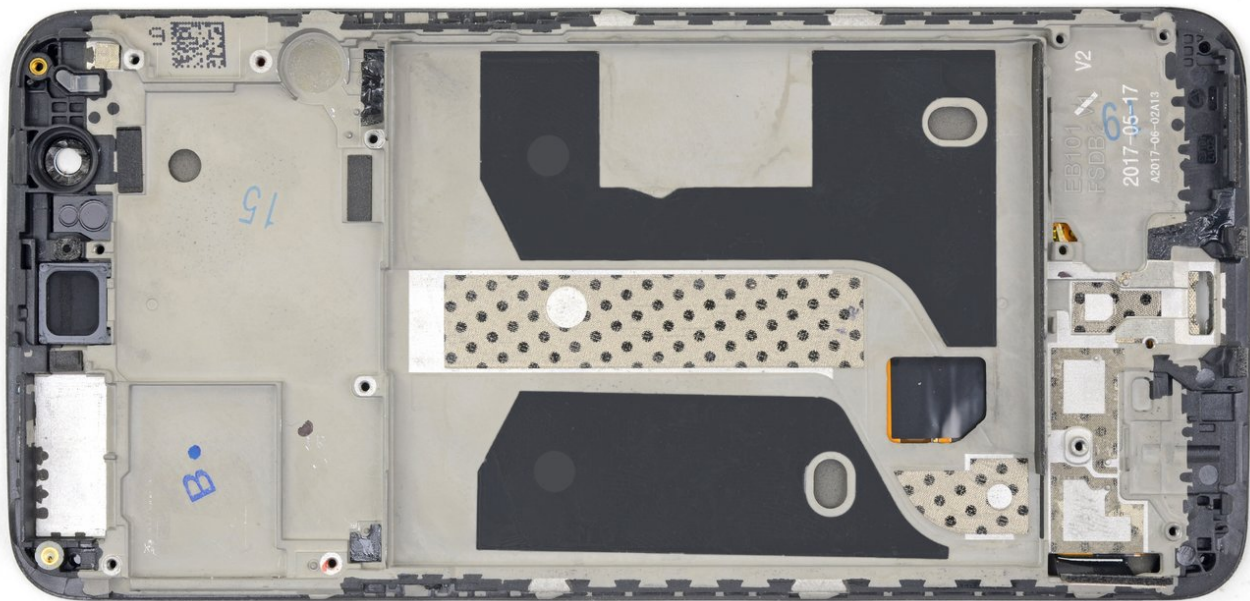




OnePlus 5 Screen and Digitizer Assembly Replacement

Follow this guide to replace the screen and digitizer for the OnePlus 5. This replaces the screen as well as the frame it is attached to.

Written By: Arthur Shi



INTRODUCTION

This guide shows how to remove and replace the screen and digitizer assembly for the OnePlus 5.

Use this guide for screens that come pre-mounted on a frame.

This procedure requires significant disassembly, including battery replacement, and transferring small parts from the old screen to the replacement. The two most difficult parts are getting the frame clips of the back cover free, and not damaging the fingerprint scanner cable.

Some guide images will show the dual rear-facing camera module already removed from the phone. You do not need to remove it for this procedure.

If your battery is swollen, [take appropriate precautions](#).

For your safety, discharge your battery below 25% before disassembling your phone. This reduces the risk of a dangerous thermal event if the battery is accidentally damaged during the repair.



TOOLS:

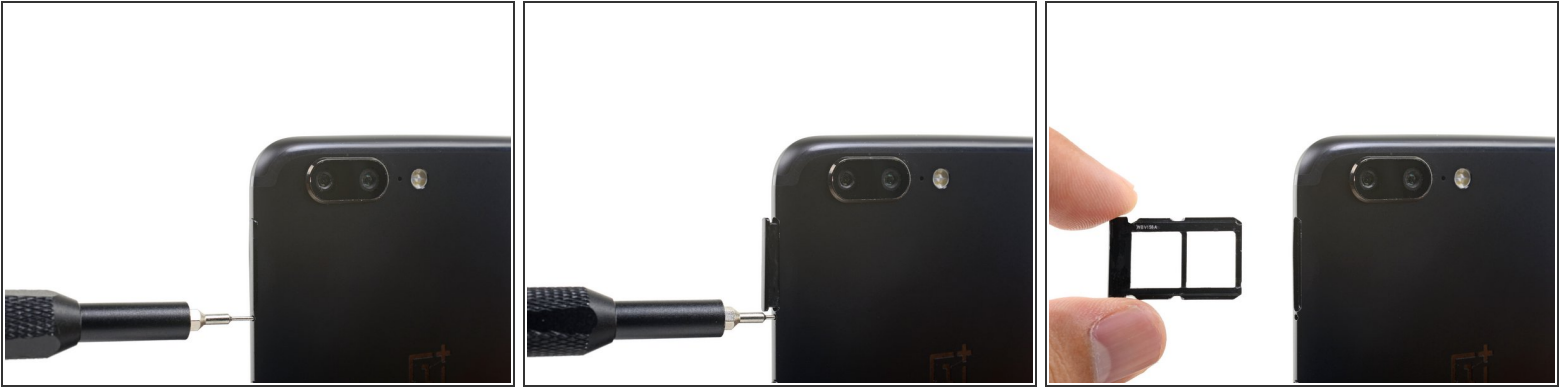
- [SIM Card Eject Tool](#) (1)
- [T2 Torx Screwdriver](#) (1)
- [Suction Handle](#) (1)
- [iFixit Opening Tool](#) (1)
- [Phillips #00 Screwdriver](#) (1)
- [Spudger](#) (1)
- [Tweezers](#) (1)
- [iFixit Opening Picks \(Set of 6\)](#) (1)



PARTS:

- [OnePlus 5 Screen](#) (1)
- [OnePlus 5/5T Replacement Battery](#) (1)

Step 1 — SIM Card Tray



- Insert a SIM card eject tool, bit, or a straightened paperclip into the small hole below the SIM card tray, located near the rear cameras on the edge of the phone.
 - Press firmly to eject the tray.
- ☒ During reassembly, be sure to properly orient the SIM tray you you insert it.

Step 2 — Back Cover



- Remove the two 2.6 mm T2 screws straddling the USB-C port on the bottom edge of the phone.

Step 3



⚠ There is a high risk of damaging the display panel if this opening procedure is improperly followed.

i The following four steps show how to pry the rear case from the plastic frame. Read through the steps first before attempting the procedure.

⚠ There are two different seams between the body and the screen of the phone:

- *Display panel seam*: This seam is part of the display assembly. **Do not pry** at this seam, or you will separate and damage the display panel.
- *Frame seam*: This is where the plastic frame meets the back cover. **Only pry at this seam.**
- There are twelve clips that hold the frame against the rear case. Be aware of their location as you pry the back cover off in the following steps.

Step 4



- ⓘ As you work, try not to accidentally power on the phone. If you do, turn the phone off before resuming disassembly.
- Place a suction cup near the bottom edge of the display.
- Pull on the suction cup with strong steady force.
- Press the edge of an opening tool straight into the frame seam near the suction cup until the edge wedges between the plastic frame and the back cover's lip.
- ⓘ Due to tight tolerances, this will take substantial force. Using a new opening tool with an unmarred edge will help with this step.

Step 5



- Once the opening tool's edge is wedged in position, carefully slide the tool along the bottom edge of the phone.
- Carefully guide the opening tool around the left corner of the phone while keeping the tool's edge within the seam.

Step 6



- Lever the opening tool to release the first clip from the frame.

Step 7





- Continue sliding the opening tool along the long edge, releasing the clips along the way.
- ⓘ The last clip in the top-left corner near the front-facing camera is recessed and can be difficult to release. Take your time and use the flat end of a spudger or an opening pick to help.


Step 8



- With the bottom and left edge of the phone freed, gently wiggle the frame to release the top and right edge clips.

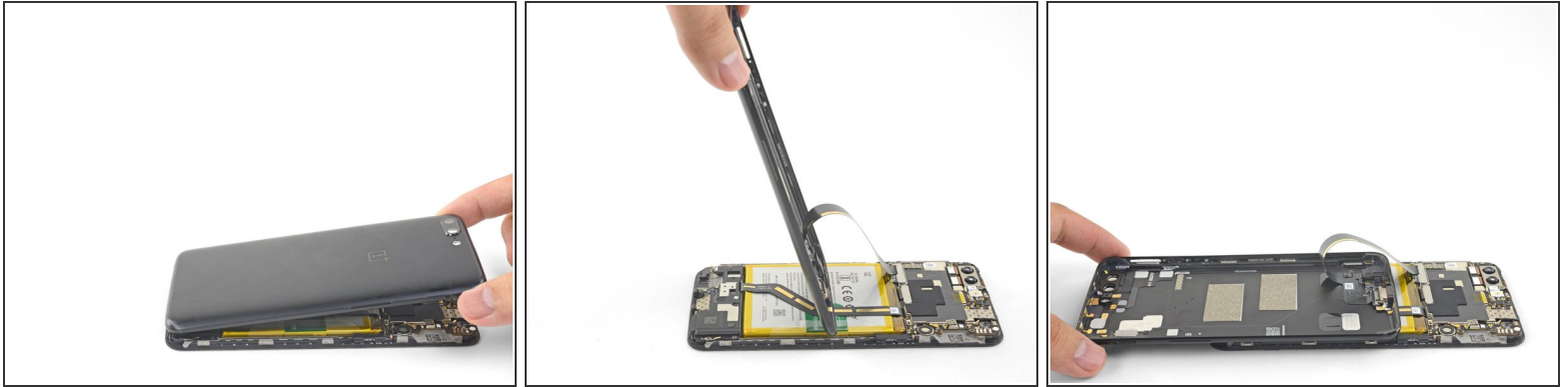
 **The frame is still connected to the back cover by a long flex cable. Do not remove the back cover.**

 During reassembly, pause here to test your phone's functionality before securing the back cover.

