

Samsung Galaxy S6 Edge Screen Replacement

Follow this guide to learn how to replace the...

Written By: Arthur Shi



INTRODUCTION

Follow this guide to learn how to replace the display assembly on your Samsung Galaxy S6 Edge.

Use this guide if you are replacing the display assembly only. If your replacement part comes with a frame, <u>follow this guide instead</u>.

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.

This guide involves removing the rear glass. Removing the rear glass destroys the adhesive holding it in place. Follow <u>this guide</u> to reinstall the rear glass.

TOOLS:

Suction Handle (1)

Tweezers (1)

Spudger (1)

Precision Tweezers Set (1)

SIM Card Eject Tool (1)

iOpener (1)

iFixit Opening Picks (Set of 6) (1)

Phillips #00 Screwdriver (1)

PARTS:

Galaxy S6 Edge Screen (1)

NuGlas Tempered Glass Screen

Protector for Galaxy S6 Edge (1)

Galaxy S6 Edge Touch Screen Adhesive

(1)

Galaxy S6 Edge Rear Cover Adhesive

(1)

Step 1 — Display assembly guide differentiation



- If your replacement part looks like the first image, follow the <u>display assembly and</u> <u>frame replacement guide</u>.
- If your replacement part looks like the second image, follow the <u>display assembly</u> replacement guide.

Step 2 — SIM Tray



- Insert a paper clip or SIM eject tool into the hole in the SIM card slot on top 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 3 — iOpener Heating





- *i* We recommend that you clean your microwave before proceeding, as any nasty gunk on the bottom may end up stuck to the iOpener.
- Place the iOpener in the center of the microwave.

⚠ For carousel microwaves: Make sure the plate spins freely. If your iOpener gets stuck, it may overheat and burn.



- Heat the iOpener for thirty seconds.
- Throughout the repair procedure, as the iOpener cools, reheat it in the microwave for an additional thirty seconds at a time.
- ⚠ Be careful not to overheat the iOpener during the repair.
 Overheating may cause the iOpener to burst. Do not attempt to heat over 100°C (212°F).
- ⚠ Never touch the iOpener if it appears swollen.
- ⚠ If the iOpener is still too hot in the middle to touch, continue using it while waiting for it to cool down some more before reheating. A properly heated iOpener should stay warm for up to 10 minutes.



- Remove the iOpener from the microwave, holding it by one of the two flat ends to avoid the hot center.
- ⚠ The iOpener will be very hot, so be careful when handling it. Use an oven mitt if necessary.

Step 6 — Alternate iOpener heating method



- (i) If you don't have a microwave, follow this step to heat your iOpener in boiling water.
- Fill a pot or pan with enough water to fully submerge an iOpener.
- Heat the water to a boil. **Turn off the heat.**
- Place an iOpener into the hot water for 2-3 minutes. Make sure the iOpener is fully submerged in the water.
- Use tongs to extract the heated iOpener from the hot water.
- Thoroughly dry the iOpener with a towel.
 The iOpener will be very hot, so be careful to hold it only by the end tabs.
- Your iOpener is ready for use! If you need to reheat the iOpener, heat the water to a boil, turn off the heat, and place the iOpener in the water for 2-3 minutes.

Step 7 — Rear Glass





- (i) 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.
- (i) If your glass is shattered, put packing tape over the entire panel to hold it together during the removal process.
- Lay the heated iOpener over the rear panel for about two minutes to loosen the adhesive around the edge of the glass.
 - ② You may need to reheat and reapply the iOpener several times to get the phone warm enough. Follow the iOpener instructions to avoid overheating.
- Shift the iOpener to heat the remaining section of the panel for another two minutes.

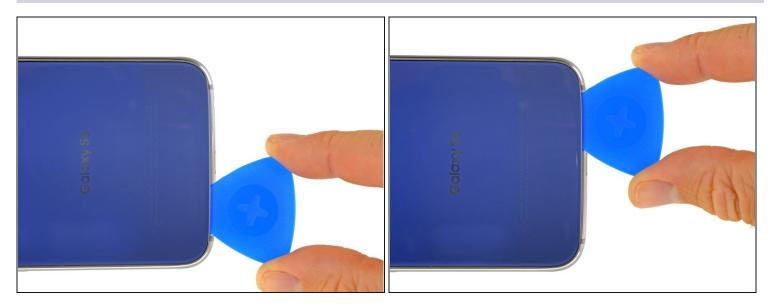
⚠ A hair dryer, heat gun, or hot plate may also be used, but be careful not to overheat the phone—the OLED display and internal battery are both susceptible to heat damage.







