

Samsung Galaxy S6 Edge+ Display Replacement

Replace a cracked or broken Samsung Galaxy S6 Edge Plus screen.

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INTRODUCTION

Use this guide to replace the screen on your Samsung Galaxy S6 Edge+.

This guide instructs you to replace only the display while leaving the original frame, logic board, and battery in place. **Note**: some replacement screens for this phone come pre-installed in a new frame (a.k.a. chassis), which requires you to transplant all of your phone's internals and install a new battery. This procedure is very different, so make sure you have the correct part before starting this guide.

If the frame is damaged or bent, it's important to replace it, or else the new screen may not mount correctly and can suffer damage from uneven pressure.

The process of separating the display from the frame usually destroys the display, so don't follow this guide unless you intend to replace the display.

Removing the rear glass destroys the adhesive holding it in place. The adhesive will need to be replaced before the rear glass is replaced or reinstalled.



TOOLS:

- SIM Card Eject Tool (1)
- iOpener (1)
- Suction Handle (1)
- iFixit Opening Picks set of 6 (1)
- Tweezers (1)
- Phillips #00 Screwdriver (1)
- Spudger (1)



PARTS:

- Galaxy S6 Edge+ Screen (1)
- Galaxy S6 Edge Plus Rear Cover Adhesive (1)
- Galaxy S6 Edge Plus Touch Screen Adhesive (1)

Step 1 — SIM Tray







- Insert a paper clip or SIM card eject tool into the hole in the SIM card slot on the volume button side of the phone.
 - Do not insert the tool into the microphone hole or you could cause damage. Look for the outline of the SIM tray.
- Press to eject the SIM card tray.
- Remove the SIM card tray from the phone.

Step 2 — Rear Glass



- Heat an iOpener and apply it to the volume button side of the phone for about two minutes.
 - 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 3







- Once the back panel is hot to the touch, apply a suction cup near the center of the phone, and as close as possible to the edge of the panel.
- Lift on the suction cup to create a small gap underneath the rear glass, and insert an opening pick into the gap.



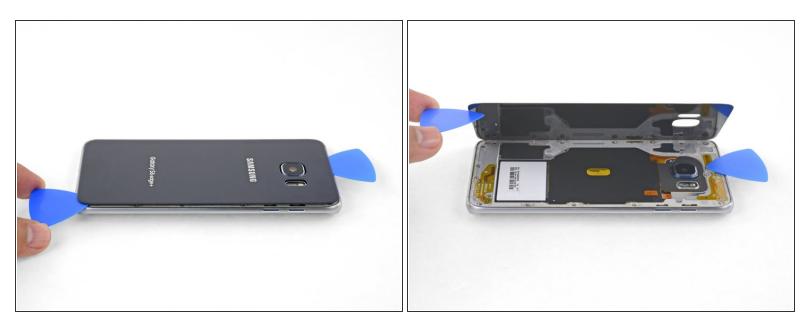




- Slide the pick along the side of the phone to cut the adhesive securing the rear panel.
 - (i) Go slowly so that the pick doesn't slip out of the seam. If cutting becomes difficult, reheat and reapply the iOpener.



- Repeat the heating and cutting procedure for the remaining three sides of the phone.
- Leave an opening pick under each edge to prevent the adhesive from resealing.



- Use an opening pick to slice through any remaining adhesive.
- Remove the rear glass.



- To reinstall the back cover:
 - First use tweezers to peel away any remaining adhesive from both the back cover and the phone's chassis.
 - Then, clean the adhesion areas with high concentration isopropyl alcohol (at least 90%) and a lintfree cloth. Swipe in one direction only, not back and forth. This will help prep the surface for the new adhesive.
 - Be sure to turn on your phone and test your repair before installing new adhesive and resealing the phone.
 - Replacement adhesive comes in a pre-cut sheet to match the exact contours of the back cover. The sheet is asymmetrical, so make sure the screw holes in the adhesive sheet line up with the screws on the frame before applying the adhesive.
 - i If the adhesive sheet is not available, you can use a high-bond double-sided tape, such as <u>Tesa 61395</u>.

