

Samsung Galaxy S9 Battery Replacement

Remove or replace a dying battery in the Samsung Galaxy S9.

Written By: Dominik Schnabelrauch



INTRODUCTION

Use this guide to replace the battery in your Samsung Galaxy S9.

Opening the Samsung Galaxy S9 will damage the waterproof seals on the device. If you do not replace the adhesive seals, your phone will function normally, but will lose its water protection.

Before disassembling your phone, discharge the battery below 25%. <u>If your battery is swollen</u>, do no heat your phone. 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.

You'll need replacement adhesive to reattach components when reassembling the device.



TOOLS:

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



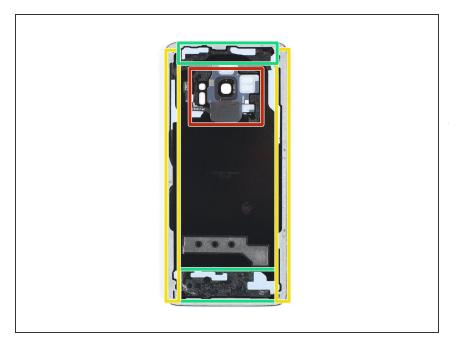
PARTS:

- Galaxy S9 Replacement Battery (1)
- Galaxy S9 Battery Adhesive Strips (1)
- Galaxy S9 Rear Cover Adhesive (1)

Step 1 — Rear Glass Removal



- Before you begin, switch off your phone.
- Apply a <u>heated iOpener</u> to a long edge of the phone to loosen the adhesive beneath the rear glass.
 Apply the iOpener for at least two minutes.
 - i You might need to reheat and reapply the iOpener several times during the removal procedure to get the adhesive warm enough to cut. Follow the iOpener instructions to avoid overheating.
- The adhesive of the Samsung
 Galaxy S9 is very strong. A hair
 dryer, heat gun, or hot plate may
 also be used if you aren't able to
 open the device with the iOpener.
 Be careful not to overheat the phone
 —the AMOLED display and internal
 battery are both susceptible to heat
 damage.



- In the following steps, you'll be cutting through the adhesive securing the back cover.
- The adhesive in the inside of the back cover is laid out as seen in the image.
- You'll be slicing through the adhesive in the areas shown:
 - Thick portions of adhesive
 - Thin areas of adhesive
 - Avoid prying or slicing in this area, to protect the fingerprint sensor flex cable.







- if the phone's rear glass is cracked, the suction cup may not stick. Try <u>lifting it with strong tape</u>, or superglue the suction cup in place and allow it to cure so you can proceed.
- Press a suction cup onto the back cover.
- Lift the back cover's bottom edge with your suction cup, opening a slight gap between the back cover and the frame.
 - This may require a significant amount of force, but you only need to open a very slight gap with the suction cup to insert your tool. 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.
- Insert an opening pick in the gap you created and slide it to the bottom right corner.
- Insert a second opening pick and slide it to the bottom left corner.
- Insert a third opening pick to prevent the adhesive from resealing during the rest of the removal procedure.





- While inserting only the tip of the opening pick, slide it from the bottom left corner along the side to the top.
- Slide the pick around the top corner and leave it there to prevent the adhesive from resealing.







- Slide the opening pick from the bottom right corner along the side to the top.
 - Apply more heat if the adhesive becomes hard to cut. During the removal process, the back cover is under tension all the time and is likely to break if the adhesive isn't softened enough.
- Slide the opening pick around the corner and cut the remaining adhesive at the top of the phone.
- non't open the phone all the way yet. The fragile fingerprint sensor cable still connects the back cover to the motherboard.

Step 6





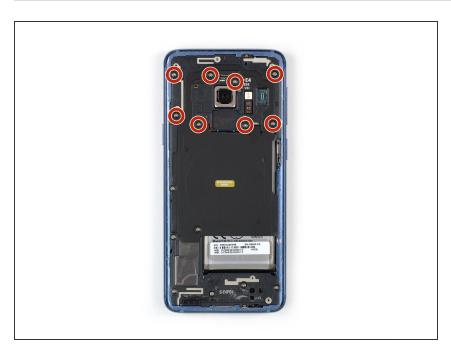
- Carefully lift the side of the rear glass where the volume button is located.
- Use the edge of a spudger to pry up and disconnect the fingerprint sensor flex cable.

This document was generated on 2022-08-16 11:32:59 PM (MST).



- Remove the rear glass.
- When reassembling follow this guide to replace the adhesive and reinstall the rear glass.
- In case you want to replace your rear glass follow this guide to transfer the rear camera bezel including the fingerprint.

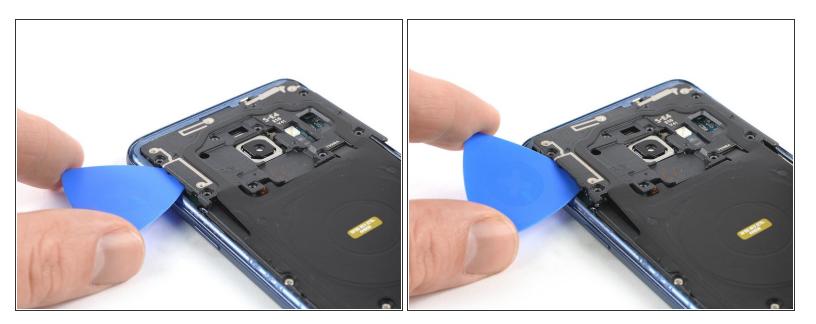
Step 8 — NFC Antenna and Charging Coil



 Remove the eight 4 mm Phillips #00 screws.



- Insert an opening pick under the right side of the plastic cover containing the NFC antenna and charging coil.
- Twist or pry to release the plastic clips securing the cover.



- Insert an opening pick under the left side of the plastic cover.
- Twist or pry to release the plastic clips securing the cover.

Step 11



 Remove the plastic cover containing the NFC antenna and charging coil.

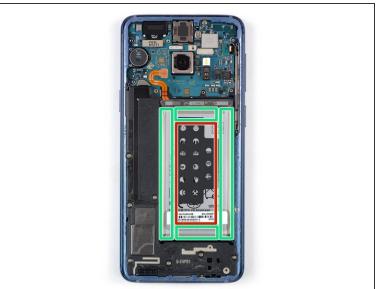
Step 12 — Battery Disconnection



 Use the flat end of a spudger to pry up and disconnect the battery flex cable.

Step 13 — Battery





- Use an iOpener to loosen the adhesive beneath the battery. Apply the iOpener for at least two
 minutes.
- In the following step, only apply the spudger in the areas marked in green, which is where the battery adhesive is located.
- Avoid this area. There's a gap in the mid-frame right below the battery, and you can accidentally damage the display through it.





- in case you have trouble to pry up the battery the adhesive may not be loose enough. You can apply some isopropyl alcohol under each corner of the battery and allow it to penetrate for several minutes to help weaken the adhesive.
- ↑ Try your best not to deform the battery during the following removal 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.
- Insert the flat end of a spudger at the top left corner of the battery where the flex cable is located and start to pry it up.
- Work your way down the left side of the battery and loosen the adhesive with the spudger.



 Insert the spudger at the top right corner of the battery and pry it up.



- 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, follow this guide.

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

If possible, turn on your phone and **test your repair** before installing new adhesive and resealing the phone.

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.