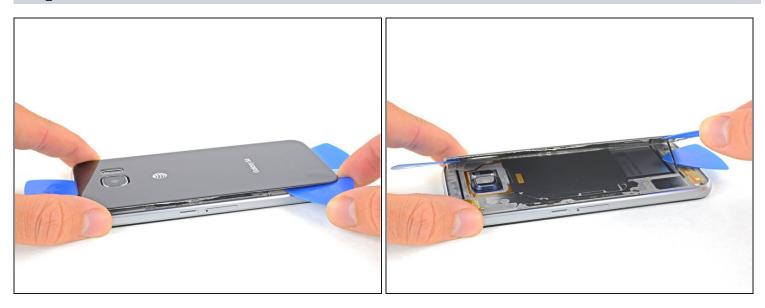
- Once the rear glass is hot to the touch, apply a suction cup near the bottom edge of the glass.
- Lift on the suction cup to create a small gap underneath the rear glass, and insert an opening pick into the gap.
- (i) Optionally, once the pick is inserted, you can add a few drops of isopropyl alcohol into the gap to help weaken the adhesive in the following steps.



- Slide the pick along the bottom edge of the phone to slice through the adhesive securing the rear glass.
- (i) Afterward, it may help to 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.
- (i) Re-heat the rear glass as needed to prevent the glue from cooling and hardening.



- 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 install new rear glass:
 - Use <u>tweezers</u> to peel away any remaining adhesive from the phone's chassis.
 - Clean the adhesion areas with high concentration isopropyl alcohol (at least 90%) and a lint-free cloth. Swipe in one direction only, not back and forth. This will help 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 rear glass, or using rear glass without adhesive preinstalled, follow this guide.

Step 13 — Midframe Assembly



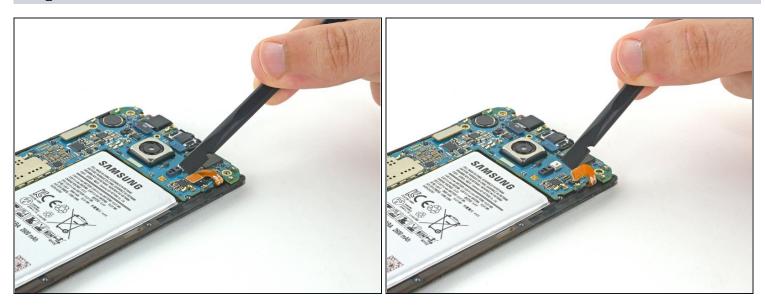
• Remove the thirteen 3.3 mm Phillips #00 screws from the midframe.

Step 14



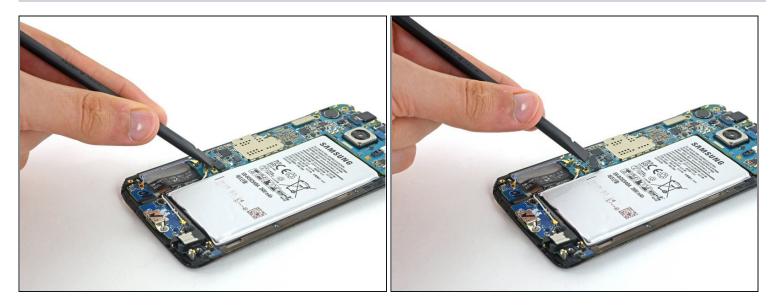
• Press down on the back of the battery and lift up on the edges of the midframe to separate it from the rest of the phone.

Step 15 — Motherboard Removal



• Using the flat end of the spudger, disconnect the battery ribbon cable from the motherboard.

Step 16

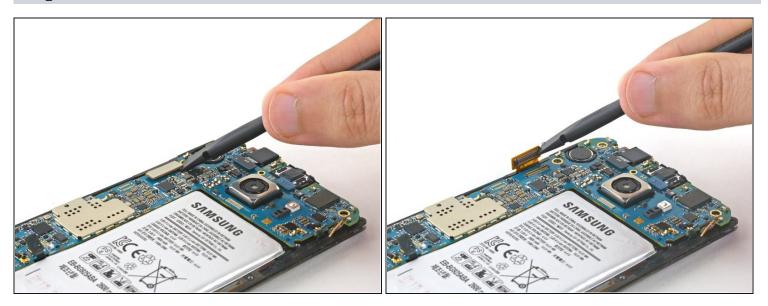


• Disconnect the home button ribbon cable from the motherboard.

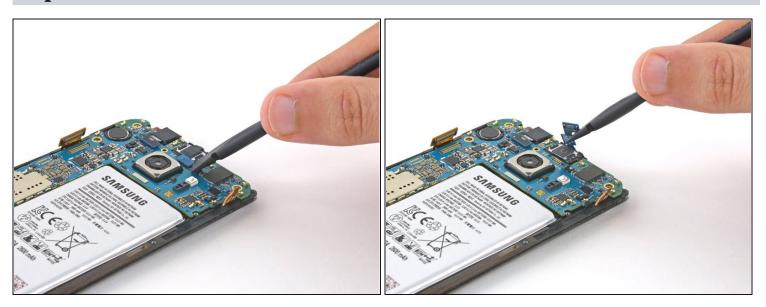


• Use the pointed end of a spudger to disconnect the two antenna interconnect cables from the motherboard.

Step 18



• Disconnect the display ribbon cable from the motherboard using the flat end of the spudger.

