



MacBook Pro 13" Touch Bar 2019 USB-C/Thunderbolt ports Replacement

This Guide will show you how to replace your...

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INTRODUCTION

This Guide will show you how to replace your MacBook Pro's USB-C/Thunderbolt Ports.



TOOLS:

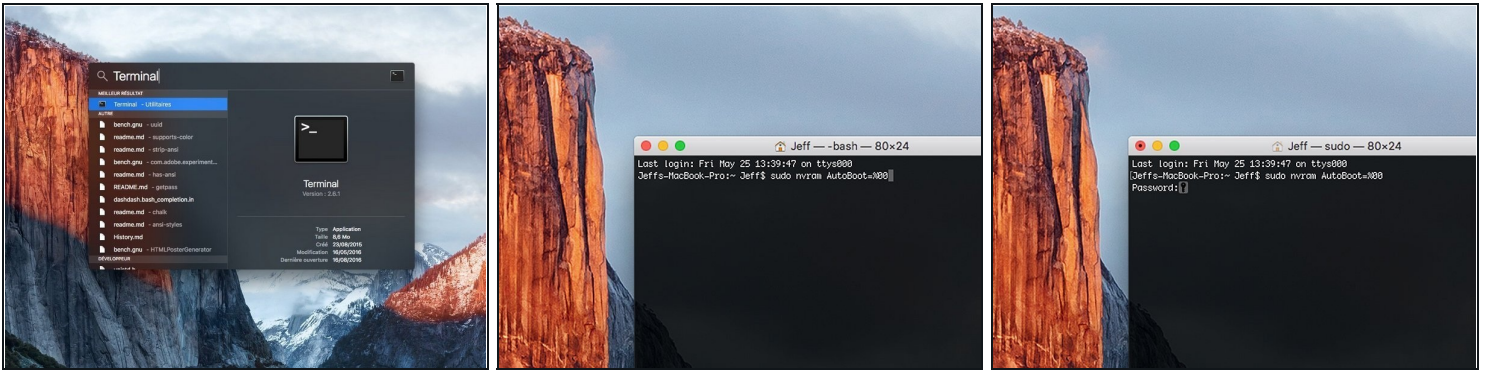
[Data Alliance Insertion Tools to Push/Pull Connector From Jack \(1\)](#)



PARTS:

[MacBook Pro Retina \(A1989 A1990 Mid 2018\) USB-C Board \(1\)](#)

Step 1 — Disable Auto Boot



- ⓘ 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."
- ⓘ 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 (typed into Terminal, as shown above):
- sudo nvram AutoBoot=%03

Step 2 — Remove the pentalobe screws



⚠ Before proceeding, 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
 - Four 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 — Open a gap using a suction cup



- 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 gap between the lower case and the chassis.

Step 4 — Separate the clips



- 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.
- ⓘ 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.
- Pull first at one corner, then the other.

⚠ Pull to the side—not up.

ⓘ This can require a lot of force.

Step 8 — Remove the lower case



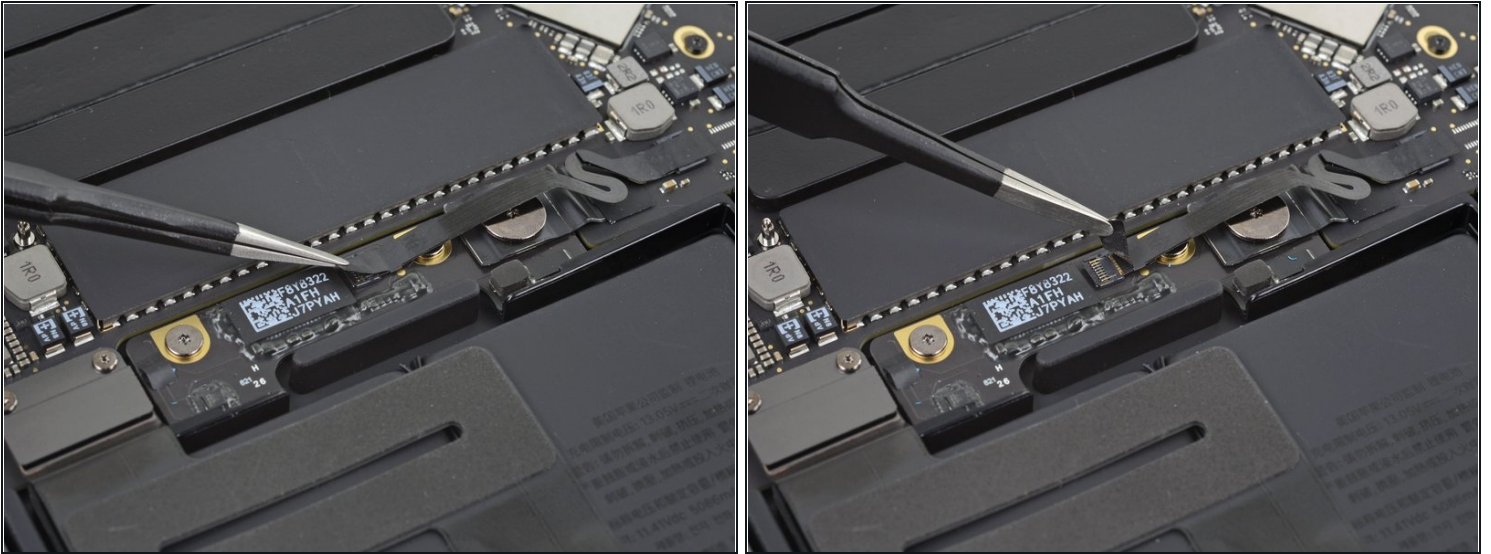
- Remove the lower case.

