



LG G6 Motherboard Replacement

This guide will show you how to remove or replace the motherboard of an LG G6.

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INTRODUCTION

Follow this guide to remove or replace an LG G6 motherboard.

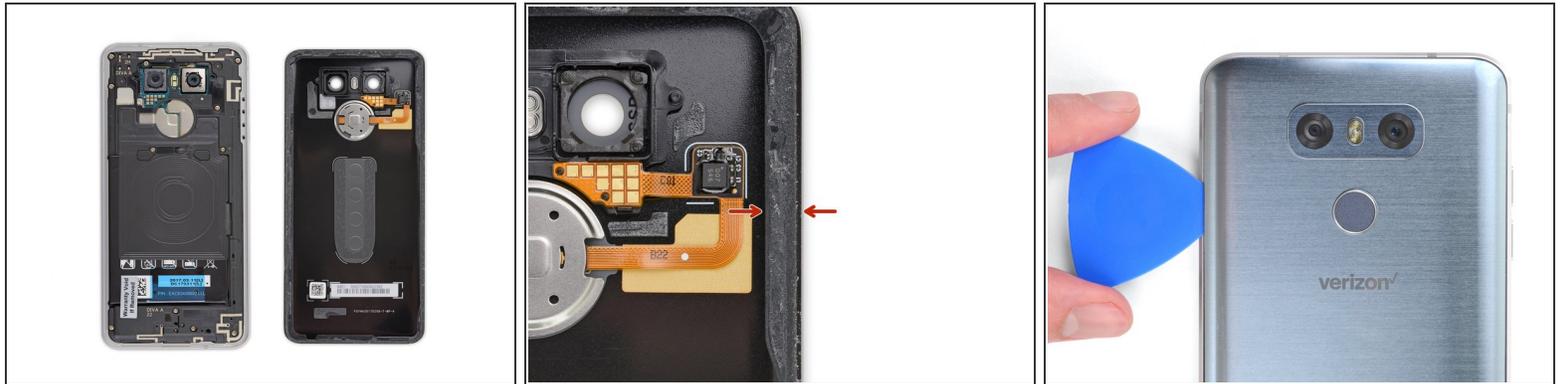
TOOLS:

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

PARTS:

- [LG G6 Rear Cover Adhesive](#) (1)

Step 1 — Rear Glass Panel



i In the following steps you'll be cutting through the adhesive that adheres the rear glass panel to the phone.

- For reference, the backside of the panel is shown in the first photo. Note the clearance between the edge of the panel and the fragile ribbon cable beside the fingerprint sensor.
 - Be careful as you slice and pry to the left side of the fingerprint sensor, as seen from the outside of the phone in the third photo.
- !** Inserting an opening tool more than 3 mm into the phone in this area can damage or tear the fingerprint sensor cable.

Step 2



- i** Heating the backside of the G6 helps soften the adhesive securing the rear panel, making it easier to open.
- Use a hairdryer, a heat gun, or [prepare an iOpener](#) and apply it to the lower edge of the G6 for about a minute to soften up the adhesive underneath the rear glass panel.

Step 3



- Secure a suction cup to the rear panel, as close to the heated edge as possible.

Step 4



- ⓘ To make this step easier, you can prop up the heated edge of the phone on something that is about 0.5 inches (13 mm) thick, like an eraser. This will angle the phone so that the opening tool is easier to insert.
 - If you don't have a small object for propping, you can (carefully) perform this step at the edge of a desk or table to achieve the same angle of entry.
- Lift the rear panel's bottom edge with your suction cup, opening a slight gap between the panel and the frame.
- ⓘ This may require a significant amount of force. If you have trouble, apply more heat to further soften the adhesive, and try again. The adhesive cools very fast, so you may need to heat it repeatedly.
- Once you've created a gap, press the flat end of an opening tool into the gap.
- ⚠ The rear glass panel is fragile and can break if you use too much force or attempt to pry with metal tools.

Step 5



- Slide the opening tool back and forth across the bottom edge of the phone, cutting through the adhesive securing the rear glass panel.
- Once the adhesive is cut and the gap is wide enough, insert an opening pick into the gap to keep the adhesive from re-bonding. Remove the opening tool.

