MacBook Pro 13" Touch Bar Late 2016 Display Assembly Replacement

Use this guide to replace the display assembly...

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INTRODUCTION

Use this guide to replace the display assembly of your MacBook Pro 13" Touch Bar Late 2016.

Before starting this procedure, you may want to check with Apple to see if you qualify for a free repair. If your display's backlight has stopped working, or the display shows vertical bright areas along the entire bottom of the screen (a.k.a. "stage lights"), your MacBook Pro may be eligible for Apple's display backlight service program.

For your safety, drain your MacBook Pro's battery below 25% charge before starting repairs.

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)
Tweezers (1)
T5 Torx Screwdriver (1)
TR8 Torx Security Screwdriver (1)
P2 Pentalobe Screwdriver iPhone (1)

PARTS:

MacBook Pro 13" Retina (Late 2016-2017) Display Assembly (1)
MacBook Pro 13" Retina (Touch Bar, Late 2016-2020) Display Cable Brackets (1)
Display Assembly Compatible with MacBook Pro 13" (Late 2016-2017) (1)

Step 1 — Disable Auto Boot
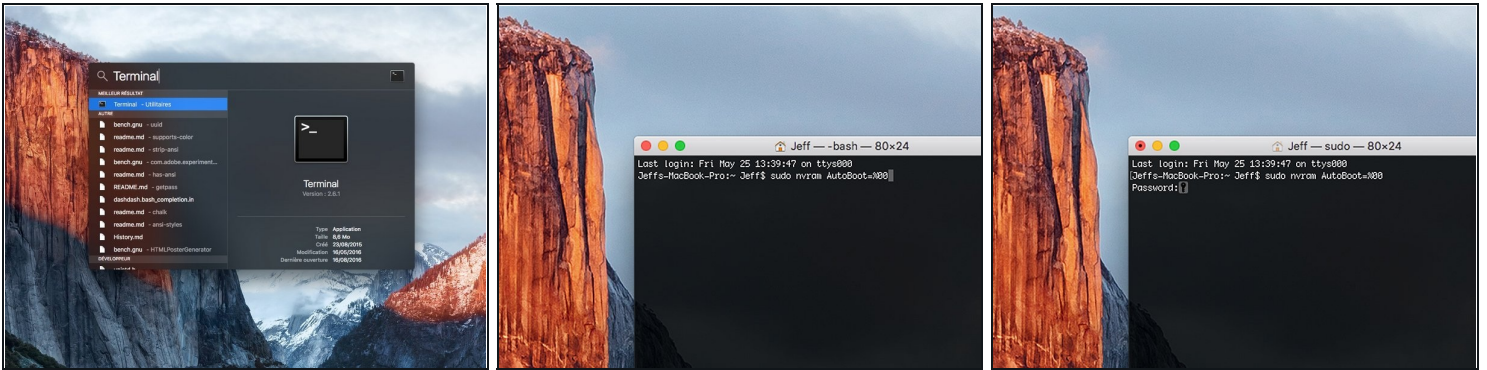
(i) Before starting this procedure, you must disable your Mac's **Auto Boot** feature. Auto Boot powers on your Mac when you open the lid, and may be accidentally triggered during disassembly. Use this guide or follow the abbreviated instructions below to disable Auto Boot. *This command may not work 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 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
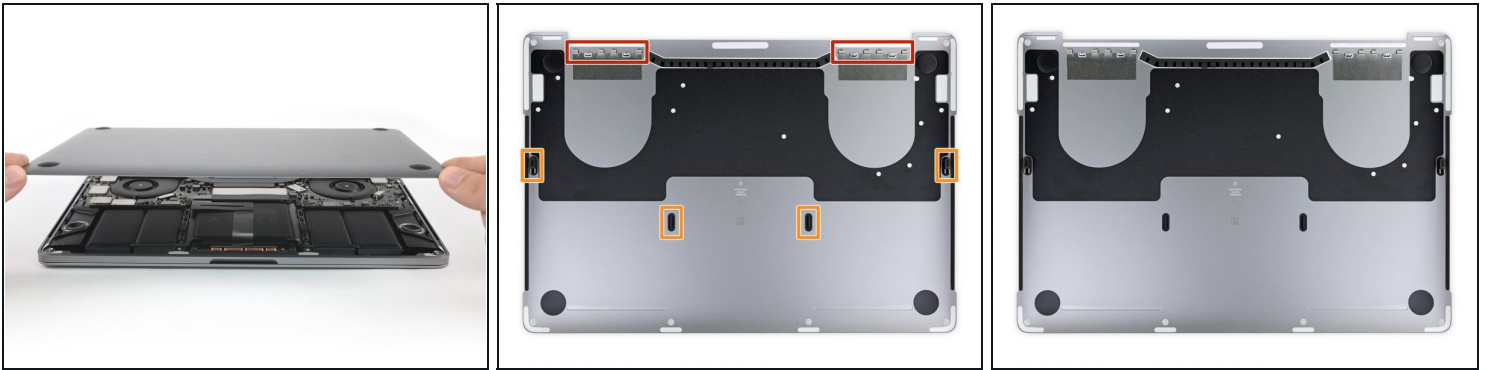
- Remove the lower case.

📌 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 9 — Uncover the battery connector
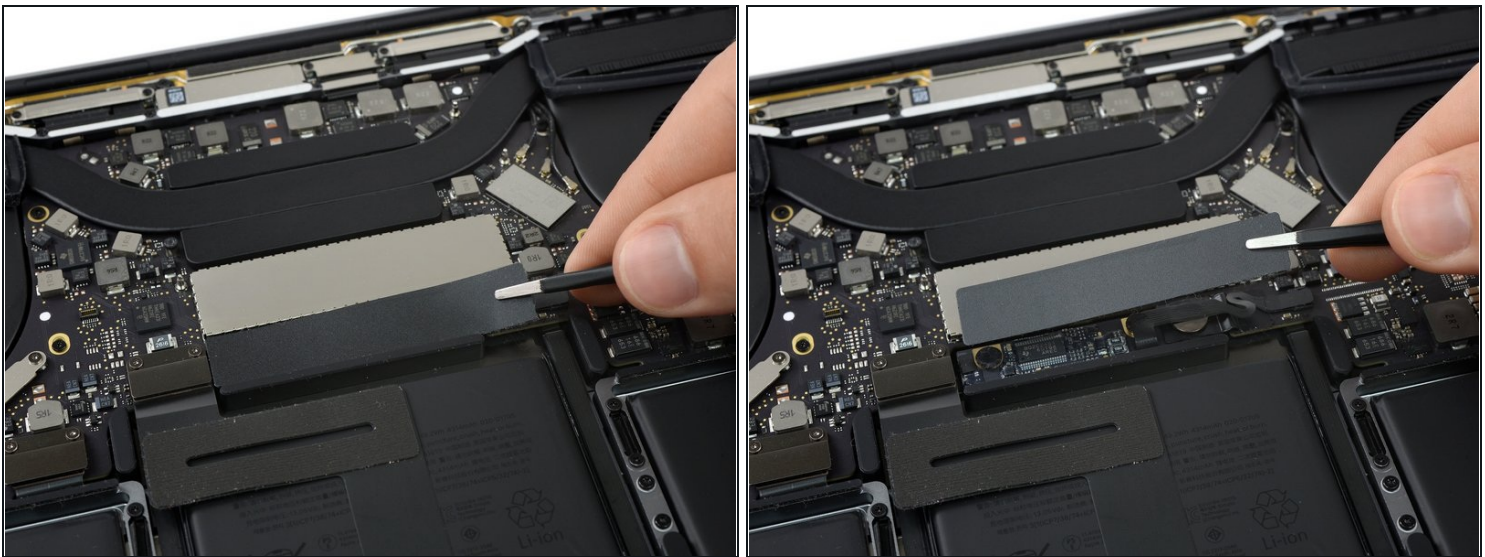
- Carefully peel up the large piece of tape covering the battery connector, on the edge of the logic board nearest the battery.

