

# iPad mini 5 Wi-Fi Battery Replacement

Follow this guide to replace the battery on an...

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# **INTRODUCTION**

Follow this guide to replace the battery on an iPad mini 5 Wi-Fi. You may need to do this if the battery is no longer holding a charge as well as it used to.

**For your safety, discharge the battery below 25% before disassembling your device.** This reduces the risk of a dangerous thermal event if the battery is accidentally damaged during the repair. If your battery is swollen, <u>take appropriate precautions</u>.

Some photos in this guide are from a different model and may contain slight visual discrepancies, but they won't affect the guide procedure.

# 🖌 TOOLS:

### iOpener (1) iFixit Opening Picks (Set of 6) (1) Suction Handle (1) Tweezers (1) Phillips #00 Screwdriver (1) Spudger (1) Plastic Cards (1) Isopropyl Alcohol (90% or Greater) (1) Safety Glasses (1) Packing Tape (1)

# 🔅 PARTS:

iPad mini 5 Battery (1) iPad mini 5 Adhesive Strips (1) Tesa 61395 Tape (1)

### Step 1 — Apply tape to a cracked screen



- If your display glass is cracked, keep further breakage contained and prevent bodily harm during your repair by taping the glass.
- Lay overlapping strips of clear packing tape over the iPad's display until the whole face is covered.
- (i) This will keep glass shards contained and provide structural integrity when prying and lifting the display.
- Do your best to follow the rest of the guide as described. However, once the glass is broken, it will likely continue to crack as you work, and you may need to use a metal prying tool to scoop the glass out.

A Wear safety glasses to protect your eyes, and be careful not to damage the LCD screen.

### **Step 2**—**Opening Procedure**



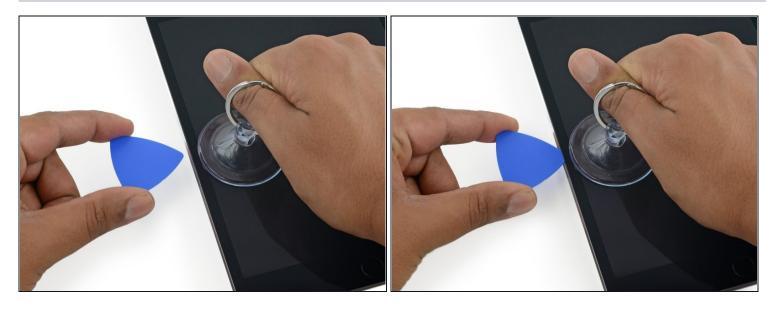
• <u>Heat an iOpener</u> and apply it to the left edge for two minutes.

### Step 3



- Apply a suction cup halfway up the heated side.
- Be sure the cup is completely flat on the screen to get a tight seal.
- While holding the iPad down with one hand, pull up on the suction cup with strong, steady force to create a gap.
- (i) Depending on the age of your device, this may be difficult. If you have trouble, apply more heat and try again.

A Be careful to only lift the glass enough to insert an opening pick—any more and you risk cracking the glass.



- While holding the glass up with the suction cup, insert the point of an opening pick into the gap between the glass and body of the iPad.
- ⚠️ Don't insert the opening pick any deeper than 2 mm into the side of the display. Inserting the pick deeper than 2 mm could damage the backlight assembly, LCD display, or touchscreen.



- Reheat and reapply the iOpener to the left edge for a few minutes.
  - ▲ Be careful not to overheat the iOpener during the repair procedure. Always wait at least ten minutes before reheating the iOpener.



• Insert a second opening pick alongside the first and slide the pick down along the edge of the iPad, releasing the adhesive as you go.

A Throughout the rest of the procedure, if you encounter significant resistance while sliding the pick, stop and reheat the section you're working on. Applying too much pressure with the pick can crack the glass.



- Continue moving the opening pick down the side of the display to release the adhesive.
- If the opening pick gets stuck in the adhesive, "roll" the pick along the side of the iPad, continuing to release the adhesive.



• Take the first pick you inserted and slide it up toward the top corner of the iPad.



- Reheat the iOpener and place it on the top edge of the iPad, over the front-facing camera.
  - A Be careful not to overheat the iOpener during the repair procedure. Wait at least ten minutes before reheating the iOpener.
- If you have a flexible iOpener, you can bend it to heat both the upper left corner and the upper edge at the same time.



