Google Pixel XL Daughterboard Replacement

Replace the charging assembly, charging port board, or daughterboard in the Google Pixel XL.

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INTRODUCTION

Follow this guide to replace the daughterboard (otherwise known as the charging assembly or charging port board) for the Google Pixel XL.

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.
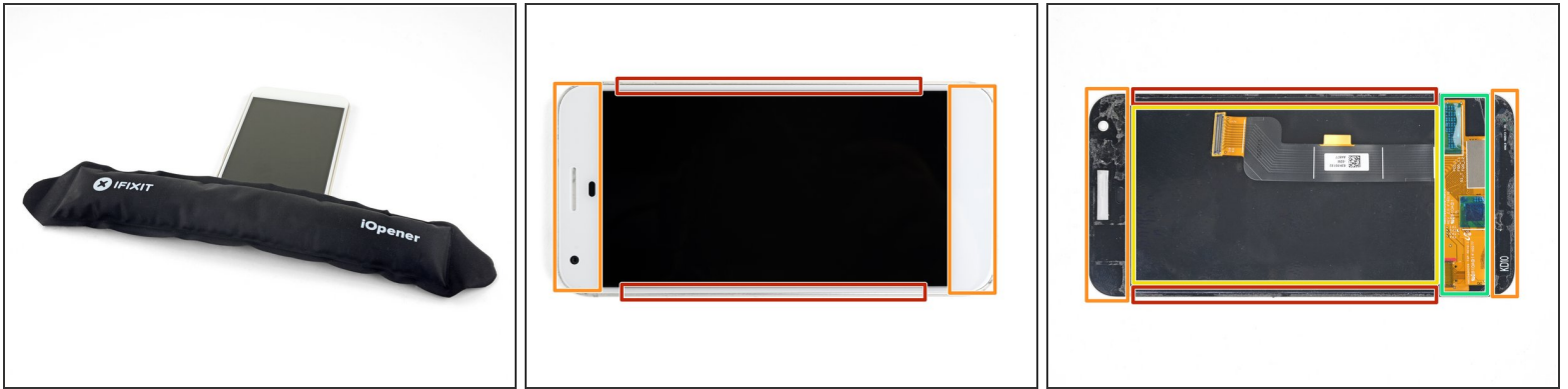
TOOLS:

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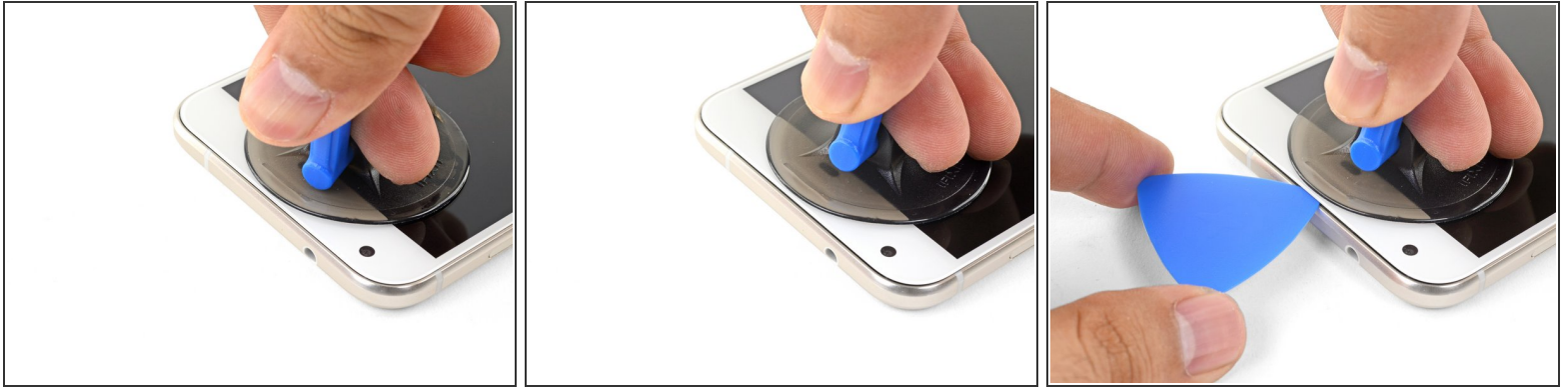- T5 Torx Screwdriver (1)
- iOpener (1)
- Spudger (1)

PARTS:

- Google Pixel XL Charging Assembly (1)
- Google Pixel XL Display Adhesive (1)

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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.

- ⓘ 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.

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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.

