

Sony Xperia Z4 LCD & Digitizer Replacement

This guide shows you how to remove a broken or defective LCD & Digitizer in the Sony Xperia Z4.

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INTRODUCTION

Use this guide to remove a broken or defective LCD & Digitizer in your Sony Xperia Z4.

Opening the Sony Xperia Z4 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**.

Due to the phone's design, you must remove the lithium-ion battery to access the display cables. If the battery was deformed during removal replace it with a new one—reusing a deformed battery is a potential safety hazard.

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:

- Phillips #00 Screwdriver (1)
- Tweezers (1)
- iOpener (1)
- iFixit Opening Picks set of 6 (1)
- Suction Handle (1)
- ESD Safe Tweezers Blunt Nose (1)
- Spudger (1)



PARTS:

- Sony Xperia Z4 Rear Cover Adhesive (1)
- Sony Xperia Z4 Battery (1)
- Sony Xperia Z4 Display Adhesive Strips
 (1)
- Sony Xperia Z4 LCD Screen and Digitizer (1)

Step 1 — Back Cover



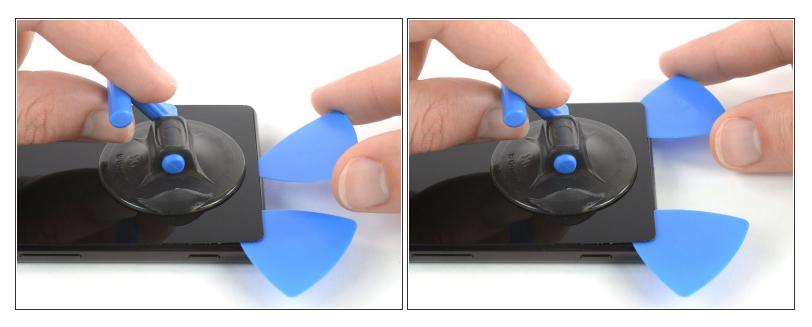
- Before you begin, switch off your phone.
- Apply a <u>heated iOpener</u> to the back of the phone to loosen the adhesive beneath the back cover. Apply the iOpener for at least two minutes.







- Secure a suction handle to the bottom of the back cover, as close to the edge as possible.
- Lift the back cover with the suction handle to create a small gap between the cover and the frame.
- Insert an opening pick into the gap.
 - (i) If you have trouble, apply more heat to further soften the adhesive. Follow the iOpener instructions to avoid overheating.
- Slide the opening pick to the bottom left corner.



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





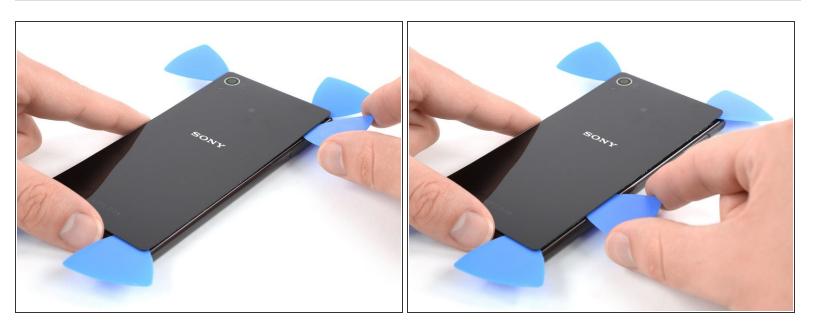


- Insert a third opening pick at the bottom left corner.
- In the next few steps whilst cutting around the rear camera make sure you only use the tip of the opening pick to avoid smearing the lens or damaging the camera.
 - Start to slide the tip of the opening pick from the bottom left corner along the side of the phone to cut the adhesive.
- Leave the opening pick in its place at the top left corner to prevent the adhesive from resealing.





- If the adhesive becomes hard to cut it most likely cooled down. Use your iOpener to reheat it.
- Insert a fourth opening pick under the top left corner of the back cover.
- Slide the opening pick along the top edge of the phone to cut the adhesive.
- Leave the opening pick in the top right corner to prevent the adhesive from resealing.



