



Apple Watch Series 1 Screen Replacement

Replace a broken, cracked, or defective screen (a.k.a. display assembly) on your Apple Watch.

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INTRODUCTION

Replace a broken, cracked or defective display on your Apple Watch.

As a precaution against damaging your device, this guide starts by disconnecting the battery, in the only way you can—by removing it.

TOOLS:

- iOpener (1)
- iFixit Opening Tools (1)
- iFixit Opening Picks set of 6 (1)
- Curved Razor Blade (1)
- Tweezers (1)
- 1.0 mm Flathead Screwdriver (1)
- Utility Scissors (1)
- Tri-point Y000 Screwdriver Bit (1)

PARTS:

- Apple Watch (38 mm) Replacement Battery (1)
- Apple Watch (42 mm, Original & Series 1) Replacement Battery (1)
- Apple Watch Battery Connector Bracket (1)
- Apple Watch (38 mm, Original & Series 1) Screen (1)
- Apple Watch (42 mm, Original & Series 1) Screen (1)

Step 1 — iOpener Heating



- ⓘ We recommend that you clean your microwave before proceeding, as any nasty gunk on the bottom may end up stuck to the iOpener.
- Place the iOpener in the center of the microwave.
- ⚠ For carousel microwaves: Make sure the plate spins freely. If your iOpener gets stuck, it may overheat and burn.

Step 2



- Heat the iOpener for **thirty seconds**.
- Throughout the repair procedure, as the iOpener cools, reheat it in the microwave for an additional thirty seconds at a time.

⚠ Be careful not to overheat the iOpener during the repair. Overheating may cause the iOpener to burst.

⚠ Never touch the iOpener if it appears swollen.

⚠ If the iOpener is still too hot in the middle to touch, continue using it while waiting for it to cool down some more before reheating. A properly heated iOpener should stay warm for up to 10 minutes.

Step 3



- Remove the iOpener from the microwave, holding it by one of the two flat ends to avoid the hot center.

 The iOpener will be very hot, so be careful when handling it. Use an oven mitt if necessary.

Step 4 — Power off the Apple Watch



- Before starting repairs, take your watch off the charger and power it down.

 If your touchscreen is broken and prevents powering off the watch, [use this alternate method to power it down](#).

Step 5 — Apply heat



- [Prepare an iOpener](#) (or grab a hair dryer or heat gun) and heat the face of the watch until it's slightly too hot to touch.
- Leave the iOpener on the watch for at least a minute to fully heat the screen and soften the adhesive holding it to the case.

i You may need to reheat the iOpener, or move it around on the screen as sections cool, to heat the screen enough to pry it off.

Step 6 — Observe all warnings



i Because the gap between the screen and watch body is so thin, a sharp blade is required to separate the two. **Read the following warnings carefully before proceeding.**

⚠ Protect your fingers by keeping them completely clear of the knife. If in doubt, protect your free hand with a heavy glove, such as a leather shop glove or gardening glove.

⚠ Be careful **not to apply too much pressure**, as this might cause the knife to slip and cut you, or damage the watch.

⚠ Wear eye protection. The knife or glass may break, sending pieces flying.

Step 7 — Pry up the screen



- ⓘ Using a curved blade minimizes the chance of scratching the case or cracking the glass. Only pry with the curved section of the blade, and not the tip or flat section.
- Place the curved section of the blade in the gap between the glass and case on the lower edge of the watch face, and press firmly *straight down* into the gap.

⚠ Be very careful to maintain complete control over the knife—once the gap opens, if you're pressing too hard on the knife it may slip in and cut the battery.

- ⓘ This should wedge the gap open and cause the glass to lift slightly up from the case.
- When the glass has lifted, gently rotate the knife down, opening the gap more by pushing the glass up.

Step 8



- Once you've opened the gap enough, insert the tip of an opening pick under the glass.
- Slide the pick along the bottom edge to separate adhesive holding the screen to the case.

⚠ Be careful not to insert the opening pick too far. Only about 1/8" (about 3 mm) is necessary, any deeper and you may damage cables.

Step 9



- Roll the opening pick up the side of the button side of the watch, gently pushing in to separate the adhesive and widening the gap as you go.

i Remember not to push the pick in too far—it's easier to avoid this by rolling the pick, rather than dragging a tip along.

