

Google Pixel 5 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 the battery on a Google Pixel 5.

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, <u>take appropriate precautions</u>.

The rear cameras were removed in the photos, but it is not a necessary step to take when removing the battery.

TOOLS:

iOpener (1)

Suction Handle (1)

iFixit Opening Picks (Set of 6) (1)

Tweezers (1)

Spudger (1)

T3 Torx Screwdriver (1)

Isopropyl Alcohol (1)

ESD Safe Blunt Nose Tweezers (1)

Plastic Cards (1)

PARTS:

Google Pixel 5 Battery - Genuine (1)

Google Pixel 5 Battery Adhesive Strips -

Genuine (1)

Google Pixel 5 Display Adhesive -

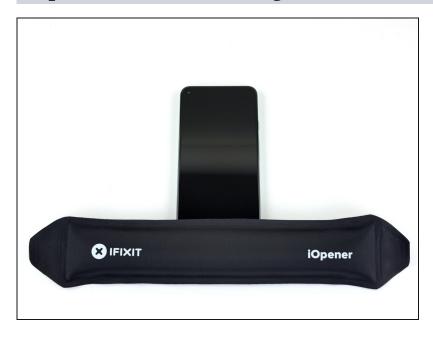
Genuine (1)

Google Pixel 5 Battery Graphite Tape -

Genuine (1)

Tesa 61395 Tape (1)

Step 1 — Heat the bottom edge of the screen



- Heat an iOpener and apply it to the bottom edge of the screen for one minute.
 - (i) 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.

Step 2 — Screen removal information

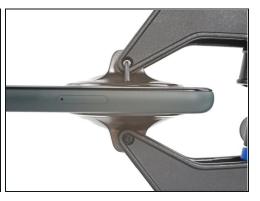


- (i) While you're waiting for the adhesive to loosen, take note of the following:
 - Screen seam: This seam separates the screen from the rest of the phone. **Do not pry at this seam.**
 - Bezel seam: This is where the plastic bezel designed to protect the screen meets the frame. It's held in place by plastic clips. This is where you should pry.

Step 3 — Anti-Clamp instructions







- (i) 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.
 - i For complete instructions on how to use the Anti-Clamp, check out this guide.
- Pull the blue handle towards the hinge to disengage opening mode.
- Position the suction cups near the bottom edge of the screen—one on the front, and one
 on the back.
- Push down on the cups to apply suction to the desired area.
 - (i) If you find that the surface of your device is too slippery for the Anti-Clamp to hold onto, you can use packing tape to create a grippier surface.







- Push the blue handle away from the hinge to engage opening mode.
- Turn the handle clockwise until you see the cups start to stretch.
 - (i) Make sure the suction cups <u>remain aligned to each other</u>. If they begin to slip out of alignment, loosen the suction cups slightly and realign the arms.
- Wait one minute to give the adhesive a chance to release and present an opening gap.
- Insert an opening pick under the screen and its bezel frame when the Anti-Clamp creates a large enough gap.
 - (i) If the Anti-Clamp doesn't create a sufficient gap, apply more heat to the area and rotate the handle clockwise half a turn.
 - ⚠ Don't crank more than a half a turn at a time, and wait one minute between turns. Let the Anti-Clamp and time do the work for you.
- Skip the next step.

Step 5 — Insert an opening pick







- Apply a suction cup to the screen, as close to the heated edge as possible.
- if your screen is badly cracked, follow this guide to tape over the cracked screen. If all else fails, you can superglue the suction cup to the broken screen.
- Pull up on the suction cup with strong, steady force to create a gap.
 - ② Depending on the age of your device, this may be difficult. If you have trouble, apply more heat and try again.
- Insert the opening pick into the gap.

Step 6 — Slice the bottom adhesive

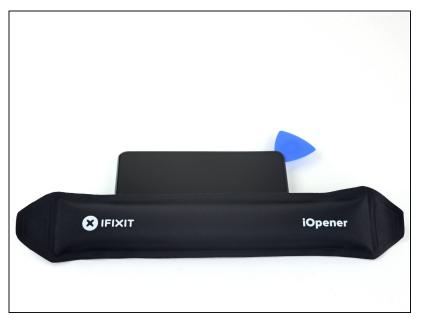






- Slide the opening pick back and forth along the bottom of the screen to slice the adhesive.
- Leave the pick inserted in the bottom right corner to prevent the adhesive from resealing.

Step 7 — Heat the left edge of the screen



 Apply a heated iOpener to the left edge of the screen for one minute.



