



Motorola Moto X4 Battery Replacement

How to remove and replace a worn out Moto X4 battery.

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INTRODUCTION

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

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](#).

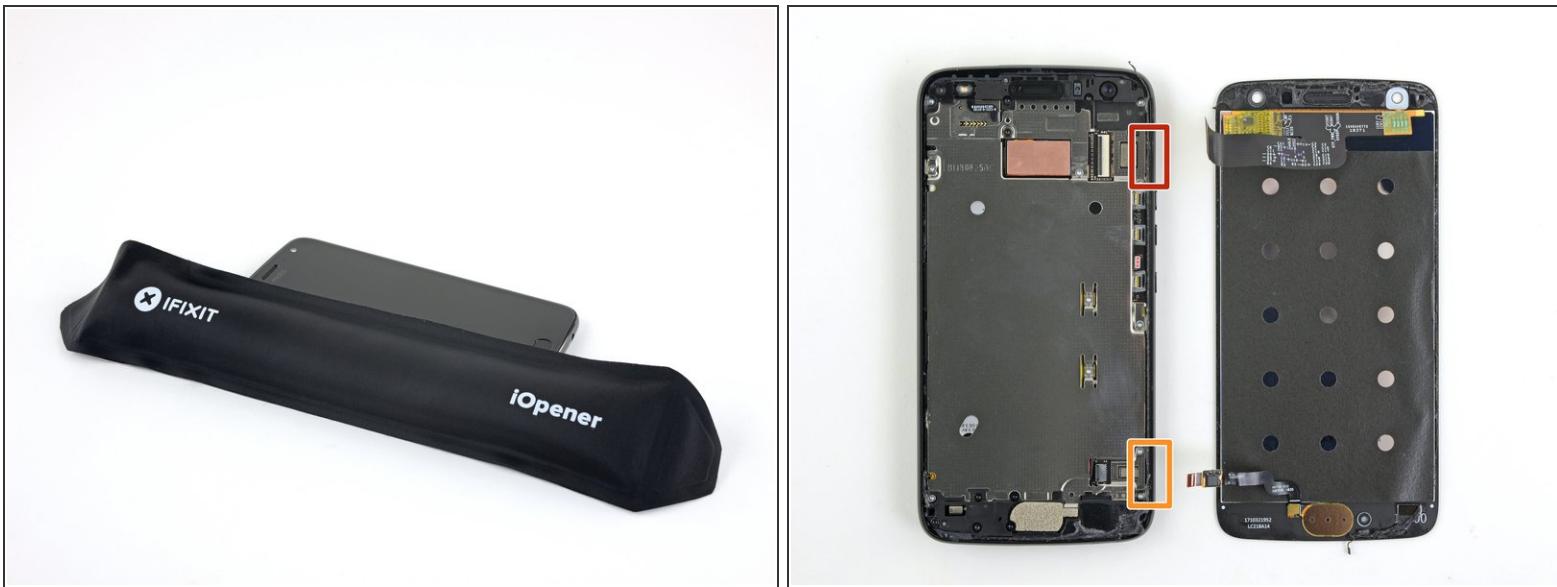
TOOLS:

- Suction Handle (1)
- iFixit Opening Picks set of 6 (1)
- iFixit Opening Tools (1)
- iOpener (1)
- Spudger (1)
- T4 Torx Screwdriver (1)
- T3 Torx Screwdriver (1)
- Tweezers (1)

PARTS:

- Motorola Moto X4 Replacement Battery (1)
- Moto X4 Display Adhesive (1)
- Precut Adhesive Card (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.
 - (i)* 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.
- (i)* 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.

Step 4



- 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.

