



# Motorola Moto X Battery Replacement

Replace the battery in a Motorola Moto X.

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## INTRODUCTION

Suffering from a rapidly waning, or non-existent, battery life? Use this guide to replace the battery in your Motorola Moto X. If your battery is swollen, [take appropriate precautions](#).

[video: <https://www.youtube.com/watch?v=d6Z7swi5PRs>]



### TOOLS:

- [SIM Card Eject Tool](#) (1)
- [iOpener](#) (1)
- [iFixit Opening Tools](#) (1)
- [Spudger](#) (1)
- [T3 Torx Screwdriver](#) (1)



### PARTS:

- [Motorola Moto X Replacement Battery](#) (1)

## Step 1 — SIM Card



- Insert the SIM card eject tool into the hole in the side of the SIM card tray and push to eject the tray.
  - Remove the SIM card tray.
- i** If the SIM card does not fall free from the tray on its own, simply remove it with your fingers.

## Step 2 — Back Cover Assembly



- i** In the following steps you will be releasing the clips holding the phone's cases together. However, the back case is also secured with an adhesive pad. After separating the clips you will use an iOpener to allow the case to fully open. **Do not** attempt to fully open the phone before loosening the adhesive.
- Insert a plastic opening tool into the seam between the front and rear covers near the SIM card slot.
  - Slide the plastic opening tool along the seam toward the upper corner.

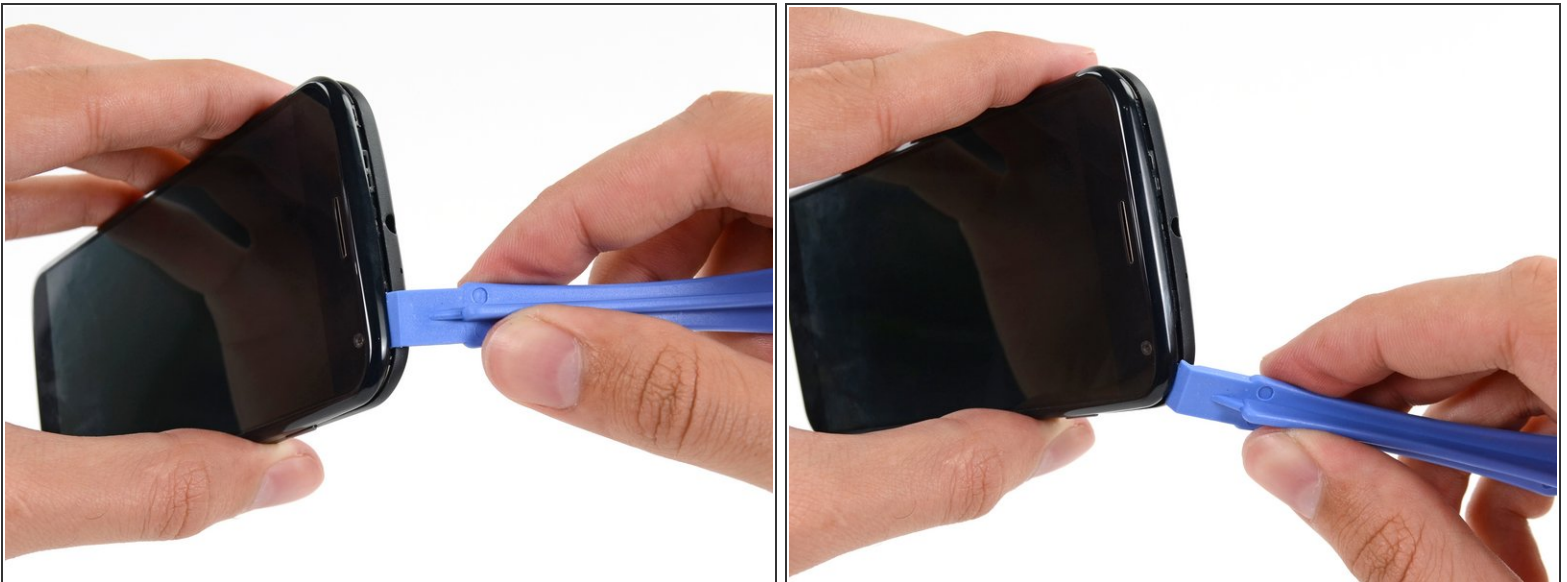


### Step 3



- Carefully slide the plastic opening tool around the corner, freeing it from clips.

### Step 4



- Pry around the top right corner of the phone between the two covers.

