Moto G4 LCD Screen and Digitizer Assembly Replacement

Replace a cracked or faulty display as a complete assembly, including the surrounding frame/chassis.

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INTRODUCTION

If the screen on your Moto G4 has become cracked or distorted then it may be time for a replacement. Follow this easy guide to do it yourself.

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.

Before you begin, skip to the last step and make sure your replacement part matches the one shown. This guide is for replacing a screen/display that is already installed in a new frame. If you bought a bare display instead, you will need to carefully separate your old display from your phone's existing frame, and then glue the new display in. Those steps are not covered by this guide.

TOOLS:

- Spudger (1)
- T3 Torx Screwdriver (1)
- Tweezers (1)

PARTS:

- Motorola Moto G4 Screen (1)

Step 1 — Back Cover



- Insert a fingernail or a spudger into the notch on the bottom edge of the phone, near the charge port.
- Gently twist or pry to open a small gap between the back cover and the body of the phone.
- While keeping your tool (or fingernail) inserted into the gap between the back cover and the body of the phone, slide it around the corner to begin loosening the plastic clips holding the cover in place.

Step 2


- Slide your tool all along the side of the phone to separate more of the clips securing the back cover.

Step 3



- Keep your tool inserted slightly under the back cover, and slide it around the top corner.
- If necessary, continue prying around the remaining edges of the phone until the back cover comes free.

Step 4


- Remove the back cover.

To install the back cover, carefully position it over the phone and then press gently all around the edges until you feel the clips snap into place.

Step 5 — Midframe



- Push to eject and remove the MicroSD and SIM cards (if installed).

Step 6


- Use a spudger to pry up the rubber cover for the camera flash connector.

Step 7

- Remove the rubber cover.

Step 8

- Use a spudger to disconnect the camera flash connector by prying it straight up.

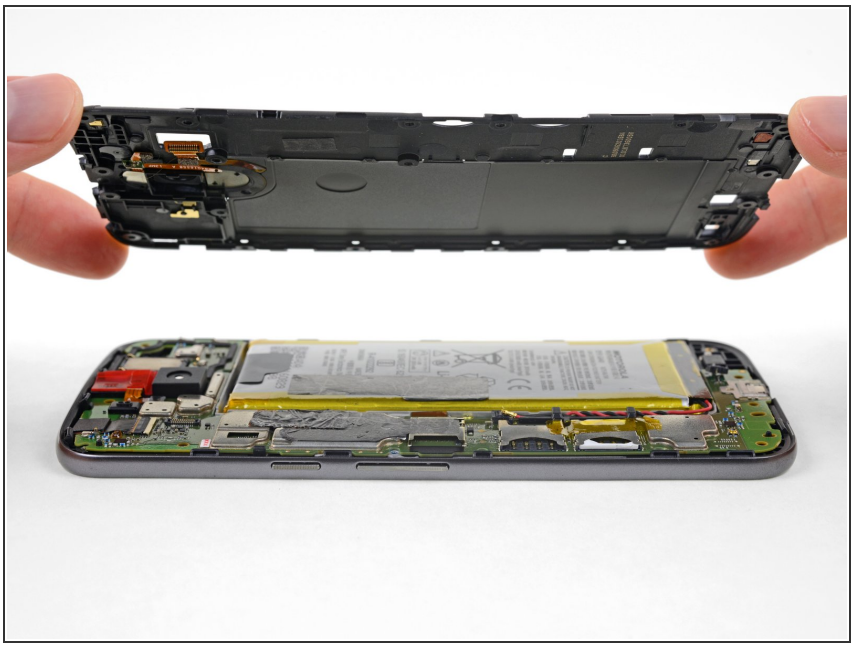
Step 9

- Use a T3 Torx driver to remove the nineteen identical 3.1 mm screws securing the midframe.

Step 10

- Insert a spudger under the midframe at the top left corner, and gently twist to separate it from the body of the phone.

Step 11



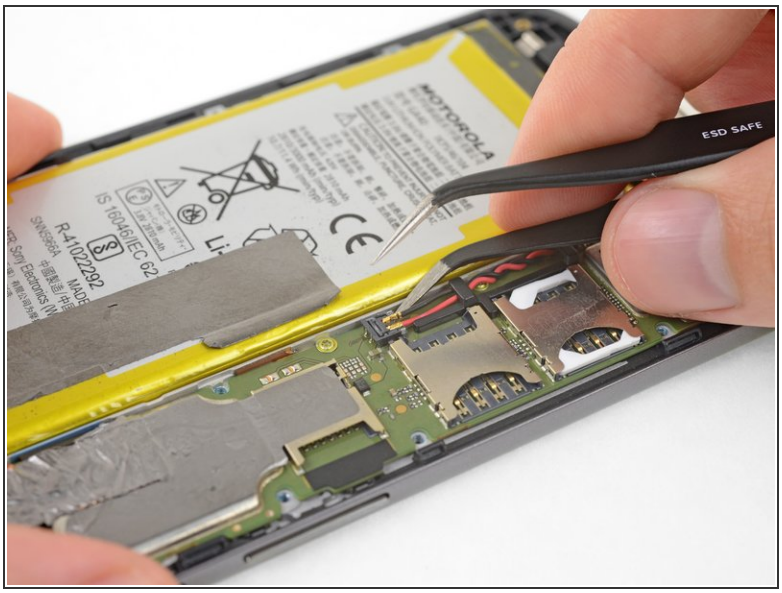
- Remove the midframe.