 To reinstall the back cover:

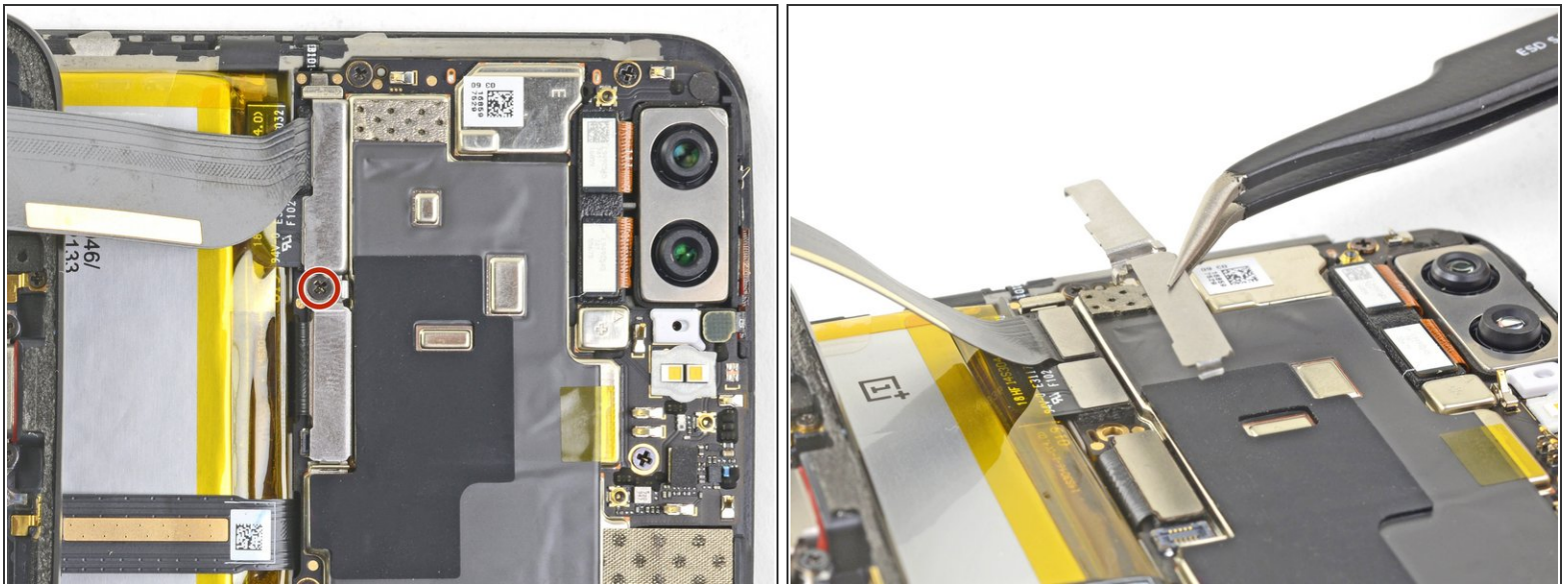
- [Align the top edge of the frame](#) to the back cover and ensure that the top clips slip into place.
- [Squeeze along the long edges of the phone](#) to snap the remaining clips into place.

Step 9



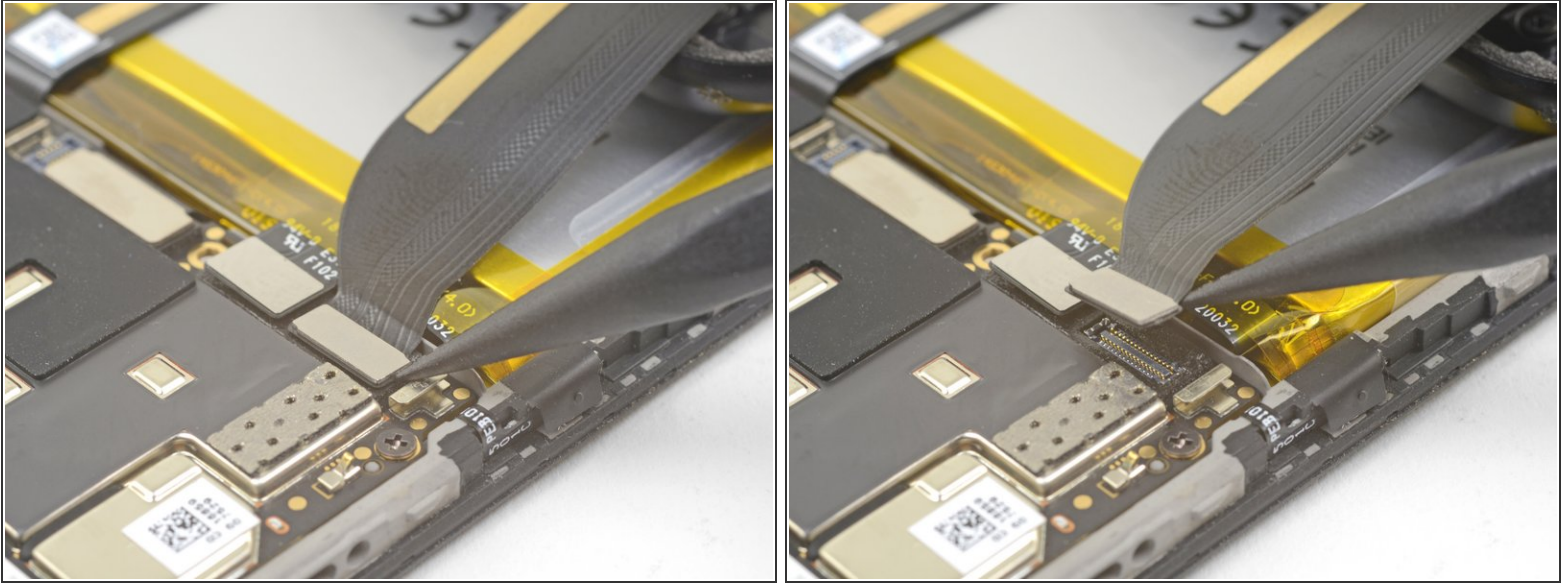
- With all the clips released, flip the phone over so that the display is face-down.
- Swing the back cover around and rest it on top of the exposed frame.
- ⓘ Be careful not to stress the flex cable connecting the back cover and the frame.

Step 10



- Remove the 2.6 mm Phillips screw holding the cable bracket above the battery in place.
- Lift up and remove the cable bracket.
- ☑ To reinstall the bracket, [position one end into place](#), and bend the bracket slightly to spring the other end into place.

Step 11



- Use the point of a spudger to pry up and disconnect the back cover flex cable from its socket.
- i** 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.

Step 13 — OnePlus 5 Battery Disconnect



- Use the point of a spudger to pry up and disconnect the battery connector from its socket.

Step 14 — Loudspeaker



- Remove the six 2.6 mm Phillips screws securing the loudspeaker to the frame.

Step 15



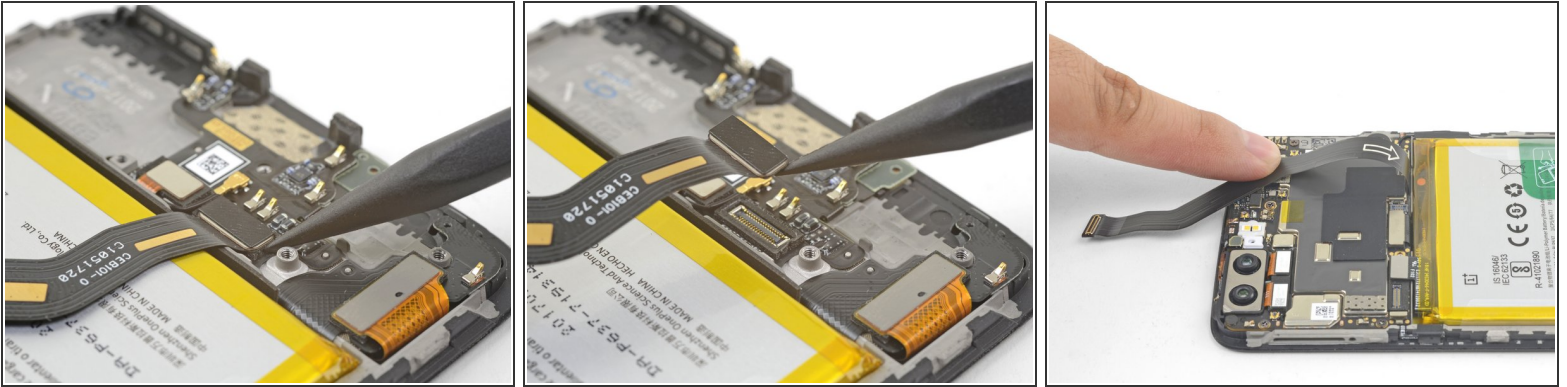
- Insert the flat end of a spudger into the corner of the loudspeaker assembly and pry slightly, loosening the loudspeaker from its recess.

Step 16



- Remove the loudspeaker.
- ★ To reinstall the loudspeaker, align the loudspeaker's bottom edge to the frame, then press the assembly into place.
- i During reinstallation, make sure that the [display cable connector](#) under the loudspeaker assembly is still securely fastened.

Step 17 — OnePlus 5 Interconnect Cable Disconnect



- Use the point of a spudger to pry up and disconnect the interconnect flex cable from the socket.
- ⓘ If you are replacing the battery, bend the interconnect flex cable away from the phone and secure it out of the way with a rubber band or tape.

Step 18 — Battery



- Peel the green pull tab up from the battery.

Step 19



- Brace the phone frame against the table.
- Using a strong, steady force, pull the green pull tab upwards until the battery loosens from its recess.
- ❗ If you are having a hard time, apply some high concentration (over 90%) isopropyl alcohol along the battery seam to help weaken the adhesive.
- Swing the battery completely out of its recess and pull it off of the plastic liner.

Step 20

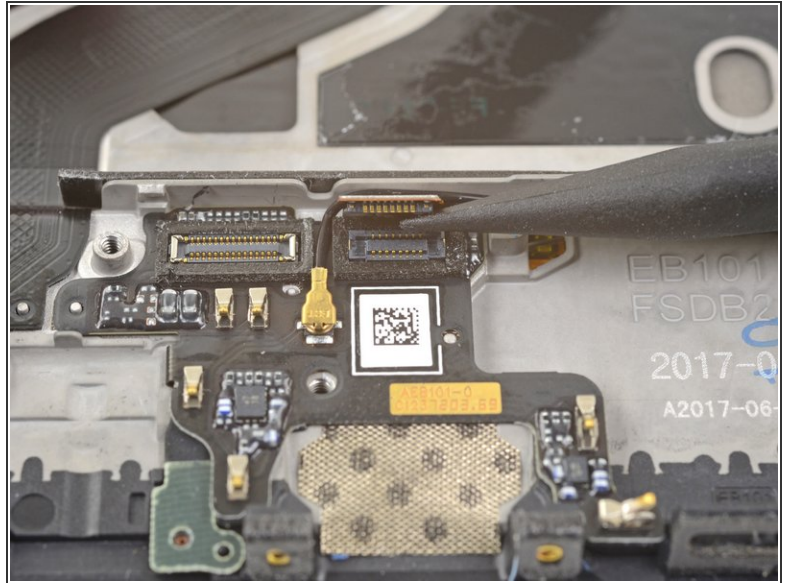
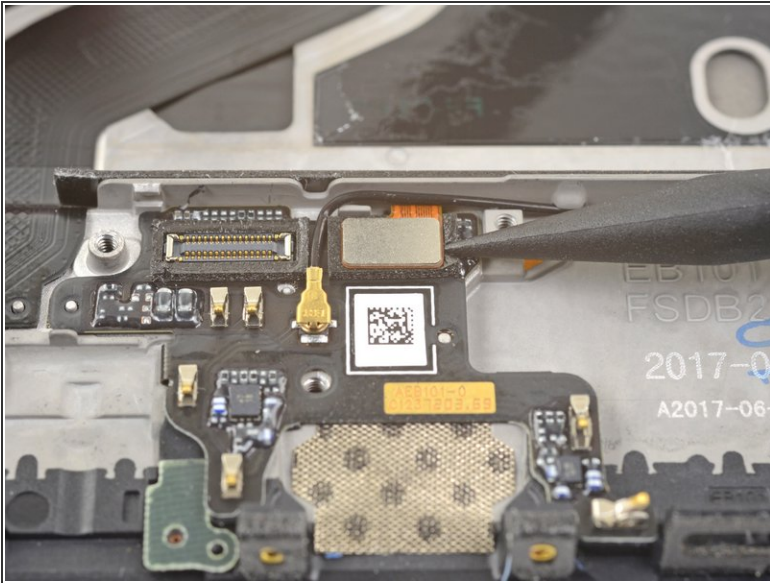


- Remove the battery.