## Step 5



- Run the opening tool along the seam around all four sides, separating the remaining clips holding the cover on.
- ⚠ The plastic on the front cover is thinner near the buttons, and the buttons may move around. Go slowly to avoid damaging the buttons or the front cover.
- ⚠ Do not push the opening tool deep into phone, or you may damage internal components.

## Step 6



- [Heat an iOpener](#) and lay it over the phone for approximately 90 seconds to loosen the adhesive securing the back cover.

## Step 7



- Starting from the SIM slot side, carefully peel the back cover off of the phone.
- ⓘ The back cover is very flexible, but you don't want to damage any internal components by being too hasty.
- ⚠ There is a chance that the NFC coil may remain stubbornly adhered to the back cover. If that's the case, stop peeling the cover and reapply a heated iOpener to the back cover.
- ⚠ **Do not** separate the back cover entirely; it is still connected to the phone by the camera flash cable.
- ⓘ The flash cable is attached on the power/volume button side of the phone.



## Step 8



- Gently set the back cover down in a way that exposes the camera flash cable connector, but does not put strain on it.

## Step 9



- Use the tip of a spudger to flip up the retaining flap on the flash cable ZIF connector.

⚠ Be sure to pry only on the flap itself, **not** on the connector.

- Pull the flash cable straight out of its socket.

## Step 10



- Separate the back cover from the phone.

## Step 11 — Lower Antenna Assembly



- Remove the four 3 mm T3 Torx screws securing the lower antenna assembly to the phone.



## Step 12



- Use the flat end of a spudger to pry up the lower antenna assembly and free it from the phone.
- Remove the antenna assembly.

## Step 13 — Battery



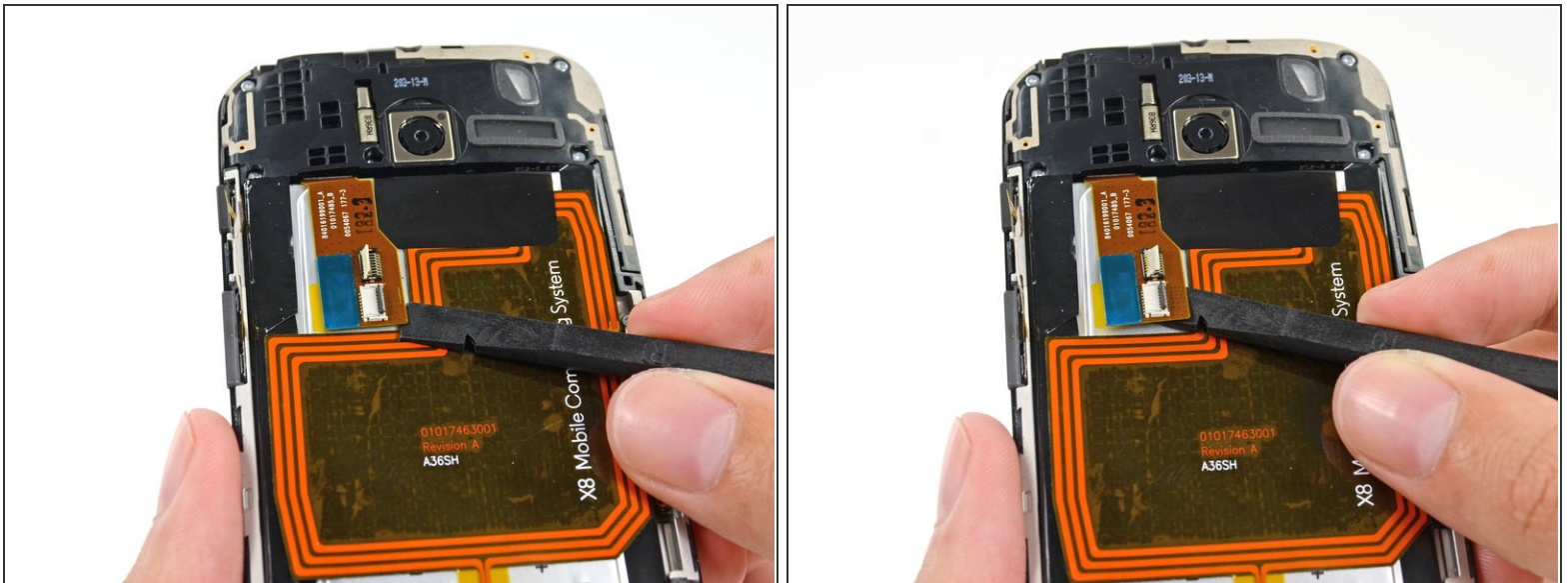
- Insert the tip of a spudger under the battery cable near the connector to lift it straight up from its socket.
- Use the flat end of a spudger to disconnect the NFC antenna cable connector.

