

# Xiaomi Mi 9 AMOLED & Digitizer Replacement

Use this guide to replace a broken or defective...

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## **INTRODUCTION**

Use this guide to replace a broken or defective AMOLED & Digitizer in your Xiaomi Mi 9.

Due to the phone's design, you must remove the lithium-ion battery to access the display cables. Reusing a deformed or bent battery after it has forcefully been removed, is a potential safety hazard. Replace it with a new battery in this case.

**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.

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TOOLS:
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ESD Safe Blunt Nose Tweezers (1) Suction Handle (1) iFixit Opening Picks (Set of 6) (1) iOpener (1) Phillips #00 Screwdriver (1) Spudger (1) Tweezers (1) 🍳 PARTS:

Xiaomi Mi 9 Battery (1)

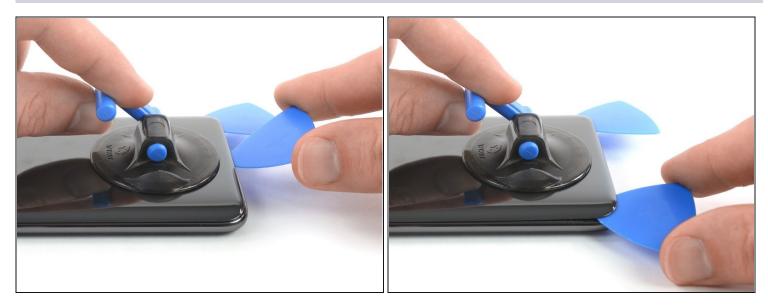
## Step 1 — Rear Glass



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



- Secure a suction handle to the lower edge of the rear glass, as close to the edge as possible.
  - (i) If the phone's rear glass is cracked, the suction handle may not stick. Try <u>lifting it with</u> <u>strong tape</u>, or superglue the suction handle in place and allow it to cure so you can proceed.
- Lift the rear glass with the suction handle to create a gap between the glass 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 right corner of the phone.



- Insert a second opening pick and slide it to the bottom left 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.
- Start to slide the opening pick from the bottom left corner along the side of the Xiaomi Mi 9 to cut the adhesive.
  - (i) Be aware of the rear cameras and only insert the tip of the opening pick. As the adhesive cools down it gets harder to cut. If necessary <u>use your iOpener</u> to reheat it.
- Leave the opening pick in the top left corner to prevent the adhesive from resealing.



- Insert a fourth opening pick under the top left corner of the rear glass.
- Slide the opening pick along the top 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 edge to cut the remaining adhesive.

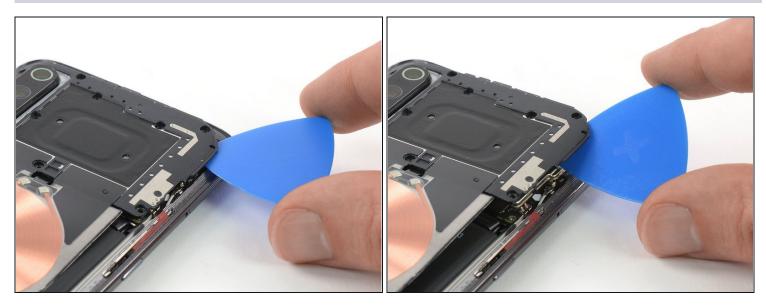


- Carefully lift the rear glass and remove it.
- Before installing new adhesive and reassembly, remove any remaining adhesive from the phone, and clean the glued areas with isopropyl alcohol and a lint-free cloth.



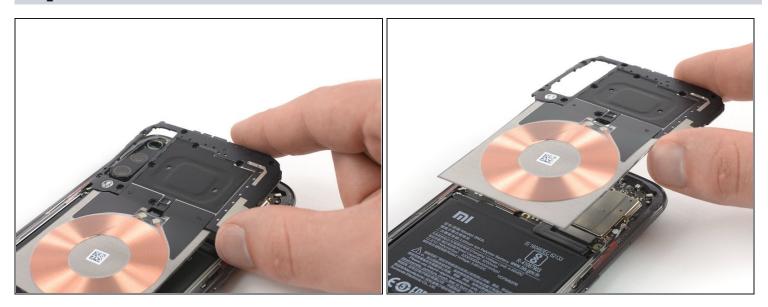
## Step 8 — Motherboard Cover with Charging Coil

- Remove the ten Phillips #00 screws (3 mm length) that secure the motherboard cover.
  - (i) There might be tamper proof sticker on some of the screws.



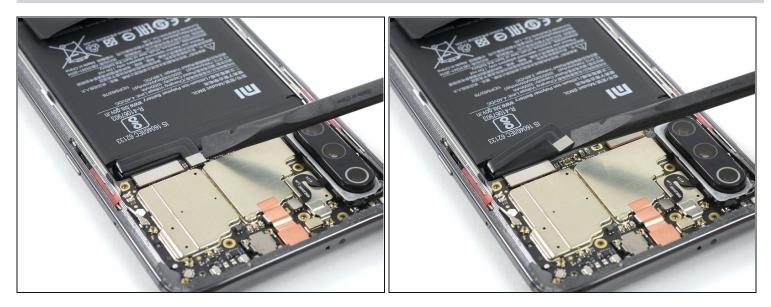
- Insert an opening pick at the top right corner of the motherboard cover.
- Twist the opening pick sideways to pry up and slightly lift the motherboard cover.

