

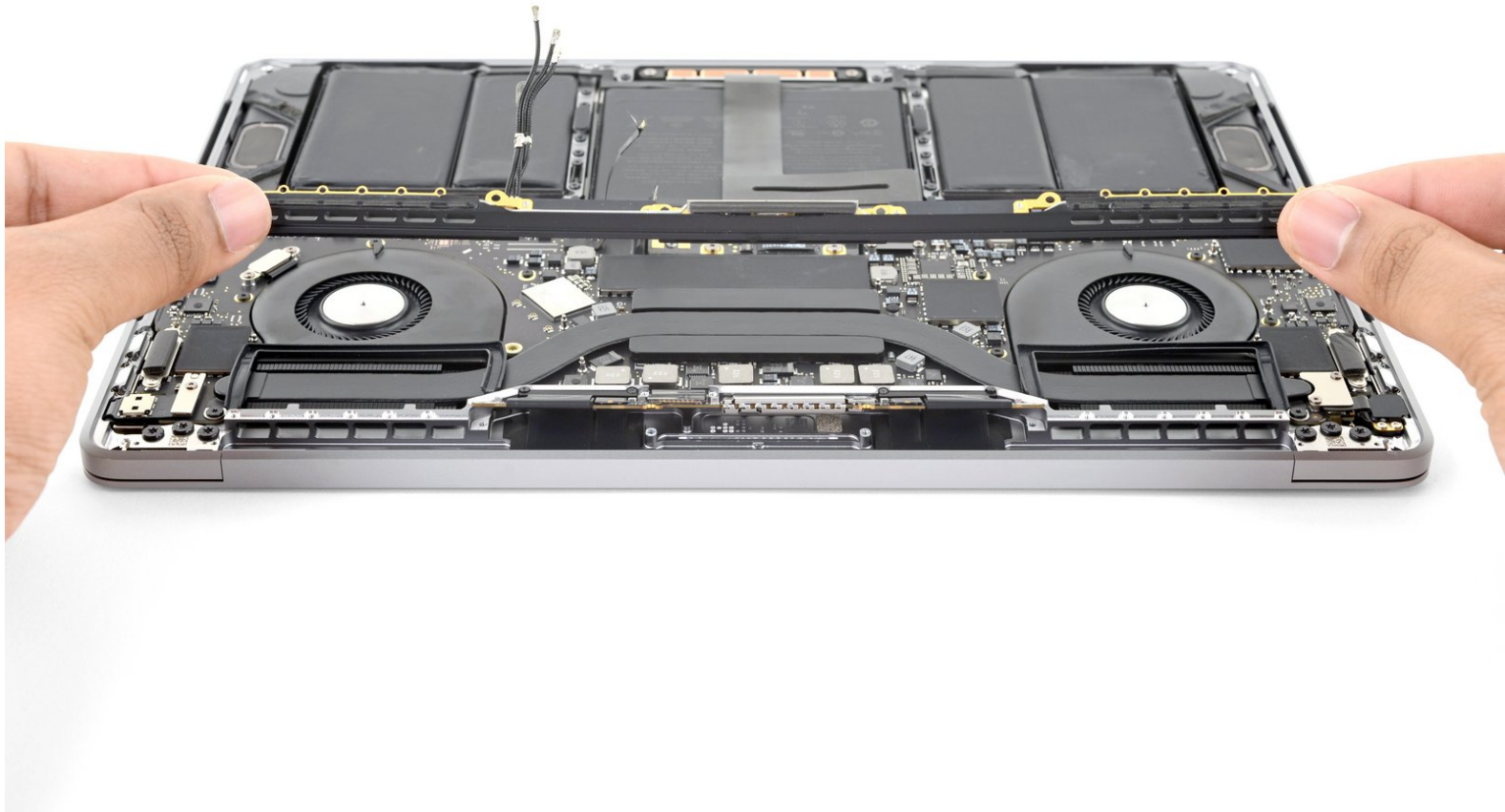


# MacBook Pro 13" Four Thunderbolt Ports 2020

## Antenna Bar Assembly Replacement

How to replace the antenna bar assembly in your MacBook Pro 13" Four Thunderbolt Ports 2020.

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# INTRODUCTION

Follow this guide to replace the wireless antenna assembly in your MacBook Pro, or to get it out of the way for other repairs.

**For your safety, drain your MacBook Pro's battery to 25% charge or less before you begin.**

*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)
- [T3 Torx Screwdriver](#) (1)
- [Spudger](#) (1)
- [T5 Torx Screwdriver](#) (1)
- [Tweezers](#) (1)
- [P2 Pentalobe Screwdriver iPhone](#) (1)



## PARTS:

- [MacBook Pro 13" Retina \(Touch Bar, Late 2016-2020\) Antenna Bar](#) (1)

## Step 1 — Remove the pentalobe screws



**i** Before starting this procedure, you should 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](#) to disable Auto Boot.

