



Motorola Moto X4 Front-facing Camera Replacement

Follow this guide to remove and replace the...

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INTRODUCTION

Follow this guide to remove and replace the front-facing camera for the Moto X4. In order to access the camera, you must remove the motherboard.

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



TOOLS:

[Suction Handle](#) (1)
[iFixit Opening Tool](#) (1)
[T3 Torx Screwdriver](#) (1)
[iFixit Opening Picks \(Set of 6\)](#) (1)
[iOpener](#) (1)
[Spudger](#) (1)
[T4 Torx Screwdriver](#) (1)
[Tweezers](#) (1)



PARTS:

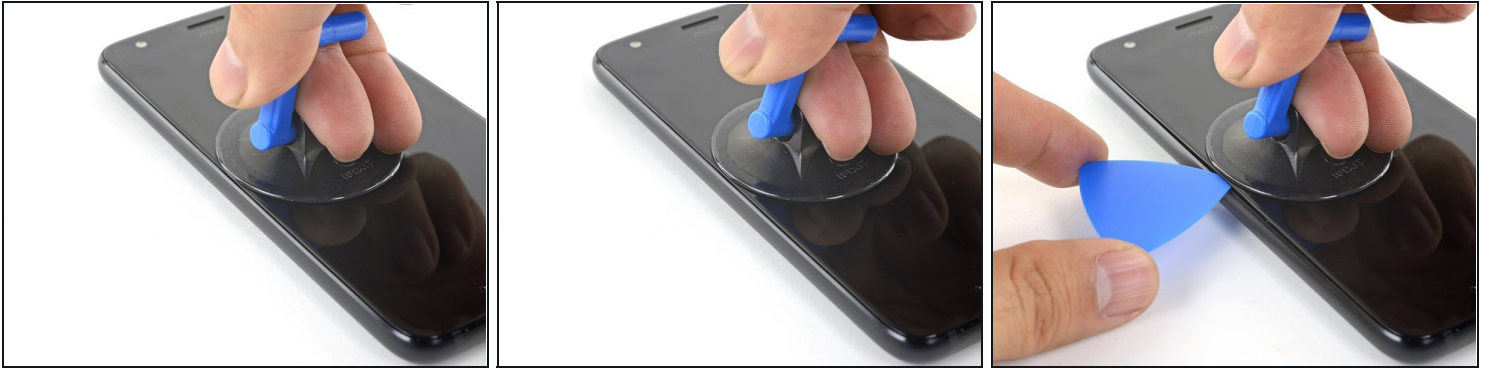
[Moto X4 Display Adhesive](#) (2)

Step 1 — Heat the screen



- ⓘ Before you begin, turn off your phone.
- [Heat an iOpener](#) and apply it to the left edge of the phone for two minutes.
 - ⓘ 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 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



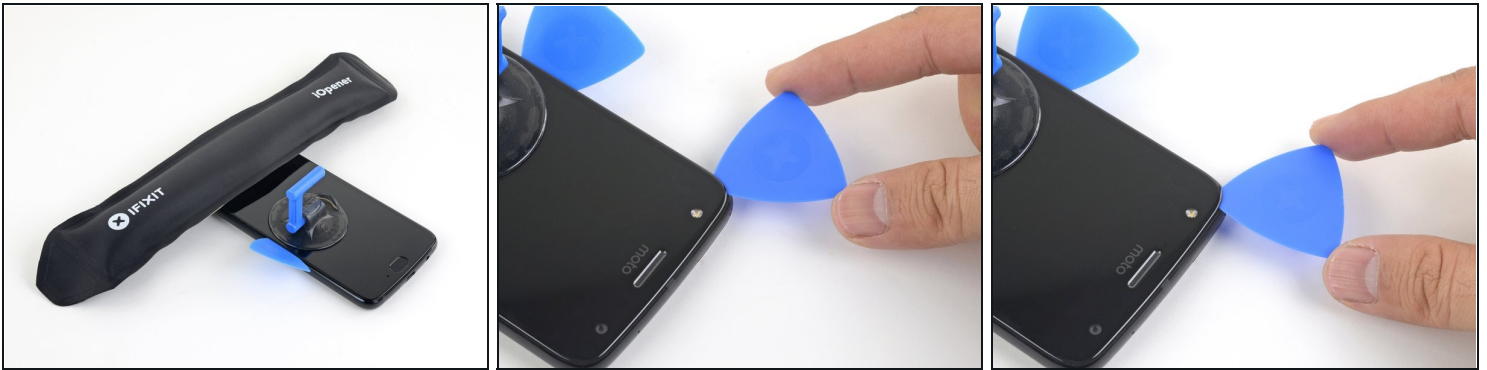
- Apply a suction cup to the screen, as close to the heated edge as possible.
- Pull on the suction cup with strong, steady force to create a gap in the seam.
- Insert the point of an opening pick into the gap.
 - ① Depending on the age of your phone, this may be difficult. If you are having trouble, 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



