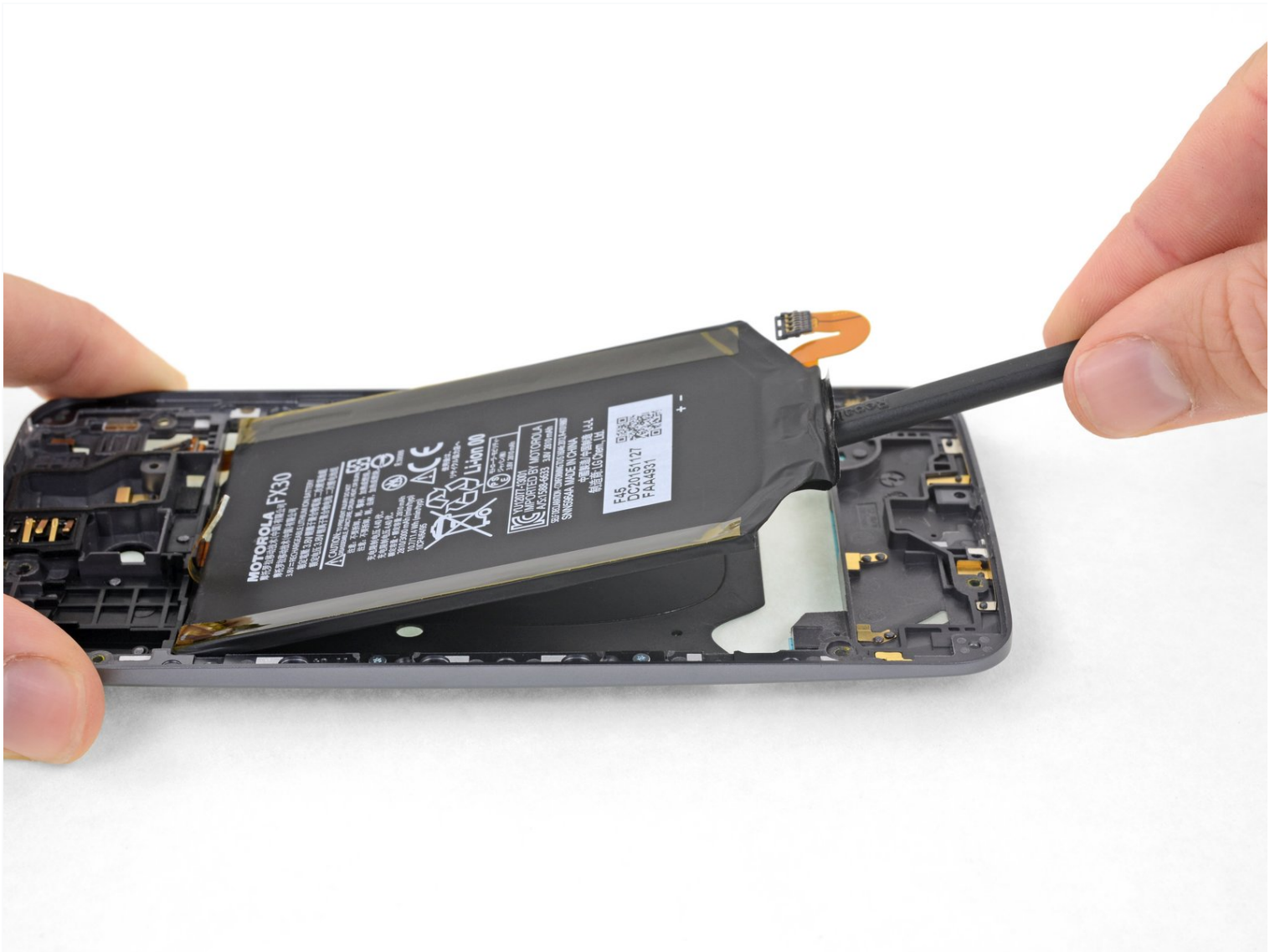# Motorola Moto X Pure Edition Battery Replacement

Use this guide to remove or replace a dead or...

