

Motorola Moto G7 Motherboard Replacement

The motherboard is one of the most important...

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INTRODUCTION

The motherboard is one of the most important components of a cell phone. It contains the processor, graphics card, RAM, and other necessary components for the phone's functionality. Replacing the Motorola Moto G7 motherboard is only necessary if there has been major damage to the phone. To replace the motherboard, other components must be removed first, including the screen, speaker, and camera assemblies. When replacing the motherboard, be careful to not puncture the battery.

Before you begin, download the [Rescue and Smart Assistant](#) app to backup your device and diagnose whether your problem is software or hardware related.



TOOLS:

[T3 Torx Screwdriver](#) (1)

[iFixit Opening Tool](#) (1)

[iOpener](#) (1)

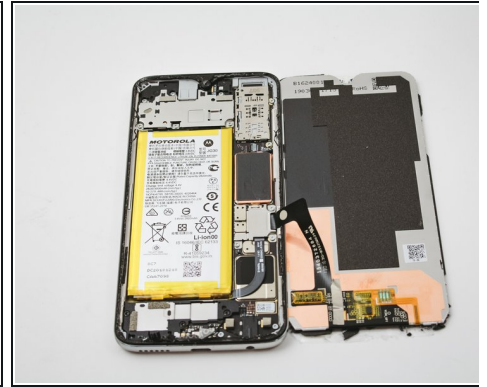
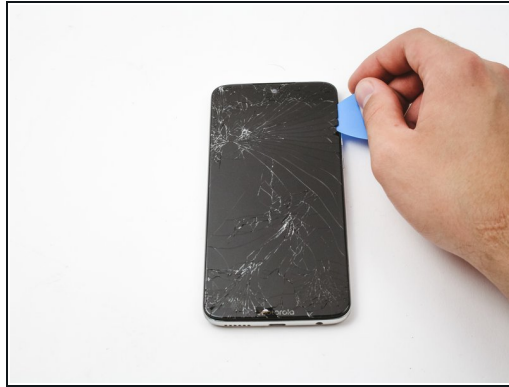
[Heat Gun](#) (1)

[iFixit Opening Picks \(Set of 6\)](#) (1)

[Spudger](#) (1)

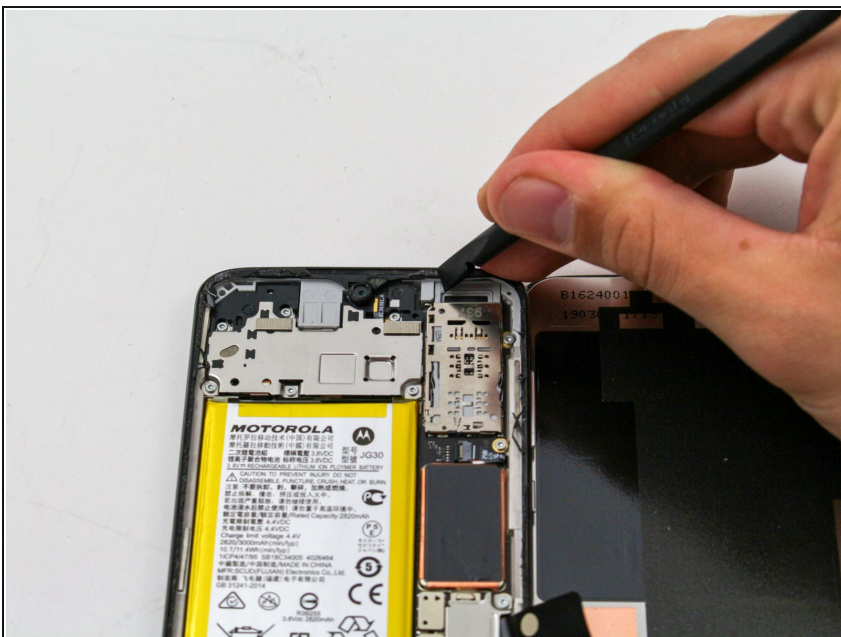
[SIM Card Eject Tool](#) (1)

Step 1 — Screen



- Use the iFixit opening tools to gently wedge the front screen from the rest of the device.
- ① Try to focus on the corners to make it easier to insert and use the iFixit opening picks.
- ① It is also recommended to use the iOpener or a heat gun to weaken the adhesive that holds the edges of the screen down.
- ⚠ The screen is glass, so when using force to lift the screen, be cautious of cracked glass and stray shards of glass coming off.
- ⚠ You have to be extra careful to dig deep enough, so you lift the entire screen unit!