⚠ Do not reuse the battery after it has been removed. Reusing a battery that is bent or otherwise stressed is a potential safety hazard.

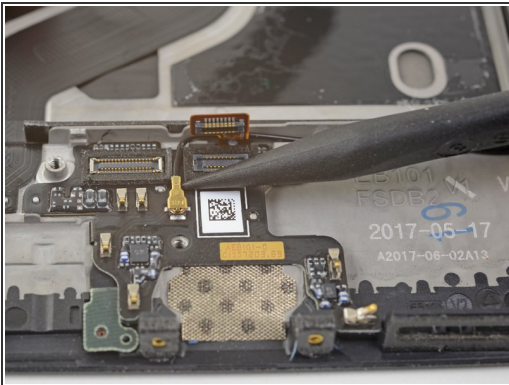
- ☑ If your replacement battery did not come with a green pull tab, you can transfer the old tab to the new battery to help with subsequent replacements.
- ☑ While installing a new battery, *temporarily* connect the battery to the phone to ensure proper battery alignment.
- ☑ If you are installing a battery onto a new screen and digitizer assembly, be sure to peel off the [dark blue adhesive liners](#) to expose the battery adhesive for the new battery.

Step 21 — Daughterboard



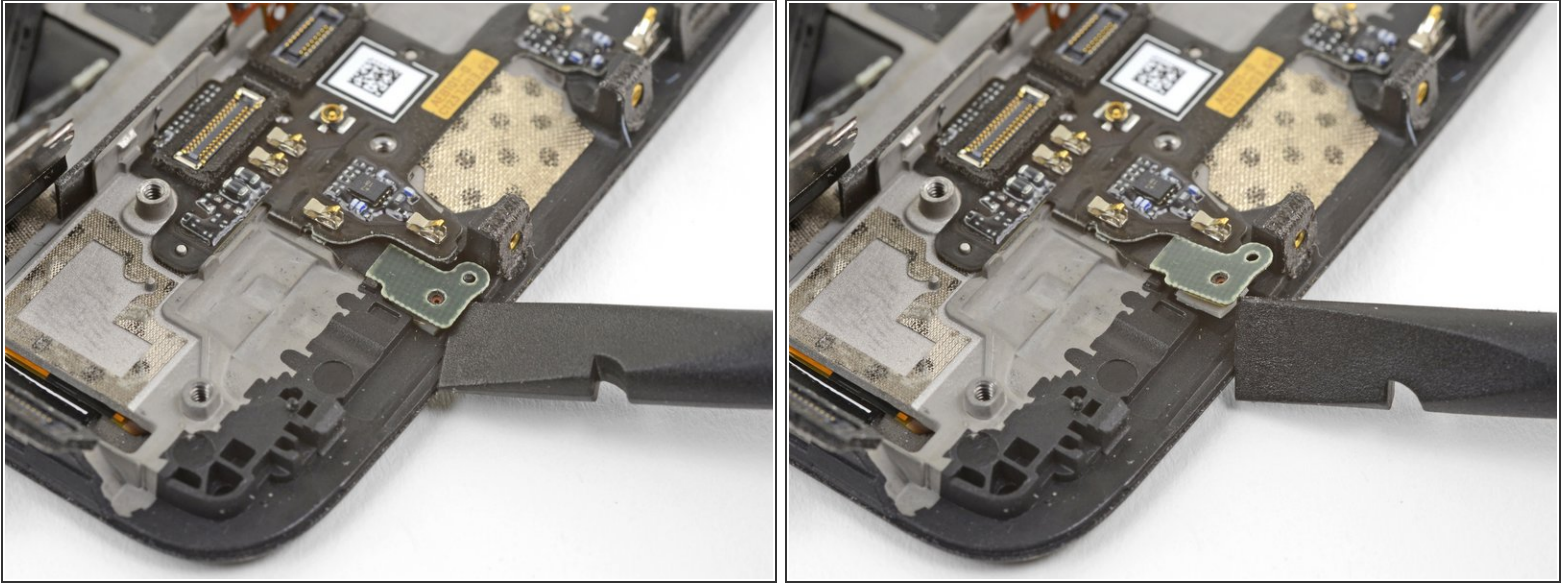
- Use the point of a spudger to pry up and disconnect the fingerprint scanner connector from its socket on the daughterboard.

Step 22



- Slip the point of a spudger underneath the antenna interconnect cable and pry up to disconnect it from its socket on the daughterboard.
- De-route the antenna interconnect cable out of the way of the daughterboard.

Step 23



- Insert the edge of a flat end of the spudger underneath the microphone board and twist slightly to release the board's adhesive.

Step 24



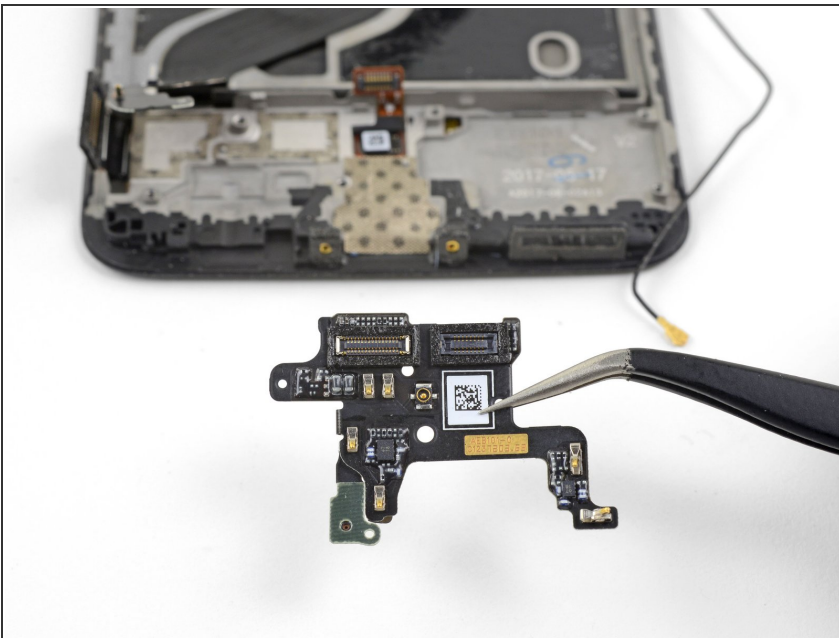
- Slide the flat end of a spudger or the point of an opening pick underneath the daughterboard near its right edge.
- Gently pry to loosen the daughterboard from its recess.
- ⓘ If the daughterboard begins to bend significantly, **stop** and pry from a different angle.

Step 25



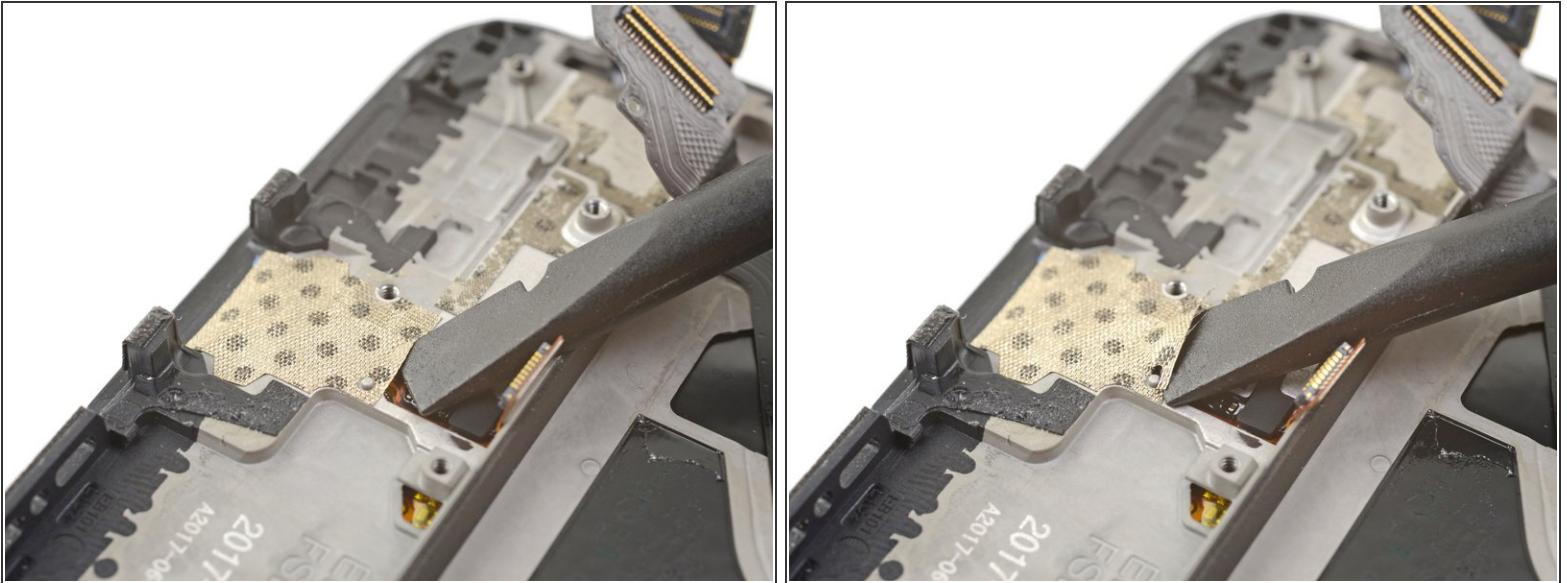
- Insert the flat end of a spudger underneath the daughterboard, this time approaching it from the bottom.
- Twist and slide the spudger slightly to release the daughterboard from its recess.

