



iPhone 8 Battery Replacement

Replace the battery in your iPhone 8 if it has failed, swollen, or no longer holds sufficient charge.

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INTRODUCTION

Use this guide to revive your iPhone 8's battery life and performance 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 accidental 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 detaching the display. Additionally, while it's possible to remove the adhesive strips securing the battery as soon as you open the phone, this guide recommends first removing the Taptic Engine. Doing so reduces the risk of breaking the lower adhesive strips accidentally, either by snagging them on the Taptic Engine, or by pulling the strips at too sharp of an angle.

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%.



TOOLS:

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





PARTS:

- [iPhone 8 Replacement Battery](#) (1)
- [iPhone 8 Battery Adhesive Strips](#) (1)
- [iPhone 8 Display Assembly Adhesive](#) (1)
- [iPhone 8/8 Plus Bottom Screws](#) (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 3.5 mm pentalobe screws on 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 phone for about 90 seconds 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 an opening pick into the gap.
- i** 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, apply more heat, and gently rock the screen up and down to weaken the adhesive until you create enough of a gap to insert your tool.

Step 5




- Slide the opening pick 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.
- Stop near the top left corner of the display.

! 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




- Re-insert your tool at the lower right corner of the iPhone, and slide it around the corner and up the right side of the phone to separate the adhesive.

 Don't insert the pick very far, or you may damage the display cables along this side of the iPhone. Insert it only a few millimeters, or about the width of the display bezel.

Step 7



- Gently pull up on the suction cup to lift up the bottom edge of the display.
 -  **Do not raise the display more than 15°** or you'll risk straining or tearing the ribbon cables connecting the display.
- Pull on the small nub on the suction cup to remove it from the front panel.

Step 8



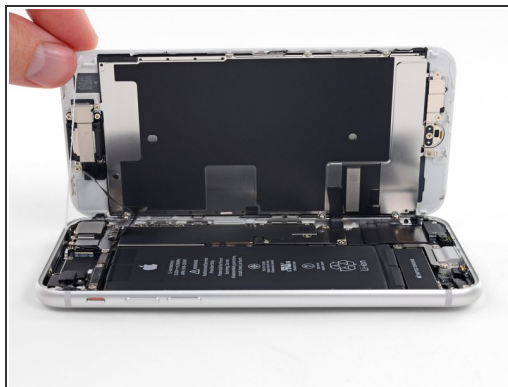
- Slide an opening pick underneath the display around the top left corner and along the top edge of the phone to loosen the last of the adhesive.

Step 9



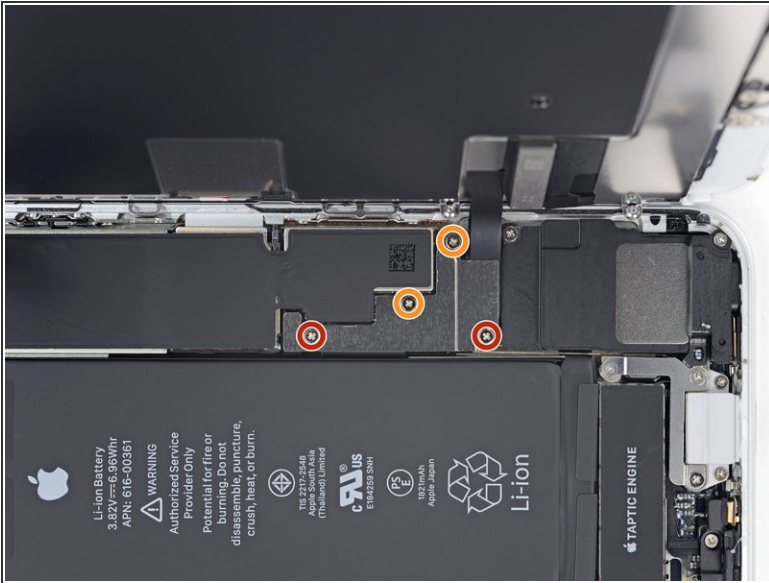
- Slide the display assembly slightly down (away from the top edge of the phone) to disengage the clips holding it to the rear case.

Step 10



- 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.
- Lean the display against something to keep it propped up while you're working on the phone.