Step 9 — Uncover the battery connector



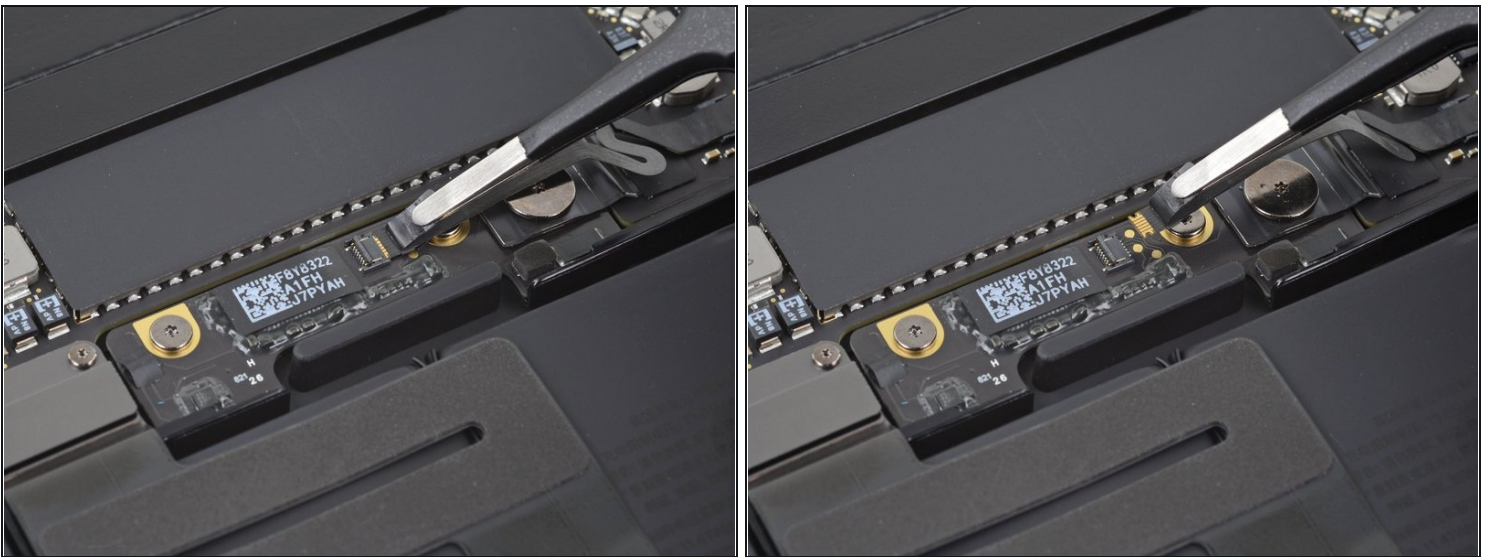
- Carefully peel up the large piece of tape covering the battery connector, on the edge of the logic board nearest the battery.
- Remove the tape.

Step 10



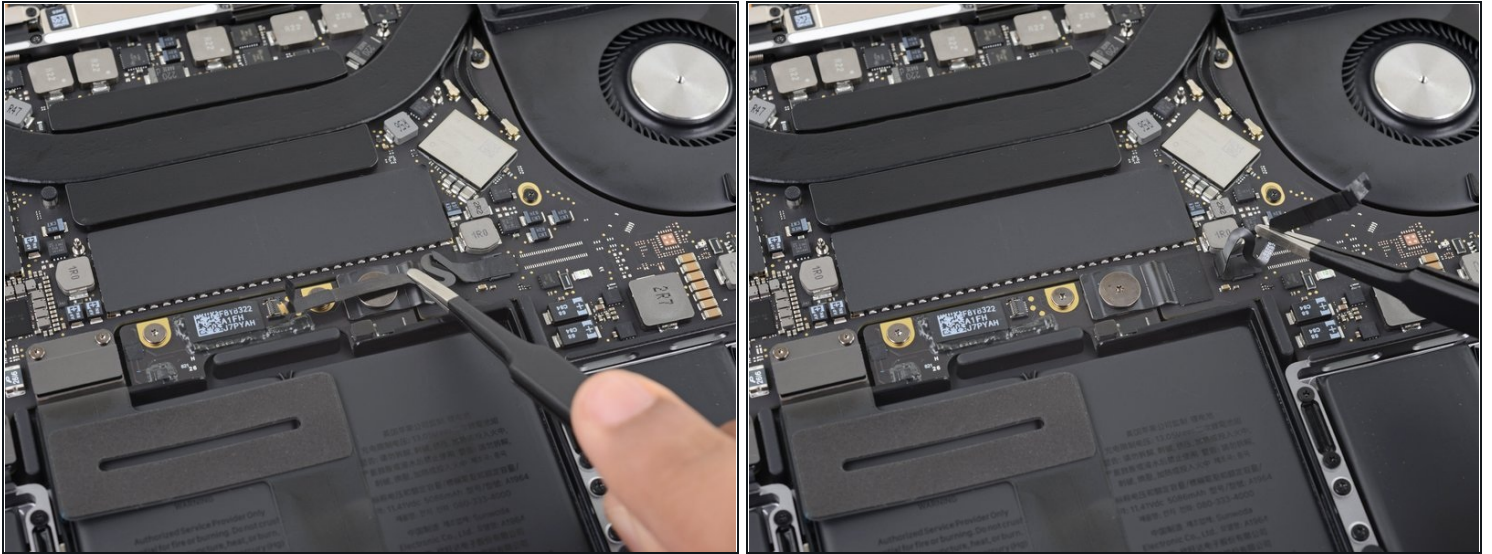
- Gently peel back the small piece of tape covering the battery board data cable connector.
- ① The tape is integrated into the ribbon cable and will not detach completely. Simply peel it back enough to access the connector.

Step 11



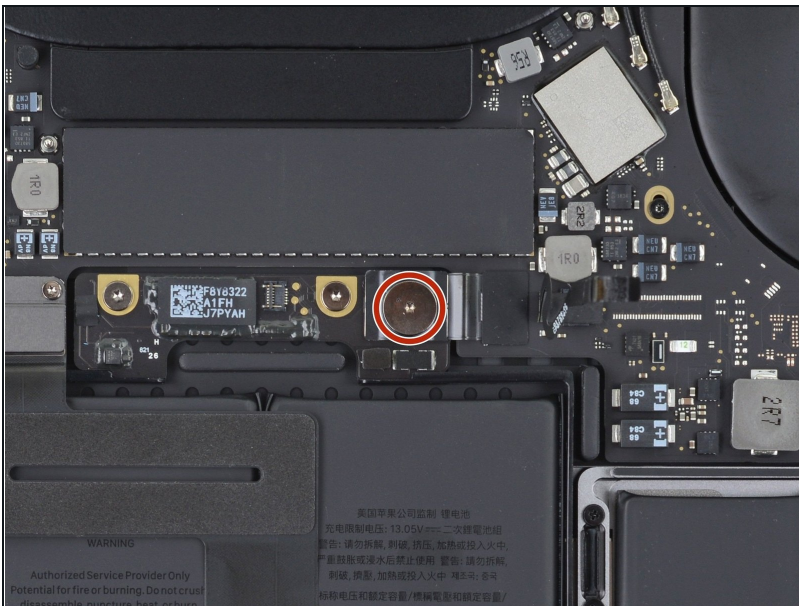
- Disconnect the battery board data cable by sliding it out from its socket.
- Slide parallel to the logic board, in the direction of the cable.

Step 12



- Fold the battery board data cable to the side and out of the way.

Step 13



- Use a T5 Torx driver to remove the 3.7 mm pancake screw securing the battery power connector.