• Slide the opening pick around the top left corner of the iPad to separate the adhesive.



- Slide the opening pick along the top edge of the iPad, stopping just before you reach the camera.
- As you reach the front-facing camera, pull the pick out slightly and continue sliding it across the top edge.
  - Avoid sliding the opening pick over the front-facing camera, as you may smear adhesive onto the lens or damage the camera. The following steps will detail how to best avoid disturbing the front-facing camera.



- Leave the opening pick in the iPad slightly past the front-facing camera.
- Take a second pick and insert it to the left of the camera, where the first pick just was. Slide it back to the corner to completely cut any remaining adhesive.
- Leave the second pick in place to prevent the corner adhesive from re-sealing as it cools.



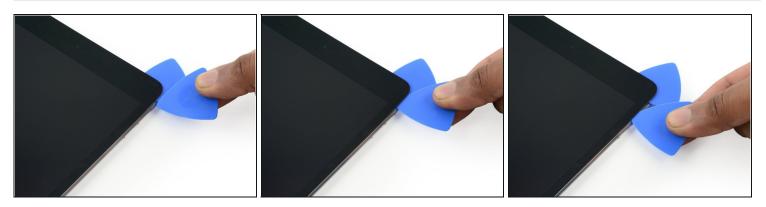
# Step 13

• Insert the previous pick deeper into the iPad and slide it away from the camera toward the corner.



- Leave the three picks in the corners of the iPad to prevent re-adhering of the front panel adhesive.
- Reheat the iOpener and place it on the remaining long side of the iPad—along the volume and lock buttons.

# Step 15



• Insert a new opening pick and slide it down the right edge of the iPad, releasing the adhesive as you go.



• Continue sliding the opening pick down the right edge of the iPad, reheating the edge using an iOpener if necessary.

A Be careful not to slice too deep near the <u>bottom right corner</u>, or you risk damaging the display cable.



- Leave the opening picks in place and reheat the iOpener.
  Remember not to overheat the iOpener—no more than once every ten minutes.
- Set the reheated iOpener on the home button end of the iPad and let it rest for a few minutes to soften the adhesive beneath the glass.



- Insert a new opening pick at the bottom right corner of the display, below the last opening pick you used to slice down the right edge.
- Rotate the new pick around the lower right corner of the device.

# Step 19



• Slide the pick from the bottom right corner along the lower edge of the device. Stop about half an inch shy of the home button.



• Insert a final opening pick at the lower left corner of the iPad, directly below the existing one.

# Step 21



• Slide the pick around the lower left edge of the iPad.



• Continue sliding the pick at the lower left edge of the display toward the center of the iPad, until it is roughly half an inch from the home button.



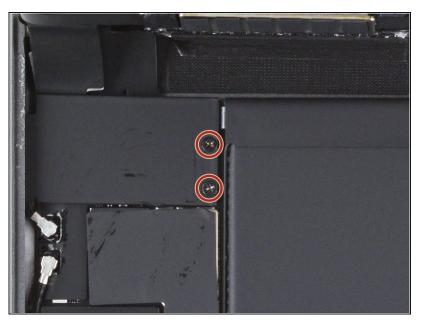
- Twist the two picks at the top edge of the iPad to break up the last of the adhesive holding the display assembly in place.
- Lift the display from the top edge to open the device.

# Step 24 — Hold the screen perpendicular



• To avoid stressing any cables, hold the screen perpendicular to the frame.

### Step 25 — Remove the display cable bracket



- (i) Continue to hold the screen perpendicular during this step.
  - Use a Phillips screwdriver to remove the two 1.3 mm screws securing the display cable bracket.
- (i) Throughout this repair, <u>keep</u> <u>track of each screw</u> and make sure it goes back exactly where it came from.

# Step 26 — Reposition the screen



- You'll need to reposition the screen to access the bottom side of the display cable bracket.
- Lower the screen to about 30 degrees above the frame.

### Step 27 — Disconnect the battery



- (i) The battery press connector is attached to the underside of the display cable bracket on the screw hole side.
- Insert the flat end of a spudger under the display cable bracket and lift up to disconnect the battery press connector from the logic board.
- Take care to pry only under the edge of the connector to prevent damaging the socket itself and surrounding components.
- To re-attach <u>press connectors</u> like this one, carefully align and press down on one side until it clicks into place, then repeat on the other side. Do not press down on the middle. If the connector is misaligned, the pins can bend, causing permanent damage.

