Google Pixel 6 Rear Camera 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.

Use this guide to remove or replace the rear camera assembly in your Google Pixel 6.

For your safety, discharge the 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.

Caution: The Pixel 6 contains class 1 lasers. Disassembly could result in exposure to invisible infrared laser emissions.

Retaining water resistance after the repair will depend on how well you reapply the adhesive, but your device will lose its IP (Ingress Protection) rating.

You'll need replacement adhesive to reattach components when reassembling the device.

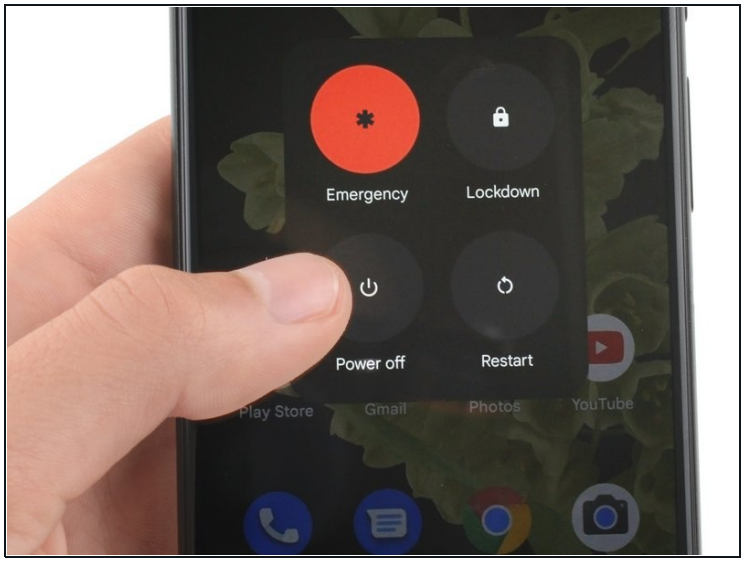
TOOLS:

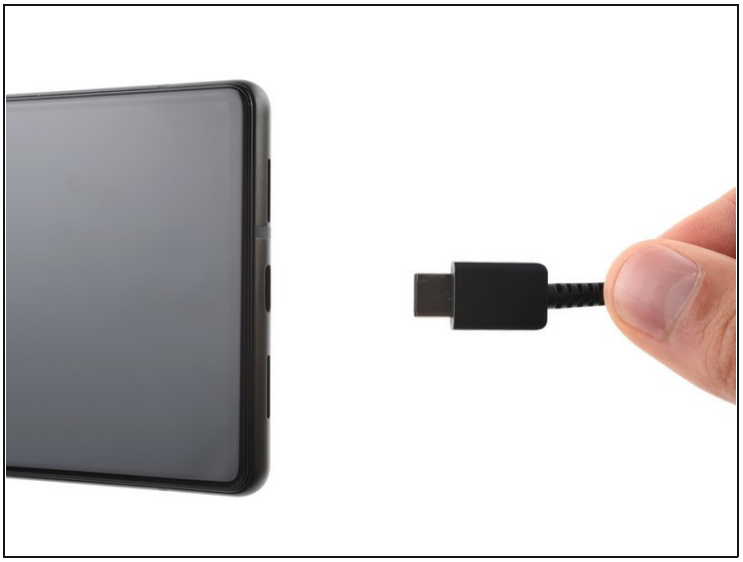
- Clampy - Anti-Clamp (1)
- iOpener (1)
- Suction Handle (1)
- iFixit Opening Picks (Set of 6) (1)
- Spudger (1)
- Tweezers (1)
- Microfiber Cleaning Cloths (1)
- Heat Gun (1)
- T3 Torx Screwdriver (1)
- ESD Safe Blunt Nose Tweezers (1)
- Isopropyl Alcohol (90% or Greater) (1)

PARTS:

- Google Pixel 6 Rear Camera - Genuine (1)
- Precut Double-Sided Adhesive Card (1)
- iFixit Adhesive Remover (1)

Step 1 — Safety precautions





⚠ Allow your battery to drain below 25% before starting this repair. A charged battery may catch fire if damaged.