Step 14 — Disconnect the battery



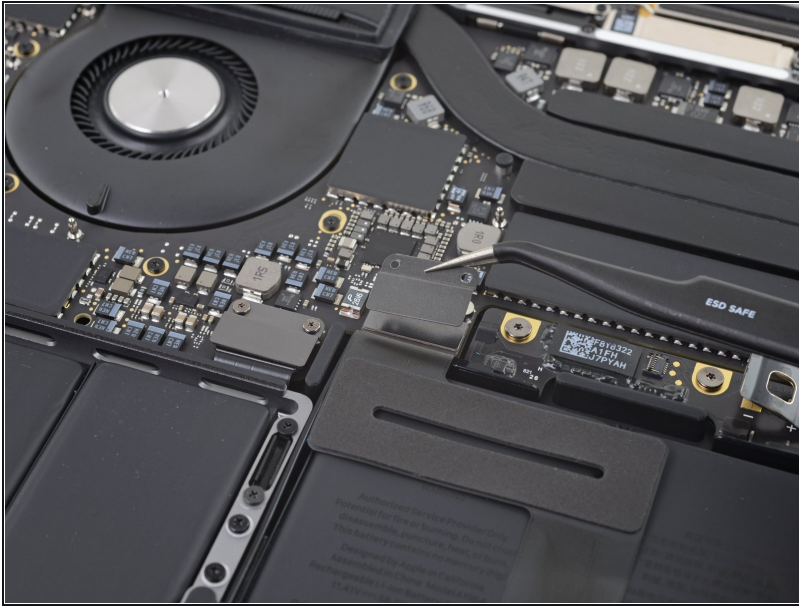
- Use a spudger to gently lift the battery power connector, disconnecting the battery.
- Lift the connector high enough so that it stays separated from its socket. If it accidentally makes contact during the course of your repair, it could damage your MacBook Pro.

Step 15 — Remove the trackpad connector screws



- Use a T3 Torx driver to remove the two 1.8 mm screws securing the trackpad cable connector bracket.

Step 16



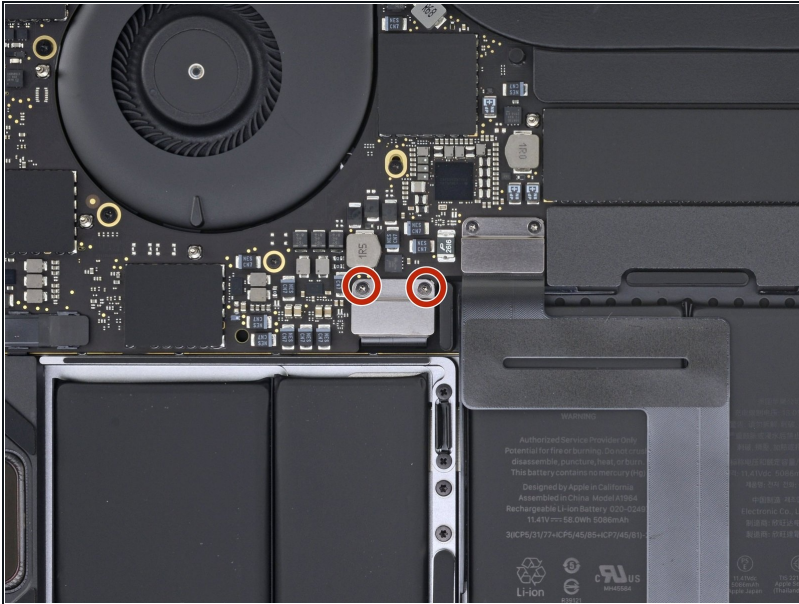
- Remove the trackpad cable connector bracket with a pair of tweezers.

Step 17



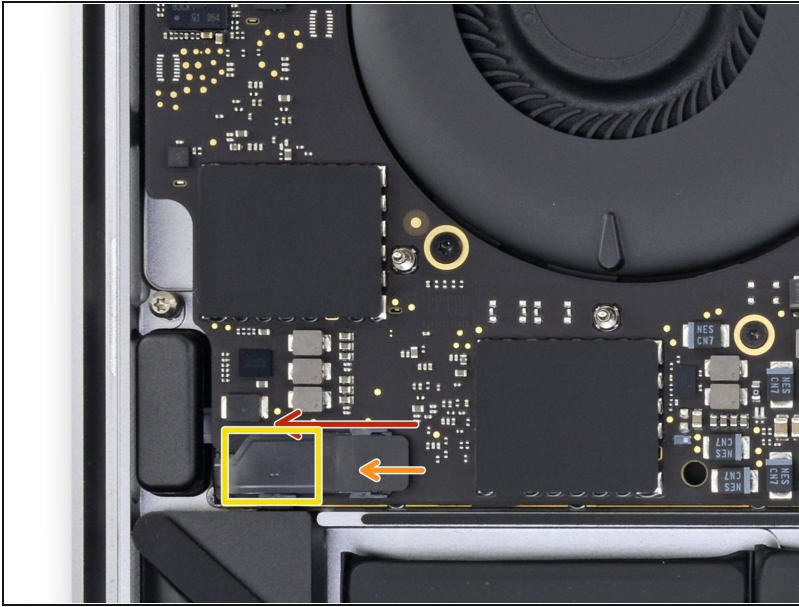
- Use a spudger to disconnect the trackpad ribbon cable by gently prying its connector straight up from the logic board.

Step 18 — Disconnect keyboard connector



- Use a T3 Torx driver to remove the two screws.
- Two T3 Torx Screws.

