

Samsung Galaxy S10e Battery Replacement

Use this guide to replace the battery in your...

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INTRODUCTION

Use this guide to replace the battery in your Samsung Galaxy S10e.

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

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.

If your battery is swollen, <u>take appropriate precautions</u> and do not heat your phone.

TOOLS:

- iOpener (1)
- Suction Handle (1)
- iFixit Opening Tool (1)
- iFixit Opening Picks (Set of 6) (1)
- Tweezers (1)
- Spudger (1)
- Phillips #00 Screwdriver (1)
- Isopropyl Alcohol (90% or Greater) (1)
- iFixit Adhesive Remover (for Battery, Screen, and Glass Adhesive) (1)

PARTS:

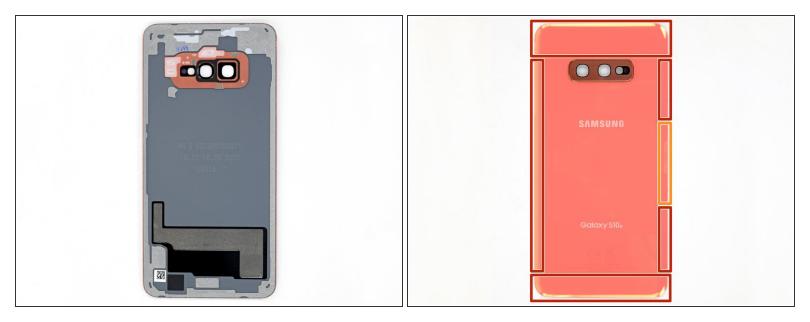
- Galaxy S10e Replacement Battery (1)
- Tesa 61395 Tape (1)

Step 1 — Heat the back cover



- Opening your phone will compromise its waterproof seals. Have replacement adhesive ready before you proceed, or take care to avoid liquid exposure if you reassemble your phone without replacing the adhesive.
- Turn your phone off completely before you begin this repair.
- Prepare an iOpener and heat the back of the phone along the right edge for about two minutes. This will help soften the adhesive securing the back cover.
 - 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 OLED display and internal battery are both susceptible to heat damage.

Step 2 — Prepare to slice the adhesive



- In the following steps, you'll be cutting through the adhesive securing the back cover.
- The adhesive is laid out as seen in the first image, which shows the inside of the cover after it has been removed.
 - As seen from the outside of the phone, you'll be slicing through the adhesive in the highlighted areas.
 - The adhesive is the thinnest on the right side of the phone, just below the Bixby button.

Step 3 — Secure a suction cup



- Secure a suction cup to the back cover, as close to the heated edge as possible, just under the Bixby button where the adhesive is thinnest.
 - (i) The suction cup will not make a good seal on the curved portion of the glass, so avoid putting it on the very edge.
 - (i) If the phone's back cover is cracked, the suction cup may not stick. <u>Try lifting it with strong tape</u>, or superglue the suction cup in place and allow it to cure so you can proceed.

Step 4 — Create an opening gap



- Prop up the heated edge of the phone on something that is about 0.5 inches (13 mm) thick. This will angle the phone so that the opening tool is easier to insert.
- Lift the back cover's right edge with your suction cup, opening a slight gap between the back cover and the frame.
 - This may require a significant amount of force. If you have trouble, apply more heat to further soften the adhesive, and try again. The adhesive cools very fast, so you may need to heat it repeatedly.
 - (i) If you're using an iOpener, follow the heating <u>instructions</u> to avoid overheating it, or the gel pack may burst.
- Press the edge of an opening tool into the gap.

 \bigwedge The rear glass can break if you use too much force or attempt to pry with metal tools.



 Slide the opening tool along the right edge of the phone to slice through the adhesive securing the back cover.

Step 6



 Insert an opening pick into the edge next to the opening tool. Leave the pick here to prevent the separated glue from re-adhering.



• Apply a heated iOpener to the top edge of the phone for two minutes.