- Fully power off your phone and unplug any cables.

Step 2 — Anti-Clamp instructions







ⓘ The next three 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.**

ⓘ For complete instructions on how to use the Anti-Clamp, check out this guide.

ⓘ If your screen is cracked, cover it with a layer of clear packing tape to help the suction cup adhere.

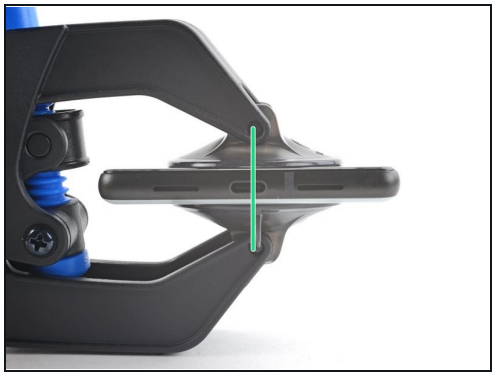
- Pull the blue handle backwards to unlock the Anti-Clamp's arms.
- Slide the arms over either the left or right edge of your phone.
- Position the suction cups near the bottom edge of the phone—one on the front, and one on the back.
- Squeeze the cups together to apply suction.

ⓘ If you find that the surface of your phone 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 forward 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.

Step 4







- Heat an iOpener and thread it through the arms of the Anti-Clamp.

  ⓘ You can also use a hair dryer or heat gun—but extreme heat can damage the display and/or internal battery, so proceed with care.

- Fold the iOpener so it lays on the bottom edge of the phone.

- Wait one minute to give the adhesive a chance to release and present an opening gap.

- Insert an opening pick under the screen frame 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 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 two steps.**

Step 5 — Loosen the display adhesive



- Apply a heated iOpener to the screen to loosen the adhesive underneath. Apply the iOpener for at least three minutes.

  ⓘ A hair dryer, heat gun, or hot plate may also be used, but be careful not to overheat the device.

Step 6 — Insert an opening pick



- Once the screen is warm to the touch, apply a suction handle to the bottom edge of the screen.

  ⓘ If your screen is badly cracked, covering it with a layer of clear packing tape may allow the suction handle to adhere. Alternatively, very strong tape may be used instead of the suction handle. If all else fails, you can superglue the suction handle to the screen.

- Lift the screen, including its safety frame, with the suction handle to create a small gap between the screen and the phone assembly.

- Insert an opening pick into the gap between the screen frame and the phone assembly.

  ⚠ Make sure to insert your opening pick in the right position to avoid separating the screen from its safety frame instead of the phone assembly.

- Slide the opening pick to the bottom right corner of the screen to slice its adhesive.

- Leave the opening pick in place to prevent the adhesive from resealing.

Step 7 — Slice the adhesive





- Insert a second opening pick at the bottom edge and slide it to the bottom left corner of the screen to slice the adhesive.
- Leave the opening pick in place to prevent the adhesive from resealing.

Step 8





- The screen of the Google Pixel 6 is not only held in place by adhesive but also small plastic clips. If your opening pick gets blocked during the screen removal procedure, it means you inserted your pick too deep underneath the screen. Only insert the tip of the opening pick (3-4 mm) when slicing the display adhesive.
- Insert a third opening pick underneath the bottom left corner of the screen.
- Slide the opening pick along the left edge of the screen to slice the adhesive.
- Leave the opening pick in the top left corner to prevent the adhesive from resealing.

Step 9





ⓘ If the adhesive becomes hard to cut, it has most likely cooled down. Use your iOpener or heat gun for 1-2 minutes to reheat it.

⚠ When you slice near the front facing camera, insert only the tip of the opening pick (2-3 mm) to avoid damaging or smearing the camera.

- Insert a fourth opening pick at the top left corner of the screen.
- Slide the opening pick along the top edge of the phone to slice the adhesive.
- Leave the opening pick in the top right corner to prevent the adhesive from resealing.

