



Samsung Galaxy S10+ Battery Replacement

This guide shows how to remove and replace the...

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INTRODUCTION

This guide shows how to remove and replace the battery for the Samsung Galaxy S10+.

The battery is held in place with strong adhesive. High concentration (over 90%) isopropyl alcohol will make the battery removal process much easier.

If your battery is swollen, [take appropriate precautions](#) and do not heat your phone.

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.



TOOLS:

- [iFixit Opening Tool](#) (1)
- [Suction Handle](#) (1)
- [iFixit Opening Picks \(Set of 6\)](#) (1)
- [Tweezers](#) (1)
- [Phillips #00 Screwdriver](#) (1)
- [iOpener](#) (1)
- [Spudger](#) (1)
- [Isopropyl Alcohol](#) (1)



PARTS:

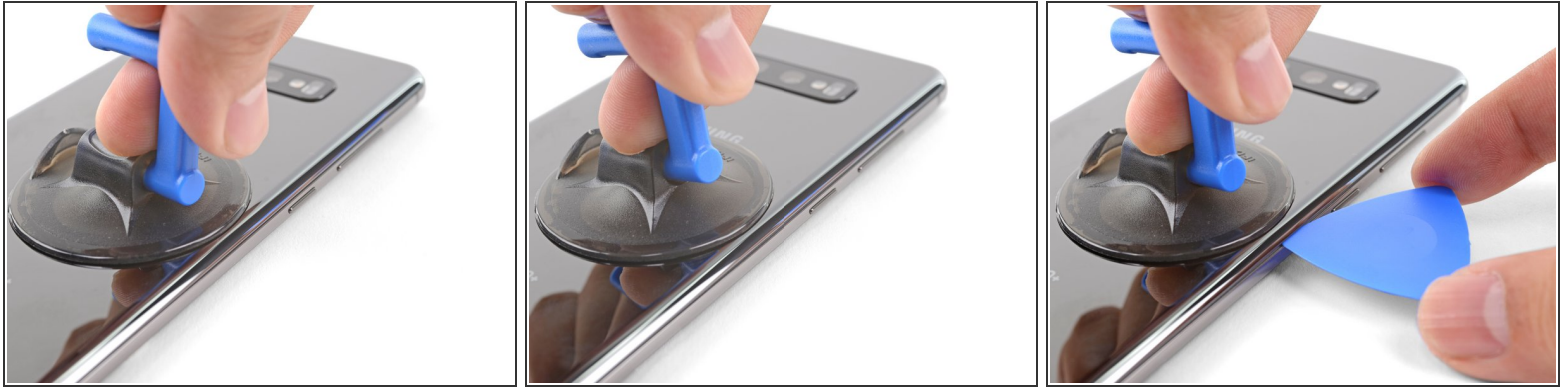
- [Galaxy S10 Plus Replacement Battery](#) (1)

Step 1 — Heat the back cover



- Unplug and power off your phone before you begin.
- [Heat an iOpener](#) and apply it to the **back cover's right edge** for two minutes.
 - ⓘ 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 a look at the image of the removed back cover and take note of where the adhesive is located.

Step 2 — Create an opening gap



- Apply a suction cup to the back of the phone, as close to the center of the right edge as possible ([where the adhesive is narrowest](#)).
 - Pull on the suction cup with strong, steady force to create a gap between the back cover and the frame.
 - Insert the point of an opening pick into the gap.
- i** Due to tight tolerances, this may take multiple attempts.
- If you are having trouble creating a gap, your best bet is to apply more heat to the edge and try the previous step again.
 - You can try applying a few drops of high concentration (over 90%) isopropyl alcohol into the seam to help loosen the adhesive.

⚠ Do not apply excessive force with the pick, or you will risk cracking the back cover glass.

Step 3



- Rest the heated right edge of the phone on something that is about 0.5 inches (13 mm) thick. This angles the phone for the opening tool.
- Brace the left edge of the phone with your fingers so that the phone won't slide. Pull on the suction cup with firm pressure.
- Press the edge of an opening tool into the seam between the back cover and the frame.
- Slide the opening tool back and forth along the seam a few times.

