



iPhone 6s Plus Battery Replacement

Use this guide to bring life back to your...

Written By: Evan Noronha



INTRODUCTION

Use this guide to bring life back to your iPhone 6s Plus with a new battery. If your battery is swollen, [take appropriate precautions](#).

This guide instructs you to detach the front panel assembly; this is intended to prevent damage to the display cables. If you feel comfortable supporting the display carefully while peeling the battery out of the iPhone, you can skip the display removal and go directly to the battery removal steps.

This guide also instructs you to remove the Taptic Engine. This procedure is optional but recommended to assist removing the battery's adhesive.

For optimal performance, after completing this guide, [calibrate](#) your newly installed battery: Charge it to 100% and keep charging it for at least two more hours. Then use your iPhone until it shuts off due to low battery. Finally, charge it uninterrupted to 100%.

You can also use this guide to replace the [battery connector bracket](#).

[video: <https://www.youtube.com/watch?v=4Kskal4s1sU>]



TOOLS:

[Anti-Clamp](#) (1)
[P2 Pentalobe Screwdriver iPhone](#) (1)
[Suction Handle](#) (1)
[Spudger](#) (1)
[Tweezers](#) (1)
[Phillips #000 Screwdriver](#) (1)
[iFixit Opening Tool](#) (1)
[iOpener](#) (1)



PARTS:

[iPhone 6s Plus Battery](#) (1)
[iPhone 6 Plus/6s Plus/7 Plus Battery Adhesive Strips](#) (1)
[iPhone 6s Plus Battery Connector Bracket](#) (1)
[iPhone 6s Plus 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 Pentalobe screws on either side of the Lightning port.

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.
 - ① 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.
 - ① 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 — Opening Procedure



- If you don't have an [Anti-Clamp](#), follow the next three steps to use a suction handle.
- Apply mild heat to the lower edge of the iPhone using an [iOpener](#) or hair dryer for about a minute.
- ① Heat softens the adhesive securing the display, making it easier to open.

Step 5



- ① Opening the display on the 6s Plus 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.
- 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.

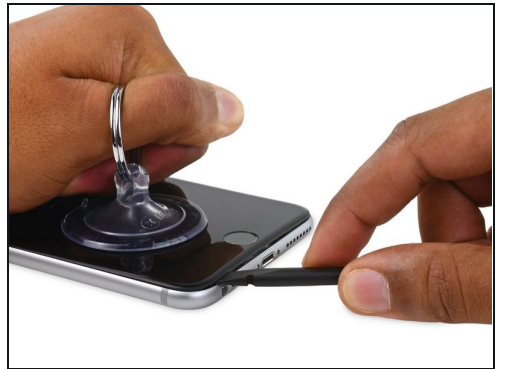
Step 6



- Pull up on the suction cup with firm, constant pressure to create a slight gap between the front panel and rear case.

⚠ 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.

Step 7



- The safest place to pry from is the notch in the front panel above the headphone jack.
- While still maintaining pressure on the suction cup, insert the flat tip of a spudger into the gap, directly above the headphone jack.

Step 8



- Twist the spudger to widen the gap between the front panel and the rear case.

Step 9



- While firmly pulling up on the suction cup, slide the edge of the spudger under the bottom left corner of the display.