- If your MacBook is running Big Sur v11.1 or later, disabling Auto Boot may not work. You can proceed normally, but make sure to disconnect the battery as soon as you're inside.

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

- Use a P5 Pentalobe driver to remove the six screws securing the lower case:

- Two 6.7 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 2 — 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 3 — 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 4



- 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 5



- 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 6

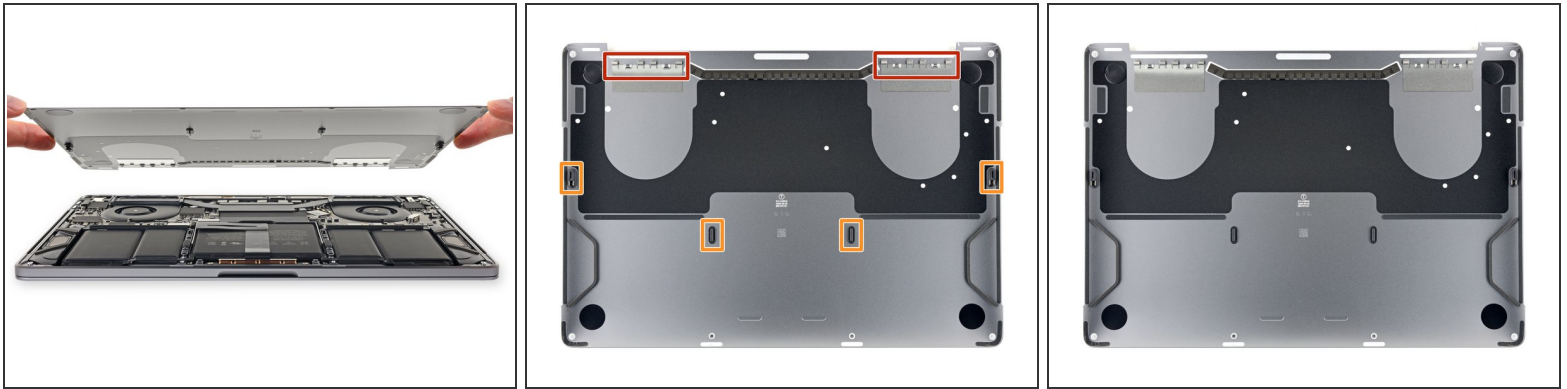


- Pull the lower case firmly towards the front of the MacBook (away from the hinge area) to separate the last of the clips securing the lower case.
  - Pull first at one corner, then the other.

 Pull to the side—not up.

 This can require a lot of force.

## Step 7 — 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 8 — 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 9



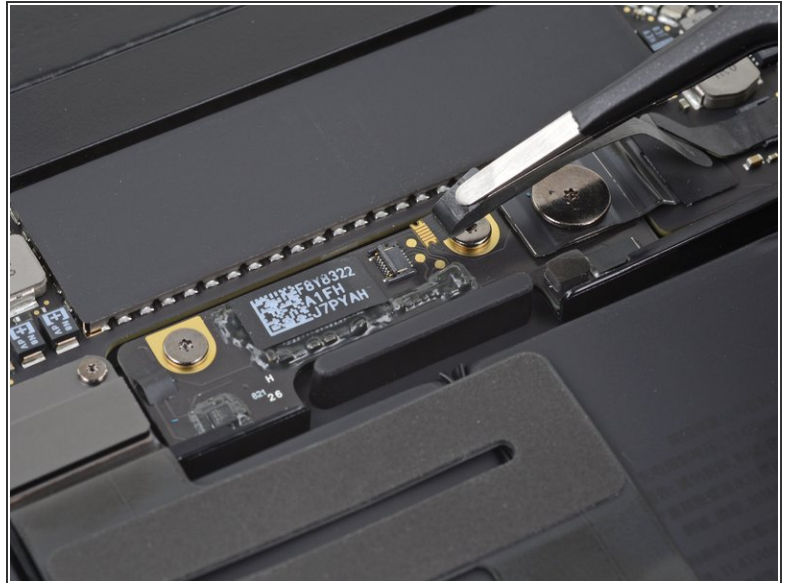
- Gently peel back the small piece of tape covering the battery board data cable connector.
  - ❗ The tape is integrated into the ribbon cable and will not detach completely. Simply peel it back enough to access the connector.

## Step 10



- Use the tip of a spudger to flip up the small black locking tab securing the cable in its 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.