Step 11 — Battery Disconnection



- Remove four Phillips screws securing the lower display cable bracket to the logic board, of the following lengths:
 - Two 1.3 mm screws
 - Two 2.8 mm screws
- ☑ Throughout this guide, [keep careful track of your screws](#) so that each one goes back where it came from during reassembly. Installing a screw in the wrong place can cause permanent damage.
- Remove the bracket.

Step 12



- Use the point of a spudger to pry the battery connector out of its socket in the logic board.
- Bend the battery connector cable slightly away from the logic board to prevent it from accidentally making contact with the socket and providing power to the phone during your repair.

Step 13 — Display Assembly



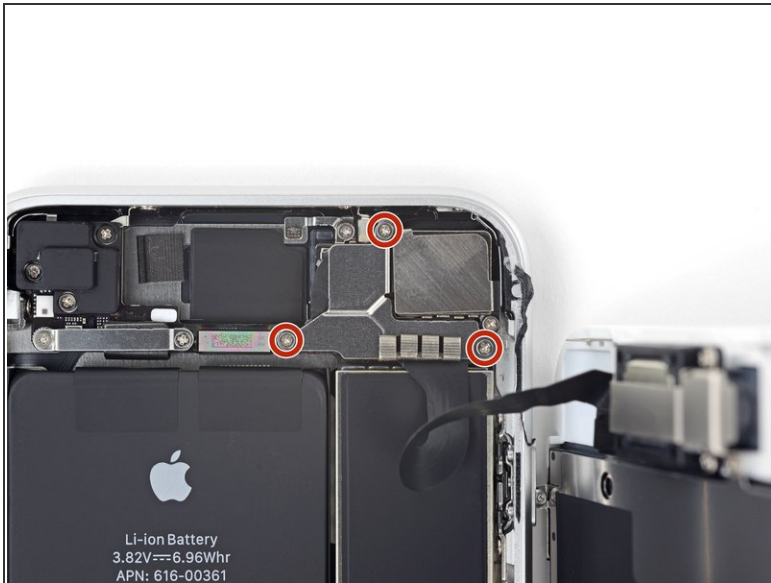
- Use the point of a spudger to pry the lower display connector out of its socket.
- ✦ To re-attach [press connectors](#) like this one, press down on one side until it clicks into place, then repeat on the other side. Do not press down on the middle. If the connector is even slightly misaligned, the connector can bend, causing permanent damage.

Step 14



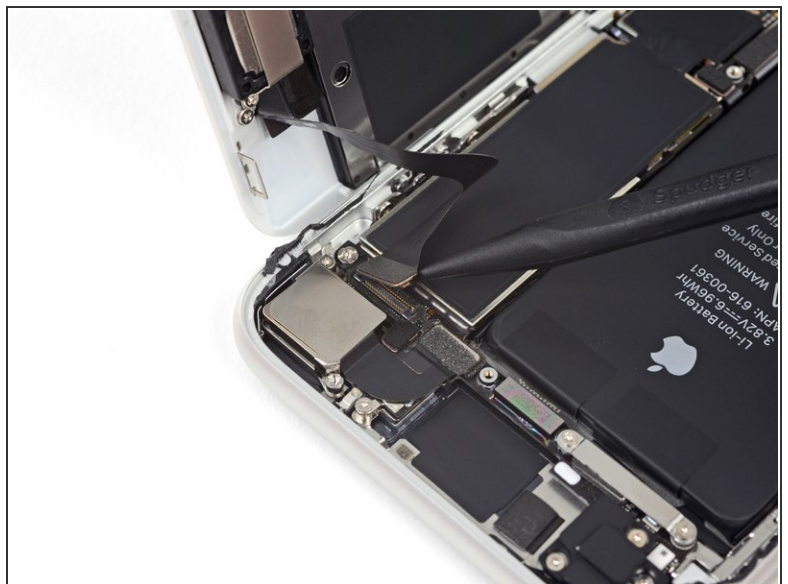
- Use the point of a spudger to disconnect the second lower display cable.