Step 10



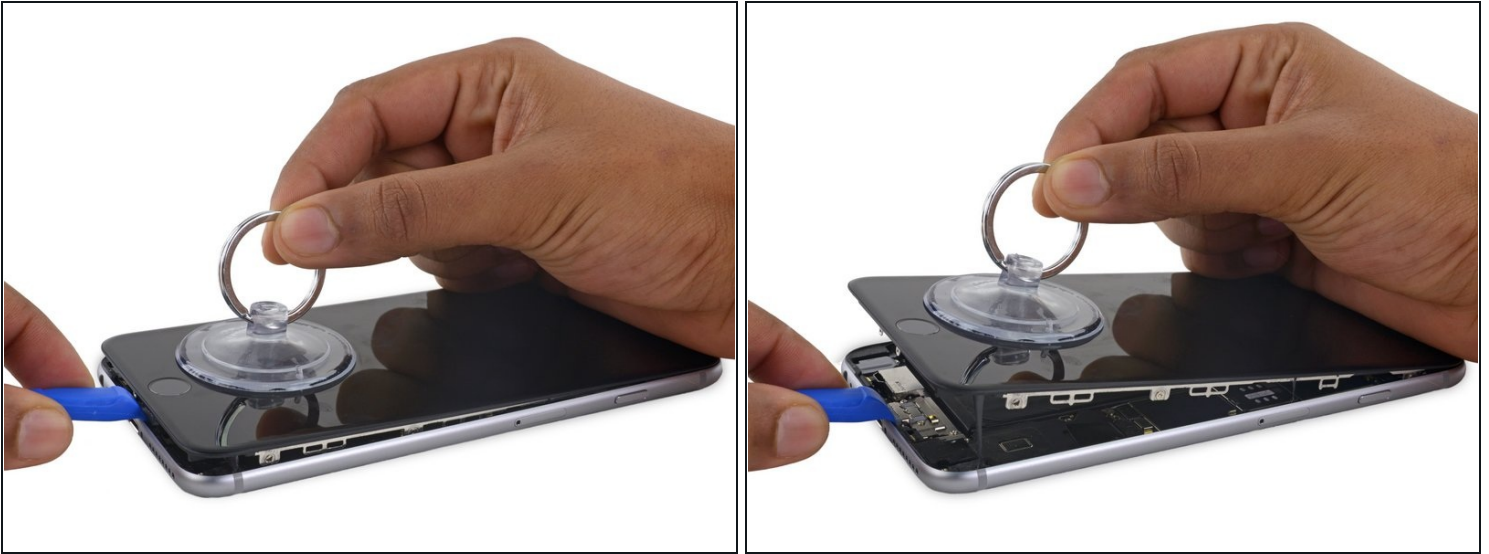
- Slide the tip of the spudger up the left side of the phone, between the front panel and the rear case.

Step 11



- Insert the flat tip of the spudger under the right edge of the display.
- Slide the spudger up the right side.

Step 12



- Use a plastic opening tool to hold down the rear case while pulling up the suction cup to open the phone.

⚠ Do **not** remove the display completely, or you will damage the data cables connecting the display near the top edge of the iPhone.

Step 13



- Pull up on the small nub on the suction cup to remove it from the display.

Step 14



- 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.
 - ⚠ Don't open the display more than 90°—it is still connected to the top of the phone by the display, digitizer, and front camera cables which can tear easily.
- Add a rubber band to keep the display securely in place while you work. This prevents undue strain on the display cables.
- ⓘ In a pinch, you can use an unopened canned beverage to support the display.

Step 15 — Battery Connector



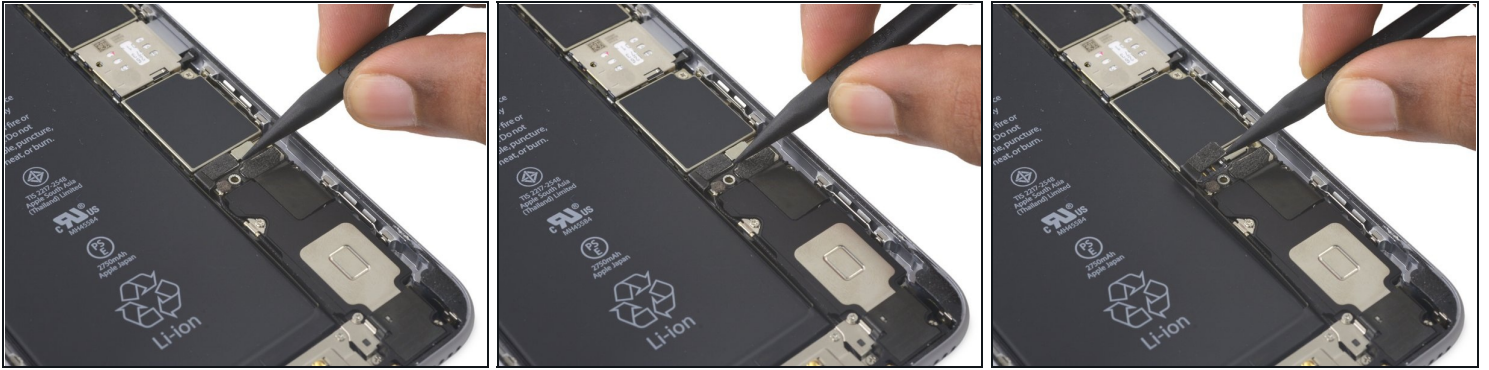
- Remove two Phillips screws securing the battery connector bracket to the logic board, of the following lengths:
 - One 2.9 mm screw
 - One 2.3 mm screw
- ☑ Throughout this guide, [keep careful track of your screws](#) so that each one goes back where it came from during reassembly. Installing a screw in the wrong place can cause permanent damage.

Step 16



- Remove the battery connector bracket.

Step 17



- Use a spudger or a clean fingernail to disconnect the battery connector by prying it straight up off the logic board.