## Step 14



- Use the tip of a spudger to flip up the ZIF retaining flap from the button assembly cable connector.
- Slide the tip of the spudger under the button assembly cable near the connector to pull the cable straight out of its socket.

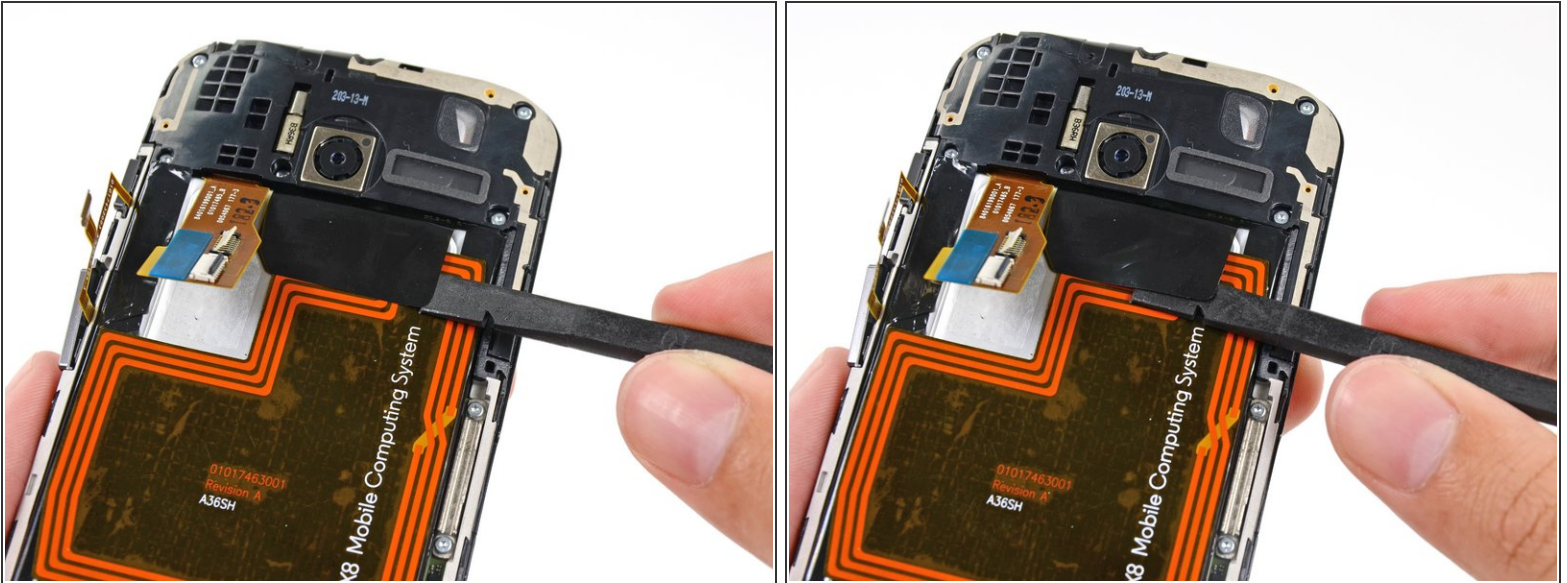
## Step 15



- Insert the flat end of a spudger under the interconnect cable to free it from the adhesive holding it to the battery.

