

Google Pixel 3 Charging Assembly 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 replace the charging assembly for the Pixel 3. The charging assembly contains the USB-C port as well as some antenna connectors, and is layered underneath the loudspeaker. This requires removing the loudspeaker first, which will compromise the loudspeaker's ingress gasket.

TOOLS:

Suction Handle (1)
Isopropyl Alcohol (1)
Spudger (1)
iFixit Opening Picks (Set of 6) (1)
iOpener (1)
Phillips #000 Screwdriver (1)
Tweezers (1)

PARTS:

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

Step 1 — Weaken the back cover's adhesive



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

Step 2 — 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.
 - (i) 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.
 - ② 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 3 — 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 4 — Cut through the adhesive



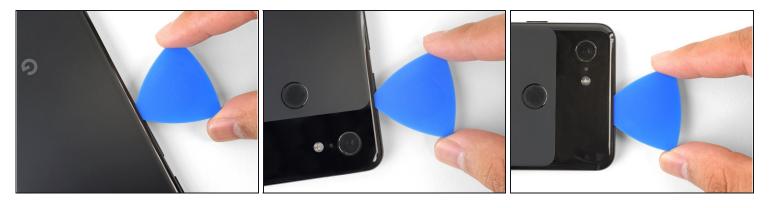
- Slice the adhesive along the bottom edge of the phone and around the right corner.
- Leave a pick in the bottom edge to prevent the adhesive from re-sealing.

Step 5



- Heat the right edge with an iOpener and continue slicing the adhesive with an opening pick.
- (i) The adhesive can be very gummy. Push the pick in and out in a sawing motion to help with slicing.

Step 6



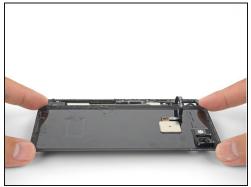
• Continue heating and slicing through the rest of the phone perimeter. Leave a pick in each edge to prevent the adhesive from resealing.

⚠ When slicing above the power button, do not insert the pick more than halfway in to avoid damaging the fingerprint sensor cable.

Step 7 — Lift the left edge of the back cover

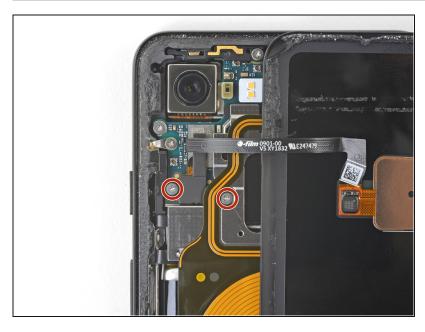






- Once you have sliced around the perimeter of the phone, carefully lift the left edge of the back cover.
- ⚠ Do not attempt to remove the back cover. It is still attached to the phone by the fingerprint sensor cable.
- Flip the back cover along its long axis and rest it so that the fingerprint sensor cable is not strained.

Step 8 — 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 9 — 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 10 — Disconnect the fingerprint connector



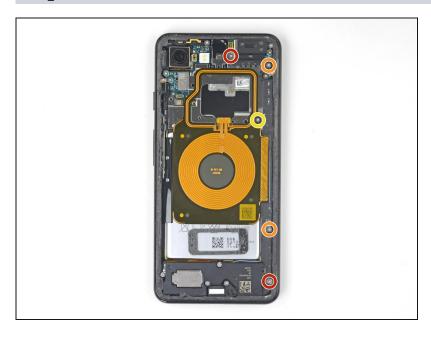
- Use the point of a spudger to pry up and disconnect the fingerprint connector from its socket.
 - (i) When you disconnect connectors like these, be careful not to dislodge the small surface-mounted components surrounding the socket.
- To re-attach <u>press connectors</u> like this one, carefully align 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 11 — Remove the back cover



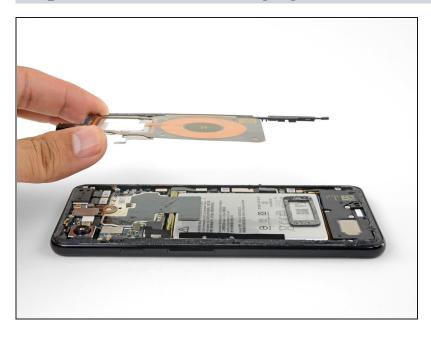
- Remove the back cover.
- Before you install a replacement back cover, be sure to remove all adhesive residue from the phone frame. Use an opening tool to scrape and high concentration isopropyl alcohol to clean the surface.
- If you are re-using the back cover, be sure to clean off any adhesive, and 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 12 — Remove the screws



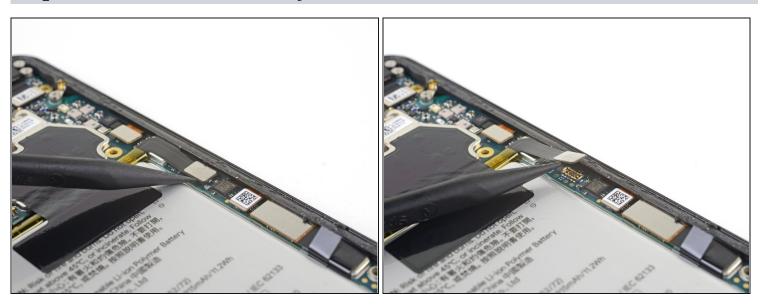
- Remove the five Phillips screws securing the wireless charging coil:
 - Two 1.9 mm screws
 - Two 4.2 mm screws
 - One 4.3 mm screw

Step 13 — Remove the charging coil



 Lift up and remove the wireless charging coil.