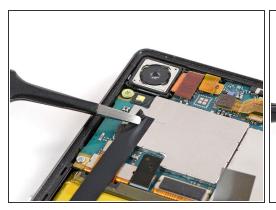
- Insert a fifth opening pick at the top right corner of the phone.
- Slide the opening pick along the right side to cut the remaining adhesive.





- Lift and remove the back cover.
- After installing the back 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.

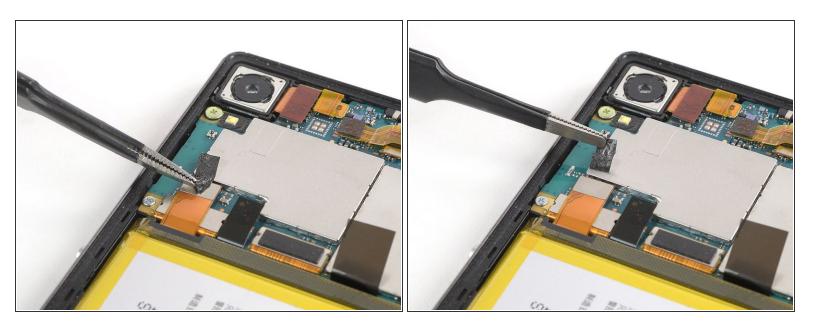
Step 8 — Battery Disconnect





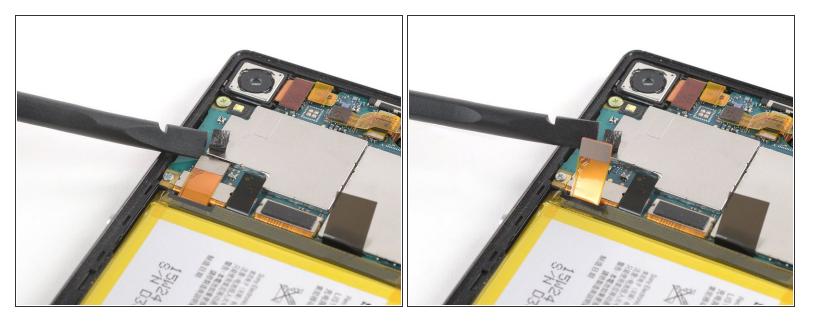


 Use a pair of tweezers to carefully peel the adhesive strip off the mother board and the battery and remove it.



 Use a pair of tweezers to peel the black adhesive strip off the battery connector and fold it out of the way.

Step 10



Use a spudger to pry up and disconnect the battery connector.

Step 11 — Battery



- Use a pair of tweezers and grab the pull tab at the top right corner of the battery.
- Pull out the adhesive strip with a pair of tweezers.
 - (i) Make sure you pull out the strip in a slow and steady motion and in a flat angle. To prevent the adhesive strip from ripping, it is helpful to twist the strip around the tweezers.
- in case one of the adhesive strips rips and it's not possible to pull it out completely, you can use high isopropyl alcohol (>90%) and/or a heated iOpener to loosen the adhesive. After the adhesive is soft enough use a prying tool such as an opening pick, a plastic/playing card or a spudger to carefully pry out the battery.

Step 12

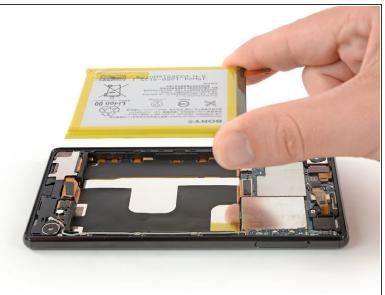


Repeat the previous process with the adhesive tab next to the battery flex cable.



Use an opening pick to pry the battery out of its recess until you can get a good grip.





- Remove the battery.
- ↑ Do not reinstall a damaged or deformed battery, as doing so is a potential safety hazard.
- Remove any remaining adhesive from the midframe, and clean the glued areas with isopropyl alcohol and a lint-free cloth before applying new adhesive.

