

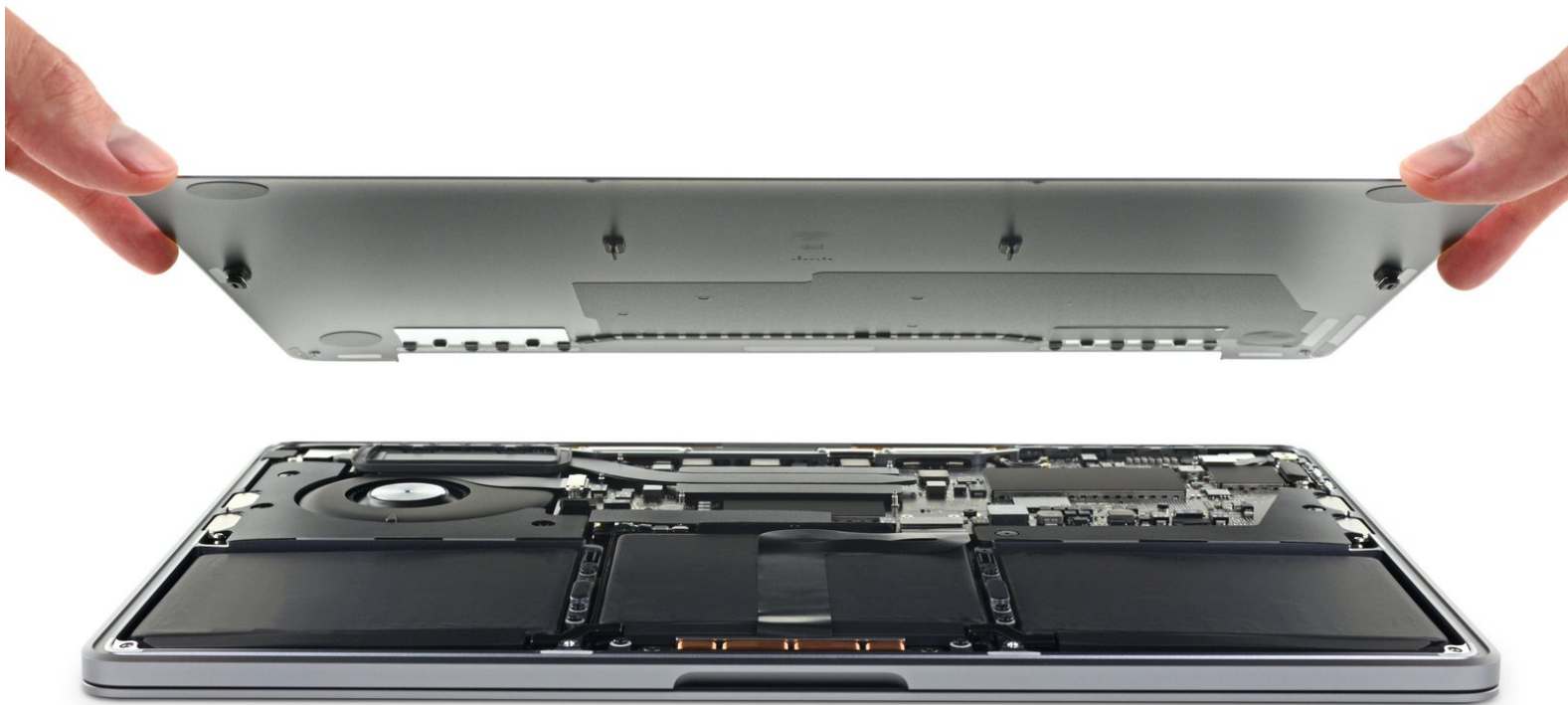


MacBook Pro 13" Two Thunderbolt Ports 2019

Lower Case Replacement

Remove the lower case on your Touch Bar MacBook Pro (2019, Two Thunderbolt 3 ports), either to replace it or to access the internals for further repair.

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INTRODUCTION

This serves as the starting point for every repair on your MacBook Pro. You'll need a P5 Pentalobe screwdriver to remove the lower case and get into the device.

For your safety, discharge your MacBook Pro's battery before you begin this procedure. A charged lithium-ion battery can create a dangerous and uncontrollable fire if accidentally punctured.