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INTRODUCTION

Use this guide to remove or replace a dead or dying battery in your Motorola Moto X Pure Edition. If your battery is swollen, take appropriate precautions.

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

For your safety, discharge your existing 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.

🔧 **TOOLS:**	⚙️ **PARTS:**
SIM Card Eject Tool (1)	Moto X Pure Edition Battery - Genuine (1)
iOpener (1)	Moto X Pure Battery Adhesive Strips (1)
Tweezers (1)	Moto X Pure Rear Cover Adhesive (1)
iFixit Opening Picks (Set of 6) (1)	
Spudger (1)	
T3 Torx Screwdriver (1)	

Step 1 — SIM Tray

- Insert a SIM card eject tool, bit, or a straightened paperclip into the small hole in the SIM card tray.

- Press to eject the tray.
  - ⓘ This may require a significant amount of force.

Step 2

- Remove the SIM card tray from the phone.
  - ⓘ The SIM card will fall out of the tray easily.

- ⊠ When reinserting the SIM card, ensure that it is in the proper orientation relative to the tray.

Step 3 — Opening Procedure

- [Prepare an iOpener](#) and heat the back of the phone along its right edge for about five minutes. This will help soften the adhesive securing the back cover.
  - ⓘ You may need to reheat and reapply the iOpener several times to get the phone warm enough. Follow the iOpener instructions to avoid overheating.
- ⚠ A hair dryer, heat gun, or hot plate may also be used, but be careful not to overheat the phone—the LCD display and internal battery are both susceptible to heat damage.

Step 4

- In the following steps, you'll be cutting through the adhesive securing the back cover.

- ⓘ The adhesive is laid out as seen in the first image, which shows the inside of the cover.

- **Avoid slicing in this area to avoid damaging delicate ribbon cables.**

Step 5
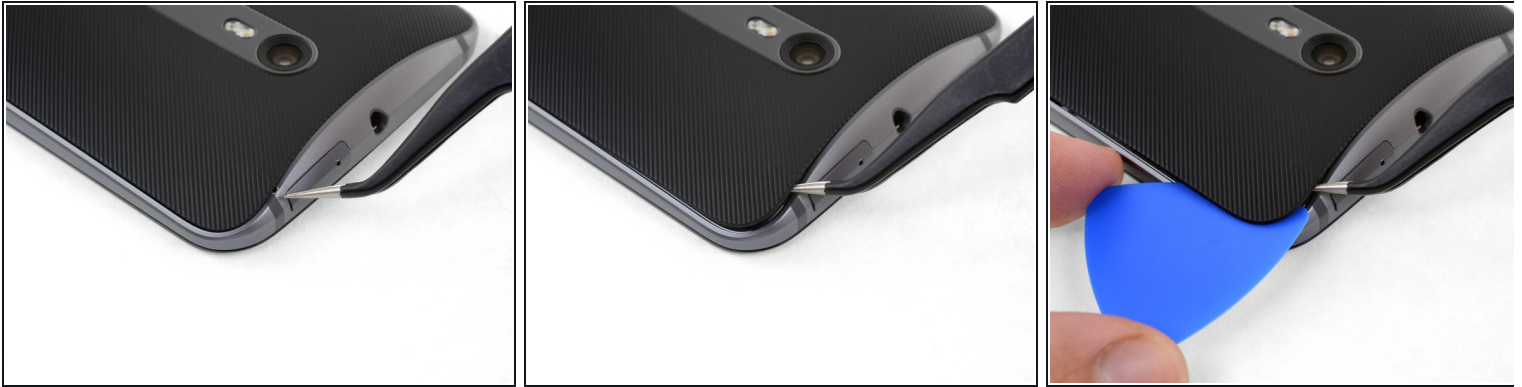
- Hold a pair of pointed tweezers closed, and insert them into the small hole on the edge of the back cover near the SIM card slot.

