



Samsung Galaxy M51 Screen Replacement

How to replace a cracked or broken screen on your Samsung Galaxy M51.

Written By: Adriana Zwink



INTRODUCTION

Use this guide to replace a cracked or broken screen on your Samsung Galaxy M51.

If the frame is deformed, it's important to replace it to make sure the new screen will mount correctly and won't suffer damage from uneven pressure.

Before disassembling your phone, discharge the battery below 25%. The battery can catch fire and/or explode if accidentally punctured, but the chances of that happening are much lower if discharged.

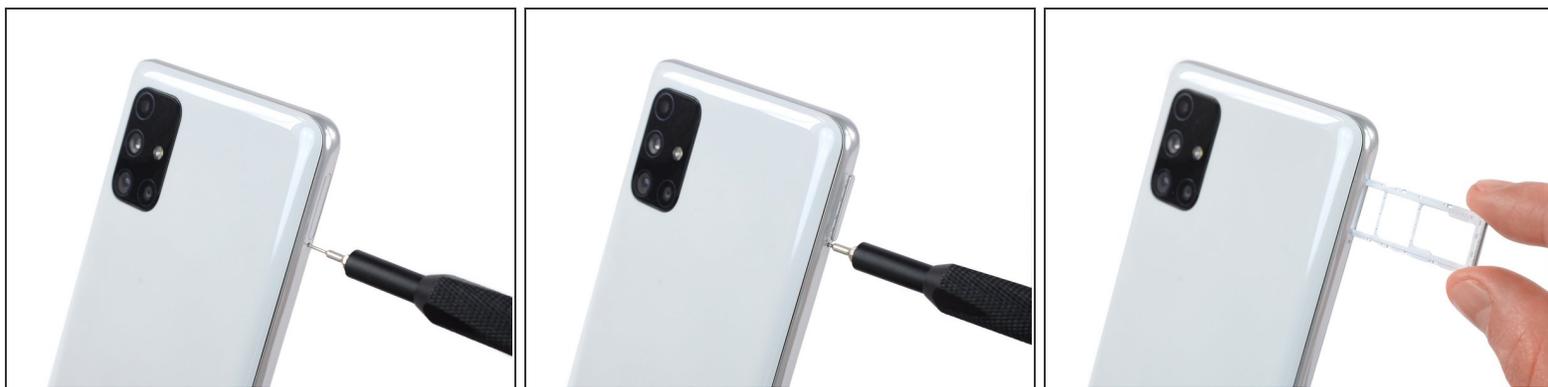
Note: This guide instructs you to replace only the screen while leaving the original frame and motherboard in place. However, some replacement screens for this phone come pre-installed in a new frame (a.k.a. chassis), which requires a very different procedure. Make sure you have the correct part before starting this guide.

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

TOOLS:

- [SIM Card Eject Tool](#) (1)
 - [iOpener](#) (1)
 - [iFixit Opening Picks set of 6](#) (1)
 - [Suction Handle](#) (1)
 - [Spudger](#) (1)
 - [Phillips #00 Screwdriver](#) (1)
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Step 1 — How to remove the SIM Tray



- Insert a SIM eject tool into the small hole on the SIM card tray on the left edge of the phone.
 - Press firmly to eject the tray.
 - Remove the SIM card tray.
- i** When reinserting the cards, make sure to properly orient them in the tray.