Step 15



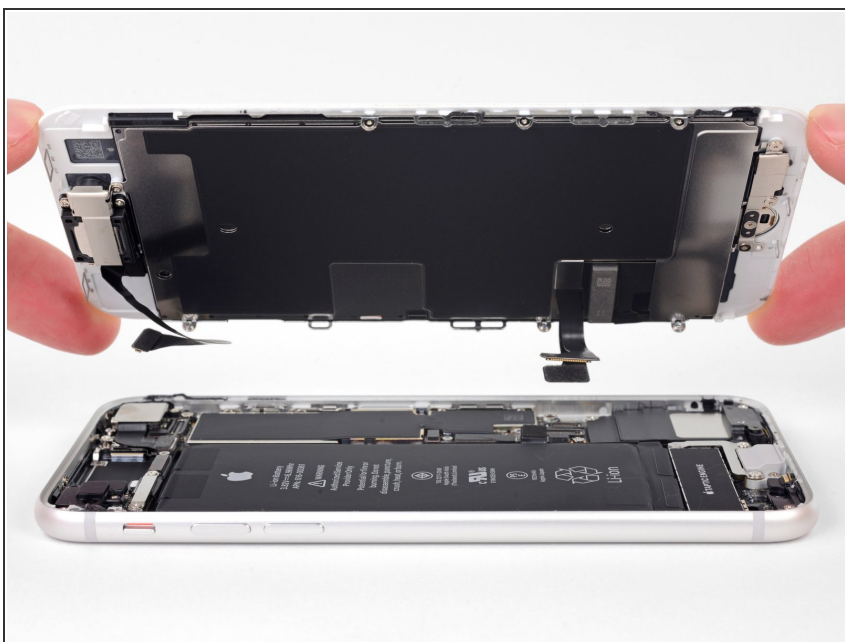
- Remove the three 1.3 mm Phillips screws securing the bracket over the front panel sensor assembly connector.
- Remove the bracket.

Step 16



- Use the point of a spudger to disconnect the front panel sensor assembly connector.

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 — Wi-Fi Diversity Antenna



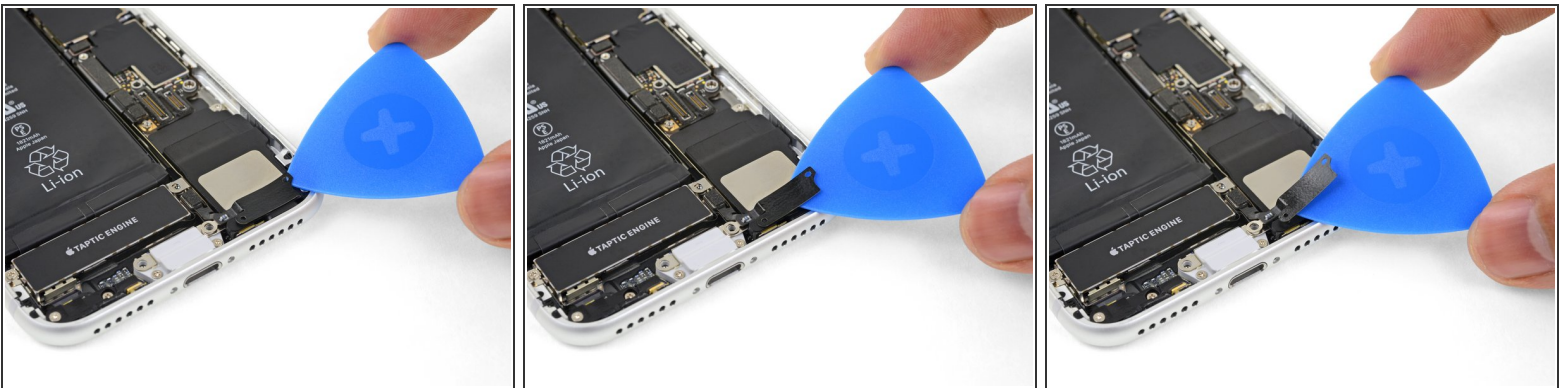
- Remove the three screws securing the bracket next to the Taptic Engine:
- One 1.3 mm Y000 screw
- One 2.7 mm Phillips screw
- One 2.9 mm Phillips screw