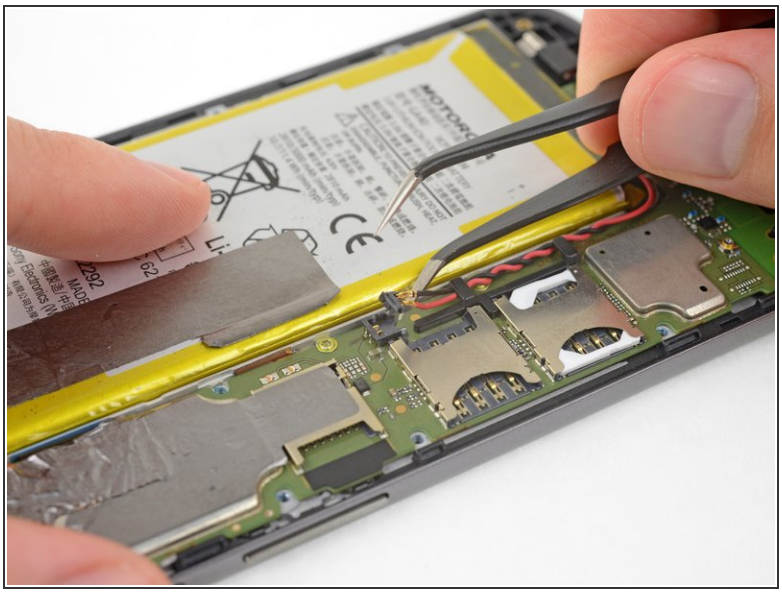
Step 12 — Battery

- Peel up and remove any tape connecting the battery to the main board.

⚠ Be very careful not to puncture the battery with any sharp tools. A damaged lithium-ion battery can catch fire and/or explode.

Step 13



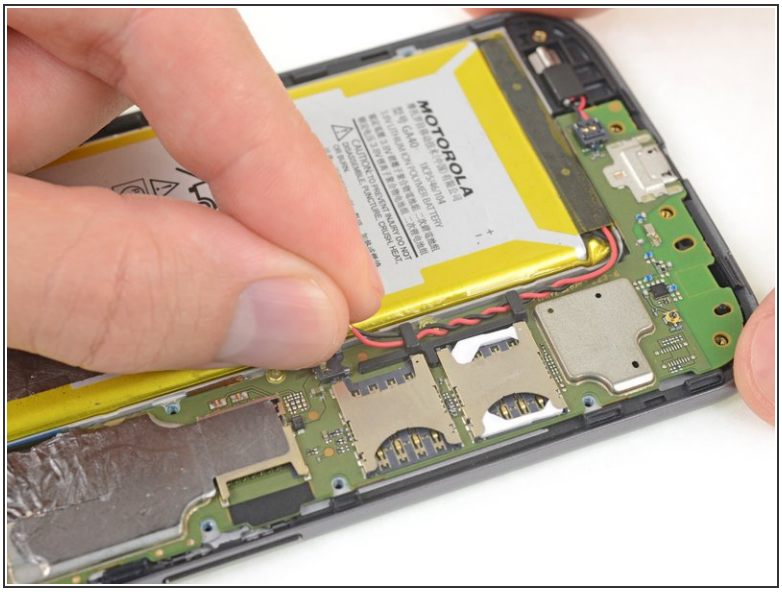


- Insert a thin tool (such as one of your tweezer tips) under the red and black battery wires, and slide it underneath the battery connector.
- Gently pry straight up to disconnect the battery.

⚠ Pry only from the side where the wires attach to the connector—if you pry anywhere else, you may break the socket.

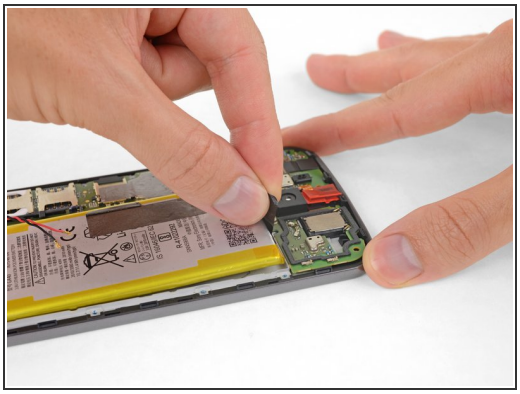
During reassembly, align the connector in its socket with the exposed copper wire facing up, and then press straight down to reconnect it, wiggling slightly as you press to help it seat correctly.

Step 14



- Push the battery wires towards the battery to de-route them from the black bracket on the motherboard.

Step 15


- Peel up the black pull tab at the top of the battery, and pull slowly but firmly to separate the battery from the adhesive holding it in place.

The battery separates more easily if you add a few drops of isopropyl alcohol along each side, to soften the adhesive beneath. High concentration (90% or greater) alcohol will not harm your phone's components.

Heating the area behind the battery can also help soften the adhesive, but be very careful not to overheat the battery.

- If the pull tab breaks, use a spudger or an old credit card to pry up carefully on the edges of the battery until it comes loose.

Don't deform or puncture the battery—it can catch fire and/or explode if damaged.

Never reinstall a damaged or deformed battery. Replace the battery.

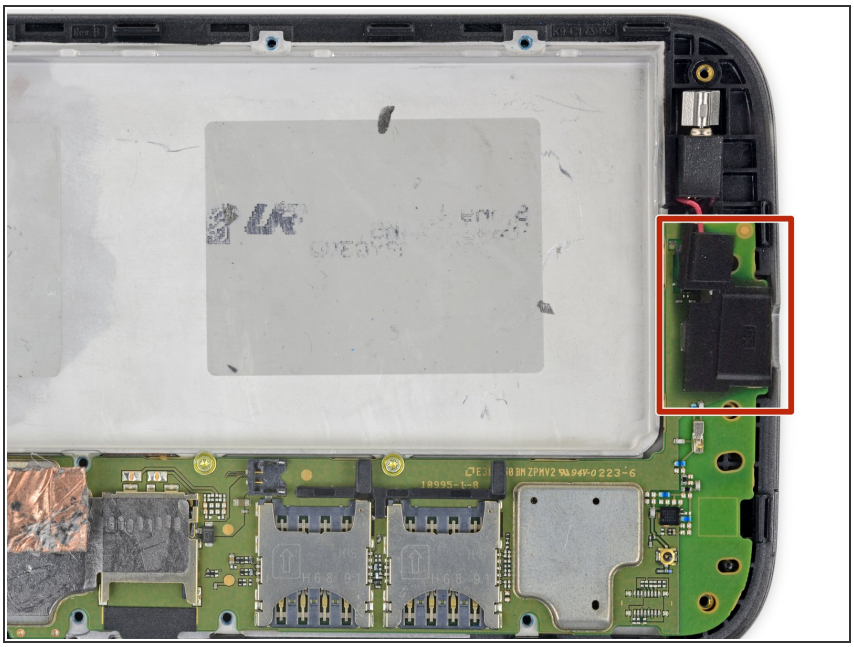
Step 16

- Remove the battery.

