Google Pixel 3 Screen Assembly Replacement

This repair guide was authored by the iFixit...

Written By: Alex Diaz-Kokaisl

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 screen assembly in your Google Pixel 3.

This guide is written for the genuine Google screen assembly. The assembly consists of the screen and frame together in one part. Be sure you have the right part before you begin the repair.

Some photos in this guide are from a different model and may contain slight visual discrepancies, but they won't affect the guide procedure.

TOOLS:

- Phillips #000 Screwdriver (1)
- iOpener (1)
- Suction Handle (1)
- iFixit Opening Picks (Set of 6) (1)
- Spudger (1)
- Tweezers (1)
- Isopropyl Alcohol (1)
- Phillips #00 Screwdriver (1)
- Standoff Screwdriver for iPhones (1)
- Halberd Spudger (1)
- SIM Card Eject Tool (1)

PARTS:

- Tesa 61395 Tape (1)
- Google Pixel 3 Screen Assembly - Genuine (1)

Step 1 — Remove the SIM card tray

- Insert a SIM eject tool, bit, or straightened paper clip into the SIM card tray hole.
- Press the SIM eject tool into the SIM card tray hole to eject the SIM card tray.
- Remove the SIM card tray.

Step 2 — Weaken the back cover's adhesive

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

Step 3 — 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.

  ⓘ 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.

  ⓘ 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.

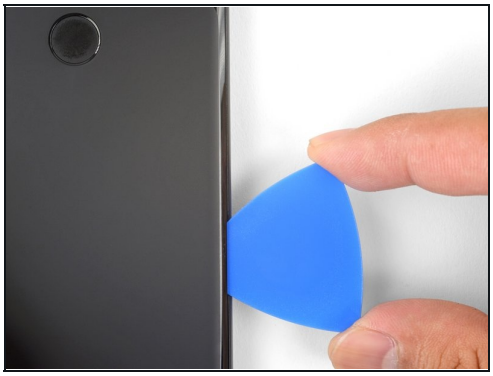
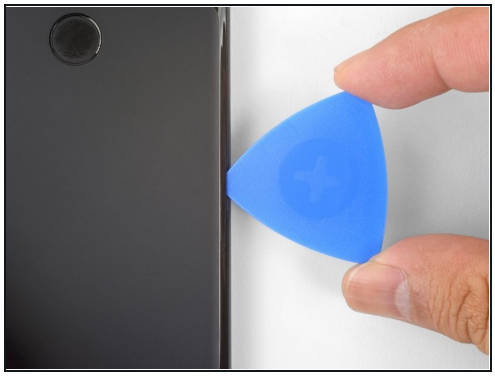
Step 4 — Fingerprint cable information

⚠ 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 5 — 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.

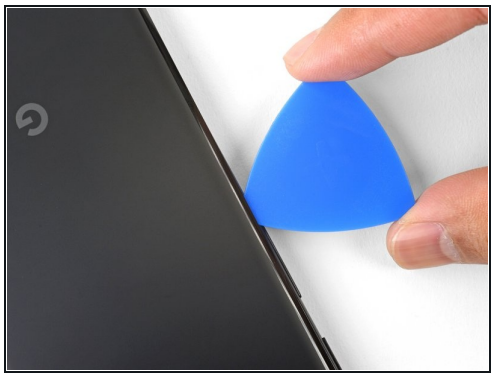
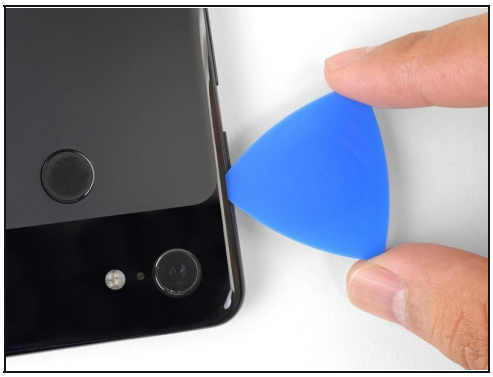
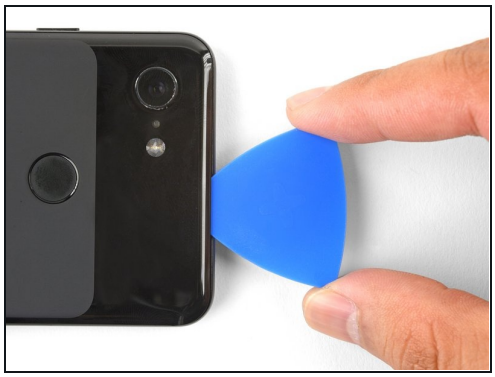
Step 6

- Heat the right edge with an iOpener and continue slicing the adhesive with an opening pick.

ⓘ The adhesive can be very gummy. Push the pick in and out in a sawing motion to help with slicing.

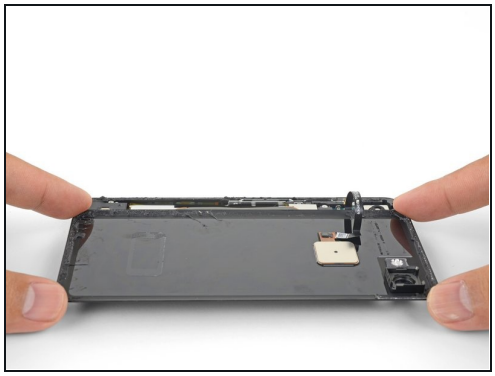
Step 7

- 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 8 — Lift the left edge of the back cover

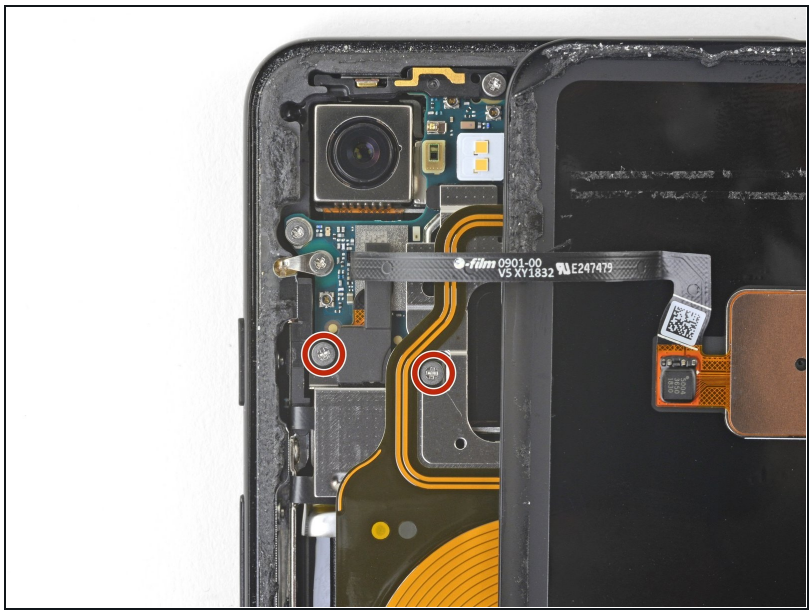


- Once you have sliced around the perimeter of the phone, carefully lift the **left edge** of the back cover.

⚠ 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 9 — Remove the screws

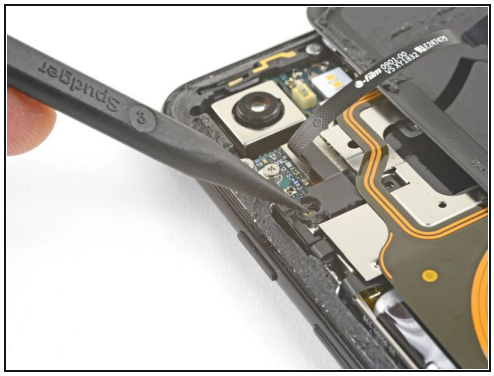
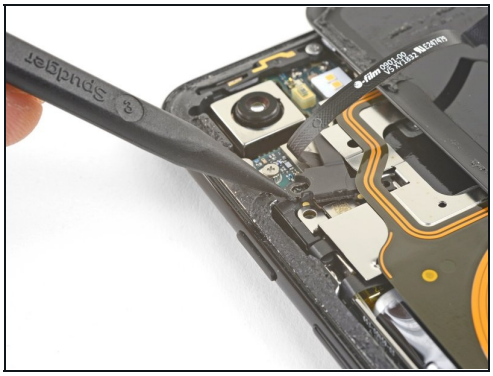
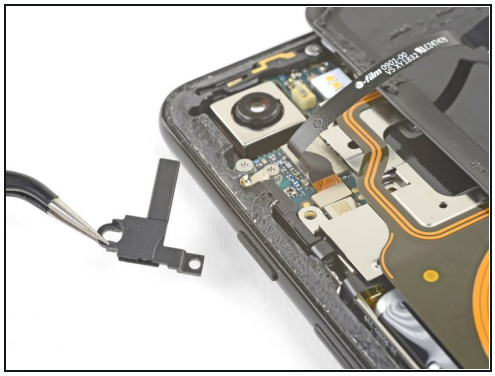


- Remove the two 4.1 mm-long Phillips screws securing the fingerprint connector bracket.

