

# Motorola Moto G7 Power Motherboard Replacement

Use this guide to remove or replace the...

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#### INTRODUCTION

Use this guide to remove or replace the motherboard on your Motorola Moto G7 Power.

Before you begin, download the <u>Rescue and Smart Assistant</u> app to backup your device and diagnose whether your problem is software or hardware related.

You'll need some double-sided tape ( <u>such as Tesa tape</u>) in order to adhere the replaced components.

For your safety, discharge the 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. If your battery is swollen, take appropriate precautions.



#### Step 1 — Eject the SIM card tray





- Insert a SIM card eject tool into the small hole on the left side of the phone.
- Press gently until you feel the SIM card tray pop out slowly.

#### Step 2 — Remove the SIM card tray





- Remove the SIM card tray from the phone.
  - Mhen reinserting the SIM card tray, ensure that the hole is on the bottom side.

#### Step 3 — Weaken the adhesive



- Apply a <u>heated iOpener</u> or a heat gun to the bottom edge of the screen for approximately two minutes to help soften the adhesive.
  - A hair dryer, heat gun, or hot plate may also be used, but be careful not to overheat the device —the display and internal battery are both susceptible to heat damage.

#### Step 4 — Loosen the rear cover







- Apply a suction cup to the rear cover, as close to the heated edge as possible.
- Pull up on the suction cup with strong, steady force to create a gap.
  - (i) Depending on the age of your device, this may be difficult. If you have trouble, apply more heat and try again.
- Insert an opening pick into the gap you created under the rear cover.





- Slide the pick along the bottom of the gap to slice through the adhesive securing the rear cover to the midframe.
  - (i) After being cut, the adhesive will sometimes stick back together as it cools. To prevent this, you can leave the pick in this edge after cutting, and continue the next steps with a new pick. Repeat this with each edge, leaving a pick and continuing with a new one.





 Slide the pick along the gap on the same side of the phone as the SIM card tray to slice through the adhesive securing the rear cover to the midframe.

# Step 7





• Slide the pick along the gap at the top of the phone to slice through the adhesive securing the rear cover to the midframe.







- Slightly lift up the rear cover starting from the right side.
  - This will prevent damage to the fingerprint sensor connector under the left side of the rear cover.
  - if lifting the rear cover is difficult, slice through any remaining adhesive with an opening pick.

    Reapplying the iOpener can also help weaken the adhesive.
- Use a finger to press down on the fingerprint sensor until it separates from the rear cover.

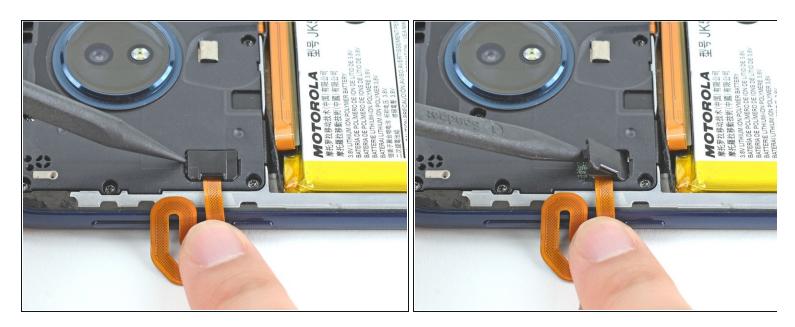
#### Step 9 — Remove the rear cover





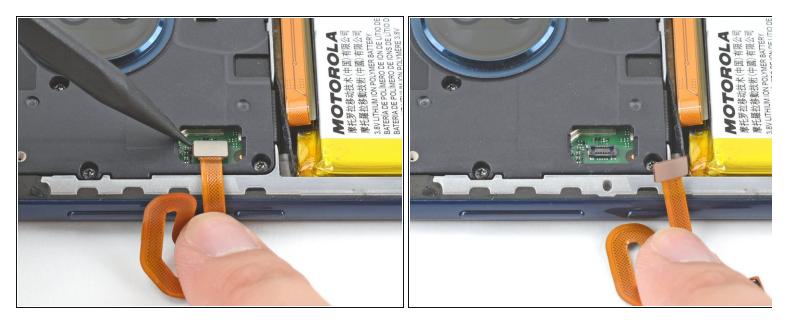
- Remove the rear cover, taking care not to damage the fingerprint sensor.
- During reassembly, follow this guide to install custom-cut adhesives for your device.

# Step 10 — Remove the fingerprint sensor



- Insert the pointed end of a spudger into the divot at the top of the fingerprint sensor connector cover.
- Gently pry the cover open.
- Remove the cover.