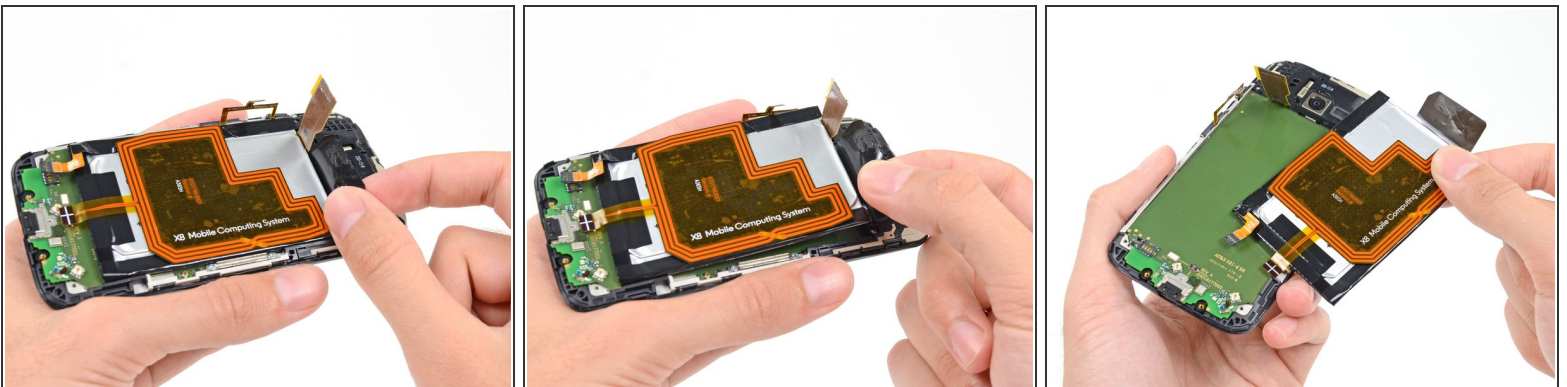


## Step 16




- Use the flat end of a spudger to peel the adhesive pull-tab off the top of battery.


## Step 17



- Use the adhesive pull-tab to lift the battery from its recess.

 The battery is secured to the motherboard with mild adhesive. Peel slowly, and be careful not to bend or puncture the battery.

- Remove the battery from the phone.

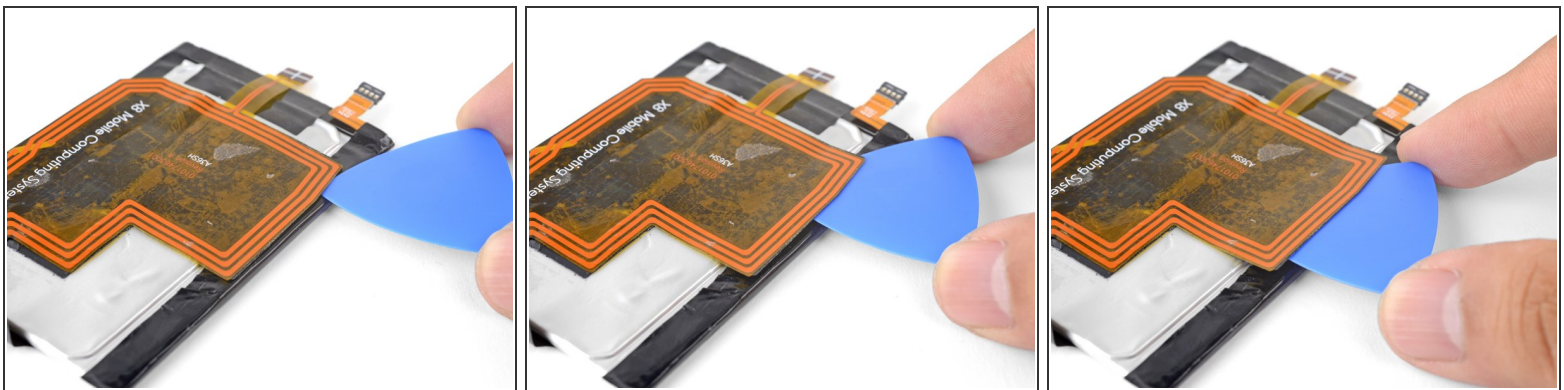
 When reassembling your phone secure the battery with [double-sided tape](#) or [pre-cut adhesive strips](#).

## Step 18 — NFC Antenna



- ❗ Proceed only if you want to transfer the NFC antenna from the old battery to the new battery.
  - If you choose not to, or if you damage the coil, your phone will work without it, but lose its NFC capabilities.
  - Apply a [heated iOpener](#) to the NFC antenna for 90 seconds.