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

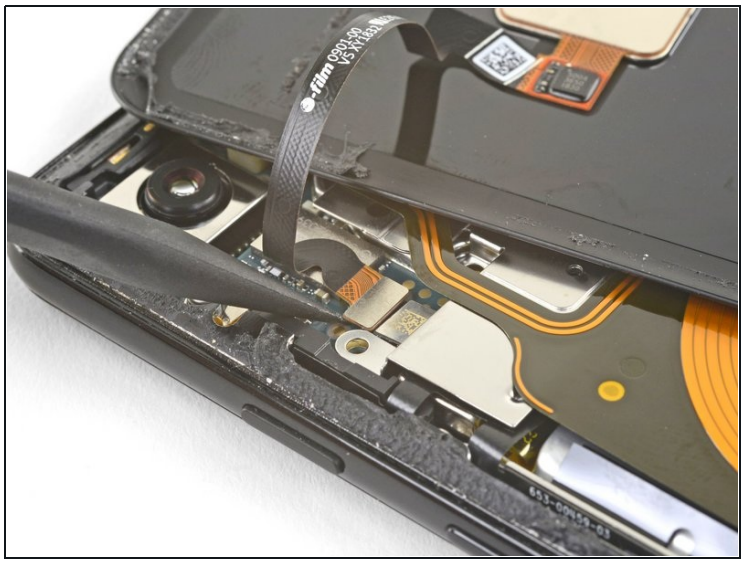
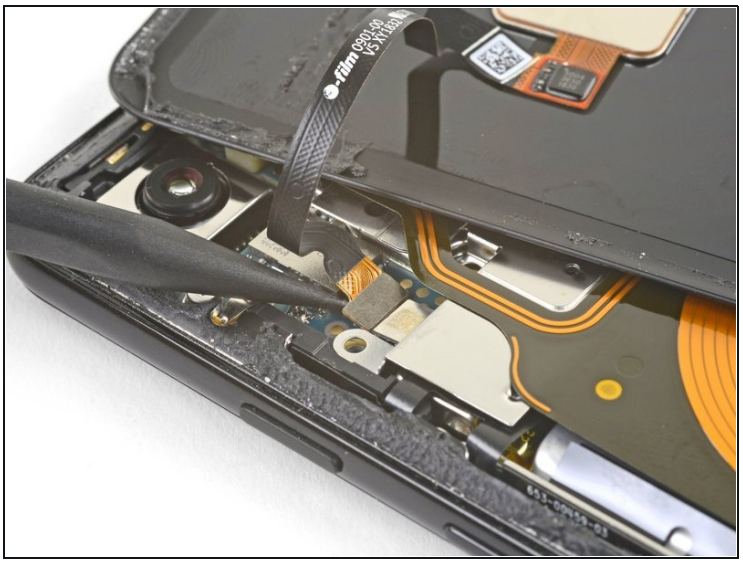
During reassembly, be careful not to over-tighten these screws, or you may damage your display.

Step 10 — 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.

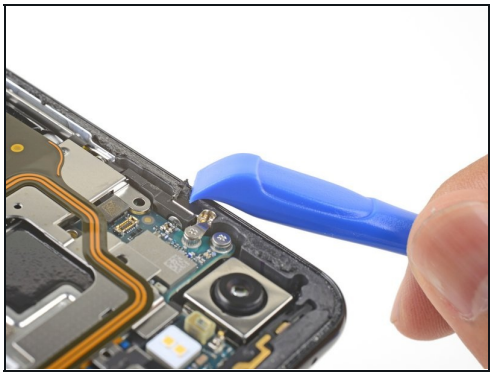
Step 11 — Disconnect the fingerprint connector

- Use the point of a spudger to pry up and disconnect the fingerprint connector from its socket.
  - ⓘ When you disconnect connectors like these, be careful not to dislodge the small surface-mounted components surrounding the socket.

To re-attach press connectors 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 12 — 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 13 — 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

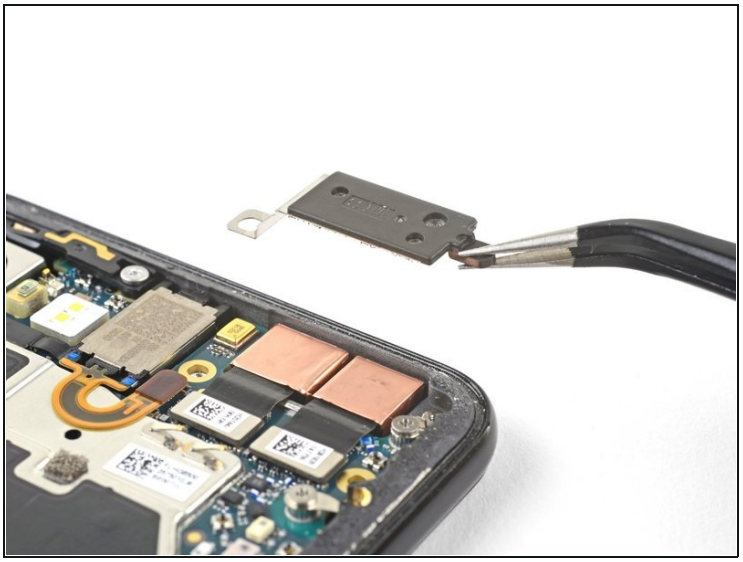
Step 14 — Remove the charging coil

- Lift up and remove the wireless charging coil.

Step 15 — 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 16 — Remove the screws

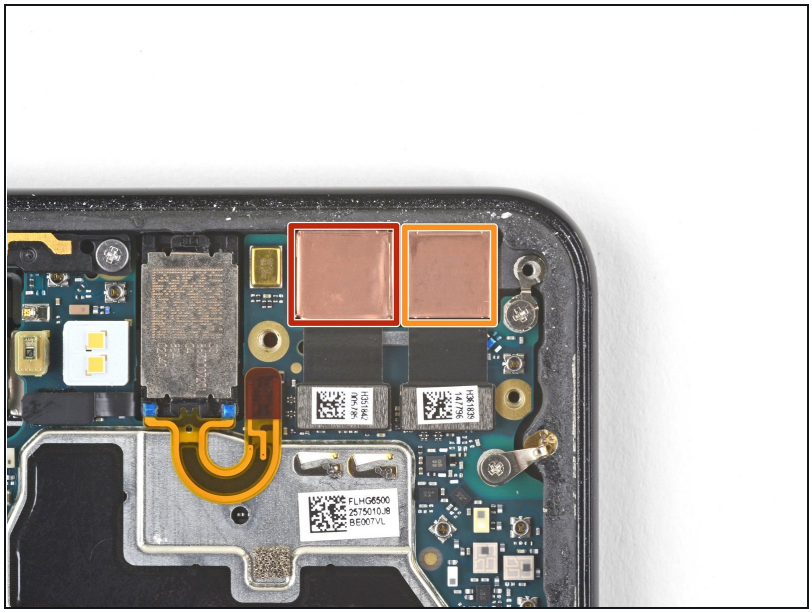


- Remove the two screws securing the camera bracket:
  - One 4.1 mm Phillips screw
  - One 4 mm standoff screw

ⓘ Standoff screws are best removed using a standoff bit. In a pinch, a small flathead screwdriver will do the job—but use extra caution to ensure it doesn't slip and damage surrounding components.

- Remove the camera bracket.

Step 17 — Identify the cameras

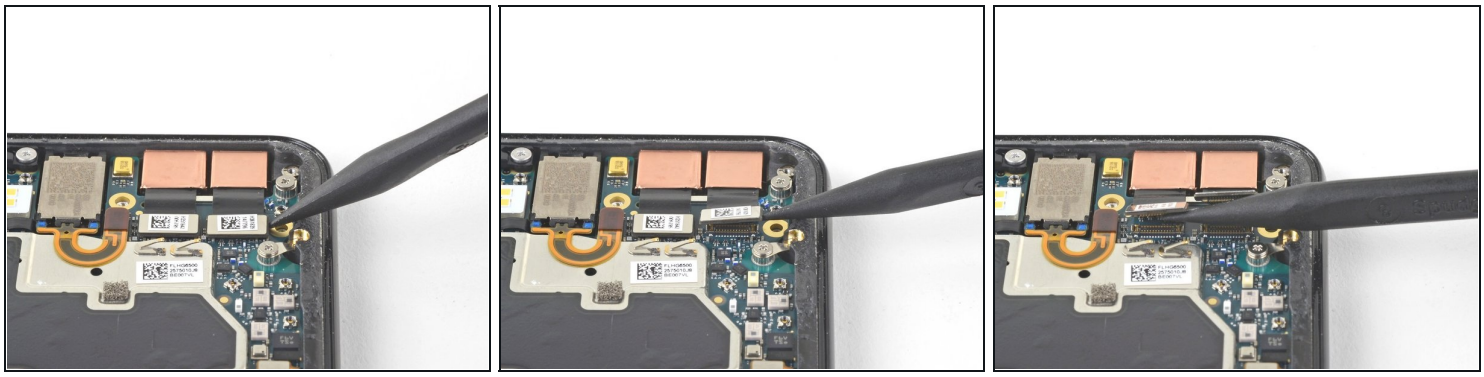


ⓘ If you are replacing front-facing cameras, determine which one you need to replace:

- Normal view camera
- Wide-angle camera

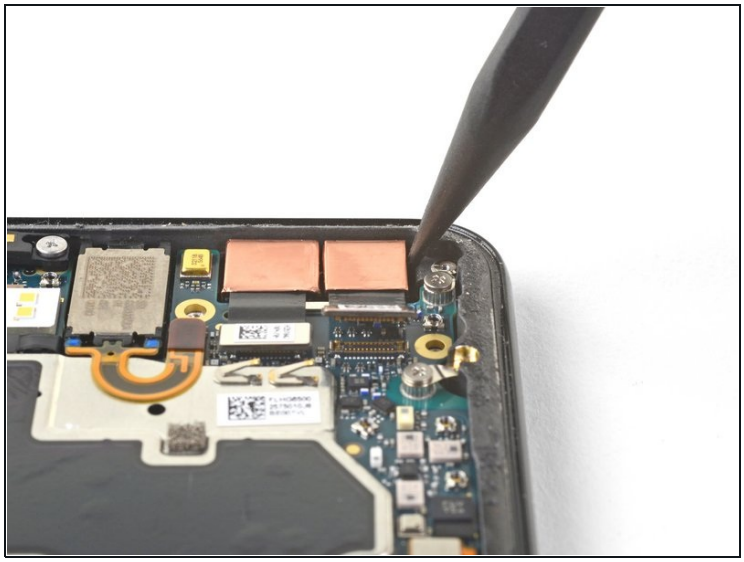
ⓘ If you are doing the motherboard removal procedure, you will need to remove both cameras.