- Use the tweezers to lift the cover up slightly, and slide an opening pick into the gap between the cover and the frame.
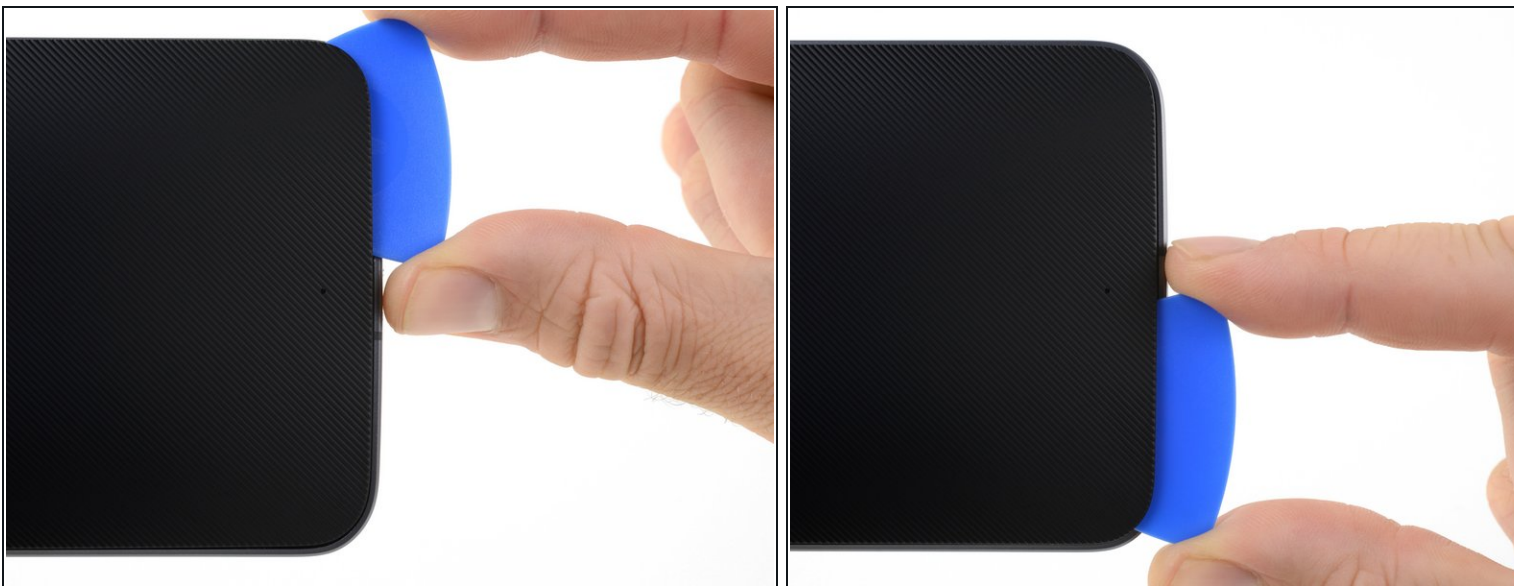
Step 6

- Slide the opening pick along the edge of the phone to slice through the back cover adhesive.
  - Try to insert the pick as far as you can underneath the cover, toward the center of the cover. There's thick adhesive on the middle of the cover that must be separated.

- (i) Leave the pick in place as you proceed to the next step. Leaving the pick inserted can help prevent the glue you just separated from re-adhering.

Step 7

- [Prepare an iOpener](#) and heat the back of the phone along its left edge for about five minutes. This will help soften the adhesive securing the rest of the back cover.
  - ⓘ You may need to reheat and reapply the iOpener several times to get the phone warm enough. Follow the iOpener instructions to avoid overheating.