Step 19



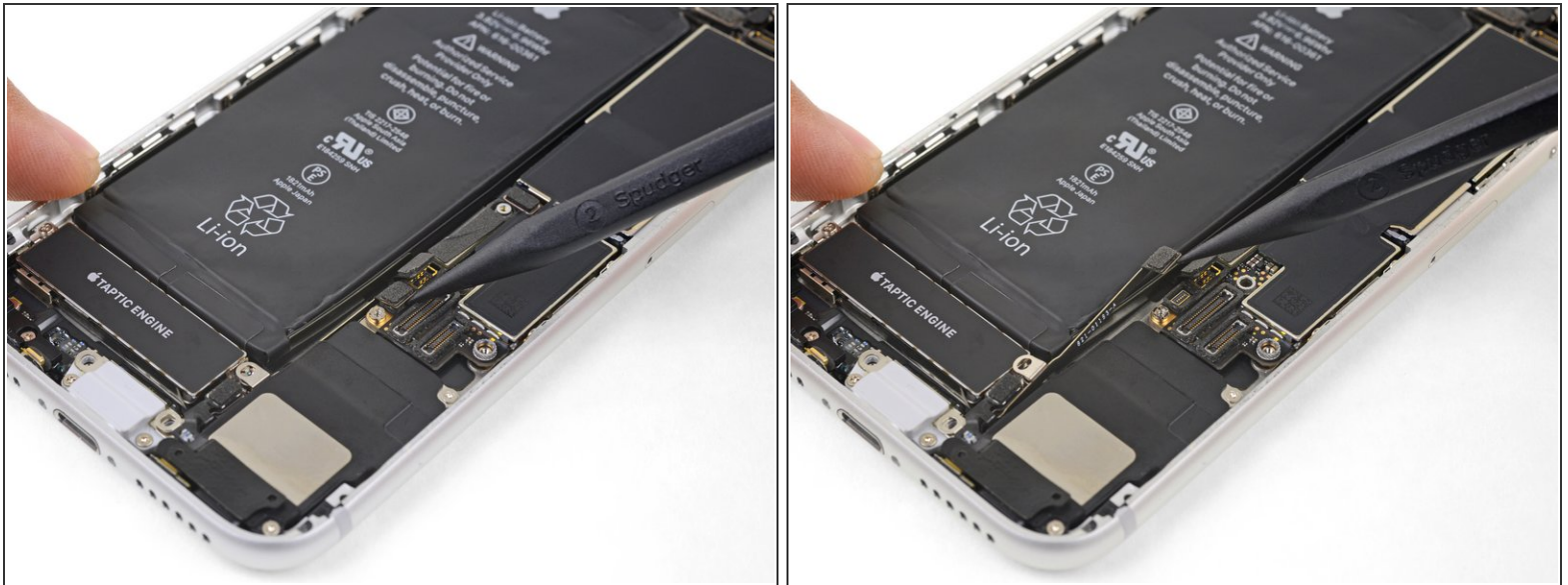
- Remove the bracket.

Step 20



- Gently slide an opening pick between the antenna flex cable and the top of the speaker.
- ⓘ This portion of the flex cable is lightly adhered in place. If necessary, apply a little heat from an iOpener or hair dryer to soften the adhesive. This will make it easier to separate the flex cable safely.

Step 21



- Use the point of a spudger to pry up and disconnect the diversity antenna flex cable from the logic board.

Step 22



- Slide an opening pick under the antenna flex cable to hold the socket down.
- Use the point of your spudger to pry up and disconnect the antenna flex cable from its socket, using the opening pick to hold the socket down.
- ☑ Reconnecting this cable can be tricky. Make it easier by using your tweezers to hold the flex cable so the connector aligns with its socket. Then, gently press straight down on the connector with the flat of your spudger until it clicks into place.

Step 23



- Remove the Wi-Fi diversity antenna.

Step 24 — Taptic Engine



- Remove the two screws securing the Taptic Engine:
 - One 2.1 mm Phillips screw
 - One 2.1 mm standoff screw
- ⓘ Standoff screws are best removed using an [iPhone Standoff Screwdriver Bit](#) and [driver handle](#).
- ⚠ In a pinch, a small flathead screwdriver will do the job—but use extra caution to ensure it doesn't slip and damage surrounding components.

Step 25



- Use the point of your spudger to move the antenna cable socket up and away from the connector below it.