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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.
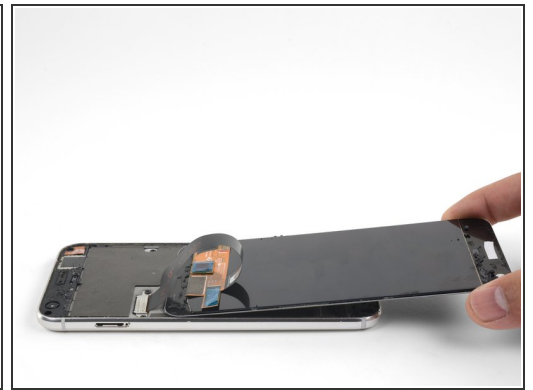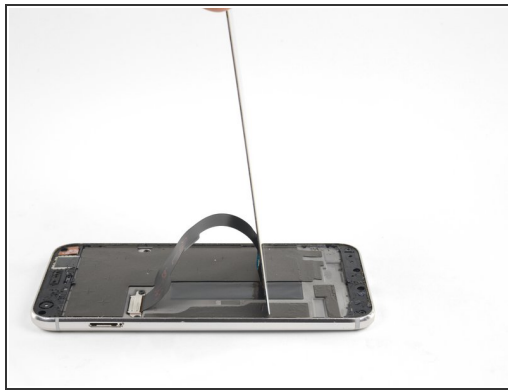
Step 6

- 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.

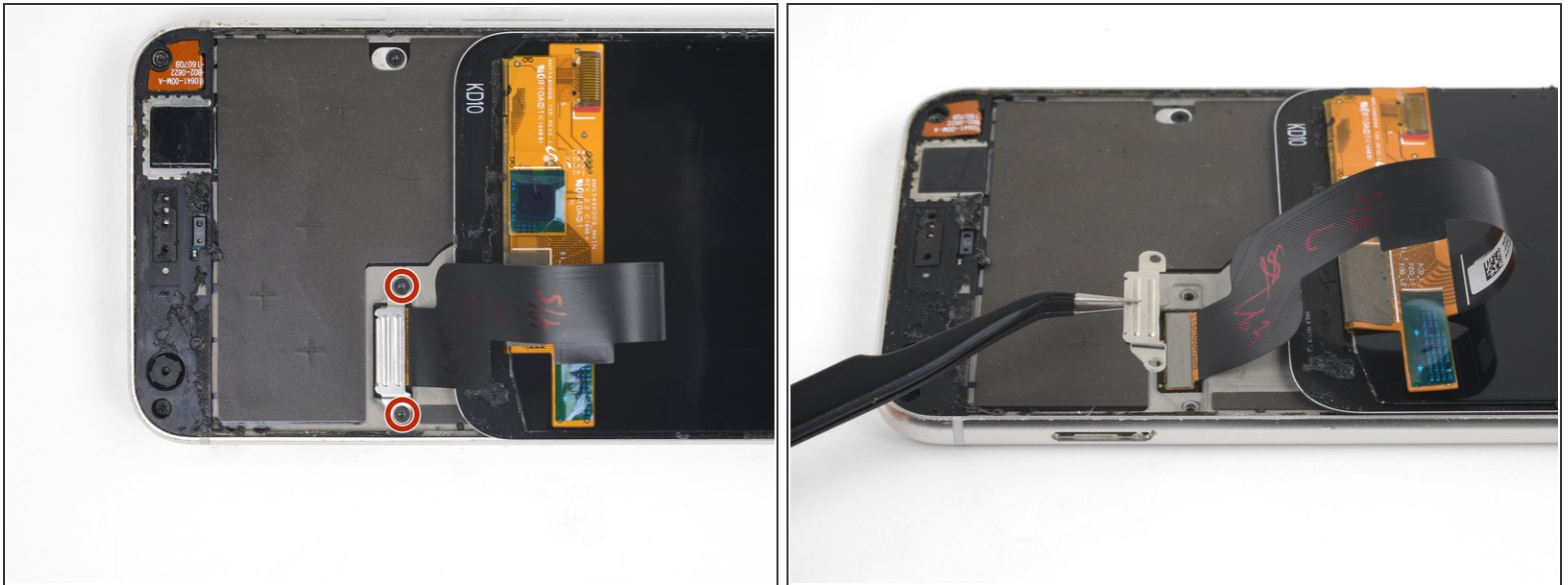- Use an opening pick to slice through any remaining adhesive.

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.

