

# **iPhone 14 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 iPhone 14.

iPhone batteries are rated to hold 80% of their capacity for up to 500 charge cycles, which lasts roughly 18-24 months for most users. After that, your iPhone may need to be charged far more frequently, and iOS may warn you that performance is affected (in other words, your phone will run slower).

This guide was created using the **A2882** (international) model. If you're fixing a different iPhone 14 model, there may be some visual discrepancies, but the procedure should be the same.

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

**Note**: After the repair, your iPhone may display a warning about the "genuineness" of the battery, even when using original Apple parts. If your iPhone functions normally, you can safely ignore the warning.

You'll need replacement adhesive to reattach the battery and the screen when reassembling the device. Your device will function normally, but will most likely lose its IP (Ingress Protection) rating.

#### TOOLS:

Anti-Clamp (1)

Hair Dryer (1)

P2 Pentalobe Screwdriver iPhone (1)

Suction Handle (1)

iFixit Opening Picks (Set of 6) (1)

Tri-point Y000 Screwdriver (1)

ESD Safe Blunt Nose Tweezers (1)

Tweezers (1)

Spudger (1)

Isopropyl Alcohol (90% or Greater) (1)

Safety Glasses (1)

Packing Tape (1)

#### PARTS:

iPhone 14 Battery (1)

iPhone 14 Battery Adhesive Strips (1)

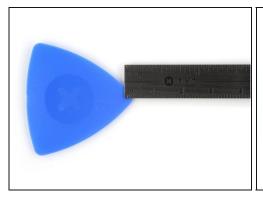
## Step 1 — Remove the pentalobe screws



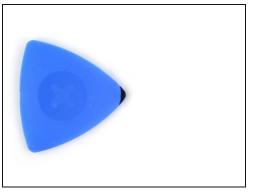


- Power off your iPhone before beginning disassembly.
- Remove the two 6.8 mm-long pentalobe P2 screws at the bottom edge of the iPhone.

### Step 2 — Mark your opening picks







- (i) If inserted too far, an opening pick can damage your device. Follow this step to mark your pick and prevent damage.
- Measure 3 mm from the tip and mark the opening pick with a permanent marker.
- ② You can also mark the other corners of the pick with different measurements.
- (i) Alternatively, tape a coin to a pick 3 mm from the tip.

#### Step 3 — Tape over any cracks





- (i) If your iPhone has a cracked rear glass, keep further breakage contained and prevent bodily harm during your repair by taping over the glass.
- Lay overlapping strips of clear packing tape over the iPhone's rear glass until the whole face is covered.

## ⚠ Wear safety glasses to protect your eyes from any glass shaken free during the repair.

- If you can't get the suction cup to stick in the next few steps, fold a strong piece of tape (such as duct tape) into a handle and lift the rear glass with that instead.
  - (i) If all else fails, you can superglue the suction cup to the rear glass.

#### Step 4 — Anti-Clamp instructions







- (i) The next three steps demonstrate the <u>Anti-Clamp</u>, a tool we designed to make the opening procedure easier. **If you aren't using the Anti-Clamp, skip down three steps for an alternate method.** 
  - i For complete instructions on how to use the Anti-Clamp, check out this guide.
- Follow this guide to secure your screen with the included tape.
- Pull the blue handle backwards to unlock the Anti-Clamp's arms.
- Slide the arms over either the left or right edge of your iPhone.
- Position the suction cups near the bottom edge of the iPhone—one on the front, and one on the back.
- Squeeze the cups together to apply suction to the desired area.
  - (i) If you find that the surface of your iPhone is too slippery for the Anti-Clamp to hold onto, you can <u>use tape</u> to create a grippier surface.

# Step 5







- Pull the blue handle forwards to lock the arms.
- Turn the handle clockwise 360 degrees or until the cups start to stretch.
- Make sure the suction cups remain aligned with each other. If they begin to slip out of alignment, loosen the suction cups slightly and realign the arms.

#### Step 6





- Support your iPhone on something sturdy such as a hardcover book so it rests handsfree and parallel to the ground; this makes it easier to work with in the following steps.
- Use a hair dryer to heat along the bottom edge of the iPhone. The glass should feel slightly too hot to touch.
- (i) For complete instructions on how to use a hair dryer, check out this guide.
- Wait one minute to give the adhesive a chance to release and present an opening gap.
- Insert an opening pick under the rear glass when the Anti-Clamp creates a large enough gap.
  - (i) If the Anti-Clamp doesn't create a sufficient gap, apply more heat to the area and rotate the handle a quarter turn.
  - ⚠ Don't crank more than a quarter turn at a time, and wait one minute between turns. Let the Anti-Clamp and time do the work for you.
- Skip the next two steps.