Step 8

- Slice through the adhesive along the bottom edge of the phone.
  - ⓘ Re-heat the back cover as needed to prevent the glue from cooling and hardening.

Step 9

- Slice through the adhesive along the left side of the phone.
    - Try to insert the pick as far as you can underneath the cover, toward the center of the cover. There's thick adhesive on the middle of the cover that must be separated.
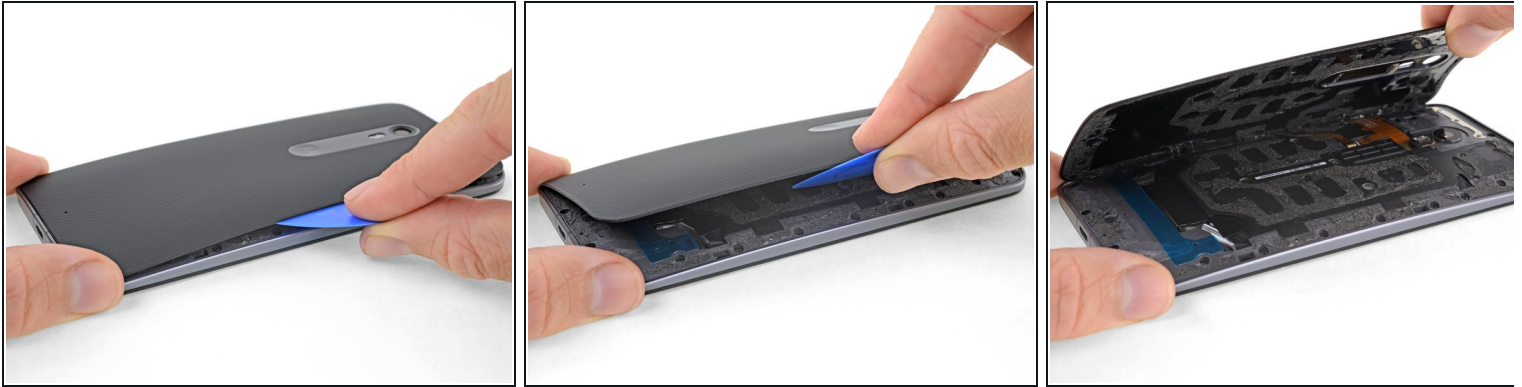
⚠ Stop cutting when you get to the edge of the volume buttons. Cutting past this point may damage the ribbon cables underneath the cover.

Step 10

- Slice through the adhesive along the top edge of the phone, pulling the pick out slightly to guide it around the rear-facing camera.

- Carefully pry the cover away from the phone.
  - ⓘ This may take a lot of force if the adhesive in the middle is still attached. As you lift the cover, you may need to use an opening pick to slice through any remaining adhesive.

- 📌 To reinstall the back cover:
  - First use tweezers and a spudger to peel and scrape away any remaining adhesive from both the back cover and the phone's chassis.

  - Then, 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.

  - Replacement adhesive comes in a pre-cut sheet to match the exact contours of the back cover. If that's not available, you can use a high-bond double-sided tape, such as Tesa 61395. Before installing the precut adhesive on the back cover, remove the metal insert. Install the adhesive, then replace the insert.

  - After installing the back cover, apply strong, steady pressure to your phone for several minutes to help the adhesive form a good bond.

- ⓘ If desired, you may reinstall the back cover without replacing the adhesive. Remove any large chunks of adhesive that might prevent the back cover from sitting down flush. After installation, heat the back cover and apply pressure to secure it.

Step 12

- Use the point of a spudger to pry up the rubber cover over the battery connector.

- Remove the rubber cover.

Step 13

- Use the flat end of a spudger to pry the battery connector straight up and out of its socket.