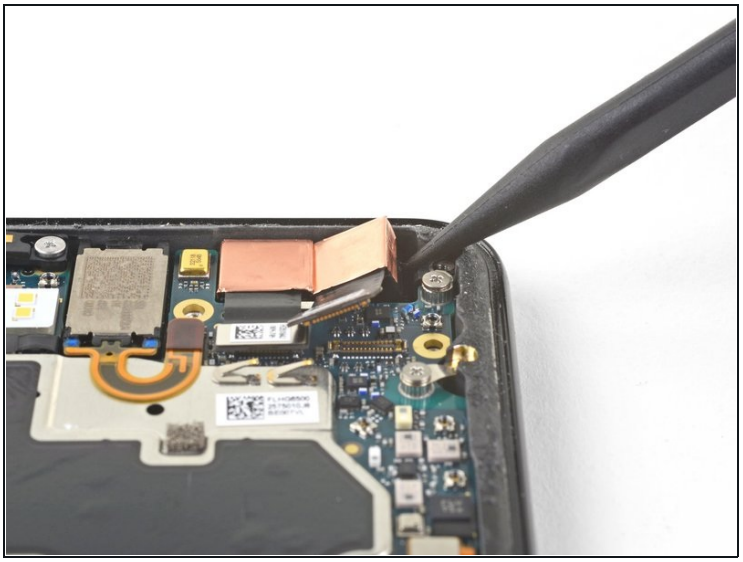
Step 18 — Disconnect the camera(s)



- Use the point of a spudger to pry up and disconnect the connector for the camera(s) you are replacing.

Step 19 — Loosen the camera(s)

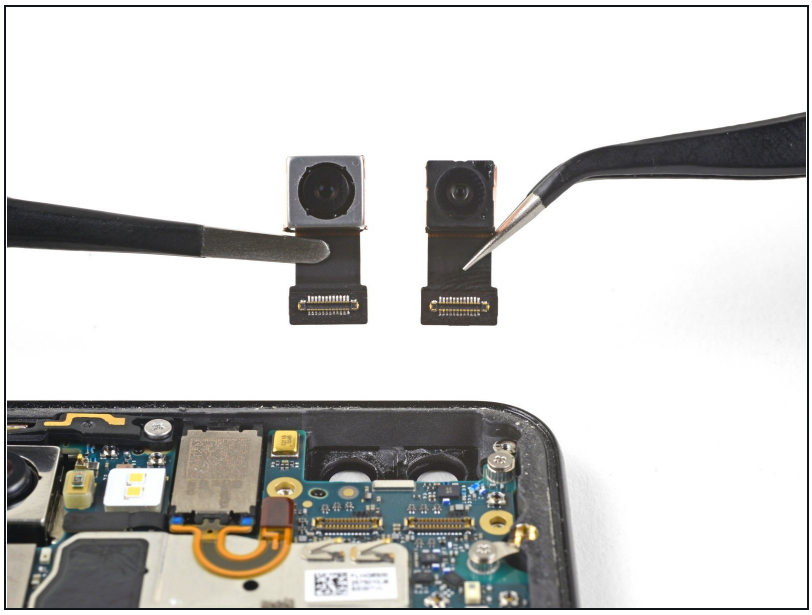




ⓘ The cameras are held in place with adhesive.

- Insert the point of a spudger behind the edge of the camera module and pry up to loosen it from the frame.

Step 20 — Remove the camera(s)



- Use a pair of blunt nose tweezers to remove the camera(s).

If the adhesive holding the camera module is in good condition, you can re-use the adhesive. Otherwise, replace the adhesive with double-sided Tesa tape.

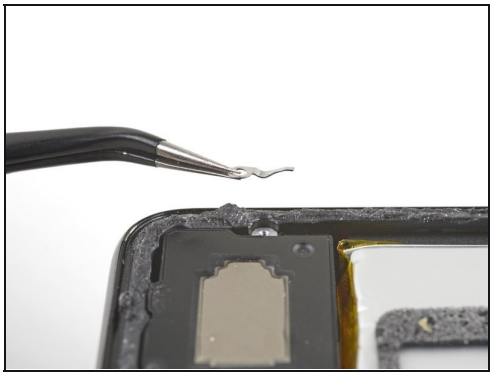
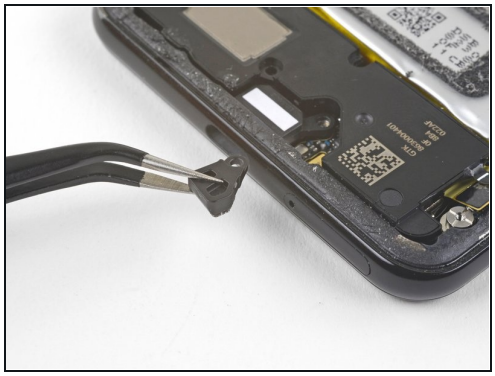
When installing a replacement camera module, make sure that the phone frame lens are free of adhesive residue or debris.

Step 21 — Disconnect the loudspeaker

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

⚠ Be careful not to puncture the battery with the spudger.

Step 22 — Remove the screws

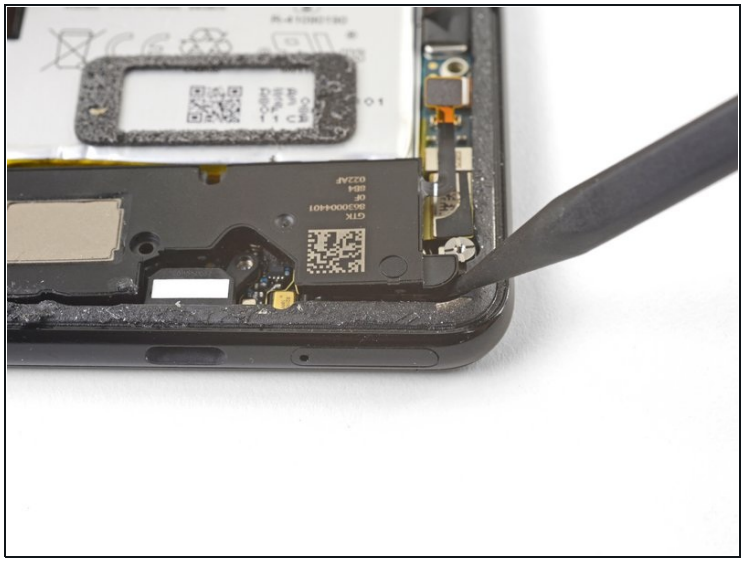



- Remove the following four Phillips screws:
  - One 1.9 mm screw
  - One 4.3 mm screw
  - Two 4.3 mm screws with thinner shanks
- Remove the tiny grounding clip from the left screw hole. Be careful not to lose it.

  The grounding clip installs such that the contoured edge faces the left side of the phone.
- Remove the small plastic insert from the right side of the USB-C port.

  Be sure to reinstall this insert before you screw down the daughterboard.

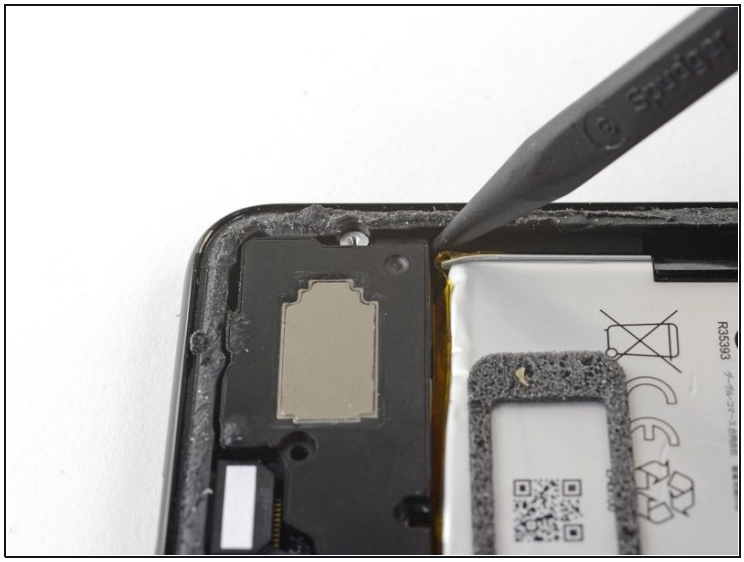
Step 23 — Loosen the loudspeaker

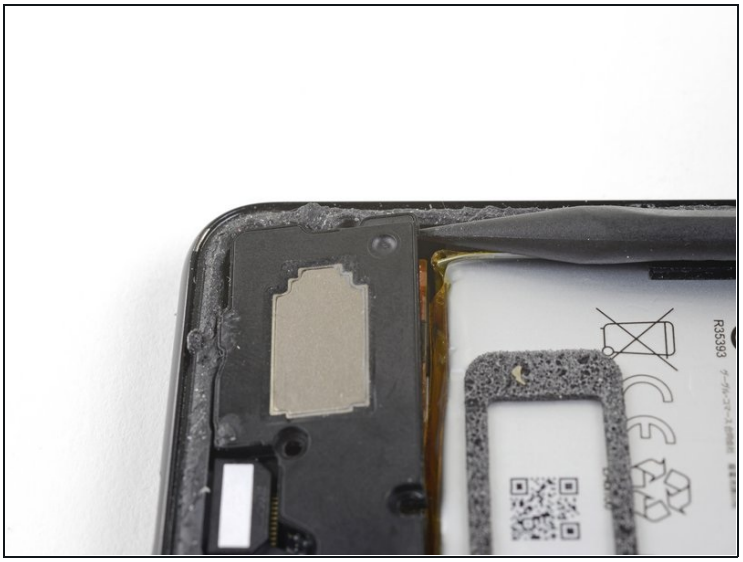


ⓘ The loudspeaker is still held in place by a strong adhesive gasket. Before attempting to remove it, pry it up in a few different places to break the adhesive seal.