Step 2



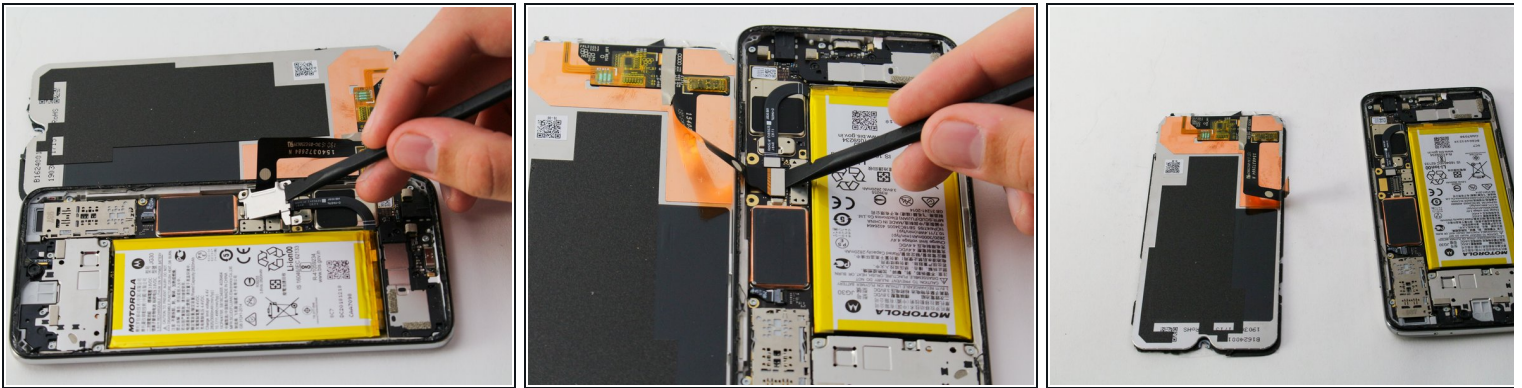
- Excessive glass and adhesive around the edges should be removed with the spudger.
- ⚠ The glass is black and may blend in with edges of the device. Be cautious using bare hands when moving the device.

Step 3



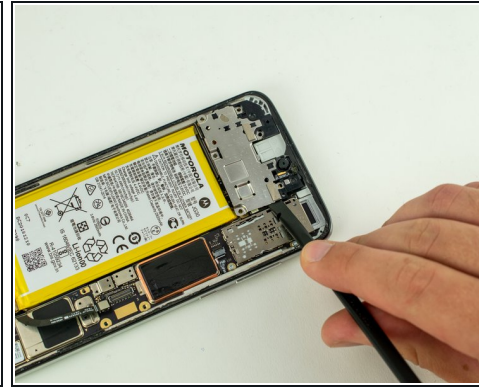
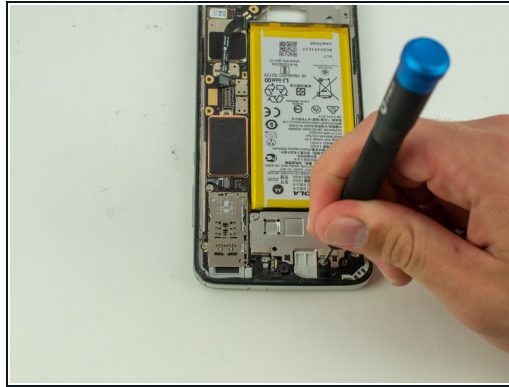
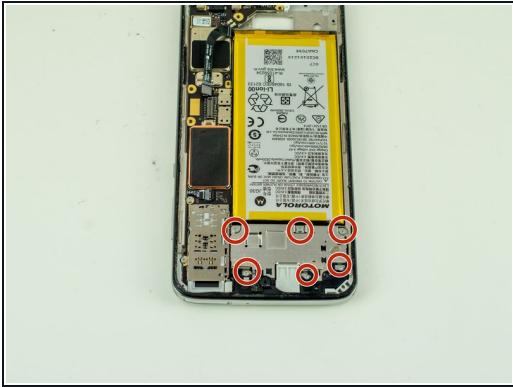
- Remove three 2.7mm T3 Torx screws from the metal piece to the right of the battery.