Step 26



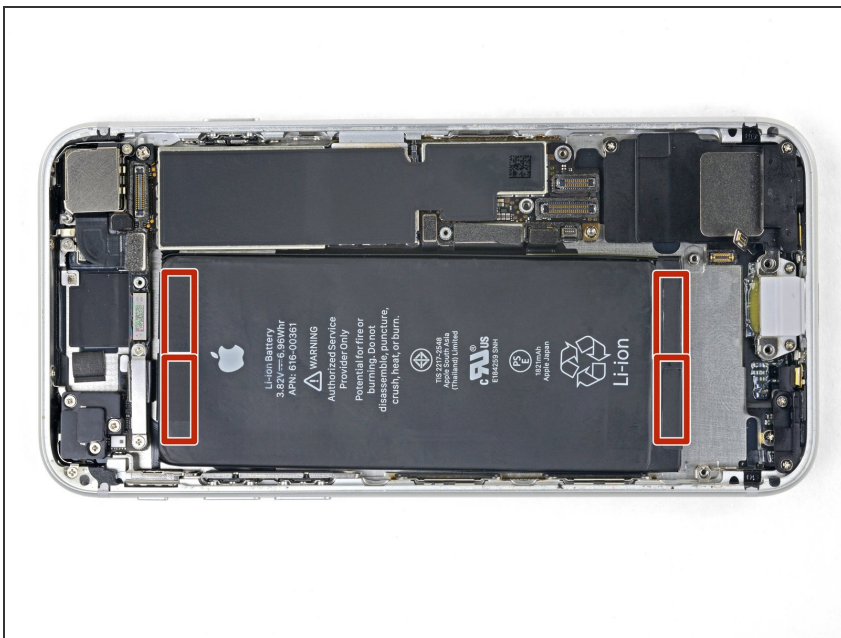
- Use the point of your spudger to pry up and disconnect the Taptic Engine flex cable.

Step 27



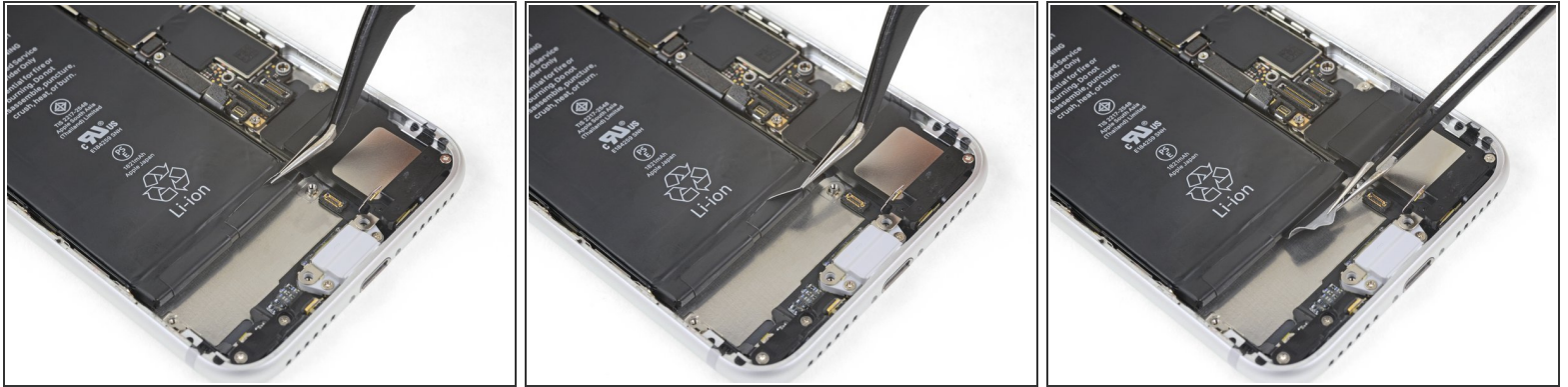
- Remove the Taptic Engine.

Step 28 — Battery



- ① The iPhone's battery is secured by four pieces of stretch-release adhesive—two at the top, and two at the bottom.
- Each piece of adhesive has a black pull-tab at the end, which is lightly adhered to the front surface of the battery.