Step 10



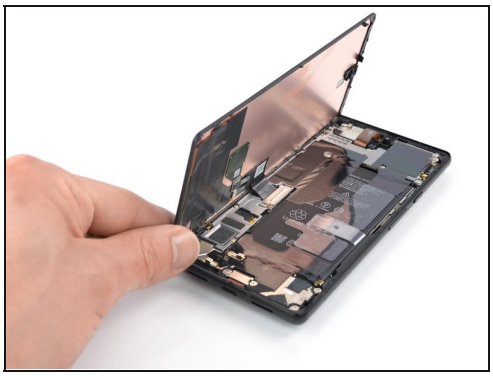


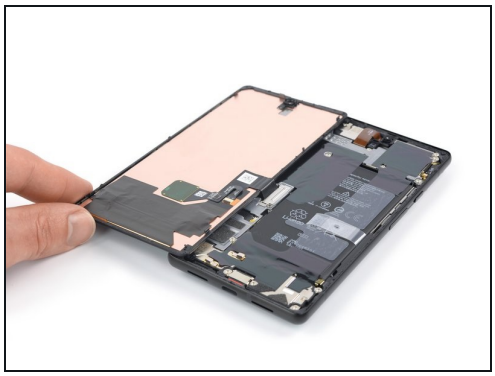
- Insert a fifth opening pick and slide it along the right edge of the phone to slice the remaining adhesive.

⚠ Do not try to remove the display all the way yet, the screen is still connected to the phone assembly.

Step 11 — Open up the phone assembly



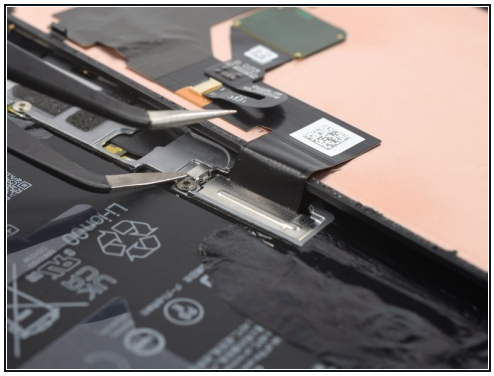
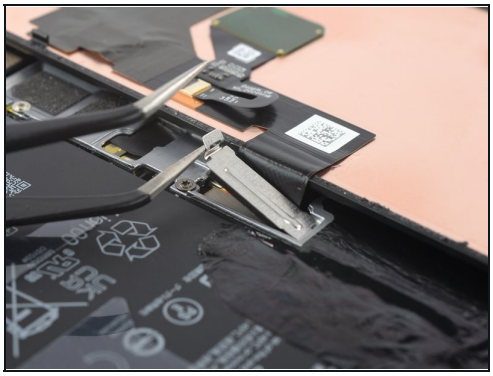
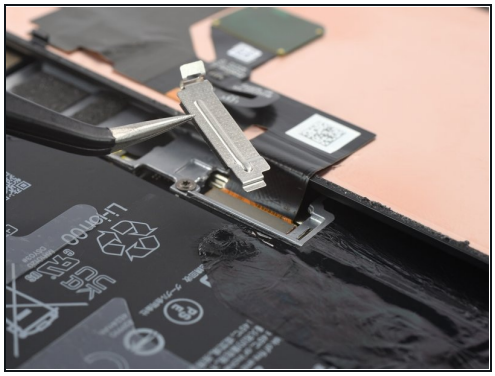




⚠ Avoid straining the display cable during the following procedure.

- Carefully open the right side of the screen to the left side of the phone assembly like you would open a book.