- Insert the point of a spudger under the bottom right corner of the loudspeaker.
- Pry up to loosen the loudspeaker from the phone.

Step 24



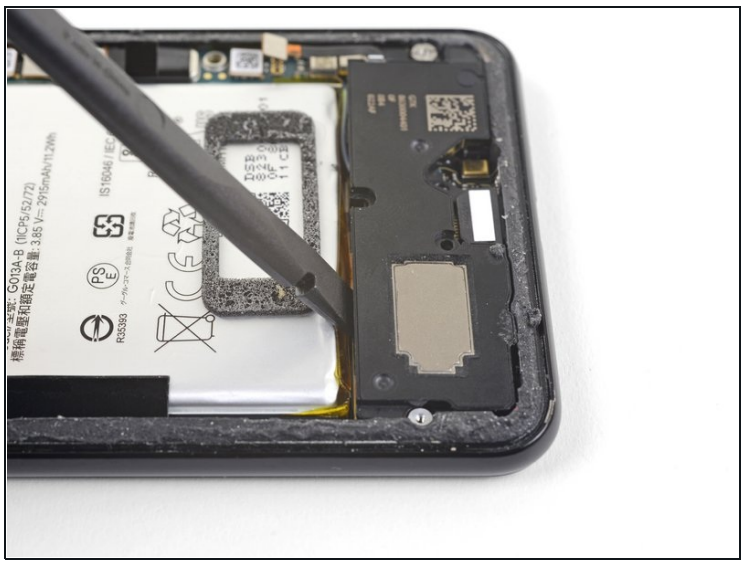


- Insert the point of a spudger under the top left corner of the loudspeaker.

  ⚠ Be careful not to puncture the battery with the spudger.

- Pry up to loosen the loudspeaker.

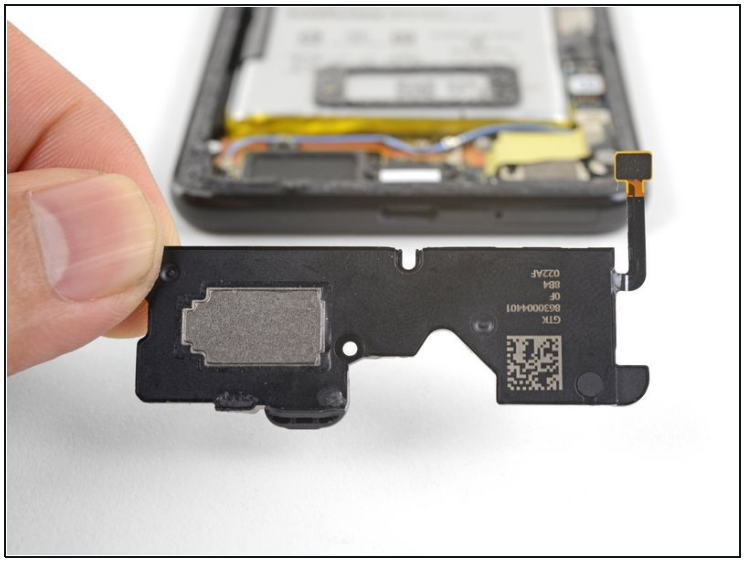
Step 25

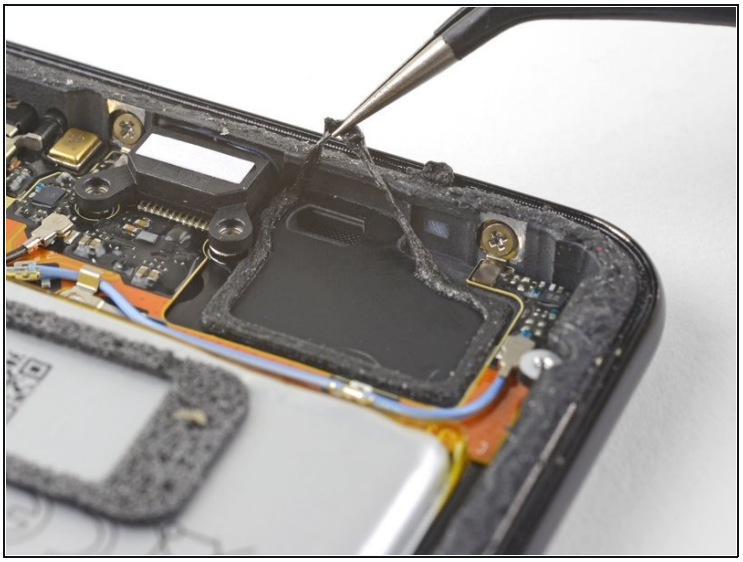


- Insert the flat end of the spudger under the top edge of the loudspeaker, towards the left edge.

- Pry up to loosen the loudspeaker.

Step 26 — Remove the loudspeaker



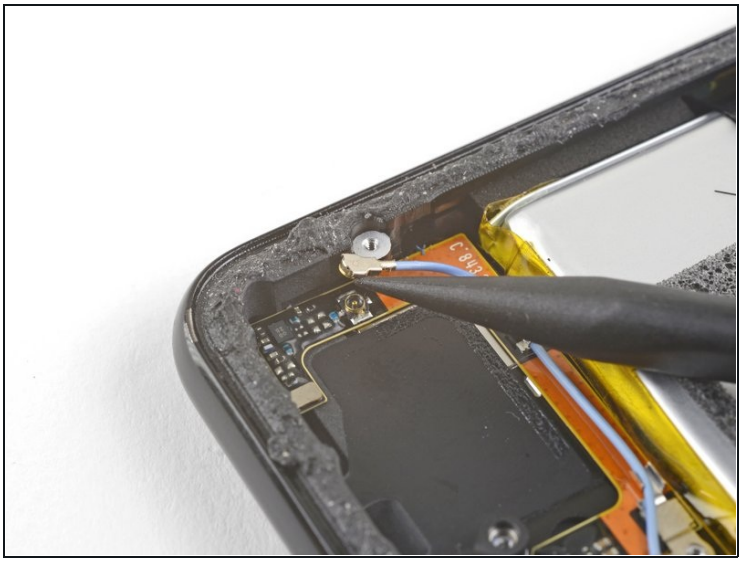


- Remove the loudspeaker.

Before you install a replacement loudspeaker, check the adhesive gasket.

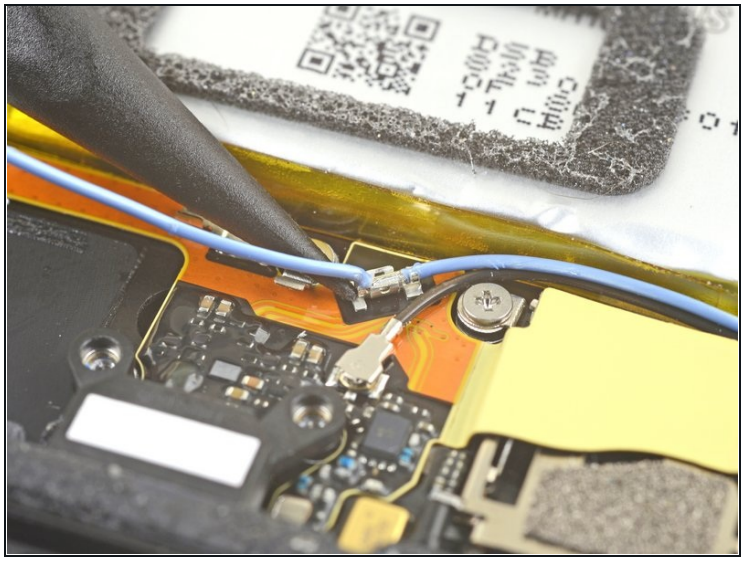
- If it is in good condition, you can re-use the gasket. Make sure that the gasket does not cover the exit hole.
- If the gasket is pulled out of place, remove it and replace the adhesive with a pre-cut strip or Tesa tape.

