



# Moto G6 Play Motherboard Replacement

How to remove or replace the motherboard in your Motorola Moto G6 Play.

Written By: Tarun Thiruma



# INTRODUCTION

Use this guide to replace the motherboard in your Moto G6 Play.

While this guide may include images of the device with the battery removed, it is not necessary to remove the battery to replace the motherboard.



## TOOLS:

- [Phillips #00 Screwdriver](#) (1)
- [iFixit Opening Picks set of 6](#) (1)
- [iOpener](#) (1)
- [Suction Handle](#) (1)
- [Spudger](#) (1)
- [Tweezers](#) (1)
- [SIM Card Eject Tool](#) (1)



## PARTS:

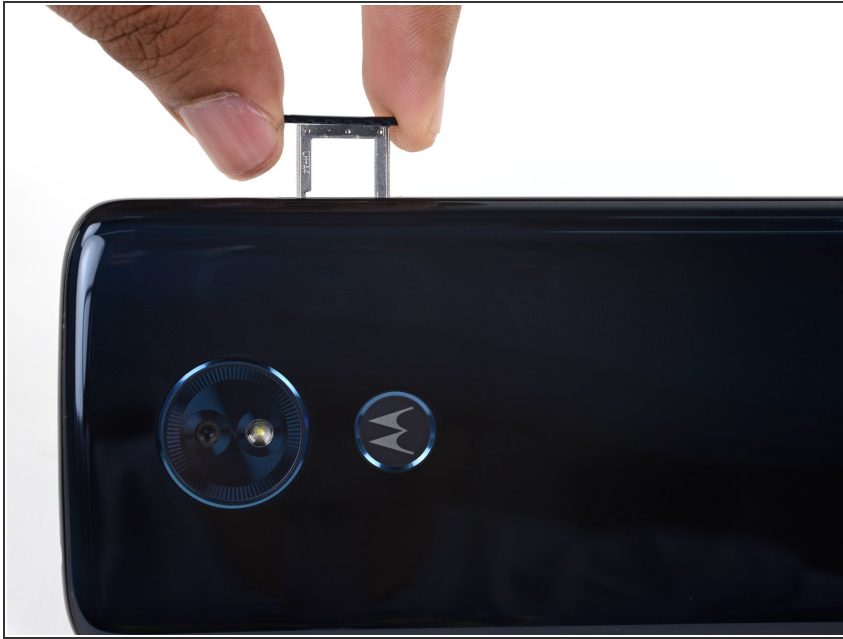
- [Precut Adhesive Card](#) (1)

## Step 1 — Remove the SIM Card Tray



- Insert a paperclip or SIM card eject tool into the small hole in the SIM card tray on the upper right edge of the phone.
- Press the tool into the hole to eject the tray.
- ⓘ This may require a significant amount of force.
- ⓘ The ejection mechanism is deeper in this phone than others and may require a longer SIM card eject tool. If your tool isn't long enough to reach the mechanism, try using an unfolded paperclip instead.

## Step 2



- Remove the SIM card tray.
- ★ When reinserting the SIM card, ensure that it is in the proper orientation relative to the tray.

## Step 3 — Separate the Rear Glass Adhesive



- ⚠ Power your phone off before you begin.
- If possible, drain the battery before disassembly. When the battery is charged, there's an increased risk of a dangerous thermal event if the battery is overheated or damaged during repairs.
- ⓘ If the rear glass is cracked, completely [cover it with packing tape](#) to contain the glass shards and avoid injury.
- [Prepare an iOpener](#) and heat the back of the phone along its bottom edge for about two minutes, or until it's slightly too hot to touch. This will help soften the adhesive securing the rear glass.
- ⓘ You may need to reheat and reapply the iOpener several times to get the phone warm enough. Follow the iOpener instructions to avoid overheating.
- ⚠ 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.