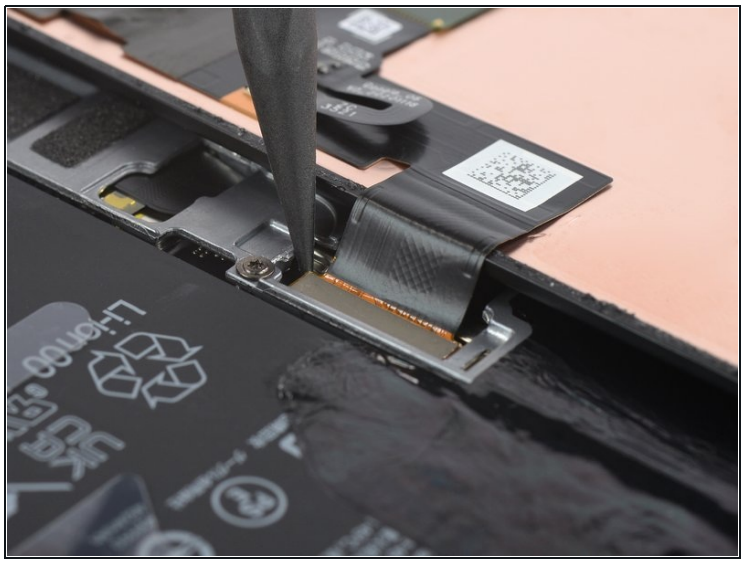
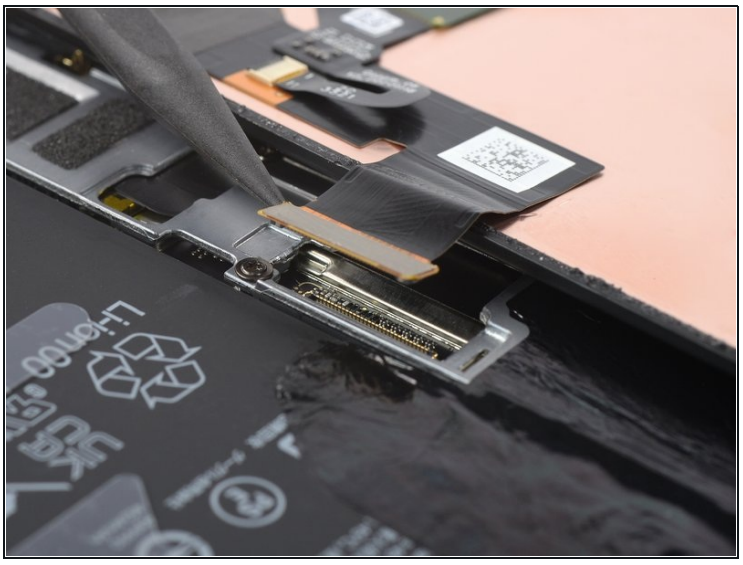
Step 12 — Remove the display cable bracket

- Use a pair of tweezers to carefully unhinge and remove the metal bracket sitting on top of the display cable connector.

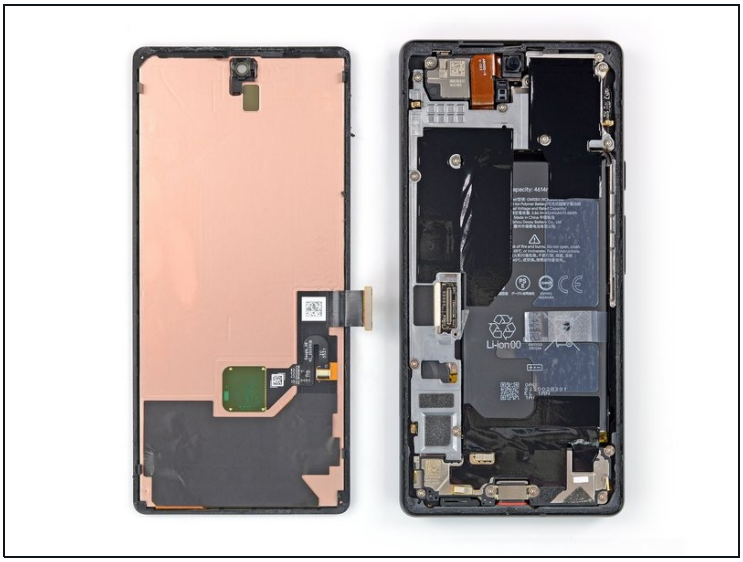
ⓘ Make sure to keep this component to reinstall it during reassembly.