Step 18



- Bend the connector back to ensure it doesn't make contact and power the iPhone on while you're working on it.

Step 19 — Display Assembly



- Remove the following Phillips screws:
 - Three 1.3 mm screws
 - One 1.6 mm screw
 - One 3.0 mm screw
- ☑ During reassembly, it's critical to place this 3.0 mm screw in the top-right corner of the bracket. Placing it anywhere else may damage the logic board.

Step 20



- Remove the display cable bracket.

Step 21



⚠ Be careful to only pry up on the connector itself and not the socket on the logic board.

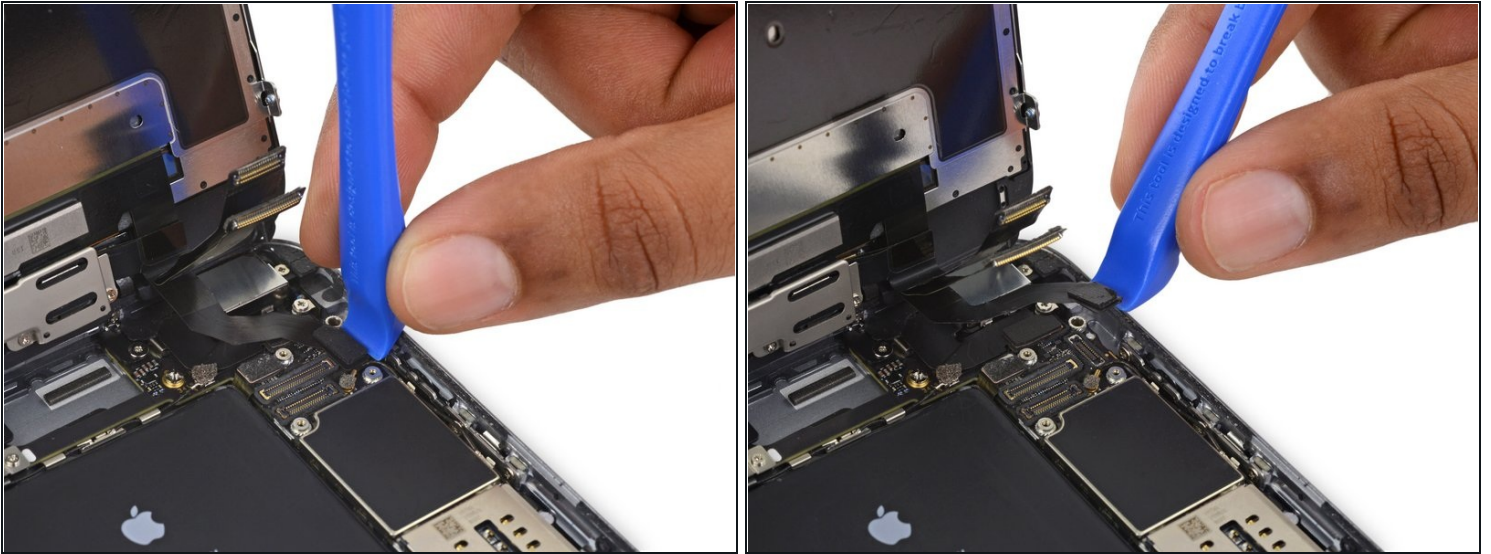
- Use a plastic opening tool to disconnect the front-facing camera and sensor cable connector.

Step 22



- Use a plastic opening tool to 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.

