



Google Pixel 3 XL 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](#).

This guide shows how to remove and replace a worn out battery for your Pixel 3 XL.

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. If your battery is swollen, [take appropriate precautions](#).

Replacing the battery requires un-gluing the wireless charging coil from it and transferring the coil to a replacement battery.



TOOLS:

- [iOpener](#) (1)
- [Suction Handle](#) (1)
- [Tweezers](#) (1)
- [T3 Torx Screwdriver](#) (1)
- [Spudger](#) (1)
- [iFixit Opening Picks \(Set of 6\)](#) (1)
- [iFixit Adhesive Remover \(for Battery, Screen, and Glass Adhesive\)](#) (1)
- [Isopropyl Alcohol](#) (1)



PARTS:

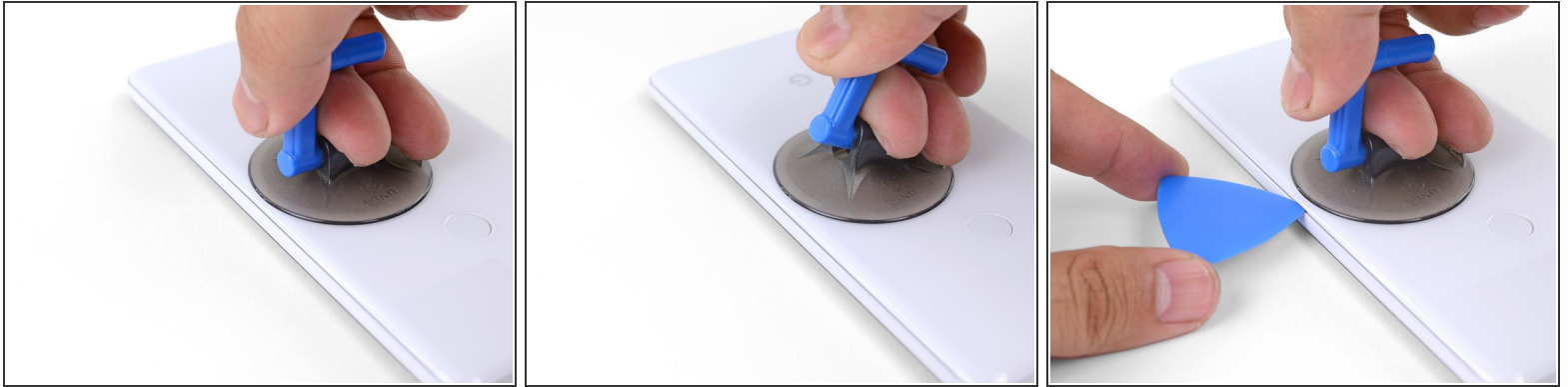
- [Google Pixel 3 XL Battery - Genuine](#) (1)
- [Google Pixel 3 XL Battery Adhesive Strips - Genuine](#) (1)
- [Google Pixel 3 XL Back Cover Adhesive - Genuine](#) (1)

Step 1 — Heat the edge of the back cover



- [Heat an iOpener](#) and apply it to the right edge of the back cover for a minute.
- ⓘ A hair dryer, heat gun, or hot plate may also be used, but be careful not to overheat the phone—the display and internal battery are both susceptible to heat damage.
- While you wait, note the following areas on the back cover:
 - Strong adhesive—there are large patches of adhesive near the bottom of the phone.
 - Fingerprint sensor cable—be careful not to slice through the cable as you pry

Step 2 — Create a gap under the back cover



- Apply a suction cup to the heated edge of the back cover, as close to the edge as possible.
- Pull up on the suction cup with strong, steady force to create a gap.
 - Depending on the age of your phone, this may be difficult. If you are having trouble, apply heat to the edge and try again.
- Insert the point of an opening pick into the gap.

Step 3 — Loosen the right edge adhesives



- Slide the opening pick along the right edge to slice through the adhesive.
- The adhesive gums up and becomes hard to slice once it cools. If that happens, re-apply heat to the edge to make slicing easier.
- Once you have sliced through the edge, leave an opening pick in the seam to prevent the adhesive from re-sealing.

