



# iPhone 7 Plus Battery Replacement

Replace the battery in your iPhone 7 Plus.

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## INTRODUCTION

Use this guide to bring life back to your iPhone 7 Plus with a new battery. If your battery is swollen, [take appropriate precautions](#).

This guide instructs you to completely detach the display assembly; this is intended to prevent damage to the display cables. If you feel comfortable removing the battery without putting undue strain on the display cables, you can skip the steps for disconnecting the display.

For optimal performance, after completing this guide, [calibrate](#) your newly installed battery: Charge it to 100% and keep charging it for at least two more hours. Then use your iPhone until it shuts off due to low battery. Finally, charge it uninterrupted to 100%.

[video: <https://www.youtube.com/watch?v=fvd3dCMRjS4>]



### TOOLS:

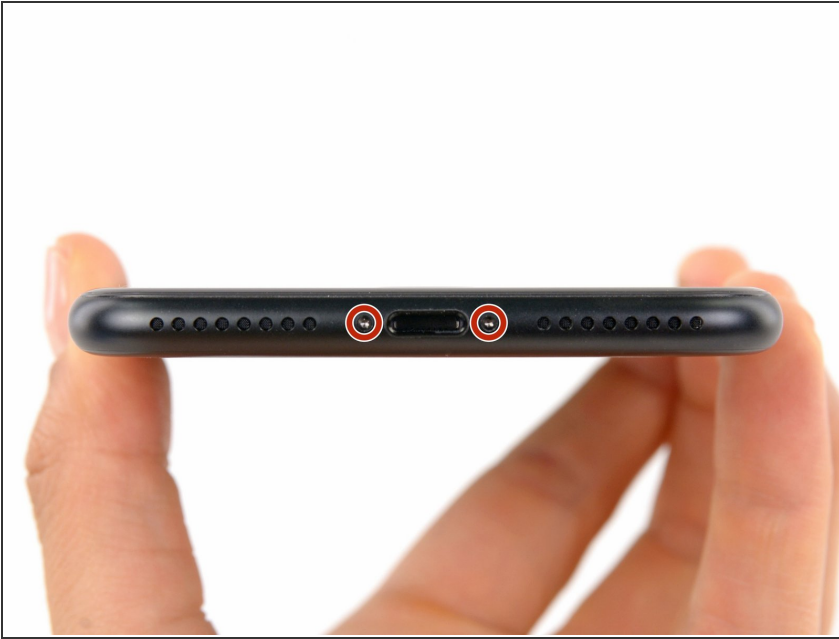
- [Phillips #000 Screwdriver](#) (1)
- [Spudger](#) (1)
- [Tri-point Y000 Screwdriver Bit](#) (1)
- [Suction Handle](#) (1)
- [iFixit Opening Picks set of 6](#) (1)
- [P2 Pentalobe Screwdriver iPhone](#) (1)
- [iOpener](#) (1)
- [Tweezers](#) (1)



### PARTS:

- [iPhone 7 Plus Replacement Battery](#) (1)
- [iPhone 6 Plus/6s Plus/7 Plus Battery Adhesive Strips](#) (1)
- [iPhone 7/7 Plus Bottom Screws](#) (1)
- [iPhone 7 Plus Display Assembly Adhesive](#) (1)

## Step 1 — Pentalobe Screws



- ⚠ Before you begin, discharge your iPhone battery below 25%. A charged lithium-ion battery can catch fire and/or explode if accidentally punctured.
- Power off your iPhone before beginning disassembly.
- Remove the two 3.4 mm pentalobe screws at the bottom edge of the iPhone.
- ⓘ Opening the iPhone's display will compromise its waterproof seals. Have [replacement seals](#) ready before you proceed past this step, or take care to avoid liquid exposure if you reassemble your iPhone without replacing the seals.

## Step 2 — Opening Procedure



- ⓘ Heating the lower edge of the iPhone will help soften the adhesive securing the display, making it easier to open.
- Use a hairdryer or [prepare an iOpener](#) and apply it to the lower edge of the iPhone for about a minute in order to soften up the adhesive underneath.