Step 6



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

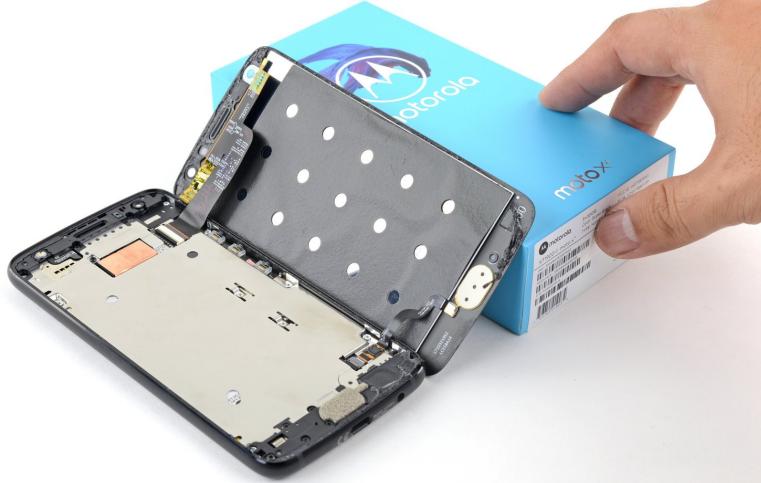
Step 7



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

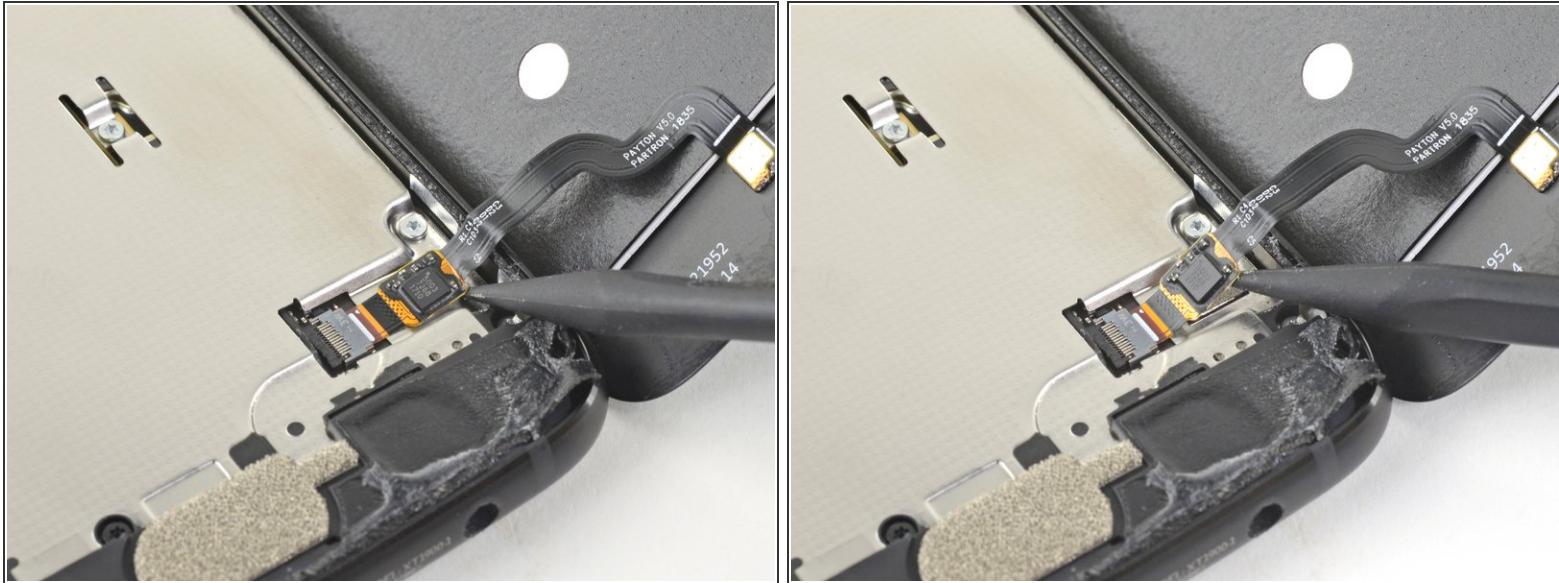
- Carefully lift up the left edge of the screen and cut away remaining adhesives with an opening pick.

Step 8



- 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.