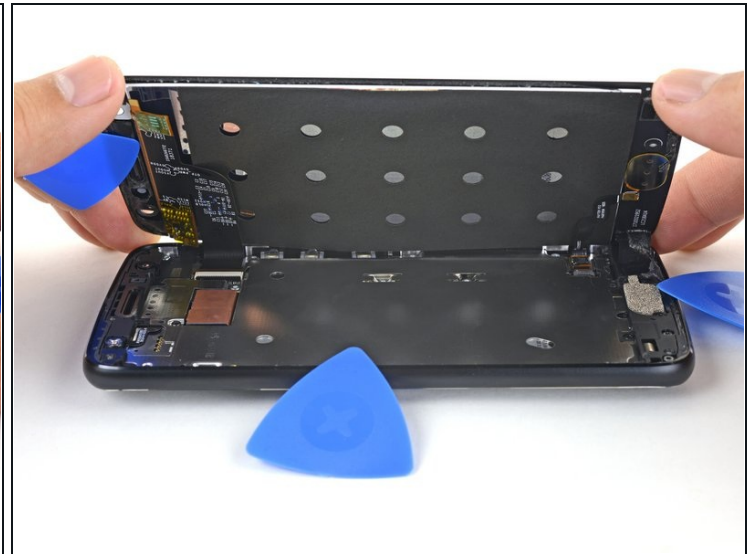
- Heat the screen's right edge with an iOpener.
- Be careful not to slice too deeply near the cables to avoid damaging them.
- Use an opening pick to slice along the right edge to separate the adhesive.

Step 6



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

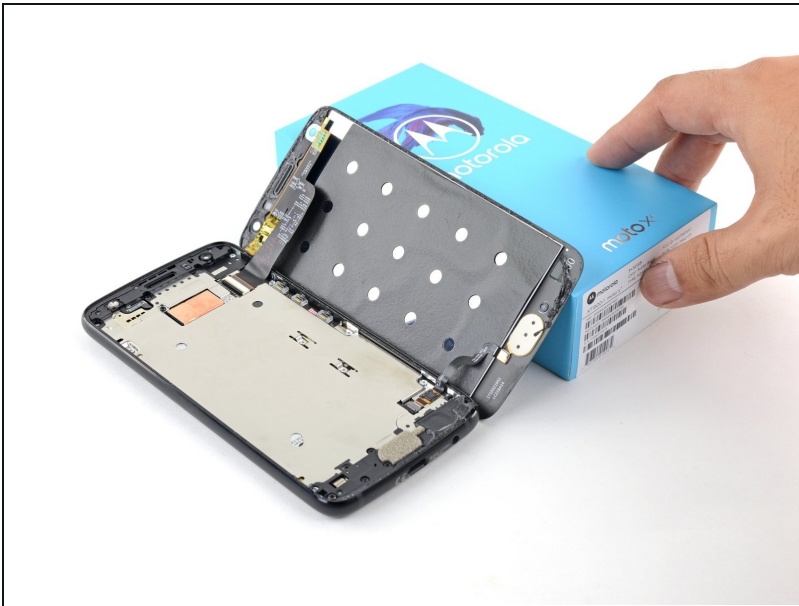
Step 7



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

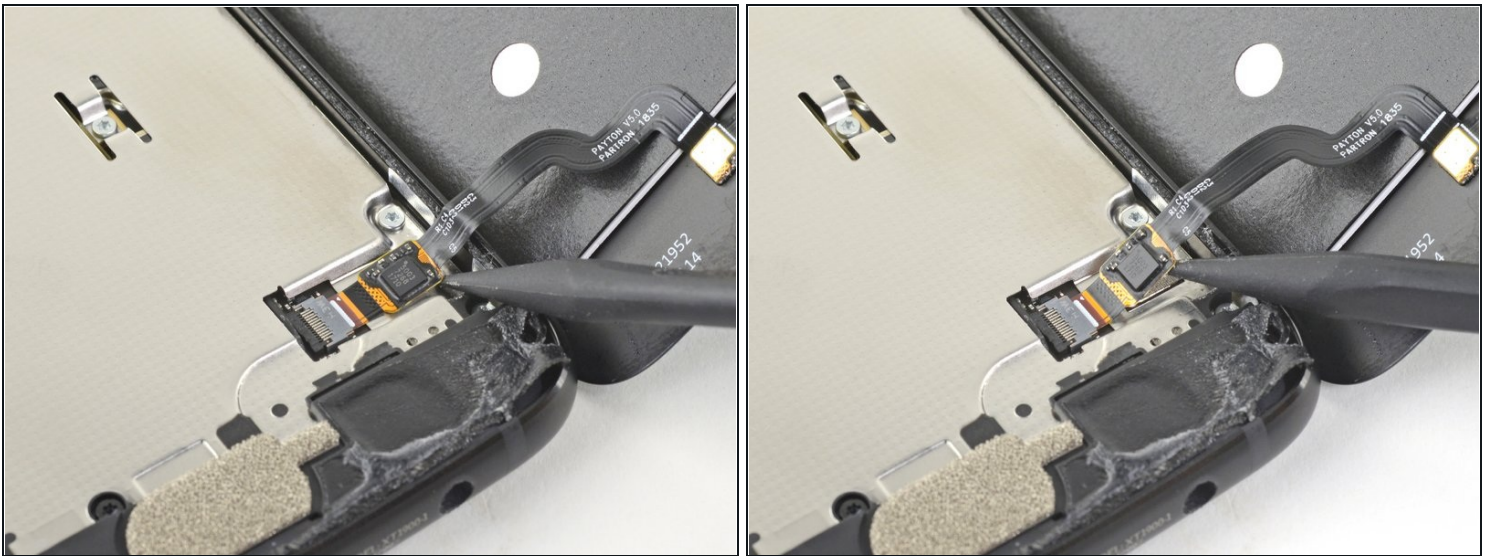
- Carefully lift up the left edge of the screen and cut away remaining adhesives with an opening pick.