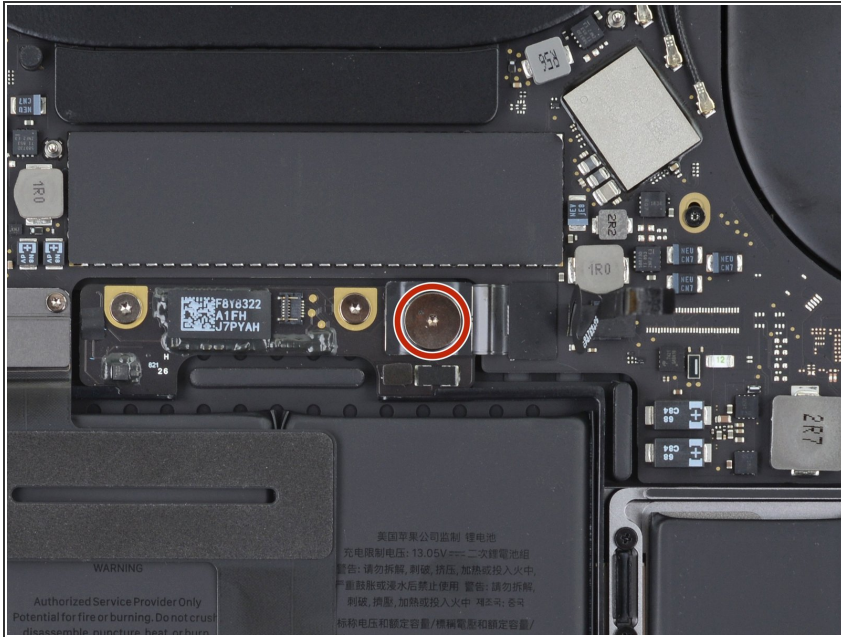
## Step 12



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



## Step 13



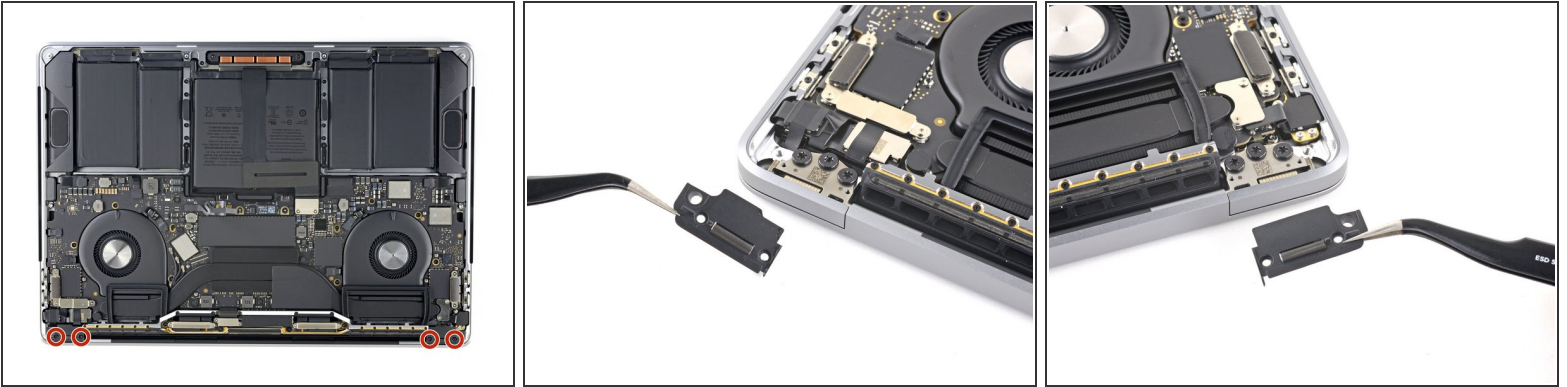
- Use a T5 Torx driver to remove the 3.7 mm pancake screw securing the battery power connector.