Step 4



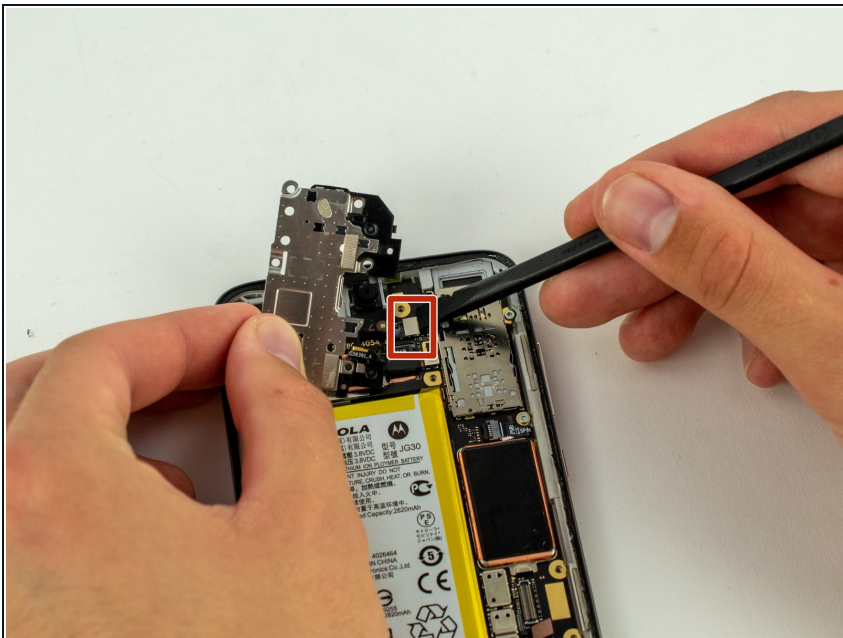
- Use a spudger to gently take off the metal piece that was held down by the screws.
- A second metal piece is held under the first. This can also be popped off by using the spudger and nudging it under the metal piece connected to the band.

Step 5 — Camera



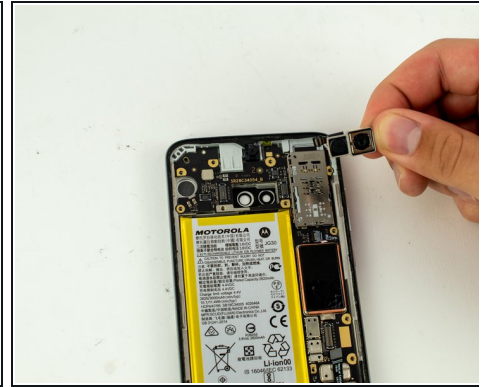
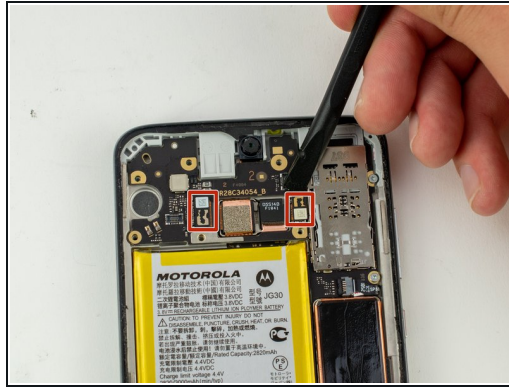
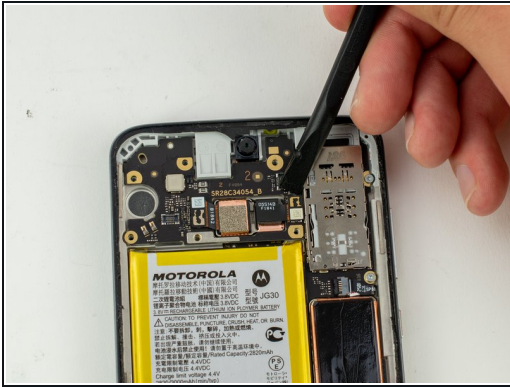
- Remove by the six 2.7mm T3 Torx screws from the metal panel above the battery.
- Wedge a spudger between the SD card tray and the metal plate, and use a medium amount of force to pry up the plate.