# Step 10

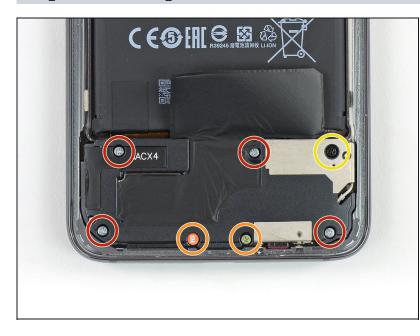


• Carefully remove the motherboard cover including the charging coil / NFC antenna.

#### **Step 11 — Battery Disconnect**



• Use a spudger to pry up and disconnect the battery flex cable.



### Step 12 — Loudspeaker Unit

- Remove the seven Phillips #00 screws securing the loudspeaker unit:
  - Four silver 3.2 mm long screws
  - Two yellowish 3.8 mm long screws
  - One black 2.8 mm long screw
- (i) Some screws may be hidden beneath tamper proof stickers.



- Slide an opening pick under the right side of the loudspeaker unit.
- Twist the opening pick sideways to pry up the loudspeaker unit until you can get a good grip.

## Step 14



 $\triangle$  There is still an antenna cable connected to the back of the unit.

• Carefully lift the loudspeaker unit and hinge it open towards the left side.



- Use a pair of tweezers to pry off and disconnect the antenna cable from the loudspeaker unit.
- Remove the loudspeaker unit.
- Before reassembly check your old loudspeaker for components that might need to be transferred to the replacement part such as the antenna flex cable with its coax connector.

### Step 16 — Battery



• Use a pair of tweezers to peel the black ends of the adhesive tabs off the battery.



- Use a pair of tweezers to pull out the left adhesive tab from underneath the battery.
  The adhesive tab underneath the battery can rip very easily. Make sure you pull out the tab in a slow and steady motion and in a flat angle. To prevent the adhesive tab from ripping, it's helpfull to twist the strip around the tweezers.
- (i) In case one of the adhesive tabs rips and it's not possible to pull it out completely, you can use isopropyl alcohol or an <u>heated iOpener</u> to loosen the adhesive. After the adhesive is soft enough use a prying tool such as an opening pick or a <u>plastic card</u> to pry out the battery.



• Use a pair of tweezers to pull out the right adhesive tab from underneath the battery.

# Step 19



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



- Remove the battery.
- A Reusing a deformed or bent battery after it has forcefully been removed, is a potential safety hazard. Replace it with a new battery.
- 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 21 — AMOLED & Digitizer



- Use a spudger to pry up and disconnect the display flex cable.
- Use a pair of tweezers to peel the display flex cable off the midframe. It is attached with mild adhesive.

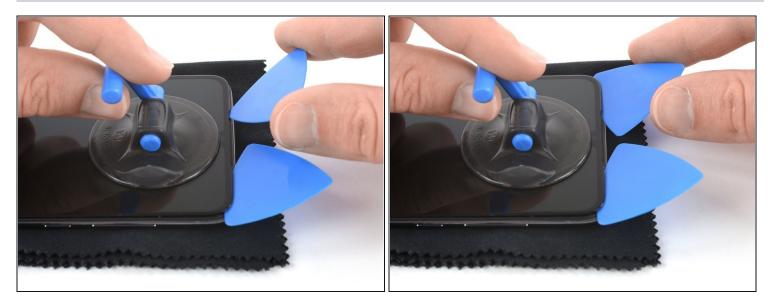


- Apply a <u>heated iOpener</u> to the display for two minutes to loosen the adhesive beneath.
  - The adhesive that holds down the screen is fairly strong. You might need to reheat and reapply the iOpener several times to get the adhesive warm enough.



i You can use a piece of cloth to minimize the phone rocking over the camera bump.

- 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</u> strong tape, 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.
- Rotate the opening pick sideways to bring the long edge of the pick under the display glass and slide it to the top right corner. Leave it there to prevent the adhesive from resealing.



- Repeat the previous process on the left corner of the speaker recess and slide the long edge of an opening pick to the top left corner of the phone.
- Leave the opening pick in its place to prevent the adhesive from resealing.



- Slide the long edge of the first opening pick around the top right corner and along the right edge of the phone.
- Leave the opening pick where the power and volume buttons are located to generate a bigger gap between the midframe and display glass.
- Insert a third opening pick at the top right edge of the screen. Make sure to slide it <u>underneath the AMOLED</u> and not between the the display glass and panel.



(i) <u>Apply more heat</u> if the adhesive becomes hard to cut.

- Reposition the opening pick above the power and volume buttons so that the tip of the opening pick is placed underneath the display panel too.
- Slide the opening pick to the bottom right of the phone to cut the adhesive. Leave it there to prevent the adhesive from resealing.

#### Step 27



- Insert a fourth opening pick underneath the display panel at the top left corner of the phone.
- Slide the opening pick along the side towards and around the bottom left corner of the phone to cut the adhesive.

A 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.

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

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.

Take your e-waste to an <u>R2 or e-Stewards certified recycler</u>.

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