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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.
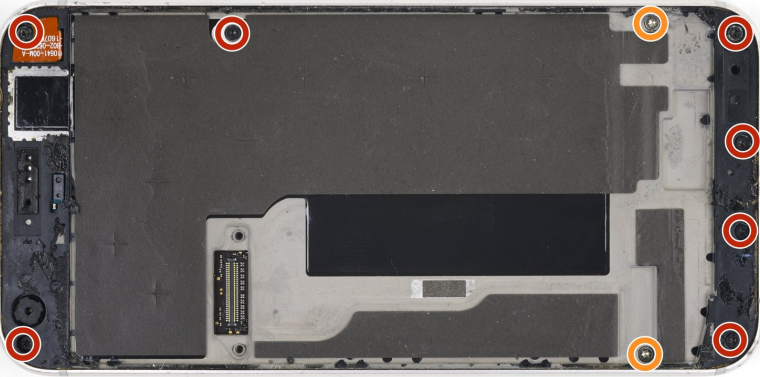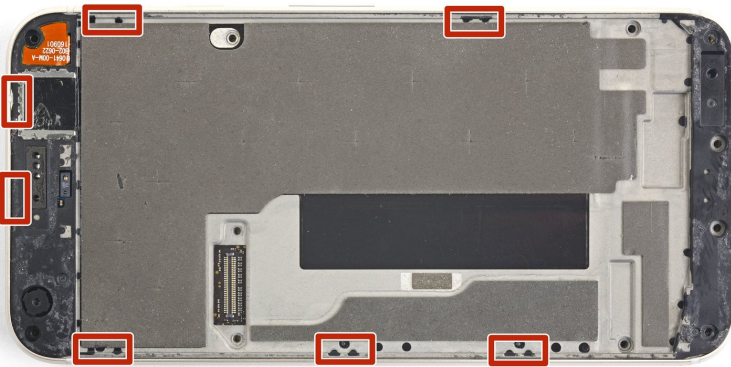
Step 10

- 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.

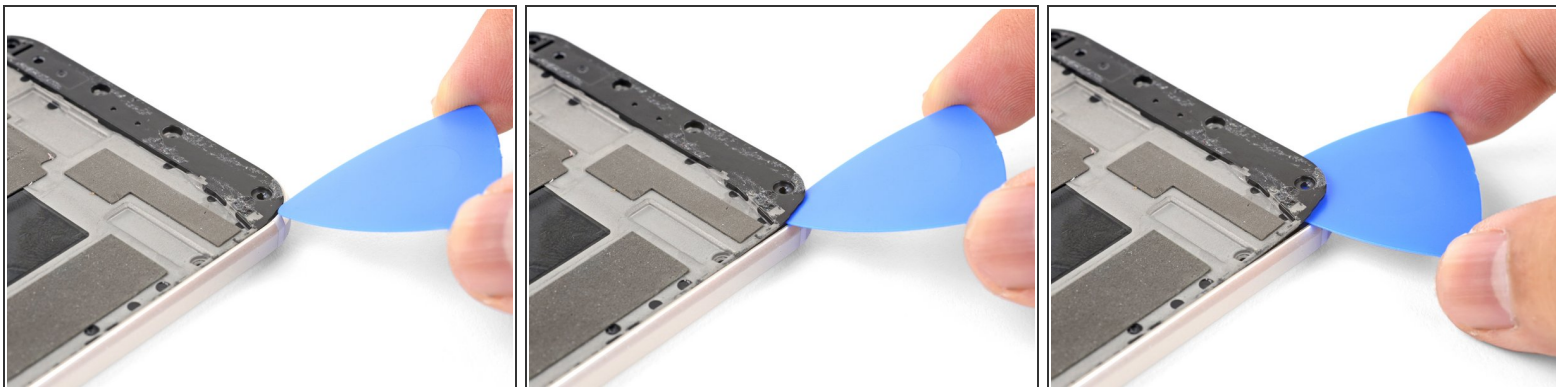## Step 11 — Google Pixel XL Opening Procedure

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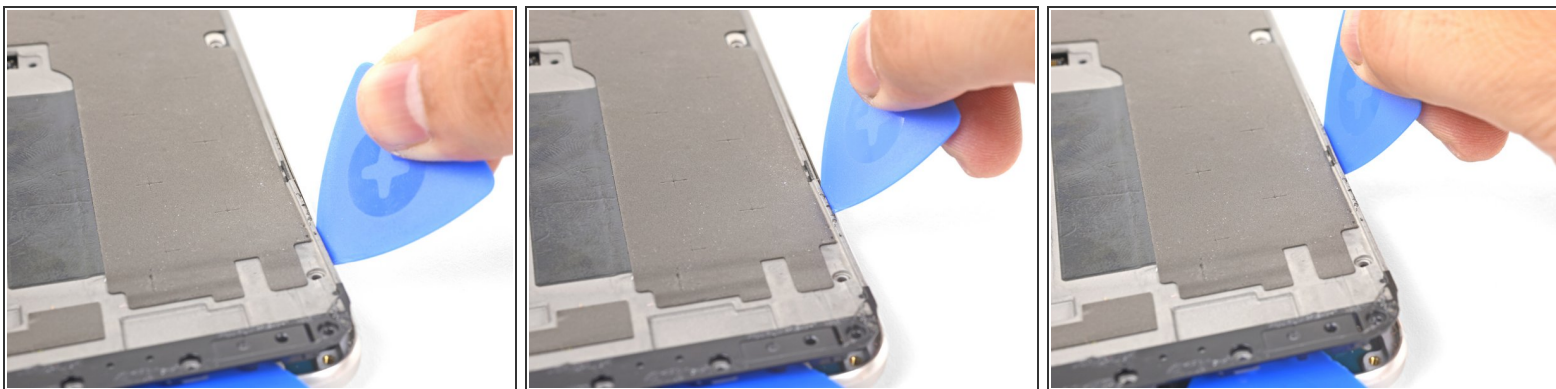 - Two silver 3 mm T5 screws