- Remove the tape.

Step 10
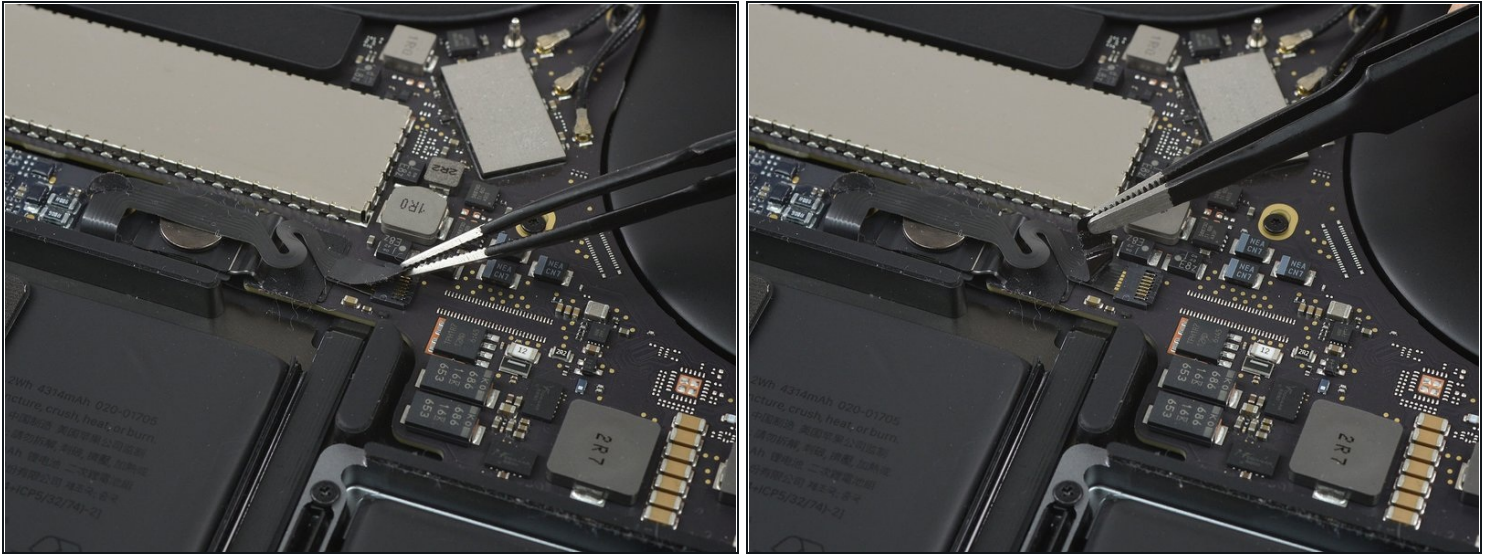
- Gently peel back the small piece of tape covering the battery board data cable connector.
  - ⓘ The tape is integrated into the ribbon cable and will not detach completely. Simply peel it back enough to access the connector.
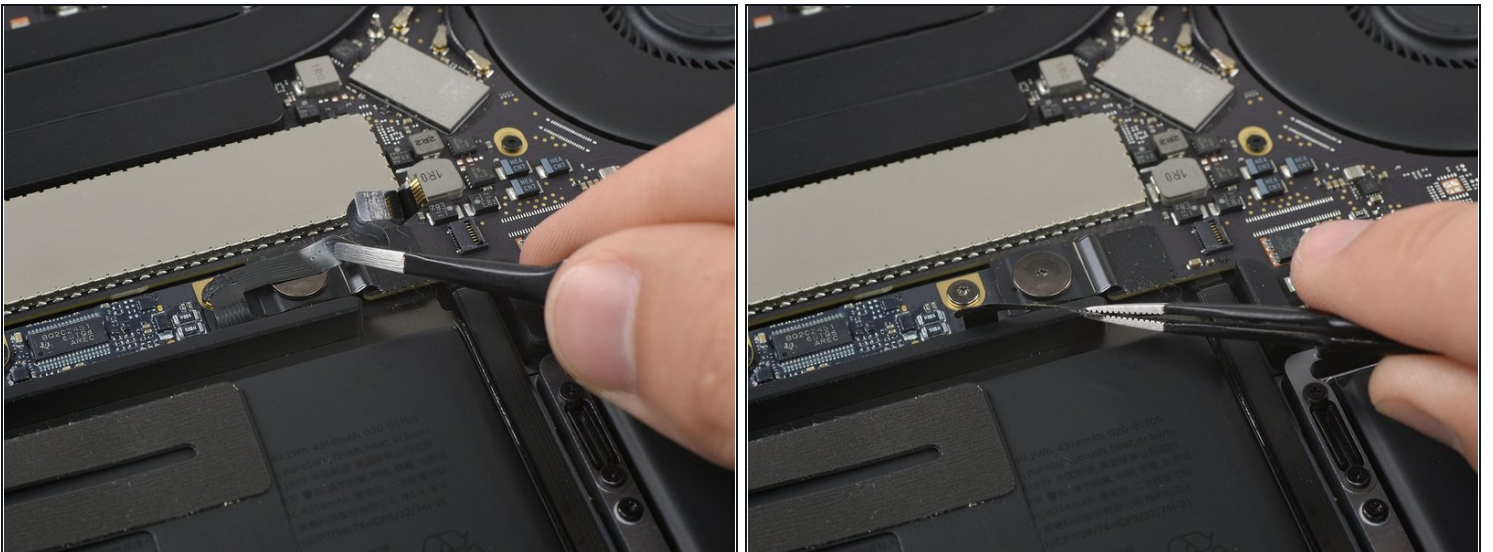
Step 11
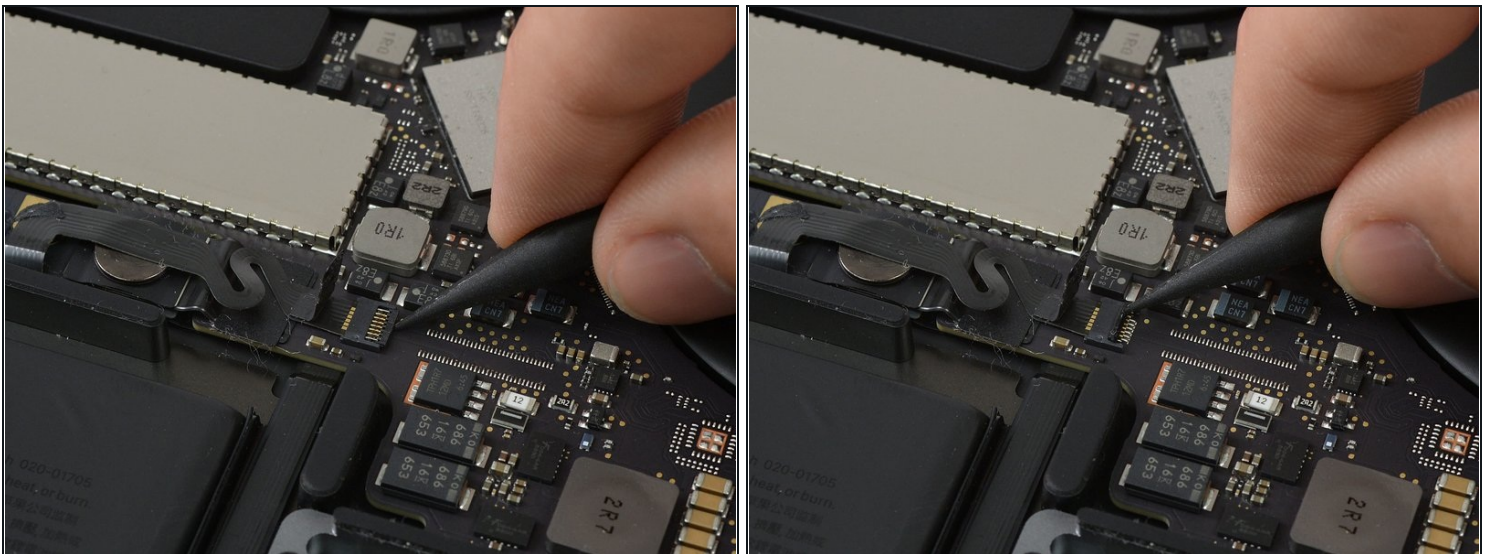
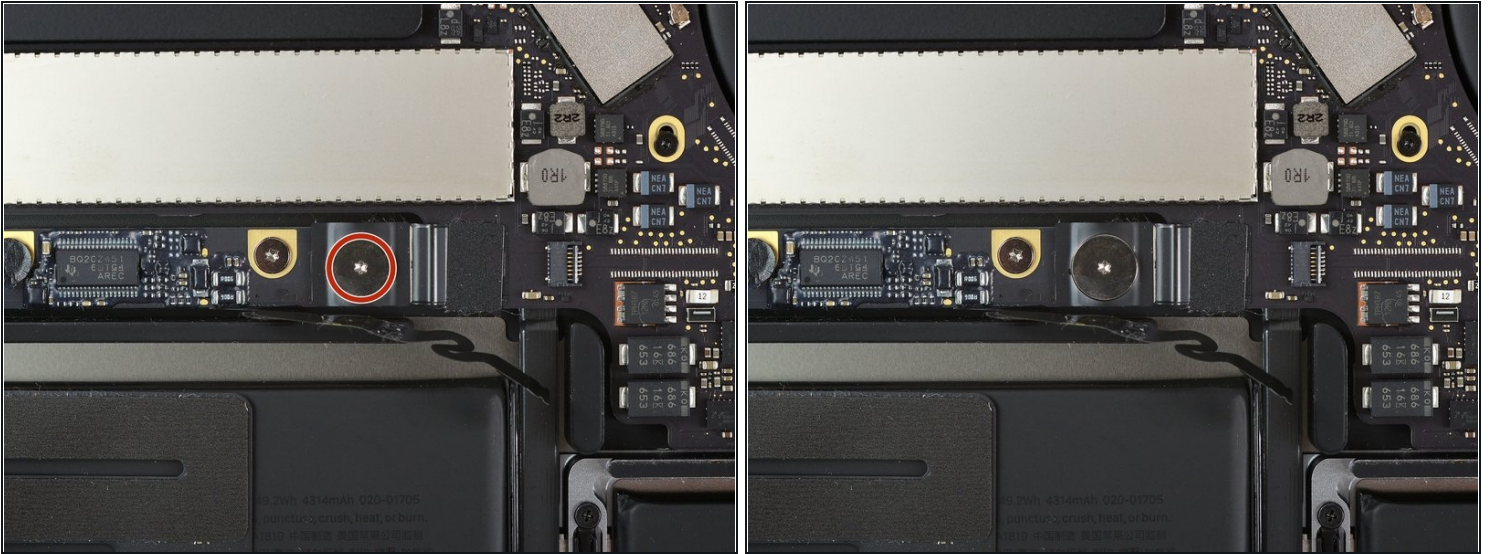- Use the tip of a spudger to flip up the small black locking tab securing the cable in its connector.