  - (i) Only pry the small tab on the end of the connector opposite the ribbon cable. Do not push against the connector too hard or you risk damaging the plug on the motherboard.
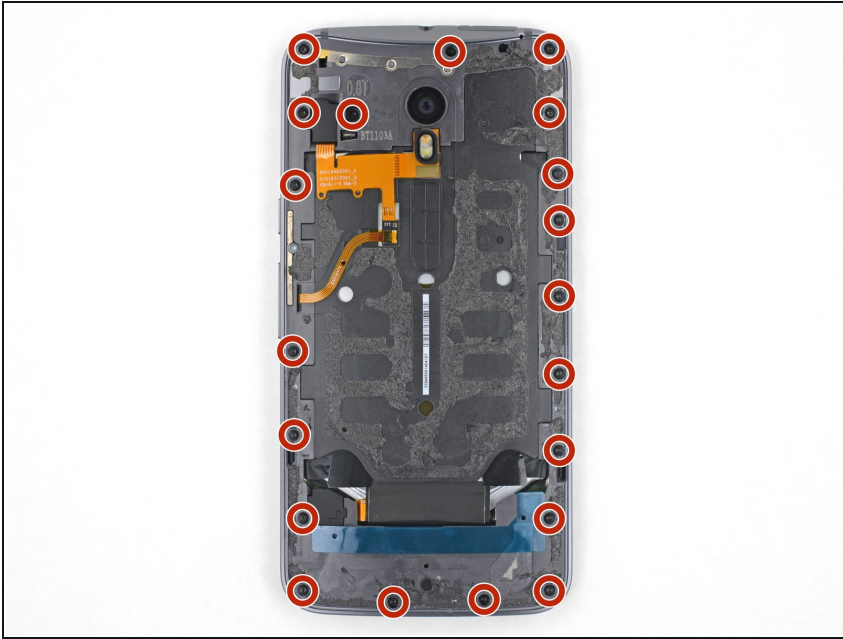
Step 14

- Use tweezers to lift away the rubber cover over the flash connector.