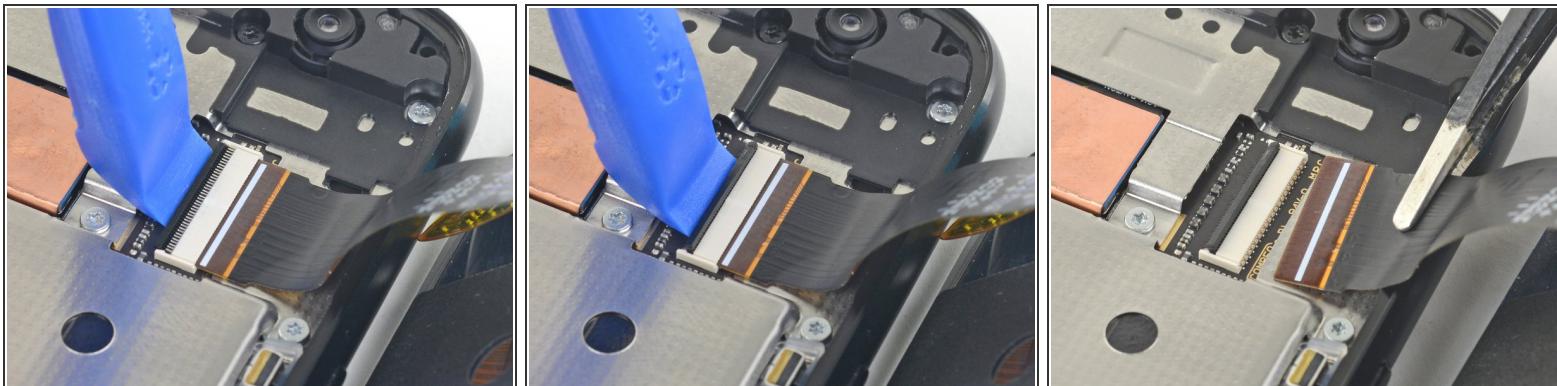
⚠ Do not pull on the cable. It is still attached to the phone by a delicate ZIF socket.

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, [follow this guide](#) to 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.