Step 12

- The midframe is held tightly in place by plastic clips which push into the edge of the back case.
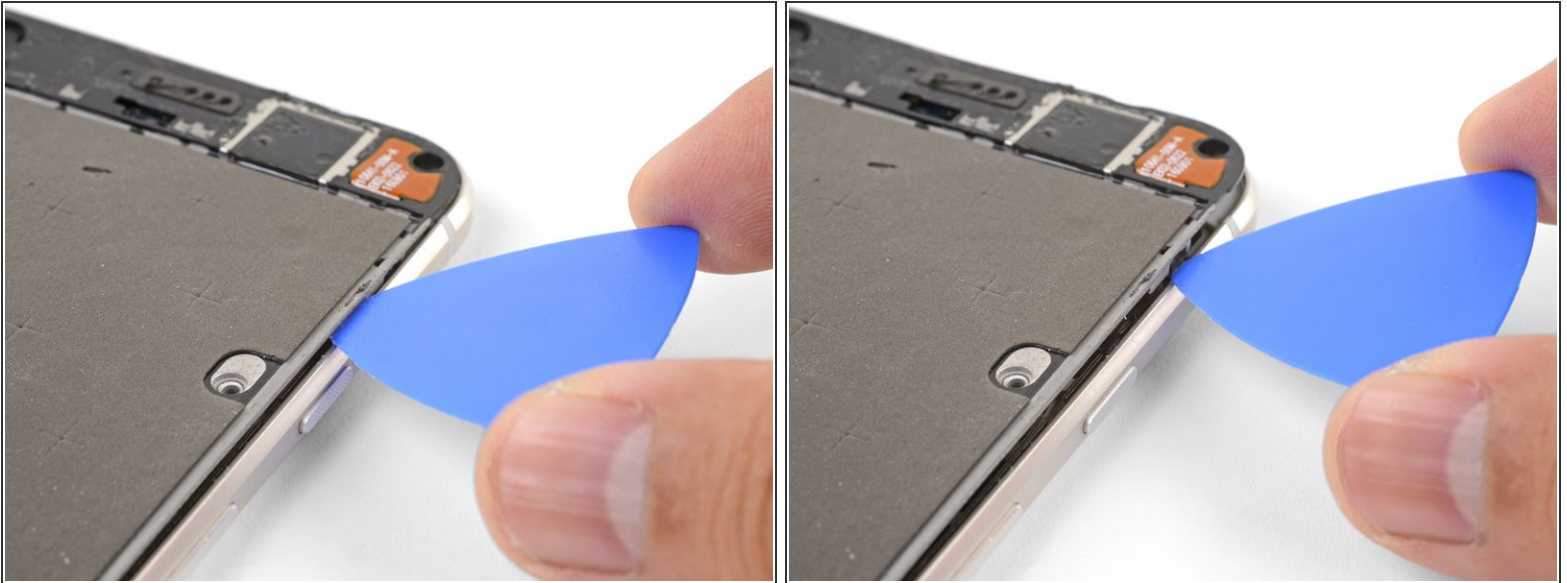
Step 13

