

# **OnePlus 5 Motherboard Replacement**

This guide show how to remove and replace the motherboard for the OnePlus 5.

Written By: Arthur Shi



#### **INTRODUCTION**

Follow this guide to remove and replace the motherboard for the OnePlus 5. The hardest part of the guide is getting the frame clips of the back cover free.



## **TOOLS:**

- SIM Card Eject Tool (1)
- T2 Torx Screwdriver (1)
- Suction Handle (1)
- iFixit Opening Tool (1)
- Spudger (1)
- Tweezers (1)
- Phillips #00 Screwdriver (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.

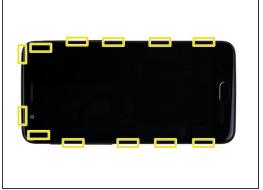
#### Step 2 — Back Cover



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







- 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.





- (i) 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.
  - i Due to tight tolerances, this will take substantial force. Using a new opening tool with an unmarred edge will help with this step.



- 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.



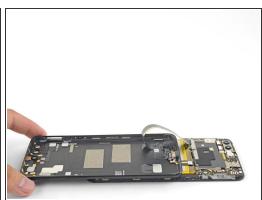
- Continue sliding the opening tool along the long edge, releasing the clips along the way.
- i The last clip in the top-left corner near the front-facing camera is recessed and can be difficult to release. Take your time and use the flat end of a spudger or an opening pick to help.



- 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.







- 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.
  - (i) Be careful not to stress the flex cable connecting the back cover and the frame.





- 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.



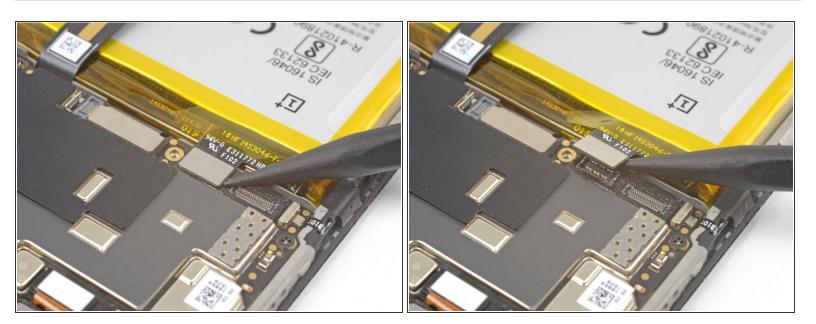
- Use the point of a spudger to pry up and disconnect the back cover flex cable from its socket.
- To re-attach <u>press connectors</u> like this one, carefully align and press down on one side until it clicks into place, then repeat on the other side. Do not press down on the middle. If the connector is misaligned, the pins can bend, causing permanent damage.

## Step 12



Remove the back cover.

#### Step 13 — OnePlus 5 Battery Disconnect

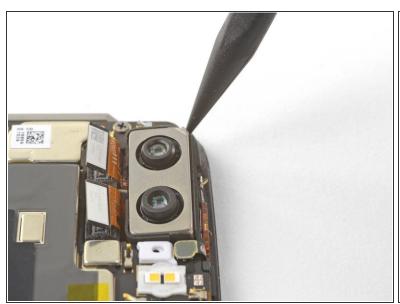


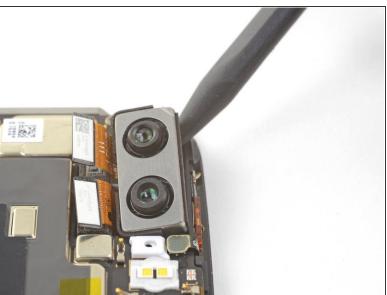
Use the point of a spudger to pry up and disconnect the battery connector from its socket.

#### Step 14 — Rear-Facing Camera



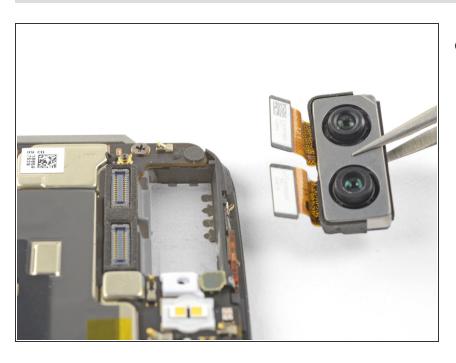
• Use the point of a spudger to pry up and disconnect the two rear-facing camera connectors from their sockets on the motherboard.





 Insert the point of a spudger under the top left corner of the camera module and pry up to loosen it from its recess.

# Step 16



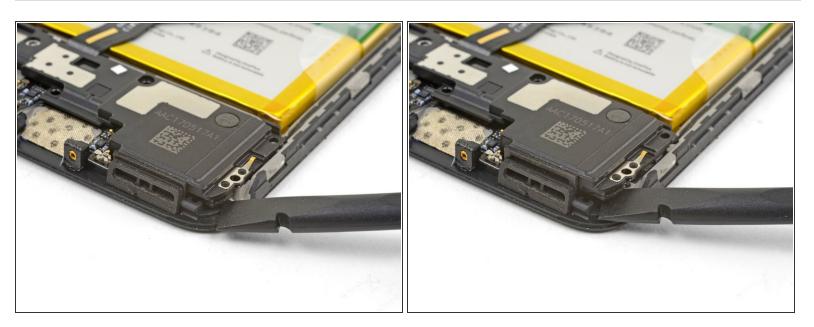
 Remove the rear-facing camera module.