⚠ Don't try to remove the display cable bracket as it's attached to the battery by the battery cable.

# Step 28 — Rotate the display cable bracket



- (i) The display cable bracket is secured by a clip under the edge of the frame.
- Use a pair of tweezers to pull the display cable bracket's clip out from under the frame's edge.
- Rotate the display cable bracket toward the battery.
  - ⚠ Don't bend the battery cable too much past vertical to avoid damaging it. You only need enough space to disconnect the display press connectors and prevent the battery connector from making contact with its socket during the repair.

#### Step 29 — Disconnect the display press connectors



• Use the pointed end of a spudger to disconnect the digitizer press connector from the logic board.



• Use the pointed end of a spudger to disconnect the second and third display press connectors.

# Step 31 — Remove the screen



• Lift and remove the screen.

### Step 32 — Screen reassembly information



- During reassembly, remove any remaining adhesive and residue from the perimeters of the frame and the screen. Then, apply new adhesive to secure the screen to the frame.
  - Don't remove the black tape on the left, right, and upper edges of the display. These hold the display to the front glass.
  - Follow this guide if you are using a pre-cut adhesive card. Follow this guide if you are using custom-cut adhesives.

### Step 33 — Battery adhesive information

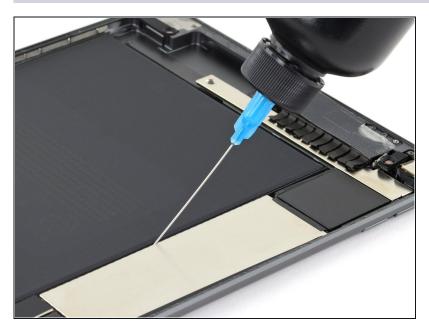


- (i) In the following steps, you'll separate the battery from the adhesive securing it to the frame.
  - The adhesive is laid out as shown: two strips along the long edges, and two shorter strips perpendicular in the center.

# $\triangle$ Don't pry near the logic board, as you could damage your iPad.

(i) If you are performing this procedure on the Wi-Fi version, you can safely insert <u>plastic</u> <u>card</u>s from the upper, lower, and left edges of the battery (when the charging port is oriented down). For the LTE version, only insert plastic cards under the lower and left sides.

# Step 34 — Apply isopropyl alcohol



- Apply a few drops of highconcentration (90% or higher) isopropyl alcohol around the perimeter of the battery.
- Wait two minutes for the isopropyl alcohol to weaken the adhesive underneath the battery.

### Step 35 — Insert a plastic card under the battery



- Insert the corner of a plastic card between the lower end of the battery and the frame.
- Press the card until approximately an inch and a half of it is underneath the battery.
  Take care not to bend the battery—a bent battery may leak dangerous chemicals or cause a thermal event.
- ⚠ Don't try to forcefully lever the battery out. If needed, apply a few more drops of alcohol to further weaken the adhesive. Never deform or puncture the battery with your pry tool.

#### Step 36 — Insert a second plastic card



- Insert a second plastic card between the battery and first card, this time with the card edge parallel to the battery.
- Press the card in until about an inch and a half of it is underneath the battery.

#### Step 37 — Cut through the remaining adhesive



- Rotate the second plastic card around the bottom left corner under the battery.
- Slide the second plastic card up the left edge of the battery toward the top left corner.
- If the battery hasn't detached from the frame, push the second card in further under the battery and slide it back and forth to cut through more adhesive. Apply a few more drops of isopropyl alcohol as necessary.

#### Step 38 — Remove the battery



- Lift and remove the battery.
- If there's any alcohol solution remaining in the device, carefully wipe it off or allow it to air dry before installing your new battery.
- Don't reuse the battery after it has been removed, as doing so is a potential safety hazard. Replace it with a new battery.
- 团 To install a new battery:
  - Remove the old adhesive and residue from the battery well.
  - If your replacement battery doesn't come with replacement adhesive, apply <u>stretch release adhesive</u> <u>strips</u>, double sided adhesive tape, or <u>pre-cut adhesive</u> in the iPad's battery well.
  - Peel away any tape liners to expose the adhesive.
  - Lay the battery on the adhesive and press firmly.

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.

For optimal performance, <u>calibrate your newly installed battery</u> after completing this guide.

### 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? Try some <u>basic troubleshooting</u>, or ask our <u>iPad mini 5</u> <u>Answers community</u> for help.