Step 4 — Heat the bottom edge of the back cover



- Apply a heated iOpener to the bottom of the back cover for a minute.

Step 5 — Slice through the bottom adhesives



- Use an opening pick to slice around the bottom right corner and continue along the bottom edge of the phone.
- ⓘ Work slowly as you slice around the corner to prevent the panel from cracking. If the slicing becomes hard, re-apply heat.
- Leave a pick in the edge to prevent the adhesive from re-sealing.

Step 6 — Slice through the remaining edges



- Continue heating and slicing the remaining edges of the phone.
- Be careful as you slice along the left edge of the phone. If your pick feels like it's stuck near the top, you may have snagged the fingerprint sensor. Retract the pick out of the seam slightly and try again.
- Be sure to cut through the thick portions of adhesive near the bottom and right edge of the phone.

Step 7 — Slice through the leftover adhesive



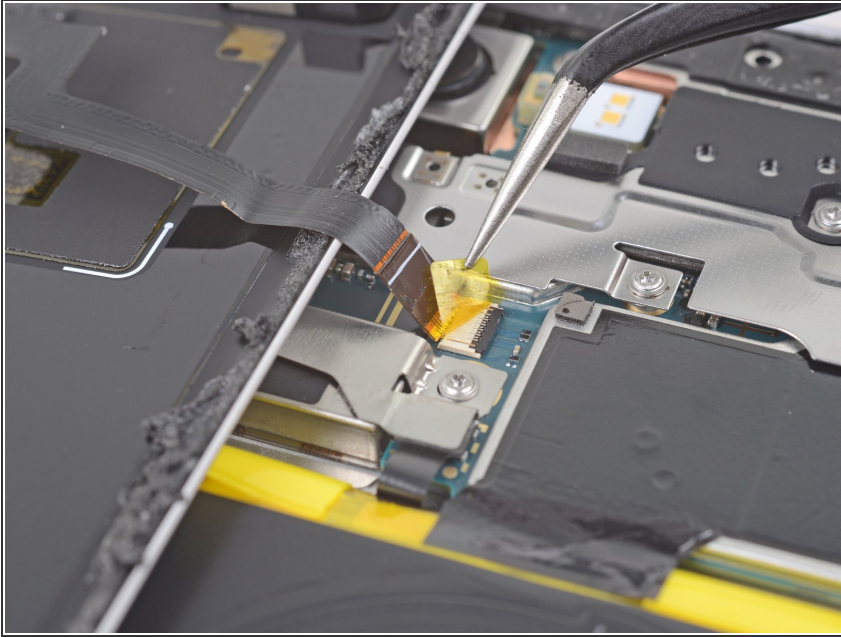
- Gently pry up the right edge of the back cover.
- Use an opening pick to slice through any remaining adhesive along the edges.

Step 8 — Swing open the back cover



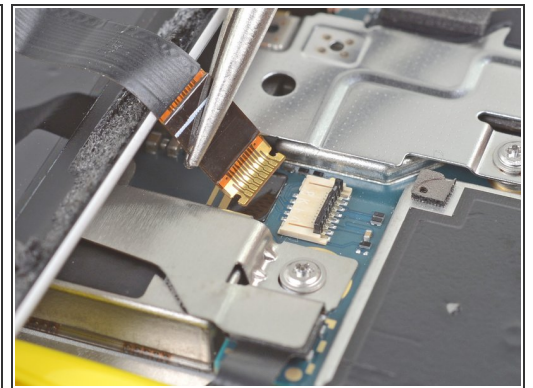
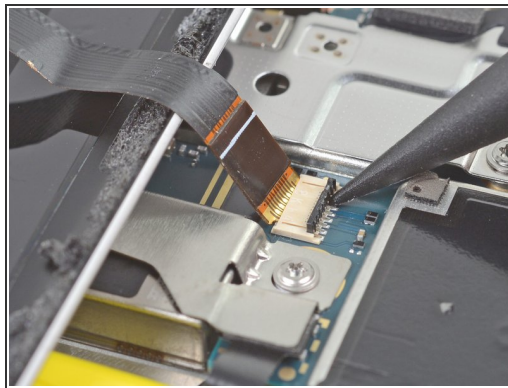
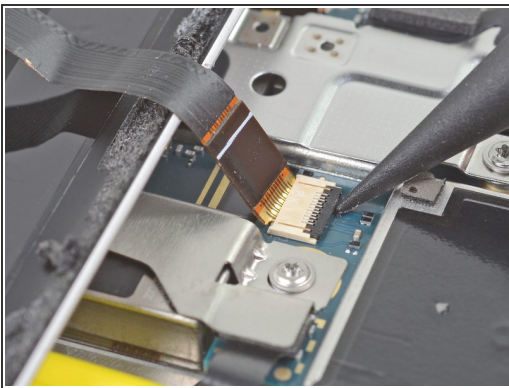
- Swing the right edge of the back cover upwards and rest the flipped panel along the left side of the phone.
- ⓘ Be sure to maintain slack on the fingerprint sensor cable and prevent it from being pinched.
- ✦ During reassembly, this is a good point to power on your phone and test all functions before sealing it up. Be sure to power your phone back down completely before you continue working.
- ✦ During reassembly, [follow this guide](#) to install custom-cut adhesives for your back cover.
- ✦ If you replaced the fingerprint sensor, you'll need to use [this software tool](#) to make the phone recognize the new sensor.