Step 2 — Heat an iOpener



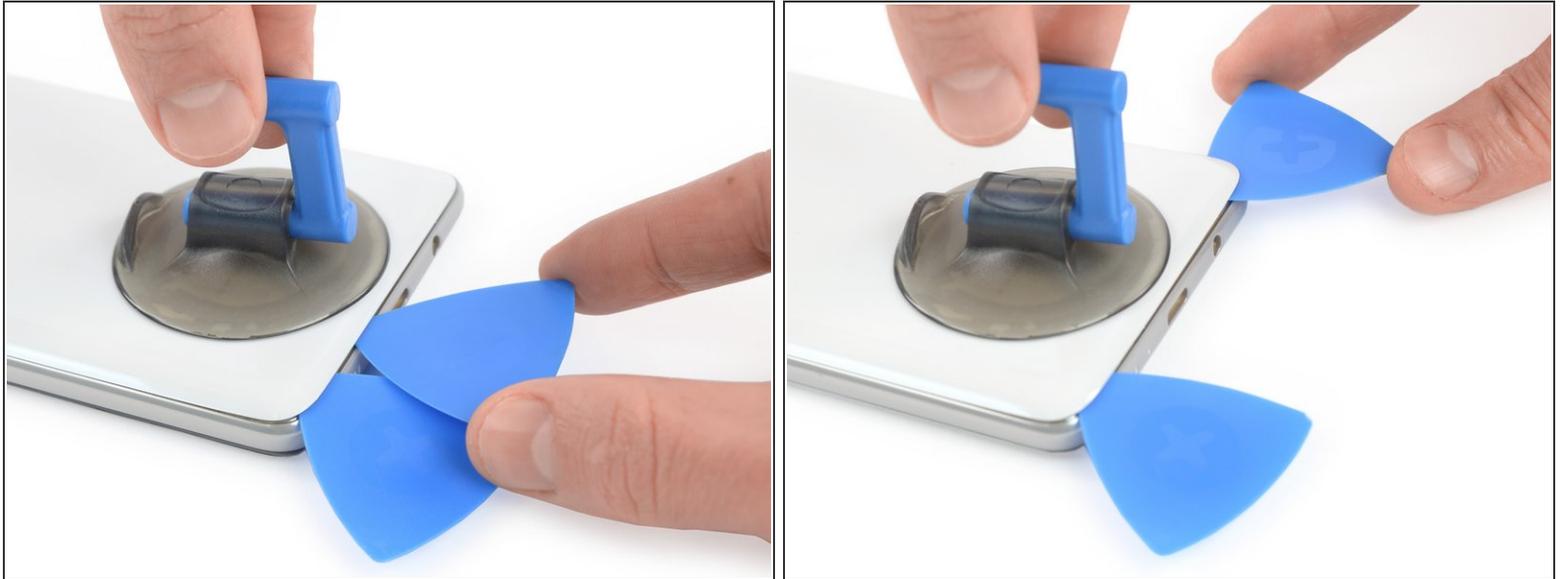
- i** Before beginning this procedure, completely power off your phone.
- [Prepare an iOpener](#) and apply it to the back cover for at least two minutes.
- i** A hair dryer, heat gun, or hot plate may also be used, but be careful not to overheat the phone—the display and internal battery are both susceptible to heat damage.

Step 3 — Create an opening gap



- Apply a suction handle to the back cover, as close to the USB-C port as possible.
- Lift the back cover's bottom edge with your suction handle, opening a slight gap between the back cover and the frame.
- Insert the tip of an opening pick in the gap you created.
- Slide the opening pick to the bottom left corner and leave it there.

Step 4 — Slice through the adhesive



- Insert a second opening pick and slide it from the bottom left corner to the bottom right corner to cut the adhesive.
- Leave the opening picks in place to prevent the adhesive from resealing.

Step 5



- Insert a third opening pick under the bottom right corner of the back cover.
 - ⓘ If you have any trouble, apply more heat to further soften the adhesive. Follow the iOpener instructions to avoid overheating.
- Slide it along the right edge of the phone to the top right corner to cut the adhesive.
- Leave the opening pick in the top right corner to prevent the adhesive from resealing.

Step 6



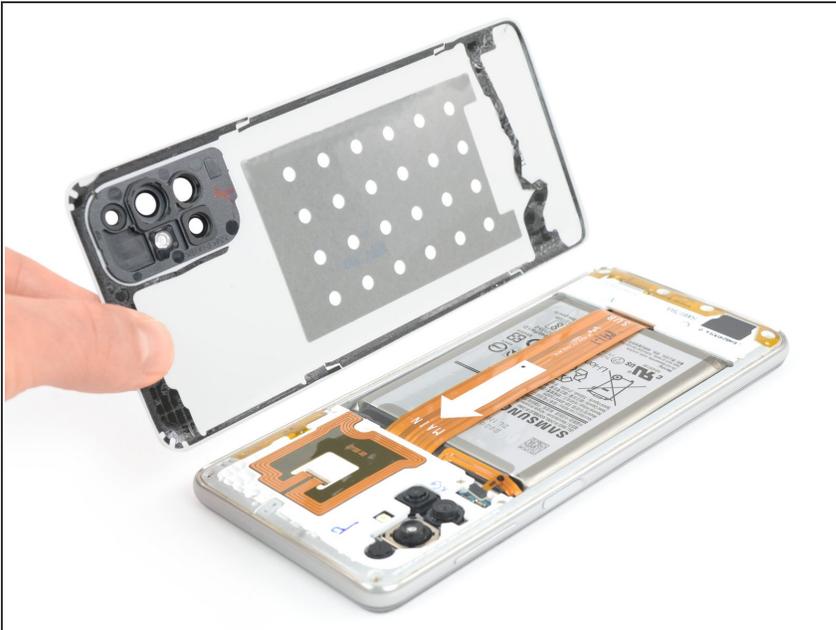
- Insert a fourth opening pick under the top right corner.
- Slide it along the top edge to the left corner to cut the adhesive.
- Leave the opening pick in its place to prevent the adhesive from resealing.

Step 7



- Insert a fifth opening pick on the top left corner and slide it along the edge to cut the remaining adhesive.