Step 10



- Work the pick around the top right corner, and roll it along the top edge of the screen.

Step 11



- Continue working the pick around the perimeter of the screen, rolling down along the left side to cut the last of the adhesive.
- ① Leave the pick in place to keep the adhesive from resealing the screen in place.

Step 12



- While holding the first pick in place, use a second to check that all of the adhesive is separated around the entire perimeter of the screen.

Step 13



⚠ There are two cables connecting the screen to the inside of the watch, near the top left corner. Be careful when prying or you may damage these cables.

- Pry slightly up on the right side of the screen, to free it from any remaining adhesive.
- Pry up on the left to free it as well—but **do not attempt to remove the screen** as it is still held in place by two cables.

Step 14



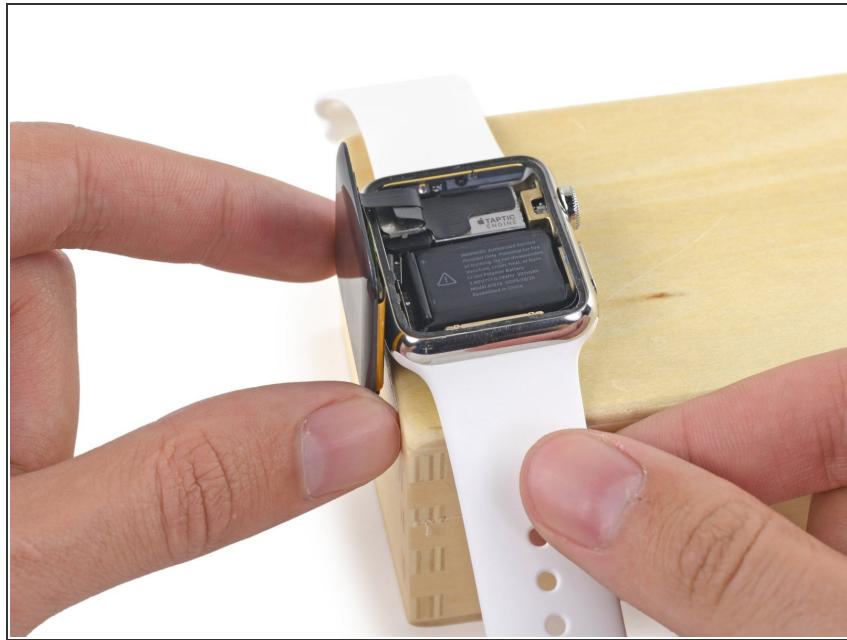
- ⓘ If you can see the top layer of your Force Touch sensor among the display adhesive, it means the two layers of the sensor separated and you're going to need to replace or repair it.
- ⓘ iFixit screen and battery repair kits come with a replacement Force Touch sensor, so if you got one of those, don't fret.
- The top layer of the sensor may be adhered to the back of the screen—if so, push it back down and separate it.

Step 15



- Lift the screen up and shift it to the left, minding the display data and digitizer cables.

Step 16



- Place the watch on an elevated surface, at least 1/2" or 1 cm tall—a small box or the edge of a book will work great. This will allow the screen to hang down vertically and give better access to the battery.

 Be careful not to bump the screen or strain the cables while you work.

