

Google Pixel 3 Battery Replacement

This repair guide was authored by the iFixit...

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INTRODUCTION

This repair guide was authored by the iFixit staff and hasn't been endorsed by Google. Learn more about our repair guides here.

Follow this guide to remove and replace a worn battery for the Pixel 3. If your battery is swollen, take appropriate precautions.

For your safety, discharge your battery below 25% before disassembling your phone. This reduces the risk of a dangerous thermal event if the battery is accidentally damaged during the repair.

TOOLS:

Phillips #00 Screwdriver (1)

iOpener (1)

Suction Handle (1)

iFixit Opening Picks (Set of 6) (1)

Phillips #000 Screwdriver (1)

Isopropyl Alcohol (1)

Spudger (1)

Tweezers (1)

PARTS:

Google Pixel 3 Battery - Genuine (1) Google Pixel 3 Battery Adhesive Strips -Genuine (1) Tesa 61395 Tape (1)

Step 1 — Weaken the back cover's adhesive



Heat an iOpener and apply it to the bottom of the phone for one minute.

Step 2 — Create a gap in the seam







- Apply a suction cup to the heated bottom edge of the back cover.
 - ⚠ Make sure you did not mistake the screen side for the back cover side.
 - (i) If your back cover is badly cracked, covering it with a layer of clear packing tape may allow the suction cup to adhere.
- Lift on the suction cup with strong, steady force to create a gap.
 - ② Depending on how aged your phone is, this may take significant force. If you are having trouble, apply more heat and try again.
- Insert an opening pick into the gap.
 - ⚠ Don't use metal tools to pry, or you'll mar or shatter the glass back cover. If the panel won't budge, apply more heat, either with a hair dryer or heat gun.

Step 3 — Fingerprint cable information



⚠ When inserting an opening pick above the power button, be careful not to insert the pick too deeply, or you will damage the fingerprint sensor cable.

Step 4 — Cut through the adhesive



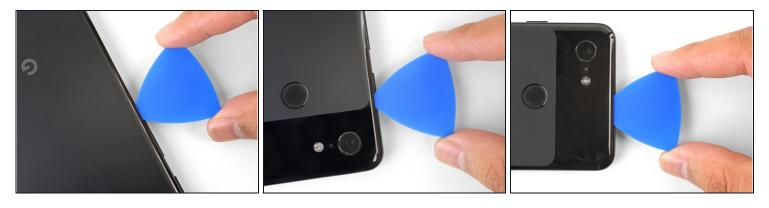
- Slice the adhesive along the bottom edge of the phone and around the right corner.
- Leave a pick in the bottom edge to prevent the adhesive from re-sealing.

Step 5



- Heat the right edge with an iOpener and continue slicing the adhesive with an opening pick.
- (i) The adhesive can be very gummy. Push the pick in and out in a sawing motion to help with slicing.

Step 6



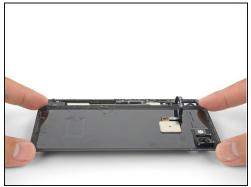
• Continue heating and slicing through the rest of the phone perimeter. Leave a pick in each edge to prevent the adhesive from resealing.

⚠ When slicing above the power button, do not insert the pick more than halfway in to avoid damaging the fingerprint sensor cable.

Step 7 — Lift the left edge of the back cover

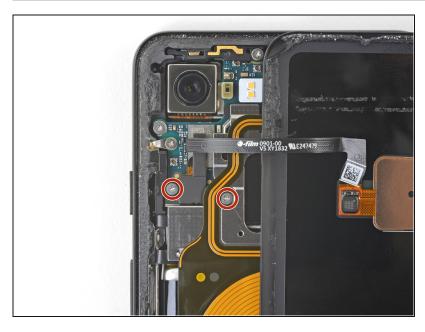






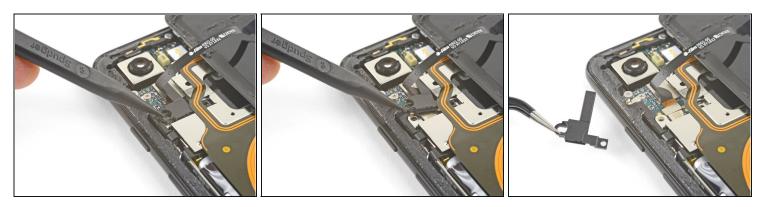
- Once you have sliced around the perimeter of the phone, carefully lift the left edge of the back cover.
- ⚠ Do not attempt to remove the back cover. It is still attached to the phone by the fingerprint sensor cable.
- Flip the back cover along its long axis and rest it so that the fingerprint sensor cable is not strained.

Step 8 — Remove the screws



- Remove the two 4.1 mm-long Phillips screws securing the fingerprint connector bracket.
- Throughout this repair, keep track of each screw and make sure it goes back exactly where it came from.
- During reassembly, be careful not to over-tighten these screws, or you may damage your display.

Step 9 — Remove the fingerprint connector bracket



- Use the point of a spudger to slide the fingerprint connector bracket out from under the NFC coil.
- Remove the fingerprint connector bracket.