Step 8 — Remove the back cover



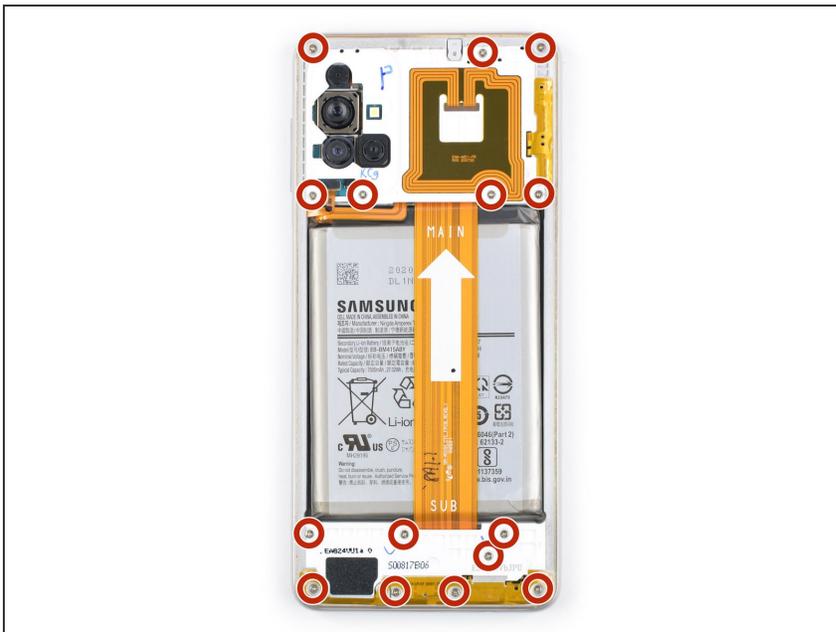
- Remove the back cover.

Step 9 — Disconnect the fingerprint sensor



- Use the pointy end of a spudger to disconnect the fingerprint sensor from the motherboard.

Step 10 — Remove the screws



- Remove the 15 4.0 mm-long Phillips #00 screws securing the midframe.

Step 11 — Release the plastic clips



i The midframe is held by plastic clips.

- Insert an opening pick between midframe and display near the usb-c port.
- Slide the opening pick to bottom right corner to release the plastic clips.

Step 12



- Slide the opening pick along the right edge to release the plastic clips.

Step 13



- Slide the opening pick along the top edge to release the midframe from the plastic clips.

Step 14



- Slide the opening pick along the left edge to release the plastic clips.

Step 15 — Remove the midframe



- Remove the midframe.

Step 16 — Battery Disconnect



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

Step 17 — Disconnect the screen



- Use the flat end of a spudger to disconnect the display cable from the daughterboard.

Step 18 — Heat an iOpener



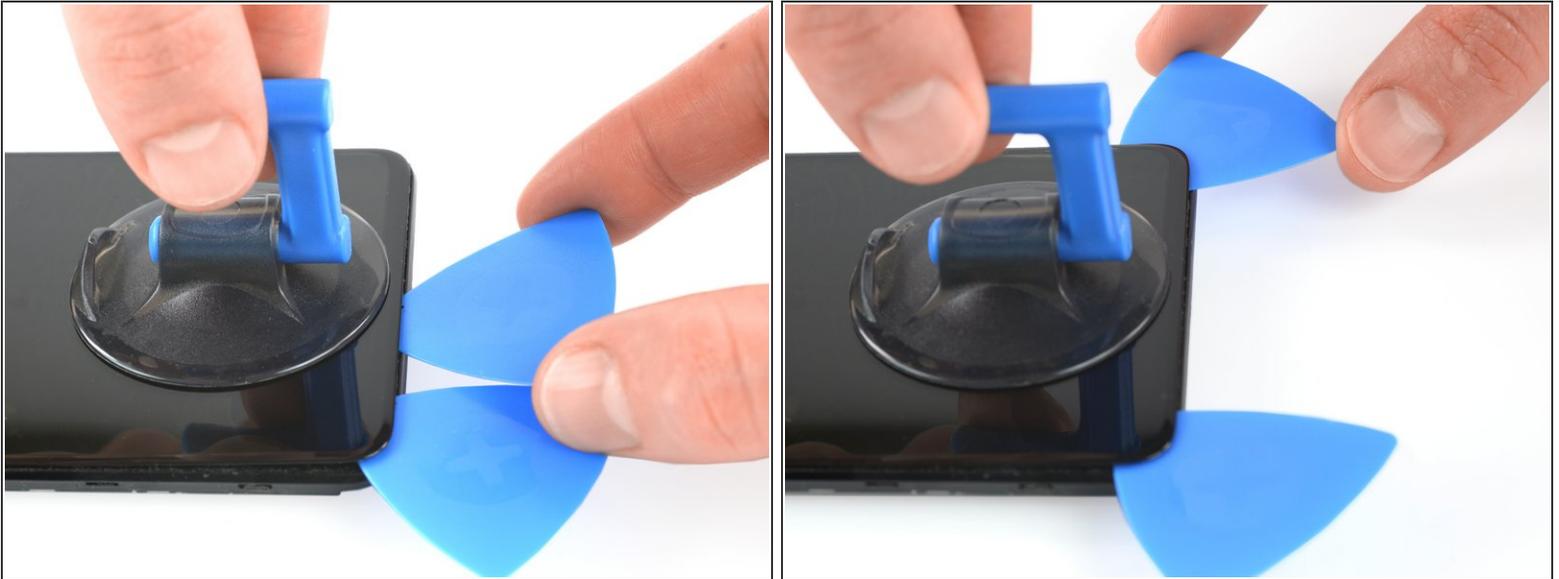
- [Prepare an iOpener](#) and apply it to the display for at least two minutes to loosen the adhesive beneath.
- ⓘ The adhesive is placed on the edges of the display. Make sure that the iOpener covers all edges and repeat the heating process if necessary.