Step 14 — 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 15 — Disconnect the loudspeaker

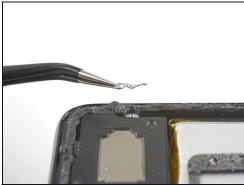


• Use the point of a spudger to pry up and disconnect the loudspeaker connector from its motherboard socket near the right edge of the phone.

 \triangle Be careful not to puncture the battery with the spudger.

Step 16 — 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 17 — Loosen the loudspeaker



- (i) 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 18





- 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.

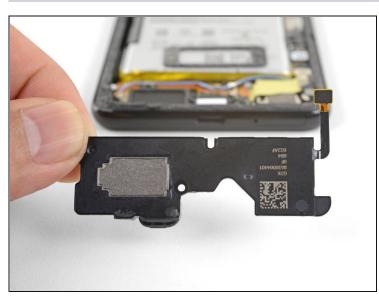
Step 19





- Insert the flat end of the spudger under the top edge of the loudspeaker, towards the left edge.
- Pry up to loosen the loudspeaker.

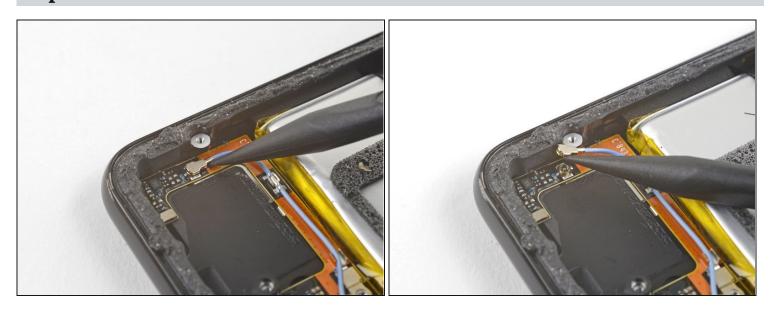
Step 20 — Remove the loudspeaker





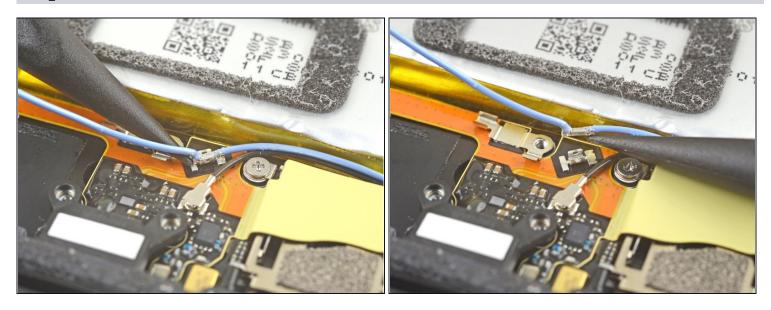
- Remove the loudspeaker.
- Before you install a replacement loudspeaker, check the adhesive gasket.
 - If it is in good condition, you can re-use the gasket. Make sure that the gasket does not cover the exit hole.
 - If the gasket is pulled out of place, remove it and replace the adhesive with a pre-cut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

Step 21 — 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 22



- Use the point of a spudger to carefully pry up and release the blue antenna cable from its grounding clip.
 - (i) 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 23 — 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.

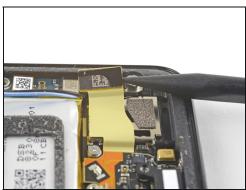
Step 24 — De-route the antenna cables



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

Step 25 — Disconnect the charging assembly connector

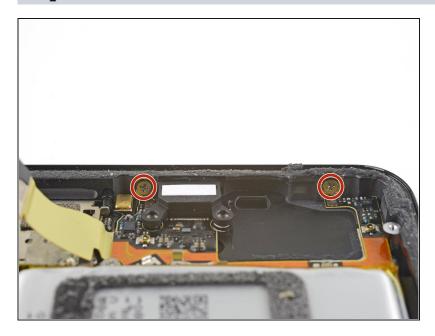






- Use the point of a spudger to pry up and disconnect the charging assembly's connector from its motherboard socket, near the right edge of the phone.
- Carefully peel the flex cable from the top of the SIM card reader.

Step 26 — Remove the screws



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

Step 27 — 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 28 — Loosen the charging assembly cable

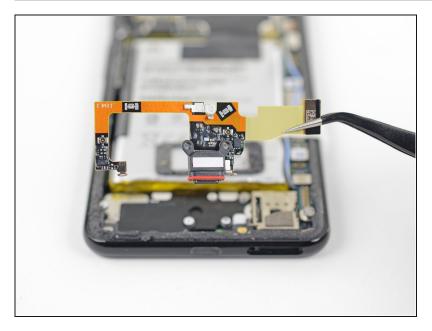






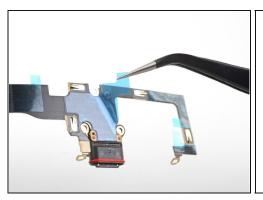
- Insert an opening pick underneath the charging assembly's flex cable.
- Slide the opening pick below the charging assembly to loosen it from the phone.

Step 29 — Remove the charging assembly



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

Step 30







- 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.

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

Repair didn't go as planned? Check out our <u>Google Pixel 3 Answers community</u> for troubleshooting help.