Step 12

- 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 13

- Fold the battery board data cable to the side and out of the way.
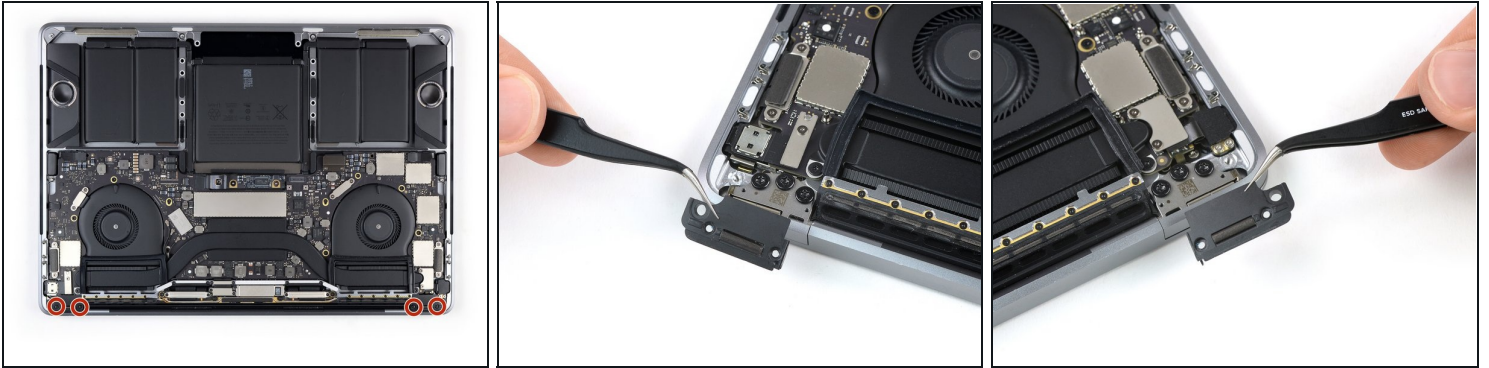
Step 14