#### Step 7 — Heat the bottom edge



- i If you're using a suction handle, follow the next two steps to loosen the rear glass.
- Use a <u>hair dryer</u> or a <u>heat gun</u> to heat the bottom edge of the iPhone for 90 seconds or until the rear glass is slightly too hot to touch.
  - A Never leave your hair dryer in one spot for an extended period of time.

#### Step 8 — Insert an opening pick







- Apply a suction handle to the bottom edge of the rear glass, while avoiding the very edge of the glass.
- Pull up on the suction cup with firm, constant pressure to create a slight gap between the rear glass and the case.
- Insert an opening pick into the gap.
- (i) The adhesive holding the rear glass in place is very strong; creating this initial gap takes a significant amount of force. If you're having a hard time opening a gap, apply more heat, and gently rock the rear glass up and down to weaken the adhesive until you create enough of a gap to insert your opening pick.

## Step 9 — Heat the left edge



 Use a hair dryer to heat the left edge of the iPhone for 90 seconds or until the rear glass is slightly too hot to touch.

# Step 10 — Slice the left edge adhesive



• Slide the opening pick around the lower left corner and up the left edge of the iPhone, slicing through the adhesive holding the rear glass in place.

⚠ Don't insert your pick more than 3 mm, as you may damage internal components.

# **Step 11 — Screen information**



⚠ There's a delicate cable along the right edge of your iPhone. **Don't insert your pick here**, as you may damage the cable.

## Step 12 — Heat the right edge



 Use a hair dryer to heat the right edge of the iPhone (the edge with the power button) for 90 seconds or until the rear glass is slightly too hot to touch.

# Step 13 — Slice the right edge adhesive



• Re-insert your pick at the bottom edge of the iPhone, and slide it up the right side to continue separating the adhesive.

⚠ Don't insert your pick more than 3 mm, as you may damage the charging coil cable.

# Step 14 — Heat the top edge



• Use a hair dryer to heat the top edge of the iPhone for 90 seconds or until the rear glass is slightly too hot to touch.

## Step 15 — Slice the top edge adhesive



• Insert your pick underneath the top right edge of the phone. Slide it around the topright corner and halfway across the top edge.

## Step 16



- Insert your pick underneath the top-left edge of the phone. Slide it around the top-left corner and halfway across the top edge.
  - ⚠ Don't insert the pick more than 3 mm, as you may damage or smear the camera array.

⚠ Don't try to fully separate the rear glass yet, as a fragile ribbon cable still connects it to the iPhone's logic board.

# Step 17 — Open the iPhone







- Remove your suction handle from the rear glass.
- Slowly open your iPhone by swinging the rear glass up from the left side, like the back cover of a book.
  - ⚠ Be careful not to strain the short charging coil flex cable.
- Lean the rear glass against something to keep it propped up while you're working on the phone.
  - If you don't have anything at hand to lean the rear glass against, your <u>suction handle</u> <u>can do the trick</u>.
- During reassembly, lay the rear glass in position, align the clips along the top edge, and carefully press the top edge into place before snapping the rest down. If it doesn't click easily into place, check the condition of the clips around the perimeter of the rear glass and make sure they aren't bent.

#### Step 18 — Unfasten the battery connector cover screws



- Use a Y000 screwdriver to remove the two 1.3 mm-long screws securing the battery connector cover.
- (i) Throughout this repair, <u>keep track of each screw</u> and make sure it goes back exactly where it came from to avoid damaging your iPhone.
- During reassembly, this is a good point to power on your iPhone and test all functions before you seal the display in place. Be sure to power your iPhone back down completely before you continue working.

## Step 19 — Remove the battery connector cover



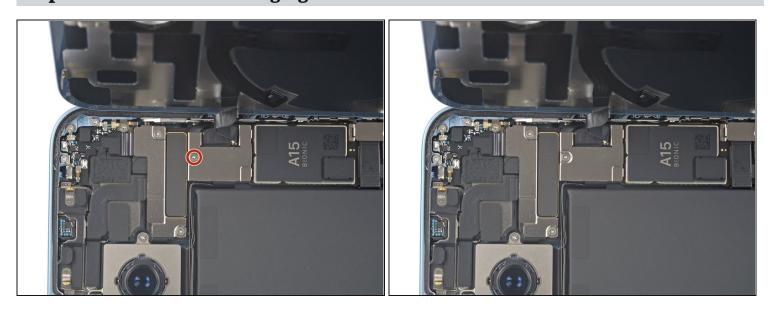
- Grasp the battery connector cover with a pair of tweezers and slide it upwards (towards the A15 print) to unlatch the <u>top hook</u>.
- Remove the battery connector cover.