During installation, note the orientation of the battery—if the connector is on the same side as the motherboard, and the text is upside-down relative to the rest of the phone, you've done it correctly.

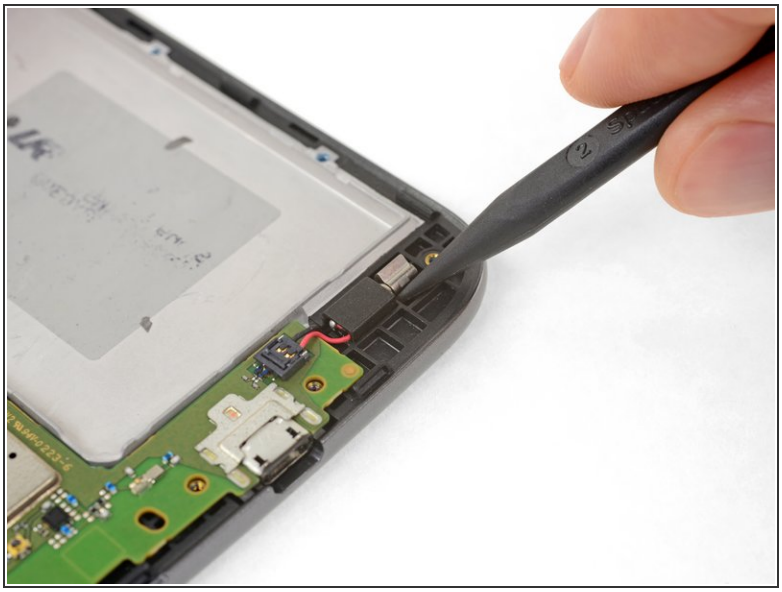
Use a few strips of thin double-sided adhesive tape or a pre-cut adhesive card to secure the battery. (Or, if you are replacing the display, it may come with adhesive for the battery pre-installed.)

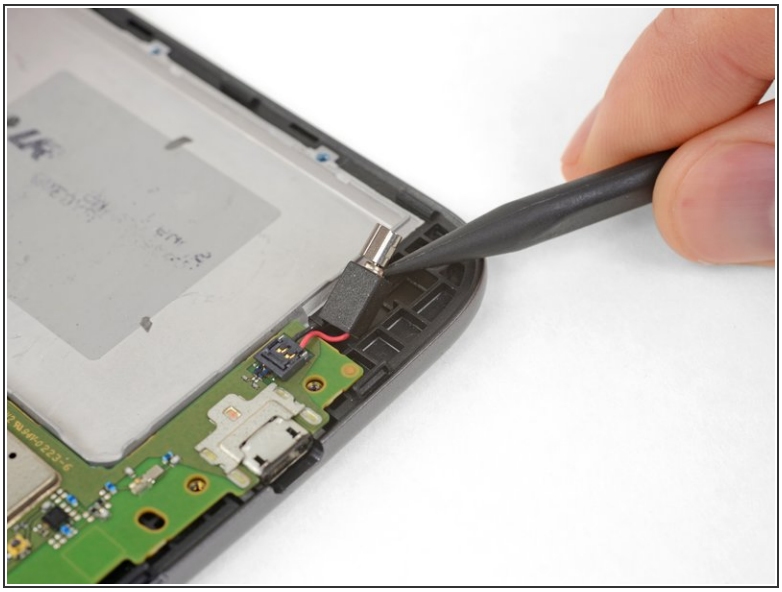
Step 17 — LCD Screen and Digitizer Assembly



- Peel up and remove the black rubber cover from the charging port and vibration motor connector.

Step 18

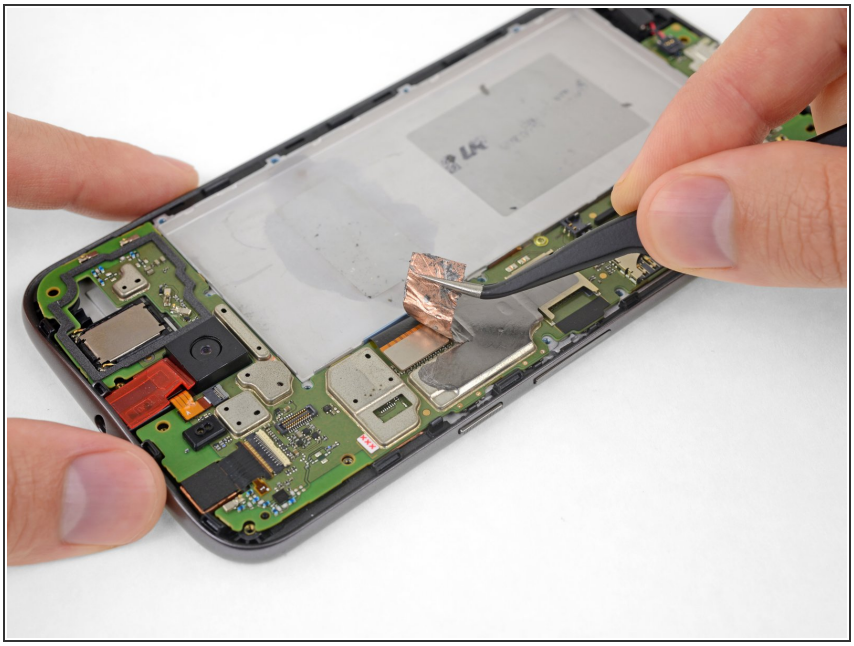




- Insert the point of your spudger underneath the vibration motor, and gently pry up to separate it from the frame.