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.

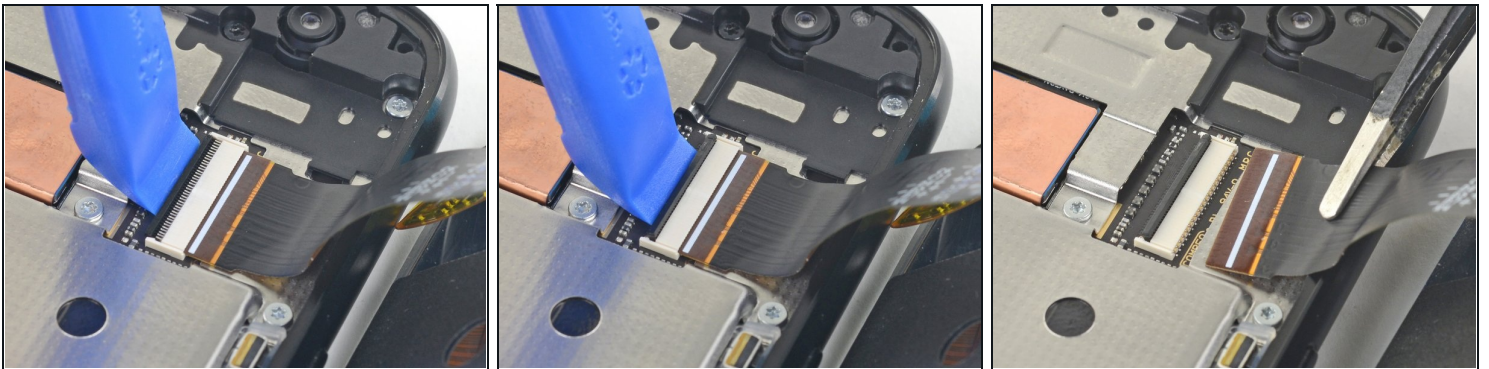
⚠ Do not pull on the cable. It is still attached to the phone by a delicate ZIF socket.

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



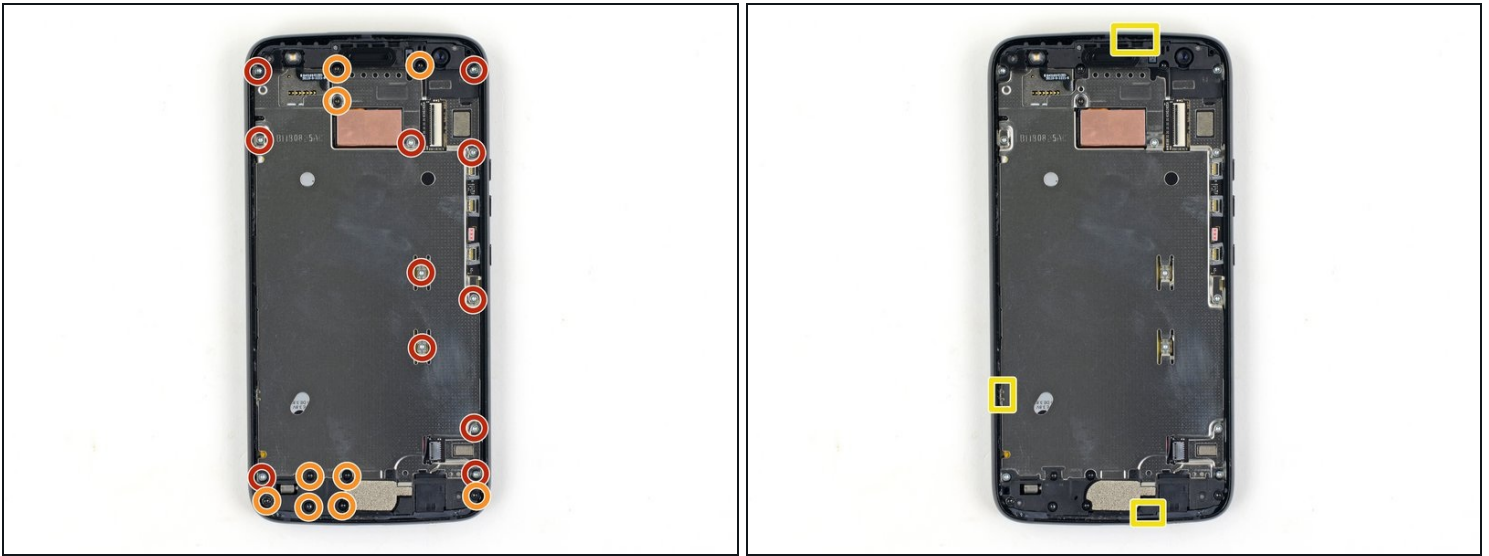
- Use an opening tool to flip up the wide lock bar on the display cable's ZIF socket, near the top right of the phone.
- Use tweezers to carefully slide the display cable out of the ZIF socket.