## Step 14 — Disconnect the battery



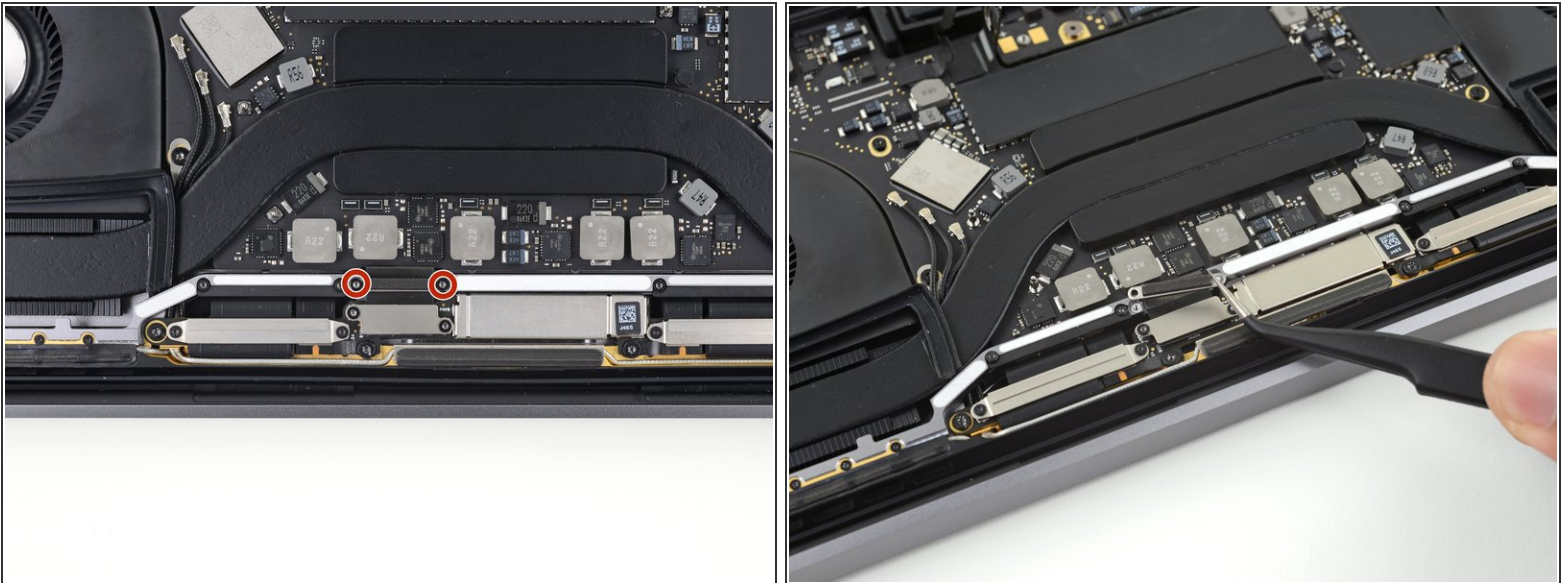
- Use a spudger to gently lift the battery power connector, disconnecting the battery.
- Lift the connector high enough so that it stays separated from its socket. If it accidentally makes contact during the course of your repair, it could damage your MacBook Pro.

## Step 15 — Remove the hinge covers



- Use a T3 Torx driver to remove the four 1.9 mm screws securing the plastic covers on top of the display hinges.
- Remove both plastic hinge covers.

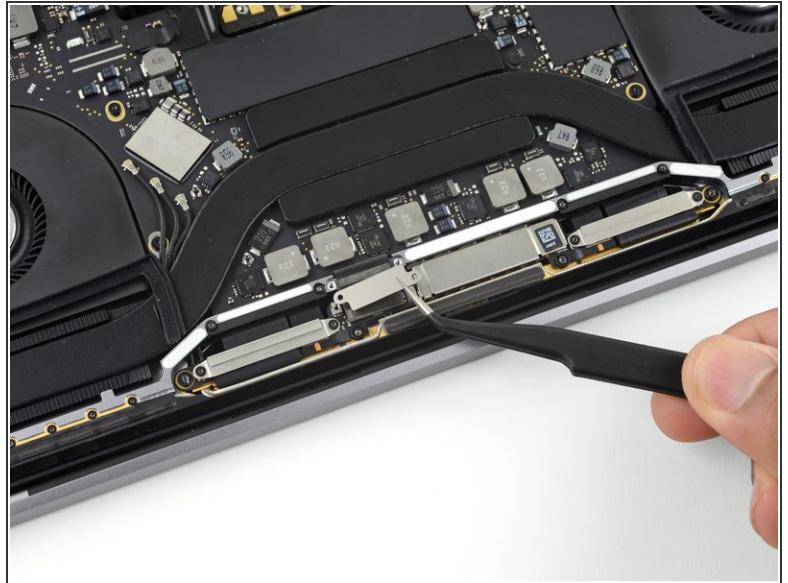
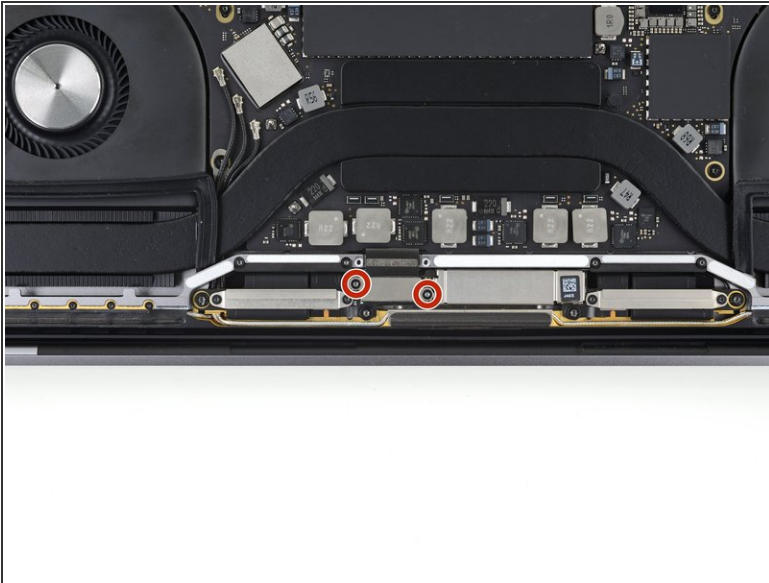
## Step 16 — Disconnect the main display cable