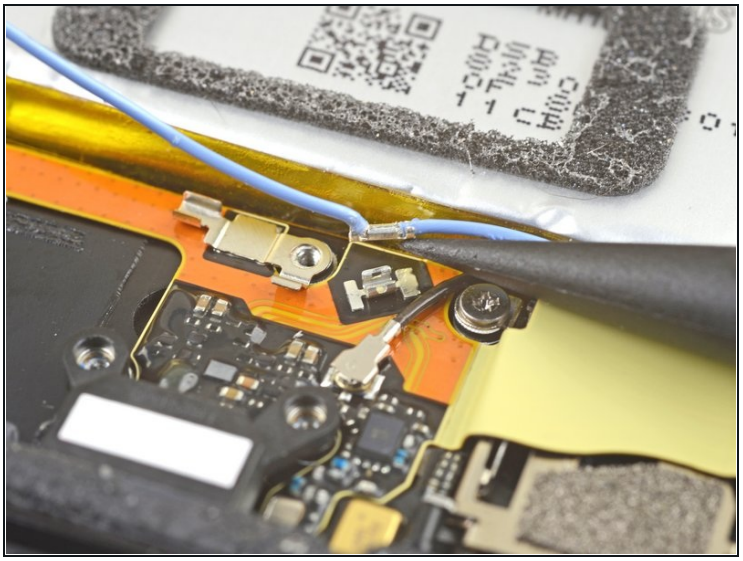
Step 27 — Disconnect the blue antenna cable



- Use the point of a spudger to pry up and disconnect the blue antenna cable from its socket on the charging assembly.

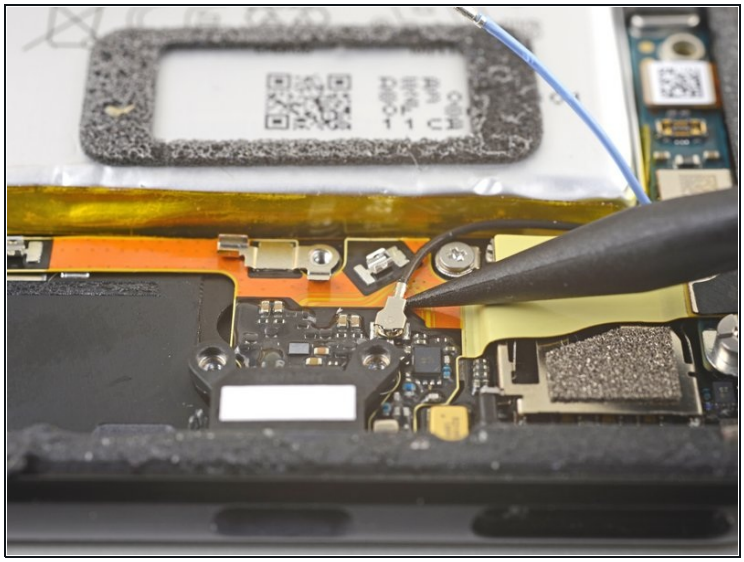
Step 28

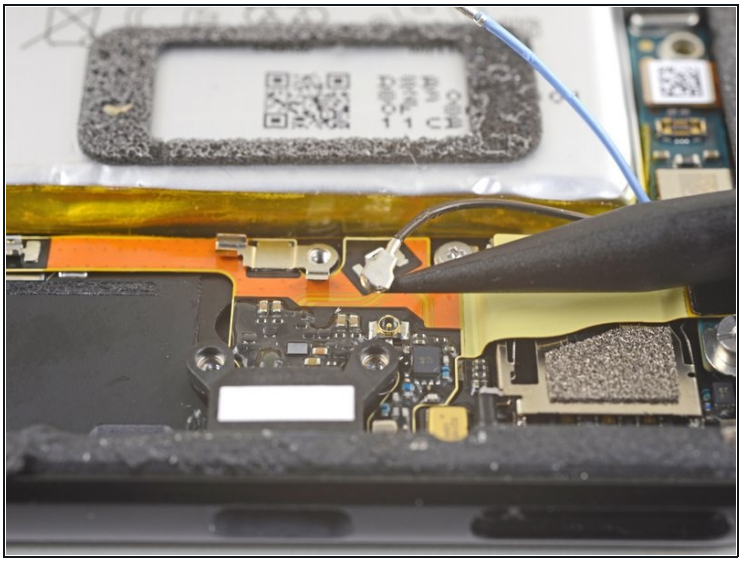




- Use the point of a spudger to carefully pry up and release the blue antenna cable from its grounding clips.
  - ⓘ The cable is fragile and prone to breaking. If it feels like the wire is firmly clamped in place, use the point of a spudger to push the clip open slightly, then try again.

Step 29 — Disconnect the black antenna cable



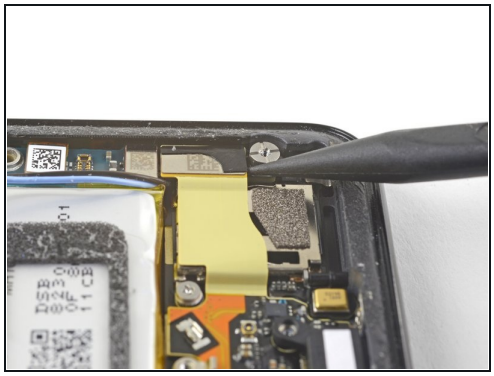
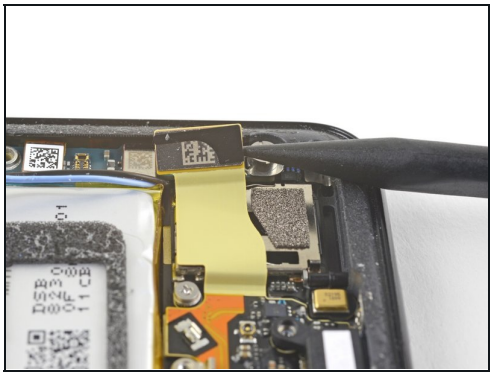
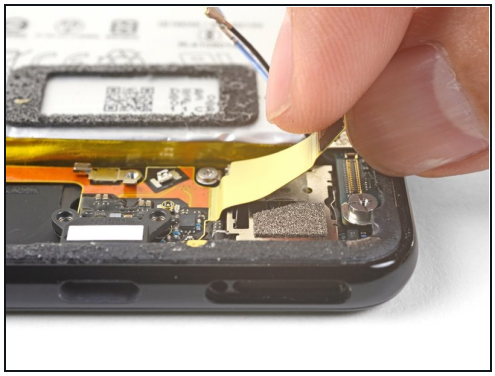


- Use the point of a spudger to pry up and disconnect the black antenna cable from its socket near the USB-C port.

Step 30 — De-route the antenna cables

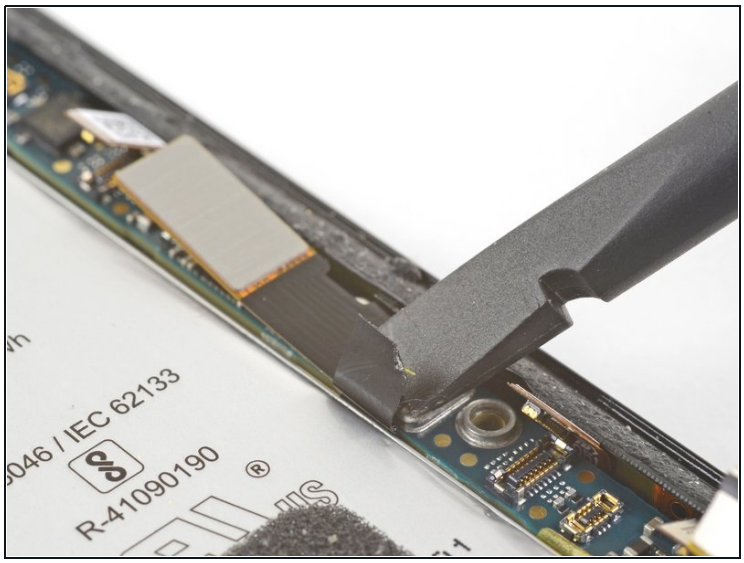
- Carefully de-route both antenna cables and move them away from the charging assembly.

Step 31

- Use the point of a spudger to pry up and disconnect the charging assembly's connector from its motherboard socket, near the right edge of the phone.
- Carefully peel the flex cable from the top of the SIM card reader.

Step 32 — Disconnect the display connector

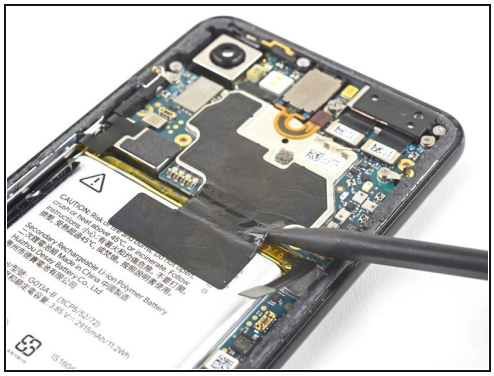
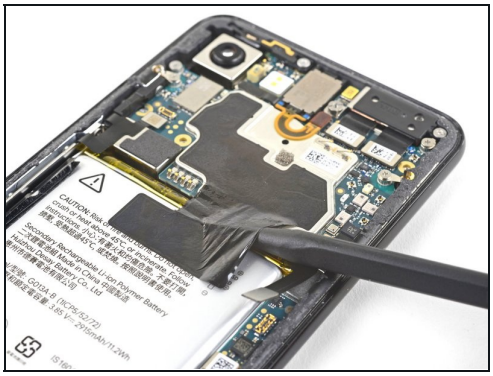


- Use the flat end of a spudger to carefully pry up the black tape holding the display flex cable in place, near the right edge of the phone.

⚠ Do not use metal tools to pry, or you may damage the flex cable.

- Use the flat end of a spudger to pry up and disconnect the display connector from the motherboard.

Step 33 — 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.