Step 12 — Remove the screen



- Remove the screen.
- ☑ During reassembly, [follow this guide](#) to 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.

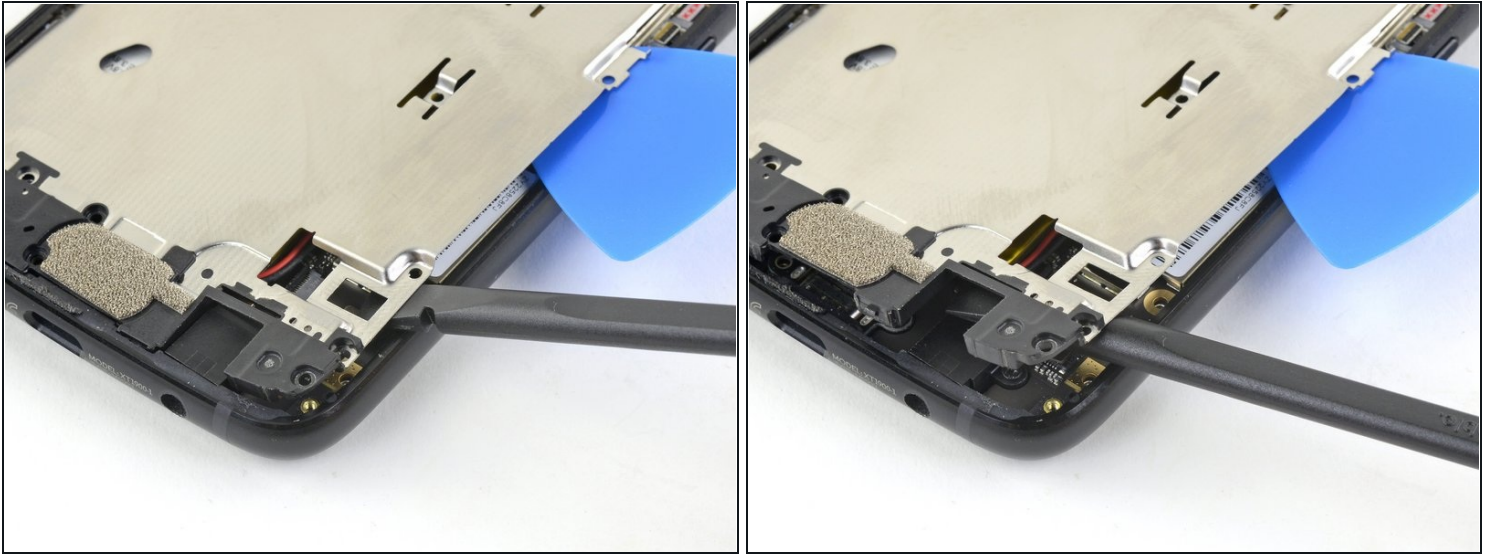
Step 14 — Loosen the midframe



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.