- Remove the two 2.9 mm T3 Torx screws securing the aluminum cover on top of the main display cable.
- Remove the cover.

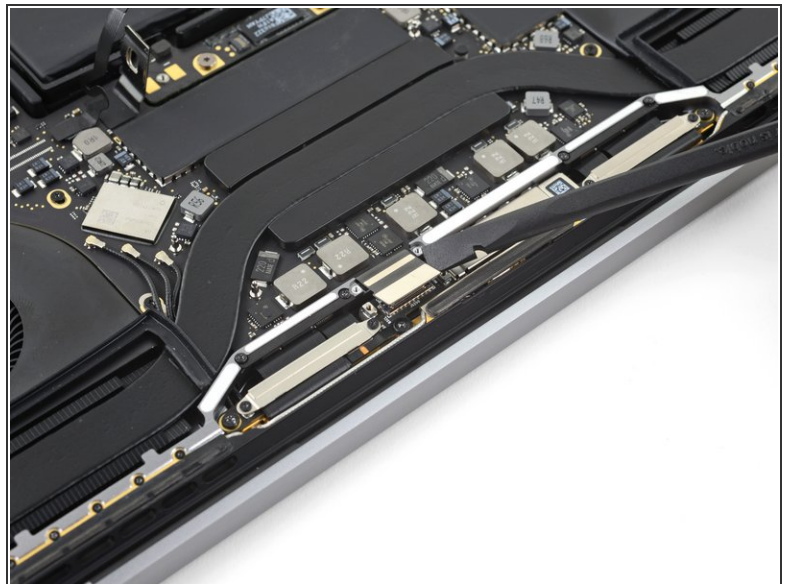
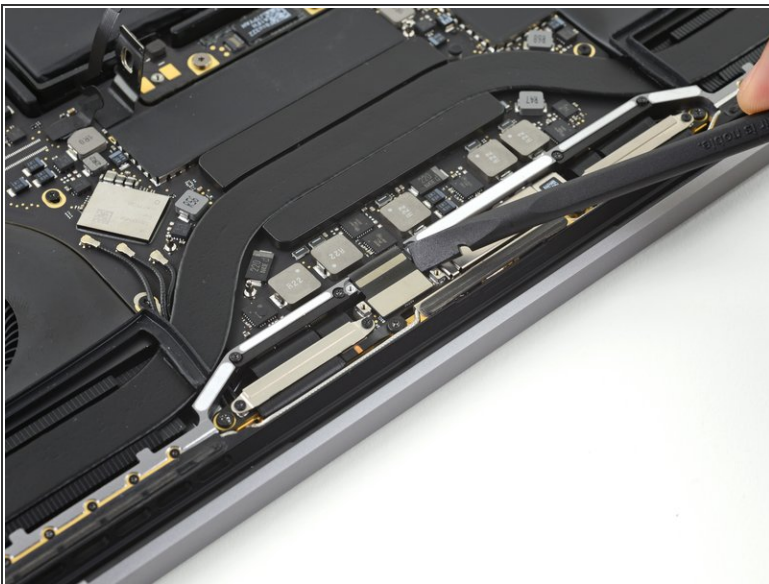


## Step 17



- Remove the two 1.7 mm T3 Torx screws securing the aluminum cover on top of the display cable flex connector.
- Remove the cover.