Step 9 — Remove the fingerprint sensor tape



- Use tweezers to carefully peel up the yellow tape over the fingerprint sensor connector.

Step 10 — Disconnect the fingerprint sensor



- Use the point of a spudger to carefully flip up the black lock bar on the fingerprint sensor's ZIF socket.
- Grasp the cable's tab with your fingers or tweezers and gently walk the flex cable out of the socket.
 - ❗ To prevent shorting, be careful not to touch the metal contacts on the flex cable with your tweezers.

Step 11 — Remove the back cover



- Remove the back cover.
- ☑ Follow [this guide](#) to correctly apply new back cover adhesive.

Step 12 — Remove the metal cover bracket screws



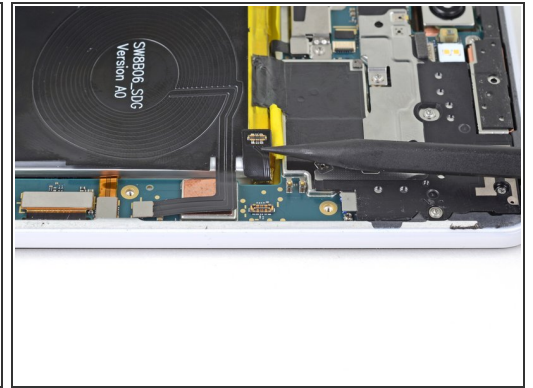
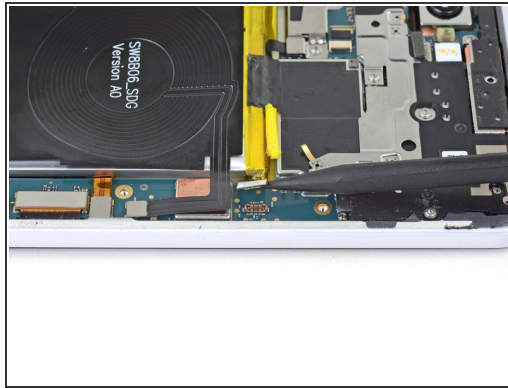
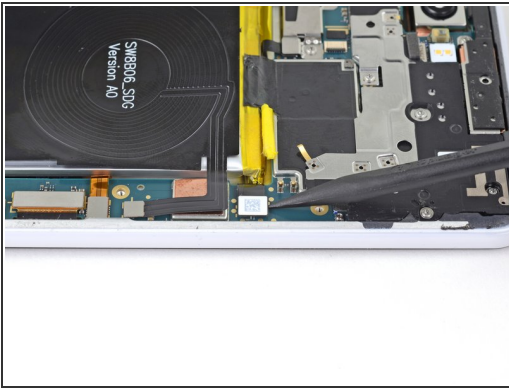
- Remove the following four T3 screws securing the metal cover bracket:
 - Three 4 mm long screws
 - One 3 mm long screw
- ☑ Throughout this repair, [keep track of each screw](#) and make sure it goes back exactly where it came from.

