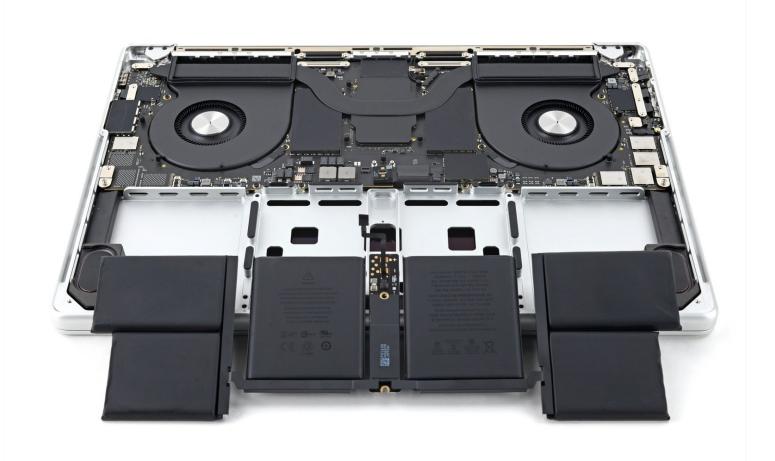


# MacBook Pro 14" 2021 Battery Replacement

Use this guide to replace the battery in your...

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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 Blunt Nose Tweezers (1)

### PARTS:

MacBook Pro 14" (2021 A2442) Battery (1)

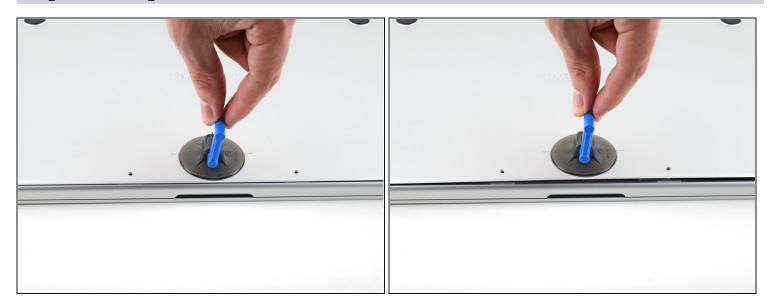
# Step 1 — Unfasten the lower case





- ⚠ Completely power off and unplug your MacBook Pro before you start. Close the screen 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
- (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 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 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.
  - (i) 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 left clips



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

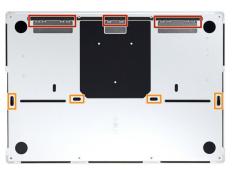
# Step 5 — Release the sliding clips

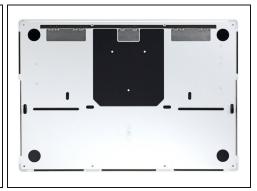


- ② <u>Sliding clips</u> along the back edge of the MacBook further secure the lower case. Separating these clips may require a lot of force—consider using gloves to protect your hands from the sharp edges of the lower case.
- Firmly pull the lower case away from the back edge, one corner at a time, to disengage the sliding clips.
  - ⚠ Keep the lower case flat to the MacBook. Don't pull upward until it's completely separated.

#### Step 6 — Remove the lower case

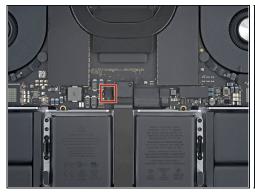






- Remove the lower case.
- To reinstall the lower case:
  - Lay it down and align the sliding clips with the back edge of the MacBook. Press down on the lower case and slide it toward the back edge to engage the clips.
    - (i) When one side is engaged, it may push the other out of alignment. Check both sides as you push.
  - Once the back corners of the lower case are secured and flush with the frame, press down along the middle of the lower case to engage the four remaining clips.
  - ② You'll hear and feel each clip snap into place.