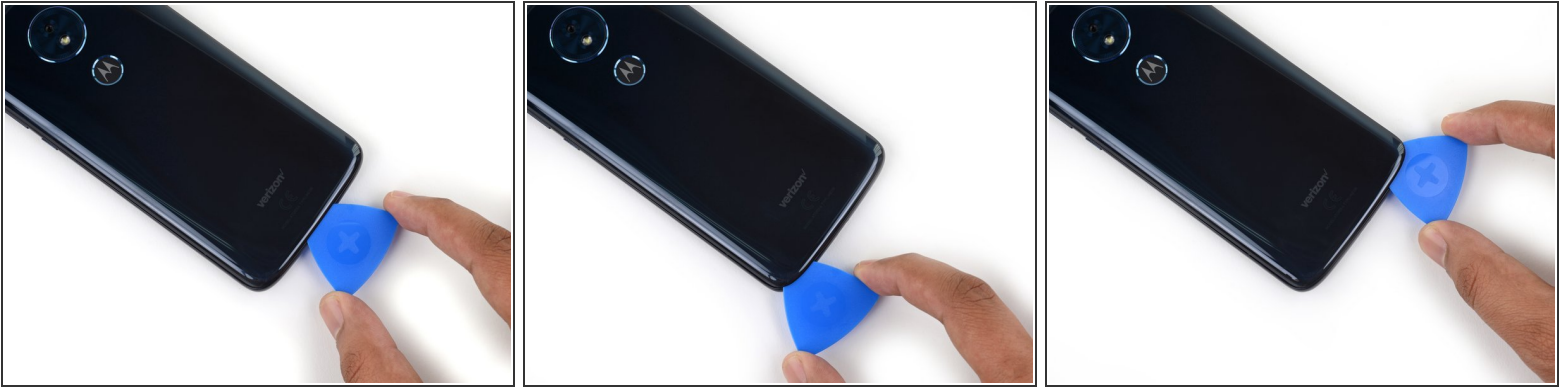
## Step 4



- Apply a suction cup to the bottom edge of the rear glass.
- Pull up on the suction cup with firm, constant pressure to create a slight gap between the rear glass and the frame.
  - ⓘ If the glass is cracked, the suction cup may not stick. [Try lifting it with strong tape](#), or superglue the suction cup in place and allow it to cure so you can proceed.
  - ⓘ This may require a significant amount of force, but you only need to open a very slight gap with the suction cup to insert your tool.
- If you have trouble, apply more heat to further soften the adhesive, and try again. The adhesive cools quickly, so you may need to heat it repeatedly.
- Insert an opening pick into the gap you created under the rear glass.



## Step 5



- Slide the pick all along the bottom edge of the phone to slice through the adhesive securing the rear glass.
- ⚠ Slow down and slice very carefully as you get to the corners. The curved part of the glass along the left and right edges can crack very easily if the pick pushes up against the curved glass.
- ℹ After being cut, the adhesive will sometimes stick back together as it cools. To prevent this, leave the pick under this edge after cutting, and continue the next steps with new pick.


## Step 6



- Heat the right edge of the back of the phone to soften the adhesive underneath.

## Step 7



- Slide the pick along the right edge of the rear glass to separate the adhesive underneath.  
 Take care to not insert the pick more than ~1 cm past the edge of the rear glass to avoid damaging the fingerprint sensor cable.
- Leave the pick under the top right corner of the glass to prevent the adhesive from re-adhering. Continue with a new pick.

## Step 8



- Heat the top edge of the back of the phone to soften the rear glass adhesive.



## Step 9



- Slide the pick all along the top edge of the phone to slice through the adhesive securing the rear glass.
  - ⚠ Take care to not insert the pick more than ~1 cm past the edge of the glass to avoid damaging the thermal dissipation pad surrounding the camera bump.
  - ⚠ Slow down and slice very carefully as you get to the corners. The curved part of the glass along the left and right edges can crack very easily if the pick pushes up against the curved glass.
- Leave the pick under the top left corner of the glass to prevent the adhesive from re-adhering. Continue with a new pick.