Step 26



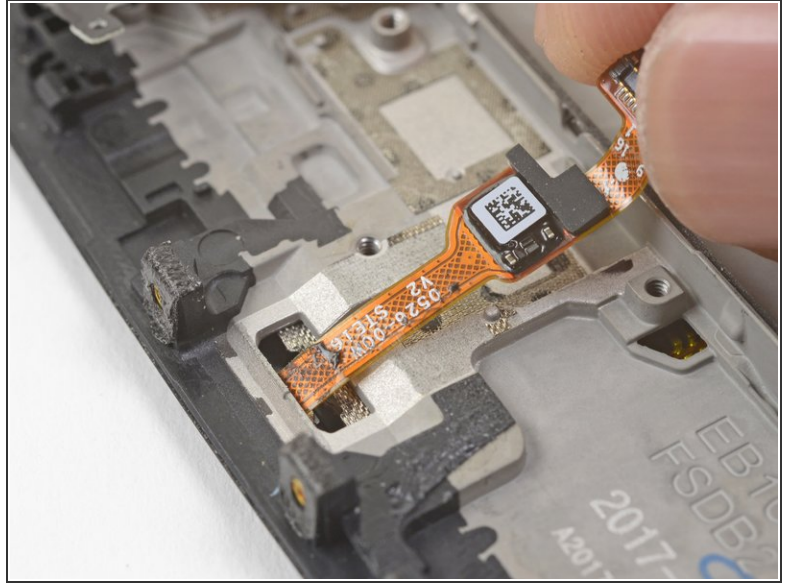
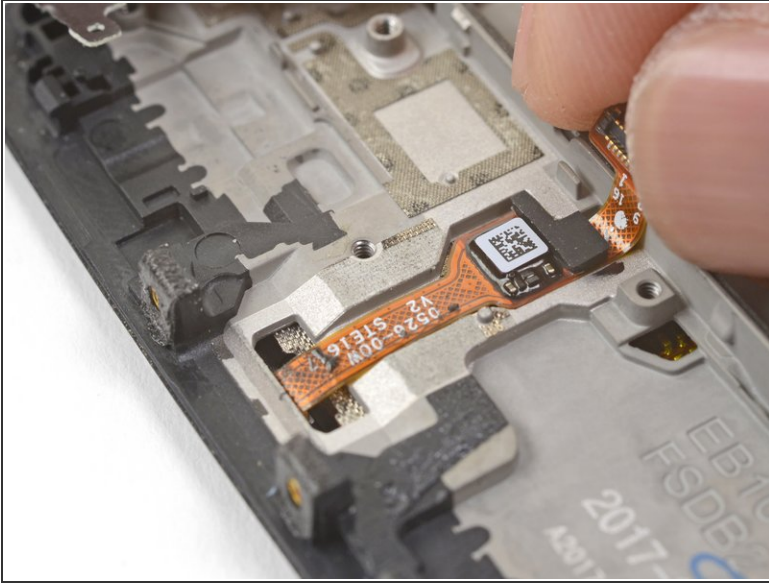
- Remove the daughterboard.
- ☑ If you are installing the daughterboard onto a replacement frame, be sure to peel off the [blue adhesive liners for the daughterboard](#) before sticking it in place.

Step 27 — Fingerprint Scanner



- Slide the flat end of a spudger underneath the tape covering the fingerprint scanner.
 - Lift up to pry and remove the tape.
- ✦ You will most likely not be able to reuse the tape during reinstallation. Replace it with a piece of [electrical tape](#).

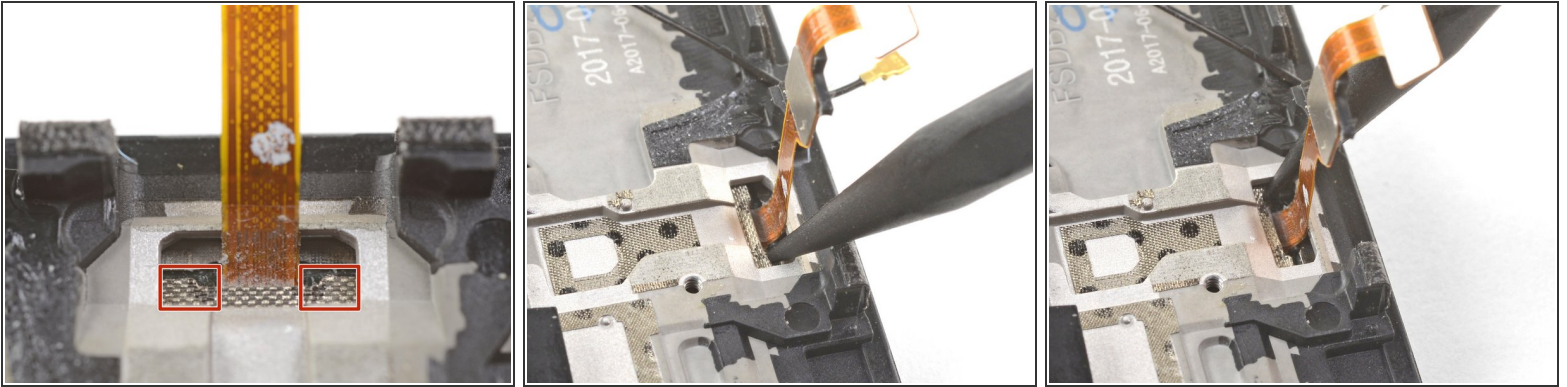
Step 28



⚠ If you are planning to reuse the fingerprint scanner, be extremely careful pulling the flex cable up. It is very delicate and prone to breaking.

- Use your finger to gently lift up the connector end of the fingerprint scanner. Pull upwards slowly. Do not pull directly away from the fingerprint scanner.
- Keep pulling upwards until the fingerprint scanner cable is freed from its recess.

Step 29

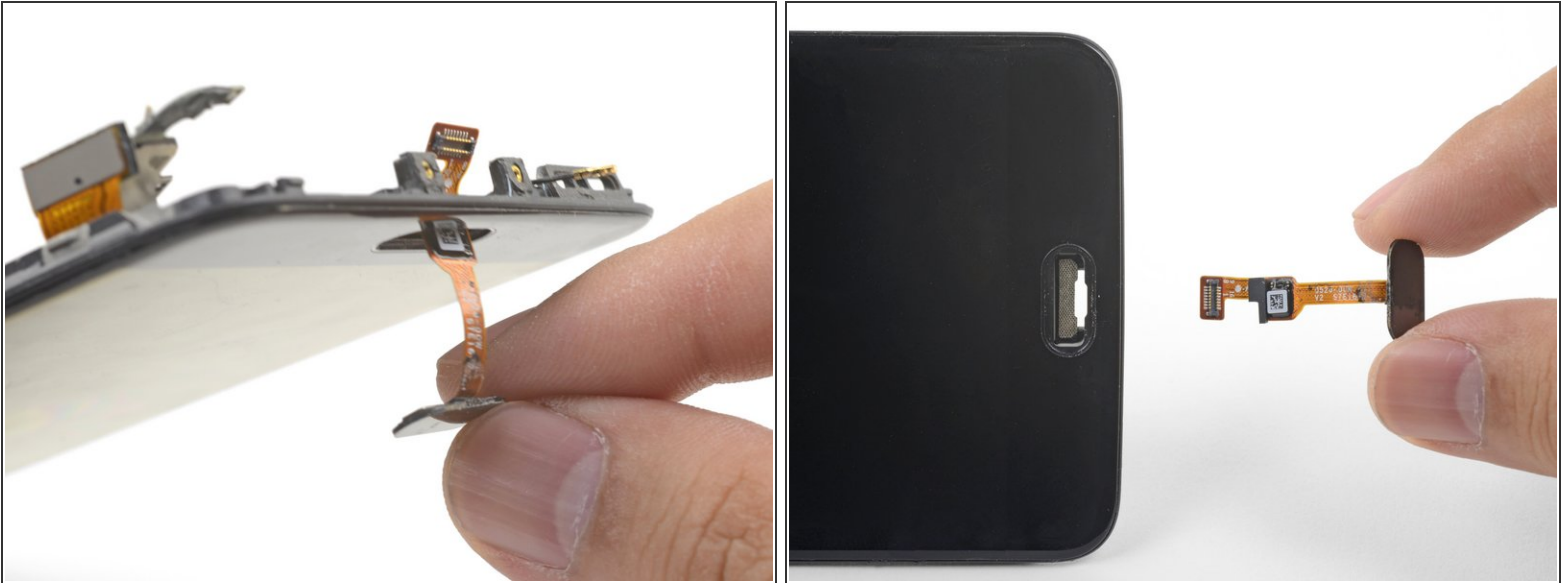


- Insert the point of a spudger into the marked areas on either side of the flex cable, and push until the fingerprint scanner is loosened from its recess.

⚠ Do not apply pressure directly onto the delicate flex cable.

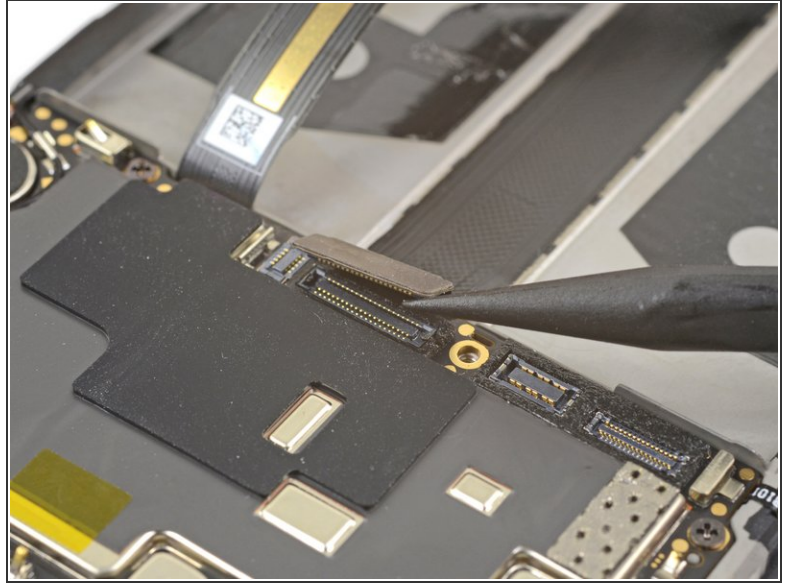
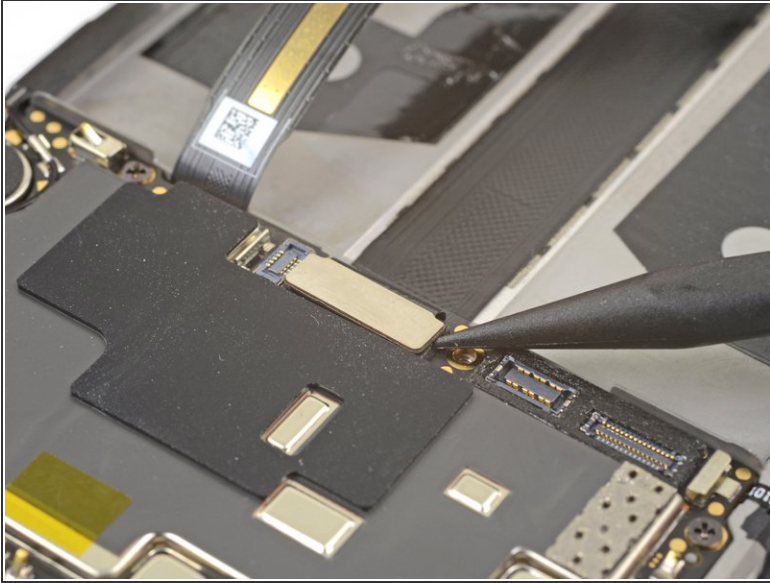
- ⓘ If the fingerprint scanner is not coming loose, make sure you are pressing the spudger's point against the backside of the scanner as indicated in the first image, and not [the metal plate](#) below it.

