

Samsung Galaxy S7 Screen Replacement

Learn how to replace a cracked or broken OLED display and digitizer on your Samsung Galaxy S7.

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INTRODUCTION

Use this guide to replace a cracked or faulty OLED display on your Samsung Galaxy S7.

Be aware that the video guide *does not* match the step-by-step guide below, it is an older edition of the guide.

The video guide recommends removing the battery, SIM tray, and motherboard. This is not necessary, but it does make heating the phone safer. This procedure is only recommended if you're replacing the battery and the screen at the same time.

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. 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.

If your screen is badly shattered, wear eye protection, and apply a screen-protector, or tape, to the display to help contain glass shards.



TOOLS:

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



PARTS:

- Galaxy S7 Screen (1)
- Galaxy S7 Rear Cover Adhesive (1)
- Galaxy S7 Touch Screen Adhesive (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.
- Apply a <u>heated iOpener</u> to a long edge 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.







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- When 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 make a good seal on the curved portion of the glass.
 - 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.
- Lift on the suction cup and insert an opening pick under the rear glass.
 - The rear glass can break if you use too much force or attempt to pry with metal tools.
 - ② 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.
 - (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.



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





- Slide the opening pick down 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.

Step 5

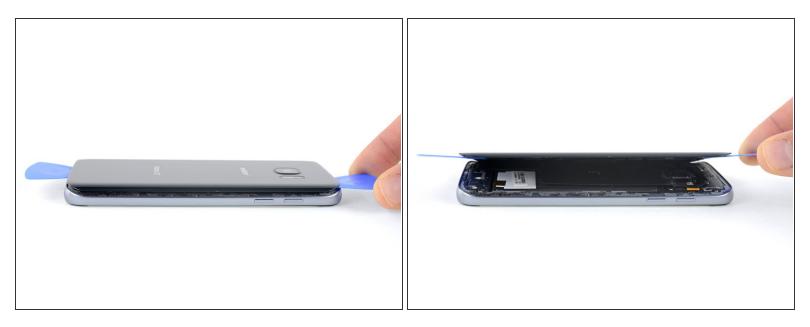




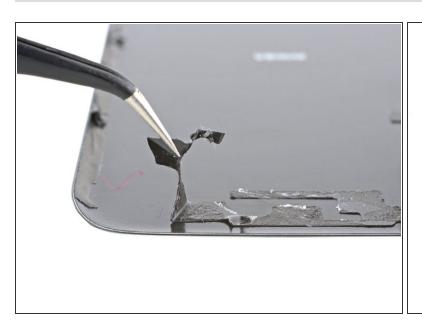


- Repeat the previous heating and cutting procedure for the remaining three sides of the phone.
- Leave an opening pick in each edge of the phone as you continue to the next to prevent the adhesive from resealing.

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Lift the glass and remove it from the phone.





- To reinstall the back cover with a custom-cut adhesive strip, follow this guide.
 - If you're cleaning the midframe surface with isopropyl alcohol, be careful not to get any alcohol on the wireless charging coil. The coil coating will break down if it contacts alcohol.
 - Be sure to turn on your phone and test your repair before installing new adhesive and resealing the phone.
- (i) 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 — NFC Antenna and Charging Coil Assembly



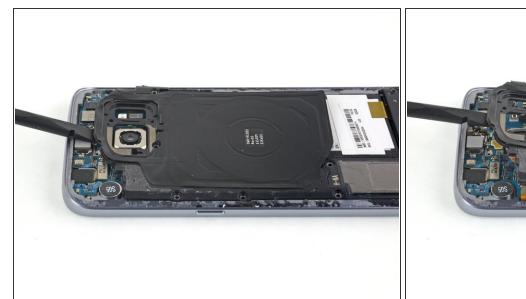
 Remove the eight 3.5 mm Phillips screws securing the NFC antenna and charging coil assembly.







- Insert the tip of a spudger into the small notch on the left side of the antenna assembly, and pry the assembly up and out of the frame.
- Remove the antenna assembly.





Use the flat end of a spudger to lift the charging coil assembly out of the phone.

Step 11 — Battery Connector





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

Step 12 — Screen





Use the flat end of a spudger to unplug the display and digitizer connector.



- Prepare an iOpener and apply to a long edge of the phone for about 2 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.
 - The glue securing the display can be significantly stronger than the glue that secures the back cover. If necessary, switch to a hair dryer or heat gun in order to apply enough heat to weaken the adhesive.







- Once the screen is warm to the touch, apply a suction cup as close to the heated edge of the phone as you can.
- If your display is badly cracked, the suction cup may not stick. Try <u>lifting the display with strong</u> tape, 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 display assembly.

Step 15



 Once the pick is firmly inserted underneath the display, <u>reheat</u> and reapply the iOpener to soften the display adhesive.





- Slide the opening pick down the side of the phone, separating the adhesive.
 - The display cable is located just above the midpoint on this side, and may interfere with your pick if you pry too deeply.
- 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.







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- 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 prevent the adhesive from resealing.

Don't cut too deep on the top or bottom, or you may damage the front-facing sensors or speaker assembly on the top, or capacitive buttons on the bottom.

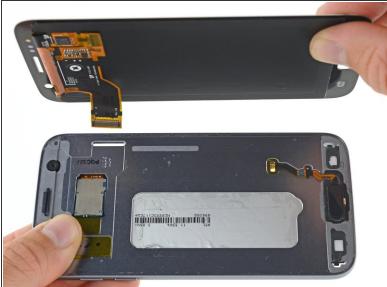
Step 18



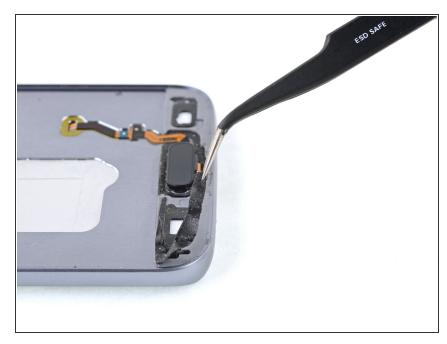


 Pry up the side of the display opposite the display cable so that the cable acts like a hinge as the phone opens.





- Carefully lift the display away from the mid frame, gently pulling the display connector through the hole in the mid frame.
- Remove the display.



- Follow this link for a detailed screen adhesive application guide.
- 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.
 - This helps remove any remaining adhesive residue and preps the surface for the new display.
- 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.

To reassemble your device, apply the adhesive to the rear cover and follow these instructions in reverse order.