⚠ You don't need to completely detach the vibration motor; it can stay wired to the motherboard.

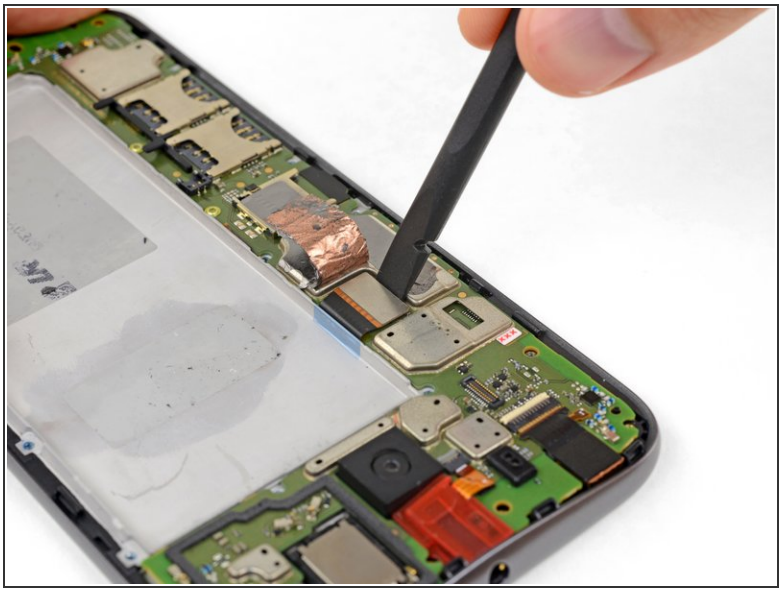
Step 19

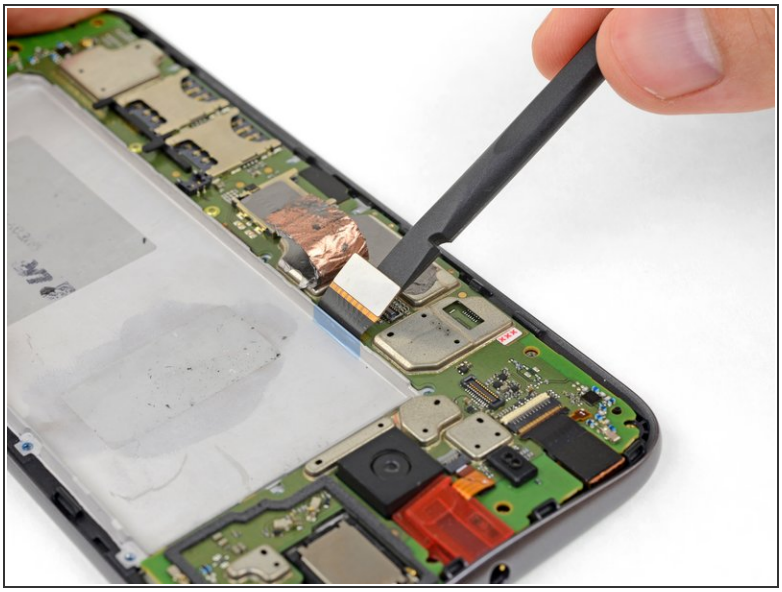


- Peel up the copper tape covering the display connector.

This tape provides protection from electromagnetic interference. Keep it in one piece if possible, and carefully fold it back into position when your repair is complete.

Step 20





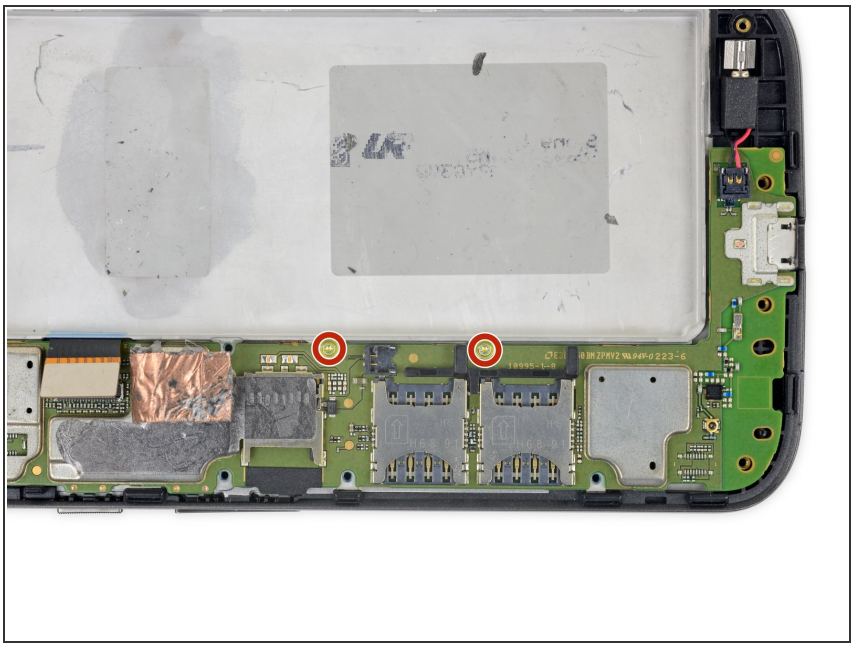
- Use your spudger to disconnect the display by prying its connector straight up from the motherboard, on the edge nearest the side of the phone.

Step 21

- Pry up with your spudger to flip open the locking flap on the headphone jack's ZIF connector.