- Insert another opening pick into the bottom left corner of the screen.
- Slide the opening pick around the left corner.
 - ⚠ Do not insert the pick more than 1/4 inch (6 mm) or you may damage the screen's flex cable located in the middle of the left edge.
- Continue to slide the pick up towards the front camera to slice the adhesive on the left edge of the screen.
- Leave the pick inserted to prevent the adhesive from re-sealing.



- Insert another opening pick into the top left corner of the screen.
- Slide the pick around the front camera and across the top edge of the phone.
 - if the adhesive is difficult to slice, apply heat to the area for one minute and try again.
- Slide the pick to the top right corner of the phone and leave the pick inserted.



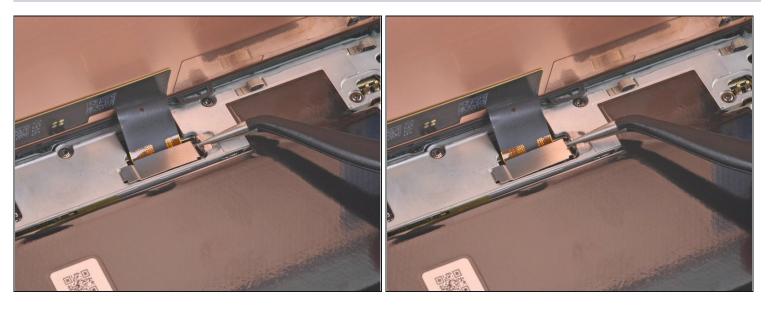
- Insert an opening pick into the bottom right corner of the screen.
- Slide the pick up to the top right corner to slice the last edge of adhesive.
 - ② You may need to run an opening pick around the edges again to ensure all the adhesive is cut. It is applied the thickest on the four corners.

Step 11 — Open up the screen

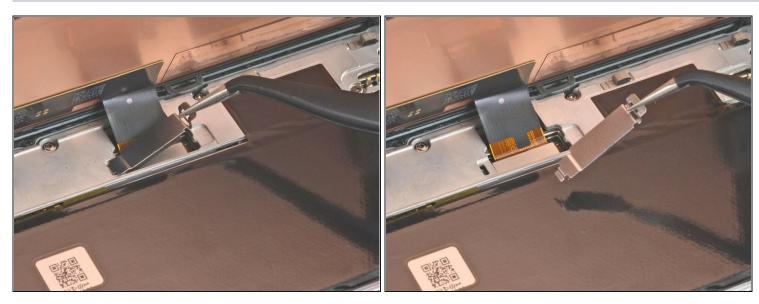


- Use the opening pick from the top left corner to lift up the left edge of the screen a few millimeters. This will keep the clips from snapping back down into the case.
- Lift up on the right side of the screen and open up the phone like a book.
 Do not open the screen more than 90 degrees to prevent damaging the screen flex cable.

Step 12 — Disconnect the screen



- Use tweezers to grip the screen connector cover securing the screen flex cable.
- Push the clip in towards the connector to unlatch it.



- Remove the screen connector cover.
- (i) Make sure to keep this component to reinstall it during reassembly.



- Use the tip of the spudger to pry up and disconnect the screen flex cable.
- 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 15 — Remove the screen





- Remove the screen.
 - (i) Use tweezers to pick off the <u>remaining adhesive</u> on the case.
 - ⚠ If you use isopropyl alcohol to clean the adhesive off the display, be sure to not let it splash onto any unintended components, as this can weaken their adhesive bond.
- If you replaced the screen, check the screen's front-facing camera hole and remove any protective liners covering it.
- If your replacement screen's display cable is held down by tape, remove the tape before installation.
- If you are using a custom-cut adhesive, follow <u>this guide</u> to correctly apply new screen adhesive.
- If you are using Tesa tape to reattach the screen, follow this guide.
- During the boot-up process after reassembly, the screen will go through a calibration sequence. Do not touch the screen during this process, as it could result in improper touch calibration and create touch issues.

Step 16 — Remove the graphite tape



- Use tweezers to lift up the graphite tape until you are able to grip it with your fingers.
 - ⚠ Take care not to puncture or bend the battery with your tool—a punctured or bent battery may leak dangerous chemicals or cause a thermal event.
- Peel off the graphite tape.



- Use tweezers to peel off the graphite pad covering the charging plate cover.
 - (i) If you are able to keep the graphite pad in good condition, you may reapply it during reassembly.

Step 18 — Remove the charging plate cover



- Use a T3 Torx driver to remove the two 4.6 mm-long screws securing the charging plate cover to the midframe.
- i Throughout this repair, keep track of each screw and make sure it goes back exactly where it came from.





- Use tweezers to remove the charging plate cover.
- (i) Make sure to keep this component to reinstall it during reassembly.



 Use a T3 Torx driver to remove the eight 4.6 mm-long screws securing the midframe.