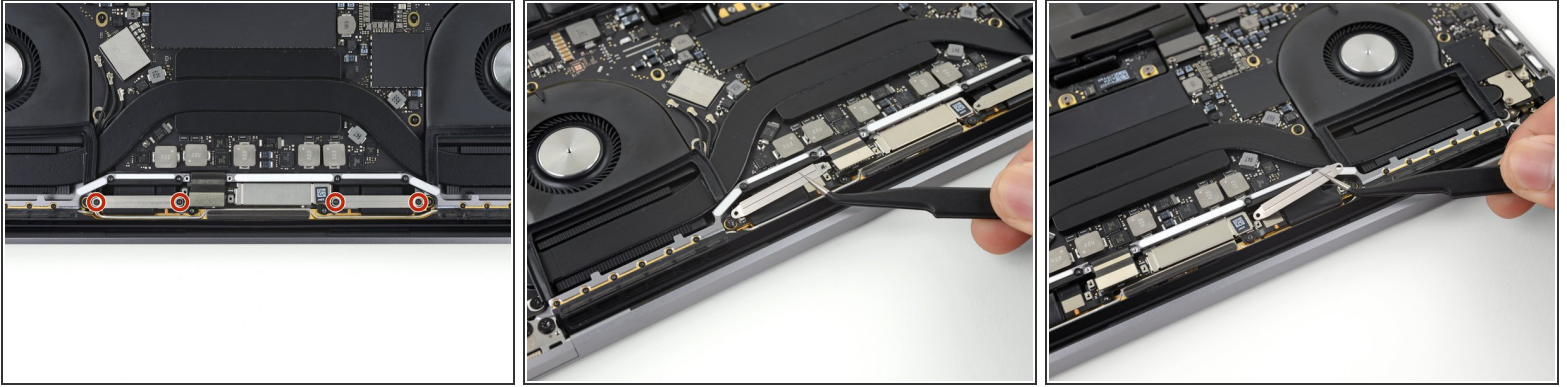
## Step 18



- Pry the display board flex cable straight up from its socket to disconnect it from the display board.