- 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.
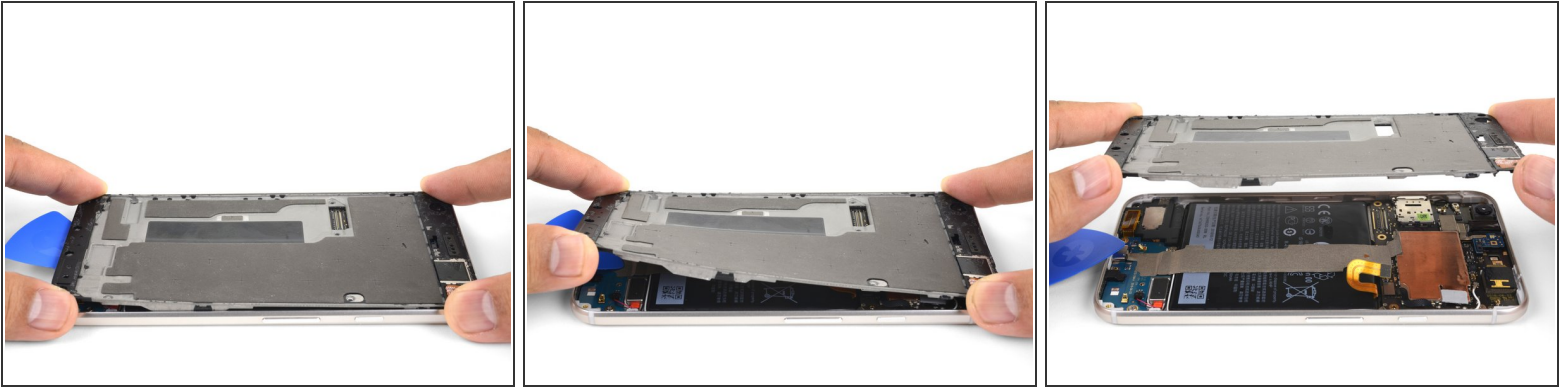
Step 14

- 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.

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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.
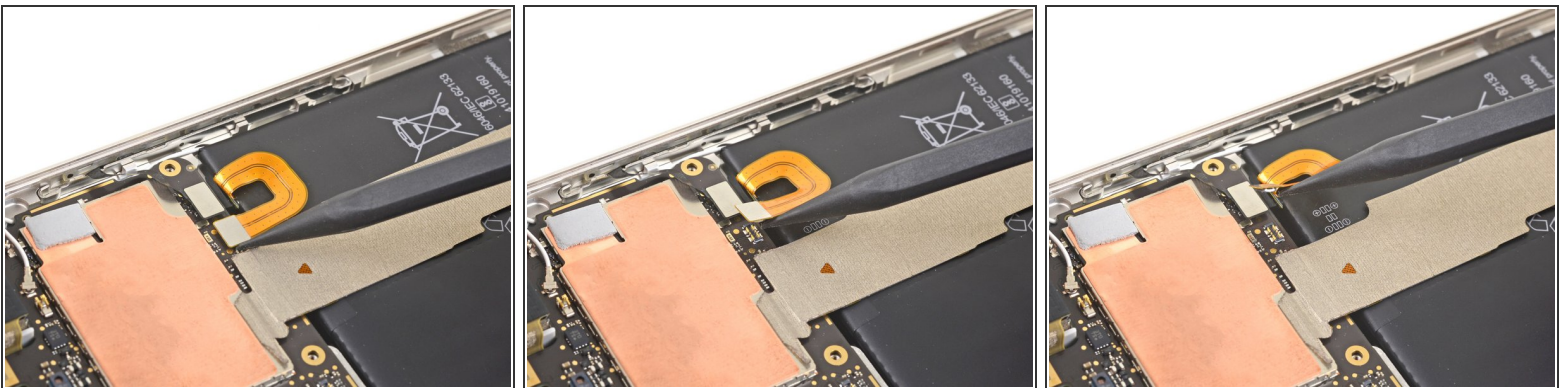
Step 16