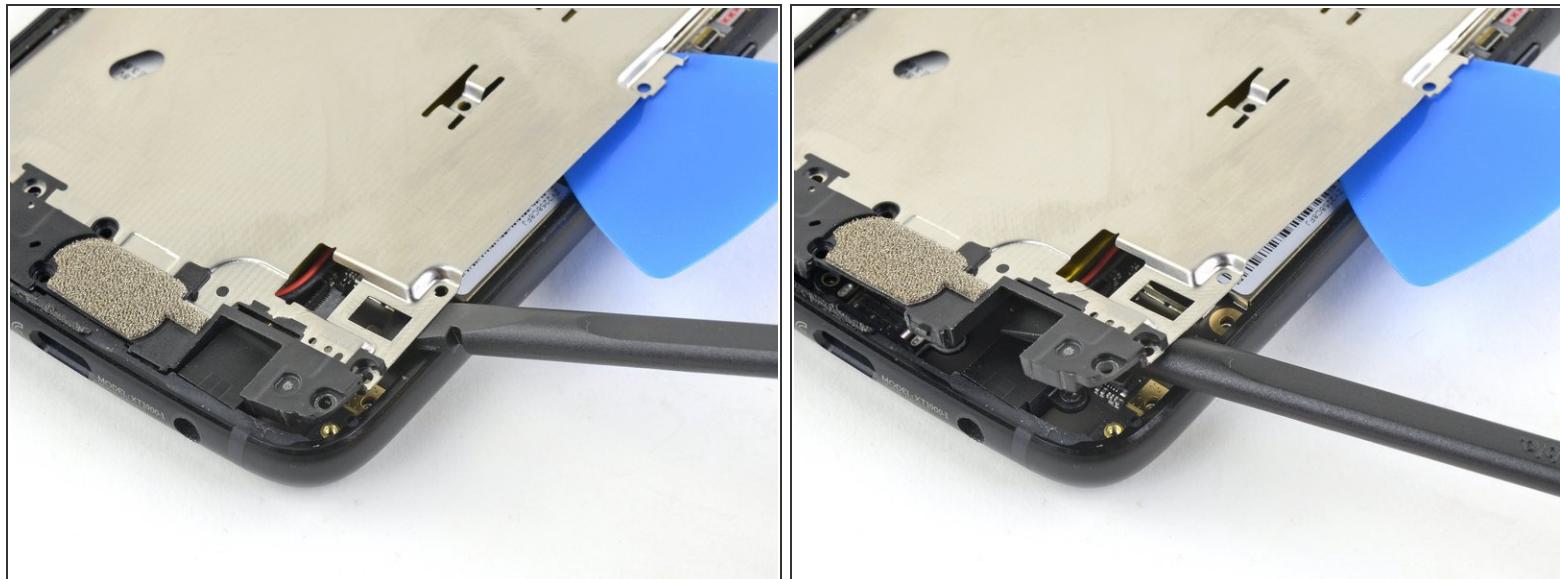
Step 14 — Loosen the midframe



(i) The next few steps show how to loosen the midframe clips.

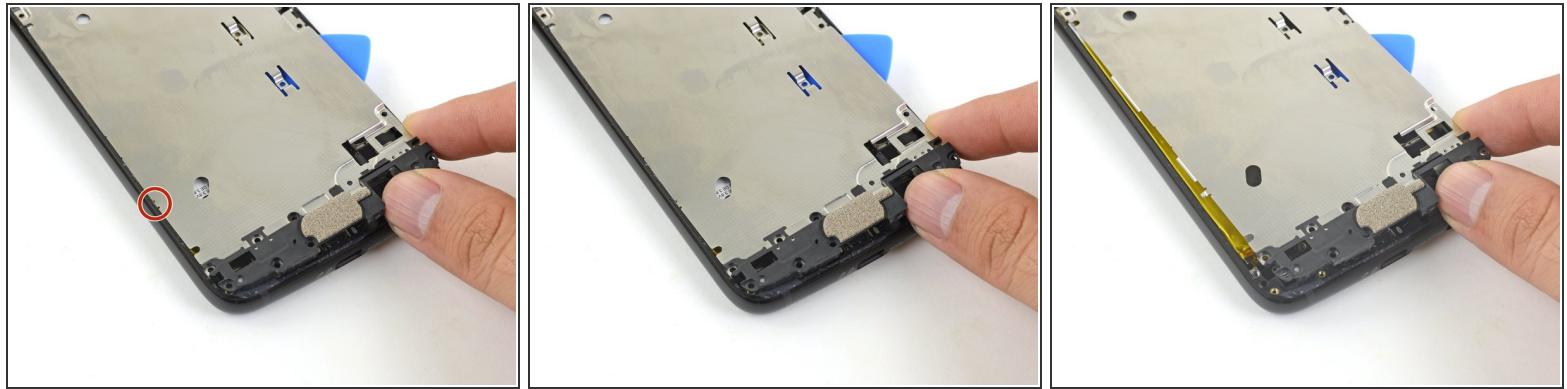
- Insert the flat end of a spudger under the right edge of the metal midframe and pry up to loosen the midframe.
- Insert an opening pick in the edge to hold the midframe in place.