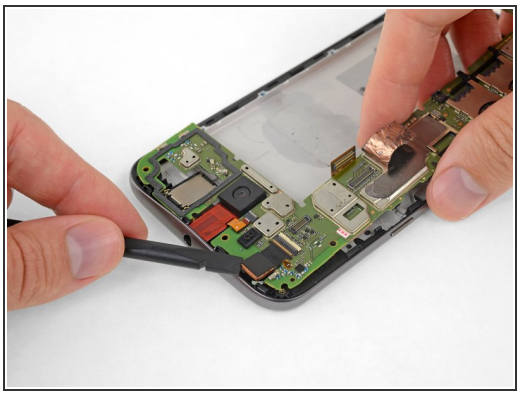
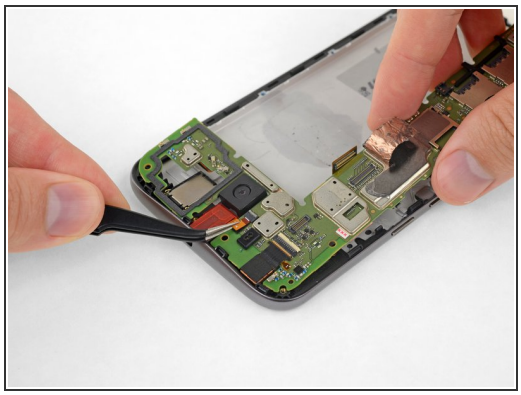
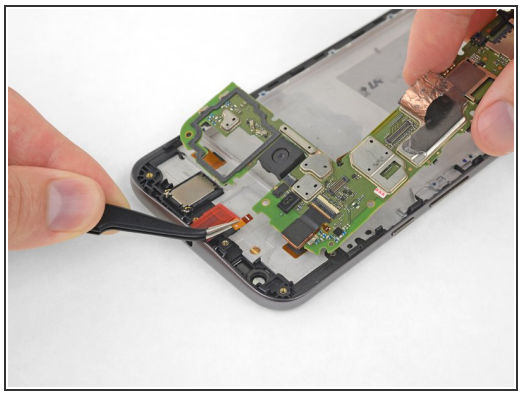
⚠ It's possible to disconnect the headphone jack at this point by pulling its orange flex cable straight out of the ZIF socket, but it's easy to tear the cable if you're not careful. For a better method, continue with the steps below.

Step 22



- Use a T3 Torx driver to remove the two bronze-colored, 2.4 mm screws securing the motherboard.

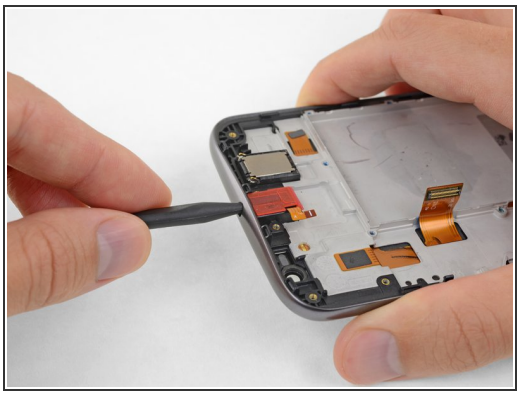
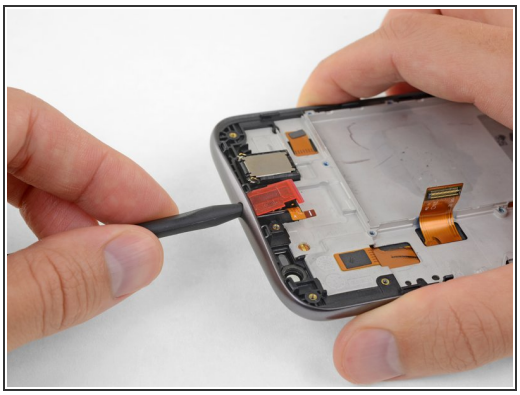
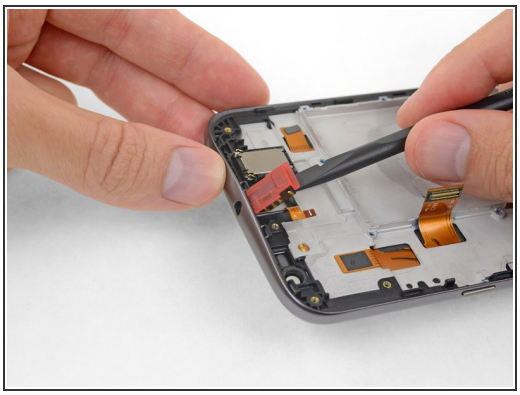
Step 23

- Grasping the motherboard by its edges, left the bottom end up at an angle, while keeping the top edge close to the phone.
- Use your spudger to pry up the front-facing camera and make sure it separates safely from the frame. The camera can remain attached to the motherboard.
- Using your tweezers, grasp the headphone jack flex cable and carefully pull it out of its socket as you remove the motherboard.
- Remove the motherboard.