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

Step 15 — Disconnect the battery
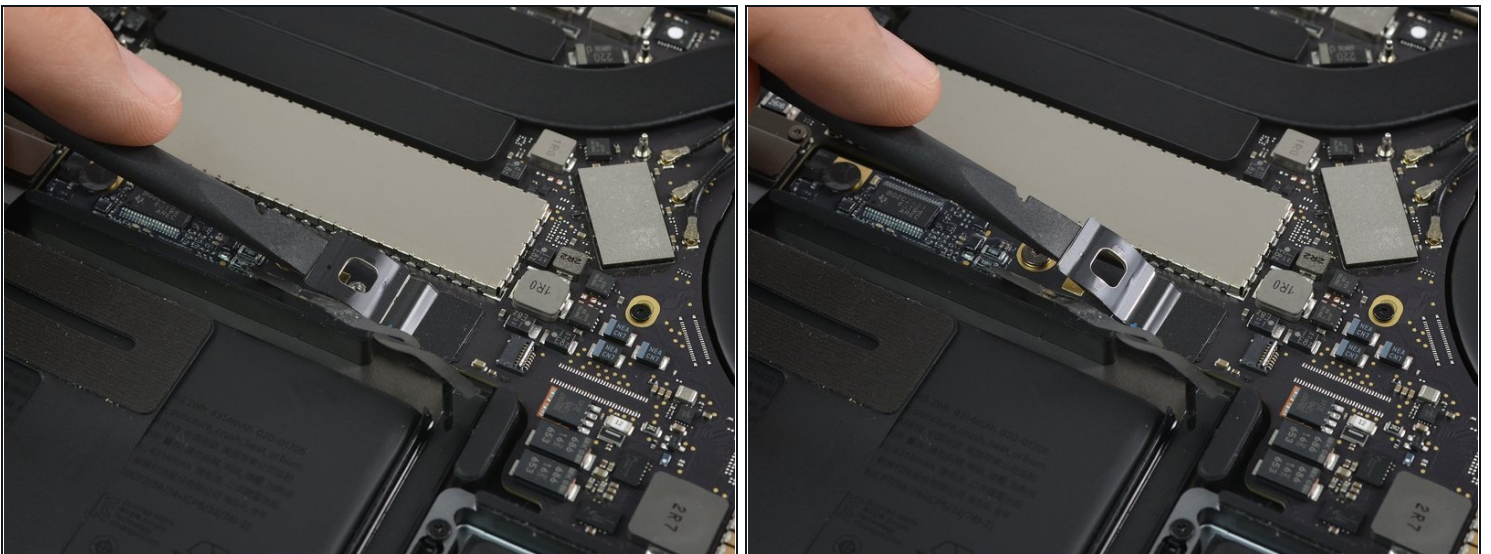
- Use a spudger to gently lift the battery power connector, disconnecting the battery.

- 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.
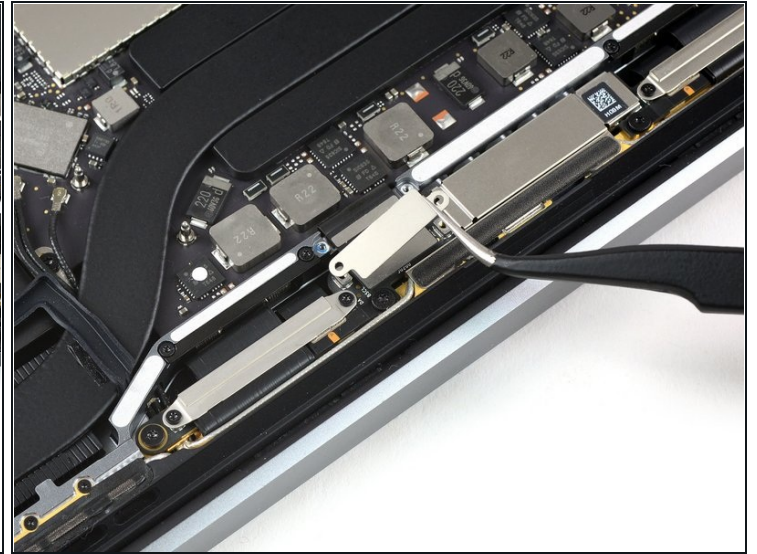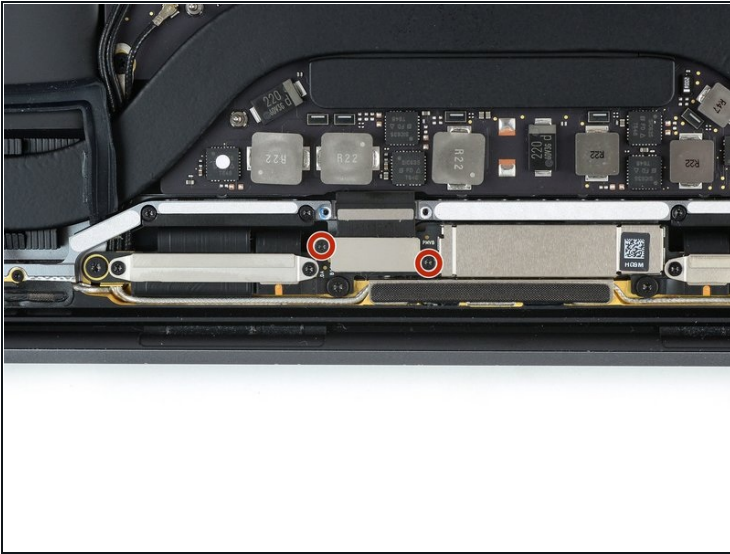
Step 16 — Antenna Cable Assembly

- Remove the four 1.9 mm T3 Torx screws securing the plastic covers on top of the display hinges.

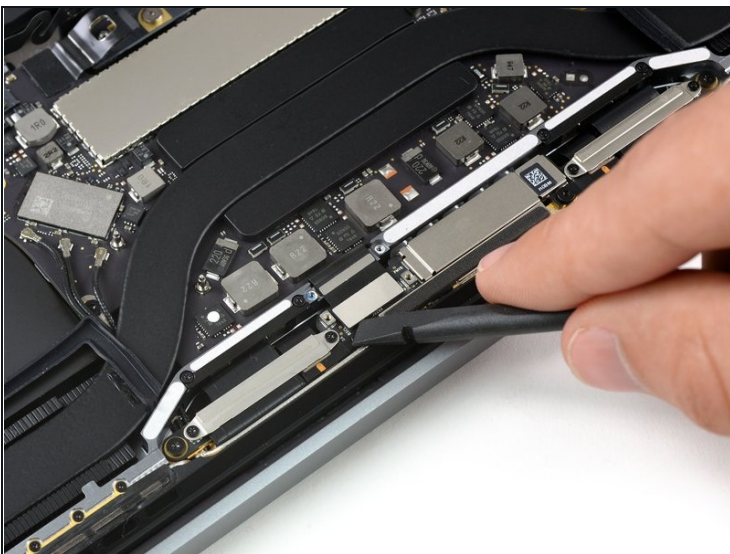- Remove both plastic hinge covers.