## Step 10



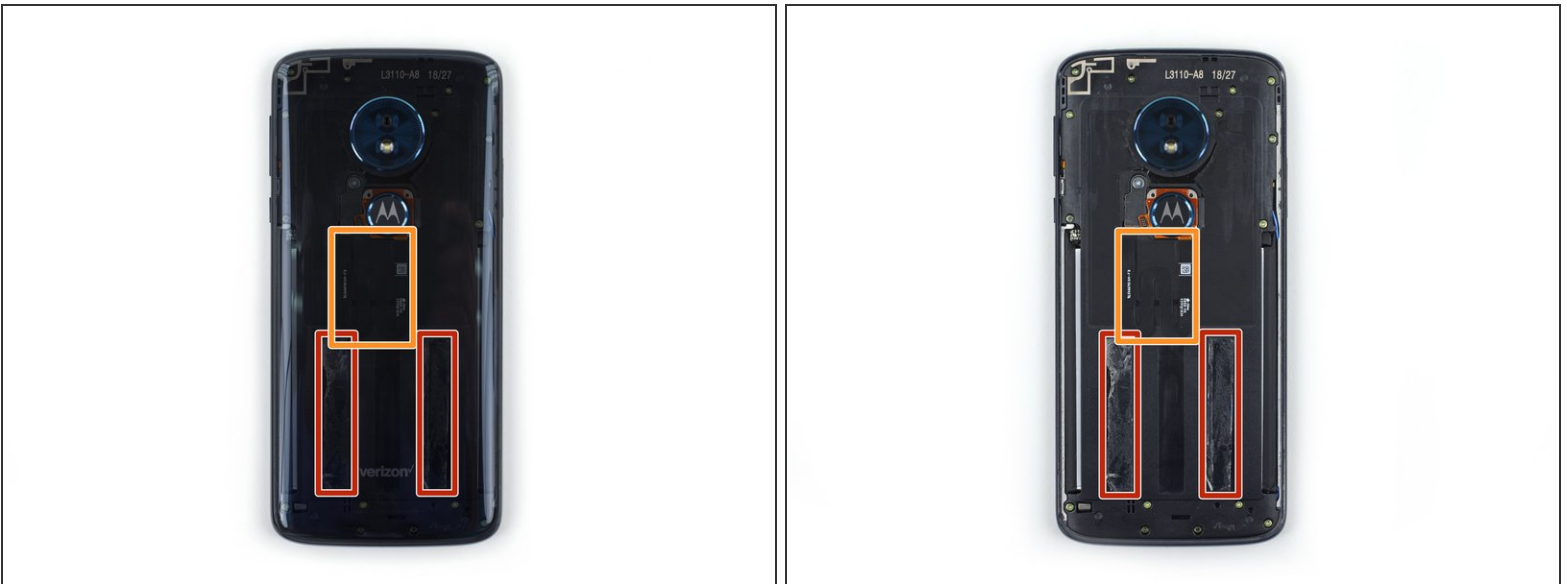
- Heat the left edge of the back of the phone to soften the adhesive underneath.

## Step 11



- Slide a pick along the left edge of the phone to slice through the rear glass adhesive.  
 Take care to not insert the pick more than ~1 cm past the edge of the rear glass to avoid damaging the fingerprint sensor cable.

## Step 12




- There are two strips of adhesive on either side of the lower half of the phone that must be separated to remove the rear glass panel.
- You will need to release these adhesive strips without damaging the fingerprint sensor cable located in the center of the phone.

## Step 13




- Insert the flat end of a spudger into the lower half of the right side of the phone about 2 cm and slide it down the right edge to release the right strip of adhesive.

 Do not insert the spudger too deep, and pry slowly to prevent damaging the fingerprint sensor cable or cracking the rear glass panel.

## Step 14




- Insert a spudger into the lower half of the left side of the phone about 2 cm and slide it down the left edge to release the right strip of adhesive.

 Do not insert the spudger too deep, and pry slowly to prevent damaging the fingerprint sensor cable or cracking the rear glass panel.

## Step 15 — Open the Rear Glass



- If the glass remains stuck, re-heat and slice any remaining adhesive repeatedly as needed.
  - Lift the rear glass carefully, making sure it's fully separated from any adhesive.
  - Open the rear glass.
-  Do not completely remove the rear glass panel, as the fingerprint sensor is still connected to the phone via a fragile ribbon cable.
- ✦ During reassembly, pause here to [replace the adhesive on the rear glass](#) using a precut adhesive card or high-strength double-sided adhesive tape, such as [Tesa 61395](#).
  - ✦ After closing your device back up during reassembly, stack something heavy, like a textbook or two, on top of the device for 30-60 minutes. This ensures a strong adhesive bond.



## Step 16 — Disconnect the Fingerprint Sensor



- Use a Phillips screwdriver to remove the two screws securing the fingerprint sensor cable retention bracket:
  - One silver 1.5 mm screw
  - One gold 3.5 mm screw

## Step 17



- Use a pair of tweezers to remove the fingerprint sensor cable retention bracket.

## Step 18



- Use the pointed edge of a spudger to disconnect the fingerprint sensor cable.

