

Apple Watch Series 7 Screen Replacement

Use this guide to replace a broken, cracked, or...

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INTRODUCTION

Use this guide to replace a broken, cracked, or defective screen on your Apple Watch Series 7.

It is possible to replace the screen of the Apple Watch Series 7 without removing or disconnecting the battery first. However, this can lead to a malfunction of the NFC antenna under certain circumstances. If you are unsure about your repair, we recommend that you first follow the <u>battery guide</u> and then continue with <u>Step 23</u> of this guide.

Replacing the display can cause issues with **Apple Pay**. If possible, to reduce the likelihood of problems, delete all your Apple Pay account info before the replacement, and then re-enter it with the new display installed.

This guide shows the procedure on the cellular/LTE version of the watch, but the standard GPS-only version is similar.

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



TOOLS:

- ESD Safe Tweezers Blunt Nose (1) optional
- Spudger (1) optional
- Safety Glasses (1)
- ESD Gloves (1)
- Curved Razor Blade (1)
- iOpener (1)
- iFixit Opening Picks (Set of 6) (1)
- iFixit Adhesive Remover (for Battery, Screen, and Glass Adhesive) (1)

optional

Heat Gun (1)

optional

- Microfiber Cleaning Cloths (1) optional
- Tweezers (1)



PARTS:

- Apple Watch (45 mm Series 7) Screen(1)
- Apple Watch (41 mm Series 7) Screen
 (1)
- Apple Watch (45 mm Series 7) Adhesive Strip (1)
- Apple Watch (41 mm Series 7) Adhesive Strip (1)

Step 1 — Power down the watch





- Before starting repairs, take your watch off the charger and power it down.
 - if your touchscreen is broken and you can't power off the watch, use this alternate method to power it down.

Step 2 — Safety Requirements







- Because the gap between the screen and watch body is so thin, a sharp blade is needed 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.
 - Near eye protection. The knife or glass may break, sending pieces flying.
- (i) Attach or remove the watch band as needed to provide more control as you make repairs.

Step 3 — Soften the display adhesive



- Prepare an iOpener and apply it to the screen for at least two minutes to loosen the adhesive underneath.
 - A hair dryer, heat gun, or hot plate may also be used, but be careful not to overheat the watch—the display and internal battery are both susceptible to heat damage.
 - You may need to reheat the iOpener and repeat this procedure several times until the display adhesive softens.

Step 4 — Create a gap







- A Be aware that a sharp tool easily scratches your watch housing when not handled with care. To avoid undesired scratches, take your time and work carefully rather than hastily.
- Place the edge of a curved blade into the thin gap between the display and the outer case. Start at the short side of the display, most distant to the digital crown.
- Once inserted, tilt the blade to pry the display open slightly and create a gap between the screen and the watch body.
 - The Apple Watch Series 7 display is equipped with a plastic bezel on its rear side. If you want to reuse your display, avoid using too much pressure with the knife or you may separate the bezel from the screen.

Step 5 — Slice the adhesive



- Insert an opening pick in the gap your created.
- Slide the opening pick along the short edge of the watch to slice the adhesive.

Step 6



 Slide the opening pick around the corner and along the long edge on the opposite side of the watch crown to slice the display adhesive.

Step 7



 Slide the opening pick around the corner to slice the remaining adhesive on the short edge of the watch next to the watch crown.

♠ Don't try to remove the display. It is still connected to the watch assembly.

Step 8 — Swing open the display







⚠ Be careful not to strain the display cables when you fold the display to the side.

- Lift the display and carefully pull it towards the watch crown.
- Swing the display open to an upward position.

Step 9 — Soften the battery adhesive



- Prepare an iOpener and apply it to the rear side of your Apple Watch for at least two minutes to loosen the adhesive underneath the battery.
- A hair dryer, heat gun, or hot plate may also be used, but be careful not to overheat the watch—the display and internal battery are both susceptible to heat damage.

Step 10 — Determine which procedure to follow



- From this point, the battery removal procedure for the 41 mm watch differs slightly from the 45 mm version.
 - If you're replacing the battery for a 41 mm watch, continue with this step.
 - If you're replacing the battery for a 45 mm watch, continue with <u>this</u> <u>step</u>.