Step 17
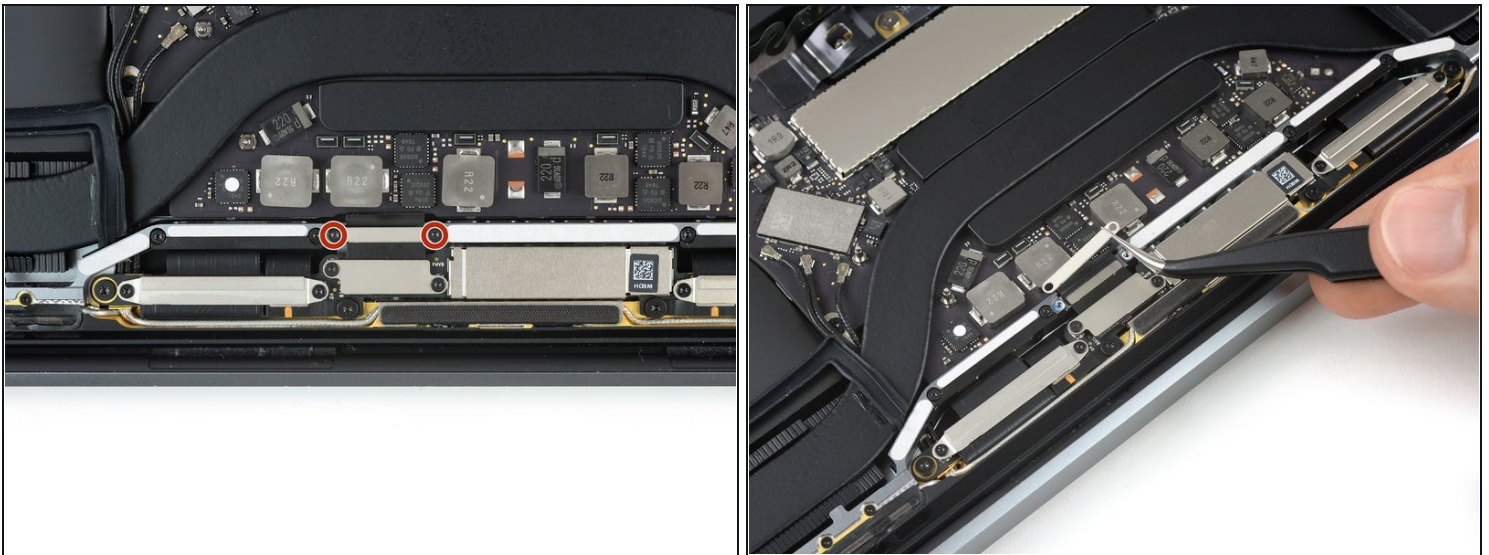
- Remove the two 2.9 mm T3 Torx screws securing the aluminum cover on top of the main display cable.

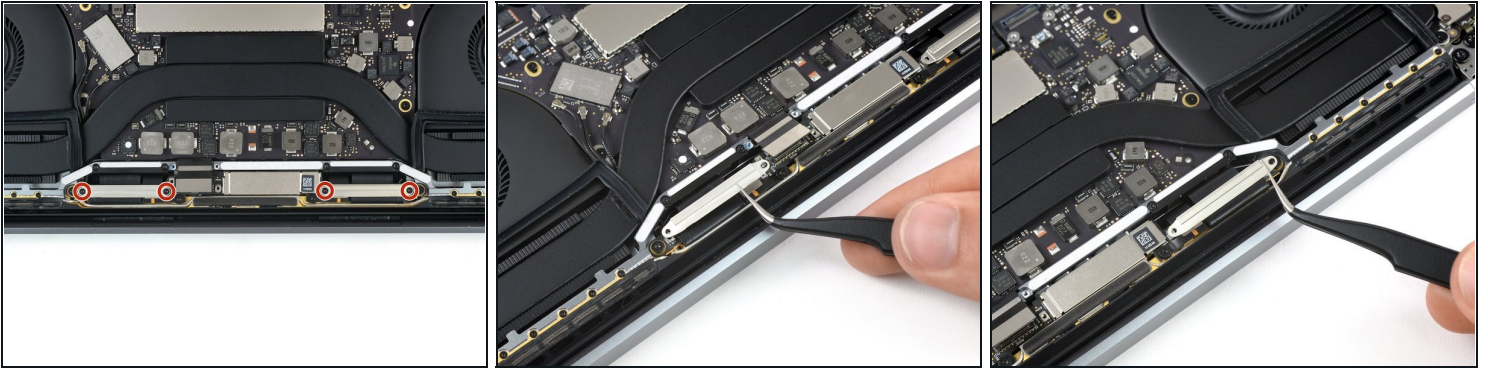- Remove the cover.

Step 18

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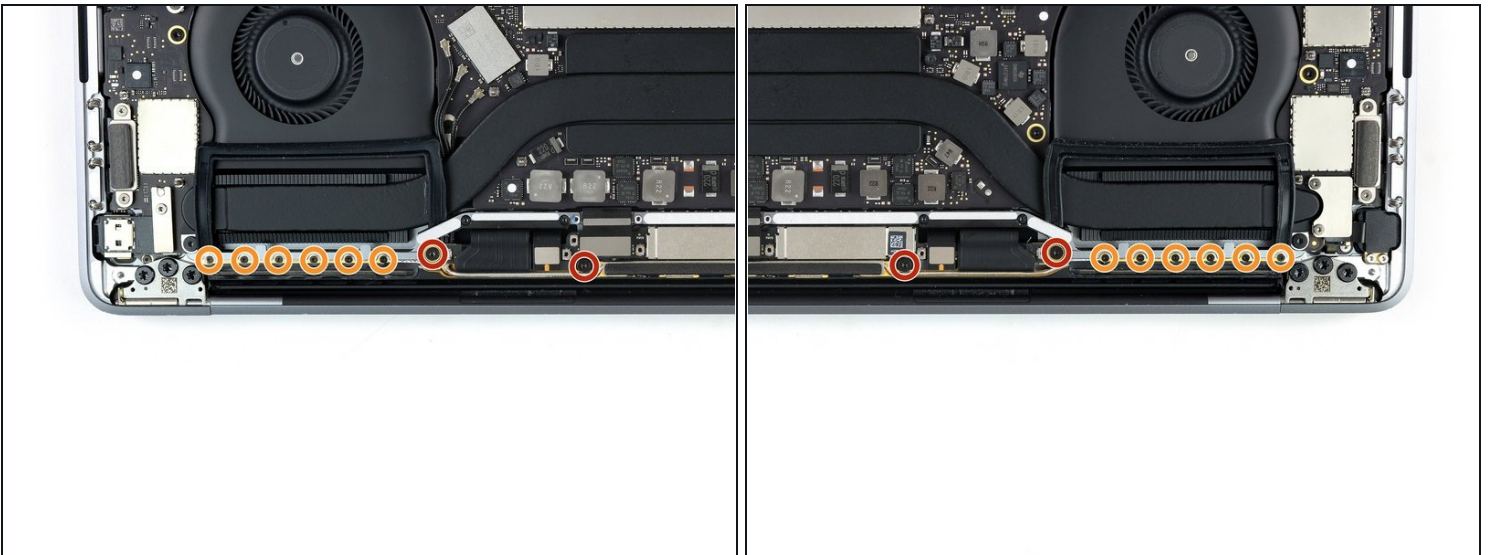
- Remove the cover.

