Motorola Moto Z Repairability Assessment


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INTRODUCTION

The modularity and easy to remove battery found in the Lenovo Moto Z earns it a 7 out of 10 on the repairability scale.

TOOLS:

- iOpener (1)
- T3 Torx Screwdriver (1)
- iSclack (1)
- Spudger (1)
- Tweezers (1)
- iFixit Opening Picks set of 6 (1)
Step 1 — Reference front/back

- External expansion is possible with magnetically attached "Moto Mods." Easily swapped external battery packs may increase life of device.

Step 2

- Sticky adhesive holds the display in place. Heat is required to soften the adhesive enough to pry up the display.

  This adhesive is similar to adhesive found in waterproof devices like the iPhone 6s/7. This device is splashproof, not waterproof.

- The display cable is long enough to allow you to fold the display over completely, so you don't have to support it while disconnecting.

  However, it is very wide and hinders access to the battery connector—it's considerably easier to disconnect the battery after the screen is removed, which is not best practice.
Step 3

- The fingerprint sensor button and ambient light sensor are held onto the back of the display assembly with strong adhesive.

- Heat was not needed, and both components can be easily reinstalled.

To test the most common repair, we remove the battery before proceeding.

- Battery has a plastic tab to aid in removal. The angle helps avoid ripping the tab off before it's free from the adhesive in the lower right corner.
Step 4

- Vibrator and rear-facing camera are lightly adhered in place and can be removed now, (or before the battery is removed).

- Earpiece speaker assembly and lower bracket are held in place with Torx T3 screws and serve to hold down the top and bottom halves of the motherboard.
Step 5

- Removing the adhered motherboard
  - Motherboard as a single component is an expensive repair, especially with the commonly failing charging port soldered on.
  - With the motherboard removed, the next layer of components can come out, including: front-facing camera, camera cover/LED flash assembly, heat pipe, button covers and switch ribbon cable.
The Lenovo Moto Z earns a **7 out of 10** on our repairability scale (10 is the easiest to repair):

- Pull-tab on battery, easy to access once you have the device open.
- Modular assembly allows independent replacement of many components.
- Display is adhered in place with no external fasteners, but the adhesive is weak enough to easily separate after heating.
- Charging port soldered to the motherboard means a common repair will be very expensive.
- Manufacturer does not provide user-accessible repair documentation.