# Step 11



• Use the pointed end of a spudger to pry up on the fingerprint sensor connector to disconnect it.

#### Step 12 — Remove the motherboard cover



- Use a T5 Torx screwdriver to remove the ten screws securing the motherboard cover to the midframe:
  - Nine 3.5 mm screws
  - One 3.0 mm screw

# Step 13







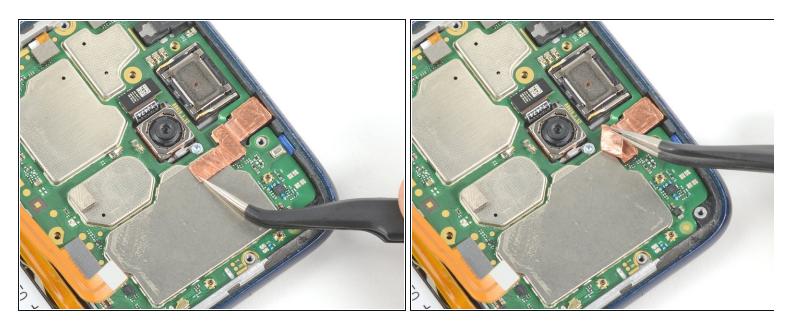
- Insert the flat end of a spudger under the motherboard cover.
- Pry the motherboard cover upwards to lift it from the motherboard.
- Remove the motherboard cover.

# Step 14 — Disconnect the battery

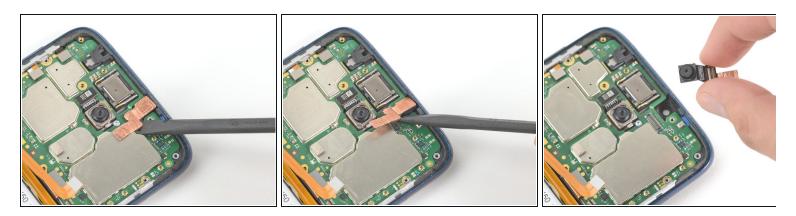


Use the flat end of a spudger to pry up on the battery connector to disconnect it.

#### Step 15 — Remove the front-facing camera

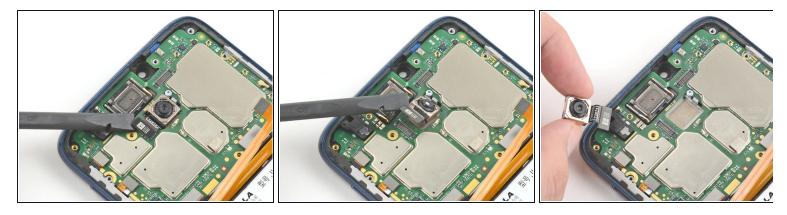


• Use a pair of tweezers to gently peel back the bottom of the copper sheet covering the metal shield below the front-facing camera.



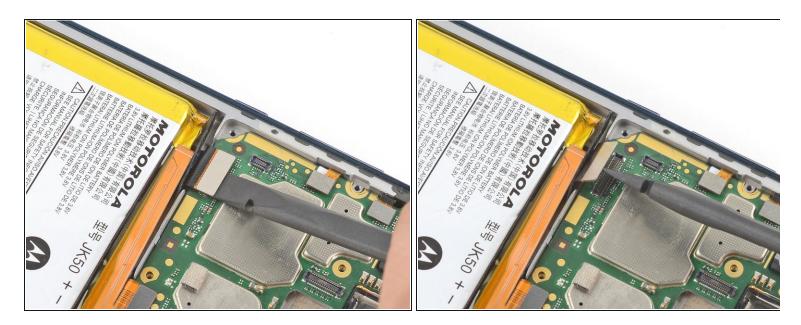
- Use the flat end of a spudger to pry up on the front-facing camera's connector to disconnect it.
- Remove the front-facing camera.

# Step 17 — Remove the rear camera



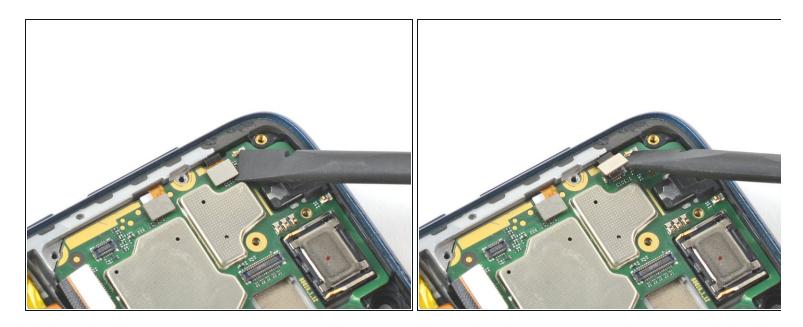
- Use the flat end of a spudger to pry up on the rear camera connector to disconnect it.
- Remove the rear camera.