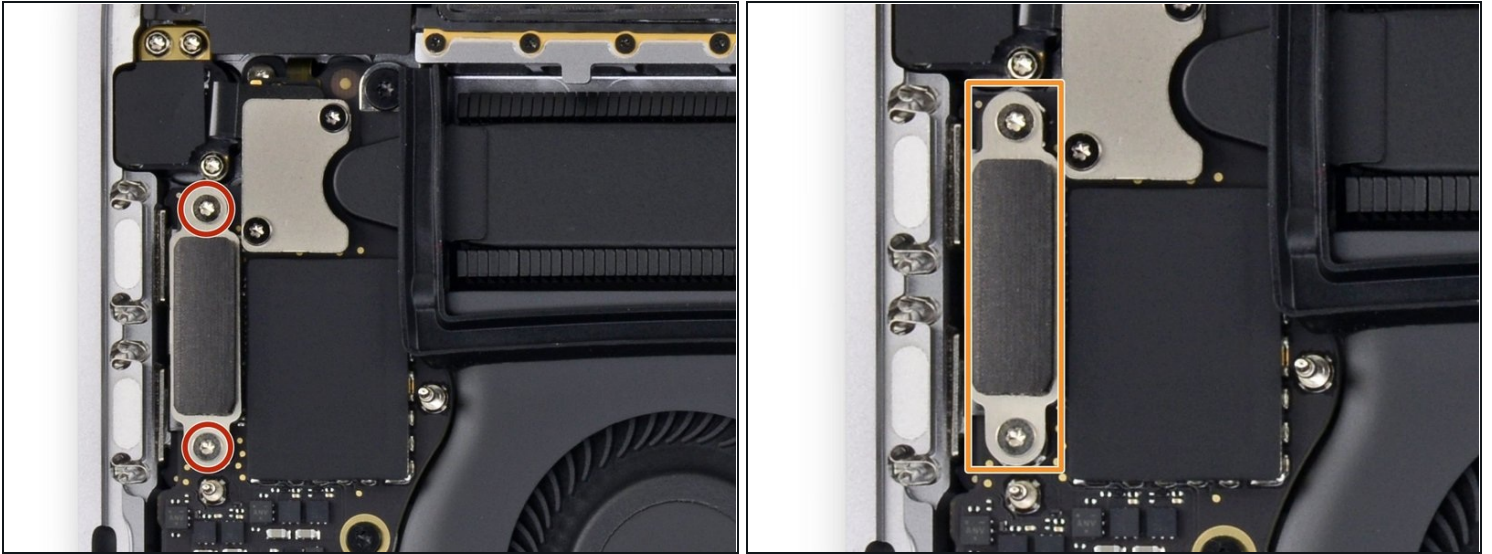
Step 19 — Unplug Left speaker cables



- Carefully peel back the black tape to reveal the ZIF connector.
- Unlatch the ZIF connector by flicking the arm on the connector upwards and carefully remove the cable from the connector by sliding it out.
- Repeat this process with the newly revealed connector.

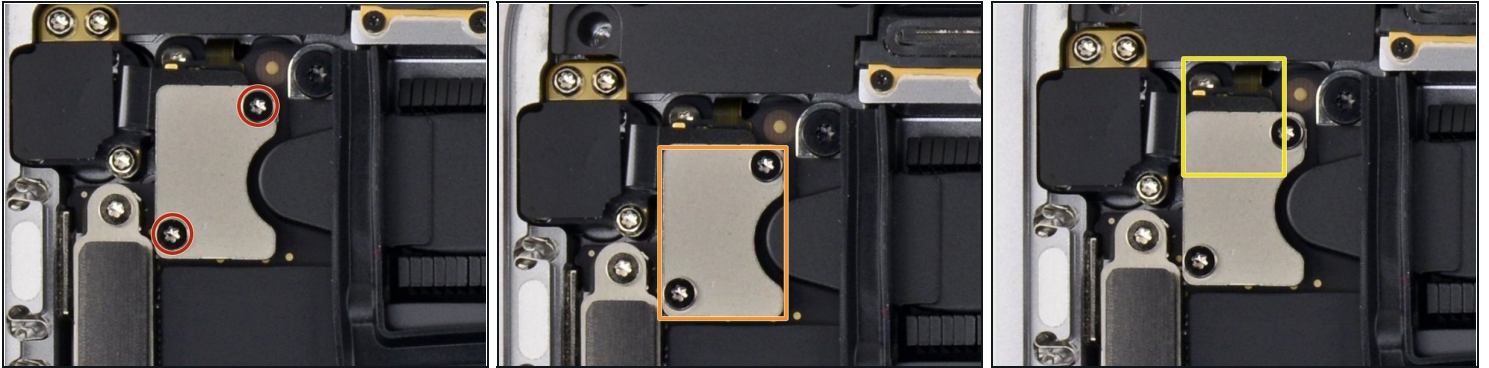
i The two screws that are outlined in yellow are not relevant to this step and are marked on the board itself. For this step, yellow corresponds to the yellow rectangle in the image.

Step 20 — Unplug left Thunderbolt ports



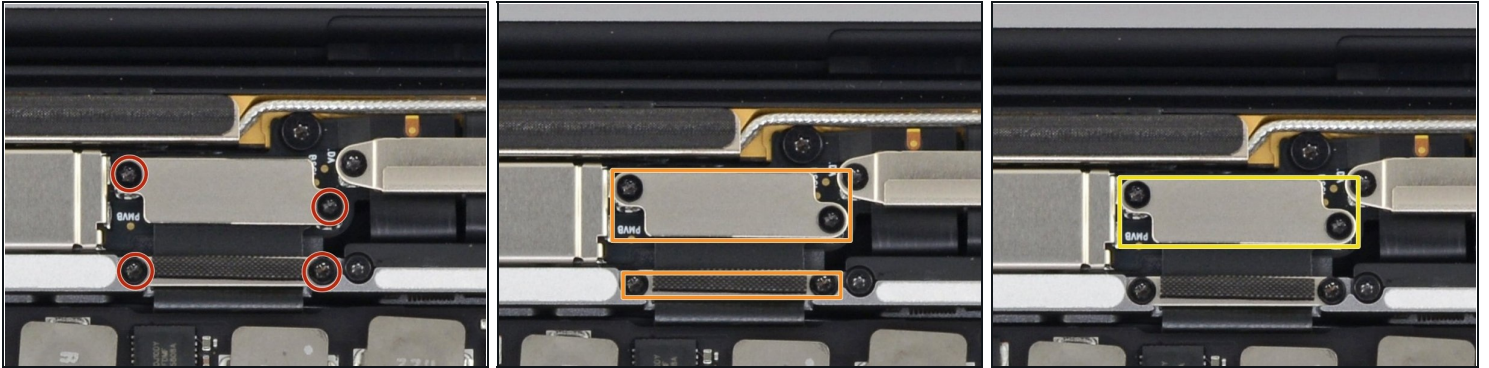
- Use a T3 Torx driver to remove the two screws.
- Once the screws have been removed, carefully remove the metal shield.
- Under the metal shield, there is a connector; carefully unplug it.

Step 21 — Unplug Touch ID and Auxiliary port



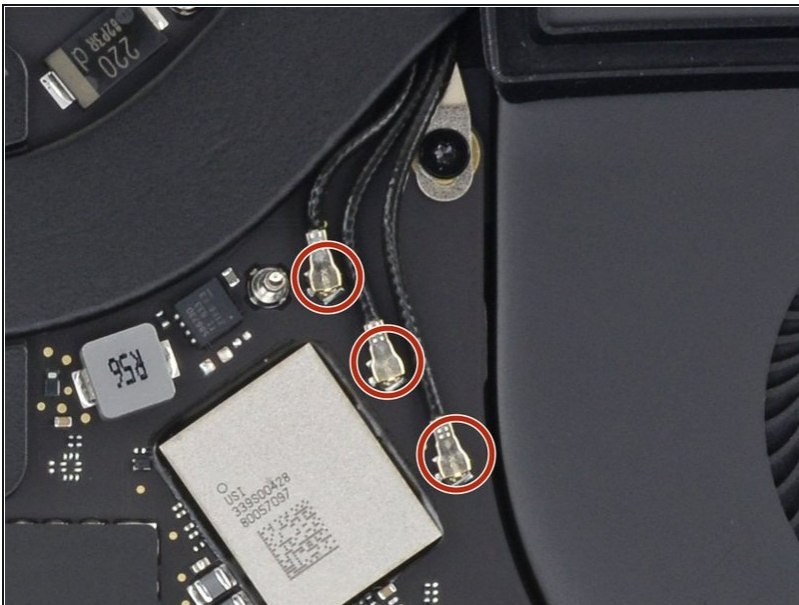
- Use a T4 Torx driver to remove the two screws.
 - Two T4 Torx screws.
 - Carefully remove the metal shield.
 - ① Under the metal shield you will find two connectors, carefully unclip them.
 - The second cable you will disconnect will be lightly adhered so carefully slide a plastic spudger under it and finally unplug it.
- ⚠ The adhered cable is very thin and delicate so don't rush it and take your time.