Step 19

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

Step 20

- Remove the four 1.5 mm T3 Torx screws securing the two aluminum covers on top of the two display cable connectors.

- Use a pair of tweezers to remove the two aluminium covers.
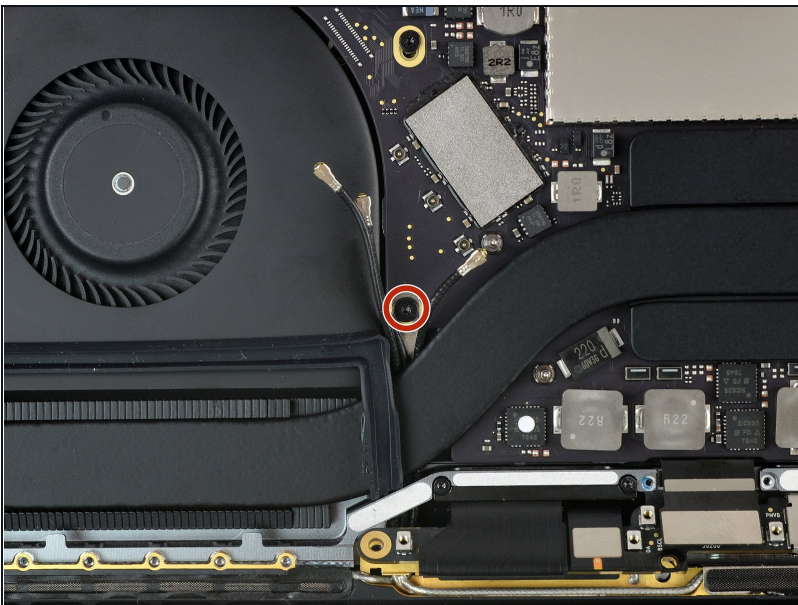
Step 21

- 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 22

- Carefully disconnect the three antenna coax cables by prying them **straight up** from the logic board.
  - Slide your tweezers or the flat 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 23

- Remove the 2.8 mm T5 Torx screw securing the three antenna coax cables to the main board.
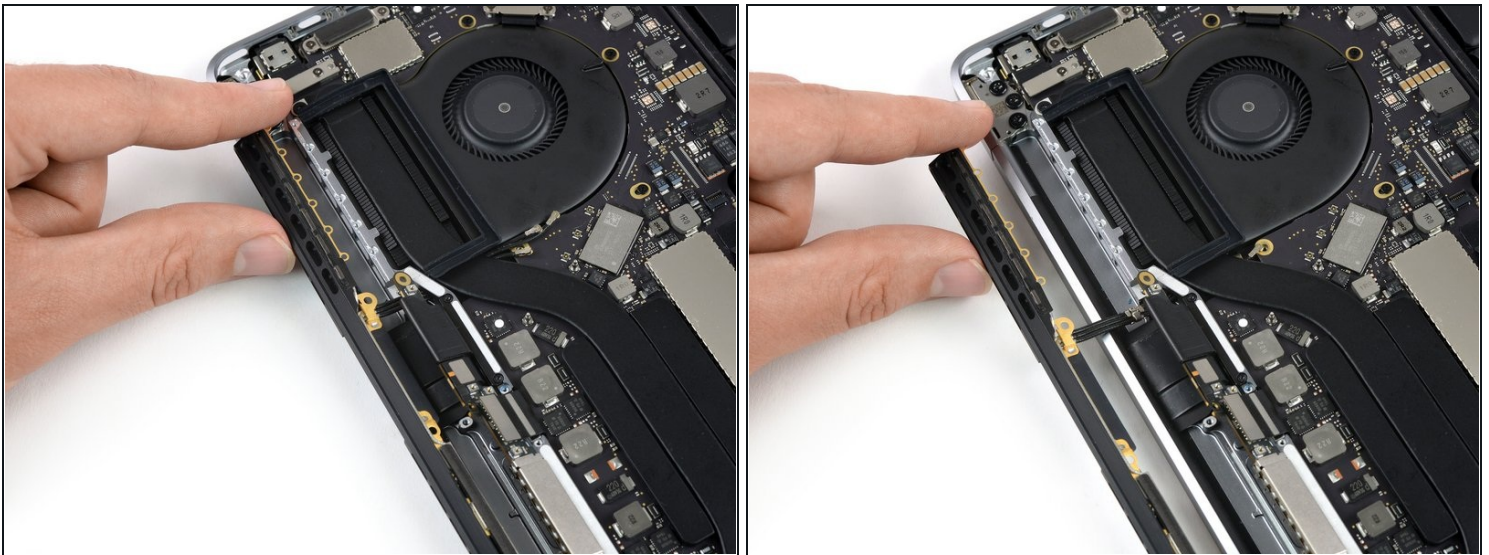
Step 24

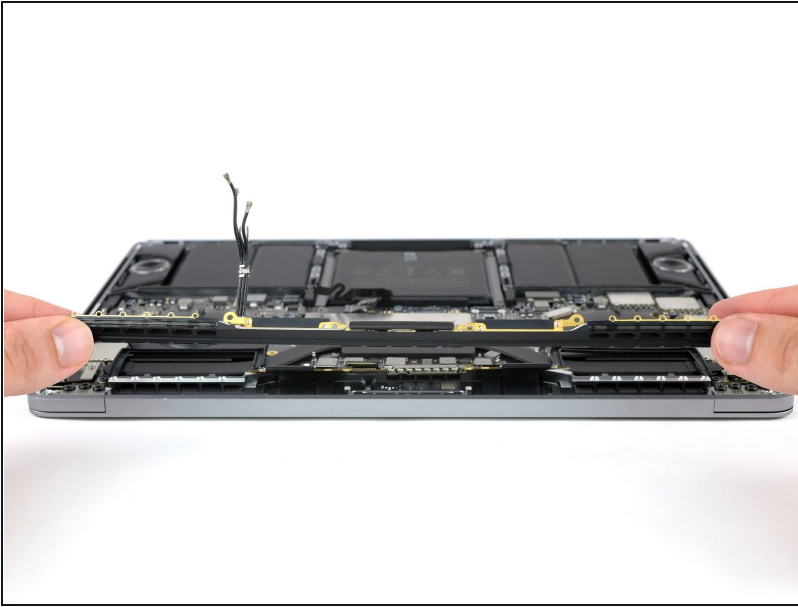- Use an opening pick to lever out the antenna cable assembly in the areas shown.