Step 15 — Daughterboard with Cover



Remove the Phillips #00 screw (3 mm length).





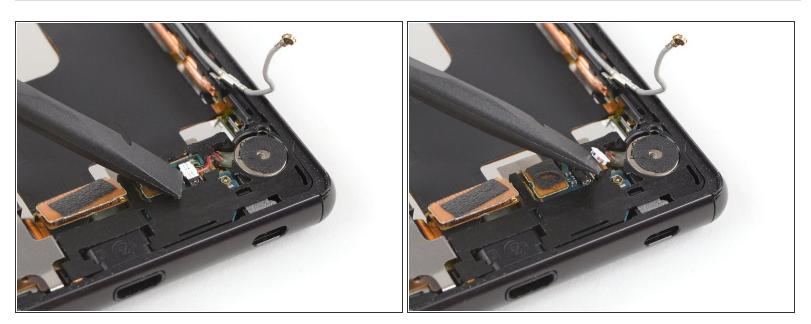
Use a pair of tweezers to peel off and remove the foam pad on top of the daughterboard.

Step 17



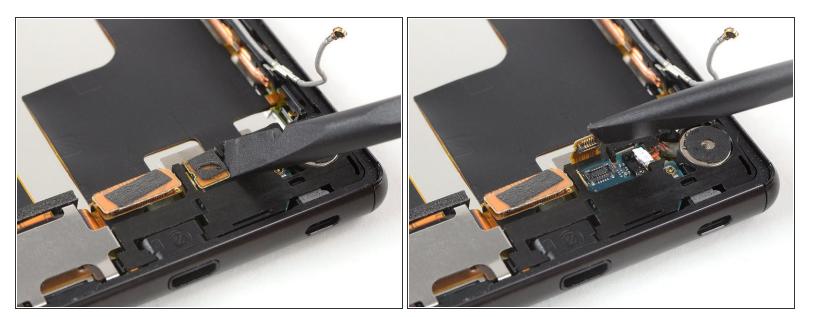


• Use a pair of tweezers to pry up and disconnect the antenna cable.



Use a spudger to pry up and disconnect the vibration motor connector.

Step 19



 Use the flat end of a spudger to pry up and disconnect the small main flex connector next to the vibration motor connector.

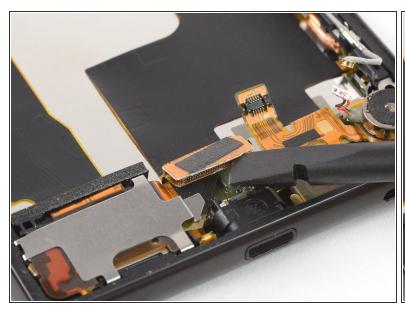


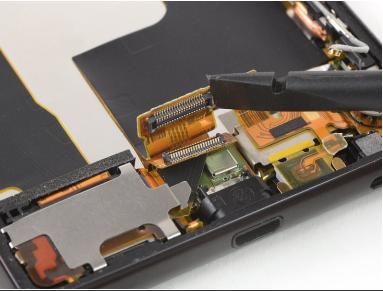




- Lift the daughterboard cover using a pair of tweezers or a spudger by prying it up from its left side.
- Remove the daughterboard cover carrying the daughterboard.
- in case you only want to replace the daughterboard you can easily separate it from the plastic cover with an opening pick or a pair of tweezers.

Step 21 — Flex Cable Assemblies and Loudspeaker



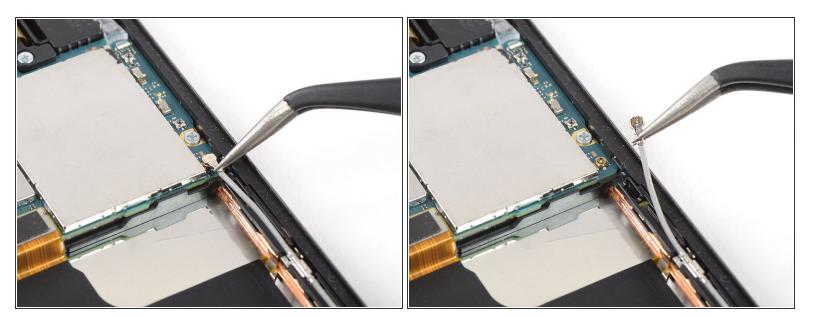


- in case you only want to remove the loudspeaker and/or the left side button flex cable including the charging port and the loudspeaker cover, jump to this step.
- Use the flat end of a spudger to pry up and disconnect the main flex cable connector.