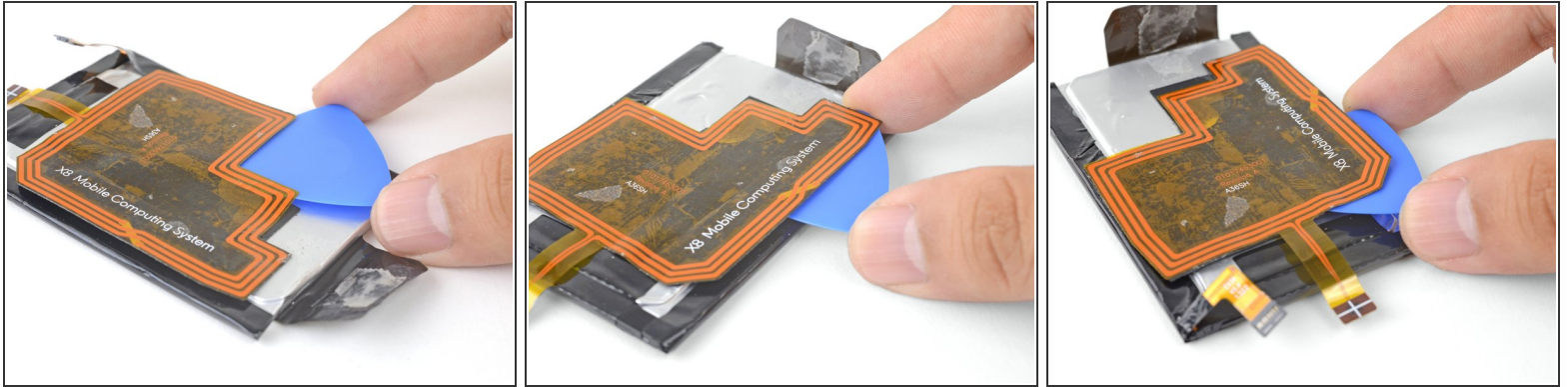
## Step 19



- Insert an opening pick under one of the corners of the NFC antenna and slowly slide it along the edge to cut through the black adhesive.
- ❗ While it is not imperative to keep the black adhesive layer intact, try to cut underneath it so that it comes off in one piece.

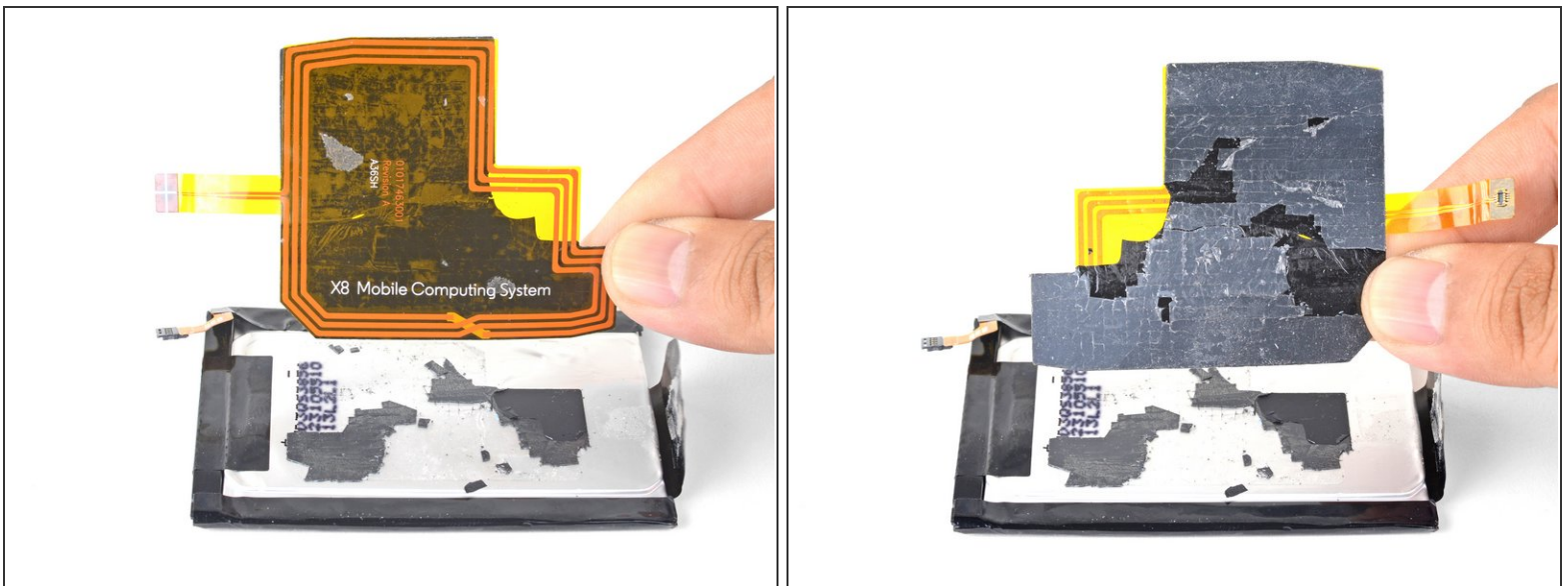


## Step 20



- Continue using the opening pick to cut around the NFC antenna, loosening the remaining black adhesive.
- ❗ The NFC antenna should still function normally as long as the plastic layer is not ripped.

## Step 21



- Remove the NFC antenna from the old battery.
- ☑ Use [pre-cut double sided tape](#) or [Tesa tape](#) to reattach the NFC coil to the replacement battery.
- ❗ Before installing the NFC antenna, install the replacement battery and plug in the NFC antenna, to make sure that the antenna is properly aligned.

Compare your new replacement part to the original part. You may need to transfer remaining components or remove adhesive backings from the new part before installing.

To reassemble your device, follow these instructions 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 [Motorola Moto X Answers community](#) for troubleshooting help.