### Step 3



- Apply a suction cup to the lower half of the front panel, just above the home button.
  - ⓘ Be sure the suction cup does not overlap with the home button, as this will prevent a seal from forming between the suction cup and front glass.
  - ⓘ If your display is badly cracked, [covering it with a layer of clear packing tape](#) may allow the suction cup to adhere. Alternatively, very strong tape may be used instead of the suction cup. If all else fails, you can superglue the suction cup to the broken screen.

## Step 4



- Pull up on the suction cup with firm, constant pressure to create a slight gap between the front panel and rear case.
- Insert the flat end of a spudger into the gap.
  - ⓘ The watertight adhesive holding the display in place is very strong; creating this initial gap takes a significant amount of force. If you're having a hard time opening a gap, rock the screen up and down to weaken the adhesive until you can fit a spudger inside.
- While pulling up on the suction cup, twist the spudger to widen the opening between the screen and rear case.



## Step 5



- Insert the flat end of the spudger between the front panel and the rear case at the lower left edge of the iPhone.
  - Slide the spudger up the left edge of the phone starting at the lower edge and moving towards the volume control buttons and silent switch, breaking up the adhesive holding the display in place.
- ⚠ Do not try to pry the top edge of the display away from the rear case, as it is held in place by plastic clips that may break.

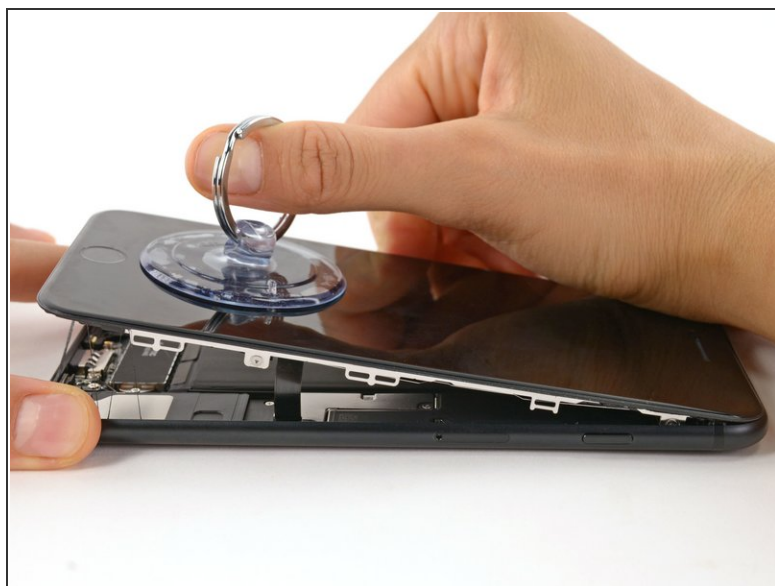
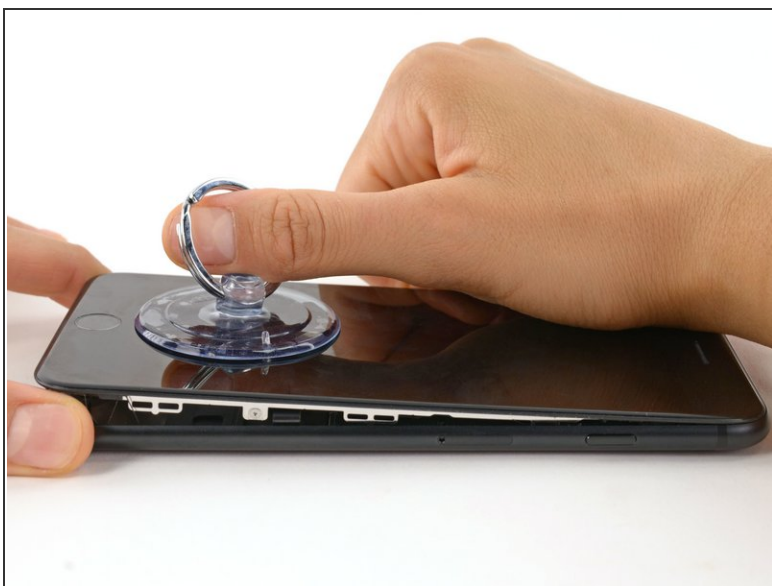
## Step 6




- Remove the spudger from the left side of the phone and insert the flat end into the bottom right corner.
- Slide the spudger up the right edge of the phone to the top corner, breaking up the adhesive holding the display in place.