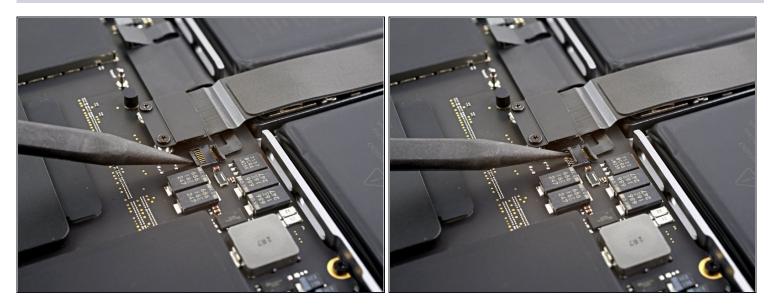
### Step 7 — Disconnect the battery board





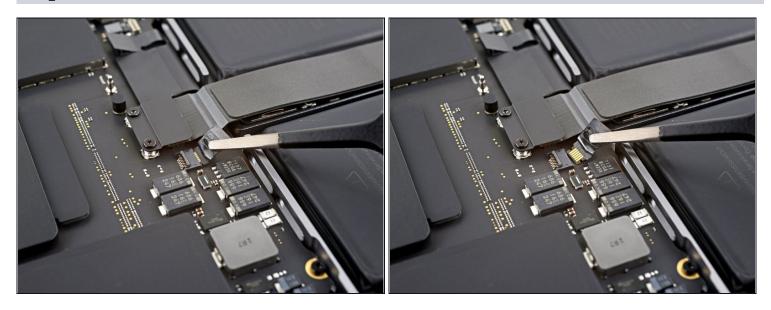


Peel back any tape covering the battery board data cable connector on the logic board.



• Use a spudger to gently pry up the locking flap on the <u>ZIF connector</u> for the battery board data cable.

# Step 9



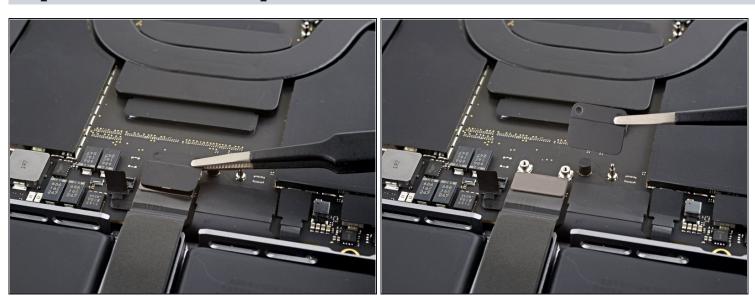
 Disconnect the battery board data cable by sliding it out from its socket on the logic board.

# Step 10 — Unfasten the trackpad cable bracket



- i While your MacBook uses some Torx Plus screws, standard Torx bits work. Make sure to apply constant, downward force to avoid stripping.
- Use a T3 Torx driver to remove the two 2.1 mm-long 3IP Torx Plus screws securing the trackpad cable bracket to the logic board.

Step 11 — Remove the trackpad cable bracket



• Use tweezers, or your fingers, to remove the trackpad cable bracket.

### Step 12 — 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.
- (i) To re-attach <u>press connectors</u> 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 13 — Reposition the trackpad cable





- (i) The trackpad cable is lightly adhered to the frame.
- Peel the trackpad cable away from the device, making sure to separate the adhesive.

# Step 14 — Disconnect the battery board



• Peel back any tape covering the battery board data cable connector under the large pancake screw.

# Step 15

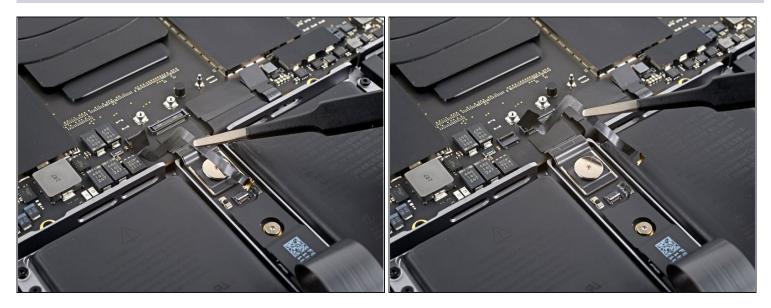


• Use a spudger to gently pry up the locking flap on the ZIF connector for the battery board data cable.



• Disconnect the battery board data cable by sliding it out from its socket on the battery board.

# Step 17 — Remove the data cable



- *i* The battery board data cable is lightly adhered to the device.
- Slide blunt nose tweezers under areas with adhesive to separate the cable from the device.
- Remove the battery board data cable.

#### Step 18 — Unfasten the battery connector



 Use a T5 Torx driver to remove the 3.8 mm 5IP Torx Plus widehead screw securing the battery power connector.