- 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.
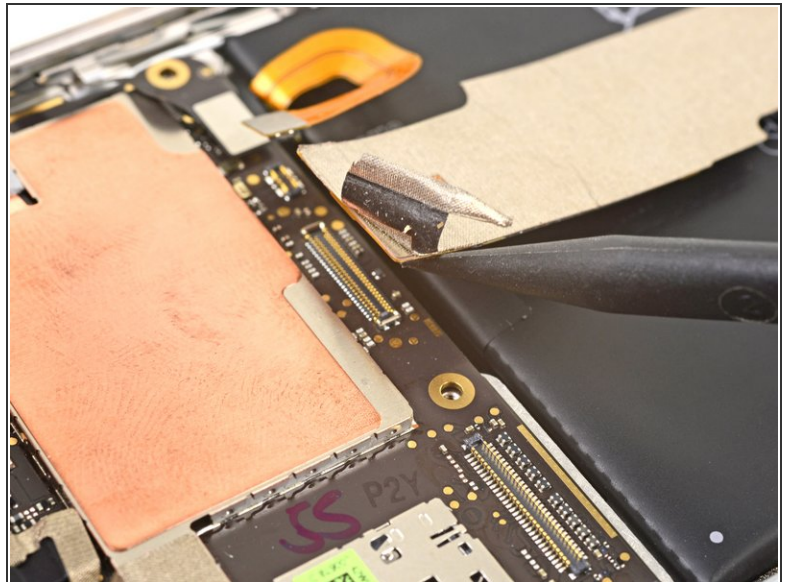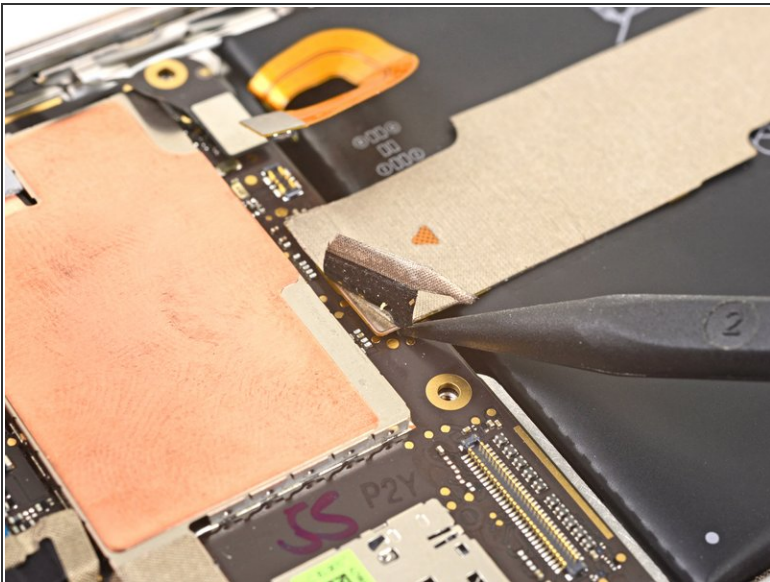
Step 17 — Charging Port

- 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.

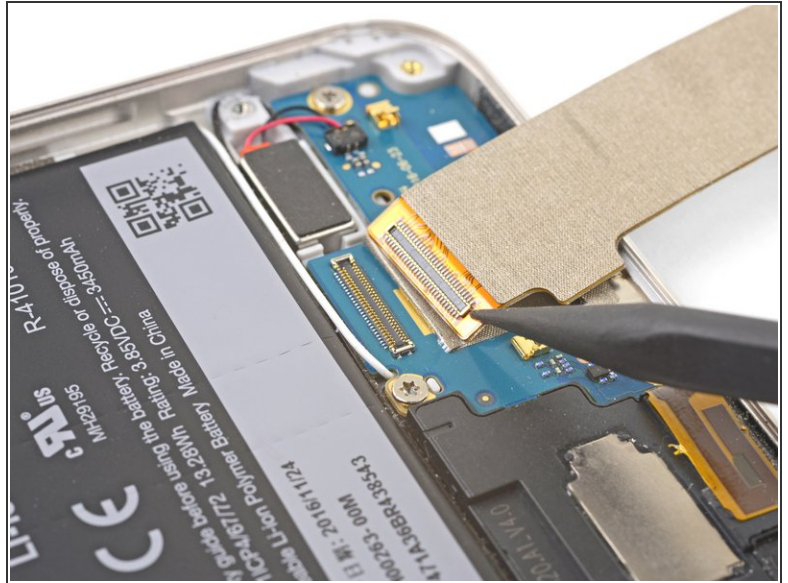This document was generated on 2020-01-25 08:10:19 AM (MST).