Step 13 — Remove the metal cover bracket



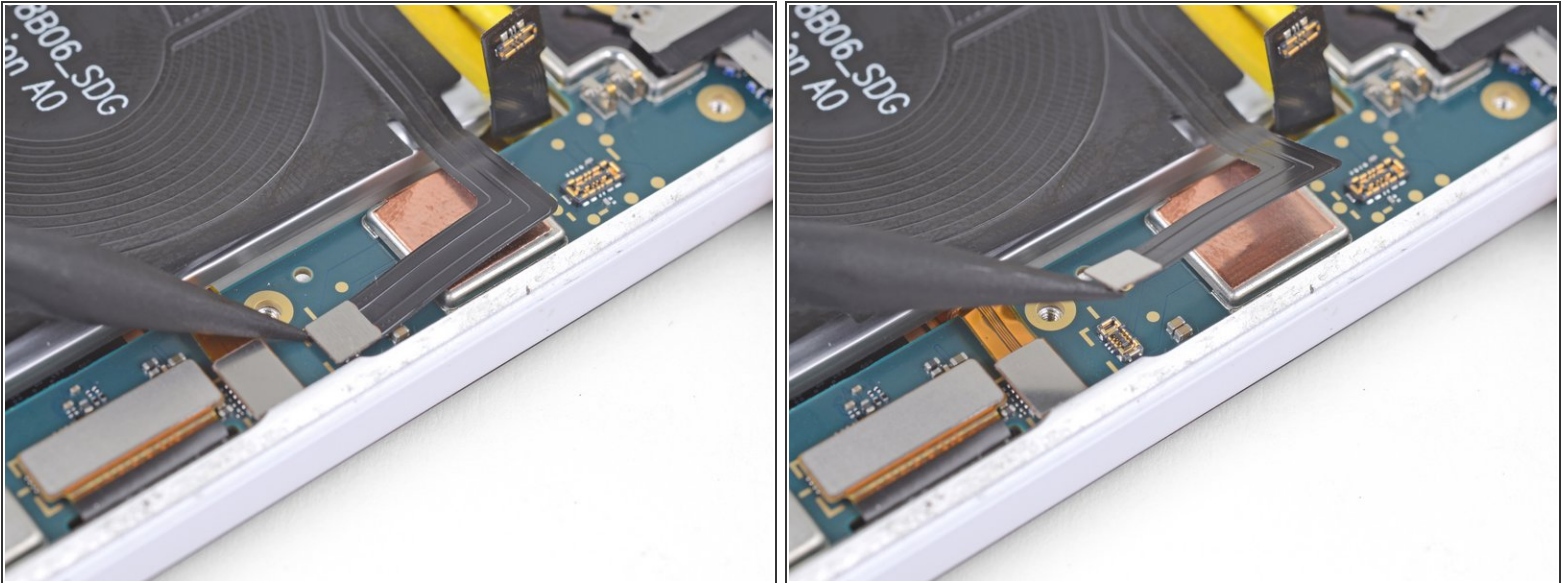
- Insert the flat end of a spudger underneath the top right edge of the metal bracket and pry up to loosen it.
- Remove the metal cover bracket.