Step 4 — Slice through the adhesive



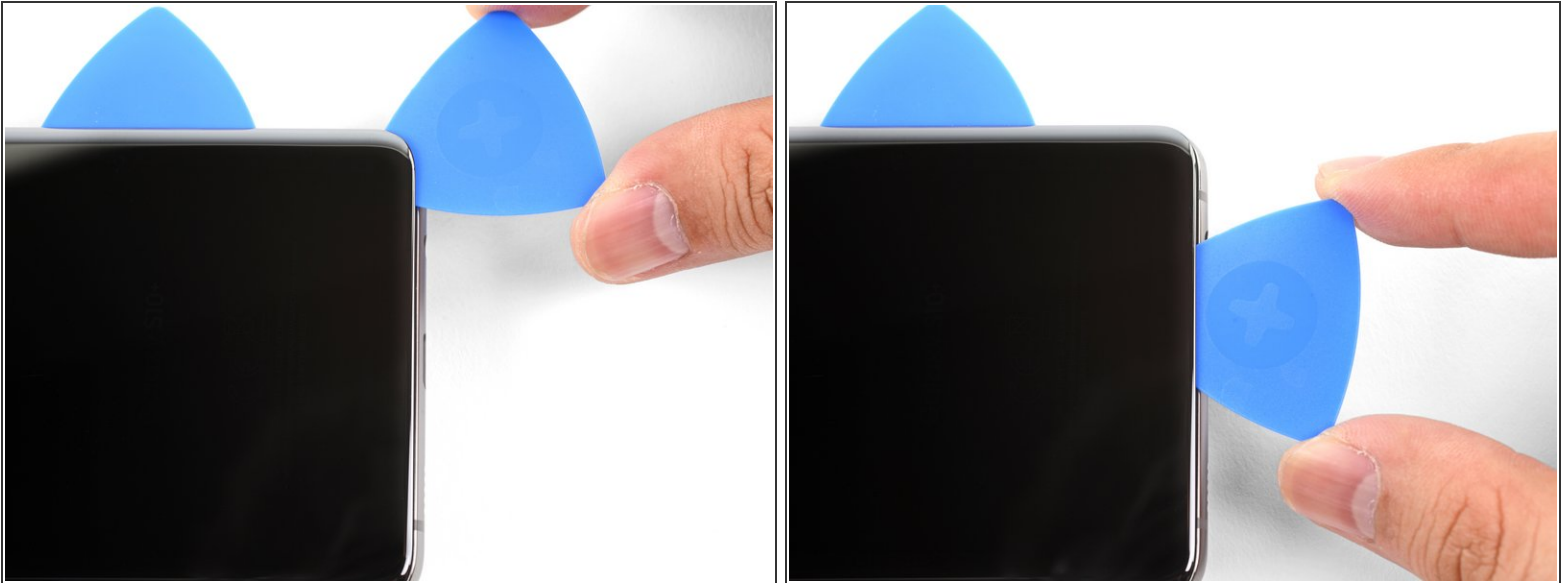
- Slide the opening pick along the edge of the phone, slicing through the adhesive.
- ⚠ Do not attempt to slice the adhesive holding the corners down before applying heat. If you do, you may crack the back cover.
- Leave a pick in the seam to prevent the adhesive from re-sealing.

Step 5



- Apply a heated iOpener to the bottom edge of the phone for two minutes.

Step 6



- Insert an opening pick into the right edge near the bottom right corner.
- Carefully slide the pick around the corner. Continue cutting along the bottom edge and around the bottom left corner.
- ❗ If the cutting feels difficult, re-apply heat to the edge before continuing.
- Leave an opening pick in the seam to prevent the adhesive from re-sealing.

