



Google Pixel XL Battery Replacement

A guide showing how to replace a non-functional battery in the Google Pixel XL.

Written By: Arthur Shi



INTRODUCTION

Follow this guide to open up the Pixel XL to remove and replace its battery. If your battery is swollen, [take appropriate precautions](#).

Before disassembling your phone, discharge the battery below 25%. The battery can catch fire and/or explode if accidentally punctured, but the chances of that happening are much lower if discharged.

The Pixel XL's unreinforced display panel is fragile and is attached to the frame with strong adhesive, making repairs difficult. There is a considerable chance of breaking the display, especially if it already has micro-fractures. Be sure to apply plenty of heat and be extremely careful during the prying stage.



TOOLS:

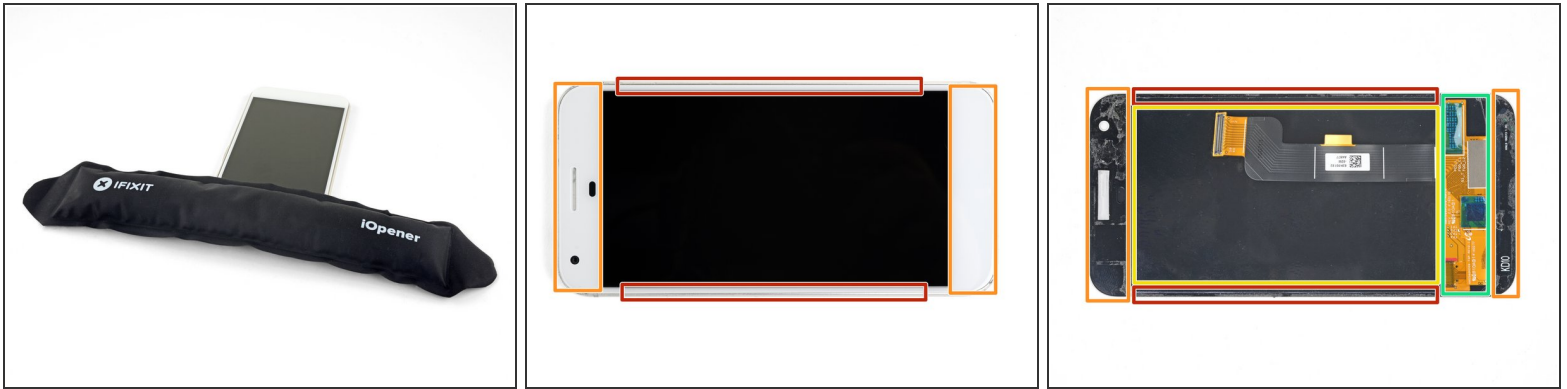
- [iFixit Opening Tools](#) (1)
- [Suction Handle](#) (1)
- [T5 Torx Screwdriver](#) (1)
- [iOpener](#) (1)
- [Spudger](#) (1)
- [iFixit Opening Picks set of 6](#) (1)



PARTS:

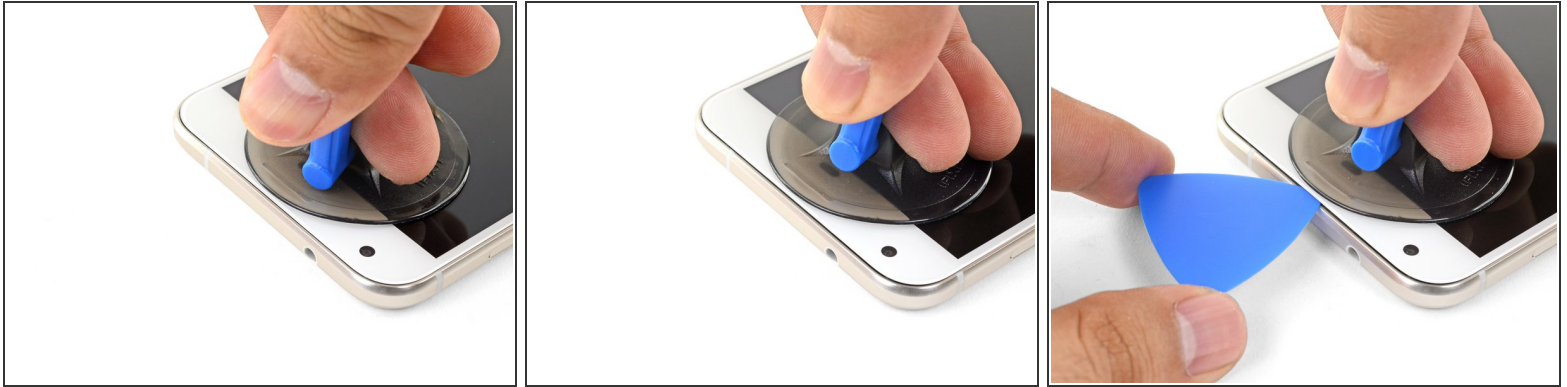
- [Google Pixel XL Replacement Battery](#) (1)
- [Google Pixel XL Display Adhesive](#) (1)
- [Precut Adhesive Card](#) (1)