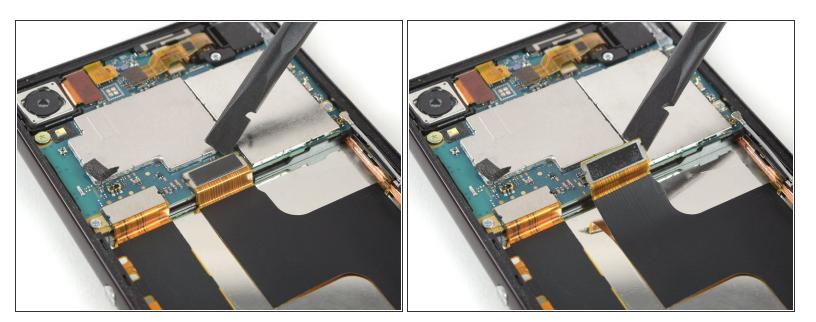


Use the pointed end of a spudger to lever the microphone out of its recess.

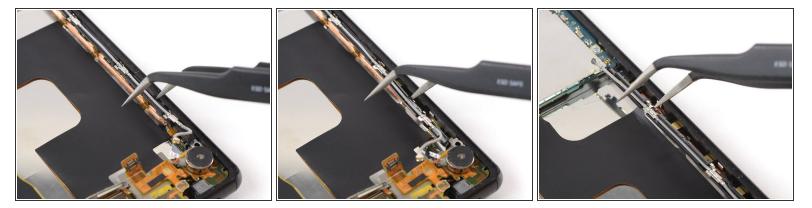
Step 23



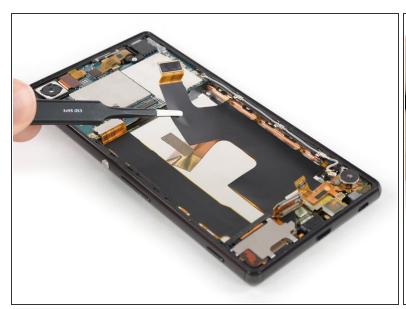
Use a pair of tweezers to pry up and disconnect the upper connector of the antenna cable.



Use a spudger to pry up and disconnect the main flex cable from the motherboard.



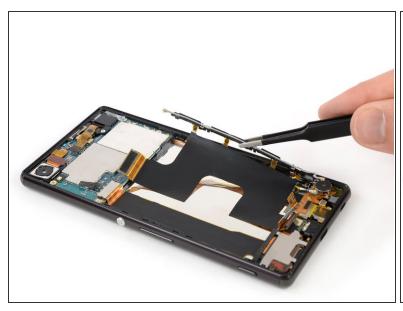
- Insert one arm of the tweezer into the gaps between antenna cable routing and midframe.
- Loosen the clips along the antenna cable on the right side of the midframe by gently twisting the tweezers sideways until the cable routing pops out of the clips.

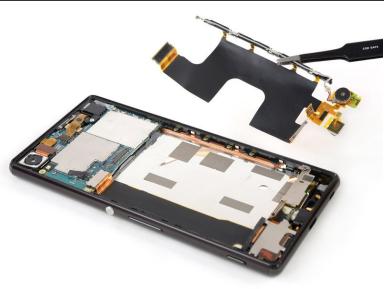




- Use a pair of tweezers to peel up the main flex cable and separate it from the midframe.
- in case you're having trouble to separate the main flex cable from the mid frame you can place an iOpener onto the display to loosen the adhesive underneath the flex cable.

