

# **Motorola Moto X4 Battery Replacement**

This guide shows how to remove and replace a...

Written By: Arthur Shi



### INTRODUCTION

This guide shows how to remove and replace a battery for the Moto X4.

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

If your battery is swollen, take appropriate precautions.

**For your safety, discharge your 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. If your battery is swollen, take appropriate precautions.

# Frools: Suction Handle (1) iFixit Opening Picks (Set of 6) (1) iFixit Opening Tool (1) iOpener (1) Spudger (1) T4 Torx Screwdriver (1) T3 Torx Screwdriver (1) Tweezers (1) Moto X4 Battery - Genuine (1) Moto X4 Display Adhesive (1) Tesa 61395 Tape (1) Stretch Release Battery Adhesive (1)

### Step 1 — Heat the screen





- (i) Before you begin, turn off your phone.
- Heat an iOpener and apply it to the left edge of the phone for two minutes.
- ② You may need to reheat and reapply the iOpener several times to get the phone warm enough. Follow the iOpener instructions to avoid overheating.
- (i) A hair dryer, heat gun, or hot plate may also be used, but be careful not to overheat the phone—the display and internal battery are both susceptible to heat damage.
- As you wait, take note of the the following areas:
  - Display cable—be careful not to slice too deeply near the edge here, or you may damage the display cable.
  - Fingerprint sensor cable—be careful not to slice too deeply near the edge here, or you may damage the fingerprint sensor cable.

### Step 2 — Create a gap



- Apply a suction cup to the screen, as close to the heated edge as possible.
- Pull on the suction cup with strong, steady force to create a gap in the seam.
- Insert the point of an opening pick into the gap.
  - ② Depending on the age of your phone, this may be difficult. If you are having trouble, apply heat to the edge and try again.

# Step 3 — Slice the screen adhesive

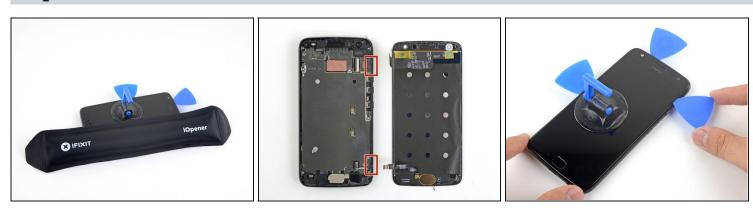


- Slide the opening pick along the edge to slice through the adhesive.
- Leave an opening pick in the seam to prevent the adhesive from re-sealing.



- Heat the top edge of the phone with an iOpener.
- Carefully slice around the corner and through the top edge to separate the adhesive.

# Step 5



- Heat the screen's right edge with an iOpener.
- Be careful not to slice too deeply near the cables to avoid damaging them.
- Use an opening pick to slice along the right edge to separate the adhesive.



• Repeat the previous steps to heat and slice the bottom edge of the phone.

# Step 7



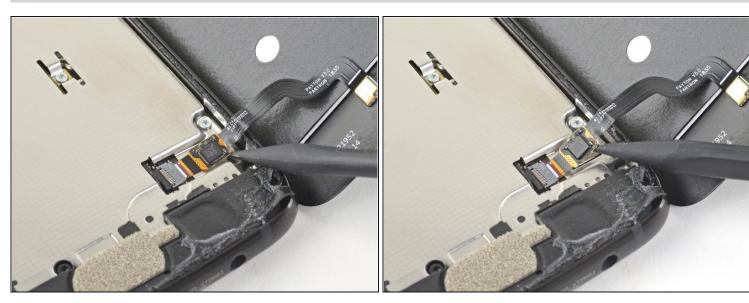
⚠ Do not try to remove the screen yet—it is still attached to the phone by delicate flex cables.

• Carefully lift up the left edge of the screen and cut away remaining adhesives with an opening pick.



- Swing open the screen and prop it up with a small box as you work on disconnecting the flex cables.
- During reassembly, this is a good time to power on your phone and test all functions before sealing it up. Be sure to power your phone back down completely before you continue working.

### Step 9 — Detach the fingerprint sensor cable



• Slide the point of a spudger underneath the fingerprint sensor cable and gently pry up to loosen the cable from the phone.

 $\triangle$  Do not pull on the cable. It is still attached to the phone by a delicate ZIF socket.

## Step 10 — Disconnect the fingerprint sensor

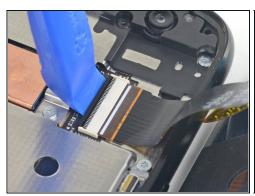


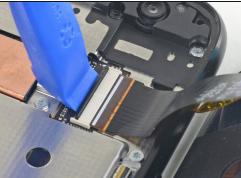




- Use the point of a spudger to flip up the lock bar on the fingerprint sensor's ZIF socket, near the bottom right of the phone.
- Use tweezers to carefully slide the fingerprint sensor cable out of the socket.

### Step 11 — Disconnect the display cable

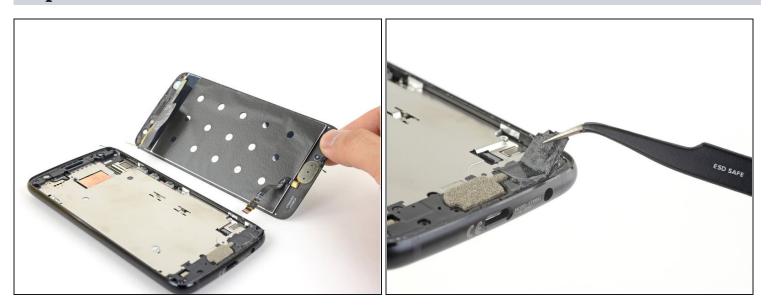






- Use an opening tool to flip up the wide lock bar on the display cable's ZIF socket, near the top right of the phone.
- Use tweezers to carefully slide the display cable out of the ZIF socket.

