MacBook Pro 14" 2021 Battery Replacement

How to replace the battery in your MacBook Pro 16" 2021.

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INTRODUCTION

Use this guide to replace the battery in your MacBook Pro 14" 2021.

The MacBook Pro uses stretch-release adhesives to secure the battery. Some of the strips are hidden underneath the trackpad, so you’ll need to remove it first to access the strips.

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

You'll need replacement adhesive in order to complete this repair.

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:

- Suction Handle (1)
- iFixit Opening Picks (Set of 6) (1)
- P5 Pentalobe Screwdriver Retina MacBook Pro and Air (1)
- T5 Torx Screwdriver (1)
- Spudger (1)
- T3 Torx Screwdriver (1)
- ESD Safe Tweezers Blunt Nose (1)
Step 1 — Unfasten the lower case

⚠️ Completely power off and unplug your MacBook Pro before you start. Close the display and flip the entire laptop upside-down.

- Use a P5 Pentalobe driver to remove eight screws securing the lower case:
  - Four 9.3 mm screws
  - Four 5 mm screws

閣 Throughout this repair, keep track of each screw and make sure it goes back exactly where it came from to avoid damaging your device.
Step 2 — Unclip the lower case

- Press a suction handle into place near the front edge of the lower case, between the screw holes.
- Pull up on the suction handle to create a small gap under the lower case.

Step 3 — Release the lower case’s right clips

- Insert an opening pick into the gap you just created.
- Slide the opening pick around the nearest corner and then halfway up the side of the MacBook Pro.
  
  This releases the first of the hidden clips securing the lower case. You should feel and hear the clip pop free.
Step 4 — Release the lower case's left clips

- Repeat the previous step on the other side, using an opening pick to release the second clip.

Step 5

- Pull firmly to slide the lower case towards the front edge of the MacBook (away from the hinge area) to separate the last of the clips securing the lower case.
  - Pull first at one corner, then the other.

⚠️ Pull to the side—not up.

ℹ️ This may require a lot of force.
Step 6 — Remove the lower case

- Remove the lower case.

To reinstall the lower case:

- Set it in place and align the sliding clips near the display hinge. Press down and slide the cover toward the hinge. It should stop sliding as the clips engage.

- When the sliding clips are fully engaged and the lower case looks correctly aligned, press down firmly on the lower case to engage the four hidden clips underneath. You should feel and hear them snap into place.

Step 7 — Unfasten the trackpad cable bracket

- Use a T3 Torx driver to remove the two 2.1 mm-long screws securing the trackpad cable bracket to the logic board.
Step 8 — Remove the trackpad cable bracket

- Use tweezers, or your fingers, to remove the trackpad cable bracket.
Step 9 — Disconnect the trackpad cable

- Use the flat end of a spudger to pry up and disconnect the trackpad cable’s press connector secured to the logic board.

💡 To re-attach press connectors like this one, carefully align and press down on one side until it clicks into place, then repeat on the other side. Don't press down on the middle. If the connector is misaligned, the pins can bend, causing permanent damage.
Step 10 — Reposition the trackpad cable

The trackpad cable is lightly adhered to the frame.

- Peel the trackpad cable away from the device, making sure to separate the adhesive.

Step 11 — Disconnect the battery board

- Peel back any tape covering the battery board data cable connector.
Step 12

- Use a spudger to gently pry up the locking flap on the ZIF connector for the battery board data cable.

Step 13

- The battery board data cable is lightly adhered to the logic board.
  - Insert blunt-nosed tweezers between the battery board data cable and the logic board.
  - Slide the the tweezers underneath the cable to separate the adhesive.
  - Disconnect the battery board data cable by sliding it out from its socket on the logic board.
Step 14 — Reposition the battery board cable

- Use tweezers, or your fingers, to pull the battery board data cable away from the device.

Step 15 — Unfasten the battery connector

- Use a T5 Torx driver to remove the 3.8 mm pancake screw securing the battery power connector.
Step 16 — Disconnect the battery connector

- Use a spudger to lift the battery power connector, disconnecting the battery.

⚠️ Lift the connector high enough to keep it separated from its socket while you work. If it accidentally makes contact, it could damage your MacBook Pro.
Step 17 — Unfasten the trackpad

- Use a T5 Torx driver to remove the ten 5.7 mm screws securing the trackpad assembly:

- Adding a little blue threadlocker to the screw threads during reassembly can help prevent the screws from working themselves loose over time.

- Install the screws loosely at first, and then check the trackpad alignment before tightening them down.
Step 18 — Remove the trackpad

- Swing the display open slightly, but keep the MacBook upside-down. The trackpad assembly should separate and lay flat on the display.

⚠️ As you remove the trackpad assembly, be very careful not to lose the nine small metal washers resting on the screw posts. (They will fly off and get lost with very little provocation.)

- Carefully feed the trackpad's ribbon cable through its slot in the frame.

Step 19

- Remove the trackpad assembly.

友情提示: Make sure that each of the nine washers are present before you reinstall the trackpad.
Step 20 — Unfasten the battery board

- Use a T5 Torx driver to remove the 4 mm screw securing the battery board.

Step 21 — Battery removal information

There are 14 total stretch release adhesive strips that secure the battery to the frame:
- There are eight adhesive strips that are accessed from the bottom of the device.
- There are six more adhesive strips accessed from the trackpad's location on the frame.
Step 22 — Remove the stretch release adhesive

- Use tweezers, or your fingers, to grasp the black pull-tab on one of the adhesive strips.

Step 23

- Pull the strip out slowly and steadily at a low angle. Give it plenty of time to stretch and un-stick from under the battery.

- If the adhesive strip breaks off, try to retrieve it using your fingers or blunt tweezers, and continue pulling—but don't pry under the battery.

- Repeat the process for all 14 stretch release adhesive strips.
Step 24

Follow the next two steps if you weren't able to pull all the stretch-release adhesives.

⚠️ 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. In case you're struggling to pull up the battery, apply more isopropyl alcohol and try again.

- Apply a few drops of high concentration (over 90%) isopropyl alcohol to the gaps surrounding the affected area of the battery.

⚠️ Be careful not to get an isopropyl alcohol near the speakers, as that will loosen them from the frame.

- Wait between one to two minutes for the adhesive to loosen.
Step 25

- Insert a plastic card between the battery and the frame.
- Pry up with the card while slicing the adhesive to separate the battery from the frame.

Step 26 — Remove the battery

- Slide the battery out of the frame to remove it.
To reassemble your device, follow these instructions in reverse order.

For optimal performance, calibrate your newly installed battery after completing this guide.

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 you install it.

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 MacBook Pro 14" 2021 Answers community for help.