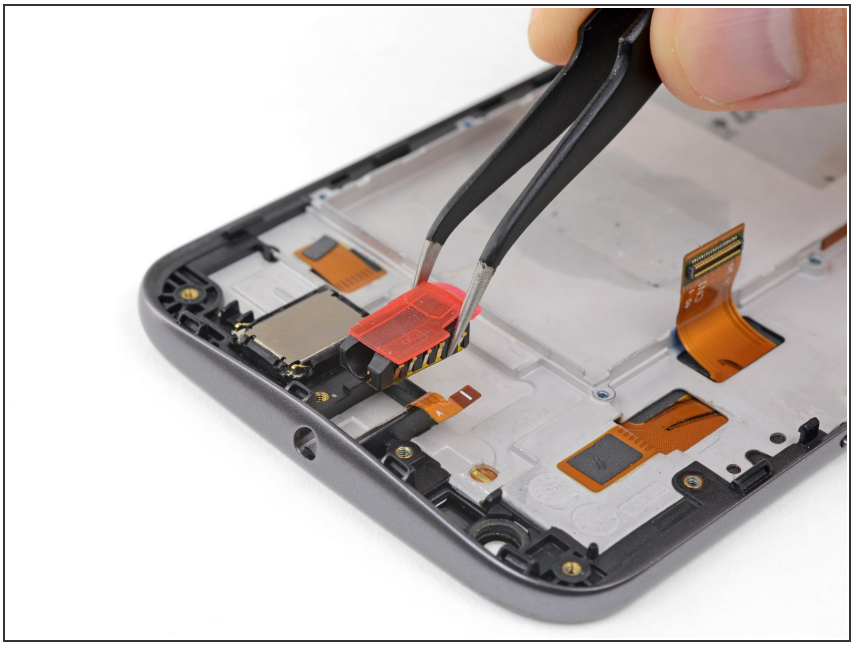
⚠ If you feel any resistance, **stop**. Make sure there are no components still holding the frame to the motherboard.

Step 24

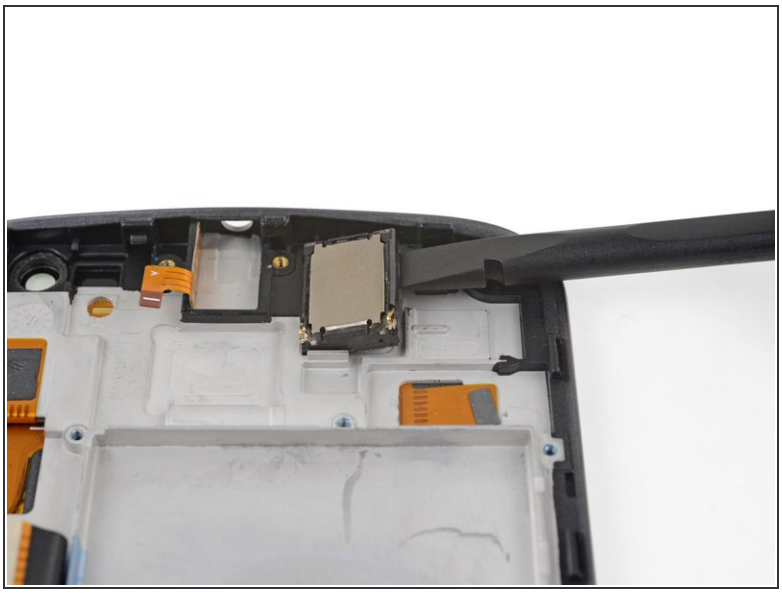
- Insert the point of your spudger into the headphone port, and pry straight up to separate the headphone jack from the frame.
- If needed, pry from the opposite side of the headphone jack to finish separating it.

Step 25



- Remove the headphone jack.

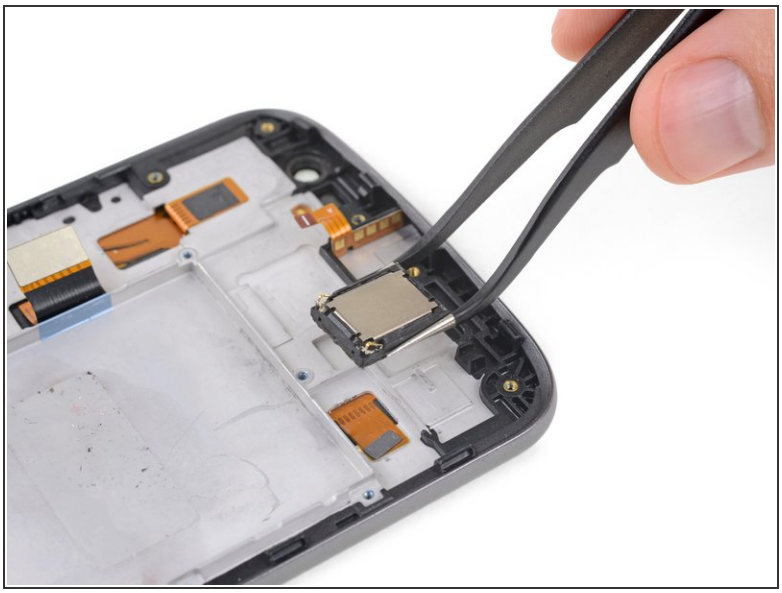
Step 26

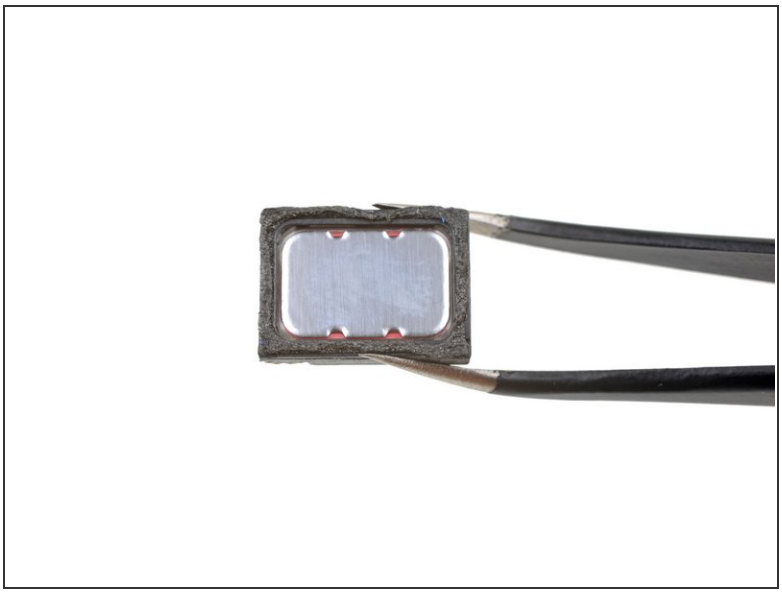


- Using the flat of your spudger, pry up on the upper right edge of the earpiece speaker to separate it from the frame.