## Step 7



- Pull up on the suction cup to lift up the display and open the iPhone.

 **Do not raise the display more than 10°** as there are delicate ribbon cables along the right edge of the device connecting the display to the logic board.

## Step 8



- Pull up on the small nub on the suction cup to remove it from the front panel.

## Step 9



- Slide an opening pick underneath the display along the top edge of the phone to loosen the last of the adhesive.

## Step 10



- Pull the display assembly slightly away from the top edge of the phone to disengage the clips holding it to the rear case.
- Open the iPhone by swinging the display up from the left side, like the back cover of a book.
  - ⚠ Don't try to fully separate the display yet, as several fragile ribbon cables still connect it to the iPhone's logic board.



## Step 11 — Battery Disconnection



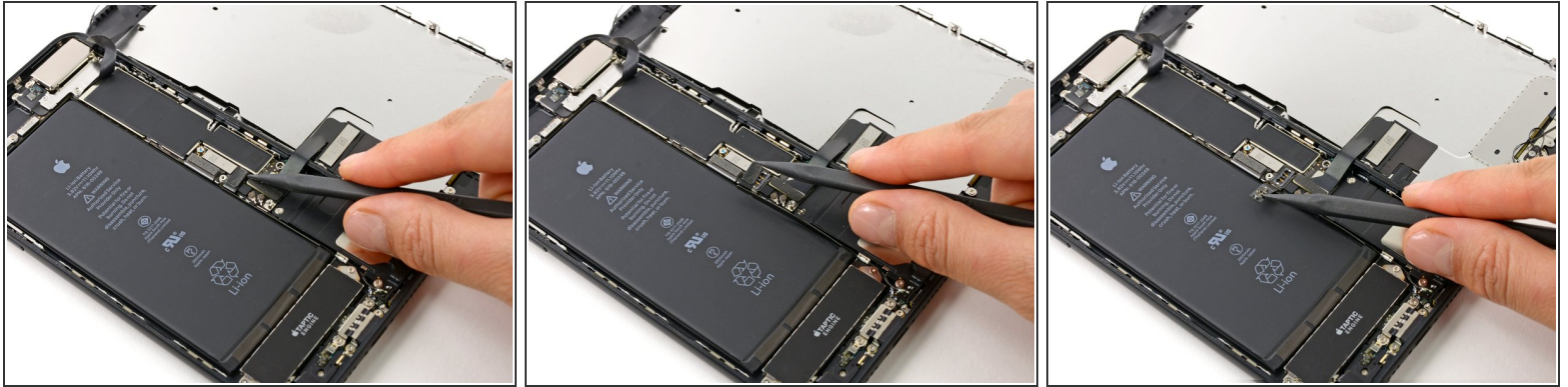
- Remove the following four tri-point Y000 screws securing the lower display cable bracket to the logic board:
  - Three 1.2 mm screws
  - One 2.6 mm screw

## Step 12



- Remove the lower display cable bracket.


## Step 13





- Use the point of a spudger to lift the battery connector out of its socket on the logic board.
- ⓘ Bend the connector cable up slightly to prevent it from making contact with the socket and providing power to the phone.

## Step 14 — Display Assembly



 Make sure the battery is disconnected before you disconnect or reconnect the cables in this step.

- Use the flat end of a spudger or a fingernail to disconnect the two lower display connectors by prying them straight up from their sockets on the logic board.
-  To re-attach press connectors, press down on one end until it clicks into place, then repeat on the other end. Do not press down on the middle. If the connector is even slightly misaligned, the connector can bend, causing permanent damage.
-  If you have a blank screen, white lines on the display, or partial or complete lack of touch response after reassembling your phone, try disconnecting and carefully reconnecting both of these cables and make sure they are fully seated.