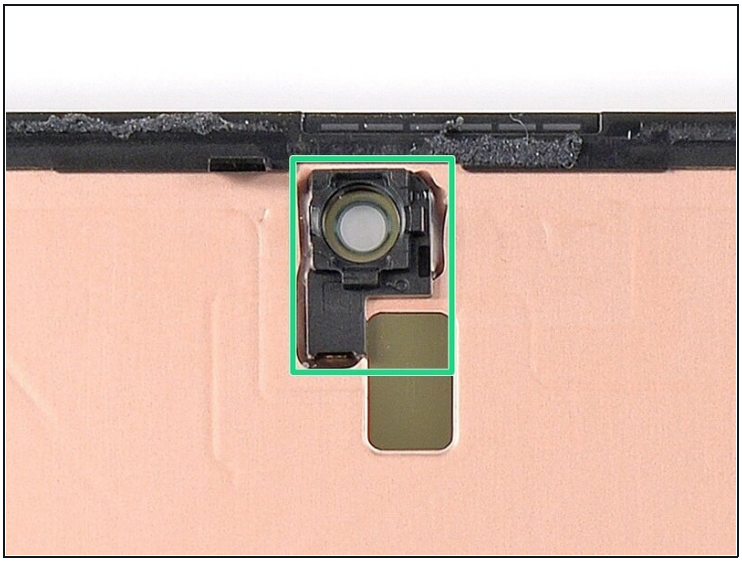
Step 13 — Disconnect the display cable

- Use a spudger to disconnect the display flex cable by prying the connector straight up from its socket.

Step 14 — Remove the screen





⚠ **The back of the Pixel's screen is very fragile. Even a small scratch or dent can damage the screen.** To prevent damaging your screen or replacement screen:

- When handling your screen, grip it by its edges.
- When placing the screen on your work area, make sure nothing is touching the bottom of the screen. Consider placing it on a soft, lint-free cloth.

- Remove the screen.

- Check if your replacement screen comes with the front camera plastic bracket. If not, use a spudger to pry the bracket from the old screen and adhere it to the new one using some double-sided tape.

Step 15 — Reassembly tips



During reassembly:

- If you replaced the screen, check the front-facing camera hole on the screen and remove any remaining protective liners in it.

Remember to reinstall the display cable bracket.

- This is a good point to test your phone before sealing it up. Temporarily connect your screen, power on your phone, and make sure it works as expected. Before continuing with reassembly, **power off your phone and disconnect the screen**.

- Follow this guide if you're using custom-cut adhesives for your device.

- Follow this guide if you're using a pre-cut adhesive card.

- If you're installing a new screen, follow this guide to calibrate the fingerprint sensor.

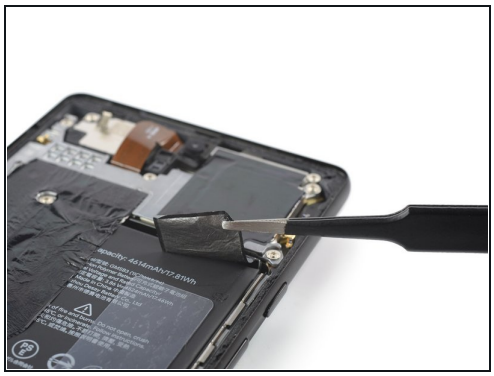
Step 16 — Loosen the graphite film adhesive



- Apply a heated iOpener or a heat gun to the rear glass to loosen the adhesive underneath the graphite films on top of the battery. Apply the iOpener for at least two minutes.

⚠ Don't apply heat directly onto the battery. It is susceptible to heat damage and could cause a thermal event.