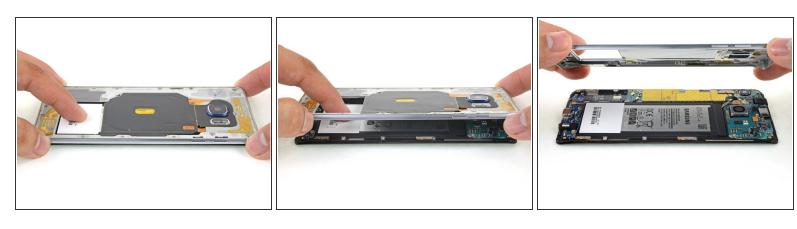
 After installing the rear cover, apply strong, steady pressure to your phone for several minutes to

- help the adhesive form a good bond, such as by placing it under a stack of heavy books.
- 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 — Midframe

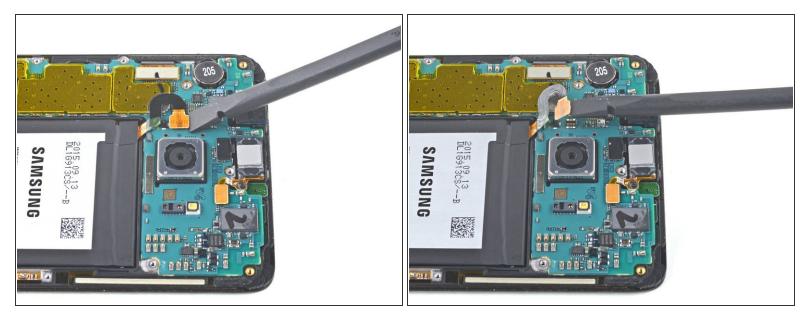


 Remove eighteen 3.2 mm screws from the midframe.



 Press down on the back of the battery while you lift up on the edges of the midframe to separate the midframe from the rest of the phone.

Step 10 — Motherboard



Use the flat end of a spudger to disconnect the battery ribbon cable from the motherboard.





- Use the flat end of a spudger to pry the display cable connecter straight up out of its socket.
- (i) If you have a replacement display, you can pause here, plug in the battery, and plug in your new display to make sure that it functions correctly.
 - After testing the replacement display, unplug the battery and replacement display and continue with the guide.





Use the flat end of a spudger to disconnect the front-facing camera ribbon cable.

Step 13





 Use the flat end of a spudger to disconnect the front-facing sensor array ribbon cable by prying it straight up from its socket.







Use the point of a spudger to disconnect the two antenna cables.







- ⚠ Do not lift the motherboard all the way out in this step; the daughterboard ribbon cable on the underside needs to be disconnected first.
- Grip the edges of the motherboard and lift up slightly.
- Use the point of a spudger to move the battery and sensor assembly ribbon cables away from the edges of the motherboard.
- With the battery and sensor assembly cables out of the way, hinge the motherboard up and away from the display, taking care not to put too much stress on the daughterboard ribbon cable.



- Use the flat end of a spudger to disconnect the daughterboard ribbon cable from the underside of the motherboard.
- Remove the motherboard.

Step 17 — Display



- If your display glass is badly cracked, tape over the glass to contain stray glass and make prying easier.
- Heat an iOpener and apply it to the left edge of the display for at least two minutes.
 - You may need to reheat and reapply the iOpener several times to get the phone warm enough. Follow the iOpener instructions to avoid overheating.
- (i) As you're waiting for the adhesive to soften, move on and read the following step to get an idea of where to pry.





- ♠ In the following steps, extra caution is required in certain areas to avoid damage to the phone:
 - Cut very gently near the "recent" and "back" capacitive buttons near the bottom of the display.
 These are adhered to the display and are very easy to tear.
- While the OLED panel and display cable will be replaced with the new display, the capacitive buttons must be reused, so take care not to damage them.