Step 30



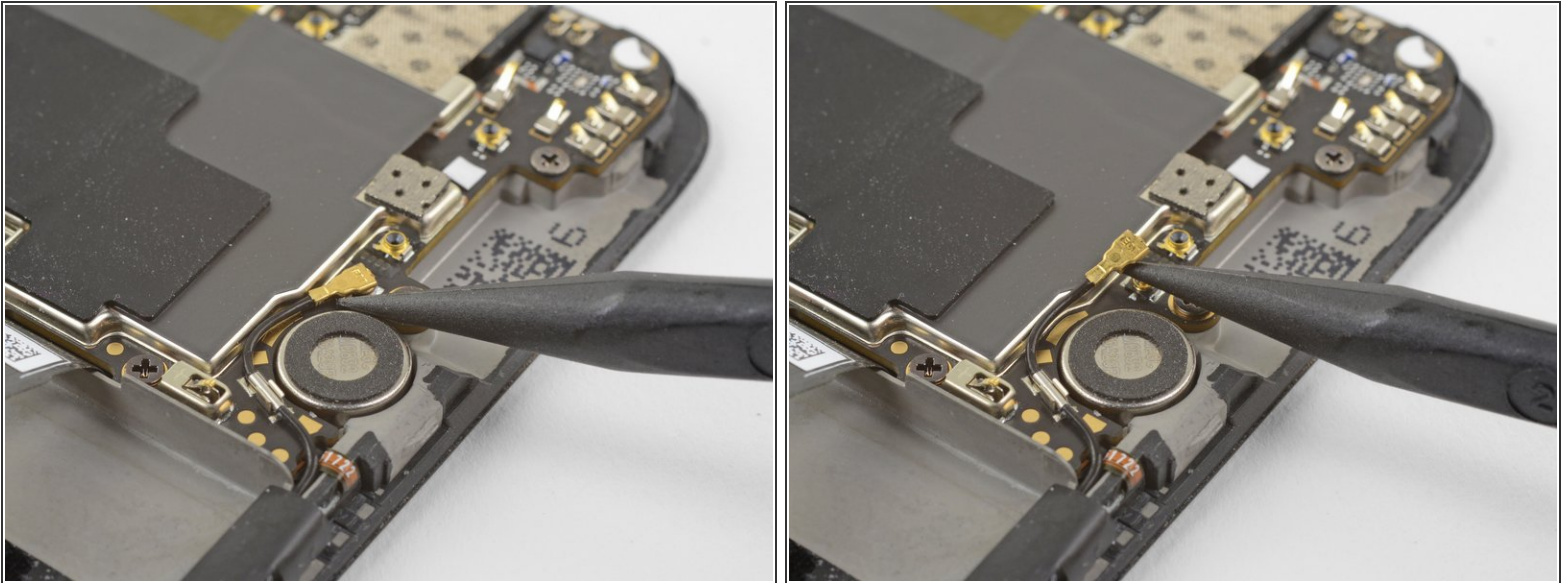
- Once the fingerprint scanner is loosened from its recess, carefully thread its flex cable through the cutout, out of the front of the display.
 - Remove the fingerprint scanner.
- ✦ If you are installing the fingerprint scanner onto a replacement frame, be sure to [peel off the blue adhesive liner for the fingerprint scanner](#) before sticking it in place.

Step 31 — Motherboard



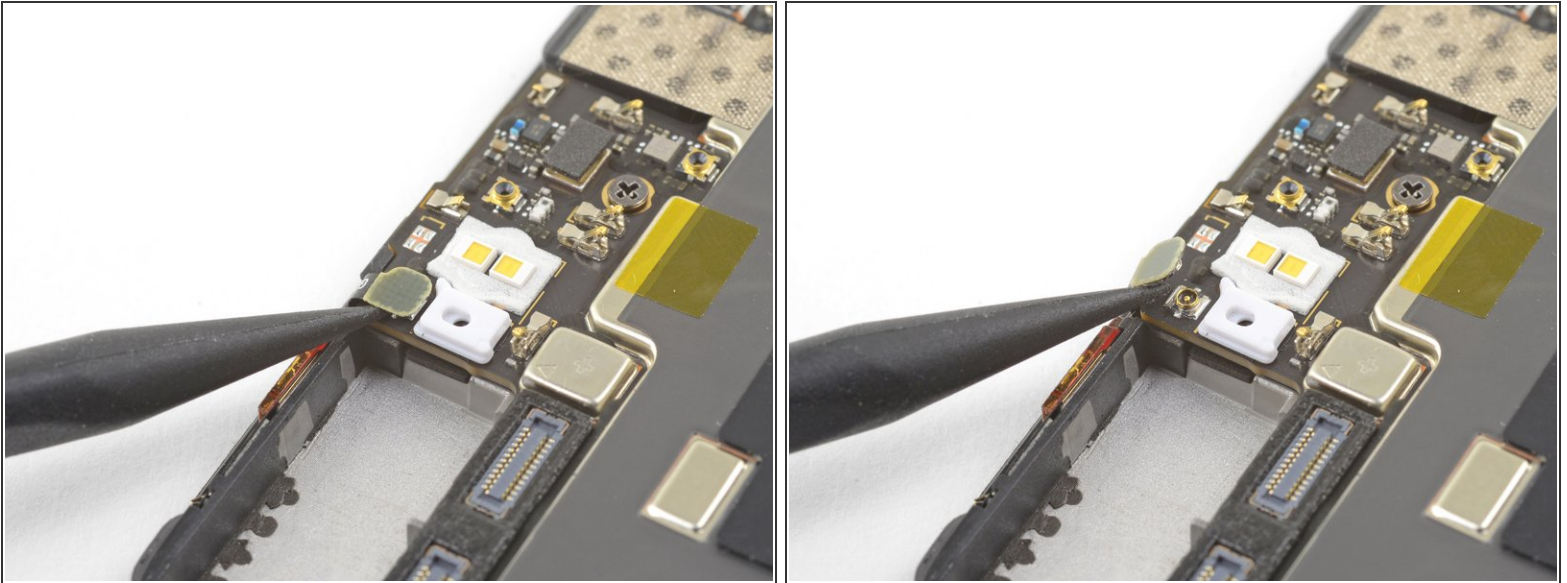
- Use the point of a spudger to pry up and disconnect the display interconnect cable from its socket near the bottom edge of the motherboard.

Step 32



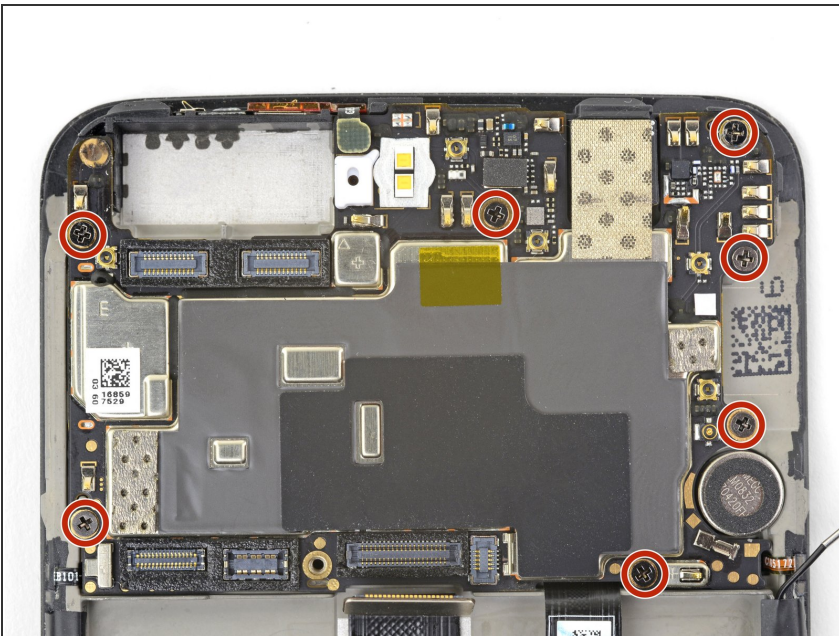
- Slide the point of a spudger underneath the antenna interconnect cable that is connected to the motherboard above the vibration motor.
- Pry up to disconnect the cable from its socket.
- De-route the cable out of its motherboard grounding clip and move it out of the way.

Step 33



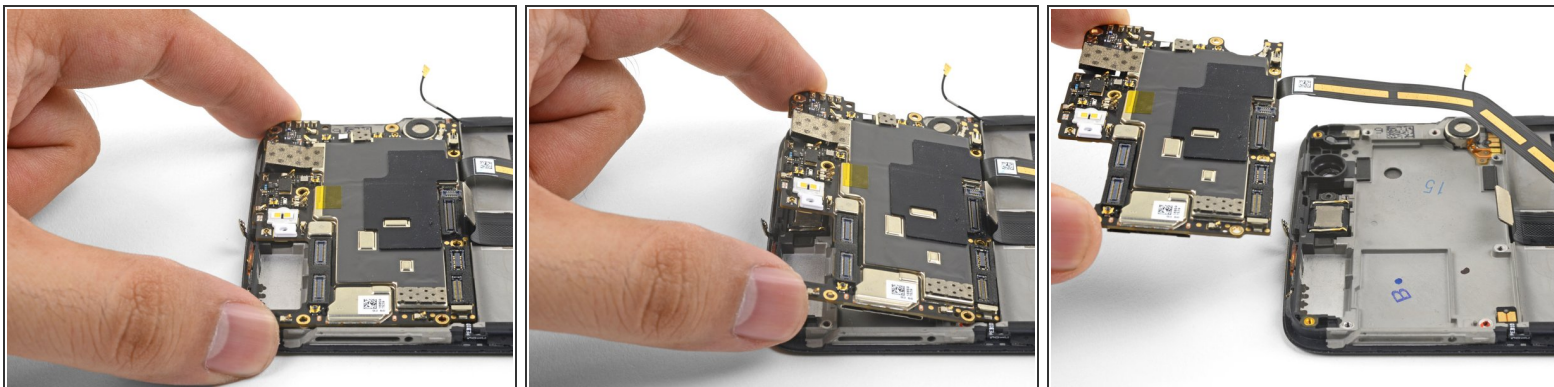
- Slide the point of a spudger under the small square antenna connector connected to the motherboard near the top edge.
- Pry up to disconnect the antenna connector from its socket.