Step 15
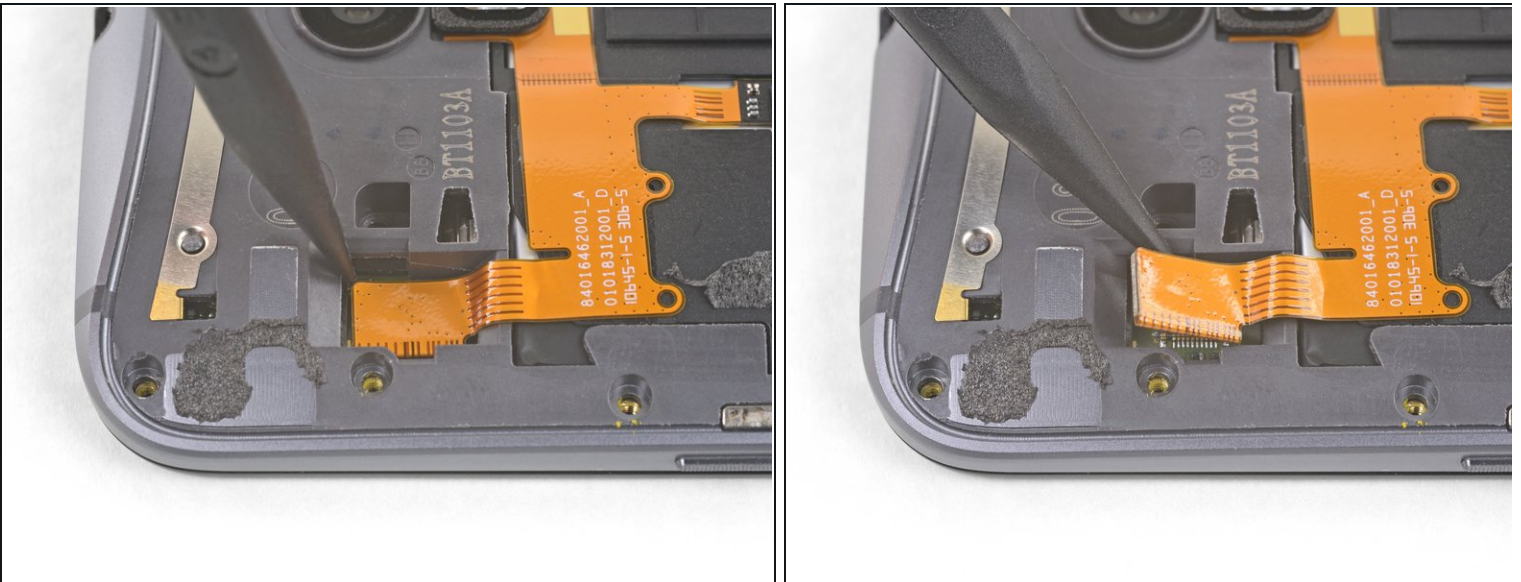
- Use the tip of a spudger against the corner of the flash connector to pry the connecter straight up and out of its socket.
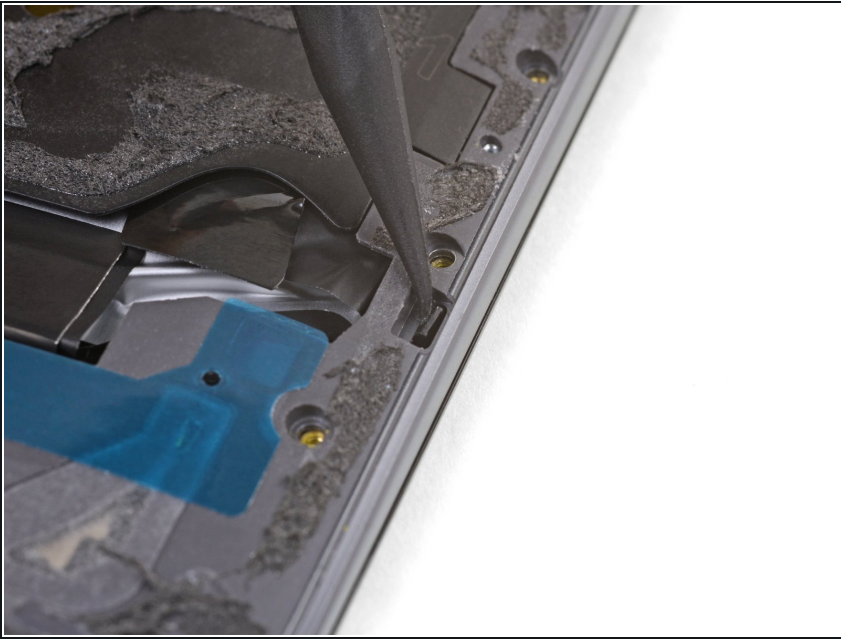
Step 16

- Use a T3 Torx driver to remove twenty 2.4 mm screws.
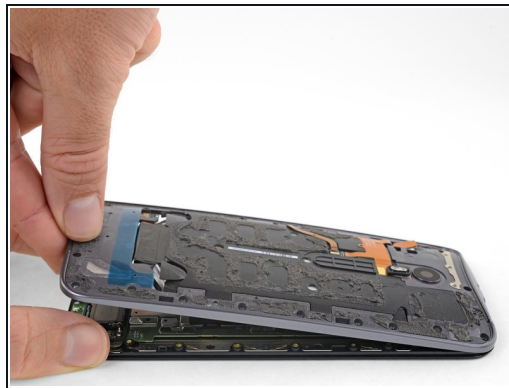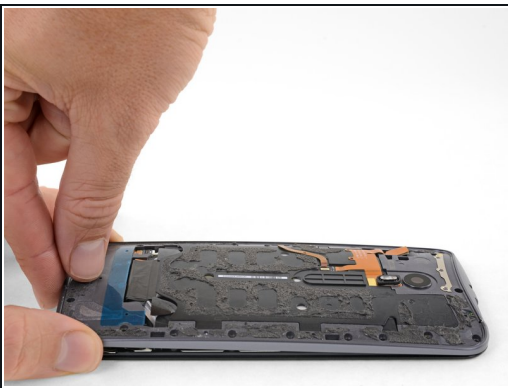
Step 17