Step 21 — Remove the midframe

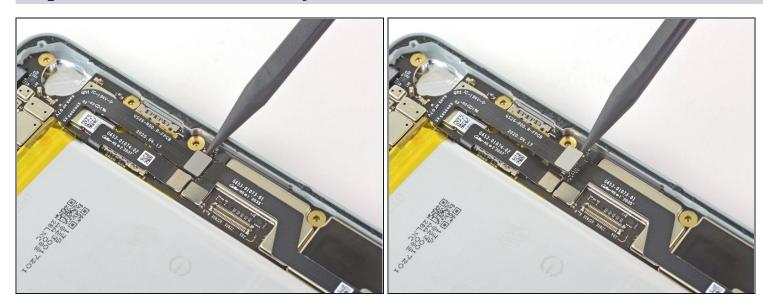






- Use tweezers to lift up the right side of the midframe.
- Remove the midframe.
- (i) The spacer at the top of the phone is likely to fall out when you remove the midframe. Remember to save this spacer for reassembly. See pictures in the motherboard replacement guide.

Step 22 — Disconnect the battery



• Use the pointed end of the spudger to pry the battery connector straight up and disconnect it from the motherboard.

Step 23 — Remove adhesive pull tabs





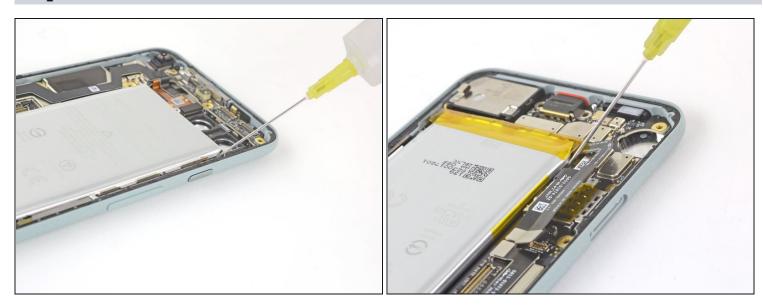


- Use blunt nose tweezers to grip the black adhesive pull tab located on the top right edge
 of the battery. Lift the pull tab with the tweezers until you are able to grip it with your
 fingers.
- Pull on the pull tab with a **slow, steady force at a shallow angle** to prevent the pull tab from snapping in the middle.
 - Try to keep the adhesive strips flat and unwrinkled during this procedure; twisted or wrinkled strips will stick together and break instead of pulling out cleanly.
 - (i) If the adhesive becomes hard to pull, you can roll it around a spudger and continue pulling.
- If the pull tab breaks prematurely, use tweezers to retrieve the remaining length of adhesive and continue pulling.
 - (i) If you are unable to retrieve it, move on to the next step.



- Use the same process to remove the pull tab located at the bottom left edge of the battery.
 - (i) If this tab breaks prematurely and you are not able to retrieve it with tweezers, move on to the next step.

Step 25 — Loosen the adhesive



• If any of the adhesive strips broke off underneath the battery and could not be retrieved, apply a few drops of high concentration (over 90%) isopropyl alcohol into the opening of the affected tab.





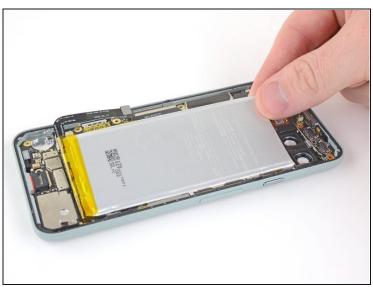
- Tilt the phone so that the alcohol flows towards the remaining adhesive.
- Wait one minute for the adhesive to soften, then proceed to the next step.

Step 27 — Remove the battery





- Insert an opening pick into the gap long the left side of the battery.
- Use the opening pick to slice the remaining adhesive at the top and bottom of the battery.
 - Avoid scraping the two flex cables under the battery with your opening pick.
 - (i) This may be difficult as the adhesive is <u>strategically located</u> between the cables and the battery tray. A possible solution is to cut a plastic card to fit between the flex cables and battery tray edge.
 - \triangle Do not bend the battery.
 - Avoid the <u>earpiece contact pins</u> located near the top left corner of the battery as you pry up with your opening pick.
- If you cannot pry the battery up, add a few more drops of isopropyl alcohol to the adhesive. A <u>plastic card</u> can also be helpful during this process.





⚠ Do not reuse the battery if it has been deformed or damaged, as doing so is a potential safety hazard. Replace it with a new battery.

Remove your old battery.

For optimal performance, <u>calibrate your newly installed battery</u> after completing this guide.

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? Try some <u>basic troubleshooting</u>, or ask our <u>Answers community</u> for help.