Step 8



- Insert an opening pick near the top right corner of the phone and slide it around the corner and across the top edge of the phone.
 - (i) The glued area is <u>larger here</u>, so you'll need to insert your pick farther into the phone to separate it.
- Leave the opening pick in place to prevent the adhesive from re-adhering.



• Apply a heated iOpener to the left edge of the phone for two minutes.

Step 10



- Insert a new opening pick near the top left corner and slide it along the left edge of the phone.
- Again, leave the opening pick in place in the left edge of the phone to prevent the adhesive from resealing.



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

Step 12



- Insert an opening pick near a bottom corner of the phone, and slide it along the bottom edge of the phone to separate the adhesive there.
 - (i) The glued area is larger here, so you'll need to insert your pick farther into the phone to fully separate it.

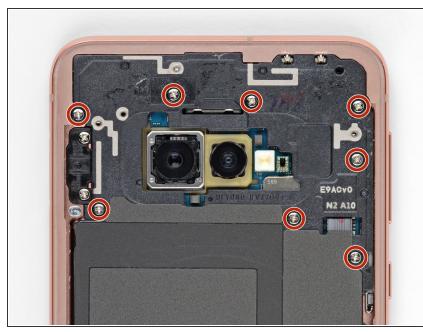


- Use the opening picks to very carefully pry up the back cover.
 - If you encounter any resistance, stop prying and use an opening pick to cut any remaining adhesive.
- Remove the back cover.



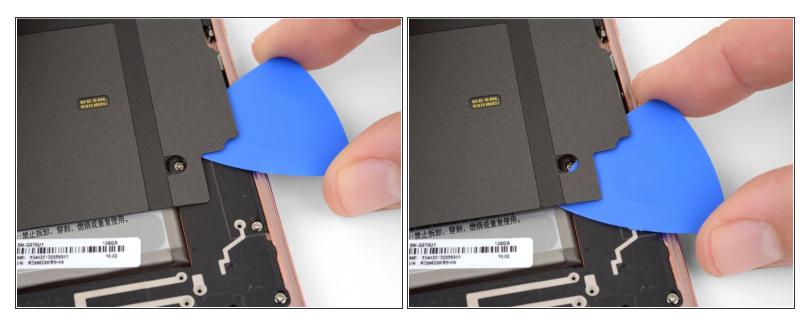
- Follow this guide to reinstall the back cover and replace the adhesive.
 - (i) Be sure to turn on your phone and test your repair before installing new adhesive and resealing the phone.
- If desired, you may reinstall the back cover without replacing the adhesive. Remove any large chunks of adhesive that might prevent the back cover from sitting down flush. After installation, heat the back cover and apply pressure to secure it. It won't be waterproof, but the leftover adhesive is usually more than strong enough to hold.

Step 15 — Remove the midframe



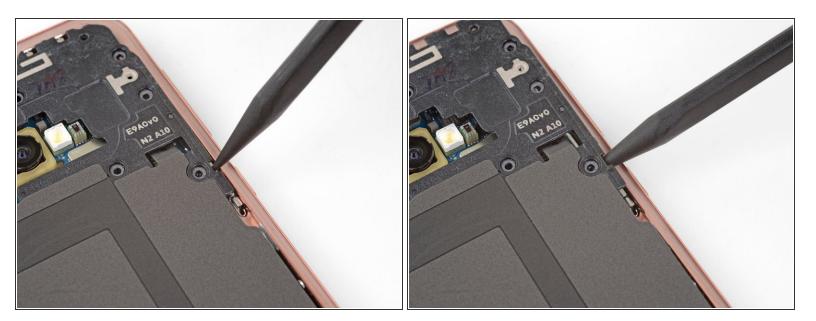
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Remove the eight 3.9 mm Phillips screws securing the upper midframe to the phone.