Step 34 — Disconnect the press connectors

- Use a spudger to pry up and disconnect the following seven press-fit connectors from their motherboard sockets:
  - External buttons connector
  - Top microphone connector
  - Earpiece connector
  - Left squeeze sensor connector
  - Screen connector
  - Right squeeze sensor connector
  - SIM tray connector

Step 35 — Move the earpiece speaker cable away from the motherboard

- Use the flat of a spudger to carefully pry up and bend the earpiece speaker's flex cable upwards, out of the way of the motherboard.

Step 36 — Remove the screws

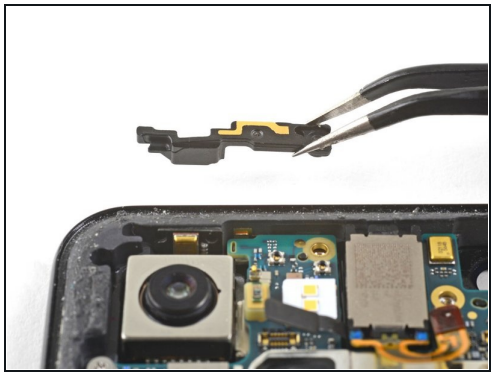
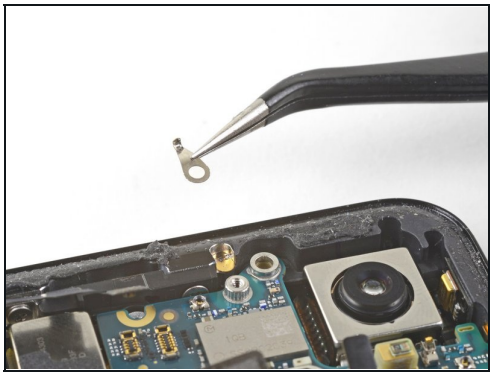
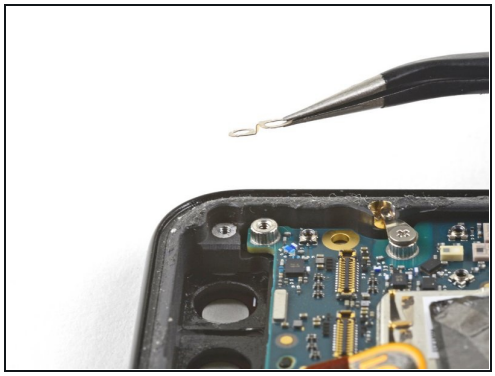
ⓘ Some of these screws hold very small grounding clips in place. *Be careful not to lose these clips* as you remove the screws.

- Remove the six screws securing the motherboard in place:
  - One 4.2 mm Phillips screw
  - Three 1.9 mm Phillips screws
  - One 4.3 mm Phillips screw
  - One 3.83 mm standoff screw

ⓘ Standoff screws are best removed using a standoff bit. In a pinch, a small flathead screwdriver will do the job—but use extra caution to ensure it doesn't slip and damage surrounding components.

- Remove and retain the three small metal grounding clips.

Step 37 — Remove the antenna bracket

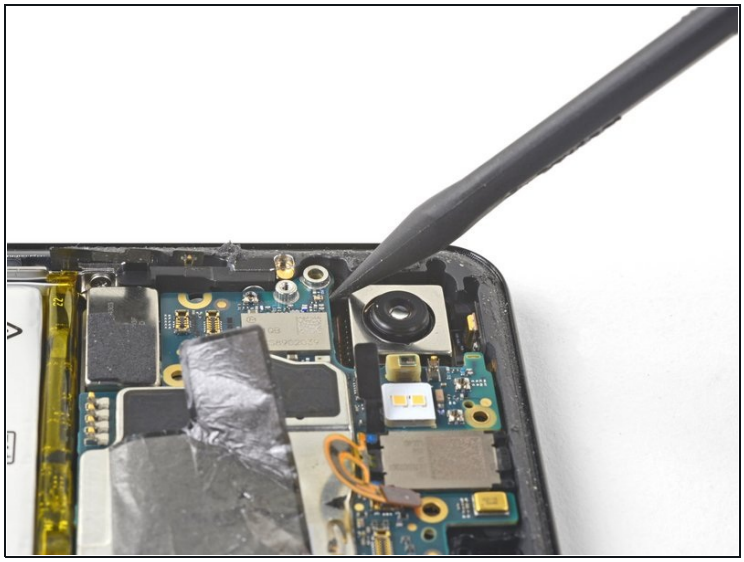




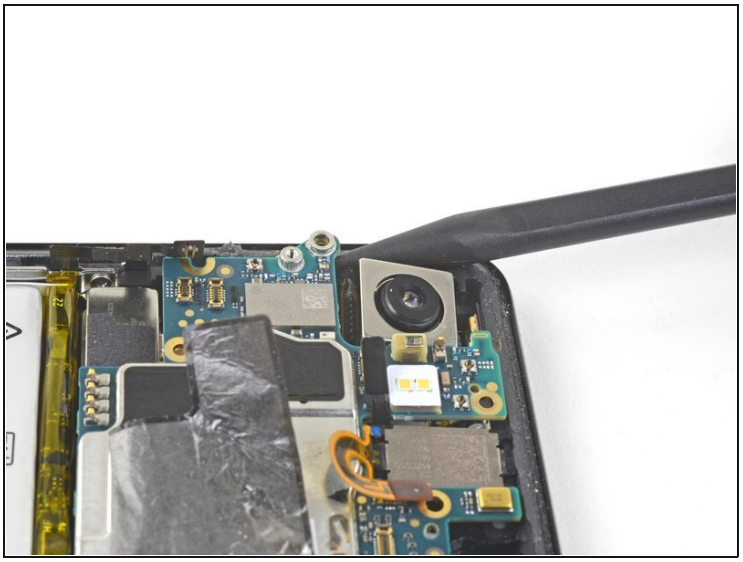
- Carefully remove the antenna bracket from the top left edge of the phone.

To reinstall the small metal grounding clips:

- Orient the clips such that the silver side is facing upwards.
- The teardrop shaped clips should have their points facing towards the phone edge.
- The double-holed clip dips downwards towards the frame's top-right screw hole.

Step 38 — Check the motherboard





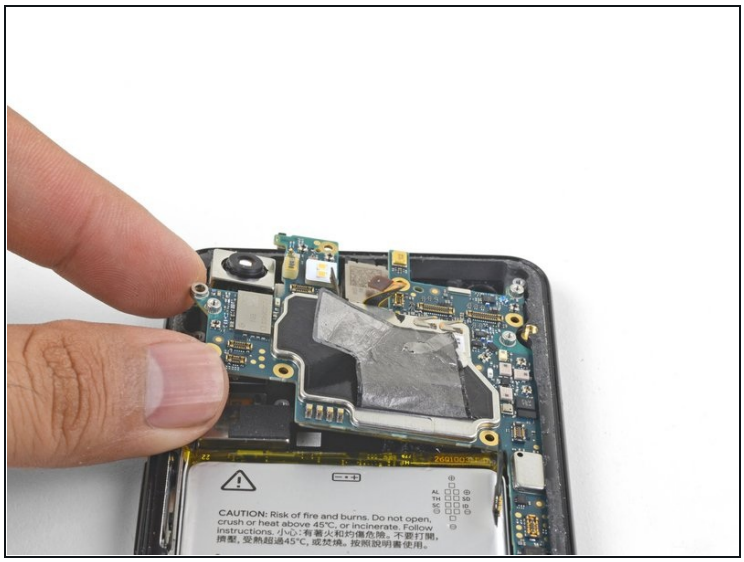
- Insert the point of a spudger near the top left corner of the motherboard, right below the rear-facing camera.
- Pry up gently to loosen the motherboard, bending all flex cables away to accommodate for the movement.
  - If the motherboard feels firmly seated, check for any flex cables or screws that may still be connected.

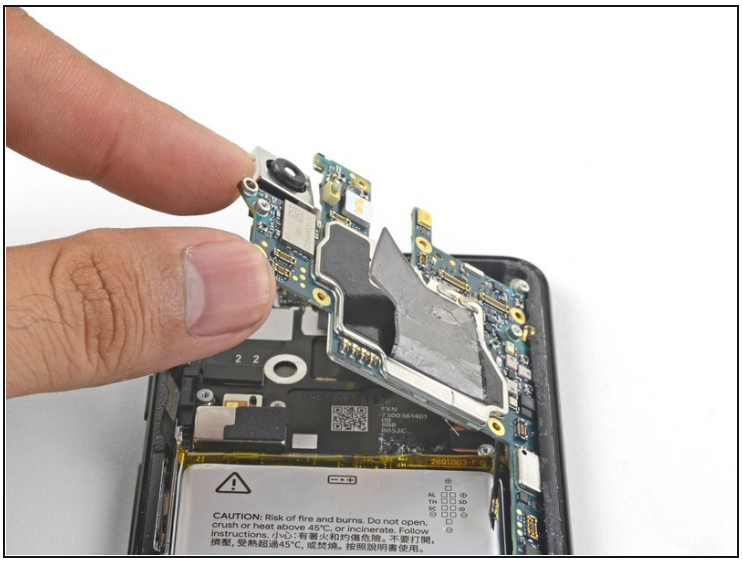
Step 39 — Loosen the motherboard

- Insert the spudger underneath the top edge of the motherboard and carefully pry up to loosen the motherboard.

ⓘ The earpiece speaker's flex cable will press tightly against the motherboard. Take your time and carefully guide the motherboard around the flex cable.