Step 22 — Disconnecting the display connector



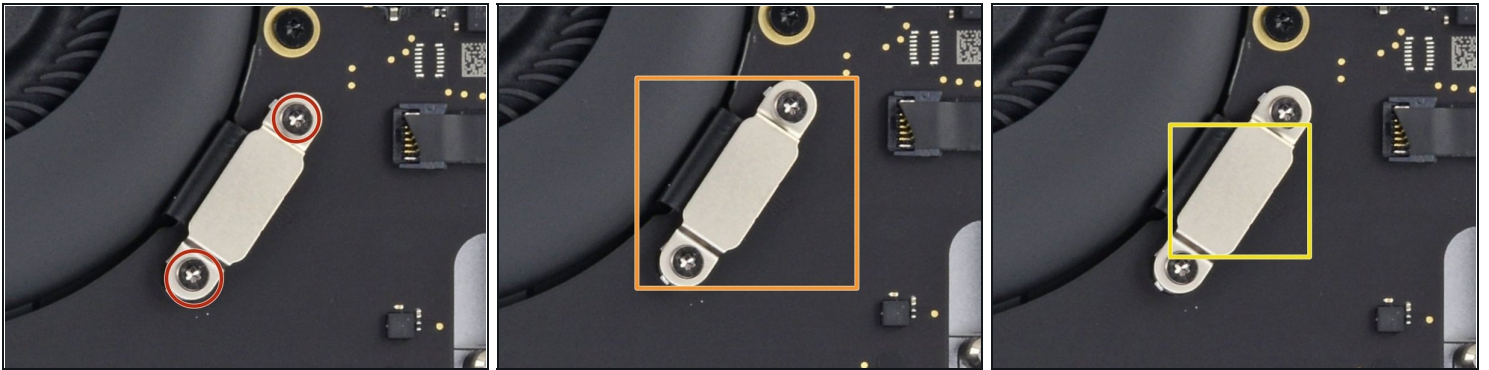
- Use a T3 Torx driver to remove the four screws.
- 4 T3 Torx screws.
- Once the screws are removed carefully remove the metal shields.
- Carefully unclip the connector.

Step 23 — Disconnect wifi and Bluetooth antennas



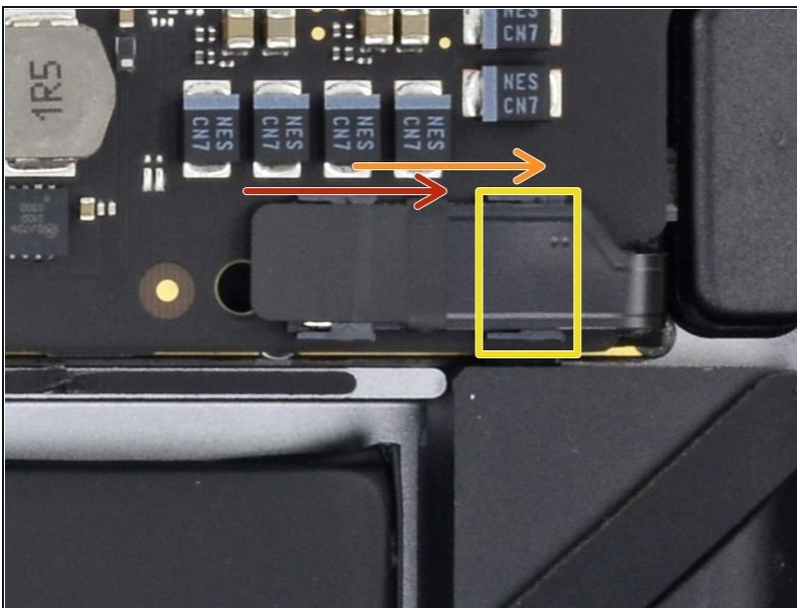
- Disconnect the cables carefully with a plastic pry tool.
- ⚠ Be gentle, if too much force is applied it can take the board connector up with it.

Step 24 — Touch Bar cable 1



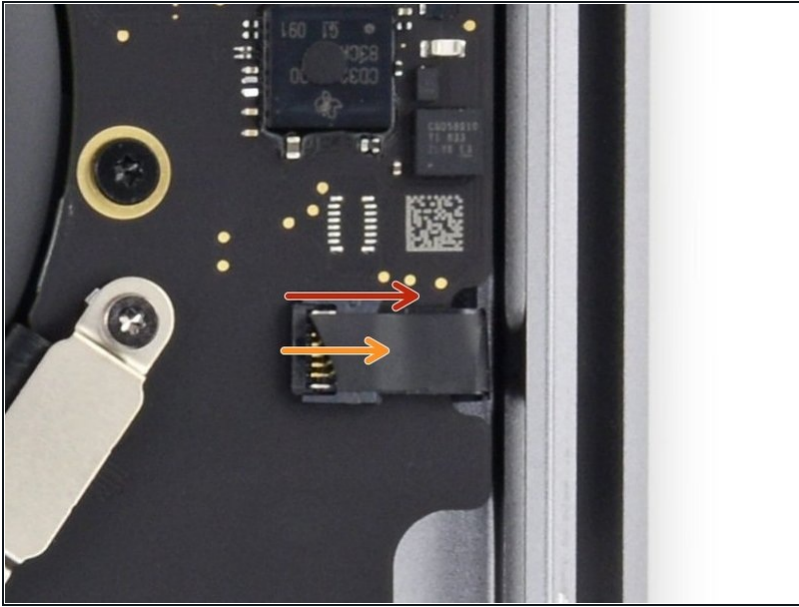
- Use a T3 Torx driver to remove the two screws.
- Remove the metal shield carefully.
- Carefully unplug the connector.