Step 18

- Use tweezers to peel up the tape at the top of the interconnect cable.
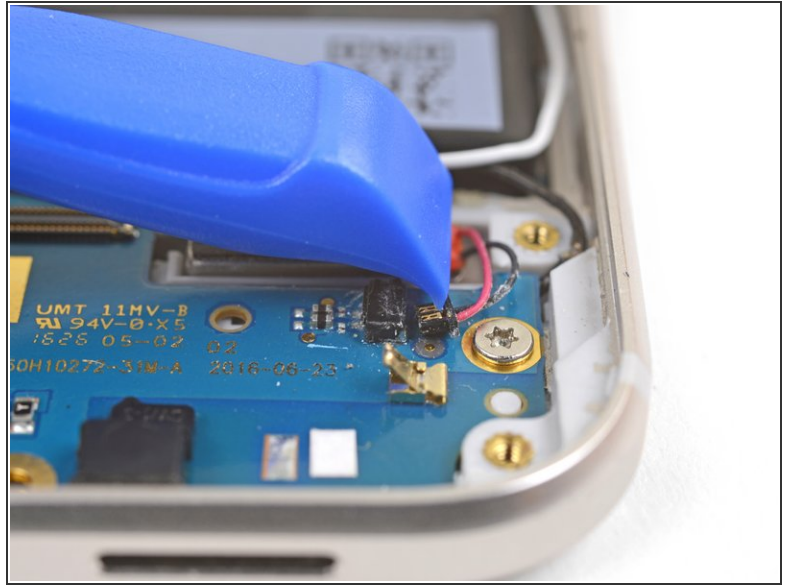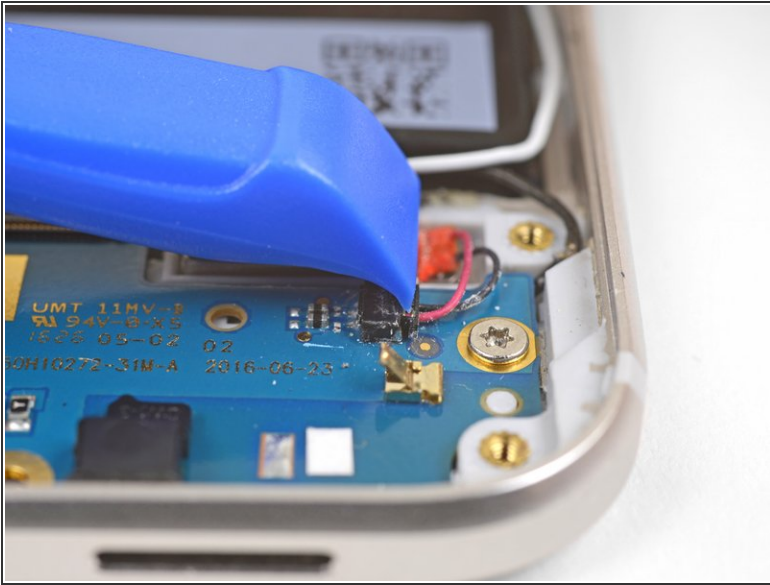
Step 19

- 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.

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Step 20

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

- Continue peeling the interconnect cable from the bottom daughterboard.

- Remove the interconnect cable.

Step 21

- Use the edge of an opening tool to carefully push the vibration motor connector out of its socket.
- ⚠ Do not pull the connector by the wires. Doing so will most likely break the connector.

- ★ To reinstall the connector, use the opening tool and the tip of a spudger to help align the connector, then gently push the connector in with the opening tool while using the spudger to brace against the socket.

Step 22

- Remove the two 3 mm T5 screws securing the daughterboard to the frame.

Step 23

- Use the flat end of a spudger to pry up and loosen the right edge of the daughterboard.

- Swing the daughterboard to the left to move it out of its recess.

⚠ Do not attempt to remove the daughterboard. It is still attached to the frame.

📌 During reassembly, be sure to route the white antenna cable through the daughterboard notch and wrap the black antenna cable around the screw post.

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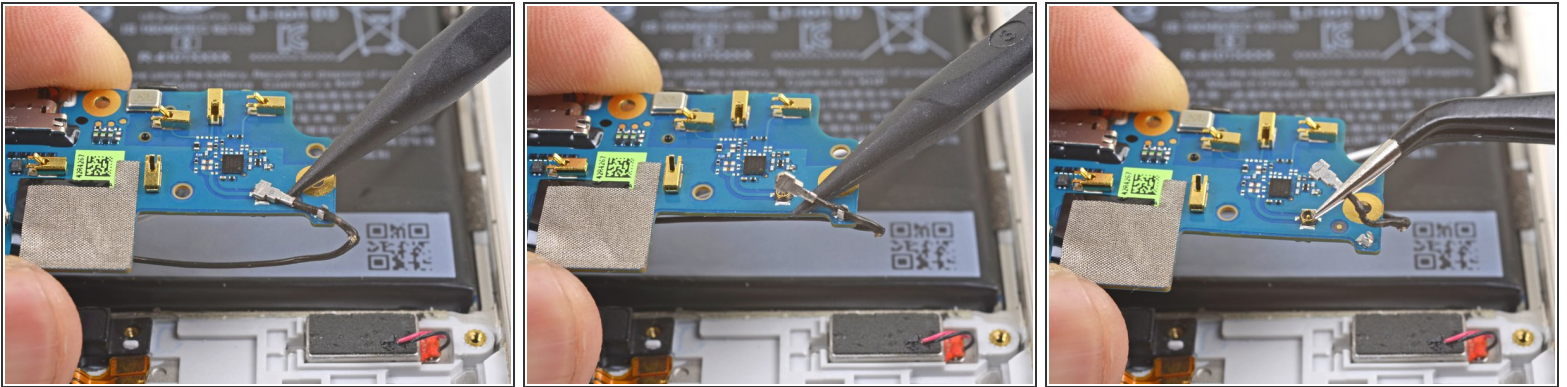
Step 24

- Slowly lift the left edge of the daughterboard up, pulling the antenna patch off of the loudspeaker.