Step 17 — Remove the graphite films





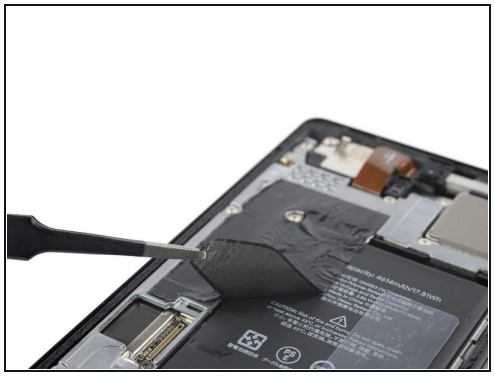
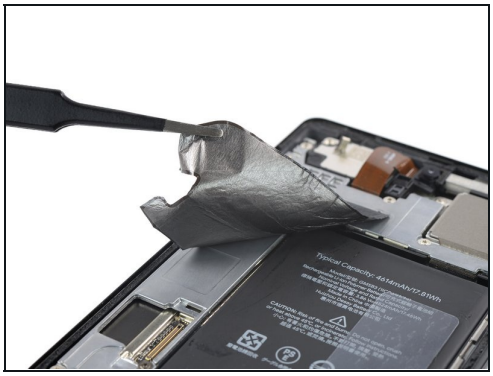
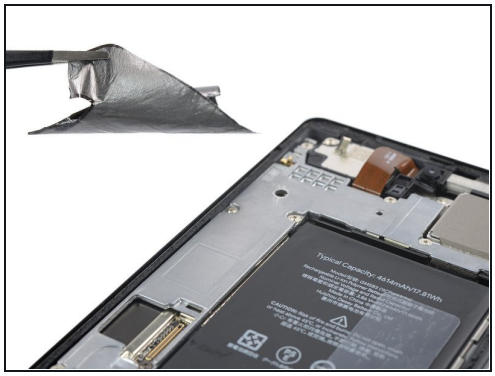


⚠ Take care not to puncture or bend the battery with your tool—a punctured or bent battery may leak dangerous chemicals or cause a thermal event.

- Use a pair of blunt nose tweezers or a clean fingernail to carefully peel the black graphite film off the top edge of the battery and the motherboard shield.

- Remove the graphite film.

Step 18

ⓘ If the graphite film is hard to peel off, it has most likely cooled down. Reapply your iOpener or heat gun to the rear glass for 1-2 minutes to reheat it.

- Use a pair of blunt nose tweezers or a clean fingernail to carefully peel the black graphite film off the left edge of the battery and the motherboard shield.

Step 19





ⓘ The graphite film at the bottom edge of the battery only needs to be removed when replacing the battery or the loudspeaker.

- Use a pair of blunt nose tweezers or a clean fingernail to carefully peel the black graphite film off the bottom edge of the battery and the loudspeaker assembly.
  - ⓘ You'll also remove a piece of foam that bridges the display and the speaker. Be sure to replace the foam after installing a new graphite film.
- Remove the graphite film.

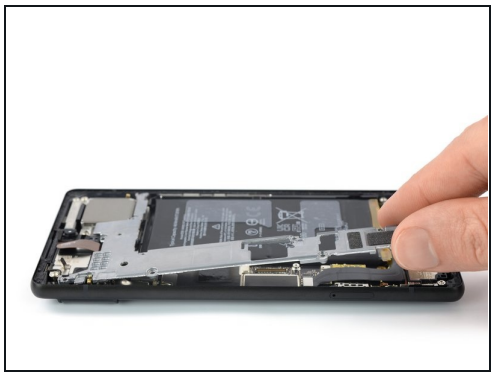
Step 20 — Unfasten the motherboard cover screws