Step 1 — Display Assembly



- [Heat an iOpener](#) and apply it to the **top edge** of the display for two minutes.
 - ⓘ 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.
- Take note of the following regions before you begin prying:
 - Thin adhesive lined against the display panel
 - Thick adhesive
 - The OLED display panel, which is very prone to damage
 - The display cable, which can be damaged during prying

Step 2



- Once the edge is warm to the touch, apply a suction cup close to the edge.
- Lift on the suction cup, and insert an opening pick into the gap.
- ⚠ Do not insert the pick more than 13 mm (0.5 inches), or you will damage the display assembly.
- If you have trouble creating a gap, reheat the edge and try again.
- ℹ You can also try to use a playing card instead of an opening pick to help make the initial entry.

Step 3



- Slide the opening clip across the top edge to slice through the adhesive.
- ⚠ Be sure not to cut deeper than 13 mm (0.5 inches) or you will damage the display.
- Leave an opening pick in the edge to prevent the adhesive from resealing.

Step 4



- Heat an iOpener and apply it to the right edge of the phone for two minutes.
- Insert an opening pick near the top edge of the phone, where you have already sliced the adhesive.
- Slowly guide the pick around the right corner.
- Carefully slide the pick down the right edge of the phone to slice through the adhesive.
- ⚠ **Do not insert the pick more than 1 mm (1/32") along the edge, or you will damage the display assembly.**
- Repeat the step for the left edge of the phone.

Step 5




- Heat the bottom edge with an iOpener for two minutes.
 - Insert a pick near the right edge where you have already loosened the adhesive.
 - Carefully guide the pick around the corner.
 - Slide the pick along the bottom edge to slice through the adhesive.
- ⚠ Do not slice deeper than 8.5 mm (1/3") or you will damage the display cable.

Step 6

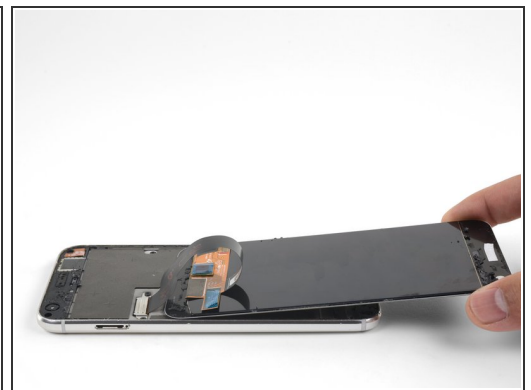
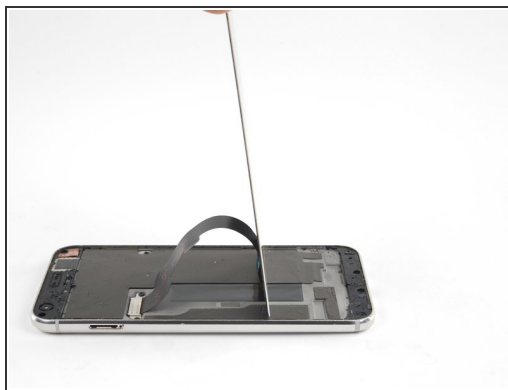


- Once you have sliced around the perimeter of the phone, carefully lift the display assembly up slightly by the right corners.


 Do not attempt to remove the display assembly. It is still attached by a flex cable.

- Use an opening pick to slice through any remaining adhesive.