Step 14 — Disconnect the battery



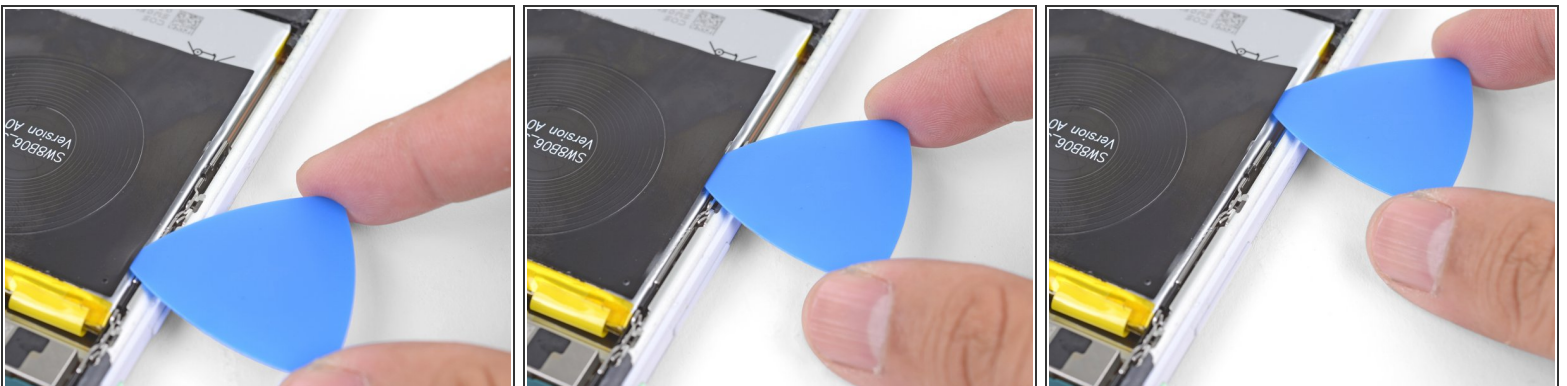
- Use the point of a spudger to pry up and disconnect the battery connector from its socket.
⚠ Do not use metal tools to to disconnect the battery, or you will risk shorting the battery.
- Bend the battery cable such that the connector will not accidentally touch the socket.

Step 15 — Disconnect the charging coil



- Use the point of a spudger to pry up and disconnect the charging coil connector from motherboard near the right edge of the phone.

Step 16 — Slice under the charging coil



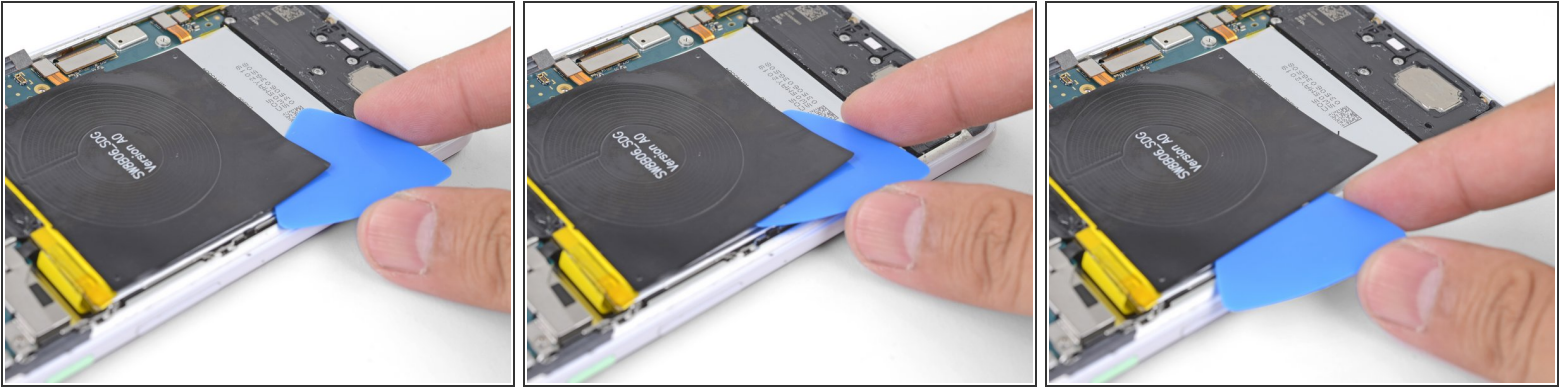
- Insert the point of an opening pick underneath one edge of the charging coil.
 - Slide the pick along the edge to loosen the adhesive.
- ⚠ Slice as deep as you can while taking care not to puncture the battery's surface.**