Step 15



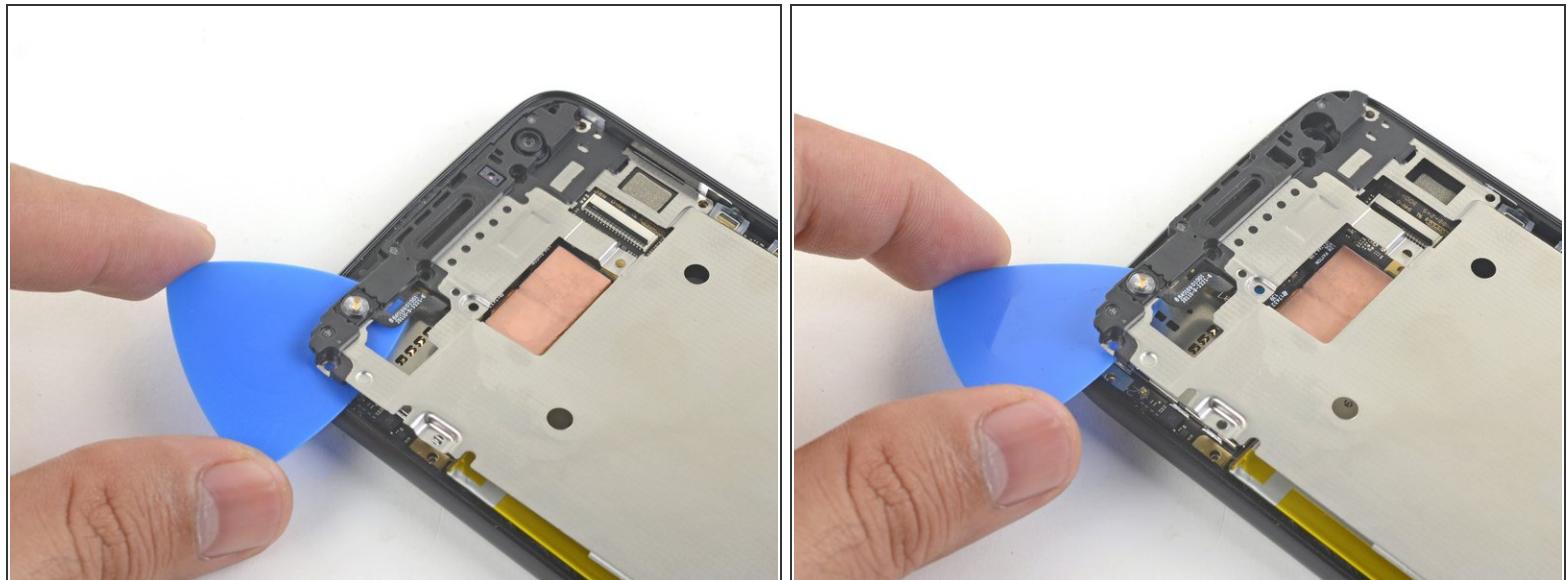
- Insert the flat end of a spudger under the lower right edge of the midframe and pry up to release the midframe clip.

Step 16



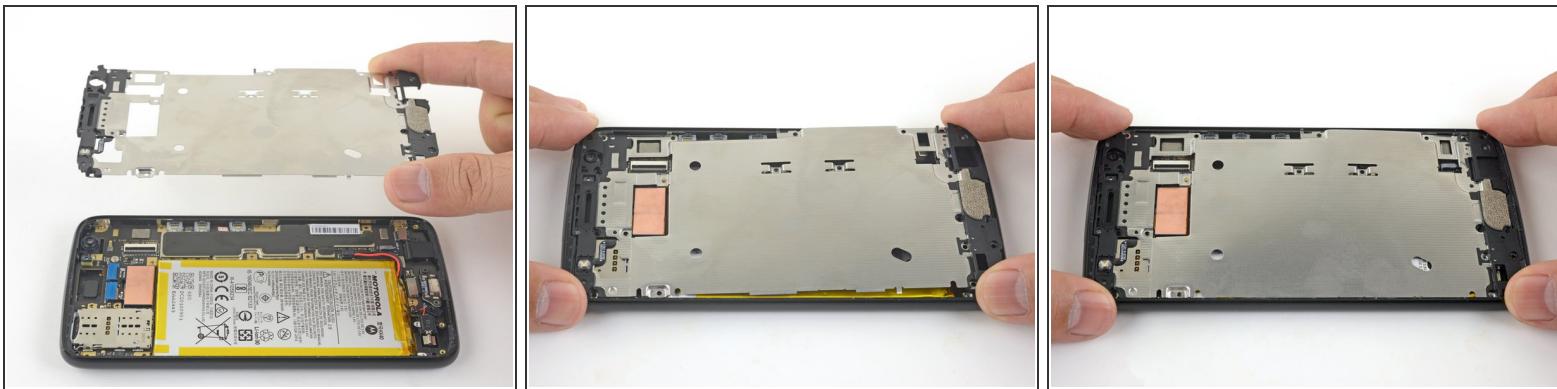
- Grasp the lower edge of the midframe and pull the edge slightly to the right, to clear the metal midframe clip.