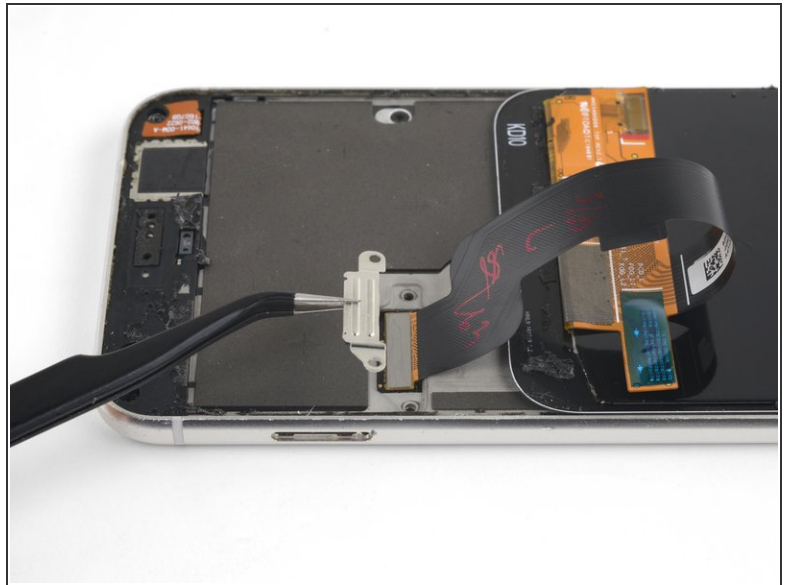
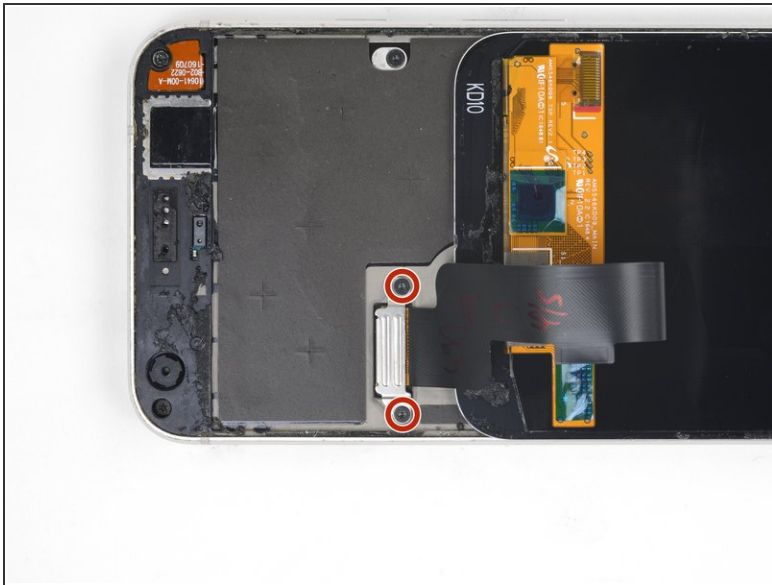
Step 7



- Lift the display assembly from the top end and swing it around such that it rests upside down on the frame.

 Be careful not to strain the flex cable when you swing the assembly around.

Step 8



- Remove the two 4 mm T5 screws securing the display cable bracket.
- Remove the display cable bracket.

Step 9



- Use the point of a spudger to pry up and disconnect the display cable from its connector.
- ⓘ 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.

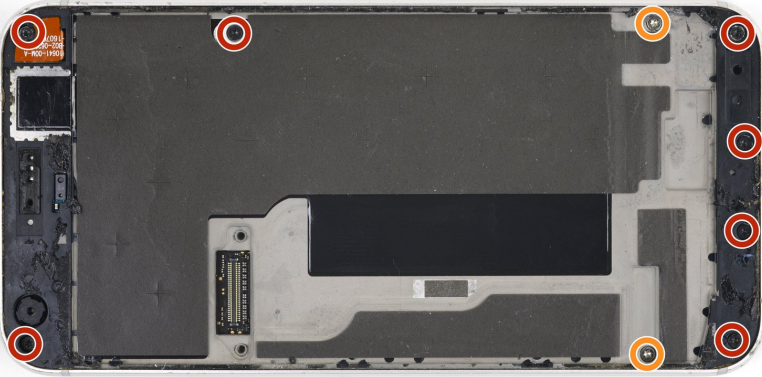
Step 10



- Remove the display assembly.