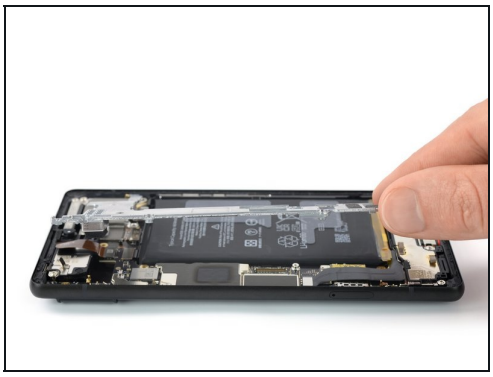


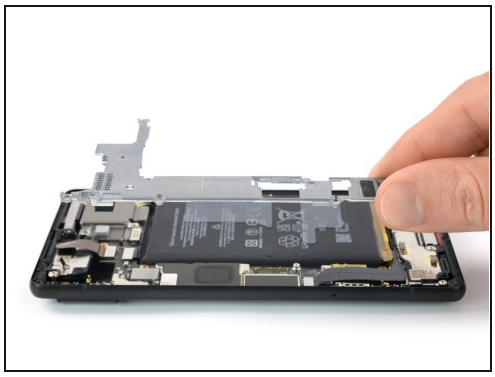
- Use a Torx T3 screwdriver to remove the screws securing the motherboard cover:
  - Eight 4.8 mm-long screws
  - One 2.4 mm-long screw

ⓘ Throughout this repair, keep track of each screw and make sure it goes back exactly where it came from.

Step 21

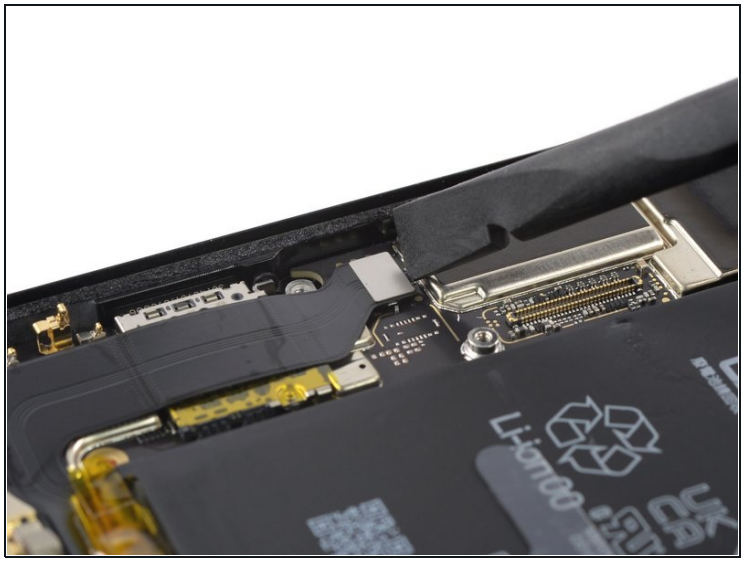


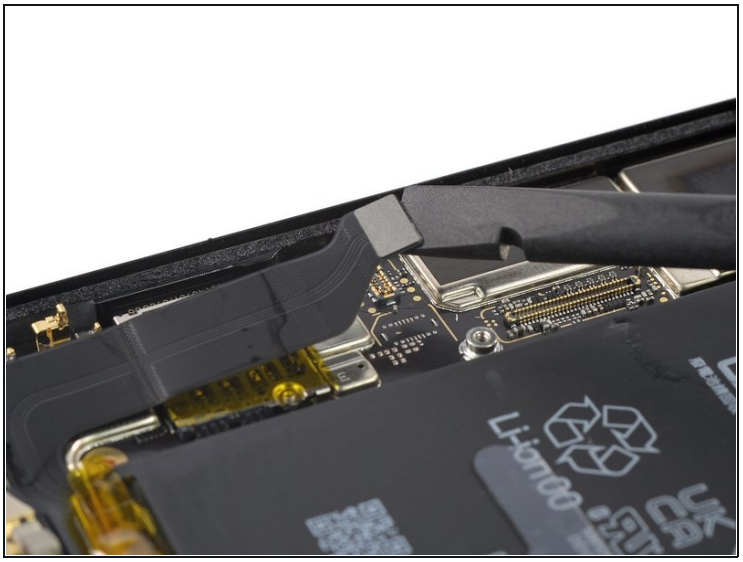




- Carefully lift up the motherboard cover and remove it.