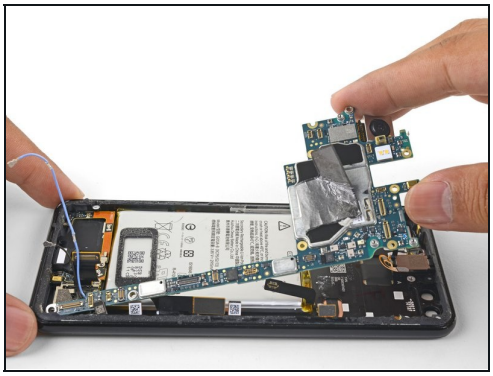
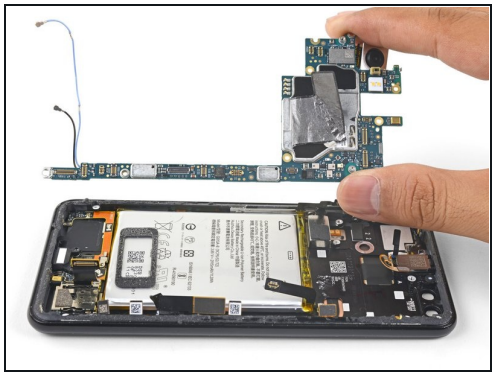
Step 40 — Start removing the motherboard





- Lift the left edge of the motherboard and carefully swing upwards it towards the right. Carefully push any press connectors snagging the motherboard out of the way.

Step 41 — Remove the motherboard

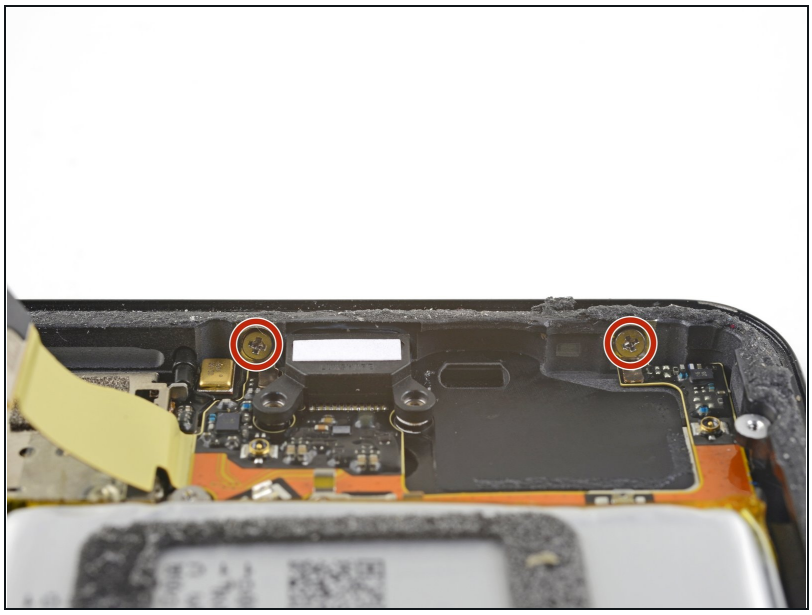



- Carefully lift the top end of the motherboard away from the frame.
- Remove the motherboard.

When you reinstall the motherboard, be careful not to trap any flex cable connectors underneath it.

It may be difficult to reposition the motherboard around the earpiece flex cable. You can gently pry up the earpiece speaker, install the motherboard, and reinstall the earpiece speaker.

Step 42 — Remove the screws

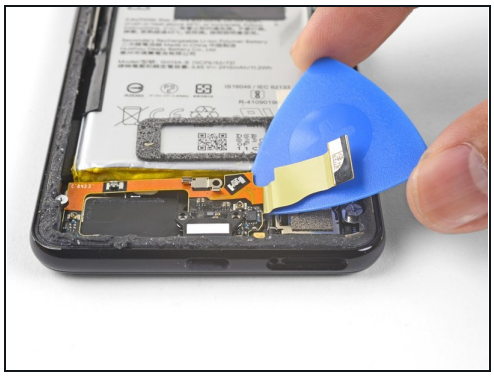


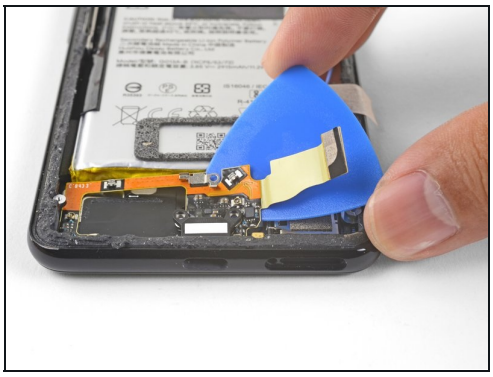
- Remove the two 1.9 mm Phillips screws securing the charging assembly to the bottom edge of the phone.

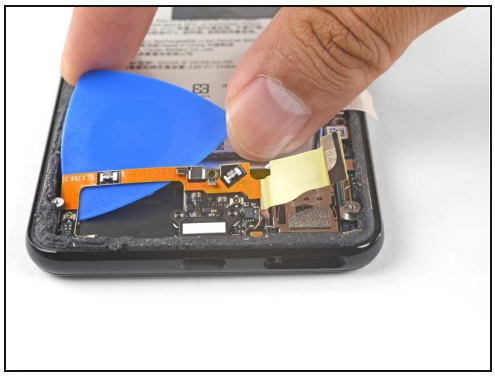
Step 43 — Weaken the adhesive

- Apply a heated iOpener to the bottom edge of the phone for a minute to loosen the adhesive holding the charging assembly in place.

Step 44 — Loosen the charging assembly cable





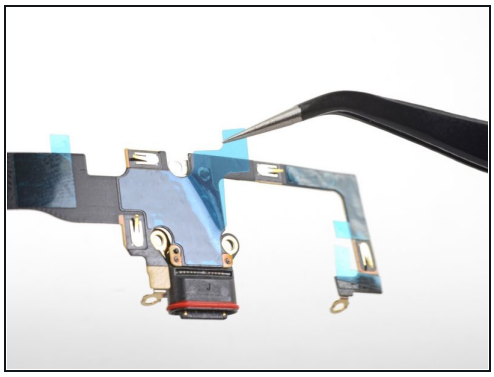


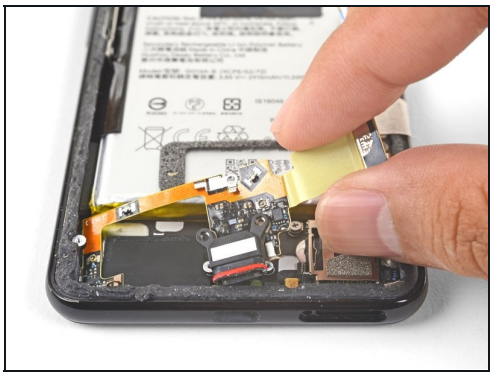
- Insert an opening pick underneath the charging assembly's flex cable.
- Slide the opening pick below the charging assembly to loosen it from the phone.

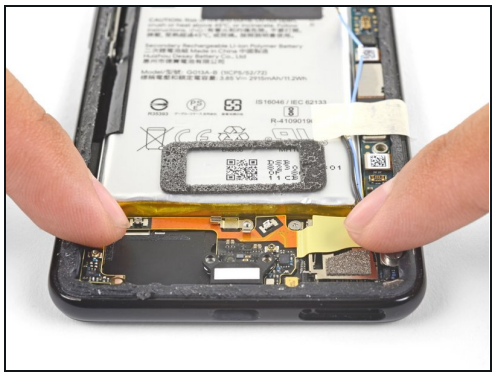
Step 45 — Remove the charging assembly

- Use a pair of tweezers or your fingers to remove the charging assembly.

Step 46







When you are installing a replacement assembly:

- Be sure to remove all plastic liners from the assembly to expose the adhesive.
- Line up the assembly's bottom left corner into place.
- Carefully lay the rest of the assembly in place, making sure that the USB-C port is correctly seated in its respective cutout.
- Use your fingers to press the assembly onto the frame.

Step 47 — Unfasten the SIM card reader

- Use a Phillips screwdriver to remove the two 1.9 mm screws securing the SIM card reader.

Step 48 — Heat the SIM card reader

ⓘ Be sure you've removed the SIM card tray before proceeding with the disassembly.

ⓘ The SIM card reader is lightly adhered to the frame.

- Heat an iOpener and apply it to the bottom right of the device for two minutes.

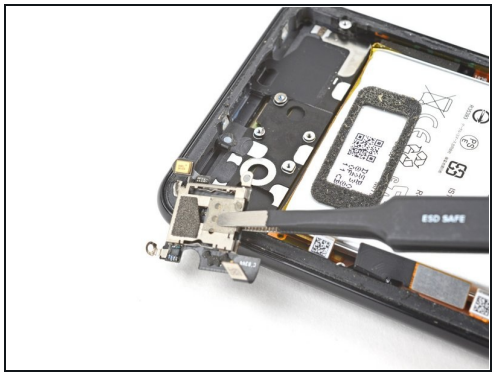
Step 49 — Separate the adhesive

- Insert an opening pick between the frame and the lower microphone module.
- Pry up with the opening pick to separate the adhesive.

Step 50

- Rotate the pick around the perimeter of the SIM card reader to separate the adhesive.

Step 51 — Remove the SIM card reader



- Use tweezers, or your fingers, to lift up the SIM card reader and separate the remaining adhesive.
- Remove the SIM card reader.

Step 52 — Heat the earpiece speaker

ⓘ The earpiece speaker is lightly adhered to the frame.

- Heat an iOpener and apply it to the top edge of the device for two minutes.