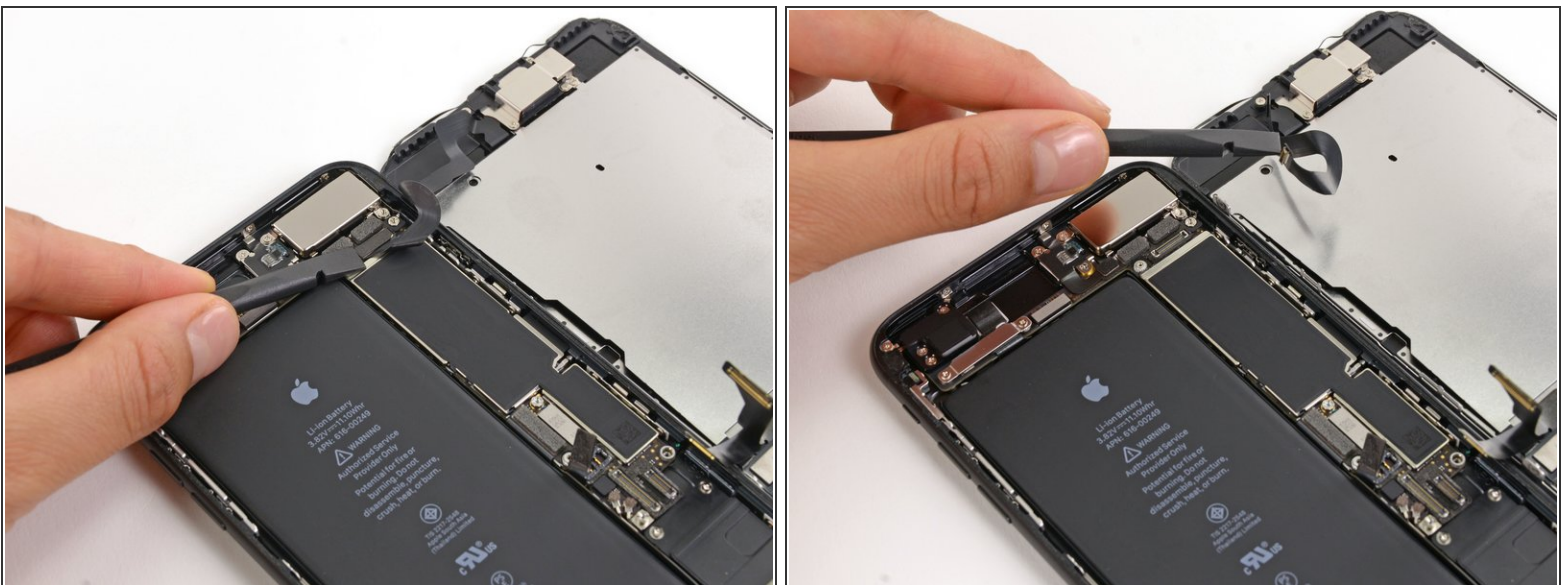


## Step 15



- Remove the three tri-point Y000 screws securing the bracket over the front panel sensor assembly connector:
  - One 1.3 mm screw
  - Two 1.0 mm screws
- Remove the bracket.

## Step 16



- Disconnect the front panel sensor assembly connector from its socket on the logic board.
- ✦ This press connector should also be reconnected one end at a time to minimize the risk of bending.

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## Step 17



- Remove the display assembly.
- ★ During reassembly, pause here if you wish to [replace the adhesive around the edges of the display](#).