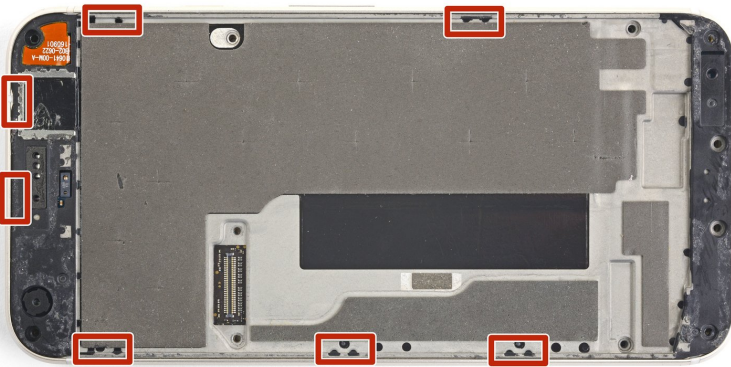
- ✦ **For comprehensive instructions on how to reinstall the Pixel XL display, [follow this guide](#).**
- ✦ If your replacement display did not come with a speaker grille, use tweezers to [gently peel the adhesive grille](#) from your old display, and transfer it to the replacement.
- ✦ Before installing a new display, be sure to remove all traces of adhesive from the frame. Use a spudger or an opening tool to scrape it off, and use high-concentration isopropyl alcohol to remove any residue.
- ✦ If you are reinstalling the same display assembly, be sure to remove all adhesive residue from the panel and the frame before applying new adhesive.
- ✦ Be sure to turn on your phone and test your repair before installing new adhesive and resealing the phone.

Step 11 — Google Pixel XL Opening Procedure



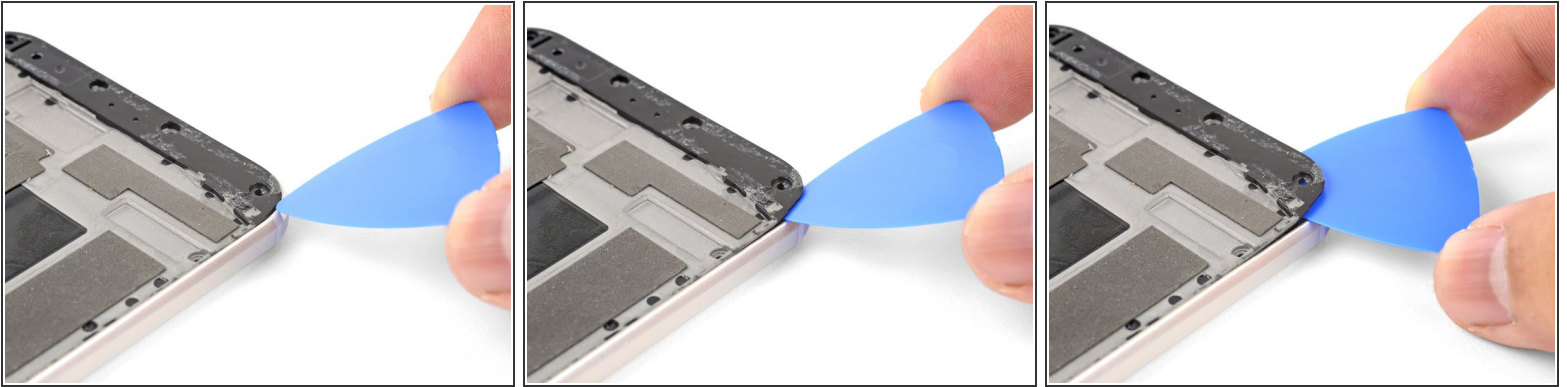
- Remove the following screws that secure the midframe to the back:
 - Seven black 4 mm T5 screws
 - Two silver 3 mm T5 screws

Step 12



- The midframe is held tightly in place by plastic clips which push into the edge of the back case.

