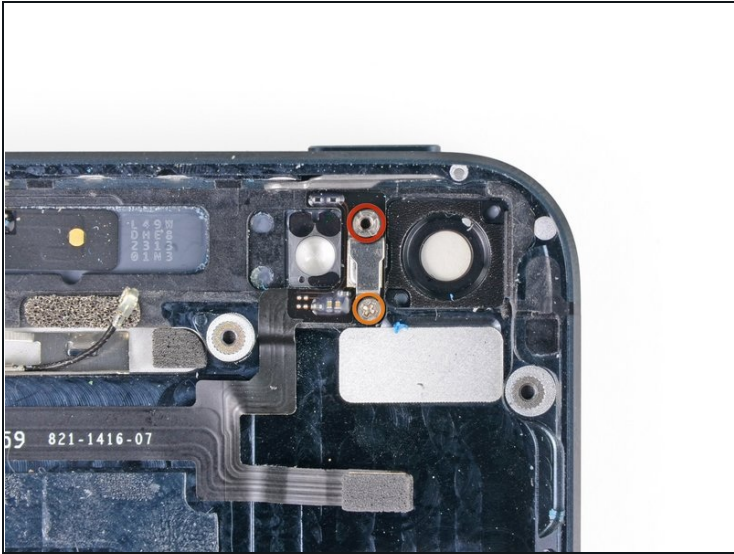
Step 32

- Remove the logic board assembly from the rear case.

- While your logic board is out of your phone, keep it on a grounded [anti-static mat](#) to prevent any damage to the circuitry.

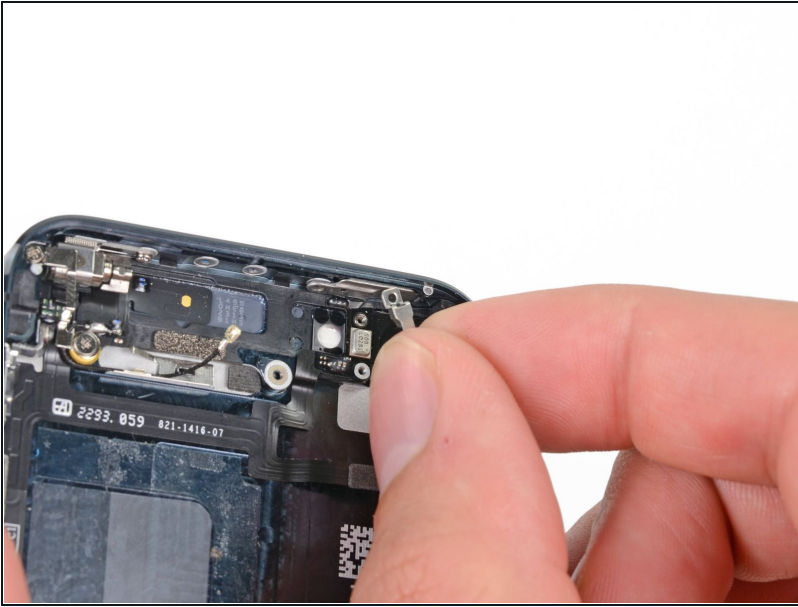## Step 33 — Power Button

- Use the tip of a spudger to remove the rubber bumper from below the power button.
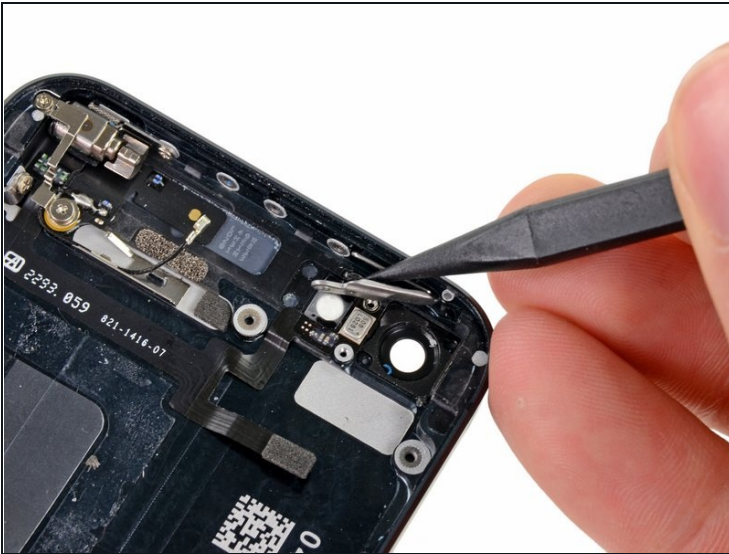
Step 34

- Remove the following screws from the metal bracket between the rear facing flash and camera windows:
  - One 2.9 mm standoff screw
    - (i) Standoff screws are best removed with a [standoff screwdriver](#) or standoff driver bit. A small flathead screwdriver can also do the job—but use extra caution to ensure it doesn't slip and damage surrounding components.
  - One 1.6 mm Phillips screw
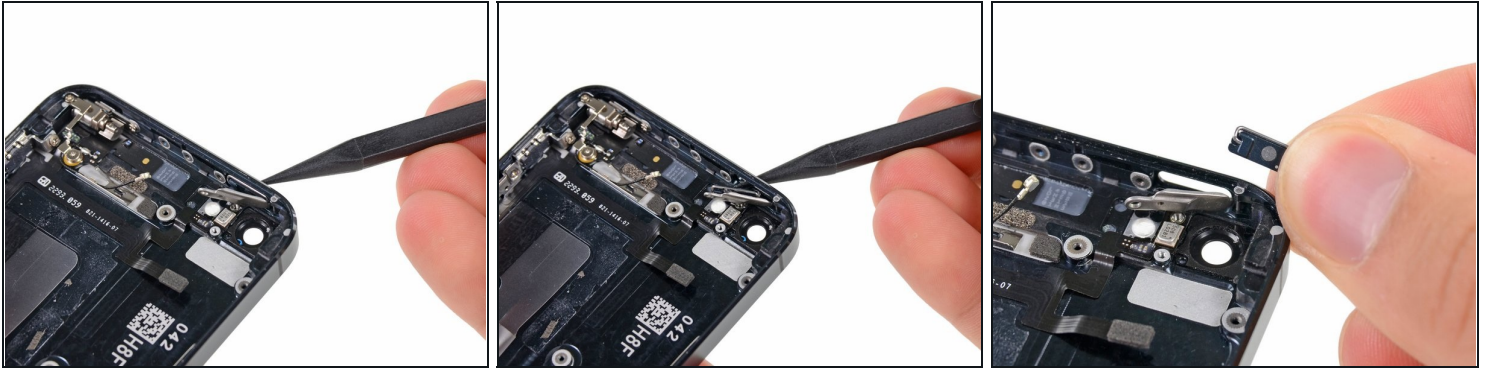 - One 1.9 mm Phillips screw

Step 35

- Remove the metal bracket between the rear facing flash and camera windows.

Step 36

- Use the tip of a spudger to flip the metal bracket holding the power switch away from the top of the rear case.

Step 37

- Press the power button into the rear case from the outside of the phone with the tip of a spudger.

- Remove the power button.

- ☑ When installing the power button, make sure the hinged metal loop on the back is flipped up, as shown—not down.

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