## Step 17 — Loudspeaker



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

#### Step 18



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



- Remove the loudspeaker.
- To reinstall the loudspeaker, align the loudspeaker's bottom edge to the frame, then press the assembly into place.
  - During reinstallation, make sure that the <u>display cable connector</u> under the loudspeaker assembly is still securely fastened.

#### Step 20 — OnePlus 5 Interconnect Cable Disconnect

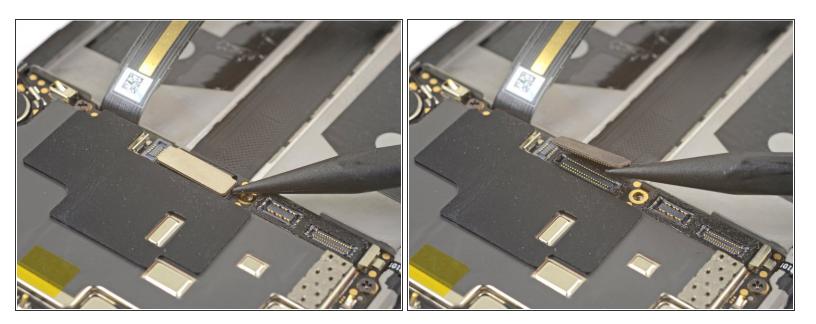




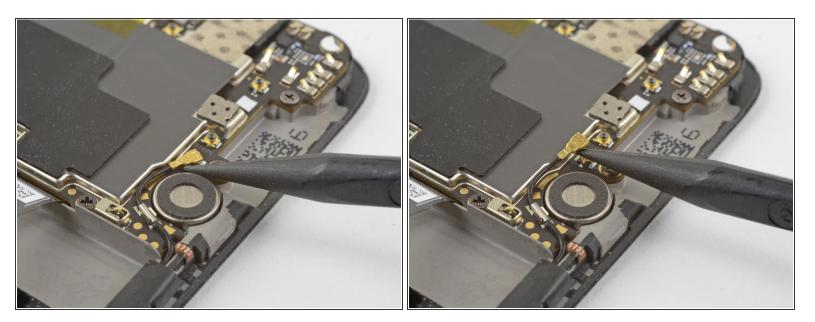


- Use the point of a spudger to pry up and disconnect the interconnect flex cable from the socket.
- if you are replacing the battery, bend the interconnect flex cable away from the phone and secure it out of the way with a rubber band or tape.

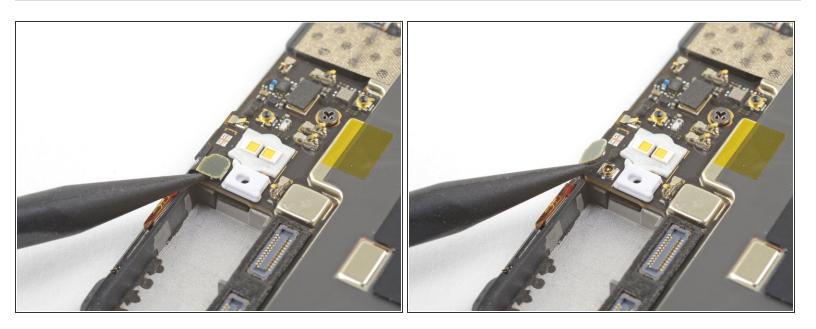
## Step 21 — Motherboard



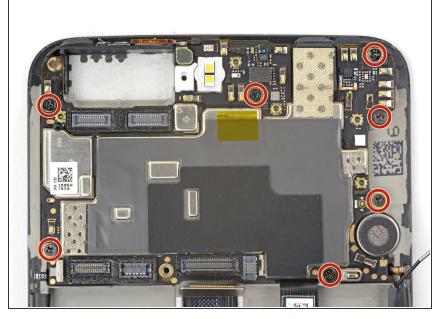
 Use the point of a spudger to pry up and disconnect the display interconnect cable from its socket near the bottom edge of the motherboard.



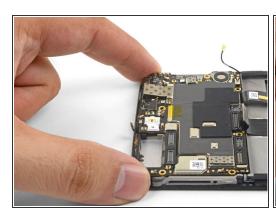
- Slide the point of a spudger underneath the antenna interconnect cable that is connected to the motherboard above the vibration motor.
- Pry up to disconnect the cable from its socket.
- De-route the cable out of its motherboard grounding clip and move it out of the way.

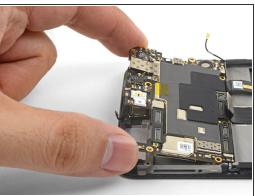


- Slide the point of a spudger under the small square antenna connector connected to the motherboard near the top edge.
- Pry up to disconnect the antenna connector from its socket.



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







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

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.