Step 6



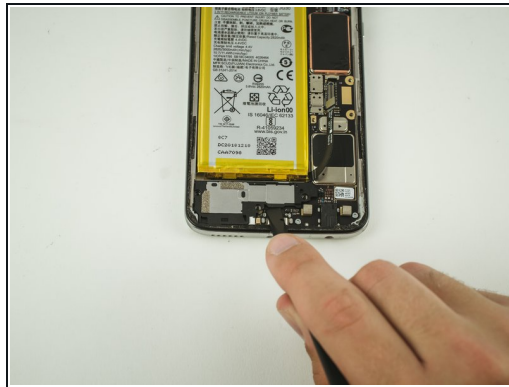
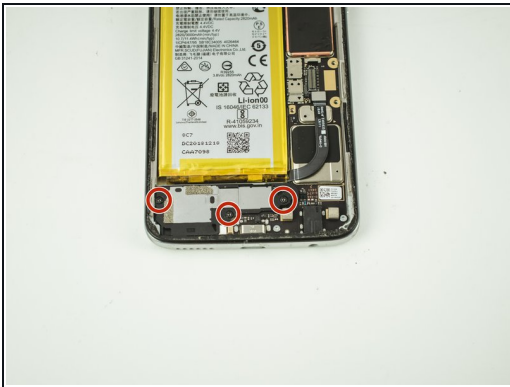
- Use a spudger beneath the right side of the connector to detach it.

Step 7



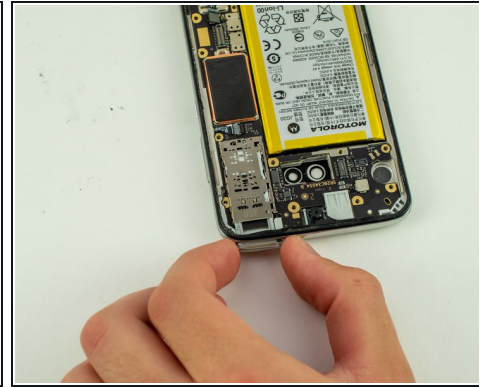
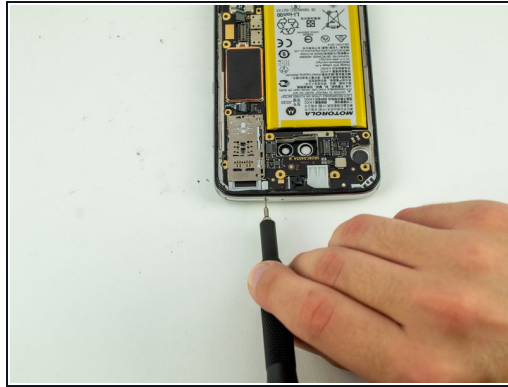
- Detach the two small black and white connectors on either side of the camera using a spudger.
- Remove the camera from the smartphone.