Step 25 — Right speaker cable



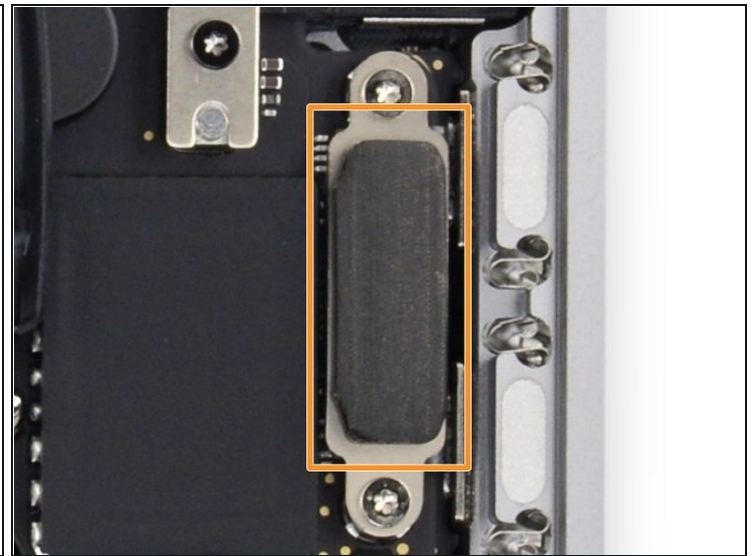
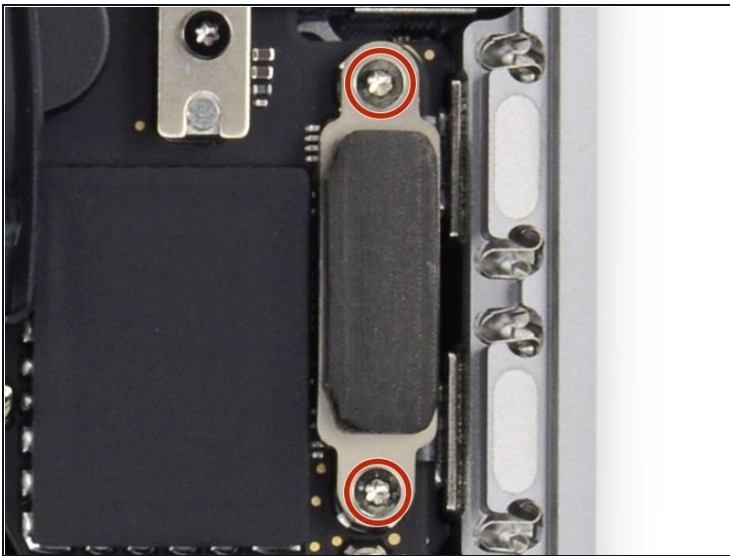
- Carefully peel back the black tape to reveal the ZIF connector.
- Unlatch the ZIF connector by flicking the arm on the connector upwards and carefully remove the cable from the connector by sliding it out.
- Repeat this process with the newly revealed connector.

Step 26 — ZIF connector



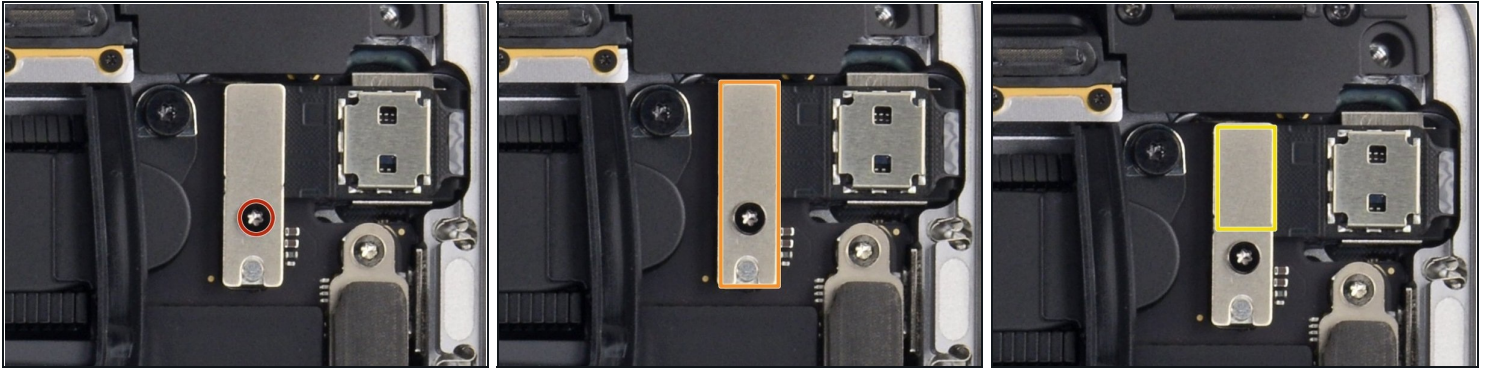
- Carefully peel back the black tape to reveal the ZIF connector.
- Unlatch the ZIF connector by flicking the arm on the connector upwards and carefully remove the cable from the connector by sliding it out.

Step 27 — Unplug Right Thunderbolt ports



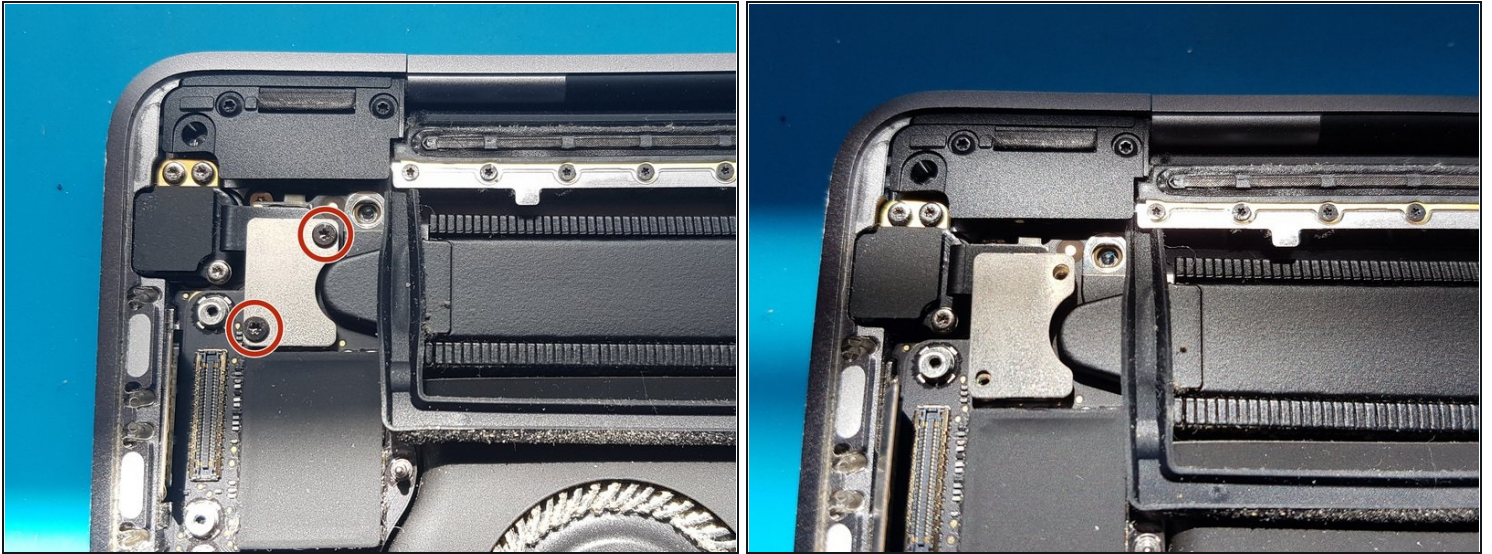
- Use a T3 Torx driver to remove the two screws.
- Once the screws have been removed carefully remove the metal shield.
- Under the metal shield there is a connector, carefully unplug it.