Step 15



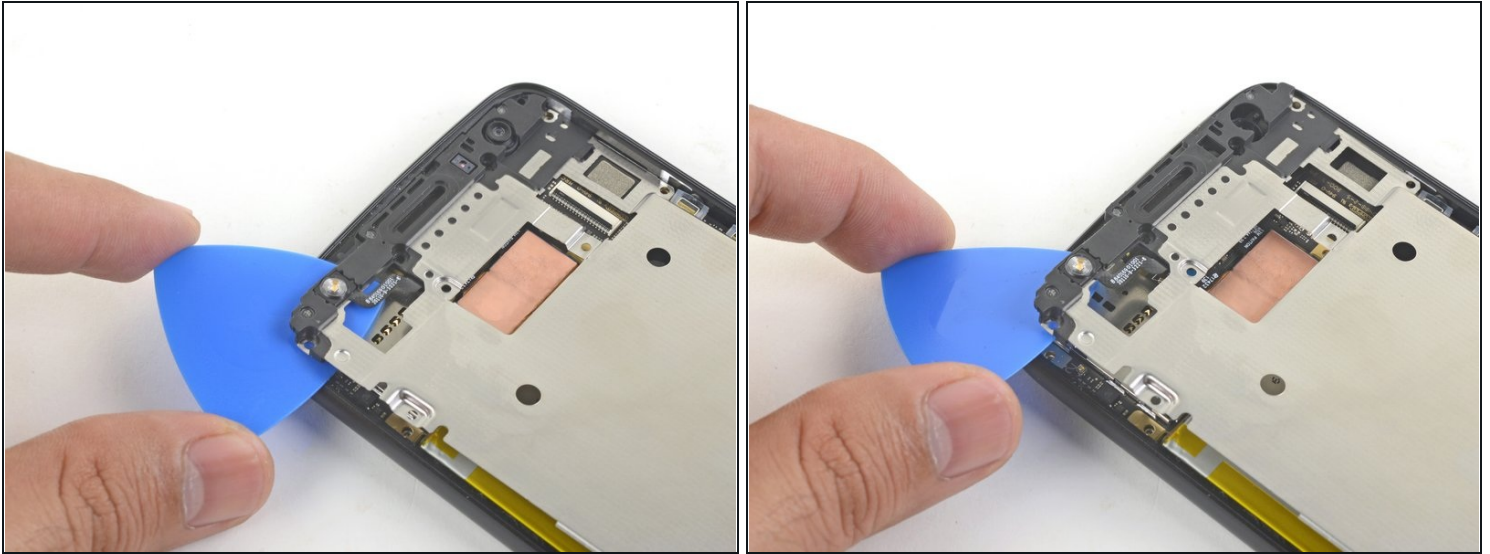
- Insert the flat end of a spudger under the lower right edge of the midframe and pry up to release the midframe clip.

Step 16



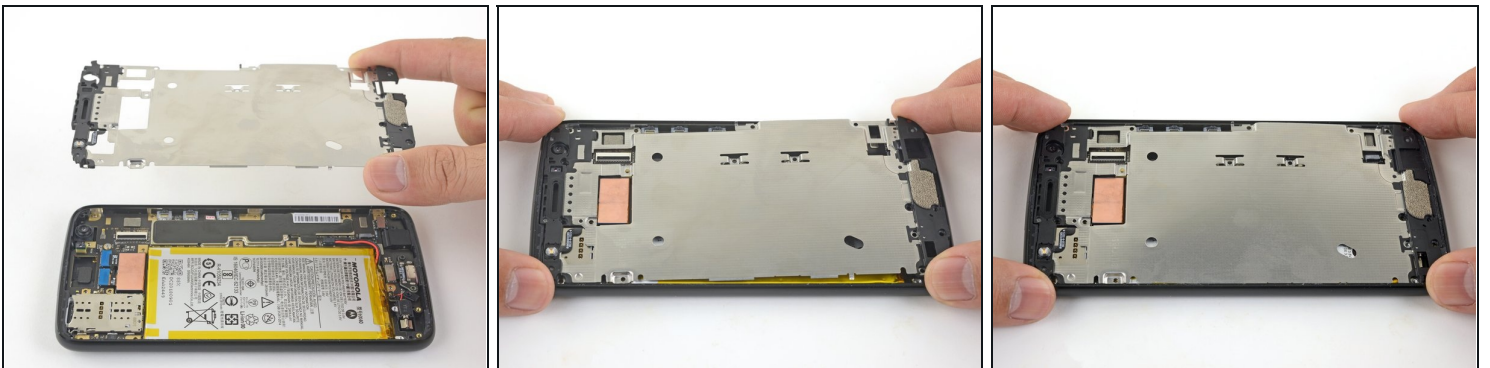
- Grasp the lower edge of the midframe and pull the edge slightly to the right, to clear the metal midframe clip.