⚠ Don't slide the opening pick from side to side, because there are two display cables that can be damaged.
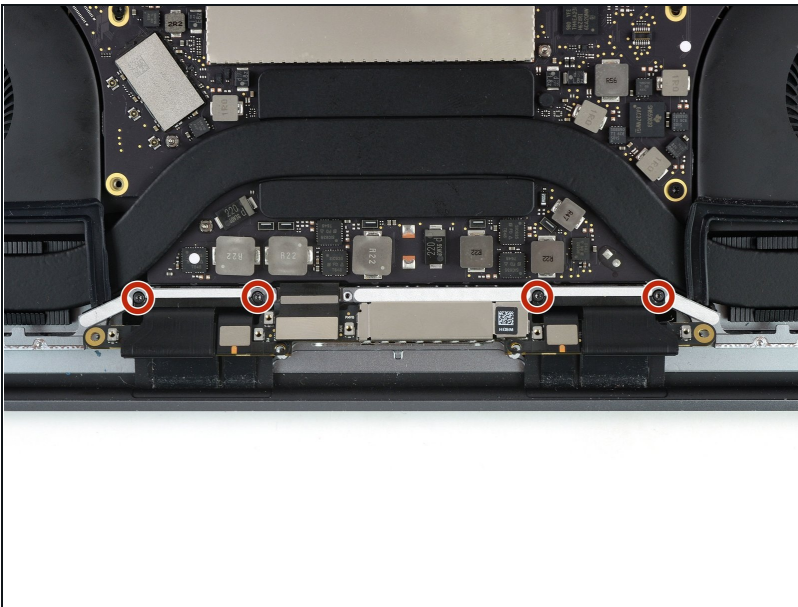
Step 25

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

Step 26

- 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.

## Step 27 — Unscrew the display cable assembly

- Remove the four 3.9 mm T3 Torx screws securing the two display cable cover springs.

## Step 28 — Remove the display cable assembly
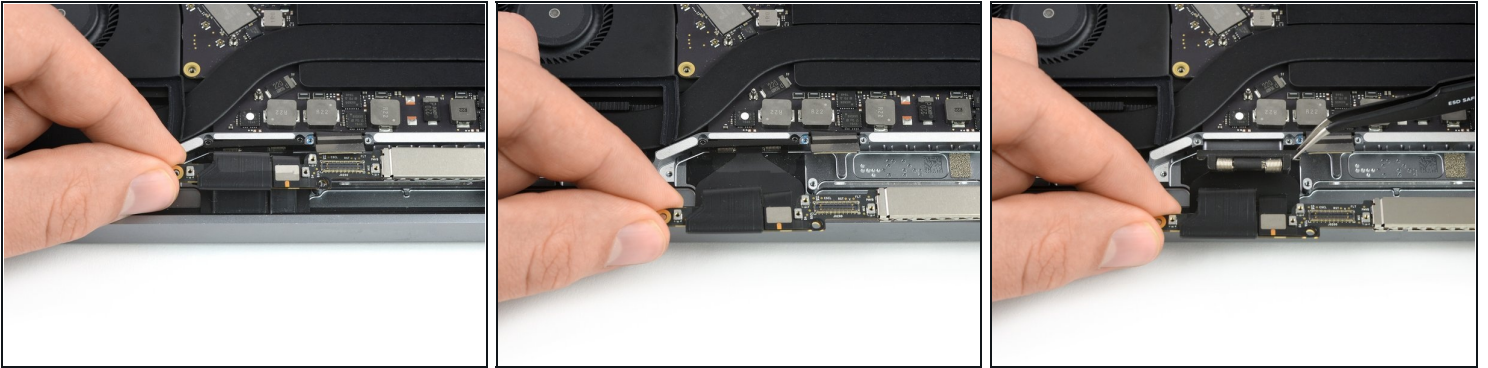
- Grab the left side of the display cable assembly and pull it towards the bottom end of the MacBook and away from the cover spring.

- Use a pair of tweezers to pull the cover spring of the display cable out of its recess.

- Repeat this step with the right cover spring of the display cable assembly.