Step 17 — Apply adhesive remover under the coil



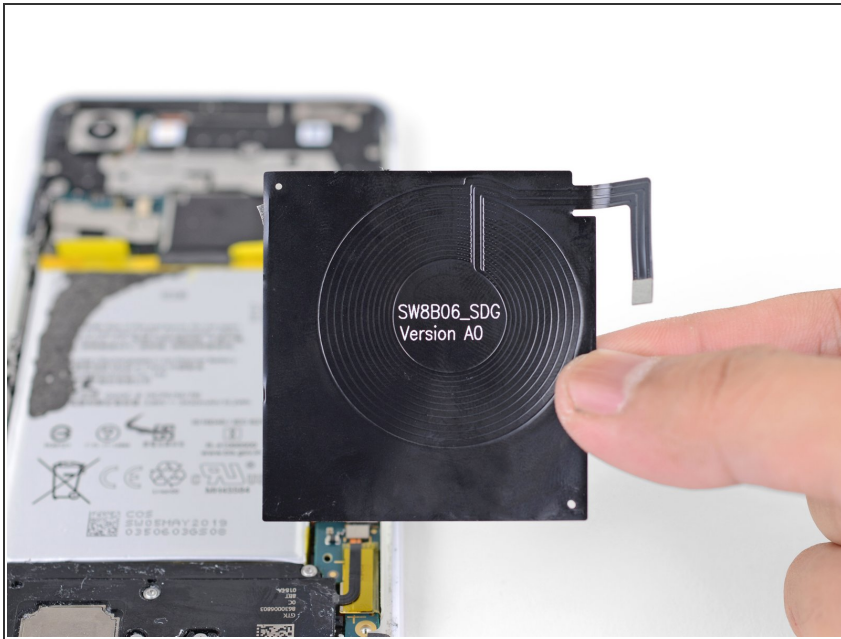
- Tilt the edge you have been slicing upwards.
- While holding the phone in a tilted position, apply a few drops of adhesive remover or high concentration isopropyl alcohol along the edge.
- Keep the phone in that position for a minute or two to allow the adhesive to soften.

Step 18 — Slice through the coil adhesive



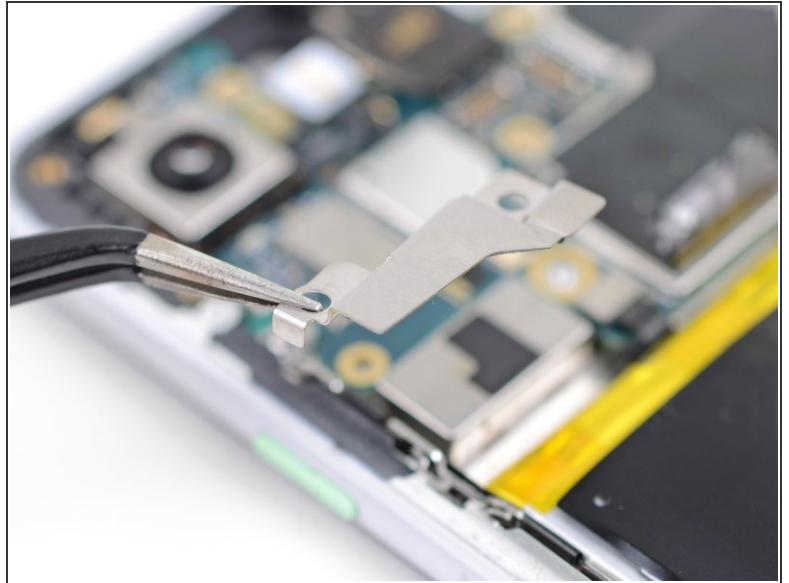
- Insert the flat end of an opening pick underneath a corner of the charging coil.
- Push the pick slowly and firmly under the coil to loosen the adhesive.
- The adhesive is mostly around the perimeter of the wireless coil. Use the opening pick to slowly slice through the adhesive.
- ❗ If the adhesive feels difficult to slice through, tilt the phone up and apply a few more drops of adhesive remover.

Step 19 — Remove the charging coil



- Remove the wireless charging coil.
- ★ To install a replacement coil:
 - Be sure to clean off the battery surface of any adhesive residue.
Be very careful not to puncture the battery.
 - Connect the wireless coil connector to its motherboard socket. This ensures that the coil is properly aligned.
 - Peel off any adhesive backing on the replacement coil.
 - Lay the coil on top of the battery and firmly press it into position.