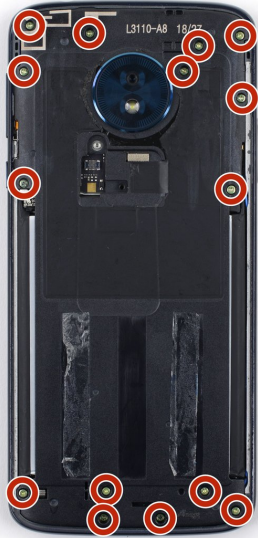
## Step 19 — Remove the Rear Glass Panel



- Remove the rear glass panel.



## Step 20 — Remove the Midframe Screws



- Use a Phillips screwdriver to remove the fifteen gold 3.5 mm screws securing the plastic midframe.
- ⓘ Some of these screws are covered with stickers. Others are in deep wells and need to be removed with tweezers or pushed out from the other side of the midframe.

## Step 21 — Remove the Plastic Midframe



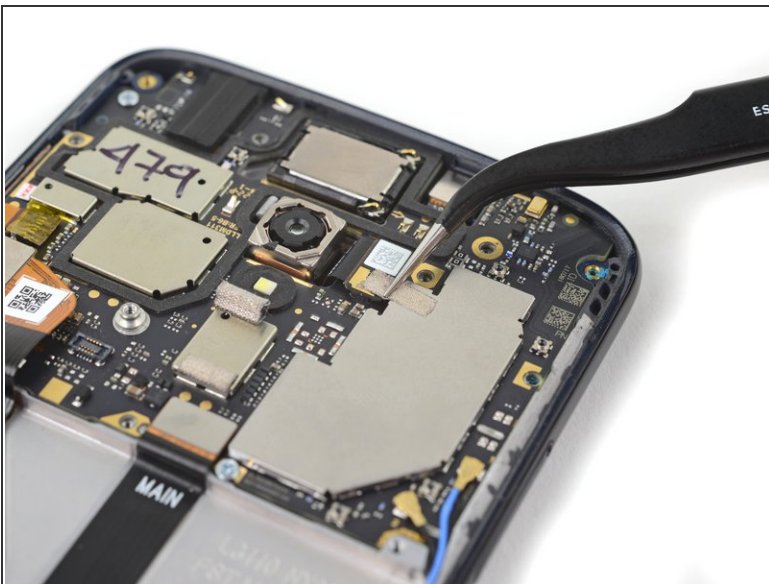
- Insert a spudger into the notch on the upper right edge of the midframe.
- Pry the midframe up to release the clips securing it to the device's aluminum frame.
- Remove the plastic midframe.

## Step 22 — Disconnect the Battery



- Use a spudger to pry up and disconnect the battery cable.

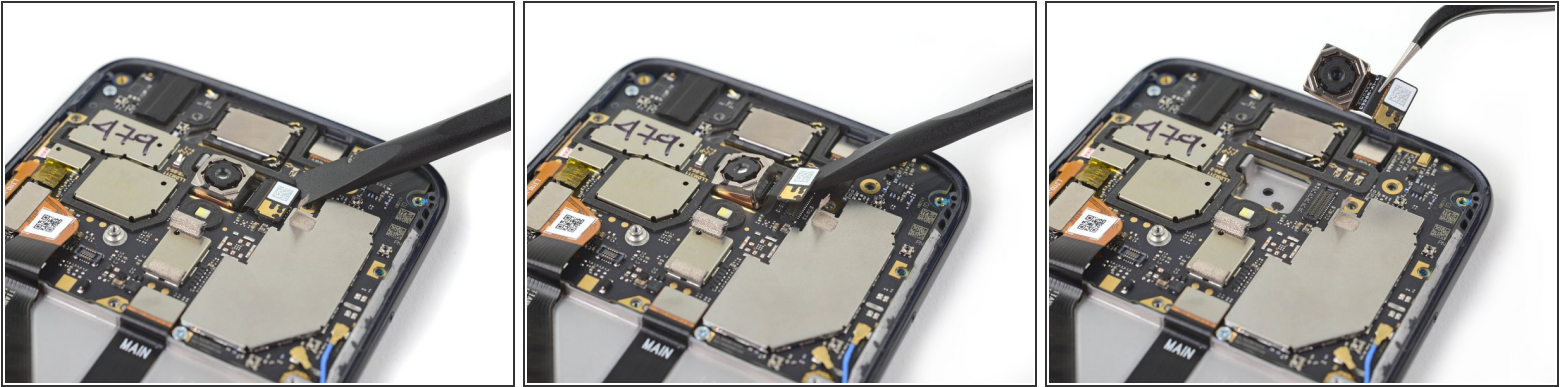
## Step 23 — Remove the Camera Module



- Use a pair of tweezers to carefully remove the tape covering the camera module connector.
  - ⓘ It is not necessary to completely remove the tape, just the part covering the connector.
  - ⓘ Try to not damage the tape so it can be reused during reassembly.