Step 7



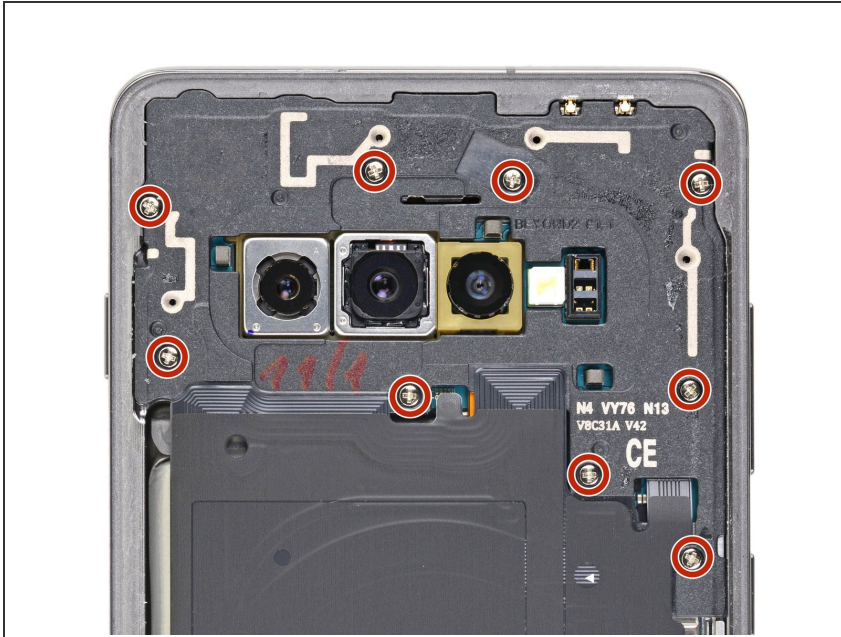
- Continue heating and slicing around the remaining edges of the phone.
- ❗ When cutting around corners, be sure that the corner is thoroughly heated.

Step 8



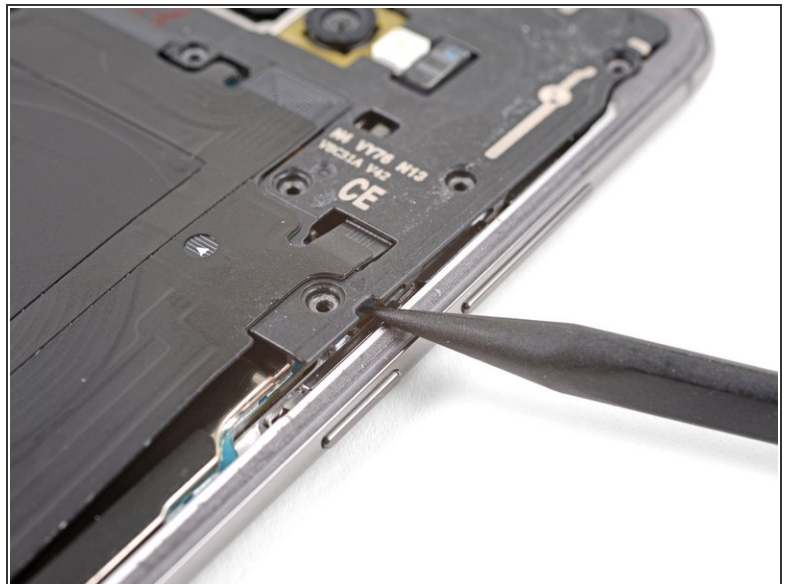
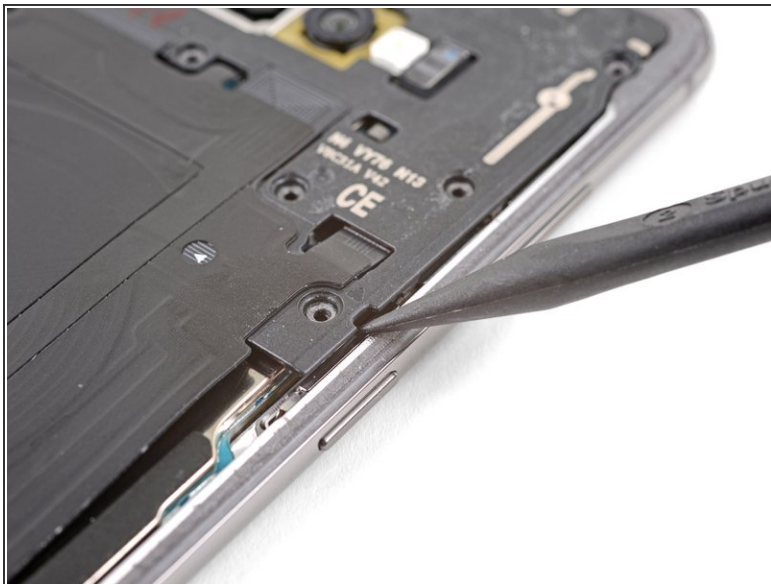
- Once you have sliced around the phone, twist an opening pick in one of the edges to help separate the back cover from the frame.
 - Lift the back cover slowly. Use opening picks to slice any remaining adhesive.
 - Remove the back cover.
- ✦ During reassembly, this is a good point to power on your phone and test all functions before you seal the back cover in place. Be sure to power your phone back down completely before you continue working.
- ✦ [Follow this guide](#) to reinstall the back cover, transfer and install the camera bezel, and replace the adhesive.