Step 28 — Touch bar bracket / Flex



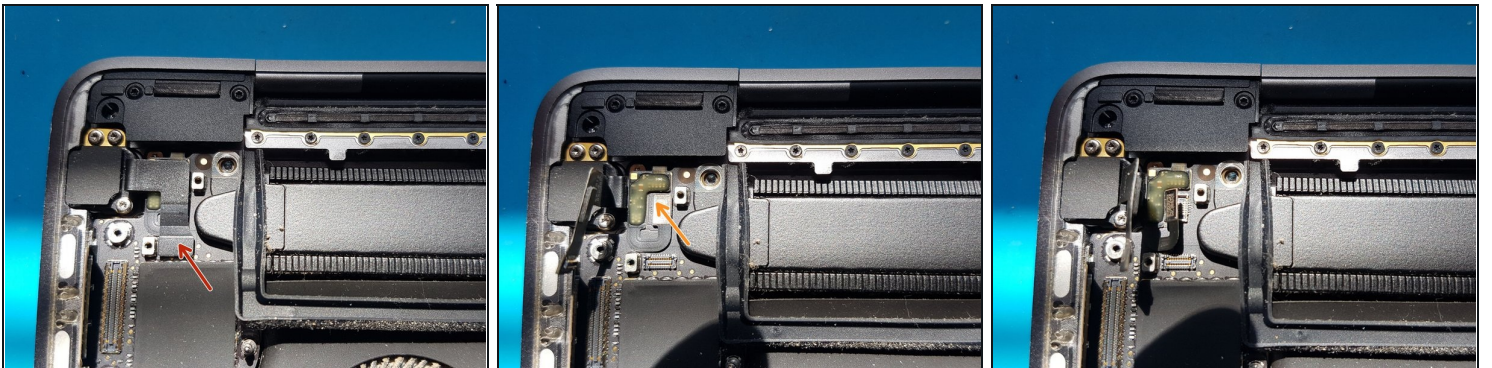
- Use a T4 Torx driver to remove the screw.
 - T4 Torx screw.
 - Remove the metal shield carefully.
 - Carefully unplug the connector.
- ⓘ The two screws that are outlined in yellow are not relevant to this step and are marked on the board itself. For this step, yellow corresponds to the yellow rectangle in the image.

Step 29 — Audio socket / Touch ID bracket



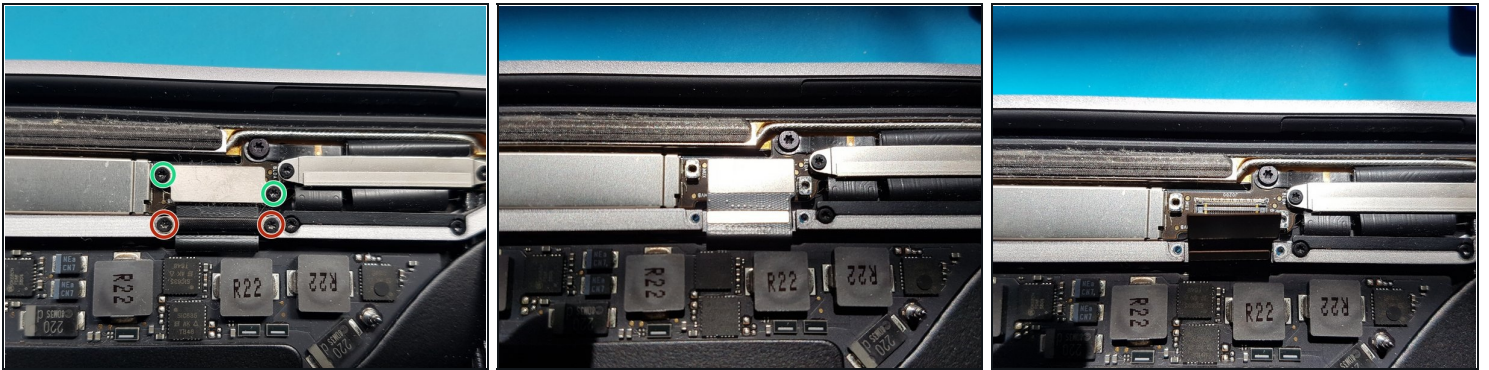
- Use a T3 Torx driver to remove the two 1.4mm screws securing the bracket.
- ① Remove the bracket.

Step 30



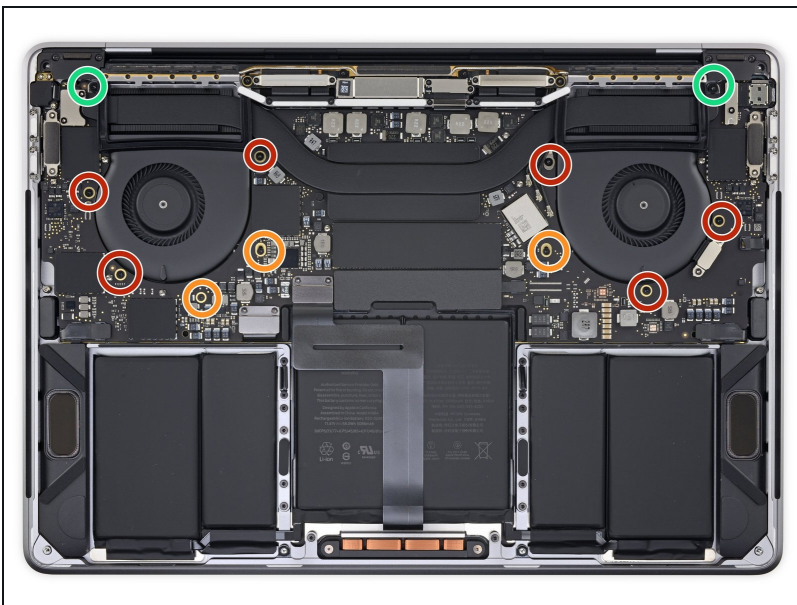
- gently disconnect the audio socket flex cable with a spudger.
- gently disconnect the Touch ID flex cable with a spudger.