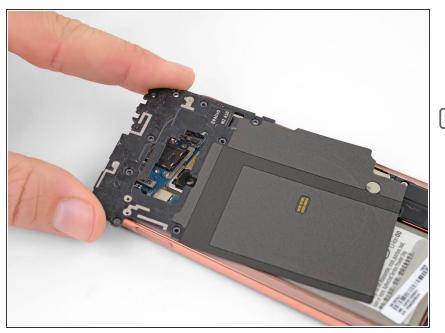


• Slide an opening pick under the bottom right corner of the upper midframe to separate the adhesive holding it to the lower midframe.

Step 17

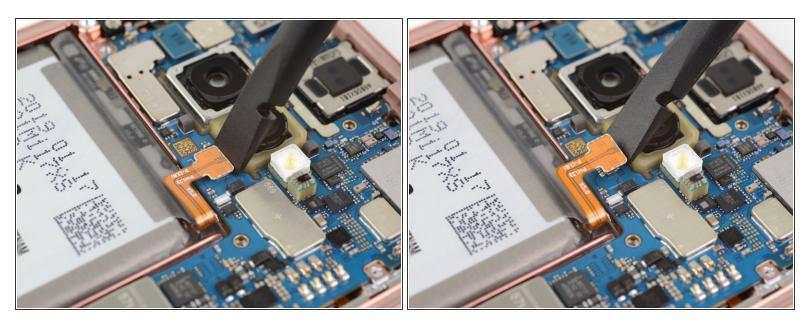


- Insert the point of a spudger in the small cutout on the right edge of the plastic part of the upper midframe, near the Bixby button.
- Use the point of the spudger to pry the midframe up from the phone chassis.



- Lift the midframe by the plastic section and remove it from the phone.
- To reinstall, first insert the top edge of the assembly into the phone's frame, and then gently press down on the rest of the assembly to snap it into place.

Step 19 — Disconnect the battery

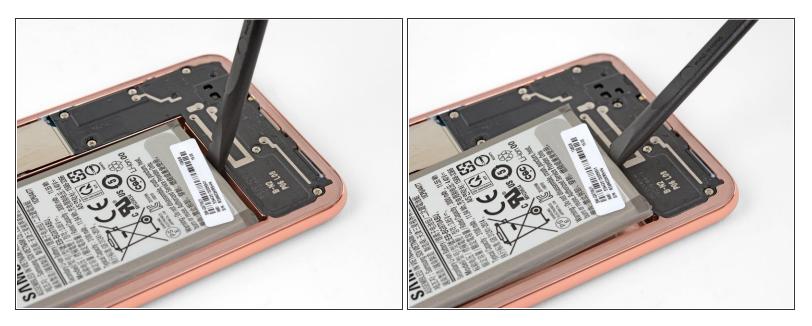


 Use the flat end of a spudger to pry the battery connector straight up from its socket and disconnect it.

Step 20 — Battery



- (i) This step can be completed using either <u>adhesive remover</u> or high concentration (over 90%) isopropyl alcohol.
- Prop the bottom edge of the phone up to angle the phone so that the adhesive remover will run from the bottom of the battery toward the top.
- Apply isopropyl alcohol or adhesive remover along the bottom edge of the battery. Allow it to sit for several minutes to allow the adhesive to weaken.



- Use the flat end of a spudger to carefully pry the battery out of the phone.
- Try your best not to deform the battery during this process. Soft-shell lithium-ion batteries can leak dangerous chemicals, catch fire, or even explode if damaged. Do not use excessive force or pry at the battery with metal tools.
- If you encounter significant resistance or the battery starts to deform, repeat the last step to further dissolve the adhesive.



- 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.
- To install a new battery and adhesive, <u>follow this guide.</u>

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

For optimal performance, <u>calibrate your newly installed battery</u> after completing this guide.

Take your e-waste to an <u>R2 or e-Stewards certified recycler</u>.

Repair didn't go as planned? Check out our <u>Answers community</u> for troubleshooting help.