Step 34



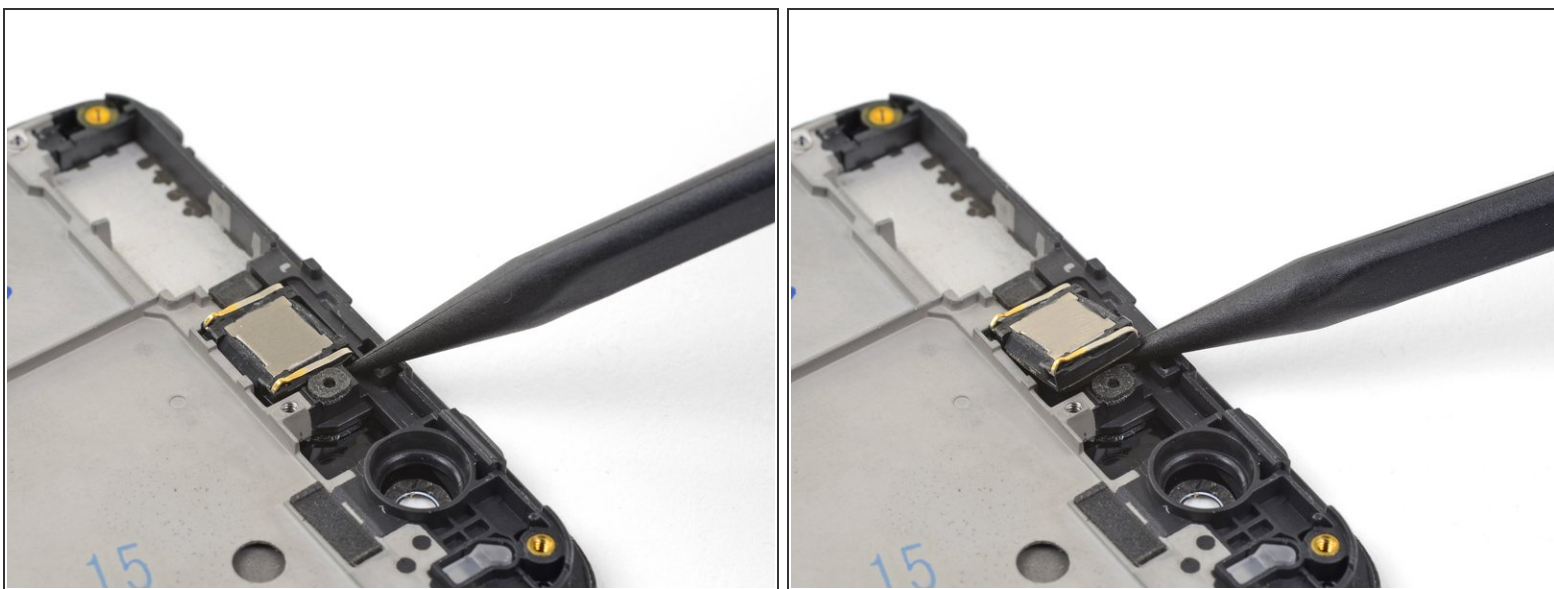
- Remove the following seven 2.6 mm Phillips screws securing the motherboard:
- ❗ Some screws may be hidden under stickers. Remove the stickers to access the screws.

Step 35



- Use your fingers to lift up the top edge of the motherboard.
- Lift the motherboard out of its recess and remove it.

Step 36 — Earpiece Speaker



- Insert the point of a spudger under the top right corner of the earpiece module and pry up, loosening the module from its recess.

Step 37



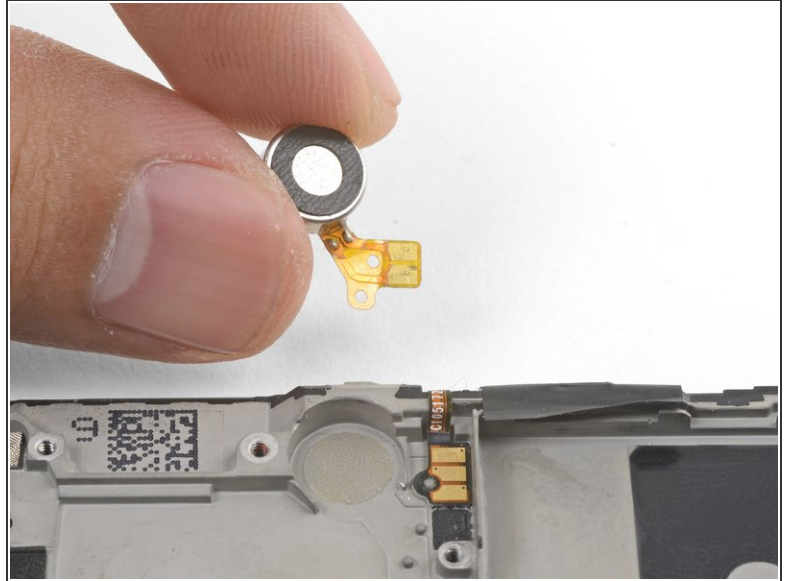
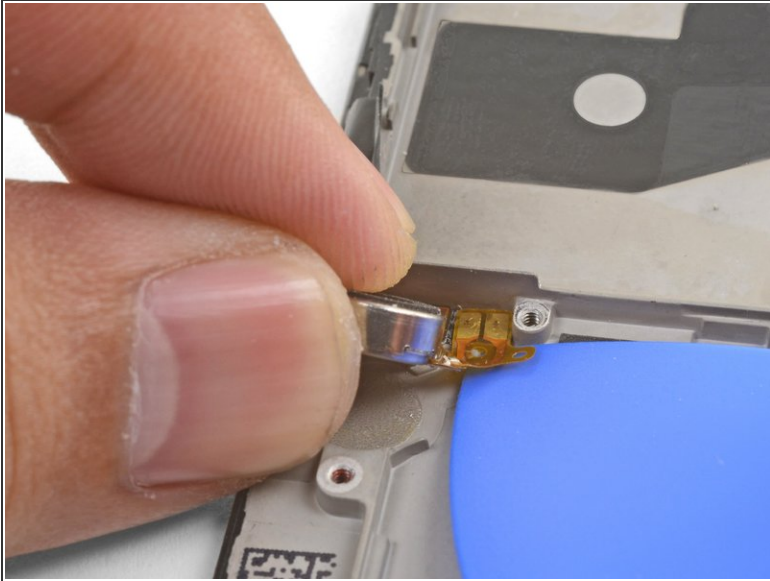
- Remove the earpiece module.
- ☑ During reinstallation, be sure that the earpiece module is [properly oriented](#) such that the gold contacts face downwards.
- ☑ If you are transferring the earpiece module to a replacement frame, be sure to peel and remove [the white adhesive liner](#) before pressing the earpiece module into place.

Step 38 — Vibration Motor



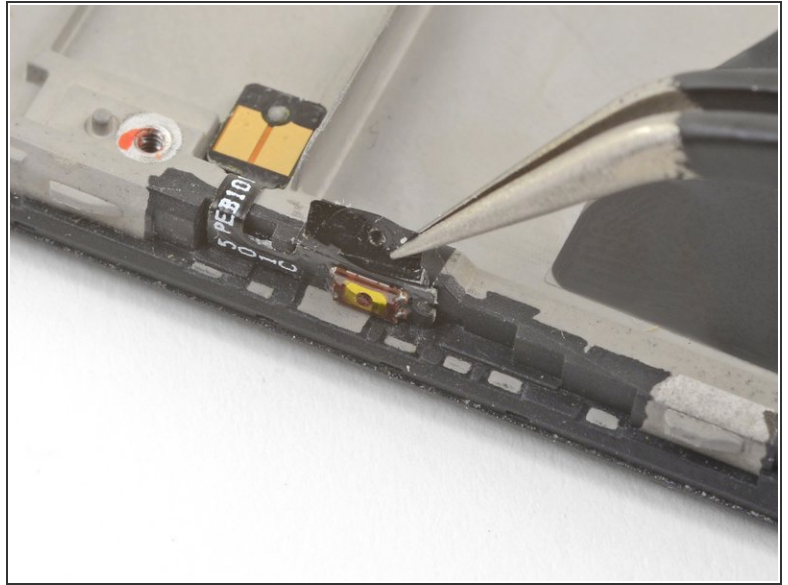
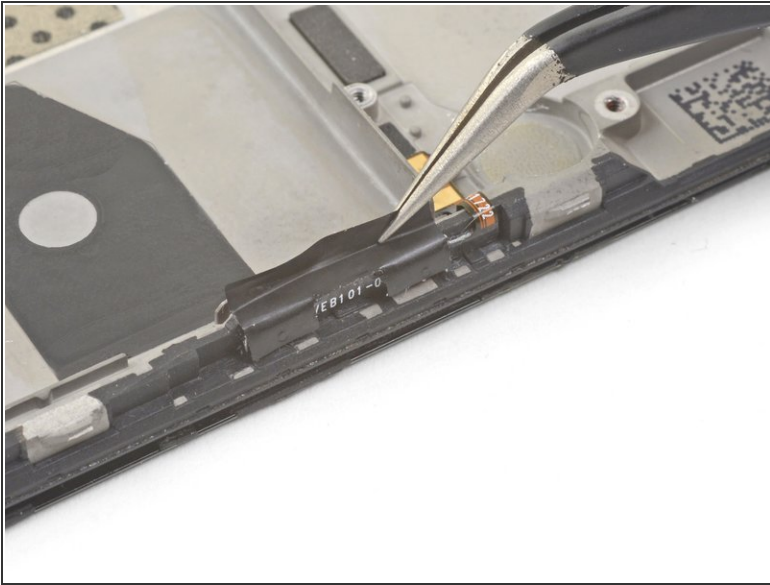
- Wedge the point of an opening pick between the vibration motor and the frame and push downward to loosen the vibration motor from its recess.
- Once the vibration motor is slightly loosened, you can wedge the flat end of a spudger between the motor and the frame to help free it from its recess.

Step 39



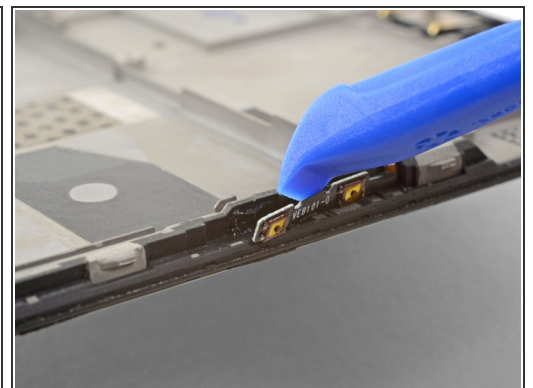
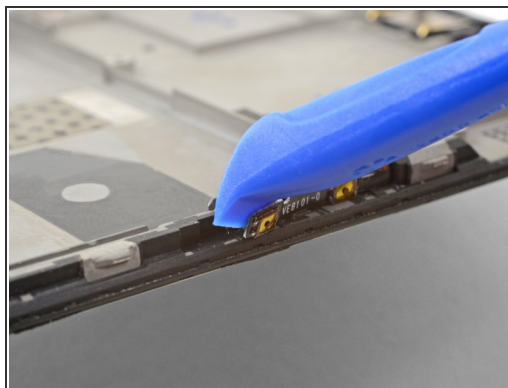
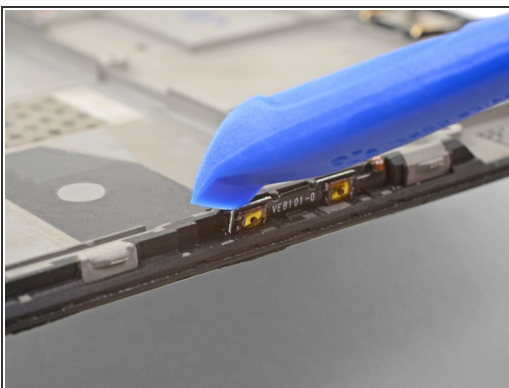
- Slide the point of an opening pick underneath the vibration motor's flex pad and gently pry it off of the frame.
- Remove the vibration motor.