Step 9 — Remove the midframe



- Remove the nine 4 mm Phillips screws securing the top midframe to the phone.

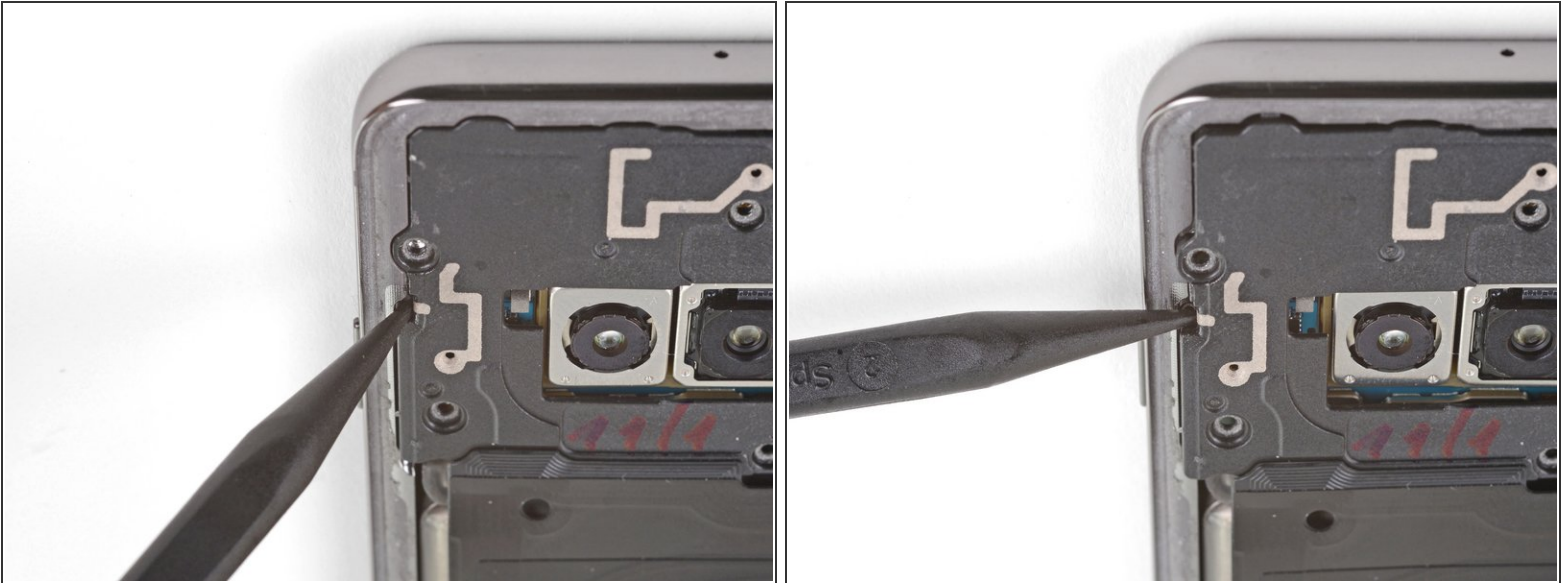
Step 10



- ⓘ The midframe is still held in place by a few plastic clips around the edge.
- Insert the point of a spudger into the notch on the right edge of the midframe, near the Bixby button.
- Pry up to loosen the midframe from the phone.

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Step 11



- Insert the point of a spudger into the notch on the left edge of the phone, located near the power button.
- Pry up to loosen the midframe from the phone.