Step 17



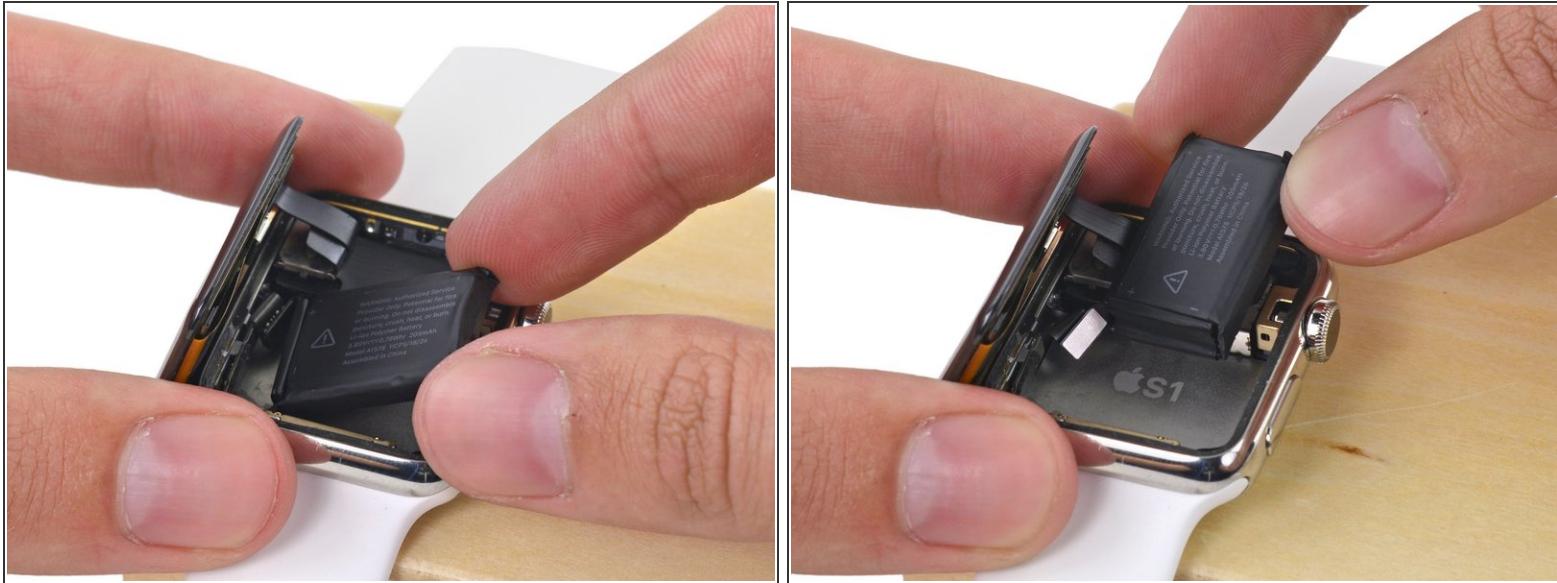
- Use scissors to cut one of your opening picks to about the width of the battery. Try not to leave any sharp corners.
- Insert the modified pick between the right side of the battery and the case.
- Use constant, steady pressure to *slowly* pry the battery up, separating it from the adhesive securing it to the system board.

 Be careful not to deform or puncture the battery.

- On the larger (42 mm) models, it's possible to [accidentally pry at the system board](#) underneath the battery. Insert the pick only far enough to get underneath the battery, not the system board.
- If needed, apply a little high concentration isopropyl alcohol (90% or greater) around and under the battery to help weaken the adhesive.

 **Do not** attempt to remove the battery as it is still connected.

Step 18



- Rotate the battery counterclockwise to expose its connector.

Step 19



- Hold the battery up and out of the way, to expose the battery cable connector.
- Use a plastic opening tool, prying against the bottom of the case to separate the battery cable connector from the watch's battery cable.
- Remove the battery from the watch.

⚠ If the battery is visibly dented or deformed, it should be replaced. For best results, replace with a new battery whenever it is removed.

Step 20 — Screen



- Fold the screen up and over to the right, to expose the cables underneath.

Step 21



- The display and digitizer cable connectors are secured beneath a small metal bracket that is adhered to the speaker.
- Use a plastic opening tool to flip the bracket toward the display and up from the speaker.

⚠ If you simply pry toward the watch band you may tear the cables.

Step 22



- Steady the bracket from the left side using your fingers or tweezers.
- At the same time, insert a small (1 mm) flathead screwdriver under the tiny tab on the right.
- Finally, place one finger behind the tab, and pinch the bracket *hard* between your finger and the screwdriver to detach the cover.
 - ⓘ This releases two slotted tabs that hold the cover to the bracket, and should free the cover.
 - ⚠ Prying the cover off can be challenging and may take more than one attempt. Be patient, and take care not to pull on the bracket or tear the attached cables.

Step 23



- Grab the cover with your tweezers and slide it toward the top of the watch to free the final slotted tab, and remove the cover.

Step 24



- Carefully pry up to disconnect the display data and digitizer cables.
- ⚠ Be careful not to touch any of the exposed pins directly, as your finger oils may impede connectivity.
- Remove the display.

Continue from Step 22 of our [Force Touch Sensor guide](#) to re-seal your watch and complete your repair.