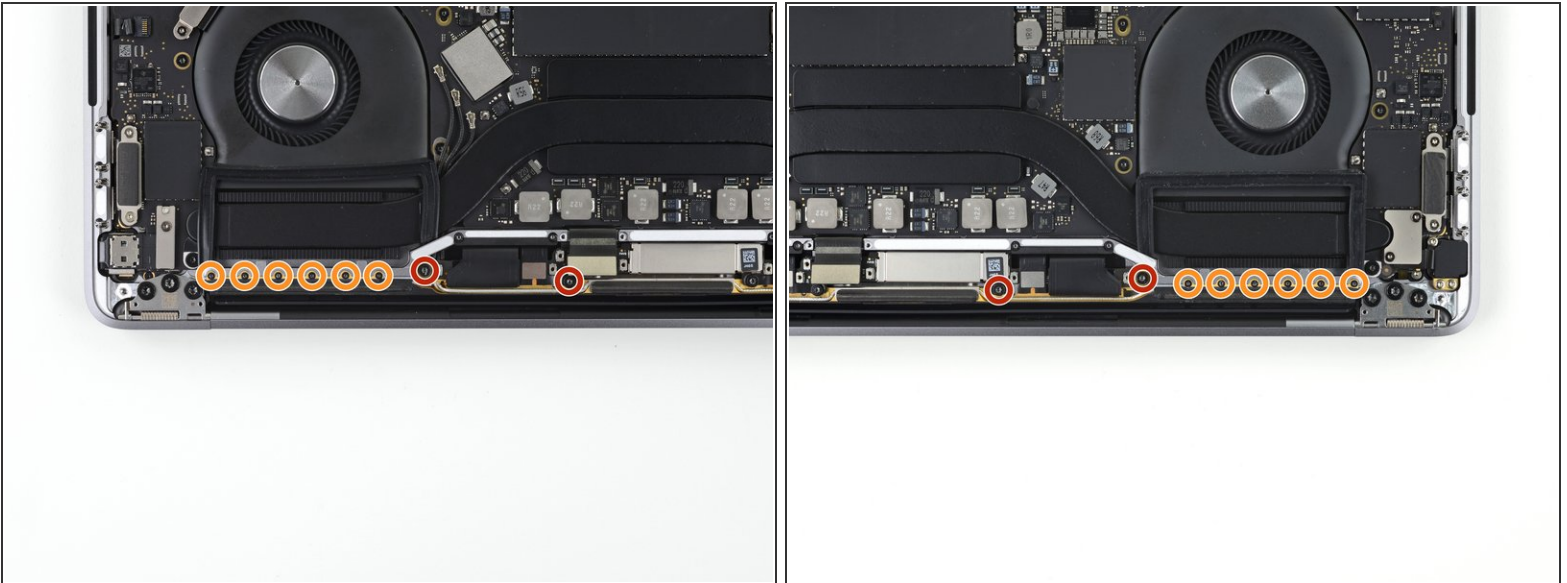


## Step 19 — Unscrew the antenna cable assembly



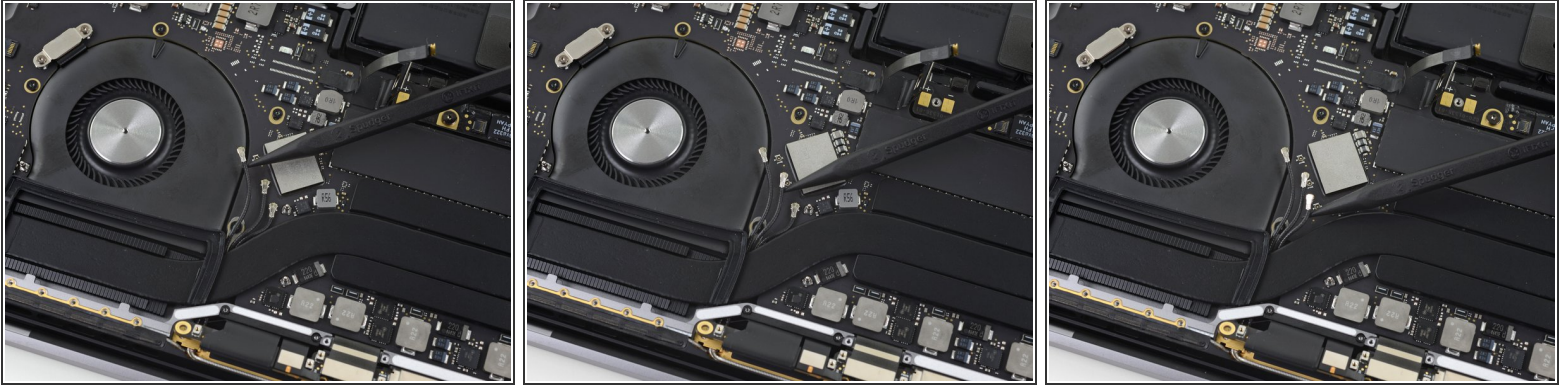
- Remove the four 1.5 mm T3 Torx screws securing the two aluminum covers on top of the two display board cables.
- Use a pair of tweezers to remove the two aluminium covers.

## Step 20



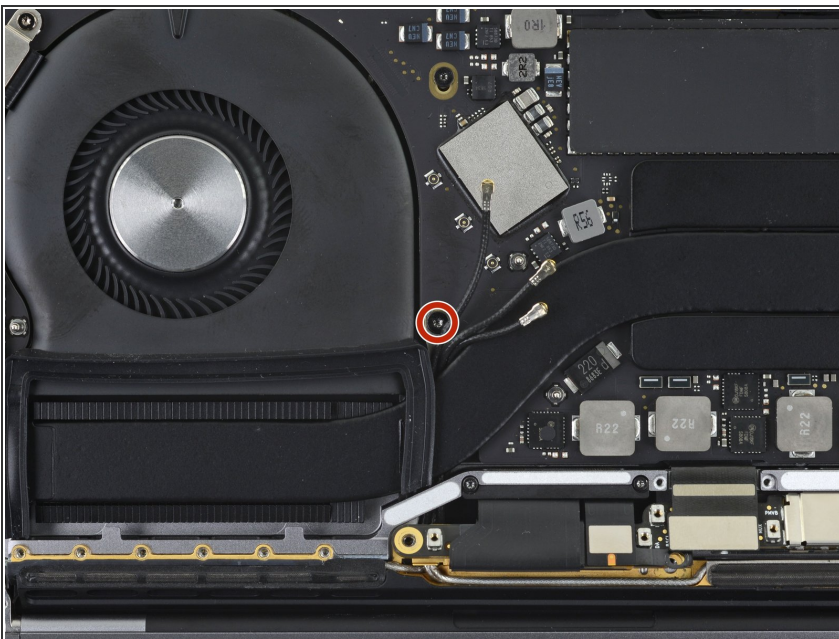
- Remove the four 3.9 mm T5 Torx screws (two from each side) securing the antenna cable assembly.
- Also remove the twelve 1.1 mm P2 pentalobe screws (six from each side).

## Step 21 — Disconnect the antenna cables



- Carefully disconnect the three [antenna coax cables](#) by prying them **straight up** from the logic board.
- ⓘ Slide your tweezers or the pointed end of your spudger underneath each cable until it's near the socket, and then gently twist or pry up to disconnect it.
- ✦ To reconnect each cable, align the connector directly over its socket, and then press down so it snaps into place.

## Step 22



- Remove the 2.8 mm T5 Torx screw securing the three antenna coax cables to the main board.



