

MacBook Pro 16" 2021 Screen Replacement

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

Written By: Alex Diaz-Kokaisl



INTRODUCTION

Use this guide to replace the screen in your MacBook Pro 16" 2021.

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, <u>take appropriate precautions</u>.

Note: Replacing your screen disables its True Tone functionality.

TOOLS: PARTS: T3 Torx Screwdriver (1) MacBook Pro 16" (2021 A2485) Display Assembly (1) Tweezers (1) MacBook Pro 16" (2021 A2485) Display P2 Pentalobe Screwdriver iPhone (1) Hinge Covers (1) Suction Handle (1) MacBook Pro 14" (A2442, A2779) and 16" iFixit Opening Picks (Set of 6) (1) (2021 A2485) Display Cable Brackets (1) P5 Pentalobe Screwdriver Retina MacBook Pro and Air (1) T5 Torx Screwdriver (1) Spudger (1) TR8 Torx Security Screwdriver (1)



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 9.1 mm screws
 - Four 5 mm screws

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 rear cover'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.
 - (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 rear cover's left clips



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

A Pull to the side—not up.

i This may require a lot of force.



• Remove 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 — Disconnect the battery board



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

Step 8



• 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



 Use a T3 Torx driver to remove the two 2.1 mm-long 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 from the logic board.
- 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. Do not press down on the middle. If the connector is misaligned, the pins can bend, causing permanent damage.



- *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.

Step 16



• 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 3.9 mm pancake screw securing the battery power connector.

Step 19 — 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 20 — Unfasten the antenna bar's connector bracket



 Use a T3 Torx screwdriver to remove the three 2.1 mm screws securing the antenna board bracket and coaxial cable cover to the frame.

Step 21



• Use tweezers, or your fingers, to remove the cover on top of the antenna bar's coaxial cables.

Step 22 — Disconnect the antenna bar



- Use the tip of a spudger to pry up and disconnect the antenna bar's coaxial cable.
- Repeat for the two other cables.
- During reassembly, these can be tricky to reconnect. One at a time, hold each connector in place over its socket and press down with the flat end of a spudger. The connector should snap into place.



- Use a T5 Torx screwdriver to remove the six screws securing the antenna bar to the frame:
 - Two 7.5 mm screws
 - Four 3 mm screws
- Use a P2 Pentalobe driver to remove the nine 1.5 mm screws securing the antenna bar to the frame.
 - (i) These screws strip very easily; use constant downward pressure and work slowly when you loosen these.

Step 24 — Remove the antenna bar



- Insert the tip of a spudger between the antenna bar and the frame.
- Pry up with the spudger to separate the antenna bar from the frame.

Step 25



• Pull the antenna bar straight up and out of the frame to remove it.

Step 26 — Unfasten the display cable covers



• Use a T3 Torx driver to remove the four 2.1 mm screws securing the display cable covers.

Step 27 — Remove the display cable covers



• Use tweezers, or your fingers, to remove the two display cable covers from the logic board.

Step 28 — Disconnect the display cables



• Use the flat end of a spudger to pry up and disconnect the right-most display cable press connectors secured to the logic board.

Step 29



• Repeat the previous step for the left-most press connector.

Step 30 — Remove the display cable brackets



- Pull up on the back of the display cable bracket to release the clips securing it to the frame.
- Remove the display cable bracket.
- Repeat for the other display cable bracket.

Step 31



- (i) If the two display cable bracket buffers are removed alongside the brackets, then skip this step.
- Pull the two display cable bracket buffers straight up and out of the frame to remove them.

Step 32 — Unfasten the lid angle sensor cover



 Use a T3 Torx driver to remove the two 2.1 mm screws securing the lid angle sensor cover near the right hinge.

Step 33 — Remove the lid angle sensor cover



• Use tweezers, or your fingers, to remove the lid angle sensor cover.

Step 34 — Disconnect the lid angle sensor cable



• Use the flat of a spudger to pry up and disconnect the lid angle sensor's press connector.

Step 35 — Unfasten the hinge covers



 Use a T5 Torx driver to remove the four 2.5 mm screws securing the hinge covers (two screws on each side).



- Use tweezers to pull the hinge covers horizontally away from the hinge to separate it from the frame.
- Remove the hinge covers.

Step 37 — Unfasten some of the hinge screws



• Use a T8 Torx driver to remove two 6.4 mm screws from each hinge (four screws total).

(i) Each hinge has a third screw, which you should leave in place for now.

Step 38 — Protect the MacBook



- If you plan to re-use your screen, open it and apply a piece of tape to the glass directly above each hinge. This helps protect the glass from getting scratched in the following step.
- Fully open the screen and stand your MacBook Pro up on one side.

Step 39 — Unfasten the remaining screws



- Use a T8 Torx driver to remove the two remaining 6.4 mm screws (one from each hinge).
 - Remove the topmost screw last, using one hand to steady both halves of the MacBook Pro to make sure they don't separate and fall over unexpectedly.

Step 40 — Remove the screen



- Keep a firm grip on both the screen and main body of the MacBook Pro. Either half can fall unexpectedly during this step.
- Push both halves of the MacBook Pro together so that the hinges can be lifted clear of their recesses in the chassis.
- Push the main body of the MacBook Pro away from you while pulling the screen toward you to separate it.



Step 41

• Remove the screen.

Step 42



- During reassembly, first install the hinge screws without tightening them fully. Then adjust the screen until it is correctly centered and aligned on each side. Finally, tighten the screws.
- If your screen clicks or snaps upon opening, loosen the hinge screws and adjust the alignment. Make sure the screen doesn't sit too far forward, or it can catch on the body when opening and closing.
- If desired, add a little blue threadlocker to the screw threads to prevent them from loosening over time.

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

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.

Repair didn't go as planned? Try some <u>basic troubleshooting</u>, or ask our <u>MacBook Pro 16" 2021</u> <u>Answers community</u> for help.