Step 53 — Remove the earpiece speaker

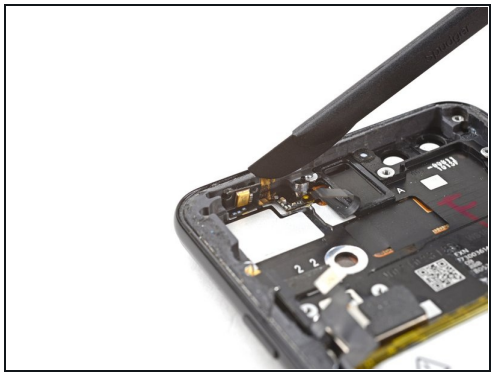
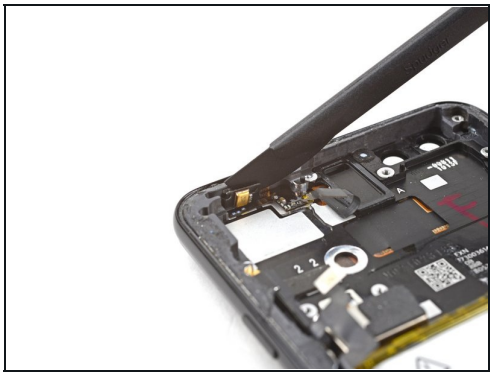
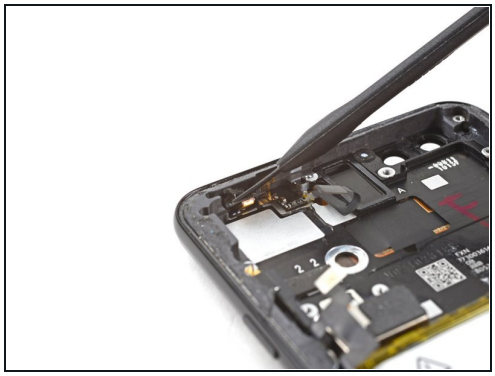
- Insert the flat end of spudger between the earpiece speaker and the frame.
- Pry up with the spudger to separate the adhesive.
- Remove the earpiece speaker.

Step 54 — Heat the microphone assembly

ⓘ The microphone assembly is lightly adhered to the frame.

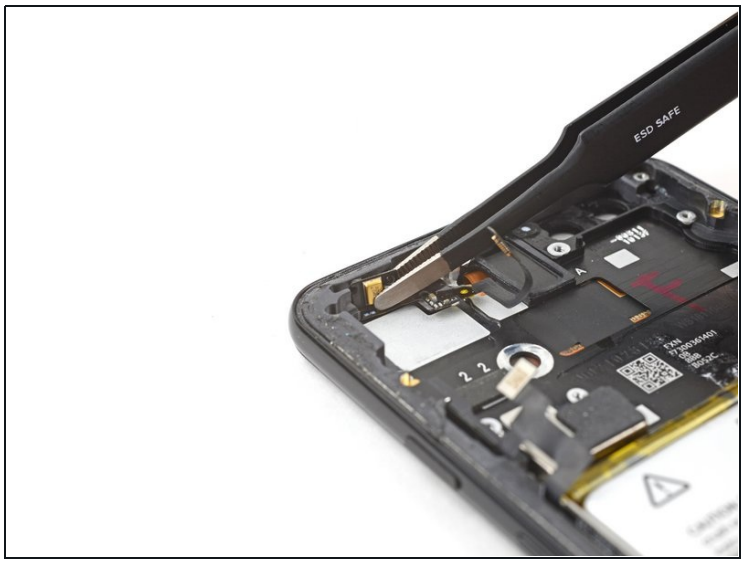
- Heat an iOpener and apply it to the top left of the device for two minutes.

Step 55 — Separate the adhesive

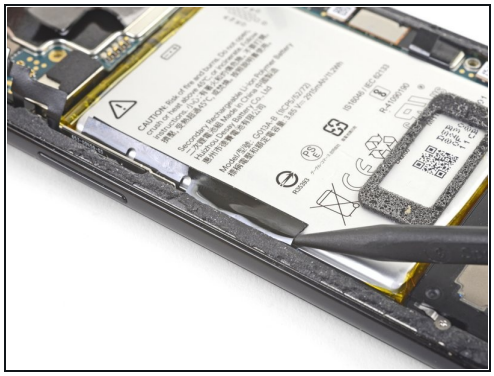
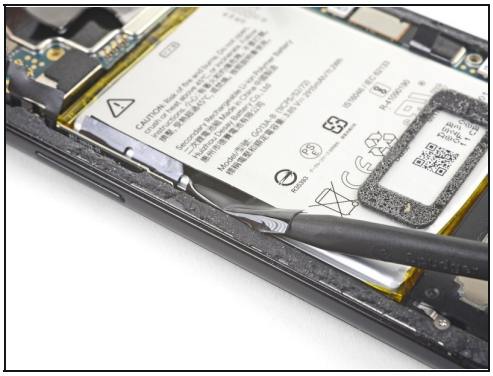
- Insert a halberd spudger or an opening pick between the microphone assembly and the perimeter of the frame.
- Slide the halberd spudger downward and pry towards the battery to separate the adhesive.

Step 56 — Remove the microphone assembly



- Use tweezers, or your fingers, to remove the microphone assembly.

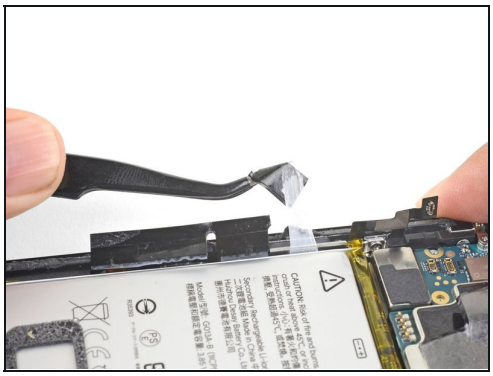
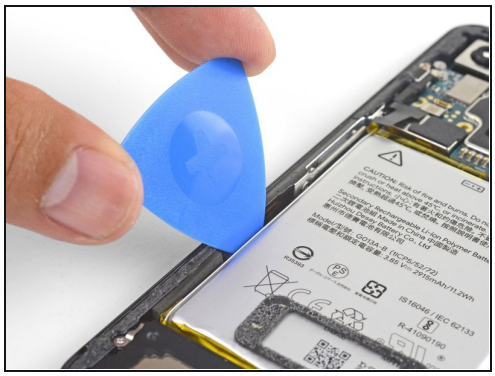
Step 57 — Loosen the pull tab

- 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.

ⓘ 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.

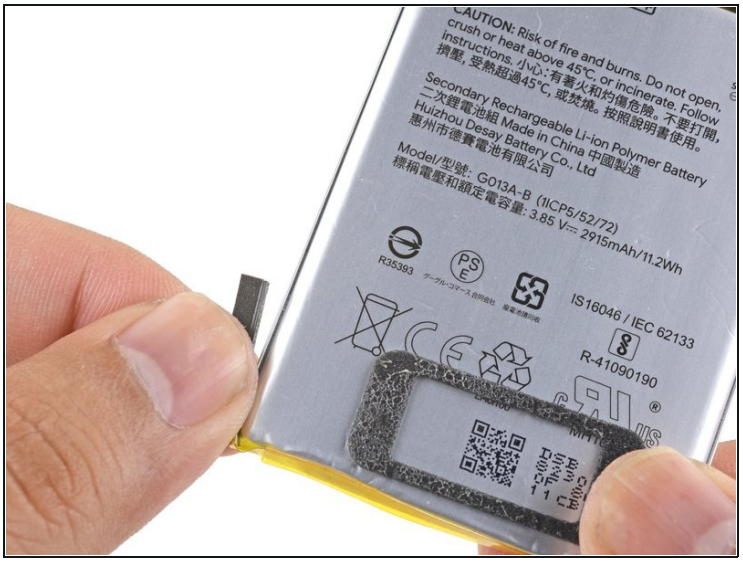
Step 58 — Remove the pull tab

- 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.

ⓘ You can also fill a plastic dropper or syringe with high concentration isopropyl alcohol and apply a few drops under the left edge of the battery. Give the alcohol a minute to weaken the battery adhesive.

Step 59 — Remove the battery

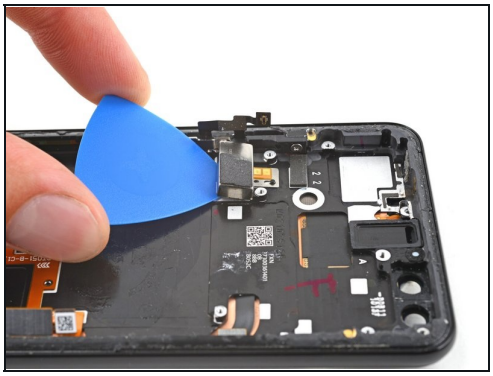


- Remove the battery.
- Carefully pull and remove the small foam buffer block from the left edge of the battery and transfer it to your replacement part. If it begins to tear, use the flat end of a spudger to gently pry it off the battery.

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, follow this guide. If using stretch-release adhesive, follow this guide.
- *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 re-assembly.

Step 60 — Separate the adhesive



- Insert an opening pick between the frame and the long edge of the vibrator.
- Slide the pick underneath the vibrator to separate the adhesive.

ⓘ If you're having trouble separating the adhesive, apply a heated iOpener to the vibrator for one minute.

Step 61 — Remove the vibrator

- Use tweezers, or your fingers, to remove the vibrator.

Step 62 — Only the screen assembly remains

- You're now left with the screen assembly.

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 you install it.

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 Google Pixel 3 Answers community for troubleshooting help.