Step 6



- ⓘ As you proceed with separating the adhesive, you might need to re-apply heat to each edge before you can slice the adhesive securing it.
 - Additionally, you can use multiple opening picks for this process, [leaving one in place on each side](#) after you finish slicing to prevent the adhesive from re-adhering as it cools.
- Slide the opening pick along the left edge of the phone to slice through the adhesive securing the rear panel.

Step 7



- Re-insert the opening pick into the bottom edge of the phone and slide it up the right edge of the phone, cutting through the adhesive holding it in place.

Step 8



⚠ As seen in [Step 1](#), the fingerprint reader cable runs to the left of the camera, fairly close to the edge of the phone. Be careful as you cut through the adhesive in the upper edges of the phone.

- Carefully slide an opening pick across the top edge of the phone, separating the last of the adhesive securing the rear glass panel.

Step 9



- Once all the adhesive is cut, use an opening pick to pry up the rear glass panel.
- Remove the panel.

Step 10



 If reusing the rear glass panel during reassembly:

- Use tweezers to peel away any remaining adhesive from both the rear panel and the phone's chassis.
- Clean the adhesion areas with high concentration isopropyl alcohol (at least 90%) and a lint-free cloth. Swipe in one direction only, not back and forth. This will help prep the surface for the new adhesive.

 **Be sure to turn on your phone and test your repair before installing new adhesive and resealing the phone.**

- Peel away the replacement adhesive's liner, align it with the back of the phone, and press it into place.
 - Remove any remaining liners, and replace the rear glass panel.
 - After installing the rear panel, apply strong, steady pressure to your phone for several minutes to help the adhesive form a good bond, such as by placing it under a stack of heavy books.
- ⓘ You can also reinstall the rear panel without replacing the adhesive. Remove any large chunks of adhesive that might prevent the panel from sitting down flush. After installation, heat the panel and apply pressure to secure it. The phone won't be waterproof, but the residual adhesive is usually more than strong enough to hold.

Step 11 — Battery Disconnect



- Remove the four Phillips screws holding down the lower antenna shield.
- ⓘ Bonus points: remove the [illegal](#) *Warranty Void If Removed* sticker.

Step 12



- Insert the point of a spudger into the small gap between the lower antenna shield and the metal frame of the phone.
- Gently pry up the antenna shield and remove it from the phone.

Step 13



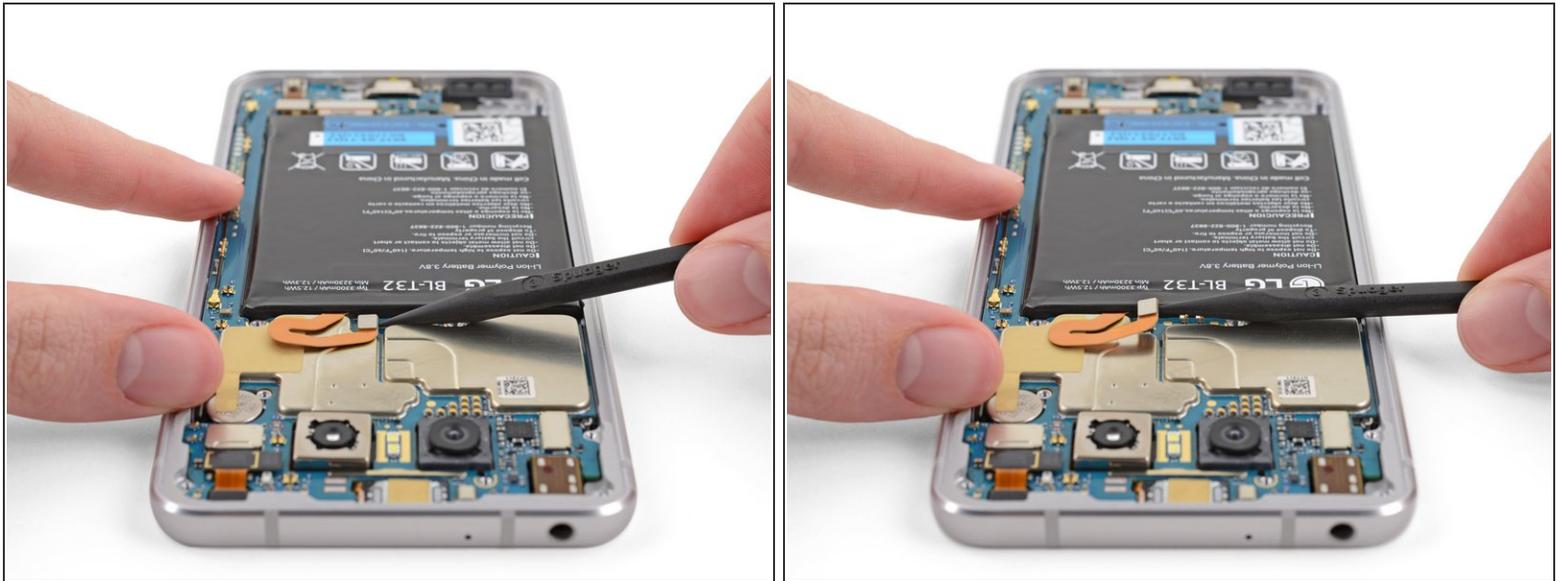
- Remove the seven Phillips screws holding down the upper antenna shield.