Step 17



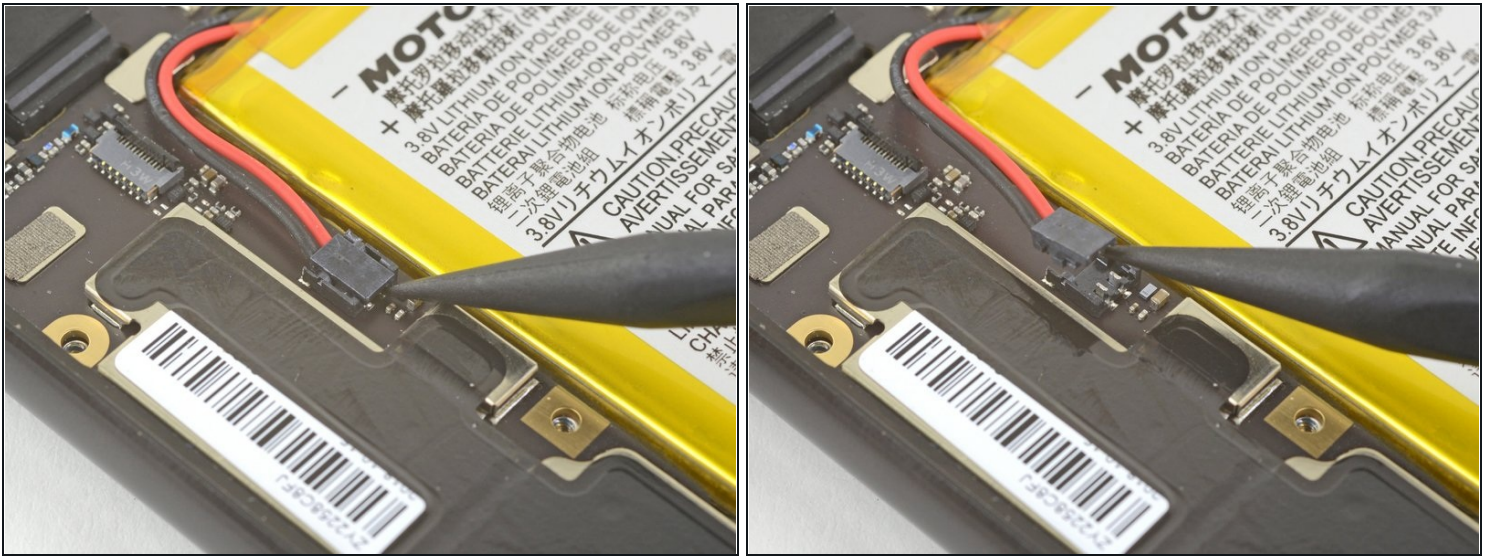
- Insert the point of an opening pick under the top left corner of the midframe and twist slightly to release the top clip.

Step 18 — Remove the midframe



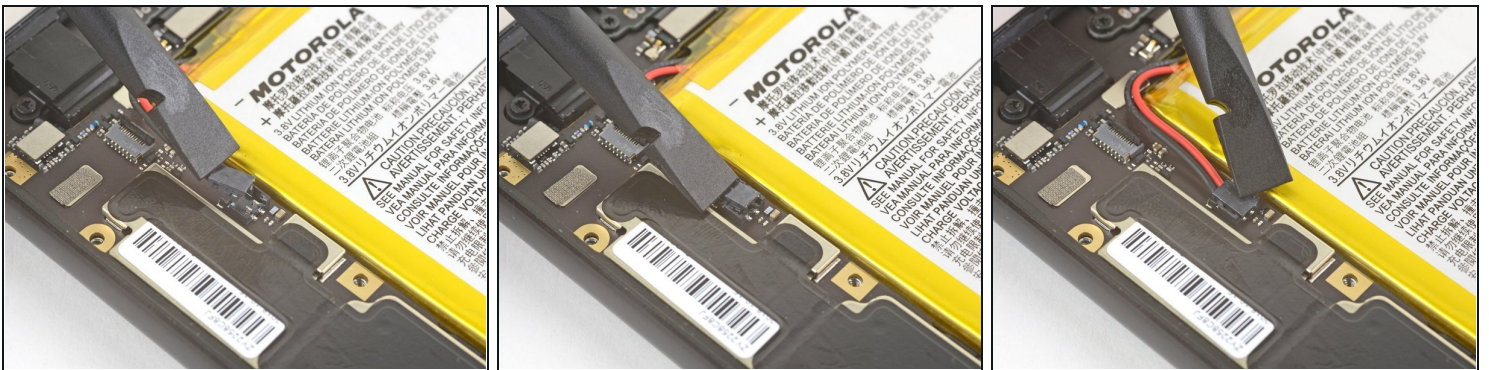
- Remove the midframe.
- ☒ To reinstall the midframe:
- Align the the midframe's top edge to the phone and press it into position.
 - Shift the bottom edge slightly to the left, to maneuver the [left metal midframe clip](#) underneath the phone edge.
 - Press the midframe's bottom edge into position.

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



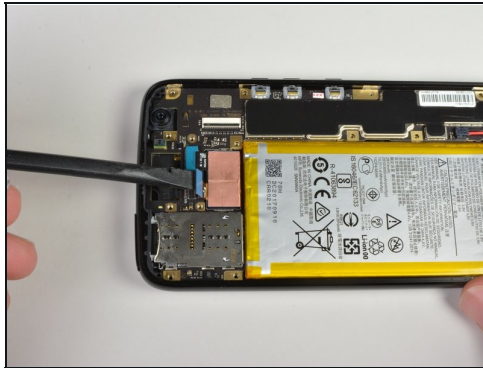
- ☑ To re-connect the battery, align the connector on top of the socket, and press it down with your finger or a spudger.