Step 12

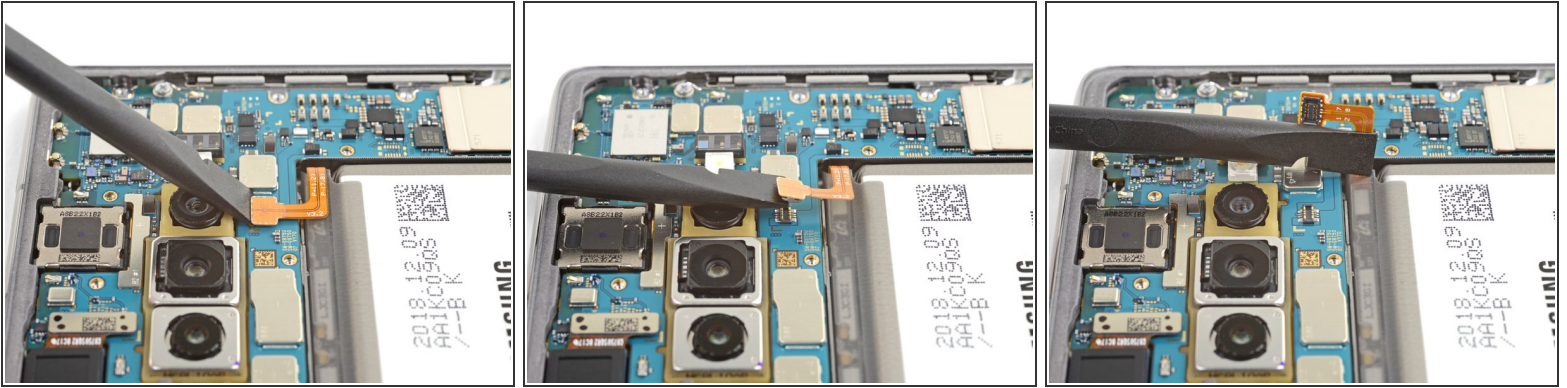


- Lift the midframe from the top corners and remove it from the phone.
- ★ To reinstall the top midframe:
 - [Align the midframe's top edge to the phone](#) and lay the frame down on the phone.

- [Use fingers to apply pressure along the midframe perimeter](#) to snap the midframe clips back into

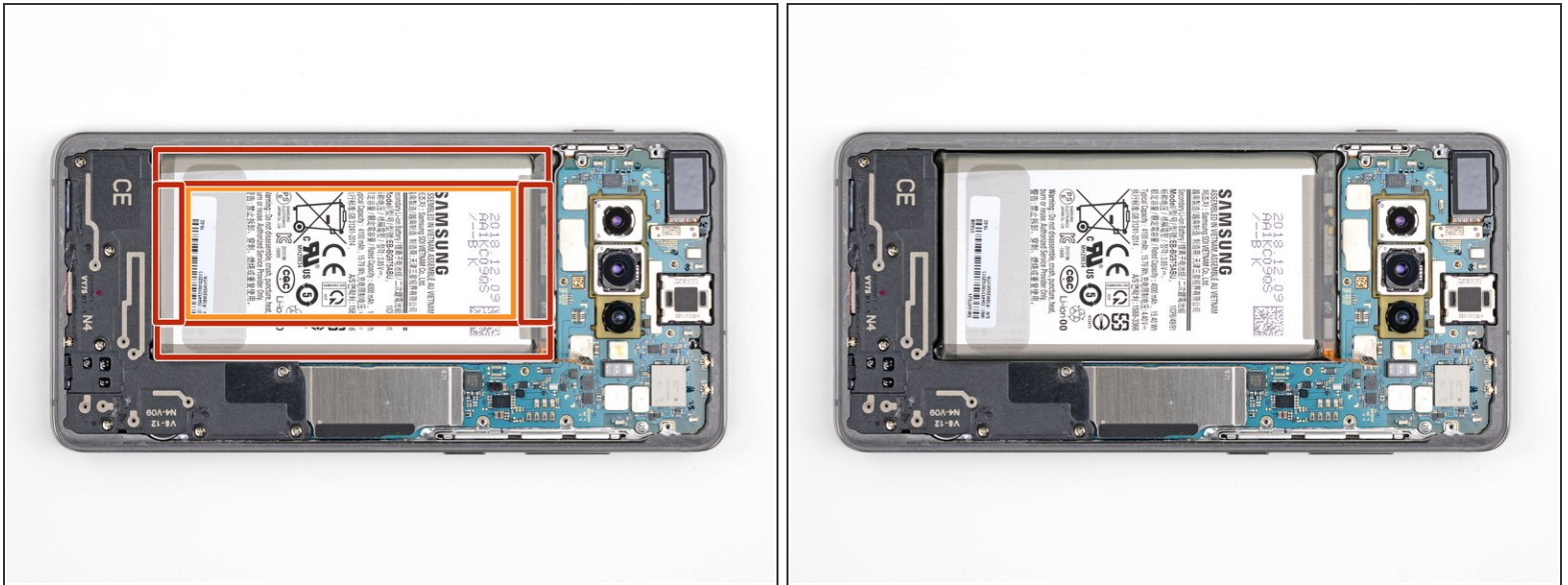
place. The edges should sit flush against the phone edge.

