



LG G6 Repairability Assessment

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Written By: Sam Goldheart



INTRODUCTION

Barebones disassembly of the LG G6 to determine its repairability.



TOOLS:

- [iOpener](#) (1)
 - [Halberd Spudger](#) (1)
 - [Spudger](#) (1)
 - [Phillips #00 Screwdriver](#) (1)
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Step 1 — LG G6 Repairability Assessment



- Front and back reference photos.
- SIM and SD card tray immediately removable.

Step 2



- Opening requires heating the back and cutting through several pieces of adhesive.
 - The glass is fairly stiff and opening isn't too tough, but the rear glass doubles the potential damage if the phone is dropped
- The rear button is connected to the phone via spring contacts, making opening much safer.

Step 3



- The rear button is covered by a reinforcement bracket that is adhered to the rear case. Presumably this makes the button less likely to fail, and may protect the rear case as well.
- The button components and gasket use adhesive, but replacement isn't too challenging. A mechanical button may be more likely to fail than a solid touch button.

Step 4



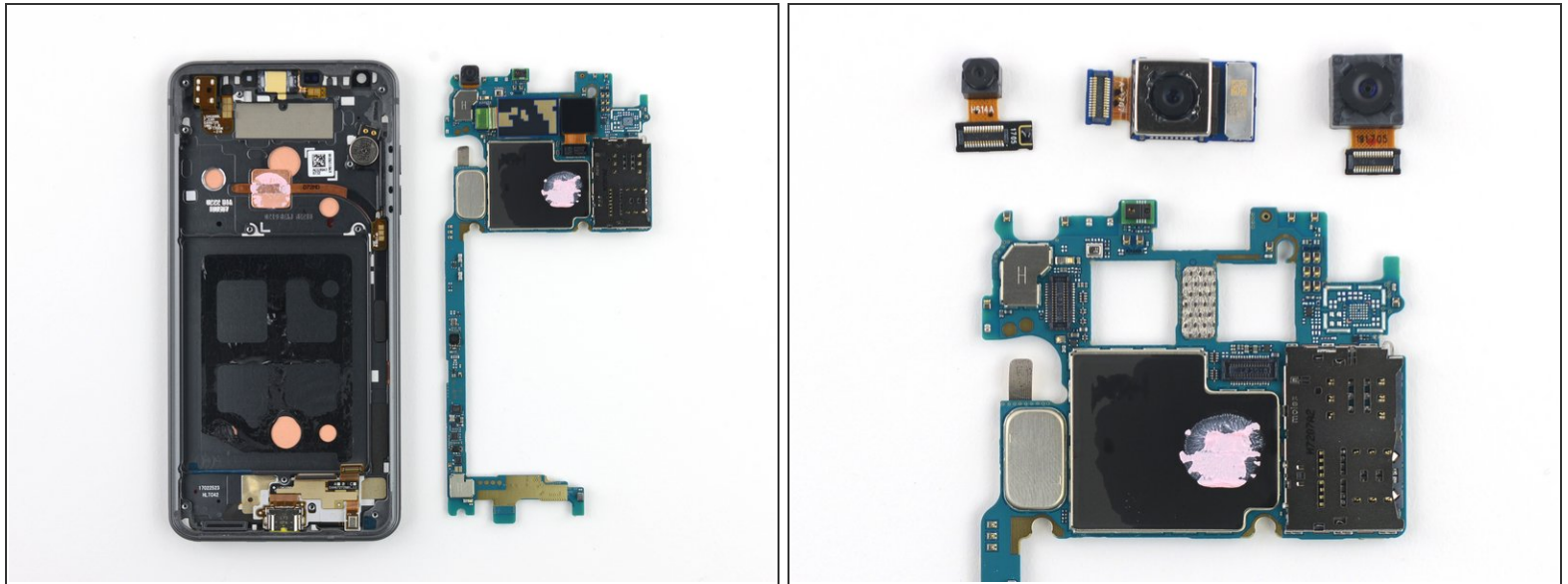
- The battery isn't immediately disconnectable; the midframe components must first be removed.
- Several identical Phillips #00 screws secure the midframe/antenna assembly. These are the only screws in the device.
- The lower speaker/antenna portion must be removed first; the upper portion comes out second, and has the NFC coil adhered to it.

Step 5



- The battery can now be removed. The blue plastic tab on the battery appears to be intended to aid removal. It helps a bit, but breaks easily at the wrong angle.
- Large patch of specialty cut adhesive secures the battery making removal more difficult than necessary.

Step 6



- Motherboard is now removable.
- Once the motherboard is removed, the cameras can be removed.
- There is also an antenna interconnect cable removable at this point.
- The SIM/SD slots are soldered to the main board making replacements expensive. However, these are relatively low wear and the motherboard is mostly modular.

Step 7



- The final component removal includes:
 - Headphone jack (modular, gasket to aid waterproofing) and modular earpiece speaker
 - Vibrator, switch assembly (gaskets in display assembly to protect ingress from button covers)
 - Charging port assembly (modular cheap repair, gasket against hole)

Step 8



REPAIRABILITY SCORE:



- The LG G6 earns a **5 out of 10** on our repairability scale (10 is the easiest to repair):
 - Many components are modular and can be replaced independently.
 - Standard Phillips screws used, very sparingly, throughout.
 - The battery *can* be replaced, but tough adhesive and a glued-on rear panel make it unnecessarily difficult.
 - Front and back glass doubles the crackability, and strong adhesive on both makes it tough to begin any repair.
 - Components adhered to the back of a fused display assembly.