- Insert an opening pick into the small gap between the display and the display frame, near the middle of the battery-side edge of the display.
 - When you insert the pick make sure it is on top of the pink shield layer of the display to properly cut the adhesive.
- Slide the pick along the entire edge of the display, separating the adhesive.
 - ⚠ Stop before the pick gets to the daughterboard at the bottom of the phone, as there are delicate capacitive buttons adhered to the display under the daughterboard that are easily damaged.







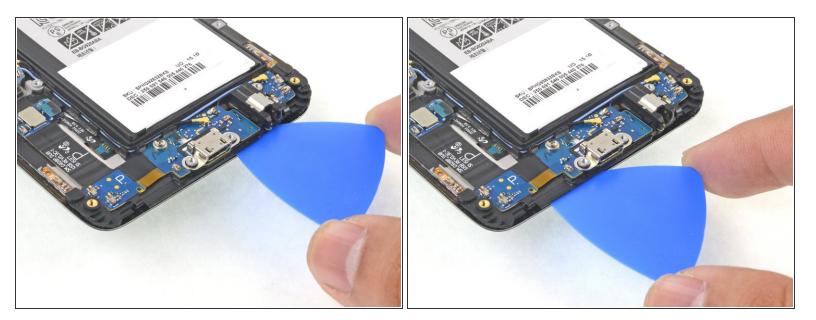
- Insert the pick as far as you can while maintaining a firm grip.
- Slide the pick back up the edge of the display to separate the last of the adhesive.
- (i) If cutting becomes difficult, reheat and reapply the iOpener.
- After cutting the adhesive, leave the pick in the side of the display to prevent the display from readhering to the frame.





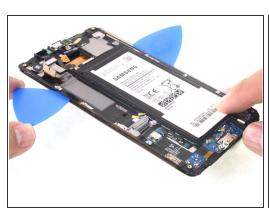


- Insert an opening pick no more than 0.25 inches (~6 mm) into the bottom battery-side corner of the display, near the top of the daughterboard.
- Slide the pick around the corner of the display, stopping before you reach the "recent" button ribbon cable.
- if you do break either of the capacitive buttons or ribbon cables, you can replace the daughterboard assembly, which includes new capacitive buttons.



- Heat and apply an iOpener to the bottom of the display.
- Insert an opening pick no more than 0.25 inches (~6 mm) in the bottom edge of the display, near the headphone port. Inserting it farther may damage the home button.
- Avoid getting the pick too close to either small ribbon cable on the bottom edge of the display.

 These lead to capacitive buttons that are adhered to the display and are easily torn.
- Slide the pick along the bottom edge of the display, separating the adhesive. Stop before you
 reach the "back" button ribbon cable.







- Heat an iOpener and apply it to the display cable side of the display.
- Insert an opening pick into the gap along the display cable edge of the display, just below the display cable.
 - (i) As with the <u>first edge</u>, make sure the opening pick slides into the gap on top of the pink shield layer.
- Slide the pick down the edge of the display, stopping before you reach the daughterboard.



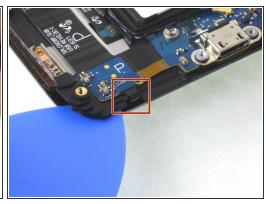




- Insert the pick as far as you can while maintaining a firm grip.
- Slide the pick back up the edge of the display, cutting the remaining adhesive.
 - (i) The display cable threads through this side of the phone and may interfere with the opening pick if the pick is inserted too far.
- (i) If cutting becomes difficult, reheat and reapply the iOpener.
- After cutting the adhesive, leave the pick in the side of the display to prevent the display from readhering to the frame.