Step 13 — Disconnect the battery



- Insert the flat end of a spudger underneath the battery connector, which is attached to the motherboard below the rear-facing camera.
- Pry upwards to disconnect the connector from its socket.
- ⚠ When you disconnect connectors like these, be careful not to dislodge the small surface-mounted components surrounding the socket.
- Gently push the battery's flex cable away from the motherboard socket to prevent accidental contact.

Step 14 — Battery



- The battery is heavily glued in place. Note the marked areas under the battery:
 - The frame, where the battery is held by strong adhesive
 - A cutout in the frame, exposing the fragile display assembly underneath. Be careful when prying in this area, or you may damage the display.

Step 15



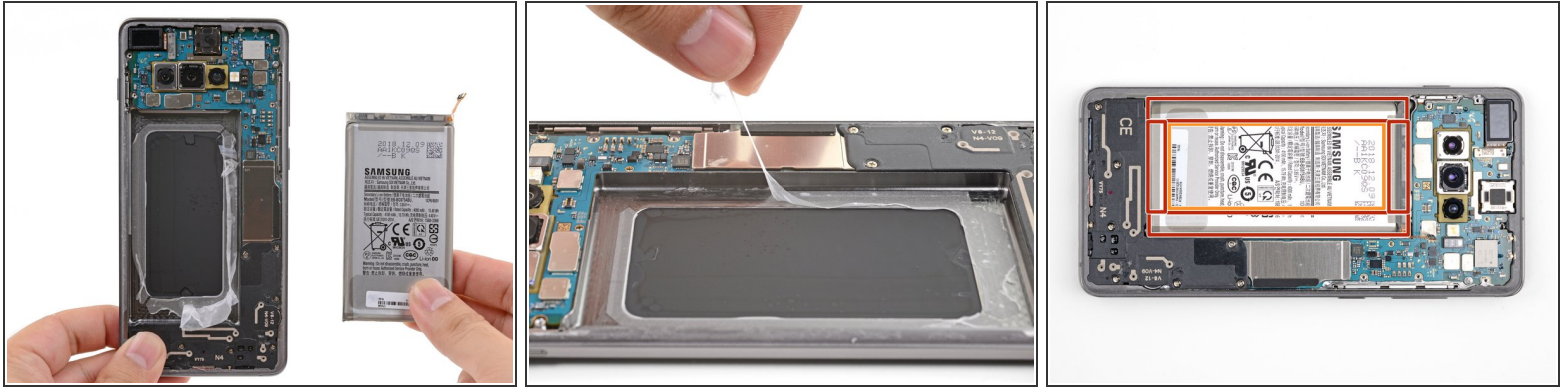
- i** Applying high concentration (over 90%) isopropyl alcohol to the battery will make the battery removal significantly easier.
- Lift the **bottom edge** of the phone up and hold the phone in a tilted position.
 - Apply drops of isopropyl alcohol into the crevice between the battery and the phone's bottom midframe.
 - Hold the phone in a tilted position for a minute to allow the isopropyl alcohol to soak into the adhesive.
 - Alternatively, [heat an iOpener](#) and apply it to the right side of the front of the phone for two minutes.

Step 16



- Insert the corner of an opening card into the crevice between the battery and the bottom midframe.
 - Pry the battery out of its recess.
- i** If the battery does not budge, the adhesive is not sufficiently weakened.
- Use an opening pick, an opening tool, or a spudger to pry the battery out. **Do not use metal tools.**
 - Repeat the isopropyl alcohol application step and try again.
 - Try applying more heat with an iOpener.

Step 17



- Remove the battery.

⚠ Do not reuse the battery after it has been removed, as doing so is a potential safety hazard. Replace it with a new battery.

🔧 [Follow this guide](#) to replace the battery adhesive.

🔧 *Temporarily* re-connect the battery to the motherboard before sticking the battery in place. This ensures proper battery alignment.

- Apply pre-cut adhesive, or double-sided tape to the frame first before pressing the battery into the recess.
- Do not apply adhesive on the exposed display back.

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

For optimal performance, [calibrate your newly installed battery](#) after completing this guide.

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.