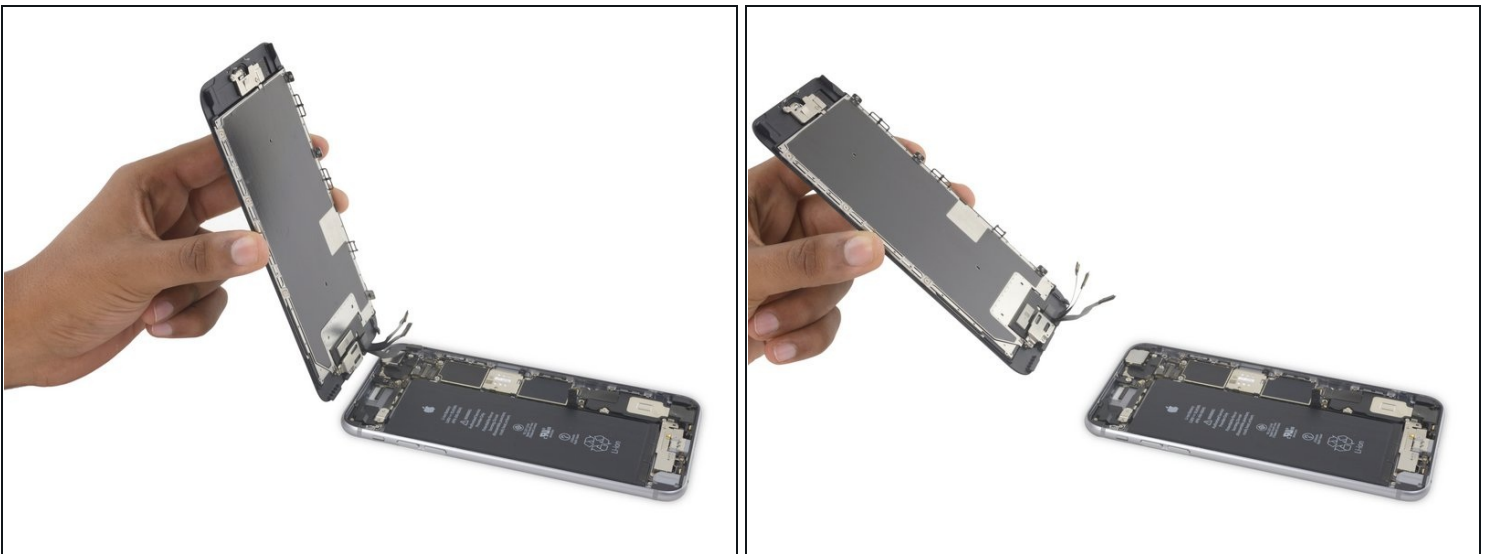
Step 23



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

- Disconnect the home button/fingerprint sensor cable by prying it straight up from its socket on the logic board.

Step 24



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

Step 25 — Taptic Engine



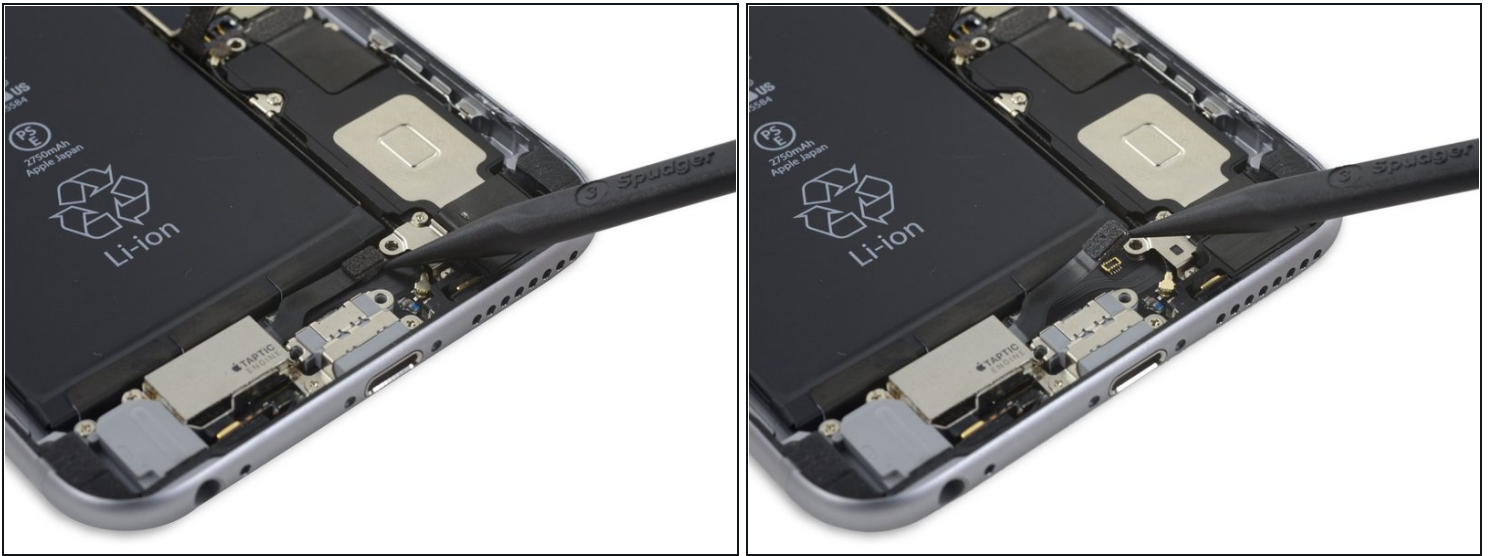
- Remove the following Phillips screws over the Taptic Engine cable bracket:
 - Two 3.5 mm screws
 - One 2.7 mm screw

Step 26



- Remove the Taptic Engine cable bracket.