Step 17



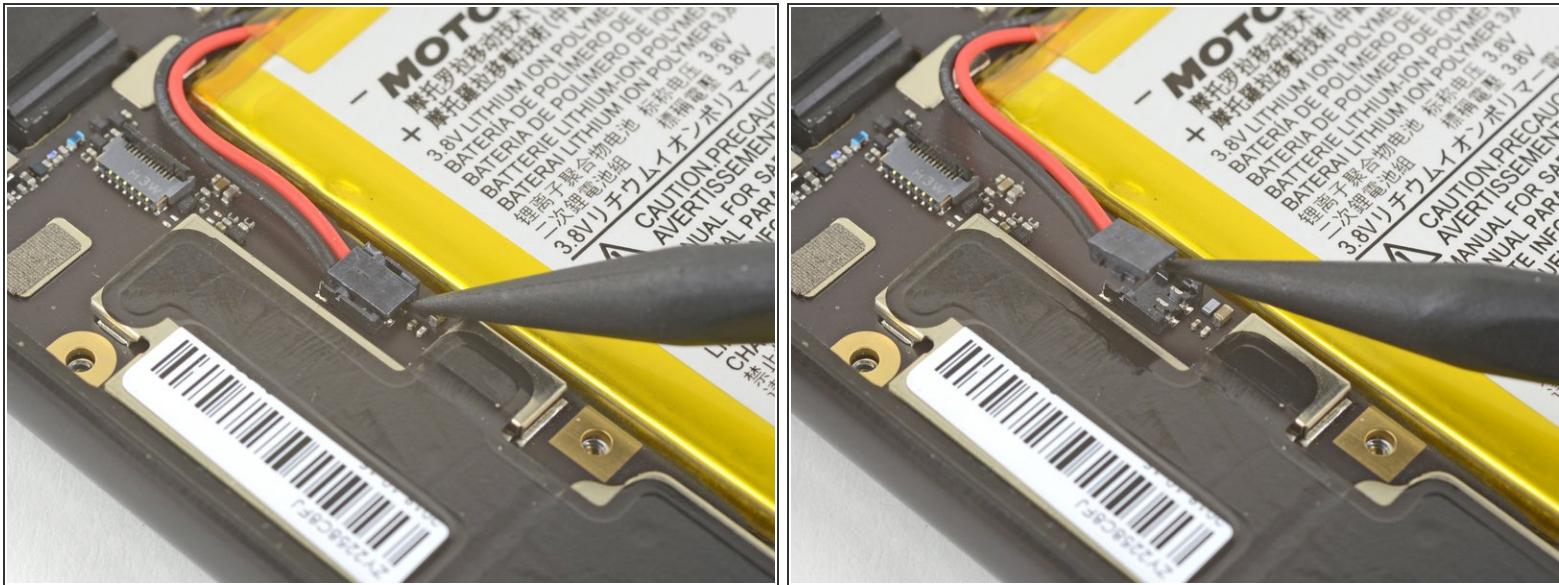
- Insert the point of an opening pick under the top left corner of the midframe and twist slightly to release the top clip.

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 [left metal midframe clip](#) underneath the phone edge.
 - Press the midframe's bottom edge into position.

Step 19 — Disconnect the battery



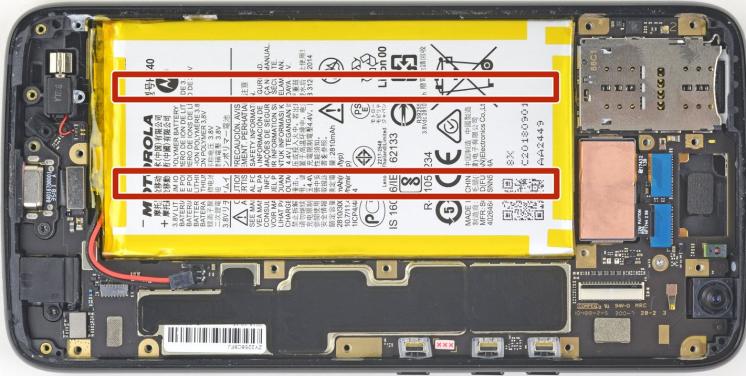
- Insert the point of a spudger underneath the top edge of the battery connector.
- ⚠ Be careful not to dislodge the small surface-mounted components surrounding the socket.
- Gently pry up the connector to disconnect the battery.

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 two thin strips of adhesive (such as Tesa tape) to the battery well.
 - 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 [basic troubleshooting](#), or ask our [Motorola Moto X4 Answers community](#) for help.