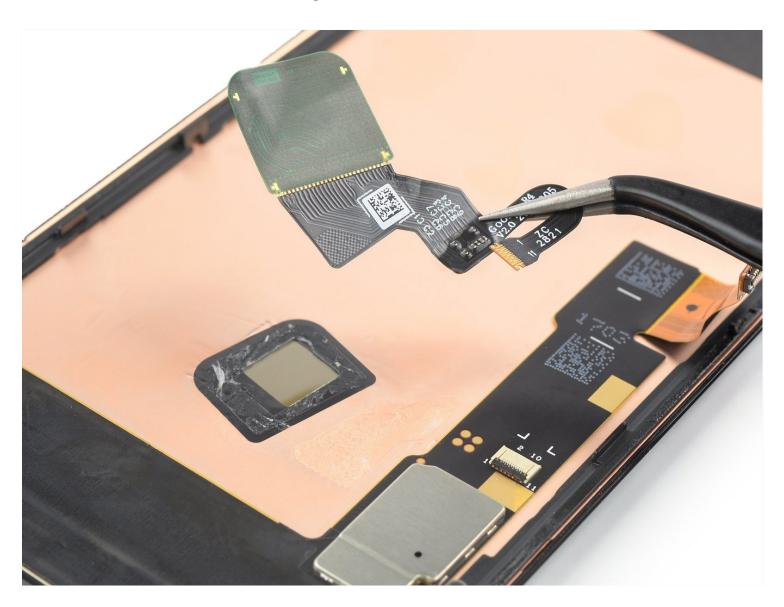


Google Pixel 6 Pro Fingerprint Reader Replacement

This repair guide was authored by the iFixit...

Written By: Dominik Schnabelrauch



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 replace the fingerprint reader in your Google Pixel 6 Pro.

If you replace the fingerprint reader in the Pixel 6 Pro or switch it between two different displays, you need to <u>recalibrate it</u> to maintain its functionality.

Warning: The replacement of the fingerprint reader in the Google Pixel 6 Pro is not super complicated however, the screen gets damaged very easily during the removal procedure.

Caution: The Pixel 6 Pro 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.

Note: Replacement fingerprint sensors are not available for sale on iFixit or from Google.

TOOLS:

Anti-Clamp (1)

iOpener (1)

Suction Handle (1)

iFixit Opening Picks (Set of 6) (1)

Spudger (1)

Tweezers (1)

T3 Torx Screwdriver (1)

Microfiber Cleaning Cloths (1)

Heat Gun (1)

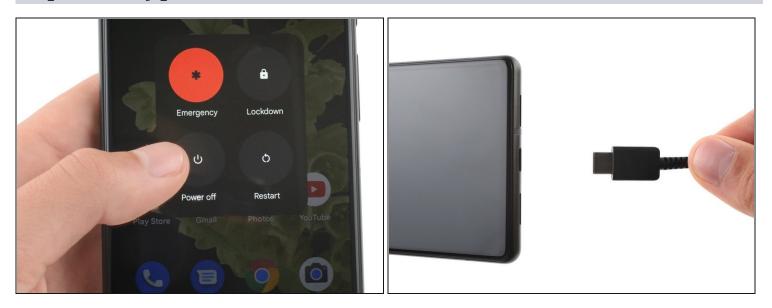
Isopropyl Alcohol (90% or Greater) (1)

ESD Safe Blunt Nose Tweezers (1)

PARTS:

Tesa 61395 Tape (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







- (i) The next three steps demonstrate the <u>Anti-Clamp</u>, 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.**
 - (i) For complete instructions on how to use the Anti-Clamp, check out this guide.
- (i) 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.
 - (i) If you find that the surface of your phone is too slippery for the Anti-Clamp to hold onto, you can <u>use tape</u> to create a grippier surface.







- 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.



- Heat an iOpener and thread it through the arms of the Anti-Clamp.
 - ② You can also use a <u>hair dryer</u> or <u>heat gun</u>—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.
 - (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 two steps.

Step 5 — Loosen the display adhesive



- Apply a <u>heated iOpener</u> to the screen to loosen the adhesive underneath. Apply the iOpener for at least 3 minutes.
 - (i) A hair dryer, heat gun, or hot plate may also be used, but be careful not to overheat the device.

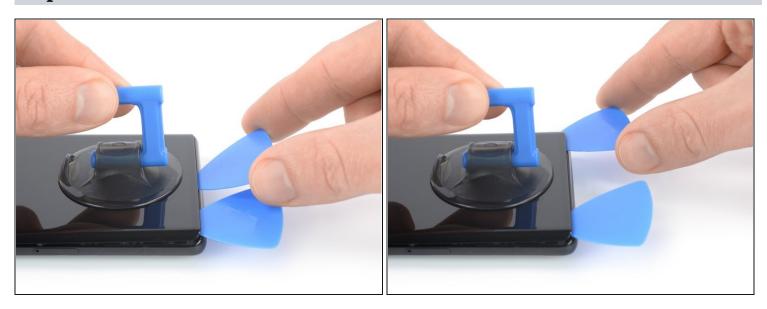
Step 6 — Insert an opening pick



- Once the screen is warm to the touch, apply a suction handle to the bottom edge of the screen.
 - (i) If your screen is badly cracked, covering it with a layer of clear packing tape may allow the suction handle to adhere. Alternatively, <u>very strong tape</u> 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 left corner of the screen to slice its adhesive.
- Leave the opening pick in place to prevent the adhesive from resealing.