Step 27



- Disconnect the Taptic Engine's flex cable from the socket on the Lightning Connector flex cable.

Step 28



- Remove the following two Phillips screws:
 - One 3.1 mm screw
 - One 2.1 mm screw

Step 29



- Remove the Taptic Engine.

Step 30 — Remove the stretch-release adhesive



- Use tweezers, or your fingers, to peel up the black pull tab on one of the adhesive strips.

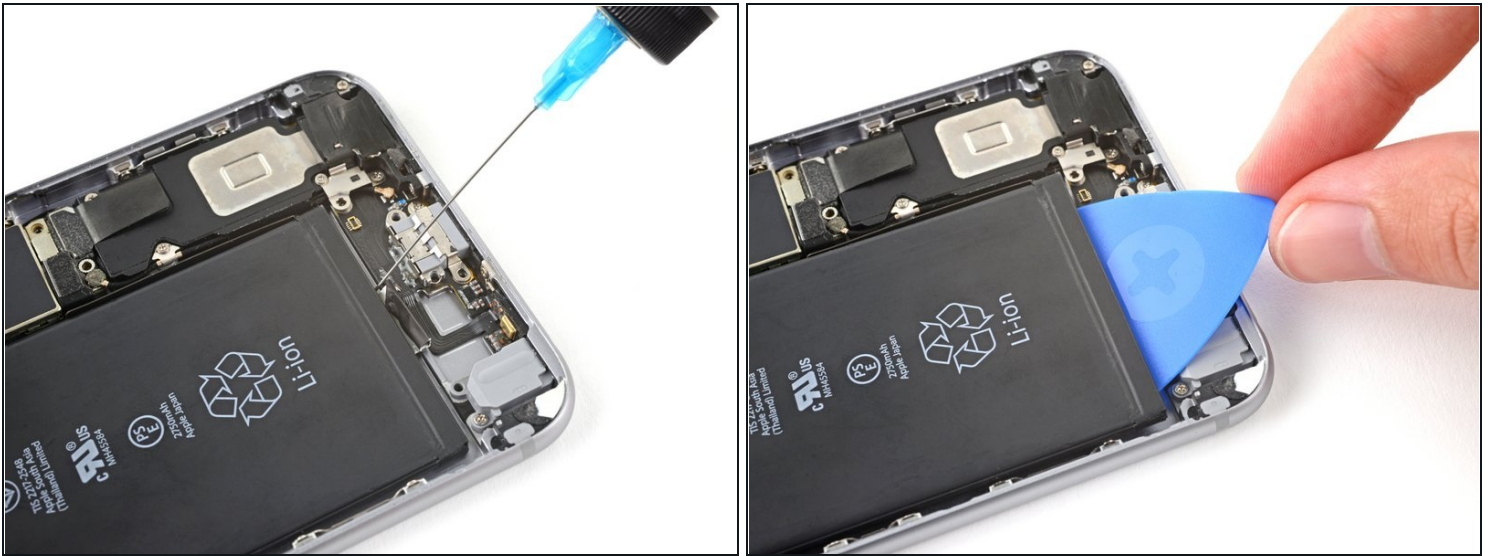
⚠ Take care not to puncture or bend the battery with your tool—a punctured or bent battery may leak dangerous chemicals or cause a fire.

Step 31



- Pull the strip out slowly and steadily at a low angle. Give it plenty of time to stretch and un-stick from under the battery.
 - ① If the adhesive strip breaks off, try to retrieve it using your fingers or blunt tweezers, and continue pulling—but don't pry under the battery.
 - ① You can optionally [wrap the pull-tabs around a spudger](#) to make it easier to pull out the adhesive strip.
 - Repeat the process for the remaining stretch release adhesive strips.
- ⚠ If the adhesive breaks off underneath the battery and can't be retrieved, continue with the next step.

Step 32 — How to remove a stuck battery



- If you're still having trouble removing the battery, apply a few drops of high concentration (90% or higher) isopropyl alcohol under the edge of the battery in the area of the broken adhesive strip(s).
- Tilt the phone up so the isopropyl alcohol can flow toward the adhesive strip.
- Hold for 1–2 minutes to allow the isopropyl alcohol to weaken the adhesive.
- Use an opening pick or the flat end of a spudger to slowly pry up the battery.

Step 33



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

Compare your new replacement part to the original part—you may need to transfer remaining components or remove adhesive backings from the new part before installing.

To reassemble your device, follow the above steps in reverse order.

Take your e-waste to an [R2 or e-Stewards certified recycler](#).

Repair didn't go as planned? Check out our [Answers community](#) for troubleshooting help.