Step 13



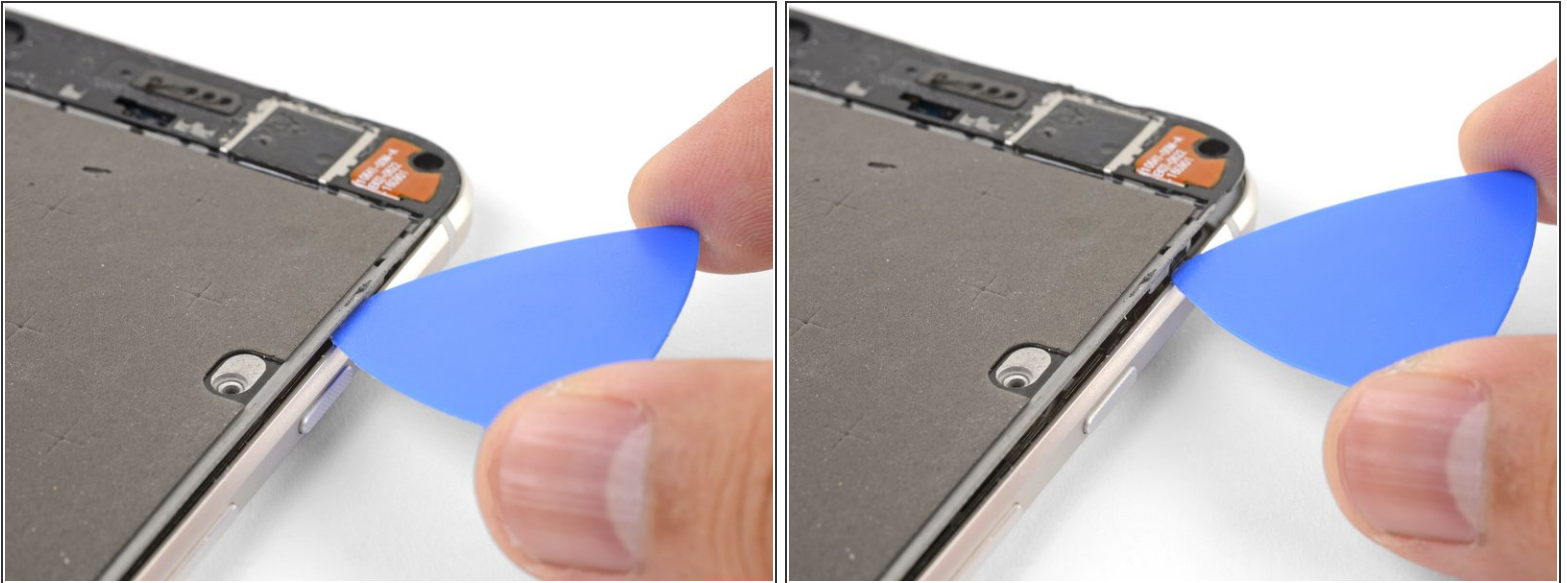
- Find the small notch in the bottom left corner of the frame and insert an opening pick.
- Slide the opening pick along the bottom edge of the phone towards the bottom right corner and leave it there.

Step 14



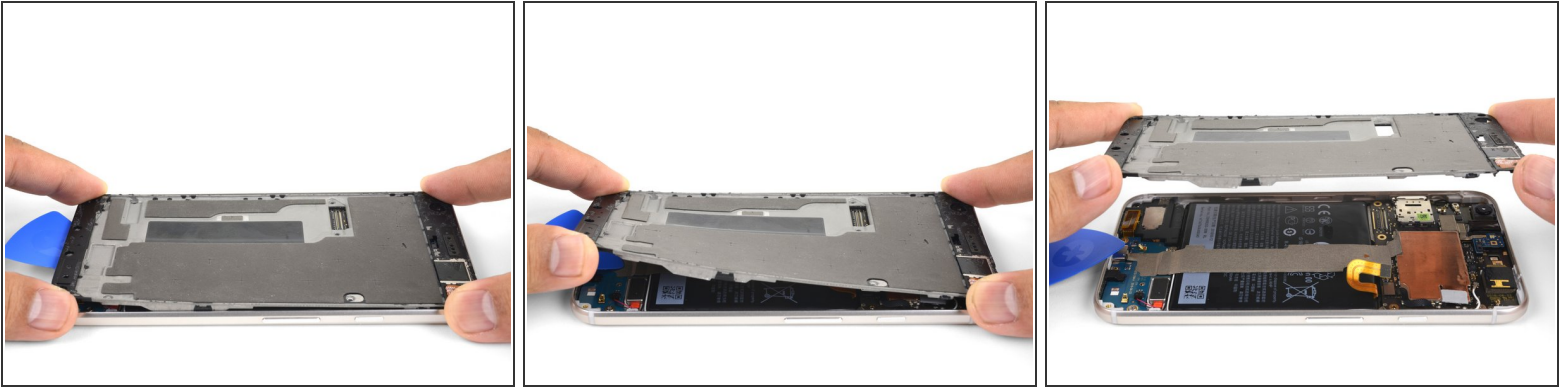
- Insert a separate opening pick into the right edge of the phone, near the bottom.
- Slowly push the pick upwards along the seam until the first clip pops free.
- ❗ Due to the tight tolerances, this may be difficult, requiring a substantial amount of force. If you are having trouble, try [inserting and sliding a playing card](#).
- Once you've released the clip, leave the opening pick in place to prevent the midframe from resealing.