Step 21 — Motherboard



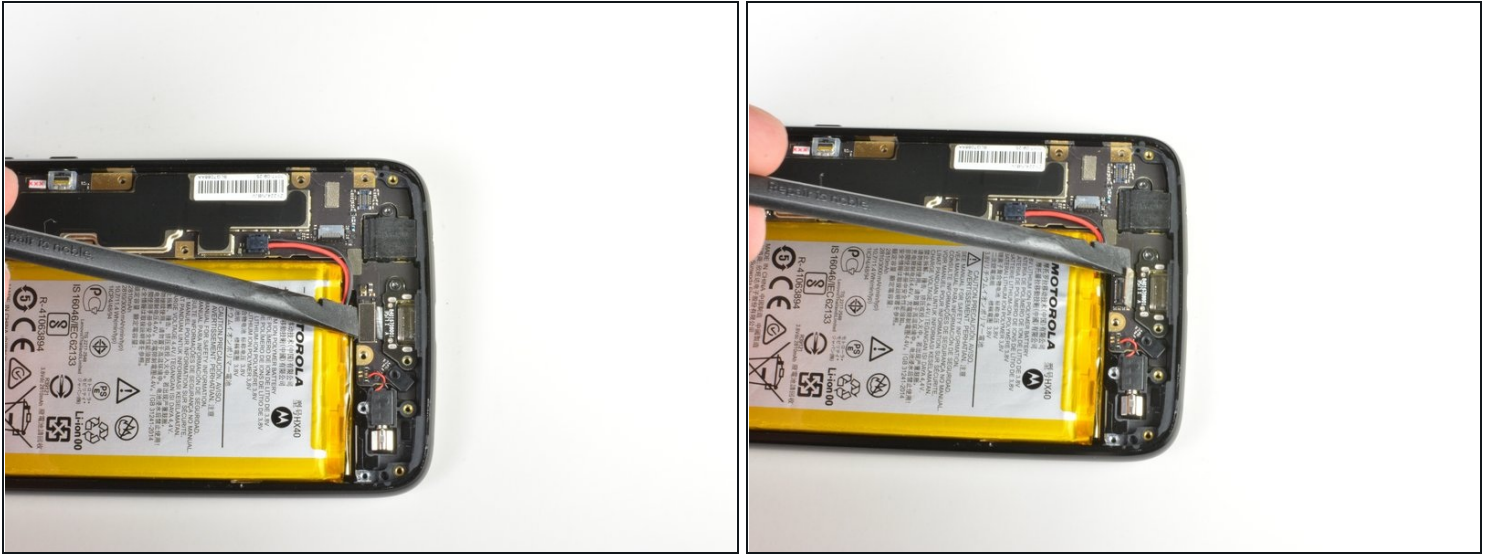
- Remove the T3 screw that is holding in the motherboard.

Step 22



- Use flat edge of the spudger to pry up the two blue connectors near the top of the device.

Step 23



- Use flat side of spudger to pry up connector near the bottom of the device.

Step 24



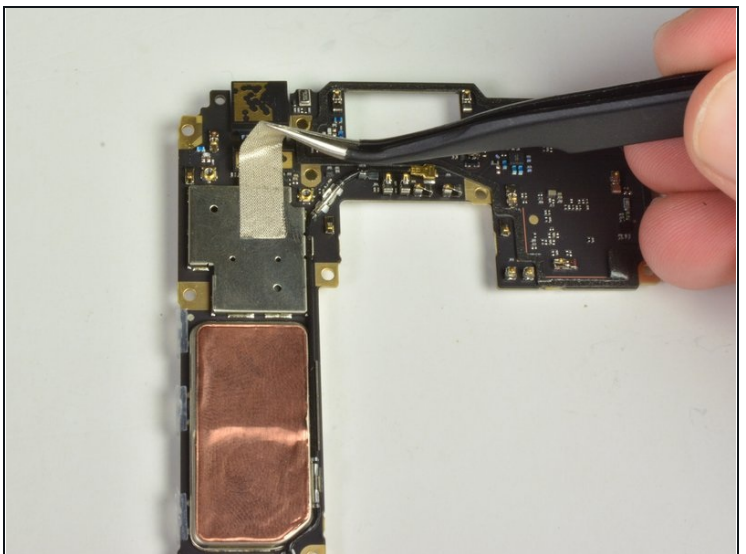
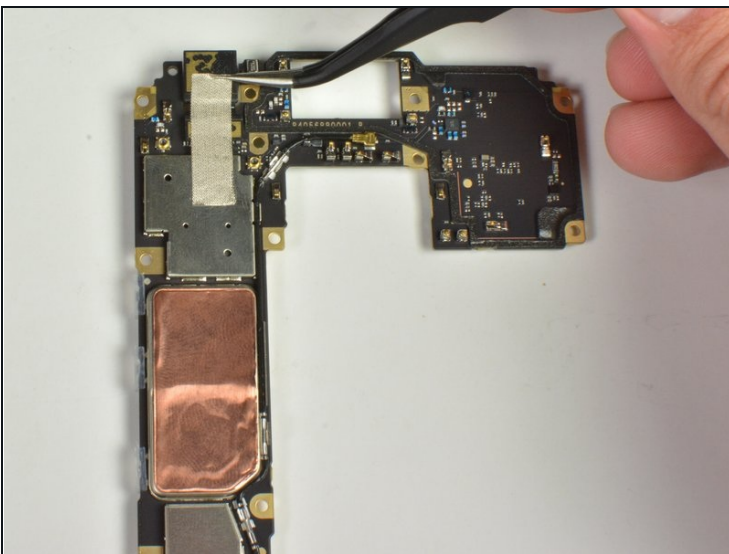
- Using a pair of [tweezers](#) disconnect the vibrating motors connector near the bottom of the device.
⚠ Caution: these wires are very delicate!
- ① Also note that while it may not look the same, this connector also lifts **up**, similar to the camera and battery connectors, and does not slide out.
- ① Alternatively, you can also leave the connector plugged in and simply remove the vibration motor from the frame and keep it together with the motherboard as you remove it, being careful to not dangle it from the small wires.