Step 27





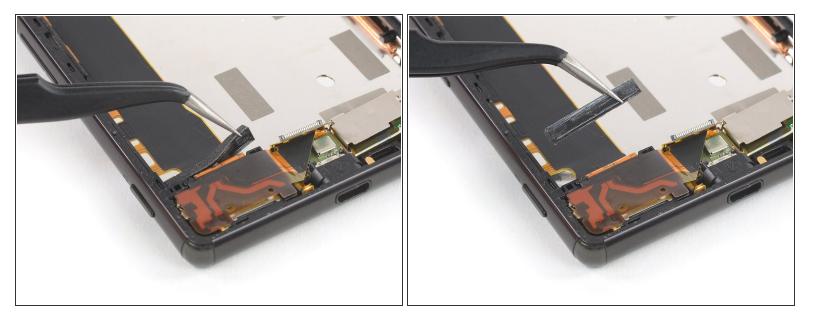
 Use a pair of tweezers to remove the main flex cable assembly including the vibration motor and the microphone.

Step 28 — Loudspeaker

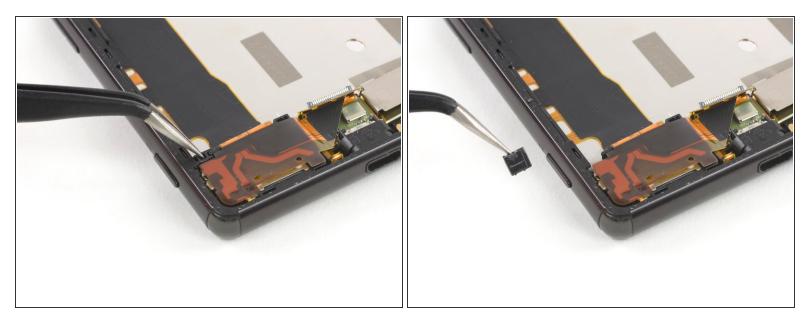


Unhook and remove the metal shield above the loudspeaker cover located at the bottom left.

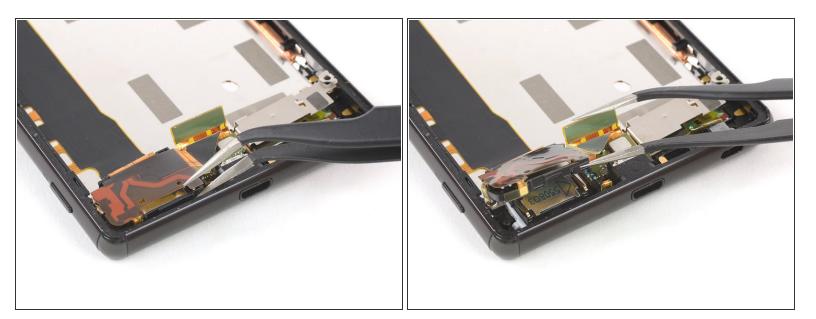
Step 29



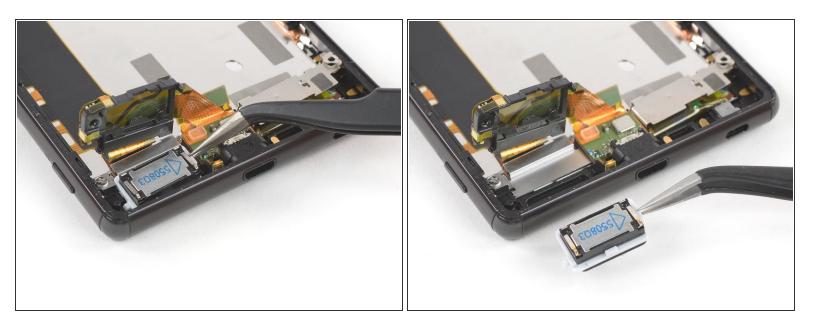
Peel off and remove the foam pad next to the loudspeaker cover.



Also remove the plastic safeguard between the midframe and the loudspeaker cover.