Step 15



- Insert an opening pick into the right edge of the phone and slide it upwards towards the top right clip.
 - ⓘ You do not need to insert the pick more than 2 mm into the edge. If you insert the pick all the way in, you may risk damaging flex cables.
- Slowly slide the pick past the clip to disengage it from the frame.
 - ⓘ At this point, the right edge of the midframe should be free from the case. If it isn't, slide an opening clip up and down along the right edge.

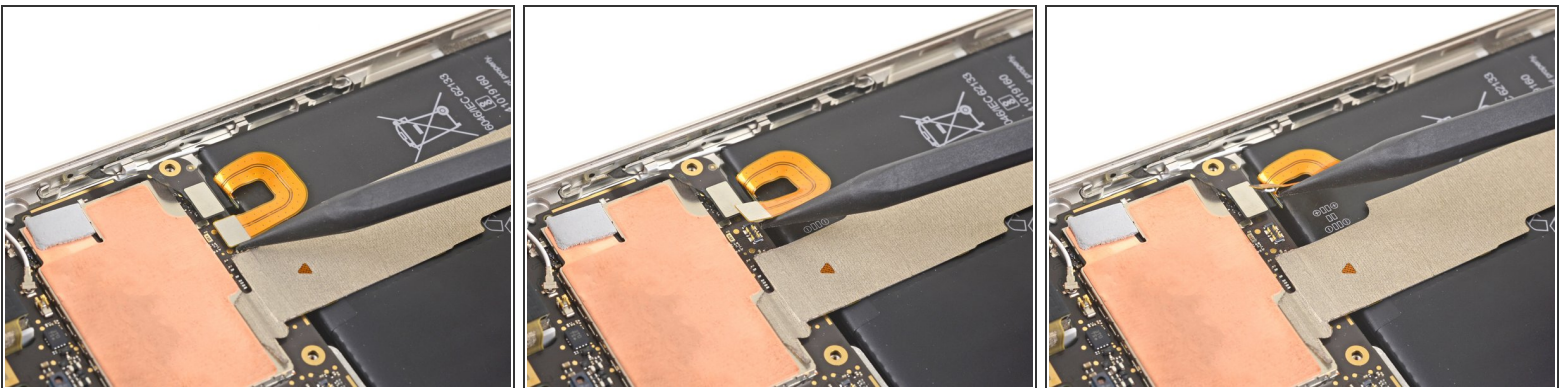
Step 16



- Grasp the right edge of the midframe by the corners and slowly hinge the edge up.
- When the left edge feels loose, stop hinging and lift the midframe upwards.
- Remove the midframe.

✦ To reinstall the midframe, align it to the case, then [squeeze around the perimeter](#) until all the clips snap back into position. When properly done, the midframe should lie flat.

Step 17 — Battery



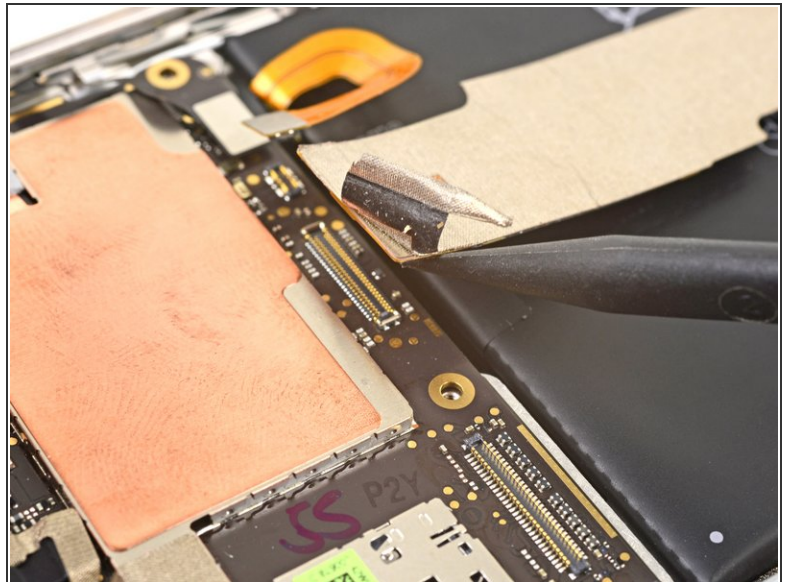
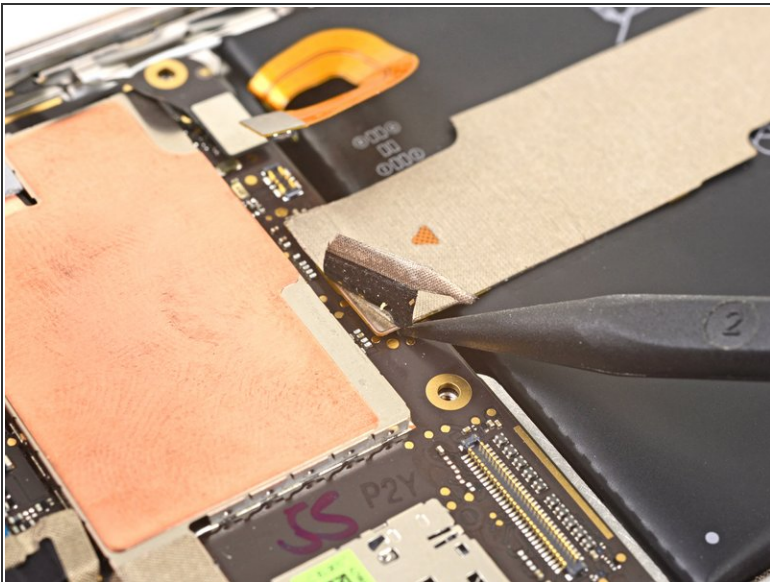
- Use the point of a spudger to pry up and disconnect the battery connector.
- Bend the battery flex cable slightly so that it will not accidentally touch the motherboard.