## Step 18 — Barometric Vent



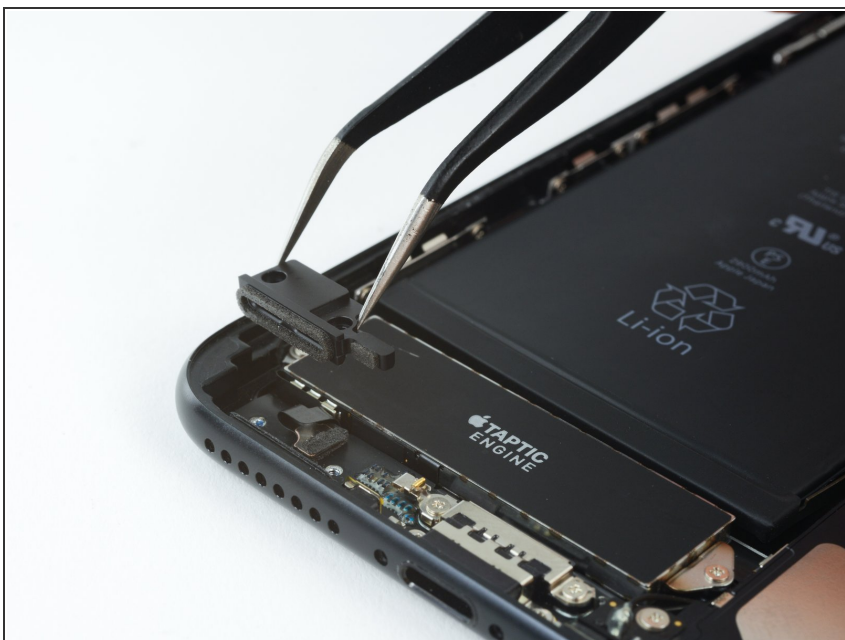
- Remove the following two Phillips screws securing the barometric vent to the rear case:
  - One 2.9 mm screw
  - One 2.1 mm screw

## Step 19



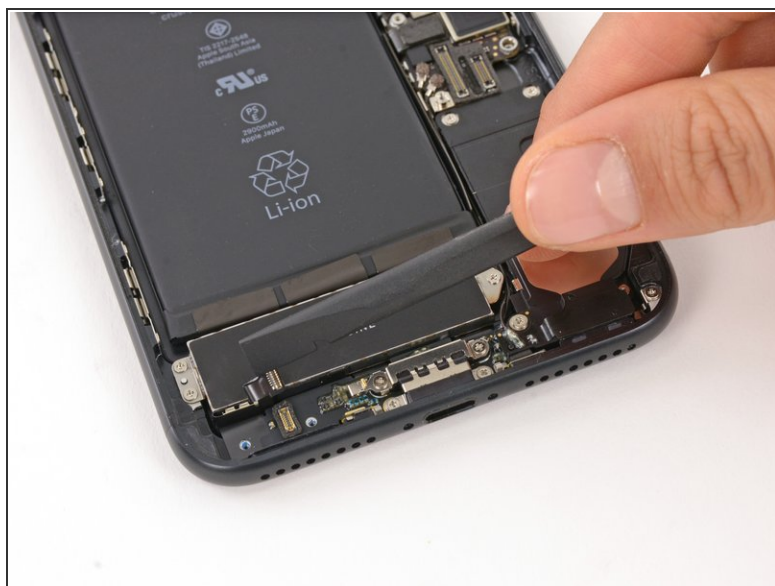
- Gently push the barometric vent in the direction of the Taptic Engine to separate the adhesive securing it to the bottom edge of the iPhone.