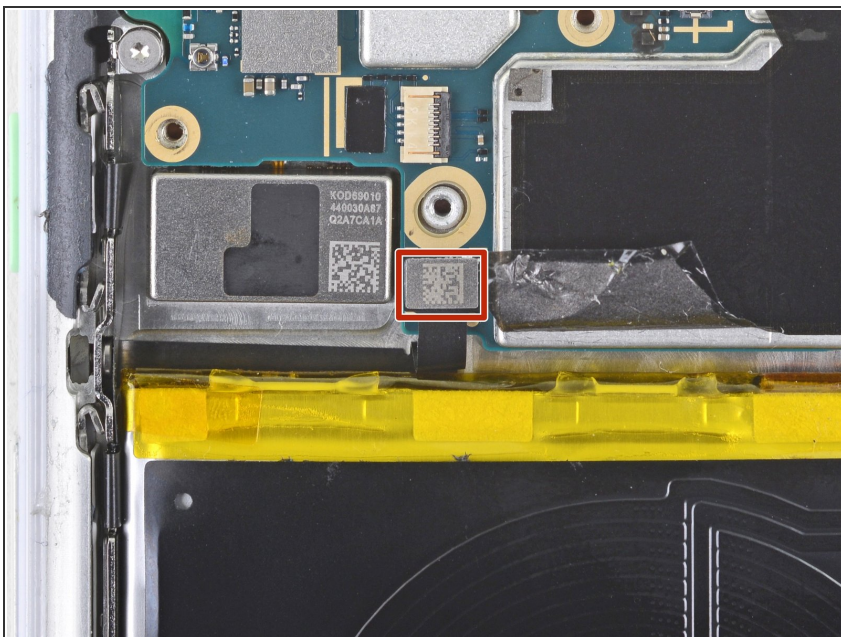
Step 20 — Disconnect the button array connector



i The next two steps show how to disconnect the button array connector so you won't accidentally damage it when you pry the battery out.

- Remove the two 3 mm-long T3 screws securing the button array connector bracket.
- Remove the button array connector bracket.

Step 21



- Use the point of a spudger to pry up and disconnect the button array connector from its motherboard socket.

Step 22 — Loosen the insulating tape



- Insert the point of a spudger into the gap along the top edge of the battery.
- Slowly slide the point along the gap to lift up and detach the insulating tape from the battery.
- Fold the tape away from the battery.

Step 23 — Loosen the battery pull tabs



- Carefully slide the point of a spudger underneath the yellow battery pull tabs folded along the top edge of the battery.
- Separate the pull tabs from the battery.

Step 24 — Insert a bracing pick



- i** There are steep, sharp edges near the top of the battery, that can easily break the adhesive strip as it's being pulled out.
- Insert the flat end of an opening pick into the gap above the battery, behind a yellow pull tab.
 - Wedge the pick firmly underneath the battery. The pick will serve as a buffer for the adhesive strip as well as a prying point.

Step 25 — Remove the battery adhesive strips



- Pull on the yellow adhesive pull tab with slow steady force. Try your best to pull it as shallow of an angle (vs. straight up) as possible.
- As you pull on the adhesive tab, maintain pressure on the opening pick to wedge it underneath the battery as much as possible.
- ⓘ If the adhesive feels stuck, you can apply a few drops of adhesive remover or high concentration isopropyl alcohol into the gap to help loosen the battery. Doing this will most likely loosen both strips at once.
- Repeat the process with the second adhesive pull tab.

Step 26 — Remove the battery



- Remove the battery.

⚠ Do not reuse the battery after it has been removed, as doing so is a potential safety hazard. Replace it with a new battery.

☑ To install a replacement battery:

- Remove any remaining adhesive from the battery well.
- *Temporarily* re-connect the battery connector to its motherboard socket. This ensures that the battery will be properly aligned.
- Apply [stretch release adhesive strips](#), [double-sided tape](#), or [pre-cut adhesive strips](#).
- Lay the battery in the phone and press it firmly in place.
- Disconnect the battery connector from its motherboard socket and resume reassembly.

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

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%.

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

Repair didn't go as planned? Try some [basic troubleshooting](#), or ask our [Answers community](#) for help.