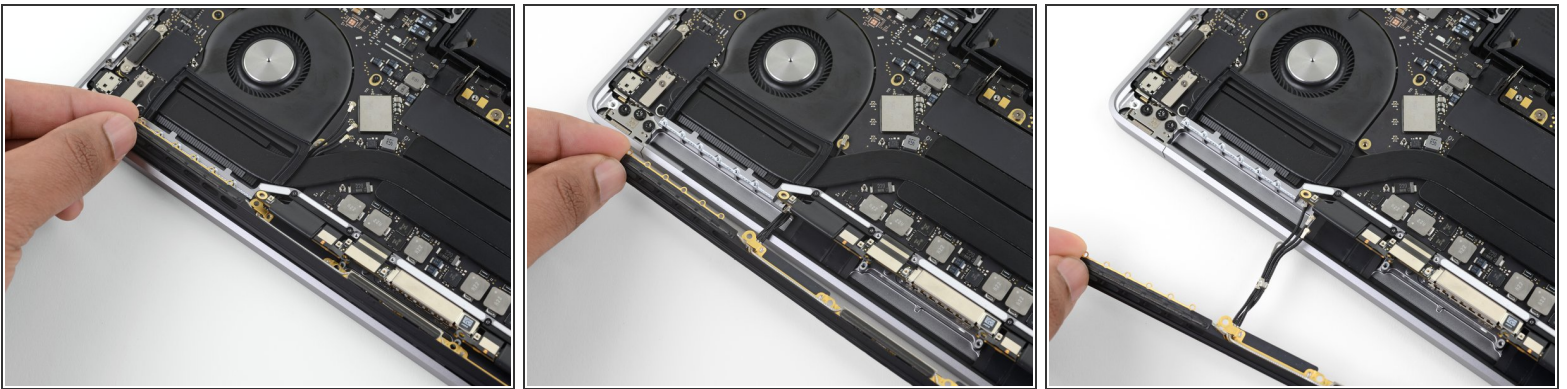
## Step 23 — Pry up the antenna cable assembly



- Use an opening pick to lever out the antenna cable assembly in the areas shown.

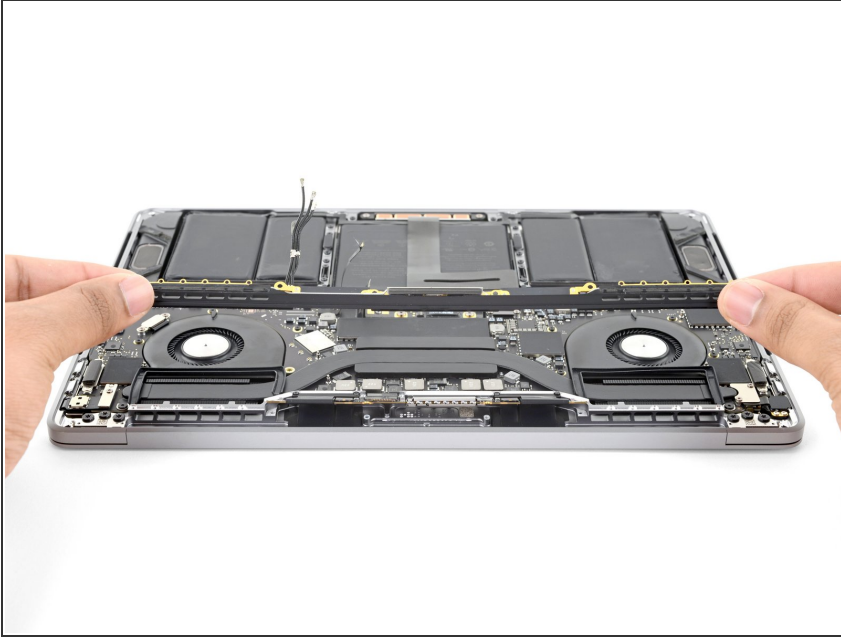
**⚠ Don't slide the opening pick from side to side, as there are two display cables that could be damaged in the way.**

## Step 24 — Remove the antenna assembly



- Carefully remove the antenna assembly, while simultaneously feeding the antenna cable bundle out from underneath the heat pipe.

## Step 25



- Remove the antenna cable assembly.
- ✦ During reassembly, gently pinch the cable bundle together and guide it under the heat pipe into the correct position on the board. If needed, use your tools to help guide it through, but don't force it.

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 installing.

**To reassemble your device, follow the above steps in reverse order.**

Take your e-waste to an [R2 or e-Stewards certified recycler](#).

Repair didn't go as planned? Try some basic [troubleshooting](#) or search our [Answers community](#) for help