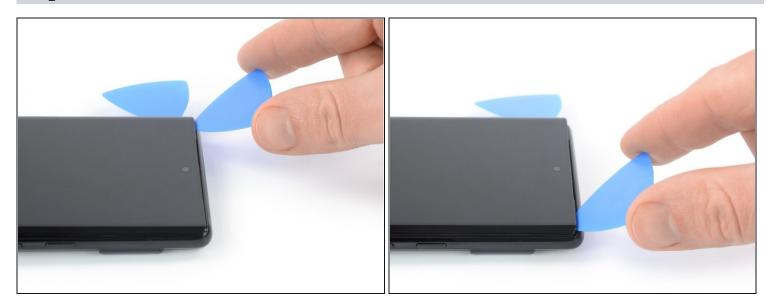
Step 7 — Slice the adhesive



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



- (i) The screen of the Google Pixel 6 Pro is not only held in place by adhesive but also small plastic pins. In case 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.



- (i) If the adhesive becomes hard to cut, it has most likely cooled down. <u>Use your iOpener</u> 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.



• 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 fold the screen to the left side of the phone assembly like you would open the front cover of a book.

Step 12 — Unfasten the display bracket screw



- (i) While the Pixel 6 Pro uses Torx Plus screws, standard Torx bits work. Make sure to apply constant, downward force to prevent stripping.
- Use a Torx T3 screwdriver to remove the 2.0 mm-long 3IP Torx Plus screw securing the display cable metal bracket.
- *track of each screw* and make sure it goes back exactly where it came from.

Step 13 — Remove the display cable bracket



- Use a pair of tweezers to remove the metal bracket sitting on top of the display cable connector.
- (i) Make sure to keep this component to reinstall it during reassembly.

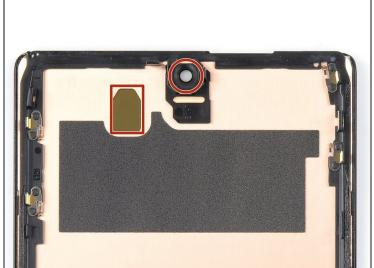
Step 14 — Disconnect the display cable



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

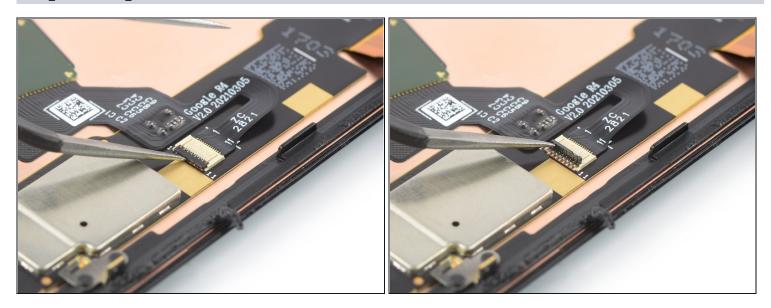
Step 15 — Remove the screen





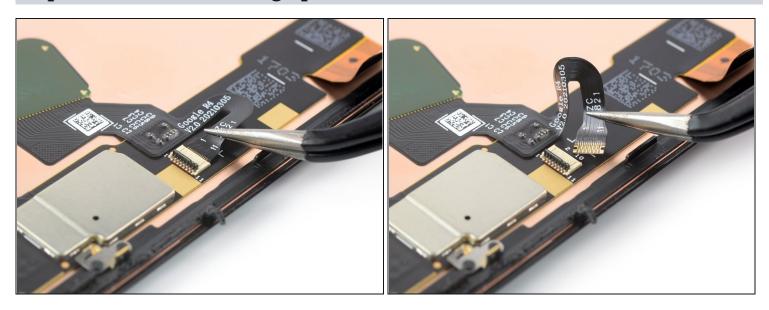
- Remove the screen.
- During reassembly:
 - If you replaced the screen, check the screen's front-facing camera hole and sensor cutout for any protective liners. Remove these liners before you close the phone up.
 - (i) Remember to reinstall the display cable bracket.
 - This is a good point to test 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 in case 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 — Open the ZIF connector



- If you replace the fingerprint reader in the Pixel 6 Pro or switch it between two different displays you need recalibrate it to maintain its functionality.
- Use one arm of a pair of tweezers to carefully open the ZIF connector at the rear side of the screen.

Step 17 — Disconnect the fingerprint reader



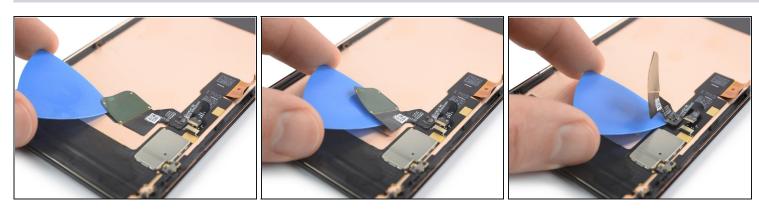
• Use a pair of tweezers to disconnect the fingerprint reader by pulling its cable out of the ZIF connector.

Step 18 — Loosen the fingerprint reader adhesive



 Apply a <u>heated iOpener</u> to the screen where the fingerprint reader is located to loosen the adhesive underneath. Apply the iOpener for at least 3 minutes.

Step 19 — Separate the fingerprint reader from the screen



- Carefully slide an opening pick underneath the fingerprint reader to slice its adhesive.
 - i Be very gentle during this procedure. Too much force might damage the display. If the adhesive is hard to cut, <u>reapply your iOpener</u> for another minute to loosen it.

 \triangle Be careful not to overheat the screen—the display is susceptible to heat damage.

Use your opening pick to separate the fingerprint reader from the screen.

Step 20 — Remove the fingerprint reader



- Use a pair of tweezers or your fingers to carefully remove the fingerprint reader.
 - 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. Remove the old fingerprint reader adhesive before installing a new one.

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, <u>click here</u>.

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</u> <u>community</u> for help.