Step 11 — Pry up the battery

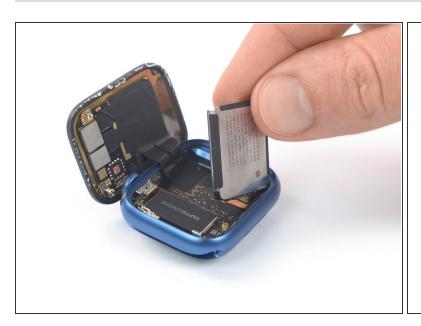






- (i) The following six steps show how to remove the battery from a 41 mm Apple Watch Series 7.
- Insert an opening pick between watch body and the long edge of the battery.
- Use constant, steady pressure to slowly pry up the battery.
- Take care not to puncture or bend the battery with your tool—a punctured or bent battery may leak dangerous chemicals or cause a fire.
- ↑ Don't try to remove the battery all the way yet. It is still connected to the motherboard.

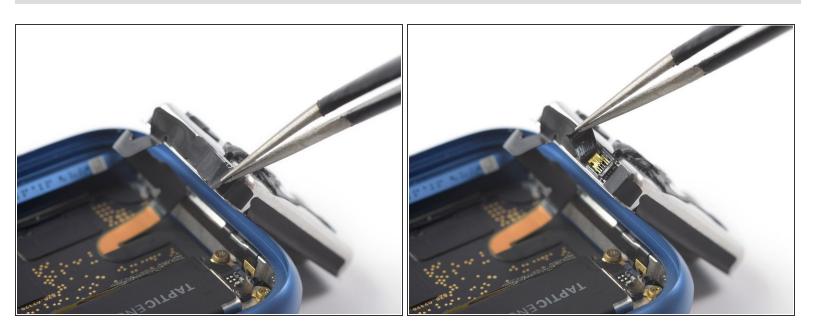
Step 12 — Move the battery





- ↑ The battery flex cable is long enough to allow you to place the battery outside the watch housing, but avoid straining or folding the the cable sharply when you lift the battery out of its recess.
- Carefully lift and swing the battery out of its recess and place it next to the watch body.

Step 13 — Peel the black protective tape off the ZIF connector



Use a pair of tweezers to peel the black protective tape off the ZIF connector.

Make sure to only peel the tape off the connector but avoid to remove it completely. Otherwise you have to replace the tape during reassembly.

Step 14 — Open the ZIF connector



 Use one arm of your tweezers or the pointed end of a spudger to pry up the lock bar on the ZIF connector securing the battery cable.

Step 15 — Disconnect the battery





Use a pair of tweezers to pull the battery cable out of the battery ZIF connector.

During reassembly make sure to push the cable all the way back into the ZIF connector before locking the it. Reapply the black tape on top of the connector to secure the battery cable or replace it with new one. Otherwise the battery cable may slip out of the connector and your watch won't turn on.

Step 16 — Remove the battery



- Remove the battery.
- ⚠ Do not reuse the battery if it has been deformed or damaged, as doing so is a potential safety hazard. Replace it with a new battery.
 - If you're reusing your old battery during reassembly, you can reuse the existing adhesive to secure the battery during reassembly.
 - Secure a new battery with pre-cut adhesive or double-sided adhesive tape. In order to position it correctly, apply the new adhesive into the device at the places where the old adhesive was located, not directly onto the battery. Press the new battery firmly into place.

Step 17 — Pry up the battery



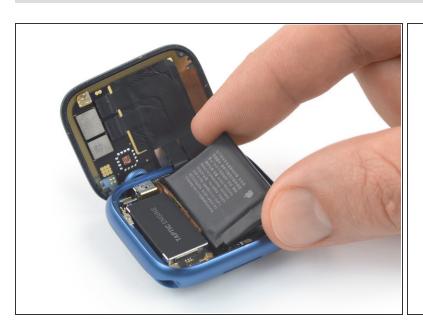




- (i) The following six steps show how to remove the battery from a 45 mm Apple Watch Series 7.
- Insert an opening pick between watch body and the long edge of the battery.
- Use constant, steady pressure to slowly pry up the battery.
- Take care not to puncture or bend the battery with your tool—a punctured or bent battery may leak dangerous chemicals or cause a fire.

↑ Don't try to remove the battery all the way yet. It is still connected to the motherboard.

Step 18 — Move the battery





- The battery flex cable is long enough to allow you to place the battery outside the watch housing, but avoid straining or folding the the cable sharply when you lift the battery out of its recess.
- Carefully lift and swing the battery out of its recess and place it next to the watch body.