- Use a pair of tweezers to pry up the loudspeaker cover.
- Fold the loudspeaker cover upwards until you have enough space to remove the loudspeaker in the next step.

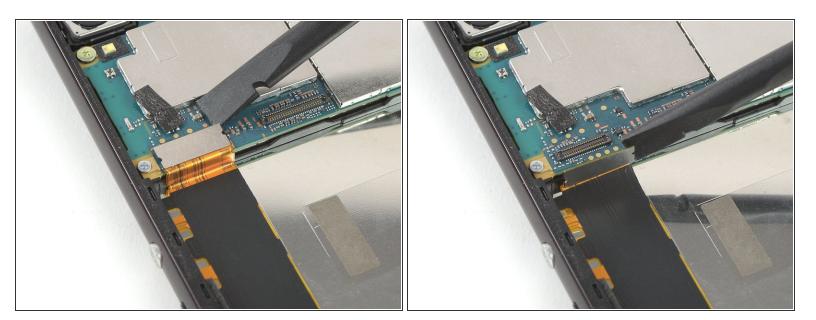


Use a pair of tweezers to lift the loudspeaker out of its recess and remove it.

Step 33 — Sidebutton Flex Cable including Charging Port

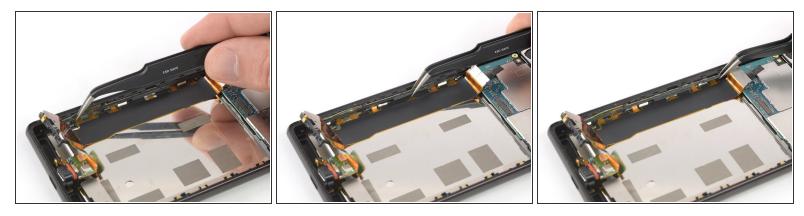


- Use a pair of blunt nose tweezers to grab the flex cable between the charging port and the loudspeaker cover.
- Carefully pull the charging port out of its housing.



 Use a spudger to pry up and disconnect the side button flex cable on the left side of the motherboard.

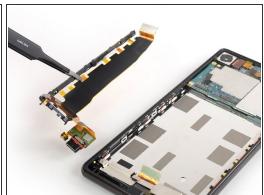
Step 35



 Use a pair of tweezers to loosen the plastic clips along the side button flex cable on the left side of the midframe.

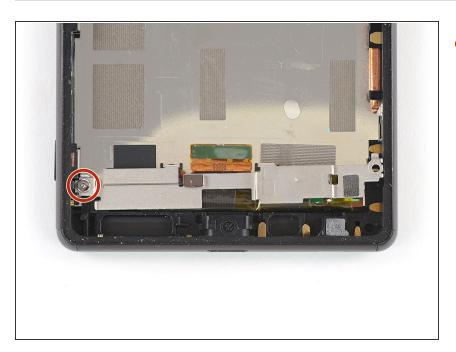




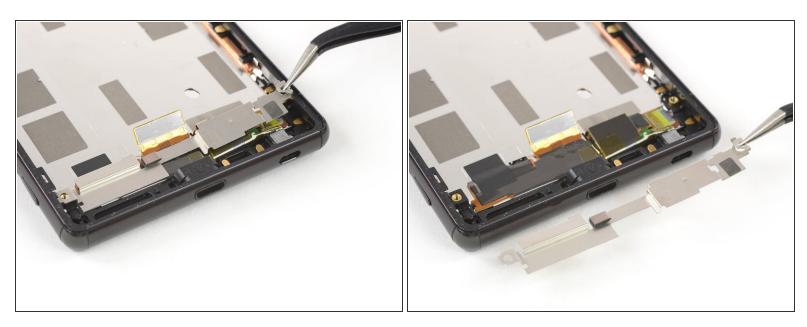


- Peel up the side button flex cable and separate it from the midframe.
- in case you're having trouble separating the side button flex cable from the midframe you can place an iOpener onto the display to loosen the adhesive underneath the flex cable.
- Remove the side button flex cable including the loudspeaker cover and the charging port.