Step 31 — Display cable



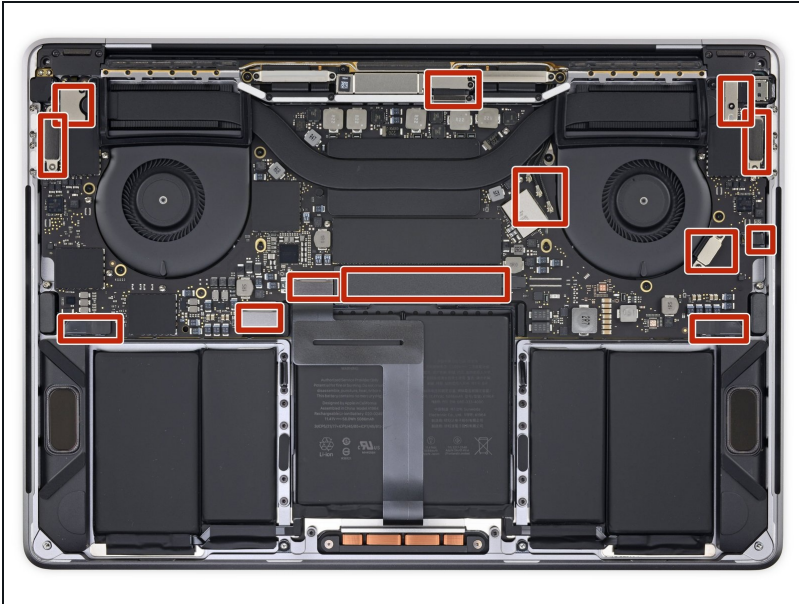
- Use a T3 Torx driver to remove the two 2.4mm screws securing the display cable bracket.
- Use a T3 Torx driver to remove the two 1.2mm screws securing the display cable bracket.
- ① Remove the bracket.
- ① gently disconnect the flex cable with a spudger.

Step 32



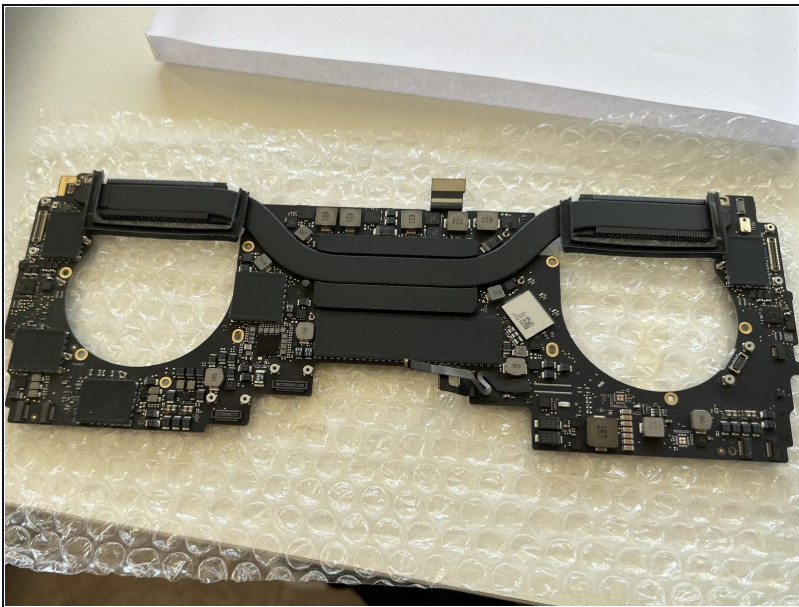
- Use a T5 Torx driver to remove the six 2.2mm screws securing the logic board.
- Use a T3 Torx driver to remove the three 1.9mm screws securing the logic board.
- Use a T5 Torx driver to remove the two 2.3mm (3.7mm head) screws securing the heatsink.

Step 33



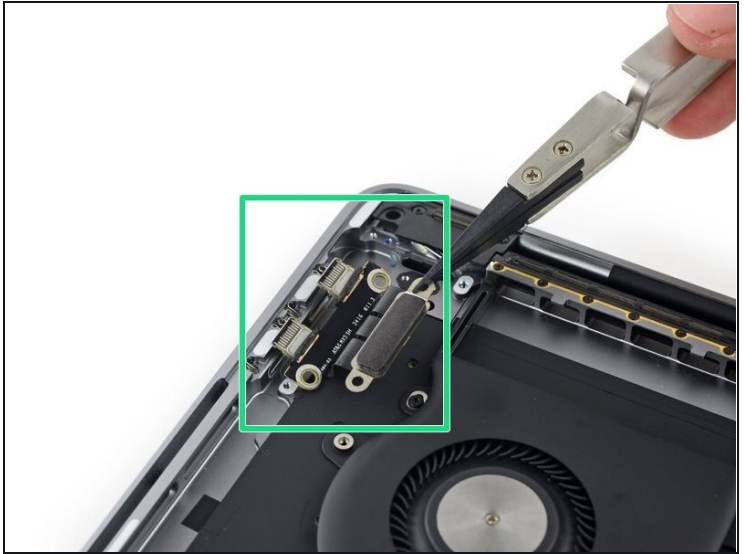
⚠ Carefully lift up the logic board, make sure none of the connectors are connected, also make sure they aren't caught on the logic board.

Step 34



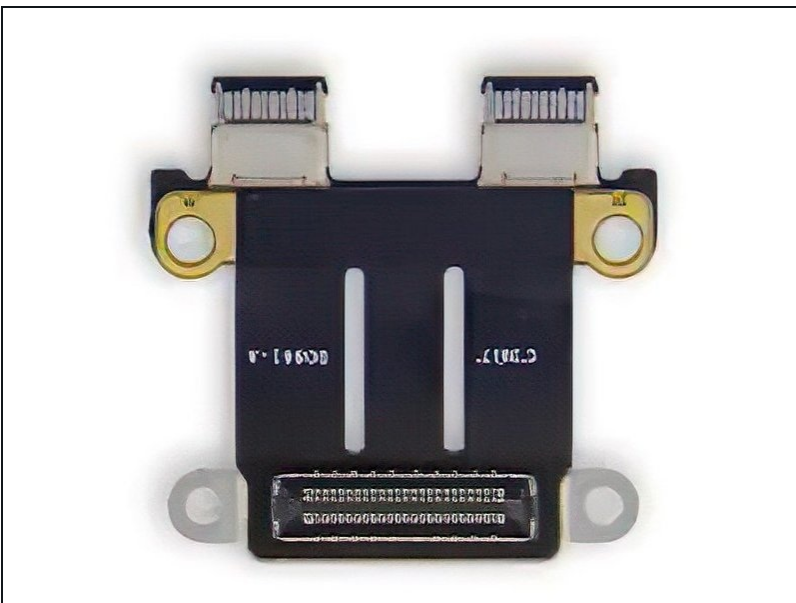
- Congratulations you have now removed your MacBook's LogicBoard

Step 35 — Remove the USB-C/Thunderbolt



- Use a T5 Torx driver to remove the two screws.
- Two T5 screws
- Carefully remove the port
- ① Repeat on the other side

Step 36



- Congratulations!
- You have now replaced your USB-C/Thunderbolt Port
- ① If you have any questions please ask:-)

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