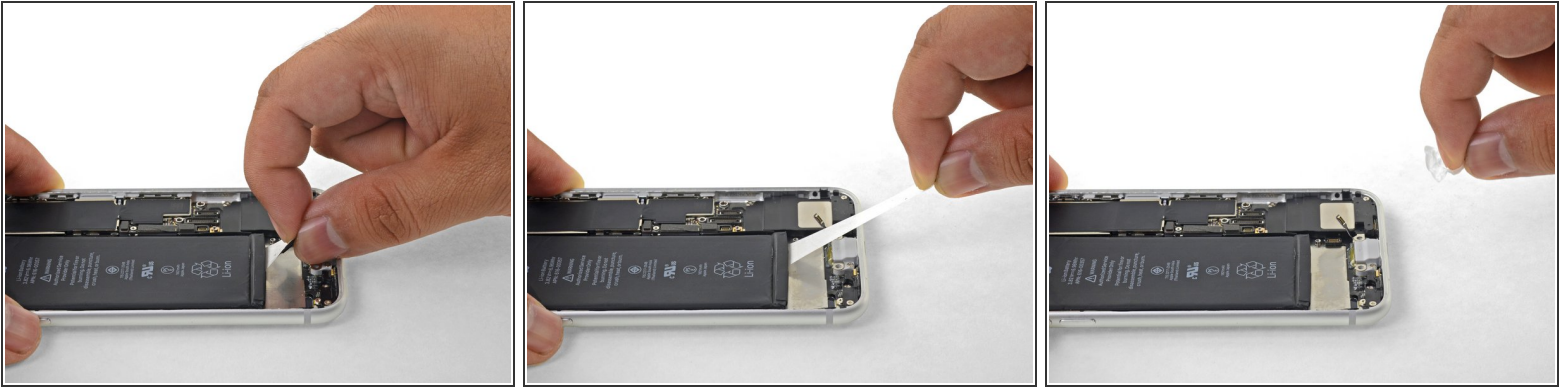
Step 29



- Peel back the first battery adhesive tab from the bottom right edge of the battery.

⚠ If possible, use your fingernails or blunt tweezers. Be careful not to poke the battery with any sharp tools.

Step 30




- ⚠ Try to keep the adhesive strips flat and unwrinkled during this procedure; twisted or wrinkled strips will stick together and break instead of pulling out cleanly.
- ⚠ Additionally, do not press down on the battery as you pull the strips. Pressing on the battery creates pressure points that can snag and break the adhesive.
- **Slowly** pull one battery adhesive tab away from the battery, towards 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 as low an angle as possible**, without snagging it on any of the iPhone's other components.
- ⓘ The strip will stretch to many times its original length. Continue pulling and re-grab the strip near the battery if necessary.
- If the battery adhesive tabs break during the removal process, use your fingers or blunt tweezers to retrieve the remaining length of adhesive, and continue pulling.
- ⚠ If any of the adhesive strips break underneath the battery and cannot be retrieved, try to remove the remaining strips, and then proceed as instructed below.


Step 31



- Repeat the above steps to remove the remaining three adhesive strips.

 Be sure to hold onto the battery as you remove the final strip, or it may fling out of the iPhone unexpectedly.

- If you removed all of the adhesive strips successfully, skip the next step.

 If any of the adhesive strips broke off underneath the battery and could not be retrieved, **continue with the next step below.**

Step 32



- 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. This will help soften the adhesive.
- ⚠ Heat the iPhone until the rear case is slightly too hot to comfortably touch. Don't overheat the iPhone, or you may accidentally ignite the battery.
- Flip the iPhone back over and thread a strong piece of string (such as dental floss or a length of thin guitar string) underneath the battery.
- Pull the string from side to side in a sawing motion all along the length of the battery to separate the adhesive. **Do not deform or damage the battery.**
- ⓘ To protect your fingers, wear gloves or wrap the string ends around a tool (such as the two screwdriver handles shown in the image).
- ⚠ If you choose to use pry tools to lift the battery out of the iPhone, use extreme caution or you may damage the ribbon cables or the wireless charging coil directly underneath the battery.

Step 33



- Remove the battery from the iPhone.
- ☑ If your replacement battery came in a plastic sleeve, slide off and remove the sleeve before installation.
- 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, [reapply the display adhesive](#) and follow these instructions in reverse order.

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

Repair didn't go as planned? Check out our [iPhone 8 Answers community](#) for troubleshooting help.