Step 14



- Insert the flat end of a spudger into the [small gap](#) between the upper antenna shield and the phone chassis and pry up, releasing the clips holding the shield in place.
- Remove the upper antenna shield and wireless charging coil.

Step 15



- Use a spudger to pry up the press connector at the end of the battery's ribbon cable, disconnecting the battery.

Step 16 — Motherboard



- Insert a SIM removal tool or the SIM removal bit into the hole opposite the volume buttons and press to release the SIM/MicroSD card tray.
- Remove the SIM/MicroSD tray.
- ⓘ Do not skip this step! The motherboard cannot be removed from the device without first removing the SIM/SD tray.

Step 17



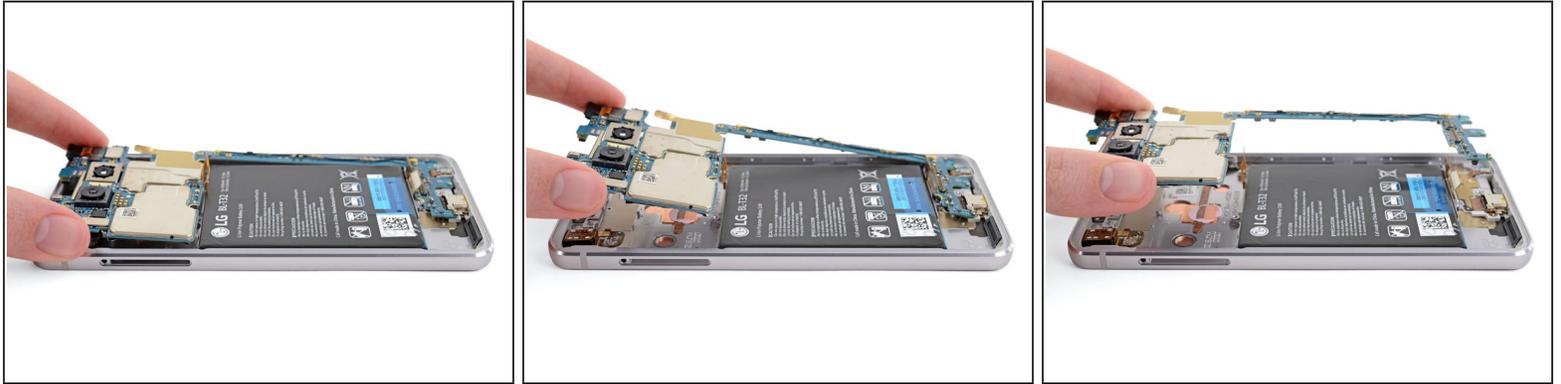
- Use the flat end of the spudger to lift up the two press connectors on the bottom end of the motherboard above the USB-C port.

Step 18



- Remove the sticker connecting the motherboard to the vibration motor.

Step 19



- Grab the motherboard by the top end (the end with the cameras) and gently lift it up and out of the phone.

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? Check out our [Answers community](#) for troubleshooting help.