TOOLS:

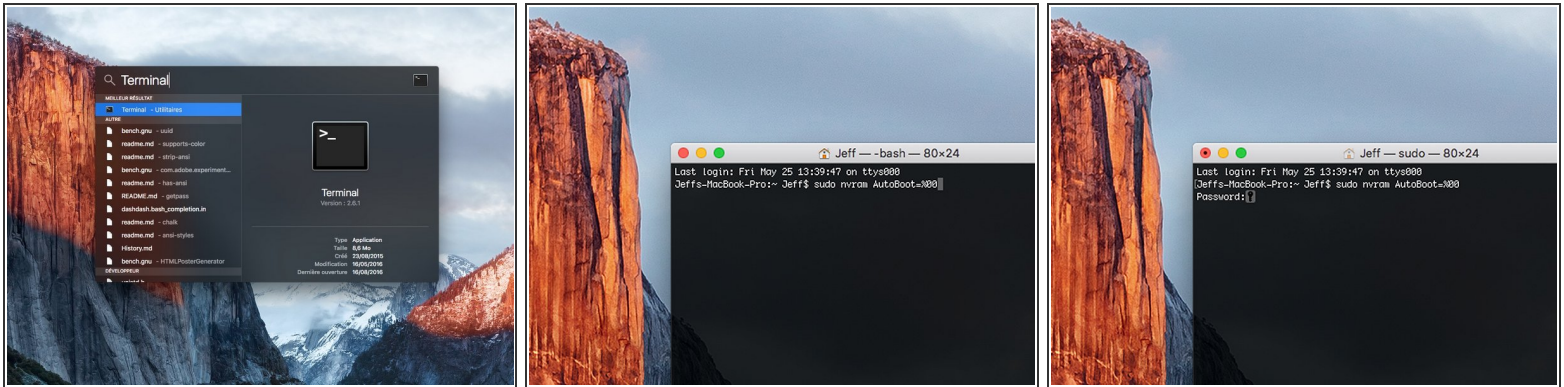
- [P5 Pentalobe Screwdriver Retina MacBook Pro and Air](#) (1)
- [Suction Handle](#) (1)
- [iFixit Opening Picks set of 6](#) (1)



PARTS:

- [MacBook Pro 13" \(A2159, 2019\) Lower Case](#) (1)

Step 1 — Disable Auto Boot



- i** Before starting this procedure, you must disable your Mac's **Auto Boot** feature. Auto Boot powers on your Mac when you open the lid, and may be accidentally triggered during disassembly. [Use this guide](#) or follow the abbreviated instructions below to disable Auto Boot. *This command may not work on all Macs.*
- Power on your Mac and launch **Terminal**.
 - Copy and paste the following command (or type it exactly) into Terminal:
 - **sudo nvram AutoBoot=%00**
 - Press **[return]**. If prompted, enter your administrator password and press **[return]** again. *Note: Your return key may also be labeled ↵ or "enter."*
- i** You can now safely power down your Mac and open the bottom case, without it accidentally powering on.
- ★** When your repair is complete and your Mac is successfully reassembled, re-enable Auto Boot with the following command:
- **sudo nvram AutoBoot=%03**

Step 2 — Remove the lower case



- ⚠ Before you proceed, unplug and power down your MacBook. Close the display and lay it on a soft surface, top-side down.
- Use a P5 Pentalobe driver to remove the six screws securing the lower case:
 - Two 6.2 mm screws
 - Two 5.3 mm screws
 - Two 3.4 mm screws
- 📌 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 3



- Apply a suction handle to the lower case near the front-center area of the MacBook Pro.
- Lift the suction handle to create a slight separation between the lower case and the chassis.

Step 4



- Insert one corner of an opening pick into the space between the lower case and the chassis.
- Slide the opening pick around the nearest corner and halfway up the side of the case.
- ① This releases the first of the hidden clips securing the lower case to the chassis. You should feel and hear the clip pop free.

Step 5



- Repeat the previous step on the opposite side, sliding your opening pick under the lower case and up the side to pop the second clip free.

Step 6



- Insert your opening pick once again under the front edge of the lower case, near one of the two centermost screw holes.
- Give the pick a firm twist to pop free the third clip securing the lower case to the chassis.
- Repeat this procedure near the other of the two centermost screw holes, popping the fourth clip free.

Step 7



- Pull the lower case firmly towards the front of the MacBook (away from the hinge area) to separate the last of the clips securing the lower case.
 - ❗ It may help to pull first at one corner, then the other.
 - ⚠ Pull to the side—not up.
 - ⚠ This may require a lot of force.

Step 8



- 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.

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