Step 19 — Unfasten the battery connector bracket screw



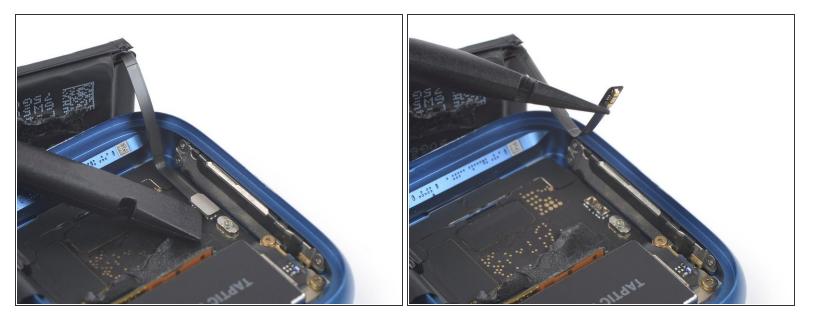
 Use a Tri-Point Y000 screwdriver to remove the 1.1 mm-long screw securing the battery connector bracket.

Step 20 — Remove the battery connector bracket



Use a pair of tweezers to remove the battery connector bracket.

Step 21 — Disconnect the battery cable



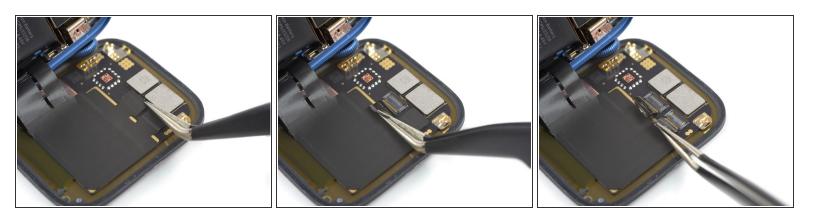
• Use a spudger to disconnect the battery cable by prying the connector straight up from its socket.

Step 22 — Remove the battery



- Remove the battery.
- ⚠ Do not reuse the battery if it has been deformed or damaged, as doing so is a potential safety hazard. Replace it with a new battery.
 - If you're reusing your old battery, you can reuse the existing adhesive to secure the battery during reassembly.
 - Secure a new battery with pre-cut adhesive or double-sided adhesive tape. In order to position it correctly, apply the new adhesive into the device at the places where the old adhesive was located, not directly onto the battery. Press the new battery firmly into place.
- During reassembly apply new adhesive where necessary after cleaning the relevant areas with isopropyl alcohol (>90%).

Step 23 — Peel the protective tape off the display connectors



- Use a pair of tweezers to carefully peel the black protective tape off both display connectors.
- During reassembly, this is a good point to power on your watch and test all functions before sealing it up. Be sure to power your watch back down completely before you continue working.

Step 24 — Open the ZIF connectors



 Use a spudger or one arm of your tweezers to pry up the lock bar on the ZIF connectors securing the display cables.

Step 25 — Soften the protective tape adhesive

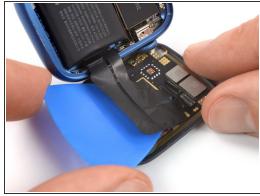


- Prepare an iOpener and apply it to the screen for at least two minutes to loosen the protective tape on its rear side.
 - A hair dryer, heat gun, or hot plate may also be used, but be careful not to overheat the phone —the display and internal battery are both susceptible to heat damage.

Step 26 — Separate the display cables



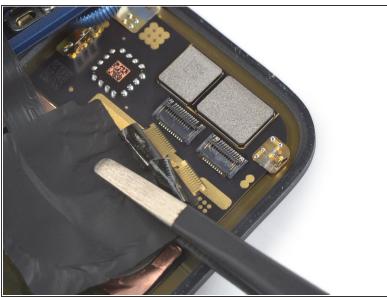




Carefully slide an opening pick underneath the display cables to separate them from the screen.

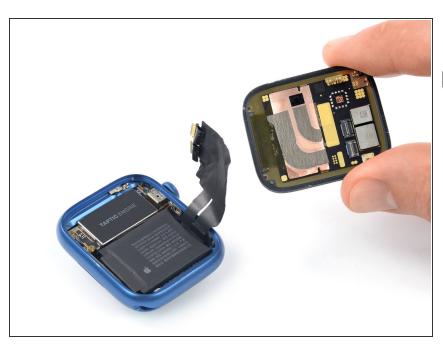
Step 27 — Disconnect the display cables





- Use a pair of tweezers to pull both display cables out of the ZIF connectors.
 - Avoid pulling on the watch assembly, or you may rip the display cables.
- if not damaged you can reuse the old tape during reassembly. Otherwise replace it with new tape.

Step 28 — Remove the screen



- Remove the screen.
- Apply new adhesive where it's necessary after cleaning the relevant areas with isopropyl alcohol (>90%).

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

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 Answers community for troubleshooting help.