Step 25



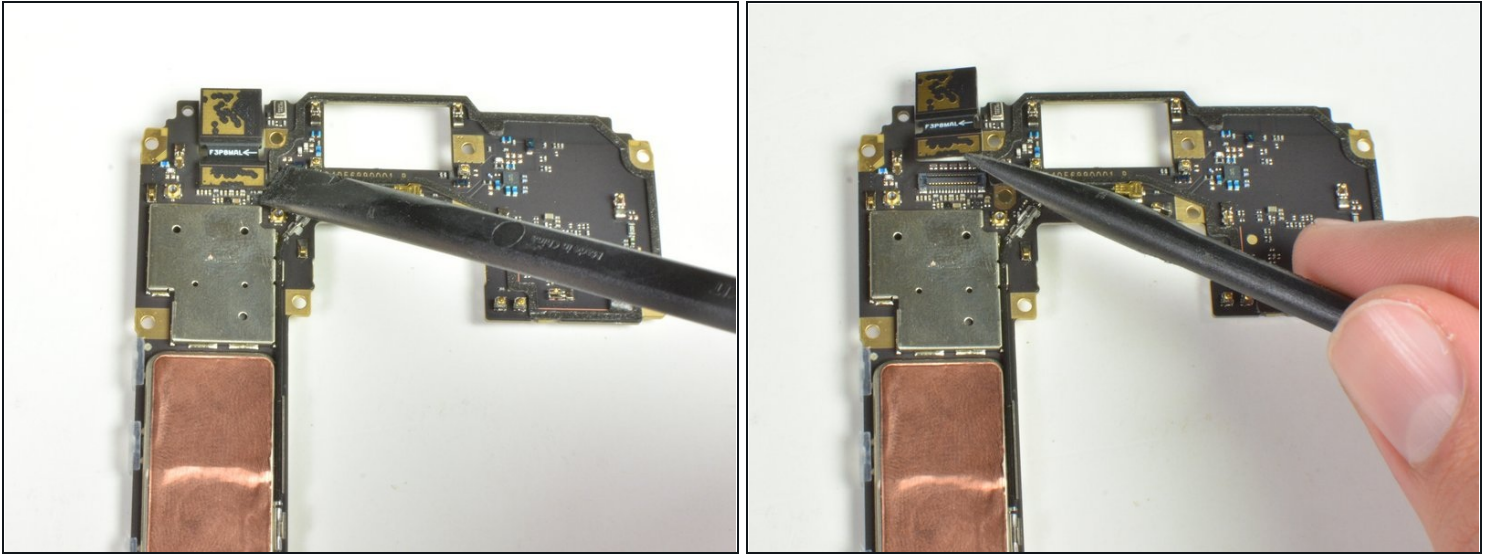
- Carefully pry up the motherboard using the spudger.
- ⓘ The previously disconnected wires may have to be held back in order to easily remove the motherboard.

Step 26 — Front Facing Camera



- Now carefully peel off the tape on the back of the camera with [tweezers](#).

Step 27



- Now use the flat edge of a spudger to carefully disconnect the camera from the motherboard.

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

Take your e-waste to an [R2 or e-Stewards certified recycler](#).

Repair didn't go as planned? Try some [basic troubleshooting](#), or ask our [Motorola Moto X4 Answers community](#) for help.