Step 40 — Volume and Power Button



- ❗ Try not to tear the black tape pieces in this step so that you can reuse them during re-assembly. If you do tear the tape, replace them with pieces of [electrical tape](#).
- Use tweezers or the point of a spudger to pry up and remove the black tape covering the volume buttons on the right edge of the phone.
- Repeat the process with the black tape covering the power button on the left edge of the phone.

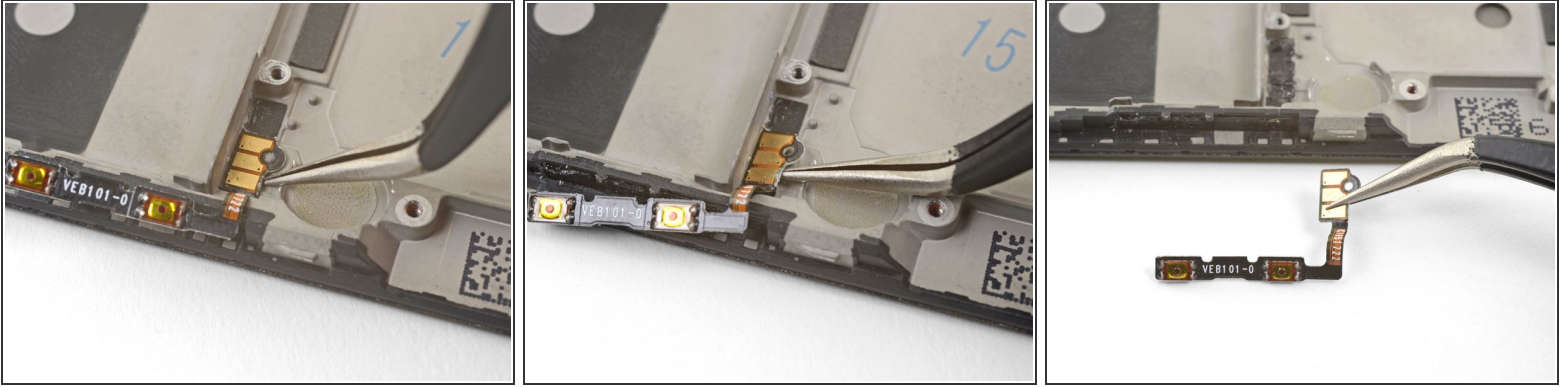
Step 41



- Use the edge of an opening tool to gently pry the volume button board away from the frame.
- ❗ If the volume button board begins to bend significantly, **stop** and pry from a different angle.
- Continue prying until you loosen the volume button board from the frame.

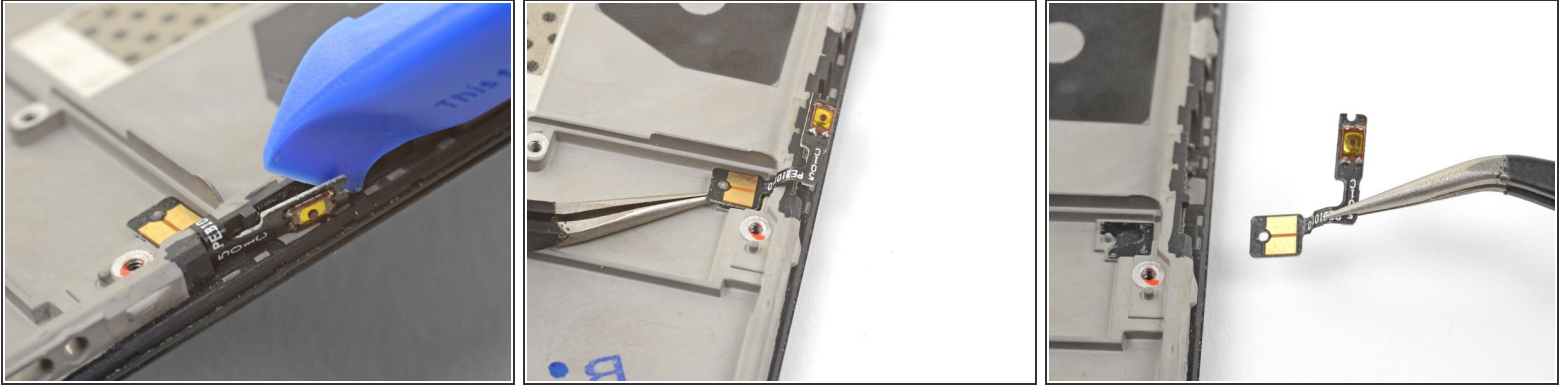
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Step 42



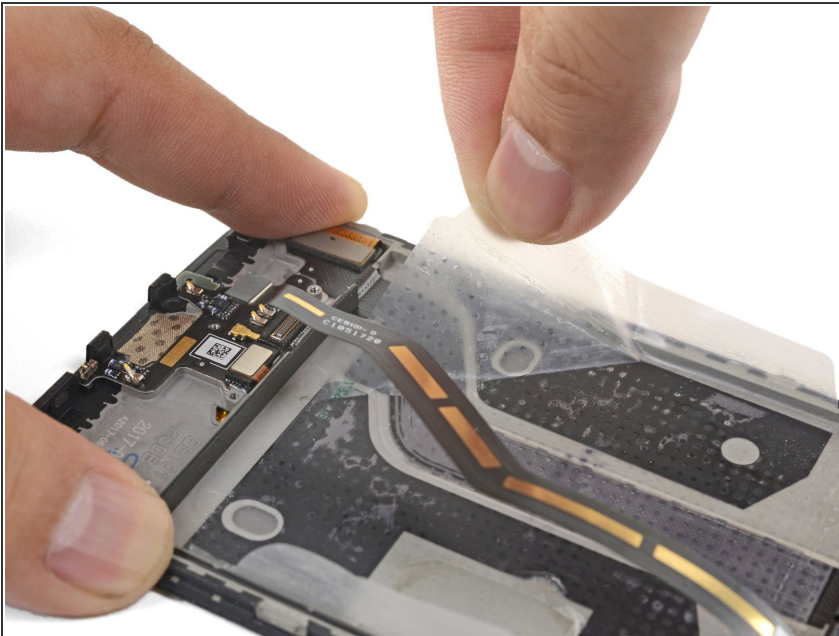
- Squeeze the tweezer tips together and insert the point underneath the volume button board's contact pad near the top right edge of the frame.
 - Pry upwards to loosen the contact pad from the frame.
 - Remove the volume buttons.
- ✦ To install the volume button board *onto a used frame*, cut a small piece of adhesive from the pre-cut adhesive card or [a roll of Tesa tape](#), and use it to stick the volume button board back onto the frame.
- ✦ To install the volume button board *onto a new replacement frame*, peel [the blue liner](#) on the right edge of the frame to expose the adhesive. Then, stick the board onto the edge of the frame.

Step 43



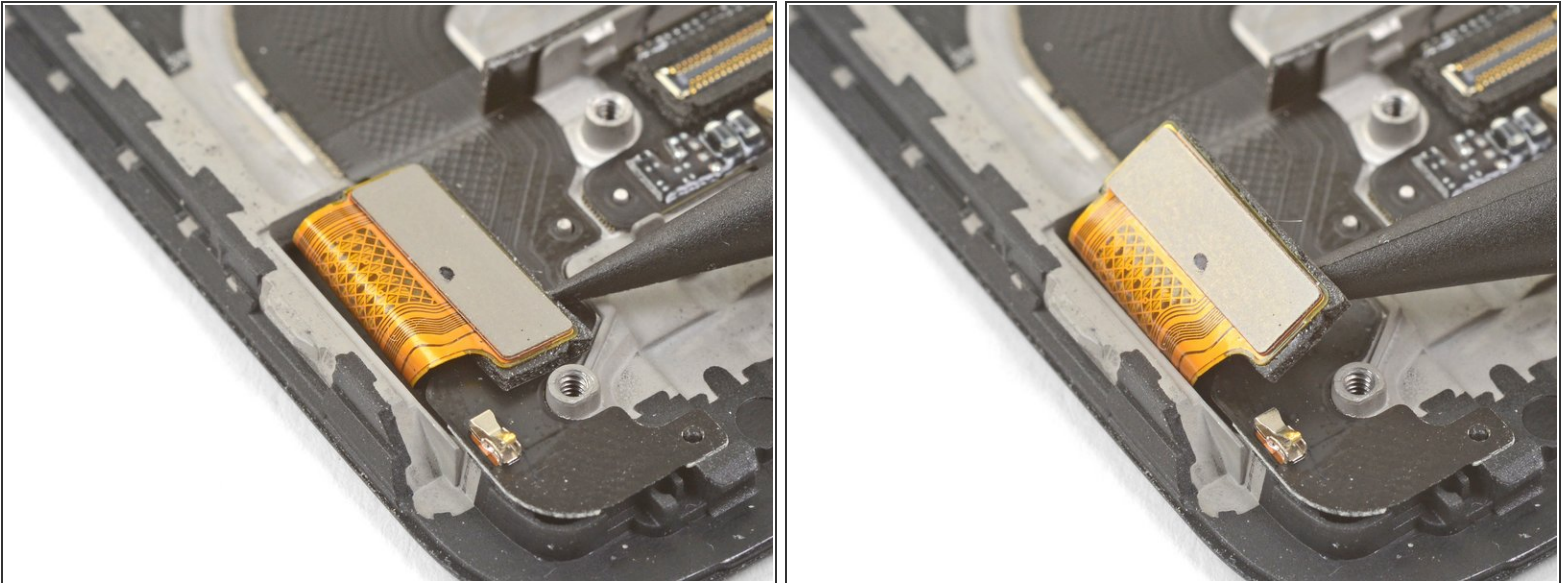
- Repeat the previous two steps to remove the power button from the left edge of the frame.
- ☑ If you are transferring the power button *onto a replacement frame*, peel [the blue liner](#) on the left edge of the frame to expose the adhesive. Then, stick the button onto the edge of the frame.