Step 22 — Disconnect the battery cable





- Use a spudger to disconnect the battery cable by prying the connector straight up from its socket.

Step 23 — Unfasten the camera assembly screws



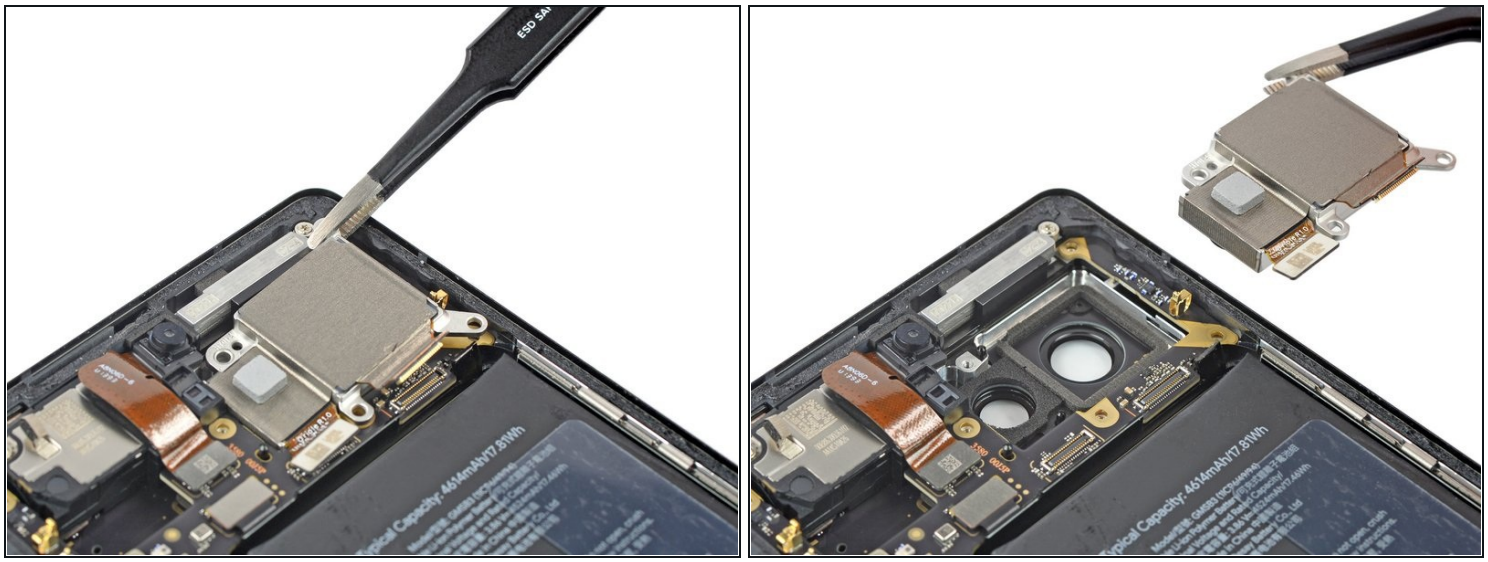
- Use a Torx T3 screwdriver to remove the two 4.8 mm-long screws securing the camera assembly.

Step 24 — Disconnect the camera cables



- Use a spudger to disconnect the two camera cables by prying their connectors straight up from their sockets.

Step 25 — Remove the rear camera assembly



- Use your fingers or a pair of tweezers to carefully lift the rear camera assembly out of its recess and remove it.

Compare your new replacement part to the original part—you may need to transfer remaining components like the grey protective cushion.

If your replacement camera module has a plastic spacer, be sure to remove it before you install the module.

Make sure the lens surface is smudge and dust free before you install the camera assembly.

If possible, turn on your device and test your repair before installing new adhesive and resealing.

To reassemble your device, follow these instructions in reverse order. During reassembly apply new adhesive where necessary after cleaning the relevant areas with isopropyl alcohol (>90%).

To run a diagnostics test with the built-in Pixel Diagnostic tool, click here.

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.