### Step 19 — Disconnect the battery connector



- Use the flat end of your spudger to lift the battery connector away from the battery board, disconnecting the battery.
- ⚠ Lift the connector high enough that it doesn't accidentally make contact during the repair, but no more than 45 degrees to prevent damaging its hinge.
- (i) For added safety, place a barrier, such as a piece of a playing card, between the connector and board.

# Step 20 — Unfasten the trackpad



- Use a T5 Torx driver to remove the ten 5.7 mm 5IP Torx Plus 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 21 — Remove the trackpad







- Swing the screen open slightly, but keep the MacBook upside-down. The trackpad should separate and lay flat on the display.
  - As you remove the trackpad, be very careful not to lose the <u>six small metal washers</u> 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 22



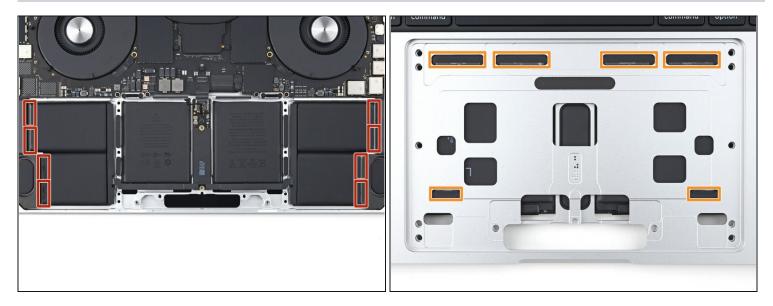
- Remove the trackpad.
- During reassembly, make sure that each of the nine washers are present before you install the trackpad.

# Step 23 — Unfasten the battery board



• Use a T5 Torx driver to remove the 4 mm 5IP Torx Plus screw securing the battery board.

# Step 24 — Battery removal information



- *(i)* 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 25 — Remove the stretch release adhesive

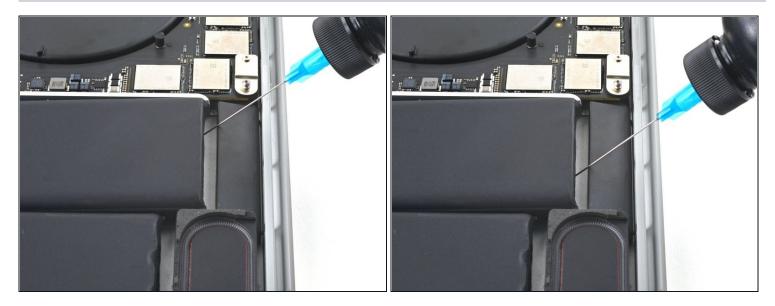


 Use tweezers, or your fingers, to grasp the black pull-tab on one of the adhesive strips.

# Step 26



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

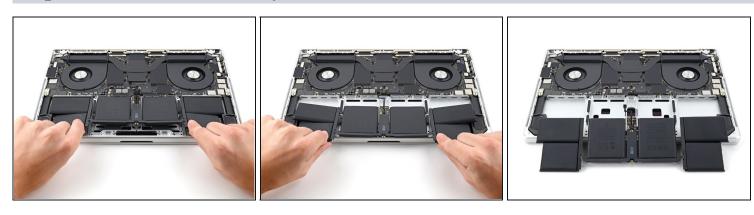


- ② Follow the next two steps if you weren't able to pull all the stretch-release adhesives.
- ⚠ Take care not to puncture or bend the battery with your tool—a punctured or bent battery may leak dangerous chemicals or cause a fire. In case you're struggling to pull up the battery, apply more isopropyl 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.



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

#### Step 29 — Remove the battery



- Slide the battery out of the frame to remove it.
- If any adhesive remains, clean it with a few drops of isopropyl alcohol and wipe it with a lint-free or microfiber cloth.
- Before removing any adhesive liners from your new battery, place it in its recess to make sure it fits. Then, remove the adhesive liners and firmly press each cell into place.
- If your battery doesn't come with adhesive, secure it with <u>new stretch-release adhesive</u>.
  - (i) Alternatively, you may use strong double-sided tape such as <u>Tesa Tape</u> to secure the battery.

### To reassemble your device, follow these instructions in reverse order.

For optimal performance, <u>calibrate your newly installed battery</u> 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 <u>basic troubleshooting</u>, or ask our <u>MacBook Pro 14"</u> <u>2021 Answers community</u> for help.