# Step 12 — Remove the screen



- Remove the screen.
- During reassembly, <u>follow this guide</u> to clean the existing adhesive off and install custom-cut adhesives for your phone.

## Step 13 — Unscrew the midframe





- Remove the following twenty screws securing the midframe:
  - Eleven silver 2.7 mm-long T3 screws
  - Nine black 3.6 mm-long T4 screws
- The midframe is still held in place by clips.

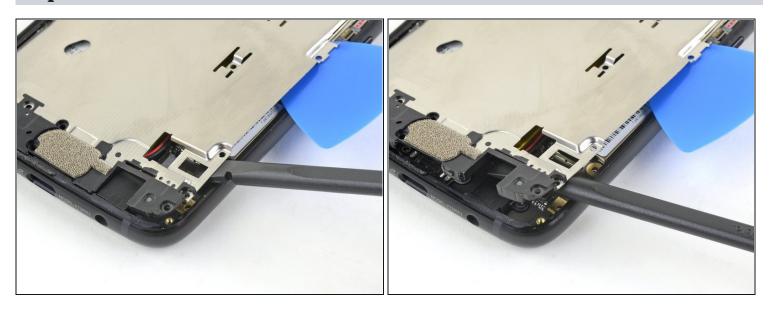
## Step 14 — Loosen the midframe







- (i) The next few steps show how to loosen the midframe clips.
- Insert the flat end of a spudger under the right edge of the metal midframe and pry up to loosen the midframe.
- Insert an opening pick in the edge to hold the midframe in place.

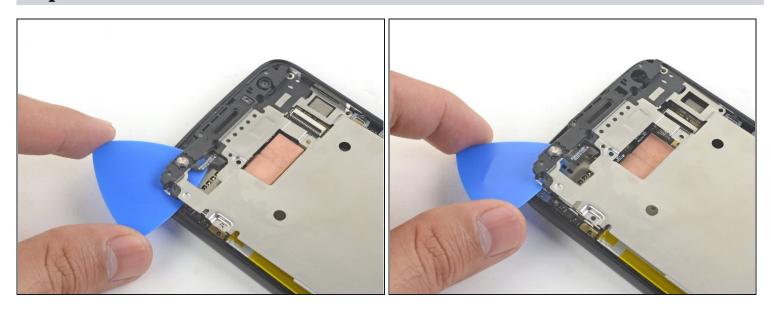


• Insert the flat end of a spudger under the lower right edge of the midframe and pry up to release the midframe clip.

# Step 16



• Grasp the lower edge of the midframe and pull the edge slightly to the right, to clear the metal midframe clip.



• Insert the point of an opening pick under the top left corner of the midframe and twist slightly to release the top clip.

### Step 18 — Remove the midframe



- Remove the midframe.
- **▼** To reinstall the midframe:
  - Align the the midframe's top edge to the phone and press it into position.
  - Shift the bottom edge slightly to the left, to maneuver the <u>left metal midframe clip</u> underneath the phone edge.
  - Press the midframe's bottom edge into position.

# Step 19 — Disconnect the battery



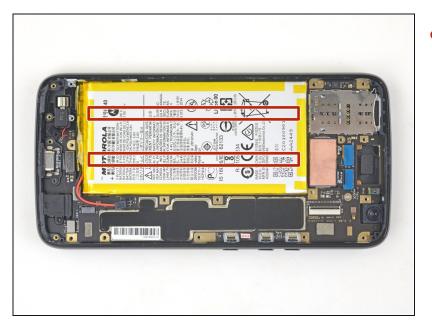
- Insert the point of a spudger underneath the top edge of the battery connector.
   Be careful not to dislodge the small surface-mounted components surrounding the socket.
- Gently pry up the connector to disconnect the battery.

# Step 20



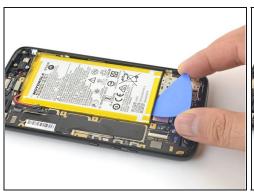
To re-connect the battery, align the connector on top of the socket, and press it down with your finger or a spudger.

# Step 21 — Battery



 The battery is held in place by two thin strips of adhesive on the underside of the battery.

### Step 22 — Loosen the battery







- Slide the tip of an opening pick under the lower edge of the battery
- Slowly push the pick in halfway to loosen the adhesive.
- Insert another opening pick alongside the first pick, and slowly press it in until the adhesive releases the battery.
  - (i) If you are having trouble, you can apply some high-concentration (over 90%) isopropyl alcohol along the battery edges to help soften the adhesive.

## Step 23 — Remove the battery



- Remove the battery.
- To install a replacement battery:
  - Remove all traces of adhesive from the battery well.
  - Apply <u>stretch release</u> <u>adhesive strips</u>, <u>double-sided</u> <u>tape</u>, or <u>pre-cut adhesive</u> <u>strips</u>.
  - Press the battery firmly in place for thirty seconds.

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

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

Repair didn't go as planned? Try some <u>basic troubleshooting</u>, or ask our <u>Motorola Moto X4</u> <u>Answers community</u> for help.