- Use the point of a spudger to push the small clip securing the left side of the midframe toward the edge of the phone, releasing the clip.
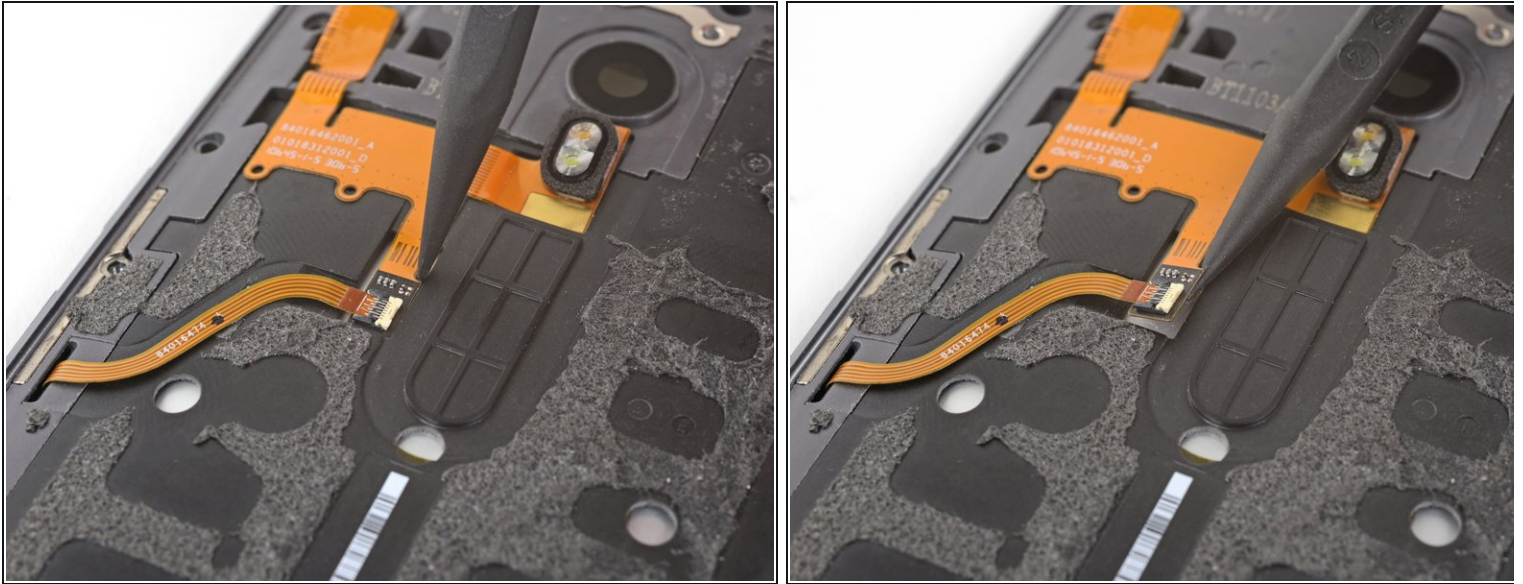
Step 18

- Repeat the previous step to release the right side midframe clip.

Step 19

- Holding the display by the edges, gently lift the midframe away from the display.

- Remove the midframe from the display.

- Gently slide the point of a spudger underneath the corner of the volume button connector board, which is adhered to the battery.

- Lift the board slightly to separate it from the battery.

⚠ There is risk of puncturing the battery with the point of the spudger, or damaging the delicate ribbon cables attached to the board. Work carefully and don't apply any downward force against the battery.