## Step 20



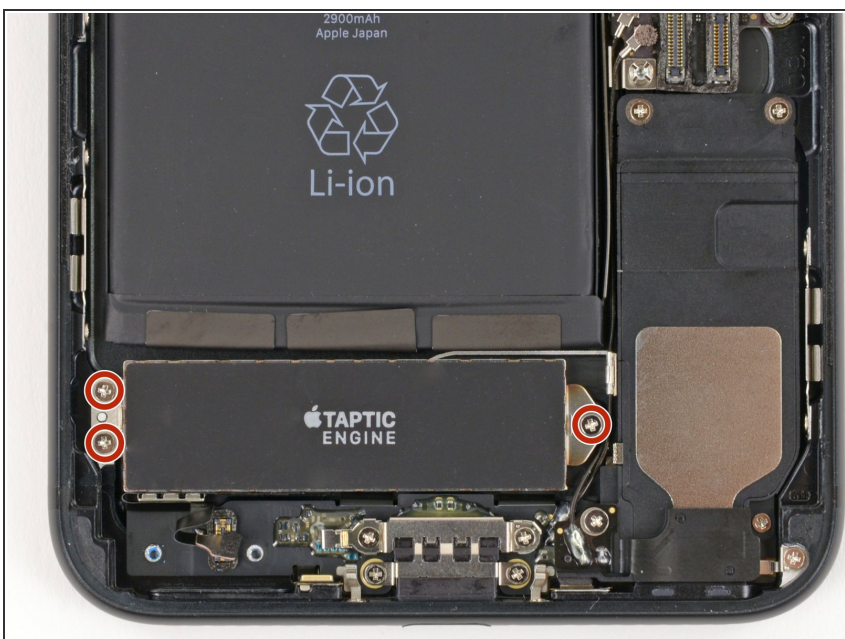
- Remove the vent.

## Step 21 — Taptic Engine



- Use the flat end of a spudger to disconnect the Taptic Engine connector from its socket on the logic board.

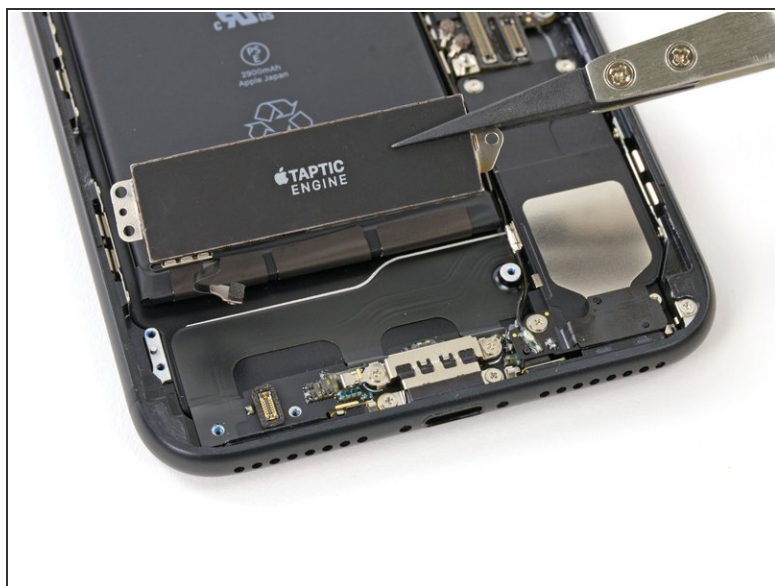
## Step 22



- Remove the three 1.5 mm Phillips screws securing the Taptic Engine to the rear case.



## Step 23



- Remove the Taptic Engine.


## Step 24 — Battery




- Peel back the three adhesive strips on the lower edge of the battery.
  - ⚠ If possible, use your fingernails or blunt tweezers. Be careful not to poke the battery with any sharp tools.

## Step 25



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

- Slowly pull one battery adhesive tab away from the battery, toward the bottom of the iPhone.
- Pull steadily, maintaining constant tension on the strip until it slips out from between the battery and the rear case. For best results, pull the strip at a 60° angle or less.
-  The strip will stretch to many times its original length. Continue pulling and re-grab the strip near the battery if necessary.

