

Apple Watch Series 5 Battery Replacement

Use this guide to replace a worn-out or dead...

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INTRODUCTION

Use this guide to replace a worn-out or dead battery in your Apple Watch Series 5.

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

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

During the display opening procedure of the Apple Watch you might damage the force touch gasket. If you separate the gasket layers or cut the cable, you'll also need to replace the Force Touch gasket itself.

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



TOOLS:

- iOpener (1)
- iFixit Opening Tool (1)
- iFixit Opening Picks (Set of 6) (1)
- Curved Razor Blade (1)
- Safety Glasses (1)
- ESD Gloves (1)
- Tri-point Y000 Screwdriver (1)
- Tweezers (1)
- Spudger (1)

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PARTS:

- Apple Watch (44 mm SE and Series 5)
 Replacement Battery (1)
- Apple Watch (40 mm SE and Series 5)
 Replacement Battery (1)
- Apple Watch Battery Adhesive (1)
- Apple Watch (44 mm Series 5) Force Touch Sensor Gasket (1)
- Apple Watch (40 mm Series 5) Force Touch Sensor Gasket (1)
- Apple Watch (44 mm Series 4/5)
 Adhesive Strip (1)
- Apple Watch (40 mm Series 4/5)
 Adhesive Strip (1)

Step 1 — Display Opening





- 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, <u>use this alternate method to power it down</u>.

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.



- Prepare an iOpener (or use a hair dryer or heat gun) and heat the face of the watch to loosen the display adhesive.
 - Leave the iOpener on the watch for at least two minutes to fully heat the screen and soften the adhesive holding it to the case.
- You may need to reheat the iOpener and repeat this procedure several times until the display adhesive softens.

Step 4







- 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, closest to the digital crown.
- Press firmly straight down into the gap.
- Once inserted, tilt the blade to pry the display open slightly.
 - ⚠ Do not insert the knife more than 1/16th of an inch (~2 mm) to avoid damaging the force touch sensor.





- Once you've opened a small gap with the curved blade, remove the blade and insert the thinner edge of an opening tool into the gap.
- Push the opening tool into the gap, using your thumb as a pivot to lift the display open a bit farther.

n Don't try to fully open or detach the display yet.







- It's likely that the force touch sensor will stick to the display frame instead to the watch's body. In this case, insert an opening pick under the display and carefully separate the Force Touch gasket from the display.
 - To preserve the Force Touch gasket, pry carefully under the edge of the display. If the Force Touch gasket splits when lifting the display, or if you separate the gasket layers, you'll also need to replace the Force Touch gasket itself.
- Slide the pick around the display to separate the adhesive between the Force Touch gasket and the display.
 - ♠ Don't insert the opening pick deeper than 1/16th of an inch (~2 mm) to avoid damaging other components.





 $\begin{tabular}{ll} Λ void tensioning the display cables when folding the screen to the back.$

Carefully lift the display open like a book.

Step 8 — Battery

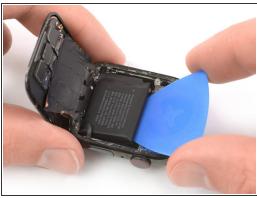




- Lift the screen until there's enough space to access the battery.
- Insert an opening pick between the battery and the Taptic Engine.
 - (i) A regular opening pick works fine with the 44 mm version of the Apple Watch Series 5. However if you own the 40 mm version and don't have enough space you can <u>customize your opening</u> <u>pick with scissors</u>.

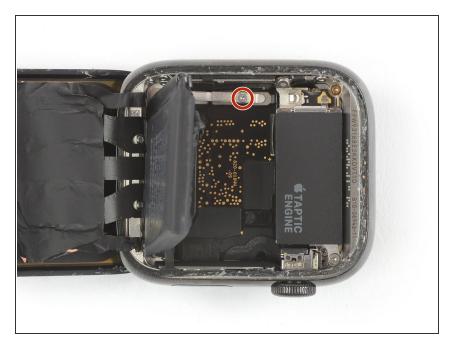
Step 9 — Pry up the Battery





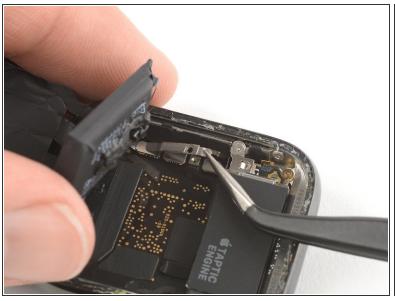


- Slide the opening pick along the edge of the battery to loosen the adhesive.
 - The battery adhesive is soft. However, if you're struggling to pry out the battery you can place a heated iOpener on the rear side of the watch to loosen the adhesive. Apply the iOpener for at least two minutes.
- Use constant, steady pressure to slowly pry the battery up, separating it from the adhesive securing it to the mainboard.
- Avoid damaging the display cables, and especially the force touch cable, which covers the battery in one corner during the prying procedure.
- ↑ Make sure you don't puncture or deform the battery, as it can catch fire and/or explode if damaged.
- ↑ Don't try to remove the battery all the way yet. It is still connected to the watch assembly.



- Carefully lift the battery to a 75degree angle.
- Remove the 1.1 mm-long Y000 screw.

Step 11 — Remove The Metal Plate

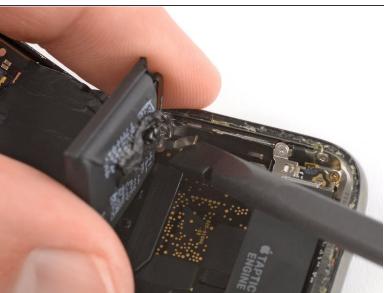




Use a pair of tweezers to remove the metal plate covering the battery connector.

Step 12 — Disconnect the battery

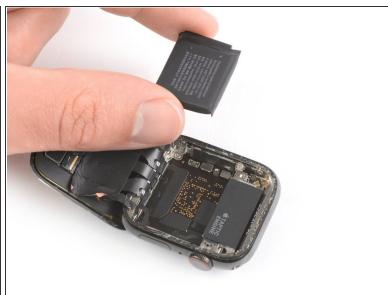




Use the flat end of a spudger to pry up and disconnect the battery flex cable.

Step 13 — Remove the Battery





Remove the battery.

↑ Do not reinstall a damaged or deformed battery, as doing so is a potential safety hazard.

- (i) If you are reusing your old battery during reassembly, you can reuse the existing adhesive to secure the battery during reassembly. Alternatively, remove the old adhesive with high isopropyl alcohol and a lint free cloth and use a small piece of double-sided tape such as Tesa 61395, or a dab of liquid adhesive such as E6000.
- Follow the resealing guide to reseal your watch after reassembly.

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

<u>Secure the new battery with pre-cut adhesive</u> 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.

To reassemble your device, follow these instructions in reverse order. Apply new adhesive where necessary after cleaning the relevant areas with isopropyl alcohol (>90%).

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

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

Repair didn't go as planned? Try some basic troubleshooting, or ask our Answers community for help.

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