Step 18



- Use tweezers to peel up the tape at the top of the interconnect cable.

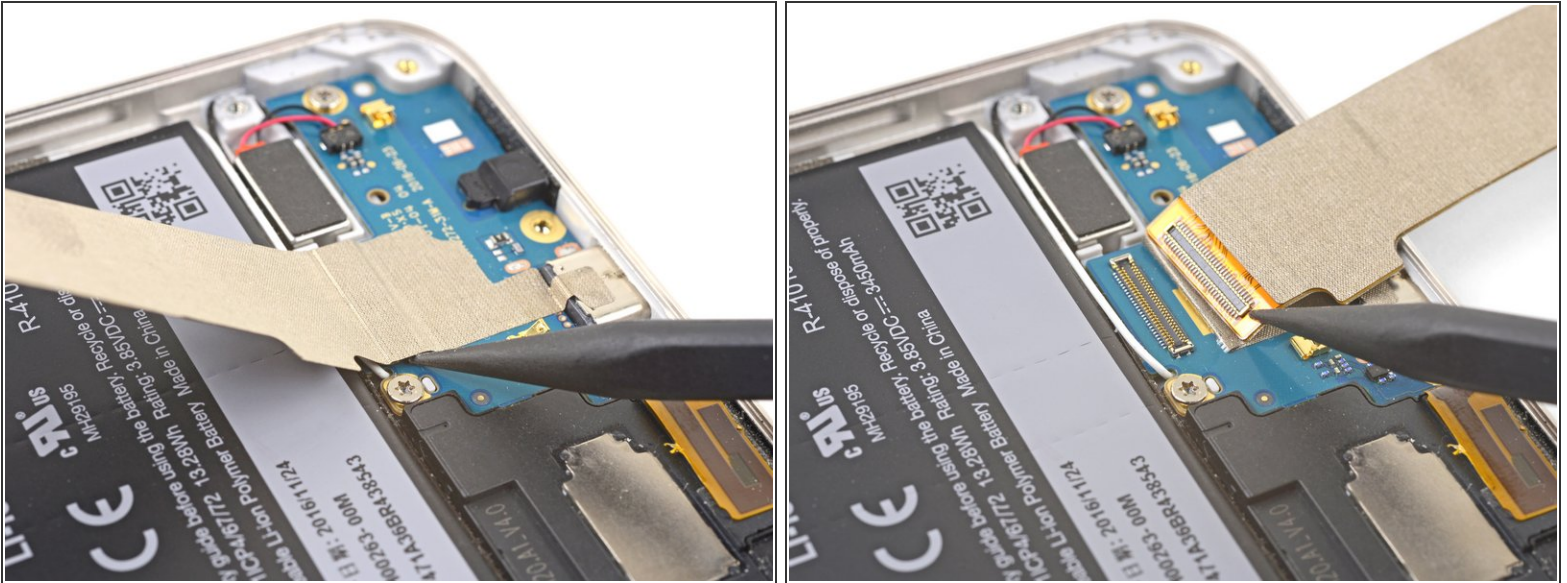
Step 19



- Use the point of a spudger to pry up and disconnect the interconnect cable from the motherboard.