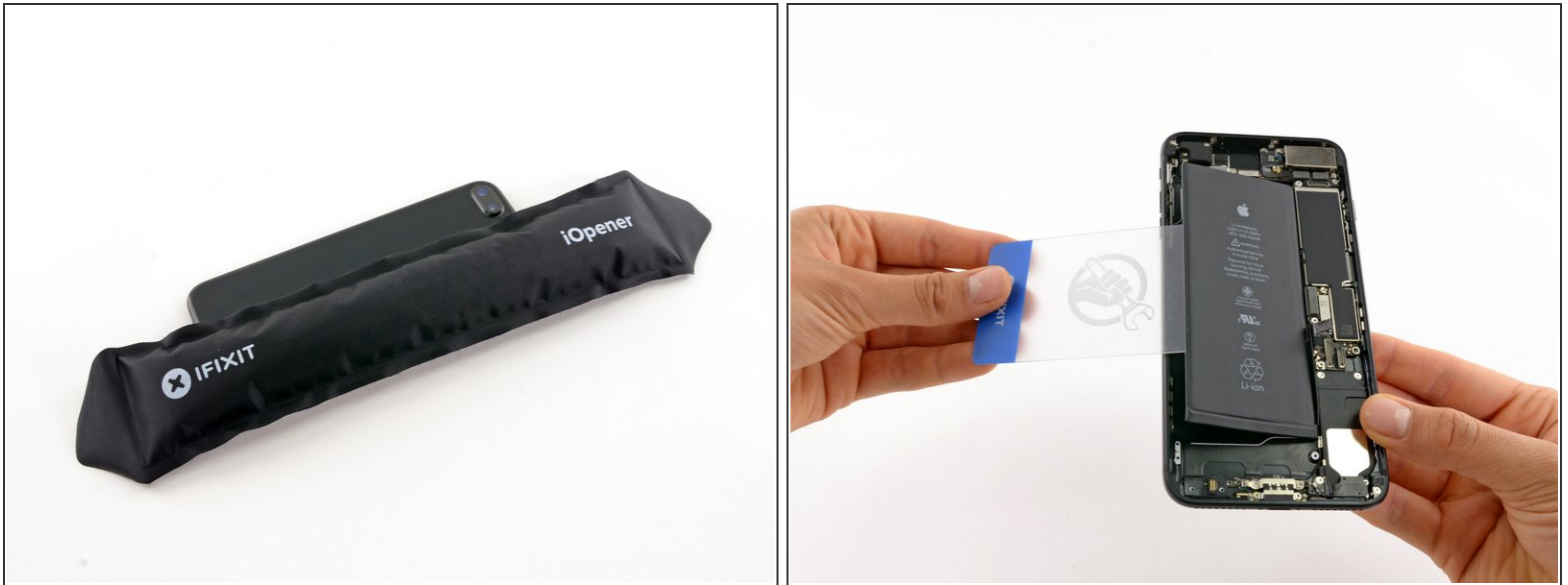
## Step 26



- Repeat the previous step for the second and third strips.
- ⚠ Hold down the battery as you remove the final strip, or the strip may fling the battery when it separates from the case.
- **If you removed all adhesive strips successfully, skip the next step.**
  - Otherwise, if any of the adhesive strips broke off underneath the battery and could not be retrieved, **continue with the next step below.**



## Step 27



- If any of the adhesive strips broke off and the battery remains stuck to the rear case, [prepare an iOpener](#) or use a hair dryer to heat the rear case directly behind the battery. It should be slightly too warm to touch comfortably.
- ⚠ Overheating the iPhone may ignite the battery.
- Flip the phone over and use a plastic card to break up any remaining adhesive behind the battery.
  - ⚠ **Do not** insert your card in the area between the volume down (-) button and the top edge of the battery, or you may damage the volume control cable lying underneath.
  - ⚠ **Do not** pry against the logic board or you may damage the phone.
  - ⚠ Keep the card as flat as possible to avoid bending the battery, which may damage it and cause it to release dangerous chemicals or catch fire. Do not use any sharp tools to pry at the battery.
- ⓘ Alternatively, a piece of dental floss may be used to separate the battery from the rear case. A stronger alternative to dental floss is an unwound guitar string, such as a 0.009 E string from a 12-string set.
- Thread the floss or string behind the upper battery corners, bring the ends together, wrap them around a folded cloth, and pull evenly.

## Step 28



- Remove the battery.
- ⓘ If your replacement battery came in a plastic sleeve, remove the sleeve before installation by pulling it away from the ribbon cable.
- ★ If your new battery doesn't have adhesive preinstalled, refer to [this guide](#) to replace the adhesive strips.
- ★ Perform a [force restart](#) after reassembly. This can prevent several issues and simplify troubleshooting.

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

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.