

Samsung Galaxy S7 Edge Battery Replacement

Follow this guide to replace a dead or...

Written By: Arthur Shi



INTRODUCTION

Follow this guide to replace a dead or low-capacity battery for the Samsung Galaxy S7 Edge.

Note: The curved edge and strong adhesive make the initial opening procedure very challenging. Be patient, repeat multiple heat and pull cycles, and the adhesive will eventually loosen.

Before disassembling your phone, discharge the battery below 25%. A charged lithiumion battery can catch fire and/or explode if accidentally punctured.

If your battery is swollen, <u>take appropriate precautions</u>. **Do not heat your phone**. If needed, you can use a dropper or syringe to inject isopropyl alcohol (90+%) around the edges of the back cover to weaken the adhesive. Swollen batteries can be very dangerous, so wear eye protection and exercise due caution, or take it to a professional if you're not sure how to proceed.

TOOLS:

Phillips #00 Screwdriver (1) Spudger (1) iOpener (1) Suction Handle (1) iFixit Opening Picks (Set of 6) (1) Tweezers (1)

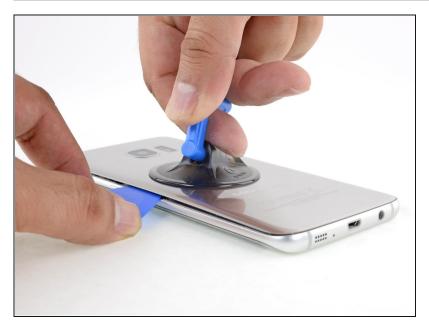
🌣 PARTS:

Galaxy S7 Edge Battery (1) Galaxy S7 Edge Rear Cover Adhesive (1) Galaxy S7 Edge Battery Adhesive Strips (1)

Step 1 — Rear Glass



- 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.
- Heat an iOpener and apply it to a long edge of the phone for about two minutes.
- (i) 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.



- Once the back panel is warm to the touch, apply a suction cup as close to the heated edge of the phone as you can while avoiding the curved edge.
 - (i) The suction cup will not adhere well on the curved portion of the glass.
 - (i) If the phone's back cover is cracked, the suction cup may not stick. <u>Try lifting it with</u> <u>strong tape</u>, or superglue the suction cup in place and allow it to cure so you can proceed.
- Lift on the suction cup and insert an opening pick under the rear glass.
- Due to the curved glass, you will be pushing up, rather than inserting parallel to the plane of the phone.
- 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.



• Once you have the pick firmly inserted into the glass, reheat and reapply the iOpener to soften the adhesive.

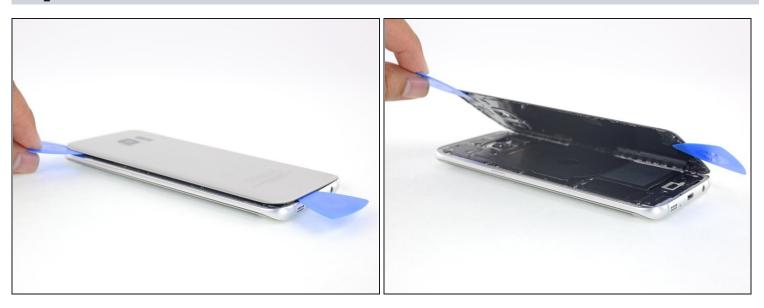


- Slide the opening pick up along the side of the phone, separating the adhesive.
- (i) Go slowly so that the tip doesn't slip out of the seam. If sliding becomes difficult, reheat and reapply the iOpener.
- Leave the pick in place and grab a second pick as you proceed to the next step. Leaving the pick inserted can help prevent the glue you just separated from re-adhering.



- Repeat the previous heating and cutting procedure for the remaining three sides of the phone.
- Leave an opening pick on each side as you continue to the next to prevent the adhesive from resealing.

Step 6



• Lift the glass and remove it from the phone.



🗷 To install a new back cover:

- Use <u>tweezers</u> to peel away any remaining adhesive from the phone's chassis. Then clean the adhesion areas with high concentration isopropyl alcohol (at least 90%) and a lint-free cloth to prep the surface for the new adhesive.
- Peel the adhesive backing off of the new rear glass, carefully line up one edge of the glass against the phone chassis, and firmly press the glass onto the phone.
- If you're reinstalling the old back cover, or using a back cover without adhesive preinstalled, <u>follow this guide</u>.
 - (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 glue is usually more than strong enough to hold.

Step 8 — Loudspeaker Assembly



• Remove the twelve 3.5 mm Phillips screws.



- Use the small notch on the lower left of the upper antenna to pry it out of the phone.
- Remove the upper antenna.



• Lift and remove the wireless charging coil from the phone.

Step 11



• Lift and remove the loudspeaker from the phone.

Step 12 — Battery Disconnect

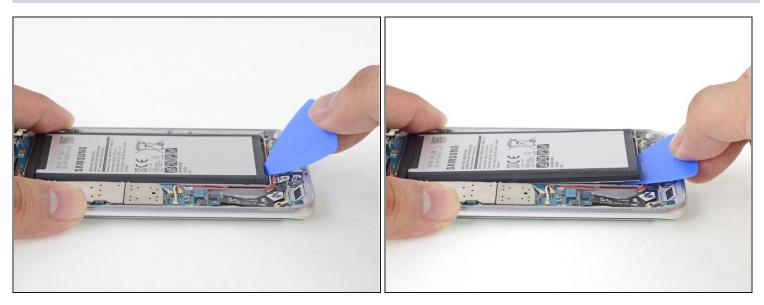


• Use the flat end of a spudger to disconnect the battery connector.

Step 13 — Battery



- <u>Prepare an iOpener</u> and apply it directly to the battery.
- Alternatively, apply some isopropyl alcohol under each corner of the battery and allow it to penetrate for several minutes to help weaken the adhesive.

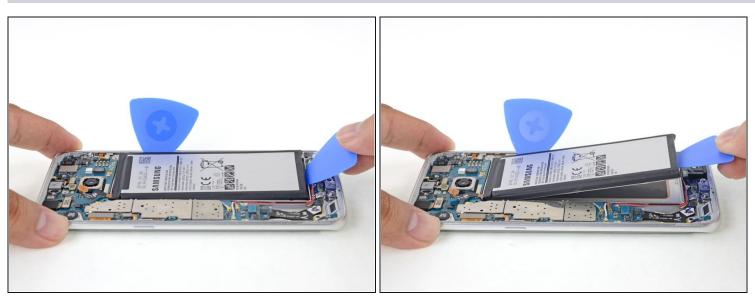


- Use an opening pick to pry the battery from the bottom.
- ⚠ You will be prying against the case directly above the daughterboard and antenna cables. Pry carefully to avoid damaging either of these components.
- (i) You may need to reheat and reapply the iOpener repeatedly to further soften to adhesive. The adhesive is tough and it may take a few tries to get the pick started under the battery.
- ⚠ 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.



• Slide the opening pick up the side of the battery to break apart any remaining adhesive.

Step 16



- Lift the battery out of the case.
- ⚠ 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.

After completing this guide, <u>calibrate your newly-installed battery</u>.