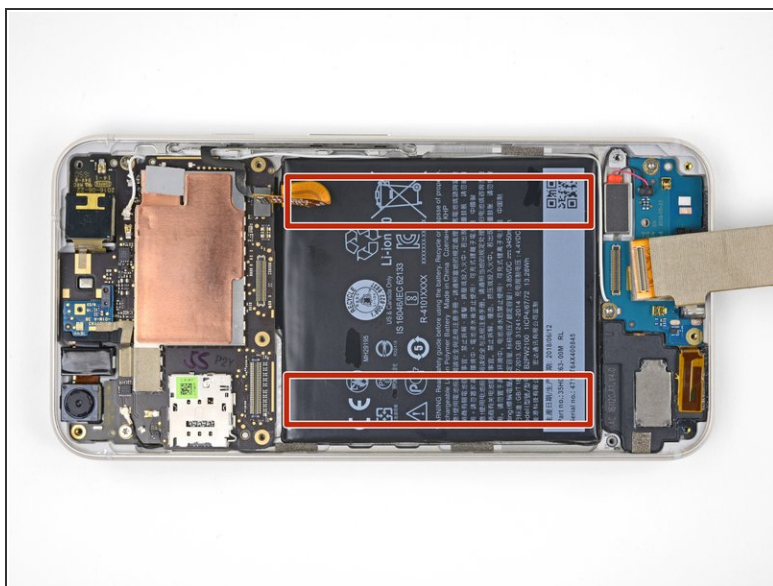
- ☑ To reconnect during reinstallation, align the cable with the socket and use your finger to press down on one side, followed by the other. If done correctly, the cable should be firmly held in place by the socket.

Step 20



- Use the point of a spudger to pry up and disconnect the interconnect cable from the bottom daughterboard.
- ⓘ You can leave the interconnect cable attached to the daughterboard via the adhesive, or you can completely remove it.

Step 21



- The battery is secured by two strips of double-sided tape.
- [Heat an iOpener](#) and place it on the **back of the phone's left edge** for two minutes. You may need to reheat and reapply the iOpener.

Step 22



- Flip the phone over.
- Push an opening pick slowly and firmly down the right edge of the battery (which should be warm). Slide it slightly back and forth to slice through the adhesive.
 - ⚠ Be careful not to snag the white antenna cable running along the edge of the battery while you are push down on the pick.
 - ℹ If you are having a hard time getting the opening pick under the battery, heat and re-apply an iOpener as instructed in the previous step.
 - ℹ You can also apply some high concentration isopropyl alcohol to the edge in order to help weaken the adhesive.
- Once you have loosened the right side of the battery from the case, leave an opening pick in place to prevent the adhesive from re-adhering.

Step 23



- [Heat an iOpener](#) and place it on the back of the phone's **right** edge for two minutes. You may need to reheat and reapply the iOpener.

Step 24



- Flip the phone over.
- Grasp the loosened right edge of the battery by the corners and slowly swing the right edge upwards.
 - ⚠ If you feel or see that the battery is bending from the stress, **stop** and reapply a heated iOpener as directed in the previous step.
 - ℹ You can apply some high concentration isopropyl alcohol to the left edge of the battery to help weaken the adhesive.
- Once the battery pack is loosened from the adhesive, slowly peel the battery out of the frame.
- Remove the battery.

Step 25



To reduce the risk of fire and chemical leakage, do not reuse and reinstall a used battery.



To install a battery, apply new adhesive strips and ensure that the battery connector is properly aligned.

- Tear two adhesive strips from the [adhesive card](#), and apply them to the frame. Do not remove the top liner yet.
- Place the new battery in the recess.
- Use the flat end of a spudger or your finger to *temporarily* connect the battery connector to the motherboard.

Step 26



- While the battery is still connected, lift the bottom end of the battery up.
- Use tweezers to pull all of the adhesive liners off.
- Carefully lower the battery back into place and press against the edges to activate the adhesive.
- Use a spudger to pry up and disconnect the battery connector from the motherboard and bend it away slightly.
- Continue with the reassembly process.

If your Pixel won't turn on after you reconnect the screen, there is a chance that the phone has silently turned on when the battery is re-connected. Hold the power button for a few seconds until the phone vibrates off. Afterwards, re-connect the screen, and try again.

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

After completing this guide, [calibrate your newly-installed battery](#).

Take your e-waste to an [R2 or e-Stewards certified recycler](#).

Repair didn't go as planned? Check out our [Google Pixel XL Answers community](#) for troubleshooting help.