## Step 20 — Disconnect the battery



- Use the pointed end of a spudger to disconnect the battery cable by prying the connector straight up from its socket.
  - (i) Try not to damage the black silicone seal surrounding this and other board connections. These seals provide extra protection against water and dust intrusion.
- Bend the connector slightly away from the logic board to prevent it from accidentally making contact with the socket and providing power to the phone during your repair.

# Step 21 — Unfasten the charging coil connector cover screw



• Use a Y000 screwdriver to remove the single 1.0 mm-long screw securing the charging coil connector cover.

# Step 22 — Remove the charging coil connector bracket



• Use a pair of tweezers to remove the charging coil connector cover.

# Step 23 — Disconnect the charging coil



• Use the pointed end of a spudger to disconnect the charging coil cable by prying the connector straight up from its socket.

#### Step 24 — Remove the rear glass assembly



- Remove the rear glass assembly.
- Apply new adhesive where it's necessary after cleaning the relevant areas with isopropyl alcohol (>90%).
- During reassembly, pause here if you wish to replace the rear glass adhesives.

## Step 25 — Locate the adhesive pull-tabs



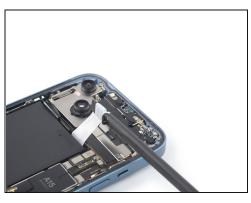
- i Two stretch adhesive strips secure the battery to the case. They're both accessed from the top edge of the battery.
  - Each adhesive strip has a black pull-tab at the end, which is lightly adhered to the edge of the battery.
- in the following steps, you'll pull each tab to slowly stretch out the adhesive underneath the battery. These "command-strip" style adhesives lose their stick when stretched, so you can remove the battery with ease.
- i If the strips break, don't panic! They don't always work as intended. Keep reading for tips on removing broken strips.

# Step 26 — Remove the stretch-release adhesive



- **Caution:** Don't jab the battery with any sharp tools. A punctured battery may leak dangerous chemicals or catch fire.
- Use a pair of blunt-nosed tweezers to peel up the two battery adhesive pull-tabs along the top edge of the battery.

#### **Step 27**







- Grab the first pull-tab with your fingers or wrap it around a spudger and *slowly* pull it away from the battery, toward the top of the iPhone.
  - Pull out hard enough to maintain tension on the strip, but don't force it. Give it plenty of time to stretch and un-stick from under the battery.
  - Don't press down on the battery but hold the iPhone firmly by its sides.
  - Keep the strip flat and unwrinkled. Try to pull evenly on the whole strip, rather than pulling mainly in the middle or on one side.
- If the adhesive strip breaks off, try to retrieve it using your fingers or blunt tweezers, and continue pulling—but **do not** pry under the battery.

1 If any of the adhesive strips break off underneath the battery and can't be retrieved, try to remove the other strip, and then proceed as instructed below.

#### Step 28







- Grab the second pull-tab with your fingers or the center of a spudger and pull it away from the battery, toward the top of the iPhone.
  - Follow the same procedure as with the previous strip: don't press down on the battery, keep the strip flat and unwrinkled, and pull at a low angle.
- If the adhesive strip breaks off, try to retrieve it using your fingers or blunt tweezers, and continue pulling—but **do not** pry under the battery.

⚠ If the adhesive breaks off underneath the battery and can't be retrieved, continue with the next step.

#### Step 29 — How to remove a stuck battery

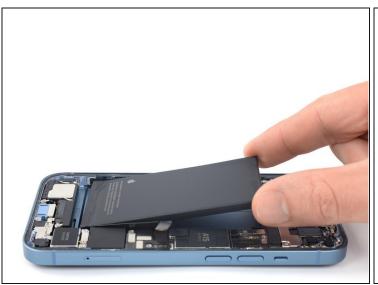






- If you're still having trouble removing the battery, apply a few drops of high concentration (90% or higher) isopropyl alcohol under the edge of the battery in the area of the broken adhesive strip(s).
- Wait about one minute for the alcohol solution to weaken the adhesive.
- Use an opening pick or the flat end of a spudger to gently lift the battery.
  - ⚠ 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 30 — Remove the battery





- Remove the battery.
- ⚠ Do not reinstall a damaged or deformed battery, as doing so is a potential safety hazard.
- If there's any alcohol solution remaining in the phone, carefully wipe it off before installing your new battery.
- If your new battery didn't come with adhesive preinstalled, refer to this guide for help replacing the adhesive strips.
- Perform a <u>force restart</u> after reassembly. This can prevent several issues and simplify troubleshooting.

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.** During reassembly 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 <u>basic troubleshooting</u>, or ask our <u>Answers community</u> for help.