## Step 24



- Use the flat end of a spudger to pry up the camera module connector and disconnect it.
- Remove the camera module.

## Step 25 — Remove the Earpiece Speaker



- Insert the pointed end of a spudger underneath the bottom left corner of the earpiece speaker and pry it up.
- Remove the earpiece speaker.

## Step 26 — Disconnect the Motherboard



- Use a spudger to pry up and disconnect the daughterboard flex cable from the motherboard.

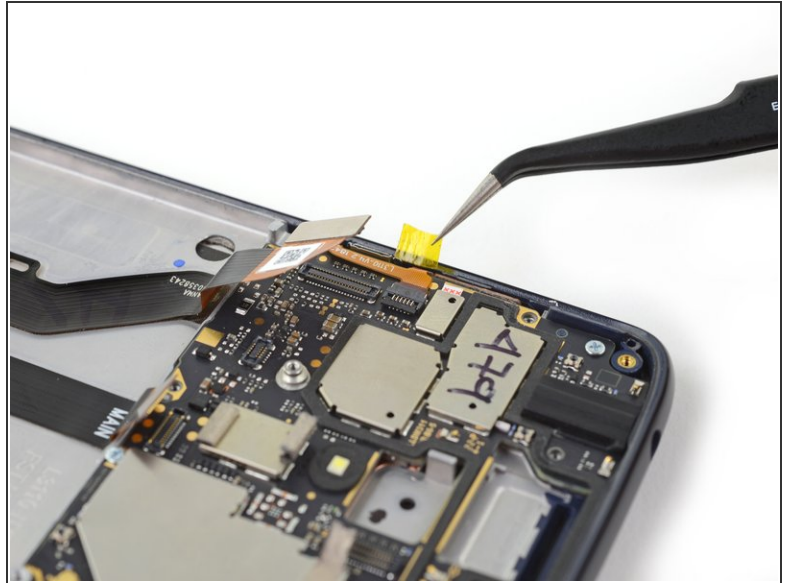
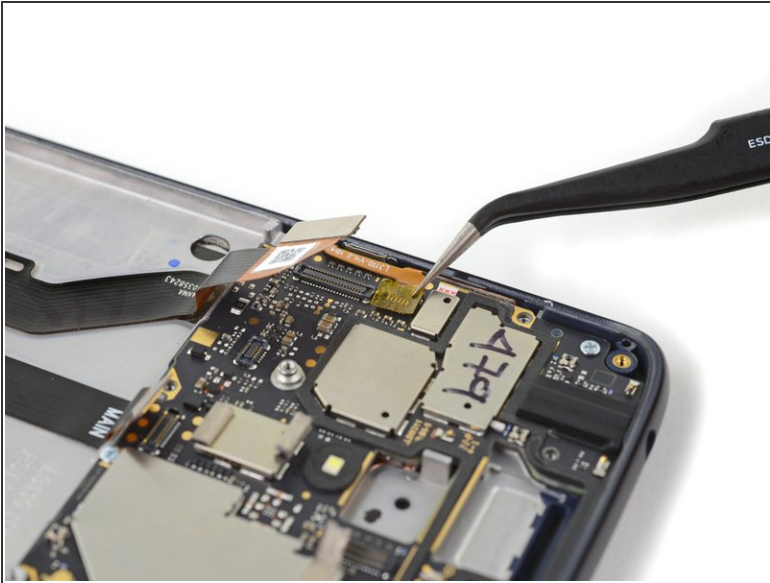
## Step 27



- Use a spudger to pry up and disconnect the display flex cable.