# Step 18 — Disconnect the display cable

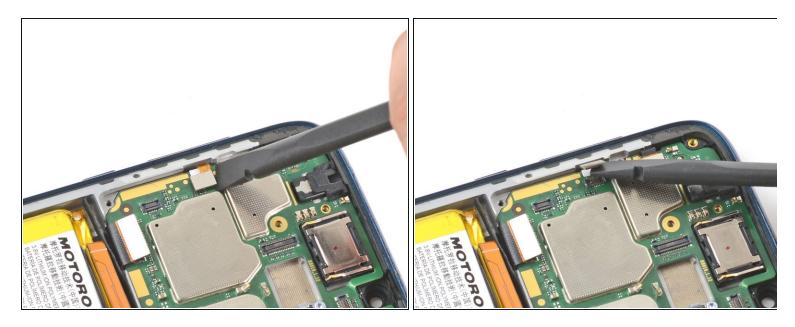


• Use the flat end of a spudger to pry up on the display cable to disconnect it.

#### Step 19 — Disconnect the side buttons



• Use the flat end of a spudger to pry up on the upper side button connector to disconnect it.



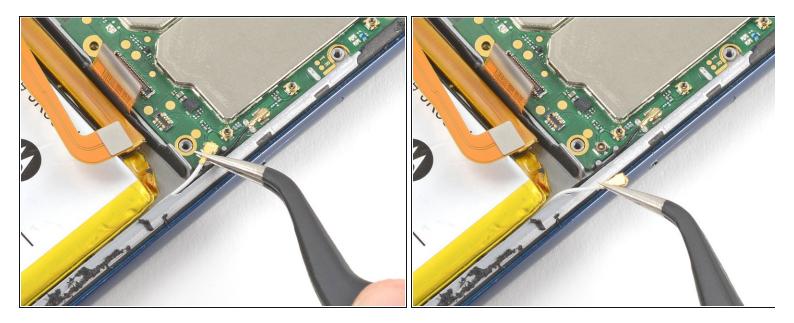
• Use the flat end of a spudger to pry up on the lower side button connector to disconnect it.

#### Step 21 — Disconnect the interconnect cable

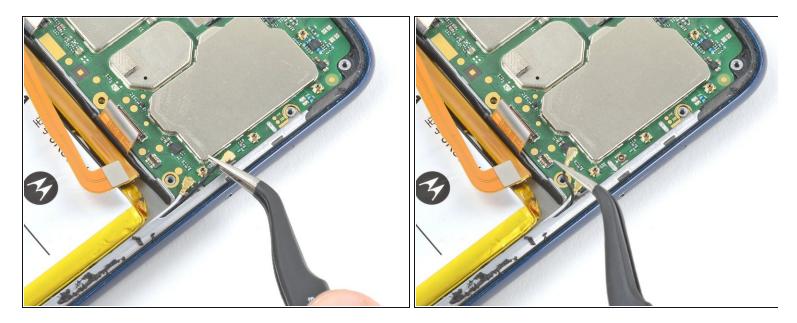


• Use the flat end of a spudger to pry up on the interconnect cable connector to disconnect it.

#### Step 22 — Disconnect the antenna cables



- i Follow this guide for in-depth instructions on how to disconnect a coaxial connector.
- Slide one of the tweezer's tips under the white wire until it's snug against the connector, and pry straight up from the board.
- To reinstall, hold the connectors in place and gently press them straight down. The connectors "snap" into their sockets much like the metal snaps on a jacket.



 Slide one of the tweezer's tips under the black wire until it's snug against the connector, and pry straight up from the board.

# Step 24 — Loosen the motherboard



 Use a T5 Torx screwdriver to remove the 3 mm screw securing the motherboard to the midframe.

#### Step 25 — Remove the motherboard



- i The SIM card tray also secures the motherboard to the midframe, so ensure that it has been removed before this step.
- Insert the pointed end of a spudger under the top right corner of the motherboard to lift it from the midframe.
- Remove the motherboard.

#### 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? Try some <u>basic troubleshooting</u>, or ask our <u>Motorola Moto G7 Power Answers community</u> for help.

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 you install it.