Strong adhesive secures the earpiece speaker. If necessary, apply heat or a few drops of isopropyl alcohol to help weaken the adhesive and make it easier to remove.

Step 27



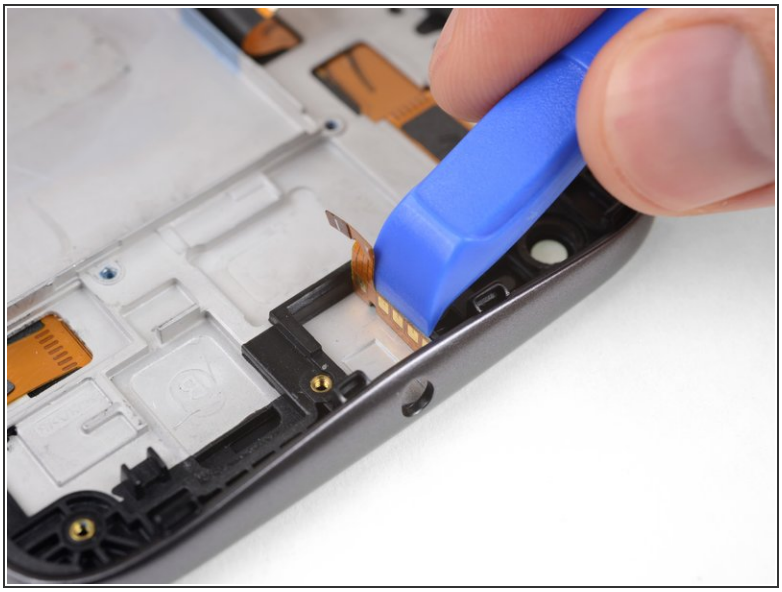


- Remove the earpiece speaker.

Check the condition of the adhesive around the bottom of the earpiece speaker when you reinstall it. A little heat from a hair dryer or iOpener can help soften the adhesive and make it sticky again. Be careful not to touch or damage the surface of the speaker.

In some of the previous photos in this guide, the speaker is shown installed incorrectly. During installation, make sure the speaker's two spring contacts are located at the bottom corners, as shown in the first image in this step. Images showing the speaker rotated 180° (with the spring contacts near the top edge of the phone) are incorrect.

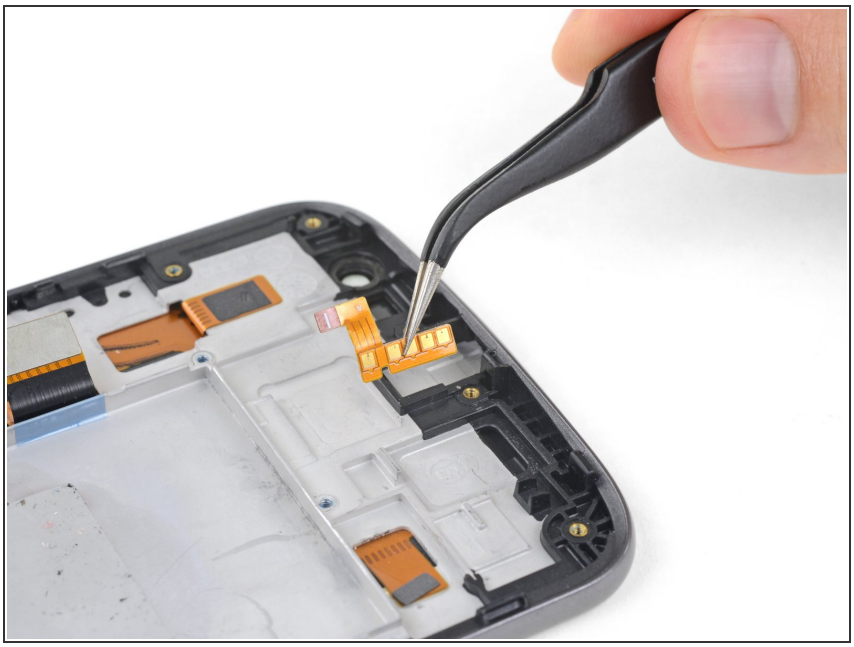
Step 28



- Wedge the sharp edge of your iFixit opening tool between the headphone jack flex and the plastic frame it's adhered to.
- Carefully press down to separate the headphone jack flex cable from the adhesive securing it.

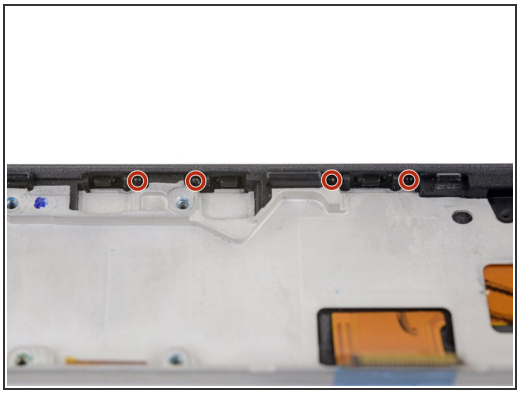
⚠ Don't use too much force, or you may damage the flex cable. If necessary, apply heat or a few drops of isopropyl alcohol to help weaken the adhesive and make it easier to remove.