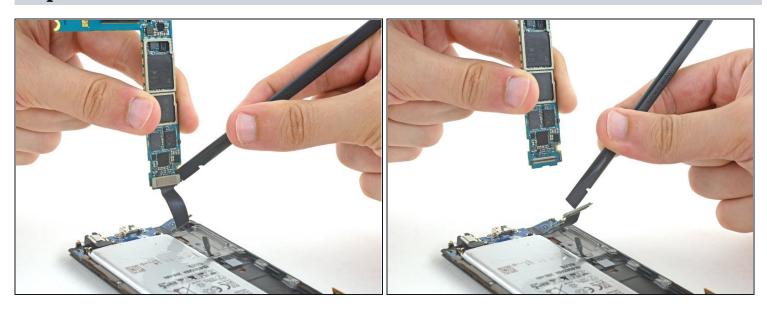


• Disconnect the earpiece ribbon cable from the motherboard.





- ⚠ The motherboard is an ESD sensitive component and should be handled with care. iFixit recommends using a anti-static bracelet whenever handling components of this nature to avoid damage.
- Grip the motherboard on both edges toward the top of the device.
- ⚠ Do not lift the motherboard all the way out in this step; the ribbon cable on the underside needs to be disconnected first.
- Lift the motherboard up and away from the display, taking care not to put too much stress on the daughterboard ribbon cable.

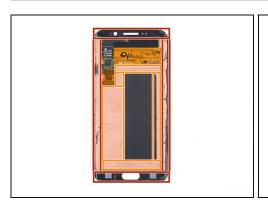


• Disconnect the daughterboard ribbon cable from the underside of the motherboard.

Step 22 — Screen



- Prepare an iOpener and apply to the left edge of the phone for about a minute.
 - 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) While you are waiting, read through the next step to get an idea of where to pry.







- The display edges are secured by strips of strong foam adhesive.
- Strong double-sided tape covers the entire copper surface.
- Cut very carefully 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.
- *i* 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 heated edge of the phone, between the plastic frame and the display.
 - (i) The pick should slide underneath the plastic and remain above the copper colored shielding.
 - (i) If you can see the pick through front glass, the pick is riding on top of the display panel. Pull the pick out, angle it so that the point aims more towards the plastic frame side, and try again.
- (i) Keep in mind that the display cable threads through the midframe just above the midpoint of the right edge. It may interfere with your cutting if the pick is too deep.

Step 25



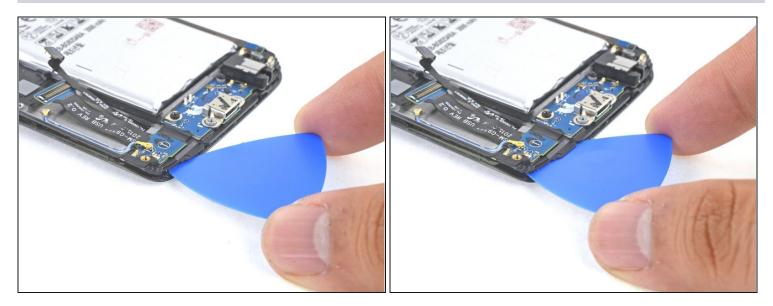
Slide the pick along the edge to cut through the adhesive.



- Repeat the cutting process for the top edge.
 - ⚠ Use a little extra caution when prying near the top edge so as not to damage the front-facing sensors and earpiece speaker.
- Keep an opening pick in the edge you've worked on to prevent it from re-adhering.
- (i) If the cutting becomes difficult, <u>heat an iOpener</u> and apply it to the edge.

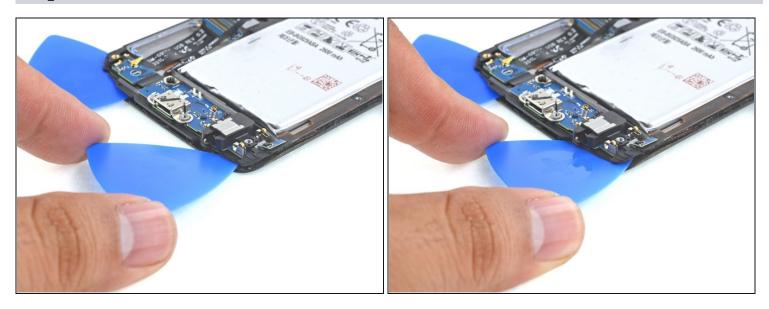


- Continue to cut through the adhesive on the other long side of the phone. Try to slice as deep as you can to separate the double-sided tape.
- Leave a pick in the edge you just cut to prevent the edge from resealing.



- 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 "back" button, no more than 0.5 (~12 mm) inches deep to avoid damaging the display.
- Leave the pick there to keep the edge from resealing.

Step 29



• Repeat the same procedure for the "recents" button.





- Use your picks as needed to finish separating the adhesive beneath all areas of the display.
- ⚠ Do not completely remove the plastic frame from the display yet, the display cable is still threaded through the midframe.
- Gently lift the battery edge of the plastic frame upwards, separating the plastic frame from the display.







- As you lift the plastic frame away from the display, carefully thread the display ribbon and connector out of the frame.
- Remove the plastic frame.



- A 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.
- ⚠ 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.