Step 21

⚠️ Try to keep the adhesive strips flat and unwrinkled during this procedure; twisted or wrinkled strips will stick together and break instead of pulling out cleanly.

⚠️ Additionally, do not press down on the battery as you pull the strips. Pressing on the battery creates pressure points that can snag and break the adhesive.

- Grasp one of the battery adhesive tabs with your fingers and *slowly* pull it away from the battery, towards the bottom of the phone.

- Pull steadily, maintaining constant tension on the strip until it slips out from between the battery and the midframe. For best results, pull the strip at as low an angle as possible, without snagging it on any other components.

  ⓘ The strip will stretch to many times its original length. Continue pulling and re-grab the strip near the battery if necessary.

- If the battery adhesive tabs break during the removal process, use your fingers or blunt tweezers to retrieve the remaining length of adhesive, and continue pulling.

ⓘ If any of the adhesive strips break underneath the battery and cannot be retrieved, try to remove the remaining strip, and then proceed with the rest of the steps.

Step 22

- Repeat the previous step to remove the remaining adhesive strip.

Step 23
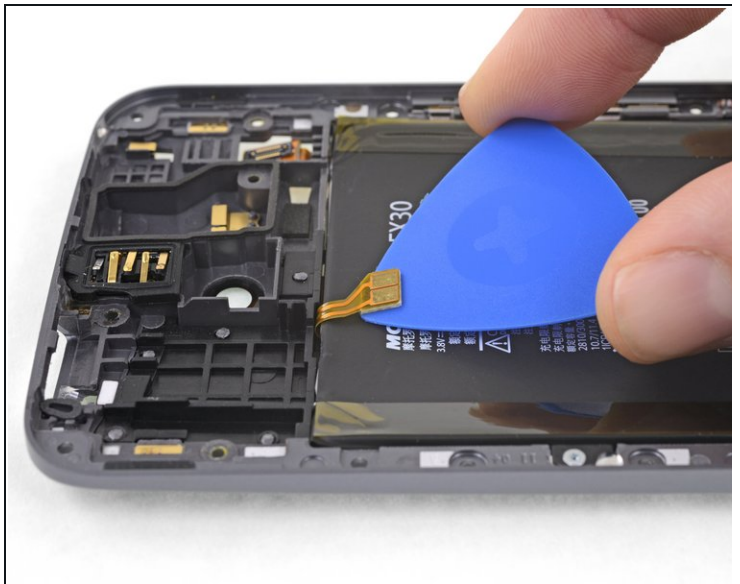
- Slide an opening pick under the NFC connector to remove it from the battery.

- ⚑ Note the position of the NFC connector, as it will need to be reinstalled in the same position on the replacement battery. If its existing adhesive is no longer sticky, you can remove that and use a high-bond double-sided tape, such as Tesa 61395.

Step 24

- Use the flat end of a spudger to lift the battery out of the midframe.

  ⚠ Check to make sure no ribbon cables remain stuck to the battery, and separate them carefully if needed.

- If there is still adhesive holding the battery down, slowly pry the battery away from the midframe, taking care not to bend the battery.

  ⓘ The battery will separate more easily if you add a few drops of isopropyl alcohol along each side, to soften the adhesive beneath. High concentration (90% or greater) alcohol will not harm your phone's components.

  ⓘ Alternatively, you may apply heat to the midframe to soften the battery adhesive, but be very careful not to overheat the battery.

⚠ Don't deform or puncture the battery—it can catch fire and/or explode if damaged.

⚠ Never reinstall a damaged or deformed battery. Replace the battery.

📌 Use a few strips of thin double-sided adhesive tape, such as Tesa 61395 or strips from a pre-cut adhesive card, to secure the replacement battery.

Carefully compare your new replacement part to the original part. Remove any adhesive backings before installing your new battery.

To reassemble your device, follow the above steps in reverse order.

After completing this guide, calibrate your newly-installed battery.

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.