- You can insert an opening pick under the antenna patch to help separate it from the loudspeaker.
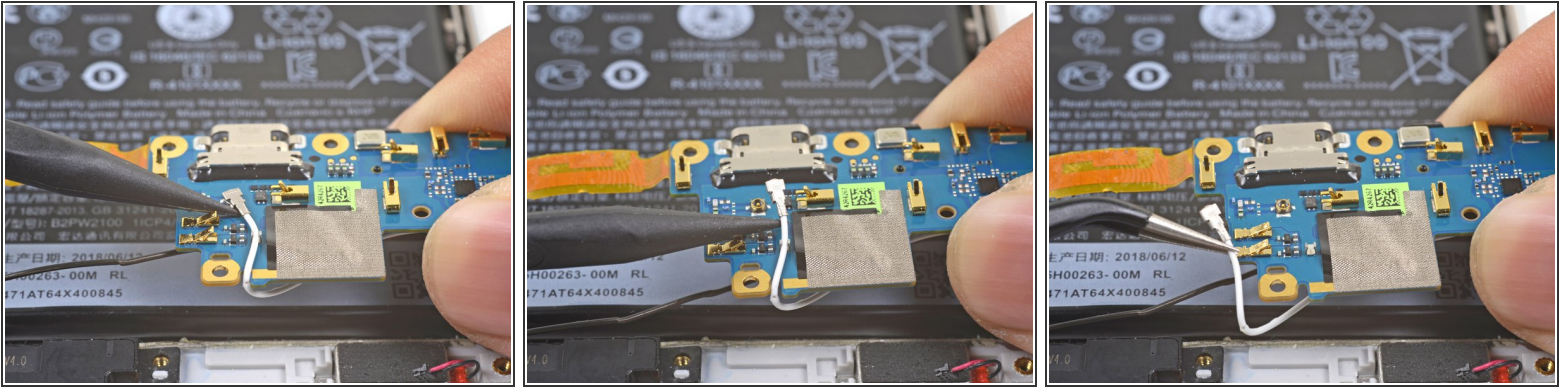
⚠ If the antenna patch begins to rip, **stop pulling**. Heat an iOpener, apply it to the corner for a minute, and use an opening pick to help remove it from the loudspeaker.
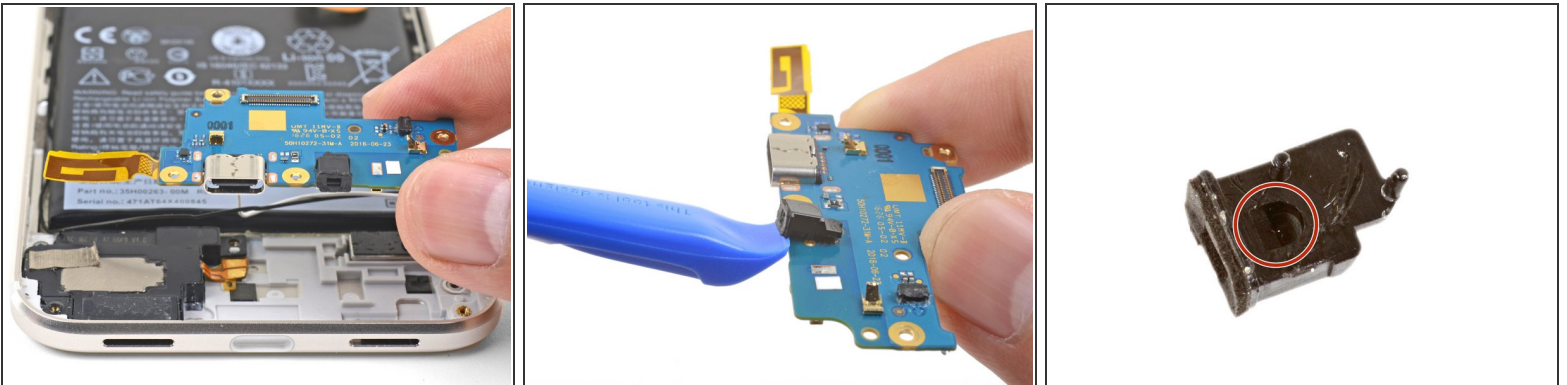
Step 25

- Flip the daughterboard over.

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

- Release the antenna cable from its retaining clip.

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Step 26

- Use the point of a spudger to pry up and disconnect the white antenna cable from its socket.

- Release the antenna cable from its retaining clip.

Step 27

- 📌 If your replacement part does not come with a plastic barometric vent, transfer the one from your old part to the new one.

  - Use the edge of an opening tool to gently push up and loosen the barometric vent from the board.

  - ⓘ Be careful not to push too hard, or you will bend the vent's plastic alignment pins.

  - You may need to use some adhesive or double-sided tape in order to attach the vent to the new part. If you do, be sure not to cover the bottom vent hole.

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.

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

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

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