Step 10 — Disconnect the fingerprint connector



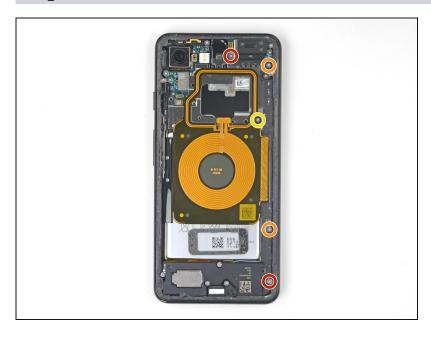
- Use the point of a spudger to pry up and disconnect the fingerprint connector from its socket.
 - (i) When you disconnect connectors like these, be careful not to dislodge the small surface-mounted components surrounding the socket.
- To re-attach <u>press connectors</u> like this one, carefully align and press down on one side until it clicks into place, then repeat on the other side. Do not press down on the middle. If the connector is misaligned, the pins can bend, causing permanent damage.

Step 11 — Remove the back cover



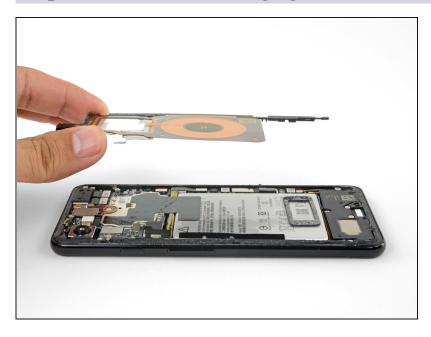
- Remove the back cover.
- Before you install a replacement back cover, be sure to remove all adhesive residue from the phone frame. Use an opening tool to scrape and high concentration isopropyl alcohol to clean the surface.
- If you are re-using the back cover, be sure to clean off any adhesive, and apply new back cover adhesive.
- If you are installing a replacement back cover, be sure to compare it with the original part. Transfer any remaining parts (such as the flash diffuser) over to your replacement part.
- Follow this guide to correctly apply new back cover adhesive.

Step 12 — Remove the screws



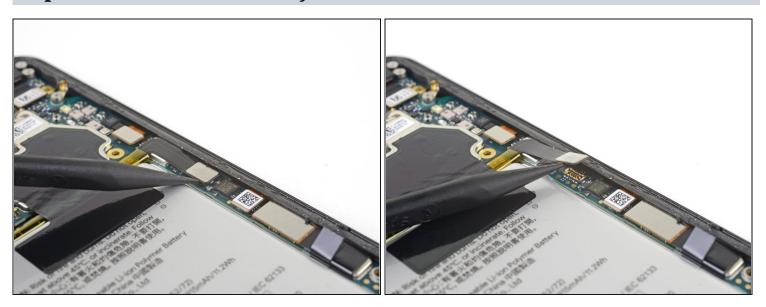
- Remove the five Phillips screws securing the wireless charging coil:
 - Two 1.9 mm screws
 - Two 4.2 mm screws
 - One 4.3 mm screw

Step 13 — Remove the charging coil



 Lift up and remove the wireless charging coil.

Step 14 — Disconnect the battery cable



• Use the point of a spudger to pry up and disconnect the battery press connector from its socket near the right edge of the phone.

Step 15 — Peel the black tape away from the battery



⚠ Whenever you use the spudger near the battery, be very careful not to puncture the battery.

- Slide the point of a spudger in the crevice underneath the black tape bridging across the battery and the motherboard.
- Slide the spudger along the crevice to pry up the tape from the battery side.
- Carefully peel the tape from the battery and fold it out of the way.
 - (i) The tape acts as a cooling pad for the motherboard and the battery. It will still work if it's torn.

Step 16 — Disconnect the buttons connector



- Use the point of a spudger to pry up and disconnect the buttons connector from its motherboard socket near the left edge of the phone.
- Push the connector and its flex cable out of the way of the battery.

Step 17 — Loosen the pull tab



- Insert the point of a spudger underneath the black battery pull tab on the left edge of the phone.
- Slide the spudger upwards along the edge to loosen the pull tab from the battery.
- (i) The battery is held in place with three separate stretch adhesive strips, which are connected to a single black pull tab. You can try to pull all three strips out together, but it is easier to cut the black pull tab where it is notched and pull each strip out individually.

Step 18 — Remove the pull tab







- Pull on the black pull tab at a shallow angle with steady force. When the adhesive grows long, roll it around some tweezer tips and continue pulling.
- If the adhesive strips break, use an opening pick to help pry up and loosen the battery.
 - <u>A flex cable</u> runs underneath the battery. Don't pry near the cable, or you may damage it.
 - ② You can also fill a plastic dropper or syringe with high concentration isopropyl alcohol and apply a few drops of alcohol under the left edge of the battery. Give the alcohol a minute to weaken the battery adhesive.

Step 19 — Remove the battery



- Remove the battery.
- Carefully pull and remove the small foam buffer block from the left edge of the battery and transfer it to your replacement part. If it begins to tear, use the flat end of a spudger to gently pry it off the battery.

To install a replacement battery:

- Lay some double-sided tape in the phone's battery well. If you're using Tesa tape to reattach components, <u>follow this guide</u>. If using stretch-release adhesive, follow <u>this guide</u>.
- *Temporarily* re-connect the battery's connector to the motherboard socket. This ensures that the battery is properly positioned.
- Peel away any tape liners to expose the adhesive.
- Lay the battery on the adhesive and press firmly.
- Disconnect the battery connector from its motherboard socket and resume reassembly.

For optimal performance, calibrate your newly installed battery: Charge it to 100% and keep charging it for at least 2 more hours. Then use your device until it shuts off due to low battery. Finally, charge it uninterrupted to 100%.

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

Take your e-waste to an R2 or e-Stewards certified recycler.

Repair didn't go as planned? Check out our <u>Google Pixel 3 Answers community</u> for troubleshooting help.