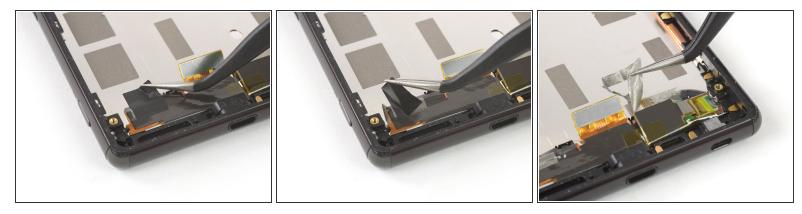
Step 37 — LCD & Digitizer



Remove the Phillips #00 screw (2.4 mm length).



 Use a pair of tweezers to unhook the metal shield on top of the display cable assembly and remove.



- Use a pair of tweezers to peel off the black adhesive on the left side of the display cable assembly.
- Also remove the silver adhesive strip on the right side of the display cable assembly.







- Get an opening pick under the left side of the display cable assembly.
- Use the opening pick to pry up the display cable assembly.
- Carefully slide the opening pick from left to right to separate the display cable assembly from the midframe.



- Apply a <u>heated iOpener</u> to the display for two minutes to loosen the adhesive beneath.
 - i The adhesive that holds down the screen is fairly strong. You might need to reheat and reapply the iOpener several times to get the adhesive warm enough.







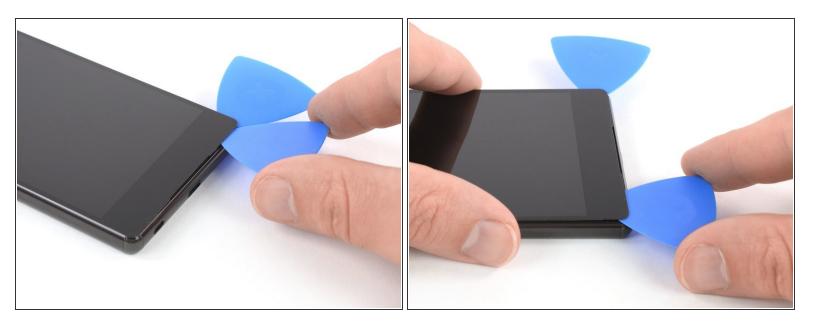
- Apply a suction handle near the top edge of the phone right under the earpiece speaker.
 - *i* If the phone's screen is cracked, the suction handle may not stick. Try <u>lifting it with strong tape</u>, or superglue the suction handle in place and allow it to cure so you can proceed.
- Use the suction handle to pull up the screen and insert just the tip of an opening pick under the right edge of the speaker recess.
- Slide the opening pick to the top right corner to loosen the adhesive.
- Leave the opening pick in its position to prevent the adhesive from resealing.







- Insert a second opening pick at the top right corner of the screen.
- Slide the opening pick along the midframe to loosen the adhesive under the right edge of the screen.
- Leave the opening pick in the bottom right corner to prevent the adhesive from resealing.



- (i) Apply more heat if the adhesive becomes hard to cut.
- Insert a third opening pick under the bottom right edge of the screen.
- Slide the opening pick to the bottom left corner to loosen the adhesive underneath the screen.
- Leave the opening pick in the bottom left corner to prevent the adhesive from resealing.







- Insert a fourth opening pick under the bottom left edge of the screen.
- Slide the opening pick along the midframe to loosen the adhesive under the left side of the screen.
- Slide the opening pick around the top left corner of the screen to loosen the remaining adhesive.

Try not to remove the display all the way yet. The display flex cable is still threaded through the midframe.







- Slowly separate the screen from the frame and cut any remaining adhesive. Make sure the flex cable is no longer stuck to the frame and carefully thread it through its gap.
- Remove the screen.



Remove any remaining adhesive from the midframe, and clean the glued areas with isopropyl alcohol and a lint-free cloth before installing a new screen.

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.

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

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

Take your e-waste to an R2 or e-Stewards certified recycler.

Repair didn't go as planned? Check out our <u>Answers community</u> for troubleshooting help.