Step 19 — Create an opening gap



- Apply a suction handle near the bottom edge.
- ⓘ If the screen is cracked, the suction cup may not stick. Try [lifting it with strong tape](#), or superglue the suction cup in place and allow it to cure so you can proceed.
- Pull up on the suction up with strong, steady force to create a gap.
- Insert an opening pick into the gap between display and the frame.
- Slide the opening pick to the bottom left corner and leave it there.

Step 20 — Slice through the adhesive



- Insert a second opening pick and slide it to the bottom right corner to cut the adhesive.
- Leave the opening pick in its place to prevent the adhesive from resealing.

Step 21



- Insert a third opening pick and slide it along the left edge to cut the adhesive.
- Leave the opening pick on the top right corner.

Step 22



i You may need to reheat and reapply the iOpener several times to get the phone warm enough to cut the adhesive. Follow the iOpener instructions to avoid overheating.

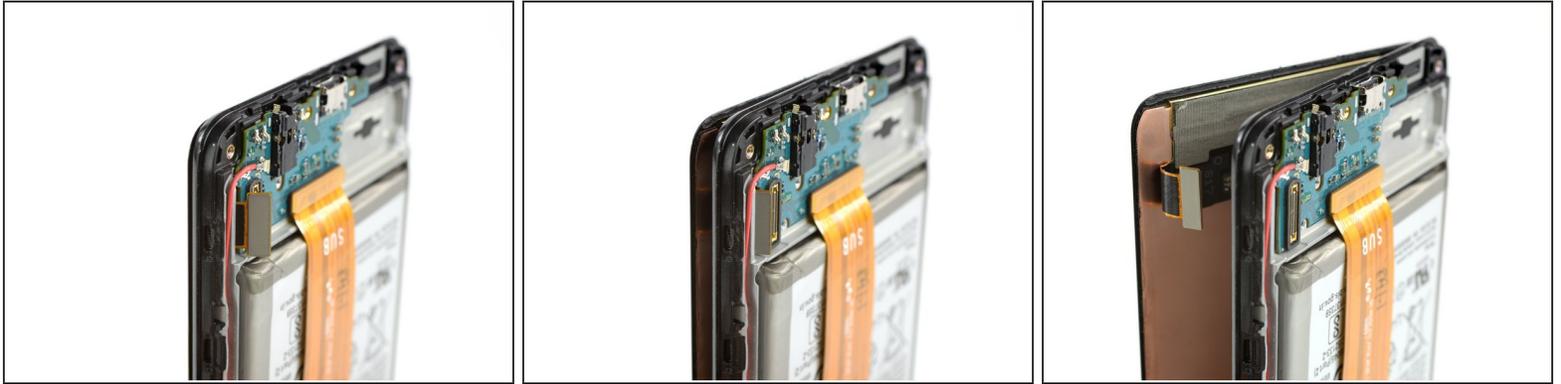
- Insert a fourth opening pick and slide it to the top left corner to cut the adhesive.
- Leave the opening pick in its place to prevent the adhesive from resealing.

Step 23



- Insert a fifth opening pick and slide it along the left edge to cut the remaining adhesive.

Step 24



- Thread the display cable through the frame.

Step 25



- Remove the display.

If possible, turn on your device and test your repair before installing new adhesive and resealing.

Compare your new replacement part to the original part—you may need to transfer remaining components or remove adhesive backings from the new part before installing.

To reassemble your device, follow these instructions in reverse order. Apply new adhesive where necessary after cleaning the relevant areas with isopropyl alcohol (>90%).

The best way to secure the new screen is to apply a sheet of custom-cut double-sided tape to the back of the screen.

Take your e-waste to an [R2 or e-Stewards certified recycler](#).

Repair didn't go as planned? Try some [basic troubleshooting](#), or ask our [Answers community](#) for help.