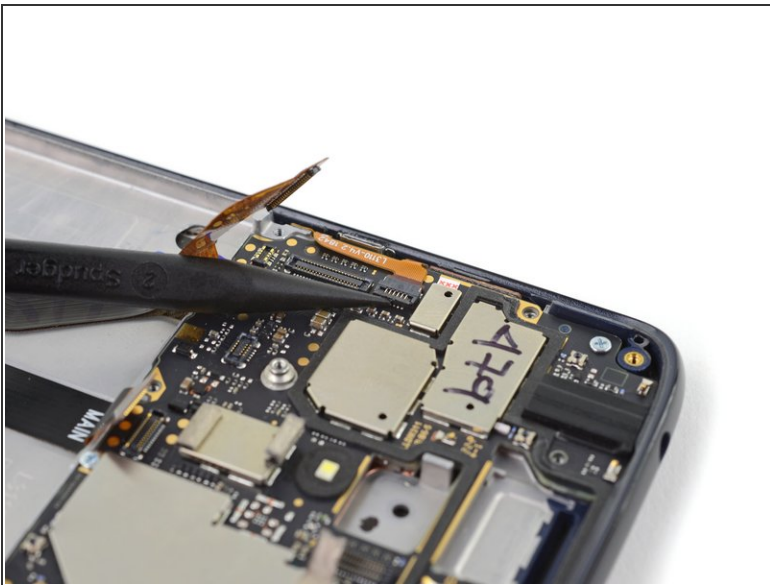


## Step 28



- Use a pair of tweezers to remove the piece of tape covering the side button flex cable connector.
- Retain this piece of tape for reassembly.

## Step 29



- Use the pointed end of a spudger to flip up the locking flap on the side button [ZIF connector](#).

## Step 30




- Use a pair of tweezers to slide the side button cable out of its socket.

## Step 31



- Use the pointed end of a spudger to pry up and disconnect the black antenna cable.

 These UFL connectors are fragile. Take care to not damage them when disconnecting or reconnecting.



## Step 32



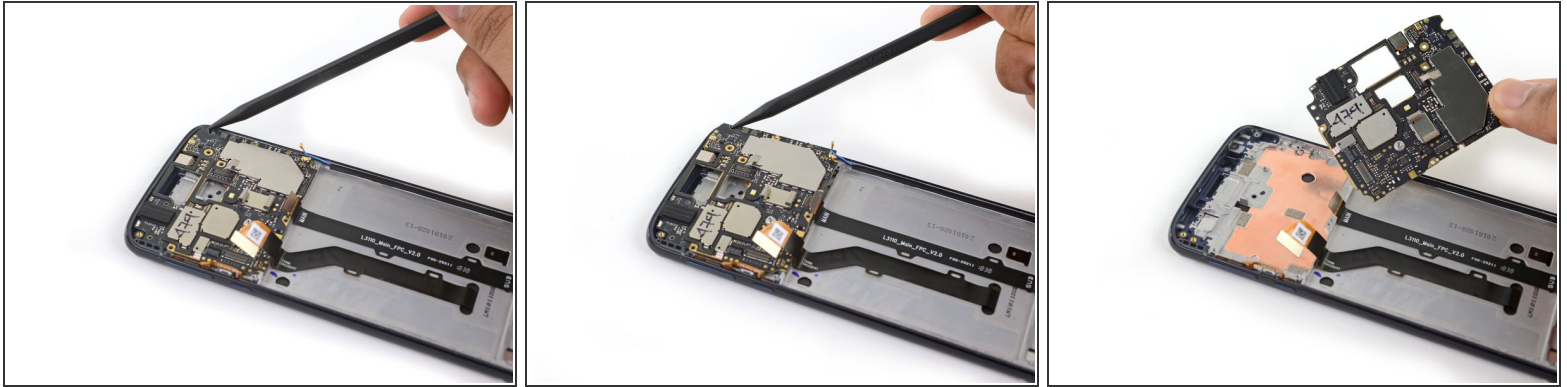
- Use the pointed end of a spudger to pry up and disconnect the blue antenna cable.

## Step 33 — Remove the Motherboard



- Use a Phillips screwdriver to remove the two silver 2 mm screws securing the motherboard.

## Step 34



- Use the pointed edge of a spudger to pry up the top right corner of the motherboard.
  - Remove the motherboard.
- ✦ During reassembly, ensure the [headphone jack gasket](#) is properly seated on to the headphone connector. Then, insert the motherboard gasket-side first, ensuring there are no cables stuck underneath it, and set it into place. Ensure the front facing camera is properly seated as well.

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 the above steps in reverse order.**

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

Repair didn't go as planned? Try some [basic troubleshooting](#), or ask our [Moto G6 Play Answers Community](#) for help.