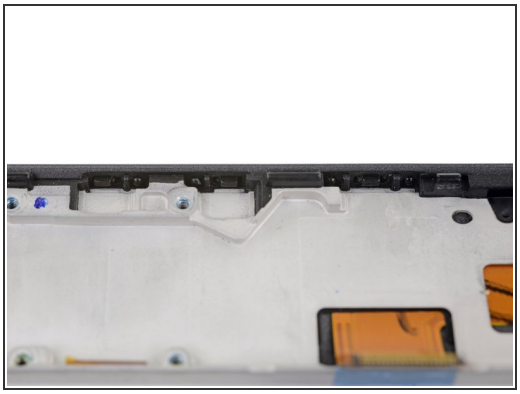
Step 29

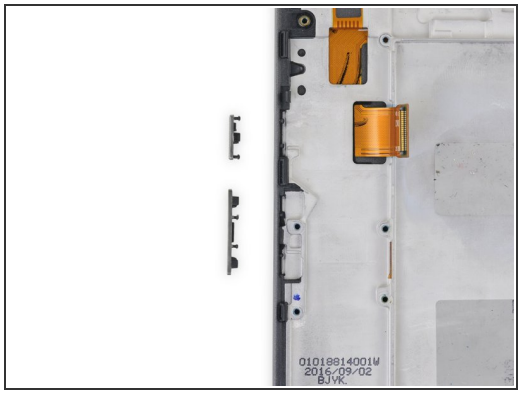


- Remove the headphone jack flex cable.

Step 30



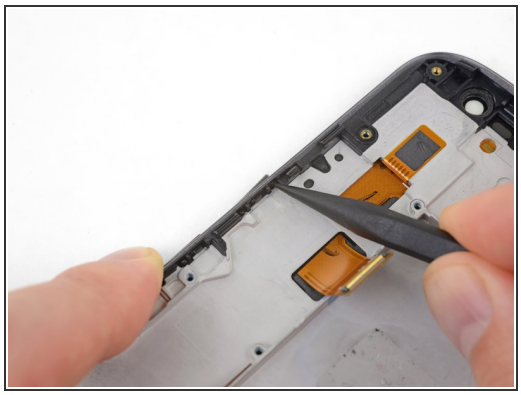
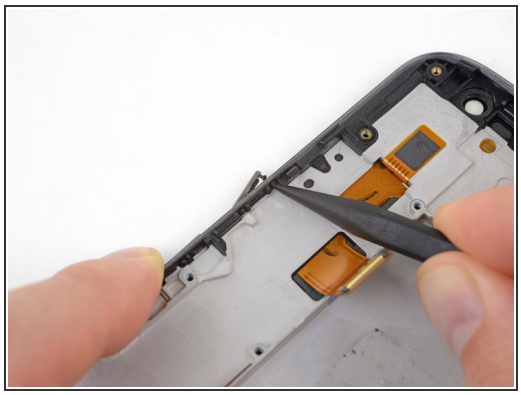
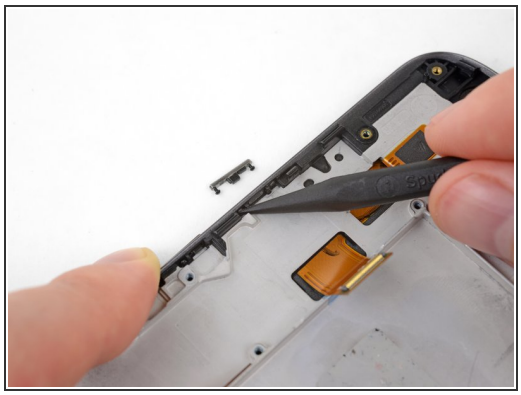




The two case buttons (power and volume rocker) are each secured with two mushroom-shaped pins.

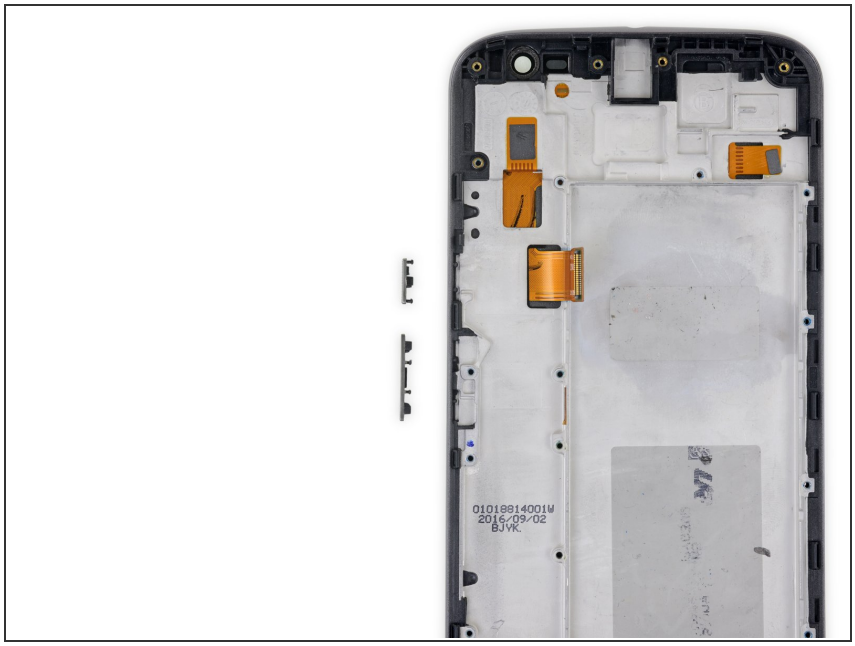
- In the following steps, you'll apply pressure to these pins from the inside in order to remove and transfer the buttons.

Step 31

- Push the power button out of the frame from the inside by carefully pressing the tip of your spudger against the tops of the two mushroom pins securing it.

Step 32



- Repeat the previous step to push the volume rocker button out of the frame.

During reassembly, press the buttons gently into the frame in the orientation shown here.

Step 33

- Only the LCD screen and digitizer assembly (with frame) remains.
- Check carefully to make sure your replacement part matches, and that you've removed all the necessary parts from the old frame for installation in the new one.

Carefully compare your new replacement part to the original part. Remove any adhesive backings before installing your new battery.

To reassemble your device, follow the above steps in reverse order.

Take your e-waste to an R2 or e-Stewards certified recycler.

Repair didn’t go as planned? Check out our Answers community for troubleshooting help.