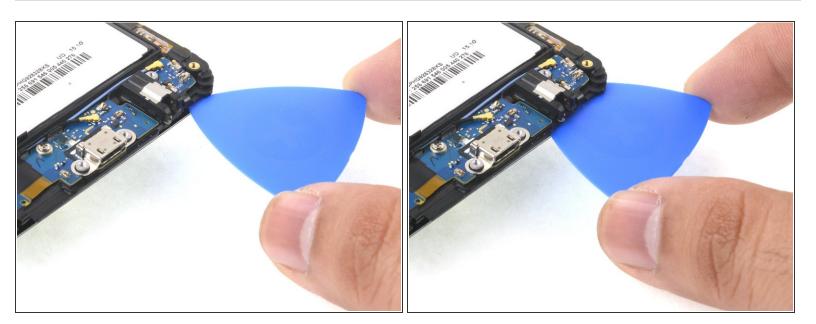




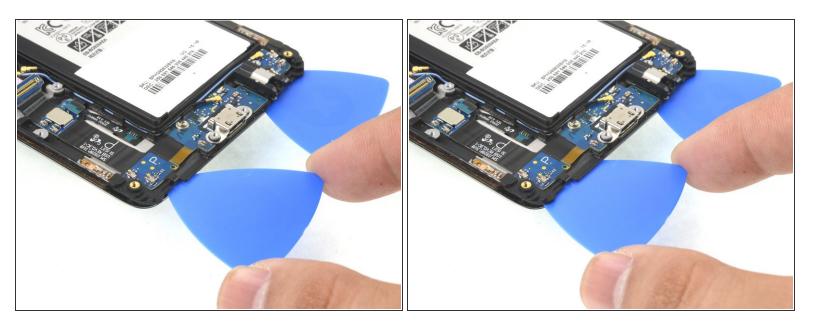
- Insert an opening pick no more than 0.25 inches (~6 mm) into the bottom, display cable side corner of the display, near the top of the daughterboard.
- Slide the pick around the corner of the display, stopping before you reach the "back" button ribbon cable.



- Insert an opening pick no more than 0.25 inches (~6 mm) into the gap at the top edge of the display.
- ♠ Inserting the pick too far may damage the front-facing camera or earpiece speaker.
- Slide the opening pick along the top edge of the display, cutting the adhesive.
- Leave the pick in the top edge to prevent the adhesive from resealing.



- Apply a heated iOpener to the bottom edge of the display for about one minute.
- Gently insert an opening pick between the display and the "recent" button, no more than 0.5 (~12 mm) inches deep to avoid damaging the display.
- ★ Keep a close eye on the button's ribbon cable as you insert the pick. The cable is fragile and very easy to tear. If the pick is hard to insert or the cable starts to stretch, apply more heat.
- Leave the pick under the display to prevent the button from re-adhering to the display.



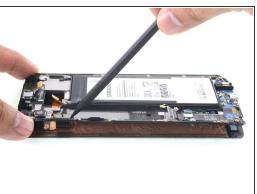
- Insert an opening pick between the "back" capacitive button and the display.
- Leave the pick under the display to prevent the button from re-adhering to the display.





- Insert an opening pick in between the display and the display frame on the battery side.
- Twist the pick to pry apart the display and the frame.
- if any part of the display stays stuck, apply more heat and try to cut any remaining adhesive in that area.
- ① Do not remove the display at this point. The display cable is still threaded through the display frame.







- Slowly lift the display frame away from the display.
- Use a spudger to push the display cable connector away from the edges of the hole in the display frame and gently thread the cable through the hole.
- With the display cable connector safely through the display frame, completely separate the display from the frame.



- Before installing a new display, it's very important to remove all traces of the old adhesive from the frame, while taking special care to remove any small glass fragments.
- After removing all traces of glue and glass from the frame, clean the adhesion areas with 90% (or higher) isopropyl alcohol and a lint-free cloth or coffee filter. Swipe in one direction only, not back and forth.
 - This helps remove any remaining adhesive residue and preps the surface for the new adhesive.
- If the frame is bent, or if any glue or glass remnants are left behind, the new display will not mount correctly and may be damaged. If necessary, replace the frame.
- The best way to secure the new screen is with a sheet of custom-cut double-sided tape. Apply the tape to the back of the screen, then carefully feed the display cable through the frame. Align the screen and press it into place.

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