Step 44 — Screen



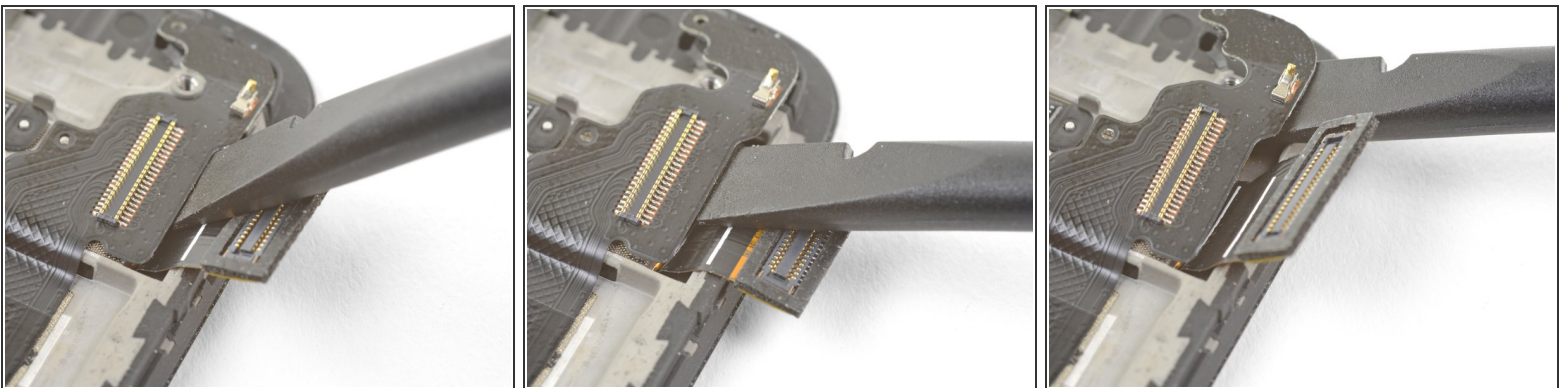
- Peel and remove the plastic battery liner from the frame.
- ☑ If your replacement battery did not come with this plastic liner, save it and transfer it to the replacement frame.

Step 45



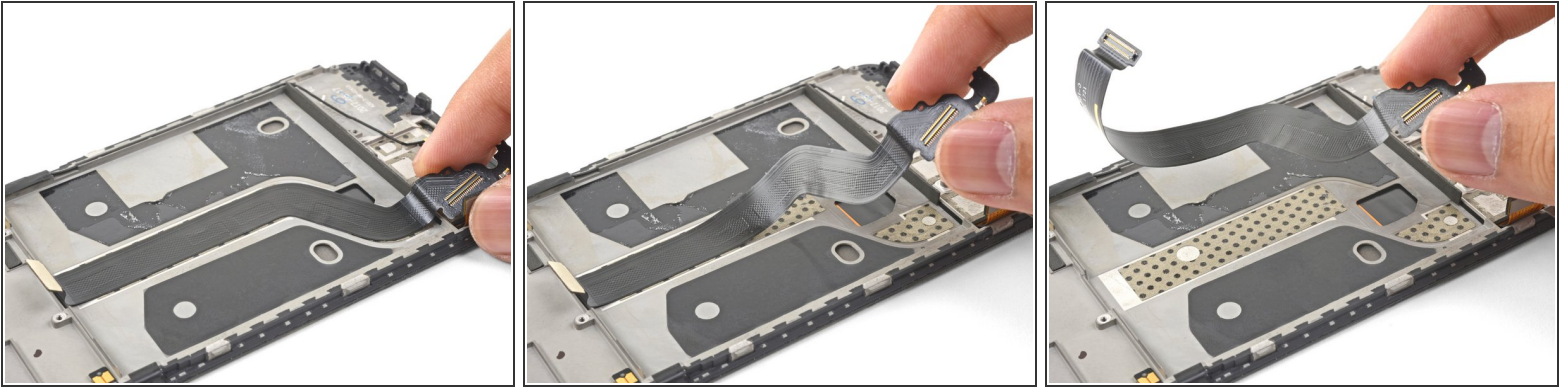
- Use the point of a spudger to pry up the display connector from its socket near the bottom left corner of the frame.

Step 46



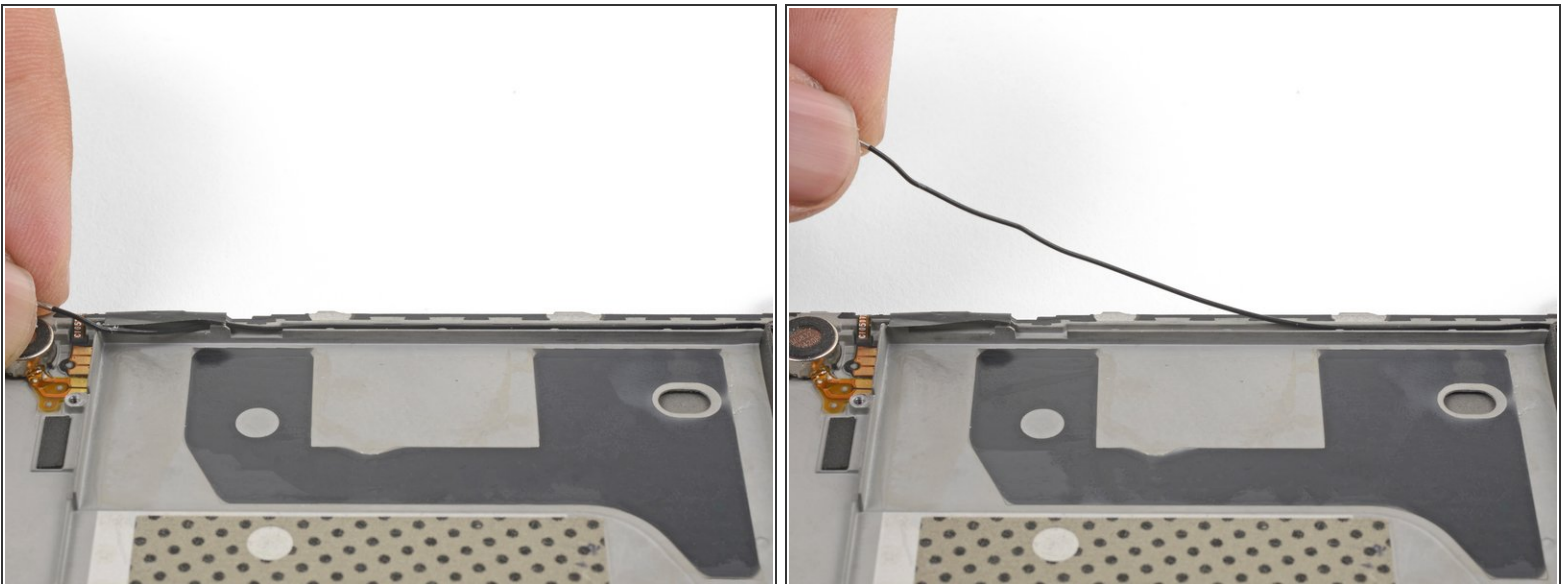
- Insert the flat end of a spudger underneath the display interconnect cable socket, near where it connected with the display connector in the bottom left corner of the frame.
- Pry upwards and slide the spudger underneath the cable to loosen the cable from the frame.

Step 47



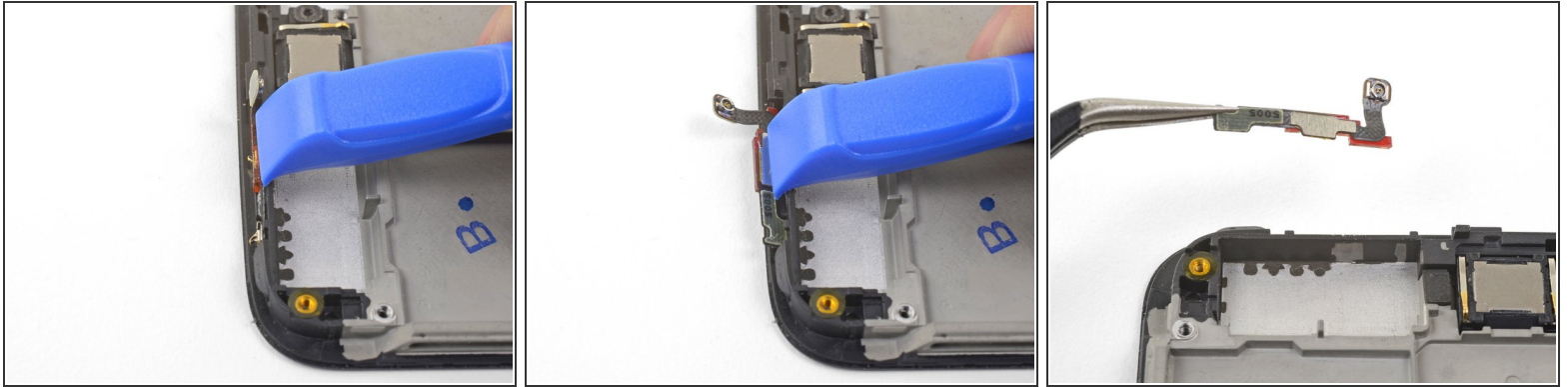
- Grasp the loosened end of the display interconnect cable with your fingers and pull upwards, releasing the cable from the frame.
 - Remove the display interconnect cable.
- ☒ If you are transferring this onto a replacement frame, peel and remove [the blue adhesive liners](#) before sticking the cable in place.

Step 48



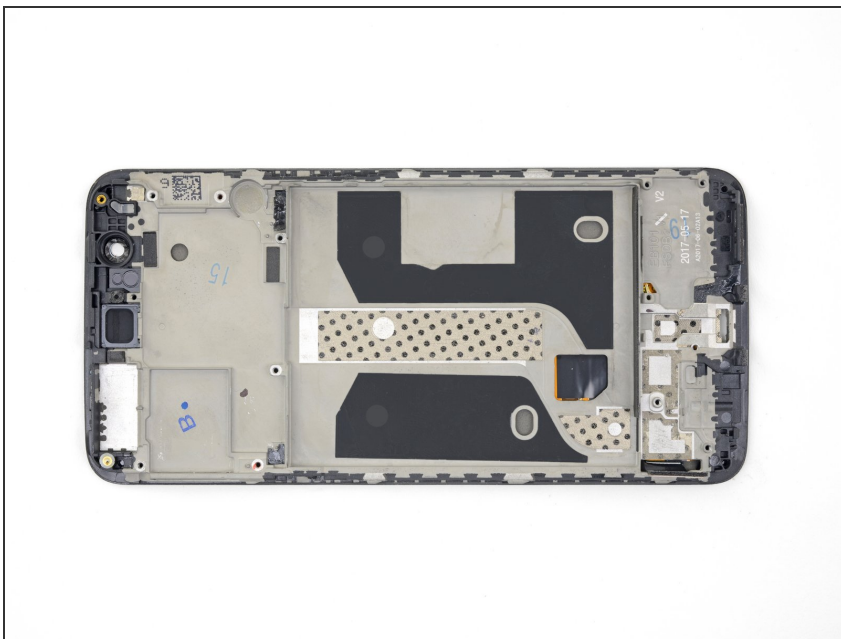
- Use your fingers to lift and de-route the antenna interconnect cable from its groove on the right edge of the frame.
- Transfer the antenna interconnect cable to the new frame.

Step 49



- Use the edge of an opening tool to push the back cover antenna connector away from the frame. It is located on the top edge of the frame.
- Remove the back cover antenna connector.
- If you are transferring the connector onto a replacement frame, peel the [blue liner](#) on the top edge of the replacement frame before sticking the connector onto the edge.

Step 50



- The bare screen and digitizer assembly remains.
- Transfer all of the parts you removed in the previous steps from the old assembly to the new one.

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 [OnePlus 5 Answers Community](#) for troubleshooting help.