Step 8 — Speaker



- Remove three 3.7mm T3 Torx screws from the bottom of the phone.
- Use the spudger to gently lift the speaker out of the phone.

Step 9 — Motherboard



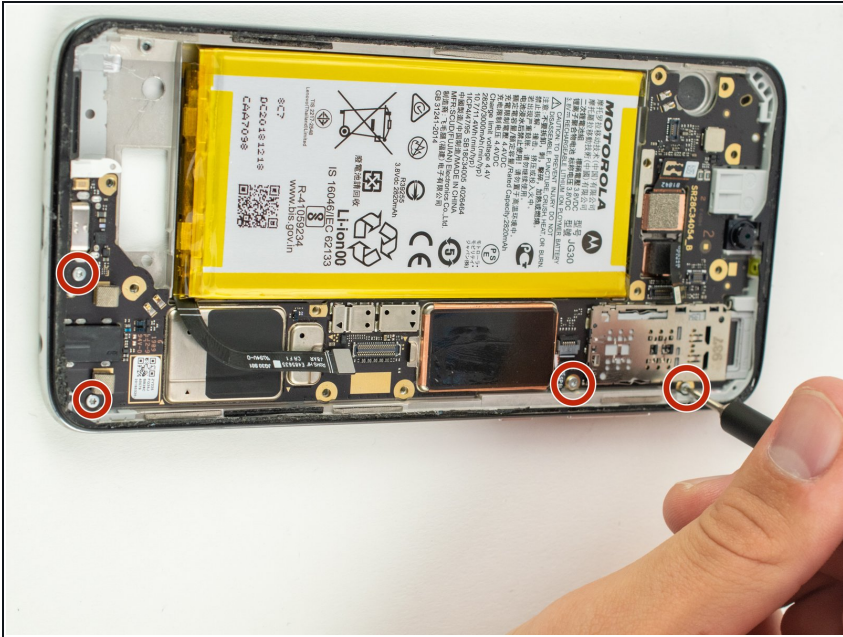
- Use the SIM card removal bit to remove the SIM card tray.

Step 10



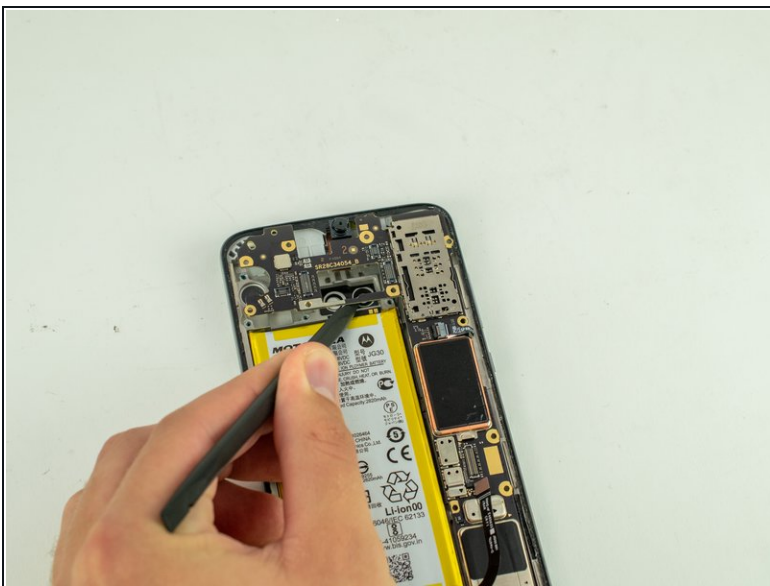
- Remove the fingerprint scanner connector from the motherboard by levering the spudger underneath the connector corner.

Step 11



- Use a T3 Torx screwdriver to remove the four 2.3mm screws from the bottom and right sides of the phone.

Step 12



- Lever the spudger underneath the motherboard above the battery.
- Use a medium amount of force to remove the motherboard from the rest of the phone assembly.

To reassemble your device, follow these instructions in reverse order.