Step 29 — Set your laptop down
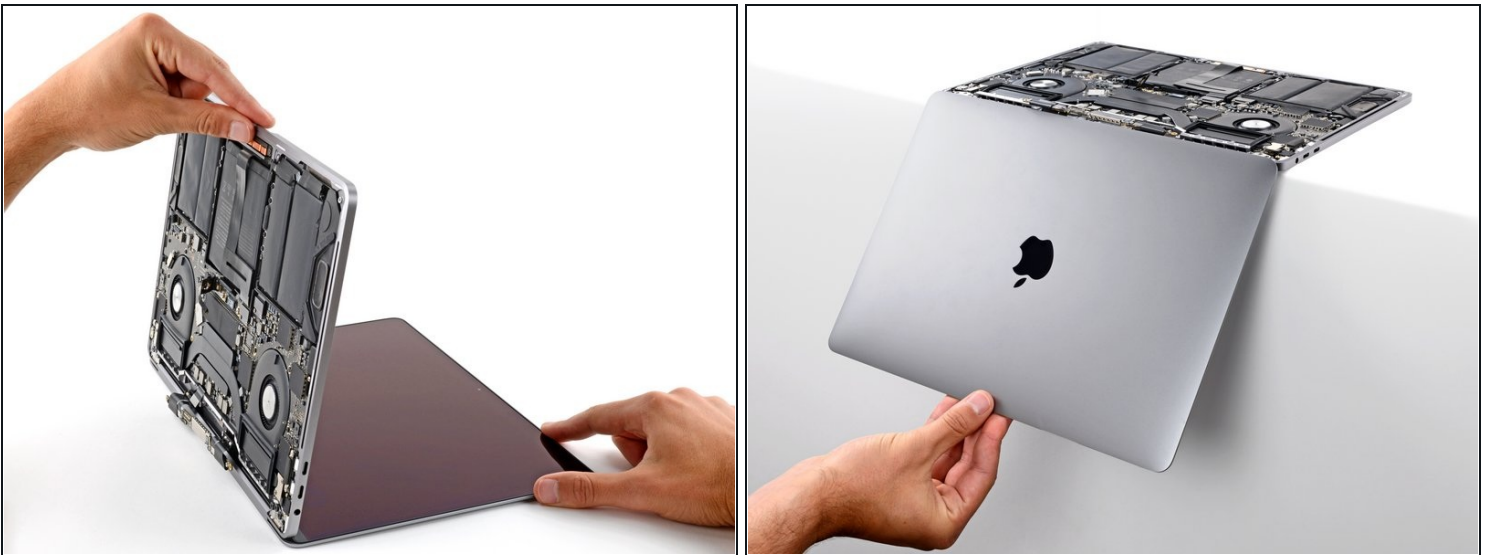
- *Fully* open your MacBook and gently place it keyboard-side-down on a table so the screen hangs over the edge.
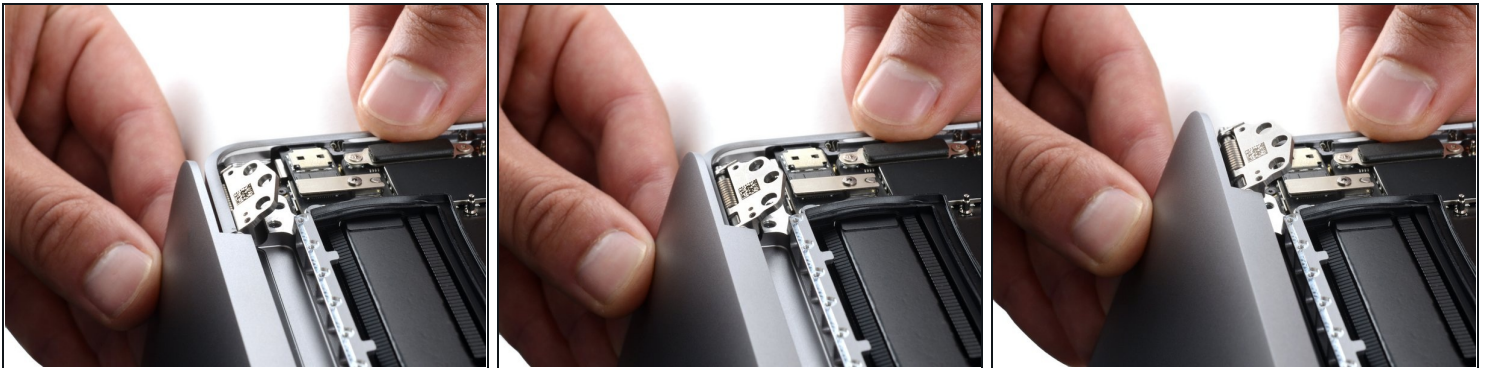
Step 30 — Remove the hinge screws
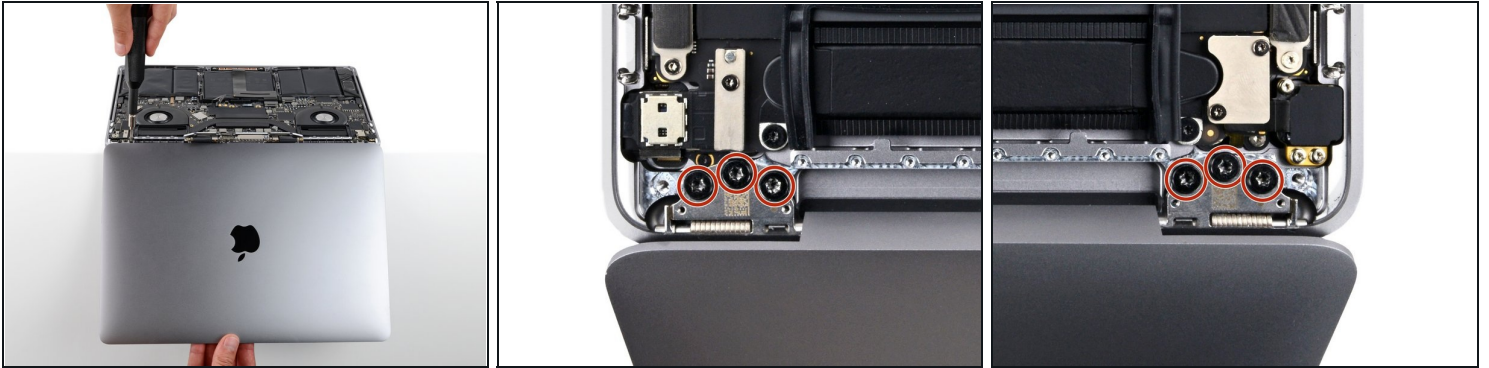
- Support the screen with one hand and use your free hand to remove the six T8 Torx screws securing the hinges.

  ⚠ Keep a firm grip on your laptop, as it can easily fall off the table.

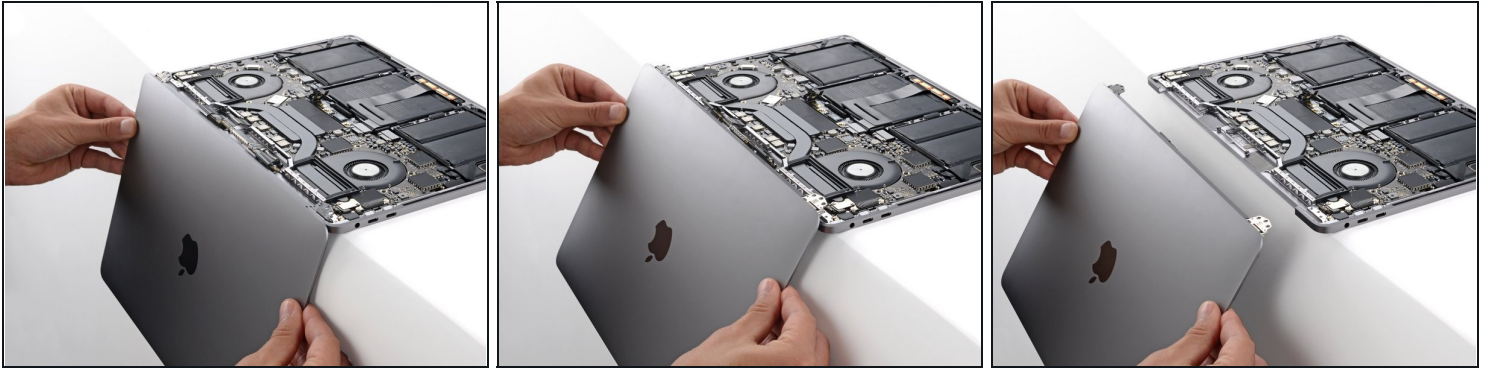## Step 31 — Free the left hinge

- ⓘ Keep the screen supported **constantly** during the next two steps.

- Firmly secure the main body of your MacBook with one hand.

- With your free hand, push the left side of the screen up and towards the bottom of your laptop to free the left hinge.

  ⚠ **Be very careful not to damage the [Touch Bar connector](#) when moving the left hinge**. It can be easily crushed, resulting in an inoperable Touch Bar.

Step 32 — Remove the screen

- Free the right hinge and remove the screen.

🔲 To install a new screen:
  - Make sure the screen hinges are fully open and guide them into their recesses in the frame.
    ⚠️ Be very careful not to damage the Touch Bar connector when inserting the left hinge.

  - Partially tighten the six hinge screws.

  - Close your laptop and make sure the screen is properly aligned. If it clicks or snaps, readjust the alignment.

  - Fully tighten the hinge screws.

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.